Technical Summary Report – Pilot Study
HOFF VC HSCA Site

Perkiomenville, New Hanover Township, Montgomery County, Pennsylvania
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1.0 INTRODUCTION

Tetra Tech, Inc. (Tetra Tech) is pleased to submit this Technical Summary Report to the Pennsylvania Department of Environmental Protection (PADEP). This document summarizes Tetra Tech's investigation and pilot study activities conducted between January 2020 and December 2021 for the Hoff VC Hazardous Sites Cleanup Act (HSCA) Site (the Site), located in Perkiomenville, New Hanover Township, Montgomery County, Pennsylvania.

Tetra Tech's work has been conducted under the Interim Response and Remediation Service Contract 7 (IRRSC7) SAP#4000019261, contract requisition number IRRSC7-1-319.

This section describes the purpose of this document, project objectives, and report organization.

1.1 PURPOSE

This technical summary report summarizes Tetra Tech's investigation and pilot study activities conducted between January 2020 and December 2021, including findings and analytical results of work completed at the Site. All work was performed in accordance with PADEP's Office of Hazardous Sites IRRSC Scope of Work (SOW) and subsequent Change Orders for the project.

1.2 OBJECTIVES

During the project scoping meeting conducted on April 26, 2018, the Pennsylvania Department of Environmental Protection (PADEP) tasked Tetra Tech to develop a remediation plan appropriate for Site conditions, capable of decreasing the high concentrations of volatile organic compounds (VOCs) at specific areas ("hot spots"). Ultimately, the primary objective of this project has been to monitor the Site and evaluate treatment technologies at the pilot scale as a "remediation pilot study." The work discussed in this Technical Summary Report is in support of and considers the above objectives.

1.3 REPORT ORGANIZATION

This report contains the following subsequent sections:

- Section 2 presents the Site description, Site history, and brief summary of previous environmental investigations completed.
- Section 3 describes the remediation pilot study design.
- Section 4 describes the completed remediation pilot study, including details regarding in situ remediation injections (both active and passive), and the simultaneous groundwater monitoring and sampling activities.
- Section 5 includes conclusions and recommendations.
- Section 6 lists reference documents.

2.0 SITE DESCRIPTION AND BACKGROUND

This section summaries the Site description and background information for the Hoff VC HSCA Site, as provided by PADEP.

2.1 SITE DESCRIPTION

The Site is within a primarily rural portion of Pennsylvania, approximately 40-miles north-northwest (NNW) of Philadelphia, located at 334 Layfield Road, New Hanover Township, Montgomery County, Pennsylvania (**Figure 1**). The primary focus area for this pilot study is the northwest portion of property (**Figure 2**). It is suspected that effluent from a historical truck washing facility (presently office and truck shop) was conveyed (via an underground pipe at the eastern corner of the building) to a concrete vault located approximately 95 feet northeast of the building. The dimensions of the concrete vault are approximately 6 feet wide by 40 feet long with a depth of approximately 9.5 feet.

2.2 SITE HISTORY

The Site was formerly used for many decades as an oil distribution facility. Swann Oil initially owned the property from the 1960's through the late 1980's, when it was then purchased by Good Oil Company. Good Oil Company is the current property owner. Multiple Oil storage tanks (both above-and-below ground) used by Swann Oil and Good Oil, have since been removed. Several buildings (offices and maintenance shops), along with an asphalt paved parking area are currently located in the front portion of the property. The developed operating area covers approximately 18 acres, with the remainder of the parcel being undeveloped and wooded.

Historical use of trichloroethene (TCE) solvent at both the maintenance building and truck washing facilities has been reported. In recent years, the property has been leased to a metal fabrication/welding shop and residual waste disposal company**.** Presently, White Tail Disposal operates a residual waste disposal transport operation.

2.3 PREVIOUS INVESTIGATIONS

In 2011, the Montgomery County Health Department (MCHD) collected a potable water sample from a well serving a multi-tenant apartment building property located on Layfield Road. This sample was collected as a response to a heating oil tank leak reported at that property. Results indicated elevated levels of trichlorethylene (TCE), cis-1,2-dichloroethylene (cis-1,2-DCE), 1,1-dichloroethylene (1,1-DCE), vinyl chloride (VC), and methyl-butyl ether (MTBE). These findings triggered PADEP to collect additional potable well samples from wells serving other nearby properties. Results from this additional sampling indicated elevated VOC concentrations above their MCLs at five locations.

From 2012 to 2014, several monitoring wells (MWs) were installed on- and off-site, and multiple site-wide groundwater sampling events were completed.

In 2016, PADEP was informed of (and during inspection with Tetra Tech confirmed) the existence of an underground concrete waste pit (WPA) located at the northwestern portion of Site. PADEP directed Tetra Tech to investigate this waste pit (and the surrounding soils) to determine if it was or had contributed to soil and groundwater contamination.

Tetra Tech conducted an initial soil boring investigation at the WPA and next to southwestern corner of the WPA. Liquid in the waste pit was also sampled by Tetra Tech, and the analytical results revealed detections of VOCs and 1,4-Dioxane (as well as concentrations of several metals and pesticides). Additional soil sampling was performed to close the data gaps from the previous investigation and to follow the suspect subsurface piping adjacent to the waste pit.

With this additional information, PADEP determined it was appropriate to excavate the impacted soils adjacent to the waste pit and along the suspected pipes extending to the nearby main building. Between December 2017 and March 2018, Tetra Tech's subcontractor, Lewis Environmental, completed excavation activities including: the cleanout of the onsite waste pit; investigation of piping associated with the waste pit, and excavation and disposal of impacted soils. Confirmatory soil samples collected during this excavation work indicated VOC and 1,4-Dioxane contamination remaining at the southwestern portion of the excavation near the main building.

In April 2018, PADEP began seeking alternative remedial approaches. In-Situ chemical and/or biochemical/chemical remediation of impacted overburden soils and groundwater was considered for cleanup within the WPA

3.0 REMEDIATION PILOT STUDY DESIGN

PADEP requested that Tetra Tech identify prospective in-situ remediation technologies to target primarily VOCs at the most impacted areas. The proposals included in-situ chemical oxidation (ISCO) technology and application of similar amendments.

Innovative Environmental Technologies, Incorporated's (IET) proposal to use an activated persulfate technology to help remediate groundwater via the implementation of chemical oxidation with both sodium and potassium persulfate, activated by ferric oxide, and buffered by magnesium oxide was selected by PADEP. The proposed treatment amendment is patented under Provectus-OX; additional details about Provectus-OX is provided in **Appendix A**.

Site work was conducted to evaluate baseline conditions. This work included:

March 2019: Two shallow bedrock wells (MW-A and MW-B) were installed by Tetra Tech's subcontractor Summit Drilling in the WPA. These two wells were installed to help further characterize both vertical and horizontal shallow groundwater conditions within the WPA.

May 2019: An initial groundwater sampling event was conducted at wells located in the WPA (MW-A, MW-B and MW-13). These wells were analyzed for VOCs and 1,4-dioxane.

August 2019: An expanded groundwater sampling event was conducted at the following Site wells: MW-A, MW-B, MW-6, MW-8, MW-10, and MW-13. These wells were analyzed for VOCs and 1-4-dioxane.

October 2019: A second groundwater sampling event was conducted at wells located in the WPA (MW-A, MW-B and MW-13). All groundwater samples collected were analyzed for VOCs, 1,4-dioxane, SVOCs, pesticides, and total and dissolved Metals.

Samples from August 2019 were also analyzed for natural attenuation (NA) parameters: sulfate and ethane/ethene/methane. Throughout this report only VOCs, 1,4-dioxane, and NA parameters are presented for evaluation. The full analytical analyses and other site-wide wells results are presented in the analytical laboratory reports (**Appendix E**). A summary of results for VOCs, 1,4-dioxane and NA parameters analytical results from May 2019, August 2019, and October 2019 are presented in **Tables 1a and 2a.**

The final pilot study design included: seven temporary Direct Push Technology (DPT) injection points, four permanent injection well locations (MW-A/-B/-C/-D), and the installation (and injection) of three, double-nested 1-in wells (IW-1, IW-2 and IW-3).

A subsurface vertical barrier situated perpendicular to apparent contaminant groundwater flow was planned (**Figure 3**). This vertical barrier of injected Provectus-OX remedial product, (sodium and potassium pair persulfate and ferric oxide along with added magnesium oxide for a pH buffer) could promote the oxidation of VOCs, via the generation of sulfate free radicals from iron activation. After an initial estimated 3–6-month oxidation period, a facultative attenuation period (where sulfate reduction occurs across the targeted area) was expected, further reducing VOC concentrations.

Tetra Tech developed a performance monitoring plan to monitor long-term post-treatment performance. This included the sampling of both monitoring and injection wells within the WPA, with a schedule of 30/60/180 days after the completion of the ISCO injection phase.

4.0 SITE REMEDIATION PILOT STUDY

This section presents the field activities conducted for the Remedial Pilot Study.

4.1 FIELD ACTIVITIES

This section summarizes the field activities performed during the Remedial Pilot Study and ongoing remediation within the WPA at the Hoff HSCA Site. These field activities included: the installation of monitoring/injection wells, pre-injection (baseline) groundwater sampling, ISCO DPT, nested injection wells installation, well injections, ISCO post-injection performance groundwater sampling, ISCO sleeve deployment and implementation in wells, groundwater monitoring sampling and investigation-derived waste (IDW) disposal.

4.1.1 Injection Well Installation and Sampling (Pre-Injection Baseline)

In January 2020, three additional shallow bedrock wells (MW-C, MW-D and MW-E) were installed. The reasoning for the installation of these three new wells was to serve as both additional monitoring points and for in-situ injection wells (if needed). These three wells were appropriately constructed for the dual purpose of both monitoring well and injection point purposes.

From January 21 - 23, 2020, Tetra Tech conducted a groundwater sampling event to establish a pre-injection baseline to measure initial contaminant levels for future remedial performance evaluations. The following wells were sampled during this pre-injection groundwater sampling: MW-A, MW-B, MW-C, MW-D, MW-E, MW-F, MW-6, MW-8, MW-10, and MW-13.

All groundwater samples were placed into laboratory-provided bottleware and stored in iced coolers for sample preservation. Collected samples were relinquished to PADEP directly for shipment to PADEP's Bureau of Laboratories (BOL) for analysis.

All sample purge water was containerized and treated on-Site through granulated activated carbon (GAC) media (provided by PADEP) and released to the ground in accordance with PADEP.

Summary of 2020 January groundwater analytical results of VOCs; 1,4-dioxane, and NA parameters are presented in **Tables 1b and 2b**.

4.1.2 Injection Event 1 – Active ISCO Implementation

The active ISCO Injection Event 1 was implemented on November 16, 18-20 and 23-24, 2020. This event consisted of: ISCO injection (via DPT) at seven temporary locations (IP-01 through IP-07*)*, the installation of three double-nested injection wells *(*IW-1A/B, IW-2A/B, IW-3A/B), the installation of one double-nested monitoring well (MW-FA/B) and ISCO injections (via existing wells and new installed injection wells).

This ISCO remedial approach utilized sodium persulfate and ferric oxide solutions, with added magnesium oxide to create a pH buffer. When combined, these products pair with a self-activating

oxidation persulfate chemistry while providing the appropriate components for a longer lasting biological attenuation process following the initial oxidation event (**Appendix A**).

On November 16, 2020, IET mobilized to the Site and conducted injection activities at seven (IP-01 to IP-07) temporary DPT locations. By design, each DPT was drilled to 20 ft bgs and within wo intervals in borehole inject 150 gallons of ISCO amendments. None of the borings reached 20 ft bgs due to hitting refusal. Refusal depths differed, however ISCO was injected at each boring just above refusal and at an interval several feet shallower. The details on the quantity of amendment injected and at what intervals are presented in the IET Report attached in **Appendix B**.

From November 18 through 20, 2020, IET installed three double-nested injection wells (IW-1A/B, IW-2A/B, IW-3A/B) and one double-nested monitoring well (MW-FA/B). Drilling of all new wells was completed using a hollow stem auger through overburden, then air rotary drilling through weathered bedrock. Well construction details are provided in **Table 4** and Well Logs in **Appendix C**.

On November 23 – 24, 2020, IET conducted ISCO injection into four existing wells (MW-B, MW-C, MW-D, and MW-13) and three double nested injection wells (IW-A/B, IW-2A/B, and IW-3A/B). The well injections were successful, except in MW-D, where the annulus of the well was compromised, and daylighting of the amendment occurred around the well's casing. A total of 1,400 gallons of ISCO amendment was injected at nine screened well points during this event. Further details on the quantity of amendments injected at each well are presented in the IET Report (**Appendix B**).

4.1.3 Groundwater Sampling (Post-active ISCO Injection 1)

Under the planned performance monitoring events, scheduled 30/60/180 days post-injection; Tetra Tech conducted three groundwater sampling events after the ISCO Injection Event to collect data for comparison with baseline levels and remedial performance monitoring measurements. Dates, wells sampled, and analyses performed for each round are listed below:

- *30 days post-injection* - December 2020: Sampling took place from December 9 through 11, 2020, and included MW-A, MW-B, MW-C, MW-E, MW-FA/FB, MW-6, MW-10, MW-13, IW-1A/1B, IW-2A/2B, and IW-3A/3B. A Summary of the December 2020 groundwater analytical results of VOCs; 1,4-dioxane, and NA parameters are presented in **Tables 1c and 2c.**
- *60 days post-injection*; January 2021: Sampling took place from January 9 through 11, 2020, and included MW-A, MW-B, MW-C, MW-E, MW-FA/FB, MW-6, MW-10, MW-13, IW-1A/1B, IW-2A/2B, and IW-3A/3B. A Summary of the January 2021 groundwater analytical results of VOCs; 1,4-dioxane, and NA parameters are presented in **Tables 1d and 2d**.
- *180 days post-injection*; June 2021: Sampling took place from June 1 through 3 and 22, 2021, and included MW-A, MW-C, MW-E, MW-FA/FB, MW-10, MW-13, IW-2A/2B, and IW-3A/3B. A Summary of the June 2021 groundwater analytical results of VOCs; 1,4-dioxane, and NA parameters are presented in **Tables 1e and 2e**.

As previously noted, for wells located within the in WPA, contaminants of concern (COCs) are only VOCs and 1,4-dioxane, therefore only VOCs, 1,4-dioxane and NA parameters are presented for evaluation.

Low-flow groundwater sampling techniques were followed during each of the individual sampling events. All field sample and purge sheets are included in **Appendix D.**

4.1.4 Pre-deployment Groundwater Sampling and ISCO (Provectus) Sleeves Deployment – Passive ISCO Implementation 1

During this remedial process, Tetra Tech and IET regularly provided PADEP with data evaluations summarizing the remediation progress. In August 2021, while reviewing the performance groundwater data collected in June 2021, it appeared that subsurface oxidation processes (induced by ISCO amendments) were weakened at the WPA. Such was expected as approximately 180-days had passed since the active ISCO injection occurred, which corresponds to the oxidation longevity for the product amended. In several wells (MW-C, MW-FA, MW-FB, IW-2A, and IW-2B) elevated levels of VOCs COCs were detected as well as 1,4-dioxane exceeding criteria (PADEP Medium Specific Concentration for residential used aquifer). However, field observation (brown-red color of sampled groundwater); water quality measurements (specific conductivity, pH, and ORP); and NA parameters (elevated total Fe and high sulfate concentrations) indicate that degradation process still goes on and likely via sulfate reduction.

PADEP requested Tetra Tech to address high COCs concentrations found in WPA wells – “hot spots.” Since ISCO amended material is still within WPA subsurface, another injection at the time was not necessary. Tetra Tech proposed deployment of ISCO sleeves to enhance degradation of COCs at hot spot wells.

- To establish present groundwater conditions and obtain pre-deployment ISCO sleeves implementation data, a groundwater sampling event was conducted approximately 300 days post injection.
- ~300 days post-injection; September 2021: Sampling took place from September 27 through 30, 2021, and included MW-A, MW-B, MW-C, MW-D, MW-FA/FB, MW-10, MW-13, IW-1A/1B, IW-2A/2B, and IW-3A/3B. A Summary of the September 2021 groundwater analytical results of VOCs; 1,4-dioxane, and NA parameters are presented in **Tables 1f and 2f**.

On October 1, 2021, sixteen passive sleeves (provided by Provectus Environmental Services) were installed in wells MW-B, MW-C, and MW-13, upon the completion of the fourth groundwater sampling event. These passive sleeves (filled with sodium persulfate and ferric oxide solutions, with added magnesium oxide) were installed to continue to treat hotspots within the WPA. Details on sleeves placement are provided in **Table 5.**

4.1.5 Groundwater Sampling (Post-Passive ISCO Implementation 1)

Tetra Tech conducted one groundwater sampling event, post-passive sleeve deployment, to collect data for comparison with remedial performance monitoring measurements:

- December 2021: Sampling included MW-A, MW-C, MW-D, IW-B, IW-1A/1B, IW-2A/2B, IW-3A/3B, MW-2S/2DL/2DV, MW-03, MW-04DL/4DV, MW-5S/3DL/5DV, MW-6S/6DL/6DV, MW-7S, MW-

08DL/8DU, MW-10 and MW-FA/FB. A Summary of the December 2021 groundwater analytical results of VOCs, 1,4-dioxane, and NA parameters are presented in **Tables 1g and 2.**

5.0 SUMMARY, CONCLUSIONS, AND RECOMMENDATION

This section summarizes analytical results for contaminants of concern, draws conclusions from the ISCO pilot study, and provides recommendations based on the data collected thus far.

5.1 ANALYTICAL SUMMARY

Below is summary of detected values at each WPA well from May 2019 to December 2021. Tetra Tech compared the results to the PADEP Medium Specific Concentrations (MSCs, measured in micrograms per liter – µg/L) for a used aquifer with Total Dissolved Solids (TDS) ≤ 2,500 mg/L (milligrams per Liter) in a residential scenario. For uniformity, data for all sampling rounds were compared to PADEP MSCs revised and published on November 21, 2021.

MW-A

MW-A was sampled in May, August, and October 2019 (pre-baseline), January 2020 (pre-injection), December 2020 (30-day post-injection), January 2021 (60-day post-injection), June 2021 (180-day post-injection), September 2021 (pre-sleeve deployment), and December 2021 (post-sleeve deployment).

1,4-Dioxane concentrations only exceeded the MSC (6.5 µg/L) in May 2019 (14.1 µg/L); the rest of the samples were below MSC: August 2019 (non-detect); October 2019 (5.6 µg/L); January 2020 (non-detect, ND); December 2020 (0.97 µg/L); January 2021 (0.81 µg/L), June 2021 (6.4 µg/L); September 2021 (non-detect); and December 2021 (2.0 B).

MW-B

MW-B was sampled in May, August, and October 2019 (pre-baseline), January 2020 (pre-injection), December 2020 (30-day post-injection), January 2021 (60-day post-injection), September 2021 (pre-sleeve deployment), and December 2021 (post-sleeve deployment).

Benzene concentrations exceeded the MSC (5 µg/L) for all samples except in May 2019 (non-detect). Exceeding results are as follows: August 2019 (30.1 Q µg/L); October 2019 (220 Q µg/L); January 2020 (49 Q µg/L); December 2020 (15 µg/L), January 2021 (49 µg/L), September 2021 (28.8 Q µg/L) and December 2021 (263 µg/L).

Chlorobenzene concentrations exceeded the MSC of 100 µg/L for all samples except May 2019 (non-detect). Exceeding results are as follows: August 2019 (8830 µg/L); October 2019 (34700 µg/L); January 2020 (13100 µg/L), December 2020 (1500 µg/L), January 2021 (3000 µg/L), September 2021 (2010 µg/L); and December 2021 (13600 µg/L).

1,2-Dichlorobenzene concentrations exceeded the MSC of 600 µg/L in August 2019 (2330 Q µg/L); October 2019 (1160 Q µg/L); January 2020 (2820 Q µg/L); and January 2021 (940 µg/L). Non-exceedance results were as follows: May 2019 (non-detect); December 2020 (260 µg/L); September 2021 (312 Q µg/L) and December 2021 (509 µg/L).

1,4-Dichlorobenzene concentrations exceeded the MSC of 75 µg/L for all samples except in May 2019 (0.56 µg/L). Results were the following: August 2019 (476 Q µg/L); October 2019 (697 Q µg/L); January 2020 (748 Q); December 2020 (100 µg/L), January 2021 (210 µg/L); September 2021 (95.6 Q µg/L) and December 2021 (270 µg/L).

1,1-Dichloroethane concentrations exceeded the MSC of 31 µg/L in January 2020 and the Resident Standards (31 µg/L) for August 2019 and January 2021, with ND May 2019 (pre-baseline), 158 Q µg/L August 2019 (pre-baseline), and 27.4 Q µg/L October 2019 (pre-baseline), 202 Q µg/L January 2020 (pre-injection), 23 µg/L December 2020 (post-injection), 67 µg/L January 2021 (60-day post-injection), 22.7 Q µg/L September 2021 (pre-sleeve deployment) and 26.6 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethene concentrations exceeded the MSC (7 µg/L) for August and October 2019 and January 2020, with ND µg/L May 2019 (pre-baseline), 35.9 Q µg/L August 2019 (pre-baseline), and 8.4 Q µg/L October 2019 (pre-baseline), 50.6 Q µg/L January 2020 (pre-injection), ND µg/L December 2020 (post-injection), ND µg/L January 2021 (60-day post-injection), ND µg/L September 2021 (pre-sleeve deployment) and ND µg/L November-December 2021 (post-sleeve deployment).

cis-1,2-Dichloroethene concentrations exceeded MSC (70 µg/L) for August and October 2019 and January 2020, with ND µg/L May 2019 (pre-baseline), 2370 Q µg/L August 2019 (pre-baseline), and 278 Q µg/L October 2019 (pre-baseline), 3510 Q µg/L January 2020 (pre-injection), 16 µg/L December 2020 (post-injection), 39 µg/L January 2021 (60-day post-injection), 7.8 Q µg/L September 2021 (pre-sleeve deployment) and 17.4 µg/L November-December 2021 (post-sleeve deployment).

Trichloroethene concentrations exceeded the MSC (5 µg/L) for August and October 2019 and January 2020, with ND May 2019 (pre-baseline), 45.2 Q µg/L August 2019 (pre-baseline), and 12.6 Q µg/L October 2019 (pre-baseline), 15.4 Q µg/L January 2020 (pre-injection), 4 µg/L December 2020 (post-injection), 5.7 µg/L January 2021 (60-day post-injection), 3.6 µg/L September 2021 (pre-sleeve deployment) and ND November-December 2021 (post-sleeve deployment).

Vinyl chloride concentrations exceeded the MSC (2 µg/L) for August and October 2019 and January 2020, with ND May 2019 (pre-baseline), 28.8 Q µg/L August 2019 (pre-baseline), and 6.1 µg/L October 2019 (pre-baseline), 56.4 Q µg/L January 2020 (pre-injection), ND December 2020 (post-injection), ND January 2021 (60-day post-injection), ND September 2021 (pre-sleeve deployment) and ND November-December 2021 (post-sleeve deployment).

1,4-Dioxane concentrations exceeded the MSC (27 µg/L) for January 2020 and the Residential Standards (6.5 µg/L) for August 2019 and November-December 2021, with ND May 2019 (pre-baseline), 17 µg/L August 2019 (pre-baseline), and 5.5 µg/L October 2019 (pre-baseline), 25.8 µg/L January 2020 (pre-injection), 4 µg/L December 2020 (post-injection), 39 µg/L January 2021 (60-day post-injection), 7.8 Q µg/L September 2021 (pre-sleeve deployment) and 9.6 µg/L November-December 2021 (post-sleeve deployment).

MW-C

MW-C was sampled in January 2020 (pre-injection), December 2020 (30-day post-injection), January 2021 (60-day post-injection), June 2021 (90-day post-injection), September 2021 (pre-sleeve deployment), and November-December 2021 (post-sleeve deployment).

Bromomethane concentrations exceeded the MSC (10 µg/L) for June, September, and November-December 2021, with 0.74 B µg/L January 2020 (pre-injection), 4.6 µg/L December 2020 (post-injection), 5 µg/L January 2021 (60-day post-injection), 27.6 µg/L June 2021 (90-day post-injection), 36.2 Q µg/L September 2021 (pre-sleeve deployment) and 13.8 µg/L November-December 2021 (post-sleeve deployment).

Chlorobenzene concentrations exceeded the MSC (100 µg/L) for January 2021 and June, September, and November-December 2021, with 1140 µg/L January 2020 (pre-injection), 21 µg/L December 2020 (post-injection), 99 µg/L January 2021 (60-day post-injection), 336 µg/L June 2021 (90-day post-injection), 322 Q µg/L September 2021 (pre-sleeve deployment) and 324 µg/L November-December 2021 (post-sleeve deployment).

Chloromethane (methyl chloride) concentrations exceeded the MSC (30 µg/L) for all sampling events after January 2020, with ND January 2020 (pre-injection), 35 µg/L December 2020 (post-injection), 62 µg/L January 2021 (60-day post-injection), 164 µg/L June 2021 (90-day post-injection), 156 Q µg/L September 2021 (pre-sleeve deployment) and 69.1 µg/L November-December 2021 (post-sleeve deployment).

1,2-Dichlorobenzene concentrations exceeded the MSC (600 µg/L) for January 2020 and June 2021; with 3820 µg/L January 2020 (pre-injection), 320 µg/L December 2020 (post-injection), 310 µg/L January 2021 (60-day post-injection), 1090 µg/L June 2021 (90-day post-injection), 565 µg/L September 2021 (pre-sleeve deployment) and 599 µg/L November-December 2021 (post-sleeve deployment).

1,4-Dichlorobenzene concentrations exceeded the MSC (75 µg/L) for January 2020 and June, September, and November-December 2021, with 442 Q µg/L January 2020 (pre-injection), 73 µg/L December 2020 (post-injection), 62 µg/L January 2021 (60-day post-injection), 274 µg/L June 2021 (90-day post-injection), 138 Q µg/L September 2021 (pre-sleeve deployment) and 131 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethane concentrations exceeded the MSC (31 µg/L) for all events, with 244 Q µg/L January 2020 (pre-injection), 350 µg/L December 2020 (post-injection), 190 µg/L January 2021 (60-day post-injection), 386 µg/L June 2021 (90-day post-injection), 242 Q µg/L September 2021 (pre-sleeve deployment) and 218 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethene concentrations exceeded the MSC (7 µg/L) for January 2021, with 25.8 Q µg/L January 2020 (pre-injection). 1,1-Dichloroethene levels remained at ND for all subsequent sampling events.

cis-1,2-Dichloroethene concentrations exceeded the MSC (70 µg/L) for January 2020 and September and November-December 2021, with 1100 µg/L January 2020 (pre-injection), 6.8 µg/L December 2020

(post-injection), 20 µg/L January 2021 (60-day post-injection), 47.8 µg/L June 2021 (90-day post-injection), 108 Q µg/L September 2021 (pre-sleeve deployment) and 270 µg/L November-December 2021 (post-sleeve deployment).

1,1,2,2-Tetrachloroethane concentrations exceeded the MSC (0.84 µg/L) in December 2020, January, June, and September 2021, and January and November-December 2021, with no sampling on January 2020 (pre-injection), 1.8 µg/L December 2020 (post-injection), 1.2 µg/L January 2021 (60-day post-injection), 33.6 µg/L June 2021 (90-day post-injection), 7.2 µg/L September 2021 (pre-sleeve deployment) and 1.1 µg/L November-December 2021 (post-sleeve deployment).

1,1,2-Trichloroethane concentrations exceeded the MSC (5 µg/L) for December 2020, with no sampling on January 2020 (pre-injection), 96 µg/L December 2020 (post-injection), 2.3 µg/L January 2021 (60-day post-injection), 4.4 µg/L June 2021 (90-day post-injection), 3.6 µg/L September 2021 (pre-sleeve deployment) and 2.4 µg/L November-December 2021 (post-sleeve deployment).

Trichloroethene concentrations exceeded the MSC (5 µg/L) for January 2020, and June, September, and November-December 2021, with 230 Q µg/L January 2020 (pre-injection), ND µg/L December 2020 (post-injection), 1.7 µg/L January 2021 (60-day post-injection), 8.5 µg/L June 2021 (90-day post-injection), 8.6 Q µg/L September 2021 (pre-sleeve deployment) and 13.5 µg/L November-December 2021 (post-sleeve deployment).

Vinyl chloride concentrations exceeded the MSC (2 µg/L) for January 2020, with 5.5 QQ µg/L January 2020 (pre-injection). Vinyl chloride levels remained at ND for all subsequent sampling events.

1,4-Dioxane concentrations exceeded the MSC (6.6 µg/L) for January 2020, and June, September, and November-December 2021, with 28.8 µg/L January 2020 (pre-injection), 0.45 µg/L December 2020 (post-injection), 2.8 µg/L January 2021 (60-day post-injection), 17.3 µg/L June 2021 (90-day post-injection), 14.5 µg/L September 2021 (pre-sleeve deployment) and 23.3 µg/L November-December 2021 (post-sleeve deployment).

MW-D

MW-D was sampled in January 2020 (pre-injection), September 2021 (pre-sleeve deployment), and November-December 2021 (post-sleeve deployment), and had no exceedances of VOCs and 1,4-Dioxane during these sampling events.

MW-E

MW-E was sampled in January 2020 (pre-injection), December 2020 (30-day post-injection), January 2021 (60-day post-injection), June 2021 (90-day post-injection), and had no exceedances of VOCs and 1,4-Dioxane during these sampling events.

MW-FA

MW-FA was sampled in December 2020 (30-day post-injection), January 2021 (60-day post-injection), June 2021 (90-day post-injection), September 2021 (pre-sleeve deployment), and November-December 2021 (post-sleeve deployment).

Benzene concentrations exceeded the MSC (5 µg/L) for all samples, with 51 µg/L December 2020 (post-injection), 67 µg/L January 2021 (60-day post-injection), 80.2 µg/L June 2021 (90-day post-injection), 56.2 µg/L September 2021 (pre-sleeve deployment), and 42.8 µg/L November-December 2021 (post-sleeve deployment).

Chlorobenzene concentrations exceeded the MSC (100 µg/L) for all samples except January 2021, with 1200 µg/L December 2020 (post-injection), 2.2 µg/L January 2021 (60-day post-injection), 979 µg/L June 2021 (90-day post-injection), 1480 Q µg/L September 2021 (pre-sleeve deployment), and 856 µg/L November-December 2021 (post-sleeve deployment).

Chloromethane (methyl chloride) concentrations exceeded the MSC (30 µg/L) for January 2021, with 120 µg/L January 2021 (60-day post-injection). Chloromethane (methyl chloride) levels remained at ND for all subsequent sampling events.

1,2-Dichlorobenzene concentrations exceeded the MSC (600 µg/L) for December 2020, with 610 µg/L December 2020 (post-injection), 480 µg/L January 2021 (60-day post-injection), 453 µg/L June 2021 (90-day post-injection), 590 Q µg/L September 2021 (pre-sleeve deployment), and 425 µg/L November-December 2021 (post-sleeve deployment).

1,4-Dichlorobenzene concentrations exceeded the MSC (75 µg/L) for all sampling events, with 200 µg/L December 2020 (post-injection), 190 µg/L January 2021 (60-day post-injection), 185 µg/L June 2021 (90-day post-injection), 210 µg/L September 2021 (pre-sleeve deployment), and 186 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethane concentrations exceeded the MSC (31 µg/L) for January and September 2021, with 29 µg/L December 2020 (post-injection), 31 µg/L January 2021 (60-day post-injection), 27.6 µg/L June 2021 (90-day post-injection), 33.8 µg/L September 2021 (pre-sleeve deployment), and 28.1 µg/L November-December 2021 (post-sleeve deployment).

1,2-Dichloroethane concentrations exceeded the MSC (5 µg/L) for all sampling events, with 14 µg/L December 2020 (post-injection), 14 µg/L January 2021 (60-day post-injection), 16.8 µg/L June 2021 (90-day post-injection), 13.7 µg/L September 2021 (pre-sleeve deployment), and 13.3 µg/L November-December 2021 (post-sleeve deployment).

cis-1,2-Dichloroethene concentrations exceeded the MSC (70 µg/L) for December 2020 and September 2021, with 150 µg/L December 2020 (post-injection), 14 µg/L January 2021 (60-day post-injection), 55 µg/L June 2021 (90-day post-injection), 126 µg/L September 2021 (pre-sleeve deployment), and 65.5 µg/L November-December 2021 (post-sleeve deployment).

Methyl Tert Butyl Ether concentrations exceeded the MSC (20 µg/L) for all sampling events except January 2021, with 300 µg/L December 2020 (post-injection), 3.8 µg/L January 2021 (60-day post-injection), 385 µg/L June 2021 (90-day post-injection), 323 µg/L September 2021 (pre-sleeve deployment), and 279 µg/L November-December 2021 (post-sleeve deployment).

Vinyl chloride concentrations exceeded the MSC (2 µg/L) for all sampling events, with 36 µg/L December 2020 (post-injection), 47 µg/L January 2021 (60-day post-injection), 40 µg/L June 2021 (90-day post-

injection), 47.4 µg/L September 2021 (pre-sleeve deployment), and 43 µg/L November-December 2021 (post-sleeve deployment).

1,4-Dioxane concentrations exceeded the MSC (6.6 µg/L) for all sampling events, with 97 µg/L December 2020 (post-injection), 100 µg/L January 2021 (60-day post-injection), 98.6 µg/L June 2021 (90-day post-injection), 97.2 µg/L September 2021 (pre-sleeve deployment), and 151 B µg/L November-December 2021 (post-sleeve deployment).

MW-FB

MW-FB was sampled in May, August, and October 2019 (pre-baseline), January 2020 (pre-injection), December 2020 (30-day post-injection), January 2021 (60-day post-injection), June 2021 (90-day post-injection), September 2021 (pre-sleeve deployment), and November-December 2021 (post-sleeve deployment).

Benzene concentrations exceeded the MSC (5 µg/L) for all samples except December 2020, with 1.4 µg/L December 2020 (post-injection), 6.9 µg/L January 2021 (60-day post-injection), 8.1 µg/L June 2021 (90-day post-injection), 10.2 Q µg/L September 2021 (pre-sleeve deployment), and 11.1 µg/L November-December 2021 (post-sleeve deployment).

Chlorobenzene concentrations exceeded the MSC (100 µg/L) for all samples except January 2021, with 360 µg/L December 2020 (post-injection), 7.6 µg/L January 2021 (60-day post-injection), 1780 µg/L June 2021 (90-day post-injection), 2680 Q µg/L September 2021 (pre-sleeve deployment), and 2260 µg/L November-December 2021 (post-sleeve deployment).

Chloromethane (methyl chloride) concentrations exceeded the MSC (30 µg/L) for January 2021, with 2.6 µg/L December 2020 (post-injection), 960 µg/L January 2021 (60-day post-injection), 1.6 µg/L June 2021 (90-day post-injection), 1.4 µg/L September 2021 (pre-sleeve deployment), and ND November-December 2021 (post-sleeve deployment).

1,2-Dichlorobenzene concentrations exceeded the MSC (600 µg/L) for all sampling events except December 2020, with 590 µg/L December 2020 (post-injection), 680 µg/L January 2021 (60-day post-injection), 1240 µg/L June 2021 (90-day post-injection), 1900 Q µg/L September 2021 (pre-sleeve deployment), and 1900 µg/L November-December 2021 (post-sleeve deployment).

1,4-Dichlorobenzene concentrations exceeded the MSC (75 µg/L) for all sampling events, with 140 µg/L December 2020 (post-injection), 140 µg/L January 2021 (60-day post-injection), 262 µg/L June 2021 (90-day post-injection), 346 Q µg/L September 2021 (pre-sleeve deployment), and 354 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethane concentrations exceeded the MSC (31 µg/L) for all sampling events, with 160 µg/L December 2020 (post-injection), 140 µg/L January 2021 (60-day post-injection), 140 µg/L June 2021 (90-day post-injection), 174 Q µg/L September 2021 (pre-sleeve deployment), and 170 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethene concentrations exceeded the MSC (7 µg/L) for June, September, and November-December 2021, with ND December 2020 (post-injection), 5.2 µg/L January 2021 (60-day post-injection),

15.2 µg/L June 2021 (90-day post-injection), 29.8 Q µg/L September 2021 (pre-sleeve deployment), and 30.6 µg/L November-December 2021 (post-sleeve deployment).

cis-1,2-Dichloroethene concentrations exceeded the MSC (70 µg/L) for every sampling event except January 2021, with 510 µg/L December 2020 (post-injection), ND January 2021 (60-day post-injection), 1340 µg/L June 2021 (90-day post-injection), 2200 Q µg/L September 2021 (pre-sleeve deployment), and 2140 µg/L November-December 2021 (post-sleeve deployment).

trans-1,2-Dichloroethene concentrations exceeded the MSC (100 µg/L) for December 2020 and January 2021, with 130 µg/L December 2020 (post-injection), 130 µg/L January 2021 (60-day post-injection), 58.2 µg/L June 2021 (90-day post-injection), 58.8 Q µg/L September 2021 (pre-sleeve deployment), and 76 µg/L November-December 2021 (post-sleeve deployment).

Trichloroethene concentrations exceeded the MSC (5 µg/L) for every sampling event, with µg/L December 2020 (post-injection), µg/L January 2021 (60-day post-injection), µg/L June 2021 (90-day post-injection), µg/L September 2021 (pre-sleeve deployment), and µg/L November-December 2021 (post-sleeve deployment).

Vinyl chloride concentrations exceeded the MSC (2 µg/L) for all sampling events except December 2020, with ND December 2020 (post-injection), 6.7 µg/L January 2021 (60-day post-injection), 11.5 µg/L June 2021 (90-day post-injection), 12.6 Q µg/L September 2021 (pre-sleeve deployment), and 16.4 µg/L November-December 2021 (post-sleeve deployment).

1,4-Dioxane concentrations exceeded the MSC (6.6 µg/L) for all sampling events, with 42 µg/L December 2020 (post-injection), 27 µg/L January 2021 (60-day post-injection), 26.7 µg/L June 2021 (90-day post-injection), 34.4 µg/L September 2021 (pre-sleeve deployment), and 76.3 B µg/L November-December 2021 (post-sleeve deployment).

MW-8

MW-8 was sampled in August 2019 (pre-baseline), January 2020 (pre-injection), December 2020 (post-injection), and November-December 2021 (post-sleeve deployment).

Benzene concentrations exceeded the MSC (5 µg/L) for November-December 2021, for all samples, with 2.5 µg/L August 2019 (pre-baseline), 0.5 µg/L January 2020 (pre-injection), and 47.8 µg/L November-December 2021 (post-sleeve deployment).

Chlorobenzene concentrations exceeded the MSC (100 µg/L) for November-December 2021, with 64.7 µg/L August 2019 (pre-baseline), 44.8 µg/L January 2020 (pre-injection), and 2240 µg/L November-December 2021 (post-sleeve deployment).

cis-1,2-Dichloroethene concentrations exceeded the MSC (70 µg/L) for November-December 2021, with 6.4 µg/L August 2019 (pre-baseline), 18 µg/L January 2020 (pre-injection), and 70.6 µg/L November-December 2021 (post-sleeve deployment).

Tetrahydrofuran concentrations exceeded the MSC (25 µg/L) for January 2020, with 144 E µg/L (pre-injection). Tetrahydrofuran levels remained at ND for all subsequent sampling events.

Trichloroethene concentrations exceeded the MSC (5 µg/L) for November-December 2021, with ND August 2019 (pre-baseline), 1.1 µg/L January 2020 (pre-injection), and 7.6 µg/L November-December 2021 (post-sleeve deployment).

Vinyl chloride concentrations exceeded the MSC (2 µg/L) for November-December 2021, with 0.54 µg/L August 2019 (pre-baseline), 1.2 µg/L January 2020 (pre-injection), and 18.3 µg/L November-December 2021 (post-sleeve deployment).

1,4-Dioxane concentrations exceeded the MSC (6.6 µg/L) for November-December 2021, with 37.8 µg/L (post-sleeve deployment). 1,4-Dioxane levels remained at ND for all subsequent sampling events.

MW-10

MW-10 was sampled in August 2019 (pre-baseline), January 2020 (pre-injection), December 2020 (post-injection), January 2021 (60-day post-injection), June 2021 (90-day post-injection), September 2021 (pre-sleeve deployment) and November-December 2021 (post-sleeve deployment).

Benzene concentrations exceeded the MSC (5 µg/L) for August 2019 and November-December 2021, with 5.7 µg/L August 2019 (pre-baseline), 4.6 µg/L January 2020 (pre-injection), 0.23 µg/L December 2020 (post-injection), 3.8 µg/L January 2021 (60-day post-injection), 1.5 µg/L June 2021 (90-day post-injection), 2.2 µg/L September 2021 (pre-sleeve deployment) and 7.3 µg/L November-December 2021 (post-sleeve deployment).

Chlorobenzene concentrations exceeded the MSC (100 µg/L) for November-December 2021, with 283 µg/L August 2019 (pre-baseline), 390 µg/L January 2020 (pre-injection), 40 µg/L December 2020 (post-injection), 0.49 µg/L January 2021 (60-day post-injection), 213 µg/L June 2021 (90-day post-injection), 234 µg/L September 2021 (pre-sleeve deployment) and 572 µg/L November-December 2021 (post-sleeve deployment).

Vinyl chloride concentrations exceeded the MSC (2 µg/L) for every event except June and September 2021, with 3.4 µg/L August 2019 (pre-baseline), 2.6 µg/L January 2020 (pre-injection), ND December 2020 (post-injection), 4.4 µg/L January 2021 (60-day post-injection), 0.69 µg/L June 2021 (90-day post-injection), 1.6 µg/L September 2021 (pre-sleeve deployment) and 5.3 µg/L November-December 2021 (post-sleeve deployment).

MW-13

MW-13 was sampled in May, August, and October 2019 (pre-baseline), January 2020 (pre-injection), December 2020 (post-injection), January 2021 (60-day post-injection), June 2021 (90-day post-injection), September 2021 (pre-sleeve deployment) and November-December 2021 (post-sleeve deployment).

Benzene concentrations exceeded the MSC (5 µg/L) for December 2020, with 0.75 µg/L May 2019 (pre-baseline), ND August 2019 (pre-baseline), ND October 2019 (pre-baseline), ND January 2020 (pre-injection), 5.8 µg/L December 2020 (post-injection), 0.66 µg/L January 2021 (60-day post-injection), 1.2 µg/L June 2021 (90-day post-injection), ND September 2021 (pre-sleeve deployment) and ND November-December 2021 (post-sleeve deployment).

Chloromethane (methyl chloride) concentrations exceeded the MSC (30 µg/L) for December 2020, with ND µg/L May 2019 (pre-baseline), ND µg/L August 2019 (pre-baseline), ND µg/L October 2019 (pre-baseline), ND µg/L January 2020 (pre-injection), 78 µg/L December 2020 (post-injection), 0.81 µg/L January 2021 (60-day post-injection), ND µg/L June 2021 (90-day post-injection), ND µg/L September 2021 (pre-sleeve deployment) and ND µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethane concentrations exceeded the MSC (31 µg/L) for May and August 2019, with 43.4 µg/L May 2019 (pre-baseline), 46 µg/L August 2019 (pre-baseline), 24.6 µg/L October 2019 (pre-baseline), 25.7 µg/L January 2020 (pre-injection), 4.5 µg/L December 2020 (post-injection), 1.5 µg/L January 2021 (60-day post-injection), 3.2 µg/L June 2021 (90-day post-injection), 1.2 µg/L September 2021 (pre-sleeve deployment) and 2.3 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethene concentrations exceeded the MSC (7 µg/L) for May and August 2019, with 8.5 µg/L May 2019 (pre-baseline), 7.3 µg/L August 2019 (pre-baseline), 6.4 µg/L October 2019 (pre-baseline), 4.3 µg/L January 2020 (pre-injection), ND December 2020 (post-injection), ND January 2021 (60-day post-injection), ND June 2021 (90-day post-injection), ND September 2021 (pre-sleeve deployment) and ND November-December 2021 (post-sleeve deployment).

cis-1,2-Dichloroethene concentrations exceeded the MSC (70 µg/L) for October 2019, with 10.8 µg/L May 2019 (pre-baseline), 12.3 µg/L August 2019 (pre-baseline), 71.7 Q µg/L October 2019 (pre-baseline), 16 µg/L January 2020 (pre-injection), 0.45 µg/L December 2020 (post-injection), 0.15 µg/L January 2021 (60-day post-injection), ND June 2021 (90-day post-injection), ND September 2021 (pre-sleeve deployment) and 1.2 µg/L November-December 2021 (post-sleeve deployment).

Trichloroethene concentrations exceeded the MSC (5 µg/L) for May, August, and October 2019, with 21.3 µg/L May 2019 (pre-baseline), 21.3 µg/L August 2019 (pre-baseline), 103 Q µg/L October 2019 (pre-baseline), 4.4 µg/L January 2020 (pre-injection), 0.067 µg/L December 2020 (post-injection), 0.24 µg/L January 2021 (60-day post-injection), ND June 2021 (90-day post-injection), ND September 2021 (pre-sleeve deployment) and ND November-December 2021 (post-sleeve deployment).

Vinyl chloride concentrations exceeded the MSC (2 µg/L) for August 2019, with 1.8 µg/L May 2019 (pre-baseline), 2 µg/L August 2019 (pre-baseline), 1.8 µg/L October 2019 (pre-baseline), 1.3 µg/L January 2020 (pre-injection), 0.18 µg/L December 2020 (post-injection), 0.19 µg/L January 2021 (60-day post-injection), ND June 2021 (90-day post-injection), ND September 2021 (pre-sleeve deployment) and ND November-December 2021 (post-sleeve deployment).

1,4-Dioxane concentrations exceeded the MSC (6.6 µg/L) for August 2019 and January 2020, with 1.8 µg/L May 2019 (pre-baseline), 53.3 µg/L August 2019 (pre-baseline), 1.8 µg/L October 2019 (pre-baseline), 47 µg/L January 2020 (pre-injection), 3.6 µg/L December 2020 (post-injection), 2.1 µg/L January 2021 (60-day post-injection), 2.9 µg/L June 2021 (90-day post-injection), non-detect September 2021 (pre-sleeve deployment) and 4.5 µg/L November-December 2021 (post-sleeve deployment).

IW-1A

IW-1A was sampled in December 2020 (post-injection), January 2021 (60-day post-injection), September 2021 (pre-sleeve deployment) and November-December 2021 (post-sleeve deployment).

Bromomethane concentrations exceeded the MSC (10 µg/L) for December 2022 and September 2021, with 15 µg/L December 2020 (post-injection), 0.13 µg/L January 2021 (60-day post-injection), 11.2µg/L September 2021 (pre-sleeve deployment) and 9.5 µg/L November-December 2021 (post-sleeve deployment).

Chloromethane (methyl chloride) concentrations exceeded the MSC Standards (30 µg/L) for December 2020, with 63 µg/L December 2020 (post-injection), 0.88 µg/L January 2021 (60-day post-injection), 29.4 µg/L September 2021 (pre-sleeve deployment) and 23.2 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethane concentrations exceeded the MSC (31 µg/L) for December 2020, with 130 µg/L December 2020 (post-injection), 28 µg/L January 2021 (60-day post-injection), ND September 2021 (pre-sleeve deployment) and 23.1 µg/L November-December 2021 (post-sleeve deployment).

IW-1B

IW-1B was sampled in December 2020 (post-injection), January 2021 (60-day post-injection), September 2021 (pre-sleeve deployment) and November-December 2021 (post-sleeve deployment).

Benzene concentrations exceeded the MSC (5 µg/L) for January 2021, with 0.68 µg/L December 2020 (post-injection), 7.1 µg/L January 2021 (60-day post-injection), ND September 2021 (pre-sleeve deployment) and ND November-December 2021 (post-sleeve deployment).

Bromomethane concentrations exceeded the MSC (10 µg/L) for December 2020, with 16 µg/L December 2020 (post-injection), 0.44 µg/L January 2021 (60-day post-injection), 7.4 Q µg/L September 2021 (pre-sleeve deployment) and 5.8 µg/L November-December 2021 (post-sleeve deployment).

Chloromethane (methyl chloride) concentrations exceeded the MSC (30 µg/L) for December 2020, with 63 µg/L December 2020 (post-injection), 13 µg/L January 2021 (60-day post-injection), 24 Q µg/L September 2021 (pre-sleeve deployment) and 12.6 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethene concentrations exceeded the MSC (31 µg/L) for January 2021, with 110 µg/L December 2020 (post-injection), ND January 2021 (60-day post-injection), 67.9 µg/L September 2021 (pre-sleeve deployment) and 53.4 µg/L November-December 2021 (post-sleeve deployment).

Tetrahydrofuran concentrations exceeded the MSC (2 µg/L) for January 2020, with no sampling on December 2020 (post-injection) and January 2021 (60-day post-injection), 32.1 µg/L September 2021 (pre-sleeve deployment) and 12.8 µg/L November-December 2021 (post-sleeve deployment).

Trichloroethene concentrations exceeded the MSC (5 µg/L) for December 2020, with 0.16 µg/L December 2020 (post-injection), 13 µg/L January 2021 (60-day post-injection), 44.3 Q µg/L September 2021 (pre-sleeve deployment) and 44 µg/L November-December 2021 (post-sleeve deployment).

1,4-Dioxane concentrations exceeded the MSC (6.6 µg/L) every sampling event, with 12 µg/L December 2020 (post-injection), 15 µg/L January 2021 (60-day post-injection), 26 µg/L September 2021 (pre-sleeve deployment) and 36.8 µg/L November-December 2021 (post-sleeve deployment).

IW-2A

IW-2A was sampled in December 2020 (post-injection), January 2021 (60-day post-injection), June 2021 (90-day post-injection), September 2021 (pre-sleeve deployment), and November-December 2021 (post-sleeve deployment).

Benzene concentrations exceeded the MSC (5 µg/L) for January 2021, with 1.2 µg/L December 2020 (post-injection), 8.3 µg/L January 2021 (60-day post-injection), 2.8 µg/L June 2021 (90-day post-injection), 2 µg/L September 2021 (pre-sleeve deployment), and 0.77 µg/L November-December 2021 (post-sleeve deployment).

Bromomethane concentrations exceeded the MSC (10 µg/L) for June, September, and November-December 2021, with 2.9 µg/L December 2020 (post-injection), 1.0 µg/L January 2021 (60-day post-injection), 61.7 µg/L June 2021 (90-day post-injection), 76 E µg/L September 2021 (pre-sleeve deployment), and 45.8 µg/L November-December 2021 (post-sleeve deployment).

Carbon disulfide concentrations exceeded the MSC (1500 µg/L) for January 2021, with 0.62 µg/L December 2020 (post-injection), 1900 µg/L January 2021 (60-day post-injection), 1.8 µg/L June 2021 (90-day post-injection), 0.7 µg/L September 2021 (pre-sleeve deployment), and ND November-December 2021 (post-sleeve deployment).

Chlorobenzene concentrations exceeded the MSC (100 µg/L) for June 2021, with 85 µg/L December 2020 (post-injection), 24 µg/L January 2021 (60-day post-injection), 346 µg/L June 2021 (90-day post-injection), 95.8 E µg/L September 2021 (pre-sleeve deployment), and 5.4 µg/L November-December 2021 (post-sleeve deployment).

Chloromethane (methyl chloride) concentrations exceeded the MSC (30 µg/L) for every sampling event except December 2020, with 7.2 µg/L December 2020 (post-injection), 3600 µg/L January 2021 (60-day post-injection), 164 µg/L June 2021 (90-day post-injection), 338 µg/L September 2021 (pre-sleeve deployment), and 211 µg/L November-December 2021 (post-sleeve deployment).

1,2-Dichlorobenzene concentrations exceeded the MSC (600 µg/L) for January and June 2021, with 330 µg/L December 2020 (post-injection), 2900 µg/L January 2021 (60-day post-injection), 1940 µg/L June 2021 (90-day post-injection), 431 E µg/L September 2021 (pre-sleeve deployment), and 101 µg/L November-December 2021 (post-sleeve deployment).

1,4-Dichlorobenzene concentrations exceeded the MSC (75 µg/L) for January and June 2021, with 58 µg/L December 2020 (post-injection), 530 µg/L January 2021 (60-day post-injection), 264 µg/L June 2021 (90-day post-injection), 61.4 E µg/L September 2021 (pre-sleeve deployment), and 24 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethane concentrations exceeded the MSC (31 µg/L) for all sampling events, with 86 µg/L December 2020 (post-injection), 440 µg/L January 2021 (60-day post-injection), 223 µg/L June 2021 (90-

day post-injection), 118 E µg/L September 2021 (pre-sleeve deployment), and 89.9 µg/L November-December 2021 (post-sleeve deployment).

cis-1,2-Dichloroethene concentrations exceeded the MSC (70 µg/L) for December 2020 and June and September 2021, with 70 µg/L December 2020 (post-injection), ND January 2021 (60-day post-injection), 898 µg/L June 2021 (90-day post-injection), 115 E µg/L September 2021 (pre-sleeve deployment), and 9.5 µg/L November-December 2021 (post-sleeve deployment).

Concentrations of trans-1,2-Dichloroethene exceeded the MSC (100 µg/L) for January and June 2021, with 13 µg/L December 2020 (post-injection), 710 µg/L January 2021 (60-day post-injection), 143 µg/L June 2021 (90-day post-injection), 19.4 µg/L September 2021 (pre-sleeve deployment), and 1.9 µg/L November-December 2021 (post-sleeve deployment).

Concentrations of 1,1,2,2-Tetrachloroethane concentrations exceeded the MSC (0.84 µg/L) for September 2021, with ND December 2020 (post-injection), 0.72 µg/L January 2021 (60-day post-injection), ND June 2021 (90-day post-injection), 7.7 µg/L September 2021 (pre-sleeve deployment), and ND November-December 2021 (post-sleeve deployment).

Concentrations of 1,1,1-Trichloroethane exceeded the MSC (200 µg/L) for January 2021, with 2.2 µg/L December 2020 (post-injection), 210 µg/L January 2021 (60-day post-injection), 12.8 µg/L June 2021 (90-day post-injection), 5.3 µg/L September 2021 (pre-sleeve deployment), and 2.6 µg/L November-December 2021 (post-sleeve deployment).

1,1,2-Trichloroethane concentrations exceeded the MSC (5 µg/L) for December 2020, with 17 µg/L December 2020 (post-injection), 2.2 µg/L January 2021 (60-day post-injection), 3.7 µg/L June 2021 (90-day post-injection), 1.3 µg/L September 2021 (pre-sleeve deployment), and 0.88 J µg/L November-December 2021 (post-sleeve deployment).

Trichloroethene concentrations exceeded the MSC (5 µg/L) for January, June, and September 2021, with ND December 2020 (post-injection), 18 µg/L January 2021 (60-day post-injection), 112 µg/L June 2021 (90-day post-injection), 7.7 µg/L September 2021 (pre-sleeve deployment), and 0.76 J µg/L November-December 2021 (post-sleeve deployment).

1,4-Dioxane concentrations exceeded the MSC (6.6 µg/L) for all sampling events, with 6.8 µg/L December 2020 (post-injection), 11 µg/L January 2021 (60-day post-injection), 83.1 µg/L June 2021 (90-day post-injection), 44.2 µg/L September 2021 (pre-sleeve deployment), and 16.5 B µg/L November-December 2021 (post-sleeve deployment).

IW-2B

IW-2B was sampled in December 2020 (post-injection), January 2021 (60-day post-injection), June 2021 (90-day post-injection), September 2021 (pre-sleeve deployment), and November-December 2021 (post-sleeve deployment).

Benzene concentrations exceeded the MSC (5 µg/L) for January, June, and September 2021, with 2.1 µg/L December 2020 (post-injection), 8.3 µg/L January 2021 (60-day post-injection), 15.1 µg/L June

2021 (90-day post-injection), 17.4 Q µg/L September 2021 (pre-sleeve deployment), and ND November-December 2021 (post-sleeve deployment).

Carbon disulfide concentrations exceeded the MSC (1500 µg/L) for January 2021, with ND µg/L December 2020 (post-injection), 1900 µg/L January 2021 (60-day post-injection), 1.8 µg/L June 2021 (90-day post-injection), 0.7 µg/L September 2021 (pre-sleeve deployment), and ND November-December 2021 (post-sleeve deployment).

Chlorobenzene concentrations exceeded the MSC (100 µg/L) for all sampling events except January 2021, with 570 µg/L December 2020 (post-injection), 24 µg/L January 2021 (60-day post-injection), 3360 µg/L June 2021 (90-day post-injection), 4480 Q µg/L September 2021 (pre-sleeve deployment), and 3320 µg/L November-December 2021 (post-sleeve deployment).

Chloroform concentrations exceeded the MSC (80 µg/L) for November-December 2021, with ND December 2020 (post-injection), 2.9 µg/L January 2021 (60-day post-injection), ND June 2021 (90-day post-injection), ND September 2021 (pre-sleeve deployment), and 102 µg/L November-December 2021 (post-sleeve deployment).

Chloromethane (methyl chloride) concentrations exceeded the MSC (30 µg/L) for January and November-December 2021, with 2.3 µg/L December 2020 (post-injection), 3600 µg/L January 2021 (60-day post-injection), 1.6 µg/L June 2021 (90-day post-injection), 1.7 µg/L September 2021 (pre-sleeve deployment), and 64.2 µg/L November-December 2021 (post-sleeve deployment).

1,2-Dichlorobenzene concentrations exceeded the MSC (600 µg/L) for all sampling events, with 1200 µg/L December 2020 (post-injection), 2900 µg/L January 2021 (60-day post-injection), 4520 µg/L June 2021 (90-day post-injection), 5850 µg/L September 2021 (pre-sleeve deployment), and 7840 µg/L November-December 2021 (post-sleeve deployment).

1,4-Dichlorobenzene concentrations exceeded the MSC (75 µg/L) for all sampling events, with 230 µg/L December 2020 (post-injection), 530 µg/L January 2021 (60-day post-injection), 742 µg/L June 2021 (90-day post-injection), 924 Q µg/L September 2021 (pre-sleeve deployment), and 1000 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethane concentrations exceeded the MSC (31 µg/L) for all sampling events, with 340 µg/L December 2020 (post-injection), 440 µg/L January 2021 (60-day post-injection), 504 µg/L June 2021 (90-day post-injection), 517 Q µg/L September 2021 (pre-sleeve deployment), and 719 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethene concentrations exceeded the MSC (7 µg/L) for June, September, and November-December 20201, with ND December 2020 (post-injection), 4.5 µg/L January 2021 (60-day post-injection), 104 µg/L June 2021 (90-day post-injection), 134 Q µg/L September 2021 (pre-sleeve deployment), and 171 µg/L November-December 2021 (post-sleeve deployment).

cis-1,2-Dichloroethene concentrations exceeded the MSC (70 µg/L) for all sampling events except January 2021, with 880 µg/L December 2020 (post-injection), ND January 2021 (60-day post-injection),

6590 µg/L June 2021 (90-day post-injection), 7820 µg/L September 2021 (pre-sleeve deployment), and 12400 µg/L November-December 2021 (post-sleeve deployment).

trans-1,2-Dichloroethene concentrations exceeded the MSC (100 µg/L) for all sampling events, with 230 µg/L December 2020 (post-injection), 710 µg/L January 2021 (60-day post-injection), 173 µg/L June 2021 (90-day post-injection), 152 Q µg/L September 2021 (pre-sleeve deployment), and 277 µg/L November-December 2021 (post-sleeve deployment).

1,1,2,2-Tetrachloroethane concentrations exceeded the MSC (0.84 µg/L) for December 2020, with 0.99 µg/L December 2020 (post-injection), 0.72 µg/L January 2021 (60-day post-injection), was not sampled in June 2021 (90-day post-injection), ND September 2021 (pre-sleeve deployment), and ND November-December 2021 (post-sleeve deployment).

1,1,1-Trichloroethane concentrations exceeded the MSC (200 µg/L) for all sampling events except December 2020, with 150 µg/L December 2020 (post-injection), 210 µg/L January 2021 (60-day post-injection), 254 µg/L June 2021 (90-day post-injection), 247 Q µg/L September 2021 (pre-sleeve deployment), and 387 µg/L November-December 2021 (post-sleeve deployment).

Trichloroethene concentrations exceeded the MSC (5 µg/L) for all sampling events except December 2020, with ND December 2020 (post-injection), 18 µg/L January 2021 (60-day post-injection), 30.4 µg/L June 2021 (90-day post-injection), 44.9 Q µg/L September 2021 (pre-sleeve deployment), and 37.3 J µg/L November-December 2021 (post-sleeve deployment).

Vinyl chloride concentrations exceeded the MSC (2 µg/L) for June, September, and November-December 2021, with ND December 2020 (post-injection), 1.0 µg/L January 2021 (60-day post-injection), 35 µg/L June 2021 (90-day post-injection), 39.1 Q µg/L September 2021 (pre-sleeve deployment), and 44.3 J µg/L November-December 2021 (post-sleeve deployment).

1,4-Dioxane concentrations exceeded the MSC (6.6 µg/L) for all sampling events, with 29 µg/L December 2020 (post-injection), 49 µg/L January 2021 (60-day post-injection), 55.6 µg/L June 2021 (90-day post-injection), 70.3 µg/L September 2021 (pre-sleeve deployment), and 124 B µg/L November-December 2021 (post-sleeve deployment).

IW-3A

IW-3A was sampled in December 2020 (post-injection), June 2021 (90-day post-injection), September 2021 (pre-sleeve deployment), and November-December 2021 (post-sleeve deployment).

Bromomethane concentrations exceeded the MSC (10 µg/L) for all sampling events, with 500 µg/L December 2020 (post-injection), 53.2 µg/L June 2021 (90-day post-injection), 36 Q µg/L September 2021 (pre-sleeve deployment), and 33.9 µg/L November-December 2021 (post-sleeve deployment).

Chlorobenzene concentrations exceeded the MSC (100 µg/L) for September and November-December 2021, with 20 µg/L December 2020 (post-injection), 76 µg/L June 2021 (90-day post-injection), 206 Q µg/L September 2021 (pre-sleeve deployment), and 136 µg/L November-December 2021 (post-sleeve deployment).

Chloromethane (methyl chloride) concentrations exceeded the MSC (30 µg/L) for every sampling event except December 2020, with 8.8 µg/L December 2020 (post-injection), 211 µg/L June 2021 (90-day post-injection), 162 Q µg/L September 2021 (pre-sleeve deployment), and 89.1 µg/L November-December 2021 (post-sleeve deployment).

Dibromochloromethane concentrations exceeded the MSC (30 µg/L) for December 2020, with 500 µg/L December 2020 (post-injection), 0.74 µg/L June 2021 (90-day post-injection), 0.62 µg/L September 2021 (pre-sleeve deployment), and ND November-December 2021 (post-sleeve deployment).

1,1-Dichloroethane concentrations exceeded the MSC (31 µg/L) for June and September 2021, with 17 µg/L December 2020 (post-injection), 39 µg/L June 2021 (90-day post-injection), 34.4 Q µg/L September 2021 (pre-sleeve deployment), and 28.4 µg/L November-December 2021 (post-sleeve deployment).

1,2-Dichloroethane concentrations exceeded the MSC (5 µg/L) for December 2020, with 5.4 µg/L December 2020 (post-injection), 0.65 µg/L June 2021 (90-day post-injection), 0.69 µg/L September 2021 (pre-sleeve deployment), and ND November-December 2021 (post-sleeve deployment).

cis-1,2-Dichloroethene concentrations exceeded the MSC (70 µg/L) for September and November-December 2021, with 3.6 µg/L December 2020 (post-injection), 50.1 µg/L June 2021 (90-day post-injection), 142 Q µg/L September 2021 (pre-sleeve deployment), and 118 µg/L November-December 2021 (post-sleeve deployment).

1,1,2-Trichloroethane concentrations exceeded the MSC (5 µg/L) for December 2020, with 7.4 µg/L (post-injection). 1,1,2-Trichloroethane levels remained at ND for all subsequent sampling events.

Trichloroethene concentrations exceeded the MSC (5 µg/L) for September and November-December 2021, with ND December 2020 (post-injection), 2 µg/L June 2021 (90-day post-injection), 9 Q µg/L September 2021 (pre-sleeve deployment), and 6 µg/L November-December 2021 (post-sleeve deployment).

1,4-Dioxane concentrations exceeded the MSC (6.6 µg/L) for June, September, and November-December 2021, with 1.5 µg/L December 2020 (post-injection), 20.8 µg/L June 2021 (90-day post-injection), 29 µg/L September 2021 (pre-sleeve deployment), and 31.4 µg/L November-December 2021 (post-sleeve deployment).

IW-3B

IW-3B was sampled in December 2020 (post-injection), June 2021 (90-day post-injection), September 2021 (pre-sleeve deployment), and November-December 2021 (post-sleeve deployment).

Bromomethane concentrations exceeded the MSC (10 µg/L) for all sampling events, with 12 µg/L December 2020 (post-injection), 52 µg/L June 2021 (90-day post-injection), 34 Q µg/L September 2021 (pre-sleeve deployment), and 20.2 µg/L November-December 2021 (post-sleeve deployment).

Chlorobenzene concentrations exceeded the MSC (100 µg/L) for all sampling events except November-December 2021, with 920 µg/L December 2020 (post-injection), 207 µg/L June 2021 (90-day post-

injection), 238 µg/L September 2021 (pre-sleeve deployment), and 10.9 µg/L November-December 2021 (post-sleeve deployment).

Chloromethane (methyl chloride) concentrations exceeded the MSC (30 µg/L) for all sampling events, with 99 µg/L December 2020 (post-injection), 177 µg/L June 2021 (90-day post-injection), 187 µg/L September 2021 (pre-sleeve deployment), and 140 µg/L November-December 2021 (post-sleeve deployment).

1,1-Dichloroethane concentrations exceeded the MSC (31 µg/L) for each sampling event except November-December 2021, with 43 µg/L December 2020 (post-injection), 56 µg/L June 2021 (90-day post-injection), 32 Q µg/L September 2021 (pre-sleeve deployment), and 18.1 µg/L November-December 2021 (post-sleeve deployment).

cis-1,2-Dichloroethene concentrations exceeded the MSC (70 µg/L) for December 2020 and June 2021, with 96 µg/L December 2020 (post-injection), 86.1 µg/L June 2021 (90-day post-injection), 59.3 Q µg/L September 2021 (pre-sleeve deployment), and 2.9 µg/L November-December 2021 (post-sleeve deployment).

Methylene chloride (Dichloromethane) concentrations exceeded the MSC (5 µg/L) for December 2020, with 11 µg/L (post-injection). Methylene chloride (Dichloromethane) had ND for November-December 2021 and was not sampled June and September 2021.

Tetrahydrofuran concentrations exceeded the MSC (26 µg/L) for each sampling event except December 2020, with no sampling on December 2020 (post-injection), 79 µg/L June 2021 (90-day post-injection), 39.3 Q µg/L September 2021 (pre-sleeve deployment), and 28.8 µg/L November-December 2021 (post-sleeve deployment).

1,1,2-Trichloroethane concentrations exceeded the MSC (5 µg/L) for December 2020, with 9.8 µg/L December 2020 (post-injection), 0.58 µg/L June 2021 (90-day post-injection), ND µg/L September 2021 (pre-sleeve deployment), and ND µg/L November-December 2021 (post-sleeve deployment).

1,4-Dioxane concentrations exceeded the MSC (6.6 µg/L) for all sampling events, with 17 µg/L December 2020 (post-injection), 29.3 µg/L June 2021 (90-day post-injection), 18 µg/L September 2021 (pre-sleeve deployment), and 25.8 µg/L November-December 2021 (post-sleeve deployment).

A summary of analytical results of samples collected during each groundwater event conducted over the monitoring period May 2019 through December 2021 is presented on **Tables 1a-g**. Laboratory analytical packages are included in **Appendix E**. Field sampling and purge water sheets with water quality data is attached in **Appendix D**. A summary of water quality records is presented in **Tables 2a-g**. Ground water elevations for each sampling round are summarized in **Table 3.**

5.2 CONCLUSIONS

The Pilot Study results and quantitative data evaluation show that both the active injected ISCO amendment and subsequent ISCO passive sleeve deployments were suitable to address contaminated groundwater at the Site. In general, the Pilot Study was successful in helping to reduce both VOCs and

1,4-Dioxane concentrations, specifically in wells MW-A, MW-B, MW-C, MW-6 and MW-13. The use of the ISCO sleeves was an efficient and economical option to continue treatment in-between injection events. Data from December 2021 sampling event shows that the ISCO sleeves were effective in treatment but were consumed in the short-term.

In monitoring wells where 1,4-dioxane was detected at lower levels, it was difficult to treat and attain the regulatory limit of 6.5 ug/L. Data evaluation shows a particular concern for 1,4-Dioxane concentrations at MW-C and MW-FA/FB. An amendment suitable for 1,4-Dioxane treatment should be applied at the barrier along the contaminant migration pathway at these wells.

Additional noteworthy comments are as follows:

- In MW-6, a significant reduction of VOCs occurred, while in MW-10, VOCs increase was seen. These shallow overburden monitoring wells are further southeast apart from the treatment barrier. Only limited impact on these wells is seen from treatment barrier.
- MW-8 is the furthermost monitoring well (approximately 400 ft southeast of the treatment barrier). Initially, low VOCs concentrations were observed, but in the most-recent sampling round (December 2021), a significant increase in VOCs was seen.
- The results at MW-FA/FB monitoring wells indicate probable contaminant migration in a south-southeast direction.
- VOC concentrations in MW-D (which is close to the ISCO barrier and side-gradient from the WPA) did slightly increase after the injection had completed. Also, in the downgradient south-southeast wells (MW-FA/FB), high VOCs levels were observed. In the deeper screened well (MW-FB), VOCs concentrations increased more than threefold.

For help in further interpreting analytical results, a series of Concentration vs. Time trendline graphs (**Figures 4a-b through 8a-b**) were generated. For selected pair/group of wells, two graphs were made: one showing the sum of VOC COCs (benzene; chlorobenzene; 1,2-dichlorobenzene; 1,4-dichlorobenzene; 1,1-dichloroethene; cis 1,2-dichloroethene; trichloroethene; vinyl chloride; and 1,2,4-trimethylbenzene; trans 1,2-dichloroethene) and the other showing 1,4-Dioxane levels. Additional details are as follows:

MW-A and MW-D

Overall, in both MW-A and MW-D the sum of VOC COCs is low. 1,4-Dioxane concentrations in MW-A and MW-D are also low. A very slight trend of decrease in MW-A and increase in MW-D is noted, but likely it is due to temporal variations. MW-A was not impacted by the pilot study injection, while in MW-D injected material reached (observed daylighting and color in post-injection samples) during injections at surrounding wells.

MW-B, MW-C, MW-13

In MW-B, MW-C, and MW-13 a decreasing trend of VOC concentrations was noted with some rebound in later post-injection samples. The rebound is more prominent in MW-B. Similarly, as for VOCs, 1,4-

Dioxane in MW-B, MW-C, and MW-13 showed a decreasing trend with rebound in concentrations noted in post-injection sampling rounds.

May 2019 results for MW-B show uncharacteristically low contaminant concentrations. MW-B is a flush mount well and frequently floods; the sample was taken under flood conditions and believed to be biased low in contamination due surface/storm water mixing.

MW-FA and MW-FB

MW-FA and MW-FB did not show a decrease in VOC and 1,4 -Dioxane levels. On contrary, the in most-recent sample round (December 2021) in MW-FB, VOCs concentrations increased three-fold from the baseline levels. Also, higher concentrations of 1,4-dioxane are observed in MW-FA than in MW-FB.

MW-6, MW-8, and MW-10

MW-8 and MW-10 showed a VOC increase with a more significant increase noted in MW-8.

MW-6 showed a decrease in VOCs, but recent sample rounds results were not available (well is not accessible for sampling).

In both MW-6 and MW-10 a decrease of VOCs was noted in the first two post-injection sample rounds; while results for these rounds for MW-8 are not available.

In both MW-6 and MW-10 slight fluctuations of I,4 Dioxane from non-detect/very low concentrations to just above and below criteria (6.5 ug/L) were noted. 1,4-Dioxane was detected only in last sampling round (December 2021). In the previous pre-baseline and baseline sampling rounds 1,4 -Dioxane was non-detect.

IW-1B, IW-2B, and IW-3B

IW-2B has the highest VOCs levels among these injection wells. An increasing VOCs trend was observed in IW-1B and IW-2B, while there is a moderate VOCs decrease with some significant decrease observed in last sampling round (December 2021). The highest concentrations of 1,4-Dioxane among these three wells was in IW-2B. An increase trend in 1,4-Dioxane levels was observed in all these three wells, with the highest rate increase seen in IW-2B.

5.3 RECOMMENDATIONS

Tetra Tech recommends continuing the remedial efforts at the Site. These efforts include the continued use of the same ISCO chemical amendment to conduct re-injections at the same wells as the Pilot Study (or installing additional injection points). These additional new injection points include areas predominately in the south-southeast direction of the WPA.

Tetra Tech also recommends:

- The use of additional chemical ISCO treatments (or mix with the current amendments) that specifically degrades 1,4-dioxane, when injecting at nearby MW-C and MW-FA/FB wells.

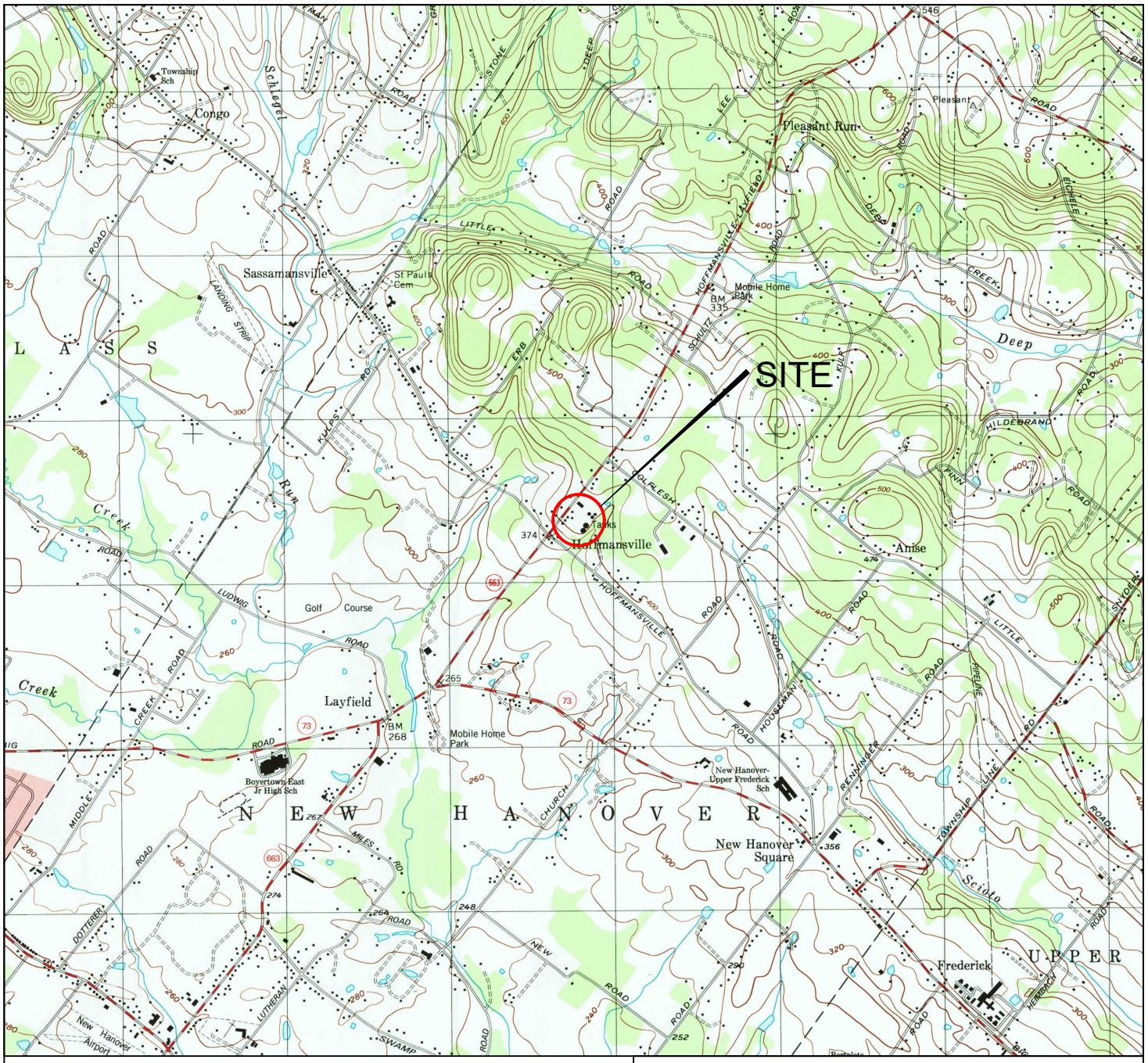
- Recovering and rehabilitating monitoring wells MW-12 and MW-14 to include them in future performance monitoring sampling.
- Adding new monitoring wells in between MW-12 and MW-14 (with corresponding depths to match Site injection wells (~35 ft bgs)). If wells MW-12 and MW-14 cannot be recovered, installing a second monitoring well in this area is appropriate.
- Continuing with ISCO sleeves implementation at MW-B (near WPA) and other hot spot wells (MW-C and MW-13).
- Consider placing ISCO sleeves in MW-8.
- Continue with routine WPA groundwater sampling.
- After the proposed re-injection event, apply the suggested post-injection groundwater sampling schedule.
- Evaluate the re-injection event and post -injection sampling data for possible further approaches of remediating and attaining concentrations below regulated standards for all COCs.

6.0 REFERENCES

Tetra Tech. 2018. Waste Pit Area Soil Excavation Report

Leidos. 2014. Project Investigation Report for Hoff VC Site

FIGURES



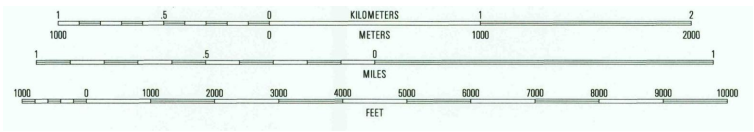


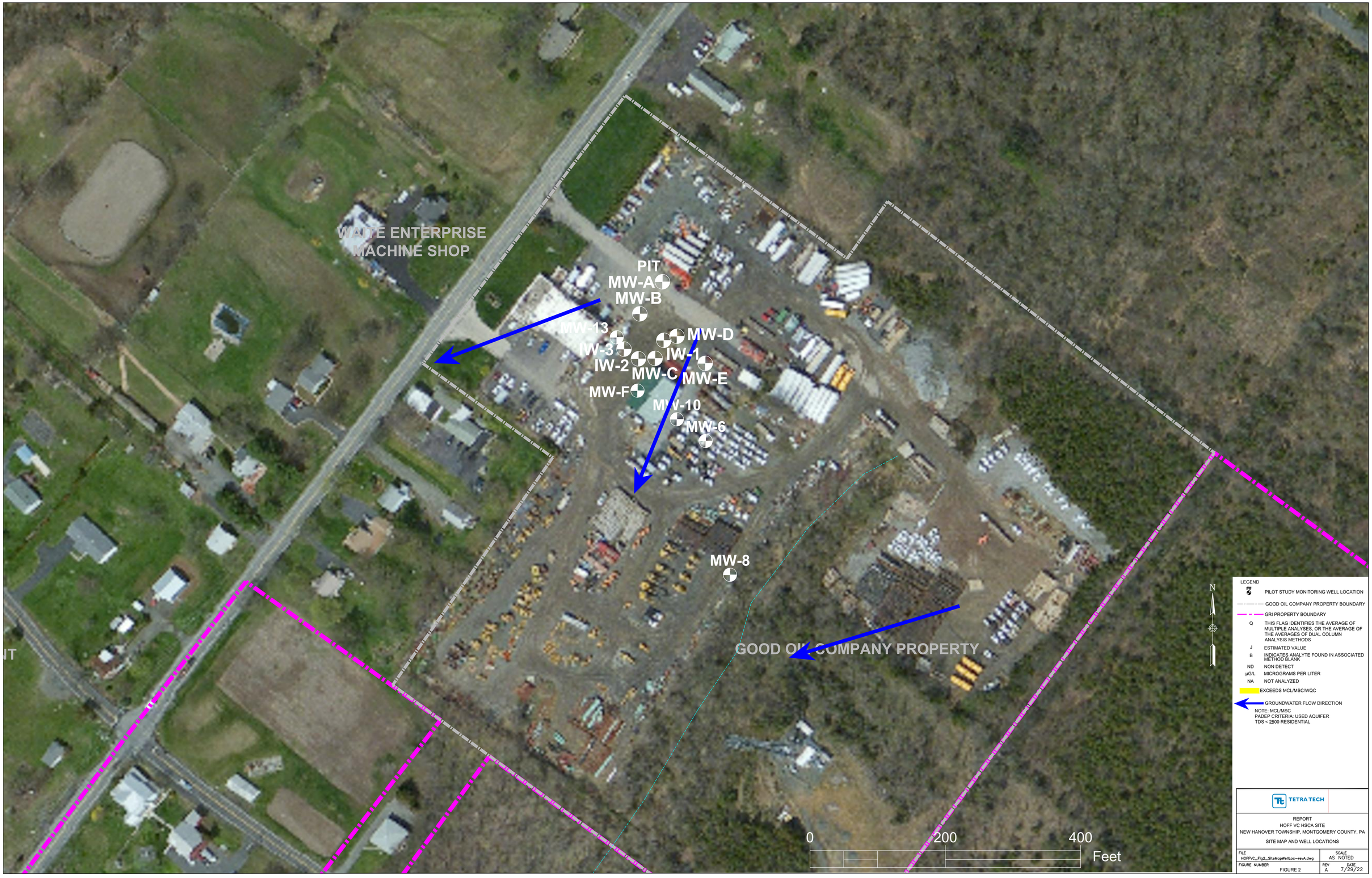
IMAGE SOURCE:
USGS TOPOGRAPHIC MAP, SASSAMANSVILLE, PA QUADRANGLE, 1999.

TETRA TECH

REPORT
HOFF VC HSCA SITE
NEW HANOVER TOWNSHIP,
MONTOMERY COUNTY, PA

GENERAL SITE AREA

FILE	SCALE
HOFFVC_Fig1_GeneralSiteArea-revA.dwg	AS NOTED
FIGURE NUMBER: 1	REV: A / DATE: 7/29/22



LEGEND

##	PILOT STUDY MONITORING WELL LOCATION
	GOOD OIL COMPANY PROPERTY BOUNDARY
	GRI PROPERTY BOUNDARY
Q	THIS FLAG IDENTIFIES THE AVERAGE OF MULTIPLE ANALYSES, OR THE AVERAGE OF THE AVERAGES OF DUAL COLUMN ANALYSIS METHODS
J	ESTIMATED VALUE
B	INDICATES ANALYTE FOUND IN ASSOCIATED METHOD BLANK
ND	NON DETECT
µG/L	MICROGRAMS PER LITER
NA	NOT ANALYZED
	EXCEEDS MCL/MSC/WQC
	GROUNDWATER FLOW DIRECTION

NOTE: MCL/MSC
PADEP CRITERIA: USED AQUIFER
TDS < 2500 RESIDENTIAL

TETRA TECH

REPORT
HOFF VC HSCA SITE
NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PA

SITE MAP AND WELL LOCATIONS

FILE: HOFFVC_Fig2_SiteMapWellLoc-revA.dwg	SCALE: AS NOTED
FIGURE NUMBER: FIGURE 2	REV: A; DATE: 7/29/22

MW-13	PRE-INJECTION			POST-INJECTION				
	8/7/2019	10/15/2019	1/22/2020	12/11/2020	1/19/2021	6/22/2021	9/29/2021	12/9/2021
VOCs (uG/L)								
1,1-Dichloroethane	46	34.6	24.5	4.5	1.5	3.2	1.2	2.3
1,1 Dichloroethene	7.3	6.4	4.2	ND	ND	ND	ND	ND
Benzene		ND	ND	5.8	0.66	1.2	ND	ND
Chloroethene (Vinyl Chloride)	2	1.8	1.3	0.18	0.19	ND	ND	ND
Chloromethane		ND	ND	78	14	7.5	ND	ND a
cis-1,2-Dichloroethene	12.3	71.7 Q	15.6	0.45	0.15	ND	ND	1.2
Trichloroethene	21.3	103 Q	4.4		0.24	ND	ND	ND
1,4 Dioxane	55.3	58.8	47	3.6	2.1	2.9	ND	4.5
SVOCs (uG/L)								
Benzo[b]fluoranthene	NA	NA	ND	ND	0.37	ND	NA	ND
Benzo[k]fluoranthene	NA	NA	ND	ND	0.19	ND	NA	ND
Indeno[1,2,3-cd]pyrene	NA	NA	ND	ND	0.19	ND	NA	ND
beta-BHC	NA	NA	NA	ND	NA	NA	NA	0.17 e

MW-B	PRE-INJECTION			POST-INJECTION			
	8/7/2019	10/15/2019	1/22/2020	12/11/2020	1/19/2021	9/30/2021	12/10/2021
VOCs (uG/L)							
1,1-Dichloroethane	158 Q	27.4 Q	202 Q	23	67	22.7 Q	26.6
1,1-Dichloroethene	35.9 Q	8 Q	50.6	ND	ND	ND	ND
1,2,4-Trimethylbenzene	46.7 Q	314 Q	136 Q	NA	NA	2.3	NA
1,2-Dichlorobenzene	2330 Q	1160 Q	2820 Q	260	940	312 Q	509
1,4-Dichlorobenzene	476 Q	697 Q	748 Q	100	210	95.6 Q	270
Benzene	30.1 Q	220 Q	49 Q	15	49	28.8 Q	263
Chlorobenzene	8830	34200	13100	1500	3000	2010	13600
Chloroethene (Vinyl Chloride)	ND	6.1	56.4 Q	ND	ND	ND	ND
cis-1,2-Dichloroethene	2370 Q	278 Q	3510 Q	16	39	7.8 Q	17.4
Trichloroethene	45.2 Q	12 Q	15.4 Q	NA	4.0	0.66	ND
1,4 Dioxane	17	5.2	25.8	2.9	5.7	3.6	9.6
SVOCs (uG/L)							
2-Chlorophenol	NA	NA	23.6	NA	44	7.2	19.3
Benzo(a)anthracene	NA	NA	ND	ND	ND	ND	0.595 d
Benzo(a)pyrene	NA	NA	ND	ND	ND	ND	0.906
Benzo(b)fluoranthene	NA	NA	ND	ND	ND	2.4	2.18
Benzo(g,h,i)perylene	NA	NA	ND	ND	ND	ND	1.20 d
Benzo(k)fluoranthene	NA	NA	ND	ND	ND	ND	0.665
Dibenzo(a,h)anthracene	NA	NA	ND	NA	NA	NA	0.223
Indeno(1,2,3-cd)pyrene	NA	NA	ND	ND	ND	ND	0.993 d

MW-A	POST-INJECTION				
	12/9/2020	1/19/2021	6/1/2021	9/28/2021	12/6/2021
	No Exceedances	No Exceedances	No Exceedances	No Exceedances	No Exceedances

IW-1A	POST-INJECTION			
	12/10/2020	1/20/2021	9/30/2021	12/9/2021
VOCs (uG/L)				
1,1-Dichloroethane	130	28	27.8	23.1
Bromomethane	15	10	11.2	9.5
Chloromethane	63	19	29.4	23.2

IW-1B	POST-INJECTION			
	12/10/2020	1/20/2021	9/30/2021	12/9/2021
VOCs (uG/L)				
1,1-Dichloroethane	110	53	67.9	53.4
Benzene	0.68	7.1	ND	ND
Bromomethane	16	18	7.4 Q	5.8
Chloromethane	63	49	24 Q	12.6
Tetrahydrofuran	NA	NA	32.1	12.8
Trichloroethene	0.16	13	44.3 Q	44
1,4 Dioxane	12	15	26	36.8
SVOCs (uG/L)				
Benzo[b]fluoranthene	ND	0.33	NA	ND
Indeno[1,2,3-cd]pyrene	ND	0.22	NA	0.0402 J d

MW-D	PRE-INJECTION	POST-INJECTION	
	1/21/2020	9/30/2021	12/9/2021
	No Exceedances	No Exceedances	No Exceedances

MW-E	PRE-INJECTION	POST-INJECTION		
	1/20/2020	12/10/2020	1/21/2021	6/1/2021
	No Exceedances	No Exceedances	No Exceedances	No Exceedances

MW-10	PRE-INJECTION		POST-INJECTION				
	8/7/2019	1/23/2020	12/10/2020	1/21/2021	6/3/2021	9/27/2021	12/6/2021
VOCs (uG/L)							
Benzene	5.7	4.6	0.23	3.8	1.5	2.2	7.3
Chlorobenzene	283	390	40	480	213	234	572
Chloroethene (Vinyl Chloride)	3.4	2.6	ND	4.4	0.69	1.6	5.3
1,4-Dioxane	ND	ND	ND	1.6	ND	ND	9.3
SVOCs (uG/L)							
Benzo[g,h,i]perylene	NA	ND	1.1	ND	ND	ND	0.0467 J
Indeno[1,2,3-cd]pyrene	NA	ND	0.58	ND	ND	ND	0.0403 J

IW-3B	POST-INJECTION			
	12/11/2020	6/2/2021	9/29/2021	12/10/2021
VOCs (uG/L)				
1,1-Dichloroethane	43	56	32 Q	18.1
Bromomethane	12	52	34 Q	20.2
Chlorobenzene	920	207	238	10.9
Chloromethane	99	177	187	140
cis-1,2-Dichloroethene	96	86.1	59.3 Q	2.9
Tetrahydrofuran	NA	79	39.3 Q	28.8
1,4 Dioxane	17	29.3	18	25.8
SVOCs (uG/L)				
Benzo[b]fluoranthene	0.21	NA	NA	ND

IW-3A	POST-INJECTION			
	12/11/2020	6/2/2021	9/29/2021	12/10/2021
VOCs (uG/L)				
1,1-Dichloroethane	17	39	34.4 Q	28.4
1,2-Dichloroethane	5.4	0.65	0.69	ND
Bromomethane	23	53.2	36 Q	33.9
Chlorobenzene	20	76	206 Q	136
Chloromethane	500	211	162 Q	89.1
cis-1,2-Dichloroethene	3.6	50.1	142 Q	118
Trichloroethene	NA	2	9 Q	6
1,4 Dioxane	1.5	20.8	29	31.4
SVOCs (uG/L)				
Benzo[a]anthracene	1.1	NA	NA	ND c
Benzo[a]pyrene	0.68	NA	NA	ND
Benzo[b]fluoranthene	1.4	NA	NA	ND
Benzo[g,h,i]perylene	0.56	NA	NA	ND c
Benzo[k]fluoranthene	0.57	NA	NA	ND
Indeno[1,2,3-cd]pyrene	0.60	NA	NA	ND

IW-2A	POST-INJECTION				
	12/11/2020	1/21/2021	6/3/2021	9/29/2021	12/10/2021
VOCs (uG/L)					
1,1,2,2-Tetrachloroethane	ND	1.0	ND	7.7	ND
1,1-Dichloroethane	86	130	223	118 E	89.9
1,2-Dichlorobenzene	330	180	1940	431 E	101
1,4-Dichlorobenzene	58	22	264	61.4 E	24
Bromomethane	2.9	3.3	61.7	76 E	45.8
Chlorobenzene	85	10	346	95.8 E	5.4
Chloromethane	7.2	11	164	338 E	211
cis-1,2-Dichloroethene	70	9.4	898	115 E	9.5
trans-1,2-Dichloroethene	13	4.2	143	19.4	1.9
Trichloroethene	NA	0.87	112	7.7	0.76 J
1,4 Dioxane	6.8	11	83.1	44.2	16.5 B
SVOCs (uG/L)					
Benzo[a]anthracene	2.6	0.19	ND	ND	ND c
Benzo[a]pyrene	2.6	0.29	1.4	ND	0.0307 J
Benzo[b]fluoranthene	3.3	0.32	1.5	ND	ND
Benzo[g,h,i]perylene	1.8	0.18	ND	ND	ND c
Benzo[k]fluoranthene	1.3	0.15	ND	ND	ND
Chrysene	2.9	0.18	ND	ND	ND
Indeno[1,2,3-cd]pyrene	2.2	0.20	1.4	ND	ND

IW-2B	POST-INJECTION				
	12/11/2020	1/20/2021	6/3/2021	9/29/2021	12/10/2021
VOCs (uG/L)					
1,1,1-Trichloroethane	150	210	254	247 Q	387
1,1,2,2-Tetrachloroethane	0.99	0.72	ND	ND	ND
1,1-Dichloroethane	340	440	504	517 Q	719
1,1-Dichloroethene	ND	4.5	104	134 Q	171
1,2-Dichlorobenzene	1200	2900	4520	5850	7840
1,4-Dichlorobenzene	230	530	742	924 Q	1000
Benzene	2.1	8.3	15.1	17.4 Q	ND
Chlorobenzene	570	1900	3360	4480 Q	3320
Chloroethene (Vinyl chloride)	ND	1.0	35	39.1 Q	44.3 J
Chloroform					102
Chloromethane					64.2
cis-1,2-Dichloroethene	880	3600	6590	7820	12400
trans-1,2-Dichloroethene	230	710	173	152 Q	277
Trichloroethene	NA	18	30.4	44.9 Q	37.3 J
1,4 Dioxane	29	49	55.6	70.3	124 B
SVOCs (uG/L)					
2-Methylnaphthalene	ND	2.6	5.6	13.2	12.2
Pentachlorophenol	NA	NA	NA	NA	1.9 J

MW-F-A	POST-INJECTION				
	12/9/2020	1/20/2021	6/2/2021	9/28/2021	12/8/2021
VOCs (uG/L)					
1,1-Dichloroethane	29	31	27.6	33.8	28.1
1,2-Dichlorobenzene	610	480	453	590 Q	425
1,2-Dichloroethane	14	14	16.8	13.7	13.3
1,4-Dichlorobenzene	200	190	185	210	186
Benzene	51	67	80.2	56.2	42.8
Chlorobenzene	1200	1000	979	1480 Q	856
Chloroethene (Vinyl chloride)	35	47	40	47.4	43
cis-1,2-Dichloroethene	150	120	55	126	65.5
Methyl tertiary butyl ether	300	390	385	323	279
1,4 Dioxane	97	100	98.6	97.2	151 B
SVOCs (uG/L)					
Dieldrin	0.036	0.046	ND	NA	NA

MW-F-B	POST-INJECTION				
	12/9/2020	1/20/2021	6/2/2021	9/28/2021	12/8/2021
VOCs (uG/L)					
1,1-Dichloroethane	160	140	140	170 Q	170
1,1-Dichloroethene	ND	5.2	15.2	29.8 Q	30.6
1,2-Dichlorobenzene	590	680	1240	1900 Q	1900
1,4-Dichlorobenzene	140	140	262	346 Q	354
Benzene	1.4	6.9	8.1	9.8 Q	11.1
Chlorobenzene	360	1100	1780	2590 Q	2260
Chloroethene (Vinyl chloride)	ND	6.7	11.5	12.6 Q	16.4
cis-1,2-Dichloroethene	510	960	1340	2180 Q	2140
trans-1,2-Dichloroethene	130	130	58.2	58.8 Q	76
Trichloroethene	8.3	12	17	17.6 Q	18.2
1,4 Dioxane	42	27	26.7	33.5	76.3 B

MW-C	PRE-INJECTION	POST-INJECTION				
	1/22/2020	12/10/2020	1/19/2021	6/1/2021	9/27/2021	12/9/2021
VOCs (uG/L)						
1,1,2,2-Tetrachloroethane	NA	1.8	1.2	33.6	7.2	1.1
1,1-Dichloroethane	244 Q	350	190	386	242 Q	218
1,1-Dichloroethene	25.8 Q	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3820	320	310	1090	565	599
1,4-Dichlorobenzene	442 Q	73	62	274	138 Q	131
Bromomethane	0.74 B	4.6	28	27.6	36.2 Q	13.8
Chlorobenzene	1140	21	99	336	322 Q	324
Chloroethene (Vinyl Chloride)	5.5 Q	ND	ND	ND	ND	ND
Chloromethane	ND	35	62	164	156 Q	69.1
cis-1,2-Dichloroethene	1100	6.8	20	47.8	108 Q	270
Trichloroethene	230 Q	NA	1.7	8.5	8.6 Q	13.5
1,4 Dioxane	28.8	0.45	2.8	17.3	14.5	23.3
SVOCs (uG/L)						
Benzo[b]fluoranthene	ND	ND	ND	ND	NA	0.275

MW-6	PRE-INJECTION		POST-INJECTION	
	8/7/2019	1/23/2020	12/10/2020	1/21/2021
VOCs (uG/L)				
Benzene	39 Q	5.8 Q	2.5	2.8
Chlorobenzene	1900	776	540	480
Chloroethene (Vinyl Chloride)	3.1	ND	ND	ND
SVOCs (uG/L)				
Benzo[a]anthracene		ND	0.15	1.5
Benzo[a]pyrene		ND	0.20	1.9
Benzo[b]fluoranthene		ND	0.27	1.8
Benzo[g,h,i]perylene		ND	0.16	1.2
Benzo[k]fluoranthene		ND	0.13	0.79
Indeno[1,2,3-cd]pyrene		ND	0.17	1.4

MW-8	PRE-INJECTION		POST-INJECTION
	8/7/2019	1/23/2020	12/7/2021
VOCs (uG/L)			
Benzene	2.5	0.5	47.8
Chlorobenzene	64.7	44.8	2240
Chloroethene (Vinyl chloride)	0.54	1.2	18.3
cis-1,2-DicHloroethene	6.4	18	70.6
Tetrahydrofuran	ND	144 E	ND a
Trichloroethene	ND	1.1	7.6
1,4-Dioxane	ND	ND	37.8
SVOCs (uG/L)			
Benzo(a)athracene	NA	3.1	0.262
Benzo(a)pyrene	NA	3.6	0.223
Benzo(b)fluoroanthene	NA	2.6	0.288
Benzo(g,h,i)perylene	NA	1.8	0.153
Chrysene	NA	3.4	0.139
Dibenzo(a,h)anthracene	NA	NA	0.0523 J
Indeno-1,2,3-cd pyrene	NA	3	0.135

LEGEND

- PILOT STUDY MONITORING WELL LOCATION
- GOOD OIL COMPANY PROPERTY BOUNDARY
- GRI PROPERTY BOUNDARY
- Q — THIS FLAG IDENTIFIES THE AVERAGE OF MULTIPLE ANALYSES, OR THE AVERAGE OF THE AVERAGES OF DUAL COLUMN ANALYSIS METHODS
- J — ESTIMATED VALUE
- B — INDICATES ANALYTE FOUND IN ASSOCIATED METHOD BLANK
- ND — NON DETECT
- µG/L — MICROGRAMS PER LITER
- NA — NOT ANALYZED
- RESULT — EXCEEDS MCL/MSC/WQC
- GROUNDWATER FLOW DIRECTION

NOTE: MCL/MSC
PADEP CRITERIA: USED AQUIFER
TDS < 2500 RESIDENTIAL

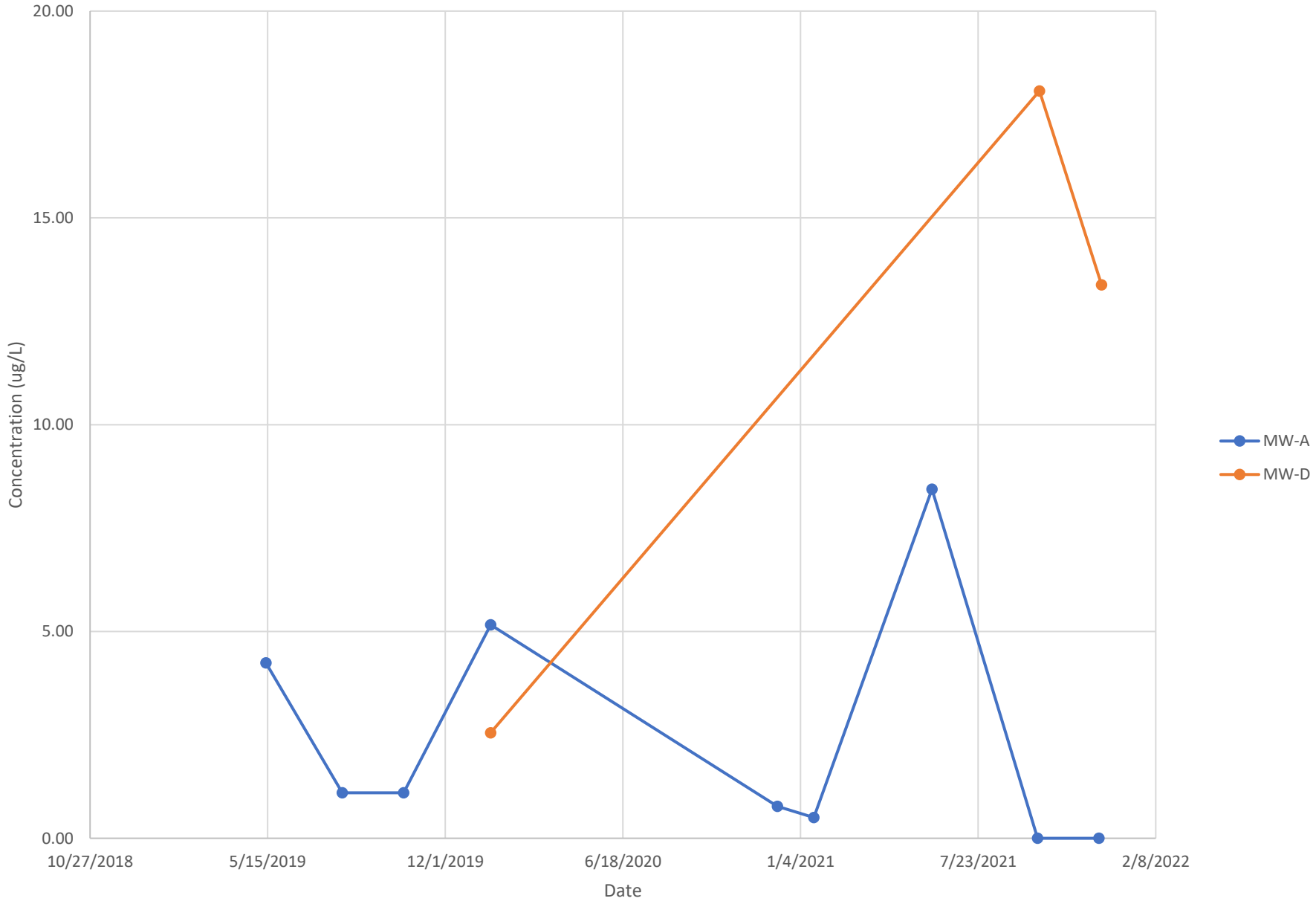
TETRA TECH

REPORT
HOFF VC HSCA SITE
NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PA

RESULTS MAP

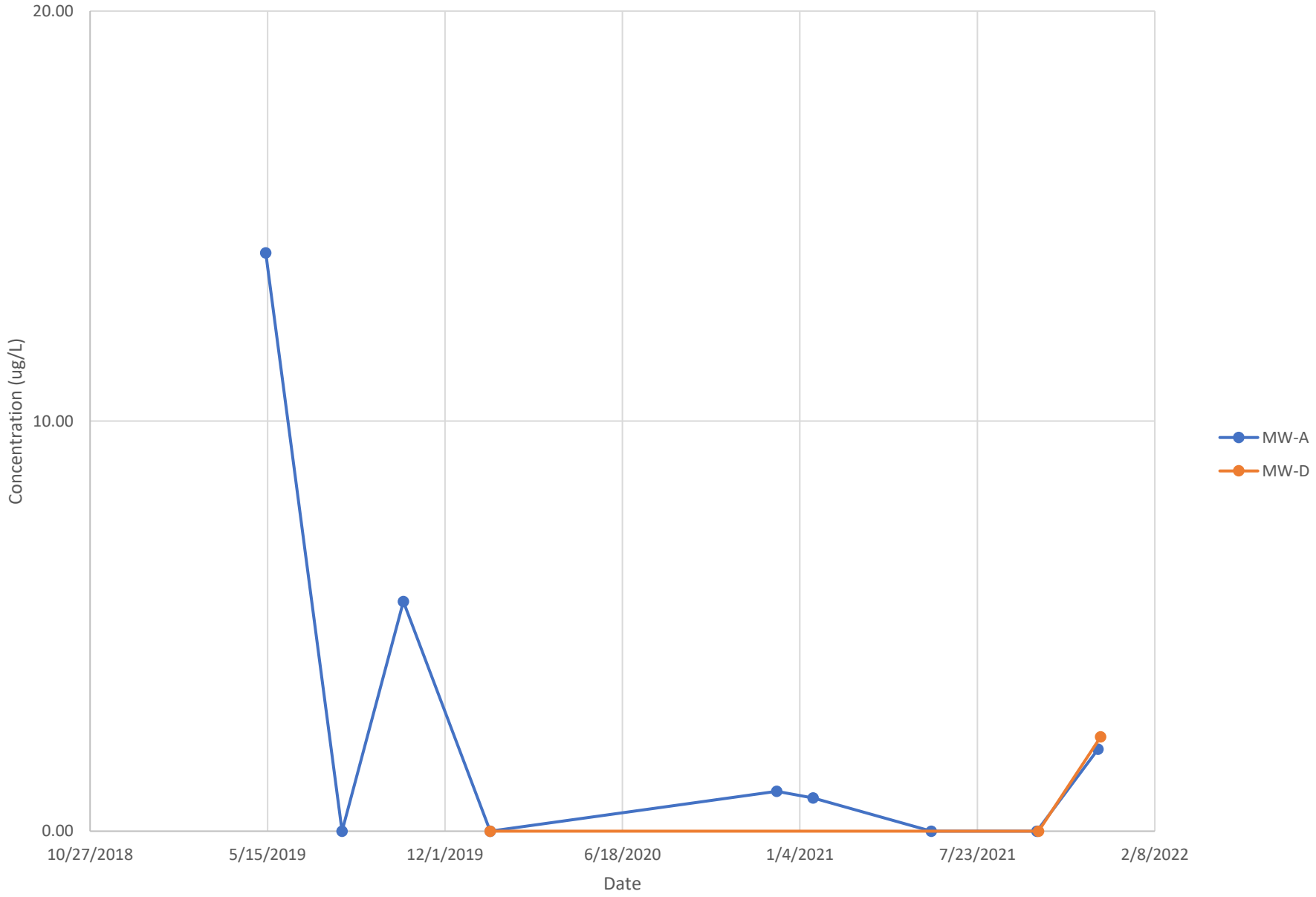
FILE	SCALE
HOFFVC_Fig3_ResultsMap-revA.dwg	AS NOTED
FIGURE NUMBER	REV / DATE
FIGURE 3	A 8/2/22

Figure 4a - Combined Concentrations of Select VOCs in MW-A & MW-D



TETRA TECH

Figure 4b - Concentration of 1,4-dioxane in MW-A & MW-D



TETRA TECH

Figure 5a - Combined Concentrations of Select VOCs in MW-B, MW-C, & MW-13

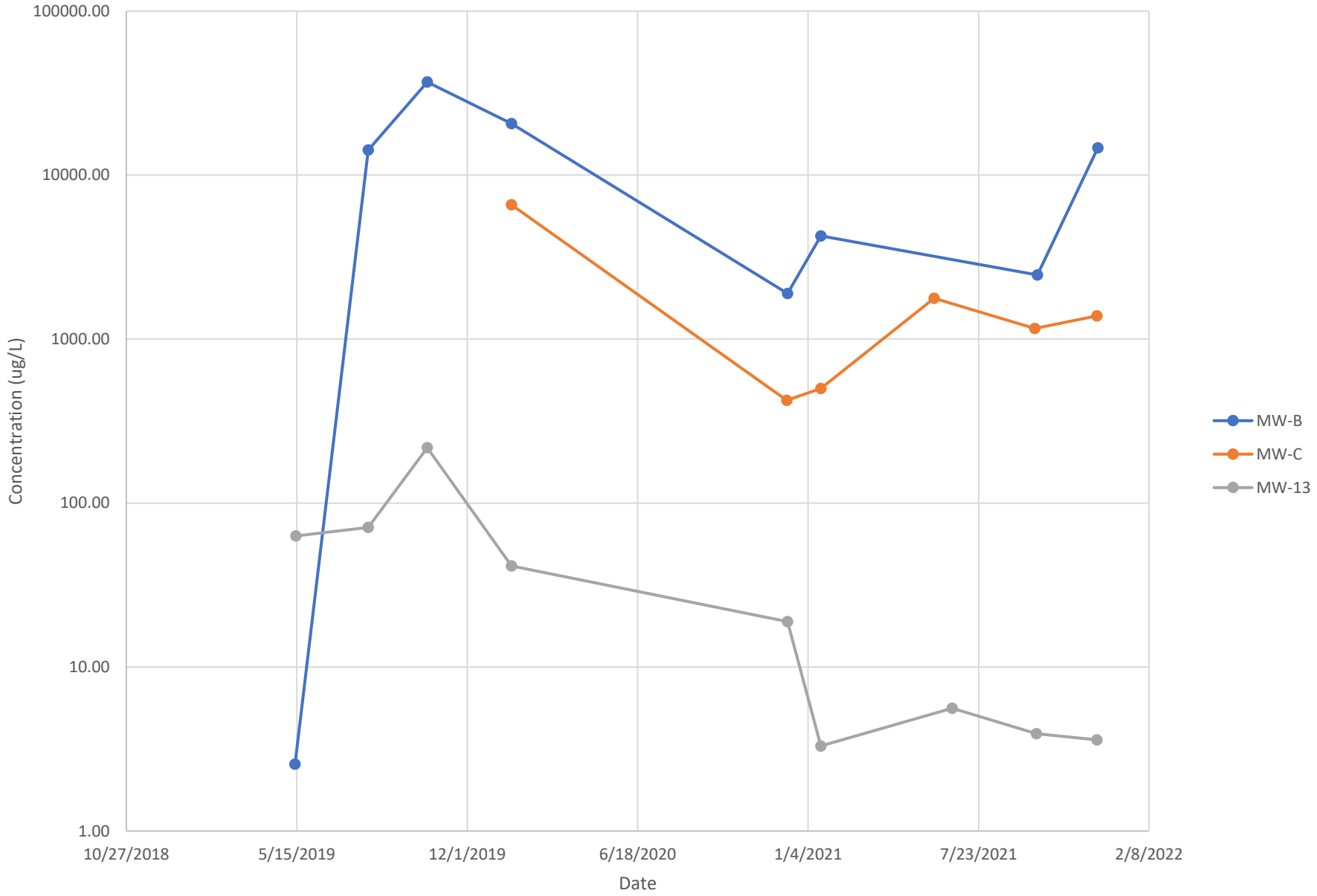


Figure 5b - Concentration of 1,4-dioxane in MW-B, MW-C, & MW-13

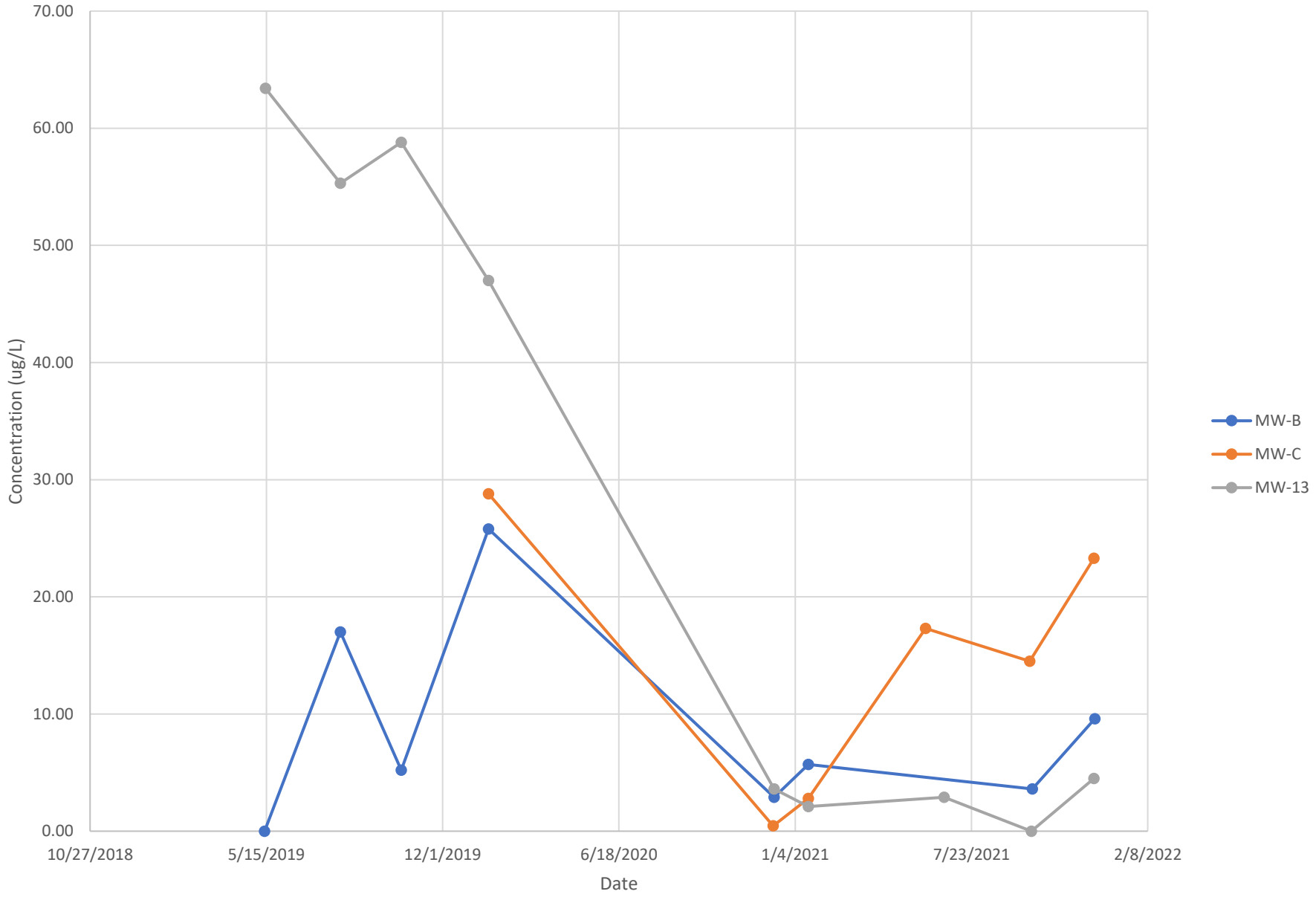


Figure 6a - Combined Concentrations of Select VOCs in MW-FA & MW-FB

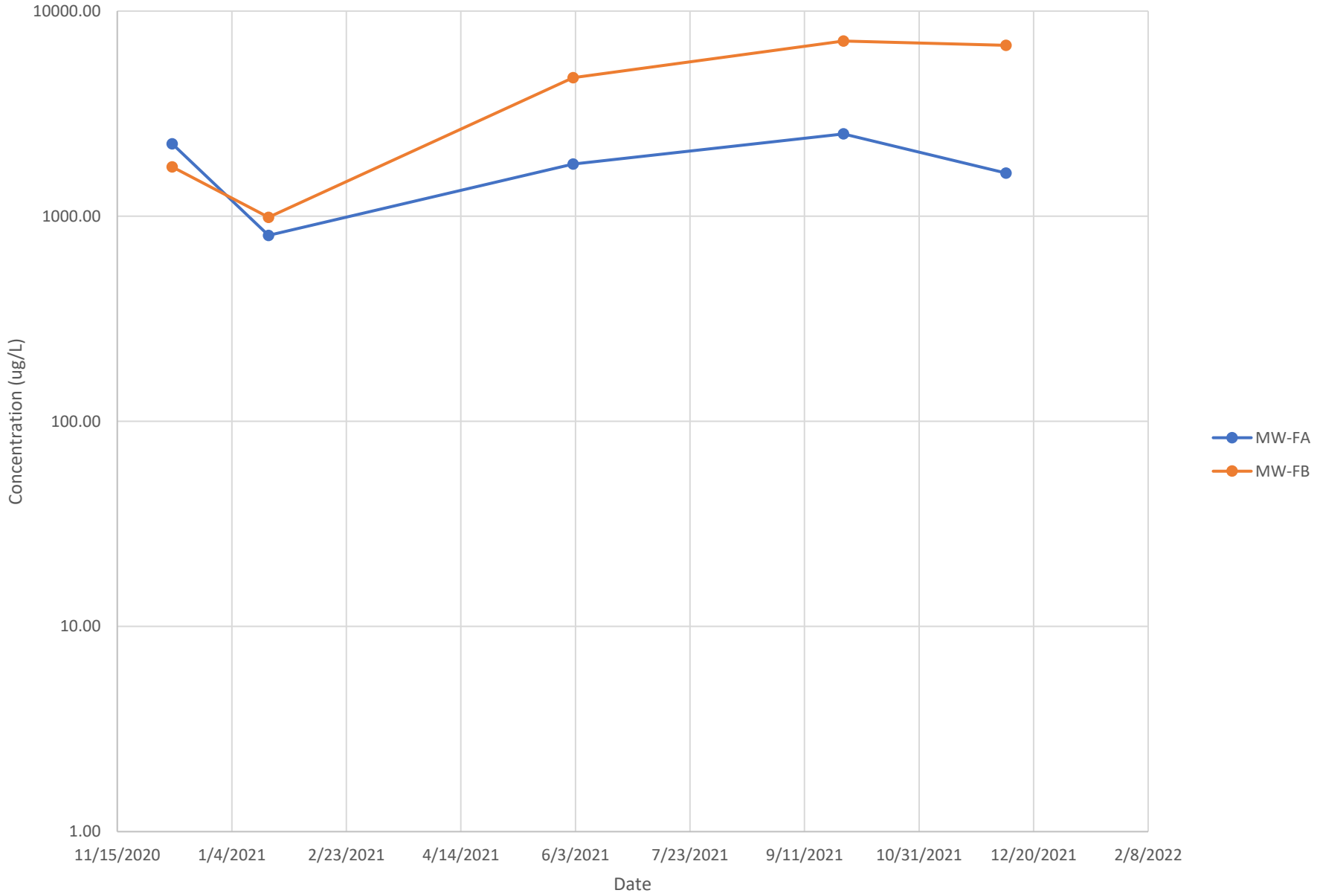


Figure 6b - Concentration of 1,4-dioxane in MW-FA & MW-FB

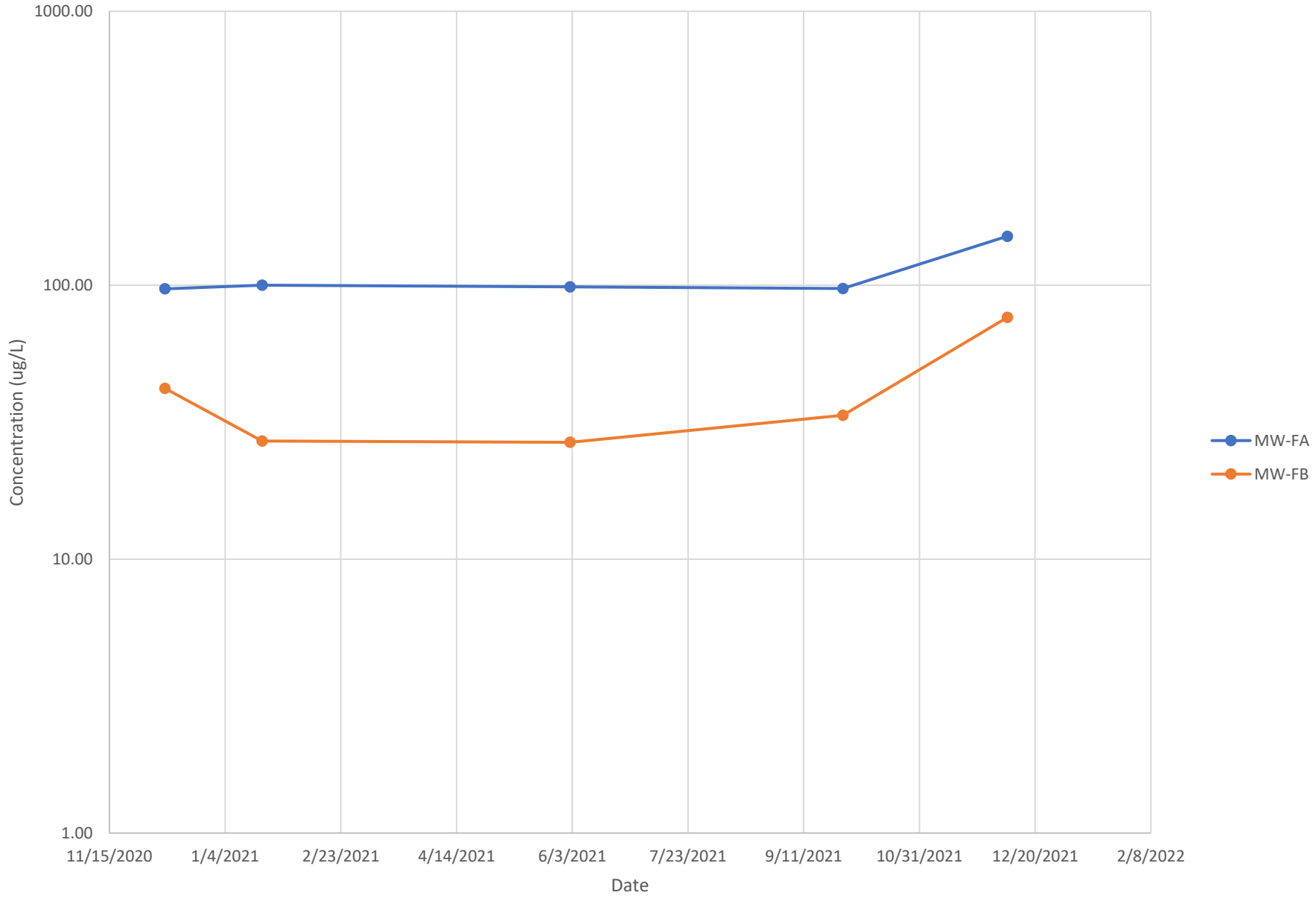


Figure 7a - Combined Concentrations of Select VOCs in MW-6, MW-8, & MW-10

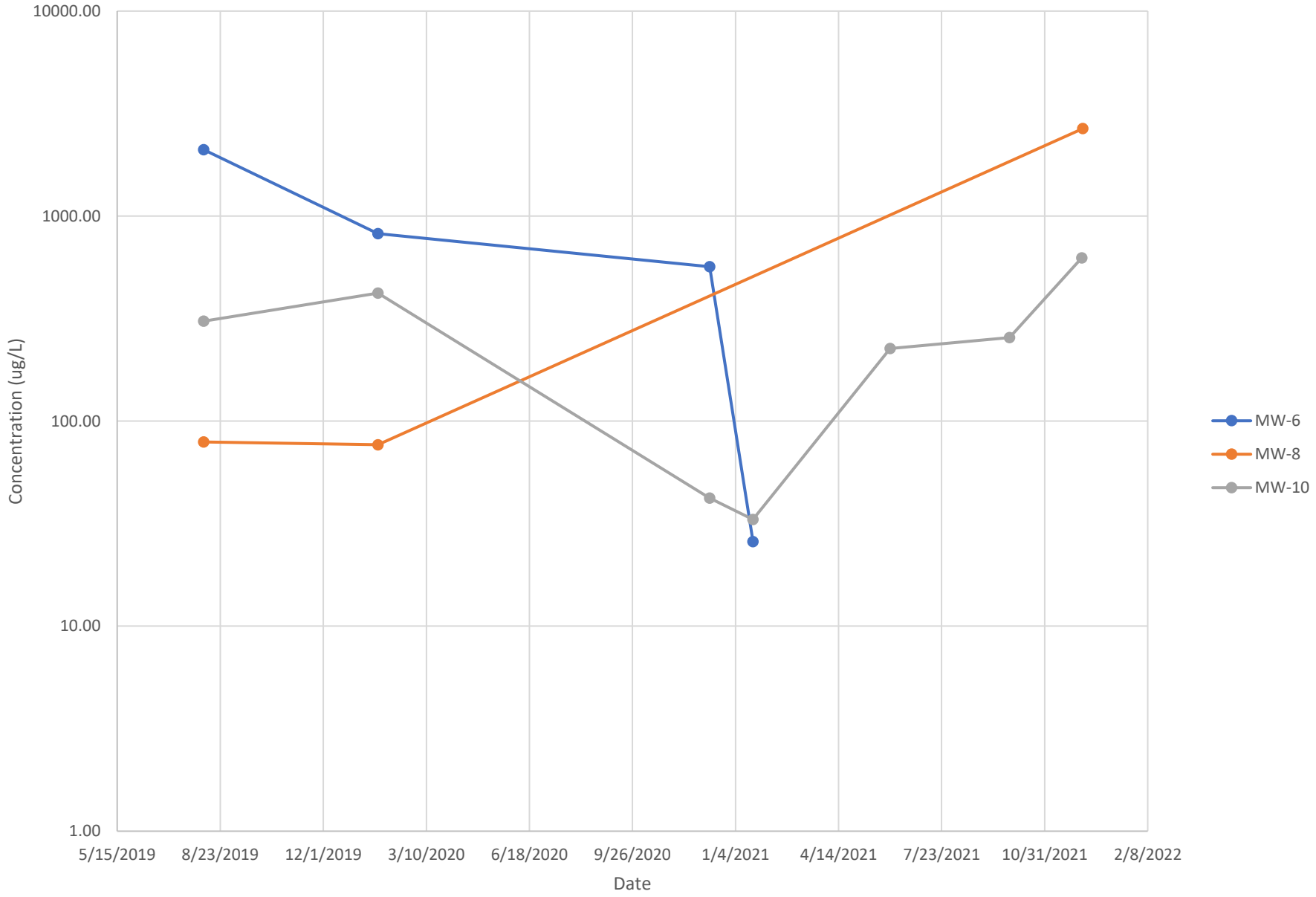


Figure 7b - Concentration of 1,4-dioxane in MW-6, MW-8, & MW-10

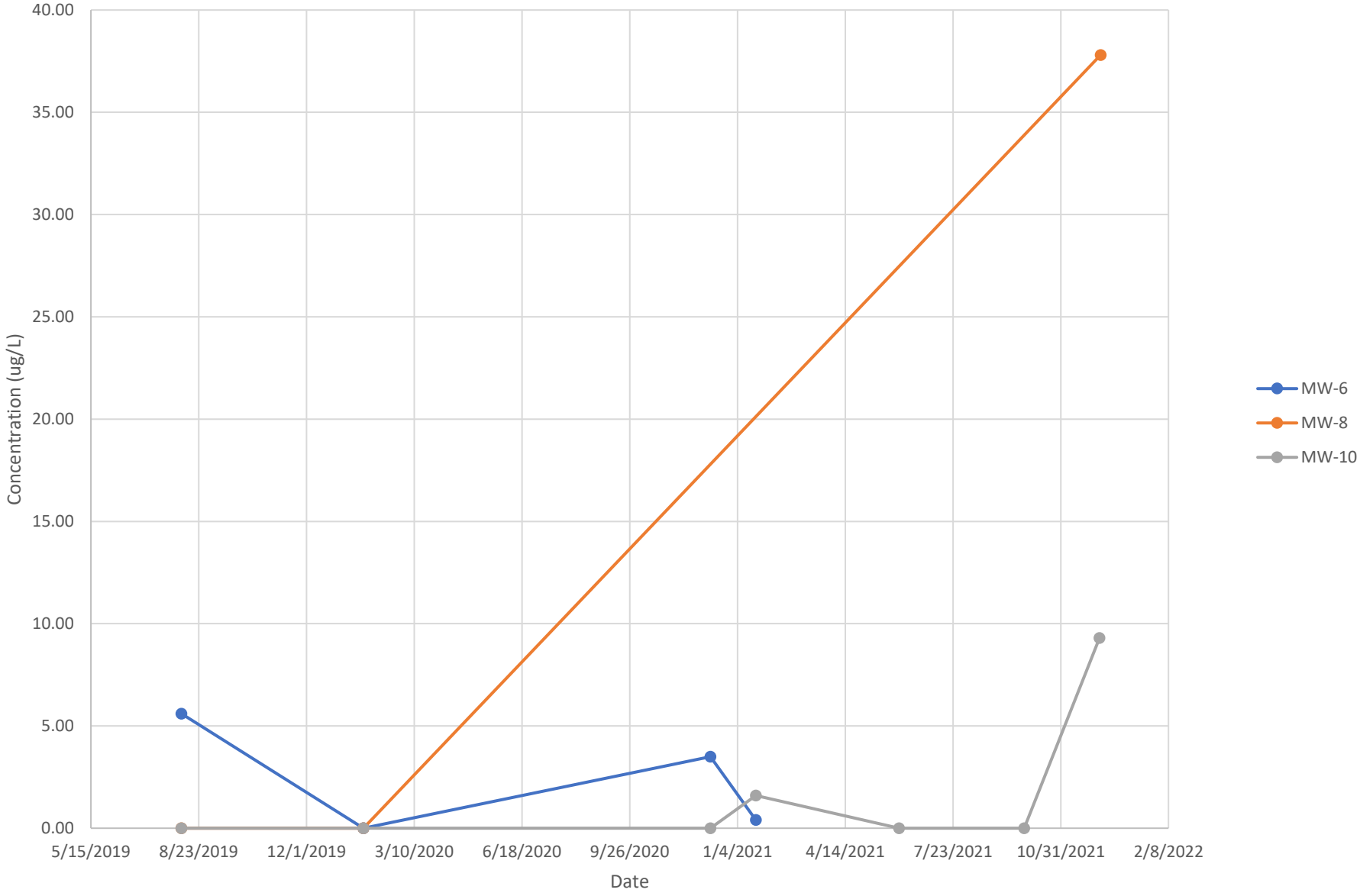


Figure 8a - Combined Concentrations of Select VOCs in IW-1B, IW-2B, & IW-3B

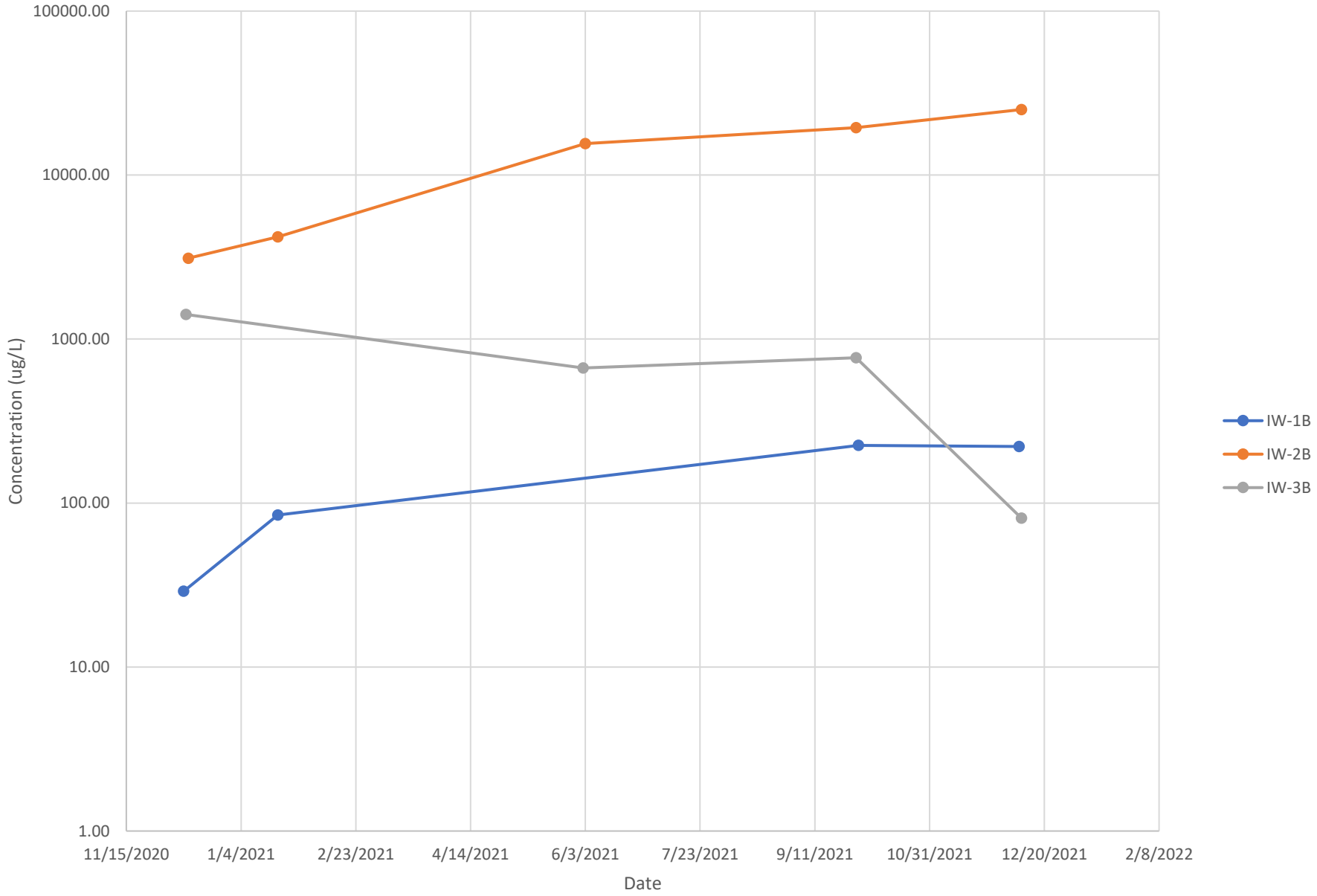
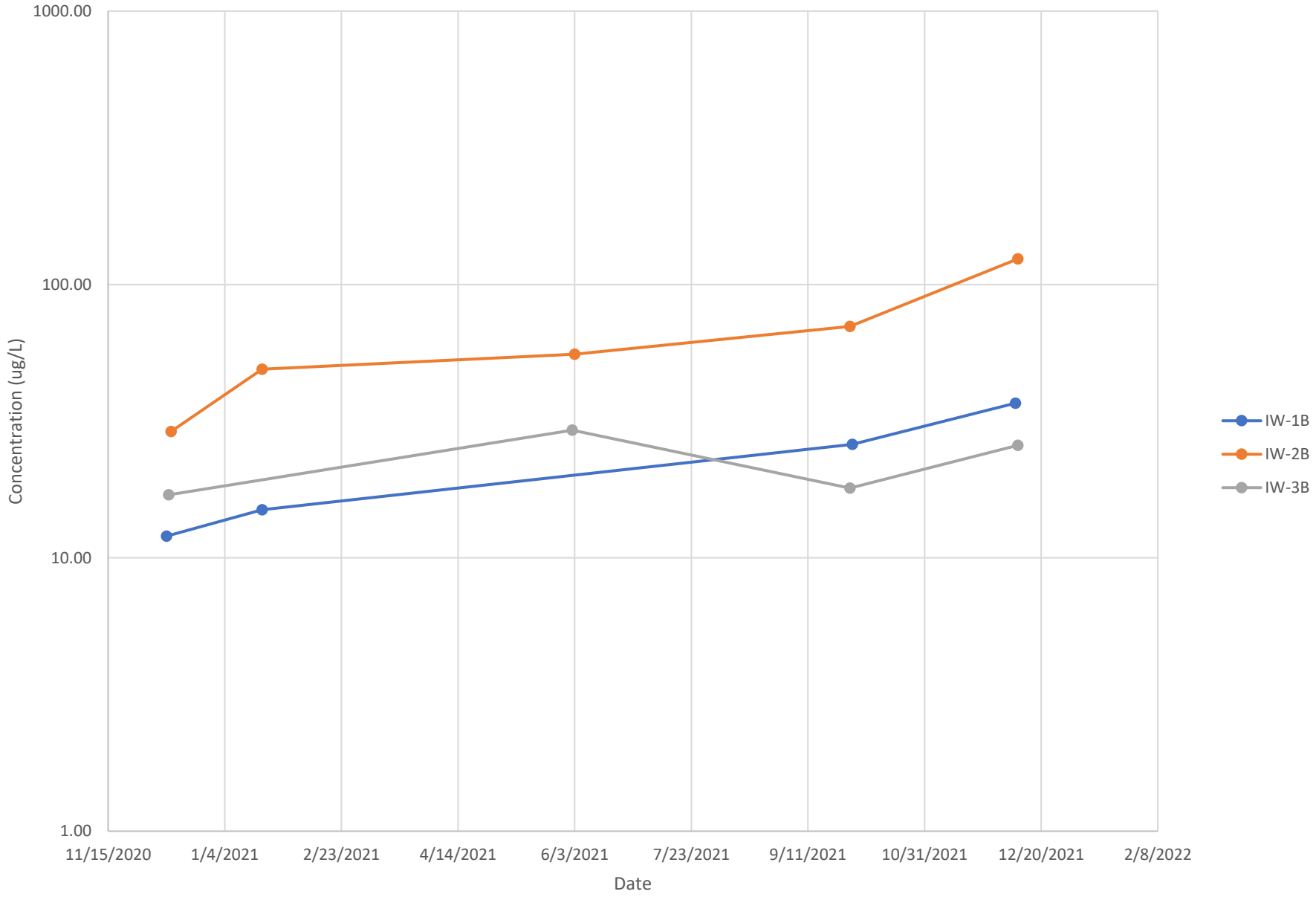


Figure 8b - Concentration of 1,4-dioxane in IW-1B, IW-2B, & IW-3B



TABLES

Table 1a
Analytical Data Summary - Volatile Organic Compounds and 1,4-Dioxane
Groundwater Sampling (May 2019, August 2019, and October 2019) Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Hoff VC HSCA Site, Groundwater Sampling			May 2019				August 2019						October 2019			
Well ID	PADEP MSCs		MW-A	MW-B	MW-13		MW-A	MW-B	MW-6	MW-8	MW-10	MW-13	MW-A	MW-B		MW-13
Sample ID			MW-A	MW-B	MW-13	DUP-051419	Hoff MW-A	Hoff MW-B	Hoff MW-6	Hoff MW-8	Hoff MW-10	Hoff MW-13	Hoff MW-A	Hoff MW-B	Hoff DUP-101519	Hoff MW-13
Screen Interval:	Used Aquifer TDS ≤ 2500		15'-35'	16'-36'	10'-25'		15'-35'	16'-36'	1'-11'	15'-30'	1'-8'	10'-25'	15'-35'	16'-36'		10'-25'
Date Sampled:	Residential	Non-residential	5/13/2019	5/13/2019	5/14/2019	5/14/2019	8/7/2019	8/7/2019	8/7/2019	8/7/2019	8/7/2019	8/7/2019	10/15/2019	10/15/2019	10/15/2019	10/15/2019
Matrix:	GW		GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
Volatile Organics. All Results and Standards in ug/L																
Acetone	31000	88000	**31.3**	**8.8 B**	ND	ND	ND	23.2	ND	ND	ND	ND	ND	**13.6 B**	15.1 B	ND
Benzene	5	5	ND	ND	0.75	0.64	ND	**30.1 Q**	**39 Q**	**2.5**	**5.7**	ND	ND	**220 Q**	**218 Q**	ND
Bromomethane	10	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	1500	6200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	100	ND	ND	ND	ND	ND	**8830**	1900	**64.7**	**283**	**12.9**	ND	**34200**	**34700**	**18.5**
Chloroethane	2100	88000	**0.73**	ND	ND	ND	ND	**7.8 Q**	ND	ND	**2.4**	ND	ND	**1.3**	**1.3**	ND
Chloroethene (Vinyl Chloride)	2	2	ND	ND	**1.8**	**1.7**	ND	ND	**3.1**	0.54	**3.4**	**2**	ND	**6.1**	**5.4**	1.8
Chloroform	80	80	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	30	30	ND	ND	ND	ND	ND	**28.8 Q**	**19.3 Q**	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	ND	ND	ND	ND	ND	**9.4 Q**	**3.4**	ND	ND	ND	ND	**17.2**	**17.9**	ND
Isoprophylbenzene	840	3500	ND	ND	ND	ND	ND	**6.8 Q**	ND	ND	ND	ND	ND	**14.5 Q**	**14.2 Q**	ND
4-Isopropyltoluene			ND	ND	ND	ND	ND	8	ND	ND	ND	ND	ND	13 Q	11.8 Q	ND
cis-1,2-Dichloroethene	70	70	ND	ND	**10.4**	**10.8**	ND	**2370 Q**	**0.69**	**6.4**	**3.6**	**12.3**	ND	**278 Q**	**267 Q**	**71.7 Q**
1,2-Dichlorobenzene	600	600	3	2	**17.5**	**17.9**	**1.1 B**	**2330 Q**	**10.4 Q**	**3**	**1.8**	**12.8**	**1.1**	**1160 Q**	**1160 Q**	**13**
1,3-Dichlorobenzene	600	600	ND	ND	ND	ND	ND	**37.6**	**2**	ND	ND	ND	ND	120 Q	117 Q	ND
1,4-Dichlorobenzene	75	75	**0.54**	**0.56**	**3.1**	**3.3**	ND	**476 Q**	**57.4 Q**	**0.91**	**9 Q**	**2.4**	ND	**697 Q**	**678 Q**	**2.9**
1,1-Dichloroethane	31	160	**25.4**	ND	**42.9**	**43.4**	**11.3**	**158 Q**	ND	ND	ND	**46**	**9.3**	**27.4 Q**	**26 Q**	**34.6**
1,1 Dichloroethene	7	7	0.7	ND	**8.4**	**8.5**	ND	**35.9 Q**	ND	**1.1**	**0.55**	**7.3**	ND	**8 Q**	**8.4 Q**	6.4
1,2-Dichloropropane	5	5	ND	ND	ND	ND	ND	**0.97**	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Tert-Butyl Ether (MTBE)	20	20	ND	ND	0.53	0.54	ND	**0.53**	**0.76**	ND	ND	**0.68**	ND	ND	ND	**0.58**
Naphthalene	100	100	ND	ND	ND	ND	ND	**18.8 Q**	**9.4 Q**	ND	ND	ND	ND	**41.6 Q**	**40.3 Q**	ND
n-Butylbenzene	1700	4900	ND	ND	ND	ND	ND	**1.4**	ND	ND	ND	ND	ND	**11.5 Q**	**11 Q**	ND
n-Propylbenzene	2100	8800	ND	ND	ND	ND	ND	**9.9 Q**	ND	ND	ND	ND	ND	**34.9 Q**	**33.8 Q**	ND
Sec-Butylbenzene	3500	9700	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	**9.8 Q**	**9**	ND
Styrene	100	100	ND	ND	ND	ND	ND	0.77	ND	ND	ND	ND	ND	ND	ND	ND
t-Buty-lalcohol	4200	12000	ND	ND	ND	ND	ND	7.9	15.8	7	ND	ND	ND	7.4	ND	ND
Tert-Buthylbenzene	3500	9700	ND	ND	ND	ND	ND	0.93	0.51	ND	ND	ND	ND	2.6	2.4	ND
Tetrahydrofuran	25	130	ND	ND	**1.2**	**1.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	5	ND	ND	ND	ND	ND	ND	ND	**0.68**	ND	ND	ND	ND	ND	ND
Toluene	1000	1000	ND	ND	ND	ND	ND	**5.3**	**0.84**	ND	ND	0.62	ND	**9.8 Q**	**10.2 Q**	ND
trans-1,2-Dichloroethene	100	100	ND	ND	ND	ND	ND	**38.2 Q**	**1.3**	ND	ND	ND	ND	**5**	**4.9**	ND
1,1,1-Trichloroethane	200	200	ND	ND	ND	ND	ND	**84.1 Q**	ND	ND	ND	ND	ND	**10 Q**	**9.9 Q**	ND
Trichloroethene	5	5	ND	ND	**21**	**21.3**	ND	**45.2 Q**	ND	ND	ND	**21.3**	ND	**12 Q**	**12.6 Q**	**103 Q**
1,2,3-Trichlorobenzene	70	70	ND	ND	ND	ND	ND	**1.1**	ND	ND	ND	ND	ND	**1.4**	**1.5**	ND
1,2,4-Trichlorobenzene	70	70	ND	ND	ND	ND	ND	**7.6 Q**	ND	ND	ND	ND	ND	**14 Q**	**14.8 Q**	ND
1,2,4-Trimethylbenzene	15	62	ND	ND	ND	ND	ND	**46.7 Q**	**2**	ND	ND	ND	ND	**314 Q**	**310 Q**	ND
1,3,5-Trimethylbenzene	420	1200	ND	ND	ND	ND	ND	**3.6**	**1.1**	ND	ND	ND	ND	**89 Q**	**86.4 Q**	ND
α-Xylene	10000	10000	ND	ND	ND	ND	ND	**22.9 Q**	**4.4**	ND	ND	ND	ND	**60.8 Q**	**59.3 Q**	ND
m/p-Xylene	10000	10000	ND	ND	ND	ND	ND	**6.6**	**2**	ND	ND	ND	ND	**46.6 Q**	**45.5 Q**	ND
Total Xylenes	10000	10000	ND	ND	ND	ND	ND	**29.5**	**6.4**	ND	ND	ND	ND	**107.4**	**104.8**	ND
1,4 Dioxane. All Results and Standards in ug/L																
1,4 Dioxane	6.5	27	**14.1**	ND	**63.4**	**62.2**	ND	**17**	**5.6**	ND	ND	**55.3**	**5.6**	**5.2**	**5.5**	**58.8**

Footnotes:
ND = Not detected
ug/L = microgram per Liter
B = Compound was found in the blank sample
Q -= Result Qualified By Laboratory
GW = Groundwater

1.9 = Detected value
46.7 = Exceeded Standard (Used Aquifer, Residential)
J = Result is lab-estimated value due to low detection level
Used MSC from November 21, 2021 revision.

= No Value

TETRA TECH

Table 1b
Analytical Data Summary - Volatile Organic Compounds and 1,4-Dioxane Groundwater Sampling (January 2020) Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Well ID	PADEP MSCs		MW-A	MW-B	MW-C	MW-D	MW-E	MW-6	MW-8	MW-10	MW-13	
Sample ID			Hoff MW-A	Hoff MW-B	Hoff MW-C	Hoff MW-D	Hoff MW-E	Hoff MW-6	Hoff MW-8	Hoff MW-10	Hoff MW-13	Hoff DUP-012220
Screen Interval:	Used Aquifer TDS ≤ 2500		15'-35'	16'-36'	15'-35'	15'-35'	15'-35'	1'-11'	15'-30'	1'-8'	10'-25'	
Date Sampled:	Residential	Non-residential	1/21/2020	1/22/2020	1/22/2020	1/21/2020	1/21/2020	1/23/2020	1/23/2020	1/23/2020	1/22/2020	1/22/2020
Matrix:	GW		GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
Volatile Organics. All Results and Standards in ug/L												
Acetone	38000	110000	ND	ND	ND	ND	ND	ND	**137**	ND	**11.2 B**	**11.9 B**
Benzene	5	5	**3.1**	49 Q	**3.2**	ND	**0.59**	**5.8 Q**	**0.5**	**4.6**	ND	ND
Bromomethane	10	10	ND	**0.63 B**	**0.74 B**	ND	0.51 B	ND	ND	ND	ND	ND
2-Butanone			ND	ND	ND	ND	ND	ND	**136**	ND	**3.2**	**3**
Carbon disulfide	1500	6200	ND	ND	ND	ND	ND	ND	**1.2**	ND	ND	ND
Chlorobenzene	100	100	**1.5 B**	**13100**	**1140**	**1.6 B**	**15.7**	**776**	**44.8**	**390**	**9**	**9**
Chloroethane	250	1200	**12**	**10.6 Q**	**16.4 Q**	ND	ND	ND	ND	**0.97**	ND	ND
Chloroethene (Vinyl Chloride)	2	2	ND	**56.4 Q**	**5.5 Q**	ND	ND	ND	**1.2**	**2.6**	**1.3**	ND
Chloroform	80	80	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	30	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	**0.66**	**13.9 Q**	ND	ND	ND	ND	ND	ND	ND	ND
Isoprophylbenzene	840	3500	ND	**11.1 Q**	**3.5**	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	70	70	ND	**3510 Q**	**1100**	ND	**12.8**	ND	**18**	**8.2 Q**	**15.6**	**16**
1,2-Dichlorobenzene	600	600	**0.56 B**	**2820 Q**	**3820**	**0.95 B**	**15.6**	**6.1 Q**	**9.3**	**1.7**	**9.2**	**9.3**
1,3-Dichlorobenzene	600	600	ND	**78.4 Q**	**25.7**	ND	**0.63**	**1.5**	ND	**1**	ND	ND
1,4-Dichlorobenzene	75	75	ND	**748 Q**	**442 Q**	ND	**1.5**	**33.1 Q**	**2.2**	**13.6 Q**	**2**	**2.1**
1,1-Dichloroethane	31	160	2.9	**202 Q**	**244 Q**	**0.56**	**0.54**	ND	**2.6**	**2.6**	**24.5**	**25.7**
1,1 Dichloroethene	7	7	ND	**50.6**	**25.8 Q**	ND	ND	ND	**0.73**	ND	**4.2**	**4.3**
1,2-Dichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Tert-Butyl Ether (MTBE)	20	20	ND	**0.68**	ND	ND	ND	ND	ND	ND	ND	**0.5**
Naphthalene	100	100	**3.2**	**35.9 Q**	**2.4**	**0.78**	**0.68**	**2.4**	ND	ND	**0.52**	**0.5**
n-Butylbenzene	2100	5800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	2100	8800	ND	**20.6 Q**	ND	ND	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	4200	12000	ND	**7.8 Q**	**1.8**	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
t-Buty-lalcohol	4200	12000	ND	ND	6	ND	ND	ND	6	ND	ND	ND
Tert-Buthylbenzene	4200	12000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrahydrofuran	26	130	ND	ND	ND	ND	ND	ND	**144 E**	ND	ND	ND
Tetrachloroethene	5	5	ND	ND	**0.81**	ND	ND	ND	ND	ND	ND	ND
Toluene	1000	1000	ND	**7.4 Q**	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	100	ND	**54.8 Q**	**14.7 Q**	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200	200	ND	**106 Q**	**31.8 Q**	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	5	ND	**15.4 Q**	**230 Q**	ND	**0.77**	ND	**1.1**	ND	**4.4**	**4.2**
1,2,3-Trichlorobenzene	70	70	ND	**3.2**	**3.5**	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	70	70	ND	**18.4 Q**	**26.6 Q**	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	15	62	ND	**136 Q**	ND	ND	ND	**1.1**	ND	**0.62**	ND	ND
1,3,5-Trimethylbenzene	420	1200	ND	**21.3 Q**	ND	ND	ND	**1**	ND	ND	ND	ND
α-Xylene	10000	10000	**0.68**	**34.4 Q**	ND	ND	**0.53**	**2.7**	ND	ND	ND	ND
m/p-Xylene	10000	10000	**1**	**11.2 Q**	ND	ND	ND	**1.3**	ND	ND	ND	ND
Total Xylenes	10000	10000	**1.68**	**45.6**	0	0	0.53	4	0	0	0	0
1,4 Dioxane. All Results and Standards in ug/L												
1,4 Dioxane	6.4	32	ND	**25.8**	**28.8**	ND	ND	ND	ND	ND	**47**	**46.2**

Footnotes:

ND = Not detected
ug/L = microgram per Liter
B = Compound was found in the blank sample
Q -= Result Qualified By Laboratory
GW = Groundwater

1.9 = Detected value
46.7 = Exceeded Standard (Used Aquifer, Residential)
J = Result is lab-estimated value due to low detection level
Used MSC from November 21, 2021 revision.
= No Value

TETRA TECH

Table 1c
Analytical Data Summary - Volatile Organic Compounds and 1,4-Dioxane Groundwater Sampling (December 2020) Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Well ID	PADEP MSCs		MW-A	MW-B	MW-B	MW-C	MW-E	MW-F_A	MW-F_B	MW-6	MW-10	MW-13	IW-1A	IW-1B	IW-2A	IW-2B	IW-3A	IW-3B
Sample ID			Hoff MW-A	Hoff MW-B	DUP-121120	Hoff MW-C	Hoff MW-E	Hoff MW-F_A	Hoff MW-F_B	Hoff MW-6	Hoff MW-10	Hoff MW-13	HOFF IW-1A	HOFF IW-1B	Hoff IW-2A	Hoff IW-2B	Hoff IW-3A	Hoff IW-3B
Screen Interval:	Used Aquifer TDS ≤ 2500		15'-35'	16'-36'	16'-36'	15'-35'	15'-35'	18'-23'	30'-35'	1'-11'	1'-8'	10'-25'	17'-22'	27'-32'	17'-22'	30'-35'	18'-23'	32'-37'
Date Sampled:	Residential	Non-residential	12/9/2020	12/11/2020	12/11/2020	12/10/2020	12/10/2020	12/9/2020	12/9/2020	12/10/2020	12/10/2020	12/11/2020	12/10/2020	12/10/2020	12/11/2020	12/12/2020	12/11/2020	12/11/2020
Matrix:	GW		GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
Volatile Organics. All Results and Standards in ug/L																		
1,2-Dichlorobenzene	600	600	**0.36J**	**260**	**240**	**320**	**0.75**	**610**	**590**	**3.5**	**0.30**	**4.2**	ND	**21**	**330**	**1200**	**22**	**300**
1,3-Dichlorobenzene	600	600	ND	**17**	**15**	**2.7**	ND	**20**	**4.5**	**1.0**	**0.10**	**0.16**	**1.4**	**0.34**	**2.9**	**8.3**	**0.37**	**5.2**
1,4-Dichlorobenzene	75	75	**0.10J**	**100**	**91**	**73**	**0.16**	**200**	**140**	**21**	**1.6**	**1.3**	**29**	**5.7**	58	**230**	**5.8**	**66**
1,1-Dichloroethane	31	160	**2.4**	**23**	**21**	**350**	**0.19**	**29**	**160**	ND	ND	**4.5**	**130**	**110**	**86**	**340**	**17**	**43**
1,2-Dichloroethane	5	5	ND	ND	ND	**0.83**	ND	**14**	ND	ND	ND	**1.1**	**0.63**	**1.1**	**1.0**	**0.90**	**5.4**	**2.5**
1,1-Dichloroethene	7	7	**0.11J^c**	ND	ND	ND	ND	**2.0J^c**	ND	ND	ND	ND	ND	ND	**0.61**	ND	ND	ND
1,2-Dichloropropane	5	5	ND	ND	ND	**1.4**	ND	ND	**1.5**	ND	ND	**0.20**	**0.76**	**3.0**	**1.6**	**3.1**	**0.32**	**0.72**
1,2,4-Trichlorobenzene	70	70	ND	**5.4**	**4.8**	**5.8**	ND	**3.8J**	**3.1**	ND	ND	**0.12**	**3.0**	**0.71**	**3.0**	**4.7**	**0.20**	**2.2**
1,1,2-Trichloroethane	5	5	ND	**3.2**	**3.1**	**96**	ND	ND	**2.8**	ND	ND	**0.066**	**0.67**	**0.98**	**17**	**150**	**7.4**	**9.8**
1,1,1-Trichloroethane	200	200	**0.11J**	**1.1**	**0.91**	**4.4**	ND	**2.0J**	**61**	ND	ND	ND	**8.5**	**3.0**	**2.2**	**2.1**	**1.1**	**1.0**
1,1,2,2-Tetrachloroethane	0.84	4.3	ND	ND	ND	**1.8**	ND	ND	ND	ND	ND	ND	**0.21**	**0.63**	ND	**0.99**	**0.17**	ND
2-Butanone			ND	**27**	**26**	**60**	ND	ND	**45**	ND	ND	**27**	**89**	**190**	1500	**110**	410	**1100**
2-Hexanone			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.2**	ND	**1.8**	ND	ND	ND
4-Methyl-2-pentanone	3300	9300	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.1**	ND	ND	**1.2**	ND	ND	ND
Acetone	31000	88000	ND	**110**	**120**	**230**	ND	ND	**130**	ND	**1.4**	**110**	**610**	440	2900	440	2000	3200
Benzene	5	5	ND	**15**	**13**	**0.14**	ND	**51**	**1.4**	**2.5**	**0.23**	**5.8**	**0.11**	**0.68**	**1.2**	**2.1**	**0.51**	**4.3**
Bromodichloromethane	80	80	ND	ND	ND	**0.87**	ND	ND	ND	ND	ND	ND	**1.7**	**4.1**	ND	ND	**0.28**	ND
Bromoform	80	80	ND	ND	ND	**1.6**	ND	ND	ND	ND	ND	ND	**13**	**0.49**	ND	ND	ND	**2.5**
Bromomethane	10	10	ND	**3.9**	**3.5**	**4.6**	ND	ND	ND	ND	ND	**2.9**	**15**	**16**	**2.9**	ND	**23**	**12**
Carbon disulfide	1500	6200	ND	**2.6**	**2.1**	**0.34**	ND	ND	ND	ND	ND	**3.7**	**0.67**	**0.80**	**0.62**	ND	**0.99**	**2.6**
Carbon tetrachloride	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.74**	ND	ND	ND	ND
Chlorobenzene	100	100	**0.21J**	**1500**	**1400**	**21**	**0.12**	**1200**	**360**	**540**	**40**	**6.9**	**2.2**	**1.1**	85	**570**	**20**	**920**
Chloroethane	2100	88000	**3.9**	**1.7**	**1.4**	**14**	ND	**1.7J**	**8.8**	ND	ND	**4.1**	**5.4**	**4.6**	**3.9**	**18**	**1.3**	**2.7**
Chloroform	80	80	ND	ND	ND	**1.3**	ND	ND	ND	ND	ND	**0.11**	**2.2**	**3.9**	**0.59**	ND	**8.8**	**3.5**
Chloromethane	30	30	ND	**20**	**17**	**35**	ND	ND	**2.6**	ND	ND	**78**	**63**	**63**	**7.2**	**2.3**	**500**	**99**
cis-1,2-Dichloroethene	70	70	ND	**16**	**15**	**6.8**	**0.22**	**150**	**510**	ND	ND	**0.45**	**0.27**	**0.10**	**70**	**880**	**3.6**	**96**
Cyclohexane	13,000	13,000	ND	ND	ND	ND	ND	**6.1J**	ND	**0.75**	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	80	80	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	**4.5**	**5.6**	ND	ND	ND	ND
Ethylbenzene	700	700	ND	**0.85**	ND	ND	ND	**1.5J**	ND	**1.3**	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	840	3500	ND	**0.63**	ND	ND	ND	**2.6J**	ND	ND	ND	ND	ND	ND	**0.13**	ND	ND	ND
Methyl acetate	42,000	42,000	ND	ND	ND	**4.2**	ND	ND	ND	ND	ND	**2.0**	**4.1**	ND	ND	ND	**18**	ND
Methyl tertiary butyl ether	20	20	ND	ND	ND	ND	**0.052**	**300**	ND	ND	ND	**0.054**	ND	**0.086**	**0.46**	ND	**0.084**	**0.35**
Methylcyclohexane			ND	ND	ND	ND	ND	**1.6J**	ND	**0.84**	ND	ND	ND	ND	**0.42**	ND	ND	ND
Methylene Chloride	30	30	ND	ND	ND	**1.0**	ND	ND	ND	ND	ND	**0.68**	**2.3**	**15**	**0.72**	**1.4**	**25**	**11**
Tetrachloroethene	5	5	ND	ND	ND	**0.28**	ND	ND	ND	ND	ND	**0.067**	**0.50**	**0.28**	**1.9**	ND	**0.60**	**0.36**
Toluene	1000	1000	ND	ND	ND	ND	ND	**2.8J**	ND	ND	ND	**0.24**	ND	ND	**0.48**	ND	ND	ND
trans-1,2-Dichloroethene	100	100	ND	**2.4**	**2.5**	**1.9**	ND	**2.7J^c**	**130**	ND	ND	**0.068**	ND	**0.073**	**13**	**230**	**0.56**	**26**
trans-1,3-Dichloropropene	7.3	34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.37**	ND	ND	ND	ND
Trichloroethene	5	5	ND	ND	ND	ND	**0.33**	**2.7J**	**8.3**	ND	ND	ND	ND	**0.16**	ND	ND	ND	ND
Vinyl chloride	2	2	ND	ND	ND	ND	ND	**35**	ND	ND	ND	**0.18**	ND	**0.16**	**0.60**	ND	ND	ND
Total Xylenes	10000	10000	ND	**1.6**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4 Dioxane. All Results and Standards in ug/L																		
1,4 Dioxane	6.5	27	**0.97**	**2.9**	**4.0**	**0.45**	**0.70**	**97**	**42**	**3.5**	ND	**3.6**	ND	**12**	**6.8**	**29**	**1.5**	**17**

Footnotes:

ND = Not detected
ug/L = microgram per Liter
B = Compound was found in the blank sample
Q -= Result Qualified By Laboratory
GW = Groundwater

1.9 = Detected value
46.7 = Exceeded Standard (Used Aquifer, Residential)
J = Result is lab-estimated value due to low detection level
Used MSC from November 21, 2021 revision.
^c = CCV Recovery is outside acceptable limits

=No Value

TETRA TECH

Table 1d
Analytical Data Summary - Volatile Organic Compounds and 1,4-Dioxane Groundwater Sampling (January 2021) Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Well ID	PADEP MSCs		MW-A	MW-B	MW-C	MW-E	MW-6	MW-10	MW-13	MW-F_B	MW-F_A	IW-1-A	IW-1-B	IW-2-A	IW-2-B
Sample ID			Hoff MW-A-011921	Hoff MW-B-011921	Hoff MW-C-011921	Hoff MW-E	Hoff MW-6	Hoff MW-10	Hoff MW-13-011921	Hoff MW-F_B	Hoff MW-F_A	Hoff IW-1-A	Hoff IW-1-B	Hoff IW-2-A	Hoff IW-2-B
Screen Interval:	Used Aquifer TDS ≤ 2500		15'-35'	16'-36'	15'-35'	15'-35'	1'-11'	1'-8'	10'-25'	30'-35'	18'-23'	17'-22'	27'-32'	17'-22'	30'-35'
Date Sampled:	Residential	Non-residential	1/19/2021	1/19/2021	1/19/2021	1/21/2021	1/21/2021	1/21/2021	1/19/2021	1/20/2021	1/20/2021	1/20/2021	1/20/2021	1/21/2021	1/20/2021
Matrix:	GW		GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
Volatile Organics. All Results and Standards in ug/L															
1,2-Dichlorobenzene	600	600	0.24	940	310	0.82	3.1	3.0	0.78	680	480	25	47	180	2900
1,3-Dichlorobenzene	600	600	ND	24	2.6	ND	1.0	1.5	ND	7.5	20	0.70	0.41	5.2	23
1,4-Dichlorobenzene	75	75	0.071	210	62	0.15	19	21	0.30	140	190	9.2	12	22	530
1,1-Dichloroethane	31	160	1.4	67	190	0.24	ND	2.3	1.5	140	31	28	ND	130	440
1,2-Dichloroethane	5	5	ND	0.54	0.55	ND	ND	ND	0.10	0.57	14	0.15	0.46	0.98	0.97
1,1-Dichloroethene	7	7	0.078	ND	ND	0.069	ND	ND	ND	5.2	1.9	ND	ND	ND	4.5
1,2-Dichloropropane	5	5	ND	ND	0.81	ND	ND	ND	ND	1.3	ND	ND	1.1	2.6	3.8
1,2,4-Trichlorobenzene	70	70	ND	8.7	3.5	ND	ND	ND	ND	3.5	4.5	1.3	1.0	1.4	13
1,1,1-Trichloroethane	200	200	0.12	12	ND	ND	ND	ND	0.096	55	1.4	1.5	1.7	17	210
1,1,2-Trichloroethane	5	5	ND	0.99	2.3	ND	ND	ND	ND	1.2	ND	ND	0.37	3.7	2.2
1,1,2,2-Tetrachloroethane	0.84	4.3	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	0.31	1.0	0.72
2-Butanone			ND	15	27	ND	ND	ND	7.6	6.6	ND	10	43	1100	19
Acetone	31000	88000	0.99	80	180	ND	ND	3.6	26	36	25	80	470	5900	98
Benzene	5	5	ND	49	0.26	ND	2.8	3.8	0.66	6.9	67	0.18	7.1	0.39	8.3
Bromodichloromethane	80	80	ND	ND	1.1	ND	ND	ND	0.30	ND	ND	ND	ND	0.67	ND
Bromoform	80	80	ND	ND	5.0	ND	ND	ND	ND	0.92	ND	10	18	3.3	1.7
Bromomethane	10	10	ND	4.2	28	ND	ND	ND	1.0	ND	ND	0.13	0.44	0.24	1.0
Carbon disulfide	1500	6200	ND	2.8	0.35	0.30	480	480	0.60	1100	1000	11	7.1	10	1900
Chlorobenzene	100	100	0.11	3000	99	ND	ND	0.49	0.98	7.6	2.2	6.2	3.3	4.6	24
Chloroethane	250	1200	6.9	3.8	8.5	ND	ND	ND	0.81	ND	ND	ND	0.48	1.9	ND
Chloroform	80	80	ND	ND	1.4	ND	ND	0.21	0.50	2.3	ND	19	49	11	2.9
Chloromethane	30	30	ND	16	62	ND	ND	6.8	14	960	120	0.88	13	9.4	3600
cis-1,2-Dichloroethene	70	70	ND	39	20	ND	0.91	0.18	0.15	ND	14	ND	ND	ND	ND
Dibromochloromethane	80	80	ND	ND	1.8	ND	ND	ND	0.10	0.60	4.0	ND	ND	0.22	1.4
Ethylbenzene	700	700	ND	1.5	ND	ND	1.4	0.47	ND	ND	1.4	ND	ND	ND	0.62
Isopropylbenzene	840	3500	ND	2.0	ND	ND	ND	0.33	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	42,000	120,000	ND	ND	ND	0.075	ND	0.055	0.76	ND	390	ND	0.14	0.29	ND
Methyl tertiary butyl ether	20	20	ND	ND	ND	ND	1.1	0.12	ND	ND	3.8	0.16	0.076	ND	0.63
Methylcyclohexane			ND	ND	ND	ND	ND	ND	ND	ND	ND	0.30	0.98	3.6	1.9
Methylene Chloride	30	30	ND	ND	1.6	ND	ND	ND	1.6	ND	ND	ND	0.12	0.16	0.63
Tetrachloroethene	5	5	ND	ND	ND	ND	ND	0.12	0.063	ND	2.5	ND	0.18	ND	0.90
trans-1,2-Dichloroethene	100	100	ND	6.2	6.3	ND	ND	0.28	ND	130	2.6	0.17	1.9	4.2	710
Trichloroethene	5	5	ND	4.0	1.7	0.49	ND	ND	0.24	12	1.9	0.32	13	0.87	18
Vinyl chloride	2	2	ND	ND	ND	ND	ND	4.4	0.19	6.7	47	ND	0.18	0.15	1.0
Xylenes, Total	10000	10000	ND	6.6	ND	ND	ND	0.42	ND	ND	ND	ND	ND	ND	ND
1,4 Dioxane. All Results and Standards in ug/L															
1,4 Dioxane	6.6	27	0.81	5.7	2.8	0.86	0.40	1.6	2.1	27	100	1.9	15	11	49

Footnotes:

ND = Not detected
ug/L = microgram per Liter
B = Compound was found in the blank sample
Q -= Result Qualified By Laboratory
GW = Groundwater

1.9 = Detected value
46.7 = Exceeded Standard (Used Aquifer, Residential)
J = Result is lab-estimated value due to low detection level
Used MSC from November 21, 2021 revision.

=No Value

Table 1e
Analytical Data Summary - Volatile Organic Compounds and 1,4-Dioxane Groundwater Sampling (June 2021) Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Well ID	PADEP MSCs		MW-A	MW-C	MW-E	MW-F_A	MW-F_B	MW-10	MW-10	MW-13	IW-2-A	IW-2-B	IW-3-A	IW-3B
Sample ID			Hoff MW-A-060121	Hoff MW-C-060121	Hoff MW-E	Hoff MW-F_A	Hoff MW-F_B	Hoff MW-10	Hoff Dup-1	Hoff MW-13	Hoff IW-2-A	Hoff IW-2-B	Hoff IW-3A	Hoff IW-3B
Screen Interval:	Used Aquifer TDS ≤ 2500		15'-35'	15'-35'	15'-35'	18'-23'	30'-35'	1'-8'		10'-25'	17'-22'	30'-35'	18'-23'	32'-37'
Date Sampled:	Residential	Non-residential	6/1/2021	6/1/2021	6/1/2021	6/2/2021	6/2/2021	6/3/2021	6/3/2021	6/22/2021	6/3/2021	6/3/2021	6/2/2021	6/2/2021
Matrix:	GW		GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
Volatile Organics. All Results and Standards in ug/L														
Ethylbenzene	700	700	ND	ND	ND	**1.4**	0.65	ND	ND	ND	ND	**3.2**	ND	ND
1,1,1-Trichloroethane	200	200	ND	**112**	ND	ND	**54.7**	ND	ND	ND	**12.8**	**254**	**1**	**1.9**
1,1,2,2-Tetrachloroethane	0.84	4.3	ND	**33.6**	ND	**0.82**	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5	5	ND	**4.4**	ND	ND	**1.1**	ND	ND	ND	**3.7**	**1.8**	ND	**0.58**
1,1-Dichloroethane	31	160	**2.2**	**386**	ND	**27.6**	**140**	**0.65**	**0.57**	**3.2**	**223**	**504**	**39**	**56**
1,1-Dichloroethene	7	7	ND	ND	ND	**0.7**	**15.2**	ND	ND	ND	ND	104	ND	ND
1,2,3-Trichlorobenzene	70	70	ND	ND	ND	ND	**1.1**	ND	ND	ND	**2**	**2.7**	**0.54**	**0.98**
1,2,4-Trichlorobenzene	70	70	ND	**14.1**	ND	**4.3**	**6.7**	ND	ND	ND	**12.7**	**16**	**3.2**	**5.5**
1,2-Dichlorobenzene	600	600	**2.7**	**1090**	**1.3**	**453**	**1240**	**1.3**	**1.2**	**1.4**	**1940**	**4520**	**251**	**286**
1,2-Dichloroethane	5	5	ND	**1**	ND	**16.8**	ND	ND	ND	ND	**1.1**	**0.8**	**0.65**	**0.63**
1,2-Dichloropropane	5	5	ND	**1.9**	ND	**0.75**	**1.6**	ND	ND	ND	**2.2**	**4**	**0.62**	**0.53**
1,3-Dichlorobenzene	600	600	ND	**9.5**	ND	**20.2**	ND	**0.68**	ND	ND	ND	**36.1**	ND	ND
1,4-Dichlorobenzene	75	75	**0.74**	**274**	ND	**185**	**262**	**8.2**	**7.6**	**0.61**	**264**	**742**	**43.9**	**70.3**
2-Butanone			ND	**25.8**	ND	ND	ND	3.2	ND	32.4	147	ND	89.4	89.5
Acetone	31000	88000	ND	**216**	ND	**9.8**	**10.3**	**12.9**	**10**	**28.4**	**987**	**26.4**	**202**	**236**
Benzene	5	5	ND	**0.87**	ND	**80.2**	**8.1**	**1.5**	**1.3**	**1.2**	**2.8**	**15.1**	**2.1**	**3.1**
Bromoform	80	80	ND	ND	ND	ND	ND	ND	ND	ND	**0.71**	ND	ND	ND
Bromochloromethane	10	10	ND	**1.7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane			ND	**1.2**	ND	ND	ND	ND	ND	ND	**4.8**	ND	ND	ND
Bromomethane	10	10	ND	**27.6**	ND	ND	**2.2**	ND	ND	**9.8**	**61.7**	**2.4**	**53.2**	**52**
Carbon disulfide	1500	6200	ND	**15.6**	ND	ND	**4.4**	ND	ND	**3.1**	**1.8**	**0.83**	**2.7**	**4.4**
Chlorobenzene	100	100	**2.1**	**336**	ND	**979**	**1780**	**213**	**185**	**2.4**	**346**	**3360**	**76**	**207**
Chloroethane	250	1200	ND	**16.8**	ND	**2.4**	**7**	ND	ND	ND	**7**	**27.8**	**7.7**	**4.2**
Chloroform	80	80	ND	5.8	ND	ND	ND	ND	ND	ND	4.6	ND	1	0.73
Chloromethane	30	30	ND	**164**	ND	ND	**1.6**	ND	ND	**7.5**	**164**	**1.6**	**211**	**177**
cis-1,2-Dichloroethene	70	70	**2.9**	**47.8**	**1.1**	**55**	**1340**	**1.5**	**1.2**	ND	**898**	**6590**	**50.1**	**86.1**
Cyclohexane	13,000	13,000	ND	ND	NA	NA	NA	NA	NA	ND	NA	NA	ND	ND
Dibromochloromethane	80	80	ND	**1.4**	ND	ND	ND	ND	ND	ND	**0.99**	ND	ND	ND
Dibromomethane	8.4	35	ND	ND	ND	ND	ND	ND	ND	ND	**1.5**	ND	ND	ND
Dichloromethane (Methylene chloride	5	5	ND	**2.6**	ND	ND	ND	ND	ND	ND	**3**	**1.6**	**0.74**	**0.67**
Isopropylbenzene	840	3500	ND	ND	ND	**3.5**	**1.6**	ND	ND	ND	ND	**4.3**	ND	ND
Methyl acetate	42,000	120,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tertiary butyl ether	20	20	ND	ND	ND	**385**	ND	ND	ND	ND	**1.4**	ND	**0.8**	**1.4**
Naphthalene	100	100	ND	ND	ND	ND	**3.5**	ND	ND	ND	ND	**20.5**	ND	ND
n-Butylbenzene	1700	4900	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.82**	ND	ND
n-Propylbenzene	2100	8800	ND	ND	ND	**0.71**	**1**	ND	ND	ND	ND	**3.1**	ND	ND
o-Xylene	1000	1000	ND	ND	ND	**1.2**	**0.76**	ND	ND	ND	ND	**11.5**	ND	ND
Sec-Butylbenzene	3500	9700	ND	ND	ND	**3.5**	**1.2**	ND	ND	ND	ND	**2.3**	ND	ND
t-Butyl alcohol	4200	12000	ND	ND	ND	**418**	**9**	**9.3**	**7**	**11.1**	**27.4**	**11.2**	**32.3**	**30.9**
Methylcyclohexane			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tert-Butylbenzene	3500	9700	ND	ND	ND	**0.61**	ND	ND	ND	ND	ND	**0.82**	ND	ND
Tetrahydrofuran	25	130	ND	ND	ND	ND	**2.7**	ND	ND	**21.8**	ND	**25.6**	**6.9**	**79**
Tetrachloroethene	5	5	ND	ND	ND	ND	ND	ND	ND	ND	**0.54**	**1**	ND	ND
Toluene	1000	1000	ND	ND	**1.9**	**3.8**	ND	**8.3**	**6.9**	ND	ND	**1.6**	ND	ND
trans-1,2-Dichloroethene	100	100	ND	**15.6**	ND	**1.9**	**58.2**	ND	ND	ND	**143**	**173**	**5.2**	**9.1**
Trichloroethene	5	5	ND	**8.5**	ND	**0.89**	**17**	ND	ND	ND	**112**	**30.4**	**2**	**4.4**
Vinyl chloride	2	2	ND	ND	ND	**40**	**11.5**	**0.69**	**0.67**	ND	ND	**35**	ND	ND
Xylenes, Total	10000	10000	0	0	ND	1.2	0.76	0	0	0	0	13	0	0
1,4 Dioxane. All Results and Standards in ug/L														
1,4 Dioxane	6.5	27	ND	**17.3**	ND	**98.6**	**26.7**	ND	ND	**2.9**	**83.1**	**55.6**	**20.8**	**29.3**

Footnotes:

ND = Not detected
ug/L = microgram per Liter
B = Compound was found in the blank sample

1.9 = Detected value
46.7 = Exceeded Standard (Used Aquifer, Residential)
J = Result is lab-estimated value due to low detection level

Q -= Result Qualified By Laboratory
GW = Groundwater
Used MSC from November 21, 2021 revision.

=No Value

Table 1f
Analytical Data Summary - Volatile Organic Compounds and 1,4-Dioxane Groundwater Sampling (September 2021) Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Well ID	PADEP MSCs		MW-A	MW-B	MW-C	MW-D	MW-F_A	MW-F_B	MW-10	MW-13	IW-1A	IW-1B	IW-2A	IW-2B	IW-3A	IW-3B	Dup
Sample ID			Hoff MW-A	Hoff MW-B	Hoff MW-C	Hoff MW-D	Hoff MW-F_A	Hoff MW-F_B	Hoff MW-10	Hoff MW-13	Hoff IW-1A	Hoff IW-1B	Hoff IW-2A	Hoff IW-2B	Hoff IW-3A	Hoff IW-3B	Hoff DUP-092821
Screen Interval:	Used Aquifer TDS ≤ 2500		15'-35'	16'-36'	15'-35'	15'-35'	18'-23'	30'-35'	1'-8'	10'-25'	17'-22'	27'-32'	17'-22'	30'-35'	18'-23'	32'-37'	
Date Sampled:	Residential	Non-residential	9/28/2021	9/30/2021	9/27/2021	9/30/2021	9/28/2021	9/28/2021	9/27/2021	9/29/2021	9/30/2021	9/30/2021	9/29/2021	9/29/2021	9/29/2021	9/29/2021	9/98/2021
Matrix:	GW		GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
Volatile Organics. All Results and Standards in ug/L																	
1,1-Dichloroethane	31	160	**1.4**	**22.7 Q**	**242 Q**	**5.8**	**33.8**	**170 Q**	**2.4**	**1.2**	**27.8**	**67.9**	**118 E**	**517 Q**	**34.4 Q**	**32 Q**	**174 Q**
1,1-Dichloroethene	7	7	ND	ND	ND	ND	**1.4**	**29.8 Q**	ND	ND	ND	**1.2**	ND	**134 Q**	ND	ND	**29.2 Q**
1,1,1-Trichloroethane	200	200	ND	**2.8**	**66.2 Q**	ND	**1.5**	**74.4**	ND	ND	**1.9**	**1.5**	**5.3**	**247 Q**	**2.2**	**1.2**	**75.2 Q**
1,1,2-Trichloroethane	5	5	ND	ND	**3.6**	ND	ND	**0.87**	ND	ND	ND	ND	**1.3**	**1.4**	ND	ND	**0.9**
1,1,2,2-Tetrachloroethane	0.84	4.3	ND	ND	**7.2**	ND	ND	ND	ND	ND	ND	ND	**7.7**	ND	**0.78**	**0.53**	ND
1,2-Dichlorobenzene	600	600	ND	**312 Q**	**565**	**7**	**590**	**1900 Q**	**4.9**	**0.61**	**30**	**105**	**431 E**	**5850**	**436 Q**	**399**	**1840 Q**
1,2-Dichloroethane	5	5	ND	ND	**1.1**	ND	**13.7**	ND	ND	ND	ND	ND	**1.1**	**0.8**	**0.69**	**0.61**	ND
1,2-Dichloropropane	5	5	ND	ND	**1.3**	ND	**0.76**	**1.4**	ND	ND	ND	**1.1**	**1.1**	**3.8**	0.5	ND	**1.6**
1,2,3-Trichlorobenzene	70	70	ND	ND	**2**	ND	ND	**0.64**	ND	ND	ND	ND	**1.7**	0.5	**0.78**	ND	**0.53**
1,2,4-Trichlorobenzene	70	70	ND	**2.8**	**11.2 Q**	ND	**4.9**	**7.4**	ND	ND	**1.4**	**1.7**	**6.6**	**2.8**	**4.9**	**3.6**	**6.6 Q**
1,2,4-Trimethylbenzene	15	62	ND	**2.3**	ND	ND	ND	0.61	ND	ND	ND	ND	ND	**2.3**	ND	ND	ND
1,3-Dichlorobenzene	600	600	ND	**19 Q**	**5.8**	ND	**22.7**	**18.2**	**0.63**	ND	ND	ND	ND	**40.1**	ND	ND	**18.8**
1,4-Dichlorobenzene	75	75	ND	**95.6 Q**	**138 Q**	**1.1**	**210**	**346 Q**	**7.4 Q**	**0.51**	**9.5**	**20.4 Q**	**61.4 E**	**924 Q**	**62.8 Q**	**60.8 Q**	**344 Q**
2-Butanone			ND	**2.6**	**23.4**	ND	ND	ND	ND	ND	**5.3**	**10.7**	**62.6**	2.5	**26.6 Q**	**58.6 Q**	ND
Acetone	31000	88000	ND	**13.3 B**	**224 Q**	ND	5	**6.4 B**	5	**5.3 B**	**73.4**	**75 Q**	**589 E**	**8.1 B**	**128 Q**	**156 Q**	**6 B**
Benzene	5	5	ND	**28.8 Q**	**2.1**	ND	**56.2**	**9.8 Q**	**2.2**	ND	ND	ND	**2**	**17.4 Q**	**1.6**	**1.8**	**10.2 Q**
Bromodichloromethane	80	80	ND	ND	**0.65**	ND	ND	ND	ND	ND	ND	ND	**1.6**	ND	ND	ND	ND
Bromochloromethane	80	80	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	**3.7**	ND	ND	ND	ND
Bromomethane	10	10	ND	**2.4**	36.2 Q	ND	ND	**2.9**	**0.73**	ND	**11.2**	**7.4 Q**	**76 E**	**2.2**	**36 Q**	**34 Q**	**2.4**
Carbon disulfide	1500	6200	ND	0.5	**1.6**	ND	ND	ND	ND	**0.95**	ND	ND	**0.7**	**0.64**	**0.85**	**0.93**	ND
Chlorobenzene	100	100	ND	**2010**	**322 Q**	**6**	**1480 Q**	**2590 Q**	**234**	**2.8**	**9.6**	**7.9**	**95.8 E**	**4480 Q**	**206 Q**	**238**	**2680 Q**
Chloroethane	2100	88000	ND	**1**	**10.5 Q**	ND	**1.6**	**8.2 Q**	**0.53**	ND	**1.6**	**1**	**3.3**	**26.4 Q**	**2.1**	ND	**7.2**
Chloroform	80	80	ND	0.5	**2**	ND	ND	ND	ND	ND	ND	ND	**2.4**	ND	**0.62**	**0.65**	ND
Chloromethane	30	30	ND	**1.9**	**156 Q**	ND	ND	1.3	0.7	ND	**29.4**	**24 Q**	**338 E**	**1.7**	**162 Q**	**187**	**1.4**
cis-1,2-Dichloroethene	70	70	ND	**7.8 Q**	**108 Q**	**2.6**	**126**	**2180 Q**	**5.7**	ND	**1.4**	**43.2 Q**	**115 E**	**7820**	**142 Q**	**59.3 Q**	**2200 Q**
Dichloromethane	5	5	ND	ND	**2.1**	ND	ND	ND	ND	ND	ND	ND	**3.1**	**2.4**	**0.62**	**0.6**	ND
Dibromochloromethane	80	80	ND	ND	**0.59**	ND	ND	ND	ND	ND	ND	ND	**2.2**	ND	ND	ND	ND
Dibromomethane	8.4	35	ND	ND	**0.58**	ND	ND	ND	ND	ND	ND	ND	**1.6**	ND	ND	ND	ND
Ethylbenzene	700	700	ND	ND	ND	ND	**1.5**	ND	ND	ND	ND	ND	ND	**4.2**	ND	ND	**1.4**
Isopropylbenzene	840	3500	ND	**1.1**	ND	ND	**4.6**	**2.9**	ND	ND	ND	ND	ND	**7.6 Q**	ND	ND	**2.9**
Methyl tertiary butyl ether	20	20	ND	ND	ND	ND	**323**	ND	ND	ND	ND	ND	**1.4**	ND	ND	**0.58**	ND
Naphthalene	100	100	ND	ND	ND	ND	ND	**6.6**	ND	ND	ND	ND	**1.4**	**2.1**	ND	ND	**6.9**
n-Butylbenzene	1700	4900	ND	ND	ND	ND	ND	**0.61**	ND	ND	ND	ND	ND	**1.7**	ND	ND	**0.56**
n-Propylbenzene	4200	12000	ND	**1.7**	ND	ND	**0.66**	**2.2**	ND	ND	ND	ND	ND	**5.8 Q**	ND	ND	**2.1**
o-chlorotoluene	4200	1200	ND	**0.58**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5
Sec-Butylbenzene	3500	9700	ND	**1.6**	ND	ND	**4.8**	**1.7**	ND	ND	ND	ND	ND	**3.6**	ND	ND	**1.8**
t-Butyl alcohol	4200	12000	**19.4**	**23.2 B**	**19.4**	**16.9**	**372**	**20**	**12.8**	**29.9 B**	**24.3**	**24.8 B**	**40.3**	**24.3 B**	**32.3**	**39.8**	**20.7**
Tert-Butylbenzene	3500	9700	ND	**0.62**	ND	ND	**0.78**	ND	ND	ND	ND	ND	ND	**0.99**	ND	ND	ND
Tetrachloroethene	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.2**	ND	ND	ND
Tetrahydrofuran	25	130	ND	ND	ND	ND	ND	**1.7**	ND	ND	**1.9**	**32.1**	**19.4**	**4.8**	**10.1**	**39.3 Q**	**1.7**
Toluene	1000	1000	ND	ND	ND	ND	**2.3**	**0.6**	ND	ND	ND	ND	ND	**1.6**	ND	ND	**0.53**
trans-1,2-Dichloroethene	100	100	ND	**0.67**	**17 Q**	ND	**4.5**	**58.8 Q**	ND	ND	ND	**2.6**	**19.4**	**152 Q**	**8.6 Q**	**4.8 Q**	**58.3**
Trichloroethene	5	5	ND	**0.66**	**8.6 Q**	**0.74**	**2.6**	**17.6 Q**	ND	ND	ND	**44.3 Q**	**7.7**	**44.9 Q**	**9 Q**	**4.4 Q**	**18 Q**
Vinyl chloride	2	2	ND	ND	ND	**0.63**	**47.4**	**12.6 Q**	**1.6**	ND	ND	ND	ND	**39.1 Q**	ND	ND	**12.6 Q**
m/p-Xylenes	10000	10000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylenes	10000	10000	ND	**0.82**	ND	ND	**1**	**2.1**	ND	ND	ND	ND	ND	**12.2 Q**	ND	ND	**1.9**
Total Xylenes	10000	10000	0	**0.82**	0	0	**1**	**2.1**	0	0	0	0	0	**13.2**	0	0	**1.9**
1,4 Dioxane. All Results and Standards in ug/L																	
1,4 Dioxane	6.5	27	ND	**3.6**	**14.5**	ND	**97.2**	**33.5**	ND	ND	ND	**26**	**44.2**	**70.3**	**29**	**18**	**34.4**

Footnotes:
ND = Not detected
ug/L = microgram per Liter
B = Compound was found in the blank sample

GW = Groundwater
1.9 = Detected value
46.7 = Exceeded Standard (Used Aquifer, Residential)
J = Result is lab-estimated value due to low detection level

Q -= Result Qualified By Laboratory
Used MSC from November 21, 2021 revision.

=No Value

TETRA TECH

Table 1g
Analytical Data Summary - Volatile Organic Compounds and 1,4-Dioxane Groundwater Sampling (December 2021) Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Well ID:	PADEP MSCs		MW-A	MW-B	MW-C	MW-D	MW-FA	MW-FB	MW-8	MW-10	MW-13	IW-1A	IW-1B	IW-2A	IW-2B	IW-3A	IW-3B
Sample ID:			HOFF MW-A	HOFF IW-B	HOFF MW-C	HOFF MW-D	HOFF MW-FA	HOFF MW-FB	HOFF MW-8	HOFF MW-10	HOFF MW-13	HOFF IW-1A	HOFF IW-1B	HOFF IW-2A	HOFF IW-2B	HOFF IW-3A	HOFF IW-3B
Screen Interval	Used Aquifer TDS ≤ 2500		15'-35'	16'-36'	15'-35'	15'-35'	18'-23'	30'-35'	15'-30'	1'-8'	10'-25'	17'-22'	27'-32'	17'-22'	30'-35'	18'-23'	32'-37'
Date Sampled:	Residential	Non-residential	12/6/2021	12/10/2021	12/9/2021	12/9/2021	12/8/2021	12/8/2021	12/7/2021	12/6/2021	12/9/2021	12/9/2021	12/9/2021	12/10/2021	12/10/2021	12/10/2021	12/10/2021
Matrix	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
Volatile Organics. All Results and Standards in ug/L																	
Acetone	31000	88000	ND	ND	**128**	ND	ND	ND	ND	ND	**20.8**	**63.4**	**54.5**	**727**	ND	**76.9**	**115**
Benzene	5	5	ND	**263**	**1**	ND	**42.8**	**11.1**	**47.8**	**7.3**	ND	ND	ND	**0.77**	ND	**1.2**	ND
Bromodichloromethane	80	80	ND	ND	**0.91 J**	ND	ND	ND	ND	ND	ND	ND	ND	**2.7**	ND	ND	ND
Bromoform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**17.4**	ND	ND	ND
Bromomethane	10	10	ND	ND	**13.8**	ND	ND	ND	ND	ND	ND	**9.5**	**5.8**	**45.8**	ND	**33.9**	**20.2**
2-Butanone (MEK)	4000	4000	ND	ND	**7.9 J**	ND	ND	ND	ND	ND	ND	ND	**9.9 J**	**77.2**	ND	**8.3 J**	**24.3**
sec-Butylbenzene	4200	12000	ND	ND	ND	ND	**4.2 J**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	1500	6200	ND	ND	**0.72 J**	ND	ND	ND	ND	ND	**1.1 J**	ND	ND	ND	ND	**0.53 J**	**0.78 J**
Chlorobenzene	100	100	ND	**13600**	**324**	**5.1**	**856**	**2260**	**2240**	**572**	**1.2**	**9.9**	**6.4**	**5.4**	**3320**	**136**	**10.9**
Chloroethane	2100	88000	ND	ND	**10**	ND	ND	**12**	**4.1 J**	ND	ND	**0.81 J**	**0.79 J**	**3.4**	**57**	**1.5**	**1.9**
Chloroform	80	80	ND	ND	ND	ND	ND	**7.8**	ND	ND	ND	ND	ND	ND	**102**	ND	ND
Chloromethane (Methyl Chloride)	30	30	ND	ND	**69.1**	ND	ND	ND	ND	ND	ND	**23.2**	**12.6**	**211**	**64.2**	**89.1**	**140**
Dibromochloromethane	80	80	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.7**	ND	ND	ND
1,2-Dichlorobenzene	600	600	ND	**509**	**599**	**4.4**	**425**	**1900**	**215**	**3.1**	**1.2**	**23.7**	**104**	**101**	**7840**	**270**	**56.6**
1,3-Dichlorobenzene	600	600	ND	**48.2**	**6.2**	ND	**22**	**20.4**	**6.6**	**1.1**	ND	**0.65 J**	**0.68 J**	**1.1**	46.8 J	**2.7**	ND
1,4-Dichlorobenzene	75	75	ND	**270**	**131**	**0.90 J**	186	**354**	**66.2**	**15**	ND	**8.8**	**18.6**	**24**	**1000**	**42.1**	**9.9**
1,1-Dichloroethane	31	160	**2.6**	26.6	**218**	**5.6**	**28.1**	**170**	**22**	**10.7**	**2.3**	**23.1**	**53.4**	89.9	**719**	**28.4**	**18.1**
1,2-Dichloroethane	5	5	ND	ND	**0.72 J**	ND	**13.3**	ND	ND	ND	ND	ND	ND	**0.75 J**	ND	ND	ND
1,1-Dichloroethene	7	7	ND	ND	ND	ND	ND	**30.6**	ND	ND	ND	ND	**1.7**	ND	**171**	ND	ND
cis-1,2-Dichloroethene	70	70	ND	**17.4**	**270**	**2.1**	**65.5**	**2140**	70.6	**21.9**	**1.2**	**1.9**	**44.2**	**9.5**	**12400**	**118**	**2.9**
trans-1,2-Dichloroethene	100	100	ND	ND	**44.6**	ND	**3.1 J**	**76**	**5.4**	**0.78 J**	ND	ND	**2.3**	**1.9**	**277**	**19.8**	**0.68 J**
1,2-Dichloropropane	5	5	ND	ND	**1.1**	ND	ND	ND	ND	ND	ND	ND	**0.90 J**	ND	ND	ND	ND
Ethylbenzene	700	700	ND	ND	ND	ND	ND	ND	**3.2 J**	ND	ND	**ND**	ND	ND	ND	ND	ND
Isopropylbenzene (CUMENE)	840	3500	ND	ND	ND	ND	**4.1 J**	ND	**6**	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Tert Butyl Ether	20	20	ND	ND	ND	ND	**279**	ND	**7.5**	ND	ND	ND	ND	**1**	ND	ND	ND
4-Methyl-2-pentanone(MIBK)	3300	9300	ND	ND	ND	ND	ND	ND	ND	ND	**2.8 J**	ND	ND	ND	ND	ND	ND
Methylene bromide (Dibromomethane)	8.4	35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.2**	ND	ND	ND
Methylene chloride	5	5	ND	ND	**1.3 J**	ND	ND	ND	ND	ND	ND	ND	ND	**1.7 J**	ND	ND	ND
n-Propylbenzene	2100	8800	ND	**9.3 J**	ND	ND	ND	ND	**3.7 J**	ND	ND	ND	ND	ND	ND	ND	ND
Tert Butyl Alcohol			ND	ND	ND	ND	**336**	ND	**198**	**9.7 J**	**20.4**	ND	ND	**24.6**	ND	**15.5**	**20.8**
1,1,2,2-Tetrachloroethane	0.84	4.3	ND	ND	**1.1**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrahydrofuran	25	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**12.8**	**11.8**	ND	**11**	**28.8**
Toluene	1000	1000	ND	ND	ND	ND	**2.7 J**	ND	**24.9**	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	70*	70*	ND	ND	**1.4**	ND	ND	ND	ND	ND	ND	ND	ND	**1.4**	ND	ND	ND
1,2,4-Trichlorobenzene	70	70	ND	ND	**8.6**	ND	**4.7 J**	**8.5**	ND	ND	ND	**1.3**	**1.3**	**4.9**	ND	**2.9**	**0.71 J**
1,1,1-Trichloroethane	200	200	ND	ND	**74.6**	ND	ND	**84.3**	**3.8 J**	ND	ND	**1.9**	**1.2**	**2.6**	**387**	**1.6**	ND
1,1,2-Trichloroethane	5	5	ND	ND	**2.4**	ND	ND	ND	ND	ND	ND	ND	ND	**0.88 J**	ND	ND	ND
Trichloroethene	5	5	ND	ND	**13.5**	ND	**2.8 J**	**18.2**	**7.6**	ND	ND	ND	**44**	**0.76 J**	**37.3 J**	**6**	ND
Vinyl chloride	2	2	ND	ND	ND	**0.88 J**	**43**	**16.4**	**18.3**	**5.3**	ND	ND	ND	ND	**44.3 J**	ND	ND
m,p-Xylene	10000	10000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	10000	10000	ND	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4 Dioxane. All Results and Standards in ug/L																	
1,4-Dioxane	6.5	27	**2.0 B**	**9.6**	**23.3**	**2.3**	**151 B**	**76.3 B**	**37.8**	**9.3**	**4.5**	**2.5**	**36.8**	**16.5 B**	**124 B**	**31.4**	**25.8**

Footnotes:

ND = Not detected
ug/L = microgram per Liter
B = Compound was found in the blank sample
Q -= Result Qualified By Laboratory
GW = Groundwater

1.9 = Detected value
46.7 = Exceeded Standard (Used Aquifer, Residential)
J = Result is lab-estimated value due to low detection level
Used MSC from November 20, 2021 revision.

= No Value

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Table 2a
Data Summary - Water Quality Parameters Measurement and Natural Attenuation Parameters Results
Groundwater Sampling May 2019, (August 2019, and October 2019) Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Hoff VC HSCA Site, Groundwater Sampling	May 2019				August 2019						October 2019			
Well ID	**MW-A**	**MW-B**	**MW-13**		**MW-A**	**MW-B**	**MW-6**	**MW-8**	**MW-10**	**MW-13**	**MW-A**	**MW-B**		**MW-13**
Sample ID	**MW-A**	**MW-B**	**MW-13**	**DUP-051419**	**Hoff MW-A**	**Hoff MW-B**	**Hoff MW-6**	**Hoff MW-8**	**Hoff MW-10**	**Hoff MW-13**	**Hoff MW-A**	**Hoff MW-B**	**Hoff DUP-101519**	**Hoff MW-13**
Screen Interval:	**15'-35'**	**16'-36'**	**10'-25'**		**15'-35'**	**16'-36'**	**1'-11'**	**15'30'**	**1'-8'**	**10'-25'**	**15'-35'**	**16'-36'**		**10'-25'**
Date Sampled:	**5/13/2019**	**5/13/2019**	**5/14/2019**	**5/14/2019**	**8/7/2019**	**8/7/2019**	**8/7/2019**	**8/7/2019**	**8/7/2019**	**8/7/2019**	**10/15/2019**	**10/15/2019**	**10/15/2019**	**10/15/2019**
Matrix:	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**
Water Quality Parameters Measurement														
T (ºC)	**13.3**	**13.15**	13.2	DUP	18.4	21.3	24.09	20.96	28	25.88	21.04	20.67	NM	20.56
p.H. (S.U.)	7.59	8.66	6.22	DUP	7.26	6.88	6.76	7.38	7.58	6.63	6.94	6.76	NM	6.69
S.C. (mS/cm)	0.65	0.246	0.969	DUP	0.505	0.668	0.745	0.3	.0.626	0.78	0.826	0.776	NM	0.732
Turbidity (NTU)	OR	OR	10.9	DUP	OR	244	0	60.4	0	13.3	236	381	NM	3.4
DO (mg/L)	2.52	4.96	0	DUP	0	0	0	0	0	0	0.95	0.36	NM	0.14
ORP (mV)	NM	-90	34	DUP	-157	-100	-175	-44	-79	97	-182	-187	NM	-23
Natural Attenuation Parameters														
Iron total (ug/L)	na	na	na	na	956	3800	7208	1005	1810	ND	9418	11410	na	1232
Iron dissolved (ug/L	na	na	na	na	na	na	na	na	na	na	2146	2259	2404	951
Sulfate (mg/L)	na	na	na	na	na	na	21.8	27.3	na	na	na	na	na	na
Ethane (mg/L)	na	na	na	na	na	na	ND	ND	na	na	ND	ND	na	na
Ethene (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Methane (mg/L)	na	na	na	na	na	na	9250	81.7	na	na	1190	2430	na	316
Propane (mg/L)	na	na	na	na	na	na	ND	ND	na	na	ND	ND	na	ND

Footnotes:

ND = Not detected
ug/L = microgram per Liter
mg/L = miligram per Liter
na = not analysed
GW = Groundwater
mV - millivolts
mS/cm - millisiemens per centimeter
NTU - nephelometric turbidity units
1.9 = Detected value
ORP - Oxidation/Reduction Potential
DO - Dissolved Oxygen
S.C. = Special Conductivity
OR - Over the Range (>1,000 NTU)
º C - degrees Celsius
NM = Not Measured

Table 2b
Data Summary - Water Quality Parameters Measurement and Natural Attenuation Parameters Results
Groundwater Sampling January 2020 Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Well ID	MW-A	MW-B	MW-C	MW-D	MW-E	MW-6	MW-8	MW-10	MW-13	
Sample ID	**Hoff MW-A**	**Hoff MW-B**	**Hoff MW-C**	**Hoff MW-D**	**Hoff MW-E**	**Hoff MW-6**	**Hoff MW-8**	**Hoff MW-10**	**Hoff MW-13**	**Hoff DUP-012220**
Screen Interval:	**15'-35'**	**16'-36'**	**15'-35'**	**15'-35'**	**15'-35'**	**1'-11'**	**15'-30'**	**1'-8'**	**10'-25'**	
Date Sampled:	**1/21/2020**	**1/22/2020**	**1/22/2020**	**1/21/2020**	**1/21/2020**	**1/23/2020**	**1/23/2020**	**1/23/2020**	**1/22/2020**	**1/22/2020**
Matrix:	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**
Water Quality Parameters Measurement										
T	12.35	15.88	10.42	12.4	12.09	7.22	12.55	10.42	10.24	NM
p.H.	6.45	**6.13**	**6.38**	7	7.12	6.65	6.98	6.42	6.05	NM
S.C.	0.617	0.909	0.838	0.76	0.995	0.58	5.44	0.61	0.969	NM
Turbidity	160	4.31	120	208	190	13.8	336	15.8	15.5	NM
DO	0	0	2.2	1.95	3.4	0	0	1.05	0	NM
ORP	-49	**20**	125	73	73	-128	-253	77	-126	NM
Natural Attenuation Parameters										
Iron total (ug/L)	na	na	na	na	na	na	na	na	na	na
Iron dissolved (ug/L	1380	1140	ND	ND	ND	7208	806	ND	10.8	10.7
Sulfate (mg/L)	50.5	ND	ND	45.2	56.3	25.2	54.8	108	ND	ND
Ethane (mg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethene (mg/L)	ND	ND	ND	ND	ND	na	ND	ND	ND	ND
Methane (mg/L)	204	2170	208	ND	11.9	2920	499	1230	285	306
Propane (mg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Footnotes:

ND = Not detected
ug/L = microgram per Liter
mg/L = miligram per Liter
na = not analysed
GW = Groundwater
mV - millivolts
mS/cm - millisiemens per centimeter
NTU - nephelometric turbidity units
1.9 = Detected value
ORP - Oxidation/Reduction Potential
DO - Dissolved Oxygen
NM = Not Measured
º C - degrees Celsius
OR - Over the Range (>1,000 NTU)
S.C. = Special Conductivity

Table 2c
Data Summary - Water Quality Parameters Measurement and Natural Attenuation Parameters Results
Groundwater Sampling December 2020 Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Well ID	MW-A	MW-B	MW-B	MW-C	MW-E	MW-F_A	MW-F_B	MW-6	MW-10	MW-13	IW-1A	IW-1B	IW-2A	IW-2B	IW-3A	IW-3B
Sample ID	**Hoff MW-A**	**Hoff MW-B**	**Hoff DUP-121120**	**Hoff MW-C**	**Hoff MW-E**	**Hoff MW-F_A**	**Hoff MW-F_B**	**Hoff MW-6**	**Hoff MW-10**	**Hoff MW-13**	**HOFF IW-1A**	**HOFF IW-1B**	**Hoff IW-2A**	**Hoff IW-2B**	**Hoff IW-3A**	**Hoff IW-3B**
Screen Interval:	**15'-35'**	**16'-36'**	**--**	**15'-35'**	**15'-35'**	**18'-23'**	**30'-35'**	**1'-11'**	**1'-8'**	**10'-25'**	**17'-22'**	**27'-32'**	**17'-22'**	**30'-35'**	**18'-23'**	**32'-37'**
Date Sampled:	**12/9/2020**	**12/11/2020**	**--**	**12/11/2020**	**12/10/2020**	**12/9/2020**	**12/9/2020**	**12/10/2020**	**12/11/2020**	**12/11/2020**	**12/10/2020**	**12/10/2020**	**12/11/2020**	**12/12/2020**	**12/11/2020**	**12/11/2020**
Matrix:	**GW**	**GW**		**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**
Water Quality Parameters Measurement																
T	14.9	15.37	DUP	13.87	13.19	15.72	13.27	10.69	12.86	14.85	13.52	14.47	NM	15.26	NM	NM
p.H.	6.99	9.29	DUP	8.49	7.13	6.9	6.38	7.09	7.58	7.14	7.73	7.41	NM	8.54	NM	NM
S.C.	0.357	8.13	DUP	28.3	0.503	0.796	5.06	0.302	0.377	6.71	37.8	29.5	NM	11.3	NM	NM
Turbidity	59.1	315	DUP	840	28.6	120	35.1	42.1	76.5	501	456	152	OR	428	OR	OR
DO	0.28	0.68	DUP	1.28	0.17	0.11	0.14	0.51	0	0.76	12.10?	0.95	NM	1.92	NM	NM
ORP	10	321	DUP	418	403	68	395	32	50	372	455	417	NM	401	NM	NM
Natural Attenuation Parameters																
Iron total (ug/L)	3400	26000	29000	46000	390	2000	1600	1100	10000	63000	28000	19000	3000000	21000	na	1100000
Iron dissolved (ug/L	1100	ND	ND	540	ND	ND	87	590	770	21000	ND	1100	7500	ND	na	4800
Sulfate (mg/L)	75	1700	na	2400	41	6.6	770	27	110	2000	4500	3400	na	1300	na	4800
Ethane (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Ethene (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Methane (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Propane (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
TDS (mg/L)	410	2500	na	4300	510	550	4700	230	370	5500	4700	5500	na	6400	na	40000

Footnotes:

ND = Not detected
ug/L = microgram per Liter
mg/L = miligram per Liter
na = not analysed
GW = Groundwater
mV - millivolts
mS/cm - millisiemens per centimeter
NTU - nephelometric turbidity units
1.9 = Detected value
ORP - Oxidation/Reduction Potential
DO - Dissolved Oxygen
° C - degrees Celsius
OR - Over the Range (>1,000 NTU)
NM = Not Measured
S.C. = Special Conductivity

Table 2d
Data Summary - Water Quality Parameters Measurement and Natural Attenuation Parameters Results
Groundwater Sampling January 2021 Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Well ID	MW-A	MW-B	MW-C	MW-E	MW-F_A	MW-F_B	MW-6	MW-10	MW-13	IW-1-A	IW-1-B	IW-2-A	IW-2-B
Sample ID	Hoff MW-A-011921	Hoff MW-B-011921	Hoff MW-C-011921	Hoff MW-E	Hoff MW-F_A	Hoff MW-F_B	Hoff MW-6	Hoff MW-10	Hoff MW-13-011921	Hoff IW-1-A	Hoff IW-1-B	Hoff IW-2-A	Hoff IW-2-B
Screen Interval:	15'-35'	16'-36'	15'-35'	15'-35'	18'-23'	30'-35'	1'-11'	1'-8'	10'-25'	17'-22'	27'-32'	17'-22'	30'-35'
Date Sampled:	1/19/2021	1/19/2021	1/19/2021	1/21/2021	1/20/2021	1/20/2021	1/21/2021	1/21/2021	1/19/2021	1/20/2021	1/20/2021	1/21/2021	1/20/2021
Matrix:	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
Water Quality Parameters Measurement													
T	14.51	13.44	12.73	13.86	13.65	14.31	7.86	**11**	13.89	13.98	13.6	NM	13.89
p.H.	7.65	7.7	9.2	6.53	6.81	6.82	6.42	6.36	**8.2**	**7.6**	**6.87**	NM	7.82
S.C.	0.474	6.73	25.5	0.63	1.99	0.82	0.377	0.483	0.8	3.85	9	NM	3.46
Turbidity	51.7	33.1	153	126	54.2	11.82	22.4	24.2	OR	29.8	140	NM	5.7
DO	0	0	0	0	0	0	0	0	0	3.3	0	NM	0
ORP	-35	328	443	unknown	380	250	-225	-14	**411**	390	**380**	NM	389
Natural Attenuation Parameters													
Iron total (ug/L)	9000	1300	25000	980	170 J	670 FH	3100	1900	110000	5200	3900	11000	260
Iron dissolved (ug/L	920	ND	ND	ND	ND	ND	460	410	46 J	ND	ND	na	ND
Sulfate (mg/L)	46	1600	2300	57	6.5	510	16	110	**390**	760	2000	3200	750
Ethane (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na	na
Ethene (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na	na
Methane (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na	na
Propane (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na	na

Footnotes:

ND = Not detected
ug/L = microgram per Liter
mg/L = miligram per Liter
na = not analysed
GW = Groundwater
mV - millivolts
mS/cm - millisiemens per centimeter
NTU - nephelometric turbidity units
1.9 = Detected value
ORP - Oxidation/Reduction Potential
DO - Dissolved Oxygen
° C - degrees Celsius
OR - Over the Range (>1,000 NTU)
NM = Not Measured
S.C. = Special Conductivity
FH = MS and/or MSD recovery above control limits.

Table 2e
Data Summary - Water Quality Parameters Measurement and Natural Attenuation Parameters Results
Groundwater Sampling June 2021 Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Well ID	MW-A	MW-C	MW-E	MW-F_A	MW-F_B	MW-10	MW-10	MW-13	IW-2A	IW-2B	IW-3A	IW-3B
Sample ID	Hoff MW-A-060121	Hoff MW-C-060121	Hoff MW-E	Hoff MW-F_A	Hoff MW-F_B	Hoff MW-10	Hoff Dup-1	Hoff MW-13	Hoff IW-2-A	Hoff IW-2-B	Hoff IW-3A	Hoff IW-3B
Screen Interval:	15'-35'	15'-35'	15'-35'	18'-23'	30'-35'	1'-8'	1'-8'	10'-25'	17'-22'	30'-35'	18'-23'	32'-37'
Date Sampled:	6/1/2021	6/1/2021	6/1/2021	6/2/2021	6/2/2021	6/3/2021	6/3/2021	6/22/2021	6/3/2021	6/3/2021	6/2/2021	6/2/2021
Matrix:	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
Water Quality Parameters Measurement												
T	17.29	18.33	20.83	NM	15.86	18.5	18.5	17.96	17.83	16.49	22.38	23.13
p.H.	7.83	9.61	8.63	NM	8	8.8	8.8	6.5	7.96	8.57	7.7	7.73
S.C.	0.661	10.9	0.816	NM	1.61	0.688	0.688	1.7	14.7	1.47	8.79	5.42
Turbidity	0	523	29.3	NM	88	40.3	40.3	620	267	22.5	791	0
DO	0	0	6	NM	0	4.44	4.44	0.72	0.00	0.00	0.00	3.38
ORP	-147	346	306	NM	330	-158	-158	6	361	303	382	301
Natural Attenuation Parameters												
Iron total (ug/L)	1500	25500	434	929	466	1760	1730	2540	85500	ND	80100	1310
Iron dissolved (ug/L	1250	2050	ND	ND	ND	1400	1350	ND	ND	ND	ND	801
Sulfate (mg/L)	68.68	2127.86	521	17.44	493.78	182.7	165	309.7	3340	605.9	1424.58	2035.54
Ethane (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na
Ethene (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na
Methane (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na
Propane (mg/L)	na	na	na	na	na	na	na	na	na	na	na	na
TDS (mg/L)	388	1252	570	668	1072	486	474	1224	14768	1074	5302	5792

Footnotes:

ND = Not detected
ug/L = microgram per Liter
mg/L = miligram per Liter
na = not analysed
GW = Groundwater
mV - millivolts
mS/cm - millisiemens per centimeter
NTU - nephelometric turbidity units
1.9 = Detected value
ORP - Oxidation/Reduction Potential
DO - Dissolved Oxygen
° C - degrees Celsius
OR - Over the Range (>1,000 NTU)
NM = Not Measured
S.C. = Special Conductivity

Table 2f
Data Summary - Water Quality Parameters Measurement and Natural Attenuation Parameters Results
Groundwater Sampling September 2021 Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Well ID	MW-A	MW-B	MW-C	MW-D	MW-F_A	MW-F_B	MW-F_B	MW-10	MW-13	IW-1A	IW-1B	IW-2A	IW-2B	IW-3A	IW-3B
Sample ID	**Hoff MW-A**	**Hoff MW-B**	**Hoff MW-C**	**Hoff MW-D**	**Hoff MW-F_A**	**Hoff MW-F_B**	**Hoff DUP-092821**	**Hoff MW-10**	**Hoff MW-13**	**Hoff IW-1A**	**Hoff IW-1B**	**Hoff IW-2A**	**Hoff IW-2B**	**Hoff IW-3A**	**Hoff IW-3B**
Screen Interval:	**15'-35'**	**16'-36'**	**15'-35'**	**15'-35'**	**18'-23'**	**30'-35'**	**30'-35'**	**1'-8'**	**10'-25'**	**17'-22'**	**27'-32'**	**17'-22'**	**30'-35'**	**18'-23'**	**32'-37'**
Date Sampled:	**9/28/2021**	**9/30/2021**	**9/27/2021**	**9/30/2021**	**9/28/2021**	**9/28/2021**	**9/28/2021**	**9/27/2021**	**9/29/2021**	**9/30/2021**	**9/30/2021**	**9/29/2021**	**9/29/2021**	**9/29/2021**	**9/29/2021**
Matrix:	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**
Water Quality Parameters Measurement															
T	20.05	19.21	17.96	18.02	18.16	16.84	DUP	19.61	20.15	17.13	17.59	20.21	17.77	NM	20.13
p.H.	6.83	6.64	7.16	6.17	6.42	6.55	DUP	6.98	6.63	6.7	6.53	6.35	6.99	NM	6.66
S.C.	0.625	1.46	9.47	0.614	1.45	1.58	DUP	0.564	1.02	2.36	3.03	12.1	1.46	NM	4.46
Turbidity	20.5	OR	19.1	40.9	16.8	19.7	DUP	58.7	95.7	16.7	13.2	OR	21	NM	249
DO	0.04	1.12	0.06	0.01	0.11	0.01	DUP	1.84	0.73	0.11	0.24	0.28	0.05	NM	4.1
ORP	-64	28	394	358	36	225	DUP	-47	-19	336	328	412	273	NM	295
Natural Attenuation Parameters															
Iron total (ug/L)	2030	43300	7450	1030	708	343	354	3540	4760	508	310	497000	ND	23800	41400
Iron dissolved (ug/L	988	140	ND	ND	120	ND	ND	1060	365	ND	ND	ND	ND	ND	ND
Sulfate (mg/L)	64	535	1739	103	42.6	560	DUP	203.8	468	643	1360	5499	861	1760	2134
Ethane (mg/L)	51.2	ND	48.1	ND	56.4	41	DUP	53.7	ND	ND	ND	ND	ND	ND	ND
Ethene (mg/L)	na	na	na	na	na	na	DUP	na	na	na	na	na	na	na	na
Methane (mg/L)	290	723	578	281	2450	1250	DUP	921	1620	333	172	359	1640	383	577
Propane (mg/L)	ND	ND	ND	na	ND	ND	DUP	ND	ND	ND	ND	ND	ND	ND	ND

Footnotes:

ND = Not detected
ug/L = microgram per Liter
mg/L = miligram per Liter
na = not analysed
GW = Groundwater
mV - millivolts
mS/cm - millisiemens per centimeter
NTU - nephelometric turbidity units
1.9 = Detected value
ORP - Oxidation/Reduction Potential
DO - Dissolved Oxygen
° C - degrees Celsius
OR - Over the Range (>1,000 NTU)
NM = Not Measured
S.C. = Special Conductivity

Table 2g
Data Summary - Water Quality Parameters Measurement and Natural Attenuation Parameters Results
Groundwater Sampling December 2021 Waste Pit Area
Hoff VC HSCA Site
New Hanover Township, PA

Well ID	MW-A	MW-B	MW-C	MW-D	MW-F_A	MW-F_B	MW-8	MW-10	MW-13	IW-1A	IW-1B	IW-2A	IW-2B	IW-3A	IW-3B
Sample ID	**Hoff MW-A**	**Hoff MW-B**	**Hoff MW-C**	**Hoff MW-D**	**Hoff MW-F_A**	**Hoff MW-F_B**	**Hoff MW-8**	**Hoff MW-10**	**Hoff MW-13**	**HOFF IW-1A**	**HOFF IW-1B**	**Hoff IW-2A**	**Hoff IW-2B**	**Hoff IW-3A**	**Hoff IW-3B**
Screen Interval:	**15'-35'**	**16'-36'**	**15'-35'**	**15'-35'**	**18'-23'**	**30'-35'**	**15'-30'**	**1'-8'**	**10'-25'**	**17'-22'**	**27'-32'**	**17'-22**	**30'-35'**	**18'-23'**	**32'-37'**
Date Sampled:	**12/6/2021**	**12/10/2021**	**12/9/2021**	**12/9/2021**	**12/8/2021**	**12/8/2021**	**12/7/2021**	**12/6/2021**	**12/9/2021**	**12/9/2021**	**12/9/2021**	**12/10/2021**	**12/10/2021**	**12/10/2021**	**12/10/2021**
Matrix:	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**	**GW**
Water Quality Parameters Measurement															
T	16.87	14.42	12.52	11.55	14.8	14.07	12.65	14.89	14.52	14.26	12.36	12.93	12.89	NM	14.84
p.H.	6.92	6.68	7.05	6.69	6.56	6.76	6.69	6.78	6.56	6.77	6.67	6.87	7.16	NM	7.05
S.C.	0.669	1.37	7.25	0.65	1.48	1.53	1.09	1.03	1.83	2.11	2.81	10.2	5.71	NM	3.94
Turbidity	80.1	420	OR	32.8	63.4	32.6		10.7	201	43.4	36.1	OR	478	NM	355
DO	0.73	1.87	NM	NM	0.32	0.15	1.15	0.49	0.24	1.37	NM	2.14	NM	NM	1.84
ORP	-90	253	271	NM	50	194	-153	-79	35	319	298	354	362	NM	125
Natural Attenuation Parameters															
Iron total (ug/L)	5500	77300	28400	900	1030	495	32600	2300	16300	647	na	na	6340	9440	2330
Iron dissolved (ug/L	844	123	ND	ND	189	ND	33200	2210	1880	ND	na	na	ND	ND	ND
Sulfate (mg/L)	78.2	179	1930	87.4	39.2	376	60.3	305	414	539	808	na	193	1060	1210
Ethane (mg/L)	ND	ND	0.39	0.38	5.52	0.62	5.09	ND	0.63	0.36	0.31	na	1.8	0.82	1.1
Ethene (mg/L)	ND	ND	ND	ND	2.2	0.6	5.91	ND	ND	ND	ND	na	2.2	ND	ND
Methane (mg/L)	30.2	1890	327	215	1010	862	2400	1080	571	286	84.9	na	1180	356	354

Footnotes:

ND = Not detected
ug/L = microgram per Liter
mg/L = miligram per Liter
na = not analysed
GW = Groundwater
mV - millivolts
mS/cm - millisiemens per centimeter
NTU - nephelometric turbidity units
1.9 = Detected value
ORP - Oxidation/Reduction Potential
DO - Dissolved Oxygen
° C - degrees Celsius
OR - Over the Range (>1,000 NTU)
NM = Not Measured
S.C. = Special Conductivity

TETRA TECH

Table 3
Hoff VC HSCA Site
Groundwater Elaevations. Pilot Study Area January 2020 - December 2021
New Hanover Twp, PA

Hoff VC GW Levels			January 2020			December 2020			January 2021			June 2021		
Well ID	Top of Casing Elevation	Total Depth	Date	Depth to Water	Groundwater Elevation	Date	Depth to Water	Groundwater Elevation	Date	Depth to Water	Groundwater Elevation	Date	Depth to Water	Groundwater Elevation
MW-A	419.56	34.70	1/21/2020	4.88	414.68	12/9/2020	4.60	414.96	1/19/2021	5.45	414.11	6/1/2021	4.00	415.56
MW-B	417.10	35.00	1/22/2020	4.82	412.28	12/11/2020	4.45	412.65	1/19/2021	4.49	412.61	NM	NM	NM
MW-C	416.73	34.50	1/22/2020	4.20	412.53	12/10/2020	5.38	411.35	1/19/2021	5.70	411.03	6/1/2021	5.04	411.69
MW-D	417.03	35.20	1/21/2020	2.71	414.32		NA	NA		NA	NA		NA	NA
MW-E	417.36	38.00	1/21/2020	3.61	413.75	12/10/2020	3.82	413.54	1/21/2021	6.85	410.51	6/1/2021	3.60	413.76
MW-6	410.98	12.00	1/23/2020	0.40	410.58	12/10/2020	0.70	410.28	1/21/2021	0.50	410.48		NA	NA
MW-8	407.59	30.12	1/23/2020	11.20	396.39		NA	NA		NA	NA	6/1/2021	NM	NM
MW-10	411.75	7.50	1/23/2020	0.80	410.95	12/10/2020	1.30	410.45	1/21/2021	1.50	410.25	6/3/2021	0.80	410.95
MW-12	NA	11.00		NA	NA		NA	NA		NA	NA		NA	NA
MW-13	417.25	25.00	1/22/2020	4.25	413.00	12/11/2020	3.54	413.71	1/19/2021	3.25	414.00	6/22/2021	3.20	414.05
MW-14	NA	15.00		NA	NA		NA	NA		NA	NA		NA	NA
MW-FA	NA	23	NA	NA	NA	12/9/2020	5.54	NA	1/20/2021	6.2	NA		NA	NA
MW-FB	NA	35	NA	NA	NA	12/9/2020	5.05	NA	1/20/2021	5.02	NA	6/2/2021	5.50	NA
IW-1A	NA	22	NA	NA	NA	12/10/2020	5.25	NA	1/20/2021	4.55	NA		NA	NA
IW-1B	NA	32	NA	NA	NA	12/10/2020	4.43	NA	1/20/2021	4.15	NA		NA	NA
IW-2A	NA	22	NA	NA	NA	12/11/2020	1.98	NA	1/21/2021	4.6	NA	6/3/2021	4.47	NA
IW-2B	NA	32	NA	NA	NA	12/11/2020	5.25	NA	1/20/2021	4.83	NA	6/3/2021	5.5	NA
IW-3A	NA	23	NA	NA	NA	12/11/2020	1.71	NA		NA	NA	6/2/2021	4	NA
IW-3B	NA	37	NA	NA	NA	12/11/2020	1.9	NA		NA	NA	6/2/2021	4.85	NA

All depths in ft.

	Well not sampled during sampling event.
NM	Depth or elevation not measured during sampling event.
NA	Not aplicable

Table 3
Hoff VC HSCA Site
Groundwater Elaevations. Pilot Study Area January 2020 - December 2021
New Hanover Twp, PA

Hoff VC GW Levels			September 2021			November-December 2021		
Well ID	Top of Casing Elevation	Total Depth	Date	Depth to Water	Groundwater Elevation	Date	Depth to Water	Groundwater Elevation
MW-A	419.56	34.70	9/28/2021	4.87	414.69	12/6/2021	6.18	413.38
MW-B	417.10	35.00	9/30/2021	4.33	412.77	12/10/2021	5.58	411.52
MW-C	416.73	34.50	9/27/2021	4.96	411.77	12/9/2021	7.90	408.83
MW-D	417.03	35.20	9/30/2021	4.43	412.60	12/9/2021	5.37	411.66
MW-E	417.36	38.00		NA	NA		NA	NA
MW-6	410.98	12.00		NA	NA		NA	NA
MW-8	407.59	30.12		NA	NA	12/7/2021	11.20	396.39
MW-10	411.75	7.50	9/27/2021	0.86	410.89	12/6/2021	1.97	409.78
MW-12	NA	11.00		NA	NA		NA	NA
MW-13	417.25	25.00	9/29/2021	2.80	414.45	12/9/2021	7.00	410.25
MW-14	NA	15.00		NA	NA		NA	NA
MW-FA	NA	23	9/28/2021	5.81	NA	12/8/2021	7.02	NA
MW-FB	NA	35	9/28/2021	5.06	NA	12/8/2021	7.12	NA
IW-1A	NA	22	9/30/2021	4.39	NA	12/9/2021	6.00	NA
IW-1B	NA	32	9/30/2021	4.55	NA	12/9/2021	6.41	NA
IW-2A	NA	22	9/29/2021	4.85	NA	12/10/2021	6.89	NA
IW-2B	NA	32	9/29/2021	5.05	NA	12/10/2021	6.52	NA
IW-3A	NA	23	9/29/2021	5.65	NA	12/10/2021	6.57	NA
IW-3B	NA	37	9/29/2021	5.41	NA	12/10/2021	7.05	NA

All depths in ft.

	Well not sampled during sampling event.
NM	Depth or elevation not measured during sampling event.
NA	Not aplicable

TETRA TECH

Table 4
Well Construction Detail
Hoff VC Site New Hanover Twp,, Mongomery Co., PA

Well ID	Well Diameter (inches)	Total Depth of Well (bgs ft)	Screened Interval (ft)	Comments
Hoff VC Monitoring/Injection Wells				
MW-A	2	35	15-35	flush mount, pvc sch 80, 40-slot, monitoring
MW-B	2	35	15-35	flush mount, pvc sch 80, 40-slot, injection
MW-C	2	35	15-35	flush mount, pvc sch 80, 30-slot, injection
MW-D	2	35.2	15-35	flush mount, pvc sch 80, 30-slot, injection
MW-E	2	38	18-38	flush mount, pvc sch 80, 30-slot, monitoring
MW-F				flush mount, Monitoring
MW-F_A	1	20.5	18-23	pvc sch 40, 10-slot
MW-F_B	1	35	30-35	pvc sch 40, 10-slot
MW-6	4	12	1-12	flush mount, pvc sch 40, 10-slot, Monitoring
MW-8	4	30	15-30	flush mount, pvc sch 40, monitoring
MW-10	4	7.5	1-7.5	flush mount, in the vault. pvc sch 40, monitoring
MW-12	2	11	2-11	flush mount, pvc sch 40, monitoring
MW-13	4	25	5-25	flush mount, pvc sch 40, 10-slot, injection
MW-14	4	15	2-15	flush mount, pvc sch 40, monitoring
IW-1				flush mount, Injection
IW-1_A	1	22	17-22	pvc sch 80, perforated 3/8"
IW-1_B	1	32	27-32	pvc sch 80, perforated 3/8"
IW-2				flush mount, Injection
IW-2_A	1	22	17-22	pvc sch 80, perforated 3/8"
IW-2_B	1	35	30-35	pvc sch 80, perforated 3/8"
IW-3				flush mount, Injection
IW-3_A	1	18	18-23	pvc sch 80, perforated 3/8"
IW-3_B	1	37	32-37	pvc sch 80, perforated 3/8"

Notes:
ft = feet
TOC = top of casing
NM = not measured

TETRA TECH

Table 5
In-Situ Slow-Release (Provectus OX/OX2) Implementation. Sleeves Deployment October 1, 2021
Hoff VC HSCA Site

Well ID	Well Screen BGS ft	In-Situ Remedial Status	Provectus Products					
			4-inWell Locking Plugs	2-in Well Locking Plugs	Cable (25 ft)	3-ft x 4-in PVC Canister	3-ft x 4-in ISCO Sleeve Bag	3-ft x 2-in Canister + ISCO 2-in Sleeve Bag
Pilot Study, Waste Pit Area								
MW-B	15-35	Direct	---	1	1	--	--	6
MW-C	15-35	Direct	---	1	1	--	--	6
MW-13	5-25	Direct	1	--	1	4	4	--

-- = No product used for that descriptor

APPENDIX A

Technical Data Sheet

Provect-OX2™

Self-Activating, Extended Release ISCO + Enhanced Bioremediation Reagent

TECHNOLOGY DESCRIPTION

Provect-OX2™ is an *in situ* chemical oxidation (ISCO) + enhanced bioremediation reagent that integrates an extended release source of potassium persulfate into the modern Provect-OX® formula. Ferric iron (Fe III) activation is used as a safe and effective means of activating the potassium and sodium persulfates (US Patent No. 9,126,245; patents pending). Similar to our original Provect-OX® technology, Provect-OX2™ oxidizes a wide variety of organic compounds present in impacted soil, sediment and groundwater, including chlorinated solvents, petroleum hydrocarbons, and pesticides. However, Provect-OX2™ ensures extended release of oxidant throughout the treatment media. The ferric oxide iron, along with the residual sulfate, will provide enhanced bioremediation components following the chemical oxidation processes. Provect-OX2™ will also include Terr-OR™ ferrate stabilizer and pH buffer to offset the sulfuric acid produced during breakdown of the persulfates.

Provect-OX® and Provect-OX2™ are the only ISCO technologies designed to actively manage rebound. The advanced activation catalyst is further unique considering its ability to enhance bioremediation processes. This is accomplished via the subsequent utilization of sulfate and iron as terminal electron acceptors for facultative reductive processes. Degradation intermediates generated during pollutant oxidation may act as electron shuttles, allowing the reduction of Fe(III) to Fe(II) in the redox cycling of iron and continued activation of persulfate. This combined remedy provides supplemental treatment mechanisms thereby allowing for more cost-efficient dosing of the product.

Like all Provectus products, Provect-OX2™ was developed by experienced practitioners who understand real-world field applications. For example, the oxidants (potassium and sodium persulfate) and its activator (ferric oxide) are conveniently packaged in a single, pre-mixed bag for ease of use and safe handling. Moreover, due to its safe and non-extreme activation chemistry, Provect-OX2™ will not generate excessive heat / off-gases, nor will it mobilize heavy metals or lead to the generation of secondary impact issues, such as elevated arsenic, chromium, or pH.

TRADITIONAL ACTIVATION CHEMISTRIES

Heretofore, sodium persulfate has been activated via heat, chelated metals, hydrogen peroxide, ZVI/surface catalysis, and/or pH extremes in order to generate sulfate radicals, hydroxyl radicals, etc. (Tsitonaki *et al.,* 2010). Not only do these systems require the addition of other products or energy, they tend to disregard the many biologically mediated processes possible as a consequence of the decomposition products of persulfate.

Divalent metal activation: The utilization of ferrous iron, usually as a chelated cation consumes the oxidant (persulfate) in a conversion of the ferrous iron to ferric iron. Additionally, the presence of the chelator

Provect-IR®, Provect-OX®, Provect-OX2™, Provect-GS™, Provect-IRM®, ABC-CH4®, EZVI-CH4™ AquaGate®-CH4 and Provect-CH4® are registered trademarks of Provectus Environmental Products, Inc. and/or our affiliates v1 – July 31, 2018 • Copyright ©2018 Provectus Environmental Products, Inc.

inhibits biological utilization of the generated ferric species as a biological terminal electron acceptor and consumes oxidant. Over dosing of the chelated ferrous iron further consumes the oxidant.

Caustic Activation: The utilization of caustic (high pH) activation of persulfate presents inherit health and safety issues while creating an unsuitably high pH environment for biological attenuation. Further, within this activation mechanism is a self-limiting biological attenuation process once the pH returns to suitable levels. The sulfate, when used as a biological terminal electron acceptor, transitions to sulfite and finally sulfide. This final product forms hydrogen sulfide which inhibits further biological activity.

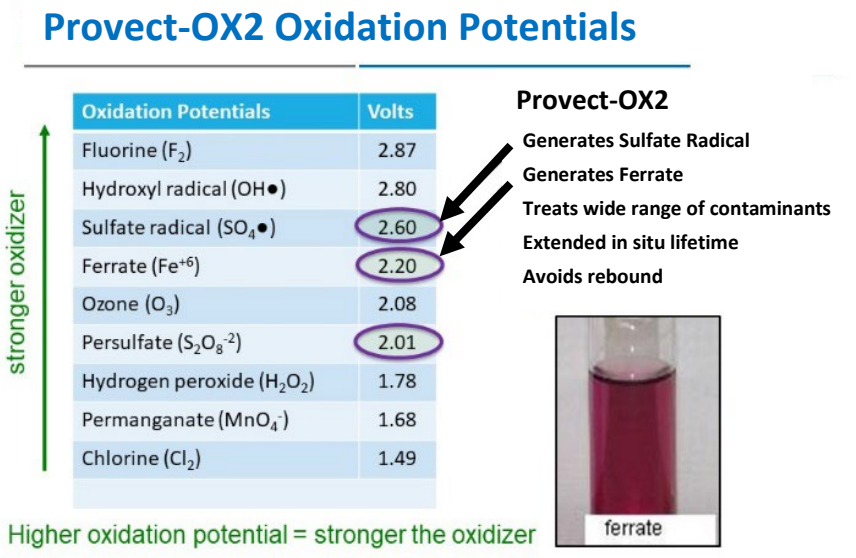
Heat Activation: The utilization of heat as an activation mechanism is generally difficult to implement, and it incurs high implementation costs while not addressing the hydrogen sulfide issue.

Hydrogen Peroxide Activation: The use of peroxide as an activating mechanism again does not address the hydrogen sulfide generation problem while having limited efficacy on many targeted compounds.

MODE OF ACTION

ISCO: Under the Provectus approach, potassium and sodium persulfate are activated by Fe III (pre-mixed formulation) which requires a lower activation energy than alternative mechanisms while not consuming the persulfate oxidant. The mechanism is believed to elevate the oxidation state of the iron transiently to a supercharged iron ion which in itself may act as an oxidant. As this supercharged iron cation is consumed, the resulting ferric species can act as a terminal electron acceptor for biological attenuation. Coincidentally, the generated sulfate ion from the decomposition of the persulfate provides a terminal electron acceptor for sulfate reducers which may further remediate the targeted compounds in the groundwater and soils. The reactions that occur in the chemical oxidation include persulfate radicals and ferrate, as summarized below (Equation 1):

$$S_2O_8^{-2} + Fe^{+3} \text{ ---------> } Fe^{(+4 \text{ to } +6)} + SO_4^{2-} + SO_4^{2-\bullet} \quad \text{(Eq. 1)}$$



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SECONDARY ATTENUATION PROCESS (Biologically Mediated):

1) Sulfate Residual

After dissolved oxygen has been depleted in the treatment area, sulfate (a by-product of the persulfate oxidation) may be used as an electron acceptor for anaerobic biodegradation by indigenous microbes. This process is termed sulfidogenesis and results in the production of sulfide. Stoichiometrically, each 1.0 mg/L of sulfate consumed by microbes results in the destruction of approximately 0.21 mg/L of BTEX compounds. Sulfate can play an important role in bioremediation of petroleum products, acting as an electron acceptor in co-metabolic processes as well. For example, the basic reactions for the mineralization of benzene and toluene under sulfate reducing conditions are presented in equations 2 and 3:

$$C_6H_6 + 3.75\ SO_4^{2-} + 3\ H_2O \rightarrow 0.37\ H^+ + 6\ HCO_3^- + 1.87\ HS^- + 1.88\ H_2S^-$$ (Eq. 2)

$$C_7H_8 + 4.5\ SO_4^{2-} + 3\ H_2O \rightarrow 0.25\ H^+ + 7\ HCO_3^- + 2.25\ HS^- + 2.25\ H_2S^-$$ (Eq. 3)

2) Ferric Iron:

Ferric iron is also used as an electron acceptor during anaerobic biodegradation of many contaminants, sometimes in conjunction with sulfate. During this process, ferric iron is reduced to ferrous iron, which is soluble in water. Hence, ferrous iron may be used as an indicator of anaerobic activity. As an example, Stoichiometrically, the degradation of 1 mg/L of BTEX results in the average consumption of approximately 22 mg/L of ferric iron (or "production" of ferrous iron) as shown below (equations 4-6).

$$C_6H_6 + 18\ H_2O + 30\ Fe^{3+} \text{-------}> 6\ HCO_3^- + 30\ Fe^{2+} + 36\ H^+$$ (Eq. 4)

$$C_7H_8 + 21\ H_2O + 36\ Fe^{3+} \text{-------}> 7\ HCO_3^- + 36\ Fe^{2+} + 43\ H^+$$ (Eq. 5)

$$C_8H_{10} + 24\ H_2O + 42\ Fe^{3+} \text{-------}> 8\ HCO_3^- + 42\ Fe^{2+} + 50\ H^+$$ (Eq. 6)

3) Pyrite Formation:

While ferrous iron is formed as a result of the use of the ferric species as a terminal electron acceptor, residual sulfate is utilized as a terminal electron acceptor by facultative organisms thereby generating sulfide under these same conditions. Together, the ferrous iron and the sulfide promote the formation of pyrite as a remedial byproduct (equation 7). This reaction combats the toxic effects of sulfide and hydrogen sulfide accumulation on the facultative bacteria, while also providing a means of removing targeted organic and inorganic COIs via precipitation reactions. Moreover, pyrite possesses a high number of reactive sites that are directly proportional to both its reductive capacity and the rate of decay for the target organics.

$$Fe^{2+} + 2S^{2-} \text{-------}> FeS_2 + 2e$$ (Eq. 7)

PRIMARY FEATURES:

The combination of potassium and sodium persulfates provide a short and long-term oxidant release that will be effective for many different treatment matrices. The combined persulfates and activation methodology maximizes the synergy between coupled oxidation and enhanced bioremediation: i) sulfate is

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generated from persulfate, i) ferric iron (Fe III) is microbiologically reduced to ferrous iron (Fe II) readily supplying electrons to exchange and react with sulfide. Together, sulfide and iron form pyrite, an iron bearing soil mineral with a favorable reductive capacity.

- Extended Longevity: ISCO reactions remain active for an estimated 1 to 4 months (versus < 2 weeks for standard persulfate -based oxidants); secondary enhanced bioremediation processes remain active for many years
- Effective: Promotes multiple oxidation pathways of a wide-range of organic contaminants for an extended time compared to traditional persulfate options. Also provides a unique microbiological component for multiple accelerated attenuation processes.
- Efficient: Significantly lower costs as a result of sub-stoichiometric dosing requirements.
- Safe: Fewer health and safety concerns as compared with use of traditional activation methods such as heat, chelated metals, hydrogen peroxide or pH extremes. Contains built-in activation, which eliminates the need for additional and potentially hazardous chemicals required to achieve traditional persulfate activation.
- Ease of Use: Single component product with integrated activator results in simplified logistics and application. No additional containers or multi-step mixing ratios required prior to application. Fewer material compatibility issues.
- Improved Performance: Combined remedy prevents "rebound" which is often seen in other oxidation processes. Maximizes the inherent geochemistry of a "post-oxidation" environment for biologically based attenuation.
- Eliminates Secondary Groundwater Issues: Includes Terr-OR™ ferrate stabilizer and pH buffer to offset the sulfuric acid produced during breakdown of the persulfates and limit the mobilization of pH sensitive heavy metals (e.g., arsenic).
- Patented Technology: US Patent No. 9,126,245 (international filings in EU, Australia, Brazil, Canada, China, Colombia, Japan and Mexico) and others pending allow us to freely market this advanced persulfate-based ISCO technology globally, using our choice of suppliers.
- Manufactured Globally: USA, Italy, Taiwan

LITERATURE CITED:

Rodriguez S, L. Vasquez, D. Costa D, A. Romero and A. Santos. 2014. Oxidation of Orange G by Persulfate activated by Fe(II), Fe(III) and zero valent iron (ZVI). Chemosphere 101:86-92.

Scalzi, M. and A. Karachalios. 2013. Chemical Oxidation and Biological Attenuation Process for the Treatment of Contaminated Media. US PTO 9,126,245.

Tsitonaki, A., B.Petri, M. Crimi, H.Mosbaek, R. Siegrist and P. Berg. 2010. *In Situ* Chemical Oxidation of Contaminated Soil and Groundwater using Persulfate: A Review. Critical Rev. Environ. Sci and Technol. 40: 55-91.

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View Our Technical Data Sheet (http://www.provectusenvironmental.com/p-ox/Provect-OX_Tech_Sheet_FINAL.pdf)

AD SDS (HTTP://WWW.PROVECTUSENVIRONMENTAL.COM/P-OX/PROVECT-OX_SELF_ACTIVATING_ISCO_REAGENT_(USA)_EN_SDS_FINAL.PDF)

Provect-OX® Self Activating ISCO-Enhanced Bioremediation Reagent

Provect-OX® Self-Activating ISCO / Enhanced Bioremediation Reagent >1

(http://dev.provectusenvironmental.com/wp-content/uploads/2017/05/P-OX1_Logo.png) (http://dev.provectusenvironmental.com/wp-content/uploads/2017/03/iron-powder.jpg)

Provect-OX is an *in situ* chemical oxidation (ISCO) + enhanced bioremediation technology that combines persulfate with ferric iron in a single, premixed package. The persulfate is activated by ferric iron to create strong oxidizers including the sulfate radical and ferrate ($Fe^{+4 \text{ to } +6}$) that can address a wide variety of organic compounds present in impacted soil, sediment and groundwater, including chlorinated solvents, petroleum hydrocarbons, and pesticides. This built-in activation method eliminates the need for traditional activation chemistries (*e.g.,* hydrogen peroxide and sodium hydroxide) that have associated health, safety, and handling concerns.

Provect-OX uniquely provides long-term, sustained secondary enhanced bioremediation to manage residuals and prevent contaminant rebound, which is a common problem encountered with conventional ISCO technologies. This is accomplished via the utilization of residual iron and sulfate (generated from decomposition of persulfate) as terminal electron acceptors for facultative reductive processes. This technique maximizes the synergy between persulfate and iron for coupled oxidation and enhanced bioremediation.

Provect-OX was developed by experienced practitioners who understand field applications. Our convenient packaging includes 50 lb bags or various sized supersacks and our non-extreme activation chemistry will prevent the mobilization of metals (high pH) and generation of excessive heat or off-gasses.

For more information on how Provect-OX® compares to other ISCO technologies, Click Here (http://www.provectusenvironmental.com/p-ox/Provect-OX-OX2_Comparative_Analysis_FINAL.pdf).

- Industry Updates
- Abstracts
- Analysis
- Case Studies
- Data Sheets
- Guidelines
- Papers
- Patents
- Posters & Presentations
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Provect-OX Projects

ALL PROJECTS (HTTP://DEV.PROVECTUSENVIRONMENTAL.COM/PROJECTS/)

(https://www.provectusenvironmental.com/project/former-gasoline-station-madison-new-jersey/)

Former Gasoline Station – Madison, New Jersey (https://www.provectusenvironmental.com/project/former-gasoline-station-madison-new-jersey/)

POSTED ON JANUARY 7, 2021

Provect-OX® – In Situ Chemical Oxidation + Enhanced Bioremediation for Source Area Remediation Site: Former Gasoline Station – Madison, New Jersey Constituents of Interest: LNAPL, BTEX, and TMB Project Summary At a former gas station in Madison, New Jersey, in situ remediation was applied to address petroleum hydrocarbon source mass within the subsurface smear […]

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(https://www.provectusenvironmental.com/project/former-gasoline-station-raleigh-north-carolina/)

Former Gasoline Station – Raleigh, North Carolina (https://www.provectusenvironmental.com/project/former-gasoline-station-raleigh-north-carolina/)

POSTED ON JULY 12, 2018

Site: Former Gasoline Station – Raleigh, North Carolina Constituents of Interest: BTEX, Chlorobenzene, and Naphthalene Remedial design and implementation contractor: Innovative Environmental Technologies, Inc. (IET) Project Summary The site is a former gas station located in Raleigh, North Carolina. The site was contaminated with benzene, toluene, ethylbenzene, xylene (BTEX), chlorobenzene, naphthalene, dichlorobenzenes, and isopropylbenzene. The […]

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Active Gas Station Site – Milport, Alabama (https://www.provectusenvironmental.com/project/active-gas-station-site-milport-alabama/)

POSTED ON APRIL 16, 2018

X2 Tackles Remedial Effort Using Advanced Oxidation Technologies By Brendan Gerber – Operations Manager at X2 Environmental Contracting, Inc. X2 Environmental Contracting, Inc. recently completed another successful In-Situ Chemical Oxidation (ISCO) / Enhanced Bioremediation project to treat BTEX contamination at an active gas station site in Alabama. This project included challenging drilling conditions and work […]

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oxidation (ISCO) + enhanced bioremediation technology that combines persulfate with ferric iron in a single, premixed package. The persulfate is activated by ferric iron to create strong oxidizers including the sulfate radical and ferrate (Fe +4 to +6) that can address a wide variety of organic

Provectus (Latin) = advanced; higher level of knowledge. We are not consultants. Our business model is to support RPs, environmental engineers, technical consultants, governmental regulators, and the wider academic community by providing design and selection of cost-effective remediation strategies.

TWITTER FEEDS

Last Call for Focused Remediation Seminars (FRS) Webinar Offering - July 15, 2021#focusedremsem (https://twitter.com/search?q=focusedremsem)... https://t.co/wZeqqdCjYo (https://t.co/wZeqqdCjYo) JUL. 12, 2021

Remedial Success Continues with Coupled Excavation and ISCR Soil Blending https://t.co/QJkcrzo5Bj (https://t.co/QJkcrzo5Bj) https://t.co/3EKhZl36nD (https://t.co/3EKhZl36nD) JUN. 10, 2021

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Safety Data Sheet (SDS)

OSHA HazCom 2012 Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 07/02/2018 *Revised on 6/15/2018*

*
1 Identification

· **Product identifier**

· **Trade name: Buffered Provect-OX2™ Self Activating ISCO Enhanced Bioremediation Reagent**
· **Application of the substance / the mixture**
In situ and *ex situ* chemical oxidation of contaminants and compounds of concern for environmental remediation applications.

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Provectus Environmental Products
2871 W. Forest Road
Suite 2
Freeport, IL 61032
Phone: 815-650-2230
Fax: 815-650-2232
www.provectusenvironmental.com
· **Emergency telephone number:** (815) 650-2230

2 Hazard(s) identification

· **Classification of the substance or mixture**

Flame over circle

May intensify fire; oxidizer.

Health hazard

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Harmful if swallowed.

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

· **Label elements**
· **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS03 GHS07 GHS08

(Contd. on page 2)

Safety Data Sheet (SDS)

OSHA HazCom 2012 Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 07/02/2018 Revised on 6/15/2018

Trade name: Buffered Provect-OX2™ Self Activating ISCO Enhanced Bioremediation Reagent

(Contd. of page 1)

· **Signal word** Danger

· **Hazard-determining components of labeling:**
disodium peroxodisulphate; sodium persulfate

· **Hazard statements**
May intensify fire; oxidizer.
Harmful if swallowed or if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause respiratory irritation.

· **Precautionary statements**
Take any precaution to avoid mixing with combustibles.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
In case of inadequate ventilation wear respiratory protection.
Keep/Store away from clothing/combustible materials.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).
Take off contaminated clothing and wash before reuse.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Wash contaminated clothing before reuse.
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If skin irritation occurs: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Rinse mouth.
In case of fire: Use for extinction: CO2, powder or water spray.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
IF ON SKIN: Wash with plenty of water.
Call a POISON CENTER/doctor if you feel unwell.
If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**

Health = 2
Fire = 3
Reactivity = 2

The substance possesses oxidizing properties.

(Contd. on page 3)

Safety Data Sheet (SDS)

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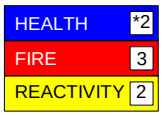
Trade name: Buffered Provect-OX2™ Self Activating ISCO Enhanced Bioremediation Reagent

(Contd. of page 2)

· **HMIS-ratings (scale 0 - 4)**



Health = *2
Fire = 3
Reactivity = 2

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

7727-21-1	Potassium peroxodisulfate; potassium persulfate Ox. Sol. 2, H272; Resp. Sens. 1, H334; Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2B, H319; Skin Sens. 1, H317; STOT SE 3, H335	50-70%
7775-27-1	Disodium peroxodisulphate; sodium persulfate Ox. Sol. 2, H272; Resp. Sens. 1, H334; Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2B, H319; Skin Sens. 1, H317; STOT SE 3, H335	20-30%
1309-37-1	Ferric oxide	1-20%
n.a.	Terr-OR™ buffer and ferrate stabilizer (see associated SDS)	0-5%

4 First-aid measures

· **Description of first aid measures**
· **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness, place patient securely on side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:** Immediately call a doctor.
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Not required.
· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

(Contd. on page 4)

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(Contd. of page 3)

7 Handling and storage

· **Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
· **Information about protection against explosions and fires:** Protect from heat.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see section 7.

· **Control parameters**

· **Components with occupational exposure limits:**	
7727-21-1 Potassium peroxodisulfate	
TLV	Long-term value: 0.1 mg/m³ as Persulfates
7775-27-1 Disodium peroxodisulphate	
TLV	Long-term value: 0.1 mg/m³ as Persulfates
1309-37-1 Ferric oxide	
PEL	Long-term value: 10 mg/m³ Fume
REL	Long-term value: 5 mg/m³ Dust & fume, as Fe
TLV	Long-term value: 5* mg/m³ *as respirable fraction

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.
· **Breathing equipment:** Not required.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Select glove material based on penetration times, rates of diffusion and degradation.

(Contd. on page 5)

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(Contd. of page 4)

· ***Material of gloves***
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

· ***Penetration time of glove material***
The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

*
9 Physical and chemical properties

· ***Information on basic physical and chemical properties***
· ***General Information***
· ***Appearance:***
Form: Powder
Color: Red
· ***Odor:*** Odorless
· ***Odor threshold:*** Not determined.

· ***pH-value @ 20 °C (68 °F):*** 6

· ***Change in condition***
Melting point/Melting range: Not determined.
Boiling point/Boiling range: Undetermined.

· ***Flash point:*** Not applicable.

· ***Flammability (solid, gaseous):*** Contact with combustible material may cause fire.

· ***Ignition temperature:***

Decomposition temperature: Not determined.

· ***Auto igniting:*** Product is not self-igniting.

· ***Danger of explosion:*** Not determined.

· ***Explosion limits:***
Lower: Not determined.
Upper: Not determined.

· ***Vapor pressure:*** Not applicable.

· ***Density:*** Not determined.
· ***Relative density*** Not determined.
· ***Vapour density*** Not applicable.
· ***Evaporation rate*** Not applicable.

· ***Solubility in / Miscibility with***
Water: Soluble.

· ***Partition coefficient (n-octanol/water):*** Not determined.

· ***Viscosity:***
Dynamic: Not applicable.
Kinematic: Not applicable.

· ***Solvent content:***
Organic solvents: 0.0 %

Solids content: 99.5 %

(Contd. on page 6)

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(Contd. of page 5)

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
Oral	LD50	1130 mg/kg (rate)
7775-27-1 disodium peroxodisulphate		
Oral	LD50	925 mg/kg (rat)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:**
Sensitization possible through inhalation.
Sensitization possible through skin contact.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
1309-37-1	Ferric oxide	3

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

(Contd. on page 7)

Safety Data Sheet (SDS)

OSHA HazCom 2012 Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 07/02/2018 Revised on 6/15/2018

Trade name: Buffered Provect-OX2™ Self Activating ISCO Enhanced Bioremediation Reagent

(Contd. of page 6)

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

* 14 Transport information

· **UN-Number**	1505 and 1492
· **UN proper shipping name**	Sodium Persulfate and Potassium Persulfate
· **Transport hazard class(es)**	5.1 (Oxidizer)
· **Packing group**	III
· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	UN1505, Sodium persulfate and UN1492, Potassium persulfate

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

· **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**
All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.

(Contd. on page 8)

Safety Data Sheet (SDS)

OSHA HazCom 2012 Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 07/02/2018 Revised on 6/15/2018

Trade name: Buffered Provect-OX2™ Self Activating ISCO Enhanced Bioremediation Reagent

(Contd. of page 7)

· **TLV (Threshold Limit Value established by ACGIH)**		
1309-37-1	Ferric oxide	A4
· **NIOSH-Ca (National Institute for Occupational Safety and Health)**		
None of the ingredients is listed.		

· **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS03 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
Potassium peroxodisulfate, disodium peroxodisulphate
· **Hazard statements**
May intensify fire; oxidizer.
Harmful if swallowed or if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause respiratory irritation.
· **Precautionary statements**
Take any precaution to avoid mixing with combustibles.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
In case of inadequate ventilation wear respiratory protection.
Keep/Store away from clothing/combustible materials.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).
Take off contaminated clothing and wash before reuse.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Wash contaminated clothing before reuse.
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If skin irritation occurs: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Rinse mouth.
In case of fire: Use for extinction: CO2, powder or water spray.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
IF ON SKIN: Wash with plenty of water.
Call a POISON CENTER/doctor if you feel unwell.

(Contd. on page 9)

Safety Data Sheet (SDS)

OSHA HazCom 2012 Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 07/02/2018 *Revised on 6/15/2018*

Trade name: Buffered Provect-OX2™ Self Activating ISCO Enhanced Bioremediation Reagent

(Contd. of page 8)

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· ***National regulations:***

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· ***State Right to Know***

7727-21-1	Potassium peroxodisulfate	50-70%
	Ox. Sol. 2, H272; Resp. Sens. 1, H334; Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2B, H319; Skin Sens. 1, H317; STOT SE 3, H335	
7775-27-1	Disodium peroxodisulphate Ox. Sol. 2, H272; Resp. Sens. 1, H334; Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335	20-30%
1309-37-1	Ferric oxide	1-20%
-na-	Terr-OR buffer and ferrate stabilizer (see associated SDS)	0 – 5%

All ingredients are listed.

· ***Chemical safety assessment:*** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· ***Date of preparation / last revision*** 06/02/2014 / 3

· ***Abbreviations and acronyms:***

ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Ox. Sol. 2: Oxidizing Solids, Hazard Category 2
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Resp. Sens. 1: Sensitization - Respirat., Hazard Category 1
Skin Sens. 1: Sensitization - Skin, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· **** Data compared to the previous version altered.***

SDS / MSDS Created by MSDS Authoring Services (www.MSDSAuthoring.com)

APPENDIX B

Innovative Environmental Technologies, Inc.

Technology Discussion and Field Report

To

Tetra Tech Engineering

For

The Application Of

"Provect-OX® & Magnesium Oxide pH Buffer"

At

Hoff VC HSCA Site
334 Layfield Road
New Hanover Township, PA

November, 2020

Innovative Environmental Technologies, Inc.
6071 Easton Road
Pipersville, PA 18947
(888) 721-8283
www.iet-inc.net

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- **Subsurface Pathway Development** 3
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Executive Summary

On behalf of Tetra Tech Engineering Services (Tetra Tech), Innovative Environmental Technologies, Inc. (IET) has prepared the following injection report. This report has been prepared to document remediation activities conducted at the site.
The injection program was implemented on November 16th,23rd, and 24th 2020. The remedial approach employed the oxidation remediation products, sodium persulfate and ferric oxide with an added magnesium oxide for a pH buffer. These product pair a self-activating oxidation persulfate chemistry while providing the appropriate components for a longer lasting biological attenuation process following the initial oxidation event.

The materials introduced in the vicinity of MW-13, MW-C, MW-D and MW-B included: 4,410 pounds of Sodium Persulfate, 266 pounds of Potassium Persulfate, 578 pounds of Ferric Oxide, 218 pounds of Magnesium Oxide and approximately 2300 gallons of total solution. The point by point dosages along with all field notes are provided in the attached field logs.

Introduction

The Hoff VC HSCA Site located in New Hanover township, Pennsylvania, was identified as having soils and groundwater impacted by the historical release of petroleum hydrocarbons. The primary compounds of concern at the site was Chlorobenzene and Halogenated VOCs. An injection program was proposed by IET for the remediation of these impacts in both soil and groundwater around MW-13, MW-C, MW-D and MW-B utilizing advanced oxidation technologies.

Remediation Implementation

Injection Procedures

IET attempted a total of 7 dpt injection locations, 6 injection wells and 4 existing wells at the site. Details regarding each injection attempt are provided in the field logs in the Appendix.

FIGURE 1: AMS POWER PROBE 9500 VTR

Direct-Push-Driven Perforated Rod Placement

A Powerprobe 9580 unit comparable to the one pictured in Figure 1, was utilized to drive the injection screen (as seen in Figure 2) to depths ranging from 8 to 15 feet below ground surface (bgs). It is at these depths that dpt refusal was encountered.

Subsurface Pathway Development

FIGURE 2: RETRACTABLE INJECTION SCREEN

Compressed air was used to propel all injectants into the subsurface. Compressed air was first injected into the subsurface at approximately 150 pounds per square inch (psi) until a significant pressure drop was observed at the injection pressure vessel. This process is referred to as pathway development. The intent of this step is to open pathways in the subsurface for the injectants to follow. These pathways are believed to be those more permeable pathways along which COCs are more likely to have migrated, both in the vadose and saturated zones. Liquid and liquid-entrained injectants are then delivered with pressurized gas to the pathways that were produced during the development step.

Slurry Injection

A predetermined volume of the material was immediately injected into the subsurface fractures and voids that were developed during the compressed air injection step.

Liquid Rinse

A small amount of water was injected to clear the injection lines of the injectant and promotes mounding of groundwater into the vadose zone.

Post Injection Line Purge

Compressed air was injected to clear the lines of all material and to force the remedial components further into the formation before moving to the next injection location.

Site Map

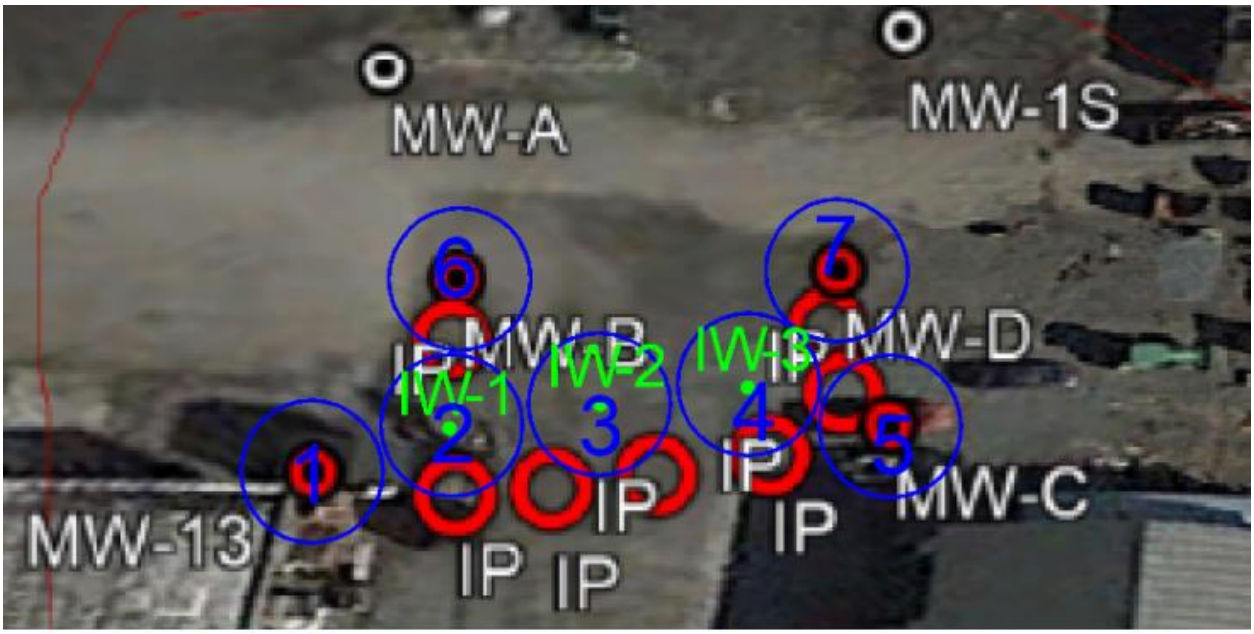


FIGURE 3: GENERAL INJECTION IMPLEMENTATION – INJECTION LOCATIONS

Conclusion

The injection program at the former Hoff VC HSCA Site was implemented based on the proposed design. All proposed injectants were introduced at the targeted depths. All of the proposed injection locations were completed with the exception of MW-D. MW-D was attempted, but the annulus of the well was compromised and daylighting of the reagent occurred around the well's casing. It is expected that the injection event will yield positive results and IET looks forward the assessing the data following future sampling events.

Appendix A – Injection Logs

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site — **2020 Injections**
Pilot Area

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/16/2020 **Time of Injection:**

	11:15	10:50	
	11:25	11:05	

P-1

					Summary	
Injection Point Summary	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**
Target Injection Zone	**8-10'**	**14-16'**	**13-15'**	**18-20'**	**8-15'**	**14-20'**
Duration of Fracture (seconds):	**3**	**3**	**3**	**3**		
Pressure of Pre-injection pathway development	**150**	**150**	**150**	**150**		
Estimated Radius of Influence	**8**	**8**	**8**	**8**		
Pounds of Sodium Persulfate	**175**	**175**	**175**	**175**	**350**	**350**
Pounds of Potassium Persulfate	**19**	**19**	**19**	**19**	**38**	**38**
Pounds of Ferric Oxide	**19**	**19**	**19**	**19**	**38**	**38**
Pounds of Mag Oxide	**10**	**10**	**10**	**10**	**20**	**20**
Gallons of Solution	**75**	**75**	**75**	**75**	**150**	**150**
Pressure of Post-injection pathway dev.	**50**	**50**	**100**	**50**		

Note: Attempt deepest possible interval, weathered rock matrix

Odors:

Field Observations: **DPT refusal at 16 feet**

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site — **2020 Injections**
Pilot Area

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/16/2020 **Time of Injection:**

	11:47	11:31	
	11:54	11:43	

P-2

					Summary	
Injection Point Summary	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**
Target Injection Zone	**8-10'**	**14-16'**	**12-14'**	**18-20'**	**8-14'**	**14-20'**
Duration of Fracture (seconds):	**3**	**3**	**3**	**3**		
Pressure of Pre-injection pathway development	**150**	**150**	**150**	**150**		
Estimated Radius of Influence	**8**	**8**	**8**	**8**		
Pounds of Sodium Persulfate	**175**	**175**	**175**	**175**	**350**	**350**
Pounds of Potassium Persulfate	**19**	**19**	**19**	**19**	**38**	**38**
Pounds of Ferric Oxide	**19**	**19**	**19**	**19**	**38**	**38**
Pounds of Mag Oxide	**10**	**10**	**10**	**10**	**20**	**20**
Gallons of Solution	**75**	**75**	**75**	**75**	**150**	**150**
Pressure of Post-injection pathway dev.	**50**	**50**	**50**	**50**		

Note: Attempt deepest possible interval, weathered rock matrix

Odors:

Field Observations: **DPT refusal at 15 feet**

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site — **2020 Injections**
Pilot Area

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/16/2020 **Time of Injection:**

	12:17	12:02	
	12:26	12:15	

P-3

					Summary	
Injection Point Summary	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**
Target Injection Zone	**7-9'**	**14-16'**	**11-13'**	**18-20'**	**7-13'**	**14-20'**
Duration of Fracture (seconds):	**3**	**3**	**3**	**3**		
Pressure of Pre-injection pathway development	**150**	**150**	**150**	**150**		
Estimated Radius of Influence	**8**	**8**	**8**	**8**		
Pounds of Sodium Persulfate	**175**	**175**	**175**	**175**	**350**	**350**
Pounds of Potassium Persulfate	**19**	**19**	**19**	**19**	**38**	**38**
Pounds of Ferric Oxide	**19**	**19**	**19**	**19**	**38**	**38**
Pounds of Mag Oxide	**10**	**10**	**10**	**10**	**20**	**20**
Gallons of Solution	**75**	**75**	**75**	**75**	**150**	**150**
Pressure of Post-injection pathway dev.	**50**	**50**	**50**	**50**		

Note: Attempt deepest possible interval, weathered rock matrix

Odors:

Field Observations: DPT refusal @ 14'

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site Pilot Area **2020 Injections**

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/16/2020 **Time of Injection:**

12:47 12:35

12:59 12:44

P-4

Injection Point Summary	Actual	Proposed	Actual	Proposed	Summary Actual	Summary Proposed
Target Injection Zone	8-10'	14-16'	12-14'	18-20'	8-14'	14-20'
Duration of Fracture (seconds):	3	3	3	3		
Pressure of Pre-injection pathway development	150	150	150	150		
Estimated Radius of Influence	8	8	8	8		
Pounds of Sodium Persulfate	175	175	175	175	350	350
Pounds of Potassium Persulfate	19	19	19	19	38	38
Pounds of Ferric Oxide	19	19	19	19	38	38
Pounds of Mag Oxide	10	10	10	10	20	20
Gallons of Solution	75	75	75	75	150	150
Pressure of Post-injection pathway dev.	50	50	50	50		

Note: Attempt deepest possible interval, weathered rock matrix

Odors:

Field Observations: DPT refusal @ 15' bgs

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site Pilot Area — **2020 Injections**

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/16/2020 **Time of Injection:** 14:40 — 15:00

P-5

Injection Point Summary	Actual	Proposed	Actual	Proposed	Summary Actual	Summary Proposed
Target Injection Zone	9-11'	14-16'		18-20'	9-11'	14-20'
Duration of Fracture (seconds):		3		3		
Pressure of Pre-injection pathway development		150		150		
Estimated Radius of Influence		8		8		
Pounds of Sodium Persulfate	175	175		175	175	350
Pounds of Potassium Persulfate	19	19		19	19	38
Pounds of Ferric Oxide	19	19		19	19	38
Pounds of Mag Oxide	10	10		10	10	20
Gallons of Solution	75	75		75	75	150
Pressure of Post-injection pathway dev.		50		50		

Note: Attempt deepest possible interval, weathered rock matrix

Odors:

Field Observations: DPT refusal at 12 feet

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site — 2020 Injections
Pilot Area

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/16/2020 **Time of Injection:**

Grid Point: 15:26 15:03

15:40 15:26

P-6

Injection Point Summary	Actual	Proposed	Actual	Proposed	Summary Actual	Summary Proposed
Target Injection Zone	8-10'	14-16'	13-15'	18-20'	8-15'	14-20'
Duration of Fracture (seconds):	3	3	3	3		
Pressure of Pre-injection pathway development	150	150	150	150		
Estimated Radius of Influence	8	8	8	8		
Pounds of Sodium Persulfate	175	175	350	175	525	350
Pounds of Potassium Persulfate	19	19	38	19	57	38
Pounds of Ferric Oxide	19	19	38	19	57	38
Pounds of Mag Oxide	10	10	20	10	30	20
Gallons of Solution	75	75	150	75	225	150
Pressure of Post-injection pathway dev.	50	50	50	50		

Note: Attempt deepest possible interval, weathered rock matrix

Odors:

Field Observations: Deeper interval from Injection point A-5 added here. DPT refusal at 16 feet

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site — **2020 Injections**
Pilot Area

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/16/2020 **Time of Injection:**

	16:00	15:43
	16:20	15:56

P-7

					Summary	
Injection Point Summary	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**
Target Injection Zone	**8-10'**	**14-16'**	**10-12'**	**18-20'**	**8-12'**	**14-20'**
Duration of Fracture (seconds):	**3**	**3**	**3**	**3**		
Pressure of Pre-injection pathway development	**150**	**150**	**150**	**150**		
Estimated Radius of Influence	**8.5**	**8.5**	**8.5**	**8.5**		
Pounds of Sodium Persulfate	**175**	**175**	**175**	**175**	**350**	**350**
Pounds of Potassium Persulfate	**19**	**19**	**19**	**19**	**38**	**38**
Pounds of Ferric Oxide	**19**	**19**	**19**	**19**	**38**	**38**
Pounds of Mag Oxide	**10**	**10**	**10**	**10**	**20**	**20**
Gallons of Solution	**75**	**75**	**75**	**75**	**150**	**150**
Pressure of Post-injection pathway dev.	**50**	**50**	**50**	**50**		

Note: Attempt deepest possible interval, weathered rock matrix

Odors:

Field Observations: **DPT refusal at 13 feet**

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site 2020 Injections

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injections: 11/16/2020

DPT Summary	Summary	
	Actual	Proposed
Target Injection Zone	8-16'	14-20'
Pounds of Sodium Persulfate	2100	2100
Pounds of Potassium Persulfate	228	228
Pounds of Ferric Oxide	228	228
Pounds of Mag Oxide	120	120
Gallons of Solution	900	900

Field Observations:

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site 2020 Injections
Pilot Area

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/23, 11/24/2020 **Time of Injection:**

15:34 10:25

15:57 10:42

IW-1 cluster

					Summary	
Injection Point Summary	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**
Target Injection Zone	20-25'	20-25'	30-35'	30-35'	20-35'	20-35'
Duration of Fracture (seconds):	3	3	3	3		
Pressure of Pre-injection pathway development	150	150	150	150		
Estimated Radius of Influence	10	10	10	10		
Pounds of Sodium Persulfate	165	165	165	165	330	330
Pounds of Ferric Oxide	25	25	25	25	50	50
Pounds of Mag Oxide	7	7	7	7	14	14
Gallons of Solution	100	100	100	100	200	200
Pressure of Post-injection pathway dev.	50	50	50	50		

Odors:

Field Observations: Deep well was clogged on 11/23, was able to air knife obstruction and complete as proposed 11/24

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site 2020 Injections
Pilot Area

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/24/2020 **Time of Injection:**

10:45 11:18

11:02 12:04

IW-2 cluster

					Summary	
Injection Point Summary	Actual	Proposed	Actual	Proposed	Actual	Proposed
Target Injection Zone	20-25'	20-25'	30-35'	30-35'	20-35'	20-35'
Duration of Fracture (seconds):	3	3	3	3		
Pressure of Pre-injection pathway development	150	150	150	150		
Estimated Radius of Influence	10	10	10	10		
Pounds of Sodium Persulfate	165	165	165	165	330	330
Pounds of Ferric Oxide	25	25	25	25	50	50
Pounds of Mag Oxide	7	7	7	7	14	14
Gallons of Solution	100	100	100	100	200	200
Pressure of Post-injection pathway dev.	50	50	50	50		

Odors:

Field Observations: Deep injection was tight

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site 2020 Injections
Pilot Area

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/23/2020 **Time of Injection:**

10:41, 12:51 9:55, 12:15

10:56, 13:15 10:25, 12:48

IW-3 cluster

					Summary	
Injection Point Summary	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**
Target Injection Zone	20-25'	20-25'	30-35'	30-35'	20-35'	20-35'
Duration of Fracture (seconds):	3	3	3	3		
Pressure of Pre-injection pathway development	150	150	150	150		
Estimated Radius of Influence	10	10	10	10		
Pounds of Sodium Persulfate	330	165	330	165	660	330
Pounds of Ferric Oxide	50	25	50	25	100	50
Pounds of Mag Oxide	14	7	14	7	28	14
Gallons of Solution	200	100	200	100	400	200
Pressure of Post-injection pathway dev.	50	50	50	50		

Odors:

Field Observations: Proposed injectant from MW-D was added here.

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site Pilot Area **2020 Injections**

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/23/2020 **Time of Injection:**

MW-D

			Summary	
Injection Point Summary	**Actual**	**Proposed**	**Actual**	**Proposed**
Target Injection Zone		15-35'		15-35'
Duration of Fracture (seconds):		5		
Pressure of Pre-injection pathway development		100		
Estimated Radius of Influence		10		
Pounds of Sodium Persulfate	0	330	0	330
Pounds of Ferric Oxide	0	50	0	50
Pounds of Mag Oxide	0	14	0	14
Gallons of Solution	0	200	0	200
Pressure of Post-injection pathway dev.		50		

Odors:

Field Observations: Attempted 11/23/2020 but well riser lifted ~ 4' out of flush mount upon pressurization, influcing around riser (well not usable for injection).

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site Pilot Area — 2020 Injections

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/23/2020 **Time of Injection:**

11:12

12:05

MW-C

			Summary	
Injection Point Summary	**Actual**	**Proposed**	**Actual**	**Proposed**
Target Injection Zone	15-25'	15-25'	15-35'	15-35'
Duration of Fracture (seconds):	NA	5		
Pressure of Pre-injection pathway development	NA	100		
Estimated Radius of Influence	10	10		
Pounds of Sodium Persulfate	330	330	330	330
Pounds of Ferric Oxide	50	50	50	50
Pounds of Mag Oxide	14	14	14	14
Gallons of Solution	200	200	200	200
Pressure of Post-injection pathway dev.	NA	50		

Odors:

Field Observations: Injected 35 psi

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site 2020 Injections

Pilot Area

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/23/2020 **Time of Injection:**

14:34

15:18

MW-13

			Summary	
Injection Point Summary	**Actual**	**Proposed**	**Actual**	**Proposed**
Target Injection Zone	5-25'	5-25'	5-25'	5-25'
Duration of Fracture (seconds):	NA	5		
Pressure of Pre-injection pathway development	NA	100		
Estimated Radius of Influence	10	10		
Pounds of Sodium Persulfate	330	330	330	330
Pounds of Ferric Oxide	50	50	50	50
Pounds of Mag Oxide	14	14	14	14
Gallons of Solution	200	200	200	200
Pressure of Post-injection pathway dev.	NA	50		

Odors:

Field Observations: Injected 35 psi

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: Tetra Tech - Hoff VC Site Pilot Area 2020 Injections

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injection: 11/23/2020 **Time of Injection:**

12:08

12:25

MW-B

			Summary	
Injection Point Summary	**Actual**	**Proposed**	**Actual**	**Proposed**
Target Injection Zone	15-35'	15-35'	15-35'	15-35'
Duration of Fracture (seconds):	NA	5		
Pressure of Pre-injection pathway development	NA	100		
Estimated Radius of Influence	10	10		
Pounds of Sodium Persulfate	330	330	330	330
Pounds of Ferric Oxide	50	50	50	50
Pounds of Mag Oxide	14	14	14	14
Gallons of Solution	200	200	200	200
Pressure of Post-injection pathway dev.	NA	50		

Odors:

Field Observations: Injected 25 psi, slight surface escape around well riser during rinsing of injectant

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: **Tetra Tech - Hoff VC Site** **2020 Injections**

In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injections: **11/23, 11/24/2020**

IW Summary	Summary	
	Actual	**Proposed**
Target Injection Zone	**5-35'**	**5-35'**
Pounds of Sodium Persulfate	**2310**	**2310**
Pounds of Ferric Oxide	**350**	**350**
Pounds of Mag Oxide	**98**	**98**
Gallons of Solution	**1400**	**1400**

Field Observations: _____

INNOVATIVE ENVIRONMENTAL TECHNOLOGIES, INC.

Job Name: **Tetra Tech - Hoff VC Site** **2020 Injections**

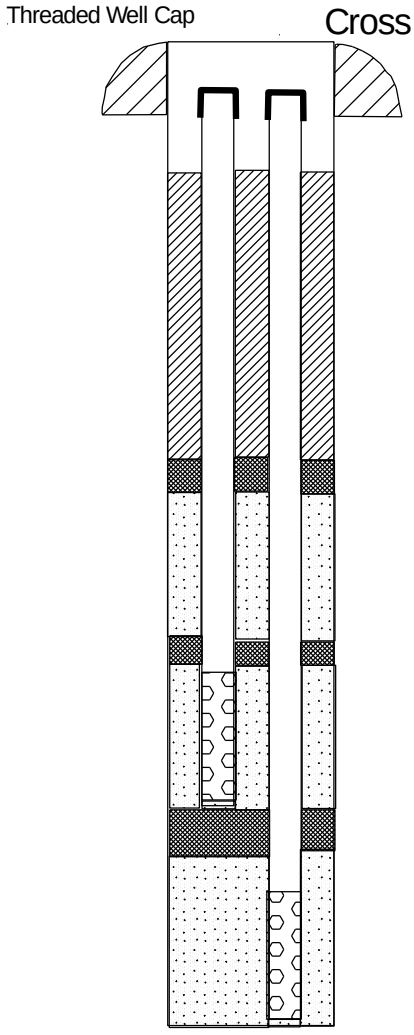
In-Situ Chemical Oxidation using Ferric Oxide Activated Persulfate & Mag Oxide Buffer

Date of Injections: **11/16, 11/23, 11/24/2020**

Site Summary	Summary	
	Actual	**Proposed**
Target Injection Zone	**5-35'**	**5-35'**
Pounds of Sodium Persulfate	**4410**	**4410**
Pounds of Potassium Persulfate	**228**	**228**
Pounds of Ferric Oxide	**578**	**578**
Pounds of Mag Oxide	**218**	**218**
Gallons of Solution	**2300**	**2300**

Field Observations: _____

Nested Injection Well Construction Details
Flush Grade Manhole
Cross Sectional View



Concrete Pad	
Pad Dimentions	2 feet x 2 feet
Hieght Above Ground	flush mounted
Well Casing(s)	
Material	sch 80 PVC
Diameter	1 inch
Joint Type	Coupling(s)
Length	20, 27 feet
Backfill Around Casing(s)	
Material	cement-sand grout
Thickness	13 feet
Seal(s)	
Type of Seal	Bentonite
Thickness	1 foot min.
Filter Pack(s)	
Type of Filter	Pea Gravel
Distance Above Screen	6 inch min
Well Screens	
Screen Material	sch 80 PVC
Diameter	1 inch
Length	5 feet
Perforated	3/32 inches
Depth to Bottom of Injection Wells	25, 32 feet
Depth to Bottom of Borehole	33 feet
Diameter of Borehole	3-6 inches

Technology Discussion and Data Evaluation

to

Tetra Tech Engineering Services (Tetra Tech)

for

"Application of Provect-OX® & Magnesium Oxide pH Buffer"

at

Hoff VC HSCA Site
334 Layfield Road
New Hanover Township, PA

April 2021

Innovative Environmental Technologies, Inc.
6071 Easton Road
Pipersville, PA 18947
(888) 721-8283

Project Summary

Innovative Environmental Technologies, Inc. (IET) has reviewed the January 2021 data provided, regarding the Former Hoff VC HSCA site located in New Hanover township, Pennsylvania. The last data set reflects the most recent groundwater conditions approximately 60 days after the implementation of the first injection event (from November 16th and November 24th, 2020).

The remedial approach included the direct injection of ferric oxide, sodium persulfate, potassium persulfate and magnesium hydroxide suspended in solution. The integration of these amendments initiate direct oxidation of VOCs via the generation of sulfate free radicals via iron activation. This oxidation period is designed to persist for three to six months following the injection program. This period is than followed by facultative attenuation period where further degradation of VOCs is expected to occur while sulfate reduction occurs across the targeted area.

The mechanisms employed by IET in the injection process utilized compressed air followed by the introduction of the remedial liquid. The liquid injection was accomplished via a double diaphragm pump. As a result of the injection process, the pre-existing pore volume was displaced both laterally and vertically. The transient elevation in groundwater and the rapid radial movement of the injectant often results in an initial homogenization of the targeted compounds, such as chlorobenzene and other chlorinated VOCs. The overall effect is an in-situ mixing of the subsurface contaminants with the remedial materials.

During the injection program, the materials introduced in the vicinity of monitoring wells MW-B, MW-C, MW-D and MW-13 included 4,410 pounds of Sodium Persulfate, Potassium Persulfate, 578 pounds of ferric oxide and 218 pounds of magnesium hydroxide was suspended in 2,300 gallons of water. The injectants were distributed among 7 dpt locations from 7-15' bgs, six injection wells that were installed between 20 and 35' bgs. (IW-1S, 1D, 2S, 2D, 3S, 3D) and three permanent monitoring wells which were screened between 5 and 35' bgs (MW-B, MW-C and MW-13).

Slight surfacing of remedial material was encountered during the implementation of the design at several locations, including from around the outer casing of MW-13 and MW-B. Shallow refusal was also encountered at all of the dpt locations between 12-16' bgs. One monitoring location proposed to be injected (MW-D) was compromised because the well itself rose 2-3' out of the ground upon being pressurized.

Two figures picturing the injection locations are included below.

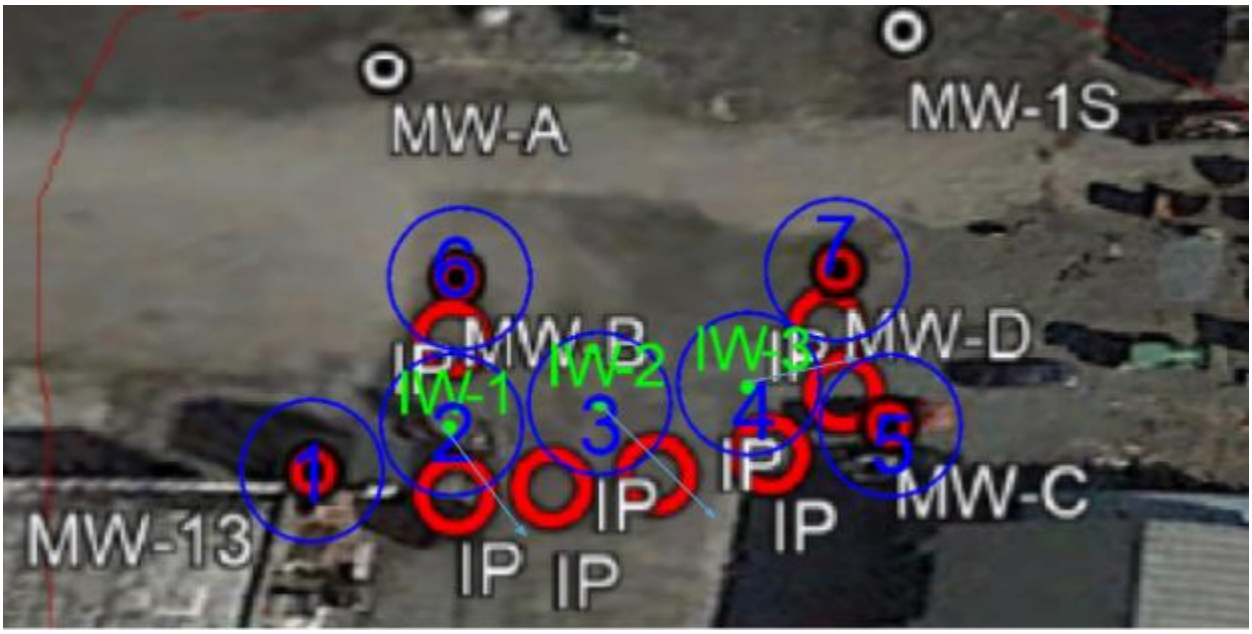


Figure 1. Shows a zoomed in photo of the injection locations

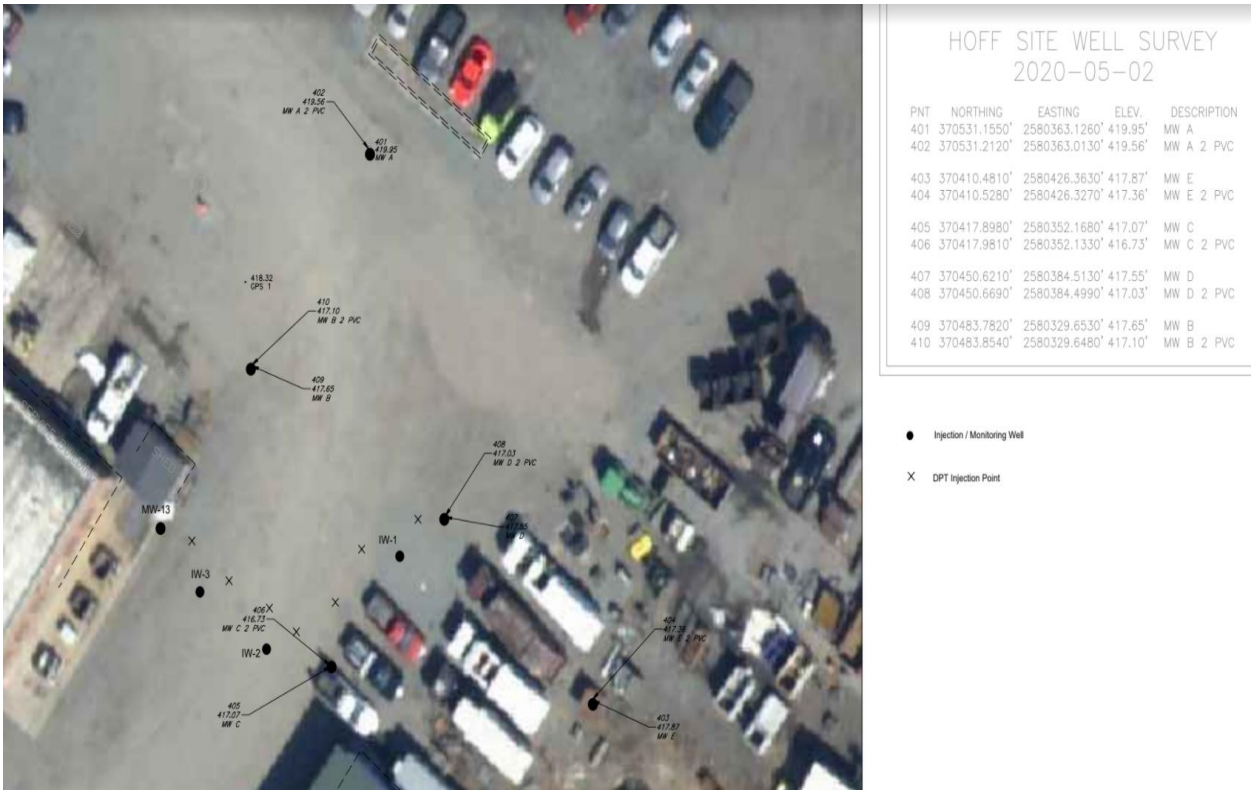


Figure 2. Shows the MW, IW and the DPT locations - Injection Locations Map.

Data Analysis

The treatment area targeted an approximate 2,736-square foot area in the vicinity of monitoring wells MW-B, MW-C, MW-D and MW-3. Targeting the soils, weathered bedrock and groundwater present from 7-35' bgs.

Three monitoring locations within the area directly targeted were sampled for compounds of concern both prior to and post injection, all of these wells were utilized for injection during the application of the amendments and are discussed below (MW-B, MW-C and MW-13).

MW-B

The field, geochemical and VOC data for the monitoring well MW-B is presented in Tables 1 and 2 below. As the field parameter and geochemical data shows, the monitoring location was favorably impacted by the remedial injections. This location is screened 16-36' bgs and is located in the northeast corner of the targeted area. In the 60-day sampling event pH has remained relatively neutral at 7.7 pH units and the ORP has increased to +328 mV. Sulfate concentrations are elevated as a result of the successful emplacement of the amendments.

Table 1. Field and Geochemical Parameters for MW-B.

Field and Geochemical Parameters for MW- B							
Sample Date	pH	ORP (mV)	D.O. (mg/L)	Temperature ©	Sulfate (mg/L)	Dissolved Iron (mg/L)	Total Iron (mg/L)
1/1/2020	6.13	20	0	15.85			
12/1/2020	9.29	321	0.68	15.37	1700	ND	26
1/1/2021	7.7	328	0	13.44	1600	ND	1.3

Total recorded VOCs have decreased in the 60 days following the injection program when compared to the baseline sampling event of January 2020. When tabulated, total VOCs have decreased by 79% in this location and currently five compounds have been recorded above their residential PADEP MSC including Benzene, Chlorobenzene (CB), 1,2 Dichlorobenzene (1,2 DCB), 1,4 Dichlorobenzene (1,4 DCB), and 1,1 Dichloroethane (1,1 DCA).

Table 2. VOC Data for MW-B.

VOC'S MW-B			
Results in ug/L **Sample Date**	**1/1/2020**	**12/1/2020**	**1/1/2021**
Benzene	**49**	15	**49**
Bromomethane	0.63	ND	ND
Chlorobenzene	**13100**	**1500**	**3000**
Chloroethane	10.6	1.7	3.8
Chloroethene (Vinyl Chloride)	**56.4**	ND	ND
Chloroform	ND	ND	ND
Chloromethane	ND	20	16
cis-1,2-Dichloroethene	**3510**	16	39
1,2-Dichlorobenzene	**2820**	260	**940**
1,3-Dichlorobenzene	78.4	17	24
1,4-Dichlorobenzene	**748**	**100**	**210**
1,1-Dichloroethane	**202**	23	**67**
1,1-Dichloroethene	**50.6**	ND	ND
Naphthalene	35.9	ND	ND
Trichloroethene	**15.4**	ND	4
1,2,4-Trichlorobenzene	**136**	5.4	8.7
1,4-Dioxane	**25.8**	2.9	5.7
ND: NOT DETECTED			

MW-C

The field, geochemical and VOC data for the monitoring well MW-C is presented in Tables 3 and 4 below. As the field parameter and geochemical data shows, the monitoring location was favorably impacted by the remedial injections. This location is screened 15-35' bgs and is located in the southern corner of the targeted area. In the 60-day sampling event pH has been elevated at 9.2 pH units and the ORP has increased to +443 mV. Sulfate, Iron and dissolved oxygen concentrations are elevated as a result of the successful emplacement of the amendments and continued oxidation of the groundwater within this area.

Table 3. Field and Geochemical Parameters for MW-C.

Field and Geochemical Parameters for MW- C							
Sample Date	pH	ORP (mV)	D.O. (mg/L)	Temperature ©	Sulfate (mg/L)	Dissolved Iron (mg/L)	Total Iron (mg/L)
1/1/2020	6.38	125	2.2	10.42			
12/1/2020	8.49	418	1.28	13.87	2400	0.54	46
1/1/2021	9.2	443	51.3	12.73	2300	ND	25

Total recorded VOCs have decreased in the 60 days following the injection program when compared to the baseline sampling event of January 2020. When tabulated, total VOCs have decreased by 89% in this location and currently two compounds have been recorded above their residential PADEP MSC, 1,1 DCA and Chloromethane. Chloromethane is anticipated to be a transient compound associated with the oxidation of soil organics.

Table 4. VOC Data for MW-C.

VOC'S MW-C				
Results in ug/L	**Sample Date**	**1/1/2020**	**12/1/2020**	**1/1/2021**
Benzene		3.2	0.14	0.26
Bromomethane		0.74	0.87	1.1
Chlorobenzene		**1140**	21	99
Chloroethane		16.4	14	8.5
Chloroethene (Vinyl Chloride)		**5.5**	ND	ND
Chloroform		ND	13	1.4
Chloromethane		ND	**35**	**62**
cis-1,2-Dichloroethene		**1100**	6.8	20
1,2-Dichlorobenzene		**3820**	320	310
1,3-Dichlorobenzene		25.7	2.7	2.6
1,4-Dichlorobenzene		**442**	ND	62
1,1-Dichloroethane		**244**	**350**	**190**
1,1-Dichloroethene		25.8	ND	ND
Naphthalene		2.4	ND	ND
Trichloroethene		**230**	ND	1.7
1,2,4-Trichlorobenzene		ND	5.8	3.5
1,4-Dioxane		**28.8**	0.45	2.8
ND: NOT DETECTED				

MW-13

The field, geochemical and VOC data for the monitoring well MW-13 is presented in Tables 4 and 5 below. As the field parameter and geochemical data shows, the monitoring location was favorably impacted by the remedial injections. This location is screened 5-35' bgs and is located in the western side of the targeted area. In the 60-day sampling event pH has been elevated at 8.2 pH units and the ORP has increased to +411 mV. Sulfate and iron concentrations are elevated as a result of the successful emplacement of the amendments of the groundwater within this area.

Table 4. Field and Geochemical Parameters for MW-13.

Field and Geochemical Parameters for MW-13							
Sample Date	pH	ORP (mV)	D.O. (mg/L)	Temperature ©	Sulfate (mg/L)	Dissolved Iron (mg/L)	Total Iron (mg/L)
1/1/2020	6.05	-126	0	10.24			
12/1/2020	7.14	372	0.76	14.85	2000	21	63
1/1/2021	8.2	411	0	13.98	390	0.046	110

Total recorded VOCs have decreased in the 60 days following the injection program when compared to the baseline sampling event of January 2020. When tabulated, total VOCs have decreased by 79% in this location and currently no compounds have been recorded above their residential PADEP MSC.

Table 5. VOC Data for MW-13.

VOC'S MW-13			
Results in ug/L Sample Date	**1/1/2020**	**12/1/2020**	**1/1/2021**
Benzene	ND	**5.8**	0.68
Bromomethane	ND	2.9	1
Chlorobenzene	9	6.9	0.98
Chloroethane	ND	4.1	0.81
Chloroethene (Vinyl Chloride)	1.3	ND	ND
Chloroform	ND	0.11	0.5
Chloromethane	ND	**78**	14
cis-1,2-Dichloroethene	15.6	0.45	0.15
1,2-Dichlorobenzene	9.2	4.2	0.78
1,3-Dichlorobenzene	ND	0.16	ND
1,4-Dichlorobenzene	2	1.3	0.3
1,1-Dichloroethane	24.5	4.5	1.5
1,1-Dichloroethene	4.2	ND	ND
Naphthalene	0.52	ND	ND
Trichloroethene	ND	0.067	0.063
1,2,4-Trichlorobenzene	ND	0.12	ND
1,4-Dioxane	**47**	3.6	2.1
ND: NOT DETECTED			

Monitoring Locations sampled outside of the Treatment Area

Monitoring locations MW-6, MW-10 and MW-F have been sampled during the January 2021 sampling event, to date these locations to not appear to have been impacted by the injection event as conductivity measurements have not varied and VOC concentrations have not substantially changed when compared to previous sampling events. MW-A and MW-E are upgradient and sidegradient, respectively, of the injection area, data collected during the January 2021 does not indicate that these injections or amendments associated with the injections have affected groundwater in these areas either.

Conclusions and Recommendations

As of the January 2021 sampling event that was conducted at the Hoff VC site VOC concentrations are trending down and chemical oxidation of targeted groundwater is continuing. Almost all iron species exists in its oxidized form of Fe^{3+} and ORP values are elevated. Sulfate concentrations are elevated and remain prevalent in the sites groundwater, while the pH values have remained neutral to slightly basic. These parameters will allow for enhanced attenuation of most to all VOCs via sulfate reduction once the oxidant that was added via the injections has been consumed.

At this time IET expects further degradation of VOCs to be recorded in the future monitoring events and recommends the continued monitoring of the site as planned.

Thank you for considering IET for your remediation needs. If you have any questions or concerns, please contact our office.

Best Regards,

Ian H. Connor, Vice President of Operations
Innovative Environmental Technologies, Inc.
888-721-8283

APPENDIX C

TETRA TECH, INC.
Tetra Tech
240 Continental Drive
Suite 200
Newark, DE 19713

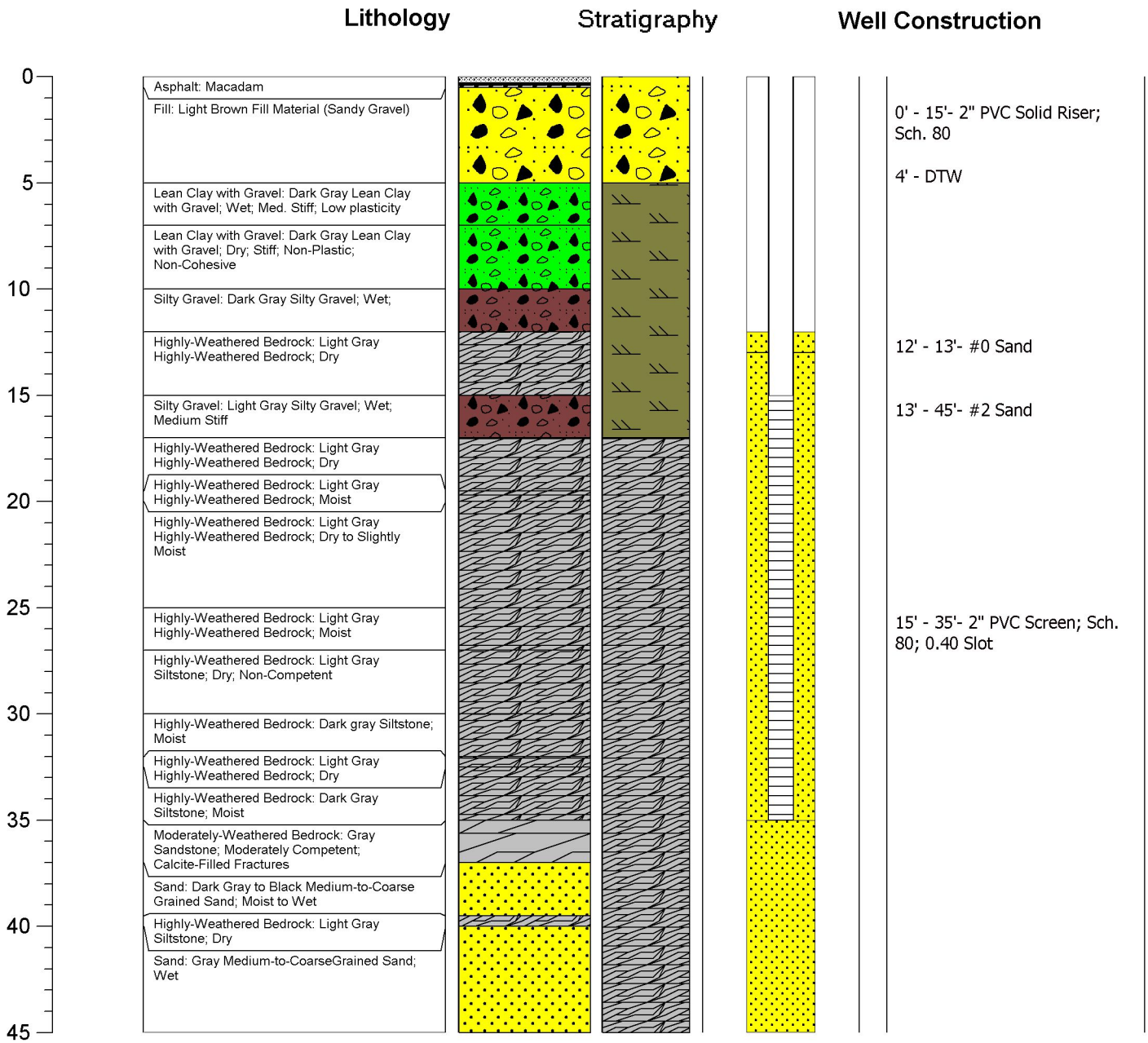
MW-A

Project Name: PADEP - Hoff VC Site

Starting Date: 04/24/19
Completion Date: 04/25/19
Drill Rig: Fraste MD XL170 Sonic Rig

Geologist: Jason Daliessio
Drilling Co.: Summit Drilling
Driller: Bo Crandell

Elevation (Ground):
Elevation (inner-casing):
Easting:
Northing:



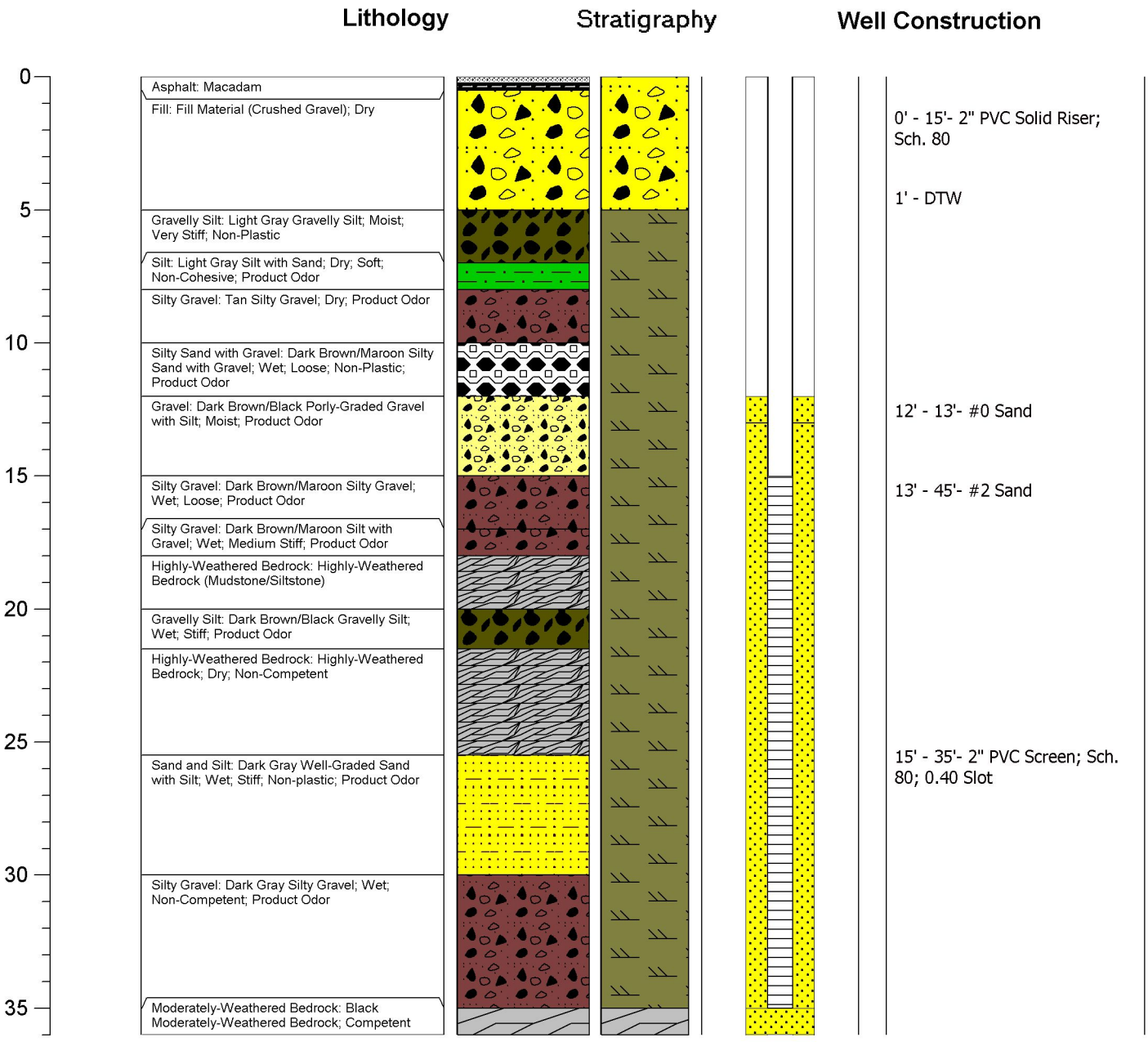
Total Depth = 45

TETRA TECH, INC.
Tetra Tech
240 Continental Drive
Suite 200
Newark, DE 19713

MW-B

Project Name: PADEP - Hoff VC Site

Starting Date:	04/25/19	**Geologist:**	Jason Daliessio	**Elevation (Ground):**	
Completion Date:	04/26/19	**Drilling Co.:**	Summit Drilling	**Elevation (inner-casing):**	
Drill Rig:	Fraste MD XL170 Sonic Rig	**Driller:**	Bo Crandell	**Easting:**	
				Northing:	



Total Depth = 36

TETRA TECH, INC.

Tetra Tech
1777 Sentry Pkwy West
Bldg. 12, Suite 102
Blue Bell, PA 19422

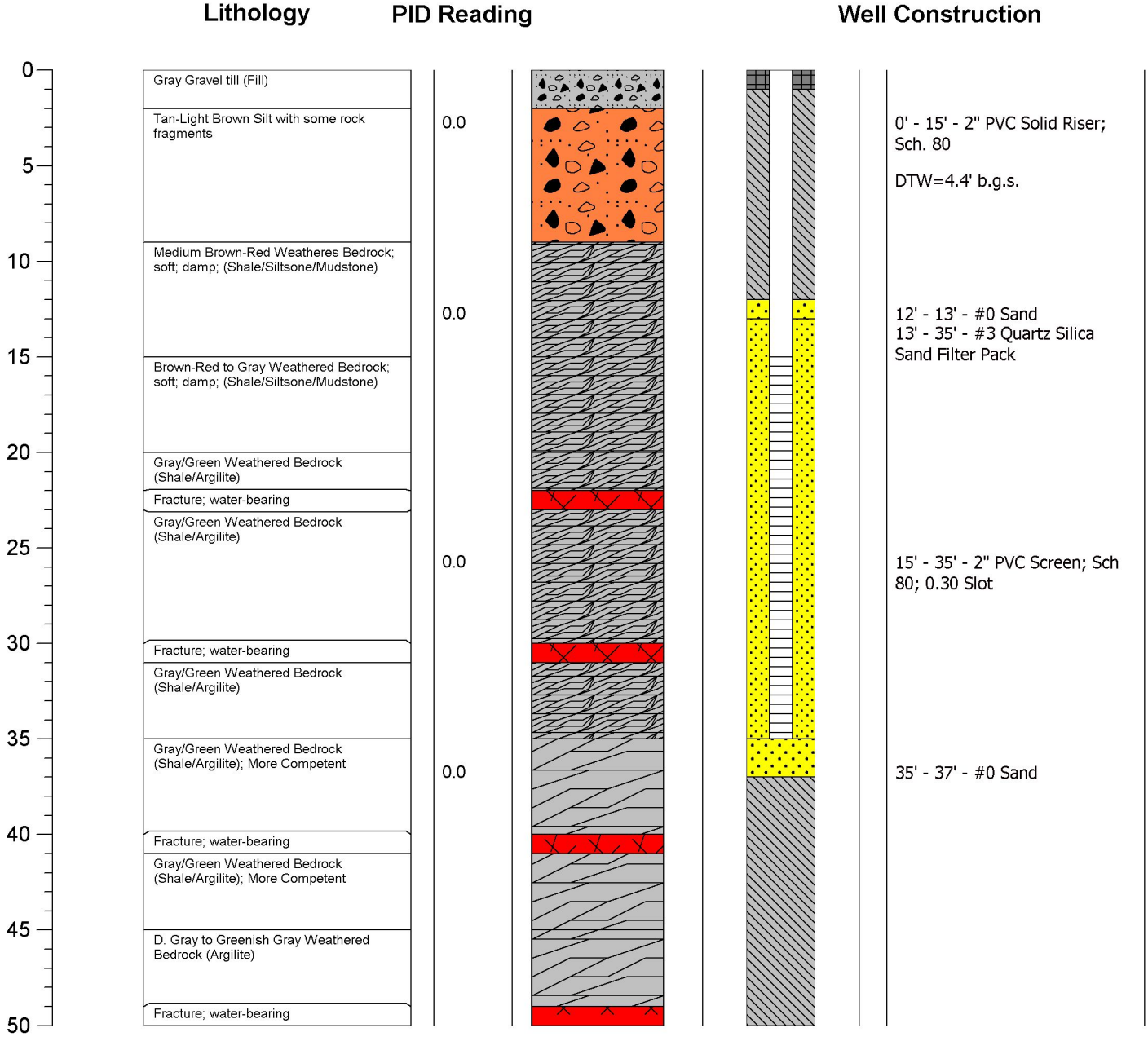
MW-C

Project Name: PADEP - Hoff VC Site

Starting Date: 1/14/2020
Completion Date: 1/15/2020
Drill Rig: Reich Drill T-650 WII

Geologist: Neb Dedic
Drilling Co.: Talon Drilling
Driller: Chris Bandoian

Elevation (Ground):
Easting:
Northing:



Total Depth = 50'

TETRA TECH, INC. — Tetra Tech, 1777 Sentry Pkwy West, Bldg. 12, Suite 102, Blue Bell, PA 19422	**MW-D**
	Project Name: PADEP - Hoff VC Site

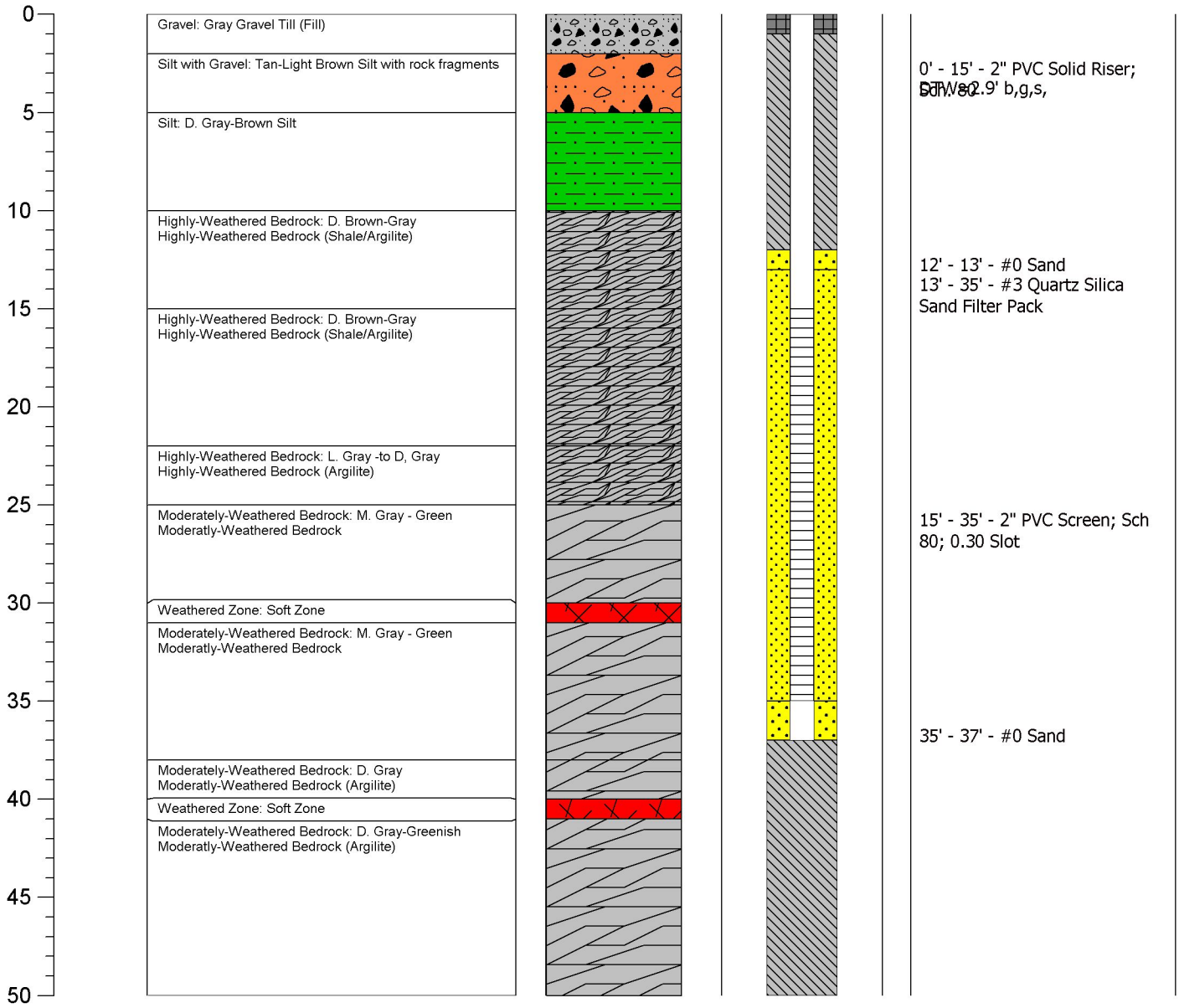
Starting Date: 1/14/2020
Completion Date: 1/15/2020
Drill Rig: Reich Drill T-650 WII

Geologist: Neb Dedic
Drilling Co.: Talon Drilling
Driller: Chris Bandoian

Elevation (Ground):
Easting:
Northing:

Lithology

Well Construction



Total Depth = 50'

TETRA TECH, INC.

Tetra Tech
1777 Sentry Pkwy West
Bldg. 12, Suite 102
Blue Bell, PA 19422

MW-E

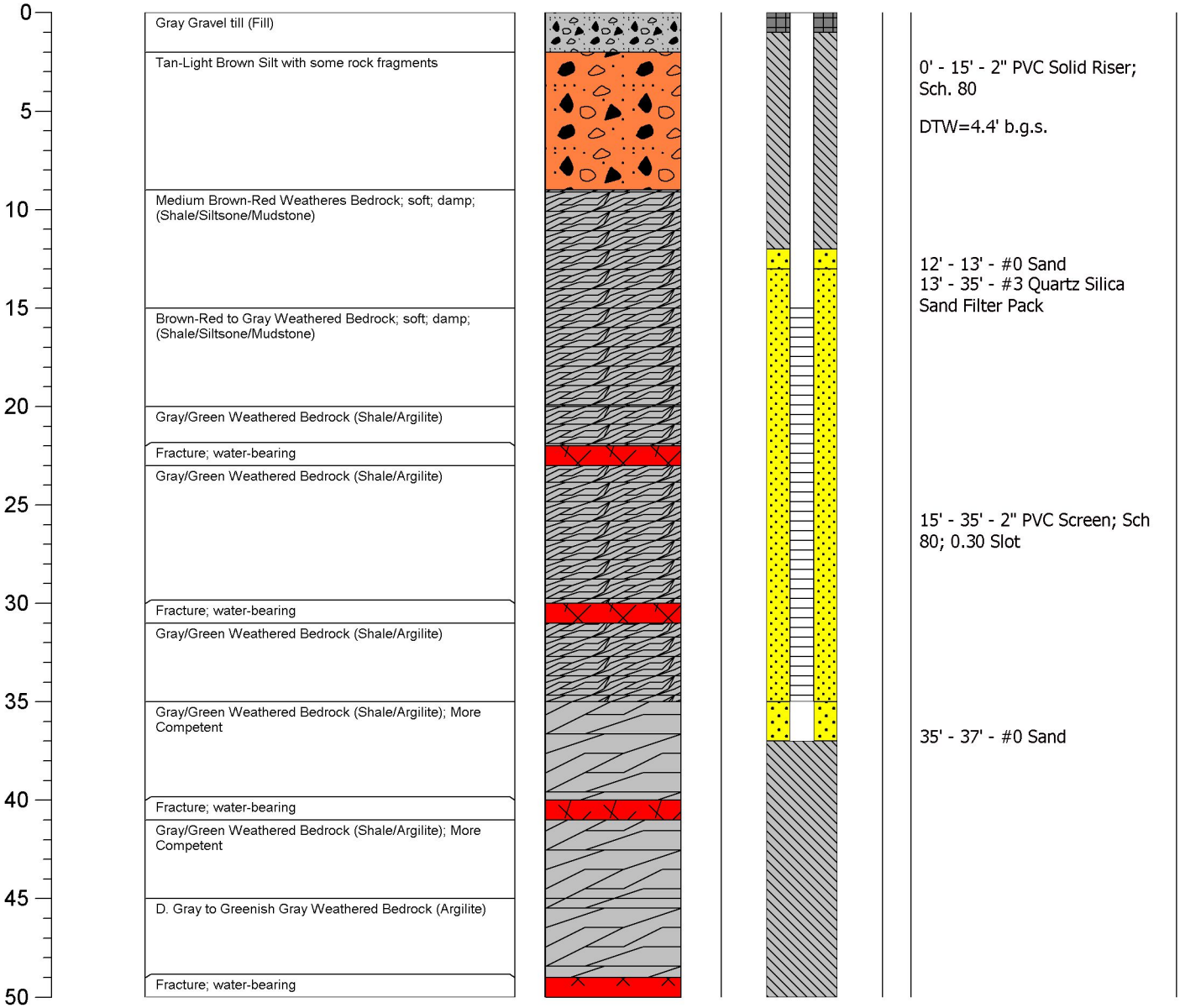
Project Name: PADEP - Hoff VC Site

Starting Date: 1/14/2020
Completion Date: 1/15/2020
Drill Rig: Reich Drill T-650 WII

Geologist: Neb Dedic
Drilling Co.: Talon Drilling
Driller: Chris Bandoian

Elevation (Ground):
Easting:
Northing:

Lithology



Well Construction

0' - 15' - 2" PVC Solid Riser; Sch. 80

DTW=4.4' b.g.s.

12' - 13' - #0 Sand
13' - 35' - #3 Quartz Silica Sand Filter Pack

15' - 35' - 2" PVC Screen; Sch 80; 0.30 Slot

35' - 37' - #0 Sand

Total Depth = 50'

Tetra Tech
240 Continental Drive
Suite 200
Newark, DE 19713
TETRA TECH, INC.

MW-F

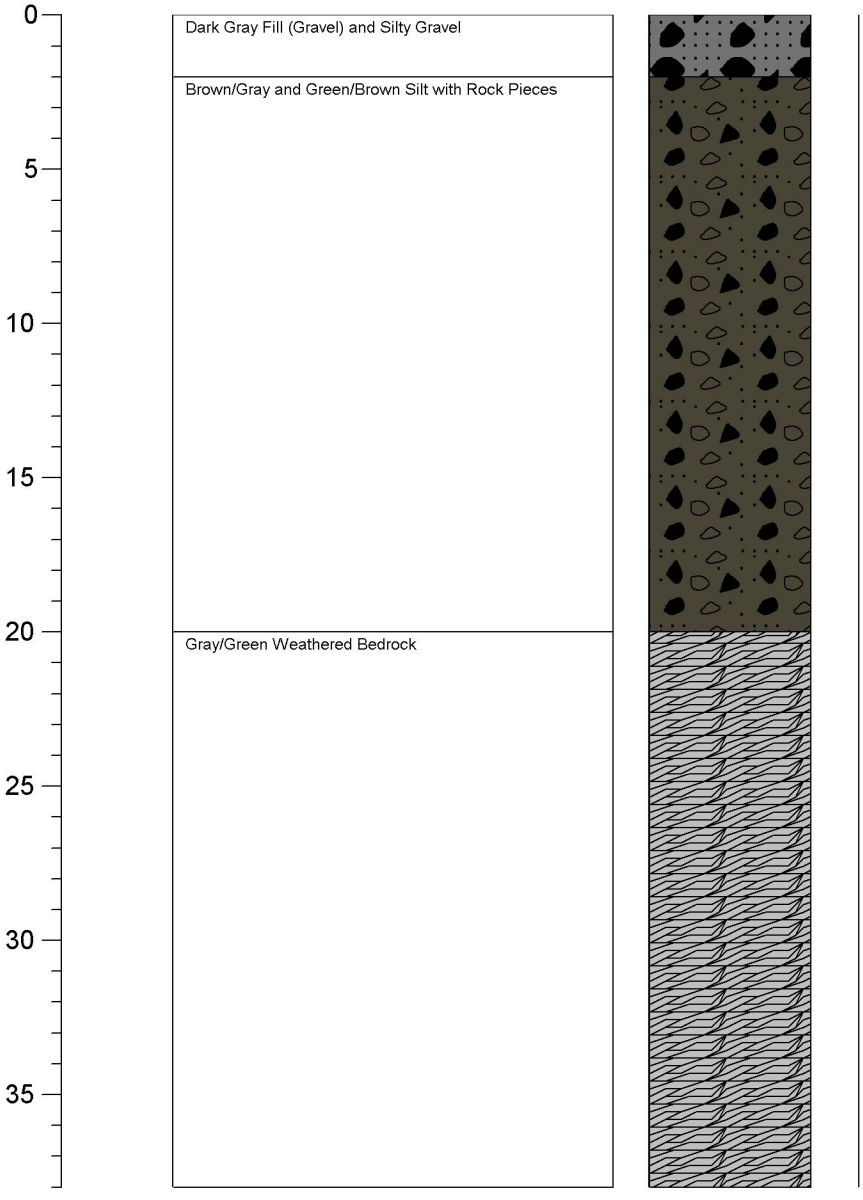
Project Name: PADEP - Hoff VC Site

Starting Date: 11/18/2020
Completion Date: 11/20/2020
Drill Rig: AMS Power Probe 9580 VTR

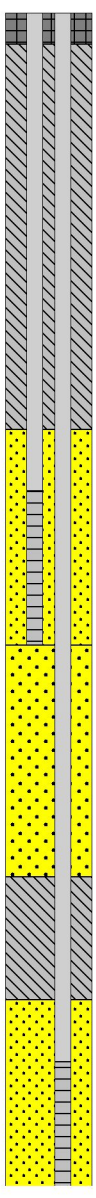
Geologist: Neb Dedic
Drilling Co.: IET
Driller: Justin Marianni

Elevation (Ground): N/A
Easting: N/A
Northing: N/A

Lithology



Well Construction



MW-F-A=Screen Interval 15.5'-20.5'
MW-F-B=Screen Interval 34'-39'

0'-1'- Concrete Pad and Flushmount Lid

0' - 15.5'- 1" Threaded PVC Solid Riser; Sch. 40

1' - 13.5'- Bentonite

13' - 20.5'- #1 Sand

15.5' - 20.5'- 1" Threaded PVC Screen; Sch. 40; 0.010 Slot

0' - 34'- 1" Threaded PVC Solid Riser; Sch. 40

28' - 32'- Bentonite

32' - 39'- #1 Sand

34' - 39'- 1" Threaded PVC Screen; Sch. 40; 0.010 Slot

Total Depth = 39'

Tetra Tech 240 Continental Drive Suite 200 Newark, DE 19713 TETRA TECH, INC.	**MW-F** **Project Name:** PADEP - Hoff VC Site

Starting Date: 11/18/2020
Completion Date: 11/20/2020
Drill Rig: AMS Power Probe 9580 VTR

Geologist: Neb Dedic
Drilling Co.: IET
Driller: Justin Marianni

Elevation (Ground): N/A
Easting: N/A
Northing: N/A

Lithology | **Well Construction**

Total Depth = 39'

Tetra Tech
240 Continental Drive
Suite 200
Newark, DE 19713
TETRA TECH, INC.

IW-1

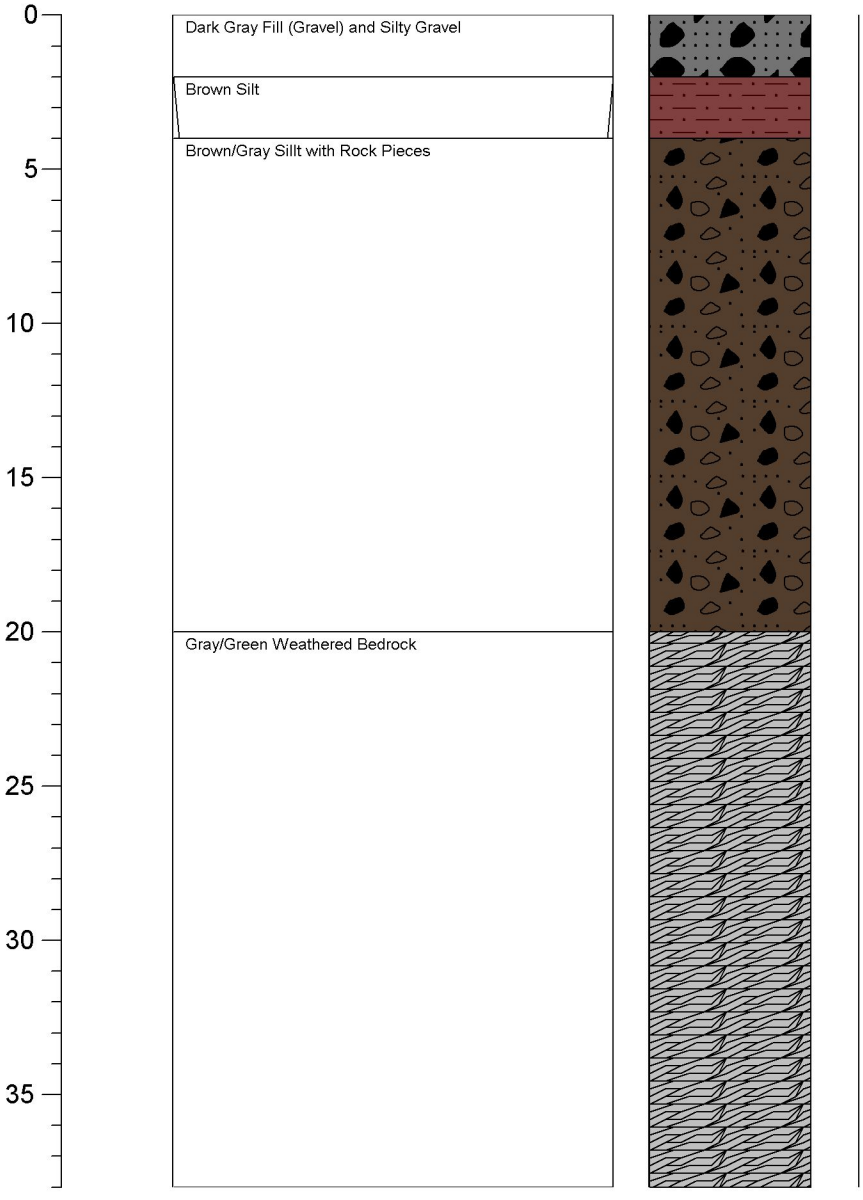
Project Name: PADEP - Hoff VC Site

Starting Date: 11/19/2020
Completion Date: 11/20/2020
Drill Rig: AMS Power Probe 9580 VTR

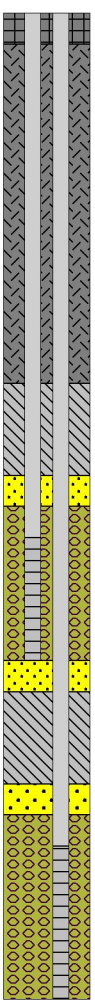
Geologist: Neb Dedic
Drilling Co.: IET
Driller: Justin Marianni

Elevation (Ground): N/A
Easting: N/A
Northing: N/A

Lithology



Well Construction



IW-1-A=Screen Interval 17'-22'
IW-1-B=Screen Interval 27'-32'

0'-1'- Concrete Pad and Flushmount Lid

0' - 17'- 1" Threaded PVC Solid Riser; Sch. 80

0' - 27'- 1" Threaded PVC Solid Riser; Sch. 80

1' - 12'- Grout

12'-15'-Bentonite Seal

15' - 16'- #1 Sand

16' - 21'- Filter Pea Gravel

17' - 21'- 1" Threaded PVC Screen; Sch. 80; 3/8" Perforated Screen

21' - 22'- #1 Sand

22'-25'-Bentonite Seal

25' - 26'- #1 Sand

26' - 32'- Filter Pea Gravel

27' - 32'- 1" Threaded PVC Screen; Sch. 80; 3/8" Perforated Screen

Total Depth = 38'

TETRA TECH, INC.
Tetra Tech
240 Continental Drive
Suite 200
Newark, DE 19713

IW-2

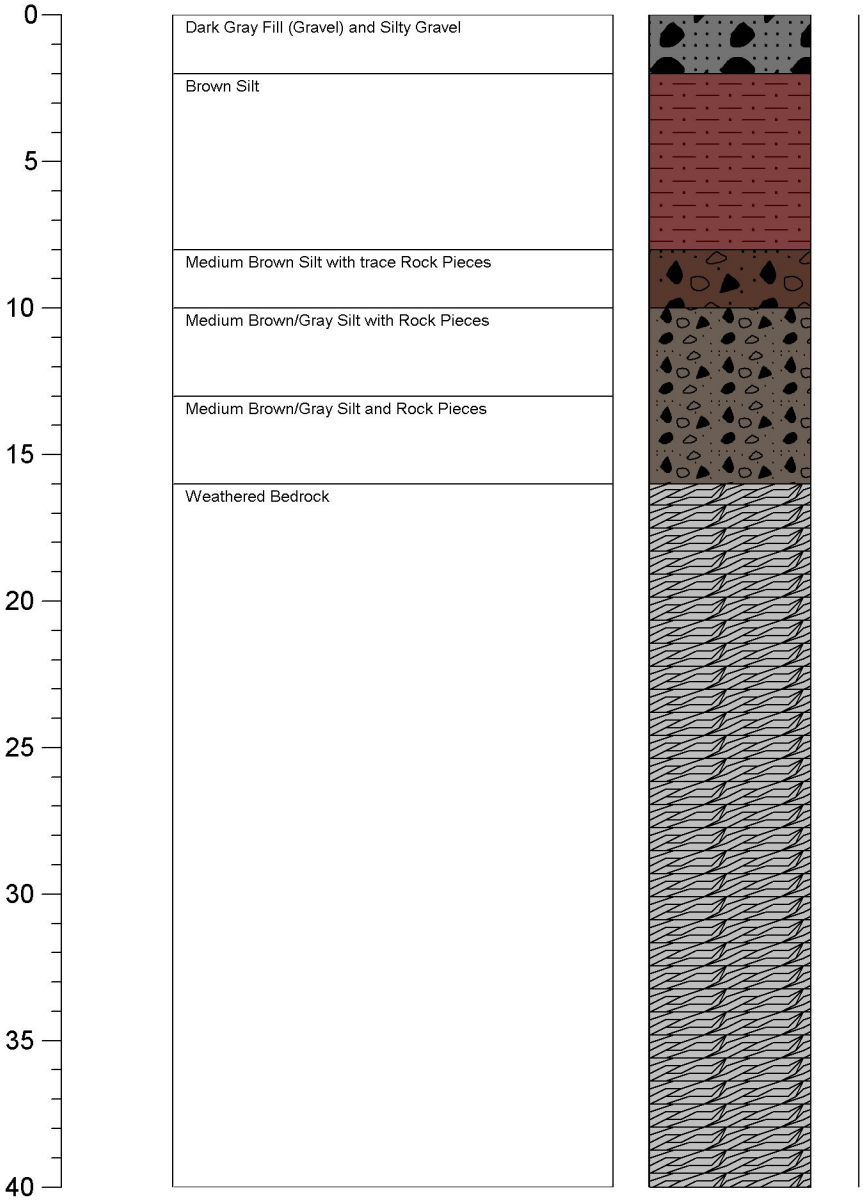
Project Name: PADEP - Hoff VC Site

Starting Date: 11/20/2020
Completion Date: 11/20/2020
Drill Rig: AMS Power Probe 9580 VTR

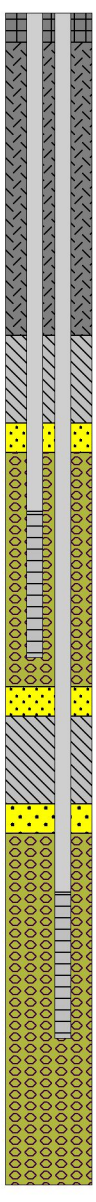
Geologist: Neb Dedic
Drilling Co.: IET
Driller: Justin Marianni

Elevation (Ground): N/A
Easting: N/A
Northing: N/A

Lithology



Well Construction



IW-2-A=Screen Interval 17'-22'
IW-1-B=Screen Interval 30'-35'

0'-1'- Concrete Pad and Flushmount Lid

0' - 17'- 1" Threaded PVC Solid Riser; Sch. 80

0' - 30'- 1" Threaded PVC Solid Riser; Sch. 80

1' - 11'- Grout

11'-14'-Bentonite Seal

14' - 15'- #1 Sand

15' - 23'- Filter Pea Gravel

17' - 22'- 1" Threaded PVC Screen; Sch. 80; 3/8" Perforated Screen

23' - 24'- #1 Sand

24'-27'-Bentonite Seal

27' - 28'- #1 Sand

28' - 35'- Filter Pea Gravel

30' - 35'- 1" Threaded PVC Screen; Sch. 80; 3/8" Perforated Screen

Total Depth = 40"

TETRA TECH, INC.
Tetra Tech
240 Continental Drive
Suite 200
Newark, DE 19713

IW-3

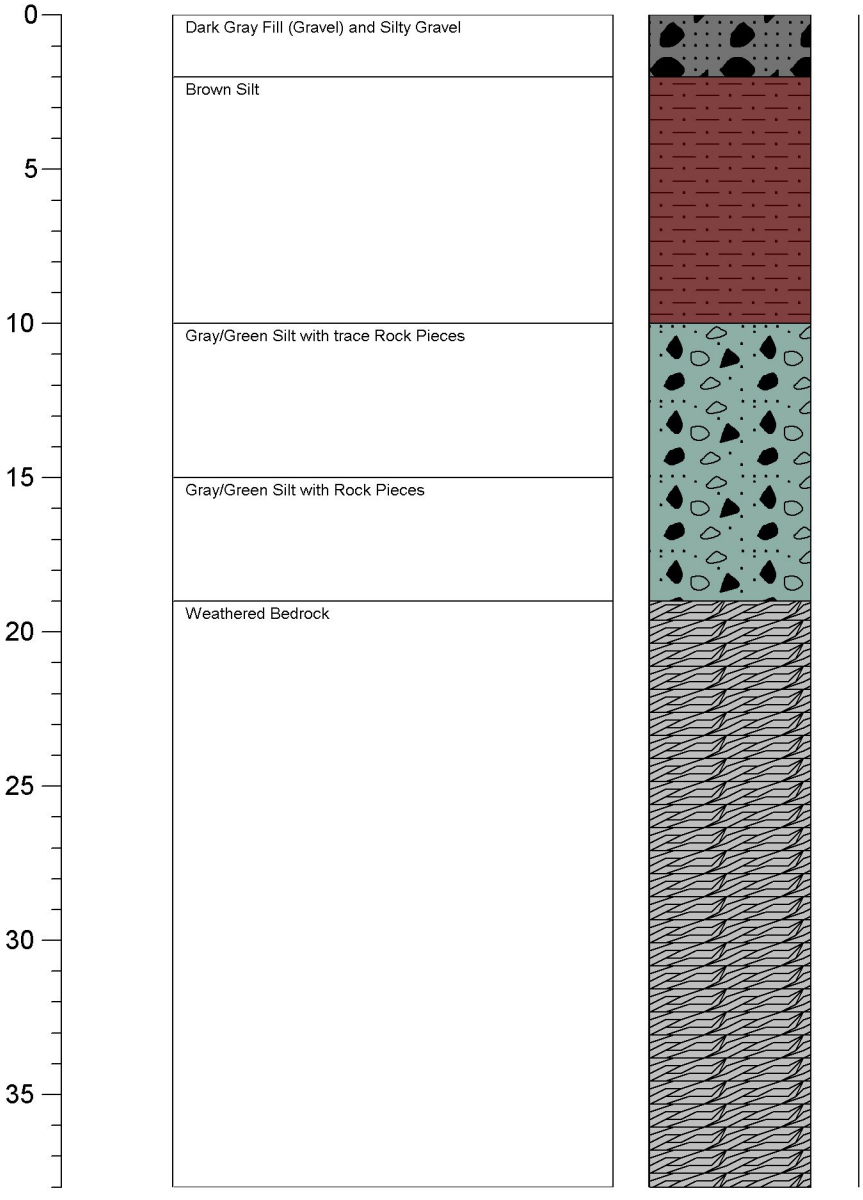
Project Name: PADEP - Hoff VC Site

Starting Date: 11/20/2020
Completion Date: 11/20/2020
Drill Rig: AMS Power Probe 9580 VTR

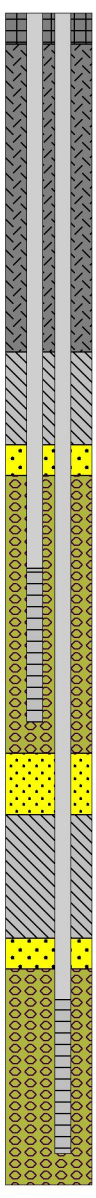
Geologist: Neb Dedic
Drilling Co.: IET
Driller: Justin Marianni

Elevation (Ground): N/A
Easting: N/A
Northing: N/A

Lithology



Well Construction



IW-3-A=Screen Interval 18'-23'
IW-3-B=Screen Interval 32'-37'

0'-1'- Concrete Pad and Flushmount Lid

0' - 18'- 1" Threaded PVC Solid Riser; Sch. 80

0' - 32'- 1" Threaded PVC Solid Riser; Sch. 80

1' - 11'- Grout

11'-14'-Bentonite Seal

14' - 15'- #1 Sand

15' - 23'- Filter Pea Gravel

18' - 23'- 1" Threaded PVC Screen; Sch. 80; 3/8" Perforated Screen

24' - 26'- #1 Sand

26'-30'-Bentonite Seal

30' - 31'- #1 Sand

31' - 38'- Filter Pea Gravel

32' - 37'- 1" Threaded PVC Screen; Sch. 80; 3/8" Perforated Screen

Total Depth = 38"

APPENDIX D

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-A
Sample Location: MW-A
Sampled By: S. McC, N.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-9-2020 / Time: 1445	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Method: SUBM. 2" MONSOON	clear	6.54	0.357	14.90	59.1	0.28	10	

PURGE DATA:

Date: 12-9-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: SUBM. 2" MONSOON								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 34.40								
Static Water Level (WL): 4.60								
One Casing Volume(gal/L):								
Start Purge (hrs): 1410								
End Purge (hrs): 1445								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): ~3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~	40 ml vial	3
SVOCs & Pesticides	none	250 - 1 ~~1L~~ amber glass	
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500 - 1 Plastic	1
~~Alkalinity~~ Fe 2+	HCL	250 - 1 Amber glass Unpres	1

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-A

Date: 12-9-2020

Well Depth (from T.O.C.) = 34.40 ft

Well Diameter (d) = 2in ~~ft~~

Static Water Level (WL) = 4.60 ft
(from T.O.C.)

Tt Sampler(s): S. McCoy
M. Dehic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 34.40 - 4.60
T = 29.80 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1410	9.82	~~6.55~~	0.342	0.0	6.53	108	200	4.55	clear	
1415	14.86	6.76	0.361	OR	1.58	64	~~300~~	5.92	L. gray	
1420	15.03	6.81	0.360	~~62~~4	1.00	44	~~300~~	6.88	L. gray	
1425	14.93	6.87	0.359	198	0.69	37	300	7.31	SL. cloudy	
1430	15.05	6.98	0.358	125	0.47	22	300	7.25	SL. cloudy	
1435	15.01	6.97	0.357	105.3	0.32	18	300	7.26	SL. cloudy	
1440	14.96	6.97	0.357	74.9	0.26	15	300	7.24	clear	
1445	14.90	6.99	0.357	59.1	0.28	10	300	7.08	clear	

TETRA TECH, INC.

Total Volume Removed: ~3 GAL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-3
Sample Location: MW-3
Sampled By: D.L. & L.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-11-2020 / Time: 0900	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Method: Peristaltic	sl.Red	9.29	8.13	15.37	315	0.68	321	

PURGE DATA:

Date: 12-11-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 33.90								
Static Water Level (WL): 4.45								
One Casing Volume(gal/L):								
Start Purge (hrs): 0830								
End Purge (hrs): 0900								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): ~3.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	6
1,4 Dioxane	none	40 ml vial	6
SVOCs / Pesticides	none	250 ml x amber glass	6
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	
Metals_total	HN03	250 ml plastic	
Sulfate & TDS	none	500-1 Plastic	1
Alkalinity Fe 2+	HCl	250-1 amber glass w septa	1

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD

Duplicate ID No.: Hoff DUP-121120

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-13

Date: 12-11-2020

Well Depth (from T.O.C.) = 33.90 ft

Well Diameter (d) = 2in ~~ft~~

Static Water Level (WL) = 4.45 ft
(from T.O.C.)

Tt Sampler(s): D. Lemi
N. DeMic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 33.90 - 4.45
T = 29.45 ft

mS/cm

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0830	14.87	8.71	8.21	268	6.24	396	250	4.45	sl. turb	black turbid
0835	14.70	8.75	8.20	489	4.73	390	250	5.95		
0840	14.68	8.82	8.18	412	4.02	385	250	6.07		
0845	14.54	8.91	8.18	349	3.91	380	250	6.08		MW-14 452
0850	15.21	9.24	8.14	345	1.18	340	250	6.15		
0855	15.34	9.29	8.13	320	0.80	324	~~200~~	6.20		
0900	15.37	9.29	8.13	315	0.68	321	250	6.22	sl. turb	

TETRA TECH, INC.

Total Volume Removed: ~3.5 GAL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-6
Sample Location: MW-C
Sampled By: D.L. & P.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-10-2020 / Time: 1650	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Method: peristaltic	Red	8.49	28.3	13.87	840	1.28	418	

PURGE DATA:

Date: 12-10-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 34.55								
Static Water Level (WL): 5.36								
One Casing Volume(gal/L):								
Start Purge (hrs): 1610								
End Purge (hrs): 1650								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): ~3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~	40 ml vial	3
SVOCs & Pesticides	none	250 ml 1L amber glass	3
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500 ml plastic	1
~~Alkalinity~~ Fe 2+	HCL	250 ml Amber glass w septa	1

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-C

Date: 12-10-2020

Well Depth (from T.O.C.) = 34.55 ft

Well Diameter (d) = 2 in ~~ft~~

Static Water Level (WL) = 5.38 ft
(from T.O.C.)

Tt Sampler(s): D. Hein
N. Dedic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 34.55 - 5.38
T = 29.17 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
1610				OR			300	5.38	Red	
1615				↓			↓	6.12	↓	
1620				↓			↓	6.25	↓	
1625				↓			↓	6.33	↓	
1630				↓			↓	6.42	↓	
1635				↓			↓	6.60	↓	
1640	12.80	8.28	28.5	OR	2.06	4.40	↓	6.80	↓	
1645	13.20	8.36	28.3	980	1.44	4.27	↓	7.04	↓	
1650	13.87	8.49	28.3	840	1.28	418	300	7.22	Red	

TETRA TECH, INC.

Total Volume Removed: ~ 3GAL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-E
Sample Location: MW-E
Sampled By: D.C. & N.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 12-10-2020	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 0940								
Method: Sub, 2" Monsoon	CLEAR	7.13	0.503	13.19	28.6	0.17	403	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 12-10-2020								
Method: Sub, 2" Monsoon								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 37.90								
Static Water Level (WL): 3.82								
One Casing Volume(gal/L):								
Start Purge (hrs): 0900								
End Purge (hrs): 0940								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~	40 ml vial	3
SVOCs & Pesticides	none	250 ml 1st amber glass	3
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500 ml plastic	1
~~Alkalinity~~ Fe 2+	HCl	250 - 1 amber glass w septa	1

OBSERVATIONS / NOTES:

Circle If Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-E

Date: 12/10/2020

Well Depth (from T.O.C.) = 37.90 ft

Well Diameter (d) = 2in ~~ft~~

Static Water Level (WL) = 3.82 ft
(from T.O.C.)

Tt Sampler(s): Neb Dedic
Deanna Leri

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 37.90 - 3.82
T = 34.08 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0900	12.60	7.43	0.507	47.5	3.88	452	483	4.60	clear	
0905	12.41	7.37	0.505	202	2.10	444	200	6.32	clear	
0910	12.19	7.36	0.504	122	1.63	440	200	6.40	clear	
0915	12.39	7.31	0.503	80.8	1.12	438	200	6.14	clear	
0920	12.36	7.24	0.505	65.0	0.85	436	200	6.45	clear	
0925	13.22	7.21	0.504	67.2	0.56	426	200	8.25	clear	
0930	13.27	7.16	0.503	39.5	0.37	417	200	8.69	clear	
0935	13.12	7.12	0.503	33.5	0.25	410	200	8.75	clear	
0940	13.19	7.13	0.503	28.6	0.17	403	200	8.80	clear	

TETRA TECH, INC.

Total Volume Removed: ~4GAL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

Sample ID No.: HOFF MW-E_A
Sample Location: MW-E_A
Sampled By: S. McC & KD
C.O.C. No.:

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-9-2020	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1610	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Peristaltic	SL. cloudy	6.90	0.796	15.72	120	0.11	68	

PURGE DATA:

Date: 12-9-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 20.30								
Static Water Level (WL): 5.54								
One Casing Volume(gal/L):								
Start Purge (hrs): 1530								
End Purge (hrs): 1610								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs & Pesticides	none	250-1 1 L amber glass	3
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500-1 Plastic	1
~~Alkalinity~~ FE 2+	HCL	250-1 Amber glass & Plastic	1

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-EA

Date: 12-4-2020

Well Depth (from T.O.C.) = 20.30 ft

Well Diameter (d) = lin ~~ft~~

Static Water Level (WL) = 5.54 ft
(from T.O.C.)

Tt Sampler(s): S. McCoy
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 20.30 - 5.54
T = 14.76 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1530	12.16	6.71	0.870	OR	2.63	65	350	5.50	~~Gray~~-brn	
1535	14.69	6.95	0.799	OR	1.47	57	350	8.62	gray-brn	
1540	14.88	6.93	0.810	OR	0.87	56	350	9.15	cl-gy	
1545	15.05	6.91	0.818	OR	0.73	60	350	9.45	cl-gy	
1550	15.36	6.90	0.817	OR	0.44	63	350	9.58	cl-gy	
1555	15.56	6.89	0.815	OR	0.25	62	350	9.63	cl-gy	
1600	15.63	6.90	0.804	428	0.20	63	350	9.88	cl-gy	
1605	15.68	6.89	0.800	184	0.15	65	350	9.93	cl-gy	
1610	15.72	6.90	0.796	120	0.11	68	350	9.98	sl. cl-gy	

TETRA TECH, INC.

Total Volume Removed: ~ 4 GAL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

Sample ID No.: HOFF MW-F_R
Sample Location: MW-F_R
Sampled By: S, McC, ND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

Date: 12-9-2020 / Time: 1705	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Method: Peristaltic	clear	6.38	5.06	13.27	35.1	0.14	395	

PURGE DATA:

Date: 12-9-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1 in, PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 38.60								
Static Water Level (WL): 5.05								
One Casing Volume(gal/L):								
Start Purge (hrs): 1635								
End Purge (hrs): 1705								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): 3.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs & Pesticides	none	1 L amber glass	3
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500 -1 plastic	1
~~Alkalinity~~ Fe^{2+}	HCL	250 -1 Amber glass w Septa	1

OBSERVATIONS / NOTES:

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-EB

Date: 12-9-2020

Well Depth (from T.O.C.) = 38.60 ft

Well Diameter (d) = 1in ~~ft~~

Static Water Level (WL) = 5.05 ft
(from T.O.C.)

Tt Sampler(s): S. McCoy
N. Dedic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 38.60 - 5.05
T = 33.55 ft

mS/cm

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1635	13.10	7.02	3.55	OR	2.85	195	350	5.58	clr-vs	
1640	13.59	6.61	4.35	OR	0.31	341	350	6.25	clr-s	
1645	13.87	6.54	4.37	203	0.28	350	350	6.38	sl.clr	
1650	13.64	6.45	4.60	114	0.23	368	350	6.40	sl.clr	
1655	13.49	6.39	4.95	53.1	0.19	387	350	6.42	clear	
1700	13.36	6.38	5.04	38.3	0.16	392	350	6.45	clear	
1705	13.27	6.38	5.06	35.1	0.14	395	350	6.46	clear	

TETRA TECH, INC.

Total Volume Removed: ~3.5 GAL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-6
Sample Location: MW-6
Sampled By: D.L. & C.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/10/20	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1245	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: peristaltic	CLEAR	7.09	0.302	10.69	42.1	0.51	32	SLODOR

PURGE DATA:

Date: 12/10/2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 4in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 11.92								
Static Water Level (WL): .7								
One Casing Volume(gal/L):								
Start Purge (hrs): 1150								
End Purge (hrs): 1245								
Total Purge Time (min):								
Total Vol. Purged (gal/L): ~2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~ none	40 ml vial	3
SVOCs	none	1 L amber glass	3
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500 ml plastic	1
~~Alkalinity~~ Fe2+	HCl	250 ml amber glass w septa	1

OBSERVATIONS / NOTES:

* WELLHEAD WAS UNCOVERED BELOW GRAVEL FILL. MISSING-DAMAGED FLUSH MOUNT LETAL COVER, ONLY PLASTIC CAP PRESENT. AFTER SAMPLING COVERED WELLHEAD WITH GRAVEL. BEGIN PURGE/PUMP W SUBM. - MONSOON PUMP - BROKE/STOP, CONTINUE W. PERISTALTIC

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-6

Date: 12/10/2020

Well Depth (from T.O.C.) = 11.92 ft

Well Diameter (d) = 4in ~~ft~~

Static Water Level (WL) = 0.70 ft
(from T.O.C.)

Tt Sampler(s): D. Leri
N. Dedic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 11.92 - 0.70
T = 11.22 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1150	11.12	7.42	0.304	86.1	6.29	107	250	0.7	clear	Monsoon pump
1155								1.02		Out of [illegible]
1200										Slodor Petrol Like
1205										
1210	13.86	7.47	0.305	56.7	1.95	95	250	1.05	clear	Peri pump
1215	11.03	7.28	0.305	54.3	1.19	61	250	0.95	clear	
1220	11.02	7.23	0.304	48.5	0.98	50	250	0.95	clear	
1225	11.00	7.22	0.304	47.2	0.92	50	250	0.95	clear	
1230	10.98	7.22	0.305	45.8	0.77	42	250	0.95	clear	
1235	10.89	7.21	0.305	49.7	0.54	34	250	0.95	clear	
1240	10.88	7.18	0.305	46.3	0.52	32	250	0.95	clear	
1245	10.69	7.09	0.302	42.1	0.51	32	250	0.95	clear	

TETRA TECH, INC.

Total Volume Removed: ~2.5 GAL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-10
Sample Location: MW-10
Sampled By: D.L. & K.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-10-2020	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1115	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: SUB.2 "MONSOON	CLEAR	7.58	0.372	12.86	76.5	0.0	50	

PURGE DATA:

Date: 12-10-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: SUBM, 2" MONSOON								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 4in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 7.48								
Static Water Level (WL): 1.30								
One Casing Volume(gal/L):								
Start Purge (hrs): 1035								
End Purge (hrs): 1115								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): ~3.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~ none	40 ml vial	3
SVOCs & Pesticides	none	250-1 1L amber glass	3
~~Pesticides~~	~~none~~	~~1-L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500-1 plastic	1
~~Alkalinity~~ Fe 2+	HCl	250-1 amber glass w sppta	1

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-10

Date: 12/10/2020

Well Depth (from T.O.C.) = 7.48 ft

Well Diameter (d) = 4in ~~ft~~

Static Water Level (WL) = 1.30 ft
(from T.O.C.)

Tt Sampler(s): D. Leri
N. Dodic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 7.48 - 1.30
T = 6.18 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1035	13.35	7.59	0.377	OR	5.85	185	300	2.05	grey/cloudy	
1040	13.22	7.516	0.3716	265	1.78	125	300	2.23	clear	
1045	12.97	7.58	0.376	171	0.716	72	300	2.85	clear	
1050	12.72	7.600	0.375	96.2	0.33	58	300	2.85	clear	
1055	13.11	7.59	0.376	336	0.14	47	300	2.85	clear	
1100	13.29	7.59	0.376	246	0.16	44	300	2.90	clear	
1105	13.09	7.60	0.376	204	0.05	45	300	3.00	clear	
1110	12.93	7.600	0.377	173	0.0	47	300	3.04	clear	
1115	12.86	7.58	0.377	76.5	0.0	50	300	3.10	clear	

TETRA TECH, INC.

Total Volume Removed: 3.5 gal

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff-MW-13
Sample Location: MW-13
Sampled By:
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-11-2020	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1015	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Peristaltic	Lt. Red	7.14	6.71	14.85	501	0.76	372	

PURGE DATA:

Date: 12-11-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 4in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 25.20								
Static Water Level (WL): 3.54								
One Casing Volume(gal/L):								
Start Purge (hrs): 0940								
End Purge (hrs): 1015								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): ~ 4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs & Pesticides	none	250 ml x amber glass	3
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500 ml Plastic	1
~~Alkalinity~~ Ferr	HCL	250 ml Amber glass w septa	1

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-13

Date: 12-11-2020

Well Depth (from T.O.C.) = 25.20 ft

Well Diameter (d) = 4 in ~~ft~~

Static Water Level (WL) = 3.54 ft
(from T.O.C.)

Tt Sampler(s): D. Leni
N. Dedic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 25.20 - 3.54
T = 21.66 ft

mS/cm

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0940	13.67			598			350	3.54	Lt. Red	high turbidity
0945	13.78			462			350	3.88	lt. red	
0950	13.82			483			350	4.21	lt. red	
0955	14.05			480			350	4.48	lt. red	
1000	14.20			475			350	4.63	lt. red	
1005	14.36	7.84	6.58	452	2.60	368	350	4.72	lt. red	stabilized WQ
1010	14.73	7.37	6.65	504	1.32	373	350	4.83	lt. red	
1015	14.85	7.14	6.71	501	0.76	372	350	4.91	lt. red	

TETRA TECH, INC.

Total Volume Removed: ~4 Gal

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF IW-1-A
Sample Location: IW-1-A
Sampled By: D.L.G N.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-10-2020	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1455	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: peristaltic	sl. red	7.73	37.8	13.52	456	12.10	435	

PURGE DATA:

Date: 12-10-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: lin PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 17.40								
Static Water Level (WL): 5.25								
One Casing Volume(gal/L):								
Start Purge (hrs): 1410								
End Purge (hrs): 1455								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): ~3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~	40 ml vial	3
SVOCs & Pesticides	none	250 mL x 1 amber glass	3
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500 mL plastic	1
~~Alkalinity~~ Fe2+	HCL	250 mL amber glass w septa	1

OBSERVATIONS / NOTES:

DO = ?

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: IW-1-A

Date: 12-10-2020

Well Depth (from T.O.C.) = 17.40 ft

Well Diameter (d) = 1 in ~~ft~~

Static Water Level (WL) = 5.25 ft
(from T.O.C.)

Tt Sampler(s): D. Veri
N. Dedic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 17.40 - 5.25
T = 12.15 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1410				OR			250	5.25	Red	
1415				OR				5.63	Red	
1420				820				6.10	Red	
1425	15.78	6.32	38.1	615	11.66	480		6.70	Lt. Red	
1430	15.66	6.50	38.1	541	11.88	472		6.96	Lt. Red	
1435	15.30	6.43	38.0	720	11.96	470		7.18	Lt. Red	
1440	14.77	6.80	38.0	480	12.04	460		7.30	Sl. Red	
1445	14.60	7.20	37.8	456	12.12	460		7.38	Sl. Red	
1450	14.15	7.28	37.8	4.30	12.15	458		7.44	Sl. Red	
1455	13.52	7.33	37.8	4.42	12.10	455	250	7.51	Sl. Red	DO = ?

TETRA TECH, INC.

Total Volume Removed: ~36711

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF IW-1_B
Sample Location: IW-1_B
Sampled By: D.L. & N.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-10-2020	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1550	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: peristaltic	sl. red	7.41	29.5	14.47	152	0.95	417	

PURGE DATA:

Date: 12-10-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 30.60								
Static Water Level (WL): 4.43								
One Casing Volume(gal/L):								
Start Purge (hrs): 1515								
End Purge (hrs): 1550								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): ~2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~	40 ml vial	3
SVOCs & Pesticides	none	250 ml 1L amber glass	3
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500 ml plastic	1
~~Alkalinity~~ Fe 2+	HCL	250 ml amber glass w septa	1

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: IW-1B

Date: 12/10/20

Well Depth (from T.O.C.) = 30.50 ft

Well Diameter (d) = 1 in ~~ft~~

Static Water Level (WL) = 4.43 ft
(from T.O.C.)

Tt Sampler(s): D. Leri
Neb D.

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 30.50 - 4.43
T = 26.07 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1515	13.16	6.78		OR				10.105	Red	HACH Turbidimeter
1525				575					Sl. Red	
1530				340		406		7.52	Sl. Red	
1540	14.47	7.52	29.9	101	3.71	406	200	7.66	Sl. red	HORIBA U-52 WQ
1545	14.46	7.45	29.7	136	1.02	415	200	7.74	Sl. Red	
1550	14.47	7.41	29.5	152	0.95	417	200	2.85	Sl. Red	

TETRA TECH, INC.

Total Volume Removed: ~2.5 GAL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: IW-2
Sample Location: IW-2 A
Sampled By: D.L. & N.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-11-2020 / Time: 1450	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Method: Peristaltic	Red	—	—	—	OR	—	—	

PURGE DATA:

Date: 12-11-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 14.20								
Static Water Level (WL): 1.98								
One Casing Volume(gal/L):								
Start Purge (hrs): 1340								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs & Pesticides	none	250 - 1 ~~1L~~ amber glass	3
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500 - 1 Plastic	—
~~Alkalinity~~ Fe2+	HCL	250 - 1 Amber glass w septa	—

OBSERVATIONS / NOTES:

Begin purge @ 1340, DRY-out @ 1345, wait to recover, Resume purging/pumping @ 1447, Collect SAMPLE @ 1450.
OR - over the range, HACH turbidimeter
Water red due injected amendment in Nov-Dec 2020

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-2_B
Sample Location: MW-2_B
Sampled By: D.L. & N.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-11-2020	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1430	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Peristaltic	Lt. Red	8.54	11.3	15.26	428	1.92	401	

PURGE DATA:

Date: 12-11-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 31.50								
Static Water Level (WL): 5.25								
One Casing Volume(gal/L):								
Start Purge (hrs): 1400								
End Purge (hrs): 1430								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): ~2								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs & Pesticides	none	250-1 1L amber glass	3
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500-1 plastic	1
~~Alkalinity~~ Fe2+	HCl	250-1 amber glass w/ septa	1

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: IW-2_B

Date: 12-11-2020

Well Depth (from T.O.C.) = 31.50 ft → 31.80 POST SAMPLING

Well Diameter (d) = 1in ft

Static Water Level (WL) = 5.25 ft
(from T.O.C.)

Tt Sampler(s): D. LERI
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 31.80 - 5.25
T = 26.55 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
1400				OR			250		Red	HACH Turbidimeter
1405				↓			↓		↓	↓
1410				↓			↓		↓	↓
1415	16.41	7.77	11.5	OR	3.05	396	↓		↓	HORIBA WQ Meter
1420	15.45	8.63	12.1	910	2.12	396	↓		↓	↓
1425	15.34	8.56	11.8	479	2.05	400	↓		Lt. Red	↓
1430	15.26	8.54	11.3	428	1.92	401	250		Lt. Red	↓

TETRA TECH, INC.

Total Volume Removed: ~2 GAL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff IW-3_A
Sample Location: IW-3_A
Sampled By: D. LERI, N. DEDIC
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-11-2020	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1245	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Peristaltic	Red	—	—	—	OR	—	—	

PURGE DATA:

Date: 12-11-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: lin PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 14.66								
Static Water Level (WL): 1.71								
One Casing Volume(gal/L):								
Start Purge (hrs): 1045								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs & Pesticides	none	250 ml ~~1L~~ amber glass	3
~~Pesticides~~	~~none~~	~~1 L amber glass~~	
Metals_diss	HN03	250 ml plastic	—
Metals_total	HN03	250 ml plastic	—
Sulfate & TDS	none	500-l plastic	—
~~Alkalinity~~ Fe^{2+}	HCL	250-l Amber glass w Septa	—

OBSERVATIONS / NOTES:

Begin purge @ 1045, Dry-out @ 1055. Wait to recover, Resume pump/purge @ 1240, Collect sample @ 1245, Insufficient water to collect for all parameters. Water red, due injected amendment in NOV. 2020

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-IW-3_B
Sample Location: IW-3_B
Sampled By: D. KELLY, N. DESIR
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-11-2020	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1220	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Peristaltic	Red	—	—	—	OR	—	—	

PURGE DATA:

Date: 12-11-2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 19								
Static Water Level (WL): 1.90								
One Casing Volume(gal/L):								
Start Purge (hrs): 1105								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs & Pesticides	none	250 ml 1L amber glass	3
~~Pesticides~~	~~none~~	~~1-L amber glass~~	
Metals_diss	HN03	250 ml plastic	1
Metals_total	HN03	250 ml plastic	1
Sulfate & TDS	none	500 ml plastic	1
~~Alkalinity~~ Fe^{2+}	HCL	250-1 Amber glass w septa	1

OBSERVATIONS / NOTES:

Begin purge @ 1105, Dry-out @ 1125, wait to recover, resume purge/pump @ 1215, collect sample @ 1220
* OR-over the Range, HACH turbidimeter

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

Sample ID No.: HOFF-MW-A
Sample Location: MW-A
Sampled By: MEB DLC
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

Date: 1-21-2020	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1035	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Low Flow	Clear	6.45	0.617	12.35	160	0.00	-49	—

PURGE DATA:

Date: 1/21/2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Low Flow								
Monitor Reading (ppm): NA								
Well Casing Diameter & Material								
Type: PVC 2.0		SEE LOW FLOW SHEET						
Total Well Depth (TD): 34.50								
Static Water Level (WL): 4.88								
One Casing Volume(gal/L):								
Start Purge (hrs): 0935								
End Purge (hrs): 1035								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	2
1,4 Dioxane	none	40 ml vial	2
SVOCs	none	1 L amber glass	2
Pesticides	none	1 L amber glass	2
Metals_diss	HN03	250 ml plastic	1
Ethane/Ethene/Methane	none	40 ml vial	2
Sulfate	none	500 ml plastic	1
Fatty Acids		40 ml vial	2

1/21/2020

OBSERVATIONS / NOTES:

No well lock
Horiba U-52 19474

2166-002

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

LOW-FLOW DATA SHEET

Project Name: HOFF VC

Project No.: 1035 5436008

Well I.D.: MW-17

Date: 1/21/2020

Well Depth (from T.O.C.) = 34.50 ft

Well Diameter (d) = 2in

Static Water Level (WL) = 4.88 ft
(from T.O.C.)

Tt Sampler(s): Neb Dell
Jason Ryan

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 34.50 - 4.88
T = 29.62 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
0935	8.26	5.67	0.661	71000	8.19	-7	200	5.73	brown	
0940	10.21	6.28	0.644	71000	2.65	-29	200	5.93		
0945	11.42	6.44	0.633	71000	1.42	-48	200	5.95		
0950	12.27	6.48	0.628	71000	0.96	-63	200	5.95		
0955	12.38	6.50	0.629	71000	0.59	-75	200	5.90		
1000	12.57	6.50	0.628	71000	0.42	-76	200	5.88		
1005	11.96	6.50	0.628	592	0.27	-71	200	5.82	cloudy	
1010	12.25	6.50	0.628	414	0.23	-69	200	5.72		
1015	12.18	6.48	0.626	250	0.11	-60	200	5.62		
1020	11.84	6.47	0.622	187	0.04	-54	200	5.55		
1025	12.00	6.47	0.620	165	0.00	-51	200	5.50		
1030	12.32	6.45	0.619	152	0.00	-50	200	5.45		
1035	12.35	6.45	0.617	160	0.00	-49	200	5.42		
										1/21/2020

TETRA TECH, INC.

Total Volume Removed: 4 Gallons

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-D
Sample Location: MW-D
Sampled By: N. Dodd
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1/21/2020 Time: 1210	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Method: Low Flow	Clear	7.00	0.760	12.40	208	1.95	73	—

PURGE DATA:

Date: 1/21/2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Low Flow								
Monitor Reading (ppm): NA								
Well Casing Diameter & Material Type: 2.7 PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 35.20								
Static Water Level (WL): 2.71								
One Casing Volume(gal/L): 5.36								
Start Purge (hrs): 1110								
End Purge (hrs): 1210								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 56								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	2
1,4 Dioxane	none	40 ml vial	2
SVOCs	none	1 L amber glass	2
Pesticides	none	1 L amber glass	2
Metals_diss	HN03	250 ml plastic	1
Ethane/Ethene/Methane	none	40 ml vial	2
Sulfate	none	500 ml plastic	1
Fatty Acids		40 ml vial	2

OBSERVATIONS / NOTES: 1/24/2020

No well lock

Horiba U-52 19474

2166-003

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S543600 8

Well I.D.: MW-D

Date: 1/21/2020

Well Depth (from T.O.C.) = 35.20 ft

Well Diameter (d) = 2.5 ft

Static Water Level (WL) = 2.71 ft
(from T.O.C.)

Tt Sampler(s): Neb Dedic
Jason Rojas

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 35.20 - 2.71
T = 32.49 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
1110	11.30	6.98	0.767	890	9.04	102	250	3.86	Brown	cloudy
1115	10.72	6.99	0.779	71000	4.52	98	250	3.84		
1120	10.68	6.99	0.781	734	2.97	74	250	4.00		
1125	11.69	6.98	0.773	760	2.58	73	250	4.25		
1130	11.76	6.98	0.763	730	2.36	73	250	4.27		
1135	11.67	6.98	0.764	740	2.15	73	250	4.27	↓	
1140	11.69	6.98	0.760	634	2.00	72	250	4.27	clearing	
1145	11.90	6.98	0.761	572	1.94	71	250	4.25		
1150	12.61	6.99	0.760	498	1.93	73	250	4.25		
1155	12.62	7.00	0.760	335	1.95	72	250	4.40		
1200	12.68	7.00	0.759	241	1.96	70	250	4.45		
1205	12.72	7.00	0.760	219	1.96	73	250	4.45	↓	
1210	12.40	7.00	0.760	208	1.95	73	250	4.40	clear	↓
										1/21/2020

TETRA TECH, INC.

Total Volume Removed: 56

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-E
Sample Location: MW-E
Sampled By: M. Dell.e
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 1/21/2020	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1430								
Method: Low Flow	Clear	7.12	0.995	12.09	190	3.40	73	—

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 01/21/2020								
Method: Low Flow								
Monitor Reading (ppm): NT								
Well Casing Diameter & Material Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 38.00								
Static Water Level (WL): 3.61								
One Casing Volume(gal/L): 5.66								
Start Purge (hrs): 1330								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	2
1,4 Dioxane	none	40 ml vial	2
SVOCs	none	1 L amber glass	2
Pesticides	none	1 L amber glass	2
Metals_diss	HN03	250 ml plastic	1
Ethane/Ethene/Methane	none	40 ml vial	2
Sulfate	none	500 ml plastic	1
Fatty Acids		40 ml vial	2

1/21/2020

OBSERVATIONS / NOTES:

No well locic

Horiba U-52 # 19474

2166-004

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 1035 5436008

Well I.D.: MW-E

Date: 01/21/2020

Well Depth (from T.O.C.) = 38.00 ft

Well Diameter (d) = 2.0 in

Static Water Level (WL) = 3.61 ft
(from T.O.C.)

Tt Sampler(s): Neb Dec. C
Jason Rojo

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 38 - 3.61
T = 34.39 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
1330	11.47	7.21	0.996	997	6.31	146	200	3.90	cloudy,	Brown,
1335	12.74	7.23	0.941	859	5.41	120		4.62		
1340	12.20	7.22	0.919	655	4.19	60		4.55		
1345	11.59	7.20	0.914	514	4.07	52		~~4.55~~ 4.80		4.80'
1350	10.32	7.16	0.968	474	3.51	52		4.95		4.95'
1355	12.06	7.13	1.03	>1000	3.48	57		5.20	↓	
1400	12.51	7.11	0.998	578	3.19	89		5.52	clear-	
1405	12.08	7.13	0.998	445	3.11	82		6.02		
1410	11.92	7.13	0.993	411	3.86	78		67.32		
1415	11.90	7.14	0.992	250	3.45	75		7.72		
1420	11.82	7.14	0.996	209	3.40	73		8.05		
1425	11.92	7.13	0.996	192	3.42	73		8.12	↓	
1430	12.09	7.12	0.995	190	3.40	73	↓	8.29	clear	
										1/21/2020

TETRA TECH, INC.

Total Volume Removed: 46

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

Sample ID No.: HOFF MW-13
Sample Location: MW-13
Sampled By: M. DeLuc
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

Date: 1/22/2020	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 0915	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Low Flow	Clear	6.05	0.969	10.24	15.5	0.00	-126	—

PURGE DATA:

Date: 1/22/2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Low Flow								
Monitor Reading (ppm): NA								
Well Casing Diameter & Material Type: 4" PVC								
Total Well Depth (TD): 25.32	SEE LOW FLOW SHEET							
Static Water Level (WL): 4.25								
One Casing Volume(gal/L): 1.46								
Start Purge (hrs): 0835								
End Purge (hrs): 0915								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): 4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	2
1,4 Dioxane	none	40 ml vial	2
SVOCs	none	1 L amber glass	2
Pesticides	none	1 L amber glass	2
Metals_diss	HN03	250 ml plastic	1
Ethane/Ethene/Methane	none	40 ml vial	2
Sulfate	none	500 ml plastic	1
Fatty Acids		40 ml vial	2

OBSERVATIONS / NOTES:

Need to replace surface plate/cover of flush mount 12in x 14in x 1in thick (wood/metal)

2166-005

Circle if Applicable:

MS/MSD

Duplicate ID No.: 2166-006 / 1200
Hoff Dup 012220 Time

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 1035 5436008

Well I.D.: MW-13

Date: 1/22/2020

Well Depth (from T.O.C.) = 25.72 ft

Well Diameter (d) = 4.0 ft

Static Water Level (WL) = 4.25 ft
(from T.O.C.)

Tt Sampler(s): Neb Dietz
Jason Ryan

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 25.72 - 4.25
T = 21.47 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
0835	10.28	6.16	0.939	21.2	4.51	-70	250	4.26	Clear	
0840	12.31	6.11	0.976	35.1	3.73	-93		4.55	Clear	
0845	11.88	6.11	0.965	32.6	3.55	-100		5.00	Clear	
0850	11.04	6.10	0.953	30.8	0.48	-108		5.15	Clear	
0855	12.15	6.07	0.954	30.0	0.20	-116		5.25	Clear	
0900	11.41	6.06	0.957	15.4	0.04	-121		5.36		
0905	11.02	6.06	0.951	15.6	0.00	-122		5.43		
0910	10.17	6.05	0.969	15.8	0.00	-124		5.55		
0915	10.24	6.05	0.969	15.5	0.00	-126		5.62		

1/22/2020

TETRA TECH, INC.

Total Volume Removed: 4

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-C
Sample Location: MW-C
Sampled By: M. Okie
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 1/22/2020	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1115								
Method: Low Flow	Clear	6.38	0.538	10.42	120	2.20	125	-

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 1/22/2020								
Method: Low Flow								
Monitor Reading (ppm): NA								
Well Casing Diameter & Material								
Type: 2.0		SEE LOW FLOW SHEET						
Total Well Depth (TD): 34.5								
Static Water Level (WL): 4.20								
One Casing Volume(gal/L): 5.6								
Start Purge (hrs): 1015								
End Purge (hrs): 1115								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	2
1,4 Dioxane	none	40 ml vial	2
SVOCs	none	1 L amber glass	2
Pesticides	none	1 L amber glass	2
Metals_diss	HN03	250 ml plastic	1
Ethane/Ethene/Methane	none	40 ml vial	2
Sulfate	none	500 ml plastic	1
Fatty Acids		40 ml vial	2

OBSERVATIONS / NOTES:

1/22/20

2166-007

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC Site

Project No.: 10355436008

Well I.D.: MW-C

Date: 1-22-2020

Well Depth (from T.O.C.) = 34.50 ft

Well Diameter (d) = 2 in ~~ft~~

Static Water Level (WL) = 4.20 ft
(from T.O.C.)

Tt Sampler(s): J. Rajan & N. Dedic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 34.5 - 4.20
T = 30.3 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
1015	9.52	6.76	0.857	25.2	8.80	-36	200	4.30	Clear	
1020	7.32	7.06	0.885	162	4.90	41		4.75	Cloudy	
1025	6.77	7.07	0.933	662	3.76	56		4.83	Cloudy	Brown tint
1030	8.32	7.06	0.957	775	3.43	48		5.32		
1035	10.25	7.04	0.939	556	3.28	44		5.88		
1040	10.73	7.05	0.952	405	3.41	46		6.05		
1045	9.73	7.01	0.929	321	3.05	35		5.85		
1050	9.41	6.97	0.930	255	3.20	36		5.92	clearing	
1055	10.35	6.97	0.915	241	2.88	39		5.90		
1100	9.88	6.95	0.909	199	2.78	43		5.90		
1105	10.96	6.98	0.860	124	2.85	43 130		5.95		
1110	10.32	6.40	0.844	121	2.24	127		6.07		
1115	10.42	6.38	0.838	120	2.20	125		6.15	Clear	

TETRA TECH, INC.

Total Volume Removed: 56

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-13
Sample Location: MW-13
Sampled By: Neb Odezi
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 1/22/2020	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1325								
Method: Low Flow	Clear	6.13	0.904	15.85	431	0.00	20	ODOR

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 1/22/2020								
Method: Low Flow								
Monitor Reading (ppm): NA								
Well Casing Diameter & Material								
Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 37								
Static Water Level (WL): 2.45								
One Casing Volume(gal/L): 4.36								
Start Purge (hrs): 1225								
End Purge (hrs): 1325								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 8								

4.82 –

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	2
1,4 Dioxane	none	40 ml vial	2
SVOCs	none	1 L amber glass	2
Pesticides	none	1 L amber glass	2
Metals_diss	HN03	250 ml plastic	1
Ethane/Ethene/Methane	none	40 ml vial	2
Sulfate	none	500 ml plastic	1
Fatty Acids		40 ml vial	2

1/22/2020

OBSERVATIONS / NOTES:

2166-008

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 1035 573600X

Well I.D.: MW-B

Date: 01/22/2020

Well Depth (from T.O.C.) = 34.00 ft

Well Diameter (d) = 2 in

Static Water Level (WL) = 7.45 ft
(from T.O.C.)

Tt Sampler(s): Neb Dod. E
Jason Rajan

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 34.0 - 7.45
T = 26.55 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
1225	12.15	6.09	0.954	71000	5.99	31	300	5.75	Brown	Cloudy
1230	13.62	6.09	0.939	71000	3.23	25		5.89		
1235	14.27	6.08	0.936	71000	0.86	14		6.02		
1240	14.76	6.07	0.944	71000	0.22	14		5.88		
1245	15.10	6.08	0.941	71000	0.06	17		5.90		
1250	15.20	6.09	0.936	71000	0.00	18		5.85		
1255	15.18	6.10	0.932	71000	0.00	19		5.82		
1300	15.60	6.11	0.929	71000	0.00	18		5.88		
1305	15.52	6.11	0.927	71000	0.00	18		5.90		
1310	16.10	6.10	0.925	71000	0.00	20		7.18		
1315	16.00	6.11	0.918	435	0.00	22		7.22	Cloudy	
1320	15.99	6.12	0.913	344	0.00	21		7.35		
1325	15.85	6.13	0.909	231	0.00	20		7.30		

1/22/2020

TETRA TECH, INC.

Total Volume Removed: _____

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-10
Sample Location: MW-10
Sampled By: N. Dietz
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1/23/2020	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 0930	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Low Flow	Clear	6.92	0.610	10.42	15.8	1.05	77	ODOR

PURGE DATA:

Date: 1/23/2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Low Flow								
Monitor Reading (ppm): NA								
Well Casing Diameter & Material Type: 4.1 PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 7.40								
Static Water Level (WL): 0.80								
One Casing Volume(gal/L): 4.3								
Start Purge (hrs): 0835								
End Purge (hrs): 0930								
Total Purge Time (min): 55								
Total Vol. Purged (gal/L): 5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	2
1,4 Dioxane	none	40 ml vial	2
SVOCs	none	1 L amber glass	2
Pesticides	none	1 L amber glass	2
Metals_diss	HN03	250 ml plastic	1
Ethane/Ethene/Methane	none	40 ml vial	2
Sulfate	none	500 ml plastic	1
Fatty Acids		40 ml vial	2

1/23/2020

OBSERVATIONS / NOTES:

2166-010

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103554360008

Well I.D.: MW-10

Date: 1/23/2020

Well Depth (from T.O.C.) = 7.40 ft

Well Diameter (d) = 4 in ft

Static Water Level (WL) = 0.80 ft
(from T.O.C.)

Tt Sampler(s): Neb Dedic
Jason Reiss

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 7.40 - 0.80
T = 6.60 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
0835	8.74	8.13	0.599	385	6.14	77	250	0.90	cloudy	light Brown
0840	10.18	7.41	0.596	108	3.26	59	250	0.95	clear	
0845	9.74	7.30	0.598	55.3	3.00	67	250	1.20		
0850	9.11	7.24	0.598	26.0	2.81	78	250	1.84		
0855	9.46	7.21	0.600	22.6	2.48	80	250	2.00		
0900	8.38	7.19	0.602	20.5	2.29	81	250	2.02		
0905	8.33	7.17	0.602	19.7	2.19	84	250	2.05		
0910	9.62	7.07	0.601	19.9	1.99	85	250	2.08		
0915	9.30	7.05	0.603	18.6	1.94	87	250	2.13		
0920	10.30	6.93	0.609	16.6	1.08	77	250	2.20		
0925	10.54	6.93	0.609	16.0	1.06	77	250	2.42		
0930	10.42	6.92	0.610	15.8	1.09	77	250	2.54		
										1/23/2020

TETRA TECH, INC.

Total Volume Removed: 5

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-6
Sample Location: MW-6
Sampled By: Neb Dedic
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 01/23/2020	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1040	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Low Flow	Clear	6.65	0.580	7.22	13.8	0.00	-128	ODOR

PURGE DATA:

Date: 1/23/2020	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Low Flow								
Monitor Reading (ppm): NA								
Well Casing Diameter & Material								
Type: 4 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 12.3								
Static Water Level (WL): 0.40								
One Casing Volume(gal/L): 7.76								
Start Purge (hrs): 0950								
End Purge (hrs): 1040								
Total Purge Time (min): 50								
Total Vol. Purged (gal/L): 76								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	2
1,4 Dioxane	none	40 ml vial	2
SVOCs	none	1 L amber glass	2
Pesticides	none	1 L amber glass	2
Metals_diss	HN03	250 ml plastic	1
Ethane/Ethene/Methane	none	40 ml vial	2
Sulfate	none	500 ml plastic	1
Fatty Acids		40 ml vial	2

1/23/20

OBSERVATIONS / NOTES:

2166-011

52' from MW-10 in a straight line.
No well lid covered by a rock painted orange.

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff UC

Project No.: 1035 5436008

Well I.D.: MW-6

Date: 01/23/2020

Well Depth (from T.O.C.) = 12.30 ft

Well Diameter (d) = 4 in ft

Static Water Level (WL) = 0.40 ft
(from T.O.C.)

Tt Sampler(s): Neb Dedic
Jason Ryan

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 12.30 - 0.40
T = 11.90 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
0950	9.55	7.03	0.548	87.6	8.03	-19	~~250~~ 400	0.45	clear	
0955	9.92	6.81	0.547	37.5	1.73	-40	400	0.45		stagnant odor
1000	8.88	6.70	0.552	31.6	0.00	-64		0.45		
1005	7.85	6.71	0.556	28.4	0.00	-74		0.45		
1010	7.80	6.68	0.560	24.3	0.00	-88		0.46		
1015	7.82	6.68	0.560	24.0	0.00	-96		0.45		
1020	7.53	6.66	0.570	18.4	0.00	-105		0.46		
1025	7.22	6.66	0.577	16.1	0.00	-115		0.45		
1030	7.30	6.65	0.578	14.9	0.00	-120		0.45		
1035	7.24	6.65	0.579	13.8	0.00	-125		0.45		
1040	7.22	6.65	0.580	13.8	0.00	-128	↓	0.45	↓	odor

1/23/20

TETRA TECH, INC.

Total Volume Removed: 7 6

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-8
Sample Location: MW-8
Sampled By: Neb Ded. C
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 1/23/2020	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1245								
Method: Low Flow	Brown	6.98	5.44	12.55	336	0.00	-253	0.00K

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 01/23/2020								
Method: Low Flow								
Monitor Reading (ppm): NA								
Well Casing Diameter & Material								
Type: 4in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 30.60								
Static Water Level (WL): 11.20								
One Casing Volume(gal/L): 136								
Start Purge (hrs): 1145								
End Purge (hrs): 1245								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 56								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	2
1,4 Dioxane	none	40 ml vial	2
SVOCs	none	1 L amber glass	2
Pesticides	none	1 L amber glass	2
Metals_diss	HN03	250 ml plastic	1
Ethane/Ethene/Methane	none	40 ml vial	2
Sulfate	none	500 ml plastic	1
Fatty Acids		40 ml vial	2

OBSERVATIONS / NOTES:

2166-012

Rinsate Blank collected after pump deconned. Used organic free Reagent water from PA BOL Exp 10/23/2020

2166-013 Hoff RB 012320

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff UC

Project No.: 103543600 8

Well I.D.: MW-8

Date: 01/23/2020

Well Depth (from T.O.C.) = 30.60 ft

Well Diameter (d) = 4 in ~~ft~~

Static Water Level (WL) = 11.20 ft
(from T.O.C.)

Tt Sampler(s): Neb Dodic
Jason Ryan

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 30.60 - 11.20
T = 19.4 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
1145	9.38	6.91	5.46	296	5.55	-132	250	11.42	Brown	
1150	10.47	6.86	5.68	475	1.57	-165		11.97		
1155	12.02	6.89	5.57	411	0.52	-187		12.22		
1200	12.47	6.89	5.51	302	0.00	-194		12.50		
1205	13.42	6.90	5.49	277	0.00	-218		13.35	↓	
1210	12.82	6.92	5.51	199	0.00	-236		14.08	Clear	
1215	12.63	6.94	5.48	195	0.00	-250		14.29	↓	
1220	13.70	6.94	5.48	201	0.00	-250		14.60	↓	
1225	13.26	6.95	5.48	206	0.00	-262		14.73	↓	
1230	13.00	6.97	5.47	500	0.00	-266		15.00	Brown	Cloud.
1235	12.61	6.99	5.46	378	0.00	-260		15.20	↓	
1240	12.56	6.99	5.44	376	0.00	-254		16.10	↓	
1245	12.55	6.98	5.44	336	0.00	-253	↓	16.34	↓	

TETRA TECH, INC.

Total Volume Removed: _____

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Hoff VC Site
Project No.: 103S5436006

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-MW-F-A
Sample Location: MW-FA
Sampled By: CW/SMS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date:	1-20-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time:	1030								
Method:	Peristaltic	Clear	6.87	0.820	14.31	11.82	0.00	250	

PURGE DATA:

	Date: 1-20-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:	Peristaltic								
Monitor Reading (ppm):	—								
Well Casing Diameter & Material Type:	4 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD):	20.30								
Static Water Level (WL):	6.20								
One Casing Volume(gal/L):									
Start Purge (hrs):	1000								
End Purge (hrs):	1030								
Total Purge Time (min):	30								
Total Vol. Purged (gal/L):	~3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~	40 ml vial	3
SVOCs + Pest	none	250 mL Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 mL Plastic	1
Metals_total	HN03	250 mL Plastic	1
Sulfate	none	250 ~~500~~ mL Plastic	1
Fe 2	Hcl	250 - 1 Amber glass	1

OBSERVATIONS / NOTES:

Circle if Applicable:
MS/MSD | Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103 55436008

Well I.D.: MW-F-A

Date: 1-20-2021

Well Depth (from T.O.C.) = 20.30 ft

Well Diameter (d) = 1" ft

Static Water Level (WL) = 6.20 ft
(from T.O.C.)

Tt Sampler(s): L Hagen
M Shrift

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 20.30 - 6.20
T = 14.1 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	ORP (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1000	12.91	6.79	0.842	~~3.00~~ 55.8	0.00	391	300	6.20	clear	
1005	13.22	6.79	0.842	145.0	0.00	375	300	—	cloudy	
1010	13.33	6.80	0.842	327.0	0.00	359	300	—	cloudy	Lamotte 2020
1015	14.15	6.91	0.825	228.0	0.00	278	300	—	cloudy	27.3
1020	14.23	6.90	0.824	109.0	0.00	260	300	—	cloudy	14.7
1025	14.28	6.90	0.824	91.7	0.00	256	300	—	cloudy	17.0
1030	14.31	6.87	0.820	56.5	0.00	260	300	—	clear	11.82 Sample
~~1035~~								8.40		end of Sampling 1050
1040										

HOFF - MW-F-A

TETRA TECH, INC.

Total Volume Removed: ≈3.0

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-MW-F B
Sample Location: MW-F
Sampled By: RW / MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 1.20.21	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 09:35								
Method: Peristaltic	Clear	6.81	1.99	13.65	54.2	0.00	280	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 1.20.2021								
Method: Peristaltic								
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 4 inch PVC								
Total Well Depth (TD): 38.40	SEE LOW FLOW SHEET							
Static Water Level (WL): 5.02								
One Casing Volume(gal/L): —								
Start Purge (hrs): 0905								
End Purge (hrs): 0935								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): 3.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~none~~ HCl	40 ml vial	3
SVOCs + Pest	none	250 mL Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 mL Plastic	1
Sulfate	none	250 ~~500~~ ~~250~~ ML Plastic	1
Fe 2	HCl	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

Circle If Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103 5543600 8

Well I.D.: ~~MW-1~~ MW-F-B

Date: 1.20.21

Well Depth (from T.O.C.) = 38.40 ft

Well Diameter (d) = 1" ft

Static Water Level (WL) = 5.02 ft
(from T.O.C.)

Tt Sampler(s): R. WAGNER
M. Shuft

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 38.40 - 5.02
T = 33.38 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Hach Turbidity (NTUs)	D.O. (mg/l)	ORP Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0905	11.90	5.98	1.68	0.0/62	1.29	358	300	5.02	clear/cl	WL meter won't fit in casing
0910	13.05	6.60	1.55	725	0.00	349	300	?	cloudy	with tubing
0915	13.29	6.77	1.64	208	0.00	356	300	?	clear	Low flow 2020 @ 24.7
0920	13.37	6.80	1.73	118	0.00	362	300	?	Clear	" " 21.0
0925	13.43	6.82	1.89	73.3	0.00	371	300	?	clear	" " 14.3
0930	13.49	6.82	1.90	86.6	0.06	377	300	?	clear	" " 11.3
0935	13.65	6.81	1.99	54.2	0.00	380	300	?	Clear	" " 11.08
								5.70	"	End of Sampling @ 0950

Hoff- MW-F B @ 0935

TETRA TECH, INC.

Total Volume Removed: 3.5≈

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-MW-1 A
Sample Location: MW-1
Sampled By: RH/MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Date: 1.20.2021								
Time: 1325								
Method:	clear	7.60	3.85	13.98	29.8	3.30	390	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 1.20.2021								
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 1" PVC								
Total Well Depth (TD): 17.40		SEE LOW FLOW SHEET						
Static Water Level (WL): 4.55								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1255								
End Purge (hrs): 1325								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): ≈ 2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~none~~ HCl	40 ml vial	3
SVOCs & Pest	none	250 mL Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 ML Plastic	1
Sulfate	none	25° ~~500~~ 250 ML Plastic	1
Fe 2	HCL	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

WL meter would not fit into PVC casing w/ tubing - HAD to take Reading Before and After Sampling. Ran into bucket Drive Rod till cleared up (5 mins)
USED Lamotte 2020 for turbid stabilization and Readings

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	[signature]

LOW-FLOW DATA SHEET

Project Name: HOFF VC

Project No.: 103 55436002 306005

Well I.D.: IW-1_A

Date: 1-20-2021

Well Depth (from T.O.C.) = 17.40 ft

Well Diameter (d) = 1" ft

Static Water Level (WL) = 4.55 ft
(from T.O.C.)

Tt Sampler(s): R. WAGNER
M. SHAFT

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 17.40 - 4.55
T = 12.85 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1255	Dew in	to Bucket	till clear				200	4.58	Dark Red	we want go Back to bring
1300	12.91	7.93	2.34	392	5.49	450	200	—	clear	54.1 Lamotte 2020
1305	13.45	7.77	2.58	122	3.57	428	200	—	clear	44.1 NTU "
1310	13.63	7.71	3.01	146	3.46	410	200	—	clear	38.3 NTU "
1315	13.46	7.67	3.34	150	3.19	401	200	—	clear	33.6 NTU "
1320	13.64	7.63	3.66	113	3.37	392	200	—	clear	30.9 NTU
1325	13.98	7.60	3.85	82.0	3.30	390	200	—	clear	29.8 NTU
										END of SAMPLING

TETRA TECH, INC.

Total Volume Removed: ≈ 2.5

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-MW-1B
Sample Location: MW-1
Sampled By: RW/MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1.20.2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1140	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Peristaltic	LT. PINK	6.87	9.00	13.60	36.2	0.00	380	

PURGE DATA:

Date: 1.20.2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic Pump								
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 4 inch PVC								
Total Well Depth (TD): 30.50	SEE LOW FLOW SHEET							
Static Water Level (WL): 4.15								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1105								
End Purge (hrs): 1140								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): 3.0 G								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~	40 ml vial	3
SVOCs # Pest	none	250 mL Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 mL Plastic	1
Sulfate	none	250 ML Plastic	1
Fe 2	HCl	250 - 1 Amber glass	1

OBSERVATIONS / NOTES:

Started purged very turbid Dark Red, Also used Lamotte 2020 to collect turbidity Readings. Flow thru cell still turbid, used Lamotte reading for Sample / more accurate

* Broken Casing Top / Lid sits on top of both PVC casings (PC)

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103554360.06

Well I.D.: MW-1B

Date: 1.20.2021

Well Depth (from T.O.C.) = 30.50 ft

Well Diameter (d) = 1" ft

Static Water Level (WL) = 4.15 ft
(from T.O.C.)

Tt Sampler(s): R. WAGNER
M SHAFT

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 30.50 - 4.15
T = 26.35 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	ORP Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1105	11.96	—	—	OR	—	—	200	4.15	DK RED	DTW meter went off of tubing
1110	12.03	—	—	OR	—	—	200	—	DK RED	Landfill 2020
1115	12.14	6.43	7.99	OR	1.70	329	200	—	LT RED	"235 AM
1120	13.39	6.82	8.10	295	0.00	358	200	—	Tint RED	68.8 NTU
1125	13.67	6.85	8.19	261	0.00	360	200	—	PINK	58.7 NTU
1130	13.75	6.87	8.68	351	0.00	370	200	—	LT. PINK	59.1 NTU
1135	13.57	6.88	8.85	175	0.00	377	200	—	LT PINK	45.3 NTU
1140	13.60	6.87	9.00	140	0.00	380	200	—	LT PINK	36.2 NTU SAMPLE
								6.35		12:00 end of sample
										Broken CASING TOP

Hoff - MW-1B @ 1140

TETRA TECH, INC.

Total Volume Removed: ≈ 30

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-IW-2 B
Sample Location: IW-2
Sampled By: RW/MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-20-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1445	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method:	clear	7.82	3.46	13.89	5.70	0.00	-89	

PURGE DATA:

Date: 1-20-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic Pump								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 4" PVC								
Total Well Depth (TD): 31.50	SEE LOW FLOW SHEET							
Static Water Level (WL): 4.83								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1410								
End Purge (hrs): 1455								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): ~3.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~	40 ml vial	3
SVOCs & Pest	none	250 mL Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 ML Plastic	1
Sulfate	none	250 ML Plastic	1
Fe2	HCl	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

Purge started at LT RED/Sampled water was clear
Took WL reading PRE & Post sample- tube would not fit in end of tubing

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103554360 08

Well I.D.: IW-2 B

Date: 1.20.2021

Well Depth (from T.O.C.) = 31.50 ft

Well Diameter (d) = 1" ft

Static Water Level (WL) = 4.83 ft
(from T.O.C.)

Tt Sampler(s): R. WAGNER
M-SHRUFT

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 31.50 - 4.83
T = 26.67 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1410	13.77	7.71	4.69	158.	—	435	200	4.83	Lt Brn	Lamotte 2020 NTU
1415	13.74	7.65	4.67	571.	0.00		200		Lt. Red	62.0
1420	13.75	7.70	4.43	556.	0.00	406	200		Lt. Red	78.2
1425	———	—	———	———	—	—	200		Pink	95.9
1430	13.68	7.83	3.77	62.2	0.00	395	200		Lt Pink	65.9
1435	13.72	7.82	3.74	17.8	0.00	394	200		Lt Pink	11.0
1440	13.90	7.83	3.55	14.8	0.00	391	200		Clear	8.29
1445	13.89	7.82	3.46	9.5	0.00	389	200		Clear	5.70
								5.70		end of Sampling @ 1455

TETRA TECH, INC.

Total Volume Removed: 3.0

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-6
Sample Location: MW-6
Sampled By: TW/MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1.21.2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 0970	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Monsoon Pump	Clr	6.42	0.777	2.86	22.4	0.00	-225	

PURGE DATA:

Date: 1.21.2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Monsoon Pump								
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 4 PVC								
Total Well Depth (TD): 11.92		SEE LOW FLOW SHEET						
Static Water Level (WL): 0.84								
One Casing Volume(gal/L): —								
Start Purge (hrs): 0900								
End Purge (hrs): 0930								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): ~3.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~	40 ml vial	3
SVOCs + Pest	none	250 mL Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 ML Plastic	1
Sulfate	none	250 ~~500~~ ~~250~~ ML Plastic	1
Fe 2	HCl	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

USED LaMotte 2020 for Accurate Turbid Readings & Stabilization

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103 S5436008

Well I.D.: MW-6

Date: 1.21.2021

Well Depth (from T.O.C.) = 11.92 ft

Well Diameter (d) = ~~4~~ 4" ft

Static Water Level (WL) = 0.4 ft
(from T.O.C.)

Tt Sampler(s): R. Wagner
M Shrift

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 11.92 - 0.4
T = 11.52 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	ORP Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
~~0900~~	7.31	5.03	0.418	413.	0.00	49	250	0.5	clear	oil sheen on top of water in vial
0905	7.56	5.59	0.392	407.	0.00	-16	250	0.8	clear	
0910	7.68	6.02	0.385	359.	0.00	-76	250	0.6	clear	Lamotte 2020 22.5 NTU
0915	7.83	6.22	0.382	240	0.00	-141	250	0.6	clear	" " 23.5 NTU
0920	7.71	6.28	0.382	221	0.00	-169	250	0.6	clear	" " 21.7 NTU
0925	7.86	6.34	0.378	212	0.00	-194	250	0.6	clear	" " 22.9 NTU
0930	7.86	6.42	0.377	197.0	0.00	-225	250	0.6	clear	" " 22.4 NTU

Hoff MW-6 @ 0930

TETRA TECH, INC.

Total Volume Removed: ~3.0

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff-MW-19
Sample Location: MW-10
Sampled By: TAN MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 1.21.2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1035								
Method: Monsoon Pump	Clear	6.36	0.483	11.00	242	0.00	-14	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 1.21.2021								
Method: Monsoon Pump								
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 2" PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 7.48								
Static Water Level (WL): 1.50								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1010								
End Purge (hrs): 1035								
Total Purge Time (min): 25								
Total Vol. Purged (gal/L): ~ 3.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~ HCl	40 ml vial	3
SVOCs + Pest	none	250 mL Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 ML Plastic	1
Sulfate	none	250 ~~500~~ ~~250~~ ML Plastic	1
Fe 2	HCl	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

VAULT

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 301554306008

Well I.D.: MW-10

Date: 1.21.2021

Well Depth (from T.O.C.) = 7.48 ft

Well Diameter (d) = 4" ft

Static Water Level (WL) = 1.50 ft
(from T.O.C.)

Tt Sampler(s): R. Wagner
M. Shrift

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 7.48 - 1.50
T = 5.95 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Hanna 152 Turbidity (NTUs)	D.O. (mg/l)	ORP (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1000	10.38	6.76	0.446	7528	0.89	-24	200	2.26	clear	Sent in MORGOT / To BC for ENCLOSURE
1015	10.24	6.74	0.446	485	0.00	-26	200	2.70	clear	
1020	10.17	6.53	0.455	560	0.00	-12	300	2.75	clear	
1025	10.30	6.47	0.483	32.0	0.00	-14	300	2.80	clear	
1030	10.32	6.33	0.475	26.1	0.00	-14	250	2.80	clear	
1035	10.00	6.36	0.483	24.2	0.00	-14	250	2.80	clear	Sample
							300			

HOFF-MW-10 @ 1035

TETRA TECH, INC.

Total Volume Removed: ~ 3.5

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff - MW-E
Sample Location: MW-E
Sampled By: RW / MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Date: 1.21.2021								
Time: 1155								
Method:	Cloudy	6.53	0.630	13.86	39.3	0.00	38	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 1.21.2021								
Method: MONSOON								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2"		SEE LOW FLOW SHEET						
Total Well Depth (TD): 37.90								
Static Water Level (WL): 6.85								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1120								
End Purge (hrs): 1155								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): ≤4.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~none~~ HCl	40 ml vial	3
SVOCs & Pest	none	250 ML Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 ML Plastic	1
Sulfate	none	250 ~~500~~ ~~250~~ ML Plastic	1
Fe 2	HCl	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

Purged well color was Lt Grey to cloudy when sampled / USED LAMBK 2020 for Accurate turbid measurements. / Horiba flow cell cloudy

Circle if Applicable:

~~MS/MSD~~ | Duplicate ~~ID~~ No.:

Signature(s): [signature]

LOW-FLOW DATA SHEET

page __ of __

Project Name: Hoff VC

Project No.: 301 55436008

Well I.D.: MW-E

Date: 1. 21. 2021

Well Depth (from T.O.C.) = 37.90 ft

Well Diameter (d) = 2" ft

Static Water Level (WL) = 6.85 ft
(from T.O.C.)

Tt Sampler(s): R. Wagner

M. Shrift

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 37.90 - 6.85
T = 31.05 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	ORP Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1120	12.83	6.07	0.756	223	1.60		250	5.40	Lt Grey	
1125	13.24	6.35	0.749	OR	0.00		250	6.70	"	
1130	13.33	6.45	0.691	OR	0.00		250	7.15	"	
1135	13.52	6.50	0.668	728	0.00		250	7.40	"	
1140	13.18	6.57	0.651	521	0.00		250	8.70	Lt Grey sh	
1145	13.43	6.59	0.647	~~486~~ 252	0.00		200	8.50	Lt Grey sh	Lamotte 2020 68.9 NTU
1150	13.25	6.56	0.635	208	0.00		200	8.50	cloudy	" 41.1 NTU
1155	13.86	6.53	~~0.660~~ 0.630	126	0.00		200	8.50	cloudy	" 39.3 NTU
								8.50		

TETRA TECH, INC.

Total Volume Removed: ≈ 40

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-IW-2A
Sample Location: IW-2
Sampled By: RW / MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1.20.2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: ~~1500~~ 1500	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Peristaltic	LT. RED							

PURGE DATA:

Date: 1.20.2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 4" PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 15.60								
Static Water Level (WL): 4.60								
One Casing Volume(gal/L): –								
Start Purge (hrs): 1500								
End Purge (hrs): 1505 (DRY)								
Total Purge Time (min): ≈ 5								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~none~~ HCl	40 ml vial	3
SVOCs & Pest	none	250 mL Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	0
Metals_total	HN03	250 ML Plastic	1/2
Sulfate	none	250 ML Plastic	1
Fe2	HCl	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

Purged well Dry in Approx 4 mins - Came back on 1/21/2021 to sample well in 24hr period.
WL@ 4.77 No Readings obtained - insufficient water volume.
Filled bottles that were not dry

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	Ray Wagner

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: ~~103S5496666~~ 103543 6009

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-A - 011921
Sample Location: MW-A
Sampled By: RH / MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1.19.21 / Time: 10:40	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Method: Submersible	Clear	7.65	0.474	14.51	51.7	0.00	-35	

PURGE DATA:

Date: 01.19.2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Submers. 2" Masoon								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2" PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 34.40								
Static Water Level (WL): 5.45								
One Casing Volume(gal/L):								
Start Purge (hrs): 0950								
End Purge (hrs): 1040								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): 5.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~none~~ HCl	40 ml vial	3
SVOCs + Pest	none	250 mL Amber	3
~~Pesticides~~	~~none~~		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 ML Plastic	1
Sulfate	none	250 ~~500~~ ~~250~~ ML Plastic	1
Fe 2	HCl	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

Started very turbid (Gray)

Circle if Applicable: MS/MSD	Duplicate ID No.:	Signature(s):
—	—	

LOW-FLOW DATA SHEET

Project Name: Hoff VC Site

Project No.: 103534 6008.3060

Well I.D.: MW-A

Date: 1/19/21

Well Depth (from T.O.C.) = 34.40 ft

Well Diameter (d) = 2" ft

Static Water Level (WL) = 5.45 ft
(from T.O.C.)

Tt Sampler(s): R. Wagner
M. Shaft

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 34.40 - 5.45
T = 28.95 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs) Lamotte	D.O. (mg/l)	ORP (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0950	14.16	10.91	0.482	OR	1.14	-135	200	4.80	Grey	
1010	14.35	9.01	0.481	OR	0.00	-59	150	7.40	Grey	Lamotte 2020 - OR
1015	14.12	8.62	0.477	OR	0.00	-44	150	6.85	Greyish	" OR
1020	14.06	8.29	0.477	1190	0.00	-29	150	6.42	LT Grey	" 1190
1025	14.40	8.09	0.475	80	0.00	-22	150	6.55	LT Grey	
1030	14.46	8.00	0.474	43	0.00	-48	150	6.80	LT. Greyish	
1035	14.69	7.97	0.472	56.5	0.00	-40	150	6.90	Tkr	
1040	14.51	7.65	0.474	58.7	0.00	-35	150	7.01	clear	- Sample
	Sampled @ 10:40									

Hoff - MW-A - 011921

TETRA TECH, INC.

Total Volume Removed: ≈ 50

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: ~~10335436008~~ 10355436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-B-011921
Sample Location: MW-B ~~[illegible]~~
Sampled By: RW/MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Date: 1.19.21								
Time: 1210								
Method: Peristaltic	Slt. RED	7.70	6.73	13.44	33.1	0.00	328	—

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 01.19.2021								
Method: Peristaltic								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 2 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 33.90								
Static Water Level (WL): 4.49								
One Casing Volume(gal/L):								
Start Purge (hrs): 1135								
End Purge (hrs): 1210								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): ≈ 3.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~none~~ HCl	40 ml vial	3
SVOCs + Pest	none	250 ML Amber	3
~~Pesticides~~	~~none~~		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 ML Plastic	1
Sulfate	none	250 ~~500/250~~ ML Plastic	1
Fe 2	HCL	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

Circle if Applicable:
~~MS/MSD~~ ~~Duplicate ID No:~~

Signature(s): [signature]

LOW-FLOW DATA SHEET

Project Name: Hoff RC site

Project No.: 103554360008.3060

Well I.D.: MW-B

Date: 1.19.21

Well Depth (from T.O.C.) = 33.90 ft

Well Diameter (d) = 2" ft

Static Water Level (WL) = 4.49 ft
(from T.O.C.)

Tt Sampler(s): R. WAGNER
M. SHRIFE

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 33.90 - 4.49
T = 29.41 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	ORP ~~Eh~~ (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1135	12.89	7.21	6.71	312	4.11	258	250	5.10	clear	Pri. pump
1140	12.95	7.32	6.66	289	0.22	266	150	5.20	clear	SUB-RED
1145	12.99	7.47	6.68	119	0.00	279	150	5.25	clear	"
1150	12.99	7.62	6.69	64.7	0.00	305	150	5.35	clear	"
1155	13.04	7.64	6.69	53.1	0.00	310	150	5.38	clear	"
1200	13.24	7.68	6.71	42.8	0.00	321	150	5.40	clear	"
1205	13.29	7.69	6.72	32.2	0.00	325	150	5.45	clear	"
1210	13.44	7.70	6.73	33.1	0.00	328	150	5.50	clear	"
	Sampled @	12:10								

HOFF - MW-B - 11921

TETRA TECH, INC.

Total Volume Removed: ~ 3.0

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: ~~103S5436006~~ 103S5436004

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff-MW-C-011921
Sample Location: MW-C
Sampled By: RW/MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: ~~OFF~~ 01/19/2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 13:15								
Method: Peristaltic	Lt. Red/clear	9.20	25.5	12.73	51.3	0.00	443	—

PURGE DATA:

Date: 1.19.2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2" PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 34.55								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs): 1245								
End Purge (hrs): 1315								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): ~3.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~none~~ HCl	40 ml vial	3
SVOCs + Pest	none	250 mL Amber	3
~~Pesticides~~	~~none~~		
Metals_diss	HN03	250 mL Plastic	1
Metals_total	HN03	250 mL Plastic	1
Sulfate	none	250 ~~500~~ ~~250~~ mL Plastic	1
Fe 2	HCl	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

USED LAMOTTE 2020 for ACCURATE TURBIDITY READINGS

Circle if Applicable:

~~MS/MSD~~ | ~~Duplicate ID No.:~~

Signature(s): [signature]

LOW-FLOW DATA SHEET

Project Name: Hoff

Project No.: 103 5543600

Well I.D.: MW-C

Date: 1-19-21

Well Depth (from T.O.C.) = 34.55 ft

Well Diameter (d) = 2" ft

Static Water Level (WL) = 5.70 ft
(from T.O.C.)

Tt Sampler(s): R. Wagner
M. Shaft

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 34.55 - 5.70
T = 28.85 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm) mS/cm	Horiba Turbidity (NTUs)	D.O. (mg/l)	ORP Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1245	12.42	7.73	29.2	249	4.20	428	200	5.85	clear/tan	
1250	12.70	8.37	29.0	145	0.00	438	150	5.86	clear/tan	
1255	12.54	8.68	27.8	17	0.00	436	150	6.02	clear/tan	
1300	12.60	8.77	27.2	114	0.00	437	150	6.05	clear/tan	
1305	12.58	9.07	26.0	149	0.00	441	150	6.10	clear/tan	56.7 (Composite 2020)
1310	12.55	9.17	25.8	162	0.00	443	150	6.15	clear/tan	50.3 " "
1315	12.73	9.20	25.5	153	0.00	443	150	6.20	clear/tan	51.3 " "
Sample @ 1315										
1245 - SNOWING										

Hoff-MW-C-011921

TETRA TECH, INC.

Total Volume Removed: ≈ 30

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: ~~10385436008~~ 10355436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff-MW-13-011921
Sample Location: MW-13
Sampled By: RW/MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 1-19-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 14:50								
Method: SUB Monsoon	LT RED	8.20	1.80	13.89	1748.0	0.00	411	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 1-19-2021								
Method: SUB Monsoon								
Monitor Reading (ppm): —								
Well Casing Diameter & Material								
Type: 4 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 25.20								
Static Water Level (WL): 3.25								
One Casing Volume(gal/L):								
Start Purge (hrs): 1415								
End Purge (hrs): 1450								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): 4.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~none~~ HCl	40 ml vial	3
SVOCs & Pest	none	250 ML Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 ML Plastic	1
Sulfate	none	250 ~~500~~ ~~250~~ ML Plastic	1
Fe 2	HCL	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

WEll Located By Building with OIL Bucket next to well / No protective casing

Circle if Applicable:

~~MS/MSD~~ | ~~Duplicate ID No.:~~

Signature(s): [signature]

LOW-FLOW DATA SHEET

Project Name: Hoff

Project No.: 103554366008

Well I.D.: MW-13

Date: 1.19.21

Well Depth (from T.O.C.) = ~~25.0~~ 25.20 ft

Well Diameter (d) = 4" ft

Static Water Level (WL) = 3.25 ft
(from T.O.C.)

Tt Sampler(s): R. Wagner
M. Shrift

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 25.20 - 3.25
T = 21.95 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct ~~(mmhos/cm)~~ mS/cm	Horiba Turbidity (NTUs)	D.O. (mg/l)	ORP Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments Lamotte 2020
1415	—	—	—	OR	—	—	—	3.80	RED	"
1420	14.92	9.79	1.82	OR	1.54	429	200	4.25	RED	OR
1425	14.00	9.16	1.83	OR	0.00	425	200	4.40	RED	OR
1430	13.78	9.07	1.84	OR	0.00	424	250	4.32	RED	OR
1435	13.22	8.89	1.83	OR	0.00	423	250	4.28	REDDISH	2702 AU
1440	13.23	8.60	1.82	OR	0.00	419	250	4.25	REDDISH	1984 AU
1445	13.78	8.25	1.80	OR	0.00	414	250	4.28	REDDISH	1773 AU
1450	13.89	8.20	1.80	OR	0.00	411	250	4.30	REDDISH	1748 AU
Sampled @ 1450										

Hoff - MW13 - 011921

TETRA TECH, INC.

Total Volume Removed: ~~6.0~~ 4.5 GAL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-MW-F-A
Sample Location: MW-F A
Sampled By: CJ/SMS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-20-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1030	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Peristaltic	clear	6.87	0.820	14.31	11.82	0.00	250	

PURGE DATA:

Date: 1-20-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 4 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 20.30								
Static Water Level (WL): 6.20								
One Casing Volume(gal/L):								
Start Purge (hrs): 1000								
End Purge (hrs): 1030								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L)≈ 3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~	40 ml vial	3
SVOCs + Pest	none	250 mL Amber	3
~~Pesticides~~	none		
Metals_diss	HNO3	250 ML Plastic	1
Metals_total	HNO3	250 ML Plastic	1
Sulfate	none	250 ~~500~~ ML Plastic	1
Fe 2	HCl	250 - 1 Amber glass	1

OBSERVATIONS / NOTES:

Circle if Applicable:		Signature(s):
~~MS/MSD~~	Duplicate ID No.:	

LOW-FLOW DATA SHEET

Project Name: HOFF VC

Project No.: 103 55436008

Well I.D.: MW-F-A

Date: 1-20-2021

Well Depth (from T.O.C.) = 20.30 ft

Well Diameter (d) = 1" ft

Static Water Level (WL) = 6.20 ft
(from T.O.C.)

Tt Sampler(s): L WAGNER
M SHRIFT

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 20.30 - 6.20
T = 14.1 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	~~Eh~~ ORP (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1000	12.91	6.79	0.842	~~6.00~~ 55.8	0.00	391	300	6.20	clear	
1005	13.22	6.79	0.842	145.0	0.00	375	300	—	cloudy	
1010	13.33	6.80	0.842	327.0	0.00	359	300	—	cloudy	Lamotte 2020
1015	14.15	6.91	0.825	228.0	0.00	278	300	—	cloudy	27.3
1020	14.23	6.90	0.824	109.0	0.00	260	300	—	clearing	14.7
1025	14.28	6.90	0.824	91.7	0.00	256	300	—	clearing	17.0
1030	14.31	6.87	0.820	51.5	0.00	250	300	—	clear	11.82 Sample
~~1035~~								8.40		end of Samples 1050
~~1040~~										

HOFF - MW-F-A

TETRA TECH, INC.

Total Volume Removed: ≈3.0

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436006

[ ] Domestic Well Data
[x] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: HOFF-MW-F B
Sample Location: MW-F
Sampled By: RW / MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

SAMPLING DATA:

Date: 1.20.21	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 09:35	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Peristaltic	Clear	6.81	1.99	13.65	54.2	0.00	380	

PURGE DATA:

Date: 1.20.2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic								
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 4 inch PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 38.40								
Static Water Level (WL): 5.02								
One Casing Volume(gal/L): —								
Start Purge (hrs): 0905								
End Purge (hrs): 0935								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): 3.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~HCl~~	40 ml vial	3
SVOCs + Pest	none	250 mL Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 ML Plastic	1
Sulfate	none	250 ML Plastic	1
Fe 2	HCl	250 - 1 Amb Glass	1

OBSERVATIONS / NOTES:

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103 5543600 8

Well I.D.: ~~MW~~ MW-F-B

Date: 1.20.21

Well Depth (from T.O.C.) = 38.40 ft

Well Diameter (d) = 1" ft

Static Water Level (WL) = 5.02 ft
(from T.O.C.)

Tt Sampler(s): R. WAGNER
M. Shuft

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 38.40 - 5.02
T = 33.38 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Horiba Turbidity (NTUs)	D.O. (mg/l)	ORP Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0905	11.90	5.98	1.68	0.0/02	1.29	358	300	5.02	clear/cl	WL meter went 6ft in casi
0910	13.05	6.60	1.55	725	0.00	349	300	?	cloudy	with tubing
0915	13.29	6.77	1.64	208	0.00	356	300	?	clear	Low flo 2020 @ 24.7
0920	13.37	6.80	1.73	118	0.00	362	300	?	clear	" " 21.0
0925	13.43	6.82	1.89	73.3	0.00	371	300	?	clear	" " 14.3
0930	13.45	6.82	1.90	86.6	0.06	377	300	?	clear	" " 11.3
0935	13.65	6.81	1.99	54.2	0.00	380	300	?	clear	" " 11.08
								5.70		End of Sampling @ 0950

Hoff- MW-F B @ 0936

TETRA TECH, INC.

Total Volume Removed: 3.5≈

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436006

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-MW-1A
Sample Location: MW-1
Sampled By: RH/MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Date: 1.20.2021								
Time: 1725								
Method:	Clear	7.60	3.85	13.98	29.8	3.30	390	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 1.20.2021								
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1" PVC								
Total Well Depth (TD): 17.40		SEE LOW FLOW SHEET						
Static Water Level (WL): 4.55								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1255								
End Purge (hrs): 1325								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): ~2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~nitric~~ HCl	40 ml vial	3
SVOCs & Pest	none	250 mL Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 mL Plastic	1
Sulfate	none	250 ML Plastic	1
Fe 2	HCl	250 - 1 Amber glass	1

OBSERVATIONS / NOTES:

WL meter would not fit into PVC casing w/ tubing - Had to take Readings before and After Sampling. Ran into bucket Drew Red till cleared up (5 mins)
Used Lamotte 2020 for turbid stabilization and Readings

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103 55436002 306005

Well I.D.: IW-1_A

Date: 1-20-2021

Well Depth (from T.O.C.) = 17.40 ft

Well Diameter (d) = 1" ft

Static Water Level (WL) = 4.55 ft
(from T.O.C.)

Tt Sampler(s): R. Wagner
M. Shaft

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 17.40 - 4.55
T = 12.85 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1255	Dew in	to Bucket	till clear				200	4.58	Dark Red	we want to Boot tubing
1300	12.91	7.93	2.34	392	5.49	450	200	—	clear	54.1 Lamotte 2020
1305	13.45	7.77	2.58	192	3.57	428	200	—	clear	44.1 NTU "
1310	13.63	7.71	3.01	146	3.46	410	200	—	clear	38.3 NTU "
1315	13.46	7.67	3.34	150	3.19	401	200	—	clear	33.6 NTU "
1320	13.64	7.63	3.66	113	3.37	392	200	—	clear	30.9 NTU
1325	13.98	7.60	3.85	82.0	3.30	390	200	—	clear	29.8 NTU
										END of Sampling

TETRA TECH, INC.

Total Volume Removed: ≈ 2.5

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436006

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-MW-1B
Sample Location: MW-1
Sampled By: RW/MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1.20.2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1140	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Peristaltic	LT. PINK	6.87	9.00	13.60	36.2	0.00	380	

PURGE DATA:

Date: 1.20.2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Peristaltic Pump								
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 4 inch PVC								
Total Well Depth (TD): 30.50		SEE LOW FLOW SHEET						
Static Water Level (WL): 4.15								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1105								
End Purge (hrs): 1140								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): 3.0 ≈								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~none~~ HCl	40 ml vial	3
SVOCs & Pest	none	250 mL Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 ML Plastic	1
Sulfate	none	125 ~~250~~ ML Plastic	1
Fe 2	HCL	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

Started purged very turbid Dark Red, Also used Lamotte 2020 to collect turbidity Readings. Flow thru cell still turbid, used Lamotte Reading for Sample / more accurate

* Broken Casing Top / Lid sits on top of Both PVC casings (PC)

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103554360006

Well I.D.: MW IW-1B

Date: 1-20-2021

Well Depth (from T.O.C.) = 30.50 ft

Well Diameter (d) = 1" ft

Static Water Level (WL) = 4.15 ft
(from T.O.C.)

Tt Sampler(s): R. WAGNER
M SHIFT

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 30.50 - 4.15
T = 26.35 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	ORP Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1105	11.56	—	—	OR	—	—	200	4.15	DK RED	DTW meter went left w/ fitting
1110	12.03	—	—	OR	—	—	200	—	DK RED	Lamotte 2020
1115	12.14	6.43	7.99	OR	1.70	329	200	—	LT RED	"235 AU
1120	13.39	6.82	8.10	285	0.00	358	200	—	Tint RED	68.8 NTU
1125	13.67	6.85	8.19	261	0.00	360	200	—	PINK	58.7 NTU
1130	13.95	6.87	8.68	351	0.00	370	200	—	LT. PINK	59.1 NTU
1135	13.57	6.88	8.85	175	0.00	377	200	—	LT PINK	45.3 NTU
1140	13.60	6.87	9.00	140	0.00	380	200	—	LT PINK	36.2 NTU Sample
								6.35		12:00 end of sample
										Broken CASING TOP

Hoff - MW-1B IW @ 1140

TETRA TECH, INC.

Total Volume Removed: ≈ 30

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff-IW-2 B
Sample Location: IW-2
Sampled By: RW/MS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Date: 1-20-2021								
Time: 1445								
Method:	clear	7.82	3.46	13.89	5.70	0.00	289	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 1-20-2021								
Method: Peristaltic Pump								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 4" PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 31.50								
Static Water Level (WL): 4.83								
One Casing Volume(gal/L): —								
Start Purge (hrs): 1410								
End Purge (hrs): 1455								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): ~3.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	~~none~~ HCl	40 ml vial	3
SVOCs + Pest	none	250 ML Amber	3
~~Pesticides~~	none		
Metals_diss	HN03	250 ML Plastic	1
Metals_total	HN03	250 ML Plastic	1
Sulfate	none	25 ~~500~~ ~~250~~ ML Plastic	1
Fe2	HCl	250 - 1 Amber Glass	1

OBSERVATIONS / NOTES:

Purge started at LT RED/Sampled water was clear
Took WL Reading PRE & Post Sample - meter would not fit in PVC of tubing

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103543 6008

Well I.D.: IW-2 B

Date: 1.20.2021

Well Depth (from T.O.C.) = 31.50 ft

Well Diameter (d) = 1" ft

Static Water Level (WL) = 4.83 ft
(from T.O.C.)

Tt Sampler(s): R. WAGNER
M-SHRFT

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 31.50 - 4.83
T = 26.67 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1410	12.77	7.71	4.69	158.	—	435	200	4.83	LT BRO	Lavalle 2020 NTU
1415	13.74	7.65	4.67	571	0.00		200		LT. RED	62.0
1420	13.75	7.70	4.43	556.	0.00	406	200		LT. RED	78.2
1425	—	—	—	—	—	—	200		Pink	95.9
1430	12.68	7.83	3.77	62.2	0.00	385	200		LT Pink	65.9
1435	13.72	7.82	2.74	17.8	0.00	394	200		LT Pink	11.0
1440	13.90	7.83	3.55	14.8	0.00	391	200		Clear	8.29
1445	13.89	7.82	3.46	9.5	0.00	389	200		Clear	5.70
								5.70		end of Sampling @ 1455

TETRA TECH, INC.

Total Volume Removed: 3.0

LOW-FLOW DATA SHEET

Project Name: Hoff

Project No.:

Well I.D.: MW-A

Date: 06/01/21

Well Depth (from T.O.C.) = 35 ft

Well Diameter (d) = ft

Static Water Level (WL) = 4.08 ft
(from T.O.C.)

Tt Sampler(s): J. Dalinssio, H. Madan, N. Dedic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = _____ - _____
T = _____ ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1045	16.66	7.81	0.656	28.0	0.23	-114	150	5.25	C+C	
1050	17.15	7.68	0.664	0.0	0.0	-138	~~100~~	5.34		
1055	17.28	7.75	0.663	0.0	0.00	-142		5.26		
1100	17.33	7.79	0.663	0.0	0.00	-144		5.26		
1105	17.33	7.82	0.660	0.0	0.00	-146		5.28		[illegible]
1110	17.31	7.84	0.660	0.0	0.00	-147		5.29		
1115	17.25	7.84	0.660	0.0	0.00	-148		5.30		
1120	17.29	7.83	0.661	0.0	0.00	-147		5.31		

TETRA TECH, INC.

Total Volume Removed: 25 Gall

LOW-FLOW DATA SHEET

Project Name: Hoff

Project No.:

Well I.D.: MW - C

Date: 06/01/2021

Well Depth (from T.O.C.) = 34.60 ft

Well Diameter (d) = 2.7 ft

Static Water Level (WL) = 5.02 ft
(from T.O.C.)

Tt Sampler(s): H. Martin J. Dalrestio
N. Delic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = _____ - _____
T = _____ ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1240	21.23	7.23	9.70	0.0	2.16	343	150	6.50	red	flush colour damaged
1245	18.44	8.24	10.0	0.0	0.0	335		6.20	"	
1250	16.99	9.19	10.1	798	0.0	338		6.60		
1255	17.92	9.36	10.1	>1000	0.0	336		6.30		
1300	18.51	9.46	10.4	>1000	0.0	334		6.21		
1305	18.35	9.59	10.3	950	0.0	336		6.27		~~Monitor~~
1310	18.26	9.60	10.5	657	0.0	342		6.31		Monitor reset
1315	18.39	9.60	10.5	571	0.0	346		6.33		
1320	18.33	9.61	10.8	523	0.0	348		6.34		

TETRA TECH, INC.

Total Volume Removed: _____

LOW-FLOW DATA SHEET

Project Name: Hoff

Project No.:

Well I.D.: MW-E

Date: 06/01/21

Well Depth (from T.O.C.) = _____ ft

Well Diameter (d) = 2 in ft

Static Water Level (WL) = ~~[illegible]~~ 23.60 ft
(from T.O.C.)

Tt Sampler(s): H. Martin, J. Dalrosso & N. Dedic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = _____ - _____
T = _____ ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
14.05	18.44	9.26	1.02	67.2	1.20	368	150	6.30		
1410	17.59	8.86	0.860	29.9	4.77	364	↓	7.22		
1419	18.04	8.67	0.863	32.5	3.99	357	↓	7.43		
1420	20.70	8.66	0.823	21.0	5.56	347	↓	7.58		
1425	20.53	8.63	0.816	19.3	6.09	346	↓	"		

TETRA TECH, INC.

Total Volume Removed: _____

LOW-FLOW DATA SHEET

Project Name: Hopf VC

Project No.:

Well I.D.: IW-2A

Date: 6/3/21

Well Depth (from T.O.C.) = 17.93 ft

Well Diameter (d) = ft

Static Water Level (WL) = ~~12.61~~ 4.47 ft
(from T.O.C.)

Tt Sampler(s): J. Davidson

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = _____ - _____
T = _____ ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1107	17.83	7.96	14.7	267	0.0	361	100	12.62		
1110	Runs	Dry -	Allow	to	Recharge +		Collect	Sample		

TETRA TECH, INC.

Total Volume Removed: _____

LOW-FLOW DATA SHEET

Project Name: Hoff - VC

Project No.: _____

Well I.D.: TW-2B

Date: 6/3/21

Well Depth (from T.O.C.) = _____ ft

Well Diameter (d) = _____ ft

Static Water Level (WL) = 5.50 ft
(from T.O.C.)

Ft Sampler(s): J. Daniels

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = _____ - _____
T = _____ ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1000	16.96	9.93	1.57	6.37	8.00	219	150	4.80	Clear	
1005	16.88	8.75	1.52	12.6	"	249	"	5.00	"	
1010	16.99	8.69	1.49	24.5	"	237	"	5.03	"	
1015	16.98	8.69	1.49	52.3	"	231	"	5.05	"	
1020	16.94	8.60	1.48	32.1	"	300	"	5.10	"	
1025	16.99	8.57	1.49	22.3	"	303	"	5.14	"	

TETRA TECH, INC.

Total Volume Removed: _____

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: _____

Well I.D.: EW-3A

Date: 6/12/24

Well Depth (from T.O.C.) = _____ ft

Well Diameter (d) = _____ ft

Static Water Level (WL) = ~~9.91~~ 9.00 ft
(from T.O.C.)

Ft Sampler(s): J. Dallesio

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)

T = _____ - _____

T = _____ ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1350	28.30	7.91	9.52	803	0.00	358	100	9.00		
1355	22.38	7.70	8.79	791	0.00	392	↓	14.55		
1357	RUNS	DRY -	ALLOW	TO RECHARGE	FOR	COLLECT	SAMPLE			

TETRA TECH, INC.

Total Volume Removed: _____

LOW-FLOW DATA SHEET

page 1 of 1

Project Name: [illegible]

Project No.: [illegible]

Well I.D.: [illegible] IW-38

Date: [illegible] 6/2/21

Well Depth (from T.O.C.) = [illegible] 21.35 ft

Well Diameter (d) = [illegible] ~~ft~~

Static Water Level (WL) = 4.85 ft
(from T.O.C.)

Tr Sampler(s): J. DACIESSIO

Height of Water in Well (T): 1245 - Collect Sample

T = depth (ft) - Static Water Level (ft)
T = _____ - _____
T = _____ ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
1210	23.73	7.73	5.42	0.0	3.38	301	150	1000	Brown	
1220	— RUNS		Dry -	Turn -	OFF	/ LET	RECHARGE			
~~1230~~										
1245	— COLLECT		SAMPLE	(only	1	PEAK	+ 1	SVOC	bottle	collected)

TETRA TECH, INC.

Total Volume Removed: _____

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 10355436008

Well I.D.: MW-10

Date: 06/03/21

Well Depth (from T.O.C.) = 7.5 ft

Well Diameter (d) = 4 in

Static Water Level (WL) = 0.80 ft
(from T.O.C.)

Tt Sampler(s): J. Dalessio
H. Martin

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = _____ - _____
T = _____ ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (mS/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static Water Level	Color	Comments
1255	18.20	9.32	1.40	71000	6.61	28	150	0.91	Clear	
1300	16.05	8.68	0.855	37.2	1.36	-119		1.61		
1305	16.27	8.66	0.793	17.1	1.86	-146		1.94		
1310	16.50	8.68	0.772	15.9	2.44	-154				
1315	16.73	8.70	0.761	14.5	2.78	-158		2.58		
1320	17.53	8.79	0.746	76.9	3.92	-159		2.66		Monitor reset
1325	18.12	8.83	0.727	42.3	4.48	-157		2.72		
1330	18.06	8.86	0.708	38.3	4.58	-158		2.78		
1335	18.19	8.82	0.693	48.9	4.53	-157		2.81		
1340	18.30	8.80	0.688	40.3	4.44	-158		2.85		

TETRA TECH, INC.

Total Volume Removed: _____

LOW-FLOW DATA SHEET

Project Name: HOFF VC Site

Project No.: 103554360008

Well I.D.: MW-13

Date: 6-22-2021

Well Depth (from T.O.C.) = 25 ft

Well Diameter (d) = 4.2 in

Static Water Level (WL) = 3.20 ft
(from T.O.C.)

Tt Sampler(s): E. Gilligan
M. Dedic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 25 - 3.20
T = 21.80 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1040	—	—	—	—	—	—	~500	3.20	cloudy	
1045	17.99	6.46	1.52	130	3.86	48		3.35	cloudy	
1050	17.88	6.38	1.48	125	2.51	33		3.41	cloudy	
1055	18.22	6.40	1.55	80.2	1.36	15		3.47	sl. cloudy	
1100	18.06	6.42	1.59	175	1.07	9		3.58	cloudy	
1105	18.21	6.45	1.63	366	0.90	5		3.66	reddish	
1110	18.43	6.46	1.67	540	0.67	3	↓	3.72	reddish	
1115	17.96	6.50	1.70	620	0.72	6	~500	3.81	reddish	

TETRA TECH, INC.

Total Volume Removed: ~ 5 GAL

LOW-FLOW DATA SHEET

Project Name: Hoff

Project No.:

Well I.D.: MW - FB

Date: 6/2/21

Well Depth (from T.O.C.) = 38.60 ft

Well Diameter (d) = 1" ft

Static Water Level (WL) = 5.50 ft
(from T.O.C.)

Tt Sampler(s): J. Pacella

Height of Water in Well (T):

T = depth (ft) – Static Water Level (ft)
T = _____ – _____
T = _____ ft

Sample Time - 1015

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (µmhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0950	15.95	8.58	1.56	149	0.00	-238	350	6.75	clear	
0955	15.71	8.42	1.50	621	0.00	307	350	7.15	"	
1000	15.86	8.13	1.53	225	0.00	318	150	6.95	"	
1005	15.87	8.09	1.59	123	0.00	326	150	6.35	"	
1010	15.86	8.00	1.61	88	0.00	330	150	6.35	"	

TETRA TECH, INC.

Total Volume Removed: _____

HOFF MW-A

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

Sample ID No.: HOFF MW-A
Sample Location: MW-A
Sampled By: M.B. & ND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

Date: 9-28-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Time: 1100	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Method: 12V, submers. 54	CLEAR	6.83	0.624	20.05	20.5	0.04	-64	

PURGE DATA:

Date: 9-28-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Method: 12V, submers. 64								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2 in PVC	See Low Flow Purge Data Sheet(s)							
Total Well Depth (TD): 34.27								
Static Water Level (WL): 4.87								
One Casing Volume(gal/L):								
Start Purge (hrs): 1005								
End Purge (hrs): 1100								
Total Purge Time (min): 55								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	—
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-A

Date: 9-28-2021

Well Depth (from T.O.C.) = 34.27 ft

Well Diameter (d) = 2.2 ~~ft~~

Static Water Level (WL) = 4.87 ft
(from T.O.C.)

Tt Sampler(s): M. BLOMER
N. DEDIZ

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 34.27 - 4.87
T = 29.40 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1005	19.12	7.02	0.633	165	0.47	-53	250	5.80	cloudy	
1010	19.05	6.96	0.628	134	0.30	-55		5.68		slight sulfuric
1015	18.77	6.81	0.624	121	0.22	-59				odor
1020	18.90	6.73	0.624	111	0.19	-58		5.79		
1025	19.05	6.73	0.624	95	0.14	-59			sl.cloudy	
1030	19.08	6.74	0.624	90	0.12	-60		5.79	clear	
1035	19.21	6.75	0.624	84	0.08	-61				
1040	19.19	6.75	0.624	52	0.06	-61		5.78		
1045	19.18	6.75	0.623	43	0.06	-60				
1050	19.24	6.78	0.624	30.1	0.05	-62		6.02		
1055	19.98	6.81	0.624	24.4	0.05	-64				
1100	20.05	6.83	0.624	20.5	0.04	-64	250	6.05	clear	

TETRA TECH, INC.

Total Volume Removed: ~4 Gal

HOFF MW-B

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-B
Sample Location: MW-B
Sampled By: MB & ND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Date: 9-30-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Time: 1415								
Method: 2in 12V SUBM.								

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Date: 9-30-2021								
Method: 2in 12V SUBM								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC	See Low Flow Purge Data Sheet(s)							
Total Well Depth (TD): 31.06								
Static Water Level (WL): 4.33								
One Casing Volume(gal/L):								
Start Purge (hrs): 1320								
End Purge (hrs): 1415								
Total Purge Time (min): 55								
Total Vol. Purged (gal/L): ~8								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	—
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-B

Date: 9-30-2021

Well Depth (from T.O.C.) = 31.06 ft

Well Diameter (d) = 2in ~~ft~~

Static Water Level (WL) = 4.33 ft
(from T.O.C.)

Tt Sampler(s): M. BROMEL
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 31.06 - 4.33
T = 26.73 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1320	22.01	7.14	1.08	OR	6.33	16	550	4.21	D.Red	
1325	20.30	6.70	1.41	OR	4.28	-10		5.02		
1330	20.00	6.48	1.39	OR	3.20	-33		5.31		
1335	18.82	6.78	1.31	OR	2.80	-41		6.18		OR - OVER the Range of Instrument
1340	18.69	6.69	1.29	OR	2.44	-18		7.08		
1345	18.82	6.65	1.31	OR	2.06	-5		7.20		
1350	19.01	6.67	1.38	OR	1.88	9		7.36		
1355	19.05	6.66	1.39	OR	1.65	19		7.44		
1400	19.17	6.67	1.42	OR	1.53	22		7.56		
1405	19.18	6.63	1.44	OR	1.36	25		7.63		
1410	19.22	6.64	1.45	OR	1.28	27	↓	7.70	↓	
1415	19.21	6.64	1.46	OR	1.12	28	500	7.75	D.Red	

TETRA TECH, INC.

Total Volume Removed: ~8 GAL

Hoff MW-C

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff-MW-C
Sample Location: MW-C
Sampled By: MEB & HM
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 9/27/21	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Time: 1130	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Method: Low Flow	—	7.26	9.47	17.86	16.1	0.06	391	

PURGE DATA:

Date: 9/27/21	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC	See Low Flow Purge Data Sheet(s)							
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs): 1040								
End Purge (hrs): 1130								
Total Purge Time (min): 50								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	0
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: Hoff-MW-C

Date: 09/27/21

Well Depth (from T.O.C.) = _____ ft

Well Diameter (d) = 2 in. ~~ft~~

Static Water Level (WL) = 7.86 ft
(from T.O.C.)

Tt Sampler(s): H, M.

M.E.B.

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = _____ - _____
T = _____ ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1040	17.15	7.51	9.65	76.0	0.89	387	150	5.94	Red	
1045	16.60	7.96	9.55	46.0	0.30	350		6.93	Red	
1050	16.60	7.70	9.54	39.1	0.23	363		7.23		
1055	16.88	7.54	9.51	24.7	0.20	372		7.38		
1100	16.91	7.40	9.47	25.0	0.15	380		7.52		
1105	16.93	7.13	9.54	26.0	0.13	389		7.79		
1110	16.96	7.06	9.60	25.0	0.14	394		7.85		
1115	16.95	7.03	9.68	27.6	0.10	397		8.13		
1120	17.84	7.16	9.60	18.7	0.08	393		7.64		
1125	17.99	7.16	9.59	18.4	0.07	396		7.54		
1130	17.96	7.26	9.47	19.1	0.06	394		7.46		

TETRA TECH, INC.

Total Volume Removed: _____

HOFF MW-D

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-D
Sample Location: MW-D
Sampled By: M.B.
C.O.C. No.: N.D.
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 9-30-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Time: 1150	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Method: peristaltic	CLEAR	6.17	0.614	18.02	40.9	0.01	358	

PURGE DATA:

Date: 9-30-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Method: peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2.4								
Total Well Depth (TD): 30.11								
Static Water Level (WL): 4.43								
One Casing Volume(gal/L):								
Start Purge (hrs): 1055								
End Purge (hrs): 1150								
Total Purge Time (min): 55								
Total Vol. Purged (gal/L): ~5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	—
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

HOFF MW-D

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-D

Date: 9-30-2021

Well Depth (from T.O.C.) = 30.11 ft

Well Diameter (d) = 2 in ~~ft~~

Static Water Level (WL) = 4.43 ft
(from T.O.C.)

Tt Sampler(s): M. BLOMEIR
A. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 30.11 - 4.43
T = 26.68 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1055	19.45	6.87	0.659	OR	0.12	430	350	4.30	D. red	
1100	18.73	6.33	0.615	781	0.20	449	350	5.08	↓	Light odor
1105	18.66	6.26	0.611	663	0.13	443	350	5.20	↓	"Sulfuric like"
1110	18.46	6.29	0.612	651	0.09	430	350	5.23	↓	
1115	18.30	6.29	0.613	493	0.05	419	350	5.28	↓	
1120	18.33	6.25	0.615	322	0.05	406	350	5.26	L. red	
1125	18.39	6.23	0.616	200	0.05	400	350	5.26	↓	
1130	18.20	6.23	0.616	120.1	0.05	392	350		↓	
1135	18.14	6.21	0.615	99.4	0.04	385	350	5.27	↓	
1140	17.93	6.20	0.615	50.3	0.03	370	350		CLEAR	
1145	17.80	6.18	0.617	48.2	0.02	361	350	5.28	↓	
1150	18.02	6.17	0.614	40.9	0.01	358	350	5.27	CLEAR	

TETRA TECH, INC.

Total Volume Removed: ~5 GAL

HOFF MW-FA

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-FA
Sample Location: MW-FA
Sampled By: M.B. & ND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 9-28-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Time: 1350	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Method: Peristaltic	CLEAR	6.42	1.45	18.16	16.8	0.11	36	

PURGE DATA:

Date: 9-28-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1in PVC								
Total Well Depth (TD): 20.10								
Static Water Level (WL): 5.81								
One Casing Volume(gal/L):								
Start Purge (hrs): 1310								
End Purge (hrs): 1350								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): ~3.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	—
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-FA

Date: 9-28-2021

Well Depth (from T.O.C.) = 20.10 ft

Well Diameter (d) = 1in ~~ft~~

Static Water Level (WL) = 5.81 ft
(from T.O.C.)

Tt Sampler(s): M. BLOMEK
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 20.10 - 5.81
T = 14.29 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1310	19.15	6.38	1.41	OR	1.23	13	275	5.55	cloudy	
1315	17.99	6.40	1.48	624	0.35	17				Light odor
1320	18.10	6.45	1.47	129	0.19	21		8.15		
1325	18.13	6.43	1.46	92.3	0.17	23			clear	
1330	18.19	6.42	1.46	40.2	0.14	27		7.75		
1335	18.07	6.43	1.46	28.6	0.12	29				
1340	18.07	6.42	1.46	25.1	0.13	32		7.78		
1345	18.18	6.42	1.46	19.5	0.13	35				
1350	18.16	6.42	1.45	16.8	0.11	36	275	7.77	clear	

Total Volume Removed: ~ 3 GAL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No. HOFF MW-FB
Sample Location: MW-FB
Sampled By: M.B. / ND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 9-28-2021 / Time: 1230	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	
Method: Peristaltic	CLEAR	6.55	1.58	16.84	19.7	0.01	225	

PURGE DATA:

Date: 9-28-2021	Volume	pH	S.C.	Temp (C)	Turbidity	DO	ORP	
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1" PVC								
Total Well Depth (TD): 38.20								
Static Water Level (WL): 5.06								
One Casing Volume(gal/L):								
Start Purge (hrs): 1155								
End Purge (hrs): 1230								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): ~3.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	4
1,4-Dioxane	None	40-ml wial	4
SVOCs	None	1 L amber glass	4
Pesticides	None	1 L amber glass	—
Metals_total	HN03	150 ml plastic	2
Metals_disolved	HN03	150 ml plastic	2
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD

Duplicate ID No.: HOFF DUP-092821 (1200) (VOC, 1,4-Da, SVOC Metals, Sulfate)

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-FB

Date: 9.28.2021

Well Depth (from T.O.C.) = 38.20 ft

Well Diameter (d) = 1¼ ~~ft~~

Static Water Level (WL) = 5.06 ft
(from T.O.C.)

Tt Sampler(s): M. BLOKER
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 38.20 - 5.06
T = 33.14 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1155	18.53	6.42	1.47	OR	1.14	138	350	5.15	CLOUDY	
1200	17.05	6.76	1.48	463	0.20	171	350	6.36		LIGHT ODOR
1205	17.11	6.68	1.48	63.2	0.12	188	350		CLEAR	
1210	17.06	6.60	1.50	38.1	0.08	195	350	6.52		
1215	16.89	6.57	1.53	32.2	0.06	207	350			
1220	16.81	6.54	1.58	21.8	0.03	218	350	6.72		
1225	16.80	6.55	1.58	20.4	0.02	223	350			
1230	16.84	6.55	1.58	19.7	0.01	225	350	6.75	CLEAR	

TETRA TECH, INC.

Total Volume Removed: ~3.5 GAL

HOFF MW-10

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-MW-10
Sample Location: MW-10
Sampled By: MEB & HM
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 9/27/21	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Time: 1400	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Method: Low Flow								

PURGE DATA:

Date: 9/27/2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 4in PVC	See Low Flow Purge Data Sheet(s)							
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs): 1320								
End Purge (hrs): 1400								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	0
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Hoff MW-10

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: ~~Hoff~~ MW-10

Date: 09/27/21

Well Depth (from T.O.C.) = _____ ft

Well Diameter (d) = 4" ~~ft~~

Static Water Level (WL) = 0.86 ft
(from T.O.C.)

Tt Sampler(s): MEB & HM

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = _____ - _____
T = _____ ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1320	20.16	7.52	0.475	36.2	3.31	157	150	~~0.86~~ 0.85	MURKY GREY	
1325	20.78	7.02	0.519	39.5	1.53	12		0.95		
1330	21.33	6.95	0.514	39.4	1.17	-13		0.95		
1335	21.15	6.88	0.508	41.6	1.09	-14		1.13		
1340	19.11	7.17	0.484	54.7	1.96	-35		1.82		
1345	19.74	7.06	0.449	31.9	2.16	-19		2.70		
1350	20.31	6.84	0.449	32.4	2.11	-3		3.02		
1355	19.61	7.08	0.477	55.7	2.15	-27		3.53		
1400	19.67	6.98	0.564	28.7	1.84	-47		3.78		

TETRA TECH, INC.

Total Volume Removed: _____

HOFF MW-13

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-13
Sample Location: MW-13
Sampled By: M.B. & RD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 9-29-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Time: 0935	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Method: 2in 12V Subm.	SL. cloudy	6.61	1.02	20.15	95.2	0.73	-19	

PURGE DATA:

Date: 9-29-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Method: 2in 12V Subm.								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 4in PVC	See Low Flow Purge Data Sheet(s)							
Total Well Depth (TD): 25.40								
Static Water Level (WL): 2.80								
One Casing Volume(gal/L):								
Start Purge (hrs): 0835								
End Purge (hrs): 0935								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	—
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-13

Date: 9-29-2021

Well Depth (from T.O.C.) = 25.40 ft

Well Diameter (d) = 4in ~~ft~~

Static Water Level (WL) = 2.80 ft
(from T.O.C.)

Tt Sampler(s): M. BROLEI
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 25.40 - 2.80
T = 22.60 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0835	17.11	6.42	1.04	86	4.02	-6	250	2.75	L. cloudy	-reddish
0840	18.06	6.50	1.04	92	2.85	-10		3.25		odor, sulfuric
0845	18.30	6.55	1.04	123	2.28	-12				like
0850	18.55	6.63	1.04	158	2.20	-15		3.62		
0855	19.03	6.63	1.03	163	1.52	-16				
0900	19.14	6.63	1.03	121	1.46	-16		3.65		
0905	19.45	6.68	1.03	166	1.39	-17				
0910	19.62	6.62	1.03	165	1.31	-16		3.65		
0915	19.73	6.63	1.02	158	1.19	-16			↓	
0920	19.98	6.63	1.02	116	1.09	-16		3.69	sl. cloudy	
0925	20.10	6.64	1.02	118	0.94	-17			↓	
0930	20.05	6.62	1.02	100	0.82	-18	↓	3.78	↓	
0935	20.15	6.62	1.02	95.7	0.72	-19	250	3.81	sl. cloudy	-reddish

TETRA TECH, INC.

Total Volume Removed: ~4 GAL

Hoff IW-1A

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff-IW-1A
Sample Location: IW-1A
Sampled By: M.B. & N.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 9-30-2021 / Time: 0910	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	
Method: Peristaltic	CLEAR	6.70	2.36	17.13	16.12	0.11	336	

PURGE DATA:

Date: 9-30-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1in PVC								
Total Well Depth (TD): 17.02								
Static Water Level (WL): 4.39								
One Casing Volume(gal/L):								
Start Purge (hrs): 0840								
End Purge (hrs): 0910								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): ~2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	—
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: IW-1A

Date: 9-30-2021

Well Depth (from T.O.C.) = 17.02 ft

Well Diameter (d) = 1 in ~~ft~~

Static Water Level (WL) = 4.39 ft
(from T.O.C.)

Tt Sampler(s): M. ISAKER
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 17.02 - 4.39
T = 12.63 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0840	17.16	7.01	1.73	OR	1.15	286	300	4.37	D. RED	
0845	17.07	6.98	1.83	68.4	0.25	295	300	5.39	CLEAR	
0850	17.08	6.95	1.88	35.1	0.21	292	300	5.80	"	
0855	17.16	6.86	1.98	45.5	0.18	304	300	6.17	"	
0900	17.11	6.74	2.14	20.3	0.15	321	300	6.47	"	
0905	17.09	6.72	2.26	19.2	0.13	326	300	6.58	"	
0910	17.13	6.70	2.36	16.7	0.11	336	300	6.73	CLEAR	

TETRA TECH, INC.

Total Volume Removed: ~2.5 GAL

HOFF IW-1B

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF IW-1B
Sample Location: IW-1B
Sampled By: M.A. JMD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 9-30-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Time: 1000	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Method: peristaltic	CLEAR	6.53	3.03	17.59	13.2	0.24	328	

PURGE DATA:

Date: 9-30-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Method: peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1in PVC								
Total Well Depth (TD):								
Static Water Level (WL): 4.55								
One Casing Volume(gal/L): 29.93								
Start Purge (hrs): 0930								
End Purge (hrs): 1000								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): ~2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	—
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

IW-1A TDL = 17.02
DTL = 2.10

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: TW-1B

Date: 9-30-2021

Well Depth (from T.O.C.) = 29.93 ft

Well Diameter (d) = 1in ~~ft~~

Static Water Level (WL) = 4.55 ft
(from T.O.C.)

Tt Sampler(s): M. BLOMER
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 29.93 - 4.55
T = 24.38 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0930	17.39	6.72	3.21	224	1.12	315	300	5.52	SL. CLOUDY	
0935	17.48	6.68	3.19	84.6	0.38	313	300	5.27	CLEAR	
0940	17.55	6.72	3.14	36.8	0.28	309	300	6.15		
0945	17.55	6.68	3.11	29.4	0.27	311	300	6.43		
0950	17.52	6.64	3.07	23.3	0.27	315	300	6.44		
0955	17.57	6.56	3.05	15.5	0.24	325	300	6.46	↓	
1000	17.54	6.53	3.03	13.2	0.24	328	300	6.49	CLEAR	

TETRA TECH, INC.

Total Volume Removed: ~2.5 GAL

HOFF IW-2A

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF IW-2A
Sample Location: IW-2A
Sampled By: M.B & ND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

5.65

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Date: 9-29-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Time: 1535								
Method: peristaltic	D. Red	6.35	12.1	20.21	OR	0.28	412	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Date: 9-29-2021								
Method: peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1 in PVC	See Low Flow Purge Data Sheet(s)							
Total Well Depth (TD): 15								
Static Water Level (WL): ~~5.65~~ 4.85								
One Casing Volume(gal/L):								
Start Purge (hrs): 1330								
End Purge (hrs): 1347								
Total Purge Time (min): 17								
Total Vol. Purged (gal/L): ~1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	—
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Well Dry out @ 1347, wait for recovery, @ 1535 DTW_{TOC} = 6' Collect sample

DTW_{TOC} = 4.85' 9-29-2021

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

9-29-2021 IW-2B TDW = 31.59
~1330 DTW = 5.05

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: IW-2A

Date: 9-29-2021

Well Depth (from T.O.C.) = 15 ft

Well Diameter (d) = 1 in ~~ft~~

Static Water Level (WL) = 4.85 ft
(from T.O.C.)

Tt Sampler(s): M. BLOMER
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 15 - 4.85
T = 10.15 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1330	20.38	5.31	13.0	OR	0.92	391	~~300~~	4.85	red-brown	
1335	20.56	5.95	12.7	OR	0.29	414	300	9.36	↓	
1340	20.27	6.39	12.3	OR	0.23	411	300	13.51	↓	
1345	20.21	6.55	12.1	OR	0.28	412	300	14.84	D. red	
										1347 DRY-OUT
										1535 DTL = 6'
										Collect sample
										1535

TETRA TECH, INC.

Total Volume Removed: ~1.5 GAL

HOFF TW-2B

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF TW-2B
Sample Location: TW-2B
Sampled By: M.B / ND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Date: 9-29-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Time: 1510								
Method: peristaltic	CLEAR	6.99	1.46	17.77	21.0	0.05	273	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Date: 9-29-2021								
Method: peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1in PVC	See Low Flow Purge Data Sheet(s)							
Total Well Depth (TD): 31.59								
Static Water Level (WL): 5.05								
One Casing Volume(gal/L):								
Start Purge (hrs): 1430								
End Purge (hrs): 1510								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): ~2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	—
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: TH-23

Date: 9-29-2021

Well Depth (from T.O.C.) = 31.59 ft

Well Diameter (d) = 1" ft

Static Water Level (WL) = 5.05 ft
(from T.O.C.)

Tt Sampler(s): M. BLOMER
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 31.59 - 5.05
T = 26.54 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1430	20.61	7.08	1.88	OR	0.63	320	200	5.10	red	
1435	18.31	6.98	1.44	136	0.15	337		5.39	L. red	slight odor
1440	18.02	6.94	1.42	69.0	0.11	327		5.50	clear	(ACmonday)
1445	17.91	6.95	1.42	50.2	0.10	316		5.53		
1450	17.71	6.96	1.42	37.7	0.08	305		5.57		
1455	17.47	6.98	1.41	36.4	0.06	297		5.60		
1500	17.64	6.97	1.43	26.2	0.05	280		5.63		
1505	17.62	7.04	1.44	27.6	0.05	278	↓	5.63	↓	
1510	17.77	6.99	1.46	21.0	0.05	271	200	5.63	clear	

TETRA TECH, INC.

Total Volume Removed: ~2.5 GAL

HOFF IW-3A

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF IW-3A
Sample Location: IW-3A
Sampled By: M.A. JAD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Date: 9-29-2021								
Time: 1350	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Method: peristaltic	Red	—	—	—	—	—	—	

PURGE DATA:

Date:	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1 in PVC	See Low Flow Purge Data Sheet(s)							
Total Well Depth (TD): 15								
Static Water Level (WL): 5.65								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	—
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

* While purging & sampling IW-3B, DUE INFLUENCE-CONNECTION; WL @ IW-3A DEWATERED/DRY-OUT wait for WL recovery and @ 1350 collected SAMPLE.

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

Tetra Tech, Inc.

HOFF IW-3B

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF IW-3B
Sample Location: IW-3B
Sampled By: M.A. & MD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 9-29-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Time: 1125	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Method: Peristaltic	L. Red	6.66	4.46	20.13	249	4.10	295	

PURGE DATA:

Date: 9-29-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1in PVC	See Low Flow Purge Data Sheet(s)							
Total Well Depth (TD): 21.04								
Static Water Level (WL): 5.41								
One Casing Volume(gal/L):								
Start Purge (hrs): 1045								
End Purge (hrs): 1125								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): ~ 2								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-ml wial	2
1,4-Dioxane	None	40-ml wial	2
SVOCs	None	1 L amber glass	2
Pesticides	None	1 L amber glass	—
Metals_total	HN03	150 ml plastic	1
Metals_disolved	HN03	150 ml plastic	1
Sulfate	None	500 ml plastic	1
Ethane/Ethene/Methane	None	40-ml wial	2

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: TW-3B

Date: 9-29-2021

Well Depth (from T.O.C.) = 21.04 ft

Well Diameter (d) = 1 in ~~ft~~

Static Water Level (WL) = 5.41 ft
(from T.O.C.)

Tt Sampler(s): M. BRUNEL
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 21.04 - 5.41
T = 15.63 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
~~1045~~	22.24	6.65	4.43	471	7.02	228	200	5.10	Red	
1050	20.64	6.66	4.61	450		269		8.64		
1055	20.35	6.66	4.61	461	7.32	278		9.80		
1100	20.34	6.65	~~4.62~~	392	6.89	287		12.70		
1105	20.03	6.64	~~4.56~~	343	6.17	294		14.24		
1110	20.18	6.67	4.47	211	5.62	~~298~~		15.31	↓	
1115	20.38	6.67	4.44	~~282~~	4.62	292		16.49	L. red	
1120	19.87	6.67	4.46	261	4.32	294	↓	18.05	↓	
1125	20.13	6.66	4.46	249	4.10	295	200	17.54	L. red	

TETRA TECH, INC.

Total Volume Removed: ~ 2641

HOFF MW-2S

Tetra Tech, Inc

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-2S
Sample Location: MW-2S
Sampled By: MB JHD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 11-30-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 0945								
Method: Grnnt. Rd FLZ	L. Cloudy	6.81	2.14	16.22	84	1.25	-12	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 11-30-2021								
Method: Grnnt. Rd FLZ								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 29.20								
Static Water Level (WL): 4.88								
One Casing Volume(gal/L):								
Start Purge (hrs): 0900								
End Purge (hrs): 0945								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): ~2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-25

Date: 11-30-21

Well Depth (from T.O.C.) = 29.20 ft

Well Diameter (d) = 2 in ~~ft~~

Static Water Level (WL) = 4.88 ft
(from T.O.C.)

Tt Sampler(s): M. BLOMBERG
A. OZDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 29.20 - 4.88
T = 24.32 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0900	14.08	7.58	1.86	685	14.18	82	200	4.78	Brown	
0905	15.11	6.90	1.97	534	2.90	>6	|	6.00	|	
0910	15.19	6.88	2.00	455	2.00	23	|	6.43	|	
0915	15.26	6.87	1.99	378	1.43	12	|	~~7.43~~ 6.43	|	
0920	14.92	6.86	2.01	336	1.47	-4	|	6.88	V	
0925	14.79	6.85	2.01	263	1.20	2	|	7.10	L. brn	
0930	14.36	6.85	2.02	248	1.01	-10	|	7.01	L brn	
0935	14.86	6.84	2.04	157	1.21	-14	|	7.60	L brn	
0940	15.99	6.81	2.11	110	1.00	-13	V	8.-	L. cloudy	
0945	16.28	6.81	2.09	84.0	1.35	-12	200	8.24	L. cloudy	

TETRA TECH, INC.

Total Volume Removed: 2.5 gal

HOFF MW-20A

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-20A
Sample Location: MW-20A
Sampled By: M.B. / N.D.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 11-29-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1535	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Grndf. RIFLE	cloudy	6.79	1.81	10.76	240	0.19	-186	

PURGE DATA:

Date: 11-29-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Grndf. RIFLE								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in pvc		SEE LOW FLOW SHEET						
Total Well Depth (TD): 116.5								
Static Water Level (WL): 3.62								
One Casing Volume(gal/L):								
Start Purge (hrs): 1435								
End Purge (hrs): 1535								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): ~3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

Circle If Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-204

Date: 11/29/2021

Well Depth (from T.O.C.) = _____ ft

Well Diameter (d) = 2in ~~ft~~

Static Water Level (WL) = 3.62 ft
(from T.O.C.)

Tt Sampler(s): M. BROMEL
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 116.5 - 3.62
T = 112.88 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1435	8.96	8.39	0.706	257	5.77	154	200	3.50	cloudy	
1440	9.39	7.48	0.740	204	5.00	149		5.52		
1445	8.78	7.11	1.19	190	1.77	106		6.56		
1450	8.35	6.91	1.29	191	1.59	78		6.96		
1455	8.27	6.80	1.46	188	1.02	44		7.61		
1500	9.10	6.78	1.61	180	0.24	0		8.28		
1505	8.65	6.79	1.73	171	0.31	-88		8.88		
1510	8.63	6.79	1.78	165	0.48	-111		9.21		
1515	8.62	6.78	1.83	166	0.29	-113		9.91		
1520	8.64	6.79	1.84	161	0.20	-165		10.08		
1525	8.65	6.80	1.80	154	0.49	-184		10.07		
1530	8.56	6.79	1.85	158	~~0.32~~ 0.28	~~-188~~ -189	↓	10.87	↓	
1535	10.76	6.79	1.81	240	0.13	~~-188~~ -186	200	12.55	cloudy	

TETRA TECH, INC.

Total Volume Removed: ~3 GAL

HOFF MW-2DL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-2DL
Sample Location: MW-2DL
Sampled By: MB & ND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 11-29-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1400								
Method: Bellinf. Rd/FL2	CLPAR	7.68	0.622	13.64	27.9	0.84	-91	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 11-29-2021								
Method: Grnvt. Rd/FL2								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 218'								
Static Water Level (WL): 6.32								
One Casing Volume(gal/L):								
Start Purge (hrs): 1300								
End Purge (hrs): 1400								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

DTL

MW-2DL = 6.32
MW-2DU = 3.62

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-2 DL

Date: 11/29/2001

Well Depth (from T.O.C.) = 218 ft

Well Diameter (d) = 2in ~~ft~~

Static Water Level (WL) = 6.32 ft
(from T.O.C.)

Tt Sampler(s): M. Blomeke
N. Oedic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 217 - 6.32
T = 210.68 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1300	13.76	7.58	0.639	14.3	1.72	215	250	2.49	clear	
1305	13.03	7.57	0.632	5.6	3.00	188		5.60	clear	
1310	13.07	7.61	0.628	29.5	1.78	14		6.44		
1315	13.74	7.64	0.629	19.3	1.50	-6		6.93		
1320	13.99	7.66	0.628	40.6	1.58	-27		695		
1325	13.60	7.67	0.628	47.5	1.32	-50		7.54		
1330	12.98	7.63	0.627	46.8	1.30	-52		2.28		
1335	13.24	7.61	0.627	44.1	1.24	-53		8.97		
1340	13.39	7.62	0.626	40.7	1.15	-56		9.38		
1345	13.61	7.60	0.625	34.8	1.05	-57		9.05		
1350	13.54	7.60	0.625	31.9	0.99	-57		9.33		
1355	13.43	7.67	0.624	29.4	0.95	-55		9.39		
1400	13.64	7.68	0.622	27.0	0.89	-61	250	9.83	clear	

TETRA TECH, INC.

Total Volume Removed: 4 gal

HOFF MW-4DU

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-4DU
Sample Location: MW-4DU
Sampled By: MB & ND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 12-8-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1300								
Method: Grunt. RdFL2	clear	7.53	1.21	12.60	20.1	0.77	-78	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 12-8-2021								
Method: Grunt. RdFL2								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 118								
Static Water Level (WL): 8.48								
One Casing Volume(gal/L):								
Start Purge (hrs): 1215								
End Purge (hrs): 1300								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): ~5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	6
1,4 Dioxane	none	40 ml vial	6
SVOCs	none	250 ml amber glass	4
Pesticides	none	250 ml amber glass	4
Metals_diss	HN03	500 ml plastic	2
Metals_total	HN03	500 ml plastic	2
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

Circle If Applicable:

MS/MSD

Duplicate ID No.: DUP-120821 (1200)

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-4DU

Date: 12-8-2021

Well Depth (from T.O.C.) = 118 ft

Well Diameter (d) = 2 in ~~ft~~

Static Water Level (WL) = 8.48 ft
(from T.O.C.)

Tt Sampler(s): M. BLOMER
N. DREW

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 118 - 8.48
T = 109.52 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1215	9.93	7.66	0.97	49.1	4.86	-39	400	8.15	clear	slight sulfur odor
1220	11.73	7.60	1.05	31.2	1.24	-88	"	9.08	"	
1225	11.88	7.60	1.07	22.9	1.07	-93	"	9.18	"	
1230	11.97	7.59	1.10	20.1	1.05	-93	"	9.44	"	
1235	12.24	7.55	1.17	19.5	0.96	-87	"	9.58	"	
1240	12.31	7.54	1.19	20.5	0.88	-84	"	9.52	"	
1245	12.38	7.53	1.20	20.2	0.80	-80	"	9.48	"	
1250	12.42	7.53	1.20	21.4	0.77	-79	"	9.49	"	
1255	12.57	7.53	1.20	20.8	0.79	-79	"	9.44	"	
1300	12.60	7.53	1.21	20.1	0.72	-78	400	9.46	clear	

TETRA TECH, INC.

Total Volume Removed: ~ 5 Gal

HOFF MW-4DL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-4DL
Sample Location: MW-4DL
Sampled By: MB & MD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 12-8-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1130								
Method: Grundf. RdFL2	L. gr-yllw	7.56	5.38	9.81	35.6	0.41	-114	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 12-8-2021								
Method: Grundf. RdFL2								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 245								
Static Water Level (WL): 22.88								
One Casing Volume(gal/L):								
Start Purge (hrs): 1030								
End Purge (hrs): 1130								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): ~3.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

* filtered TM sample: sl. yellow color
* high S.C. mScm
* sulfur odor

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-4DL

Date: 12-8-2021

Well Depth (from T.O.C.) = 245 ft

Well Diameter (d) = 2 in ~~ft~~

Static Water Level (WL) = 22.88 ft
(from T.O.C.)

Tt Sampler(s): M. BLOWELL
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 245 - 22.88
T = 222.12 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1030	12.90	9.00	5.04	119	5.63	-148	200	14.84	gry-yllw	SULFUR ODOR
1035	10.15	7.71	4.60	66.9	2.42	-133		20.52	L. gr-yllw	
1040	10.03	7.68	5.30	58.6	1.68	-124		23.31		
1045	11.55	7.53	5.37	49.3	1.37	-103		24.29		
1050	11.43	7.49	5.11	48.7	0.88	-102		25.60		
1055	10.94	7.49	5.31	50.0	0.66	-102		26.44		
1100	11.05	7.52	5.35	46.6	0.67	-103		27.72		
1105	11.19	7.57	5.42	37.7	0.77	-104		28.54		
1110	10.66	7.58	5.43	38.4	0.60	-105		29.98		
1115	10.25	7.53	5.41	40.0	0.53	-104		30.93		
1120	10.64	7.55	5.40	37.7	0.49	-110		31.74		
1125	10.46	7.55	5.41	36.6	0.45	-112		32.85		
1130	10.33	7.56	5.38	35.6	0.41	-114	200	33.63	L. gry-yl	

FILTERED TM SAMPLE COLOR; SL. YELLOW
High S.C. mS/cm

TETRA TECH, INC.

Total Volume Removed: ~3.5 GALL

HOFF MW-5S

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-5S
Sample Location: MW-5S
Sampled By: M.B. & ND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 12-2-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1320								
Method: Grundf. RdFL2	CLEAR	6.28	0.167	15.77	7.3	9.09	139	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 12-2-2021								
Method: Grundf. RdFL2								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 28.65								
Static Water Level (WL): 7.07								
One Casing Volume(gal/L):								
Start Purge (hrs): 1240								
End Purge (hrs): 1320								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-55

Date: 12-22-2021

Well Depth (from T.O.C.) = 29.65 ft

Well Diameter (d) = 2 in ft

Static Water Level (WL) = 7.07 ft
(from T.O.C.)

Tt Sampler(s): M. BLOMER
N. DEAIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 29.65 - 7.07
T = 22.58 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1240	13.82	6.35	0.167	93.8	19.34	163	350	6.87	Cloudy	
1245	14.85	6.31	0.167	54.4	5.78	145		8.65	clear	
1250	15.04	6.27	0.163	29.6	4.52	151		8.83		
1255	14.93	6.28	0.164	20.7	4.54	149		8.79		
1300	15.01	6.28	0.163	16.3	4.87	133		8.70		
1305	15.99	6.27	0.162	10.7	4.70	136		8.84		
1310	15.85	6.28	0.161	9.2	4.06	141		8.90		
1315	15.75	6.28	0.162	9.3	4.10	141	↓	9.02	↓	
1320	15.77	6.28	0.162	7.3	4.09	139	350	8.94	clear	

TETRA TECH, INC.

Total Volume Removed: ~ 4 Gal

HOFF MW-50d

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-50d
Sample Location: MW-50d
Sampled By: M.B. DM
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-2-2021 / Time: 1135 / Method: Grnd. PUMP 2	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
	clear	7.19	1.55	13.38	44.9	0.81	55	

PURGE DATA:

Date: 12-2-2021 / Method: Grnd. PUMP 2	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 92'								
Static Water Level (WL): 9.92'								
One Casing Volume(gal/L):								
Start Purge (hrs): 1050								
End Purge (hrs): 1135								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): ~8								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-50M

Date: 12-2-2021

Well Depth (from T.O.C.) = 92 ft

Well Diameter (d) = 2in ft

Static Water Level (WL) = 9.92 ft
(from T.O.C.)

Tt Sampler(s): M. Brunel
K. DeRic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 92 - 9.92
T = 82.08 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1050	12.78	7.25	0.222	100	4.35	-33	~650	9.70	cloudy	
1055	12.90	7.19	1.55	OK	1.14	23	↓	11.09	↓	
1100	13.20	7.00	1.56	557	1.01	34		~~10.60~~ 11.4		
1105	13.26	7.00	1.56	470	0.95	41		~~10.73~~ 11.13		
1110	13.35	7.00	1.55	370	0.92	45		11.15		
1115	13.38	7.00	1.55	245	0.91	49		11.15		
1120	13.38	7.00	1.55	160	0.87	51		11.01	↓	
1125	13.40	7.19	1.55	86.1	0.85	53		11.09	clear	
1130	13.39	7.19	1.55	74.5	0.81	55	↓	11.15	↓	
1135	13.38	7.19	1.55	44.9	0.81	55	650	11.15	clear	

TETRA TECH, INC.

Total Volume Removed: ~8 GAL

HOFF MW-5DL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-5DL
Sample Location: MW-5DL
Sampled By: M.B. & MD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-2-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1020	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: GRAB. RIFLE	SLYLW	7.33	0.123	13.08	23.2	0.40	-140	

PURGE DATA:

Date: 12-2-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: GRAB. RIFLE								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 187.5								
Static Water Level (WL): 5.95								
One Casing Volume(gal/L):								
Start Purge (hrs): 0940								
End Purge (hrs): 1020								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): ~4.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

WATER has slight sulfur like odor

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

9.92

MW-5DA TDL_{TIC} = 92 DTL_{TIC} = 9.92
MW-5DL TDL_{TIC} = DTL_{TIC} = 5.95

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-5DL

Date: 12-2-2021

Well Depth (from T.O.C.) = 187.5 ft

Well Diameter (d) = 2in ~~ft~~

Static Water Level (WL) = 5.95 ft
(from T.O.C.)

Tt Sampler(s): M. BLOMER
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 187.5 - 5.95
T = 181.55 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0940	13.12	7.89	0.128	17.8	5.11	21	400	4.78	CLEAR	→ Slight SULFUR odor
0945	13.14	7.43	0.126	18.6	1.92	-72		11.06		
0950	13.26	7.36	0.125	~~161~~	1.25	-98		11.81		
0955	13.47	7.37	0.125	13.4	0.61	-111		12.15		
1000	13.75	7.36	0.125	16.9	0.56	-117		12.30		
1005	13.77	7.35	0.125	16.6	0.44	-129		12.44		
1010	13.84	7.34	0.124	21.1	0.50	-133		12.62		
1015	13.72	7.33	0.123	20.6	0.41	-138		12.81		
1020	13.68	7.33	0.123	23.2	0.40	-140	400	12.94	CLEAR	→ V. SL. YELLOW
1025										
1030										

TETRA TECH, INC.

Total Volume Removed: ~4.5 GAL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Hoff MW-6S

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-6S
Sample Location: MW-6S
Sampled By: M.B. & MD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-2-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1510	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Grundfos RDFL2	cloudy	6.21	0.095	14.26	683	2.91	158	

PURGE DATA:

Date: 12-2-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Grundfos RDFL2								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 28.76								
Static Water Level (WL): 2.02								
One Casing Volume(gal/L):								
Start Purge (hrs): 1425								
End Purge (hrs): 1510								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): ~5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	4
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-65

Date: 12-2-2021

Well Depth (from T.O.C.) = 28.76 ft

Well Diameter (d) = 2 in ~~ft~~

Static Water Level (WL) = 2.07 ft
(from T.O.C.)

Tt Sampler(s): M. BOWER
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 28.76 - 2.07
T = 26.69 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1425	14.16	6.19	0.096	879	11.53	190	400	1.90	Cloudy	
1430	14.06	6.17	~~0.095~~ 0.095	846	5.64	188		5.10		
1435	14.02	6.16	0.094	863	4.90	185		5.30		
1440	14.01	6.16	0.095	671	4.17	177		5.60		
1445	14.10	6.16	0.095	OR	3.84	166		5.77		
1450	14.45	6.20	0.096	OR	3.18	165		5.91		
1455	14.42	6.22	0.096	915	2.96	165		5.97		
1500	14.38	6.23	0.096	836	2.89	164		6.00		
1505	14.28	6.22	0.095	805	2.87	161	↓	5.93	↓	
1510	14.26	6.21	0.095	683	2.91	158	400	5.87	cloudy	

TETRA TECH, INC.

Total Volume Removed: ~5 GAL

Hoff MW-75

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-75
Sample Location: MW-75
Sampled By: M.B. & RS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 11-30-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1545	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Grndf.RWFL2	clear	6.76	1.51	12.76	19.4	1.13	73	

PURGE DATA:

Date: 11-30-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: GrndH.RWFL2								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2 in PVC								
Total Well Depth (TD): 29.55		SEE LOW FLOW SHEET						
Static Water Level (WL): 1.01								
One Casing Volume(gal/L):								
Start Purge (hrs): 1445								
End Purge (hrs): 1545								
Total Purge Time (min): 55								
Total Vol. Purged (gal/L): ~6								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	~

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-75

Date: 11-30-2021

Well Depth (from T.O.C.) = 29.55 ft

Well Diameter (d) = 2 in ~~ft~~

Static Water Level (WL) = 1.0 ft
(from T.O.C.)

Tt Sampler(s): M. Blomeyer
N. Dedic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 29.55 - 1.0
T = 28.55 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1445	9.03	7.15	1.75	OR	4.73	-61	400	2.57	Gray	
1450	11.05	6.70	1.70	987	2.07	13	↓	2.58	Gray	
1455	12.18	6.66	1.67	75.5	0.56	33		2.93	Sl. cloudy	
1500	12.14	6.71	1.67	58.1	0.60	33	↓	2.94	Sl. cloudy	
1505	12.18	6.74	1.66	41.8	0.65	34	400	3.03	clear	
1510	—	—	—	—	—	—	—	3.17	—	Pump stop, restart
1515	12.31	6.88	1.65	OR	1.31	-12	400	3.19	Gray	
1520	12.95	6.74	1.64	376	1.13	45	↓	3.81	L. gray	
1525	12.63	6.71	1.64	182	0.95	64		3.58	clear	
1530	12.68	6.76	1.60	70.1	1.09	65		3.61	↓	
1535	12.69	6.77	1.57	43.5	1.16	67		3.65		
1540	12.67	6.77	1.55	29.7	1.13	71	↓	4.01	↓	
1545	12.76	6.76	1.51	19.4	1.13	73	400	4.05	clear	Collect sample @ 1545

TETRA TECH, INC.

Total Volume Removed: 6 gal

HOFF MW-7DU

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-7DU
Sample Location: MW-7DU
Sampled By:
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 11-30-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1340								
Method: Grundf. RdFlz	clear	7.64	0.931	10.97	1.7	0.45	-81	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 11-30-2021								
Method: Grund/RdFlz								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 116.5								
Static Water Level (WL): artesian								
One Casing Volume(gal/L):								
Start Purge (hrs): 1250								
End Purge (hrs): 1340								
Total Purge Time (min): 50								
Total Vol. Purged (gal/L): ~7								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	–
Ethane/Ethene/Methane		40 ml vial	–

OBSERVATIONS / NOTES:

DTW_{TOC} = artesian + 2 FT

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-7DA

Date: 11-30-2011

Well Depth (from T.O.C.) = 116.5 ft

Well Diameter (d) = 2 in

Static Water Level (WL) = +2 FT (optesm) ft
(from T.O.C.)

Tt Sampler(s): M. BLOMER
N. OKEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 116.5 -
T = 116.5 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1250	11.65	7.41	0.937	5.7	2.01	-32	~500	+2.00	CLEAR	
1255	11.52	7.48	0.935	3.6	1.19	-45				
1300	11.40	7.50	0.935	4.3	0.72	-50				
1305	11.21	7.53	0.934	2.1	0.63	-54				
1310	11.20	7.60	0.927	2.0	0.60	-66				
1315	11.16	7.64	0.926	2.8	0.54	-70				
1320	11.14	7.65	0.925	1.8	0.46	-74				
1325	11.08	7.65	0.928	2.2	0.44	-76				
1330	10.95	7.65	0.930	1.8	0.40	-78				
1335	10.93	7.65	0.932	1.6	0.45	-80				
1340	10.97	7.64	0.931	1.7	0.45	-81	~500	+2.00	CLEAR	

TETRA TECH, INC.

Total Volume Removed: ~7 GAL

HOFF MW-7DL

Tetra Tech, Inc

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-7DL
Sample Location: MW-7DL
Sampled By: MB & RD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 11-30-2021 / Time: 1155 / Method: GRUNDFOS	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
	CLEAR	7.66	0.880	11.89	13.3	0.21	-35	

PURGE DATA:

Date: 11-30-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: GRUNDFOS								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 210.5								
Static Water Level (WL): artesian								
One Casing Volume(gal/L):								
Start Purge (hrs): 1110								
End Purge (hrs): 1155								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): ~ 8								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	6
1,4 Dioxane	none	40 ml vial	6
SVOCs	none	250 ml amber glass	4
Pesticides	none	250 ml amber glass	4
Metals_diss	HN03	500 ml plastic	2
Metals_total	HN03	500 ml plastic	2
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

DTW_{TOC} = artesian + 2'

Circle if Applicable:

MS/MSD

Duplicate ID No.: HOFF DUP-113021 (1200)

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-7DL

Date: ~~11/30/2021~~ 11/30/2021

Well Depth (from T.O.C.) = 210.5 ft

Well Diameter (d) = 2 in ~~ft~~

Static Water Level (WL) = +2 ft ft
(from T.O.C.)

Tt Sampler(s): M. Blumer
V. Deniz

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 210.5 -
T = 210.5 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1110	12.11	7.41	0.905	9.4	8.78	164	~650	+1.5	Clear	
1115	11.59	7.54	0.875	6.6	10.04	-9		+1.5		
1120	11.63	7.58	0.875	6.2	0.62	-18		+1.5		
1125	11.72	7.53	0.875	8.0	0.55	-16				
1130	11.71	7.48	0.873	7.8	0.42	-15				
1135	11.98	7.62	0.871	7.5	0.36	-21				
1140	11.97	7.63	0.872	8.0	0.33	-33				
1145	12.03	7.65	0.873	9.0	0.23	-35				
1150	11.98	7.66	0.875	~~10.01~~ 10.1	0.21	-35	↓	↓	↓	
1155	11.89	7.66	0.8~~80~~	13.3	0.21	-35	~650	+1.5	Clear	

TETRA TECH, INC.

Total Volume Removed: ~ 8 Gal

Hoff MW-8

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-8
Sample Location: MW-8
Sampled By: M.B & MD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-7-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1530	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Grndf. PP2	clear	6.69	1.09	12.65	18.2	1.15	-153	

PURGE DATA:

Date: 12-7-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Grndf. PP2								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 4in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 31.00								
Static Water Level (WL): 11.20								
One Casing Volume(gal/L):								
Start Purge (hrs): 1445								
End Purge (hrs): 1530								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): ~5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	250 ~~500~~ ml ~~plastic~~ amber glass	1
Ethane/Ethene/Methane	HCl	40 ml vial	3

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-8

Date: 10/7/2021

Well Depth (from T.O.C.) = 31.80 ft

Well Diameter (d) = 4 in ~~ft~~

Static Water Level (WL) = 11.20 ft
(from T.O.C.)

Tt Sampler(s): Mark Blomer
Nick Davis

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 31.00 - 11.20
T = 19.80 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1445	11.66	6.53	1.09	903	13.10	-78	400	11.23	Brown	Slight Sheen
1450	12.49	6.61	1.11	172	1.37	-103		12.24		
1455	12.43	6.63	1.11	113	1.04	-113		12.90		
1500	12.45	6.66	1.11	186	1.10	-122		13.54		
1505	12.66	6.68	1.10	35.0	1.39	-130		14.14	Clear	
1510	12.65	6.68	1.10	36.3	1.34	-134		14.66		
1515	12.64	6.68	1.10	20.0	1.30	-141		15.12		
1520	12.69	6.68	1.09	100	1.31	-145		15.85		
1525	12.63	6.69	1.09	19.4	1.21	-149		15.95		
1530	12.65	6.69	1.09	18.0	1.15	-153	400	15.91	clear	

TETRA TECH, INC.

Total Volume Removed: 5 gal

HOFF MW-80A

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-80A
Sample Location: MW-80A
Sampled By: MB & MD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1145	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 12-7-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Grnd. RJKL 2	CLEAR	7.10	1.34	11.23	15.6	0.55	-92	

PURGE DATA:

Date: 12-7-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Grnd. RJKL 2								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 119								
Static Water Level (WL): 13.18								
One Casing Volume(gal/L):								
Start Purge (hrs): 1105								
End Purge (hrs): 1145								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): ~5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-8DL

Date: 12/7/2021

Well Depth (from T.O.C.) = 119 ft

Well Diameter (d) = 2 in ~~ft~~

Static Water Level (WL) = 13.18 ft
(from T.O.C.)

Tt Sampler(s): Neb Denes
Marcus Brown

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 119 - 13.18
T = 105.82 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1105	9.24	7.15	1.05	36.8	16.90	-89	450	13.00	~~Clear~~ Brown	
1110	10.31	7.13	1.34	29.5	1.17	-73		13.32	clear	
1115	10.83	7.12	1.34	22.7	0.91	-78		13.71		
1120	11.24	7.11	1.34	23.1	0.80	-81		13.79		
1125	11.42	7.11	1.34	21.9	0.73	-85		13.81		
1130	11.29	7.11	1.34	18.8	0.68	-87		13.94		
1135	11.27	7.10	1.35	16.8	0.65	-91		13.98		
1140	11.25	7.10	1.34	17.1	0.59	-95		13.80		
1145	11.23	7.12	1.34	15.6	0.55	-97	450	13.74	clear	
1150										

TETRA TECH, INC.

Total Volume Removed: ~5 GALL

HOFF MW-8DL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-8DL
Sample Location: MW-8DL
Sampled By: MB & WD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 12-7-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1025								
Method: Grundf. RdFL 2	CLEAR	7.05	1.14	9.78	12.6	0.84	-100	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 12-7-2021								
Method: Grundf. RdFL 2								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 250								
Static Water Level (WL): 25.39								
One Casing Volume(gal/L):								
Start Purge (hrs): 0940								
End Purge (hrs): 1025								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): ~2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane	HCl	40 ml vial	—

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-8DL

Date: 12/7/2011

Well Depth (from T.O.C.) = 250 ft

Well Diameter (d) = 2 in ~~ft~~

Static Water Level (WL) = 25.39 ft
(from T.O.C.)

Tt Sampler(s): Nick Pench
Markus Blomin

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 250 - 25.39
T = 224.61 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0940	12.39	7.15	1.04	19.7	16.98	-56	200	23.91	clear	
0945	12.34	7.09	1.05	18.2	4.08	-72		27.21		
0950	12.16	7.05	1.09	15.6	15.6 1.78	-72		27.88		
0955	11.63	7.00	1.13	13.9	1.08	-89		31.21		
1000	11.39	7.01	1.14	15.2	1.03	-95		32.68		
1005	11.15	7.02	1.14	13.4	0.96	-90		33.89		
1010	10.94	7.11	1.13	13.3	0.91	-103		34.72		
1015	10.45	7.14	1.13	12.6	0.82	-105		35.95		
1020	10.07	7.09	1.12	12.9	0.79	-102	↓	37.17	↓	
1025	9.78	7.05	1.14	12.6	0.84	-100	200	39.13	clear	

TETRA TECH, INC.

Total Volume Removed: ~2.5 gal

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Hoff MW-10

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff MW-10
Sample Location: MW-10
Sampled By: MK LND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-6-2021 / Time: 1415	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Method: Grundf. RIFLE	CLEAR	6.78	1.03	14.89	10.7	0.49	-79	

PURGE DATA:

Date: 12-6-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Grundf. RIFLE								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 4in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 7.45								
Static Water Level (WL): 1.97								
One Casing Volume(gal/L):								
Start Purge (hrs): 1330								
End Purge (hrs): 1415								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	250 ~~500~~ ml ~~plastic~~ amber glass	1
Ethane/Ethene/Methane	HCL	40 ml vial	3

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-10

Date: 10/6/2021

Well Depth (from T.O.C.) = 7.45 ft

Well Diameter (d) = 4 in ~~ft~~

Static Water Level (WL) = 1.97 ft
(from T.O.C.)

Tt Sampler(s): Ned Dench
Marcus Blome

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 7.45 - 1.97
T = 5.48 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1330	14.79	6.96	0.753	81.6	7.65	50	300	2.78	slightly cloudy	
1335	14.82	6.96	0.755	20.8	1.18	54		3.04	clear	
1340	14.83	6.94	0.775	8.1	0.70	-9		3.80		
1345	14.85	6.97	0.786	7.4	0.61	-10		4.07		
1350	14.86	6.89	0.808	11.3	0.57	-23		4.13		
1355	14.86	6.86	0.838	11.6	0.53	-53		4.15		
1400	14.85	6.84	0.887	11.8	0.45	-66		14.17		
1405	14.85	6.82	0.935	12.8	0.48	-74		14.19		
1410	14.87	6.81	0.994	11.2	0.47	-77	↓	14.20	↓	
1415	14.89	6.78	1.03	10.7	0.49	-79	300	14.22	clear	

TETRA TECH, INC.

Total Volume Removed: ~4 Gal

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

HOFF MW-13

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-13
Sample Location: ~~HOFF~~ MW-13
Sampled By: M.A. & AD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-9-2024 / Time: 0935 / Method: Grundfos	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
		6.56	1.83	14.52	201	0.24	35	

PURGE DATA:

Date: 12-9-2024 / Method: Grundfos	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 4 in PVC								
Total Well Depth (TD): 25		SEE LOW FLOW SHEET						
Static Water Level (WL): 7.0								
One Casing Volume(gal/L):								
Start Purge (hrs): 0855								
End Purge (hrs): 0935								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): ~3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	250 ~~500~~ ml ~~plastic~~ amber glass	1
Ethane/Ethene/Methane		40 ml vial	3

OBSERVATIONS / NOTES:

* IN WELL ARE ISCO SLEEVES PRESENT (4)

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-13

Date: 12-9-2021

Well Depth (from T.O.C.) = 25 ft

Well Diameter (d) = 4in ~~ft~~

Static Water Level (WL) = 7.0 ft
(from T.O.C.)

Tt Sampler(s): M. BOWEN
D. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 25.0 - 7.0
T = 18 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
0855	15.27	6.62	1.88	418	9.91	51	250	6.45	Light red	
0900	15.46	6.60	1.86	335	1.11	43		7.20		
0905	14.71	6.60	1.87	325	0.75	37		7.30		
0910	14.44	6.60	1.85	314	0.54	35		7.33		
0915	13.16	6.58	1.86	336	0.50	40		7.35		
0920	13.88	6.53	1.84	327	0.41	44		7.40		
0925	14.20	6.54	1.84	312	0.38	40		7.45		
0930	14.42	6.55	1.83	257	0.29	38	↓	7.52	↓	
0935	14.57	6.56	1.83	201	0.24	35	250	7.60	Light red	

TETRA TECH, INC.

Total Volume Removed: ~3 Gal

HOFF OW-4DU

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF OW-4DU
Sample Location: OW-4DU
Sampled By: M.B & RD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-1-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1630	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Grundf. RDS2	L. cloudy	8,61	0.462	11.99	102	0.26	-73	

PURGE DATA:

Date: 12-1-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Grundf. RDS2								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 123								
Static Water Level (WL): 15.15								
One Casing Volume(gal/L):								
Start Purge (hrs): 1550								
End Purge (hrs): 1630								
Total Purge Time (min): 40								
Total Vol. Purged (gal/L): ~3,5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: OW-4DU

Date: 10/1/2021

Well Depth (from T.O.C.) = 123 ft

Well Diameter (d) = 2in ~~ft~~

Static Water Level (WL) = 15.15 ft
(from T.O.C.)

Tt Sampler(s): M. Blomer
N. DEDic

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)

T = 123 - 15.15

T = 107.85 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1550	12.11	11.25	0.952	44.5	12.04	57	250	17.81	Clear	
1555	12.20	9.81	0.909	292	1.65	0		19.37	cloudy	
1600	11.77	9.23	0.347	449	1.22	-97		20.49		
1605	11.81	9.04	0.353	332	0.66	-107		20.68		
1610	11.61	8.78	0.391	274	0.58	-108		21.04		
1615	11.66	8.69	0.428	178	0.40	-94		22.17	cloudy	
1620	12.18	8.91	0.416	110	0.35	-91		22.68	L. cloudy	
1625	12.10	8.74	0.437	111	0.33	-77		22.97	L. cloudy	
1630	11.94	8.61	0.467	102	0.26	-73	250	23.35	L. cloudy	

TETRA TECH, INC.

Total Volume Removed: ~3.5 GAL

OW-4DL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF OW-4DL
Sample Location: OW-4DL
Sampled By: M.B. & ND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 12-1-2021	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 1425								
Method: Grundf. RdFL2	CLEAR	8.06	0.361	12.98	2.5	0.53	-116	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 12-1-2021								
Method: Grundf. RdFL2								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 245								
Static Water Level (WL): 1.62								
One Casing Volume(gal/L):								
Start Purge (hrs): 1310								
End Purge (hrs): 1425								
Total Purge Time (min): 45								
Total Vol. Purged (gal/L): ~8								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

DTW_{TOC} = 15.15' OW-4DL
1.62' OW-4DL

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: OW-4DL

Date: 6/11/21

Well Depth (from T.O.C.) = 245 ft

Well Diameter (d) = 2in ~~ft~~

Static Water Level (WL) = 1.62 ft
(from T.O.C.)

Tt Sampler(s): M. BLOOMER
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 245 - 1.62
T = 243.38 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1340	15.77	8.16	0.392	6.7	16.48	105	650	~~0.83~~ 1.0	Clear	
1345	14.35	8.14	0.382	0.9	7.33	-34		3.36		
1350	14.07	8.10	0.381	0.4	1.37	-103		3.51		
1355	14.14	8.10	0.380	1.3	1.22	-141		3.64		
1400	14.14	8.10	0.380	1.8	1.24	-146		3.62		
1405	13.99	8.10	0.380	1.9	1.22	-146		3.56		
1410	~~3.75~~	8.09	0.380	2.5	0.90	-136		3.50		
1415	13.75	8.08	0.379	2.6	0.83	-130		3.55		
1420	13.26	8.08	0.380	2.4	0.65	-123	↓	3.61	↓	
1425	12.98	8.06	0.380	2.5	0.53	-116	650	3.71	Clear	

TETRA TECH, INC.

Total Volume Removed: 8 gal

HOFF OW-6DU

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF OW-6DU
Sample Location: OW-6DU
Sampled By: MR JMD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-3-2021 / Time: 1100	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Grndf. RDF 2	Clear	7.76	0.512	13.09	56.6	0.75	68	

PURGE DATA:

Date: 12-3-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Grndf. RDF 2								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC								
Total Well Depth (TD): 128.98'		SEE LOW FLOW SHEET						
Static Water Level (WL): 0.5'								
One Casing Volume(gal/L):								
Start Purge (hrs): 1000								
End Purge (hrs): 1100								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): ~15								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	4
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: OW-6DA

Date: 12-3-21

Well Depth (from T.O.C.) = 128.98 ft

Well Diameter (d) = 2in ft

Static Water Level (WL) = 0.5 ft
(from T.O.C.)

Tt Sampler(s): M. Blaney
N. Dedz

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 128.98 - 0.5
T = 128.48 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1000	13.14	7.69	0.516	305	4.91	204	900	3.25	cloudy	
1005	13.66	7.69	0.510	218	2.07	169		3.37		
1010	13.68	7.70	0.504	301	4.00	139		3.45		
1015	13.81	7.70	0.509	362	1.25	118		4.07		
1020	13.88	7.71	0.510	370	1.08	108		4.00		
1025	13.78	7.72	0.511	345	0.97	99		4.31		
1030	13.88	7.73	0.508	350	0.86	95		4.31	↓	
1035	13.75	7.74	0.509	268	0.84	87		4.48	cloudy	
1040	13.64	7.75	0.509	191	0.84	83		4.46	L. cloudy	
1045	13.49	7.75	0.510	143	0.80	78		4.39	L. cloudy	
1050	13.38	7.76	0.511	108	0.76	71		4.49	L. cloudy	
1055	13.24	7.76	0.512	75.5	0.76	63	↓	4.50	clear	
1100	13.09	7.76	0.512	56.6	0.75	68	900	4.58	clear	

TETRA TECH, INC.

Total Volume Removed: 15 gal

Hoff OW-6DL

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff OW-6DL
Sample Location: OW-6DL
Sampled By: MB & RD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-3-2021 / Time: 1230	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Grnf. MP12	Clear	8.12	0.403	12.67	1.9	0.07	-106	

PURGE DATA:

Date: 12-3-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: Grnf. MP12								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2 in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 260								
Static Water Level (WL): artesian								
One Casing Volume(gal/L):								
Start Purge (hrs): 1130								
End Purge (hrs): 1230								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): ~18								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	500 ml plastic	—
Ethane/Ethene/Methane		40 ml vial	—

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: QW-6DL

Date: 10/31/2001

Well Depth (from T.O.C.) = _____ ft

Well Diameter (d) = 2in ~~ft~~

Static Water Level (WL) = Artisan ft
(from T.O.C.)

Tt Sampler(s): M. BLOMBERG
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 260 - _____
T = 260 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1130	13.22	8.16	0.386	2.2	3.01	4	1,100	~~Artisan~~ 3.05	clear	
1135	12.53	8.17	0.386	2.2	0.43	-81		4.00		
1140	12.44	8.17	0.387	2.1	0.29	-91		3.98		
1145	12.41	8.18	0.389	2.0	0.22	-96		4.05		
1150	12.48	8.18	0.389	2.0	0.17	-99		4.01		
1155	12.53	8.18	0.388	2.0	0.13	-101		4.01		
1200	12.48	8.18	0.391	1.9	0.13	-103		4.01		
1205	12.50	8.18	0.394	2.0	0.11	-105		4.06		
1210	12.45	8.18	0.394	1.9	0.14	-105		4.05		
1215	12.55	8.18	0.397	1.9	0.10	-106		4.05		
1220	12.32	8.17	0.399	1.9	0.11	-106		4.05		
1225	12.48	8.17	0.400	1.9	0.07	-106	↓	3.90	↓	
1230	12.67	8.17	0.403	1.9	0.07	-106	1,100	3.86	clear	

TETRA TECH, INC.

Total Volume Removed: ~18 gal

HOFF MW-A

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-A
Sample Location: MW-A
Sampled By: M.B. & ND
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-6-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1230	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: GRAB/FLOW	Sl. cloudy	6.92	0.669	16.87	80.1	0.73	-90	

PURGE DATA:

Date: 12-6-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: GRAB/FLOW								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 34.45								
Static Water Level (WL): 6.18								
One Casing Volume(gal/L):								
Start Purge (hrs): 1140								
End Purge (hrs): 1230								
Total Purge Time (min): 50								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	4
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	amber 250 ml ~~plastic~~ GLASS	1
Ethane/Ethene/Methane	HCL	40 ml vial	3

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-A

Date: 12/6/2021

Well Depth (from T.O.C.) = 34.45 ft

Well Diameter (d) = 2 in ~~ft~~

Static Water Level (WL) = 6.18 ft
(from T.O.C.)

Tt Sampler(s): Neb Deneb
Marcus Blanier

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 34.45 - 6.18
T = 28.27 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1140	16.45	7.19	0.658	OR	15.26	-22	300	6.30	Cloudy	
1145	16.73	6.99	0.653	OR	1.91	-68		7.39		
1150	16.77	6.97	0.655	OR	1.53	-93		7.50		
1155	16.73	6.97	0.660	OR	1.23	-104		7.78		
1200	16.81	6.96	0.663	OR	1.07	-106		8.03		
1205	16.81	6.96	0.665	586	0.93	-105		8.00		
1210	16.73	6.96	0.666	390	0.77	-102		7.84		
1215	17.03	6.94	0.671	294	0.89	-104		8.30		
1220	16.95	6.93	0.670	145	0.76	-96		8.35	S. cloudy	
1225	16.92	6.92	0.670	101	0.77	-92		8.58	Sl. cloudy	
1230	16.87	6.92	0.669	80.1	0.73	-90	300	8.68	Clear -	Sl. cloudy

TETRA TECH, INC.

Total Volume Removed: ~4 Gall

HOFF MW-B

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-B
Sample Location: MW-B
Sampled By: MA/NB
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-10-2021 / Time: 1300 / Method: Peristaltic	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	TIME
	Brown	6.68	1.37	14.42	420	1.87	253	1300

PURGE DATA:

Date: 12-10-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC								
Total Well Depth (TD):								
Static Water Level (WL): 5.58								
One Casing Volume(gal/L):								
Start Purge (hrs): 1235								
End Purge (hrs): 1300								
Total Purge Time (min): 25								
Total Vol. Purged (gal/L): ~2								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40-1 vial	3
1,4 Dioxane	HCl	40-1 vial	3
SVOCs	NONE	250-1 amber glass	2
Pesticides	NONE	250-1 amber glass	2
Metals_total	HNO3	500-1 plastic	1
Metals_diss	HNO3	500-1 plastic	1
Sulfate	NONE	250-1 amber glass	1
Ethane/Ethene/Methane	HCl	40-1 vial	3

OBSERVATIONS / NOTES:

WL stable, DTW_{TOC} = 6.50' - 6.65' Bucket
WQ Parameters NSE in cup, after collecting VOC sample.

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

HOFF MW-C

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-C
Sample Location: MW-C
Sampled By: MAJ/KD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-9-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	TIME
Time: 1120	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Method: Grundfos RDS2	D. Red	7.05	7.25	12.52	OR	—	271	1120

PURGE DATA:

Date: 12-9-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	TIME
Method: Grundfos RDS2	7.28	—	—	—	—	—	—	1050
Monitor Reading (ppm):	8.68	—	—	—	—	—	—	1055
Well Casing Diameter & Material	9.28	—	—	—	—	—	—	1110
Type: 2 in PVC	9.50	—	—	—	—	—	—	1115
Total Well Depth (TD):	9.63	—	—	—	—	—	—	1120
Static Water Level (WL): 7.90								
One Casing Volume(gal/L):								
Start Purge (hrs): 1050								
End Purge (hrs): 1120								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): ~4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL	40-1 Vial	3
1,4 Dioxane	HCL	40-1 Vial	3
SVOCs	NONE	250-1 amber glass	2
Pesticides	NONE	250-1 amber glass	2
Metals_total	HNO3	500-1 Plastic	1
Metals_diss	HNO3	500-1 Plastic	1
Sulfate	NONE	250-1 amber glass	1
Ethane/Ethene/Methane	HCL	40-1 vial	3

OBSERVATIONS / NOTES:

WQ PARAMETERS MSE @ SAMPLE TIME IN SLOW BUCKET.
* IN WELL ARE ISCO SLEEVES PRESENT

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	

HOFF MW-D

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-D
Sample Location: MW-D
Sampled By: MB & MD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-9-2021 / Time: 1250	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	TIME
Method: peristaltic	CLEAR	6.69	0.650	11.55	32.8	—	—	1250

PURGE DATA:

Date: 12-9-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	TIME
Method: peristaltic	6.22							1220
Monitor Reading (ppm):	6.35							1230
Well Casing Diameter & Material	6.41							1240
Type: 2in PVC	6.42							1250
Total Well Depth (TD):								
Static Water Level (WL): 5.17								
One Casing Volume(gal/L):								
Start Purge (hrs): 1220								
End Purge (hrs): 1250								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): 2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40-1 vial	3
1,4 Dioxane	HCl	40-1 vial	3
SVOCs	NONE	250-1 amber glass	2
Pesticides	NONE	250-1 amber glass	2
Metals_total	HNO3	500-1 plastic	1
Metals_diss	HNO3	500-1 plastic	1
Sulfate	NONE	250-1 amber glass	1
Ethane/Ethene/Methane	HCl	40-1 vial	3

OBSERVATIONS / NOTES:

WQ PARAMETERS MSE @ S-ALL SHEET @ SAME TIME

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

HOFF MW-FA

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-FA
Sample Location: MW-FA
Sampled By: MB DMD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-8-2021 / Time: 1455 / Method: peristaltic	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
	clear	6.56	1.48	14.80	63.4	0.32	50	

PURGE DATA:

Date: 12-8-21 / Method: peristaltic	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1in PVC								
Total Well Depth (TD): 20.35		SEE LOW FLOW SHEET						
Static Water Level (WL): 7.02								
One Casing Volume(gal/L):								
Start Purge (hrs): 1420								
End Purge (hrs): 1455								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): ~2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	3
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	250 ~~500~~ ml ~~plastic~~ amber glass	1
Ethane/Ethene/Methane		40 ml vial	3

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-FD

Date: 12-8-2021

Well Depth (from T.O.C.) = 20.35 ft

Well Diameter (d) = 1in ~~ft~~

Static Water Level (WL) = 7.02 ft
(from T.O.C.)

Tt Sampler(s): M. BLOMER
N. DEDIC

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 20.35 - 7.02
T = 13.23 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1430	14.87	6.61	1.47	OR	5.47	34	250	7.02	cloudy	
1435	15.20	6.59	1.48	OR	1.32	33		9.45	cloudy	
1440	15.12	6.57	1.48	450	0.99	45		9.31	cloudy	
1445	14.98	6.57	1.48	108	0.66	48		9.27	L.cloudy	
1450	14.87	6.57	1.48	87.4	0.52	48		9.22	clear	
1445	14.96	6.57	1.47	77.7	0.40	49		9.20	clear	
1450	14.87	6.55	1.48	72.7	0.37	49	↓	9.22	clear	
1455	14.80	6.56	1.48	63.4	0.32	50	250	9.18	clear	

TETRA TECH, INC.

Total Volume Removed: ~2.5 Gal

HOFF MW-FB

Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF MW-FB
Sample Location: MW-FB
Sampled By: M.B. & MD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Date: 12-8-2021								
Time: 1555								
Method: Peristaltic	clear	6.76	1.53	14.07	32.6	0.15	194	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Date: 12-8-2021								
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1in PVC		SEE LOW FLOW SHEET						
Total Well Depth (TD): 38.33								
Static Water Level (WL): 7.12								
One Casing Volume(gal/L):								
Start Purge (hrs): 1525								
End Purge (hrs): 1555								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): 5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml vial	4
1,4 Dioxane	none	40 ml vial	3
SVOCs	none	250 ml amber glass	2
Pesticides	none	250 ml amber glass	2
Metals_diss	HN03	500 ml plastic	1
Metals_total	HN03	500 ml plastic	1
Sulfate	none	250 ~~500~~ ml ~~plastic~~ amber glass	1
Ethane/Ethene/Methane	HCL	40 ml vial	3

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

LOW-FLOW DATA SHEET

Project Name: Hoff VC

Project No.: 103S5436008

Well I.D.: MW-PB

Date: 12-8-2021

Well Depth (from T.O.C.) = 38.33 ft

Well Diameter (d) = 1in ft

Static Water Level (WL) = 7.12 ft
(from T.O.C.)

Tt Sampler(s): M. Blumer
N. Dent

Height of Water in Well (T):

T = depth (ft) - Static Water Level (ft)
T = 38.33 7.12
T = 31.21 ft

Time:	Temp. (°C)	pH (SU)	Spec. Conduct (umhos/cm)	Turbidity (NTUs)	D.O. (mg/l)	Eh (mV)	Flow Rate (ml/min)	Static water Level	Color	Comments
1525	12.75	6.03	1.46	OR	4.55	130	600	7.02	Cloudy	
1530	13.95	6.84	1.45	141	0.71	173		8.30	L. Cloudy	
1535	14.07	6.83	1.44	75.7	0.37	179		9.13	clear	
1540	14.05	6.78	1.52	42.9	0.26	184		9.33		
1545	14.06	6.77	1.53	40.5	0.20	189		9.35		
1550	13.98	6.76	1.53	35.4	0.17	192		9.37		
1555	14.07	6.76	1.53	32.6	0.15	194	600	9.42	clear	

TETRA TECH, INC.

Total Volume Removed: ~5 GAL

HOFF IW-1A

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-IW-1A
Sample Location: IW-1A
Sampled By: MR / MD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-9-2021 / Time: 1430 / Method: peristaltic	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	TIME
	CLEAR	6.77	2.11	14.26	43.4	1.37	319	1430

PURGE DATA:

Date: 12-9-2021 / Method: peristaltic	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	TIME
		6.81	1.74	14.00	82.1	—	337	1415
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1in PVC								
Total Well Depth (TD): 17.39								
Static Water Level (WL): 6.00								
One Casing Volume(gal/L):								
Start Purge (hrs): 1400								
End Purge (hrs): 1430								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): 2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40-1 vial	3
1,4 Dioxane	HCl	40-1 vial	3
SVOCs	NONE	250-1 amber glass	2
Pesticides	NONE	250-1 amber glass	2
Metals_total	HNO3	500-1 plastic	1
Metals_diss	HNO3	500-1 plastic	1
Sulfate	NONE	250-1 amber glass	1
Ethane/Ethene/Methane	HCL	40-1 vial	3

OBSERVATIONS / NOTES:

WQ PARAMETERS ARE IN SAGE POCKET AFTER SAMPLE COLLECTION

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

HOFF IW-1B

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF IW-1B
Sample Location: IW-1B
Sampled By: MJ AD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-9-2021 / Time: 1530	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	TIME
Method: peristaltic	CLEAR	6.67	2.81	12.36	36.1	—	298	1530

PURGE DATA:

Date: 12-9-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	
Method: peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: lin PVC								
Total Well Depth (TD): 30.86								
Static Water Level (WL): 6.41								
One Casing Volume(gal/L):								
Start Purge (hrs): 1500								
End Purge (hrs): 1530								
Total Purge Time (min): 30								
Total Vol. Purged (gal/L): ~3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40-1 vial	3
1,4 Dioxane	HCl	40-1 vial	3
SVOCs	none	250-1 amber glass	2
Pesticides	none	250-1 amber glass	2
Metals_total	HNO3	500-1 plastic	1
Metals_diss	HNO3	500-1 plastic	1
Sulfate	none	250-1 amber glass	1
Ethane/Ethene/Methane	HCl	40-1 vial	3

OBSERVATIONS / NOTES:

WQ Parameters NSE in bucket after sample collection

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

HOFF IW-2A

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF IW-2A
Sample Location: IW-2A
Sampled By: MB DKD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-10-2021	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	TIME
Time: 1100	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	
Method: Peristaltic	cloudy	6.87	10.2	12.93	OR	2.14	359	1100

PURGE DATA:

Date: 12-10-2021	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	
Method: Peristaltic								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2in PVC								
Total Well Depth (TD): 15.75								
Static Water Level (WL): 6.89								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs): 1100								
Total Purge Time (min):								
Total Vol. Purged (gal/L): ~1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 ml VIAL	3
1,4 Dioxane	HCl	40 ml VIAL	3
SVOCs	NONE	250 ml amber glass	2
Pesticides	NONE	250 ml amber glass	2
Metals_total	HNO3	500 ml plastic	1
Metals_diss	HNO3	500 ml plastic	1
Sulfate	NONE	250 ml amber glass	1
Ethane/Ethene/Methane	HCl	40 ml VIAL	3

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Hoff IW-2B

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Hoff IW-2B
Sample Location: IW-2B
Sampled By: MB & MD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-10-2021 / Time: 1200 / Method: Peristaltic	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	TIME
	C. Red	7.16	5.71	12.89	478	—	362	

PURGE DATA:

Date:	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1in PVC								
Total Well Depth (TD): 31.83								
Static Water Level (WL): 6.52								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L): 2								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40-1 vial	3
1,4 Dioxane	HCl	40-1 vial	3
SVOCs	NONE	250-1 amber glass	2
Pesticides	NONE	250-1 amber glass	2
Metals_total	HNO3	500 ml PLASTIC	1
Metals_diss	HNO3	500 ml plastic	1
Sulfate	NONE	250 ml amber glass	1
Ethane/Ethene/Methane	HCl	40-1 vial	3

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

HOFF IW-3A

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF-IW-3A
Sample Location: IW-3A
Sampled By: MN & MD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-10-2021	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	
Time: 0915								
Method: peristaltic		—	—	—	—	—	—	

PURGE DATA:

Date:	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1 in PVC								
Total Well Depth (TD): 15.27								
Static Water Level (WL): 6.57								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L): —								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 - 1 vial	3
1,4 Dioxane	HCl	40 - 1 vial	3
SVOCs	none	250 - 1 amber glass	2
Pesticides	none	250 - 1 amber glass	2
Metals_total	HNO3	500 - 1 plastic	1
Metals_diss	HNO3	500 - 1 plastic	1
Sulfate	none	250 - 1 amber glass	1
Ethane/Ethene/Methane	HCl	40 - 1 vial	3

OBSERVATIONS / NOTES:

Circle If Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

HOFF IW-3B

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Hoff VC Site
Project No.: 103S5436008

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: HOFF IW-3B
Sample Location: IW-3B
Sampled By: MB & MD
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12-10-2021 / Time: 0940 / Method: peristaltic	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	TIME
	L.Red	7.05	3.94	14.84	355	1.84	125	0940

PURGE DATA:

Date:	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: lin PVC								
Total Well Depth (TD): 21.40								
Static Water Level (WL): 7.05								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L): 1.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	40 - 1 vial	3
1,4 Dioxane	HCl	40 - 1 vial	3
SVOCs	none	250 - 1 amber glass	2
Pesticides	none	250 - 1 amber glass	2
Metals_total	~~HNO3~~	500 - 1 plastic	1
Metals_diss	HNO3	500 - 1 plastic	1
Sulfate	none	250 - 1 amber glass	1
Ethane/Ethene/Methane	HCl	40 - 1 vial	3

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

APPENDIX E

COLLECTO	SEQUENCE	DATE_COLLECTED	TIME_COL	STANDARI	SAMPLE_N	SAMPLE_MEDIUM_I	LOCATION	ADDRESS_	LAB_SAMI	CHEMICAL	ANALYTE_	READING_	FINAL_AM	FINAL_AM	QUALITY_I	DATE_ANALYZED	DATE_VERIFIED	DILUTION_	VOID_SAN	FREE_FOR	STANDARD_COMMENT_DESC
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7429905	Aluminum		86100	ug/L		5/20/2019 13:41	5/23/2019 14:12	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7429905	Aluminum	<	300	ug/L	U	5/20/2019 13:41	5/23/2019 14:12	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7429905	Aluminum		34000	ug/L		5/20/2019 13:52	5/23/2019 14:14	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7429905	Aluminum		6060	ug/L		5/20/2019 13:52	5/23/2019 14:15	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7429905	Aluminum	<	300	ug/L	U	5/20/2019 13:57	5/23/2019 14:20	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7429905	Aluminum	<	300	ug/L	U	5/20/2019 13:57	5/23/2019 14:24	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7429905	Aluminum	<	300	ug/L	U	5/20/2019 14:03	5/23/2019 14:27	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7429905	Aluminum	<	300	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7439896	Iron		223	ug/L		5/20/2019 13:41	5/23/2019 14:12	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7439896	Iron		130000	ug/L		5/21/2019 13:41	5/28/2019 12:58	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7439896	Iron		7400	ug/L		5/20/2019 13:52	5/23/2019 14:15	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7439896	Iron		44800	ug/L		5/20/2019 13:52	5/23/2019 14:15	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7439896	Iron	<	100	ug/L	U	5/20/2019 13:57	5/23/2019 14:25	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7439896	Iron		361	ug/L		5/20/2019 13:57	5/23/2019 14:21	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7439896	Iron	<	100	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7439896	Iron		324	ug/L		5/20/2019 14:03	5/23/2019 14:29	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7439921	Lead		53.2	ug/L		5/17/2019 9:13	5/17/2019 10:53	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7439921	Lead	<	1	ug/L	U	5/17/2019 9:13	5/17/2019 10:53	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7439921	Lead		22.5	ug/L		5/17/2019 9:19	5/17/2019 10:54	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7439921	Lead		4.04	ug/L		5/17/2019 9:19	5/17/2019 10:54	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7439921	Lead	<	1	ug/L	U	5/17/2019 9:31	5/17/2019 10:55	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7439921	Lead	<	1	ug/L	U	5/17/2019 9:31	5/17/2019 10:55	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7439921	Lead	<	1	ug/L	U	5/17/2019 9:40	5/17/2019 10:57	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7439921	Lead	<	1	ug/L	U	5/17/2019 9:40	5/17/2019 10:57	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7439954	Magnesium		92.2	mg/L		5/21/2019 13:41	5/28/2019 12:58	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7439954	Magnesium		21.9	mg/L		5/20/2019 13:41	5/23/2019 14:13	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7439954	Magnesium		26.6	mg/L		5/20/2019 13:52	5/23/2019 14:15	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7439954	Magnesium		7.48	mg/L		5/20/2019 13:52	5/23/2019 14:15	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7439954	Magnesium		33.8	mg/L		5/20/2019 13:57	5/23/2019 14:21	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7439954	Magnesium		33.6	mg/L		5/20/2019 13:57	5/23/2019 14:27	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7439954	Magnesium		34	mg/L		5/20/2019 14:03	5/23/2019 14:29	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7439954	Magnesium		33.3	mg/L		5/20/2019 14:03	5/23/2019 14:32	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7439965	Manganese		3278	ug/L		5/20/2019 13:41	5/23/2019 14:12	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7439965	Manganese		506	ug/L		5/20/2019 13:41	5/23/2019 14:13	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7439965	Manganese		772	ug/L		5/20/2019 13:52	5/23/2019 14:15	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7439965	Manganese		219	ug/L		5/20/2019 13:52	5/23/2019 14:15	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7439965	Manganese		148	ug/L		5/20/2019 13:57	5/23/2019 14:21	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7439965	Manganese		150	ug/L		5/20/2019 13:57	5/23/2019 14:25	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7439965	Manganese		152	ug/L		5/20/2019 14:03	5/23/2019 14:29	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7439965	Manganese		148	ug/L		5/20/2019 14:03	5/23/2019 14:30	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7439976	Mercury	<	0.2	ug/L	U	5/16/2019 16:36	5/17/2019 13:51	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7439976	Mercury	<	0.2	ug/L	U	5/16/2019 16:38	5/17/2019 13:51	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7439976	Mercury	<	0.2	ug/L	U	5/16/2019 16:44	5/17/2019 13:54	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7439976	Mercury	<	0.2	ug/L	U	5/16/2019 16:46	5/17/2019 13:54	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7439976	Mercury	<	0.2	ug/L	U	5/16/2019 16:48	5/17/2019 14:00	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7439976	Mercury	<	0.2	ug/L	U	5/16/2019 16:52	5/17/2019 14:00	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7439976	Mercury	<	0.2	ug/L	U	5/16/2019 17:02	5/17/2019 14:02	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7439976	Mercury	<	0.2	ug/L	U	5/16/2019 17:07	5/17/2019 14:02	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7440020	Nickel		143	ug/L		5/20/2019 13:41	5/23/2019 14:12	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7440020	Nickel	<	50	ug/L	U	5/20/2019 13:41	5/23/2019 14:13	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7440020	Nickel		64	ug/L		5/20/2019 13:52	5/23/2019 14:15	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7440020	Nickel	<	50	ug/L	U	5/20/2019 13:52	5/23/2019 14:15	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7440020	Nickel	<	50	ug/L	U	5/20/2019 13:57	5/23/2019 14:21	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7440020	Nickel	<	50	ug/L	U	5/20/2019 13:57	5/23/2019 14:25	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7440020	Nickel	<	50	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7440020	Nickel	<	50	ug/L	U	5/20/2019 14:03	5/23/2019 14:30	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7440097	Potassium		7.05	mg/L		5/20/2019 13:41	5/23/2019 14:13	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7440097	Potassium		28.5	mg/L		5/20/2019 13:41	5/23/2019 14:12	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7440097	Potassium		4.61	mg/L		5/20/2019 13:52	5/23/2019 14:20	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7440097	Potassium		11.4	mg/L		5/20/2019 13:52	5/23/2019 14:15	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7440097	Potassium		1.19	mg/L		5/20/2019 13:57	5/23/2019 14:29	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7440097	Potassium		1.14	mg/L		5/20/2019 13:57	5/23/2019 14:24	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7440097	Potassium		1.19	mg/L		5/20/2019 14:03	5/23/2019 14:32	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7440097	Potassium		1.16	mg/L		5/20/2019 14:03	5/23/2019 14:29	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7440224	Silver	<	10	ug/L	U	6/5/2019 13:41	6/10/2019 14:47	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7440224	Silver	<	10	ug/L	U	6/14/2019 13:41	6/18/2019 14:57	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7440224	Silver	<	10	ug/L	U	6/5/2019 13:52	6/10/2019 14:48	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7440224	Silver	<	10	ug/L	U	6/5/2019 13:52	6/10/2019 14:48	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7440224	Silver	<	10	ug/L	U	6/5/2019 13:57	6/10/2019 14:49	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7440224	Silver	<	10	ug/L	U	6/5/2019 13:57	6/10/2019 14:49	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7440224	Silver	<	10	ug/L	U	6/5/2019 14:03	6/10/2019 14:50	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7440224	Silver	<	10	ug/L	U	6/5/2019 14:03	6/10/2019 14:49	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7440235	Sodium		41.4	mg/L		5/20/2019 13:41	5/23/2019 14:12	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7440235	Sodium		34.2	mg/L		5/20/2019 13:41	5/23/2019 14:13	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7440235	Sodium		29.5	mg/L		5/20/2019 13:52	5/23/2019 14:15	1			
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B		I20190118	7440235	Sodium		25.9	mg/L		5/20/2019 13:52	5/23/2019 14:15	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7440235	Sodium		103	mg/L		5/21/2019 13:57	5/28/2019 13:01	1			
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13		I20190118	7440235	Sodium		105	mg/L		5/21/2019 13:57	5/28/2019 13:02	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7440235	Sodium		103	mg/L		5/21/2019 14:03	5/28/2019 13:03	1			
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419		I20190118	7440235	Sodium		104	mg/L		5/21/2019 14:03	5/28/2019 13:03	1			
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A		I20190118	7440360	Antimony	<	2	ug/L	U	5/17/2019 9:13	5/17/2019 10:53	1			

2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440360	Antimony	<	2	ug/L	U	5/17/2019 9:13	5/17/2019 10:53	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440360	Antimony	<	2	ug/L	U	5/17/2019 9:19	5/17/2019 10:54	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440360	Antimony	<	2	ug/L	U	5/17/2019 9:19	5/17/2019 10:54	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440360	Antimony	<	2	ug/L	U	5/17/2019 9:31	5/17/2019 10:55	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440360	Antimony	<	2	ug/L	U	5/17/2019 9:31	5/17/2019 10:55	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440360	Antimony	<	2	ug/L	U	5/17/2019 9:40	5/17/2019 10:57	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440360	Antimony	<	2	ug/L	U	5/17/2019 9:40	5/17/2019 10:57	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440382	Arsenic		11.4	ug/L		5/17/2019 9:13	5/17/2019 10:53	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440382	Arsenic	<	3	ug/L	U	5/17/2019 9:13	5/17/2019 10:53	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440382	Arsenic		4.81	ug/L		5/17/2019 9:19	5/17/2019 10:54	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440382	Arsenic	<	3	ug/L	U	5/17/2019 9:19	5/17/2019 10:54	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440382	Arsenic	<	3	ug/L	U	5/17/2019 9:31	5/17/2019 10:55	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440382	Arsenic	<	3	ug/L	U	5/17/2019 9:31	5/17/2019 10:55	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440382	Arsenic	<	3	ug/L	U	5/17/2019 9:40	5/17/2019 10:57	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440382	Arsenic	<	3	ug/L	U	5/17/2019 9:40	5/17/2019 10:57	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440393	Barium		224	ug/L		5/20/2019 13:41	5/23/2019 14:10	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440393	Barium		14	ug/L		5/20/2019 13:41	5/23/2019 14:12	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440393	Barium		329	ug/L		5/20/2019 13:52	5/23/2019 14:14	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440393	Barium		34	ug/L		5/20/2019 13:52	5/23/2019 14:15	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440393	Barium	<	10	ug/L	U	5/20/2019 13:57	5/23/2019 14:20	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440393	Barium	<	10	ug/L	U	5/20/2019 13:57	5/23/2019 14:24	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440393	Barium	<	10	ug/L	U	5/20/2019 14:03	5/23/2019 14:27	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440393	Barium	<	10	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440439	Cadmium	<	10	ug/L	U	5/20/2019 13:41	5/23/2019 14:12	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440439	Cadmium	<	10	ug/L	U	5/20/2019 13:41	5/23/2019 14:10	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440439	Cadmium	<	10	ug/L	U	5/20/2019 13:52	5/23/2019 14:15	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440439	Cadmium	<	10	ug/L	U	5/20/2019 13:52	5/23/2019 14:14	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440439	Cadmium	<	10	ug/L	U	5/20/2019 13:57	5/23/2019 14:24	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440439	Cadmium	<	10	ug/L	U	5/20/2019 13:57	5/23/2019 14:21	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440439	Cadmium	<	10	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440439	Cadmium	<	10	ug/L	U	5/20/2019 14:03	5/23/2019 14:27	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440508	Copper		479	ug/L		5/20/2019 13:41	5/23/2019 14:12	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440508	Copper	<	10	ug/L	U	5/20/2019 13:41	5/23/2019 14:12	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440508	Copper		100	ug/L		5/20/2019 13:52	5/23/2019 14:14	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440508	Copper		37	ug/L		5/20/2019 13:52	5/23/2019 14:15	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440508	Copper	<	10	ug/L	U	5/20/2019 13:57	5/23/2019 14:21	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440508	Copper	<	10	ug/L	U	5/20/2019 13:57	5/23/2019 14:25	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440508	Copper	<	10	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440508	Copper	<	10	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440622	Vanadium		389	ug/L		5/20/2019 13:41	5/23/2019 14:12	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440622	Vanadium	<	30	ug/L	U	5/20/2019 13:41	5/23/2019 14:13	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440622	Vanadium		82	ug/L		5/20/2019 13:52	5/23/2019 14:15	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440622	Vanadium	<	30	ug/L	U	5/20/2019 13:52	5/23/2019 14:15	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440622	Vanadium	<	30	ug/L	U	5/20/2019 13:57	5/23/2019 14:24	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440622	Vanadium	<	30	ug/L	U	5/20/2019 13:57	5/23/2019 14:25	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440622	Vanadium	<	30	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440622	Vanadium	<	30	ug/L	U	5/20/2019 14:03	5/23/2019 14:30	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440666	Zinc		222	ug/L		5/20/2019 13:41	5/23/2019 14:12	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440666	Zinc	<	30	ug/L	U	5/20/2019 13:41	5/23/2019 14:13	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440666	Zinc		194	ug/L		5/20/2019 13:52	5/23/2019 14:15	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440666	Zinc	<	30	ug/L	U	5/20/2019 13:52	5/23/2019 14:15	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440666	Zinc	<	30	ug/L	U	5/20/2019 13:57	5/23/2019 14:24	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440666	Zinc	<	30	ug/L	U	5/20/2019 13:57	5/23/2019 14:25	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440666	Zinc	<	30	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440666	Zinc	<	30	ug/L	U	5/20/2019 14:03	5/23/2019 14:30	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440702	Calcium		47.4	mg/L		5/20/2019 13:41	5/23/2019 14:13	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440702	Calcium		85.3	mg/L		5/20/2019 13:41	5/23/2019 14:12	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440702	Calcium		15.9	mg/L		5/20/2019 13:52	5/23/2019 14:15	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440702	Calcium		28.5	mg/L		5/20/2019 13:52	5/23/2019 14:14	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440702	Calcium		34	mg/L		5/20/2019 13:57	5/23/2019 14:25	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440702	Calcium		34.2	mg/L		5/20/2019 13:57	5/23/2019 14:21	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440702	Calcium		33.9	mg/L		5/20/2019 14:03	5/23/2019 14:30	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440702	Calcium		34.5	mg/L		5/20/2019 14:03	5/23/2019 14:29	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7782492	Selenium	<	7	ug/L	U	5/17/2019 9:13	5/17/2019 10:53	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7782492	Selenium	<	7	ug/L	U	5/17/2019 9:13	5/17/2019 10:53	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7782492	Selenium	<	7	ug/L	U	5/17/2019 9:19	5/17/2019 10:54	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7782492	Selenium	<	7	ug/L	U	5/17/2019 9:19	5/17/2019 10:54	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7782492	Selenium	<	7	ug/L	U	5/17/2019 9:31	5/17/2019 10:55	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7782492	Selenium	<	7	ug/L	U	5/17/2019 9:31	5/17/2019 10:55	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7782492	Selenium	<	7	ug/L	U	5/17/2019 9:40	5/17/2019 10:57	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7782492	Selenium	<	7	ug/L	U	5/17/2019 9:40	5/17/2019 10:57	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440-28-0	Thallium	<	2	ug/L	U	5/17/2019 9:13	5/17/2019 10:53	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440-28-0	Thallium	<	2	ug/L	U	5/17/2019 9:13	5/17/2019 10:53	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440-28-0	Thallium	<	2	ug/L	U	5/17/2019 9:19	5/17/2019 10:54	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440-28-0	Thallium	<	2	ug/L	U	5/17/2019 9:19	5/17/2019 10:54	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440-28-0	Thallium	<	2	ug/L	U	5/17/2019 9:31	5/17/2019 10:55	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440-28-0	Thallium	<	2	ug/L	U	5/17/2019 9:31	5/17/2019 10:55	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440-28-0	Thallium	<	2	ug/L	U	5/17/2019 9:40	5/17/2019 10:57	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440-28-0	Thallium	<	2	ug/L	U	5/17/2019 9:40	5/17/2019 10:57	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440-42-8	Boron		695	ug/L		5/20/2019 13:41	5/23/2019 14:13	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I20190118	7440-42-8	Boron	<	200	ug/L	U	5/20/2019 13:41	5/23/2019 14:13	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440-42-8	Boron	<	200	ug/L	U	5/20/2019 13:52	5/23/2019 14:15	1

2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I20190118	7440-42-8	Boron	<	200	ug/L	U	5/20/2019 13:52	5/23/2019 14:15	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440-42-8	Boron	<	200	ug/L	U	5/20/2019 13:57	5/23/2019 14:27	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I20190118	7440-42-8	Boron	<	200	ug/L	U	5/20/2019 13:57	5/23/2019 14:27	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440-42-8	Boron	<	200	ug/L	U	5/20/2019 14:03	5/23/2019 14:30	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I20190118	7440-42-8	Boron	<	200	ug/L	U	5/20/2019 14:03	5/23/2019 14:30	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I2019011838		Cobalt Cor	<	50	ug/L	U	5/20/2019 13:41	5/23/2019 14:12	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I2019011838		Chromium Compounc		191	ug/L		5/20/2019 13:41	5/23/2019 14:10	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I2019011838		Beryllium Compounds		6	ug/L		5/20/2019 13:41	5/23/2019 14:10	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I2019011838		Beryllium	<	1	ug/L	U	5/20/2019 13:41	5/23/2019 14:12	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I2019011838		Cobalt Compounds		76	ug/L		5/20/2019 13:41	5/23/2019 14:10	1
2166	2	5/13/2019	12:40	515	Water	Ground Water	Hoff MW-A	I2019011838		Chromium	<	50	ug/L	U	5/20/2019 13:41	5/23/2019 14:12	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I2019011839		Cobalt Cor	<	50	ug/L	U	5/20/2019 13:52	5/23/2019 14:15	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I2019011839		Chromium Compounc		68	ug/L		5/20/2019 13:52	5/23/2019 14:14	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I2019011839		Beryllium Compounds		2	ug/L		5/20/2019 13:52	5/23/2019 14:14	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I2019011839		Beryllium	<	1	ug/L	U	5/20/2019 13:52	5/23/2019 14:15	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I2019011839		Cobalt Cor	<	50	ug/L	U	5/20/2019 13:52	5/23/2019 14:14	1
2166	3	5/13/2019	15:40	515	Water	Ground Water	Hoff MW-B	I2019011839		Chromium	<	50	ug/L	U	5/20/2019 13:52	5/23/2019 14:15	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I2019011840		Cobalt Cor	<	50	ug/L	U	5/20/2019 13:57	5/23/2019 14:24	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I2019011840		Chromium	<	50	ug/L	U	5/20/2019 13:57	5/23/2019 14:21	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I2019011840		Beryllium	<	1	ug/L	U	5/20/2019 13:57	5/23/2019 14:20	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I2019011840		Beryllium	<	1	ug/L	U	5/20/2019 13:57	5/23/2019 14:24	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I2019011840		Cobalt Cor	<	50	ug/L	U	5/20/2019 13:57	5/23/2019 14:21	1
2166	4	5/14/2019	11:00	515	Water	Ground Water	Hoff MW-13	I2019011840		Chromium	<	50	ug/L	U	5/20/2019 13:57	5/23/2019 14:25	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I2019011841		Cobalt Cor	<	50	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I2019011841		Chromium	<	50	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I2019011841		Beryllium	<	1	ug/L	U	5/20/2019 14:03	5/23/2019 14:27	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I2019011841		Beryllium	<	1	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I2019011841		Cobalt Cor	<	50	ug/L	U	5/20/2019 14:03	5/23/2019 14:27	1
2166	5	5/14/2019	12:00	515	Water	Ground Water	DUP-051419	I2019011841		Chromium	<	50	ug/L	U	5/20/2019 14:03	5/23/2019 14:29	1
2166	1	5/13/2019	10:00	DIOXA	Water	Ground Water	TB-051390	O2019003	123911	1,4-Dioxane		2.5	ug/L	U	5/25/2019 2:00	6/4/2019 8:34	1
2166	2	5/13/2019	12:40	DIOXA	Water	Ground Water	Hoff MW-A	O2019003	123911	1,4-Dioxane		14.1	ug/L		5/25/2019 2:00	6/4/2019 8:34	1
2166	3	5/13/2019	15:40	DIOXA	Water	Ground Water	Hoff MW-B	O2019003	123911	1,4-Dioxane		2.5	ug/L	U	5/25/2019 2:00	6/4/2019 8:34	1
2166	4	5/14/2019	11:00	DIOXA	Water	Ground Water	Hoff MW-13	O2019003	123911	1,4-Dioxane		63.4	ug/L		5/25/2019 2:00	6/4/2019 8:34	1
2166	5	5/14/2019	12:00	DIOXA	Water	Ground Water	DUP-051419	O2019003	123911	1,4-Dioxane		62.2	ug/L		5/25/2019 2:00	6/4/2019 8:34	1
2166	6	5/14/2019	14:30	DIOXA	Water	Ground Water	FB-051419	O2019003	123911	1,4-Dioxane		2.5	ug/L	U	5/25/2019 2:00	6/4/2019 8:34	1
2166	1	5/13/2019	10:00	DIOXA	Water	Ground Water	TB-051392	O2019003364		EXTRACTED DATE		5222019	Day		5/25/2019 2:00	6/4/2019 8:34	1
2166	2	5/13/2019	12:40	DIOXA	Water	Ground Water	Hoff MW-A	O2019003365		EXTRACTED DATE		5222019	Day		5/25/2019 2:00	6/4/2019 8:34	1
2166	3	5/13/2019	15:40	DIOXA	Water	Ground Water	Hoff MW-B	O2019003366		EXTRACTED DATE		5222019	Day		5/25/2019 2:00	6/4/2019 8:34	1
2166	4	5/14/2019	11:00	DIOXA	Water	Ground Water	Hoff MW-13	O2019003367		EXTRACTED DATE		5222019	Day		5/25/2019 2:00	6/4/2019 8:34	1
2166	5	5/14/2019	12:00	DIOXA	Water	Ground Water	DUP-051419	O2019003368		EXTRACTED DATE		5222019	Day		5/25/2019 2:00	6/4/2019 8:34	1
2166	6	5/14/2019	14:30	DIOXA	Water	Ground Water	FB-051419	O2019003369		EXTRACTED DATE		5222019	Day		5/25/2019 2:00	6/4/2019 8:34	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	50328	Benzo(a)pyrene		1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	50328	Benzo(a)pyrene		2	ug/L		5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	50328	Benzo(a)pyrene		1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	50328	Benzo(a)pyrene		1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	51285	2,4-Dinitrophenol		12.7	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	51285	2,4-Dinitrophenol		12.9	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	51285	2,4-Dinitrophenol		13	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	51285	2,4-Dinitrophenol		12.8	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	53703	Dibenzo(a,h)anthrace		1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	53703	Dibenzo(a,h)anthrace		1.3	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	53703	Dibenzo(a,h)anthrace		1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	53703	Dibenzo(a,h)anthrace		1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	53963	2-Acetylaminofluoren		2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	53963	2-Acetylaminofluoren		2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	53963	2-Acetylaminofluoren		2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	53963	2-Acetylaminofluoren		2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	55185	N-Nitrosodiethylamin		2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	55185	N-Nitrosodiethylamin		2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	55185	N-Nitrosodiethylamin		2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	55185	N-Nitrosodiethylamin		2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	56382	Ethyl Parathion		2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	56382	Ethyl Parathion		2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	56382	Ethyl Parathion		2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	56382	Ethyl Parathion		2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	56553	Benz(a)anthracene		1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	56553	Benz(a)anthracene		1.8	ug/L		5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	56553	Benz(a)anthracene		1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	56553	Benz(a)anthracene		1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	58902	2,3,4,6-Tetrachloroph		2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	58902	2,3,4,6-Tetrachloroph		2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	58902	2,3,4,6-Tetrachloroph		2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	58902	2,3,4,6-Tetrachloroph		2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	59507	4-Chloro-3-methylphe		2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	59507	4-Chloro-3-methylphe		2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	59507	4-Chloro-3-methylphe		2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	59507	4-Chloro-3-methylphe		2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	59892	N-Nitrosomorpholine		2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	59892	N-Nitrosomorpholine		2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	59892	N-Nitrosomorpholine		2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	59892	N-Nitrosomorpholine		2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	60117	Dimethylaminoazobe		1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1

2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	60117	Dimethylaminoazobe	1.3	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	60117	Dimethylaminoazobe	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	60117	Dimethylaminoazobe	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	60515	Dimethoate	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	60515	Dimethoate	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	60515	Dimethoate	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	60515	Dimethoate	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	62500	Ethyl methanesulfona	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	62500	Ethyl methanesulfona	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	62500	Ethyl methanesulfona	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	62500	Ethyl methanesulfona	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	62533	Aniline	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	62533	Aniline	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	62533	Aniline	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	62533	Aniline	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	62759	N-Nitrosodimethylam	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	62759	N-Nitrosodimethylam	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	62759	N-Nitrosodimethylam	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	62759	N-Nitrosodimethylam	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	66273	Methyl Methanesulfo	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	66273	Methyl Methanesulfo	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	66273	Methyl Methanesulfo	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	66273	Methyl Methanesulfo	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	67721	Hexachloroethane	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	67721	Hexachloroethane	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	67721	Hexachloroethane	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	67721	Hexachloroethane	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	76017	Pentachlorethane	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	76017	Pentachlorethane	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	76017	Pentachlorethane	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	76017	Pentachlorethane	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	77474	Hexachlorocyclopenta	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	77474	Hexachlorocyclopenta	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	77474	Hexachlorocyclopenta	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	77474	Hexachlorocyclopenta	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	78591	Isophorone	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	78591	Isophorone	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	78591	Isophorone	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	78591	Isophorone	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	82688	Pentachloronitrobenz	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	82688	Pentachloronitrobenz	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	82688	Pentachloronitrobenz	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	82688	Pentachloronitrobenz	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	83329	Acenaphthene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	83329	Acenaphthene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	83329	Acenaphthene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	83329	Acenaphthene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	84662	Diethylphthalate	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	84662	Diethylphthalate	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	84662	Diethylphthalate	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	84662	Diethylphthalate	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	84742	Di-n-butylphthalate	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	84742	Di-n-butylphthalate	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	84742	Di-n-butylphthalate	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	84742	Di-n-butylphthalate	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	85018	Phenanthrene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	85018	Phenanthrene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	85018	Phenanthrene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	85018	Phenanthrene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	85687	Butylbenzylphthalate	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	85687	Butylbenzylphthalate	1.3	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	85687	Butylbenzylphthalate	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	85687	Butylbenzylphthalate	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	86737	Fluorene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	86737	Fluorene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	86737	Fluorene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	86737	Fluorene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	87650	2,6-Dichlorophenol	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	87650	2,6-Dichlorophenol	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	87650	2,6-Dichlorophenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	87650	2,6-Dichlorophenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	87683	Hexachlorobutadiene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	87683	Hexachlorobutadiene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	87683	Hexachlorobutadiene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	87683	Hexachlorobutadiene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	87865	Pentachlorophenol	5.1	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	87865	Pentachlorophenol	5.2	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	87865	Pentachlorophenol	5.2	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	87865	Pentachlorophenol	5.1	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	88062	2,4,6-Trichlorophenol	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	88062	2,4,6-Trichlorophenol	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	88062	2,4,6-Trichlorophenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1

2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	88062	2,4,6-Trichlorophenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	88744	2-Nitroaniline	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	Continuing calibration recoveries low. Results and/or reporting limits may be biased low.
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	88744	2-Nitroaniline	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	88744	2-Nitroaniline	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	Continuing calibration recoveries low. Results and/or reporting limits may be biased low.
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	88744	2-Nitroaniline	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	Continuing calibration recoveries low. Results and/or reporting limits may be biased low.
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	88755	2-Nitrophenol	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	88755	2-Nitrophenol	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	88755	2-Nitrophenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	88755	2-Nitrophenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	90120	1-Methylnaphthalene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	90120	1-Methylnaphthalene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	90120	1-Methylnaphthalene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	90120	1-Methylnaphthalene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	90131	1-Chloronaphthalene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	90131	1-Chloronaphthalene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	90131	1-Chloronaphthalene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	90131	1-Chloronaphthalene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	91203	Naphthalene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	91203	Naphthalene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	91203	Naphthalene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	91203	Naphthalene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	91576	2-Methylnaphthalene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	91576	2-Methylnaphthalene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	91576	2-Methylnaphthalene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	91576	2-Methylnaphthalene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	91587	2-Chloronaphthalene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	91587	2-Chloronaphthalene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	91587	2-Chloronaphthalene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	91587	2-Chloronaphthalene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	91941	3,3'-Dichlorobenzidin	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	91941	3,3'-Dichlorobenzidin	1.3	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	91941	3,3'-Dichlorobenzidin	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	91941	3,3'-Dichlorobenzidin	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	92671	4-Aminobiphenyl	5.1	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	Continuing calibration recoveries low. Results and/or reporting limits may be biased low.
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	92671	4-Aminobiphenyl	5.2	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	Continuing calibration recoveries low. Results and/or reporting limits may be biased low.
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	92671	4-Aminobiphenyl	5.2	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	Continuing calibration recoveries low. Results and/or reporting limits may be biased low.
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	92671	4-Aminobiphenyl	5.1	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	Continuing calibration recoveries low. Results and/or reporting limits may be biased low.
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	94597	Safrole	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	94597	Safrole	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	94597	Safrole	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	94597	Safrole	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	95487	2-Methylphenol	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	95487	2-Methylphenol	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	95487	2-Methylphenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	95487	2-Methylphenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	95534	o-Toluidine	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	95534	o-Toluidine	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	95534	o-Toluidine	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	95534	o-Toluidine	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	95578	2-Chlorophenol	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	95578	2-Chlorophenol	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	95578	2-Chlorophenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	95578	2-Chlorophenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	95943	1,2,4,5-Tetrachlorobe	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	95943	1,2,4,5-Tetrachlorobe	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	95943	1,2,4,5-Tetrachlorobe	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	95943	1,2,4,5-Tetrachlorobe	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	95954	2,4,5-Trichlorophenol	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	95954	2,4,5-Trichlorophenol	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	95954	2,4,5-Trichlorophenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	95954	2,4,5-Trichlorophenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	98555	a-Terpineol	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	98555	a-Terpineol	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	98555	a-Terpineol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	98555	a-Terpineol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	98862	Acetophenone	5.1	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	98862	Acetophenone	5.2	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	98862	Acetophenone	5.2	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	98862	Acetophenone	5.1	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	98953	Nitrobenzene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	98953	Nitrobenzene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	98953	Nitrobenzene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	98953	Nitrobenzene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	99092	3-Nitroaniline	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	99092	3-Nitroaniline	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	99092	3-Nitroaniline	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	99092	3-Nitroaniline	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	99558	5-Nitro-o-toluidine	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	99558	5-Nitro-o-toluidine	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	99558	5-Nitro-o-toluidine	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	99558	5-Nitro-o-toluidine	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	99650	1,3-Dinitrobenzene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	

2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	99650	1,3-Dinitrobenzene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	99650	1,3-Dinitrobenzene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	99650	1,3-Dinitrobenzene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	100016	4-Nitroaniline	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	100016	4-Nitroaniline	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	100016	4-Nitroaniline	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	100016	4-Nitroaniline	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	100027	4-Nitrophenol	12.7	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	100027	4-Nitrophenol	12.9	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	100027	4-Nitrophenol	13	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	100027	4-Nitrophenol	12.8	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	100516	Benzyl alcohol	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	100516	Benzyl alcohol	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	100516	Benzyl alcohol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	100516	Benzyl alcohol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	100754	N-nitrosopiperidine	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	100754	N-nitrosopiperidine	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	100754	N-nitrosopiperidine	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	100754	N-nitrosopiperidine	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	101553	4-Bromophenyl-phen	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	101553	4-Bromophenyl-phen	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	101553	4-Bromophenyl-phen	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	101553	4-Bromophenyl-phen	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	105679	2,4-Dimethylphenol	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	105679	2,4-Dimethylphenol	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	105679	2,4-Dimethylphenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	105679	2,4-Dimethylphenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	106478	4-Chloroaniline	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	106478	4-Chloroaniline	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	106478	4-Chloroaniline	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	106478	4-Chloroaniline	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	108952	Phenol	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	108952	Phenol	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	108952	Phenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	108952	Phenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	109068	2-Picoline (2-Methylp	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	109068	2-Picoline (2-Methylp	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	109068	2-Picoline (2-Methylp	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	109068	2-Picoline (2-Methylp	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	110861	Pyridine	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	110861	Pyridine	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	110861	Pyridine	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	110861	Pyridine	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	111444	bis(2-Chloroethyl)eth	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	111444	bis(2-Chloroethyl)eth	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	111444	bis(2-Chloroethyl)eth	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	111444	bis(2-Chloroethyl)eth	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	111911	bis(2-Chloroethoxy)m	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	111911	bis(2-Chloroethoxy)m	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	111911	bis(2-Chloroethoxy)m	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	111911	bis(2-Chloroethoxy)m	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	117817	bis(2-Ethylhexyl)phth	10.2	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	117817	bis(2-Ethylhexyl)phth	10.3	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	117817	bis(2-Ethylhexyl)phth	10.4	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	117817	bis(2-Ethylhexyl)phth	10.2	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	117840	Di-n-octylphthalate	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	117840	Di-n-octylphthalate	1.3	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	117840	Di-n-octylphthalate	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	117840	Di-n-octylphthalate	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	118741	Hexachlorobenzene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	118741	Hexachlorobenzene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	118741	Hexachlorobenzene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	118741	Hexachlorobenzene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	120127	Anthracene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	120127	Anthracene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	120127	Anthracene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	120127	Anthracene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	120581	Isosafrole	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	120581	Isosafrole	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	120581	Isosafrole	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	120581	Isosafrole	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	120821	1,2,4-Trichlorobenzer	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	120821	1,2,4-Trichlorobenzer	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	120821	1,2,4-Trichlorobenzer	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	120821	1,2,4-Trichlorobenzer	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	120832	2,4-Dichlorophenol	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	120832	2,4-Dichlorophenol	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	120832	2,4-Dichlorophenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	120832	2,4-Dichlorophenol	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	121142	2,4-Dinitrotoluene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	121142	2,4-Dinitrotoluene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	121142	2,4-Dinitrotoluene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		

2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	121142	2,4-Dinitrotoluene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	122394	Diphenylamine&n-Nit	5.1	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	122394	Diphenylamine&n-Nit	5.2	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	122394	Diphenylamine&n-Nit	5.2	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	122394	Diphenylamine&n-Nit	5.1	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	126681	O,O,O-Triethylphosph	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	126681	O,O,O-Triethylphosph	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	126681	O,O,O-Triethylphosph	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	126681	O,O,O-Triethylphosph	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	129000	Pyrene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	129000	Pyrene	3.9	ug/L		5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	129000	Pyrene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	129000	Pyrene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	130154	1,4-Naphthoquinone	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	Continuing calibration recoveries low. Results and/or reporting limits may be biased low.
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	130154	1,4-Naphthoquinone	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	Continuing calibration recoveries low. Results and/or reporting limits may be biased low.
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	130154	1,4-Naphthoquinone	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	Continuing calibration recoveries low. Results and/or reporting limits may be biased low.
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	130154	1,4-Naphthoquinone	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	Continuing calibration recoveries low. Results and/or reporting limits may be biased low.
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	131113	Dimethylphthalate	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	131113	Dimethylphthalate	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	131113	Dimethylphthalate	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	131113	Dimethylphthalate	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	132649	Dibenzofuran	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	132649	Dibenzofuran	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	132649	Dibenzofuran	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	132649	Dibenzofuran	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	140578	Aramite	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	140578	Aramite	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	140578	Aramite	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	140578	Aramite	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	191242	Benzo(g,h,i)perylene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	191242	Benzo(g,h,i)perylene	1.4	ug/L		5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	191242	Benzo(g,h,i)perylene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	191242	Benzo(g,h,i)perylene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	193395	Indeno-1,2,3-cd-pyrer	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	193395	Indeno-1,2,3-cd-pyrer	1.4	ug/L		5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	193395	Indeno-1,2,3-cd-pyrer	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	193395	Indeno-1,2,3-cd-pyrer	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	205992	Benzo(b)fluoranthene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	Includes benzo(j)fluoranthene
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	205992	Benzo(b)fluoranthene	2.9	ug/L		5/31/2019 2:00	6/10/2019 14:45	1	Includes benzo(j)fluoranthene
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	205992	Benzo(b)fluoranthene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	Includes benzo(j)fluoranthene
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	205992	Benzo(b)fluoranthene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	Includes benzo(j)fluoranthene
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	206440	Fluoranthene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	206440	Fluoranthene	4.2	ug/L		5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	206440	Fluoranthene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	206440	Fluoranthene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	207089	Benzo(k)fluoranthene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	207089	Benzo(k)fluoranthene	1.3	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	207089	Benzo(k)fluoranthene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	207089	Benzo(k)fluoranthene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	208968	Acenaphthylene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	208968	Acenaphthylene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	208968	Acenaphthylene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	208968	Acenaphthylene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	218019	Chrysene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	218019	Chrysene	2.4	ug/L		5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	218019	Chrysene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	218019	Chrysene	1.3	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	297972	Thionazine	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	297972	Thionazine	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	297972	Thionazine	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	297972	Thionazine	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	298000	Methyl Parathion	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	298000	Methyl Parathion	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	298000	Methyl Parathion	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	298000	Methyl Parathion	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	298022	Phorate	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	298022	Phorate	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	298022	Phorate	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	298022	Phorate	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	298044	Disulfoton	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	298044	Disulfoton	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	298044	Disulfoton	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	298044	Disulfoton	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	465736	Isodrin	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	465736	Isodrin	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	465736	Isodrin	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	465736	Isodrin	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	510156	Chlorobenzilate	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	510156	Chlorobenzilate	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	510156	Chlorobenzilate	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	510156	Chlorobenzilate	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	534521	4,6-Dinitro-2-methylp	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	

2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	534521	4,6-Dinitro-2-methylp	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	534521	4,6-Dinitro-2-methylp	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	534521	4,6-Dinitro-2-methylp	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	606202	2,6-Dinitrotoluene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	606202	2,6-Dinitrotoluene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	606202	2,6-Dinitrotoluene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	606202	2,6-Dinitrotoluene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	608935	Pentachlorobenzene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	608935	Pentachlorobenzene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	608935	Pentachlorobenzene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	608935	Pentachlorobenzene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	621647	N-Nitrosodipropylami	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	621647	N-Nitrosodipropylami	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	621647	N-Nitrosodipropylami	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	621647	N-Nitrosodipropylami	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	924163	N-Nitrosodibutylamin	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	924163	N-Nitrosodibutylamin	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	924163	N-Nitrosodibutylamin	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	924163	N-Nitrosodibutylamin	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	930552	N-Nitrosopyrrolidine	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	930552	N-Nitrosopyrrolidine	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	930552	N-Nitrosopyrrolidine	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	930552	N-Nitrosopyrrolidine	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	1319773	3&4-Methylphenol	5.1	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	1319773	3&4-Methylphenol	5.2	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	1319773	3&4-Methylphenol	5.2	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	1319773	3&4-Methylphenol	5.1	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	1888717	Hexachloropropene	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	1888717	Hexachloropropene	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	1888717	Hexachloropropene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	1888717	Hexachloropropene	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	2303164	Diallate (Cis & Trans)	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	2303164	Diallate (Cis & Trans)	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	2303164	Diallate (Cis & Trans)	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	2303164	Diallate (Cis & Trans)	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	3689245	Sulfotep	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	3689245	Sulfotep	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	3689245	Sulfotep	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	3689245	Sulfotep	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	7005723	4-Chlorophenyl-phen	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	7005723	4-Chlorophenyl-phen	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	7005723	4-Chlorophenyl-phen	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	7005723	4-Chlorophenyl-phen	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	10595956	N-Nitrosomethylethy	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	10595956	N-Nitrosomethylethy	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	10595956	N-Nitrosomethylethy	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	10595956	N-Nitrosomethylethy	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	23950585	Pronamide	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	23950585	Pronamide	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003	23950585	Pronamide	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	23950585	Pronamide	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003	108-60-1	2,2'-oxybis(1-Chlorop	2.5	ug/L	U	5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003	108-60-1	2,2'-oxybis(1-Chlorop	2.6	ug/L	U	5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	108-60-1	2,2'-oxybis(1-Chlorop	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003	108-60-1	2,2'-oxybis(1-Chlorop	2.6	ug/L	U	5/30/2019 2:00	6/10/2019 12:30	1		
2166	2	5/13/2019	12:40	SV-SW	Water	Ground Water	Hoff MW-A	O2019003370		EXTRACTED DATE	5202019	Day		5/30/2019 2:00	6/10/2019 12:10	1		
2166	3	5/13/2019	15:40	SV-SW	Water	Ground Water	Hoff MW-B	O2019003371		EXTRACTED DATE	5202019	Day		5/31/2019 2:00	6/10/2019 14:45	1		
2166	4	5/14/2019	11:00	SV-SW	Water	Ground Water	Hoff MW-13	O2019003372		EXTRACTED DATE	5202019	Day		5/30/2019 2:00	6/10/2019 12:25	1		
2166	5	5/14/2019	12:00	SV-SW	Water	Ground Water	DUP-051419	O2019003373		EXTRACTED DATE	5202019	Day		5/30/2019 2:00	6/10/2019 12:30	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051337	O2019003	56235	Carbon tetrachloride	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	56235	Carbon tetrachloride	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	56235	Carbon tetrachloride	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	56235	Carbon tetrachloride	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	56235	Carbon tetrachloride	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	56235	Carbon tetrachloride	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051356	O2019003	67641	Acetone	5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	67641	Acetone	31.3	ug/L		5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	67641	Acetone	8.8	ug/L	B	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	67641	Acetone	5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	67641	Acetone	5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	67641	Acetone	5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051348	O2019003	67663	Chloroform	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	67663	Chloroform	1.9	ug/L		5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	67663	Chloroform	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	67663	Chloroform	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	67663	Chloroform	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	67663	Chloroform	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051336	O2019003	71432	Benzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	71432	Benzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	71432	Benzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	71432	Benzene	0.75	ug/L		5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	71432	Benzene	0.64	ug/L		5/17/2019 2:00	5/29/2019 15:12	1		

2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	71432	Benzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051376	O2019003	71556	1,1,1-Trichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	71556	1,1,1-Trichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	71556	1,1,1-Trichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	71556	1,1,1-Trichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	71556	1,1,1-Trichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	71556	1,1,1-Trichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051377	O2019003	74839	Bromomethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	74839	Bromomethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	74839	Bromomethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	74839	Bromomethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	74839	Bromomethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	74839	Bromomethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051378	O2019003	74873	Chloromethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	74873	Chloromethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	74873	Chloromethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	74873	Chloromethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	74873	Chloromethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	74873	Chloromethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051349	O2019003	74953	Dibromomethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	74953	Dibromomethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	74953	Dibromomethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	74953	Dibromomethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	74953	Dibromomethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	74953	Dibromomethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051326	O2019003	74975	Bromochloromethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	74975	Bromochloromethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	74975	Bromochloromethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	74975	Bromochloromethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	74975	Bromochloromethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	74975	Bromochloromethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051379	O2019003	75003	Chloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	75003	Chloroethane	0.73	ug/L		5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	75003	Chloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	75003	Chloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	75003	Chloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	75003	Chloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051319	O2019003	75014	Chloroethene (vinyl c	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	75014	Chloroethene (vinyl c	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	75014	Chloroethene (vinyl c	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	75014	Chloroethene (vinyl c	1.8	ug/L		5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	75014	Chloroethene (vinyl c	1.7	ug/L		5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	75014	Chloroethene (vinyl c	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051380	O2019003	75092	Dichloromethane	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	75092	Dichloromethane	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	75092	Dichloromethane	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	75092	Dichloromethane	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	75092	Dichloromethane	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	75092	Dichloromethane	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051327	O2019003	75150	Carbon disulfide	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	75150	Carbon disulfide	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	75150	Carbon disulfide	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	75150	Carbon disulfide	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	75150	Carbon disulfide	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	75150	Carbon disulfide	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051350	O2019003	75252	Bromoform	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	75252	Bromoform	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	75252	Bromoform	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	75252	Bromoform	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	75252	Bromoform	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	75252	Bromoform	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051357	O2019003	75274	Bromodichlorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	75274	Bromodichlorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	75274	Bromodichlorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	75274	Bromodichlorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	75274	Bromodichlorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	75274	Bromodichlorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051381	O2019003	75343	1,1-Dichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	75343	1,1-Dichloroethane	25.4	ug/L		5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	75343	1,1-Dichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	75343	1,1-Dichloroethane	42.9	ug/L		5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	75343	1,1-Dichloroethane	43.4	ug/L		5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	75343	1,1-Dichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051351	O2019003	75354	1,1-Dichloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	75354	1,1-Dichloroethene	0.7	ug/L		5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	75354	1,1-Dichloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	75354	1,1-Dichloroethene	8.4	ug/L		5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	75354	1,1-Dichloroethene	8.5	ug/L		5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	75354	1,1-Dichloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051388	O2019003	75650	t-Butyl alcohol	5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	75650	t-Butyl alcohol	5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	75650	t-Butyl alcohol	5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1

2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	75650	t-Butyl alcohol	5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	75650	t-Butyl alcohol	5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	75650	t-Butyl alcohol	5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051328	O2019003	75694	Trichlorofluorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	75694	Trichlorofluorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	75694	Trichlorofluorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	75694	Trichlorofluorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	75694	Trichlorofluorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	75694	Trichlorofluorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051352	O2019003	75718	Dichlorodifluorometh	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	75718	Dichlorodifluorometh	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	75718	Dichlorodifluorometh	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	75718	Dichlorodifluorometh	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	75718	Dichlorodifluorometh	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	75718	Dichlorodifluorometh	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051382	O2019003	78875	1,2-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	78875	1,2-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	78875	1,2-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	78875	1,2-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	78875	1,2-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	78875	1,2-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051383	O2019003	78933	2-Butanone	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	78933	2-Butanone	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	78933	2-Butanone	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	78933	2-Butanone	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	78933	2-Butanone	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	78933	2-Butanone	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051329	O2019003	79005	1,1,2-Trichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	79005	1,1,2-Trichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	79005	1,1,2-Trichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	79005	1,1,2-Trichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	79005	1,1,2-Trichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	79005	1,1,2-Trichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051384	O2019003	79016	Trichloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	79016	Trichloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	79016	Trichloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	79016	Trichloroethene	21	ug/L		5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	79016	Trichloroethene	21.3	ug/L		5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	79016	Trichloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051358	O2019003	79345	1,1,2,2-Tetrachloroetl	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	79345	1,1,2,2-Tetrachloroetl	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	79345	1,1,2,2-Tetrachloroetl	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	79345	1,1,2,2-Tetrachloroetl	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	79345	1,1,2,2-Tetrachloroetl	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	79345	1,1,2,2-Tetrachloroetl	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051334	O2019003	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051331	O2019003	87683	Hexachlorobutadiene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	87683	Hexachlorobutadiene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	87683	Hexachlorobutadiene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	87683	Hexachlorobutadiene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	87683	Hexachlorobutadiene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	87683	Hexachlorobutadiene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051332	O2019003	91203	Naphthalene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	91203	Naphthalene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	91203	Naphthalene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	91203	Naphthalene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	91203	Naphthalene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	91203	Naphthalene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051333	O2019003	95476	o-Xylene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	95476	o-Xylene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	95476	o-Xylene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	95476	o-Xylene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	95476	o-Xylene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	95476	o-Xylene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051361	O2019003	95498	o-Chlorotoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	95498	o-Chlorotoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	95498	o-Chlorotoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	95498	o-Chlorotoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	95498	o-Chlorotoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	95498	o-Chlorotoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051335	O2019003	95501	1,2-Dichlorobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	95501	1,2-Dichlorobenzene	3	ug/L		5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	95501	1,2-Dichlorobenzene	2	ug/L		5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	95501	1,2-Dichlorobenzene	17.5	ug/L		5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	95501	1,2-Dichlorobenzene	17.9	ug/L		5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	95501	1,2-Dichlorobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051365	O2019003	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	

2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051366	O2019003	96128	1,2-Dibromo-3-chloro	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	96128	1,2-Dibromo-3-chloro	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	96128	1,2-Dibromo-3-chloro	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	96128	1,2-Dibromo-3-chloro	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	96128	1,2-Dibromo-3-chloro	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	96128	1,2-Dibromo-3-chloro	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051359	O2019003	96184	1,2,3-Trichloropropar	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	96184	1,2,3-Trichloropropar	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	96184	1,2,3-Trichloropropar	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	96184	1,2,3-Trichloropropar	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	96184	1,2,3-Trichloropropar	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	96184	1,2,3-Trichloropropar	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051385	O2019003	98066	Tert-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	98066	Tert-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	98066	Tert-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	98066	Tert-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	98066	Tert-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	98066	Tert-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051364	O2019003	98566	PCTFB	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	98566	PCTFB	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	98566	PCTFB	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	98566	PCTFB	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	98566	PCTFB	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	98566	PCTFB	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051386	O2019003	98828	Isopropylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	98828	Isopropylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	98828	Isopropylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	98828	Isopropylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	98828	Isopropylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	98828	Isopropylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051360	O2019003	99876	4-Isopropyltoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	99876	4-Isopropyltoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	99876	4-Isopropyltoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	99876	4-Isopropyltoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	99876	4-Isopropyltoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	99876	4-Isopropyltoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051367	O2019003	100414	Ethylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	100414	Ethylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	100414	Ethylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	100414	Ethylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	100414	Ethylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	100414	Ethylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051340	O2019003	100425	Styrene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	100425	Styrene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	100425	Styrene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	100425	Styrene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	100425	Styrene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	100425	Styrene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051321	O2019003	103651	n-Propylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	103651	n-Propylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	103651	n-Propylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	103651	n-Propylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	103651	n-Propylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	103651	n-Propylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051342	O2019003	104518	n-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	104518	n-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	104518	n-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	104518	n-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	104518	n-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	104518	n-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051368	O2019003	106434	p-Chlorotoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	106434	p-Chlorotoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	106434	p-Chlorotoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	106434	p-Chlorotoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	106434	p-Chlorotoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	106434	p-Chlorotoluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051322	O2019003	106467	1,4-Dichlorobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	106467	1,4-Dichlorobenzene	0.54	ug/L		5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	106467	1,4-Dichlorobenzene	0.56	ug/L		5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	106467	1,4-Dichlorobenzene	3.1	ug/L		5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	106467	1,4-Dichlorobenzene	3.3	ug/L		5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	106467	1,4-Dichlorobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051363	O2019003	106934	1,2-Dibromoethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	106934	1,2-Dibromoethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	106934	1,2-Dibromoethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	106934	1,2-Dibromoethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	106934	1,2-Dibromoethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1

2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	106934	1,2-Dibromoethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051387	O2019003	107062	1,2-Dichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	107062	1,2-Dichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	107062	1,2-Dichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	107062	1,2-Dichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	107062	1,2-Dichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	107062	1,2-Dichloroethane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051323	O2019003	108054	Vinyl Acetate	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	108054	Vinyl Acetate	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	108054	Vinyl Acetate	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	108054	Vinyl Acetate	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	108054	Vinyl Acetate	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	108054	Vinyl Acetate	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051369	O2019003	108101	4-Methyl-2-pentanon	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	108101	4-Methyl-2-pentanon	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	108101	4-Methyl-2-pentanon	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	108101	4-Methyl-2-pentanon	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	108101	4-Methyl-2-pentanon	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	108101	4-Methyl-2-pentanon	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051370	O2019003	108383	m/p-Xylenes	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	108383	m/p-Xylenes	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	108383	m/p-Xylenes	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	108383	m/p-Xylenes	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	108383	m/p-Xylenes	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	108383	m/p-Xylenes	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051354	O2019003	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051343	O2019003	108861	Bromobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	108861	Bromobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	108861	Bromobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	108861	Bromobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	108861	Bromobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	108861	Bromobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051324	O2019003	108883	Toluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	108883	Toluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	108883	Toluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	108883	Toluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	108883	Toluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	108883	Toluene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051344	O2019003	108907	Chlorobenzene	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	108907	Chlorobenzene	1.7	ug/L		5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	108907	Chlorobenzene	7.1	ug/L		5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	108907	Chlorobenzene	16.1	ug/L		5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	108907	Chlorobenzene	16.6	ug/L		5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	108907	Chlorobenzene	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051345	O2019003	109999	Tetrahydrofuran	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	109999	Tetrahydrofuran	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	109999	Tetrahydrofuran	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	109999	Tetrahydrofuran	1.2	ug/L		5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	109999	Tetrahydrofuran	1.2	ug/L		5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	109999	Tetrahydrofuran	1	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051325	O2019003	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051330	O2019003	124481	Dibromochlorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	124481	Dibromochlorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	124481	Dibromochlorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	124481	Dibromochlorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	124481	Dibromochlorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	124481	Dibromochlorometha	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051371	O2019003	127184	Tetrachloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	127184	Tetrachloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	127184	Tetrachloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	127184	Tetrachloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	127184	Tetrachloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	127184	Tetrachloroethene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051372	O2019003	135988	Sec-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	135988	Sec-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	135988	Sec-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	135988	Sec-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1	
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	135988	Sec-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1	
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	135988	Sec-Butylbenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051373	O2019003	142289	1,3-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1	
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	142289	1,3-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	142289	1,3-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1	

2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	142289	1,3-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	142289	1,3-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	142289	1,3-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051353	O2019003	156592	cis-1,2-Dichloroethen	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	156592	cis-1,2-Dichloroethen	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	156592	cis-1,2-Dichloroethen	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	156592	cis-1,2-Dichloroethen	10.4	ug/L		5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	156592	cis-1,2-Dichloroethen	10.8	ug/L		5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	156592	cis-1,2-Dichloroethen	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051374	O2019003	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051389	O2019003	540885	tert-Butyl Acetate	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	540885	tert-Butyl Acetate	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	540885	tert-Butyl Acetate	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	540885	tert-Butyl Acetate	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	540885	tert-Butyl Acetate	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	540885	tert-Butyl Acetate	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.	
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051362	O2019003	541731	1,3-Dichlorobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	541731	1,3-Dichlorobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	541731	1,3-Dichlorobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	541731	1,3-Dichlorobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	541731	1,3-Dichlorobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	541731	1,3-Dichlorobenzene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051375	O2019003	563586	1,1-Dichloropropene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	563586	1,1-Dichloropropene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	563586	1,1-Dichloropropene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	563586	1,1-Dichloropropene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	563586	1,1-Dichloropropene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	563586	1,1-Dichloropropene	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051346	O2019003	591786	2-Hexanone	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	591786	2-Hexanone	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	591786	2-Hexanone	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	591786	2-Hexanone	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	591786	2-Hexanone	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	591786	2-Hexanone	2.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051355	O2019003	594207	2,2-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	594207	2,2-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	594207	2,2-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	594207	2,2-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	594207	2,2-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	594207	2,2-Dichloropropane	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051347	O2019003	630206	1,1,1,2-Tetrachloroetl	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	630206	1,1,1,2-Tetrachloroetl	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	630206	1,1,1,2-Tetrachloroetl	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	630206	1,1,1,2-Tetrachloroetl	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	630206	1,1,1,2-Tetrachloroetl	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	630206	1,1,1,2-Tetrachloroetl	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051339	O2019003	1330207	Total Xylenes	0	ug/L		5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	1330207	Total Xylenes	0	ug/L		5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	1330207	Total Xylenes	0	ug/L		5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	1330207	Total Xylenes	0	ug/L		5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	1330207	Total Xylenes	0	ug/L		5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	1330207	Total Xylenes	0	ug/L		5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051338	O2019003	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	1634044	Methyl-tert-butyl Eth	0.53	ug/L		5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	1634044	Methyl-tert-butyl Eth	0.54	ug/L		5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051320	O2019003	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051341	O2019003	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:11	1		
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:12	1		
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	5/17/2019 2:00	5/29/2019 15:14	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051391	O2019003343		EXTRACTED DATE				5/17/2019 2:00	5/29/2019 15:05	1		
2166	1	5/13/2019	10:00	VOASW	Water	Ground Water	TB-051393	O2019003343		EXTRACTED TIME				5/17/2019 2:00	5/29/2019 15:05	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003344		EXTRACTED DATE				5/17/2019 2:00	5/29/2019 15:09	1		
2166	2	5/13/2019	12:40	VOASW	Water	Ground Water	Hoff MW-A	O2019003344		EXTRACTED TIME				5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003345		EXTRACTED DATE				5/17/2019 2:00	5/29/2019 15:09	1		
2166	3	5/13/2019	15:40	VOASW	Water	Ground Water	Hoff MW-B	O2019003345		EXTRACTED TIME				5/17/2019 2:00	5/29/2019 15:09	1		
2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003346		EXTRACTED DATE				5/17/2019 2:00	5/29/2019 15:11	1		

2166	4	5/14/2019	11:00	VOASW	Water	Ground Water	Hoff MW-13	O2019003346	EXTRACTED TIME	5/17/2019 2:00	5/29/2019 15:11	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003347	EXTRACTED DATE	5/17/2019 2:00	5/29/2019 15:12	1
2166	5	5/14/2019	12:00	VOASW	Water	Ground Water	DUP-051419	O2019003347	EXTRACTED TIME	5/17/2019 2:00	5/29/2019 15:12	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003348	EXTRACTED DATE	5/17/2019 2:00	5/29/2019 15:14	1
2166	6	5/14/2019	14:30	VOASW	Water	Ground Water	FB-051419	O2019003348	EXTRACTED TIME	5/17/2019 2:00	5/29/2019 15:14	1

COLLECTO	SEQUENCI	DATE_COLLECTED	TIME_COL	STANDARI	SAMPLE_M	SAMPLE_I	LOCATION	ADDRESS_	LAB_SAMI	CHEMICAI	ANALYTE_	READING_	FINAL_AM	FINAL_AM	QUALITY_	DATE_ANALYZED	DATE_VERIFIED	DILUTION	VOID_SAM	FREE_FOR	STANDARD_COMMENT_DESC
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	108054	Vinyl Acetate		1	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	108883	Toluene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	74975	Bromochloromethane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	124481	Dibromochloromethane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	91203	Naphthalene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	95476	o-Xylene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	87616	1,2,3-Trichlorobenzer		0.69	ug/L		8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	71432	Benzene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	1330207	Total Xylenes		0	ug/L		8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	100425	Styrene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	108861	Bromobenzene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	108907	Chlorobenzene		1	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	591786	2-Hexanone		2.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	67663	Chloroform		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	74953	Dibromomethane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	75252	Bromoform		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	67641	Acetone		5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	98566	PCTFB		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	108383	m/p-Xylenes		1	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	74839	Bromomethane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	74873	Chloromethane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	75003	Chloroethane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	75092	Dichloromethane		1	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	78933	2-Butanone		2.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	79016	Trichloroethene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	DIOXA	Water	Ground W	HOFF TB-080519		O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/20/2019 2:00	8/26/2019 13:13	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	143		EXTRACTED DATE				8/7/2019 2:00	8/19/2019 14:19	1			
2166	1	8/5/2019	9:45	DIOXA	Water	Ground W	HOFF TB-080519		O2019006	157		EXTRACTED DATE	8152019	Day		8/20/2019 2:00	8/26/2019 13:13	1			
2166	1	8/5/2019	9:45	VOASW	Water	Ground W	HOFF TB-080519		O2019006	143		EXTRACTED TIME				8/7/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W	Hoff MW-2S		O2019006	319857	beta-BHC		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W	Hoff MW-2S		O2019006	51218452	Metolachlor		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W	Hoff MW-2S		O2019006	51877748	trans-Permethrin		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W	Hoff MW-2S		O2019006	54774457	cis-Permethrin		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W	Hoff MW-2S		O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W	Hoff MW-2S		O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W	Hoff MW-2S		O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W	Hoff MW-2S		O2019006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W	Hoff MW-2S		O2019006	108054	Vinyl Acetate		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W	Hoff MW-2S		O2019006	108883	Toluene		2.1	ug/L		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W	Hoff MW-2S		O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W	Hoff MW-2S		O2019006	74975	Bromochloromethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W	Hoff MW-2S		O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W	Hoff MW-2S		O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W	Hoff MW-2S		O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W	Hoff MW-2S		O2019006	124481	Dibromochloromethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	502	Water	Ground W	Hoff MW-2S		I2019019(	7440-42-8	Boron	<	200	ug/L	U	8/12/2019 12:53	8/15/2019 13:49	1			

2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	91203	Naphthalene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	95476	o-Xylene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	959988	Endosulfan I		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	21725462	Cyanazine		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	2675776	Chlorneb		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	319846	alpha-BHC		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	71432	Benzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	510156	Chlorobenzilate		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	5103719	alpha-Chlordane		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	53494705	Endrin Ketone		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440224	Silver	<	10	ug/L	U	8/12/2019 12:53	8/15/2019 13:48	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	21087649	Metribuzin		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	2921882	Dursban		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1	Mid-level LCS recovery low. Results may be biased low.		
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	33213659	Endosulfan II		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	50293	4,4'-DDT		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1	Mid-level LCS recovery low. Results may be biased low.		
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440439	Cadmium	<	10	ug/L	U	8/12/2019 12:53	8/15/2019 13:48	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019667		Cobalt Cor	<	50	ug/L	U	8/12/2019 12:53	8/15/2019 13:48	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	1330207	Total Xylenes		0	ug/L		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	100425	Styrene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440097	Potassium		3.02	mg/L		8/12/2019 12:53	8/15/2019 13:50	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7439965	Manganese		66	ug/L		8/12/2019 12:53	8/15/2019 13:49	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	1024573	Heptachlor Epoxide		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	108907	Chlorobenzene		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	118741	Hexachlorobenzene		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	60571	Dieldrin		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	67663	Chloroform		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	72208	Endrin		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	72548	4,4'-DDD		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	7421934	Endrin Aldehyde		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1	Mid-level LCS recovery low. Results may be biased low.		
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	75252	Bromoform		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	77474	Hexachlorocyclopenta		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7429905	Aluminum	<	300	ug/L	U	8/12/2019 12:53	8/15/2019 13:48	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	1582098	Trifluralin		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	15972608	Alachlor		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440382	Arsenic		4.86	ug/L		8/8/2019 13:09	9/6/2019 14:36	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440393	Barium		23	ug/L		8/12/2019 12:53	8/15/2019 13:48	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019667		Beryllium	<	1	ug/L	U	8/12/2019 12:53	8/15/2019 13:48	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440702	Calcium		39.1	mg/L		8/12/2019 12:53	8/15/2019 13:48	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019667		Chromium	<	50	ug/L	U	8/12/2019 12:53	8/15/2019 13:48	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440508	Copper	<	10	ug/L	U	8/12/2019 12:53	8/15/2019 13:48	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7439896	Iron		358	ug/L		8/12/2019 12:53	8/15/2019 13:49	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7439976	Mercury	<	0.2	ug/L	U	8/13/2019 14:03	8/14/2019 13:31	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7439954	Magnesium		32.2	mg/L		8/12/2019 12:53	8/15/2019 13:50	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440235	Sodium		195	mg/L		8/12/2019 12:53	8/15/2019 13:50	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440020	Nickel	<	50	ug/L	U	8/12/2019 12:53	8/15/2019 13:49	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	1861321	DCPA		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	1897456	Chlorothalonil		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7439921	Lead	<	1	ug/L	U	8/8/2019 13:09	9/6/2019 14:36	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440360	Antimony	<	2	ug/L	U	8/8/2019 13:09	9/6/2019 14:36	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7782492	Selenium	<	7	ug/L	U	8/8/2019 13:09	9/6/2019 14:36	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440-28-0	Thallium	<	2	ug/L	U	8/8/2019 13:09	9/6/2019 14:36	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	1031078	Endosulfan Sulfate		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	67641	Acetone		5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	72435	Methoxychlor		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	76448	Heptachlor		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440622	Vanadium	<	30	ug/L	U	8/12/2019 12:53	8/15/2019 13:49	1			
2166	2	8/5/2019	10:45	502	Water	Ground W Hoff MW-2S	I2019019	7440666	Zinc	<	30	ug/L	U	8/12/2019 12:53	8/15/2019 13:49	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	2593159	Etridiazole		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	309002	Aldrin		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	319868	delta-BHC		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	5103742	gamma-Chlordane		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	98566	PCTFB		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	1918167	Propachlor		0.05	ug/L	U	9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:19	1			

2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	127184	Tetrachloroethene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	135988	Sec-Butylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	142289	1,3-Dichloropropane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	563586	1,1-Dichloropropene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	58899	Lindane	0.05	ug/L	U		9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	71556	1,1,1-Trichloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006	72559	4,4'-DDE	0.05	ug/L	U		9/4/2019 2:00	9/12/2019 9:40	1	Mid-level LCS recovery low. Results may be biased low.		
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	74839	Bromomethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	74873	Chloromethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	75003	Chloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	75092	Dichloromethane	1	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	75343	1,1-Dichloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	78933	2-Butanone	2.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	79016	Trichloroethene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	98828	Isopropylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	75650	t-Butyl alcohol	5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	DIOXA	Water	Ground W Hoff MW-2S	O2019006	123911	1,4-Dioxane	2.5	ug/L	U		8/20/2019 2:00	8/26/2019 13:13	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006144		EXTRACTED DATE					8/8/2019 2:00	8/19/2019 14:19	1			
2166	2	8/5/2019	10:45	DIOXA	Water	Ground W Hoff MW-2S	O2019006158		EXTRACTED DATE	8152019	Day			8/20/2019 2:00	8/26/2019 13:13	1			
2166	2	8/5/2019	10:45	PSTSW	Water	Ground W Hoff MW-2S	O2019006174		EXTRACTED DATE	8092019	Day			9/4/2019 2:00	9/12/2019 9:40	1			
2166	2	8/5/2019	10:45	VOASW	Water	Ground W Hoff MW-2S	O2019006144		EXTRACTED TIME					8/8/2019 2:00	8/19/2019 14:19	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	319857	beta-BHC	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	51218452	Metolachlor	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	51877748	trans-Permethrin	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	54774457	cis-Permethrin	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	103651	n-Propylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	108054	Vinyl Acetate	1	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	108883	Toluene	1.6	ug/L			8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	74975	Bromochloromethan	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	75150	Carbon disulfide	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	124481	Dibromochlorometha	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	502	Water	Ground W Hoff MW-2DU	I2019019(	7440-42-8	Boron	945	ug/L			8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	91203	Naphthalene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	95476	o-Xylene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	959988	Endosulfan I	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	21725462	Cyanazine	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	2675776	Chlorneb	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	319846	alpha-BHC	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	71432	Benzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	510156	Chlorobenzilate	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	5103719	alpha-Chlordane	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	53494705	Endrin Ketone	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	502	Water	Ground W Hoff MW-2DU	I2019019(	7440224	Silver <	10	ug/L	U		8/12/2019 12:56	8/15/2019 13:49	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	21087649	Metribuzin	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	2921882	Dursban	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1	Mid-level LCS recovery low. Results may be biased low.		
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	33213659	Endosulfan II	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	50293	4,4'-DDT	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1	Mid-level LCS recovery low. Results may be biased low.		
2166	3	8/5/2019	12:15	502	Water	Ground W Hoff MW-2DU	I2019019(	7440439	Cadmium <	10	ug/L	U		8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	502	Water	Ground W Hoff MW-2DU	I2019019668		Cobalt Cor <	50	ug/L	U		8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	1330207	Total Xylenes	0	ug/L			8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	100425	Styrene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	502	Water	Ground W Hoff MW-2DU	I2019019(	7440097	Potassium	4.51	mg/L			8/12/2019 12:56	8/15/2019 13:51	1			
2166	3	8/5/2019	12:15	502	Water	Ground W Hoff MW-2DU	I2019019(	7439965	Manganese	106	ug/L			8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	1024573	Heptachlor Epoxide	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	104518	n-Butylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	108861	Bromobenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	108907	Chlorobenzene	1	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	109999	Tetrahydrofuran	1	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	118741	Hexachlorobenzene	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	591786	2-Hexanone	2.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	60571	Dieldrin	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	67663	Chloroform	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	72208	Endrin	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	72548	4,4'-DDD	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	7421934	Endrin Aldehyde	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1	Mid-level LCS recovery low. Results may be biased low.		
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	74953	Dibromomethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	75252	Bromoform	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	75354	1,1-Dichloroethene	0.91	ug/L			8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	75718	Dichlorodifluoromeh	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	77474	Hexachlorocyclopent	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	3	8/5/2019	12:15	502	Water	Ground W Hoff MW-2DU	I2019019(	7429905	Aluminum	328	ug/L			8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W Hoff MW-2DU	O2019006	156592	cis-1,2-Dichloroethen	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	1582098	Trifluralin	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W Hoff MW-2DU	O2019006	15972608	Alachlor	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	502	Water	Ground W Hoff MW-2DU	I2019019(	7440382	Arsenic <	3	ug/L	U		8/8/2019 13:12	8/8/2019 13:46	1			

2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7440393	Barium		16	ug/L		8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019668		Beryllium	<	1	ug/L	U	8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7440702	Calcium		182	mg/L		8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019668		Chromiurr	<	50	ug/L	U	8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7440508	Copper	<	10	ug/L	U	8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7439896	Iron	<	100	ug/L	U	8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7439976	Mercury	<	0.2	ug/L	U	8/13/2019 14:05	8/14/2019 13:31	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7439954	Magnesium		51.8	mg/L		8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7440235	Sodium		30.1	mg/L		8/12/2019 12:56	8/15/2019 13:51	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7440020	Nickel	<	50	ug/L	U	8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006	1861321	DCPA		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006	1897456	Chlorothalonil		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7439921	Lead	<	1	ug/L	U	8/8/2019 13:12	8/8/2019 13:46	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7440360	Antimony	<	2	ug/L	U	8/8/2019 13:12	8/8/2019 13:46	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7782492	Selenium	<	7	ug/L	U	8/8/2019 13:12	8/8/2019 13:46	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7440-28-0	Thallium	<	2	ug/L	U	8/8/2019 13:12	8/8/2019 13:46	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006	1031078	Endosulfan Sulfate		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	67641	Acetone		5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	Matrix spike recovery high. Results may be biased high.		
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006	72435	Methoxychlor		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006	76448	Heptachlor		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7440622	Vanadium	<	30	ug/L	U	8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	502	Water	Ground W	Hoff MW-2DU	I2019019€	7440666	Zinc	<	30	ug/L	U	8/12/2019 12:56	8/15/2019 13:50	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006	2593159	Etridiazole		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006	309002	Aldrin		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006	319868	delta-BHC		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006	5103742	gamma-Chlordane		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	98566	PCTFB		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006	1918167	Propachlor		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006	58899	Lindane		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006	72559	4,4'-DDE		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:45	1	Mid-level LCS recovery low. Results may be biased low.		
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	74839	Bromomethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	74873	Chloromethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	75003	Chloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	75092	Dichloromethane		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	75343	1,1-Dichloroethane		0.67	ug/L		8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	78933	2-Butanone		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	Matrix spike recovery high. Results may be biased high.		
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	DIOXA	Water	Ground W	Hoff MW-2DU	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/20/2019 2:00	8/26/2019 13:13	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006145		EXTRACTED DATE					8/8/2019 2:00	8/19/2019 14:20	1			
2166	3	8/5/2019	12:15	DIOXA	Water	Ground W	Hoff MW-2DU	O2019006159		EXTRACTED DATE		8152019	Day		8/20/2019 2:00	8/26/2019 13:13	1			
2166	3	8/5/2019	12:15	PSTSW	Water	Ground W	Hoff MW-2DU	O2019006175		EXTRACTED DATE		8092019	Day		9/4/2019 2:00	9/12/2019 9:45	1			
2166	3	8/5/2019	12:15	VOASW	Water	Ground W	Hoff MW-2DU	O2019006145		EXTRACTED TIME					8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W	Hoff MW-2DL	O2019006	319857	beta-BHC		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1			
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W	Hoff MW-2DL	O2019006	51218452	Metolachlor		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1			
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W	Hoff MW-2DL	O2019006	51877748	trans-Permethrin		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1			
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W	Hoff MW-2DL	O2019006	54774457	cis-Permethrin		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	108883	Toluene		1.9	ug/L		8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	74975	Bromochloromethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	502	Water	Ground W	Hoff MW-2DL	I2019019€	7440-42-8	Boron		2680	ug/L		8/21/2019 12:59	8/28/2019 14:10	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	91203	Naphthalene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	95476	o-Xylene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W	Hoff MW-2DL	O2019006	959988	Endosulfan I		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	VOASW	Water	Ground W	Hoff MW-2DL	O2019006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W	Hoff MW-2DL	O2019006	21725462	Cyanazine		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1			

2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	2675776	Chlorneb		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	319846	alpha-BHC		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	71432	Benzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	510156	Chlorobenzilate		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	5103719	alpha-Chlordane		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	53494705	Endrin Ketone		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440224	Silver	<	10	ug/L	U	8/12/2019 12:59	8/15/2019 13:50	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	21087649	Metribuzin		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	2921882	Dursban		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	Mid-level LCS recovery low. Results may be biased low.
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	33213659	Endosulfan II		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	50293	4,4'-DDT		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	Mid-level LCS recovery low. Results may be biased low.
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440439	Cadmium	<	10	ug/L	U	8/12/2019 12:59	8/15/2019 13:51	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019669		Cobalt Cor	<	50	ug/L	U	8/12/2019 12:59	8/15/2019 13:51	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	1330207	Total Xylenes		0	ug/L		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	100425	Styrene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440097	Potassium		1.35	mg/L		8/12/2019 12:59	8/15/2019 13:52	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7439965	Manganese		23	ug/L		8/12/2019 12:59	8/15/2019 13:51	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	1024573	Heptachlor Epoxide		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	108907	Chlorobenzene		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	118741	Hexachlorobenzene		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	60571	Dieldrin		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	67663	Chloroform		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	72208	Endrin		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	72548	4,4'-DDD		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	7421934	Endrin Aldehyde		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.Mid-level LCS recovery low. Results may be biased low.
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	75252	Bromoform		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	77474	Hexachlorocyclopent		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7429905	Aluminum	<	300	ug/L	U	8/12/2019 12:59	8/15/2019 13:50	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	1582098	Trifluralin		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	15972608	Alachlor		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440382	Arsenic		6.41	ug/L		8/8/2019 13:15	8/8/2019 13:47	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440393	Barium		11	ug/L		8/12/2019 12:59	8/15/2019 13:50	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019669		Beryllium	<	1	ug/L	U	8/12/2019 12:59	8/15/2019 13:51	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440702	Calcium		70.6	mg/L		8/12/2019 12:59	8/15/2019 13:52	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019669		Chromium	<	50	ug/L	U	8/12/2019 12:59	8/15/2019 13:51	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440508	Copper	<	10	ug/L	U	8/12/2019 12:59	8/15/2019 13:51	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7439896	Iron	<	100	ug/L	U	8/12/2019 12:59	8/15/2019 13:51	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7439976	Mercury	<	0.2	ug/L	U	8/13/2019 14:07	8/14/2019 13:32	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7439954	Magnesium		21.7	mg/L		8/12/2019 12:59	8/15/2019 13:52	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440235	Sodium		22	mg/L		8/12/2019 12:59	8/15/2019 13:52	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440020	Nickel	<	50	ug/L	U	8/12/2019 12:59	8/15/2019 13:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	1861321	DCPA		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	1897456	Chlorothalonil		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7439921	Lead	<	1	ug/L	U	8/8/2019 13:15	8/8/2019 13:47	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440360	Antimony	<	2	ug/L	U	8/8/2019 13:15	8/8/2019 13:47	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7782492	Selenium	<	7	ug/L	U	8/8/2019 13:15	8/8/2019 13:47	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440-28-0	Thallium	<	2	ug/L	U	8/8/2019 13:15	8/8/2019 13:47	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	1031078	Endosulfan Sulfate		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	67641	Acetone		6.9	ug/L	B	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	72435	Methoxychlor		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	76448	Heptachlor		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440622	Vanadium	<	30	ug/L	U	8/12/2019 12:59	8/15/2019 13:52	1	
2166	4	8/5/2019	14:15	502	Water	Ground W Hoff MW-2DL	I2019019	7440666	Zinc	<	30	ug/L	U	8/12/2019 12:59	8/15/2019 13:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	2593159	Etridiazole		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	309002	Aldrin		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	319868	delta-BHC		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	5103742	gamma-Chlordane		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	98566	PCTFB		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	1918167	Propachlor		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	58899	Lindane		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1	

2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006	72559	4,4'-DDE	0.051	ug/L	U		9/4/2019 2:00	9/12/2019 9:52	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.Mid-level LCS recovery low. Results may be biased low.
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	74839	Bromomethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	74873	Chloromethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	75003	Chloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	75092	Dichloromethane	1	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	75343	1,1-Dichloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	78933	2-Butanone	2.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	79016	Trichloroethene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	98828	Isopropylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	75650	t-Butyl alcohol	5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	DIOXA	Water	Ground W Hoff MW-2DL	O2019006	123911	1,4-Dioxane	2.5	ug/L	U		8/20/2019 2:00	8/26/2019 13:14	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006146		EXTRACTED DATE					8/8/2019 2:00	8/19/2019 14:20	1	
2166	4	8/5/2019	14:15	DIOXA	Water	Ground W Hoff MW-2DL	O2019006160		EXTRACTED DATE	8152019	Day			8/20/2019 2:00	8/26/2019 13:14	1	
2166	4	8/5/2019	14:15	PSTSW	Water	Ground W Hoff MW-2DL	O2019006176		EXTRACTED DATE	8092019	Day			9/4/2019 2:00	9/12/2019 9:52	1	
2166	4	8/5/2019	14:15	VOASW	Water	Ground W Hoff MW-2DL	O2019006146		EXTRACTED TIME					8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	319857	beta-BHC	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	51218452	Metolachlor	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	51877748	trans-Permethrin	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	54774457	cis-Permethrin	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	103651	n-Propylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	108054	Vinyl Acetate	1	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	108883	Toluene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	METH	Water	Ground W Hoff MW-7S	O2019006	74828	Methane	11.6	ug/L	U		8/9/2019 2:00	8/13/2019 9:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	74975	Bromochloromethan	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	75150	Carbon disulfide	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	124481	Dibromochlorometha	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440-42-8	Boron	1250	ug/L			8/12/2019 13:28	8/15/2019 14:01	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	91203	Naphthalene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	95476	o-Xylene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	959988	Endosulfan I	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	21725462	Cyanazine	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	2675776	Chlorneb	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	319846	alpha-BHC	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	71432	Benzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	510156	Chlorobenzilate	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	5103719	alpha-Chlordane	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	53494705	Endrin Ketone	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440224	Silver <	10	ug/L	U		8/12/2019 13:28	8/15/2019 13:52	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	21087649	Metribuzin	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	2921882	Dursban	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	Mid-level LCS recovery low. Results may be biased low.
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	33213659	Endosulfan II	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	50293	4,4'-DDT	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	Mid-level LCS recovery low. Results may be biased low.
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440439	Cadmium <	10	ug/L	U		8/12/2019 13:28	8/15/2019 13:59	1	
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019670		Cobalt Cor <	50	ug/L	U		8/12/2019 13:28	8/15/2019 13:59	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	1330207	Total Xylenes	0	ug/L			8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	100425	Styrene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440097	Potassium	4.73	mg/L			8/12/2019 13:28	8/15/2019 14:01	1	
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7439965	Manganese	520	ug/L			8/12/2019 13:28	8/15/2019 13:59	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	1024573	Heptachlor Epoxide	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	104518	n-Butylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	108861	Bromobenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	108907	Chlorobenzene	1	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	109999	Tetrahydrofuran	1	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	118741	Hexachlorobenzene	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	591786	2-Hexanone	2.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	60571	Dieldrin	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	67663	Chloroform	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	72208	Endrin	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	72548	4,4'-DDD	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	7421934	Endrin Aldehyde	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	Mid-level LCS recovery low. Results may be biased low.
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	74953	Dibromomethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	METH	Water	Ground W Hoff MW-7S	O2019006	74986	Propane	14.2	ug/L	U		8/9/2019 2:00	8/13/2019 9:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	75252	Bromoform	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	75354	1,1-Dichloroethene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	77474	Hexachlorocyclopent	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7429905	Aluminum <	300	ug/L	U		8/12/2019 13:28	8/15/2019 13:59	1	
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	156592	cis-1,2-Dichloroethen	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:20	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	1582098	Trifluralin	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	15972608	Alachlor	0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:55	1	
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440382	Arsenic	4.67	ug/L			8/8/2019 13:18	8/8/2019 13:48	1	
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440393	Barium	22	ug/L			8/12/2019 13:28	8/15/2019 13:59	1	
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019670		Beryllium <	1	ug/L	U		8/12/2019 13:28	8/15/2019 13:59	1	
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440702	Calcium	102	mg/L			8/12/2019 13:28	8/15/2019 13:59	1	
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019670		Chromium <	50	ug/L	U		8/12/2019 13:28	8/15/2019 13:59	1	
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440508	Copper <	10	ug/L	U		8/12/2019 13:28	8/15/2019 13:59	1	

2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7439896	Iron	<	100	ug/L	U	8/12/2019 13:28	8/15/2019 13:59	1			
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7439976	Mercury	<	0.2	ug/L	U	8/13/2019 14:09	8/14/2019 13:32	1			
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7439954	Magnesium		69.5	mg/L		8/12/2019 13:28	8/15/2019 14:00	1			
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440235	Sodium		140	mg/L		8/12/2019 13:28	8/15/2019 14:00	1			
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440020	Nickel	<	50	ug/L	U	8/12/2019 13:28	8/15/2019 13:59	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	1861321	DCPA		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:55	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	1897456	Chlorothalonil		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:55	1			
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7439921	Lead	<	1	ug/L	U	8/8/2019 13:18	8/8/2019 13:48	1			
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440360	Antimony	<	2	ug/L	U	8/8/2019 13:18	8/8/2019 13:48	1			
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7782492	Selenium	<	7	ug/L	U	8/8/2019 13:18	8/8/2019 13:48	1			
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440-28-0	Thallium	<	2	ug/L	U	8/8/2019 13:18	8/8/2019 13:48	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	1031078	Endosulfan Sulfate		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:55	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	67641	Acetone		5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	72435	Methoxychlor		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:55	1			
2166	5	8/5/2019	16:00	METH	Water	Ground W Hoff MW-7S	O2019006	74840	Ethane		12.4	ug/L	U	8/9/2019 2:00	8/13/2019 9:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	76448	Heptachlor		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:55	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440622	Vanadium	<	30	ug/L	U	8/12/2019 13:28	8/15/2019 14:00	1			
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019(	7440666	Zinc		35	ug/L		8/12/2019 13:28	8/15/2019 14:00	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	2593159	Etridiazole		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:55	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	309002	Aldrin		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:55	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	319868	delta-BHC		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:55	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	5103742	gamma-Chlordane		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:55	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	502	Water	Ground W Hoff MW-7S	I2019019670		Sulfate		61.8	mg/L		8/15/2019 13:44	8/16/2019 12:10	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	98566	PCTFB		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	1918167	Propachlor		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:55	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	58899	Lindane		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:55	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006	72559	4,4'-DDE		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:55	1	Mid-level LCS recovery low. Results may be biased low.		
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	74839	Bromomethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	74873	Chloromethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	75003	Chloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	75092	Dichloromethane		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	78933	2-Butanone		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	DIOXA	Water	Ground W Hoff MW-7S	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/20/2019 2:00	8/26/2019 13:14	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006147		EXTRACTED DATE					8/8/2019 2:00	8/19/2019 14:20	1			
2166	5	8/5/2019	16:00	DIOXA	Water	Ground W Hoff MW-7S	O2019006161		EXTRACTED DATE		8152019	Day		8/20/2019 2:00	8/26/2019 13:14	1			
2166	5	8/5/2019	16:00	PSTSW	Water	Ground W Hoff MW-7S	O2019006177		EXTRACTED DATE		8092019	Day		9/4/2019 2:00	9/12/2019 9:55	1			
2166	5	8/5/2019	16:00	VOASW	Water	Ground W Hoff MW-7S	O2019006147		EXTRACTED TIME					8/8/2019 2:00	8/19/2019 14:20	1			
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	319857	beta-BHC		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:59	1			
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	51218452	Metolachlor		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:59	1			
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	51877748	trans-Permethrin		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:59	1			
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	54774457	cis-Permethrin		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:59	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	75014	Chloroethene (vinyl c		1.2	ug/L		8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	106467	1,4-Dichlorobenzene		1.6	ug/L		8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	108883	Toluene		0.52	ug/L		8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	METH	Water	Ground W Hoff MW-7D-L	O2019006	74828	Methane		11.6	ug/L	U	8/9/2019 2:00	8/13/2019 9:20	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019(	7440-42-8	Boron		3510	ug/L		8/12/2019 13:34	8/15/2019 14:03	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	91203	Naphthalene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	95476	o-Xylene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	959988	Endosulfan I		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:59	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	95501	1,2-Dichlorobenzene		11.7	ug/L		8/8/2019 2:00	8/19/2019 14:22	1			
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	21725462	Cyanazine		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:59	1			
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	2675776	Chlorneb		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:59	1			
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	319846	alpha-BHC		0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:59	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		

2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	71432	Benzene		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	510156	Chlorobenzilate		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	5103719	alpha-Chlordane		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	53494705	Endrin Ketone		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	1634044	Methyl-tert-butyl Eth		5	ug/L			8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440224	Silver	<	10	ug/L	U		8/12/2019 13:34	8/15/2019 14:01	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	21087649	Metribuzin		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	2921882	Dursban		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1	Mid-level LCS recovery low. Results may be biased low.			
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	33213659	Endosulfan II		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	50293	4,4'-DDT		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1	Mid-level LCS recovery low. Results may be biased low.			
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440439	Cadmium	<	10	ug/L	U		8/12/2019 13:34	8/15/2019 14:02	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	671	Cobalt Cor	<	50	ug/L	U		8/12/2019 13:34	8/15/2019 14:01	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	1330207	Total Xylenes		0	ug/L			8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	100425	Styrene		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440097	Potassium		2.43	mg/L			8/12/2019 13:34	8/15/2019 14:03	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7439965	Manganes	<	10	ug/L	U		8/12/2019 13:34	8/15/2019 14:02	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	1024573	Heptachlor Epoxide		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	104518	n-Butylbenzene		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	108861	Bromobenzene		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	108907	Chlorobenzene		1.2	ug/L	B		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	109999	Tetrahydrofuran		1	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	118741	Hexachlorobenzene		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	591786	2-Hexanone		2.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	60571	Dieldrin		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	67663	Chloroform		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	72208	Endrin		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	72548	4,4'-DDD		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	7421934	Endrin Aldehyde		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1	Mid-level LCS recovery low. Results may be biased low.			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	74953	Dibromomethane		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	METH	Water	Ground W Hoff MW-7D-L	O2019006	74986	Propane		14.2	ug/L	U		8/9/2019 2:00	8/13/2019 9:20	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	75252	Bromoform		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	75354	1,1-Dichloroethene		39.7	ug/L			8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	77474	Hexachlorocyclopent		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7429905	Aluminum	<	300	ug/L	U		8/12/2019 13:34	8/15/2019 14:01	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	156592	cis-1,2-Dichloroethen		23.5	ug/L			8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	1582098	Trifluralin		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	15972608	Alachlor		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440382	Arsenic	<	3	ug/L	U		8/8/2019 13:43	8/8/2019 14:27	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440393	Barium		14	ug/L			8/12/2019 13:34	8/15/2019 14:01	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	671	Beryllium	<	1	ug/L	U		8/12/2019 13:34	8/15/2019 14:01	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440702	Calcium		92.2	mg/L			8/12/2019 13:34	8/15/2019 14:02	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	671	Chromium	<	50	ug/L	U		8/12/2019 13:34	8/15/2019 14:02	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440508	Copper	<	10	ug/L	U		8/12/2019 13:34	8/15/2019 14:02	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7439896	Iron	<	100	ug/L	U		8/12/2019 13:34	8/15/2019 14:02	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7439976	Mercury	<	0.2	ug/L	U		8/13/2019 14:17	8/14/2019 13:33	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7439954	Magnesium		32.2	mg/L			8/12/2019 13:34	8/15/2019 14:03	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440235	Sodium		29	mg/L			8/12/2019 13:34	8/15/2019 14:02	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440020	Nickel	<	50	ug/L	U		8/12/2019 13:34	8/15/2019 14:02	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	1861321	DCPA		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	1897456	Chlorothalonil		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7439921	Lead	<	1	ug/L	U		8/8/2019 13:43	8/8/2019 14:27	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440360	Antimony	<	2	ug/L	U		8/8/2019 13:43	8/8/2019 14:27	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7782492	Selenium	<	7	ug/L	U		8/8/2019 13:43	8/8/2019 14:27	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440-28-0	Thallium	<	2	ug/L	U		8/8/2019 13:43	8/8/2019 14:27	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	1031078	Endosulfan Sulfate		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	67641	Acetone		13.3	ug/L	B		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	72435	Methoxychlor		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	METH	Water	Ground W Hoff MW-7D-L	O2019006	74840	Ethane		12.4	ug/L	U		8/9/2019 2:00	8/13/2019 9:20	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	75274	Bromodichlorometha		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	76448	Heptachlor		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440622	Vanadium	<	30	ug/L	U		8/12/2019 13:34	8/15/2019 14:02	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	7440666	Zinc	<	30	ug/L	U		8/12/2019 13:34	8/15/2019 14:03	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	2593159	Etridiazole		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	309002	Aldrin		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	319868	delta-BHC		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	5103742	gamma-Chlordane		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	502	Water	Ground W Hoff MW-7D-L	I2019019	671	Sulfate		48.7	mg/L			8/15/2019 13:47	8/16/2019 12:10	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	98566	PCTFB		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	1918167	Propachlor		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	100414	Ethylbenzene		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	108383	m/p-Xylenes		1	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	127184	Tetrachloroethene		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	58899	Lindane		0.052	ug/L	U		9/4/2019 2:00	9/12/2019 9:59	1				

2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	71556	1,1,1-Trichloroethane	9.1	ug/L		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006	72559	4,4'-DDE	0.052	ug/L	U	9/4/2019 2:00	9/12/2019 9:59	1	Mid-level LCS recovery low. Results may be biased low.			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	74839	Bromomethane	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	74873	Chloromethane	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	75003	Chloroethane	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	75092	Dichloromethane	1	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	75343	1,1-Dichloroethane	14.1	ug/L		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	78933	2-Butanone	2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	79016	Trichloroethene	19.3	ug/L		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	98828	Isopropylbenzene	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	107062	1,2-Dichloroethane	1.1	ug/L		8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	75650	t-Butyl alcohol	5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	DIOXA	Water	Ground W Hoff MW-7D-L	O2019006	123911	1,4-Dioxane	14.5	ug/L		8/20/2019 2:00	8/26/2019 13:17	1	Mid-level LCS recovery low. Results may be biased low.			
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006148		EXTRACTED DATE				8/8/2019 2:00	8/19/2019 14:22	1				
2166	6	8/6/2019	9:00	DIOXA	Water	Ground W Hoff MW-7D-L	O2019006162		EXTRACTED DATE	8152019	Day		8/20/2019 2:00	8/26/2019 13:17	1				
2166	6	8/6/2019	9:00	PSTSW	Water	Ground W Hoff MW-7D-L	O2019006178		EXTRACTED DATE	8132019	Day		9/4/2019 2:00	9/12/2019 9:59	1				
2166	6	8/6/2019	9:00	VOASW	Water	Ground W Hoff MW-7D-L	O2019006148		EXTRACTED TIME				8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	319857	beta-BHC	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	51218452	Metolachlor	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	51877748	trans-Permethrin	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	54774457	cis-Permethrin	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	108883	Toluene	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	METH	Water	Ground W Hoff MW-7D-U	O2019006	74828	Methane	11.6	ug/L	U	8/9/2019 2:00	8/13/2019 9:21	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	74975	Bromochloromethane	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	75150	Carbon disulfide	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	124481	Dibromochlorometha	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440-42-8	Boron	2120	ug/L		8/12/2019 13:37	8/15/2019 14:14	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	91203	Naphthalene	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	95476	o-Xylene	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	959988	Endosulfan I	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	95501	1,2-Dichlorobenzene	1.5	ug/L		8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	21725462	Cyanazine	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	2675776	Chlorneb	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	319846	alpha-BHC	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	71432	Benzene	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	510156	Chlorobenzilate	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	5103719	alpha-Chlordane	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	53494705	Endrin Ketone	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	1634044	Methyl-tert-butyl Eth	1.8	ug/L		8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440224	Silver <	10	ug/L	U	8/12/2019 13:37	8/15/2019 14:12	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	21087649	Metribuzin	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	2921882	Dursban	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1	Mid-level LCS recovery low. Results may be biased low.			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	33213659	Endosulfan II	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	50293	4,4'-DDT	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1	Mid-level LCS recovery low. Results may be biased low.			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440439	Cadmium <	10	ug/L	U	8/12/2019 13:37	8/15/2019 14:12	1				
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019672		Cobalt Cor <	50	ug/L	U	8/12/2019 13:37	8/15/2019 14:12	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	1330207	Total Xylenes	0	ug/L		8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	100425	Styrene	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440097	Potassium	4.6	mg/L		8/12/2019 13:37	8/15/2019 14:14	1				
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7439965	Manganese	23	ug/L		8/12/2019 13:37	8/15/2019 14:13	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	1024573	Heptachlor Epoxide	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	104518	n-Butylbenzene	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	108861	Bromobenzene	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	108907	Chlorobenzene	1	ug/L	B	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	109999	Tetrahydrofuran	1	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	118741	Hexachlorobenzene	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	591786	2-Hexanone	2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	60571	Dieldrin	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	67663	Chloroform	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	72208	Endrin	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	72548	4,4'-DDD	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	7421934	Endrin Aldehyde	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1	Mid-level LCS recovery low. Results may be biased low.			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	74953	Dibromomethane	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	METH	Water	Ground W Hoff MW-7D-U	O2019006	74986	Propane	14.2	ug/L	U	8/9/2019 2:00	8/13/2019 9:21	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	75252	Bromoform	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	75354	1,1-Dichloroethene	3.2	ug/L		8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	77474	Hexachlorocyclopent	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7429905	Aluminum <	300	ug/L	U	8/12/2019 13:37	8/15/2019 14:12	1				
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	156592	cis-1,2-Dichloroethen	11.2	ug/L		8/8/2019 2:00	8/19/2019 14:22	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	1582098	Trifluralin	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	15972608	Alachlor	0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1				
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440382	Arsenic	25.6	ug/L		8/8/2019 13:48	8/8/2019 14:27	1				
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440393	Barium	62	ug/L		8/12/2019 13:37	8/15/2019 14:12	1				
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019672		Beryllium <	1	ug/L	U	8/12/2019 13:37	8/15/2019 14:12	1				
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440702	Calcium	104	mg/L		8/12/2019 13:37	8/15/2019 14:13	1				
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019672		Chromium <	50	ug/L	U	8/12/2019 13:37	8/15/2019 14:13	1				

2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440508	Copper	<	10	ug/L	U	8/12/2019 13:37	8/15/2019 14:13	1			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7439896	Iron		143	ug/L		8/12/2019 13:37	8/15/2019 14:13	1			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7439976	Mercury	<	0.2	ug/L	U	8/13/2019 14:21	8/14/2019 13:34	1			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7439954	Magnesium		25.1	mg/L		8/12/2019 13:37	8/15/2019 14:14	1			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440235	Sodium		20.4	mg/L		8/12/2019 13:37	8/15/2019 14:14	1			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440020	Nickel	<	50	ug/L	U	8/12/2019 13:37	8/15/2019 14:13	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	1861321	DCPA		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	1897456	Chlorothalonil		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7439921	Lead	<	1	ug/L	U	8/8/2019 13:48	8/8/2019 14:27	1			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440360	Antimony	<	2	ug/L	U	8/8/2019 13:48	8/8/2019 14:27	1			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7782492	Selenium	<	7	ug/L	U	8/8/2019 13:48	8/8/2019 14:27	1			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440-28-0	Thallium	<	2	ug/L	U	8/8/2019 13:48	8/8/2019 14:27	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	1031078	Endosulfan Sulfate		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	67641	Acetone		5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	72435	Methoxychlor		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1			
2166	7	8/6/2019	10:05	METH	Water	Ground W Hoff MW-7D-U	O2019006	74840	Ethane		12.4	ug/L	U	8/9/2019 2:00	8/13/2019 9:21	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	76448	Heptachlor		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440622	Vanadium	<	30	ug/L	U	8/12/2019 13:37	8/15/2019 14:13	1			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019(	7440666	Zinc	<	30	ug/L	U	8/12/2019 13:37	8/15/2019 14:13	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	2593159	Etridiazole		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	309002	Aldrin		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	319868	delta-BHC		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	5103742	gamma-Chlordane		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	502	Water	Ground W Hoff MW-7D-U	I2019019672		Sulfate		56.7	mg/L		8/15/2019 13:49	8/16/2019 12:10	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	98566	PCTFB		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	1918167	Propachlor		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	58899	Lindane		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006	72559	4,4'-DDE		0.051	ug/L	U	9/4/2019 2:00	9/12/2019 10:05	1	Mid-level LCS recovery low. Results may be biased low.		
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	74839	Bromomethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	74873	Chloromethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	75003	Chloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	75092	Dichloromethane		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	75343	1,1-Dichloroethane		3.7	ug/L		8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	78933	2-Butanone		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	79016	Trichloroethene		3.7	ug/L		8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	DIOXA	Water	Ground W Hoff MW-7D-U	O2019006	123911	1,4-Dioxane		3.8	ug/L		8/20/2019 2:00	8/26/2019 13:17	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006149		EXTRACTED DATE					8/8/2019 2:00	8/19/2019 14:22	1			
2166	7	8/6/2019	10:05	DIOXA	Water	Ground W Hoff MW-7D-U	O2019006163		EXTRACTED DATE		8152019	Day		8/20/2019 2:00	8/26/2019 13:17	1			
2166	7	8/6/2019	10:05	PSTSW	Water	Ground W Hoff MW-7D-U	O2019006179		EXTRACTED DATE		8092019	Day		9/4/2019 2:00	9/12/2019 10:05	1			
2166	7	8/6/2019	10:05	VOASW	Water	Ground W Hoff MW-7D-U	O2019006149		EXTRACTED TIME					8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	319857	beta-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1			
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	51218452	Metolachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1			
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	51877748	trans-Permethrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1			
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	54774457	cis-Permethrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	108883	Toluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019(	7440-42-8	Boron		4270	ug/L		8/21/2019 13:39	8/28/2019 14:11	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	91203	Naphthalene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	95476	o-Xylene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	959988	Endosulfan I		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	21725462	Cyanazine		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1			
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	2675776	Chlorneb		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	319846	alpha-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1			

2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	71432	Benzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	510156	Chlorobenzilate		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	5103719	alpha-Chlordane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	53494705	Endrin Ketone		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440224	Silver	<	10	ug/L	U	8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	21087649	Metribuzin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	2921882	Dursban		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1	Mid-level LCS recovery low. Results may be biased low.			
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	33213659	Endosulfan II		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	50293	4,4'-DDT		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1	Mid-level LCS recovery low. Results may be biased low.			
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440439	Cadmium	<	10	ug/L	U	8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019673		Cobalt Cor	<	50	ug/L	U	8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	1330207	Total Xylenes		0	ug/L		8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	100425	Styrene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440097	Potassium		1.19	mg/L		8/12/2019 13:39	8/15/2019 14:15	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7439965	Manganese		10	ug/L		8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	1024573	Heptachlor Epoxide		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	108907	Chlorobenzene		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	118741	Hexachlorobenzene		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	60571	Dieldrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	67663	Chloroform		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	72208	Endrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	72548	4,4'-DDD		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	7421934	Endrin Aldehyde		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1	Mid-level LCS recovery low. Results may be biased low.			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	75252	Bromoform		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	77474	Hexachlorocyclopent		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7429905	Aluminum	<	300	ug/L	U	8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	1582098	Trifluralin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	15972608	Alachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440382	Arsenic		27.1	ug/L		8/8/2019 13:54	8/8/2019 14:27	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440393	Barium	<	10	ug/L	U	8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019673		Beryllium	<	1	ug/L	U	8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440702	Calcium		44.6	mg/L		8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019673		Chromium	<	50	ug/L	U	8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440508	Copper	<	10	ug/L	U	8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7439896	Iron	<	100	ug/L	U	8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7439976	Mercury	<	0.2	ug/L	U	8/13/2019 14:23	8/14/2019 13:34	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7439954	Magnesium		15.1	mg/L		8/12/2019 13:39	8/15/2019 14:15	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440235	Sodium		7.75	mg/L		8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440020	Nickel	<	50	ug/L	U	8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	1861321	DCPA		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	1897456	Chlorothalonil		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7439921	Lead	<	1	ug/L	U	8/8/2019 13:54	8/8/2019 14:27	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440360	Antimony	<	2	ug/L	U	8/8/2019 13:54	8/8/2019 14:27	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7782492	Selenium	<	7	ug/L	U	8/8/2019 13:54	8/8/2019 14:27	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440-28-0	Thallium	<	2	ug/L	U	8/8/2019 13:54	8/8/2019 14:27	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	1031078	Endosulfan Sulfate		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	67641	Acetone		5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	72435	Methoxychlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	76448	Heptachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440622	Vanadium	<	30	ug/L	U	8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	502	Water	Ground W Hoff OW-4-L	I2019019	7440666	Zinc	<	30	ug/L	U	8/12/2019 13:39	8/15/2019 14:14	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	2593159	Etridiazole		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	309002	Aldrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	319868	delta-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	5103742	gamma-Chlordane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	98566	PCTFB		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	1918167	Propachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	58899	Lindane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1				
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006	72559	4,4'-DDE		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:09	1	Mid-level LCS recovery low. Results may be biased low.			
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	74839	Bromomethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1				

2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	74873	Chloromethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	75003	Chloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	75092	Dichloromethane	1	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	75343	1,1-Dichloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	78933	2-Butanone	2.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	79016	Trichloroethene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	98828	Isopropylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	75650	t-Butyl alcohol	5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	DIOXA	Water	Ground W Hoff OW-4-L	O2019006	123911	1,4-Dioxane	2.5	ug/L	U		8/20/2019 2:00	8/26/2019 13:17	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006150		EXTRACTED DATE					8/8/2019 2:00	8/19/2019 14:22	1					
2166	8	8/6/2019	12:20	DIOXA	Water	Ground W Hoff OW-4-L	O2019006164		EXTRACTED DATE	8152019	Day			8/20/2019 2:00	8/26/2019 13:17	1					
2166	8	8/6/2019	12:20	PSTSW	Water	Ground W Hoff OW-4-L	O2019006180		EXTRACTED DATE	8092019	Day			9/5/2019 2:00	9/12/2019 10:09	1					
2166	8	8/6/2019	12:20	VOASW	Water	Ground W Hoff OW-4-L	O2019006150		EXTRACTED TIME					8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	319857	beta-BHC	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	51218452	Metolachlor	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	51877748	trans-Permethrin	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	54774457	cis-Permethrin	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	103651	n-Propylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	108054	Vinyl Acetate	1	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	108883	Toluene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	74975	Bromochloromethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	75150	Carbon disulfide	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	124481	Dibromochlorometha	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440-42-8	Boron	2230	ug/L			8/21/2019 13:42	8/28/2019 14:12	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	91203	Naphthalene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	95476	o-Xylene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	959988	Endosulfan I	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	21725462	Cyanazine	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	2675776	Chlorneb	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.				
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	319846	alpha-BHC	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	71432	Benzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	510156	Chlorobenzilate	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	5103719	alpha-Chlordane	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	53494705	Endrin Ketone	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440224	Silver	< 10	ug/L	U		8/12/2019 13:42	8/15/2019 14:14	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	21087649	Metribuzin	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	2921882	Dursban	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1	Mid-level LCS recovery low. Results may be biased low.				
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	33213659	Endosulfan II	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	50293	4,4'-DDT	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1	Mid-level LCS recovery low. Results may be biased low.				
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440439	Cadmium	< 10	ug/L	U		8/12/2019 13:42	8/15/2019 14:15	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019674		Cobalt Cor	< 50	ug/L	U		8/12/2019 13:42	8/15/2019 14:15	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	1330207	Total Xylenes	0	ug/L			8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	100425	Styrene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440097	Potassium	6.08	mg/L			8/12/2019 13:42	8/15/2019 14:19	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7439965	Manganes	< 10	ug/L	U		8/12/2019 13:42	8/15/2019 14:16	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	1024573	Heptachlor Epoxide	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	104518	n-Butylbenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	108861	Bromobenzene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	108907	Chlorobenzene	1	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	109999	Tetrahydrofuran	1	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	118741	Hexachlorobenzene	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	591786	2-Hexanone	2.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	60571	Dieldrin	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	67663	Chloroform	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	72208	Endrin	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	72548	4,4'-DDD	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	7421934	Endrin Aldehyde	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1	Mid-level LCS recovery low. Results may be biased low.				
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	74953	Dibromomethane	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	75252	Bromoform	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	75354	1,1-Dichloroethene	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	77474	Hexachlorocyclopent	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.				
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7429905	Aluminum	< 300	ug/L	U		8/12/2019 13:42	8/15/2019 14:15	1					
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	156592	cis-1,2-Dichloroethen	0.5	ug/L	U		8/8/2019 2:00	8/19/2019 14:22	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	1582098	Trifluralin	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	15972608	Alachlor	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:13	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440382	Arsenic	8.28	ug/L			8/8/2019 14:02	8/8/2019 14:28	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440393	Barium	234	ug/L			8/12/2019 13:42	8/15/2019 14:15	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019674		Beryllium	< 1	ug/L	U		8/12/2019 13:42	8/15/2019 14:15	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440702	Calcium	43.5	mg/L			8/12/2019 13:42	8/15/2019 14:16	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019674		Chromium	< 50	ug/L	U		8/12/2019 13:42	8/15/2019 14:15	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440508	Copper	< 10	ug/L	U		8/12/2019 13:42	8/15/2019 14:15	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7439896	Iron	< 100	ug/L	U		8/12/2019 13:42	8/15/2019 14:15	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7439976	Mercury	< 0.2	ug/L	U		8/13/2019 14:25	8/14/2019 13:35	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7439954	Magnesium	10.9	mg/L			8/12/2019 13:42	8/15/2019 14:16	1					
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440235	Sodium	15.2	mg/L			8/12/2019 13:42	8/15/2019 14:19	1					

2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440020	Nickel	<	50	ug/L	U	8/12/2019 13:42	8/15/2019 14:16	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	1861321	DCPA		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:13	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	1897456	Chlorothalonil		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:13	1			
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7439921	Lead	<	1	ug/L	U	8/8/2019 14:02	8/8/2019 14:28	1			
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440360	Antimony	<	2	ug/L	U	8/8/2019 14:02	8/8/2019 14:28	1			
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7782492	Selenium	<	7	ug/L	U	8/8/2019 14:02	8/8/2019 14:28	1			
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440-28-0	Thallium	<	2	ug/L	U	8/8/2019 14:02	8/8/2019 14:28	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	1031078	Endosulfan Sulfate		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:13	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	67641	Acetone		5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	72435	Methoxychlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:13	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	76448	Heptachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:13	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440622	Vanadium	<	30	ug/L	U	8/12/2019 13:42	8/15/2019 14:16	1			
2166	9	8/6/2019	13:50	502	Water	Ground W Hoff OW-4-U	I2019019(	7440666	Zinc	<	30	ug/L	U	8/12/2019 13:42	8/15/2019 14:16	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	2593159	Etridiazole		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:13	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	309002	Aldrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:13	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	319868	delta-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:13	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	5103742	gamma-Chlordane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:13	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	98566	PCTFB		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	1918167	Propachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:13	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	58899	Lindane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:13	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006	72559	4,4'-DDE		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:13	1	Mid-level LCS recovery low. Results may be biased low.		
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	74839	Bromomethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	74873	Chloromethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	75003	Chloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	75092	Dichloromethane		1	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	78933	2-Butanone		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	DIOXA	Water	Ground W Hoff OW-4-U	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/20/2019 2:00	8/26/2019 13:17	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006151		EXTRACTED DATE					8/8/2019 2:00	8/19/2019 14:22	1			
2166	9	8/6/2019	13:50	DIOXA	Water	Ground W Hoff OW-4-U	O2019006165		EXTRACTED DATE		8152019	Day		8/20/2019 2:00	8/26/2019 13:17	1			
2166	9	8/6/2019	13:50	PSTSW	Water	Ground W Hoff OW-4-U	O2019006181		EXTRACTED DATE		8092019	Day		9/5/2019 2:00	9/12/2019 10:13	1			
2166	9	8/6/2019	13:50	VOASW	Water	Ground W Hoff OW-4-U	O2019006151		EXTRACTED TIME					8/8/2019 2:00	8/19/2019 14:22	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	108883	Toluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	91203	Naphthalene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	95476	o-Xylene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	71432	Benzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	1330207	Total Xylenes		0	ug/L		8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	100425	Styrene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	108907	Chlorobenzene		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	67663	Chloroform		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	75252	Bromoform		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1			

2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	67641	Acetone		5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	98566	PCTFB		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	74839	Bromomethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	74873	Chloromethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	75003	Chloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	75092	Dichloromethane		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	78933	2-Butanone		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	DIOXA	Water	Ground W Hoff -TB080619	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/20/2019 2:00	8/26/2019 13:17	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006227		EXTRACTED DATE					8/12/2019 2:00	8/29/2019 12:36	1
2166	10	8/6/2019	15:00	DIOXA	Water	Ground W Hoff -TB080619	O2019006238		EXTRACTED DATE	8152019	Day			8/20/2019 2:00	8/26/2019 13:17	1
2166	10	8/6/2019	15:00	VOASW	Water	Ground W Hoff -TB080619	O2019006227		EXTRACTED TIME					8/12/2019 2:00	8/29/2019 12:36	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	319857	beta-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	51218452	Metolachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	51877748	trans-Permethrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	54774457	cis-Permethrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	106467	1,4-Dichlorobenzene		0.6	ug/L	B	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	108883	Toluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	124481	Dibromochloromethe		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440-42-8	Boron		5216	ug/L		8/16/2019 11:59	8/23/2019 14:24	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	91203	Naphthalene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	95476	o-Xylene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	959988	Endosulfan I		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	95501	1,2-Dichlorobenzene		4.1	ug/L		8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	21725462	Cyanazine		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	2675776	Chlorneb		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	319846	alpha-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	71432	Benzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	510156	Chlorobenzilate		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	5103719	alpha-Chlordane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	53494705	Endrin Ketone		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	1634044	Methyl-tert-butyl Eth		0.59	ug/L		8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440224	Silver	<	10	ug/L	U	8/16/2019 11:59	8/23/2019 14:24	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	21087649	Metribuzin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	2921882	Dursban		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	33213659	Endosulfan II		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	50293	4,4'-DDT		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440439	Cadmium	<	10	ug/L	U	8/16/2019 11:59	8/23/2019 14:24	1
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019930		Cobalt Cor	<	50	ug/L	U	8/16/2019 11:59	8/23/2019 14:24	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	1330207	Total Xylenes		0	ug/L		8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	100425	Styrene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440097	Potassium	<	1	mg/L	U	8/16/2019 11:59	8/23/2019 14:24	1
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7439965	Manganese		11	ug/L		8/16/2019 11:59	8/23/2019 14:24	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	1024573	Heptachlor Epoxide		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	108907	Chlorobenzene		5.1	ug/L	B	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	118741	Hexachlorobenzene		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1

2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	60571	Dieldrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	67663	Chloroform		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	72208	Endrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	72548	4,4'-DDD		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	7421934	Endrin Aldehyde		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	75252	Bromoform		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	75354	1,1-Dichloroethene		2.4	ug/L		8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	77474	Hexachlorocyclopent		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7429905	Aluminum	<	300	ug/L	U	8/16/2019 11:59	8/23/2019 14:24	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	156592	cis-1,2-Dichloroethen		8.6	ug/L		8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	1582098	Trifluralin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	15972608	Alachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440382	Arsenic		9.08	ug/L		8/12/2019 12:45	8/22/2019 9:58	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440393	Barium	<	10	ug/L	U	8/16/2019 11:59	8/23/2019 14:24	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019930		Beryllium	<	1	ug/L	U	8/16/2019 11:59	8/23/2019 14:24	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440702	Calcium		70.75	mg/L		8/16/2019 11:59	8/23/2019 14:24	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019930		Chromium	<	50	ug/L	U	8/16/2019 11:59	8/23/2019 14:24	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440508	Copper	<	10	ug/L	U	8/16/2019 11:59	8/23/2019 14:24	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7439896	Iron	<	100	ug/L	U	8/16/2019 11:59	8/23/2019 14:24	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7439976	Mercury	<	0.2	ug/L	U	8/16/2019 13:40	8/19/2019 9:14	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7439954	Magnesium		21.61	mg/L		8/16/2019 11:59	8/23/2019 14:24	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440235	Sodium		21.01	mg/L		8/16/2019 11:59	8/23/2019 14:24	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440020	Nickel	<	50	ug/L	U	8/16/2019 11:59	8/23/2019 14:24	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	1861321	DCPA		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	1897456	Chlorothalonil		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7439921	Lead	<	1	ug/L	U	8/12/2019 12:45	8/22/2019 9:58	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440360	Antimony	<	2	ug/L	U	8/12/2019 12:45	8/22/2019 9:58	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7782492	Selenium	<	7	ug/L	U	8/12/2019 12:45	8/22/2019 9:58	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440-28-0	Thallium	<	2	ug/L	U	8/12/2019 12:45	8/22/2019 9:58	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	1031078	Endosulfan Sulfate		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	67641	Acetone		5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	72435	Methoxychlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	76448	Heptachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440622	Vanadium	<	30	ug/L	U	8/16/2019 11:59	8/23/2019 14:24	1				
2166	11	8/6/2019	16:00	502	Water	Ground W Hoff OW-6-L	I2019019S	7440666	Zinc	<	30	ug/L	U	8/16/2019 11:59	8/23/2019 14:24	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	2593159	Etridiazole		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	309002	Aldrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	319868	delta-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	5103742	gamma-Chlordane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	98566	PCTFB		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	1918167	Propachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	58899	Lindane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006	72559	4,4'-DDE		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	74839	Bromomethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	74873	Chloromethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	75003	Chloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	75092	Dichloromethane		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	75343	1,1-Dichloroethane		3.5	ug/L		8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	78933	2-Butanone		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	79016	Trichloroethene		4.2	ug/L		8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	DIOXA	Water	Ground W Hoff OW-6-L	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/20/2019 2:00	8/26/2019 13:17	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006228		EXTRACTED DATE					8/12/2019 2:00	8/29/2019 12:38	1				
2166	11	8/6/2019	16:00	DIOXA	Water	Ground W Hoff OW-6-L	O2019006239		EXTRACTED DATE		8152019	Day		8/20/2019 2:00	8/26/2019 13:17	1				
2166	11	8/6/2019	16:00	PSTSW	Water	Ground W Hoff OW-6-L	O2019006249		EXTRACTED DATE		8132019	Day		9/5/2019 2:00	9/12/2019 10:14	1				
2166	11	8/6/2019	16:00	VOASW	Water	Ground W Hoff OW-6-L	O2019006228		EXTRACTED TIME					8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	319857	beta-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1				
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	51218452	Metolachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1				
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	51877748	trans-Permethrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1				
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	54774457	cis-Permethrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				

2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	108883	Toluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440-42-8	Boron		3841	ug/L		8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	91203	Naphthalene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	95476	o-Xylene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	959988	Endosulfan I		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	21725462	Cyanazine		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	2675776	Chlorneb		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	319846	alpha-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	71432	Benzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	510156	Chlorobenzilate		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	5103719	alpha-Chlordane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	53494705	Endrin Ketone		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440224	Silver	<	10	ug/L	U	8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	21087649	Metribuzin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	2921882	Dursban		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	33213659	Endosulfan II		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	50293	4,4'-DDT		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440439	Cadmium	<	10	ug/L	U	8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019931		Cobalt Cor	<	50	ug/L	U	8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	1330207	Total Xylenes		0	ug/L		8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	100425	Styrene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440097	Potassium		2.391	mg/L		8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7439965	Manganes	<	10	ug/L	U	8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	1024573	Heptachlor Epoxide		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	108907	Chlorobenzene		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	118741	Hexachlorobenzene		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	60571	Dieldrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	67663	Chloroform		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	72208	Endrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	72548	4,4'-DDD		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	7421934	Endrin Aldehyde		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	75252	Bromoform		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	77474	Hexachlorocyclopent		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7429905	Aluminum	<	300	ug/L	U	8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	1582098	Trifluralin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	15972608	Alachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440382	Arsenic		10.1	ug/L		8/12/2019 12:58	8/22/2019 9:58	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440393	Barium		15	ug/L		8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019931		Beryllium	<	1	ug/L	U	8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440702	Calcium		60.83	mg/L		8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019931		Chromium	<	50	ug/L	U	8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440508	Copper	<	10	ug/L	U	8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7439896	Iron	<	100	ug/L	U	8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7439976	Mercury	<	0.2	ug/L	U	8/16/2019 13:44	8/19/2019 9:14	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7439954	Magnesium		16.53	mg/L		8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440235	Sodium		16.93	mg/L		8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440020	Nickel	<	50	ug/L	U	8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	1861321	DCPA		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	1897456	Chlorothalonil		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7439921	Lead	<	1	ug/L	U	8/12/2019 12:58	8/22/2019 9:58	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440360	Antimony	<	2	ug/L	U	8/20/2019 11:20	8/22/2019 9:58	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7782492	Selenium	<	7	ug/L	U	8/12/2019 12:58	8/22/2019 9:58	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440-28-0	Thallium	<	2	ug/L	U	8/12/2019 12:58	8/22/2019 9:58	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	1031078	Endosulfan Sulfate		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	67641	Acetone		5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	72435	Methoxychlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	76448	Heptachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440622	Vanadium	<	30	ug/L	U	8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	502	Water	Ground W Hoff OW-6-U	I2019019S	7440666	Zinc	<	30	ug/L	U	8/16/2019 12:04	8/23/2019 14:26	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	2593159	Etridiazole		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	309002	Aldrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	319868	delta-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	5103742	gamma-Chlordane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1		
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1		

2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	106934	1,2-Dibromoethane	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	98566	PCTFB	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	96128	1,2-Dibromo-3-chlorc	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	1918167	Propachlor	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	100414	Ethylbenzene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	106434	p-Chlorotoluene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	108101	4-Methyl-2-pentanon	2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	108383	m/p-Xylenes	1	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	127184	Tetrachloroethene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	135988	Sec-Butylbenzene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	142289	1,3-Dichloropropane	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	563586	1,1-Dichloropropene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	58899	Lindane	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	71556	1,1,1-Trichloroethane	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006	72559	4,4'-DDE	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:15	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	74839	Bromomethane	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	74873	Chloromethane	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	75003	Chloroethane	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	75092	Dichloromethane	1	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	75343	1,1-Dichloroethane	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	78933	2-Butanone	2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	79016	Trichloroethene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	98828	Isopropylbenzene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	75650	t-Butyl alcohol	5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	DIOXA	Water	Ground W Hoff OW-6-U	O2019006	123911	1,4-Dioxane	2.5	ug/L	U	8/20/2019 2:00	8/26/2019 13:17	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006229		EXTRACTED DATE				8/12/2019 2:00	8/29/2019 12:38	1				
2166	12	8/6/2019	17:15	DIOXA	Water	Ground W Hoff OW-6-U	O2019006240		EXTRACTED DATE	8152019	Day		8/20/2019 2:00	8/26/2019 13:17	1				
2166	12	8/6/2019	17:15	PSTSW	Water	Ground W Hoff OW-6-U	O2019006250		EXTRACTED DATE	8132019	Day		9/5/2019 2:00	9/12/2019 10:15	1				
2166	12	8/6/2019	17:15	VOASW	Water	Ground W Hoff OW-6-U	O2019006229		EXTRACTED TIME				8/12/2019 2:00	8/29/2019 12:38	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	319857	beta-BHC	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	51218452	Metolachlor	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	51877748	trans-Permethrin	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	54774457	cis-Permethrin	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	108883	Toluene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	74975	Bromochloromethane	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	75150	Carbon disulfide	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	124481	Dibromochlorometha	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	502	Water	Ground W Hoff MW-A	I2019019S	7440-42-8	Boron <	200	ug/L	U	8/16/2019 12:08	8/23/2019 14:28	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	91203	Naphthalene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	95476	o-Xylene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	959988	Endosulfan I	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	95501	1,2-Dichlorobenzene	1.1	ug/L	B	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	21725462	Cyanazine	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	2675776	Chlorneb	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	319846	alpha-BHC	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	71432	Benzene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	510156	Chlorobenzilate	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	5103719	alpha-Chlordane	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	53494705	Endrin Ketone	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	502	Water	Ground W Hoff MW-A	I2019019S	7440224	Silver <	10	ug/L	U	8/16/2019 12:08	8/23/2019 14:28	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	21087649	Metribuzin	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	2921882	Dursban	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	33213659	Endosulfan II	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	50293	4,4'-DDT	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	502	Water	Ground W Hoff MW-A	I2019019S	7440439	Cadmium <	10	ug/L	U	8/16/2019 12:08	8/23/2019 14:28	1				
2166	13	8/7/2019	9:05	502	Water	Ground W Hoff MW-A	I2019019932		Cobalt Cor <	50	ug/L	U	8/16/2019 12:08	8/23/2019 14:28	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	1330207	Total Xylenes	0	ug/L		8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	100425	Styrene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	502	Water	Ground W Hoff MW-A	I2019019S	7440097	Potassium	3.716	mg/L		8/16/2019 12:08	8/23/2019 14:28	1				
2166	13	8/7/2019	9:05	502	Water	Ground W Hoff MW-A	I2019019S	7439965	Manganese	2787	ug/L		8/16/2019 12:08	8/23/2019 14:28	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	1024573	Heptachlor Epoxide	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	104518	n-Butylbenzene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	108861	Bromobenzene	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	108907	Chlorobenzene	1	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	109999	Tetrahydrofuran	1	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	118741	Hexachlorobenzene	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	591786	2-Hexanone	2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	60571	Dieldrin	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	67663	Chloroform	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	72208	Endrin	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	72548	4,4'-DDD	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1				
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-A	O2019006	7421934	Endrin Aldehyde	0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	13	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-A	O2019006	74953	Dibromomethane	0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1				

2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	75252	Bromoform		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	77474	Hexachlorocyclopent		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7429905	Aluminum	<	300	ug/L	U	8/16/2019 12:08	8/23/2019 14:28	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	1582098	Trifluralin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	15972608	Alachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7440382	Arsenic		4.31	ug/L		8/12/2019 13:02	8/22/2019 9:58	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7440393	Barium		14	ug/L		8/16/2019 12:08	8/23/2019 14:28	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019932		Beryllium	<	1	ug/L	U	8/16/2019 12:08	8/23/2019 14:28	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7440702	Calcium		46.61	mg/L		8/16/2019 12:08	8/23/2019 14:28	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019932		Chromium	<	50	ug/L	U	8/16/2019 12:08	8/23/2019 14:28	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7440508	Copper	<	10	ug/L	U	8/16/2019 12:08	8/23/2019 14:28	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7439896	Iron		956	ug/L		8/16/2019 12:08	8/23/2019 14:28	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7439976	Mercury	<	0.2	ug/L	U	8/16/2019 13:46	8/19/2019 9:15	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7439954	Magnesium		17.99	mg/L		8/16/2019 12:08	8/23/2019 14:28	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7440235	Sodium		45.89	mg/L		8/16/2019 12:08	8/23/2019 14:28	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7440020	Nickel	<	50	ug/L	U	8/16/2019 12:08	8/23/2019 14:28	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	1861321	DCPA		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	1897456	Chlorothalonil		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7439921	Lead	<	1	ug/L	U	8/12/2019 13:02	8/22/2019 9:58	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7440360	Antimony	<	2	ug/L	U	8/12/2019 13:02	8/22/2019 9:58	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7782492	Selenium	<	7	ug/L	U	8/12/2019 13:02	8/22/2019 9:58	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7440-28-0	Thallium	<	2	ug/L	U	8/12/2019 13:02	8/22/2019 9:58	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	1031078	Endosulfan Sulfate		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	67641	Acetone		5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	72435	Methoxychlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	76448	Heptachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7440622	Vanadium	<	30	ug/L	U	8/16/2019 12:08	8/23/2019 14:28	1
2166	13	8/7/2019	9:05	502	Water	Ground W	Hoff MW-A	I2019019S	7440666	Zinc	<	30	ug/L	U	8/16/2019 12:08	8/23/2019 14:28	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	2593159	Etridiazole		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	309002	Aldrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	319868	delta-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	5103742	gamma-Chlordane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	98566	PCTFB		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	1918167	Propachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	58899	Lindane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006	72559	4,4'-DDE		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	74839	Bromomethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	74873	Chloromethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	75003	Chloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	75092	Dichloromethane		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	75343	1,1-Dichloroethane		11.3	ug/L		8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	78933	2-Butanone		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	DIOXA	Water	Ground W	Hoff MW-A	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/20/2019 2:00	8/26/2019 13:18	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006230		EXTRACTED DATE					8/12/2019 2:00	8/29/2019 12:39	1
2166	13	8/7/2019	9:05	DIOXA	Water	Ground W	Hoff MW-A	O2019006241		EXTRACTED DATE		8152019	Day		8/20/2019 2:00	8/26/2019 13:18	1
2166	13	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-A	O2019006251		EXTRACTED DATE		8132019	Day		9/5/2019 2:00	9/12/2019 10:17	1
2166	13	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-A	O2019006230		EXTRACTED TIME					8/12/2019 2:00	8/29/2019 12:39	1
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	319857	beta-BHC		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	51218452	Metolachlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	51877748	trans-Permethrin		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	54774457	cis-Permethrin		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	75014	Chloroethene (vinyl c		28.8	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	103651	n-Propylbenzene		9.9	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	106467	1,4-Dichlorobenzene		476	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	108883	Toluene		5.3	ug/L		8/13/2019 2:00	8/29/2019 12:42	1
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	120821	1,2,4-Trichlorobenzer		7.6	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1

2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	124481	Dibromochlorometha	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440-42-8	Boron	203	ug/L		8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	91203	Naphthalene	18.8	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	95476	o-Xylene	22.9	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	959988	Endosulfan I	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	87616	1,2,3-Trichlorobenzer	1.1	ug/L		8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	95501	1,2-Dichlorobenzene	2330	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	21725462	Cyanazine	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	2675776	Chlorneb	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	319846	alpha-BHC	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	71432	Benzene	30.1	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	510156	Chlorobenzilate	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	5103719	alpha-Chlordane	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	53494705	Endrin Ketone	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	1634044	Methyl-tert-butyl Eth	0.53	ug/L		8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440224	Silver <	10	ug/L	U	8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	21087649	Metribuzin	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	2921882	Dursban	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	33213659	Endosulfan II	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	50293	4,4'-DDT	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440439	Cadmium <	10	ug/L	U	8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019933		Cobalt Cor <	50	ug/L	U	8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	1330207	Total Xylenes	29.5	ug/L		8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	100425	Styrene	0.77	ug/L		8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440097	Potassium	5.725	mg/L		8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7439965	Manganese	2660	ug/L		8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	1024573	Heptachlor Epoxide	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	104518	n-Butylbenzene	1.4	ug/L		8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	108861	Bromobenzene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	108907	Chlorobenzene	8830	ug/L		8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	109999	Tetrahydrofuran	1	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	118741	Hexachlorobenzene	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	591786	2-Hexanone	2.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	60571	Dieldrin	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	67663	Chloroform	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	72208	Endrin	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	72548	4,4'-DDD	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	7421934	Endrin Aldehyde	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	74953	Dibromomethane	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	75252	Bromoform	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	75354	1,1-Dichloroethene	35.9	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	77474	Hexachlorocyclopent	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7429905	Aluminum <	300	ug/L	U	8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	156592	cis-1,2-Dichloroethen	2370	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	1582098	Trifluralin	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	15972608	Alachlor	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440382	Arsenic	3.92	ug/L		8/12/2019 13:06	8/22/2019 9:58	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440393	Barium	139	ug/L		8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019933		Beryllium <	1	ug/L	U	8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440702	Calcium	62.17	mg/L		8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019933		Chromium <	50	ug/L	U	8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440508	Copper <	10	ug/L	U	8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7439896	Iron	3800	ug/L		8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7439976	Mercury <	0.2	ug/L	U	8/16/2019 13:48	8/19/2019 9:16	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7439954	Magnesium	30.64	mg/L		8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440235	Sodium	42.27	mg/L		8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440020	Nickel <	50	ug/L	U	8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	1861321	DCPA	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	1897456	Chlorothalonil	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7439921	Lead <	1	ug/L	U	8/12/2019 13:06	8/22/2019 9:58	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440360	Antimony <	2	ug/L	U	8/12/2019 13:06	8/22/2019 9:58	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7782492	Selenium <	7	ug/L	U	8/12/2019 13:06	8/22/2019 9:58	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440-28-0	Thallium <	2	ug/L	U	8/12/2019 13:06	8/22/2019 9:58	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	1031078	Endosulfan Sulfate	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	108678	1,3,5-Trimethylbenze	3.6	ug/L		8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	594207	2,2-Dichloropropane	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	67641	Acetone	23.2	ug/L		8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	72435	Methoxychlor	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	75274	Bromodichlorometha	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	76448	Heptachlor	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	79345	1,1,2,2-Tetrachloroet	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	96184	1,2,3-Trichloropropar	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	99876	4-Isopropyltoluene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	95498	o-Chlorotoluene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440622	Vanadium <	30	ug/L	U	8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	502	Water	Ground W	Hoff MW-B	I2019019S	7440666	Zinc <	30	ug/L	U	8/16/2019 12:11	8/23/2019 14:33	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	2593159	Etridiazole	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	309002	Aldrin	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	319868	delta-BHC	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	5103742	gamma-Chlordane	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	541731	1,3-Dichlorobenzene	37.6	ug/L		8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	106934	1,2-Dibromoethane	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	98566	PCTFB	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	95636	1,2,4-Trimethylbenze	46.7	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	96128	1,2-Dibromo-3-chloro	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W	Hoff MW-B	O2019006	1918167	Propachlor	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	100414	Ethylbenzene	9.4	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1		
2166	14	8/7/2019	9:05	VOASW	Water	Ground W	Hoff MW-B	O2019006	106434	p-Chlorotoluene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1		

2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	108101	4-Methyl-2-pentanon	2.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	108383	m/p-Xylenes	6.6	ug/L		8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	127184	Tetrachloroethene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	135988	Sec-Butylbenzene	2.8	ug/L		8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	142289	1,3-Dichloropropane	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	156605	trans-1,2-Dichloroeth	38.2	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	563586	1,1-Dichloropropene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-B	O2019006	58899	Lindane	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	71556	1,1,1-Trichloroethane	84.1	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-B	O2019006	72559	4,4'-DDE	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:18	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	74839	Bromomethane	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	74873	Chloromethane	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	75003	Chloroethane	7.8	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	75092	Dichloromethane	1	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	75343	1,1-Dichloroethane	158	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	78875	1,2-Dichloropropane	0.97	ug/L		8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	78933	2-Butanone	2.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	79016	Trichloroethene	45.2	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	98066	Tert-Butylbenzene	0.93	ug/L		8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	98828	Isopropylbenzene	6.8	ug/L	Q	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	75650	t-Butyl alcohol	7.9	ug/L		8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	DIOXA	Water	Ground W Hoff MW-B	O2019006	123911	1,4-Dioxane	17	ug/L		8/20/2019 2:00	8/26/2019 13:19	1	Mid-level LCS recovery low. Results may be biased low.				
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006231		EXTRACTED DATE				8/13/2019 2:00	8/29/2019 12:42	1					
2166	14	8/7/2019	9:05	DIOXA	Water	Ground W Hoff MW-B	O2019006242		EXTRACTED DATE	8152019	Day		8/20/2019 2:00	8/26/2019 13:19	1					
2166	14	8/7/2019	9:05	PSTSW	Water	Ground W Hoff MW-B	O2019006252		EXTRACTED DATE	8132019	Day		9/5/2019 2:00	9/12/2019 10:18	1					
2166	14	8/7/2019	9:05	VOASW	Water	Ground W Hoff MW-B	O2019006231		EXTRACTED TIME				8/13/2019 2:00	8/29/2019 12:42	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	319857	beta-BHC	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	51218452	Metolachlor	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	51877748	trans-Permethrin	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	54774457	cis-Permethrin	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	75014	Chloroethene (vinyl c	2	ug/L		8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	106467	1,4-Dichlorobenzene	2.4	ug/L		8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	108883	Toluene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	74975	Bromochloromethane	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	75150	Carbon disulfide	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	124481	Dibromochloromethane	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	502	Water	Ground W Hoff MW-13	I2019019S	7440-42-8	Boron <	200	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	91203	Naphthalene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	95476	o-Xylene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	959988	Endosulfan I	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	95501	1,2-Dichlorobenzene	12.8	ug/L		8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	21725462	Cyanazine	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	2675776	Chlorneb	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	319846	alpha-BHC	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	71432	Benzene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	510156	Chlorobenzilate	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	5103719	alpha-Chlordane	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	53494705	Endrin Ketone	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	1634044	Methyl-tert-butyl Eth	0.68	ug/L		8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	502	Water	Ground W Hoff MW-13	I2019019S	7440224	Silver <	10	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	21087649	Metribuzin	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	2921882	Dursban	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	33213659	Endosulfan II	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	50293	4,4'-DDT	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	502	Water	Ground W Hoff MW-13	I2019019S	7440439	Cadmium <	10	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1					
2166	15	8/7/2019	12:35	502	Water	Ground W Hoff MW-13	I2019019934		Cobalt Cor <	50	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	1330207	Total Xylenes	0	ug/L		8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	100425	Styrene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	502	Water	Ground W Hoff MW-13	I2019019S	7440097	Potassium	1.068	mg/L		8/16/2019 12:20	8/23/2019 14:39	1					
2166	15	8/7/2019	12:35	502	Water	Ground W Hoff MW-13	I2019019S	7439965	Manganese	103	ug/L		8/16/2019 12:20	8/23/2019 14:39	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	1024573	Heptachlor Epoxide	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	104518	n-Butylbenzene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	108861	Bromobenzene	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	108907	Chlorobenzene	12.9	ug/L		8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	109999	Tetrahydrofuran	1	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	118741	Hexachlorobenzene	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	591786	2-Hexanone	2.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	60571	Dieldrin	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	67663	Chloroform	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	72208	Endrin	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	72548	4,4'-DDD	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	7421934	Endrin Aldehyde	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.				
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	74953	Dibromomethane	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	75252	Bromoform	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	75354	1,1-Dichloroethene	7.3	ug/L		8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	77474	Hexachlorocyclopent	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					
2166	15	8/7/2019	12:35	502	Water	Ground W Hoff MW-13	I2019019S	7429905	Aluminum <	300	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1					
2166	15	8/7/2019	12:35	VOASW	Water	Ground W Hoff MW-13	O2019006	156592	cis-1,2-Dichloroethen	12.3	ug/L		8/13/2019 2:00	8/29/2019 12:48	1					
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W Hoff MW-13	O2019006	1582098	Trifluralin	0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1					

2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	15972608	Alachlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7440382	Arsenic	<	3	ug/L	U	8/12/2019 13:14	8/22/2019 9:58	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7440393	Barium	<	10	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	934	Beryllium	<	1	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7440702	Calcium		31.98	mg/L		8/16/2019 12:20	8/23/2019 14:39	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	934	Chromium	<	50	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7440508	Copper	<	10	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7439896	Iron	<	100	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7439976	Mercury	<	0.2	ug/L	U	8/16/2019 13:50	8/19/2019 9:17	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7439954	Magnesium		29.05	mg/L		8/16/2019 12:20	8/23/2019 14:39	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7440235	Sodium		110.1	mg/L		8/16/2019 15:23	8/23/2019 14:39	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7440020	Nickel	<	50	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	1861321	DCPA		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	1897456	Chlorothalonil		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7439921	Lead	<	1	ug/L	U	8/12/2019 13:14	8/22/2019 9:58	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7440360	Antimony	<	2	ug/L	U	8/12/2019 13:14	8/22/2019 9:58	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7782492	Selenium	<	7	ug/L	U	8/12/2019 13:14	8/22/2019 9:58	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7440-28-0	Thallium	<	2	ug/L	U	8/12/2019 13:14	8/22/2019 9:58	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	1031078	Endosulfan Sulfate		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	67641	Acetone		5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	72435	Methoxychlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	76448	Heptachlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7440622	Vanadium	<	30	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1			
2166	15	8/7/2019	12:35	502	Water	Ground W	Hoff MW-13	I2019019	7440666	Zinc	<	30	ug/L	U	8/16/2019 12:20	8/23/2019 14:39	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	2593159	Etridiazole		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	309002	Aldrin		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	319868	delta-BHC		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	5103742	gamma-Chlordane		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	98566	PCTFB		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	1918167	Propachlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	58899	Lindane		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	72559	4,4'-DDE		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	74839	Bromomethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	74873	Chloromethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	75003	Chloroethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	75092	Dichloromethane		1	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	75343	1,1-Dichloroethane		46	ug/L		8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	78933	2-Butanone		2.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	79016	Trichloroethene		21.3	ug/L		8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	DIOXA	Water	Ground W	Hoff MW-13	O2019006	123911	1,4-Dioxane		53.3	ug/L		8/20/2019 2:00	8/26/2019 13:20	1	Mid-level LCS recovery low. Results may be biased low.		
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	232	EXTRACTED DATE					8/13/2019 2:00	8/29/2019 12:48	1			
2166	15	8/7/2019	12:35	DIOXA	Water	Ground W	Hoff MW-13	O2019006	243	EXTRACTED DATE	8152019	Day			8/20/2019 2:00	8/26/2019 13:20	1			
2166	15	8/7/2019	12:35	PSTSW	Water	Ground W	Hoff MW-13	O2019006	253	EXTRACTED DATE	8132019	Day			9/5/2019 2:00	9/12/2019 10:19	1			
2166	15	8/7/2019	12:35	VOASW	Water	Ground W	Hoff MW-13	O2019006	232	EXTRACTED TIME					8/13/2019 2:00	8/29/2019 12:48	1			
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	319857	beta-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1			
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	51218452	Metolachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1			
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	51877748	trans-Permethrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1			
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	54774457	cis-Permethrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	108883	Toluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	74975	Bromochloromethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019	7440-42-8	Boron	<	200	ug/L	U	8/16/2019 12:30	8/23/2019 14:42	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	91203	Naphthalene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	95476	o-Xylene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	959988	Endosulfan I		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1			
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1			

2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	95501	1,2-Dichlorobenzene		0.88	ug/L		8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	21725462	Cyanazine		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	2675776	Chlorneb		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	319846	alpha-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	71432	Benzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	510156	Chlorobenzilate		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	5103719	alpha-Chlordane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	53494705	Endrin Ketone		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440224	Silver	<	10	ug/L	U	8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	21087649	Metribuzin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	2921882	Dursban		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	33213659	Endosulfan II		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	50293	4,4'-DDT		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440439	Cadmium	<	10	ug/L	U	8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S		Cobalt Cor	<	50	ug/L	U	8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	1330207	Total Xylenes		0	ug/L		8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	100425	Styrene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440097	Potassium		2.971	mg/L		8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7439965	Manganese		261	ug/L		8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	1024573	Heptachlor Epoxide		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	108907	Chlorobenzene		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	118741	Hexachlorobenzene		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	60571	Dieldrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	67663	Chloroform		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	72208	Endrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	72548	4,4'-DDD		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	7421934	Endrin Aldehyde		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	75252	Bromoform		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	75354	1,1-Dichloroethene		2.4	ug/L		8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	77474	Hexachlorocyclopent		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7429905	Aluminum	<	300	ug/L	U	8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	1582098	Trifluralin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	15972608	Alachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440382	Arsenic	<	3	ug/L	U	8/12/2019 13:23	8/22/2019 9:58	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440393	Barium		19	ug/L		8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S		Beryllium	<	1	ug/L	U	8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440702	Calcium		19.17	mg/L		8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S		Chromium	<	50	ug/L	U	8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440508	Copper	<	10	ug/L	U	8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7439896	Iron		6018	ug/L		8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7439976	Mercury	<	0.2	ug/L	U	8/16/2019 13:52	8/19/2019 9:20	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7439954	Magnesium		8.45	mg/L		8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440235	Sodium		21.03	mg/L		8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440020	Nickel	<	50	ug/L	U	8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	1861321	DCPA		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	1897456	Chlorothalonil		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7439921	Lead	<	1	ug/L	U	8/12/2019 13:23	8/22/2019 9:58	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440360	Antimony	<	2	ug/L	U	8/12/2019 13:23	8/22/2019 9:58	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7782492	Selenium	<	7	ug/L	U	8/12/2019 13:23	8/22/2019 9:58	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440-28-0	Thallium	<	2	ug/L	U	8/12/2019 13:23	8/22/2019 9:58	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	1031078	Endosulfan Sulfate		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	67641	Acetone		5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	72435	Methoxychlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	76448	Heptachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440622	Vanadium	<	30	ug/L	U	8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	502	Water	Ground W	Hoff MW-15	I2019019S	7440666	Zinc	<	30	ug/L	U	8/16/2019 12:30	8/23/2019 14:42	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	2593159	Etridiazole		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	309002	Aldrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	319868	delta-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	5103742	gamma-Chlordane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	98566	PCTFB		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W	Hoff MW-15	O2019006	1918167	Propachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:20	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	
2166	16	8/7/2019	14:40	VOASW	Water	Ground W	Hoff MW-15	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1	

2166	16	8/7/2019	14:40	PSTSW	Water	Ground W Hoff MW-15	O2019006	58899	Lindane	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:20	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	71556	1,1,1-Trichloroethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W Hoff MW-15	O2019006	72559	4,4'-DDE	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:20	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	74839	Bromomethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	74873	Chloromethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	75003	Chloroethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	75092	Dichloromethane	1	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	75343	1,1-Dichloroethane	3	ug/L			8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	78933	2-Butanone	2.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	79016	Trichloroethene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	98828	Isopropylbenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	75650	t-Butyl alcohol	5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	DIOXA	Water	Ground W Hoff MW-15	O2019006	123911	1,4-Dioxane	3	ug/L			8/20/2019 2:00	8/26/2019 13:20	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006233		EXTRACTED DATE					8/12/2019 2:00	8/29/2019 12:51	1				
2166	16	8/7/2019	14:40	DIOXA	Water	Ground W Hoff MW-15	O2019006244		EXTRACTED DATE	8152019	Day			8/20/2019 2:00	8/26/2019 13:20	1				
2166	16	8/7/2019	14:40	PSTSW	Water	Ground W Hoff MW-15	O2019006254		EXTRACTED DATE	8132019	Day			9/5/2019 2:00	9/12/2019 10:20	1				
2166	16	8/7/2019	14:40	VOASW	Water	Ground W Hoff MW-15	O2019006233		EXTRACTED TIME					8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	319857	beta-BHC	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	51218452	Metolachlor	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	51877748	trans-Permethrin	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	54774457	cis-Permethrin	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	103651	n-Propylbenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	108054	Vinyl Acetate	1	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	108883	Toluene	0.62	ug/L			8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	74975	Bromochloromethan	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	75150	Carbon disulfide	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	124481	Dibromochlorometha	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019S	7440-42-8	Boron	3155	ug/L			8/16/2019 12:32	8/23/2019 14:45	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	91203	Naphthalene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	95476	o-Xylene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	959988	Endosulfan I	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	21725462	Cyanazine	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	2675776	Chlorneb	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	319846	alpha-BHC	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	71432	Benzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	510156	Chlorobenzilate	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	5103719	alpha-Chlordane	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	53494705	Endrin Ketone	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019S	7440224	Silver <	10	ug/L	U		8/16/2019 12:32	8/23/2019 14:45	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	21087649	Metribuzin	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	2921882	Dursban	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	33213659	Endosulfan II	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	50293	4,4'-DDT	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019S	7440439	Cadmium <	10	ug/L	U		8/16/2019 12:32	8/23/2019 14:45	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019936		Cobalt Cor <	50	ug/L	U		8/16/2019 12:32	8/23/2019 14:45	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	1330207	Total Xylenes	0	ug/L			8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	100425	Styrene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019S	7440097	Potassium	3.166	mg/L			8/16/2019 12:32	8/23/2019 14:45	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019S	7439965	Manganese	121	ug/L			8/16/2019 12:32	8/23/2019 14:45	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	1024573	Heptachlor Epoxide	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	104518	n-Butylbenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	108861	Bromobenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	108907	Chlorobenzene	1	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	109999	Tetrahydrofuran	1	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	118741	Hexachlorobenzene	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	591786	2-Hexanone	2.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	60571	Dieldrin	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	67663	Chloroform	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	72208	Endrin	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	72548	4,4'-DDD	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	7421934	Endrin Aldehyde	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	74953	Dibromomethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	75252	Bromoform	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	75354	1,1-Dichloroethene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	77474	Hexachlorocyclopent	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019S	7429905	Aluminum <	300	ug/L	U		8/16/2019 12:32	8/23/2019 14:45	1				
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	156592	cis-1,2-Dichloroethen	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	1582098	Trifluralin	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	15972608	Alachlor	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:21	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019S	7440382	Arsenic	5.61	ug/L			8/12/2019 13:27	8/22/2019 9:58	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019S	7440393	Barium	15	ug/L			8/16/2019 12:32	8/23/2019 14:45	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019936		Beryllium <	1	ug/L	U		8/16/2019 12:32	8/23/2019 14:45	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019S	7440702	Calcium	71.62	mg/L			8/16/2019 12:32	8/23/2019 14:45	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019936		Chromium <	50	ug/L	U		8/16/2019 12:32	8/23/2019 14:45	1				
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I2019019S	7440508	Copper <	10	ug/L	U		8/16/2019 12:32	8/23/2019 14:45	1				

2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I20190199	7439896	Iron		398	ug/L		8/16/2019 12:32	8/23/2019 14:45	1
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I20190199	7439976	Mercury	<	0.2	ug/L	U	8/16/2019 13:54	8/19/2019 9:20	1
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I20190199	7439954	Magnesium		11.58	mg/L		8/16/2019 12:32	8/23/2019 14:45	1
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I20190199	7440235	Sodium		114.4	mg/L		8/16/2019 15:26	8/23/2019 14:45	1
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I20190199	7440020	Nickel	<	50	ug/L	U	8/16/2019 12:32	8/23/2019 14:45	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	1861321	DCPA		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	1897456	Chlorothalonil		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I20190199	7439921	Lead	<	1	ug/L	U	8/12/2019 13:27	8/22/2019 9:58	1
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I20190199	7440360	Antimony	<	2	ug/L	U	8/12/2019 13:27	8/22/2019 9:58	1
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I20190199	7782492	Selenium	<	7	ug/L	U	8/12/2019 13:27	8/22/2019 9:58	1
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I20190199	7440-28-0	Thallium	<	2	ug/L	U	8/12/2019 13:27	8/22/2019 9:58	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	1031078	Endosulfan Sulfate		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	67641	Acetone		5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	72435	Methoxychlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	76448	Heptachlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I20190199	7440622	Vanadium	<	30	ug/L	U	8/16/2019 12:32	8/23/2019 14:45	1
2166	17	8/8/2019	9:25	502	Water	Ground W Hoff MW-1DL	I20190199	7440666	Zinc	<	30	ug/L	U	8/16/2019 12:32	8/23/2019 14:45	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	2593159	Etridiazole		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	309002	Aldrin		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	319868	delta-BHC		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	5103742	gamma-Chlordane		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	98566	PCTFB		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	1918167	Propachlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	58899	Lindane		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006	72559	4,4'-DDE		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	74839	Bromomethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	74873	Chloromethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	75003	Chloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	75092	Dichloromethane		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	78933	2-Butanone		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	DIOXA	Water	Ground W Hoff MW-1DL	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/20/2019 2:00	8/26/2019 13:20	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006234		EXTRACTED DATE					8/12/2019 2:00	8/29/2019 12:51	1
2166	17	8/8/2019	9:25	DIOXA	Water	Ground W Hoff MW-1DL	O2019006245		EXTRACTED DATE		8152019	Day		8/20/2019 2:00	8/26/2019 13:20	1
2166	17	8/8/2019	9:25	PSTSW	Water	Ground W Hoff MW-1DL	O2019006255		EXTRACTED DATE		8132019	Day		9/5/2019 2:00	9/12/2019 10:21	1
2166	17	8/8/2019	9:25	VOASW	Water	Ground W Hoff MW-1DL	O2019006234		EXTRACTED TIME					8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	PSTSW	Water	Ground W Hoff MW-1DU	O2019006	319857	beta-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:22	1
2166	18	8/8/2019	11:05	PSTSW	Water	Ground W Hoff MW-1DU	O2019006	51218452	Metolachlor		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:22	1
2166	18	8/8/2019	11:05	PSTSW	Water	Ground W Hoff MW-1DU	O2019006	51877748	trans-Permethrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:22	1
2166	18	8/8/2019	11:05	PSTSW	Water	Ground W Hoff MW-1DU	O2019006	54774457	cis-Permethrin		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:22	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	108883	Toluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	502	Water	Ground W Hoff MW-1DU	I20190199	7440-42-8	Boron		3394	ug/L		8/16/2019 12:49	8/26/2019 8:25	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	91203	Naphthalene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	95476	o-Xylene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	PSTSW	Water	Ground W Hoff MW-1DU	O2019006	959988	Endosulfan I		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:22	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	PSTSW	Water	Ground W Hoff MW-1DU	O2019006	21725462	Cyanazine		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:22	1
2166	18	8/8/2019	11:05	PSTSW	Water	Ground W Hoff MW-1DU	O2019006	2675776	Chlorneb		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:22	1
2166	18	8/8/2019	11:05	PSTSW	Water	Ground W Hoff MW-1DU	O2019006	319846	alpha-BHC		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:22	1
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	71432	Benzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1
2166	18	8/8/2019	11:05	PSTSW	Water	Ground W Hoff MW-1DU	O2019006	510156	Chlorobenzilate		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:22	1
2166	18	8/8/2019	11:05	PSTSW	Water	Ground W Hoff MW-1DU	O2019006	5103719	alpha-Chlordane		0.051	ug/L	U	9/5/2019 2:00	9/12/2019 10:22	1

2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	53494705	Endrin Ketone	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440224	Silver	< 10	ug/L	U		8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	21087649	Metribuzin	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	2921882	Dursban	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	33213659	Endosulfan II	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	50293	4,4'-DDT	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440439	Cadmium	< 10	ug/L	U		8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019937		Cobalt Cor	< 50	ug/L	U		8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	1330207	Total Xylenes	0	ug/L			8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	100425	Styrene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440097	Potassium	3.135	mg/L			8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7439965	Manganese	151	ug/L			8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	1024573	Heptachlor Epoxide	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	104518	n-Butylbenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	108861	Bromobenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	108907	Chlorobenzene	1	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	109999	Tetrahydrofuran	1	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	118741	Hexachlorobenzene	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	591786	2-Hexanone	2.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	60571	Dieldrin	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	67663	Chloroform	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	72208	Endrin	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	72548	4,4'-DDD	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	7421934	Endrin Aldehyde	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	74953	Dibromomethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	75252	Bromoform	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	75354	1,1-Dichloroethene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	77474	Hexachlorocyclopent	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7429905	Aluminum	< 300	ug/L	U		8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	156592	cis-1,2-Dichloroethen	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	1582098	Trifluralin	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	15972608	Alachlor	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440382	Arsenic	< 3	ug/L	U		8/12/2019 13:31	8/22/2019 9:58	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440393	Barium	23	ug/L			8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019937		Beryllium	< 1	ug/L	U		8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440702	Calcium	116.6	mg/L			8/16/2019 15:29	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019937		Chromium	< 50	ug/L	U		8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440508	Copper	< 10	ug/L	U		8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7439896	Iron	< 100	ug/L	U		8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7439976	Mercury	< 0.2	ug/L	U		8/16/2019 13:56	8/19/2019 9:21	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7439954	Magnesium	33.76	mg/L			8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440235	Sodium	22.96	mg/L			8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440020	Nickel	< 50	ug/L	U		8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	1861321	DCPA	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	1897456	Chlorothalonil	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7439921	Lead	< 1	ug/L	U		8/12/2019 13:31	8/22/2019 9:58	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440360	Antimony	< 2	ug/L	U		8/12/2019 13:31	8/22/2019 9:58	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7782492	Selenium	< 7	ug/L	U		8/12/2019 13:31	8/22/2019 9:58	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440-28-0	Thallium	< 2	ug/L	U		8/12/2019 13:31	8/22/2019 9:58	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	1031078	Endosulfan Sulfate	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	108678	1,3,5-Trimethylbenze	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	594207	2,2-Dichloropropane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	67641	Acetone	5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	72435	Methoxychlor	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	75274	Bromodichlorometha	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	76448	Heptachlor	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	79345	1,1,2,2-Tetrachloroet	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	96184	1,2,3-Trichloropropar	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	99876	4-Isopropyltoluene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	95498	o-Chlorotoluene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440622	Vanadium	< 30	ug/L	U		8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	502	Water	Ground W	Hoff MW-1DU	I2019019	7440666	Zinc	< 30	ug/L	U		8/16/2019 12:49	8/26/2019 8:25	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	2593159	Etridiazole	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	309002	Aldrin	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	319868	delta-BHC	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	5103742	gamma-Chlordane	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	541731	1,3-Dichlorobenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	106934	1,2-Dibromoethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	98566	PCTFB	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	95636	1,2,4-Trimethylbenze	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	96128	1,2-Dibromo-3-chloro	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	1918167	Propachlor	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	100414	Ethylbenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	106434	p-Chlorotoluene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	108101	4-Methyl-2-pentanon	2.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	108383	m/p-Xylenes	1	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	127184	Tetrachloroethene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	135988	Sec-Butylbenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	142289	1,3-Dichloropropane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	563586	1,1-Dichloropropene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	58899	Lindane	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	71556	1,1,1-Trichloroethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	PSTSW	Water	Ground W	Hoff MW-1DU	O2019006	72559	4,4'-DDE	0.051	ug/L	U		9/5/2019 2:00	9/12/2019 10:22	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	74839	Bromomethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	74873	Chloromethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	75003	Chloroethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	
2166	18		8/8/2019	11:05	VOASW	Water	Ground W	Hoff MW-1DU	O2019006	75092	Dichloromethane	1	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1	

2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	75343	1,1-Dichloroethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	78933	2-Butanone	2.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	79016	Trichloroethene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	98828	Isopropylbenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	75650	t-Butyl alcohol	5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	18	8/8/2019	11:05	DIOXA	Water	Ground W Hoff MW-1DU	O2019006	123911	1,4-Dioxane	2.5	ug/L	U		8/21/2019 2:00	8/26/2019 13:20	1				
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006235		EXTRACTED DATE					8/12/2019 2:00	8/29/2019 12:51	1				
2166	18	8/8/2019	11:05	DIOXA	Water	Ground W Hoff MW-1DU	O2019006246		EXTRACTED DATE	8152019	Day			8/21/2019 2:00	8/26/2019 13:20	1				
2166	18	8/8/2019	11:05	PSTSW	Water	Ground W Hoff MW-1DU	O2019006256		EXTRACTED DATE	8132019	Day			9/5/2019 2:00	9/12/2019 10:22	1				
2166	18	8/8/2019	11:05	VOASW	Water	Ground W Hoff MW-1DU	O2019006235		EXTRACTED TIME					8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	319857	beta-BHC	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	51218452	Metolachlor	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	51877748	trans-Permethrin	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	54774457	cis-Permethrin	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	103651	n-Propylbenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	108054	Vinyl Acetate	1	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	108883	Toluene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	74975	Bromochloromethan	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	75150	Carbon disulfide	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	124481	Dibromochlorometha	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7440-42-8	Boron	3404	ug/L			8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	91203	Naphthalene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	95476	o-Xylene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	959988	Endosulfan I	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	21725462	Cyanazine	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	2675776	Chlorneb	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	319846	alpha-BHC	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	71432	Benzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	510156	Chlorobenzilate	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	5103719	alpha-Chlordane	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	53494705	Endrin Ketone	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7440224	Silver	< 10	ug/L	U		8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	21087649	Metribuzin	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	2921882	Dursban	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	33213659	Endosulfan II	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	50293	4,4'-DDT	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7440439	Cadmium	< 10	ug/L	U		8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019938		Cobalt Cor	< 50	ug/L	U		8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	1330207	Total Xylenes	0	ug/L			8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	100425	Styrene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7440097	Potassium	3.148	mg/L			8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7439965	Manganese	152	ug/L			8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	1024573	Heptachlor Epoxide	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	104518	n-Butylbenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	108861	Bromobenzene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	108907	Chlorobenzene	1	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	109999	Tetrahydrofuran	1	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	118741	Hexachlorobenzene	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	591786	2-Hexanone	2.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	60571	Dieldrin	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	67663	Chloroform	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	72208	Endrin	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	72548	4,4'-DDD	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	7421934	Endrin Aldehyde	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	74953	Dibromomethane	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	75252	Bromoform	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	75354	1,1-Dichloroethene	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	77474	Hexachlorocyclopent	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7429905	Aluminum	< 300	ug/L	U		8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	156592	cis-1,2-Dichloroethen	0.5	ug/L	U		8/12/2019 2:00	8/29/2019 12:51	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	1582098	Trifluralin	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	15972608	Alachlor	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7440382	Arsenic	< 3	ug/L	U		8/12/2019 13:35	8/22/2019 9:58	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7440393	Barium	23	ug/L			8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019938		Beryllium	< 1	ug/L	U		8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7440702	Calcium	117.4	mg/L			8/16/2019 15:31	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019938		Chromium	< 50	ug/L	U		8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7440508	Copper	< 10	ug/L	U		8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7439896	Iron	< 100	ug/L	U		8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7439976	Mercury	< 0.2	ug/L	U		8/16/2019 14:03	8/19/2019 9:22	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7439954	Magnesium	33.88	mg/L			8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7440235	Sodium	23.02	mg/L			8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I2019019S	7440020	Nickel	< 50	ug/L	U		8/16/2019 12:54	8/26/2019 8:31	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	1861321	DCPA	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	1897456	Chlorothalonil	0.052	ug/L	U		9/5/2019 2:00	9/12/2019 10:25	1				

2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I20190199	7439921	Lead	<	1	ug/L	U	8/12/2019 13:35	8/22/2019 9:58	1					
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I20190199	7440360	Antimony	<	2	ug/L	U	8/12/2019 13:35	8/22/2019 9:58	1					
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I20190199	7782492	Selenium	<	7	ug/L	U	8/12/2019 13:35	8/22/2019 9:58	1					
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I20190199	7440-28-0	Thallium	<	2	ug/L	U	8/12/2019 13:35	8/22/2019 9:58	1					
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	1031078	Endosulfan Sulfate		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:25	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	67641	Acetone		5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	72435	Methoxychlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:25	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	76448	Heptachlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:25	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I20190199	7440622	Vanadium	<	30	ug/L	U	8/16/2019 12:54	8/26/2019 8:31	1					
2166	19	8/8/2019	12:00	502	Water	Ground W Hoff DUP-080819	I20190199	7440666	Zinc	<	30	ug/L	U	8/16/2019 12:54	8/26/2019 8:31	1					
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	2593159	Etridiazole		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:25	1					
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	309002	Aldrin		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:25	1					
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	319868	delta-BHC		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:25	1					
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	5103742	gamma-Chlordane		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:25	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	98566	PCTFB		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	1918167	Propachlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:25	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	58899	Lindane		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:25	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006	72559	4,4'-DDE		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:25	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	74839	Bromomethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	74873	Chloromethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	75003	Chloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	75092	Dichloromethane		1	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	78933	2-Butanone		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	DIOXA	Water	Ground W Hoff DUP-080819	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/21/2019 2:00	8/26/2019 13:20	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006236		EXTRACTED DATE					8/12/2019 2:00	8/29/2019 12:51	1					
2166	19	8/8/2019	12:00	DIOXA	Water	Ground W Hoff DUP-080819	O2019006247		EXTRACTED DATE		8152019	Day		8/21/2019 2:00	8/26/2019 13:20	1					
2166	19	8/8/2019	12:00	PSTSW	Water	Ground W Hoff DUP-080819	O2019006257		EXTRACTED DATE		8132019	Day		9/5/2019 2:00	9/12/2019 10:25	1					
2166	19	8/8/2019	12:00	VOASW	Water	Ground W Hoff DUP-080819	O2019006236		EXTRACTED TIME					8/12/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	319857	beta-BHC		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1					
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	51218452	Metolachlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.				
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	51877748	trans-Permethrin		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1					
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	54774457	cis-Permethrin		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.				
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	108883	Toluene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	502	Water	Ground W Hoff MW-1S	I20190199	7440-42-8	Boron	<	200	ug/L	U	8/16/2019 12:58	8/26/2019 8:35	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	91203	Naphthalene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	95476	o-Xylene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	959988	Endosulfan I		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	21725462	Cyanazine		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.				
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	2675776	Chlorneb		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.				
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	319846	alpha-BHC		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	71432	Benzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	510156	Chlorobenzilate		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.				
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	5103719	alpha-Chlordane		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1					
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	53494705	Endrin Ketone		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	502	Water	Ground W Hoff MW-1S	I20190199	7440224	Silver	<	10	ug/L	U	8/16/2019 12:58	8/26/2019 8:35	1					
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	21087649	Metribuzin		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1					
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	2921882	Dursban		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1					
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006	33213659	Endosulfan II		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1					

2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	50293	4,4'-DDT		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7440439	Cadmium	<	10	ug/L	U	8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	939	Cobalt	Cor <	50	ug/L	U	8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	1330207	Total Xylenes		0	ug/L		8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	100425	Styrene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7440097	Potassium		1.759	mg/L		8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7439965	Manganese		174	ug/L		8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	1024573	Heptachlor Epoxide		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	108907	Chlorobenzene		1	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	118741	Hexachlorobenzene		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	60571	Dieldrin		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	67663	Chloroform		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	72208	Endrin		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	72548	4,4'-DDD		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	7421934	Endrin Aldehyde		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	75252	Bromoform		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	77474	Hexachlorocyclopent		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7429905	Aluminum	<	300	ug/L	U	8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	1582098	Trifluralin		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	15972608	Alachlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7440382	Arsenic	<	3	ug/L	U	8/12/2019 13:48	8/22/2019 9:58	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7440393	Barium	<	10	ug/L	U	8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	939	Beryllium	<	1	ug/L	U	8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7440702	Calcium		20.65	mg/L		8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	939	Chromium	<	50	ug/L	U	8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7440508	Copper	<	10	ug/L	U	8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7439896	Iron		493	ug/L		8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7439976	Mercury	<	0.2	ug/L	U	8/16/2019 14:13	8/19/2019 9:31	1	The lab-fortified blank recovery is > 115 %. The result may be biased high.
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7439954	Magnesium		11.81	mg/L		8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7440235	Sodium		33.88	mg/L		8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7440020	Nickel	<	50	ug/L	U	8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	1861321	DCPA		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	1897456	Chlorothalonil		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7439921	Lead	<	1	ug/L	U	8/12/2019 13:48	8/22/2019 9:58	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7440360	Antimony	<	2	ug/L	U	8/12/2019 13:48	8/22/2019 9:58	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7782492	Selenium	<	7	ug/L	U	8/12/2019 13:48	8/22/2019 9:58	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7440-28-0	Thallium	<	2	ug/L	U	8/12/2019 13:48	8/22/2019 9:58	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	1031078	Endosulfan Sulfate		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	67641	Acetone		5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	72435	Methoxychlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	76448	Heptachlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7440622	Vanadium	<	30	ug/L	U	8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	502	Water	Ground W	Hoff MW-1S	I2019019S	7440666	Zinc	<	30	ug/L	U	8/16/2019 12:58	8/26/2019 8:35	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	2593159	Etridiazole		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	309002	Aldrin		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	319868	delta-BHC		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	5103742	gamma-Chlordane		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	98566	PCTFB		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	1918167	Propachlor		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	58899	Lindane		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	PSTSW	Water	Ground W	Hoff MW-1S	O2019006	72559	4,4'-DDE		0.052	ug/L	U	9/5/2019 2:00	9/12/2019 10:34	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	74839	Bromomethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	74873	Chloromethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	75003	Chloroethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	75092	Dichloromethane		1	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	78933	2-Butanone		2.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	
2166	20		8/8/2019	13:50	VOASW	Water	Ground W	Hoff MW-1S	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1	

2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	75650	t-Butyl alcohol	5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U	8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	DIOXA	Water	Ground W Hoff MW-1S	O2019006	123911	1,4-Dioxane	2.5	ug/L	U	8/21/2019 2:00	8/26/2019 13:20	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006237		EXTRACTED DATE				8/13/2019 2:00	8/29/2019 12:51	1					
2166	20	8/8/2019	13:50	DIOXA	Water	Ground W Hoff MW-1S	O2019006248		EXTRACTED DATE	8152019	Day		8/21/2019 2:00	8/26/2019 13:20	1					
2166	20	8/8/2019	13:50	PSTSW	Water	Ground W Hoff MW-1S	O2019006258		EXTRACTED DATE	8132019	Day		9/5/2019 2:00	9/12/2019 10:34	1					
2166	20	8/8/2019	13:50	VOASW	Water	Ground W Hoff MW-1S	O2019006237		EXTRACTED TIME				8/13/2019 2:00	8/29/2019 12:51	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	108883	Toluene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	74975	Bromochloromethan	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	75150	Carbon disulfide	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	124481	Dibromochlorometha	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	91203	Naphthalene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	95476	o-Xylene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	71432	Benzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	1330207	Total Xylenes	0	ug/L		8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	100425	Styrene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	104518	n-Butylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	108861	Bromobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	108907	Chlorobenzene	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	109999	Tetrahydrofuran	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	591786	2-Hexanone	2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	67663	Chloroform	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	74953	Dibromomethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	75252	Bromoform	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.				
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	75354	1,1-Dichloroethene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	156592	cis-1,2-Dichloroethen	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	594207	2,2-Dichloropropane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	67641	Acetone	5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	75274	Bromodichlorometha	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	79345	1,1,2,2-Tetrachloroet	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	96184	1,2,3-Trichloropropar	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	99876	4-Isopropyltoluene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	95498	o-Chlorotoluene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	541731	1,3-Dichlorobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	106934	1,2-Dibromoethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	98566	PCTFB	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	96128	1,2-Dibromo-3-chlorc	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	100414	Ethylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	106434	p-Chlorotoluene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	108101	4-Methyl-2-pentanon	2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	108383	m/p-Xylenes	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	127184	Tetrachloroethene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	135988	Sec-Butylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	142289	1,3-Dichloropropane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	563586	1,1-Dichloropropene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	71556	1,1,1-Trichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	74839	Bromomethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	74873	Chloromethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	75003	Chloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	75092	Dichloromethane	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	75343	1,1-Dichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	78933	2-Butanone	2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	79016	Trichloroethene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	98828	Isopropylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	75650	t-Butyl alcohol	5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	DIOXA	Water	Ground W Hoff TB-081219	O2019006	123911	1,4-Dioxane	2.5	ug/L	U	8/21/2019 2:00	8/26/2019 13:21	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006394		EXTRACTED DATE				8/14/2019 2:00	9/9/2019 13:13	1					
2166	21	8/12/2019	8:00	DIOXA	Water	Ground W Hoff TB-081219	O2019006420		EXTRACTED DATE	8192019	Day		8/21/2019 2:00	8/26/2019 13:21	1					
2166	21	8/12/2019	8:00	VOASW	Water	Ground W Hoff TB-081219	O2019006394		EXTRACTED TIME				8/14/2019 2:00	9/9/2019 13:13	1					
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	319857	beta-BHC	0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1					
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	51218452	Metolachlor	0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1					
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	51877748	trans-Permethrin	0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1					
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	54774457	cis-Permethrin	0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1					
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1					
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1					
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1					
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1					
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1					
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	108883	Toluene	0.6	ug/L		8/14/2019 2:00	9/9/2019 13:14	1					
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1					

2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440-42-8	Boron		2070	ug/L		8/29/2019 11:10	9/6/2019 10:58	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	91203	Naphthalene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	95476	o-Xylene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	959988	Endosulfan I		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	21725462	Cyanazine		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	2675776	Chlorneb		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	319846	alpha-BHC		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	71432	Benzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	510156	Chlorobenzilate		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	5103719	alpha-Chlordane		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1	Mid-level LCS recovery low. Results may be biased low.		
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	53494705	Endrin Ketone		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440224	Silver	<	10	ug/L	U	8/15/2019 11:10	8/27/2019 12:19	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	21087649	Metribuzin		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	2921882	Dursban		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	33213659	Endosulfan II		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	50293	4,4'-DDT		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1	Mid-level LCS recovery low. Results may be biased low.		
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440439	Cadmium	<	10	ug/L	U	8/15/2019 11:10	8/27/2019 12:19	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020281		Cobalt Cor	<	50	ug/L	U	8/15/2019 11:10	8/27/2019 12:19	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	1330207	Total Xylenes		0	ug/L		8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	100425	Styrene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440097	Potassium		1.53	mg/L		8/15/2019 11:10	8/27/2019 12:20	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7439965	Manganese		19	ug/L		8/15/2019 11:10	8/27/2019 12:20	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	1024573	Heptachlor Epoxide		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	108907	Chlorobenzene		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	118741	Hexachlorobenzene		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	60571	Dieldrin		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	67663	Chloroform		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	72208	Endrin		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	72548	4,4'-DDD		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1	Mid-level LCS recovery low. Results may be biased low.		
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	7421934	Endrin Aldehyde		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1	Mid-level LCS recovery low. Results may be biased low.		
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	75252	Bromoform		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	77474	Hexachlorocyclopent		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7429905	Aluminum	<	300	ug/L	U	8/15/2019 11:10	8/27/2019 12:19	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	1582098	Trifluralin		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	15972608	Alachlor		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440382	Arsenic		5.81	ug/L		8/15/2019 11:11	8/22/2019 9:59	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440393	Barium		10	ug/L		8/15/2019 11:10	8/27/2019 12:19	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020281		Beryllium	<	1	ug/L	U	8/15/2019 11:10	8/27/2019 12:19	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440702	Calcium		41.8	mg/L		8/15/2019 11:10	8/27/2019 12:20	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020281		Chromium	<	50	ug/L	U	8/15/2019 11:10	8/27/2019 12:19	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440508	Copper	<	10	ug/L	U	8/15/2019 11:10	8/27/2019 12:19	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7439896	Iron	<	100	ug/L	U	8/15/2019 11:10	8/27/2019 12:20	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7439976	Mercury	<	0.2	ug/L	U	8/16/2019 14:19	8/19/2019 9:34	1	The lab-fortified blank recovery is > 115 %. The result may be biased high.		
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7439954	Magnesium		12.4	mg/L		8/15/2019 11:10	8/27/2019 12:21	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440235	Sodium		19.9	mg/L		8/15/2019 11:10	8/27/2019 12:21	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440020	Nickel	<	50	ug/L	U	8/15/2019 11:10	8/27/2019 12:20	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	1861321	DCPA		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	1897456	Chlorothalonil		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7439921	Lead	<	1	ug/L	U	8/15/2019 11:11	8/22/2019 9:59	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440360	Antimony	<	2	ug/L	U	8/15/2019 11:11	8/22/2019 9:59	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7782492	Selenium	<	7	ug/L	U	8/15/2019 11:11	8/22/2019 9:59	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440-28-0	Thallium	<	2	ug/L	U	8/15/2019 11:11	8/22/2019 9:59	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	1031078	Endosulfan Sulfate		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	67641	Acetone		5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	72435	Methoxychlor		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1	Mid-level LCS recovery low. Results may be biased low.		
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	76448	Heptachlor		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440622	Vanadium	<	30	ug/L	U	8/15/2019 11:10	8/27/2019 12:20	1			
2166	22	8/12/2019	10:00	502	Water	Ground W Hoff MW-3D-L	I2019020	7440666	Zinc	<	30	ug/L	U	8/15/2019 11:10	8/27/2019 12:20	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	2593159	Etridiazole		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	309002	Aldrin		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	319868	delta-BHC		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1			
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	5103742	gamma-Chlordane		0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1	Mid-level LCS recovery low. Results may be biased low.		
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	98566	PCTFB		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1			

2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	96128	1,2-Dibromo-3-chlorc	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	1918167	Propachlor	0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	100414	Ethylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	106434	p-Chlorotoluene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	108101	4-Methyl-2-pentanon	2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	108383	m/p-Xylenes	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	127184	Tetrachloroethene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	135988	Sec-Butylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	142289	1,3-Dichloropropane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	563586	1,1-Dichloropropene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	58899	Lindane	0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	71556	1,1,1-Trichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006	72559	4,4'-DDE	0.048	ug/L	U	9/5/2019 2:00	9/12/2019 10:40	1	Mid-level LCS recovery low. Results may be biased low.			
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	74839	Bromomethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	74873	Chloromethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	75003	Chloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	75092	Dichloromethane	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	75343	1,1-Dichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	78933	2-Butanone	2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	79016	Trichloroethene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	98828	Isopropylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	75650	t-Butyl alcohol	5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	DIOXA	Water	Ground W Hoff MW-3D-L	O2019006	123911	1,4-Dioxane	2.5	ug/L	U	8/21/2019 2:00	8/26/2019 13:21	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006395		EXTRACTED DATE				8/14/2019 2:00	9/9/2019 13:14	1				
2166	22	8/12/2019	10:00	DIOXA	Water	Ground W Hoff MW-3D-L	O2019006421		EXTRACTED DATE	8192019	Day		8/21/2019 2:00	8/26/2019 13:21	1				
2166	22	8/12/2019	10:00	PSTSW	Water	Ground W Hoff MW-3D-L	O2019006429		EXTRACTED DATE	8152019	Day		9/5/2019 2:00	9/12/2019 10:40	1				
2166	22	8/12/2019	10:00	VOASW	Water	Ground W Hoff MW-3D-L	O2019006395		EXTRACTED TIME				8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	319857	beta-BHC	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	51218452	Metolachlor	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	51877748	trans-Permethrin	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	54774457	cis-Permethrin	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	108883	Toluene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	74975	Bromochloromethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	75150	Carbon disulfide	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	124481	Dibromochlorometha	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440-42-8	Boron	2100	ug/L		8/29/2019 11:12	9/6/2019 10:58	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	91203	Naphthalene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	95476	o-Xylene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	959988	Endosulfan I	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	21725462	Cyanazine	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	2675776	Chlorneb	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	319846	alpha-BHC	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	71432	Benzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	510156	Chlorobenzilate	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	5103719	alpha-Chlordane	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1	Mid-level LCS recovery low. Results may be biased low.			
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	53494705	Endrin Ketone	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440224	Silver <	10	ug/L	U	8/15/2019 11:12	8/27/2019 12:20	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	21087649	Metribuzin	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	2921882	Dursban	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	33213659	Endosulfan II	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	50293	4,4'-DDT	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1	Mid-level LCS recovery low. Results may be biased low.			
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440439	Cadmium <	10	ug/L	U	8/15/2019 11:12	8/27/2019 12:21	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020282		Cobalt Cor <	50	ug/L	U	8/15/2019 11:12	8/27/2019 12:21	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	1330207	Total Xylenes	0	ug/L		8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	100425	Styrene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440097	Potassium	2.09	mg/L		8/15/2019 11:12	8/27/2019 12:24	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7439965	Manganes <	10	ug/L	U	8/15/2019 11:12	8/27/2019 12:24	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	1024573	Heptachlor Epoxide	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	104518	n-Butylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	108861	Bromobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	108907	Chlorobenzene	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	109999	Tetrahydrofuran	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	118741	Hexachlorobenzene	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	591786	2-Hexanone	2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	60571	Dieldrin	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	67663	Chloroform	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	72208	Endrin	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	72548	4,4'-DDD	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1	Mid-level LCS recovery low. Results may be biased low.			
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	7421934	Endrin Aldehyde	0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1	Mid-level LCS recovery low. Results may be biased low.			
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	74953	Dibromomethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	75252	Bromoform	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	75354	1,1-Dichloroethene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				

2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	77474	Hexachlorocyclopent		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7429905	Aluminum	<	300	ug/L	U	8/15/2019 11:12	8/27/2019 12:21	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	1582098	Trifluralin		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	15972608	Alachlor		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440382	Arsenic		9.5	ug/L		8/15/2019 11:14	8/22/2019 9:59	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440393	Barium	<	10	ug/L	U	8/15/2019 11:12	8/27/2019 12:21	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020282		Beryllium	<	1	ug/L	U	8/15/2019 11:12	8/27/2019 12:21	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440702	Calcium		50.9	mg/L		8/15/2019 11:12	8/27/2019 12:24	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020282		Chromium	<	50	ug/L	U	8/15/2019 11:12	8/27/2019 12:21	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440508	Copper	<	10	ug/L	U	8/15/2019 11:12	8/27/2019 12:21	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7439896	Iron	<	100	ug/L	U	8/15/2019 11:12	8/27/2019 12:21	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7439976	Mercury	<	0.2	ug/L	U	8/16/2019 14:21	8/19/2019 9:35	1	The lab-fortified blank recovery is > 115 %. The result may be biased high.			
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7439954	Magnesium		12.9	mg/L		8/15/2019 11:12	8/27/2019 12:24	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440235	Sodium		12.1	mg/L		8/15/2019 11:12	8/27/2019 12:24	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440020	Nickel	<	50	ug/L	U	8/15/2019 11:12	8/27/2019 12:24	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	1861321	DCPA		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	1897456	Chlorothalonil		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7439921	Lead	<	1	ug/L	U	8/15/2019 11:14	8/22/2019 9:59	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440360	Antimony	<	2	ug/L	U	8/15/2019 11:14	8/22/2019 9:59	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7782492	Selenium	<	7	ug/L	U	8/15/2019 11:14	8/22/2019 9:59	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440-28-0	Thallium	<	2	ug/L	U	8/15/2019 11:14	8/22/2019 9:59	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	1031078	Endosulfan Sulfate		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	67641	Acetone		5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	72435	Methoxychlor		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1	Mid-level LCS recovery low. Results may be biased low.			
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	76448	Heptachlor		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440622	Vanadium	<	30	ug/L	U	8/15/2019 11:12	8/27/2019 12:24	1				
2166	23	8/12/2019	11:10	502	Water	Ground W Hoff MW-3D-U	I2019020	7440666	Zinc	<	30	ug/L	U	8/15/2019 11:12	8/27/2019 12:24	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	2593159	Etridiazole		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	309002	Aldrin		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	319868	delta-BHC		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	5103742	gamma-Chlordane		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1	Mid-level LCS recovery low. Results may be biased low.			
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	98566	PCTFB		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	1918167	Propachlor		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	58899	Lindane		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006	72559	4,4'-DDE		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:45	1	Mid-level LCS recovery low. Results may be biased low.			
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	74839	Bromomethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	74873	Chloromethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	75003	Chloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	75092	Dichloromethane		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	78933	2-Butanone		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	DIOXA	Water	Ground W Hoff MW-3D-U	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/21/2019 2:00	8/26/2019 13:21	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006396		EXTRACTED DATE					8/14/2019 2:00	9/9/2019 13:14	1				
2166	23	8/12/2019	11:10	DIOXA	Water	Ground W Hoff MW-3D-U	O2019006422		EXTRACTED DATE		8192019	Day		8/21/2019 2:00	8/26/2019 13:21	1				
2166	23	8/12/2019	11:10	PSTSW	Water	Ground W Hoff MW-3D-U	O2019006430		EXTRACTED DATE		8152019	Day		9/6/2019 2:00	9/12/2019 10:45	1				
2166	23	8/12/2019	11:10	VOASW	Water	Ground W Hoff MW-3D-U	O2019006396		EXTRACTED TIME					8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	319857	beta-BHC		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1				
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	51218452	Metolachlor		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1				
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	51877748	trans-Permethrin		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1				
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	54774457	cis-Permethrin		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	108883	Toluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	124481	Dibromochloromethe		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440-42-8	Boron		1000	ug/L		8/15/2019 11:35	8/27/2019 12:28	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				

2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	91203	Naphthalene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	95476	o-Xylene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	959988	Endosulfan I		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	21725462	Cyanazine		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	2675776	Chlorneb		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	319846	alpha-BHC		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	71432	Benzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	510156	Chlorobenzilate		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	5103719	alpha-Chlordane		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	53494705	Endrin Ketone		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440224	Silver	<	10	ug/L	U	8/15/2019 11:35	8/27/2019 12:24	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	21087649	Metribuzin		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	2921882	Dursban		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	33213659	Endosulfan II		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	50293	4,4'-DDT		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440439	Cadmium	<	10	ug/L	U	8/15/2019 11:35	8/27/2019 12:25	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020283		Cobalt Cor	<	50	ug/L	U	8/15/2019 11:35	8/27/2019 12:25	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	1330207	Total Xylenes		0	ug/L		8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	100425	Styrene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440097	Potassium	<	1	mg/L	U	8/15/2019 11:35	8/27/2019 12:28	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7439965	Manganes	<	10	ug/L	U	8/15/2019 11:35	8/27/2019 12:26	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	1024573	Heptachlor Epoxide		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	108907	Chlorobenzene		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	118741	Hexachlorobenzene		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	60571	Dieldrin		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	67663	Chloroform		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	72208	Endrin		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	72548	4,4'-DDD		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	7421934	Endrin Aldehyde		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	75252	Bromoform		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	77474	Hexachlorocyclopent		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7429905	Aluminum	<	300	ug/L	U	8/15/2019 11:35	8/27/2019 12:24	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	1582098	Trifluralin		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	15972608	Alachlor		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440382	Arsenic	<	3	ug/L	U	8/15/2019 11:17	8/22/2019 9:59	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440393	Barium	<	10	ug/L	U	8/15/2019 11:35	8/27/2019 12:24	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020283		Beryllium	<	1	ug/L	U	8/15/2019 11:35	8/27/2019 12:25	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440702	Calcium		29	mg/L		8/15/2019 11:35	8/27/2019 12:26	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020283		Chromium	<	50	ug/L	U	8/15/2019 11:35	8/27/2019 12:26	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440508	Copper	<	10	ug/L	U	8/15/2019 11:35	8/27/2019 12:26	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7439896	Iron	<	100	ug/L	U	8/15/2019 11:35	8/27/2019 12:26	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7439976	Mercury	<	0.2	ug/L	U	8/16/2019 14:27	8/19/2019 9:36	1	The lab-fortified blank recovery is > 115 %. The result may be biased high.	
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7439954	Magnesium		14.5	mg/L		8/15/2019 11:35	8/27/2019 12:28	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440235	Sodium		15.2	mg/L		8/15/2019 11:35	8/27/2019 12:28	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440020	Nickel	<	50	ug/L	U	8/15/2019 11:35	8/27/2019 12:26	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	1861321	DCPA		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	1897456	Chlorothalonil		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7439921	Lead	<	1	ug/L	U	8/15/2019 11:17	8/22/2019 9:59	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440360	Antimony	<	2	ug/L	U	8/15/2019 11:17	8/22/2019 9:59	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7782492	Selenium	<	7	ug/L	U	8/15/2019 11:17	8/22/2019 9:59	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440-28-0	Thallium	<	2	ug/L	U	8/15/2019 11:17	8/22/2019 9:59	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	1031078	Endosulfan Sulfate		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	67641	Acetone		5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	72435	Methoxychlor		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	76448	Heptachlor		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440622	Vanadium	<	30	ug/L	U	8/15/2019 11:35	8/27/2019 12:26	1		
2166	24	8/12/2019	12:30	502	Water	Ground W Hoff MW-3S	I2019020	7440666	Zinc	<	30	ug/L	U	8/15/2019 11:35	8/27/2019 12:26	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	2593159	Etridiazole		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	309002	Aldrin		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	319868	delta-BHC		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	5103742	gamma-Chlordane		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	98566	PCTFB		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	1918167	Propachlor		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1		

2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	58899	Lindane		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006	72559	4,4'-DDE		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:07	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	74839	Bromomethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	74873	Chloromethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	75003	Chloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	75092	Dichloromethane		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	78933	2-Butanone		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	DIOXA	Water	Ground W Hoff MW-3S	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/21/2019 2:00	8/26/2019 13:21	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006397		EXTRACTED DATE					8/14/2019 2:00	9/9/2019 13:14	1				
2166	24	8/12/2019	12:30	DIOXA	Water	Ground W Hoff MW-3S	O2019006423		EXTRACTED DATE		8192019	Day		8/21/2019 2:00	8/26/2019 13:21	1				
2166	24	8/12/2019	12:30	PSTSW	Water	Ground W Hoff MW-3S	O2019006431		EXTRACTED DATE		8192019	Day		9/11/2019 2:00	9/13/2019 15:07	1				
2166	24	8/12/2019	12:30	VOASW	Water	Ground W Hoff MW-3S	O2019006397		EXTRACTED TIME					8/14/2019 2:00	9/9/2019 13:14	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	319857	beta-BHC		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	51218452	Metolachlor		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	51877748	trans-Permethrin		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	54774457	cis-Permethrin		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	75014	Chloroethene (vinyl c		3.4	ug/L		8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	106467	1,4-Dichlorobenzene		9	ug/L	Q	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	108883	Toluene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	74975	Bromochloromethane		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	502	Water	Ground W Hoff MW-10	I2019020	7440-42-8	Boron	<	200	ug/L	U	8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	91203	Naphthalene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	95476	o-Xylene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	959988	Endosulfan I		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	95501	1,2-Dichlorobenzene		1.8	ug/L		8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	21725462	Cyanazine		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	2675776	Chlorneb		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	319846	alpha-BHC		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	71432	Benzene		5.7	ug/L		8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	510156	Chlorobenzilate		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	5103719	alpha-Chlordane		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1	Mid-level LCS recovery low. Results may be biased low.			
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	53494705	Endrin Ketone		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	502	Water	Ground W Hoff MW-10	I2019020	7440224	Silver	<	10	ug/L	U	8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	21087649	Metribuzin		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	2921882	Dursban		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	33213659	Endosulfan II		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	50293	4,4'-DDT		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1	Mid-level LCS recovery low. Results may be biased low.			
2166	25	8/12/2019	14:25	502	Water	Ground W Hoff MW-10	I2019020	7440439	Cadmium	<	10	ug/L	U	8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	502	Water	Ground W Hoff MW-10	I2019020284		Cobalt Cor	<	50	ug/L	U	8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	1330207	Total Xylenes		0	ug/L		8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	100425	Styrene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	502	Water	Ground W Hoff MW-10	I2019020	7440097	Potassium		6.74	mg/L		8/15/2019 11:38	8/27/2019 12:29	1				
2166	25	8/12/2019	14:25	502	Water	Ground W Hoff MW-10	I2019020	7439965	Manganese		2120	ug/L		8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	1024573	Heptachlor Epoxide		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	108907	Chlorobenzene		283	ug/L		8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	118741	Hexachlorobenzene		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	60571	Dieldrin		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	67663	Chloroform		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	72208	Endrin		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	72548	4,4'-DDD		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1	Mid-level LCS recovery low. Results may be biased low.			
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	7421934	Endrin Aldehyde		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1	Mid-level LCS recovery low. Results may be biased low.			
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	75252	Bromoform		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	77474	Hexachlorocyclopent		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	502	Water	Ground W Hoff MW-10	I2019020	7429905	Aluminum	<	300	ug/L	U	8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W Hoff MW-10	O2019006	156592	cis-1,2-Dichloroethen		3.6	ug/L		8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	1582098	Trifluralin		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W Hoff MW-10	O2019006	15972608	Alachlor		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	502	Water	Ground W Hoff MW-10	I2019020	7440382	Arsenic	<	3	ug/L	U	8/15/2019 11:21	8/22/2019 9:59	1				
2166	25	8/12/2019	14:25	502	Water	Ground W Hoff MW-10	I2019020	7440393	Barium		51	ug/L		8/15/2019 11:38	8/27/2019 12:28	1				

2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I2019020284		Beryllium	<	1	ug/L	U	8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7440702	Calcium		99	mg/L		8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I2019020284		Chromium	<	50	ug/L	U	8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7440508	Copper	<	10	ug/L	U	8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7439896	Iron		1810	ug/L		8/15/2019 11:38	8/27/2019 12:29	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7439976	Mercury	<	0.2	ug/L	U	8/16/2019 14:31	8/19/2019 9:37	1	The lab-fortified blank recovery is > 115 %. The result may be biased high.			
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7439954	Magnesium		19.9	mg/L		8/15/2019 11:38	8/27/2019 12:29	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7440235	Sodium		17.7	mg/L		8/15/2019 11:38	8/27/2019 12:29	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7440020	Nickel	<	50	ug/L	U	8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006	1861321	DCPA		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006	1897456	Chlorothalonil		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7439921	Lead	<	1	ug/L	U	8/15/2019 11:21	8/22/2019 9:59	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7440360	Antimony	<	2	ug/L	U	8/15/2019 11:21	8/22/2019 9:59	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7782492	Selenium	<	7	ug/L	U	8/15/2019 11:21	8/22/2019 9:59	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7440-28-0	Thallium	<	2	ug/L	U	8/15/2019 11:21	8/22/2019 9:59	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006	1031078	Endosulfan Sulfate		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	67641	Acetone		5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006	72435	Methoxychlor		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1	Mid-level LCS recovery low. Results may be biased low.			
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006	76448	Heptachlor		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7440622	Vanadium	<	30	ug/L	U	8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	502	Water	Ground W	Hoff MW-10	I20190202	7440666	Zinc		32	ug/L		8/15/2019 11:38	8/27/2019 12:28	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006	2593159	Etridiazole		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006	309002	Aldrin		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006	319868	delta-BHC		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006	5103742	gamma-Chlordane		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1	Mid-level LCS recovery low. Results may be biased low.			
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	98566	PCTFB		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006	1918167	Propachlor		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006	58899	Lindane		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006	72559	4,4'-DDE		0.048	ug/L	U	9/6/2019 2:00	9/12/2019 10:49	1	Mid-level LCS recovery low. Results may be biased low.			
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	74839	Bromomethane		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	74873	Chloromethane		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	75003	Chloroethane		2.4	ug/L		8/15/2019 2:00	9/9/2019 13:15	1	Continuing calibration recoveries high. Results may be biased high.			
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	75092	Dichloromethane		1	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	75343	1,1-Dichloroethane		0.55	ug/L		8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	78933	2-Butanone		2.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	DIOXA	Water	Ground W	Hoff MW-10	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/21/2019 2:00	8/26/2019 13:21	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006398		EXTRACTED DATE					8/15/2019 2:00	9/9/2019 13:15	1				
2166	25	8/12/2019	14:25	DIOXA	Water	Ground W	Hoff MW-10	O2019006424		EXTRACTED DATE		8192019	Day		8/21/2019 2:00	8/26/2019 13:21	1				
2166	25	8/12/2019	14:25	PSTSW	Water	Ground W	Hoff MW-10	O2019006432		EXTRACTED DATE		8152019	Day		9/6/2019 2:00	9/12/2019 10:49	1				
2166	25	8/12/2019	14:25	VOASW	Water	Ground W	Hoff MW-10	O2019006398		EXTRACTED TIME					8/15/2019 2:00	9/9/2019 13:15	1				
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I20190203	7440473	Chromium		61.6	mg/kg		8/22/2019 12:52	9/4/2019 12:27	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	75014	Chloroethene (vinyl c		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	10061015	cis-1,3-Dichloroprope		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	103651	n-Propylbenzene		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	106467	1,4-Dichlorobenzene		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	108054	Vinyl Acetate		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	108883	Toluene		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	120821	1,2,4-Trichlorobenzer		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	74975	Bromochloromethan		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	75150	Carbon disulfide		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	75694	Trichlorofluorometha		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	79005	1,1,2-Trichloroethane		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	124481	Dibromochlorometha		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	87683	Hexachlorobutadiene		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	91203	Naphthalene		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	95476	o-Xylene		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	87616	1,2,3-Trichlorobenzer		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	95501	1,2-Dichlorobenzene		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	71432	Benzene		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	56235	Carbon tetrachloride		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	1634044	Methyl-tert-butyl Eth		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I20190203	7429905	Aluminum		29960	mg/kg		8/22/2019 12:59	9/4/2019 12:29	1				
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020387		Acidity		0	Each		8/20/2019 12:00	8/28/2019 8:58	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	1330207	Total Xylenes		0	ug/kg		8/15/2019 2:00	9/9/2019 14:37	1				
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	100425	Styrene		78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				

2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	10061026	trans-1,3-Dichloropro	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	104518	n-Butylbenzene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	108861	Bromobenzene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	108907	Chlorobenzene	158	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	109999	Tetrahydrofuran	158	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	591786	2-Hexanone	394	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	630206	1,1,1,2-Tetrachloroet	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	67663	Chloroform	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	74953	Dibromomethane	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	75252	Bromoform	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	75354	1,1-Dichloroethene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	75718	Dichlorodifluorometh	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020	7440-42-8	Boron	31.6	mg/kg		8/22/2019 12:52	9/4/2019 12:30	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	156592	cis-1,2-Dichloroethen	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020387		Moisture	23.5	%		8/16/2019 11:42	8/28/2019 8:46	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020387		Solids	76.5	%		8/16/2019 11:42	8/28/2019 8:46	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020387		Sulfate <	1	mg/L	U	9/10/2019 16:43	9/11/2019 10:38	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020	7440097	Potassium	2656	mg/kg		8/22/2019 12:56	9/4/2019 12:30	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020	7439954	Magnesium	7794	mg/kg		8/22/2019 12:56	9/4/2019 12:29	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020	7440235	Sodium	197	mg/kg		8/22/2019 12:52	9/4/2019 12:29	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020	7439896	Iron	46166	mg/kg		8/22/2019 16:33	9/4/2019 12:27	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020	7439965	Manganese	790	mg/kg		8/22/2019 12:52	9/4/2019 12:29	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020	7440702	Calcium	4300	mg/kg		8/22/2019 12:56	9/4/2019 12:27	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020	7440508	Copper	19.4	mg/kg		8/22/2019 12:52	9/4/2019 12:27	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020	7439976	Mercury <	0.158	mg/kg		8/26/2019 15:25	8/28/2019 10:55	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020	7440393	Barium	98.8	mg/kg		8/22/2019 12:52	9/4/2019 12:30	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020	7440666	Zinc	76.7	mg/kg		8/22/2019 12:52	9/4/2019 12:29	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020	7440622	Vanadium	83	mg/kg		8/22/2019 12:52	9/4/2019 12:29	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	108678	1,3,5-Trimethylbenze	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	594207	2,2-Dichloropropane	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	67641	Acetone	394	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	75274	Bromodichlorometha	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	79345	1,1,2,2-Tetrachloroet	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	96184	1,2,3-Trichloropropar	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	99876	4-Isopropyltoluene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	95498	o-Chlorotoluene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020387		Leach	0	Each		8/29/2019 0:00	8/30/2019 14:50	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	541731	1,3-Dichlorobenzene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	106934	1,2-Dibromoethane	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	98566	PCTFB	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	95636	1,2,4-Trimethylbenze	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	96128	1,2-Dibromo-3-chlorc	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	100414	Ethylbenzene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	106434	p-Chlorotoluene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	108101	4-Methyl-2-pentanon	394	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	108383	m/p-Xylenes	158	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	127184	Tetrachloroethene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	135988	Sec-Butylbenzene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	142289	1,3-Dichloropropane	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	156605	trans-1,2-Dichloroeth	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	563586	1,1-Dichloropropene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	71556	1,1,1-Trichloroethane	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	74839	Bromomethane	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	74873	Chloromethane	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	75003	Chloroethane	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	75092	Dichloromethane	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	75343	1,1-Dichloroethane	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	78875	1,2-Dichloropropane	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	78933	2-Butanone	394	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	79016	Trichloroethene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	98066	Tert-Butylbenzene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	98828	Isopropylbenzene	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	107062	1,2-Dichloroethane	78.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	75650	t-Butyl alcohol	788	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006	540885	tert-Butyl Acetate	394	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	DIOXA	Sediment	Sediment	Hoff SED-1	O2019006	123911	1,4-Dioxane	160	mg/kg	U	8/22/2019 2:00	8/26/2019 13:30	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020387		Weight	0.4134	GRAMS		8/20/2019 12:00	8/28/2019 8:58	1			
2166	26	8/13/2019	8:35	503	Sediment	Sediment	Hoff SED-1	I2019020387		Sulfate <	26.1438	mg/kg		9/10/2019 16:43	9/13/2019 14:54	1			
2166	26	8/13/2019	8:35	DIOXA	Sediment	Sediment	Hoff SED-1	O2019006457		EXTRACTED DATE	8142019	Day		8/22/2019 2:00	8/26/2019 13:30	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006403		EXTRACTED DATE	8142019	Day		8/15/2019 2:00	9/9/2019 14:37	1			
2166	26	8/13/2019	8:35	DIOXA	Sediment	Sediment	Hoff SED-1	O2019006457		EXTRACTED TIME	1315			8/22/2019 2:00	8/26/2019 13:30	1			
2166	26	8/13/2019	8:35	VOASW	Sediment	Sediment	Hoff SED-1	O2019006403		EXTRACTED TIME	953			8/15/2019 2:00	9/9/2019 14:37	1			
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	319857	beta-BHC	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:01	1			
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	51218452	Metolachlor	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:01	1			
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	51877748	trans-Permethrin	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:01	1			
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	54774457	cis-Permethrin	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:01	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	108883	Toluene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020	7782492	Selenium <	7	ug/L	U	8/15/2019 11:24	8/22/2019 9:59	1			
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020	7440-28-0	Thallium <	2	ug/L	U	8/15/2019 11:24	8/22/2019 9:59	1			
2166	27	8/13/2019	8:30	METH	Water	Water	Hoff SW-1	O2019006	74828	Methane	35.1	ug/L		8/15/2019 2:00	8/20/2019 8:07	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	74975	Bromochloromethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	75150	Carbon disulfide	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020	7440-42-8	Boron	497	ug/L		8/15/2019 11:44	8/27/2019 12:31	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	124481	Dibromochlorometha	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1			

2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	91203	Naphthalene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	95476	o-Xylene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	959988	Endosulfan I		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.	
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	95501	1,2-Dichlorobenzene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	21725462	Cyanazine		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	2675776	Chlorneb		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	319846	alpha-BHC		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	71432	Benzene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	510156	Chlorobenzilate		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	5103719	alpha-Chlordane		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1	Mid-level LCS recovery low. Results may be biased low.Matrix spike recoveries low. Results and/or reporting limits may be biased low.	
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	53494705	Endrin Ketone		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	1634044	Methyl-tert-butyl Eth		0.89	ug/L			8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	21087649	Metribuzin		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	2921882	Dursban		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.	
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	33213659	Endosulfan II		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.	
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	50293	4,4'-DDT		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1	Mid-level LCS recovery low. Results may be biased low.Matrix spike recoveries low. Results and/or reporting limits may be biased low.	
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285		Chromium	<	50	ug/L	U		8/15/2019 11:44	8/27/2019 12:29	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	1330207	Total Xylenes		0	ug/L			8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7440508	Copper	<	10	ug/L	U		8/15/2019 11:44	8/27/2019 12:29	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	100425	Styrene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7439976	Mercury	<	0.2	ug/L	U		8/16/2019 14:35	8/19/2019 9:38	1	The lab-fortified blank recovery is > 115 %. The result may be biased high.	
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7439954	Magnesium		26.8	mg/L			8/15/2019 11:44	8/27/2019 12:32	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7439965	Manganese		5620	ug/L			8/15/2019 11:44	8/27/2019 12:32	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	1024573	Heptachlor Epoxide		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	104518	n-Butylbenzene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	108861	Bromobenzene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	108907	Chlorobenzene		1	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	109999	Tetrahydrofuran		1	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	118741	Hexachlorobenzene		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	591786	2-Hexanone		2.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	60571	Dieldrin		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	67663	Chloroform		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	72208	Endrin		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	72548	4,4'-DDD		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1	Mid-level LCS recovery low. Results may be biased low.Matrix spike recoveries low. Results and/or reporting limits may be biased low.	
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	7421934	Endrin Aldehyde		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1	Mid-level LCS recovery low. Results may be biased low.Matrix spike recoveries low. Results and/or reporting limits may be biased low.	
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	74953	Dibromomethane		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	METH	Water	Water	Hoff SW-1	O2019006	74986	Propane		14.2	ug/L	U		8/15/2019 2:00	8/20/2019 8:07	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	75252	Bromoform		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	77474	Hexachlorocyclopent		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7440224	Silver	<	10	ug/L	U		8/15/2019 11:44	8/27/2019 12:29	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7429905	Aluminum	<	300	ug/L	U		8/15/2019 11:44	8/27/2019 12:29	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	1582098	Trifluralin		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	15972608	Alachlor		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7440382	Arsenic	<	3	ug/L	U		8/15/2019 11:24	8/22/2019 9:59	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7440393	Barium		55	ug/L			8/15/2019 11:44	8/27/2019 12:29	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285		Beryllium	<	1	ug/L	U		8/15/2019 11:44	8/27/2019 12:29	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7440702	Calcium		78.5	mg/L			8/15/2019 11:44	8/27/2019 12:31	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7440439	Cadmium	<	10	ug/L	U		8/15/2019 11:44	8/27/2019 12:29	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285		Cobalt	Cor <	50	ug/L	U		8/15/2019 11:44	8/27/2019 12:29	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7439896	Iron		632	ug/L			8/15/2019 11:44	8/27/2019 12:29	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7440097	Potassium		4.08	mg/L			8/15/2019 11:44	8/27/2019 12:31	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7440235	Sodium		23.2	mg/L			8/15/2019 11:44	8/27/2019 12:32	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7440020	Nickel	<	50	ug/L	U		8/15/2019 11:44	8/27/2019 12:31	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	1861321	DCPA		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	1897456	Chlorothalonil		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7439921	Lead	<	1	ug/L	U		8/15/2019 11:24	8/22/2019 9:59	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7440360	Antimony	<	2	ug/L	U		8/15/2019 11:24	8/22/2019 9:59	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	1031078	Endosulfan Sulfate		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.	
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	67641	Acetone		5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	72435	Methoxychlor		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1	Mid-level LCS recovery low. Results may be biased low.	
2166	27	8/13/2019	8:30	METH	Water	Water	Hoff SW-1	O2019006	74840	Ethane		12.4	ug/L	U		8/15/2019 2:00	8/20/2019 8:07	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	75274	Bromodichlorometha		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	76448	Heptachlor		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7440622	Vanadium	<	30	ug/L	U		8/15/2019 11:44	8/27/2019 12:31	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285	7440666	Zinc	<	30	ug/L	U		8/15/2019 11:44	8/27/2019 12:31	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	2593159	Etridiazole		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	309002	Aldrin		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	319868	delta-BHC		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	5103742	gamma-Chlordane		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1	Mid-level LCS recovery low. Results may be biased low.Matrix spike recoveries low. Results and/or reporting limits may be biased low.	
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	501	Water	Water	Hoff SW-1	I2019020285		Sulfate		36.5	mg/L			8/21/2019 13:40	8/26/2019 13:25	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	98566	PCTFB		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	1918167	Propachlor		0.052	ug/L	U		9/6/2019 2:00	9/12/2019 11:01	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	100414	Ethylbenzene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	108383	m/p-Xylenes		1	ug/L	U		8/14/2019 2:00	9/9/2019 13:16	1		

2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	127184	Tetrachloroethene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	135988	Sec-Butylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	142289	1,3-Dichloropropane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	563586	1,1-Dichloropropene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	58899	Lindane	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:01	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	71556	1,1,1-Trichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006	72559	4,4'-DDE	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:01	1	Mid-level LCS recovery low. Results may be biased low.Matrix spike recoveries low. Results and/or reporting limits may be biased low.			
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	74839	Bromomethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	74873	Chloromethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	75003	Chloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	75092	Dichloromethane	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	75343	1,1-Dichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	78933	2-Butanone	2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	79016	Trichloroethene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	98828	Isopropylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	75650	t-Butyl alcohol	5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	METH	Water	Water	Hoff SW-1	O2019006	74851	Ethene	29.8	ug/L	U	8/15/2019 2:00	8/20/2019 8:07	1				
2166	27	8/13/2019	8:30	DIOXA	Water	Water	Hoff SW-1	O2019006	123911	1,4-Dioxane	2.5	ug/L	U	8/23/2019 2:00	8/26/2019 13:21	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006399		EXTRACTED DATE				8/14/2019 2:00	9/9/2019 13:16	1				
2166	27	8/13/2019	8:30	DIOXA	Water	Water	Hoff SW-1	O2019006425		EXTRACTED DATE	8192019	Day		8/23/2019 2:00	8/26/2019 13:21	1				
2166	27	8/13/2019	8:30	PSTSW	Water	Water	Hoff SW-1	O2019006434		EXTRACTED DATE	8152019	Day		9/6/2019 2:00	9/12/2019 11:01	1				
2166	27	8/13/2019	8:30	VOASW	Water	Water	Hoff SW-1	O2019006399		EXTRACTED TIME				8/14/2019 2:00	9/9/2019 13:16	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7440473	Chromium	69.7	mg/kg		8/22/2019 10:39	9/4/2019 10:31	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	75014	Chloroethene (vinyl c	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	10061015	cis-1,3-Dichloroprope	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	103651	n-Propylbenzene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	106467	1,4-Dichlorobenzene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	108054	Vinyl Acetate	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	108883	Toluene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	120821	1,2,4-Trichlorobenzer	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	74975	Bromochloromethan	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	75150	Carbon disulfide	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	75694	Trichlorofluorometha	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	79005	1,1,2-Trichloroethane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	124481	Dibromochlorometha	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	87683	Hexachlorobutadiene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	91203	Naphthalene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	95476	o-Xylene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	87616	1,2,3-Trichlorobenzer	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	95501	1,2-Dichlorobenzene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	71432	Benzene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	56235	Carbon tetrachloride	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	1634044	Methyl-tert-butyl Eth	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7429905	Aluminum	24358	mg/kg		8/22/2019 10:45	9/4/2019 10:36	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020386		Acidity	0	Each		8/15/2019 12:00	8/28/2019 8:33	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	1330207	Total Xylenes	0	ug/kg		8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	100425	Styrene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	10061026	trans-1,3-Dichloropro	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	104518	n-Butylbenzene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	108861	Bromobenzene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	108907	Chlorobenzene	126	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	109999	Tetrahydrofuran	126	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	591786	2-Hexanone	315	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	630206	1,1,1,2-Tetrachloroet	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	67663	Chloroform	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	74953	Dibromomethane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	75252	Bromoform	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	75354	1,1-Dichloroethene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	75718	Dichlorodifluorometh	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7440-42-8	Boron	< 24.7	mg/kg		8/22/2019 10:39	9/4/2019 10:38	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	156592	cis-1,2-Dichloroethen	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020386		Moisture	17.65	%		8/16/2019 11:42	8/28/2019 8:46	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020386		Solids	82.35	%		8/16/2019 11:42	8/28/2019 8:46	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020386		Sulfate	1.3359	mg/L		9/10/2019 16:28	9/11/2019 10:37	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7440097	Potassium	3188	mg/kg		8/22/2019 10:39	9/4/2019 10:38	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7439954	Magnesium	13937	mg/kg		8/22/2019 10:45	9/4/2019 10:36	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7440235	Sodium	220	mg/kg		8/22/2019 10:39	9/4/2019 10:36	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7439896	Iron	56054	mg/kg		8/22/2019 16:31	9/4/2019 10:46	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7439965	Manganese	1776	mg/kg		8/22/2019 10:43	9/4/2019 10:36	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7440702	Calcium	11038	mg/kg		8/22/2019 10:45	9/4/2019 10:32	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7440508	Copper	19.4	mg/kg		8/22/2019 10:39	9/4/2019 10:31	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7439976	Mercury	< 0.123	mg/kg		8/23/2019 14:27	8/28/2019 11:56	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7440393	Barium	83.2	mg/kg		8/22/2019 10:39	9/4/2019 10:38	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7440666	Zinc	91.9	mg/kg		8/22/2019 10:39	9/4/2019 10:36	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020	7440622	Vanadium	127	mg/kg		8/22/2019 10:43	9/4/2019 10:36	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	108678	1,3,5-Trimethylbenze	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	594207	2,2-Dichloropropane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	67641	Acetone	315	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	75274	Bromodichlorometha	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	79345	1,1,2,2-Tetrachloroet	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	96184	1,2,3-Trichloropropar	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	99876	4-Isopropyltoluene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	95498	o-Chlorotoluene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020386		Leach	0	Each		8/29/2019 0:00	8/30/2019 14:49	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	541731	1,3-Dichlorobenzene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	106934	1,2-Dibromoethane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	98566	PCTFB	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	95636	1,2,4-Trimethylbenze	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1				

2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	96128	1,2-Dibromo-3-chlorc	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	100414	Ethylbenzene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	106434	p-Chlorotoluene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	108101	4-Methyl-2-pentanon	315	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	108383	m/p-Xylenes	126	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	127184	Tetrachloroethene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	135988	Sec-Butylbenzene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	142289	1,3-Dichloropropane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	156605	trans-1,2-Dichloroeth	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	563586	1,1-Dichloropropene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	71556	1,1,1-Trichloroethane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	74839	Bromomethane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	74873	Chloromethane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	75003	Chloroethane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	75092	Dichloromethane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	75343	1,1-Dichloroethane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	78875	1,2-Dichloropropane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	78933	2-Butanone	315	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	79016	Trichloroethene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	98066	Tert-Butylbenzene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	98828	Isopropylbenzene	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	107062	1,2-Dichloroethane	63	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	75650	t-Butyl alcohol	630	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006	540885	tert-Butyl Acetate	315	ug/kg	U	8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	DIOXA	Sediment	Sediment	Hoff SED-2	O2019006	123911	1,4-Dioxane	117	mg/kg	U	8/22/2019 2:00	8/26/2019 13:30	1	
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020386		Weight	0.4923	GRAMS		8/15/2019 12:00	8/28/2019 8:33	1	
2166	28	8/13/2019	9:30	503	Sediment	Sediment	Hoff SED-2	I2019020386		Sulfate	32.44444	mg/kg		9/10/2019 16:28	9/13/2019 14:54	1	
2166	28	8/13/2019	9:30	DIOXA	Sediment	Sediment	Hoff SED-2	O2019006458		EXTRACTED DATE	8142019	Day		8/22/2019 2:00	8/26/2019 13:30	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006404		EXTRACTED DATE	8142019	Day		8/15/2019 2:00	9/9/2019 14:37	1	
2166	28	8/13/2019	9:30	DIOXA	Sediment	Sediment	Hoff SED-2	O2019006458		EXTRACTED TIME	1315			8/22/2019 2:00	8/26/2019 13:30	1	
2166	28	8/13/2019	9:30	VOASW	Sediment	Sediment	Hoff SED-2	O2019006404		EXTRACTED TIME	953			8/15/2019 2:00	9/9/2019 14:37	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	319857	beta-BHC	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	51218452	Metolachlor	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	51877748	trans-Permethrin	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	54774457	cis-Permethrin	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	108883	Toluene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I2019020	7782492	Selenium <	7	ug/L	U	8/15/2019 11:27	8/22/2019 9:59	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I2019020	7440-28-0	Thallium <	2	ug/L	U	8/15/2019 11:27	8/22/2019 9:59	1	
2166	29	8/13/2019	9:25	METH	Water	Water	Hoff SW-2	O2019006	74828	Methane	17.8	ug/L		8/15/2019 2:00	8/20/2019 8:08	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	74975	Bromochloromethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	75150	Carbon disulfide	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I2019020	7440-42-8	Boron	1010	ug/L		8/15/2019 11:50	8/27/2019 12:34	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	124481	Dibromochlorometha	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	91203	Naphthalene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	95476	o-Xylene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	959988	Endosulfan I	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	21725462	Cyanazine	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	2675776	Chlorneb	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	319846	alpha-BHC	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	71432	Benzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	510156	Chlorobenzilate	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	5103719	alpha-Chlordane	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	Mid-level LCS recovery low. Results may be biased low.
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	53494705	Endrin Ketone	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	21087649	Metribuzin	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	2921882	Dursban	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	33213659	Endosulfan II	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	50293	4,4'-DDT	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	Mid-level LCS recovery low. Results may be biased low.
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I2019020286		Chromiurr <	50	ug/L	U	8/15/2019 11:50	8/27/2019 12:32	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	1330207	Total Xylenes	0	ug/L		8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I2019020	7440508	Copper <	10	ug/L	U	8/15/2019 11:50	8/27/2019 12:32	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	100425	Styrene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I2019020	7439976	Mercury <	0.2	ug/L	U	8/16/2019 14:37	8/19/2019 9:39	1	The lab-fortified blank recovery is > 115 %. The result may be biased high.
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I2019020	7439954	Magnesium	20.3	mg/L		8/15/2019 11:50	8/27/2019 12:33	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I2019020	7439965	Manganese	179	ug/L		8/15/2019 11:50	8/27/2019 12:33	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	1024573	Heptachlor Epoxide	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	104518	n-Butylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	108861	Bromobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	108907	Chlorobenzene	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	109999	Tetrahydrofuran	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	118741	Hexachlorobenzene	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	591786	2-Hexanone	2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	60571	Dieldrin	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	67663	Chloroform	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	72208	Endrin	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	72548	4,4'-DDD	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	Mid-level LCS recovery low. Results may be biased low.
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	7421934	Endrin Aldehyde	0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	Mid-level LCS recovery low. Results may be biased low.
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	74953	Dibromomethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	METH	Water	Water	Hoff SW-2	O2019006	74986	Propane	14.2	ug/L	U	8/15/2019 2:00	8/20/2019 8:08	1	

2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	75252	Bromoform		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	77474	Hexachlorocyclopent		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7440224	Silver	<	10	ug/L	U	8/15/2019 11:50	8/27/2019 12:31	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7429905	Aluminum	<	300	ug/L	U	8/15/2019 11:50	8/27/2019 12:31	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	1582098	Trifluralin		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	15972608	Alachlor		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7440382	Arsenic	<	3	ug/L	U	8/15/2019 11:27	8/22/2019 9:59	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7440393	Barium		22	ug/L		8/15/2019 11:50	8/27/2019 12:32	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I2019020286		Beryllium	<	1	ug/L	U	8/15/2019 11:50	8/27/2019 12:33	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7440702	Calcium		63.8	mg/L		8/15/2019 11:50	8/27/2019 12:33	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7440439	Cadmium	<	10	ug/L	U	8/15/2019 11:50	8/27/2019 12:32	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I2019020286		Cobalt Cor	<	50	ug/L	U	8/15/2019 11:50	8/27/2019 12:32	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7439896	Iron	<	100	ug/L	U	8/15/2019 11:50	8/27/2019 12:32	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7440097	Potassium		3.59	mg/L		8/15/2019 11:50	8/27/2019 12:33	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7440235	Sodium		18.8	mg/L		8/15/2019 11:50	8/27/2019 12:34	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7440020	Nickel	<	50	ug/L	U	8/15/2019 11:50	8/27/2019 12:33	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	1861321	DCPA		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	1897456	Chlorothalonil		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7439921	Lead	<	1	ug/L	U	8/15/2019 11:27	8/22/2019 9:59	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7440360	Antimony	<	2	ug/L	U	8/15/2019 11:27	8/22/2019 9:59	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	1031078	Endosulfan Sulfate		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	67641	Acetone		5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	72435	Methoxychlor		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	Mid-level LCS recovery low. Results may be biased low.
2166	29	8/13/2019	9:25	METH	Water	Water	Hoff SW-2	O2019006	74840	Ethane		12.4	ug/L	U	8/15/2019 2:00	8/20/2019 8:08	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	76448	Heptachlor		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7440622	Vanadium	<	30	ug/L	U	8/15/2019 11:50	8/27/2019 12:33	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I20190202	7440666	Zinc	<	30	ug/L	U	8/15/2019 11:50	8/27/2019 12:33	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	2593159	Etridiazole		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	309002	Aldrin		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	319868	delta-BHC		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	5103742	gamma-Chlordane		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	Mid-level LCS recovery low. Results may be biased low.
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	501	Water	Water	Hoff SW-2	I2019020286		Sulfate		31.5	mg/L		8/21/2019 13:43	8/26/2019 13:25	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	98566	PCTFB		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	1918167	Propachlor		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	58899	Lindane		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006	72559	4,4'-DDE		0.052	ug/L	U	9/6/2019 2:00	9/12/2019 11:05	1	Mid-level LCS recovery low. Results may be biased low.
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	74839	Bromomethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	74873	Chloromethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	75003	Chloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	75092	Dichloromethane		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	78933	2-Butanone		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	METH	Water	Water	Hoff SW-2	O2019006	74851	Ethene		29.8	ug/L	U	8/15/2019 2:00	8/20/2019 8:08	1	
2166	29	8/13/2019	9:25	DIOXA	Water	Water	Hoff SW-2	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/21/2019 2:00	8/26/2019 13:21	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006400		EXTRACTED DATE					8/14/2019 2:00	9/9/2019 13:16	1	
2166	29	8/13/2019	9:25	DIOXA	Water	Water	Hoff SW-2	O2019006426		EXTRACTED DATE		8192019	Day		8/21/2019 2:00	8/26/2019 13:21	1	
2166	29	8/13/2019	9:25	PSTSW	Water	Water	Hoff SW-2	O2019006436		EXTRACTED DATE		8152019	Day		9/6/2019 2:00	9/12/2019 11:05	1	
2166	29	8/13/2019	9:25	VOASW	Water	Water	Hoff SW-2	O2019006400		EXTRACTED TIME					8/14/2019 2:00	9/9/2019 13:16	1	
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I20190203	7440473	Chromium		61.8	mg/kg		8/22/2019 10:48	9/4/2019 10:50	1	
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	75014	Chloroethene (vinyl c		97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	10061015	cis-1,3-Dichloroprope		97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	103651	n-Propylbenzene		97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	106467	1,4-Dichlorobenzene		792	ug/kg		8/15/2019 2:00	9/9/2019 14:42	1	
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	108054	Vinyl Acetate		97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	108883	Toluene		97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	120821	1,2,4-Trichlorobenzer		274	ug/kg		8/15/2019 2:00	9/9/2019 14:42	1	
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	74975	Bromochloromethan		97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	75150	Carbon disulfide		97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	75694	Trichlorofluorometha		97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.Matrix spike recoveries low. Results and/or reporting limits may be biased low.
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	79005	1,1,2-Trichloroethane		97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	124481	Dibromochlorometha		97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	87683	Hexachlorobutadiene		97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	

2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	91203	Naphthalene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	95476	o-Xylene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	87616	1,2,3-Trichlorobenzer	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	95501	1,2-Dichlorobenzene	4250	ug/kg		8/15/2019 2:00	9/9/2019 14:42	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.				
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	71432	Benzene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	56235	Carbon tetrachloride	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	1634044	Methyl-tert-butyl Eth	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7429905	Aluminum	26252	mg/kg		8/22/2019 11:02	9/4/2019 10:53	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020388		Acidity	0	Each		8/15/2019 12:00	8/28/2019 8:34	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	1330207	Total Xylenes	0	ug/kg		8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	100425	Styrene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	10061026	trans-1,3-Dichloropro	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	104518	n-Butylbenzene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	108861	Bromobenzene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	108907	Chlorobenzene	660	ug/kg	B	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	109999	Tetrahydrofuran	196	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	591786	2-Hexanone	489	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	630206	1,1,1,2-Tetrachloroet	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	67663	Chloroform	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	74953	Dibromomethane	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	75252	Bromoform	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.				
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	75354	1,1-Dichloroethene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	75718	Dichlorodifluorometh	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7440-42-8	Boron	61	mg/kg		8/22/2019 10:48	9/4/2019 10:55	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	156592	cis-1,2-Dichloroethen	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020388		Moisture	54.26	%		8/16/2019 11:42	8/28/2019 8:47	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020388		Solids	45.74	%		8/16/2019 11:42	8/28/2019 8:47	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020388		Sulfate	25.0804	mg/L		8/30/2019 19:35	9/9/2019 10:03	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7440097	Potassium	1538	mg/kg		8/22/2019 10:48	9/4/2019 10:55	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7439954	Magnesium	8721	mg/kg		8/22/2019 10:52	9/4/2019 10:53	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7440235	Sodium	220	mg/kg		8/22/2019 10:48	9/4/2019 10:53	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7439896	Iron	35479	mg/kg		8/22/2019 11:02	9/4/2019 10:51	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7439965	Manganese	402	mg/kg		8/22/2019 10:48	9/4/2019 10:53	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7440702	Calcium	8029	mg/kg		8/22/2019 10:52	9/4/2019 10:50	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7440508	Copper	30.1	mg/kg		8/22/2019 10:48	9/4/2019 10:50	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7439976	Mercury	< 0.22	mg/kg		8/23/2019 14:29	8/28/2019 11:56	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7440393	Barium	64.9	mg/kg		8/22/2019 10:48	9/4/2019 10:55	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7440666	Zinc	75.5	mg/kg		8/22/2019 10:48	9/4/2019 10:53	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020	7440622	Vanadium	89.3	mg/kg		8/22/2019 10:48	9/4/2019 10:53	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	108678	1,3,5-Trimethylbenze	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	594207	2,2-Dichloropropane	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	67641	Acetone	489	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	75274	Bromodichlorometha	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	79345	1,1,2,2-Tetrachloroet	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	96184	1,2,3-Trichloropropar	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	99876	4-Isopropyltoluene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	95498	o-Chlorotoluene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020388		Leach	0	Each		8/30/2019 0:00	8/30/2019 14:58	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	541731	1,3-Dichlorobenzene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	106934	1,2-Dibromoethane	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	98566	PCTFB	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	95636	1,2,4-Trimethylbenze	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	96128	1,2-Dibromo-3-chlorc	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.				
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	100414	Ethylbenzene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	106434	p-Chlorotoluene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	108101	4-Methyl-2-pentanon	489	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	108383	m/p-Xylenes	196	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	127184	Tetrachloroethene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	135988	Sec-Butylbenzene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	142289	1,3-Dichloropropane	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	156605	trans-1,2-Dichloroeth	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	563586	1,1-Dichloropropene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	71556	1,1,1-Trichloroethane	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	74839	Bromomethane	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	Matrix spike recoveries low. Results and/or reporting limits may be biased low.				
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	74873	Chloromethane	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	75003	Chloroethane	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.Matrix spike recoveries low. Results and/or reporting limits may be biased low.				
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	75092	Dichloromethane	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	75343	1,1-Dichloroethane	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	78875	1,2-Dichloropropane	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	78933	2-Butanone	489	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	79016	Trichloroethene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	98066	Tert-Butylbenzene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	98828	Isopropylbenzene	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	107062	1,2-Dichloroethane	97.8	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	75650	t-Butyl alcohol	978	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006	540885	tert-Butyl Acetate	489	ug/kg	U	8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	DIOXA	Sediment	Sediment	Hoff SED-3	O2019006	123911	1,4-Dioxane	253	mg/kg	U	8/22/2019 2:00	8/26/2019 13:30	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020388		Weight	0.4976	GRAMS		8/15/2019 12:00	8/28/2019 8:34	1					
2166	30	8/13/2019	9:50	503	Sediment	Sediment	Hoff SED-3	I2019020388		Sulfate	1096.651	mg/kg		8/30/2019 19:35	9/13/2019 14:55	1					
2166	30	8/13/2019	9:50	DIOXA	Sediment	Sediment	Hoff SED-3	O2019006459		EXTRACTED DATE	8142019	Day		8/22/2019 2:00	8/26/2019 13:30	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006405		EXTRACTED DATE	8142019	Day		8/15/2019 2:00	9/9/2019 14:42	1					
2166	30	8/13/2019	9:50	DIOXA	Sediment	Sediment	Hoff SED-3	O2019006459		EXTRACTED TIME	1315			8/22/2019 2:00	8/26/2019 13:30	1					
2166	30	8/13/2019	9:50	VOASW	Sediment	Sediment	Hoff SED-3	O2019006405		EXTRACTED TIME	953			8/15/2019 2:00	9/9/2019 14:42	1					
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	319857	beta-BHC	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	51218452	Metolachlor	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	51877748	trans-Permethrin	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	54774457	cis-Permethrin	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	75014	Chloroethene (vinyl c	6.1	ug/L	Q	8/15/2019 2:00	9/9/2019 13:18	1					
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1					
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1					
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	106467	1,4-Dichlorobenzene	10.2	ug/L	Q	8/15/2019 2:00	9/9/2019 13:18	1					
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1					
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	108883	Toluene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1					

2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	120821	1,2,4-Trichlorobenzer	0.92	ug/L		8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7782492	Selenium	< 7	ug/L	U	8/15/2019 11:31	8/22/2019 9:59	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440-28-0	Thallium	< 2	ug/L	U	8/15/2019 11:31	8/22/2019 9:59	1				
2166	31	8/13/2019	9:45	METH	Water	Water	Hoff SW-3	O2019006	74828	Methane	148	ug/L		8/15/2019 2:00	8/20/2019 8:08	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	74975	Bromochloromethan	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	75150	Carbon disulfide	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440-42-8	Boron	2980	ug/L		8/29/2019 11:52	9/6/2019 10:59	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	124481	Dibromochlorometha	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	91203	Naphthalene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	95476	o-Xylene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	959988	Endosulfan I	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	95501	1,2-Dichlorobenzene	51.5	ug/L		8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	21725462	Cyanazine	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	2675776	Chlorneb	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	319846	alpha-BHC	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	71432	Benzene	0.9	ug/L		8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	510156	Chlorobenzilate	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	5103719	alpha-Chlordane	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	53494705	Endrin Ketone	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	1634044	Methyl-tert-butyl Eth	0.52	ug/L		8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	21087649	Metribuzin	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	2921882	Dursban	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	33213659	Endosulfan II	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	50293	4,4'-DDT	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020287		Chromiun	< 50	ug/L	U	8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	1330207	Total Xylenes	0	ug/L		8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440508	Copper	< 10	ug/L	U	8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	100425	Styrene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7439976	Mercury	< 0.2	ug/L	U	8/21/2019 15:18	8/23/2019 8:08	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7439954	Magnesium	29	mg/L		8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7439965	Manganese	791	ug/L		8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	1024573	Heptachlor Epoxide	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	104518	n-Butylbenzene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	108861	Bromobenzene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	108907	Chlorobenzene	64.1	ug/L		8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	109999	Tetrahydrofuran	1	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	118741	Hexachlorobenzene	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	591786	2-Hexanone	2.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	60571	Dieldrin	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	67663	Chloroform	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	72208	Endrin	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	72548	4,4'-DDD	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	7421934	Endrin Aldehyde	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	74953	Dibromomethane	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	METH	Water	Water	Hoff SW-3	O2019006	74986	Propane	14.2	ug/L	U	8/15/2019 2:00	8/20/2019 8:08	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	75252	Bromoform	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	75354	1,1-Dichloroethene	23.4	ug/L	Q	8/15/2019 2:00	9/9/2019 13:18	1	Continuing calibration recoveries high. Results may be biased high.			
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	77474	Hexachlorocyclopent	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440224	Silver	< 10	ug/L	U	8/15/2019 11:52	8/27/2019 12:33	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7429905	Aluminum	< 300	ug/L	U	8/15/2019 11:52	8/27/2019 12:33	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	156592	cis-1,2-Dichloroethen	16.2	ug/L	Q	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	1582098	Trifluralin	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	15972608	Alachlor	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440382	Arsenic	< 3	ug/L	U	8/15/2019 11:31	8/22/2019 9:59	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440393	Barium	26	ug/L		8/15/2019 11:52	8/27/2019 12:33	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020287		Beryllium	< 1	ug/L	U	8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440702	Calcium	84.7	mg/L		8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440439	Cadmium	< 10	ug/L	U	8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020287		Cobalt Cor	< 50	ug/L	U	8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7439896	Iron	154	ug/L		8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440097	Potassium	3.31	mg/L		8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440235	Sodium	33.8	mg/L		8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440020	Nickel	< 50	ug/L	U	8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	1861321	DCPA	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	1897456	Chlorothalonil	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7439921	Lead	< 1	ug/L	U	8/15/2019 11:31	8/22/2019 9:59	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440360	Antimony	< 2	ug/L	U	8/15/2019 11:31	8/22/2019 9:59	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	1031078	Endosulfan Sulfate	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	594207	2,2-Dichloropropane	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	67641	Acetone	5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	72435	Methoxychlor	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	METH	Water	Water	Hoff SW-3	O2019006	74840	Ethane	12.4	ug/L	U	8/15/2019 2:00	8/20/2019 8:08	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	75274	Bromodichlorometha	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	76448	Heptachlor	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	79345	1,1,2,2-Tetrachloroet	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	96184	1,2,3-Trichloropropar	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	99876	4-Isopropyltoluene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	95498	o-Chlorotoluene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440622	Vanadium	< 30	ug/L	U	8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020	7440666	Zinc	< 30	ug/L	U	8/15/2019 11:52	8/27/2019 12:34	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	2593159	Etridiazole	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	309002	Aldrin	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	319868	delta-BHC	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	5103742	gamma-Chlordane	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1				

2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	541731	1,3-Dichlorobenzene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	106934	1,2-Dibromoethane	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	501	Water	Water	Hoff SW-3	I2019020287		Sulfate	34.6	mg/L		8/21/2019 13:45	8/26/2019 13:25	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	98566	PCTFB	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	96128	1,2-Dibromo-3-chlorc	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	1918167	Propachlor	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	100414	Ethylbenzene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	106434	p-Chlorotoluene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	108101	4-Methyl-2-pentanon	2.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	108383	m/p-Xylenes	1	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	127184	Tetrachloroethene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	135988	Sec-Butylbenzene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	142289	1,3-Dichloropropane	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	563586	1,1-Dichloropropene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	58899	Lindane	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	71556	1,1,1-Trichloroethane	33.5	ug/L	Q	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006	72559	4,4'-DDE	0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	74839	Bromomethane	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	74873	Chloromethane	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	75003	Chloroethane	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	75092	Dichloromethane	1	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	75343	1,1-Dichloroethane	9.2	ug/L	Q	8/15/2019 2:00	9/9/2019 13:18	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.						
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	78933	2-Butanone	2.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	79016	Trichloroethene	9.6	ug/L	Q	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	98828	Isopropylbenzene	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	75650	t-Butyl alcohol	8.2	ug/L		8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U	8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	METH	Water	Water	Hoff SW-3	O2019006	74851	Ethene	29.8	ug/L	U	8/15/2019 2:00	8/20/2019 8:08	1							
2166	31	8/13/2019	9:45	DIOXA	Water	Water	Hoff SW-3	O2019006	123911	1,4-Dioxane	9	ug/L		8/21/2019 2:00	8/26/2019 13:22	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006401		EXTRACTED DATE				8/15/2019 2:00	9/9/2019 13:18	1							
2166	31	8/13/2019	9:45	DIOXA	Water	Water	Hoff SW-3	O2019006427		EXTRACTED DATE	8192019	Day		8/21/2019 2:00	8/26/2019 13:22	1							
2166	31	8/13/2019	9:45	PSTSW	Water	Water	Hoff SW-3	O2019006438		EXTRACTED DATE	8192019	Day		9/11/2019 2:00	9/13/2019 15:08	1							
2166	31	8/13/2019	9:45	VOASW	Water	Water	Hoff SW-3	O2019006401		EXTRACTED TIME				8/15/2019 2:00	9/9/2019 13:18	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7440473	Chromium	69.6	mg/kg		8/22/2019 11:05	9/4/2019 10:58	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	75014	Chloroethene (vinyl c	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	10061015	cis-1,3-Dichloroprope	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	103651	n-Propylbenzene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	106467	1,4-Dichlorobenzene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	108054	Vinyl Acetate	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	108883	Toluene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	120821	1,2,4-Trichlorobenzer	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	74975	Bromochloromethane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	75150	Carbon disulfide	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	75694	Trichlorofluorometha	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.						
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	79005	1,1,2-Trichloroethane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	124481	Dibromochloromethane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	87683	Hexachlorobutadiene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	91203	Naphthalene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	95476	o-Xylene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	87616	1,2,3-Trichlorobenzer	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	95501	1,2-Dichlorobenzene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	71432	Benzene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	56235	Carbon tetrachloride	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	1634044	Methyl-tert-butyl Eth	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7429905	Aluminum	19690	mg/kg		8/22/2019 11:12	9/4/2019 11:02	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020389		Acidity	0	Each		8/15/2019 12:00	8/28/2019 8:34	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	1330207	Total Xylenes	0	ug/kg		8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	100425	Styrene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	10061026	trans-1,3-Dichloropro	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	104518	n-Butylbenzene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	108861	Bromobenzene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	108907	Chlorobenzene	122	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	109999	Tetrahydrofuran	122	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	591786	2-Hexanone	305	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	630206	1,1,1,2-Tetrachloroet	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	67663	Chloroform	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	74953	Dibromomethane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	75252	Bromoform	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.						
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	75354	1,1-Dichloroethene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	75718	Dichlorodifluorometh	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7440-42-8	Boron	<	22.4	mg/kg		8/22/2019 11:05	9/4/2019 11:05	1						
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	156592	cis-1,2-Dichloroethen	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020389		Moisture	12.72	%		8/16/2019 11:42	8/28/2019 8:48	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020389		Solids	87.28	%		8/16/2019 11:42	8/28/2019 8:48	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020389		Sulfate	<	1	mg/L	U	8/30/2019 19:50	9/9/2019 10:05	1						
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7440097	Potassium	5228	mg/kg		8/22/2019 11:09	9/4/2019 11:05	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7439954	Magnesium	13239	mg/kg		8/22/2019 11:12	9/4/2019 11:02	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7440235	Sodium	195	mg/kg		8/22/2019 11:05	9/4/2019 11:02	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7439896	Iron	53573	mg/kg		8/22/2019 16:36	9/4/2019 10:59	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7439965	Manganese	1341	mg/kg		8/22/2019 11:09	9/4/2019 11:02	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7440702	Calcium	9593	mg/kg		8/22/2019 11:12	9/4/2019 10:59	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7440508	Copper	14.3	mg/kg		8/22/2019 11:05	9/4/2019 10:58	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7439976	Mercury	<	0.112	mg/kg		8/23/2019 14:31	8/28/2019 11:57	1						
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7440393	Barium	72.9	mg/kg		8/22/2019 11:05	9/4/2019 11:05	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7440666	Zinc	87.5	mg/kg		8/22/2019 11:05	9/4/2019 11:02	1							
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020	7440622	Vanadium	118	mg/kg		8/22/2019 11:09	9/4/2019 11:02	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	108678	1,3,5-Trimethylbenze	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	594207	2,2-Dichloropropane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1							

2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	67641	Acetone	305	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	75274	Bromodichlorometha	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	79345	1,1,2,2-Tetrachloroet	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	96184	1,2,3-Trichloropropar	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	99876	4-Isopropyltoluene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	95498	o-Chlorotoluene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020389		Leach	0	Each		8/30/2019 0:00	8/30/2019 14:59	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	541731	1,3-Dichlorobenzene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	106934	1,2-Dibromoethane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	98566	PCTFB	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	95636	1,2,4-Trimethylbenze	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	96128	1,2-Dibromo-3-chlorc	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	100414	Ethylbenzene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	106434	p-Chlorotoluene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	108101	4-Methyl-2-pentanon	305	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	108383	m/p-Xylenes	122	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	127184	Tetrachloroethene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	135988	Sec-Butylbenzene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	142289	1,3-Dichloropropane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	156605	trans-1,2-Dichloroeth	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	563586	1,1-Dichloropropene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	71556	1,1,1-Trichloroethane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	74839	Bromomethane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	74873	Chloromethane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	75003	Chloroethane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	75092	Dichloromethane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	75343	1,1-Dichloroethane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	78875	1,2-Dichloropropane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	78933	2-Butanone	305	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	79016	Trichloroethene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	98066	Tert-Butylbenzene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	98828	Isopropylbenzene	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	107062	1,2-Dichloroethane	61	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	75650	t-Butyl alcohol	610	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006	540885	tert-Butyl Acetate	305	ug/kg	U	8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	DIOXA	Sediment	Sediment	Hoff SED-4	O2019006	123911	1,4-Dioxane	138	mg/kg	U	8/22/2019 2:00	8/26/2019 13:32	1			
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020389		Weight	0.5106	GRAMS		8/15/2019 12:00	8/28/2019 8:34	1			
2166	32	8/13/2019	10:25	503	Sediment	Sediment	Hoff SED-4	I2019020389		Sulfate <	22.9148	mg/kg		8/30/2019 19:50	9/13/2019 14:55	1			
2166	32	8/13/2019	10:25	DIOXA	Sediment	Sediment	Hoff SED-4	O2019006460		EXTRACTED DATE	8142019	Day		8/22/2019 2:00	8/26/2019 13:32	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006406		EXTRACTED DATE	8142019	Day		8/15/2019 2:00	9/9/2019 14:43	1			
2166	32	8/13/2019	10:25	DIOXA	Sediment	Sediment	Hoff SED-4	O2019006460		EXTRACTED TIME	1315			8/22/2019 2:00	8/26/2019 13:32	1			
2166	32	8/13/2019	10:25	VOASW	Sediment	Sediment	Hoff SED-4	O2019006406		EXTRACTED TIME	953			8/15/2019 2:00	9/9/2019 14:43	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	319857	beta-BHC	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	51218452	Metolachlor	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	51877748	trans-Permethrin	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	54774457	cis-Permethrin	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	108883	Toluene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7782492	Selenium <	7	ug/L	U	8/15/2019 11:41	8/22/2019 9:59	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440-28-0	Thallium <	2	ug/L	U	8/15/2019 11:41	8/22/2019 9:59	1			
2166	33	8/13/2019	10:30	METH	Water	Water	Hoff SW-4	O2019006	74828	Methane	11.6	ug/L	U	8/15/2019 2:00	8/20/2019 8:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	74975	Bromochloromethan	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	75150	Carbon disulfide	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440-42-8	Boron	1820	ug/L		8/29/2019 11:55	9/6/2019 11:00	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	124481	Dibromochlorometha	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	91203	Naphthalene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	95476	o-Xylene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	959988	Endosulfan I	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	21725462	Cyanazine	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	2675776	Chlorneb	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	319846	alpha-BHC	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	71432	Benzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	510156	Chlorobenzilate	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	5103719	alpha-Chlordane	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	53494705	Endrin Ketone	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	21087649	Metribuzin	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	2921882	Dursban	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	33213659	Endosulfan II	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	50293	4,4'-DDT	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020288		Chromiurr <	50	ug/L	U	8/15/2019 11:55	8/27/2019 12:34	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	1330207	Total Xylenes	0	ug/L		8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440508	Copper <	10	ug/L	U	8/15/2019 11:55	8/27/2019 12:34	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	100425	Styrene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7439976	Mercury <	0.2	ug/L	U	8/21/2019 15:20	8/23/2019 8:09	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7439954	Magnesium	20.1	mg/L		8/15/2019 11:55	8/27/2019 12:35	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7439965	Manganese	24	ug/L		8/15/2019 11:55	8/27/2019 12:34	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	1024573	Heptachlor Epoxide	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	104518	n-Butylbenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	108861	Bromobenzene	0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	108907	Chlorobenzene	1	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			

2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	118741	Hexachlorobenzene		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	60571	Dieldrin		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	67663	Chloroform		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	72208	Endrin		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	72548	4,4'-DDD		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	7421934	Endrin Aldehyde		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	METH	Water	Water	Hoff SW-4	O2019006	74986	Propane		14.2	ug/L	U	8/15/2019 2:00	8/20/2019 8:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	75252	Bromoform		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	77474	Hexachlorocyclopent		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440224	Silver	<	10	ug/L	U	8/15/2019 11:55	8/27/2019 12:34	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7429905	Aluminum	<	300	ug/L	U	8/15/2019 11:55	8/27/2019 12:34	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	156592	cis-1,2-Dichloroethen		3	ug/L		8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	1582098	Trifluralin		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	15972608	Alachlor		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440382	Arsenic	<	3	ug/L	U	8/15/2019 11:41	8/22/2019 9:59	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440393	Barium		35	ug/L		8/15/2019 11:55	8/27/2019 12:34	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020288		Beryllium	<	1	ug/L	U	8/15/2019 11:55	8/27/2019 12:34	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440702	Calcium		63.8	mg/L		8/15/2019 11:55	8/27/2019 12:34	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440439	Cadmium	<	10	ug/L	U	8/15/2019 11:55	8/27/2019 12:34	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020288		Cobalt Cor	<	50	ug/L	U	8/15/2019 11:55	8/27/2019 12:34	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7439896	Iron	<	100	ug/L	U	8/15/2019 11:55	8/27/2019 12:34	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440097	Potassium		3.94	mg/L		8/15/2019 11:55	8/27/2019 12:35	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440235	Sodium		28.7	mg/L		8/15/2019 11:55	8/27/2019 12:35	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440020	Nickel	<	50	ug/L	U	8/15/2019 11:55	8/27/2019 12:34	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	1861321	DCPA		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	1897456	Chlorothalonil		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7439921	Lead	<	1	ug/L	U	8/15/2019 11:41	8/22/2019 9:59	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440360	Antimony	<	2	ug/L	U	8/19/2019 12:03	8/22/2019 9:59	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	1031078	Endosulfan Sulfate		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	67641	Acetone		5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	72435	Methoxychlor		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	METH	Water	Water	Hoff SW-4	O2019006	74840	Ethane		12.4	ug/L	U	8/15/2019 2:00	8/20/2019 8:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	76448	Heptachlor		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440622	Vanadium	<	30	ug/L	U	8/15/2019 11:55	8/27/2019 12:35	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020	7440666	Zinc	<	30	ug/L	U	8/15/2019 11:55	8/27/2019 12:35	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	2593159	Etridiazole		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	309002	Aldrin		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	319868	delta-BHC		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	5103742	gamma-Chlordane		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	501	Water	Water	Hoff SW-4	I2019020288		Sulfate		31.6	mg/L		8/28/2019 13:15	9/4/2019 13:49	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	98566	PCTFB		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	1918167	Propachlor		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	58899	Lindane		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006	72559	4,4'-DDE		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	74839	Bromomethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	74873	Chloromethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	75003	Chloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	75092	Dichloromethane		1	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	75343	1,1-Dichloroethane		0.67	ug/L		8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	78933	2-Butanone		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	79016	Trichloroethene		0.5	ug/L		8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	METH	Water	Water	Hoff SW-4	O2019006	74851	Ethene		29.8	ug/L	U	8/15/2019 2:00	8/20/2019 8:08	1			
2166	33	8/13/2019	10:30	DIOXA	Water	Water	Hoff SW-4	O2019006	123911	1,4-Dioxane		5.5	ug/L		8/21/2019 2:00	8/26/2019 13:22	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006402		EXTRACTED DATE					8/14/2019 2:00	9/9/2019 13:19	1			
2166	33	8/13/2019	10:30	DIOXA	Water	Water	Hoff SW-4	O2019006428		EXTRACTED DATE		8192019	Day		8/21/2019 2:00	8/26/2019 13:22	1			
2166	33	8/13/2019	10:30	PSTSW	Water	Water	Hoff SW-4	O2019006440		EXTRACTED DATE		8192019	Day		9/11/2019 2:00	9/13/2019 15:08	1			
2166	33	8/13/2019	10:30	VOASW	Water	Water	Hoff SW-4	O2019006402		EXTRACTED TIME					8/14/2019 2:00	9/9/2019 13:19	1			
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W	Hoff MW-5D-L	O2019006	319857	beta-BHC		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W	Hoff MW-5D-L	O2019006	51218452	Metolachlor		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W	Hoff MW-5D-L	O2019006	51877748	trans-Permethrin		0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1			

2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	54774457	cis-Permethrin	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	108883	Toluene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	74975	Bromochloromethan	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	75150	Carbon disulfide	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	124481	Dibromochlorometha	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440-42-8	Boron	< 200	ug/L	U	8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	91203	Naphthalene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	95476	o-Xylene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	959988	Endosulfan I	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	21725462	Cyanazine	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	2675776	Chlorneb	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	319846	alpha-BHC	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	71432	Benzene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	510156	Chlorobenzilate	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	5103719	alpha-Chlordane	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	53494705	Endrin Ketone	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440224	Silver	< 10	ug/L	U	8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	21087649	Metribuzin	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	2921882	Dursban	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	33213659	Endosulfan II	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	50293	4,4'-DDT	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440439	Cadmium	< 10	ug/L	U	8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	606	Cobalt Cor	< 50	ug/L	U	8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	1330207	Total Xylenes	0	ug/L		8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	100425	Styrene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440097	Potassium	17.59	mg/L		8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7439965	Manganese	55	ug/L		8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	1024573	Heptachlor Epoxide	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	104518	n-Butylbenzene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	108861	Bromobenzene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	108907	Chlorobenzene	1	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	109999	Tetrahydrofuran	1	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	118741	Hexachlorobenzene	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	591786	2-Hexanone	2.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	60571	Dieldrin	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	67663	Chloroform	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	72208	Endrin	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	72548	4,4'-DDD	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	7421934	Endrin Aldehyde	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	74953	Dibromomethane	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	75252	Bromoform	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.				
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	75354	1,1-Dichloroethene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	77474	Hexachlorocyclopent	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7429905	Aluminum	< 300	ug/L	U	8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	156592	cis-1,2-Dichloroethen	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	1582098	Trifluralin	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	15972608	Alachlor	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440382	Arsenic	< 3	ug/L	U	8/19/2019 11:10	8/19/2019 12:28	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440393	Barium	23	ug/L		8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	606	Beryllium	< 1	ug/L	U	8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440702	Calcium	18.68	mg/L		8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	606	Chromiun	< 50	ug/L	U	8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440508	Copper	< 10	ug/L	U	8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7439896	Iron	670	ug/L		8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7439976	Mercury	< 0.2	ug/L	U	8/28/2019 11:04	8/28/2019 13:51	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7439954	Magnesium	2.03	mg/L		8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440235	Sodium	6.23	mg/L		8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440020	Nickel	< 50	ug/L	U	8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	1861321	DCPA	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	1897456	Chlorothalonil	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7439921	Lead	< 1	ug/L	U	8/19/2019 11:10	8/19/2019 12:28	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440360	Antimony	< 2	ug/L	U	8/19/2019 11:10	8/19/2019 12:28	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7782492	Selenium	< 7	ug/L	U	8/19/2019 11:10	8/19/2019 12:28	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440-28-0	Thallium	< 2	ug/L	U	8/19/2019 11:10	8/19/2019 12:28	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	1031078	Endosulfan Sulfate	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	594207	2,2-Dichloropropane	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	67641	Acetone	5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	72435	Methoxychlor	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	75274	Bromodichlorometha	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-5D-L	O2019006	76448	Heptachlor	0.048	ug/L	U	9/11/2019 2:00	9/13/2019 15:08	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	79345	1,1,2,2-Tetrachloroet	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	96184	1,2,3-Trichloropropar	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	99876	4-Isopropyltoluene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-5D-L	O2019006	95498	o-Chlorotoluene	0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:27	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440622	Vanadium	< 30	ug/L	U	8/20/2019 12:15	8/26/2019 13:07	1					
2166	34	8/13/2019	13:50	502	Water	Ground W Hoff MW-5D-L	I2019020	7440666	Zinc	< 30	ug/L	U	8/20/2019 12:15	8/26/2019 13:07	1					

2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-SD-L	O2019006	2593159	Etridiazole	0.048	ug/L	U		9/11/2019 2:00	9/13/2019 15:08	1			
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-SD-L	O2019006	309002	Aldrin	0.048	ug/L	U		9/11/2019 2:00	9/13/2019 15:08	1			
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-SD-L	O2019006	319868	delta-BHC	0.048	ug/L	U		9/11/2019 2:00	9/13/2019 15:08	1			
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-SD-L	O2019006	5103742	gamma-Chlordane	0.048	ug/L	U		9/11/2019 2:00	9/13/2019 15:08	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	541731	1,3-Dichlorobenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	106934	1,2-Dibromoethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	98566	PCTFB	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	95636	1,2,4-Trimethylbenze	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	96128	1,2-Dibromo-3-chlorc	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-SD-L	O2019006	1918167	Propachlor	0.048	ug/L	U		9/11/2019 2:00	9/13/2019 15:08	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	100414	Ethylbenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	106434	p-Chlorotoluene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	108101	4-Methyl-2-pentanon	2.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	108383	m/p-Xylenes	1	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	127184	Tetrachloroethene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	135988	Sec-Butylbenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	142289	1,3-Dichloropropane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	563586	1,1-Dichloropropene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-SD-L	O2019006	58899	Lindane	0.048	ug/L	U		9/11/2019 2:00	9/13/2019 15:08	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	71556	1,1,1-Trichloroethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-SD-L	O2019006	72559	4,4'-DDE	0.048	ug/L	U		9/11/2019 2:00	9/13/2019 15:08	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	74839	Bromomethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	74873	Chloromethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	75003	Chloroethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	75092	Dichloromethane	1	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	75343	1,1-Dichloroethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	78933	2-Butanone	2.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	79016	Trichloroethene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	98828	Isopropylbenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	75650	t-Butyl alcohol	5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	DIOXA	Water	Ground W Hoff MW-SD-L	O2019006	123911	1,4-Dioxane	2.5	ug/L	U		8/21/2019 2:00	8/26/2019 13:22	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006532		EXTRACTED DATE					8/17/2019 2:00	9/9/2019 15:27	1			
2166	34	8/13/2019	13:50	DIOXA	Water	Ground W Hoff MW-SD-L	O2019006560		EXTRACTED DATE	8192019	Day			8/21/2019 2:00	8/26/2019 13:22	1			
2166	34	8/13/2019	13:50	PSTSW	Water	Ground W Hoff MW-SD-L	O2019006575		EXTRACTED DATE	8192019	Day			9/11/2019 2:00	9/13/2019 15:08	1			
2166	34	8/13/2019	13:50	VOASW	Water	Ground W Hoff MW-SD-L	O2019006532		EXTRACTED TIME					8/17/2019 2:00	9/9/2019 15:27	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	319857	beta-BHC	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	51218452	Metolachlor	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	51877748	trans-Permethrin	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	54774457	cis-Permethrin	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	103651	n-Propylbenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	108054	Vinyl Acetate	1	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	108883	Toluene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	74975	Bromochloromethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	75150	Carbon disulfide	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	124481	Dibromochloromethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020(	7440-42-8	Boron	1506	ug/L			8/20/2019 12:20	8/26/2019 13:12	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	91203	Naphthalene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	95476	o-Xylene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	959988	Endosulfan I	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	21725462	Cyanazine	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	2675776	Chlorneb	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	319846	alpha-BHC	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	71432	Benzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	510156	Chlorobenzilate	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	5103719	alpha-Chlordane	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	53494705	Endrin Ketone	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020(	7440224	Silver <	10	ug/L	U		8/20/2019 12:20	8/26/2019 13:12	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	21087649	Metribuzin	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	2921882	Dursban	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	33213659	Endosulfan II	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	50293	4,4'-DDT	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020(	7440439	Cadmium <	10	ug/L	U		8/20/2019 12:20	8/26/2019 13:12	1			
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020607		Cobalt Cor <	50	ug/L	U		8/20/2019 12:20	8/26/2019 13:12	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	1330207	Total Xylenes	0	ug/L			8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	100425	Styrene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020(	7440097	Potassium	4.866	mg/L			8/20/2019 12:20	8/26/2019 13:12	1			
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020(	7439965	Manganes <	10	ug/L	U		8/20/2019 12:20	8/26/2019 13:12	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	1024573	Heptachlor Epoxide	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	104518	n-Butylbenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	108861	Bromobenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	108907	Chlorobenzene	1	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	109999	Tetrahydrofuran	1	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	118741	Hexachlorobenzene	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	591786	2-Hexanone	2.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	60571	Dieldrin	0.052	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1			

2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	67663	Chloroform		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	72208	Endrin		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	72548	4,4'-DDD		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	7421934	Endrin Aldehyde		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	75252	Bromoform		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	77474	Hexachlorocyclopent		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7429905	Aluminum	<	300	ug/L	U	8/20/2019 12:20	8/26/2019 13:12	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	1582098	Trifluralin		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	15972608	Alachlor		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7440382	Arsenic	<	3	ug/L	U	8/19/2019 11:13	8/19/2019 12:28	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7440393	Barium		42	ug/L		8/20/2019 12:20	8/26/2019 13:12	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	607	Beryllium	<	1	ug/L	U	8/20/2019 12:20	8/26/2019 13:12	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7440702	Calcium		160.1	mg/L		8/20/2019 15:26	8/26/2019 13:12	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	607	Chromium	<	50	ug/L	U	8/20/2019 12:20	8/26/2019 13:12	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7440508	Copper	<	10	ug/L	U	8/20/2019 12:20	8/26/2019 13:12	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7439896	Iron	<	100	ug/L	U	8/20/2019 12:20	8/26/2019 13:12	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7439976	Mercury	<	0.2	ug/L	U	8/28/2019 11:09	8/28/2019 13:51	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7439954	Magnesium		37.73	mg/L		8/20/2019 12:20	8/26/2019 13:12	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7440235	Sodium		62.82	mg/L		8/20/2019 12:20	8/26/2019 13:12	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7440020	Nickel	<	50	ug/L	U	8/20/2019 12:20	8/26/2019 13:12	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	1861321	DCPA		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	1897456	Chlorothalonil		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7439921	Lead	<	1	ug/L	U	8/19/2019 11:13	8/19/2019 12:28	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7440360	Antimony	<	2	ug/L	U	8/19/2019 11:13	8/19/2019 12:28	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7782492	Selenium	<	7	ug/L	U	8/19/2019 11:13	8/19/2019 12:28	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7440-28-0	Thallium	<	2	ug/L	U	8/19/2019 11:13	8/19/2019 12:28	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	1031078	Endosulfan Sulfate		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	67641	Acetone		5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	72435	Methoxychlor		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	76448	Heptachlor		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7440622	Vanadium	<	30	ug/L	U	8/20/2019 12:20	8/26/2019 13:12	1				
2166	35	8/13/2019	15:05	502	Water	Ground W Hoff MW-SD-U	I2019020	7440666	Zinc	<	30	ug/L	U	8/20/2019 12:20	8/26/2019 13:12	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	2593159	Etridiazole		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	309002	Aldrin		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	319868	delta-BHC		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	5103742	gamma-Chlordane		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	98566	PCTFB		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	1918167	Propachlor		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	58899	Lindane		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	71556	1,1,1-Trichloroethane		0.61	ug/L		8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	72559	4,4'-DDE		0.052	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	74839	Bromomethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	74873	Chloromethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	75003	Chloroethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	75092	Dichloromethane		1	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	78933	2-Butanone		2.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	DIOXA	Water	Ground W Hoff MW-SD-U	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/21/2019 2:00	8/26/2019 13:22	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	6533	EXTRACTED DATE					8/17/2019 2:00	9/9/2019 15:28	1				
2166	35	8/13/2019	15:05	DIOXA	Water	Ground W Hoff MW-SD-U	O2019006	561	EXTRACTED DATE		8192019	Day		8/21/2019 2:00	8/26/2019 13:22	1				
2166	35	8/13/2019	15:05	PSTSW	Water	Ground W Hoff MW-SD-U	O2019006	576	EXTRACTED DATE		8192019	Day		9/11/2019 2:00	9/13/2019 15:09	1				
2166	35	8/13/2019	15:05	VOASW	Water	Ground W Hoff MW-SD-U	O2019006	6533	EXTRACTED TIME					8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	108883	Toluene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	74975	Bromochloromethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:28	1				

2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	124481	Dibromochlorometha	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	91203	Naphthalene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	95476	o-Xylene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	71432	Benzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	1330207	Total Xylenes	0	ug/L			8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	100425	Styrene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	104518	n-Butylbenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	108861	Bromobenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	108907	Chlorobenzene	1	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	109999	Tetrahydrofuran	1	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	591786	2-Hexanone	2.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	67663	Chloroform	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	74953	Dibromomethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	75252	Bromoform	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	75354	1,1-Dichloroethene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	156592	cis-1,2-Dichloroethen	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	108678	1,3,5-Trimethylbenze	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	594207	2,2-Dichloropropane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	67641	Acetone	5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	75274	Bromodichlorometha	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	79345	1,1,2,2-Tetrachloroet	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	96184	1,2,3-Trichloropropar	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	99876	4-Isopropyltoluene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	95498	o-Chlorotoluene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	541731	1,3-Dichlorobenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	106934	1,2-Dibromoethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	98566	PCTFB	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	95636	1,2,4-Trimethylbenze	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	96128	1,2-Dibromo-3-chloro	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	100414	Ethylbenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	106434	p-Chlorotoluene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	108101	4-Methyl-2-pentanon	2.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	108383	m/p-Xylenes	1	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	127184	Tetrachloroethene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	135988	Sec-Butylbenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	142289	1,3-Dichloropropane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	563586	1,1-Dichloropropene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	71556	1,1,1-Trichloroethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	74839	Bromomethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	74873	Chloromethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	75003	Chloroethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	75092	Dichloromethane	1	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	75343	1,1-Dichloroethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	78933	2-Butanone	2.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	79016	Trichloroethene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	98828	Isopropylbenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	75650	t-Butyl alcohol	5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	DIOXA	Water	Ground W Hoff TB-081319	O2019006	123911	1,4-Dioxane	2.5	ug/L	U		8/21/2019 2:00	8/26/2019 13:22	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006534		EXTRACTED DATE					8/17/2019 2:00	9/9/2019 15:28	1				
2166	36	8/13/2019	16:15	DIOXA	Water	Ground W Hoff TB-081319	O2019006562		EXTRACTED DATE	8192019	Day			8/21/2019 2:00	8/26/2019 13:22	1				
2166	36	8/13/2019	16:15	VOASW	Water	Ground W Hoff TB-081319	O2019006534		EXTRACTED TIME					8/17/2019 2:00	9/9/2019 15:28	1				
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	319857	beta-BHC	0.053	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1				
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	51218452	Metolachlor	0.053	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1				
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	51877748	trans-Permethrin	0.053	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1				
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	54774457	cis-Permethrin	0.053	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	75014	Chloroethene (vinyl c	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	103651	n-Propylbenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	106467	1,4-Dichlorobenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	108054	Vinyl Acetate	1	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	108883	Toluene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	74975	Bromochloromethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	75150	Carbon disulfide	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	124481	Dibromochlorometha	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440-42-8	Boron	247	ug/L			8/20/2019 12:29	8/26/2019 13:18	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	91203	Naphthalene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	95476	o-Xylene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	959988	Endosulfan I	0.053	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	95501	1,2-Dichlorobenzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	21725462	Cyanazine	0.053	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1				
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	2675776	Chlorneb	0.053	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1				
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	319846	alpha-BHC	0.053	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1				
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	71432	Benzene	0.5	ug/L	U		8/17/2019 2:00	9/9/2019 15:29	1				
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	510156	Chlorobenzilate	0.053	ug/L	U		9/11/2019 2:00	9/13/2019 15:09	1				

2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	5103719	alpha-Chlordane		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	53494705	Endrin Ketone		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440224	Silver	<	10	ug/L	U	8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	21087649	Metribuzin		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	2921882	Dursban		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	33213659	Endosulfan II		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	50293	4,4'-DDT		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440439	Cadmium	<	10	ug/L	U	8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	608	Cobalt Cor	<	50	ug/L	U	8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	1330207	Total Xylenes		0	ug/L		8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	100425	Styrene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440097	Potassium		1.961	mg/L		8/20/2019 12:39	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7439965	Manganes	<	10	ug/L	U	8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	1024573	Heptachlor Epoxide		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	108907	Chlorobenzene		1	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	118741	Hexachlorobenzene		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	60571	Dieldrin		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	67663	Chloroform		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	72208	Endrin		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	72548	4,4'-DDD		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	7421934	Endrin Aldehyde		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	75252	Bromoform		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	77474	Hexachlorocyclopent		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7429905	Aluminum	<	300	ug/L	U	8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	1582098	Trifluralin		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	15972608	Alachlor		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440382	Arsenic	<	3	ug/L	U	8/19/2019 11:19	8/19/2019 12:29	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440393	Barium		11	ug/L		8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	608	Beryllium	<	1	ug/L	U	8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440702	Calcium		16.35	mg/L		8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	608	Chromium	<	50	ug/L	U	8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440508	Copper	<	10	ug/L	U	8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7439896	Iron	<	100	ug/L	U	8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7439976	Mercury	<	0.2	ug/L	U	8/28/2019 11:11	8/28/2019 13:52	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7439954	Magnesium		3.76	mg/L		8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440235	Sodium		14.1	mg/L		8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440020	Nickel	<	50	ug/L	U	8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	1861321	DCPA		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	1897456	Chlorothalonil		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7439921	Lead	<	1	ug/L	U	8/19/2019 11:19	8/19/2019 12:29	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440360	Antimony	<	2	ug/L	U	8/19/2019 11:19	8/19/2019 12:29	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7782492	Selenium	<	7	ug/L	U	8/19/2019 11:19	8/19/2019 12:29	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440-28-0	Thallium	<	2	ug/L	U	8/19/2019 11:19	8/19/2019 12:29	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	1031078	Endosulfan Sulfate		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	67641	Acetone		5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	72435	Methoxychlor		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	76448	Heptachlor		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440622	Vanadium	<	30	ug/L	U	8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	502	Water	Ground W Hoff MW-5S	I2019020	7440666	Zinc	<	30	ug/L	U	8/20/2019 12:29	8/26/2019 13:18	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	2593159	Etridiazole		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	309002	Aldrin		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	319868	delta-BHC		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	5103742	gamma-Chlordane		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	98566	PCTFB		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	1918167	Propachlor		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	58899	Lindane		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W Hoff MW-5S	O2019006	72559	4,4'-DDE		0.053	ug/L	U	9/11/2019 2:00	9/13/2019 15:09	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	74839	Bromomethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	74873	Chloromethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			
2166	37	8/13/2019	16:20	VOASW	Water	Ground W Hoff MW-5S	O2019006	75003	Chloroethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1			

2166	37	8/13/2019	16:20	VOASW	Water	Ground W	Hoff MW-5S	O2019006	75092	Dichloromethane		1	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W	Hoff MW-5S	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W	Hoff MW-5S	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W	Hoff MW-5S	O2019006	78933	2-Butanone		2.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W	Hoff MW-5S	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W	Hoff MW-5S	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W	Hoff MW-5S	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W	Hoff MW-5S	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W	Hoff MW-5S	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W	Hoff MW-5S	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:29	1		
2166	37	8/13/2019	16:20	DIOXA	Water	Ground W	Hoff MW-5S	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/21/2019 2:00	8/26/2019 13:22	1		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W	Hoff MW-5S	O2019006535		EXTRACTED DATE					8/17/2019 2:00	9/9/2019 15:29	1		
2166	37	8/13/2019	16:20	DIOXA	Water	Ground W	Hoff MW-5S	O2019006563		EXTRACTED DATE		8192019	Day		8/21/2019 2:00	8/26/2019 13:22	1		
2166	37	8/13/2019	16:20	PSTSW	Water	Ground W	Hoff MW-5S	O2019006577		EXTRACTED DATE		8192019	Day		9/11/2019 2:00	9/13/2019 15:09	1		
2166	37	8/13/2019	16:20	VOASW	Water	Ground W	Hoff MW-5S	O2019006535		EXTRACTED TIME					8/17/2019 2:00	9/9/2019 15:29	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	108883	Toluene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	74975	Bromochloromethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440-42-8	Boron	<	200	ug/L	U	8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	91203	Naphthalene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	95476	o-Xylene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	71432	Benzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440224	Silver	<	10	ug/L	U	8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440439	Cadmium	<	10	ug/L	U	8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020609		Cobalt Cor	<	50	ug/L	U	8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	1330207	Total Xylenes		0	ug/L		8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	100425	Styrene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440097	Potassium		1.698	mg/L		8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7439965	Manganese		82	ug/L		8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	108907	Chlorobenzene		1	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	67663	Chloroform		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	75252	Bromoform		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7429905	Aluminum	<	300	ug/L	U	8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440382	Arsenic	<	3	ug/L	U	8/19/2019 11:22	8/19/2019 12:29	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440393	Barium	<	10	ug/L	U	8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020609		Beryllium	<	1	ug/L	U	8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440702	Calcium		6.97	mg/L		8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020609		Chromium	<	50	ug/L	U	8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440508	Copper	<	10	ug/L	U	8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7439896	Iron		1722	ug/L		8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7439976	Mercury	<	0.2	ug/L	U	8/28/2019 11:13	8/28/2019 13:52	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7439954	Magnesium		1.64	mg/L		8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440235	Sodium		17.39	mg/L		8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440020	Nickel	<	50	ug/L	U	8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7439921	Lead	<	1	ug/L	U	8/19/2019 11:22	8/19/2019 12:29	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440360	Antimony	<	2	ug/L	U	8/19/2019 11:22	8/19/2019 12:29	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7782492	Selenium	<	7	ug/L	U	8/19/2019 11:22	8/19/2019 12:29	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440-28-0	Thallium	<	2	ug/L	U	8/19/2019 11:22	8/19/2019 12:29	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	67641	Acetone		5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440622	Vanadium	<	30	ug/L	U	8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	502	Water	Ground W	Hoff MW-6S	I2019020	7440666	Zinc	<	30	ug/L	U	8/20/2019 12:32	8/26/2019 13:21	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	98566	PCTFB		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1		

2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	74839	Bromomethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	74873	Chloromethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	75003	Chloroethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	75092	Dichloromethane		1	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	78933	2-Butanone		2.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	DIOXA	Water	Ground W	Hoff MW-6S	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/21/2019 2:00	8/26/2019 13:22	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006536		EXTRACTED DATE					8/17/2019 2:00	9/9/2019 15:30	1			
2166	38	8/14/2019	9:40	DIOXA	Water	Ground W	Hoff MW-6S	O2019006564		EXTRACTED DATE		8202019	Day		8/21/2019 2:00	8/26/2019 13:22	1			
2166	38	8/14/2019	9:40	VOASW	Water	Ground W	Hoff MW-6S	O2019006536		EXTRACTED TIME					8/17/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	75014	Chloroethene (vinyl c		3.1	ug/L		8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	106467	1,4-Dichlorobenzene		57.4	ug/L	Q	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	108883	Toluene		0.84	ug/L		8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	METH	Water	Ground W	Hoff MW-6	O2019006	74828	Methane		9250	ug/L		8/20/2019 2:00	8/23/2019 10:17	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	74975	Bromochloromethane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440-42-8	Boron		870	ug/L		8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	91203	Naphthalene		9.4	ug/L	Q	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	95476	o-Xylene		4.4	ug/L		8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	95501	1,2-Dichlorobenzene		10.4	ug/L	Q	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	71432	Benzene		39	ug/L	Q	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	1634044	Methyl-tert-butyl Eth		0.76	ug/L		8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440224	Silver	<	10	ug/L	U	8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440439	Cadmium	<	10	ug/L	U	8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	610	Cobalt Cor	<	50	ug/L	U	8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	1330207	Total Xylenes		6.4	ug/L		8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	100425	Styrene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440097	Potassium		6.644	mg/L		8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7439965	Manganese		3045	ug/L		8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	108907	Chlorobenzene		1900	ug/L		8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	67663	Chloroform		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	METH	Water	Ground W	Hoff MW-6	O2019006	74986	Propane		14.2	ug/L	U	8/20/2019 2:00	8/23/2019 10:17	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	75252	Bromoform		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7429905	Aluminum	<	300	ug/L	U	8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	156592	cis-1,2-Dichloroethen		0.69	ug/L		8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440382	Arsenic	<	3	ug/L	U	8/19/2019 11:31	8/19/2019 12:31	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440393	Barium		44	ug/L		8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	610	Beryllium	<	1	ug/L	U	8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440702	Calcium		107.7	mg/L		8/20/2019 15:29	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	610	Chromiur	<	50	ug/L	U	8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440508	Copper	<	10	ug/L	U	8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7439896	Iron		7208	ug/L		8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7439976	Mercury	<	0.2	ug/L	U	8/28/2019 11:15	8/28/2019 13:53	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7439954	Magnesium		27.92	mg/L		8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440235	Sodium		35.94	mg/L		8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440020	Nickel	<	50	ug/L	U	8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7439921	Lead	<	1	ug/L	U	8/19/2019 11:31	8/19/2019 12:31	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440360	Antimony	<	2	ug/L	U	8/19/2019 11:31	8/19/2019 12:31	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7782492	Selenium	<	7	ug/L	U	8/19/2019 11:31	8/19/2019 12:31	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440-28-0	Thallium	<	2	ug/L	U	8/19/2019 11:31	8/19/2019 12:31	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	108678	1,3,5-Trimethylbenze		1.1	ug/L		8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	67641	Acetone		5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	METH	Water	Ground W	Hoff MW-6	O2019006	74840	Ethane		12.4	ug/L	U	8/20/2019 2:00	8/23/2019 10:17	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440622	Vanadium	<	30	ug/L	U	8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020	7440666	Zinc	<	30	ug/L	U	8/20/2019 12:47	8/26/2019 13:26	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	541731	1,3-Dichlorobenzene		2	ug/L		8/19/2019 2:00	9/9/2019 15:30	1			
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1			

2166	39	8/14/2019	10:50	502	Water	Ground W	Hoff MW-6	I2019020610		Sulfate	21.8	mg/L		8/22/2019 13:27	8/26/2019 14:15	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	98566	PCTFB	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	95636	1,2,4-Trimethylbenze	2	ug/L		8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	96128	1,2-Dibromo-3-chlorc	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	100414	Ethylbenzene	3.4	ug/L		8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	106434	p-Chlorotoluene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	108101	4-Methyl-2-pentanon	2.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	108383	m/p-Xylenes	2	ug/L		8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	127184	Tetrachloroethene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	135988	Sec-Butylbenzene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	142289	1,3-Dichloropropane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	156605	trans-1,2-Dichloroeth	1.3	ug/L		8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	563586	1,1-Dichloropropene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	71556	1,1,1-Trichloroethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	74839	Bromomethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	74873	Chloromethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	75003	Chloroethane	19.3	ug/L	Q	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	75092	Dichloromethane	1	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	75343	1,1-Dichloroethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	78933	2-Butanone	2.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	79016	Trichloroethene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	98066	Tert-Butylbenzene	0.51	ug/L		8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	98828	Isopropylbenzene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	75650	t-Butyl alcohol	15.8	ug/L		8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	DIOXA	Water	Ground W	Hoff MW-6	O2019006	123911	1,4-Dioxane	5.6	ug/L		8/21/2019 2:00	8/26/2019 13:23	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006537		EXTRACTED DATE				8/19/2019 2:00	9/9/2019 15:30	1		
2166	39	8/14/2019	10:50	DIOXA	Water	Ground W	Hoff MW-6	O2019006565		EXTRACTED DATE	8202019	Day		8/21/2019 2:00	8/26/2019 13:23	1		
2166	39	8/14/2019	10:50	VOASW	Water	Ground W	Hoff MW-6	O2019006537		EXTRACTED TIME				8/19/2019 2:00	9/9/2019 15:30	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	75014	Chloroethene (vinyl c	0.54	ug/L		8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	106467	1,4-Dichlorobenzene	0.91	ug/L		8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	108883	Toluene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	METH	Water	Ground W	Hoff MW-8	O2019006	74828	Methane	81.7	ug/L		8/20/2019 2:00	8/23/2019 10:17	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	74975	Bromochloromethan	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	75150	Carbon disulfide	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	124481	Dibromochlorometha	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7440-42-8	Boron	236	ug/L		8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	91203	Naphthalene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	95476	o-Xylene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	95501	1,2-Dichlorobenzene	3	ug/L		8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	71432	Benzene	2.5	ug/L		8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7440224	Silver <	10	ug/L	U	8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7440439	Cadmium <	10	ug/L	U	8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020611		Cobalt Cor <	50	ug/L	U	8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	1330207	Total Xylenes	0	ug/L		8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	100425	Styrene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7440097	Potassium	4.714	mg/L		8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7439965	Manganese	216	ug/L		8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	104518	n-Butylbenzene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	108861	Bromobenzene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	108907	Chlorobenzene	64.7	ug/L		8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	109999	Tetrahydrofuran	1	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	591786	2-Hexanone	2.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	67663	Chloroform	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	74953	Dibromomethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	METH	Water	Ground W	Hoff MW-8	O2019006	74986	Propane	14.2	ug/L	U	8/20/2019 2:00	8/23/2019 10:17	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	75252	Bromoform	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	75354	1,1-Dichloroethene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7429905	Aluminum <	300	ug/L	U	8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	156592	cis-1,2-Dichloroethen	6.4	ug/L	Q	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7440382	Arsenic <	3	ug/L	U	8/19/2019 11:34	8/19/2019 12:31	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7440393	Barium	77	ug/L		8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020611		Beryllium <	1	ug/L	U	8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7440702	Calcium	49.8	mg/L		8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020611		Chromium <	50	ug/L	U	8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7440508	Copper	12	ug/L		8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7439896	Iron	1005	ug/L		8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7439976	Mercury <	0.2	ug/L	U	8/28/2019 11:17	8/28/2019 13:53	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7439954	Magnesium	4.27	mg/L		8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7440235	Sodium	15.35	mg/L		8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7440020	Nickel <	50	ug/L	U	8/20/2019 12:51	8/26/2019 13:29	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7439921	Lead	1.01	ug/L		8/19/2019 12:46	8/19/2019 13:21	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7440360	Antimony <	2	ug/L	U	8/19/2019 11:34	8/19/2019 12:31	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7782492	Selenium <	7	ug/L	U	8/19/2019 11:34	8/19/2019 12:31	1		
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020(	7440-28-0	Thallium <	2	ug/L	U	8/19/2019 11:34	8/19/2019 12:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	594207	2,2-Dichloropropane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	67641	Acetone	5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1		

2166	40	8/14/2019	12:25	METH	Water	Ground W	Hoff MW-8	O2019006	74840	Ethane	12.4	ug/L	U	8/20/2019 2:00	8/23/2019 10:17	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	75274	Bromodichlorometha	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	79345	1,1,2,2-Tetrachloroet	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	96184	1,2,3-Trichloropropar	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	99876	4-Isopropyltoluene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	95498	o-Chlorotoluene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020E	7440622	Vanadium	< 30	ug/L	U	8/20/2019 12:51	8/26/2019 13:29	1			
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020E	7440666	Zinc	239	ug/L		8/20/2019 12:51	8/26/2019 13:29	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	541731	1,3-Dichlorobenzene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	106934	1,2-Dibromoethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	502	Water	Ground W	Hoff MW-8	I2019020611		Sulfate	27.3	mg/L		8/22/2019 13:29	8/26/2019 14:15	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	98566	PCTFB	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	96128	1,2-Dibromo-3-chlorc	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	100414	Ethylbenzene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	106434	p-Chlorotoluene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	108101	4-Methyl-2-pentanon	2.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	108383	m/p-Xylenes	1	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	127184	Tetrachloroethene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	135988	Sec-Butylbenzene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	142289	1,3-Dichloropropane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	563586	1,1-Dichloropropene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	71556	1,1,1-Trichloroethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	74839	Bromomethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	74873	Chloromethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	75003	Chloroethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	75092	Dichloromethane	1	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	75343	1,1-Dichloroethane	1.1	ug/L		8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	78875	1,2-Dichloropropane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	78933	2-Butanone	2.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	79016	Trichloroethene	0.68	ug/L		8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	98066	Tert-Butylbenzene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	98828	Isopropylbenzene	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	107062	1,2-Dichloroethane	0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	75650	t-Butyl alcohol	7	ug/L		8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006	540885	tert-Butyl Acetate	2.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	DIOXA	Water	Ground W	Hoff MW-8	O2019006	123911	1,4-Dioxane	2.5	ug/L	U	8/21/2019 2:00	8/26/2019 13:23	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006538		EXTRACTED DATE				8/19/2019 2:00	9/9/2019 15:31	1			
2166	40	8/14/2019	12:25	DIOXA	Water	Ground W	Hoff MW-8	O2019006566		EXTRACTED DATE	8202019	Day		8/21/2019 2:00	8/26/2019 13:23	1			
2166	40	8/14/2019	12:25	VOASW	Water	Ground W	Hoff MW-8	O2019006538		EXTRACTED TIME				8/19/2019 2:00	9/9/2019 15:31	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	75014	Chloroethene (vinyl c	196	ug/L	Q	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	103651	n-Propylbenzene	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	106467	1,4-Dichlorobenzene	160	ug/L	Q	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	108054	Vinyl Acetate	1	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	108883	Toluene	0.75	ug/L		8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	120821	1,2,4-Trichlorobenzer	2.2	ug/L		8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	METH	Water	Ground W	Hoff MW-8D-L	O2019006	74828	Methane	1420	ug/L		8/20/2019 2:00	8/23/2019 10:18	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	74975	Bromochloromethane	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	75150	Carbon disulfide	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	75694	Trichlorofluorometha	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	124481	Dibromochlorometha	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020E	7440-42-8	Boron	2192	ug/L		8/20/2019 12:54	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	87683	Hexachlorobutadiene	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	91203	Naphthalene	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	95476	o-Xylene	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	95501	1,2-Dichlorobenzene	1110	ug/L		8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	71432	Benzene	21.4	ug/L	Q	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	56235	Carbon tetrachloride	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	1634044	Methyl-tert-butyl Eth	11.6	ug/L	Q	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020E	7440224	Silver	< 10	ug/L	U	8/20/2019 12:54	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020E	7440439	Cadmium	< 10	ug/L	U	8/20/2019 12:54	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020612		Cobalt Cor	< 50	ug/L	U	8/20/2019 12:54	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	1330207	Total Xylenes	0	ug/L		8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	100425	Styrene	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020E	7440097	Potassium	2.837	mg/L		8/20/2019 12:54	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020E	7439965	Manganese	227	ug/L		8/20/2019 12:54	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	104518	n-Butylbenzene	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	108861	Bromobenzene	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	108907	Chlorobenzene	2340	ug/L		8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	109999	Tetrahydrofuran	1	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	591786	2-Hexanone	2.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	67663	Chloroform	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	74953	Dibromomethane	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	METH	Water	Ground W	Hoff MW-8D-L	O2019006	74986	Propane	14.2	ug/L	U	8/20/2019 2:00	8/23/2019 10:18	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	75252	Bromoform	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	75354	1,1-Dichloroethene	9	ug/L	Q	8/20/2019 2:00	9/9/2019 15:33	1	Continuing calibration recoveries high. Results may be biased high.		
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	75718	Dichlorodifluorometh	0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020E	7429905	Aluminum	< 300	ug/L	U	8/20/2019 12:54	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W	Hoff MW-8D-L	O2019006	156592	cis-1,2-Dichloroethen	238	ug/L	Q	8/20/2019 2:00	9/9/2019 15:33	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020E	7440382	Arsenic	< 3	ug/L	U	8/19/2019 11:37	8/19/2019 12:32	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020E	7440393	Barium	16	ug/L		8/20/2019 12:54	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020612		Beryllium	< 1	ug/L	U	8/20/2019 12:54	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020E	7440702	Calcium	127.9	mg/L		8/20/2019 15:31	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020612		Chromium	< 50	ug/L	U	8/20/2019 12:54	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020E	7440508	Copper	< 10	ug/L	U	8/20/2019 12:54	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020E	7439896	Iron	2579	ug/L		8/20/2019 12:54	8/26/2019 13:37	1			
2166	41	8/14/2019	15:15	502	Water	Ground W	Hoff MW-8D-L	I2019020E	7439976	Mercury	< 0.2	ug/L	U	8/28/2019 11:19	8/28/2019 13:54	1			

2166	41	8/14/2019	15:15	502	Water	Ground W Hoff MW-8D-L	I2019020€	7439954	Magnesium		36.99	mg/L			8/20/2019 12:54	8/26/2019 13:37	1				
2166	41	8/14/2019	15:15	502	Water	Ground W Hoff MW-8D-L	I2019020€	7440235	Sodium		27.42	mg/L			8/20/2019 12:54	8/26/2019 13:37	1				
2166	41	8/14/2019	15:15	502	Water	Ground W Hoff MW-8D-L	I2019020€	7440020	Nickel	<	50	ug/L	U		8/20/2019 12:54	8/26/2019 13:37	1				
2166	41	8/14/2019	15:15	502	Water	Ground W Hoff MW-8D-L	I2019020€	7439921	Lead	<	1	ug/L	U		8/19/2019 11:37	8/19/2019 12:32	1				
2166	41	8/14/2019	15:15	502	Water	Ground W Hoff MW-8D-L	I2019020€	7440360	Antimony	<	2	ug/L	U		8/19/2019 11:37	8/19/2019 12:32	1				
2166	41	8/14/2019	15:15	502	Water	Ground W Hoff MW-8D-L	I2019020€	7782492	Selenium	<	7	ug/L	U		8/19/2019 11:37	8/19/2019 12:32	1				
2166	41	8/14/2019	15:15	502	Water	Ground W Hoff MW-8D-L	I2019020€	7440-28-0	Thallium	<	2	ug/L	U		8/19/2019 11:37	8/19/2019 12:32	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	67641	Acetone		5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	METH	Water	Ground W Hoff MW-8D-L	O2019006	74840	Ethane		12.4	ug/L	U		8/20/2019 2:00	8/23/2019 10:18	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	75274	Bromodichlorometha		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	502	Water	Ground W Hoff MW-8D-L	I2019020€	7440622	Vanadium	<	30	ug/L	U		8/20/2019 12:54	8/26/2019 13:37	1				
2166	41	8/14/2019	15:15	502	Water	Ground W Hoff MW-8D-L	I2019020€	7440666	Zinc	<	30	ug/L	U		8/20/2019 12:54	8/26/2019 13:37	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	541731	1,3-Dichlorobenzene		9.1	ug/L			8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	502	Water	Ground W Hoff MW-8D-L	I2019020612		Sulfate		27	mg/L			8/22/2019 13:31	8/26/2019 14:15	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	98566	PCTFB		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	100414	Ethylbenzene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	108383	m/p-Xylenes		1	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	127184	Tetrachloroethene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	135988	Sec-Butylbenzene		0.77	ug/L			8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	156605	trans-1,2-Dichloroeth		10.8	ug/L	Q		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	71556	1,1,1-Trichloroethane		17	ug/L	Q		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	74839	Bromomethane		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	74873	Chloromethane		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	75003	Chloroethane		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	75092	Dichloromethane		1	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	75343	1,1-Dichloroethane		130	ug/L	Q		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	78875	1,2-Dichloropropane		0.9	ug/L			8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	78933	2-Butanone		2.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	79016	Trichloroethene		36.7	ug/L	Q		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	98828	Isopropylbenzene		1.7	ug/L			8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	107062	1,2-Dichloroethane		1.2	ug/L			8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	75650	t-Butyl alcohol		181	ug/L	Q		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	DIOXA	Water	Ground W Hoff MW-8D-L	O2019006	123911	1,4-Dioxane		26.4	ug/L			8/21/2019 2:00	8/26/2019 13:23	1	Mid-level LCS recovery low. Results may be biased low.			
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006539		EXTRACTED DATE						8/20/2019 2:00	9/9/2019 15:33	1				
2166	41	8/14/2019	15:15	DIOXA	Water	Ground W Hoff MW-8D-L	O2019006567		EXTRACTED DATE		8202019	Day			8/21/2019 2:00	8/26/2019 13:23	1				
2166	41	8/14/2019	15:15	VOASW	Water	Ground W Hoff MW-8D-L	O2019006539		EXTRACTED TIME						8/20/2019 2:00	9/9/2019 15:33	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	75014	Chloroethene (vinyl c		154	ug/L	Q		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	103651	n-Propylbenzene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	106467	1,4-Dichlorobenzene		302	ug/L	Q		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	108054	Vinyl Acetate		1	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	108883	Toluene		0.68	ug/L			8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	120821	1,2,4-Trichlorobenzer		11.7	ug/L	Q		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	METH	Water	Ground W Hoff MW-8D-U	O2019006	74828	Methane		1410	ug/L			8/20/2019 2:00	8/23/2019 10:22	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	74975	Bromochloromethane		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	75150	Carbon disulfide		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	124481	Dibromochlorometha		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440-42-8	Boron		2217	ug/L			8/20/2019 12:58	8/26/2019 13:44	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	91203	Naphthalene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	95476	o-Xylene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	87616	1,2,3-Trichlorobenzer		1.4	ug/L			8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	95501	1,2-Dichlorobenzene		1650	ug/L			8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	71432	Benzene		23.4	ug/L	Q		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	1634044	Methyl-tert-butyl Eth		11.5	ug/L	Q		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440224	Silver	<	10	ug/L	U		8/20/2019 12:58	8/26/2019 13:44	1				
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440439	Cadmium	<	10	ug/L	U		8/20/2019 12:58	8/26/2019 13:44	1				
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020613		Cobalt Cor	<	50	ug/L	U		8/20/2019 12:58	8/26/2019 13:44	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	1330207	Total Xylenes		0	ug/L			8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	100425	Styrene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440097	Potassium		3.032	mg/L			8/20/2019 12:58	8/26/2019 13:44	1				
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7439965	Manganese		206	ug/L			8/20/2019 12:58	8/26/2019 13:44	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	104518	n-Butylbenzene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	108861	Bromobenzene		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	108907	Chlorobenzene		2870	ug/L			8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	109999	Tetrahydrofuran		1	ug/L			8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	591786	2-Hexanone		2.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	67663	Chloroform		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	74953	Dibromomethane		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	METH	Water	Ground W Hoff MW-8D-U	O2019006	74986	Propane		14.2	ug/L	U		8/20/2019 2:00	8/23/2019 10:22	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	75252	Bromoform		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	75354	1,1-Dichloroethene		32.1	ug/L	Q		8/20/2019 2:00	9/9/2019 15:34	1				
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U		8/20/2019 2:00	9/9/2019 15:34	1				

2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7429905	Aluminum	<	300	ug/L	U	8/20/2019 12:58	8/26/2019 13:44	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	156592	cis-1,2-Dichloroethen		621	ug/L		8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440382	Arsenic	<	3	ug/L	U	8/19/2019 11:42	8/19/2019 13:19	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440393	Barium		14	ug/L		8/20/2019 12:58	8/26/2019 13:44	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020613		Beryllium	<	1	ug/L	U	8/20/2019 12:58	8/26/2019 13:44	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440702	Calcium		119.7	mg/L		8/20/2019 15:34	8/26/2019 13:44	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020613		Chromium	<	50	ug/L	U	8/20/2019 12:58	8/26/2019 13:44	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440508	Copper	<	10	ug/L	U	8/20/2019 12:58	8/26/2019 13:44	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7439896	Iron		2090	ug/L		8/20/2019 12:58	8/26/2019 13:44	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7439976	Mercury	<	0.2	ug/L	U	8/28/2019 11:21	8/28/2019 13:54	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7439954	Magnesium		37.68	mg/L		8/20/2019 12:58	8/26/2019 13:44	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440235	Sodium		26.87	mg/L		8/20/2019 12:58	8/26/2019 13:44	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440020	Nickel	<	50	ug/L	U	8/20/2019 12:58	8/26/2019 13:44	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7439921	Lead	<	1	ug/L	U	8/19/2019 11:42	8/19/2019 13:19	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440360	Antimony	<	2	ug/L	U	8/19/2019 11:42	8/19/2019 13:19	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7782492	Selenium	<	7	ug/L	U	8/19/2019 11:42	8/19/2019 13:19	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440-28-0	Thallium	<	2	ug/L	U	8/19/2019 11:42	8/19/2019 13:19	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	67641	Acetone		5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	METH	Water	Ground W Hoff MW-8D-U	O2019006	74840	Ethane		12.4	ug/L	U	8/20/2019 2:00	8/23/2019 10:22	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440622	Vanadium	<	30	ug/L	U	8/20/2019 12:58	8/26/2019 13:44	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020€	7440666	Zinc	<	30	ug/L	U	8/20/2019 12:58	8/26/2019 13:44	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	541731	1,3-Dichlorobenzene		19	ug/L		8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	502	Water	Ground W Hoff MW-8D-U	I2019020613		Sulfate		29	mg/L		8/22/2019 13:34	8/26/2019 14:15	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	98566	PCTFB		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	135988	Sec-Butylbenzene		4.4	ug/L		8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	156605	trans-1,2-Dichloroeth		12	ug/L	Q	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	71556	1,1,1-Trichloroethane		22.9	ug/L	Q	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	74839	Bromomethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	74873	Chloromethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	75003	Chloroethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	75092	Dichloromethane		1	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	75343	1,1-Dichloroethane		131	ug/L	Q	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	78875	1,2-Dichloropropane		0.95	ug/L		8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	78933	2-Butanone		2.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	79016	Trichloroethene		124	ug/L	Q	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	98066	Tert-Butylbenzene		0.8	ug/L		8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	98828	Isopropylbenzene		2.2	ug/L		8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	107062	1,2-Dichloroethane		1.1	ug/L		8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	75650	t-Butyl alcohol		170	ug/L	Q	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	DIOXA	Water	Ground W Hoff MW-8D-U	O2019006	123911	1,4-Dioxane		26.4	ug/L		8/21/2019 2:00	8/26/2019 13:24	1	Mid-level LCS recovery low. Results may be biased low.		
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006540		EXTRACTED DATE					8/20/2019 2:00	9/9/2019 15:34	1			
2166	42	8/14/2019	16:55	DIOXA	Water	Ground W Hoff MW-8D-U	O2019006568		EXTRACTED DATE		8202019	Day		8/21/2019 2:00	8/26/2019 13:24	1			
2166	42	8/14/2019	16:55	VOASW	Water	Ground W Hoff MW-8D-U	O2019006540		EXTRACTED TIME					8/20/2019 2:00	9/9/2019 15:34	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	75014	Chloroethene (vinyl c		23.4	ug/L	Q	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	106467	1,4-Dichlorobenzene		4.4	ug/L		8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	108883	Toluene		0.73	ug/L		8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020€	7440-42-8	Boron		365	ug/L		8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	91203	Naphthalene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	95476	o-Xylene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	95501	1,2-Dichlorobenzene		26.6	ug/L	Q	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	71432	Benzene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020€	7440224	Silver	<	10	ug/L	U	8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020€	7440439	Cadmium	<	10	ug/L	U	8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020614		Cobalt	Cor <	50	ug/L	U	8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	1330207	Total Xylenes		0	ug/L		8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	100425	Styrene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020€	7440097	Potassium		22.56	mg/L		8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020€	7439965	Manganese		876	ug/L		8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	108907	Chlorobenzene		12.8	ug/L	Q	8/19/2019 2:00	9/9/2019 15:35	1			

2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	67663	Chloroform		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	75252	Bromoform		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7429905	Aluminum	<	300	ug/L	U	8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	156592	cis-1,2-Dichloroethen		60.2	ug/L		8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7440382	Arsenic	<	3	ug/L	U	8/19/2019 13:28	8/19/2019 13:40	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7440393	Barium		267	ug/L		8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	614	Beryllium	<	1	ug/L	U	8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7440702	Calcium		197.8	mg/L		8/20/2019 15:36	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	614	Chromium	<	50	ug/L	U	8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7440508	Copper	<	10	ug/L	U	8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7439896	Iron		524	ug/L		8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7439976	Mercury	<	0.2	ug/L	U	8/28/2019 11:29	8/28/2019 13:55	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7439954	Magnesium		26.6	mg/L		8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7440235	Sodium		761.1	mg/L		8/20/2019 15:36	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7440020	Nickel	<	50	ug/L	U	8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7439921	Lead	<	1	ug/L	U	8/19/2019 13:28	8/19/2019 13:40	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7440360	Antimony	<	2	ug/L	U	8/19/2019 13:28	8/19/2019 13:40	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7782492	Selenium	<	7	ug/L	U	8/19/2019 13:28	8/19/2019 13:40	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7440-28-0	Thallium	<	2	ug/L	U	8/19/2019 13:28	8/19/2019 13:40	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	67641	Acetone		5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7440622	Vanadium	<	30	ug/L	U	8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	502	Water	Ground W Hoff DUP-081519	I2019020	7440666	Zinc	<	30	ug/L	U	8/20/2019 13:03	8/26/2019 14:00	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	98566	PCTFB		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	156605	trans-1,2-Dichloroeth		1.3	ug/L		8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	74839	Bromomethane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	74873	Chloromethane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	75003	Chloroethane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	75092	Dichloromethane		1	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	75343	1,1-Dichloroethane		1.7	ug/L		8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	78933	2-Butanone		2.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	79016	Trichloroethene		0.57	ug/L		8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	DIOXA	Water	Ground W Hoff DUP-081519	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/22/2019 2:00	8/26/2019 13:24	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	541	EXTRACTED DATE					8/19/2019 2:00	9/9/2019 15:35	1			
2166	43	8/15/2019	10:00	DIOXA	Water	Ground W Hoff DUP-081519	O2019006	569	EXTRACTED DATE		8202019	Day		8/22/2019 2:00	8/26/2019 13:24	1			
2166	43	8/15/2019	10:00	VOASW	Water	Ground W Hoff DUP-081519	O2019006	541	EXTRACTED TIME					8/19/2019 2:00	9/9/2019 15:35	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	75014	Chloroethene (vinyl c		23.4	ug/L	Q	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	106467	1,4-Dichlorobenzene		3.4	ug/L		8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	108883	Toluene		0.7	ug/L		8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	METH	Water	Ground W Hoff MW-4D-L	O2019006	74828	Methane		230	ug/L		8/20/2019 2:00	8/23/2019 10:22	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	502	Water	Ground W Hoff MW-4D-L	I2019020	7440-42-8	Boron		355	ug/L		8/20/2019 13:13	8/26/2019 14:42	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	91203	Naphthalene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	95476	o-Xylene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	95501	1,2-Dichlorobenzene		24.2	ug/L	Q	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	71432	Benzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1			
2166	44	8/15/2019	8:55	502	Water	Ground W Hoff MW-4D-L	I2019020	7440224	Silver	<	10	ug/L	U	8/20/2019 13:13	8/26/2019 14:42	1			
2166	44	8/15/2019	8:55	502	Water	Ground W Hoff MW-4D-L	I2019020	7440439	Cadmium	<	10	ug/L	U	8/20/2019 13:13	8/26/2019 14:42	1			
2166	44	8/15/2019	8:55	502	Water	Ground W Hoff MW-4D-L	I2019020	615	Cobalt Cor	<	50	ug/L	U	8/20/2019 13:13	8/26/2019 14:42	1			
2166	44	8/15/2019	8:55	VOASW	Water	Ground W Hoff MW-4D-L	O2019006	1330207	Total Xylenes		0	ug/L		8/20/2019 2:00	9/9/2019 15:36	1			

2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	100425	Styrene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7440097	Potassium		22.72	mg/L		8/20/2019 13:13	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7439965	Manganese		877	ug/L		8/20/2019 13:13	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	108907	Chlorobenzene		11.6	ug/L	Q	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	67663	Chloroform		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	METH	Water	Ground W	Hoff MW-4D-L	O2019006	74986	Propane		28.4	ug/L	U	8/20/2019 2:00	8/23/2019 10:22	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	75252	Bromoform		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7429905	Aluminum	<	300	ug/L	U	8/20/2019 13:13	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	156592	cis-1,2-Dichloroethen		63	ug/L		8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7440382	Arsenic	<	3	ug/L	U	8/19/2019 13:31	8/19/2019 13:41	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7440393	Barium		267	ug/L		8/20/2019 13:13	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	615	Beryllium	<	1	ug/L	U	8/20/2019 13:13	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7440702	Calcium		198.5	mg/L		8/20/2019 15:51	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	615	Chromium	<	50	ug/L	U	8/20/2019 13:13	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7440508	Copper	<	10	ug/L	U	8/20/2019 13:13	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7439896	Iron		536	ug/L		8/20/2019 13:13	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7439976	Mercury	<	0.2	ug/L	U	8/30/2019 11:10	9/3/2019 8:04	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7439954	Magnesium		26.61	mg/L		8/20/2019 13:13	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7440235	Sodium		764.7	mg/L		8/20/2019 15:51	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7440020	Nickel	<	50	ug/L	U	8/20/2019 13:13	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7439921	Lead	<	1	ug/L	U	8/19/2019 13:31	8/19/2019 13:41	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7440360	Antimony	<	2	ug/L	U	8/19/2019 13:31	8/19/2019 13:41	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7782492	Selenium	<	7	ug/L	U	8/19/2019 13:31	8/19/2019 13:41	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7440-28-0	Thallium	<	2	ug/L	U	8/19/2019 13:31	8/19/2019 13:41	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	67641	Acetone		5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	METH	Water	Ground W	Hoff MW-4D-L	O2019006	74840	Ethane		24.8	ug/L	U	8/20/2019 2:00	8/23/2019 10:22	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7440622	Vanadium	<	30	ug/L	U	8/20/2019 13:13	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	7440666	Zinc	<	30	ug/L	U	8/20/2019 13:13	8/26/2019 14:42	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	502	Water	Ground W	Hoff MW-4D-L	I2019020	615	Sulfate		115.1	mg/L		8/21/2019 21:41	8/26/2019 13:43	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	98566	PCTFB		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	156605	trans-1,2-Dichloroeth		1.2	ug/L		8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	74839	Bromomethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.	
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	74873	Chloromethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	75003	Chloroethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	75092	Dichloromethane		1	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	75343	1,1-Dichloroethane		1.4	ug/L		8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	78933	2-Butanone		2.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	79016	Trichloroethene		0.62	ug/L		8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	DIOXA	Water	Ground W	Hoff MW-4D-L	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/22/2019 2:00	8/26/2019 13:24	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	542	EXTRACTED DATE					8/20/2019 2:00	9/9/2019 15:36	1		
2166	44	8/15/2019	8:55	DIOXA	Water	Ground W	Hoff MW-4D-L	O2019006	570	EXTRACTED DATE	8202019	Day			8/22/2019 2:00	8/26/2019 13:24	1		
2166	44	8/15/2019	8:55	VOASW	Water	Ground W	Hoff MW-4D-L	O2019006	542	EXTRACTED TIME					8/20/2019 2:00	9/9/2019 15:36	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	75014	Chloroethene (vinyl c		106	ug/L	Q	8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	106467	1,4-Dichlorobenzene		120	ug/L	Q	8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	108883	Toluene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	120821	1,2,4-Trichlorobenzer		3.5	ug/L		8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	METH	Water	Ground W	Hoff MW-4D-U	O2019006	74828	Methane		339	ug/L		8/20/2019 2:00	8/23/2019 10:22	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	502	Water	Ground W	Hoff MW-4D-U	I2019020	7440-42-8	Boron		2086	ug/L		8/20/2019 13:22	8/26/2019 14:44	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1		
2166	45	8/15/2019	10:45	VOASW	Water	Ground W	Hoff MW-4D-U	O2019006	91203	Naphthalene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1		

2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	95476	o-Xylene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	95501	1,2-Dichlorobenzene		973	ug/L		8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	71432	Benzene		13.2	ug/L	Q	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	1634044	Methyl-tert-butyl Eth		84.8	ug/L	Q	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440224	Silver	<	10	ug/L	U	8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440439	Cadmium	<	10	ug/L	U	8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	616	Cobalt Cor	<	50	ug/L	U	8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	1330207	Total Xylenes		0	ug/L		8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	100425	Styrene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440097	Potassium		3.993	mg/L		8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7439965	Manganese		231	ug/L		8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	108907	Chlorobenzene		257	ug/L	Q	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	109999	Tetrahydrofuran		2	ug/L		8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	67663	Chloroform		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	METH	Water	Ground W Hoff MW-4D-U	O2019006	74986	Propane		14.2	ug/L	U	8/20/2019 2:00	8/23/2019 10:22	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	75252	Bromoform		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.						
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	75354	1,1-Dichloroethene		177	ug/L	Q	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7429905	Aluminum	<	300	ug/L	U	8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	156592	cis-1,2-Dichloroethen		1720	ug/L		8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440382	Arsenic	<	3	ug/L	U	8/19/2019 11:51	8/19/2019 13:20	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440393	Barium		46	ug/L		8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	616	Beryllium	<	1	ug/L	U	8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440702	Calcium		110.6	mg/L		8/20/2019 15:54	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	616	Chromium	<	50	ug/L	U	8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440508	Copper	<	10	ug/L	U	8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7439896	Iron		281	ug/L		8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7439976	Mercury	<	0.2	ug/L	U	8/30/2019 11:12	9/3/2019 8:19	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7439954	Magnesium		39.09	mg/L		8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440235	Sodium		28.07	mg/L		8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440020	Nickel	<	50	ug/L	U	8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7439921	Lead	<	1	ug/L	U	8/19/2019 11:51	8/19/2019 13:20	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440360	Antimony	<	2	ug/L	U	8/19/2019 11:51	8/19/2019 13:20	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7782492	Selenium	<	7	ug/L	U	8/19/2019 11:51	8/19/2019 13:20	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440-28-0	Thallium	<	2	ug/L	U	8/19/2019 11:51	8/19/2019 13:20	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	67641	Acetone		5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	METH	Water	Ground W Hoff MW-4D-U	O2019006	74840	Ethane		12.4	ug/L	U	8/20/2019 2:00	8/23/2019 10:22	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440622	Vanadium	<	30	ug/L	U	8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	7440666	Zinc	<	30	ug/L	U	8/20/2019 13:22	8/26/2019 14:44	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	541731	1,3-Dichlorobenzene		7	ug/L		8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	502	Water	Ground W Hoff MW-4D-U	I2019020	616	Sulfate		37.2	mg/L		8/22/2019 13:36	8/26/2019 14:52	1	Possible Matrix Interference						
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	98566	PCTFB		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.						
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	135988	Sec-Butylbenzene		0.87	ug/L		8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	156605	trans-1,2-Dichloroeth		16.6	ug/L	Q	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	71556	1,1,1-Trichloroethane		9	ug/L	Q	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	74839	Bromomethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.						
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	74873	Chloromethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	75003	Chloroethane		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	75092	Dichloromethane		1	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	75343	1,1-Dichloroethane		250	ug/L	Q	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	78875	1,2-Dichloropropane		1.7	ug/L		8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	78933	2-Butanone		2.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	79016	Trichloroethene		212	ug/L	Q	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	107062	1,2-Dichloroethane		2.1	ug/L		8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	75650	t-Butyl alcohol		141	ug/L	Q	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	DIOXA	Water	Ground W Hoff MW-4D-U	O2019006	123911	1,4-Dioxane		69.6	ug/L		8/22/2019 2:00	8/26/2019 13:25	1	Mid-level LCS recovery low. Results may be biased low.						
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006543		EXTRACTED DATE					8/20/2019 2:00	9/9/2019 15:38	1							
2166	45	8/15/2019	10:45	DIOXA	Water	Ground W Hoff MW-4D-U	O2019006571		EXTRACTED DATE		8202019	Day		8/22/2019 2:00	8/26/2019 13:25	1							
2166	45	8/15/2019	10:45	VOASW	Water	Ground W Hoff MW-4D-U	O2019006543		EXTRACTED TIME					8/20/2019 2:00	9/9/2019 15:38	1							
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	75014	Chloroethene (vinyl c		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1							
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1							
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	103651	n-Propylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1							
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	106467	1,4-Dichlorobenzene		0.71	ug/L		8/19/2019 2:00	9/11/2019 10:04	1							
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	108054	Vinyl Acetate		1	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1							
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	108883	Toluene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1							

2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7782492	Selenium	<	7	ug/L	U	8/19/2019 11:54	8/19/2019 13:21	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440-28-0	Thallium	<	2	ug/L	U	8/19/2019 11:54	8/19/2019 13:21	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	74975	Bromochloromethan		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	75150	Carbon disulfide		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	75694	Trichlorofluorometha		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440-42-8	Boron	<	200	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	124481	Dibromochlorometha		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	87683	Hexachlorobutadiene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	91203	Naphthalene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	95476	o-Xylene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	95501	1,2-Dichlorobenzene		4	ug/L		8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	71432	Benzene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	56235	Carbon tetrachloride		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	617	Chromium	<	50	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	1330207	Total Xylenes		0	ug/L		8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440508	Copper		13	ug/L		8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	100425	Styrene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7439976	Mercury	<	0.2	ug/L	U	8/30/2019 11:14	9/3/2019 8:19	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7439954	Magnesium		0.06	mg/L		8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7439965	Manganes	<	10	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	104518	n-Butylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	108861	Bromobenzene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	108907	Chlorobenzene		1	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	109999	Tetrahydrofuran		1	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	591786	2-Hexanone		2.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	67663	Chloroform		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	74953	Dibromomethane		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	75252	Bromoform		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	75354	1,1-Dichloroethene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	75718	Dichlorodifluorometh		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440224	Silver	<	10	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7429905	Aluminum	<	300	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	156592	cis-1,2-Dichloroethen		0.94	ug/L		8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440382	Arsenic	<	3	ug/L	U	8/19/2019 11:54	8/19/2019 13:21	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440393	Barium	<	10	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	617	Beryllium	<	1	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440702	Calcium		0.347	mg/L		8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440439	Cadmium	<	10	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	617	Cobalt Cor	<	50	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7439896	Iron	<	100	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440097	Potassium	<	1	mg/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440235	Sodium		0.82	mg/L		8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440020	Nickel	<	50	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7439921	Lead	<	1	ug/L	U	8/19/2019 11:54	8/19/2019 13:21	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440360	Antimony	<	2	ug/L	U	8/19/2019 11:54	8/19/2019 13:21	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	594207	2,2-Dichloropropane		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	67641	Acetone		5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	75274	Bromodichlorometha		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	99876	4-Isopropyltoluene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	95498	o-Chlorotoluene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440622	Vanadium	<	30	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	501	Water	Ground W Hoff RB-081519	I2019020(	7440666	Zinc	<	30	ug/L	U	8/20/2019 13:27	8/26/2019 14:47	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	106934	1,2-Dibromoethane		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	98566	PCTFB		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	96128	1,2-Dibromo-3-chlorc		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	100414	Ethylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	106434	p-Chlorotoluene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	108383	m/p-Xylenes		1	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	127184	Tetrachloroethene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	135988	Sec-Butylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	142289	1,3-Dichloropropane		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	563586	1,1-Dichloropropene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	71556	1,1,1-Trichloroethane		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	74839	Bromomethane		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1	Low-level LFB recovery low. Results and/or reporting limit may be biased low.		
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	74873	Chloromethane		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	75003	Chloroethane		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	75092	Dichloromethane		1	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	75343	1,1-Dichloroethane		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	78875	1,2-Dichloropropane		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	78933	2-Butanone		2.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	79016	Trichloroethene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	98066	Tert-Butylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	98828	Isopropylbenzene		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	107062	1,2-Dichloroethane		0.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	75650	t-Butyl alcohol		5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006	540885	tert-Butyl Acetate		2.5	ug/L	U	8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	DIOXA	Water	Ground W Hoff RB-081519	O2019006	123911	1,4-Dioxane		2.5	ug/L	U	8/22/2019 2:00	8/26/2019 13:25	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006544		EXTRACTED DATE					8/19/2019 2:00	9/11/2019 10:04	1			
2166	46	8/15/2019	11:15	DIOXA	Water	Ground W Hoff RB-081519	O2019006572		EXTRACTED DATE		8202019	Day		8/22/2019 2:00	8/26/2019 13:25	1			
2166	46	8/15/2019	11:15	VOASW	Water	Ground W Hoff RB-081519	O2019006544		EXTRACTED TIME					8/19/2019 2:00	9/11/2019 10:04	1			

COLLECTO	SEQUENCI	DATE_COLLECT	TIME_COL	STANDARD_ANALYSIS_OR_SUITE	SAMPLE_MEDIUM_TYPE_DESC	SAMPLE_MEDIUM_DESC	LOCATION	ADDRESS_	LAB_SAMI	CHEMICAL	ANALYTE_	READING_	FINAL_AM	FINAL_AM	QUALITY_	DATE_ANALYZED	DATE_VERIFIED	DILUTION_	VOID_SAN	FREE_FOR	STANDARD_COMMENT_DESC
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	75014	Chloroethene (vinyl c		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	1E+07	cis-1,3-Dichloroprope		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	103651	n-Propylbenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	106467	1,4-Dichlorobenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	108054	Vinyl Acetate		1	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	108883	Toluene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7782492	Selenium	<	7	ug/L	U	###############	10/22/2019 11:48	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440-28-0	Thallium	<	2	ug/L	U	###############	10/22/2019 11:48	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	74975	Bromochloromethan		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	75150	Carbon disulfide		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	75694	Trichlorofluorometha		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	79005	1,1,2-Trichloroethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440-42-8	Boron	<	200	ug/L	U	10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	124481	Dibromochlorometha		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	87683	Hexachlorobutadiene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	91203	Naphthalene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	95476	o-Xylene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	95501	1,2-Dichlorobenzene		0.6	ug/L		10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	71432	Benzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	56235	Carbon tetrachloride		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025961		Chromium	<	50	ug/L	U	10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	1330207	Total Xylenes		0	ug/L		10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440508	Copper		11	ug/L		10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	100425	Styrene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	1E+07	trans-1,3-Dichloropro		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7439976	Mercury	<	0.2	ug/L	U	###############	10/31/2019 9:19	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7439954	Magnesium		0.35	mg/L		10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7439965	Manganese		12	ug/L		10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	104518	n-Butylbenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	108861	Bromobenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	108907	Chlorobenzene		7.7	ug/L		10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	109999	Tetrahydrofuran		1	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	591786	2-Hexanone		2.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	67663	Chloroform		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	74953	Dibromomethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	75252	Bromoform		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	75354	1,1-Dichloroethene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	75718	Dichlorodifluorometh		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440224	Silver	<	10	ug/L	U	10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7429905	Aluminum		694	ug/L		10/29/2019 9:46	10/30/2019 13:42	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440382	Arsenic	<	3	ug/L	U	###############	10/22/2019 11:48	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440393	Barium	<	10	ug/L	U	10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025961		Beryllium	<	1	ug/L	U	10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440702	Calcium		0.387	mg/L		10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440439	Cadmium	<	10	ug/L	U	10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025961		Cobalt Cor	<	50	ug/L	U	10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7439896	Iron		552	ug/L		10/29/2019 9:46	10/30/2019 13:42	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440097	Potassium	<	1	mg/L	U	10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440235	Sodium		0.91	mg/L		10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440020	Nickel	<	50	ug/L	U	10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7439921	Lead	<	1	ug/L	U	###############	10/22/2019 11:48	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440360	Antimony	<	2	ug/L	U	###############	10/22/2019 11:48	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	594207	2,2-Dichloropropane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	67641	Acetone		5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	75274	Bromodichlorometha		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	96184	1,2,3-Trichloropropar		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	99876	4-Isopropyltoluene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	95498	o-Chlorotoluene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440622	Vanadium	<	30	ug/L	U	10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	501	Groundwater	Water	HOFF EQRB-101519		I2019025	7440666	Zinc	<	30	ug/L	U	10/23/2019 9:46	10/23/2019 16:16	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	541731	1,3-Dichlorobenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	106934	1,2-Dibromoethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	98566	PCTFB		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	96128	1,2-Dibromo-3-chlor		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	100414	Ethylbenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	106434	p-Chlorotoluene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	108101	4-Methyl-2-pentanon		2.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	108383	m/p-Xylenes		1	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	127184	Tetrachloroethene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	135988	Sec-Butylbenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	142289	1,3-Dichloropropane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	563586	1,1-Dichloropropene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	71556	1,1,1-Trichloroethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	74839	Bromomethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	74873	Chloromethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	75003	Chloroethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			
2166	6	10/15/2019	14:45	VOASW	Groundwater	Water	HOFF EQRB-101519		O2019008	75092	Dichloromethane		1	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1			

2166	6	10/15/2019	14:45	VOASW		Groundwater	Water	HOFF EQRB-101519	O2019008	75343	1,1-Dichloroethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1
2166	6	10/15/2019	14:45	VOASW		Groundwater	Water	HOFF EQRB-101519	O2019008	78875	1,2-Dichloropropane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1
2166	6	10/15/2019	14:45	VOASW		Groundwater	Water	HOFF EQRB-101519	O2019008	78933	2-Butanone		2.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1
2166	6	10/15/2019	14:45	VOASW		Groundwater	Water	HOFF EQRB-101519	O2019008	79016	Trichloroethene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1
2166	6	10/15/2019	14:45	VOASW		Groundwater	Water	HOFF EQRB-101519	O2019008	98066	Tert-Butylbenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1
2166	6	10/15/2019	14:45	VOASW		Groundwater	Water	HOFF EQRB-101519	O2019008	98828	Isopropylbenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1
2166	6	10/15/2019	14:45	VOASW		Groundwater	Water	HOFF EQRB-101519	O2019008	107062	1,2-Dichloroethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1
2166	6	10/15/2019	14:45	VOASW		Groundwater	Water	HOFF EQRB-101519	O2019008	75650	t-Butyl alcohol		5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1
2166	6	10/15/2019	14:45	VOASW		Groundwater	Water	HOFF EQRB-101519	O2019008	540885	tert-Butyl Acetate		2.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:25	1
2166	6	10/15/2019	14:45	DIOXA		Groundwater	Water	HOFF EQRB-101519	O2019008	123911	1,4-Dioxane		2.5	ug/L	U	10/23/2019 2:00	10/28/2019 11:27	1
2166	6	10/15/2019	14:45	VOASW		Groundwater	Water	HOFF EQRB-101519	O2019008343		EXTRACTED DATE					10/16/2019 2:00	10/29/2019 13:25	1
2166	6	10/15/2019	14:45	DIOXA		Groundwater	Water	HOFF EQRB-101519	O2019008379		EXTRACTED DATE		1E+07	Day		10/23/2019 2:00	10/28/2019 11:27	1
2166	6	10/15/2019	14:45	VOASW		Groundwater	Water	HOFF EQRB-101519	O2019008343		EXTRACTED TIME					10/16/2019 2:00	10/29/2019 13:25	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	75014	Chloroethene (vinyl c		1.8	ug/L		10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	1E+07	cis-1,3-Dichloroprope		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	103651	n-Propylbenzene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	106467	1,4-Dichlorobenzene		2.9	ug/L		10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	108054	Vinyl Acetate		1	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	108883	Toluene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7782492	Selenium	<	7	ug/L	U	###############	10/18/2019 14:07	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440-28-0	Thallium	<	2	ug/L	U	###############	10/18/2019 14:07	1
2166	5	10/15/2019	14:00	METH		Groundwater	Water	HOFF MW-13	O2019008	74828	Methane		316	ug/L		10/16/2019 2:00	10/21/2019 14:23	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	74975	Bromochloromethan		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	75150	Carbon disulfide		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	75694	Trichlorofluorometha		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	79005	1,1,2-Trichloroethane		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440-42-8	Boron	<	200	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	124481	Dibromochlorometha		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440-42-8	Boron	<	200	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	87683	Hexachlorobutadiene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	91203	Naphthalene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	95476	o-Xylene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	95501	1,2-Dichlorobenzene		13	ug/L		10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	71432	Benzene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	56235	Carbon tetrachloride		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	1634044	Methyl-tert-butyl Eth		0.58	ug/L		10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440224	Silver	<	10	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440439	Cadmium	<	10	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025710		Cobalt Cor	<	50	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025710		Chromium	<	50	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	1330207	Total Xylenes		0	ug/L		10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440508	Copper	<	10	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	100425	Styrene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	1E+07	trans-1,3-Dichloropro		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7439976	Mercury	<	0.2	ug/L	U	###############	10/29/2019 9:10	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440097	Potassium		1.073	mg/L		###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7439954	Magnesium		25.46	mg/L		###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7439965	Manganese		546	ug/L		###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7439965	Manganese		540	ug/L		###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	104518	n-Butylbenzene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	108861	Bromobenzene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	108907	Chlorobenzene		18.5	ug/L		10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	109999	Tetrahydrofuran		1	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	591786	2-Hexanone		2.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	67663	Chloroform		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	74953	Dibromomethane		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	METH		Groundwater	Water	HOFF MW-13	O2019008	74986	Propane		14.2	ug/L	U	10/16/2019 2:00	10/21/2019 14:23	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	75252	Bromoform		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	75354	1,1-Dichloroethene		6.4	ug/L		10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	75718	Dichlorodifluorometh		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440224	Silver	<	10	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7429905	Aluminum		393	ug/L		###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7429905	Aluminum	<	300	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	156592	cis-1,2-Dichloroethen		71.7	ug/L	Q	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440382	Arsenic		7.31	ug/L		###############	10/18/2019 14:07	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440382	Arsenic		6.87	ug/L		###############	10/18/2019 14:07	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440393	Barium	<	10	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440393	Barium	<	10	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025710		Beryllium	<	1	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025710		Beryllium	<	1	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440702	Calcium		28.16	mg/L		###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440702	Calcium		28.11	mg/L		###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440439	Cadmium	<	10	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025710		Cobalt Cor	<	50	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025710		Chromium	<	50	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440508	Copper	<	10	ug/L	U	###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7439896	Iron		951	ug/L		###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7439896	Iron		1232	ug/L		###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7439976	Mercury	<	0.2	ug/L	U	###############	10/29/2019 9:10	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440097	Potassium		1.18	mg/L		###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7439954	Magnesium		25.36	mg/L		###############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440235	Sodium		110.9	mg/L		10/21/2019 9:46	10/21/2019 14:01	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440235	Sodium		109.1	mg/L		10/21/2019 9:49	10/21/2019 14:01	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440020	Nickel	<	50	ug/L	U	###############	10/18/2019 14:17	1

2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440020	Nickel	<	50	ug/L	U	##############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7439921	Lead	<	1	ug/L	U	##############	10/18/2019 14:07	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7439921	Lead	<	1	ug/L	U	##############	10/18/2019 14:07	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440360	Antimony	<	2	ug/L	U	##############	10/18/2019 14:07	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440360	Antimony	<	2	ug/L	U	##############	10/18/2019 14:07	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7782492	Selenium	<	7	ug/L	U	##############	10/18/2019 14:07	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440-28-0	Thallium	<	2	ug/L	U	##############	10/18/2019 14:07	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	594207	2,2-Dichloropropane		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	67641	Acetone		5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	METH		Groundwater	Water	HOFF MW-13	O2019008	74840	Ethane		12.4	ug/L	U	10/16/2019 2:00	10/21/2019 14:23	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	75274	Bromodichlorometha		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	96184	1,2,3-Trichloropropa		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	99876	4-Isopropyltoluene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	95498	o-Chlorotoluene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440622	Vanadium	<	30	ug/L	U	##############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440622	Vanadium	<	30	ug/L	U	##############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440666	Zinc	<	30	ug/L	U	##############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00		501	Groundwater	Water	HOFF MW-13	I2019025	7440666	Zinc	<	30	ug/L	U	##############	10/18/2019 14:17	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	541731	1,3-Dichlorobenzene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	106934	1,2-Dibromoethane		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	98566	PCTFB		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	96128	1,2-Dibromo-3-chlor		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	100414	Ethylbenzene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	106434	p-Chlorotoluene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	108101	4-Methyl-2-pentanon		2.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	108383	m/p-Xylenes		1	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	127184	Tetrachloroethene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	135988	Sec-Butylbenzene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	142289	1,3-Dichloropropane		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	563586	1,1-Dichloropropene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	71556	1,1,1-Trichloroethane		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	74839	Bromomethane		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	74873	Chloromethane		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	75003	Chloroethane		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	75092	Dichloromethane		1	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	75343	1,1-Dichloroethane		34.6	ug/L		10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	78875	1,2-Dichloropropane		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	78933	2-Butanone		2.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	79016	Trichloroethene		103	ug/L	Q	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	98066	Tert-Butylbenzene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	98828	Isopropylbenzene		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	107062	1,2-Dichloroethane		0.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	75650	t-Butyl alcohol		5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008	540885	tert-Butyl Acetate		2.5	ug/L	U	10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	DIOXA		Groundwater	Water	HOFF MW-13	O2019008	123911	1,4-Dioxane		58.8	ug/L		10/23/2019 2:00	10/28/2019 11:27	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008342		EXTRACTED DATE					10/17/2019 2:00	10/29/2019 13:24	1
2166	5	10/15/2019	14:00	DIOXA		Groundwater	Water	HOFF MW-13	O2019008378		EXTRACTED DATE		1E+07	Day		10/23/2019 2:00	10/28/2019 11:27	1
2166	5	10/15/2019	14:00	VOASW		Groundwater	Water	HOFF MW-13	O2019008342		EXTRACTED TIME					10/17/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	75014	Chloroethene (vinyl c		5.4	ug/L		10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	1E+07	cis-1,3-Dichloroprope		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	103651	n-Propylbenzene		33.8	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	106467	1,4-Dichlorobenzene		678	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	108054	Vinyl Acetate		1	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	108883	Toluene		10.2	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	120821	1,2,4-Trichlorobenze		14.8	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7782492	Selenium	<	7	ug/L	U	##############	10/18/2019 14:07	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440-28-0	Thallium	<	2	ug/L	U	##############	10/18/2019 14:07	1
2166	4	10/15/2019	12:00	METH		Groundwater	Water	HOFF DUP-101519	O2019008	74828	Methane		2380	ug/L		10/16/2019 2:00	10/21/2019 14:23	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	74975	Bromochloromethan		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	75150	Carbon disulfide		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	75694	Trichlorofluorometha		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	79005	1,1,2-Trichloroethane		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440-42-8	Boron		336	ug/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	124481	Dibromochlorometha		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440-42-8	Boron		329	ug/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	87683	Hexachlorobutadiene		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	91203	Naphthalene		40.3	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	95476	o-Xylene		59.3	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	87616	1,2,3-Trichlorobenze		1.5	ug/L		10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	95501	1,2-Dichlorobenzene		1160	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	71432	Benzene		218	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	56235	Carbon tetrachloride		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440224	Silver	<	10	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440439	Cadmium	<	10	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025709		Cobalt Cor	<	50	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025709		Chromium	<	50	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	1330207	Total Xylenes		104.8	ug/L		10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440508	Copper	<	10	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	100425	Styrene		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	1E+07	trans-1,3-Dichloropro		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7439976	Mercury	<	0.2	ug/L	U	##############	10/29/2019 9:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440097	Potassium		5.044	mg/L		##############	10/18/2019 14:12	1

2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7439954	Magnesium		32.23	mg/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7439965	Manganese		2896	ug/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7439965	Manganese		2772	ug/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	104518	n-Butylbenzene		11	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	108861	Bromobenzene		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	108907	Chlorobenzene		34700	ug/L		10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	109999	Tetrahydrofuran		1	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	591786	2-Hexanone		2.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	67663	Chloroform		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	74953	Dibromomethane		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	METH		Groundwater	Water	HOFF DUP-101519	O2019008	74986	Propane		14.2	ug/L	U	10/16/2019 2:00	10/21/2019 14:23	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	75252	Bromoform		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	75354	1,1-Dichloroethene		8.4	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	75718	Dichlorodifluorometh		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440224	Silver	<	10	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7429905	Aluminum		8865	ug/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7429905	Aluminum	<	300	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	156592	cis-1,2-Dichloroethen		267	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440382	Arsenic		6.22	ug/L		##############	10/18/2019 14:07	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440382	Arsenic		5.51	ug/L		##############	10/18/2019 14:07	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440393	Barium		134	ug/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440393	Barium		72	ug/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025709		Beryllium Compound		1	ug/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025709		Beryllium	<	1	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440702	Calcium		59.05	mg/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440702	Calcium		62.33	mg/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440439	Cadmium	<	10	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025709		Cobalt Cor	<	50	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025709		Chromium	<	50	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440508	Copper	<	10	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7439896	Iron		2404	ug/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7439896	Iron		10890	ug/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7439976	Mercury	<	0.2	ug/L	U	##############	10/29/2019 9:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440097	Potassium		7.35	mg/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7439954	Magnesium		27.05	mg/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440235	Sodium		67.64	mg/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440235	Sodium		66.78	mg/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440020	Nickel	<	50	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440020	Nickel	<	50	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7439921	Lead		3.24	ug/L		##############	10/18/2019 14:07	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7439921	Lead	<	1	ug/L	U	##############	10/18/2019 14:07	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440360	Antimony	<	2	ug/L	U	##############	10/18/2019 14:07	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440360	Antimony	<	2	ug/L	U	##############	10/18/2019 14:07	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7782492	Selenium	<	7	ug/L	U	##############	10/18/2019 14:07	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440-28-0	Thallium	<	2	ug/L	U	##############	10/18/2019 14:07	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	108678	1,3,5-Trimethylbenze		86.4	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	594207	2,2-Dichloropropane		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	67641	Acetone		15.1	ug/L	B	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	METH		Groundwater	Water	HOFF DUP-101519	O2019008	74840	Ethane		12.4	ug/L	U	10/16/2019 2:00	10/21/2019 14:23	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	75274	Bromodichlorometha		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	96184	1,2,3-Trichloropropa		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	99876	4-Isopropyltoluene		11.8	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	95498	o-Chlorotoluene		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440622	Vanadium	<	30	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440622	Vanadium	<	30	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440666	Zinc		40	ug/L		##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00		501	Groundwater	Water	HOFF DUP-101519	I2019025	7440666	Zinc	<	30	ug/L	U	##############	10/18/2019 14:12	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	541731	1,3-Dichlorobenzene		117	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	106934	1,2-Dibromoethane		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	98566	PCTFB		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	95636	1,2,4-Trimethylbenze		310	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	96128	1,2-Dibromo-3-chlor		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	100414	Ethylbenzene		17.9	ug/L		10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	106434	p-Chlorotoluene		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	108101	4-Methyl-2-pentanon		2.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	108383	m/p-Xylenes		45.5	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	127184	Tetrachloroethene		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	135988	Sec-Butylbenzene		9	ug/L		10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	142289	1,3-Dichloropropane		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	156605	trans-1,2-Dichloroeth		4.9	ug/L		10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	563586	1,1-Dichloropropene		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	71556	1,1,1-Trichloroethane		9.9	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	74839	Bromomethane		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	74873	Chloromethane		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	75003	Chloroethane		1.3	ug/L		10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	75092	Dichloromethane		1	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	75343	1,1-Dichloroethane		26	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	78875	1,2-Dichloropropane		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	78933	2-Butanone		2.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	79016	Trichloroethene		12.6	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	98066	Tert-Butylbenzene		2.4	ug/L		10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	98828	Isopropylbenzene		14.2	ug/L	Q	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	107062	1,2-Dichloroethane		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	75650	t-Butyl alcohol		5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008	540885	tert-Butyl Acetate		2.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:24	1

2166	4	10/15/2019	12:00	DIOXA		Groundwater	Water	HOFF DUP-101519	O2019008	123911	1,4-Dioxane		5.5	ug/L		10/23/2019 2:00	10/28/2019 11:27	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008341		EXTRACTED DATE					10/18/2019 2:00	10/29/2019 13:24	1
2166	4	10/15/2019	12:00	DIOXA		Groundwater	Water	HOFF DUP-101519	O2019008377		EXTRACTED DATE		1E+07	Day		10/23/2019 2:00	10/28/2019 11:27	1
2166	4	10/15/2019	12:00	VOASW		Groundwater	Water	HOFF DUP-101519	O2019008341		EXTRACTED TIME					10/18/2019 2:00	10/29/2019 13:24	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	75014	Chloroethene (vinyl c		6.1	ug/L		10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	1E+07	cis-1,3-Dichloroprope		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	103651	n-Propylbenzene		34.9	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	106467	1,4-Dichlorobenzene		697	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	108054	Vinyl Acetate		1	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	108883	Toluene		9.8	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	120821	1,2,4-Trichlorobenzer		14	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7782492	Selenium	<	7	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440-28-0	Thallium	<	2	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45	METH		Groundwater	Water	HOFF MW-B	O2019008	74828	Methane		2430	ug/L		10/16/2019 2:00	10/21/2019 14:23	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	74975	Bromochloromethan		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	75150	Carbon disulfide		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	75694	Trichlorofluorometha		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	79005	1,1,2-Trichloroethane		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440-42-8	Boron		336	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	124481	Dibromochlorometha		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440-42-8	Boron		332	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	87683	Hexachlorobutadiene		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	91203	Naphthalene		41.6	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	95476	o-Xylene		60.8	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	87616	1,2,3-Trichlorobenzer		1.4	ug/L		10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	95501	1,2-Dichlorobenzene		1160	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	71432	Benzene		220	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	56235	Carbon tetrachloride		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440224	Silver	<	10	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440439	Cadmium	<	10	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025708		Cobalt Cor	<	50	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025708		Chromium	<	50	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	1330207	Total Xylenes		107.4	ug/L		10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440508	Copper	<	10	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	100425	Styrene		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	1E+07	trans-1,3-Dichloropro		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7439976	Mercury	<	0.2	ug/L	U	###############	10/29/2019 9:13	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440097	Potassium		5.049	mg/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7439954	Magnesium		32.15	mg/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7439965	Manganese		2885	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7439965	Manganese		2714	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	104518	n-Butylbenzene		11.5	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	108861	Bromobenzene		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	108907	Chlorobenzene		34200	ug/L		10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	109999	Tetrahydrofuran		1	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	591786	2-Hexanone		2.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	67663	Chloroform		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	74953	Dibromomethane		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	METH		Groundwater	Water	HOFF MW-B	O2019008	74986	Propane		14.2	ug/L	U	10/16/2019 2:00	10/21/2019 14:23	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	75252	Bromoform		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	75354	1,1-Dichloroethene		8	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	75718	Dichlorodifluorometh		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440224	Silver	<	10	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7429905	Aluminum		8650	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7429905	Aluminum	<	300	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	156592	cis-1,2-Dichloroethen		278	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440382	Arsenic		6.21	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440382	Arsenic		5.02	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440393	Barium		134	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440393	Barium		72	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025708		Beryllium Compound		1	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025708		Beryllium	<	1	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440702	Calcium		58.17	mg/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440702	Calcium		61.65	mg/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440439	Cadmium	<	10	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025708		Cobalt Cor	<	50	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025708		Chromium	<	50	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440508	Copper	<	10	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7439896	Iron		2259	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7439896	Iron		11410	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7439976	Mercury	<	0.2	ug/L	U	###############	10/29/2019 9:13	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440097	Potassium		7.14	mg/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7439954	Magnesium		26.66	mg/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440235	Sodium		66.94	mg/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440235	Sodium		66.25	mg/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440020	Nickel	<	50	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440020	Nickel	<	50	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7439921	Lead		3.46	ug/L		###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7439921	Lead	<	1	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440360	Antimony	<	2	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440360	Antimony	<	2	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7782492	Selenium	<	7	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440-28-0	Thallium	<	2	ug/L	U	###############	10/18/2019 14:06	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	108678	1,3,5-Trimethylbenze		89	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	594207	2,2-Dichloropropane		0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1

2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	67641	Acetone	13.6	ug/L	B	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	METH		Groundwater	Water	HOFF MW-B	O2019008	74840	Ethane	12.4	ug/L	U	10/16/2019 2:00	10/21/2019 14:23	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	75274	Bromodichlorometha	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	79345	1,1,2,2-Tetrachloroet	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	96184	1,2,3-Trichloropropar	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	99876	4-Isopropyltoluene	13	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	95498	o-Chlorotoluene	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440622	Vanadium <	30	ug/L	U	##########	10/18/2019 14:06	1		
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440622	Vanadium <	30	ug/L	U	##########	10/18/2019 14:06	1		
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440666	Zinc	54	ug/L		##########	10/18/2019 14:06	1		
2166	3	10/15/2019	11:45		501	Groundwater	Water	HOFF MW-B	I2019025	7440666	Zinc <	30	ug/L	U	##########	10/18/2019 14:06	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	541731	1,3-Dichlorobenzene	120	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	106934	1,2-Dibromoethane	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	98566	PCTFB	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	95636	1,2,4-Trimethylbenze	314	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	96128	1,2-Dibromo-3-chlor	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	100414	Ethylbenzene	17.2	ug/L		10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	106434	p-Chlorotoluene	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	108101	4-Methyl-2-pentanon	2.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	108383	m/p-Xylenes	46.6	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	127184	Tetrachloroethene	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	135988	Sec-Butylbenzene	9.8	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	142289	1,3-Dichloropropane	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	156605	trans-1,2-Dichloroeth	5	ug/L		10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	563586	1,1-Dichloropropene	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	71556	1,1,1-Trichloroethane	10	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	74839	Bromomethane	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	74873	Chloromethane	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	75003	Chloroethane	1.3	ug/L		10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	75092	Dichloromethane	1	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	75343	1,1-Dichloroethane	27.4	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	78875	1,2-Dichloropropane	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	78933	2-Butanone	2.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	79016	Trichloroethene	12	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	98066	Tert-Butylbenzene	2.6	ug/L		10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	98828	Isopropylbenzene	14.5	ug/L	Q	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	107062	1,2-Dichloroethane	0.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	75650	t-Butyl alcohol	7.4	ug/L		10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008	540885	tert-Butyl Acetate	2.5	ug/L	U	10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	DIOXA		Groundwater	Water	HOFF MW-B	O2019008	123911	1,4-Dioxane	5.2	ug/L		10/24/2019 2:00	10/28/2019 11:27	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008340		EXTRACTED DATE				10/18/2019 2:00	10/29/2019 13:22	1		
2166	3	10/15/2019	11:45	DIOXA		Groundwater	Water	HOFF MW-B	O2019008376		EXTRACTED DATE	1E+07	Day		10/24/2019 2:00	10/28/2019 11:27	1		
2166	3	10/15/2019	11:45	VOASW		Groundwater	Water	HOFF MW-B	O2019008340		EXTRACTED TIME				10/18/2019 2:00	10/29/2019 13:22	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	75014	Chloroethene (vinyl c	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	1E+07	cis-1,3-Dichloroprope	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	103651	n-Propylbenzene	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	106467	1,4-Dichlorobenzene	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	108054	Vinyl Acetate	1	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	108883	Toluene	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7782492	Selenium <	7	ug/L	U	##########	10/18/2019 14:05	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440-28-0	Thallium <	2	ug/L	U	##########	10/18/2019 14:05	1		
2166	2	10/15/2019	10:00	METH		Groundwater	Water	HOFF MW-A	O2019008	74828	Methane	1190	ug/L		10/16/2019 2:00	10/21/2019 14:23	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	74975	Bromochloromethan	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	75150	Carbon disulfide	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	75694	Trichlorofluorometha	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	79005	1,1,2-Trichloroethane	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440-42-8	Boron	213	ug/L		##########	10/18/2019 13:54	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	124481	Dibromochlorometha	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440-42-8	Boron <	200	ug/L	U	##########	10/18/2019 13:54	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	87683	Hexachlorobutadiene	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	91203	Naphthalene	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	95476	o-Xylene	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	95501	1,2-Dichlorobenzene	1.1	ug/L		10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	71432	Benzene	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	56235	Carbon tetrachloride	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440224	Silver <	10	ug/L	U	##########	10/18/2019 13:54	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440439	Cadmium <	10	ug/L	U	##########	10/18/2019 13:54	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025707		Cobalt Cor <	50	ug/L	U	##########	10/18/2019 13:54	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025707		Chromium <	50	ug/L	U	##########	10/18/2019 13:54	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	1330207	Total Xylenes	0	ug/L		10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440508	Copper	29	ug/L		##########	10/18/2019 13:54	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	100425	Styrene	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	1E+07	trans-1,3-Dichloropro	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7439976	Mercury <	0.2	ug/L	U	##########	10/29/2019 9:14	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440097	Potassium	3.95	mg/L		##########	10/18/2019 13:54	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7439954	Magnesium	35.94	mg/L		##########	10/18/2019 13:54	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7439965	Manganese	5404	ug/L		##########	10/18/2019 13:54	1		
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7439965	Manganese	4874	ug/L		##########	10/18/2019 13:54	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	104518	n-Butylbenzene	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	108861	Bromobenzene	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	108907	Chlorobenzene	1	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1	Duplicate values are not within acceptable range	
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	109999	Tetrahydrofuran	1	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	591786	2-Hexanone	2.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1		

2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	67663	Chloroform		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	74953	Dibromomethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	METH		Groundwater	Water	HOFF MW-A	O2019008	74986	Propane		14.2	ug/L	U	10/16/2019 2:00	10/21/2019 14:23	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	75252	Bromoform		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	75354	1,1-Dichloroethene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	75718	Dichlorodifluorometh		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440224	Silver	<	10	ug/L	U	##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7429905	Aluminum		5632	ug/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7429905	Aluminum	<	300	ug/L	U	##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	156592	cis-1,2-Dichloroethen		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440382	Arsenic		12.9	ug/L		##############	10/18/2019 14:05	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440382	Arsenic		12.3	ug/L		##############	10/18/2019 14:05	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440393	Barium		54	ug/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440393	Barium		37	ug/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025707		Beryllium Compound		1	ug/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025707		Beryllium	<	1	ug/L	U	##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440702	Calcium		76.57	mg/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440702	Calcium		84.43	mg/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440439	Cadmium	<	10	ug/L	U	##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025707		Cobalt Cor	<	50	ug/L	U	##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025707		Chromium	<	50	ug/L	U	##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440508	Copper	<	10	ug/L	U	##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7439896	Iron		2146	ug/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7439896	Iron		9418	ug/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7439976	Mercury	<	0.2	ug/L	U	##############	10/29/2019 9:14	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440097	Potassium		5.53	mg/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7439954	Magnesium		30.07	mg/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440235	Sodium		59.51	mg/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440235	Sodium		54.45	mg/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440020	Nickel	<	50	ug/L	U	##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440020	Nickel	<	50	ug/L	U	##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7439921	Lead		5.65	ug/L		##############	10/18/2019 14:05	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7439921	Lead	<	1	ug/L	U	##############	10/18/2019 14:05	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440360	Antimony	<	2	ug/L	U	##############	10/18/2019 14:05	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440360	Antimony	<	2	ug/L	U	##############	10/18/2019 14:05	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7782492	Selenium	<	7	ug/L	U	##############	10/18/2019 14:05	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440-28-0	Thallium	<	2	ug/L	U	##############	10/18/2019 14:05	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	594207	2,2-Dichloropropane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	67641	Acetone		5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	METH		Groundwater	Water	HOFF MW-A	O2019008	74840	Ethane		12.4	ug/L	U	10/16/2019 2:00	10/21/2019 14:23	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	75274	Bromodichlorometha		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	96184	1,2,3-Trichloropropa		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	99876	4-Isopropyltoluene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	95498	o-Chlorotoluene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440622	Vanadium	<	30	ug/L	U	##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440622	Vanadium	<	30	ug/L	U	##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440666	Zinc	<	30	ug/L	U	##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00		501	Groundwater	Water	HOFF MW-A	I2019025	7440666	Zinc		30	ug/L		##############	10/18/2019 13:54	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	541731	1,3-Dichlorobenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	106934	1,2-Dibromoethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	98566	PCTFB		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	96128	1,2-Dibromo-3-chlor		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	100414	Ethylbenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	106434	p-Chlorotoluene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	108101	4-Methyl-2-pentanon		2.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	108383	m/p-Xylenes		1	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	127184	Tetrachloroethene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	135988	Sec-Butylbenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	142289	1,3-Dichloropropane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	563586	1,1-Dichloropropene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	71556	1,1,1-Trichloroethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	74839	Bromomethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	74873	Chloromethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	75003	Chloroethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	75092	Dichloromethane		1	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	75343	1,1-Dichloroethane		9.3	ug/L		10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	78875	1,2-Dichloropropane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	78933	2-Butanone		2.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	79016	Trichloroethene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	98066	Tert-Butylbenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	98828	Isopropylbenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	107062	1,2-Dichloroethane		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	75650	t-Butyl alcohol		5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008	540885	tert-Butyl Acetate		2.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	DIOXA		Groundwater	Water	HOFF MW-A	O2019008	123911	1,4-Dioxane		2.5	ug/L	U	10/23/2019 2:00	10/28/2019 11:27	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008339		EXTRACTED DATE					10/16/2019 2:00	10/29/2019 13:19	1
2166	2	10/15/2019	10:00	DIOXA		Groundwater	Water	HOFF MW-A	O2019008375		EXTRACTED DATE		1E+07	Day		10/23/2019 2:00	10/28/2019 11:27	1
2166	2	10/15/2019	10:00	VOASW		Groundwater	Water	HOFF MW-A	O2019008339		EXTRACTED TIME					10/16/2019 2:00	10/29/2019 13:19	1
2166	1	10/15/2019	8:30	VOASW		Groundwater	Water	HOFF TB-101519	O2019008	75014	Chloroethene (vinyl c		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW		Groundwater	Water	HOFF TB-101519	O2019008	1E+07	cis-1,3-Dichloroprope		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW		Groundwater	Water	HOFF TB-101519	O2019008	103651	n-Propylbenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW		Groundwater	Water	HOFF TB-101519	O2019008	106467	1,4-Dichlorobenzene		0.5	ug/L	U	10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW		Groundwater	Water	HOFF TB-101519	O2019008	108054	Vinyl Acetate		1	ug/L	U	10/16/2019 2:00	10/29/2019 13:18	1

2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	108883	Toluene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	74975	Bromochloromethan	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	75150	Carbon disulfide	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	75694	Trichlorofluorometha	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	79005	1,1,2-Trichloroethane	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	124481	Dibromochlorometha	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	87683	Hexachlorobutadiene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	91203	Naphthalene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	95476	o-Xylene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	95501	1,2-Dichlorobenzene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	71432	Benzene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	56235	Carbon tetrachloride	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	1330207	Total Xylenes	0	ug/L			10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	100425	Styrene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	1E+07	trans-1,3-Dichloropro	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	104518	n-Butylbenzene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	108861	Bromobenzene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	108907	Chlorobenzene	1	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	109999	Tetrahydrofuran	1	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	591786	2-Hexanone	2.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	67663	Chloroform	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	74953	Dibromomethane	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	75252	Bromoform	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	75354	1,1-Dichloroethene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	75718	Dichlorodifluorometh	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	156592	cis-1,2-Dichloroethen	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	108678	1,3,5-Trimethylbenze	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	594207	2,2-Dichloropropane	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	67641	Acetone	5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	75274	Bromodichlorometha	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	79345	1,1,2,2-Tetrachloroet	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	96184	1,2,3-Trichloropropar	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	99876	4-Isopropyltoluene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	95498	o-Chlorotoluene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	541731	1,3-Dichlorobenzene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	106934	1,2-Dibromoethane	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	98566	PCTFB	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	95636	1,2,4-Trimethylbenze	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	96128	1,2-Dibromo-3-chlor	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	100414	Ethylbenzene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	106434	p-Chlorotoluene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	108101	4-Methyl-2-pentanon	2.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	108383	m/p-Xylenes	1	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	127184	Tetrachloroethene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	135988	Sec-Butylbenzene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	142289	1,3-Dichloropropane	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	156605	trans-1,2-Dichloroeth	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	563586	1,1-Dichloropropene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	71556	1,1,1-Trichloroethane	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	74839	Bromomethane	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	74873	Chloromethane	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	75003	Chloroethane	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	75092	Dichloromethane	1	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	75343	1,1-Dichloroethane	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	78875	1,2-Dichloropropane	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	78933	2-Butanone	2.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	79016	Trichloroethene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	98066	Tert-Butylbenzene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	98828	Isopropylbenzene	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	107062	1,2-Dichloroethane	0.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	75650	t-Butyl alcohol	5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008	540885	tert-Butyl Acetate	2.5	ug/L	U		10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	DIOXA	Groundwater	Water	HOFF TB-101519	O2019008	123911	1,4-Dioxane	2.5	ug/L	U		10/23/2019 2:00	10/28/2019 11:27	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008338		EXTRACTED DATE					10/16/2019 2:00	10/29/2019 13:18	1
2166	1	10/15/2019	8:30	DIOXA	Groundwater	Water	HOFF TB-101519	O2019008374		EXTRACTED DATE	1E+07	Day			10/23/2019 2:00	10/28/2019 11:27	1
2166	1	10/15/2019	8:30	VOASW	Groundwater	Water	HOFF TB-101519	O2019008338		EXTRACTED TIME					10/16/2019 2:00	10/29/2019 13:18	1

Pace Analytical Energy Services LLC
220 William Pitt Way
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Phone: (412) 826-5245
Fax: (412) 826-3433

February 5, 2020

Jonathan Dziekan
TetraTech
One Oxford Valley
Suite 200
Langhorne, PA 19047

RE: **HOFF VC SIDE**

Pace Workorder: 32759

Dear Jonathan Dziekan:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, January 23, 2020. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ruth Welsh 02/05/2020
Ruth.Welsh@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email PAESfeedback@pacelabs.com.

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CERTIFICATE OF ANALYSIS

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Pace Analytical Energy Services LLC
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LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water
Accreditor:	West Virginia Department of Environmental Protection, Division of Water and Waste Management
Accreditation ID:	395
Scope:	Non-Potable Water
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	State of Virginia
Accreditation ID:	460201
Scope:	Non-Potable Water
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

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Phone: (412) 826-5245
Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 32759 HOFF VC SIDE

Lab ID	Sample ID	Matrix	Date Collected	Date Received
327590001	HOFF MW-A	Water	1/21/2020 10:35	1/23/2020 11:30
327590002	HOFF MW-D	Water	1/21/2020 12:10	1/23/2020 11:30
327590003	HOFF MW-E	Water	1/21/2020 14:30	1/23/2020 11:30
327590004	HOFF MW-13	Water	1/22/2020 09:15	1/23/2020 11:30
327590005	HOFF MW-C	Water	1/22/2020 11:15	1/23/2020 11:30
327590006	HOFF MW-B	Water	1/22/2020 13:25	1/23/2020 11:30

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ANALYTICAL RESULTS

Workorder: 32759 HOFF VC SIDE

Lab ID: **327590001** Date Received: 1/23/2020 11:30 Matrix: Water

Sample ID: **HOFF MW-A** Date Collected: 1/21/2020 10:35

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - PAES								
Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	**0.20 U**	mg/l	0.20	0.048	1	1/31/2020 19:15	KB	
Acetic Acid	**0.028J**	mg/l	0.10	0.025	1	1/31/2020 19:15	KB	
Propionic Acid	**0.10 U**	mg/l	0.10	0.0020	1	1/31/2020 19:15	KB	
Formic Acid	**0.50 U**	mg/l	0.50	0.098	1	1/31/2020 19:15	KB	
Butyric Acid	**0.10 U**	mg/l	0.10	0.0070	1	1/31/2020 19:15	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0050	1	1/31/2020 19:15	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0050	1	1/31/2020 19:15	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.011	1	1/31/2020 19:15	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.011	1	1/31/2020 19:15	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.032	1	1/31/2020 19:15	KB	

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ANALYTICAL RESULTS

Workorder: 32759 HOFF VC SIDE

Lab ID: **327590002** Date Received: 1/23/2020 11:30 Matrix: Water

Sample ID: **HOFF MW-D** Date Collected: 1/21/2020 12:10

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - PAES								
Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	**0.052J**	mg/l	0.20	0.048	1	1/31/2020 20:09	KB	
Acetic Acid	**0.10 U**	mg/l	0.10	0.025	1	1/31/2020 20:09	KB	
Propionic Acid	**0.10 U**	mg/l	0.10	0.0020	1	1/31/2020 20:09	KB	
Formic Acid	**0.50 U**	mg/l	0.50	0.098	1	1/31/2020 20:09	KB	
Butyric Acid	**0.10 U**	mg/l	0.10	0.0070	1	1/31/2020 20:09	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0050	1	1/31/2020 20:09	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0050	1	1/31/2020 20:09	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.011	1	1/31/2020 20:09	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.011	1	1/31/2020 20:09	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.032	1	1/31/2020 20:09	KB	

nelac

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ANALYTICAL RESULTS

Workorder: 32759 HOFF VC SIDE

Lab ID: **327590003** Date Received: 1/23/2020 11:30 Matrix: Water

Sample ID: **HOFF MW-E** Date Collected: 1/21/2020 14:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - PAES								
Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	**0.20 U**	mg/l	0.20	0.048	1	1/31/2020 21:02	KB	
Acetic Acid	**0.10 U**	mg/l	0.10	0.025	1	1/31/2020 21:02	KB	
Propionic Acid	**0.10 U**	mg/l	0.10	0.0020	1	1/31/2020 21:02	KB	
Formic Acid	**0.50 U**	mg/l	0.50	0.098	1	1/31/2020 21:02	KB	
Butyric Acid	**0.10 U**	mg/l	0.10	0.0070	1	1/31/2020 21:02	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0050	1	1/31/2020 21:02	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0050	1	1/31/2020 21:02	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.011	1	1/31/2020 21:02	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.011	1	1/31/2020 21:02	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.032	1	1/31/2020 21:02	KB	

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ANALYTICAL RESULTS

Workorder: 32759 HOFF VC SIDE

Lab ID: **327590004** Date Received: 1/23/2020 11:30 Matrix: Water

Sample ID: **HOFF MW-13** Date Collected: 1/22/2020 09:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - PAES								
Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	**2.0 U**	mg/l	2.0	0.48	10	2/2/2020 06:08	KB	d
Acetic Acid	**110**	mg/l	10	2.5	100	2/2/2020 07:01	KB	d
Propionic Acid	**17**	mg/l	1.0	0.020	10	2/2/2020 06:08	KB	d
Formic Acid	**0.38J**	mg/l	0.50	0.098	1	1/31/2020 21:55	KB	
Butyric Acid	**0.25**	mg/l	0.10	0.0070	1	1/31/2020 21:55	KB	
Pyruvic Acid	**0.044J**	mg/l	0.10	0.0050	1	1/31/2020 21:55	KB	
i-Pentanoic Acid	**0.028J**	mg/l	0.10	0.0050	1	1/31/2020 21:55	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.011	1	1/31/2020 21:55	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.011	1	1/31/2020 21:55	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.032	1	1/31/2020 21:55	KB	

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ANALYTICAL RESULTS

Workorder: 32759 HOFF VC SIDE

Lab ID: **327590005** Date Received: 1/23/2020 11:30 Matrix: Water

Sample ID: **HOFF MW-C** Date Collected: 1/22/2020 11:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - PAES								
Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	**0.20 U**	mg/l	0.20	0.048	1	1/31/2020 22:48	KB	
Acetic Acid	**0.029J**	mg/l	0.10	0.025	1	1/31/2020 22:48	KB	
Propionic Acid	**0.10 U**	mg/l	0.10	0.0020	1	1/31/2020 22:48	KB	
Formic Acid	**0.50 U**	mg/l	0.50	0.098	1	1/31/2020 22:48	KB	
Butyric Acid	**0.10 U**	mg/l	0.10	0.0070	1	1/31/2020 22:48	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0050	1	1/31/2020 22:48	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0050	1	1/31/2020 22:48	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.011	1	1/31/2020 22:48	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.011	1	1/31/2020 22:48	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.032	1	1/31/2020 22:48	KB	

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ANALYTICAL RESULTS

Workorder: 32759 HOFF VC SIDE

Lab ID: **327590006** Date Received: 1/23/2020 11:30 Matrix: Water

Sample ID: **HOFF MW-B** Date Collected: 1/22/2020 13:25

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - PAES								
Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	**0.20 U**	mg/l	0.20	0.048	1	1/31/2020 23:42	KB	
Acetic Acid	**0.069J**	mg/l	0.10	0.025	1	1/31/2020 23:42	KB	
Propionic Acid	**0.10 U**	mg/l	0.10	0.0020	1	1/31/2020 23:42	KB	
Formic Acid	**0.50 U**	mg/l	0.50	0.098	1	1/31/2020 23:42	KB	
Butyric Acid	**0.10 U**	mg/l	0.10	0.0070	1	1/31/2020 23:42	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0050	1	1/31/2020 23:42	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0050	1	1/31/2020 23:42	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.011	1	1/31/2020 23:42	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.011	1	1/31/2020 23:42	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.032	1	1/31/2020 23:42	KB	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 32759 HOFF VC SIDE

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
d	The analyte concentration was determined from a dilution.

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QUALITY CONTROL DATA

Workorder: 32759 HOFF VC SIDE

QC Batch: EDON/4353 Analysis Method: AM23G

QC Batch Method: AM23G

Associated Lab Samples: 327590001, 327590002, 327590003, 327590004, 327590005, 327590006

METHOD BLANK: 65621

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Lactic Acid	mg/l	0.20 U	0.20	
Acetic Acid	mg/l	0.10 U	0.10	
Propionic Acid	mg/l	0.10 U	0.10	
Formic Acid	mg/l	0.50 U	0.50	
Butyric Acid	mg/l	0.10 U	0.10	
Pyruvic Acid	mg/l	0.10 U	0.10	
i-Pentanoic Acid	mg/l	0.10 U	0.10	
Pentanoic Acid	mg/l	0.10 U	0.10	
i-Hexanoic Acid	mg/l	0.20 U	0.20	
Hexanoic Acid	mg/l	0.20 U	0.20	

LABORATORY CONTROL SAMPLE: 65622

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lactic Acid	mg/l	2	1.9	94	70-130	
Acetic Acid	mg/l	2	1.9	95	70-130	
Propionic Acid	mg/l	2	1.9	94	70-130	
Formic Acid	mg/l	2	1.8	92	70-130	
Butyric Acid	mg/l	2	1.7	87	70-130	
Pyruvic Acid	mg/l	2	1.6	81	70-130	
i-Pentanoic Acid	mg/l	2	1.8	91	70-130	
Pentanoic Acid	mg/l	2	1.9	93	70-130	
i-Hexanoic Acid	mg/l	2	1.9	96	70-130	
Hexanoic Acid	mg/l	2	1.8	89	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 65623 65624 Original: 327560001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
EDonors											
Lactic Acid	mg/l	0	2	2.0	2.0	101	100	70-130	1.5	30	
Acetic Acid	mg/l	5.4	2	7.2	7.2	92	92	70-130	0.06	30	

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QUALITY CONTROL DATA

Workorder: 32759 HOFF VC SIDE

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 65623 65624 Original: 327560001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Propionic Acid	mg/l	0.95	2	2.8	2.8	95	95	70-130	0.48	30	
Formic Acid	mg/l	2.3	2	4.0	4.0	87	89	70-130	1	30	
Butyric Acid	mg/l	0.31	2	2.1	2.1	90	91	70-130	0.75	30	
Pyruvic Acid	mg/l	0.16	2	1.8	1.8	82	82	70-130	0	30	
i-Pentanoic Acid	mg/l	0.35	2	2.2	2.2	94	94	70-130	0.16	30	
Pentanoic Acid	mg/l	0.091	2	2.2	2.2	103	105	70-130	1.8	30	
i-Hexanoic Acid	mg/l	0	2	2.1	2.2	106	108	70-130	2	30	
Hexanoic Acid	mg/l	0.059	2	2.2	2.3	106	110	70-130	3.4	30	

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QUALITY CONTROL DATA

Workorder: 32759 HOFF VC SIDE

QC Batch: EDON/4356 Analysis Method: AM23G

QC Batch Method: AM23G

Associated Lab Samples: 327590004

METHOD BLANK: 65676

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Lactic Acid	mg/l	0.20 U	0.20	
Acetic Acid	mg/l	0.10 U	0.10	
Propionic Acid	mg/l	0.10 U	0.10	

LABORATORY CONTROL SAMPLE: 65677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lactic Acid	mg/l	2	1.9	96	70-130	
Acetic Acid	mg/l	2	1.9	95	70-130	
Propionic Acid	mg/l	2	1.9	93	70-130	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 32759 HOFF VC SIDE

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
327590001	HOFF MW-A			AM23G	EDON/4353
327590002	HOFF MW-D			AM23G	EDON/4353
327590003	HOFF MW-E			AM23G	EDON/4353
327590004	HOFF MW-13			AM23G	EDON/4353
327590005	HOFF MW-C			AM23G	EDON/4353
327590006	HOFF MW-B			AM23G	EDON/4353
327590004	HOFF MW-13			AM23G	EDON/4356

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CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

32759

ALL SHADED AREAS are for LAB USE ONLY SRJ 1/23/2020

Company: TETRA TECH INC	Billing Information:
Address: ONE OXFORD VALLEY Ste 200	
Report To: JONATHAN DZIEKAN	Email To:
Copy To:	Site Collection Info/Address: HOFF VC SITE
Customer Project Name/Number: HOFF VC SITE	State: PA / County/City: MONTGOMERY Time Zone Collected: [ ] PT [ ] MT [ ] CT [X] ET
Phone: Email:	Site/Facility ID #: HOFF VC SITE
Collected By (print): N. DESIC	Purchase Order #: Quote #:
Collected By (signature):	Turnaround Date Required: STANDARD 10-17-20
Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Compliance Monitoring? [ ] Yes [X] No

DW PWS ID #: DW Location Code:

Immediately Packed on Ice: [X] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [X] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other Benzalkonium Chl.

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Preservative Type ** (O) Analyses: VOA Fatty Acids
Hoff MW-A	GW	Grab	1-21-20	1035				2	X
Hoff MW-D	GW	Grab	1-21-20	1210				2	X
Hoff MW-E	GW	Grab	1-21-20	1430				2	X
Hoff MW-13	GW	Grab	1-22-20	0915				2	X
Hoff MW-C	GW	Grab	1-22-20	1115				2	X
Hoff MW-B	GW	Grab	1-22-20	1325				2	X

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips:	
Sample pH Acceptable	Y N NA
pH Strips:	
Sulfide Present	Y N NA
Lead Acetate Strips:	

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: (Wet) Blue Dry None

Packing Material Used: bb

Radchem sample(s) screened (<500 cpm): Y N (NA)

SHORT HOLDS PRESENT (<72 hours): Y (N) N/A

Lab Tracking #: 27981 / 27232 / 27331

Samples received via: (FEDEX) UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: (Y) N NA
Therm ID#: 03
Cooler 1 Temp Upon Receipt: ____oC
Cooler 1 Therm Corr. Factor: ____oC
Cooler 1 Corrected Temp: ____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
NeoNeelan / TT / NV Rest	1-22-2020 / 1530	PACE	1.23.2020 1130
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N (NA)
HCL MeOH TSP Other

Non Conformance(s): YES / (NO)

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

February 5, 2020

Jonathan Dziekan
TetraTech
One Oxford Valley
Suite 200
Langhorne, PA 19047

RE: **HOFF VC SITE**

Pace Workorder: 32780

Dear Jonathan Dziekan:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, January 24, 2020. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ruth Welsh 02/05/2020
Ruth.Welsh@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email PAESfeedback@pacelabs.com.

Total Number of Pages 13

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LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water
Accreditor:	West Virginia Department of Environmental Protection, Division of Water and Waste Management
Accreditation ID:	395
Scope:	Non-Potable Water
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	State of Virginia
Accreditation ID:	460201
Scope:	Non-Potable Water
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

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Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 32780 HOFF VC SITE

Lab ID	Sample ID	Matrix	Date Collected	Date Received
327800001	HOFF MW-10	Water	1/23/2020 09:30	1/24/2020 10:15
327800002	HOFF MW-6	Water	1/23/2020 10:40	1/24/2020 10:15
327800003	HOFF MW-8	Water	1/23/2020 12:45	1/24/2020 10:15

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PROJECT SUMMARY

Workorder: 32780 HOFF VC SITE

Sample Comments

Lab ID: 327800003 **Sample ID:** HOFF MW-8 **Sample Type:** N

The analysis for volatile fatty acids, method AM23G, was reported at dilution for sample due to the measured chloride concentration within the sample; matrix interfering compound.

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ANALYTICAL RESULTS

Workorder: 32780 HOFF VC SITE

Lab ID: **327800001** Date Received: 1/24/2020 10:15 Matrix: Water

Sample ID: **HOFF MW-10** Date Collected: 1/23/2020 09:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - PAES								
Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	**0.20 U**	mg/l	0.20	0.043	1	1/29/2020 20:46	KB	
Acetic Acid	**0.10 U**	mg/l	0.10	0.028	1	1/29/2020 20:46	KB	
Propionic Acid	**0.10 U**	mg/l	0.10	0.0040	1	1/29/2020 20:46	KB	
Formic Acid	**0.50 U**	mg/l	0.50	0.086	1	1/29/2020 20:46	KB	
Butyric Acid	**0.10 U**	mg/l	0.10	0.011	1	1/29/2020 20:46	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0050	1	1/29/2020 20:46	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0060	1	1/29/2020 20:46	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0070	1	1/29/2020 20:46	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.029	1	1/29/2020 20:46	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.010	1	1/29/2020 20:46	KB	

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ANALYTICAL RESULTS

Workorder: 32780 HOFF VC SITE

Lab ID: **327800002** Date Received: 1/24/2020 10:15 Matrix: Water

Sample ID: **HOFF MW-6** Date Collected: 1/23/2020 10:40

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - PAES								
Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	**0.20 U**	mg/l	0.20	0.043	1	1/29/2020 21:39	KB	
Acetic Acid	**0.10 U**	mg/l	0.10	0.028	1	1/29/2020 21:39	KB	
Propionic Acid	**0.10 U**	mg/l	0.10	0.0040	1	1/29/2020 21:39	KB	
Formic Acid	**0.50 U**	mg/l	0.50	0.086	1	1/29/2020 21:39	KB	
Butyric Acid	**0.10 U**	mg/l	0.10	0.011	1	1/29/2020 21:39	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0050	1	1/29/2020 21:39	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0060	1	1/29/2020 21:39	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0070	1	1/29/2020 21:39	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.029	1	1/29/2020 21:39	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.010	1	1/29/2020 21:39	KB	

ACCREDITED IN ACCORDANCE WITH nelac

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ANALYTICAL RESULTS

Workorder: 32780 HOFF VC SITE

Lab ID: **327800003** Date Received: 1/24/2020 10:15 Matrix: Water

Sample ID: **HOFF MW-8** Date Collected: 1/23/2020 12:45

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - PAES								
Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	**2.0 U**	mg/l	2.0	0.43	10	1/29/2020 22:33	KB	d
Acetic Acid	**8.1**	mg/l	1.0	0.28	10	1/29/2020 22:33	KB	d
Propionic Acid	**0.17J**	mg/l	1.0	0.040	10	1/29/2020 22:33	KB	d
Formic Acid	**5.0 U**	mg/l	5.0	0.86	10	1/29/2020 22:33	KB	d
Butyric Acid	**0.26J**	mg/l	1.0	0.11	10	1/29/2020 22:33	KB	d
Pyruvic Acid	**1.0 U**	mg/l	1.0	0.050	10	1/29/2020 22:33	KB	d
i-Pentanoic Acid	**0.55J**	mg/l	1.0	0.060	10	1/29/2020 22:33	KB	d
Pentanoic Acid	**0.074J**	mg/l	1.0	0.070	10	1/29/2020 22:33	KB	d
i-Hexanoic Acid	**2.0 U**	mg/l	2.0	0.29	10	1/29/2020 22:33	KB	d
Hexanoic Acid	**2.0 U**	mg/l	2.0	0.10	10	1/29/2020 22:33	KB	d

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 32780 HOFF VC SITE

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
d	The analyte concentration was determined from a dilution.

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QUALITY CONTROL DATA

Workorder: 32780 HOFF VC SITE

QC Batch: EDON/4352 Analysis Method: AM23G

QC Batch Method: AM23G

Associated Lab Samples: 327800001, 327800002, 327800003

METHOD BLANK: 65602

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Lactic Acid	mg/l	0.20 U	0.20	
Acetic Acid	mg/l	0.10 U	0.10	
Propionic Acid	mg/l	0.10 U	0.10	
Formic Acid	mg/l	0.50 U	0.50	
Butyric Acid	mg/l	0.10 U	0.10	
Pyruvic Acid	mg/l	0.10 U	0.10	
i-Pentanoic Acid	mg/l	0.10 U	0.10	
Pentanoic Acid	mg/l	0.10 U	0.10	
i-Hexanoic Acid	mg/l	0.20 U	0.20	
Hexanoic Acid	mg/l	0.20 U	0.20	

LABORATORY CONTROL SAMPLE: 65603

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lactic Acid	mg/l	2	2.2	108	70-130	
Acetic Acid	mg/l	2	2.2	108	70-130	
Propionic Acid	mg/l	2	2.1	107	70-130	
Formic Acid	mg/l	2	2.1	107	70-130	
Butyric Acid	mg/l	2	2.1	107	70-130	
Pyruvic Acid	mg/l	2	2.1	107	70-130	
i-Pentanoic Acid	mg/l	2	2.1	105	70-130	
Pentanoic Acid	mg/l	2	2.1	104	70-130	
i-Hexanoic Acid	mg/l	2	2.1	104	70-130	
Hexanoic Acid	mg/l	2	1.9	97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 65604 65605 Original: 328130013

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
EDonors											
Lactic Acid	mg/l	0.33	20	21	20	102	101	70-130	0.98	30	d
Acetic Acid	mg/l	0.42	20	22	22	109	109	70-130	0.58	30	d

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QUALITY CONTROL DATA

Workorder: 32780 HOFF VC SITE

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 65604 65605 Original: 328130013

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Propionic Acid	mg/l	0.039	20	22	22	110	111	70-130	0.91	30	d
Formic Acid	mg/l	0.63	20	22	22	106	106	70-130	0.56	30	d
Butyric Acid	mg/l	0.016	20	22	22	109	113	70-130	3	30	d
Pyruvic Acid	mg/l	0.015	20	22	21	108	106	70-130	1.1	30	d
i-Pentanoic Acid	mg/l	0	20	22	23	108	113	70-130	4.6	30	d
Pentanoic Acid	mg/l	0	20	22	23	108	115	70-130	6.1	30	d
i-Hexanoic Acid	mg/l	0	20	21	24	106	119	70-130	11	30	d
Hexanoic Acid	mg/l	0.005	20	20	23	100	117	70-130	15	30	d

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QUALITY CONTROL DATA QUALIFIERS

Workorder: 32780 HOFF VC SITE

QUALITY CONTROL PARAMETER QUALIFIERS

d	The analyte concentration was determined from a dilution.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 32780 HOFF VC SITE

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
327800001	HOFF MW-10			AM23G	EDON/4352
327800002	HOFF MW-6			AM23G	EDON/4352
327800003	HOFF MW-8			AM23G	EDON/4352

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CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

32780

ALL SHADED AREAS are for LAB USE ONLY 1/24/2020

Company: TETRA TECH INC

Billing Information:

Address: ONE OXFORD VALLEY, STE 200

Report To: JONATHAN DZIEKAN

Email To:

Copy To:

Site Collection Info/Address: HOFF VC SITE

Customer Project Name/Number: HOFF VC SITE

State: PA / County/City: MONTGOMERY

Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone:
Email:

Site/Facility ID #: HOFF VC

Compliance Monitoring? [ ] Yes [X] No

Collected By (print): Neb Dedic

Purchase Order #:
Quote #:

DW PWS ID #:
DW Location Code:

Collected By (signature): Neb Dedic

Turnaround Date Required: STANDARD 10-DAY

Immediately Packed on Ice: [ ] Yes [ ] No

Sample Disposal:
[X] Dispose as appropriate [ ] Return
[ ] Archive: _____
[ ] Hold: _____

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **: O

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other Benzoalkonium chloride

Analyses

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	FATTY ACIDS (VFA)
Hoff MW-10	GW	GRAB	1-23-20	0930				2	X
Hoff MW-6	GW	GRAB	1-23-20	1040				2	X
Hoff MW-8	GW	GRAB	1-23-20	1245				2	X

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact Y N NA
Custody Signatures Present Y N NA
Collector Signature Present Y N NA
Bottles Intact Y N NA
Correct Bottles Y N NA
Sufficient Volume Y N NA
Samples Received on Ice Y N NA
VOA - Headspace Acceptable Y N NA
USDA Regulated Soils Y N NA
Samples in Holding Time Y N NA
Residual Chlorine Present Y N NA
Cl Strips: _____
Sample pH Acceptable Y N NA
pH Strips: _____
Sulfide Present Y N NA
Lead Acetate Strips: _____

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used: bb

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2324732

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: 1.4 oC
Cooler 1 Therm Corr. Factor: _____ oC
Cooler 1 Corrected Temp: _____ oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
TETRA TECH / Neb Dedic	1-23-20/1530	[signature] PAS	1.24.2020 1015
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: _____
of: _____

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-23402-1
Client Project/Site: HOFF

For:
Tetra Tech, Inc.
1 Oxford Valley
Suite 200
Langhorne, Pennsylvania 19047

Attn: Jon Dziekan

Authorized for release by:
12/21/2020 11:18:25 AM

Stephen Gordon, Senior Project Manager
(412)525-0071
Stephen.Gordon@eurofinset.com

LINKS

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Results relate only to the items tested and the sample(s) as received by the laboratory.

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Stephen Gordon
Senior Project Manager
12/21/2020 11:18:25 AM

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-23402-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-23402-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-23402-1

Receipt
The samples were received on 12/9/2020 6:11 PM; the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.6°C

GC/MS VOA
Method 8260C_LL: The continuing calibration verification (CCV) associated with batch 410-77244 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene and Carbon disulfide. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260C_LL: The continuing calibration verification (CCV) associated with batch 410-77244 recovered above the upper control limit for Bromoform. Non-detections of the affected analytes are reported. Any detections are considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-23402-1

Client Sample ID: HOFF MW-A — Lab Sample ID: 410-23402-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.10	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Chlorobenzene	0.21	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
1,1,1-Trichloroethane	0.11	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Chloroethane	3.9		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,1-Dichloroethane	2.4		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,1-Dichloroethene	0.11	J ^c	0.50	0.060	ug/L	1		8260C LL	Total/NA
1,2-Dichlorobenzene	0.36	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
1,4-Dioxane	0.97		0.40	0.20	ug/L	1		8260C SIM 14D	Total/NA
Aluminum	2.1		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.036		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	64		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.0039	J	0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0020	J	0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.012	J	0.020	0.012	mg/L	1		6010C	Total/NA
Iron	3.4		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	25		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	3.5		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.0049	J	0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.0049	J	0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	3.8		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	25		1.0	0.24	mg/L	1		6010C	Total/NA
Vanadium	0.0077	J	0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.025		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	60		0.52	0.099	mg/L	1		6010C	Dissolved
Iron	1.1		0.21	0.041	mg/L	1		6010C	Dissolved
Magnesium	22		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	3.2		0.010	0.0031	mg/L	1		6010C	Dissolved
Potassium	3.1		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	24		1.0	0.25	mg/L	1		6010C	Dissolved
Total Dissolved Solids	410		60	20	mg/L	1		2540C-2011	Total/NA
Ferrous Iron	1.9	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	75		24	8.0	mg/L	4		375.4	Total/NA

Client Sample ID: HOFF TB-20201209 — Lab Sample ID: 410-23402-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-23402-1

Client Sample ID: HOFF MW-A

Date Collected: 12/09/20 14:45
Date Received: 12/09/20 18:11

Lab Sample ID: 410-23402-1

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/16/20 05:16	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/16/20 05:16	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/16/20 05:16	1
Styrene	ND		0.50	0.050	ug/L			12/16/20 05:16	1
1,4-Dichlorobenzene	**0.10**	**J**	0.50	0.070	ug/L			12/16/20 05:16	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/16/20 05:16	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/16/20 05:16	1
4-Methyl-2-pentanone	ND	*3	5.0	0.70	ug/L			12/16/20 05:16	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/16/20 05:16	1
Toluene	ND		0.50	0.070	ug/L			12/16/20 05:16	1
Chlorobenzene	**0.21**	**J**	0.50	0.060	ug/L			12/16/20 05:16	1
Cyclohexane	ND		0.50	0.050	ug/L			12/16/20 05:16	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			12/16/20 05:16	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/16/20 05:16	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/16/20 05:16	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/16/20 05:16	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/16/20 05:16	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/16/20 05:16	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			12/16/20 05:16	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			12/16/20 05:16	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/16/20 05:16	1
2-Hexanone	ND	*3	5.0	0.60	ug/L			12/16/20 05:16	1
Acetone	ND	*3	5.0	0.90	ug/L			12/16/20 05:16	1
Chloroform	ND		0.50	0.090	ug/L			12/16/20 05:16	1
Benzene	ND		0.50	0.050	ug/L			12/16/20 05:16	1
1,1,1-Trichloroethane	**0.11**	**J**	0.50	0.060	ug/L			12/16/20 05:16	1
Bromomethane	ND		0.50	0.070	ug/L			12/16/20 05:16	1
Chloromethane	ND		0.50	0.060	ug/L			12/16/20 05:16	1
Chloroethane	**3.9**		0.50	0.070	ug/L			12/16/20 05:16	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/16/20 05:16	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/16/20 05:16	1
Carbon disulfide	ND	^c	1.0	0.060	ug/L			12/16/20 05:16	1
Bromoform	ND	^c	1.0	0.30	ug/L			12/16/20 05:16	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/16/20 05:16	1
1,1-Dichloroethane	**2.4**		0.50	0.070	ug/L			12/16/20 05:16	1
1,1-Dichloroethene	**0.11**	**J ^c**	0.50	0.060	ug/L			12/16/20 05:16	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/16/20 05:16	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/16/20 05:16	1
Freon 113	ND		0.50	0.060	ug/L			12/16/20 05:16	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/16/20 05:16	1
2-Butanone	ND	*3	5.0	0.60	ug/L			12/16/20 05:16	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/16/20 05:16	1
Trichloroethene	ND		0.50	0.060	ug/L			12/16/20 05:16	1
Methyl acetate	ND	*3	1.0	0.10	ug/L			12/16/20 05:16	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/16/20 05:16	1
1,2-Dichlorobenzene	**0.36**	**J**	0.50	0.060	ug/L			12/16/20 05:16	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/16/20 05:16	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/16/20 05:16	1

Client Sample ID: HOFF MW-A

Date Collected: 12/09/20 14:45
Date Received: 12/09/20 18:11

Lab Sample ID: 410-23402-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*80 - 120*		*12/16/20 05:16*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*12/16/20 05:16*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*12/16/20 05:16*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/16/20 05:16*	*1*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.97**		0.40	0.20	ug/L			12/16/20 10:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*80 - 120*		*12/16/20 10:52*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
2,4-Dichlorophenol	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
2,4-Dinitrophenol	ND		30	14	ug/L		12/14/20 10:30	12/15/20 17:44	1
2,4-Dinitrotoluene	ND		5.1	1.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
2,4,5-Trichlorophenol	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
2,4,6-Trichlorophenol	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
Di-n-butyl phthalate	ND		5.1	2.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
Di-n-octyl phthalate	ND		11	5.1	ug/L		12/14/20 10:30	12/15/20 17:44	1
Benzo[a]anthracene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Benzo[a]pyrene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Benzo[b]fluoranthene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Benzo[g,h,i]perylene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Benzo[k]fluoranthene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Acenaphthene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Acenaphthylene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Acetophenone	ND		10	4.1	ug/L		12/14/20 10:30	12/15/20 17:44	1
Anthracene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Atrazine	ND		5.1	2.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
Benzaldehyde	ND		10	3.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
Butylbenzylphthalate	ND		5.1	2.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
Caprolactam	ND		11	5.1	ug/L		12/14/20 10:30	12/15/20 17:44	1
Carbazole	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
Chrysene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Dibenz(a,h)anthracene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Dibenzofuran	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
Diethyl phthalate	ND		5.1	2.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
Dimethyl phthalate	ND		5.1	2.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
Hexachlorobenzene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Hexachlorobutadiene	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
Hexachlorocyclopentadiene	ND		11	5.1	ug/L		12/14/20 10:30	12/15/20 17:44	1
Hexachloroethane	ND		5.1	1.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
Fluoranthene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Fluorene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Indeno[1,2,3-cd]pyrene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Isophorone	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1

Client Sample ID: HOFF MW-A

Date Collected: 12/09/20 14:45
Date Received: 12/09/20 18:11

Lab Sample ID: 410-23402-1

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		3.0	0.71	ug/L		12/14/20 10:30	12/15/20 17:44	1
N-Nitrosodiphenylamine	ND		3.0	0.71	ug/L		12/14/20 10:30	12/15/20 17:44	1
Naphthalene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Nitrobenzene	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
Pentachlorophenol	ND		5.1	1.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
Phenanthrene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Phenol	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
Pyrene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
2-Chloronaphthalene	ND		1.0	0.41	ug/L		12/14/20 10:30	12/15/20 17:44	1
2-Chlorophenol	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
2-Methylnaphthalene	ND		0.51	0.10	ug/L		12/14/20 10:30	12/15/20 17:44	1
2-Methylphenol	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
2-Nitroaniline	ND		5.1	2.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
2-Nitrophenol	ND		10	3.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
3-Nitroaniline	ND		7.1	3.0	ug/L		12/14/20 10:30	12/15/20 17:44	1
4,6-Dinitro-2-methylphenol	ND		21	8.1	ug/L		12/14/20 10:30	12/15/20 17:44	1
4-Bromophenyl-phenylether	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
4-Methylphenol	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
4-Nitroaniline	ND		3.0	0.91	ug/L		12/14/20 10:30	12/15/20 17:44	1
4-Nitrophenol	ND		30	10	ug/L		12/14/20 10:30	12/15/20 17:44	1
Bis(2-chloroethoxy)methane	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
Bis(2-chloroethyl)ether	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
Bis(2-ethylhexyl) phthalate	ND		11	5.1	ug/L		12/14/20 10:30	12/15/20 17:44	1
2,6-Dinitrotoluene	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		12/14/20 10:30	12/15/20 17:44	1
4-Chloroaniline	ND		10	4.1	ug/L		12/14/20 10:30	12/15/20 17:44	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.51	ug/L		12/14/20 10:30	12/15/20 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*57*		*10 - 150*	*12/14/20 10:30*	*12/15/20 17:44*	*1*
2-Fluorobiphenyl (Surr)	*58*		*44 - 102*	*12/14/20 10:30*	*12/15/20 17:44*	*1*
2-Fluorophenol (Surr)	*31*		*10 - 84*	*12/14/20 10:30*	*12/15/20 17:44*	*1*
Nitrobenzene-d5 (Surr)	*66*		*23 - 128*	*12/14/20 10:30*	*12/15/20 17:44*	*1*
p-Terphenyl-d14 (Surr)	*49*		*31 - 113*	*12/14/20 10:30*	*12/15/20 17:44*	*1*
Phenol-d5 (Surr)	*26*		*10 - 67*	*12/14/20 10:30*	*12/15/20 17:44*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.11	0.011	ug/L		12/15/20 17:30	12/16/20 08:39	1
alpha-BHC (1C)	ND		0.11	0.016	ug/L		12/15/20 17:30	12/16/20 08:39	1
alpha-Chlordane (1C)	ND		0.11	0.016	ug/L		12/15/20 17:30	12/16/20 08:39	1
beta-BHC (1C)	ND		0.11	0.018	ug/L		12/15/20 17:30	12/16/20 08:39	1
delta-BHC (1C)	ND		0.11	0.018	ug/L		12/15/20 17:30	12/16/20 08:39	1
Dieldrin (1C)	ND		0.16	0.029	ug/L		12/15/20 17:30	12/16/20 08:39	1
Endosulfan I (1C)	ND		0.11	0.023	ug/L		12/15/20 17:30	12/16/20 08:39	1
Endosulfan II (1C)	ND		0.22	0.082	ug/L		12/15/20 17:30	12/16/20 08:39	1
Endosulfan sulfate (1C)	ND		0.16	0.032	ug/L		12/15/20 17:30	12/16/20 08:39	1
Endrin (1C)	ND		0.16	0.044	ug/L		12/15/20 17:30	12/16/20 08:39	1
Endrin aldehyde (1C)	ND		0.54	0.11	ug/L		12/15/20 17:30	12/16/20 08:39	1

Client Sample ID: HOFF MW-A

Date Collected: 12/09/20 14:45
Date Received: 12/09/20 18:11

Lab Sample ID: 410-23402-1

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin ketone (1C)	ND		0.16	0.027	ug/L		12/15/20 17:30	12/16/20 08:39	1
gamma-BHC (Lindane) (1C)	ND		0.11	0.011	ug/L		12/15/20 17:30	12/16/20 08:39	1
gamma-Chlordane (1C)	ND		0.22	0.038	ug/L		12/15/20 17:30	12/16/20 08:39	1
Heptachlor (1C)	ND		0.11	0.011	ug/L		12/15/20 17:30	12/16/20 08:39	1
Heptachlor epoxide (1C)	ND		0.11	0.013	ug/L		12/15/20 17:30	12/16/20 08:39	1
Methoxychlor (1C)	ND		0.60	0.16	ug/L		12/15/20 17:30	12/16/20 08:39	1
Toxaphene (1C)	ND		5.4	1.6	ug/L		12/15/20 17:30	12/16/20 08:39	1
p,p'-DDD (1C)	ND		0.16	0.027	ug/L		12/15/20 17:30	12/16/20 08:39	1
p,p'-DDE (1C)	ND		0.16	0.027	ug/L		12/15/20 17:30	12/16/20 08:39	1
p,p'-DDT (1C)	ND		0.16	0.028	ug/L		12/15/20 17:30	12/16/20 08:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*40*		*32 - 149*	*12/15/20 17:30*	*12/16/20 08:39*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*42*		*32 - 149*	*12/15/20 17:30*	*12/16/20 08:39*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*56*		*29 - 129*	*12/15/20 17:30*	*12/16/20 08:39*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*54*		*29 - 129*	*12/15/20 17:30*	*12/16/20 08:39*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		12/10/20 02:59	12/14/20 16:00	1
Aluminum	**2.1**		0.30	0.15	mg/L		12/10/20 02:59	12/14/20 16:00	1
Antimony	ND		0.050	0.016	mg/L		12/10/20 02:59	12/14/20 16:00	1
Barium	**0.036**		0.0050	0.0010	mg/L		12/10/20 02:59	12/14/20 16:00	1
Beryllium	ND		0.0050	0.0010	mg/L		12/10/20 02:59	12/14/20 16:00	1
Cadmium	ND		0.0050	0.0010	mg/L		12/10/20 02:59	12/14/20 16:00	1
Calcium	**64**		0.50	0.096	mg/L		12/10/20 02:59	12/14/20 16:00	1
Chromium	**0.0039**	**J**	0.015	0.0016	mg/L		12/10/20 02:59	12/14/20 16:00	1
Cobalt	**0.0020**	**J**	0.0050	0.0015	mg/L		12/10/20 02:59	12/14/20 16:00	1
Copper	**0.012**	**J**	0.020	0.012	mg/L		12/10/20 02:59	12/14/20 16:00	1
Iron	**3.4**		0.20	0.040	mg/L		12/10/20 02:59	12/14/20 16:00	1
Lead	ND		0.015	0.0071	mg/L		12/10/20 02:59	12/14/20 16:00	1
Magnesium	**25**		0.10	0.040	mg/L		12/10/20 02:59	12/14/20 20:58	1
Manganese	**3.5**		0.010	0.0030	mg/L		12/10/20 02:59	12/14/20 16:00	1
Nickel	**0.0049**	**J**	0.010	0.0021	mg/L		12/10/20 02:59	12/14/20 16:00	1
Zinc	**0.0049**	**J**	0.020	0.0037	mg/L		12/10/20 02:59	12/14/20 16:00	1
Silver	ND		0.010	0.0050	mg/L		12/10/20 02:59	12/14/20 16:00	1
Selenium	ND		0.050	0.016	mg/L		12/10/20 02:59	12/14/20 16:00	1
Potassium	**3.8**		0.50	0.20	mg/L		12/10/20 02:59	12/14/20 16:00	1
Sodium	**25**		1.0	0.24	mg/L		12/10/20 02:59	12/14/20 16:00	1
Thallium	ND		0.030	0.0081	mg/L		12/10/20 02:59	12/14/20 16:00	1
Vanadium	**0.0077**	**J**	0.010	0.0019	mg/L		12/10/20 02:59	12/14/20 16:00	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/10/20 06:34	12/11/20 16:25	1
Aluminum	ND		0.31	0.16	mg/L		12/10/20 06:34	12/11/20 16:25	1
Antimony	ND		0.052	0.016	mg/L		12/10/20 06:34	12/11/20 16:25	1
Barium	**0.025**		0.0052	0.0010	mg/L		12/10/20 06:34	12/16/20 11:59	1
Beryllium	ND		0.0052	0.0010	mg/L		12/10/20 06:34	12/11/20 16:25	1
Cadmium	ND		0.0052	0.0010	mg/L		12/10/20 06:34	12/11/20 16:25	1

Client Sample ID: HOFF MW-A

Lab Sample ID: 410-23402-1

Date Collected: 12/09/20 14:45

Matrix: Water

Date Received: 12/09/20 18:11

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**60**		0.52	0.099	mg/L		12/10/20 06:34	12/11/20 16:25	1
Chromium	ND		0.015	0.0016	mg/L		12/10/20 06:34	12/11/20 16:25	1
Cobalt	ND		0.0052	0.0015	mg/L		12/10/20 06:34	12/11/20 16:25	1
Copper	ND		0.021	0.012	mg/L		12/10/20 06:34	12/11/20 16:25	1
Iron	**1.1**		0.21	0.041	mg/L		12/10/20 06:34	12/16/20 11:59	1
Lead	ND		0.015	0.0073	mg/L		12/10/20 06:34	12/11/20 16:25	1
Magnesium	**22**		0.10	0.041	mg/L		12/10/20 06:34	12/16/20 11:59	1
Manganese	**3.2**		0.010	0.0031	mg/L		12/10/20 06:34	12/11/20 16:25	1
Nickel	ND		0.010	0.0022	mg/L		12/10/20 06:34	12/16/20 11:59	1
Zinc	ND		0.021	0.0038	mg/L		12/10/20 06:34	12/11/20 16:25	1
Silver	ND		0.010	0.0052	mg/L		12/10/20 06:34	12/11/20 16:25	1
Selenium	ND		0.052	0.016	mg/L		12/10/20 06:34	12/11/20 16:25	1
Potassium	**3.1**		0.52	0.21	mg/L		12/10/20 06:34	12/16/20 11:59	1
Sodium	**24**		1.0	0.25	mg/L		12/10/20 06:34	12/14/20 14:30	1
Thallium	ND		0.031	0.0083	mg/L		12/10/20 06:34	12/16/20 11:59	1
Vanadium	ND		0.010	0.0020	mg/L		12/10/20 06:34	12/16/20 11:59	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/10/20 09:20	12/10/20 19:08	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/10/20 09:20	12/10/20 19:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**410**		60	20	mg/L			12/11/20 11:27	1
Ferrous Iron	**1.9**	**HF**	0.10	0.050	mg/L			12/15/20 09:19	1
Sulfate	**75**		24	8.0	mg/L			12/15/20 10:45	4

Client Sample ID: HOFF TB-20201209

Lab Sample ID: 410-23402-2

Date Collected: 12/09/20 12:00

Matrix: Water

Date Received: 12/09/20 18:11

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/16/20 02:44	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/16/20 02:44	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/16/20 02:44	1
Styrene	ND		0.50	0.050	ug/L			12/16/20 02:44	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/16/20 02:44	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/16/20 02:44	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/16/20 02:44	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/16/20 02:44	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/16/20 02:44	1
Toluene	ND		0.50	0.070	ug/L			12/16/20 02:44	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/16/20 02:44	1
Cyclohexane	ND		0.50	0.050	ug/L			12/16/20 02:44	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			12/16/20 02:44	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/16/20 02:44	1

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-23402-1

Client Sample ID: HOFF TB-20201209

Date Collected: 12/09/20 12:00
Date Received: 12/09/20 18:11

Lab Sample ID: 410-23402-2

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		1.0	0.15	ug/L			12/16/20 02:44	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/16/20 02:44	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/16/20 02:44	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/16/20 02:44	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			12/16/20 02:44	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			12/16/20 02:44	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/16/20 02:44	1
2-Hexanone	ND		5.0	0.60	ug/L			12/16/20 02:44	1
Acetone	ND		5.0	0.90	ug/L			12/16/20 02:44	1
Chloroform	ND		0.50	0.090	ug/L			12/16/20 02:44	1
Benzene	ND		0.50	0.050	ug/L			12/16/20 02:44	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/16/20 02:44	1
Bromomethane	ND		0.50	0.070	ug/L			12/16/20 02:44	1
Chloromethane	ND		0.50	0.060	ug/L			12/16/20 02:44	1
Chloroethane	ND		0.50	0.070	ug/L			12/16/20 02:44	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/16/20 02:44	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/16/20 02:44	1
Carbon disulfide	ND	^c	1.0	0.060	ug/L			12/16/20 02:44	1
Bromoform	ND	^c	1.0	0.30	ug/L			12/16/20 02:44	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/16/20 02:44	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/16/20 02:44	1
1,1-Dichloroethene	ND	^c	0.50	0.060	ug/L			12/16/20 02:44	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/16/20 02:44	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/16/20 02:44	1
Freon 113	ND		0.50	0.060	ug/L			12/16/20 02:44	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/16/20 02:44	1
2-Butanone	ND		5.0	0.60	ug/L			12/16/20 02:44	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/16/20 02:44	1
Trichloroethene	ND		0.50	0.060	ug/L			12/16/20 02:44	1
Methyl acetate	ND		1.0	0.10	ug/L			12/16/20 02:44	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/16/20 02:44	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			12/16/20 02:44	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/16/20 02:44	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/16/20 02:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*80 - 120*		*12/16/20 02:44*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*12/16/20 02:44*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*12/16/20 02:44*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/16/20 02:44*	*1*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			12/16/20 10:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*80 - 120*		*12/16/20 10:32*	*1*

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-23402-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	BFB	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-23402-1	HOFF MW-A	110	106	90	96
410-23402-2	HOFF TB-20201209	110	108	90	97
LCS 410-77244/4	Lab Control Sample	103	103	95	98
LCS 410-77834/5	Lab Control Sample	98	96	97	100
MB 410-77244/6	Method Blank	104	105	91	97
MB 410-77834/8	Method Blank	103	96	94	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TOL
Lab Sample ID	Client Sample ID	(80-120)
410-23402-1	HOFF MW-A	88
410-23402-2	HOFF TB-20201209	88
LCS 410-77374/4	Lab Control Sample	88
LCSD 410-77374/5	Lab Control Sample Dup	88
MB 410-77374/7	Method Blank	88

Surrogate Legend

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(10-150)	(44-102)	(10-84)	(23-128)	(31-113)	(10-67)
410-23402-1	HOFF MW-A	57	58	31	66	49	26

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(32-149)	(32-149)	(29-129)	(29-129)
410-23402-1	HOFF MW-A	40	42	56	54
LCS 410-77079/2-A	Lab Control Sample	55	57	61	64

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-23402-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(32-149)	(32-149)	(29-129)	(29-129)
LCSD 410-77079/3-A	Lab Control Sample Dup	47	49	60	58
MB 410-77079/1-A	Method Blank	55	58	58	60

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-23402-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-77244/6
Matrix: Water
Analysis Batch: 77244

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/16/20 02:00	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/16/20 02:00	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/16/20 02:00	1
Styrene	ND		0.50	0.050	ug/L			12/16/20 02:00	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/16/20 02:00	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/16/20 02:00	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/16/20 02:00	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/16/20 02:00	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/16/20 02:00	1
Toluene	ND		0.50	0.070	ug/L			12/16/20 02:00	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/16/20 02:00	1
Cyclohexane	ND		0.50	0.050	ug/L			12/16/20 02:00	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			12/16/20 02:00	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/16/20 02:00	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/16/20 02:00	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/16/20 02:00	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/16/20 02:00	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/16/20 02:00	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			12/16/20 02:00	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			12/16/20 02:00	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/16/20 02:00	1
2-Hexanone	ND		5.0	0.60	ug/L			12/16/20 02:00	1
Acetone	ND		5.0	0.90	ug/L			12/16/20 02:00	1
Chloroform	ND		0.50	0.090	ug/L			12/16/20 02:00	1
Benzene	ND		0.50	0.050	ug/L			12/16/20 02:00	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/16/20 02:00	1
Bromomethane	ND		0.50	0.070	ug/L			12/16/20 02:00	1
Chloromethane	ND		0.50	0.060	ug/L			12/16/20 02:00	1
Chloroethane	ND		0.50	0.070	ug/L			12/16/20 02:00	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/16/20 02:00	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/16/20 02:00	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/16/20 02:00	1
Bromoform	ND		1.0	0.30	ug/L			12/16/20 02:00	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/16/20 02:00	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/16/20 02:00	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/16/20 02:00	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/16/20 02:00	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/16/20 02:00	1
Freon 113	ND		0.50	0.060	ug/L			12/16/20 02:00	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/16/20 02:00	1
2-Butanone	ND		5.0	0.60	ug/L			12/16/20 02:00	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/16/20 02:00	1
Trichloroethene	ND		0.50	0.060	ug/L			12/16/20 02:00	1
Methyl acetate	ND		1.0	0.10	ug/L			12/16/20 02:00	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/16/20 02:00	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			12/16/20 02:00	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/16/20 02:00	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/16/20 02:00	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-77244/6
Matrix: Water
Analysis Batch: 77244

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*12/16/20 02:00*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*12/16/20 02:00*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*12/16/20 02:00*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/16/20 02:00*	*1*

Lab Sample ID: LCS 410-77244/4
Matrix: Water
Analysis Batch: 77244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.59		ug/L		92	67 - 121
trans-1,3-Dichloropropene	5.00	4.74		ug/L		95	61 - 129
Ethylbenzene	5.00	4.47		ug/L		89	80 - 120
Styrene	5.00	4.62		ug/L		92	80 - 120
1,4-Dichlorobenzene	5.00	4.79		ug/L		96	80 - 120
1,2-Dibromoethane	5.00	5.02		ug/L		100	80 - 120
1,2-Dichloroethane	5.00	5.03		ug/L		101	69 - 122
4-Methyl-2-pentanone	25.0	25.2		ug/L		101	55 - 140
Methylcyclohexane	5.00	4.26		ug/L		85	80 - 120
Toluene	5.00	4.54		ug/L		91	80 - 120
Chlorobenzene	5.00	4.83		ug/L		97	80 - 120
Cyclohexane	5.00	4.47		ug/L		89	69 - 120
1,2,4-Trichlorobenzene	5.00	4.52		ug/L		90	68 - 122
Dibromochloromethane	5.00	5.25		ug/L		105	64 - 138
Xylenes, Total	15.0	13.4		ug/L		90	80 - 120
Tetrachloroethene	5.00	5.13		ug/L		103	80 - 120
cis-1,2-Dichloroethene	5.00	4.76		ug/L		95	80 - 122
trans-1,2-Dichloroethene	5.00	4.46		ug/L		89	80 - 122
Methyl tertiary butyl ether	5.00	4.20		ug/L		84	69 - 120
1,3-Dichlorobenzene	5.00	4.72		ug/L		94	80 - 120
Carbon tetrachloride	5.00	4.86		ug/L		97	64 - 141
2-Hexanone	25.0	26.4		ug/L		106	52 - 140
Acetone	37.5	40.0		ug/L		107	60 - 146
Chloroform	5.00	4.77		ug/L		95	80 - 120
Benzene	5.00	4.55		ug/L		91	80 - 120
1,1,1-Trichloroethane	5.00	4.51		ug/L		90	78 - 126
Bromomethane	5.00	3.91		ug/L		78	60 - 136
Chloromethane	5.00	3.79		ug/L		76	56 - 124
Chloroethane	5.00	3.86		ug/L		77	63 - 120
Vinyl chloride	5.00	3.99		ug/L		80	60 - 125
Methylene Chloride	5.00	4.65		ug/L		93	80 - 120
Carbon disulfide	5.00	4.47		ug/L		89	67 - 130
Bromoform	5.00	5.56		ug/L		111	49 - 144
Bromodichloromethane	5.00	4.99		ug/L		100	73 - 124
1,1-Dichloroethane	5.00	4.77		ug/L		95	74 - 120
1,1-Dichloroethene	5.00	4.53		ug/L		91	80 - 131
Trichlorofluoromethane	5.00	4.59		ug/L		92	62 - 136
Dichlorodifluoromethane	5.00	3.82		ug/L		76	43 - 123

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-77244/4
Matrix: Water
Analysis Batch: 77244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Freon 113	5.00	4.51		ug/L		90	75 - 133
1,2-Dichloropropane	5.00	5.05		ug/L		101	80 - 120
2-Butanone	37.5	41.1		ug/L		110	59 - 141
1,1,2-Trichloroethane	5.00	5.01		ug/L		100	80 - 120
Trichloroethene	5.00	4.62		ug/L		92	80 - 120
Methyl acetate	5.00	4.77		ug/L		95	59 - 143
1,1,2,2-Tetrachloroethane	5.00	4.65		ug/L		93	75 - 123
1,2-Dichlorobenzene	5.00	4.65		ug/L		93	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	5.16		ug/L		103	56 - 148
Isopropylbenzene	5.00	4.30		ug/L		86	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 410-77834/8
Matrix: Water
Analysis Batch: 77834

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/17/20 22:22	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/17/20 22:22	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/17/20 22:22	1
Styrene	ND		0.50	0.050	ug/L			12/17/20 22:22	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/17/20 22:22	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/17/20 22:22	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/17/20 22:22	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/17/20 22:22	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/17/20 22:22	1
Toluene	ND		0.50	0.070	ug/L			12/17/20 22:22	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/17/20 22:22	1
Cyclohexane	ND		0.50	0.050	ug/L			12/17/20 22:22	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			12/17/20 22:22	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/17/20 22:22	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/17/20 22:22	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/17/20 22:22	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/17/20 22:22	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/17/20 22:22	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			12/17/20 22:22	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			12/17/20 22:22	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/17/20 22:22	1
2-Hexanone	ND		5.0	0.60	ug/L			12/17/20 22:22	1
Acetone	ND		5.0	0.90	ug/L			12/17/20 22:22	1
Chloroform	ND		0.50	0.090	ug/L			12/17/20 22:22	1
Benzene	ND		0.50	0.050	ug/L			12/17/20 22:22	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/17/20 22:22	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-77834/8
Matrix: Water
Analysis Batch: 77834

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		0.50	0.070	ug/L			12/17/20 22:22	1
Chloromethane	ND		0.50	0.060	ug/L			12/17/20 22:22	1
Chloroethane	ND		0.50	0.070	ug/L			12/17/20 22:22	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/17/20 22:22	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/17/20 22:22	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/17/20 22:22	1
Bromoform	ND		1.0	0.30	ug/L			12/17/20 22:22	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/17/20 22:22	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/17/20 22:22	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/17/20 22:22	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/17/20 22:22	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/17/20 22:22	1
Freon 113	ND		0.50	0.060	ug/L			12/17/20 22:22	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/17/20 22:22	1
2-Butanone	ND		5.0	0.60	ug/L			12/17/20 22:22	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/17/20 22:22	1
Trichloroethene	ND		0.50	0.060	ug/L			12/17/20 22:22	1
Methyl acetate	ND		1.0	0.10	ug/L			12/17/20 22:22	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/17/20 22:22	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			12/17/20 22:22	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/17/20 22:22	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/17/20 22:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*12/17/20 22:22*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*12/17/20 22:22*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/17/20 22:22*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*12/17/20 22:22*	*1*

Lab Sample ID: LCS 410-77834/5
Matrix: Water
Analysis Batch: 77834

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.60		ug/L		92	67 - 121
trans-1,3-Dichloropropene	5.00	4.51		ug/L		90	61 - 129
Ethylbenzene	5.00	4.66		ug/L		93	80 - 120
Styrene	5.00	4.86		ug/L		97	80 - 120
1,4-Dichlorobenzene	5.00	4.82		ug/L		96	80 - 120
1,2-Dibromoethane	5.00	4.72		ug/L		94	80 - 120
1,2-Dichloroethane	5.00	3.90		ug/L		78	69 - 122
4-Methyl-2-pentanone	25.0	23.2		ug/L		93	55 - 140
Methylcyclohexane	5.00	5.22		ug/L		104	80 - 120
Toluene	5.00	4.77		ug/L		95	80 - 120
Chlorobenzene	5.00	4.97		ug/L		99	80 - 120
Cyclohexane	5.00	4.75		ug/L		95	69 - 120
1,2,4-Trichlorobenzene	5.00	5.04		ug/L		101	68 - 122
Dibromochloromethane	5.00	5.23		ug/L		105	64 - 138

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-77834/5
Matrix: Water
Analysis Batch: 77834

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	15.0	14.6		ug/L		97	80 - 120
Tetrachloroethene	5.00	5.11		ug/L		102	80 - 120
cis-1,2-Dichloroethene	5.00	5.04		ug/L		101	80 - 122
trans-1,2-Dichloroethene	5.00	4.77		ug/L		95	80 - 122
Methyl tertiary butyl ether	5.00	4.27		ug/L		85	69 - 120
1,3-Dichlorobenzene	5.00	4.93		ug/L		99	80 - 120
Carbon tetrachloride	5.00	4.40		ug/L		88	64 - 141
2-Hexanone	25.0	24.4		ug/L		98	52 - 140
Acetone	37.5	40.9		ug/L		109	60 - 146
Chloroform	5.00	4.41		ug/L		88	80 - 120
Benzene	5.00	4.73		ug/L		95	80 - 120
1,1,1-Trichloroethane	5.00	4.22		ug/L		84	78 - 126
Bromomethane	5.00	4.69		ug/L		94	60 - 136
Chloromethane	5.00	4.32		ug/L		86	56 - 124
Chloroethane	5.00	4.12		ug/L		82	63 - 120
Vinyl chloride	5.00	4.78		ug/L		96	60 - 125
Methylene Chloride	5.00	4.92		ug/L		98	80 - 120
Carbon disulfide	5.00	4.88		ug/L		98	67 - 130
Bromoform	5.00	5.88		ug/L		118	49 - 144
Bromodichloromethane	5.00	4.56		ug/L		91	73 - 124
1,1-Dichloroethane	5.00	4.48		ug/L		90	74 - 120
1,1-Dichloroethene	5.00	4.87		ug/L		97	80 - 131
Trichlorofluoromethane	5.00	4.18		ug/L		84	62 - 136
Dichlorodifluoromethane	5.00	4.48		ug/L		90	43 - 123
Freon 113	5.00	4.73		ug/L		95	75 - 133
1,2-Dichloropropane	5.00	4.71		ug/L		94	80 - 120
2-Butanone	37.5	36.6		ug/L		98	59 - 141
1,1,2-Trichloroethane	5.00	4.96		ug/L		99	80 - 120
Trichloroethene	5.00	4.63		ug/L		93	80 - 120
Methyl acetate	5.00	3.97		ug/L		79	59 - 143
1,1,2,2-Tetrachloroethane	5.00	4.65		ug/L		93	75 - 123
1,2-Dichlorobenzene	5.00	4.89		ug/L		98	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	5.39		ug/L		108	56 - 148
Isopropylbenzene	5.00	4.76		ug/L		95	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-77374/7
Matrix: Water
Analysis Batch: 77374

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			12/16/20 10:12	1

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	88		80 - 120		12/16/20 10:12	1

Lab Sample ID: LCS 410-77374/4
Matrix: Water
Analysis Batch: 77374

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	4.56		ug/L		92	74 - 133		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	88		80 - 120

Lab Sample ID: LCSD 410-77374/5
Matrix: Water
Analysis Batch: 77374

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.81		ug/L		97	74 - 133	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	88		80 - 120

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 410-77079/1-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77079

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 06:21	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		12/15/20 17:30	12/16/20 06:21	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		12/15/20 17:30	12/16/20 06:21	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		12/15/20 17:30	12/16/20 06:21	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		12/15/20 17:30	12/16/20 06:21	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endosulfan sulfate (1C)	ND		0.030	0.0058	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endrin (1C)	ND		0.030	0.0081	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		12/15/20 17:30	12/16/20 06:21	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 06:21	1
gamma-Chlordane (1C)	ND		0.040	0.0070	ug/L		12/15/20 17:30	12/16/20 06:21	1
Heptachlor (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 06:21	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		12/15/20 17:30	12/16/20 06:21	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		12/15/20 17:30	12/16/20 06:21	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		12/15/20 17:30	12/16/20 06:21	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		12/15/20 17:30	12/16/20 06:21	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		12/15/20 17:30	12/16/20 06:21	1
p,p'-DDT (1C)	ND		0.030	0.0052	ug/L		12/15/20 17:30	12/16/20 06:21	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 410-77079/1-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77079

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	55		32 - 149	12/15/20 17:30	12/16/20 06:21	1
DCB Decachlorobiphenyl (Surr) (2C)	58		32 - 149	12/15/20 17:30	12/16/20 06:21	1
Tetrachloro-m-xylene (Surr) (1C)	58		29 - 129	12/15/20 17:30	12/16/20 06:21	1
Tetrachloro-m-xylene (Surr) (2C)	60		29 - 129	12/15/20 17:30	12/16/20 06:21	1

Lab Sample ID: LCS 410-77079/2-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77079

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aldrin (1C)			0.100	0.0548		ug/L		55	28 - 119		
alpha-BHC (2C)			0.101	0.0902		ug/L		89	47 - 132		
beta-BHC (1C)			0.100	0.0948		ug/L		95	27 - 143		
delta-BHC (2C)			0.101	0.102		ug/L		101	28 - 141		
Dieldrin (2C)			0.201	0.178		ug/L		88	31 - 145		
Endosulfan I (1C)			0.101	0.0866		ug/L		85	40 - 138		
Endosulfan II (2C)			0.200	0.181		ug/L		90	27 - 138		
Endosulfan sulfate (2C)			0.201	0.184		ug/L		92	41 - 133		
Endrin (1C)			0.201	0.181		ug/L		90	35 - 143		
Endrin aldehyde (2C)			0.201	0.177		ug/L		88	40 - 135		
Endrin ketone (2C)			0.201	0.184		ug/L		92	44 - 136		
gamma-BHC (Lindane) (2C)			0.100	0.0911		ug/L		91	29 - 136		
Heptachlor (2C)			0.101	0.0587		ug/L		58	38 - 135		
Heptachlor epoxide (2C)			0.100	0.0874		ug/L		87	28 - 146		
Methoxychlor (2C)			1.01	1.01		ug/L		100	39 - 143		
p,p'-DDD (2C)			0.201	0.182		ug/L		90	42 - 148		
p,p'-DDE (1C)			0.201	0.145		ug/L		72	22 - 138		
p,p'-DDT (2C)			0.201	0.182		ug/L		91	40 - 145		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	55		32 - 149
DCB Decachlorobiphenyl (Surr) (2C)	57		32 - 149
Tetrachloro-m-xylene (Surr) (1C)	61		29 - 129
Tetrachloro-m-xylene (Surr) (2C)	64		29 - 129

Lab Sample ID: LCSD 410-77079/3-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 77079

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin (2C)			0.100	0.0500		ug/L		50	28 - 119	9	30
alpha-BHC (2C)			0.101	0.0841		ug/L		83	47 - 132	7	30
beta-BHC (2C)			0.100	0.0895		ug/L		90	27 - 143	6	30
delta-BHC (2C)			0.101	0.0863		ug/L		85	28 - 141	16	30
Dieldrin (2C)			0.201	0.174		ug/L		86	31 - 145	2	30

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 410-77079/3-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 77079

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Endosulfan I (2C)			0.101	0.0849		ug/L		84	40 - 138	2	30
Endosulfan II (2C)			0.200	0.173		ug/L		86	27 - 138	5	30
Endosulfan sulfate (1C)			0.201	0.167		ug/L		83	41 - 133	10	30
Endrin (2C)			0.201	0.163		ug/L		81	35 - 143	10	30
Endrin aldehyde (2C)			0.201	0.163		ug/L		81	40 - 135	8	20
Endrin ketone (2C)			0.201	0.171		ug/L		85	44 - 136	7	30
gamma-BHC (Lindane) (1C)			0.100	0.0878		ug/L		88	29 - 136	4	30
Heptachlor (2C)			0.101	0.0543		ug/L		54	38 - 135	8	30
Heptachlor epoxide (2C)			0.100	0.0860		ug/L		86	28 - 146	2	30
Methoxychlor (2C)			1.01	0.937		ug/L		93	39 - 143	8	30
p,p'-DDD (2C)			0.201	0.180		ug/L		89	42 - 148	1	30
p,p'-DDE (1C)			0.201	0.145		ug/L		72	22 - 138	0	30
p,p'-DDT (2C)			0.201	0.178		ug/L		88	40 - 145	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*47*		*32 - 149*
DCB Decachlorobiphenyl (Surr) (2C)	*49*		*32 - 149*
Tetrachloro-m-xylene (Surr) (1C)	*60*		*29 - 129*
Tetrachloro-m-xylene (Surr) (2C)	*58*		*29 - 129*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 410-75111/1-A
Matrix: Water
Analysis Batch: 76566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 75111

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		12/10/20 02:59	12/14/20 15:15	1
Aluminum	ND		0.30	0.15	mg/L		12/10/20 02:59	12/14/20 15:15	1
Antimony	ND		0.050	0.016	mg/L		12/10/20 02:59	12/14/20 15:15	1
Barium	ND		0.0050	0.0010	mg/L		12/10/20 02:59	12/14/20 15:15	1
Beryllium	ND		0.0050	0.0010	mg/L		12/10/20 02:59	12/14/20 15:15	1
Cadmium	ND		0.0050	0.0010	mg/L		12/10/20 02:59	12/14/20 15:15	1
Calcium	ND		0.50	0.096	mg/L		12/10/20 02:59	12/14/20 15:15	1
Chromium	ND		0.015	0.0016	mg/L		12/10/20 02:59	12/14/20 15:15	1
Cobalt	ND		0.0050	0.0015	mg/L		12/10/20 02:59	12/14/20 15:15	1
Copper	ND		0.020	0.012	mg/L		12/10/20 02:59	12/14/20 15:15	1
Iron	ND		0.20	0.040	mg/L		12/10/20 02:59	12/14/20 15:15	1
Lead	ND		0.015	0.0071	mg/L		12/10/20 02:59	12/14/20 15:15	1
Manganese	ND		0.010	0.0030	mg/L		12/10/20 02:59	12/14/20 15:15	1
Nickel	ND		0.010	0.0021	mg/L		12/10/20 02:59	12/14/20 15:15	1
Zinc	ND		0.020	0.0037	mg/L		12/10/20 02:59	12/14/20 15:15	1
Silver	ND		0.010	0.0050	mg/L		12/10/20 02:59	12/14/20 15:15	1
Selenium	ND		0.050	0.016	mg/L		12/10/20 02:59	12/14/20 15:15	1
Potassium	ND		0.50	0.20	mg/L		12/10/20 02:59	12/14/20 15:15	1
Sodium	ND		1.0	0.24	mg/L		12/10/20 02:59	12/14/20 15:15	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-75111/1-A
Matrix: Water
Analysis Batch: 76566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 75111

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.030	0.0081	mg/L		12/10/20 02:59	12/14/20 15:15	1
Vanadium	ND		0.010	0.0019	mg/L		12/10/20 02:59	12/14/20 15:15	1

Lab Sample ID: MB 410-75111/1-A
Matrix: Water
Analysis Batch: 76675

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 75111

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		0.10	0.040	mg/L		12/10/20 02:59	12/14/20 20:52	1

Lab Sample ID: LCS 410-75111/2-A
Matrix: Water
Analysis Batch: 76566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 75111

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0613		mg/L		102	80 - 120
Aluminum	0.405	0.394		mg/L		97	80 - 120
Antimony	0.100	0.107		mg/L		107	80 - 120
Barium	0.0100	0.0104		mg/L		104	80 - 120
Beryllium	0.0100	0.00975		mg/L		98	80 - 120
Cadmium	0.0100	0.00945		mg/L		94	80 - 120
Calcium	0.400	0.409	J	mg/L		102	80 - 120
Chromium	0.0300	0.0288		mg/L		96	80 - 120
Cobalt	0.0100	0.0102		mg/L		102	80 - 120
Copper	0.0400	0.0451		mg/L		113	80 - 120
Iron	0.400	0.389		mg/L		97	80 - 120
Lead	0.0300	0.0308		mg/L		103	80 - 120
Manganese	0.0200	0.0210		mg/L		105	80 - 120
Nickel	2.00	2.08		mg/L		104	80 - 120
Zinc	0.404	0.409		mg/L		101	80 - 120
Silver	0.0200	0.0182		mg/L		91	80 - 120
Selenium	0.100	0.105		mg/L		105	80 - 120
Potassium	6.00	5.86		mg/L		98	80 - 120
Sodium	2.00	2.04		mg/L		102	80 - 120
Thallium	0.0600	0.0711		mg/L		119	80 - 120
Vanadium	0.0200	0.0204		mg/L		102	80 - 120

Lab Sample ID: LCS 410-75111/2-A
Matrix: Water
Analysis Batch: 76675

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 75111

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Magnesium	0.200	0.219		mg/L		109	80 - 120

Lab Sample ID: MB 410-75147/1-A
Matrix: Water
Analysis Batch: 75970

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 75147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/10/20 06:34	12/11/20 15:48	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-75147/1-A
Matrix: Water
Analysis Batch: 75970

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 75147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.31	0.16	mg/L		12/10/20 06:34	12/11/20 15:48	1
Antimony	ND		0.052	0.016	mg/L		12/10/20 06:34	12/11/20 15:48	1
Beryllium	ND		0.0052	0.0010	mg/L		12/10/20 06:34	12/11/20 15:48	1
Cadmium	ND		0.0052	0.0010	mg/L		12/10/20 06:34	12/11/20 15:48	1
Chromium	ND		0.015	0.0016	mg/L		12/10/20 06:34	12/11/20 15:48	1
Cobalt	ND		0.0052	0.0015	mg/L		12/10/20 06:34	12/11/20 15:48	1
Copper	ND		0.021	0.012	mg/L		12/10/20 06:34	12/11/20 15:48	1
Lead	ND		0.015	0.0073	mg/L		12/10/20 06:34	12/11/20 15:48	1
Manganese	ND		0.010	0.0031	mg/L		12/10/20 06:34	12/11/20 15:48	1
Zinc	ND		0.021	0.0038	mg/L		12/10/20 06:34	12/11/20 15:48	1
Silver	ND		0.010	0.0052	mg/L		12/10/20 06:34	12/11/20 15:48	1
Selenium	ND		0.052	0.016	mg/L		12/10/20 06:34	12/11/20 15:48	1
Vanadium	ND		0.010	0.0020	mg/L		12/10/20 06:34	12/11/20 15:48	1

Lab Sample ID: MB 410-75147/1-A
Matrix: Water
Analysis Batch: 76517

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 75147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/10/20 06:34	12/14/20 13:40	1
Aluminum	ND		0.31	0.16	mg/L		12/10/20 06:34	12/14/20 13:40	1
Antimony	ND		0.052	0.016	mg/L		12/10/20 06:34	12/14/20 13:40	1
Beryllium	ND		0.0052	0.0010	mg/L		12/10/20 06:34	12/14/20 13:40	1
Cadmium	ND		0.0052	0.0010	mg/L		12/10/20 06:34	12/14/20 13:40	1
Calcium	ND		0.52	0.099	mg/L		12/10/20 06:34	12/14/20 13:40	1
Chromium	ND		0.015	0.0016	mg/L		12/10/20 06:34	12/14/20 13:40	1
Cobalt	ND		0.0052	0.0015	mg/L		12/10/20 06:34	12/14/20 13:40	1
Lead	ND		0.015	0.0073	mg/L		12/10/20 06:34	12/14/20 13:40	1
Magnesium	ND		0.10	0.041	mg/L		12/10/20 06:34	12/14/20 13:40	1
Manganese	ND		0.010	0.0031	mg/L		12/10/20 06:34	12/14/20 13:40	1
Zinc	ND		0.021	0.0038	mg/L		12/10/20 06:34	12/14/20 13:40	1
Selenium	ND		0.052	0.016	mg/L		12/10/20 06:34	12/14/20 13:40	1
Sodium	ND		1.0	0.25	mg/L		12/10/20 06:34	12/14/20 13:40	1
Vanadium	ND		0.010	0.0020	mg/L		12/10/20 06:34	12/14/20 13:40	1

Lab Sample ID: MB 410-75147/1-A
Matrix: Water
Analysis Batch: 77566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 75147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^3+	0.052	0.016	mg/L		12/10/20 06:34	12/16/20 11:40	1
Aluminum	ND		0.31	0.16	mg/L		12/10/20 06:34	12/16/20 11:40	1
Antimony	ND		0.052	0.016	mg/L		12/10/20 06:34	12/16/20 11:40	1
Barium	ND		0.0052	0.0010	mg/L		12/10/20 06:34	12/16/20 11:40	1
Beryllium	ND		0.0052	0.0010	mg/L		12/10/20 06:34	12/16/20 11:40	1
Cadmium	ND		0.0052	0.0010	mg/L		12/10/20 06:34	12/16/20 11:40	1
Calcium	ND		0.52	0.099	mg/L		12/10/20 06:34	12/16/20 11:40	1
Chromium	ND		0.015	0.0016	mg/L		12/10/20 06:34	12/16/20 11:40	1
Cobalt	ND		0.0052	0.0015	mg/L		12/10/20 06:34	12/16/20 11:40	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-75147/1-A
Matrix: Water
Analysis Batch: 77566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 75147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.021	0.012	mg/L		12/10/20 06:34	12/16/20 11:40	1
Iron	ND		0.21	0.041	mg/L		12/10/20 06:34	12/16/20 11:40	1
Lead	ND		0.015	0.0073	mg/L		12/10/20 06:34	12/16/20 11:40	1
Magnesium	ND		0.10	0.041	mg/L		12/10/20 06:34	12/16/20 11:40	1
Manganese	ND		0.010	0.0031	mg/L		12/10/20 06:34	12/16/20 11:40	1
Nickel	ND		0.010	0.0022	mg/L		12/10/20 06:34	12/16/20 11:40	1
Zinc	ND		0.021	0.0038	mg/L		12/10/20 06:34	12/16/20 11:40	1
Silver	ND		0.010	0.0052	mg/L		12/10/20 06:34	12/16/20 11:40	1
Selenium	ND		0.052	0.016	mg/L		12/10/20 06:34	12/16/20 11:40	1
Potassium	ND		0.52	0.21	mg/L		12/10/20 06:34	12/16/20 11:40	1
Sodium	ND		1.0	0.25	mg/L		12/10/20 06:34	12/16/20 11:40	1
Thallium	ND		0.031	0.0083	mg/L		12/10/20 06:34	12/16/20 11:40	1
Vanadium	ND		0.010	0.0020	mg/L		12/10/20 06:34	12/16/20 11:40	1

Lab Sample ID: LCS 410-75147/2-A
Matrix: Water
Analysis Batch: 75970

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 75147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0620		mg/L		103	80 - 120
Aluminum	0.405	0.387		mg/L		96	80 - 120
Antimony	0.100	0.0973		mg/L		97	80 - 120
Beryllium	0.0100	0.00931		mg/L		93	80 - 120
Cadmium	0.0100	0.0102		mg/L		102	80 - 120
Chromium	0.0300	0.0292		mg/L		97	80 - 120
Cobalt	0.0100	0.00967		mg/L		97	80 - 120
Copper	0.0400	0.0407		mg/L		102	80 - 120
Lead	0.0300	0.0284		mg/L		95	80 - 120
Manganese	0.0200	0.0201		mg/L		100	80 - 120
Zinc	0.404	0.426		mg/L		105	80 - 120
Silver	0.0200	0.0186		mg/L		93	80 - 120
Selenium	0.100	0.111		mg/L		111	80 - 120
Vanadium	0.0200	0.0198		mg/L		99	80 - 120

Lab Sample ID: LCS 410-75147/2-A
Matrix: Water
Analysis Batch: 76517

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 75147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0611		mg/L		102	80 - 120
Aluminum	0.405	0.375		mg/L		92	80 - 120
Antimony	0.100	0.100		mg/L		100	80 - 120
Beryllium	0.0100	0.00922		mg/L		92	80 - 120
Cadmium	0.0100	0.0104		mg/L		104	80 - 120
Calcium	0.400	0.414	J	mg/L		103	80 - 120
Chromium	0.0300	0.0293		mg/L		98	80 - 120
Cobalt	0.0100	0.0106		mg/L		106	80 - 120
Lead	0.0300	0.0327		mg/L		109	80 - 120
Magnesium	0.200	0.173		mg/L		86	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-75147/2-A
Matrix: Water
Analysis Batch: 76517

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 75147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.0200	0.0204		mg/L		102	80 - 120
Zinc	0.404	0.444		mg/L		110	80 - 120
Selenium	0.100	0.120		mg/L		120	80 - 120
Sodium	2.00	2.05		mg/L		102	80 - 120
Vanadium	0.0200	0.0190		mg/L		95	80 - 120

Lab Sample ID: LCS 410-75147/2-A
Matrix: Water
Analysis Batch: 77566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 75147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.405	0.426		mg/L		105	80 - 120
Antimony	0.100	0.0898		mg/L		90	80 - 120
Barium	0.0100	0.0101		mg/L		101	80 - 120
Beryllium	0.0100	0.00976		mg/L		98	80 - 120
Cadmium	0.0100	0.0107		mg/L		107	80 - 120
Calcium	0.400	0.397	J	mg/L		99	80 - 120
Chromium	0.0300	0.0300		mg/L		100	80 - 120
Cobalt	0.0100	0.0105		mg/L		105	80 - 120
Copper	0.0400	0.0404		mg/L		101	80 - 120
Iron	0.400	0.385		mg/L		96	80 - 120
Lead	0.0300	0.0325		mg/L		108	80 - 120
Magnesium	0.200	0.197		mg/L		98	80 - 120
Manganese	0.0200	0.0208		mg/L		104	80 - 120
Nickel	2.00	2.11		mg/L		105	80 - 120
Zinc	0.404	0.418		mg/L		104	80 - 120
Silver	0.0200	0.0187		mg/L		94	80 - 120
Potassium	6.00	5.59		mg/L		93	80 - 120
Sodium	2.00	2.03		mg/L		102	80 - 120
Thallium	0.0600	0.0681		mg/L		114	80 - 120
Vanadium	0.0200	0.0203		mg/L		102	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-75297/1-A
Matrix: Water
Analysis Batch: 75598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 75297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/10/20 09:20	12/10/20 19:04	1

Lab Sample ID: LCS 410-75297/2-A
Matrix: Water
Analysis Batch: 75598

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 75297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.977		ug/L		98	80 - 118

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 410-23402-1 MS
Matrix: Water
Analysis Batch: 75598

Client Sample ID: HOFF MW-A
Prep Type: Total/NA
Prep Batch: 75297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		1.00	1.02		ug/L		102	80 - 120

Lab Sample ID: 410-23402-1 MSD
Matrix: Water
Analysis Batch: 75598

Client Sample ID: HOFF MW-A
Prep Type: Total/NA
Prep Batch: 75297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		1.00	1.03		ug/L		103	80 - 120	1	20

Lab Sample ID: 410-23402-1 DU
Matrix: Water
Analysis Batch: 75598

Client Sample ID: HOFF MW-A
Prep Type: Total/NA
Prep Batch: 75297

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		ug/L		NC	20

Method: 2540C-2011 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 410-75813/1
Matrix: Water
Analysis Batch: 75813

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		30	10	mg/L			12/11/20 11:27	1

Lab Sample ID: LCS 410-75813/2
Matrix: Water
Analysis Batch: 75813

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	200	208		mg/L		104	72 - 127

Method: 3500 Fe B-2011 - Iron, Ferrous and Ferric

Lab Sample ID: MB 410-76880/14
Matrix: Water
Analysis Batch: 76880

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND		0.10	0.050	mg/L			12/15/20 09:19	1

Lab Sample ID: 410-23402-1 DU
Matrix: Water
Analysis Batch: 76880

Client Sample ID: HOFF MW-A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ferrous Iron	1.9	HF	1.93		mg/L		0.3	10

Method: 375.4 - Sulfate

Lab Sample ID: MB 410-76930/1
Matrix: Water
Analysis Batch: 76930

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		6.0	2.0	mg/L			12/15/20 10:45	1

Lab Sample ID: LCS 410-76930/7
Matrix: Water
Analysis Batch: 76930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	19.7		mg/L		98	96 - 104

GC/MS VOA

Analysis Batch: 77244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Total/NA	Water	8260C LL	
410-23402-2	HOFF TB-20201209	Total/NA	Water	8260C LL	
MB 410-77244/6	Method Blank	Total/NA	Water	8260C LL	
LCS 410-77244/4	Lab Control Sample	Total/NA	Water	8260C LL	

Analysis Batch: 77374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Total/NA	Water	8260C SIM 14D	
410-23402-2	HOFF TB-20201209	Total/NA	Water	8260C SIM 14D	
MB 410-77374/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-77374/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-77374/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

Analysis Batch: 77834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1 - RA	HOFF MW-A	Total/NA	Water	8260C LL	
MB 410-77834/8	Method Blank	Total/NA	Water	8260C LL	
LCS 410-77834/5	Lab Control Sample	Total/NA	Water	8260C LL	

GC/MS Semi VOA

Prep Batch: 76281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Total/NA	Water	3510C	

Analysis Batch: 76763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Total/NA	Water	8270D	76281

GC Semi VOA

Prep Batch: 77079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Total/NA	Water	3510C	
MB 410-77079/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-77079/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-77079/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 77299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Total/NA	Water	8081B	77079
MB 410-77079/1-A	Method Blank	Total/NA	Water	8081B	77079
LCS 410-77079/2-A	Lab Control Sample	Total/NA	Water	8081B	77079
LCSD 410-77079/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	77079

Metals

Prep Batch: 75111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Total/NA	Water	3010A	
MB 410-75111/1-A	Method Blank	Total/NA	Water	3010A	
LCS 410-75111/2-A	Lab Control Sample	Total/NA	Water	3010A	

Metals

Prep Batch: 75147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Dissolved	Water	Non-Digest Prep	
MB 410-75147/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-75147/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	

Prep Batch: 75297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Dissolved	Water	7470A	
410-23402-1	HOFF MW-A	Total/NA	Water	7470A	
MB 410-75297/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-75297/2-A	Lab Control Sample	Total/NA	Water	7470A	
410-23402-1 MS	HOFF MW-A	Total/NA	Water	7470A	
410-23402-1 MSD	HOFF MW-A	Total/NA	Water	7470A	
410-23402-1 DU	HOFF MW-A	Total/NA	Water	7470A	

Analysis Batch: 75598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Dissolved	Water	7470A	75297
410-23402-1	HOFF MW-A	Total/NA	Water	7470A	75297
MB 410-75297/1-A	Method Blank	Total/NA	Water	7470A	75297
LCS 410-75297/2-A	Lab Control Sample	Total/NA	Water	7470A	75297
410-23402-1 MS	HOFF MW-A	Total/NA	Water	7470A	75297
410-23402-1 MSD	HOFF MW-A	Total/NA	Water	7470A	75297
410-23402-1 DU	HOFF MW-A	Total/NA	Water	7470A	75297

Analysis Batch: 75970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Dissolved	Water	6010C	75147
MB 410-75147/1-A	Method Blank	Total/NA	Water	6010C	75147
LCS 410-75147/2-A	Lab Control Sample	Total/NA	Water	6010C	75147

Analysis Batch: 76517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Dissolved	Water	6010C	75147
MB 410-75147/1-A	Method Blank	Total/NA	Water	6010C	75147
LCS 410-75147/2-A	Lab Control Sample	Total/NA	Water	6010C	75147

Analysis Batch: 76566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Total/NA	Water	6010C	75111
MB 410-75111/1-A	Method Blank	Total/NA	Water	6010C	75111
LCS 410-75111/2-A	Lab Control Sample	Total/NA	Water	6010C	75111

Analysis Batch: 76675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Total/NA	Water	6010C	75111
MB 410-75111/1-A	Method Blank	Total/NA	Water	6010C	75111
LCS 410-75111/2-A	Lab Control Sample	Total/NA	Water	6010C	75111

Analysis Batch: 77566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Dissolved	Water	6010C	75147

Metals (Continued)

Analysis Batch: 77566 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-75147/1-A	Method Blank	Total/NA	Water	6010C	75147
LCS 410-75147/2-A	Lab Control Sample	Total/NA	Water	6010C	75147

General Chemistry

Analysis Batch: 75813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Total/NA	Water	2540C-2011	
MB 410-75813/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 410-75813/2	Lab Control Sample	Total/NA	Water	2540C-2011	

Analysis Batch: 76880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Total/NA	Water	3500 Fe B-2011	
MB 410-76880/14	Method Blank	Total/NA	Water	3500 Fe B-2011	
LCS 410-76880/13	Lab Control Sample	Total/NA	Water	3500 Fe B-2011	
410-23402-1 DU	HOFF MW-A	Total/NA	Water	3500 Fe B-2011	

Analysis Batch: 76930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23402-1	HOFF MW-A	Total/NA	Water	375.4	
MB 410-76930/1	Method Blank	Total/NA	Water	375.4	
LCS 410-76930/7	Lab Control Sample	Total/NA	Water	375.4	

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-23402-1

Client Sample ID: HOFF MW-A

Lab Sample ID: 410-23402-1

Date Collected: 12/09/20 14:45

Matrix: Water

Date Received: 12/09/20 18:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL	RA	1	77834	12/18/20 07:16	K4WN	ELLE
Total/NA	Analysis	8260C LL		1	77244	12/16/20 05:16	UCB5	ELLE
Total/NA	Analysis	8260C SIM 14D		1	77374	12/16/20 10:52	UJML	ELLE
Total/NA	Prep	3510C			76281	12/14/20 10:30	U2SJ	ELLE
Total/NA	Analysis	8270D		1	76763	12/15/20 17:44	W6XI	ELLE
Total/NA	Prep	3510C			77079	12/15/20 17:30	DFX4	ELLE
Total/NA	Analysis	8081B		1	77299	12/16/20 08:39	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			75147	12/10/20 06:34	UJL8	ELLE
Dissolved	Analysis	6010C		1	75970	12/11/20 16:25	MDP5	ELLE
Dissolved	Prep	Non-Digest Prep			75147	12/10/20 06:34	UJL8	ELLE
Dissolved	Analysis	6010C		1	76517	12/14/20 14:30	SB	ELLE
Dissolved	Prep	Non-Digest Prep			75147	12/10/20 06:34	UJL8	ELLE
Dissolved	Analysis	6010C		1	77566	12/16/20 11:59	MDP5	ELLE
Total/NA	Prep	3010A			75111	12/10/20 02:59	UJL8	ELLE
Total/NA	Analysis	6010C		1	76566	12/14/20 16:00	UCIG	ELLE
Total/NA	Prep	3010A			75111	12/10/20 02:59	UJL8	ELLE
Total/NA	Analysis	6010C		1	76675	12/14/20 20:58	UCIG	ELLE
Dissolved	Prep	7470A			75297	12/10/20 09:20	UJLA	ELLE
Dissolved	Analysis	7470A		1	75598	12/10/20 19:20	UEFS	ELLE
Total/NA	Prep	7470A			75297	12/10/20 09:20	UJLA	ELLE
Total/NA	Analysis	7470A		1	75598	12/10/20 19:08	UEFS	ELLE
Total/NA	Analysis	2540C-2011		1	75813	12/11/20 11:27	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	76880	12/15/20 09:19	MFV9	ELLE
Total/NA	Analysis	375.4		4	76930	12/15/20 10:45	USAE	ELLE

Client Sample ID: HOFF TB-20201209

Lab Sample ID: 410-23402-2

Date Collected: 12/09/20 12:00

Matrix: Water

Date Received: 12/09/20 18:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	77244	12/16/20 02:44	UCB5	ELLE
Total/NA	Analysis	8260C SIM 14D		1	77374	12/16/20 10:32	UJML	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-23402-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-22

Method Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-23402-1

Method	Method Description	Protocol	Laboratory
8260C LL	Volatile Organic Compounds by GC/MS	SW846	ELLE
8260C SIM 14D	Volatile Organic Compounds (GC/MS)	SW846	ELLE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ELLE
8081B	Organochlorine Pesticides (GC)	SW846	ELLE
6010C	Metals (ICP)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
2540C-2011	Solids, Total Dissolved (TDS)	SM	ELLE
3500 Fe B-2011	Iron, Ferrous and Ferric	SM	ELLE
375.4	Sulfate	MCAWW	ELLE
3010A	Preparation, Total Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
Non-Digest Prep	Preparation, Non-Digested Aqueous Metals	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-23402-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-23402-1	HOFF MW-A	Water	12/09/20 14:45	12/09/20 18:11	
410-23402-2	HOFF TB-20201209	Water	12/09/20 12:00	12/09/20 18:11	

Environmental Analysis R ustody

eurofins | Lancaster Laboratories Environmental

Acct. # _____

410-23402 Chain of Custody

ntal use only

COC #615283

Client Information

Client: Tetra Tech	Acct. #:
Project Name/#: HOFF	PWSID #:
Project Manager: Jonathan Dzickan	P.O. #:
Sampler: Neb Dedic	Quote #:
State where samples were collected: PA	For Compliance: Yes ☐ No ☒

Sample Identification	Collected Date	Collected Time	Grab	Composite	Soil	Sediment	Tissue	Water	Ground	Potable	Surface	NPDES	Other: DI water	Total # of Containers	VOC	VOC 14 Diox	SVOC	Pesticides	Fe 2+	METALS - Total	METALS - Diss	SO4	TDS
~~MW-A~~ HOFF MW-A	12/9/2020	14:45	X					X						13	X	X	X	X	X	X	X	X	X
HOFF TB-20201209	12/9/2020	12:00											X	4	X	X							

Matrix: Soil ☐ Sediment ☐ Tissue ☐ | Water ☒ Ground ☐ Potable ☐ Surface ☐ NPDES ☐ Other: DI water

Analysis Requested — Preservation and Filtration Codes: HCl | HCl | | | # | HNO3 | HNO3 | | | |

For Lab Use Only

FSC: _____

SCR#: 265107

Preservation Codes

H=HCl	T=Thiosulfate
N=HNO_3	B=NaOH
S=H_2SO_4	P=H_3PO_4
F=Field Filtered	O=Other

Remarks

Turnaround Time (TAT) Requested (please circle)

Standard Rush

(Rush TAT is subject to laboratory approval and surcharge.)

Requested TAT in business days: _____

E-mail address: _____

Data Package Options (circle if required)

Type I (EPA Level 3 Equivalent/non-CLP)	Type VI (Raw Data Only)	
Type III (Reduced non-CLP)	NJ DKQP	TX TRRP-13
NYSDEC Category A or B	MA MCP	CT RCP

Relinquished by	Date	Time	Received by	Date	Time
[signature]	12/9/20	15:35	Stan King	12/9/20	15:35
Stan King	12/9/20	18:20			
			[signature]	12-9-20	1811

EDD Required? Yes No

If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No

(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____

Temperature upon receipt 2.6 °C °C

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The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7044 0919

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 410-23402-1

Login Number: 23402
List Number: 1
Creator: Knoedler, Christine M

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	N/A	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-23571-1
Client Project/Site: Hoff VC

For:
Tetra Tech, Inc.
1 Oxford Valley
Suite 200
Langhorne, Pennsylvania 19047

Attn: Jon Dziekan

Authorized for release by:
1/4/2021 9:45:47 AM

Stephen Gordon, Senior Project Manager
(412)525-0071
Stephen.Gordon@eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Stephen Gordon
Senior Project Manager
1/4/2021 9:45:47 AM

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL.
FH	MS and/or MSD recovery above control limits.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-23571-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-23571-1

Receipt
The samples were received on 12/10/2020 7:20 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.9º C and 4.2º C.

GC/MS VOA
Method 8260C LL: The continuing calibration verification (CCV) associated with batch 410-78295 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene, Carbon disulfide and trans-1,2-Dichloroethene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Methods 8260C LL, 8260D: The continuing calibration verification (CCV) associated with batch 410-78607 recovered outside acceptance criteria, low biased, for Carbon disulfide 1,1-Dichloroethene and trans-1,2-Dichloroethene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260C LL: The method requirement for no headspace was not met on analytical batch 410-78976. Due to the need for re-analysis, the container used for the following sample was previously opened and contained headspace: HOFF IW-1B (410-23571-7). The original sample container did not contain headspace.

Method 8260C SIM 14D: The following samples were diluted due to the abundance of non-target analytes: HOFF MW-F_A (410-23571-1) and HOFF MW-6 (410-23571-5). Elevated reporting limits (RLs) are provided.

Method 8260C SIM 14D: The following sample was diluted due to the abundance of non-target analytes: HOFF IW-1 A (410-23571-6). Elevated reporting limits (RLs) are provided.

Method 8260C SIM 14D: The method requirement for no headspace was not met. The container (s) used for reanalysis of the following sample contained headspace: HOFF IW-1A (410-23571-6).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The method blank for preparation batch 410-77321 and analytical batch 410-77649 contained Naphthalene above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 8270D: Surrogate recovery for the following samples were outside acceptance limits: HOFF MW-F_A (410-23571-1), HOFF MW-F_B (410-23571-2), HOFF IW-1A (410-23571-6) and HOFF IW-1B (410-23571-7). The results have been reported per client request.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Job ID: 410-23571-1 (Continued)

Laboratory: Eurofins Lancaster Laboratories Env, LLC (Continued)

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF MW-F_A

Lab Sample ID: 410-23571-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.5	J	10	1.2	ug/L	20		8260C LL	Total/NA
1,4-Dichlorobenzene	200		10	1.4	ug/L	20		8260C LL	Total/NA
1,2-Dichloroethane	14		10	1.0	ug/L	20		8260C LL	Total/NA
Methylcyclohexane	1.6	J	10	1.0	ug/L	20		8260C LL	Total/NA
Toluene	2.8	J	10	1.4	ug/L	20		8260C LL	Total/NA
Cyclohexane	6.1	J	10	1.0	ug/L	20		8260C LL	Total/NA
1,2,4-Trichlorobenzene	3.8	J	10	1.2	ug/L	20		8260C LL	Total/NA
cis-1,2-Dichloroethene	150		10	1.0	ug/L	20		8260C LL	Total/NA
trans-1,2-Dichloroethene	2.7	J ^c	10	1.2	ug/L	20		8260C LL	Total/NA
Methyl tertiary butyl ether	300		10	1.0	ug/L	20		8260C LL	Total/NA
1,3-Dichlorobenzene	20		10	1.2	ug/L	20		8260C LL	Total/NA
Benzene	51		10	1.0	ug/L	20		8260C LL	Total/NA
1,1,1-Trichloroethane	2.0	J	10	1.2	ug/L	20		8260C LL	Total/NA
Chloroethane	1.7	J	10	1.4	ug/L	20		8260C LL	Total/NA
Vinyl chloride	35		10	2.0	ug/L	20		8260C LL	Total/NA
1,1-Dichloroethane	29		10	1.4	ug/L	20		8260C LL	Total/NA
1,1-Dichloroethene	2.0	J ^c	10	1.2	ug/L	20		8260C LL	Total/NA
Trichloroethene	2.7	J	10	1.2	ug/L	20		8260C LL	Total/NA
Isopropylbenzene	2.6	J	10	1.0	ug/L	20		8260C LL	Total/NA
Chlorobenzene - DL	1200		100	12	ug/L	200		8260C LL	Total/NA
1,2-Dichlorobenzene - DL	610		100	12	ug/L	200		8260C LL	Total/NA
1,4-Dioxane	97		2.0	1.0	ug/L	5		8260C SIM 14D	Total/NA
Acenaphthene	0.92		0.51	0.10	ug/L	1		8270D	Total/NA
Anthracene	0.48	J	0.51	0.10	ug/L	1		8270D	Total/NA
Dibenzofuran	1.1	J	2.0	0.51	ug/L	1		8270D	Total/NA
Fluoranthene	0.28	J	0.51	0.10	ug/L	1		8270D	Total/NA
Fluorene	1.1		0.51	0.10	ug/L	1		8270D	Total/NA
Naphthalene	2.0	B	0.51	0.10	ug/L	1		8270D	Total/NA
Phenanthrene	4.0		0.51	0.10	ug/L	1		8270D	Total/NA
Pyrene	0.19	J	0.51	0.10	ug/L	1		8270D	Total/NA
2-Methylnaphthalene	5.3		0.51	0.10	ug/L	1		8270D	Total/NA
beta-BHC (2C)	0.018	J p	0.11	0.018	ug/L	5		8081B	Total/NA
Dieldrin (2C)	0.036	J p	0.16	0.028	ug/L	5		8081B	Total/NA
Heptachlor (1C)	0.013	J	0.11	0.011	ug/L	5		8081B	Total/NA
Aluminum	2.1		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.029		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	82		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.0032	J	0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.012		0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.018	J *+	0.020	0.012	mg/L	1		6010C	Total/NA
Iron	2.0		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	67		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	6.6		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.018		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.0063	J	0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	5.3		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	110		1.0	0.24	mg/L	1		6010C	Total/NA
Thallium	0.013	J	0.030	0.0081	mg/L	1		6010C	Total/NA
Vanadium	0.0071	J	0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.023		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	79		0.52	0.099	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF MW-F_A (Continued)

Lab Sample ID: 410-23571-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.0087		0.0052	0.0015	mg/L	1		6010C	Dissolved
Magnesium	65		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	6.3		0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.014		0.010	0.0022	mg/L	1		6010C	Dissolved
Potassium	5.2		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	110		1.0	0.25	mg/L	1		6010C	Dissolved
Total Dissolved Solids	550		60	20	mg/L	1		2540C-2011	Total/NA
Ferrous Iron	0.20	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	6.6		6.0	2.0	mg/L	1		375.4	Total/NA

Client Sample ID: HOFF MW-F_B

Lab Sample ID: 410-23571-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	140		5.0	0.70	ug/L	10		8260C LL	Total/NA
1,2,4-Trichlorobenzene	3.1	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
trans-1,2-Dichloroethene	130	^c	5.0	0.60	ug/L	10		8260C LL	Total/NA
1,3-Dichlorobenzene	4.5	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Acetone	130		50	9.0	ug/L	10		8260C LL	Total/NA
Benzene	1.4	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
1,1,1-Trichloroethane	61		5.0	0.60	ug/L	10		8260C LL	Total/NA
Chloromethane	2.6	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Chloroethane	8.8		5.0	0.70	ug/L	10		8260C LL	Total/NA
1,1-Dichloroethane	160		5.0	0.70	ug/L	10		8260C LL	Total/NA
1,2-Dichloropropane	1.5	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
2-Butanone	45	J	50	6.0	ug/L	10		8260C LL	Total/NA
1,1,2-Trichloroethane	2.8	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Trichloroethene	8.3		5.0	0.60	ug/L	10		8260C LL	Total/NA
Chlorobenzene - DL	360		50	6.0	ug/L	100		8260C LL	Total/NA
cis-1,2-Dichloroethene - DL	510		50	5.0	ug/L	100		8260C LL	Total/NA
1,2-Dichlorobenzene - DL	590		50	6.0	ug/L	100		8260C LL	Total/NA
1,4-Dioxane	42		8.0	4.0	ug/L	20		8260C SIM 14D	Total/NA
2,4-Dichlorophenol	0.61	J	2.1	0.51	ug/L	1		8270D	Total/NA
Phenanthrene	0.17	J	0.51	0.10	ug/L	1		8270D	Total/NA
alpha-BHC (2C)	0.0053	J p	0.021	0.0031	ug/L	1		8081B	Total/NA
alpha-Chlordane (2C)	0.0088	J p	0.021	0.0031	ug/L	1		8081B	Total/NA
beta-BHC (1C)	0.011	J p	0.021	0.0035	ug/L	1		8081B	Total/NA
delta-BHC (2C)	0.0046	J p	0.021	0.0035	ug/L	1		8081B	Total/NA
Endosulfan II (2C)	0.021	J	0.041	0.016	ug/L	1		8081B	Total/NA
Endosulfan sulfate (1C)	0.015	J	0.031	0.0060	ug/L	1		8081B	Total/NA
Heptachlor (1C)	0.0091	J p	0.021	0.0021	ug/L	1		8081B	Total/NA
p,p'-DDD (2C)	0.023	J p	0.031	0.0052	ug/L	1		8081B	Total/NA
Aluminum	1.4		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.10		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	510		2.5	0.48	mg/L	5		6010C	Total/NA
Chromium	0.0049	J	0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0027	J	0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.085	*+	0.020	0.012	mg/L	1		6010C	Total/NA
Iron	1.6		0.20	0.040	mg/L	1		6010C	Total/NA
Lead	0.014	J	0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	250		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	1.7		0.010	0.0030	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF MW-F_B (Continued)

Lab Sample ID: 410-23571-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.058		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.017	J	0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	35		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	270		1.0	0.24	mg/L	1		6010C	Total/NA
Vanadium	0.0099	J	0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.091		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	540		2.6	0.49	mg/L	5		6010C	Dissolved
Chromium	0.0040	J	0.015	0.0016	mg/L	1		6010C	Dissolved
Copper	0.054		0.021	0.012	mg/L	1		6010C	Dissolved
Iron	0.087	J	0.21	0.041	mg/L	1		6010C	Dissolved
Magnesium	240		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	1.6		0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.052		0.010	0.0022	mg/L	1		6010C	Dissolved
Zinc	0.011	J	0.021	0.0038	mg/L	1		6010C	Dissolved
Potassium	31		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	260		1.0	0.25	mg/L	1		6010C	Dissolved
Vanadium	0.0057	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	0.19	J	0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	0.19	J	0.20	0.079	ug/L	1		7470A	Dissolved
Total Dissolved Solids	4700		240	80	mg/L	1		2540C-2011	Total/NA
Sulfate	770		300	100	mg/L	50		375.4	Total/NA

Client Sample ID: HOFF MW-E

Lab Sample ID: 410-23571-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.16	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Chlorobenzene	0.12	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
cis-1,2-Dichloroethene	0.22	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
Methyl tertiary butyl ether	0.052	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,1-Dichloroethane	0.19	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Trichloroethene	0.33	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
1,2-Dichlorobenzene	0.75		0.50	0.060	ug/L	1		8260C LL	Total/NA
1,4-Dioxane	0.70		0.40	0.20	ug/L	1		8260C SIM 14D	Total/NA
Aluminum	0.71		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.0062		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	97		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.0023	J	0.015	0.0016	mg/L	1		6010C	Total/NA
Iron	0.39		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	31		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.021		0.010	0.0030	mg/L	1		6010C	Total/NA
Potassium	2.7		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	21		1.0	0.24	mg/L	1		6010C	Total/NA
Vanadium	0.0058	J	0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.0041	J	0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	110		0.52	0.099	mg/L	1		6010C	Dissolved
Magnesium	33		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.018		0.010	0.0031	mg/L	1		6010C	Dissolved
Potassium	2.6		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	23		1.0	0.25	mg/L	1		6010C	Dissolved
Vanadium	0.0051	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	0.095	J	0.20	0.079	ug/L	1		7470A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF MW-E (Continued) — Lab Sample ID: 410-23571-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.092	J	0.20	0.079	ug/L	1		7470A	Dissolved
Total Dissolved Solids	510		60	20	mg/L	1		2540C-2011	Total/NA
Ferrous Iron	0.10	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	41		24	8.0	mg/L	4		375.4	Total/NA

Client Sample ID: HOFF MW-10 — Lab Sample ID: 410-23571-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	1.6		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,3-Dichlorobenzene	0.10	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Acetone	1.4	J	5.0	0.90	ug/L	1		8260C LL	Total/NA
Benzene	0.23	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,2-Dichlorobenzene	0.30	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Chlorobenzene - DL	40		5.0	0.60	ug/L	10		8260C LL	Total/NA
Benzo[a]anthracene	0.16	J	0.56	0.11	ug/L	1		8270D	Total/NA
Benzo[a]pyrene	0.15	J	0.56	0.11	ug/L	1		8270D	Total/NA
Benzo[b]fluoranthene	0.18	J	0.56	0.11	ug/L	1		8270D	Total/NA
Benzo[g,h,i]perylene	1.1		0.56	0.11	ug/L	1		8270D	Total/NA
Fluoranthene	0.29	J	0.56	0.11	ug/L	1		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.58		0.56	0.11	ug/L	1		8270D	Total/NA
Pyrene	0.29	J	0.56	0.11	ug/L	1		8270D	Total/NA
Aluminum	11		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.11		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	96		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.019		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0061		0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.050		0.020	0.012	mg/L	1		6010C	Total/NA
Iron	10		0.20	0.040	mg/L	1		6010C	Total/NA
Lead	0.011	J	0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	21		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.61		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.010		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	2.5		0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	5.6		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	7.4		1.0	0.24	mg/L	1		6010C	Total/NA
Vanadium	0.020		0.010	0.0019	mg/L	1		6010C	Total/NA
Aluminum	0.37		0.31	0.16	mg/L	1		6010C	Dissolved
Barium	0.055		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	100		0.52	0.099	mg/L	1		6010C	Dissolved
Iron	0.77		0.21	0.041	mg/L	1		6010C	Dissolved
Magnesium	19		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.32		0.010	0.0031	mg/L	1		6010C	Dissolved
Zinc	0.45		0.021	0.0038	mg/L	1		6010C	Dissolved
Potassium	4.5		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	7.3		1.0	0.25	mg/L	1		6010C	Dissolved
Vanadium	0.0020	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	0.13	J	0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	0.086	J	0.20	0.079	ug/L	1		7470A	Dissolved
Total Dissolved Solids	370		60	20	mg/L	1		2540C-2011	Total/NA
Ferrous Iron	8.7	HF	0.50	0.25	mg/L	5		3500 Fe B-2011	Total/NA
Sulfate	110	FH	60	20	mg/L	10		375.4	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF MW-6 — Lab Sample ID: 410-23571-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.3	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
1,4-Dichlorobenzene	21		5.0	0.70	ug/L	10		8260C LL	Total/NA
Methylcyclohexane	0.84	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
Cyclohexane	0.75	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
1,3-Dichlorobenzene	1.0	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Benzene	2.5	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
1,2-Dichlorobenzene	3.5	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Chlorobenzene - DL	540		50	6.0	ug/L	100		8260C LL	Total/NA
1,4-Dioxane	3.5		0.80	0.40	ug/L	2		8260C SIM 14D	Total/NA
Benzo[a]anthracene	0.15	J	0.55	0.11	ug/L	1		8270D	Total/NA
Benzo[a]pyrene	0.20	J	0.55	0.11	ug/L	1		8270D	Total/NA
Benzo[b]fluoranthene	0.27	J	0.55	0.11	ug/L	1		8270D	Total/NA
Benzo[g,h,i]perylene	0.16	J	0.55	0.11	ug/L	1		8270D	Total/NA
Benzo[k]fluoranthene	0.13	J	0.55	0.11	ug/L	1		8270D	Total/NA
Acenaphthene	1.3		0.55	0.11	ug/L	1		8270D	Total/NA
Chrysene	0.16	J	0.55	0.11	ug/L	1		8270D	Total/NA
Fluoranthene	0.22	J	0.55	0.11	ug/L	1		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.17	J	0.55	0.11	ug/L	1		8270D	Total/NA
Phenanthrene	0.13	J	0.55	0.11	ug/L	1		8270D	Total/NA
Pyrene	0.60		0.55	0.11	ug/L	1		8270D	Total/NA
2-Chlorophenol	0.93	J	2.2	0.55	ug/L	1		8270D	Total/NA
beta-BHC (2C)	0.077	p	0.020	0.0034	ug/L	1		8081B	Total/NA
gamma-BHC (Lindane) (2C)	0.0040	J p	0.020	0.0020	ug/L	1		8081B	Total/NA
p,p'-DDT (1C)	0.0088	J p	0.030	0.0053	ug/L	1		8081B	Total/NA
Aluminum	0.38		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.036		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	78		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.0016	J	0.015	0.0016	mg/L	1		6010C	Total/NA
Iron	1.1		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	16		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.92		0.010	0.0030	mg/L	1		6010C	Total/NA
Zinc	0.031		0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	4.6		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	9.2		1.0	0.24	mg/L	1		6010C	Total/NA
Vanadium	0.0019	J	0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.032		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	79		0.52	0.099	mg/L	1		6010C	Dissolved
Iron	0.59		0.21	0.041	mg/L	1		6010C	Dissolved
Magnesium	16		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.96		0.010	0.0031	mg/L	1		6010C	Dissolved
Potassium	4.4		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	9.5		1.0	0.25	mg/L	1		6010C	Dissolved
Mercury	0.081	J	0.20	0.079	ug/L	1		7470A	Total/NA
Total Dissolved Solids	230		120	40	mg/L	1		2540C-2011	Total/NA
Ferrous Iron	0.91	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	27		6.0	2.0	mg/L	1		375.4	Total/NA

Client Sample ID: HOFF IW-1A — Lab Sample ID: 410-23571-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	29		1.0	0.14	ug/L	2		8260C LL	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Client Sample ID: HOFF IW-1A (Continued)

Lab Sample ID: 410-23571-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.63	J	1.0	0.10	ug/L	2		8260C LL	Total/NA
Chlorobenzene	2.2		1.0	0.12	ug/L	2		8260C LL	Total/NA
1,2,4-Trichlorobenzene	3.0		1.0	0.12	ug/L	2		8260C LL	Total/NA
Dibromochloromethane	4.5		1.0	0.14	ug/L	2		8260C LL	Total/NA
Tetrachloroethene	0.50	J	1.0	0.12	ug/L	2		8260C LL	Total/NA
cis-1,2-Dichloroethene	0.27	J	1.0	0.10	ug/L	2		8260C LL	Total/NA
1,3-Dichlorobenzene	1.4		1.0	0.12	ug/L	2		8260C LL	Total/NA
2-Hexanone	1.2	J	10	1.2	ug/L	2		8260C LL	Total/NA
Chloroform	2.2		1.0	0.18	ug/L	2		8260C LL	Total/NA
Benzene	0.11	J	1.0	0.10	ug/L	2		8260C LL	Total/NA
1,1,1-Trichloroethane	8.5		1.0	0.12	ug/L	2		8260C LL	Total/NA
Bromomethane	15		1.0	0.14	ug/L	2		8260C LL	Total/NA
Chloroethane	5.4		1.0	0.14	ug/L	2		8260C LL	Total/NA
Methylene Chloride	2.3		1.0	0.14	ug/L	2		8260C LL	Total/NA
Carbon disulfide	0.67	J ^c	2.0	0.12	ug/L	2		8260C LL	Total/NA
Bromoform	13		2.0	0.60	ug/L	2		8260C LL	Total/NA
Bromodichloromethane	1.7		1.0	0.10	ug/L	2		8260C LL	Total/NA
1,2-Dichloropropane	0.76	J	1.0	0.12	ug/L	2		8260C LL	Total/NA
2-Butanone	89		10	1.2	ug/L	2		8260C LL	Total/NA
1,1,2-Trichloroethane	0.67	J	1.0	0.12	ug/L	2		8260C LL	Total/NA
Methyl acetate	4.1		2.0	0.20	ug/L	2		8260C LL	Total/NA
1,1,2,2-Tetrachloroethane	0.21	J	1.0	0.14	ug/L	2		8260C LL	Total/NA
Acetone - DL	610		100	18	ug/L	20		8260C LL	Total/NA
Chloromethane - DL	63		10	1.2	ug/L	20		8260C LL	Total/NA
1,1-Dichloroethane - DL	130		10	1.4	ug/L	20		8260C LL	Total/NA
1,2-Dichlorobenzene - DL	68		10	1.2	ug/L	20		8260C LL	Total/NA
Aldrin (1C)	0.0025	J	0.019	0.0019	ug/L	1		8081B	Total/NA
Heptachlor (2C)	0.0041	J p	0.019	0.0019	ug/L	1		8081B	Total/NA
Arsenic	0.022	J	0.050	0.016	mg/L	1		6010C	Total/NA
Aluminum	7.7		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.37		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	480		2.5	0.48	mg/L	5		6010C	Total/NA
Chromium	0.21		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0064		0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.028	*+	0.020	0.012	mg/L	1		6010C	Total/NA
Iron	28		0.20	0.040	mg/L	1		6010C	Total/NA
Lead	0.029		0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	1400		0.50	0.20	mg/L	5		6010C	Total/NA
Manganese	0.28		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.024		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.027		0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	120		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	6900		50	12	mg/L	50		6010C	Total/NA
Vanadium	0.034		0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.19		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	2000		2.6	0.49	mg/L	5		6010C	Dissolved
Chromium	0.17		0.015	0.0016	mg/L	1		6010C	Dissolved
Cobalt	0.0057		0.0052	0.0015	mg/L	1		6010C	Dissolved
Copper	0.046		0.021	0.012	mg/L	1		6010C	Dissolved
Magnesium	1300		0.52	0.21	mg/L	5		6010C	Dissolved
Manganese	0.033		0.010	0.0031	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF IW-1A (Continued)

Lab Sample ID: 410-23571-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.023		0.010	0.0022	mg/L	1		6010C	Dissolved
Selenium	0.023	J	0.052	0.016	mg/L	1		6010C	Dissolved
Potassium	110		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	7800		52	12	mg/L	50		6010C	Dissolved
Mercury	2.8		0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	2.6		0.20	0.079	ug/L	1		7470A	Dissolved
Total Dissolved Solids	4700		240	80	mg/L	1		2540C-2011	Total/NA
Ferrous Iron	0.19	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	4500		1200	400	mg/L	200		375.4	Total/NA

Client Sample ID: HOFF IW-1B

Lab Sample ID: 410-23571-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,3-Dichloropropene	0.37	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
1,4-Dichlorobenzene	5.7		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,2-Dichloroethane	1.1		0.50	0.050	ug/L	1		8260C LL	Total/NA
Chlorobenzene	1.1		0.50	0.060	ug/L	1		8260C LL	Total/NA
1,2,4-Trichlorobenzene	0.71		0.50	0.060	ug/L	1		8260C LL	Total/NA
Dibromochloromethane	5.6		0.50	0.070	ug/L	1		8260C LL	Total/NA
Tetrachloroethene	0.28	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
cis-1,2-Dichloroethene	0.10	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
trans-1,2-Dichloroethene	0.073	J ^c	0.50	0.060	ug/L	1		8260C LL	Total/NA
Methyl tertiary butyl ether	0.086	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,3-Dichlorobenzene	0.34	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Carbon tetrachloride	0.74		0.50	0.070	ug/L	1		8260C LL	Total/NA
Benzene	0.68		0.50	0.050	ug/L	1		8260C LL	Total/NA
1,1,1-Trichloroethane	3.0		0.50	0.060	ug/L	1		8260C LL	Total/NA
Bromomethane	16		0.50	0.070	ug/L	1		8260C LL	Total/NA
Chloroethane	4.6		0.50	0.070	ug/L	1		8260C LL	Total/NA
Vinyl chloride	0.16	J	0.50	0.10	ug/L	1		8260C LL	Total/NA
Methylene Chloride	15		0.50	0.070	ug/L	1		8260C LL	Total/NA
Carbon disulfide	0.80	J ^c	1.0	0.060	ug/L	1		8260C LL	Total/NA
Bromoform	0.49	J	1.0	0.30	ug/L	1		8260C LL	Total/NA
Bromodichloromethane	4.1		0.50	0.050	ug/L	1		8260C LL	Total/NA
1,2-Dichloropropane	3.0		0.50	0.060	ug/L	1		8260C LL	Total/NA
2-Butanone	190		5.0	0.60	ug/L	1		8260C LL	Total/NA
1,1,2-Trichloroethane	0.98		0.50	0.060	ug/L	1		8260C LL	Total/NA
Trichloroethene	0.16	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
1,1,2,2-Tetrachloroethane	0.63		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,2-Dichlorobenzene	21		0.50	0.060	ug/L	1		8260C LL	Total/NA
Acetone - DL	440		50	9.0	ug/L	10		8260C LL	Total/NA
Chloroform - DL	3.9	J	5.0	0.90	ug/L	10		8260C LL	Total/NA
Chloromethane - DL	63		5.0	0.60	ug/L	10		8260C LL	Total/NA
1,1-Dichloroethane - DL	110		5.0	0.70	ug/L	10		8260C LL	Total/NA
1,4-Dioxane	12		8.0	4.0	ug/L	20		8260C SIM 14D	Total/NA
alpha-BHC (2C)	0.0050	J p	0.020	0.0030	ug/L	1		8081B	Total/NA
Endrin ketone (2C)	0.0094	J	0.030	0.0049	ug/L	1		8081B	Total/NA
gamma-BHC (Lindane) (1C)	0.0057	J	0.020	0.0020	ug/L	1		8081B	Total/NA
p,p'-DDT (1C)	0.0073	J	0.030	0.0051	ug/L	1		8081B	Total/NA
Arsenic	0.023	J	0.050	0.016	mg/L	1		6010C	Total/NA
Aluminum	6.8		0.30	0.15	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF IW-1B (Continued)

Lab Sample ID: 410-23571-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.13		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	410		2.5	0.48	mg/L	5		6010C	Total/NA
Chromium	0.066		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0055		0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.029	*+	0.020	0.012	mg/L	1		6010C	Total/NA
Iron	19		0.20	0.040	mg/L	1		6010C	Total/NA
Lead	0.030		0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	1100		0.50	0.20	mg/L	5		6010C	Total/NA
Manganese	0.14		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.011		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.017	J	0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	61		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	5000		50	12	mg/L	50		6010C	Total/NA
Vanadium	0.030		0.010	0.0019	mg/L	1		6010C	Total/NA
Aluminum	0.74		0.31	0.16	mg/L	1		6010C	Dissolved
Barium	0.056		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	1500		2.6	0.49	mg/L	5		6010C	Dissolved
Chromium	0.056		0.015	0.0016	mg/L	1		6010C	Dissolved
Copper	0.031		0.021	0.012	mg/L	1		6010C	Dissolved
Iron	1.1		0.21	0.041	mg/L	1		6010C	Dissolved
Lead	0.012	J	0.015	0.0073	mg/L	1		6010C	Dissolved
Magnesium	1000		0.52	0.21	mg/L	5		6010C	Dissolved
Manganese	0.038		0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.011		0.010	0.0022	mg/L	1		6010C	Dissolved
Zinc	0.0054	J	0.021	0.0038	mg/L	1		6010C	Dissolved
Potassium	51		2.6	1.1	mg/L	5		6010C	Dissolved
Sodium	5000		21	4.9	mg/L	20		6010C	Dissolved
Vanadium	0.0086	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	4.0		0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	3.2		0.20	0.079	ug/L	1		7470A	Dissolved
Total Dissolved Solids	5500		240	80	mg/L	1		2540C-2011	Total/NA
Ferrous Iron	0.16	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	3400		600	200	mg/L	100		375.4	Total/NA

Client Sample ID: TB-01-120920

Lab Sample ID: 410-23571-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.9		5.0	0.90	ug/L	1		8260C LL	Total/NA
Chloroform	0.20	J	0.50	0.090	ug/L	1		8260C LL	Total/NA
2-Butanone	2.5	J	5.0	0.60	ug/L	1		8260C LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF MW-F_A

Date Collected: 12/09/20 16:10
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-1

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			12/19/20 02:18	20
trans-1,3-Dichloropropene	ND		10	1.2	ug/L			12/19/20 02:18	20
Ethylbenzene	**1.5**	**J**	10	1.2	ug/L			12/19/20 02:18	20
Styrene	ND		10	1.0	ug/L			12/19/20 02:18	20
1,4-Dichlorobenzene	**200**		10	1.4	ug/L			12/19/20 02:18	20
1,2-Dibromoethane	ND		10	1.2	ug/L			12/19/20 02:18	20
1,2-Dichloroethane	**14**		10	1.0	ug/L			12/19/20 02:18	20
4-Methyl-2-pentanone	ND		100	14	ug/L			12/19/20 02:18	20
Methylcyclohexane	**1.6**	**J**	10	1.0	ug/L			12/19/20 02:18	20
Toluene	**2.8**	**J**	10	1.4	ug/L			12/19/20 02:18	20
Cyclohexane	**6.1**	**J**	10	1.0	ug/L			12/19/20 02:18	20
1,2,4-Trichlorobenzene	**3.8**	**J**	10	1.2	ug/L			12/19/20 02:18	20
Dibromochloromethane	ND		10	1.4	ug/L			12/19/20 02:18	20
Xylenes, Total	ND		20	3.0	ug/L			12/19/20 02:18	20
Tetrachloroethene	ND		10	1.2	ug/L			12/19/20 02:18	20
cis-1,2-Dichloroethene	**150**		10	1.0	ug/L			12/19/20 02:18	20
trans-1,2-Dichloroethene	**2.7**	**J ^c**	10	1.2	ug/L			12/19/20 02:18	20
Methyl tertiary butyl ether	**300**		10	1.0	ug/L			12/19/20 02:18	20
1,3-Dichlorobenzene	**20**		10	1.2	ug/L			12/19/20 02:18	20
Carbon tetrachloride	ND		10	1.4	ug/L			12/19/20 02:18	20
2-Hexanone	ND		100	12	ug/L			12/19/20 02:18	20
Acetone	ND		100	18	ug/L			12/19/20 02:18	20
Chloroform	ND		10	1.8	ug/L			12/19/20 02:18	20
Benzene	**51**		10	1.0	ug/L			12/19/20 02:18	20
1,1,1-Trichloroethane	**2.0**	**J**	10	1.2	ug/L			12/19/20 02:18	20
Bromomethane	ND		10	1.4	ug/L			12/19/20 02:18	20
Chloromethane	ND		10	1.2	ug/L			12/19/20 02:18	20
Chloroethane	**1.7**	**J**	10	1.4	ug/L			12/19/20 02:18	20
Vinyl chloride	**35**		10	2.0	ug/L			12/19/20 02:18	20
Methylene Chloride	ND		10	1.4	ug/L			12/19/20 02:18	20
Carbon disulfide	ND	^c	20	1.2	ug/L			12/19/20 02:18	20
Bromoform	ND		20	6.0	ug/L			12/19/20 02:18	20
Bromodichloromethane	ND		10	1.0	ug/L			12/19/20 02:18	20
1,1-Dichloroethane	**29**		10	1.4	ug/L			12/19/20 02:18	20
1,1-Dichloroethene	**2.0**	**J ^c**	10	1.2	ug/L			12/19/20 02:18	20
Trichlorofluoromethane	ND		10	1.0	ug/L			12/19/20 02:18	20
Dichlorodifluoromethane	ND		10	1.0	ug/L			12/19/20 02:18	20
Freon 113	ND		10	1.2	ug/L			12/19/20 02:18	20
1,2-Dichloropropane	ND		10	1.2	ug/L			12/19/20 02:18	20
2-Butanone	ND		100	12	ug/L			12/19/20 02:18	20
1,1,2-Trichloroethane	ND		10	1.2	ug/L			12/19/20 02:18	20
Trichloroethene	**2.7**	**J**	10	1.2	ug/L			12/19/20 02:18	20
Methyl acetate	ND		20	2.0	ug/L			12/19/20 02:18	20
1,1,2,2-Tetrachloroethane	ND		10	1.4	ug/L			12/19/20 02:18	20
1,2-Dibromo-3-Chloropropane	ND		10	2.0	ug/L			12/19/20 02:18	20
Isopropylbenzene	**2.6**	**J**	10	1.0	ug/L			12/19/20 02:18	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*12/19/20 02:18*	*20*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*12/19/20 02:18*	*20*

Client Sample ID: HOFF MW-F_A
Date Collected: 12/09/20 16:10
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-1
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/19/20 02:18*	*20*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/19/20 02:18*	*20*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**1200**		100	12	ug/L			12/19/20 02:39	200
1,2-Dichlorobenzene	**610**		100	12	ug/L			12/19/20 02:39	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*12/19/20 02:39*	*200*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*12/19/20 02:39*	*200*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*12/19/20 02:39*	*200*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/19/20 02:39*	*200*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**97**		2.0	1.0	ug/L			12/18/20 14:48	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*85*		*80 - 120*		*12/18/20 14:48*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.1	ug/L		12/16/20 08:00	12/17/20 18:18	1
2,4-Dichlorophenol	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
2,4-Dimethylphenol	ND		10	3.1	ug/L		12/16/20 08:00	12/17/20 18:18	1
2,4-Dinitrophenol	ND		31	14	ug/L		12/16/20 08:00	12/17/20 18:18	1
2,4-Dinitrotoluene	ND		5.1	1.0	ug/L		12/16/20 08:00	12/17/20 18:18	1
2,4,5-Trichlorophenol	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
2,4,6-Trichlorophenol	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
Di-n-butyl phthalate	ND		5.1	2.0	ug/L		12/16/20 08:00	12/17/20 18:18	1
Di-n-octyl phthalate	ND		11	5.1	ug/L		12/16/20 08:00	12/17/20 18:18	1
Benzo[a]anthracene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Benzo[a]pyrene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Benzo[b]fluoranthene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Benzo[g,h,i]perylene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Benzo[k]fluoranthene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Acenaphthene	**0.92**		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Acenaphthylene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Acetophenone	ND		10	4.1	ug/L		12/16/20 08:00	12/17/20 18:18	1
Anthracene	**0.48**	**J**	0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Atrazine	ND		5.1	2.0	ug/L		12/16/20 08:00	12/17/20 18:18	1
Benzaldehyde	ND		10	3.1	ug/L		12/16/20 08:00	12/17/20 18:18	1
Butylbenzylphthalate	ND		5.1	2.0	ug/L		12/16/20 08:00	12/17/20 18:18	1
Caprolactam	ND		11	5.1	ug/L		12/16/20 08:00	12/17/20 18:18	1
Carbazole	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
Chrysene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Dibenz(a,h)anthracene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Dibenzofuran	**1.1**	**J**	2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1

Client Sample ID: HOFF MW-F_A
Date Collected: 12/09/20 16:10
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Lab Sample ID: 410-23571-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	ND		5.1	2.0	ug/L		12/16/20 08:00	12/17/20 18:18	1
Dimethyl phthalate	ND		5.1	2.0	ug/L		12/16/20 08:00	12/17/20 18:18	1
Hexachlorobenzene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Hexachlorobutadiene	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
Hexachlorocyclopentadiene	ND	*+	11	5.1	ug/L		12/16/20 08:00	12/17/20 18:18	1
Hexachloroethane	ND		5.1	1.0	ug/L		12/16/20 08:00	12/17/20 18:18	1
Fluoranthene	**0.28**	**J**	0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Fluorene	**1.1**		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Indeno[1,2,3-cd]pyrene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Isophorone	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
N-Nitrosodi-n-propylamine	ND		3.1	0.72	ug/L		12/16/20 08:00	12/17/20 18:18	1
N-Nitrosodiphenylamine	ND		3.1	0.72	ug/L		12/16/20 08:00	12/17/20 18:18	1
Naphthalene	**2.0**	**B**	0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Nitrobenzene	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
Pentachlorophenol	ND		5.1	1.0	ug/L		12/16/20 08:00	12/17/20 18:18	1
Phenanthrene	**4.0**		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Phenol	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
Pyrene	**0.19**	**J**	0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
2-Chloronaphthalene	ND		1.0	0.41	ug/L		12/16/20 08:00	12/17/20 18:18	1
2-Chlorophenol	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
2-Methylnaphthalene	**5.3**		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:18	1
2-Methylphenol	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
2-Nitroaniline	ND		5.1	2.0	ug/L		12/16/20 08:00	12/17/20 18:18	1
2-Nitrophenol	ND		10	3.1	ug/L		12/16/20 08:00	12/17/20 18:18	1
3,3'-Dichlorobenzidine	ND		10	3.1	ug/L		12/16/20 08:00	12/17/20 18:18	1
3-Nitroaniline	ND		7.2	3.1	ug/L		12/16/20 08:00	12/17/20 18:18	1
4,6-Dinitro-2-methylphenol	ND		22	8.2	ug/L		12/16/20 08:00	12/17/20 18:18	1
4-Bromophenyl-phenylether	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
4-Methylphenol	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
4-Nitroaniline	ND		3.1	0.92	ug/L		12/16/20 08:00	12/17/20 18:18	1
4-Nitrophenol	ND		31	10	ug/L		12/16/20 08:00	12/17/20 18:18	1
Bis(2-chloroethoxy)methane	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
Bis(2-chloroethyl)ether	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
Bis(2-ethylhexyl) phthalate	ND		11	5.1	ug/L		12/16/20 08:00	12/17/20 18:18	1
2,6-Dinitrotoluene	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1
4-Chloro-3-methylphenol	ND		3.6	1.6	ug/L		12/16/20 08:00	12/17/20 18:18	1
4-Chloroaniline	ND		10	4.1	ug/L		12/16/20 08:00	12/17/20 18:18	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.51	ug/L		12/16/20 08:00	12/17/20 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*27*		*10 - 150*	*12/16/20 08:00*	*12/17/20 18:18*	*1*
2-Fluorobiphenyl (Surr)	*42*	*S1-*	*44 - 102*	*12/16/20 08:00*	*12/17/20 18:18*	*1*
2-Fluorophenol (Surr)	*26*		*10 - 84*	*12/16/20 08:00*	*12/17/20 18:18*	*1*
Nitrobenzene-d5 (Surr)	*66*		*23 - 128*	*12/16/20 08:00*	*12/17/20 18:18*	*1*
p-Terphenyl-d14 (Surr)	*67*		*31 - 113*	*12/16/20 08:00*	*12/17/20 18:18*	*1*
Phenol-d5 (Surr)	*31*		*10 - 67*	*12/16/20 08:00*	*12/17/20 18:18*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.11	0.011	ug/L		12/15/20 17:30	12/16/20 08:50	5

Client Sample ID: HOFF MW-F_A
Date Collected: 12/09/20 16:10
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-1
Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC (1C)	ND		0.11	0.016	ug/L		12/15/20 17:30	12/16/20 08:50	5
alpha-Chlordane (1C)	ND		0.11	0.016	ug/L		12/15/20 17:30	12/16/20 08:50	5
beta-BHC (2C)	**0.018**	**J p**	0.11	0.018	ug/L		12/15/20 17:30	12/16/20 08:50	5
delta-BHC (2C)	ND		0.11	0.018	ug/L		12/15/20 17:30	12/16/20 08:50	5
Dieldrin (2C)	**0.036**	**J p**	0.16	0.028	ug/L		12/15/20 17:30	12/16/20 08:50	5
Endosulfan I (1C)	ND		0.11	0.023	ug/L		12/15/20 17:30	12/16/20 08:50	5
Endosulfan II (1C)	ND		0.21	0.079	ug/L		12/15/20 17:30	12/16/20 08:50	5
Endosulfan sulfate (1C)	ND		0.16	0.031	ug/L		12/15/20 17:30	12/16/20 08:50	5
Endrin (1C)	ND		0.16	0.043	ug/L		12/15/20 17:30	12/16/20 08:50	5
Endrin aldehyde (1C)	ND		0.53	0.11	ug/L		12/15/20 17:30	12/16/20 08:50	5
Endrin ketone (1C)	ND		0.16	0.026	ug/L		12/15/20 17:30	12/16/20 08:50	5
gamma-BHC (Lindane) (2C)	ND		0.11	0.011	ug/L		12/15/20 17:30	12/16/20 08:50	5
gamma-Chlordane (1C)	ND		0.21	0.037	ug/L		12/15/20 17:30	12/16/20 08:50	5
Heptachlor (1C)	**0.013**	**J**	0.11	0.011	ug/L		12/15/20 17:30	12/16/20 08:50	5
Heptachlor epoxide (1C)	ND		0.11	0.012	ug/L		12/15/20 17:30	12/16/20 08:50	5
Methoxychlor (1C)	ND		0.58	0.16	ug/L		12/15/20 17:30	12/16/20 08:50	5
Toxaphene (1C)	ND		5.3	1.6	ug/L		12/15/20 17:30	12/16/20 08:50	5
p,p'-DDD (1C)	ND		0.16	0.026	ug/L		12/15/20 17:30	12/16/20 08:50	5
p,p'-DDE (1C)	ND		0.16	0.026	ug/L		12/15/20 17:30	12/16/20 08:50	5
p,p'-DDT (1C)	ND		0.16	0.027	ug/L		12/15/20 17:30	12/16/20 08:50	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*48*		*32 - 149*	*12/15/20 17:30*	*12/16/20 08:50*	*5*
DCB Decachlorobiphenyl (Surr) (2C)	*51*		*32 - 149*	*12/15/20 17:30*	*12/16/20 08:50*	*5*
Tetrachloro-m-xylene (Surr) (1C)	*47*		*29 - 129*	*12/15/20 17:30*	*12/16/20 08:50*	*5*
Tetrachloro-m-xylene (Surr) (2C)	*43*		*29 - 129*	*12/15/20 17:30*	*12/16/20 08:50*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 14:59	1
Aluminum	**2.1**		0.30	0.15	mg/L		12/14/20 06:02	12/17/20 14:59	1
Antimony	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 14:59	1
Barium	**0.029**		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 14:59	1
Beryllium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 14:59	1
Cadmium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 14:59	1
Calcium	**82**		0.50	0.096	mg/L		12/14/20 06:02	12/17/20 21:14	1
Chromium	**0.0032**	**J**	0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 14:59	1
Cobalt	**0.012**		0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 14:59	1
Copper	**0.018**	**J *+**	0.020	0.012	mg/L		12/14/20 06:02	12/17/20 14:59	1
Iron	**2.0**		0.20	0.040	mg/L		12/14/20 06:02	12/17/20 21:14	1
Lead	ND		0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 14:59	1
Magnesium	**67**		0.10	0.040	mg/L		12/14/20 06:02	12/17/20 21:14	1
Manganese	**6.6**		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 14:59	1
Nickel	**0.018**		0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 14:59	1
Zinc	**0.0063**	**J**	0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 14:59	1
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:14	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 14:59	1
Potassium	**5.3**		0.50	0.20	mg/L		12/14/20 06:02	12/18/20 15:49	1
Sodium	**110**		1.0	0.24	mg/L		12/14/20 06:02	12/18/20 15:49	1
Thallium	**0.013**	**J**	0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 14:59	1

Client Sample ID: HOFF MW-F_A

Lab Sample ID: 410-23571-1

Date Collected: 12/09/20 16:10

Matrix: Water

Date Received: 12/10/20 19:20

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	**0.0071**	**J**	0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 14:59	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^1+ ^+ *+	0.052	0.016	mg/L		12/14/20 20:16	12/15/20 17:55	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 20:16	12/15/20 17:55	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:16	12/15/20 17:55	1
Barium	**0.023**		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 17:55	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 17:55	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 17:55	1
Calcium	**79**		0.52	0.099	mg/L		12/14/20 20:16	12/15/20 17:55	1
Chromium	ND		0.015	0.0016	mg/L		12/14/20 20:16	12/15/20 17:55	1
Cobalt	**0.0087**		0.0052	0.0015	mg/L		12/14/20 20:16	12/15/20 17:55	1
Copper	ND		0.021	0.012	mg/L		12/14/20 20:16	12/15/20 17:55	1
Iron	ND		0.21	0.041	mg/L		12/14/20 20:16	12/15/20 17:55	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 20:16	12/15/20 17:55	1
Magnesium	**65**		0.10	0.041	mg/L		12/14/20 20:16	12/15/20 17:55	1
Manganese	**6.3**		0.010	0.0031	mg/L		12/14/20 20:16	12/15/20 17:55	1
Nickel	**0.014**		0.010	0.0022	mg/L		12/14/20 20:16	12/15/20 17:55	1
Zinc	ND	^1+ ^+	0.021	0.0038	mg/L		12/14/20 20:16	12/15/20 17:55	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:16	12/15/20 17:55	1
Selenium	ND	^1+ ^+ *+	0.052	0.016	mg/L		12/14/20 20:16	12/15/20 17:55	1
Potassium	**5.2**		0.52	0.21	mg/L		12/14/20 20:16	12/15/20 17:55	1
Sodium	**110**		1.0	0.25	mg/L		12/14/20 20:16	12/15/20 17:55	1
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:16	12/15/20 17:55	1
Vanadium	ND		0.010	0.0020	mg/L		12/14/20 20:16	12/15/20 17:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/11/20 11:52	12/14/20 14:08	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/11/20 11:52	12/14/20 14:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**550**		60	20	mg/L			12/14/20 11:33	1
Ferrous Iron	**0.20**	**HF**	0.10	0.050	mg/L			12/15/20 09:24	1
Sulfate	**6.6**		6.0	2.0	mg/L			12/15/20 10:45	1

Client Sample ID: HOFF MW-F_B

Lab Sample ID: 410-23571-2

Date Collected: 12/09/20 17:05

Matrix: Water

Date Received: 12/10/20 19:20

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/19/20 03:01	10
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/L			12/19/20 03:01	10
Ethylbenzene	ND		5.0	0.60	ug/L			12/19/20 03:01	10
Styrene	ND		5.0	0.50	ug/L			12/19/20 03:01	10

Client Sample ID: HOFF MW-F_B
Date Collected: 12/09/20 17:05
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-2
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	**140**		5.0	0.70	ug/L			12/19/20 03:01	10
1,2-Dibromoethane	ND		5.0	0.60	ug/L			12/19/20 03:01	10
1,2-Dichloroethane	ND		5.0	0.50	ug/L			12/19/20 03:01	10
4-Methyl-2-pentanone	ND		50	7.0	ug/L			12/19/20 03:01	10
Methylcyclohexane	ND		5.0	0.50	ug/L			12/19/20 03:01	10
Toluene	ND		5.0	0.70	ug/L			12/19/20 03:01	10
Cyclohexane	ND		5.0	0.50	ug/L			12/19/20 03:01	10
1,2,4-Trichlorobenzene	**3.1**	**J**	5.0	0.60	ug/L			12/19/20 03:01	10
Dibromochloromethane	ND		5.0	0.70	ug/L			12/19/20 03:01	10
Xylenes, Total	ND		10	1.5	ug/L			12/19/20 03:01	10
Tetrachloroethene	ND		5.0	0.60	ug/L			12/19/20 03:01	10
trans-1,2-Dichloroethene	**130**	**^c**	5.0	0.60	ug/L			12/19/20 03:01	10
Methyl tertiary butyl ether	ND		5.0	0.50	ug/L			12/19/20 03:01	10
1,3-Dichlorobenzene	**4.5**	**J**	5.0	0.60	ug/L			12/19/20 03:01	10
Carbon tetrachloride	ND		5.0	0.70	ug/L			12/19/20 03:01	10
2-Hexanone	ND		50	6.0	ug/L			12/19/20 03:01	10
Acetone	**130**		50	9.0	ug/L			12/19/20 03:01	10
Chloroform	ND		5.0	0.90	ug/L			12/19/20 03:01	10
Benzene	**1.4**	**J**	5.0	0.50	ug/L			12/19/20 03:01	10
1,1,1-Trichloroethane	**61**		5.0	0.60	ug/L			12/19/20 03:01	10
Bromomethane	ND		5.0	0.70	ug/L			12/19/20 03:01	10
Chloromethane	**2.6**	**J**	5.0	0.60	ug/L			12/19/20 03:01	10
Chloroethane	**8.8**		5.0	0.70	ug/L			12/19/20 03:01	10
Vinyl chloride	ND		5.0	1.0	ug/L			12/19/20 03:01	10
Methylene Chloride	ND		5.0	0.70	ug/L			12/19/20 03:01	10
Carbon disulfide	ND	^c	10	0.60	ug/L			12/19/20 03:01	10
Bromoform	ND		10	3.0	ug/L			12/19/20 03:01	10
Bromodichloromethane	ND		5.0	0.50	ug/L			12/19/20 03:01	10
1,1-Dichloroethane	**160**		5.0	0.70	ug/L			12/19/20 03:01	10
1,1-Dichloroethene	ND	^c	5.0	0.60	ug/L			12/19/20 03:01	10
Trichlorofluoromethane	ND		5.0	0.50	ug/L			12/19/20 03:01	10
Dichlorodifluoromethane	ND		5.0	0.50	ug/L			12/19/20 03:01	10
Freon 113	ND		5.0	0.60	ug/L			12/19/20 03:01	10
1,2-Dichloropropane	**1.5**	**J**	5.0	0.60	ug/L			12/19/20 03:01	10
2-Butanone	**45**	**J**	50	6.0	ug/L			12/19/20 03:01	10
1,1,2-Trichloroethane	**2.8**	**J**	5.0	0.60	ug/L			12/19/20 03:01	10
Trichloroethene	**8.3**		5.0	0.60	ug/L			12/19/20 03:01	10
Methyl acetate	ND		10	1.0	ug/L			12/19/20 03:01	10
1,1,2,2-Tetrachloroethane	ND		5.0	0.70	ug/L			12/19/20 03:01	10
1,2-Dibromo-3-Chloropropane	ND		5.0	1.0	ug/L			12/19/20 03:01	10
Isopropylbenzene	ND		5.0	0.50	ug/L			12/19/20 03:01	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*12/19/20 03:01*	*10*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*12/19/20 03:01*	*10*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*12/19/20 03:01*	*10*
Toluene-d8 (Surr)	*87*		*80 - 120*		*12/19/20 03:01*	*10*

Client Sample ID: HOFF MW-F_B

Lab Sample ID: 410-23571-2

Date Collected: 12/09/20 17:05

Matrix: Water

Date Received: 12/10/20 19:20

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**360**		50	6.0	ug/L			12/19/20 03:23	100
cis-1,2-Dichloroethene	**510**		50	5.0	ug/L			12/19/20 03:23	100
1,2-Dichlorobenzene	**590**		50	6.0	ug/L			12/19/20 03:23	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*12/19/20 03:23*	*100*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*12/19/20 03:23*	*100*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*12/19/20 03:23*	*100*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/19/20 03:23*	*100*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**42**		8.0	4.0	ug/L			12/19/20 14:16	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*81*		*80 - 120*		*12/19/20 14:16*	*20*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
2,4-Dichlorophenol	**0.61**	**J**	2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
2,4-Dimethylphenol	ND		10	3.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
2,4-Dinitrophenol	ND		31	14	ug/L		12/16/20 08:00	12/17/20 18:46	1
2,4-Dinitrotoluene	ND		5.1	1.0	ug/L		12/16/20 08:00	12/17/20 18:46	1
2,4,5-Trichlorophenol	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
2,4,6-Trichlorophenol	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
2,2'-oxybis[1-chloropropane]	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
Di-n-butyl phthalate	ND		5.1	2.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
Di-n-octyl phthalate	ND		11	5.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
Benzo[a]anthracene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Benzo[a]pyrene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Benzo[b]fluoranthene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Benzo[g,h,i]perylene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Benzo[k]fluoranthene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Acenaphthene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Acenaphthylene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Acetophenone	ND		10	4.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
Anthracene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Atrazine	ND		5.1	2.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
Benzaldehyde	ND		10	3.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
Butylbenzylphthalate	ND		5.1	2.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
Caprolactam	ND		11	5.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
Carbazole	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
Chrysene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Dibenz(a,h)anthracene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Dibenzofuran	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
Diethyl phthalate	ND		5.1	2.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
Dimethyl phthalate	ND		5.1	2.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
Hexachlorobenzene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Hexachlorobutadiene	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1

Client Sample ID: HOFF MW-F_B
Date Collected: 12/09/20 17:05
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND	*+	11	5.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
Hexachloroethane	ND		5.1	1.0	ug/L		12/16/20 08:00	12/17/20 18:46	1
Fluoranthene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Fluorene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Indeno[1,2,3-cd]pyrene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Isophorone	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
N-Nitrosodi-n-propylamine	ND		3.1	0.72	ug/L		12/16/20 08:00	12/17/20 18:46	1
N-Nitrosodiphenylamine	ND		3.1	0.72	ug/L		12/16/20 08:00	12/17/20 18:46	1
Naphthalene	ND	B	0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Nitrobenzene	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
Pentachlorophenol	ND		5.1	1.0	ug/L		12/16/20 08:00	12/17/20 18:46	1
Phenanthrene	**0.17**	**J**	0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Phenol	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
Pyrene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
2-Chloronaphthalene	ND		1.0	0.41	ug/L		12/16/20 08:00	12/17/20 18:46	1
2-Chlorophenol	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
2-Methylnaphthalene	ND		0.51	0.10	ug/L		12/16/20 08:00	12/17/20 18:46	1
2-Methylphenol	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
2-Nitroaniline	ND		5.1	2.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
2-Nitrophenol	ND		10	3.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
3,3'-Dichlorobenzidine	ND		10	3.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
3-Nitroaniline	ND		7.2	3.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
4,6-Dinitro-2-methylphenol	ND		22	8.2	ug/L		12/16/20 08:00	12/17/20 18:46	1
4-Bromophenyl-phenylether	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
4-Methylphenol	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
4-Nitroaniline	ND		3.1	0.93	ug/L		12/16/20 08:00	12/17/20 18:46	1
4-Nitrophenol	ND		31	10	ug/L		12/16/20 08:00	12/17/20 18:46	1
Bis(2-chloroethoxy)methane	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
Bis(2-chloroethyl)ether	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
Bis(2-ethylhexyl) phthalate	ND		11	5.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
2,6-Dinitrotoluene	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1
4-Chloro-3-methylphenol	ND		3.6	1.6	ug/L		12/16/20 08:00	12/17/20 18:46	1
4-Chloroaniline	ND		10	4.1	ug/L		12/16/20 08:00	12/17/20 18:46	1
4-Chlorophenyl-phenyl ether	ND		2.1	0.51	ug/L		12/16/20 08:00	12/17/20 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*33*		*10 - 150*	*12/16/20 08:00*	*12/17/20 18:46*	*1*
2-Fluorobiphenyl (Surr)	*79*		*44 - 102*	*12/16/20 08:00*	*12/17/20 18:46*	*1*
2-Fluorophenol (Surr)	*9*	*S1-*	*10 - 84*	*12/16/20 08:00*	*12/17/20 18:46*	*1*
Nitrobenzene-d5 (Surr)	*77*		*23 - 128*	*12/16/20 08:00*	*12/17/20 18:46*	*1*
p-Terphenyl-d14 (Surr)	*82*		*31 - 113*	*12/16/20 08:00*	*12/17/20 18:46*	*1*
Phenol-d5 (Surr)	*13*		*10 - 67*	*12/16/20 08:00*	*12/17/20 18:46*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.021	0.0021	ug/L		12/15/20 17:30	12/16/20 09:01	1
alpha-BHC (2C)	**0.0053**	**J p**	0.021	0.0031	ug/L		12/15/20 17:30	12/16/20 09:01	1
alpha-Chlordane (2C)	**0.0088**	**J p**	0.021	0.0031	ug/L		12/15/20 17:30	12/16/20 09:01	1
beta-BHC (1C)	**0.011**	**J p**	0.021	0.0035	ug/L		12/15/20 17:30	12/16/20 09:01	1
delta-BHC (2C)	**0.0046**	**J p**	0.021	0.0035	ug/L		12/15/20 17:30	12/16/20 09:01	1

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF MW-F_B
Date Collected: 12/09/20 17:05
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-2
Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin (1C)	ND		0.031	0.0055	ug/L		12/15/20 17:30	12/16/20 09:01	1
Endosulfan I (1C)	ND		0.021	0.0045	ug/L		12/15/20 17:30	12/16/20 09:01	1
Endosulfan II (2C)	**0.021**	**J**	0.041	0.016	ug/L		12/15/20 17:30	12/16/20 09:01	1
Endosulfan sulfate (1C)	**0.015**	**J**	0.031	0.0060	ug/L		12/15/20 17:30	12/16/20 09:01	1
Endrin (1C)	ND		0.031	0.0084	ug/L		12/15/20 17:30	12/16/20 09:01	1
Endrin aldehyde (1C)	ND		0.10	0.021	ug/L		12/15/20 17:30	12/16/20 09:01	1
Endrin ketone (1C)	ND		0.031	0.0052	ug/L		12/15/20 17:30	12/16/20 09:01	1
gamma-BHC (Lindane) (1C)	ND		0.021	0.0021	ug/L		12/15/20 17:30	12/16/20 09:01	1
gamma-Chlordane (1C)	ND		0.041	0.0073	ug/L		12/15/20 17:30	12/16/20 09:01	1
Heptachlor (1C)	**0.0091**	**J p**	0.021	0.0021	ug/L		12/15/20 17:30	12/16/20 09:01	1
Heptachlor epoxide (1C)	ND		0.021	0.0024	ug/L		12/15/20 17:30	12/16/20 09:01	1
Methoxychlor (2C)	ND		0.11	0.031	ug/L		12/15/20 17:30	12/16/20 09:01	1
Toxaphene (1C)	ND		1.0	0.31	ug/L		12/15/20 17:30	12/16/20 09:01	1
p,p'-DDD (2C)	**0.023**	**J p**	0.031	0.0052	ug/L		12/15/20 17:30	12/16/20 09:01	1
p,p'-DDE (2C)	ND		0.031	0.0052	ug/L		12/15/20 17:30	12/16/20 09:01	1
p,p'-DDT (2C)	ND		0.031	0.0054	ug/L		12/15/20 17:30	12/16/20 09:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*66*		*32 - 149*	*12/15/20 17:30*	*12/16/20 09:01*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*68*		*32 - 149*	*12/15/20 17:30*	*12/16/20 09:01*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*48*		*29 - 129*	*12/15/20 17:30*	*12/16/20 09:01*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*56*		*29 - 129*	*12/15/20 17:30*	*12/16/20 09:01*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:08	1
Aluminum	**1.4**		0.30	0.15	mg/L		12/14/20 06:02	12/17/20 15:08	1
Antimony	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:08	1
Barium	**0.10**		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:08	1
Beryllium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:08	1
Cadmium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:08	1
Calcium	**510**		2.5	0.48	mg/L		12/14/20 06:02	12/17/20 16:11	5
Chromium	**0.0049**	**J**	0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 15:08	1
Cobalt	**0.0027**	**J**	0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 15:08	1
Copper	**0.085**	***+**	0.020	0.012	mg/L		12/14/20 06:02	12/17/20 15:08	1
Iron	**1.6**		0.20	0.040	mg/L		12/14/20 06:02	12/17/20 15:08	1
Lead	**0.014**	**J**	0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 15:08	1
Magnesium	**250**		0.10	0.040	mg/L		12/14/20 06:02	12/17/20 17:14	1
Manganese	**1.7**		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 15:08	1
Nickel	**0.058**		0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 15:08	1
Zinc	**0.017**	**J**	0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 15:08	1
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:18	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:08	1
Potassium	**35**		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 15:08	1
Sodium	**270**		1.0	0.24	mg/L		12/14/20 06:02	12/17/20 17:14	1
Thallium	ND		0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 15:08	1
Vanadium	**0.0099**	**J**	0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 15:08	1

Client Sample ID: HOFF MW-F_B

Lab Sample ID: 410-23571-2

Date Collected: 12/09/20 17:05

Matrix: Water

Date Received: 12/10/20 19:20

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^1+ ^+ *+	0.052	0.016	mg/L		12/14/20 20:16	12/15/20 17:59	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 20:16	12/15/20 17:59	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:16	12/15/20 17:59	1
Barium	**0.091**		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 17:59	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 17:59	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 17:59	1
Calcium	**540**		2.6	0.49	mg/L		12/14/20 20:16	12/15/20 18:18	5
Chromium	**0.0040**	**J**	0.015	0.0016	mg/L		12/14/20 20:16	12/15/20 17:59	1
Cobalt	ND		0.0052	0.0015	mg/L		12/14/20 20:16	12/15/20 17:59	1
Copper	**0.054**		0.021	0.012	mg/L		12/14/20 20:16	12/22/20 09:04	1
Iron	**0.087**	**J**	0.21	0.041	mg/L		12/14/20 20:16	12/15/20 17:59	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 20:16	12/15/20 17:59	1
Magnesium	**240**		0.10	0.041	mg/L		12/14/20 20:16	12/15/20 17:59	1
Manganese	**1.6**		0.010	0.0031	mg/L		12/14/20 20:16	12/15/20 17:59	1
Nickel	**0.052**		0.010	0.0022	mg/L		12/14/20 20:16	12/15/20 17:59	1
Zinc	**0.011**	**J**	0.021	0.0038	mg/L		12/14/20 20:16	12/22/20 09:04	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:16	12/15/20 17:59	1
Selenium	ND	^1+ ^+ *+	0.052	0.016	mg/L		12/14/20 20:16	12/15/20 17:59	1
Potassium	**31**		0.52	0.21	mg/L		12/14/20 20:16	12/15/20 17:59	1
Sodium	**260**		1.0	0.25	mg/L		12/14/20 20:16	12/15/20 17:59	1
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:16	12/15/20 17:59	1
Vanadium	**0.0057**	**J**	0.010	0.0020	mg/L		12/14/20 20:16	12/15/20 17:59	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.19**	**J**	0.20	0.079	ug/L		12/11/20 11:59	12/14/20 15:21	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.19**	**J**	0.20	0.079	ug/L		12/11/20 11:52	12/14/20 14:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4700**		240	80	mg/L			12/14/20 11:33	1
Ferrous Iron	ND	HF	0.10	0.050	mg/L			12/15/20 09:21	1
Sulfate	**770**		300	100	mg/L			12/15/20 10:45	50

Client Sample ID: HOFF MW-E

Lab Sample ID: 410-23571-3

Date Collected: 12/10/20 09:40

Matrix: Water

Date Received: 12/10/20 19:20

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/19/20 00:08	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/19/20 00:08	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/19/20 00:08	1
Styrene	ND		0.50	0.050	ug/L			12/19/20 00:08	1
1,4-Dichlorobenzene	**0.16**	**J**	0.50	0.070	ug/L			12/19/20 00:08	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/19/20 00:08	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/19/20 00:08	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/19/20 00:08	1

Client Sample ID: HOFF MW-E
Date Collected: 12/10/20 09:40
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-3
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		0.50	0.050	ug/L			12/19/20 00:08	1
Toluene	ND		0.50	0.070	ug/L			12/19/20 00:08	1
Chlorobenzene	**0.12**	**J**	0.50	0.060	ug/L			12/19/20 00:08	1
Cyclohexane	ND		0.50	0.050	ug/L			12/19/20 00:08	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			12/19/20 00:08	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/19/20 00:08	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/19/20 00:08	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/19/20 00:08	1
cis-1,2-Dichloroethene	**0.22**	**J**	0.50	0.050	ug/L			12/19/20 00:08	1
trans-1,2-Dichloroethene	ND	^c	0.50	0.060	ug/L			12/19/20 00:08	1
Methyl tertiary butyl ether	**0.052**	**J**	0.50	0.050	ug/L			12/19/20 00:08	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			12/19/20 00:08	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/19/20 00:08	1
2-Hexanone	ND		5.0	0.60	ug/L			12/19/20 00:08	1
Acetone	ND		5.0	0.90	ug/L			12/19/20 00:08	1
Chloroform	ND		0.50	0.090	ug/L			12/19/20 00:08	1
Benzene	ND		0.50	0.050	ug/L			12/19/20 00:08	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/19/20 00:08	1
Bromomethane	ND		0.50	0.070	ug/L			12/19/20 00:08	1
Chloromethane	ND		0.50	0.060	ug/L			12/19/20 00:08	1
Chloroethane	ND		0.50	0.070	ug/L			12/19/20 00:08	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/19/20 00:08	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/19/20 00:08	1
Carbon disulfide	ND	^c	1.0	0.060	ug/L			12/19/20 00:08	1
Bromoform	ND		1.0	0.30	ug/L			12/19/20 00:08	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/19/20 00:08	1
1,1-Dichloroethane	**0.19**	**J**	0.50	0.070	ug/L			12/19/20 00:08	1
1,1-Dichloroethene	ND	^c	0.50	0.060	ug/L			12/19/20 00:08	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/19/20 00:08	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/19/20 00:08	1
Freon 113	ND		0.50	0.060	ug/L			12/19/20 00:08	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/19/20 00:08	1
2-Butanone	ND		5.0	0.60	ug/L			12/19/20 00:08	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/19/20 00:08	1
Trichloroethene	**0.33**	**J**	0.50	0.060	ug/L			12/19/20 00:08	1
Methyl acetate	ND		1.0	0.10	ug/L			12/19/20 00:08	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/19/20 00:08	1
1,2-Dichlorobenzene	**0.75**		0.50	0.060	ug/L			12/19/20 00:08	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/19/20 00:08	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/19/20 00:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*12/19/20 00:08*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*12/19/20 00:08*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*12/19/20 00:08*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/19/20 00:08*	*1*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.70**		0.40	0.20	ug/L			12/18/20 12:47	1

Client Sample ID: HOFF MW-E
Date Collected: 12/10/20 09:40
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*87*		*80 - 120*		*12/18/20 12:47*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		11	3.3	ug/L		12/17/20 16:24	12/18/20 12:36	1
2,4-Dichlorophenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
2,4-Dimethylphenol	ND		11	3.3	ug/L		12/17/20 16:24	12/18/20 12:36	1
2,4-Dinitrophenol	ND		33	16	ug/L		12/17/20 16:24	12/18/20 12:36	1
2,4-Dinitrotoluene	ND		5.5	1.1	ug/L		12/17/20 16:24	12/18/20 12:36	1
2,4,5-Trichlorophenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
2,4,6-Trichlorophenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
2,2'-oxybis[1-chloropropane]	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
Di-n-butyl phthalate	ND		5.5	2.2	ug/L		12/17/20 16:24	12/18/20 12:36	1
Di-n-octyl phthalate	ND		12	5.5	ug/L		12/17/20 16:24	12/18/20 12:36	1
Benzo[a]anthracene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Benzo[a]pyrene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Benzo[b]fluoranthene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Benzo[g,h,i]perylene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Benzo[k]fluoranthene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Acenaphthene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Acenaphthylene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Acetophenone	ND		11	4.4	ug/L		12/17/20 16:24	12/18/20 12:36	1
Anthracene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Atrazine	ND		5.5	2.2	ug/L		12/17/20 16:24	12/18/20 12:36	1
Benzaldehyde	ND		11	3.3	ug/L		12/17/20 16:24	12/18/20 12:36	1
Butylbenzylphthalate	ND		5.5	2.2	ug/L		12/17/20 16:24	12/18/20 12:36	1
Caprolactam	ND		12	5.5	ug/L		12/17/20 16:24	12/18/20 12:36	1
Carbazole	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
Chrysene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Dibenz(a,h)anthracene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Dibenzofuran	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
Diethyl phthalate	ND		5.5	2.2	ug/L		12/17/20 16:24	12/18/20 12:36	1
Dimethyl phthalate	ND		5.5	2.2	ug/L		12/17/20 16:24	12/18/20 12:36	1
Hexachlorobenzene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Hexachlorobutadiene	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
Hexachlorocyclopentadiene	ND	*+	12	5.5	ug/L		12/17/20 16:24	12/18/20 12:36	1
Hexachloroethane	ND		5.5	1.1	ug/L		12/17/20 16:24	12/18/20 12:36	1
Fluoranthene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Fluorene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Indeno[1,2,3-cd]pyrene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Isophorone	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
N-Nitrosodi-n-propylamine	ND		3.3	0.78	ug/L		12/17/20 16:24	12/18/20 12:36	1
N-Nitrosodiphenylamine	ND		3.3	0.78	ug/L		12/17/20 16:24	12/18/20 12:36	1
Naphthalene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Nitrobenzene	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
Pentachlorophenol	ND		5.5	1.1	ug/L		12/17/20 16:24	12/18/20 12:36	1
Phenanthrene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Phenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
Pyrene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
2-Chloronaphthalene	ND		1.1	0.44	ug/L		12/17/20 16:24	12/18/20 12:36	1

Client Sample ID: HOFF MW-E
Date Collected: 12/10/20 09:40
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
2-Methylnaphthalene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 12:36	1
2-Methylphenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
2-Nitroaniline	ND		5.5	2.2	ug/L		12/17/20 16:24	12/18/20 12:36	1
2-Nitrophenol	ND		11	3.3	ug/L		12/17/20 16:24	12/18/20 12:36	1
3,3'-Dichlorobenzidine	ND		11	3.3	ug/L		12/17/20 16:24	12/18/20 12:36	1
3-Nitroaniline	ND		7.8	3.3	ug/L		12/17/20 16:24	12/18/20 12:36	1
4,6-Dinitro-2-methylphenol	ND		23	8.9	ug/L		12/17/20 16:24	12/18/20 12:36	1
4-Bromophenyl-phenylether	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
4-Methylphenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
4-Nitroaniline	ND		3.3	1.0	ug/L		12/17/20 16:24	12/18/20 12:36	1
4-Nitrophenol	ND		33	11	ug/L		12/17/20 16:24	12/18/20 12:36	1
Bis(2-chloroethoxy)methane	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
Bis(2-chloroethyl)ether	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
Bis(2-ethylhexyl) phthalate	ND		12	5.5	ug/L		12/17/20 16:24	12/18/20 12:36	1
2,6-Dinitrotoluene	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1
4-Chloro-3-methylphenol	ND		3.9	1.8	ug/L		12/17/20 16:24	12/18/20 12:36	1
4-Chloroaniline	ND		11	4.4	ug/L		12/17/20 16:24	12/18/20 12:36	1
4-Chlorophenyl-phenyl ether	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*87*		*10 - 150*	*12/17/20 16:24*	*12/18/20 12:36*	*1*
2-Fluorobiphenyl (Surr)	*68*		*44 - 102*	*12/17/20 16:24*	*12/18/20 12:36*	*1*
2-Fluorophenol (Surr)	*38*		*10 - 84*	*12/17/20 16:24*	*12/18/20 12:36*	*1*
Nitrobenzene-d5 (Surr)	*66*		*23 - 128*	*12/17/20 16:24*	*12/18/20 12:36*	*1*
p-Terphenyl-d14 (Surr)	*75*		*31 - 113*	*12/17/20 16:24*	*12/18/20 12:36*	*1*
Phenol-d5 (Surr)	*34*		*10 - 67*	*12/17/20 16:24*	*12/18/20 12:36*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 09:11	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		12/15/20 17:30	12/16/20 09:11	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		12/15/20 17:30	12/16/20 09:11	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		12/15/20 17:30	12/16/20 09:11	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		12/15/20 17:30	12/16/20 09:11	1
Dieldrin (1C)	ND		0.030	0.0054	ug/L		12/15/20 17:30	12/16/20 09:11	1
Endosulfan I (1C)	ND		0.020	0.0044	ug/L		12/15/20 17:30	12/16/20 09:11	1
Endosulfan II (1C)	ND		0.041	0.015	ug/L		12/15/20 17:30	12/16/20 09:11	1
Endosulfan sulfate (1C)	ND		0.030	0.0059	ug/L		12/15/20 17:30	12/16/20 09:11	1
Endrin (1C)	ND		0.030	0.0082	ug/L		12/15/20 17:30	12/16/20 09:11	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		12/15/20 17:30	12/16/20 09:11	1
Endrin ketone (1C)	ND		0.030	0.0051	ug/L		12/15/20 17:30	12/16/20 09:11	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 09:11	1
gamma-Chlordane (1C)	ND		0.041	0.0071	ug/L		12/15/20 17:30	12/16/20 09:11	1
Heptachlor (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 09:11	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		12/15/20 17:30	12/16/20 09:11	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		12/15/20 17:30	12/16/20 09:11	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		12/15/20 17:30	12/16/20 09:11	1
p,p'-DDD (1C)	ND		0.030	0.0051	ug/L		12/15/20 17:30	12/16/20 09:11	1
p,p'-DDE (1C)	ND		0.030	0.0051	ug/L		12/15/20 17:30	12/16/20 09:11	1

Client Sample ID: HOFF MW-E

Lab Sample ID: 410-23571-3

Date Collected: 12/10/20 09:40

Matrix: Water

Date Received: 12/10/20 19:20

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p,p'-DDT (1C)	ND		0.030	0.0053	ug/L		12/15/20 17:30	12/16/20 09:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*69*		*32 - 149*	*12/15/20 17:30*	*12/16/20 09:11*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*72*		*32 - 149*	*12/15/20 17:30*	*12/16/20 09:11*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*60*		*29 - 129*	*12/15/20 17:30*	*12/16/20 09:11*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*59*		*29 - 129*	*12/15/20 17:30*	*12/16/20 09:11*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		12/16/20 03:13	12/16/20 12:12	1
Aluminum	**0.71**		0.30	0.15	mg/L		12/16/20 03:13	12/16/20 12:12	1
Antimony	ND	^1+	0.050	0.016	mg/L		12/16/20 03:13	12/16/20 12:12	1
Barium	**0.0062**		0.0050	0.0010	mg/L		12/16/20 03:13	12/16/20 12:12	1
Beryllium	ND		0.0050	0.0010	mg/L		12/16/20 03:13	12/16/20 12:12	1
Cadmium	ND		0.0050	0.0010	mg/L		12/16/20 03:13	12/16/20 12:12	1
Calcium	**97**		0.50	0.096	mg/L		12/16/20 03:13	12/16/20 12:12	1
Chromium	**0.0023**	**J**	0.015	0.0016	mg/L		12/16/20 03:13	12/16/20 12:12	1
Cobalt	ND		0.0050	0.0015	mg/L		12/16/20 03:13	12/16/20 12:12	1
Copper	ND	^3+	0.020	0.012	mg/L		12/16/20 03:13	12/16/20 12:12	1
Iron	**0.39**		0.20	0.040	mg/L		12/16/20 03:13	12/16/20 12:12	1
Lead	ND		0.015	0.0071	mg/L		12/16/20 03:13	12/16/20 12:12	1
Magnesium	**31**		0.10	0.040	mg/L		12/16/20 03:13	12/16/20 12:12	1
Manganese	**0.021**		0.010	0.0030	mg/L		12/16/20 03:13	12/16/20 12:12	1
Nickel	ND		0.010	0.0021	mg/L		12/16/20 03:13	12/16/20 12:12	1
Zinc	ND		0.020	0.0037	mg/L		12/16/20 03:13	12/16/20 12:12	1
Silver	ND		0.010	0.0050	mg/L		12/16/20 03:13	12/16/20 12:12	1
Selenium	ND		0.050	0.016	mg/L		12/16/20 03:13	12/18/20 12:10	1
Potassium	**2.7**		0.50	0.20	mg/L		12/16/20 03:13	12/16/20 12:12	1
Sodium	**21**		1.0	0.24	mg/L		12/16/20 03:13	12/16/20 12:12	1
Thallium	ND		0.030	0.0081	mg/L		12/16/20 03:13	12/16/20 12:12	1
Vanadium	**0.0058**	**J**	0.010	0.0019	mg/L		12/16/20 03:13	12/16/20 12:12	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^1+ ^+ *+	0.052	0.016	mg/L		12/14/20 20:16	12/15/20 18:03	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 20:16	12/15/20 18:03	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:16	12/15/20 18:03	1
Barium	**0.0041**	**J**	0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 18:03	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 18:03	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 18:03	1
Calcium	**110**		0.52	0.099	mg/L		12/14/20 20:16	12/15/20 18:03	1
Chromium	ND		0.015	0.0016	mg/L		12/14/20 20:16	12/15/20 18:03	1
Cobalt	ND		0.0052	0.0015	mg/L		12/14/20 20:16	12/15/20 18:03	1
Copper	ND		0.021	0.012	mg/L		12/14/20 20:16	12/15/20 18:03	1
Iron	ND		0.21	0.041	mg/L		12/14/20 20:16	12/15/20 18:03	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 20:16	12/15/20 18:03	1
Magnesium	**33**		0.10	0.041	mg/L		12/14/20 20:16	12/15/20 18:03	1
Manganese	**0.018**		0.010	0.0031	mg/L		12/14/20 20:16	12/15/20 18:03	1
Nickel	ND		0.010	0.0022	mg/L		12/14/20 20:16	12/15/20 18:03	1

Client Sample ID: HOFF MW-E

Lab Sample ID: 410-23571-3

Date Collected: 12/10/20 09:40

Matrix: Water

Date Received: 12/10/20 19:20

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND	^1+ ^+	0.021	0.0038	mg/L		12/14/20 20:16	12/15/20 18:03	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:16	12/15/20 18:03	1
Selenium	ND	^1+ ^+ *+	0.052	0.016	mg/L		12/14/20 20:16	12/15/20 18:03	1
Potassium	**2.6**		0.52	0.21	mg/L		12/14/20 20:16	12/15/20 18:03	1
Sodium	**23**		1.0	0.25	mg/L		12/14/20 20:16	12/15/20 18:03	1
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:16	12/15/20 18:03	1
Vanadium	**0.0051**	**J**	0.010	0.0020	mg/L		12/14/20 20:16	12/15/20 18:03	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.095**	**J**	0.20	0.079	ug/L		12/11/20 11:59	12/14/20 15:23	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.092**	**J**	0.20	0.079	ug/L		12/11/20 11:52	12/14/20 14:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**510**		60	20	mg/L			12/15/20 11:44	1
Ferrous Iron	**0.10**	**HF**	0.10	0.050	mg/L			12/15/20 09:24	1
Sulfate	**41**		24	8.0	mg/L			12/15/20 10:45	4

Client Sample ID: HOFF MW-10

Lab Sample ID: 410-23571-4

Date Collected: 12/10/20 11:15

Matrix: Water

Date Received: 12/10/20 19:20

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/19/20 03:45	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/19/20 03:45	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/19/20 03:45	1
Styrene	ND		0.50	0.050	ug/L			12/19/20 03:45	1
1,4-Dichlorobenzene	**1.6**		0.50	0.070	ug/L			12/19/20 03:45	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/19/20 03:45	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/19/20 03:45	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/19/20 03:45	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/19/20 03:45	1
Toluene	ND		0.50	0.070	ug/L			12/19/20 03:45	1
Cyclohexane	ND		0.50	0.050	ug/L			12/19/20 03:45	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			12/19/20 03:45	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/19/20 03:45	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/19/20 03:45	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/19/20 03:45	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/19/20 03:45	1
trans-1,2-Dichloroethene	ND	^c	0.50	0.060	ug/L			12/19/20 03:45	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			12/19/20 03:45	1
1,3-Dichlorobenzene	**0.10**	**J**	0.50	0.060	ug/L			12/19/20 03:45	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/19/20 03:45	1
2-Hexanone	ND		5.0	0.60	ug/L			12/19/20 03:45	1
Acetone	**1.4**	**J**	5.0	0.90	ug/L			12/19/20 03:45	1
Chloroform	ND		0.50	0.090	ug/L			12/19/20 03:45	1

Client Sample ID: HOFF MW-10
Date Collected: 12/10/20 11:15
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-4
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.23**	**J**	0.50	0.050	ug/L			12/19/20 03:45	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/19/20 03:45	1
Bromomethane	ND		0.50	0.070	ug/L			12/19/20 03:45	1
Chloromethane	ND		0.50	0.060	ug/L			12/19/20 03:45	1
Chloroethane	ND		0.50	0.070	ug/L			12/19/20 03:45	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/19/20 03:45	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/19/20 03:45	1
Carbon disulfide	ND	^c	1.0	0.060	ug/L			12/19/20 03:45	1
Bromoform	ND		1.0	0.30	ug/L			12/19/20 03:45	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/19/20 03:45	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/19/20 03:45	1
1,1-Dichloroethene	ND	^c	0.50	0.060	ug/L			12/19/20 03:45	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/19/20 03:45	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/19/20 03:45	1
Freon 113	ND		0.50	0.060	ug/L			12/19/20 03:45	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/19/20 03:45	1
2-Butanone	ND		5.0	0.60	ug/L			12/19/20 03:45	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/19/20 03:45	1
Trichloroethene	ND		0.50	0.060	ug/L			12/19/20 03:45	1
Methyl acetate	ND		1.0	0.10	ug/L			12/19/20 03:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/19/20 03:45	1
1,2-Dichlorobenzene	**0.30**	**J**	0.50	0.060	ug/L			12/19/20 03:45	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/19/20 03:45	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/19/20 03:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*80 - 120*		*12/19/20 03:45*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*12/19/20 03:45*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*12/19/20 03:45*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/19/20 03:45*	*1*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**40**		5.0	0.60	ug/L			12/19/20 04:06	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*80 - 120*		*12/19/20 04:06*	*10*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*12/19/20 04:06*	*10*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*12/19/20 04:06*	*10*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/19/20 04:06*	*10*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			12/18/20 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*80 - 120*		*12/18/20 13:08*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		11	3.4	ug/L		12/17/20 16:24	12/18/20 13:05	1

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF MW-10
Date Collected: 12/10/20 11:15
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
2,4-Dimethylphenol	ND		11	3.4	ug/L		12/17/20 16:24	12/18/20 13:05	1
2,4-Dinitrophenol	ND		34	16	ug/L		12/17/20 16:24	12/18/20 13:05	1
2,4-Dinitrotoluene	ND		5.6	1.1	ug/L		12/17/20 16:24	12/18/20 13:05	1
2,4,5-Trichlorophenol	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
2,4,6-Trichlorophenol	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
2,2'-oxybis[1-chloropropane]	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
Di-n-butyl phthalate	ND		5.6	2.2	ug/L		12/17/20 16:24	12/18/20 13:05	1
Di-n-octyl phthalate	ND		12	5.6	ug/L		12/17/20 16:24	12/18/20 13:05	1
Benzo[a]anthracene	**0.16**	**J**	0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Benzo[a]pyrene	**0.15**	**J**	0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Benzo[b]fluoranthene	**0.18**	**J**	0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Benzo[g,h,i]perylene	**1.1**		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Benzo[k]fluoranthene	ND		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Acenaphthene	ND		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Acenaphthylene	ND		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Acetophenone	ND		11	4.5	ug/L		12/17/20 16:24	12/18/20 13:05	1
Anthracene	ND		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Atrazine	ND		5.6	2.2	ug/L		12/17/20 16:24	12/18/20 13:05	1
Benzaldehyde	ND		11	3.4	ug/L		12/17/20 16:24	12/18/20 13:05	1
Butylbenzylphthalate	ND		5.6	2.2	ug/L		12/17/20 16:24	12/18/20 13:05	1
Caprolactam	ND		12	5.6	ug/L		12/17/20 16:24	12/18/20 13:05	1
Carbazole	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
Chrysene	ND		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Dibenz(a,h)anthracene	ND		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Dibenzofuran	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
Diethyl phthalate	ND		5.6	2.2	ug/L		12/17/20 16:24	12/18/20 13:05	1
Dimethyl phthalate	ND		5.6	2.2	ug/L		12/17/20 16:24	12/18/20 13:05	1
Hexachlorobenzene	ND		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Hexachlorobutadiene	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
Hexachlorocyclopentadiene	ND	*+	12	5.6	ug/L		12/17/20 16:24	12/18/20 13:05	1
Hexachloroethane	ND		5.6	1.1	ug/L		12/17/20 16:24	12/18/20 13:05	1
Fluoranthene	**0.29**	**J**	0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Fluorene	ND		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Indeno[1,2,3-cd]pyrene	**0.58**		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Isophorone	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
N-Nitrosodi-n-propylamine	ND		3.4	0.78	ug/L		12/17/20 16:24	12/18/20 13:05	1
N-Nitrosodiphenylamine	ND		3.4	0.78	ug/L		12/17/20 16:24	12/18/20 13:05	1
Naphthalene	ND		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Nitrobenzene	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
Pentachlorophenol	ND		5.6	1.1	ug/L		12/17/20 16:24	12/18/20 13:05	1
Phenanthrene	ND		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Phenol	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
Pyrene	**0.29**	**J**	0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
2-Chloronaphthalene	ND		1.1	0.45	ug/L		12/17/20 16:24	12/18/20 13:05	1
2-Chlorophenol	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
2-Methylnaphthalene	ND		0.56	0.11	ug/L		12/17/20 16:24	12/18/20 13:05	1
2-Methylphenol	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
2-Nitroaniline	ND		5.6	2.2	ug/L		12/17/20 16:24	12/18/20 13:05	1

Client Sample ID: HOFF MW-10
Date Collected: 12/10/20 11:15
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		11	3.4	ug/L		12/17/20 16:24	12/18/20 13:05	1
3,3'-Dichlorobenzidine	ND		11	3.4	ug/L		12/17/20 16:24	12/18/20 13:05	1
3-Nitroaniline	ND		7.8	3.4	ug/L		12/17/20 16:24	12/18/20 13:05	1
4,6-Dinitro-2-methylphenol	ND		24	9.0	ug/L		12/17/20 16:24	12/18/20 13:05	1
4-Bromophenyl-phenylether	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
4-Methylphenol	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
4-Nitroaniline	ND		3.4	1.0	ug/L		12/17/20 16:24	12/18/20 13:05	1
4-Nitrophenol	ND		34	11	ug/L		12/17/20 16:24	12/18/20 13:05	1
Bis(2-chloroethoxy)methane	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
Bis(2-chloroethyl)ether	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
Bis(2-ethylhexyl) phthalate	ND		12	5.6	ug/L		12/17/20 16:24	12/18/20 13:05	1
2,6-Dinitrotoluene	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1
4-Chloro-3-methylphenol	ND		3.9	1.8	ug/L		12/17/20 16:24	12/18/20 13:05	1
4-Chloroaniline	ND		11	4.5	ug/L		12/17/20 16:24	12/18/20 13:05	1
4-Chlorophenyl-phenyl ether	ND		2.2	0.56	ug/L		12/17/20 16:24	12/18/20 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*83*		*10 - 150*	*12/17/20 16:24*	*12/18/20 13:05*	*1*
2-Fluorobiphenyl (Surr)	*62*		*44 - 102*	*12/17/20 16:24*	*12/18/20 13:05*	*1*
2-Fluorophenol (Surr)	*36*		*10 - 84*	*12/17/20 16:24*	*12/18/20 13:05*	*1*
Nitrobenzene-d5 (Surr)	*66*		*23 - 128*	*12/17/20 16:24*	*12/18/20 13:05*	*1*
p-Terphenyl-d14 (Surr)	*64*		*31 - 113*	*12/17/20 16:24*	*12/18/20 13:05*	*1*
Phenol-d5 (Surr)	*32*		*10 - 67*	*12/17/20 16:24*	*12/18/20 13:05*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 09:22	1
alpha-BHC (1C)	ND		0.020	0.0031	ug/L		12/15/20 17:30	12/16/20 09:22	1
alpha-Chlordane (1C)	ND		0.020	0.0031	ug/L		12/15/20 17:30	12/16/20 09:22	1
beta-BHC (1C)	ND		0.020	0.0035	ug/L		12/15/20 17:30	12/16/20 09:22	1
delta-BHC (1C)	ND		0.020	0.0035	ug/L		12/15/20 17:30	12/16/20 09:22	1
Dieldrin (2C)	ND		0.031	0.0054	ug/L		12/15/20 17:30	12/16/20 09:22	1
Endosulfan I (1C)	ND		0.020	0.0044	ug/L		12/15/20 17:30	12/16/20 09:22	1
Endosulfan II (1C)	ND		0.041	0.015	ug/L		12/15/20 17:30	12/16/20 09:22	1
Endosulfan sulfate (1C)	ND		0.031	0.0059	ug/L		12/15/20 17:30	12/16/20 09:22	1
Endrin (1C)	ND		0.031	0.0083	ug/L		12/15/20 17:30	12/16/20 09:22	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		12/15/20 17:30	12/16/20 09:22	1
Endrin ketone (1C)	ND		0.031	0.0051	ug/L		12/15/20 17:30	12/16/20 09:22	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 09:22	1
gamma-Chlordane (1C)	ND		0.041	0.0072	ug/L		12/15/20 17:30	12/16/20 09:22	1
Heptachlor (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 09:22	1
Heptachlor epoxide (1C)	ND		0.020	0.0024	ug/L		12/15/20 17:30	12/16/20 09:22	1
Methoxychlor (1C)	ND		0.11	0.031	ug/L		12/15/20 17:30	12/16/20 09:22	1
Toxaphene (1C)	ND		1.0	0.31	ug/L		12/15/20 17:30	12/16/20 09:22	1
p,p'-DDD (1C)	ND		0.031	0.0051	ug/L		12/15/20 17:30	12/16/20 09:22	1
p,p'-DDE (1C)	ND		0.031	0.0051	ug/L		12/15/20 17:30	12/16/20 09:22	1
p,p'-DDT (1C)	ND		0.031	0.0053	ug/L		12/15/20 17:30	12/16/20 09:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*57*		*32 - 149*	*12/15/20 17:30*	*12/16/20 09:22*	*1*

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF MW-10

Date Collected: 12/10/20 11:15
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-4

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (2C)	*61*		*32 - 149*	*12/15/20 17:30*	*12/16/20 09:22*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*38*		*29 - 129*	*12/15/20 17:30*	*12/16/20 09:22*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*39*		*29 - 129*	*12/15/20 17:30*	*12/16/20 09:22*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		12/16/20 03:13	12/16/20 12:16	1
Aluminum	**11**		0.30	0.15	mg/L		12/16/20 03:13	12/16/20 12:16	1
Antimony	ND	^1+	0.050	0.016	mg/L		12/16/20 03:13	12/16/20 12:16	1
Barium	**0.11**		0.0050	0.0010	mg/L		12/16/20 03:13	12/16/20 12:16	1
Beryllium	ND		0.0050	0.0010	mg/L		12/16/20 03:13	12/16/20 12:16	1
Cadmium	ND		0.0050	0.0010	mg/L		12/16/20 03:13	12/16/20 12:16	1
Calcium	**96**		0.50	0.096	mg/L		12/16/20 03:13	12/16/20 12:16	1
Chromium	**0.019**		0.015	0.0016	mg/L		12/16/20 03:13	12/16/20 12:16	1
Cobalt	**0.0061**		0.0050	0.0015	mg/L		12/16/20 03:13	12/16/20 12:16	1
Copper	**0.050**		0.020	0.012	mg/L		12/16/20 03:13	12/18/20 12:19	1
Iron	**10**		0.20	0.040	mg/L		12/16/20 03:13	12/16/20 12:16	1
Lead	**0.011**	**J**	0.015	0.0071	mg/L		12/16/20 03:13	12/16/20 12:16	1
Magnesium	**21**		0.10	0.040	mg/L		12/16/20 03:13	12/16/20 12:16	1
Manganese	**0.61**		0.010	0.0030	mg/L		12/16/20 03:13	12/16/20 12:16	1
Nickel	**0.010**		0.010	0.0021	mg/L		12/16/20 03:13	12/16/20 12:16	1
Zinc	**2.5**		0.020	0.0037	mg/L		12/16/20 03:13	12/16/20 12:16	1
Silver	ND		0.010	0.0050	mg/L		12/16/20 03:13	12/16/20 12:16	1
Selenium	ND		0.050	0.016	mg/L		12/16/20 03:13	12/18/20 12:19	1
Potassium	**5.6**		0.50	0.20	mg/L		12/16/20 03:13	12/16/20 12:16	1
Sodium	**7.4**		1.0	0.24	mg/L		12/16/20 03:13	12/16/20 12:16	1
Thallium	ND		0.030	0.0081	mg/L		12/16/20 03:13	12/16/20 12:16	1
Vanadium	**0.020**		0.010	0.0019	mg/L		12/16/20 03:13	12/16/20 12:16	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 20:11	12/15/20 19:51	1
Aluminum	**0.37**		0.31	0.16	mg/L		12/14/20 20:11	12/15/20 19:51	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:11	12/15/20 19:51	1
Barium	**0.055**		0.0052	0.0010	mg/L		12/14/20 20:11	12/15/20 19:51	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:11	12/15/20 19:51	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:11	12/15/20 19:51	1
Calcium	**100**		0.52	0.099	mg/L		12/14/20 20:11	12/15/20 19:51	1
Chromium	ND		0.015	0.0016	mg/L		12/14/20 20:11	12/15/20 19:51	1
Cobalt	ND		0.0052	0.0015	mg/L		12/14/20 20:11	12/15/20 19:51	1
Copper	ND		0.021	0.012	mg/L		12/14/20 20:11	12/15/20 19:51	1
Iron	**0.77**		0.21	0.041	mg/L		12/14/20 20:11	12/15/20 19:51	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 20:11	12/15/20 19:51	1
Magnesium	**19**		0.10	0.041	mg/L		12/14/20 20:11	12/15/20 19:51	1
Manganese	**0.32**		0.010	0.0031	mg/L		12/14/20 20:11	12/15/20 19:51	1
Nickel	ND		0.010	0.0022	mg/L		12/14/20 20:11	12/15/20 19:51	1
Zinc	**0.45**		0.021	0.0038	mg/L		12/14/20 20:11	12/15/20 19:51	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:11	12/15/20 19:51	1
Selenium	ND		0.052	0.016	mg/L		12/14/20 20:11	12/15/20 19:51	1

Client Sample ID: HOFF MW-10

Lab Sample ID: 410-23571-4

Date Collected: 12/10/20 11:15

Matrix: Water

Date Received: 12/10/20 19:20

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**4.5**		0.52	0.21	mg/L		12/14/20 20:11	12/15/20 19:51	1
Sodium	**7.3**		1.0	0.25	mg/L		12/14/20 20:11	12/16/20 04:28	1
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:11	12/15/20 19:51	1
Vanadium	**0.0020**	**J**	0.010	0.0020	mg/L		12/14/20 20:11	12/15/20 19:51	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.13**	**J**	0.20	0.079	ug/L		12/11/20 11:59	12/14/20 15:25	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.086**	**J**	0.20	0.079	ug/L		12/11/20 11:52	12/14/20 14:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**370**		60	20	mg/L			12/15/20 11:44	1
Ferrous Iron	**8.7**	**HF**	0.50	0.25	mg/L			12/15/20 09:36	5
Sulfate	**110**	**FH**	60	20	mg/L			12/15/20 10:45	10

Client Sample ID: HOFF MW-6

Lab Sample ID: 410-23571-5

Date Collected: 12/10/20 12:45

Matrix: Water

Date Received: 12/10/20 19:20

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/19/20 04:28	10
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/L			12/19/20 04:28	10
Ethylbenzene	**1.3**	**J**	5.0	0.60	ug/L			12/19/20 04:28	10
Styrene	ND		5.0	0.50	ug/L			12/19/20 04:28	10
1,4-Dichlorobenzene	**21**		5.0	0.70	ug/L			12/19/20 04:28	10
1,2-Dibromoethane	ND		5.0	0.60	ug/L			12/19/20 04:28	10
1,2-Dichloroethane	ND		5.0	0.50	ug/L			12/19/20 04:28	10
4-Methyl-2-pentanone	ND		50	7.0	ug/L			12/19/20 04:28	10
Methylcyclohexane	**0.84**	**J**	5.0	0.50	ug/L			12/19/20 04:28	10
Toluene	ND		5.0	0.70	ug/L			12/19/20 04:28	10
Cyclohexane	**0.75**	**J**	5.0	0.50	ug/L			12/19/20 04:28	10
1,2,4-Trichlorobenzene	ND		5.0	0.60	ug/L			12/19/20 04:28	10
Dibromochloromethane	ND		5.0	0.70	ug/L			12/19/20 04:28	10
Xylenes, Total	ND		10	1.5	ug/L			12/19/20 04:28	10
Tetrachloroethene	ND		5.0	0.60	ug/L			12/19/20 04:28	10
cis-1,2-Dichloroethene	ND		5.0	0.50	ug/L			12/19/20 04:28	10
trans-1,2-Dichloroethene	ND	^c	5.0	0.60	ug/L			12/19/20 04:28	10
Methyl tertiary butyl ether	ND		5.0	0.50	ug/L			12/19/20 04:28	10
1,3-Dichlorobenzene	**1.0**	**J**	5.0	0.60	ug/L			12/19/20 04:28	10
Carbon tetrachloride	ND		5.0	0.70	ug/L			12/19/20 04:28	10
2-Hexanone	ND		50	6.0	ug/L			12/19/20 04:28	10
Acetone	ND		50	9.0	ug/L			12/19/20 04:28	10
Chloroform	ND		5.0	0.90	ug/L			12/19/20 04:28	10
Benzene	**2.5**	**J**	5.0	0.50	ug/L			12/19/20 04:28	10
1,1,1-Trichloroethane	ND		5.0	0.60	ug/L			12/19/20 04:28	10
Bromomethane	ND		5.0	0.70	ug/L			12/19/20 04:28	10

Client Sample ID: HOFF MW-6
Date Collected: 12/10/20 12:45
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-5
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		5.0	0.60	ug/L			12/19/20 04:28	10
Chloroethane	ND		5.0	0.70	ug/L			12/19/20 04:28	10
Vinyl chloride	ND		5.0	1.0	ug/L			12/19/20 04:28	10
Methylene Chloride	ND		5.0	0.70	ug/L			12/19/20 04:28	10
Carbon disulfide	ND	^c	10	0.60	ug/L			12/19/20 04:28	10
Bromoform	ND		10	3.0	ug/L			12/19/20 04:28	10
Bromodichloromethane	ND		5.0	0.50	ug/L			12/19/20 04:28	10
1,1-Dichloroethane	ND		5.0	0.70	ug/L			12/19/20 04:28	10
1,1-Dichloroethene	ND	^c	5.0	0.60	ug/L			12/19/20 04:28	10
Trichlorofluoromethane	ND		5.0	0.50	ug/L			12/19/20 04:28	10
Dichlorodifluoromethane	ND		5.0	0.50	ug/L			12/19/20 04:28	10
Freon 113	ND		5.0	0.60	ug/L			12/19/20 04:28	10
1,2-Dichloropropane	ND		5.0	0.60	ug/L			12/19/20 04:28	10
2-Butanone	ND		50	6.0	ug/L			12/19/20 04:28	10
1,1,2-Trichloroethane	ND		5.0	0.60	ug/L			12/19/20 04:28	10
Trichloroethene	ND		5.0	0.60	ug/L			12/19/20 04:28	10
Methyl acetate	ND		10	1.0	ug/L			12/19/20 04:28	10
1,1,2,2-Tetrachloroethane	ND		5.0	0.70	ug/L			12/19/20 04:28	10
1,2-Dichlorobenzene	**3.5**	**J**	5.0	0.60	ug/L			12/19/20 04:28	10
1,2-Dibromo-3-Chloropropane	ND		5.0	1.0	ug/L			12/19/20 04:28	10
Isopropylbenzene	ND		5.0	0.50	ug/L			12/19/20 04:28	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*80 - 120*		*12/19/20 04:28*	*10*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*12/19/20 04:28*	*10*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*12/19/20 04:28*	*10*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/19/20 04:28*	*10*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**540**		50	6.0	ug/L			12/19/20 04:50	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*80 - 120*		*12/19/20 04:50*	*100*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*12/19/20 04:50*	*100*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*12/19/20 04:50*	*100*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/19/20 04:50*	*100*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.5**		0.80	0.40	ug/L			12/18/20 14:28	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*84*		*80 - 120*		*12/18/20 14:28*	*2*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		11	3.3	ug/L		12/17/20 16:24	12/18/20 13:34	1
2,4-Dichlorophenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
2,4-Dimethylphenol	ND		11	3.3	ug/L		12/17/20 16:24	12/18/20 13:34	1
2,4-Dinitrophenol	ND		33	15	ug/L		12/17/20 16:24	12/18/20 13:34	1

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF MW-6
Date Collected: 12/10/20 12:45
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		5.5	1.1	ug/L		12/17/20 16:24	12/18/20 13:34	1
2,4,5-Trichlorophenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
2,4,6-Trichlorophenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
2,2'-oxybis[1-chloropropane]	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
Di-n-butyl phthalate	ND		5.5	2.2	ug/L		12/17/20 16:24	12/18/20 13:34	1
Di-n-octyl phthalate	ND		12	5.5	ug/L		12/17/20 16:24	12/18/20 13:34	1
Benzo[a]anthracene	**0.15**	**J**	0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Benzo[a]pyrene	**0.20**	**J**	0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Benzo[b]fluoranthene	**0.27**	**J**	0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Benzo[g,h,i]perylene	**0.16**	**J**	0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Benzo[k]fluoranthene	**0.13**	**J**	0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Acenaphthene	**1.3**		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Acenaphthylene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Acetophenone	ND		11	4.4	ug/L		12/17/20 16:24	12/18/20 13:34	1
Anthracene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Atrazine	ND		5.5	2.2	ug/L		12/17/20 16:24	12/18/20 13:34	1
Benzaldehyde	ND		11	3.3	ug/L		12/17/20 16:24	12/18/20 13:34	1
Butylbenzylphthalate	ND		5.5	2.2	ug/L		12/17/20 16:24	12/18/20 13:34	1
Caprolactam	ND		12	5.5	ug/L		12/17/20 16:24	12/18/20 13:34	1
Carbazole	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
Chrysene	**0.16**	**J**	0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Dibenz(a,h)anthracene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Dibenzofuran	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
Diethyl phthalate	ND		5.5	2.2	ug/L		12/17/20 16:24	12/18/20 13:34	1
Dimethyl phthalate	ND		5.5	2.2	ug/L		12/17/20 16:24	12/18/20 13:34	1
Hexachlorobenzene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Hexachlorobutadiene	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
Hexachlorocyclopentadiene	ND	*+	12	5.5	ug/L		12/17/20 16:24	12/18/20 13:34	1
Hexachloroethane	ND		5.5	1.1	ug/L		12/17/20 16:24	12/18/20 13:34	1
Fluoranthene	**0.22**	**J**	0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Fluorene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Indeno[1,2,3-cd]pyrene	**0.17**	**J**	0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Isophorone	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
N-Nitrosodi-n-propylamine	ND		3.3	0.77	ug/L		12/17/20 16:24	12/18/20 13:34	1
N-Nitrosodiphenylamine	ND		3.3	0.77	ug/L		12/17/20 16:24	12/18/20 13:34	1
Naphthalene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Nitrobenzene	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
Pentachlorophenol	ND		5.5	1.1	ug/L		12/17/20 16:24	12/18/20 13:34	1
Phenanthrene	**0.13**	**J**	0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Phenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
Pyrene	**0.60**		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
2-Chloronaphthalene	ND		1.1	0.44	ug/L		12/17/20 16:24	12/18/20 13:34	1
2-Chlorophenol	**0.93**	**J**	2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
2-Methylnaphthalene	ND		0.55	0.11	ug/L		12/17/20 16:24	12/18/20 13:34	1
2-Methylphenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
2-Nitroaniline	ND		5.5	2.2	ug/L		12/17/20 16:24	12/18/20 13:34	1
2-Nitrophenol	ND		11	3.3	ug/L		12/17/20 16:24	12/18/20 13:34	1
3,3'-Dichlorobenzidine	ND		11	3.3	ug/L		12/17/20 16:24	12/18/20 13:34	1
3-Nitroaniline	ND		7.7	3.3	ug/L		12/17/20 16:24	12/18/20 13:34	1

Client Sample ID: HOFF MW-6
Date Collected: 12/10/20 12:45
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	ND		23	8.8	ug/L		12/17/20 16:24	12/18/20 13:34	1
4-Bromophenyl-phenylether	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
4-Methylphenol	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
4-Nitroaniline	ND		3.3	0.99	ug/L		12/17/20 16:24	12/18/20 13:34	1
4-Nitrophenol	ND		33	11	ug/L		12/17/20 16:24	12/18/20 13:34	1
Bis(2-chloroethoxy)methane	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
Bis(2-chloroethyl)ether	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
Bis(2-ethylhexyl) phthalate	ND		12	5.5	ug/L		12/17/20 16:24	12/18/20 13:34	1
2,6-Dinitrotoluene	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1
4-Chloro-3-methylphenol	ND		3.8	1.8	ug/L		12/17/20 16:24	12/18/20 13:34	1
4-Chloroaniline	ND		11	4.4	ug/L		12/17/20 16:24	12/18/20 13:34	1
4-Chlorophenyl-phenyl ether	ND		2.2	0.55	ug/L		12/17/20 16:24	12/18/20 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*83*		*10 - 150*	*12/17/20 16:24*	*12/18/20 13:34*	*1*
2-Fluorobiphenyl (Surr)	*65*		*44 - 102*	*12/17/20 16:24*	*12/18/20 13:34*	*1*
2-Fluorophenol (Surr)	*35*		*10 - 84*	*12/17/20 16:24*	*12/18/20 13:34*	*1*
Nitrobenzene-d5 (Surr)	*64*		*23 - 128*	*12/17/20 16:24*	*12/18/20 13:34*	*1*
p-Terphenyl-d14 (Surr)	*79*		*31 - 113*	*12/17/20 16:24*	*12/18/20 13:34*	*1*
Phenol-d5 (Surr)	*30*		*10 - 67*	*12/17/20 16:24*	*12/18/20 13:34*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 09:33	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		12/15/20 17:30	12/16/20 09:33	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		12/15/20 17:30	12/16/20 09:33	1
beta-BHC (2C)	**0.077**	**p**	0.020	0.0034	ug/L		12/15/20 17:30	12/16/20 09:33	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		12/15/20 17:30	12/16/20 09:33	1
Dieldrin (2C)	ND		0.030	0.0054	ug/L		12/15/20 17:30	12/16/20 09:33	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		12/15/20 17:30	12/16/20 09:33	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		12/15/20 17:30	12/16/20 09:33	1
Endosulfan sulfate (1C)	ND		0.030	0.0059	ug/L		12/15/20 17:30	12/16/20 09:33	1
Endrin (1C)	ND		0.030	0.0082	ug/L		12/15/20 17:30	12/16/20 09:33	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		12/15/20 17:30	12/16/20 09:33	1
Endrin ketone (2C)	ND		0.030	0.0051	ug/L		12/15/20 17:30	12/16/20 09:33	1
gamma-BHC (Lindane) (2C)	**0.0040**	**J p**	0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 09:33	1
gamma-Chlordane (1C)	ND		0.040	0.0071	ug/L		12/15/20 17:30	12/16/20 09:33	1
Heptachlor (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 09:33	1
Heptachlor epoxide (2C)	ND		0.020	0.0023	ug/L		12/15/20 17:30	12/16/20 09:33	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		12/15/20 17:30	12/16/20 09:33	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		12/15/20 17:30	12/16/20 09:33	1
p,p'-DDD (1C)	ND		0.030	0.0051	ug/L		12/15/20 17:30	12/16/20 09:33	1
p,p'-DDE (1C)	ND		0.030	0.0051	ug/L		12/15/20 17:30	12/16/20 09:33	1
p,p'-DDT (1C)	**0.0088**	**J p**	0.030	0.0053	ug/L		12/15/20 17:30	12/16/20 09:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*36*		*32 - 149*	*12/15/20 17:30*	*12/16/20 09:33*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*38*		*32 - 149*	*12/15/20 17:30*	*12/16/20 09:33*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*53*		*29 - 129*	*12/15/20 17:30*	*12/16/20 09:33*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*50*		*29 - 129*	*12/15/20 17:30*	*12/16/20 09:33*	*1*

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF MW-6

Date Collected: 12/10/20 12:45
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-5

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:49	1
Aluminum	**0.38**		0.30	0.15	mg/L		12/14/20 06:02	12/17/20 15:49	1
Antimony	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:49	1
Barium	**0.036**		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:49	1
Beryllium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:49	1
Cadmium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:49	1
Calcium	**78**		0.50	0.096	mg/L		12/14/20 06:02	12/17/20 15:49	1
Chromium	**0.0016**	**J**	0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 15:49	1
Cobalt	ND		0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 15:49	1
Copper	ND	*+	0.020	0.012	mg/L		12/14/20 06:02	12/17/20 15:49	1
Iron	**1.1**		0.20	0.040	mg/L		12/14/20 06:02	12/17/20 15:49	1
Lead	ND		0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 15:49	1
Magnesium	**16**		0.10	0.040	mg/L		12/14/20 06:02	12/17/20 17:17	1
Manganese	**0.92**		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 15:49	1
Nickel	ND		0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 15:49	1
Zinc	**0.031**		0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 15:49	1
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:55	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:49	1
Potassium	**4.6**		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 15:49	1
Sodium	**9.2**		1.0	0.24	mg/L		12/14/20 06:02	12/17/20 17:17	1
Thallium	ND		0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 15:49	1
Vanadium	**0.0019**	**J**	0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 15:49	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^1+ ^+ *+	0.052	0.016	mg/L		12/14/20 20:16	12/15/20 17:52	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 20:16	12/15/20 17:52	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:16	12/15/20 17:52	1
Barium	**0.032**		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 17:52	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 17:52	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 17:52	1
Calcium	**79**		0.52	0.099	mg/L		12/14/20 20:16	12/15/20 17:52	1
Chromium	ND		0.015	0.0016	mg/L		12/14/20 20:16	12/15/20 17:52	1
Cobalt	ND		0.0052	0.0015	mg/L		12/14/20 20:16	12/15/20 17:52	1
Copper	ND		0.021	0.012	mg/L		12/14/20 20:16	12/15/20 17:52	1
Iron	**0.59**		0.21	0.041	mg/L		12/14/20 20:16	12/15/20 17:52	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 20:16	12/15/20 17:52	1
Magnesium	**16**		0.10	0.041	mg/L		12/14/20 20:16	12/15/20 17:52	1
Manganese	**0.96**		0.010	0.0031	mg/L		12/14/20 20:16	12/15/20 17:52	1
Nickel	ND		0.010	0.0022	mg/L		12/14/20 20:16	12/15/20 17:52	1
Zinc	ND	^1+ ^+	0.021	0.0038	mg/L		12/14/20 20:16	12/15/20 17:52	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:16	12/15/20 17:52	1
Selenium	ND	^1+ ^+ *+	0.052	0.016	mg/L		12/14/20 20:16	12/15/20 17:52	1
Potassium	**4.4**		0.52	0.21	mg/L		12/14/20 20:16	12/15/20 17:52	1
Sodium	**9.5**		1.0	0.25	mg/L		12/14/20 20:16	12/15/20 17:52	1
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:16	12/15/20 17:52	1
Vanadium	ND		0.010	0.0020	mg/L		12/14/20 20:16	12/15/20 17:52	1

Client Sample ID: HOFF MW-6

Lab Sample ID: 410-23571-5

Date Collected: 12/10/20 12:45

Matrix: Water

Date Received: 12/10/20 19:20

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.081**	**J**	0.20	0.079	ug/L		12/11/20 11:59	12/14/20 15:28	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/11/20 11:52	12/14/20 14:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**230**		120	40	mg/L			12/15/20 11:44	1
Ferrous Iron	**0.91**	**HF**	0.10	0.050	mg/L			12/15/20 09:22	1
Sulfate	**27**		6.0	2.0	mg/L			12/15/20 10:45	1

Client Sample ID: HOFF IW-1A

Lab Sample ID: 410-23571-6

Date Collected: 12/10/20 14:55

Matrix: Water

Date Received: 12/10/20 19:20

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.10	ug/L			12/19/20 05:11	2
trans-1,3-Dichloropropene	ND		1.0	0.12	ug/L			12/19/20 05:11	2
Ethylbenzene	ND		1.0	0.12	ug/L			12/19/20 05:11	2
Styrene	ND		1.0	0.10	ug/L			12/19/20 05:11	2
1,4-Dichlorobenzene	**29**		1.0	0.14	ug/L			12/19/20 05:11	2
1,2-Dibromoethane	ND		1.0	0.12	ug/L			12/19/20 05:11	2
1,2-Dichloroethane	**0.63**	**J**	1.0	0.10	ug/L			12/19/20 05:11	2
4-Methyl-2-pentanone	ND		10	1.4	ug/L			12/19/20 05:11	2
Methylcyclohexane	ND		1.0	0.10	ug/L			12/19/20 05:11	2
Toluene	ND		1.0	0.14	ug/L			12/19/20 05:11	2
Chlorobenzene	**2.2**		1.0	0.12	ug/L			12/19/20 05:11	2
Cyclohexane	ND		1.0	0.10	ug/L			12/19/20 05:11	2
1,2,4-Trichlorobenzene	**3.0**		1.0	0.12	ug/L			12/19/20 05:11	2
Dibromochloromethane	**4.5**		1.0	0.14	ug/L			12/19/20 05:11	2
Xylenes, Total	ND		2.0	0.30	ug/L			12/19/20 05:11	2
Tetrachloroethene	**0.50**	**J**	1.0	0.12	ug/L			12/19/20 05:11	2
cis-1,2-Dichloroethene	**0.27**	**J**	1.0	0.10	ug/L			12/19/20 05:11	2
trans-1,2-Dichloroethene	ND	^c	1.0	0.12	ug/L			12/19/20 05:11	2
Methyl tertiary butyl ether	ND		1.0	0.10	ug/L			12/19/20 05:11	2
1,3-Dichlorobenzene	**1.4**		1.0	0.12	ug/L			12/19/20 05:11	2
Carbon tetrachloride	ND		1.0	0.14	ug/L			12/19/20 05:11	2
2-Hexanone	**1.2**	**J**	10	1.2	ug/L			12/19/20 05:11	2
Chloroform	**2.2**		1.0	0.18	ug/L			12/19/20 05:11	2
Benzene	**0.11**	**J**	1.0	0.10	ug/L			12/19/20 05:11	2
1,1,1-Trichloroethane	**8.5**		1.0	0.12	ug/L			12/19/20 05:11	2
Bromomethane	**15**		1.0	0.14	ug/L			12/19/20 05:11	2
Chloroethane	**5.4**		1.0	0.14	ug/L			12/19/20 05:11	2
Vinyl chloride	ND		1.0	0.20	ug/L			12/19/20 05:11	2
Methylene Chloride	**2.3**		1.0	0.14	ug/L			12/19/20 05:11	2
Carbon disulfide	**0.67**	**J ^c**	2.0	0.12	ug/L			12/19/20 05:11	2
Bromoform	**13**		2.0	0.60	ug/L			12/19/20 05:11	2
Bromodichloromethane	**1.7**		1.0	0.10	ug/L			12/19/20 05:11	2

Client Sample ID: HOFF IW-1A
Date Collected: 12/10/20 14:55
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-6
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND	^c	1.0	0.12	ug/L			12/19/20 05:11	2
Trichlorofluoromethane	ND		1.0	0.10	ug/L			12/19/20 05:11	2
Dichlorodifluoromethane	ND		1.0	0.10	ug/L			12/19/20 05:11	2
Freon 113	ND		1.0	0.12	ug/L			12/19/20 05:11	2
1,2-Dichloropropane	**0.76**	**J**	1.0	0.12	ug/L			12/19/20 05:11	2
2-Butanone	**89**		10	1.2	ug/L			12/19/20 05:11	2
1,1,2-Trichloroethane	**0.67**	**J**	1.0	0.12	ug/L			12/19/20 05:11	2
Trichloroethene	ND		1.0	0.12	ug/L			12/19/20 05:11	2
Methyl acetate	**4.1**		2.0	0.20	ug/L			12/19/20 05:11	2
1,1,2,2-Tetrachloroethane	**0.21**	**J**	1.0	0.14	ug/L			12/19/20 05:11	2
1,2-Dibromo-3-Chloropropane	ND		1.0	0.20	ug/L			12/19/20 05:11	2
Isopropylbenzene	ND		1.0	0.10	ug/L			12/19/20 05:11	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*80 - 120*		*12/19/20 05:11*	*2*
Dibromofluoromethane (Surr)	*114*		*80 - 120*		*12/19/20 05:11*	*2*
4-Bromofluorobenzene (Surr)	*83*		*80 - 120*		*12/19/20 05:11*	*2*
Toluene-d8 (Surr)	*55*	*S1-*	*80 - 120*		*12/19/20 05:11*	*2*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**610**		100	18	ug/L			12/19/20 05:33	20
Chloromethane	**63**		10	1.2	ug/L			12/19/20 05:33	20
1,1-Dichloroethane	**130**		10	1.4	ug/L			12/19/20 05:33	20
1,2-Dichlorobenzene	**68**		10	1.2	ug/L			12/19/20 05:33	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*80 - 120*		*12/19/20 05:33*	*20*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*12/19/20 05:33*	*20*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*12/19/20 05:33*	*20*
Toluene-d8 (Surr)	*84*		*80 - 120*		*12/19/20 05:33*	*20*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		4.0	2.0	ug/L			12/22/20 17:21	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*77*	*S1-*	*80 - 120*		*12/22/20 17:21*	*10*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.1	ug/L		12/17/20 16:24	12/18/20 14:03	1
2,4-Dichlorophenol	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
2,4-Dimethylphenol	ND		10	3.1	ug/L		12/17/20 16:24	12/18/20 14:03	1
2,4-Dinitrophenol	ND		31	15	ug/L		12/17/20 16:24	12/18/20 14:03	1
2,4-Dinitrotoluene	ND		5.2	1.0	ug/L		12/17/20 16:24	12/18/20 14:03	1
2,4,5-Trichlorophenol	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
2,4,6-Trichlorophenol	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
2,2'-oxybis[1-chloropropane]	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
Di-n-butyl phthalate	ND		5.2	2.1	ug/L		12/17/20 16:24	12/18/20 14:03	1
Di-n-octyl phthalate	ND		12	5.2	ug/L		12/17/20 16:24	12/18/20 14:03	1

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF IW-1A
Date Collected: 12/10/20 14:55
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Benzo[a]pyrene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Benzo[b]fluoranthene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Benzo[g,h,i]perylene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Benzo[k]fluoranthene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Acenaphthene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Acenaphthylene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Acetophenone	ND		10	4.2	ug/L		12/17/20 16:24	12/18/20 14:03	1
Anthracene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Atrazine	ND		5.2	2.1	ug/L		12/17/20 16:24	12/18/20 14:03	1
Benzaldehyde	ND		10	3.1	ug/L		12/17/20 16:24	12/18/20 14:03	1
Butylbenzylphthalate	ND		5.2	2.1	ug/L		12/17/20 16:24	12/18/20 14:03	1
Caprolactam	ND		12	5.2	ug/L		12/17/20 16:24	12/18/20 14:03	1
Carbazole	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
Chrysene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Dibenz(a,h)anthracene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Dibenzofuran	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
Diethyl phthalate	ND		5.2	2.1	ug/L		12/17/20 16:24	12/18/20 14:03	1
Dimethyl phthalate	ND		5.2	2.1	ug/L		12/17/20 16:24	12/18/20 14:03	1
Hexachlorobenzene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Hexachlorobutadiene	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
Hexachlorocyclopentadiene	ND	*+	12	5.2	ug/L		12/17/20 16:24	12/18/20 14:03	1
Hexachloroethane	ND		5.2	1.0	ug/L		12/17/20 16:24	12/18/20 14:03	1
Fluoranthene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Fluorene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Indeno[1,2,3-cd]pyrene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Isophorone	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
N-Nitrosodi-n-propylamine	ND		3.1	0.73	ug/L		12/17/20 16:24	12/18/20 14:03	1
N-Nitrosodiphenylamine	ND		3.1	0.73	ug/L		12/17/20 16:24	12/18/20 14:03	1
Naphthalene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Nitrobenzene	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
Pentachlorophenol	ND		5.2	1.0	ug/L		12/17/20 16:24	12/18/20 14:03	1
Phenanthrene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Phenol	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
Pyrene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
2-Chloronaphthalene	ND		1.0	0.42	ug/L		12/17/20 16:24	12/18/20 14:03	1
2-Chlorophenol	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
2-Methylnaphthalene	ND		0.52	0.10	ug/L		12/17/20 16:24	12/18/20 14:03	1
2-Methylphenol	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
2-Nitroaniline	ND		5.2	2.1	ug/L		12/17/20 16:24	12/18/20 14:03	1
2-Nitrophenol	ND		10	3.1	ug/L		12/17/20 16:24	12/18/20 14:03	1
3,3'-Dichlorobenzidine	ND		10	3.1	ug/L		12/17/20 16:24	12/18/20 14:03	1
3-Nitroaniline	ND		7.3	3.1	ug/L		12/17/20 16:24	12/18/20 14:03	1
4,6-Dinitro-2-methylphenol	ND		22	8.4	ug/L		12/17/20 16:24	12/18/20 14:03	1
4-Bromophenyl-phenylether	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
4-Methylphenol	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
4-Nitroaniline	ND		3.1	0.94	ug/L		12/17/20 16:24	12/18/20 14:03	1
4-Nitrophenol	ND		31	10	ug/L		12/17/20 16:24	12/18/20 14:03	1
Bis(2-chloroethoxy)methane	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1

Client Sample ID: HOFF IW-1A
Date Collected: 12/10/20 14:55
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
Bis(2-ethylhexyl) phthalate	ND		12	5.2	ug/L		12/17/20 16:24	12/18/20 14:03	1
2,6-Dinitrotoluene	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1
4-Chloro-3-methylphenol	ND		3.7	1.7	ug/L		12/17/20 16:24	12/18/20 14:03	1
4-Chloroaniline	ND		10	4.2	ug/L		12/17/20 16:24	12/18/20 14:03	1
4-Chlorophenyl-phenyl ether	ND		2.1	0.52	ug/L		12/17/20 16:24	12/18/20 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*22*		*10 - 150*	*12/17/20 16:24*	*12/18/20 14:03*	*1*
2-Fluorobiphenyl (Surr)	*65*		*44 - 102*	*12/17/20 16:24*	*12/18/20 14:03*	*1*
2-Fluorophenol (Surr)	*0.3*	*S1-*	*10 - 84*	*12/17/20 16:24*	*12/18/20 14:03*	*1*
Nitrobenzene-d5 (Surr)	*71*		*23 - 128*	*12/17/20 16:24*	*12/18/20 14:03*	*1*
p-Terphenyl-d14 (Surr)	*63*		*31 - 113*	*12/17/20 16:24*	*12/18/20 14:03*	*1*
Phenol-d5 (Surr)	*0.5*	*S1-*	*10 - 67*	*12/17/20 16:24*	*12/18/20 14:03*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	**0.0025**	**J**	0.019	0.0019	ug/L		12/15/20 17:30	12/16/20 09:43	1
alpha-BHC (1C)	ND		0.019	0.0029	ug/L		12/15/20 17:30	12/16/20 09:43	1
alpha-Chlordane (1C)	ND		0.019	0.0029	ug/L		12/15/20 17:30	12/16/20 09:43	1
beta-BHC (2C)	ND		0.019	0.0033	ug/L		12/15/20 17:30	12/16/20 09:43	1
delta-BHC (1C)	ND		0.019	0.0033	ug/L		12/15/20 17:30	12/16/20 09:43	1
Dieldrin (1C)	ND		0.029	0.0051	ug/L		12/15/20 17:30	12/16/20 09:43	1
Endosulfan I (1C)	ND		0.019	0.0042	ug/L		12/15/20 17:30	12/16/20 09:43	1
Endosulfan II (1C)	ND		0.039	0.015	ug/L		12/15/20 17:30	12/16/20 09:43	1
Endosulfan sulfate (1C)	ND		0.029	0.0056	ug/L		12/15/20 17:30	12/16/20 09:43	1
Endrin (1C)	ND		0.029	0.0078	ug/L		12/15/20 17:30	12/16/20 09:43	1
Endrin aldehyde (1C)	ND		0.097	0.019	ug/L		12/15/20 17:30	12/16/20 09:43	1
Endrin ketone (1C)	ND		0.029	0.0048	ug/L		12/15/20 17:30	12/16/20 09:43	1
gamma-BHC (Lindane) (2C)	ND		0.019	0.0019	ug/L		12/15/20 17:30	12/16/20 09:43	1
gamma-Chlordane (1C)	ND		0.039	0.0068	ug/L		12/15/20 17:30	12/16/20 09:43	1
Heptachlor (2C)	**0.0041**	**J p**	0.019	0.0019	ug/L		12/15/20 17:30	12/16/20 09:43	1
Heptachlor epoxide (1C)	ND		0.019	0.0022	ug/L		12/15/20 17:30	12/16/20 09:43	1
Methoxychlor (1C)	ND		0.11	0.029	ug/L		12/15/20 17:30	12/16/20 09:43	1
Toxaphene (1C)	ND		0.97	0.29	ug/L		12/15/20 17:30	12/16/20 09:43	1
p,p'-DDD (1C)	ND		0.029	0.0048	ug/L		12/15/20 17:30	12/16/20 09:43	1
p,p'-DDE (1C)	ND		0.029	0.0048	ug/L		12/15/20 17:30	12/16/20 09:43	1
p,p'-DDT (1C)	ND		0.029	0.0050	ug/L		12/15/20 17:30	12/16/20 09:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*36*		*32 - 149*	*12/15/20 17:30*	*12/16/20 09:43*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*38*		*32 - 149*	*12/15/20 17:30*	*12/16/20 09:43*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*57*		*29 - 129*	*12/15/20 17:30*	*12/16/20 09:43*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*58*		*29 - 129*	*12/15/20 17:30*	*12/16/20 09:43*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.022**	**J**	0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:39	1
Aluminum	**7.7**		0.30	0.15	mg/L		12/14/20 06:02	12/17/20 15:39	1
Antimony	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:39	1

Client Sample ID: HOFF IW-1A
Date Collected: 12/10/20 14:55
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-6
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.37		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:39	1
Beryllium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:39	1
Cadmium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:39	1
Calcium	480		2.5	0.48	mg/L		12/14/20 06:02	12/17/20 17:04	5
Chromium	0.21		0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 15:39	1
Cobalt	0.0064		0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 15:39	1
Copper	0.028	*+	0.020	0.012	mg/L		12/14/20 06:02	12/17/20 15:39	1
Iron	28		0.20	0.040	mg/L		12/14/20 06:02	12/17/20 15:39	1
Lead	0.029		0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 15:39	1
Magnesium	1400		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 17:04	5
Manganese	0.28		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 15:39	1
Nickel	0.024		0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 15:39	1
Zinc	0.027		0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 15:39	1
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:46	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:39	1
Potassium	120		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 15:39	1
Sodium	6900		50	12	mg/L		12/14/20 06:02	12/17/20 17:08	50
Thallium	ND		0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 15:39	1
Vanadium	0.034		0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 15:39	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 19:56	12/17/20 16:47	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 19:56	12/17/20 16:47	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 19:56	12/17/20 16:47	1
Barium	0.19		0.0052	0.0010	mg/L		12/14/20 19:56	12/17/20 16:47	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 19:56	12/17/20 16:47	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 19:56	12/17/20 16:47	1
Calcium	2000		2.6	0.49	mg/L		12/14/20 19:56	12/17/20 17:02	5
Chromium	0.17		0.015	0.0016	mg/L		12/14/20 19:56	12/17/20 16:47	1
Cobalt	0.0057		0.0052	0.0015	mg/L		12/14/20 19:56	12/17/20 16:47	1
Copper	0.046		0.021	0.012	mg/L		12/14/20 19:56	12/22/20 09:16	1
Iron	ND		0.21	0.041	mg/L		12/14/20 19:56	12/17/20 16:47	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 19:56	12/17/20 16:47	1
Magnesium	1300		0.52	0.21	mg/L		12/14/20 19:56	12/17/20 17:02	5
Manganese	0.033		0.010	0.0031	mg/L		12/14/20 19:56	12/17/20 16:47	1
Nickel	0.023		0.010	0.0022	mg/L		12/14/20 19:56	12/17/20 16:47	1
Zinc	ND		0.021	0.0038	mg/L		12/14/20 19:56	12/17/20 16:47	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 19:56	12/17/20 16:47	1
Selenium	0.023	J	0.052	0.016	mg/L		12/14/20 19:56	12/17/20 16:47	1
Potassium	110		0.52	0.21	mg/L		12/14/20 19:56	12/18/20 05:22	1
Sodium	7800		52	12	mg/L		12/14/20 19:56	12/18/20 05:26	50
Thallium	ND		0.031	0.0083	mg/L		12/14/20 19:56	12/22/20 09:16	1
Vanadium	ND		0.010	0.0020	mg/L		12/14/20 19:56	12/17/20 16:47	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.8		0.20	0.079	ug/L		12/11/20 11:59	12/14/20 15:32	1

Client Sample ID: HOFF IW-1A

Lab Sample ID: 410-23571-6

Date Collected: 12/10/20 14:55

Matrix: Water

Date Received: 12/10/20 19:20

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**2.6**		0.20	0.079	ug/L		12/11/20 11:52	12/14/20 14:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4700**		240	80	mg/L			12/15/20 11:44	1
Ferrous Iron	**0.19**	**HF**	0.10	0.050	mg/L			12/15/20 09:20	1
Sulfate	**4500**		1200	400	mg/L			12/15/20 10:45	200

Client Sample ID: HOFF IW-1B

Lab Sample ID: 410-23571-7

Date Collected: 12/10/20 15:50

Matrix: Water

Date Received: 12/10/20 19:20

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/21/20 00:52	1
trans-1,3-Dichloropropene	**0.37**	**J**	0.50	0.060	ug/L			12/21/20 00:52	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/21/20 00:52	1
Styrene	ND		0.50	0.050	ug/L			12/21/20 00:52	1
1,4-Dichlorobenzene	**5.7**		0.50	0.070	ug/L			12/21/20 00:52	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/21/20 00:52	1
1,2-Dichloroethane	**1.1**		0.50	0.050	ug/L			12/21/20 00:52	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/21/20 00:52	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/21/20 00:52	1
Toluene	ND		0.50	0.070	ug/L			12/21/20 00:52	1
Chlorobenzene	**1.1**		0.50	0.060	ug/L			12/21/20 00:52	1
Cyclohexane	ND		0.50	0.050	ug/L			12/21/20 00:52	1
1,2,4-Trichlorobenzene	**0.71**		0.50	0.060	ug/L			12/21/20 00:52	1
Dibromochloromethane	**5.6**		0.50	0.070	ug/L			12/21/20 00:52	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/21/20 00:52	1
Tetrachloroethene	**0.28**	**J**	0.50	0.060	ug/L			12/21/20 00:52	1
cis-1,2-Dichloroethene	**0.10**	**J**	0.50	0.050	ug/L			12/21/20 00:52	1
trans-1,2-Dichloroethene	**0.073**	**J ^c**	0.50	0.060	ug/L			12/21/20 00:52	1
Methyl tertiary butyl ether	**0.086**	**J**	0.50	0.050	ug/L			12/21/20 00:52	1
1,3-Dichlorobenzene	**0.34**	**J**	0.50	0.060	ug/L			12/21/20 00:52	1
Carbon tetrachloride	**0.74**		0.50	0.070	ug/L			12/21/20 00:52	1
2-Hexanone	ND		5.0	0.60	ug/L			12/21/20 00:52	1
Benzene	**0.68**		0.50	0.050	ug/L			12/21/20 00:52	1
1,1,1-Trichloroethane	**3.0**		0.50	0.060	ug/L			12/21/20 00:52	1
Bromomethane	**16**		0.50	0.070	ug/L			12/21/20 00:52	1
Chloroethane	**4.6**		0.50	0.070	ug/L			12/21/20 00:52	1
Vinyl chloride	**0.16**	**J**	0.50	0.10	ug/L			12/21/20 00:52	1
Methylene Chloride	**15**		0.50	0.070	ug/L			12/21/20 00:52	1
Carbon disulfide	**0.80**	**J ^c**	1.0	0.060	ug/L			12/21/20 00:52	1
Bromoform	**0.49**	**J**	1.0	0.30	ug/L			12/21/20 00:52	1
Bromodichloromethane	**4.1**		0.50	0.050	ug/L			12/21/20 00:52	1
1,1-Dichloroethene	ND	^c	0.50	0.060	ug/L			12/21/20 00:52	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/21/20 00:52	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/21/20 00:52	1
Freon 113	ND		0.50	0.060	ug/L			12/21/20 00:52	1
1,2-Dichloropropane	**3.0**		0.50	0.060	ug/L			12/21/20 00:52	1

Client Sample ID: HOFF IW-1B
Date Collected: 12/10/20 15:50
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-7
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	190		5.0	0.60	ug/L			12/21/20 00:52	1
1,1,2-Trichloroethane	0.98		0.50	0.060	ug/L			12/21/20 00:52	1
Trichloroethene	0.16	J	0.50	0.060	ug/L			12/21/20 00:52	1
Methyl acetate	ND		1.0	0.10	ug/L			12/21/20 00:52	1
1,1,2,2-Tetrachloroethane	0.63		0.50	0.070	ug/L			12/21/20 00:52	1
1,2-Dichlorobenzene	21		0.50	0.060	ug/L			12/21/20 00:52	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/21/20 00:52	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/21/20 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*80 - 120*		*12/21/20 00:52*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*12/21/20 00:52*	*1*
4-Bromofluorobenzene (Surr)	*80*		*80 - 120*		*12/21/20 00:52*	*1*
Toluene-d8 (Surr)	*73*	*S1-*	*80 - 120*		*12/21/20 00:52*	*1*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	440		50	9.0	ug/L			12/21/20 01:14	10
Chloroform	3.9	J	5.0	0.90	ug/L			12/21/20 01:14	10
Chloromethane	63		5.0	0.60	ug/L			12/21/20 01:14	10
1,1-Dichloroethane	110		5.0	0.70	ug/L			12/21/20 01:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*12/21/20 01:14*	*10*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/21/20 01:14*	*10*
4-Bromofluorobenzene (Surr)	*87*		*80 - 120*		*12/21/20 01:14*	*10*
Toluene-d8 (Surr)	*85*		*80 - 120*		*12/21/20 01:14*	*10*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	12		8.0	4.0	ug/L			12/19/20 14:36	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*77*	*S1-*	*80 - 120*		*12/19/20 14:36*	*20*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		11	3.2	ug/L		12/17/20 16:24	12/18/20 14:32	1
2,4-Dichlorophenol	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
2,4-Dimethylphenol	ND		11	3.2	ug/L		12/17/20 16:24	12/18/20 14:32	1
2,4-Dinitrophenol	ND		32	15	ug/L		12/17/20 16:24	12/18/20 14:32	1
2,4-Dinitrotoluene	ND		5.3	1.1	ug/L		12/17/20 16:24	12/18/20 14:32	1
2,4,5-Trichlorophenol	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
2,4,6-Trichlorophenol	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
2,2'-oxybis[1-chloropropane]	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
Di-n-butyl phthalate	ND		5.3	2.1	ug/L		12/17/20 16:24	12/18/20 14:32	1
Di-n-octyl phthalate	ND		12	5.3	ug/L		12/17/20 16:24	12/18/20 14:32	1
Benzo[a]anthracene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Benzo[a]pyrene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Benzo[b]fluoranthene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Benzo[g,h,i]perylene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF IW-1B
Date Collected: 12/10/20 15:50
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Acenaphthene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Acenaphthylene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Acetophenone	ND		11	4.3	ug/L		12/17/20 16:24	12/18/20 14:32	1
Anthracene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Atrazine	ND		5.3	2.1	ug/L		12/17/20 16:24	12/18/20 14:32	1
Benzaldehyde	ND		11	3.2	ug/L		12/17/20 16:24	12/18/20 14:32	1
Butylbenzylphthalate	ND		5.3	2.1	ug/L		12/17/20 16:24	12/18/20 14:32	1
Caprolactam	ND		12	5.3	ug/L		12/17/20 16:24	12/18/20 14:32	1
Carbazole	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
Chrysene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Dibenz(a,h)anthracene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Dibenzofuran	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
Diethyl phthalate	ND		5.3	2.1	ug/L		12/17/20 16:24	12/18/20 14:32	1
Dimethyl phthalate	ND		5.3	2.1	ug/L		12/17/20 16:24	12/18/20 14:32	1
Hexachlorobenzene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Hexachlorobutadiene	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
Hexachlorocyclopentadiene	ND	*+	12	5.3	ug/L		12/17/20 16:24	12/18/20 14:32	1
Hexachloroethane	ND		5.3	1.1	ug/L		12/17/20 16:24	12/18/20 14:32	1
Fluoranthene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Fluorene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Indeno[1,2,3-cd]pyrene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Isophorone	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
N-Nitrosodi-n-propylamine	ND		3.2	0.75	ug/L		12/17/20 16:24	12/18/20 14:32	1
N-Nitrosodiphenylamine	ND		3.2	0.75	ug/L		12/17/20 16:24	12/18/20 14:32	1
Naphthalene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Nitrobenzene	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
Pentachlorophenol	ND		5.3	1.1	ug/L		12/17/20 16:24	12/18/20 14:32	1
Phenanthrene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Phenol	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
Pyrene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
2-Chloronaphthalene	ND		1.1	0.43	ug/L		12/17/20 16:24	12/18/20 14:32	1
2-Chlorophenol	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
2-Methylnaphthalene	ND		0.53	0.11	ug/L		12/17/20 16:24	12/18/20 14:32	1
2-Methylphenol	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
2-Nitroaniline	ND		5.3	2.1	ug/L		12/17/20 16:24	12/18/20 14:32	1
2-Nitrophenol	ND		11	3.2	ug/L		12/17/20 16:24	12/18/20 14:32	1
3,3'-Dichlorobenzidine	ND		11	3.2	ug/L		12/17/20 16:24	12/18/20 14:32	1
3-Nitroaniline	ND		7.5	3.2	ug/L		12/17/20 16:24	12/18/20 14:32	1
4,6-Dinitro-2-methylphenol	ND		22	8.5	ug/L		12/17/20 16:24	12/18/20 14:32	1
4-Bromophenyl-phenylether	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
4-Methylphenol	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
4-Nitroaniline	ND		3.2	0.96	ug/L		12/17/20 16:24	12/18/20 14:32	1
4-Nitrophenol	ND		32	11	ug/L		12/17/20 16:24	12/18/20 14:32	1
Bis(2-chloroethoxy)methane	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
Bis(2-chloroethyl)ether	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
Bis(2-ethylhexyl) phthalate	ND		12	5.3	ug/L		12/17/20 16:24	12/18/20 14:32	1
2,6-Dinitrotoluene	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1
4-Chloro-3-methylphenol	ND		3.7	1.7	ug/L		12/17/20 16:24	12/18/20 14:32	1

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF IW-1B

Date Collected: 12/10/20 15:50
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-7

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		11	4.3	ug/L		12/17/20 16:24	12/18/20 14:32	1
4-Chlorophenyl-phenyl ether	ND		2.1	0.53	ug/L		12/17/20 16:24	12/18/20 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*47*		*10 - 150*	*12/17/20 16:24*	*12/18/20 14:32*	*1*
2-Fluorobiphenyl (Surr)	*62*		*44 - 102*	*12/17/20 16:24*	*12/18/20 14:32*	*1*
2-Fluorophenol (Surr)	*4*	*S1-*	*10 - 84*	*12/17/20 16:24*	*12/18/20 14:32*	*1*
Nitrobenzene-d5 (Surr)	*72*		*23 - 128*	*12/17/20 16:24*	*12/18/20 14:32*	*1*
p-Terphenyl-d14 (Surr)	*65*		*31 - 113*	*12/17/20 16:24*	*12/18/20 14:32*	*1*
Phenol-d5 (Surr)	*3*	*S1-*	*10 - 67*	*12/17/20 16:24*	*12/18/20 14:32*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 09:54	1
alpha-BHC (2C)	**0.0050**	**J p**	0.020	0.0030	ug/L		12/15/20 17:30	12/16/20 09:54	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		12/15/20 17:30	12/16/20 09:54	1
beta-BHC (2C)	ND		0.020	0.0034	ug/L		12/15/20 17:30	12/16/20 09:54	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		12/15/20 17:30	12/16/20 09:54	1
Dieldrin (1C)	ND		0.030	0.0052	ug/L		12/15/20 17:30	12/16/20 09:54	1
Endosulfan I (1C)	ND		0.020	0.0042	ug/L		12/15/20 17:30	12/16/20 09:54	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		12/15/20 17:30	12/16/20 09:54	1
Endosulfan sulfate (1C)	ND		0.030	0.0057	ug/L		12/15/20 17:30	12/16/20 09:54	1
Endrin (1C)	ND		0.030	0.0080	ug/L		12/15/20 17:30	12/16/20 09:54	1
Endrin aldehyde (1C)	ND		0.099	0.020	ug/L		12/15/20 17:30	12/16/20 09:54	1
Endrin ketone (2C)	**0.0094**	**J**	0.030	0.0049	ug/L		12/15/20 17:30	12/16/20 09:54	1
gamma-BHC (Lindane) (1C)	**0.0057**	**J**	0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 09:54	1
gamma-Chlordane (1C)	ND		0.040	0.0069	ug/L		12/15/20 17:30	12/16/20 09:54	1
Heptachlor (2C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 09:54	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		12/15/20 17:30	12/16/20 09:54	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		12/15/20 17:30	12/16/20 09:54	1
Toxaphene (1C)	ND		0.99	0.30	ug/L		12/15/20 17:30	12/16/20 09:54	1
p,p'-DDD (1C)	ND		0.030	0.0049	ug/L		12/15/20 17:30	12/16/20 09:54	1
p,p'-DDE (1C)	ND		0.030	0.0049	ug/L		12/15/20 17:30	12/16/20 09:54	1
p,p'-DDT (1C)	**0.0073**	**J**	0.030	0.0051	ug/L		12/15/20 17:30	12/16/20 09:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*35*		*32 - 149*	*12/15/20 17:30*	*12/16/20 09:54*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*34*		*32 - 149*	*12/15/20 17:30*	*12/16/20 09:54*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*57*		*29 - 129*	*12/15/20 17:30*	*12/16/20 09:54*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*46*		*29 - 129*	*12/15/20 17:30*	*12/16/20 09:54*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.023**	**J**	0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:36	1
Aluminum	**6.8**		0.30	0.15	mg/L		12/14/20 06:02	12/17/20 15:36	1
Antimony	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:36	1
Barium	**0.13**		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:36	1
Beryllium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:36	1
Cadmium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:36	1
Calcium	**410**		2.5	0.48	mg/L		12/14/20 06:02	12/17/20 16:49	5

Client Sample ID: HOFF IW-1B
Date Collected: 12/10/20 15:50
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-7
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.066		0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 15:36	1
Cobalt	0.0055		0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 15:36	1
Copper	0.029	*+	0.020	0.012	mg/L		12/14/20 06:02	12/17/20 15:36	1
Iron	19		0.20	0.040	mg/L		12/14/20 06:02	12/17/20 15:36	1
Lead	0.030		0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 15:36	1
Magnesium	1100		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 16:49	5
Manganese	0.14		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 15:36	1
Nickel	0.011		0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 15:36	1
Zinc	0.017	J	0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 15:36	1
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:42	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:36	1
Potassium	61		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 15:36	1
Sodium	5000		50	12	mg/L		12/14/20 06:02	12/17/20 16:52	50
Thallium	ND		0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 15:36	1
Vanadium	0.030		0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 15:36	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 17:00	1
Aluminum	0.74		0.31	0.16	mg/L		12/14/20 20:04	12/15/20 17:00	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 17:00	1
Barium	0.056		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 17:00	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 17:00	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 17:00	1
Calcium	1500		2.6	0.49	mg/L		12/14/20 20:04	12/20/20 15:10	5
Chromium	0.056		0.015	0.0016	mg/L		12/14/20 20:04	12/15/20 17:00	1
Cobalt	ND		0.0052	0.0015	mg/L		12/14/20 20:04	12/15/20 17:00	1
Copper	0.031		0.021	0.012	mg/L		12/14/20 20:04	12/15/20 17:00	1
Iron	1.1		0.21	0.041	mg/L		12/14/20 20:04	12/15/20 17:00	1
Lead	0.012	J	0.015	0.0073	mg/L		12/14/20 20:04	12/15/20 17:00	1
Magnesium	1000		0.52	0.21	mg/L		12/14/20 20:04	12/20/20 15:10	5
Manganese	0.038		0.010	0.0031	mg/L		12/14/20 20:04	12/15/20 17:00	1
Nickel	0.011		0.010	0.0022	mg/L		12/14/20 20:04	12/15/20 17:00	1
Zinc	0.0054	J	0.021	0.0038	mg/L		12/14/20 20:04	12/15/20 17:00	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:04	12/15/20 17:00	1
Selenium	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 17:00	1
Potassium	51		2.6	1.1	mg/L		12/14/20 20:04	12/20/20 15:10	5
Sodium	5000		21	4.9	mg/L		12/14/20 20:04	12/20/20 15:14	20
Thallium	ND	*+	0.15	0.042	mg/L		12/14/20 20:04	12/20/20 15:10	5
Vanadium	0.0086	J	0.010	0.0020	mg/L		12/14/20 20:04	12/15/20 17:00	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.0		0.20	0.079	ug/L		12/11/20 11:59	12/14/20 15:30	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.2		0.20	0.079	ug/L		12/11/20 11:52	12/14/20 14:37	1

Client Sample ID: HOFF IW-1B

Lab Sample ID: 410-23571-7

Date Collected: 12/10/20 15:50

Matrix: Water

Date Received: 12/10/20 19:20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**5500**		240	80	mg/L			12/15/20 11:44	1
Ferrous Iron	**0.16**	**HF**	0.10	0.050	mg/L			12/15/20 09:22	1
Sulfate	**3400**		600	200	mg/L			12/15/20 10:45	100

Client Sample ID: TB-01-120920

Lab Sample ID: 410-23571-8

Date Collected: 12/09/20 16:30

Matrix: Water

Date Received: 12/10/20 19:20

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/18/20 23:24	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/18/20 23:24	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/18/20 23:24	1
Styrene	ND		0.50	0.050	ug/L			12/18/20 23:24	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/18/20 23:24	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/18/20 23:24	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/18/20 23:24	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/18/20 23:24	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/18/20 23:24	1
Toluene	ND		0.50	0.070	ug/L			12/18/20 23:24	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/18/20 23:24	1
Cyclohexane	ND		0.50	0.050	ug/L			12/18/20 23:24	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			12/18/20 23:24	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/18/20 23:24	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/18/20 23:24	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/18/20 23:24	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/18/20 23:24	1
trans-1,2-Dichloroethene	ND	^c	0.50	0.060	ug/L			12/18/20 23:24	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			12/18/20 23:24	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			12/18/20 23:24	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/18/20 23:24	1
2-Hexanone	ND		5.0	0.60	ug/L			12/18/20 23:24	1
Acetone	**5.9**		5.0	0.90	ug/L			12/18/20 23:24	1
Chloroform	**0.20**	**J**	0.50	0.090	ug/L			12/18/20 23:24	1
Benzene	ND		0.50	0.050	ug/L			12/18/20 23:24	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/18/20 23:24	1
Bromomethane	ND		0.50	0.070	ug/L			12/18/20 23:24	1
Chloromethane	ND		0.50	0.060	ug/L			12/18/20 23:24	1
Chloroethane	ND		0.50	0.070	ug/L			12/18/20 23:24	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/18/20 23:24	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/18/20 23:24	1
Carbon disulfide	ND	^c	1.0	0.060	ug/L			12/18/20 23:24	1
Bromoform	ND		1.0	0.30	ug/L			12/18/20 23:24	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/18/20 23:24	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/18/20 23:24	1
1,1-Dichloroethene	ND	^c	0.50	0.060	ug/L			12/18/20 23:24	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/18/20 23:24	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/18/20 23:24	1
Freon 113	ND		0.50	0.060	ug/L			12/18/20 23:24	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/20 23:24	1

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: TB-01-120920
Date Collected: 12/09/20 16:30
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-8
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	**2.5**	**J**	5.0	0.60	ug/L			12/18/20 23:24	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/18/20 23:24	1
Trichloroethene	ND		0.50	0.060	ug/L			12/18/20 23:24	1
Methyl acetate	ND		1.0	0.10	ug/L			12/18/20 23:24	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/18/20 23:24	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			12/18/20 23:24	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/18/20 23:24	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/18/20 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*12/18/20 23:24*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*12/18/20 23:24*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*12/18/20 23:24*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/18/20 23:24*	*1*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			12/18/20 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*80 - 120*		*12/18/20 23:45*	*1*

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	BFB	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-23571-1	HOFF MW-F_A	103	107	94	97
410-23571-1 - DL	HOFF MW-F_A	108	108	91	97
410-23571-2	HOFF MW-F_B	105	108	91	87
410-23571-2 - DL	HOFF MW-F_B	106	107	91	94
410-23571-3	HOFF MW-E	108	108	91	96
410-23571-4	HOFF MW-10	110	108	91	95
410-23571-4 - DL	HOFF MW-10	111	110	91	96
410-23571-5	HOFF MW-6	110	109	93	96
410-23571-5 - DL	HOFF MW-6	109	110	91	97
410-23571-6	HOFF IW-1A	116	114	83	55 S1-
410-23571-6 - DL	HOFF IW-1A	109	109	88	84
410-23571-7	HOFF IW-1B	112	107	80	73 S1-
410-23571-7 - DL	HOFF IW-1B	105	101	87	85
410-23571-8	TB-01-120920	108	108	92	98
LCS 410-78295/4	Lab Control Sample	101	103	94	98
LCS 410-78607/5	Lab Control Sample	100	99	100	100
LCSD 410-78295/5	Lab Control Sample Dup	106	105	95	97
MB 410-78295/7	Method Blank	113	109	91	96
MB 410-78607/8	Method Blank	104	99	99	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		TOL
Lab Sample ID	Client Sample ID	(80-120)
410-23571-1	HOFF MW-F_A	85
410-23571-2	HOFF MW-F_B	81
410-23571-3	HOFF MW-E	87
410-23571-4	HOFF MW-10	87
410-23571-5	HOFF MW-6	84
410-23571-6	HOFF IW-1A	77 S1-
410-23571-7	HOFF IW-1B	77 S1-
410-23571-8	TB-01-120920	86
LCS 410-78069/4	Lab Control Sample	87
LCS 410-78311/4	Lab Control Sample	86
LCS 410-78368/4	Lab Control Sample	86
LCS 410-79219/4	Lab Control Sample	83
LCS 410-79617/4	Lab Control Sample	84
LCSD 410-78069/5	Lab Control Sample Dup	87
LCSD 410-78311/5	Lab Control Sample Dup	86
LCSD 410-78368/5	Lab Control Sample Dup	86
LCSD 410-79219/5	Lab Control Sample Dup	83
LCSD 410-79617/5	Lab Control Sample Dup	84

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TOL							
Lab Sample ID	Client Sample ID	(80-120)							
MB 410-78069/7	Method Blank	86							
MB 410-78311/7	Method Blank	86							
MB 410-78368/7	Method Blank	86							
MB 410-79219/7	Method Blank	83							
MB 410-79617/7	Method Blank	84							

Surrogate Legend

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	TPHd14	PHL		
Lab Sample ID	Client Sample ID	(10-150)	(44-102)	(10-84)	(23-128)	(31-113)	(10-67)		
410-23571-1	HOFF MW-F_A	27	42 S1-	26	66	67	31		
410-23571-2	HOFF MW-F_B	33	79	9 S1-	77	82	13		
410-23571-3	HOFF MW-E	87	68	38	66	75	34		
410-23571-4	HOFF MW-10	83	62	36	66	64	32		
410-23571-5	HOFF MW-6	83	65	35	64	79	30		
410-23571-6	HOFF IW-1A	22	65	0.3 S1-	71	63	0.5 S1-		
410-23571-7	HOFF IW-1B	47	62	4 S1-	72	65	3 S1-		
LCS 410-77321/2-A	Lab Control Sample	94	85	52	81	87	40		
LCS 410-77733/2-A	Lab Control Sample	99	79	50	80	90	39		
MB 410-77321/1-A	Method Blank	75	71	38	68	76	28		
MB 410-77733/1-A	Method Blank	95	76	42	75	95	34		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		DCB1	DCB2	TCX1	TCX2				
Lab Sample ID	Client Sample ID	(32-149)	(32-149)	(29-129)	(29-129)				
410-23571-1	HOFF MW-F_A	48	51	47	43				
410-23571-2	HOFF MW-F_B	66	68	48	56				
410-23571-3	HOFF MW-E	69	72	60	59				
410-23571-4	HOFF MW-10	57	61	38	39				
410-23571-5	HOFF MW-6	36	38	53	50				
410-23571-6	HOFF IW-1A	36	38	57	58				
410-23571-7	HOFF IW-1B	35	34	57	46				
LCS 410-77079/2-A	Lab Control Sample	55	57	61	64				
LCSD 410-77079/3-A	Lab Control Sample Dup	47	49	60	58				
MB 410-77079/1-A	Method Blank	55	58	58	60				

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene (Surr)

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-78295/7
Matrix: Water
Analysis Batch: 78295

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/18/20 21:51	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/18/20 21:51	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/18/20 21:51	1
Styrene	ND		0.50	0.050	ug/L			12/18/20 21:51	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/18/20 21:51	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/18/20 21:51	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/18/20 21:51	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/18/20 21:51	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/18/20 21:51	1
Toluene	ND		0.50	0.070	ug/L			12/18/20 21:51	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/18/20 21:51	1
Cyclohexane	ND		0.50	0.050	ug/L			12/18/20 21:51	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			12/18/20 21:51	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/18/20 21:51	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/18/20 21:51	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/18/20 21:51	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/18/20 21:51	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/18/20 21:51	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			12/18/20 21:51	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			12/18/20 21:51	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/18/20 21:51	1
2-Hexanone	ND		5.0	0.60	ug/L			12/18/20 21:51	1
Acetone	ND		5.0	0.90	ug/L			12/18/20 21:51	1
Chloroform	ND		0.50	0.090	ug/L			12/18/20 21:51	1
Benzene	ND		0.50	0.050	ug/L			12/18/20 21:51	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/18/20 21:51	1
Bromomethane	ND		0.50	0.070	ug/L			12/18/20 21:51	1
Chloromethane	ND		0.50	0.060	ug/L			12/18/20 21:51	1
Chloroethane	ND		0.50	0.070	ug/L			12/18/20 21:51	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/18/20 21:51	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/18/20 21:51	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/18/20 21:51	1
Bromoform	ND		1.0	0.30	ug/L			12/18/20 21:51	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/18/20 21:51	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/18/20 21:51	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/18/20 21:51	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/18/20 21:51	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/18/20 21:51	1
Freon 113	ND		0.50	0.060	ug/L			12/18/20 21:51	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/20 21:51	1
2-Butanone	ND		5.0	0.60	ug/L			12/18/20 21:51	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/18/20 21:51	1
Trichloroethene	ND		0.50	0.060	ug/L			12/18/20 21:51	1
Methyl acetate	ND		1.0	0.10	ug/L			12/18/20 21:51	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/18/20 21:51	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			12/18/20 21:51	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/18/20 21:51	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/18/20 21:51	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-78295/7
Matrix: Water
Analysis Batch: 78295

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*113*		*80 - 120*		*12/18/20 21:51*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*12/18/20 21:51*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*12/18/20 21:51*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/18/20 21:51*	*1*

Lab Sample ID: LCS 410-78295/4
Matrix: Water
Analysis Batch: 78295

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.55		ug/L		91	67 - 121
trans-1,3-Dichloropropene	5.00	4.75		ug/L		95	61 - 129
Ethylbenzene	5.00	4.36		ug/L		87	80 - 120
Styrene	5.00	4.55		ug/L		91	80 - 120
1,4-Dichlorobenzene	5.00	4.76		ug/L		95	80 - 120
1,2-Dibromoethane	5.00	4.91		ug/L		98	80 - 120
1,2-Dichloroethane	5.00	4.97		ug/L		99	69 - 122
4-Methyl-2-pentanone	25.0	27.5		ug/L		110	55 - 140
Methylcyclohexane	5.00	4.31		ug/L		86	80 - 120
Toluene	5.00	4.38		ug/L		88	80 - 120
Chlorobenzene	5.00	4.73		ug/L		95	80 - 120
Cyclohexane	5.00	4.24		ug/L		85	69 - 120
1,2,4-Trichlorobenzene	5.00	4.32		ug/L		86	68 - 122
Dibromochloromethane	5.00	5.22		ug/L		104	64 - 138
Xylenes, Total	15.0	13.0		ug/L		87	80 - 120
Tetrachloroethene	5.00	4.99		ug/L		100	80 - 120
cis-1,2-Dichloroethene	5.00	4.61		ug/L		92	80 - 122
trans-1,2-Dichloroethene	5.00	4.37		ug/L		87	80 - 122
Methyl tertiary butyl ether	5.00	3.96		ug/L		79	69 - 120
1,3-Dichlorobenzene	5.00	4.70		ug/L		94	80 - 120
Carbon tetrachloride	5.00	4.66		ug/L		93	64 - 141
2-Hexanone	25.0	28.8		ug/L		115	52 - 140
Acetone	37.5	40.6		ug/L		108	60 - 146
Chloroform	5.00	4.63		ug/L		93	80 - 120
Benzene	5.00	4.42		ug/L		88	80 - 120
1,1,1-Trichloroethane	5.00	4.34		ug/L		87	78 - 126
Bromomethane	5.00	4.09		ug/L		82	60 - 136
Chloromethane	5.00	4.27		ug/L		85	56 - 124
Chloroethane	5.00	4.03		ug/L		81	63 - 120
Vinyl chloride	5.00	4.37		ug/L		87	60 - 125
Methylene Chloride	5.00	4.58		ug/L		92	80 - 120
Carbon disulfide	5.00	4.20		ug/L		84	67 - 130
Bromoform	5.00	5.69		ug/L		114	49 - 144
Bromodichloromethane	5.00	4.89		ug/L		98	73 - 124
1,1-Dichloroethane	5.00	4.58		ug/L		92	74 - 120
1,1-Dichloroethene	5.00	4.21		ug/L		84	80 - 131
Trichlorofluoromethane	5.00	4.69		ug/L		94	62 - 136
Dichlorodifluoromethane	5.00	5.35		ug/L		107	43 - 123

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-78295/4
Matrix: Water
Analysis Batch: 78295

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Freon 113			5.00	4.31		ug/L		86	75 - 133		
1,2-Dichloropropane			5.00	4.93		ug/L		99	80 - 120		
2-Butanone			37.5	44.6		ug/L		119	59 - 141		
1,1,2-Trichloroethane			5.00	5.04		ug/L		101	80 - 120		
Trichloroethene			5.00	4.49		ug/L		90	80 - 120		
Methyl acetate			5.00	5.60		ug/L		112	59 - 143		
1,1,2,2-Tetrachloroethane			5.00	4.54		ug/L		91	75 - 123		
1,2-Dichlorobenzene			5.00	4.58		ug/L		92	80 - 120		
1,2-Dibromo-3-Chloropropane			5.00	4.98		ug/L		100	56 - 148		
Isopropylbenzene			5.00	4.16		ug/L		83	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: LCSD 410-78295/5
Matrix: Water
Analysis Batch: 78295

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene			5.00	4.99		ug/L		100	67 - 121	9	30
trans-1,3-Dichloropropene			5.00	5.20		ug/L		104	61 - 129	9	30
Ethylbenzene			5.00	4.62		ug/L		92	80 - 120	6	30
Styrene			5.00	4.77		ug/L		95	80 - 120	5	30
1,4-Dichlorobenzene			5.00	4.97		ug/L		99	80 - 120	4	30
1,2-Dibromoethane			5.00	5.53		ug/L		111	80 - 120	12	30
1,2-Dichloroethane			5.00	5.31		ug/L		106	69 - 122	7	30
4-Methyl-2-pentanone			25.0	25.6		ug/L		103	55 - 140	7	30
Methylcyclohexane			5.00	4.72		ug/L		94	80 - 120	9	30
Toluene			5.00	4.61		ug/L		92	80 - 120	5	30
Chlorobenzene			5.00	4.97		ug/L		99	80 - 120	5	30
Cyclohexane			5.00	4.62		ug/L		92	69 - 120	9	30
1,2,4-Trichlorobenzene			5.00	4.54		ug/L		91	68 - 122	5	30
Dibromochloromethane			5.00	5.63		ug/L		113	64 - 138	8	30
Xylenes, Total			15.0	13.9		ug/L		92	80 - 120	6	30
Tetrachloroethene			5.00	5.35		ug/L		107	80 - 120	7	30
cis-1,2-Dichloroethene			5.00	4.94		ug/L		99	80 - 122	7	30
trans-1,2-Dichloroethene			5.00	4.64		ug/L		93	80 - 122	6	30
Methyl tertiary butyl ether			5.00	4.50		ug/L		90	69 - 120	13	30
1,3-Dichlorobenzene			5.00	4.87		ug/L		97	80 - 120	4	30
Carbon tetrachloride			5.00	5.01		ug/L		100	64 - 141	7	30
2-Hexanone			25.0	26.8		ug/L		107	52 - 140	7	30
Acetone			37.5	40.5		ug/L		108	60 - 146	0	30
Chloroform			5.00	4.90		ug/L		98	80 - 120	6	30
Benzene			5.00	4.74		ug/L		95	80 - 120	7	30
1,1,1-Trichloroethane			5.00	4.72		ug/L		94	78 - 126	8	30

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-78295/5
Matrix: Water
Analysis Batch: 78295

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane			5.00	4.35		ug/L		87	60 - 136	6	30
Chloromethane			5.00	4.62		ug/L		92	56 - 124	8	30
Chloroethane			5.00	4.36		ug/L		87	63 - 120	8	30
Vinyl chloride			5.00	4.76		ug/L		95	60 - 125	8	30
Methylene Chloride			5.00	4.87		ug/L		97	80 - 120	6	30
Carbon disulfide			5.00	4.58		ug/L		92	67 - 130	9	30
Bromoform			5.00	6.27		ug/L		125	49 - 144	10	30
Bromodichloromethane			5.00	5.31		ug/L		106	73 - 124	8	30
1,1-Dichloroethane			5.00	4.89		ug/L		98	74 - 120	7	30
1,1-Dichloroethene			5.00	4.66		ug/L		93	80 - 131	10	30
Trichlorofluoromethane			5.00	5.17		ug/L		103	62 - 136	10	30
Dichlorodifluoromethane			5.00	5.71		ug/L		114	43 - 123	7	30
Freon 113			5.00	4.63		ug/L		93	75 - 133	7	30
1,2-Dichloropropane			5.00	5.32		ug/L		106	80 - 120	7	30
2-Butanone			37.5	42.3		ug/L		113	59 - 141	5	30
1,1,2-Trichloroethane			5.00	5.44		ug/L		109	80 - 120	8	30
Trichloroethene			5.00	4.86		ug/L		97	80 - 120	8	30
Methyl acetate			5.00	5.07		ug/L		101	59 - 143	10	30
1,1,2,2-Tetrachloroethane			5.00	5.09		ug/L		102	75 - 123	11	30
1,2-Dichlorobenzene			5.00	4.85		ug/L		97	80 - 120	6	30
1,2-Dibromo-3-Chloropropane			5.00	5.61		ug/L		112	56 - 148	12	30
Isopropylbenzene			5.00	4.45		ug/L		89	80 - 120	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 410-78607/8
Matrix: Water
Analysis Batch: 78607

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/20/20 19:43	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/20/20 19:43	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/20/20 19:43	1
Styrene	ND		0.50	0.050	ug/L			12/20/20 19:43	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/20/20 19:43	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/20/20 19:43	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/20/20 19:43	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/20/20 19:43	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/20/20 19:43	1
Toluene	ND		0.50	0.070	ug/L			12/20/20 19:43	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/20/20 19:43	1
Cyclohexane	ND		0.50	0.050	ug/L			12/20/20 19:43	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			12/20/20 19:43	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/20/20 19:43	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-78607/8
Matrix: Water
Analysis Batch: 78607

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		1.0	0.15	ug/L			12/20/20 19:43	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/20/20 19:43	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/20/20 19:43	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/20/20 19:43	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			12/20/20 19:43	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			12/20/20 19:43	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/20/20 19:43	1
2-Hexanone	ND		5.0	0.60	ug/L			12/20/20 19:43	1
Acetone	ND		5.0	0.90	ug/L			12/20/20 19:43	1
Chloroform	ND		0.50	0.090	ug/L			12/20/20 19:43	1
Benzene	ND		0.50	0.050	ug/L			12/20/20 19:43	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/20/20 19:43	1
Bromomethane	ND		0.50	0.070	ug/L			12/20/20 19:43	1
Chloromethane	ND		0.50	0.060	ug/L			12/20/20 19:43	1
Chloroethane	ND		0.50	0.070	ug/L			12/20/20 19:43	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/20/20 19:43	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/20/20 19:43	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/20/20 19:43	1
Bromoform	ND		1.0	0.30	ug/L			12/20/20 19:43	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/20/20 19:43	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/20/20 19:43	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/20/20 19:43	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/20/20 19:43	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/20/20 19:43	1
Freon 113	ND		0.50	0.060	ug/L			12/20/20 19:43	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/20/20 19:43	1
2-Butanone	ND		5.0	0.60	ug/L			12/20/20 19:43	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/20/20 19:43	1
Trichloroethene	ND		0.50	0.060	ug/L			12/20/20 19:43	1
Methyl acetate	ND		1.0	0.10	ug/L			12/20/20 19:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/20/20 19:43	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			12/20/20 19:43	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/20/20 19:43	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/20/20 19:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*12/20/20 19:43*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*12/20/20 19:43*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/20/20 19:43*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*12/20/20 19:43*	*1*

Lab Sample ID: LCS 410-78607/5
Matrix: Water
Analysis Batch: 78607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.73		ug/L		95	67 - 121
trans-1,3-Dichloropropene	5.00	4.84		ug/L		97	61 - 129

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-78607/5
Matrix: Water
Analysis Batch: 78607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	5.00	4.59		ug/L		92	80 - 120
Styrene	5.00	4.69		ug/L		94	80 - 120
1,4-Dichlorobenzene	5.00	4.73		ug/L		95	80 - 120
1,2-Dibromoethane	5.00	4.90		ug/L		98	80 - 120
1,2-Dichloroethane	5.00	4.85		ug/L		97	69 - 122
4-Methyl-2-pentanone	25.0	26.4		ug/L		105	55 - 140
Methylcyclohexane	5.00	4.68		ug/L		94	80 - 120
Toluene	5.00	4.60		ug/L		92	80 - 120
Chlorobenzene	5.00	4.77		ug/L		95	80 - 120
Cyclohexane	5.00	4.42		ug/L		88	69 - 120
1,2,4-Trichlorobenzene	5.00	4.43		ug/L		89	68 - 122
Dibromochloromethane	5.00	5.09		ug/L		102	64 - 138
Xylenes, Total	15.0	14.0		ug/L		93	80 - 120
Tetrachloroethene	5.00	4.62		ug/L		92	80 - 120
cis-1,2-Dichloroethene	5.00	4.81		ug/L		96	80 - 122
trans-1,2-Dichloroethene	5.00	4.45		ug/L		89	80 - 122
Methyl tertiary butyl ether	5.00	4.53		ug/L		91	69 - 120
1,3-Dichlorobenzene	5.00	4.70		ug/L		94	80 - 120
Carbon tetrachloride	5.00	4.61		ug/L		92	64 - 141
2-Hexanone	25.0	27.4		ug/L		110	52 - 140
Acetone	37.5	35.6		ug/L		95	60 - 146
Chloroform	5.00	4.73		ug/L		95	80 - 120
Benzene	5.00	4.60		ug/L		92	80 - 120
1,1,1-Trichloroethane	5.00	4.55		ug/L		91	78 - 126
Bromomethane	5.00	4.19		ug/L		84	60 - 136
Chloromethane	5.00	4.28		ug/L		86	56 - 124
Chloroethane	5.00	4.27		ug/L		85	63 - 120
Vinyl chloride	5.00	4.44		ug/L		89	60 - 125
Methylene Chloride	5.00	4.67		ug/L		93	80 - 120
Carbon disulfide	5.00	4.28		ug/L		86	67 - 130
Bromoform	5.00	5.12		ug/L		102	49 - 144
Bromodichloromethane	5.00	4.86		ug/L		97	73 - 124
1,1-Dichloroethane	5.00	4.78		ug/L		96	74 - 120
1,1-Dichloroethene	5.00	4.43		ug/L		89	80 - 131
Trichlorofluoromethane	5.00	4.61		ug/L		92	62 - 136
Dichlorodifluoromethane	5.00	4.11		ug/L		82	43 - 123
Freon 113	5.00	4.25		ug/L		85	75 - 133
1,2-Dichloropropane	5.00	4.87		ug/L		97	80 - 120
2-Butanone	37.5	40.4		ug/L		108	59 - 141
1,1,2-Trichloroethane	5.00	5.05		ug/L		101	80 - 120
Trichloroethene	5.00	4.62		ug/L		92	80 - 120
Methyl acetate	5.00	4.78		ug/L		96	59 - 143
1,1,2,2-Tetrachloroethane	5.00	5.01		ug/L		100	75 - 123
1,2-Dichlorobenzene	5.00	4.71		ug/L		94	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	4.91		ug/L		98	56 - 148
Isopropylbenzene	5.00	4.60		ug/L		92	80 - 120

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-78607/5
Matrix: Water
Analysis Batch: 78607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Toluene-d8 (Surr)	100		80 - 120

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-78069/7
Matrix: Water
Analysis Batch: 78069

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			12/18/20 12:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	86		80 - 120		12/18/20 12:20	1

Lab Sample ID: LCS 410-78069/4
Matrix: Water
Analysis Batch: 78069

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	5.00		ug/L		101	74 - 133		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	87		80 - 120

Lab Sample ID: LCSD 410-78069/5
Matrix: Water
Analysis Batch: 78069

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.86		ug/L		98	74 - 133	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	87		80 - 120

Lab Sample ID: MB 410-78311/7
Matrix: Water
Analysis Batch: 78311

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			12/18/20 23:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	86		80 - 120		12/18/20 23:04	1

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-78311/4
Matrix: Water
Analysis Batch: 78311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	4.56		ug/L		92	74 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*86*		*80 - 120*

Lab Sample ID: LCSD 410-78311/5
Matrix: Water
Analysis Batch: 78311

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.58		ug/L		92	74 - 133	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*86*		*80 - 120*

Lab Sample ID: MB 410-78368/7
Matrix: Water
Analysis Batch: 78368

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			12/19/20 12:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*80 - 120*		*12/19/20 12:33*	*1*

Lab Sample ID: LCS 410-78368/4
Matrix: Water
Analysis Batch: 78368

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	5.03		ug/L		101	74 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*86*		*80 - 120*

Lab Sample ID: LCSD 410-78368/5
Matrix: Water
Analysis Batch: 78368

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.85		ug/L		98	74 - 133	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*86*		*80 - 120*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-79219/7
Matrix: Water
Analysis Batch: 79219

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			12/22/20 12:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*83*		*80 - 120*		*12/22/20 12:53*	*1*

Lab Sample ID: LCS 410-79219/4
Matrix: Water
Analysis Batch: 79219

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	4.33		ug/L		87	74 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*83*		*80 - 120*

Lab Sample ID: LCSD 410-79219/5
Matrix: Water
Analysis Batch: 79219

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.27		ug/L		86	74 - 133	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*83*		*80 - 120*

Lab Sample ID: MB 410-79617/7
Matrix: Water
Analysis Batch: 79617

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			12/23/20 10:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*84*		*80 - 120*		*12/23/20 10:29*	*1*

Lab Sample ID: LCS 410-79617/4
Matrix: Water
Analysis Batch: 79617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	4.21		ug/L		85	74 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*84*		*80 - 120*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-79617/5
Matrix: Water
Analysis Batch: 79617

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.20		ug/L		85	74 - 133	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*84*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-77321/1-A
Matrix: Water
Analysis Batch: 77649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77321

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
2,4-Dinitrophenol	ND		30	14	ug/L		12/16/20 08:00	12/17/20 11:45	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Benzo[a]pyrene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Acenaphthene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Acenaphthylene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Acetophenone	ND		10	4.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
Anthracene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Atrazine	ND		5.0	2.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
Benzaldehyde	ND		10	3.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
Caprolactam	ND		11	5.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
Carbazole	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
Chrysene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Dibenzofuran	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
Diethyl phthalate	ND		5.0	2.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
Hexachlorocyclopentadiene	ND		11	5.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
Hexachloroethane	ND		5.0	1.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
Fluoranthene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Fluorene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-77321/1-A
Matrix: Water
Analysis Batch: 77649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77321

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		12/16/20 08:00	12/17/20 11:45	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		12/16/20 08:00	12/17/20 11:45	1
Naphthalene	0.126	J B	0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Nitrobenzene	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
Pentachlorophenol	ND		5.0	1.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
Phenanthrene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Phenol	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
Pyrene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		12/16/20 08:00	12/17/20 11:45	1
2-Chlorophenol	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		12/16/20 08:00	12/17/20 11:45	1
2-Methylphenol	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
2-Nitroaniline	ND		5.0	2.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
2-Nitrophenol	ND		10	3.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
3-Nitroaniline	ND		7.0	3.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
4-Methylphenol	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
4-Nitroaniline	ND		3.0	0.90	ug/L		12/16/20 08:00	12/17/20 11:45	1
4-Nitrophenol	ND		30	10	ug/L		12/16/20 08:00	12/17/20 11:45	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		12/16/20 08:00	12/17/20 11:45	1
4-Chloroaniline	ND		10	4.0	ug/L		12/16/20 08:00	12/17/20 11:45	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		12/16/20 08:00	12/17/20 11:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*75*		*10 - 150*	*12/16/20 08:00*	*12/17/20 11:45*	*1*
2-Fluorobiphenyl (Surr)	*71*		*44 - 102*	*12/16/20 08:00*	*12/17/20 11:45*	*1*
2-Fluorophenol (Surr)	*38*		*10 - 84*	*12/16/20 08:00*	*12/17/20 11:45*	*1*
Nitrobenzene-d5 (Surr)	*68*		*23 - 128*	*12/16/20 08:00*	*12/17/20 11:45*	*1*
p-Terphenyl-d14 (Surr)	*76*		*31 - 113*	*12/16/20 08:00*	*12/17/20 11:45*	*1*
Phenol-d5 (Surr)	*28*		*10 - 67*	*12/16/20 08:00*	*12/17/20 11:45*	*1*

Lab Sample ID: LCS 410-77321/2-A
Matrix: Water
Analysis Batch: 77649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77321

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	50.0	43.2		ug/L		86	50 - 110
2,4-Dichlorophenol	50.0	47.1		ug/L		94	51 - 123
2,4-Dimethylphenol	50.0	45.4		ug/L		91	43 - 102
2,4-Dinitrophenol	100	79.4		ug/L		79	30 - 143
2,4-Dinitrotoluene	50.0	45.8		ug/L		92	52 - 128

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-77321/2-A
Matrix: Water
Analysis Batch: 77649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77321

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	50.0	50.0		ug/L		100	59 - 126
2,4,6-Trichlorophenol	50.0	48.3		ug/L		97	59 - 129
2,2'-oxybis[1-chloropropane]	50.0	38.5		ug/L		77	41 - 118
Di-n-butyl phthalate	50.0	44.6		ug/L		89	43 - 118
Di-n-octyl phthalate	50.0	43.9		ug/L		88	48 - 129
Benzo[a]anthracene	50.0	48.7		ug/L		97	61 - 126
Benzo[a]pyrene	50.0	46.4		ug/L		93	60 - 116
Benzo[b]fluoranthene	50.0	44.9		ug/L		90	61 - 119
Benzo[g,h,i]perylene	50.0	52.1		ug/L		104	54 - 120
Benzo[k]fluoranthene	50.0	48.4		ug/L		97	69 - 122
Acenaphthene	50.0	44.9		ug/L		90	52 - 114
Acenaphthylene	50.0	53.5		ug/L		107	55 - 117
Acetophenone	50.0	41.4		ug/L		83	51 - 119
Anthracene	50.0	48.3		ug/L		97	61 - 117
Atrazine	50.4	47.9		ug/L		95	71 - 133
Benzaldehyde	50.5	41.8		ug/L		83	39 - 119
Butylbenzylphthalate	50.0	39.7		ug/L		79	11 - 125
Caprolactam	50.5	10.5	J	ug/L		21	12 - 40
Carbazole	50.0	47.1		ug/L		94	64 - 127
Chrysene	50.0	48.0		ug/L		96	65 - 121
Dibenz(a,h)anthracene	50.0	50.8		ug/L		102	57 - 124
Dibenzofuran	50.0	46.7		ug/L		93	60 - 112
Diethyl phthalate	50.0	43.1		ug/L		86	19 - 121
Dimethyl phthalate	50.0	38.6		ug/L		77	10 - 134
Hexachlorobenzene	50.0	49.8		ug/L		100	55 - 123
Hexachlorobutadiene	50.0	43.8		ug/L		88	20 - 108
Hexachlorocyclopentadiene	50.0	46.4	*+	ug/L		93	10 - 42
Hexachloroethane	50.0	36.9		ug/L		74	22 - 88
Fluoranthene	50.0	47.3		ug/L		95	63 - 122
Fluorene	50.0	47.3		ug/L		95	56 - 115
Indeno[1,2,3-cd]pyrene	50.0	49.8		ug/L		100	52 - 121
Isophorone	50.0	47.4		ug/L		95	55 - 122
N-Nitrosodi-n-propylamine	50.0	43.3		ug/L		87	52 - 123
N-Nitrosodiphenylamine	42.5	40.8		ug/L		96	60 - 126
Naphthalene	50.0	43.4		ug/L		87	51 - 102
Nitrobenzene	50.0	42.4		ug/L		85	52 - 119
Pentachlorophenol	100	90.9		ug/L		91	54 - 131
Phenanthrene	50.0	46.5		ug/L		93	65 - 113
Phenol	50.0	22.2		ug/L		44	22 - 69
Pyrene	50.0	45.0		ug/L		90	65 - 115
2-Chloronaphthalene	50.0	43.4		ug/L		87	43 - 110
2-Chlorophenol	50.0	42.7		ug/L		85	46 - 109
2-Methylnaphthalene	50.0	45.5		ug/L		91	45 - 108
2-Methylphenol	50.0	41.5		ug/L		83	41 - 113
2-Nitroaniline	50.0	50.4		ug/L		101	60 - 123
2-Nitrophenol	50.0	45.3		ug/L		91	53 - 123
3,3'-Dichlorobenzidine	100	82.2		ug/L		82	42 - 107
3-Nitroaniline	50.0	41.5		ug/L		83	54 - 112
4,6-Dinitro-2-methylphenol	100	90.4		ug/L		90	49 - 138

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-77321/2-A
Matrix: Water
Analysis Batch: 77649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77321

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Bromophenyl-phenylether	50.0	48.6		ug/L		97	54 - 121
4-Methylphenol	50.0	37.1		ug/L		74	41 - 109
4-Nitroaniline	50.0	43.1		ug/L		86	49 - 107
4-Nitrophenol	100	45.2		ug/L		45	23 - 89
Bis(2-chloroethoxy)methane	50.0	42.6		ug/L		85	51 - 120
Bis(2-chloroethyl)ether	50.0	42.7		ug/L		85	50 - 110
Bis(2-ethylhexyl) phthalate	50.0	46.2		ug/L		92	50 - 127
2,6-Dinitrotoluene	50.0	48.9		ug/L		98	61 - 121
4-Chloro-3-methylphenol	50.0	45.7		ug/L		91	52 - 126
4-Chloroaniline	50.0	37.6		ug/L		75	45 - 93
4-Chlorophenyl-phenyl ether	50.0	46.5		ug/L		93	47 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*94*		*10 - 150*
2-Fluorobiphenyl (Surr)	*85*		*44 - 102*
2-Fluorophenol (Surr)	*52*		*10 - 84*
Nitrobenzene-d5 (Surr)	*81*		*23 - 128*
p-Terphenyl-d14 (Surr)	*87*		*31 - 113*
Phenol-d5 (Surr)	*40*		*10 - 67*

Lab Sample ID: MB 410-77733/1-A
Matrix: Water
Analysis Batch: 77977

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77733

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
2,4-Dinitrophenol	ND		30	14	ug/L		12/17/20 16:23	12/18/20 11:38	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Benzo[a]pyrene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Acenaphthene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Acenaphthylene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Acetophenone	ND		10	4.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
Anthracene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Atrazine	ND		5.0	2.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
Benzaldehyde	ND		10	3.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
Caprolactam	ND		11	5.0	ug/L		12/17/20 16:23	12/18/20 11:38	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-77733/1-A
Matrix: Water
Analysis Batch: 77977

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77733

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
Chrysene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Dibenzofuran	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
Diethyl phthalate	ND		5.0	2.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
Hexachlorocyclopentadiene	ND		11	5.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
Hexachloroethane	ND		5.0	1.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
Fluoranthene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Fluorene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Isophorone	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		12/17/20 16:23	12/18/20 11:38	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		12/17/20 16:23	12/18/20 11:38	1
Naphthalene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Nitrobenzene	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
Pentachlorophenol	ND		5.0	1.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
Phenanthrene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Phenol	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
Pyrene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		12/17/20 16:23	12/18/20 11:38	1
2-Chlorophenol	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		12/17/20 16:23	12/18/20 11:38	1
2-Methylphenol	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
2-Nitroaniline	ND		5.0	2.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
2-Nitrophenol	ND		10	3.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
3-Nitroaniline	ND		7.0	3.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
4-Methylphenol	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
4-Nitroaniline	ND		3.0	0.90	ug/L		12/17/20 16:23	12/18/20 11:38	1
4-Nitrophenol	ND		30	10	ug/L		12/17/20 16:23	12/18/20 11:38	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		12/17/20 16:23	12/18/20 11:38	1
4-Chloroaniline	ND		10	4.0	ug/L		12/17/20 16:23	12/18/20 11:38	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		12/17/20 16:23	12/18/20 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*10 - 150*	*12/17/20 16:23*	*12/18/20 11:38*	*1*
2-Fluorobiphenyl (Surr)	*76*		*44 - 102*	*12/17/20 16:23*	*12/18/20 11:38*	*1*
2-Fluorophenol (Surr)	*42*		*10 - 84*	*12/17/20 16:23*	*12/18/20 11:38*	*1*
Nitrobenzene-d5 (Surr)	*75*		*23 - 128*	*12/17/20 16:23*	*12/18/20 11:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-77733/1-A
Matrix: Water
Analysis Batch: 77977

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77733

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14 (Surr)	95		31 - 113	12/17/20 16:23	12/18/20 11:38	1
Phenol-d5 (Surr)	34		10 - 67	12/17/20 16:23	12/18/20 11:38	1

Lab Sample ID: LCS 410-77733/2-A
Matrix: Water
Analysis Batch: 77977

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77733

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	50.0	40.9		ug/L		82	50 - 110
2,4-Dichlorophenol	50.0	45.8		ug/L		92	51 - 123
2,4-Dimethylphenol	50.0	45.1		ug/L		90	43 - 102
2,4-Dinitrophenol	100	106		ug/L		106	30 - 143
2,4-Dinitrotoluene	50.0	49.4		ug/L		99	52 - 128
2,4,5-Trichlorophenol	50.0	47.9		ug/L		96	59 - 126
2,4,6-Trichlorophenol	50.0	47.1		ug/L		94	59 - 129
2,2'-oxybis[1-chloropropane]	50.0	37.2		ug/L		74	41 - 118
Di-n-butyl phthalate	50.0	39.7		ug/L		79	43 - 118
Di-n-octyl phthalate	50.0	43.4		ug/L		87	48 - 129
Benzo[a]anthracene	50.0	48.5		ug/L		97	61 - 126
Benzo[a]pyrene	50.0	42.5		ug/L		85	60 - 116
Benzo[b]fluoranthene	50.0	44.1		ug/L		88	61 - 119
Benzo[g,h,i]perylene	50.0	47.5		ug/L		95	54 - 120
Benzo[k]fluoranthene	50.0	47.8		ug/L		96	69 - 122
Acenaphthene	50.0	42.9		ug/L		86	52 - 114
Acenaphthylene	50.0	51.7		ug/L		103	55 - 117
Acetophenone	50.0	39.7		ug/L		79	51 - 119
Anthracene	50.0	47.4		ug/L		95	61 - 117
Atrazine	50.4	45.6		ug/L		90	71 - 133
Benzaldehyde	50.5	37.4		ug/L		74	39 - 119
Butylbenzylphthalate	50.0	28.4		ug/L		57	11 - 125
Caprolactam	50.5	11.2		ug/L		22	12 - 40
Carbazole	50.0	48.6		ug/L		97	64 - 127
Chrysene	50.0	48.6		ug/L		97	65 - 121
Dibenz(a,h)anthracene	50.0	46.9		ug/L		94	57 - 124
Dibenzofuran	50.0	45.6		ug/L		91	60 - 112
Diethyl phthalate	50.0	34.4		ug/L		69	19 - 121
Dimethyl phthalate	50.0	23.0		ug/L		46	10 - 134
Hexachlorobenzene	50.0	43.7		ug/L		87	55 - 123
Hexachlorobutadiene	50.0	33.0		ug/L		66	20 - 108
Hexachlorocyclopentadiene	50.0	24.4	*+	ug/L		49	10 - 42
Hexachloroethane	50.0	30.6		ug/L		61	22 - 88
Fluoranthene	50.0	46.0		ug/L		92	63 - 122
Fluorene	50.0	45.3		ug/L		91	56 - 115
Indeno[1,2,3-cd]pyrene	50.0	46.5		ug/L		93	52 - 121
Isophorone	50.0	49.1		ug/L		98	55 - 122
N-Nitrosodi-n-propylamine	50.0	45.6		ug/L		91	52 - 123
N-Nitrosodiphenylamine	42.5	39.6		ug/L		93	60 - 126
Naphthalene	50.0	40.6		ug/L		81	51 - 102

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-77733/2-A
Matrix: Water
Analysis Batch: 77977

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77733

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrobenzene	50.0	41.8		ug/L		84	52 - 119
Pentachlorophenol	100	98.3		ug/L		98	54 - 131
Phenanthrene	50.0	46.6		ug/L		93	65 - 113
Phenol	50.0	22.3		ug/L		45	22 - 69
Pyrene	50.0	46.0		ug/L		92	65 - 115
2-Chloronaphthalene	50.0	40.1		ug/L		80	43 - 110
2-Chlorophenol	50.0	40.4		ug/L		81	46 - 109
2-Methylnaphthalene	50.0	42.8		ug/L		86	45 - 108
2-Methylphenol	50.0	38.5		ug/L		77	41 - 113
2-Nitroaniline	50.0	47.6		ug/L		95	60 - 123
2-Nitrophenol	50.0	47.5		ug/L		95	53 - 123
3,3'-Dichlorobenzidine	100	73.7		ug/L		74	42 - 107
3-Nitroaniline	50.0	38.7		ug/L		77	54 - 112
4,6-Dinitro-2-methylphenol	100	103		ug/L		103	49 - 138
4-Bromophenyl-phenylether	50.0	46.8		ug/L		94	54 - 121
4-Methylphenol	50.0	33.0		ug/L		66	41 - 109
4-Nitroaniline	50.0	43.4		ug/L		87	49 - 107
4-Nitrophenol	100	46.6		ug/L		47	23 - 89
Bis(2-chloroethoxy)methane	50.0	44.1		ug/L		88	51 - 120
Bis(2-chloroethyl)ether	50.0	41.6		ug/L		83	50 - 110
Bis(2-ethylhexyl) phthalate	50.0	46.0		ug/L		92	50 - 127
2,6-Dinitrotoluene	50.0	47.8		ug/L		96	61 - 121
4-Chloro-3-methylphenol	50.0	46.8		ug/L		94	52 - 126
4-Chloroaniline	50.0	36.6		ug/L		73	45 - 93
4-Chlorophenyl-phenyl ether	50.0	43.1		ug/L		86	47 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*99*		*10 - 150*
2-Fluorobiphenyl (Surr)	*79*		*44 - 102*
2-Fluorophenol (Surr)	*50*		*10 - 84*
Nitrobenzene-d5 (Surr)	*80*		*23 - 128*
p-Terphenyl-d14 (Surr)	*90*		*31 - 113*
Phenol-d5 (Surr)	*39*		*10 - 67*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 410-77079/1-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77079

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 06:21	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		12/15/20 17:30	12/16/20 06:21	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		12/15/20 17:30	12/16/20 06:21	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		12/15/20 17:30	12/16/20 06:21	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		12/15/20 17:30	12/16/20 06:21	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		12/15/20 17:30	12/16/20 06:21	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 410-77079/1-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77079

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan sulfate (1C)	ND		0.030	0.0058	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endrin (1C)	ND		0.030	0.0081	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		12/15/20 17:30	12/16/20 06:21	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 06:21	1
gamma-Chlordane (1C)	ND		0.040	0.0070	ug/L		12/15/20 17:30	12/16/20 06:21	1
Heptachlor (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 06:21	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		12/15/20 17:30	12/16/20 06:21	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		12/15/20 17:30	12/16/20 06:21	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		12/15/20 17:30	12/16/20 06:21	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		12/15/20 17:30	12/16/20 06:21	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		12/15/20 17:30	12/16/20 06:21	1
p,p'-DDT (1C)	ND		0.030	0.0052	ug/L		12/15/20 17:30	12/16/20 06:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*55*		*32 - 149*	*12/15/20 17:30*	*12/16/20 06:21*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*58*		*32 - 149*	*12/15/20 17:30*	*12/16/20 06:21*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*58*		*29 - 129*	*12/15/20 17:30*	*12/16/20 06:21*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*60*		*29 - 129*	*12/15/20 17:30*	*12/16/20 06:21*	*1*

Lab Sample ID: LCS 410-77079/2-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77079

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin (1C)	0.100	0.0548		ug/L		55	28 - 119
alpha-BHC (2C)	0.101	0.0902		ug/L		89	47 - 132
beta-BHC (1C)	0.100	0.0948		ug/L		95	27 - 143
delta-BHC (2C)	0.101	0.102		ug/L		101	28 - 141
Dieldrin (2C)	0.201	0.178		ug/L		88	31 - 145
Endosulfan I (1C)	0.101	0.0866		ug/L		85	40 - 138
Endosulfan II (2C)	0.200	0.181		ug/L		90	27 - 138
Endosulfan sulfate (2C)	0.201	0.184		ug/L		92	41 - 133
Endrin (1C)	0.201	0.181		ug/L		90	35 - 143
Endrin aldehyde (2C)	0.201	0.177		ug/L		88	40 - 135
Endrin ketone (2C)	0.201	0.184		ug/L		92	44 - 136
gamma-BHC (Lindane) (2C)	0.100	0.0911		ug/L		91	29 - 136
Heptachlor (2C)	0.101	0.0587		ug/L		58	38 - 135
Heptachlor epoxide (2C)	0.100	0.0874		ug/L		87	28 - 146
Methoxychlor (2C)	1.01	1.01		ug/L		100	39 - 143
p,p'-DDD (2C)	0.201	0.182		ug/L		90	42 - 148
p,p'-DDE (1C)	0.201	0.145		ug/L		72	22 - 138
p,p'-DDT (2C)	0.201	0.182		ug/L		91	40 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*55*		*32 - 149*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 410-77079/2-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77079

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (2C)	57		32 - 149
Tetrachloro-m-xylene (Surr) (1C)	61		29 - 129
Tetrachloro-m-xylene (Surr) (2C)	64		29 - 129

Lab Sample ID: LCSD 410-77079/3-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 77079

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin (2C)			0.100	0.0500		ug/L		50	28 - 119	9	30
alpha-BHC (2C)			0.101	0.0841		ug/L		83	47 - 132	7	30
beta-BHC (2C)			0.100	0.0895		ug/L		90	27 - 143	6	30
delta-BHC (2C)			0.101	0.0863		ug/L		85	28 - 141	16	30
Dieldrin (2C)			0.201	0.174		ug/L		86	31 - 145	2	30
Endosulfan I (2C)			0.101	0.0849		ug/L		84	40 - 138	2	30
Endosulfan II (2C)			0.200	0.173		ug/L		86	27 - 138	5	30
Endosulfan sulfate (1C)			0.201	0.167		ug/L		83	41 - 133	10	30
Endrin (2C)			0.201	0.163		ug/L		81	35 - 143	10	30
Endrin aldehyde (2C)			0.201	0.163		ug/L		81	40 - 135	8	20
Endrin ketone (2C)			0.201	0.171		ug/L		85	44 - 136	7	30
gamma-BHC (Lindane) (1C)			0.100	0.0878		ug/L		88	29 - 136	4	30
Heptachlor (2C)			0.101	0.0543		ug/L		54	38 - 135	8	30
Heptachlor epoxide (2C)			0.100	0.0860		ug/L		86	28 - 146	2	30
Methoxychlor (2C)			1.01	0.937		ug/L		93	39 - 143	8	30
p,p'-DDD (2C)			0.201	0.180		ug/L		89	42 - 148	1	30
p,p'-DDE (1C)			0.201	0.145		ug/L		72	22 - 138	0	30
p,p'-DDT (2C)			0.201	0.178		ug/L		88	40 - 145	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	47		32 - 149
DCB Decachlorobiphenyl (Surr) (2C)	49		32 - 149
Tetrachloro-m-xylene (Surr) (1C)	60		29 - 129
Tetrachloro-m-xylene (Surr) (2C)	58		29 - 129

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 410-76248/1-A
Matrix: Water
Analysis Batch: 77784

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76248

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 14:31	1
Aluminum	ND		0.30	0.15	mg/L		12/14/20 06:02	12/17/20 14:31	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-76248/1-A
Matrix: Water
Analysis Batch: 77784

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76248

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 14:31	1
Barium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 14:31	1
Beryllium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 14:31	1
Cadmium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 14:31	1
Calcium	ND		0.50	0.096	mg/L		12/14/20 06:02	12/17/20 14:31	1
Chromium	ND		0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 14:31	1
Cobalt	ND		0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 14:31	1
Copper	ND		0.020	0.012	mg/L		12/14/20 06:02	12/17/20 14:31	1
Iron	ND		0.20	0.040	mg/L		12/14/20 06:02	12/17/20 14:31	1
Lead	ND		0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 14:31	1
Magnesium	ND		0.10	0.040	mg/L		12/14/20 06:02	12/17/20 14:31	1
Manganese	ND		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 14:31	1
Nickel	ND		0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 14:31	1
Zinc	ND		0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 14:31	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 14:31	1
Potassium	ND		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 14:31	1
Sodium	ND		1.0	0.24	mg/L		12/14/20 06:02	12/17/20 14:31	1
Thallium	ND		0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 14:31	1
Vanadium	ND		0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 14:31	1

Lab Sample ID: MB 410-76248/1-A
Matrix: Water
Analysis Batch: 77891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76248

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:02	1

Lab Sample ID: LCS 410-76248/2-A
Matrix: Water
Analysis Batch: 77784

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76248

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0678		mg/L		113	80 - 120
Aluminum	0.405	0.424		mg/L		105	80 - 120
Antimony	0.100	0.100		mg/L		100	80 - 120
Barium	0.0100	0.0105		mg/L		105	80 - 120
Beryllium	0.0100	0.00983		mg/L		98	80 - 120
Cadmium	0.0100	0.0102		mg/L		102	80 - 120
Calcium	0.400	0.437	J	mg/L		109	80 - 120
Chromium	0.0300	0.0297		mg/L		99	80 - 120
Cobalt	0.0100	0.0108		mg/L		108	80 - 120
Copper	0.0400	0.0410		mg/L		103	80 - 120
Iron	0.400	0.407		mg/L		102	80 - 120
Lead	0.0300	0.0330		mg/L		110	80 - 120
Magnesium	0.200	0.238		mg/L		119	80 - 120
Manganese	0.0200	0.0213		mg/L		107	80 - 120
Nickel	2.00	2.04		mg/L		102	80 - 120
Zinc	0.404	0.400		mg/L		99	80 - 120
Selenium	0.100	0.104		mg/L		104	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-76248/2-A
Matrix: Water
Analysis Batch: 77784

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76248

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	6.00	5.77		mg/L		96	80 - 120
Sodium	2.00	2.08		mg/L		104	80 - 120
Thallium	0.0600	0.0666		mg/L		111	80 - 120
Vanadium	0.0200	0.0199		mg/L		100	80 - 120

Lab Sample ID: LCS 410-76248/2-A
Matrix: Water
Analysis Batch: 77891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76248

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0200	0.0187		mg/L		93	80 - 120

Lab Sample ID: MB 410-76633/1-A
Matrix: Water
Analysis Batch: 77777

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76633

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 19:56	12/17/20 15:14	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 19:56	12/17/20 15:14	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 19:56	12/17/20 15:14	1
Barium	ND		0.0052	0.0010	mg/L		12/14/20 19:56	12/17/20 15:14	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 19:56	12/17/20 15:14	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 19:56	12/17/20 15:14	1
Calcium	ND		0.52	0.099	mg/L		12/14/20 19:56	12/17/20 15:14	1
Chromium	ND		0.015	0.0016	mg/L		12/14/20 19:56	12/17/20 15:14	1
Cobalt	ND		0.0052	0.0015	mg/L		12/14/20 19:56	12/17/20 15:14	1
Copper	ND	^3+	0.021	0.012	mg/L		12/14/20 19:56	12/17/20 15:14	1
Iron	ND		0.21	0.041	mg/L		12/14/20 19:56	12/17/20 15:14	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 19:56	12/17/20 15:14	1
Magnesium	ND		0.10	0.041	mg/L		12/14/20 19:56	12/17/20 15:14	1
Manganese	ND		0.010	0.0031	mg/L		12/14/20 19:56	12/17/20 15:14	1
Nickel	ND		0.010	0.0022	mg/L		12/14/20 19:56	12/17/20 15:14	1
Zinc	ND		0.021	0.0038	mg/L		12/14/20 19:56	12/17/20 15:14	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 19:56	12/17/20 15:14	1
Selenium	ND		0.052	0.016	mg/L		12/14/20 19:56	12/17/20 15:14	1
Potassium	ND	^3+	0.52	0.21	mg/L		12/14/20 19:56	12/17/20 15:14	1
Sodium	ND		1.0	0.25	mg/L		12/14/20 19:56	12/17/20 15:14	1
Thallium	ND	^3+	0.031	0.0083	mg/L		12/14/20 19:56	12/17/20 15:14	1
Vanadium	ND		0.010	0.0020	mg/L		12/14/20 19:56	12/17/20 15:14	1

Lab Sample ID: LCS 410-76633/2-A
Matrix: Water
Analysis Batch: 77777

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76633

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0698		mg/L		116	80 - 120
Aluminum	0.405	0.426		mg/L		105	80 - 120
Antimony	0.100	0.104		mg/L		104	80 - 120
Barium	0.0100	0.0108		mg/L		108	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-76633/2-A
Matrix: Water
Analysis Batch: 77777

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76633

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.0100	0.0101		mg/L		101	80 - 120
Cadmium	0.0100	0.0105		mg/L		105	80 - 120
Calcium	0.400	0.440	J	mg/L		110	80 - 120
Chromium	0.0300	0.0310		mg/L		103	80 - 120
Cobalt	0.0100	0.0110		mg/L		110	80 - 120
Iron	0.400	0.429		mg/L		107	80 - 120
Lead	0.0300	0.0321		mg/L		107	80 - 120
Magnesium	0.200	0.214		mg/L		107	80 - 120
Manganese	0.0200	0.0222		mg/L		111	80 - 120
Nickel	2.00	2.22		mg/L		111	80 - 120
Zinc	0.404	0.449		mg/L		111	80 - 120
Silver	0.0200	0.0198		mg/L		99	80 - 120
Selenium	0.100	0.120		mg/L		120	80 - 120
Sodium	2.00	2.18		mg/L		109	80 - 120
Vanadium	0.0200	0.0209		mg/L		105	80 - 120

Lab Sample ID: LCS 410-76633/2-A
Matrix: Water
Analysis Batch: 77913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76633

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	6.00	6.47		mg/L		108	80 - 120

Lab Sample ID: LCS 410-76633/2-A
Matrix: Water
Analysis Batch: 79190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76633

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.0400	0.0423		mg/L		106	80 - 120
Thallium	0.0600	0.0668		mg/L		111	80 - 120

Lab Sample ID: MB 410-76638/1-A
Matrix: Water
Analysis Batch: 77129

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76638

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 15:15	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 20:04	12/15/20 15:15	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 15:15	1
Barium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 15:15	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 15:15	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 15:15	1
Calcium	ND		0.52	0.099	mg/L		12/14/20 20:04	12/15/20 15:15	1
Chromium	ND		0.015	0.0016	mg/L		12/14/20 20:04	12/15/20 15:15	1
Cobalt	ND		0.0052	0.0015	mg/L		12/14/20 20:04	12/15/20 15:15	1
Copper	ND		0.021	0.012	mg/L		12/14/20 20:04	12/15/20 15:15	1
Iron	ND		0.21	0.041	mg/L		12/14/20 20:04	12/15/20 15:15	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 20:04	12/15/20 15:15	1
Magnesium	ND		0.10	0.041	mg/L		12/14/20 20:04	12/15/20 15:15	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-76638/1-A
Matrix: Water
Analysis Batch: 77129

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76638

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.010	0.0031	mg/L		12/14/20 20:04	12/15/20 15:15	1
Nickel	ND		0.010	0.0022	mg/L		12/14/20 20:04	12/15/20 15:15	1
Zinc	ND		0.021	0.0038	mg/L		12/14/20 20:04	12/15/20 15:15	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:04	12/15/20 15:15	1
Selenium	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 15:15	1
Potassium	ND		0.52	0.21	mg/L		12/14/20 20:04	12/15/20 15:15	1
Sodium	ND		1.0	0.25	mg/L		12/14/20 20:04	12/15/20 15:15	1
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:04	12/15/20 15:15	1
Vanadium	ND		0.010	0.0020	mg/L		12/14/20 20:04	12/15/20 15:15	1

Lab Sample ID: LCS 410-76638/2-A
Matrix: Water
Analysis Batch: 77129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0681		mg/L		114	80 - 120
Aluminum	0.405	0.392		mg/L		97	80 - 120
Antimony	0.100	0.103		mg/L		103	80 - 120
Barium	0.0100	0.0102		mg/L		102	80 - 120
Beryllium	0.0100	0.0103		mg/L		103	80 - 120
Cadmium	0.0100	0.0109		mg/L		109	80 - 120
Chromium	0.0300	0.0315		mg/L		105	80 - 120
Cobalt	0.0100	0.0109		mg/L		109	80 - 120
Copper	0.0400	0.0409		mg/L		102	80 - 120
Iron	0.400	0.454		mg/L		113	80 - 120
Lead	0.0300	0.0322		mg/L		107	80 - 120
Magnesium	0.200	0.205		mg/L		102	80 - 120
Manganese	0.0200	0.0208		mg/L		104	80 - 120
Nickel	2.00	2.13		mg/L		106	80 - 120
Zinc	0.404	0.423		mg/L		105	80 - 120
Silver	0.0200	0.0198		mg/L		99	80 - 120
Selenium	0.100	0.104		mg/L		104	80 - 120
Thallium	0.0600	0.0645		mg/L		107	80 - 120
Vanadium	0.0200	0.0217		mg/L		109	80 - 120

Lab Sample ID: LCS 410-76638/2-A
Matrix: Water
Analysis Batch: 78578

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	0.400	0.407	J	mg/L		102	80 - 120
Potassium	6.00	5.80		mg/L		97	80 - 120
Sodium	2.00	2.01		mg/L		101	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-76640/1-A
Matrix: Water
Analysis Batch: 77186

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76640

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 20:11	12/15/20 18:15	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 20:11	12/15/20 18:15	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:11	12/15/20 18:15	1
Barium	ND		0.0052	0.0010	mg/L		12/14/20 20:11	12/15/20 18:15	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:11	12/15/20 18:15	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:11	12/15/20 18:15	1
Calcium	ND		0.52	0.099	mg/L		12/14/20 20:11	12/15/20 18:15	1
Chromium	ND		0.015	0.0016	mg/L		12/14/20 20:11	12/15/20 18:15	1
Cobalt	ND		0.0052	0.0015	mg/L		12/14/20 20:11	12/15/20 18:15	1
Copper	ND		0.021	0.012	mg/L		12/14/20 20:11	12/15/20 18:15	1
Iron	ND		0.21	0.041	mg/L		12/14/20 20:11	12/15/20 18:15	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 20:11	12/15/20 18:15	1
Magnesium	ND		0.10	0.041	mg/L		12/14/20 20:11	12/15/20 18:15	1
Manganese	ND		0.010	0.0031	mg/L		12/14/20 20:11	12/15/20 18:15	1
Nickel	ND		0.010	0.0022	mg/L		12/14/20 20:11	12/15/20 18:15	1
Zinc	ND		0.021	0.0038	mg/L		12/14/20 20:11	12/15/20 18:15	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:11	12/15/20 18:15	1
Selenium	ND		0.052	0.016	mg/L		12/14/20 20:11	12/15/20 18:15	1
Potassium	ND		0.52	0.21	mg/L		12/14/20 20:11	12/15/20 18:15	1
Sodium	ND		1.0	0.25	mg/L		12/14/20 20:11	12/15/20 18:15	1
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:11	12/15/20 18:15	1
Vanadium	ND		0.010	0.0020	mg/L		12/14/20 20:11	12/15/20 18:15	1

Lab Sample ID: LCS 410-76640/2-A
Matrix: Water
Analysis Batch: 77186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76640

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0665		mg/L		111	80 - 120
Aluminum	0.405	0.443		mg/L		109	80 - 120
Antimony	0.100	0.0974		mg/L		97	80 - 120
Barium	0.0100	0.0108		mg/L		108	80 - 120
Beryllium	0.0100	0.0104		mg/L		104	80 - 120
Cadmium	0.0100	0.0108		mg/L		108	80 - 120
Calcium	0.400	0.419	J	mg/L		105	80 - 120
Chromium	0.0300	0.0311		mg/L		104	80 - 120
Cobalt	0.0100	0.0110		mg/L		110	80 - 120
Copper	0.0400	0.0434		mg/L		108	80 - 120
Iron	0.400	0.433		mg/L		108	80 - 120
Lead	0.0300	0.0312		mg/L		104	80 - 120
Magnesium	0.200	0.222		mg/L		111	80 - 120
Manganese	0.0200	0.0225		mg/L		113	80 - 120
Nickel	2.00	2.14		mg/L		107	80 - 120
Zinc	0.404	0.437		mg/L		108	80 - 120
Silver	0.0200	0.0201		mg/L		101	80 - 120
Selenium	0.100	0.110		mg/L		110	80 - 120
Potassium	6.00	6.10		mg/L		102	80 - 120
Thallium	0.0600	0.0694		mg/L		116	80 - 120
Vanadium	0.0200	0.0221		mg/L		111	80 - 120

Method: 6010C - Metals (ICP)

Lab Sample ID: LCS 410-76640/2-A
Matrix: Water
Analysis Batch: 77282

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76640

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	2.00	2.06		mg/L		103	80 - 120

Lab Sample ID: MB 410-76643/1-A
Matrix: Water
Analysis Batch: 77154

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76643

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	^1+ ^+	0.052	0.016	mg/L		12/14/20 20:16	12/15/20 16:28	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 20:16	12/15/20 16:28	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:16	12/15/20 16:28	1
Barium	ND		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 16:28	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 16:28	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:16	12/15/20 16:28	1
Calcium	ND		0.52	0.099	mg/L		12/14/20 20:16	12/15/20 16:28	1
Chromium	ND		0.015	0.0016	mg/L		12/14/20 20:16	12/15/20 16:28	1
Cobalt	ND		0.0052	0.0015	mg/L		12/14/20 20:16	12/15/20 16:28	1
Copper	ND	^3+	0.021	0.012	mg/L		12/14/20 20:16	12/15/20 16:28	1
Iron	ND		0.21	0.041	mg/L		12/14/20 20:16	12/15/20 16:28	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 20:16	12/15/20 16:28	1
Magnesium	ND		0.10	0.041	mg/L		12/14/20 20:16	12/15/20 16:28	1
Manganese	ND		0.010	0.0031	mg/L		12/14/20 20:16	12/15/20 16:28	1
Nickel	ND		0.010	0.0022	mg/L		12/14/20 20:16	12/15/20 16:28	1
Zinc	ND	^1+ ^+	0.021	0.0038	mg/L		12/14/20 20:16	12/15/20 16:28	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:16	12/15/20 16:28	1
Selenium	ND	^1+ ^+	0.052	0.016	mg/L		12/14/20 20:16	12/15/20 16:28	1
Potassium	ND		0.52	0.21	mg/L		12/14/20 20:16	12/15/20 16:28	1
Sodium	ND		1.0	0.25	mg/L		12/14/20 20:16	12/15/20 16:28	1
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:16	12/15/20 16:28	1
Vanadium	ND		0.010	0.0020	mg/L		12/14/20 20:16	12/15/20 16:28	1

Lab Sample ID: LCS 410-76643/2-A
Matrix: Water
Analysis Batch: 77154

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76643

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0725	*+	mg/L		121	80 - 120
Aluminum	0.405	0.423		mg/L		104	80 - 120
Antimony	0.100	0.0990		mg/L		99	80 - 120
Barium	0.0100	0.0112		mg/L		112	80 - 120
Beryllium	0.0100	0.0111		mg/L		111	80 - 120
Cadmium	0.0100	0.0116		mg/L		116	80 - 120
Calcium	0.400	0.437	J	mg/L		109	80 - 120
Chromium	0.0300	0.0327		mg/L		109	80 - 120
Cobalt	0.0100	0.0105		mg/L		105	80 - 120
Iron	0.400	0.428		mg/L		107	80 - 120
Lead	0.0300	0.0305		mg/L		102	80 - 120
Magnesium	0.200	0.215		mg/L		107	80 - 120
Manganese	0.0200	0.0240		mg/L		120	80 - 120
Nickel	2.00	2.15		mg/L		107	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-76643/2-A
Matrix: Water
Analysis Batch: 77154

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76643

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0200	0.0215		mg/L		108	80 - 120
Potassium	6.00	6.19		mg/L		103	80 - 120
Sodium	2.00	2.19		mg/L		109	80 - 120
Thallium	0.0600	0.0693		mg/L		115	80 - 120
Vanadium	0.0200	0.0212		mg/L		106	80 - 120

Lab Sample ID: LCS 410-76643/2-A
Matrix: Water
Analysis Batch: 79190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76643

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.0400	0.0436		mg/L		109	80 - 120
Zinc	0.404	0.468		mg/L		116	80 - 120
Selenium	0.100	0.129	*+	mg/L		129	80 - 120

Lab Sample ID: MB 410-77264/1-A
Matrix: Water
Analysis Batch: 78148

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77264

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		12/16/20 03:13	12/18/20 11:41	1
Aluminum	ND		0.30	0.15	mg/L		12/16/20 03:13	12/18/20 11:41	1
Antimony	ND		0.050	0.016	mg/L		12/16/20 03:13	12/18/20 11:41	1
Barium	ND		0.0050	0.0010	mg/L		12/16/20 03:13	12/18/20 11:41	1
Beryllium	ND		0.0050	0.0010	mg/L		12/16/20 03:13	12/18/20 11:41	1
Cadmium	ND		0.0050	0.0010	mg/L		12/16/20 03:13	12/18/20 11:41	1
Calcium	ND		0.50	0.096	mg/L		12/16/20 03:13	12/18/20 11:41	1
Chromium	ND		0.015	0.0016	mg/L		12/16/20 03:13	12/18/20 11:41	1
Cobalt	ND		0.0050	0.0015	mg/L		12/16/20 03:13	12/18/20 11:41	1
Copper	ND		0.020	0.012	mg/L		12/16/20 03:13	12/18/20 11:41	1
Iron	ND		0.20	0.040	mg/L		12/16/20 03:13	12/18/20 11:41	1
Lead	ND		0.015	0.0071	mg/L		12/16/20 03:13	12/18/20 11:41	1
Magnesium	ND		0.10	0.040	mg/L		12/16/20 03:13	12/18/20 11:41	1
Manganese	ND		0.010	0.0030	mg/L		12/16/20 03:13	12/18/20 11:41	1
Nickel	ND		0.010	0.0021	mg/L		12/16/20 03:13	12/18/20 11:41	1
Zinc	ND		0.020	0.0037	mg/L		12/16/20 03:13	12/18/20 11:41	1
Silver	ND		0.010	0.0050	mg/L		12/16/20 03:13	12/18/20 11:41	1
Selenium	ND		0.050	0.016	mg/L		12/16/20 03:13	12/18/20 11:41	1
Potassium	ND		0.50	0.20	mg/L		12/16/20 03:13	12/18/20 11:41	1
Sodium	ND		1.0	0.24	mg/L		12/16/20 03:13	12/18/20 11:41	1
Thallium	ND		0.030	0.0081	mg/L		12/16/20 03:13	12/18/20 11:41	1
Vanadium	ND		0.010	0.0019	mg/L		12/16/20 03:13	12/18/20 11:41	1

Lab Sample ID: LCS 410-77264/2-A
Matrix: Water
Analysis Batch: 78148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77264

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0597		mg/L		99	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-77264/2-A
Matrix: Water
Analysis Batch: 78148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77264

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.405	0.391		mg/L		97	80 - 120
Antimony	0.100	0.0997		mg/L		100	80 - 120
Barium	0.0100	0.0110		mg/L		110	80 - 120
Beryllium	0.0100	0.0104		mg/L		104	80 - 120
Cadmium	0.0100	0.0100		mg/L		100	80 - 120
Calcium	0.400	0.434	J	mg/L		108	80 - 120
Chromium	0.0300	0.0289		mg/L		96	80 - 120
Cobalt	0.0100	0.0109		mg/L		109	80 - 120
Copper	0.0400	0.0430		mg/L		107	80 - 120
Iron	0.400	0.384		mg/L		96	80 - 120
Lead	0.0300	0.0308		mg/L		103	80 - 120
Magnesium	0.200	0.214		mg/L		107	80 - 120
Manganese	0.0200	0.0217		mg/L		108	80 - 120
Nickel	2.00	1.97		mg/L		98	80 - 120
Zinc	0.404	0.432		mg/L		107	80 - 120
Silver	0.0200	0.0213		mg/L		107	80 - 120
Selenium	0.100	0.102		mg/L		102	80 - 120
Potassium	6.00	5.89		mg/L		98	80 - 120
Sodium	2.00	2.04		mg/L		102	80 - 120
Thallium	0.0600	0.0638		mg/L		106	80 - 120
Vanadium	0.0200	0.0203		mg/L		101	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-75822/1-A
Matrix: Water
Analysis Batch: 76642

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 75822

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/11/20 11:52	12/14/20 14:04	1

Lab Sample ID: LCS 410-75822/2-A
Matrix: Water
Analysis Batch: 76642

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 75822

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	1.00		ug/L		100	80 - 118

Lab Sample ID: 410-23571-1 MS
Matrix: Water
Analysis Batch: 76642

Client Sample ID: HOFF MW-F_A
Prep Type: Total/NA
Prep Batch: 75822

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		1.00	0.873		ug/L		87	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 410-23571-1 MSD — **Client Sample ID: HOFF MW-F_A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 76642 — **Prep Batch: 75822**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		1.00	0.837		ug/L		84	80 - 120	4	20

Lab Sample ID: 410-23571-1 DU — **Client Sample ID: HOFF MW-F_A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 76642 — **Prep Batch: 75822**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		ug/L		NC	20

Lab Sample ID: MB 410-75824/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 76642 — **Prep Batch: 75824**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/11/20 11:59	12/14/20 15:04	1

Lab Sample ID: LCS 410-75824/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 76642 — **Prep Batch: 75824**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.965		ug/L		96	80 - 118

Method: 2540C-2011 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 410-76413/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 76413

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		30	10	mg/L			12/14/20 11:33	1

Lab Sample ID: LCS 410-76413/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 76413

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	200	191		mg/L		96	72 - 127

Lab Sample ID: 410-23571-1 MS — **Client Sample ID: HOFF MW-F_A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 76413

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	550		400	895		mg/L		87	72 - 127

Method: 2540C-2011 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 410-23571-1 DU
Matrix: Water
Analysis Batch: 76413

Client Sample ID: HOFF MW-F_A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	550			540		mg/L				1	5

Lab Sample ID: MB 410-76970/1
Matrix: Water
Analysis Batch: 76970

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		30	10	mg/L			12/15/20 11:44	1

Lab Sample ID: LCS 410-76970/2
Matrix: Water
Analysis Batch: 76970

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			200	207		mg/L		104	72 - 127		

Lab Sample ID: 410-23571-5 DU
Matrix: Water
Analysis Batch: 76970

Client Sample ID: HOFF MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	230			218		mg/L				5	5

Method: 3500 Fe B-2011 - Iron, Ferrous and Ferric

Lab Sample ID: MB 410-76880/14
Matrix: Water
Analysis Batch: 76880

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND		0.10	0.050	mg/L			12/15/20 09:19	1

Method: 375.4 - Sulfate

Lab Sample ID: MB 410-76930/1
Matrix: Water
Analysis Batch: 76930

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		6.0	2.0	mg/L			12/15/20 10:45	1

Lab Sample ID: LCS 410-76930/7
Matrix: Water
Analysis Batch: 76930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			20.0	19.7		mg/L		98	96 - 104		

Method: 375.4 - Sulfate (Continued)

Lab Sample ID: 410-23571-4 MS
Matrix: Water
Analysis Batch: 76930

Client Sample ID: HOFF MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	110	FH	200	316	FH	mg/L		105	96 - 104		

Lab Sample ID: 410-23571-4 MSD
Matrix: Water
Analysis Batch: 76930

Client Sample ID: HOFF MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	110	FH	200	315		mg/L		104	96 - 104	0	5

Lab Sample ID: 410-23571-4 DU
Matrix: Water
Analysis Batch: 76930

Client Sample ID: HOFF MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	110	FH		116	F5	mg/L				9	4

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Analysis Batch: 78069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	8260C SIM 14D	
410-23571-3	HOFF MW-E	Total/NA	Water	8260C SIM 14D	
410-23571-4	HOFF MW-10	Total/NA	Water	8260C SIM 14D	
410-23571-5	HOFF MW-6	Total/NA	Water	8260C SIM 14D	
MB 410-78069/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-78069/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-78069/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

Analysis Batch: 78295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	8260C LL	
410-23571-1 - DL	HOFF MW-F_A	Total/NA	Water	8260C LL	
410-23571-2	HOFF MW-F_B	Total/NA	Water	8260C LL	
410-23571-2 - DL	HOFF MW-F_B	Total/NA	Water	8260C LL	
410-23571-3	HOFF MW-E	Total/NA	Water	8260C LL	
410-23571-4	HOFF MW-10	Total/NA	Water	8260C LL	
410-23571-4 - DL	HOFF MW-10	Total/NA	Water	8260C LL	
410-23571-5	HOFF MW-6	Total/NA	Water	8260C LL	
410-23571-5 - DL	HOFF MW-6	Total/NA	Water	8260C LL	
410-23571-6	HOFF IW-1A	Total/NA	Water	8260C LL	
410-23571-6 - DL	HOFF IW-1A	Total/NA	Water	8260C LL	
410-23571-8	TB-01-120920	Total/NA	Water	8260C LL	
MB 410-78295/7	Method Blank	Total/NA	Water	8260C LL	
LCS 410-78295/4	Lab Control Sample	Total/NA	Water	8260C LL	
LCSD 410-78295/5	Lab Control Sample Dup	Total/NA	Water	8260C LL	

Analysis Batch: 78311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-8	TB-01-120920	Total/NA	Water	8260C SIM 14D	
MB 410-78311/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-78311/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-78311/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

Analysis Batch: 78368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-2	HOFF MW-F_B	Total/NA	Water	8260C SIM 14D	
410-23571-7	HOFF IW-1B	Total/NA	Water	8260C SIM 14D	
MB 410-78368/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-78368/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-78368/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

Analysis Batch: 78607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-6 - RA	HOFF IW-1A	Total/NA	Water	8260C LL	
410-23571-7	HOFF IW-1B	Total/NA	Water	8260C LL	
410-23571-7 - DL	HOFF IW-1B	Total/NA	Water	8260C LL	
MB 410-78607/8	Method Blank	Total/NA	Water	8260C LL	
LCS 410-78607/5	Lab Control Sample	Total/NA	Water	8260C LL	

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Analysis Batch: 78976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-7 - RA	HOFF IW-1B	Total/NA	Water	8260C LL	
MB 410-78976/8	Method Blank	Total/NA	Water	8260C LL	
LCS 410-78976/5	Lab Control Sample	Total/NA	Water	8260C LL	

Analysis Batch: 79219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-6	HOFF IW-1A	Total/NA	Water	8260C SIM 14D	
410-23571-7 - RA	HOFF IW-1B	Total/NA	Water	8260C SIM 14D	
MB 410-79219/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-79219/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-79219/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

Analysis Batch: 79617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-6 - RA	HOFF IW-1A	Total/NA	Water	8260C SIM 14D	
MB 410-79617/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-79617/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-79617/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

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Prep Batch: 77321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	3510C	
410-23571-2	HOFF MW-F_B	Total/NA	Water	3510C	
MB 410-77321/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-77321/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 77649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	8270D	77321
410-23571-2	HOFF MW-F_B	Total/NA	Water	8270D	77321
MB 410-77321/1-A	Method Blank	Total/NA	Water	8270D	77321
LCS 410-77321/2-A	Lab Control Sample	Total/NA	Water	8270D	77321

Prep Batch: 77733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-3	HOFF MW-E	Total/NA	Water	3510C	
410-23571-4	HOFF MW-10	Total/NA	Water	3510C	
410-23571-5	HOFF MW-6	Total/NA	Water	3510C	
410-23571-6	HOFF IW-1A	Total/NA	Water	3510C	
410-23571-7	HOFF IW-1B	Total/NA	Water	3510C	
MB 410-77733/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-77733/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 77977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-3	HOFF MW-E	Total/NA	Water	8270D	77733
410-23571-4	HOFF MW-10	Total/NA	Water	8270D	77733
410-23571-5	HOFF MW-6	Total/NA	Water	8270D	77733
410-23571-6	HOFF IW-1A	Total/NA	Water	8270D	77733

GC/MS Semi VOA (Continued)

Analysis Batch: 77977 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-7	HOFF IW-1B	Total/NA	Water	8270D	77733
MB 410-77733/1-A	Method Blank	Total/NA	Water	8270D	77733
LCS 410-77733/2-A	Lab Control Sample	Total/NA	Water	8270D	77733

GC Semi VOA

Prep Batch: 77079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	3510C	
410-23571-2	HOFF MW-F_B	Total/NA	Water	3510C	
410-23571-3	HOFF MW-E	Total/NA	Water	3510C	
410-23571-4	HOFF MW-10	Total/NA	Water	3510C	
410-23571-5	HOFF MW-6	Total/NA	Water	3510C	
410-23571-6	HOFF IW-1A	Total/NA	Water	3510C	
410-23571-7	HOFF IW-1B	Total/NA	Water	3510C	
MB 410-77079/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-77079/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-77079/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 77299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	8081B	77079
410-23571-2	HOFF MW-F_B	Total/NA	Water	8081B	77079
410-23571-3	HOFF MW-E	Total/NA	Water	8081B	77079
410-23571-4	HOFF MW-10	Total/NA	Water	8081B	77079
410-23571-5	HOFF MW-6	Total/NA	Water	8081B	77079
410-23571-6	HOFF IW-1A	Total/NA	Water	8081B	77079
410-23571-7	HOFF IW-1B	Total/NA	Water	8081B	77079
MB 410-77079/1-A	Method Blank	Total/NA	Water	8081B	77079
LCS 410-77079/2-A	Lab Control Sample	Total/NA	Water	8081B	77079
LCSD 410-77079/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	77079

Metals

Prep Batch: 75822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Dissolved	Water	7470A	
410-23571-1	HOFF MW-F_A	Total/NA	Water	7470A	
410-23571-2	HOFF MW-F_B	Dissolved	Water	7470A	
410-23571-3	HOFF MW-E	Dissolved	Water	7470A	
410-23571-4	HOFF MW-10	Dissolved	Water	7470A	
410-23571-5	HOFF MW-6	Dissolved	Water	7470A	
410-23571-6	HOFF IW-1A	Dissolved	Water	7470A	
410-23571-7	HOFF IW-1B	Dissolved	Water	7470A	
MB 410-75822/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-75822/2-A	Lab Control Sample	Total/NA	Water	7470A	
410-23571-1 MS	HOFF MW-F_A	Total/NA	Water	7470A	
410-23571-1 MSD	HOFF MW-F_A	Total/NA	Water	7470A	
410-23571-1 DU	HOFF MW-F_A	Total/NA	Water	7470A	

Metals

Prep Batch: 75824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-2	HOFF MW-F_B	Total/NA	Water	7470A	
410-23571-3	HOFF MW-E	Total/NA	Water	7470A	
410-23571-4	HOFF MW-10	Total/NA	Water	7470A	
410-23571-5	HOFF MW-6	Total/NA	Water	7470A	
410-23571-6	HOFF IW-1A	Total/NA	Water	7470A	
410-23571-7	HOFF IW-1B	Total/NA	Water	7470A	
MB 410-75824/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-75824/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 76248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	3010A	
410-23571-2	HOFF MW-F_B	Total/NA	Water	3010A	
410-23571-5	HOFF MW-6	Total/NA	Water	3010A	
410-23571-6	HOFF IW-1A	Total/NA	Water	3010A	
410-23571-7	HOFF IW-1B	Total/NA	Water	3010A	
MB 410-76248/1-A	Method Blank	Total/NA	Water	3010A	
LCS 410-76248/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 76633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-6	HOFF IW-1A	Dissolved	Water	Non-Digest Prep	
MB 410-76633/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-76633/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	

Prep Batch: 76638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-7	HOFF IW-1B	Dissolved	Water	Non-Digest Prep	
MB 410-76638/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-76638/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	

Prep Batch: 76640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-4	HOFF MW-10	Dissolved	Water	Non-Digest Prep	
MB 410-76640/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-76640/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	

Analysis Batch: 76642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Dissolved	Water	7470A	75822
410-23571-1	HOFF MW-F_A	Total/NA	Water	7470A	75822
410-23571-2	HOFF MW-F_B	Dissolved	Water	7470A	75822
410-23571-2	HOFF MW-F_B	Total/NA	Water	7470A	75824
410-23571-3	HOFF MW-E	Dissolved	Water	7470A	75822
410-23571-3	HOFF MW-E	Total/NA	Water	7470A	75824
410-23571-4	HOFF MW-10	Dissolved	Water	7470A	75822
410-23571-4	HOFF MW-10	Total/NA	Water	7470A	75824
410-23571-5	HOFF MW-6	Dissolved	Water	7470A	75822
410-23571-5	HOFF MW-6	Total/NA	Water	7470A	75824
410-23571-6	HOFF IW-1A	Dissolved	Water	7470A	75822
410-23571-6	HOFF IW-1A	Total/NA	Water	7470A	75824

Metals (Continued)

Analysis Batch: 76642 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-7	HOFF IW-1B	Dissolved	Water	7470A	75822
410-23571-7	HOFF IW-1B	Total/NA	Water	7470A	75824
MB 410-75822/1-A	Method Blank	Total/NA	Water	7470A	75822
MB 410-75824/1-A	Method Blank	Total/NA	Water	7470A	75824
LCS 410-75822/2-A	Lab Control Sample	Total/NA	Water	7470A	75822
LCS 410-75824/2-A	Lab Control Sample	Total/NA	Water	7470A	75824
410-23571-1 MS	HOFF MW-F_A	Total/NA	Water	7470A	75822
410-23571-1 MSD	HOFF MW-F_A	Total/NA	Water	7470A	75822
410-23571-1 DU	HOFF MW-F_A	Total/NA	Water	7470A	75822

Prep Batch: 76643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Dissolved	Water	Non-Digest Prep	
410-23571-2	HOFF MW-F_B	Dissolved	Water	Non-Digest Prep	
410-23571-3	HOFF MW-E	Dissolved	Water	Non-Digest Prep	
410-23571-5	HOFF MW-6	Dissolved	Water	Non-Digest Prep	
MB 410-76643/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-76643/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	

Analysis Batch: 77129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-7	HOFF IW-1B	Dissolved	Water	6010C	76638
MB 410-76638/1-A	Method Blank	Total/NA	Water	6010C	76638
LCS 410-76638/2-A	Lab Control Sample	Total/NA	Water	6010C	76638

Analysis Batch: 77154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Dissolved	Water	6010C	76643
410-23571-2	HOFF MW-F_B	Dissolved	Water	6010C	76643
410-23571-2	HOFF MW-F_B	Dissolved	Water	6010C	76643
410-23571-3	HOFF MW-E	Dissolved	Water	6010C	76643
410-23571-5	HOFF MW-6	Dissolved	Water	6010C	76643
MB 410-76643/1-A	Method Blank	Total/NA	Water	6010C	76643
LCS 410-76643/2-A	Lab Control Sample	Total/NA	Water	6010C	76643

Analysis Batch: 77186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-4	HOFF MW-10	Dissolved	Water	6010C	76640
MB 410-76640/1-A	Method Blank	Total/NA	Water	6010C	76640
LCS 410-76640/2-A	Lab Control Sample	Total/NA	Water	6010C	76640

Prep Batch: 77264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-3	HOFF MW-E	Total/NA	Water	3010A	
410-23571-4	HOFF MW-10	Total/NA	Water	3010A	
MB 410-77264/1-A	Method Blank	Total/NA	Water	3010A	
LCS 410-77264/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 77282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-4	HOFF MW-10	Dissolved	Water	6010C	76640

Metals (Continued)

Analysis Batch: 77282 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-76640/2-A	Lab Control Sample	Total/NA	Water	6010C	76640

Analysis Batch: 77777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-6	HOFF IW-1A	Dissolved	Water	6010C	76633
410-23571-6	HOFF IW-1A	Dissolved	Water	6010C	76633
MB 410-76633/1-A	Method Blank	Total/NA	Water	6010C	76633
LCS 410-76633/2-A	Lab Control Sample	Total/NA	Water	6010C	76633

Analysis Batch: 77784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	6010C	76248
410-23571-2	HOFF MW-F_B	Total/NA	Water	6010C	76248
410-23571-2	HOFF MW-F_B	Total/NA	Water	6010C	76248
410-23571-2	HOFF MW-F_B	Total/NA	Water	6010C	76248
410-23571-5	HOFF MW-6	Total/NA	Water	6010C	76248
410-23571-5	HOFF MW-6	Total/NA	Water	6010C	76248
410-23571-6	HOFF IW-1A	Total/NA	Water	6010C	76248
410-23571-6	HOFF IW-1A	Total/NA	Water	6010C	76248
410-23571-6	HOFF IW-1A	Total/NA	Water	6010C	76248
410-23571-7	HOFF IW-1B	Total/NA	Water	6010C	76248
410-23571-7	HOFF IW-1B	Total/NA	Water	6010C	76248
410-23571-7	HOFF IW-1B	Total/NA	Water	6010C	76248
MB 410-76248/1-A	Method Blank	Total/NA	Water	6010C	76248
LCS 410-76248/2-A	Lab Control Sample	Total/NA	Water	6010C	76248

Analysis Batch: 77891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	6010C	76248
410-23571-2	HOFF MW-F_B	Total/NA	Water	6010C	76248
410-23571-5	HOFF MW-6	Total/NA	Water	6010C	76248
410-23571-6	HOFF IW-1A	Total/NA	Water	6010C	76248
410-23571-7	HOFF IW-1B	Total/NA	Water	6010C	76248
MB 410-76248/1-A	Method Blank	Total/NA	Water	6010C	76248
LCS 410-76248/2-A	Lab Control Sample	Total/NA	Water	6010C	76248

Analysis Batch: 77913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-6	HOFF IW-1A	Dissolved	Water	6010C	76633
410-23571-6	HOFF IW-1A	Dissolved	Water	6010C	76633
LCS 410-76633/2-A	Lab Control Sample	Total/NA	Water	6010C	76633

Analysis Batch: 77998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-3	HOFF MW-E	Total/NA	Water	6010C	77264
410-23571-4	HOFF MW-10	Total/NA	Water	6010C	77264

Analysis Batch: 78148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-3	HOFF MW-E	Total/NA	Water	6010C	77264
410-23571-4	HOFF MW-10	Total/NA	Water	6010C	77264

Metals (Continued)

Analysis Batch: 78148 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-77264/1-A	Method Blank	Total/NA	Water	6010C	77264
LCS 410-77264/2-A	Lab Control Sample	Total/NA	Water	6010C	77264

Analysis Batch: 78236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	6010C	76248

Analysis Batch: 78578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-7	HOFF IW-1B	Dissolved	Water	6010C	76638
410-23571-7	HOFF IW-1B	Dissolved	Water	6010C	76638
LCS 410-76638/2-A	Lab Control Sample	Total/NA	Water	6010C	76638

Analysis Batch: 79190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-2	HOFF MW-F_B	Dissolved	Water	6010C	76643
410-23571-6	HOFF IW-1A	Dissolved	Water	6010C	76633
LCS 410-76633/2-A	Lab Control Sample	Total/NA	Water	6010C	76633
LCS 410-76643/2-A	Lab Control Sample	Total/NA	Water	6010C	76643

General Chemistry

Analysis Batch: 76413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	2540C-2011	
410-23571-2	HOFF MW-F_B	Total/NA	Water	2540C-2011	
MB 410-76413/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 410-76413/2	Lab Control Sample	Total/NA	Water	2540C-2011	
410-23571-1 MS	HOFF MW-F_A	Total/NA	Water	2540C-2011	
410-23571-1 DU	HOFF MW-F_A	Total/NA	Water	2540C-2011	

Analysis Batch: 76880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	3500 Fe B-2011	
410-23571-2	HOFF MW-F_B	Total/NA	Water	3500 Fe B-2011	
410-23571-3	HOFF MW-E	Total/NA	Water	3500 Fe B-2011	
410-23571-4	HOFF MW-10	Total/NA	Water	3500 Fe B-2011	
410-23571-5	HOFF MW-6	Total/NA	Water	3500 Fe B-2011	
410-23571-6	HOFF IW-1A	Total/NA	Water	3500 Fe B-2011	
410-23571-7	HOFF IW-1B	Total/NA	Water	3500 Fe B-2011	
MB 410-76880/14	Method Blank	Total/NA	Water	3500 Fe B-2011	
LCS 410-76880/13	Lab Control Sample	Total/NA	Water	3500 Fe B-2011	

Analysis Batch: 76930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-1	HOFF MW-F_A	Total/NA	Water	375.4	
410-23571-2	HOFF MW-F_B	Total/NA	Water	375.4	
410-23571-3	HOFF MW-E	Total/NA	Water	375.4	
410-23571-4	HOFF MW-10	Total/NA	Water	375.4	
410-23571-5	HOFF MW-6	Total/NA	Water	375.4	
410-23571-6	HOFF IW-1A	Total/NA	Water	375.4	

General Chemistry (Continued)

Analysis Batch: 76930 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-7	HOFF IW-1B	Total/NA	Water	375.4	
MB 410-76930/1	Method Blank	Total/NA	Water	375.4	
LCS 410-76930/7	Lab Control Sample	Total/NA	Water	375.4	
410-23571-4 MS	HOFF MW-10	Total/NA	Water	375.4	
410-23571-4 MSD	HOFF MW-10	Total/NA	Water	375.4	
410-23571-4 DU	HOFF MW-10	Total/NA	Water	375.4	

Analysis Batch: 76970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23571-3	HOFF MW-E	Total/NA	Water	2540C-2011	
410-23571-4	HOFF MW-10	Total/NA	Water	2540C-2011	
410-23571-5	HOFF MW-6	Total/NA	Water	2540C-2011	
410-23571-6	HOFF IW-1A	Total/NA	Water	2540C-2011	
410-23571-7	HOFF IW-1B	Total/NA	Water	2540C-2011	
MB 410-76970/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 410-76970/2	Lab Control Sample	Total/NA	Water	2540C-2011	
410-23571-5 DU	HOFF MW-6	Total/NA	Water	2540C-2011	

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF MW-F_A

Lab Sample ID: 410-23571-1

Date Collected: 12/09/20 16:10

Matrix: Water

Date Received: 12/10/20 19:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		20	78295	12/19/20 02:18	LCW8	ELLE
Total/NA	Analysis	8260C LL	DL	200	78295	12/19/20 02:39	LCW8	ELLE
Total/NA	Analysis	8260C SIM 14D		5	78069	12/18/20 14:48	UJML	ELLE
Total/NA	Prep	3510C			77321	12/16/20 08:00	U2SJ	ELLE
Total/NA	Analysis	8270D		1	77649	12/17/20 18:18	WKV3	ELLE
Total/NA	Prep	3510C			77079	12/15/20 17:30	DFX4	ELLE
Total/NA	Analysis	8081B		5	77299	12/16/20 08:50	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76643	12/14/20 20:16	UJLA	ELLE
Dissolved	Analysis	6010C		1	77154	12/15/20 17:55	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 14:59	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77891	12/17/20 21:14	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	78236	12/18/20 15:49	UCIG	ELLE
Dissolved	Prep	7470A			75822	12/11/20 11:52	UJL8	ELLE
Dissolved	Analysis	7470A		1	76642	12/14/20 14:21	UEFS	ELLE
Total/NA	Prep	7470A			75822	12/11/20 11:52	UJL8	ELLE
Total/NA	Analysis	7470A		1	76642	12/14/20 14:08	UEFS	ELLE
Total/NA	Analysis	2540C-2011		1	76413	12/14/20 11:33	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	76880	12/15/20 09:24	MFV9	ELLE
Total/NA	Analysis	375.4		1	76930	12/15/20 10:45	USAE	ELLE

Client Sample ID: HOFF MW-F_B

Lab Sample ID: 410-23571-2

Date Collected: 12/09/20 17:05

Matrix: Water

Date Received: 12/10/20 19:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		10	78295	12/19/20 03:01	LCW8	ELLE
Total/NA	Analysis	8260C LL	DL	100	78295	12/19/20 03:23	LCW8	ELLE
Total/NA	Analysis	8260C SIM 14D		20	78368	12/19/20 14:16	UJML	ELLE
Total/NA	Prep	3510C			77321	12/16/20 08:00	U2SJ	ELLE
Total/NA	Analysis	8270D		1	77649	12/17/20 18:46	WKV3	ELLE
Total/NA	Prep	3510C			77079	12/15/20 17:30	DFX4	ELLE
Total/NA	Analysis	8081B		1	77299	12/16/20 09:01	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76643	12/14/20 20:16	UJLA	ELLE
Dissolved	Analysis	6010C		1	79190	12/22/20 09:04	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76643	12/14/20 20:16	UJLA	ELLE
Dissolved	Analysis	6010C		1	77154	12/15/20 17:59	UCIG	ELLE
Dissolved	Prep	Non-Digest Prep			76643	12/14/20 20:16	UJLA	ELLE
Dissolved	Analysis	6010C		5	77154	12/15/20 18:18	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 15:08	UCIG	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF MW-F_B

Lab Sample ID: 410-23571-2

Date Collected: 12/09/20 17:05

Matrix: Water

Date Received: 12/10/20 19:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		5	77784	12/17/20 16:11	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 17:14	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77891	12/17/20 21:18	UCIG	ELLE
Dissolved	Prep	7470A			75822	12/11/20 11:52	UJL8	ELLE
Dissolved	Analysis	7470A		1	76642	12/14/20 14:23	UEFS	ELLE
Total/NA	Prep	7470A			75824	12/11/20 11:59	UJL8	ELLE
Total/NA	Analysis	7470A		1	76642	12/14/20 15:21	UEFS	ELLE
Total/NA	Analysis	2540C-2011		1	76413	12/14/20 11:33	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	76880	12/15/20 09:21	MFV9	ELLE
Total/NA	Analysis	375.4		50	76930	12/15/20 10:45	USAE	ELLE

Client Sample ID: HOFF MW-E

Lab Sample ID: 410-23571-3

Date Collected: 12/10/20 09:40

Matrix: Water

Date Received: 12/10/20 19:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	78295	12/19/20 00:08	LCW8	ELLE
Total/NA	Analysis	8260C SIM 14D		1	78069	12/18/20 12:47	UJML	ELLE
Total/NA	Prep	3510C			77733	12/17/20 16:24	DFX4	ELLE
Total/NA	Analysis	8270D		1	77977	12/18/20 12:36	SJ89	ELLE
Total/NA	Prep	3510C			77079	12/15/20 17:30	DFX4	ELLE
Total/NA	Analysis	8081B		1	77299	12/16/20 09:11	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76643	12/14/20 20:16	UJLA	ELLE
Dissolved	Analysis	6010C		1	77154	12/15/20 18:03	UCIG	ELLE
Total/NA	Prep	3010A			77264	12/16/20 03:13	UAMX	ELLE
Total/NA	Analysis	6010C		1	78148	12/18/20 12:10	SB	ELLE
Total/NA	Prep	3010A			77264	12/16/20 03:13	UAMX	ELLE
Total/NA	Analysis	6010C		1	77998	12/16/20 12:12	MDP5	ELLE
Dissolved	Prep	7470A			75822	12/11/20 11:52	UJL8	ELLE
Dissolved	Analysis	7470A		1	76642	12/14/20 14:31	UEFS	ELLE
Total/NA	Prep	7470A			75824	12/11/20 11:59	UJL8	ELLE
Total/NA	Analysis	7470A		1	76642	12/14/20 15:23	UEFS	ELLE
Total/NA	Analysis	2540C-2011		1	76970	12/15/20 11:44	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	76880	12/15/20 09:24	MFV9	ELLE
Total/NA	Analysis	375.4		4	76930	12/15/20 10:45	USAE	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF MW-10

Lab Sample ID: 410-23571-4

Date Collected: 12/10/20 11:15
Date Received: 12/10/20 19:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	78295	12/19/20 03:45	LCW8	ELLE
Total/NA	Analysis	8260C LL	DL	10	78295	12/19/20 04:06	LCW8	ELLE
Total/NA	Analysis	8260C SIM 14D		1	78069	12/18/20 13:08	UJML	ELLE
Total/NA	Prep	3510C			77733	12/17/20 16:24	DFX4	ELLE
Total/NA	Analysis	8270D		1	77977	12/18/20 13:05	SJ89	ELLE
Total/NA	Prep	3510C			77079	12/15/20 17:30	DFX4	ELLE
Total/NA	Analysis	8081B		1	77299	12/16/20 09:22	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76640	12/14/20 20:11	UJLA	ELLE
Dissolved	Analysis	6010C		1	77186	12/15/20 19:51	UCIG	ELLE
Dissolved	Prep	Non-Digest Prep			76640	12/14/20 20:11	UJLA	ELLE
Dissolved	Analysis	6010C		1	77282	12/16/20 04:28	ULJC	ELLE
Total/NA	Prep	3010A			77264	12/16/20 03:13	UAMX	ELLE
Total/NA	Analysis	6010C		1	78148	12/18/20 12:19	SB	ELLE
Total/NA	Prep	3010A			77264	12/16/20 03:13	UAMX	ELLE
Total/NA	Analysis	6010C		1	77998	12/16/20 12:16	MDP5	ELLE
Dissolved	Prep	7470A			75822	12/11/20 11:52	UJL8	ELLE
Dissolved	Analysis	7470A		1	76642	12/14/20 14:33	UEFS	ELLE
Total/NA	Prep	7470A			75824	12/11/20 11:59	UJL8	ELLE
Total/NA	Analysis	7470A		1	76642	12/14/20 15:25	UEFS	ELLE
Total/NA	Analysis	2540C-2011		1	76970	12/15/20 11:44	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		5	76880	12/15/20 09:36	MFV9	ELLE
Total/NA	Analysis	375.4		10	76930	12/15/20 10:45	USAE	ELLE

Client Sample ID: HOFF MW-6

Lab Sample ID: 410-23571-5

Date Collected: 12/10/20 12:45
Date Received: 12/10/20 19:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		10	78295	12/19/20 04:28	LCW8	ELLE
Total/NA	Analysis	8260C LL	DL	100	78295	12/19/20 04:50	LCW8	ELLE
Total/NA	Analysis	8260C SIM 14D		2	78069	12/18/20 14:28	UJML	ELLE
Total/NA	Prep	3510C			77733	12/17/20 16:24	DFX4	ELLE
Total/NA	Analysis	8270D		1	77977	12/18/20 13:34	SJ89	ELLE
Total/NA	Prep	3510C			77079	12/15/20 17:30	DFX4	ELLE
Total/NA	Analysis	8081B		1	77299	12/16/20 09:33	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76643	12/14/20 20:16	UJLA	ELLE
Dissolved	Analysis	6010C		1	77154	12/15/20 17:52	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 15:49	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 17:17	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77891	12/17/20 21:55	UCIG	ELLE

Client Sample ID: HOFF MW-6

Lab Sample ID: 410-23571-5

Date Collected: 12/10/20 12:45

Matrix: Water

Date Received: 12/10/20 19:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	7470A			75822	12/11/20 11:52	UJL8	ELLE
Dissolved	Analysis	7470A		1	76642	12/14/20 14:29	UEFS	ELLE
Total/NA	Prep	7470A			75824	12/11/20 11:59	UJL8	ELLE
Total/NA	Analysis	7470A		1	76642	12/14/20 15:28	UEFS	ELLE
Total/NA	Analysis	2540C-2011		1	76970	12/15/20 11:44	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	76880	12/15/20 09:22	MFV9	ELLE
Total/NA	Analysis	375.4		1	76930	12/15/20 10:45	USAE	ELLE

Client Sample ID: HOFF IW-1A

Lab Sample ID: 410-23571-6

Date Collected: 12/10/20 14:55

Matrix: Water

Date Received: 12/10/20 19:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL	RA	2	78607	12/21/20 03:27	K4WN	ELLE
Total/NA	Analysis	8260C LL		2	78295	12/19/20 05:11	LCW8	ELLE
Total/NA	Analysis	8260C LL	DL	20	78295	12/19/20 05:33	LCW8	ELLE
Total/NA	Analysis	8260C SIM 14D		10	79219	12/22/20 17:21	UJML	ELLE
Total/NA	Analysis	8260C SIM 14D	RA	10	79617	12/23/20 11:15	UJML	ELLE
Total/NA	Prep	3510C			77733	12/17/20 16:24	DFX4	ELLE
Total/NA	Analysis	8270D		1	77977	12/18/20 14:03	SJ89	ELLE
Total/NA	Prep	3510C			77079	12/15/20 17:30	DFX4	ELLE
Total/NA	Analysis	8081B		1	77299	12/16/20 09:43	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76633	12/14/20 19:56	UJLA	ELLE
Dissolved	Analysis	6010C		1	79190	12/22/20 09:16	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76633	12/14/20 19:56	UJLA	ELLE
Dissolved	Analysis	6010C		1	77777	12/17/20 16:47	UCIG	ELLE
Dissolved	Prep	Non-Digest Prep			76633	12/14/20 19:56	UJLA	ELLE
Dissolved	Analysis	6010C		5	77777	12/17/20 17:02	UCIG	ELLE
Dissolved	Prep	Non-Digest Prep			76633	12/14/20 19:56	UJLA	ELLE
Dissolved	Analysis	6010C		1	77913	12/18/20 05:22	ULJC	ELLE
Dissolved	Prep	Non-Digest Prep			76633	12/14/20 19:56	UJLA	ELLE
Dissolved	Analysis	6010C		50	77913	12/18/20 05:26	ULJC	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 15:39	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		5	77784	12/17/20 17:04	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		50	77784	12/17/20 17:08	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77891	12/17/20 21:46	UCIG	ELLE
Dissolved	Prep	7470A			75822	12/11/20 11:52	UJL8	ELLE
Dissolved	Analysis	7470A		1	76642	12/14/20 14:35	UEFS	ELLE
Total/NA	Prep	7470A			75824	12/11/20 11:59	UJL8	ELLE
Total/NA	Analysis	7470A		1	76642	12/14/20 15:32	UEFS	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: HOFF IW-1A

Lab Sample ID: 410-23571-6

Date Collected: 12/10/20 14:55
Matrix: Water
Date Received: 12/10/20 19:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540C-2011		1	76970	12/15/20 11:44	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	76880	12/15/20 09:20	MFV9	ELLE
Total/NA	Analysis	375.4		200	76930	12/15/20 10:45	USAE	ELLE

Client Sample ID: HOFF IW-1B

Lab Sample ID: 410-23571-7

Date Collected: 12/10/20 15:50
Matrix: Water
Date Received: 12/10/20 19:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	78607	12/21/20 00:52	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	10	78607	12/21/20 01:14	K4WN	ELLE
Total/NA	Analysis	8260C LL	RA	1	78976	12/22/20 05:48	TQ4J	ELLE
Total/NA	Analysis	8260C SIM 14D		20	78368	12/19/20 14:36	UJML	ELLE
Total/NA	Analysis	8260C SIM 14D	RA	20	79219	12/22/20 17:00	UJML	ELLE
Total/NA	Prep	3510C			77733	12/17/20 16:24	DFX4	ELLE
Total/NA	Analysis	8270D		1	77977	12/18/20 14:32	SJ89	ELLE
Total/NA	Prep	3510C			77079	12/15/20 17:30	DFX4	ELLE
Total/NA	Analysis	8081B		1	77299	12/16/20 09:54	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		1	77129	12/15/20 17:00	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		5	78578	12/20/20 15:10	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		20	78578	12/20/20 15:14	SB	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 15:36	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		5	77784	12/17/20 16:49	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		50	77784	12/17/20 16:52	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77891	12/17/20 21:42	UCIG	ELLE
Dissolved	Prep	7470A			75822	12/11/20 11:52	UJL8	ELLE
Dissolved	Analysis	7470A		1	76642	12/14/20 14:37	UEFS	ELLE
Total/NA	Prep	7470A			75824	12/11/20 11:59	UJL8	ELLE
Total/NA	Analysis	7470A		1	76642	12/14/20 15:30	UEFS	ELLE
Total/NA	Analysis	2540C-2011		1	76970	12/15/20 11:44	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	76880	12/15/20 09:22	MFV9	ELLE
Total/NA	Analysis	375.4		100	76930	12/15/20 10:45	USAE	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Client Sample ID: TB-01-120920
Date Collected: 12/09/20 16:30
Date Received: 12/10/20 19:20

Lab Sample ID: 410-23571-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	78295	12/18/20 23:24	LCW8	ELLE
Total/NA	Analysis	8260C SIM 14D		1	78311	12/18/20 23:45	UJML	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Job ID: 410-23571-1
Project/Site: Hoff VC

Laboratory: Eurofins Lancaster Laboratories Env, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-22

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Method	Method Description	Protocol	Laboratory
8260C LL	Volatile Organic Compounds by GC/MS	SW846	ELLE
8260C SIM 14D	Volatile Organic Compounds (GC/MS)	SW846	ELLE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ELLE
8081B	Organochlorine Pesticides (GC)	SW846	ELLE
6010C	Metals (ICP)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
2540C-2011	Solids, Total Dissolved (TDS)	SM	ELLE
3500 Fe B-2011	Iron, Ferrous and Ferric	SM	ELLE
375.4	Sulfate	MCAWW	ELLE
3010A	Preparation, Total Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
Non-Digest Prep	Preparation, Non-Digested Aqueous Metals	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-23571-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-23571-1	HOFF MW-F_A	Water	12/09/20 16:10	12/10/20 19:20	
410-23571-2	HOFF MW-F_B	Water	12/09/20 17:05	12/10/20 19:20	
410-23571-3	HOFF MW-E	Water	12/10/20 09:40	12/10/20 19:20	
410-23571-4	HOFF MW-10	Water	12/10/20 11:15	12/10/20 19:20	
410-23571-5	HOFF MW-6	Water	12/10/20 12:45	12/10/20 19:20	
410-23571-6	HOFF IW-1A	Water	12/10/20 14:55	12/10/20 19:20	
410-23571-7	HOFF IW-1B	Water	12/10/20 15:50	12/10/20 19:20	
410-23571-8	TB-01-120920	Water	12/09/20 16:30	12/10/20 19:20	

Environmental Analysis Request Chain of Custody

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Acct. # _____

410-23571 Chain of Custody

use only

COC # 615284

Client Information

Client: Tetra Tech	Acct. #:
Project Name/#: HOFF VC	PWSID #:
Project Manager: Jonathan Dzicken	P.O. #:
Sampler: Neb Dedic	Quote #:
State where samples were collected: PA	For Compliance: Yes ☐ No ☒

Matrix

Soil ☐ Sediment ☐ Tissue ☐ | Water ☒ Potable ☐ Ground ☐ NPDES ☐ Surface ☐ | Other: DI WATER

Analysis Requested

Preservation and Filtration Codes

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	VOC (H)	VOC 14 Diox (H)	Fe 2+ (H)	SO4	TDS	SVOC	Pesticides	METALS-Total (N)	METALS-Diss (N)
HOFF MW-F_A	12/9/20	16:10	X		13	X	X	X	X	X	X	X	X	X
HOFF MW-F_B	12/9/20	17:05	X		13	X	X	X	X	X	X	X	X	X
HOFF MW-E	12/10/20	0940	X		13	X	X	X	X	X	X	X	X	X
HOFF MW-10	12/10/20	1115	X		13	X	X	X	X	X	X	X	X	X
HOFF MW-6	12/10/20	1245	X		13	X	X	X	X	X	X	X	X	X
HOFF IW-1A	12/10/20	1455	X		13	X	X	X	X	X	X	X	X	X
HOFF IW-1B	12/10/20	1550	X		13	X	X	X	X	X	X	X	X	X
TB-01-120920	12/9/20	1630	X		4	X	X							

Preservation Codes

H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 P=H_3PO_4
F=Field Filtered O=Other

Remarks

For Lab Use Only

FSC: _____

SCR#: _____

Turnaround Time (TAT) Requested (please circle)

Standard Rush

(Rush TAT is subject to laboratory approval and surcharge.)

Requested TAT in business days: _____

E-mail address: _____

Data Package Options (circle if required)

Type I (EPA Level 3 Equivalent/non-CLP) | Type VI (Raw Data Only)

Type III (Reduced non-CLP) | NJ DKQP | TX TRRP-13

NYSDEC Category A or B | MA MCP | CT RCP

Relinquished by	Date	Time	Received by	Date	Time
Dean Ohri	12/10	1622	Stan King	12/10/20	1622
Stan King	12/10/20	1924			
			Received by	12/10/20	1920

EDD Required? Yes No

If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No

(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:

UPS _____ FedEx _____ Other _____

Temperature upon receipt 3.9-4.2 °C

KAM

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KAM 7044 0919

Environmental Analysis Re[illegible]ustody

eurofins | Lancaster Laboratories Environmental

Acct. # _____

410-23572 Chain of Custody

use only

COC # 574782

Client Information	
Client: GES	Acct. #:
Project Name/#: 3-2583 Avenel	PWSID #:
Project Manager: Milena Cunningham	P.O. #:
Sampler: Jeremy Miller	Quote #:
State where samples were collected: NJ	For Compliance: Yes ☒ No ☐

Matrix: ☐ Tissue ☐ Sediment ☒ Soil ☐ Ground ☐ Surface ☐ Potable ☐ NPDES Water ☐ Other:

Analysis Requested — Preservation and Filtration Codes

For Lab Use Only
FSC: _____
SCR#: _____

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 P=H_3PO_4
F=Field Filtered O=Other

Sample Identification	Collected Date	Collected Time	Grab	Composite	Soil	Water	Other:	Total # of Containers	EPH CAT 2	PAH	Remarks
HL (5.5-6')	12/19/20	11:30	X		X			3	X	H	H=Hold on contingency
Billing # 0320127-92725-050406											
Equip # 1673											

Turnaround Time (TAT) Requested (please circle)
Standard Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Requested TAT in business days: _____

E-mail address: mcunningham@gesonline.com

Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only)
Type III (Reduced non-CLP) NJ DKQP TX TRRP-13
NYSDEC Category A or B MA MCP CT RCP

Relinquished by	Date	Time	Received by	Date	Time
Jeremy Miller	12/19/20	1407	Lisa Nycz GES	12-9-20	1515
Lisa Nycz GES	12-10-20	1235	Brad Boyd	12/10/20	12:35
Brad Boyd	12/10/20	18:45			
			[signature]	12-10-20	1910

EDD Required? Yes No
If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS _____ FedEx _____ Other _____

Temperature upon receipt 3.5 °C

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Seal # 111179

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KAM 7044 0718

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 410-23571-1

Login Number: 23571

List Source: Eurofins Lancaster Laboratories Env

List Number: 1

Creator: Metzger, Katherine A

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-23806-1
Client Project/Site: Hoff

For:
Tetra Tech, Inc.
1 Oxford Valley
Suite 200
Langhorne, Pennsylvania 19047

Attn: Jon Dziekan

Authorized for release by:
1/5/2021 4:03:20 PM

Stephen Gordon, Senior Project Manager
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LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Stephen Gordon
Senior Project Manager
1/5/2021 4:03:20 PM

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
*3	ISTD response or retention time outside acceptable limits.
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1-	Surrogate recovery exceeds control limits, low biased.

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*H	LCS and/or LCSD recovery above control limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-23806-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-23806-1

Receipt
The samples were received on 12/11/2020 5:56 PM; the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.6°C and 3.9°C

Receipt Exceptions
The container count for the following sample did not match the information listed on the Chain-of-Custody (COC): HOFF IW-2A (410-23806-6). The COC lists a container count of 11. Received 10 containers (1 HCl vial received empty).

The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): HOFF DUP-121120

GC/MS VOA
Method 8260C_SIM_14DX: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The samples were analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: HOFF IW-3A (410-23806-5), HOFF IW-2A (410-23806-6) and HOFF IW-3B (410-23806-7).

Method 8260C_SIM_14DX: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: HOFF IW-3A (410-23806-5). Elevated reporting limits (RLs) are provided.

Method 8260C_SIM_14DX: The following samples were diluted due to the abundance of non-target analytes: HOFF MW-C (410-23806-1), HOFF MW-B (410-23806-2), HOFF IW-2A (410-23806-6), HOFF IW-3B (410-23806-7), HOFF IW-2B (410-23806-8) and HOFF DUP-121120 (410-23806-9). Elevated reporting limits (RLs) are provided.

Method 8260C_LL: The continuing calibration verification (CCV) associated with batch 410-78610 recovered outside acceptance criteria, low biased, for Carbon disulfide and 1,1-Dichloroethene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260C_LL: The following samples contained residual chlorine upon receipt: HOFF IW-3A (410-23806-5) and HOFF IW-3B (410-23806-7).

Method 8260C_LL: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The samples were analyzed within the 7-day holding time specified for unpreserved samples: HOFF IW-3A (410-23806-5) and HOFF IW-2A (410-23806-6).

Method 8260C_LL: The following samples contained residual chlorine upon receipt: HOFF IW-3A (410-23806-5) and HOFF IW-3B (410-23806-7).

Method 8260C_LL: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The samples were analyzed within the 7-day holding time specified for unpreserved samples: HOFF IW-3A (410-23806-5), HOFF IW-2A (410-23806-6) and HOFF IW-3B (410-23806-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270D: Internal standard responses were outside of acceptance limits for the following sample: HOFF MW-13 (410-23806-3). The sample was re-analyzed and internal standard responses was again outside of the acceptance limits, indicating a matrix effect. The reported data is from the initial analysis of the sample.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Job ID: 410-23806-1 (Continued)

Laboratory: Eurofins Lancaster Laboratories Env, LLC (Conti

Pesticides

Method 8081B: Surrogate recovery for the following samples were outside control limits: HOFF IW-3A (410-23806-5), HOFF IW-2A (410-23806-6) and HOFF IW-3B (410-23806-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

Method 6010C: The reference method requires samples to be preserved to a pH of <2. The following sample(s) were received with insufficient preservation at a pH of 7: HOFF IW-2A (410-23806-6).

Method 6010C: The following samples were diluted due to the nature of the sample matrix: HOFF MW-C (410-23806-1), HOFF IW-2A (410-23806-6) and HOFF IW-3B (410-23806-7). Elevated reporting limits (RLs) are provided.

Method 7470A: The reference method requires samples to be preserved to a pH of <2. The following sample(s) were received with insufficient preservation at a pH of 7: HOFF IW-2A (410-23806-6).

Method 7470A: The reference method requires samples to be preserved to a pH of <2. The following sample(s) were received with insufficient preservation at a pH of 7: HOFF IW-2A (410-23806-6).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 2540C_SingleDry: Reanalysis in duplicate of the following sample was performed outside of the analytical holding time to confirm the Total Dissolved Solids result: HOFF IW-2B (410-23806-8). The initial result was 2100 mg/L. The past hold time result is reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF MW-C

Lab Sample ID: 410-23806-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.83	J	1.0	0.10	ug/L	2		8260C LL	Total/NA
Chlorobenzene	21		1.0	0.12	ug/L	2		8260C LL	Total/NA
1,2,4-Trichlorobenzene	5.8		1.0	0.12	ug/L	2		8260C LL	Total/NA
Dibromochloromethane	3.4		1.0	0.14	ug/L	2		8260C LL	Total/NA
Tetrachloroethene	0.28	J	1.0	0.12	ug/L	2		8260C LL	Total/NA
cis-1,2-Dichloroethene	6.8		1.0	0.10	ug/L	2		8260C LL	Total/NA
trans-1,2-Dichloroethene	1.9		1.0	0.12	ug/L	2		8260C LL	Total/NA
1,3-Dichlorobenzene	2.7		1.0	0.12	ug/L	2		8260C LL	Total/NA
Acetone	230		10	1.8	ug/L	2		8260C LL	Total/NA
Chloroform	1.3		1.0	0.18	ug/L	2		8260C LL	Total/NA
Benzene	0.14	J	1.0	0.10	ug/L	2		8260C LL	Total/NA
Bromomethane	4.6		1.0	0.14	ug/L	2		8260C LL	Total/NA
Chloromethane	35		1.0	0.12	ug/L	2		8260C LL	Total/NA
Chloroethane	14		1.0	0.14	ug/L	2		8260C LL	Total/NA
Methylene Chloride	1.0		1.0	0.14	ug/L	2		8260C LL	Total/NA
Carbon disulfide	0.34	J ^c	2.0	0.12	ug/L	2		8260C LL	Total/NA
Bromoform	1.6	J	2.0	0.60	ug/L	2		8260C LL	Total/NA
Bromodichloromethane	0.87	J	1.0	0.10	ug/L	2		8260C LL	Total/NA
1,2-Dichloropropane	1.4		1.0	0.12	ug/L	2		8260C LL	Total/NA
2-Butanone	60		10	1.2	ug/L	2		8260C LL	Total/NA
1,1,2-Trichloroethane	4.4		1.0	0.12	ug/L	2		8260C LL	Total/NA
Trichloroethene	0.85	J	1.0	0.12	ug/L	2		8260C LL	Total/NA
Methyl acetate	4.2		2.0	0.20	ug/L	2		8260C LL	Total/NA
1,1,2,2-Tetrachloroethane	1.8		1.0	0.14	ug/L	2		8260C LL	Total/NA
1,4-Dichlorobenzene - DL	73		10	1.4	ug/L	20		8260C LL	Total/NA
1,1,1-Trichloroethane - DL	96		10	1.2	ug/L	20		8260C LL	Total/NA
1,1-Dichloroethane - DL	350		10	1.4	ug/L	20		8260C LL	Total/NA
1,2-Dichlorobenzene - DL	320		10	1.2	ug/L	20		8260C LL	Total/NA
1,4-Dioxane	0.45	J	0.80	0.40	ug/L	2		8260C SIM 14D	Total/NA
alpha-BHC (1C)	0.0035	J p	0.020	0.0029	ug/L	1		8081B	Total/NA
Endrin ketone (2C)	0.0067	J	0.029	0.0049	ug/L	1		8081B	Total/NA
gamma-BHC (Lindane) (2C)	0.0069	J	0.020	0.0020	ug/L	1		8081B	Total/NA
p,p'-DDD (2C)	0.0094	J p	0.029	0.0049	ug/L	1		8081B	Total/NA
p,p'-DDT (2C)	0.0053	J p	0.029	0.0051	ug/L	1		8081B	Total/NA
Arsenic	0.047	J	0.050	0.016	mg/L	1		6010C	Total/NA
Aluminum	2.9		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.46		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	410		2.5	0.48	mg/L	5		6010C	Total/NA
Chromium	0.071		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0075		0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.024		0.020	0.012	mg/L	1		6010C	Total/NA
Iron	46		0.20	0.040	mg/L	1		6010C	Total/NA
Lead	0.045		0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	1200		0.50	0.20	mg/L	5		6010C	Total/NA
Manganese	0.16		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.0031	J	0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.021		0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	280		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	4400		10	2.4	mg/L	10		6010C	Total/NA
Vanadium	0.040		0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.18		0.0052	0.0010	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Client Sample ID: HOFF MW-C (Continued) — Lab Sample ID: 410-23806-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	1300	*H	2.6	0.49	mg/L	5		6010C	Dissolved
Chromium	0.056		0.015	0.0016	mg/L	1		6010C	Dissolved
Copper	0.025		0.021	0.012	mg/L	1		6010C	Dissolved
Iron	0.54		0.21	0.041	mg/L	1		6010C	Dissolved
Lead	0.013	J	0.015	0.0073	mg/L	1		6010C	Dissolved
Magnesium	1000		0.52	0.21	mg/L	5		6010C	Dissolved
Manganese	0.011		0.010	0.0031	mg/L	1		6010C	Dissolved
Potassium	220		2.6	1.1	mg/L	5		6010C	Dissolved
Sodium	4700		21	4.9	mg/L	20		6010C	Dissolved
Vanadium	0.0029	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	0.83		0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	0.77		0.20	0.079	ug/L	1		7470A	Dissolved
Total Dissolved Solids	4300		240	80	mg/L	1		2540C-2011	Total/NA
Ferrous Iron	0.19	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	2400		600	200	mg/L	100		375.4	Total/NA

Client Sample ID: HOFF MW-B — Lab Sample ID: 410-23806-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.85	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
1,4-Dichlorobenzene	100		5.0	0.70	ug/L	10		8260C LL	Total/NA
1,2,4-Trichlorobenzene	5.4		5.0	0.60	ug/L	10		8260C LL	Total/NA
Xylenes, Total	1.6	J	10	1.5	ug/L	10		8260C LL	Total/NA
cis-1,2-Dichloroethene	16		5.0	0.50	ug/L	10		8260C LL	Total/NA
trans-1,2-Dichloroethene	2.4	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
1,3-Dichlorobenzene	17		5.0	0.60	ug/L	10		8260C LL	Total/NA
Acetone	110		50	9.0	ug/L	10		8260C LL	Total/NA
Benzene	15		5.0	0.50	ug/L	10		8260C LL	Total/NA
1,1,1-Trichloroethane	3.2	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Bromomethane	3.9	J	5.0	0.70	ug/L	10		8260C LL	Total/NA
Chloromethane	20		5.0	0.60	ug/L	10		8260C LL	Total/NA
Chloroethane	1.7	J	5.0	0.70	ug/L	10		8260C LL	Total/NA
Carbon disulfide	2.6	J ^c	10	0.60	ug/L	10		8260C LL	Total/NA
1,1-Dichloroethane	23		5.0	0.70	ug/L	10		8260C LL	Total/NA
2-Butanone	27	J	50	6.0	ug/L	10		8260C LL	Total/NA
1,1,2-Trichloroethane	1.1	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Trichloroethene	2.3	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Isopropylbenzene	0.63	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
Chlorobenzene - DL	1500		50	6.0	ug/L	100		8260C LL	Total/NA
1,2-Dichlorobenzene - DL	260		50	6.0	ug/L	100		8260C LL	Total/NA
1,4-Dioxane	2.9	J	4.0	2.0	ug/L	10		8260C SIM 14D	Total/NA
Fluoranthene	0.15	J	0.51	0.10	ug/L	1		8270D	Total/NA
Phenanthrene	0.85		0.51	0.10	ug/L	1		8270D	Total/NA
2-Methylnaphthalene	2.0		0.51	0.10	ug/L	1		8270D	Total/NA
alpha-BHC (1C)	0.016	J	0.020	0.0030	ug/L	1		8081B	Total/NA
alpha-Chlordane (2C)	0.0033	J p	0.020	0.0030	ug/L	1		8081B	Total/NA
Dieldrin (1C)	0.011	J	0.030	0.0053	ug/L	1		8081B	Total/NA
Endosulfan sulfate (1C)	0.011	J	0.030	0.0058	ug/L	1		8081B	Total/NA
gamma-BHC (Lindane) (1C)	0.0048	J p	0.020	0.0020	ug/L	1		8081B	Total/NA
Heptachlor (2C)	0.0094	J B p	0.020	0.0020	ug/L	1		8081B	Total/NA
p,p'-DDT (2C)	0.0081	J p	0.030	0.0052	ug/L	1		8081B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF MW-B (Continued) — Lab Sample ID: 410-23806-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.025	J	0.050	0.016	mg/L	1		6010C	Total/NA
Aluminum	1.5		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.32		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	150		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.020		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0048	J	0.0050	0.0015	mg/L	1		6010C	Total/NA
Iron	26		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	370		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.085		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.010		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.0084	J	0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	97		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	1200		5.0	1.2	mg/L	5		6010C	Total/NA
Vanadium	0.029		0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.028		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	130	*H	0.52	0.099	mg/L	1		6010C	Dissolved
Chromium	0.017		0.015	0.0016	mg/L	1		6010C	Dissolved
Cobalt	0.0023	J	0.0052	0.0015	mg/L	1		6010C	Dissolved
Magnesium	360		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.0063	J	0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.0091	J	0.010	0.0022	mg/L	1		6010C	Dissolved
Potassium	96		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	1200		10	2.5	mg/L	10		6010C	Dissolved
Vanadium	0.0093	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Total Dissolved Solids	2500		240	80	mg/L	1		2540C-2011	Total/NA
Ferrous Iron	0.090	J HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	1700		300	100	mg/L	50		375.4	Total/NA

Client Sample ID: HOFF MW-13 — Lab Sample ID: 410-23806-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	1.3		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,2-Dichloroethane	1.1		0.50	0.050	ug/L	1		8260C LL	Total/NA
4-Methyl-2-pentanone	1.1	J	5.0	0.70	ug/L	1		8260C LL	Total/NA
Toluene	0.24	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Chlorobenzene	6.9		0.50	0.060	ug/L	1		8260C LL	Total/NA
1,2,4-Trichlorobenzene	0.12	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Tetrachloroethene	0.067	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
cis-1,2-Dichloroethene	0.45	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
trans-1,2-Dichloroethene	0.068	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Methyl tertiary butyl ether	0.054	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,3-Dichlorobenzene	0.16	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Acetone	110		5.0	0.90	ug/L	1		8260C LL	Total/NA
Chloroform	0.11	J	0.50	0.090	ug/L	1		8260C LL	Total/NA
Benzene	5.8		0.50	0.050	ug/L	1		8260C LL	Total/NA
1,1,1-Trichloroethane	0.066	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Bromomethane	2.9		0.50	0.070	ug/L	1		8260C LL	Total/NA
Chloroethane	4.1		0.50	0.070	ug/L	1		8260C LL	Total/NA
Vinyl chloride	0.18	J	0.50	0.10	ug/L	1		8260C LL	Total/NA
Methylene Chloride	0.68		0.50	0.070	ug/L	1		8260C LL	Total/NA
Carbon disulfide	3.7	^c	1.0	0.060	ug/L	1		8260C LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF MW-13 (Continued)

Lab Sample ID: 410-23806-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.5		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,2-Dichloropropane	0.20	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
2-Butanone	27		5.0	0.60	ug/L	1		8260C LL	Total/NA
Trichloroethene	0.77		0.50	0.060	ug/L	1		8260C LL	Total/NA
Methyl acetate	2.0		1.0	0.10	ug/L	1		8260C LL	Total/NA
1,2-Dichlorobenzene	4.2		0.50	0.060	ug/L	1		8260C LL	Total/NA
Chloromethane - DL	78		5.0	0.60	ug/L	10		8260C LL	Total/NA
1,4-Dioxane	3.6		0.40	0.20	ug/L	1		8260C SIM 14D	Total/NA
Benzaldehyde	3.3	J	10	3.0	ug/L	1		8270D	Total/NA
alpha-BHC (2C)	0.0041	J B p	0.020	0.0030	ug/L	1		8081B	Total/NA
Heptachlor (2C)	0.0030	J B p	0.020	0.0020	ug/L	1		8081B	Total/NA
p,p'-DDT (2C)	0.0064	J p	0.030	0.0052	ug/L	1		8081B	Total/NA
Arsenic	0.044	J	0.050	0.016	mg/L	1		6010C	Total/NA
Aluminum	2.7		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.26		0.0050	0.0010	mg/L	1		6010C	Total/NA
Cadmium	0.0030	J	0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	400		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.031		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.020		0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.022		0.020	0.012	mg/L	1		6010C	Total/NA
Iron	63		0.20	0.040	mg/L	1		6010C	Total/NA
Lead	0.015		0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	290		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	3.1		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.12		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.093		0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	120		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	840		5.0	1.2	mg/L	5		6010C	Total/NA
Vanadium	0.048		0.010	0.0019	mg/L	1		6010C	Total/NA
Aluminum	0.47		0.31	0.16	mg/L	1		6010C	Dissolved
Barium	0.083		0.0052	0.0010	mg/L	1		6010C	Dissolved
Cadmium	0.0024	J	0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	330	*H	0.52	0.099	mg/L	1		6010C	Dissolved
Chromium	0.023		0.015	0.0016	mg/L	1		6010C	Dissolved
Cobalt	0.013		0.0052	0.0015	mg/L	1		6010C	Dissolved
Copper	0.021		0.021	0.012	mg/L	1		6010C	Dissolved
Iron	21		0.21	0.041	mg/L	1		6010C	Dissolved
Lead	0.021		0.015	0.0073	mg/L	1		6010C	Dissolved
Magnesium	250		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	2.4		0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.10		0.010	0.0022	mg/L	1		6010C	Dissolved
Zinc	0.067		0.021	0.0038	mg/L	1		6010C	Dissolved
Potassium	100		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	830		5.2	1.2	mg/L	5		6010C	Dissolved
Vanadium	0.014		0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	0.16	J	0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	0.29		0.20	0.079	ug/L	1		7470A	Dissolved
Total Dissolved Solids	5500		240	80	mg/L	1		2540C-2011	Total/NA
Ferrous Iron	0.23	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	2000		600	200	mg/L	100		375.4	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF TB-01-121120 — Lab Sample ID: 410-23806-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.0		5.0	0.90	ug/L	1		8260C LL	Total/NA
Chloroform	0.22	J	0.50	0.090	ug/L	1		8260C LL	Total/NA
Bromodichloromethane	0.065	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
2-Butanone	3.3	J	5.0	0.60	ug/L	1		8260C LL	Total/NA

Client Sample ID: HOFF IW-3A — Lab Sample ID: 410-23806-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	5.8		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,2-Dichloroethane	5.4		0.50	0.050	ug/L	1		8260C LL	Total/NA
Chlorobenzene	20		0.50	0.060	ug/L	1		8260C LL	Total/NA
1,2,4-Trichlorobenzene	0.20	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Tetrachloroethene	0.60		0.50	0.060	ug/L	1		8260C LL	Total/NA
cis-1,2-Dichloroethene	3.6		0.50	0.050	ug/L	1		8260C LL	Total/NA
trans-1,2-Dichloroethene	0.56		0.50	0.060	ug/L	1		8260C LL	Total/NA
Methyl tertiary butyl ether	0.084	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,3-Dichlorobenzene	0.37	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Chloroform	8.8		0.50	0.090	ug/L	1		8260C LL	Total/NA
Benzene	0.51		0.50	0.050	ug/L	1		8260C LL	Total/NA
1,1,1-Trichloroethane	7.4		0.50	0.060	ug/L	1		8260C LL	Total/NA
Bromomethane	23		0.50	0.070	ug/L	1		8260C LL	Total/NA
Chloroethane	1.3		0.50	0.070	ug/L	1		8260C LL	Total/NA
Methylene Chloride	25		0.50	0.070	ug/L	1		8260C LL	Total/NA
Carbon disulfide	0.99	J ^c	1.0	0.060	ug/L	1		8260C LL	Total/NA
Bromodichloromethane	0.28	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,1-Dichloroethane	17		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,2-Dichloropropane	0.32	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
1,1,2-Trichloroethane	1.1		0.50	0.060	ug/L	1		8260C LL	Total/NA
Trichloroethene	0.50		0.50	0.060	ug/L	1		8260C LL	Total/NA
Methyl acetate	18		1.0	0.10	ug/L	1		8260C LL	Total/NA
1,1,2,2-Tetrachloroethane	0.17	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
1,2-Dichlorobenzene	22		0.50	0.060	ug/L	1		8260C LL	Total/NA
Acetone - DL	2000		130	23	ug/L	25		8260C LL	Total/NA
Chloromethane - DL	500		13	1.5	ug/L	25		8260C LL	Total/NA
2-Butanone - DL	410		130	15	ug/L	25		8260C LL	Total/NA
1,4-Dioxane	1.5	J	2.0	1.0	ug/L	5		8260C SIM 14D	Total/NA
Benzo[a]anthracene	1.1		0.52	0.10	ug/L	1		8270D	Total/NA
Benzo[a]pyrene	0.68		0.52	0.10	ug/L	1		8270D	Total/NA
Benzo[b]fluoranthene	1.4		0.52	0.10	ug/L	1		8270D	Total/NA
Benzo[g,h,i]perylene	0.56		0.52	0.10	ug/L	1		8270D	Total/NA
Benzo[k]fluoranthene	0.57		0.52	0.10	ug/L	1		8270D	Total/NA
Anthracene	0.27	J	0.52	0.10	ug/L	1		8270D	Total/NA
Chrysene	1.3		0.52	0.10	ug/L	1		8270D	Total/NA
Fluoranthene	3.0		0.52	0.10	ug/L	1		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.60		0.52	0.10	ug/L	1		8270D	Total/NA
Naphthalene	0.15	J	0.52	0.10	ug/L	1		8270D	Total/NA
Phenanthrene	1.6		0.52	0.10	ug/L	1		8270D	Total/NA
Pyrene	1.9		0.52	0.10	ug/L	1		8270D	Total/NA
alpha-BHC (2C)	0.0037	J B	0.019	0.0028	ug/L	1		8081B	Total/NA
alpha-Chlordane (2C)	0.0062	J	0.019	0.0028	ug/L	1		8081B	Total/NA
gamma-BHC (Lindane) (1C)	0.0019	J p	0.019	0.0019	ug/L	1		8081B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF IW-2A

Lab Sample ID: 410-23806-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	1.0		0.50	0.050	ug/L	1		8260C LL	Total/NA
4-Methyl-2-pentanone	1.2	J	5.0	0.70	ug/L	1		8260C LL	Total/NA
Methylcyclohexane	0.42	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
Toluene	0.48	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
1,2,4-Trichlorobenzene	3.0		0.50	0.060	ug/L	1		8260C LL	Total/NA
Tetrachloroethene	1.9		0.50	0.060	ug/L	1		8260C LL	Total/NA
trans-1,2-Dichloroethene	13		0.50	0.060	ug/L	1		8260C LL	Total/NA
Methyl tertiary butyl ether	0.46	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,3-Dichlorobenzene	2.9		0.50	0.060	ug/L	1		8260C LL	Total/NA
2-Hexanone	1.8	J	5.0	0.60	ug/L	1		8260C LL	Total/NA
Chloroform	0.59		0.50	0.090	ug/L	1		8260C LL	Total/NA
Benzene	1.2		0.50	0.050	ug/L	1		8260C LL	Total/NA
1,1,1-Trichloroethane	17		0.50	0.060	ug/L	1		8260C LL	Total/NA
Bromomethane	2.9		0.50	0.070	ug/L	1		8260C LL	Total/NA
Chloromethane	7.2		0.50	0.060	ug/L	1		8260C LL	Total/NA
Chloroethane	3.9		0.50	0.070	ug/L	1		8260C LL	Total/NA
Vinyl chloride	0.60		0.50	0.10	ug/L	1		8260C LL	Total/NA
Methylene Chloride	0.72		0.50	0.070	ug/L	1		8260C LL	Total/NA
Carbon disulfide	0.62	J ^c	1.0	0.060	ug/L	1		8260C LL	Total/NA
1,1-Dichloroethene	0.61	^c	0.50	0.060	ug/L	1		8260C LL	Total/NA
1,2-Dichloropropane	1.6		0.50	0.060	ug/L	1		8260C LL	Total/NA
1,1,2-Trichloroethane	2.2		0.50	0.060	ug/L	1		8260C LL	Total/NA
Trichloroethene	8.4		0.50	0.060	ug/L	1		8260C LL	Total/NA
Isopropylbenzene	0.13	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,4-Dichlorobenzene - DL	58		5.0	0.70	ug/L	10		8260C LL	Total/NA
Chlorobenzene - DL	85		5.0	0.60	ug/L	10		8260C LL	Total/NA
cis-1,2-Dichloroethene - DL	70		5.0	0.50	ug/L	10		8260C LL	Total/NA
1,1-Dichloroethane - DL	86		5.0	0.70	ug/L	10		8260C LL	Total/NA
2-Butanone - DL	1500		50	6.0	ug/L	10		8260C LL	Total/NA
Acetone - DL2	2900		500	90	ug/L	100		8260C LL	Total/NA
1,2-Dichlorobenzene - DL2	330		50	6.0	ug/L	100		8260C LL	Total/NA
1,4-Dioxane	6.8		2.0	1.0	ug/L	5		8260C SIM 14D	Total/NA
Benzo[a]anthracene	2.6		0.51	0.10	ug/L	1		8270D	Total/NA
Benzo[a]pyrene	2.6		0.51	0.10	ug/L	1		8270D	Total/NA
Benzo[b]fluoranthene	3.3		0.51	0.10	ug/L	1		8270D	Total/NA
Benzo[g,h,i]perylene	1.8		0.51	0.10	ug/L	1		8270D	Total/NA
Benzo[k]fluoranthene	1.3		0.51	0.10	ug/L	1		8270D	Total/NA
Acenaphthene	0.29	J	0.51	0.10	ug/L	1		8270D	Total/NA
Anthracene	0.66		0.51	0.10	ug/L	1		8270D	Total/NA
Benzaldehyde	3.7	J	10	3.0	ug/L	1		8270D	Total/NA
Carbazole	0.57	J	2.0	0.51	ug/L	1		8270D	Total/NA
Chrysene	2.9		0.51	0.10	ug/L	1		8270D	Total/NA
Fluoranthene	5.5		0.51	0.10	ug/L	1		8270D	Total/NA
Fluorene	0.18	J	0.51	0.10	ug/L	1		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	2.2		0.51	0.10	ug/L	1		8270D	Total/NA
Naphthalene	0.39	J	0.51	0.10	ug/L	1		8270D	Total/NA
Phenanthrene	2.8		0.51	0.10	ug/L	1		8270D	Total/NA
Pyrene	4.0		0.51	0.10	ug/L	1		8270D	Total/NA
2-Methylnaphthalene	0.11	J	0.51	0.10	ug/L	1		8270D	Total/NA
Aldrin (2C)	0.0037	J p	0.019	0.0019	ug/L	1		8081B	Total/NA
alpha-BHC (1C)	0.0036	J p	0.019	0.0029	ug/L	1		8081B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF IW-2A (Continued)

Lab Sample ID: 410-23806-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
alpha-Chlordane (2C)	0.016	J	0.019	0.0029	ug/L	1		8081B	Total/NA
beta-BHC (2C)	0.011	J p B	0.019	0.0033	ug/L	1		8081B	Total/NA
Endosulfan II (1C)	0.019	J	0.039	0.015	ug/L	1		8081B	Total/NA
Endrin (1C)	0.0081	J p	0.029	0.0078	ug/L	1		8081B	Total/NA
Endrin ketone (1C)	0.0070	J p	0.029	0.0048	ug/L	1		8081B	Total/NA
gamma-Chlordane (2C)	0.0072	J p	0.039	0.0068	ug/L	1		8081B	Total/NA
Heptachlor epoxide (2C)	0.0034	J p	0.019	0.0022	ug/L	1		8081B	Total/NA
p,p'-DDE (2C)	0.012	J	0.029	0.0048	ug/L	1		8081B	Total/NA
p,p'-DDT (1C)	0.010	J p	0.029	0.0050	ug/L	1		8081B	Total/NA
Arsenic	0.82		0.25	0.080	mg/L	5		6010C	Total/NA
Aluminum	2100		1.5	0.77	mg/L	5		6010C	Total/NA
Antimony	0.037	J	0.050	0.016	mg/L	1		6010C	Total/NA
Barium	1.3		0.025	0.0050	mg/L	5		6010C	Total/NA
Beryllium	0.17		0.025	0.0050	mg/L	5		6010C	Total/NA
Cadmium	0.044		0.025	0.0050	mg/L	5		6010C	Total/NA
Calcium	1900		2.5	0.48	mg/L	1		6010C	Total/NA
Chromium	2.6		0.075	0.0080	mg/L	5		6010C	Total/NA
Cobalt	0.56		0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.73		0.10	0.060	mg/L	5		6010C	Total/NA
Iron	3000	B	4.0	0.80	mg/L	20		6010C	Total/NA
Lead	0.46		0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	3800		2.5	1.0	mg/L	5		6010C	Total/NA
Manganese	38		0.050	0.015	mg/L	5		6010C	Total/NA
Nickel	1.2		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	2.4		0.020	0.0037	mg/L	1		6010C	Total/NA
Silver	0.041	J	0.050	0.025	mg/L	5		6010C	Total/NA
Selenium	0.031	J	0.050	0.016	mg/L	1		6010C	Total/NA
Potassium	1200		2.5	1.0	mg/L	5		6010C	Total/NA
Sodium	3200		10	2.4	mg/L	10		6010C	Total/NA
Vanadium	4.8		0.050	0.0095	mg/L	5		6010C	Total/NA
Aluminum	6.5		0.31	0.16	mg/L	1		6010C	Dissolved
Barium	0.20		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	1200	*H	2.6	0.49	mg/L	5		6010C	Dissolved
Chromium	0.18		0.015	0.0016	mg/L	1		6010C	Dissolved
Cobalt	0.0086		0.0052	0.0015	mg/L	1		6010C	Dissolved
Copper	0.039		0.021	0.012	mg/L	1		6010C	Dissolved
Iron	7.5		0.21	0.041	mg/L	1		6010C	Dissolved
Lead	0.022		0.015	0.0073	mg/L	1		6010C	Dissolved
Magnesium	620		0.52	0.21	mg/L	5		6010C	Dissolved
Manganese	0.85		0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.060		0.010	0.0022	mg/L	1		6010C	Dissolved
Zinc	0.047		0.021	0.0038	mg/L	1		6010C	Dissolved
Potassium	850		2.6	1.1	mg/L	5		6010C	Dissolved
Sodium	2900		21	4.9	mg/L	20		6010C	Dissolved
Vanadium	0.042		0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	1.7		0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	0.64		0.20	0.079	ug/L	1		7470A	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF IW-3B

Lab Sample ID: 410-23806-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	66		2.5	0.35	ug/L	5		8260C LL	Total/NA
1,2-Dichloroethane	2.5		2.5	0.25	ug/L	5		8260C LL	Total/NA
1,2,4-Trichlorobenzene	2.2	J	2.5	0.30	ug/L	5		8260C LL	Total/NA
Tetrachloroethene	0.36	J	2.5	0.30	ug/L	5		8260C LL	Total/NA
cis-1,2-Dichloroethene	96		2.5	0.25	ug/L	5		8260C LL	Total/NA
trans-1,2-Dichloroethene	26		2.5	0.30	ug/L	5		8260C LL	Total/NA
Methyl tertiary butyl ether	0.35	J	2.5	0.25	ug/L	5		8260C LL	Total/NA
1,3-Dichlorobenzene	5.2		2.5	0.30	ug/L	5		8260C LL	Total/NA
Chloroform	3.5		2.5	0.45	ug/L	5		8260C LL	Total/NA
Benzene	4.3		2.5	0.25	ug/L	5		8260C LL	Total/NA
1,1,1-Trichloroethane	9.8		2.5	0.30	ug/L	5		8260C LL	Total/NA
Bromomethane	12		2.5	0.35	ug/L	5		8260C LL	Total/NA
Chloromethane	99		2.5	0.30	ug/L	5		8260C LL	Total/NA
Chloroethane	2.7		2.5	0.35	ug/L	5		8260C LL	Total/NA
Methylene Chloride	11		2.5	0.35	ug/L	5		8260C LL	Total/NA
Carbon disulfide	2.6	J ^c	5.0	0.30	ug/L	5		8260C LL	Total/NA
Bromoform	2.5	J	5.0	1.5	ug/L	5		8260C LL	Total/NA
1,1-Dichloroethane	43		2.5	0.35	ug/L	5		8260C LL	Total/NA
1,2-Dichloropropane	0.72	J	2.5	0.30	ug/L	5		8260C LL	Total/NA
2-Butanone	1100		25	3.0	ug/L	5		8260C LL	Total/NA
1,1,2-Trichloroethane	1.0	J	2.5	0.30	ug/L	5		8260C LL	Total/NA
Trichloroethene	3.1		2.5	0.30	ug/L	5		8260C LL	Total/NA
Chlorobenzene - DL	920		25	3.0	ug/L	50		8260C LL	Total/NA
Acetone - DL	3200		250	45	ug/L	50		8260C LL	Total/NA
1,2-Dichlorobenzene - DL	300		25	3.0	ug/L	50		8260C LL	Total/NA
1,4-Dioxane	17		2.0	1.0	ug/L	5		8260C SIM 14D	Total/NA
Benzo[a]anthracene	0.14	J	0.48	0.095	ug/L	1		8270D	Total/NA
Benzo[b]fluoranthene	0.21	J	0.48	0.095	ug/L	1		8270D	Total/NA
Benzo[g,h,i]perylene	0.11	J	0.48	0.095	ug/L	1		8270D	Total/NA
Chrysene	0.19	J	0.48	0.095	ug/L	1		8270D	Total/NA
Fluoranthene	0.29	J	0.48	0.095	ug/L	1		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.12	J	0.48	0.095	ug/L	1		8270D	Total/NA
Naphthalene	0.54		0.48	0.095	ug/L	1		8270D	Total/NA
Phenanthrene	0.19	J	0.48	0.095	ug/L	1		8270D	Total/NA
Pyrene	0.24	J	0.48	0.095	ug/L	1		8270D	Total/NA
2-Methylnaphthalene	0.31	J	0.48	0.095	ug/L	1		8270D	Total/NA
beta-BHC (2C)	0.0051	J B p	0.019	0.0033	ug/L	1		8081B	Total/NA
Heptachlor (1C)	0.0027	J	0.019	0.0019	ug/L	1		8081B	Total/NA
Arsenic	0.38		0.050	0.016	mg/L	1		6010C	Total/NA
Aluminum	580		1.5	0.77	mg/L	5		6010C	Total/NA
Antimony	0.028	J	0.050	0.016	mg/L	1		6010C	Total/NA
Barium	0.50		0.0050	0.0010	mg/L	1		6010C	Total/NA
Beryllium	0.053		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	280		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.82		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.34		0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.37		0.020	0.012	mg/L	1		6010C	Total/NA
Iron	1100		1.0	0.20	mg/L	5		6010C	Total/NA
Lead	0.24		0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	950		0.50	0.20	mg/L	5		6010C	Total/NA
Manganese	12		0.010	0.0030	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF IW-3B (Continued) — Lab Sample ID: 410-23806-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.70		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	1.0		0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	74		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	4400		20	4.8	mg/L	20		6010C	Total/NA
Thallium	0.017	J	0.030	0.0081	mg/L	1		6010C	Total/NA
Vanadium	1.2		0.010	0.0019	mg/L	1		6010C	Total/NA
Aluminum	3.7		0.31	0.16	mg/L	1		6010C	Dissolved
Barium	0.088		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	1300	*H	2.6	0.49	mg/L	5		6010C	Dissolved
Chromium	0.15		0.015	0.0016	mg/L	1		6010C	Dissolved
Cobalt	0.0067		0.0052	0.0015	mg/L	1		6010C	Dissolved
Copper	0.032		0.021	0.012	mg/L	1		6010C	Dissolved
Iron	4.8		0.21	0.041	mg/L	1		6010C	Dissolved
Lead	0.014	J	0.015	0.0073	mg/L	1		6010C	Dissolved
Magnesium	1400		0.52	0.21	mg/L	5		6010C	Dissolved
Manganese	0.20		0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.049		0.010	0.0022	mg/L	1		6010C	Dissolved
Zinc	0.021		0.021	0.0038	mg/L	1		6010C	Dissolved
Selenium	0.018	J	0.052	0.016	mg/L	1		6010C	Dissolved
Potassium	110		2.6	1.1	mg/L	5		6010C	Dissolved
Sodium	8800		21	4.9	mg/L	20		6010C	Dissolved
Vanadium	0.0090	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	0.93		0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	0.46		0.20	0.079	ug/L	1		7470A	Dissolved
Total Dissolved Solids	40000		2400	800	mg/L	1		2540C-2011	Total/NA
Ferrous Iron	0.17	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	4800		2400	800	mg/L	400		375.4	Total/NA

Client Sample ID: HOFF IW-2B — Lab Sample ID: 410-23806-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	230		5.0	0.70	ug/L	10		8260C LL	Total/NA
1,2-Dichloroethane	0.90	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
1,2,4-Trichlorobenzene	4.7	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
trans-1,2-Dichloroethene	230		5.0	0.60	ug/L	10		8260C LL	Total/NA
1,3-Dichlorobenzene	8.3		5.0	0.60	ug/L	10		8260C LL	Total/NA
Acetone	440		50	9.0	ug/L	10		8260C LL	Total/NA
Benzene	2.1	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
1,1,1-Trichloroethane	150		5.0	0.60	ug/L	10		8260C LL	Total/NA
Chloromethane	2.3	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Chloroethane	18		5.0	0.70	ug/L	10		8260C LL	Total/NA
Methylene Chloride	1.4	J	5.0	0.70	ug/L	10		8260C LL	Total/NA
1,2-Dichloropropane	3.1	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
2-Butanone	110		50	6.0	ug/L	10		8260C LL	Total/NA
1,1,2-Trichloroethane	2.1	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Trichloroethene	6.3		5.0	0.60	ug/L	10		8260C LL	Total/NA
1,1,2,2-Tetrachloroethane	0.99	J	5.0	0.70	ug/L	10		8260C LL	Total/NA
Chlorobenzene - DL	570		50	6.0	ug/L	100		8260C LL	Total/NA
cis-1,2-Dichloroethene - DL	880		50	5.0	ug/L	100		8260C LL	Total/NA
1,1-Dichloroethane - DL	340		50	7.0	ug/L	100		8260C LL	Total/NA
1,2-Dichlorobenzene - DL	1200		50	6.0	ug/L	100		8260C LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF IW-2B (Continued) — Lab Sample ID: 410-23806-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	29		4.0	2.0	ug/L	10		8260C SIM 14D	Total/NA
Aldrin (1C)	0.0049	J	0.020	0.0020	ug/L	1		8081B	Total/NA
gamma-BHC (Lindane) (2C)	0.0032	J p	0.020	0.0020	ug/L	1		8081B	Total/NA
Heptachlor (2C)	0.0034	J B p	0.020	0.0020	ug/L	1		8081B	Total/NA
p,p'-DDD (2C)	0.0055	J p	0.030	0.0050	ug/L	1		8081B	Total/NA
Arsenic	0.023	J	0.050	0.016	mg/L	1		6010C	Total/NA
Aluminum	2.0		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	1.2		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	620		2.5	0.48	mg/L	5		6010C	Total/NA
Chromium	0.015		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0033	J	0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.015	J	0.020	0.012	mg/L	1		6010C	Total/NA
Iron	21		0.20	0.040	mg/L	1		6010C	Total/NA
Lead	0.020		0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	630		0.50	0.20	mg/L	5		6010C	Total/NA
Manganese	0.15		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.0047	J	0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.026		0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	330		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	1100		5.0	1.2	mg/L	5		6010C	Total/NA
Vanadium	0.026		0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.029		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	590	*H	5.2	0.99	mg/L	10		6010C	Dissolved
Chromium	0.010	J	0.015	0.0016	mg/L	1		6010C	Dissolved
Copper	0.012	J	0.021	0.012	mg/L	1		6010C	Dissolved
Magnesium	410		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.0059	J	0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.0031	J	0.010	0.0022	mg/L	1		6010C	Dissolved
Potassium	270		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	1000		10	2.5	mg/L	10		6010C	Dissolved
Vanadium	0.0079	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	1.1		0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	1.0		0.20	0.079	ug/L	1		7470A	Dissolved
Total Dissolved Solids	6400	H	240	80	mg/L	1		2540C-2011	Total/NA
Ferrous Iron	0.13	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	1300		300	100	mg/L	50		375.4	Total/NA

Client Sample ID: HOFF DUP-121120 — Lab Sample ID: 410-23806-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	91		5.0	0.70	ug/L	10		8260C LL	Total/NA
1,2,4-Trichlorobenzene	4.8	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
cis-1,2-Dichloroethene	15		5.0	0.50	ug/L	10		8260C LL	Total/NA
trans-1,2-Dichloroethene	2.5	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
1,3-Dichlorobenzene	15		5.0	0.60	ug/L	10		8260C LL	Total/NA
Acetone	120		50	9.0	ug/L	10		8260C LL	Total/NA
Benzene	13		5.0	0.50	ug/L	10		8260C LL	Total/NA
1,1,1-Trichloroethane	3.1	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Bromomethane	3.5	J	5.0	0.70	ug/L	10		8260C LL	Total/NA
Chloromethane	17		5.0	0.60	ug/L	10		8260C LL	Total/NA
Chloroethane	1.4	J	5.0	0.70	ug/L	10		8260C LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF DUP-121120 (Continued)

Lab Sample ID: 410-23806-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	2.1	J ^c	10	0.60	ug/L	10		8260C LL	Total/NA
1,1-Dichloroethane	21		5.0	0.70	ug/L	10		8260C LL	Total/NA
2-Butanone	26	J	50	6.0	ug/L	10		8260C LL	Total/NA
1,1,2-Trichloroethane	0.91	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Trichloroethene	1.9	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
1,2-Dichlorobenzene	240		5.0	0.60	ug/L	10		8260C LL	Total/NA
Chlorobenzene - DL	1400		50	6.0	ug/L	100		8260C LL	Total/NA
1,4-Dioxane	4.0		2.0	1.0	ug/L	5		8260C SIM 14D	Total/NA
Acetophenone	4.0	J	10	4.0	ug/L	1		8270D	Total/NA
Fluoranthene	0.18	J	0.51	0.10	ug/L	1		8270D	Total/NA
Naphthalene	1.7		0.51	0.10	ug/L	1		8270D	Total/NA
Phenanthrene	0.99		0.51	0.10	ug/L	1		8270D	Total/NA
2-Methylnaphthalene	2.1		0.51	0.10	ug/L	1		8270D	Total/NA
alpha-BHC (2C)	0.020	J B	0.021	0.0031	ug/L	1		8081B	Total/NA
beta-BHC (1C)	0.010	J p	0.021	0.0035	ug/L	1		8081B	Total/NA
Dieldrin (1C)	0.015	J p	0.031	0.0055	ug/L	1		8081B	Total/NA
Endosulfan I (2C)	0.0075	J	0.021	0.0044	ug/L	1		8081B	Total/NA
Endosulfan sulfate (2C)	0.013	J	0.031	0.0060	ug/L	1		8081B	Total/NA
Endrin ketone (2C)	0.0096	J p	0.031	0.0051	ug/L	1		8081B	Total/NA
gamma-BHC (Lindane) (1C)	0.0031	J p	0.021	0.0021	ug/L	1		8081B	Total/NA
Heptachlor (2C)	0.013	J B p	0.021	0.0021	ug/L	1		8081B	Total/NA
Heptachlor epoxide (1C)	0.0041	J p	0.021	0.0024	ug/L	1		8081B	Total/NA
p,p'-DDT (1C)	0.018	J	0.031	0.0053	ug/L	1		8081B	Total/NA
Arsenic	0.032	J	0.050	0.016	mg/L	1		6010C	Total/NA
Aluminum	1.6		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.37		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	160		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.023		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0056		0.0050	0.0015	mg/L	1		6010C	Total/NA
Iron	29		0.20	0.040	mg/L	1		6010C	Total/NA
Lead	0.0087	J	0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	410		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.095		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.012		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.0094	J	0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	110		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	1100		5.0	1.2	mg/L	5		6010C	Total/NA
Vanadium	0.032		0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.028		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	130	*H	0.52	0.099	mg/L	1		6010C	Dissolved
Chromium	0.016		0.015	0.0016	mg/L	1		6010C	Dissolved
Cobalt	0.0027	J	0.0052	0.0015	mg/L	1		6010C	Dissolved
Magnesium	360		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.0059	J	0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.0092	J	0.010	0.0022	mg/L	1		6010C	Dissolved
Potassium	94		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	1100		10	2.5	mg/L	10		6010C	Dissolved
Vanadium	0.0095	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	0.12	J	0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	0.13	J	0.20	0.079	ug/L	1		7470A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF MW-C
Date Collected: 12/10/20 16:50
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-1
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.10	ug/L			12/20/20 22:18	2
trans-1,3-Dichloropropene	ND		1.0	0.12	ug/L			12/20/20 22:18	2
Ethylbenzene	ND		1.0	0.12	ug/L			12/20/20 22:18	2
Styrene	ND		1.0	0.10	ug/L			12/20/20 22:18	2
1,2-Dibromoethane	ND		1.0	0.12	ug/L			12/20/20 22:18	2
1,2-Dichloroethane	**0.83**	**J**	1.0	0.10	ug/L			12/20/20 22:18	2
4-Methyl-2-pentanone	ND		10	1.4	ug/L			12/20/20 22:18	2
Methylcyclohexane	ND		1.0	0.10	ug/L			12/20/20 22:18	2
Toluene	ND		1.0	0.14	ug/L			12/20/20 22:18	2
Chlorobenzene	**21**		1.0	0.12	ug/L			12/20/20 22:18	2
Cyclohexane	ND		1.0	0.10	ug/L			12/20/20 22:18	2
1,2,4-Trichlorobenzene	**5.8**		1.0	0.12	ug/L			12/20/20 22:18	2
Dibromochloromethane	**3.4**		1.0	0.14	ug/L			12/20/20 22:18	2
Xylenes, Total	ND		2.0	0.30	ug/L			12/20/20 22:18	2
Tetrachloroethene	**0.28**	**J**	1.0	0.12	ug/L			12/20/20 22:18	2
cis-1,2-Dichloroethene	**6.8**		1.0	0.10	ug/L			12/20/20 22:18	2
trans-1,2-Dichloroethene	**1.9**		1.0	0.12	ug/L			12/20/20 22:18	2
Methyl tertiary butyl ether	ND		1.0	0.10	ug/L			12/20/20 22:18	2
1,3-Dichlorobenzene	**2.7**		1.0	0.12	ug/L			12/20/20 22:18	2
Carbon tetrachloride	ND		1.0	0.14	ug/L			12/20/20 22:18	2
2-Hexanone	ND		10	1.2	ug/L			12/20/20 22:18	2
Acetone	**230**		10	1.8	ug/L			12/20/20 22:18	2
Chloroform	**1.3**		1.0	0.18	ug/L			12/20/20 22:18	2
Benzene	**0.14**	**J**	1.0	0.10	ug/L			12/20/20 22:18	2
Bromomethane	**4.6**		1.0	0.14	ug/L			12/20/20 22:18	2
Chloromethane	**35**		1.0	0.12	ug/L			12/20/20 22:18	2
Chloroethane	**14**		1.0	0.14	ug/L			12/20/20 22:18	2
Vinyl chloride	ND		1.0	0.20	ug/L			12/20/20 22:18	2
Methylene Chloride	**1.0**		1.0	0.14	ug/L			12/20/20 22:18	2
Carbon disulfide	**0.34**	**J ^c**	2.0	0.12	ug/L			12/20/20 22:18	2
Bromoform	**1.6**	**J**	2.0	0.60	ug/L			12/20/20 22:18	2
Bromodichloromethane	**0.87**	**J**	1.0	0.10	ug/L			12/20/20 22:18	2
1,1-Dichloroethene	ND	^c	1.0	0.12	ug/L			12/20/20 22:18	2
Trichlorofluoromethane	ND		1.0	0.10	ug/L			12/20/20 22:18	2
Dichlorodifluoromethane	ND		1.0	0.10	ug/L			12/20/20 22:18	2
Freon 113	ND		1.0	0.12	ug/L			12/20/20 22:18	2
1,2-Dichloropropane	**1.4**		1.0	0.12	ug/L			12/20/20 22:18	2
2-Butanone	**60**		10	1.2	ug/L			12/20/20 22:18	2
1,1,2-Trichloroethane	**4.4**		1.0	0.12	ug/L			12/20/20 22:18	2
Trichloroethene	**0.85**	**J**	1.0	0.12	ug/L			12/20/20 22:18	2
Methyl acetate	**4.2**		2.0	0.20	ug/L			12/20/20 22:18	2
1,1,2,2-Tetrachloroethane	**1.8**		1.0	0.14	ug/L			12/20/20 22:18	2
1,2-Dibromo-3-Chloropropane	ND		1.0	0.20	ug/L			12/20/20 22:18	2
Isopropylbenzene	ND		1.0	0.10	ug/L			12/20/20 22:18	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*12/20/20 22:18*	*2*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*12/20/20 22:18*	*2*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*12/20/20 22:18*	*2*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/20/20 22:18*	*2*

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF MW-C

Date Collected: 12/10/20 16:50
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-1

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	73		10	1.4	ug/L			12/20/20 22:40	20
1,1,1-Trichloroethane	96		10	1.2	ug/L			12/20/20 22:40	20
1,1-Dichloroethane	350		10	1.4	ug/L			12/20/20 22:40	20
1,2-Dichlorobenzene	320		10	1.2	ug/L			12/20/20 22:40	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*80 - 120*		*12/20/20 22:40*	*20*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*12/20/20 22:40*	*20*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*12/20/20 22:40*	*20*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/20/20 22:40*	*20*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.45	J	0.80	0.40	ug/L			12/23/20 12:16	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*74*	*S1-*	*80 - 120*		*12/23/20 12:16*	*2*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		11	3.2	ug/L		12/17/20 17:15	12/19/20 06:01	1
2,4-Dichlorophenol	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
2,4-Dimethylphenol	ND		11	3.2	ug/L		12/17/20 17:15	12/19/20 06:01	1
2,4-Dinitrophenol	ND		32	15	ug/L		12/17/20 17:15	12/19/20 06:01	1
2,4-Dinitrotoluene	ND		5.3	1.1	ug/L		12/17/20 17:15	12/19/20 06:01	1
2,4,5-Trichlorophenol	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
2,4,6-Trichlorophenol	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
2,2'-oxybis[1-chloropropane]	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
Di-n-butyl phthalate	ND		5.3	2.1	ug/L		12/17/20 17:15	12/19/20 06:01	1
Di-n-octyl phthalate	ND		12	5.3	ug/L		12/17/20 17:15	12/19/20 06:01	1
Benzo[a]anthracene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Benzo[a]pyrene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Benzo[b]fluoranthene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Benzo[g,h,i]perylene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Benzo[k]fluoranthene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Acenaphthene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Acenaphthylene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Acetophenone	ND		11	4.3	ug/L		12/17/20 17:15	12/19/20 06:01	1
Anthracene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Atrazine	ND		5.3	2.1	ug/L		12/17/20 17:15	12/19/20 06:01	1
Benzaldehyde	ND		11	3.2	ug/L		12/17/20 17:15	12/19/20 06:01	1
Butylbenzylphthalate	ND		5.3	2.1	ug/L		12/17/20 17:15	12/19/20 06:01	1
Caprolactam	ND		12	5.3	ug/L		12/17/20 17:15	12/19/20 06:01	1
Carbazole	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
Chrysene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Dibenz(a,h)anthracene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Dibenzofuran	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
Diethyl phthalate	ND		5.3	2.1	ug/L		12/17/20 17:15	12/19/20 06:01	1
Dimethyl phthalate	ND		5.3	2.1	ug/L		12/17/20 17:15	12/19/20 06:01	1
Hexachlorobenzene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1

Client Sample ID: HOFF MW-C
Date Collected: 12/10/20 16:50
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
Hexachlorocyclopentadiene	ND	*+	12	5.3	ug/L		12/17/20 17:15	12/19/20 06:01	1
Hexachloroethane	ND		5.3	1.1	ug/L		12/17/20 17:15	12/19/20 06:01	1
Fluoranthene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Fluorene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Indeno[1,2,3-cd]pyrene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Isophorone	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
N-Nitrosodi-n-propylamine	ND		3.2	0.75	ug/L		12/17/20 17:15	12/19/20 06:01	1
N-Nitrosodiphenylamine	ND		3.2	0.75	ug/L		12/17/20 17:15	12/19/20 06:01	1
Naphthalene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Nitrobenzene	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
Pentachlorophenol	ND		5.3	1.1	ug/L		12/17/20 17:15	12/19/20 06:01	1
Phenanthrene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Phenol	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
Pyrene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
2-Chloronaphthalene	ND		1.1	0.43	ug/L		12/17/20 17:15	12/19/20 06:01	1
2-Chlorophenol	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
2-Methylnaphthalene	ND		0.53	0.11	ug/L		12/17/20 17:15	12/19/20 06:01	1
2-Methylphenol	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
2-Nitroaniline	ND		5.3	2.1	ug/L		12/17/20 17:15	12/19/20 06:01	1
2-Nitrophenol	ND		11	3.2	ug/L		12/17/20 17:15	12/19/20 06:01	1
3,3'-Dichlorobenzidine	ND		11	3.2	ug/L		12/17/20 17:15	12/19/20 06:01	1
3-Nitroaniline	ND		7.5	3.2	ug/L		12/17/20 17:15	12/19/20 06:01	1
4,6-Dinitro-2-methylphenol	ND		22	8.6	ug/L		12/17/20 17:15	12/19/20 06:01	1
4-Bromophenyl-phenylether	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
4-Methylphenol	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
4-Nitroaniline	ND		3.2	0.96	ug/L		12/17/20 17:15	12/19/20 06:01	1
4-Nitrophenol	ND		32	11	ug/L		12/17/20 17:15	12/19/20 06:01	1
Bis(2-chloroethoxy)methane	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
Bis(2-chloroethyl)ether	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
Bis(2-ethylhexyl) phthalate	ND		12	5.3	ug/L		12/17/20 17:15	12/19/20 06:01	1
2,6-Dinitrotoluene	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1
4-Chloro-3-methylphenol	ND		3.7	1.7	ug/L		12/17/20 17:15	12/19/20 06:01	1
4-Chloroaniline	ND		11	4.3	ug/L		12/17/20 17:15	12/19/20 06:01	1
4-Chlorophenyl-phenyl ether	ND		2.1	0.53	ug/L		12/17/20 17:15	12/19/20 06:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*42*		*10 - 150*	*12/17/20 17:15*	*12/19/20 06:01*	*1*
2-Fluorobiphenyl (Surr)	*68*		*44 - 102*	*12/17/20 17:15*	*12/19/20 06:01*	*1*
2-Fluorophenol (Surr)	*3*	*S1-*	*10 - 84*	*12/17/20 17:15*	*12/19/20 06:01*	*1*
Nitrobenzene-d5 (Surr)	*69*		*23 - 128*	*12/17/20 17:15*	*12/19/20 06:01*	*1*
p-Terphenyl-d14 (Surr)	*81*		*31 - 113*	*12/17/20 17:15*	*12/19/20 06:01*	*1*
Phenol-d5 (Surr)	*3*	*S1-*	*10 - 67*	*12/17/20 17:15*	*12/19/20 06:01*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (2C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 10:58	1
alpha-BHC (1C)	**0.0035**	**J p**	0.020	0.0029	ug/L		12/15/20 17:30	12/16/20 10:58	1
alpha-Chlordane (2C)	ND		0.020	0.0029	ug/L		12/15/20 17:30	12/16/20 10:58	1
beta-BHC (2C)	ND		0.020	0.0033	ug/L		12/15/20 17:30	12/16/20 10:58	1

Client Sample ID: HOFF MW-C
Date Collected: 12/10/20 16:50
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-1
Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC (1C)	ND		0.020	0.0033	ug/L		12/15/20 17:30	12/16/20 10:58	1
Dieldrin (2C)	ND		0.029	0.0052	ug/L		12/15/20 17:30	12/16/20 10:58	1
Endosulfan I (1C)	ND		0.020	0.0042	ug/L		12/15/20 17:30	12/16/20 10:58	1
Endosulfan II (1C)	ND		0.039	0.015	ug/L		12/15/20 17:30	12/16/20 10:58	1
Endosulfan sulfate (1C)	ND		0.029	0.0057	ug/L		12/15/20 17:30	12/16/20 10:58	1
Endrin (1C)	ND		0.029	0.0079	ug/L		12/15/20 17:30	12/16/20 10:58	1
Endrin aldehyde (1C)	ND		0.098	0.020	ug/L		12/15/20 17:30	12/16/20 10:58	1
Endrin ketone (2C)	**0.0067**	**J**	0.029	0.0049	ug/L		12/15/20 17:30	12/16/20 10:58	1
gamma-BHC (Lindane) (2C)	**0.0069**	**J**	0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 10:58	1
gamma-Chlordane (1C)	ND		0.039	0.0069	ug/L		12/15/20 17:30	12/16/20 10:58	1
Heptachlor (2C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 10:58	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		12/15/20 17:30	12/16/20 10:58	1
Methoxychlor (1C)	ND		0.11	0.029	ug/L		12/15/20 17:30	12/16/20 10:58	1
Toxaphene (1C)	ND		0.98	0.29	ug/L		12/15/20 17:30	12/16/20 10:58	1
p,p'-DDD (2C)	**0.0094**	**J p**	0.029	0.0049	ug/L		12/15/20 17:30	12/16/20 10:58	1
p,p'-DDE (1C)	ND		0.029	0.0049	ug/L		12/15/20 17:30	12/16/20 10:58	1
p,p'-DDT (2C)	**0.0053**	**J p**	0.029	0.0051	ug/L		12/15/20 17:30	12/16/20 10:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*39*		*32 - 149*	*12/15/20 17:30*	*12/16/20 10:58*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*40*		*32 - 149*	*12/15/20 17:30*	*12/16/20 10:58*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*85*		*29 - 129*	*12/15/20 17:30*	*12/16/20 10:58*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*53*	*p*	*29 - 129*	*12/15/20 17:30*	*12/16/20 10:58*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.047**	**J**	0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:29	1
Aluminum	**2.9**		0.30	0.15	mg/L		12/14/20 06:02	12/17/20 15:29	1
Antimony	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:29	1
Barium	**0.46**		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:29	1
Beryllium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:29	1
Cadmium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:29	1
Calcium	**410**		2.5	0.48	mg/L		12/14/20 06:02	12/17/20 16:36	5
Chromium	**0.071**		0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 15:29	1
Cobalt	**0.0075**		0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 15:29	1
Copper	**0.024**		0.020	0.012	mg/L		12/14/20 06:02	12/17/20 15:29	1
Iron	**46**		0.20	0.040	mg/L		12/14/20 06:02	12/17/20 15:29	1
Lead	**0.045**		0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 15:29	1
Magnesium	**1200**		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 16:36	5
Manganese	**0.16**		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 15:29	1
Nickel	**0.0031**	**J**	0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 15:29	1
Zinc	**0.021**		0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 15:29	1
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:35	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:29	1
Potassium	**280**		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 15:29	1
Sodium	**4400**		10	2.4	mg/L		12/14/20 06:02	12/17/20 16:39	10
Thallium	ND		0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 15:29	1
Vanadium	**0.040**		0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 15:29	1

Client Sample ID: HOFF MW-C

Lab Sample ID: 410-23806-1

Date Collected: 12/10/20 16:50

Matrix: Water

Date Received: 12/11/20 17:56

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:50	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 20:04	12/15/20 16:50	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:50	1
Barium	**0.18**		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:50	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:50	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:50	1
Calcium	**1300**	***H**	2.6	0.49	mg/L		12/14/20 20:04	12/20/20 14:45	5
Chromium	**0.056**		0.015	0.0016	mg/L		12/14/20 20:04	12/15/20 16:50	1
Cobalt	ND		0.0052	0.0015	mg/L		12/14/20 20:04	12/15/20 16:50	1
Copper	**0.025**		0.021	0.012	mg/L		12/14/20 20:04	12/15/20 16:50	1
Iron	**0.54**		0.21	0.041	mg/L		12/14/20 20:04	12/15/20 16:50	1
Lead	**0.013**	**J**	0.015	0.0073	mg/L		12/14/20 20:04	12/15/20 16:50	1
Magnesium	**1000**		0.52	0.21	mg/L		12/14/20 20:04	12/20/20 14:45	5
Manganese	**0.011**		0.010	0.0031	mg/L		12/14/20 20:04	12/15/20 16:50	1
Nickel	ND		0.010	0.0022	mg/L		12/14/20 20:04	12/15/20 16:50	1
Zinc	ND		0.021	0.0038	mg/L		12/14/20 20:04	12/15/20 16:50	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:04	12/15/20 16:50	1
Selenium	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:50	1
Potassium	**220**		2.6	1.1	mg/L		12/14/20 20:04	12/20/20 14:45	5
Sodium	**4700**		21	4.9	mg/L		12/14/20 20:04	12/20/20 14:48	20
Thallium	ND		0.15	0.042	mg/L		12/14/20 20:04	12/20/20 14:45	5
Vanadium	**0.0029**	**J**	0.010	0.0020	mg/L		12/14/20 20:04	12/15/20 16:50	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.83**		0.20	0.079	ug/L		12/14/20 11:49	12/15/20 18:36	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.77**		0.20	0.079	ug/L		12/18/20 11:29	12/20/20 15:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**4300**		240	80	mg/L			12/15/20 11:50	1
Ferrous Iron	**0.19**	**HF**	0.10	0.050	mg/L			12/15/20 09:22	1
Sulfate	**2400**		600	200	mg/L			12/21/20 09:12	100

Client Sample ID: HOFF MW-B

Lab Sample ID: 410-23806-2

Date Collected: 12/11/20 09:00

Matrix: Water

Date Received: 12/11/20 17:56

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/20/20 21:35	10
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/L			12/20/20 21:35	10
Ethylbenzene	**0.85**	**J**	5.0	0.60	ug/L			12/20/20 21:35	10
Styrene	ND		5.0	0.50	ug/L			12/20/20 21:35	10
1,4-Dichlorobenzene	**100**		5.0	0.70	ug/L			12/20/20 21:35	10
1,2-Dibromoethane	ND		5.0	0.60	ug/L			12/20/20 21:35	10
1,2-Dichloroethane	ND		5.0	0.50	ug/L			12/20/20 21:35	10
4-Methyl-2-pentanone	ND		50	7.0	ug/L			12/20/20 21:35	10

Client Sample ID: HOFF MW-B
Date Collected: 12/11/20 09:00
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-2
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		5.0	0.50	ug/L			12/20/20 21:35	10
Toluene	ND		5.0	0.70	ug/L			12/20/20 21:35	10
Cyclohexane	ND		5.0	0.50	ug/L			12/20/20 21:35	10
1,2,4-Trichlorobenzene	**5.4**		5.0	0.60	ug/L			12/20/20 21:35	10
Dibromochloromethane	ND		5.0	0.70	ug/L			12/20/20 21:35	10
Xylenes, Total	**1.6**	**J**	10	1.5	ug/L			12/20/20 21:35	10
Tetrachloroethene	ND		5.0	0.60	ug/L			12/20/20 21:35	10
cis-1,2-Dichloroethene	**16**		5.0	0.50	ug/L			12/20/20 21:35	10
trans-1,2-Dichloroethene	**2.4**	**J**	5.0	0.60	ug/L			12/20/20 21:35	10
Methyl tertiary butyl ether	ND		5.0	0.50	ug/L			12/20/20 21:35	10
1,3-Dichlorobenzene	**17**		5.0	0.60	ug/L			12/20/20 21:35	10
Carbon tetrachloride	ND		5.0	0.70	ug/L			12/20/20 21:35	10
2-Hexanone	ND		50	6.0	ug/L			12/20/20 21:35	10
Acetone	**110**		50	9.0	ug/L			12/20/20 21:35	10
Chloroform	ND		5.0	0.90	ug/L			12/20/20 21:35	10
Benzene	**15**		5.0	0.50	ug/L			12/20/20 21:35	10
1,1,1-Trichloroethane	**3.2**	**J**	5.0	0.60	ug/L			12/20/20 21:35	10
Bromomethane	**3.9**	**J**	5.0	0.70	ug/L			12/20/20 21:35	10
Chloromethane	**20**		5.0	0.60	ug/L			12/20/20 21:35	10
Chloroethane	**1.7**	**J**	5.0	0.70	ug/L			12/20/20 21:35	10
Vinyl chloride	ND		5.0	1.0	ug/L			12/20/20 21:35	10
Methylene Chloride	ND		5.0	0.70	ug/L			12/20/20 21:35	10
Carbon disulfide	**2.6**	**J ^c**	10	0.60	ug/L			12/20/20 21:35	10
Bromoform	ND		10	3.0	ug/L			12/20/20 21:35	10
Bromodichloromethane	ND		5.0	0.50	ug/L			12/20/20 21:35	10
1,1-Dichloroethane	**23**		5.0	0.70	ug/L			12/20/20 21:35	10
1,1-Dichloroethene	ND	^c	5.0	0.60	ug/L			12/20/20 21:35	10
Trichlorofluoromethane	ND		5.0	0.50	ug/L			12/20/20 21:35	10
Dichlorodifluoromethane	ND		5.0	0.50	ug/L			12/20/20 21:35	10
Freon 113	ND		5.0	0.60	ug/L			12/20/20 21:35	10
1,2-Dichloropropane	ND		5.0	0.60	ug/L			12/20/20 21:35	10
2-Butanone	**27**	**J**	50	6.0	ug/L			12/20/20 21:35	10
1,1,2-Trichloroethane	**1.1**	**J**	5.0	0.60	ug/L			12/20/20 21:35	10
Trichloroethene	**2.3**	**J**	5.0	0.60	ug/L			12/20/20 21:35	10
Methyl acetate	ND		10	1.0	ug/L			12/20/20 21:35	10
1,1,2,2-Tetrachloroethane	ND		5.0	0.70	ug/L			12/20/20 21:35	10
1,2-Dibromo-3-Chloropropane	ND		5.0	1.0	ug/L			12/20/20 21:35	10
Isopropylbenzene	**0.63**	**J**	5.0	0.50	ug/L			12/20/20 21:35	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*80 - 120*		*12/20/20 21:35*	*10*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*12/20/20 21:35*	*10*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*12/20/20 21:35*	*10*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/20/20 21:35*	*10*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**1500**		50	6.0	ug/L			12/20/20 21:57	100
1,2-Dichlorobenzene	**260**		50	6.0	ug/L			12/20/20 21:57	100

Client Sample ID: HOFF MW-B

Date Collected: 12/11/20 09:00
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*80 - 120*		*12/20/20 21:57*	*100*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*12/20/20 21:57*	*100*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/20/20 21:57*	*100*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/20/20 21:57*	*100*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.9**	**J**	4.0	2.0	ug/L			12/23/20 12:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*83*		*80 - 120*		*12/23/20 12:37*	*10*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
2,4-Dichlorophenol	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
2,4-Dimethylphenol	ND		10	3.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
2,4-Dinitrophenol	ND		31	14	ug/L		12/17/20 17:15	12/18/20 12:53	1
2,4-Dinitrotoluene	ND		5.1	1.0	ug/L		12/17/20 17:15	12/18/20 12:53	1
2,4,5-Trichlorophenol	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
2,4,6-Trichlorophenol	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
2,2'-oxybis[1-chloropropane]	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
Di-n-butyl phthalate	ND		5.1	2.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
Di-n-octyl phthalate	ND		11	5.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
Benzo[a]anthracene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Benzo[a]pyrene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Benzo[b]fluoranthene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Benzo[g,h,i]perylene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Benzo[k]fluoranthene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Acenaphthene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Acenaphthylene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Acetophenone	ND		10	4.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
Anthracene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Atrazine	ND		5.1	2.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
Benzaldehyde	ND		10	3.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
Butylbenzylphthalate	ND	*1	5.1	2.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
Caprolactam	ND	^c	11	5.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
Carbazole	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
Chrysene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Dibenz(a,h)anthracene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Dibenzofuran	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
Diethyl phthalate	ND		5.1	2.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
Dimethyl phthalate	ND	*1	5.1	2.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
Hexachlorobenzene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Hexachlorobutadiene	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
Hexachlorocyclopentadiene	ND	*+	11	5.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
Hexachloroethane	ND		5.1	1.0	ug/L		12/17/20 17:15	12/18/20 12:53	1
Fluoranthene	**0.15**	**J**	0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Fluorene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Indeno[1,2,3-cd]pyrene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Isophorone	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1

Client Sample ID: HOFF MW-B
Date Collected: 12/11/20 09:00
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		3.1	0.72	ug/L		12/17/20 17:15	12/18/20 12:53	1
N-Nitrosodiphenylamine	ND		3.1	0.72	ug/L		12/17/20 17:15	12/18/20 12:53	1
Naphthalene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Nitrobenzene	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
Pentachlorophenol	ND		5.1	1.0	ug/L		12/17/20 17:15	12/18/20 12:53	1
Phenanthrene	**0.85**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Phenol	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
Pyrene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
2-Chloronaphthalene	ND		1.0	0.41	ug/L		12/17/20 17:15	12/18/20 12:53	1
2-Chlorophenol	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
2-Methylnaphthalene	**2.0**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 12:53	1
2-Methylphenol	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
2-Nitroaniline	ND		5.1	2.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
2-Nitrophenol	ND		10	3.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
3,3'-Dichlorobenzidine	ND		10	3.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
3-Nitroaniline	ND		7.2	3.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
4,6-Dinitro-2-methylphenol	ND		22	8.2	ug/L		12/17/20 17:15	12/18/20 12:53	1
4-Bromophenyl-phenylether	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
4-Methylphenol	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
4-Nitroaniline	ND		3.1	0.92	ug/L		12/17/20 17:15	12/18/20 12:53	1
4-Nitrophenol	ND		31	10	ug/L		12/17/20 17:15	12/18/20 12:53	1
Bis(2-chloroethoxy)methane	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
Bis(2-chloroethyl)ether	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
Bis(2-ethylhexyl) phthalate	ND		11	5.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
2,6-Dinitrotoluene	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1
4-Chloro-3-methylphenol	ND		3.6	1.6	ug/L		12/17/20 17:15	12/18/20 12:53	1
4-Chloroaniline	ND		10	4.1	ug/L		12/17/20 17:15	12/18/20 12:53	1
4-Chlorophenyl-phenyl ether	ND		2.1	0.51	ug/L		12/17/20 17:15	12/18/20 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*83*		*10 - 150*	*12/17/20 17:15*	*12/18/20 12:53*	*1*
2-Fluorobiphenyl (Surr)	*67*		*44 - 102*	*12/17/20 17:15*	*12/18/20 12:53*	*1*
2-Fluorophenol (Surr)	*33*		*10 - 84*	*12/17/20 17:15*	*12/18/20 12:53*	*1*
Nitrobenzene-d5 (Surr)	*66*		*23 - 128*	*12/17/20 17:15*	*12/18/20 12:53*	*1*
p-Terphenyl-d14 (Surr)	*85*		*31 - 113*	*12/17/20 17:15*	*12/18/20 12:53*	*1*
Phenol-d5 (Surr)	*30*		*10 - 67*	*12/17/20 17:15*	*12/18/20 12:53*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (2C)	ND		0.020	0.0020	ug/L		12/18/20 20:42	12/21/20 09:36	1
alpha-BHC (1C)	**0.016**	**J**	0.020	0.0030	ug/L		12/18/20 20:42	12/21/20 09:36	1
alpha-Chlordane (2C)	**0.0033**	**J p**	0.020	0.0030	ug/L		12/18/20 20:42	12/21/20 09:36	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		12/18/20 20:42	12/21/20 09:36	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		12/18/20 20:42	12/21/20 09:36	1
Dieldrin (1C)	**0.011**	**J**	0.030	0.0053	ug/L		12/18/20 20:42	12/21/20 09:36	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		12/18/20 20:42	12/21/20 09:36	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		12/18/20 20:42	12/21/20 09:36	1
Endosulfan sulfate (1C)	**0.011**	**J**	0.030	0.0058	ug/L		12/18/20 20:42	12/21/20 09:36	1
Endrin (1C)	ND		0.030	0.0081	ug/L		12/18/20 20:42	12/21/20 09:36	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		12/18/20 20:42	12/21/20 09:36	1

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF MW-B

Date Collected: 12/11/20 09:00
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-2

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin ketone (2C)	ND		0.030	0.0050	ug/L		12/18/20 20:42	12/21/20 09:36	1
gamma-BHC (Lindane) (1C)	**0.0048**	**J p**	0.020	0.0020	ug/L		12/18/20 20:42	12/21/20 09:36	1
gamma-Chlordane (1C)	ND		0.040	0.0070	ug/L		12/18/20 20:42	12/21/20 09:36	1
Heptachlor (2C)	**0.0094**	**J B p**	0.020	0.0020	ug/L		12/18/20 20:42	12/21/20 09:36	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		12/18/20 20:42	12/21/20 09:36	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		12/18/20 20:42	12/21/20 09:36	1
Toxaphene (2C)	ND		1.0	0.30	ug/L		12/18/20 20:42	12/21/20 09:36	1
p,p'-DDD (2C)	ND		0.030	0.0050	ug/L		12/18/20 20:42	12/21/20 09:36	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		12/18/20 20:42	12/21/20 09:36	1
p,p'-DDT (2C)	**0.0081**	**J p**	0.030	0.0052	ug/L		12/18/20 20:42	12/21/20 09:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*48*		*32 - 149*	*12/18/20 20:42*	*12/21/20 09:36*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*46*		*32 - 149*	*12/18/20 20:42*	*12/21/20 09:36*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*58*		*29 - 129*	*12/18/20 20:42*	*12/21/20 09:36*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*66*		*29 - 129*	*12/18/20 20:42*	*12/21/20 09:36*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.025**	**J**	0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:32	1
Aluminum	**1.5**		0.30	0.15	mg/L		12/14/20 06:02	12/17/20 15:32	1
Antimony	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:32	1
Barium	**0.32**		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:32	1
Beryllium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:32	1
Cadmium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:32	1
Calcium	**150**		0.50	0.096	mg/L		12/14/20 06:02	12/17/20 15:32	1
Chromium	**0.020**		0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 15:32	1
Cobalt	**0.0048**	**J**	0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 15:32	1
Copper	ND		0.020	0.012	mg/L		12/14/20 06:02	12/17/20 15:32	1
Iron	**26**		0.20	0.040	mg/L		12/14/20 06:02	12/17/20 15:32	1
Lead	ND		0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 15:32	1
Magnesium	**370**		0.10	0.040	mg/L		12/14/20 06:02	12/17/20 15:32	1
Manganese	**0.085**		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 15:32	1
Nickel	**0.010**		0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 15:32	1
Zinc	**0.0084**	**J**	0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 15:32	1
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:39	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:32	1
Potassium	**97**		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 15:32	1
Sodium	**1200**		5.0	1.2	mg/L		12/14/20 06:02	12/17/20 16:45	5
Thallium	ND		0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 15:32	1
Vanadium	**0.029**		0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 15:32	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:54	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 20:04	12/15/20 16:54	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:54	1
Barium	**0.028**		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:54	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:54	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:54	1

Client Sample ID: HOFF MW-B

Lab Sample ID: 410-23806-2

Date Collected: 12/11/20 09:00

Matrix: Water

Date Received: 12/11/20 17:56

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**130**	***H**	0.52	0.099	mg/L		12/14/20 20:04	12/20/20 14:54	1
Chromium	**0.017**		0.015	0.0016	mg/L		12/14/20 20:04	12/15/20 16:54	1
Cobalt	**0.0023**	**J**	0.0052	0.0015	mg/L		12/14/20 20:04	12/15/20 16:54	1
Copper	ND		0.021	0.012	mg/L		12/14/20 20:04	12/15/20 16:54	1
Iron	ND		0.21	0.041	mg/L		12/14/20 20:04	12/15/20 16:54	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 20:04	12/15/20 16:54	1
Magnesium	**360**		0.10	0.041	mg/L		12/14/20 20:04	12/15/20 16:54	1
Manganese	**0.0063**	**J**	0.010	0.0031	mg/L		12/14/20 20:04	12/15/20 16:54	1
Nickel	**0.0091**	**J**	0.010	0.0022	mg/L		12/14/20 20:04	12/15/20 16:54	1
Zinc	ND		0.021	0.0038	mg/L		12/14/20 20:04	12/15/20 16:54	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:04	12/15/20 16:54	1
Selenium	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:54	1
Potassium	**96**		0.52	0.21	mg/L		12/14/20 20:04	12/20/20 14:54	1
Sodium	**1200**		10	2.5	mg/L		12/14/20 20:04	12/20/20 14:58	10
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:04	12/20/20 14:54	1
Vanadium	**0.0093**	**J**	0.010	0.0020	mg/L		12/14/20 20:04	12/15/20 16:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/14/20 11:49	12/15/20 18:34	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	B	0.20	0.079	ug/L		12/15/20 10:15	12/17/20 14:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**2500**		240	80	mg/L			12/16/20 06:37	1
Ferrous Iron	**0.090**	**J HF**	0.10	0.050	mg/L			12/15/20 09:22	1
Sulfate	**1700**		300	100	mg/L			12/21/20 09:12	50

Client Sample ID: HOFF MW-13

Lab Sample ID: 410-23806-3

Date Collected: 12/11/20 10:15

Matrix: Water

Date Received: 12/11/20 17:56

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/21/20 05:33	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/21/20 05:33	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/21/20 05:33	1
Styrene	ND		0.50	0.050	ug/L			12/21/20 05:33	1
1,4-Dichlorobenzene	**1.3**		0.50	0.070	ug/L			12/21/20 05:33	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/21/20 05:33	1
1,2-Dichloroethane	**1.1**		0.50	0.050	ug/L			12/21/20 05:33	1
4-Methyl-2-pentanone	**1.1**	**J**	5.0	0.70	ug/L			12/21/20 05:33	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/21/20 05:33	1
Toluene	**0.24**	**J**	0.50	0.070	ug/L			12/21/20 05:33	1
Chlorobenzene	**6.9**		0.50	0.060	ug/L			12/21/20 05:33	1
Cyclohexane	ND		0.50	0.050	ug/L			12/21/20 05:33	1
1,2,4-Trichlorobenzene	**0.12**	**J**	0.50	0.060	ug/L			12/21/20 05:33	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/21/20 05:33	1

Client Sample ID: HOFF MW-13

Date Collected: 12/11/20 10:15
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-3

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		1.0	0.15	ug/L			12/21/20 05:33	1
Tetrachloroethene	**0.067**	**J**	0.50	0.060	ug/L			12/21/20 05:33	1
cis-1,2-Dichloroethene	**0.45**	**J**	0.50	0.050	ug/L			12/21/20 05:33	1
trans-1,2-Dichloroethene	**0.068**	**J**	0.50	0.060	ug/L			12/21/20 05:33	1
Methyl tertiary butyl ether	**0.054**	**J**	0.50	0.050	ug/L			12/21/20 05:33	1
1,3-Dichlorobenzene	**0.16**	**J**	0.50	0.060	ug/L			12/21/20 05:33	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/21/20 05:33	1
2-Hexanone	ND		5.0	0.60	ug/L			12/21/20 05:33	1
Acetone	**110**		5.0	0.90	ug/L			12/21/20 05:33	1
Chloroform	**0.11**	**J**	0.50	0.090	ug/L			12/21/20 05:33	1
Benzene	**5.8**		0.50	0.050	ug/L			12/21/20 05:33	1
1,1,1-Trichloroethane	**0.066**	**J**	0.50	0.060	ug/L			12/21/20 05:33	1
Bromomethane	**2.9**		0.50	0.070	ug/L			12/21/20 05:33	1
Chloroethane	**4.1**		0.50	0.070	ug/L			12/21/20 05:33	1
Vinyl chloride	**0.18**	**J**	0.50	0.10	ug/L			12/21/20 05:33	1
Methylene Chloride	**0.68**		0.50	0.070	ug/L			12/21/20 05:33	1
Carbon disulfide	**3.7**	**^c**	1.0	0.060	ug/L			12/21/20 05:33	1
Bromoform	ND		1.0	0.30	ug/L			12/21/20 05:33	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/21/20 05:33	1
1,1-Dichloroethane	**4.5**		0.50	0.070	ug/L			12/21/20 05:33	1
1,1-Dichloroethene	ND	^c	0.50	0.060	ug/L			12/21/20 05:33	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/21/20 05:33	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/21/20 05:33	1
Freon 113	ND		0.50	0.060	ug/L			12/21/20 05:33	1
1,2-Dichloropropane	**0.20**	**J**	0.50	0.060	ug/L			12/21/20 05:33	1
2-Butanone	**27**		5.0	0.60	ug/L			12/21/20 05:33	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/21/20 05:33	1
Trichloroethene	**0.77**		0.50	0.060	ug/L			12/21/20 05:33	1
Methyl acetate	**2.0**		1.0	0.10	ug/L			12/21/20 05:33	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/21/20 05:33	1
1,2-Dichlorobenzene	**4.2**		0.50	0.060	ug/L			12/21/20 05:33	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/21/20 05:33	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/21/20 05:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*80 - 120*		*12/21/20 05:33*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*12/21/20 05:33*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/21/20 05:33*	*1*
Toluene-d8 (Surr)	*81*		*80 - 120*		*12/21/20 05:33*	*1*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**78**		5.0	0.60	ug/L			12/22/20 07:25	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*12/22/20 07:25*	*10*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*12/22/20 07:25*	*10*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/22/20 07:25*	*10*
Toluene-d8 (Surr)	*82*		*80 - 120*		*12/22/20 07:25*	*10*

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF MW-13

Date Collected: 12/11/20 10:15
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-3

Matrix: Water

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	3.6		0.40	0.20	ug/L			12/23/20 11:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*76*	*S1-*	*80 - 120*		*12/23/20 11:36*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND	*3	10	3.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
2,4-Dichlorophenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
2,4-Dinitrophenol	ND	*3	30	14	ug/L		12/17/20 17:15	12/18/20 13:23	1
2,4-Dinitrotoluene	ND	*3	5.1	1.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
2,4,5-Trichlorophenol	ND	*3	2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
2,4,6-Trichlorophenol	ND	*3	2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
Di-n-butyl phthalate	ND		5.1	2.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
Di-n-octyl phthalate	ND		11	5.1	ug/L		12/17/20 17:15	12/18/20 13:23	1
Benzo[a]anthracene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Benzo[a]pyrene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Benzo[b]fluoranthene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Benzo[g,h,i]perylene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Benzo[k]fluoranthene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Acenaphthene	ND	*3	0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Acenaphthylene	ND	*3	0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Acetophenone	ND		10	4.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
Anthracene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Atrazine	ND		5.1	2.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
Benzaldehyde	3.3	J	10	3.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
Butylbenzylphthalate	ND	*1	5.1	2.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
Caprolactam	ND	^c	11	5.1	ug/L		12/17/20 17:15	12/18/20 13:23	1
Carbazole	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
Chrysene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Dibenz(a,h)anthracene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Dibenzofuran	ND	*3	2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
Diethyl phthalate	ND	*3	5.1	2.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
Dimethyl phthalate	ND	*3 *1	5.1	2.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
Hexachlorobenzene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Hexachlorobutadiene	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
Hexachlorocyclopentadiene	ND	*+ *3	11	5.1	ug/L		12/17/20 17:15	12/18/20 13:23	1
Hexachloroethane	ND		5.1	1.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
Fluoranthene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Fluorene	ND	*3	0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Indeno[1,2,3-cd]pyrene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Isophorone	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
N-Nitrosodi-n-propylamine	ND		3.0	0.71	ug/L		12/17/20 17:15	12/18/20 13:23	1
N-Nitrosodiphenylamine	ND		3.0	0.71	ug/L		12/17/20 17:15	12/18/20 13:23	1
Naphthalene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Nitrobenzene	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
Pentachlorophenol	ND		5.1	1.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
Phenanthrene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1

Client Sample ID: HOFF MW-13
Date Collected: 12/11/20 10:15
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
Pyrene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
2-Chloronaphthalene	ND	*3	1.0	0.40	ug/L		12/17/20 17:15	12/18/20 13:23	1
2-Chlorophenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
2-Methylnaphthalene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 13:23	1
2-Methylphenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
2-Nitroaniline	ND	*3	5.1	2.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
2-Nitrophenol	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
3-Nitroaniline	ND	*3	7.1	3.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
4,6-Dinitro-2-methylphenol	ND		21	8.1	ug/L		12/17/20 17:15	12/18/20 13:23	1
4-Bromophenyl-phenylether	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
4-Methylphenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
4-Nitroaniline	ND	*3	3.0	0.91	ug/L		12/17/20 17:15	12/18/20 13:23	1
4-Nitrophenol	ND	*3	30	10	ug/L		12/17/20 17:15	12/18/20 13:23	1
Bis(2-chloroethoxy)methane	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
Bis(2-chloroethyl)ether	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
Bis(2-ethylhexyl) phthalate	ND		11	5.1	ug/L		12/17/20 17:15	12/18/20 13:23	1
2,6-Dinitrotoluene	ND	*3	2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		12/17/20 17:15	12/18/20 13:23	1
4-Chloroaniline	ND		10	4.0	ug/L		12/17/20 17:15	12/18/20 13:23	1
4-Chlorophenyl-phenyl ether	ND	*3	2.0	0.51	ug/L		12/17/20 17:15	12/18/20 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*6*	*S1- *3*	*10 - 150*	*12/17/20 17:15*	*12/18/20 13:23*	*1*
2-Fluorobiphenyl (Surr)	*24*	*S1- *3*	*44 - 102*	*12/17/20 17:15*	*12/18/20 13:23*	*1*
2-Fluorophenol (Surr)	*2*	*S1-*	*10 - 84*	*12/17/20 17:15*	*12/18/20 13:23*	*1*
Nitrobenzene-d5 (Surr)	*74*		*23 - 128*	*12/17/20 17:15*	*12/18/20 13:23*	*1*
p-Terphenyl-d14 (Surr)	*86*		*31 - 113*	*12/17/20 17:15*	*12/18/20 13:23*	*1*
Phenol-d5 (Surr)	*5*	*S1-*	*10 - 67*	*12/17/20 17:15*	*12/18/20 13:23*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		12/18/20 20:42	12/21/20 09:48	1
alpha-BHC (2C)	**0.0041**	**J B p**	0.020	0.0030	ug/L		12/18/20 20:42	12/21/20 09:48	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		12/18/20 20:42	12/21/20 09:48	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		12/18/20 20:42	12/21/20 09:48	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		12/18/20 20:42	12/21/20 09:48	1
Dieldrin (2C)	ND		0.030	0.0053	ug/L		12/18/20 20:42	12/21/20 09:48	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		12/18/20 20:42	12/21/20 09:48	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		12/18/20 20:42	12/21/20 09:48	1
Endosulfan sulfate (2C)	ND		0.030	0.0058	ug/L		12/18/20 20:42	12/21/20 09:48	1
Endrin (1C)	ND		0.030	0.0082	ug/L		12/18/20 20:42	12/21/20 09:48	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		12/18/20 20:42	12/21/20 09:48	1
Endrin ketone (2C)	ND		0.030	0.0050	ug/L		12/18/20 20:42	12/21/20 09:48	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		12/18/20 20:42	12/21/20 09:48	1
gamma-Chlordane (1C)	ND		0.040	0.0071	ug/L		12/18/20 20:42	12/21/20 09:48	1
Heptachlor (2C)	**0.0030**	**J B p**	0.020	0.0020	ug/L		12/18/20 20:42	12/21/20 09:48	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		12/18/20 20:42	12/21/20 09:48	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		12/18/20 20:42	12/21/20 09:48	1

Client Sample ID: HOFF MW-13

Date Collected: 12/11/20 10:15
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-3

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene (2C)	ND		1.0	0.30	ug/L		12/18/20 20:42	12/21/20 09:48	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		12/18/20 20:42	12/21/20 09:48	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		12/18/20 20:42	12/21/20 09:48	1
p,p'-DDT (2C)	**0.0064**	**J p**	0.030	0.0052	ug/L		12/18/20 20:42	12/21/20 09:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*42*		*32 - 149*	*12/18/20 20:42*	*12/21/20 09:48*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*41*		*32 - 149*	*12/18/20 20:42*	*12/21/20 09:48*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*65*		*29 - 129*	*12/18/20 20:42*	*12/21/20 09:48*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*70*		*29 - 129*	*12/18/20 20:42*	*12/21/20 09:48*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.044**	**J**	0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:22	1
Aluminum	**2.7**		0.30	0.15	mg/L		12/14/20 06:02	12/17/20 15:22	1
Antimony	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:22	1
Barium	**0.26**		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:22	1
Beryllium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:22	1
Cadmium	**0.0030**	**J**	0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:22	1
Calcium	**400**		0.50	0.096	mg/L		12/14/20 06:02	12/17/20 15:22	1
Chromium	**0.031**		0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 15:22	1
Cobalt	**0.020**		0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 15:22	1
Copper	**0.022**		0.020	0.012	mg/L		12/14/20 06:02	12/17/20 15:22	1
Iron	**63**		0.20	0.040	mg/L		12/14/20 06:02	12/17/20 15:22	1
Lead	**0.015**		0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 15:22	1
Magnesium	**290**		0.10	0.040	mg/L		12/14/20 06:02	12/17/20 15:22	1
Manganese	**3.1**		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 15:22	1
Nickel	**0.12**		0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 15:22	1
Zinc	**0.093**		0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 15:22	1
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:32	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:22	1
Potassium	**120**		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 15:22	1
Sodium	**840**		5.0	1.2	mg/L		12/14/20 06:02	12/17/20 16:33	5
Thallium	ND		0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 15:22	1
Vanadium	**0.048**		0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 15:22	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:47	1
Aluminum	**0.47**		0.31	0.16	mg/L		12/14/20 20:04	12/15/20 16:47	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:47	1
Barium	**0.083**		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:47	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:47	1
Cadmium	**0.0024**	**J**	0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:47	1
Calcium	**330**	***H**	0.52	0.099	mg/L		12/14/20 20:04	12/20/20 14:38	1
Chromium	**0.023**		0.015	0.0016	mg/L		12/14/20 20:04	12/15/20 16:47	1
Cobalt	**0.013**		0.0052	0.0015	mg/L		12/14/20 20:04	12/15/20 16:47	1
Copper	**0.021**		0.021	0.012	mg/L		12/14/20 20:04	12/15/20 16:47	1
Iron	**21**		0.21	0.041	mg/L		12/14/20 20:04	12/15/20 16:47	1
Lead	**0.021**		0.015	0.0073	mg/L		12/14/20 20:04	12/15/20 16:47	1

Client Sample ID: HOFF MW-13

Lab Sample ID: 410-23806-3

Date Collected: 12/11/20 10:15

Matrix: Water

Date Received: 12/11/20 17:56

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	250		0.10	0.041	mg/L		12/14/20 20:04	12/15/20 16:47	1
Manganese	2.4		0.010	0.0031	mg/L		12/14/20 20:04	12/15/20 16:47	1
Nickel	0.10		0.010	0.0022	mg/L		12/14/20 20:04	12/15/20 16:47	1
Zinc	0.067		0.021	0.0038	mg/L		12/14/20 20:04	12/15/20 16:47	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:04	12/15/20 16:47	1
Selenium	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:47	1
Potassium	100		0.52	0.21	mg/L		12/14/20 20:04	12/20/20 14:38	1
Sodium	830		5.2	1.2	mg/L		12/14/20 20:04	12/20/20 14:42	5
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:04	12/20/20 14:38	1
Vanadium	0.014		0.010	0.0020	mg/L		12/14/20 20:04	12/15/20 16:47	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16	J	0.20	0.079	ug/L		12/14/20 11:49	12/15/20 18:44	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.29		0.20	0.079	ug/L		12/18/20 11:29	12/20/20 15:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5500		240	80	mg/L			12/16/20 06:37	1
Ferrous Iron	0.23	HF	0.10	0.050	mg/L			12/15/20 09:24	1
Sulfate	2000		600	200	mg/L			12/21/20 09:12	100

Client Sample ID: HOFF TB-01-121120

Lab Sample ID: 410-23806-4

Date Collected: 12/11/20 10:00

Matrix: Water

Date Received: 12/11/20 17:56

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/20/20 20:08	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/20/20 20:08	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/20/20 20:08	1
Styrene	ND		0.50	0.050	ug/L			12/20/20 20:08	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/20/20 20:08	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/20/20 20:08	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/20/20 20:08	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/20/20 20:08	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/20/20 20:08	1
Toluene	ND		0.50	0.070	ug/L			12/20/20 20:08	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/20/20 20:08	1
Cyclohexane	ND		0.50	0.050	ug/L			12/20/20 20:08	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			12/20/20 20:08	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/20/20 20:08	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/20/20 20:08	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/20/20 20:08	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/20/20 20:08	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/20/20 20:08	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			12/20/20 20:08	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			12/20/20 20:08	1

Client Sample ID: HOFF TB-01-121120

Lab Sample ID: 410-23806-4

Date Collected: 12/11/20 10:00

Matrix: Water

Date Received: 12/11/20 17:56

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/20/20 20:08	1
2-Hexanone	ND		5.0	0.60	ug/L			12/20/20 20:08	1
Acetone	**7.0**		5.0	0.90	ug/L			12/20/20 20:08	1
Chloroform	**0.22**	**J**	0.50	0.090	ug/L			12/20/20 20:08	1
Benzene	ND		0.50	0.050	ug/L			12/20/20 20:08	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/20/20 20:08	1
Bromomethane	ND		0.50	0.070	ug/L			12/20/20 20:08	1
Chloromethane	ND		0.50	0.060	ug/L			12/20/20 20:08	1
Chloroethane	ND		0.50	0.070	ug/L			12/20/20 20:08	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/20/20 20:08	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/20/20 20:08	1
Carbon disulfide	ND	^c	1.0	0.060	ug/L			12/20/20 20:08	1
Bromoform	ND		1.0	0.30	ug/L			12/20/20 20:08	1
Bromodichloromethane	**0.065**	**J**	0.50	0.050	ug/L			12/20/20 20:08	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/20/20 20:08	1
1,1-Dichloroethene	ND	^c	0.50	0.060	ug/L			12/20/20 20:08	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/20/20 20:08	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/20/20 20:08	1
Freon 113	ND		0.50	0.060	ug/L			12/20/20 20:08	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/20/20 20:08	1
2-Butanone	**3.3**	**J**	5.0	0.60	ug/L			12/20/20 20:08	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/20/20 20:08	1
Trichloroethene	ND		0.50	0.060	ug/L			12/20/20 20:08	1
Methyl acetate	ND		1.0	0.10	ug/L			12/20/20 20:08	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/20/20 20:08	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			12/20/20 20:08	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/20/20 20:08	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/20/20 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*12/20/20 20:08*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*12/20/20 20:08*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/20/20 20:08*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/20/20 20:08*	*1*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			12/22/20 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*82*		*80 - 120*		*12/22/20 20:04*	*1*

Client Sample ID: HOFF IW-3A

Lab Sample ID: 410-23806-5

Date Collected: 12/11/20 12:45

Matrix: Water

Date Received: 12/11/20 17:56

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/20/20 20:30	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/20/20 20:30	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/20/20 20:30	1

Client Sample ID: HOFF IW-3A

Date Collected: 12/11/20 12:45
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-5

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.50	0.050	ug/L			12/20/20 20:30	1
1,4-Dichlorobenzene	**5.8**		0.50	0.070	ug/L			12/20/20 20:30	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/20/20 20:30	1
1,2-Dichloroethane	**5.4**		0.50	0.050	ug/L			12/20/20 20:30	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/20/20 20:30	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/20/20 20:30	1
Toluene	ND		0.50	0.070	ug/L			12/20/20 20:30	1
Chlorobenzene	**20**		0.50	0.060	ug/L			12/20/20 20:30	1
Cyclohexane	ND		0.50	0.050	ug/L			12/20/20 20:30	1
1,2,4-Trichlorobenzene	**0.20**	**J**	0.50	0.060	ug/L			12/20/20 20:30	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/20/20 20:30	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/20/20 20:30	1
Tetrachloroethene	**0.60**		0.50	0.060	ug/L			12/20/20 20:30	1
cis-1,2-Dichloroethene	**3.6**		0.50	0.050	ug/L			12/20/20 20:30	1
trans-1,2-Dichloroethene	**0.56**		0.50	0.060	ug/L			12/20/20 20:30	1
Methyl tertiary butyl ether	**0.084**	**J**	0.50	0.050	ug/L			12/20/20 20:30	1
1,3-Dichlorobenzene	**0.37**	**J**	0.50	0.060	ug/L			12/20/20 20:30	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/20/20 20:30	1
2-Hexanone	ND		5.0	0.60	ug/L			12/20/20 20:30	1
Chloroform	**8.8**		0.50	0.090	ug/L			12/20/20 20:30	1
Benzene	**0.51**		0.50	0.050	ug/L			12/20/20 20:30	1
1,1,1-Trichloroethane	**7.4**		0.50	0.060	ug/L			12/20/20 20:30	1
Bromomethane	**23**		0.50	0.070	ug/L			12/20/20 20:30	1
Chloroethane	**1.3**		0.50	0.070	ug/L			12/20/20 20:30	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/20/20 20:30	1
Methylene Chloride	**25**		0.50	0.070	ug/L			12/20/20 20:30	1
Carbon disulfide	**0.99**	**J ^c**	1.0	0.060	ug/L			12/20/20 20:30	1
Bromoform	ND		1.0	0.30	ug/L			12/20/20 20:30	1
Bromodichloromethane	**0.28**	**J**	0.50	0.050	ug/L			12/20/20 20:30	1
1,1-Dichloroethane	**17**		0.50	0.070	ug/L			12/20/20 20:30	1
1,1-Dichloroethene	ND	^c	0.50	0.060	ug/L			12/20/20 20:30	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/20/20 20:30	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/20/20 20:30	1
Freon 113	ND		0.50	0.060	ug/L			12/20/20 20:30	1
1,2-Dichloropropane	**0.32**	**J**	0.50	0.060	ug/L			12/20/20 20:30	1
1,1,2-Trichloroethane	**1.1**		0.50	0.060	ug/L			12/20/20 20:30	1
Trichloroethene	**0.50**		0.50	0.060	ug/L			12/20/20 20:30	1
Methyl acetate	**18**		1.0	0.10	ug/L			12/20/20 20:30	1
1,1,2,2-Tetrachloroethane	**0.17**	**J**	0.50	0.070	ug/L			12/20/20 20:30	1
1,2-Dichlorobenzene	**22**		0.50	0.060	ug/L			12/20/20 20:30	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/20/20 20:30	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/20/20 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*80 - 120*		*12/20/20 20:30*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*12/20/20 20:30*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*12/20/20 20:30*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*12/20/20 20:30*	*1*

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF IW-3A

Date Collected: 12/11/20 12:45
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-5

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2000**		130	23	ug/L			12/22/20 07:46	25
Chloromethane	**500**		13	1.5	ug/L			12/22/20 07:46	25
2-Butanone	**410**		130	15	ug/L			12/22/20 07:46	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*80 - 120*		*12/22/20 07:46*	*25*
Dibromofluoromethane (Surr)	*113*		*80 - 120*		*12/22/20 07:46*	*25*
4-Bromofluorobenzene (Surr)	*87*		*80 - 120*		*12/22/20 07:46*	*25*
Toluene-d8 (Surr)	*58*	*S1-*	*80 - 120*		*12/22/20 07:46*	*25*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.5**	**J**	2.0	1.0	ug/L			12/23/20 11:56	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*79*	*S1-*	*80 - 120*		*12/23/20 11:56*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.1	ug/L		12/17/20 17:15	12/18/20 13:53	1
2,4-Dichlorophenol	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
2,4-Dimethylphenol	ND		10	3.1	ug/L		12/17/20 17:15	12/18/20 13:53	1
2,4-Dinitrophenol	ND		31	15	ug/L		12/17/20 17:15	12/18/20 13:53	1
2,4-Dinitrotoluene	ND		5.2	1.0	ug/L		12/17/20 17:15	12/18/20 13:53	1
2,4,5-Trichlorophenol	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
2,4,6-Trichlorophenol	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
2,2'-oxybis[1-chloropropane]	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
Di-n-butyl phthalate	ND		5.2	2.1	ug/L		12/17/20 17:15	12/18/20 13:53	1
Di-n-octyl phthalate	ND		11	5.2	ug/L		12/17/20 17:15	12/18/20 13:53	1
Benzo[a]anthracene	**1.1**		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Benzo[a]pyrene	**0.68**		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Benzo[b]fluoranthene	**1.4**		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Benzo[g,h,i]perylene	**0.56**		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Benzo[k]fluoranthene	**0.57**		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Acenaphthene	ND		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Acenaphthylene	ND		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Acetophenone	ND		10	4.2	ug/L		12/17/20 17:15	12/18/20 13:53	1
Anthracene	**0.27**	**J**	0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Atrazine	ND		5.2	2.1	ug/L		12/17/20 17:15	12/18/20 13:53	1
Benzaldehyde	ND		10	3.1	ug/L		12/17/20 17:15	12/18/20 13:53	1
Butylbenzylphthalate	ND	*1	5.2	2.1	ug/L		12/17/20 17:15	12/18/20 13:53	1
Caprolactam	ND	^c	11	5.2	ug/L		12/17/20 17:15	12/18/20 13:53	1
Carbazole	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
Chrysene	**1.3**		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Dibenz(a,h)anthracene	ND		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Dibenzofuran	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
Diethyl phthalate	ND		5.2	2.1	ug/L		12/17/20 17:15	12/18/20 13:53	1
Dimethyl phthalate	ND	*1	5.2	2.1	ug/L		12/17/20 17:15	12/18/20 13:53	1
Hexachlorobenzene	ND		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Hexachlorobutadiene	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1

Client Sample ID: HOFF IW-3A

Date Collected: 12/11/20 12:45
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-5

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND	*+	11	5.2	ug/L		12/17/20 17:15	12/18/20 13:53	1
Hexachloroethane	ND		5.2	1.0	ug/L		12/17/20 17:15	12/18/20 13:53	1
Fluoranthene	**3.0**		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Fluorene	ND		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Indeno[1,2,3-cd]pyrene	**0.60**		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Isophorone	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
N-Nitrosodi-n-propylamine	ND		3.1	0.73	ug/L		12/17/20 17:15	12/18/20 13:53	1
N-Nitrosodiphenylamine	ND		3.1	0.73	ug/L		12/17/20 17:15	12/18/20 13:53	1
Naphthalene	**0.15**	**J**	0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Nitrobenzene	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
Pentachlorophenol	ND		5.2	1.0	ug/L		12/17/20 17:15	12/18/20 13:53	1
Phenanthrene	**1.6**		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Phenol	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
Pyrene	**1.9**		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
2-Chloronaphthalene	ND		1.0	0.42	ug/L		12/17/20 17:15	12/18/20 13:53	1
2-Chlorophenol	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
2-Methylnaphthalene	ND		0.52	0.10	ug/L		12/17/20 17:15	12/18/20 13:53	1
2-Methylphenol	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
2-Nitroaniline	ND		5.2	2.1	ug/L		12/17/20 17:15	12/18/20 13:53	1
2-Nitrophenol	ND		10	3.1	ug/L		12/17/20 17:15	12/18/20 13:53	1
3,3'-Dichlorobenzidine	ND		10	3.1	ug/L		12/17/20 17:15	12/18/20 13:53	1
3-Nitroaniline	ND		7.3	3.1	ug/L		12/17/20 17:15	12/18/20 13:53	1
4,6-Dinitro-2-methylphenol	ND		22	8.3	ug/L		12/17/20 17:15	12/18/20 13:53	1
4-Bromophenyl-phenylether	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
4-Methylphenol	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
4-Nitroaniline	ND		3.1	0.93	ug/L		12/17/20 17:15	12/18/20 13:53	1
4-Nitrophenol	ND		31	10	ug/L		12/17/20 17:15	12/18/20 13:53	1
Bis(2-chloroethoxy)methane	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
Bis(2-chloroethyl)ether	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
Bis(2-ethylhexyl) phthalate	ND		11	5.2	ug/L		12/17/20 17:15	12/18/20 13:53	1
2,6-Dinitrotoluene	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1
4-Chloro-3-methylphenol	ND		3.6	1.7	ug/L		12/17/20 17:15	12/18/20 13:53	1
4-Chloroaniline	ND		10	4.2	ug/L		12/17/20 17:15	12/18/20 13:53	1
4-Chlorophenyl-phenyl ether	ND		2.1	0.52	ug/L		12/17/20 17:15	12/18/20 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*1*	*S1-*	*10 - 150*	*12/17/20 17:15*	*12/18/20 13:53*	*1*
2-Fluorobiphenyl (Surr)	*39*	*S1-*	*44 - 102*	*12/17/20 17:15*	*12/18/20 13:53*	*1*
2-Fluorophenol (Surr)	*0*	*S1-*	*10 - 84*	*12/17/20 17:15*	*12/18/20 13:53*	*1*
Nitrobenzene-d5 (Surr)	*44*		*23 - 128*	*12/17/20 17:15*	*12/18/20 13:53*	*1*
p-Terphenyl-d14 (Surr)	*19*	*S1-*	*31 - 113*	*12/17/20 17:15*	*12/18/20 13:53*	*1*
Phenol-d5 (Surr)	*0.4*	*S1-*	*10 - 67*	*12/17/20 17:15*	*12/18/20 13:53*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.019	0.0019	ug/L		12/18/20 20:42	12/21/20 10:01	1
alpha-BHC (2C)	**0.0037**	**J B**	0.019	0.0028	ug/L		12/18/20 20:42	12/21/20 10:01	1
alpha-Chlordane (2C)	**0.0062**	**J**	0.019	0.0028	ug/L		12/18/20 20:42	12/21/20 10:01	1
beta-BHC (2C)	ND	B	0.019	0.0032	ug/L		12/18/20 20:42	12/21/20 10:01	1
delta-BHC (1C)	ND		0.019	0.0032	ug/L		12/18/20 20:42	12/21/20 10:01	1

Client Sample ID: HOFF IW-3A

Date Collected: 12/11/20 12:45
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-5
Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin (1C)	ND		0.028	0.0049	ug/L		12/18/20 20:42	12/21/20 10:01	1
Endosulfan I (1C)	ND		0.019	0.0040	ug/L		12/18/20 20:42	12/21/20 10:01	1
Endosulfan II (1C)	ND		0.037	0.014	ug/L		12/18/20 20:42	12/21/20 10:01	1
Endosulfan sulfate (1C)	ND		0.028	0.0054	ug/L		12/18/20 20:42	12/21/20 10:01	1
Endrin (1C)	ND		0.028	0.0076	ug/L		12/18/20 20:42	12/21/20 10:01	1
Endrin aldehyde (1C)	ND		0.093	0.019	ug/L		12/18/20 20:42	12/21/20 10:01	1
Endrin ketone (1C)	ND		0.028	0.0047	ug/L		12/18/20 20:42	12/21/20 10:01	1
gamma-BHC (Lindane) (1C)	**0.0019**	**J p**	0.019	0.0019	ug/L		12/18/20 20:42	12/21/20 10:01	1
gamma-Chlordane (1C)	ND		0.037	0.0065	ug/L		12/18/20 20:42	12/21/20 10:01	1
Heptachlor (1C)	ND		0.019	0.0019	ug/L		12/18/20 20:42	12/21/20 10:01	1
Heptachlor epoxide (1C)	ND		0.019	0.0021	ug/L		12/18/20 20:42	12/21/20 10:01	1
Methoxychlor (1C)	ND		0.10	0.028	ug/L		12/18/20 20:42	12/21/20 10:01	1
Toxaphene (2C)	ND		0.93	0.28	ug/L		12/18/20 20:42	12/21/20 10:01	1
p,p'-DDD (1C)	ND		0.028	0.0047	ug/L		12/18/20 20:42	12/21/20 10:01	1
p,p'-DDE (1C)	ND		0.028	0.0047	ug/L		12/18/20 20:42	12/21/20 10:01	1
p,p'-DDT (2C)	ND		0.028	0.0049	ug/L		12/18/20 20:42	12/21/20 10:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*20*	*S1-*	*32 - 149*	*12/18/20 20:42*	*12/21/20 10:01*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*19*	*S1-*	*32 - 149*	*12/18/20 20:42*	*12/21/20 10:01*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*37*		*29 - 129*	*12/18/20 20:42*	*12/21/20 10:01*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*36*		*29 - 129*	*12/18/20 20:42*	*12/21/20 10:01*	*1*

Client Sample ID: HOFF IW-2A

Date Collected: 12/11/20 14:50
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-6
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/20/20 20:52	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/20/20 20:52	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/20/20 20:52	1
Styrene	ND		0.50	0.050	ug/L			12/20/20 20:52	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/20/20 20:52	1
1,2-Dichloroethane	**1.0**		0.50	0.050	ug/L			12/20/20 20:52	1
4-Methyl-2-pentanone	**1.2**	**J**	5.0	0.70	ug/L			12/20/20 20:52	1
Methylcyclohexane	**0.42**	**J**	0.50	0.050	ug/L			12/20/20 20:52	1
Toluene	**0.48**	**J**	0.50	0.070	ug/L			12/20/20 20:52	1
Cyclohexane	ND		0.50	0.050	ug/L			12/20/20 20:52	1
1,2,4-Trichlorobenzene	**3.0**		0.50	0.060	ug/L			12/20/20 20:52	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/20/20 20:52	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/20/20 20:52	1
Tetrachloroethene	**1.9**		0.50	0.060	ug/L			12/20/20 20:52	1
trans-1,2-Dichloroethene	**13**		0.50	0.060	ug/L			12/20/20 20:52	1
Methyl tertiary butyl ether	**0.46**	**J**	0.50	0.050	ug/L			12/20/20 20:52	1
1,3-Dichlorobenzene	**2.9**		0.50	0.060	ug/L			12/20/20 20:52	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/20/20 20:52	1
2-Hexanone	**1.8**	**J**	5.0	0.60	ug/L			12/20/20 20:52	1
Chloroform	**0.59**		0.50	0.090	ug/L			12/20/20 20:52	1
Benzene	**1.2**		0.50	0.050	ug/L			12/20/20 20:52	1

Client Sample ID: HOFF IW-2A
Date Collected: 12/11/20 14:50
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-6
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	17		0.50	0.060	ug/L			12/20/20 20:52	1
Bromomethane	2.9		0.50	0.070	ug/L			12/20/20 20:52	1
Chloromethane	7.2		0.50	0.060	ug/L			12/20/20 20:52	1
Chloroethane	3.9		0.50	0.070	ug/L			12/20/20 20:52	1
Vinyl chloride	0.60		0.50	0.10	ug/L			12/20/20 20:52	1
Methylene Chloride	0.72		0.50	0.070	ug/L			12/20/20 20:52	1
Carbon disulfide	0.62	J ^c	1.0	0.060	ug/L			12/20/20 20:52	1
Bromoform	ND		1.0	0.30	ug/L			12/20/20 20:52	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/20/20 20:52	1
1,1-Dichloroethene	0.61	^c	0.50	0.060	ug/L			12/20/20 20:52	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/20/20 20:52	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/20/20 20:52	1
Freon 113	ND		0.50	0.060	ug/L			12/20/20 20:52	1
1,2-Dichloropropane	1.6		0.50	0.060	ug/L			12/20/20 20:52	1
1,1,2-Trichloroethane	2.2		0.50	0.060	ug/L			12/20/20 20:52	1
Trichloroethene	8.4		0.50	0.060	ug/L			12/20/20 20:52	1
Methyl acetate	ND		1.0	0.10	ug/L			12/20/20 20:52	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/20/20 20:52	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/20/20 20:52	1
Isopropylbenzene	0.13	J	0.50	0.050	ug/L			12/20/20 20:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*80 - 120*		*12/20/20 20:52*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*12/20/20 20:52*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*12/20/20 20:52*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/20/20 20:52*	*1*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	58		5.0	0.70	ug/L			12/20/20 21:14	10
Chlorobenzene	85		5.0	0.60	ug/L			12/20/20 21:14	10
cis-1,2-Dichloroethene	70		5.0	0.50	ug/L			12/20/20 21:14	10
1,1-Dichloroethane	86		5.0	0.70	ug/L			12/20/20 21:14	10
2-Butanone	1500		50	6.0	ug/L			12/20/20 21:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*80 - 120*		*12/20/20 21:14*	*10*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*12/20/20 21:14*	*10*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*12/20/20 21:14*	*10*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/20/20 21:14*	*10*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2900		500	90	ug/L			12/22/20 08:08	100
1,2-Dichlorobenzene	330		50	6.0	ug/L			12/22/20 08:08	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*12/22/20 08:08*	*100*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*12/22/20 08:08*	*100*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*12/22/20 08:08*	*100*
Toluene-d8 (Surr)	*79*	*S1-*	*80 - 120*		*12/22/20 08:08*	*100*

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF IW-2A

Date Collected: 12/11/20 14:50
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-6

Matrix: Water

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.8**		2.0	1.0	ug/L			12/23/20 12:57	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*80*		*80 - 120*		*12/23/20 12:57*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
2,4-Dichlorophenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
2,4-Dinitrophenol	ND		30	14	ug/L		12/17/20 17:15	12/18/20 14:23	1
2,4-Dinitrotoluene	ND		5.1	1.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
2,4,5-Trichlorophenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
2,4,6-Trichlorophenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
Di-n-butyl phthalate	ND		5.1	2.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
Di-n-octyl phthalate	ND		11	5.1	ug/L		12/17/20 17:15	12/18/20 14:23	1
Benzo[a]anthracene	**2.6**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Benzo[a]pyrene	**2.6**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Benzo[b]fluoranthene	**3.3**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Benzo[g,h,i]perylene	**1.8**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Benzo[k]fluoranthene	**1.3**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Acenaphthene	**0.29**	**J**	0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Acenaphthylene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Acetophenone	ND		10	4.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
Anthracene	**0.66**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Atrazine	ND		5.1	2.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
Benzaldehyde	**3.7**	**J**	10	3.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
Butylbenzylphthalate	ND	*1	5.1	2.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
Caprolactam	ND	^c	11	5.1	ug/L		12/17/20 17:15	12/18/20 14:23	1
Carbazole	**0.57**	**J**	2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
Chrysene	**2.9**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Dibenz(a,h)anthracene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Dibenzofuran	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
Diethyl phthalate	ND		5.1	2.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
Dimethyl phthalate	ND	*1	5.1	2.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
Hexachlorobenzene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Hexachlorobutadiene	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
Hexachlorocyclopentadiene	ND	*+	11	5.1	ug/L		12/17/20 17:15	12/18/20 14:23	1
Hexachloroethane	ND		5.1	1.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
Fluoranthene	**5.5**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Fluorene	**0.18**	**J**	0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Indeno[1,2,3-cd]pyrene	**2.2**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Isophorone	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
N-Nitrosodi-n-propylamine	ND		3.0	0.71	ug/L		12/17/20 17:15	12/18/20 14:23	1
N-Nitrosodiphenylamine	ND		3.0	0.71	ug/L		12/17/20 17:15	12/18/20 14:23	1
Naphthalene	**0.39**	**J**	0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Nitrobenzene	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
Pentachlorophenol	ND		5.1	1.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
Phenanthrene	**2.8**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1

Client Sample ID: HOFF IW-2A

Date Collected: 12/11/20 14:50
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-6

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
Pyrene	**4.0**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		12/17/20 17:15	12/18/20 14:23	1
2-Chlorophenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
2-Methylnaphthalene	**0.11**	**J**	0.51	0.10	ug/L		12/17/20 17:15	12/18/20 14:23	1
2-Methylphenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
2-Nitroaniline	ND		5.1	2.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
2-Nitrophenol	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
3-Nitroaniline	ND		7.1	3.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
4,6-Dinitro-2-methylphenol	ND		21	8.1	ug/L		12/17/20 17:15	12/18/20 14:23	1
4-Bromophenyl-phenylether	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
4-Methylphenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
4-Nitroaniline	ND		3.0	0.91	ug/L		12/17/20 17:15	12/18/20 14:23	1
4-Nitrophenol	ND		30	10	ug/L		12/17/20 17:15	12/18/20 14:23	1
Bis(2-chloroethoxy)methane	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
Bis(2-chloroethyl)ether	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
Bis(2-ethylhexyl) phthalate	ND		11	5.1	ug/L		12/17/20 17:15	12/18/20 14:23	1
2,6-Dinitrotoluene	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		12/17/20 17:15	12/18/20 14:23	1
4-Chloroaniline	ND		10	4.0	ug/L		12/17/20 17:15	12/18/20 14:23	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*19*		*10 - 150*	*12/17/20 17:15*	*12/18/20 14:23*	*1*
2-Fluorobiphenyl (Surr)	*41*	*S1-*	*44 - 102*	*12/17/20 17:15*	*12/18/20 14:23*	*1*
2-Fluorophenol (Surr)	*1*	*S1-*	*10 - 84*	*12/17/20 17:15*	*12/18/20 14:23*	*1*
Nitrobenzene-d5 (Surr)	*58*		*23 - 128*	*12/17/20 17:15*	*12/18/20 14:23*	*1*
p-Terphenyl-d14 (Surr)	*15*	*S1-*	*31 - 113*	*12/17/20 17:15*	*12/18/20 14:23*	*1*
Phenol-d5 (Surr)	*2*	*S1-*	*10 - 67*	*12/17/20 17:15*	*12/18/20 14:23*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (2C)	**0.0037**	**J p**	0.019	0.0019	ug/L		12/18/20 20:42	12/21/20 18:40	1
alpha-BHC (1C)	**0.0036**	**J p**	0.019	0.0029	ug/L		12/18/20 20:42	12/21/20 18:40	1
alpha-Chlordane (2C)	**0.016**	**J**	0.019	0.0029	ug/L		12/18/20 20:42	12/21/20 18:40	1
beta-BHC (2C)	**0.011**	**J p B**	0.019	0.0033	ug/L		12/18/20 20:42	12/21/20 18:40	1
delta-BHC (2C)	ND	B	0.019	0.0033	ug/L		12/18/20 20:42	12/21/20 18:40	1
Dieldrin (1C)	ND		0.029	0.0051	ug/L		12/18/20 20:42	12/21/20 18:40	1
Endosulfan I (2C)	ND		0.019	0.0042	ug/L		12/18/20 20:42	12/21/20 18:40	1
Endosulfan II (1C)	**0.019**	**J**	0.039	0.015	ug/L		12/18/20 20:42	12/21/20 18:40	1
Endosulfan sulfate (1C)	ND		0.029	0.0056	ug/L		12/18/20 20:42	12/21/20 18:40	1
Endrin (1C)	**0.0081**	**J p**	0.029	0.0078	ug/L		12/18/20 20:42	12/21/20 18:40	1
Endrin aldehyde (1C)	ND		0.097	0.019	ug/L		12/18/20 20:42	12/21/20 18:40	1
Endrin ketone (1C)	**0.0070**	**J p**	0.029	0.0048	ug/L		12/18/20 20:42	12/21/20 18:40	1
gamma-BHC (Lindane) (2C)	ND		0.019	0.0019	ug/L		12/18/20 20:42	12/21/20 18:40	1
gamma-Chlordane (2C)	**0.0072**	**J p**	0.039	0.0068	ug/L		12/18/20 20:42	12/21/20 18:40	1
Heptachlor (1C)	ND		0.019	0.0019	ug/L		12/18/20 20:42	12/21/20 18:40	1
Heptachlor epoxide (2C)	**0.0034**	**J p**	0.019	0.0022	ug/L		12/18/20 20:42	12/21/20 18:40	1
Methoxychlor (1C)	ND		0.11	0.029	ug/L		12/18/20 20:42	12/21/20 18:40	1

Client Sample ID: HOFF IW-2A

Date Collected: 12/11/20 14:50
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-6

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene (2C)	ND		0.97	0.29	ug/L		12/18/20 20:42	12/21/20 18:40	1
p,p'-DDD (2C)	ND		0.029	0.0048	ug/L		12/18/20 20:42	12/21/20 18:40	1
p,p'-DDE (2C)	**0.012**	**J**	0.029	0.0048	ug/L		12/18/20 20:42	12/21/20 18:40	1
p,p'-DDT (1C)	**0.010**	**J p**	0.029	0.0050	ug/L		12/18/20 20:42	12/21/20 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*8*	*S1-*	*32 - 149*	*12/18/20 20:42*	*12/21/20 18:40*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*12*	*S1-*	*32 - 149*	*12/18/20 20:42*	*12/21/20 18:40*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*13*	*S1-*	*29 - 129*	*12/18/20 20:42*	*12/21/20 18:40*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*14*	*S1-*	*29 - 129*	*12/18/20 20:42*	*12/21/20 18:40*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.82**		0.25	0.080	mg/L		12/15/20 02:27	12/21/20 10:36	5
Aluminum	**2100**		1.5	0.77	mg/L		12/15/20 02:27	12/19/20 13:51	5
Antimony	**0.037**	**J**	0.050	0.016	mg/L		12/15/20 02:27	12/19/20 13:46	1
Barium	**1.3**		0.025	0.0050	mg/L		12/15/20 02:27	12/19/20 13:51	5
Beryllium	**0.17**		0.025	0.0050	mg/L		12/15/20 02:27	12/19/20 13:51	5
Cadmium	**0.044**		0.025	0.0050	mg/L		12/15/20 02:27	12/19/20 13:51	5
Calcium	**1900**		2.5	0.48	mg/L		12/23/20 02:24	12/23/20 11:45	1
Chromium	**2.6**		0.075	0.0080	mg/L		12/15/20 02:27	12/19/20 13:51	5
Cobalt	**0.56**		0.0050	0.0015	mg/L		12/15/20 02:27	12/19/20 13:46	1
Copper	**0.73**		0.10	0.060	mg/L		12/15/20 02:27	12/21/20 10:36	5
Iron	**3000**	**B**	4.0	0.80	mg/L		12/15/20 02:27	12/21/20 10:44	20
Lead	**0.46**		0.015	0.0071	mg/L		12/15/20 02:27	12/19/20 13:46	1
Magnesium	**3800**		2.5	1.0	mg/L		12/23/20 02:24	12/28/20 07:27	5
Manganese	**38**		0.050	0.015	mg/L		12/15/20 02:27	12/21/20 10:36	5
Nickel	**1.2**		0.010	0.0021	mg/L		12/15/20 02:27	12/19/20 13:46	1
Zinc	**2.4**		0.020	0.0037	mg/L		12/15/20 02:27	12/19/20 13:46	1
Silver	**0.041**	**J**	0.050	0.025	mg/L		12/15/20 02:27	12/21/20 17:12	5
Selenium	**0.031**	**J**	0.050	0.016	mg/L		12/15/20 02:27	12/19/20 13:46	1
Potassium	**1200**		2.5	1.0	mg/L		12/15/20 02:27	12/21/20 17:12	5
Sodium	**3200**		10	2.4	mg/L		12/15/20 02:27	12/21/20 10:40	10
Thallium	ND	*+	0.030	0.0081	mg/L		12/15/20 02:27	12/19/20 13:46	1
Vanadium	**4.8**		0.050	0.0095	mg/L		12/15/20 02:27	12/19/20 13:51	5

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:43	1
Aluminum	**6.5**		0.31	0.16	mg/L		12/14/20 20:04	12/15/20 16:43	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:43	1
Barium	**0.20**		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:43	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:43	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:43	1
Calcium	**1200**	***H**	2.6	0.49	mg/L		12/14/20 20:04	12/20/20 14:28	5
Chromium	**0.18**		0.015	0.0016	mg/L		12/14/20 20:04	12/15/20 16:43	1
Cobalt	**0.0086**		0.0052	0.0015	mg/L		12/14/20 20:04	12/15/20 16:43	1
Copper	**0.039**		0.021	0.012	mg/L		12/14/20 20:04	12/15/20 16:43	1
Iron	**7.5**		0.21	0.041	mg/L		12/14/20 20:04	12/15/20 16:43	1
Lead	**0.022**		0.015	0.0073	mg/L		12/14/20 20:04	12/15/20 16:43	1

Client Sample ID: HOFF IW-2A

Lab Sample ID: 410-23806-6

Date Collected: 12/11/20 14:50

Matrix: Water

Date Received: 12/11/20 17:56

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**620**		0.52	0.21	mg/L		12/14/20 20:04	12/20/20 14:28	5
Manganese	**0.85**		0.010	0.0031	mg/L		12/14/20 20:04	12/15/20 16:43	1
Nickel	**0.060**		0.010	0.0022	mg/L		12/14/20 20:04	12/15/20 16:43	1
Zinc	**0.047**		0.021	0.0038	mg/L		12/14/20 20:04	12/15/20 16:43	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:04	12/15/20 16:43	1
Selenium	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:43	1
Potassium	**850**		2.6	1.1	mg/L		12/14/20 20:04	12/20/20 14:28	5
Sodium	**2900**		21	4.9	mg/L		12/14/20 20:04	12/20/20 14:32	20
Thallium	ND		0.15	0.042	mg/L		12/14/20 20:04	12/20/20 14:28	5
Vanadium	**0.042**		0.010	0.0020	mg/L		12/14/20 20:04	12/15/20 16:43	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.7**		0.20	0.079	ug/L		12/15/20 10:00	12/15/20 21:40	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.64**		0.20	0.079	ug/L		12/18/20 11:29	12/20/20 15:53	1

Client Sample ID: HOFF IW-3B

Lab Sample ID: 410-23806-7

Date Collected: 12/11/20 12:20

Matrix: Water

Date Received: 12/11/20 17:56

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		2.5	0.25	ug/L			12/20/20 23:02	5
trans-1,3-Dichloropropene	ND		2.5	0.30	ug/L			12/20/20 23:02	5
Ethylbenzene	ND		2.5	0.30	ug/L			12/20/20 23:02	5
Styrene	ND		2.5	0.25	ug/L			12/20/20 23:02	5
1,4-Dichlorobenzene	**66**		2.5	0.35	ug/L			12/20/20 23:02	5
1,2-Dibromoethane	ND		2.5	0.30	ug/L			12/20/20 23:02	5
1,2-Dichloroethane	**2.5**		2.5	0.25	ug/L			12/20/20 23:02	5
4-Methyl-2-pentanone	ND		25	3.5	ug/L			12/20/20 23:02	5
Methylcyclohexane	ND		2.5	0.25	ug/L			12/20/20 23:02	5
Toluene	ND		2.5	0.35	ug/L			12/20/20 23:02	5
Cyclohexane	ND		2.5	0.25	ug/L			12/20/20 23:02	5
1,2,4-Trichlorobenzene	**2.2**	**J**	2.5	0.30	ug/L			12/20/20 23:02	5
Dibromochloromethane	ND		2.5	0.35	ug/L			12/20/20 23:02	5
Xylenes, Total	ND		5.0	0.75	ug/L			12/20/20 23:02	5
Tetrachloroethene	**0.36**	**J**	2.5	0.30	ug/L			12/20/20 23:02	5
cis-1,2-Dichloroethene	**96**		2.5	0.25	ug/L			12/20/20 23:02	5
trans-1,2-Dichloroethene	**26**		2.5	0.30	ug/L			12/20/20 23:02	5
Methyl tertiary butyl ether	**0.35**	**J**	2.5	0.25	ug/L			12/20/20 23:02	5
1,3-Dichlorobenzene	**5.2**		2.5	0.30	ug/L			12/20/20 23:02	5
Carbon tetrachloride	ND		2.5	0.35	ug/L			12/20/20 23:02	5
2-Hexanone	ND		25	3.0	ug/L			12/20/20 23:02	5
Chloroform	**3.5**		2.5	0.45	ug/L			12/20/20 23:02	5
Benzene	**4.3**		2.5	0.25	ug/L			12/20/20 23:02	5
1,1,1-Trichloroethane	**9.8**		2.5	0.30	ug/L			12/20/20 23:02	5
Bromomethane	**12**		2.5	0.35	ug/L			12/20/20 23:02	5

Client Sample ID: HOFF IW-3B

Date Collected: 12/11/20 12:20
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-7

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**99**		2.5	0.30	ug/L			12/20/20 23:02	5
Chloroethane	**2.7**		2.5	0.35	ug/L			12/20/20 23:02	5
Vinyl chloride	ND		2.5	0.50	ug/L			12/20/20 23:02	5
Methylene Chloride	**11**		2.5	0.35	ug/L			12/20/20 23:02	5
Carbon disulfide	**2.6**	**J ^c**	5.0	0.30	ug/L			12/20/20 23:02	5
Bromoform	**2.5**	**J**	5.0	1.5	ug/L			12/20/20 23:02	5
Bromodichloromethane	ND		2.5	0.25	ug/L			12/20/20 23:02	5
1,1-Dichloroethane	**43**		2.5	0.35	ug/L			12/20/20 23:02	5
1,1-Dichloroethene	ND	^c	2.5	0.30	ug/L			12/20/20 23:02	5
Trichlorofluoromethane	ND		2.5	0.25	ug/L			12/20/20 23:02	5
Dichlorodifluoromethane	ND		2.5	0.25	ug/L			12/20/20 23:02	5
Freon 113	ND		2.5	0.30	ug/L			12/20/20 23:02	5
1,2-Dichloropropane	**0.72**	**J**	2.5	0.30	ug/L			12/20/20 23:02	5
2-Butanone	**1100**		25	3.0	ug/L			12/20/20 23:02	5
1,1,2-Trichloroethane	**1.0**	**J**	2.5	0.30	ug/L			12/20/20 23:02	5
Trichloroethene	**3.1**		2.5	0.30	ug/L			12/20/20 23:02	5
Methyl acetate	ND		5.0	0.50	ug/L			12/20/20 23:02	5
1,1,2,2-Tetrachloroethane	ND		2.5	0.35	ug/L			12/20/20 23:02	5
1,2-Dibromo-3-Chloropropane	ND		2.5	0.50	ug/L			12/20/20 23:02	5
Isopropylbenzene	ND		2.5	0.25	ug/L			12/20/20 23:02	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*80 - 120*		*12/20/20 23:02*	*5*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*12/20/20 23:02*	*5*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*12/20/20 23:02*	*5*
Toluene-d8 (Surr)	*69*	*S1-*	*80 - 120*		*12/20/20 23:02*	*5*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**920**		25	3.0	ug/L			12/20/20 23:23	50
Acetone	**3200**		250	45	ug/L			12/20/20 23:23	50
1,2-Dichlorobenzene	**300**		25	3.0	ug/L			12/20/20 23:23	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*12/20/20 23:23*	*50*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*12/20/20 23:23*	*50*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/20/20 23:23*	*50*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/20/20 23:23*	*50*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**17**		2.0	1.0	ug/L			12/23/20 13:17	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*76*	*S1-*	*80 - 120*		*12/23/20 13:17*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		9.5	2.9	ug/L		12/17/20 17:15	12/18/20 14:53	1
2,4-Dichlorophenol	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
2,4-Dimethylphenol	ND		9.5	2.9	ug/L		12/17/20 17:15	12/18/20 14:53	1

Client Sample ID: HOFF IW-3B
Date Collected: 12/11/20 12:20
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		29	13	ug/L		12/17/20 17:15	12/18/20 14:53	1
2,4-Dinitrotoluene	ND		4.8	0.95	ug/L		12/17/20 17:15	12/18/20 14:53	1
2,4,5-Trichlorophenol	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
2,4,6-Trichlorophenol	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
2,2'-oxybis[1-chloropropane]	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
Di-n-butyl phthalate	ND		4.8	1.9	ug/L		12/17/20 17:15	12/18/20 14:53	1
Di-n-octyl phthalate	ND		10	4.8	ug/L		12/17/20 17:15	12/18/20 14:53	1
Benzo[a]anthracene	**0.14**	**J**	0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Benzo[a]pyrene	ND		0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Benzo[b]fluoranthene	**0.21**	**J**	0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Benzo[g,h,i]perylene	**0.11**	**J**	0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Benzo[k]fluoranthene	ND		0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Acenaphthene	ND		0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Acenaphthylene	ND		0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Acetophenone	ND		9.5	3.8	ug/L		12/17/20 17:15	12/18/20 14:53	1
Anthracene	ND		0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Atrazine	ND		4.8	1.9	ug/L		12/17/20 17:15	12/18/20 14:53	1
Benzaldehyde	ND		9.5	2.9	ug/L		12/17/20 17:15	12/18/20 14:53	1
Butylbenzylphthalate	ND	*1	4.8	1.9	ug/L		12/17/20 17:15	12/18/20 14:53	1
Caprolactam	ND	^c	10	4.8	ug/L		12/17/20 17:15	12/18/20 14:53	1
Carbazole	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
Chrysene	**0.19**	**J**	0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Dibenz(a,h)anthracene	ND		0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Dibenzofuran	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
Diethyl phthalate	ND		4.8	1.9	ug/L		12/17/20 17:15	12/18/20 14:53	1
Dimethyl phthalate	ND	*1	4.8	1.9	ug/L		12/17/20 17:15	12/18/20 14:53	1
Hexachlorobenzene	ND		0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Hexachlorobutadiene	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
Hexachlorocyclopentadiene	ND	*+	10	4.8	ug/L		12/17/20 17:15	12/18/20 14:53	1
Hexachloroethane	ND		4.8	0.95	ug/L		12/17/20 17:15	12/18/20 14:53	1
Fluoranthene	**0.29**	**J**	0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Fluorene	ND		0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Indeno[1,2,3-cd]pyrene	**0.12**	**J**	0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Isophorone	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
N-Nitrosodi-n-propylamine	ND		2.9	0.67	ug/L		12/17/20 17:15	12/18/20 14:53	1
N-Nitrosodiphenylamine	ND		2.9	0.67	ug/L		12/17/20 17:15	12/18/20 14:53	1
Naphthalene	**0.54**		0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Nitrobenzene	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
Pentachlorophenol	ND		4.8	0.95	ug/L		12/17/20 17:15	12/18/20 14:53	1
Phenanthrene	**0.19**	**J**	0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
Phenol	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
Pyrene	**0.24**	**J**	0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
2-Chloronaphthalene	ND		0.95	0.38	ug/L		12/17/20 17:15	12/18/20 14:53	1
2-Chlorophenol	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
2-Methylnaphthalene	**0.31**	**J**	0.48	0.095	ug/L		12/17/20 17:15	12/18/20 14:53	1
2-Methylphenol	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
2-Nitroaniline	ND		4.8	1.9	ug/L		12/17/20 17:15	12/18/20 14:53	1
2-Nitrophenol	ND		9.5	2.9	ug/L		12/17/20 17:15	12/18/20 14:53	1
3,3'-Dichlorobenzidine	ND		9.5	2.9	ug/L		12/17/20 17:15	12/18/20 14:53	1

Client Sample ID: HOFF IW-3B

Date Collected: 12/11/20 12:20
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-7

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		6.7	2.9	ug/L		12/17/20 17:15	12/18/20 14:53	1
4,6-Dinitro-2-methylphenol	ND		20	7.6	ug/L		12/17/20 17:15	12/18/20 14:53	1
4-Bromophenyl-phenylether	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
4-Methylphenol	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
4-Nitroaniline	ND		2.9	0.86	ug/L		12/17/20 17:15	12/18/20 14:53	1
4-Nitrophenol	ND		29	9.5	ug/L		12/17/20 17:15	12/18/20 14:53	1
Bis(2-chloroethoxy)methane	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
Bis(2-chloroethyl)ether	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
Bis(2-ethylhexyl) phthalate	ND		10	4.8	ug/L		12/17/20 17:15	12/18/20 14:53	1
2,6-Dinitrotoluene	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1
4-Chloro-3-methylphenol	ND		3.3	1.5	ug/L		12/17/20 17:15	12/18/20 14:53	1
4-Chloroaniline	ND		9.5	3.8	ug/L		12/17/20 17:15	12/18/20 14:53	1
4-Chlorophenyl-phenyl ether	ND		1.9	0.48	ug/L		12/17/20 17:15	12/18/20 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*25*		*10 - 150*	*12/17/20 17:15*	*12/18/20 14:53*	*1*
2-Fluorobiphenyl (Surr)	*66*		*44 - 102*	*12/17/20 17:15*	*12/18/20 14:53*	*1*
2-Fluorophenol (Surr)	*1*	*S1-*	*10 - 84*	*12/17/20 17:15*	*12/18/20 14:53*	*1*
Nitrobenzene-d5 (Surr)	*76*		*23 - 128*	*12/17/20 17:15*	*12/18/20 14:53*	*1*
p-Terphenyl-d14 (Surr)	*22*	*S1-*	*31 - 113*	*12/17/20 17:15*	*12/18/20 14:53*	*1*
Phenol-d5 (Surr)	*5*	*S1-*	*10 - 67*	*12/17/20 17:15*	*12/18/20 14:53*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.019	0.0019	ug/L		12/18/20 20:42	12/21/20 10:26	1
alpha-BHC (1C)	ND		0.019	0.0029	ug/L		12/18/20 20:42	12/21/20 10:26	1
alpha-Chlordane (2C)	ND		0.019	0.0029	ug/L		12/18/20 20:42	12/21/20 10:26	1
beta-BHC (2C)	**0.0051**	**J B p**	0.019	0.0033	ug/L		12/18/20 20:42	12/21/20 10:26	1
delta-BHC (2C)	ND	B	0.019	0.0033	ug/L		12/18/20 20:42	12/21/20 10:26	1
Dieldrin (2C)	ND		0.029	0.0051	ug/L		12/18/20 20:42	12/21/20 10:26	1
Endosulfan I (1C)	ND		0.019	0.0042	ug/L		12/18/20 20:42	12/21/20 10:26	1
Endosulfan II (1C)	ND		0.039	0.015	ug/L		12/18/20 20:42	12/21/20 10:26	1
Endosulfan sulfate (1C)	ND		0.029	0.0056	ug/L		12/18/20 20:42	12/21/20 10:26	1
Endrin (1C)	ND		0.029	0.0078	ug/L		12/18/20 20:42	12/21/20 10:26	1
Endrin aldehyde (1C)	ND		0.097	0.019	ug/L		12/18/20 20:42	12/21/20 10:26	1
Endrin ketone (1C)	ND		0.029	0.0048	ug/L		12/18/20 20:42	12/21/20 10:26	1
gamma-BHC (Lindane) (2C)	ND		0.019	0.0019	ug/L		12/18/20 20:42	12/21/20 10:26	1
gamma-Chlordane (1C)	ND		0.039	0.0068	ug/L		12/18/20 20:42	12/21/20 10:26	1
Heptachlor (1C)	**0.0027**	**J**	0.019	0.0019	ug/L		12/18/20 20:42	12/21/20 10:26	1
Heptachlor epoxide (2C)	ND		0.019	0.0022	ug/L		12/18/20 20:42	12/21/20 10:26	1
Methoxychlor (1C)	ND		0.11	0.029	ug/L		12/18/20 20:42	12/21/20 10:26	1
Toxaphene (2C)	ND		0.97	0.29	ug/L		12/18/20 20:42	12/21/20 10:26	1
p,p'-DDD (1C)	ND		0.029	0.0048	ug/L		12/18/20 20:42	12/21/20 10:26	1
p,p'-DDE (1C)	ND		0.029	0.0048	ug/L		12/18/20 20:42	12/21/20 10:26	1
p,p'-DDT (2C)	ND		0.029	0.0050	ug/L		12/18/20 20:42	12/21/20 10:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*22*	*S1-*	*32 - 149*	*12/18/20 20:42*	*12/21/20 10:26*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*22*	*S1-*	*32 - 149*	*12/18/20 20:42*	*12/21/20 10:26*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*56*		*29 - 129*	*12/18/20 20:42*	*12/21/20 10:26*	*1*

Client Sample ID: HOFF IW-3B

Date Collected: 12/11/20 12:20
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-7

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene (Surr) (2C)	*42*		*29 - 129*	*12/18/20 20:42*	*12/21/20 10:26*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.38**		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:19	1
Aluminum	**580**		1.5	0.77	mg/L		12/14/20 06:02	12/17/20 16:26	5
Antimony	**0.028**	**J**	0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:19	1
Barium	**0.50**		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:19	1
Beryllium	**0.053**		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:19	1
Cadmium	ND		0.025	0.0050	mg/L		12/14/20 06:02	12/17/20 16:26	5
Calcium	**280**		0.50	0.096	mg/L		12/14/20 06:02	12/17/20 15:19	1
Chromium	**0.82**		0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 15:19	1
Cobalt	**0.34**		0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 15:19	1
Copper	**0.37**		0.020	0.012	mg/L		12/14/20 06:02	12/17/20 15:19	1
Iron	**1100**		1.0	0.20	mg/L		12/14/20 06:02	12/17/20 16:26	5
Lead	**0.24**		0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 15:19	1
Magnesium	**950**		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 16:26	5
Manganese	**12**		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 15:19	1
Nickel	**0.70**		0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 15:19	1
Zinc	**1.0**		0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 15:19	1
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:28	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:19	1
Potassium	**74**		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 15:19	1
Sodium	**4400**		20	4.8	mg/L		12/14/20 06:02	12/17/20 17:11	20
Thallium	**0.017**	**J**	0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 15:19	1
Vanadium	**1.2**		0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 15:19	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:39	1
Aluminum	**3.7**		0.31	0.16	mg/L		12/14/20 20:04	12/15/20 16:39	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:39	1
Barium	**0.088**		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:39	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:39	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:39	1
Calcium	**1300**	***H**	2.6	0.49	mg/L		12/14/20 20:04	12/20/20 14:12	5
Chromium	**0.15**		0.015	0.0016	mg/L		12/14/20 20:04	12/15/20 16:39	1
Cobalt	**0.0067**		0.0052	0.0015	mg/L		12/14/20 20:04	12/15/20 16:39	1
Copper	**0.032**		0.021	0.012	mg/L		12/14/20 20:04	12/15/20 16:39	1
Iron	**4.8**		0.21	0.041	mg/L		12/14/20 20:04	12/15/20 16:39	1
Lead	**0.014**	**J**	0.015	0.0073	mg/L		12/14/20 20:04	12/15/20 16:39	1
Magnesium	**1400**		0.52	0.21	mg/L		12/14/20 20:04	12/20/20 14:12	5
Manganese	**0.20**		0.010	0.0031	mg/L		12/14/20 20:04	12/15/20 16:39	1
Nickel	**0.049**		0.010	0.0022	mg/L		12/14/20 20:04	12/15/20 16:39	1
Zinc	**0.021**		0.021	0.0038	mg/L		12/14/20 20:04	12/15/20 16:39	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:04	12/15/20 16:39	1
Selenium	**0.018**	**J**	0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:39	1
Potassium	**110**		2.6	1.1	mg/L		12/14/20 20:04	12/20/20 14:12	5
Sodium	**8800**		21	4.9	mg/L		12/14/20 20:04	12/20/20 14:16	20

Client Sample ID: HOFF IW-3B

Lab Sample ID: 410-23806-7

Date Collected: 12/11/20 12:20

Matrix: Water

Date Received: 12/11/20 17:56

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.15	0.042	mg/L		12/14/20 20:04	12/20/20 14:12	5
Vanadium	**0.0090**	**J**	0.010	0.0020	mg/L		12/14/20 20:04	12/15/20 16:39	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.93**		0.20	0.079	ug/L		12/14/20 11:49	12/15/20 18:38	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.46**		0.20	0.079	ug/L		12/15/20 10:21	12/15/20 22:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**40000**		2400	800	mg/L			12/16/20 06:37	1
Ferrous Iron	**0.17**	**HF**	0.10	0.050	mg/L			12/15/20 09:21	1
Sulfate	**4800**		2400	800	mg/L			12/21/20 09:12	400

Client Sample ID: HOFF IW-2B

Lab Sample ID: 410-23806-8

Date Collected: 12/11/20 14:30

Matrix: Water

Date Received: 12/11/20 17:56

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/20/20 23:45	10
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/L			12/20/20 23:45	10
Ethylbenzene	ND		5.0	0.60	ug/L			12/20/20 23:45	10
Styrene	ND		5.0	0.50	ug/L			12/20/20 23:45	10
1,4-Dichlorobenzene	**230**		5.0	0.70	ug/L			12/20/20 23:45	10
1,2-Dibromoethane	ND		5.0	0.60	ug/L			12/20/20 23:45	10
1,2-Dichloroethane	**0.90**	**J**	5.0	0.50	ug/L			12/20/20 23:45	10
4-Methyl-2-pentanone	ND		50	7.0	ug/L			12/20/20 23:45	10
Methylcyclohexane	ND		5.0	0.50	ug/L			12/20/20 23:45	10
Toluene	ND		5.0	0.70	ug/L			12/20/20 23:45	10
Cyclohexane	ND		5.0	0.50	ug/L			12/20/20 23:45	10
1,2,4-Trichlorobenzene	**4.7**	**J**	5.0	0.60	ug/L			12/20/20 23:45	10
Dibromochloromethane	ND		5.0	0.70	ug/L			12/20/20 23:45	10
Xylenes, Total	ND		10	1.5	ug/L			12/20/20 23:45	10
Tetrachloroethene	ND		5.0	0.60	ug/L			12/20/20 23:45	10
trans-1,2-Dichloroethene	**230**		5.0	0.60	ug/L			12/20/20 23:45	10
Methyl tertiary butyl ether	ND		5.0	0.50	ug/L			12/20/20 23:45	10
1,3-Dichlorobenzene	**8.3**		5.0	0.60	ug/L			12/20/20 23:45	10
Carbon tetrachloride	ND		5.0	0.70	ug/L			12/20/20 23:45	10
2-Hexanone	ND		50	6.0	ug/L			12/20/20 23:45	10
Acetone	**440**		50	9.0	ug/L			12/20/20 23:45	10
Chloroform	ND		5.0	0.90	ug/L			12/20/20 23:45	10
Benzene	**2.1**	**J**	5.0	0.50	ug/L			12/20/20 23:45	10
1,1,1-Trichloroethane	**150**		5.0	0.60	ug/L			12/20/20 23:45	10
Bromomethane	ND		5.0	0.70	ug/L			12/20/20 23:45	10
Chloromethane	**2.3**	**J**	5.0	0.60	ug/L			12/20/20 23:45	10
Chloroethane	**18**		5.0	0.70	ug/L			12/20/20 23:45	10
Vinyl chloride	ND		5.0	1.0	ug/L			12/20/20 23:45	10

Client Sample ID: HOFF IW-2B

Date Collected: 12/11/20 14:30
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-8

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	**1.4**	**J**	5.0	0.70	ug/L			12/20/20 23:45	10
Carbon disulfide	ND	^c	10	0.60	ug/L			12/20/20 23:45	10
Bromoform	ND		10	3.0	ug/L			12/20/20 23:45	10
Bromodichloromethane	ND		5.0	0.50	ug/L			12/20/20 23:45	10
1,1-Dichloroethene	ND	^c	5.0	0.60	ug/L			12/20/20 23:45	10
Trichlorofluoromethane	ND		5.0	0.50	ug/L			12/20/20 23:45	10
Dichlorodifluoromethane	ND		5.0	0.50	ug/L			12/20/20 23:45	10
Freon 113	ND		5.0	0.60	ug/L			12/20/20 23:45	10
1,2-Dichloropropane	**3.1**	**J**	5.0	0.60	ug/L			12/20/20 23:45	10
2-Butanone	**110**		50	6.0	ug/L			12/20/20 23:45	10
1,1,2-Trichloroethane	**2.1**	**J**	5.0	0.60	ug/L			12/20/20 23:45	10
Trichloroethene	**6.3**		5.0	0.60	ug/L			12/20/20 23:45	10
Methyl acetate	ND		10	1.0	ug/L			12/20/20 23:45	10
1,1,2,2-Tetrachloroethane	**0.99**	**J**	5.0	0.70	ug/L			12/20/20 23:45	10
1,2-Dibromo-3-Chloropropane	ND		5.0	1.0	ug/L			12/20/20 23:45	10
Isopropylbenzene	ND		5.0	0.50	ug/L			12/20/20 23:45	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*12/20/20 23:45*	*10*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*12/20/20 23:45*	*10*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*12/20/20 23:45*	*10*
Toluene-d8 (Surr)	*88*		*80 - 120*		*12/20/20 23:45*	*10*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**570**		50	6.0	ug/L			12/21/20 00:07	100
cis-1,2-Dichloroethene	**880**		50	5.0	ug/L			12/21/20 00:07	100
1,1-Dichloroethane	**340**		50	7.0	ug/L			12/21/20 00:07	100
1,2-Dichlorobenzene	**1200**		50	6.0	ug/L			12/21/20 00:07	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*12/21/20 00:07*	*100*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*12/21/20 00:07*	*100*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*12/21/20 00:07*	*100*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/21/20 00:07*	*100*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**29**		4.0	2.0	ug/L			12/23/20 13:38	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*82*		*80 - 120*		*12/23/20 13:38*	*10*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
2,4-Dinitrophenol	ND		30	14	ug/L		12/17/20 17:15	12/18/20 15:23	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF IW-2B
Date Collected: 12/11/20 14:30
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-8
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Benzo[a]pyrene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Acenaphthene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Acenaphthylene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Acetophenone	ND		10	4.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
Anthracene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Atrazine	ND		5.0	2.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
Benzaldehyde	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
Butylbenzylphthalate	ND	*1	5.0	2.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
Caprolactam	ND	^c	11	5.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
Carbazole	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
Chrysene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Dibenzofuran	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
Diethyl phthalate	ND		5.0	2.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
Dimethyl phthalate	ND	*1	5.0	2.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
Hexachlorocyclopentadiene	ND	*+	11	5.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
Hexachloroethane	ND		5.0	1.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
Fluoranthene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Fluorene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Isophorone	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		12/17/20 17:15	12/18/20 15:23	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		12/17/20 17:15	12/18/20 15:23	1
Naphthalene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Nitrobenzene	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
Pentachlorophenol	ND		5.0	1.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
Phenanthrene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Phenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
Pyrene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		12/17/20 17:15	12/18/20 15:23	1
2-Chlorophenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 15:23	1
2-Methylphenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
2-Nitroaniline	ND		5.0	2.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
2-Nitrophenol	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
3-Nitroaniline	ND		7.0	3.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF IW-2B

Date Collected: 12/11/20 14:30
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-8

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methylphenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
4-Nitroaniline	ND		3.0	0.90	ug/L		12/17/20 17:15	12/18/20 15:23	1
4-Nitrophenol	ND		30	10	ug/L		12/17/20 17:15	12/18/20 15:23	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		12/17/20 17:15	12/18/20 15:23	1
4-Chloroaniline	ND		10	4.0	ug/L		12/17/20 17:15	12/18/20 15:23	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*74*		*10 - 150*	*12/17/20 17:15*	*12/18/20 15:23*	*1*
2-Fluorobiphenyl (Surr)	*72*		*44 - 102*	*12/17/20 17:15*	*12/18/20 15:23*	*1*
2-Fluorophenol (Surr)	*27*		*10 - 84*	*12/17/20 17:15*	*12/18/20 15:23*	*1*
Nitrobenzene-d5 (Surr)	*70*		*23 - 128*	*12/17/20 17:15*	*12/18/20 15:23*	*1*
p-Terphenyl-d14 (Surr)	*85*		*31 - 113*	*12/17/20 17:15*	*12/18/20 15:23*	*1*
Phenol-d5 (Surr)	*23*		*10 - 67*	*12/17/20 17:15*	*12/18/20 15:23*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	**0.0049**	**J**	0.020	0.0020	ug/L		12/18/20 20:42	12/21/20 10:38	1
alpha-BHC (2C)	ND	B	0.020	0.0030	ug/L		12/18/20 20:42	12/21/20 10:38	1
alpha-Chlordane (2C)	ND		0.020	0.0030	ug/L		12/18/20 20:42	12/21/20 10:38	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		12/18/20 20:42	12/21/20 10:38	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		12/18/20 20:42	12/21/20 10:38	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		12/18/20 20:42	12/21/20 10:38	1
Endosulfan I (2C)	ND		0.020	0.0043	ug/L		12/18/20 20:42	12/21/20 10:38	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		12/18/20 20:42	12/21/20 10:38	1
Endosulfan sulfate (2C)	ND		0.030	0.0058	ug/L		12/18/20 20:42	12/21/20 10:38	1
Endrin (1C)	ND		0.030	0.0081	ug/L		12/18/20 20:42	12/21/20 10:38	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		12/18/20 20:42	12/21/20 10:38	1
Endrin ketone (2C)	ND		0.030	0.0050	ug/L		12/18/20 20:42	12/21/20 10:38	1
gamma-BHC (Lindane) (2C)	**0.0032**	**J p**	0.020	0.0020	ug/L		12/18/20 20:42	12/21/20 10:38	1
gamma-Chlordane (1C)	ND		0.040	0.0070	ug/L		12/18/20 20:42	12/21/20 10:38	1
Heptachlor (2C)	**0.0034**	**J B p**	0.020	0.0020	ug/L		12/18/20 20:42	12/21/20 10:38	1
Heptachlor epoxide (2C)	ND		0.020	0.0023	ug/L		12/18/20 20:42	12/21/20 10:38	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		12/18/20 20:42	12/21/20 10:38	1
Toxaphene (2C)	ND		1.0	0.30	ug/L		12/18/20 20:42	12/21/20 10:38	1
p,p'-DDD (2C)	**0.0055**	**J p**	0.030	0.0050	ug/L		12/18/20 20:42	12/21/20 10:38	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		12/18/20 20:42	12/21/20 10:38	1
p,p'-DDT (2C)	ND		0.030	0.0052	ug/L		12/18/20 20:42	12/21/20 10:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*63*		*32 - 149*	*12/18/20 20:42*	*12/21/20 10:38*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*64*		*32 - 149*	*12/18/20 20:42*	*12/21/20 10:38*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*65*		*29 - 129*	*12/18/20 20:42*	*12/21/20 10:38*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*66*		*29 - 129*	*12/18/20 20:42*	*12/21/20 10:38*	*1*

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF IW-2B

Date Collected: 12/11/20 14:30
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-8

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.023**	**J**	0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:15	1
Aluminum	**2.0**		0.30	0.15	mg/L		12/14/20 06:02	12/17/20 15:15	1
Antimony	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:15	1
Barium	**1.2**		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:15	1
Beryllium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:15	1
Cadmium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:15	1
Calcium	**620**		2.5	0.48	mg/L		12/14/20 06:02	12/17/20 16:17	5
Chromium	**0.015**		0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 15:15	1
Cobalt	**0.0033**	**J**	0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 15:15	1
Copper	**0.015**	**J**	0.020	0.012	mg/L		12/14/20 06:02	12/17/20 15:15	1
Iron	**21**		0.20	0.040	mg/L		12/14/20 06:02	12/17/20 15:15	1
Lead	**0.020**		0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 15:15	1
Magnesium	**630**		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 16:17	5
Manganese	**0.15**		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 15:15	1
Nickel	**0.0047**	**J**	0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 15:15	1
Zinc	**0.026**		0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 15:15	1
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:24	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:15	1
Potassium	**330**		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 15:15	1
Sodium	**1100**		5.0	1.2	mg/L		12/14/20 06:02	12/17/20 17:23	5
Thallium	ND		0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 15:15	1
Vanadium	**0.026**		0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 15:15	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:13	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 20:04	12/15/20 16:13	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:13	1
Barium	**0.029**		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:13	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:13	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:13	1
Calcium	**590**	***H**	5.2	0.99	mg/L		12/14/20 20:04	12/20/20 13:59	10
Chromium	**0.010**	**J**	0.015	0.0016	mg/L		12/14/20 20:04	12/15/20 16:13	1
Cobalt	ND		0.0052	0.0015	mg/L		12/14/20 20:04	12/15/20 16:13	1
Copper	**0.012**	**J**	0.021	0.012	mg/L		12/14/20 20:04	12/15/20 16:13	1
Iron	ND		0.21	0.041	mg/L		12/14/20 20:04	12/15/20 16:13	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 20:04	12/15/20 16:13	1
Magnesium	**410**		0.10	0.041	mg/L		12/14/20 20:04	12/20/20 13:56	1
Manganese	**0.0059**	**J**	0.010	0.0031	mg/L		12/14/20 20:04	12/15/20 16:13	1
Nickel	**0.0031**	**J**	0.010	0.0022	mg/L		12/14/20 20:04	12/15/20 16:13	1
Zinc	ND		0.021	0.0038	mg/L		12/14/20 20:04	12/15/20 16:13	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:04	12/15/20 16:13	1
Selenium	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:13	1
Potassium	**270**		0.52	0.21	mg/L		12/14/20 20:04	12/20/20 13:56	1
Sodium	**1000**		10	2.5	mg/L		12/14/20 20:04	12/20/20 13:59	10
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:04	12/20/20 13:56	1
Vanadium	**0.0079**	**J**	0.010	0.0020	mg/L		12/14/20 20:04	12/15/20 16:13	1

Client Sample ID: HOFF IW-2B

Lab Sample ID: 410-23806-8

Date Collected: 12/11/20 14:30

Matrix: Water

Date Received: 12/11/20 17:56

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.1**		0.20	0.079	ug/L		12/14/20 10:47	12/15/20 16:40	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.0**		0.20	0.079	ug/L		12/15/20 10:21	12/15/20 22:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**6400**	**H**	240	80	mg/L			12/21/20 06:44	1
Ferrous Iron	**0.13**	**HF**	0.10	0.050	mg/L			12/15/20 09:21	1
Sulfate	**1300**		300	100	mg/L			12/21/20 09:12	50

Client Sample ID: HOFF DUP-121120

Lab Sample ID: 410-23806-9

Date Collected: 12/11/20 12:00

Matrix: Water

Date Received: 12/11/20 17:56

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			12/21/20 00:29	10
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/L			12/21/20 00:29	10
Ethylbenzene	ND		5.0	0.60	ug/L			12/21/20 00:29	10
Styrene	ND		5.0	0.50	ug/L			12/21/20 00:29	10
1,4-Dichlorobenzene	**91**		5.0	0.70	ug/L			12/21/20 00:29	10
1,2-Dibromoethane	ND		5.0	0.60	ug/L			12/21/20 00:29	10
1,2-Dichloroethane	ND		5.0	0.50	ug/L			12/21/20 00:29	10
4-Methyl-2-pentanone	ND		50	7.0	ug/L			12/21/20 00:29	10
Methylcyclohexane	ND		5.0	0.50	ug/L			12/21/20 00:29	10
Toluene	ND		5.0	0.70	ug/L			12/21/20 00:29	10
Cyclohexane	ND		5.0	0.50	ug/L			12/21/20 00:29	10
1,2,4-Trichlorobenzene	**4.8**	**J**	5.0	0.60	ug/L			12/21/20 00:29	10
Dibromochloromethane	ND		5.0	0.70	ug/L			12/21/20 00:29	10
Xylenes, Total	ND		10	1.5	ug/L			12/21/20 00:29	10
Tetrachloroethene	ND		5.0	0.60	ug/L			12/21/20 00:29	10
cis-1,2-Dichloroethene	**15**		5.0	0.50	ug/L			12/21/20 00:29	10
trans-1,2-Dichloroethene	**2.5**	**J**	5.0	0.60	ug/L			12/21/20 00:29	10
Methyl tertiary butyl ether	ND		5.0	0.50	ug/L			12/21/20 00:29	10
1,3-Dichlorobenzene	**15**		5.0	0.60	ug/L			12/21/20 00:29	10
Carbon tetrachloride	ND		5.0	0.70	ug/L			12/21/20 00:29	10
2-Hexanone	ND		50	6.0	ug/L			12/21/20 00:29	10
Acetone	**120**		50	9.0	ug/L			12/21/20 00:29	10
Chloroform	ND		5.0	0.90	ug/L			12/21/20 00:29	10
Benzene	**13**		5.0	0.50	ug/L			12/21/20 00:29	10
1,1,1-Trichloroethane	**3.1**	**J**	5.0	0.60	ug/L			12/21/20 00:29	10
Bromomethane	**3.5**	**J**	5.0	0.70	ug/L			12/21/20 00:29	10
Chloromethane	**17**		5.0	0.60	ug/L			12/21/20 00:29	10
Chloroethane	**1.4**	**J**	5.0	0.70	ug/L			12/21/20 00:29	10
Vinyl chloride	ND		5.0	1.0	ug/L			12/21/20 00:29	10
Methylene Chloride	ND		5.0	0.70	ug/L			12/21/20 00:29	10
Carbon disulfide	**2.1**	**J ^c**	10	0.60	ug/L			12/21/20 00:29	10
Bromoform	ND		10	3.0	ug/L			12/21/20 00:29	10

Client Sample ID: HOFF DUP-121120

Date Collected: 12/11/20 12:00
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-9

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.0	0.50	ug/L			12/21/20 00:29	10
1,1-Dichloroethane	**21**		5.0	0.70	ug/L			12/21/20 00:29	10
1,1-Dichloroethene	ND	^c	5.0	0.60	ug/L			12/21/20 00:29	10
Trichlorofluoromethane	ND		5.0	0.50	ug/L			12/21/20 00:29	10
Dichlorodifluoromethane	ND		5.0	0.50	ug/L			12/21/20 00:29	10
Freon 113	ND		5.0	0.60	ug/L			12/21/20 00:29	10
1,2-Dichloropropane	ND		5.0	0.60	ug/L			12/21/20 00:29	10
2-Butanone	**26**	**J**	50	6.0	ug/L			12/21/20 00:29	10
1,1,2-Trichloroethane	**0.91**	**J**	5.0	0.60	ug/L			12/21/20 00:29	10
Trichloroethene	**1.9**	**J**	5.0	0.60	ug/L			12/21/20 00:29	10
Methyl acetate	ND		10	1.0	ug/L			12/21/20 00:29	10
1,1,2,2-Tetrachloroethane	ND		5.0	0.70	ug/L			12/21/20 00:29	10
1,2-Dichlorobenzene	**240**		5.0	0.60	ug/L			12/21/20 00:29	10
1,2-Dibromo-3-Chloropropane	ND		5.0	1.0	ug/L			12/21/20 00:29	10
Isopropylbenzene	ND		5.0	0.50	ug/L			12/21/20 00:29	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*12/21/20 00:29*	*10*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*12/21/20 00:29*	*10*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*12/21/20 00:29*	*10*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/21/20 00:29*	*10*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**1400**		50	6.0	ug/L			12/21/20 00:51	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*80 - 120*		*12/21/20 00:51*	*100*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*12/21/20 00:51*	*100*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/21/20 00:51*	*100*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/21/20 00:51*	*100*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.0**		2.0	1.0	ug/L			12/23/20 13:58	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*82*		*80 - 120*		*12/23/20 13:58*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
2,4-Dichlorophenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
2,4-Dinitrophenol	ND		30	14	ug/L		12/17/20 17:15	12/18/20 15:53	1
2,4-Dinitrotoluene	ND		5.1	1.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
2,4,5-Trichlorophenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
2,4,6-Trichlorophenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
Di-n-butyl phthalate	ND		5.1	2.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
Di-n-octyl phthalate	ND		11	5.1	ug/L		12/17/20 17:15	12/18/20 15:53	1

Client Sample ID: HOFF DUP-121120
Date Collected: 12/11/20 12:00
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-9
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Benzo[a]pyrene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Benzo[b]fluoranthene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Benzo[g,h,i]perylene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Benzo[k]fluoranthene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Acenaphthene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Acenaphthylene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Acetophenone	**4.0**	**J**	10	4.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
Anthracene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Atrazine	ND		5.1	2.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
Benzaldehyde	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
Butylbenzylphthalate	ND	*1	5.1	2.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
Caprolactam	ND	^c	11	5.1	ug/L		12/17/20 17:15	12/18/20 15:53	1
Carbazole	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
Chrysene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Dibenz(a,h)anthracene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Dibenzofuran	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
Diethyl phthalate	ND		5.1	2.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
Dimethyl phthalate	ND	*1	5.1	2.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
Hexachlorobenzene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Hexachlorobutadiene	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
Hexachlorocyclopentadiene	ND	*+	11	5.1	ug/L		12/17/20 17:15	12/18/20 15:53	1
Hexachloroethane	ND		5.1	1.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
Fluoranthene	**0.18**	**J**	0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Fluorene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Indeno[1,2,3-cd]pyrene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Isophorone	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
N-Nitrosodi-n-propylamine	ND		3.0	0.71	ug/L		12/17/20 17:15	12/18/20 15:53	1
N-Nitrosodiphenylamine	ND		3.0	0.71	ug/L		12/17/20 17:15	12/18/20 15:53	1
Naphthalene	**1.7**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Nitrobenzene	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
Pentachlorophenol	ND		5.1	1.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
Phenanthrene	**0.99**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Phenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
Pyrene	ND		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		12/17/20 17:15	12/18/20 15:53	1
2-Chlorophenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
2-Methylnaphthalene	**2.1**		0.51	0.10	ug/L		12/17/20 17:15	12/18/20 15:53	1
2-Methylphenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
2-Nitroaniline	ND		5.1	2.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
2-Nitrophenol	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
3-Nitroaniline	ND		7.1	3.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
4,6-Dinitro-2-methylphenol	ND		21	8.1	ug/L		12/17/20 17:15	12/18/20 15:53	1
4-Bromophenyl-phenylether	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
4-Methylphenol	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
4-Nitroaniline	ND		3.0	0.91	ug/L		12/17/20 17:15	12/18/20 15:53	1
4-Nitrophenol	ND		30	10	ug/L		12/17/20 17:15	12/18/20 15:53	1
Bis(2-chloroethoxy)methane	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1

Client Sample ID: HOFF DUP-121120
Date Collected: 12/11/20 12:00
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-9
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
Bis(2-ethylhexyl) phthalate	ND		11	5.1	ug/L		12/17/20 17:15	12/18/20 15:53	1
2,6-Dinitrotoluene	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		12/17/20 17:15	12/18/20 15:53	1
4-Chloroaniline	ND		10	4.0	ug/L		12/17/20 17:15	12/18/20 15:53	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.51	ug/L		12/17/20 17:15	12/18/20 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*77*		*10 - 150*	*12/17/20 17:15*	*12/18/20 15:53*	*1*
2-Fluorobiphenyl (Surr)	*69*		*44 - 102*	*12/17/20 17:15*	*12/18/20 15:53*	*1*
2-Fluorophenol (Surr)	*37*		*10 - 84*	*12/17/20 17:15*	*12/18/20 15:53*	*1*
Nitrobenzene-d5 (Surr)	*70*		*23 - 128*	*12/17/20 17:15*	*12/18/20 15:53*	*1*
p-Terphenyl-d14 (Surr)	*84*		*31 - 113*	*12/17/20 17:15*	*12/18/20 15:53*	*1*
Phenol-d5 (Surr)	*31*		*10 - 67*	*12/17/20 17:15*	*12/18/20 15:53*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (2C)	ND		0.021	0.0021	ug/L		12/18/20 20:42	12/21/20 10:50	1
alpha-BHC (2C)	**0.020**	**J B**	0.021	0.0031	ug/L		12/18/20 20:42	12/21/20 10:50	1
alpha-Chlordane (1C)	ND		0.021	0.0031	ug/L		12/18/20 20:42	12/21/20 10:50	1
beta-BHC (1C)	**0.010**	**J p**	0.021	0.0035	ug/L		12/18/20 20:42	12/21/20 10:50	1
delta-BHC (1C)	ND		0.021	0.0035	ug/L		12/18/20 20:42	12/21/20 10:50	1
Dieldrin (1C)	**0.015**	**J p**	0.031	0.0055	ug/L		12/18/20 20:42	12/21/20 10:50	1
Endosulfan I (2C)	**0.0075**	**J**	0.021	0.0044	ug/L		12/18/20 20:42	12/21/20 10:50	1
Endosulfan II (1C)	ND		0.041	0.015	ug/L		12/18/20 20:42	12/21/20 10:50	1
Endosulfan sulfate (2C)	**0.013**	**J**	0.031	0.0060	ug/L		12/18/20 20:42	12/21/20 10:50	1
Endrin (1C)	ND		0.031	0.0083	ug/L		12/18/20 20:42	12/21/20 10:50	1
Endrin aldehyde (1C)	ND		0.10	0.021	ug/L		12/18/20 20:42	12/21/20 10:50	1
Endrin ketone (2C)	**0.0096**	**J p**	0.031	0.0051	ug/L		12/18/20 20:42	12/21/20 10:50	1
gamma-BHC (Lindane) (1C)	**0.0031**	**J p**	0.021	0.0021	ug/L		12/18/20 20:42	12/21/20 10:50	1
gamma-Chlordane (1C)	ND		0.041	0.0072	ug/L		12/18/20 20:42	12/21/20 10:50	1
Heptachlor (2C)	**0.013**	**J B p**	0.021	0.0021	ug/L		12/18/20 20:42	12/21/20 10:50	1
Heptachlor epoxide (1C)	**0.0041**	**J p**	0.021	0.0024	ug/L		12/18/20 20:42	12/21/20 10:50	1
Methoxychlor (2C)	ND		0.11	0.031	ug/L		12/18/20 20:42	12/21/20 10:50	1
Toxaphene (2C)	ND		1.0	0.31	ug/L		12/18/20 20:42	12/21/20 10:50	1
p,p'-DDD (2C)	ND		0.031	0.0051	ug/L		12/18/20 20:42	12/21/20 10:50	1
p,p'-DDE (1C)	ND		0.031	0.0051	ug/L		12/18/20 20:42	12/21/20 10:50	1
p,p'-DDT (1C)	**0.018**	**J**	0.031	0.0053	ug/L		12/18/20 20:42	12/21/20 10:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*46*		*32 - 149*	*12/18/20 20:42*	*12/21/20 10:50*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*50*		*32 - 149*	*12/18/20 20:42*	*12/21/20 10:50*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*64*		*29 - 129*	*12/18/20 20:42*	*12/21/20 10:50*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*76*		*29 - 129*	*12/18/20 20:42*	*12/21/20 10:50*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.032**	**J**	0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:12	1
Aluminum	**1.6**		0.30	0.15	mg/L		12/14/20 06:02	12/17/20 15:12	1
Antimony	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:12	1

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF DUP-121120

Date Collected: 12/11/20 12:00
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-9

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.37**		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:12	1
Beryllium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:12	1
Cadmium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 15:12	1
Calcium	**160**		0.50	0.096	mg/L		12/14/20 06:02	12/17/20 15:12	1
Chromium	**0.023**		0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 15:12	1
Cobalt	**0.0056**		0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 15:12	1
Copper	ND		0.020	0.012	mg/L		12/14/20 06:02	12/17/20 15:12	1
Iron	**29**		0.20	0.040	mg/L		12/14/20 06:02	12/17/20 15:12	1
Lead	**0.0087**	**J**	0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 15:12	1
Magnesium	**410**		0.10	0.040	mg/L		12/14/20 06:02	12/17/20 15:12	1
Manganese	**0.095**		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 15:12	1
Nickel	**0.012**		0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 15:12	1
Zinc	**0.0094**	**J**	0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 15:12	1
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:21	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 15:12	1
Potassium	**110**		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 15:12	1
Sodium	**1100**		5.0	1.2	mg/L		12/14/20 06:02	12/17/20 17:20	5
Thallium	ND		0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 15:12	1
Vanadium	**0.032**		0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 15:12	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:17	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 20:04	12/15/20 16:17	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:17	1
Barium	**0.028**		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:17	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:17	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 16:17	1
Calcium	**130**	***H**	0.52	0.099	mg/L		12/14/20 20:04	12/20/20 14:03	1
Chromium	**0.016**		0.015	0.0016	mg/L		12/14/20 20:04	12/15/20 16:17	1
Cobalt	**0.0027**	**J**	0.0052	0.0015	mg/L		12/14/20 20:04	12/15/20 16:17	1
Copper	ND		0.021	0.012	mg/L		12/14/20 20:04	12/15/20 16:17	1
Iron	ND		0.21	0.041	mg/L		12/14/20 20:04	12/15/20 16:17	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 20:04	12/15/20 16:17	1
Magnesium	**360**		0.10	0.041	mg/L		12/14/20 20:04	12/15/20 16:17	1
Manganese	**0.0059**	**J**	0.010	0.0031	mg/L		12/14/20 20:04	12/15/20 16:17	1
Nickel	**0.0092**	**J**	0.010	0.0022	mg/L		12/14/20 20:04	12/15/20 16:17	1
Zinc	ND		0.021	0.0038	mg/L		12/14/20 20:04	12/15/20 16:17	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:04	12/15/20 16:17	1
Selenium	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 16:17	1
Potassium	**94**		0.52	0.21	mg/L		12/14/20 20:04	12/20/20 14:03	1
Sodium	**1100**		10	2.5	mg/L		12/14/20 20:04	12/20/20 14:06	10
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:04	12/20/20 14:03	1
Vanadium	**0.0095**	**J**	0.010	0.0020	mg/L		12/14/20 20:04	12/15/20 16:17	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.12**	**J**	0.20	0.079	ug/L		12/14/20 10:47	12/15/20 16:38	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF DUP-121120

Date Collected: 12/11/20 12:00
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-9

Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	J	0.20	0.079	ug/L		12/18/20 11:29	12/20/20 15:55	1

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	BFB	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-23806-1	HOFF MW-C	108	105	92	94
410-23806-1 - DL	HOFF MW-C	111	107	93	94
410-23806-2	HOFF MW-B	111	105	98	96
410-23806-2 - DL	HOFF MW-B	110	106	94	97
410-23806-3	HOFF MW-13	113	105	94	81
410-23806-3 - DL	HOFF MW-13	104	106	99	82
410-23806-4	HOFF TB-01-121120	105	105	94	98
410-23806-5	HOFF IW-3A	118	108	98	88
410-23806-5 - DL	HOFF IW-3A	114	113	87	58 S1-
410-23806-6	HOFF IW-2A	118	104	100	96
410-23806-6 - DL	HOFF IW-2A	113	106	96	93
410-23806-6 - DL2	HOFF IW-2A	104	105	97	79 S1-
410-23806-7	HOFF IW-3B	110	107	91	69 S1-
410-23806-7 - DL	HOFF IW-3B	106	105	94	94
410-23806-8	HOFF IW-2B	107	106	93	88
410-23806-8 - DL	HOFF IW-2B	106	104	93	98
410-23806-9	HOFF DUP-121120	106	104	96	95
410-23806-9 - DL	HOFF DUP-121120	109	105	94	96
LCS 410-78610/4	Lab Control Sample	108	102	99	99
LCS 410-78998/4	Lab Control Sample	102	102	102	95
LCSD 410-78610/5	Lab Control Sample Dup	105	101	96	100
MB 410-78610/7	Method Blank	106	102	94	99
MB 410-78998/6	Method Blank	103	103	99	94

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TOL
Lab Sample ID	Client Sample ID	(80-120)
410-23806-1	HOFF MW-C	74 S1-
410-23806-2	HOFF MW-B	83
410-23806-3	HOFF MW-13	76 S1-
410-23806-4	HOFF TB-01-121120	82
410-23806-5	HOFF IW-3A	79 S1-
410-23806-6	HOFF IW-2A	80
410-23806-7	HOFF IW-3B	76 S1-
410-23806-8	HOFF IW-2B	82
410-23806-9	HOFF DUP-121120	82
LCS 410-79219/4	Lab Control Sample	83
LCS 410-79617/4	Lab Control Sample	84
LCSD 410-79219/5	Lab Control Sample Dup	83
LCSD 410-79617/5	Lab Control Sample Dup	84
MB 410-79219/7	Method Blank	83

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TOL (80-120)
MB 410-79617/7	Method Blank	84

Surrogate Legend

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	TBP (10-150)	FBP (44-102)	2FP (10-84)	NBZ (23-128)	TPHd14 (31-113)	PHL (10-67)
410-23806-1	HOFF MW-C	42	68	3 S1-	69	81	3 S1-
410-23806-2	HOFF MW-B	83	67	33	66	85	30
410-23806-3	HOFF MW-13	6 S1- *3	24 S1- *3	2 S1-	74	86	5 S1-
410-23806-5	HOFF IW-3A	1 S1-	39 S1-	0 S1-	44	19 S1-	0.4 S1-
410-23806-6	HOFF IW-2A	19	41 S1-	1 S1-	58	15 S1-	2 S1-
410-23806-7	HOFF IW-3B	25	66	1 S1-	76	22 S1-	5 S1-
410-23806-8	HOFF IW-2B	74	72	27	70	85	23
410-23806-9	HOFF DUP-121120	77	69	37	70	84	31
LCS 410-77728/2-A	Lab Control Sample	93	77	54	76	90	41
LCS 410-77736/2-A	Lab Control Sample	97	76	55	80	92	44
LCS 410-80002/2-A	Lab Control Sample	86	69	44	72	91	34
LCSD 410-77736/3-A	Lab Control Sample Dup	96	75	55	78	89	45
MB 410-77728/1-A	Method Blank	85	72	43	72	87	32
MB 410-77736/1-A	Method Blank	88	67	43	72	92	35
MB 410-80002/1-A	Method Blank	72	62	31	62	85	24

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCB1 (32-149)	DCB2 (32-149)	TCX1 (29-129)	TCX2 (29-129)
410-23806-1	HOFF MW-C	39	40	85	53 p
410-23806-2	HOFF MW-B	48	46	58	66
410-23806-3	HOFF MW-13	42	41	65	70
410-23806-5	HOFF IW-3A	20 S1-	19 S1-	37	36
410-23806-6	HOFF IW-2A	8 S1-	12 S1-	13 S1-	14 S1-
410-23806-7	HOFF IW-3B	22 S1-	22 S1-	56	42
410-23806-8	HOFF IW-2B	63	64	65	66
410-23806-9	HOFF DUP-121120	46	50	64	76
LCS 410-77079/2-A	Lab Control Sample	55	57	61	64
LCS 410-78309/2-A	Lab Control Sample	84	68	66	63
LCSD 410-77079/3-A	Lab Control Sample Dup	47	49	60	58

Surrogate Summary

Client: Tetra Tech, Inc.
Job ID: 410-23806-1
Project/Site: Hoff

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(32-149)	(32-149)	(29-129)	(29-129)
LCSD 410-78309/3-A	Lab Control Sample Dup	87	71	57	58
MB 410-77079/1-A	Method Blank	55	58	58	60
MB 410-78309/1-A	Method Blank	68	76	68	64

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-78610/7
Matrix: Water
Analysis Batch: 78610

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/20/20 19:46	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/20/20 19:46	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/20/20 19:46	1
Styrene	ND		0.50	0.050	ug/L			12/20/20 19:46	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/20/20 19:46	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/20/20 19:46	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/20/20 19:46	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/20/20 19:46	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/20/20 19:46	1
Toluene	ND		0.50	0.070	ug/L			12/20/20 19:46	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/20/20 19:46	1
Cyclohexane	ND		0.50	0.050	ug/L			12/20/20 19:46	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			12/20/20 19:46	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/20/20 19:46	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/20/20 19:46	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/20/20 19:46	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/20/20 19:46	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/20/20 19:46	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			12/20/20 19:46	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			12/20/20 19:46	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/20/20 19:46	1
2-Hexanone	ND		5.0	0.60	ug/L			12/20/20 19:46	1
Acetone	ND		5.0	0.90	ug/L			12/20/20 19:46	1
Chloroform	ND		0.50	0.090	ug/L			12/20/20 19:46	1
Benzene	ND		0.50	0.050	ug/L			12/20/20 19:46	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/20/20 19:46	1
Bromomethane	ND		0.50	0.070	ug/L			12/20/20 19:46	1
Chloromethane	ND		0.50	0.060	ug/L			12/20/20 19:46	1
Chloroethane	ND		0.50	0.070	ug/L			12/20/20 19:46	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/20/20 19:46	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/20/20 19:46	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/20/20 19:46	1
Bromoform	ND		1.0	0.30	ug/L			12/20/20 19:46	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/20/20 19:46	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/20/20 19:46	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/20/20 19:46	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/20/20 19:46	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/20/20 19:46	1
Freon 113	ND		0.50	0.060	ug/L			12/20/20 19:46	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/20/20 19:46	1
2-Butanone	ND		5.0	0.60	ug/L			12/20/20 19:46	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/20/20 19:46	1
Trichloroethene	ND		0.50	0.060	ug/L			12/20/20 19:46	1
Methyl acetate	ND		1.0	0.10	ug/L			12/20/20 19:46	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/20/20 19:46	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			12/20/20 19:46	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/20/20 19:46	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/20/20 19:46	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-78610/7
Matrix: Water
Analysis Batch: 78610

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*12/20/20 19:46*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*12/20/20 19:46*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/20/20 19:46*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/20/20 19:46*	*1*

Lab Sample ID: LCS 410-78610/4
Matrix: Water
Analysis Batch: 78610

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	5.00		ug/L		100	67 - 121
trans-1,3-Dichloropropene	5.00	5.29		ug/L		106	61 - 129
Ethylbenzene	5.00	4.72		ug/L		94	80 - 120
Styrene	5.00	4.89		ug/L		98	80 - 120
1,4-Dichlorobenzene	5.00	5.02		ug/L		100	80 - 120
1,2-Dibromoethane	5.00	5.68		ug/L		114	80 - 120
1,2-Dichloroethane	5.00	5.42		ug/L		108	69 - 122
4-Methyl-2-pentanone	25.0	26.7		ug/L		107	55 - 140
Methylcyclohexane	5.00	4.57		ug/L		91	80 - 120
Toluene	5.00	4.81		ug/L		96	80 - 120
Chlorobenzene	5.00	5.05		ug/L		101	80 - 120
Cyclohexane	5.00	4.61		ug/L		92	69 - 120
1,2,4-Trichlorobenzene	5.00	4.52		ug/L		90	68 - 122
Dibromochloromethane	5.00	5.71		ug/L		114	64 - 138
Xylenes, Total	15.0	14.1		ug/L		94	80 - 120
Tetrachloroethene	5.00	4.94		ug/L		99	80 - 120
cis-1,2-Dichloroethene	5.00	5.01		ug/L		100	80 - 122
trans-1,2-Dichloroethene	5.00	4.67		ug/L		93	80 - 122
Methyl tertiary butyl ether	5.00	4.58		ug/L		92	69 - 120
1,3-Dichlorobenzene	5.00	4.92		ug/L		98	80 - 120
Carbon tetrachloride	5.00	4.66		ug/L		93	64 - 141
2-Hexanone	25.0	28.2		ug/L		113	52 - 140
Acetone	37.5	41.8		ug/L		111	60 - 146
Chloroform	5.00	4.93		ug/L		99	80 - 120
Benzene	5.00	4.85		ug/L		97	80 - 120
1,1,1-Trichloroethane	5.00	4.47		ug/L		89	78 - 126
Bromomethane	5.00	4.39		ug/L		88	60 - 136
Chloromethane	5.00	4.60		ug/L		92	56 - 124
Chloroethane	5.00	4.43		ug/L		89	63 - 120
Vinyl chloride	5.00	4.76		ug/L		95	60 - 125
Methylene Chloride	5.00	5.07		ug/L		101	80 - 120
Carbon disulfide	5.00	4.64		ug/L		93	67 - 130
Bromoform	5.00	5.99		ug/L		120	49 - 144
Bromodichloromethane	5.00	5.35		ug/L		107	73 - 124
1,1-Dichloroethane	5.00	4.93		ug/L		99	74 - 120
1,1-Dichloroethene	5.00	4.48		ug/L		90	80 - 131
Trichlorofluoromethane	5.00	4.78		ug/L		96	62 - 136
Dichlorodifluoromethane	5.00	5.02		ug/L		100	43 - 123

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-78610/4
Matrix: Water
Analysis Batch: 78610

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Freon 113	5.00	4.39		ug/L		88	75 - 133
1,2-Dichloropropane	5.00	5.46		ug/L		109	80 - 120
2-Butanone	37.5	44.0		ug/L		117	59 - 141
1,1,2-Trichloroethane	5.00	5.72		ug/L		114	80 - 120
Trichloroethene	5.00	4.79		ug/L		96	80 - 120
Methyl acetate	5.00	5.56		ug/L		111	59 - 143
1,1,2,2-Tetrachloroethane	5.00	5.73		ug/L		115	75 - 123
1,2-Dichlorobenzene	5.00	4.88		ug/L		98	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	5.90		ug/L		118	56 - 148
Isopropylbenzene	5.00	4.46		ug/L		89	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: LCSD 410-78610/5
Matrix: Water
Analysis Batch: 78610

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5.00	4.63		ug/L		93	67 - 121	8	30
trans-1,3-Dichloropropene	5.00	4.85		ug/L		97	61 - 129	9	30
Ethylbenzene	5.00	4.44		ug/L		89	80 - 120	6	30
Styrene	5.00	4.59		ug/L		92	80 - 120	6	30
1,4-Dichlorobenzene	5.00	4.71		ug/L		94	80 - 120	6	30
1,2-Dibromoethane	5.00	5.11		ug/L		102	80 - 120	11	30
1,2-Dichloroethane	5.00	4.76		ug/L		95	69 - 122	13	30
4-Methyl-2-pentanone	25.0	26.6		ug/L		107	55 - 140	0	30
Methylcyclohexane	5.00	4.21		ug/L		84	80 - 120	8	30
Toluene	5.00	4.54		ug/L		91	80 - 120	6	30
Chlorobenzene	5.00	4.77		ug/L		95	80 - 120	6	30
Cyclohexane	5.00	4.24		ug/L		85	69 - 120	8	30
1,2,4-Trichlorobenzene	5.00	4.14		ug/L		83	68 - 122	9	30
Dibromochloromethane	5.00	5.10		ug/L		102	64 - 138	11	30
Xylenes, Total	15.0	13.2		ug/L		88	80 - 120	7	30
Tetrachloroethene	5.00	4.57		ug/L		91	80 - 120	8	30
cis-1,2-Dichloroethene	5.00	4.69		ug/L		94	80 - 122	7	30
trans-1,2-Dichloroethene	5.00	4.32		ug/L		86	80 - 122	8	30
Methyl tertiary butyl ether	5.00	4.14		ug/L		83	69 - 120	10	30
1,3-Dichlorobenzene	5.00	4.64		ug/L		93	80 - 120	6	30
Carbon tetrachloride	5.00	4.33		ug/L		87	64 - 141	7	30
2-Hexanone	25.0	27.8		ug/L		111	52 - 140	2	30
Acetone	37.5	39.6		ug/L		106	60 - 146	5	30
Chloroform	5.00	4.61		ug/L		92	80 - 120	7	30
Benzene	5.00	4.57		ug/L		91	80 - 120	6	30
1,1,1-Trichloroethane	5.00	4.15		ug/L		83	78 - 126	8	30

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-78610/5
Matrix: Water
Analysis Batch: 78610

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane			5.00	4.13		ug/L		83	60 - 136	6	30
Chloromethane			5.00	4.23		ug/L		85	56 - 124	8	30
Chloroethane			5.00	4.27		ug/L		85	63 - 120	4	30
Vinyl chloride			5.00	4.38		ug/L		88	60 - 125	8	30
Methylene Chloride			5.00	4.70		ug/L		94	80 - 120	7	30
Carbon disulfide			5.00	4.17		ug/L		83	67 - 130	11	30
Bromoform			5.00	5.21		ug/L		104	49 - 144	14	30
Bromodichloromethane			5.00	4.92		ug/L		98	73 - 124	8	30
1,1-Dichloroethane			5.00	4.61		ug/L		92	74 - 120	7	30
1,1-Dichloroethene			5.00	4.23		ug/L		85	80 - 131	6	30
Trichlorofluoromethane			5.00	4.48		ug/L		90	62 - 136	6	30
Dichlorodifluoromethane			5.00	4.74		ug/L		95	43 - 123	6	30
Freon 113			5.00	4.04		ug/L		81	75 - 133	8	30
1,2-Dichloropropane			5.00	5.09		ug/L		102	80 - 120	7	30
2-Butanone			37.5	42.4		ug/L		113	59 - 141	4	30
1,1,2-Trichloroethane			5.00	5.12		ug/L		102	80 - 120	11	30
Trichloroethene			5.00	4.46		ug/L		89	80 - 120	7	30
Methyl acetate			5.00	5.21		ug/L		104	59 - 143	7	30
1,1,2,2-Tetrachloroethane			5.00	5.02		ug/L		100	75 - 123	13	30
1,2-Dichlorobenzene			5.00	4.57		ug/L		91	80 - 120	7	30
1,2-Dibromo-3-Chloropropane			5.00	5.03		ug/L		101	56 - 148	16	30
Isopropylbenzene			5.00	4.15		ug/L		83	80 - 120	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: MB 410-78998/6
Matrix: Water
Analysis Batch: 78998

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/21/20 23:12	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/21/20 23:12	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/21/20 23:12	1
Styrene	ND		0.50	0.050	ug/L			12/21/20 23:12	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			12/21/20 23:12	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			12/21/20 23:12	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/21/20 23:12	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			12/21/20 23:12	1
Methylcyclohexane	ND		0.50	0.050	ug/L			12/21/20 23:12	1
Toluene	ND		0.50	0.070	ug/L			12/21/20 23:12	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/21/20 23:12	1
Cyclohexane	ND		0.50	0.050	ug/L			12/21/20 23:12	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			12/21/20 23:12	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/21/20 23:12	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-78998/6
Matrix: Water
Analysis Batch: 78998

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		1.0	0.15	ug/L			12/21/20 23:12	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/21/20 23:12	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/21/20 23:12	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/21/20 23:12	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			12/21/20 23:12	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			12/21/20 23:12	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/21/20 23:12	1
2-Hexanone	ND		5.0	0.60	ug/L			12/21/20 23:12	1
Acetone	ND		5.0	0.90	ug/L			12/21/20 23:12	1
Chloroform	ND		0.50	0.090	ug/L			12/21/20 23:12	1
Benzene	ND		0.50	0.050	ug/L			12/21/20 23:12	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/21/20 23:12	1
Bromomethane	ND		0.50	0.070	ug/L			12/21/20 23:12	1
Chloromethane	ND		0.50	0.060	ug/L			12/21/20 23:12	1
Chloroethane	ND		0.50	0.070	ug/L			12/21/20 23:12	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/21/20 23:12	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/21/20 23:12	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/21/20 23:12	1
Bromoform	ND		1.0	0.30	ug/L			12/21/20 23:12	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/21/20 23:12	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/21/20 23:12	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/21/20 23:12	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			12/21/20 23:12	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			12/21/20 23:12	1
Freon 113	ND		0.50	0.060	ug/L			12/21/20 23:12	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/21/20 23:12	1
2-Butanone	ND		5.0	0.60	ug/L			12/21/20 23:12	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/21/20 23:12	1
Trichloroethene	ND		0.50	0.060	ug/L			12/21/20 23:12	1
Methyl acetate	ND		1.0	0.10	ug/L			12/21/20 23:12	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/21/20 23:12	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			12/21/20 23:12	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			12/21/20 23:12	1
Isopropylbenzene	ND		0.50	0.050	ug/L			12/21/20 23:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*12/21/20 23:12*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*12/21/20 23:12*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/21/20 23:12*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/21/20 23:12*	*1*

Lab Sample ID: LCS 410-78998/4
Matrix: Water
Analysis Batch: 78998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	5.23		ug/L		105	67 - 121
trans-1,3-Dichloropropene	5.00	4.84		ug/L		97	61 - 129

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-78998/4
Matrix: Water
Analysis Batch: 78998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	5.00	4.73		ug/L		95	80 - 120
Styrene	5.00	4.93		ug/L		99	80 - 120
1,4-Dichlorobenzene	5.00	4.71		ug/L		94	80 - 120
1,2-Dibromoethane	5.00	5.00		ug/L		100	80 - 120
1,2-Dichloroethane	5.00	5.08		ug/L		102	69 - 122
4-Methyl-2-pentanone	25.0	23.6		ug/L		94	55 - 140
Methylcyclohexane	5.00	5.45		ug/L		109	80 - 120
Toluene	5.00	4.74		ug/L		95	80 - 120
Chlorobenzene	5.00	4.88		ug/L		98	80 - 120
Cyclohexane	5.00	5.55		ug/L		111	69 - 120
1,2,4-Trichlorobenzene	5.00	4.94		ug/L		99	68 - 122
Dibromochloromethane	5.00	4.89		ug/L		98	64 - 138
Xylenes, Total	15.0	14.4		ug/L		96	80 - 120
Tetrachloroethene	5.00	4.83		ug/L		97	80 - 120
cis-1,2-Dichloroethene	5.00	5.44		ug/L		109	80 - 122
trans-1,2-Dichloroethene	5.00	5.22		ug/L		104	80 - 122
Methyl tertiary butyl ether	5.00	5.02		ug/L		100	69 - 120
1,3-Dichlorobenzene	5.00	4.70		ug/L		94	80 - 120
Carbon tetrachloride	5.00	5.15		ug/L		103	64 - 141
2-Hexanone	25.0	24.5		ug/L		98	52 - 140
Acetone	37.5	30.3		ug/L		81	60 - 146
Chloroform	5.00	5.21		ug/L		104	80 - 120
Benzene	5.00	5.13		ug/L		103	80 - 120
1,1,1-Trichloroethane	5.00	5.07		ug/L		101	78 - 126
Bromomethane	5.00	5.27		ug/L		105	60 - 136
Chloromethane	5.00	5.37		ug/L		107	56 - 124
Chloroethane	5.00	5.28		ug/L		106	63 - 120
Vinyl chloride	5.00	5.45		ug/L		109	60 - 125
Methylene Chloride	5.00	5.29		ug/L		106	80 - 120
Carbon disulfide	5.00	4.94		ug/L		99	67 - 130
Bromoform	5.00	4.93		ug/L		99	49 - 144
Bromodichloromethane	5.00	5.21		ug/L		104	73 - 124
1,1-Dichloroethane	5.00	5.18		ug/L		104	74 - 120
1,1-Dichloroethene	5.00	5.26		ug/L		105	80 - 131
Trichlorofluoromethane	5.00	5.59		ug/L		112	62 - 136
Dichlorodifluoromethane	5.00	5.91		ug/L		118	43 - 123
Freon 113	5.00	5.19		ug/L		104	75 - 133
1,2-Dichloropropane	5.00	5.45		ug/L		109	80 - 120
2-Butanone	37.5	35.6		ug/L		95	59 - 141
1,1,2-Trichloroethane	5.00	5.15		ug/L		103	80 - 120
Trichloroethene	5.00	5.18		ug/L		104	80 - 120
Methyl acetate	5.00	4.35		ug/L		87	59 - 143
1,1,2,2-Tetrachloroethane	5.00	4.74		ug/L		95	75 - 123
1,2-Dichlorobenzene	5.00	4.79		ug/L		96	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	5.03		ug/L		101	56 - 148
Isopropylbenzene	5.00	4.90		ug/L		98	80 - 120

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-78998/4
Matrix: Water
Analysis Batch: 78998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	102		80 - 120
Toluene-d8 (Surr)	95		80 - 120

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-79219/7
Matrix: Water
Analysis Batch: 79219

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			12/22/20 12:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	83		80 - 120		12/22/20 12:53	1

Lab Sample ID: LCS 410-79219/4
Matrix: Water
Analysis Batch: 79219

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	4.33		ug/L		87	74 - 133		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	83		80 - 120

Lab Sample ID: LCSD 410-79219/5
Matrix: Water
Analysis Batch: 79219

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.27		ug/L		86	74 - 133	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	83		80 - 120

Lab Sample ID: MB 410-79617/7
Matrix: Water
Analysis Batch: 79617

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			12/23/20 10:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	84		80 - 120		12/23/20 10:29	1

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-79617/4
Matrix: Water
Analysis Batch: 79617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	4.21		ug/L		85	74 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*84*		*80 - 120*

Lab Sample ID: LCSD 410-79617/5
Matrix: Water
Analysis Batch: 79617

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.20		ug/L		85	74 - 133	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*84*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-77728/1-A
Matrix: Water
Analysis Batch: 78325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77728

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
2,4-Dinitrophenol	ND		30	14	ug/L		12/17/20 17:15	12/19/20 00:17	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Benzo[a]pyrene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Acenaphthene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Acenaphthylene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Acetophenone	ND		10	4.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
Anthracene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Atrazine	ND		5.0	2.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
Benzaldehyde	ND		10	3.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
Caprolactam	ND		11	5.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
Carbazole	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
Chrysene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-77728/1-A
Matrix: Water
Analysis Batch: 78325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77728

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
Diethyl phthalate	ND		5.0	2.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
Hexachlorocyclopentadiene	ND		11	5.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
Hexachloroethane	ND		5.0	1.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
Fluoranthene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Fluorene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Isophorone	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		12/17/20 17:15	12/19/20 00:17	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		12/17/20 17:15	12/19/20 00:17	1
Naphthalene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Nitrobenzene	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
Pentachlorophenol	ND		5.0	1.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
Phenanthrene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Phenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
Pyrene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		12/17/20 17:15	12/19/20 00:17	1
2-Chlorophenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/19/20 00:17	1
2-Methylphenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
2-Nitroaniline	ND		5.0	2.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
2-Nitrophenol	ND		10	3.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
3-Nitroaniline	ND		7.0	3.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
4-Methylphenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
4-Nitroaniline	ND		3.0	0.90	ug/L		12/17/20 17:15	12/19/20 00:17	1
4-Nitrophenol	ND		30	10	ug/L		12/17/20 17:15	12/19/20 00:17	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		12/17/20 17:15	12/19/20 00:17	1
4-Chloroaniline	ND		10	4.0	ug/L		12/17/20 17:15	12/19/20 00:17	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		12/17/20 17:15	12/19/20 00:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*85*		*10 - 150*	*12/17/20 17:15*	*12/19/20 00:17*	*1*
2-Fluorobiphenyl (Surr)	*72*		*44 - 102*	*12/17/20 17:15*	*12/19/20 00:17*	*1*
2-Fluorophenol (Surr)	*43*		*10 - 84*	*12/17/20 17:15*	*12/19/20 00:17*	*1*
Nitrobenzene-d5 (Surr)	*72*		*23 - 128*	*12/17/20 17:15*	*12/19/20 00:17*	*1*
p-Terphenyl-d14 (Surr)	*87*		*31 - 113*	*12/17/20 17:15*	*12/19/20 00:17*	*1*
Phenol-d5 (Surr)	*32*		*10 - 67*	*12/17/20 17:15*	*12/19/20 00:17*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-77728/2-A
Matrix: Water
Analysis Batch: 78325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77728

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	50.0	40.3		ug/L		81	50 - 110
2,4-Dichlorophenol	50.0	43.5		ug/L		87	51 - 123
2,4-Dimethylphenol	50.0	42.6		ug/L		85	43 - 102
2,4-Dinitrophenol	100	79.3		ug/L		79	30 - 143
2,4-Dinitrotoluene	50.0	45.8		ug/L		92	52 - 128
2,4,5-Trichlorophenol	50.0	47.3		ug/L		95	59 - 126
2,4,6-Trichlorophenol	50.0	46.5		ug/L		93	59 - 129
2,2'-oxybis[1-chloropropane]	50.0	34.9		ug/L		70	41 - 118
Di-n-butyl phthalate	50.0	31.7		ug/L		63	43 - 118
Di-n-octyl phthalate	50.0	41.7		ug/L		83	48 - 129
Benzo[a]anthracene	50.0	49.3		ug/L		99	61 - 126
Benzo[a]pyrene	50.0	42.6		ug/L		85	60 - 116
Benzo[b]fluoranthene	50.0	44.4		ug/L		89	61 - 119
Benzo[g,h,i]perylene	50.0	37.8		ug/L		76	54 - 120
Benzo[k]fluoranthene	50.0	51.4		ug/L		103	69 - 122
Acenaphthene	50.0	42.5		ug/L		85	52 - 114
Acenaphthylene	50.0	49.7		ug/L		99	55 - 117
Acetophenone	50.0	40.2		ug/L		80	51 - 119
Anthracene	50.0	46.0		ug/L		92	61 - 117
Atrazine	50.4	45.9		ug/L		91	71 - 133
Benzaldehyde	50.5	32.5		ug/L		64	39 - 119
Butylbenzylphthalate	50.0	13.4		ug/L		27	11 - 125
Caprolactam	50.5	11.0		ug/L		22	12 - 40
Carbazole	50.0	45.9		ug/L		92	64 - 127
Chrysene	50.0	50.2		ug/L		100	65 - 121
Dibenz(a,h)anthracene	50.0	36.2		ug/L		72	57 - 124
Dibenzofuran	50.0	44.5		ug/L		89	60 - 112
Diethyl phthalate	50.0	22.9		ug/L		46	19 - 121
Dimethyl phthalate	50.0	6.96		ug/L		14	10 - 134
Hexachlorobenzene	50.0	44.5		ug/L		89	55 - 123
Hexachlorobutadiene	50.0	33.2		ug/L		66	20 - 108
Hexachlorocyclopentadiene	50.0	22.1	*+	ug/L		44	10 - 42
Hexachloroethane	50.0	30.1		ug/L		60	22 - 88
Fluoranthene	50.0	45.8		ug/L		92	63 - 122
Fluorene	50.0	45.7		ug/L		91	56 - 115
Indeno[1,2,3-cd]pyrene	50.0	35.5		ug/L		71	52 - 121
Isophorone	50.0	43.5		ug/L		87	55 - 122
N-Nitrosodi-n-propylamine	50.0	40.7		ug/L		81	52 - 123
N-Nitrosodiphenylamine	42.5	40.0		ug/L		94	60 - 126
Naphthalene	50.0	38.4		ug/L		77	51 - 102
Nitrobenzene	50.0	40.0		ug/L		80	52 - 119
Pentachlorophenol	100	82.0		ug/L		82	54 - 131
Phenanthrene	50.0	45.4		ug/L		91	65 - 113
Phenol	50.0	22.1		ug/L		44	22 - 69
Pyrene	50.0	46.1		ug/L		92	65 - 115
2-Chloronaphthalene	50.0	40.4		ug/L		81	43 - 110
2-Chlorophenol	50.0	41.2		ug/L		82	46 - 109
2-Methylnaphthalene	50.0	40.5		ug/L		81	45 - 108

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-77728/2-A
Matrix: Water
Analysis Batch: 78325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77728

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylphenol	50.0	38.8		ug/L		78	41 - 113
2-Nitroaniline	50.0	46.9		ug/L		94	60 - 123
2-Nitrophenol	50.0	44.0		ug/L		88	53 - 123
3,3'-Dichlorobenzidine	100	78.3		ug/L		78	42 - 107
3-Nitroaniline	50.0	43.4		ug/L		87	54 - 112
4,6-Dinitro-2-methylphenol	100	82.8		ug/L		83	49 - 138
4-Bromophenyl-phenylether	50.0	44.9		ug/L		90	54 - 121
4-Methylphenol	50.0	36.4		ug/L		73	41 - 109
4-Nitroaniline	50.0	41.4		ug/L		83	49 - 107
4-Nitrophenol	100	48.0		ug/L		48	23 - 89
Bis(2-chloroethoxy)methane	50.0	40.1		ug/L		80	51 - 120
Bis(2-chloroethyl)ether	50.0	39.3		ug/L		79	50 - 110
Bis(2-ethylhexyl) phthalate	50.0	43.3		ug/L		87	50 - 127
2,6-Dinitrotoluene	50.0	47.1		ug/L		94	61 - 121
4-Chloro-3-methylphenol	50.0	42.3		ug/L		85	52 - 126
4-Chloroaniline	50.0	34.8		ug/L		70	45 - 93
4-Chlorophenyl-phenyl ether	50.0	44.1		ug/L		88	47 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*93*		*10 - 150*
2-Fluorobiphenyl (Surr)	*77*		*44 - 102*
2-Fluorophenol (Surr)	*54*		*10 - 84*
Nitrobenzene-d5 (Surr)	*76*		*23 - 128*
p-Terphenyl-d14 (Surr)	*90*		*31 - 113*
Phenol-d5 (Surr)	*41*		*10 - 67*

Lab Sample ID: MB 410-77736/1-A
Matrix: Water
Analysis Batch: 77975

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77736

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
2,4-Dinitrophenol	ND		30	14	ug/L		12/17/20 17:15	12/18/20 10:24	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Benzo[a]pyrene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Acenaphthene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Acenaphthylene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-77736/1-A
Matrix: Water
Analysis Batch: 77975

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77736

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetophenone	ND		10	4.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
Anthracene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Atrazine	ND		5.0	2.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
Benzaldehyde	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
Caprolactam	ND		11	5.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
Carbazole	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
Chrysene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Dibenzofuran	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
Diethyl phthalate	ND		5.0	2.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
Hexachlorocyclopentadiene	ND		11	5.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
Hexachloroethane	ND		5.0	1.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
Fluoranthene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Fluorene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Isophorone	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		12/17/20 17:15	12/18/20 10:24	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		12/17/20 17:15	12/18/20 10:24	1
Naphthalene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Nitrobenzene	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
Pentachlorophenol	ND		5.0	1.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
Phenanthrene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Phenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
Pyrene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		12/17/20 17:15	12/18/20 10:24	1
2-Chlorophenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		12/17/20 17:15	12/18/20 10:24	1
2-Methylphenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
2-Nitroaniline	ND		5.0	2.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
2-Nitrophenol	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
3-Nitroaniline	ND		7.0	3.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
4-Methylphenol	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
4-Nitroaniline	ND		3.0	0.90	ug/L		12/17/20 17:15	12/18/20 10:24	1
4-Nitrophenol	ND		30	10	ug/L		12/17/20 17:15	12/18/20 10:24	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		12/17/20 17:15	12/18/20 10:24	1
4-Chloroaniline	ND		10	4.0	ug/L		12/17/20 17:15	12/18/20 10:24	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		12/17/20 17:15	12/18/20 10:24	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-77736/1-A
Matrix: Water
Analysis Batch: 77975

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77736

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	88		10 - 150	12/17/20 17:15	12/18/20 10:24	1
2-Fluorobiphenyl (Surr)	67		44 - 102	12/17/20 17:15	12/18/20 10:24	1
2-Fluorophenol (Surr)	43		10 - 84	12/17/20 17:15	12/18/20 10:24	1
Nitrobenzene-d5 (Surr)	72		23 - 128	12/17/20 17:15	12/18/20 10:24	1
p-Terphenyl-d14 (Surr)	92		31 - 113	12/17/20 17:15	12/18/20 10:24	1
Phenol-d5 (Surr)	35		10 - 67	12/17/20 17:15	12/18/20 10:24	1

Lab Sample ID: LCS 410-77736/2-A
Matrix: Water
Analysis Batch: 77975

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77736

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	50.0	40.5		ug/L		81	50 - 110
2,4-Dichlorophenol	50.0	43.4		ug/L		87	51 - 123
2,4-Dimethylphenol	50.0	45.0		ug/L		90	43 - 102
2,4-Dinitrophenol	100	94.2		ug/L		94	30 - 143
2,4-Dinitrotoluene	50.0	50.6		ug/L		101	52 - 128
2,4,5-Trichlorophenol	50.0	46.6		ug/L		93	59 - 126
2,4,6-Trichlorophenol	50.0	45.9		ug/L		92	59 - 129
2,2'-oxybis[1-chloropropane]	50.0	43.3		ug/L		87	41 - 118
Di-n-butyl phthalate	50.0	47.0		ug/L		94	43 - 118
Di-n-octyl phthalate	50.0	50.3		ug/L		101	48 - 129
Benzo[a]anthracene	50.0	51.6		ug/L		103	61 - 126
Benzo[a]pyrene	50.0	45.2		ug/L		90	60 - 116
Benzo[b]fluoranthene	50.0	45.7		ug/L		91	61 - 119
Benzo[g,h,i]perylene	50.0	46.7		ug/L		93	54 - 120
Benzo[k]fluoranthene	50.0	52.6		ug/L		105	69 - 122
Acenaphthene	50.0	45.1		ug/L		90	52 - 114
Acenaphthylene	50.0	50.5		ug/L		101	55 - 117
Acetophenone	50.0	45.4		ug/L		91	51 - 119
Anthracene	50.0	48.3		ug/L		97	61 - 117
Atrazine	50.4	51.6		ug/L		102	71 - 133
Benzaldehyde	50.5	41.4		ug/L		82	39 - 119
Butylbenzylphthalate	50.0	28.5		ug/L		57	11 - 125
Caprolactam	50.5	12.5		ug/L		25	12 - 40
Carbazole	50.0	54.3		ug/L		109	64 - 127
Chrysene	50.0	51.5		ug/L		103	65 - 121
Dibenz(a,h)anthracene	50.0	48.3		ug/L		97	57 - 124
Dibenzofuran	50.0	45.9		ug/L		92	60 - 112
Diethyl phthalate	50.0	35.5		ug/L		71	19 - 121
Dimethyl phthalate	50.0	18.7		ug/L		37	10 - 134
Hexachlorobenzene	50.0	45.4		ug/L		91	55 - 123
Hexachlorobutadiene	50.0	31.1		ug/L		62	20 - 108
Hexachlorocyclopentadiene	50.0	21.2		ug/L		42	10 - 42
Hexachloroethane	50.0	33.1		ug/L		66	22 - 88
Fluoranthene	50.0	53.5		ug/L		107	63 - 122
Fluorene	50.0	48.8		ug/L		98	56 - 115
Indeno[1,2,3-cd]pyrene	50.0	44.0		ug/L		88	52 - 121

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-77736/2-A
Matrix: Water
Analysis Batch: 77975

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77736

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isophorone	50.0	49.4		ug/L		99	55 - 122
N-Nitrosodi-n-propylamine	50.0	46.7		ug/L		93	52 - 123
N-Nitrosodiphenylamine	42.5	44.9		ug/L		106	60 - 126
Naphthalene	50.0	41.4		ug/L		83	51 - 102
Nitrobenzene	50.0	42.3		ug/L		85	52 - 119
Pentachlorophenol	100	100		ug/L		100	54 - 131
Phenanthrene	50.0	47.8		ug/L		96	65 - 113
Phenol	50.0	23.9		ug/L		48	22 - 69
Pyrene	50.0	47.5		ug/L		95	65 - 115
2-Chloronaphthalene	50.0	40.5		ug/L		81	43 - 110
2-Chlorophenol	50.0	42.7		ug/L		85	46 - 109
2-Methylnaphthalene	50.0	43.6		ug/L		87	45 - 108
2-Methylphenol	50.0	40.8		ug/L		82	41 - 113
2-Nitroaniline	50.0	47.7		ug/L		95	60 - 123
2-Nitrophenol	50.0	42.8		ug/L		86	53 - 123
3,3'-Dichlorobenzidine	100	89.5		ug/L		89	42 - 107
3-Nitroaniline	50.0	42.4		ug/L		85	54 - 112
4,6-Dinitro-2-methylphenol	100	98.1		ug/L		98	49 - 138
4-Bromophenyl-phenylether	50.0	47.3		ug/L		95	54 - 121
4-Methylphenol	50.0	36.2		ug/L		72	41 - 109
4-Nitroaniline	50.0	46.5		ug/L		93	49 - 107
4-Nitrophenol	100	51.8		ug/L		52	23 - 89
Bis(2-chloroethoxy)methane	50.0	45.6		ug/L		91	51 - 120
Bis(2-chloroethyl)ether	50.0	44.4		ug/L		89	50 - 110
Bis(2-ethylhexyl) phthalate	50.0	53.0		ug/L		106	50 - 127
2,6-Dinitrotoluene	50.0	49.6		ug/L		99	61 - 121
4-Chloro-3-methylphenol	50.0	47.1		ug/L		94	52 - 126
4-Chloroaniline	50.0	36.5		ug/L		73	45 - 93
4-Chlorophenyl-phenyl ether	50.0	43.9		ug/L		88	47 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*97*		*10 - 150*
2-Fluorobiphenyl (Surr)	*76*		*44 - 102*
2-Fluorophenol (Surr)	*55*		*10 - 84*
Nitrobenzene-d5 (Surr)	*80*		*23 - 128*
p-Terphenyl-d14 (Surr)	*92*		*31 - 113*
Phenol-d5 (Surr)	*44*		*10 - 67*

Lab Sample ID: LCSD 410-77736/3-A
Matrix: Water
Analysis Batch: 77975

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 77736

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	50.0	39.0		ug/L		78	50 - 110	4	30
2,4-Dichlorophenol	50.0	43.6		ug/L		87	51 - 123	0	30
2,4-Dimethylphenol	50.0	45.6		ug/L		91	43 - 102	1	30
2,4-Dinitrophenol	100	81.8		ug/L		82	30 - 143	14	30
2,4-Dinitrotoluene	50.0	50.5		ug/L		101	52 - 128	0	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-77736/3-A
Matrix: Water
Analysis Batch: 77975

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 77736

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	50.0	47.4		ug/L		95	59 - 126	2	30
2,4,6-Trichlorophenol	50.0	45.8		ug/L		92	59 - 129	0	30
2,2'-oxybis[1-chloropropane]	50.0	41.7		ug/L		83	41 - 118	4	30
Di-n-butyl phthalate	50.0	41.4		ug/L		83	43 - 118	13	30
Di-n-octyl phthalate	50.0	48.6		ug/L		97	48 - 129	3	30
Benzo[a]anthracene	50.0	50.0		ug/L		100	61 - 126	3	30
Benzo[a]pyrene	50.0	43.2		ug/L		86	60 - 116	4	30
Benzo[b]fluoranthene	50.0	44.9		ug/L		90	61 - 119	2	30
Benzo[g,h,i]perylene	50.0	45.5		ug/L		91	54 - 120	3	30
Benzo[k]fluoranthene	50.0	52.2		ug/L		104	69 - 122	1	30
Acenaphthene	50.0	42.8		ug/L		86	52 - 114	5	30
Acenaphthylene	50.0	50.0		ug/L		100	55 - 117	1	30
Acetophenone	50.0	43.2		ug/L		86	51 - 119	5	30
Anthracene	50.0	46.7		ug/L		93	61 - 117	3	30
Atrazine	50.4	49.5		ug/L		98	71 - 133	4	30
Benzaldehyde	50.5	36.6		ug/L		73	39 - 119	12	30
Butylbenzylphthalate	50.0	19.0	*1	ug/L		38	11 - 125	40	30
Caprolactam	50.5	13.5		ug/L		27	12 - 40	8	30
Carbazole	50.0	52.9		ug/L		106	64 - 127	3	30
Chrysene	50.0	49.2		ug/L		98	65 - 121	5	30
Dibenz(a,h)anthracene	50.0	46.4		ug/L		93	57 - 124	4	30
Dibenzofuran	50.0	45.6		ug/L		91	60 - 112	1	30
Diethyl phthalate	50.0	28.8		ug/L		58	19 - 121	21	30
Dimethyl phthalate	50.0	10.2	*1	ug/L		20	10 - 134	59	30
Hexachlorobenzene	50.0	42.8		ug/L		86	55 - 123	6	30
Hexachlorobutadiene	50.0	31.1		ug/L		62	20 - 108	0	30
Hexachlorocyclopentadiene	50.0	22.1	*+	ug/L		44	10 - 42	4	30
Hexachloroethane	50.0	31.6		ug/L		63	22 - 88	5	30
Fluoranthene	50.0	51.7		ug/L		103	63 - 122	3	30
Fluorene	50.0	46.7		ug/L		93	56 - 115	4	30
Indeno[1,2,3-cd]pyrene	50.0	42.5		ug/L		85	52 - 121	3	30
Isophorone	50.0	49.2		ug/L		98	55 - 122	0	30
N-Nitrosodi-n-propylamine	50.0	44.7		ug/L		89	52 - 123	5	30
N-Nitrosodiphenylamine	42.5	42.1		ug/L		99	60 - 126	6	30
Naphthalene	50.0	40.1		ug/L		80	51 - 102	3	30
Nitrobenzene	50.0	41.3		ug/L		83	52 - 119	2	30
Pentachlorophenol	100	96.7		ug/L		97	54 - 131	4	30
Phenanthrene	50.0	46.1		ug/L		92	65 - 113	4	30
Phenol	50.0	25.2		ug/L		50	22 - 69	5	30
Pyrene	50.0	45.6		ug/L		91	65 - 115	4	30
2-Chloronaphthalene	50.0	40.1		ug/L		80	43 - 110	1	30
2-Chlorophenol	50.0	42.1		ug/L		84	46 - 109	1	30
2-Methylnaphthalene	50.0	42.1		ug/L		84	45 - 108	3	30
2-Methylphenol	50.0	40.7		ug/L		81	41 - 113	0	30
2-Nitroaniline	50.0	48.8		ug/L		98	60 - 123	2	30
2-Nitrophenol	50.0	44.4		ug/L		89	53 - 123	4	30
3,3'-Dichlorobenzidine	100	86.4		ug/L		86	42 - 107	3	30
3-Nitroaniline	50.0	46.9		ug/L		94	54 - 112	10	30
4,6-Dinitro-2-methylphenol	100	93.3		ug/L		93	49 - 138	5	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-77736/3-A
Matrix: Water
Analysis Batch: 77975

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 77736

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Bromophenyl-phenylether			50.0	44.1		ug/L		88	54 - 121	7	30
4-Methylphenol			50.0	35.8		ug/L		72	41 - 109	1	30
4-Nitroaniline			50.0	50.5		ug/L		101	49 - 107	8	30
4-Nitrophenol			100	56.2		ug/L		56	23 - 89	8	30
Bis(2-chloroethoxy)methane			50.0	44.7		ug/L		89	51 - 120	2	30
Bis(2-chloroethyl)ether			50.0	43.5		ug/L		87	50 - 110	2	30
Bis(2-ethylhexyl) phthalate			50.0	51.4		ug/L		103	50 - 127	3	30
2,6-Dinitrotoluene			50.0	50.2		ug/L		100	61 - 121	1	30
4-Chloro-3-methylphenol			50.0	47.6		ug/L		95	52 - 126	1	30
4-Chloroaniline			50.0	42.8		ug/L		86	45 - 93	16	30
4-Chlorophenyl-phenyl ether			50.0	44.1		ug/L		88	47 - 121	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*96*		*10 - 150*
2-Fluorobiphenyl (Surr)	*75*		*44 - 102*
2-Fluorophenol (Surr)	*55*		*10 - 84*
Nitrobenzene-d5 (Surr)	*78*		*23 - 128*
p-Terphenyl-d14 (Surr)	*89*		*31 - 113*
Phenol-d5 (Surr)	*45*		*10 - 67*

Lab Sample ID: MB 410-80002/1-A
Matrix: Water
Analysis Batch: 80123

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80002

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*72*		*10 - 150*	*12/27/20 00:35*	*12/28/20 11:27*	*1*
2-Fluorobiphenyl (Surr)	*62*		*44 - 102*	*12/27/20 00:35*	*12/28/20 11:27*	*1*
2-Fluorophenol (Surr)	*31*		*10 - 84*	*12/27/20 00:35*	*12/28/20 11:27*	*1*
Nitrobenzene-d5 (Surr)	*62*		*23 - 128*	*12/27/20 00:35*	*12/28/20 11:27*	*1*
p-Terphenyl-d14 (Surr)	*85*		*31 - 113*	*12/27/20 00:35*	*12/28/20 11:27*	*1*
Phenol-d5 (Surr)	*24*		*10 - 67*	*12/27/20 00:35*	*12/28/20 11:27*	*1*

Lab Sample ID: LCS 410-80002/2-A
Matrix: Water
Analysis Batch: 80123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80002

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*86*		*10 - 150*
2-Fluorobiphenyl (Surr)	*69*		*44 - 102*
2-Fluorophenol (Surr)	*44*		*10 - 84*
Nitrobenzene-d5 (Surr)	*72*		*23 - 128*
p-Terphenyl-d14 (Surr)	*91*		*31 - 113*
Phenol-d5 (Surr)	*34*		*10 - 67*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 410-77079/1-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77079

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 06:21	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		12/15/20 17:30	12/16/20 06:21	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		12/15/20 17:30	12/16/20 06:21	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		12/15/20 17:30	12/16/20 06:21	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		12/15/20 17:30	12/16/20 06:21	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endosulfan sulfate (1C)	ND		0.030	0.0058	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endrin (1C)	ND		0.030	0.0081	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		12/15/20 17:30	12/16/20 06:21	1
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		12/15/20 17:30	12/16/20 06:21	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 06:21	1
gamma-Chlordane (1C)	ND		0.040	0.0070	ug/L		12/15/20 17:30	12/16/20 06:21	1
Heptachlor (1C)	ND		0.020	0.0020	ug/L		12/15/20 17:30	12/16/20 06:21	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		12/15/20 17:30	12/16/20 06:21	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		12/15/20 17:30	12/16/20 06:21	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		12/15/20 17:30	12/16/20 06:21	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		12/15/20 17:30	12/16/20 06:21	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		12/15/20 17:30	12/16/20 06:21	1
p,p'-DDT (1C)	ND		0.030	0.0052	ug/L		12/15/20 17:30	12/16/20 06:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*55*		*32 - 149*	*12/15/20 17:30*	*12/16/20 06:21*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*58*		*32 - 149*	*12/15/20 17:30*	*12/16/20 06:21*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*58*		*29 - 129*	*12/15/20 17:30*	*12/16/20 06:21*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*60*		*29 - 129*	*12/15/20 17:30*	*12/16/20 06:21*	*1*

Lab Sample ID: LCS 410-77079/2-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77079

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin (1C)	0.100	0.0548		ug/L		55	28 - 119
alpha-BHC (2C)	0.101	0.0902		ug/L		89	47 - 132
beta-BHC (1C)	0.100	0.0948		ug/L		95	27 - 143
delta-BHC (2C)	0.101	0.102		ug/L		101	28 - 141
Dieldrin (2C)	0.201	0.178		ug/L		88	31 - 145
Endosulfan I (1C)	0.101	0.0866		ug/L		85	40 - 138
Endosulfan II (2C)	0.200	0.181		ug/L		90	27 - 138
Endosulfan sulfate (2C)	0.201	0.184		ug/L		92	41 - 133
Endrin (1C)	0.201	0.181		ug/L		90	35 - 143
Endrin aldehyde (2C)	0.201	0.177		ug/L		88	40 - 135
Endrin ketone (2C)	0.201	0.184		ug/L		92	44 - 136
gamma-BHC (Lindane) (2C)	0.100	0.0911		ug/L		91	29 - 136
Heptachlor (2C)	0.101	0.0587		ug/L		58	38 - 135
Heptachlor epoxide (2C)	0.100	0.0874		ug/L		87	28 - 146
Methoxychlor (2C)	1.01	1.01		ug/L		100	39 - 143

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 410-77079/2-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77079

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
p,p'-DDD (2C)			0.201	0.182		ug/L		90	42 - 148		
p,p'-DDE (1C)			0.201	0.145		ug/L		72	22 - 138		
p,p'-DDT (2C)			0.201	0.182		ug/L		91	40 - 145		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*55*		*32 - 149*
DCB Decachlorobiphenyl (Surr) (2C)	*57*		*32 - 149*
Tetrachloro-m-xylene (Surr) (1C)	*61*		*29 - 129*
Tetrachloro-m-xylene (Surr) (2C)	*64*		*29 - 129*

Lab Sample ID: LCSD 410-77079/3-A
Matrix: Water
Analysis Batch: 77299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 77079

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin (2C)			0.100	0.0500		ug/L		50	28 - 119	9	30
alpha-BHC (2C)			0.101	0.0841		ug/L		83	47 - 132	7	30
beta-BHC (2C)			0.100	0.0895		ug/L		90	27 - 143	6	30
delta-BHC (2C)			0.101	0.0863		ug/L		85	28 - 141	16	30
Dieldrin (2C)			0.201	0.174		ug/L		86	31 - 145	2	30
Endosulfan I (2C)			0.101	0.0849		ug/L		84	40 - 138	2	30
Endosulfan II (2C)			0.200	0.173		ug/L		86	27 - 138	5	30
Endosulfan sulfate (1C)			0.201	0.167		ug/L		83	41 - 133	10	30
Endrin (2C)			0.201	0.163		ug/L		81	35 - 143	10	30
Endrin aldehyde (2C)			0.201	0.163		ug/L		81	40 - 135	8	20
Endrin ketone (2C)			0.201	0.171		ug/L		85	44 - 136	7	30
gamma-BHC (Lindane) (1C)			0.100	0.0878		ug/L		88	29 - 136	4	30
Heptachlor (2C)			0.101	0.0543		ug/L		54	38 - 135	8	30
Heptachlor epoxide (2C)			0.100	0.0860		ug/L		86	28 - 146	2	30
Methoxychlor (2C)			1.01	0.937		ug/L		93	39 - 143	8	30
p,p'-DDD (2C)			0.201	0.180		ug/L		89	42 - 148	1	30
p,p'-DDE (1C)			0.201	0.145		ug/L		72	22 - 138	0	30
p,p'-DDT (2C)			0.201	0.178		ug/L		88	40 - 145	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*47*		*32 - 149*
DCB Decachlorobiphenyl (Surr) (2C)	*49*		*32 - 149*
Tetrachloro-m-xylene (Surr) (1C)	*60*		*29 - 129*
Tetrachloro-m-xylene (Surr) (2C)	*58*		*29 - 129*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 410-78309/1-A
Matrix: Water
Analysis Batch: 78661

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 78309

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		12/18/20 20:42	12/21/20 08:20	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		12/18/20 20:42	12/21/20 08:20	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		12/18/20 20:42	12/21/20 08:20	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		12/18/20 20:42	12/21/20 08:20	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		12/18/20 20:42	12/21/20 08:20	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		12/18/20 20:42	12/21/20 08:20	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		12/18/20 20:42	12/21/20 08:20	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		12/18/20 20:42	12/21/20 08:20	1
Endosulfan sulfate (1C)	ND		0.030	0.0058	ug/L		12/18/20 20:42	12/21/20 08:20	1
Endrin (1C)	ND		0.030	0.0081	ug/L		12/18/20 20:42	12/21/20 08:20	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		12/18/20 20:42	12/21/20 08:20	1
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		12/18/20 20:42	12/21/20 08:20	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		12/18/20 20:42	12/21/20 08:20	1
gamma-Chlordane (1C)	ND		0.040	0.0070	ug/L		12/18/20 20:42	12/21/20 08:20	1
Heptachlor (1C)	ND		0.020	0.0020	ug/L		12/18/20 20:42	12/21/20 08:20	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		12/18/20 20:42	12/21/20 08:20	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		12/18/20 20:42	12/21/20 08:20	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		12/18/20 20:42	12/21/20 08:20	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		12/18/20 20:42	12/21/20 08:20	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		12/18/20 20:42	12/21/20 08:20	1
p,p'-DDT (1C)	ND		0.030	0.0052	ug/L		12/18/20 20:42	12/21/20 08:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*68*		*32 - 149*	*12/18/20 20:42*	*12/21/20 08:20*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*76*		*32 - 149*	*12/18/20 20:42*	*12/21/20 08:20*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*68*		*29 - 129*	*12/18/20 20:42*	*12/21/20 08:20*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*64*		*29 - 129*	*12/18/20 20:42*	*12/21/20 08:20*	*1*

Lab Sample ID: LCS 410-78309/2-A
Matrix: Water
Analysis Batch: 78661

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 78309

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin (2C)	0.100	0.0454		ug/L		45	28 - 119
alpha-BHC (1C)	0.101	0.0936		ug/L		92	47 - 132
beta-BHC (1C)	0.100	0.0937		ug/L		94	27 - 143
delta-BHC (2C)	0.101	0.0952		ug/L		94	28 - 141
Dieldrin (1C)	0.201	0.210		ug/L		104	31 - 145
Endosulfan I (1C)	0.101	0.0998		ug/L		99	40 - 138
Endosulfan II (1C)	0.200	0.206		ug/L		103	27 - 138
Endosulfan sulfate (1C)	0.201	0.188		ug/L		93	41 - 133
Endrin (1C)	0.201	0.206		ug/L		102	35 - 143
Endrin aldehyde (1C)	0.201	0.178		ug/L		88	40 - 135
Endrin ketone (1C)	0.201	0.202		ug/L		100	44 - 136
gamma-BHC (Lindane) (1C)	0.100	0.0967		ug/L		97	29 - 136
Heptachlor (1C)	0.101	0.0611		ug/L		60	38 - 135
Heptachlor epoxide (1C)	0.100	0.0996		ug/L		100	28 - 146
Methoxychlor (1C)	1.01	1.19		ug/L		118	39 - 143

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 410-78309/2-A
Matrix: Water
Analysis Batch: 78661

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 78309

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
p,p'-DDD (1C)			0.201	0.220		ug/L		109	42 - 148		
p,p'-DDE (1C)			0.201	0.177		ug/L		88	22 - 138		
p,p'-DDT (1C)			0.201	0.226		ug/L		112	40 - 145		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*84*		*32 - 149*
DCB Decachlorobiphenyl (Surr) (2C)	*68*		*32 - 149*
Tetrachloro-m-xylene (Surr) (1C)	*66*		*29 - 129*
Tetrachloro-m-xylene (Surr) (2C)	*63*		*29 - 129*

Lab Sample ID: LCSD 410-78309/3-A
Matrix: Water
Analysis Batch: 78661

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 78309

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin (2C)			0.100	0.0472		ug/L		47	28 - 119	4	30
alpha-BHC (2C)			0.101	0.0887		ug/L		88	47 - 132	5	30
beta-BHC (1C)			0.100	0.0867		ug/L		87	27 - 143	8	30
delta-BHC (2C)			0.101	0.0903		ug/L		89	28 - 141	5	30
Dieldrin (2C)			0.201	0.197		ug/L		98	31 - 145	6	30
Endosulfan I (2C)			0.101	0.0982		ug/L		97	40 - 138	2	30
Endosulfan II (2C)			0.200	0.195		ug/L		98	27 - 138	5	30
Endosulfan sulfate (2C)			0.201	0.188		ug/L		93	41 - 133	0	30
Endrin (2C)			0.201	0.196		ug/L		98	35 - 143	5	30
Endrin aldehyde (2C)			0.201	0.187		ug/L		93	40 - 135	5	20
Endrin ketone (2C)			0.201	0.191		ug/L		95	44 - 136	6	30
gamma-BHC (Lindane) (2C)			0.100	0.0880		ug/L		88	29 - 136	10	30
Heptachlor (2C)			0.101	0.0577		ug/L		57	38 - 135	6	30
Heptachlor epoxide (2C)			0.100	0.0930		ug/L		93	28 - 146	7	30
Methoxychlor (2C)			1.01	1.14		ug/L		113	39 - 143	4	30
p,p'-DDD (2C)			0.201	0.194		ug/L		96	42 - 148	13	30
p,p'-DDE (2C)			0.201	0.168		ug/L		84	22 - 138	5	30
p,p'-DDT (2C)			0.201	0.230		ug/L		115	40 - 145	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*87*		*32 - 149*
DCB Decachlorobiphenyl (Surr) (2C)	*71*		*32 - 149*
Tetrachloro-m-xylene (Surr) (1C)	*57*		*29 - 129*
Tetrachloro-m-xylene (Surr) (2C)	*58*		*29 - 129*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 410-76248/1-A
Matrix: Water
Analysis Batch: 77784

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76248

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 14:31	1
Aluminum	ND		0.30	0.15	mg/L		12/14/20 06:02	12/17/20 14:31	1
Antimony	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 14:31	1
Barium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 14:31	1
Beryllium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 14:31	1
Cadmium	ND		0.0050	0.0010	mg/L		12/14/20 06:02	12/17/20 14:31	1
Calcium	ND		0.50	0.096	mg/L		12/14/20 06:02	12/17/20 14:31	1
Chromium	ND		0.015	0.0016	mg/L		12/14/20 06:02	12/17/20 14:31	1
Cobalt	ND		0.0050	0.0015	mg/L		12/14/20 06:02	12/17/20 14:31	1
Copper	ND		0.020	0.012	mg/L		12/14/20 06:02	12/17/20 14:31	1
Iron	ND		0.20	0.040	mg/L		12/14/20 06:02	12/17/20 14:31	1
Lead	ND		0.015	0.0071	mg/L		12/14/20 06:02	12/17/20 14:31	1
Magnesium	ND		0.10	0.040	mg/L		12/14/20 06:02	12/17/20 14:31	1
Manganese	ND		0.010	0.0030	mg/L		12/14/20 06:02	12/17/20 14:31	1
Nickel	ND		0.010	0.0021	mg/L		12/14/20 06:02	12/17/20 14:31	1
Zinc	ND		0.020	0.0037	mg/L		12/14/20 06:02	12/17/20 14:31	1
Selenium	ND		0.050	0.016	mg/L		12/14/20 06:02	12/17/20 14:31	1
Potassium	ND		0.50	0.20	mg/L		12/14/20 06:02	12/17/20 14:31	1
Sodium	ND		1.0	0.24	mg/L		12/14/20 06:02	12/17/20 14:31	1
Thallium	ND		0.030	0.0081	mg/L		12/14/20 06:02	12/17/20 14:31	1
Vanadium	ND		0.010	0.0019	mg/L		12/14/20 06:02	12/17/20 14:31	1

Lab Sample ID: MB 410-76248/1-A
Matrix: Water
Analysis Batch: 77891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76248

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.010	0.0050	mg/L		12/14/20 06:02	12/17/20 21:02	1

Lab Sample ID: LCS 410-76248/2-A
Matrix: Water
Analysis Batch: 77784

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76248

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0678		mg/L		113	80 - 120
Aluminum	0.405	0.424		mg/L		105	80 - 120
Antimony	0.100	0.100		mg/L		100	80 - 120
Barium	0.0100	0.0105		mg/L		105	80 - 120
Beryllium	0.0100	0.00983		mg/L		98	80 - 120
Cadmium	0.0100	0.0102		mg/L		102	80 - 120
Calcium	0.400	0.437	J	mg/L		109	80 - 120
Chromium	0.0300	0.0297		mg/L		99	80 - 120
Cobalt	0.0100	0.0108		mg/L		108	80 - 120
Copper	0.0400	0.0410		mg/L		103	80 - 120
Iron	0.400	0.407		mg/L		102	80 - 120
Lead	0.0300	0.0330		mg/L		110	80 - 120
Magnesium	0.200	0.238		mg/L		119	80 - 120
Manganese	0.0200	0.0213		mg/L		107	80 - 120
Nickel	2.00	2.04		mg/L		102	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-76248/2-A
Matrix: Water
Analysis Batch: 77784

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76248

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	0.404	0.400		mg/L		99	80 - 120
Selenium	0.100	0.104		mg/L		104	80 - 120
Potassium	6.00	5.77		mg/L		96	80 - 120
Sodium	2.00	2.08		mg/L		104	80 - 120
Thallium	0.0600	0.0666		mg/L		111	80 - 120
Vanadium	0.0200	0.0199		mg/L		100	80 - 120

Lab Sample ID: LCS 410-76248/2-A
Matrix: Water
Analysis Batch: 77891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76248

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0200	0.0187		mg/L		93	80 - 120

Lab Sample ID: MB 410-76638/1-A
Matrix: Water
Analysis Batch: 77129

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76638

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 15:15	1
Aluminum	ND		0.31	0.16	mg/L		12/14/20 20:04	12/15/20 15:15	1
Antimony	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 15:15	1
Barium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 15:15	1
Beryllium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 15:15	1
Cadmium	ND		0.0052	0.0010	mg/L		12/14/20 20:04	12/15/20 15:15	1
Calcium	ND		0.52	0.099	mg/L		12/14/20 20:04	12/15/20 15:15	1
Chromium	ND		0.015	0.0016	mg/L		12/14/20 20:04	12/15/20 15:15	1
Cobalt	ND		0.0052	0.0015	mg/L		12/14/20 20:04	12/15/20 15:15	1
Copper	ND		0.021	0.012	mg/L		12/14/20 20:04	12/15/20 15:15	1
Iron	ND		0.21	0.041	mg/L		12/14/20 20:04	12/15/20 15:15	1
Lead	ND		0.015	0.0073	mg/L		12/14/20 20:04	12/15/20 15:15	1
Magnesium	ND		0.10	0.041	mg/L		12/14/20 20:04	12/15/20 15:15	1
Manganese	ND		0.010	0.0031	mg/L		12/14/20 20:04	12/15/20 15:15	1
Nickel	ND		0.010	0.0022	mg/L		12/14/20 20:04	12/15/20 15:15	1
Zinc	ND		0.021	0.0038	mg/L		12/14/20 20:04	12/15/20 15:15	1
Silver	ND		0.010	0.0052	mg/L		12/14/20 20:04	12/15/20 15:15	1
Selenium	ND		0.052	0.016	mg/L		12/14/20 20:04	12/15/20 15:15	1
Potassium	ND		0.52	0.21	mg/L		12/14/20 20:04	12/15/20 15:15	1
Sodium	ND		1.0	0.25	mg/L		12/14/20 20:04	12/15/20 15:15	1
Thallium	ND		0.031	0.0083	mg/L		12/14/20 20:04	12/15/20 15:15	1
Vanadium	ND		0.010	0.0020	mg/L		12/14/20 20:04	12/15/20 15:15	1

Lab Sample ID: LCS 410-76638/2-A
Matrix: Water
Analysis Batch: 77129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0681		mg/L		114	80 - 120
Aluminum	0.405	0.392		mg/L		97	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-76638/2-A
Matrix: Water
Analysis Batch: 77129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.100	0.103		mg/L		103	80 - 120
Barium	0.0100	0.0102		mg/L		102	80 - 120
Beryllium	0.0100	0.0103		mg/L		103	80 - 120
Cadmium	0.0100	0.0109		mg/L		109	80 - 120
Chromium	0.0300	0.0315		mg/L		105	80 - 120
Cobalt	0.0100	0.0109		mg/L		109	80 - 120
Copper	0.0400	0.0409		mg/L		102	80 - 120
Iron	0.400	0.454		mg/L		113	80 - 120
Lead	0.0300	0.0322		mg/L		107	80 - 120
Magnesium	0.200	0.205		mg/L		102	80 - 120
Manganese	0.0200	0.0208		mg/L		104	80 - 120
Nickel	2.00	2.13		mg/L		106	80 - 120
Zinc	0.404	0.423		mg/L		105	80 - 120
Silver	0.0200	0.0198		mg/L		99	80 - 120
Selenium	0.100	0.104		mg/L		104	80 - 120
Thallium	0.0600	0.0645		mg/L		107	80 - 120
Vanadium	0.0200	0.0217		mg/L		109	80 - 120

Lab Sample ID: LCS 410-76638/2-A
Matrix: Water
Analysis Batch: 78578

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	0.400	0.407	J	mg/L		102	80 - 120
Potassium	6.00	5.80		mg/L		97	80 - 120
Sodium	2.00	2.01		mg/L		101	80 - 120

Lab Sample ID: MB 410-76699/1-A
Matrix: Water
Analysis Batch: 78816

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		12/15/20 02:27	12/21/20 09:53	1
Aluminum	ND		0.30	0.15	mg/L		12/15/20 02:27	12/21/20 09:53	1
Antimony	ND		0.050	0.016	mg/L		12/15/20 02:27	12/21/20 09:53	1
Barium	ND		0.0050	0.0010	mg/L		12/15/20 02:27	12/21/20 09:53	1
Beryllium	ND		0.0050	0.0010	mg/L		12/15/20 02:27	12/21/20 09:53	1
Cadmium	ND		0.0050	0.0010	mg/L		12/15/20 02:27	12/21/20 09:53	1
Chromium	ND		0.015	0.0016	mg/L		12/15/20 02:27	12/21/20 09:53	1
Cobalt	ND		0.0050	0.0015	mg/L		12/15/20 02:27	12/21/20 09:53	1
Copper	ND		0.020	0.012	mg/L		12/15/20 02:27	12/21/20 09:53	1
Iron	0.0484	J B	0.20	0.040	mg/L		12/15/20 02:27	12/21/20 09:53	1
Lead	ND		0.015	0.0071	mg/L		12/15/20 02:27	12/21/20 09:53	1
Manganese	ND		0.010	0.0030	mg/L		12/15/20 02:27	12/21/20 09:53	1
Nickel	ND		0.010	0.0021	mg/L		12/15/20 02:27	12/21/20 09:53	1
Zinc	ND		0.020	0.0037	mg/L		12/15/20 02:27	12/21/20 09:53	1
Selenium	ND		0.050	0.016	mg/L		12/15/20 02:27	12/21/20 09:53	1
Potassium	ND		0.50	0.20	mg/L		12/15/20 02:27	12/21/20 09:53	1
Sodium	ND		1.0	0.24	mg/L		12/15/20 02:27	12/21/20 09:53	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-76699/1-A
Matrix: Water
Analysis Batch: 78816

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.030	0.0081	mg/L		12/15/20 02:27	12/21/20 09:53	1
Vanadium	ND		0.010	0.0019	mg/L		12/15/20 02:27	12/21/20 09:53	1

Lab Sample ID: MB 410-76699/1-A
Matrix: Water
Analysis Batch: 78968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.010	0.0050	mg/L		12/15/20 02:27	12/21/20 17:06	1
Potassium	ND		0.50	0.20	mg/L		12/15/20 02:27	12/21/20 17:06	1

Lab Sample ID: LCS 410-76699/2-A
Matrix: Water
Analysis Batch: 78816

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76699

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0660		mg/L		110	80 - 120
Aluminum	0.405	0.394		mg/L		97	80 - 120
Antimony	0.100	0.102		mg/L		102	80 - 120
Barium	0.0100	0.0104		mg/L		104	80 - 120
Beryllium	0.0100	0.00942		mg/L		94	80 - 120
Cadmium	0.0100	0.0103		mg/L		103	80 - 120
Chromium	0.0300	0.0303		mg/L		101	80 - 120
Cobalt	0.0100	0.0109		mg/L		109	80 - 120
Copper	0.0400	0.0416		mg/L		104	80 - 120
Iron	0.400	0.465		mg/L		116	80 - 120
Lead	0.0300	0.0292		mg/L		97	80 - 120
Manganese	0.0200	0.0208		mg/L		104	80 - 120
Nickel	2.00	2.10		mg/L		105	80 - 120
Zinc	0.404	0.398		mg/L		99	80 - 120
Selenium	0.100	0.0907		mg/L		91	80 - 120
Sodium	2.00	2.30		mg/L		115	80 - 120
Thallium	0.0600	0.0657		mg/L		110	80 - 120
Vanadium	0.0200	0.0217		mg/L		109	80 - 120

Lab Sample ID: LCS 410-76699/2-A
Matrix: Water
Analysis Batch: 78968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76699

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0200	0.0210		mg/L		105	80 - 120
Potassium	6.00	5.98		mg/L		100	80 - 120

Lab Sample ID: MB 410-79521/1-A
Matrix: Water
Analysis Batch: 79859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 79521

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		0.50	0.096	mg/L		12/23/20 02:18	12/23/20 10:58	1
Magnesium	ND		0.10	0.040	mg/L		12/23/20 02:18	12/23/20 10:58	1

Method: 6010C - Metals (ICP)

Lab Sample ID: LCS 410-79521/2-A
Matrix: Water
Analysis Batch: 79859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 79521

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	0.400	0.398	J	mg/L		99	80 - 120
Magnesium	0.200	0.205		mg/L		103	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-76402/1-A
Matrix: Water
Analysis Batch: 77136

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76402

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/14/20 10:47	12/15/20 15:41	1

Lab Sample ID: LCS 410-76402/2-A
Matrix: Water
Analysis Batch: 77136

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76402

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	1.10		ug/L		110	80 - 118

Lab Sample ID: MB 410-76418/1-A
Matrix: Water
Analysis Batch: 77240

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76418

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/14/20 11:49	12/15/20 18:19	1

Lab Sample ID: LCS 410-76418/2-A
Matrix: Water
Analysis Batch: 77240

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76418

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	1.05		ug/L		105	80 - 118

Lab Sample ID: MB 410-76875/1-A
Matrix: Water
Analysis Batch: 77240

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76875

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/15/20 10:00	12/15/20 21:23	1

Lab Sample ID: LCS 410-76875/2-A
Matrix: Water
Analysis Batch: 77240

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76875

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.963		ug/L		96	80 - 118

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 410-76894/1-A
Matrix: Water
Analysis Batch: 77240

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/15/20 10:21	12/15/20 22:30	1

Lab Sample ID: LCS 410-76894/2-A
Matrix: Water
Analysis Batch: 77240

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	1.02		ug/L		102	80 - 118

Lab Sample ID: MB 410-78115/1-A
Matrix: Water
Analysis Batch: 78596

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 78115

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		12/18/20 11:29	12/20/20 14:53	1

Lab Sample ID: LCS 410-78115/2-A
Matrix: Water
Analysis Batch: 78596

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 78115

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	1.02		ug/L		102	80 - 118

Method: 2540C-2011 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 410-76976/1
Matrix: Water
Analysis Batch: 76976

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		30	10	mg/L			12/15/20 11:50	1

Lab Sample ID: LCS 410-76976/2
Matrix: Water
Analysis Batch: 76976

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	200	199		mg/L		100	72 - 127

Lab Sample ID: MB 410-77332/1
Matrix: Water
Analysis Batch: 77332

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		30	10	mg/L			12/16/20 06:37	1

Method: 2540C-2011 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 410-77332/2
Matrix: Water
Analysis Batch: 77332

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	200	195		mg/L		98	72 - 127

Lab Sample ID: 410-23806-3 DU
Matrix: Water
Analysis Batch: 77332

Client Sample ID: HOFF MW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	5500		6100	F3	mg/L		10	5

Lab Sample ID: MB 410-78672/1
Matrix: Water
Analysis Batch: 78672

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		30	10	mg/L			12/21/20 06:43	1

Lab Sample ID: LCS 410-78672/2
Matrix: Water
Analysis Batch: 78672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	200	204		mg/L		102	72 - 127

Lab Sample ID: LCSD 410-78672/3
Matrix: Water
Analysis Batch: 78672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids	200	199		mg/L		100	72 - 127	2	23

Lab Sample ID: 410-23806-8 DU
Matrix: Water
Analysis Batch: 78672

Client Sample ID: HOFF IW-2B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	6400	H	7770	F3	mg/L		19	5

Method: 3500 Fe B-2011 - Iron, Ferrous and Ferric

Lab Sample ID: MB 410-76880/14
Matrix: Water
Analysis Batch: 76880

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND		0.10	0.050	mg/L			12/15/20 09:19	1

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Method: 375.4 - Sulfate

Lab Sample ID: MB 410-78786/1
Matrix: Water
Analysis Batch: 78786

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		6.0	2.0	mg/L			12/21/20 09:12	1

Lab Sample ID: LCS 410-78786/7
Matrix: Water
Analysis Batch: 78786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			20.0	19.7		mg/L		99	96 - 104		

GC/MS VOA

Analysis Batch: 78610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	8260C LL	
410-23806-1 - DL	HOFF MW-C	Total/NA	Water	8260C LL	
410-23806-2	HOFF MW-B	Total/NA	Water	8260C LL	
410-23806-2 - DL	HOFF MW-B	Total/NA	Water	8260C LL	
410-23806-3	HOFF MW-13	Total/NA	Water	8260C LL	
410-23806-4	HOFF TB-01-121120	Total/NA	Water	8260C LL	
410-23806-5	HOFF IW-3A	Total/NA	Water	8260C LL	
410-23806-6	HOFF IW-2A	Total/NA	Water	8260C LL	
410-23806-6 - DL	HOFF IW-2A	Total/NA	Water	8260C LL	
410-23806-7	HOFF IW-3B	Total/NA	Water	8260C LL	
410-23806-7 - DL	HOFF IW-3B	Total/NA	Water	8260C LL	
410-23806-8	HOFF IW-2B	Total/NA	Water	8260C LL	
410-23806-8 - DL	HOFF IW-2B	Total/NA	Water	8260C LL	
410-23806-9	HOFF DUP-121120	Total/NA	Water	8260C LL	
410-23806-9 - DL	HOFF DUP-121120	Total/NA	Water	8260C LL	
MB 410-78610/7	Method Blank	Total/NA	Water	8260C LL	
LCS 410-78610/4	Lab Control Sample	Total/NA	Water	8260C LL	
LCSD 410-78610/5	Lab Control Sample Dup	Total/NA	Water	8260C LL	

Analysis Batch: 78998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-3 - DL	HOFF MW-13	Total/NA	Water	8260C LL	
410-23806-5 - DL	HOFF IW-3A	Total/NA	Water	8260C LL	
410-23806-6 - DL2	HOFF IW-2A	Total/NA	Water	8260C LL	
410-23806-7 - RA	HOFF IW-3B	Total/NA	Water	8260C LL	
MB 410-78998/6	Method Blank	Total/NA	Water	8260C LL	
LCS 410-78998/4	Lab Control Sample	Total/NA	Water	8260C LL	

Analysis Batch: 79219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-4	HOFF TB-01-121120	Total/NA	Water	8260C SIM 14D	
MB 410-79219/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-79219/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-79219/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

Analysis Batch: 79617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	8260C SIM 14D	
410-23806-1 - RA	HOFF MW-C	Total/NA	Water	8260C SIM 14D	
410-23806-2	HOFF MW-B	Total/NA	Water	8260C SIM 14D	
410-23806-3	HOFF MW-13	Total/NA	Water	8260C SIM 14D	
410-23806-3 - RA	HOFF MW-13	Total/NA	Water	8260C SIM 14D	
410-23806-5	HOFF IW-3A	Total/NA	Water	8260C SIM 14D	
410-23806-5 - RA	HOFF IW-3A	Total/NA	Water	8260C SIM 14D	
410-23806-6	HOFF IW-2A	Total/NA	Water	8260C SIM 14D	
410-23806-7	HOFF IW-3B	Total/NA	Water	8260C SIM 14D	
410-23806-7 - RA	HOFF IW-3B	Total/NA	Water	8260C SIM 14D	
410-23806-8	HOFF IW-2B	Total/NA	Water	8260C SIM 14D	
410-23806-9	HOFF DUP-121120	Total/NA	Water	8260C SIM 14D	
MB 410-79617/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-79617/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	

GC/MS VOA (Continued)

Analysis Batch: 79617 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 410-79617/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

GC/MS Semi VOA

Prep Batch: 77728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	3510C	
MB 410-77728/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-77728/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 77736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-2	HOFF MW-B	Total/NA	Water	3510C	
410-23806-3 - RA	HOFF MW-13	Total/NA	Water	3510C	
410-23806-3	HOFF MW-13	Total/NA	Water	3510C	
410-23806-5	HOFF IW-3A	Total/NA	Water	3510C	
410-23806-6	HOFF IW-2A	Total/NA	Water	3510C	
410-23806-7	HOFF IW-3B	Total/NA	Water	3510C	
410-23806-8	HOFF IW-2B	Total/NA	Water	3510C	
410-23806-9	HOFF DUP-121120	Total/NA	Water	3510C	
MB 410-77736/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-77736/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-77736/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 77975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-2	HOFF MW-B	Total/NA	Water	8270D	77736
410-23806-3	HOFF MW-13	Total/NA	Water	8270D	77736
410-23806-5	HOFF IW-3A	Total/NA	Water	8270D	77736
410-23806-6	HOFF IW-2A	Total/NA	Water	8270D	77736
410-23806-7	HOFF IW-3B	Total/NA	Water	8270D	77736
410-23806-8	HOFF IW-2B	Total/NA	Water	8270D	77736
410-23806-9	HOFF DUP-121120	Total/NA	Water	8270D	77736
MB 410-77736/1-A	Method Blank	Total/NA	Water	8270D	77736
LCS 410-77736/2-A	Lab Control Sample	Total/NA	Water	8270D	77736
LCSD 410-77736/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	77736

Analysis Batch: 78325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	8270D	77728
MB 410-77728/1-A	Method Blank	Total/NA	Water	8270D	77728
LCS 410-77728/2-A	Lab Control Sample	Total/NA	Water	8270D	77728

Prep Batch: 80002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1 - RE	HOFF MW-C	Total/NA	Water	3510C	
410-23806-3 - RE	HOFF MW-13	Total/NA	Water	3510C	
410-23806-5 - RE	HOFF IW-3A	Total/NA	Water	3510C	
410-23806-6 - RE	HOFF IW-2A	Total/NA	Water	3510C	
MB 410-80002/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-80002/2-A	Lab Control Sample	Total/NA	Water	3510C	

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

GC/MS Semi VOA

Prep Batch: 80003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-7 - RE	HOFF IW-3B	Total/NA	Water	3510C	
MB 410-80003/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-80003/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-80003/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 80123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1 - RE	HOFF MW-C	Total/NA	Water	8270D	80002
410-23806-3 - RE	HOFF MW-13	Total/NA	Water	8270D	80002
MB 410-80002/1-A	Method Blank	Total/NA	Water	8270D	80002
LCS 410-80002/2-A	Lab Control Sample	Total/NA	Water	8270D	80002

Analysis Batch: 80187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-7 - RE	HOFF IW-3B	Total/NA	Water	8270D	80003
MB 410-80003/1-A	Method Blank	Total/NA	Water	8270D	80003
LCS 410-80003/2-A	Lab Control Sample	Total/NA	Water	8270D	80003
LCSD 410-80003/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	80003

Analysis Batch: 80393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-5 - RE	HOFF IW-3A	Total/NA	Water	8270D	80002
410-23806-6 - RE	HOFF IW-2A	Total/NA	Water	8270D	80002

Analysis Batch: 80742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-3 - RA	HOFF MW-13	Total/NA	Water	8270D	77736

GC Semi VOA

Prep Batch: 77079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	3510C	
MB 410-77079/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-77079/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-77079/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 77299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	8081B	77079
MB 410-77079/1-A	Method Blank	Total/NA	Water	8081B	77079
LCS 410-77079/2-A	Lab Control Sample	Total/NA	Water	8081B	77079
LCSD 410-77079/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	77079

Prep Batch: 78309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-2	HOFF MW-B	Total/NA	Water	3510C	
410-23806-3	HOFF MW-13	Total/NA	Water	3510C	
410-23806-5	HOFF IW-3A	Total/NA	Water	3510C	
410-23806-6	HOFF IW-2A	Total/NA	Water	3510C	
410-23806-7	HOFF IW-3B	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Prep Batch: 78309 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-8	HOFF IW-2B	Total/NA	Water	3510C	
410-23806-9	HOFF DUP-121120	Total/NA	Water	3510C	
MB 410-78309/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-78309/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-78309/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 78661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-2	HOFF MW-B	Total/NA	Water	8081B	78309
410-23806-3	HOFF MW-13	Total/NA	Water	8081B	78309
410-23806-5	HOFF IW-3A	Total/NA	Water	8081B	78309
410-23806-6	HOFF IW-2A	Total/NA	Water	8081B	78309
410-23806-7	HOFF IW-3B	Total/NA	Water	8081B	78309
410-23806-8	HOFF IW-2B	Total/NA	Water	8081B	78309
410-23806-9	HOFF DUP-121120	Total/NA	Water	8081B	78309
MB 410-78309/1-A	Method Blank	Total/NA	Water	8081B	78309
LCS 410-78309/2-A	Lab Control Sample	Total/NA	Water	8081B	78309
LCSD 410-78309/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	78309

Metals

Prep Batch: 76248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	3010A	
410-23806-2	HOFF MW-B	Total/NA	Water	3010A	
410-23806-3	HOFF MW-13	Total/NA	Water	3010A	
410-23806-7	HOFF IW-3B	Total/NA	Water	3010A	
410-23806-8	HOFF IW-2B	Total/NA	Water	3010A	
410-23806-9	HOFF DUP-121120	Total/NA	Water	3010A	
MB 410-76248/1-A	Method Blank	Total/NA	Water	3010A	
LCS 410-76248/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 76402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-8	HOFF IW-2B	Total/NA	Water	7470A	
410-23806-9	HOFF DUP-121120	Total/NA	Water	7470A	
MB 410-76402/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-76402/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 76418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	7470A	
410-23806-2	HOFF MW-B	Total/NA	Water	7470A	
410-23806-3	HOFF MW-13	Total/NA	Water	7470A	
410-23806-7	HOFF IW-3B	Total/NA	Water	7470A	
MB 410-76418/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-76418/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 76638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Dissolved	Water	Non-Digest Prep	

Metals (Continued)

Prep Batch: 76638 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-2	HOFF MW-B	Dissolved	Water	Non-Digest Prep	
410-23806-3	HOFF MW-13	Dissolved	Water	Non-Digest Prep	
410-23806-6	HOFF IW-2A	Dissolved	Water	Non-Digest Prep	
410-23806-7	HOFF IW-3B	Dissolved	Water	Non-Digest Prep	
410-23806-8	HOFF IW-2B	Dissolved	Water	Non-Digest Prep	
410-23806-9	HOFF DUP-121120	Dissolved	Water	Non-Digest Prep	
MB 410-76638/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-76638/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	

Prep Batch: 76699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-6	HOFF IW-2A	Total/NA	Water	3010A	
MB 410-76699/1-A	Method Blank	Total/NA	Water	3010A	
LCS 410-76699/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 76875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-6	HOFF IW-2A	Total/NA	Water	7470A	
MB 410-76875/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-76875/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 76889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-2	HOFF MW-B	Dissolved	Water	7470A	

Prep Batch: 76894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-7	HOFF IW-3B	Dissolved	Water	7470A	
410-23806-8	HOFF IW-2B	Dissolved	Water	7470A	
MB 410-76894/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-76894/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 77129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Dissolved	Water	6010C	76638
410-23806-2	HOFF MW-B	Dissolved	Water	6010C	76638
410-23806-3	HOFF MW-13	Dissolved	Water	6010C	76638
410-23806-6	HOFF IW-2A	Dissolved	Water	6010C	76638
410-23806-7	HOFF IW-3B	Dissolved	Water	6010C	76638
410-23806-8	HOFF IW-2B	Dissolved	Water	6010C	76638
410-23806-9	HOFF DUP-121120	Dissolved	Water	6010C	76638
MB 410-76638/1-A	Method Blank	Total/NA	Water	6010C	76638
LCS 410-76638/2-A	Lab Control Sample	Total/NA	Water	6010C	76638

Analysis Batch: 77136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-8	HOFF IW-2B	Total/NA	Water	7470A	76402
410-23806-9	HOFF DUP-121120	Total/NA	Water	7470A	76402
MB 410-76402/1-A	Method Blank	Total/NA	Water	7470A	76402
LCS 410-76402/2-A	Lab Control Sample	Total/NA	Water	7470A	76402

Metals

Analysis Batch: 77240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	7470A	76418
410-23806-2	HOFF MW-B	Total/NA	Water	7470A	76418
410-23806-3	HOFF MW-13	Total/NA	Water	7470A	76418
410-23806-6	HOFF IW-2A	Total/NA	Water	7470A	76875
410-23806-7	HOFF IW-3B	Dissolved	Water	7470A	76894
410-23806-7	HOFF IW-3B	Total/NA	Water	7470A	76418
410-23806-8	HOFF IW-2B	Dissolved	Water	7470A	76894
MB 410-76418/1-A	Method Blank	Total/NA	Water	7470A	76418
MB 410-76875/1-A	Method Blank	Total/NA	Water	7470A	76875
MB 410-76894/1-A	Method Blank	Total/NA	Water	7470A	76894
LCS 410-76418/2-A	Lab Control Sample	Total/NA	Water	7470A	76418
LCS 410-76875/2-A	Lab Control Sample	Total/NA	Water	7470A	76875
LCS 410-76894/2-A	Lab Control Sample	Total/NA	Water	7470A	76894

Analysis Batch: 77718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-2	HOFF MW-B	Dissolved	Water	7470A	76889

Analysis Batch: 77784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	6010C	76248
410-23806-1	HOFF MW-C	Total/NA	Water	6010C	76248
410-23806-1	HOFF MW-C	Total/NA	Water	6010C	76248
410-23806-2	HOFF MW-B	Total/NA	Water	6010C	76248
410-23806-2	HOFF MW-B	Total/NA	Water	6010C	76248
410-23806-3	HOFF MW-13	Total/NA	Water	6010C	76248
410-23806-3	HOFF MW-13	Total/NA	Water	6010C	76248
410-23806-7	HOFF IW-3B	Total/NA	Water	6010C	76248
410-23806-7	HOFF IW-3B	Total/NA	Water	6010C	76248
410-23806-7	HOFF IW-3B	Total/NA	Water	6010C	76248
410-23806-8	HOFF IW-2B	Total/NA	Water	6010C	76248
410-23806-8	HOFF IW-2B	Total/NA	Water	6010C	76248
410-23806-8	HOFF IW-2B	Total/NA	Water	6010C	76248
410-23806-9	HOFF DUP-121120	Total/NA	Water	6010C	76248
410-23806-9	HOFF DUP-121120	Total/NA	Water	6010C	76248
MB 410-76248/1-A	Method Blank	Total/NA	Water	6010C	76248
LCS 410-76248/2-A	Lab Control Sample	Total/NA	Water	6010C	76248

Analysis Batch: 77891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	6010C	76248
410-23806-2	HOFF MW-B	Total/NA	Water	6010C	76248
410-23806-3	HOFF MW-13	Total/NA	Water	6010C	76248
410-23806-7	HOFF IW-3B	Total/NA	Water	6010C	76248
410-23806-8	HOFF IW-2B	Total/NA	Water	6010C	76248
410-23806-9	HOFF DUP-121120	Total/NA	Water	6010C	76248
MB 410-76248/1-A	Method Blank	Total/NA	Water	6010C	76248
LCS 410-76248/2-A	Lab Control Sample	Total/NA	Water	6010C	76248

Metals

Prep Batch: 78115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Dissolved	Water	7470A	
410-23806-3	HOFF MW-13	Dissolved	Water	7470A	
410-23806-6	HOFF IW-2A	Dissolved	Water	7470A	
410-23806-9	HOFF DUP-121120	Dissolved	Water	7470A	
MB 410-78115/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-78115/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 78448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-6	HOFF IW-2A	Total/NA	Water	6010C	76699
410-23806-6	HOFF IW-2A	Total/NA	Water	6010C	76699

Analysis Batch: 78578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Dissolved	Water	6010C	76638
410-23806-1	HOFF MW-C	Dissolved	Water	6010C	76638
410-23806-2	HOFF MW-B	Dissolved	Water	6010C	76638
410-23806-2	HOFF MW-B	Dissolved	Water	6010C	76638
410-23806-3	HOFF MW-13	Dissolved	Water	6010C	76638
410-23806-3	HOFF MW-13	Dissolved	Water	6010C	76638
410-23806-6	HOFF IW-2A	Dissolved	Water	6010C	76638
410-23806-6	HOFF IW-2A	Dissolved	Water	6010C	76638
410-23806-7	HOFF IW-3B	Dissolved	Water	6010C	76638
410-23806-7	HOFF IW-3B	Dissolved	Water	6010C	76638
410-23806-8	HOFF IW-2B	Dissolved	Water	6010C	76638
410-23806-8	HOFF IW-2B	Dissolved	Water	6010C	76638
410-23806-9	HOFF DUP-121120	Dissolved	Water	6010C	76638
410-23806-9	HOFF DUP-121120	Dissolved	Water	6010C	76638
LCS 410-76638/2-A	Lab Control Sample	Total/NA	Water	6010C	76638

Analysis Batch: 78596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Dissolved	Water	7470A	78115
410-23806-3	HOFF MW-13	Dissolved	Water	7470A	78115
410-23806-6	HOFF IW-2A	Dissolved	Water	7470A	78115
410-23806-9	HOFF DUP-121120	Dissolved	Water	7470A	78115
MB 410-78115/1-A	Method Blank	Total/NA	Water	7470A	78115
LCS 410-78115/2-A	Lab Control Sample	Total/NA	Water	7470A	78115

Analysis Batch: 78816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-6	HOFF IW-2A	Total/NA	Water	6010C	76699
410-23806-6	HOFF IW-2A	Total/NA	Water	6010C	76699
410-23806-6	HOFF IW-2A	Total/NA	Water	6010C	76699
MB 410-76699/1-A	Method Blank	Total/NA	Water	6010C	76699
LCS 410-76699/2-A	Lab Control Sample	Total/NA	Water	6010C	76699

Analysis Batch: 78968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-6	HOFF IW-2A	Total/NA	Water	6010C	76699
MB 410-76699/1-A	Method Blank	Total/NA	Water	6010C	76699

Metals (Continued)

Analysis Batch: 78968 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-76699/2-A	Lab Control Sample	Total/NA	Water	6010C	76699

Prep Batch: 79521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-6	HOFF IW-2A	Total/NA	Water	3010A	
MB 410-79521/1-A	Method Blank	Total/NA	Water	3010A	
LCS 410-79521/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 79859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-6	HOFF IW-2A	Total/NA	Water	6010C	79521
MB 410-79521/1-A	Method Blank	Total/NA	Water	6010C	79521
LCS 410-79521/2-A	Lab Control Sample	Total/NA	Water	6010C	79521

Analysis Batch: 80102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-6	HOFF IW-2A	Total/NA	Water	6010C	79521

General Chemistry

Analysis Batch: 76880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	3500 Fe B-2011	
410-23806-2	HOFF MW-B	Total/NA	Water	3500 Fe B-2011	
410-23806-3	HOFF MW-13	Total/NA	Water	3500 Fe B-2011	
410-23806-7	HOFF IW-3B	Total/NA	Water	3500 Fe B-2011	
410-23806-8	HOFF IW-2B	Total/NA	Water	3500 Fe B-2011	
MB 410-76880/14	Method Blank	Total/NA	Water	3500 Fe B-2011	
LCS 410-76880/13	Lab Control Sample	Total/NA	Water	3500 Fe B-2011	

Analysis Batch: 76976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	2540C-2011	
MB 410-76976/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 410-76976/2	Lab Control Sample	Total/NA	Water	2540C-2011	

Analysis Batch: 77332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-2	HOFF MW-B	Total/NA	Water	2540C-2011	
410-23806-3	HOFF MW-13	Total/NA	Water	2540C-2011	
410-23806-7	HOFF IW-3B	Total/NA	Water	2540C-2011	
MB 410-77332/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 410-77332/2	Lab Control Sample	Total/NA	Water	2540C-2011	
410-23806-3 DU	HOFF MW-13	Total/NA	Water	2540C-2011	

Analysis Batch: 78672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-8	HOFF IW-2B	Total/NA	Water	2540C-2011	
MB 410-78672/1	Method Blank	Total/NA	Water	2540C-2011	
LCS 410-78672/2	Lab Control Sample	Total/NA	Water	2540C-2011	
LCSD 410-78672/3	Lab Control Sample Dup	Total/NA	Water	2540C-2011	

General Chemistry (Continued)

Analysis Batch: 78672 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-8 DU	HOFF IW-2B	Total/NA	Water	2540C-2011	

Analysis Batch: 78786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-23806-1	HOFF MW-C	Total/NA	Water	375.4	
410-23806-2	HOFF MW-B	Total/NA	Water	375.4	
410-23806-3	HOFF MW-13	Total/NA	Water	375.4	
410-23806-7	HOFF IW-3B	Total/NA	Water	375.4	
410-23806-8	HOFF IW-2B	Total/NA	Water	375.4	
MB 410-78786/1	Method Blank	Total/NA	Water	375.4	
LCS 410-78786/7	Lab Control Sample	Total/NA	Water	375.4	

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF MW-C

Lab Sample ID: 410-23806-1

Date Collected: 12/10/20 16:50

Matrix: Water

Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		2	78610	12/20/20 22:18	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	20	78610	12/20/20 22:40	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		2	79617	12/23/20 12:16	UJML	ELLE
Total/NA	Analysis	8260C SIM 14D	RA	2	79617	12/23/20 19:25	UJML	ELLE
Total/NA	Prep	3510C			77728	12/17/20 17:15	DFX4	ELLE
Total/NA	Analysis	8270D		1	78325	12/19/20 06:01	W6XI	ELLE
Total/NA	Prep	3510C	RE		80002	12/27/20 00:35	UKQ8	ELLE
Total/NA	Analysis	8270D	RE	1	80123	12/28/20 20:36	UWHS	ELLE
Total/NA	Prep	3510C			77079	12/15/20 17:30	DFX4	ELLE
Total/NA	Analysis	8081B		1	77299	12/16/20 10:58	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		1	77129	12/15/20 16:50	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		5	78578	12/20/20 14:45	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		20	78578	12/20/20 14:48	SB	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 15:29	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		5	77784	12/17/20 16:36	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		10	77784	12/17/20 16:39	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77891	12/17/20 21:35	UCIG	ELLE
Dissolved	Prep	7470A			78115	12/18/20 11:29	UJLA	ELLE
Dissolved	Analysis	7470A		1	78596	12/20/20 15:39	UEFS	ELLE
Total/NA	Prep	7470A			76418	12/14/20 11:49	UJL8	ELLE
Total/NA	Analysis	7470A		1	77240	12/15/20 18:36	UEFS	ELLE
Total/NA	Analysis	2540C-2011		1	76976	12/15/20 11:50	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	76880	12/15/20 09:22	MFV9	ELLE
Total/NA	Analysis	375.4		100	78786	12/21/20 09:12	USAE	ELLE

Client Sample ID: HOFF MW-B

Lab Sample ID: 410-23806-2

Date Collected: 12/11/20 09:00

Matrix: Water

Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		10	78610	12/20/20 21:35	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	100	78610	12/20/20 21:57	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		10	79617	12/23/20 12:37	UJML	ELLE
Total/NA	Prep	3510C			77736	12/17/20 17:15	DFX4	ELLE
Total/NA	Analysis	8270D		1	77975	12/18/20 12:53	LW6J	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF MW-B

Lab Sample ID: 410-23806-2

Date Collected: 12/11/20 09:00

Matrix: Water

Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			78309	12/18/20 20:42	K2IL	ELLE
Total/NA	Analysis	8081B		1	78661	12/21/20 09:36	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		1	77129	12/15/20 16:54	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		1	78578	12/20/20 14:54	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		10	78578	12/20/20 14:58	SB	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 15:32	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		5	77784	12/17/20 16:45	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77891	12/17/20 21:39	UCIG	ELLE
Dissolved	Prep	7470A			76889	12/15/20 10:15	UJLA	ELLE
Dissolved	Analysis	7470A		1	77718	12/17/20 14:10	UEFS	ELLE
Total/NA	Prep	7470A			76418	12/14/20 11:49	UJL8	ELLE
Total/NA	Analysis	7470A		1	77240	12/15/20 18:34	UEFS	ELLE
Total/NA	Analysis	2540C-2011		1	77332	12/16/20 06:37	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	76880	12/15/20 09:22	MFV9	ELLE
Total/NA	Analysis	375.4		50	78786	12/21/20 09:12	USAE	ELLE

Client Sample ID: HOFF MW-13

Lab Sample ID: 410-23806-3

Date Collected: 12/11/20 10:15

Matrix: Water

Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	78610	12/21/20 05:33	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	10	78998	12/22/20 07:25	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		1	79617	12/23/20 11:36	UJML	ELLE
Total/NA	Analysis	8260C SIM 14D	RA	1	79617	12/23/20 19:05	UJML	ELLE
Total/NA	Prep	3510C	RE		80002	12/27/20 00:35	UKQ8	ELLE
Total/NA	Analysis	8270D	RE	1	80123	12/28/20 21:04	UWHS	ELLE
Total/NA	Prep	3510C			77736	12/17/20 17:15	DFX4	ELLE
Total/NA	Analysis	8270D		1	77975	12/18/20 13:23	LW6J	ELLE
Total/NA	Prep	3510C	RA		77736	12/17/20 17:15	DFX4	ELLE
Total/NA	Analysis	8270D	RA	1	80742	12/29/20 21:53	LW6J	ELLE
Total/NA	Prep	3510C			78309	12/18/20 20:42	K2IL	ELLE
Total/NA	Analysis	8081B		1	78661	12/21/20 09:48	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		1	77129	12/15/20 16:47	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		1	78578	12/20/20 14:38	SB	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF MW-13

Lab Sample ID: 410-23806-3
Matrix: Water
Date Collected: 12/11/20 10:15
Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		5	78578	12/20/20 14:42	SB	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 15:22	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		5	77784	12/17/20 16:33	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77891	12/17/20 21:32	UCIG	ELLE
Dissolved	Prep	7470A			78115	12/18/20 11:29	UJLA	ELLE
Dissolved	Analysis	7470A		1	78596	12/20/20 15:51	UEFS	ELLE
Total/NA	Prep	7470A			76418	12/14/20 11:49	UJL8	ELLE
Total/NA	Analysis	7470A		1	77240	12/15/20 18:44	UEFS	ELLE
Total/NA	Analysis	2540C-2011		1	77332	12/16/20 06:37	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	76880	12/15/20 09:24	MFV9	ELLE
Total/NA	Analysis	375.4		100	78786	12/21/20 09:12	USAE	ELLE

Client Sample ID: HOFF TB-01-121120

Lab Sample ID: 410-23806-4
Matrix: Water
Date Collected: 12/11/20 10:00
Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	78610	12/20/20 20:08	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		1	79219	12/22/20 20:04	UJML	ELLE

Client Sample ID: HOFF IW-3A

Lab Sample ID: 410-23806-5
Matrix: Water
Date Collected: 12/11/20 12:45
Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	78610	12/20/20 20:30	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	25	78998	12/22/20 07:46	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		5	79617	12/23/20 11:56	UJML	ELLE
Total/NA	Analysis	8260C SIM 14D	RA	5	79617	12/23/20 19:46	UJML	ELLE
Total/NA	Prep	3510C	RE		80002	12/27/20 00:35	UKQ8	ELLE
Total/NA	Analysis	8270D	RE	1	80393	12/29/20 01:49	W6XI	ELLE
Total/NA	Prep	3510C			77736	12/17/20 17:15	DFX4	ELLE
Total/NA	Analysis	8270D		1	77975	12/18/20 13:53	LW6J	ELLE
Total/NA	Prep	3510C			78309	12/18/20 20:42	K2IL	ELLE
Total/NA	Analysis	8081B		1	78661	12/21/20 10:01	ZO3C	ELLE

Client Sample ID: HOFF IW-2A

Lab Sample ID: 410-23806-6

Date Collected: 12/11/20 14:50

Matrix: Water

Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	78610	12/20/20 20:52	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	10	78610	12/20/20 21:14	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL2	100	78998	12/22/20 08:08	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		5	79617	12/23/20 12:57	UJML	ELLE
Total/NA	Prep	3510C	RE		80002	12/27/20 00:35	UKQ8	ELLE
Total/NA	Analysis	8270D	RE	1	80393	12/29/20 02:18	W6XI	ELLE
Total/NA	Prep	3510C			77736	12/17/20 17:15	DFX4	ELLE
Total/NA	Analysis	8270D		1	77975	12/18/20 14:23	LW6J	ELLE
Total/NA	Prep	3510C			78309	12/18/20 20:42	K2IL	ELLE
Total/NA	Analysis	8081B		1	78661	12/21/20 18:40	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		1	77129	12/15/20 16:43	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		5	78578	12/20/20 14:28	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		20	78578	12/20/20 14:32	SB	ELLE
Total/NA	Prep	3010A			76699	12/15/20 02:27	UJL8	ELLE
Total/NA	Analysis	6010C		5	78816	12/21/20 10:36	SB	ELLE
Total/NA	Prep	3010A			76699	12/15/20 02:27	UJL8	ELLE
Total/NA	Analysis	6010C		10	78816	12/21/20 10:40	SB	ELLE
Total/NA	Prep	3010A			76699	12/15/20 02:27	UJL8	ELLE
Total/NA	Analysis	6010C		20	78816	12/21/20 10:44	SB	ELLE
Total/NA	Prep	3010A			79521	12/23/20 02:24	UJL8	ELLE
Total/NA	Analysis	6010C		1	79859	12/23/20 11:45	MDP5	ELLE
Total/NA	Prep	3010A			79521	12/23/20 02:24	UJL8	ELLE
Total/NA	Analysis	6010C		5	80102	12/28/20 07:27	ULJC	ELLE
Total/NA	Prep	3010A			76699	12/15/20 02:27	UJL8	ELLE
Total/NA	Analysis	6010C		1	78448	12/19/20 13:46	MDP5	ELLE
Total/NA	Prep	3010A			76699	12/15/20 02:27	UJL8	ELLE
Total/NA	Analysis	6010C		5	78448	12/19/20 13:51	MDP5	ELLE
Total/NA	Prep	3010A			76699	12/15/20 02:27	UJL8	ELLE
Total/NA	Analysis	6010C		5	78968	12/21/20 17:12	SB	ELLE
Dissolved	Prep	7470A			78115	12/18/20 11:29	UJLA	ELLE
Dissolved	Analysis	7470A		1	78596	12/20/20 15:53	UEFS	ELLE
Total/NA	Prep	7470A			76875	12/15/20 10:00	UJLA	ELLE
Total/NA	Analysis	7470A		1	77240	12/15/20 21:40	UEFS	ELLE

Client Sample ID: HOFF IW-3B

Lab Sample ID: 410-23806-7

Date Collected: 12/11/20 12:20

Matrix: Water

Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		5	78610	12/20/20 23:02	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	50	78610	12/20/20 23:23	K4WN	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF IW-3B

Lab Sample ID: 410-23806-7

Date Collected: 12/11/20 12:20

Matrix: Water

Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL	RA	5	78998	12/22/20 09:11	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		5	79617	12/23/20 13:17	UJML	ELLE
Total/NA	Analysis	8260C SIM 14D	RA	5	79617	12/23/20 20:06	UJML	ELLE
Total/NA	Prep	3510C			77736	12/17/20 17:15	DFX4	ELLE
Total/NA	Analysis	8270D		1	77975	12/18/20 14:53	LW6J	ELLE
Total/NA	Prep	3510C	RE		80003	12/27/20 00:42	UKQ8	ELLE
Total/NA	Analysis	8270D	RE	1	80187	12/28/20 16:22	UWHS	ELLE
Total/NA	Prep	3510C			78309	12/18/20 20:42	K2IL	ELLE
Total/NA	Analysis	8081B		1	78661	12/21/20 10:26	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		1	77129	12/15/20 16:39	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		5	78578	12/20/20 14:12	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		20	78578	12/20/20 14:16	SB	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 15:19	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		5	77784	12/17/20 16:26	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		20	77784	12/17/20 17:11	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77891	12/17/20 21:28	UCIG	ELLE
Dissolved	Prep	7470A			76894	12/15/20 10:21	UJLA	ELLE
Dissolved	Analysis	7470A		1	77240	12/15/20 22:53	UEFS	ELLE
Total/NA	Prep	7470A			76418	12/14/20 11:49	UJL8	ELLE
Total/NA	Analysis	7470A		1	77240	12/15/20 18:38	UEFS	ELLE
Total/NA	Analysis	2540C-2011		1	77332	12/16/20 06:37	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	76880	12/15/20 09:21	MFV9	ELLE
Total/NA	Analysis	375.4		400	78786	12/21/20 09:12	USAE	ELLE

Client Sample ID: HOFF IW-2B

Lab Sample ID: 410-23806-8

Date Collected: 12/11/20 14:30

Matrix: Water

Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		10	78610	12/20/20 23:45	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	100	78610	12/21/20 00:07	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		10	79617	12/23/20 13:38	UJML	ELLE
Total/NA	Prep	3510C			77736	12/17/20 17:15	DFX4	ELLE
Total/NA	Analysis	8270D		1	77975	12/18/20 15:23	LW6J	ELLE
Total/NA	Prep	3510C			78309	12/18/20 20:42	K2IL	ELLE
Total/NA	Analysis	8081B		1	78661	12/21/20 10:38	ZO3C	ELLE

Client Sample ID: HOFF IW-2B

Lab Sample ID: 410-23806-8

Date Collected: 12/11/20 14:30

Matrix: Water

Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		1	77129	12/15/20 16:13	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		1	78578	12/20/20 13:56	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		10	78578	12/20/20 13:59	SB	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 15:15	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		5	77784	12/17/20 16:17	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		5	77784	12/17/20 17:23	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77891	12/17/20 21:24	UCIG	ELLE
Dissolved	Prep	7470A			76894	12/15/20 10:21	UJLA	ELLE
Dissolved	Analysis	7470A		1	77240	12/15/20 22:55	UEFS	ELLE
Total/NA	Prep	7470A			76402	12/14/20 10:47	UJLA	ELLE
Total/NA	Analysis	7470A		1	77136	12/15/20 16:40	UEFS	ELLE
Total/NA	Analysis	2540C-2011		1	78672	12/21/20 06:44	M98K	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	76880	12/15/20 09:21	MFV9	ELLE
Total/NA	Analysis	375.4		50	78786	12/21/20 09:12	USAE	ELLE

Client Sample ID: HOFF DUP-121120

Lab Sample ID: 410-23806-9

Date Collected: 12/11/20 12:00

Matrix: Water

Date Received: 12/11/20 17:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		10	78610	12/21/20 00:29	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	100	78610	12/21/20 00:51	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		5	79617	12/23/20 13:58	UJML	ELLE
Total/NA	Prep	3510C			77736	12/17/20 17:15	DFX4	ELLE
Total/NA	Analysis	8270D		1	77975	12/18/20 15:53	LW6J	ELLE
Total/NA	Prep	3510C			78309	12/18/20 20:42	K2IL	ELLE
Total/NA	Analysis	8081B		1	78661	12/21/20 10:50	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		1	77129	12/15/20 16:17	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		1	78578	12/20/20 14:03	SB	ELLE
Dissolved	Prep	Non-Digest Prep			76638	12/14/20 20:04	UJLA	ELLE
Dissolved	Analysis	6010C		10	78578	12/20/20 14:06	SB	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77784	12/17/20 15:12	UCIG	ELLE
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		5	77784	12/17/20 17:20	UCIG	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Client Sample ID: HOFF DUP-121120

Date Collected: 12/11/20 12:00
Date Received: 12/11/20 17:56

Lab Sample ID: 410-23806-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			76248	12/14/20 06:02	UJL8	ELLE
Total/NA	Analysis	6010C		1	77891	12/17/20 21:21	UCIG	ELLE
Dissolved	Prep	7470A			78115	12/18/20 11:29	UJLA	ELLE
Dissolved	Analysis	7470A		1	78596	12/20/20 15:55	UEFS	ELLE
Total/NA	Prep	7470A			76402	12/14/20 10:47	UJLA	ELLE
Total/NA	Analysis	7470A		1	77136	12/15/20 16:38	UEFS	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Job ID: 410-23806-1
Project/Site: Hoff

Laboratory: Eurofins Lancaster Laboratories Env, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-22

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Method	Method Description	Protocol	Laboratory
8260C LL	Volatile Organic Compounds by GC/MS	SW846	ELLE
8260C SIM 14D	Volatile Organic Compounds (GC/MS)	SW846	ELLE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ELLE
8081B	Organochlorine Pesticides (GC)	SW846	ELLE
6010C	Metals (ICP)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
2540C-2011	Solids, Total Dissolved (TDS)	SM	ELLE
3500 Fe B-2011	Iron, Ferrous and Ferric	SM	ELLE
375.4	Sulfate	MCAWW	ELLE
3010A	Preparation, Total Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
Non-Digest Prep	Preparation, Non-Digested Aqueous Metals	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff

Job ID: 410-23806-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-23806-1	HOFF MW-C	Water	12/10/20 16:50	12/11/20 17:56	
410-23806-2	HOFF MW-B	Water	12/11/20 09:00	12/11/20 17:56	
410-23806-3	HOFF MW-13	Water	12/11/20 10:15	12/11/20 17:56	
410-23806-4	HOFF TB-01-121120	Water	12/11/20 10:00	12/11/20 17:56	
410-23806-5	HOFF IW-3A	Water	12/11/20 12:45	12/11/20 17:56	
410-23806-6	HOFF IW-2A	Water	12/11/20 14:50	12/11/20 17:56	
410-23806-7	HOFF IW-3B	Water	12/11/20 12:20	12/11/20 17:56	
410-23806-8	HOFF IW-2B	Water	12/11/20 14:30	12/11/20 17:56	
410-23806-9	HOFF DUP-121120	Water	12/11/20 12:00	12/11/20 17:56	

Environmental Analysis Rec[illegible]stody

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Acct. # _____

F[illegible]se only

410-23806 Chain of Custody

COC # 615285

Client Information	
Client: Tetra Tech	Acct. #:
Project Name/#: HOFF	PWSID #:
Project Manager: Jonathan Dziekan	P.O. #:
Sampler: Neld Dedic	Quote #:
State where samples were collected: PA	For Compliance: Yes ☐ No ☒

Matrix: Soil ☐ Sediment ☐ Tissue ☐ | Water: Potable ☐ Ground ☒ NPDES ☐ Surface ☐ | Other: DI Water

Analysis Requested — Preservation and Filtration Codes

Sample Identification	Collected Date	Collected Time	Grab	Composite	Soil	Water	Other	Total # of Containers	VOC (HCl)	VOC 14 Diox (HCl)	SVOC	Pesticides	Fe 2+ (H)	Metals-total (HNO3)	Metals-Dissolved (HNO3)	SO4	TDS		Remarks
HOFF MW-C	12/10/20	1650	X			X		13	X	X	X	X	X	X	X	X	X		
HOFF MW-B	12/11/20	0900	X			X		13	X	X	X	X	X	X	X	X	X		
HOFF MW-13	12/11/20	1015	X			X		13	X	X	X	X	X	X	X	X	X		
HOFF TB-01-121120	12/11/20	1000	X			~~X~~	X	4	X	X									
HOFF IW-3A	12/11/20	1245	X			X		9	X	X	X	X							
HOFF IW-2A	12/11/20	1450	X			X		11	X	X	X	X		X	X				
HOFF IW-3B	12/11/20	1220	X			X		13	X	X	X	X	X	X	X	X	X		
HOFF IW-2B	12/11/20	1430	X			X		13	X	X	X	X	X	X	X	X	X		

For Lab Use Only
FSC: _____
SCR#: _____

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 P=H_3PO_4
F=Field Filtered O=Other

Turnaround Time (TAT) Requested (please circle)
Standard Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Requested TAT in business days: _____

E-mail address: _____

Relinquished by	Date	Time	Received by	Date	Time
Deana [signature]	12/11/20	1610	Stan King	12/11/20	1610
Stan King	12/11/20	18:05			
			[signature]	12/11/20	1756

Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only)
Type III (Reduced non-CLP) NJ DKQP TX TRRP-13
NYSDEC Category A or B MA MCP CT RCP

EDD Required? Yes No
If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS _____ FedEx _____ Other _____

Temperature upon receipt 2.6-3.9 °C

KAM

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • FOR HELP COMPLETING FORM CHECK OUT https://www.eurofinsus.com/coc
The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

KAM 7044 0919

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 410-23806-1

Login Number: 23806
List Number: 1
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-26865-1
Client Project/Site: HOFF

For:
Tetra Tech, Inc.
1 Oxford Valley
Suite 200
Langhorne, Pennsylvania 19047

Attn: Jon Dziekan

Authorized for release by:
2/3/2021 2:19:32 PM

Stephen Gordon, Senior Project Manager
(412)525-0071
Stephen.Gordon@eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Stephen Gordon
Senior Project Manager
2/3/2021 2:19:32 PM

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
^2	Calibration Blank is outside acceptance limits.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-26865-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-26865-1

Receipt
The samples were received on 1/19/2021 5:08 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

Receipt Exceptions
The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): HOFF-MW-A-011921 (410-26865-1), HOFF-MW-B-011921 (410-26865-2), HOFF-MW-C-011921 (410-26865-3), HOFF-MW-13-011921 (410-26865-4), HOFF-TB-011921 (410-26865-5) and HOFF-EB-011921 (410-26865-6). The container labels list HOFF-MW-A-011921 collected at 11:40, while the COC lists 1040. Time stamp per the COC was used for entry.

GC/MS VOA
Method 8260C_SIM_14DX: The following sample contained residual chlorine upon receipt: HOFF-MW-C-011921 (410-26865-3).

Method 8260C_SIM_14DX: The following sample contained residual chlorine upon receipt: HOFF-MW-C-011921 (410-26865-3).

Method 8260C_LL: The following sample contained residual chlorine upon receipt: HOFF-MW-C-011921 (410-26865-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270D: HOFF-MW-B-011921 (410-26865-2)

Method 8270D: The continuing calibration verification (CCV) associated with batch 410-87484 recovered above the upper control limit for Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) analyzed in batch 410-87484 was below the method criteria for the following analyte(s): 4-Nitrophenol, 2,2'-oxybis[1-chloropropane] and Benzaldehyde. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
Method 8081B: The method blank for preparation batch 410-87105 and analytical batch 410-87372 contained Heptachlor above the method detection limit (MDL). Associated samples were not re-analyzed because results were less than the reporting limit (RL) OR practical quantitation limit (PQL).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-MW-A-011921 — Lab Sample ID: 410-26865-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.071	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Chlorobenzene	0.11	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Acetone	0.99	J	5.0	0.90	ug/L	1		8260C LL	Total/NA
1,1,1-Trichloroethane	0.12	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Chloroethane	6.9		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,1-Dichloroethane	1.4		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,1-Dichloroethene	0.078	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
1,2-Dichlorobenzene	0.24	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
1,4-Dioxane	0.81		0.40	0.20	ug/L	1		8260C SIM 14D	Total/NA
Aluminum	7.1		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.056		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	59		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.025		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0045	J	0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.041		0.020	0.012	mg/L	1		6010C	Total/NA
Iron	9.0		0.20	0.040	mg/L	1		6010C	Total/NA
Lead	0.011	J	0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	25		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	3.2		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.015		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.014	J	0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	4.4		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	23		1.0	0.24	mg/L	1		6010C	Total/NA
Thallium	0.014	J	0.030	0.0081	mg/L	1		6010C	Total/NA
Vanadium	0.022		0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.022		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	53		0.52	0.099	mg/L	1		6010C	Dissolved
Cobalt	0.0017	J	0.0052	0.0015	mg/L	1		6010C	Dissolved
Iron	0.92		0.21	0.041	mg/L	1		6010C	Dissolved
Magnesium	20		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	2.8		0.010	0.0031	mg/L	1		6010C	Dissolved
Potassium	2.8		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	22		1.0	0.25	mg/L	1		6010C	Dissolved
Vanadium	0.0023	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Ferrous Iron	3.2	HF	0.50	0.25	mg/L	5		3500 Fe B-2011	Total/NA
Sulfate	46		24	8.0	mg/L	4		375.4	Total/NA

Client Sample ID: HOFF-MW-B-011921 — Lab Sample ID: 410-26865-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.5	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
1,4-Dichlorobenzene	210		5.0	0.70	ug/L	10		8260C LL	Total/NA
1,2-Dichloroethane	0.54	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
1,2,4-Trichlorobenzene	8.7		5.0	0.60	ug/L	10		8260C LL	Total/NA
Xylenes, Total	6.6	J	10	1.5	ug/L	10		8260C LL	Total/NA
cis-1,2-Dichloroethene	39		5.0	0.50	ug/L	10		8260C LL	Total/NA
trans-1,2-Dichloroethene	6.2		5.0	0.60	ug/L	10		8260C LL	Total/NA
1,3-Dichlorobenzene	24		5.0	0.60	ug/L	10		8260C LL	Total/NA
Acetone	80		50	9.0	ug/L	10		8260C LL	Total/NA
Benzene	49		5.0	0.50	ug/L	10		8260C LL	Total/NA
1,1,1-Trichloroethane	12		5.0	0.60	ug/L	10		8260C LL	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Client Sample ID: HOFF-MW-B-011921 (Continued)

Lab Sample ID: 410-26865-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromomethane	4.2	J	5.0	0.70	ug/L	10		8260C LL	Total/NA
Chloromethane	16		5.0	0.60	ug/L	10		8260C LL	Total/NA
Chloroethane	3.8	J	5.0	0.70	ug/L	10		8260C LL	Total/NA
Carbon disulfide	2.8	J	10	0.60	ug/L	10		8260C LL	Total/NA
1,1-Dichloroethane	67		5.0	0.70	ug/L	10		8260C LL	Total/NA
2-Butanone	15	J	50	6.0	ug/L	10		8260C LL	Total/NA
1,1,2-Trichloroethane	0.99	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Trichloroethene	4.0	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Isopropylbenzene	2.0	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
1,2-Dichlorobenzene - DL	940		50	6.0	ug/L	100		8260C LL	Total/NA
Chlorobenzene - DL2	3000		500	60	ug/L	1000		8260C LL	Total/NA
1,4-Dioxane	5.7		4.0	2.0	ug/L	10		8260C SIM 14D	Total/NA
2,4-Dichlorophenol	1.1	J	2.0	0.50	ug/L	1		8270D	Total/NA
Acetophenone	7.4	J	10	4.0	ug/L	1		8270D	Total/NA
Fluoranthene	0.16	J	0.50	0.10	ug/L	1		8270D	Total/NA
Naphthalene	4.2		0.50	0.10	ug/L	1		8270D	Total/NA
Phenanthrene	0.50		0.50	0.10	ug/L	1		8270D	Total/NA
Phenol	2.8		2.0	0.50	ug/L	1		8270D	Total/NA
Pyrene	0.10	J	0.50	0.10	ug/L	1		8270D	Total/NA
2-Chlorophenol	44		2.0	0.50	ug/L	1		8270D	Total/NA
2-Methylnaphthalene	2.6		0.50	0.10	ug/L	1		8270D	Total/NA
Aldrin (1C)	0.0026	J *1	0.020	0.0020	ug/L	1		8081B	Total/NA
alpha-Chlordane (2C)	0.018	J p	0.020	0.0030	ug/L	1		8081B	Total/NA
delta-BHC (1C)	0.017	J	0.020	0.0034	ug/L	1		8081B	Total/NA
Dieldrin (1C)	0.0092	J p	0.030	0.0053	ug/L	1		8081B	Total/NA
Endosulfan sulfate (2C)	0.0069	J p	0.030	0.0058	ug/L	1		8081B	Total/NA
gamma-BHC (Lindane) (2C)	0.0074	J	0.020	0.0020	ug/L	1		8081B	Total/NA
Heptachlor (1C)	0.017	J B *1	0.020	0.0020	ug/L	1		8081B	Total/NA
Heptachlor epoxide (1C)	0.0026	J p	0.020	0.0023	ug/L	1		8081B	Total/NA
p,p'-DDE (2C)	0.0070	J p *1	0.030	0.0050	ug/L	1		8081B	Total/NA
p,p'-DDT (2C)	0.028	J	0.030	0.0052	ug/L	1		8081B	Total/NA
Barium	0.054		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	250		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.012	J	0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0028	J	0.0050	0.0015	mg/L	1		6010C	Total/NA
Iron	1.3		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	270		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.50		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.036		0.010	0.0021	mg/L	1		6010C	Total/NA
Potassium	53		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	560		5.0	1.2	mg/L	5		6010C	Total/NA
Barium	0.034		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	240		0.52	0.099	mg/L	1		6010C	Dissolved
Chromium	0.011	J	0.015	0.0016	mg/L	1		6010C	Dissolved
Cobalt	0.0029	J	0.0052	0.0015	mg/L	1		6010C	Dissolved
Copper	0.012	J	0.021	0.012	mg/L	1		6010C	Dissolved
Lead	0.011	J	0.015	0.0073	mg/L	1		6010C	Dissolved
Magnesium	300		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.45		0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.030		0.010	0.0022	mg/L	1		6010C	Dissolved
Potassium	52	^3+ ^2	0.52	0.21	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF-MW-B-011921 (Continued) — Lab Sample ID: 410-26865-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	590		5.2	1.2	mg/L	5		6010C	Dissolved
Thallium	0.0085	J	0.031	0.0083	mg/L	1		6010C	Dissolved
Vanadium	0.0041	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Ferrous Iron	0.079	J HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	1600		600	200	mg/L	100		375.4	Total/NA

Client Sample ID: HOFF-MW-C-011921 — Lab Sample ID: 410-26865-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.55	J	1.0	0.10	ug/L	2		8260C LL	Total/NA
1,2,4-Trichlorobenzene	3.5		1.0	0.12	ug/L	2		8260C LL	Total/NA
Dibromochloromethane	1.8		1.0	0.14	ug/L	2		8260C LL	Total/NA
cis-1,2-Dichloroethene	20		1.0	0.10	ug/L	2		8260C LL	Total/NA
trans-1,2-Dichloroethene	6.3		1.0	0.12	ug/L	2		8260C LL	Total/NA
1,3-Dichlorobenzene	2.6		1.0	0.12	ug/L	2		8260C LL	Total/NA
Acetone	180		10	1.8	ug/L	2		8260C LL	Total/NA
Chloroform	1.4		1.0	0.18	ug/L	2		8260C LL	Total/NA
Benzene	0.26	J	1.0	0.10	ug/L	2		8260C LL	Total/NA
Bromomethane	28		1.0	0.14	ug/L	2		8260C LL	Total/NA
Chloroethane	8.5		1.0	0.14	ug/L	2		8260C LL	Total/NA
Methylene Chloride	1.6		1.0	0.14	ug/L	2		8260C LL	Total/NA
Carbon disulfide	0.35	J	2.0	0.12	ug/L	2		8260C LL	Total/NA
Bromoform	5.0		2.0	0.60	ug/L	2		8260C LL	Total/NA
Bromodichloromethane	1.1		1.0	0.10	ug/L	2		8260C LL	Total/NA
1,2-Dichloropropane	0.81	J	1.0	0.12	ug/L	2		8260C LL	Total/NA
2-Butanone	27		10	1.2	ug/L	2		8260C LL	Total/NA
1,1,2-Trichloroethane	2.3		1.0	0.12	ug/L	2		8260C LL	Total/NA
Trichloroethene	1.7		1.0	0.12	ug/L	2		8260C LL	Total/NA
1,1,2,2-Tetrachloroethane	1.2		1.0	0.14	ug/L	2		8260C LL	Total/NA
1,4-Dichlorobenzene - DL	62		10	1.4	ug/L	20		8260C LL	Total/NA
Chlorobenzene - DL	99		10	1.2	ug/L	20		8260C LL	Total/NA
1,1,1-Trichloroethane - DL	55		10	1.2	ug/L	20		8260C LL	Total/NA
Chloromethane - DL	62		10	1.2	ug/L	20		8260C LL	Total/NA
1,1-Dichloroethane - DL	190		10	1.4	ug/L	20		8260C LL	Total/NA
1,2-Dichlorobenzene - DL	310		10	1.2	ug/L	20		8260C LL	Total/NA
1,4-Dioxane	2.8		0.80	0.40	ug/L	2		8260C SIM 14D	Total/NA
gamma-BHC (Lindane) (2C)	0.0033	J p	0.020	0.0020	ug/L	1		8081B	Total/NA
Aluminum	1.1		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.22		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	900		2.5	0.48	mg/L	5		6010C	Total/NA
Chromium	0.084		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0051		0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.012	J	0.020	0.012	mg/L	1		6010C	Total/NA
Iron	25		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	790		0.50	0.20	mg/L	5		6010C	Total/NA
Manganese	0.069		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.0044	J	0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.0078	J	0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	78		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	2600		10	2.4	mg/L	10		6010C	Total/NA
Vanadium	0.019		0.010	0.0019	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF-MW-C-011921 (Continued) — Lab Sample ID: 410-26865-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.070		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	760		2.6	0.49	mg/L	5		6010C	Dissolved
Chromium	0.079		0.015	0.0016	mg/L	1		6010C	Dissolved
Copper	0.021		0.021	0.012	mg/L	1		6010C	Dissolved
Lead	0.019		0.015	0.0073	mg/L	1		6010C	Dissolved
Magnesium	660		0.52	0.21	mg/L	5		6010C	Dissolved
Potassium	80	^3+ ^2	0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	2200		5.2	1.2	mg/L	5		6010C	Dissolved
Vanadium	0.0034	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	1.3		0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	1.2		0.20	0.079	ug/L	1		7470A	Dissolved
Ferrous Iron	0.13	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	2300		600	200	mg/L	100		375.4	Total/NA

Client Sample ID: HOFF-MW-13-011921 — Lab Sample ID: 410-26865-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.30	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
1,2-Dichloroethane	0.10	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
Chlorobenzene	0.98		0.50	0.060	ug/L	1		8260C LL	Total/NA
Dibromochloromethane	0.10	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Tetrachloroethene	0.063	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
cis-1,2-Dichloroethene	0.15	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
Acetone	26		5.0	0.90	ug/L	1		8260C LL	Total/NA
Chloroform	0.50		0.50	0.090	ug/L	1		8260C LL	Total/NA
Benzene	0.66		0.50	0.050	ug/L	1		8260C LL	Total/NA
1,1,1-Trichloroethane	0.096	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Bromomethane	1.0		0.50	0.070	ug/L	1		8260C LL	Total/NA
Chloromethane	14		0.50	0.060	ug/L	1		8260C LL	Total/NA
Chloroethane	0.81		0.50	0.070	ug/L	1		8260C LL	Total/NA
Vinyl chloride	0.19	J	0.50	0.10	ug/L	1		8260C LL	Total/NA
Methylene Chloride	1.6		0.50	0.070	ug/L	1		8260C LL	Total/NA
Carbon disulfide	0.60	J	1.0	0.060	ug/L	1		8260C LL	Total/NA
Bromodichloromethane	0.30	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,1-Dichloroethane	1.5		0.50	0.070	ug/L	1		8260C LL	Total/NA
2-Butanone	7.6		5.0	0.60	ug/L	1		8260C LL	Total/NA
Trichloroethene	0.24	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Methyl acetate	0.76	J	1.0	0.10	ug/L	1		8260C LL	Total/NA
1,2-Dichlorobenzene	0.78		0.50	0.060	ug/L	1		8260C LL	Total/NA
1,4-Dioxane	2.1		0.40	0.20	ug/L	1		8260C SIM 14D	Total/NA
Benzo[a]anthracene	0.11	J	0.50	0.10	ug/L	1		8270D	Total/NA
Benzo[a]pyrene	0.17	J	0.50	0.10	ug/L	1		8270D	Total/NA
Benzo[b]fluoranthene	0.37	J	0.50	0.10	ug/L	1		8270D	Total/NA
Benzo[g,h,i]perylene	0.18	J	0.50	0.10	ug/L	1		8270D	Total/NA
Benzo[k]fluoranthene	0.19	J	0.50	0.10	ug/L	1		8270D	Total/NA
Chrysene	0.21	J	0.50	0.10	ug/L	1		8270D	Total/NA
Fluoranthene	0.23	J	0.50	0.10	ug/L	1		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.19	J	0.50	0.10	ug/L	1		8270D	Total/NA
Pyrene	0.20	J	0.50	0.10	ug/L	1		8270D	Total/NA
Heptachlor (1C)	0.0024	J B *1	0.020	0.0020	ug/L	1		8081B	Total/NA
Arsenic	0.043	J	0.050	0.016	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HOFF-MW-13-011921 (Continued) — Lab Sample ID: 410-26865-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5.7		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.42		0.0050	0.0010	mg/L	1		6010C	Total/NA
Beryllium	0.0016	J	0.0050	0.0010	mg/L	1		6010C	Total/NA
Cadmium	0.0023	J	0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	54		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.029		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.033		0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.029		0.020	0.012	mg/L	1		6010C	Total/NA
Iron	110		0.20	0.040	mg/L	1		6010C	Total/NA
Lead	0.10		0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	59		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	1.4		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.037		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.084		0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	13		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	180		1.0	0.24	mg/L	1		6010C	Total/NA
Thallium	0.017	J	0.030	0.0081	mg/L	1		6010C	Total/NA
Vanadium	0.084		0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.037		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	50		0.52	0.099	mg/L	1		6010C	Dissolved
Chromium	0.0029	J	0.015	0.0016	mg/L	1		6010C	Dissolved
Iron	0.046	J	0.21	0.041	mg/L	1		6010C	Dissolved
Magnesium	53		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.19		0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.014		0.010	0.0022	mg/L	1		6010C	Dissolved
Zinc	0.0040	J	0.021	0.0038	mg/L	1		6010C	Dissolved
Potassium	13		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	200		1.0	0.25	mg/L	1		6010C	Dissolved
Mercury	0.37		0.20	0.079	ug/L	1		7470A	Total/NA
Ferrous Iron	0.17	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	390		120	40	mg/L	20		375.4	Total/NA

Client Sample ID: HOFF-TB-011921 — Lab Sample ID: 410-26865-5

No Detections.

Client Sample ID: HOFF-EB-011921 — Lab Sample ID: 410-26865-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.072	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Calcium	0.17	J	0.50	0.096	mg/L	1		6010C	Total/NA
Magnesium	0.065	J	0.10	0.040	mg/L	1		6010C	Total/NA
Sodium	0.67	J	1.0	0.24	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-MW-A-011921
Date Collected: 01/19/21 10:40
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-1
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/28/21 05:55	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/28/21 05:55	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/28/21 05:55	1
Styrene	ND		0.50	0.050	ug/L			01/28/21 05:55	1
1,4-Dichlorobenzene	**0.071**	**J**	0.50	0.070	ug/L			01/28/21 05:55	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/28/21 05:55	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/28/21 05:55	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/28/21 05:55	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/28/21 05:55	1
Toluene	ND		0.50	0.070	ug/L			01/28/21 05:55	1
Chlorobenzene	**0.11**	**J**	0.50	0.060	ug/L			01/28/21 05:55	1
Cyclohexane	ND		0.50	0.050	ug/L			01/28/21 05:55	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 05:55	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/28/21 05:55	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/28/21 05:55	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/28/21 05:55	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/28/21 05:55	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 05:55	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/28/21 05:55	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 05:55	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/28/21 05:55	1
2-Hexanone	ND		5.0	0.60	ug/L			01/28/21 05:55	1
Acetone	**0.99**	**J**	5.0	0.90	ug/L			01/28/21 05:55	1
Chloroform	ND		0.50	0.090	ug/L			01/28/21 05:55	1
Benzene	ND		0.50	0.050	ug/L			01/28/21 05:55	1
1,1,1-Trichloroethane	**0.12**	**J**	0.50	0.060	ug/L			01/28/21 05:55	1
Bromomethane	ND		0.50	0.070	ug/L			01/28/21 05:55	1
Chloromethane	ND		0.50	0.060	ug/L			01/28/21 05:55	1
Chloroethane	**6.9**		0.50	0.070	ug/L			01/28/21 05:55	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/28/21 05:55	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/28/21 05:55	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/28/21 05:55	1
Bromoform	ND		1.0	0.30	ug/L			01/28/21 05:55	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/28/21 05:55	1
1,1-Dichloroethane	**1.4**		0.50	0.070	ug/L			01/28/21 05:55	1
1,1-Dichloroethene	**0.078**	**J**	0.50	0.060	ug/L			01/28/21 05:55	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/28/21 05:55	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/28/21 05:55	1
Freon 113	ND		0.50	0.060	ug/L			01/28/21 05:55	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/28/21 05:55	1
2-Butanone	ND		5.0	0.60	ug/L			01/28/21 05:55	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 05:55	1
Trichloroethene	ND		0.50	0.060	ug/L			01/28/21 05:55	1
Methyl acetate	ND		1.0	0.10	ug/L			01/28/21 05:55	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/28/21 05:55	1
1,2-Dichlorobenzene	**0.24**	**J**	0.50	0.060	ug/L			01/28/21 05:55	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/28/21 05:55	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/28/21 05:55	1

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-MW-A-011921

Date Collected: 01/19/21 10:40
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*01/28/21 05:55*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*01/28/21 05:55*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*01/28/21 05:55*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/28/21 05:55*	*1*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.81**		0.40	0.20	ug/L			01/27/21 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*01/27/21 14:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
2,4-Dichlorophenol	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
2,4-Dinitrophenol	ND		30	14	ug/L		01/22/21 09:30	01/24/21 16:53	1
2,4-Dinitrotoluene	ND		5.1	1.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
2,4,5-Trichlorophenol	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
2,4,6-Trichlorophenol	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
2,2'-oxybis[1-chloropropane]	ND	^c	2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
Di-n-butyl phthalate	ND		5.1	2.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
Di-n-octyl phthalate	ND		11	5.1	ug/L		01/22/21 09:30	01/24/21 16:53	1
Benzo[a]anthracene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Benzo[a]pyrene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Benzo[b]fluoranthene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Benzo[g,h,i]perylene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Benzo[k]fluoranthene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Acenaphthene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Acenaphthylene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Acetophenone	ND		10	4.1	ug/L		01/22/21 09:30	01/24/21 16:53	1
Anthracene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Atrazine	ND		5.1	2.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
Benzaldehyde	ND	^c	10	3.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
Butylbenzylphthalate	ND		5.1	2.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
Caprolactam	ND		11	5.1	ug/L		01/22/21 09:30	01/24/21 16:53	1
Carbazole	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
Chrysene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Dibenz(a,h)anthracene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Dibenzofuran	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
Diethyl phthalate	ND		5.1	2.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
Dimethyl phthalate	ND		5.1	2.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
Hexachlorobenzene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Hexachlorobutadiene	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
Hexachlorocyclopentadiene	ND	^c *1	11	5.1	ug/L		01/22/21 09:30	01/24/21 16:53	1
Hexachloroethane	ND		5.1	1.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
Fluoranthene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Fluorene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Indeno[1,2,3-cd]pyrene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Isophorone	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1

Client Sample ID: HOFF-MW-A-011921
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Lab Sample ID: 410-26865-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		3.0	0.71	ug/L		01/22/21 09:30	01/24/21 16:53	1
N-Nitrosodiphenylamine	ND		3.0	0.71	ug/L		01/22/21 09:30	01/24/21 16:53	1
Naphthalene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Nitrobenzene	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
Pentachlorophenol	ND		5.1	1.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
Phenanthrene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Phenol	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
Pyrene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
2-Chloronaphthalene	ND		1.0	0.41	ug/L		01/22/21 09:30	01/24/21 16:53	1
2-Chlorophenol	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
2-Methylnaphthalene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 16:53	1
2-Methylphenol	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
2-Nitroaniline	ND		5.1	2.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
2-Nitrophenol	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
3-Nitroaniline	ND		7.1	3.0	ug/L		01/22/21 09:30	01/24/21 16:53	1
4,6-Dinitro-2-methylphenol	ND		21	8.1	ug/L		01/22/21 09:30	01/24/21 16:53	1
4-Bromophenyl-phenylether	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
4-Methylphenol	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
4-Nitroaniline	ND		3.0	0.91	ug/L		01/22/21 09:30	01/24/21 16:53	1
4-Nitrophenol	ND	^c	30	10	ug/L		01/22/21 09:30	01/24/21 16:53	1
Bis(2-chloroethoxy)methane	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
Bis(2-chloroethyl)ether	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
Bis(2-ethylhexyl) phthalate	ND		11	5.1	ug/L		01/22/21 09:30	01/24/21 16:53	1
2,6-Dinitrotoluene	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		01/22/21 09:30	01/24/21 16:53	1
4-Chloroaniline	ND		10	4.1	ug/L		01/22/21 09:30	01/24/21 16:53	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.51	ug/L		01/22/21 09:30	01/24/21 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*75*		*10 - 150*	*01/22/21 09:30*	*01/24/21 16:53*	*1*
2-Fluorobiphenyl (Surr)	*63*		*44 - 102*	*01/22/21 09:30*	*01/24/21 16:53*	*1*
2-Fluorophenol (Surr)	*36*		*10 - 84*	*01/22/21 09:30*	*01/24/21 16:53*	*1*
Nitrobenzene-d5 (Surr)	*60*		*23 - 128*	*01/22/21 09:30*	*01/24/21 16:53*	*1*
p-Terphenyl-d14 (Surr)	*51*		*31 - 113*	*01/22/21 09:30*	*01/24/21 16:53*	*1*
Phenol-d5 (Surr)	*28*		*10 - 67*	*01/22/21 09:30*	*01/24/21 16:53*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND	*1	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:05	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		01/22/21 09:30	01/22/21 21:05	1
alpha-Chlordane (2C)	ND		0.020	0.0030	ug/L		01/22/21 09:30	01/22/21 21:05	1
beta-BHC (2C)	ND		0.020	0.0034	ug/L		01/22/21 09:30	01/22/21 21:05	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		01/22/21 09:30	01/22/21 21:05	1
Dieldrin (2C)	ND		0.030	0.0053	ug/L		01/22/21 09:30	01/22/21 21:05	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		01/22/21 09:30	01/22/21 21:05	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		01/22/21 09:30	01/22/21 21:05	1
Endosulfan sulfate (1C)	ND		0.030	0.0058	ug/L		01/22/21 09:30	01/22/21 21:05	1
Endrin (1C)	ND		0.030	0.0081	ug/L		01/22/21 09:30	01/22/21 21:05	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		01/22/21 09:30	01/22/21 21:05	1

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Lab Sample ID: 410-26865-1

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 21:05	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:05	1
gamma-Chlordane (1C)	ND	*1	0.040	0.0070	ug/L		01/22/21 09:30	01/22/21 21:05	1
Heptachlor (1C)	ND	B *1	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:05	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		01/22/21 09:30	01/22/21 21:05	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		01/22/21 09:30	01/22/21 21:05	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		01/22/21 09:30	01/22/21 21:05	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 21:05	1
p,p'-DDE (2C)	ND	*1	0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 21:05	1
p,p'-DDT (1C)	ND		0.030	0.0052	ug/L		01/22/21 09:30	01/22/21 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*40*		*32 - 149*	*01/22/21 09:30*	*01/22/21 21:05*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*42*		*32 - 149*	*01/22/21 09:30*	*01/22/21 21:05*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*53*		*29 - 129*	*01/22/21 09:30*	*01/22/21 21:05*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*51*		*29 - 129*	*01/22/21 09:30*	*01/22/21 21:05*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:15	1
Aluminum	**7.1**		0.30	0.15	mg/L		01/20/21 05:29	01/21/21 18:15	1
Antimony	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:15	1
Barium	**0.056**		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:15	1
Beryllium	ND		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:15	1
Cadmium	ND		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:15	1
Calcium	**59**		0.50	0.096	mg/L		01/20/21 05:29	01/21/21 19:22	1
Chromium	**0.025**		0.015	0.0016	mg/L		01/20/21 05:29	01/21/21 18:15	1
Cobalt	**0.0045**	**J**	0.0050	0.0015	mg/L		01/20/21 05:29	01/21/21 18:15	1
Copper	**0.041**		0.020	0.012	mg/L		01/20/21 05:29	01/21/21 18:15	1
Iron	**9.0**		0.20	0.040	mg/L		01/20/21 05:29	01/21/21 18:15	1
Lead	**0.011**	**J**	0.015	0.0071	mg/L		01/20/21 05:29	01/22/21 14:55	1
Magnesium	**25**		0.10	0.040	mg/L		01/20/21 05:29	01/21/21 19:22	1
Manganese	**3.2**		0.010	0.0030	mg/L		01/20/21 05:29	01/21/21 18:15	1
Nickel	**0.015**		0.010	0.0021	mg/L		01/20/21 05:29	01/21/21 18:15	1
Zinc	**0.014**	**J**	0.020	0.0037	mg/L		01/20/21 05:29	01/21/21 18:15	1
Silver	ND		0.010	0.0050	mg/L		01/20/21 05:29	01/21/21 18:15	1
Selenium	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:15	1
Potassium	**4.4**		0.50	0.20	mg/L		01/20/21 05:29	01/21/21 18:15	1
Sodium	**23**		1.0	0.24	mg/L		01/20/21 05:29	01/21/21 19:22	1
Thallium	**0.014**	**J**	0.030	0.0081	mg/L		01/20/21 05:29	01/21/21 18:15	1
Vanadium	**0.022**		0.010	0.0019	mg/L		01/20/21 05:29	01/21/21 18:15	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/21/21 04:09	01/26/21 13:04	1
Aluminum	ND		0.31	0.16	mg/L		01/21/21 04:09	01/26/21 13:04	1
Antimony	ND		0.052	0.016	mg/L		01/21/21 04:09	01/26/21 13:04	1
Barium	**0.022**		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 13:04	1
Beryllium	ND		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 13:04	1
Cadmium	ND		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 13:04	1

Client Sample ID: HOFF-MW-A-011921

Lab Sample ID: 410-26865-1

Date Collected: 01/19/21 10:40

Matrix: Water

Date Received: 01/19/21 17:08

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**53**		0.52	0.099	mg/L		01/21/21 04:09	01/26/21 13:04	1
Chromium	ND		0.015	0.0016	mg/L		01/21/21 04:09	01/26/21 13:04	1
Cobalt	**0.0017**	**J**	0.0052	0.0015	mg/L		01/21/21 04:09	01/26/21 13:04	1
Copper	ND		0.021	0.012	mg/L		01/21/21 04:09	01/26/21 13:04	1
Iron	**0.92**		0.21	0.041	mg/L		01/21/21 04:09	01/26/21 13:04	1
Lead	ND		0.015	0.0073	mg/L		01/21/21 04:09	01/26/21 13:04	1
Magnesium	**20**		0.10	0.041	mg/L		01/21/21 04:09	01/26/21 13:04	1
Manganese	**2.8**		0.010	0.0031	mg/L		01/21/21 04:09	01/26/21 13:04	1
Nickel	ND		0.010	0.0022	mg/L		01/21/21 04:09	01/26/21 13:04	1
Zinc	ND		0.021	0.0038	mg/L		01/21/21 04:09	01/26/21 13:04	1
Silver	ND		0.010	0.0052	mg/L		01/21/21 04:09	01/26/21 13:04	1
Selenium	ND		0.052	0.016	mg/L		01/21/21 04:09	01/27/21 18:42	1
Potassium	**2.8**		0.52	0.21	mg/L		01/21/21 04:09	01/27/21 18:42	1
Sodium	**22**		1.0	0.25	mg/L		01/21/21 04:09	01/27/21 18:42	1
Thallium	ND		0.031	0.0083	mg/L		01/21/21 04:09	01/26/21 13:04	1
Vanadium	**0.0023**	**J**	0.010	0.0020	mg/L		01/21/21 04:09	01/26/21 13:04	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/20/21 19:59	01/21/21 19:16	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/20/21 19:59	01/21/21 19:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	**3.2**	**HF**	0.50	0.25	mg/L			01/26/21 13:06	5
Sulfate	**46**		24	8.0	mg/L			01/27/21 11:48	4

Client Sample ID: HOFF-MW-B-011921

Lab Sample ID: 410-26865-2

Date Collected: 01/19/21 12:10

Matrix: Water

Date Received: 01/19/21 17:08

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/28/21 06:17	10
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/L			01/28/21 06:17	10
Ethylbenzene	**1.5**	**J**	5.0	0.60	ug/L			01/28/21 06:17	10
Styrene	ND		5.0	0.50	ug/L			01/28/21 06:17	10
1,4-Dichlorobenzene	**210**		5.0	0.70	ug/L			01/28/21 06:17	10
1,2-Dibromoethane	ND		5.0	0.60	ug/L			01/28/21 06:17	10
1,2-Dichloroethane	**0.54**	**J**	5.0	0.50	ug/L			01/28/21 06:17	10
4-Methyl-2-pentanone	ND		50	7.0	ug/L			01/28/21 06:17	10
Methylcyclohexane	ND		5.0	0.50	ug/L			01/28/21 06:17	10
Toluene	ND		5.0	0.70	ug/L			01/28/21 06:17	10
Cyclohexane	ND		5.0	0.50	ug/L			01/28/21 06:17	10
1,2,4-Trichlorobenzene	**8.7**		5.0	0.60	ug/L			01/28/21 06:17	10
Dibromochloromethane	ND		5.0	0.70	ug/L			01/28/21 06:17	10
Xylenes, Total	**6.6**	**J**	10	1.5	ug/L			01/28/21 06:17	10
Tetrachloroethene	ND		5.0	0.60	ug/L			01/28/21 06:17	10

Client Sample ID: HOFF-MW-B-011921

Date Collected: 01/19/21 12:10
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-2

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**39**		5.0	0.50	ug/L			01/28/21 06:17	10
trans-1,2-Dichloroethene	**6.2**		5.0	0.60	ug/L			01/28/21 06:17	10
Methyl tertiary butyl ether	ND		5.0	0.50	ug/L			01/28/21 06:17	10
1,3-Dichlorobenzene	**24**		5.0	0.60	ug/L			01/28/21 06:17	10
Carbon tetrachloride	ND		5.0	0.70	ug/L			01/28/21 06:17	10
2-Hexanone	ND		50	6.0	ug/L			01/28/21 06:17	10
Acetone	**80**		50	9.0	ug/L			01/28/21 06:17	10
Chloroform	ND		5.0	0.90	ug/L			01/28/21 06:17	10
Benzene	**49**		5.0	0.50	ug/L			01/28/21 06:17	10
1,1,1-Trichloroethane	**12**		5.0	0.60	ug/L			01/28/21 06:17	10
Bromomethane	**4.2**	**J**	5.0	0.70	ug/L			01/28/21 06:17	10
Chloromethane	**16**		5.0	0.60	ug/L			01/28/21 06:17	10
Chloroethane	**3.8**	**J**	5.0	0.70	ug/L			01/28/21 06:17	10
Vinyl chloride	ND		5.0	1.0	ug/L			01/28/21 06:17	10
Methylene Chloride	ND		5.0	0.70	ug/L			01/28/21 06:17	10
Carbon disulfide	**2.8**	**J**	10	0.60	ug/L			01/28/21 06:17	10
Bromoform	ND		10	3.0	ug/L			01/28/21 06:17	10
Bromodichloromethane	ND		5.0	0.50	ug/L			01/28/21 06:17	10
1,1-Dichloroethane	**67**		5.0	0.70	ug/L			01/28/21 06:17	10
1,1-Dichloroethene	ND		5.0	0.60	ug/L			01/28/21 06:17	10
Trichlorofluoromethane	ND		5.0	0.50	ug/L			01/28/21 06:17	10
Dichlorodifluoromethane	ND		5.0	0.50	ug/L			01/28/21 06:17	10
Freon 113	ND		5.0	0.60	ug/L			01/28/21 06:17	10
1,2-Dichloropropane	ND		5.0	0.60	ug/L			01/28/21 06:17	10
2-Butanone	**15**	**J**	50	6.0	ug/L			01/28/21 06:17	10
1,1,2-Trichloroethane	**0.99**	**J**	5.0	0.60	ug/L			01/28/21 06:17	10
Trichloroethene	**4.0**	**J**	5.0	0.60	ug/L			01/28/21 06:17	10
Methyl acetate	ND		10	1.0	ug/L			01/28/21 06:17	10
1,1,2,2-Tetrachloroethane	ND		5.0	0.70	ug/L			01/28/21 06:17	10
1,2-Dibromo-3-Chloropropane	ND		5.0	1.0	ug/L			01/28/21 06:17	10
Isopropylbenzene	**2.0**	**J**	5.0	0.50	ug/L			01/28/21 06:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*01/28/21 06:17*	*10*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*01/28/21 06:17*	*10*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*01/28/21 06:17*	*10*
Toluene-d8 (Surr)	*93*		*80 - 120*		*01/28/21 06:17*	*10*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	**940**		50	6.0	ug/L			01/28/21 06:38	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*01/28/21 06:38*	*100*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*01/28/21 06:38*	*100*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*01/28/21 06:38*	*100*
Toluene-d8 (Surr)	*97*		*80 - 120*		*01/28/21 06:38*	*100*

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-MW-B-011921

Date Collected: 01/19/21 12:10
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-2

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**3000**		500	60	ug/L			01/29/21 06:05	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*01/29/21 06:05*	*1000*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*01/29/21 06:05*	*1000*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/29/21 06:05*	*1000*
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/29/21 06:05*	*1000*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.7**		4.0	2.0	ug/L			01/27/21 17:01	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*01/27/21 17:01*	*10*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
2,4-Dichlorophenol	**1.1**	**J**	2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
2,4-Dinitrophenol	ND		30	14	ug/L		01/22/21 09:30	01/24/21 17:21	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
2,2'-oxybis[1-chloropropane]	ND	^c	2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Benzo[a]pyrene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Acenaphthene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Acenaphthylene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Acetophenone	**7.4**	**J**	10	4.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
Anthracene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Atrazine	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
Benzaldehyde	ND	^c	10	3.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
Caprolactam	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
Carbazole	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
Chrysene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Dibenzofuran	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
Diethyl phthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
Hexachlorocyclopentadiene	ND	^c *1	11	5.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
Hexachloroethane	ND		5.0	1.0	ug/L		01/22/21 09:30	01/24/21 17:21	1

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-MW-B-011921
Date Collected: 01/19/21 12:10
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**0.16**	**J**	0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Fluorene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Isophorone	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		01/22/21 09:30	01/24/21 17:21	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		01/22/21 09:30	01/24/21 17:21	1
Naphthalene	**4.2**		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Nitrobenzene	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
Pentachlorophenol	ND		5.0	1.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
Phenanthrene	**0.50**		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Phenol	**2.8**		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
Pyrene	**0.10**	**J**	0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		01/22/21 09:30	01/24/21 17:21	1
2-Chlorophenol	**44**		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
2-Methylnaphthalene	**2.6**		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 17:21	1
2-Methylphenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
2-Nitroaniline	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
2-Nitrophenol	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
3-Nitroaniline	ND		7.0	3.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
4-Methylphenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
4-Nitroaniline	ND		3.0	0.90	ug/L		01/22/21 09:30	01/24/21 17:21	1
4-Nitrophenol	ND	^c	30	10	ug/L		01/22/21 09:30	01/24/21 17:21	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		01/22/21 09:30	01/24/21 17:21	1
4-Chloroaniline	ND		10	4.0	ug/L		01/22/21 09:30	01/24/21 17:21	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*65*		*10 - 150*	*01/22/21 09:30*	*01/24/21 17:21*	*1*
2-Fluorobiphenyl (Surr)	*63*		*44 - 102*	*01/22/21 09:30*	*01/24/21 17:21*	*1*
2-Fluorophenol (Surr)	*33*		*10 - 84*	*01/22/21 09:30*	*01/24/21 17:21*	*1*
Nitrobenzene-d5 (Surr)	*67*		*23 - 128*	*01/22/21 09:30*	*01/24/21 17:21*	*1*
p-Terphenyl-d14 (Surr)	*73*		*31 - 113*	*01/22/21 09:30*	*01/24/21 17:21*	*1*
Phenol-d5 (Surr)	*36*		*10 - 67*	*01/22/21 09:30*	*01/24/21 17:21*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	**0.0026**	**J *1**	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:16	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		01/22/21 09:30	01/22/21 21:16	1
alpha-Chlordane (2C)	**0.018**	**J p**	0.020	0.0030	ug/L		01/22/21 09:30	01/22/21 21:16	1
beta-BHC (1C)	ND	B	0.020	0.0034	ug/L		01/22/21 09:30	01/22/21 21:16	1
delta-BHC (1C)	**0.017**	**J**	0.020	0.0034	ug/L		01/22/21 09:30	01/22/21 21:16	1
Dieldrin (1C)	**0.0092**	**J p**	0.030	0.0053	ug/L		01/22/21 09:30	01/22/21 21:16	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		01/22/21 09:30	01/22/21 21:16	1

Client Sample ID: HOFF-MW-B-011921

Date Collected: 01/19/21 12:10
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-2

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan II (1C)	ND		0.040	0.015	ug/L		01/22/21 09:30	01/22/21 21:16	1
Endosulfan sulfate (2C)	**0.0069**	**J p**	0.030	0.0058	ug/L		01/22/21 09:30	01/22/21 21:16	1
Endrin (1C)	ND		0.030	0.0080	ug/L		01/22/21 09:30	01/22/21 21:16	1
Endrin aldehyde (1C)	ND		0.099	0.020	ug/L		01/22/21 09:30	01/22/21 21:16	1
Endrin ketone (2C)	ND		0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 21:16	1
gamma-BHC (Lindane) (2C)	**0.0074**	**J**	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:16	1
gamma-Chlordane (1C)	ND	*1	0.040	0.0069	ug/L		01/22/21 09:30	01/22/21 21:16	1
Heptachlor (1C)	**0.017**	**J B *1**	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:16	1
Heptachlor epoxide (1C)	**0.0026**	**J p**	0.020	0.0023	ug/L		01/22/21 09:30	01/22/21 21:16	1
Methoxychlor (2C)	ND		0.11	0.030	ug/L		01/22/21 09:30	01/22/21 21:16	1
Toxaphene (1C)	ND		0.99	0.30	ug/L		01/22/21 09:30	01/22/21 21:16	1
p,p'-DDD (2C)	ND		0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 21:16	1
p,p'-DDE (2C)	**0.0070**	**J p *1**	0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 21:16	1
p,p'-DDT (2C)	**0.028**	**J**	0.030	0.0052	ug/L		01/22/21 09:30	01/22/21 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*66*		*32 - 149*	*01/22/21 09:30*	*01/22/21 21:16*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*65*		*32 - 149*	*01/22/21 09:30*	*01/22/21 21:16*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*46*		*29 - 129*	*01/22/21 09:30*	*01/22/21 21:16*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*51*		*29 - 129*	*01/22/21 09:30*	*01/22/21 21:16*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:18	1
Aluminum	ND		0.30	0.15	mg/L		01/20/21 05:29	01/21/21 18:18	1
Antimony	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:18	1
Barium	**0.054**		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:18	1
Beryllium	ND		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:18	1
Cadmium	ND		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:18	1
Calcium	**250**		0.50	0.096	mg/L		01/20/21 05:29	01/21/21 19:25	1
Chromium	**0.012**	**J**	0.015	0.0016	mg/L		01/20/21 05:29	01/21/21 18:18	1
Cobalt	**0.0028**	**J**	0.0050	0.0015	mg/L		01/20/21 05:29	01/21/21 18:18	1
Copper	ND		0.020	0.012	mg/L		01/20/21 05:29	01/21/21 18:18	1
Iron	**1.3**		0.20	0.040	mg/L		01/20/21 05:29	01/21/21 18:18	1
Lead	ND	^3+	0.015	0.0071	mg/L		01/20/21 05:29	01/21/21 18:18	1
Magnesium	**270**		0.10	0.040	mg/L		01/20/21 05:29	01/21/21 19:25	1
Manganese	**0.50**		0.010	0.0030	mg/L		01/20/21 05:29	01/21/21 18:18	1
Nickel	**0.036**		0.010	0.0021	mg/L		01/20/21 05:29	01/21/21 18:18	1
Zinc	ND		0.020	0.0037	mg/L		01/20/21 05:29	01/21/21 18:18	1
Silver	ND		0.010	0.0050	mg/L		01/20/21 05:29	01/21/21 18:18	1
Selenium	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:18	1
Potassium	**53**		0.50	0.20	mg/L		01/20/21 05:29	01/21/21 18:18	1
Sodium	**560**		5.0	1.2	mg/L		01/20/21 05:29	01/22/21 14:59	5
Thallium	ND		0.030	0.0081	mg/L		01/20/21 05:29	01/21/21 18:18	1
Vanadium	ND		0.010	0.0019	mg/L		01/20/21 05:29	01/21/21 18:18	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/21/21 04:09	01/26/21 12:58	1
Aluminum	ND		0.31	0.16	mg/L		01/21/21 04:09	01/26/21 12:58	1

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Matrix: Water

Date Received: 01/19/21 17:08

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.052	0.016	mg/L		01/21/21 04:09	01/26/21 12:58	1
Barium	**0.034**		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 12:58	1
Beryllium	ND		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 12:58	1
Cadmium	ND		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 12:58	1
Calcium	**240**		0.52	0.099	mg/L		01/21/21 04:09	01/26/21 12:58	1
Chromium	**0.011**	**J**	0.015	0.0016	mg/L		01/21/21 04:09	01/26/21 12:58	1
Cobalt	**0.0029**	**J**	0.0052	0.0015	mg/L		01/21/21 04:09	01/26/21 12:58	1
Copper	**0.012**	**J**	0.021	0.012	mg/L		01/21/21 04:09	01/26/21 12:58	1
Iron	ND		0.21	0.041	mg/L		01/21/21 04:09	01/26/21 12:58	1
Lead	**0.011**	**J**	0.015	0.0073	mg/L		01/21/21 04:09	01/26/21 12:58	1
Magnesium	**300**		0.10	0.041	mg/L		01/21/21 04:09	01/26/21 12:58	1
Manganese	**0.45**		0.010	0.0031	mg/L		01/21/21 04:09	01/26/21 12:58	1
Nickel	**0.030**		0.010	0.0022	mg/L		01/21/21 04:09	01/26/21 12:58	1
Zinc	ND		0.021	0.0038	mg/L		01/21/21 04:09	01/26/21 12:58	1
Silver	ND		0.010	0.0052	mg/L		01/21/21 04:09	01/26/21 12:58	1
Selenium	ND		0.052	0.016	mg/L		01/21/21 04:09	01/27/21 18:29	1
Potassium	**52**	**^3+ ^2**	0.52	0.21	mg/L		01/21/21 04:09	01/26/21 12:58	1
Sodium	**590**		5.2	1.2	mg/L		01/21/21 04:09	01/27/21 19:13	5
Thallium	**0.0085**	**J**	0.031	0.0083	mg/L		01/21/21 04:09	01/26/21 12:58	1
Vanadium	**0.0041**	**J**	0.010	0.0020	mg/L		01/21/21 04:09	01/26/21 12:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/20/21 19:59	01/21/21 19:36	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/20/21 19:59	01/21/21 19:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	**0.079**	**J HF**	0.10	0.050	mg/L			01/26/21 12:55	1
Sulfate	**1600**		600	200	mg/L			01/27/21 11:48	100

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Date Collected: 01/19/21 13:15

Matrix: Water

Date Received: 01/19/21 17:08

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.10	ug/L			01/28/21 06:59	2
trans-1,3-Dichloropropene	ND		1.0	0.12	ug/L			01/28/21 06:59	2
Ethylbenzene	ND		1.0	0.12	ug/L			01/28/21 06:59	2
Styrene	ND		1.0	0.10	ug/L			01/28/21 06:59	2
1,2-Dibromoethane	ND		1.0	0.12	ug/L			01/28/21 06:59	2
1,2-Dichloroethane	**0.55**	**J**	1.0	0.10	ug/L			01/28/21 06:59	2
4-Methyl-2-pentanone	ND		10	1.4	ug/L			01/28/21 06:59	2
Methylcyclohexane	ND		1.0	0.10	ug/L			01/28/21 06:59	2
Toluene	ND		1.0	0.14	ug/L			01/28/21 06:59	2
Cyclohexane	ND		1.0	0.10	ug/L			01/28/21 06:59	2
1,2,4-Trichlorobenzene	**3.5**		1.0	0.12	ug/L			01/28/21 06:59	2

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Lab Sample ID: 410-26865-3
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	**1.8**		1.0	0.14	ug/L			01/28/21 06:59	2
Xylenes, Total	ND		2.0	0.30	ug/L			01/28/21 06:59	2
Tetrachloroethene	ND		1.0	0.12	ug/L			01/28/21 06:59	2
cis-1,2-Dichloroethene	**20**		1.0	0.10	ug/L			01/28/21 06:59	2
trans-1,2-Dichloroethene	**6.3**		1.0	0.12	ug/L			01/28/21 06:59	2
Methyl tertiary butyl ether	ND		1.0	0.10	ug/L			01/28/21 06:59	2
1,3-Dichlorobenzene	**2.6**		1.0	0.12	ug/L			01/28/21 06:59	2
Carbon tetrachloride	ND		1.0	0.14	ug/L			01/28/21 06:59	2
2-Hexanone	ND		10	1.2	ug/L			01/28/21 06:59	2
Acetone	**180**		10	1.8	ug/L			01/28/21 06:59	2
Chloroform	**1.4**		1.0	0.18	ug/L			01/28/21 06:59	2
Benzene	**0.26**	**J**	1.0	0.10	ug/L			01/28/21 06:59	2
Bromomethane	**28**		1.0	0.14	ug/L			01/28/21 06:59	2
Chloroethane	**8.5**		1.0	0.14	ug/L			01/28/21 06:59	2
Vinyl chloride	ND		1.0	0.20	ug/L			01/28/21 06:59	2
Methylene Chloride	**1.6**		1.0	0.14	ug/L			01/28/21 06:59	2
Carbon disulfide	**0.35**	**J**	2.0	0.12	ug/L			01/28/21 06:59	2
Bromoform	**5.0**		2.0	0.60	ug/L			01/28/21 06:59	2
Bromodichloromethane	**1.1**		1.0	0.10	ug/L			01/28/21 06:59	2
1,1-Dichloroethene	ND		1.0	0.12	ug/L			01/28/21 06:59	2
Trichlorofluoromethane	ND		1.0	0.10	ug/L			01/28/21 06:59	2
Dichlorodifluoromethane	ND		1.0	0.10	ug/L			01/28/21 06:59	2
Freon 113	ND		1.0	0.12	ug/L			01/28/21 06:59	2
1,2-Dichloropropane	**0.81**	**J**	1.0	0.12	ug/L			01/28/21 06:59	2
2-Butanone	**27**		10	1.2	ug/L			01/28/21 06:59	2
1,1,2-Trichloroethane	**2.3**		1.0	0.12	ug/L			01/28/21 06:59	2
Trichloroethene	**1.7**		1.0	0.12	ug/L			01/28/21 06:59	2
Methyl acetate	ND		2.0	0.20	ug/L			01/28/21 06:59	2
1,1,2,2-Tetrachloroethane	**1.2**		1.0	0.14	ug/L			01/28/21 06:59	2
1,2-Dibromo-3-Chloropropane	ND		1.0	0.20	ug/L			01/28/21 06:59	2
Isopropylbenzene	ND		1.0	0.10	ug/L			01/28/21 06:59	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*01/28/21 06:59*	*2*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*01/28/21 06:59*	*2*
4-Bromofluorobenzene (Surr)	*82*		*80 - 120*		*01/28/21 06:59*	*2*
Toluene-d8 (Surr)	*52*	*S1-*	*80 - 120*		*01/28/21 06:59*	*2*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	**62**		10	1.4	ug/L			01/28/21 07:21	20
Chlorobenzene	**99**		10	1.2	ug/L			01/28/21 07:21	20
1,1,1-Trichloroethane	**55**		10	1.2	ug/L			01/28/21 07:21	20
Chloromethane	**62**		10	1.2	ug/L			01/28/21 07:21	20
1,1-Dichloroethane	**190**		10	1.4	ug/L			01/28/21 07:21	20
1,2-Dichlorobenzene	**310**		10	1.2	ug/L			01/28/21 07:21	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*01/28/21 07:21*	*20*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*01/28/21 07:21*	*20*

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Lab Sample ID: 410-26865-3
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*01/28/21 07:21*	*20*
Toluene-d8 (Surr)	*64*	*S1-*	*80 - 120*		*01/28/21 07:21*	*20*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.8		0.80	0.40	ug/L			01/27/21 16:40	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*78*	*S1-*	*80 - 120*		*01/27/21 16:40*	*2*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		9.9	3.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
2,4-Dimethylphenol	ND		9.9	3.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
2,4-Dinitrophenol	ND		30	14	ug/L		01/22/21 09:30	01/24/21 17:49	1
2,4-Dinitrotoluene	ND		5.0	0.99	ug/L		01/22/21 09:30	01/24/21 17:49	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
2,2'-oxybis[1-chloropropane]	ND	^c	2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
Benzo[a]anthracene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Benzo[a]pyrene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Benzo[b]fluoranthene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Benzo[g,h,i]perylene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Benzo[k]fluoranthene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Acenaphthene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Acenaphthylene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Acetophenone	ND		9.9	4.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
Anthracene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Atrazine	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
Benzaldehyde	ND	^c	9.9	3.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
Caprolactam	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
Carbazole	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
Chrysene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Dibenz(a,h)anthracene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Dibenzofuran	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
Diethyl phthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
Hexachlorobenzene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
Hexachlorocyclopentadiene	ND	^c *1	11	5.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
Hexachloroethane	ND		5.0	0.99	ug/L		01/22/21 09:30	01/24/21 17:49	1
Fluoranthene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Fluorene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Isophorone	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
N-Nitrosodi-n-propylamine	ND		3.0	0.69	ug/L		01/22/21 09:30	01/24/21 17:49	1

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Lab Sample ID: 410-26865-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		3.0	0.69	ug/L		01/22/21 09:30	01/24/21 17:49	1
Naphthalene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Nitrobenzene	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
Pentachlorophenol	ND		5.0	0.99	ug/L		01/22/21 09:30	01/24/21 17:49	1
Phenanthrene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
Phenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
Pyrene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
2-Chloronaphthalene	ND		0.99	0.40	ug/L		01/22/21 09:30	01/24/21 17:49	1
2-Chlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
2-Methylnaphthalene	ND		0.50	0.099	ug/L		01/22/21 09:30	01/24/21 17:49	1
2-Methylphenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
2-Nitroaniline	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
2-Nitrophenol	ND		9.9	3.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
3,3'-Dichlorobenzidine	ND		9.9	3.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
3-Nitroaniline	ND		6.9	3.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
4,6-Dinitro-2-methylphenol	ND		21	7.9	ug/L		01/22/21 09:30	01/24/21 17:49	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
4-Methylphenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
4-Nitroaniline	ND		3.0	0.89	ug/L		01/22/21 09:30	01/24/21 17:49	1
4-Nitrophenol	ND	^c	30	9.9	ug/L		01/22/21 09:30	01/24/21 17:49	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		01/22/21 09:30	01/24/21 17:49	1
4-Chloroaniline	ND		9.9	4.0	ug/L		01/22/21 09:30	01/24/21 17:49	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*42*		*10 - 150*	*01/22/21 09:30*	*01/24/21 17:49*	*1*
2-Fluorobiphenyl (Surr)	*54*		*44 - 102*	*01/22/21 09:30*	*01/24/21 17:49*	*1*
2-Fluorophenol (Surr)	*6*	*S1-*	*10 - 84*	*01/22/21 09:30*	*01/24/21 17:49*	*1*
Nitrobenzene-d5 (Surr)	*57*		*23 - 128*	*01/22/21 09:30*	*01/24/21 17:49*	*1*
p-Terphenyl-d14 (Surr)	*82*		*31 - 113*	*01/22/21 09:30*	*01/24/21 17:49*	*1*
Phenol-d5 (Surr)	*7*	*S1-*	*10 - 67*	*01/22/21 09:30*	*01/24/21 17:49*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND	*1	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:26	1
alpha-BHC (2C)	ND		0.020	0.0030	ug/L		01/22/21 09:30	01/22/21 21:26	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		01/22/21 09:30	01/22/21 21:26	1
beta-BHC (2C)	ND		0.020	0.0034	ug/L		01/22/21 09:30	01/22/21 21:26	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		01/22/21 09:30	01/22/21 21:26	1
Dieldrin (1C)	ND		0.030	0.0052	ug/L		01/22/21 09:30	01/22/21 21:26	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		01/22/21 09:30	01/22/21 21:26	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		01/22/21 09:30	01/22/21 21:26	1
Endosulfan sulfate (1C)	ND		0.030	0.0057	ug/L		01/22/21 09:30	01/22/21 21:26	1
Endrin (1C)	ND		0.030	0.0080	ug/L		01/22/21 09:30	01/22/21 21:26	1
Endrin aldehyde (1C)	ND		0.099	0.020	ug/L		01/22/21 09:30	01/22/21 21:26	1
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 21:26	1

Client Sample ID: HOFF-MW-C-011921
Date Collected: 01/19/21 13:15
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Lab Sample ID: 410-26865-3
Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane) (2C)	**0.0033**	**J p**	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:26	1
gamma-Chlordane (1C)	ND	*1	0.040	0.0069	ug/L		01/22/21 09:30	01/22/21 21:26	1
Heptachlor (2C)	ND	B *1	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:26	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		01/22/21 09:30	01/22/21 21:26	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		01/22/21 09:30	01/22/21 21:26	1
Toxaphene (1C)	ND		0.99	0.30	ug/L		01/22/21 09:30	01/22/21 21:26	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 21:26	1
p,p'-DDE (1C)	ND	*1	0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 21:26	1
p,p'-DDT (2C)	ND		0.030	0.0051	ug/L		01/22/21 09:30	01/22/21 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*54*		*32 - 149*	*01/22/21 09:30*	*01/22/21 21:26*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*53*		*32 - 149*	*01/22/21 09:30*	*01/22/21 21:26*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*37*		*29 - 129*	*01/22/21 09:30*	*01/22/21 21:26*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*37*		*29 - 129*	*01/22/21 09:30*	*01/22/21 21:26*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:28	1
Aluminum	**1.1**		0.30	0.15	mg/L		01/20/21 05:29	01/21/21 18:28	1
Antimony	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:28	1
Barium	**0.22**		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:28	1
Beryllium	ND		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:28	1
Cadmium	ND		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:28	1
Calcium	**900**		2.5	0.48	mg/L		01/20/21 05:29	01/21/21 19:38	5
Chromium	**0.084**		0.015	0.0016	mg/L		01/20/21 05:29	01/21/21 18:28	1
Cobalt	**0.0051**		0.0050	0.0015	mg/L		01/20/21 05:29	01/21/21 18:28	1
Copper	**0.012**	**J**	0.020	0.012	mg/L		01/20/21 05:29	01/21/21 18:28	1
Iron	**25**		0.20	0.040	mg/L		01/20/21 05:29	01/21/21 18:28	1
Lead	ND	^3+	0.015	0.0071	mg/L		01/20/21 05:29	01/21/21 18:28	1
Magnesium	**790**		0.50	0.20	mg/L		01/20/21 05:29	01/21/21 19:38	5
Manganese	**0.069**		0.010	0.0030	mg/L		01/20/21 05:29	01/21/21 18:28	1
Nickel	**0.0044**	**J**	0.010	0.0021	mg/L		01/20/21 05:29	01/21/21 18:28	1
Zinc	**0.0078**	**J**	0.020	0.0037	mg/L		01/20/21 05:29	01/21/21 18:28	1
Silver	ND		0.010	0.0050	mg/L		01/20/21 05:29	01/21/21 18:28	1
Selenium	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:28	1
Potassium	**78**		0.50	0.20	mg/L		01/20/21 05:29	01/21/21 18:28	1
Sodium	**2600**		10	2.4	mg/L		01/20/21 05:29	01/21/21 19:51	10
Thallium	ND		0.030	0.0081	mg/L		01/20/21 05:29	01/21/21 18:28	1
Vanadium	**0.019**		0.010	0.0019	mg/L		01/20/21 05:29	01/21/21 18:28	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/21/21 04:09	01/26/21 13:01	1
Aluminum	ND		0.31	0.16	mg/L		01/21/21 04:09	01/26/21 13:01	1
Antimony	ND		0.052	0.016	mg/L		01/21/21 04:09	01/26/21 13:01	1
Barium	**0.070**		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 13:01	1
Beryllium	ND		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 13:01	1
Cadmium	ND		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 13:01	1
Calcium	**760**		2.6	0.49	mg/L		01/21/21 04:09	01/27/21 18:39	5

Client Sample ID: HOFF-MW-C-011921

Lab Sample ID: 410-26865-3

Date Collected: 01/19/21 13:15

Matrix: Water

Date Received: 01/19/21 17:08

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**0.079**		0.015	0.0016	mg/L		01/21/21 04:09	01/26/21 13:01	1
Cobalt	ND		0.0052	0.0015	mg/L		01/21/21 04:09	01/26/21 13:01	1
Copper	**0.021**		0.021	0.012	mg/L		01/21/21 04:09	01/26/21 13:01	1
Iron	ND		0.21	0.041	mg/L		01/21/21 04:09	01/26/21 13:01	1
Lead	**0.019**		0.015	0.0073	mg/L		01/21/21 04:09	01/26/21 13:01	1
Magnesium	**660**		0.52	0.21	mg/L		01/21/21 04:09	01/27/21 18:39	5
Manganese	ND		0.010	0.0031	mg/L		01/21/21 04:09	01/26/21 13:01	1
Nickel	ND		0.010	0.0022	mg/L		01/21/21 04:09	01/26/21 13:01	1
Zinc	ND		0.021	0.0038	mg/L		01/21/21 04:09	01/26/21 13:01	1
Silver	ND		0.010	0.0052	mg/L		01/21/21 04:09	01/26/21 13:01	1
Selenium	ND		0.052	0.016	mg/L		01/21/21 04:09	01/27/21 18:32	1
Potassium	**80**	**^3+ ^2**	0.52	0.21	mg/L		01/21/21 04:09	01/26/21 13:01	1
Sodium	**2200**		5.2	1.2	mg/L		01/21/21 04:09	01/27/21 18:39	5
Thallium	ND		0.031	0.0083	mg/L		01/21/21 04:09	01/26/21 13:01	1
Vanadium	**0.0034**	**J**	0.010	0.0020	mg/L		01/21/21 04:09	01/26/21 13:01	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.3**		0.20	0.079	ug/L		01/20/21 19:59	01/21/21 19:28	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.2**		0.20	0.079	ug/L		01/20/21 19:59	01/21/21 19:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	**0.13**	**HF**	0.10	0.050	mg/L			01/26/21 12:55	1
Sulfate	**2300**		600	200	mg/L			01/27/21 11:48	100

Client Sample ID: HOFF-MW-13-011921

Lab Sample ID: 410-26865-4

Date Collected: 01/19/21 14:50

Matrix: Water

Date Received: 01/19/21 17:08

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/28/21 07:42	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/28/21 07:42	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/28/21 07:42	1
Styrene	ND		0.50	0.050	ug/L			01/28/21 07:42	1
1,4-Dichlorobenzene	**0.30**	**J**	0.50	0.070	ug/L			01/28/21 07:42	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/28/21 07:42	1
1,2-Dichloroethane	**0.10**	**J**	0.50	0.050	ug/L			01/28/21 07:42	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/28/21 07:42	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/28/21 07:42	1
Toluene	ND		0.50	0.070	ug/L			01/28/21 07:42	1
Chlorobenzene	**0.98**		0.50	0.060	ug/L			01/28/21 07:42	1
Cyclohexane	ND		0.50	0.050	ug/L			01/28/21 07:42	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 07:42	1
Dibromochloromethane	**0.10**	**J**	0.50	0.070	ug/L			01/28/21 07:42	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/28/21 07:42	1
Tetrachloroethene	**0.063**	**J**	0.50	0.060	ug/L			01/28/21 07:42	1

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-MW-13-011921
Date Collected: 01/19/21 14:50
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-4
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**0.15**	**J**	0.50	0.050	ug/L			01/28/21 07:42	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 07:42	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/28/21 07:42	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 07:42	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/28/21 07:42	1
2-Hexanone	ND		5.0	0.60	ug/L			01/28/21 07:42	1
Acetone	**26**		5.0	0.90	ug/L			01/28/21 07:42	1
Chloroform	**0.50**		0.50	0.090	ug/L			01/28/21 07:42	1
Benzene	**0.66**		0.50	0.050	ug/L			01/28/21 07:42	1
1,1,1-Trichloroethane	**0.096**	**J**	0.50	0.060	ug/L			01/28/21 07:42	1
Bromomethane	**1.0**		0.50	0.070	ug/L			01/28/21 07:42	1
Chloromethane	**14**		0.50	0.060	ug/L			01/28/21 07:42	1
Chloroethane	**0.81**		0.50	0.070	ug/L			01/28/21 07:42	1
Vinyl chloride	**0.19**	**J**	0.50	0.10	ug/L			01/28/21 07:42	1
Methylene Chloride	**1.6**		0.50	0.070	ug/L			01/28/21 07:42	1
Carbon disulfide	**0.60**	**J**	1.0	0.060	ug/L			01/28/21 07:42	1
Bromoform	ND		1.0	0.30	ug/L			01/28/21 07:42	1
Bromodichloromethane	**0.30**	**J**	0.50	0.050	ug/L			01/28/21 07:42	1
1,1-Dichloroethane	**1.5**		0.50	0.070	ug/L			01/28/21 07:42	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 07:42	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/28/21 07:42	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/28/21 07:42	1
Freon 113	ND		0.50	0.060	ug/L			01/28/21 07:42	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/28/21 07:42	1
2-Butanone	**7.6**		5.0	0.60	ug/L			01/28/21 07:42	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 07:42	1
Trichloroethene	**0.24**	**J**	0.50	0.060	ug/L			01/28/21 07:42	1
Methyl acetate	**0.76**	**J**	1.0	0.10	ug/L			01/28/21 07:42	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/28/21 07:42	1
1,2-Dichlorobenzene	**0.78**		0.50	0.060	ug/L			01/28/21 07:42	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/28/21 07:42	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/28/21 07:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*01/28/21 07:42*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*01/28/21 07:42*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*01/28/21 07:42*	*1*
Toluene-d8 (Surr)	*65*	*S1-*	*80 - 120*		*01/28/21 07:42*	*1*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.1**		0.40	0.20	ug/L			01/27/21 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*84*		*80 - 120*		*01/27/21 14:17*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-MW-13-011921
Date Collected: 01/19/21 14:50
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
2,4-Dinitrophenol	ND		30	14	ug/L		01/22/21 09:30	01/24/21 18:17	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
2,2'-oxybis[1-chloropropane]	ND	^c	2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
Benzo[a]anthracene	**0.11**	**J**	0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Benzo[a]pyrene	**0.17**	**J**	0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Benzo[b]fluoranthene	**0.37**	**J**	0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Benzo[g,h,i]perylene	**0.18**	**J**	0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Benzo[k]fluoranthene	**0.19**	**J**	0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Acenaphthene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Acenaphthylene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Acetophenone	ND		10	4.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
Anthracene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Atrazine	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
Benzaldehyde	ND	^c	10	3.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
Caprolactam	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
Carbazole	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
Chrysene	**0.21**	**J**	0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Dibenzofuran	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
Diethyl phthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
Hexachlorocyclopentadiene	ND	^c *1	11	5.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
Hexachloroethane	ND		5.0	1.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
Fluoranthene	**0.23**	**J**	0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Fluorene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Indeno[1,2,3-cd]pyrene	**0.19**	**J**	0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Isophorone	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		01/22/21 09:30	01/24/21 18:17	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		01/22/21 09:30	01/24/21 18:17	1
Naphthalene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Nitrobenzene	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
Pentachlorophenol	ND		5.0	1.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
Phenanthrene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Phenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
Pyrene	**0.20**	**J**	0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		01/22/21 09:30	01/24/21 18:17	1
2-Chlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 18:17	1
2-Methylphenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
2-Nitroaniline	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
2-Nitrophenol	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 18:17	1

Client Sample ID: HOFF-MW-13-011921
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Lab Sample ID: 410-26865-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
3-Nitroaniline	ND		7.0	3.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
4-Methylphenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
4-Nitroaniline	ND		3.0	0.90	ug/L		01/22/21 09:30	01/24/21 18:17	1
4-Nitrophenol	ND	^c	30	10	ug/L		01/22/21 09:30	01/24/21 18:17	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		01/22/21 09:30	01/24/21 18:17	1
4-Chloroaniline	ND		10	4.0	ug/L		01/22/21 09:30	01/24/21 18:17	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*51*		*10 - 150*	*01/22/21 09:30*	*01/24/21 18:17*	*1*
2-Fluorobiphenyl (Surr)	*49*		*44 - 102*	*01/22/21 09:30*	*01/24/21 18:17*	*1*
2-Fluorophenol (Surr)	*31*		*10 - 84*	*01/22/21 09:30*	*01/24/21 18:17*	*1*
Nitrobenzene-d5 (Surr)	*72*		*23 - 128*	*01/22/21 09:30*	*01/24/21 18:17*	*1*
p-Terphenyl-d14 (Surr)	*70*		*31 - 113*	*01/22/21 09:30*	*01/24/21 18:17*	*1*
Phenol-d5 (Surr)	*25*		*10 - 67*	*01/22/21 09:30*	*01/24/21 18:17*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND	*1	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:37	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		01/22/21 09:30	01/22/21 21:37	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		01/22/21 09:30	01/22/21 21:37	1
beta-BHC (2C)	ND		0.020	0.0034	ug/L		01/22/21 09:30	01/22/21 21:37	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		01/22/21 09:30	01/22/21 21:37	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		01/22/21 09:30	01/22/21 21:37	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		01/22/21 09:30	01/22/21 21:37	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		01/22/21 09:30	01/22/21 21:37	1
Endosulfan sulfate (1C)	ND		0.030	0.0058	ug/L		01/22/21 09:30	01/22/21 21:37	1
Endrin (1C)	ND		0.030	0.0082	ug/L		01/22/21 09:30	01/22/21 21:37	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		01/22/21 09:30	01/22/21 21:37	1
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 21:37	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:37	1
gamma-Chlordane (1C)	ND	*1	0.040	0.0071	ug/L		01/22/21 09:30	01/22/21 21:37	1
Heptachlor (1C)	**0.0024**	**J B *1**	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:37	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		01/22/21 09:30	01/22/21 21:37	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		01/22/21 09:30	01/22/21 21:37	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		01/22/21 09:30	01/22/21 21:37	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 21:37	1
p,p'-DDE (1C)	ND	*1	0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 21:37	1
p,p'-DDT (1C)	ND		0.030	0.0052	ug/L		01/22/21 09:30	01/22/21 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*58*		*32 - 149*	*01/22/21 09:30*	*01/22/21 21:37*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*60*		*32 - 149*	*01/22/21 09:30*	*01/22/21 21:37*	*1*

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Date Collected: 01/19/21 14:50
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Lab Sample ID: 410-26865-4

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr) (1C)	*55*		*29 - 129*	*01/22/21 09:30*	*01/22/21 21:37*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*56*		*29 - 129*	*01/22/21 09:30*	*01/22/21 21:37*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.043**	**J**	0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:25	1
Aluminum	**5.7**		0.30	0.15	mg/L		01/20/21 05:29	01/21/21 18:25	1
Antimony	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:25	1
Barium	**0.42**		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:25	1
Beryllium	**0.0016**	**J**	0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:25	1
Cadmium	**0.0023**	**J**	0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:25	1
Calcium	**54**		0.50	0.096	mg/L		01/20/21 05:29	01/22/21 15:02	1
Chromium	**0.029**		0.015	0.0016	mg/L		01/20/21 05:29	01/21/21 18:25	1
Cobalt	**0.033**		0.0050	0.0015	mg/L		01/20/21 05:29	01/21/21 18:25	1
Copper	**0.029**		0.020	0.012	mg/L		01/20/21 05:29	01/21/21 18:25	1
Iron	**110**		0.20	0.040	mg/L		01/20/21 05:29	01/21/21 18:25	1
Lead	**0.10**		0.015	0.0071	mg/L		01/20/21 05:29	01/22/21 15:02	1
Magnesium	**59**		0.10	0.040	mg/L		01/20/21 05:29	01/22/21 15:02	1
Manganese	**1.4**		0.010	0.0030	mg/L		01/20/21 05:29	01/21/21 18:25	1
Nickel	**0.037**		0.010	0.0021	mg/L		01/20/21 05:29	01/21/21 18:25	1
Zinc	**0.084**		0.020	0.0037	mg/L		01/20/21 05:29	01/21/21 18:25	1
Silver	ND		0.010	0.0050	mg/L		01/20/21 05:29	01/21/21 18:25	1
Selenium	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:25	1
Potassium	**13**		0.50	0.20	mg/L		01/20/21 05:29	01/21/21 18:25	1
Sodium	**180**		1.0	0.24	mg/L		01/20/21 05:29	01/22/21 15:02	1
Thallium	**0.017**	**J**	0.030	0.0081	mg/L		01/20/21 05:29	01/21/21 18:25	1
Vanadium	**0.084**		0.010	0.0019	mg/L		01/20/21 05:29	01/21/21 18:25	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/21/21 04:09	01/26/21 12:55	1
Aluminum	ND		0.31	0.16	mg/L		01/21/21 04:09	01/26/21 12:55	1
Antimony	ND		0.052	0.016	mg/L		01/21/21 04:09	01/26/21 12:55	1
Barium	**0.037**		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 12:55	1
Beryllium	ND		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 12:55	1
Cadmium	ND		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 12:55	1
Calcium	**50**		0.52	0.099	mg/L		01/21/21 04:09	01/26/21 12:55	1
Chromium	**0.0029**	**J**	0.015	0.0016	mg/L		01/21/21 04:09	01/26/21 12:55	1
Cobalt	ND		0.0052	0.0015	mg/L		01/21/21 04:09	01/26/21 12:55	1
Copper	ND		0.021	0.012	mg/L		01/21/21 04:09	01/26/21 12:55	1
Iron	**0.046**	**J**	0.21	0.041	mg/L		01/21/21 04:09	01/26/21 12:55	1
Lead	ND		0.015	0.0073	mg/L		01/21/21 04:09	01/26/21 12:55	1
Magnesium	**53**		0.10	0.041	mg/L		01/21/21 04:09	01/26/21 12:55	1
Manganese	**0.19**		0.010	0.0031	mg/L		01/21/21 04:09	01/26/21 12:55	1
Nickel	**0.014**		0.010	0.0022	mg/L		01/21/21 04:09	01/26/21 12:55	1
Zinc	**0.0040**	**J**	0.021	0.0038	mg/L		01/21/21 04:09	01/26/21 12:55	1
Silver	ND		0.010	0.0052	mg/L		01/21/21 04:09	01/26/21 12:55	1
Selenium	ND		0.052	0.016	mg/L		01/21/21 04:09	01/27/21 18:26	1
Potassium	**13**		0.52	0.21	mg/L		01/21/21 04:09	01/27/21 18:26	1

Client Sample ID: HOFF-MW-13-011921

Lab Sample ID: 410-26865-4

Date Collected: 01/19/21 14:50

Matrix: Water

Date Received: 01/19/21 17:08

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**200**		1.0	0.25	mg/L		01/21/21 04:09	01/27/21 18:26	1
Thallium	ND		0.031	0.0083	mg/L		01/21/21 04:09	01/26/21 12:55	1
Vanadium	ND		0.010	0.0020	mg/L		01/21/21 04:09	01/26/21 12:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.37**		0.20	0.079	ug/L		01/20/21 19:59	01/21/21 19:38	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/20/21 19:59	01/21/21 19:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	**0.17**	**HF**	0.10	0.050	mg/L			01/26/21 12:57	1
Sulfate	**390**		120	40	mg/L			01/27/21 11:48	20

Client Sample ID: HOFF-TB-011921

Lab Sample ID: 410-26865-5

Date Collected: 01/19/21 09:00

Matrix: Water

Date Received: 01/19/21 17:08

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/27/21 23:52	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/27/21 23:52	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/27/21 23:52	1
Styrene	ND		0.50	0.050	ug/L			01/27/21 23:52	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			01/27/21 23:52	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/27/21 23:52	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/27/21 23:52	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/27/21 23:52	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/27/21 23:52	1
Toluene	ND		0.50	0.070	ug/L			01/27/21 23:52	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/27/21 23:52	1
Cyclohexane	ND		0.50	0.050	ug/L			01/27/21 23:52	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/27/21 23:52	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/27/21 23:52	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/27/21 23:52	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/27/21 23:52	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/27/21 23:52	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/27/21 23:52	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/27/21 23:52	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/27/21 23:52	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/27/21 23:52	1
2-Hexanone	ND		5.0	0.60	ug/L			01/27/21 23:52	1
Acetone	ND		5.0	0.90	ug/L			01/27/21 23:52	1
Chloroform	ND		0.50	0.090	ug/L			01/27/21 23:52	1
Benzene	ND		0.50	0.050	ug/L			01/27/21 23:52	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/27/21 23:52	1
Bromomethane	ND		0.50	0.070	ug/L			01/27/21 23:52	1
Chloromethane	ND		0.50	0.060	ug/L			01/27/21 23:52	1

Client Sample ID: HOFF-TB-011921

Lab Sample ID: 410-26865-5

Date Collected: 01/19/21 09:00

Matrix: Water

Date Received: 01/19/21 17:08

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		0.50	0.070	ug/L			01/27/21 23:52	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/27/21 23:52	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/27/21 23:52	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/27/21 23:52	1
Bromoform	ND		1.0	0.30	ug/L			01/27/21 23:52	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/27/21 23:52	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/27/21 23:52	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/27/21 23:52	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/27/21 23:52	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/27/21 23:52	1
Freon 113	ND		0.50	0.060	ug/L			01/27/21 23:52	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/27/21 23:52	1
2-Butanone	ND		5.0	0.60	ug/L			01/27/21 23:52	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/27/21 23:52	1
Trichloroethene	ND		0.50	0.060	ug/L			01/27/21 23:52	1
Methyl acetate	ND		1.0	0.10	ug/L			01/27/21 23:52	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/27/21 23:52	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			01/27/21 23:52	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/27/21 23:52	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/27/21 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*01/27/21 23:52*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*01/27/21 23:52*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/27/21 23:52*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/27/21 23:52*	*1*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			01/27/21 12:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*01/27/21 12:15*	*1*

Client Sample ID: HOFF-EB-011921

Lab Sample ID: 410-26865-6

Date Collected: 01/19/21 09:30

Matrix: Water

Date Received: 01/19/21 17:08

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/28/21 00:14	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/28/21 00:14	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/28/21 00:14	1
Styrene	ND		0.50	0.050	ug/L			01/28/21 00:14	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			01/28/21 00:14	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/28/21 00:14	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/28/21 00:14	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/28/21 00:14	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/28/21 00:14	1
Toluene	ND		0.50	0.070	ug/L			01/28/21 00:14	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/28/21 00:14	1

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-EB-011921

Date Collected: 01/19/21 09:30
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-6

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		0.50	0.050	ug/L			01/28/21 00:14	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 00:14	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/28/21 00:14	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/28/21 00:14	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/28/21 00:14	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/28/21 00:14	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 00:14	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/28/21 00:14	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 00:14	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/28/21 00:14	1
2-Hexanone	ND		5.0	0.60	ug/L			01/28/21 00:14	1
Acetone	ND		5.0	0.90	ug/L			01/28/21 00:14	1
Chloroform	ND		0.50	0.090	ug/L			01/28/21 00:14	1
Benzene	ND		0.50	0.050	ug/L			01/28/21 00:14	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 00:14	1
Bromomethane	ND		0.50	0.070	ug/L			01/28/21 00:14	1
Chloromethane	ND		0.50	0.060	ug/L			01/28/21 00:14	1
Chloroethane	ND		0.50	0.070	ug/L			01/28/21 00:14	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/28/21 00:14	1
Methylene Chloride	**0.072**	**J**	0.50	0.070	ug/L			01/28/21 00:14	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/28/21 00:14	1
Bromoform	ND		1.0	0.30	ug/L			01/28/21 00:14	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/28/21 00:14	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/28/21 00:14	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 00:14	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/28/21 00:14	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/28/21 00:14	1
Freon 113	ND		0.50	0.060	ug/L			01/28/21 00:14	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/28/21 00:14	1
2-Butanone	ND		5.0	0.60	ug/L			01/28/21 00:14	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 00:14	1
Trichloroethene	ND		0.50	0.060	ug/L			01/28/21 00:14	1
Methyl acetate	ND		1.0	0.10	ug/L			01/28/21 00:14	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/28/21 00:14	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 00:14	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/28/21 00:14	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/28/21 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*01/28/21 00:14*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*01/28/21 00:14*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*01/28/21 00:14*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/28/21 00:14*	*1*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			01/27/21 12:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*01/27/21 12:35*	*1*

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-EB-011921
Date Collected: 01/19/21 09:30
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-6
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
2,4-Dichlorophenol	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
2,4-Dimethylphenol	ND		10	3.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
2,4-Dinitrophenol	ND		31	14	ug/L		01/22/21 09:30	01/24/21 18:45	1
2,4-Dinitrotoluene	ND		5.1	1.0	ug/L		01/22/21 09:30	01/24/21 18:45	1
2,4,5-Trichlorophenol	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
2,4,6-Trichlorophenol	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
2,2'-oxybis[1-chloropropane]	ND	^c	2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
Di-n-butyl phthalate	ND		5.1	2.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
Di-n-octyl phthalate	ND		11	5.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
Benzo[a]anthracene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Benzo[a]pyrene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Benzo[b]fluoranthene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Benzo[g,h,i]perylene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Benzo[k]fluoranthene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Acenaphthene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Acenaphthylene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Acetophenone	ND		10	4.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
Anthracene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Atrazine	ND		5.1	2.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
Benzaldehyde	ND	^c	10	3.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
Butylbenzylphthalate	ND		5.1	2.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
Caprolactam	ND		11	5.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
Carbazole	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
Chrysene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Dibenz(a,h)anthracene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Dibenzofuran	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
Diethyl phthalate	ND		5.1	2.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
Dimethyl phthalate	ND		5.1	2.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
Hexachlorobenzene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Hexachlorobutadiene	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
Hexachlorocyclopentadiene	ND	^c *1	11	5.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
Hexachloroethane	ND		5.1	1.0	ug/L		01/22/21 09:30	01/24/21 18:45	1
Fluoranthene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Fluorene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Indeno[1,2,3-cd]pyrene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Isophorone	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
N-Nitrosodi-n-propylamine	ND		3.1	0.72	ug/L		01/22/21 09:30	01/24/21 18:45	1
N-Nitrosodiphenylamine	ND		3.1	0.72	ug/L		01/22/21 09:30	01/24/21 18:45	1
Naphthalene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Nitrobenzene	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
Pentachlorophenol	ND		5.1	1.0	ug/L		01/22/21 09:30	01/24/21 18:45	1
Phenanthrene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Phenol	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
Pyrene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
2-Chloronaphthalene	ND		1.0	0.41	ug/L		01/22/21 09:30	01/24/21 18:45	1
2-Chlorophenol	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
2-Methylnaphthalene	ND		0.51	0.10	ug/L		01/22/21 09:30	01/24/21 18:45	1
2-Methylphenol	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1

Client Sample ID: HOFF-EB-011921

Date Collected: 01/19/21 09:30
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-6

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		5.1	2.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
2-Nitrophenol	ND		10	3.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
3,3'-Dichlorobenzidine	ND		10	3.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
3-Nitroaniline	ND		7.2	3.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
4,6-Dinitro-2-methylphenol	ND		22	8.2	ug/L		01/22/21 09:30	01/24/21 18:45	1
4-Bromophenyl-phenylether	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
4-Methylphenol	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
4-Nitroaniline	ND		3.1	0.92	ug/L		01/22/21 09:30	01/24/21 18:45	1
4-Nitrophenol	ND	^c	31	10	ug/L		01/22/21 09:30	01/24/21 18:45	1
Bis(2-chloroethoxy)methane	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
Bis(2-chloroethyl)ether	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
Bis(2-ethylhexyl) phthalate	ND		11	5.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
2,6-Dinitrotoluene	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1
4-Chloro-3-methylphenol	ND		3.6	1.6	ug/L		01/22/21 09:30	01/24/21 18:45	1
4-Chloroaniline	ND		10	4.1	ug/L		01/22/21 09:30	01/24/21 18:45	1
4-Chlorophenyl-phenyl ether	ND		2.1	0.51	ug/L		01/22/21 09:30	01/24/21 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*10 - 150*	*01/22/21 09:30*	*01/24/21 18:45*	*1*
2-Fluorobiphenyl (Surr)	*69*		*44 - 102*	*01/22/21 09:30*	*01/24/21 18:45*	*1*
2-Fluorophenol (Surr)	*42*		*10 - 84*	*01/22/21 09:30*	*01/24/21 18:45*	*1*
Nitrobenzene-d5 (Surr)	*70*		*23 - 128*	*01/22/21 09:30*	*01/24/21 18:45*	*1*
p-Terphenyl-d14 (Surr)	*81*		*31 - 113*	*01/22/21 09:30*	*01/24/21 18:45*	*1*
Phenol-d5 (Surr)	*31*		*10 - 67*	*01/22/21 09:30*	*01/24/21 18:45*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND	*1	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:48	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		01/22/21 09:30	01/22/21 21:48	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		01/22/21 09:30	01/22/21 21:48	1
beta-BHC (1C)	ND	B	0.020	0.0034	ug/L		01/22/21 09:30	01/22/21 21:48	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		01/22/21 09:30	01/22/21 21:48	1
Dieldrin (1C)	ND		0.030	0.0054	ug/L		01/22/21 09:30	01/22/21 21:48	1
Endosulfan I (1C)	ND		0.020	0.0044	ug/L		01/22/21 09:30	01/22/21 21:48	1
Endosulfan II (1C)	ND		0.041	0.015	ug/L		01/22/21 09:30	01/22/21 21:48	1
Endosulfan sulfate (1C)	ND		0.030	0.0059	ug/L		01/22/21 09:30	01/22/21 21:48	1
Endrin (1C)	ND		0.030	0.0082	ug/L		01/22/21 09:30	01/22/21 21:48	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		01/22/21 09:30	01/22/21 21:48	1
Endrin ketone (1C)	ND		0.030	0.0051	ug/L		01/22/21 09:30	01/22/21 21:48	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:48	1
gamma-Chlordane (1C)	ND	*1	0.041	0.0071	ug/L		01/22/21 09:30	01/22/21 21:48	1
Heptachlor (2C)	ND	B *1	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 21:48	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		01/22/21 09:30	01/22/21 21:48	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		01/22/21 09:30	01/22/21 21:48	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		01/22/21 09:30	01/22/21 21:48	1
p,p'-DDD (1C)	ND		0.030	0.0051	ug/L		01/22/21 09:30	01/22/21 21:48	1
p,p'-DDE (1C)	ND	*1	0.030	0.0051	ug/L		01/22/21 09:30	01/22/21 21:48	1
p,p'-DDT (1C)	ND		0.030	0.0053	ug/L		01/22/21 09:30	01/22/21 21:48	1

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-EB-011921

Date Collected: 01/19/21 09:30
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*41*		*32 - 149*	*01/22/21 09:30*	*01/22/21 21:48*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*40*		*32 - 149*	*01/22/21 09:30*	*01/22/21 21:48*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*53*		*29 - 129*	*01/22/21 09:30*	*01/22/21 21:48*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*52*		*29 - 129*	*01/22/21 09:30*	*01/22/21 21:48*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:21	1
Aluminum	ND		0.30	0.15	mg/L		01/20/21 05:29	01/21/21 18:21	1
Antimony	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:21	1
Barium	ND		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:21	1
Beryllium	ND		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:21	1
Cadmium	ND		0.0050	0.0010	mg/L		01/20/21 05:29	01/21/21 18:21	1
Calcium	**0.17**	**J**	0.50	0.096	mg/L		01/20/21 05:29	01/21/21 19:29	1
Chromium	ND		0.015	0.0016	mg/L		01/20/21 05:29	01/21/21 18:21	1
Cobalt	ND		0.0050	0.0015	mg/L		01/20/21 05:29	01/21/21 18:21	1
Copper	ND		0.020	0.012	mg/L		01/20/21 05:29	01/21/21 18:21	1
Iron	ND		0.20	0.040	mg/L		01/20/21 05:29	01/21/21 18:21	1
Lead	ND	^3+	0.015	0.0071	mg/L		01/20/21 05:29	01/21/21 18:21	1
Magnesium	**0.065**	**J**	0.10	0.040	mg/L		01/20/21 05:29	01/21/21 19:29	1
Manganese	ND		0.010	0.0030	mg/L		01/20/21 05:29	01/21/21 18:21	1
Nickel	ND		0.010	0.0021	mg/L		01/20/21 05:29	01/21/21 18:21	1
Zinc	ND		0.020	0.0037	mg/L		01/20/21 05:29	01/21/21 18:21	1
Silver	ND		0.010	0.0050	mg/L		01/20/21 05:29	01/21/21 18:21	1
Selenium	ND		0.050	0.016	mg/L		01/20/21 05:29	01/21/21 18:21	1
Potassium	ND		0.50	0.20	mg/L		01/20/21 05:29	01/21/21 18:21	1
Sodium	**0.67**	**J**	1.0	0.24	mg/L		01/20/21 05:29	01/21/21 19:29	1
Thallium	ND		0.030	0.0081	mg/L		01/20/21 05:29	01/21/21 18:21	1
Vanadium	ND		0.010	0.0019	mg/L		01/20/21 05:29	01/21/21 18:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/20/21 19:59	01/21/21 19:30	1

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	BFB	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-26865-1	HOFF-MW-A-011921	101	101	96	99
410-26865-2	HOFF-MW-B-011921	100	100	97	93
410-26865-2 - DL	HOFF-MW-B-011921	101	101	96	97
410-26865-2 - DL2	HOFF-MW-B-011921	100	100	100	100
410-26865-3	HOFF-MW-C-011921	105	105	82	52 S1-
410-26865-3 - DL	HOFF-MW-C-011921	106	104	88	64 S1-
410-26865-4	HOFF-MW-13-011921	101	103	91	65 S1-
410-26865-5	HOFF-TB-011921	100	99	98	99
410-26865-6	HOFF-EB-011921	101	100	97	99
LCS 410-88755/4	Lab Control Sample	100	99	99	100
LCS 410-89203/4	Lab Control Sample	102	98	100	100
LCSD 410-88755/5	Lab Control Sample Dup	99	99	99	100
MB 410-88755/7	Method Blank	98	99	96	99
MB 410-89203/6	Method Blank	103	98	100	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TOL
Lab Sample ID	Client Sample ID	(80-120)
410-26865-1	HOFF-MW-A-011921	96
410-26865-2	HOFF-MW-B-011921	93
410-26865-3	HOFF-MW-C-011921	78 S1-
410-26865-4	HOFF-MW-13-011921	84
410-26865-5	HOFF-TB-011921	97
410-26865-6	HOFF-EB-011921	97
LCS 410-88413/4	Lab Control Sample	97
LCS 410-88882/4	Lab Control Sample	97
LCSD 410-88413/5	Lab Control Sample Dup	96
LCSD 410-88882/5	Lab Control Sample Dup	97
MB 410-88413/7	Method Blank	97
MB 410-88882/7	Method Blank	97

Surrogate Legend

TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(10-150)	(44-102)	(10-84)	(23-128)	(31-113)	(10-67)
410-26865-1	HOFF-MW-A-011921	75	63	36	60	51	28
410-26865-2	HOFF-MW-B-011921	65	63	33	67	73	36

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(10-150)	(44-102)	(10-84)	(23-128)	(31-113)	(10-67)
410-26865-3	HOFF-MW-C-011921	42	54	6 S1-	57	82	7 S1-
410-26865-4	HOFF-MW-13-011921	51	49	31	72	70	25
410-26865-6	HOFF-EB-011921	86	69	42	70	81	31
LCS 410-87109/2-A	Lab Control Sample	92	74	53	70	85	41
LCSD 410-87109/3-A	Lab Control Sample Dup	87	72	43	67	80	32
MB 410-87109/1-A	Method Blank	86	66	41	65	83	31

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(32-149)	(32-149)	(29-129)	(29-129)
410-26865-1	HOFF-MW-A-011921	40	42	53	51
410-26865-2	HOFF-MW-B-011921	66	65	46	51
410-26865-3	HOFF-MW-C-011921	54	53	37	37
410-26865-4	HOFF-MW-13-011921	58	60	55	56
410-26865-6	HOFF-EB-011921	41	40	53	52
LCS 410-87105/2-A	Lab Control Sample	49	49	56	53
LCSD 410-87105/3-A	Lab Control Sample Dup	47	49	55	50
MB 410-87105/1-A	Method Blank	51	49	51	49

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-88755/7
Matrix: Water
Analysis Batch: 88755

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/27/21 23:25	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/27/21 23:25	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/27/21 23:25	1
Styrene	ND		0.50	0.050	ug/L			01/27/21 23:25	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			01/27/21 23:25	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/27/21 23:25	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/27/21 23:25	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/27/21 23:25	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/27/21 23:25	1
Toluene	ND		0.50	0.070	ug/L			01/27/21 23:25	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/27/21 23:25	1
Cyclohexane	ND		0.50	0.050	ug/L			01/27/21 23:25	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/27/21 23:25	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/27/21 23:25	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/27/21 23:25	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/27/21 23:25	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/27/21 23:25	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/27/21 23:25	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/27/21 23:25	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/27/21 23:25	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/27/21 23:25	1
2-Hexanone	ND		5.0	0.60	ug/L			01/27/21 23:25	1
Acetone	ND		5.0	0.90	ug/L			01/27/21 23:25	1
Chloroform	ND		0.50	0.090	ug/L			01/27/21 23:25	1
Benzene	ND		0.50	0.050	ug/L			01/27/21 23:25	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/27/21 23:25	1
Bromomethane	ND		0.50	0.070	ug/L			01/27/21 23:25	1
Chloromethane	ND		0.50	0.060	ug/L			01/27/21 23:25	1
Chloroethane	ND		0.50	0.070	ug/L			01/27/21 23:25	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/27/21 23:25	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/27/21 23:25	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/27/21 23:25	1
Bromoform	ND		1.0	0.30	ug/L			01/27/21 23:25	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/27/21 23:25	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/27/21 23:25	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/27/21 23:25	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/27/21 23:25	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/27/21 23:25	1
Freon 113	ND		0.50	0.060	ug/L			01/27/21 23:25	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/27/21 23:25	1
2-Butanone	ND		5.0	0.60	ug/L			01/27/21 23:25	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/27/21 23:25	1
Trichloroethene	ND		0.50	0.060	ug/L			01/27/21 23:25	1
Methyl acetate	ND		1.0	0.10	ug/L			01/27/21 23:25	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/27/21 23:25	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			01/27/21 23:25	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/27/21 23:25	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/27/21 23:25	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-88755/7
Matrix: Water
Analysis Batch: 88755

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*01/27/21 23:25*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*01/27/21 23:25*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*01/27/21 23:25*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/27/21 23:25*	*1*

Lab Sample ID: LCS 410-88755/4
Matrix: Water
Analysis Batch: 88755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.66		ug/L		93	67 - 121
trans-1,3-Dichloropropene	5.00	4.57		ug/L		91	61 - 129
Ethylbenzene	5.00	4.71		ug/L		94	80 - 120
Styrene	5.00	4.84		ug/L		97	80 - 120
1,4-Dichlorobenzene	5.00	4.79		ug/L		96	80 - 120
1,2-Dibromoethane	5.00	4.74		ug/L		95	80 - 120
1,2-Dichloroethane	5.00	4.43		ug/L		89	69 - 122
4-Methyl-2-pentanone	25.0	26.7		ug/L		107	55 - 140
Methylcyclohexane	5.00	4.83		ug/L		97	80 - 120
Toluene	5.00	4.70		ug/L		94	80 - 120
Chlorobenzene	5.00	4.75		ug/L		95	80 - 120
Cyclohexane	5.00	5.11		ug/L		102	69 - 120
1,2,4-Trichlorobenzene	5.00	4.82		ug/L		96	68 - 122
Dibromochloromethane	5.00	4.82		ug/L		96	64 - 138
Xylenes, Total	15.0	14.2		ug/L		95	80 - 120
Tetrachloroethene	5.00	4.74		ug/L		95	80 - 120
cis-1,2-Dichloroethene	5.00	4.90		ug/L		98	80 - 122
trans-1,2-Dichloroethene	5.00	4.74		ug/L		95	80 - 122
Methyl tertiary butyl ether	5.00	4.55		ug/L		91	69 - 120
1,3-Dichlorobenzene	5.00	4.73		ug/L		95	80 - 120
Carbon tetrachloride	5.00	4.75		ug/L		95	64 - 141
2-Hexanone	25.0	27.6		ug/L		110	52 - 140
Acetone	37.5	34.5		ug/L		92	60 - 146
Chloroform	5.00	4.68		ug/L		94	80 - 120
Benzene	5.00	4.69		ug/L		94	80 - 120
1,1,1-Trichloroethane	5.00	4.59		ug/L		92	78 - 126
Bromomethane	5.00	4.79		ug/L		96	60 - 136
Chloromethane	5.00	4.87		ug/L		97	56 - 124
Chloroethane	5.00	4.66		ug/L		93	63 - 120
Vinyl chloride	5.00	5.03		ug/L		101	60 - 125
Methylene Chloride	5.00	4.68		ug/L		94	80 - 120
Carbon disulfide	5.00	4.62		ug/L		92	67 - 130
Bromoform	5.00	4.68		ug/L		94	49 - 144
Bromodichloromethane	5.00	4.69		ug/L		94	73 - 124
1,1-Dichloroethane	5.00	4.78		ug/L		96	74 - 120
1,1-Dichloroethene	5.00	4.82		ug/L		96	80 - 131
Trichlorofluoromethane	5.00	4.87		ug/L		97	62 - 136
Dichlorodifluoromethane	5.00	5.22		ug/L		104	43 - 123

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-88755/4
Matrix: Water
Analysis Batch: 88755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Freon 113	5.00	4.81		ug/L		96	75 - 133
1,2-Dichloropropane	5.00	4.89		ug/L		98	80 - 120
2-Butanone	37.5	40.8		ug/L		109	59 - 141
1,1,2-Trichloroethane	5.00	4.91		ug/L		98	80 - 120
Trichloroethene	5.00	4.70		ug/L		94	80 - 120
Methyl acetate	5.00	5.09		ug/L		102	59 - 143
1,1,2,2-Tetrachloroethane	5.00	4.74		ug/L		95	75 - 123
1,2-Dichlorobenzene	5.00	4.79		ug/L		96	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	5.03		ug/L		101	56 - 148
Isopropylbenzene	5.00	4.83		ug/L		97	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 410-88755/5
Matrix: Water
Analysis Batch: 88755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5.00	4.60		ug/L		92	67 - 121	1	30
trans-1,3-Dichloropropene	5.00	4.54		ug/L		91	61 - 129	1	30
Ethylbenzene	5.00	4.70		ug/L		94	80 - 120	0	30
Styrene	5.00	4.78		ug/L		96	80 - 120	1	30
1,4-Dichlorobenzene	5.00	4.79		ug/L		96	80 - 120	0	30
1,2-Dibromoethane	5.00	4.77		ug/L		95	80 - 120	0	30
1,2-Dichloroethane	5.00	4.53		ug/L		91	69 - 122	2	30
4-Methyl-2-pentanone	25.0	24.9		ug/L		100	55 - 140	7	30
Methylcyclohexane	5.00	4.91		ug/L		98	80 - 120	2	30
Toluene	5.00	4.62		ug/L		92	80 - 120	2	30
Chlorobenzene	5.00	4.76		ug/L		95	80 - 120	0	30
Cyclohexane	5.00	5.15		ug/L		103	69 - 120	1	30
1,2,4-Trichlorobenzene	5.00	4.67		ug/L		93	68 - 122	3	30
Dibromochloromethane	5.00	4.70		ug/L		94	64 - 138	3	30
Xylenes, Total	15.0	14.3		ug/L		95	80 - 120	0	30
Tetrachloroethene	5.00	4.77		ug/L		95	80 - 120	1	30
cis-1,2-Dichloroethene	5.00	4.93		ug/L		99	80 - 122	1	30
trans-1,2-Dichloroethene	5.00	4.67		ug/L		93	80 - 122	1	30
Methyl tertiary butyl ether	5.00	4.53		ug/L		91	69 - 120	0	30
1,3-Dichlorobenzene	5.00	4.71		ug/L		94	80 - 120	0	30
Carbon tetrachloride	5.00	4.70		ug/L		94	64 - 141	1	30
2-Hexanone	25.0	25.7		ug/L		103	52 - 140	7	30
Acetone	37.5	31.7		ug/L		85	60 - 146	8	30
Chloroform	5.00	4.69		ug/L		94	80 - 120	0	30
Benzene	5.00	4.64		ug/L		93	80 - 120	1	30
1,1,1-Trichloroethane	5.00	4.57		ug/L		91	78 - 126	0	30

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-88755/5
Matrix: Water
Analysis Batch: 88755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane			5.00	4.82		ug/L		96	60 - 136	1	30
Chloromethane			5.00	4.91		ug/L		98	56 - 124	1	30
Chloroethane			5.00	4.70		ug/L		94	63 - 120	1	30
Vinyl chloride			5.00	5.06		ug/L		101	60 - 125	1	30
Methylene Chloride			5.00	4.70		ug/L		94	80 - 120	0	30
Carbon disulfide			5.00	4.59		ug/L		92	67 - 130	1	30
Bromoform			5.00	4.61		ug/L		92	49 - 144	1	30
Bromodichloromethane			5.00	4.64		ug/L		93	73 - 124	1	30
1,1-Dichloroethane			5.00	4.73		ug/L		95	74 - 120	1	30
1,1-Dichloroethene			5.00	4.77		ug/L		95	80 - 131	1	30
Trichlorofluoromethane			5.00	4.93		ug/L		99	62 - 136	1	30
Dichlorodifluoromethane			5.00	5.21		ug/L		104	43 - 123	0	30
Freon 113			5.00	4.85		ug/L		97	75 - 133	1	30
1,2-Dichloropropane			5.00	4.83		ug/L		97	80 - 120	1	30
2-Butanone			37.5	37.8		ug/L		101	59 - 141	8	30
1,1,2-Trichloroethane			5.00	4.85		ug/L		97	80 - 120	1	30
Trichloroethene			5.00	4.69		ug/L		94	80 - 120	0	30
Methyl acetate			5.00	4.79		ug/L		96	59 - 143	6	30
1,1,2,2-Tetrachloroethane			5.00	4.79		ug/L		96	75 - 123	1	30
1,2-Dichlorobenzene			5.00	4.72		ug/L		94	80 - 120	1	30
1,2-Dibromo-3-Chloropropane			5.00	4.90		ug/L		98	56 - 148	3	30
Isopropylbenzene			5.00	4.81		ug/L		96	80 - 120	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: MB 410-89203/6
Matrix: Water
Analysis Batch: 89203

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/28/21 21:09	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Styrene	ND		0.50	0.050	ug/L			01/28/21 21:09	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			01/28/21 21:09	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/28/21 21:09	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/28/21 21:09	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/28/21 21:09	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/28/21 21:09	1
Toluene	ND		0.50	0.070	ug/L			01/28/21 21:09	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Cyclohexane	ND		0.50	0.050	ug/L			01/28/21 21:09	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/28/21 21:09	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-89203/6
Matrix: Water
Analysis Batch: 89203

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		1.0	0.15	ug/L			01/28/21 21:09	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/28/21 21:09	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/28/21 21:09	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/28/21 21:09	1
2-Hexanone	ND		5.0	0.60	ug/L			01/28/21 21:09	1
Acetone	ND		5.0	0.90	ug/L			01/28/21 21:09	1
Chloroform	ND		0.50	0.090	ug/L			01/28/21 21:09	1
Benzene	ND		0.50	0.050	ug/L			01/28/21 21:09	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Bromomethane	ND		0.50	0.070	ug/L			01/28/21 21:09	1
Chloromethane	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Chloroethane	ND		0.50	0.070	ug/L			01/28/21 21:09	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/28/21 21:09	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/28/21 21:09	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/28/21 21:09	1
Bromoform	ND		1.0	0.30	ug/L			01/28/21 21:09	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/28/21 21:09	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/28/21 21:09	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/28/21 21:09	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/28/21 21:09	1
Freon 113	ND		0.50	0.060	ug/L			01/28/21 21:09	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/28/21 21:09	1
2-Butanone	ND		5.0	0.60	ug/L			01/28/21 21:09	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Trichloroethene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Methyl acetate	ND		1.0	0.10	ug/L			01/28/21 21:09	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/28/21 21:09	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/28/21 21:09	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/28/21 21:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*01/28/21 21:09*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*01/28/21 21:09*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/28/21 21:09*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/28/21 21:09*	*1*

Lab Sample ID: LCS 410-89203/4
Matrix: Water
Analysis Batch: 89203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.90		ug/L		98	67 - 121
trans-1,3-Dichloropropene	5.00	4.88		ug/L		98	61 - 129

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-89203/4
Matrix: Water
Analysis Batch: 89203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	5.00	4.65		ug/L		93	80 - 120
Styrene	5.00	4.81		ug/L		96	80 - 120
1,4-Dichlorobenzene	5.00	4.69		ug/L		94	80 - 120
1,2-Dibromoethane	5.00	4.69		ug/L		94	80 - 120
1,2-Dichloroethane	5.00	4.23		ug/L		85	69 - 122
4-Methyl-2-pentanone	25.0	21.7		ug/L		87	55 - 140
Methylcyclohexane	5.00	5.30		ug/L		106	80 - 120
Toluene	5.00	4.71		ug/L		94	80 - 120
Chlorobenzene	5.00	4.81		ug/L		96	80 - 120
Cyclohexane	5.00	4.98		ug/L		100	69 - 120
1,2,4-Trichlorobenzene	5.00	4.92		ug/L		98	68 - 122
Dibromochloromethane	5.00	5.17		ug/L		103	64 - 138
Xylenes, Total	15.0	14.4		ug/L		96	80 - 120
Tetrachloroethene	5.00	4.88		ug/L		98	80 - 120
cis-1,2-Dichloroethene	5.00	4.91		ug/L		98	80 - 122
trans-1,2-Dichloroethene	5.00	4.77		ug/L		95	80 - 122
Methyl tertiary butyl ether	5.00	4.45		ug/L		89	69 - 120
1,3-Dichlorobenzene	5.00	4.68		ug/L		94	80 - 120
Carbon tetrachloride	5.00	4.73		ug/L		95	64 - 141
2-Hexanone	25.0	22.9		ug/L		91	52 - 140
Acetone	37.5	40.4		ug/L		108	60 - 146
Chloroform	5.00	4.54		ug/L		91	80 - 120
Benzene	5.00	4.76		ug/L		95	80 - 120
1,1,1-Trichloroethane	5.00	4.45		ug/L		89	78 - 126
Bromomethane	5.00	4.60		ug/L		92	60 - 136
Chloromethane	5.00	4.74		ug/L		95	56 - 124
Chloroethane	5.00	4.30		ug/L		86	63 - 120
Vinyl chloride	5.00	4.96		ug/L		99	60 - 125
Methylene Chloride	5.00	4.88		ug/L		98	80 - 120
Carbon disulfide	5.00	4.95		ug/L		99	67 - 130
Bromoform	5.00	5.66		ug/L		113	49 - 144
Bromodichloromethane	5.00	4.67		ug/L		93	73 - 124
1,1-Dichloroethane	5.00	4.72		ug/L		94	74 - 120
1,1-Dichloroethene	5.00	4.83		ug/L		97	80 - 131
Trichlorofluoromethane	5.00	4.37		ug/L		87	62 - 136
Dichlorodifluoromethane	5.00	4.75		ug/L		95	43 - 123
Freon 113	5.00	4.74		ug/L		95	75 - 133
1,2-Dichloropropane	5.00	4.82		ug/L		96	80 - 120
2-Butanone	37.5	35.4		ug/L		94	59 - 141
1,1,2-Trichloroethane	5.00	4.77		ug/L		95	80 - 120
Trichloroethene	5.00	4.71		ug/L		94	80 - 120
Methyl acetate	5.00	5.13		ug/L		103	59 - 143
1,1,2,2-Tetrachloroethane	5.00	4.65		ug/L		93	75 - 123
1,2-Dichlorobenzene	5.00	4.70		ug/L		94	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	5.46		ug/L		109	56 - 148
Isopropylbenzene	5.00	4.77		ug/L		95	80 - 120

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-89203/4
Matrix: Water
Analysis Batch: 89203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Toluene-d8 (Surr)	100		80 - 120

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-88413/7
Matrix: Water
Analysis Batch: 88413

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			01/27/21 10:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		01/27/21 10:07	1

Lab Sample ID: LCS 410-88413/4
Matrix: Water
Analysis Batch: 88413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	4.60		ug/L		93	74 - 133		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: LCSD 410-88413/5
Matrix: Water
Analysis Batch: 88413

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.49		ug/L		91	74 - 133	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: MB 410-88882/7
Matrix: Water
Analysis Batch: 88882

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			01/28/21 10:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		01/28/21 10:31	1

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-88882/4
Matrix: Water
Analysis Batch: 88882

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	4.70		ug/L		95	74 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: LCSD 410-88882/5
Matrix: Water
Analysis Batch: 88882

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.30		ug/L		87	74 - 133	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-87109/1-A
Matrix: Water
Analysis Batch: 87484

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87109

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
2,4-Dinitrophenol	ND		30	14	ug/L		01/22/21 09:30	01/24/21 12:14	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Benzo[a]pyrene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Acenaphthene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Acenaphthylene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Acetophenone	ND		10	4.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
Anthracene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Atrazine	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
Benzaldehyde	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
Caprolactam	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
Carbazole	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
Chrysene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-87109/1-A
Matrix: Water
Analysis Batch: 87484

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87109

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
Diethyl phthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
Hexachlorocyclopentadiene	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
Hexachloroethane	ND		5.0	1.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
Fluoranthene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Fluorene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Isophorone	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		01/22/21 09:30	01/24/21 12:14	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		01/22/21 09:30	01/24/21 12:14	1
Naphthalene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Nitrobenzene	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
Pentachlorophenol	ND		5.0	1.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
Phenanthrene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Phenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
Pyrene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		01/22/21 09:30	01/24/21 12:14	1
2-Chlorophenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		01/22/21 09:30	01/24/21 12:14	1
2-Methylphenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
2-Nitroaniline	ND		5.0	2.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
2-Nitrophenol	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
3-Nitroaniline	ND		7.0	3.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
4-Methylphenol	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
4-Nitroaniline	ND		3.0	0.90	ug/L		01/22/21 09:30	01/24/21 12:14	1
4-Nitrophenol	ND		30	10	ug/L		01/22/21 09:30	01/24/21 12:14	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		01/22/21 09:30	01/24/21 12:14	1
4-Chloroaniline	ND		10	4.0	ug/L		01/22/21 09:30	01/24/21 12:14	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		01/22/21 09:30	01/24/21 12:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*10 - 150*	*01/22/21 09:30*	*01/24/21 12:14*	*1*
2-Fluorobiphenyl (Surr)	*66*		*44 - 102*	*01/22/21 09:30*	*01/24/21 12:14*	*1*
2-Fluorophenol (Surr)	*41*		*10 - 84*	*01/22/21 09:30*	*01/24/21 12:14*	*1*
Nitrobenzene-d5 (Surr)	*65*		*23 - 128*	*01/22/21 09:30*	*01/24/21 12:14*	*1*
p-Terphenyl-d14 (Surr)	*83*		*31 - 113*	*01/22/21 09:30*	*01/24/21 12:14*	*1*
Phenol-d5 (Surr)	*31*		*10 - 67*	*01/22/21 09:30*	*01/24/21 12:14*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-87109/2-A
Matrix: Water
Analysis Batch: 87484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87109

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	50.0	36.8		ug/L		74	50 - 110
2,4-Dichlorophenol	50.0	47.2		ug/L		94	51 - 123
2,4-Dimethylphenol	50.0	42.3		ug/L		85	43 - 102
2,4-Dinitrophenol	100	79.7		ug/L		80	30 - 143
2,4-Dinitrotoluene	50.0	44.3		ug/L		89	52 - 128
2,4,5-Trichlorophenol	50.0	49.0		ug/L		98	59 - 126
2,4,6-Trichlorophenol	50.0	48.5		ug/L		97	59 - 129
2,2'-oxybis[1-chloropropane]	50.0	32.7		ug/L		65	41 - 118
Di-n-butyl phthalate	50.0	42.0		ug/L		84	43 - 118
Di-n-octyl phthalate	50.0	45.1		ug/L		90	48 - 129
Benzo[a]anthracene	50.0	46.7		ug/L		93	61 - 126
Benzo[a]pyrene	50.0	46.3		ug/L		93	60 - 116
Benzo[b]fluoranthene	50.0	46.6		ug/L		93	61 - 119
Benzo[g,h,i]perylene	50.0	47.8		ug/L		96	54 - 120
Benzo[k]fluoranthene	50.0	51.7		ug/L		103	69 - 122
Acenaphthene	50.0	40.0		ug/L		80	52 - 114
Acenaphthylene	50.0	48.0		ug/L		96	55 - 117
Acetophenone	50.0	37.0		ug/L		74	51 - 119
Anthracene	50.0	45.2		ug/L		90	61 - 117
Atrazine	50.0	45.3		ug/L		91	71 - 133
Benzaldehyde	50.0	32.8		ug/L		66	39 - 119
Butylbenzylphthalate	50.0	37.0		ug/L		74	11 - 125
Caprolactam	50.0	12.3		ug/L		25	12 - 40
Carbazole	50.0	45.6		ug/L		91	64 - 127
Chrysene	50.0	46.2		ug/L		92	65 - 121
Dibenz(a,h)anthracene	50.0	47.1		ug/L		94	57 - 124
Dibenzofuran	50.0	43.4		ug/L		87	60 - 112
Diethyl phthalate	50.0	38.7		ug/L		77	19 - 121
Dimethyl phthalate	50.0	32.9		ug/L		66	10 - 134
Hexachlorobenzene	50.0	46.5		ug/L		93	55 - 123
Hexachlorobutadiene	50.0	25.7		ug/L		51	20 - 108
Hexachlorocyclopentadiene	50.0	5.95	J	ug/L		12	10 - 42
Hexachloroethane	50.0	23.0		ug/L		46	22 - 88
Fluoranthene	50.0	45.6		ug/L		91	63 - 122
Fluorene	50.0	43.8		ug/L		88	56 - 115
Indeno[1,2,3-cd]pyrene	50.0	45.9		ug/L		92	52 - 121
Isophorone	50.0	41.7		ug/L		83	55 - 122
N-Nitrosodi-n-propylamine	50.0	37.9		ug/L		76	52 - 123
N-Nitrosodiphenylamine	42.5	40.0		ug/L		94	60 - 126
Naphthalene	50.0	36.2		ug/L		72	51 - 102
Nitrobenzene	50.0	35.9		ug/L		72	52 - 119
Pentachlorophenol	100	87.9		ug/L		88	54 - 131
Phenanthrene	50.0	43.5		ug/L		87	65 - 113
Phenol	50.0	22.2		ug/L		44	22 - 69
Pyrene	50.0	43.7		ug/L		87	65 - 115
2-Chloronaphthalene	50.0	36.7		ug/L		73	43 - 110
2-Chlorophenol	50.0	40.7		ug/L		81	46 - 109
2-Methylnaphthalene	50.0	38.2		ug/L		76	45 - 108

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-87109/2-A
Matrix: Water
Analysis Batch: 87484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87109

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
2-Methylphenol			50.0	38.6		ug/L		77	41 - 113		
2-Nitroaniline			50.0	47.6		ug/L		95	60 - 123		
2-Nitrophenol			50.0	43.9		ug/L		88	53 - 123		
3,3'-Dichlorobenzidine			100	81.6		ug/L		82	42 - 107		
3-Nitroaniline			50.0	39.2		ug/L		78	54 - 112		
4,6-Dinitro-2-methylphenol			100	90.0		ug/L		90	49 - 138		
4-Bromophenyl-phenylether			50.0	44.3		ug/L		89	54 - 121		
4-Methylphenol			50.0	35.6		ug/L		71	41 - 109		
4-Nitroaniline			50.0	40.6		ug/L		81	49 - 107		
4-Nitrophenol			100	48.0		ug/L		48	23 - 89		
Bis(2-chloroethoxy)methane			50.0	38.2		ug/L		76	51 - 120		
Bis(2-chloroethyl)ether			50.0	36.4		ug/L		73	50 - 110		
Bis(2-ethylhexyl) phthalate			50.0	43.8		ug/L		88	50 - 127		
2,6-Dinitrotoluene			50.0	47.7		ug/L		95	61 - 121		
4-Chloro-3-methylphenol			50.0	43.3		ug/L		87	52 - 126		
4-Chloroaniline			50.0	36.7		ug/L		73	45 - 93		
4-Chlorophenyl-phenyl ether			50.0	42.9		ug/L		86	47 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*92*		*10 - 150*
2-Fluorobiphenyl (Surr)	*74*		*44 - 102*
2-Fluorophenol (Surr)	*53*		*10 - 84*
Nitrobenzene-d5 (Surr)	*70*		*23 - 128*
p-Terphenyl-d14 (Surr)	*85*		*31 - 113*
Phenol-d5 (Surr)	*41*		*10 - 67*

Lab Sample ID: LCSD 410-87109/3-A
Matrix: Water
Analysis Batch: 87484

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 87109

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl			50.0	36.0		ug/L		72	50 - 110	2	30
2,4-Dichlorophenol			50.0	45.1		ug/L		90	51 - 123	5	30
2,4-Dimethylphenol			50.0	40.9		ug/L		82	43 - 102	4	30
2,4-Dinitrophenol			100	78.3		ug/L		78	30 - 143	2	30
2,4-Dinitrotoluene			50.0	43.5		ug/L		87	52 - 128	2	30
2,4,5-Trichlorophenol			50.0	47.1		ug/L		94	59 - 126	4	30
2,4,6-Trichlorophenol			50.0	46.8		ug/L		94	59 - 129	4	30
2,2'-oxybis[1-chloropropane]			50.0	30.6		ug/L		61	41 - 118	7	30
Di-n-butyl phthalate			50.0	40.7		ug/L		81	43 - 118	3	30
Di-n-octyl phthalate			50.0	45.8		ug/L		92	48 - 129	1	30
Benzo[a]anthracene			50.0	46.8		ug/L		94	61 - 126	0	30
Benzo[a]pyrene			50.0	46.0		ug/L		92	60 - 116	1	30
Benzo[b]fluoranthene			50.0	45.1		ug/L		90	61 - 119	3	30
Benzo[g,h,i]perylene			50.0	46.5		ug/L		93	54 - 120	3	30
Benzo[k]fluoranthene			50.0	48.6		ug/L		97	69 - 122	6	30
Acenaphthene			50.0	39.3		ug/L		79	52 - 114	2	30
Acenaphthylene			50.0	46.5		ug/L		93	55 - 117	3	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-87109/3-A
Matrix: Water
Analysis Batch: 87484

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 87109

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetophenone			50.0	35.4		ug/L		71	51 - 119	4	30
Anthracene			50.0	44.7		ug/L		89	61 - 117	1	30
Atrazine			50.0	44.0		ug/L		88	71 - 133	3	30
Benzaldehyde			50.0	30.1		ug/L		60	39 - 119	9	30
Butylbenzylphthalate			50.0	34.5		ug/L		69	11 - 125	7	30
Caprolactam			50.0	9.77	J	ug/L		20	12 - 40	23	30
Carbazole			50.0	45.4		ug/L		91	64 - 127	0	30
Chrysene			50.0	44.9		ug/L		90	65 - 121	3	30
Dibenz(a,h)anthracene			50.0	46.7		ug/L		93	57 - 124	1	30
Dibenzofuran			50.0	42.1		ug/L		84	60 - 112	3	30
Diethyl phthalate			50.0	36.7		ug/L		73	19 - 121	5	30
Dimethyl phthalate			50.0	28.5		ug/L		57	10 - 134	14	30
Hexachlorobenzene			50.0	44.9		ug/L		90	55 - 123	3	30
Hexachlorobutadiene			50.0	25.0		ug/L		50	20 - 108	3	30
Hexachlorocyclopentadiene			50.0	8.61	J *1	ug/L		17	10 - 42	37	30
Hexachloroethane			50.0	22.0		ug/L		44	22 - 88	5	30
Fluoranthene			50.0	44.5		ug/L		89	63 - 122	2	30
Fluorene			50.0	43.5		ug/L		87	56 - 115	1	30
Indeno[1,2,3-cd]pyrene			50.0	45.9		ug/L		92	52 - 121	0	30
Isophorone			50.0	41.0		ug/L		82	55 - 122	2	30
N-Nitrosodi-n-propylamine			50.0	36.5		ug/L		73	52 - 123	4	30
N-Nitrosodiphenylamine			42.5	38.6		ug/L		91	60 - 126	4	30
Naphthalene			50.0	35.2		ug/L		70	51 - 102	3	30
Nitrobenzene			50.0	34.3		ug/L		69	52 - 119	5	30
Pentachlorophenol			100	85.8		ug/L		86	54 - 131	2	30
Phenanthrene			50.0	43.3		ug/L		87	65 - 113	0	30
Phenol			50.0	17.7		ug/L		35	22 - 69	22	30
Pyrene			50.0	43.6		ug/L		87	65 - 115	0	30
2-Chloronaphthalene			50.0	35.9		ug/L		72	43 - 110	2	30
2-Chlorophenol			50.0	37.0		ug/L		74	46 - 109	9	30
2-Methylnaphthalene			50.0	37.5		ug/L		75	45 - 108	2	30
2-Methylphenol			50.0	34.6		ug/L		69	41 - 113	11	30
2-Nitroaniline			50.0	47.7		ug/L		95	60 - 123	0	30
2-Nitrophenol			50.0	41.8		ug/L		84	53 - 123	5	30
3,3'-Dichlorobenzidine			100	80.3		ug/L		80	42 - 107	2	30
3-Nitroaniline			50.0	39.5		ug/L		79	54 - 112	1	30
4,6-Dinitro-2-methylphenol			100	88.4		ug/L		88	49 - 138	2	30
4-Bromophenyl-phenylether			50.0	42.9		ug/L		86	54 - 121	3	30
4-Methylphenol			50.0	31.5		ug/L		63	41 - 109	12	30
4-Nitroaniline			50.0	40.7		ug/L		81	49 - 107	0	30
4-Nitrophenol			100	41.5		ug/L		41	23 - 89	15	30
Bis(2-chloroethoxy)methane			50.0	36.7		ug/L		73	51 - 120	4	30
Bis(2-chloroethyl)ether			50.0	34.3		ug/L		69	50 - 110	6	30
Bis(2-ethylhexyl) phthalate			50.0	43.4		ug/L		87	50 - 127	1	30
2,6-Dinitrotoluene			50.0	47.6		ug/L		95	61 - 121	0	30
4-Chloro-3-methylphenol			50.0	42.5		ug/L		85	52 - 126	2	30
4-Chloroaniline			50.0	37.5		ug/L		75	45 - 93	2	30
4-Chlorophenyl-phenyl ether			50.0	42.1		ug/L		84	47 - 121	2	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-87109/3-A
Matrix: Water
Analysis Batch: 87484

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 87109

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	87		10 - 150
2-Fluorobiphenyl (Surr)	72		44 - 102
2-Fluorophenol (Surr)	43		10 - 84
Nitrobenzene-d5 (Surr)	67		23 - 128
p-Terphenyl-d14 (Surr)	80		31 - 113
Phenol-d5 (Surr)	32		10 - 67

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 410-87105/1-A
Matrix: Water
Analysis Batch: 87372

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 20:33	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		01/22/21 09:30	01/22/21 20:33	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		01/22/21 09:30	01/22/21 20:33	1
beta-BHC (2C)	ND		0.020	0.0034	ug/L		01/22/21 09:30	01/22/21 20:33	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		01/22/21 09:30	01/22/21 20:33	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		01/22/21 09:30	01/22/21 20:33	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		01/22/21 09:30	01/22/21 20:33	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		01/22/21 09:30	01/22/21 20:33	1
Endosulfan sulfate (1C)	ND		0.030	0.0058	ug/L		01/22/21 09:30	01/22/21 20:33	1
Endrin (1C)	ND		0.030	0.0081	ug/L		01/22/21 09:30	01/22/21 20:33	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		01/22/21 09:30	01/22/21 20:33	1
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 20:33	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 20:33	1
gamma-Chlordane (1C)	ND		0.040	0.0070	ug/L		01/22/21 09:30	01/22/21 20:33	1
Heptachlor (1C)	0.00205	J B	0.020	0.0020	ug/L		01/22/21 09:30	01/22/21 20:33	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		01/22/21 09:30	01/22/21 20:33	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		01/22/21 09:30	01/22/21 20:33	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		01/22/21 09:30	01/22/21 20:33	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 20:33	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		01/22/21 09:30	01/22/21 20:33	1
p,p'-DDT (1C)	ND		0.030	0.0052	ug/L		01/22/21 09:30	01/22/21 20:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	51		32 - 149	01/22/21 09:30	01/22/21 20:33	1
DCB Decachlorobiphenyl (Surr) (2C)	49		32 - 149	01/22/21 09:30	01/22/21 20:33	1
Tetrachloro-m-xylene (Surr) (1C)	51		29 - 129	01/22/21 09:30	01/22/21 20:33	1
Tetrachloro-m-xylene (Surr) (2C)	49		29 - 129	01/22/21 09:30	01/22/21 20:33	1

Lab Sample ID: LCS 410-87105/2-A
Matrix: Water
Analysis Batch: 87372

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin (2C)	0.100	0.0404		ug/L		40	28 - 119

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 410-87105/2-A
Matrix: Water
Analysis Batch: 87372

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87105

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
alpha-BHC (2C)			0.101	0.0857		ug/L		85	47 - 132		
beta-BHC (1C)			0.100	0.0888		ug/L		89	27 - 143		
delta-BHC (2C)			0.101	0.0897		ug/L		89	28 - 141		
Dieldrin (2C)			0.201	0.182		ug/L		91	31 - 145		
Endosulfan I (2C)			0.101	0.0858		ug/L		85	40 - 138		
Endosulfan II (2C)			0.200	0.174		ug/L		87	27 - 138		
Endosulfan sulfate (1C)			0.201	0.163		ug/L		81	41 - 133		
Endrin (2C)			0.201	0.177		ug/L		88	35 - 143		
Endrin aldehyde (2C)			0.201	0.163		ug/L		81	40 - 135		
Endrin ketone (1C)			0.201	0.175		ug/L		87	44 - 136		
gamma-BHC (Lindane) (2C)			0.100	0.0918		ug/L		92	29 - 136		
Heptachlor (1C)			0.101	0.0460		ug/L		45	38 - 135		
Heptachlor epoxide (2C)			0.100	0.0872		ug/L		87	28 - 146		
Methoxychlor (1C)			1.01	0.914		ug/L		91	39 - 143		
p,p'-DDD (1C)			0.201	0.179		ug/L		89	42 - 148		
p,p'-DDE (2C)			0.201	0.132		ug/L		66	22 - 138		
p,p'-DDT (1C)			0.201	0.175		ug/L		87	40 - 145		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*49*		*32 - 149*
DCB Decachlorobiphenyl (Surr) (2C)	*49*		*32 - 149*
Tetrachloro-m-xylene (Surr) (1C)	*56*		*29 - 129*
Tetrachloro-m-xylene (Surr) (2C)	*53*		*29 - 129*

Lab Sample ID: LCSD 410-87105/3-A
Matrix: Water
Analysis Batch: 87372

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 87105

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin (1C)			0.100	0.0856	*1	ug/L		86	28 - 119	72	30
alpha-BHC (2C)			0.101	0.0929		ug/L		92	47 - 132	8	30
beta-BHC (1C)			0.100	0.0957		ug/L		96	27 - 143	8	30
delta-BHC (2C)			0.101	0.0968		ug/L		96	28 - 141	8	30
Dieldrin (2C)			0.201	0.199		ug/L		99	31 - 145	9	30
Endosulfan I (2C)			0.101	0.0906		ug/L		89	40 - 138	5	30
Endosulfan II (2C)			0.200	0.182		ug/L		91	27 - 138	4	30
Endosulfan sulfate (2C)			0.201	0.164		ug/L		82	41 - 133	0	30
Endrin (2C)			0.201	0.182		ug/L		91	35 - 143	3	30
Endrin aldehyde (2C)			0.201	0.167		ug/L		83	40 - 135	2	20
Endrin ketone (2C)			0.201	0.173		ug/L		86	44 - 136	1	30
gamma-BHC (Lindane) (2C)			0.100	0.0971		ug/L		97	29 - 136	6	30
Heptachlor (2C)			0.101	0.0909	*1	ug/L		90	38 - 135	66	30
Heptachlor epoxide (2C)			0.100	0.0928		ug/L		93	28 - 146	6	30
Methoxychlor (2C)			1.01	0.952		ug/L		94	39 - 143	4	30
p,p'-DDD (2C)			0.201	0.209		ug/L		104	42 - 148	15	30

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 410-87105/3-A
Matrix: Water
Analysis Batch: 87372

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 87105

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p,p'-DDE (2C)			0.201	0.186	*1	ug/L		92	22 - 138	34	30
p,p'-DDT (2C)			0.201	0.197		ug/L		98	40 - 145	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*47*		*32 - 149*
DCB Decachlorobiphenyl (Surr) (2C)	*49*		*32 - 149*
Tetrachloro-m-xylene (Surr) (1C)	*55*		*29 - 129*
Tetrachloro-m-xylene (Surr) (2C)	*50*		*29 - 129*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 410-86133/1-A
Matrix: Water
Analysis Batch: 87010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 86133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/19/21 20:26	01/21/21 17:20	1
Aluminum	ND		0.30	0.15	mg/L		01/19/21 20:26	01/21/21 17:20	1
Antimony	ND		0.050	0.016	mg/L		01/19/21 20:26	01/21/21 17:20	1
Barium	ND		0.0050	0.0010	mg/L		01/19/21 20:26	01/21/21 17:20	1
Beryllium	ND		0.0050	0.0010	mg/L		01/19/21 20:26	01/21/21 17:20	1
Cadmium	ND		0.0050	0.0010	mg/L		01/19/21 20:26	01/21/21 17:20	1
Calcium	ND		0.50	0.096	mg/L		01/19/21 20:26	01/21/21 17:20	1
Chromium	ND		0.015	0.0016	mg/L		01/19/21 20:26	01/21/21 17:20	1
Cobalt	ND		0.0050	0.0015	mg/L		01/19/21 20:26	01/21/21 17:20	1
Copper	ND		0.020	0.012	mg/L		01/19/21 20:26	01/21/21 17:20	1
Iron	ND		0.20	0.040	mg/L		01/19/21 20:26	01/21/21 17:20	1
Lead	ND	^3+	0.015	0.0071	mg/L		01/19/21 20:26	01/21/21 17:20	1
Magnesium	ND		0.10	0.040	mg/L		01/19/21 20:26	01/21/21 17:20	1
Manganese	ND		0.010	0.0030	mg/L		01/19/21 20:26	01/21/21 17:20	1
Nickel	ND		0.010	0.0021	mg/L		01/19/21 20:26	01/21/21 17:20	1
Zinc	ND		0.020	0.0037	mg/L		01/19/21 20:26	01/21/21 17:20	1
Silver	ND		0.010	0.0050	mg/L		01/19/21 20:26	01/21/21 17:20	1
Selenium	ND		0.050	0.016	mg/L		01/19/21 20:26	01/21/21 17:20	1
Potassium	ND		0.50	0.20	mg/L		01/19/21 20:26	01/21/21 17:20	1
Sodium	ND		1.0	0.24	mg/L		01/19/21 20:26	01/21/21 17:20	1
Thallium	ND		0.030	0.0081	mg/L		01/19/21 20:26	01/21/21 17:20	1
Vanadium	ND		0.010	0.0019	mg/L		01/19/21 20:26	01/21/21 17:20	1

Lab Sample ID: LCS 410-86133/2-A
Matrix: Water
Analysis Batch: 87010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86133

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic			0.0600	0.0611		mg/L		102	80 - 120
Aluminum			0.405	0.414		mg/L		102	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-86133/2-A
Matrix: Water
Analysis Batch: 87010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.100	0.102		mg/L		102	80 - 120
Barium	0.0100	0.0103		mg/L		103	80 - 120
Beryllium	0.0100	0.00951		mg/L		95	80 - 120
Cadmium	0.0100	0.00998		mg/L		100	80 - 120
Calcium	0.400	0.425	J	mg/L		106	80 - 120
Chromium	0.0300	0.0310		mg/L		103	80 - 120
Cobalt	0.0100	0.0105		mg/L		105	80 - 120
Copper	0.0400	0.0432		mg/L		108	80 - 120
Iron	0.400	0.410		mg/L		102	80 - 120
Magnesium	0.200	0.209		mg/L		105	80 - 120
Manganese	0.0200	0.0208		mg/L		104	80 - 120
Nickel	2.00	2.09		mg/L		104	80 - 120
Zinc	0.404	0.410		mg/L		102	80 - 120
Silver	0.0200	0.0198		mg/L		99	80 - 120
Selenium	0.100	0.101		mg/L		101	80 - 120
Potassium	6.00	5.97		mg/L		100	80 - 120
Sodium	2.00	2.07		mg/L		104	80 - 120
Thallium	0.0600	0.0641		mg/L		107	80 - 120
Vanadium	0.0200	0.0183		mg/L		91	80 - 120

Lab Sample ID: LCS 410-86133/2-A
Matrix: Water
Analysis Batch: 87312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.0300	0.0286		mg/L		95	80 - 120

Lab Sample ID: MB 410-86651/1-A
Matrix: Water
Analysis Batch: 88171

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 86651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/21/21 04:09	01/26/21 11:35	1
Aluminum	ND		0.31	0.16	mg/L		01/21/21 04:09	01/26/21 11:35	1
Antimony	ND		0.052	0.016	mg/L		01/21/21 04:09	01/26/21 11:35	1
Barium	ND		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 11:35	1
Beryllium	ND		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 11:35	1
Cadmium	ND		0.0052	0.0010	mg/L		01/21/21 04:09	01/26/21 11:35	1
Calcium	ND		0.52	0.099	mg/L		01/21/21 04:09	01/26/21 11:35	1
Chromium	ND		0.015	0.0016	mg/L		01/21/21 04:09	01/26/21 11:35	1
Cobalt	ND		0.0052	0.0015	mg/L		01/21/21 04:09	01/26/21 11:35	1
Copper	ND		0.021	0.012	mg/L		01/21/21 04:09	01/26/21 11:35	1
Iron	ND		0.21	0.041	mg/L		01/21/21 04:09	01/26/21 11:35	1
Lead	ND		0.015	0.0073	mg/L		01/21/21 04:09	01/26/21 11:35	1
Magnesium	ND		0.10	0.041	mg/L		01/21/21 04:09	01/26/21 11:35	1
Manganese	ND		0.010	0.0031	mg/L		01/21/21 04:09	01/26/21 11:35	1
Nickel	ND		0.010	0.0022	mg/L		01/21/21 04:09	01/26/21 11:35	1
Zinc	ND		0.021	0.0038	mg/L		01/21/21 04:09	01/26/21 11:35	1
Silver	ND		0.010	0.0052	mg/L		01/21/21 04:09	01/26/21 11:35	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-86651/1-A
Matrix: Water
Analysis Batch: 88171

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 86651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.031	0.0083	mg/L		01/21/21 04:09	01/26/21 11:35	1
Vanadium	ND		0.010	0.0020	mg/L		01/21/21 04:09	01/26/21 11:35	1

Lab Sample ID: MB 410-86651/1-A
Matrix: Water
Analysis Batch: 88769

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 86651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.052	0.016	mg/L		01/21/21 04:09	01/27/21 17:26	1
Potassium	ND		0.52	0.21	mg/L		01/21/21 04:09	01/27/21 17:26	1
Sodium	ND		1.0	0.25	mg/L		01/21/21 04:09	01/27/21 17:26	1

Lab Sample ID: LCS 410-86651/2-A
Matrix: Water
Analysis Batch: 88171

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0670		mg/L		112	80 - 120
Aluminum	0.405	0.435		mg/L		107	80 - 120
Antimony	0.100	0.107		mg/L		107	80 - 120
Barium	0.0100	0.0102		mg/L		102	80 - 120
Beryllium	0.0100	0.0102		mg/L		102	80 - 120
Cadmium	0.0100	0.0106		mg/L		106	80 - 120
Calcium	0.400	0.397	J	mg/L		99	80 - 120
Chromium	0.0300	0.0309		mg/L		103	80 - 120
Cobalt	0.0100	0.0110		mg/L		110	80 - 120
Copper	0.0400	0.0386		mg/L		97	80 - 120
Iron	0.400	0.415		mg/L		104	80 - 120
Lead	0.0300	0.0355		mg/L		118	80 - 120
Magnesium	0.200	0.193		mg/L		97	80 - 120
Manganese	0.0200	0.0212		mg/L		106	80 - 120
Nickel	2.00	2.13		mg/L		107	80 - 120
Zinc	0.404	0.433		mg/L		107	80 - 120
Silver	0.0200	0.0201		mg/L		100	80 - 120
Thallium	0.0600	0.0696		mg/L		116	80 - 120
Vanadium	0.0200	0.0222		mg/L		111	80 - 120

Lab Sample ID: LCS 410-86651/2-A
Matrix: Water
Analysis Batch: 88769

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	0.100	0.120		mg/L		120	80 - 120
Potassium	6.00	6.39		mg/L		107	80 - 120
Sodium	2.00	2.27		mg/L		114	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-86590/1-A
Matrix: Water
Analysis Batch: 87027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 86590

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/20/21 19:59	01/21/21 19:12	1

Lab Sample ID: LCS 410-86590/2-A
Matrix: Water
Analysis Batch: 87027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86590

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			1.00	1.06		ug/L		106	80 - 118		

Lab Sample ID: 410-26865-1 MS
Matrix: Water
Analysis Batch: 87027

Client Sample ID: HOFF-MW-A-011921
Prep Type: Total/NA
Prep Batch: 86590

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		1.00	1.14		ug/L		114	80 - 120		

Lab Sample ID: 410-26865-1 MSD
Matrix: Water
Analysis Batch: 87027

Client Sample ID: HOFF-MW-A-011921
Prep Type: Total/NA
Prep Batch: 86590

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		1.00	1.05		ug/L		105	80 - 120	8	20

Lab Sample ID: 410-26865-1 DU
Matrix: Water
Analysis Batch: 87027

Client Sample ID: HOFF-MW-A-011921
Prep Type: Total/NA
Prep Batch: 86590

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	ND			ND		ug/L				NC	20

Method: 3500 Fe B-2011 - Iron, Ferrous and Ferric

Lab Sample ID: MB 410-88180/14
Matrix: Water
Analysis Batch: 88180

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND		0.10	0.050	mg/L			01/26/21 12:52	1

Lab Sample ID: LCS 410-88180/13
Matrix: Water
Analysis Batch: 88180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ferrous Iron			1.00	1.01		mg/L		101	90 - 110		

Method: 375.4 - Sulfate

Lab Sample ID: MB 410-88587/1
Matrix: Water
Analysis Batch: 88587

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		6.0	2.0	mg/L			01/27/21 11:48	1

Lab Sample ID: LCS 410-88587/7
Matrix: Water
Analysis Batch: 88587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			20.0	19.8		mg/L		99	96 - 104		

Lab Sample ID: 410-26865-1 MS
Matrix: Water
Analysis Batch: 88587

Client Sample ID: HOFF-MW-A-011921
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	46		80.1	123		mg/L		97	96 - 104		

Lab Sample ID: 410-26865-1 MSD
Matrix: Water
Analysis Batch: 88587

Client Sample ID: HOFF-MW-A-011921
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	46		80.1	125		mg/L		99	96 - 104	2	5

Lab Sample ID: 410-26865-1 DU
Matrix: Water
Analysis Batch: 88587

Client Sample ID: HOFF-MW-A-011921
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	46			46.7		mg/L				2	4

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Analysis Batch: 88413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	8260C SIM 14D	
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	8260C SIM 14D	
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	8260C SIM 14D	
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	8260C SIM 14D	
410-26865-5	HOFF-TB-011921	Total/NA	Water	8260C SIM 14D	
410-26865-6	HOFF-EB-011921	Total/NA	Water	8260C SIM 14D	
MB 410-88413/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-88413/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-88413/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

Analysis Batch: 88755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	8260C LL	
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	8260C LL	
410-26865-2 - DL	HOFF-MW-B-011921	Total/NA	Water	8260C LL	
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	8260C LL	
410-26865-3 - DL	HOFF-MW-C-011921	Total/NA	Water	8260C LL	
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	8260C LL	
410-26865-5	HOFF-TB-011921	Total/NA	Water	8260C LL	
410-26865-6	HOFF-EB-011921	Total/NA	Water	8260C LL	
MB 410-88755/7	Method Blank	Total/NA	Water	8260C LL	
LCS 410-88755/4	Lab Control Sample	Total/NA	Water	8260C LL	
LCSD 410-88755/5	Lab Control Sample Dup	Total/NA	Water	8260C LL	

Analysis Batch: 88882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-3 - RA	HOFF-MW-C-011921	Total/NA	Water	8260C SIM 14D	
MB 410-88882/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-88882/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-88882/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

Analysis Batch: 89203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-2 - DL2	HOFF-MW-B-011921	Total/NA	Water	8260C LL	
410-26865-3 - RA	HOFF-MW-C-011921	Total/NA	Water	8260C LL	
410-26865-4 - RA	HOFF-MW-13-011921	Total/NA	Water	8260C LL	
MB 410-89203/6	Method Blank	Total/NA	Water	8260C LL	
LCS 410-89203/4	Lab Control Sample	Total/NA	Water	8260C LL	

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Prep Batch: 87109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	3510C	
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	3510C	
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	3510C	
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	3510C	
410-26865-6	HOFF-EB-011921	Total/NA	Water	3510C	
MB 410-87109/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-87109/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-87109/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

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Analysis Batch: 87484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	8270D	87109
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	8270D	87109
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	8270D	87109
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	8270D	87109
410-26865-6	HOFF-EB-011921	Total/NA	Water	8270D	87109
MB 410-87109/1-A	Method Blank	Total/NA	Water	8270D	87109
LCS 410-87109/2-A	Lab Control Sample	Total/NA	Water	8270D	87109
LCSD 410-87109/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	87109

Prep Batch: 87984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-3 - RE	HOFF-MW-C-011921	Total/NA	Water	3510C	
MB 410-87984/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-87984/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-87984/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 88549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-3 - RE	HOFF-MW-C-011921	Total/NA	Water	8270D	87984
MB 410-87984/1-A	Method Blank	Total/NA	Water	8270D	87984
LCS 410-87984/2-A	Lab Control Sample	Total/NA	Water	8270D	87984
LCSD 410-87984/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	87984

GC Semi VOA

Prep Batch: 87105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	3510C	
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	3510C	
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	3510C	
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	3510C	
410-26865-6	HOFF-EB-011921	Total/NA	Water	3510C	
MB 410-87105/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-87105/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-87105/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 87372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	8081B	87105
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	8081B	87105
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	8081B	87105
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	8081B	87105
410-26865-6	HOFF-EB-011921	Total/NA	Water	8081B	87105
MB 410-87105/1-A	Method Blank	Total/NA	Water	8081B	87105
LCS 410-87105/2-A	Lab Control Sample	Total/NA	Water	8081B	87105
LCSD 410-87105/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	87105

Metals

Prep Batch: 86133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 86133 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	3010A	
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	3010A	
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	3010A	
410-26865-6	HOFF-EB-011921	Total/NA	Water	3010A	
MB 410-86133/1-A	Method Blank	Total/NA	Water	3010A	
LCS 410-86133/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 86590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Dissolved	Water	7470A	
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	7470A	
410-26865-2	HOFF-MW-B-011921	Dissolved	Water	7470A	
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	7470A	
410-26865-3	HOFF-MW-C-011921	Dissolved	Water	7470A	
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	7470A	
410-26865-4	HOFF-MW-13-011921	Dissolved	Water	7470A	
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	7470A	
410-26865-6	HOFF-EB-011921	Total/NA	Water	7470A	
MB 410-86590/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-86590/2-A	Lab Control Sample	Total/NA	Water	7470A	
410-26865-1 MS	HOFF-MW-A-011921	Total/NA	Water	7470A	
410-26865-1 MSD	HOFF-MW-A-011921	Total/NA	Water	7470A	
410-26865-1 DU	HOFF-MW-A-011921	Total/NA	Water	7470A	

Prep Batch: 86651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Dissolved	Water	Non-Digest Prep	
410-26865-2	HOFF-MW-B-011921	Dissolved	Water	Non-Digest Prep	
410-26865-3	HOFF-MW-C-011921	Dissolved	Water	Non-Digest Prep	
410-26865-4	HOFF-MW-13-011921	Dissolved	Water	Non-Digest Prep	
MB 410-86651/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-86651/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	

Analysis Batch: 87010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	6010C	86133
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	6010C	86133
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	6010C	86133
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	6010C	86133
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	6010C	86133
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	6010C	86133
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	6010C	86133
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	6010C	86133
410-26865-6	HOFF-EB-011921	Total/NA	Water	6010C	86133
410-26865-6	HOFF-EB-011921	Total/NA	Water	6010C	86133
MB 410-86133/1-A	Method Blank	Total/NA	Water	6010C	86133
LCS 410-86133/2-A	Lab Control Sample	Total/NA	Water	6010C	86133

Analysis Batch: 87027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Dissolved	Water	7470A	86590

Metals (Continued)

Analysis Batch: 87027 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	7470A	86590
410-26865-2	HOFF-MW-B-011921	Dissolved	Water	7470A	86590
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	7470A	86590
410-26865-3	HOFF-MW-C-011921	Dissolved	Water	7470A	86590
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	7470A	86590
410-26865-4	HOFF-MW-13-011921	Dissolved	Water	7470A	86590
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	7470A	86590
410-26865-6	HOFF-EB-011921	Total/NA	Water	7470A	86590
MB 410-86590/1-A	Method Blank	Total/NA	Water	7470A	86590
LCS 410-86590/2-A	Lab Control Sample	Total/NA	Water	7470A	86590
410-26865-1 MS	HOFF-MW-A-011921	Total/NA	Water	7470A	86590
410-26865-1 MSD	HOFF-MW-A-011921	Total/NA	Water	7470A	86590
410-26865-1 DU	HOFF-MW-A-011921	Total/NA	Water	7470A	86590

Analysis Batch: 87312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	6010C	86133
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	6010C	86133
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	6010C	86133
LCS 410-86133/2-A	Lab Control Sample	Total/NA	Water	6010C	86133

Analysis Batch: 88171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Dissolved	Water	6010C	86651
410-26865-2	HOFF-MW-B-011921	Dissolved	Water	6010C	86651
410-26865-3	HOFF-MW-C-011921	Dissolved	Water	6010C	86651
410-26865-4	HOFF-MW-13-011921	Dissolved	Water	6010C	86651
MB 410-86651/1-A	Method Blank	Total/NA	Water	6010C	86651
LCS 410-86651/2-A	Lab Control Sample	Total/NA	Water	6010C	86651

Analysis Batch: 88769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Dissolved	Water	6010C	86651
410-26865-2	HOFF-MW-B-011921	Dissolved	Water	6010C	86651
410-26865-2	HOFF-MW-B-011921	Dissolved	Water	6010C	86651
410-26865-3	HOFF-MW-C-011921	Dissolved	Water	6010C	86651
410-26865-3	HOFF-MW-C-011921	Dissolved	Water	6010C	86651
410-26865-4	HOFF-MW-13-011921	Dissolved	Water	6010C	86651
MB 410-86651/1-A	Method Blank	Total/NA	Water	6010C	86651
LCS 410-86651/2-A	Lab Control Sample	Total/NA	Water	6010C	86651

General Chemistry

Analysis Batch: 88180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	3500 Fe B-2011	
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	3500 Fe B-2011	
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	3500 Fe B-2011	
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	3500 Fe B-2011	
MB 410-88180/14	Method Blank	Total/NA	Water	3500 Fe B-2011	
LCS 410-88180/13	Lab Control Sample	Total/NA	Water	3500 Fe B-2011	

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

General Chemistry

Analysis Batch: 88587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-26865-1	HOFF-MW-A-011921	Total/NA	Water	375.4	
410-26865-2	HOFF-MW-B-011921	Total/NA	Water	375.4	
410-26865-3	HOFF-MW-C-011921	Total/NA	Water	375.4	
410-26865-4	HOFF-MW-13-011921	Total/NA	Water	375.4	
MB 410-88587/1	Method Blank	Total/NA	Water	375.4	
LCS 410-88587/7	Lab Control Sample	Total/NA	Water	375.4	
410-26865-1 MS	HOFF-MW-A-011921	Total/NA	Water	375.4	
410-26865-1 MSD	HOFF-MW-A-011921	Total/NA	Water	375.4	
410-26865-1 DU	HOFF-MW-A-011921	Total/NA	Water	375.4	

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-MW-A-011921

Lab Sample ID: 410-26865-1

Date Collected: 01/19/21 10:40

Matrix: Water

Date Received: 01/19/21 17:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	88755	01/28/21 05:55	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		1	88413	01/27/21 14:38	UKAD	ELLE
Total/NA	Prep	3510C			87109	01/22/21 09:30	U2SJ	ELLE
Total/NA	Analysis	8270D		1	87484	01/24/21 16:53	W6XI	ELLE
Total/NA	Prep	3510C			87105	01/22/21 09:30	U2SJ	ELLE
Total/NA	Analysis	8081B		1	87372	01/22/21 21:05	UAMZ	ELLE
Dissolved	Prep	Non-Digest Prep			86651	01/21/21 04:09	UJL8	ELLE
Dissolved	Analysis	6010C		1	88171	01/26/21 13:04	UCIG	ELLE
Dissolved	Prep	Non-Digest Prep			86651	01/21/21 04:09	UJL8	ELLE
Dissolved	Analysis	6010C		1	88769	01/27/21 18:42	UCIG	ELLE
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		1	87312	01/22/21 14:55	UPJE	ELLE
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		1	87010	01/21/21 18:15	UCIG	ELLE
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		1	87010	01/21/21 19:22	UCIG	ELLE
Dissolved	Prep	7470A			86590	01/20/21 19:59	UJL8	ELLE
Dissolved	Analysis	7470A		1	87027	01/21/21 19:45	UEFS	ELLE
Total/NA	Prep	7470A			86590	01/20/21 19:59	UJL8	ELLE
Total/NA	Analysis	7470A		1	87027	01/21/21 19:16	UEFS	ELLE
Total/NA	Analysis	3500 Fe B-2011		5	88180	01/26/21 13:06	QU5I	ELLE
Total/NA	Analysis	375.4		4	88587	01/27/21 11:48	USAE	ELLE

Client Sample ID: HOFF-MW-B-011921

Lab Sample ID: 410-26865-2

Date Collected: 01/19/21 12:10

Matrix: Water

Date Received: 01/19/21 17:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL	DL2	1000	89203	01/29/21 06:05	ULCP	ELLE
Total/NA	Analysis	8260C LL		10	88755	01/28/21 06:17	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	100	88755	01/28/21 06:38	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		10	88413	01/27/21 17:01	UKAD	ELLE
Total/NA	Prep	3510C			87109	01/22/21 09:30	U2SJ	ELLE
Total/NA	Analysis	8270D		1	87484	01/24/21 17:21	W6XI	ELLE
Total/NA	Prep	3510C			87105	01/22/21 09:30	U2SJ	ELLE
Total/NA	Analysis	8081B		1	87372	01/22/21 21:16	UAMZ	ELLE
Dissolved	Prep	Non-Digest Prep			86651	01/21/21 04:09	UJL8	ELLE
Dissolved	Analysis	6010C		1	88171	01/26/21 12:58	UCIG	ELLE
Dissolved	Prep	Non-Digest Prep			86651	01/21/21 04:09	UJL8	ELLE
Dissolved	Analysis	6010C		1	88769	01/27/21 18:29	UCIG	ELLE
Dissolved	Prep	Non-Digest Prep			86651	01/21/21 04:09	UJL8	ELLE
Dissolved	Analysis	6010C		5	88769	01/27/21 19:13	UCIG	ELLE
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		5	87312	01/22/21 14:59	UPJE	ELLE

Client Sample ID: HOFF-MW-B-011921

Lab Sample ID: 410-26865-2

Date Collected: 01/19/21 12:10

Matrix: Water

Date Received: 01/19/21 17:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		1	87010	01/21/21 18:18	UCIG	ELLE
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		1	87010	01/21/21 19:25	UCIG	ELLE
Dissolved	Prep	7470A			86590	01/20/21 19:59	UJL8	ELLE
Dissolved	Analysis	7470A		1	87027	01/21/21 19:55	UEFS	ELLE
Total/NA	Prep	7470A			86590	01/20/21 19:59	UJL8	ELLE
Total/NA	Analysis	7470A		1	87027	01/21/21 19:36	UEFS	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	88180	01/26/21 12:55	QU5I	ELLE
Total/NA	Analysis	375.4		100	88587	01/27/21 11:48	USAE	ELLE

Client Sample ID: HOFF-MW-C-011921

Lab Sample ID: 410-26865-3

Date Collected: 01/19/21 13:15

Matrix: Water

Date Received: 01/19/21 17:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL	RA	2	89203	01/29/21 06:49	ULCP	ELLE
Total/NA	Analysis	8260C LL		2	88755	01/28/21 06:59	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	20	88755	01/28/21 07:21	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		2	88413	01/27/21 16:40	UKAD	ELLE
Total/NA	Analysis	8260C SIM 14D	RA	2	88882	01/28/21 14:35	USEJ	ELLE
Total/NA	Prep	3510C			87109	01/22/21 09:30	U2SJ	ELLE
Total/NA	Analysis	8270D		1	87484	01/24/21 17:49	W6XI	ELLE
Total/NA	Prep	3510C	RE		87984	01/26/21 08:14	U2SJ	ELLE
Total/NA	Analysis	8270D	RE	1	88549	01/27/21 18:46	SJ89	ELLE
Total/NA	Prep	3510C			87105	01/22/21 09:30	U2SJ	ELLE
Total/NA	Analysis	8081B		1	87372	01/22/21 21:26	UAMZ	ELLE
Dissolved	Prep	Non-Digest Prep			86651	01/21/21 04:09	UJL8	ELLE
Dissolved	Analysis	6010C		1	88171	01/26/21 13:01	UCIG	ELLE
Dissolved	Prep	Non-Digest Prep			86651	01/21/21 04:09	UJL8	ELLE
Dissolved	Analysis	6010C		1	88769	01/27/21 18:32	UCIG	ELLE
Dissolved	Prep	Non-Digest Prep			86651	01/21/21 04:09	UJL8	ELLE
Dissolved	Analysis	6010C		5	88769	01/27/21 18:39	UCIG	ELLE
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		1	87010	01/21/21 18:28	UCIG	ELLE
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		5	87010	01/21/21 19:38	UCIG	ELLE
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		10	87010	01/21/21 19:51	UCIG	ELLE
Dissolved	Prep	7470A			86590	01/20/21 19:59	UJL8	ELLE
Dissolved	Analysis	7470A		1	87027	01/21/21 19:49	UEFS	ELLE
Total/NA	Prep	7470A			86590	01/20/21 19:59	UJL8	ELLE
Total/NA	Analysis	7470A		1	87027	01/21/21 19:28	UEFS	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	88180	01/26/21 12:55	QU5I	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-MW-C-011921

Lab Sample ID: 410-26865-3
Matrix: Water
Date Collected: 01/19/21 13:15
Date Received: 01/19/21 17:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	375.4		100	88587	01/27/21 11:48	USAE	ELLE

Client Sample ID: HOFF-MW-13-011921

Lab Sample ID: 410-26865-4
Matrix: Water
Date Collected: 01/19/21 14:50
Date Received: 01/19/21 17:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL	RA	1	89203	01/29/21 06:27	ULCP	ELLE
Total/NA	Analysis	8260C LL		1	88755	01/28/21 07:42	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		1	88413	01/27/21 14:17	UKAD	ELLE
Total/NA	Prep	3510C			87109	01/22/21 09:30	U2SJ	ELLE
Total/NA	Analysis	8270D		1	87484	01/24/21 18:17	W6XI	ELLE
Total/NA	Prep	3510C			87105	01/22/21 09:30	U2SJ	ELLE
Total/NA	Analysis	8081B		1	87372	01/22/21 21:37	UAMZ	ELLE
Dissolved	Prep	Non-Digest Prep			86651	01/21/21 04:09	UJL8	ELLE
Dissolved	Analysis	6010C		1	88171	01/26/21 12:55	UCIG	ELLE
Dissolved	Prep	Non-Digest Prep			86651	01/21/21 04:09	UJL8	ELLE
Dissolved	Analysis	6010C		1	88769	01/27/21 18:26	UCIG	ELLE
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		1	87312	01/22/21 15:02	UPJE	ELLE
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		1	87010	01/21/21 18:25	UCIG	ELLE
Dissolved	Prep	7470A			86590	01/20/21 19:59	UJL8	ELLE
Dissolved	Analysis	7470A		1	87027	01/21/21 19:47	UEFS	ELLE
Total/NA	Prep	7470A			86590	01/20/21 19:59	UJL8	ELLE
Total/NA	Analysis	7470A		1	87027	01/21/21 19:38	UEFS	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	88180	01/26/21 12:57	QU5I	ELLE
Total/NA	Analysis	375.4		20	88587	01/27/21 11:48	USAE	ELLE

Client Sample ID: HOFF-TB-011921

Lab Sample ID: 410-26865-5
Matrix: Water
Date Collected: 01/19/21 09:00
Date Received: 01/19/21 17:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	88755	01/27/21 23:52	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		1	88413	01/27/21 12:15	UKAD	ELLE

Client Sample ID: HOFF-EB-011921

Lab Sample ID: 410-26865-6
Matrix: Water
Date Collected: 01/19/21 09:30
Date Received: 01/19/21 17:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	88755	01/28/21 00:14	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		1	88413	01/27/21 12:35	UKAD	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Client Sample ID: HOFF-EB-011921

Date Collected: 01/19/21 09:30
Date Received: 01/19/21 17:08

Lab Sample ID: 410-26865-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			87109	01/22/21 09:30	U2SJ	ELLE
Total/NA	Analysis	8270D		1	87484	01/24/21 18:45	W6XI	ELLE
Total/NA	Prep	3510C			87105	01/22/21 09:30	U2SJ	ELLE
Total/NA	Analysis	8081B		1	87372	01/22/21 21:48	UAMZ	ELLE
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		1	87010	01/21/21 18:21	UCIG	ELLE
Total/NA	Prep	3010A			86133	01/20/21 05:29	UAMX	ELLE
Total/NA	Analysis	6010C		1	87010	01/21/21 19:29	UCIG	ELLE
Total/NA	Prep	7470A			86590	01/20/21 19:59	UJL8	ELLE
Total/NA	Analysis	7470A		1	87027	01/21/21 19:30	UEFS	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-22

Method Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Method	Method Description	Protocol	Laboratory
8260C LL	Volatile Organic Compounds by GC/MS	SW846	ELLE
8260C SIM 14D	Volatile Organic Compounds (GC/MS)	SW846	ELLE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ELLE
8081B	Organochlorine Pesticides (GC)	SW846	ELLE
6010C	Metals (ICP)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
3500 Fe B-2011	Iron, Ferrous and Ferric	SM	ELLE
375.4	Sulfate	MCAWW	ELLE
3010A	Preparation, Total Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
Non-Digest Prep	Preparation, Non-Digested Aqueous Metals	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: HOFF

Job ID: 410-26865-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-26865-1	HOFF-MW-A-011921	Water	01/19/21 10:40	01/19/21 17:08	
410-26865-2	HOFF-MW-B-011921	Water	01/19/21 12:10	01/19/21 17:08	
410-26865-3	HOFF-MW-C-011921	Water	01/19/21 13:15	01/19/21 17:08	
410-26865-4	HOFF-MW-13-011921	Water	01/19/21 14:50	01/19/21 17:08	
410-26865-5	HOFF-TB-011921	Water	01/19/21 09:00	01/19/21 17:08	
410-26865-6	HOFF-EB-011921	Water	01/19/21 09:30	01/19/21 17:08	

Environmental Analysis [illegible] Custody

eurofins | Lancaster Laboratories Environmental

Acct. # _____

410-26865 Chain of Custody

[illegible]mental use only

COC # 616097

Client Information

Client: Tetra Tech	Acct. #:
Project Name/#: Hoff	PWSID #:
Project Manager: Jonathan Dziekan	P.O. #:
Sampler: Roy Wagner	Quote #:
State where samples were collected: PA	For Compliance: Yes ☐ No ☐

Soil ☐ Sediment ☐ Tissue ☐ | Water: Potable ☐ Ground ☒ NPDES ☐ Surface ☐ | Other: LAB DI

Analysis Requested

Preservation and Filtration Codes

Sample Identification	Collected Date	Collected Time	Grab	Composite	Water	Other	Total # of Containers	TAL Metals - total (N)	Ferrous Iron (H)	VOCs by 8260C/D (H)	VOCs by 14-Diox SIM (H)	Sulfate	OC Pest. / TCL	TAL Metals - dissolved (N F)				Remarks
Hoff-MW-A-011921	1/19/21	1040	✓		Gr		13	1	1	3	3	1	3	1				
Hoff-MW-B-011921	1/19/21	1210	✓		Gr		13	1	1	3	3	1	3	1				
Hoff-MW-C-011921	1/19/21	1315	✓		Gr		13	1	1	3	3	1	3	1				
Hoff-MW-13-011921	1/19/21	1450	✓		Gr		13	1	1	3	3	1	3	1				
Hoff-TB-011921	1/19/21	0900				X	4			2	2							
Hoff-EB-011921	1/19/21	0930	✓			X	10	1		3	3		3					

For Lab Use Only
FSC: 265469
SCR#:

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 P=H_3PO_4
F=Field Filtered O=Other

Turnaround Time (TAT) Requested (please circle)
Standard Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Requested TAT in business days: _____

E-mail address: Jonathan.Dziekan@tetratech.com

Relinquished by	Date	Time	Received by	Date	Time
Roy J Wagner	1/19/21	1535	Bill DeEvry	1-19-21	1535
Bill DeEvry	1-19-21	17:01			
			Christopher K Barns	1/19/21	1728

Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only)
Type III (Reduced non-CLP) NJ DKQP TX TRRP-13
NYSDEC Category A or B MA MCP CT RCP

EDD Required? Yes No
If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS _____ FedEx _____ Other X

Temperature upon receipt 4.4 °C

3534
170

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • FOR HELP COMPLETING FORM CHECK OUT https://www.eurofinsus.com/coc
The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7044 0919

C3

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 410-26865-1

Login Number: 26865
List Number: 1
Creator: Jeremiah, Cory T

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-27044-1
Client Project/Site: Hoff VC

For:
Tetra Tech, Inc.
1 Oxford Valley
Suite 200
Langhorne, Pennsylvania 19047

Attn: Jon Dziekan

Authorized for release by:
2/5/2021 12:48:39 PM

Stephen Gordon, Senior Project Manager
(412)525-0071
Stephen.Gordon@eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Stephen Gordon
Senior Project Manager
2/5/2021 12:48:39 PM

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1-	Surrogate recovery exceeds control limits, low biased.

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL.
FH	MS and/or MSD recovery above control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-27044-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-27044-1

Receipt
The samples were received on 1/20/2021 5:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.5°C and 3.7°C

GC/MS VOA
Method 8260C_LL: The continuing calibration verification (CCV) associated with batch 410-89203 recovered outside acceptance criteria, low biased, for 1,2-Dichloroethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260C_LL: The continuing calibration verification (CCV) analyzed on 410-89203 is compliant under 8260C method criteria for Chloroethane. The software does not display the % Drift data to the whole number as is listed in the method (i.e. limit of 20%). When applying the evaluation to a whole number, the check passes the criteria with a value of 20% Drift.

Method 8260C_LL: The continuing calibration verification (CCV) associated with batch 410-89197 recovered outside acceptance criteria, low biased, for 1,1,2,2-Tetrachloroethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260C_LL: The [QC] associated with 410-89197 is compliant under 8260C/D criteria for Freon 113. The software does not display the data to the whole number as is listed in the method (i.e. limit of 20%). When applying the evaluation to a whole number, the QC passes the criteria.

Method 8260C_LL: The following sample contained residual chlorine upon receipt: Hoff-IW-1-B (410-27044-3).

Method 8260C_LL: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: Hoff-IW-1-A (410-27044-4). Elevated reporting limits (RLs) are provided.

Method 8260C_LL: The following sample re-analysis contained residual chlorine upon receipt: Hoff-IW-1-B (410-27044-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch 410-89635 recovered above the upper control limit for Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) analyzed in batch 410-89635 was below the method criteria for the following analyte(s): 2,4-Dinitrophenol and Benzaldehyde. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The continuing calibration verification (CCV) associated with batch 410-89707 recovered above the upper control limit for Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) analyzed in batch 410-89707 was below the method criteria for the following analyte(s): Benzaldehyde. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Job ID: 410-27044-1 (Continued)

Laboratory: Eurofins Lancaster Laboratories Env, LLC (Conti

Pesticides

Method 8081B: The following sample was diluted due to the nature of the sample matrix: Hoff-IW-1-A (410-27044-4). Elevated reporting limits (RLs) are provided.

Method 8081B: The DCB Decachlorobiphenyl surrogate recovery for the laboratory control sample (LCS) associated with preparation batch 410-88709 and analytical batch 410-88836 was outside the upper control limits.

Method 8081B: The continuing calibration verification (CCV) associated with batch 410-88836 recovered below the lower control limits for DCB Decachlorobiphenyl (Surr). The CCV and samples associated with this CCV have DCB Decachlorobiphenyl surrogate %R well within acceptance criteria; therefore, the data have been reported. The associated samples are impacted: Hoff-MW-F-B (410-27044-1), Hoff-MW-F-A (410-27044-2), Hoff-IW-1-B (410-27044-3), Hoff-IW-1-A (410-27044-4), Hoff-IW-2-B (410-27044-5) and (410-27068-F-5-C).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-27044-1

Client Sample ID: Hoff-MW-F-B

Lab Sample ID: 410-27044-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	140		5.0	0.70	ug/L	10		8260C LL	Total/NA
1,2-Dichloroethane	0.57	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
1,2,4-Trichlorobenzene	3.5	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
trans-1,2-Dichloroethene	130		5.0	0.60	ug/L	10		8260C LL	Total/NA
1,3-Dichlorobenzene	7.5		5.0	0.60	ug/L	10		8260C LL	Total/NA
Acetone	36	J	50	9.0	ug/L	10		8260C LL	Total/NA
Benzene	6.9		5.0	0.50	ug/L	10		8260C LL	Total/NA
1,1,1-Trichloroethane	55		5.0	0.60	ug/L	10		8260C LL	Total/NA
Bromomethane	0.92	J	5.0	0.70	ug/L	10		8260C LL	Total/NA
Chloromethane	2.3	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Chloroethane	7.6		5.0	0.70	ug/L	10		8260C LL	Total/NA
Vinyl chloride	6.7		5.0	1.0	ug/L	10		8260C LL	Total/NA
1,1-Dichloroethane	140		5.0	0.70	ug/L	10		8260C LL	Total/NA
1,1-Dichloroethene	5.2		5.0	0.60	ug/L	10		8260C LL	Total/NA
1,2-Dichloropropane	1.3	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
2-Butanone	6.6	J	50	6.0	ug/L	10		8260C LL	Total/NA
1,1,2-Trichloroethane	1.2	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Trichloroethene	12		5.0	0.60	ug/L	10		8260C LL	Total/NA
Isopropylbenzene	0.60	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
Chlorobenzene - DL	1100		50	6.0	ug/L	100		8260C LL	Total/NA
cis-1,2-Dichloroethene - DL	960		50	5.0	ug/L	100		8260C LL	Total/NA
1,2-Dichlorobenzene - DL	680		50	6.0	ug/L	100		8260C LL	Total/NA
1,4-Dioxane	27		8.0	4.0	ug/L	20		8260C SIM 14D	Total/NA
2,4-Dichlorophenol	2.3		2.0	0.50	ug/L	1		8270D	Total/NA
Phenanthrene	0.24	J	0.50	0.10	ug/L	1		8270D	Total/NA
2-Chlorophenol	2.9		2.0	0.50	ug/L	1		8270D	Total/NA
alpha-Chlordane (2C)	0.0085	J p	0.020	0.0030	ug/L	1		8081B	Total/NA
Endosulfan sulfate (1C)	0.0095	J p	0.030	0.0058	ug/L	1		8081B	Total/NA
Endrin (1C)	0.39	p	0.030	0.0082	ug/L	1		8081B	Total/NA
Heptachlor (1C)	0.0074	J p	0.020	0.0020	ug/L	1		8081B	Total/NA
p,p'-DDD (1C)	0.028	J p	0.030	0.0050	ug/L	1		8081B	Total/NA
p,p'-DDT (2C)	0.027	J	0.030	0.0052	ug/L	1		8081B	Total/NA
Aluminum	0.62	FH	0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.021		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	240		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.0027	J	0.015	0.0016	mg/L	1		6010C	Total/NA
Copper	0.035		0.020	0.012	mg/L	1		6010C	Total/NA
Iron	0.67	FH	0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	100		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.17		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.0074	J	0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.0048	J	0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	17		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	97		1.0	0.24	mg/L	1		6010C	Total/NA
Vanadium	0.012		0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.019		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	230		0.52	0.099	mg/L	1		6010C	Dissolved
Chromium	0.0070	J	0.015	0.0016	mg/L	1		6010C	Dissolved
Copper	0.020	J	0.021	0.012	mg/L	1		6010C	Dissolved
Magnesium	100		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.15		0.010	0.0031	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: Hoff-MW-F-B (Continued)

Lab Sample ID: 410-27044-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.0079	J	0.010	0.0022	mg/L	1		6010C	Dissolved
Potassium	18		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	100		1.0	0.25	mg/L	1		6010C	Dissolved
Vanadium	0.0095	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Sulfate	510		120	40	mg/L	20		375.4	Total/NA

Client Sample ID: Hoff-MW-F-A

Lab Sample ID: 410-27044-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.4	J	10	1.2	ug/L	20		8260C LL	Total/NA
1,4-Dichlorobenzene	190		10	1.4	ug/L	20		8260C LL	Total/NA
1,2-Dichloroethane	14		10	1.0	ug/L	20		8260C LL	Total/NA
Methylcyclohexane	3.8	J	10	1.0	ug/L	20		8260C LL	Total/NA
Toluene	2.5	J	10	1.4	ug/L	20		8260C LL	Total/NA
Cyclohexane	14		10	1.0	ug/L	20		8260C LL	Total/NA
1,2,4-Trichlorobenzene	4.5	J	10	1.2	ug/L	20		8260C LL	Total/NA
cis-1,2-Dichloroethene	120		10	1.0	ug/L	20		8260C LL	Total/NA
trans-1,2-Dichloroethene	2.6	J	10	1.2	ug/L	20		8260C LL	Total/NA
Methyl tertiary butyl ether	390		10	1.0	ug/L	20		8260C LL	Total/NA
1,3-Dichlorobenzene	20		10	1.2	ug/L	20		8260C LL	Total/NA
Acetone	25	J	100	18	ug/L	20		8260C LL	Total/NA
Benzene	67		10	1.0	ug/L	20		8260C LL	Total/NA
1,1,1-Trichloroethane	1.4	J	10	1.2	ug/L	20		8260C LL	Total/NA
Chloroethane	2.2	J	10	1.4	ug/L	20		8260C LL	Total/NA
Vinyl chloride	47		10	2.0	ug/L	20		8260C LL	Total/NA
1,1-Dichloroethane	31		10	1.4	ug/L	20		8260C LL	Total/NA
1,1-Dichloroethene	1.9	J	10	1.2	ug/L	20		8260C LL	Total/NA
Trichloroethene	1.9	J	10	1.2	ug/L	20		8260C LL	Total/NA
1,2-Dichlorobenzene	480		10	1.2	ug/L	20		8260C LL	Total/NA
Isopropylbenzene	4.0	J	10	1.0	ug/L	20		8260C LL	Total/NA
Chlorobenzene - DL	1000		100	12	ug/L	200		8260C LL	Total/NA
1,4-Dioxane	100		2.0	1.0	ug/L	5		8260C SIM 14D	Total/NA
Anthracene	0.57		0.54	0.11	ug/L	1		8270D	Total/NA
Dibenzofuran	0.98	J	2.2	0.54	ug/L	1		8270D	Total/NA
Fluoranthene	0.22	J	0.54	0.11	ug/L	1		8270D	Total/NA
Phenanthrene	1.7		0.54	0.11	ug/L	1		8270D	Total/NA
Pyrene	0.26	J	0.54	0.11	ug/L	1		8270D	Total/NA
beta-BHC (2C)	0.063	J p	0.10	0.018	ug/L	5		8081B	Total/NA
delta-BHC (1C)	0.060	J p	0.10	0.018	ug/L	5		8081B	Total/NA
Dieldrin (1C)	0.046	J	0.16	0.028	ug/L	5		8081B	Total/NA
Aluminum	0.20	J	0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.014		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	75		0.50	0.096	mg/L	1		6010C	Total/NA
Cobalt	0.0073		0.0050	0.0015	mg/L	1		6010C	Total/NA
Iron	0.17	J	0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	63		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	5.9		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.015		0.010	0.0021	mg/L	1		6010C	Total/NA
Potassium	3.5		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	98		1.0	0.24	mg/L	1		6010C	Total/NA
Thallium	0.014	J	0.030	0.0081	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Hoff-MW-F-A (Continued) — Lab Sample ID: 410-27044-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	0.0020	J	0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.014		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	70		0.52	0.099	mg/L	1		6010C	Dissolved
Chromium	0.0050	J	0.015	0.0016	mg/L	1		6010C	Dissolved
Cobalt	0.0072		0.0052	0.0015	mg/L	1		6010C	Dissolved
Magnesium	59		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	5.9		0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.016		0.010	0.0022	mg/L	1		6010C	Dissolved
Potassium	3.4		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	100		1.0	0.25	mg/L	1		6010C	Dissolved
Sulfate	6.5		6.0	2.0	mg/L	1		375.4	Total/NA

Client Sample ID: Hoff-IW-1-B — Lab Sample ID: 410-27044-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	12		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,2-Dichloroethane	0.46	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
Methylcyclohexane	0.076	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
Toluene	0.18	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Chlorobenzene	7.1		0.50	0.060	ug/L	1		8260C LL	Total/NA
1,2,4-Trichlorobenzene	1.0		0.50	0.060	ug/L	1		8260C LL	Total/NA
Tetrachloroethene	0.12	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
cis-1,2-Dichloroethene	13		0.50	0.050	ug/L	1		8260C LL	Total/NA
trans-1,2-Dichloroethene	1.9		0.50	0.060	ug/L	1		8260C LL	Total/NA
Methyl tertiary butyl ether	0.14	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,3-Dichlorobenzene	0.41	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Chloroform	0.48	J	0.50	0.090	ug/L	1		8260C LL	Total/NA
Benzene	7.1		0.50	0.050	ug/L	1		8260C LL	Total/NA
1,1,1-Trichloroethane	1.7		0.50	0.060	ug/L	1		8260C LL	Total/NA
Bromomethane	18		0.50	0.070	ug/L	1		8260C LL	Total/NA
Chloroethane	3.3		0.50	0.070	ug/L	1		8260C LL	Total/NA
Vinyl chloride	0.18	J	0.50	0.10	ug/L	1		8260C LL	Total/NA
Methylene Chloride	0.98		0.50	0.070	ug/L	1		8260C LL	Total/NA
Carbon disulfide	0.44	J	1.0	0.060	ug/L	1		8260C LL	Total/NA
1,2-Dichloropropane	1.1		0.50	0.060	ug/L	1		8260C LL	Total/NA
2-Butanone	43		5.0	0.60	ug/L	1		8260C LL	Total/NA
1,1,2-Trichloroethane	0.37	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Trichloroethene	13		0.50	0.060	ug/L	1		8260C LL	Total/NA
1,1,2,2-Tetrachloroethane	0.31	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Acetone - DL	470		50	9.0	ug/L	10		8260C LL	Total/NA
Chloromethane - DL	49		5.0	0.60	ug/L	10		8260C LL	Total/NA
1,1-Dichloroethane - DL	53		5.0	0.70	ug/L	10		8260C LL	Total/NA
1,2-Dichlorobenzene - DL	47		5.0	0.60	ug/L	10		8260C LL	Total/NA
1,4-Dioxane	15		8.0	4.0	ug/L	20		8260C SIM 14D	Total/NA
Benzo[a]anthracene	0.16	J	0.56	0.11	ug/L	1		8270D	Total/NA
Benzo[a]pyrene	0.17	J	0.56	0.11	ug/L	1		8270D	Total/NA
Benzo[b]fluoranthene	0.33	J	0.56	0.11	ug/L	1		8270D	Total/NA
Benzo[g,h,i]perylene	0.18	J	0.56	0.11	ug/L	1		8270D	Total/NA
Benzo[k]fluoranthene	0.17	J	0.56	0.11	ug/L	1		8270D	Total/NA
Chrysene	0.25	J	0.56	0.11	ug/L	1		8270D	Total/NA
Dimethyl phthalate	3.0	J	5.6	2.2	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Hoff-IW-1-B (Continued) — Lab Sample ID: 410-27044-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.27	J	0.56	0.11	ug/L	1		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.22	J	0.56	0.11	ug/L	1		8270D	Total/NA
Phenanthrene	0.14	J	0.56	0.11	ug/L	1		8270D	Total/NA
Pyrene	0.24	J	0.56	0.11	ug/L	1		8270D	Total/NA
Aluminum	2.0		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.041		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	610		2.5	0.48	mg/L	5		6010C	Total/NA
Chromium	0.048		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0020	J	0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.028		0.020	0.012	mg/L	1		6010C	Total/NA
Iron	3.9		0.20	0.040	mg/L	1		6010C	Total/NA
Lead	0.012	J	0.015	0.0071	mg/L	1		6010C	Total/NA
Magnesium	350		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.068		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.010		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.011	J	0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	24		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	1200		5.0	1.2	mg/L	5		6010C	Total/NA
Vanadium	0.011		0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.026		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	640		2.6	0.49	mg/L	5		6010C	Dissolved
Chromium	0.051		0.015	0.0016	mg/L	1		6010C	Dissolved
Copper	0.022		0.021	0.012	mg/L	1		6010C	Dissolved
Magnesium	340		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.035		0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.0095	J	0.010	0.0022	mg/L	1		6010C	Dissolved
Zinc	0.0056	J	0.021	0.0038	mg/L	1		6010C	Dissolved
Potassium	23		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	1200		5.2	1.2	mg/L	5		6010C	Dissolved
Vanadium	0.0028	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	0.61		0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	0.43		0.20	0.079	ug/L	1		7470A	Dissolved
Ferrous Iron	0.15	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	2000		600	200	mg/L	100		375.4	Total/NA

Client Sample ID: Hoff-IW-1-A — Lab Sample ID: 410-27044-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	9.2		1.0	0.14	ug/L	2		8260C LL	Total/NA
1,2-Dichloroethane	0.15	J	1.0	0.10	ug/L	2		8260C LL	Total/NA
Methylcyclohexane	0.16	J	1.0	0.10	ug/L	2		8260C LL	Total/NA
Chlorobenzene	11		1.0	0.12	ug/L	2		8260C LL	Total/NA
1,2,4-Trichlorobenzene	1.3		1.0	0.12	ug/L	2		8260C LL	Total/NA
cis-1,2-Dichloroethene	0.88	J	1.0	0.10	ug/L	2		8260C LL	Total/NA
trans-1,2-Dichloroethene	0.17	J	1.0	0.12	ug/L	2		8260C LL	Total/NA
1,3-Dichlorobenzene	0.70	J	1.0	0.12	ug/L	2		8260C LL	Total/NA
Acetone	80		10	1.8	ug/L	2		8260C LL	Total/NA
Benzene	0.18	J	1.0	0.10	ug/L	2		8260C LL	Total/NA
1,1,1-Trichloroethane	1.5		1.0	0.12	ug/L	2		8260C LL	Total/NA
Bromomethane	10		1.0	0.14	ug/L	2		8260C LL	Total/NA
Chloromethane	19		1.0	0.12	ug/L	2		8260C LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Hoff-IW-1-A (Continued) — Lab Sample ID: 410-27044-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	6.2		1.0	0.14	ug/L	2		8260C LL	Total/NA
Methylene Chloride	0.30	J	1.0	0.14	ug/L	2		8260C LL	Total/NA
Carbon disulfide	0.13	J	2.0	0.12	ug/L	2		8260C LL	Total/NA
1,1-Dichloroethane	28		1.0	0.14	ug/L	2		8260C LL	Total/NA
2-Butanone	10		10	1.2	ug/L	2		8260C LL	Total/NA
Trichloroethene	0.32	J	1.0	0.12	ug/L	2		8260C LL	Total/NA
1,2-Dichlorobenzene	25		1.0	0.12	ug/L	2		8260C LL	Total/NA
1,4-Dioxane	1.9		0.40	0.20	ug/L	1		8260C SIM 14D	Total/NA
Naphthalene	0.21	J	0.54	0.11	ug/L	1		8270D	Total/NA
2-Methylnaphthalene	0.14	J	0.54	0.11	ug/L	1		8270D	Total/NA
Aluminum	1.1		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.066		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	200		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.027		0.015	0.0016	mg/L	1		6010C	Total/NA
Iron	5.2		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	160		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.33		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.0089	J	0.010	0.0021	mg/L	1		6010C	Total/NA
Potassium	13		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	580		5.0	1.2	mg/L	5		6010C	Total/NA
Vanadium	0.0083	J	0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.042		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	190		0.52	0.099	mg/L	1		6010C	Dissolved
Chromium	0.032		0.015	0.0016	mg/L	1		6010C	Dissolved
Magnesium	150		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.25		0.010	0.0031	mg/L	1		6010C	Dissolved
Nickel	0.0071	J	0.010	0.0022	mg/L	1		6010C	Dissolved
Potassium	13		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	580		5.2	1.2	mg/L	5		6010C	Dissolved
Mercury	0.17	J	0.20	0.079	ug/L	1		7470A	Total/NA
Ferrous Iron	0.11	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	760		120	40	mg/L	20		375.4	Total/NA

Client Sample ID: Hoff-IW-2-B — Lab Sample ID: 410-27044-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.62	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
1,2-Dichloroethane	0.97	J ^c	5.0	0.50	ug/L	10		8260C LL	Total/NA
Methylcyclohexane	0.63	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
Toluene	0.90	J	5.0	0.70	ug/L	10		8260C LL	Total/NA
1,2,4-Trichlorobenzene	13		5.0	0.60	ug/L	10		8260C LL	Total/NA
Tetrachloroethene	0.63	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
1,3-Dichlorobenzene	23		5.0	0.60	ug/L	10		8260C LL	Total/NA
Acetone	98		50	9.0	ug/L	10		8260C LL	Total/NA
Benzene	8.3		5.0	0.50	ug/L	10		8260C LL	Total/NA
1,1,1-Trichloroethane	210		5.0	0.60	ug/L	10		8260C LL	Total/NA
Bromomethane	1.7	J	5.0	0.70	ug/L	10		8260C LL	Total/NA
Chloromethane	2.9	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Chloroethane	24	^c	5.0	0.70	ug/L	10		8260C LL	Total/NA
Vinyl chloride	1.0	J	5.0	1.0	ug/L	10		8260C LL	Total/NA
Methylene Chloride	1.9	J	5.0	0.70	ug/L	10		8260C LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Hoff-IW-2-B (Continued) — Lab Sample ID: 410-27044-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	1.0	J	10	0.60	ug/L	10		8260C LL	Total/NA
1,1-Dichloroethene	4.5	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
1,2-Dichloropropane	3.8	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
2-Butanone	19	J	50	6.0	ug/L	10		8260C LL	Total/NA
1,1,2-Trichloroethane	2.2	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Trichloroethene	18		5.0	0.60	ug/L	10		8260C LL	Total/NA
1,1,2,2-Tetrachloroethane	0.72	J	5.0	0.70	ug/L	10		8260C LL	Total/NA
Isopropylbenzene	1.4	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
1,4-Dichlorobenzene - DL	530		50	7.0	ug/L	100		8260C LL	Total/NA
Chlorobenzene - DL	1900		50	6.0	ug/L	100		8260C LL	Total/NA
trans-1,2-Dichloroethene - DL	710		50	6.0	ug/L	100		8260C LL	Total/NA
1,1-Dichloroethane - DL	440		50	7.0	ug/L	100		8260C LL	Total/NA
cis-1,2-Dichloroethene - DL2	3600		500	50	ug/L	1000		8260C LL	Total/NA
1,2-Dichlorobenzene - DL2	2900		500	60	ug/L	1000		8260C LL	Total/NA
1,4-Dioxane	49		4.0	2.0	ug/L	10		8260C SIM 14D	Total/NA
Naphthalene	11		0.50	0.10	ug/L	1		8270D	Total/NA
Phenanthrene	0.44	J	0.50	0.10	ug/L	1		8270D	Total/NA
2-Chlorophenol	4.6		2.0	0.50	ug/L	1		8270D	Total/NA
2-Methylnaphthalene	2.6		0.50	0.10	ug/L	1		8270D	Total/NA
alpha-Chlordane (2C)	0.0039	J p	0.020	0.0030	ug/L	1		8081B	Total/NA
Endosulfan I (2C)	0.0061	J p	0.020	0.0043	ug/L	1		8081B	Total/NA
Endosulfan sulfate (2C)	0.024	J	0.030	0.0058	ug/L	1		8081B	Total/NA
Endrin ketone (2C)	0.0094	J	0.030	0.0050	ug/L	1		8081B	Total/NA
Heptachlor (1C)	0.0069	J p	0.020	0.0020	ug/L	1		8081B	Total/NA
p,p'-DDT (2C)	0.0099	J p	0.030	0.0052	ug/L	1		8081B	Total/NA
Barium	0.024		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	170		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.0048	J	0.015	0.0016	mg/L	1		6010C	Total/NA
Iron	0.26		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	170		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.034		0.010	0.0030	mg/L	1		6010C	Total/NA
Potassium	58		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	310		1.0	0.24	mg/L	1		6010C	Total/NA
Vanadium	0.0087	J	0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.016		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	160		0.52	0.099	mg/L	1		6010C	Dissolved
Chromium	0.0099	J	0.015	0.0016	mg/L	1		6010C	Dissolved
Magnesium	160		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.033		0.010	0.0031	mg/L	1		6010C	Dissolved
Potassium	58		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	330		1.0	0.25	mg/L	1		6010C	Dissolved
Vanadium	0.0060	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Mercury	0.15	J	0.20	0.079	ug/L	1		7470A	Total/NA
Mercury	0.18	J	0.20	0.079	ug/L	1		7470A	Dissolved
Sulfate	750		120	40	mg/L	20		375.4	Total/NA

Client Sample ID: Hoff-TB-012021 — Lab Sample ID: 410-27044-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-27044-1

Client Sample ID: Hoff-MW-F-B

Date Collected: 01/20/21 09:35
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-1

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/29/21 01:18	10
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/L			01/29/21 01:18	10
Ethylbenzene	ND		5.0	0.60	ug/L			01/29/21 01:18	10
Styrene	ND		5.0	0.50	ug/L			01/29/21 01:18	10
1,4-Dichlorobenzene	**140**		5.0	0.70	ug/L			01/29/21 01:18	10
1,2-Dibromoethane	ND		5.0	0.60	ug/L			01/29/21 01:18	10
1,2-Dichloroethane	**0.57**	**J**	5.0	0.50	ug/L			01/29/21 01:18	10
4-Methyl-2-pentanone	ND		50	7.0	ug/L			01/29/21 01:18	10
Methylcyclohexane	ND		5.0	0.50	ug/L			01/29/21 01:18	10
Toluene	ND		5.0	0.70	ug/L			01/29/21 01:18	10
Cyclohexane	ND		5.0	0.50	ug/L			01/29/21 01:18	10
1,2,4-Trichlorobenzene	**3.5**	**J**	5.0	0.60	ug/L			01/29/21 01:18	10
Dibromochloromethane	ND		5.0	0.70	ug/L			01/29/21 01:18	10
Xylenes, Total	ND		10	1.5	ug/L			01/29/21 01:18	10
Tetrachloroethene	ND		5.0	0.60	ug/L			01/29/21 01:18	10
trans-1,2-Dichloroethene	**130**		5.0	0.60	ug/L			01/29/21 01:18	10
Methyl tertiary butyl ether	ND		5.0	0.50	ug/L			01/29/21 01:18	10
1,3-Dichlorobenzene	**7.5**		5.0	0.60	ug/L			01/29/21 01:18	10
Carbon tetrachloride	ND		5.0	0.70	ug/L			01/29/21 01:18	10
2-Hexanone	ND		50	6.0	ug/L			01/29/21 01:18	10
Acetone	**36**	**J**	50	9.0	ug/L			01/29/21 01:18	10
Chloroform	ND		5.0	0.90	ug/L			01/29/21 01:18	10
Benzene	**6.9**		5.0	0.50	ug/L			01/29/21 01:18	10
1,1,1-Trichloroethane	**55**		5.0	0.60	ug/L			01/29/21 01:18	10
Bromomethane	**0.92**	**J**	5.0	0.70	ug/L			01/29/21 01:18	10
Chloromethane	**2.3**	**J**	5.0	0.60	ug/L			01/29/21 01:18	10
Chloroethane	**7.6**		5.0	0.70	ug/L			01/29/21 01:18	10
Vinyl chloride	**6.7**		5.0	1.0	ug/L			01/29/21 01:18	10
Methylene Chloride	ND		5.0	0.70	ug/L			01/29/21 01:18	10
Carbon disulfide	ND		10	0.60	ug/L			01/29/21 01:18	10
Bromoform	ND		10	3.0	ug/L			01/29/21 01:18	10
Bromodichloromethane	ND		5.0	0.50	ug/L			01/29/21 01:18	10
1,1-Dichloroethane	**140**		5.0	0.70	ug/L			01/29/21 01:18	10
1,1-Dichloroethene	**5.2**		5.0	0.60	ug/L			01/29/21 01:18	10
Trichlorofluoromethane	ND		5.0	0.50	ug/L			01/29/21 01:18	10
Dichlorodifluoromethane	ND		5.0	0.50	ug/L			01/29/21 01:18	10
Freon 113	ND	^c	5.0	0.60	ug/L			01/29/21 01:18	10
1,2-Dichloropropane	**1.3**	**J**	5.0	0.60	ug/L			01/29/21 01:18	10
2-Butanone	**6.6**	**J**	50	6.0	ug/L			01/29/21 01:18	10
1,1,2-Trichloroethane	**1.2**	**J**	5.0	0.60	ug/L			01/29/21 01:18	10
Trichloroethene	**12**		5.0	0.60	ug/L			01/29/21 01:18	10
Methyl acetate	ND		10	1.0	ug/L			01/29/21 01:18	10
1,1,2,2-Tetrachloroethane	ND	^c	5.0	0.70	ug/L			01/29/21 01:18	10
1,2-Dibromo-3-Chloropropane	ND		5.0	1.0	ug/L			01/29/21 01:18	10
Isopropylbenzene	**0.60**	**J**	5.0	0.50	ug/L			01/29/21 01:18	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*01/29/21 01:18*	*10*
Dibromofluoromethane (Surr)	*113*		*80 - 120*		*01/29/21 01:18*	*10*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/29/21 01:18*	*10*

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Lab Sample ID: 410-27044-1

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*80 - 120*		*01/29/21 01:18*	*10*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**1100**		50	6.0	ug/L			01/29/21 01:39	100
cis-1,2-Dichloroethene	**960**		50	5.0	ug/L			01/29/21 01:39	100
1,2-Dichlorobenzene	**680**		50	6.0	ug/L			01/29/21 01:39	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*01/29/21 01:39*	*100*
Dibromofluoromethane (Surr)	*114*		*80 - 120*		*01/29/21 01:39*	*100*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/29/21 01:39*	*100*
Toluene-d8 (Surr)	*89*		*80 - 120*		*01/29/21 01:39*	*100*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**27**		8.0	4.0	ug/L			01/28/21 17:18	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*01/28/21 17:18*	*20*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
2,4-Dichlorophenol	**2.3**		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
2,4-Dinitrophenol	ND	^c	30	14	ug/L		01/27/21 16:33	01/30/21 08:11	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Benzo[a]pyrene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Acenaphthene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Acenaphthylene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Acetophenone	ND		10	4.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
Anthracene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Atrazine	ND		5.0	2.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
Benzaldehyde	ND	^c	10	3.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
Caprolactam	ND		11	5.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
Carbazole	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
Chrysene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Dibenzofuran	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1

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Lab Sample ID: 410-27044-1

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	ND		5.0	2.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
Hexachlorocyclopentadiene	ND	^c	11	5.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
Hexachloroethane	ND		5.0	1.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
Fluoranthene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Fluorene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Isophorone	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		01/27/21 16:33	01/30/21 08:11	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		01/27/21 16:33	01/30/21 08:11	1
Naphthalene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Nitrobenzene	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
Pentachlorophenol	ND		5.0	1.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
Phenanthrene	**0.24**	**J**	0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Phenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
Pyrene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		01/27/21 16:33	01/30/21 08:11	1
2-Chlorophenol	**2.9**		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 08:11	1
2-Methylphenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
2-Nitroaniline	ND		5.0	2.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
2-Nitrophenol	ND		10	3.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
3-Nitroaniline	ND		7.0	3.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
4-Methylphenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
4-Nitroaniline	ND		3.0	0.91	ug/L		01/27/21 16:33	01/30/21 08:11	1
4-Nitrophenol	ND		30	10	ug/L		01/27/21 16:33	01/30/21 08:11	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		01/27/21 16:33	01/30/21 08:11	1
4-Chloroaniline	ND		10	4.0	ug/L		01/27/21 16:33	01/30/21 08:11	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 08:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*74*		*10 - 150*	*01/27/21 16:33*	*01/30/21 08:11*	*1*
2-Fluorobiphenyl (Surr)	*75*		*44 - 102*	*01/27/21 16:33*	*01/30/21 08:11*	*1*
2-Fluorophenol (Surr)	*37*		*10 - 84*	*01/27/21 16:33*	*01/30/21 08:11*	*1*
Nitrobenzene-d5 (Surr)	*76*		*23 - 128*	*01/27/21 16:33*	*01/30/21 08:11*	*1*
p-Terphenyl-d14 (Surr)	*88*		*31 - 113*	*01/27/21 16:33*	*01/30/21 08:11*	*1*
Phenol-d5 (Surr)	*31*		*10 - 67*	*01/27/21 16:33*	*01/30/21 08:11*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		01/27/21 18:00	01/28/21 07:29	1

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Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		01/27/21 18:00	01/28/21 07:29	1
alpha-Chlordane (2C)	**0.0085**	**J p**	0.020	0.0030	ug/L		01/27/21 18:00	01/28/21 07:29	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		01/27/21 18:00	01/28/21 07:29	1
delta-BHC (2C)	ND		0.020	0.0034	ug/L		01/27/21 18:00	01/28/21 07:29	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		01/27/21 18:00	01/28/21 07:29	1
Endosulfan I (2C)	ND		0.020	0.0043	ug/L		01/27/21 18:00	01/28/21 07:29	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		01/27/21 18:00	01/28/21 07:29	1
Endosulfan sulfate (1C)	**0.0095**	**J p**	0.030	0.0058	ug/L		01/27/21 18:00	01/28/21 07:29	1
Endrin (1C)	**0.39**	**p**	0.030	0.0082	ug/L		01/27/21 18:00	01/28/21 07:29	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		01/27/21 18:00	01/28/21 07:29	1
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		01/27/21 18:00	01/28/21 07:29	1
gamma-BHC (Lindane) (2C)	ND		0.020	0.0020	ug/L		01/27/21 18:00	01/28/21 07:29	1
gamma-Chlordane (1C)	ND		0.040	0.0071	ug/L		01/27/21 18:00	01/28/21 07:29	1
Heptachlor (1C)	**0.0074**	**J p**	0.020	0.0020	ug/L		01/27/21 18:00	01/28/21 07:29	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		01/27/21 18:00	01/28/21 07:29	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		01/27/21 18:00	01/28/21 07:29	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		01/27/21 18:00	01/28/21 07:29	1
p,p'-DDD (1C)	**0.028**	**J p**	0.030	0.0050	ug/L		01/27/21 18:00	01/28/21 07:29	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		01/27/21 18:00	01/28/21 07:29	1
p,p'-DDT (2C)	**0.027**	**J**	0.030	0.0052	ug/L		01/27/21 18:00	01/28/21 07:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*52*		*32 - 149*	*01/27/21 18:00*	*01/28/21 07:29*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*51*	*^c*	*32 - 149*	*01/27/21 18:00*	*01/28/21 07:29*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*59*		*29 - 129*	*01/27/21 18:00*	*01/28/21 07:29*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*62*		*29 - 129*	*01/27/21 18:00*	*01/28/21 07:29*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 11:38	1
Aluminum	**0.62**	**FH**	0.30	0.15	mg/L		01/22/21 01:30	01/22/21 11:38	1
Antimony	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 11:38	1
Barium	**0.021**		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 11:38	1
Beryllium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 11:38	1
Cadmium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 11:38	1
Calcium	**240**		0.50	0.096	mg/L		01/22/21 01:30	01/22/21 11:38	1
Chromium	**0.0027**	**J**	0.015	0.0016	mg/L		01/22/21 01:30	01/22/21 11:38	1
Cobalt	ND		0.0050	0.0015	mg/L		01/22/21 01:30	01/22/21 11:38	1
Copper	**0.035**		0.020	0.012	mg/L		01/22/21 01:30	01/25/21 15:20	1
Iron	**0.67**	**FH**	0.20	0.040	mg/L		01/22/21 01:30	01/22/21 11:38	1
Lead	ND		0.015	0.0071	mg/L		01/22/21 01:30	01/22/21 11:38	1
Magnesium	**100**		0.10	0.040	mg/L		01/22/21 01:30	01/22/21 11:38	1
Manganese	**0.17**		0.010	0.0030	mg/L		01/22/21 01:30	01/22/21 11:38	1
Nickel	**0.0074**	**J**	0.010	0.0021	mg/L		01/22/21 01:30	01/22/21 11:38	1
Zinc	**0.0048**	**J**	0.020	0.0037	mg/L		01/22/21 01:30	01/22/21 11:38	1
Silver	ND	^3+ FH	0.010	0.0050	mg/L		01/22/21 01:30	01/22/21 11:38	1
Selenium	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 11:38	1
Potassium	**17**		0.50	0.20	mg/L		01/22/21 01:30	01/22/21 11:38	1
Sodium	**97**		1.0	0.24	mg/L		01/22/21 01:30	01/22/21 11:38	1
Thallium	ND		0.030	0.0081	mg/L		01/22/21 01:30	01/22/21 11:38	1

Client Sample ID: Hoff-MW-F-B

Lab Sample ID: 410-27044-1

Date Collected: 01/20/21 09:35

Matrix: Water

Date Received: 01/20/21 17:45

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	**0.012**		0.010	0.0019	mg/L		01/22/21 01:30	01/22/21 11:38	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:23	1
Aluminum	ND		0.31	0.16	mg/L		01/22/21 02:25	01/26/21 13:23	1
Antimony	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:23	1
Barium	**0.019**		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:23	1
Beryllium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:23	1
Cadmium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:23	1
Calcium	**230**		0.52	0.099	mg/L		01/22/21 02:25	01/26/21 13:23	1
Chromium	**0.0070**	**J**	0.015	0.0016	mg/L		01/22/21 02:25	01/26/21 13:23	1
Cobalt	ND		0.0052	0.0015	mg/L		01/22/21 02:25	01/26/21 13:23	1
Copper	**0.020**	**J**	0.021	0.012	mg/L		01/22/21 02:25	01/27/21 11:34	1
Iron	ND		0.21	0.041	mg/L		01/22/21 02:25	01/27/21 11:34	1
Lead	ND		0.015	0.0073	mg/L		01/22/21 02:25	01/27/21 11:34	1
Magnesium	**100**		0.10	0.041	mg/L		01/22/21 02:25	01/26/21 13:23	1
Manganese	**0.15**		0.010	0.0031	mg/L		01/22/21 02:25	01/27/21 11:34	1
Nickel	**0.0079**	**J**	0.010	0.0022	mg/L		01/22/21 02:25	01/27/21 11:34	1
Zinc	ND		0.021	0.0038	mg/L		01/22/21 02:25	01/26/21 13:23	1
Silver	ND		0.010	0.0052	mg/L		01/22/21 02:25	01/26/21 13:23	1
Selenium	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:23	1
Potassium	**18**		0.52	0.21	mg/L		01/22/21 02:25	01/27/21 11:34	1
Sodium	**100**		1.0	0.25	mg/L		01/22/21 02:25	01/26/21 13:23	1
Thallium	ND		0.031	0.0083	mg/L		01/22/21 02:25	01/26/21 13:23	1
Vanadium	**0.0095**	**J**	0.010	0.0020	mg/L		01/22/21 02:25	01/26/21 13:23	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/25/21 16:46	01/26/21 19:37	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	*+	0.20	0.079	ug/L		01/22/21 03:31	01/22/21 09:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND	HF	0.10	0.050	mg/L			01/26/21 12:57	1
Sulfate	**510**		120	40	mg/L			01/28/21 09:47	20

Client Sample ID: Hoff-MW-F-A

Lab Sample ID: 410-27044-2

Date Collected: 01/20/21 10:30

Matrix: Water

Date Received: 01/20/21 17:45

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			01/29/21 02:00	20
trans-1,3-Dichloropropene	ND		10	1.2	ug/L			01/29/21 02:00	20
Ethylbenzene	**1.4**	**J**	10	1.2	ug/L			01/29/21 02:00	20
Styrene	ND		10	1.0	ug/L			01/29/21 02:00	20
1,4-Dichlorobenzene	**190**		10	1.4	ug/L			01/29/21 02:00	20

Client Sample ID: Hoff-MW-F-A
Date Collected: 01/20/21 10:30
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-2
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		10	1.2	ug/L			01/29/21 02:00	20
1,2-Dichloroethane	**14**		10	1.0	ug/L			01/29/21 02:00	20
4-Methyl-2-pentanone	ND		100	14	ug/L			01/29/21 02:00	20
Methylcyclohexane	**3.8**	**J**	10	1.0	ug/L			01/29/21 02:00	20
Toluene	**2.5**	**J**	10	1.4	ug/L			01/29/21 02:00	20
Cyclohexane	**14**		10	1.0	ug/L			01/29/21 02:00	20
1,2,4-Trichlorobenzene	**4.5**	**J**	10	1.2	ug/L			01/29/21 02:00	20
Dibromochloromethane	ND		10	1.4	ug/L			01/29/21 02:00	20
Xylenes, Total	ND		20	3.0	ug/L			01/29/21 02:00	20
Tetrachloroethene	ND		10	1.2	ug/L			01/29/21 02:00	20
cis-1,2-Dichloroethene	**120**		10	1.0	ug/L			01/29/21 02:00	20
trans-1,2-Dichloroethene	**2.6**	**J**	10	1.2	ug/L			01/29/21 02:00	20
Methyl tertiary butyl ether	**390**		10	1.0	ug/L			01/29/21 02:00	20
1,3-Dichlorobenzene	**20**		10	1.2	ug/L			01/29/21 02:00	20
Carbon tetrachloride	ND		10	1.4	ug/L			01/29/21 02:00	20
2-Hexanone	ND		100	12	ug/L			01/29/21 02:00	20
Acetone	**25**	**J**	100	18	ug/L			01/29/21 02:00	20
Chloroform	ND		10	1.8	ug/L			01/29/21 02:00	20
Benzene	**67**		10	1.0	ug/L			01/29/21 02:00	20
1,1,1-Trichloroethane	**1.4**	**J**	10	1.2	ug/L			01/29/21 02:00	20
Bromomethane	ND		10	1.4	ug/L			01/29/21 02:00	20
Chloromethane	ND		10	1.2	ug/L			01/29/21 02:00	20
Chloroethane	**2.2**	**J**	10	1.4	ug/L			01/29/21 02:00	20
Vinyl chloride	**47**		10	2.0	ug/L			01/29/21 02:00	20
Methylene Chloride	ND		10	1.4	ug/L			01/29/21 02:00	20
Carbon disulfide	ND		20	1.2	ug/L			01/29/21 02:00	20
Bromoform	ND		20	6.0	ug/L			01/29/21 02:00	20
Bromodichloromethane	ND		10	1.0	ug/L			01/29/21 02:00	20
1,1-Dichloroethane	**31**		10	1.4	ug/L			01/29/21 02:00	20
1,1-Dichloroethene	**1.9**	**J**	10	1.2	ug/L			01/29/21 02:00	20
Trichlorofluoromethane	ND		10	1.0	ug/L			01/29/21 02:00	20
Dichlorodifluoromethane	ND		10	1.0	ug/L			01/29/21 02:00	20
Freon 113	ND	^c	10	1.2	ug/L			01/29/21 02:00	20
1,2-Dichloropropane	ND		10	1.2	ug/L			01/29/21 02:00	20
2-Butanone	ND		100	12	ug/L			01/29/21 02:00	20
1,1,2-Trichloroethane	ND		10	1.2	ug/L			01/29/21 02:00	20
Trichloroethene	**1.9**	**J**	10	1.2	ug/L			01/29/21 02:00	20
Methyl acetate	ND		20	2.0	ug/L			01/29/21 02:00	20
1,1,2,2-Tetrachloroethane	ND	^c	10	1.4	ug/L			01/29/21 02:00	20
1,2-Dichlorobenzene	**480**		10	1.2	ug/L			01/29/21 02:00	20
1,2-Dibromo-3-Chloropropane	ND		10	2.0	ug/L			01/29/21 02:00	20
Isopropylbenzene	**4.0**	**J**	10	1.0	ug/L			01/29/21 02:00	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*01/29/21 02:00*	*20*
Dibromofluoromethane (Surr)	*112*		*80 - 120*		*01/29/21 02:00*	*20*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/29/21 02:00*	*20*
Toluene-d8 (Surr)	*89*		*80 - 120*		*01/29/21 02:00*	*20*

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-27044-1

Client Sample ID: Hoff-MW-F-A

Date Collected: 01/20/21 10:30
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-2

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**1000**		100	12	ug/L			01/29/21 02:22	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*01/29/21 02:22*	*200*
Dibromofluoromethane (Surr)	*112*		*80 - 120*		*01/29/21 02:22*	*200*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/29/21 02:22*	*200*
Toluene-d8 (Surr)	*89*		*80 - 120*		*01/29/21 02:22*	*200*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**100**		2.0	1.0	ug/L			01/28/21 15:16	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*01/28/21 15:16*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		11	3.2	ug/L		01/27/21 16:33	01/30/21 08:39	1
2,4-Dichlorophenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
2,4-Dimethylphenol	ND		11	3.2	ug/L		01/27/21 16:33	01/30/21 08:39	1
2,4-Dinitrophenol	ND	^c	32	15	ug/L		01/27/21 16:33	01/30/21 08:39	1
2,4-Dinitrotoluene	ND		5.4	1.1	ug/L		01/27/21 16:33	01/30/21 08:39	1
2,4,5-Trichlorophenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
2,4,6-Trichlorophenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
2,2'-oxybis[1-chloropropane]	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
Di-n-butyl phthalate	ND		5.4	2.2	ug/L		01/27/21 16:33	01/30/21 08:39	1
Di-n-octyl phthalate	ND		12	5.4	ug/L		01/27/21 16:33	01/30/21 08:39	1
Benzo[a]anthracene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Benzo[a]pyrene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Benzo[b]fluoranthene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Benzo[g,h,i]perylene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Benzo[k]fluoranthene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Acenaphthene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Acenaphthylene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Acetophenone	ND		11	4.3	ug/L		01/27/21 16:33	01/30/21 08:39	1
Anthracene	**0.57**		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Atrazine	ND		5.4	2.2	ug/L		01/27/21 16:33	01/30/21 08:39	1
Benzaldehyde	ND	^c	11	3.2	ug/L		01/27/21 16:33	01/30/21 08:39	1
Butylbenzylphthalate	ND		5.4	2.2	ug/L		01/27/21 16:33	01/30/21 08:39	1
Caprolactam	ND		12	5.4	ug/L		01/27/21 16:33	01/30/21 08:39	1
Carbazole	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
Chrysene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Dibenz(a,h)anthracene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Dibenzofuran	**0.98**	**J**	2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
Diethyl phthalate	ND		5.4	2.2	ug/L		01/27/21 16:33	01/30/21 08:39	1
Dimethyl phthalate	ND		5.4	2.2	ug/L		01/27/21 16:33	01/30/21 08:39	1
Hexachlorobenzene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Hexachlorobutadiene	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
Hexachlorocyclopentadiene	ND	^c	12	5.4	ug/L		01/27/21 16:33	01/30/21 08:39	1
Hexachloroethane	ND		5.4	1.1	ug/L		01/27/21 16:33	01/30/21 08:39	1

Client Sample ID: Hoff-MW-F-A
Date Collected: 01/20/21 10:30
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**0.22**	**J**	0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Fluorene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Indeno[1,2,3-cd]pyrene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Isophorone	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
N-Nitrosodi-n-propylamine	ND		3.2	0.76	ug/L		01/27/21 16:33	01/30/21 08:39	1
N-Nitrosodiphenylamine	ND		3.2	0.76	ug/L		01/27/21 16:33	01/30/21 08:39	1
Naphthalene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Nitrobenzene	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
Pentachlorophenol	ND		5.4	1.1	ug/L		01/27/21 16:33	01/30/21 08:39	1
Phenanthrene	**1.7**		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Phenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
Pyrene	**0.26**	**J**	0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
2-Chloronaphthalene	ND		1.1	0.43	ug/L		01/27/21 16:33	01/30/21 08:39	1
2-Chlorophenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
2-Methylnaphthalene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 08:39	1
2-Methylphenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
2-Nitroaniline	ND		5.4	2.2	ug/L		01/27/21 16:33	01/30/21 08:39	1
2-Nitrophenol	ND		11	3.2	ug/L		01/27/21 16:33	01/30/21 08:39	1
3,3'-Dichlorobenzidine	ND		11	3.2	ug/L		01/27/21 16:33	01/30/21 08:39	1
3-Nitroaniline	ND		7.6	3.2	ug/L		01/27/21 16:33	01/30/21 08:39	1
4,6-Dinitro-2-methylphenol	ND		23	8.6	ug/L		01/27/21 16:33	01/30/21 08:39	1
4-Bromophenyl-phenylether	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
4-Methylphenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
4-Nitroaniline	ND		3.2	0.97	ug/L		01/27/21 16:33	01/30/21 08:39	1
4-Nitrophenol	ND		32	11	ug/L		01/27/21 16:33	01/30/21 08:39	1
Bis(2-chloroethoxy)methane	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
Bis(2-chloroethyl)ether	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
Bis(2-ethylhexyl) phthalate	ND		12	5.4	ug/L		01/27/21 16:33	01/30/21 08:39	1
2,6-Dinitrotoluene	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1
4-Chloro-3-methylphenol	ND		3.8	1.7	ug/L		01/27/21 16:33	01/30/21 08:39	1
4-Chloroaniline	ND		11	4.3	ug/L		01/27/21 16:33	01/30/21 08:39	1
4-Chlorophenyl-phenyl ether	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 08:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*30*		*10 - 150*	*01/27/21 16:33*	*01/30/21 08:39*	*1*
2-Fluorobiphenyl (Surr)	*60*		*44 - 102*	*01/27/21 16:33*	*01/30/21 08:39*	*1*
2-Fluorophenol (Surr)	*30*		*10 - 84*	*01/27/21 16:33*	*01/30/21 08:39*	*1*
Nitrobenzene-d5 (Surr)	*75*		*23 - 128*	*01/27/21 16:33*	*01/30/21 08:39*	*1*
p-Terphenyl-d14 (Surr)	*90*		*31 - 113*	*01/27/21 16:33*	*01/30/21 08:39*	*1*
Phenol-d5 (Surr)	*37*		*10 - 67*	*01/27/21 16:33*	*01/30/21 08:39*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.10	0.010	ug/L		01/27/21 18:00	01/28/21 07:40	5
alpha-BHC (1C)	ND		0.10	0.016	ug/L		01/27/21 18:00	01/28/21 07:40	5
alpha-Chlordane (1C)	ND		0.10	0.016	ug/L		01/27/21 18:00	01/28/21 07:40	5
beta-BHC (2C)	**0.063**	**J p**	0.10	0.018	ug/L		01/27/21 18:00	01/28/21 07:40	5
delta-BHC (1C)	**0.060**	**J p**	0.10	0.018	ug/L		01/27/21 18:00	01/28/21 07:40	5
Dieldrin (1C)	**0.046**	**J**	0.16	0.028	ug/L		01/27/21 18:00	01/28/21 07:40	5
Endosulfan I (1C)	ND		0.10	0.022	ug/L		01/27/21 18:00	01/28/21 07:40	5

Client Sample ID: Hoff-MW-F-A

Date Collected: 01/20/21 10:30
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-2

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan II (1C)	ND		0.21	0.078	ug/L		01/27/21 18:00	01/28/21 07:40	5
Endosulfan sulfate (1C)	ND		0.16	0.030	ug/L		01/27/21 18:00	01/28/21 07:40	5
Endrin (1C)	ND		0.16	0.042	ug/L		01/27/21 18:00	01/28/21 07:40	5
Endrin aldehyde (1C)	ND		0.52	0.10	ug/L		01/27/21 18:00	01/28/21 07:40	5
Endrin ketone (1C)	ND		0.16	0.026	ug/L		01/27/21 18:00	01/28/21 07:40	5
gamma-BHC (Lindane) (2C)	ND		0.10	0.010	ug/L		01/27/21 18:00	01/28/21 07:40	5
gamma-Chlordane (1C)	ND		0.21	0.036	ug/L		01/27/21 18:00	01/28/21 07:40	5
Heptachlor (1C)	ND		0.10	0.010	ug/L		01/27/21 18:00	01/28/21 07:40	5
Heptachlor epoxide (2C)	ND		0.10	0.012	ug/L		01/27/21 18:00	01/28/21 07:40	5
Methoxychlor (1C)	ND		0.57	0.16	ug/L		01/27/21 18:00	01/28/21 07:40	5
Toxaphene (1C)	ND		5.2	1.6	ug/L		01/27/21 18:00	01/28/21 07:40	5
p,p'-DDD (1C)	ND		0.16	0.026	ug/L		01/27/21 18:00	01/28/21 07:40	5
p,p'-DDE (1C)	ND		0.16	0.026	ug/L		01/27/21 18:00	01/28/21 07:40	5
p,p'-DDT (1C)	ND		0.16	0.027	ug/L		01/27/21 18:00	01/28/21 07:40	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*58*		*32 - 149*	*01/27/21 18:00*	*01/28/21 07:40*	*5*
DCB Decachlorobiphenyl (Surr) (2C)	*53*	*^c*	*32 - 149*	*01/27/21 18:00*	*01/28/21 07:40*	*5*
Tetrachloro-m-xylene (Surr) (1C)	*41*		*29 - 129*	*01/27/21 18:00*	*01/28/21 07:40*	*5*
Tetrachloro-m-xylene (Surr) (2C)	*37*		*29 - 129*	*01/27/21 18:00*	*01/28/21 07:40*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 12:00	1
Aluminum	**0.20**	**J**	0.30	0.15	mg/L		01/22/21 01:30	01/22/21 12:00	1
Antimony	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 12:00	1
Barium	**0.014**		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 12:00	1
Beryllium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 12:00	1
Cadmium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 12:00	1
Calcium	**75**		0.50	0.096	mg/L		01/22/21 01:30	01/22/21 12:00	1
Chromium	ND		0.015	0.0016	mg/L		01/22/21 01:30	01/22/21 12:00	1
Cobalt	**0.0073**		0.0050	0.0015	mg/L		01/22/21 01:30	01/22/21 12:00	1
Copper	ND	^3+	0.020	0.012	mg/L		01/22/21 01:30	01/22/21 12:00	1
Iron	**0.17**	**J**	0.20	0.040	mg/L		01/22/21 01:30	01/22/21 12:00	1
Lead	ND		0.015	0.0071	mg/L		01/22/21 01:30	01/22/21 12:00	1
Magnesium	**63**		0.10	0.040	mg/L		01/22/21 01:30	01/22/21 12:00	1
Manganese	**5.9**		0.010	0.0030	mg/L		01/22/21 01:30	01/22/21 12:00	1
Nickel	**0.015**		0.010	0.0021	mg/L		01/22/21 01:30	01/22/21 12:00	1
Zinc	ND		0.020	0.0037	mg/L		01/22/21 01:30	01/22/21 12:00	1
Silver	ND	^3+	0.010	0.0050	mg/L		01/22/21 01:30	01/22/21 12:00	1
Selenium	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 12:00	1
Potassium	**3.5**		0.50	0.20	mg/L		01/22/21 01:30	01/22/21 12:00	1
Sodium	**98**		1.0	0.24	mg/L		01/22/21 01:30	01/22/21 12:00	1
Thallium	**0.014**	**J**	0.030	0.0081	mg/L		01/22/21 01:30	01/22/21 12:00	1
Vanadium	**0.0020**	**J**	0.010	0.0019	mg/L		01/22/21 01:30	01/22/21 12:00	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:43	1
Aluminum	ND		0.31	0.16	mg/L		01/22/21 02:25	01/26/21 13:43	1

Client Sample ID: Hoff-MW-F-A

Lab Sample ID: 410-27044-2

Date Collected: 01/20/21 10:30
Matrix: Water
Date Received: 01/20/21 17:45

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:43	1
Barium	**0.014**		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:43	1
Beryllium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:43	1
Cadmium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:43	1
Calcium	**70**		0.52	0.099	mg/L		01/22/21 02:25	01/26/21 13:43	1
Chromium	**0.0050**	**J**	0.015	0.0016	mg/L		01/22/21 02:25	01/26/21 13:43	1
Cobalt	**0.0072**		0.0052	0.0015	mg/L		01/22/21 02:25	01/26/21 13:43	1
Copper	ND		0.021	0.012	mg/L		01/22/21 02:25	01/27/21 12:17	1
Iron	ND		0.21	0.041	mg/L		01/22/21 02:25	01/27/21 12:17	1
Lead	ND		0.015	0.0073	mg/L		01/22/21 02:25	01/27/21 12:17	1
Magnesium	**59**		0.10	0.041	mg/L		01/22/21 02:25	01/26/21 13:43	1
Manganese	**5.9**		0.010	0.0031	mg/L		01/22/21 02:25	01/27/21 12:17	1
Nickel	**0.016**		0.010	0.0022	mg/L		01/22/21 02:25	01/27/21 12:17	1
Zinc	ND		0.021	0.0038	mg/L		01/22/21 02:25	01/26/21 13:43	1
Silver	ND		0.010	0.0052	mg/L		01/22/21 02:25	01/26/21 13:43	1
Selenium	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:43	1
Potassium	**3.4**		0.52	0.21	mg/L		01/22/21 02:25	01/27/21 12:17	1
Sodium	**100**		1.0	0.25	mg/L		01/22/21 02:25	01/26/21 13:43	1
Thallium	ND		0.031	0.0083	mg/L		01/22/21 02:25	01/26/21 13:43	1
Vanadium	ND		0.010	0.0020	mg/L		01/22/21 02:25	01/26/21 13:43	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	*+	0.20	0.079	ug/L		01/22/21 03:31	01/22/21 10:47	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	*+	0.20	0.079	ug/L		01/22/21 03:31	01/22/21 09:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND	HF	0.10	0.050	mg/L			01/26/21 12:57	1
Sulfate	**6.5**		6.0	2.0	mg/L			01/28/21 09:47	1

Client Sample ID: Hoff-IW-1-B

Lab Sample ID: 410-27044-3

Date Collected: 01/20/21 11:40
Matrix: Water
Date Received: 01/20/21 17:45

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/29/21 01:49	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/29/21 01:49	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/29/21 01:49	1
Styrene	ND		0.50	0.050	ug/L			01/29/21 01:49	1
1,4-Dichlorobenzene	**12**		0.50	0.070	ug/L			01/29/21 01:49	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/29/21 01:49	1
1,2-Dichloroethane	**0.46**	**J**	0.50	0.050	ug/L			01/29/21 01:49	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/29/21 01:49	1
Methylcyclohexane	**0.076**	**J**	0.50	0.050	ug/L			01/29/21 01:49	1
Toluene	**0.18**	**J**	0.50	0.070	ug/L			01/29/21 01:49	1
Chlorobenzene	**7.1**		0.50	0.060	ug/L			01/29/21 01:49	1

Client Sample ID: Hoff-IW-1-B
Date Collected: 01/20/21 11:40
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-3
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		0.50	0.050	ug/L			01/29/21 01:49	1
1,2,4-Trichlorobenzene	**1.0**		0.50	0.060	ug/L			01/29/21 01:49	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/29/21 01:49	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/29/21 01:49	1
Tetrachloroethene	**0.12**	**J**	0.50	0.060	ug/L			01/29/21 01:49	1
cis-1,2-Dichloroethene	**13**		0.50	0.050	ug/L			01/29/21 01:49	1
trans-1,2-Dichloroethene	**1.9**		0.50	0.060	ug/L			01/29/21 01:49	1
Methyl tertiary butyl ether	**0.14**	**J**	0.50	0.050	ug/L			01/29/21 01:49	1
1,3-Dichlorobenzene	**0.41**	**J**	0.50	0.060	ug/L			01/29/21 01:49	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/29/21 01:49	1
2-Hexanone	ND		5.0	0.60	ug/L			01/29/21 01:49	1
Chloroform	**0.48**	**J**	0.50	0.090	ug/L			01/29/21 01:49	1
Benzene	**7.1**		0.50	0.050	ug/L			01/29/21 01:49	1
1,1,1-Trichloroethane	**1.7**		0.50	0.060	ug/L			01/29/21 01:49	1
Bromomethane	**18**		0.50	0.070	ug/L			01/29/21 01:49	1
Chloroethane	**3.3**		0.50	0.070	ug/L			01/29/21 01:49	1
Vinyl chloride	**0.18**	**J**	0.50	0.10	ug/L			01/29/21 01:49	1
Methylene Chloride	**0.98**		0.50	0.070	ug/L			01/29/21 01:49	1
Carbon disulfide	**0.44**	**J**	1.0	0.060	ug/L			01/29/21 01:49	1
Bromoform	ND		1.0	0.30	ug/L			01/29/21 01:49	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/29/21 01:49	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/29/21 01:49	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/29/21 01:49	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/29/21 01:49	1
Freon 113	ND		0.50	0.060	ug/L			01/29/21 01:49	1
1,2-Dichloropropane	**1.1**		0.50	0.060	ug/L			01/29/21 01:49	1
2-Butanone	**43**		5.0	0.60	ug/L			01/29/21 01:49	1
1,1,2-Trichloroethane	**0.37**	**J**	0.50	0.060	ug/L			01/29/21 01:49	1
Trichloroethene	**13**		0.50	0.060	ug/L			01/29/21 01:49	1
Methyl acetate	ND		1.0	0.10	ug/L			01/29/21 01:49	1
1,1,2,2-Tetrachloroethane	**0.31**	**J**	0.50	0.070	ug/L			01/29/21 01:49	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/29/21 01:49	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/29/21 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*01/29/21 01:49*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*01/29/21 01:49*	*1*
4-Bromofluorobenzene (Surr)	*85*		*80 - 120*		*01/29/21 01:49*	*1*
Toluene-d8 (Surr)	*55*	*S1-*	*80 - 120*		*01/29/21 01:49*	*1*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**470**		50	9.0	ug/L			01/29/21 02:10	10
Chloromethane	**49**		5.0	0.60	ug/L			01/29/21 02:10	10
1,1-Dichloroethane	**53**		5.0	0.70	ug/L			01/29/21 02:10	10
1,2-Dichlorobenzene	**47**		5.0	0.60	ug/L			01/29/21 02:10	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*01/29/21 02:10*	*10*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*01/29/21 02:10*	*10*

Client Sample ID: Hoff-IW-1-B

Date Collected: 01/20/21 11:40
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-3

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*01/29/21 02:10*	*10*
Toluene-d8 (Surr)	*77*	*S1-*	*80 - 120*		*01/29/21 02:10*	*10*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**15**		8.0	4.0	ug/L			01/28/21 17:39	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*01/28/21 17:39*	*20*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		11	3.3	ug/L		01/27/21 16:33	01/30/21 09:08	1
2,4-Dichlorophenol	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
2,4-Dimethylphenol	ND		11	3.3	ug/L		01/27/21 16:33	01/30/21 09:08	1
2,4-Dinitrophenol	ND	^c	33	16	ug/L		01/27/21 16:33	01/30/21 09:08	1
2,4-Dinitrotoluene	ND		5.6	1.1	ug/L		01/27/21 16:33	01/30/21 09:08	1
2,4,5-Trichlorophenol	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
2,4,6-Trichlorophenol	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
2,2'-oxybis[1-chloropropane]	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
Di-n-butyl phthalate	ND		5.6	2.2	ug/L		01/27/21 16:33	01/30/21 09:08	1
Di-n-octyl phthalate	ND		12	5.6	ug/L		01/27/21 16:33	01/30/21 09:08	1
Benzo[a]anthracene	**0.16**	**J**	0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Benzo[a]pyrene	**0.17**	**J**	0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Benzo[b]fluoranthene	**0.33**	**J**	0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Benzo[g,h,i]perylene	**0.18**	**J**	0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Benzo[k]fluoranthene	**0.17**	**J**	0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Acenaphthene	ND		0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Acenaphthylene	ND		0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Acetophenone	ND		11	4.5	ug/L		01/27/21 16:33	01/30/21 09:08	1
Anthracene	ND		0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Atrazine	ND		5.6	2.2	ug/L		01/27/21 16:33	01/30/21 09:08	1
Benzaldehyde	ND	^c	11	3.3	ug/L		01/27/21 16:33	01/30/21 09:08	1
Butylbenzylphthalate	ND		5.6	2.2	ug/L		01/27/21 16:33	01/30/21 09:08	1
Caprolactam	ND		12	5.6	ug/L		01/27/21 16:33	01/30/21 09:08	1
Carbazole	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
Chrysene	**0.25**	**J**	0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Dibenz(a,h)anthracene	ND		0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Dibenzofuran	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
Diethyl phthalate	ND		5.6	2.2	ug/L		01/27/21 16:33	01/30/21 09:08	1
Dimethyl phthalate	**3.0**	**J**	5.6	2.2	ug/L		01/27/21 16:33	01/30/21 09:08	1
Hexachlorobenzene	ND		0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Hexachlorobutadiene	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
Hexachlorocyclopentadiene	ND	^c	12	5.6	ug/L		01/27/21 16:33	01/30/21 09:08	1
Hexachloroethane	ND		5.6	1.1	ug/L		01/27/21 16:33	01/30/21 09:08	1
Fluoranthene	**0.27**	**J**	0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Fluorene	ND		0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Indeno[1,2,3-cd]pyrene	**0.22**	**J**	0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Isophorone	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
N-Nitrosodi-n-propylamine	ND		3.3	0.78	ug/L		01/27/21 16:33	01/30/21 09:08	1

Client Sample ID: Hoff-IW-1-B
Date Collected: 01/20/21 11:40
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		3.3	0.78	ug/L		01/27/21 16:33	01/30/21 09:08	1
Naphthalene	ND		0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Nitrobenzene	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
Pentachlorophenol	ND		5.6	1.1	ug/L		01/27/21 16:33	01/30/21 09:08	1
Phenanthrene	**0.14**	**J**	0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Phenol	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
Pyrene	**0.24**	**J**	0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
2-Chloronaphthalene	ND		1.1	0.45	ug/L		01/27/21 16:33	01/30/21 09:08	1
2-Chlorophenol	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
2-Methylnaphthalene	ND		0.56	0.11	ug/L		01/27/21 16:33	01/30/21 09:08	1
2-Methylphenol	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
2-Nitroaniline	ND		5.6	2.2	ug/L		01/27/21 16:33	01/30/21 09:08	1
2-Nitrophenol	ND		11	3.3	ug/L		01/27/21 16:33	01/30/21 09:08	1
3,3'-Dichlorobenzidine	ND		11	3.3	ug/L		01/27/21 16:33	01/30/21 09:08	1
3-Nitroaniline	ND		7.8	3.3	ug/L		01/27/21 16:33	01/30/21 09:08	1
4,6-Dinitro-2-methylphenol	ND		23	8.9	ug/L		01/27/21 16:33	01/30/21 09:08	1
4-Bromophenyl-phenylether	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
4-Methylphenol	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
4-Nitroaniline	ND		3.3	1.0	ug/L		01/27/21 16:33	01/30/21 09:08	1
4-Nitrophenol	ND		33	11	ug/L		01/27/21 16:33	01/30/21 09:08	1
Bis(2-chloroethoxy)methane	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
Bis(2-chloroethyl)ether	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
Bis(2-ethylhexyl) phthalate	ND		12	5.6	ug/L		01/27/21 16:33	01/30/21 09:08	1
2,6-Dinitrotoluene	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1
4-Chloro-3-methylphenol	ND		3.9	1.8	ug/L		01/27/21 16:33	01/30/21 09:08	1
4-Chloroaniline	ND		11	4.5	ug/L		01/27/21 16:33	01/30/21 09:08	1
4-Chlorophenyl-phenyl ether	ND		2.2	0.56	ug/L		01/27/21 16:33	01/30/21 09:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*84*		*10 - 150*	*01/27/21 16:33*	*01/30/21 09:08*	*1*
2-Fluorobiphenyl (Surr)	*71*		*44 - 102*	*01/27/21 16:33*	*01/30/21 09:08*	*1*
2-Fluorophenol (Surr)	*37*		*10 - 84*	*01/27/21 16:33*	*01/30/21 09:08*	*1*
Nitrobenzene-d5 (Surr)	*73*		*23 - 128*	*01/27/21 16:33*	*01/30/21 09:08*	*1*
p-Terphenyl-d14 (Surr)	*79*		*31 - 113*	*01/27/21 16:33*	*01/30/21 09:08*	*1*
Phenol-d5 (Surr)	*34*		*10 - 67*	*01/27/21 16:33*	*01/30/21 09:08*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.022	0.0022	ug/L		01/27/21 18:00	01/28/21 07:51	1
alpha-BHC (1C)	ND		0.022	0.0032	ug/L		01/27/21 18:00	01/28/21 07:51	1
alpha-Chlordane (1C)	ND		0.022	0.0032	ug/L		01/27/21 18:00	01/28/21 07:51	1
beta-BHC (1C)	ND		0.022	0.0037	ug/L		01/27/21 18:00	01/28/21 07:51	1
delta-BHC (1C)	ND		0.022	0.0037	ug/L		01/27/21 18:00	01/28/21 07:51	1
Dieldrin (1C)	ND		0.032	0.0057	ug/L		01/27/21 18:00	01/28/21 07:51	1
Endosulfan I (1C)	ND		0.022	0.0046	ug/L		01/27/21 18:00	01/28/21 07:51	1
Endosulfan II (1C)	ND		0.043	0.016	ug/L		01/27/21 18:00	01/28/21 07:51	1
Endosulfan sulfate (1C)	ND		0.032	0.0063	ug/L		01/27/21 18:00	01/28/21 07:51	1
Endrin (1C)	ND		0.032	0.0087	ug/L		01/27/21 18:00	01/28/21 07:51	1
Endrin aldehyde (1C)	ND		0.11	0.022	ug/L		01/27/21 18:00	01/28/21 07:51	1
Endrin ketone (1C)	ND		0.032	0.0054	ug/L		01/27/21 18:00	01/28/21 07:51	1

Client Sample ID: Hoff-IW-1-B

Date Collected: 01/20/21 11:40
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-3

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane) (2C)	ND		0.022	0.0022	ug/L		01/27/21 18:00	01/28/21 07:51	1
gamma-Chlordane (1C)	ND		0.043	0.0075	ug/L		01/27/21 18:00	01/28/21 07:51	1
Heptachlor (2C)	ND		0.022	0.0022	ug/L		01/27/21 18:00	01/28/21 07:51	1
Heptachlor epoxide (1C)	ND		0.022	0.0025	ug/L		01/27/21 18:00	01/28/21 07:51	1
Methoxychlor (1C)	ND		0.12	0.032	ug/L		01/27/21 18:00	01/28/21 07:51	1
Toxaphene (1C)	ND		1.1	0.32	ug/L		01/27/21 18:00	01/28/21 07:51	1
p,p'-DDD (1C)	ND		0.032	0.0054	ug/L		01/27/21 18:00	01/28/21 07:51	1
p,p'-DDE (1C)	ND		0.032	0.0054	ug/L		01/27/21 18:00	01/28/21 07:51	1
p,p'-DDT (1C)	ND		0.032	0.0056	ug/L		01/27/21 18:00	01/28/21 07:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*33*		*32 - 149*	*01/27/21 18:00*	*01/28/21 07:51*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*33*	*^c*	*32 - 149*	*01/27/21 18:00*	*01/28/21 07:51*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*40*		*29 - 129*	*01/27/21 18:00*	*01/28/21 07:51*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*41*		*29 - 129*	*01/27/21 18:00*	*01/28/21 07:51*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 12:09	1
Aluminum	**2.0**		0.30	0.15	mg/L		01/22/21 01:30	01/22/21 12:09	1
Antimony	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 12:09	1
Barium	**0.041**		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 12:09	1
Beryllium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 12:09	1
Cadmium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 12:09	1
Calcium	**610**		2.5	0.48	mg/L		01/22/21 01:30	01/25/21 15:48	5
Chromium	**0.048**		0.015	0.0016	mg/L		01/22/21 01:30	01/22/21 12:09	1
Cobalt	**0.0020**	**J**	0.0050	0.0015	mg/L		01/22/21 01:30	01/22/21 12:09	1
Copper	**0.028**		0.020	0.012	mg/L		01/22/21 01:30	01/25/21 15:45	1
Iron	**3.9**		0.20	0.040	mg/L		01/22/21 01:30	01/22/21 12:09	1
Lead	**0.012**	**J**	0.015	0.0071	mg/L		01/22/21 01:30	01/22/21 12:09	1
Magnesium	**350**		0.10	0.040	mg/L		01/22/21 01:30	01/22/21 12:09	1
Manganese	**0.068**		0.010	0.0030	mg/L		01/22/21 01:30	01/22/21 12:09	1
Nickel	**0.010**		0.010	0.0021	mg/L		01/22/21 01:30	01/22/21 12:09	1
Zinc	**0.011**	**J**	0.020	0.0037	mg/L		01/22/21 01:30	01/22/21 12:09	1
Silver	ND	^3+	0.010	0.0050	mg/L		01/22/21 01:30	01/22/21 12:09	1
Selenium	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 12:09	1
Potassium	**24**		0.50	0.20	mg/L		01/22/21 01:30	01/22/21 12:09	1
Sodium	**1200**		5.0	1.2	mg/L		01/22/21 01:30	01/25/21 15:48	5
Thallium	ND		0.030	0.0081	mg/L		01/22/21 01:30	01/22/21 12:09	1
Vanadium	**0.011**		0.010	0.0019	mg/L		01/22/21 01:30	01/22/21 12:09	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:47	1
Aluminum	ND		0.31	0.16	mg/L		01/22/21 02:25	01/26/21 13:47	1
Antimony	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:47	1
Barium	**0.026**		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:47	1
Beryllium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:47	1
Cadmium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:47	1
Calcium	**640**		2.6	0.49	mg/L		01/22/21 02:25	01/27/21 12:24	5

Client Sample ID: Hoff-IW-1-B

Lab Sample ID: 410-27044-3

Date Collected: 01/20/21 11:40

Matrix: Water

Date Received: 01/20/21 17:45

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**0.051**		0.015	0.0016	mg/L		01/22/21 02:25	01/26/21 13:47	1
Cobalt	ND		0.0052	0.0015	mg/L		01/22/21 02:25	01/26/21 13:47	1
Copper	**0.022**		0.021	0.012	mg/L		01/22/21 02:25	01/27/21 12:20	1
Iron	ND		0.21	0.041	mg/L		01/22/21 02:25	01/27/21 12:20	1
Lead	ND		0.015	0.0073	mg/L		01/22/21 02:25	01/27/21 12:20	1
Magnesium	**340**		0.10	0.041	mg/L		01/22/21 02:25	01/26/21 13:47	1
Manganese	**0.035**		0.010	0.0031	mg/L		01/22/21 02:25	01/27/21 12:20	1
Nickel	**0.0095**	**J**	0.010	0.0022	mg/L		01/22/21 02:25	01/27/21 12:20	1
Zinc	**0.0056**	**J**	0.021	0.0038	mg/L		01/22/21 02:25	01/26/21 13:47	1
Silver	ND		0.010	0.0052	mg/L		01/22/21 02:25	01/26/21 13:47	1
Selenium	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:47	1
Potassium	**23**		0.52	0.21	mg/L		01/22/21 02:25	01/27/21 12:20	1
Sodium	**1200**		5.2	1.2	mg/L		01/22/21 02:25	01/27/21 12:24	5
Thallium	ND		0.031	0.0083	mg/L		01/22/21 02:25	01/26/21 13:47	1
Vanadium	**0.0028**	**J**	0.010	0.0020	mg/L		01/22/21 02:25	01/26/21 13:47	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.61**		0.20	0.079	ug/L		01/22/21 03:57	01/25/21 18:14	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.43**		0.20	0.079	ug/L		01/22/21 03:57	01/25/21 18:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	**0.15**	**HF**	0.10	0.050	mg/L			01/26/21 12:57	1
Sulfate	**2000**		600	200	mg/L			01/28/21 09:47	100

Client Sample ID: Hoff-IW-1-A

Lab Sample ID: 410-27044-4

Date Collected: 01/20/21 13:25

Matrix: Water

Date Received: 01/20/21 17:45

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.10	ug/L			01/29/21 02:31	2
trans-1,3-Dichloropropene	ND		1.0	0.12	ug/L			01/29/21 02:31	2
Ethylbenzene	ND		1.0	0.12	ug/L			01/29/21 02:31	2
Styrene	ND		1.0	0.10	ug/L			01/29/21 02:31	2
1,4-Dichlorobenzene	**9.2**		1.0	0.14	ug/L			01/29/21 02:31	2
1,2-Dibromoethane	ND		1.0	0.12	ug/L			01/29/21 02:31	2
1,2-Dichloroethane	**0.15**	**J**	1.0	0.10	ug/L			01/29/21 02:31	2
4-Methyl-2-pentanone	ND		10	1.4	ug/L			01/29/21 02:31	2
Methylcyclohexane	**0.16**	**J**	1.0	0.10	ug/L			01/29/21 02:31	2
Toluene	ND		1.0	0.14	ug/L			01/29/21 02:31	2
Chlorobenzene	**11**		1.0	0.12	ug/L			01/29/21 02:31	2
Cyclohexane	ND		1.0	0.10	ug/L			01/29/21 02:31	2
1,2,4-Trichlorobenzene	**1.3**		1.0	0.12	ug/L			01/29/21 02:31	2
Dibromochloromethane	ND		1.0	0.14	ug/L			01/29/21 02:31	2
Xylenes, Total	ND		2.0	0.30	ug/L			01/29/21 02:31	2
Tetrachloroethene	ND		1.0	0.12	ug/L			01/29/21 02:31	2

Client Sample ID: Hoff-IW-1-A

Date Collected: 01/20/21 13:25
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-4

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**0.88**	**J**	1.0	0.10	ug/L			01/29/21 02:31	2
trans-1,2-Dichloroethene	**0.17**	**J**	1.0	0.12	ug/L			01/29/21 02:31	2
Methyl tertiary butyl ether	ND		1.0	0.10	ug/L			01/29/21 02:31	2
1,3-Dichlorobenzene	**0.70**	**J**	1.0	0.12	ug/L			01/29/21 02:31	2
Carbon tetrachloride	ND		1.0	0.14	ug/L			01/29/21 02:31	2
2-Hexanone	ND		10	1.2	ug/L			01/29/21 02:31	2
Acetone	**80**		10	1.8	ug/L			01/29/21 02:31	2
Chloroform	ND		1.0	0.18	ug/L			01/29/21 02:31	2
Benzene	**0.18**	**J**	1.0	0.10	ug/L			01/29/21 02:31	2
1,1,1-Trichloroethane	**1.5**		1.0	0.12	ug/L			01/29/21 02:31	2
Bromomethane	**10**		1.0	0.14	ug/L			01/29/21 02:31	2
Chloromethane	**19**		1.0	0.12	ug/L			01/29/21 02:31	2
Chloroethane	**6.2**		1.0	0.14	ug/L			01/29/21 02:31	2
Vinyl chloride	ND		1.0	0.20	ug/L			01/29/21 02:31	2
Methylene Chloride	**0.30**	**J**	1.0	0.14	ug/L			01/29/21 02:31	2
Carbon disulfide	**0.13**	**J**	2.0	0.12	ug/L			01/29/21 02:31	2
Bromoform	ND		2.0	0.60	ug/L			01/29/21 02:31	2
Bromodichloromethane	ND		1.0	0.10	ug/L			01/29/21 02:31	2
1,1-Dichloroethane	**28**		1.0	0.14	ug/L			01/29/21 02:31	2
1,1-Dichloroethene	ND		1.0	0.12	ug/L			01/29/21 02:31	2
Trichlorofluoromethane	ND		1.0	0.10	ug/L			01/29/21 02:31	2
Dichlorodifluoromethane	ND		1.0	0.10	ug/L			01/29/21 02:31	2
Freon 113	ND		1.0	0.12	ug/L			01/29/21 02:31	2
1,2-Dichloropropane	ND		1.0	0.12	ug/L			01/29/21 02:31	2
2-Butanone	**10**		10	1.2	ug/L			01/29/21 02:31	2
1,1,2-Trichloroethane	ND		1.0	0.12	ug/L			01/29/21 02:31	2
Trichloroethene	**0.32**	**J**	1.0	0.12	ug/L			01/29/21 02:31	2
Methyl acetate	ND		2.0	0.20	ug/L			01/29/21 02:31	2
1,1,2,2-Tetrachloroethane	ND		1.0	0.14	ug/L			01/29/21 02:31	2
1,2-Dichlorobenzene	**25**		1.0	0.12	ug/L			01/29/21 02:31	2
1,2-Dibromo-3-Chloropropane	ND		1.0	0.20	ug/L			01/29/21 02:31	2
Isopropylbenzene	ND		1.0	0.10	ug/L			01/29/21 02:31	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*01/29/21 02:31*	*2*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*01/29/21 02:31*	*2*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*01/29/21 02:31*	*2*
Toluene-d8 (Surr)	*71*	*S1-*	*80 - 120*		*01/29/21 02:31*	*2*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.9**		0.40	0.20	ug/L			02/02/21 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*02/02/21 15:00*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		11	3.2	ug/L		01/27/21 16:33	01/30/21 14:55	1
2,4-Dichlorophenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1

Client Sample ID: Hoff-IW-1-A
Date Collected: 01/20/21 13:25
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		11	3.2	ug/L		01/27/21 16:33	01/30/21 14:55	1
2,4-Dinitrophenol	ND		32	15	ug/L		01/27/21 16:33	01/30/21 14:55	1
2,4-Dinitrotoluene	ND		5.4	1.1	ug/L		01/27/21 16:33	01/30/21 14:55	1
2,4,5-Trichlorophenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
2,4,6-Trichlorophenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
2,2'-oxybis[1-chloropropane]	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
Di-n-butyl phthalate	ND		5.4	2.2	ug/L		01/27/21 16:33	01/30/21 14:55	1
Di-n-octyl phthalate	ND		12	5.4	ug/L		01/27/21 16:33	01/30/21 14:55	1
Benzo[a]anthracene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Benzo[a]pyrene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Benzo[b]fluoranthene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Benzo[g,h,i]perylene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Benzo[k]fluoranthene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Acenaphthene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Acenaphthylene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Acetophenone	ND		11	4.3	ug/L		01/27/21 16:33	01/30/21 14:55	1
Anthracene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Atrazine	ND		5.4	2.2	ug/L		01/27/21 16:33	01/30/21 14:55	1
Benzaldehyde	ND	^c	11	3.2	ug/L		01/27/21 16:33	01/30/21 14:55	1
Butylbenzylphthalate	ND		5.4	2.2	ug/L		01/27/21 16:33	01/30/21 14:55	1
Caprolactam	ND		12	5.4	ug/L		01/27/21 16:33	01/30/21 14:55	1
Carbazole	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
Chrysene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Dibenz(a,h)anthracene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Dibenzofuran	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
Diethyl phthalate	ND		5.4	2.2	ug/L		01/27/21 16:33	01/30/21 14:55	1
Dimethyl phthalate	ND		5.4	2.2	ug/L		01/27/21 16:33	01/30/21 14:55	1
Hexachlorobenzene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Hexachlorobutadiene	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
Hexachlorocyclopentadiene	ND	^c	12	5.4	ug/L		01/27/21 16:33	01/30/21 14:55	1
Hexachloroethane	ND		5.4	1.1	ug/L		01/27/21 16:33	01/30/21 14:55	1
Fluoranthene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Fluorene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Indeno[1,2,3-cd]pyrene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Isophorone	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
N-Nitrosodi-n-propylamine	ND		3.2	0.75	ug/L		01/27/21 16:33	01/30/21 14:55	1
N-Nitrosodiphenylamine	ND		3.2	0.75	ug/L		01/27/21 16:33	01/30/21 14:55	1
Naphthalene	**0.21**	**J**	0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Nitrobenzene	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
Pentachlorophenol	ND		5.4	1.1	ug/L		01/27/21 16:33	01/30/21 14:55	1
Phenanthrene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Phenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
Pyrene	ND		0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
2-Chloronaphthalene	ND		1.1	0.43	ug/L		01/27/21 16:33	01/30/21 14:55	1
2-Chlorophenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
2-Methylnaphthalene	**0.14**	**J**	0.54	0.11	ug/L		01/27/21 16:33	01/30/21 14:55	1
2-Methylphenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
2-Nitroaniline	ND		5.4	2.2	ug/L		01/27/21 16:33	01/30/21 14:55	1
2-Nitrophenol	ND		11	3.2	ug/L		01/27/21 16:33	01/30/21 14:55	1

Client Sample ID: Hoff-IW-1-A

Date Collected: 01/20/21 13:25
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-4

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	ND		11	3.2	ug/L		01/27/21 16:33	01/30/21 14:55	1
3-Nitroaniline	ND		7.5	3.2	ug/L		01/27/21 16:33	01/30/21 14:55	1
4,6-Dinitro-2-methylphenol	ND		23	8.6	ug/L		01/27/21 16:33	01/30/21 14:55	1
4-Bromophenyl-phenylether	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
4-Methylphenol	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
4-Nitroaniline	ND		3.2	0.97	ug/L		01/27/21 16:33	01/30/21 14:55	1
4-Nitrophenol	ND		32	11	ug/L		01/27/21 16:33	01/30/21 14:55	1
Bis(2-chloroethoxy)methane	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
Bis(2-chloroethyl)ether	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
Bis(2-ethylhexyl) phthalate	ND		12	5.4	ug/L		01/27/21 16:33	01/30/21 14:55	1
2,6-Dinitrotoluene	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1
4-Chloro-3-methylphenol	ND		3.8	1.7	ug/L		01/27/21 16:33	01/30/21 14:55	1
4-Chloroaniline	ND		11	4.3	ug/L		01/27/21 16:33	01/30/21 14:55	1
4-Chlorophenyl-phenyl ether	ND		2.2	0.54	ug/L		01/27/21 16:33	01/30/21 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*78*		*10 - 150*	*01/27/21 16:33*	*01/30/21 14:55*	*1*
2-Fluorobiphenyl (Surr)	*75*		*44 - 102*	*01/27/21 16:33*	*01/30/21 14:55*	*1*
2-Fluorophenol (Surr)	*38*		*10 - 84*	*01/27/21 16:33*	*01/30/21 14:55*	*1*
Nitrobenzene-d5 (Surr)	*76*		*23 - 128*	*01/27/21 16:33*	*01/30/21 14:55*	*1*
p-Terphenyl-d14 (Surr)	*92*		*31 - 113*	*01/27/21 16:33*	*01/30/21 14:55*	*1*
Phenol-d5 (Surr)	*28*		*10 - 67*	*01/27/21 16:33*	*01/30/21 14:55*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.10	0.010	ug/L		01/27/21 18:00	01/28/21 08:01	5
alpha-BHC (1C)	ND		0.10	0.015	ug/L		01/27/21 18:00	01/28/21 08:01	5
alpha-Chlordane (1C)	ND		0.10	0.015	ug/L		01/27/21 18:00	01/28/21 08:01	5
beta-BHC (1C)	ND		0.10	0.017	ug/L		01/27/21 18:00	01/28/21 08:01	5
delta-BHC (1C)	ND		0.10	0.017	ug/L		01/27/21 18:00	01/28/21 08:01	5
Dieldrin (1C)	ND		0.15	0.027	ug/L		01/27/21 18:00	01/28/21 08:01	5
Endosulfan I (1C)	ND		0.10	0.022	ug/L		01/27/21 18:00	01/28/21 08:01	5
Endosulfan II (1C)	ND		0.20	0.076	ug/L		01/27/21 18:00	01/28/21 08:01	5
Endosulfan sulfate (1C)	ND		0.15	0.029	ug/L		01/27/21 18:00	01/28/21 08:01	5
Endrin (1C)	ND		0.15	0.041	ug/L		01/27/21 18:00	01/28/21 08:01	5
Endrin aldehyde (1C)	ND		0.51	0.10	ug/L		01/27/21 18:00	01/28/21 08:01	5
Endrin ketone (1C)	ND		0.15	0.025	ug/L		01/27/21 18:00	01/28/21 08:01	5
gamma-BHC (Lindane) (1C)	ND		0.10	0.010	ug/L		01/27/21 18:00	01/28/21 08:01	5
gamma-Chlordane (1C)	ND		0.20	0.035	ug/L		01/27/21 18:00	01/28/21 08:01	5
Heptachlor (1C)	ND		0.10	0.010	ug/L		01/27/21 18:00	01/28/21 08:01	5
Heptachlor epoxide (1C)	ND		0.10	0.012	ug/L		01/27/21 18:00	01/28/21 08:01	5
Methoxychlor (1C)	ND		0.56	0.15	ug/L		01/27/21 18:00	01/28/21 08:01	5
Toxaphene (1C)	ND		5.1	1.5	ug/L		01/27/21 18:00	01/28/21 08:01	5
p,p'-DDD (1C)	ND		0.15	0.025	ug/L		01/27/21 18:00	01/28/21 08:01	5
p,p'-DDE (1C)	ND		0.15	0.025	ug/L		01/27/21 18:00	01/28/21 08:01	5
p,p'-DDT (1C)	ND		0.15	0.026	ug/L		01/27/21 18:00	01/28/21 08:01	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*64*		*32 - 149*	*01/27/21 18:00*	*01/28/21 08:01*	*5*
DCB Decachlorobiphenyl (Surr) (2C)	*65*	*^c*	*32 - 149*	*01/27/21 18:00*	*01/28/21 08:01*	*5*

Client Sample ID: Hoff-IW-1-A
Date Collected: 01/20/21 13:25
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-4
Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr) (1C)	*57*		*29 - 129*	*01/27/21 18:00*	*01/28/21 08:01*	*5*
Tetrachloro-m-xylene (Surr) (2C)	*57*		*29 - 129*	*01/27/21 18:00*	*01/28/21 08:01*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 12:16	1
Aluminum	**1.1**		0.30	0.15	mg/L		01/22/21 01:30	01/22/21 12:16	1
Antimony	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 12:16	1
Barium	**0.066**		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 12:16	1
Beryllium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 12:16	1
Cadmium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 12:16	1
Calcium	**200**		0.50	0.096	mg/L		01/22/21 01:30	01/22/21 12:16	1
Chromium	**0.027**		0.015	0.0016	mg/L		01/22/21 01:30	01/22/21 12:16	1
Cobalt	ND		0.0050	0.0015	mg/L		01/22/21 01:30	01/22/21 12:16	1
Copper	ND	^3+	0.020	0.012	mg/L		01/22/21 01:30	01/22/21 12:16	1
Iron	**5.2**		0.20	0.040	mg/L		01/22/21 01:30	01/22/21 12:16	1
Lead	ND		0.015	0.0071	mg/L		01/22/21 01:30	01/22/21 12:16	1
Magnesium	**160**		0.10	0.040	mg/L		01/22/21 01:30	01/22/21 12:16	1
Manganese	**0.33**		0.010	0.0030	mg/L		01/22/21 01:30	01/22/21 12:16	1
Nickel	**0.0089**	**J**	0.010	0.0021	mg/L		01/22/21 01:30	01/22/21 12:16	1
Zinc	ND		0.020	0.0037	mg/L		01/22/21 01:30	01/22/21 12:16	1
Silver	ND	^3+	0.010	0.0050	mg/L		01/22/21 01:30	01/22/21 12:16	1
Selenium	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 12:16	1
Potassium	**13**		0.50	0.20	mg/L		01/22/21 01:30	01/22/21 12:16	1
Sodium	**580**		5.0	1.2	mg/L		01/22/21 01:30	01/25/21 15:52	5
Thallium	ND		0.030	0.0081	mg/L		01/22/21 01:30	01/22/21 12:16	1
Vanadium	**0.0083**	**J**	0.010	0.0019	mg/L		01/22/21 01:30	01/22/21 12:16	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:57	1
Aluminum	ND		0.31	0.16	mg/L		01/22/21 02:25	01/26/21 13:57	1
Antimony	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:57	1
Barium	**0.042**		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:57	1
Beryllium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:57	1
Cadmium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:57	1
Calcium	**190**		0.52	0.099	mg/L		01/22/21 02:25	01/26/21 13:57	1
Chromium	**0.032**		0.015	0.0016	mg/L		01/22/21 02:25	01/26/21 13:57	1
Cobalt	ND		0.0052	0.0015	mg/L		01/22/21 02:25	01/26/21 13:57	1
Copper	ND		0.021	0.012	mg/L		01/22/21 02:25	01/27/21 12:27	1
Iron	ND		0.21	0.041	mg/L		01/22/21 02:25	01/27/21 12:27	1
Lead	ND		0.015	0.0073	mg/L		01/22/21 02:25	01/26/21 13:57	1
Magnesium	**150**		0.10	0.041	mg/L		01/22/21 02:25	01/26/21 13:57	1
Manganese	**0.25**		0.010	0.0031	mg/L		01/22/21 02:25	01/27/21 12:27	1
Nickel	**0.0071**	**J**	0.010	0.0022	mg/L		01/22/21 02:25	01/27/21 12:27	1
Zinc	ND		0.021	0.0038	mg/L		01/22/21 02:25	01/26/21 13:57	1
Silver	ND		0.010	0.0052	mg/L		01/22/21 02:25	01/26/21 13:57	1
Selenium	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:57	1
Potassium	**13**		0.52	0.21	mg/L		01/22/21 02:25	01/27/21 12:27	1

Client Sample ID: Hoff-IW-1-A

Lab Sample ID: 410-27044-4

Date Collected: 01/20/21 13:25
Matrix: Water
Date Received: 01/20/21 17:45

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**580**		5.2	1.2	mg/L		01/22/21 02:25	01/27/21 12:30	5
Thallium	ND		0.031	0.0083	mg/L		01/22/21 02:25	01/26/21 13:57	1
Vanadium	ND		0.010	0.0020	mg/L		01/22/21 02:25	01/26/21 13:57	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.17**	**J**	0.20	0.079	ug/L		01/22/21 03:57	01/25/21 18:19	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/22/21 03:57	01/25/21 18:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	**0.11**	**HF**	0.10	0.050	mg/L			01/26/21 12:58	1
Sulfate	**760**		120	40	mg/L			01/28/21 09:47	20

Client Sample ID: Hoff-IW-2-B

Lab Sample ID: 410-27044-5

Date Collected: 01/20/21 14:45
Matrix: Water
Date Received: 01/20/21 17:45

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/29/21 04:58	10
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/L			01/29/21 04:58	10
Ethylbenzene	**0.62**	**J**	5.0	0.60	ug/L			01/29/21 04:58	10
Styrene	ND		5.0	0.50	ug/L			01/29/21 04:58	10
1,2-Dibromoethane	ND		5.0	0.60	ug/L			01/29/21 04:58	10
1,2-Dichloroethane	**0.97**	**J ^c**	5.0	0.50	ug/L			01/29/21 04:58	10
4-Methyl-2-pentanone	ND		50	7.0	ug/L			01/29/21 04:58	10
Methylcyclohexane	**0.63**	**J**	5.0	0.50	ug/L			01/29/21 04:58	10
Toluene	**0.90**	**J**	5.0	0.70	ug/L			01/29/21 04:58	10
Cyclohexane	ND		5.0	0.50	ug/L			01/29/21 04:58	10
1,2,4-Trichlorobenzene	**13**		5.0	0.60	ug/L			01/29/21 04:58	10
Dibromochloromethane	ND		5.0	0.70	ug/L			01/29/21 04:58	10
Xylenes, Total	ND		10	1.5	ug/L			01/29/21 04:58	10
Tetrachloroethene	**0.63**	**J**	5.0	0.60	ug/L			01/29/21 04:58	10
Methyl tertiary butyl ether	ND		5.0	0.50	ug/L			01/29/21 04:58	10
1,3-Dichlorobenzene	**23**		5.0	0.60	ug/L			01/29/21 04:58	10
Carbon tetrachloride	ND		5.0	0.70	ug/L			01/29/21 04:58	10
2-Hexanone	ND		50	6.0	ug/L			01/29/21 04:58	10
Acetone	**98**		50	9.0	ug/L			01/29/21 04:58	10
Chloroform	ND		5.0	0.90	ug/L			01/29/21 04:58	10
Benzene	**8.3**		5.0	0.50	ug/L			01/29/21 04:58	10
1,1,1-Trichloroethane	**210**		5.0	0.60	ug/L			01/29/21 04:58	10
Bromomethane	**1.7**	**J**	5.0	0.70	ug/L			01/29/21 04:58	10
Chloromethane	**2.9**	**J**	5.0	0.60	ug/L			01/29/21 04:58	10
Chloroethane	**24**	**^c**	5.0	0.70	ug/L			01/29/21 04:58	10
Vinyl chloride	**1.0**	**J**	5.0	1.0	ug/L			01/29/21 04:58	10
Methylene Chloride	**1.9**	**J**	5.0	0.70	ug/L			01/29/21 04:58	10
Carbon disulfide	**1.0**	**J**	10	0.60	ug/L			01/29/21 04:58	10

Client Sample ID: Hoff-IW-2-B

Date Collected: 01/20/21 14:45
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-5

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		10	3.0	ug/L			01/29/21 04:58	10
Bromodichloromethane	ND		5.0	0.50	ug/L			01/29/21 04:58	10
1,1-Dichloroethene	**4.5**	**J**	5.0	0.60	ug/L			01/29/21 04:58	10
Trichlorofluoromethane	ND		5.0	0.50	ug/L			01/29/21 04:58	10
Dichlorodifluoromethane	ND		5.0	0.50	ug/L			01/29/21 04:58	10
Freon 113	ND		5.0	0.60	ug/L			01/29/21 04:58	10
1,2-Dichloropropane	**3.8**	**J**	5.0	0.60	ug/L			01/29/21 04:58	10
2-Butanone	**19**	**J**	50	6.0	ug/L			01/29/21 04:58	10
1,1,2-Trichloroethane	**2.2**	**J**	5.0	0.60	ug/L			01/29/21 04:58	10
Trichloroethene	**18**		5.0	0.60	ug/L			01/29/21 04:58	10
Methyl acetate	ND		10	1.0	ug/L			01/29/21 04:58	10
1,1,2,2-Tetrachloroethane	**0.72**	**J**	5.0	0.70	ug/L			01/29/21 04:58	10
1,2-Dibromo-3-Chloropropane	ND		5.0	1.0	ug/L			01/29/21 04:58	10
Isopropylbenzene	**1.4**	**J**	5.0	0.50	ug/L			01/29/21 04:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*01/29/21 04:58*	*10*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*01/29/21 04:58*	*10*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*01/29/21 04:58*	*10*
Toluene-d8 (Surr)	*96*		*80 - 120*		*01/29/21 04:58*	*10*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	**530**		50	7.0	ug/L			01/29/21 05:21	100
Chlorobenzene	**1900**		50	6.0	ug/L			01/29/21 05:21	100
trans-1,2-Dichloroethene	**710**		50	6.0	ug/L			01/29/21 05:21	100
1,1-Dichloroethane	**440**		50	7.0	ug/L			01/29/21 05:21	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*01/29/21 05:21*	*100*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*01/29/21 05:21*	*100*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/29/21 05:21*	*100*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/29/21 05:21*	*100*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**3600**		500	50	ug/L			01/29/21 23:31	1000
1,2-Dichlorobenzene	**2900**		500	60	ug/L			01/29/21 23:31	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*01/29/21 23:31*	*1000*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*01/29/21 23:31*	*1000*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/29/21 23:31*	*1000*
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/29/21 23:31*	*1000*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**49**		4.0	2.0	ug/L			01/28/21 16:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*01/28/21 16:17*	*10*

Client Sample ID: Hoff-IW-2-B
Date Collected: 01/20/21 14:45
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
2,4-Dinitrophenol	ND		30	14	ug/L		01/27/21 16:33	01/30/21 15:24	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Benzo[a]pyrene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Acenaphthene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Acenaphthylene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Acetophenone	ND		10	4.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
Anthracene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Atrazine	ND		5.0	2.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
Benzaldehyde	ND	^c	10	3.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
Caprolactam	ND		11	5.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
Carbazole	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
Chrysene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Dibenzofuran	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
Diethyl phthalate	ND		5.0	2.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
Hexachlorocyclopentadiene	ND	^c	11	5.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
Hexachloroethane	ND		5.0	1.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
Fluoranthene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Fluorene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Isophorone	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
N-Nitrosodi-n-propylamine	ND		3.0	0.71	ug/L		01/27/21 16:33	01/30/21 15:24	1
N-Nitrosodiphenylamine	ND		3.0	0.71	ug/L		01/27/21 16:33	01/30/21 15:24	1
Naphthalene	**11**		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Nitrobenzene	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
Pentachlorophenol	ND		5.0	1.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
Phenanthrene	**0.44**	**J**	0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Phenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
Pyrene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		01/27/21 16:33	01/30/21 15:24	1
2-Chlorophenol	**4.6**		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
2-Methylnaphthalene	**2.6**		0.50	0.10	ug/L		01/27/21 16:33	01/30/21 15:24	1
2-Methylphenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1

Client Sample ID: Hoff-IW-2-B

Date Collected: 01/20/21 14:45
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-5

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		5.0	2.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
2-Nitrophenol	ND		10	3.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
3-Nitroaniline	ND		7.1	3.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
4,6-Dinitro-2-methylphenol	ND		21	8.1	ug/L		01/27/21 16:33	01/30/21 15:24	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
4-Methylphenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
4-Nitroaniline	ND		3.0	0.91	ug/L		01/27/21 16:33	01/30/21 15:24	1
4-Nitrophenol	ND		30	10	ug/L		01/27/21 16:33	01/30/21 15:24	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		01/27/21 16:33	01/30/21 15:24	1
4-Chloroaniline	ND		10	4.0	ug/L		01/27/21 16:33	01/30/21 15:24	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		01/27/21 16:33	01/30/21 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*90*		*10 - 150*	*01/27/21 16:33*	*01/30/21 15:24*	*1*
2-Fluorobiphenyl (Surr)	*81*		*44 - 102*	*01/27/21 16:33*	*01/30/21 15:24*	*1*
2-Fluorophenol (Surr)	*47*		*10 - 84*	*01/27/21 16:33*	*01/30/21 15:24*	*1*
Nitrobenzene-d5 (Surr)	*81*		*23 - 128*	*01/27/21 16:33*	*01/30/21 15:24*	*1*
p-Terphenyl-d14 (Surr)	*93*		*31 - 113*	*01/27/21 16:33*	*01/30/21 15:24*	*1*
Phenol-d5 (Surr)	*38*		*10 - 67*	*01/27/21 16:33*	*01/30/21 15:24*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		01/27/21 18:00	01/28/21 08:12	1
alpha-BHC (2C)	ND		0.020	0.0030	ug/L		01/27/21 18:00	01/28/21 08:12	1
alpha-Chlordane (2C)	**0.0039**	**J p**	0.020	0.0030	ug/L		01/27/21 18:00	01/28/21 08:12	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		01/27/21 18:00	01/28/21 08:12	1
delta-BHC (2C)	ND		0.020	0.0034	ug/L		01/27/21 18:00	01/28/21 08:12	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		01/27/21 18:00	01/28/21 08:12	1
Endosulfan I (2C)	**0.0061**	**J p**	0.020	0.0043	ug/L		01/27/21 18:00	01/28/21 08:12	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		01/27/21 18:00	01/28/21 08:12	1
Endosulfan sulfate (2C)	**0.024**	**J**	0.030	0.0058	ug/L		01/27/21 18:00	01/28/21 08:12	1
Endrin (1C)	ND		0.030	0.0082	ug/L		01/27/21 18:00	01/28/21 08:12	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		01/27/21 18:00	01/28/21 08:12	1
Endrin ketone (2C)	**0.0094**	**J**	0.030	0.0050	ug/L		01/27/21 18:00	01/28/21 08:12	1
gamma-BHC (Lindane) (2C)	ND		0.020	0.0020	ug/L		01/27/21 18:00	01/28/21 08:12	1
gamma-Chlordane (1C)	ND		0.040	0.0071	ug/L		01/27/21 18:00	01/28/21 08:12	1
Heptachlor (1C)	**0.0069**	**J p**	0.020	0.0020	ug/L		01/27/21 18:00	01/28/21 08:12	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		01/27/21 18:00	01/28/21 08:12	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		01/27/21 18:00	01/28/21 08:12	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		01/27/21 18:00	01/28/21 08:12	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		01/27/21 18:00	01/28/21 08:12	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		01/27/21 18:00	01/28/21 08:12	1
p,p'-DDT (2C)	**0.0099**	**J p**	0.030	0.0052	ug/L		01/27/21 18:00	01/28/21 08:12	1

Client Sample ID: Hoff-IW-2-B

Date Collected: 01/20/21 14:45
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	71		32 - 149	01/27/21 18:00	01/28/21 08:12	1
DCB Decachlorobiphenyl (Surr) (2C)	71	^c	32 - 149	01/27/21 18:00	01/28/21 08:12	1
Tetrachloro-m-xylene (Surr) (1C)	55		29 - 129	01/27/21 18:00	01/28/21 08:12	1
Tetrachloro-m-xylene (Surr) (2C)	50		29 - 129	01/27/21 18:00	01/28/21 08:12	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 12:12	1
Aluminum	ND		0.30	0.15	mg/L		01/22/21 01:30	01/22/21 12:12	1
Antimony	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 12:12	1
Barium	**0.024**		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 12:12	1
Beryllium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 12:12	1
Cadmium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 12:12	1
Calcium	**170**		0.50	0.096	mg/L		01/22/21 01:30	01/22/21 12:12	1
Chromium	**0.0048**	**J**	0.015	0.0016	mg/L		01/22/21 01:30	01/22/21 12:12	1
Cobalt	ND		0.0050	0.0015	mg/L		01/22/21 01:30	01/22/21 12:12	1
Copper	ND	^3+	0.020	0.012	mg/L		01/22/21 01:30	01/22/21 12:12	1
Iron	**0.26**		0.20	0.040	mg/L		01/22/21 01:30	01/22/21 12:12	1
Lead	ND		0.015	0.0071	mg/L		01/22/21 01:30	01/22/21 12:12	1
Magnesium	**170**		0.10	0.040	mg/L		01/22/21 01:30	01/22/21 12:12	1
Manganese	**0.034**		0.010	0.0030	mg/L		01/22/21 01:30	01/22/21 12:12	1
Nickel	ND		0.010	0.0021	mg/L		01/22/21 01:30	01/22/21 12:12	1
Zinc	ND		0.020	0.0037	mg/L		01/22/21 01:30	01/22/21 12:12	1
Silver	ND	^3+	0.010	0.0050	mg/L		01/22/21 01:30	01/22/21 12:12	1
Selenium	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 12:12	1
Potassium	**58**		0.50	0.20	mg/L		01/22/21 01:30	01/22/21 12:12	1
Sodium	**310**		1.0	0.24	mg/L		01/22/21 01:30	01/22/21 12:12	1
Thallium	ND		0.030	0.0081	mg/L		01/22/21 01:30	01/22/21 12:12	1
Vanadium	**0.0087**	**J**	0.010	0.0019	mg/L		01/22/21 01:30	01/22/21 12:12	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 14:28	1
Aluminum	ND		0.31	0.16	mg/L		01/22/21 02:25	01/26/21 14:28	1
Antimony	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 14:28	1
Barium	**0.016**		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 14:28	1
Beryllium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 14:28	1
Cadmium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 14:28	1
Calcium	**160**		0.52	0.099	mg/L		01/22/21 02:25	01/26/21 14:28	1
Chromium	**0.0099**	**J**	0.015	0.0016	mg/L		01/22/21 02:25	01/26/21 14:28	1
Cobalt	ND		0.0052	0.0015	mg/L		01/22/21 02:25	01/26/21 14:28	1
Copper	ND		0.021	0.012	mg/L		01/22/21 02:25	01/27/21 12:59	1
Iron	ND	B ^3+	0.21	0.041	mg/L		01/22/21 02:25	01/26/21 14:28	1
Lead	ND		0.015	0.0073	mg/L		01/22/21 02:25	01/27/21 12:59	1
Magnesium	**160**		0.10	0.041	mg/L		01/22/21 02:25	01/26/21 14:28	1
Manganese	**0.033**		0.010	0.0031	mg/L		01/22/21 02:25	01/27/21 12:59	1
Nickel	ND		0.010	0.0022	mg/L		01/22/21 02:25	01/27/21 12:59	1
Zinc	ND		0.021	0.0038	mg/L		01/22/21 02:25	01/26/21 14:28	1
Silver	ND		0.010	0.0052	mg/L		01/22/21 02:25	01/26/21 14:28	1
Selenium	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 14:28	1

Client Sample ID: Hoff-IW-2-B

Lab Sample ID: 410-27044-5

Date Collected: 01/20/21 14:45

Matrix: Water

Date Received: 01/20/21 17:45

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**58**		0.52	0.21	mg/L		01/22/21 02:25	01/27/21 12:59	1
Sodium	**330**		1.0	0.25	mg/L		01/22/21 02:25	01/26/21 14:28	1
Thallium	ND		0.031	0.0083	mg/L		01/22/21 02:25	01/26/21 14:28	1
Vanadium	**0.0060**	**J**	0.010	0.0020	mg/L		01/22/21 02:25	01/26/21 14:28	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.15**	**J**	0.20	0.079	ug/L		01/22/21 03:57	01/25/21 18:12	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.18**	**J**	0.20	0.079	ug/L		01/22/21 03:57	01/25/21 18:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND	HF	0.10	0.050	mg/L			01/26/21 12:57	1
Sulfate	**750**		120	40	mg/L			01/28/21 09:47	20

Client Sample ID: Hoff-TB-012021

Lab Sample ID: 410-27044-6

Date Collected: 01/20/21 09:00

Matrix: Water

Date Received: 01/20/21 17:45

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/28/21 22:37	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/28/21 22:37	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/28/21 22:37	1
Styrene	ND		0.50	0.050	ug/L			01/28/21 22:37	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			01/28/21 22:37	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/28/21 22:37	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/28/21 22:37	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/28/21 22:37	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/28/21 22:37	1
Toluene	ND		0.50	0.070	ug/L			01/28/21 22:37	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/28/21 22:37	1
Cyclohexane	ND		0.50	0.050	ug/L			01/28/21 22:37	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 22:37	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/28/21 22:37	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/28/21 22:37	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/28/21 22:37	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/28/21 22:37	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 22:37	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/28/21 22:37	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 22:37	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/28/21 22:37	1
2-Hexanone	ND		5.0	0.60	ug/L			01/28/21 22:37	1
Acetone	ND		5.0	0.90	ug/L			01/28/21 22:37	1
Chloroform	ND		0.50	0.090	ug/L			01/28/21 22:37	1
Benzene	ND		0.50	0.050	ug/L			01/28/21 22:37	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 22:37	1
Bromomethane	ND		0.50	0.070	ug/L			01/28/21 22:37	1

Client Sample ID: Hoff-TB-012021
Date Collected: 01/20/21 09:00
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-6
Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		0.50	0.060	ug/L			01/28/21 22:37	1
Chloroethane	ND		0.50	0.070	ug/L			01/28/21 22:37	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/28/21 22:37	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/28/21 22:37	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/28/21 22:37	1
Bromoform	ND		1.0	0.30	ug/L			01/28/21 22:37	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/28/21 22:37	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/28/21 22:37	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 22:37	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/28/21 22:37	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/28/21 22:37	1
Freon 113	ND		0.50	0.060	ug/L			01/28/21 22:37	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/28/21 22:37	1
2-Butanone	ND		5.0	0.60	ug/L			01/28/21 22:37	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 22:37	1
Trichloroethene	ND		0.50	0.060	ug/L			01/28/21 22:37	1
Methyl acetate	ND		1.0	0.10	ug/L			01/28/21 22:37	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/28/21 22:37	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 22:37	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/28/21 22:37	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/28/21 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*01/28/21 22:37*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*01/28/21 22:37*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*01/28/21 22:37*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/28/21 22:37*	*1*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			01/28/21 11:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*01/28/21 11:52*	*1*

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-27044-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	BFB	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-27044-1	Hoff-MW-F-B	98	113	100	87
410-27044-1 - DL	Hoff-MW-F-B	101	114	98	89
410-27044-2	Hoff-MW-F-A	102	112	100	89
410-27044-2 - DL	Hoff-MW-F-A	99	112	99	89
410-27044-3	Hoff-IW-1-B	107	106	85	55 S1-
410-27044-3 - DL	Hoff-IW-1-B	104	103	94	77 S1-
410-27044-4	Hoff-IW-1-A	103	102	92	71 S1-
410-27044-5	Hoff-IW-2-B	101	98	97	96
410-27044-5 - DL	Hoff-IW-2-B	102	99	98	99
410-27044-5 - DL2	Hoff-IW-2-B	102	97	98	100
410-27044-6	Hoff-TB-012021	100	100	97	99
LCS 410-89194/5	Lab Control Sample	98	100	98	100
LCS 410-89197/4	Lab Control Sample	95	106	102	91
LCS 410-89203/4	Lab Control Sample	102	98	100	100
LCS 410-89603/4	Lab Control Sample	101	98	100	101
LCSD 410-89194/6	Lab Control Sample Dup	101	99	97	100
LCSD 410-89603/5	Lab Control Sample Dup	104	98	99	101
MB 410-89194/10	Method Blank	100	101	96	99
MB 410-89197/6	Method Blank	98	111	99	90
MB 410-89203/6	Method Blank	103	98	100	100
MB 410-89603/7	Method Blank	102	99	98	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TOL
Lab Sample ID	Client Sample ID	(80-120)
410-27044-1	Hoff-MW-F-B	94
410-27044-2	Hoff-MW-F-A	95
410-27044-3	Hoff-IW-1-B	94
410-27044-4	Hoff-IW-1-A	96
410-27044-5	Hoff-IW-2-B	94
410-27044-6	Hoff-TB-012021	96
LCS 410-88882/4	Lab Control Sample	97
LCS 410-90028/4	Lab Control Sample	100
LCSD 410-88882/5	Lab Control Sample Dup	97
LCSD 410-90028/5	Lab Control Sample Dup	100
MB 410-88882/7	Method Blank	97
MB 410-90028/7	Method Blank	101

Surrogate Legend

TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-27044-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	TBP (10-150)	FBP (44-102)	2FP (10-84)	NBZ (23-128)	TPHd14 (31-113)	PHL (10-67)
410-27044-1	Hoff-MW-F-B	74	75	37	76	88	31
410-27044-2	Hoff-MW-F-A	30	60	30	75	90	37
410-27044-3	Hoff-IW-1-B	84	71	37	73	79	34
410-27044-4	Hoff-IW-1-A	78	75	38	76	92	28
410-27044-5	Hoff-IW-2-B	90	81	47	81	93	38
LCS 410-88684/2-A	Lab Control Sample	86	68	56	69	88	43
MB 410-88684/1-A	Method Blank	97	77	53	82	97	38

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCB1 (32-149)	DCB2 (32-149)	TCX1 (29-129)	TCX2 (29-129)
410-27044-1	Hoff-MW-F-B	52	51 ^c	59	62
410-27044-2	Hoff-MW-F-A	58	53 ^c	41	37
410-27044-3	Hoff-IW-1-B	33	33 ^c	40	41
410-27044-4	Hoff-IW-1-A	64	65 ^c	57	57
410-27044-5	Hoff-IW-2-B	71	71 ^c	55	50
LCS 410-88709/2-A	Lab Control Sample	35	31 S1-	56	53
MB 410-88709/1-A	Method Blank	62	58	65	63

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-27044-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-89194/10
Matrix: Water
Analysis Batch: 89194

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/28/21 21:53	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/28/21 21:53	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/28/21 21:53	1
Styrene	ND		0.50	0.050	ug/L			01/28/21 21:53	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			01/28/21 21:53	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/28/21 21:53	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/28/21 21:53	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/28/21 21:53	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/28/21 21:53	1
Toluene	ND		0.50	0.070	ug/L			01/28/21 21:53	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:53	1
Cyclohexane	ND		0.50	0.050	ug/L			01/28/21 21:53	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:53	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/28/21 21:53	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/28/21 21:53	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/28/21 21:53	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/28/21 21:53	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 21:53	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/28/21 21:53	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:53	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/28/21 21:53	1
2-Hexanone	ND		5.0	0.60	ug/L			01/28/21 21:53	1
Acetone	ND		5.0	0.90	ug/L			01/28/21 21:53	1
Chloroform	ND		0.50	0.090	ug/L			01/28/21 21:53	1
Benzene	ND		0.50	0.050	ug/L			01/28/21 21:53	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 21:53	1
Bromomethane	ND		0.50	0.070	ug/L			01/28/21 21:53	1
Chloromethane	ND		0.50	0.060	ug/L			01/28/21 21:53	1
Chloroethane	ND		0.50	0.070	ug/L			01/28/21 21:53	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/28/21 21:53	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/28/21 21:53	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/28/21 21:53	1
Bromoform	ND		1.0	0.30	ug/L			01/28/21 21:53	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/28/21 21:53	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/28/21 21:53	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 21:53	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/28/21 21:53	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/28/21 21:53	1
Freon 113	ND		0.50	0.060	ug/L			01/28/21 21:53	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/28/21 21:53	1
2-Butanone	ND		5.0	0.60	ug/L			01/28/21 21:53	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 21:53	1
Trichloroethene	ND		0.50	0.060	ug/L			01/28/21 21:53	1
Methyl acetate	ND		1.0	0.10	ug/L			01/28/21 21:53	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/28/21 21:53	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:53	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/28/21 21:53	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/28/21 21:53	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-89194/10
Matrix: Water
Analysis Batch: 89194

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*01/28/21 21:53*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*01/28/21 21:53*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*01/28/21 21:53*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/28/21 21:53*	*1*

Lab Sample ID: LCS 410-89194/5
Matrix: Water
Analysis Batch: 89194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.41		ug/L		88	67 - 121
trans-1,3-Dichloropropene	5.00	4.41		ug/L		88	61 - 129
Ethylbenzene	5.00	4.27		ug/L		85	80 - 120
Styrene	5.00	4.55		ug/L		91	80 - 120
1,4-Dichlorobenzene	5.00	4.52		ug/L		90	80 - 120
1,2-Dibromoethane	5.00	4.68		ug/L		94	80 - 120
1,2-Dichloroethane	5.00	4.33		ug/L		87	69 - 122
4-Methyl-2-pentanone	25.0	23.4		ug/L		93	55 - 140
Methylcyclohexane	5.00	4.23		ug/L		85	80 - 120
Toluene	5.00	4.28		ug/L		86	80 - 120
Chlorobenzene	5.00	4.51		ug/L		90	80 - 120
Cyclohexane	5.00	4.41		ug/L		88	69 - 120
1,2,4-Trichlorobenzene	5.00	4.51		ug/L		90	68 - 122
Dibromochloromethane	5.00	4.58		ug/L		92	64 - 138
Xylenes, Total	15.0	13.2		ug/L		88	80 - 120
Tetrachloroethene	5.00	4.39		ug/L		88	80 - 120
cis-1,2-Dichloroethene	5.00	4.64		ug/L		93	80 - 122
trans-1,2-Dichloroethene	5.00	4.35		ug/L		87	80 - 122
Methyl tertiary butyl ether	5.00	4.50		ug/L		90	69 - 120
1,3-Dichlorobenzene	5.00	4.46		ug/L		89	80 - 120
Carbon tetrachloride	5.00	4.32		ug/L		86	64 - 141
2-Hexanone	25.0	24.4		ug/L		98	52 - 140
Acetone	37.5	33.3		ug/L		89	60 - 146
Chloroform	5.00	4.41		ug/L		88	80 - 120
Benzene	5.00	4.33		ug/L		87	80 - 120
1,1,1-Trichloroethane	5.00	4.18		ug/L		84	78 - 126
Bromomethane	5.00	4.49		ug/L		90	60 - 136
Chloromethane	5.00	4.34		ug/L		87	56 - 124
Chloroethane	5.00	4.18		ug/L		84	63 - 120
Vinyl chloride	5.00	4.44		ug/L		89	60 - 125
Methylene Chloride	5.00	4.49		ug/L		90	80 - 120
Carbon disulfide	5.00	4.11		ug/L		82	67 - 130
Bromoform	5.00	4.55		ug/L		91	49 - 144
Bromodichloromethane	5.00	4.50		ug/L		90	73 - 124
1,1-Dichloroethane	5.00	4.35		ug/L		87	74 - 120
1,1-Dichloroethene	5.00	4.37		ug/L		87	80 - 131
Trichlorofluoromethane	5.00	4.37		ug/L		87	62 - 136
Dichlorodifluoromethane	5.00	4.41		ug/L		88	43 - 123

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-89194/5
Matrix: Water
Analysis Batch: 89194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Freon 113	5.00	4.21		ug/L		84	75 - 133
1,2-Dichloropropane	5.00	4.59		ug/L		92	80 - 120
2-Butanone	37.5	35.5		ug/L		95	59 - 141
1,1,2-Trichloroethane	5.00	4.84		ug/L		97	80 - 120
Trichloroethene	5.00	4.31		ug/L		86	80 - 120
Methyl acetate	5.00	4.31		ug/L		86	59 - 143
1,1,2,2-Tetrachloroethane	5.00	4.64		ug/L		93	75 - 123
1,2-Dichlorobenzene	5.00	4.61		ug/L		92	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	4.87		ug/L		97	56 - 148
Isopropylbenzene	5.00	4.34		ug/L		87	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 410-89194/6
Matrix: Water
Analysis Batch: 89194

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5.00	4.40		ug/L		88	67 - 121	0	30
trans-1,3-Dichloropropene	5.00	4.41		ug/L		88	61 - 129	0	30
Ethylbenzene	5.00	4.35		ug/L		87	80 - 120	2	30
Styrene	5.00	4.61		ug/L		92	80 - 120	1	30
1,4-Dichlorobenzene	5.00	4.53		ug/L		91	80 - 120	0	30
1,2-Dibromoethane	5.00	4.68		ug/L		94	80 - 120	0	30
1,2-Dichloroethane	5.00	4.40		ug/L		88	69 - 122	2	30
4-Methyl-2-pentanone	25.0	23.4		ug/L		94	55 - 140	0	30
Methylcyclohexane	5.00	4.28		ug/L		86	80 - 120	1	30
Toluene	5.00	4.35		ug/L		87	80 - 120	2	30
Chlorobenzene	5.00	4.49		ug/L		90	80 - 120	1	30
Cyclohexane	5.00	4.46		ug/L		89	69 - 120	1	30
1,2,4-Trichlorobenzene	5.00	4.52		ug/L		90	68 - 122	0	30
Dibromochloromethane	5.00	4.57		ug/L		91	64 - 138	0	30
Xylenes, Total	15.0	13.4		ug/L		89	80 - 120	1	30
Tetrachloroethene	5.00	4.44		ug/L		89	80 - 120	1	30
cis-1,2-Dichloroethene	5.00	4.54		ug/L		91	80 - 122	2	30
trans-1,2-Dichloroethene	5.00	4.32		ug/L		86	80 - 122	1	30
Methyl tertiary butyl ether	5.00	4.44		ug/L		89	69 - 120	1	30
1,3-Dichlorobenzene	5.00	4.48		ug/L		90	80 - 120	1	30
Carbon tetrachloride	5.00	4.35		ug/L		87	64 - 141	1	30
2-Hexanone	25.0	24.3		ug/L		97	52 - 140	0	30
Acetone	37.5	32.8		ug/L		88	60 - 146	2	30
Chloroform	5.00	4.40		ug/L		88	80 - 120	0	30
Benzene	5.00	4.32		ug/L		86	80 - 120	0	30
1,1,1-Trichloroethane	5.00	4.19		ug/L		84	78 - 126	0	30

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-89194/6
Matrix: Water
Analysis Batch: 89194

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane			5.00	4.45		ug/L		89	60 - 136	1	30
Chloromethane			5.00	4.37		ug/L		87	56 - 124	1	30
Chloroethane			5.00	4.19		ug/L		84	63 - 120	0	30
Vinyl chloride			5.00	4.50		ug/L		90	60 - 125	1	30
Methylene Chloride			5.00	4.42		ug/L		88	80 - 120	2	30
Carbon disulfide			5.00	4.16		ug/L		83	67 - 130	1	30
Bromoform			5.00	4.55		ug/L		91	49 - 144	0	30
Bromodichloromethane			5.00	4.46		ug/L		89	73 - 124	1	30
1,1-Dichloroethane			5.00	4.36		ug/L		87	74 - 120	0	30
1,1-Dichloroethene			5.00	4.37		ug/L		87	80 - 131	0	30
Trichlorofluoromethane			5.00	4.41		ug/L		88	62 - 136	1	30
Dichlorodifluoromethane			5.00	4.41		ug/L		88	43 - 123	0	30
Freon 113			5.00	4.25		ug/L		85	75 - 133	1	30
1,2-Dichloropropane			5.00	4.55		ug/L		91	80 - 120	1	30
2-Butanone			37.5	35.5		ug/L		95	59 - 141	0	30
1,1,2-Trichloroethane			5.00	4.72		ug/L		94	80 - 120	2	30
Trichloroethene			5.00	4.37		ug/L		87	80 - 120	1	30
Methyl acetate			5.00	4.31		ug/L		86	59 - 143	0	30
1,1,2,2-Tetrachloroethane			5.00	4.57		ug/L		91	75 - 123	2	30
1,2-Dichlorobenzene			5.00	4.60		ug/L		92	80 - 120	0	30
1,2-Dibromo-3-Chloropropane			5.00	4.74		ug/L		95	56 - 148	3	30
Isopropylbenzene			5.00	4.42		ug/L		88	80 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: MB 410-89197/6
Matrix: Water
Analysis Batch: 89197

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/28/21 21:03	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/28/21 21:03	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/28/21 21:03	1
Styrene	ND		0.50	0.050	ug/L			01/28/21 21:03	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			01/28/21 21:03	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/28/21 21:03	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/28/21 21:03	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/28/21 21:03	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/28/21 21:03	1
Toluene	ND		0.50	0.070	ug/L			01/28/21 21:03	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:03	1
Cyclohexane	ND		0.50	0.050	ug/L			01/28/21 21:03	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:03	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/28/21 21:03	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-89197/6
Matrix: Water
Analysis Batch: 89197

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		1.0	0.15	ug/L			01/28/21 21:03	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/28/21 21:03	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/28/21 21:03	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 21:03	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/28/21 21:03	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:03	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/28/21 21:03	1
2-Hexanone	ND		5.0	0.60	ug/L			01/28/21 21:03	1
Acetone	ND		5.0	0.90	ug/L			01/28/21 21:03	1
Chloroform	ND		0.50	0.090	ug/L			01/28/21 21:03	1
Benzene	ND		0.50	0.050	ug/L			01/28/21 21:03	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 21:03	1
Bromomethane	ND		0.50	0.070	ug/L			01/28/21 21:03	1
Chloromethane	ND		0.50	0.060	ug/L			01/28/21 21:03	1
Chloroethane	ND		0.50	0.070	ug/L			01/28/21 21:03	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/28/21 21:03	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/28/21 21:03	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/28/21 21:03	1
Bromoform	ND		1.0	0.30	ug/L			01/28/21 21:03	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/28/21 21:03	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/28/21 21:03	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 21:03	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/28/21 21:03	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/28/21 21:03	1
Freon 113	ND		0.50	0.060	ug/L			01/28/21 21:03	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/28/21 21:03	1
2-Butanone	ND		5.0	0.60	ug/L			01/28/21 21:03	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 21:03	1
Trichloroethene	ND		0.50	0.060	ug/L			01/28/21 21:03	1
Methyl acetate	ND		1.0	0.10	ug/L			01/28/21 21:03	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/28/21 21:03	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:03	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/28/21 21:03	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/28/21 21:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*01/28/21 21:03*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*01/28/21 21:03*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/28/21 21:03*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*01/28/21 21:03*	*1*

Lab Sample ID: LCS 410-89197/4
Matrix: Water
Analysis Batch: 89197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	5.19		ug/L		104	67 - 121
trans-1,3-Dichloropropene	5.00	4.33		ug/L		87	61 - 129

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-89197/4
Matrix: Water
Analysis Batch: 89197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	5.00	4.41		ug/L		88	80 - 120
Styrene	5.00	4.51		ug/L		90	80 - 120
1,4-Dichlorobenzene	5.00	4.10		ug/L		82	80 - 120
1,2-Dibromoethane	5.00	4.18		ug/L		84	80 - 120
1,2-Dichloroethane	5.00	4.77		ug/L		95	69 - 122
4-Methyl-2-pentanone	25.0	25.5		ug/L		102	55 - 140
Methylcyclohexane	5.00	4.98		ug/L		100	80 - 120
Toluene	5.00	4.36		ug/L		87	80 - 120
Chlorobenzene	5.00	4.33		ug/L		87	80 - 120
Cyclohexane	5.00	5.97		ug/L		119	69 - 120
1,2,4-Trichlorobenzene	5.00	4.30		ug/L		86	68 - 122
Dibromochloromethane	5.00	4.58		ug/L		92	64 - 138
Xylenes, Total	15.0	13.4		ug/L		89	80 - 120
Tetrachloroethene	5.00	4.59		ug/L		92	80 - 120
cis-1,2-Dichloroethene	5.00	5.40		ug/L		108	80 - 122
trans-1,2-Dichloroethene	5.00	5.21		ug/L		104	80 - 122
Methyl tertiary butyl ether	5.00	5.47		ug/L		109	69 - 120
1,3-Dichlorobenzene	5.00	4.11		ug/L		82	80 - 120
Carbon tetrachloride	5.00	5.65		ug/L		113	64 - 141
2-Hexanone	25.0	25.4		ug/L		101	52 - 140
Acetone	37.5	36.7		ug/L		98	60 - 146
Chloroform	5.00	5.14		ug/L		103	80 - 120
Benzene	5.00	5.03		ug/L		101	80 - 120
1,1,1-Trichloroethane	5.00	5.34		ug/L		107	78 - 126
Bromomethane	5.00	5.20		ug/L		104	60 - 136
Chloromethane	5.00	5.46		ug/L		109	56 - 124
Chloroethane	5.00	5.10		ug/L		102	63 - 120
Vinyl chloride	5.00	5.51		ug/L		110	60 - 125
Methylene Chloride	5.00	4.79		ug/L		96	80 - 120
Carbon disulfide	5.00	5.41		ug/L		108	67 - 130
Bromoform	5.00	4.54		ug/L		91	49 - 144
Bromodichloromethane	5.00	5.22		ug/L		104	73 - 124
1,1-Dichloroethane	5.00	5.31		ug/L		106	74 - 120
1,1-Dichloroethene	5.00	5.28		ug/L		106	80 - 131
Trichlorofluoromethane	5.00	5.60		ug/L		112	62 - 136
Dichlorodifluoromethane	5.00	5.45		ug/L		109	43 - 123
Freon 113	5.00	5.79		ug/L		116	75 - 133
1,2-Dichloropropane	5.00	5.03		ug/L		101	80 - 120
2-Butanone	37.5	38.2		ug/L		102	59 - 141
1,1,2-Trichloroethane	5.00	4.28		ug/L		86	80 - 120
Trichloroethene	5.00	5.13		ug/L		103	80 - 120
Methyl acetate	5.00	4.86		ug/L		97	59 - 143
1,1,2,2-Tetrachloroethane	5.00	3.84		ug/L		77	75 - 123
1,2-Dichlorobenzene	5.00	4.14		ug/L		83	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	4.26		ug/L		85	56 - 148
Isopropylbenzene	5.00	4.62		ug/L		92	80 - 120

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-89197/4
Matrix: Water
Analysis Batch: 89197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*91*		*80 - 120*

Lab Sample ID: MB 410-89203/6
Matrix: Water
Analysis Batch: 89203

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/28/21 21:09	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Styrene	ND		0.50	0.050	ug/L			01/28/21 21:09	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			01/28/21 21:09	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/28/21 21:09	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/28/21 21:09	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/28/21 21:09	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/28/21 21:09	1
Toluene	ND		0.50	0.070	ug/L			01/28/21 21:09	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Cyclohexane	ND		0.50	0.050	ug/L			01/28/21 21:09	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/28/21 21:09	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/28/21 21:09	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/28/21 21:09	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/28/21 21:09	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/28/21 21:09	1
2-Hexanone	ND		5.0	0.60	ug/L			01/28/21 21:09	1
Acetone	ND		5.0	0.90	ug/L			01/28/21 21:09	1
Chloroform	ND		0.50	0.090	ug/L			01/28/21 21:09	1
Benzene	ND		0.50	0.050	ug/L			01/28/21 21:09	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Bromomethane	ND		0.50	0.070	ug/L			01/28/21 21:09	1
Chloromethane	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Chloroethane	ND		0.50	0.070	ug/L			01/28/21 21:09	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/28/21 21:09	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/28/21 21:09	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/28/21 21:09	1
Bromoform	ND		1.0	0.30	ug/L			01/28/21 21:09	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/28/21 21:09	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/28/21 21:09	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/28/21 21:09	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/28/21 21:09	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-89203/6
Matrix: Water
Analysis Batch: 89203

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Freon 113	ND		0.50	0.060	ug/L			01/28/21 21:09	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/28/21 21:09	1
2-Butanone	ND		5.0	0.60	ug/L			01/28/21 21:09	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Trichloroethene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
Methyl acetate	ND		1.0	0.10	ug/L			01/28/21 21:09	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/28/21 21:09	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			01/28/21 21:09	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/28/21 21:09	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/28/21 21:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*01/28/21 21:09*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*01/28/21 21:09*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/28/21 21:09*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/28/21 21:09*	*1*

Lab Sample ID: LCS 410-89203/4
Matrix: Water
Analysis Batch: 89203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.90		ug/L		98	67 - 121
trans-1,3-Dichloropropene	5.00	4.88		ug/L		98	61 - 129
Ethylbenzene	5.00	4.65		ug/L		93	80 - 120
Styrene	5.00	4.81		ug/L		96	80 - 120
1,4-Dichlorobenzene	5.00	4.69		ug/L		94	80 - 120
1,2-Dibromoethane	5.00	4.69		ug/L		94	80 - 120
1,2-Dichloroethane	5.00	4.23		ug/L		85	69 - 122
4-Methyl-2-pentanone	25.0	21.7		ug/L		87	55 - 140
Methylcyclohexane	5.00	5.30		ug/L		106	80 - 120
Toluene	5.00	4.71		ug/L		94	80 - 120
Chlorobenzene	5.00	4.81		ug/L		96	80 - 120
Cyclohexane	5.00	4.98		ug/L		100	69 - 120
1,2,4-Trichlorobenzene	5.00	4.92		ug/L		98	68 - 122
Dibromochloromethane	5.00	5.17		ug/L		103	64 - 138
Xylenes, Total	15.0	14.4		ug/L		96	80 - 120
Tetrachloroethene	5.00	4.88		ug/L		98	80 - 120
cis-1,2-Dichloroethene	5.00	4.91		ug/L		98	80 - 122
trans-1,2-Dichloroethene	5.00	4.77		ug/L		95	80 - 122
Methyl tertiary butyl ether	5.00	4.45		ug/L		89	69 - 120
1,3-Dichlorobenzene	5.00	4.68		ug/L		94	80 - 120
Carbon tetrachloride	5.00	4.73		ug/L		95	64 - 141
2-Hexanone	25.0	22.9		ug/L		91	52 - 140
Acetone	37.5	40.4		ug/L		108	60 - 146
Chloroform	5.00	4.54		ug/L		91	80 - 120
Benzene	5.00	4.76		ug/L		95	80 - 120
1,1,1-Trichloroethane	5.00	4.45		ug/L		89	78 - 126

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-89203/4
Matrix: Water
Analysis Batch: 89203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	5.00	4.60		ug/L		92	60 - 136
Chloromethane	5.00	4.74		ug/L		95	56 - 124
Chloroethane	5.00	4.30		ug/L		86	63 - 120
Vinyl chloride	5.00	4.96		ug/L		99	60 - 125
Methylene Chloride	5.00	4.88		ug/L		98	80 - 120
Carbon disulfide	5.00	4.95		ug/L		99	67 - 130
Bromoform	5.00	5.66		ug/L		113	49 - 144
Bromodichloromethane	5.00	4.67		ug/L		93	73 - 124
1,1-Dichloroethane	5.00	4.72		ug/L		94	74 - 120
1,1-Dichloroethene	5.00	4.83		ug/L		97	80 - 131
Trichlorofluoromethane	5.00	4.37		ug/L		87	62 - 136
Dichlorodifluoromethane	5.00	4.75		ug/L		95	43 - 123
Freon 113	5.00	4.74		ug/L		95	75 - 133
1,2-Dichloropropane	5.00	4.82		ug/L		96	80 - 120
2-Butanone	37.5	35.4		ug/L		94	59 - 141
1,1,2-Trichloroethane	5.00	4.77		ug/L		95	80 - 120
Trichloroethene	5.00	4.71		ug/L		94	80 - 120
Methyl acetate	5.00	5.13		ug/L		103	59 - 143
1,1,2,2-Tetrachloroethane	5.00	4.65		ug/L		93	75 - 123
1,2-Dichlorobenzene	5.00	4.70		ug/L		94	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	5.46		ug/L		109	56 - 148
Isopropylbenzene	5.00	4.77		ug/L		95	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: MB 410-89603/7
Matrix: Water
Analysis Batch: 89603

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/29/21 19:26	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/29/21 19:26	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/29/21 19:26	1
Styrene	ND		0.50	0.050	ug/L			01/29/21 19:26	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			01/29/21 19:26	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/29/21 19:26	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/29/21 19:26	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/29/21 19:26	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/29/21 19:26	1
Toluene	ND		0.50	0.070	ug/L			01/29/21 19:26	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/29/21 19:26	1
Cyclohexane	ND		0.50	0.050	ug/L			01/29/21 19:26	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/29/21 19:26	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/29/21 19:26	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-89603/7
Matrix: Water
Analysis Batch: 89603

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		1.0	0.15	ug/L			01/29/21 19:26	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/29/21 19:26	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/29/21 19:26	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/29/21 19:26	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/29/21 19:26	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/29/21 19:26	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/29/21 19:26	1
2-Hexanone	ND		5.0	0.60	ug/L			01/29/21 19:26	1
Acetone	ND		5.0	0.90	ug/L			01/29/21 19:26	1
Chloroform	ND		0.50	0.090	ug/L			01/29/21 19:26	1
Benzene	ND		0.50	0.050	ug/L			01/29/21 19:26	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/29/21 19:26	1
Bromomethane	ND		0.50	0.070	ug/L			01/29/21 19:26	1
Chloromethane	ND		0.50	0.060	ug/L			01/29/21 19:26	1
Chloroethane	ND		0.50	0.070	ug/L			01/29/21 19:26	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/29/21 19:26	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/29/21 19:26	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/29/21 19:26	1
Bromoform	ND		1.0	0.30	ug/L			01/29/21 19:26	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/29/21 19:26	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/29/21 19:26	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/29/21 19:26	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/29/21 19:26	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/29/21 19:26	1
Freon 113	ND		0.50	0.060	ug/L			01/29/21 19:26	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/29/21 19:26	1
2-Butanone	ND		5.0	0.60	ug/L			01/29/21 19:26	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/29/21 19:26	1
Trichloroethene	ND		0.50	0.060	ug/L			01/29/21 19:26	1
Methyl acetate	ND		1.0	0.10	ug/L			01/29/21 19:26	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/29/21 19:26	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			01/29/21 19:26	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/29/21 19:26	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/29/21 19:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*01/29/21 19:26*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*01/29/21 19:26*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/29/21 19:26*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/29/21 19:26*	*1*

Lab Sample ID: LCS 410-89603/4
Matrix: Water
Analysis Batch: 89603

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.67		ug/L		93	67 - 121
trans-1,3-Dichloropropene	5.00	4.64		ug/L		93	61 - 129

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-89603/4
Matrix: Water
Analysis Batch: 89603

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	5.00	4.68		ug/L		94	80 - 120
Styrene	5.00	4.87		ug/L		97	80 - 120
1,4-Dichlorobenzene	5.00	4.89		ug/L		98	80 - 120
1,2-Dibromoethane	5.00	4.85		ug/L		97	80 - 120
1,2-Dichloroethane	5.00	4.31		ug/L		86	69 - 122
4-Methyl-2-pentanone	25.0	21.2		ug/L		85	55 - 140
Methylcyclohexane	5.00	5.32		ug/L		106	80 - 120
Toluene	5.00	4.76		ug/L		95	80 - 120
Chlorobenzene	5.00	4.87		ug/L		97	80 - 120
Cyclohexane	5.00	5.01		ug/L		100	69 - 120
1,2,4-Trichlorobenzene	5.00	5.24		ug/L		105	68 - 122
Dibromochloromethane	5.00	5.17		ug/L		103	64 - 138
Xylenes, Total	15.0	14.5		ug/L		97	80 - 120
Tetrachloroethene	5.00	4.81		ug/L		96	80 - 120
cis-1,2-Dichloroethene	5.00	5.02		ug/L		100	80 - 122
trans-1,2-Dichloroethene	5.00	4.65		ug/L		93	80 - 122
Methyl tertiary butyl ether	5.00	4.55		ug/L		91	69 - 120
1,3-Dichlorobenzene	5.00	4.81		ug/L		96	80 - 120
Carbon tetrachloride	5.00	4.66		ug/L		93	64 - 141
2-Hexanone	25.0	22.2		ug/L		89	52 - 140
Acetone	37.5	39.4		ug/L		105	60 - 146
Chloroform	5.00	4.46		ug/L		89	80 - 120
Benzene	5.00	4.72		ug/L		94	80 - 120
1,1,1-Trichloroethane	5.00	4.42		ug/L		88	78 - 126
Bromomethane	5.00	4.41		ug/L		88	60 - 136
Chloromethane	5.00	4.65		ug/L		93	56 - 124
Chloroethane	5.00	4.34		ug/L		87	63 - 120
Vinyl chloride	5.00	4.72		ug/L		94	60 - 125
Methylene Chloride	5.00	4.93		ug/L		99	80 - 120
Carbon disulfide	5.00	4.83		ug/L		97	67 - 130
Bromoform	5.00	5.46		ug/L		109	49 - 144
Bromodichloromethane	5.00	4.61		ug/L		92	73 - 124
1,1-Dichloroethane	5.00	4.66		ug/L		93	74 - 120
1,1-Dichloroethene	5.00	4.78		ug/L		96	80 - 131
Trichlorofluoromethane	5.00	4.26		ug/L		85	62 - 136
Dichlorodifluoromethane	5.00	4.55		ug/L		91	43 - 123
Freon 113	5.00	4.71		ug/L		94	75 - 133
1,2-Dichloropropane	5.00	4.91		ug/L		98	80 - 120
2-Butanone	37.5	35.9		ug/L		96	59 - 141
1,1,2-Trichloroethane	5.00	5.03		ug/L		101	80 - 120
Trichloroethene	5.00	4.66		ug/L		93	80 - 120
Methyl acetate	5.00	4.10		ug/L		82	59 - 143
1,1,2,2-Tetrachloroethane	5.00	4.99		ug/L		100	75 - 123
1,2-Dichlorobenzene	5.00	4.91		ug/L		98	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	5.81		ug/L		116	56 - 148
Isopropylbenzene	5.00	4.77		ug/L		95	80 - 120

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-89603/4
Matrix: Water
Analysis Batch: 89603

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 410-89603/5
Matrix: Water
Analysis Batch: 89603

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene			5.00	4.70		ug/L		94	67 - 121	1	30
trans-1,3-Dichloropropene			5.00	4.68		ug/L		94	61 - 129	1	30
Ethylbenzene			5.00	4.76		ug/L		95	80 - 120	2	30
Styrene			5.00	4.99		ug/L		100	80 - 120	3	30
1,4-Dichlorobenzene			5.00	4.86		ug/L		97	80 - 120	1	30
1,2-Dibromoethane			5.00	4.89		ug/L		98	80 - 120	1	30
1,2-Dichloroethane			5.00	4.19		ug/L		84	69 - 122	3	30
4-Methyl-2-pentanone			25.0	24.5		ug/L		98	55 - 140	14	30
Methylcyclohexane			5.00	5.51		ug/L		110	80 - 120	3	30
Toluene			5.00	4.83		ug/L		97	80 - 120	1	30
Chlorobenzene			5.00	4.92		ug/L		98	80 - 120	1	30
Cyclohexane			5.00	5.17		ug/L		103	69 - 120	3	30
1,2,4-Trichlorobenzene			5.00	5.16		ug/L		103	68 - 122	2	30
Dibromochloromethane			5.00	5.11		ug/L		102	64 - 138	1	30
Xylenes, Total			15.0	14.7		ug/L		98	80 - 120	1	30
Tetrachloroethene			5.00	4.91		ug/L		98	80 - 120	2	30
cis-1,2-Dichloroethene			5.00	4.99		ug/L		100	80 - 122	1	30
trans-1,2-Dichloroethene			5.00	4.76		ug/L		95	80 - 122	2	30
Methyl tertiary butyl ether			5.00	4.59		ug/L		92	69 - 120	1	30
1,3-Dichlorobenzene			5.00	4.91		ug/L		98	80 - 120	2	30
Carbon tetrachloride			5.00	4.65		ug/L		93	64 - 141	0	30
2-Hexanone			25.0	25.5		ug/L		102	52 - 140	14	30
Acetone			37.5	41.9		ug/L		112	60 - 146	6	30
Chloroform			5.00	4.58		ug/L		92	80 - 120	3	30
Benzene			5.00	4.81		ug/L		96	80 - 120	2	30
1,1,1-Trichloroethane			5.00	4.44		ug/L		89	78 - 126	0	30
Bromomethane			5.00	4.52		ug/L		90	60 - 136	2	30
Chloromethane			5.00	4.97		ug/L		99	56 - 124	7	30
Chloroethane			5.00	4.37		ug/L		87	63 - 120	1	30
Vinyl chloride			5.00	4.83		ug/L		97	60 - 125	2	30
Methylene Chloride			5.00	4.93		ug/L		99	80 - 120	0	30
Carbon disulfide			5.00	4.92		ug/L		98	67 - 130	2	30
Bromoform			5.00	5.34		ug/L		107	49 - 144	2	30
Bromodichloromethane			5.00	4.70		ug/L		94	73 - 124	2	30
1,1-Dichloroethane			5.00	4.77		ug/L		95	74 - 120	2	30
1,1-Dichloroethene			5.00	4.98		ug/L		100	80 - 131	4	30
Trichlorofluoromethane			5.00	4.43		ug/L		89	62 - 136	4	30
Dichlorodifluoromethane			5.00	4.75		ug/L		95	43 - 123	4	30

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-89603/5
Matrix: Water
Analysis Batch: 89603

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Freon 113			5.00	4.88		ug/L		98	75 - 133	4	30
1,2-Dichloropropane			5.00	4.89		ug/L		98	80 - 120	0	30
2-Butanone			37.5	40.0		ug/L		107	59 - 141	11	30
1,1,2-Trichloroethane			5.00	5.08		ug/L		102	80 - 120	1	30
Trichloroethene			5.00	4.77		ug/L		95	80 - 120	2	30
Methyl acetate			5.00	4.75		ug/L		95	59 - 143	15	30
1,1,2,2-Tetrachloroethane			5.00	4.84		ug/L		97	75 - 123	3	30
1,2-Dichlorobenzene			5.00	4.92		ug/L		98	80 - 120	0	30
1,2-Dibromo-3-Chloropropane			5.00	5.80		ug/L		116	56 - 148	0	30
Isopropylbenzene			5.00	4.93		ug/L		99	80 - 120	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-88882/7
Matrix: Water
Analysis Batch: 88882

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			01/28/21 10:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*01/28/21 10:31*	*1*

Lab Sample ID: LCS 410-88882/4
Matrix: Water
Analysis Batch: 88882

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	4.70		ug/L		95	74 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: LCSD 410-88882/5
Matrix: Water
Analysis Batch: 88882

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.30		ug/L		87	74 - 133	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-90028/7
Matrix: Water
Analysis Batch: 90028

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			02/02/21 11:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/02/21 11:17*	*1*

Lab Sample ID: LCS 410-90028/4
Matrix: Water
Analysis Batch: 90028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	5.01		ug/L		101	74 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 410-90028/5
Matrix: Water
Analysis Batch: 90028

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.81		ug/L		97	74 - 133	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-88684/1-A
Matrix: Water
Analysis Batch: 88926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88684

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
2,4-Dinitrophenol	ND		30	14	ug/L		01/27/21 16:33	01/28/21 11:58	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Benzo[a]pyrene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Acenaphthene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-88684/1-A
Matrix: Water
Analysis Batch: 88926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88684

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Acetophenone	ND		10	4.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
Anthracene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Atrazine	ND		5.0	2.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
Benzaldehyde	ND		10	3.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
Caprolactam	ND		11	5.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
Carbazole	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
Chrysene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Dibenzofuran	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
Diethyl phthalate	ND		5.0	2.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
Hexachlorocyclopentadiene	ND		11	5.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
Hexachloroethane	ND		5.0	1.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
Fluoranthene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Fluorene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Isophorone	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		01/27/21 16:33	01/28/21 11:58	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		01/27/21 16:33	01/28/21 11:58	1
Naphthalene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Nitrobenzene	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
Pentachlorophenol	ND		5.0	1.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
Phenanthrene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Phenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
Pyrene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		01/27/21 16:33	01/28/21 11:58	1
2-Chlorophenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		01/27/21 16:33	01/28/21 11:58	1
2-Methylphenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
2-Nitroaniline	ND		5.0	2.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
2-Nitrophenol	ND		10	3.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
3-Nitroaniline	ND		7.0	3.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
4-Methylphenol	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
4-Nitroaniline	ND		3.0	0.90	ug/L		01/27/21 16:33	01/28/21 11:58	1
4-Nitrophenol	ND		30	10	ug/L		01/27/21 16:33	01/28/21 11:58	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		01/27/21 16:33	01/28/21 11:58	1
4-Chloroaniline	ND		10	4.0	ug/L		01/27/21 16:33	01/28/21 11:58	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		01/27/21 16:33	01/28/21 11:58	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	97		10 - 150	01/27/21 16:33	01/28/21 11:58	1
2-Fluorobiphenyl (Surr)	77		44 - 102	01/27/21 16:33	01/28/21 11:58	1
2-Fluorophenol (Surr)	53		10 - 84	01/27/21 16:33	01/28/21 11:58	1
Nitrobenzene-d5 (Surr)	82		23 - 128	01/27/21 16:33	01/28/21 11:58	1
p-Terphenyl-d14 (Surr)	97		31 - 113	01/27/21 16:33	01/28/21 11:58	1
Phenol-d5 (Surr)	38		10 - 67	01/27/21 16:33	01/28/21 11:58	1

Lab Sample ID: LCS 410-88684/2-A
Matrix: Water
Analysis Batch: 88926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88684

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	50.0	33.9		ug/L		68	50 - 110
2,4-Dichlorophenol	50.0	42.2		ug/L		84	51 - 123
2,4-Dimethylphenol	50.0	40.7		ug/L		81	43 - 102
2,4-Dinitrophenol	100	73.4		ug/L		73	30 - 143
2,4-Dinitrotoluene	50.0	42.3		ug/L		85	52 - 128
2,4,5-Trichlorophenol	50.0	45.7		ug/L		91	59 - 126
2,4,6-Trichlorophenol	50.0	44.7		ug/L		89	59 - 129
2,2'-oxybis[1-chloropropane]	50.0	32.3		ug/L		65	41 - 118
Di-n-butyl phthalate	50.0	37.4		ug/L		75	43 - 118
Di-n-octyl phthalate	50.0	40.1		ug/L		80	48 - 129
Benzo[a]anthracene	50.0	45.8		ug/L		92	61 - 126
Benzo[a]pyrene	50.0	42.0		ug/L		84	60 - 116
Benzo[b]fluoranthene	50.0	42.0		ug/L		84	61 - 119
Benzo[g,h,i]perylene	50.0	46.3		ug/L		93	54 - 120
Benzo[k]fluoranthene	50.0	48.9		ug/L		98	69 - 122
Acenaphthene	50.0	36.3		ug/L		73	52 - 114
Acenaphthylene	50.0	42.3		ug/L		85	55 - 117
Acetophenone	50.0	38.0		ug/L		76	51 - 119
Anthracene	50.0	41.6		ug/L		83	61 - 117
Atrazine	50.0	41.3		ug/L		83	71 - 133
Benzaldehyde	50.0	35.5		ug/L		71	39 - 119
Butylbenzylphthalate	50.0	30.0		ug/L		60	11 - 125
Caprolactam	50.0	11.4		ug/L		23	12 - 40
Carbazole	50.0	40.0		ug/L		80	64 - 127
Chrysene	50.0	46.5		ug/L		93	65 - 121
Dibenz(a,h)anthracene	50.0	45.0		ug/L		90	57 - 124
Dibenzofuran	50.0	38.0		ug/L		76	60 - 112
Diethyl phthalate	50.0	34.3		ug/L		69	19 - 121
Dimethyl phthalate	50.0	25.6		ug/L		51	10 - 134
Hexachlorobenzene	50.0	42.9		ug/L		86	55 - 123
Hexachlorobutadiene	50.0	28.8		ug/L		58	20 - 108
Hexachlorocyclopentadiene	50.0	12.7		ug/L		25	10 - 42
Hexachloroethane	50.0	25.4		ug/L		51	22 - 88
Fluoranthene	50.0	41.1		ug/L		82	63 - 122
Fluorene	50.0	38.5		ug/L		77	56 - 115
Indeno[1,2,3-cd]pyrene	50.0	43.2		ug/L		86	52 - 121
Isophorone	50.0	41.9		ug/L		84	55 - 122
N-Nitrosodi-n-propylamine	50.0	38.5		ug/L		77	52 - 123
N-Nitrosodiphenylamine	42.5	36.2		ug/L		85	60 - 126

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-88684/2-A
Matrix: Water
Analysis Batch: 88926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88684

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	50.0	33.5		ug/L		67	51 - 102
Nitrobenzene	50.0	36.7		ug/L		73	52 - 119
Pentachlorophenol	100	75.8		ug/L		76	54 - 131
Phenanthrene	50.0	41.2		ug/L		82	65 - 113
Phenol	50.0	23.3		ug/L		47	22 - 69
Pyrene	50.0	41.5		ug/L		83	65 - 115
2-Chloronaphthalene	50.0	36.1		ug/L		72	43 - 110
2-Chlorophenol	50.0	40.3		ug/L		81	46 - 109
2-Methylnaphthalene	50.0	34.8		ug/L		70	45 - 108
2-Methylphenol	50.0	39.2		ug/L		78	41 - 113
2-Nitroaniline	50.0	42.3		ug/L		85	60 - 123
2-Nitrophenol	50.0	41.6		ug/L		83	53 - 123
3,3'-Dichlorobenzidine	100	71.0		ug/L		71	42 - 107
3-Nitroaniline	50.0	36.2		ug/L		72	54 - 112
4,6-Dinitro-2-methylphenol	100	83.2		ug/L		83	49 - 138
4-Bromophenyl-phenylether	50.0	42.2		ug/L		84	54 - 121
4-Methylphenol	50.0	37.7		ug/L		75	41 - 109
4-Nitroaniline	50.0	38.0		ug/L		76	49 - 107
4-Nitrophenol	100	53.3		ug/L		53	23 - 89
Bis(2-chloroethoxy)methane	50.0	37.2		ug/L		74	51 - 120
Bis(2-chloroethyl)ether	50.0	38.0		ug/L		76	50 - 110
Bis(2-ethylhexyl) phthalate	50.0	41.1		ug/L		82	50 - 127
2,6-Dinitrotoluene	50.0	43.0		ug/L		86	61 - 121
4-Chloro-3-methylphenol	50.0	42.0		ug/L		84	52 - 126
4-Chloroaniline	50.0	28.3		ug/L		57	45 - 93
4-Chlorophenyl-phenyl ether	50.0	39.2		ug/L		78	47 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*86*		*10 - 150*
2-Fluorobiphenyl (Surr)	*68*		*44 - 102*
2-Fluorophenol (Surr)	*56*		*10 - 84*
Nitrobenzene-d5 (Surr)	*69*		*23 - 128*
p-Terphenyl-d14 (Surr)	*88*		*31 - 113*
Phenol-d5 (Surr)	*43*		*10 - 67*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 410-88709/1-A
Matrix: Water
Analysis Batch: 88836

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88709

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		01/27/21 18:00	01/28/21 06:26	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		01/27/21 18:00	01/28/21 06:26	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		01/27/21 18:00	01/28/21 06:26	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		01/27/21 18:00	01/28/21 06:26	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		01/27/21 18:00	01/28/21 06:26	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		01/27/21 18:00	01/28/21 06:26	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		01/27/21 18:00	01/28/21 06:26	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 410-88709/1-A
Matrix: Water
Analysis Batch: 88836

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88709

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan II (1C)	ND		0.040	0.015	ug/L		01/27/21 18:00	01/28/21 06:26	1
Endosulfan sulfate (1C)	ND		0.030	0.0058	ug/L		01/27/21 18:00	01/28/21 06:26	1
Endrin (1C)	ND		0.030	0.0081	ug/L		01/27/21 18:00	01/28/21 06:26	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		01/27/21 18:00	01/28/21 06:26	1
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		01/27/21 18:00	01/28/21 06:26	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		01/27/21 18:00	01/28/21 06:26	1
gamma-Chlordane (1C)	ND		0.040	0.0070	ug/L		01/27/21 18:00	01/28/21 06:26	1
Heptachlor (1C)	ND		0.020	0.0020	ug/L		01/27/21 18:00	01/28/21 06:26	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		01/27/21 18:00	01/28/21 06:26	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		01/27/21 18:00	01/28/21 06:26	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		01/27/21 18:00	01/28/21 06:26	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		01/27/21 18:00	01/28/21 06:26	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		01/27/21 18:00	01/28/21 06:26	1
p,p'-DDT (1C)	ND		0.030	0.0052	ug/L		01/27/21 18:00	01/28/21 06:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*62*		*32 - 149*	*01/27/21 18:00*	*01/28/21 06:26*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*58*		*32 - 149*	*01/27/21 18:00*	*01/28/21 06:26*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*65*		*29 - 129*	*01/27/21 18:00*	*01/28/21 06:26*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*63*		*29 - 129*	*01/27/21 18:00*	*01/28/21 06:26*	*1*

Lab Sample ID: LCS 410-88709/2-A
Matrix: Water
Analysis Batch: 88836

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88709

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin (1C)	0.100	0.0443		ug/L		44	28 - 119
alpha-BHC (1C)	0.101	0.0749		ug/L		74	47 - 132
beta-BHC (1C)	0.100	0.0760		ug/L		76	27 - 143
delta-BHC (2C)	0.101	0.0735		ug/L		73	28 - 141
Dieldrin (2C)	0.201	0.150		ug/L		74	31 - 145
Endosulfan I (1C)	0.101	0.0696		ug/L		69	40 - 138
Endosulfan II (2C)	0.200	0.145		ug/L		73	27 - 138
Endosulfan sulfate (2C)	0.201	0.149		ug/L		74	41 - 133
Endrin (2C)	0.201	0.142		ug/L		71	35 - 143
Endrin aldehyde (2C)	0.201	0.153		ug/L		76	40 - 135
Endrin ketone (2C)	0.201	0.156		ug/L		77	44 - 136
gamma-BHC (Lindane) (1C)	0.100	0.0745		ug/L		75	29 - 136
Heptachlor (1C)	0.101	0.0513		ug/L		51	38 - 135
Heptachlor epoxide (2C)	0.100	0.0730		ug/L		73	28 - 146
Methoxychlor (1C)	1.01	0.782		ug/L		78	39 - 143
p,p'-DDD (1C)	0.201	0.150		ug/L		75	42 - 148
p,p'-DDE (2C)	0.201	0.108		ug/L		54	22 - 138
p,p'-DDT (1C)	0.201	0.131		ug/L		65	40 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*35*		*32 - 149*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 410-88709/2-A
Matrix: Water
Analysis Batch: 88836

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88709

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (2C)	*31*	*S1-*	*32 - 149*
Tetrachloro-m-xylene (Surr) (1C)	*56*		*29 - 129*
Tetrachloro-m-xylene (Surr) (2C)	*53*		*29 - 129*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 410-87041/1-A
Matrix: Water
Analysis Batch: 87245

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87041

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 11:31	1
Aluminum	ND		0.30	0.15	mg/L		01/22/21 01:30	01/22/21 11:31	1
Antimony	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 11:31	1
Barium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 11:31	1
Beryllium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 11:31	1
Cadmium	ND		0.0050	0.0010	mg/L		01/22/21 01:30	01/22/21 11:31	1
Calcium	ND		0.50	0.096	mg/L		01/22/21 01:30	01/22/21 11:31	1
Chromium	ND		0.015	0.0016	mg/L		01/22/21 01:30	01/22/21 11:31	1
Cobalt	ND		0.0050	0.0015	mg/L		01/22/21 01:30	01/22/21 11:31	1
Copper	ND	^3+	0.020	0.012	mg/L		01/22/21 01:30	01/22/21 11:31	1
Iron	ND		0.20	0.040	mg/L		01/22/21 01:30	01/22/21 11:31	1
Lead	ND		0.015	0.0071	mg/L		01/22/21 01:30	01/22/21 11:31	1
Magnesium	ND		0.10	0.040	mg/L		01/22/21 01:30	01/22/21 11:31	1
Manganese	ND		0.010	0.0030	mg/L		01/22/21 01:30	01/22/21 11:31	1
Nickel	ND		0.010	0.0021	mg/L		01/22/21 01:30	01/22/21 11:31	1
Zinc	ND		0.020	0.0037	mg/L		01/22/21 01:30	01/22/21 11:31	1
Silver	ND	^3+	0.010	0.0050	mg/L		01/22/21 01:30	01/22/21 11:31	1
Selenium	ND		0.050	0.016	mg/L		01/22/21 01:30	01/22/21 11:31	1
Potassium	ND		0.50	0.20	mg/L		01/22/21 01:30	01/22/21 11:31	1
Sodium	ND		1.0	0.24	mg/L		01/22/21 01:30	01/22/21 11:31	1
Thallium	ND		0.030	0.0081	mg/L		01/22/21 01:30	01/22/21 11:31	1
Vanadium	ND		0.010	0.0019	mg/L		01/22/21 01:30	01/22/21 11:31	1

Lab Sample ID: LCS 410-87041/2-A
Matrix: Water
Analysis Batch: 87245

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87041

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0558		mg/L		93	80 - 120
Aluminum	0.405	0.417		mg/L		103	80 - 120
Antimony	0.100	0.107		mg/L		107	80 - 120
Barium	0.0100	0.0105		mg/L		105	80 - 120
Beryllium	0.0100	0.0100		mg/L		100	80 - 120
Cadmium	0.0100	0.0106		mg/L		106	80 - 120
Calcium	0.400	0.427	J	mg/L		107	80 - 120
Chromium	0.0300	0.0306		mg/L		102	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-87041/2-A
Matrix: Water
Analysis Batch: 87245

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87041

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.0100	0.0103		mg/L		103	80 - 120
Iron	0.400	0.401		mg/L		100	80 - 120
Lead	0.0300	0.0327		mg/L		109	80 - 120
Magnesium	0.200	0.210		mg/L		105	80 - 120
Manganese	0.0200	0.0211		mg/L		106	80 - 120
Nickel	2.00	2.11		mg/L		105	80 - 120
Zinc	0.404	0.408		mg/L		101	80 - 120
Silver	0.0200	0.0235	^3+	mg/L		117	80 - 120
Selenium	0.100	0.117		mg/L		117	80 - 120
Potassium	6.00	5.83		mg/L		97	80 - 120
Sodium	2.00	1.93		mg/L		97	80 - 120
Thallium	0.0600	0.0580		mg/L		97	80 - 120
Vanadium	0.0200	0.0212		mg/L		106	80 - 120

Lab Sample ID: LCS 410-87041/2-A
Matrix: Water
Analysis Batch: 87794

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87041

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.0400	0.0413		mg/L		103	80 - 120

Lab Sample ID: 410-27044-1 MS
Matrix: Water
Analysis Batch: 87245

Client Sample ID: Hoff-MW-F-B
Prep Type: Total/NA
Prep Batch: 87041

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.0600	0.0729		mg/L		122	75 - 125
Aluminum	0.62	FH	0.405	1.29	FH	mg/L		166	75 - 125
Antimony	ND		0.100	0.115		mg/L		115	75 - 125
Barium	0.021		0.0100	0.0332		mg/L		118	75 - 125
Beryllium	ND		0.0100	0.0107		mg/L		107	75 - 125
Cadmium	ND		0.0100	0.0107		mg/L		107	75 - 125
Calcium	240		0.400	239	4	mg/L		955	75 - 125
Chromium	0.0027	J	0.0300	0.0343		mg/L		105	75 - 125
Cobalt	ND		0.0100	0.0117		mg/L		117	75 - 125
Iron	0.67	FH	0.400	1.29	FH	mg/L		156	75 - 125
Lead	ND		0.0300	0.0352		mg/L		117	75 - 125
Magnesium	100		0.200	105	4	mg/L		505	75 - 125
Manganese	0.17		0.0200	0.197	4	mg/L		129	75 - 125
Nickel	0.0074	J	2.00	2.11		mg/L		105	75 - 125
Zinc	0.0048	J	0.404	0.446		mg/L		109	75 - 125
Silver	ND	^3+ FH	0.0200	0.0255	^3+ FH	mg/L		127	75 - 125
Selenium	ND		0.100	0.106		mg/L		106	75 - 125
Potassium	17		6.00	23.8		mg/L		110	75 - 125
Sodium	97		2.00	100	4	mg/L		144	75 - 125
Thallium	ND		0.0600	0.0620		mg/L		103	75 - 125
Vanadium	0.012		0.0200	0.0357		mg/L		117	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 410-27044-1 MS
Matrix: Water
Analysis Batch: 87794

Client Sample ID: Hoff-MW-F-B
Prep Type: Total/NA
Prep Batch: 87041

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Copper	0.035		0.0400	0.0823		mg/L		117	75 - 125		

Lab Sample ID: 410-27044-1 MSD
Matrix: Water
Analysis Batch: 87245

Client Sample ID: Hoff-MW-F-B
Prep Type: Total/NA
Prep Batch: 87041

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.0600	0.0642		mg/L		107	75 - 125	13	20
Aluminum	0.62	FH	0.405	1.25	FH	mg/L		156	75 - 125	3	20
Antimony	ND		0.100	0.105		mg/L		105	75 - 125	10	20
Barium	0.021		0.0100	0.0330		mg/L		116	75 - 125	1	20
Beryllium	ND		0.0100	0.0103		mg/L		103	75 - 125	3	20
Cadmium	ND		0.0100	0.0104		mg/L		104	75 - 125	3	20
Calcium	240		0.400	238	4	mg/L		655	75 - 125	1	20
Chromium	0.0027	J	0.0300	0.0330		mg/L		101	75 - 125	4	20
Cobalt	ND		0.0100	0.0113		mg/L		113	75 - 125	3	20
Iron	0.67	FH	0.400	1.27	FH	mg/L		150	75 - 125	2	20
Lead	ND		0.0300	0.0297		mg/L		99	75 - 125	17	20
Magnesium	100		0.200	106	4	mg/L		910	75 - 125	1	20
Manganese	0.17		0.0200	0.201	4	mg/L		147	75 - 125	2	20
Nickel	0.0074	J	2.00	2.03		mg/L		101	75 - 125	4	20
Zinc	0.0048	J	0.404	0.428		mg/L		105	75 - 125	4	20
Silver	ND	^3+ FH	0.0200	0.0237	^3+	mg/L		118	75 - 125	7	20
Selenium	ND		0.100	0.0985		mg/L		98	75 - 125	8	20
Potassium	17		6.00	23.8		mg/L		109	75 - 125	0	20
Sodium	97		2.00	101	4	mg/L		182	75 - 125	1	20
Thallium	ND		0.0600	0.0518		mg/L		86	75 - 125	18	20
Vanadium	0.012		0.0200	0.0338		mg/L		107	75 - 125	5	20

Lab Sample ID: 410-27044-1 MSD
Matrix: Water
Analysis Batch: 87794

Client Sample ID: Hoff-MW-F-B
Prep Type: Total/NA
Prep Batch: 87041

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.035		0.0400	0.0799		mg/L		111	75 - 125	3	20

Lab Sample ID: 410-27044-1 DU
Matrix: Water
Analysis Batch: 87245

Client Sample ID: Hoff-MW-F-B
Prep Type: Total/NA
Prep Batch: 87041

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Arsenic	ND			ND		mg/L				NC	20
Aluminum	0.62	FH		0.815	F5	mg/L				28	20
Antimony	ND			ND		mg/L				NC	20
Barium	0.021			0.0225		mg/L				5	20
Beryllium	ND			ND		mg/L				NC	20
Cadmium	ND			ND		mg/L				NC	20
Calcium	240			241		mg/L				2	20
Chromium	0.0027	J		0.00336	J	mg/L				20	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 410-27044-1 DU
Matrix: Water
Analysis Batch: 87245

Client Sample ID: Hoff-MW-F-B
Prep Type: Total/NA
Prep Batch: 87041

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cobalt	ND		0.00150	J	mg/L		NC	20
Iron	0.67	FH	0.922	F3	mg/L		32	20
Lead	ND		ND		mg/L		NC	20
Magnesium	100		106		mg/L		2	20
Manganese	0.17		0.178		mg/L		4	20
Nickel	0.0074	J	0.00743	J	mg/L		0.1	20
Zinc	0.0048	J	0.00502	J	mg/L		5	20
Silver	ND	^3+ FH	ND	^3+	mg/L		NC	20
Selenium	ND		ND		mg/L		NC	20
Potassium	17		17.8		mg/L		3	20
Sodium	97		99.3		mg/L		2	20
Thallium	ND		ND		mg/L		NC	20
Vanadium	0.012		0.0135		mg/L		9	20

Lab Sample ID: 410-27044-1 DU
Matrix: Water
Analysis Batch: 87794

Client Sample ID: Hoff-MW-F-B
Prep Type: Total/NA
Prep Batch: 87041

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Copper	0.035		0.0400		mg/L		12	20

Lab Sample ID: MB 410-87047/1-A
Matrix: Water
Analysis Batch: 88173

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87047

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:17	1
Aluminum	ND		0.31	0.16	mg/L		01/22/21 02:25	01/26/21 13:17	1
Antimony	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:17	1
Barium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:17	1
Beryllium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:17	1
Cadmium	ND		0.0052	0.0010	mg/L		01/22/21 02:25	01/26/21 13:17	1
Calcium	ND		0.52	0.099	mg/L		01/22/21 02:25	01/26/21 13:17	1
Chromium	ND		0.015	0.0016	mg/L		01/22/21 02:25	01/26/21 13:17	1
Cobalt	ND		0.0052	0.0015	mg/L		01/22/21 02:25	01/26/21 13:17	1
Lead	ND		0.015	0.0073	mg/L		01/22/21 02:25	01/26/21 13:17	1
Magnesium	ND		0.10	0.041	mg/L		01/22/21 02:25	01/26/21 13:17	1
Manganese	ND	^3+	0.010	0.0031	mg/L		01/22/21 02:25	01/26/21 13:17	1
Zinc	ND		0.021	0.0038	mg/L		01/22/21 02:25	01/26/21 13:17	1
Silver	ND		0.010	0.0052	mg/L		01/22/21 02:25	01/26/21 13:17	1
Selenium	ND		0.052	0.016	mg/L		01/22/21 02:25	01/26/21 13:17	1
Sodium	ND		1.0	0.25	mg/L		01/22/21 02:25	01/26/21 13:17	1
Thallium	ND		0.031	0.0083	mg/L		01/22/21 02:25	01/26/21 13:17	1
Vanadium	ND		0.010	0.0020	mg/L		01/22/21 02:25	01/26/21 13:17	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-87047/1-A
Matrix: Water
Analysis Batch: 88635

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87047

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.021	0.012	mg/L		01/22/21 02:25	01/27/21 11:28	1
Iron	ND		0.21	0.041	mg/L		01/22/21 02:25	01/27/21 11:28	1
Nickel	ND		0.010	0.0022	mg/L		01/22/21 02:25	01/27/21 11:28	1
Potassium	ND		0.52	0.21	mg/L		01/22/21 02:25	01/27/21 11:28	1

Lab Sample ID: LCS 410-87047/2-A
Matrix: Water
Analysis Batch: 88173

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87047

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0594		mg/L		99	80 - 120
Aluminum	0.405	0.369		mg/L		91	80 - 120
Antimony	0.100	0.0921		mg/L		92	80 - 120
Barium	0.0100	0.0101		mg/L		101	80 - 120
Beryllium	0.0100	0.00981		mg/L		98	80 - 120
Cadmium	0.0100	0.0109		mg/L		109	80 - 120
Calcium	0.400	0.350	J	mg/L		87	80 - 120
Chromium	0.0300	0.0311		mg/L		104	80 - 120
Cobalt	0.0100	0.0109		mg/L		109	80 - 120
Lead	0.0300	0.0298		mg/L		99	80 - 120
Magnesium	0.200	0.175		mg/L		88	80 - 120
Zinc	0.404	0.440		mg/L		109	80 - 120
Silver	0.0200	0.0228		mg/L		114	80 - 120
Selenium	0.100	0.110		mg/L		110	80 - 120
Sodium	2.00	1.78		mg/L		89	80 - 120
Thallium	0.0600	0.0676		mg/L		113	80 - 120
Vanadium	0.0200	0.0199		mg/L		100	80 - 120

Lab Sample ID: LCS 410-87047/2-A
Matrix: Water
Analysis Batch: 88635

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87047

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.0400	0.0422		mg/L		105	80 - 120
Iron	0.400	0.448		mg/L		112	80 - 120
Manganese	0.0200	0.0218		mg/L		109	80 - 120
Nickel	2.00	2.10		mg/L		105	80 - 120
Potassium	6.00	5.97		mg/L		99	80 - 120

Lab Sample ID: 410-27044-1 MS
Matrix: Water
Analysis Batch: 88173

Client Sample ID: Hoff-MW-F-B
Prep Type: Dissolved
Prep Batch: 87047

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.0600	0.0536		mg/L		89	75 - 125
Aluminum	ND		0.405	0.381		mg/L		94	75 - 125
Antimony	ND		0.100	0.109		mg/L		109	75 - 125
Barium	0.019		0.0100	0.0292		mg/L		101	75 - 125
Beryllium	ND		0.0100	0.0102		mg/L		102	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 410-27044-1 MS
Matrix: Water
Analysis Batch: 88173

Client Sample ID: Hoff-MW-F-B
Prep Type: Dissolved
Prep Batch: 87047

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		0.0100	0.0107		mg/L		107	75 - 125
Calcium	230		0.400	226	4	mg/L		-25	75 - 125
Chromium	0.0070	J	0.0300	0.0374		mg/L		101	75 - 125
Cobalt	ND		0.0100	0.00954		mg/L		95	75 - 125
Magnesium	100		0.200	99.9	4	mg/L		194	75 - 125
Zinc	ND		0.404	0.444		mg/L		110	75 - 125
Silver	ND		0.0200	0.0230		mg/L		115	75 - 125
Selenium	ND		0.100	0.114		mg/L		114	75 - 125
Sodium	100		2.00	105	4	mg/L		162	75 - 125
Thallium	ND		0.0600	0.0563		mg/L		94	75 - 125
Vanadium	0.0095	J	0.0200	0.0308		mg/L		106	75 - 125

Lab Sample ID: 410-27044-1 MS
Matrix: Water
Analysis Batch: 88635

Client Sample ID: Hoff-MW-F-B
Prep Type: Dissolved
Prep Batch: 87047

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.020	J	0.0400	0.0649		mg/L		112	75 - 125
Iron	ND		0.400	0.426		mg/L		106	75 - 125
Lead	ND		0.0300	0.0354		mg/L		118	75 - 125
Manganese	0.15		0.0200	0.169	4	mg/L		103	75 - 125
Nickel	0.0079	J	2.00	2.03		mg/L		101	75 - 125
Potassium	18		6.00	24.0		mg/L		108	75 - 125

Lab Sample ID: 410-27044-1 MSD
Matrix: Water
Analysis Batch: 88173

Client Sample ID: Hoff-MW-F-B
Prep Type: Dissolved
Prep Batch: 87047

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.0600	0.0618		mg/L		103	75 - 125	14	20
Aluminum	ND		0.405	0.361		mg/L		89	75 - 125	6	20
Antimony	ND		0.100	0.106		mg/L		106	75 - 125	3	20
Barium	0.019		0.0100	0.0292		mg/L		100	75 - 125	0	20
Beryllium	ND		0.0100	0.0102		mg/L		102	75 - 125	0	20
Cadmium	ND		0.0100	0.0107		mg/L		107	75 - 125	0	20
Calcium	230		0.400	225	4	mg/L		-411	75 - 125	1	20
Chromium	0.0070	J	0.0300	0.0362		mg/L		97	75 - 125	3	20
Cobalt	ND		0.0100	0.00882		mg/L		88	75 - 125	8	20
Magnesium	100		0.200	99.2	4	mg/L		-173	75 - 125	1	20
Zinc	ND		0.404	0.448		mg/L		111	75 - 125	1	20
Silver	ND		0.0200	0.0234		mg/L		117	75 - 125	2	20
Selenium	ND		0.100	0.101		mg/L		101	75 - 125	13	20
Sodium	100		2.00	105	4	mg/L		124	75 - 125	1	20
Thallium	ND		0.0600	0.0644		mg/L		107	75 - 125	14	20
Vanadium	0.0095	J	0.0200	0.0301		mg/L		103	75 - 125	2	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 410-27044-1 MSD
Matrix: Water
Analysis Batch: 88635

Client Sample ID: Hoff-MW-F-B
Prep Type: Dissolved
Prep Batch: 87047

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.020	J	0.0400	0.0655		mg/L		113	75 - 125	1	20
Iron	ND		0.400	0.423		mg/L		106	75 - 125	1	20
Lead	ND		0.0300	0.0340		mg/L		113	75 - 125	4	20
Manganese	0.15		0.0200	0.169	4	mg/L		104	75 - 125	0	20
Nickel	0.0079	J	2.00	2.05		mg/L		102	75 - 125	1	20
Potassium	18		6.00	24.0		mg/L		108	75 - 125	0	20

Lab Sample ID: 410-27044-1 DU
Matrix: Water
Analysis Batch: 88173

Client Sample ID: Hoff-MW-F-B
Prep Type: Dissolved
Prep Batch: 87047

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Arsenic	ND			ND		mg/L				NC	20
Aluminum	ND			ND		mg/L				NC	20
Antimony	ND			ND		mg/L				NC	20
Barium	0.019			0.0197		mg/L				3	20
Beryllium	ND			ND		mg/L				NC	20
Cadmium	ND			ND		mg/L				NC	20
Calcium	230			225		mg/L				0.5	20
Chromium	0.0070	J		0.00739	J	mg/L				5	20
Cobalt	ND			ND		mg/L				NC	20
Magnesium	100			99.5		mg/L				0.06	20
Zinc	ND			ND		mg/L				NC	20
Silver	ND			ND		mg/L				NC	20
Selenium	ND			ND		mg/L				NC	20
Sodium	100			102		mg/L				0	20
Thallium	ND			ND		mg/L				NC	20
Vanadium	0.0095	J		0.00961	J	mg/L				0.7	20

Lab Sample ID: 410-27044-1 DU
Matrix: Water
Analysis Batch: 88635

Client Sample ID: Hoff-MW-F-B
Prep Type: Dissolved
Prep Batch: 87047

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Copper	0.020	J		0.0209	J	mg/L				3	20
Iron	ND			ND		mg/L				NC	20
Lead	ND			ND		mg/L				NC	20
Manganese	0.15			0.148		mg/L				0.2	20
Nickel	0.0079	J		0.00743	J	mg/L				6	20
Potassium	18			17.6		mg/L				0.4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-87057/1-A
Matrix: Water
Analysis Batch: 87201

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87057

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/22/21 03:31	01/22/21 09:38	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 410-87057/2-A
Matrix: Water
Analysis Batch: 87201

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87057

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	1.25	*+	ug/L		125	80 - 118

Lab Sample ID: MB 410-87060/1-A
Matrix: Water
Analysis Batch: 87882

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87060

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/22/21 03:57	01/25/21 18:00	1

Lab Sample ID: LCS 410-87060/2-A
Matrix: Water
Analysis Batch: 87882

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87060

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	1.03		ug/L		103	80 - 118

Lab Sample ID: MB 410-87812/1-A
Matrix: Water
Analysis Batch: 88315

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87812

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/25/21 16:46	01/26/21 19:08	1

Lab Sample ID: LCS 410-87812/2-A
Matrix: Water
Analysis Batch: 88315

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87812

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	1.10		ug/L		110	80 - 118

Method: 3500 Fe B-2011 - Iron, Ferrous and Ferric

Lab Sample ID: MB 410-88180/14
Matrix: Water
Analysis Batch: 88180

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND		0.10	0.050	mg/L			01/26/21 12:52	1

Lab Sample ID: LCS 410-88180/13
Matrix: Water
Analysis Batch: 88180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	1.00	1.01		mg/L		101	90 - 110

Method: 375.4 - Sulfate

Lab Sample ID: MB 410-88989/1
Matrix: Water
Analysis Batch: 88989

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		6.0	2.0	mg/L			01/28/21 09:47	1

Lab Sample ID: LCS 410-88989/7
Matrix: Water
Analysis Batch: 88989

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			20.0	20.0		mg/L		100	96 - 104		

GC/MS VOA

Analysis Batch: 88882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	8260C SIM 14D	
410-27044-2	Hoff-MW-F-A	Total/NA	Water	8260C SIM 14D	
410-27044-3	Hoff-IW-1-B	Total/NA	Water	8260C SIM 14D	
410-27044-5	Hoff-IW-2-B	Total/NA	Water	8260C SIM 14D	
410-27044-6	Hoff-TB-012021	Total/NA	Water	8260C SIM 14D	
MB 410-88882/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-88882/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-88882/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

Analysis Batch: 89194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-3	Hoff-IW-1-B	Total/NA	Water	8260C LL	
410-27044-3 - DL	Hoff-IW-1-B	Total/NA	Water	8260C LL	
410-27044-4	Hoff-IW-1-A	Total/NA	Water	8260C LL	
410-27044-6	Hoff-TB-012021	Total/NA	Water	8260C LL	
MB 410-89194/10	Method Blank	Total/NA	Water	8260C LL	
LCS 410-89194/5	Lab Control Sample	Total/NA	Water	8260C LL	
LCSD 410-89194/6	Lab Control Sample Dup	Total/NA	Water	8260C LL	

Analysis Batch: 89197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	8260C LL	
410-27044-1 - DL	Hoff-MW-F-B	Total/NA	Water	8260C LL	
410-27044-2	Hoff-MW-F-A	Total/NA	Water	8260C LL	
410-27044-2 - DL	Hoff-MW-F-A	Total/NA	Water	8260C LL	
MB 410-89197/6	Method Blank	Total/NA	Water	8260C LL	
LCS 410-89197/4	Lab Control Sample	Total/NA	Water	8260C LL	

Analysis Batch: 89203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-5	Hoff-IW-2-B	Total/NA	Water	8260C LL	
410-27044-5 - DL	Hoff-IW-2-B	Total/NA	Water	8260C LL	
MB 410-89203/6	Method Blank	Total/NA	Water	8260C LL	
LCS 410-89203/4	Lab Control Sample	Total/NA	Water	8260C LL	

Analysis Batch: 89603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-3 - RA	Hoff-IW-1-B	Total/NA	Water	8260C LL	
410-27044-4 - RA	Hoff-IW-1-A	Total/NA	Water	8260C LL	
410-27044-5 - DL2	Hoff-IW-2-B	Total/NA	Water	8260C LL	
MB 410-89603/7	Method Blank	Total/NA	Water	8260C LL	
LCS 410-89603/4	Lab Control Sample	Total/NA	Water	8260C LL	
LCSD 410-89603/5	Lab Control Sample Dup	Total/NA	Water	8260C LL	

Analysis Batch: 90028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-4	Hoff-IW-1-A	Total/NA	Water	8260C SIM 14D	
MB 410-90028/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-90028/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-90028/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

GC/MS Semi VOA

Prep Batch: 88684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	3510C	
410-27044-2	Hoff-MW-F-A	Total/NA	Water	3510C	
410-27044-3	Hoff-IW-1-B	Total/NA	Water	3510C	
410-27044-4	Hoff-IW-1-A	Total/NA	Water	3510C	
410-27044-5	Hoff-IW-2-B	Total/NA	Water	3510C	
MB 410-88684/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-88684/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 88926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-88684/1-A	Method Blank	Total/NA	Water	8270D	88684
LCS 410-88684/2-A	Lab Control Sample	Total/NA	Water	8270D	88684

Analysis Batch: 89635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	8270D	88684
410-27044-2	Hoff-MW-F-A	Total/NA	Water	8270D	88684
410-27044-3	Hoff-IW-1-B	Total/NA	Water	8270D	88684

Analysis Batch: 89707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-4	Hoff-IW-1-A	Total/NA	Water	8270D	88684
410-27044-5	Hoff-IW-2-B	Total/NA	Water	8270D	88684

GC Semi VOA

Prep Batch: 88709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	3510C	
410-27044-2	Hoff-MW-F-A	Total/NA	Water	3510C	
410-27044-3	Hoff-IW-1-B	Total/NA	Water	3510C	
410-27044-4	Hoff-IW-1-A	Total/NA	Water	3510C	
410-27044-5	Hoff-IW-2-B	Total/NA	Water	3510C	
MB 410-88709/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-88709/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 88836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	8081B	88709
410-27044-2	Hoff-MW-F-A	Total/NA	Water	8081B	88709
410-27044-3	Hoff-IW-1-B	Total/NA	Water	8081B	88709
410-27044-4	Hoff-IW-1-A	Total/NA	Water	8081B	88709
410-27044-5	Hoff-IW-2-B	Total/NA	Water	8081B	88709
MB 410-88709/1-A	Method Blank	Total/NA	Water	8081B	88709
LCS 410-88709/2-A	Lab Control Sample	Total/NA	Water	8081B	88709

Metals

Prep Batch: 87041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	3010A	
410-27044-2	Hoff-MW-F-A	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 87041 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-3	Hoff-IW-1-B	Total/NA	Water	3010A	
410-27044-4	Hoff-IW-1-A	Total/NA	Water	3010A	
410-27044-5	Hoff-IW-2-B	Total/NA	Water	3010A	
MB 410-87041/1-A	Method Blank	Total/NA	Water	3010A	
LCS 410-87041/2-A	Lab Control Sample	Total/NA	Water	3010A	
410-27044-1 MS	Hoff-MW-F-B	Total/NA	Water	3010A	
410-27044-1 MSD	Hoff-MW-F-B	Total/NA	Water	3010A	
410-27044-1 DU	Hoff-MW-F-B	Total/NA	Water	3010A	

Prep Batch: 87047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Dissolved	Water	Non-Digest Prep	
410-27044-2	Hoff-MW-F-A	Dissolved	Water	Non-Digest Prep	
410-27044-3	Hoff-IW-1-B	Dissolved	Water	Non-Digest Prep	
410-27044-4	Hoff-IW-1-A	Dissolved	Water	Non-Digest Prep	
410-27044-5	Hoff-IW-2-B	Dissolved	Water	Non-Digest Prep	
MB 410-87047/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-87047/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	
410-27044-1 MS	Hoff-MW-F-B	Dissolved	Water	Non-Digest Prep	
410-27044-1 MSD	Hoff-MW-F-B	Dissolved	Water	Non-Digest Prep	
410-27044-1 DU	Hoff-MW-F-B	Dissolved	Water	Non-Digest Prep	

Prep Batch: 87057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Dissolved	Water	7470A	
410-27044-2	Hoff-MW-F-A	Dissolved	Water	7470A	
410-27044-2	Hoff-MW-F-A	Total/NA	Water	7470A	
MB 410-87057/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-87057/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 87060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-3	Hoff-IW-1-B	Dissolved	Water	7470A	
410-27044-3	Hoff-IW-1-B	Total/NA	Water	7470A	
410-27044-4	Hoff-IW-1-A	Dissolved	Water	7470A	
410-27044-4	Hoff-IW-1-A	Total/NA	Water	7470A	
410-27044-5	Hoff-IW-2-B	Dissolved	Water	7470A	
410-27044-5	Hoff-IW-2-B	Total/NA	Water	7470A	
MB 410-87060/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-87060/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 87201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Dissolved	Water	7470A	87057
410-27044-2	Hoff-MW-F-A	Dissolved	Water	7470A	87057
410-27044-2	Hoff-MW-F-A	Total/NA	Water	7470A	87057
MB 410-87057/1-A	Method Blank	Total/NA	Water	7470A	87057
LCS 410-87057/2-A	Lab Control Sample	Total/NA	Water	7470A	87057

Metals

Analysis Batch: 87245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	6010C	87041
410-27044-2	Hoff-MW-F-A	Total/NA	Water	6010C	87041
410-27044-3	Hoff-IW-1-B	Total/NA	Water	6010C	87041
410-27044-4	Hoff-IW-1-A	Total/NA	Water	6010C	87041
410-27044-5	Hoff-IW-2-B	Total/NA	Water	6010C	87041
MB 410-87041/1-A	Method Blank	Total/NA	Water	6010C	87041
LCS 410-87041/2-A	Lab Control Sample	Total/NA	Water	6010C	87041
410-27044-1 MS	Hoff-MW-F-B	Total/NA	Water	6010C	87041
410-27044-1 MSD	Hoff-MW-F-B	Total/NA	Water	6010C	87041
410-27044-1 DU	Hoff-MW-F-B	Total/NA	Water	6010C	87041

Analysis Batch: 87794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	6010C	87041
410-27044-3	Hoff-IW-1-B	Total/NA	Water	6010C	87041
410-27044-3	Hoff-IW-1-B	Total/NA	Water	6010C	87041
410-27044-4	Hoff-IW-1-A	Total/NA	Water	6010C	87041
LCS 410-87041/2-A	Lab Control Sample	Total/NA	Water	6010C	87041
410-27044-1 MS	Hoff-MW-F-B	Total/NA	Water	6010C	87041
410-27044-1 MSD	Hoff-MW-F-B	Total/NA	Water	6010C	87041
410-27044-1 DU	Hoff-MW-F-B	Total/NA	Water	6010C	87041

Prep Batch: 87812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	7470A	
MB 410-87812/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-87812/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 87882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-3	Hoff-IW-1-B	Dissolved	Water	7470A	87060
410-27044-3	Hoff-IW-1-B	Total/NA	Water	7470A	87060
410-27044-4	Hoff-IW-1-A	Dissolved	Water	7470A	87060
410-27044-4	Hoff-IW-1-A	Total/NA	Water	7470A	87060
410-27044-5	Hoff-IW-2-B	Dissolved	Water	7470A	87060
410-27044-5	Hoff-IW-2-B	Total/NA	Water	7470A	87060
MB 410-87060/1-A	Method Blank	Total/NA	Water	7470A	87060
LCS 410-87060/2-A	Lab Control Sample	Total/NA	Water	7470A	87060

Analysis Batch: 88173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Dissolved	Water	6010C	87047
410-27044-2	Hoff-MW-F-A	Dissolved	Water	6010C	87047
410-27044-3	Hoff-IW-1-B	Dissolved	Water	6010C	87047
410-27044-4	Hoff-IW-1-A	Dissolved	Water	6010C	87047
410-27044-5	Hoff-IW-2-B	Dissolved	Water	6010C	87047
MB 410-87047/1-A	Method Blank	Total/NA	Water	6010C	87047
LCS 410-87047/2-A	Lab Control Sample	Total/NA	Water	6010C	87047
410-27044-1 MS	Hoff-MW-F-B	Dissolved	Water	6010C	87047
410-27044-1 MSD	Hoff-MW-F-B	Dissolved	Water	6010C	87047
410-27044-1 DU	Hoff-MW-F-B	Dissolved	Water	6010C	87047

Metals

Analysis Batch: 88315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	7470A	87812
MB 410-87812/1-A	Method Blank	Total/NA	Water	7470A	87812
LCS 410-87812/2-A	Lab Control Sample	Total/NA	Water	7470A	87812

Analysis Batch: 88635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Dissolved	Water	6010C	87047
410-27044-2	Hoff-MW-F-A	Dissolved	Water	6010C	87047
410-27044-3	Hoff-IW-1-B	Dissolved	Water	6010C	87047
410-27044-3	Hoff-IW-1-B	Dissolved	Water	6010C	87047
410-27044-4	Hoff-IW-1-A	Dissolved	Water	6010C	87047
410-27044-4	Hoff-IW-1-A	Dissolved	Water	6010C	87047
410-27044-5	Hoff-IW-2-B	Dissolved	Water	6010C	87047
MB 410-87047/1-A	Method Blank	Total/NA	Water	6010C	87047
LCS 410-87047/2-A	Lab Control Sample	Total/NA	Water	6010C	87047
410-27044-1 MS	Hoff-MW-F-B	Dissolved	Water	6010C	87047
410-27044-1 MSD	Hoff-MW-F-B	Dissolved	Water	6010C	87047
410-27044-1 DU	Hoff-MW-F-B	Dissolved	Water	6010C	87047

General Chemistry

Analysis Batch: 88180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	3500 Fe B-2011	
410-27044-2	Hoff-MW-F-A	Total/NA	Water	3500 Fe B-2011	
410-27044-3	Hoff-IW-1-B	Total/NA	Water	3500 Fe B-2011	
410-27044-4	Hoff-IW-1-A	Total/NA	Water	3500 Fe B-2011	
410-27044-5	Hoff-IW-2-B	Total/NA	Water	3500 Fe B-2011	
MB 410-88180/14	Method Blank	Total/NA	Water	3500 Fe B-2011	
LCS 410-88180/13	Lab Control Sample	Total/NA	Water	3500 Fe B-2011	

Analysis Batch: 88989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27044-1	Hoff-MW-F-B	Total/NA	Water	375.4	
410-27044-2	Hoff-MW-F-A	Total/NA	Water	375.4	
410-27044-3	Hoff-IW-1-B	Total/NA	Water	375.4	
410-27044-4	Hoff-IW-1-A	Total/NA	Water	375.4	
410-27044-5	Hoff-IW-2-B	Total/NA	Water	375.4	
MB 410-88989/1	Method Blank	Total/NA	Water	375.4	
LCS 410-88989/7	Lab Control Sample	Total/NA	Water	375.4	

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-27044-1

Client Sample ID: Hoff-MW-F-B

Lab Sample ID: 410-27044-1

Date Collected: 01/20/21 09:35
Date Received: 01/20/21 17:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		10	89197	01/29/21 01:18	ULCP	ELLE
Total/NA	Analysis	8260C LL	DL	100	89197	01/29/21 01:39	ULCP	ELLE
Total/NA	Analysis	8260C SIM 14D		20	88882	01/28/21 17:18	USEJ	ELLE
Total/NA	Prep	3510C			88684	01/27/21 16:33	DFX4	ELLE
Total/NA	Analysis	8270D		1	89635	01/30/21 08:11	W6XI	ELLE
Total/NA	Prep	3510C			88709	01/27/21 18:00	DFX4	ELLE
Total/NA	Analysis	8081B		1	88836	01/28/21 07:29	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			87047	01/22/21 02:25	UJL8	ELLE
Dissolved	Analysis	6010C		1	88635	01/27/21 11:34	SB	ELLE
Dissolved	Prep	Non-Digest Prep			87047	01/22/21 02:25	UJL8	ELLE
Dissolved	Analysis	6010C		1	88173	01/26/21 13:23	MDP5	ELLE
Total/NA	Prep	3010A			87041	01/22/21 01:30	UJL8	ELLE
Total/NA	Analysis	6010C		1	87245	01/22/21 11:38	UPJE	ELLE
Total/NA	Prep	3010A			87041	01/22/21 01:30	UJL8	ELLE
Total/NA	Analysis	6010C		1	87794	01/25/21 15:20	UCIG	ELLE
Dissolved	Prep	7470A			87057	01/22/21 03:31	UJL8	ELLE
Dissolved	Analysis	7470A		1	87201	01/22/21 09:58	S8DY	ELLE
Total/NA	Prep	7470A			87812	01/25/21 16:46	UJL8	ELLE
Total/NA	Analysis	7470A		1	88315	01/26/21 19:37	UEFS	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	88180	01/26/21 12:57	QU5I	ELLE
Total/NA	Analysis	375.4		20	88989	01/28/21 09:47	USAE	ELLE

Client Sample ID: Hoff-MW-F-A

Lab Sample ID: 410-27044-2

Date Collected: 01/20/21 10:30
Date Received: 01/20/21 17:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		20	89197	01/29/21 02:00	ULCP	ELLE
Total/NA	Analysis	8260C LL	DL	200	89197	01/29/21 02:22	ULCP	ELLE
Total/NA	Analysis	8260C SIM 14D		5	88882	01/28/21 15:16	USEJ	ELLE
Total/NA	Prep	3510C			88684	01/27/21 16:33	DFX4	ELLE
Total/NA	Analysis	8270D		1	89635	01/30/21 08:39	W6XI	ELLE
Total/NA	Prep	3510C			88709	01/27/21 18:00	DFX4	ELLE
Total/NA	Analysis	8081B		5	88836	01/28/21 07:40	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			87047	01/22/21 02:25	UJL8	ELLE
Dissolved	Analysis	6010C		1	88635	01/27/21 12:17	SB	ELLE
Dissolved	Prep	Non-Digest Prep			87047	01/22/21 02:25	UJL8	ELLE
Dissolved	Analysis	6010C		1	88173	01/26/21 13:43	MDP5	ELLE
Total/NA	Prep	3010A			87041	01/22/21 01:30	UJL8	ELLE
Total/NA	Analysis	6010C		1	87245	01/22/21 12:00	UPJE	ELLE
Dissolved	Prep	7470A			87057	01/22/21 03:31	UJL8	ELLE
Dissolved	Analysis	7470A		1	87201	01/22/21 09:55	S8DY	ELLE
Total/NA	Prep	7470A			87057	01/22/21 03:31	UJL8	ELLE
Total/NA	Analysis	7470A		1	87201	01/22/21 10:47	S8DY	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-27044-1

Client Sample ID: Hoff-MW-F-A
Date Collected: 01/20/21 10:30
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	3500 Fe B-2011		1	88180	01/26/21 12:57	QU5I	ELLE
Total/NA	Analysis	375.4		1	88989	01/28/21 09:47	USAE	ELLE

Client Sample ID: Hoff-IW-1-B
Date Collected: 01/20/21 11:40
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL	RA	1	89603	01/30/21 04:21	K4WN	ELLE
Total/NA	Analysis	8260C LL		1	89194	01/29/21 01:49	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL	10	89194	01/29/21 02:10	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		20	88882	01/28/21 17:39	USEJ	ELLE
Total/NA	Prep	3510C			88684	01/27/21 16:33	DFX4	ELLE
Total/NA	Analysis	8270D		1	89635	01/30/21 09:08	W6XI	ELLE
Total/NA	Prep	3510C			88709	01/27/21 18:00	DFX4	ELLE
Total/NA	Analysis	8081B		1	88836	01/28/21 07:51	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			87047	01/22/21 02:25	UJL8	ELLE
Dissolved	Analysis	6010C		1	88635	01/27/21 12:20	SB	ELLE
Dissolved	Prep	Non-Digest Prep			87047	01/22/21 02:25	UJL8	ELLE
Dissolved	Analysis	6010C		5	88635	01/27/21 12:24	SB	ELLE
Dissolved	Prep	Non-Digest Prep			87047	01/22/21 02:25	UJL8	ELLE
Dissolved	Analysis	6010C		1	88173	01/26/21 13:47	MDP5	ELLE
Total/NA	Prep	3010A			87041	01/22/21 01:30	UJL8	ELLE
Total/NA	Analysis	6010C		1	87245	01/22/21 12:09	UPJE	ELLE
Total/NA	Prep	3010A			87041	01/22/21 01:30	UJL8	ELLE
Total/NA	Analysis	6010C		1	87794	01/25/21 15:45	UCIG	ELLE
Total/NA	Prep	3010A			87041	01/22/21 01:30	UJL8	ELLE
Total/NA	Analysis	6010C		5	87794	01/25/21 15:48	UCIG	ELLE
Dissolved	Prep	7470A			87060	01/22/21 03:57	UJL8	ELLE
Dissolved	Analysis	7470A		1	87882	01/25/21 18:59	UEFS	ELLE
Total/NA	Prep	7470A			87060	01/22/21 03:57	UJL8	ELLE
Total/NA	Analysis	7470A		1	87882	01/25/21 18:14	UEFS	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	88180	01/26/21 12:57	QU5I	ELLE
Total/NA	Analysis	375.4		100	88989	01/28/21 09:47	USAE	ELLE

Client Sample ID: Hoff-IW-1-A
Date Collected: 01/20/21 13:25
Date Received: 01/20/21 17:45

Lab Sample ID: 410-27044-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL	RA	2	89603	01/30/21 04:43	K4WN	ELLE
Total/NA	Analysis	8260C LL		2	89194	01/29/21 02:31	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		1	90028	02/02/21 15:00	USEJ	ELLE

Client Sample ID: Hoff-IW-1-A

Lab Sample ID: 410-27044-4

Date Collected: 01/20/21 13:25

Matrix: Water

Date Received: 01/20/21 17:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			88684	01/27/21 16:33	DFX4	ELLE
Total/NA	Analysis	8270D		1	89707	01/30/21 14:55	UWHS	ELLE
Total/NA	Prep	3510C			88709	01/27/21 18:00	DFX4	ELLE
Total/NA	Analysis	8081B		5	88836	01/28/21 08:01	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			87047	01/22/21 02:25	UJL8	ELLE
Dissolved	Analysis	6010C		1	88635	01/27/21 12:27	SB	ELLE
Dissolved	Prep	Non-Digest Prep			87047	01/22/21 02:25	UJL8	ELLE
Dissolved	Analysis	6010C		5	88635	01/27/21 12:30	SB	ELLE
Dissolved	Prep	Non-Digest Prep			87047	01/22/21 02:25	UJL8	ELLE
Dissolved	Analysis	6010C		1	88173	01/26/21 13:57	MDP5	ELLE
Total/NA	Prep	3010A			87041	01/22/21 01:30	UJL8	ELLE
Total/NA	Analysis	6010C		1	87245	01/22/21 12:16	UPJE	ELLE
Total/NA	Prep	3010A			87041	01/22/21 01:30	UJL8	ELLE
Total/NA	Analysis	6010C		5	87794	01/25/21 15:52	UCIG	ELLE
Dissolved	Prep	7470A			87060	01/22/21 03:57	UJL8	ELLE
Dissolved	Analysis	7470A		1	87882	01/25/21 18:26	UEFS	ELLE
Total/NA	Prep	7470A			87060	01/22/21 03:57	UJL8	ELLE
Total/NA	Analysis	7470A		1	87882	01/25/21 18:19	UEFS	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	88180	01/26/21 12:58	QU5I	ELLE
Total/NA	Analysis	375.4		20	88989	01/28/21 09:47	USAE	ELLE

Client Sample ID: Hoff-IW-2-B

Lab Sample ID: 410-27044-5

Date Collected: 01/20/21 14:45

Matrix: Water

Date Received: 01/20/21 17:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		10	89203	01/29/21 04:58	ULCP	ELLE
Total/NA	Analysis	8260C LL	DL	100	89203	01/29/21 05:21	ULCP	ELLE
Total/NA	Analysis	8260C LL	DL2	1000	89603	01/29/21 23:31	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		10	88882	01/28/21 16:17	USEJ	ELLE
Total/NA	Prep	3510C			88684	01/27/21 16:33	DFX4	ELLE
Total/NA	Analysis	8270D		1	89707	01/30/21 15:24	UWHS	ELLE
Total/NA	Prep	3510C			88709	01/27/21 18:00	DFX4	ELLE
Total/NA	Analysis	8081B		1	88836	01/28/21 08:12	ZO3C	ELLE
Dissolved	Prep	Non-Digest Prep			87047	01/22/21 02:25	UJL8	ELLE
Dissolved	Analysis	6010C		1	88635	01/27/21 12:59	SB	ELLE
Dissolved	Prep	Non-Digest Prep			87047	01/22/21 02:25	UJL8	ELLE
Dissolved	Analysis	6010C		1	88173	01/26/21 14:28	MDP5	ELLE
Total/NA	Prep	3010A			87041	01/22/21 01:30	UJL8	ELLE
Total/NA	Analysis	6010C		1	87245	01/22/21 12:12	UPJE	ELLE
Dissolved	Prep	7470A			87060	01/22/21 03:57	UJL8	ELLE
Dissolved	Analysis	7470A		1	87882	01/25/21 18:28	UEFS	ELLE
Total/NA	Prep	7470A			87060	01/22/21 03:57	UJL8	ELLE
Total/NA	Analysis	7470A		1	87882	01/25/21 18:12	UEFS	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-27044-1

Client Sample ID: Hoff-IW-2-B

Lab Sample ID: 410-27044-5

Date Collected: 01/20/21 14:45

Matrix: Water

Date Received: 01/20/21 17:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	3500 Fe B-2011		1	88180	01/26/21 12:57	QU5I	ELLE
Total/NA	Analysis	375.4		20	88989	01/28/21 09:47	USAE	ELLE

Client Sample ID: Hoff-TB-012021

Lab Sample ID: 410-27044-6

Date Collected: 01/20/21 09:00

Matrix: Water

Date Received: 01/20/21 17:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	89194	01/28/21 22:37	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		1	88882	01/28/21 11:52	USEJ	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-27044-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-22

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-27044-1

Method	Method Description	Protocol	Laboratory
8260C LL	Volatile Organic Compounds by GC/MS	SW846	ELLE
8260C SIM 14D	Volatile Organic Compounds (GC/MS)	SW846	ELLE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ELLE
8081B	Organochlorine Pesticides (GC)	SW846	ELLE
6010C	Metals (ICP)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
3500 Fe B-2011	Iron, Ferrous and Ferric	SM	ELLE
375.4	Sulfate	MCAWW	ELLE
3010A	Preparation, Total Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
Non-Digest Prep	Preparation, Non-Digested Aqueous Metals	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC

Job ID: 410-27044-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-27044-1	Hoff-MW-F-B	Water	01/20/21 09:35	01/20/21 17:45	
410-27044-2	Hoff-MW-F-A	Water	01/20/21 10:30	01/20/21 17:45	
410-27044-3	Hoff-IW-1-B	Water	01/20/21 11:40	01/20/21 17:45	
410-27044-4	Hoff-IW-1-A	Water	01/20/21 13:25	01/20/21 17:45	
410-27044-5	Hoff-IW-2-B	Water	01/20/21 14:45	01/20/21 17:45	
410-27044-6	Hoff-TB-012021	Water	01/20/21 09:00	01/20/21 17:45	

Environmental Analysis Request/Cha

eurofins | Lancaster Laboratories Environmental

Acct. # _____ Group # _____ For Eurofins Lancaster Lat

410-27044 Chain of Custody

COC # 616098

Client Information

Client: Tetra Tech	Acct. #:
Project Name/#: Hoff VC	PWSID #:
Project Manager: Jonathan Dziekan	P.O. #:
Sampler: Roy Wagner	Quote #:
State where samples were collected: Pennsylvania	For Compliance: Yes ☐ No ☐

Matrix: Soil ☐ Sediment ☐ Tissue ☐ | Water: Potable ☐ Ground ☐ NPDES ☐ Surface ☐ | Other: Gas DI

Analysis Requested — Preservation and Filtration Codes

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	N TAL Metals - Total	H Ferrous Iron	H VOCs 8260C/D	H VOCs 14-Diox SIM	OC Pest. / TCL	Sulfate	NF TAL Metals dissolved
Hoff-MW-F-B	01/20/21	0935	✓		13	1	1	3	3	3	1	1
Hoff-MW-F-A	01/20/21	1030	✓		13	1	1	3	3	3	1	1
Hoff-IW-1-B	01/20/21	1140	✓		13	1	1	3	3	3	1	1
Hoff-IW-1-A	01/20/21	1325	✓		13	1	1	3	3	3	1	1
Hoff-IW-2-B	01/20/21	1445	✓		13	1	1	3	3	3	1	1
Hoff-TB-012021	01/20/21	0900			4			2	2			

For Lab Use Only

FSC: _____

SCR#: _____

Preservation Codes

H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 P=H_3PO_4
F=Field Filtered O=Other

Remarks

Turnaround Time (TAT) Requested (please circle)

Standard Rush

(Rush TAT is subject to laboratory approval and surcharge.)

Requested TAT in business days: _____

E-mail address: Jonathan.Dziekan@tetratech.com

Data Package Options (circle if required)

Type I (EPA Level 3 Equivalent/non-CLP) | Type VI (Raw Data Only)

Type III (Reduced non-CLP) | NJ DKQP | TX TRRP-13

NYSDEC Category A or B | MA MCP | CT RCP

Relinquished by	Date	Time	Received by	Date	Time
Margot Clift	1/20/21	1530	Roy Wagner	1/20/21	1530
Roy Wagner	1/20/21	1610	Stan King	1/20/21	16:10
Stan King	1/20/21	17:50			

EDD Required? Yes No

If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No

(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other X

Temperature upon receipt 3.5-3.7 °C

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 410-27044-1

Login Number: 27044
List Number: 1
Creator: Cyms, Carolyn M

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-27216-1
Client Project/Site: Hoff VC Site Perkiomenville PA

For:
Tetra Tech, Inc.
1 Oxford Valley
Suite 200
Langhorne, Pennsylvania 19047

Attn: Jon Dziekan

Authorized for release by:
2/10/2021 8:27:01 AM

Stephen Gordon, Senior Project Manager
(412)525-0071
Stephen.Gordon@eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Stephen Gordon
Senior Project Manager
2/10/2021 8:27:01 AM

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1-	Surrogate recovery exceeds control limits, low biased.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL.
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
FL	MS and/or MSD recovery below control limits.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-27216-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-27216-1

Receipt
The samples were received on 1/21/2021 6:26 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.2°C and 5.9°C

GC/MS VOA
Method 8260C_SIM_14DX: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: Hoff-MW-6 (410-27216-1). Elevated reporting limits (RLs) are provided.

Method 8260C_LL: The continuing calibration verification (CCV) associated with batch 410-89609 recovered above the upper control limit for 2-Butanone, 2-Hexanone, 4-Methyl-2-pentanone and Methyl acetate. Non-detections of the affected analytes are reported. Any detections are considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270D: The recovery for 4-Chloroaniline in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

Method 8270D: The continuing calibration verification (CCV) analyzed in batch 410-89811 was below the method criteria for the following analyte(s): 2,4-Dinitrophenol and Benzaldehyde. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
Method 8081B: The laboratory control sample (LCS) for preparation batch 410-87970 and analytical batch 410-88292 recovered outside control limits for the following analytes: Aldrin, Heptachlor and gamma-Chlordane. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. The first trial is reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Client Sample ID: Hoff-MW-6 — Lab Sample ID: 410-27216-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.4	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
1,4-Dichlorobenzene	19		5.0	0.70	ug/L	10		8260C LL	Total/NA
Methylcyclohexane	1.1	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
Cyclohexane	0.91	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
1,3-Dichlorobenzene	1.0	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Benzene	2.8	J	5.0	0.50	ug/L	10		8260C LL	Total/NA
1,2-Dichlorobenzene	3.1	J	5.0	0.60	ug/L	10		8260C LL	Total/NA
Chlorobenzene - DL	480		50	6.0	ug/L	100		8260C LL	Total/NA
1,4-Dioxane	0.40	J	0.80	0.40	ug/L	2		8260C SIM 14D	Total/NA
Benzo[a]anthracene	1.5		0.52	0.10	ug/L	1		8270D	Total/NA
Benzo[a]pyrene	1.9		0.52	0.10	ug/L	1		8270D	Total/NA
Benzo[b]fluoranthene	1.8		0.52	0.10	ug/L	1		8270D	Total/NA
Benzo[g,h,i]perylene	1.2		0.52	0.10	ug/L	1		8270D	Total/NA
Benzo[k]fluoranthene	0.79		0.52	0.10	ug/L	1		8270D	Total/NA
Acenaphthene	2.2		0.52	0.10	ug/L	1		8270D	Total/NA
Chrysene	1.5		0.52	0.10	ug/L	1		8270D	Total/NA
Dibenz(a,h)anthracene	0.30	J	0.52	0.10	ug/L	1		8270D	Total/NA
Fluoranthene	2.2		0.52	0.10	ug/L	1		8270D	Total/NA
Fluorene	1.6		0.52	0.10	ug/L	1		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1.4		0.52	0.10	ug/L	1		8270D	Total/NA
Phenanthrene	0.87		0.52	0.10	ug/L	1		8270D	Total/NA
Pyrene	2.5		0.52	0.10	ug/L	1		8270D	Total/NA
2-Chlorophenol	1.2	J	2.1	0.52	ug/L	1		8270D	Total/NA
4-Methylphenol	1.8	J	2.1	0.52	ug/L	1		8270D	Total/NA
Aluminum	0.94		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.078		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	76		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.0036	J	0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0017	J	0.0050	0.0015	mg/L	1		6010C	Total/NA
Iron	3.1		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	17		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.80		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.0048	J	0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.19		0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	7.5		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	12		1.0	0.24	mg/L	1		6010C	Total/NA
Vanadium	0.0055	J	0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.038		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	73		0.52	0.099	mg/L	1		6010C	Dissolved
Iron	0.46		0.21	0.041	mg/L	1		6010C	Dissolved
Magnesium	15		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.79		0.010	0.0031	mg/L	1		6010C	Dissolved
Selenium	0.081		0.052	0.016	mg/L	1		6010C	Dissolved
Potassium	6.8		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	11		1.0	0.25	mg/L	1		6010C	Dissolved
Ferrous Iron	2.9	HF FL F2	0.50	0.25	mg/L	5		3500 Fe B-2011	Total/NA
Sulfate	16		6.0	2.0	mg/L	1		375.4	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Client Sample ID: Hoff-MW-10 — Lab Sample ID: 410-27216-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.47	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
1,4-Dichlorobenzene	21		0.50	0.070	ug/L	1		8260C LL	Total/NA
Methylcyclohexane	0.12	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
Toluene	0.12	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Cyclohexane	0.18	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
Xylenes, Total	0.42	J	1.0	0.15	ug/L	1		8260C LL	Total/NA
cis-1,2-Dichloroethene	6.8		0.50	0.050	ug/L	1		8260C LL	Total/NA
trans-1,2-Dichloroethene	0.28	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Methyl tertiary butyl ether	0.055	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,3-Dichlorobenzene	1.5		0.50	0.060	ug/L	1		8260C LL	Total/NA
Acetone	3.6	J	5.0	0.90	ug/L	1		8260C LL	Total/NA
Benzene	3.8		0.50	0.050	ug/L	1		8260C LL	Total/NA
Chloromethane	0.21	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Chloroethane	0.49	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Vinyl chloride	4.4		0.50	0.10	ug/L	1		8260C LL	Total/NA
1,1-Dichloroethane	2.3		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,2-Dichlorobenzene	3.0		0.50	0.060	ug/L	1		8260C LL	Total/NA
Isopropylbenzene	0.33	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
Chlorobenzene - DL	480		50	6.0	ug/L	100		8260C LL	Total/NA
1,4-Dioxane	1.6		0.40	0.20	ug/L	1		8260C SIM 14D	Total/NA
Acenaphthene	0.18	J	0.51	0.10	ug/L	1		8270D	Total/NA
Fluorene	0.16	J	0.51	0.10	ug/L	1		8270D	Total/NA
2-Chlorophenol	4.1		2.1	0.51	ug/L	1		8270D	Total/NA
beta-BHC (2C)	0.0048	J p	0.020	0.0034	ug/L	1		8081B	Total/NA
Aluminum	1.7		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.054		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	100		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.0040	J	0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0015	J	0.0050	0.0015	mg/L	1		6010C	Total/NA
Iron	1.9		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	23		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.96		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.0043	J	0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.53		0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	4.5		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	9.9		1.0	0.24	mg/L	1		6010C	Total/NA
Vanadium	0.0040	J	0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.044		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	110		0.52	0.099	mg/L	1		6010C	Dissolved
Iron	0.41		0.21	0.041	mg/L	1		6010C	Dissolved
Magnesium	24		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.97		0.010	0.0031	mg/L	1		6010C	Dissolved
Zinc	0.19		0.021	0.0038	mg/L	1		6010C	Dissolved
Potassium	4.2		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	9.7		1.0	0.25	mg/L	1		6010C	Dissolved
Ferrous Iron	0.42	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	110		30	10	mg/L	5		375.4	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Client Sample ID: Hoff-MW-E — Lab Sample ID: 410-27216-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.15	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Chlorobenzene	0.30	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Methyl tertiary butyl ether	0.075	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,1-Dichloroethane	0.24	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
1,1-Dichloroethene	0.069	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
Trichloroethene	0.49	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
1,2-Dichlorobenzene	0.82		0.50	0.060	ug/L	1		8260C LL	Total/NA
1,4-Dioxane	0.86		0.40	0.20	ug/L	1		8260C SIM 14D	Total/NA
Aluminum	1.6		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.013		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	110		0.50	0.096	mg/L	1		6010C	Total/NA
Chromium	0.0092	J	0.015	0.0016	mg/L	1		6010C	Total/NA
Iron	0.98		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	33		0.10	0.040	mg/L	1		6010C	Total/NA
Manganese	0.046		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.0063	J	0.010	0.0021	mg/L	1		6010C	Total/NA
Potassium	3.2		0.50	0.20	mg/L	1		6010C	Total/NA
Sodium	32		1.0	0.24	mg/L	1		6010C	Total/NA
Vanadium	0.0076	J	0.010	0.0019	mg/L	1		6010C	Total/NA
Barium	0.0074		0.0052	0.0010	mg/L	1		6010C	Dissolved
Calcium	110		0.52	0.099	mg/L	1		6010C	Dissolved
Magnesium	32		0.10	0.041	mg/L	1		6010C	Dissolved
Manganese	0.034		0.010	0.0031	mg/L	1		6010C	Dissolved
Potassium	2.7		0.52	0.21	mg/L	1		6010C	Dissolved
Sodium	29		1.0	0.25	mg/L	1		6010C	Dissolved
Vanadium	0.0043	J	0.010	0.0020	mg/L	1		6010C	Dissolved
Ferrous Iron	0.22	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	57		24	8.0	mg/L	4		375.4	Total/NA

Client Sample ID: Hoff-IW-2-A — Lab Sample ID: 410-27216-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	22		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,2-Dichloroethane	0.98		0.50	0.050	ug/L	1		8260C LL	Total/NA
Chlorobenzene	10		0.50	0.060	ug/L	1		8260C LL	Total/NA
1,2,4-Trichlorobenzene	1.4		0.50	0.060	ug/L	1		8260C LL	Total/NA
Dibromochloromethane	0.22	J	0.50	0.070	ug/L	1		8260C LL	Total/NA
Tetrachloroethene	0.16	J	0.50	0.060	ug/L	1		8260C LL	Total/NA
cis-1,2-Dichloroethene	9.4		0.50	0.050	ug/L	1		8260C LL	Total/NA
trans-1,2-Dichloroethene	4.2		0.50	0.060	ug/L	1		8260C LL	Total/NA
Methyl tertiary butyl ether	0.29	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,3-Dichlorobenzene	5.2		0.50	0.060	ug/L	1		8260C LL	Total/NA
Chloroform	1.9		0.50	0.090	ug/L	1		8260C LL	Total/NA
Benzene	0.39	J	0.50	0.050	ug/L	1		8260C LL	Total/NA
1,1,1-Trichloroethane	17		0.50	0.060	ug/L	1		8260C LL	Total/NA
Bromomethane	3.3		0.50	0.070	ug/L	1		8260C LL	Total/NA
Chloromethane	11		0.50	0.060	ug/L	1		8260C LL	Total/NA
Chloroethane	4.6		0.50	0.070	ug/L	1		8260C LL	Total/NA
Vinyl chloride	0.15	J	0.50	0.10	ug/L	1		8260C LL	Total/NA
Methylene Chloride	3.6		0.50	0.070	ug/L	1		8260C LL	Total/NA
Carbon disulfide	0.24	J	1.0	0.060	ug/L	1		8260C LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Hoff-IW-2-A (Continued)
Lab Sample ID: 410-27216-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromodichloromethane	0.67		0.50	0.050	ug/L	1		8260C LL	Total/NA
1,2-Dichloropropane	2.6		0.50	0.060	ug/L	1		8260C LL	Total/NA
1,1,2-Trichloroethane	3.7		0.50	0.060	ug/L	1		8260C LL	Total/NA
Trichloroethene	0.87		0.50	0.060	ug/L	1		8260C LL	Total/NA
1,1,2,2-Tetrachloroethane	1.0		0.50	0.070	ug/L	1		8260C LL	Total/NA
1,1-Dichloroethane - DL	130		5.0	0.70	ug/L	10		8260C LL	Total/NA
2-Butanone - DL	1100	^c	50	6.0	ug/L	10		8260C LL	Total/NA
1,2-Dichlorobenzene - DL	180		5.0	0.60	ug/L	10		8260C LL	Total/NA
Acetone - DL2	5900		500	90	ug/L	100		8260C LL	Total/NA
1,4-Dioxane	11		2.0	1.0	ug/L	5		8260C SIM 14D	Total/NA
Benzo[a]anthracene	0.19	J	0.50	0.099	ug/L	1		8270D	Total/NA
Benzo[a]pyrene	0.29	J	0.50	0.099	ug/L	1		8270D	Total/NA
Benzo[b]fluoranthene	0.32	J	0.50	0.099	ug/L	1		8270D	Total/NA
Benzo[g,h,i]perylene	0.18	J	0.50	0.099	ug/L	1		8270D	Total/NA
Benzo[k]fluoranthene	0.15	J	0.50	0.099	ug/L	1		8270D	Total/NA
Chrysene	0.18	J	0.50	0.099	ug/L	1		8270D	Total/NA
Fluoranthene	0.33	J	0.50	0.099	ug/L	1		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	0.20	J	0.50	0.099	ug/L	1		8270D	Total/NA
Phenanthrene	0.17	J	0.50	0.099	ug/L	1		8270D	Total/NA
Pyrene	0.36	J	0.50	0.099	ug/L	1		8270D	Total/NA
Aluminum	9.7		0.30	0.15	mg/L	1		6010C	Total/NA
Barium	0.24		0.0050	0.0010	mg/L	1		6010C	Total/NA
Calcium	860		2.5	0.48	mg/L	5		6010C	Total/NA
Chromium	0.14		0.015	0.0016	mg/L	1		6010C	Total/NA
Cobalt	0.0061		0.0050	0.0015	mg/L	1		6010C	Total/NA
Copper	0.028		0.020	0.012	mg/L	1		6010C	Total/NA
Iron	11		0.20	0.040	mg/L	1		6010C	Total/NA
Magnesium	680		0.50	0.20	mg/L	5		6010C	Total/NA
Manganese	0.21		0.010	0.0030	mg/L	1		6010C	Total/NA
Nickel	0.036		0.010	0.0021	mg/L	1		6010C	Total/NA
Zinc	0.030		0.020	0.0037	mg/L	1		6010C	Total/NA
Potassium	540		2.5	1.0	mg/L	5		6010C	Total/NA
Sodium	2300		10	2.4	mg/L	10		6010C	Total/NA
Thallium	0.019	J FL	0.030	0.0081	mg/L	1		6010C	Total/NA
Vanadium	0.029		0.010	0.0019	mg/L	1		6010C	Total/NA
Ferrous Iron	0.14	HF	0.10	0.050	mg/L	1		3500 Fe B-2011	Total/NA
Sulfate	3200		600	200	mg/L	100		375.4	Total/NA

Client Sample ID: Hoff-TB-012121
Lab Sample ID: 410-27216-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: Hoff-MW-6
Lab Sample ID: 410-27216-1

Date Collected: 01/21/21 09:30
Matrix: Water
Date Received: 01/21/21 18:26

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/30/21 00:43	10
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/L			01/30/21 00:43	10
Ethylbenzene	**1.4**	**J**	5.0	0.60	ug/L			01/30/21 00:43	10
Styrene	ND		5.0	0.50	ug/L			01/30/21 00:43	10
1,4-Dichlorobenzene	**19**		5.0	0.70	ug/L			01/30/21 00:43	10
1,2-Dibromoethane	ND		5.0	0.60	ug/L			01/30/21 00:43	10
1,2-Dichloroethane	ND		5.0	0.50	ug/L			01/30/21 00:43	10
4-Methyl-2-pentanone	ND	^c	50	7.0	ug/L			01/30/21 00:43	10
Methylcyclohexane	**1.1**	**J**	5.0	0.50	ug/L			01/30/21 00:43	10
Toluene	ND		5.0	0.70	ug/L			01/30/21 00:43	10
Cyclohexane	**0.91**	**J**	5.0	0.50	ug/L			01/30/21 00:43	10
1,2,4-Trichlorobenzene	ND		5.0	0.60	ug/L			01/30/21 00:43	10
Dibromochloromethane	ND		5.0	0.70	ug/L			01/30/21 00:43	10
Xylenes, Total	ND		10	1.5	ug/L			01/30/21 00:43	10
Tetrachloroethene	ND		5.0	0.60	ug/L			01/30/21 00:43	10
cis-1,2-Dichloroethene	ND		5.0	0.50	ug/L			01/30/21 00:43	10
trans-1,2-Dichloroethene	ND		5.0	0.60	ug/L			01/30/21 00:43	10
Methyl tertiary butyl ether	ND		5.0	0.50	ug/L			01/30/21 00:43	10
1,3-Dichlorobenzene	**1.0**	**J**	5.0	0.60	ug/L			01/30/21 00:43	10
Carbon tetrachloride	ND		5.0	0.70	ug/L			01/30/21 00:43	10
2-Hexanone	ND	^c	50	6.0	ug/L			01/30/21 00:43	10
Acetone	ND		50	9.0	ug/L			01/30/21 00:43	10
Chloroform	ND		5.0	0.90	ug/L			01/30/21 00:43	10
Benzene	**2.8**	**J**	5.0	0.50	ug/L			01/30/21 00:43	10
1,1,1-Trichloroethane	ND		5.0	0.60	ug/L			01/30/21 00:43	10
Bromomethane	ND		5.0	0.70	ug/L			01/30/21 00:43	10
Chloromethane	ND		5.0	0.60	ug/L			01/30/21 00:43	10
Chloroethane	ND		5.0	0.70	ug/L			01/30/21 00:43	10
Vinyl chloride	ND		5.0	1.0	ug/L			01/30/21 00:43	10
Methylene Chloride	ND		5.0	0.70	ug/L			01/30/21 00:43	10
Carbon disulfide	ND		10	0.60	ug/L			01/30/21 00:43	10
Bromoform	ND		10	3.0	ug/L			01/30/21 00:43	10
Bromodichloromethane	ND		5.0	0.50	ug/L			01/30/21 00:43	10
1,1-Dichloroethane	ND		5.0	0.70	ug/L			01/30/21 00:43	10
1,1-Dichloroethene	ND		5.0	0.60	ug/L			01/30/21 00:43	10
Trichlorofluoromethane	ND		5.0	0.50	ug/L			01/30/21 00:43	10
Dichlorodifluoromethane	ND		5.0	0.50	ug/L			01/30/21 00:43	10
Freon 113	ND		5.0	0.60	ug/L			01/30/21 00:43	10
1,2-Dichloropropane	ND		5.0	0.60	ug/L			01/30/21 00:43	10
2-Butanone	ND	^c	50	6.0	ug/L			01/30/21 00:43	10
1,1,2-Trichloroethane	ND		5.0	0.60	ug/L			01/30/21 00:43	10
Trichloroethene	ND		5.0	0.60	ug/L			01/30/21 00:43	10
Methyl acetate	ND	^c	10	1.0	ug/L			01/30/21 00:43	10
1,1,2,2-Tetrachloroethane	ND		5.0	0.70	ug/L			01/30/21 00:43	10
1,2-Dichlorobenzene	**3.1**	**J**	5.0	0.60	ug/L			01/30/21 00:43	10
1,2-Dibromo-3-Chloropropane	ND		5.0	1.0	ug/L			01/30/21 00:43	10
Isopropylbenzene	ND		5.0	0.50	ug/L			01/30/21 00:43	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*01/30/21 00:43*	*10*

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Lab Sample ID: 410-27216-1

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*01/30/21 00:43*	*10*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*01/30/21 00:43*	*10*
Toluene-d8 (Surr)	*98*		*80 - 120*		*01/30/21 00:43*	*10*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**480**		50	6.0	ug/L			01/30/21 01:04	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*01/30/21 01:04*	*100*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*01/30/21 01:04*	*100*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*01/30/21 01:04*	*100*
Toluene-d8 (Surr)	*98*		*80 - 120*		*01/30/21 01:04*	*100*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.40**	**J**	0.80	0.40	ug/L			02/02/21 15:41	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/02/21 15:41*	*2*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.1	ug/L		01/28/21 22:52	01/29/21 21:54	1
2,4-Dichlorophenol	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
2,4-Dimethylphenol	ND		10	3.1	ug/L		01/28/21 22:52	01/29/21 21:54	1
2,4-Dinitrophenol	ND		31	15	ug/L		01/28/21 22:52	01/29/21 21:54	1
2,4-Dinitrotoluene	ND		5.2	1.0	ug/L		01/28/21 22:52	01/29/21 21:54	1
2,4,5-Trichlorophenol	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
2,4,6-Trichlorophenol	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
2,2'-oxybis[1-chloropropane]	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
Di-n-butyl phthalate	ND		5.2	2.1	ug/L		01/28/21 22:52	01/29/21 21:54	1
Di-n-octyl phthalate	ND		11	5.2	ug/L		01/28/21 22:52	01/29/21 21:54	1
Benzo[a]anthracene	**1.5**		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Benzo[a]pyrene	**1.9**		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Benzo[b]fluoranthene	**1.8**		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Benzo[g,h,i]perylene	**1.2**		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Benzo[k]fluoranthene	**0.79**		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Acenaphthene	**2.2**		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Acenaphthylene	ND		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Acetophenone	ND		10	4.2	ug/L		01/28/21 22:52	01/29/21 21:54	1
Anthracene	ND		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Atrazine	ND		5.2	2.1	ug/L		01/28/21 22:52	01/29/21 21:54	1
Benzaldehyde	ND		10	3.1	ug/L		01/28/21 22:52	01/29/21 21:54	1
Butylbenzylphthalate	ND		5.2	2.1	ug/L		01/28/21 22:52	01/29/21 21:54	1
Caprolactam	ND		11	5.2	ug/L		01/28/21 22:52	01/29/21 21:54	1
Carbazole	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
Chrysene	**1.5**		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Dibenz(a,h)anthracene	**0.30**	**J**	0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Dibenzofuran	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1

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Lab Sample ID: 410-27216-1

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	ND		5.2	2.1	ug/L		01/28/21 22:52	01/29/21 21:54	1
Dimethyl phthalate	ND		5.2	2.1	ug/L		01/28/21 22:52	01/29/21 21:54	1
Hexachlorobenzene	ND		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Hexachlorobutadiene	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
Hexachlorocyclopentadiene	ND		11	5.2	ug/L		01/28/21 22:52	01/29/21 21:54	1
Hexachloroethane	ND		5.2	1.0	ug/L		01/28/21 22:52	01/29/21 21:54	1
Fluoranthene	**2.2**		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Fluorene	**1.6**		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Indeno[1,2,3-cd]pyrene	**1.4**		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Isophorone	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
N-Nitrosodi-n-propylamine	ND		3.1	0.73	ug/L		01/28/21 22:52	01/29/21 21:54	1
N-Nitrosodiphenylamine	ND		3.1	0.73	ug/L		01/28/21 22:52	01/29/21 21:54	1
Naphthalene	ND		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Nitrobenzene	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
Pentachlorophenol	ND		5.2	1.0	ug/L		01/28/21 22:52	01/29/21 21:54	1
Phenanthrene	**0.87**		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Phenol	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
Pyrene	**2.5**		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
2-Chloronaphthalene	ND		1.0	0.42	ug/L		01/28/21 22:52	01/29/21 21:54	1
2-Chlorophenol	**1.2**	**J**	2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
2-Methylnaphthalene	ND		0.52	0.10	ug/L		01/28/21 22:52	01/29/21 21:54	1
2-Methylphenol	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
2-Nitroaniline	ND		5.2	2.1	ug/L		01/28/21 22:52	01/29/21 21:54	1
2-Nitrophenol	ND		10	3.1	ug/L		01/28/21 22:52	01/29/21 21:54	1
3,3'-Dichlorobenzidine	ND		10	3.1	ug/L		01/28/21 22:52	01/29/21 21:54	1
3-Nitroaniline	ND		7.3	3.1	ug/L		01/28/21 22:52	01/29/21 21:54	1
4,6-Dinitro-2-methylphenol	ND		22	8.3	ug/L		01/28/21 22:52	01/29/21 21:54	1
4-Bromophenyl-phenylether	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
4-Methylphenol	**1.8**	**J**	2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
4-Nitroaniline	ND		3.1	0.94	ug/L		01/28/21 22:52	01/29/21 21:54	1
4-Nitrophenol	ND		31	10	ug/L		01/28/21 22:52	01/29/21 21:54	1
Bis(2-chloroethoxy)methane	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
Bis(2-chloroethyl)ether	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
Bis(2-ethylhexyl) phthalate	ND		11	5.2	ug/L		01/28/21 22:52	01/29/21 21:54	1
2,6-Dinitrotoluene	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1
4-Chloro-3-methylphenol	ND		3.6	1.7	ug/L		01/28/21 22:52	01/29/21 21:54	1
4-Chloroaniline	ND	*-	10	4.2	ug/L		01/28/21 22:52	01/29/21 21:54	1
4-Chlorophenyl-phenyl ether	ND		2.1	0.52	ug/L		01/28/21 22:52	01/29/21 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*94*		*10 - 150*	*01/28/21 22:52*	*01/29/21 21:54*	*1*
2-Fluorobiphenyl (Surr)	*65*		*44 - 102*	*01/28/21 22:52*	*01/29/21 21:54*	*1*
2-Fluorophenol (Surr)	*36*		*10 - 84*	*01/28/21 22:52*	*01/29/21 21:54*	*1*
Nitrobenzene-d5 (Surr)	*62*		*23 - 128*	*01/28/21 22:52*	*01/29/21 21:54*	*1*
p-Terphenyl-d14 (Surr)	*82*		*31 - 113*	*01/28/21 22:52*	*01/29/21 21:54*	*1*
Phenol-d5 (Surr)	*31*		*10 - 67*	*01/28/21 22:52*	*01/29/21 21:54*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND	*-	0.10	0.010	ug/L		01/26/21 08:02	01/27/21 09:12	5

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Lab Sample ID: 410-27216-1

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC (1C)	ND		0.10	0.016	ug/L		01/26/21 08:02	01/27/21 09:12	5
alpha-Chlordane (1C)	ND		0.10	0.016	ug/L		01/26/21 08:02	01/27/21 09:12	5
beta-BHC (2C)	ND		0.10	0.018	ug/L		01/26/21 08:02	01/27/21 09:12	5
delta-BHC (1C)	ND		0.10	0.018	ug/L		01/26/21 08:02	01/27/21 09:12	5
Dieldrin (1C)	ND		0.16	0.027	ug/L		01/26/21 08:02	01/27/21 09:12	5
Endosulfan I (1C)	ND		0.10	0.022	ug/L		01/26/21 08:02	01/27/21 09:12	5
Endosulfan II (1C)	ND		0.21	0.078	ug/L		01/26/21 08:02	01/27/21 09:12	5
Endosulfan sulfate (1C)	ND		0.16	0.030	ug/L		01/26/21 08:02	01/27/21 09:12	5
Endrin (1C)	ND		0.16	0.042	ug/L		01/26/21 08:02	01/27/21 09:12	5
Endrin aldehyde (1C)	ND		0.52	0.10	ug/L		01/26/21 08:02	01/27/21 09:12	5
Endrin ketone (1C)	ND		0.16	0.026	ug/L		01/26/21 08:02	01/27/21 09:12	5
gamma-BHC (Lindane) (1C)	ND		0.10	0.010	ug/L		01/26/21 08:02	01/27/21 09:12	5
gamma-Chlordane (1C)	ND	*-	0.21	0.036	ug/L		01/26/21 08:02	01/27/21 09:12	5
Heptachlor (1C)	ND	*-	0.10	0.010	ug/L		01/26/21 08:02	01/27/21 09:12	5
Heptachlor epoxide (1C)	ND		0.10	0.012	ug/L		01/26/21 08:02	01/27/21 09:12	5
Methoxychlor (1C)	ND		0.57	0.16	ug/L		01/26/21 08:02	01/27/21 09:12	5
Toxaphene (1C)	ND		5.2	1.6	ug/L		01/26/21 08:02	01/27/21 09:12	5
p,p'-DDD (1C)	ND		0.16	0.026	ug/L		01/26/21 08:02	01/27/21 09:12	5
p,p'-DDE (1C)	ND		0.16	0.026	ug/L		01/26/21 08:02	01/27/21 09:12	5
p,p'-DDT (1C)	ND		0.16	0.027	ug/L		01/26/21 08:02	01/27/21 09:12	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*48*		*32 - 149*	*01/26/21 08:02*	*01/27/21 09:12*	*5*
DCB Decachlorobiphenyl (Surr) (2C)	*42*		*32 - 149*	*01/26/21 08:02*	*01/27/21 09:12*	*5*
Tetrachloro-m-xylene (Surr) (1C)	*39*		*29 - 129*	*01/26/21 08:02*	*01/27/21 09:12*	*5*
Tetrachloro-m-xylene (Surr) (2C)	*34*		*29 - 129*	*01/26/21 08:02*	*01/27/21 09:12*	*5*

Method: 8081B - Organochlorine Pesticides (GC) - RE

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*34*		*32 - 149*	*02/04/21 16:00*	*02/05/21 06:44*	*5*
DCB Decachlorobiphenyl (Surr) (2C)	*48*		*32 - 149*	*02/04/21 16:00*	*02/05/21 06:44*	*5*
Tetrachloro-m-xylene (Surr) (1C)	*69*		*29 - 129*	*02/04/21 16:00*	*02/05/21 06:44*	*5*
Tetrachloro-m-xylene (Surr) (2C)	*75*		*29 - 129*	*02/04/21 16:00*	*02/05/21 06:44*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 05:56	1
Aluminum	**0.94**		0.30	0.15	mg/L		01/25/21 03:07	01/27/21 05:56	1
Antimony	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 05:56	1
Barium	**0.078**		0.0050	0.0010	mg/L		01/25/21 03:07	01/27/21 05:56	1
Beryllium	ND		0.0050	0.0010	mg/L		01/25/21 03:07	01/31/21 15:01	1
Cadmium	ND		0.0050	0.0010	mg/L		01/25/21 03:07	01/27/21 05:56	1
Calcium	**76**		0.50	0.096	mg/L		02/02/21 02:53	02/02/21 21:30	1
Chromium	**0.0036**	**J**	0.015	0.0016	mg/L		01/25/21 03:07	01/27/21 05:56	1
Cobalt	**0.0017**	**J**	0.0050	0.0015	mg/L		01/25/21 03:07	01/27/21 05:56	1
Copper	ND		0.020	0.012	mg/L		01/25/21 03:07	01/31/21 15:01	1
Iron	**3.1**		0.20	0.040	mg/L		01/25/21 03:07	01/27/21 05:56	1
Lead	ND		0.015	0.0071	mg/L		01/25/21 03:07	01/27/21 05:56	1
Magnesium	**17**		0.10	0.040	mg/L		02/02/21 02:53	02/02/21 21:30	1
Manganese	**0.80**		0.010	0.0030	mg/L		01/25/21 03:07	01/27/21 05:56	1

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Client Sample ID: Hoff-MW-6

Date Collected: 01/21/21 09:30
Date Received: 01/21/21 18:26

Lab Sample ID: 410-27216-1

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.0048**	**J**	0.010	0.0021	mg/L		01/25/21 03:07	01/27/21 05:56	1
Zinc	**0.19**		0.020	0.0037	mg/L		01/25/21 03:07	01/27/21 05:56	1
Silver	ND		0.010	0.0050	mg/L		01/25/21 03:07	01/27/21 05:56	1
Selenium	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 05:56	1
Potassium	**7.5**		0.50	0.20	mg/L		01/25/21 03:07	01/31/21 15:01	1
Sodium	**12**		1.0	0.24	mg/L		02/02/21 02:53	02/02/21 21:30	1
Thallium	ND		0.030	0.0081	mg/L		01/25/21 03:07	01/27/21 05:56	1
Vanadium	**0.0055**	**J**	0.010	0.0019	mg/L		01/25/21 03:07	01/27/21 05:56	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/25/21 05:28	01/25/21 10:32	1
Aluminum	ND		0.31	0.16	mg/L		01/25/21 05:28	01/25/21 10:32	1
Antimony	ND		0.052	0.016	mg/L		01/25/21 05:28	01/25/21 10:32	1
Barium	**0.038**		0.0052	0.0010	mg/L		01/25/21 05:28	01/25/21 10:32	1
Beryllium	ND		0.0052	0.0010	mg/L		01/25/21 05:28	01/25/21 10:32	1
Cadmium	ND		0.0052	0.0010	mg/L		01/25/21 05:28	01/25/21 10:32	1
Calcium	**73**		0.52	0.099	mg/L		01/25/21 05:28	01/25/21 10:32	1
Chromium	ND		0.015	0.0016	mg/L		01/25/21 05:28	01/25/21 10:32	1
Cobalt	ND		0.0052	0.0015	mg/L		01/25/21 05:28	01/25/21 10:32	1
Copper	ND		0.021	0.012	mg/L		01/25/21 05:28	01/25/21 10:32	1
Iron	**0.46**		0.21	0.041	mg/L		01/25/21 05:28	01/25/21 10:32	1
Lead	ND		0.015	0.0073	mg/L		01/25/21 05:28	01/25/21 10:32	1
Magnesium	**15**		0.10	0.041	mg/L		01/25/21 05:28	01/25/21 10:32	1
Manganese	**0.79**		0.010	0.0031	mg/L		01/25/21 05:28	01/25/21 10:32	1
Nickel	ND		0.010	0.0022	mg/L		01/25/21 05:28	01/25/21 10:32	1
Zinc	ND		0.021	0.0038	mg/L		01/25/21 05:28	01/25/21 10:32	1
Silver	ND		0.010	0.0052	mg/L		01/25/21 05:28	01/25/21 10:32	1
Selenium	**0.081**		0.052	0.016	mg/L		01/25/21 05:28	01/25/21 10:32	1
Potassium	**6.8**		0.52	0.21	mg/L		01/25/21 05:28	01/25/21 10:32	1
Sodium	**11**		1.0	0.25	mg/L		01/25/21 05:28	01/25/21 10:32	1
Thallium	ND		0.031	0.0083	mg/L		01/25/21 05:28	01/25/21 10:32	1
Vanadium	ND		0.010	0.0020	mg/L		01/25/21 05:28	01/25/21 10:32	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/25/21 04:20	01/26/21 15:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/25/21 16:40	01/26/21 17:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	**2.9**	**HF FL F2**	0.50	0.25	mg/L			01/26/21 13:47	5
Sulfate	**16**		6.0	2.0	mg/L			01/28/21 09:47	1

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Client Sample ID: Hoff-MW-10

Date Collected: 01/21/21 10:35
Date Received: 01/21/21 18:26

Lab Sample ID: 410-27216-2

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/30/21 01:26	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/30/21 01:26	1
Ethylbenzene	**0.47**	**J**	0.50	0.060	ug/L			01/30/21 01:26	1
Styrene	ND		0.50	0.050	ug/L			01/30/21 01:26	1
1,4-Dichlorobenzene	**21**		0.50	0.070	ug/L			01/30/21 01:26	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/30/21 01:26	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/30/21 01:26	1
4-Methyl-2-pentanone	ND	^c	5.0	0.70	ug/L			01/30/21 01:26	1
Methylcyclohexane	**0.12**	**J**	0.50	0.050	ug/L			01/30/21 01:26	1
Toluene	**0.12**	**J**	0.50	0.070	ug/L			01/30/21 01:26	1
Cyclohexane	**0.18**	**J**	0.50	0.050	ug/L			01/30/21 01:26	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/30/21 01:26	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/30/21 01:26	1
Xylenes, Total	**0.42**	**J**	1.0	0.15	ug/L			01/30/21 01:26	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/30/21 01:26	1
cis-1,2-Dichloroethene	**6.8**		0.50	0.050	ug/L			01/30/21 01:26	1
trans-1,2-Dichloroethene	**0.28**	**J**	0.50	0.060	ug/L			01/30/21 01:26	1
Methyl tertiary butyl ether	**0.055**	**J**	0.50	0.050	ug/L			01/30/21 01:26	1
1,3-Dichlorobenzene	**1.5**		0.50	0.060	ug/L			01/30/21 01:26	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/30/21 01:26	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			01/30/21 01:26	1
Acetone	**3.6**	**J**	5.0	0.90	ug/L			01/30/21 01:26	1
Chloroform	ND		0.50	0.090	ug/L			01/30/21 01:26	1
Benzene	**3.8**		0.50	0.050	ug/L			01/30/21 01:26	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/30/21 01:26	1
Bromomethane	ND		0.50	0.070	ug/L			01/30/21 01:26	1
Chloromethane	**0.21**	**J**	0.50	0.060	ug/L			01/30/21 01:26	1
Chloroethane	**0.49**	**J**	0.50	0.070	ug/L			01/30/21 01:26	1
Vinyl chloride	**4.4**		0.50	0.10	ug/L			01/30/21 01:26	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/30/21 01:26	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/30/21 01:26	1
Bromoform	ND		1.0	0.30	ug/L			01/30/21 01:26	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/30/21 01:26	1
1,1-Dichloroethane	**2.3**		0.50	0.070	ug/L			01/30/21 01:26	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/30/21 01:26	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/30/21 01:26	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/30/21 01:26	1
Freon 113	ND		0.50	0.060	ug/L			01/30/21 01:26	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/30/21 01:26	1
2-Butanone	ND	^c	5.0	0.60	ug/L			01/30/21 01:26	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/30/21 01:26	1
Trichloroethene	ND		0.50	0.060	ug/L			01/30/21 01:26	1
Methyl acetate	ND	^c	1.0	0.10	ug/L			01/30/21 01:26	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/30/21 01:26	1
1,2-Dichlorobenzene	**3.0**		0.50	0.060	ug/L			01/30/21 01:26	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/30/21 01:26	1
Isopropylbenzene	**0.33**	**J**	0.50	0.050	ug/L			01/30/21 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*01/30/21 01:26*	*1*

Client Sample ID: Hoff-MW-10

Date Collected: 01/21/21 10:35
Date Received: 01/21/21 18:26

Lab Sample ID: 410-27216-2

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*01/30/21 01:26*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/30/21 01:26*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*01/30/21 01:26*	*1*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**480**		50	6.0	ug/L			02/04/21 10:59	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*02/04/21 10:59*	*100*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*02/04/21 10:59*	*100*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*02/04/21 10:59*	*100*
Toluene-d8 (Surr)	*99*		*80 - 120*		*02/04/21 10:59*	*100*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**		0.40	0.20	ug/L			01/28/21 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*01/28/21 13:54*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
2,4-Dichlorophenol	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
2,4-Dimethylphenol	ND		10	3.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
2,4-Dinitrophenol	ND	^c	31	14	ug/L		01/28/21 22:52	01/31/21 22:47	1
2,4-Dinitrotoluene	ND		5.1	1.0	ug/L		01/28/21 22:52	01/31/21 22:47	1
2,4,5-Trichlorophenol	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
2,4,6-Trichlorophenol	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
2,2'-oxybis[1-chloropropane]	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
Di-n-butyl phthalate	ND		5.1	2.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
Di-n-octyl phthalate	ND		11	5.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
Benzo[a]anthracene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Benzo[a]pyrene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Benzo[b]fluoranthene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Benzo[g,h,i]perylene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Benzo[k]fluoranthene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Acenaphthene	**0.18**	**J**	0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Acenaphthylene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Acetophenone	ND		10	4.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
Anthracene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Atrazine	ND		5.1	2.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
Benzaldehyde	ND	^c	10	3.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
Butylbenzylphthalate	ND		5.1	2.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
Caprolactam	ND		11	5.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
Carbazole	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
Chrysene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Dibenz(a,h)anthracene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Dibenzofuran	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1

Client Sample ID: Hoff-MW-10

Date Collected: 01/21/21 10:35
Date Received: 01/21/21 18:26

Lab Sample ID: 410-27216-2

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	ND		5.1	2.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
Dimethyl phthalate	ND		5.1	2.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
Hexachlorobenzene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Hexachlorobutadiene	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
Hexachlorocyclopentadiene	ND		11	5.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
Hexachloroethane	ND		5.1	1.0	ug/L		01/28/21 22:52	01/31/21 22:47	1
Fluoranthene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Fluorene	**0.16**	**J**	0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Indeno[1,2,3-cd]pyrene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Isophorone	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
N-Nitrosodi-n-propylamine	ND		3.1	0.72	ug/L		01/28/21 22:52	01/31/21 22:47	1
N-Nitrosodiphenylamine	ND		3.1	0.72	ug/L		01/28/21 22:52	01/31/21 22:47	1
Naphthalene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Nitrobenzene	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
Pentachlorophenol	ND		5.1	1.0	ug/L		01/28/21 22:52	01/31/21 22:47	1
Phenanthrene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Phenol	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
Pyrene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
2-Chloronaphthalene	ND		1.0	0.41	ug/L		01/28/21 22:52	01/31/21 22:47	1
2-Chlorophenol	**4.1**		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
2-Methylnaphthalene	ND		0.51	0.10	ug/L		01/28/21 22:52	01/31/21 22:47	1
2-Methylphenol	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
2-Nitroaniline	ND		5.1	2.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
2-Nitrophenol	ND		10	3.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
3,3'-Dichlorobenzidine	ND		10	3.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
3-Nitroaniline	ND		7.2	3.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
4,6-Dinitro-2-methylphenol	ND		22	8.2	ug/L		01/28/21 22:52	01/31/21 22:47	1
4-Bromophenyl-phenylether	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
4-Methylphenol	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
4-Nitroaniline	ND		3.1	0.93	ug/L		01/28/21 22:52	01/31/21 22:47	1
4-Nitrophenol	ND		31	10	ug/L		01/28/21 22:52	01/31/21 22:47	1
Bis(2-chloroethoxy)methane	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
Bis(2-chloroethyl)ether	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
Bis(2-ethylhexyl) phthalate	ND		11	5.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
2,6-Dinitrotoluene	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1
4-Chloro-3-methylphenol	ND		3.6	1.6	ug/L		01/28/21 22:52	01/31/21 22:47	1
4-Chloroaniline	ND	*-	10	4.1	ug/L		01/28/21 22:52	01/31/21 22:47	1
4-Chlorophenyl-phenyl ether	ND		2.1	0.51	ug/L		01/28/21 22:52	01/31/21 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*10 - 150*	*01/28/21 22:52*	*01/31/21 22:47*	*1*
2-Fluorobiphenyl (Surr)	*66*		*44 - 102*	*01/28/21 22:52*	*01/31/21 22:47*	*1*
2-Fluorophenol (Surr)	*32*		*10 - 84*	*01/28/21 22:52*	*01/31/21 22:47*	*1*
Nitrobenzene-d5 (Surr)	*68*		*23 - 128*	*01/28/21 22:52*	*01/31/21 22:47*	*1*
p-Terphenyl-d14 (Surr)	*80*		*31 - 113*	*01/28/21 22:52*	*01/31/21 22:47*	*1*
Phenol-d5 (Surr)	*25*		*10 - 67*	*01/28/21 22:52*	*01/31/21 22:47*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND	*-	0.020	0.0020	ug/L		01/26/21 08:02	01/27/21 09:23	1

Client Sample ID: Hoff-MW-10

Date Collected: 01/21/21 10:35
Date Received: 01/21/21 18:26

Lab Sample ID: 410-27216-2

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		01/26/21 08:02	01/27/21 09:23	1
alpha-Chlordane (2C)	ND		0.020	0.0030	ug/L		01/26/21 08:02	01/27/21 09:23	1
beta-BHC (2C)	**0.0048**	**J p**	0.020	0.0034	ug/L		01/26/21 08:02	01/27/21 09:23	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		01/26/21 08:02	01/27/21 09:23	1
Dieldrin (2C)	ND		0.030	0.0053	ug/L		01/26/21 08:02	01/27/21 09:23	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		01/26/21 08:02	01/27/21 09:23	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		01/26/21 08:02	01/27/21 09:23	1
Endosulfan sulfate (1C)	ND		0.030	0.0058	ug/L		01/26/21 08:02	01/27/21 09:23	1
Endrin (1C)	ND		0.030	0.0082	ug/L		01/26/21 08:02	01/27/21 09:23	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		01/26/21 08:02	01/27/21 09:23	1
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		01/26/21 08:02	01/27/21 09:23	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		01/26/21 08:02	01/27/21 09:23	1
gamma-Chlordane (1C)	ND	*-	0.040	0.0070	ug/L		01/26/21 08:02	01/27/21 09:23	1
Heptachlor (1C)	ND	*-	0.020	0.0020	ug/L		01/26/21 08:02	01/27/21 09:23	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		01/26/21 08:02	01/27/21 09:23	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		01/26/21 08:02	01/27/21 09:23	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		01/26/21 08:02	01/27/21 09:23	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		01/26/21 08:02	01/27/21 09:23	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		01/26/21 08:02	01/27/21 09:23	1
p,p'-DDT (1C)	ND		0.030	0.0052	ug/L		01/26/21 08:02	01/27/21 09:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*60*		*32 - 149*	*01/26/21 08:02*	*01/27/21 09:23*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*66*		*32 - 149*	*01/26/21 08:02*	*01/27/21 09:23*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*38*		*29 - 129*	*01/26/21 08:02*	*01/27/21 09:23*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*35*		*29 - 129*	*01/26/21 08:02*	*01/27/21 09:23*	*1*

Method: 8081B - Organochlorine Pesticides (GC) - RE

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*70*		*32 - 149*	*02/04/21 16:00*	*02/05/21 06:57*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*71*		*32 - 149*	*02/04/21 16:00*	*02/05/21 06:57*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*56*		*29 - 129*	*02/04/21 16:00*	*02/05/21 06:57*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*59*		*29 - 129*	*02/04/21 16:00*	*02/05/21 06:57*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 06:05	1
Aluminum	**1.7**		0.30	0.15	mg/L		01/25/21 03:07	01/27/21 06:05	1
Antimony	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 06:05	1
Barium	**0.054**		0.0050	0.0010	mg/L		01/25/21 03:07	01/27/21 06:05	1
Beryllium	ND		0.0050	0.0010	mg/L		01/25/21 03:07	01/31/21 15:04	1
Cadmium	ND		0.0050	0.0010	mg/L		01/25/21 03:07	01/27/21 06:05	1
Calcium	**100**		0.50	0.096	mg/L		02/02/21 02:53	02/02/21 21:27	1
Chromium	**0.0040**	**J**	0.015	0.0016	mg/L		01/25/21 03:07	01/27/21 06:05	1
Cobalt	**0.0015**	**J**	0.0050	0.0015	mg/L		01/25/21 03:07	01/27/21 06:05	1
Copper	ND		0.020	0.012	mg/L		01/25/21 03:07	01/31/21 15:04	1
Iron	**1.9**		0.20	0.040	mg/L		01/25/21 03:07	01/27/21 06:05	1
Lead	ND		0.015	0.0071	mg/L		01/25/21 03:07	01/27/21 06:05	1
Magnesium	**23**		0.10	0.040	mg/L		02/02/21 02:53	02/02/21 21:27	1
Manganese	**0.96**		0.010	0.0030	mg/L		01/25/21 03:07	01/27/21 06:05	1

Client Sample ID: Hoff-MW-10

Date Collected: 01/21/21 10:35
Date Received: 01/21/21 18:26

Lab Sample ID: 410-27216-2

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.0043	J	0.010	0.0021	mg/L		01/25/21 03:07	01/27/21 06:05	1
Zinc	0.53		0.020	0.0037	mg/L		01/25/21 03:07	01/27/21 06:05	1
Silver	ND		0.010	0.0050	mg/L		01/25/21 03:07	01/27/21 06:05	1
Selenium	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 06:05	1
Potassium	4.5		0.50	0.20	mg/L		01/25/21 03:07	01/31/21 15:04	1
Sodium	9.9		1.0	0.24	mg/L		02/02/21 02:53	02/02/21 21:27	1
Thallium	ND		0.030	0.0081	mg/L		01/25/21 03:07	01/27/21 06:05	1
Vanadium	0.0040	J	0.010	0.0019	mg/L		01/25/21 03:07	01/27/21 06:05	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/25/21 05:28	01/25/21 10:35	1
Aluminum	ND		0.31	0.16	mg/L		01/25/21 05:28	01/25/21 10:35	1
Antimony	ND		0.052	0.016	mg/L		01/25/21 05:28	01/25/21 10:35	1
Barium	0.044		0.0052	0.0010	mg/L		01/25/21 05:28	01/25/21 10:35	1
Beryllium	ND		0.0052	0.0010	mg/L		01/25/21 05:28	01/25/21 10:35	1
Cadmium	ND		0.0052	0.0010	mg/L		01/25/21 05:28	01/25/21 10:35	1
Calcium	110		0.52	0.099	mg/L		01/25/21 05:28	01/25/21 10:35	1
Chromium	ND		0.015	0.0016	mg/L		01/25/21 05:28	01/25/21 10:35	1
Cobalt	ND		0.0052	0.0015	mg/L		01/25/21 05:28	01/25/21 10:35	1
Copper	ND		0.021	0.012	mg/L		01/25/21 05:28	01/25/21 10:35	1
Iron	0.41		0.21	0.041	mg/L		01/25/21 05:28	01/25/21 10:35	1
Lead	ND		0.015	0.0073	mg/L		01/25/21 05:28	01/25/21 10:35	1
Magnesium	24		0.10	0.041	mg/L		01/25/21 05:28	01/25/21 10:35	1
Manganese	0.97		0.010	0.0031	mg/L		01/25/21 05:28	01/25/21 10:35	1
Nickel	ND		0.010	0.0022	mg/L		01/25/21 05:28	01/25/21 10:35	1
Zinc	0.19		0.021	0.0038	mg/L		01/25/21 05:28	01/25/21 10:35	1
Silver	ND		0.010	0.0052	mg/L		01/25/21 05:28	01/25/21 10:35	1
Selenium	ND		0.052	0.016	mg/L		01/25/21 05:28	01/25/21 10:35	1
Potassium	4.2		0.52	0.21	mg/L		01/25/21 05:28	01/25/21 10:35	1
Sodium	9.7		1.0	0.25	mg/L		01/25/21 05:28	01/25/21 10:35	1
Thallium	ND		0.031	0.0083	mg/L		01/25/21 05:28	01/25/21 10:35	1
Vanadium	ND		0.010	0.0020	mg/L		01/25/21 05:28	01/25/21 10:35	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/25/21 04:20	01/26/21 15:32	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/25/21 16:40	01/26/21 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	0.42	HF	0.10	0.050	mg/L			01/26/21 12:55	1
Sulfate	110		30	10	mg/L			01/28/21 09:47	5

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Client Sample ID: Hoff-MW-E

Date Collected: 01/21/21 11:55
Date Received: 01/21/21 18:26

Lab Sample ID: 410-27216-3

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/29/21 22:55	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/29/21 22:55	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/29/21 22:55	1
Styrene	ND		0.50	0.050	ug/L			01/29/21 22:55	1
1,4-Dichlorobenzene	**0.15**	**J**	0.50	0.070	ug/L			01/29/21 22:55	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/29/21 22:55	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/29/21 22:55	1
4-Methyl-2-pentanone	ND	^c	5.0	0.70	ug/L			01/29/21 22:55	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/29/21 22:55	1
Toluene	ND		0.50	0.070	ug/L			01/29/21 22:55	1
Chlorobenzene	**0.30**	**J**	0.50	0.060	ug/L			01/29/21 22:55	1
Cyclohexane	ND		0.50	0.050	ug/L			01/29/21 22:55	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/29/21 22:55	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/29/21 22:55	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/29/21 22:55	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/29/21 22:55	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/29/21 22:55	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/29/21 22:55	1
Methyl tertiary butyl ether	**0.075**	**J**	0.50	0.050	ug/L			01/29/21 22:55	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/29/21 22:55	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/29/21 22:55	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			01/29/21 22:55	1
Acetone	ND		5.0	0.90	ug/L			01/29/21 22:55	1
Chloroform	ND		0.50	0.090	ug/L			01/29/21 22:55	1
Benzene	ND		0.50	0.050	ug/L			01/29/21 22:55	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/29/21 22:55	1
Bromomethane	ND		0.50	0.070	ug/L			01/29/21 22:55	1
Chloromethane	ND		0.50	0.060	ug/L			01/29/21 22:55	1
Chloroethane	ND		0.50	0.070	ug/L			01/29/21 22:55	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/29/21 22:55	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/29/21 22:55	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/29/21 22:55	1
Bromoform	ND		1.0	0.30	ug/L			01/29/21 22:55	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/29/21 22:55	1
1,1-Dichloroethane	**0.24**	**J**	0.50	0.070	ug/L			01/29/21 22:55	1
1,1-Dichloroethene	**0.069**	**J**	0.50	0.060	ug/L			01/29/21 22:55	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/29/21 22:55	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/29/21 22:55	1
Freon 113	ND		0.50	0.060	ug/L			01/29/21 22:55	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/29/21 22:55	1
2-Butanone	ND	^c	5.0	0.60	ug/L			01/29/21 22:55	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/29/21 22:55	1
Trichloroethene	**0.49**	**J**	0.50	0.060	ug/L			01/29/21 22:55	1
Methyl acetate	ND	^c	1.0	0.10	ug/L			01/29/21 22:55	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/29/21 22:55	1
1,2-Dichlorobenzene	**0.82**		0.50	0.060	ug/L			01/29/21 22:55	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/29/21 22:55	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/29/21 22:55	1

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Client Sample ID: Hoff-MW-E

Date Collected: 01/21/21 11:55
Date Received: 01/21/21 18:26

Lab Sample ID: 410-27216-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*01/29/21 22:55*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*01/29/21 22:55*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*01/29/21 22:55*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*01/29/21 22:55*	*1*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.86**		0.40	0.20	ug/L			01/28/21 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*01/28/21 14:14*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
2,4-Dinitrophenol	ND	^c	30	14	ug/L		01/28/21 22:52	01/31/21 23:16	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Benzo[a]pyrene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Acenaphthene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Acenaphthylene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Acetophenone	ND		10	4.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
Anthracene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Atrazine	ND		5.0	2.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
Benzaldehyde	ND	^c	10	3.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
Caprolactam	ND		11	5.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
Carbazole	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
Chrysene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Dibenzofuran	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
Diethyl phthalate	ND		5.0	2.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
Hexachlorocyclopentadiene	ND		11	5.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
Hexachloroethane	ND		5.0	1.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
Fluoranthene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Fluorene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Isophorone	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1

Client Sample ID: Hoff-MW-E
Lab Sample ID: 410-27216-3

Date Collected: 01/21/21 11:55
Matrix: Water

Date Received: 01/21/21 18:26

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		01/28/21 22:52	01/31/21 23:16	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		01/28/21 22:52	01/31/21 23:16	1
Naphthalene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Nitrobenzene	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
Pentachlorophenol	ND		5.0	1.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
Phenanthrene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Phenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
Pyrene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		01/28/21 22:52	01/31/21 23:16	1
2-Chlorophenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/31/21 23:16	1
2-Methylphenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
2-Nitroaniline	ND		5.0	2.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
2-Nitrophenol	ND		10	3.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
3-Nitroaniline	ND		7.0	3.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
4,6-Dinitro-2-methylphenol	ND		21	8.1	ug/L		01/28/21 22:52	01/31/21 23:16	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
4-Methylphenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
4-Nitroaniline	ND		3.0	0.91	ug/L		01/28/21 22:52	01/31/21 23:16	1
4-Nitrophenol	ND		30	10	ug/L		01/28/21 22:52	01/31/21 23:16	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		01/28/21 22:52	01/31/21 23:16	1
4-Chloroaniline	ND	*-	10	4.0	ug/L		01/28/21 22:52	01/31/21 23:16	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*10 - 150*	*01/28/21 22:52*	*01/31/21 23:16*	*1*
2-Fluorobiphenyl (Surr)	*76*		*44 - 102*	*01/28/21 22:52*	*01/31/21 23:16*	*1*
2-Fluorophenol (Surr)	*49*		*10 - 84*	*01/28/21 22:52*	*01/31/21 23:16*	*1*
Nitrobenzene-d5 (Surr)	*78*		*23 - 128*	*01/28/21 22:52*	*01/31/21 23:16*	*1*
p-Terphenyl-d14 (Surr)	*81*		*31 - 113*	*01/28/21 22:52*	*01/31/21 23:16*	*1*
Phenol-d5 (Surr)	*36*		*10 - 67*	*01/28/21 22:52*	*01/31/21 23:16*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND	*-	0.020	0.0020	ug/L		01/26/21 08:02	01/27/21 09:34	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		01/26/21 08:02	01/27/21 09:34	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		01/26/21 08:02	01/27/21 09:34	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		01/26/21 08:02	01/27/21 09:34	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		01/26/21 08:02	01/27/21 09:34	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		01/26/21 08:02	01/27/21 09:34	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		01/26/21 08:02	01/27/21 09:34	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		01/26/21 08:02	01/27/21 09:34	1
Endosulfan sulfate (1C)	ND		0.030	0.0058	ug/L		01/26/21 08:02	01/27/21 09:34	1
Endrin (1C)	ND		0.030	0.0081	ug/L		01/26/21 08:02	01/27/21 09:34	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		01/26/21 08:02	01/27/21 09:34	1

Client Sample ID: Hoff-MW-E

Date Collected: 01/21/21 11:55
Date Received: 01/21/21 18:26

Lab Sample ID: 410-27216-3

Matrix: Water

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		01/26/21 08:02	01/27/21 09:34	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		01/26/21 08:02	01/27/21 09:34	1
gamma-Chlordane (1C)	ND	*-	0.040	0.0070	ug/L		01/26/21 08:02	01/27/21 09:34	1
Heptachlor (1C)	ND	*-	0.020	0.0020	ug/L		01/26/21 08:02	01/27/21 09:34	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		01/26/21 08:02	01/27/21 09:34	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		01/26/21 08:02	01/27/21 09:34	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		01/26/21 08:02	01/27/21 09:34	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		01/26/21 08:02	01/27/21 09:34	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		01/26/21 08:02	01/27/21 09:34	1
p,p'-DDT (1C)	ND		0.030	0.0052	ug/L		01/26/21 08:02	01/27/21 09:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*58*		*32 - 149*	*01/26/21 08:02*	*01/27/21 09:34*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*59*		*32 - 149*	*01/26/21 08:02*	*01/27/21 09:34*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*45*		*29 - 129*	*01/26/21 08:02*	*01/27/21 09:34*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*44*		*29 - 129*	*01/26/21 08:02*	*01/27/21 09:34*	*1*

Method: 8081B - Organochlorine Pesticides (GC) - RE

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*72*		*32 - 149*	*02/04/21 16:00*	*02/05/21 07:21*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*68*		*32 - 149*	*02/04/21 16:00*	*02/05/21 07:21*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*65*		*29 - 129*	*02/04/21 16:00*	*02/05/21 07:21*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*62*		*29 - 129*	*02/04/21 16:00*	*02/05/21 07:21*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 05:53	1
Aluminum	**1.6**		0.30	0.15	mg/L		01/25/21 03:07	01/27/21 05:53	1
Antimony	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 05:53	1
Barium	**0.013**		0.0050	0.0010	mg/L		01/25/21 03:07	01/27/21 05:53	1
Beryllium	ND		0.0050	0.0010	mg/L		01/25/21 03:07	01/31/21 14:58	1
Cadmium	ND		0.0050	0.0010	mg/L		01/25/21 03:07	01/27/21 05:53	1
Calcium	**110**		0.50	0.096	mg/L		02/02/21 02:53	02/02/21 21:33	1
Chromium	**0.0092**	**J**	0.015	0.0016	mg/L		01/25/21 03:07	01/27/21 05:53	1
Cobalt	ND		0.0050	0.0015	mg/L		01/25/21 03:07	01/27/21 05:53	1
Copper	ND		0.020	0.012	mg/L		01/25/21 03:07	01/31/21 14:58	1
Iron	**0.98**		0.20	0.040	mg/L		01/25/21 03:07	01/27/21 05:53	1
Lead	ND		0.015	0.0071	mg/L		01/25/21 03:07	01/27/21 05:53	1
Magnesium	**33**		0.10	0.040	mg/L		02/02/21 02:53	02/02/21 21:33	1
Manganese	**0.046**		0.010	0.0030	mg/L		01/25/21 03:07	01/27/21 05:53	1
Nickel	**0.0063**	**J**	0.010	0.0021	mg/L		01/25/21 03:07	01/27/21 05:53	1
Zinc	ND		0.020	0.0037	mg/L		01/25/21 03:07	01/27/21 05:53	1
Silver	ND		0.010	0.0050	mg/L		01/25/21 03:07	01/27/21 05:53	1
Selenium	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 05:53	1
Potassium	**3.2**		0.50	0.20	mg/L		01/25/21 03:07	01/31/21 14:58	1
Sodium	**32**		1.0	0.24	mg/L		02/02/21 02:53	02/02/21 21:33	1
Thallium	ND		0.030	0.0081	mg/L		01/25/21 03:07	01/27/21 05:53	1
Vanadium	**0.0076**	**J**	0.010	0.0019	mg/L		01/25/21 03:07	01/27/21 05:53	1

Client Sample ID: Hoff-MW-E
Lab Sample ID: 410-27216-3
Date Collected: 01/21/21 11:55
Matrix: Water
Date Received: 01/21/21 18:26

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/25/21 05:28	01/25/21 10:44	1
Aluminum	ND		0.31	0.16	mg/L		01/25/21 05:28	01/25/21 10:44	1
Antimony	ND		0.052	0.016	mg/L		01/25/21 05:28	01/25/21 10:44	1
Barium	**0.0074**		0.0052	0.0010	mg/L		01/25/21 05:28	01/25/21 10:44	1
Beryllium	ND		0.0052	0.0010	mg/L		01/25/21 05:28	01/25/21 10:44	1
Cadmium	ND		0.0052	0.0010	mg/L		01/25/21 05:28	01/25/21 10:44	1
Calcium	**110**		0.52	0.099	mg/L		01/25/21 05:28	01/25/21 10:44	1
Chromium	ND		0.015	0.0016	mg/L		01/25/21 05:28	01/25/21 10:44	1
Cobalt	ND		0.0052	0.0015	mg/L		01/25/21 05:28	01/25/21 10:44	1
Copper	ND		0.021	0.012	mg/L		01/25/21 05:28	01/25/21 10:44	1
Iron	ND		0.21	0.041	mg/L		01/25/21 05:28	01/25/21 10:44	1
Lead	ND		0.015	0.0073	mg/L		01/25/21 05:28	01/25/21 10:44	1
Magnesium	**32**		0.10	0.041	mg/L		01/25/21 05:28	01/25/21 10:44	1
Manganese	**0.034**		0.010	0.0031	mg/L		01/25/21 05:28	01/25/21 10:44	1
Nickel	ND		0.010	0.0022	mg/L		01/25/21 05:28	01/25/21 10:44	1
Zinc	ND		0.021	0.0038	mg/L		01/25/21 05:28	01/25/21 10:44	1
Silver	ND		0.010	0.0052	mg/L		01/25/21 05:28	01/25/21 10:44	1
Selenium	ND		0.052	0.016	mg/L		01/25/21 05:28	01/25/21 10:44	1
Potassium	**2.7**		0.52	0.21	mg/L		01/25/21 05:28	01/25/21 10:44	1
Sodium	**29**		1.0	0.25	mg/L		01/25/21 05:28	01/25/21 10:44	1
Thallium	ND		0.031	0.0083	mg/L		01/25/21 05:28	01/25/21 10:44	1
Vanadium	**0.0043**	**J**	0.010	0.0020	mg/L		01/25/21 05:28	01/25/21 10:44	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/25/21 04:20	01/26/21 15:24	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/25/21 16:40	01/26/21 17:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	**0.22**	**HF**	0.10	0.050	mg/L			01/26/21 12:53	1
Sulfate	**57**		24	8.0	mg/L			01/28/21 09:47	4

Client Sample ID: Hoff-IW-2-A
Lab Sample ID: 410-27216-4
Date Collected: 01/21/21 15:00
Matrix: Water
Date Received: 01/21/21 18:26

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/30/21 02:08	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/30/21 02:08	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/30/21 02:08	1
Styrene	ND		0.50	0.050	ug/L			01/30/21 02:08	1
1,4-Dichlorobenzene	**22**		0.50	0.070	ug/L			01/30/21 02:08	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/30/21 02:08	1
1,2-Dichloroethane	**0.98**		0.50	0.050	ug/L			01/30/21 02:08	1
4-Methyl-2-pentanone	ND	^c	5.0	0.70	ug/L			01/30/21 02:08	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/30/21 02:08	1

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Client Sample ID: Hoff-IW-2-A

Date Collected: 01/21/21 15:00
Date Received: 01/21/21 18:26

Lab Sample ID: 410-27216-4

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.50	0.070	ug/L			01/30/21 02:08	1
Chlorobenzene	**10**		0.50	0.060	ug/L			01/30/21 02:08	1
Cyclohexane	ND		0.50	0.050	ug/L			01/30/21 02:08	1
1,2,4-Trichlorobenzene	**1.4**		0.50	0.060	ug/L			01/30/21 02:08	1
Dibromochloromethane	**0.22**	**J**	0.50	0.070	ug/L			01/30/21 02:08	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/30/21 02:08	1
Tetrachloroethene	**0.16**	**J**	0.50	0.060	ug/L			01/30/21 02:08	1
cis-1,2-Dichloroethene	**9.4**		0.50	0.050	ug/L			01/30/21 02:08	1
trans-1,2-Dichloroethene	**4.2**		0.50	0.060	ug/L			01/30/21 02:08	1
Methyl tertiary butyl ether	**0.29**	**J**	0.50	0.050	ug/L			01/30/21 02:08	1
1,3-Dichlorobenzene	**5.2**		0.50	0.060	ug/L			01/30/21 02:08	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/30/21 02:08	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			01/30/21 02:08	1
Chloroform	**1.9**		0.50	0.090	ug/L			01/30/21 02:08	1
Benzene	**0.39**	**J**	0.50	0.050	ug/L			01/30/21 02:08	1
1,1,1-Trichloroethane	**17**		0.50	0.060	ug/L			01/30/21 02:08	1
Bromomethane	**3.3**		0.50	0.070	ug/L			01/30/21 02:08	1
Chloromethane	**11**		0.50	0.060	ug/L			01/30/21 02:08	1
Chloroethane	**4.6**		0.50	0.070	ug/L			01/30/21 02:08	1
Vinyl chloride	**0.15**	**J**	0.50	0.10	ug/L			01/30/21 02:08	1
Methylene Chloride	**3.6**		0.50	0.070	ug/L			01/30/21 02:08	1
Carbon disulfide	**0.24**	**J**	1.0	0.060	ug/L			01/30/21 02:08	1
Bromoform	ND		1.0	0.30	ug/L			01/30/21 02:08	1
Bromodichloromethane	**0.67**		0.50	0.050	ug/L			01/30/21 02:08	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/30/21 02:08	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/30/21 02:08	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/30/21 02:08	1
Freon 113	ND		0.50	0.060	ug/L			01/30/21 02:08	1
1,2-Dichloropropane	**2.6**		0.50	0.060	ug/L			01/30/21 02:08	1
1,1,2-Trichloroethane	**3.7**		0.50	0.060	ug/L			01/30/21 02:08	1
Trichloroethene	**0.87**		0.50	0.060	ug/L			01/30/21 02:08	1
Methyl acetate	ND	^c	1.0	0.10	ug/L			01/30/21 02:08	1
1,1,2,2-Tetrachloroethane	**1.0**		0.50	0.070	ug/L			01/30/21 02:08	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/30/21 02:08	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/30/21 02:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*80 - 120*		*01/30/21 02:08*	*1*
Dibromofluoromethane (Surr)	*115*		*80 - 120*		*01/30/21 02:08*	*1*
4-Bromofluorobenzene (Surr)	*77*	*S1-*	*80 - 120*		*01/30/21 02:08*	*1*
Toluene-d8 (Surr)	*40*	*S1-*	*80 - 120*		*01/30/21 02:08*	*1*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	**130**		5.0	0.70	ug/L			01/30/21 02:29	10
2-Butanone	**1100**	**^c**	50	6.0	ug/L			01/30/21 02:29	10
1,2-Dichlorobenzene	**180**		5.0	0.60	ug/L			01/30/21 02:29	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*01/30/21 02:29*	*10*

Client Sample ID: Hoff-IW-2-A

Date Collected: 01/21/21 15:00
Date Received: 01/21/21 18:26

Lab Sample ID: 410-27216-4

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*01/30/21 02:29*	*10*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*01/30/21 02:29*	*10*
Toluene-d8 (Surr)	*85*		*80 - 120*		*01/30/21 02:29*	*10*

Method: 8260C LL - Volatile Organic Compounds by GC/MS - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**5900**		500	90	ug/L			02/01/21 20:00	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*02/01/21 20:00*	*100*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*02/01/21 20:00*	*100*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*02/01/21 20:00*	*100*
Toluene-d8 (Surr)	*96*		*80 - 120*		*02/01/21 20:00*	*100*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**11**		2.0	1.0	ug/L			01/28/21 14:55	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*89*		*80 - 120*		*01/28/21 14:55*	*5*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		9.9	3.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
2,4-Dimethylphenol	ND		9.9	3.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
2,4-Dinitrophenol	ND	^c	30	14	ug/L		01/28/21 22:52	01/31/21 23:45	1
2,4-Dinitrotoluene	ND		5.0	0.99	ug/L		01/28/21 22:52	01/31/21 23:45	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
Benzo[a]anthracene	**0.19**	**J**	0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Benzo[a]pyrene	**0.29**	**J**	0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Benzo[b]fluoranthene	**0.32**	**J**	0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Benzo[g,h,i]perylene	**0.18**	**J**	0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Benzo[k]fluoranthene	**0.15**	**J**	0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Acenaphthene	ND		0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Acenaphthylene	ND		0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Acetophenone	ND		9.9	4.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
Anthracene	ND		0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Atrazine	ND		5.0	2.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
Benzaldehyde	ND	^c	9.9	3.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
Caprolactam	ND		11	5.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
Carbazole	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
Chrysene	**0.18**	**J**	0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Dibenz(a,h)anthracene	ND		0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Dibenzofuran	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1

Client Sample ID: Hoff-IW-2-A
Lab Sample ID: 410-27216-4

Date Collected: 01/21/21 15:00
Matrix: Water
Date Received: 01/21/21 18:26

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	ND		5.0	2.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
Hexachlorobenzene	ND		0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
Hexachlorocyclopentadiene	ND		11	5.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
Hexachloroethane	ND		5.0	0.99	ug/L		01/28/21 22:52	01/31/21 23:45	1
Fluoranthene	**0.33**	**J**	0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Fluorene	ND		0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Indeno[1,2,3-cd]pyrene	**0.20**	**J**	0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Isophorone	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		01/28/21 22:52	01/31/21 23:45	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		01/28/21 22:52	01/31/21 23:45	1
Naphthalene	ND		0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Nitrobenzene	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
Pentachlorophenol	ND		5.0	0.99	ug/L		01/28/21 22:52	01/31/21 23:45	1
Phenanthrene	**0.17**	**J**	0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
Phenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
Pyrene	**0.36**	**J**	0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
2-Chloronaphthalene	ND		0.99	0.40	ug/L		01/28/21 22:52	01/31/21 23:45	1
2-Chlorophenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
2-Methylnaphthalene	ND		0.50	0.099	ug/L		01/28/21 22:52	01/31/21 23:45	1
2-Methylphenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
2-Nitroaniline	ND		5.0	2.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
2-Nitrophenol	ND		9.9	3.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
3,3'-Dichlorobenzidine	ND		9.9	3.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
3-Nitroaniline	ND		7.0	3.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
4,6-Dinitro-2-methylphenol	ND		21	7.9	ug/L		01/28/21 22:52	01/31/21 23:45	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
4-Methylphenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
4-Nitroaniline	ND		3.0	0.89	ug/L		01/28/21 22:52	01/31/21 23:45	1
4-Nitrophenol	ND		30	9.9	ug/L		01/28/21 22:52	01/31/21 23:45	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		01/28/21 22:52	01/31/21 23:45	1
4-Chloroaniline	ND	*-	9.9	4.0	ug/L		01/28/21 22:52	01/31/21 23:45	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		01/28/21 22:52	01/31/21 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*71*		*10 - 150*	*01/28/21 22:52*	*01/31/21 23:45*	*1*
2-Fluorobiphenyl (Surr)	*74*		*44 - 102*	*01/28/21 22:52*	*01/31/21 23:45*	*1*
2-Fluorophenol (Surr)	*21*		*10 - 84*	*01/28/21 22:52*	*01/31/21 23:45*	*1*
Nitrobenzene-d5 (Surr)	*77*		*23 - 128*	*01/28/21 22:52*	*01/31/21 23:45*	*1*
p-Terphenyl-d14 (Surr)	*75*		*31 - 113*	*01/28/21 22:52*	*01/31/21 23:45*	*1*
Phenol-d5 (Surr)	*26*		*10 - 67*	*01/28/21 22:52*	*01/31/21 23:45*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	FL F2	0.050	0.016	mg/L		01/25/21 03:07	01/27/21 05:33	1

Client Sample ID: Hoff-IW-2-A
Lab Sample ID: 410-27216-4

Date Collected: 01/21/21 15:00
Matrix: Water
Date Received: 01/21/21 18:26

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9.7**		0.30	0.15	mg/L		01/25/21 03:07	01/27/21 05:33	1
Antimony	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 05:33	1
Barium	**0.24**		0.0050	0.0010	mg/L		01/25/21 03:07	01/27/21 05:33	1
Beryllium	ND		0.0050	0.0010	mg/L		01/25/21 03:07	01/31/21 14:13	1
Cadmium	ND		0.0050	0.0010	mg/L		01/25/21 03:07	01/27/21 05:33	1
Calcium	**860**		2.5	0.48	mg/L		02/02/21 02:53	02/03/21 14:41	5
Chromium	**0.14**		0.015	0.0016	mg/L		01/25/21 03:07	01/27/21 05:33	1
Cobalt	**0.0061**		0.0050	0.0015	mg/L		01/25/21 03:07	01/27/21 05:33	1
Copper	**0.028**		0.020	0.012	mg/L		01/25/21 03:07	01/31/21 14:13	1
Iron	**11**		0.20	0.040	mg/L		01/25/21 03:07	01/27/21 05:33	1
Lead	ND		0.015	0.0071	mg/L		01/25/21 03:07	01/27/21 05:33	1
Magnesium	**680**		0.50	0.20	mg/L		02/02/21 02:53	02/03/21 14:41	5
Manganese	**0.21**		0.010	0.0030	mg/L		01/25/21 03:07	01/27/21 05:33	1
Nickel	**0.036**		0.010	0.0021	mg/L		01/25/21 03:07	01/27/21 05:33	1
Zinc	**0.030**		0.020	0.0037	mg/L		01/25/21 03:07	01/27/21 05:33	1
Silver	ND		0.010	0.0050	mg/L		01/25/21 03:07	01/27/21 05:33	1
Selenium	ND	FH	0.050	0.016	mg/L		01/25/21 03:07	01/27/21 05:33	1
Potassium	**540**		2.5	1.0	mg/L		01/25/21 03:07	01/31/21 14:33	5
Sodium	**2300**		10	2.4	mg/L		02/02/21 02:53	02/03/21 14:44	10
Thallium	**0.019**	**J FL**	0.030	0.0081	mg/L		01/25/21 03:07	01/27/21 05:33	1
Vanadium	**0.029**		0.010	0.0019	mg/L		01/25/21 03:07	01/27/21 05:33	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/25/21 04:20	01/26/21 15:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	**0.14**	**HF**	0.10	0.050	mg/L			01/26/21 12:54	1
Sulfate	**3200**		600	200	mg/L			01/28/21 09:47	100

Client Sample ID: Hoff-TB-012121
Lab Sample ID: 410-27216-5

Date Collected: 01/21/21 09:00
Matrix: Water
Date Received: 01/21/21 18:26

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/29/21 20:47	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/29/21 20:47	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/29/21 20:47	1
Styrene	ND		0.50	0.050	ug/L			01/29/21 20:47	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			01/29/21 20:47	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/29/21 20:47	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/29/21 20:47	1
4-Methyl-2-pentanone	ND	^c	5.0	0.70	ug/L			01/29/21 20:47	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/29/21 20:47	1
Toluene	ND		0.50	0.070	ug/L			01/29/21 20:47	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/29/21 20:47	1
Cyclohexane	ND		0.50	0.050	ug/L			01/29/21 20:47	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/29/21 20:47	1

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Client Sample ID: Hoff-TB-012121

Date Collected: 01/21/21 09:00
Date Received: 01/21/21 18:26

Lab Sample ID: 410-27216-5

Matrix: Water

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.50	0.070	ug/L			01/29/21 20:47	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/29/21 20:47	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/29/21 20:47	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/29/21 20:47	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/29/21 20:47	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/29/21 20:47	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/29/21 20:47	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/29/21 20:47	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			01/29/21 20:47	1
Acetone	ND		5.0	0.90	ug/L			01/29/21 20:47	1
Chloroform	ND		0.50	0.090	ug/L			01/29/21 20:47	1
Benzene	ND		0.50	0.050	ug/L			01/29/21 20:47	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/29/21 20:47	1
Bromomethane	ND		0.50	0.070	ug/L			01/29/21 20:47	1
Chloromethane	ND		0.50	0.060	ug/L			01/29/21 20:47	1
Chloroethane	ND		0.50	0.070	ug/L			01/29/21 20:47	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/29/21 20:47	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/29/21 20:47	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/29/21 20:47	1
Bromoform	ND		1.0	0.30	ug/L			01/29/21 20:47	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/29/21 20:47	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/29/21 20:47	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/29/21 20:47	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/29/21 20:47	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/29/21 20:47	1
Freon 113	ND		0.50	0.060	ug/L			01/29/21 20:47	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/29/21 20:47	1
2-Butanone	ND	^c	5.0	0.60	ug/L			01/29/21 20:47	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/29/21 20:47	1
Trichloroethene	ND		0.50	0.060	ug/L			01/29/21 20:47	1
Methyl acetate	ND	^c	1.0	0.10	ug/L			01/29/21 20:47	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/29/21 20:47	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			01/29/21 20:47	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/29/21 20:47	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/29/21 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*01/29/21 20:47*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*01/29/21 20:47*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*01/29/21 20:47*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/29/21 20:47*	*1*

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			01/28/21 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*01/28/21 12:33*	*1*

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	BFB	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-27216-1	Hoff-MW-6	101	100	96	98
410-27216-1 - DL	Hoff-MW-6	100	101	96	98
410-27216-2	Hoff-MW-10	100	100	98	98
410-27216-2 - DL	Hoff-MW-10	101	101	98	99
410-27216-3	Hoff-MW-E	101	100	96	98
410-27216-4	Hoff-IW-2-A	115	115	77 S1-	40 S1-
410-27216-4 - DL	Hoff-IW-2-A	103	102	94	85
410-27216-4 - DL2	Hoff-IW-2-A	106	99	95	96
410-27216-5	Hoff-TB-012121	99	100	97	99
LCS 410-89609/4	Lab Control Sample	99	101	97	99
LCS 410-89900/4	Lab Control Sample	105	98	100	100
LCS 410-90866/4	Lab Control Sample	101	101	98	98
LCSD 410-89609/5	Lab Control Sample Dup	100	99	98	99
LCSD 410-89900/5	Lab Control Sample Dup	102	97	100	101
LCSD 410-90866/5	Lab Control Sample Dup	98	100	98	98
MB 410-89609/7	Method Blank	97	100	97	99
MB 410-89900/7	Method Blank	105	98	98	100
MB 410-90866/7	Method Blank	99	100	97	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		TOL
Lab Sample ID	Client Sample ID	(80-120)
410-27216-1	Hoff-MW-6	101
410-27216-2	Hoff-MW-10	95
410-27216-3	Hoff-MW-E	96
410-27216-4	Hoff-IW-2-A	89
410-27216-5	Hoff-TB-012121	96
LCS 410-88882/4	Lab Control Sample	97
LCS 410-90028/4	Lab Control Sample	100
LCSD 410-88882/5	Lab Control Sample Dup	97
LCSD 410-90028/5	Lab Control Sample Dup	100
MB 410-88882/7	Method Blank	97
MB 410-90028/7	Method Blank	101

Surrogate Legend

TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: Tetra Tech, Inc.
Job ID: 410-27216-1
Project/Site: Hoff VC Site Perkiomenville PA

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(10-150)	(44-102)	(10-84)	(23-128)	(31-113)	(10-67)
410-27216-1	Hoff-MW-6	94	65	36	62	82	31
410-27216-2	Hoff-MW-10	76	66	32	68	80	25
410-27216-3	Hoff-MW-E	92	76	49	78	81	36
410-27216-4	Hoff-IW-2-A	71	74	21	77	75	26
LCS 410-89268/2-A	Lab Control Sample	98	64	56	70	87	44
LCSD 410-89268/3-A	Lab Control Sample Dup	99	71	56	75	92	44
MB 410-89268/1-A	Method Blank	82	68	42	70	90	31

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(32-149)	(32-149)	(29-129)	(29-129)
410-27216-1	Hoff-MW-6	48	42	39	34
410-27216-1 - RE	Hoff-MW-6	34	48	69	75
410-27216-2	Hoff-MW-10	60	66	38	35
410-27216-2 - RE	Hoff-MW-10	70	71	56	59
410-27216-3	Hoff-MW-E	58	59	45	44
410-27216-3 - RE	Hoff-MW-E	72	68	65	62
LCS 410-87970/2-A	Lab Control Sample	68	72	17 S1-	16 S1-
LCS 410-90832/2-A	Lab Control Sample	34		79	
LCSD 410-90832/3-A	Lab Control Sample Dup	46		67	
MB 410-87970/1-A	Method Blank	57	54	15 S1-	14 S1-
MB 410-90832/1-A	Method Blank		56		75

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

Method: 8260C LL - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-89609/7
Matrix: Water
Analysis Batch: 89609

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/29/21 19:58	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/29/21 19:58	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/29/21 19:58	1
Styrene	ND		0.50	0.050	ug/L			01/29/21 19:58	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			01/29/21 19:58	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			01/29/21 19:58	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/29/21 19:58	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			01/29/21 19:58	1
Methylcyclohexane	ND		0.50	0.050	ug/L			01/29/21 19:58	1
Toluene	ND		0.50	0.070	ug/L			01/29/21 19:58	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/29/21 19:58	1
Cyclohexane	ND		0.50	0.050	ug/L			01/29/21 19:58	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			01/29/21 19:58	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/29/21 19:58	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/29/21 19:58	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/29/21 19:58	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/29/21 19:58	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/29/21 19:58	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			01/29/21 19:58	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			01/29/21 19:58	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/29/21 19:58	1
2-Hexanone	ND		5.0	0.60	ug/L			01/29/21 19:58	1
Acetone	ND		5.0	0.90	ug/L			01/29/21 19:58	1
Chloroform	ND		0.50	0.090	ug/L			01/29/21 19:58	1
Benzene	ND		0.50	0.050	ug/L			01/29/21 19:58	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/29/21 19:58	1
Bromomethane	ND		0.50	0.070	ug/L			01/29/21 19:58	1
Chloromethane	ND		0.50	0.060	ug/L			01/29/21 19:58	1
Chloroethane	ND		0.50	0.070	ug/L			01/29/21 19:58	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/29/21 19:58	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/29/21 19:58	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/29/21 19:58	1
Bromoform	ND		1.0	0.30	ug/L			01/29/21 19:58	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/29/21 19:58	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/29/21 19:58	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/29/21 19:58	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			01/29/21 19:58	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			01/29/21 19:58	1
Freon 113	ND		0.50	0.060	ug/L			01/29/21 19:58	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/29/21 19:58	1
2-Butanone	ND		5.0	0.60	ug/L			01/29/21 19:58	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/29/21 19:58	1
Trichloroethene	ND		0.50	0.060	ug/L			01/29/21 19:58	1
Methyl acetate	ND		1.0	0.10	ug/L			01/29/21 19:58	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/29/21 19:58	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			01/29/21 19:58	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			01/29/21 19:58	1
Isopropylbenzene	ND		0.50	0.050	ug/L			01/29/21 19:58	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-89609/7
Matrix: Water
Analysis Batch: 89609

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		01/29/21 19:58	1
Dibromofluoromethane (Surr)	100		80 - 120		01/29/21 19:58	1
4-Bromofluorobenzene (Surr)	97		80 - 120		01/29/21 19:58	1
Toluene-d8 (Surr)	99		80 - 120		01/29/21 19:58	1

Lab Sample ID: LCS 410-89609/4
Matrix: Water
Analysis Batch: 89609

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.51		ug/L		90	67 - 121
trans-1,3-Dichloropropene	5.00	4.39		ug/L		88	61 - 129
Ethylbenzene	5.00	4.67		ug/L		93	80 - 120
Styrene	5.00	4.79		ug/L		96	80 - 120
1,4-Dichlorobenzene	5.00	4.73		ug/L		95	80 - 120
1,2-Dibromoethane	5.00	4.67		ug/L		93	80 - 120
1,2-Dichloroethane	5.00	4.53		ug/L		91	69 - 122
4-Methyl-2-pentanone	25.0	33.5		ug/L		134	55 - 140
Methylcyclohexane	5.00	4.91		ug/L		98	80 - 120
Toluene	5.00	4.61		ug/L		92	80 - 120
Chlorobenzene	5.00	4.71		ug/L		94	80 - 120
Cyclohexane	5.00	4.89		ug/L		98	69 - 120
1,2,4-Trichlorobenzene	5.00	4.77		ug/L		95	68 - 122
Dibromochloromethane	5.00	4.61		ug/L		92	64 - 138
Xylenes, Total	15.0	14.2		ug/L		94	80 - 120
Tetrachloroethene	5.00	4.79		ug/L		96	80 - 120
cis-1,2-Dichloroethene	5.00	4.92		ug/L		98	80 - 122
trans-1,2-Dichloroethene	5.00	4.76		ug/L		95	80 - 122
Methyl tertiary butyl ether	5.00	4.53		ug/L		91	69 - 120
1,3-Dichlorobenzene	5.00	4.69		ug/L		94	80 - 120
Carbon tetrachloride	5.00	4.74		ug/L		95	64 - 141
2-Hexanone	25.0	34.6		ug/L		139	52 - 140
Acetone	37.5	41.4		ug/L		110	60 - 146
Chloroform	5.00	4.70		ug/L		94	80 - 120
Benzene	5.00	4.62		ug/L		92	80 - 120
1,1,1-Trichloroethane	5.00	4.70		ug/L		94	78 - 126
Bromomethane	5.00	4.90		ug/L		98	60 - 136
Chloromethane	5.00	4.62		ug/L		92	56 - 124
Chloroethane	5.00	4.69		ug/L		94	63 - 120
Vinyl chloride	5.00	4.82		ug/L		96	60 - 125
Methylene Chloride	5.00	4.70		ug/L		94	80 - 120
Carbon disulfide	5.00	4.58		ug/L		92	67 - 130
Bromoform	5.00	4.47		ug/L		89	49 - 144
Bromodichloromethane	5.00	4.70		ug/L		94	73 - 124
1,1-Dichloroethane	5.00	4.69		ug/L		94	74 - 120
1,1-Dichloroethene	5.00	4.84		ug/L		97	80 - 131
Trichlorofluoromethane	5.00	4.96		ug/L		99	62 - 136
Dichlorodifluoromethane	5.00	4.82		ug/L		96	43 - 123

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-89609/4
Matrix: Water
Analysis Batch: 89609

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Freon 113	5.00	4.64		ug/L		93	75 - 133
1,2-Dichloropropane	5.00	4.82		ug/L		96	80 - 120
2-Butanone	37.5	49.1		ug/L		131	59 - 141
1,1,2-Trichloroethane	5.00	4.78		ug/L		96	80 - 120
Trichloroethene	5.00	4.76		ug/L		95	80 - 120
Methyl acetate	5.00	6.72		ug/L		134	59 - 143
1,1,2,2-Tetrachloroethane	5.00	4.51		ug/L		90	75 - 123
1,2-Dichlorobenzene	5.00	4.69		ug/L		94	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	4.68		ug/L		94	56 - 148
Isopropylbenzene	5.00	4.78		ug/L		96	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: LCSD 410-89609/5
Matrix: Water
Analysis Batch: 89609

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5.00	4.57		ug/L		91	67 - 121	1	30
trans-1,3-Dichloropropene	5.00	4.50		ug/L		90	61 - 129	3	30
Ethylbenzene	5.00	4.71		ug/L		94	80 - 120	1	30
Styrene	5.00	4.93		ug/L		99	80 - 120	3	30
1,4-Dichlorobenzene	5.00	4.82		ug/L		96	80 - 120	2	30
1,2-Dibromoethane	5.00	4.70		ug/L		94	80 - 120	1	30
1,2-Dichloroethane	5.00	4.49		ug/L		90	69 - 122	1	30
4-Methyl-2-pentanone	25.0	32.6		ug/L		130	55 - 140	3	30
Methylcyclohexane	5.00	4.85		ug/L		97	80 - 120	1	30
Toluene	5.00	4.72		ug/L		94	80 - 120	2	30
Chlorobenzene	5.00	4.86		ug/L		97	80 - 120	3	30
Cyclohexane	5.00	4.95		ug/L		99	69 - 120	1	30
1,2,4-Trichlorobenzene	5.00	4.83		ug/L		97	68 - 122	1	30
Dibromochloromethane	5.00	4.79		ug/L		96	64 - 138	4	30
Xylenes, Total	15.0	14.5		ug/L		97	80 - 120	2	30
Tetrachloroethene	5.00	4.92		ug/L		98	80 - 120	3	30
cis-1,2-Dichloroethene	5.00	4.96		ug/L		99	80 - 122	1	30
trans-1,2-Dichloroethene	5.00	4.75		ug/L		95	80 - 122	0	30
Methyl tertiary butyl ether	5.00	4.58		ug/L		92	69 - 120	1	30
1,3-Dichlorobenzene	5.00	4.77		ug/L		95	80 - 120	2	30
Carbon tetrachloride	5.00	4.83		ug/L		97	64 - 141	2	30
2-Hexanone	25.0	33.6		ug/L		135	52 - 140	3	30
Acetone	37.5	41.3		ug/L		110	60 - 146	0	30
Chloroform	5.00	4.72		ug/L		94	80 - 120	1	30
Benzene	5.00	4.70		ug/L		94	80 - 120	2	30
1,1,1-Trichloroethane	5.00	4.75		ug/L		95	78 - 126	1	30

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-89609/5
Matrix: Water
Analysis Batch: 89609

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane			5.00	4.97		ug/L		99	60 - 136	1	30
Chloromethane			5.00	4.69		ug/L		94	56 - 124	2	30
Chloroethane			5.00	4.73		ug/L		95	63 - 120	1	30
Vinyl chloride			5.00	4.90		ug/L		98	60 - 125	2	30
Methylene Chloride			5.00	4.71		ug/L		94	80 - 120	0	30
Carbon disulfide			5.00	4.62		ug/L		92	67 - 130	1	30
Bromoform			5.00	4.54		ug/L		91	49 - 144	1	30
Bromodichloromethane			5.00	4.68		ug/L		94	73 - 124	0	30
1,1-Dichloroethane			5.00	4.79		ug/L		96	74 - 120	2	30
1,1-Dichloroethene			5.00	4.92		ug/L		98	80 - 131	2	30
Trichlorofluoromethane			5.00	5.02		ug/L		100	62 - 136	1	30
Dichlorodifluoromethane			5.00	4.90		ug/L		98	43 - 123	2	30
Freon 113			5.00	4.64		ug/L		93	75 - 133	0	30
1,2-Dichloropropane			5.00	4.89		ug/L		98	80 - 120	1	30
2-Butanone			37.5	46.1		ug/L		123	59 - 141	6	30
1,1,2-Trichloroethane			5.00	4.83		ug/L		97	80 - 120	1	30
Trichloroethene			5.00	4.79		ug/L		96	80 - 120	1	30
Methyl acetate			5.00	5.82		ug/L		116	59 - 143	14	30
1,1,2,2-Tetrachloroethane			5.00	4.59		ug/L		92	75 - 123	2	30
1,2-Dichlorobenzene			5.00	4.81		ug/L		96	80 - 120	2	30
1,2-Dibromo-3-Chloropropane			5.00	4.84		ug/L		97	56 - 148	3	30
Isopropylbenzene			5.00	4.87		ug/L		97	80 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 410-89900/7
Matrix: Water
Analysis Batch: 89900

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			02/01/21 12:09	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			02/01/21 12:09	1
Ethylbenzene	ND		0.50	0.060	ug/L			02/01/21 12:09	1
Styrene	ND		0.50	0.050	ug/L			02/01/21 12:09	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			02/01/21 12:09	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			02/01/21 12:09	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			02/01/21 12:09	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			02/01/21 12:09	1
Methylcyclohexane	ND		0.50	0.050	ug/L			02/01/21 12:09	1
Toluene	ND		0.50	0.070	ug/L			02/01/21 12:09	1
Chlorobenzene	ND		0.50	0.060	ug/L			02/01/21 12:09	1
Cyclohexane	ND		0.50	0.050	ug/L			02/01/21 12:09	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			02/01/21 12:09	1
Dibromochloromethane	ND		0.50	0.070	ug/L			02/01/21 12:09	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-89900/7
Matrix: Water
Analysis Batch: 89900

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		1.0	0.15	ug/L			02/01/21 12:09	1
Tetrachloroethene	ND		0.50	0.060	ug/L			02/01/21 12:09	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			02/01/21 12:09	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			02/01/21 12:09	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			02/01/21 12:09	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			02/01/21 12:09	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			02/01/21 12:09	1
2-Hexanone	ND		5.0	0.60	ug/L			02/01/21 12:09	1
Acetone	ND		5.0	0.90	ug/L			02/01/21 12:09	1
Chloroform	ND		0.50	0.090	ug/L			02/01/21 12:09	1
Benzene	ND		0.50	0.050	ug/L			02/01/21 12:09	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			02/01/21 12:09	1
Bromomethane	ND		0.50	0.070	ug/L			02/01/21 12:09	1
Chloromethane	ND		0.50	0.060	ug/L			02/01/21 12:09	1
Chloroethane	ND		0.50	0.070	ug/L			02/01/21 12:09	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/01/21 12:09	1
Methylene Chloride	ND		0.50	0.070	ug/L			02/01/21 12:09	1
Carbon disulfide	ND		1.0	0.060	ug/L			02/01/21 12:09	1
Bromoform	ND		1.0	0.30	ug/L			02/01/21 12:09	1
Bromodichloromethane	ND		0.50	0.050	ug/L			02/01/21 12:09	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			02/01/21 12:09	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			02/01/21 12:09	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			02/01/21 12:09	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			02/01/21 12:09	1
Freon 113	ND		0.50	0.060	ug/L			02/01/21 12:09	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			02/01/21 12:09	1
2-Butanone	ND		5.0	0.60	ug/L			02/01/21 12:09	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			02/01/21 12:09	1
Trichloroethene	ND		0.50	0.060	ug/L			02/01/21 12:09	1
Methyl acetate	ND		1.0	0.10	ug/L			02/01/21 12:09	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/01/21 12:09	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			02/01/21 12:09	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			02/01/21 12:09	1
Isopropylbenzene	ND		0.50	0.050	ug/L			02/01/21 12:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*02/01/21 12:09*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*02/01/21 12:09*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*02/01/21 12:09*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/01/21 12:09*	*1*

Lab Sample ID: LCS 410-89900/4
Matrix: Water
Analysis Batch: 89900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.61		ug/L		92	67 - 121
trans-1,3-Dichloropropene	5.00	4.69		ug/L		94	61 - 129

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-89900/4
Matrix: Water
Analysis Batch: 89900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	5.00	4.47		ug/L		89	80 - 120
Styrene	5.00	4.72		ug/L		94	80 - 120
1,4-Dichlorobenzene	5.00	4.68		ug/L		94	80 - 120
1,2-Dibromoethane	5.00	4.74		ug/L		95	80 - 120
1,2-Dichloroethane	5.00	4.30		ug/L		86	69 - 122
4-Methyl-2-pentanone	25.0	21.6		ug/L		86	55 - 140
Methylcyclohexane	5.00	5.08		ug/L		102	80 - 120
Toluene	5.00	4.51		ug/L		90	80 - 120
Chlorobenzene	5.00	4.63		ug/L		93	80 - 120
Cyclohexane	5.00	4.66		ug/L		93	69 - 120
1,2,4-Trichlorobenzene	5.00	5.05		ug/L		101	68 - 122
Dibromochloromethane	5.00	5.00		ug/L		100	64 - 138
Xylenes, Total	15.0	13.8		ug/L		92	80 - 120
Tetrachloroethene	5.00	4.46		ug/L		89	80 - 120
cis-1,2-Dichloroethene	5.00	4.85		ug/L		97	80 - 122
trans-1,2-Dichloroethene	5.00	4.58		ug/L		92	80 - 122
Methyl tertiary butyl ether	5.00	4.46		ug/L		89	69 - 120
1,3-Dichlorobenzene	5.00	4.62		ug/L		92	80 - 120
Carbon tetrachloride	5.00	4.34		ug/L		87	64 - 141
2-Hexanone	25.0	22.4		ug/L		89	52 - 140
Acetone	37.5	39.5		ug/L		105	60 - 146
Chloroform	5.00	4.38		ug/L		88	80 - 120
Benzene	5.00	4.58		ug/L		92	80 - 120
1,1,1-Trichloroethane	5.00	4.14		ug/L		83	78 - 126
Bromomethane	5.00	4.37		ug/L		87	60 - 136
Chloromethane	5.00	4.63		ug/L		93	56 - 124
Chloroethane	5.00	4.25		ug/L		85	63 - 120
Vinyl chloride	5.00	4.69		ug/L		94	60 - 125
Methylene Chloride	5.00	4.85		ug/L		97	80 - 120
Carbon disulfide	5.00	4.66		ug/L		93	67 - 130
Bromoform	5.00	5.25		ug/L		105	49 - 144
Bromodichloromethane	5.00	4.54		ug/L		91	73 - 124
1,1-Dichloroethane	5.00	4.59		ug/L		92	74 - 120
1,1-Dichloroethene	5.00	4.50		ug/L		90	80 - 131
Trichlorofluoromethane	5.00	4.03		ug/L		81	62 - 136
Dichlorodifluoromethane	5.00	3.99		ug/L		80	43 - 123
Freon 113	5.00	4.26		ug/L		85	75 - 133
1,2-Dichloropropane	5.00	4.89		ug/L		98	80 - 120
2-Butanone	37.5	36.8		ug/L		98	59 - 141
1,1,2-Trichloroethane	5.00	4.98		ug/L		100	80 - 120
Trichloroethene	5.00	4.47		ug/L		89	80 - 120
Methyl acetate	5.00	4.83		ug/L		97	59 - 143
1,1,2,2-Tetrachloroethane	5.00	5.14		ug/L		103	75 - 123
1,2-Dichlorobenzene	5.00	4.65		ug/L		93	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	5.67		ug/L		113	56 - 148
Isopropylbenzene	5.00	4.50		ug/L		90	80 - 120

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-89900/4
Matrix: Water
Analysis Batch: 89900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 410-89900/5
Matrix: Water
Analysis Batch: 89900

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene			5.00	4.63		ug/L		93	67 - 121	0	30
trans-1,3-Dichloropropene			5.00	4.71		ug/L		94	61 - 129	0	30
Ethylbenzene			5.00	4.47		ug/L		89	80 - 120	0	30
Styrene			5.00	4.69		ug/L		94	80 - 120	1	30
1,4-Dichlorobenzene			5.00	4.61		ug/L		92	80 - 120	1	30
1,2-Dibromoethane			5.00	4.87		ug/L		97	80 - 120	3	30
1,2-Dichloroethane			5.00	4.28		ug/L		86	69 - 122	1	30
4-Methyl-2-pentanone			25.0	21.8		ug/L		87	55 - 140	1	30
Methylcyclohexane			5.00	4.91		ug/L		98	80 - 120	4	30
Toluene			5.00	4.56		ug/L		91	80 - 120	1	30
Chlorobenzene			5.00	4.59		ug/L		92	80 - 120	1	30
Cyclohexane			5.00	4.60		ug/L		92	69 - 120	1	30
1,2,4-Trichlorobenzene			5.00	4.88		ug/L		98	68 - 122	4	30
Dibromochloromethane			5.00	4.96		ug/L		99	64 - 138	1	30
Xylenes, Total			15.0	13.8		ug/L		92	80 - 120	0	30
Tetrachloroethene			5.00	4.41		ug/L		88	80 - 120	1	30
cis-1,2-Dichloroethene			5.00	4.79		ug/L		96	80 - 122	1	30
trans-1,2-Dichloroethene			5.00	4.43		ug/L		89	80 - 122	3	30
Methyl tertiary butyl ether			5.00	4.47		ug/L		89	69 - 120	0	30
1,3-Dichlorobenzene			5.00	4.57		ug/L		91	80 - 120	1	30
Carbon tetrachloride			5.00	4.24		ug/L		85	64 - 141	2	30
2-Hexanone			25.0	22.7		ug/L		91	52 - 140	2	30
Acetone			37.5	39.2		ug/L		105	60 - 146	1	30
Chloroform			5.00	4.28		ug/L		86	80 - 120	2	30
Benzene			5.00	4.52		ug/L		90	80 - 120	1	30
1,1,1-Trichloroethane			5.00	4.05		ug/L		81	78 - 126	2	30
Bromomethane			5.00	4.33		ug/L		87	60 - 136	1	30
Chloromethane			5.00	4.71		ug/L		94	56 - 124	2	30
Chloroethane			5.00	4.28		ug/L		86	63 - 120	1	30
Vinyl chloride			5.00	4.58		ug/L		92	60 - 125	2	30
Methylene Chloride			5.00	4.71		ug/L		94	80 - 120	3	30
Carbon disulfide			5.00	4.63		ug/L		93	67 - 130	1	30
Bromoform			5.00	5.23		ug/L		105	49 - 144	0	30
Bromodichloromethane			5.00	4.49		ug/L		90	73 - 124	1	30
1,1-Dichloroethane			5.00	4.57		ug/L		91	74 - 120	0	30
1,1-Dichloroethene			5.00	4.54		ug/L		91	80 - 131	1	30
Trichlorofluoromethane			5.00	4.01		ug/L		80	62 - 136	0	30
Dichlorodifluoromethane			5.00	4.05		ug/L		81	43 - 123	1	30

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-89900/5
Matrix: Water
Analysis Batch: 89900

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Freon 113			5.00	4.11		ug/L		82	75 - 133	4	30
1,2-Dichloropropane			5.00	4.85		ug/L		97	80 - 120	1	30
2-Butanone			37.5	36.3		ug/L		97	59 - 141	1	30
1,1,2-Trichloroethane			5.00	5.02		ug/L		100	80 - 120	1	30
Trichloroethene			5.00	4.47		ug/L		89	80 - 120	0	30
Methyl acetate			5.00	4.06		ug/L		81	59 - 143	17	30
1,1,2,2-Tetrachloroethane			5.00	5.04		ug/L		101	75 - 123	2	30
1,2-Dichlorobenzene			5.00	4.56		ug/L		91	80 - 120	2	30
1,2-Dibromo-3-Chloropropane			5.00	5.63		ug/L		113	56 - 148	1	30
Isopropylbenzene			5.00	4.52		ug/L		90	80 - 120	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 410-90866/7
Matrix: Water
Analysis Batch: 90866

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			02/04/21 10:38	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			02/04/21 10:38	1
Ethylbenzene	ND		0.50	0.060	ug/L			02/04/21 10:38	1
Styrene	ND		0.50	0.050	ug/L			02/04/21 10:38	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			02/04/21 10:38	1
1,2-Dibromoethane	ND		0.50	0.060	ug/L			02/04/21 10:38	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			02/04/21 10:38	1
4-Methyl-2-pentanone	ND		5.0	0.70	ug/L			02/04/21 10:38	1
Methylcyclohexane	ND		0.50	0.050	ug/L			02/04/21 10:38	1
Toluene	ND		0.50	0.070	ug/L			02/04/21 10:38	1
Chlorobenzene	ND		0.50	0.060	ug/L			02/04/21 10:38	1
Cyclohexane	ND		0.50	0.050	ug/L			02/04/21 10:38	1
1,2,4-Trichlorobenzene	ND		0.50	0.060	ug/L			02/04/21 10:38	1
Dibromochloromethane	ND		0.50	0.070	ug/L			02/04/21 10:38	1
Xylenes, Total	ND		1.0	0.15	ug/L			02/04/21 10:38	1
Tetrachloroethene	ND		0.50	0.060	ug/L			02/04/21 10:38	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			02/04/21 10:38	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			02/04/21 10:38	1
Methyl tertiary butyl ether	ND		0.50	0.050	ug/L			02/04/21 10:38	1
1,3-Dichlorobenzene	ND		0.50	0.060	ug/L			02/04/21 10:38	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			02/04/21 10:38	1
2-Hexanone	ND		5.0	0.60	ug/L			02/04/21 10:38	1
Acetone	ND		5.0	0.90	ug/L			02/04/21 10:38	1
Chloroform	ND		0.50	0.090	ug/L			02/04/21 10:38	1
Benzene	ND		0.50	0.050	ug/L			02/04/21 10:38	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			02/04/21 10:38	1

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-90866/7
Matrix: Water
Analysis Batch: 90866

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		0.50	0.070	ug/L			02/04/21 10:38	1
Chloromethane	ND		0.50	0.060	ug/L			02/04/21 10:38	1
Chloroethane	ND		0.50	0.070	ug/L			02/04/21 10:38	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/04/21 10:38	1
Methylene Chloride	ND		0.50	0.070	ug/L			02/04/21 10:38	1
Carbon disulfide	ND		1.0	0.060	ug/L			02/04/21 10:38	1
Bromoform	ND		1.0	0.30	ug/L			02/04/21 10:38	1
Bromodichloromethane	ND		0.50	0.050	ug/L			02/04/21 10:38	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			02/04/21 10:38	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			02/04/21 10:38	1
Trichlorofluoromethane	ND		0.50	0.050	ug/L			02/04/21 10:38	1
Dichlorodifluoromethane	ND		0.50	0.050	ug/L			02/04/21 10:38	1
Freon 113	ND		0.50	0.060	ug/L			02/04/21 10:38	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			02/04/21 10:38	1
2-Butanone	ND		5.0	0.60	ug/L			02/04/21 10:38	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			02/04/21 10:38	1
Trichloroethene	ND		0.50	0.060	ug/L			02/04/21 10:38	1
Methyl acetate	ND		1.0	0.10	ug/L			02/04/21 10:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/04/21 10:38	1
1,2-Dichlorobenzene	ND		0.50	0.060	ug/L			02/04/21 10:38	1
1,2-Dibromo-3-Chloropropane	ND		0.50	0.10	ug/L			02/04/21 10:38	1
Isopropylbenzene	ND		0.50	0.050	ug/L			02/04/21 10:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*02/04/21 10:38*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*02/04/21 10:38*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*02/04/21 10:38*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*02/04/21 10:38*	*1*

Lab Sample ID: LCS 410-90866/4
Matrix: Water
Analysis Batch: 90866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	5.00	4.79		ug/L		96	67 - 121
trans-1,3-Dichloropropene	5.00	4.86		ug/L		97	61 - 129
Ethylbenzene	5.00	4.66		ug/L		93	80 - 120
Styrene	5.00	4.75		ug/L		95	80 - 120
1,4-Dichlorobenzene	5.00	4.63		ug/L		93	80 - 120
1,2-Dibromoethane	5.00	4.62		ug/L		92	80 - 120
1,2-Dichloroethane	5.00	4.76		ug/L		95	69 - 122
4-Methyl-2-pentanone	25.0	24.8		ug/L		99	55 - 140
Methylcyclohexane	5.00	5.27		ug/L		105	80 - 120
Toluene	5.00	4.57		ug/L		91	80 - 120
Chlorobenzene	5.00	4.69		ug/L		94	80 - 120
Cyclohexane	5.00	5.15		ug/L		103	69 - 120
1,2,4-Trichlorobenzene	5.00	4.62		ug/L		92	68 - 122
Dibromochloromethane	5.00	4.68		ug/L		94	64 - 138

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-90866/4
Matrix: Water
Analysis Batch: 90866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	15.0	14.0		ug/L		94	80 - 120
Tetrachloroethene	5.00	4.71		ug/L		94	80 - 120
cis-1,2-Dichloroethene	5.00	4.78		ug/L		96	80 - 122
trans-1,2-Dichloroethene	5.00	4.84		ug/L		97	80 - 122
Methyl tertiary butyl ether	5.00	4.64		ug/L		93	69 - 120
1,3-Dichlorobenzene	5.00	4.55		ug/L		91	80 - 120
Carbon tetrachloride	5.00	4.91		ug/L		98	64 - 141
2-Hexanone	25.0	26.0		ug/L		104	52 - 140
Acetone	37.5	32.4		ug/L		86	60 - 146
Chloroform	5.00	4.75		ug/L		95	80 - 120
Benzene	5.00	4.74		ug/L		95	80 - 120
1,1,1-Trichloroethane	5.00	4.88		ug/L		98	78 - 126
Bromomethane	5.00	5.01		ug/L		100	60 - 136
Chloromethane	5.00	4.87		ug/L		97	56 - 124
Chloroethane	5.00	4.71		ug/L		94	63 - 120
Vinyl chloride	5.00	5.12		ug/L		102	60 - 125
Methylene Chloride	5.00	4.74		ug/L		95	80 - 120
Carbon disulfide	5.00	4.77		ug/L		95	67 - 130
Bromoform	5.00	4.70		ug/L		94	49 - 144
Bromodichloromethane	5.00	4.82		ug/L		96	73 - 124
1,1-Dichloroethane	5.00	4.71		ug/L		94	74 - 120
1,1-Dichloroethene	5.00	4.96		ug/L		99	80 - 131
Trichlorofluoromethane	5.00	5.09		ug/L		102	62 - 136
Dichlorodifluoromethane	5.00	5.28		ug/L		106	43 - 123
Freon 113	5.00	4.83		ug/L		97	75 - 133
1,2-Dichloropropane	5.00	4.82		ug/L		96	80 - 120
2-Butanone	37.5	36.9		ug/L		98	59 - 141
1,1,2-Trichloroethane	5.00	4.69		ug/L		94	80 - 120
Trichloroethene	5.00	4.72		ug/L		94	80 - 120
Methyl acetate	5.00	4.53		ug/L		91	59 - 143
1,1,2,2-Tetrachloroethane	5.00	4.47		ug/L		89	75 - 123
1,2-Dichlorobenzene	5.00	4.60		ug/L		92	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	4.46		ug/L		89	56 - 148
Isopropylbenzene	5.00	4.55		ug/L		91	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: LCSD 410-90866/5
Matrix: Water
Analysis Batch: 90866

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5.00	4.86		ug/L		97	67 - 121	2	30
trans-1,3-Dichloropropene	5.00	4.89		ug/L		98	61 - 129	1	30

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-90866/5
Matrix: Water
Analysis Batch: 90866

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	5.00	4.77		ug/L		95	80 - 120	2	30
Styrene	5.00	4.88		ug/L		98	80 - 120	3	30
1,4-Dichlorobenzene	5.00	4.72		ug/L		94	80 - 120	2	30
1,2-Dibromoethane	5.00	4.66		ug/L		93	80 - 120	1	30
1,2-Dichloroethane	5.00	4.63		ug/L		93	69 - 122	3	30
4-Methyl-2-pentanone	25.0	25.6		ug/L		102	55 - 140	3	30
Methylcyclohexane	5.00	5.27		ug/L		105	80 - 120	0	30
Toluene	5.00	4.64		ug/L		93	80 - 120	2	30
Chlorobenzene	5.00	4.79		ug/L		96	80 - 120	2	30
Cyclohexane	5.00	5.20		ug/L		104	69 - 120	1	30
1,2,4-Trichlorobenzene	5.00	4.68		ug/L		94	68 - 122	1	30
Dibromochloromethane	5.00	4.70		ug/L		94	64 - 138	0	30
Xylenes, Total	15.0	14.3		ug/L		95	80 - 120	2	30
Tetrachloroethene	5.00	4.84		ug/L		97	80 - 120	3	30
cis-1,2-Dichloroethene	5.00	4.82		ug/L		96	80 - 122	1	30
trans-1,2-Dichloroethene	5.00	4.91		ug/L		98	80 - 122	2	30
Methyl tertiary butyl ether	5.00	4.66		ug/L		93	69 - 120	1	30
1,3-Dichlorobenzene	5.00	4.68		ug/L		94	80 - 120	3	30
Carbon tetrachloride	5.00	4.92		ug/L		98	64 - 141	0	30
2-Hexanone	25.0	26.5		ug/L		106	52 - 140	2	30
Acetone	37.5	33.2		ug/L		88	60 - 146	2	30
Chloroform	5.00	4.90		ug/L		98	80 - 120	3	30
Benzene	5.00	4.81		ug/L		96	80 - 120	1	30
1,1,1-Trichloroethane	5.00	4.89		ug/L		98	78 - 126	0	30
Bromomethane	5.00	5.01		ug/L		100	60 - 136	0	30
Chloromethane	5.00	4.99		ug/L		100	56 - 124	3	30
Chloroethane	5.00	4.76		ug/L		95	63 - 120	1	30
Vinyl chloride	5.00	5.18		ug/L		104	60 - 125	1	30
Methylene Chloride	5.00	4.79		ug/L		96	80 - 120	1	30
Carbon disulfide	5.00	4.76		ug/L		95	67 - 130	0	30
Bromoform	5.00	4.70		ug/L		94	49 - 144	0	30
Bromodichloromethane	5.00	4.87		ug/L		97	73 - 124	1	30
1,1-Dichloroethane	5.00	4.81		ug/L		96	74 - 120	2	30
1,1-Dichloroethene	5.00	5.07		ug/L		101	80 - 131	2	30
Trichlorofluoromethane	5.00	5.13		ug/L		103	62 - 136	1	30
Dichlorodifluoromethane	5.00	5.29		ug/L		106	43 - 123	0	30
Freon 113	5.00	4.88		ug/L		98	75 - 133	1	30
1,2-Dichloropropane	5.00	4.91		ug/L		98	80 - 120	2	30
2-Butanone	37.5	38.3		ug/L		102	59 - 141	4	30
1,1,2-Trichloroethane	5.00	4.85		ug/L		97	80 - 120	3	30
Trichloroethene	5.00	4.81		ug/L		96	80 - 120	2	30
Methyl acetate	5.00	4.69		ug/L		94	59 - 143	3	30
1,1,2,2-Tetrachloroethane	5.00	4.52		ug/L		90	75 - 123	1	30
1,2-Dichlorobenzene	5.00	4.70		ug/L		94	80 - 120	2	30
1,2-Dibromo-3-Chloropropane	5.00	4.48		ug/L		90	56 - 148	0	30
Isopropylbenzene	5.00	4.68		ug/L		94	80 - 120	3	30

Method: 8260C LL - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-90866/5
Matrix: Water
Analysis Batch: 90866

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Toluene-d8 (Surr)	98		80 - 120

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-88882/7
Matrix: Water
Analysis Batch: 88882

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			01/28/21 10:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		01/28/21 10:31	1

Lab Sample ID: LCS 410-88882/4
Matrix: Water
Analysis Batch: 88882

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	4.96	4.70		ug/L		95	74 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: LCSD 410-88882/5
Matrix: Water
Analysis Batch: 88882

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	4.96	4.30		ug/L		87	74 - 133	9	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: MB 410-90028/7
Matrix: Water
Analysis Batch: 90028

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			02/02/21 11:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		02/02/21 11:17	1

Method: 8260C SIM 14D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-90028/4
Matrix: Water
Analysis Batch: 90028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			4.96	5.01		ug/L		101	74 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 410-90028/5
Matrix: Water
Analysis Batch: 90028

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			4.96	4.81		ug/L		97	74 - 133	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-89268/1-A
Matrix: Water
Analysis Batch: 89436

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 89268

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		10	3.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
2,4-Dichlorophenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
2,4-Dimethylphenol	ND		10	3.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
2,4-Dinitrophenol	ND		30	14	ug/L		01/28/21 22:52	01/29/21 14:08	1
2,4-Dinitrotoluene	ND		5.0	1.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
2,4,5-Trichlorophenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
2,4,6-Trichlorophenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
2,2'-oxybis[1-chloropropane]	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
Di-n-butyl phthalate	ND		5.0	2.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
Di-n-octyl phthalate	ND		11	5.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
Benzo[a]anthracene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Benzo[a]pyrene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Benzo[b]fluoranthene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Benzo[g,h,i]perylene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Benzo[k]fluoranthene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Acenaphthene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Acenaphthylene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Acetophenone	ND		10	4.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
Anthracene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Atrazine	ND		5.0	2.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
Benzaldehyde	ND		10	3.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
Butylbenzylphthalate	ND		5.0	2.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
Caprolactam	ND		11	5.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
Carbazole	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
Chrysene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Dibenz(a,h)anthracene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-89268/1-A
Matrix: Water
Analysis Batch: 89436

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 89268

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
Diethyl phthalate	ND		5.0	2.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
Dimethyl phthalate	ND		5.0	2.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
Hexachlorobenzene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Hexachlorobutadiene	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
Hexachlorocyclopentadiene	ND		11	5.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
Hexachloroethane	ND		5.0	1.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
Fluoranthene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Fluorene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Indeno[1,2,3-cd]pyrene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Isophorone	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
N-Nitrosodi-n-propylamine	ND		3.0	0.70	ug/L		01/28/21 22:52	01/29/21 14:08	1
N-Nitrosodiphenylamine	ND		3.0	0.70	ug/L		01/28/21 22:52	01/29/21 14:08	1
Naphthalene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Nitrobenzene	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
Pentachlorophenol	ND		5.0	1.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
Phenanthrene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Phenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
Pyrene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
2-Chloronaphthalene	ND		1.0	0.40	ug/L		01/28/21 22:52	01/29/21 14:08	1
2-Chlorophenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
2-Methylnaphthalene	ND		0.50	0.10	ug/L		01/28/21 22:52	01/29/21 14:08	1
2-Methylphenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
2-Nitroaniline	ND		5.0	2.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
2-Nitrophenol	ND		10	3.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
3,3'-Dichlorobenzidine	ND		10	3.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
3-Nitroaniline	ND		7.0	3.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
4,6-Dinitro-2-methylphenol	ND		21	8.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
4-Bromophenyl-phenylether	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
4-Methylphenol	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
4-Nitroaniline	ND		3.0	0.90	ug/L		01/28/21 22:52	01/29/21 14:08	1
4-Nitrophenol	ND		30	10	ug/L		01/28/21 22:52	01/29/21 14:08	1
Bis(2-chloroethoxy)methane	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
Bis(2-chloroethyl)ether	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
Bis(2-ethylhexyl) phthalate	ND		11	5.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
2,6-Dinitrotoluene	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1
4-Chloro-3-methylphenol	ND		3.5	1.6	ug/L		01/28/21 22:52	01/29/21 14:08	1
4-Chloroaniline	ND		10	4.0	ug/L		01/28/21 22:52	01/29/21 14:08	1
4-Chlorophenyl-phenyl ether	ND		2.0	0.50	ug/L		01/28/21 22:52	01/29/21 14:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*82*		*10 - 150*	*01/28/21 22:52*	*01/29/21 14:08*	*1*
2-Fluorobiphenyl (Surr)	*68*		*44 - 102*	*01/28/21 22:52*	*01/29/21 14:08*	*1*
2-Fluorophenol (Surr)	*42*		*10 - 84*	*01/28/21 22:52*	*01/29/21 14:08*	*1*
Nitrobenzene-d5 (Surr)	*70*		*23 - 128*	*01/28/21 22:52*	*01/29/21 14:08*	*1*
p-Terphenyl-d14 (Surr)	*90*		*31 - 113*	*01/28/21 22:52*	*01/29/21 14:08*	*1*
Phenol-d5 (Surr)	*31*		*10 - 67*	*01/28/21 22:52*	*01/29/21 14:08*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-89268/2-A
Matrix: Water
Analysis Batch: 89436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 89268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	50.0	36.1		ug/L		72	50 - 110
2,4-Dichlorophenol	50.0	41.4		ug/L		83	51 - 123
2,4-Dimethylphenol	50.0	40.5		ug/L		81	43 - 102
2,4-Dinitrophenol	100	75.1		ug/L		75	30 - 143
2,4-Dinitrotoluene	50.0	41.4		ug/L		83	52 - 128
2,4,5-Trichlorophenol	50.0	45.2		ug/L		90	59 - 126
2,4,6-Trichlorophenol	50.0	42.5		ug/L		85	59 - 129
2,2'-oxybis[1-chloropropane]	50.0	34.4		ug/L		69	41 - 118
Di-n-butyl phthalate	50.0	36.6		ug/L		73	43 - 118
Di-n-octyl phthalate	50.0	42.8		ug/L		86	48 - 129
Benzo[a]anthracene	50.0	42.0		ug/L		84	61 - 126
Benzo[a]pyrene	50.0	47.2		ug/L		94	60 - 116
Benzo[b]fluoranthene	50.0	43.1		ug/L		86	61 - 119
Benzo[g,h,i]perylene	50.0	49.3		ug/L		99	54 - 120
Benzo[k]fluoranthene	50.0	45.8		ug/L		92	69 - 122
Acenaphthene	50.0	37.3		ug/L		75	52 - 114
Acenaphthylene	50.0	39.5		ug/L		79	55 - 117
Acetophenone	50.0	35.6		ug/L		71	51 - 119
Anthracene	50.0	41.1		ug/L		82	61 - 117
Atrazine	50.0	39.4		ug/L		79	71 - 133
Benzaldehyde	50.0	34.4		ug/L		69	39 - 119
Butylbenzylphthalate	50.0	29.0		ug/L		58	11 - 125
Caprolactam	50.0	13.1		ug/L		26	12 - 40
Carbazole	50.0	41.2		ug/L		82	64 - 127
Chrysene	50.0	43.3		ug/L		87	65 - 121
Dibenz(a,h)anthracene	50.0	46.2		ug/L		92	57 - 124
Dibenzofuran	50.0	38.2		ug/L		76	60 - 112
Diethyl phthalate	50.0	34.4		ug/L		69	19 - 121
Dimethyl phthalate	50.0	25.1		ug/L		50	10 - 134
Hexachlorobenzene	50.0	42.2		ug/L		84	55 - 123
Hexachlorobutadiene	50.0	28.2		ug/L		56	20 - 108
Hexachlorocyclopentadiene	50.0	10.8	J	ug/L		22	10 - 42
Hexachloroethane	50.0	25.4		ug/L		51	22 - 88
Fluoranthene	50.0	41.7		ug/L		83	63 - 122
Fluorene	50.0	38.6		ug/L		77	56 - 115
Indeno[1,2,3-cd]pyrene	50.0	44.7		ug/L		89	52 - 121
Isophorone	50.0	38.3		ug/L		77	55 - 122
N-Nitrosodi-n-propylamine	50.0	36.0		ug/L		72	52 - 123
N-Nitrosodiphenylamine	42.5	35.7		ug/L		84	60 - 126
Naphthalene	50.0	33.6		ug/L		67	51 - 102
Nitrobenzene	50.0	37.1		ug/L		74	52 - 119
Pentachlorophenol	100	87.0		ug/L		87	54 - 131
Phenanthrene	50.0	40.0		ug/L		80	65 - 113
Phenol	50.0	23.6		ug/L		47	22 - 69
Pyrene	50.0	42.4		ug/L		85	65 - 115
2-Chloronaphthalene	50.0	34.2		ug/L		68	43 - 110
2-Chlorophenol	50.0	38.4		ug/L		77	46 - 109
2-Methylnaphthalene	50.0	35.1		ug/L		70	45 - 108

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-89268/2-A
Matrix: Water
Analysis Batch: 89436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 89268

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
2-Methylphenol			50.0	37.5		ug/L		75	41 - 113		
2-Nitroaniline			50.0	40.2		ug/L		80	60 - 123		
2-Nitrophenol			50.0	38.7		ug/L		77	53 - 123		
3,3'-Dichlorobenzidine			100	55.7		ug/L		56	42 - 107		
3-Nitroaniline			50.0	29.3		ug/L		59	54 - 112		
4,6-Dinitro-2-methylphenol			100	81.7		ug/L		82	49 - 138		
4-Bromophenyl-phenylether			50.0	40.3		ug/L		81	54 - 121		
4-Methylphenol			50.0	34.7		ug/L		69	41 - 109		
4-Nitroaniline			50.0	33.6		ug/L		67	49 - 107		
4-Nitrophenol			100	52.2		ug/L		52	23 - 89		
Bis(2-chloroethoxy)methane			50.0	39.0		ug/L		78	51 - 120		
Bis(2-chloroethyl)ether			50.0	36.2		ug/L		72	50 - 110		
Bis(2-ethylhexyl) phthalate			50.0	39.8		ug/L		80	50 - 127		
2,6-Dinitrotoluene			50.0	44.2		ug/L		88	61 - 121		
4-Chloro-3-methylphenol			50.0	40.8		ug/L		82	52 - 126		
4-Chloroaniline			50.0	22.0	*-	ug/L		44	45 - 93		
4-Chlorophenyl-phenyl ether			50.0	38.0		ug/L		76	47 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*98*		*10 - 150*
2-Fluorobiphenyl (Surr)	*64*		*44 - 102*
2-Fluorophenol (Surr)	*56*		*10 - 84*
Nitrobenzene-d5 (Surr)	*70*		*23 - 128*
p-Terphenyl-d14 (Surr)	*87*		*31 - 113*
Phenol-d5 (Surr)	*44*		*10 - 67*

Lab Sample ID: LCSD 410-89268/3-A
Matrix: Water
Analysis Batch: 89436

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 89268

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl			50.0	37.8		ug/L		76	50 - 110	5	30
2,4-Dichlorophenol			50.0	43.9		ug/L		88	51 - 123	6	30
2,4-Dimethylphenol			50.0	43.4		ug/L		87	43 - 102	7	30
2,4-Dinitrophenol			100	78.9		ug/L		79	30 - 143	5	30
2,4-Dinitrotoluene			50.0	43.8		ug/L		88	52 - 128	5	30
2,4,5-Trichlorophenol			50.0	46.7		ug/L		93	59 - 126	3	30
2,4,6-Trichlorophenol			50.0	45.9		ug/L		92	59 - 129	8	30
2,2'-oxybis[1-chloropropane]			50.0	36.9		ug/L		74	41 - 118	7	30
Di-n-butyl phthalate			50.0	39.0		ug/L		78	43 - 118	6	30
Di-n-octyl phthalate			50.0	44.9		ug/L		90	48 - 129	5	30
Benzo[a]anthracene			50.0	45.1		ug/L		90	61 - 126	7	30
Benzo[a]pyrene			50.0	50.3		ug/L		101	60 - 116	6	30
Benzo[b]fluoranthene			50.0	44.6		ug/L		89	61 - 119	3	30
Benzo[g,h,i]perylene			50.0	51.5		ug/L		103	54 - 120	5	30
Benzo[k]fluoranthene			50.0	49.1		ug/L		98	69 - 122	7	30
Acenaphthene			50.0	39.2		ug/L		78	52 - 114	5	30
Acenaphthylene			50.0	41.7		ug/L		83	55 - 117	5	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-89268/3-A
Matrix: Water
Analysis Batch: 89436

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 89268

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetophenone			50.0	38.2		ug/L		76	51 - 119	7	30
Anthracene			50.0	43.9		ug/L		88	61 - 117	7	30
Atrazine			50.0	43.0		ug/L		86	71 - 133	9	30
Benzaldehyde			50.0	37.0		ug/L		74	39 - 119	7	30
Butylbenzylphthalate			50.0	32.5		ug/L		65	11 - 125	11	30
Caprolactam			50.0	13.7		ug/L		27	12 - 40	4	30
Carbazole			50.0	43.1		ug/L		86	64 - 127	4	30
Chrysene			50.0	46.1		ug/L		92	65 - 121	6	30
Dibenz(a,h)anthracene			50.0	48.3		ug/L		97	57 - 124	4	30
Dibenzofuran			50.0	40.1		ug/L		80	60 - 112	5	30
Diethyl phthalate			50.0	37.5		ug/L		75	19 - 121	9	30
Dimethyl phthalate			50.0	27.1		ug/L		54	10 - 134	8	30
Hexachlorobenzene			50.0	44.5		ug/L		89	55 - 123	5	30
Hexachlorobutadiene			50.0	28.2		ug/L		56	20 - 108	0	30
Hexachlorocyclopentadiene			50.0	11.8		ug/L		24	10 - 42	8	30
Hexachloroethane			50.0	26.0		ug/L		52	22 - 88	2	30
Fluoranthene			50.0	44.8		ug/L		90	63 - 122	7	30
Fluorene			50.0	41.0		ug/L		82	56 - 115	6	30
Indeno[1,2,3-cd]pyrene			50.0	46.6		ug/L		93	52 - 121	4	30
Isophorone			50.0	42.0		ug/L		84	55 - 122	9	30
N-Nitrosodi-n-propylamine			50.0	39.7		ug/L		79	52 - 123	10	30
N-Nitrosodiphenylamine			42.5	37.9		ug/L		89	60 - 126	6	30
Naphthalene			50.0	35.7		ug/L		71	51 - 102	6	30
Nitrobenzene			50.0	39.7		ug/L		79	52 - 119	7	30
Pentachlorophenol			100	89.6		ug/L		90	54 - 131	3	30
Phenanthrene			50.0	42.8		ug/L		86	65 - 113	7	30
Phenol			50.0	22.6		ug/L		45	22 - 69	4	30
Pyrene			50.0	45.1		ug/L		90	65 - 115	6	30
2-Chloronaphthalene			50.0	35.7		ug/L		71	43 - 110	4	30
2-Chlorophenol			50.0	40.0		ug/L		80	46 - 109	4	30
2-Methylnaphthalene			50.0	37.1		ug/L		74	45 - 108	6	30
2-Methylphenol			50.0	39.3		ug/L		79	41 - 113	5	30
2-Nitroaniline			50.0	43.2		ug/L		86	60 - 123	7	30
2-Nitrophenol			50.0	41.8		ug/L		84	53 - 123	8	30
3,3'-Dichlorobenzidine			100	61.0		ug/L		61	42 - 107	9	30
3-Nitroaniline			50.0	30.0		ug/L		60	54 - 112	2	30
4,6-Dinitro-2-methylphenol			100	88.8		ug/L		89	49 - 138	8	30
4-Bromophenyl-phenylether			50.0	44.9		ug/L		90	54 - 121	11	30
4-Methylphenol			50.0	35.6		ug/L		71	41 - 109	2	30
4-Nitroaniline			50.0	34.6		ug/L		69	49 - 107	3	30
4-Nitrophenol			100	49.8		ug/L		50	23 - 89	5	30
Bis(2-chloroethoxy)methane			50.0	42.0		ug/L		84	51 - 120	7	30
Bis(2-chloroethyl)ether			50.0	39.2		ug/L		78	50 - 110	8	30
Bis(2-ethylhexyl) phthalate			50.0	43.0		ug/L		86	50 - 127	8	30
2,6-Dinitrotoluene			50.0	45.4		ug/L		91	61 - 121	3	30
4-Chloro-3-methylphenol			50.0	43.2		ug/L		86	52 - 126	6	30
4-Chloroaniline			50.0	24.3		ug/L		49	45 - 93	10	30
4-Chlorophenyl-phenyl ether			50.0	39.8		ug/L		80	47 - 121	4	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-89268/3-A
Matrix: Water
Analysis Batch: 89436

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 89268

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*99*		*10 - 150*
2-Fluorobiphenyl (Surr)	*71*		*44 - 102*
2-Fluorophenol (Surr)	*56*		*10 - 84*
Nitrobenzene-d5 (Surr)	*75*		*23 - 128*
p-Terphenyl-d14 (Surr)	*92*		*31 - 113*
Phenol-d5 (Surr)	*44*		*10 - 67*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 410-87970/1-A
Matrix: Water
Analysis Batch: 88292

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87970

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		01/26/21 08:02	01/27/21 07:37	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		01/26/21 08:02	01/27/21 07:37	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		01/26/21 08:02	01/27/21 07:37	1
beta-BHC (1C)	ND		0.020	0.0034	ug/L		01/26/21 08:02	01/27/21 07:37	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		01/26/21 08:02	01/27/21 07:37	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		01/26/21 08:02	01/27/21 07:37	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		01/26/21 08:02	01/27/21 07:37	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		01/26/21 08:02	01/27/21 07:37	1
Endosulfan sulfate (1C)	ND		0.030	0.0058	ug/L		01/26/21 08:02	01/27/21 07:37	1
Endrin (1C)	ND		0.030	0.0081	ug/L		01/26/21 08:02	01/27/21 07:37	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		01/26/21 08:02	01/27/21 07:37	1
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		01/26/21 08:02	01/27/21 07:37	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		01/26/21 08:02	01/27/21 07:37	1
gamma-Chlordane (1C)	ND		0.040	0.0070	ug/L		01/26/21 08:02	01/27/21 07:37	1
Heptachlor (1C)	ND		0.020	0.0020	ug/L		01/26/21 08:02	01/27/21 07:37	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		01/26/21 08:02	01/27/21 07:37	1
Methoxychlor (1C)	ND		0.11	0.030	ug/L		01/26/21 08:02	01/27/21 07:37	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		01/26/21 08:02	01/27/21 07:37	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		01/26/21 08:02	01/27/21 07:37	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		01/26/21 08:02	01/27/21 07:37	1
p,p'-DDT (1C)	ND		0.030	0.0052	ug/L		01/26/21 08:02	01/27/21 07:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (1C)	*57*		*32 - 149*	*01/26/21 08:02*	*01/27/21 07:37*	*1*
DCB Decachlorobiphenyl (Surr) (2C)	*54*		*32 - 149*	*01/26/21 08:02*	*01/27/21 07:37*	*1*
Tetrachloro-m-xylene (Surr) (1C)	*15*	*S1-*	*29 - 129*	*01/26/21 08:02*	*01/27/21 07:37*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*14*	*S1-*	*29 - 129*	*01/26/21 08:02*	*01/27/21 07:37*	*1*

Lab Sample ID: LCS 410-87970/2-A
Matrix: Water
Analysis Batch: 88292

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin (1C)	0.100	0.00635	J *-	ug/L		6	28 - 119

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 410-87970/2-A
Matrix: Water
Analysis Batch: 88292

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
alpha-BHC (1C)	0.101	0.100		ug/L		99	47 - 132
beta-BHC (2C)	0.100	0.109		ug/L		109	27 - 143
delta-BHC (2C)	0.101	0.107		ug/L		106	28 - 141
Dieldrin (2C)	0.201	0.200		ug/L		100	31 - 145
Endosulfan I (2C)	0.101	0.0956		ug/L		94	40 - 138
Endosulfan II (2C)	0.200	0.220		ug/L		110	27 - 138
Endosulfan sulfate (1C)	0.201	0.218		ug/L		108	41 - 133
Endrin (1C)	0.201	0.194		ug/L		96	35 - 143
Endrin aldehyde (2C)	0.201	0.223		ug/L		111	40 - 135
Endrin ketone (2C)	0.201	0.224		ug/L		111	44 - 136
gamma-BHC (Lindane) (2C)	0.100	0.108		ug/L		108	29 - 136
Heptachlor (1C)	0.101	0.00812	J *-	ug/L		8	38 - 135
Heptachlor epoxide (2C)	0.100	0.0921		ug/L		92	28 - 146
Methoxychlor (2C)	1.01	1.17		ug/L		116	39 - 143
p,p'-DDD (1C)	0.201	0.213		ug/L		106	42 - 148
p,p'-DDE (1C)	0.201	0.0603		ug/L		30	22 - 138
p,p'-DDT (1C)	0.201	0.180		ug/L		89	40 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*68*		*32 - 149*
DCB Decachlorobiphenyl (Surr) (2C)	*72*		*32 - 149*
Tetrachloro-m-xylene (Surr) (1C)	*17*	*S1-*	*29 - 129*
Tetrachloro-m-xylene (Surr) (2C)	*16*	*S1-*	*29 - 129*

Lab Sample ID: MB 410-90832/1-A
Matrix: Water
Analysis Batch: 91288

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 90832

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin (1C)	ND		0.020	0.0020	ug/L		02/04/21 16:00	02/05/21 06:07	1
alpha-BHC (1C)	ND		0.020	0.0030	ug/L		02/04/21 16:00	02/05/21 06:07	1
alpha-Chlordane (1C)	ND		0.020	0.0030	ug/L		02/04/21 16:00	02/05/21 06:07	1
beta-BHC (2C)	ND		0.020	0.0034	ug/L		02/04/21 16:00	02/05/21 06:07	1
delta-BHC (1C)	ND		0.020	0.0034	ug/L		02/04/21 16:00	02/05/21 06:07	1
Dieldrin (1C)	ND		0.030	0.0053	ug/L		02/04/21 16:00	02/05/21 06:07	1
Endosulfan I (1C)	ND		0.020	0.0043	ug/L		02/04/21 16:00	02/05/21 06:07	1
Endosulfan II (1C)	ND		0.040	0.015	ug/L		02/04/21 16:00	02/05/21 06:07	1
Endosulfan sulfate (1C)	ND		0.030	0.0058	ug/L		02/04/21 16:00	02/05/21 06:07	1
Endrin (1C)	ND		0.030	0.0081	ug/L		02/04/21 16:00	02/05/21 06:07	1
Endrin aldehyde (1C)	ND		0.10	0.020	ug/L		02/04/21 16:00	02/05/21 06:07	1
Endrin ketone (1C)	ND		0.030	0.0050	ug/L		02/04/21 16:00	02/05/21 06:07	1
gamma-BHC (Lindane) (1C)	ND		0.020	0.0020	ug/L		02/04/21 16:00	02/05/21 06:07	1
gamma-Chlordane (1C)	ND		0.040	0.0070	ug/L		02/04/21 16:00	02/05/21 06:07	1
Heptachlor (2C)	0.00245	J B p	0.020	0.0020	ug/L		02/04/21 16:00	02/05/21 06:07	1
Heptachlor epoxide (1C)	ND		0.020	0.0023	ug/L		02/04/21 16:00	02/05/21 06:07	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 410-90832/1-A
Matrix: Water
Analysis Batch: 91288

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 90832

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor (1C)	ND		0.11	0.030	ug/L		02/04/21 16:00	02/05/21 06:07	1
Toxaphene (1C)	ND		1.0	0.30	ug/L		02/04/21 16:00	02/05/21 06:07	1
p,p'-DDD (1C)	ND		0.030	0.0050	ug/L		02/04/21 16:00	02/05/21 06:07	1
p,p'-DDE (1C)	ND		0.030	0.0050	ug/L		02/04/21 16:00	02/05/21 06:07	1
p,p'-DDT (1C)	ND		0.030	0.0052	ug/L		02/04/21 16:00	02/05/21 06:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr) (2C)	*56*		*32 - 149*	*02/04/21 16:00*	*02/05/21 06:07*	*1*
Tetrachloro-m-xylene (Surr) (2C)	*75*		*29 - 129*	*02/04/21 16:00*	*02/05/21 06:07*	*1*

Lab Sample ID: LCS 410-90832/2-A
Matrix: Water
Analysis Batch: 91288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 90832

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin (2C)	0.100	0.0522		ug/L		52	28 - 119
alpha-BHC (2C)	0.101	0.118		ug/L		116	47 - 132
beta-BHC (1C)	0.100	0.117		ug/L		117	27 - 143
delta-BHC (2C)	0.101	0.136		ug/L		134	28 - 141
Dieldrin (1C)	0.201	0.246		ug/L		122	31 - 145
Endosulfan I (1C)	0.101	0.114		ug/L		113	40 - 138
Endosulfan II (1C)	0.200	0.240		ug/L		120	27 - 138
Endosulfan sulfate (1C)	0.201	0.246		ug/L		122	41 - 133
Endrin (2C)	0.201	0.244		ug/L		121	35 - 143
Endrin aldehyde (1C)	0.201	0.239		ug/L		119	40 - 135
Endrin ketone (1C)	0.201	0.250		ug/L		124	44 - 136
gamma-BHC (Lindane) (2C)	0.100	0.119		ug/L		119	29 - 136
Heptachlor (1C)	0.101	0.0608		ug/L		60	38 - 135
Heptachlor epoxide (1C)	0.100	0.117		ug/L		117	28 - 146
Methoxychlor (2C)	1.01	1.34		ug/L		133	39 - 143
p,p'-DDD (2C)	0.201	0.239		ug/L		119	42 - 148
p,p'-DDE (2C)	0.201	0.152		ug/L		76	22 - 138
p,p'-DDT (2C)	0.201	0.225		ug/L		112	40 - 145

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*34*		*32 - 149*
Tetrachloro-m-xylene (Surr) (1C)	*79*		*29 - 129*

Lab Sample ID: LCSD 410-90832/3-A
Matrix: Water
Analysis Batch: 91288

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 90832

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin (2C)	0.100	0.0514		ug/L		51	28 - 119	2	30
alpha-BHC (2C)	0.101	0.104		ug/L		103	47 - 132	12	30
beta-BHC (2C)	0.100	0.104		ug/L		104	27 - 143	11	30
delta-BHC (2C)	0.101	0.123		ug/L		121	28 - 141	10	30

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 410-90832/3-A
Matrix: Water
Analysis Batch: 91288

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 90832

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dieldrin (1C)			0.201	0.241		ug/L		120	31 - 145	2	30
Endosulfan I (1C)			0.101	0.109		ug/L		108	40 - 138	4	30
Endosulfan II (1C)			0.200	0.220		ug/L		110	27 - 138	9	30
Endosulfan sulfate (1C)			0.201	0.214		ug/L		106	41 - 133	14	30
Endrin (1C)			0.201	0.216		ug/L		107	35 - 143	12	30
Endrin aldehyde (2C)			0.201	0.205		ug/L		102	40 - 135	15	20
Endrin ketone (2C)			0.201	0.222		ug/L		110	44 - 136	12	30
gamma-BHC (Lindane) (2C)			0.100	0.104		ug/L		104	29 - 136	13	30
Heptachlor (2C)			0.101	0.0620		ug/L		61	38 - 135	2	30
Heptachlor epoxide (1C)			0.100	0.112		ug/L		112	28 - 146	5	30
Methoxychlor (1C)			1.01	1.06		ug/L		105	39 - 143	24	30
p,p'-DDD (2C)			0.201	0.205		ug/L		102	42 - 148	16	30
p,p'-DDE (2C)			0.201	0.164		ug/L		82	22 - 138	8	30
p,p'-DDT (2C)			0.201	0.175		ug/L		87	40 - 145	25	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr) (1C)	*46*		*32 - 149*
Tetrachloro-m-xylene (Surr) (1C)	*67*		*29 - 129*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 410-87538/1-A
Matrix: Water
Analysis Batch: 88376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87538

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 05:27	1
Aluminum	ND		0.30	0.15	mg/L		01/25/21 03:07	01/27/21 05:27	1
Antimony	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 05:27	1
Barium	ND		0.0050	0.0010	mg/L		01/25/21 03:07	01/27/21 05:27	1
Cadmium	ND		0.0050	0.0010	mg/L		01/25/21 03:07	01/27/21 05:27	1
Chromium	ND		0.015	0.0016	mg/L		01/25/21 03:07	01/27/21 05:27	1
Cobalt	ND		0.0050	0.0015	mg/L		01/25/21 03:07	01/27/21 05:27	1
Iron	ND		0.20	0.040	mg/L		01/25/21 03:07	01/27/21 05:27	1
Lead	ND		0.015	0.0071	mg/L		01/25/21 03:07	01/27/21 05:27	1
Manganese	ND		0.010	0.0030	mg/L		01/25/21 03:07	01/27/21 05:27	1
Nickel	ND		0.010	0.0021	mg/L		01/25/21 03:07	01/27/21 05:27	1
Zinc	ND		0.020	0.0037	mg/L		01/25/21 03:07	01/27/21 05:27	1
Silver	ND		0.010	0.0050	mg/L		01/25/21 03:07	01/27/21 05:27	1
Selenium	ND		0.050	0.016	mg/L		01/25/21 03:07	01/27/21 05:27	1
Thallium	ND		0.030	0.0081	mg/L		01/25/21 03:07	01/27/21 05:27	1
Vanadium	ND		0.010	0.0019	mg/L		01/25/21 03:07	01/27/21 05:27	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-87538/1-A
Matrix: Water
Analysis Batch: 89828

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87538

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0050	0.0010	mg/L		01/25/21 03:07	01/31/21 14:06	1
Copper	ND		0.020	0.012	mg/L		01/25/21 03:07	01/31/21 14:06	1
Potassium	ND		0.50	0.20	mg/L		01/25/21 03:07	01/31/21 14:06	1

Lab Sample ID: LCS 410-87538/2-A
Matrix: Water
Analysis Batch: 88376

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87538

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0623		mg/L		104	80 - 120
Aluminum	0.405	0.403		mg/L		100	80 - 120
Antimony	0.100	0.109		mg/L		109	80 - 120
Barium	0.0100	0.0100		mg/L		100	80 - 120
Cadmium	0.0100	0.00979		mg/L		98	80 - 120
Chromium	0.0300	0.0310		mg/L		103	80 - 120
Cobalt	0.0100	0.0104		mg/L		104	80 - 120
Iron	0.400	0.400		mg/L		100	80 - 120
Lead	0.0300	0.0333		mg/L		111	80 - 120
Manganese	0.0200	0.0201		mg/L		100	80 - 120
Nickel	2.00	2.00		mg/L		100	80 - 120
Zinc	0.404	0.408		mg/L		101	80 - 120
Silver	0.0200	0.0194		mg/L		97	80 - 120
Selenium	0.100	0.0969		mg/L		97	80 - 120
Thallium	0.0600	0.0642		mg/L		107	80 - 120
Vanadium	0.0200	0.0206		mg/L		103	80 - 120

Lab Sample ID: LCS 410-87538/2-A
Matrix: Water
Analysis Batch: 89828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87538

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.0100	0.00984		mg/L		98	80 - 120
Copper	0.0400	0.0419		mg/L		105	80 - 120
Potassium	6.00	6.08		mg/L		101	80 - 120

Lab Sample ID: 410-27216-4 MS
Matrix: Water
Analysis Batch: 88376

Client Sample ID: Hoff-IW-2-A
Prep Type: Total/NA
Prep Batch: 87538

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND	FL F2	0.0600	0.0519		mg/L		87	75 - 125
Aluminum	9.7		0.405	12.1	4	mg/L		588	75 - 125
Antimony	ND		0.100	0.107		mg/L		107	75 - 125
Barium	0.24		0.0100	0.305	4	mg/L		655	75 - 125
Cadmium	ND		0.0100	0.00874		mg/L		87	75 - 125
Chromium	0.14		0.0300	0.162	4	mg/L		84	75 - 125
Cobalt	0.0061		0.0100	0.0156		mg/L		95	75 - 125
Iron	11		0.400	13.5	4	mg/L		608	75 - 125
Lead	ND		0.0300	0.0279		mg/L		93	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 410-27216-4 MS
Matrix: Water
Analysis Batch: 88376

Client Sample ID: Hoff-IW-2-A
Prep Type: Total/NA
Prep Batch: 87538

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.21		0.0200	0.247	4	mg/L		183	75 - 125
Nickel	0.036		2.00	1.74		mg/L		85	75 - 125
Zinc	0.030		0.404	0.463		mg/L		107	75 - 125
Silver	ND		0.0200	0.0189		mg/L		94	75 - 125
Selenium	ND	FH	0.100	0.142	FH	mg/L		142	75 - 125
Thallium	0.019	J FL	0.0600	0.0629	FL	mg/L		74	75 - 125
Vanadium	0.029		0.0200	0.0536		mg/L		121	75 - 125

Lab Sample ID: 410-27216-4 MS
Matrix: Water
Analysis Batch: 89828

Client Sample ID: Hoff-IW-2-A
Prep Type: Total/NA
Prep Batch: 87538

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	ND		0.0100	0.0104		mg/L		104	75 - 125
Copper	0.028		0.0400	0.0702		mg/L		105	75 - 125

Lab Sample ID: 410-27216-4 MS
Matrix: Water
Analysis Batch: 89828

Client Sample ID: Hoff-IW-2-A
Prep Type: Total/NA
Prep Batch: 87538

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	540		6.00	518	4	mg/L		-391	75 - 125

Lab Sample ID: 410-27216-4 MSD
Matrix: Water
Analysis Batch: 88376

Client Sample ID: Hoff-IW-2-A
Prep Type: Total/NA
Prep Batch: 87538

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND	FL F2	0.0600	0.0398	J FL F2	mg/L		66	75 - 125	26	20
Aluminum	9.7		0.405	12.2	4	mg/L		623	75 - 125	1	20
Antimony	ND		0.100	0.115		mg/L		115	75 - 125	7	20
Barium	0.24		0.0100	0.302	4	mg/L		625	75 - 125	1	20
Cadmium	ND		0.0100	0.00914		mg/L		91	75 - 125	4	20
Chromium	0.14		0.0300	0.164	4	mg/L		90	75 - 125	1	20
Cobalt	0.0061		0.0100	0.0160		mg/L		99	75 - 125	2	20
Iron	11		0.400	13.5	4	mg/L		608	75 - 125	0	20
Lead	ND		0.0300	0.0279		mg/L		93	75 - 125	0	20
Manganese	0.21		0.0200	0.247	4	mg/L		184	75 - 125	0	20
Nickel	0.036		2.00	1.79		mg/L		88	75 - 125	3	20
Zinc	0.030		0.404	0.477		mg/L		111	75 - 125	3	20
Silver	ND		0.0200	0.0189		mg/L		95	75 - 125	0	20
Selenium	ND	FH	0.100	0.143	FH	mg/L		143	75 - 125	1	20
Thallium	0.019	J FL	0.0600	0.0671		mg/L		81	75 - 125	7	20
Vanadium	0.029		0.0200	0.0533		mg/L		120	75 - 125	1	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 410-27216-4 MSD
Matrix: Water
Analysis Batch: 89828

Client Sample ID: Hoff-IW-2-A
Prep Type: Total/NA
Prep Batch: 87538

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Beryllium	ND		0.0100	0.0106		mg/L		106	75 - 125	2	20
Copper	0.028		0.0400	0.0717		mg/L		109	75 - 125	2	20

Lab Sample ID: 410-27216-4 MSD
Matrix: Water
Analysis Batch: 89828

Client Sample ID: Hoff-IW-2-A
Prep Type: Total/NA
Prep Batch: 87538

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium	540		6.00	514	4	mg/L		-454	75 - 125	1	20

Lab Sample ID: 410-27216-4 DU
Matrix: Water
Analysis Batch: 88376

Client Sample ID: Hoff-IW-2-A
Prep Type: Total/NA
Prep Batch: 87538

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	ND	FL F2	ND		mg/L		NC	20
Aluminum	9.7		10.9		mg/L		12	20
Antimony	ND		ND		mg/L		NC	20
Barium	0.24		0.302	F3	mg/L		23	20
Cadmium	ND		ND		mg/L		NC	20
Chromium	0.14		0.135		mg/L		1	20
Cobalt	0.0061		0.00696		mg/L		13	20
Iron	11		13.1		mg/L		17	20
Lead	ND		ND		mg/L		NC	20
Manganese	0.21		0.230		mg/L		9	20
Nickel	0.036		0.0295		mg/L		19	20
Zinc	0.030		0.0297		mg/L		3	20
Silver	ND		ND		mg/L		NC	20
Selenium	ND	FH	ND		mg/L		NC	20
Thallium	0.019	J FL	0.0351	F5	mg/L		61	20
Vanadium	0.029		0.0324		mg/L		10	20

Lab Sample ID: 410-27216-4 DU
Matrix: Water
Analysis Batch: 89828

Client Sample ID: Hoff-IW-2-A
Prep Type: Total/NA
Prep Batch: 87538

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Beryllium	ND		ND		mg/L		NC	20
Copper	0.028		0.0259		mg/L		9	20

Lab Sample ID: 410-27216-4 DU
Matrix: Water
Analysis Batch: 89828

Client Sample ID: Hoff-IW-2-A
Prep Type: Total/NA
Prep Batch: 87538

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Potassium	540		502		mg/L		7	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-87563/1-A
Matrix: Water
Analysis Batch: 87708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87563

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.052	0.016	mg/L		01/25/21 05:28	01/25/21 10:06	1
Aluminum	ND		0.31	0.16	mg/L		01/25/21 05:28	01/25/21 10:06	1
Antimony	ND		0.052	0.016	mg/L		01/25/21 05:28	01/25/21 10:06	1
Barium	ND		0.0052	0.0010	mg/L		01/25/21 05:28	01/25/21 10:06	1
Beryllium	ND		0.0052	0.0010	mg/L		01/25/21 05:28	01/25/21 10:06	1
Cadmium	ND		0.0052	0.0010	mg/L		01/25/21 05:28	01/25/21 10:06	1
Calcium	ND		0.52	0.099	mg/L		01/25/21 05:28	01/25/21 10:06	1
Chromium	ND		0.015	0.0016	mg/L		01/25/21 05:28	01/25/21 10:06	1
Cobalt	ND		0.0052	0.0015	mg/L		01/25/21 05:28	01/25/21 10:06	1
Copper	ND		0.021	0.012	mg/L		01/25/21 05:28	01/25/21 10:06	1
Iron	ND		0.21	0.041	mg/L		01/25/21 05:28	01/25/21 10:06	1
Lead	ND		0.015	0.0073	mg/L		01/25/21 05:28	01/25/21 10:06	1
Magnesium	ND		0.10	0.041	mg/L		01/25/21 05:28	01/25/21 10:06	1
Manganese	ND		0.010	0.0031	mg/L		01/25/21 05:28	01/25/21 10:06	1
Nickel	ND		0.010	0.0022	mg/L		01/25/21 05:28	01/25/21 10:06	1
Zinc	ND		0.021	0.0038	mg/L		01/25/21 05:28	01/25/21 10:06	1
Silver	ND		0.010	0.0052	mg/L		01/25/21 05:28	01/25/21 10:06	1
Selenium	ND		0.052	0.016	mg/L		01/25/21 05:28	01/25/21 10:06	1
Potassium	ND		0.52	0.21	mg/L		01/25/21 05:28	01/25/21 10:06	1
Sodium	ND		1.0	0.25	mg/L		01/25/21 05:28	01/25/21 10:06	1
Thallium	ND		0.031	0.0083	mg/L		01/25/21 05:28	01/25/21 10:06	1
Vanadium	ND		0.010	0.0020	mg/L		01/25/21 05:28	01/25/21 10:06	1

Lab Sample ID: LCS 410-87563/2-A
Matrix: Water
Analysis Batch: 87708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87563

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0600	0.0663		mg/L		110	80 - 120
Aluminum	0.405	0.401		mg/L		99	80 - 120
Antimony	0.100	0.0972		mg/L		97	80 - 120
Barium	0.0100	0.0105		mg/L		105	80 - 120
Beryllium	0.0100	0.00922		mg/L		92	80 - 120
Cadmium	0.0100	0.0108		mg/L		108	80 - 120
Calcium	0.400	0.408	J	mg/L		102	80 - 120
Chromium	0.0300	0.0295		mg/L		98	80 - 120
Cobalt	0.0100	0.0106		mg/L		106	80 - 120
Copper	0.0400	0.0403		mg/L		101	80 - 120
Iron	0.400	0.397		mg/L		99	80 - 120
Lead	0.0300	0.0356		mg/L		119	80 - 120
Magnesium	0.200	0.203		mg/L		102	80 - 120
Manganese	0.0200	0.0211		mg/L		106	80 - 120
Nickel	2.00	2.14		mg/L		107	80 - 120
Zinc	0.404	0.431		mg/L		107	80 - 120
Silver	0.0200	0.0218		mg/L		109	80 - 120
Selenium	0.100	0.112		mg/L		112	80 - 120
Potassium	6.00	5.85		mg/L		98	80 - 120
Sodium	2.00	2.02		mg/L		101	80 - 120
Thallium	0.0600	0.0638		mg/L		106	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-87563/2-A
Matrix: Water
Analysis Batch: 87708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87563

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	0.0200	0.0201		mg/L		100	80 - 120

Lab Sample ID: MB 410-89896/1-A
Matrix: Water
Analysis Batch: 90292

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 89896

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		0.50	0.096	mg/L		02/01/21 09:31	02/02/21 20:09	1
Magnesium	ND		0.10	0.040	mg/L		02/01/21 09:31	02/02/21 20:09	1
Sodium	ND		1.0	0.24	mg/L		02/01/21 09:31	02/02/21 20:09	1

Lab Sample ID: LCS 410-89896/2-A
Matrix: Water
Analysis Batch: 90292

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 89896

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	0.400	0.405	J	mg/L		101	80 - 120
Magnesium	0.200	0.208		mg/L		104	80 - 120
Sodium	2.00	2.05		mg/L		102	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-87551/1-A
Matrix: Water
Analysis Batch: 88235

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87551

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/25/21 04:20	01/26/21 15:20	1

Lab Sample ID: LCS 410-87551/2-A
Matrix: Water
Analysis Batch: 88235

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87551

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.967		ug/L		97	80 - 118

Lab Sample ID: 410-27216-3 MS
Matrix: Water
Analysis Batch: 88235

Client Sample ID: Hoff-MW-E
Prep Type: Total/NA
Prep Batch: 87551

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		1.00	1.10		ug/L		110	80 - 120

Lab Sample ID: 410-27216-3 MSD
Matrix: Water
Analysis Batch: 88235

Client Sample ID: Hoff-MW-E
Prep Type: Total/NA
Prep Batch: 87551

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		1.00	1.11		ug/L		111	80 - 120	1	20

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 410-27216-3 DU
Matrix: Water
Analysis Batch: 88235

Client Sample ID: Hoff-MW-E
Prep Type: Total/NA
Prep Batch: 87551

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	ND			ND		ug/L				NC	20

Lab Sample ID: MB 410-87808/1-A
Matrix: Water
Analysis Batch: 88235

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.079	ug/L		01/25/21 16:40	01/26/21 16:22	1

Lab Sample ID: LCS 410-87808/2-A
Matrix: Water
Analysis Batch: 88235

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87808

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			1.00	1.02		ug/L		102	80 - 118		

Method: 3500 Fe B-2011 - Iron, Ferrous and Ferric

Lab Sample ID: MB 410-88180/14
Matrix: Water
Analysis Batch: 88180

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND		0.10	0.050	mg/L			01/26/21 12:52	1

Lab Sample ID: LCS 410-88180/13
Matrix: Water
Analysis Batch: 88180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ferrous Iron			1.00	1.01		mg/L		101	90 - 110		

Lab Sample ID: 410-27216-1 MS
Matrix: Water
Analysis Batch: 88180

Client Sample ID: Hoff-MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ferrous Iron	2.9	HF FL F2	5.00	3.85	FL	mg/L		19	90 - 110		

Lab Sample ID: 410-27216-1 MSD
Matrix: Water
Analysis Batch: 88180

Client Sample ID: Hoff-MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ferrous Iron	2.9	HF FL F2	5.00	3.87	FL	mg/L		19	90 - 110	1	10

Method: 3500 Fe B-2011 - Iron, Ferrous and Ferric (Continued)

Lab Sample ID: 410-27216-1 DU
Matrix: Water
Analysis Batch: 88180

Client Sample ID: Hoff-MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Ferrous Iron	2.9	HF FL F2		3.10		mg/L				7	10

Method: 375.4 - Sulfate

Lab Sample ID: MB 410-88989/1
Matrix: Water
Analysis Batch: 88989

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		6.0	2.0	mg/L			01/28/21 09:47	1

Lab Sample ID: LCS 410-88989/7
Matrix: Water
Analysis Batch: 88989

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			20.0	20.0		mg/L		100	96 - 104		

Marginal Exceedance (ME) Summary

Client: Tetra Tech, Inc.
Job ID: 410-27216-1
Project/Site: Hoff VC Site Perkiomenville PA

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: LCS 410-87970/2-A
Matrix: Water

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	%Rec	%Rec. Limits	ME %Rec. Limits	Marginal Exceedance Status
Aldrin (1C)	0.100	0.00635	J *-	ug/L	6	28 - 119	13 - 134	X
alpha-BHC (1C)	0.101	0.100		ug/L	99	47 - 132	33 - 146	
beta-BHC (2C)	0.100	0.109		ug/L	109	27 - 143	44 - 137	
delta-BHC (2C)	0.101	0.107		ug/L	106	28 - 141	40 - 149	
Dieldrin (2C)	0.201	0.200		ug/L	100	31 - 145	42 - 138	
Endosulfan I (2C)	0.101	0.0956		ug/L	94	40 - 138	24 - 154	
Endosulfan II (2C)	0.200	0.220		ug/L	110	27 - 138	42 - 136	
Endosulfan sulfate (1C)	0.201	0.218		ug/L	108	41 - 133	26 - 148	
Endrin (1C)	0.201	0.194		ug/L	96	35 - 143	17 - 161	
Endrin aldehyde (2C)	0.201	0.223		ug/L	111	40 - 135	25 - 151	
Endrin ketone (2C)	0.201	0.224		ug/L	111	44 - 136	29 - 152	
gamma-BHC (Lindane) (2C)	0.100	0.108		ug/L	108	29 - 136	37 - 146	
Heptachlor (1C)	0.101	0.00812	J *-	ug/L	8	38 - 135	21 - 151	X
Heptachlor epoxide (2C)	0.100	0.0921		ug/L	92	28 - 146	43 - 145	
Methoxychlor (2C)	1.01	1.17		ug/L	116	39 - 143	22 - 160	
p,p'-DDD (1C)	0.201	0.213		ug/L	106	42 - 148	33 - 155	
p,p'-DDE (1C)	0.201	0.0603		ug/L	30	22 - 138	38 - 142	
p,p'-DDT (1C)	0.201	0.180		ug/L	89	40 - 145	26 - 157	

Summary

Number of Analytes Reported	Number of Marginal Exceedances Allowed	Number of Marginal Exceedances Found
18	1	0

X = % Recovery is greater than widest possible limit

GC/MS VOA

Analysis Batch: 88882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-2	Hoff-MW-10	Total/NA	Water	8260C SIM 14D	
410-27216-3	Hoff-MW-E	Total/NA	Water	8260C SIM 14D	
410-27216-4	Hoff-IW-2-A	Total/NA	Water	8260C SIM 14D	
410-27216-5	Hoff-TB-012121	Total/NA	Water	8260C SIM 14D	
MB 410-88882/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-88882/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-88882/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

Analysis Batch: 89609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	8260C LL	
410-27216-1 - DL	Hoff-MW-6	Total/NA	Water	8260C LL	
410-27216-2	Hoff-MW-10	Total/NA	Water	8260C LL	
410-27216-3	Hoff-MW-E	Total/NA	Water	8260C LL	
410-27216-4	Hoff-IW-2-A	Total/NA	Water	8260C LL	
410-27216-4 - DL	Hoff-IW-2-A	Total/NA	Water	8260C LL	
410-27216-5	Hoff-TB-012121	Total/NA	Water	8260C LL	
MB 410-89609/7	Method Blank	Total/NA	Water	8260C LL	
LCS 410-89609/4	Lab Control Sample	Total/NA	Water	8260C LL	
LCSD 410-89609/5	Lab Control Sample Dup	Total/NA	Water	8260C LL	

Analysis Batch: 89900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-4 - RA	Hoff-IW-2-A	Total/NA	Water	8260C LL	
410-27216-4 - DL2	Hoff-IW-2-A	Total/NA	Water	8260C LL	
MB 410-89900/7	Method Blank	Total/NA	Water	8260C LL	
LCS 410-89900/4	Lab Control Sample	Total/NA	Water	8260C LL	
LCSD 410-89900/5	Lab Control Sample Dup	Total/NA	Water	8260C LL	

Analysis Batch: 90028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	8260C SIM 14D	
MB 410-90028/7	Method Blank	Total/NA	Water	8260C SIM 14D	
LCS 410-90028/4	Lab Control Sample	Total/NA	Water	8260C SIM 14D	
LCSD 410-90028/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM 14D	

Analysis Batch: 90866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-2 - DL	Hoff-MW-10	Total/NA	Water	8260C LL	
MB 410-90866/7	Method Blank	Total/NA	Water	8260C LL	
LCS 410-90866/4	Lab Control Sample	Total/NA	Water	8260C LL	
LCSD 410-90866/5	Lab Control Sample Dup	Total/NA	Water	8260C LL	

GC/MS Semi VOA

Prep Batch: 89268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	3510C	
410-27216-2	Hoff-MW-10	Total/NA	Water	3510C	
410-27216-3	Hoff-MW-E	Total/NA	Water	3510C	
410-27216-4	Hoff-IW-2-A	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 89268 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-89268/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-89268/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-89268/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 89436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	8270D	89268
MB 410-89268/1-A	Method Blank	Total/NA	Water	8270D	89268
LCS 410-89268/2-A	Lab Control Sample	Total/NA	Water	8270D	89268
LCSD 410-89268/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	89268

Analysis Batch: 89811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-2	Hoff-MW-10	Total/NA	Water	8270D	89268
410-27216-3	Hoff-MW-E	Total/NA	Water	8270D	89268
410-27216-4	Hoff-IW-2-A	Total/NA	Water	8270D	89268

GC Semi VOA

Prep Batch: 87970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	3510C	
410-27216-2	Hoff-MW-10	Total/NA	Water	3510C	
410-27216-3	Hoff-MW-E	Total/NA	Water	3510C	
MB 410-87970/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-87970/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 88292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	8081B	87970
410-27216-2	Hoff-MW-10	Total/NA	Water	8081B	87970
410-27216-3	Hoff-MW-E	Total/NA	Water	8081B	87970
MB 410-87970/1-A	Method Blank	Total/NA	Water	8081B	87970
LCS 410-87970/2-A	Lab Control Sample	Total/NA	Water	8081B	87970

Prep Batch: 90832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1 - RE	Hoff-MW-6	Total/NA	Water	3510C	
410-27216-2 - RE	Hoff-MW-10	Total/NA	Water	3510C	
410-27216-3 - RE	Hoff-MW-E	Total/NA	Water	3510C	
MB 410-90832/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-90832/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-90832/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 91288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1 - RE	Hoff-MW-6	Total/NA	Water	8081B	90832
410-27216-2 - RE	Hoff-MW-10	Total/NA	Water	8081B	90832
410-27216-3 - RE	Hoff-MW-E	Total/NA	Water	8081B	90832
MB 410-90832/1-A	Method Blank	Total/NA	Water	8081B	90832
LCS 410-90832/2-A	Lab Control Sample	Total/NA	Water	8081B	90832

GC Semi VOA (Continued)

Analysis Batch: 91288 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 410-90832/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	90832

Metals

Prep Batch: 87538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	3010A	
410-27216-2	Hoff-MW-10	Total/NA	Water	3010A	
410-27216-3	Hoff-MW-E	Total/NA	Water	3010A	
410-27216-4	Hoff-IW-2-A	Total/NA	Water	3010A	
MB 410-87538/1-A	Method Blank	Total/NA	Water	3010A	
LCS 410-87538/2-A	Lab Control Sample	Total/NA	Water	3010A	
410-27216-4 MS	Hoff-IW-2-A	Total/NA	Water	3010A	
410-27216-4 MSD	Hoff-IW-2-A	Total/NA	Water	3010A	
410-27216-4 DU	Hoff-IW-2-A	Total/NA	Water	3010A	

Prep Batch: 87551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	7470A	
410-27216-2	Hoff-MW-10	Total/NA	Water	7470A	
410-27216-3	Hoff-MW-E	Total/NA	Water	7470A	
410-27216-4	Hoff-IW-2-A	Total/NA	Water	7470A	
MB 410-87551/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-87551/2-A	Lab Control Sample	Total/NA	Water	7470A	
410-27216-3 MS	Hoff-MW-E	Total/NA	Water	7470A	
410-27216-3 MSD	Hoff-MW-E	Total/NA	Water	7470A	
410-27216-3 DU	Hoff-MW-E	Total/NA	Water	7470A	

Prep Batch: 87563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Dissolved	Water	Non-Digest Prep	
410-27216-2	Hoff-MW-10	Dissolved	Water	Non-Digest Prep	
410-27216-3	Hoff-MW-E	Dissolved	Water	Non-Digest Prep	
MB 410-87563/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-87563/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	

Analysis Batch: 87708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Dissolved	Water	6010C	87563
410-27216-2	Hoff-MW-10	Dissolved	Water	6010C	87563
410-27216-3	Hoff-MW-E	Dissolved	Water	6010C	87563
MB 410-87563/1-A	Method Blank	Total/NA	Water	6010C	87563
LCS 410-87563/2-A	Lab Control Sample	Total/NA	Water	6010C	87563

Prep Batch: 87808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Dissolved	Water	7470A	
410-27216-2	Hoff-MW-10	Dissolved	Water	7470A	
410-27216-3	Hoff-MW-E	Dissolved	Water	7470A	
MB 410-87808/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-87808/2-A	Lab Control Sample	Total/NA	Water	7470A	

Metals

Analysis Batch: 88235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Dissolved	Water	7470A	87808
410-27216-1	Hoff-MW-6	Total/NA	Water	7470A	87551
410-27216-2	Hoff-MW-10	Dissolved	Water	7470A	87808
410-27216-2	Hoff-MW-10	Total/NA	Water	7470A	87551
410-27216-3	Hoff-MW-E	Dissolved	Water	7470A	87808
410-27216-3	Hoff-MW-E	Total/NA	Water	7470A	87551
410-27216-4	Hoff-IW-2-A	Total/NA	Water	7470A	87551
MB 410-87551/1-A	Method Blank	Total/NA	Water	7470A	87551
MB 410-87808/1-A	Method Blank	Total/NA	Water	7470A	87808
LCS 410-87551/2-A	Lab Control Sample	Total/NA	Water	7470A	87551
LCS 410-87808/2-A	Lab Control Sample	Total/NA	Water	7470A	87808
410-27216-3 MS	Hoff-MW-E	Total/NA	Water	7470A	87551
410-27216-3 MSD	Hoff-MW-E	Total/NA	Water	7470A	87551
410-27216-3 DU	Hoff-MW-E	Total/NA	Water	7470A	87551

Analysis Batch: 88376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	6010C	87538
410-27216-2	Hoff-MW-10	Total/NA	Water	6010C	87538
410-27216-3	Hoff-MW-E	Total/NA	Water	6010C	87538
410-27216-4	Hoff-IW-2-A	Total/NA	Water	6010C	87538
MB 410-87538/1-A	Method Blank	Total/NA	Water	6010C	87538
LCS 410-87538/2-A	Lab Control Sample	Total/NA	Water	6010C	87538
410-27216-4 MS	Hoff-IW-2-A	Total/NA	Water	6010C	87538
410-27216-4 MSD	Hoff-IW-2-A	Total/NA	Water	6010C	87538
410-27216-4 DU	Hoff-IW-2-A	Total/NA	Water	6010C	87538

Analysis Batch: 89828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	6010C	87538
410-27216-2	Hoff-MW-10	Total/NA	Water	6010C	87538
410-27216-3	Hoff-MW-E	Total/NA	Water	6010C	87538
410-27216-4	Hoff-IW-2-A	Total/NA	Water	6010C	87538
410-27216-4	Hoff-IW-2-A	Total/NA	Water	6010C	87538
MB 410-87538/1-A	Method Blank	Total/NA	Water	6010C	87538
LCS 410-87538/2-A	Lab Control Sample	Total/NA	Water	6010C	87538
410-27216-4 MS	Hoff-IW-2-A	Total/NA	Water	6010C	87538
410-27216-4 MS	Hoff-IW-2-A	Total/NA	Water	6010C	87538
410-27216-4 MSD	Hoff-IW-2-A	Total/NA	Water	6010C	87538
410-27216-4 MSD	Hoff-IW-2-A	Total/NA	Water	6010C	87538
410-27216-4 DU	Hoff-IW-2-A	Total/NA	Water	6010C	87538
410-27216-4 DU	Hoff-IW-2-A	Total/NA	Water	6010C	87538

Prep Batch: 89896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	3010A	
410-27216-2	Hoff-MW-10	Total/NA	Water	3010A	
410-27216-3	Hoff-MW-E	Total/NA	Water	3010A	
410-27216-4	Hoff-IW-2-A	Total/NA	Water	3010A	
MB 410-89896/1-A	Method Blank	Total/NA	Water	3010A	
LCS 410-89896/2-A	Lab Control Sample	Total/NA	Water	3010A	

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Metals

Analysis Batch: 90292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	6010C	89896
410-27216-2	Hoff-MW-10	Total/NA	Water	6010C	89896
410-27216-3	Hoff-MW-E	Total/NA	Water	6010C	89896
MB 410-89896/1-A	Method Blank	Total/NA	Water	6010C	89896
LCS 410-89896/2-A	Lab Control Sample	Total/NA	Water	6010C	89896

Analysis Batch: 90618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-4	Hoff-IW-2-A	Total/NA	Water	6010C	89896
410-27216-4	Hoff-IW-2-A	Total/NA	Water	6010C	89896

General Chemistry

Analysis Batch: 88180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	3500 Fe B-2011	
410-27216-2	Hoff-MW-10	Total/NA	Water	3500 Fe B-2011	
410-27216-3	Hoff-MW-E	Total/NA	Water	3500 Fe B-2011	
410-27216-4	Hoff-IW-2-A	Total/NA	Water	3500 Fe B-2011	
MB 410-88180/14	Method Blank	Total/NA	Water	3500 Fe B-2011	
LCS 410-88180/13	Lab Control Sample	Total/NA	Water	3500 Fe B-2011	
410-27216-1 MS	Hoff-MW-6	Total/NA	Water	3500 Fe B-2011	
410-27216-1 MSD	Hoff-MW-6	Total/NA	Water	3500 Fe B-2011	
410-27216-1 DU	Hoff-MW-6	Total/NA	Water	3500 Fe B-2011	

Analysis Batch: 88989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-27216-1	Hoff-MW-6	Total/NA	Water	375.4	
410-27216-2	Hoff-MW-10	Total/NA	Water	375.4	
410-27216-3	Hoff-MW-E	Total/NA	Water	375.4	
410-27216-4	Hoff-IW-2-A	Total/NA	Water	375.4	
MB 410-88989/1	Method Blank	Total/NA	Water	375.4	
LCS 410-88989/7	Lab Control Sample	Total/NA	Water	375.4	

Client Sample ID: Hoff-MW-6
Lab Sample ID: 410-27216-1

Date Collected: 01/21/21 09:30
Matrix: Water
Date Received: 01/21/21 18:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		10	89609	01/30/21 00:43	R64Z	ELLE
Total/NA	Analysis	8260C LL	DL	100	89609	01/30/21 01:04	R64Z	ELLE
Total/NA	Analysis	8260C SIM 14D		2	90028	02/02/21 15:41	USEJ	ELLE
Total/NA	Prep	3510C			89268	01/28/21 22:52	K2IL	ELLE
Total/NA	Analysis	8270D		1	89436	01/29/21 21:54	DZ6A	ELLE
Total/NA	Prep	3510C			87970	01/26/21 08:02	U2SJ	ELLE
Total/NA	Analysis	8081B		5	88292	01/27/21 09:12	UAMZ	ELLE
Total/NA	Prep	3510C	RE		90832	02/04/21 16:00	U2SJ	ELLE
Total/NA	Analysis	8081B	RE	5	91288	02/05/21 06:44	UAMZ	ELLE
Dissolved	Prep	Non-Digest Prep			87563	01/25/21 05:28	UJL8	ELLE
Dissolved	Analysis	6010C		1	87708	01/25/21 10:32	ULJC	ELLE
Total/NA	Prep	3010A			87538	01/25/21 03:07	UJL8	ELLE
Total/NA	Analysis	6010C		1	89828	01/31/21 15:01	SB	ELLE
Total/NA	Prep	3010A			87538	01/25/21 03:07	UJL8	ELLE
Total/NA	Analysis	6010C		1	88376	01/27/21 05:56	ULJC	ELLE
Total/NA	Prep	3010A			89896	02/02/21 02:53	UJL8	ELLE
Total/NA	Analysis	6010C		1	90292	02/02/21 21:30	UCIG	ELLE
Dissolved	Prep	7470A			87808	01/25/21 16:40	UJL8	ELLE
Dissolved	Analysis	7470A		1	88235	01/26/21 17:11	UEFS	ELLE
Total/NA	Prep	7470A			87551	01/25/21 04:20	UJL8	ELLE
Total/NA	Analysis	7470A		1	88235	01/26/21 15:35	UEFS	ELLE
Total/NA	Analysis	3500 Fe B-2011		5	88180	01/26/21 13:47	QU5I	ELLE
Total/NA	Analysis	375.4		1	88989	01/28/21 09:47	USAE	ELLE

Client Sample ID: Hoff-MW-10
Lab Sample ID: 410-27216-2

Date Collected: 01/21/21 10:35
Matrix: Water
Date Received: 01/21/21 18:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	89609	01/30/21 01:26	R64Z	ELLE
Total/NA	Analysis	8260C LL	DL	100	90866	02/04/21 10:59	K4WN	ELLE
Total/NA	Analysis	8260C SIM 14D		1	88882	01/28/21 13:54	USEJ	ELLE
Total/NA	Prep	3510C			89268	01/28/21 22:52	K2IL	ELLE
Total/NA	Analysis	8270D		1	89811	01/31/21 22:47	UWHS	ELLE
Total/NA	Prep	3510C			87970	01/26/21 08:02	U2SJ	ELLE
Total/NA	Analysis	8081B		1	88292	01/27/21 09:23	UAMZ	ELLE
Total/NA	Prep	3510C	RE		90832	02/04/21 16:00	U2SJ	ELLE
Total/NA	Analysis	8081B	RE	1	91288	02/05/21 06:57	UAMZ	ELLE
Dissolved	Prep	Non-Digest Prep			87563	01/25/21 05:28	UJL8	ELLE
Dissolved	Analysis	6010C		1	87708	01/25/21 10:35	ULJC	ELLE
Total/NA	Prep	3010A			87538	01/25/21 03:07	UJL8	ELLE
Total/NA	Analysis	6010C		1	89828	01/31/21 15:04	SB	ELLE
Total/NA	Prep	3010A			87538	01/25/21 03:07	UJL8	ELLE
Total/NA	Analysis	6010C		1	88376	01/27/21 06:05	ULJC	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Job ID: 410-27216-1
Project/Site: Hoff VC Site Perkiomenville PA

Client Sample ID: Hoff-MW-10
Lab Sample ID: 410-27216-2
Date Collected: 01/21/21 10:35
Matrix: Water
Date Received: 01/21/21 18:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			89896	02/02/21 02:53	UJL8	ELLE
Total/NA	Analysis	6010C		1	90292	02/02/21 21:27	UCIG	ELLE
Dissolved	Prep	7470A			87808	01/25/21 16:40	UJL8	ELLE
Dissolved	Analysis	7470A		1	88235	01/26/21 17:05	UEFS	ELLE
Total/NA	Prep	7470A			87551	01/25/21 04:20	UJL8	ELLE
Total/NA	Analysis	7470A		1	88235	01/26/21 15:32	UEFS	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	88180	01/26/21 12:55	QU5I	ELLE
Total/NA	Analysis	375.4		5	88989	01/28/21 09:47	USAE	ELLE

Client Sample ID: Hoff-MW-E
Lab Sample ID: 410-27216-3
Date Collected: 01/21/21 11:55
Matrix: Water
Date Received: 01/21/21 18:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	89609	01/29/21 22:55	R64Z	ELLE
Total/NA	Analysis	8260C SIM 14D		1	88882	01/28/21 14:14	USEJ	ELLE
Total/NA	Prep	3510C			89268	01/28/21 22:52	K2IL	ELLE
Total/NA	Analysis	8270D		1	89811	01/31/21 23:16	UWHS	ELLE
Total/NA	Prep	3510C			87970	01/26/21 08:02	U2SJ	ELLE
Total/NA	Analysis	8081B		1	88292	01/27/21 09:34	UAMZ	ELLE
Total/NA	Prep	3510C	RE		90832	02/04/21 16:00	U2SJ	ELLE
Total/NA	Analysis	8081B	RE	1	91288	02/05/21 07:21	UAMZ	ELLE
Dissolved	Prep	Non-Digest Prep			87563	01/25/21 05:28	UJL8	ELLE
Dissolved	Analysis	6010C		1	87708	01/25/21 10:44	ULJC	ELLE
Total/NA	Prep	3010A			87538	01/25/21 03:07	UJL8	ELLE
Total/NA	Analysis	6010C		1	89828	01/31/21 14:58	SB	ELLE
Total/NA	Prep	3010A			87538	01/25/21 03:07	UJL8	ELLE
Total/NA	Analysis	6010C		1	88376	01/27/21 05:53	ULJC	ELLE
Total/NA	Prep	3010A			89896	02/02/21 02:53	UJL8	ELLE
Total/NA	Analysis	6010C		1	90292	02/02/21 21:33	UCIG	ELLE
Dissolved	Prep	7470A			87808	01/25/21 16:40	UJL8	ELLE
Dissolved	Analysis	7470A		1	88235	01/26/21 17:13	UEFS	ELLE
Total/NA	Prep	7470A			87551	01/25/21 04:20	UJL8	ELLE
Total/NA	Analysis	7470A		1	88235	01/26/21 15:24	UEFS	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	88180	01/26/21 12:53	QU5I	ELLE
Total/NA	Analysis	375.4		4	88989	01/28/21 09:47	USAE	ELLE

Client Sample ID: Hoff-IW-2-A
Lab Sample ID: 410-27216-4
Date Collected: 01/21/21 15:00
Matrix: Water
Date Received: 01/21/21 18:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL	RA	1	89900	02/01/21 19:37	K4WN	ELLE
Total/NA	Analysis	8260C LL	DL2	100	89900	02/01/21 20:00	K4WN	ELLE

Lab Chronicle

Client: Tetra Tech, Inc.
Job ID: 410-27216-1
Project/Site: Hoff VC Site Perkiomenville PA

Client Sample ID: Hoff-IW-2-A
Lab Sample ID: 410-27216-4
Date Collected: 01/21/21 15:00
Matrix: Water
Date Received: 01/21/21 18:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	89609	01/30/21 02:08	R64Z	ELLE
Total/NA	Analysis	8260C LL	DL	10	89609	01/30/21 02:29	R64Z	ELLE
Total/NA	Analysis	8260C SIM 14D		5	88882	01/28/21 14:55	USEJ	ELLE
Total/NA	Prep	3510C			89268	01/28/21 22:52	K2IL	ELLE
Total/NA	Analysis	8270D		1	89811	01/31/21 23:45	UWHS	ELLE
Total/NA	Prep	3010A			89896	02/02/21 02:53	UJL8	ELLE
Total/NA	Analysis	6010C		5	90618	02/03/21 14:41	SB	ELLE
Total/NA	Prep	3010A			89896	02/02/21 02:53	UJL8	ELLE
Total/NA	Analysis	6010C		10	90618	02/03/21 14:44	SB	ELLE
Total/NA	Prep	3010A			87538	01/25/21 03:07	UJL8	ELLE
Total/NA	Analysis	6010C		1	89828	01/31/21 14:13	SB	ELLE
Total/NA	Prep	3010A			87538	01/25/21 03:07	UJL8	ELLE
Total/NA	Analysis	6010C		5	89828	01/31/21 14:33	SB	ELLE
Total/NA	Prep	3010A			87538	01/25/21 03:07	UJL8	ELLE
Total/NA	Analysis	6010C		1	88376	01/27/21 05:33	ULJC	ELLE
Total/NA	Prep	7470A			87551	01/25/21 04:20	UJL8	ELLE
Total/NA	Analysis	7470A		1	88235	01/26/21 15:49	UEFS	ELLE
Total/NA	Analysis	3500 Fe B-2011		1	88180	01/26/21 12:54	QU5I	ELLE
Total/NA	Analysis	375.4		100	88989	01/28/21 09:47	USAE	ELLE

Client Sample ID: Hoff-TB-012121
Lab Sample ID: 410-27216-5
Date Collected: 01/21/21 09:00
Matrix: Water
Date Received: 01/21/21 18:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C LL		1	89609	01/29/21 20:47	R64Z	ELLE
Total/NA	Analysis	8260C SIM 14D		1	88882	01/28/21 12:33	USEJ	ELLE

Laboratory References:
ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Job ID: 410-27216-1
Project/Site: Hoff VC Site Perkiomenville PA

Laboratory: Eurofins Lancaster Laboratories Env, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-22

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Method	Method Description	Protocol	Laboratory
8260C LL	Volatile Organic Compounds by GC/MS	SW846	ELLE
8260C SIM 14D	Volatile Organic Compounds (GC/MS)	SW846	ELLE
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	ELLE
8081B	Organochlorine Pesticides (GC)	SW846	ELLE
6010C	Metals (ICP)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
3500 Fe B-2011	Iron, Ferrous and Ferric	SM	ELLE
375.4	Sulfate	MCAWW	ELLE
3010A	Preparation, Total Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
Non-Digest Prep	Preparation, Non-Digested Aqueous Metals	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Hoff VC Site Perkiomenville PA

Job ID: 410-27216-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-27216-1	Hoff-MW-6	Water	01/21/21 09:30	01/21/21 18:26	
410-27216-2	Hoff-MW-10	Water	01/21/21 10:35	01/21/21 18:26	
410-27216-3	Hoff-MW-E	Water	01/21/21 11:55	01/21/21 18:26	
410-27216-4	Hoff-IW-2-A	Water	01/21/21 15:00	01/21/21 18:26	
410-27216-5	Hoff-TB-012121	Water	01/21/21 09:00	01/21/21 18:26	

Environmental Analysis Reques[illegible]y

eurofins | Lancaster Laboratories Environmental

For Eurofins Acct. # _____ Group # _____

410-27216 Chain of Custody

COC #616099

Client Information

Client: Tetra Tech	Acct. #:
Project Name/#: Hoff VC	PWSID #:
Project Manager: Jonathan Dziekan	P.O. #:
Sampler: Roy Wagner	Quote #:
State where samples were collected: PA	For Compliance: Yes ☐ No ☐

Matrix: Soil ☐ Sediment ☐ Tissue ☐ | Water: Potable ☐ Ground ☒ NPDES ☐ Surface ☐ | Other: LAB DI

Analysis Requested — Preservation and Filtration Codes

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	N TAL Metals - total	H Ferrous Iron	H VOCs by 8260 C/D	H VOCs by 1,4-Diox SIM	Sulfate	OC Pest. / TCL	NF TAL Metals - dissolved
Hoff-MW-1a	1/21/21	0930	✓		13	1	1	3	3	1	3	1
Hoff-MW-1D	1/21/21	1035	✓		13	1	1	3	3	1	3	1
Hoff-MW-E	1/21/21	1155	✓		13	1	1	3	3	1	3	1
Hoff-IW-2-A	1/21/21	1500	✓		10	1	1	3	3	1	1	
Hoff-TB-012121	1/21/21	0900			X 4			2	2			

For Lab Use Only
FSC: _____
SCR#: _____

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 P=H_3PO_4
F=Field Filtered O=Other

Remarks

Turnaround Time (TAT) Requested (please circle)
Standard Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Requested TAT in business days: _____

E-mail address: Jonathan.Dziekan@tetratech.com

Data Package Options (circle if required)
Type I (EPA Level 3 Equivalent/non-CLP) | Type VI (Raw Data Only)
Type III (Reduced non-CLP) | NJ DKQP | TX TRRP-13
NYSDEC Category A or B | MA MCP | CT RCP

	Relinquished by	Date	Time	Received by	Date	Time
1	Roy Wagner	1/21/21	1645		1/21/21	1645
2		1/21/21	1812			
3						
4						
5					1/22/21	1826

EDD Required? Yes No
If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes (No)
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other X

Temperature upon receipt 3.2/5.9 °C

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 410-27216-1

Login Number: 27216
List Number: 1
Creator: Rivera-Santa, Julissa

List Source: Eurofins Lancaster Laboratories Env

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	

COLLECTI	SEQUENC	DATE_COLLECTED	TIME	CO	STANDAR	SAMPLE	SAMPLE	LOCATION	ADDRESS	LAB SAM	CHEMICA	ANALYTE	READING	FINAL	AN	FINAL AN	QUALITY	DATE_ANALYZED	DATE_VERIFIED	DILUTION	VOID	SAI	FREE	FOI	STANDAR	LAB SAM	LAB SAM	SAMPLE_COMMENT
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	75014	Chloroethane (vinyl	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	10417	cis-1,3-Dichloroprop	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	103651	n-Propylbenzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	106467	1,4-Dichlorobenzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	108054	Vinyl Acetate	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	108883	Toluene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	120821	1,2,4-Trichlorobenz	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	74975	Bromochloromethan	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	75150	Carbon disulfide	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	75694	Trichlorofluorometh	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	79005	1,1,2-Trichloroethar	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	124481	Dibromochloromeht	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	87683	Hexachlorobutadien	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	91203	Naphthalene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	95476	o-Xylene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	87616	1,2,3-Trichlorobenz	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	95501	1,2-Dichlorobenzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	71432	Benzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	56235	Carbon tetrachlorid	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	1634044	Methyl tert-butyl Et	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	1330207	Total Xylenes	0	ug/L				6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	100425	Styrene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								LFB %Rec low. Results +/- RL may be biased low.
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	10417	trans-1,3-Dichloropr	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	104518	n-Butylbenzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	108861	Bromobenzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	108907	Chlorobenzene	1.1	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	109999	Tetrahydrofuran	1.1	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	591786	2-Hexanone	2.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	630206	1,1,1,2-Tetrachloroe	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	79345	1,1,2,2-Tetrachloroe	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	541731	1,3-Dichlorobenzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	106934	1,4-Dichlorobenzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	95636	1,2,4-Trimethylbenz	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	98566	PCP/8	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	95636	1,3,5-Trimethylbenz	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	96128	1,2-Dibromo-3-chlo	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	100414	Ethylbenzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	106434	p-Chlorotoluene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	108101	4-Methyl-2-pentano	2.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	108383	m/p-Xylenes	1	ug/L				6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	127184	Tetrachloroethene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	135988	Sec-Butylbenzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	142289	1,3-Dichloropropane	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	156605	trans-1,2-Dichloroet	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	563586	1,1-Dichloropropene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	71556	1,1,1-Trichloroethar	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	74839	Bromomethane	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	74873	Chloromethane	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	75003	Chloroethane	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	75092	Dichloromethane	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	75343	1,1-Dichloroethane	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	78875	1,2-Dichloropropane	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	78933	2-Butanone	2.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	79016	Trichloroethene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	98066	Tert-Butylbenzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	98828	Isopropylbenzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	107062	1,2-Dichloroethane	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	75650	t-Butyl alcohol	25	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020100	540885	tert-Butyl Acetate	2.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	DIOXA	Water	Ground W	Huff TW01			G0020100	123911	1,4-Dioxane	2.5	ug/L	U		U	6/15/2021 2:00	6/23/2021 8:32	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020103708		EXTRACTED DATE						6/3/2021 2:00	6/22/2021 11:57	1								
2166	1	6/1/2021	9:00	DIOXA	Water	Ground W	Huff TW01			G0020103716		EXTRACTED DATE	6142321	Day				6/15/2021 2:00	6/23/2021 8:32	1								
2166	1	6/1/2021	9:00	VOASW	Water	Ground W	Huff TW01			G0020103708		EXTRACTED TIME						6/3/2021 2:00	6/22/2021 11:57	1								
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	207089	Benzo(b)fluoranthe	1.2	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	218019	Chrysene	1.2	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	206044	Dibenzo(a,h)anthra	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	PSTSW	Water	Ground W	Huff MW-A			G0020100	319857	beta-BHC	0.05	ug/L	U		U	6/30/2021 2:00	7/27/2021 9:17	1								
2166	2	6/1/2021	11:30	PSTSW	Water	Ground W	Huff MW-A			G0020100	1.1E+07	Metolachlor	0.05	ug/L	U		U	6/30/2021 2:00	7/27/2021 9:17	1								
2166	2	6/1/2021	11:30	PSTSW	Water	Ground W	Huff MW-A			G0020100	1.2E+07	trans-Permethrin	0.05	ug/L	U		U	6/30/2021 2:00	7/27/2021 9:17	1								
2166	2	6/1/2021	11:30	PSTSW	Water	Ground W	Huff MW-A			G0020100	1.1E+07	cis-Permethrin	0.05	ug/L	U		U	6/30/2021 2:00	7/27/2021 9:17	1								
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			G0020100	75014	Chloroethene (vinyl	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			G0020100	10417	cis-1,3-Dichloroprop	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	101553	4-Bromophenyl-phe	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			G0020100	103651	n-Propylbenzene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			G0020100	106467	1,4-Dichlorobenzene	0.74	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			G0020100	108054	Vinyl Acetate	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			G0020100	108883	Toluene	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	117840	Di-n-octylphthalate	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	120821	1,2,4-Trichlorobenz	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			G0020100	120821	1,2,4-Trichlorobenz	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	SIS	Water	Ground W	Huff MW-A			7782492	Selenium	<	2	ug/L	U		U	6/4/2021 11:10	6/4/2021 13:12	1								
2166	2	6/1/2021	11:30	SIS	Water	Ground W	Huff MW-A			7440280	Thallium	<	2	ug/L	U		U	6/4/2021 11:10	6/4/2021 13:12	1								
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			74975	Bromochloromethe		0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			G0020100	75150	Carbon disulfide	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			G0020100	75694	Trichlorofluoromeh	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			G0020100	79005	1,1,2-Trichloroethar	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	85687	Butylbenzylphthalat	5.2	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SIS	Water	Ground W	Huff MW-A			G0020103	7440428	Boron	200	ug/L	U		U	6/4/2021 11:10	6/4/2021 13:12	1								
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	117840	N-Nitrosodiethyleth	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	108394	3,4-Dimethylphenol	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1	Low-level LFB recove							This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	1888717	Hexachlorocyclopen	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	2979972	Thionazine	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	8065485	Sulfotep	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	119619	2-Acetylaminofluore	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	68932	3,3,5-Trimethylcycl	5.2	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	60117	Dimethylaminoazob	5.2	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	60893	Pentachlorobenzene	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	66273	Methyl Methanesul	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	82688	N-Nitrosodiethylami	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	924163	N-Nitrosodibutylam	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	90043	N-Nitrosomorpholine	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			98862	Acetophenone		5.2	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			2051607	Hexachlorocyclopen		5.2	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1	Interfered							This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			98953	Nitrobenzene		2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			124481	Dibromochloromeht		0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	SIS	Water	Ground W	Huff MW-A			G0020103	7440428	Boron	200	ug/L	U		U	6/4/2021 11:10	6/4/2021 13:12	1								
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	87683	Hexachlorobutadien	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			G0020100	87683	Hexachlorobutadien	0.5	ug/L	U		U	6/3/2021 2:00	6/22/2021 11:58	1								
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	88744	2-Nitroaniline	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	SV-SW	Water	Ground W	Huff MW-A			G0020100	91203	Naphthalene	2.5	ug/L	U		U	6/11/2021 2:00	7/23/2021 11:09	1								This sample contains the following Tentatively Identified Compounds: hexadecanoic acid, octadecanoic acid, a heavily weathered heavy-weightproduct, resulting in baseline rise, but which could not be identified.
2166	2	6/1/2021	11:30	VOASW	Water	Ground W	Huff MW-A			G0020100	91203	Naphthal

2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	608935	Pentachlorobenzene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	66273	Methyl Methanesul	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	82688	Pentachloronitrobe	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	924163	N-Nitrosodibutylam	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	930552	N-Nitrosopyrrolidin	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	98862	Acetophenone	5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	353901	Benzotrifluoroethar	1.2	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1	Includes 1	This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	98953	Nitrobenzene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	124481	Dibromochlorometh	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440-42-(	Boron	1690	ug/L		6/4/2021 11:15	6/9/2021 13:17	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	87683	Hexachlorobutadien	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	87683	Hexachlorobutadien	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	88744	2-Nitroaniline	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	91203	Naphthalene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	91203	Naphthalene	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	95476	o-Xylene	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	95578	2-Chlorophenol	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	959988	Endosulfan I	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	99606	1,3-Dinitrobenzene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	87616	1,2,3-Trichlorobenz	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	91941	3,3'-Dichlorobenzidi	5.2	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1	Matrix interference	This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	95501	1,2-Dichlorobenzene	1.2	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	91954	3,4-Dichloroaniline	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	2,6e+07	Cyanazine	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	2675-77-(	Chlorneb	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	298000	Methyl Parathion	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	319846	alpha-BHC	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	71432	Benzene	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	510516	Chlorobenzilate	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	510516	Chlorobenzilate	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	5103719	alpha-Chlordane	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	1,3E+07	Endrin ketone	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	56235	Carbon tetrachlorid	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	1634044	Methyl-tert-butyl Et	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	129000	Pyrene	1.2	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440224	Silver	10	ug/L	U	6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	193395	Indeno-1,2,3-cd-pyr	1.2	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	2,1E+07	Metribuzin	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	2,4E+07	Fluoranthe	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	2921882	Dursban	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	1,3E+07	Endosulfan II	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	50293	4,4'-DDT	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	51285	2,4-Dinitrophenol	25	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1	Continuine calibrati	This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	53703	Dibenzo(a,h)anthrac	1.2	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440439	Cadmium	10	ug/L	U	6/4/2021 11:15	6/9/2021 13:14	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	035	Cobalt Cr	50	ug/L	U	6/4/2021 11:15	6/9/2021 13:14	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	035	Chromium	50	ug/L	U	6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	1330207	Total Xylenes	0	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440508	Copper	10	ug/L	U	6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	100027	4-Nitrophenol	12.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	100425	Styrene	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1	LFB %Rec low.	Results +/- RL may be biased low.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	100516	Benzyl alcohol	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	10417	trans-1,3-Dichlorope	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7439976	Mercury	0.2	ug/L	U	6/10/2021 16:22	6/11/2021 13:56	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440097	Potassium	2.67	mg/L		6/4/2021 11:15	6/9/2021 13:17	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7439954	Magnesium	33.1	mg/L		6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7439965	Manganese	50	ug/L		6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7439965	Manganese	59	ug/L		6/4/2021 11:15	6/9/2021 13:14	1		
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	1024573	Heptachlor Epoxide	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	104518	n-Butylbenzene	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	106478	4-Chloroaniline	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	108861	Bromobenzene	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	108907	Chlorobenzene	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	108999	Tetrahydrofuran	1.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	111444	bis(2-Chloroethyl)et	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	111911	bis(2-Chloroethoxy)	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	117817	bis(2-Ethylhexyl)ph	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	118741	Hexachlorobenzene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	118741	Hexachlorobenzene	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1	Matrix spike recoveries low.	Results and/or reporting limits may be biased low.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	120832	2,4-Dichlorophenol	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	122667	Ethyl Parathion	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	56553	Benz(a)anthracene	1.2	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	591786	2-Hexanone	2.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	59507	4-Chloro-3-methylp	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	60571	Dieldrin	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	621647	N-Nitrosodiphenylar	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	630206	1,1,1,2-Tetrachloroe	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	67663	Chloroform	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	7005723	4-Chlorophenyl-pha	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	72208	Endrin	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	72548	4,4'-DDD	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	7421934	Endrin Aldehyde	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	74953	Dibromomethane	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	75252	Bromoform	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	75354	1,1-Dichloroethene	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	75718	Dichlorodifluorometl	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	77474	Hexachlorocyclopen	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	77474	Hexachlorocyclopen	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	78591	Isophorone	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440224	Silver	10	ug/L	U	6/4/2021 11:15	6/9/2021 13:12	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7429905	Aluminum	622	ug/L		6/4/2021 11:15	6/9/2021 13:12	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7429905	Aluminur	306	ug/L	U	6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	83329	Acenaphthene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	84662	Diethylphthalate	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	85018	Phenanthrene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	156592	cis-1,3-Dichloroprop	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	1582098	Trifluralin	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	1,6E+07	Alachlor	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440382	Arsenic	3	ug/L	U	6/4/2021 11:15	6/9/2021 13:12	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440382	Arsenic	3	ug/L	U	6/4/2021 11:15	6/9/2021 13:12	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440393	Barium	10	ug/L	U	6/4/2021 11:15	6/9/2021 13:12	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440393	Barium	10	ug/L	U	6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	035	Beryllium	5	ug/L	U	6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	035	Beryllium	5	ug/L	U	6/4/2021 11:15	6/9/2021 13:14	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440702	Calcium	104	mg/L		6/7/2021 11:15	6/10/2021 14:24	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440702	Calcium	102	mg/L		6/7/2021 11:15	6/10/2021 14:26	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440439	Cadmium	10	ug/L	U	6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	035	Cobalt Cr	50	ug/L	U	6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	035	Chromiur	50	ug/L	U	6/4/2021 11:15	6/9/2021 13:14	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440508	Copper	10	ug/L	U	6/4/2021 11:15	6/9/2021 13:14	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7439896	Iron	100	ug/L	U	6/4/2021 11:15	6/9/2021 13:14	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7439896	Iron	434	ug/L		6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7439976	Mercury	0.2	ug/L	U	6/10/2021 16:22	6/11/2021 13:56	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440097	Potassium	2.84	mg/L		6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7439954	Magnesium	33.6	mg/L		6/4/2021 11:15	6/9/2021 13:36	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440235	Sodium	24.3	mg/L		6/4/2021 11:15	6/9/2021 13:36	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440235	Sodium	22.1	mg/L		6/4/2021 11:15	6/9/2021 13:36	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440020	Nickel	50	ug/L	U	6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440020	Nickel	50	ug/L	U	6/4/2021 11:15	6/9/2021 13:14	1		
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	1861321	DCPA	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	1897456	Chlorothalonil	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	191242	Benzo(e,h,i)perylene	1.2	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1	Continuine calibrati	This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7439921	Lead	5	ug/L	U	6/4/2021 11:15	6/9/2021 13:12	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7439921	Lead	5	ug/L	U	6/4/2021 11:15	6/9/2021 13:13	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	035	Sulfate	52.1	mg/L		6/3/2021 15:45	6/14/2021 5:17	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440360	Antimon	3	ug/L	U	6/4/2021 11:15	6/9/2021 13:12	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440360	Antimon	3	ug/L	U	6/4/2021 11:15	6/9/2021 13:12	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7782492	Selenium	7	ug/L	U	6/4/2021 11:15	6/9/2021 13:12	1		
2166	3	6/1/2021	14:45	SIS	Water	Ground W	Hoffman-E	GI202101	7440-28-(	Thallium	2	ug/L	U	6/4/2021 11:15	6/9/2021 13:12	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	100016	4-Nitroaniline	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1		This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	PST-W	Water	Ground W	Hoffman-E	GI202100	1031078	Endosulfan Sulfate	0.053	ug/L	U	6/30/2021 2:00	7/27/2021 9:38	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W	Hoffman-E	GI202100	105679	2,4-Dimethylphenol	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 11:17	1	Low-level LFB recove	This sample does not contain any Tentatively Identified Compounds.
2166	3	6/1/2021	14:45	VOA-W	Water	Ground W	Hoffman-E	GI202100	108678	1,3,5-Trimethylbenz	0.5	ug/L	U	6/3/2021 2:00	6/22/2021 11:58	1		
2166	3	6/1/2021	14:45	SV-SW	Water	Ground W

2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7439896	Iron	25500	ug/L		6/4/2021 11:49	6/9/2021 13:57	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7439976	Mercury	1.99	ug/L		6/10/2021 14:26	6/11/2021 13:57	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7440097	Potassium	57	mg/L		6/4/2021 11:49	6/9/2021 13:58	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7439965	Magnesium	684	mg/L		6/7/2021 11:49	6/10/2021 14:26	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7440235	Sodium	1296	mg/L		6/7/2021 11:49	6/10/2021 14:27	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7440231	Sodium	1288	mg/L		6/7/2021 11:49	6/10/2021 14:28	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7440020	Nickel	< 50	ug/L	U	6/4/2021 11:49	6/9/2021 13:57	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7440020	Nickel	< 50	ug/L	U	6/4/2021 11:49	6/9/2021 13:58	1					
2166	4	6/1/2021	13:30	PSTSW	Water	Ground Water	MoffettMC	QG02100	1861321	DCPA	0.053	ug/L	U	7/1/2021 2:00	7/27/2021 9:39	1					
2166	4	6/1/2021	13:30	PSTSW	Water	Ground Water	MoffettMC	QG02100	1897456	Chlorothalonil	0.053	ug/L	U	7/1/2021 2:00	7/27/2021 9:39	1					
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	191242	Benzoic Acid	1.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2	Continuine calibrati	Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7439921	Lead	2.51	ug/L		6/4/2021 12:05	6/4/2021 13:14	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7439921	Lead	< 1	ug/L	U	6/4/2021 12:05	6/4/2021 13:14	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG2101026		Sulfate	2127.86	mg/L		6/15/2021 13:58	6/16/2021 15:55	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7440360	Antimon <	1	ug/L	U	6/4/2021 12:05	6/4/2021 13:14	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7440360	Antimon <	1	ug/L	U	6/4/2021 12:05	6/4/2021 13:14	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7782492	Selenium <	1	ug/L	U	6/4/2021 12:05	6/4/2021 13:14	1					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7440-28-	Thallium <	1	ug/L	U	6/4/2021 12:05	6/4/2021 13:14	1					
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	100016	4-Nitroaniline	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	PSTSW	Water	Ground Water	MoffettMC	QG02100	1031078	Endosulfan Sulfate	0.053	ug/L	U	7/1/2021 2:00	7/27/2021 9:39	1					
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	[illegible]	105679	3-4-Dimethylphenol	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2	Interfered COD matrix	Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	[illegible]	108678	1 3 5-Trimethylbenz	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	[illegible]	108952	Phenol	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	120127	Anthracene	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	121142	2,4-Dinitrotoluene	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	594207	2,2-Dichloropropane	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	606202	2,6-Dinitrotoluene	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	62533	Aniline	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	62750	N-Nitrosodimethyla	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	67641	Acetone	216	ug/L	Q	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	67721	Hexachloroethane	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	PSTSW	Water	Ground Water	MoffettMC	QG02100	72435	Methoxychlor	0.053	ug/L	U	7/1/2021 2:00	7/27/2021 9:39	1							
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	75274	Bromodichloromeeth	1.2	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1	Surrogate	Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	PSTSW	Water	Ground Water	MoffettMC	QG02100	76448	Heptachlor	0.053	ug/L	U	7/1/2021 2:00	7/27/2021 9:39	1							
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	79345	1 1 2 2-Tetrachloroe	33.6	ug/L		6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	84742	Di-n-butylphthalate	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	86737	Fluorene	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	100754	N-nitrosopiperidine	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	110861	Pyridine	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	122394	Diphenylamine&n-N	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	126568	1-4-Naphthoquinone	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2	Continuine calibrati	Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	140578	Aramite	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	2303164	Diallate-Cis & Trans	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	298022	Phorate	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	461794	Isodrin	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	[illegible]	55185	N-Nitrosodiethylam	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	[illegible]	56851	N-Nitrosomorpholin	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	[illegible]	60515	Dimethoate	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	62500	Ethyl methanesulfo	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	76057	Pentachloroethane	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	87616	2,6-Dichlorophenol	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	92671	4-Aminobiphenyl	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2	Continuine calibrati	Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	94597	Dilate	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	95943	1 2 4 5-Tetrachlorob	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	99558	5-Nitro-o-toluidine	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	96184	1 2 3-Trichloropro	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	99876	4-Isopropyltoluene	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	88062	2 4 6-Trichlorophen	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	91587	2-Chloronaphthalen	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	95498	o-Chlorotoluene	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7440622	Vanadiur <	30	ug/L	U	6/4/2021 11:49	6/9/2021 13:57	1							
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7440622	Vanadiur <	30	ug/L	U	6/4/2021 11:49	6/9/2021 13:58	1							
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7440666	Zinc <	30	ug/L	U	6/4/2021 11:49	6/9/2021 13:57	1							
2166	4	6/1/2021	13:30	SLS	Water	Ground Water	MoffettMC	QG210117	7440666	Zinc <	30	ug/L	U	6/4/2021 11:49	6/9/2021 13:58	1							
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	208968	Acenaphthylene	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	PSTSW	Water	Ground Water	MoffettMC	QG02100	2931559	Etridiazole	0.053	ug/L	U	7/1/2021 2:00	7/27/2021 9:39	1							
2166	4	6/1/2021	13:30	PSTSW	Water	Ground Water	MoffettMC	QG02100	309002	Aldrin	0.053	ug/L	U	7/1/2021 2:00	7/27/2021 9:39	1							
2166	4	6/1/2021	13:30	PSTSW	Water	Ground Water	MoffettMC	QG02100	319868	delta-BHC	0.053	ug/L	U	7/1/2021 2:00	7/27/2021 9:39	1							
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	[illegible]	56328	Benzo(g)pyrene	1.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	PSTSW	Water	Ground Water	MoffettMC	[illegible]	5103742	gamma-Chlordane	0.053	ug/L	U	7/1/2021 2:00	7/27/2021 9:39	1							
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	[illegible]	541731	1 3 5-Trichlorobenz	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	106934	1 2-Dibromoethane	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	74958	MTBE	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	87865	Pentachlorophenol	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2	Continuine calibrati	Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	88755	2-Nitrophenol	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	91576	2-Methylnaphthalen	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	95487	2-Methylphenol	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	95636	1 2 4-Trimethylbenz	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	96128	1 2-Dibromo-3-chlo	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	131113	Dimethylphthalate	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	PSTSW	Water	Ground Water	MoffettMC	QG02100	1918167	Propachlor	0.053	ug/L	U	7/1/2021 2:00	7/27/2021 9:39	1							
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	206440	Fluoranthene	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	SV-SW	Water	Ground Water	MoffettMC	QG02100	98953	2-Nitroaniline	2.1	ug/L	U	6/11/2021 2:00	7/23/2021 11:39	2		Sample not properly preserved - residual chlorine present	Surrogate recovery low. Results and/or reporting limits may be biased low. This sample contains the following Tentatively Identified Compounds: tri- and tetra- chlorosethanes; chlorobenzene; dichlorobenzenes; tetrachlorobutadiene; pentachlorobutadiene; butyl palmitate; butyl stearate.				
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	100414	Ethylbenzene	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	106434	p-Chlorotoluene	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1		Sample not properly preserved - residual chlorine present					
2166	4	6/1/2021	13:30	VOASW	Water	Ground Water	MoffettMC	QG02100	108101	4-Methyl-2-pentano	2.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:01	1

2166	S	6/2/2021	10:15	VOA5W	Water	Ground Water	Hoff Mill-FB	GI202100	75650	t-Butyl alcohol	9	ug/L		6/5/2021 2:00	6/22/2021 12:04	1		Sample not properly preserved - residual chlorine present			
2166	S	6/2/2021	10:15	SV-SW	Water	Ground Water	Hoff Mill-FB	GI202100	98553	a-Terpineol	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:23	1		One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; benzoic acid; phosgene oxime; tetrachloroethane; chlorophenol; chloronitrophenol; dichlorophenol.			
2166	S	6/2/2021	10:15	VOA5W	Water	Ground Water	Hoff Mill-FB	GI202100	540881	tert-Butyl Acetate	2.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:04	1		Sample not properly preserved - residual chlorine present			
2166	S	6/2/2021	10:15	DIOXA	Water	Ground Water	Hoff Mill-FB	GI202100	123911	1,4-Dioxane	26.7	ug/L		6/15/2021 2:00	6/23/2021 8:32	1					
2166	S	6/2/2021	10:15	VOA5W	Water	Ground Water	Hoff Mill-FB	GI202100712		EXTRACTED DATE				6/5/2021 2:00	6/22/2021 12:04	1		Sample not properly preserved - residual chlorine present			
2166	S	6/2/2021	10:15	SV-SW	Water	Ground Water	Hoff Mill-FB	GI202100730		EXTRACTED DATE	6072021	Day		6/11/2021 2:00	7/23/2021 12:23	1		One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; benzoic acid; phosgene oxime; tetrachloroethane; chlorophenol; chloronitrophenol; dichlorophenol.			
2166	S	6/2/2021	10:15	DIOXA	Water	Ground Water	Hoff Mill-FB	GI202100720		EXTRACTED DATE	6142021	Day		6/15/2021 2:00	6/23/2021 8:32	1					
2166	S	6/2/2021	10:15	PSTSW	Water	Ground Water	Hoff Mill-FB	GI202100737		EXTRACTED DATE	6072021	Day		7/1/2021 2:00	7/27/2021 9:39	1					
2166	S	6/2/2021	10:15	VOA5W	Water	Ground Water	Hoff Mill-FB	GI202100712		EXTRACTED TIME				6/5/2021 2:00	6/22/2021 12:04	1		Sample not properly preserved - residual chlorine present			
2166	S	6/2/2021	10:15	SV-SW	Water	Ground Water	Hoff Mill-FB	GI202100	90120	1-Methylnaphthalen	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:23	1		One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; benzoic acid; phosgene oxime; tetrachloroethane; chlorophenol; chloronitrophenol; dichlorophenol.			
2166	S	6/2/2021	10:15	SV-SW	Water	Ground Water	Hoff Mill-FB	GI202100	90101	1-Chloronaphthalen	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:23	1		One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; benzoic acid; phosgene oxime; tetrachloroethane; chlorophenol; chloronitrophenol; dichlorophenol.			
2166	S	6/2/2021	10:15	SV-SW	Water	Ground Water	Hoff Mill-FB	GI202100	108-60-1	2,2'-oxybis(1-Chloro	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:23	1		One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; benzoic acid; phosgene oxime; tetrachloroethane; chlorophenol; chloronitrophenol; dichlorophenol.			
2166	G	6/2/2021	11:15		Water	Ground Water	Hoff Mill-FA														
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	207089	Benzo(k)fluoranther	1.2	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	218019	Chrysene	1.2	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	206044	Disulfoton	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	PSTSW	Water	Ground Water	Hoff Mill-FA	GI202100	319857	beta-BHC	0.053	ug/L	U	7/14/2021 2:00	7/27/2021 9:39	1					
2166	G	6/2/2021	11:15	PSTSW	Water	Ground Water	Hoff Mill-FA	GI202100	5.1E+07	Metolachlor	0.053	ug/L	U	7/14/2021 2:00	7/27/2021 9:39	1					
2166	G	6/2/2021	11:15	PSTSW	Water	Ground Water	Hoff Mill-FA	GI202100	5.2E+07	trans-Permethrin	0.053	ug/L	U	7/14/2021 2:00	7/27/2021 9:39	1					
2166	G	6/2/2021	11:15	PSTSW	Water	Ground Water	Hoff Mill-FA	GI202100	5.5E+07	cis-Permethrin	0.053	ug/L	U	7/14/2021 2:00	7/27/2021 9:39	1					
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	[illegible]	75354	[illegible]	40	ug/L	Q	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	[illegible]	1E+07	[illegible]	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	[illegible]	101552	[illegible]	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	103651	n-Propylbenzene	0.71	ug/L		6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	106467	1,4-Dichlorobenzene	185	ug/L	Q	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	108054	Vinyl Acetate	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	108883	Toluene	3.8	ug/L		6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	117840	Di-n-octylphthalate	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	120821	1,2,4-Trichlorobenz	3.4	ug/L		6/5/2021 2:00	6/22/2021 12:05	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	120821	1,2,4-Trichlorobenz	4.3	ug/L		6/5/2021 2:00	6/22/2021 12:05	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SVLS	Water	Ground Water	Hoff Mill-FA	GI202101	7782492	Selenium <	1	ug/L	U	6/4/2021 11:40	6/4/2021 13:13	1					
2166	G	6/2/2021	11:15	SVLS	Water	Ground Water	Hoff Mill-FA	GI202101	7440-28-	Thallium <	1	ug/L	U	6/4/2021 11:40	6/4/2021 13:13	1					
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	74975	Bromochloromethar	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	75150	Carbon disulfide	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	75694	Trichlorofluorometh	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	79005	1,1,2-Trichloroethar	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	85687	Butylbenzylphthalat	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SVLS	Water	Ground Water	Hoff Mill-FA	GI202101	7440-42-	Boron	261	ug/L		6/4/2021 12:16	6/9/2021 13:27	1					
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	114547	N-Nitrosomethyleth	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	109068	2-Picoline (2-Methy	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	110861	Isocyanide	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	126681	O,O,O-Triethylthioso	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	1888717	Hexachloropropene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1	Low-level LFB recove	This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	297972	Thionazine	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	8089245	Jodrea	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	[illegible]	53963	[illegible]	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	[illegible]	58902	[illegible]	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	[illegible]	60117	[illegible]	1.2	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	608935	Pentachlorobenzene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	66273	Methyl Methanesul	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	62488	Pentachloroethane	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	924163	N-Nitrosodibutylam	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	90012	2-Methylnaphthalen	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	98862	Acetophenone	5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	2051992	Benzaldehydeether	1.2	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1	Includes 1 This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	98953	Nitrobenzene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	124481	Dibromochloromeeth	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	SVLS	Water	Ground Water	Hoff Mill-FA	GI202101	7440-42-	Boron	261	ug/L		6/4/2021 12:16	6/9/2021 13:27	1					
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	87683	Hexachlorobutadien	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	87683	Hexachlorobutadien	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:05	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	88744	2-Nitroaniline	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	91203	Naphthalene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	91203	Naphthalene	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	95476	o-Xylene	1.2	ug/L		6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	95578	2-Chlorophenol	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	PSTSW	Water	Ground Water	Hoff Mill-FA	GI202100	959988	Endosulfan I	0.053	ug/L	U	7/14/2021 2:00	7/27/2021 9:39	1					
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	95668	1,2-Dichlorobenzene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	87616	1,2,3-Trichlorobenz	0.5	ug/L	U	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	[illegible]	91941	[illegible]	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	[illegible]	95501	[illegible]	451	ug/L	Q	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	[illegible]	91654	[illegible]	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	PSTSW	Water	Ground Water	Hoff Mill-FA	GI202100	2.2E+07	Cypermethrin	0.053	ug/L	U	7/14/2021 2:00	7/27/2021 9:39	1					
2166	G	6/2/2021	11:15	PSTSW	Water	Ground Water	Hoff Mill-FA	GI202100	2675-77-	Chlorneb	0.053	ug/L	U	7/14/2021 2:00	7/27/2021 9:39	1					
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	298000	Methyl Parathion	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heavily weathered mid-weight petroleum product primarily consisting of substituted PAHs.			
2166	G	6/2/2021	11:15	PSTSW	Water	Ground Water	Hoff Mill-FA	GI202100	319846	alpha-BHC	0.053	ug/L	U	7/14/2021 2:00	7/27/2021 9:39	1					
2166	G	6/2/2021	11:15	VOA5W	Water	Ground Water	Hoff Mill-FA	GI202100	71432	Benzene	80.2	ug/L	Q	6/5/2021 2:00	6/22/2021 12:05	1					
2166	G	6/2/2021	11:15	SV-SW	Water	Ground Water	Hoff Mill-FA	GI202100	510556	Chlorobenzilate	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 12:25	1		This sample contains the following Tentatively identified Compounds: light-weight alcohols which could not be identified; chlorobenzenes; methyl cyclohexanol; dichlorobenzenes; methyl indan; trichlorobenzenes; dihydrobenzothiophene; methylbenzothiophene; tetralins; trimethyl benzoic acid; t-butyl benzoic acid; stearic acid. This sample contains a heav

2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	85018	Phenanthrene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	GI202100	156592	cis-1,2-Dichloroethe	6590	ug/L		6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	PSTSW	Water	Ground Wate	MoffFW28	GI202100	1582099	Trifluralin	0.052	ug/L	U	7/14/2021 2:00	8/9/2021 11:51	1			
2166	9	6/3/2021	10:35	PSTSW	Water	Ground Wate	MoffFW28	GI202100	1.6E+07	Alachlor	0.052	ug/L	U	7/14/2021 2:00	8/9/2021 11:51	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440382	Arsenic	1	ug/L	U	6/7/2021 12:22	6/7/2021 13:36	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440382	Arsenic	1	ug/L	U	6/7/2021 12:22	6/7/2021 13:36	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440393	Barium	23	ug/L		6/9/2021 10:23	6/11/2021 14:44	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440393	Barium	24	ug/L		6/9/2021 10:23	6/11/2021 14:44	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101078		Beryllium	1	ug/L	U	6/7/2021 10:23	6/10/2021 13:20	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101078		Beryllium	1	ug/L	U	6/7/2021 10:23	6/10/2021 13:20	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440702	Calcium	130	mg/L		6/9/2021 10:23	6/11/2021 14:44	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440702	Calcium	129	mg/L		6/9/2021 10:23	6/11/2021 14:44	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440439	Cadmium	10	ug/L	U	6/7/2021 10:23	6/10/2021 13:20	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101078		Cobalt Cr	50	ug/L	U	6/7/2021 10:23	6/10/2021 13:20	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101078		Chromium	50	ug/L	U	6/7/2021 10:23	6/10/2021 13:20	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440508	Copper	10	ug/L	U	6/7/2021 10:23	6/10/2021 13:20	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7439896	Iron	100	ug/L	U	6/7/2021 10:23	6/10/2021 13:20	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7439896	Iron	100	ug/L	U	6/7/2021 10:23	6/10/2021 13:20	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7439976	Mercury	0.2	ug/L	U	6/10/2021 15:34	6/11/2021 14:01	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440097	Potassium	18.6	mg/L		6/7/2021 10:23	6/10/2021 13:28	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7439954	Magnesium	84.2	mg/L		6/7/2021 10:23	6/10/2021 13:26	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440235	Sodium	94.1	mg/L		6/9/2021 10:23	6/11/2021 14:44	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440235	Sodium	96.1	mg/L		6/9/2021 10:23	6/11/2021 14:44	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440020	Nickel	50	ug/L	U	6/7/2021 10:23	6/10/2021 13:20	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440020	Nickel	50	ug/L	U	6/7/2021 10:23	6/10/2021 13:20	1			
2166	9	6/3/2021	10:35	PSTSW	Water	Ground Wate	MoffFW28	GI202100	1861321	DCPA	0.052	ug/L	U	7/14/2021 2:00	8/9/2021 11:51	1			
2166	9	6/3/2021	10:35	PSTSW	Water	Ground Wate	MoffFW28	GI202100	1897456	Chlorothalonil	0.052	ug/L	U	7/14/2021 2:00	8/9/2021 11:51	1			
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	191242	Benzo(e,h,i)perylene	1.2	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1	Continuine calibratio		One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7439921	Lead	1	ug/L	U	6/7/2021 12:22	6/7/2021 13:36	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7439921	Lead	1	ug/L	U	6/7/2021 12:22	6/7/2021 13:36	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440360	Antimony	2	ug/L	U	6/7/2021 12:22	6/7/2021 13:36	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440360	Antimony	2	ug/L	U	6/7/2021 12:22	6/7/2021 13:36	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7782492	Selenium	2	ug/L	U	6/7/2021 12:22	6/7/2021 13:36	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440-28-	Thallium	2	ug/L	U	6/7/2021 12:22	6/7/2021 13:36	1			
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	100016	4-Nitroaniline	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	PSTSW	Water	Ground Wate	MoffFW28	GI202100	1031078	Endosulfan Sulfate	0.052	ug/L	U	7/14/2021 2:00	8/9/2021 11:51	1			
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	105679	2,4-Dimethylphenol	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1	Low-level LFB recove		One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	GI202100	108678	1,3,5-Trimethylbenz	0.5	ug/L	U	6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	108952	Phenol	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	120127	Anthracene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	121142	2,4-Dinitrotoluene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	GI202100	594207	2,2-Dichloropropane	0.5	ug/L	U	6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	606202	2,6-Dinitrotoluene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	62533	Aniline	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	62759	N-Nitrosodimethyla	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	CASTASK5	67641	Acetone	26.4	ug/L		6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	CASTASK5	67721	Hexachloroethane	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	PSTSW	Water	Ground Wate	MoffFW28	CASTASK5	72435	Methoxychlor	0.052	ug/L	U	7/14/2021 2:00	8/9/2021 11:51	1			
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	GI202100	75274	Bromodichloromeeth	0.5	ug/L	U	6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	PSTSW	Water	Ground Wate	MoffFW28	GI202100	76448	Heptachlor	0.052	ug/L	U	7/14/2021 2:00	8/9/2021 11:51	1			
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	GI202100	79345	1,1,2,2-Tetrachloroe	0.5	ug/L	U	6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	84742	Di-n-butylphthalate	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	86737	Fluorene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	100754	N-nitrosoazeridine	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	110861	Pyridine	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	122394	Diphenylamine/4-N	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	130154	1,4-Naphthoquinon	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1	Continuine calibratio		One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	140578	Aramite	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	2815540	Dalitaze Cis & Trans	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	298022	Phorate	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	465736	Isodrin	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	55185	N-Nitrosodiethylam	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	GI202100	59892	N-Nitrosomorpholine	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	60515	Dimethoate	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	62500	Ethyl methanesulfo	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	76017	Pentachloroethane	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	87650	2,6-Dichlorophenol	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	92671	4-Aminobiphenyl	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1	Low-level LFB recove		One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	CASTASK5	94597	Safrole	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	CASTASK5	95943	1,1,2,2-Tetrachloroe	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	CASTASK5	95954	1,4-Dichlorobenzene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	GI202100	96388	1,2,3-Trichloroprop	0.5	ug/L	U	6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	GI202100	99876	4-Isopropyltoluene	0.5	ug/L	U	6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	88062	2,4,6-Trichlorophen	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	91587	2-Chloronaphthalen	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	GI202100	95498	o-Chlorotoluene	0.5	ug/L	U	6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440622	Vanadium	30	ug/L	U	6/7/2021 10:23	6/10/2021 13:26	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440622	Vanadium	30	ug/L	U	6/7/2021 10:23	6/10/2021 13:26	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440666	Zinc	30	ug/L	U	6/7/2021 10:23	6/10/2021 13:26	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101	7440666	Zinc	30	ug/L	U	6/7/2021 10:23	6/10/2021 13:26	1			
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	208968	Acenaphthylene	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	PSTSW	Water	Ground Wate	MoffFW28	GI202100	2931519	Diridazole	0.052	ug/L	U	7/14/2021 2:00	8/9/2021 11:51	1			
2166	9	6/3/2021	10:35	PSTSW	Water	Ground Wate	MoffFW28	GI202100	309002	Aldrin	0.052	ug/L	U	7/14/2021 2:00	8/9/2021 11:51	1			
2166	9	6/3/2021	10:35	PSTSW	Water	Ground Wate	MoffFW28	GI202100	319868	delta-BHC	0.052	ug/L	U	7/14/2021 2:00	8/9/2021 11:51	1			
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	56238	Benzo(g)perylene	1.2	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	PSTSW	Water	Ground Wate	MoffFW28	GI202100	5103742	gamma-Chlordane	0.052	ug/L	U	7/14/2021 2:00	8/9/2021 11:51	1			
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	GI202100	541731	1,3-Dichlorobenzene	36.1	ug/L		6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	GI202100	106934	1,2-Dibromoethane	0.5	ug/L	U	6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	SI01	Water	Ground Wate	MoffFW28	GI202101078		Sulfate	605.9	mg/L		6/8/2021 16:56	6/14/2021 14:10	1			
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	GI202100	98566	PCTFB	0.5	ug/L	U	6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	87865	Pentachlorophenol	5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1	Continuine calibratio		One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	88755	2-Nitrophenol	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	91576	2-Methylnaphthalen	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	CASTASK5	95487	2-Methylphenol	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	CASTASK5	95636	1,2,4-Trimethylbenz	4.4	ug/L	CJ	6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	VOASW	Water	Ground Wate	MoffFW28	CASTASK5	96128	1,2-Dibromo-3-chlo	0.5	ug/L	U	6/7/2021 2:00	6/22/2021 12:14	1			
2166	9	6/3/2021	10:35	SV-SW	Water	Ground Wate	MoffFW28	GI202100	131113	Dimethylphthalate	2.5	ug/L	U	6/11/2021 2:00	7/23/2021 15:40	1			One of six surrogate recoveries low. Some results and/or reporting limits may be biased low.This sample contains the following Tentatively identified Compounds: chlorobenzene; dichlorobenzenes; methyl ethyl benzene; dichlorophenols; chlorophenol; chloronitrophenol; palmitic acid; stearic acid.
2166	9	6/3/2021	10:35	PSTSW	Water	Ground Wate	MoffFW28	GI202100	1918167	Propachlor	0.052	ug/L	U	7/14/2021 2:00	8/9/2

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2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	124881	Dibromochloromethane	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7440-42-	Boron	426	ug/L		6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	87683	Hexachlorobutadiene	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	87683	Hexachlorobutadiene	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	88744	2-Nitroaniline	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	91203	Naphthalene	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	91203	Naphthalene	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	95476	o-Xylene	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	95578	2-Chlorophenol	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	959988	Endosulfan I	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	99650	1,3-Dinitrobenzene	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	87616	1,2,3-Trichlorobenz	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	91941	3,3'-Dichlorobenzidi	5.2	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	Matrix spike recover GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	95501	1,2-Dichlorobenzene	1.4	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	95954	2,4,5-Trichlorophen	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	2.26-07	Cyanazine	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	2675776	Chlomeb	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	298000	Methyl Parathion	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	319846	alpha-BHC	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	71432	Benzene	1.2	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	510556	Chlorobenzilate	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	510556	Chlorobenzilate	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	1.63-07	alpha-Chlordane	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	1.56-07	Endrin ketone	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	56235	Carbon tetrachlorid	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	1634044	Methyl-tert-butyl Et	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	129000	Pyrene	1.3	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7440224	Silver <	10	ug/L	U	6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	193395	Indeno-1,2,3-cd-pyre	1.3	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	Matrix spike recover GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	2.16-07	Metribuzin	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	2.40-07	Fenamiphi	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	2921882	Dursban	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	1.61-07	Endosulfan II	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	50293	4,4'-DDT	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	51285	2,4-Dinitrophenol	26	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	53703	Dibenzo(a,h)anthrac	1.3	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	Matrix spike recover GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7440439	Cadmium <	10	ug/L	U	6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7440-48-	Cobalt Cr <	50	ug/L	U	6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7440-47-	Chromium <	50	ug/L	U	6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	1330207	Total Xylenes	0	ug/L		6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7440508	Copper	11	ug/L		6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	100027	4-Nitrophenol	13	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	100425	Styrene	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	100516	Benzyl alcohol	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	10-47-	trans-1,3-Dichloropr	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202103	7439976	Mercury <	0.2	ug/L	U	6/28/2021 16:28	6/29/2021 12:54	1							
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7440097	Potassium	10.52	mg/L		6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7439954	Magnesium	60.43	mg/L		6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7439965	Manganese	1567	ug/L		6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7439965	Manganese	1366	ug/L		6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	1024573	Hexachlor Epoxide	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	104518	n-Butylbenzene	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	106478	4-Chloroaniline	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	Matrix spike recover GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	108861	Bromobenzene	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	108907	Chlorobenzene	2.4	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	109993	Tetrahydrofuran	21.6	ug/L		6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	111444	bis(2-Chloroethyl)et	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	111911	bis(2-Chloroethoxy)e	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	117817	bis(2-Ethylhexyl)Pht	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	Matrix spike recover GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	118741	Hexachlorobenzene	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1	Mid-level LCS recovery low. Results may be biased low.						
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	118741	Hexachlorobenzene	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	120832	2,4-Dichlorophenol	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	56382	Ethyl Parathion	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	56553	Benzo(a)anthracene	1.3	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	Matrix spike recover GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	591786	2-Hexanone	2.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	59507	4-Chloro-3-methylp	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	60571	Dieldrin	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	621647	N-Nitrosodipropylam	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	630206	1,1,1,2-Tetrachloroe	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	67663	Chloroform	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	7005723	4-Chlorophenyl-phe	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	72208	Endrin	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	72548	4,4'-DDD	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	7421934	Endrin Aldehyde	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	7005-72-	4-Chlorophenyl-phe	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	74953	Dibromomethane	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	75252	Bromoform	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	75354	1,1-Dichloroethene	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	VOA5W	Water	Ground Water	HofTHW-13	GI202100	75718	Dichlorodifluorometh	0.5	ug/L	U	6/23/2021 2:00	7/12/2021 8:20	1							
2166	1S	6/22/2021	11:15	PSTSW	Water	Ground Water	HofTHW-13	GI202100	77474	Hexachlorocyclopen	0.049	ug/L	U	7/1/2021 2:00	8/2/2021 12:35	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	77474	Hexachlorocyclopen	5.2	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	78591	Isophorone	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	Matrix spike recover GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7440224	Silver <	10	ug/L	U	6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7429905	Aluminum	2996	ug/L		6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	5 1S	Water	Ground Water	HofTHW-13	GI202102	7429905	Aluminum <	300	ug/L	U	6/25/2021 11:27	6/29/2021 13:18	1							
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	83329	Acenaphthene	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.						
2166	1S	6/22/2021	11:15	SV-SIM	Water	Ground Water	HofTHW-13	GI202100	84662	Diethylphthalate	2.6	ug/L	U	7/20/2021 2:00	7/28/2021 14:55	1	GC/MS detected compounds identified as Butanoic acid, Methyl Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-

2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	127184	Tetrachloroethene	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	SV-SW	Water	Ground W	Hoff MW-13	GI202100	132649	Dibenzofuran	2.6	ug/L	U		7/20/2021 2:00	7/28/2021 14:15	1		GC/MS detected compounds identified as Butanoic acid, Methyl-Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.	
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	135988	Sec-Butylbenzene	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	142289	1,3-Dichloropropane	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	156405	trans-1,2-Dichloroet	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	SV-SW	Water	Ground W	Hoff MW-13	GI202100	534521	4,6-Dinitro-2-methy	2.6	ug/L	U		7/20/2021 2:00	7/28/2021 14:15	1		GC/MS detected compounds identified as Butanoic acid, Methyl-Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.	
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	563586	1,1-Dichloropropene	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	PST5W	Water	Ground W	Hoff MW-13	GI202100	58899	Lindane	0.049	ug/L	U		7/1/2021 2:00	8/2/2021 12:35	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	71556	1,1,1-Trichloroethar	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	PST5W	Water	Ground W	Hoff MW-13	GI202100	72559	4,4'-DDE	0.049	ug/L	U		7/1/2021 2:00	8/2/2021 12:35	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	74839	Bromomethane	9.6	ug/L			6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	74873	Chloromethane	7.5	ug/L			6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	75003	Chloroethane	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	75092	Dichloromethane	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	75343	1,1-Dichloroethene	3.2	ug/L			6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	78875	1,2-Dichloropropane	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	78931	2-Butanone	10.4	ug/L			6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	79016	Trichloroethene	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	SV-SW	Water	Ground W	Hoff MW-13	GI202100	95534	o-Toluidine	2.6	ug/L	U		7/20/2021 2:00	7/28/2021 14:15	1	Matrix spike recover	GC/MS detected compounds identified as Butanoic acid, Methyl-Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.	
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	98066	Tert-Butylbenzene	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	98828	Isopropylbenzene	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	107062	1,2-Dichloroethane	0.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	SV-SW	Water	Ground W	Hoff MW-13	GI202100	1319773	3&4-Methylphenol	5.2	ug/L	U		7/20/2021 2:00	7/28/2021 14:15	1		GC/MS detected compounds identified as Butanoic acid, Methyl-Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.	
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	75650	t-Butyl alcohol	11.1	ug/L			6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	SV-SW	Water	Ground W	Hoff MW-13	GI202100	98555	a-Terpineol	2.6	ug/L	U		7/20/2021 2:00	7/28/2021 14:15	1	Low-level LFB recove	GC/MS detected compounds identified as Butanoic acid, Methyl-Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.	
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI202100	540885	tert-Butyl Acetate	2.5	ug/L	U		6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	DIOXA	Water	Ground W	Hoff MW-13	GI202100	123911	1,4-Dioxane	2.9	ug/L			7/2/2021 2:00	7/2/2021 14:47	1			
2166	1S		6/22/2021	11:15	5.15	Water	Ground W	Hoff MW-13	GI21012413		Dissolved Solids	1224	mg/L			6/23/2021 7:41	6/29/2021 13:19	1			
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI20210062S0		EXTRACTED DATE					6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	DIOXA	Water	Ground W	Hoff MW-13	GI20210062S5		EXTRACTED DATE	7012021	Day			7/2/2021 2:00	7/2/2021 14:47	1			
2166	1S		6/22/2021	11:15	PST5W	Water	Ground W	Hoff MW-13	GI20210062S9		EXTRACTED DATE	6282021	Day			7/1/2021 2:00	8/2/2021 12:35	1			
2166	1S		6/22/2021	11:15	SV-SW	Water	Ground W	Hoff MW-13	GI20210062S8		EXTRACTED DATE	6292021	Day			7/20/2021 2:00	7/28/2021 14:15	1		GC/MS detected compounds identified as Butanoic acid, Methyl-Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.	
2166	1S		6/22/2021	11:15	VOA5W	Water	Ground W	Hoff MW-13	GI20210062S0		EXTRACTED TIME					6/23/2021 2:00	7/12/2021 8:20	1			
2166	1S		6/22/2021	11:15	SV-SW	Water	Ground W	Hoff MW-13	GI202100	90120	1-Methylnaphthalen	2.6	ug/L	U		7/20/2021 2:00	7/28/2021 14:15	1		GC/MS detected compounds identified as Butanoic acid, Methyl-Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.	
2166	1S		6/22/2021	11:15	SV-SW	Water	Ground W	Hoff MW-13	GI202100	91531	2-Chloronaphthalen	2.6	ug/L	U		7/20/2021 2:00	7/28/2021 14:15	1		GC/MS detected compounds identified as Butanoic acid, Methyl-Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.	
2166	1S		6/22/2021	11:15	SV-SW	Water	Ground W	Hoff MW-13	GI202100	108-60-1	2,2'-oxybis(1-Chloro	2.6	ug/L	U		7/20/2021 2:00	7/28/2021 14:15	1		GC/MS detected compounds identified as Butanoic acid, Methyl-Butanoic acid, Pentanoic acid, Hexanoic acid, Ethyl Hexanoic acid, Benzoic acid, Methyl Benzoic acid,Butyl Benzoic acid and Methyl 1H-Benzotriazole isomers.Detected Chlorine in sample Pentachlorophenol was detected and is estimated to be between the reporting limit of 5 ppb and 1ppb.	

COLLECTC	SEQUENC	DATE_COLLECTED	TIME	CO	STANDAR	SAMPLE I	SAMPLE I	LOCATION	ADDRESS	LAB SAM	CHEMICAL	ANALYTE	READING	FINAL	AN	QUALITY	DATE_ANALYZED	DATE_VERIFIED	DILUTION	VOID	SA	FREE	FOR	STANDARI	LAB SAMI	LAB SAM	SAMPLE_COMMENT
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	75014	Chloroethene (vinyl c		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	103651	n-Propylbenzene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	108054	Vinyl Acetate		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	108883	Toluene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	74975	Bromochloromethan		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	75150	Carbon disulfide		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	75694	Trichlorofluorometha		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	79005	1,1,2-Trichloroethane		2.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	124481	Dibromochloromethe		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								LRB %Rec low. Results +/- RL may be biased low.
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	87683	Hexachlorobutadiene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	91203	Naphthalene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	95476	o-Xylene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	71432	Benzene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	56235	Carbon tetrachloride		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	1330207	Total Xylenes		0	ug/L		10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	100425	Styrene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	106516	n-Butylbenzene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	108861	Bromobenzene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	108907	Chlorobenzene		1.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	109999	Tetrahydrofuran		1.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	591786	2-Hexanone		2.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	67663	Chloroform		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	74953	Dibromomethane		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	75252	Bromoform		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								LRB %Rec low. Results +/- RL may be biased low.
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	75354	1,1-Dichloroethene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	75718	Dichlorodifluorometh		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	156592	cis-1,2-Dichloroether		2.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	594207	2,2-Dichloropropane		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	67641	Acetone		5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	75274	Bromodichloromethe		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	99876	4-Isopropyltoluene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	95498	o-Chlorotoluene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	106934	1,2-Dibromoethane		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	98566	PCTFB		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	100414	Ethylbenzene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	106434	p-Chlorotoluene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	108101	4-Methyl-2-pentanor		2.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	108383	m/p-Xylenes		1	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	127184	Tetrachloroethene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	135988	Sec-Butylbenzene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	142289	1,3-Dichloropropane		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	156605	trans-1,2-Dichloroeth		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	563586	1,1-Dichloropropene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	71556	1,1,1-Trichloroethane		0.56	ug/L		10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	74839	Bromomethane		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	74873	Chloromethane		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	75003	Chloroethane		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	75092	Dichloromethane		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	75343	1,1-Dichloroethane		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	78875	1,2-Dichloropropane		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	78933	2-Butanone		2.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	79016	Trichloroethene		1.8	ug/L		10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	98066	Tert-Butylbenzene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	98828	Isopropylbenzene		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	107062	1,2-Dichloroethane		0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	75650	t-Butyl alcohol		5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006	540885	tert-Butyl Acetate		2.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006S06		EXTRACTED DATE					10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/30/2021	9:15	VOASW	Water	Ground W	NP1-S-1			G2021006S04		EXTRACTED TIME					10/5/2021 2:00	10/19/2021 14:28	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	75014	Chloroethene (vinyl c		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	103651	n-Propylbenzene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	106467	1,4-Dichlorobenzene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	108054	Vinyl Acetate		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	108883	Toluene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	120821	1,2,4-Trichlorobenzer		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	74975	Bromochloromethan		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	75150	Carbon disulfide		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	75694	Trichlorofluorometha		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	79005	1,1,2-Trichloroethane		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	124481	Dibromochloromethe		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	87683	Hexachlorobutadiene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	91203	Naphthalene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	95476	o-Xylene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	87616	1,2,3-Trichlorobenzer		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	95501	1,2-Dichlorobenzene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	71432	Benzene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	56235	Carbon tetrachloride		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	1634044	Methyl-tert-butyl Eth		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	1330207	Total Xylenes		0	ug/L		9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	100425	Styrene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	10061026	trans-1,3-Dichloropro		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	106516	n-Butylbenzene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	108861	Bromobenzene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	108907	Chlorobenzene		1.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	109999	Tetrahydrofuran		1.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	591786	2-Hexanone		2.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	630206	1,1,1,2-Tetrachloroet		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	67663	Chloroform		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	74953	Dibromomethane		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	75252	Bromoform		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	75354	1,1-Dichloroethene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	75718	Dichlorodifluorometh		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	156592	cis-1,2-Dichloroether		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	594207	2,2-Dichloropropane		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	67641	Acetone		5.8	ug/L	B	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	75274	Bromodichloromethe		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	99876	4-Isopropyltoluene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	95498	o-Chlorotoluene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	541731	1,3-Dichlorobenzene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	106934	1,2-Dibromoethane		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	98566	PCTFB		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	95636	1,2,4-Trimethylbenze		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	100414	Ethylbenzene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	106434	p-Chlorotoluene		0.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	108101	4-Methyl-2-pentanor		2.5	ug/L	U	9/29/2021 2:00	10/15/2021 11:18	1								
2166	1	9/27/2021	9:38	VOASW	Water	Ground W	Hoff-TB-20210927			G2021006	108383	m/p-Xylenes		1	ug/L	U	9/29/2021 2:00	10/15/2021 11:18

2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	108907	Chlorobenzene	1.1	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	109999	Tetrahydrofuran	1.1	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	591786	2-Hexanone	2.3	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	67663	Chloroform	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	74953	Dibromomethane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	75252	Bromoform	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1	LRB %Rec low. Results +/- RL may be biased low.		
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	75354	1,1-Dichloroethene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	75718	Dichlorodifluorometh	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	156592	cis-1,2-Dichloroether	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	594207	2,2-Dichloropropane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	67641	Acetone	5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	75274	Bromodichloromethа	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	79345	1,1,2,2-Tetrachloroet	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	96184	1,2,3-Trichloropropan	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	99876	4-Isopropyltoluene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	95498	o-Chlorotoluene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	541731	1,3-Dichlorobenzene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	106934	1,2-Dibromoethane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	98566	PCT78	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	96128	1,2-Dibromo-3-chloro	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	100414	Ethylbenzene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	106434	p-Chlorotoluene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	108101	4-Methyl-2-pentanor	2.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	108383	m/p-Xylenes	1	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	127184	Tetrachloroethene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	135988	Sec-Butylbenzene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	142289	1,3-Dichloropropane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	563586	1,1-Dichloropropene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	71556	1,1,1-Trichloroethane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	74839	Bromomethane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	74873	Chloromethane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	75003	Chloroethane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	75092	Dichloromethane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	75343	1,1-Dichloroethane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	78875	1,2-Dichloropropane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	78933	2-Butanone	2.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	79016	Trichloroethene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	98066	Tert-Butylbenzene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	98828	Isopropylbenzene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	107062	1,2-Dichloroethane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	75650	t-Butyl alcohol	13.2	ug/L	B	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006	540885	tert-Butyl Acetate	2.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006SGS		EXTRACTED DATE				10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/30/2021	9:25	VOASW	Water	Ground W NP1 TWOA	02021006SGS		EXTRACTED TIME				10/4/2021 2:00	10/19/2021 14:31	1			
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	207089	Benzo(k)fluoranthene	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Sample not properly preserved - residual chlorine present		
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	218019	Chrysene	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Sample not properly preserved - residual chlorine present		
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	298044	Disulfoton	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	75014	Chloroethene (vinyl c	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	100516	4-Bromofluorobenzen	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1			
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	103651	n-Propylbenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	106467	1,4-Dichlorobenzene	138	ug/L	Q	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	108054	Vinyl Acetate	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	108883	Toluene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	117840	Di-n-octylphthalate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	120821	1,2,4-Trichlorobenzer	30	ug/L	Q	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	120821	1,2,4-Trichlorobenzer	1.1	ug/L	Q	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018	7782492	Selenium <	5	ug/L	U	10/1/2021 10:20	10/4/2021 13:06	1			
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018	7440-28-0	Thallium <	5	ug/L	U	10/1/2021 10:20	10/4/2021 13:06	1			
2166	2	9/27/2021	11:30	METH	Water	Ground W Hoff-MW-C	02021006	74828	Methane	578	ug/L		9/30/2021 2:00	10/6/2021 14:55	1			
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	74975	Bromochloromethan	1.1	ug/L		9/30/2021 2:00	10/15/2021 11:25	1	Sample not properly preserved - residual chlorine present		
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	75150	Carbon disulfide	1.6	ug/L		9/30/2021 2:00	10/15/2021 11:25	1	Sample not properly preserved - residual chlorine present		
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	75694	Trichlorofluoromeths	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1	Sample not properly preserved - residual chlorine present		
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	79005	1,1,2-Trichloroethane	3.6	ug/L		9/30/2021 2:00	10/15/2021 11:25	1	Surrogate	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	85687	Butylbenzylphthalate	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018	7440-43-9	Cadmium <	5	ug/L	U	9/30/2021 10:55	10/1/2021 14:32	1			
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	10595956	N-Nitrosomethylethy	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	109678	2-Picoline (2-Methyly	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	120581	Isosafrole	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	126208	O,O,O-Triethylphosph	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	1888717	Hexachloropropene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Low-level LRB recove	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	297972	Thionazine	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	3689245	Sulfotep	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	53963	4-Acetylaminofluorer	12	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Mid-level LCS recover	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	58902	2,3,4,6-Tetrachlorop	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	60117	Dimethylaminoazobe	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	87865	Pentachlorobenzene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	66273	Methyl Methanesulfo	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	76188	Pentachloronitroben	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	924163	N-Nitrosodibutylamir	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	62759	N-Nitrosodimethylam	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	98862	Acetophenone	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	206440	Benzo(b)fluoranthe	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Includes b	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	98953	Nitrobenzene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	124481	Dibromochloromeths	0.58	ug/L		9/30/2021 2:00	10/15/2021 11:25	1	Surrogate	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018	7440-42-8	Boron	457	ug/L		9/30/2021 10:55	10/1/2021 14:32	1			
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	87683	Hexachlorobutadiene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Low-level LRB recove	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	87683	Hexachlorobutadiene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	88744	2-Nitroaniline	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	91087	Naphthalene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	91203	Naphthalene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	95476	o-Xylene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	95578	2-Chlorophenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	91941	3,3'-Dichlorobenzidin	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Continuine calibratior	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	91941	3,3'-Dichlorobenzidin	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	95954	2,4,5-Trichlorophenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	298000	Methyl Parathion	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	71432	Benzene	2.1	ug/L		9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	510156	Chlorobenzilate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	56235	Carbon tetrachloride	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	MOASW	Water	Ground W Hoff-MW-C	02021006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	129000	Pyrene	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018	7440224	Silver <	10	ug/L	U	9/30/2021 10:55	10/1/2021 14:27	1			
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	193395	Indeno-1,2,3-cd-pyre	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	23950585	Pronamide	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	110862	2,4-Dinitrophenol	12	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	53703	Dibenz(a,h)anthrace	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018	7440439	Cadmium <	10	ug/L	U	9/30/2021 10:55	10/1/2021 14:30	1			
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018571		Cobalt Co <	50	ug/L	U	9/30/2021 10:55	10/1/2021 14:30	1			
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018571		Chromium <	50	ug/L	U	9/30/2021 10:55	10/1/2021 14:26	1			
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	1330207	Total Xylenes	0	ug/L		9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018	7440508	Copper <	10	ug/L	U	10/7/2021 10:55	10/7/2021 15:31	1			
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	100027	4-Nitrophenol	12.1	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	100425	Styrene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	100516	Benzyl alcohol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018	7439976	Mercury	1.36	ug/L		10/5/2021 13:53	10/8/2021 14:42	1			
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018	7440097	Potassium	46.7	mg/L		9/30/2021 10:55	10/1/2021 14:35	1			
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018	7439954	Magnesium	555	mg/L		9/30/2021 10:55	10/1/2021 14:30	1			
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018	7439965	Manganese	44	ug/L		9/30/2021 10:55	10/1/2021 14:27	1			
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	02021018	7439965	Manganese <	10	ug/L	U	9/30/2021 10:55	10/1/2021 14:27	1			
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	104518	n-Butylbenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021006	534478	4-Chloroaniline	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Mid-level LCS recover	Sample not properly preserved - residual chlorine present	
2166	2	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021006	108861	Bromobenzene	0.5	ug/L	U	9/30/2021 2:00

2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7440097	Potassium	48.2	mg/L		9/30/2021 10:55	10/1/2021 14:27	1		
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7439954	Magnesium	541	mg/L		9/30/2021 10:55	10/1/2021 14:32	1		
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7440235	Sodium	1010	mg/L		9/30/2021 10:55	10/1/2021 14:30	1		
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7440235	Sodium	987	mg/L		9/30/2021 10:55	10/1/2021 14:35	1		
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7440020	Nickel	< 50	ug/L	U	9/30/2021 10:55	10/1/2021 14:27	1		
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7440020	Nickel	< 50	ug/L	U	9/30/2021 10:55	10/1/2021 14:32	1		
2166	2	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	191242	Benzo(g,h,i)perylene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7439921	Lead	1	ug/L	U	10/1/2021 10:20	10/4/2021 13:06	1		
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7439921	Lead	< 1	ug/L	U	10/1/2021 10:20	10/4/2021 13:06	1		
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7440360	Antimony	< 1	ug/L	U	10/1/2021 10:20	10/4/2021 13:06	1		
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7440360	Antimony	< 1	ug/L	U	10/1/2021 10:20	10/4/2021 13:06	1		
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7782492	Selenium	< 1	ug/L	U	10/1/2021 10:20	10/4/2021 13:06	1		
2166	2	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7440-28-0	Thallium	< 1	ug/L	U	10/1/2021 10:20	10/4/2021 13:06	1		
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	100516	Styrene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	105679	2,4-Dimethylphenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021030I	108678	3,5-Trimethylbenze	0.5	ug/L	U	9/30/2021 2:00	10/1/2021 11:25	1		Sample not properly preserved - residual chlorine present
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	108952	Phenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	120127	Anthracene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	121142	2,4-Dinitrotoluene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021030I	594207	2,2-Dichloropropane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	606202	2,6-Dinitrotoluene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	62533	Aniline	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	62759	N-Nitrosodimethylam	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021030I	67641	Acetone	236	ug/L	Q	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	67721	Hexachloroethane	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Low-level LFB recove	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	METH	Water	Ground W Hoff-MW-C	02021030I	74840	Ethane	48.1	ug/L		9/30/2021 2:00	10/6/2021 14:55	1		
2166	3	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021030I	75274	Bromodichloromethe	0.65	ug/L		9/30/2021 2:00	10/15/2021 11:25	1	Surrogate	Sample not properly preserved - residual chlorine present
2166	3	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021030I	79345	1,1,2,2-Tetrachloroet	7.1	ug/L		9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	84742	Di-n-butylphthalate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	86737	Fluorene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	100754	N-nitrosopiperidine	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	110861	Pyridine	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Low-level LFB recove	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	122394	Diphenylamine/N-Ni	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	119564	1,4-Naphthoquinone	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	140578	Aramite	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	2303161	Diallate (Cis & Trans)	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	298022	Phorate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	465736	Isodrin	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	55181	N-Nitrosodiethylamir	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	59892	N-Nitrosomorpholine	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	60515	Dimethoate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	62500	Ethyl methanesulfona	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	76017	Pentachloroethane	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	87650	2,6-Dichlorophenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	91587	1,4-Naphthalenediol	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Mid-level LCS recove	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	94597	Sulfotep	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	95954	2,4,5-Tetrachlorobe	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	99558	5-Nitro-o-toluidine	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021030I	96184	1,2,3-Trichlorobenzer	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present
2166	3	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021030I	99876	4-Isopropyltoluene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	88062	2,4,6-Trichlorophenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	95954	2-Chloronaphthalene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021030I	95636	o-Chlorotoluene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present
2166	3	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7440622	Vanadium	< 36	ug/L	U	9/30/2021 10:55	10/1/2021 14:27	1		
2166	3	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7440622	Vanadium	< 36	ug/L	U	9/30/2021 10:55	10/1/2021 14:32	1		
2166	3	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7440666	Zinc	< 30	ug/L	U	9/30/2021 10:55	10/1/2021 14:27	1		
2166	3	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	7440666	Zinc	< 30	ug/L	U	9/30/2021 10:55	10/1/2021 14:32	1		
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	208968	Acenaphthylene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	208968	Benzo(a)pyrene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021030I	541731	1,3-Dichlorobenzene	5.8	ug/L		9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present
2166	3	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02021030I	106934	1,2-Dibromoethane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present
2166	3	9/27/2021	11:30	SLS	Water	Ground W Hoff-MW-C	12021010I	5171	Sulfate	1730	mg/L		9/30/2021 19:03	10/1/2021 9:55	1		
2166	3	9/27/2021	11:30	VOASW	PCTRB	Ground W Hoff-MW-C	02021030I	74556	PCTRB	91	%R		9/30/2021 2:00	10/15/2021 11:25	1		Sample not properly preserved - residual chlorine present
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	87865	Pentachlorophenol	9.7	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	91576	2-Methylnaphthalene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	SV-SW	Water	Ground W Hoff-MW-C	02021030I	91576	1-Methylnaphthalene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:10	1	Matrix spike recovery l	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Benzoic acid estimated at 25ppb and Acetophenone belowreporting levelAlso detected Chlorobenzene; Dichlorobenzene and various compounds identified as 2,3-dichloro-2-methyl Butane, Tetrachloroethane,; 1,1,2,4,4-pentachloro 1,3-Butadiene; Pentachlorocyclopropane;Also detected traces of 2,4-Dichlorophenol and various chlorinated unknown compounds.
2166	3	9/27/2021	11:30	VOASW	Water	Ground W Hoff-MW-C	02

2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018572	Cobalt Co <	50	ug/L	U	10/4/2021 10:04	10/5/2021 12:27	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018572	Chromium <	50	ug/L	U	10/4/2021 10:04	10/5/2021 12:21	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	1330207 Total Xylenes	0	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018572	7440508 Copper <	50	ug/L	U	10/4/2021 10:04	10/5/2021 12:21	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	100027 4-Nitrophenol	12.1	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	100425 Styrene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	100516 Benzyl alcohol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	10061026 trans-1,3-Dichloropro	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7439976 Mercury <	0.2	ug/L	U	10/5/2021 13:55	10/8/2021 14:37	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440097 Potassium	6.31	mg/L		10/4/2021 10:04	10/5/2021 12:31	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7439954 Magnesium	23.9	mg/L		10/4/2021 10:04	10/5/2021 12:27	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7439965 Manganese	1540	ug/L		10/4/2021 10:04	10/5/2021 12:27	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7439965 Manganese	1570	ug/L		10/4/2021 10:04	10/5/2021 12:29	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	104518 n-Butylbenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	106478 4-Chloroaniline	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1	Mid-level LCS recover	Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	108941 Bromobenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	108907 Chlorobenzene	234	ug/L		9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	109999 Tetrahydrofuran	1.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	111444 bis(2-Chloroethyl)eth	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	111911 bis(2-Chloroethoxy)et	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	117817 bis(2-Ethylhexyl)phth	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	118741 Hexachlorobenzene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	120832 2,4-Dichlorophenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	56382 Ethyl Parathion	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	56553 Benz[a]anthracene	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	591786 2-Hexanone	2.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	59507 4-Chloro-3-methylph	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	621647 N-Nitrosodipropylam	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	630206 1,1,1,2-Tetrachloroet	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	67663 Chloroform	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	7005723 4-Chlorophenyl-phen	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	74953 Dibromomethane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	METH	Water	Ground W Hoff-MW-10	12021030	74986 Propane	14.2	ug/L	U	9/30/2021 2:00	10/6/2021 14:54	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	75252 Bromoform	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	75354 1,1-Dichloroethene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	75718 Dichlorodifluoromeeth	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	77474 Hexachlorocyclopenti	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	78591 Isophorone	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440224 Silver <	10	ug/L	U	10/4/2021 10:04	10/5/2021 12:21	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7429905 Aluminum	2110	ug/L		10/4/2021 10:04	10/5/2021 12:25	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7429905 Aluminum	300	ug/L	U	10/4/2021 10:04	10/5/2021 12:21	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	83329 Acenaphthene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	84662 Diethylphthalate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	85018 Phenanthrene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	156592 cis-1,2-Dichloroethe	5.7	ug/L		9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440382 Arsenic <	3	ug/L	U	10/4/2021 9:42	10/5/2021 8:51	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440382 Arsenic <	3	ug/L	U	10/4/2021 9:42	10/5/2021 8:51	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440393 Barium	72	ug/L		10/4/2021 10:04	10/5/2021 12:21	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440393 Barium	64	ug/L		10/4/2021 10:04	10/5/2021 12:27	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018572	Beryllium <	1	ug/L	U	10/4/2021 10:04	10/5/2021 12:21	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018572	Beryllium <	1	ug/L	U	10/4/2021 10:04	10/5/2021 12:27	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440702 Calcium	126	mg/L		10/4/2021 10:04	10/5/2021 14:43	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440702 Calcium	117	mg/L		10/4/2021 10:04	10/5/2021 14:42	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440439 Cadmium <	10	ug/L	U	10/4/2021 10:04	10/5/2021 12:21	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018572	Cobalt Co <	50	ug/L	U	10/4/2021 10:04	10/5/2021 12:21	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018572	Chromium <	50	ug/L	U	10/4/2021 10:04	10/5/2021 12:27	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440508 Copper <	10	ug/L	U	10/4/2021 10:04	10/5/2021 12:27	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7439896 Iron	1060	ug/L		10/4/2021 10:04	10/5/2021 12:29	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7439896 Iron	3540	ug/L		10/4/2021 10:04	10/5/2021 12:25	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7439976 Mercury <	0.2	ug/L	U	10/5/2021 13:57	10/8/2021 14:37	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440097 Potassium	6.31	mg/L		10/4/2021 10:04	10/5/2021 12:31	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7439954 Magnesium	24.1	mg/L		10/4/2021 10:04	10/5/2021 12:29	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440235 Sodium	16.4	mg/L		10/4/2021 10:04	10/5/2021 12:27	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440235 Sodium	17.2	mg/L		10/4/2021 10:04	10/5/2021 12:31	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440020 Nickel <	50	ug/L	U	10/4/2021 10:04	10/5/2021 12:21	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440020 Nickel <	50	ug/L	U	10/4/2021 10:04	10/5/2021 12:29	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	191242 Benzo(g,h,i)perylene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7439921 Lead	1.62	ug/L		10/4/2021 9:42	10/5/2021 8:51	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7439921 Lead <	1	ug/L	U	10/4/2021 9:42	10/5/2021 8:51	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440360 Antimony <	2	ug/L	U	10/4/2021 9:42	10/5/2021 8:51	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440360 Antimony <	2	ug/L	U	10/4/2021 9:42	10/5/2021 8:51	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7782492 Selenium <	2	ug/L	U	10/4/2021 9:42	10/5/2021 8:51	1											
2166	3	9/27/2021	14:00	SLS	Water	Ground W Hoff-MW-10	12021018	7440-28-0 Thallium <	2	ug/L	U	10/5/2021 13:45	10/6/2021 12:13	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	100016 4-Nitroaniline	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	105679 2,4-Dimethylphenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	108678 1,3,5-Trimethylbenze	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	108952 Phenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	120127 Anthracene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	121142 2,4-Dinitrotoluene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	594207 2,2-Dichloropropane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	606202 2,6-Dinitrotoluene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	62533 Aniline	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	62759 N-Nitrosodimethylam	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	67641 Acetone	5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	67721 Hexachloroethane	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1	Low-level LFB recove	Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	METH	Water	Ground W Hoff-MW-10	12021030	74840 Ethane	53.7	ug/L		9/30/2021 2:00	10/6/2021 14:54	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	75274 Bromodichloromeetha	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	VOASW	Water	Ground W Hoff-MW-10	12021020	79345 1,1,2,2-Tetrachloroet	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:27	1											
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	84742 Di-n-butylphthalate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	86737 Fluorene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	100754 N-nitrosopiperidine	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	110861 Pyridine	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1	Low-level LFB recove	Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	122394 Diphenylamine&n-Nit	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	126514 1,4-Naphthoquinone	0.5	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	140578 Aramite	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	2303164 Diallate (Cis & Trans)	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid, Diisooctyl adipate										
2166	3	9/27/2021	14:00	SV-SW	Water	Ground W Hoff-MW-10	12021020	298022 Phorate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:06	1		Also detected compounds identified as Chlorobenzene and Dichlorobenzene; isomer of Chlorophenol, Dimethyl benzoic acid, Methyl Cyclohexene,2,3-dihydro 1H-Indene-5-carboxylic acid, Sulfur, Octadecanoic acid,

2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	103651	n-Propylbenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	106467	1,4-Dichlorobenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	108054	Vinyl Acetate	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	108883	Toluene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	117840	Di-n-octylphthalate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	120821	1,2,4-Trichlorobenzer	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	120821	1,2,4-Trichlorobenzer	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7782492	Selenium <	7	ug/L	U	10/1/2021 9:44	10/4/2021 12:57	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440-28-0	Thallium <	2	ug/L	U	10/1/2021 9:44	10/4/2021 12:57	1							
2166	4	9/28/2021	11:00	METH	Water	Ground W	Hoff-MW-A	02021008	74828	Methane	290	ug/L		9/30/2021 2:00	10/6/2021 14:51	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	74975	Bromochloromethan	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	75150	Carbon disulfide	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	75694	Trichlorofluoromeths	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	79005	1,1,2-Trichloroethane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	85687	Butylbenzylphthalate	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440-42-8	Boron <	200	ug/L	U	9/30/2021 11:07	10/1/2021 14:36	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	10595956	N-Nitrosomethylethy	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	109068	2-Picoline-(2-Methyla	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	110581	Isosafrole	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	126681	O,O,O-Triethylphosph	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	1888717	Hexachloropropene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1	Low-level LFB recove	GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	297972	Thionazine	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	3689245	Sulfotep	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	53963	2-Acetylaminofluorer	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1	Mid-level LCS recover	GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	58902	1,2,4,5-Tetrachlorobr	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	60117	Dimethylaminoazobe	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	608935	Pentachlorobenzene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	66273	Methyl Methanesulfo	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	82688	Pentachloronitrobenz	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	924163	N-Nitrosodibutylamir	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	930552	N-Nitrosopyrrolidine	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	98862	Acetophenone	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	205992	Benzo(b)fluoranthene	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1	Includes b	GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	98953	Nitrobenzene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	124481	Dibromochloromeths	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440-41-7	Beryllium <	200	ug/L	U	9/30/2021 11:07	10/1/2021 14:36	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	87683	Hexachlorobutadiene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1	Low-level LFB recove	GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	87683	Hexachlorobutadiene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	88744	2-Nitroaniline	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	91203	Naphthalene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	91203	Naphthalene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	95476	o-Xylene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	95578	2-Chlorophenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	99650	1,3-Dinitrobenzene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	91941	3,3'-Dichlorobenzidin	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1	Continuine calibratior	GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	95501	1,2-Dichlorobenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	95954	2,4,5-Trichlorophenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	298000	Methyl Parathion	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	71432	Benzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	510156	Chlorobenzilate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	56235	Carbon tetrachloride	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	129000	Pyrene	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1	Low-level LFB recove	GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440-22-4	Silver <	10	ug/L	U	9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	193395	Indeno-1,2,3-cd-pyre	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	23950585	Pronamide	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	51285	2,4-Dinitrophenol	12.1	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	53703	Dibenz(a,h)anthracer	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440-43-9	Cadmium <	10	ug/L	U	9/30/2021 11:07	10/1/2021 14:36	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440-48-4	Cobalt Co <	50	ug/L	U	9/30/2021 11:07	10/1/2021 14:36	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018573		Chromium <	50	ug/L	U	9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	1330207	Total Xylenes	1	ug/L		9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440-50-8	Copper <	10	ug/L	U	9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	100027	4-Nitrophenol	12.1	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	100425	Styrene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	100516	Benzyl alcohol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7439976	Mercury <	0.2	ug/L	U	10/5/2021 14:03	10/8/2021 14:38	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440097	Potassium	4.06	mg/L		9/30/2021 11:07	10/1/2021 14:38	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7439954	Magnesium	22	mg/L		9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7439965	Manganese	2780	ug/L		9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7439965	Manganese	2770	ug/L		9/30/2021 11:07	10/1/2021 14:36	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	104518	n-Butylbenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	106478	4-Chloroaniline	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1	Mid-level LCS recover	GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	108861	Bromobenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	108907	Chlorobenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	109999	Tetrahydrofuran	1.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	111444	bis(2-Chloroethyl)eth	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	111911	bis(2-Chloroethoxy)m	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	117817	bis(2-Ethylhexyl)phth	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	118741	Hexachlorobenzene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	120832	2,4-Dichlorophenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	56382	Ethyl Parathion	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	56553	Benzo(a)anthracene	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	591786	2-Hexanone	2.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	59507	4-Chloro-3-methylph	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1						GC/MS detected traces of unknown hydrocarbons in the C15-C20 range	
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	621647	N-Nitrosodipropylam	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	67663	Chloroform	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	7005723	4-Chlorophenyl-phen	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	74953	Dibromomethane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	METH	Water	Ground W	Hoff-MW-A	02021008	74986	Propane	14.2	ug/L	U	9/30/2021 2:00	10/6/2021 14:51	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	75252	Bromoform	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	75354	1,1-Dichloroethene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	75718	Dichlorodifluorometh	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	77474	Hexachlorocyclopent	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	78591	Isophorone	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440224	Silver <	10	ug/L	U	9/30/2021 11:07	10/1/2021 14:32	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7429905	Aluminum	808	ug/L		9/30/2021 11:07	10/1/2021 14:32	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7429905	Aluminum <	200	ug/L	U	9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	83329	Acenaphthene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	84662	Diethylphthalate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021008	85018	Phenanthrene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021008	156592	cis-1,2-Dichloroether	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440382	Arsenic	9.37	ug/L		10/1/2021 9:44	10/4/2021 12:57	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440382	Arsenic	9.43	ug/L		10/1/2021 9:44	10/4/2021 12:57	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440393	Barium	27	ug/L		9/30/2021 11:07	10/1/2021 14:32	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440393	Barium	26	ug/L		9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018573		Beryllium <	1	ug/L	U	9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018573		Beryllium <	1	ug/L	U	9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440702	Calcium	64.6	mg/L		9/30/2021 11:07	10/1/2021 14:36	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440702	Calcium	64.6	mg/L		9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440439	Cadmium <	10	ug/L	U	9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018573		Cobalt Co <	50	ug/L	U	9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018573		Chromium <	50	ug/L	U	9/30/2021 11:07	10/1/2021 14:36	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440508	Copper <	10	ug/L	U	9/30/2021 11:07	10/1/2021 14:36	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7439896	Iron	988	ug/L		9/30/2021 11:07	10/1/2021 14:36	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7439896	Iron	2030	ug/L		9/30/2021 11:07	10/1/2021 14:35	1							
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7439976	Merc

2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440622	Vanadium <	30	ug/L	U	9/30/2021 11:07	10/1/2021 14:36	1					
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440666	Zinc <	30	ug/L	U	9/30/2021 11:07	10/1/2021 14:35	1					
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018	7440666	Zinc <	30	ug/L	U	9/30/2021 11:07	10/1/2021 14:36	1					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	208968	Acenaphthylene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	50328	Benzo(a)pyrene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	541731	1,3-Dichlorobenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	106934	1,2-Dibromoethane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	SLS	Water	Ground W	Hoff-MW-A	12021018573		Sulfate	63.6	mg/L		10/6/2021 9:40	10/7/2021 8:50	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	98566	PCTFB	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	87865	Pentachlorophenol	9.7	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	88755	2-Nitrophenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	91576	2-Methylnaphthalene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	95487	2-Methylphenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	96128	1,2-Dibromo-3-chloro	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	131113	Dimethylphthalate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	206440	Fluoranthene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	99092	3-Nitroaniline	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1	Mid-level LCS recover		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	100414	Ethylbenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	106434	p-Chlorotoluene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	108101	4-Methyl-2-pentanon	2.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	108383	m/p-Xylenes	1	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	127184	Tetrachloroethene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	132649	Dibenzofuran	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	135988	Sec-Butylbenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	142289	1,3-Dichloropropane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	534521	4,6-Dinitro-2-methylp	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1	Low-level LFB recove		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	563586	1,1-Dichloropropene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	71556	1,1,1-Trichloroethane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	74839	Bromomethane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	74873	Chloromethane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	75003	Chloroethane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	75092	Dichloromethane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	75343	1,1-Dichloroethene	1.4	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	78875	1,2-Dichloropropane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	78933	2-Butanone	2.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	79016	Trichloroethene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	95134	o-Toluidine	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1	Mid-level LCS recover		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	98066	Tert-Butylbenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	98828	Isopropylbenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	107062	1,2-Dichloroethane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	119773	3&4-Methylphenol	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	75650	t-Butyl alcohol	19.4	ug/L		9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	98555	a-Terpineol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1	Low-level LFB recove		GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006	540885	tert-Butyl Acetate	2.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	DIOXA	Water	Ground W	Hoff-MW-A	02021006	123911	1,4-Dioxane	2.5	ug/L	U	9/30/2021 2:00	10/7/2021 11:29	1					
2166	4	9/28/2021	11:00	DIOXA	Water	Ground W	Hoff-MW-A	02021006458		EXTRACTED DATE				9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	DIOXA	Water	Ground W	Hoff-MW-A	02021006471		EXTRACTED DATE	9303021	Day		10/3/2021 2:00	10/7/2021 11:29	1					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006477		EXTRACTED DATE	9292021	Day		10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	VOASW	Water	Ground W	Hoff-MW-A	02021006458		EXTRACTED TIME				9/30/2021 2:00	10/15/2021 11:28	1					
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	90120	1-Methylnaphthalene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	90131	1-Chloronaphthalene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	4	9/28/2021	11:00	SV-SW	Water	Ground W	Hoff-MW-A	02021006	534521	4,6-Dinitro-2-methylp	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:05	1			GC/MS detected traces of unknown hydrocarbons in the C15-C20 range		
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	208968	Acenaphthylene	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	50328	Benzo(a)pyrene	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	218019	Chrysene	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	298044	Disulfoton	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	VOASW	Water	Ground W	Hoff-MW-FB	02021006	75014	Chloroethene (vinyl c	12.6	ug/L	Q	9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	101553	4-Bromodiphenyl-ether	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	VOASW	Water	Ground W	Hoff-MW-FB	02021006	103651	n-Propylbenzene	2.2	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	VOASW	Water	Ground W	Hoff-MW-FB	02021006	106467	1,4-Dichlorobenzene	346	ug/L	Q	9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	VOASW	Water	Ground W	Hoff-MW-FB	02021006	108054	Vinyl Acetate	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	VOASW	Water	Ground W	Hoff-MW-FB	02021006	108883	Toluene	0.6	ug/L		9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	117840	Di-n-octylphthalate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	120821	1,2,4-Trichlorobenzen	7.4	ug/L	Q	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	120821	1,2,4-Trichlorobenzen	7.4	ug/L	Q	9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	SLS	Water	Ground W	Hoff-MW-FB	12021018	7782492	Selenium <	7	ug/L	U	10/1/2021 9:50	10/4/2021 13:00	1					
2166	5	9/28/2021	12:30	SLS	Water	Ground W	Hoff-MW-FB	12021018	7440-28-0	Thallium <	7	ug/L	U	10/1/2021 9:50	10/4/2021 13:00	1					
2166	5	9/28/2021	12:30	METH	Water	Ground W	Hoff-MW-FB	02021006	74828	Methane	1250	ug/L		9/30/2021 2:00	10/15/2021 14:51	1					
2166	5	9/28/2021	12:30	VOASW	Water	Ground W	Hoff-MW-FB	02021006	74975	Bromochloromethan	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	VOASW	Water	Ground W	Hoff-MW-FB	02021006	75150	Carbon disulfide	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	VOASW	Water	Ground W	Hoff-MW-FB	02021006	75694	Trichlorofluoromethа	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	VOASW	Water	Ground W	Hoff-MW-FB	02021006	79005	1,1,2-Trichloroethane	0.87	ug/L		9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	85687	Butylbenzylphthalate	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SLS	Water	Ground W	Hoff-MW-FB	12021018	7440-42-8	Boron	701	ug/L		9/30/2021 11:49	10/1/2021 14:43	1					
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	10595956	N-Nitrosomethylethy	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	108608	2-Picoline (2-Methyp	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	120581	Isosafrole	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	126681	O,O,O-Triethylphosph	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	10883717	Hexachlorocyclopenta	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1	Low-level LFB recove		Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	297972	Thionazine	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	3268245	Sulfotep	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	53963	2-Acetylaminofluoren	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1	Mid-level LCS recover		Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	58902	2,3,4,6-Tetrachlorophf	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	60117	Dimethylaminoazobe	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	608935	Pentachlorobenzene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	66273	Methyl Methanesulfo	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	82688	Pentachloronitrobenz	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	924163	Isobutyl alcohol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	930552	N-Nitrosopyrrolidine	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	99092	Acetophenone	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	205992	Benzo(b)fluoranthene	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1	Includes b		Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	98953	Nitrobenzene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	VOASW	Water	Ground W	Hoff-MW-FB	02021006	124481	Dibromochloromethа	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	SLS	Water	Ground W	Hoff-MW-FB	12021018	7440-42-8	Boron	722	ug/L		9/30/2021 11:49	10/1/2021 14:43	1					
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	87683	Hexachlorobutadiene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1	Mid-level LCS recover		Sample not properly preserved - residual chlorine present	GC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.	
2166	5	9/28/2021	12:30	VOASW	Water	Ground W	Hoff-MW-FB	02021006	87683	Hexachlorobutadiene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1					
2166	5	9/28/2021	12:30	SV-SW	Water	Ground W	Hoff-MW-FB	02021006	88744	2-Nitroaniline	2.4	ug/

2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	Cobalt Co	<	50	ug/L	U	9/30/2021 11:49	10/1/2021 14:40	1				
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	Chromium	<	50	ug/L	U	9/30/2021 11:49	10/1/2021 14:42	1				
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440508	Copper	<	10	ug/L	U	9/30/2021 11:49	10/1/2021 14:43	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7439896	Iron	<	100	ug/L	U	9/30/2021 11:49	10/1/2021 14:43	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7439896	Iron		343	ug/L		9/30/2021 11:49	10/1/2021 14:40	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7439976	Mercury	<	0.2	ug/L	U	10/5/2021 14:09	10/8/2021 14:39	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440097	Potassium		8.41	mg/L		9/30/2021 11:49	10/1/2021 14:42	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7439954	Magnesium		75.9	mg/L		9/30/2021 11:49	10/1/2021 14:41	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440235	Sodium		45.1	mg/L		9/30/2021 11:49	10/1/2021 14:42	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440235	Sodium		46.4	mg/L		9/30/2021 11:49	10/1/2021 14:45	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440020	Nickel	<	50	ug/L	U	9/30/2021 11:49	10/1/2021 14:40	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440020	Nickel	<	50	ug/L	U	9/30/2021 11:49	10/1/2021 14:43	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	191242	Benzo(b,j)perylene		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7439921	Lead	<	1	ug/L	U	10/1/2021 9:50	10/4/2021 13:00	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7439921	Lead	<	1	ug/L	U	10/1/2021 9:50	10/4/2021 13:00	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440360	Antimony	<	2	ug/L	U	10/1/2021 9:50	10/4/2021 13:00	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440360	Antimony	<	2	ug/L	U	10/1/2021 9:50	10/4/2021 13:00	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7782492	Selenium	<	7	ug/L	U	10/1/2021 9:50	10/4/2021 13:00	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440-28-0	Thallium	<	2	ug/L	U	10/1/2021 9:50	10/4/2021 13:00	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	100016	4-Nitroaniline		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	105679	2,4-Dimethylphenol		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	108678	1,3,5-Trimethylbenze		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	108952	Phenol		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	120127	Anthracene		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	121142	2,4-Dinitrotoluene		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	594207	2,2-Dichloropropane		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	606202	2,6-Dinitrotoluene		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	62533	Aniline		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	62759	N-Nitrosodimethylam		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	67641	Acetone		6.4	ug/L	B	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	67721	Hexachloroethane		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1	Low-level LFB recove	Sample not properly preserved - residual chlorine presentGC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.		
2166	S	9/28/2021	12:30	METH	Water	Ground W Hoff-MW-FB	C20211006	74840	Ethane		46	ug/L		9/30/2021 2:00	10/6/2021 14:55	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	75274	Bromodichloromethe		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	79345	1,1,2,2-Tetrachloroet		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	84742	Di-n-butylphthalate		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	86737	Fluorene		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	100754	N-nitrosopiperidine		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	110861	Pyridine		4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1	Low-level LFB recove	Sample not properly preserved - residual chlorine presentGC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.		
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	122394	Diethylenetriamine&n-Nit		4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	130154	1,4-Naphthoquinone		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	134578	Aramite		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	2303164	Diallate ICIs & Transi		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	298022	Phorate		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	465736	Isodrin		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	55185	N-Nitrosodiethylamir		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	59892	N-Nitrosomorpholine		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	60515	Dimethoate		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	62500	Ethyl methanesulfona		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	76017	Pentachloroethane		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	87650	2,6-Dichlorophenol		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	92671	4-Aminobiphenyl		4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1	Mid-level LCS recover	Sample not properly preserved - residual chlorine presentGC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.		
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	93721	Safrole		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	95943	1,2,4,5-Tetrachlorobe		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	99558	5-Nitro-o-toluidine		4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	96184	1,2,3-Trichloropropar		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	98828	4-Isopropyltoluene		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	88062	2,4,6-Trichlorophenol		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	91587	2-Chloronaphthalene		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	95498	o-Chlorotoluene		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440622	Vanadium	<	30	ug/L	U	9/30/2021 11:49	10/1/2021 14:40	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440622	Vanadium	<	30	ug/L	U	9/30/2021 11:49	10/1/2021 14:43	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440666	Zinc	<	20	ug/L	U	9/30/2021 11:49	10/1/2021 14:42	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	7440666	Zinc	<	30	ug/L	U	9/30/2021 11:49	10/1/2021 14:43	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	208968	Acenaphthylene		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	92328	Benzo(a)pyrene		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	541731	1,3-Dichlorobenzene		18.2	ug/L		9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	106934	1,2-Dibromoethane		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SLS	Water	Ground W Hoff-MW-FB	LB21018574	Sulfate		560.4	mg/L		9/30/2021 16:18	10/1/2021 9:55	1				
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	98566	PCTFA		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	87865	Pentachlorophenol		9.7	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	88755	2-Nitrophenol		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	91576	2-Methylnaphthalene		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	95487	2-Methylphenol		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	95636	1,2,4-Trimethylbenze		0.61	ug/L		9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	96128	1,2-Dibromo-3-chloro		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	131113	Dimethylphthalate		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	206440	Fluoranthene		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	99092	3-Nitroaniline		4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1	Mid-level LCS recover	Sample not properly preserved - residual chlorine presentGC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.		
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	100414	Ethylbenzene		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	106434	p-Chlorotoluene		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	108101	4-Methyl-2-pentanon		2.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	108383	m/p-Xylenes		1	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	127184	Tetrachloroethene		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	132649	Dibenzofuran		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	135988	Sec-Butylbenzene		1.7	ug/L		9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	142289	1,3-Dichloropropane		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	156605	trans-1,2-Dichloroeth		58.8	ug/L	Q	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	534521	4,6-Dinitro-2-methylc		4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1	Low-level LFB recove	Sample not properly preserved - residual chlorine presentGC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.		
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	542346	1,3-Dichloropropene		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	71556	1,1,1-Trichloroethane		74.4	ug/L		9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	74839	Bromomethane		2.9	ug/L		9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	74873	Chloromethane		1.1	ug/L		9/30/2021 2:00	10/15/2021 11:30	1	Low-level LFB recovery high. Results may be biased high.		
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	75003	Chloroethane		8.2	ug/L	Q	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	75092	Dichloromethane		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	75343	1,1-Dichloroethane		170	ug/L	Q	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	78875	1,2-Dichloropropane		1.4	ug/L		9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	78933	2-Butanone		2.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	79016	Trichloroethene		17.6	ug/L	Q	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	95534	o-Toluidine		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1	Mid-level LCS recover	Sample not properly preserved - residual chlorine presentGC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.		
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	98066	Tert-Butylbenzene		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	98828	Isopropylbenzene		2.9	ug/L		9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	107062	1,2-Dichloroethane		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	1634773	18-4-Methylphenol		4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	75650	t-Butyl alcohol		20	ug/L		9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	98555	a-Terpineol		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1	Low-level LFB recove	Sample not properly preserved - residual chlorine presentGC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.		
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006	540885	tert-Butyl Acetate		2.5	ug/L	U	9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	DIOXA	Water	Ground W Hoff-MW-FB	C20211006	123911	1,4-Dioxane		33.5	ug/L		10/3/2021 2:00	10/7/2021 11:29	1	This sample tested positive for residual chlorine.		
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006459	EXTRACTED DATE						9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	DIOXA	Water	Ground W Hoff-MW-FB	C20211006472	EXTRACTED DATE		9303021	Day			10/3/2021 2:00	10/7/2021 11:29	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006459	EXTRACTED DATE		9292021	Day			10/12/2021 2:00	10/21/2021 14:04	1	Sample not properly preserved - residual chlorine presentGC/MS Also detected Chloro and dichlorobenzenes; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo[b]thiophene, Dichlorophenol, Dimethyl Naphthalenes, Hexadecanoic Acid, and Diisooctyl adipate.		
2166	S	9/28/2021	12:30	VOASW	Water	Ground W Hoff-MW-FB	C20211006459	EXTRACTED TIME						9/30/2021 2:00	10/15/2021 11:30	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	90120	1-Methylnaphthalene		3.6	ug/L		10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	90131	1-Chloronaphthalene		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:30	SV-SW	Water	Ground W Hoff-MW-FB	C20211006	1634-0	1,2'-oxybis(1-Chloroe		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:04	1			
2166	S	9/28/2021	12:00	SV-SW	Water	Ground W Hoff100up-092821	C20211006	542346	1,3-Dichloropropene		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1			
2166	S	9/28/2021	12:00	SV-SW	Water	Ground W Hoff100up-092821	C20211006	207089	Benzo(k)fluoranthene		1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1			
2166	S	9/28/2021	12:00	SV-SW	Water	Ground W Hoff100up-092821	C20211006	218019	Chrysene		1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1			
2166	S	9/28/2021	12:00	SV-SW	Water	Ground W Hoff100up-092821	C20211006	298044	Disulfoton		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1			
2166	S	9/28/2021	12:00	VOASW	Water	Ground W Hoff100up-092821	C20211006	75014	Chloroethene (vinyl c		12.6	ug/L	Q	9/30/2021 2:00	10/15/2021 12:02	1			
2166	S	9/28/2021	12:00	VOASW	Water	Ground W Hoff100up-092821	C20211006	10061015	cis-1,3-Dichloroprope		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1			
2166	S	9/28/2021	12:00	SV-SW	Water	Ground W Hoff100up-092821	C20211006	101553	4-Bromophenyl-phen		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1			
2166	S	9/28/2021	12:00	VOASW	Water	Ground W Hoff100up-092821	C20211006	103651	n-Propylbenzene		2.1	ug/L		9/30/2021 2:00	10/15/2021 12:02	1			
2166	S	9/28/2021	12:00	VOASW	Water	Ground W Hoff100up-092821	C20211006	106467	1,4-Dichlorobenzene		246	ug/L	Q	9/30/2021 2:00	10/15/2021 12:02	1			
2166	S	9/28/2021	12:00	VOASW	Water	Ground W Hoff100up-092821	C20211006	108054	Vinyl Acetate		0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1			
2166	S	9/28/2021	12:00	VOASW	Water	Ground W Hoff100up-092821	C20211006	108883	Toluene		0.53	ug/L		9/30/2021 2:00	10/15/2021 12:02	1			
2166	S	9/28/2021	12:00	SV-SW	Water	Ground W Hoff100up-092821	C20211006	117840	Di-n-octylphthalate		2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1			
2166	S	9/28/2021	12:00	SV-SW	Water	Ground W Hoff100up-092821	C20211006	120821	1,2,4-Trichlorobenzer		6.8	ug/L		10/12/2021 2:00	10/21/2021 14:02	1			
2166	S	9/28/2021	12:00	VOASW	Water	Ground W Hoff100up-092821	C20211006	120821	1,2,4-Trichlorobenzer		6.6	ug/L	Q	9/30/2021 2:00	10/15/2021 12:02	1			
2166	S	9/28/2021	12:00	SLS	Water	Ground W Hoff100up-092821	LB

2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	193195	Indeno-1,2,3-cd-pyre	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	23950585	Pronamide	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	51285	2,4-Dinitrophenol	12	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	53703	Dibenzo(a,h)anthrace	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440439	Cadmium <	10	ug/L	U	9/30/2021 12:00	10/1/2021 14:47	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038575		Cobalt Co <	50	ug/L	U	9/30/2021 12:00	10/1/2021 14:47	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038575		Chromium <	50	ug/L	U	9/30/2021 12:00	10/1/2021 14:45	1										
2166	6	9/28/2021	12:00	VOAW	Water	Ground W Hoff00up-092821	02021006	1330207	Total Xylenes	1.9	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440508	Copper <	10	ug/L	U	9/30/2021 12:00	10/1/2021 14:45	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	100027	4-Nitrophenol	12	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	100425	Styrene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	100516	Benzyl alcohol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7439976	Mercury <	0.2	ug/L	U	10/5/2021 14:11	10/8/2021 14:39	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440097	Potassium	8.48	mg/L		9/30/2021 12:00	10/1/2021 14:48	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7439954	Magnesium	73.4	mg/L		9/30/2021 12:00	10/1/2021 14:48	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7439965	Manganese	770	ug/L		9/30/2021 12:00	10/1/2021 14:46	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7439965	Manganese	771	ug/L		9/30/2021 12:00	10/1/2021 14:48	1										
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	106518	n-Butylbenzene	0.58	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	106478	4-Chloroaniline	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Mid-level LCS recover	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	108861	Bromobenzene	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	108907	Chlorobenzene	2680	ug/L	Q	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	109999	Tetrahydrofuran	1.7	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	111444	bis(2-Chloroethyl)eth	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	111911	bis(2-Chloroethoxy)e	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	117817	bis(2-Ethylhexyl)phth	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	118741	Hexachlorobenzene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	120832	2,4-Dichlorophenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	56382	Ethyl Parathion	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	56553	Benz(a)anthracene	1.2	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	591786	2-Hexanone	2.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	59507	4-Chloro-3-methylph	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	621647	N-Nitrosodipropylam	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	67663	Chloroform	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	7005723	4-Chlorophenyl-phen	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	74953	Dibromomethane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	75252	Bromoform	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	75354	1,1-Dichloroethene	29.2	ug/L	Q	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	75718	Dichlorodifluorometh	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	77474	Hexachlorocyclopent	4.8	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	78591	Isophorone	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440224	Silver <	10	ug/L	U	9/30/2021 12:00	10/1/2021 14:45	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7429905	Aluminum	358	ug/L		9/30/2021 12:00	10/1/2021 14:45	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7429905	Aluminum <	100	ug/L	U	9/30/2021 12:00	10/1/2021 14:46	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	83329	Acenaphthene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	84662	Diethylphthalate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	85018	Phenanthrene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	156592	cis-1,2-Dichloroethen	2200	ug/L	Q	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440382	Arsenic <	1	ug/L	U	10/1/2021 9:32	10/4/2021 12:55	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440382	Arsenic <	1	ug/L	U	10/1/2021 9:32	10/4/2021 12:55	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440393	Barium <	10	ug/L	U	9/30/2021 12:00	10/1/2021 14:45	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440393	Barium <	10	ug/L	U	9/30/2021 12:00	10/1/2021 14:47	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038575		Beryllium <	1	ug/L	U	9/30/2021 12:00	10/1/2021 14:45	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038575		Beryllium <	1	ug/L	U	9/30/2021 12:00	10/1/2021 14:47	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440702	Calcium	165	mg/L		9/30/2021 12:00	10/1/2021 14:48	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440702	Calcium	164	mg/L		9/30/2021 12:00	10/1/2021 14:46	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440439	Cadmium <	10	ug/L	U	9/30/2021 12:00	10/1/2021 14:45	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038575		Cobalt Co <	50	ug/L	U	9/30/2021 12:00	10/1/2021 14:45	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038575		Chromium <	50	ug/L	U	9/30/2021 12:00	10/1/2021 14:47	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440508	Copper <	10	ug/L	U	9/30/2021 12:00	10/1/2021 14:47	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7439896	Iron <	100	ug/L	U	9/30/2021 12:00	10/1/2021 14:47	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7439896	Iron <	354	ug/L	U	9/30/2021 12:00	10/1/2021 14:46	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7439976	Mercury <	0.2	ug/L	U	10/5/2021 14:21	10/8/2021 14:39	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440097	Potassium	8.44	mg/L		9/30/2021 12:00	10/1/2021 14:46	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7439954	Magnesium	73.9	mg/L		9/30/2021 12:00	10/1/2021 14:48	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440235	Sodium	44.9	mg/L		9/30/2021 12:00	10/1/2021 14:47	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440235	Sodium	45.3	mg/L		9/30/2021 12:00	10/1/2021 14:48	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440020	Nickel <	50	ug/L	U	9/30/2021 12:00	10/1/2021 14:46	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440020	Nickel <	50	ug/L	U	9/30/2021 12:00	10/1/2021 14:48	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	191242	Benzo(b,h,i)perylene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7439921	Lead <	5.17	ug/L	U	10/1/2021 9:32	10/4/2021 12:55	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7439921	Lead <	1	ug/L	U	10/1/2021 9:32	10/4/2021 12:55	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440360	Antimony <	1	ug/L	U	10/1/2021 9:32	10/4/2021 12:55	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440360	Antimony <	1	ug/L	U	10/1/2021 9:32	10/4/2021 12:55	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7782492	Selenium <	1	ug/L	U	10/1/2021 9:32	10/4/2021 12:55	1										
2166	6	9/28/2021	12:00	SLS	Water	Ground W Hoff00up-092821	18201038	7440-28-0	Thallium <	1	ug/L	U	10/1/2021 9:32	10/4/2021 12:55	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	100516	4-Nitroaniline	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	105679	2,4-Dimethylphenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	108952	Phenol	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	120127	Anthracene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	120821	1,2,4-Trichlorobenze	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	594207	2,2-Dichloropropane	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	606202	2,6-Dinitrotoluene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	62533	Aniline	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	62759	N-Nitrosodimethylam	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	67641	Acetone	4	ug/L	B	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	67721	Hexachloroethane	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Low-level LFB recove	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	75274	Bromodichloromethа	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	VOASW	Water	Ground W Hoff00up-092821	02021006	79345	1,1,2,2-Tetrachloroet	0.5	ug/L	U	9/30/2021 2:00	10/15/2021 12:02	1										
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	84742	Di-n-butylphthalate	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	86737	Fluorene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene; compounds identified as 4-Chloro-2-nitrophenol, Methyl Benzo(b)thiophene, Dichlorophenol, Dimethyl Naphthalenes, Dioxocyl adipate.									
2166	6	9/28/2021	12:00	SV-SW	Water	Ground W Hoff00up-092821	02021006	87647	Hexachlorobutadiene	2.4	ug/L	U	10/12/2021 2:00	10/21/2021 14:02	1	Surrogate recovery low. Results and/or reporting limits may be biasedlow. Sample not properly preserved - residual chlorine presentGC/MS Also detected Chlorobenzene and Dichlorobenzene

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2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	87683	Hexachlorobutadiene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	88744	2-Nitroaniline	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	91203	Naphthalene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	91203	Naphthalene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	95476	o-Xylene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	95178	2-Chlorophenol	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	99650	1,3-Dinitrobenzene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	87616	1,2,3-Trichlorobenzer	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	91941	3,3'-Dichlorobenzidin	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	Continuing calibration	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	95501	1,2-Dichlorobenzene	0.61	ug/L	J	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	95954	2,4,5-Trichlorophenol	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	298000	Methyl Parathion	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	71432	Benzene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	510156	Chlorobenzilate	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	56235	Carbon tetrachloride	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	129000	Pyrene	1.3	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021010	7440224	Silver <	10	ug/L	U	10/4/2021 10:31	10/5/2021 12:50	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	193395	Indeno-1,2,3-cd-pyre	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	23950585	Pronamide	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	51285	2,4-Dinitrophenol	13	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	53703	Dibenz(a,h)anthrace	1.3	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021010	7440439	Cadmium <	10	ug/L	U	10/4/2021 10:31	10/5/2021 12:52	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018706		Cobalt Co <	50	ug/L	U	10/4/2021 10:31	10/5/2021 12:52	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018706		Chromium <	50	ug/L	U	10/4/2021 10:31	10/5/2021 12:39	1								
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	1330207	Total Xylenes	0	ug/L		10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021010	7440508	Copper	14	ug/L		10/4/2021 10:31	10/5/2021 12:39	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	100027	4-Nitrophenol	13	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	Continuing calibration	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	100425	Styrene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	100516	Benzyl alcohol	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7439976	Mercury <	0.2	ug/L	U	10/5/2021 14:37	10/8/2021 14:41	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440097	Potassium	9.23	mg/L		10/4/2021 10:31	10/5/2021 13:05	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7439954	Magnesium	28.5	mg/L		10/4/2021 10:31	10/5/2021 12:50	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7439965	Manganese	1260	ug/L		10/4/2021 10:31	10/5/2021 12:50	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7439965	Manganese	1240	ug/L		10/4/2021 10:31	10/5/2021 12:01	1								
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	106518	n-Butylbenzene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	106478	4-Chloroaniline	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	108861	Bromobenzene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	108907	Chlorobenzene	2.6	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	109999	Tetrahydrofuran	1.1	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	111444	bis(2-Chloroethyl)eth	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	110911	bis(2-Chloroethoxy)m	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	117817	bis(2-Ethylhexyl)phth	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	118741	Hexachlorobenzene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	120832	2,4-Dichlorophenol	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	84742	Diethylphthalate	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	56553	Benz[a]anthracene	1.3	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	591786	2-Hexanone	2.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	59507	4-Chloro-3-methylph	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	621647	N-Nitrosodipropylam	5.2	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	67663	Chloroform	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	7005723	4-Chlorophenyl-phen	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	74953	Dibromomethane	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	METH	Water	Ground W Hoff-MW-13	02021008	74986	Propane	14.2	ug/L	U	10/1/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	75252	Bromoform	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1	LRB %Rec low. Results +/- RL may be biased low.								
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	75354	1,1-Dichloroethene	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	75718	Dichlorodifluoromett	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	77474	Hexachlorocyclopent	5.2	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	78591	Isophorone	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021010	7440224	Silver <	10	ug/L	U	10/4/2021 10:31	10/5/2021 12:36	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7429905	Aluminum	959	ug/L		10/4/2021 10:31	10/5/2021 12:36	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7429905	Aluminum <	300	ug/L	U	10/4/2021 10:31	10/5/2021 12:50	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	83329	Acenaphthene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	84662	Diethylphthalate	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	85018	Phenanthrene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	VOASW	Water	Ground W Hoff-MW-13	02021008	156592	cis-1,2-Dichloroethen	0.5	ug/L	U	10/4/2021 2:00	10/19/2021 14:32	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440382	Arsenic	10.4	ug/L		10/4/2021 12:03	10/6/2021 12:41	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440382	Arsenic	5.68	ug/L		10/6/2021 12:03	10/6/2021 12:41	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440393	Barium	165	ug/L		10/4/2021 10:31	10/5/2021 12:39	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440393	Barium	118	ug/L		10/6/2021 10:31	10/6/2021 12:50	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018706		Beryllium <	1	ug/L	U	10/4/2021 10:31	10/5/2021 12:39	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018706		Beryllium <	1	ug/L	U	10/6/2021 10:31	10/6/2021 12:50	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440702	Calcium	42.4	mg/L		10/4/2021 10:31	10/5/2021 12:50	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440702	Calcium	42.9	mg/L		10/6/2021 10:31	10/6/2021 12:50	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440439	Cadmium <	10	ug/L	U	10/4/2021 10:31	10/5/2021 12:39	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018706		Cobalt Co <	50	ug/L	U	10/4/2021 10:31	10/5/2021 12:39	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018706		Chromium <	50	ug/L	U	10/4/2021 10:31	10/5/2021 12:52	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021010	7440508	Copper <	10	ug/L	U	10/4/2021 10:31	10/5/2021 12:52	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7439896	Iron	365	ug/L		10/4/2021 10:31	10/5/2021 12:52	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7439896	Iron	4760	ug/L		10/6/2021 10:31	10/6/2021 12:39	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7439976	Mercury <	0.2	ug/L	U	10/5/2021 14:39	10/8/2021 14:41	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440097	Potassium	9.42	mg/L		10/4/2021 10:31	10/5/2021 12:50	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7439954	Magnesium	27.4	mg/L		10/6/2021 10:31	10/6/2021 13:03	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440235	Sodium	122	mg/L		10/4/2021 10:31	10/5/2021 14:45	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440235	Sodium	123	mg/L		10/6/2021 10:31	10/6/2021 14:47	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440020	Nickel <	50	ug/L	U	10/4/2021 10:31	10/5/2021 12:50	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440020	Nickel <	50	ug/L	U	10/6/2021 10:31	10/6/2021 12:52	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	191242	Benzo(g,h,i)perylene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	Continuing calibration	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7439921	Lead	3.28	ug/L		10/4/2021 12:03	10/6/2021 12:41	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7439921	Lead <	1	ug/L	U	10/6/2021 12:03	10/6/2021 12:41	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440360	Antimony <	1	ug/L	U	10/4/2021 12:03	10/6/2021 12:41	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440360	Antimony <	1	ug/L	U	10/6/2021 12:03	10/6/2021 12:41	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7782492	Selenium <	1	ug/L	U	10/4/2021 12:03	10/6/2021 12:41	1								
2166	9	9/29/2021	9:35	SLS	Water	Ground W Hoff-MW-13	12021018	7440-28-0	Thallium <	1	ug/L	U	10/5/2021 14:22	10/6/2021 12:41	1								
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	100016	4-Nitroaniline	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methoxy Furan; Caprolactam; Methyl benzoic acid; Methyl 1H-Benzotriazole; a-tert-butyl Benzoic acid, Hexadecanoic acid(Palmitic Acid) Sulfur;Traces of unidentified hydrocarbons in the C16-C30 range			
2166	9	9/29/2021	9:35	SV-SW	Water	Ground W Hoff-MW-13	02021008	105679	2,4-Dimethylphenol	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:11	1	GC/MS	detected. Traces of compounds identified as 2-methox

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2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008	74873	Chloromethane	1.7	ug/L			10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008	75003	Chloroethane	26.4	ug/L	Q		10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008	75092	Dichloromethane	2.4	ug/L	U		10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008	75343	1,1-Dichloroethane	517	ug/L	Q		10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008	78875	1,2-Dichloropropane	3.8	ug/L			10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008	78933	2-Butanone	2.5	ug/L	U		10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008	79016	Trichloroethene	44.9	ug/L	Q		10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	SV-SW	Water	Ground W Hoff-IW-2B		G2021008	95134	o-Toluidine	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:29	1					
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008	98066	Tert-Butylbenzene	0.98	ug/L			10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008	98828	Isopropylbenzene	7.6	ug/L	Q		10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008	107062	1,2-Dichloroethane	0.8	ug/L			10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	SV-SW	Water	Ground W Hoff-IW-2B		G2021008	13197733	1&4-Methylphenol	5.2	ug/L	U		10/13/2021 2:00	10/26/2021 13:29	1					
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008	75650	t-Butyl alcohol	24.1	ug/L	B		10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	SV-SW	Water	Ground W Hoff-IW-2B		G2021008	98555	o-Terpineol	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:29	1	Low-level LRB recove				
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008	540885	tert-Butyl Acetate	2.5	ug/L	U		10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	DIORA	Water	Ground W Hoff-IW-2B		G2021008	123911	1,4-Dioxane	70.3	ug/L			10/14/2021 2:00	10/21/2021 15:02	1					
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008610		EXTRACTED DATE					10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	SV-SW	Water	Ground W Hoff-IW-2B		G2021008169		EXTRACTED DATE	10042021	Day			10/13/2021 2:00	10/26/2021 13:29	1					
2166	12	9/29/2021	15:10	DIORA	Water	Ground W Hoff-IW-2B		G2021008145		EXTRACTED DATE	10212021	Day			10/14/2021 2:00	10/21/2021 15:02	1					
2166	12	9/29/2021	15:10	VOASW	Water	Ground W Hoff-IW-2B		G2021008610		EXTRACTED TIME					10/5/2021 2:00	10/19/2021 14:41	1					
2166	12	9/29/2021	15:10	SV-SW	Water	Ground W Hoff-IW-2B		G2021008	90120	1-Methylnaphthalene	14.5	ug/L			10/13/2021 2:00	10/26/2021 13:29	1					
2166	12	9/29/2021	15:10	SV-SW	Water	Ground W Hoff-IW-2B		G2021008	90131	1-Chloronaphthalene	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:29	1					
2166	12	9/29/2021	15:10	SV-SW	Water	Ground W Hoff-IW-2B		G2021008	608-60-1	2,2'-oxybis(1-Chloro	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:29	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	207089	Benzo(k)fluoranthene	1.3	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	218019	Chrysene	1.3	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	298044	Disulfoton	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	75014	Chlorotrifluoroethylene	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	101553	4-Bromodiphenyl-phen	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	103651	n-Propylbenzene	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	106467	1,4-Dichlorobenzene	61.4	ug/L	E		10/4/2021 2:00	10/19/2021 14:51	1	Results is estimated. B vial was broken so dilution was not possible.				
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	108054	Vinyl Acetate	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	108883	Toluene	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	117840	Di-n-octylphthalate	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	120821	1,2,4-Trichlorobenzen	5.1	ug/L			10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	120821	1,2,4-Trichlorobenzen	6.6	ug/L			10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021010	7782492	Selenium <	35	ug/L			10/7/2021 14:10	10/8/2021 9:16	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021010	7440-28-0	Thallium <	30	ug/L			10/7/2021 14:10	10/8/2021 9:16	1					
2166	13	9/29/2021	15:35	METH	Water	Ground W Hoff-IW-2A		G2021008	74828	Methane	358	ug/L			10/1/2021 2:00	10/6/2021 13:43	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	74975	Bromochloromethane	3.7	ug/L			10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	75150	Carbon disulfide	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	75694	Trichlorofluoromethane	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	79005	1,1,2-Trichloroethane	1.1	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1	Surrogate recovery low. Results may be biased low				
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	85687	Butylbenzylphthalate	1.3	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021010	7440-42-8	Boron	217	ug/L			10/6/2021 2:00	10/7/2021 13:27	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	10595956	N-Nitrosomethylethy	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	109648	2-Picoline (2-Methylp	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1	Low-level LRB recove				
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	120581	Isosafrole	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	126681	O,O,O-Triethylphosph	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	10061021	trans-1,3-Dichloropro	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1	Low-level LRB recove				
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	297972	Thionazine	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	298045	Sulfotep	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	52663	2-Acetylaminofluoren	5.2	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	58902	1,2,4,5-Tetrachlorobf	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	60117	Dimethylaminoazobe	1.3	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	56553	Pentachlorobenzene	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	66273	Methyl Methanesulfo	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	82688	Pentachloronitroben	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	924163	N-Nitrosodibutylamin	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	930552	N-Nitrosopyrrolidine	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	67641	Acetonitrile	2.2	ug/L			10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	205992	Benzo(b)fluoranthene	1.3	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1	Includes b				
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	99092	Nitrobenzene	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	124481	Dibromochloromethane	2.2	ug/L			10/4/2021 2:00	10/19/2021 14:51	1	Surrogate recovery low. Results may be biased low				
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021010	7440-42-8	Boron	217	ug/L			10/6/2021 2:00	10/7/2021 13:27	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	87683	Hexachlorobutadiene	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	87683	Hexachlorobutadiene	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	88744	2-Nitroaniline	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	91203	Naphthalene	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	91203	Naphthalene	1.4	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	95476	o-Xylene	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	95578	2-Chlorophenol	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	99650	1,3-Dinitrobenzene	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	87616	1,2,3-Trichlorobenzen	1.7	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	91941	3,3'-Dichlorobenzidin	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1	Continuing calibratior				
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	95501	1,2-Dichlorobenzene	436	ug/L	E		10/4/2021 2:00	10/19/2021 14:51	1	Results is estimated. B vial was broken so dilution was not possible.				
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	95954	2,4,5-Trichlorophenol	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	298000	Methyl Parathion	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	71432	Benzene	4	ug/L			10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	510156	Chlorobenzilate	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	56235	Carbon tetrachloride	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	1634044	Methyl-tert-butyl Eth	1.4	ug/L			10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	129000	Pyrene	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021011	7440-22-4	Silver <	10	ug/L	U		10/4/2021 10:59	10/5/2021 13:23	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	193395	Indeno-1,2,3-cd-pyre	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	23950585	Pronamide	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	541-73-1	1,3-Dichlorobenzene	5.1	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	53703	Dibenzo(a,h)anthrace	1.3	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021010	7440439	Cadmium <	10	ug/L	U		10/4/2021 10:59	10/5/2021 13:24	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021010710		Cobalt Co <	50	ug/L	U		10/4/2021 10:59	10/5/2021 13:24	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021010710		Chromium Compounds	638	ug/L			10/4/2021 10:59	10/5/2021 13:23	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	1330207	Total Xylenes	0	ug/L			10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021011	7440508	Copper	325	ug/L			10/4/2021 10:59	10/5/2021 13:23	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	100027	4-Nitrophenol	13	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1	Continuing calibratior				
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	100425	Styrene	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	100516	Benzyl alcohol	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	10061026	trans-1,3-Dichloropro	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021011	7439976	Mercury	2.98	ug/L			10/6/2021 15:01	10/8/2021 14:43	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021011	7440097	Potassium	87	mg/L			10/4/2021 10:59	10/5/2021 13:29	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021011	7439954	Magnesium	1284	mg/L			10/4/2021 10:59	10/5/2021 14:53	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021011	7439965	Manganese	19408	ug/L			10/4/2021 10:59	10/5/2021 14:55	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021011	7439965	Manganese	70	ug/L			10/4/2021 10:59	10/5/2021 12:24	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	104518	n-Butylbenzene	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	106478	4-Chloroaniline	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	108861	Bromobenzene	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	108907	Chlorobenzene	95.8	ug/L	E		10/4/2021 2:00	10/19/2021 14:51	1	Results is estimated. B vial was broken so dilution was not possible.				
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	127184	Tetrachloroethylene	19.4	ug/L			10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	111444	bis(2-Chloroethyl)eth	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	111911	bis(2-Chloroethoxy)m	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	117817	bis(2-Ethylhexyl)phth	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	118741	Hexachlorobenzene	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	120832	2,4-Dichlorophenol	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	56382	Ethyl Parathion	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	56553	Benz(a)anthracene	1.3	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	591786	2-Hexanone	2.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	59507	4-Chloro-3-methylph	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	621647	N-Nitrosodipropylam	5.2	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	67663	Chloroform	2.4	ug/L			10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	7005723	4-Chlorophenyl-phen	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	74953	Bromomethane	1.6	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1	Surrogate recovery low. Results may be biased low				
2166	13	9/29/2021	15:35	METH	Water	Ground W Hoff-IW-2A		G2021008	74986	Propane	14.2	ug/L	U		10/1/2021 2:00	10/6/2021 12:43	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	75252	Bromoform	4.7	ug/L			10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	75354	1,1-Dichloroethene	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	VOASW	Water	Ground W Hoff-IW-2A		G2021008	75718	Dichlorodifluoromeff	0.5	ug/L	U		10/4/2021 2:00	10/19/2021 14:51	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	77474	Hexachlorocyclopent	5.2	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	78591	Isophorone	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13:39	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021011	7440224	Silver <	50	ug/L	U		10/4/2021 10:59	10/5/2021 13:18	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021011	7429905	Aluminum	460000	ug/L			10/4/2021 10:59	10/5/2021 14:53	1					
2166	13	9/29/2021	15:35	SLS	Water	Ground W Hoff-IW-2A		I2021011	7429905	Aluminum <	300	ug/L	U		10/4/2021 10:59	10/5/2021 13:23	1					
2166	13	9/29/2021	15:35	SV-SW	Water	Ground W Hoff-IW-2A		G2021008	83329	Acenaphthene	2.6	ug/L	U		10/13/2021 2:00	10/26/2021 13

21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	53963	2-Acetylaminofluorer	5.2	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	58902	2,3,4,6-Tetrachlorop	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	60117	Dimethylaminoazobe	1.3	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Matrix spike recovery	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	608935	Pentachlorobenzene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	66273	Methylmethanesulfo	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	82688	Pentachloronitroben	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	924163	N-Nitrosodibutylamir	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	930552	N-Nitrosomorpholine	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	98862	Acetophenone	5.2	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	206992	Benzo(k)fluoranthene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Matrix sol Includes b	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	98953	Nitrobenzene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	124481	Dibromochloromethe	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1	LRB %Rec	Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-42-8	Boron	288	ug/L		10/7/2021 11:30	10/7/2021 13:22	1	Answer Rechecked By Analyst						
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	87683	Hexachlorobutadiene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	87683	Hexachlorobutadiene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	88744	1-Nitroaniline	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Matrix spike recovery	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	91203	Naphthalene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	91203	Naphthalene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	95476	o-Xylene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	95578	2-Chlorophenol	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	95950	2,4-Dichlorophenol	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	87116	1,2,3-Trichlorobenze	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	91941	1,2'-Dichlorobenzidin	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Continuine calibration	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	95501	1,2-Dichlorobenzene	100	ug/L		10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	95954	2,4,5-Trichlorophenol	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	298000	Methyl Parathion	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	71432	Benzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	510156	Chlorobenzilate	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	56235	Carbon tetrachloride	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	129000	Pyrene	1.3	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-22-4	Silver	10	ug/L	U	10/6/2021 11:30	10/6/2021 13:50	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	193395	Indeno-1,2,3-cd-pyre	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Matrix spike recovery	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	23950585	Fosmanide	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	51285	2,4-Dinitrophenol	13	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	53703	Dibenzo(a,h)anthrace	1.3	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Matrix spike recovery	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-43-9	Cadmium	10	ug/L	U	10/6/2021 11:30	10/7/2021 13:51	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-48-4	Cobalt-Co	50	ug/L	U	10/6/2021 11:30	10/7/2021 13:51	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-47-3	Chromium	50	ug/L	U	10/6/2021 11:30	10/7/2021 13:33	1							
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	1330207	Total Xylenes	1.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-50-8	Copper	10	ug/L	U	10/6/2021 11:30	10/7/2021 13:50	1							
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	100027	4-Nitrophenol	13	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Continuine calibration	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	100425	Styrene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	100516	Benzyl alcohol	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	10061026	trans-1,3-Dichloropro	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7439-97-6	Mercury	0.2	ug/L	U	10/5/2021 15:11	10/8/2021 14:44	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-09-7	Potassium	8.2	mg/L		10/6/2021 11:30	10/7/2021 13:51	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7439-95-4	Magnesium	111	mg/L		10/6/2021 11:30	10/7/2021 14:59	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7439-96-5	Manganese	111	ug/L		10/6/2021 11:30	10/7/2021 13:50	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7439-96-5	Manganese	96	ug/L		10/6/2021 11:30	10/7/2021 13:52	1							
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	104518	n-Butylbenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	106478	4-Chloroaniline	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Matrix spike recovery	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	108861	Bromobenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	108907	Chlorobenzene	7.9	ug/L		10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	109999	Tetrahydrofuran	22.1	ug/L		10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	111444	bis(2-Chloroethyleth	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	111911	bis(2-Chloroethoxy)m	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	117817	bis(2-Ethylhexyl)phth	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Matrix spike recovery	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	118741	Hexachlorobenzene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	120832	2,4-Dichlorophenol	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	56382	Ethyl Parathion	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	56553	Benz[a]anthracene	1.3	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Matrix spike recovery	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	591786	2-Hexanone	2.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	59507	4-Chloro-3-methylph	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	621647	N-Nitrosodipropylam	5.2	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Matrix spike recovery	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	67663	Chloroform	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	7005723	4-Chlorophenyl-phen	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	74953	Dibromomethane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	METH	Water	Ground W	Hoffman-18	02021000	74986	Propane	14.2	ug/L		10/1/2021 2:00	10/1/2021 13:43	1							
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	75252	Bromoform	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1	LRB %Rec	Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	75354	1,1-Dichloroethene	1.2	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	75718	Dichlorodifluorometh	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	77474	Hexachlorocyclopent	5.2	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	78591	Isophorone	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-22-4	Silver	10	ug/L	U	10/6/2021 11:30	10/7/2021 13:33	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7429905	Aluminum	300	ug/L	U	10/6/2021 11:30	10/7/2021 13:33	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7429905	Aluminum	300	ug/L	U	10/6/2021 11:30	10/7/2021 13:51	1							
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	83329	Acenaphthene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	84662	Diethylphthalate	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffman-18	02021000	85018	Phenanthrene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzenes; Dichlorobenzenes; Tetrachlorophenes; Dichlorophenol and other chlorinated compounds					
21666	15	9/30/2021	10:00	VOA5W	Water	Ground W	Hoffman-18	02021000	156592	cis-1,2-Dichloroethen	43.2	ug/L	CL	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-38-2	Arsenic	1	ug/L	U	10/6/2021 11:23	10/6/2021 12:26	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-38-2	Arsenic	1	ug/L	U	10/6/2021 11:23	10/6/2021 12:26	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-39-3	Barium	10	ug/L	U	10/6/2021 11:30	10/7/2021 13:33	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-39-3	Barium	10	ug/L	U	10/6/2021 11:30	10/7/2021 13:51	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-41-7	Beryllium	1	ug/L	U	10/6/2021 11:30	10/7/2021 13:33	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-41-7	Beryllium	1	ug/L	U	10/6/2021 11:30	10/7/2021 13:51	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-70-2	Calcium	190	mg/L		10/6/2021 11:30	10/7/2021 15:00	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-70-2	Calcium	184	mg/L		10/6/2021 11:30	10/7/2021 14:59	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	7440-43-9	Cadmium	10	ug/L	U	10/6/2021 11:30	10/7/2021 13:33	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010		Cobalt-Co	50	ug/L	U	10/6/2021 11:30	10/7/2021 13:33	1							
21666	15	9/30/2021	10:00	SLS	Water	Ground W	Hoffman-18	12021010	712	Chromium	50	ug/L	U

2166	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffl0W-18	02021006	132649	Dibenzofuran	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	135988	Sec-Butylbenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	142289	1,3-Dichloropropane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	156605	trans-1,2-Dichloroeth	2.6	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffl0W-18	02021006	534521	4,6-Dinitro-2-methylp	5.2	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	563186	1,1-Dichloropropene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	71556	1,1,1-Trichloroethane	1.3	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	74839	Bromomethane	7.4	ug/L	QL	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	74873	Chloromethane	24	ug/L	QL	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	75003	Chloroethane	1	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	75092	Dichloromethane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	75343	1,1-Dichloroethane	67.6	ug/L		10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	78875	1,2-Dichloropropane	1.1	ug/L		10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	78933	2-Butanone	10.7	ug/L		10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	79016	Trichloroethene	44.1	ug/L	QL	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	95534	o-Toluidine	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Matrix spike recovers	Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	98066	Tert-Butylbenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	98828	Isopropylbenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	107062	1,2-Dichloroethane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffl0W-18	02021006	1319773	3&4-Methylphenol	5.2	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Matrix spike recovers	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrachloroethane; Dichloropheno	and other chlorinated compounds				
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	71410	n-Butyl alcohol	24.6	ug/L	B	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffl0W-18	02021006	98555	o-Terpineol	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1	Low-level LRB recove	Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrachloroethane; Dichloropheno	and other chlorinated compounds				
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006	540885	tert-Butyl Acetate	2.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	DIOXA	Water	Ground W	Hoffl0W-18	02021006	123911	1,4-Dioxane	25.7	ug/L		10/14/2021 2:00	10/21/2021 15:05	1	This sample tested positive for residual chlorine.						
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006113		EXTRACTED DATE				10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffl0W-18	02021006572		EXTRACTED DATE	10042021	Day		10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	DIOXA	Water	Ground W	Hoffl0W-18	02021006548		EXTRACTED DATE	10122021	Day		10/14/2021 2:00	10/21/2021 15:05	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	VOASW	Water	Ground W	Hoffl0W-18	02021006113		EXTRACTED TIME				10/5/2021 2:00	10/19/2021 14:54	1		Sample not properly preserved - residual chlorine present					
2166	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffl0W-18	02021006	90120	1-Methylnaphthalene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrachloroethane; Dichloropheno	and other chlorinated compounds				
2166	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffl0W-18	02021006	90131	1-Chloronaphthalene	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrachloroethane; Dichloropheno	and other chlorinated compounds				
2166	15	9/30/2021	10:00	SV-SW	Water	Ground W	Hoffl0W-18	02021006	108-60-1	2,2'-oxybis(1-Chlorop	2.6	ug/L	U	10/13/2021 2:00	10/26/2021 13:49	1		Sample not properly preserved - residual chlorine presentSurrogate recovery low. Results and/or reporting limits may be biasedlow GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrachloroethane; Dichloropheno	and other chlorinated compounds				
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	205992	Benzo(b)fluoranthene	1.3	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	218019	Chrysene	1.3	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	298044	Disulfoton	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	75014	Chlorotrifluoroethylene	0.63	ug/L		10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	10061015	cis-1,3-Dichloroprope	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	101553	4-Bromophenyl-phen	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	103651	n-Propylbenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	106467	1,4-Dichlorobenzene	1.1	ug/L		10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	108054	Vinyl Acetate	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	108883	Toluene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	117840	Di-n-octylphthalate	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	120821	1,2,4-Trichlorobenzen	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	120821	1,2,4-Trichlorobenzen	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SLS	Water	Ground W	Hoffl0W-MW-D	02021006	7782492	Selenium <	2	ug/L	U	10/6/2021 11:50	10/6/2021 12:34	1							
2166	16	9/30/2021	11:50	SLS	Water	Ground W	Hoffl0W-MW-D	02021006	7440-28-0	Thallium <	2	ug/L	U	10/5/2021 14:10	10/6/2021 12:34	1							
2166	16	9/30/2021	11:50	METH	Water	Ground W	Hoffl0W-MW-D	02021006	74828	Methane	280	ug/L		10/1/2021 2:00	10/6/2021 13:43	1							
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	74975	Bromochloromethan	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	75150	Carbon disulfide	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	75694	Trichlorofluoromeths	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	79005	1,1,2-Trichloroethane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	85687	Butylbenzylphthalate	1.3	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SLS	Water	Ground W	Hoffl0W-MW-D	02021006	7440-42-8	Boron <	200	ug/L	U	10/6/2021 11:38	10/6/2021 14:01	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	10595956	N-Nitrosomethylethy	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	109068	2-Picoline (2-Methyla	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1	Low-level LRB recove	GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	120541	Isosafrole	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	126681	O,O,O-Triethylphosph	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	1888717	Hexachloropropene	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1	Low-level LRB recove	GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	2975972	Thionazine	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	3689245	Sulfotep	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	53963	2-Acetylaminofluorer	10.5	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	58902	2,3,4,6-Tetrachlorop	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	60117	Dimethylaminoazobe	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	608935	Pentachlorobenzene	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	66273	Methyl Methanesulfo	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	82688	Pentachloronitrobenz	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	924163	N-Nitrosodibutylamine	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	930552	N-Nitrosopyrrolidine	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	98862	Acetophenone	5.2	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	205992	Benzo(b)fluoranthene	1.3	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1	Includes LCS	GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	98953	Nitrobenzene	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	124481	Dibromochloromeths	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SLS	Water	Ground W	Hoffl0W-MW-D	02021006	7440-42-8	Boron <	200	ug/L	U	10/6/2021 11:38	10/6/2021 14:01	1							
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	87683	Hexachlorobutadiene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	87683	Hexachlorobutadiene	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	88744	2-Nitroaniline	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	91203	Naphthalene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	91203	Naphthalene	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	95476	o-Xylene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	95578	2-Chlorophenol	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	99650	1,3-Dinitrobenzene	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	87616	1,2,3-Trichlorobenzen	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	91941	3,3'-Dichlorobenzidin	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1	Continuine calibratior	GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	95501	1,2-Dichlorobenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	95954	2,4,5-Trichlorophenol	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	298000	Methyl Parathion	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	71432	Benzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	5101516	Chlorobenzilate	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	56235	Carbon tetrachloride	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	1634044	Methyl-tert-butyl Eth	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	129000	Pyrene	1.3	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	SLS	Water	Ground W	Hoffl0W-MW-D	02021006	7440224	Silver <	10	ug/L	U	10/6/2021 11:38	10/6/2021 13:59	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W	Hoffl0W-MW-D	02021006	193395	Indeno-1,2,3-cd-pyre	2.6	ug/L	U	10/13/2021 2:00	10/27/2021 14:43	1		GC/MS detected Chlorobenzene; Dichlorobenzene; Tetrahydro-Naphthalenes; n-Hexadecanoic and Octadecanoic acids; Traces of large number of unidentified hydrocarbons in the C14-C30 range.					
2166	16	9/30/2021	11:50	VOASW	Water	Ground W	Hoffl0W-MW-D	02021006	10595985	Pronamide	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:55	1							
2166	16	9/30/2021	11:50	SV-SW	Water	Ground W

2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018715	Chromium Compoun	62	ug/L		10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	1330207	Total Xylenes	0	ug/L		10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7440508	Copper	19	ug/L		10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	100425	Styrene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	10061026	trans-1,3-Dichlorop	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7439976	Mercury <	0.2	ug/L	U	10/14/2021 15:23	10/20/2021 14:08	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7439954	Magnesium	1.48	mg/L		10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7439965	Manganese	109	ug/L		10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	104518	n-Butylbenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	108861	Bromobenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	108907	Chlorobenzene	3.4	ug/L	B	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	109999	Tetrahydrofuran	1.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	591786	2-Hexanone	2.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	630206	1,1,1,2-Tetrachloroet	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	67663	Chloroform	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	74953	Dibromomethane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	75252	Bromoform	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	75354	1,1-Dichloroethene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	75718	Dichlorodifluorometh	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7440224	Silver <	10	ug/L	U	10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7429905	Aluminum	974	ug/L		10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	156592	cis-1,2-Dichloroether	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7440382	Arsenic <	3	ug/L	U	10/6/2021 10:39	10/7/2021 9:01	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7440393	Barium	102	ug/L		10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018715		Beryllium <	1	ug/L	U	10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7440702	Calcium	1.01	mg/L		10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7440439	Cadmium <	10	ug/L	U	10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018715		Cobalt Co <	50	ug/L	U	10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7439896	Iron	23500	ug/L		10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7440097	Potassium <	1	mg/L	U	10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7440235	Sodium	0.6	mg/L		10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7440020	Nickel <	50	ug/L	U	10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7439921	Lead	3.62	ug/L		10/4/2021 10:39	10/5/2021 9:01	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7440360	Antimony <	2	ug/L	U	10/6/2021 10:39	10/7/2021 9:01	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	108678	1,3,5-Trimethylbenze	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	594207	2,2-Dichloropropane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	67641	Acetone	5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	75274	Bromodichloromethe	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	79345	1,1,2,2-Tetrachloroet	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	96184	1,2,3-Trichloropropan	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	99876	4-Isopropyltoluene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	95498	o-Chlorotoluene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7440622	Vanadium	66	ug/L		10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	SD1	Water	Ground W	RB-093021	J2021018	7440666	Zinc <	20	ug/L	U	10/4/2021 11:49	10/5/2021 14:04	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	541731	1,3-Dichlorobenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	106934	1,2-Dibromoethane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	98566	PCTFB	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	95636	1,2,4-Trimethylbenze	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	96128	1,2-Dibromo-3-chloro	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	100414	Ethylbenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	106434	p-Chlorotoluene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	108101	4-Methyl-2-pentanon	2.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	108383	m/p-Xylenes	1	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	127184	Tetrachloroethene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	135988	Sec-Butylbenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	142289	1,3-Dichloropropane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	156605	trans-1,2-Dichloroeth	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	563586	1,1-Dichloropropene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	71556	1,1,1-Trichloroethane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	74839	Bromomethane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	74873	Chloromethane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	75003	Chloroethane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	75092	Dichloromethane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	75343	1,1-Dichloroethane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	78875	1,2-Dichloropropane	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	78933	2-Butanone	2.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	79016	Trichloroethene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	98066	Tert-Butylbenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	98828	Isopropylbenzene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	107062	1,2-Dichloroethene	0.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	75650	t-Butyl alcohol	17	ug/L		10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006	540885	tert-Butyl Acetate	2.5	ug/L	U	10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	DIOXA	Water	Ground W	RB-093021	O2021006	123911	1,4-Dioxane	2.5	ug/L	U	10/14/2021 2:00	10/21/2021 15:03	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006516		EXTRACTED DATE				10/5/2021 2:00	10/19/2021 14:58	1
2166	18	9/30/2021	14:40	DIOXA	Water	Ground W	RB-093021	O2021006551		EXTRACTED DATE	10122021	Day		10/14/2021 2:00	10/21/2021 15:03	1
2166	18	9/30/2021	14:40	VOASW	Water	Ground W	RB-093021	O2021006516		EXTRACTED TIME				10/5/2021 2:00	10/19/2021 14:58	1

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Tetra Tech EC Inc.

Hoff VC- 336 Layfield Road, Perkiomenville, PA

SGS Job Number: JD36682

Sampling Date: 12/13/21

Report to:

Tetra Tech EC Inc.
One Oxford Valley Suite 200
Langhorne, PA 19047
Jonathan.Dziekan@tetratech.com; Neb.Dedic@tetratech.com

ATTN: Jonathan Dziekan

Total number of pages in report: 955

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Mike Earp
General Manager

Client Service contact: Jadon Schiller 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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SGS North America Inc.

Sample Summary

Tetra Tech EC Inc.

Job No: JD36682

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD36682-1	12/13/21	12:00	ND	12/13/21	AQ	Trip Blank Water	TB-121321
JD36682-2	12/13/21	10:15	ND	12/13/21	AQ	Surface Water	HOFF SW-4
JD36682-3	12/13/21	10:35	ND	12/13/21	AQ	Surface Water	HOFF SW-3
JD36682-4	12/13/21	11:20	ND	12/13/21	AQ	Surface Water	HOFF SW-2
JD36682-5	12/13/21	11:40	ND	12/13/21	AQ	Surface Water	HOFF SW-1
JD36682-6	12/13/21	12:00	ND	12/13/21	AQ	Surface Water	HOFF-DUP-121321SW
JD36682-7	12/13/21	10:20	ND	12/13/21	SO	Sediment	HOFF SED-4
JD36682-8	12/13/21	10:40	ND	12/13/21	SO	Sediment	HOFF SED-3
JD36682-9	12/13/21	11:25	ND	12/13/21	SO	Sediment	HOFF SED-2
JD36682-10	12/13/21	11:45	ND	12/13/21	SO	Sediment	HOFF SED-1
JD36682-11	12/13/21	12:00	ND	12/13/21	SO	Sediment	HOFF DUP-121321SED

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Tetra Tech EC Inc.	**Job No**	JD36682
Site:	Hoff VC- 336 Layfield Road, Perkiomenville, PA	**Report Date**	1/11/2022 5:15:58 PM

On 12/13/2021, 10 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.6 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD36682 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** VL10113

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36655-4MS, JD36655-4MSD were used as the QC samples indicated.
- Matrix Spike Duplicate Recovery(s) for Tetrahydrofuran are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for cis-1,2-Dichloroethene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JD36682-6 for Acetone: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36682-2 for Tert Butyl Alcohol: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36682-5 for Tert Butyl Alcohol: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36682-6 for Tetrahydrofuran: Associated CCV outside of control limits high, sample was ND.
- JD36682-2 for Acetone: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36682-2 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD36682-2 for Tetrahydrofuran: Associated CCV outside of control limits high, sample was ND.
- VL10113-MB for 1,1,2,2-Tetrachloroethane: MDL from current instrument.
- JD36682-1 for Acetone: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36682-1 for Tert Butyl Alcohol: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36682-1 for Tetrahydrofuran: Associated CCV outside of control limits high, sample was ND.
- JD36682-1 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD36682-4 for Acetone: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- VL10113-MB for Dibromochloromethane: MDL from current instrument.
- JD36682-6 for Tert Butyl Alcohol: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36682-4 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD36682-3 for Tetrahydrofuran: Associated CCV outside of control limits high, sample was ND.
- JD36682-5 for Acetone: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** VL10113

- JD36682-5 for Tetrahydrofuran: Associated CCV outside of control limits high, sample was ND.
- JD36682-5 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD36682-6 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD36682-3 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD36682-3 for Acetone: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36682-3 for Tert Butyl Alcohol: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36682-4 for Tert Butyl Alcohol: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36682-4 for Tetrahydrofuran: Associated CCV outside of control limits high, sample was ND.

Matrix: SO **Batch ID:** V1C7979

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36688-1MS, JD36688-2DUP, JD36688-1MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Vinyl Acetate are outside control limits. Outside control limits due to matrix interference.
- JD36682-11 for 1,1-Dichloroethane: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD36682-9 for 1,2-Dichloropropane: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- V1C7979-BS for 1,1-Dichloroethane: High percent recovery and no associated positive reported in the QC batch.
- JD36682-10 for 1,2-Dichloropropane: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- V1C7979-BS for 1,2-Dichloropropane: High percent recovery and no associated positive reported in the QC batch.
- JD36682-11 for 1,2-Dichloropropane: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD36682-9 for 1,1-Dichloroethane: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD36682-10 for 1,1-Dichloroethane: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

Matrix: SO **Batch ID:** V1C7983

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36756-7MS, JD36756-8DUP were used as the QC samples indicated.
- RPD(s) for Duplicate for 2-Butanone (MEK), Carbon disulfide are outside control limits for sample JD36756-8DUP. RPD acceptable due to low DUP and sample concentrations.

MS Volatiles By Method SW846 8260D BY SIM

Matrix: AQ **Batch ID:** V3A7273

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36682-2MS, JD36682-3DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ **Batch ID:** OP37474

- All method blanks for this batch meet method specific criteria.
- JD36682-6: Sample extracted outside the holding time.
- JD36682-5: Sample extracted outside the holding time.
- JD36682-2: Sample extracted outside the holding time.
- JD36682-4: Sample extracted outside the holding time.
- JD36682-3: Sample extracted outside the holding time.
- OP37474-BS1 for Pyridine: Outside of in house control limits.
- RPD of OP37474-BSD for Pyridine: Analytical precision exceeds in-house control limits.

Matrix: SO **Batch ID:** OP37283

- All samples were extracted within the recommended method holding time.
- Sample(s) JD36682-7MS, JD36682-7MSD, OP37283-MSMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD36682-11 for Isosafrole: This compound does not meet the <30% method criteria in the preceding ICV. Result is bias high.
- JD36682-10 for m-Dinitrobenzene: Associated CCV outside of control limits high, sample was ND.
- JD36682-11 for N-Nitrosopyrrolidine: Associated CCV outside of control limits high, sample was ND.
- OP37283-BS13 for 2-Picoline: Outside of in house control limits.
- JD36682-10 for 5-Nitro-o-toluidine: Associated CCV outside of control limits high, sample was ND.
- JD36682-10 for Dimethoate: Associated CCV outside of control limits high, sample was ND.
- JD36682-10 for Aramite: Associated CCV outside of control limits high, sample was ND.
- JD36682-11 for 1,4-Naphthoquinone: Associated CCV outside of control limits high, sample was ND.
- JD36682-10 for 2-Acetylaminofluorene: Associated CCV outside of control limits high, sample was ND.
- JD36682-10 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36682-11 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36682-11 for m-Dinitrobenzene: Associated CCV outside of control limits high, sample was ND.
- JD36682-11 for Dimethoate: Associated CCV outside of control limits high, sample was ND.
- JD36682-11 for Aramite: Associated CCV outside of control limits high, sample was ND.
- JD36682-11 for 5-Nitro-o-toluidine: Associated CCV outside of control limits high, sample was ND.
- JD36682-11 for 2-Acetylaminofluorene: Associated CCV outside of control limits high, sample was ND.
- JD36682-11 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36682-10 for Tetraethyl dithiopyrophosphate: Associated CCV outside of control limits high, sample was ND.
- JD36682-10 for 1,4-Naphthoquinone: Associated CCV outside of control limits high, sample was ND.
- JD36682-9 for N-Nitrosopyrrolidine: Associated CCV outside of control limits high, sample was ND.
- JD36682-8 for Aramite: Associated CCV outside of control limits high, sample was ND.
- JD36682-10 for Isosafrole: This compound does not meet the <30% method criteria in the preceding ICV. Result is bias high.
- JD36682-9 for 1,4-Naphthoquinone: Associated CCV outside of control limits high, sample was ND.
- JD36682-9 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36682-10 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36682-9 for 5-Nitro-o-toluidine: Associated CCV outside of control limits high, sample was ND.
- JD36682-9 for Aramite: Associated CCV outside of control limits high, sample was ND.
- JD36682-7 for 5-Nitro-o-toluidine: Associated CCV outside of control limits high, sample was ND.

MS Semi-volatiles By Method SW846 8270E

Matrix: SO **Batch ID:** OP37283

- JD36682-9 for m-Dinitrobenzene: Associated CCV outside of control limits high, sample was ND.
- JD36682-9 for 2-Acetylaminofluorene: Associated CCV outside of control limits high, sample was ND.
- JD36682-9 for Tetraethyl dithiopyrophosphate: Associated CCV outside of control limits high, sample was ND.
- JD36682-9 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36682-9 for Isosafrole: This compound does not meet the <30% method criteria in the preceding ICV. Result is bias high.
- JD36682-8 for 1,4-Naphthoquinone: Associated CCV outside of control limits high, sample was ND.
- JD36682-9 for Dimethoate: Associated CCV outside of control limits high, sample was ND.
- JD36682-8 for 2-Acetylaminofluorene: Associated CCV outside of control limits high, sample was ND.
- JD36682-8 for 5-Nitro-o-toluidine: Associated CCV outside of control limits high, sample was ND.
- JD36682-8 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36682-7 for Aramite: Associated CCV outside of control limits high, sample was ND.
- JD36682-8 for m-Dinitrobenzene: Associated CCV outside of control limits high, sample was ND.
- JD36682-8 for N-Nitrosopyrrolidine: Associated CCV outside of control limits high, sample was ND.
- JD36682-8 for Tetraethyl dithiopyrophosphate: Associated CCV outside of control limits high, sample was ND.
- JD36682-8 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36682-8 for Isosafrole: This compound does not meet the <30% method criteria in the preceding ICV. Result is bias high.
- JD36682-7 for 1,4-Naphthoquinone: Associated CCV outside of control limits high, sample was ND.
- JD36682-7 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36682-7 for N-Nitrosopyrrolidine: Associated CCV outside of control limits high, sample was ND.
- JD36682-8 for Dimethoate: Associated CCV outside of control limits high, sample was ND.
- OP37283-BS13 for 1,4-Naphthoquinone: Outside of in house control limits.
- JD36682-7 for Dimethoate: Associated CCV outside of control limits high, sample was ND.
- JD36682-7 for Tetraethyl dithiopyrophosphate: Associated CCV outside of control limits high, sample was ND.
- JD36682-7 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36682-7 for Isosafrole: This compound does not meet the <30% method criteria in the preceding ICV. Result is bias high.
- JD36682-10 for N-Nitrosopyrrolidine: Associated CCV outside of control limits high, sample was ND.
- JD36682-11 for Tetraethyl dithiopyrophosphate: Associated CCV outside of control limits high, sample was ND.
- JD36682-7 for m-Dinitrobenzene: Associated CCV outside of control limits high, sample was ND.
- JD36682-7 for 2-Acetylaminofluorene: Associated CCV outside of control limits high, sample was ND.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: AQ **Batch ID:** OP37474A

- All method blanks for this batch meet method specific criteria.
- JD36682-4: Sample extracted outside the holding time.
- JD36682-5: Sample extracted outside the holding time.
- JD36682-2: Sample extracted outside the holding time.
- JD36682-6: Sample extracted outside the holding time.
- JD36682-3: Sample extracted outside the holding time.
- OP37474A-BSD12 for Nitrobenzene-d5: Outside of in house control limits.

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: AQ **Batch ID:** OP37193

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- RPD of OP37193-BSD for Dieldrin: Analytical precision exceeds in-house control limits.
- RPD of OP37193-BSD for 4,4'-DDE: Analytical precision exceeds in-house control limits.
- OP37193-BS1 for Endosulfan-II: Reported from 2nd signal. 1st signal used for confirmation.
- RPD of OP37193-BSD for Endrin aldehyde: Analytical precision exceeds in-house control limits.
- RPD of OP37193-BSD for Heptachlor epoxide: Analytical precision exceeds in-house control limits.

Matrix: SO **Batch ID:** OP37171

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36682-7MS, JD36682-7MSD, OP37171-MSMSD were used as the QC samples indicated.
- JD36682-9: Had TBA cleanup.
- JD36682-9 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.
- JD36682-7 for 4,4'-DDE: More than 40 % RPD for detected concentrations between the two GC columns.
- JD36682-7 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.
- JD36682-8 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.

Metals Analysis By Method SW846 6020B

Matrix: AQ **Batch ID:** MP30441

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36533-1MSD, JD36533-1SDL, JD36533-1MS, JD36533-1MSD were used as the QC samples for metals.
- Blank Spike Recovery(s) for Silver are outside control limits.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Sodium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Arsenic, Beryllium, Cadmium, Cobalt, Lead, Manganese, Selenium, Silver, Thallium, Vanadium are outside control limits for sample MP30441-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP30441-B1 for Silver: Spike blank indicates possible high bias, but all associated samples < RL.
- MP30441-SD1 for Copper, Iron: Serial dilution indicates possible matrix interference.

Matrix: SO **Batch ID:** MP30463

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36682-9MS, JD36682-9MSD, JD36682-9PS, JD36682-9SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Vanadium, Antimony, Lead are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Duplicate Recovery(s) for Chromium, Antimony, Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Aluminum, Calcium, Iron, Magnesium, Manganese, Zinc are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for MSD for Calcium are outside control limits for sample MP30463-S2. High rpd due to possible sample nonhomogeneity.
- RPD(s) for Serial Dilution for Cadmium, Silver, Antimony are outside control limits for sample MP30463-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP30463-SD1 for Nickel: Serial dilution indicates possible matrix interference.
- MP30463-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Metals Analysis By Method SW846 7470A

Matrix: AQ **Batch ID:** MP30421

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36639-5MS, JD36639-5MSD were used as the QC samples for metals.

Metals Analysis By Method SW846 7471B

Matrix: SO **Batch ID:** MP30399

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36639-25MS, JD36639-25MSD were used as the QC samples for metals.

General Chemistry By Method SM2540 G 18TH ED MOD

Matrix: SO **Batch ID:** GN24712

- Sample(s) JD36639-30DUP were used as the QC samples for Solids, Percent.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JD36682
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/13/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD36682-1	**TB-121321**					
No hits reported in this sample.						
JD36682-2	**HOFF SW-4**					
Chlorobenzene		0.58 J	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene		1.0	1.0	0.53	ug/l	SW846 8260D
1,1-Dichloroethane		2.2	1.0	0.57	ug/l	SW846 8260D
1,1-Dichloroethene		1.4	1.0	0.59	ug/l	SW846 8260D
cis-1,2-Dichloroethene		15.0	1.0	0.51	ug/l	SW846 8260D
Methyl Tert Butyl Ether		0.75 J	1.0	0.51	ug/l	SW846 8260D
1,1,1-Trichloroethane		0.92 J	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		3.4	1.0	0.53	ug/l	SW846 8260D
1,4-Dioxane		3.6	0.40	0.095	ug/l	SW846 8260D BY SIM
Fluoranthene [a]		0.0383 J	0.074	0.037	ug/l	SW846 8270E BY SIM
Naphthalene [a]		0.234	0.074	0.037	ug/l	SW846 8270E BY SIM
Phenanthrene [a]		0.0387 J	0.074	0.037	ug/l	SW846 8270E BY SIM
Pyrene [a]		0.0632 J	0.074	0.037	ug/l	SW846 8270E BY SIM
Aluminum		1140	50		ug/l	SW846 6020B
Arsenic		1.0	1.0		ug/l	SW846 6020B
Barium		39.4	2.0		ug/l	SW846 6020B
Calcium		62400	2500		ug/l	SW846 6020B
Chromium		3.1	2.0		ug/l	SW846 6020B
Cobalt		1.1	1.0		ug/l	SW846 6020B
Copper		5.7	4.0		ug/l	SW846 6020B
Iron		1730	50		ug/l	SW846 6020B
Lead		2.1	1.0		ug/l	SW846 6020B
Magnesium		22800	2500		ug/l	SW846 6020B
Manganese		121	2.0		ug/l	SW846 6020B
Nickel		3.2	2.0		ug/l	SW846 6020B
Potassium		3950	500		ug/l	SW846 6020B
Sodium		30600	2500		ug/l	SW846 6020B
Vanadium		4.8	2.0		ug/l	SW846 6020B
Zinc		12.9	10		ug/l	SW846 6020B
JD36682-3	**HOFF SW-3**					
Chlorobenzene		2.3	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene		3.7	1.0	0.53	ug/l	SW846 8260D
1,4-Dichlorobenzene		1.4	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane		3.5	1.0	0.57	ug/l	SW846 8260D
1,1-Dichloroethene		2.6	1.0	0.59	ug/l	SW846 8260D
cis-1,2-Dichloroethene		24.3	1.0	0.51	ug/l	SW846 8260D
Methyl Tert Butyl Ether		1.0	1.0	0.51	ug/l	SW846 8260D

Summary of Hits

Job Number: JD36682
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/13/21

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
1,1,1-Trichloroethane	1.6	1.0	0.54	ug/l	SW846 8260D
Trichloroethene	5.2	1.0	0.53	ug/l	SW846 8260D
1,4-Dioxane	3.6	0.40	0.095	ug/l	SW846 8260D BY SIM
Anthracene [a]	0.0508 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Benzo(a)anthracene [a]	0.258	0.038	0.023	ug/l	SW846 8270E BY SIM
Benzo(a)pyrene [a]	0.232	0.038	0.023	ug/l	SW846 8270E BY SIM
Benzo(b)fluoranthene [a]	0.339	0.038	0.023	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene [b]	0.158	0.077	0.038	ug/l	SW846 8270E BY SIM
Benzo(k)fluoranthene [a]	0.115	0.077	0.038	ug/l	SW846 8270E BY SIM
Chrysene [a]	0.142	0.077	0.038	ug/l	SW846 8270E BY SIM
Dibenzo(a,h)anthracene [a]	0.0431 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Fluoranthene [a]	0.263	0.077	0.038	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene [b]	0.142	0.077	0.038	ug/l	SW846 8270E BY SIM
Phenanthrene [a]	0.136	0.077	0.038	ug/l	SW846 8270E BY SIM
Pyrene [a]	0.268	0.077	0.038	ug/l	SW846 8270E BY SIM
Aluminum	528	50		ug/l	SW846 6020B
Barium	31.9	2.0		ug/l	SW846 6020B
Calcium	60800	2500		ug/l	SW846 6020B
Iron	808	50		ug/l	SW846 6020B
Lead	1.1	1.0		ug/l	SW846 6020B
Magnesium	22700	2500		ug/l	SW846 6020B
Manganese	81.9	2.0		ug/l	SW846 6020B
Nickel	2.5	2.0		ug/l	SW846 6020B
Potassium	3650	500		ug/l	SW846 6020B
Sodium	31000	2500		ug/l	SW846 6020B
Vanadium	2.9	2.0		ug/l	SW846 6020B
JD36682-4 HOFF SW-2					
Chlorobenzene	13.2	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene	7.9	1.0	0.53	ug/l	SW846 8260D
1,4-Dichlorobenzene	1.9	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane	1.7	1.0	0.57	ug/l	SW846 8260D
1,1-Dichloroethene	4.6	1.0	0.59	ug/l	SW846 8260D
cis-1,2-Dichloroethene	3.8	1.0	0.51	ug/l	SW846 8260D
1,1,1-Trichloroethane	6.9	1.0	0.54	ug/l	SW846 8260D
Trichloroethene	3.4	1.0	0.53	ug/l	SW846 8260D
1,4-Dioxane	1.3	0.40	0.095	ug/l	SW846 8260D BY SIM
Benzo(a)pyrene [a]	0.0534	0.037	0.022	ug/l	SW846 8270E BY SIM
Benzo(b)fluoranthene [a]	0.0504	0.037	0.022	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene [b]	0.0424 J	0.074	0.037	ug/l	SW846 8270E BY SIM
Fluoranthene [a]	0.0610 J	0.074	0.037	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene [b]	0.0392 J	0.074	0.037	ug/l	SW846 8270E BY SIM
Naphthalene [b]	0.0712 J	0.074	0.037	ug/l	SW846 8270E BY SIM
Phenanthrene [a]	0.0608 J	0.074	0.037	ug/l	SW846 8270E BY SIM

Summary of Hits

Job Number: JD36682
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/13/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Pyrene [a]		0.0572 J	0.074	0.037	ug/l	SW846 8270E BY SIM
Aluminum		7600	50		ug/l	SW846 6020B
Arsenic		4.2	1.0		ug/l	SW846 6020B
Barium		120	2.0		ug/l	SW846 6020B
Calcium		67600	2500		ug/l	SW846 6020B
Chromium		17.3	2.0		ug/l	SW846 6020B
Cobalt		7.4	1.0		ug/l	SW846 6020B
Copper		26.0	4.0		ug/l	SW846 6020B
Iron		12900	50		ug/l	SW846 6020B
Lead		19.2	1.0		ug/l	SW846 6020B
Magnesium		26600	2500		ug/l	SW846 6020B
Manganese		2280	50		ug/l	SW846 6020B
Nickel		12.3	2.0		ug/l	SW846 6020B
Potassium		5970	500		ug/l	SW846 6020B
Sodium		31800	2500		ug/l	SW846 6020B
Vanadium		30.1	2.0		ug/l	SW846 6020B
Zinc		89.4	10		ug/l	SW846 6020B
JD36682-5	**HOFF SW-1**					
Naphthalene [b]		0.0421 J	0.074	0.037	ug/l	SW846 8270E BY SIM
Phenanthrene [a]		0.0371 J	0.074	0.037	ug/l	SW846 8270E BY SIM
Barium		27.0	2.0		ug/l	SW846 6020B
Calcium		55300	5000		ug/l	SW846 6020B
Iron		1620	50		ug/l	SW846 6020B
Magnesium		19100	500		ug/l	SW846 6020B
Manganese		1180	20		ug/l	SW846 6020B
Nickel		2.2	2.0		ug/l	SW846 6020B
Potassium		3230	500		ug/l	SW846 6020B
Sodium		29200	5000		ug/l	SW846 6020B
JD36682-6	**HOFF-DUP-121321SW**					
Aluminum		60.4	50		ug/l	SW846 6020B
Barium		26.8	2.0		ug/l	SW846 6020B
Calcium		45500	5000		ug/l	SW846 6020B
Chromium		8.7	2.0		ug/l	SW846 6020B
Iron		1680	50		ug/l	SW846 6020B
Magnesium		18400	500		ug/l	SW846 6020B
Manganese		1240	20		ug/l	SW846 6020B
Nickel		6.9	2.0		ug/l	SW846 6020B
Potassium		3110	500		ug/l	SW846 6020B
Sodium		29600	5000		ug/l	SW846 6020B
Zinc		13.3	10		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36682
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/13/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD36682-7	**HOFF SED-4**					
Chlorobenzene		0.75 J	2.4	0.55	ug/kg	SW846 8260D
1,2-Dichlorobenzene		4.2	1.2	0.66	ug/kg	SW846 8260D
1,4-Dichlorobenzene		1.1 J	1.2	0.60	ug/kg	SW846 8260D
1,1-Dichloroethane		2.4	1.2	0.60	ug/kg	SW846 8260D
cis-1,2-Dichloroethene		7.0	1.2	1.0	ug/kg	SW846 8260D
Toluene		3.2	1.2	0.63	ug/kg	SW846 8260D
Dibenzofuran		38.0 J	90	18	ug/kg	SW846 8270E
4,4'-DDE [c]		1.3	0.83	0.72	ug/kg	SW846 8081B
4,4'-DDT [c]		3.0	0.83	0.73	ug/kg	SW846 8081B
Aluminum		23400	230		mg/kg	SW846 6020B
Arsenic		14.3	0.23		mg/kg	SW846 6020B
Barium		70.4	0.92		mg/kg	SW846 6020B
Beryllium		1.8	0.23		mg/kg	SW846 6020B
Calcium		7350	230		mg/kg	SW846 6020B
Chromium		58.6	1.8		mg/kg	SW846 6020B
Cobalt		22.1	0.23		mg/kg	SW846 6020B
Copper		19.3	0.92		mg/kg	SW846 6020B
Iron		48900	1200		mg/kg	SW846 6020B
Lead		29.8	0.23		mg/kg	SW846 6020B
Magnesium		13100	1200		mg/kg	SW846 6020B
Manganese		1300	23		mg/kg	SW846 6020B
Nickel		34.5	0.92		mg/kg	SW846 6020B
Potassium		2010	120		mg/kg	SW846 6020B
Selenium		0.74	0.23		mg/kg	SW846 6020B
Sodium		167	120		mg/kg	SW846 6020B
Vanadium		101	9.2		mg/kg	SW846 6020B
Zinc		107	46		mg/kg	SW846 6020B
JD36682-8	**HOFF SED-3**					
Acetone		5.3 J	11	4.4	ug/kg	SW846 8260D
1,1-Dichloroethane		6.8	1.1	0.52	ug/kg	SW846 8260D
1,1-Dichloroethene		3.2	1.1	0.69	ug/kg	SW846 8260D
cis-1,2-Dichloroethene		48.5	1.1	0.88	ug/kg	SW846 8260D
trans-1,2-Dichloroethene		0.90 J	1.1	0.64	ug/kg	SW846 8260D
1,1,1-Trichloroethane		1.0 J	2.1	0.51	ug/kg	SW846 8260D
Trichloroethene		11.7	1.1	0.80	ug/kg	SW846 8260D
Dibenzofuran		95.2	80	16	ug/kg	SW846 8270E
bis(2-Ethylhexyl)phthalate		53.3 J	80	9.4	ug/kg	SW846 8270E
4,4'-DDT [c]		3.2	0.79	0.70	ug/kg	SW846 8081B
Heptachlor epoxide		1.6	0.79	0.56	ug/kg	SW846 8081B
Aluminum		16300	200		mg/kg	SW846 6020B
Arsenic		10.7	0.20		mg/kg	SW846 6020B

Summary of Hits

Job Number: JD36682
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/13/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Barium		56.1	0.81		mg/kg	SW846 6020B
Beryllium		1.5	0.20		mg/kg	SW846 6020B
Calcium		5410	200		mg/kg	SW846 6020B
Chromium		44.2	1.6		mg/kg	SW846 6020B
Cobalt		13.9	0.20		mg/kg	SW846 6020B
Copper		17.0	0.81		mg/kg	SW846 6020B
Iron		32400	200		mg/kg	SW846 6020B
Lead		21.4	0.20		mg/kg	SW846 6020B
Magnesium		9200	1000		mg/kg	SW846 6020B
Manganese		963	16		mg/kg	SW846 6020B
Nickel		22.0	0.81		mg/kg	SW846 6020B
Potassium		1100	100		mg/kg	SW846 6020B
Selenium		0.63	0.20		mg/kg	SW846 6020B
Sodium		113	100		mg/kg	SW846 6020B
Vanadium		70.5	1.6		mg/kg	SW846 6020B
Zinc		68.9	8.1		mg/kg	SW846 6020B
JD36682-9	**HOFF SED-2**					
Acetone		8.0 J	13	5.2	ug/kg	SW846 8260D
Carbon disulfide		1.3 J	2.5	0.68	ug/kg	SW846 8260D
1,2-Dichlorobenzene		1.7	1.3	0.69	ug/kg	SW846 8260D
1,4-Dichlorobenzene		1.1 J	1.3	0.62	ug/kg	SW846 8260D
Toluene		1.5	1.3	0.66	ug/kg	SW846 8260D
1,2,4-Trichlorobenzene		11.5 J	82	11	ug/kg	SW846 8270E
4,4'-DDT [d]		1.5	0.79	0.70	ug/kg	SW846 8081B
Aluminum		19800	120		mg/kg	SW846 6020B
Arsenic		10.0	0.31		mg/kg	SW846 6020B
Barium		66.2	2.5		mg/kg	SW846 6020B
Beryllium		1.8	0.31		mg/kg	SW846 6020B
Calcium		13500	610		mg/kg	SW846 6020B
Chromium		60.6	4.9		mg/kg	SW846 6020B
Cobalt		17.7	0.31		mg/kg	SW846 6020B
Copper		24.7	1.2		mg/kg	SW846 6020B
Iron		45800	610		mg/kg	SW846 6020B
Lead		20.4	0.31		mg/kg	SW846 6020B
Magnesium		12400	610		mg/kg	SW846 6020B
Manganese		818	12		mg/kg	SW846 6020B
Nickel		25.9	1.2		mg/kg	SW846 6020B
Potassium		973	150		mg/kg	SW846 6020B
Selenium		0.83	0.31		mg/kg	SW846 6020B
Vanadium		101	4.9		mg/kg	SW846 6020B
Zinc		105	25		mg/kg	SW846 6020B

Summary of Hits

Job Number: JD36682
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/13/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD36682-10	**HOFF SED-1**					
Acetone		6.4 J	11	4.7	ug/kg	SW846 8260D
Toluene		3.1	1.1	0.60	ug/kg	SW846 8260D
Aluminum		22600	160		mg/kg	SW846 6020B
Arsenic		3.4	0.31		mg/kg	SW846 6020B
Barium		89.8	3.1		mg/kg	SW846 6020B
Beryllium		0.75	0.31		mg/kg	SW846 6020B
Calcium		4300	160		mg/kg	SW846 6020B
Chromium		34.1	1.2		mg/kg	SW846 6020B
Cobalt		6.8	0.31		mg/kg	SW846 6020B
Copper		10.8	1.2		mg/kg	SW846 6020B
Iron		28200	160		mg/kg	SW846 6020B
Lead		8.7	0.31		mg/kg	SW846 6020B
Magnesium		3790	160		mg/kg	SW846 6020B
Manganese		3310	62		mg/kg	SW846 6020B
Nickel		15.9	1.2		mg/kg	SW846 6020B
Potassium		1380	160		mg/kg	SW846 6020B
Selenium		0.57	0.31		mg/kg	SW846 6020B
Vanadium		35.8	1.2		mg/kg	SW846 6020B
Zinc		39.9	6.2		mg/kg	SW846 6020B
JD36682-11	**HOFF DUP-121321SED**					
Acetone		9.6 J	13	5.4	ug/kg	SW846 8260D
Toluene		2.0	1.3	0.68	ug/kg	SW846 8260D
Aluminum		23800	340		mg/kg	SW846 6020B
Arsenic		5.9	0.34		mg/kg	SW846 6020B
Barium		94.9	1.3		mg/kg	SW846 6020B
Beryllium		1.0	0.34		mg/kg	SW846 6020B
Calcium		4050	170		mg/kg	SW846 6020B
Chromium		50.6	1.3		mg/kg	SW846 6020B
Cobalt		9.2	0.34		mg/kg	SW846 6020B
Copper		15.4	1.3		mg/kg	SW846 6020B
Iron		36000	340		mg/kg	SW846 6020B
Lead		13.4	0.34		mg/kg	SW846 6020B
Magnesium		6410	170		mg/kg	SW846 6020B
Manganese		2310	34		mg/kg	SW846 6020B
Nickel		21.8	1.3		mg/kg	SW846 6020B
Potassium		1930	170		mg/kg	SW846 6020B
Selenium		0.61	0.34		mg/kg	SW846 6020B
Vanadium		67.0	1.3		mg/kg	SW846 6020B
Zinc		53.0	6.7		mg/kg	SW846 6020B

(a) Sample extracted outside the holding time.

Summary of Hits

Job Number: JD36682
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/13/21

Lab Sample ID	Client Sample ID	Result/				
Analyte		Qual	RL	MDL	Units	Method

(b) Sample extracted outside the holding time. Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
(c) More than 40 % RPD for detected concentrations between the two GC columns.
(d) Had TBA cleanup. More than 40 % RPD for detected concentrations between the two GC columns.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	TB-121321		
Lab Sample ID:	JD36682-1	**Date Sampled:**	12/13/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/13/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167546.D	1	12/23/21 16:05	BK	n/a	n/a	V3A7273
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	136%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	TB-121321		
Lab Sample ID:	JD36682-1	**Date Sampled:**	12/13/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L336253.D	1	12/21/21 15:28	JS	n/a	n/a	VL10113
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB-121321
Lab Sample ID: JD36682-1
Matrix: AQ - Trip Blank Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/13/21
Date Received: 12/13/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK [b]	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol [a]	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [b]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-121321		
Lab Sample ID:	JD36682-1	**Date Sampled:**	12/13/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		80-120%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	98%		82-114%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-4		
Lab Sample ID:	JD36682-2	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167540.D	1	12/23/21 13:12	BK	n/a	n/a	V3A7273
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	3.6	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	127%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-4		
Lab Sample ID:	JD36682-2	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L336259.D	1	12/21/21 17:34	JS	n/a	n/a	VL10113
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	0.58	1.0	0.56	ug/l	J
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	1.0	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	2.2	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	1.4	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	15.0	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SW-4		
Lab Sample ID:	JD36682-2	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.75	1.0	0.51	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK [b]	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol [a]	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [b]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.92	1.0	0.54	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	3.4	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SW-4		
Lab Sample ID:	JD36682-2	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		80-120%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	95%		82-114%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-4		
Lab Sample ID:	JD36682-2	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5P80854A.D	1	01/07/22 09:46	KLS	01/06/22 09:56	OP37474	E5P3826
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.7	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.7	0.49	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.48	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.7	0.62	ug/l	
51-28-5	2,4-Dinitrophenol [b]	ND	3.7	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.7	0.42	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.7	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.43	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.7	0.37	ug/l	
100-02-7	4-Nitrophenol [b]	ND	7.4	0.42	ug/l	
87-86-5	Pentachlorophenol	ND	3.7	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.7	0.59	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.7	0.45	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.7	0.55	ug/l	
98-86-2	Acetophenone	ND	1.9	0.48	ug/l	
62-53-3	Aniline	ND	1.9	0.70	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.51	ug/l	
85-68-7	Butyl benzyl phthalate [b]	ND	1.9	0.80	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.91	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.40	ug/l	
106-47-8	4-Chloroaniline	ND	3.7	0.49	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.42	ug/l	
111-44-4	bis(2-Chloroethyl)ether [c]	ND	1.9	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.55	ug/l	
121-14-2	2,4-Dinitrotoluene [b]	ND	0.93	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.93	0.52	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.0	ug/l	
132-64-9	Dibenzofuran	ND	3.7	0.67	ug/l	
84-74-2	Di-n-butyl phthalate [b]	ND	1.9	0.49	ug/l	
117-84-0	Di-n-octyl phthalate [b]	ND	1.9	1.5	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SW-4		
Lab Sample ID:	JD36682-2	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate [b]	ND	1.9	0.54	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.51	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate [b]	ND	1.9	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.93	0.50	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.93	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.4	0.91	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.51	ug/l	
78-59-1	Isophorone	ND	1.9	0.36	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.93	0.60	ug/l	
88-74-4	2-Nitroaniline	ND	3.7	0.57	ug/l	
99-09-2	3-Nitroaniline	ND	3.7	0.59	ug/l	
100-01-6	4-Nitroaniline	ND	3.7	0.69	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine [c]	ND	1.9	0.29	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.60	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.7	0.39	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.7		ug/l	
110-86-1	Pyridine	ND	1.9	0.29	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.45	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.93	0.33	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	39%		10-73%
4165-62-2	Phenol-d5	25%		10-64%
118-79-6	2,4,6-Tribromophenol	100%		31-130%
4165-60-0	Nitrobenzene-d5	92%		28-126%
321-60-8	2-Fluorobiphenyl	88%		26-114%
1718-51-0	Terphenyl-d14	67%		16-122%

(a) Sample extracted outside the holding time.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-4		
Lab Sample ID:	JD36682-2	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4P50638.D	1	01/11/22 13:23	KLS	01/06/22 09:56	OP37474A	E4P2648
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.074	0.037	ug/l	
208-96-8	Acenaphthylene	ND	0.074	0.037	ug/l	
120-12-7	Anthracene	ND	0.074	0.037	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.037	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.037	0.022	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.037	0.022	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.074	0.037	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.074	0.037	ug/l	
218-01-9	Chrysene	ND	0.074	0.037	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.074	0.037	ug/l	
206-44-0	Fluoranthene	0.0383	0.074	0.037	ug/l	J
86-73-7	Fluorene	ND	0.074	0.037	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.074	0.037	ug/l	
91-20-3	Naphthalene	0.234	0.074	0.037	ug/l	
85-01-8	Phenanthrene	0.0387	0.074	0.037	ug/l	J
129-00-0	Pyrene	0.0632	0.074	0.037	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	107%		29-124%
321-60-8	2-Fluorobiphenyl	107%		23-122%
1718-51-0	Terphenyl-d14	84%		22-130%

(a) Sample extracted outside the holding time.

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-4		
Lab Sample ID:	JD36682-2	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81309.D	1	12/20/21 05:38	CP	12/17/21 20:48	OP37193	G6G2876
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	64%		10-190%
877-09-8	Tetrachloro-m-xylene	63%		10-190%
2051-24-3	Decachlorobiphenyl	46%		10-156%
2051-24-3	Decachlorobiphenyl	56%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF SW-4
Lab Sample ID: JD36682-2
Matrix: AQ - Surface Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/13/21
Date Received: 12/13/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	1140	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	39.4	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	62400	2500	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Chromium	3.1	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	1.1	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	5.7	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	1730	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	2.1	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	22800	2500	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Manganese	121	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/17/21	12/17/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	3.2	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	3950	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	30600	2500	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	4.8	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	12.9	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51616
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Prep QC Batch: MP30421
(5) Prep QC Batch: MP30441

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-3		
Lab Sample ID:	JD36682-3	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167541.D	1	12/23/21 13:41	BK	n/a	n/a	V3A7273
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	3.6	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	114%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-3		
Lab Sample ID:	JD36682-3	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L336260.D	1	12/21/21 17:55	JS	n/a	n/a	VL10113
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	2.3	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	3.7	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	1.4	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	3.5	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	2.6	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	24.3	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF SW-3
Lab Sample ID: JD36682-3
Matrix: AQ - Surface Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/13/21
Date Received: 12/13/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.0	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK [b]	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol [a]	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [b]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	1.6	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	5.2	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SW-3		
Lab Sample ID:	JD36682-3	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%		80-120%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	97%		82-114%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-3		
Lab Sample ID:	JD36682-3	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5P80855.D	1	01/07/22 10:12	KLS	01/06/22 09:56	OP37474	E5P3826
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.8	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.8	0.51	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.50	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.8	0.65	ug/l	
51-28-5	2,4-Dinitrophenol [b]	ND	3.8	1.8	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.8	0.44	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.8	1.5	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.45	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.8	0.38	ug/l	
100-02-7	4-Nitrophenol [b]	ND	7.7	0.43	ug/l	
87-86-5	Pentachlorophenol	ND	3.8	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.25	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.8	0.61	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.8	0.47	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.8	0.57	ug/l	
98-86-2	Acetophenone	ND	1.9	0.50	ug/l	
62-53-3	Aniline	ND	1.9	0.73	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.53	ug/l	
85-68-7	Butyl benzyl phthalate [b]	ND	1.9	0.83	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.95	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	3.8	0.51	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.44	ug/l	
111-44-4	bis(2-Chloroethyl)ether [c]	ND	1.9	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.57	ug/l	
121-14-2	2,4-Dinitrotoluene [b]	ND	0.96	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.96	0.54	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.1	ug/l	
132-64-9	Dibenzofuran	ND	3.8	0.70	ug/l	
84-74-2	Di-n-butyl phthalate [b]	ND	1.9	0.51	ug/l	
117-84-0	Di-n-octyl phthalate [b]	ND	1.9	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SW-3		
Lab Sample ID:	JD36682-3	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate [b]	ND	1.9	0.56	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.53	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate [b]	ND	1.9	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	0.96	0.52	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.96	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.7	0.94	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.53	ug/l	
78-59-1	Isophorone	ND	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.96	0.62	ug/l	
88-74-4	2-Nitroaniline	ND	3.8	0.59	ug/l	
99-09-2	3-Nitroaniline	ND	3.8	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	3.8	0.72	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.40	ug/l	
62-75-9	n-Nitrosodimethylamine [c]	ND	1.9	0.30	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.62	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.8	0.41	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.8		ug/l	
110-86-1	Pyridine	ND	1.9	0.30	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.96	0.34	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	31%		10-73%
4165-62-2	Phenol-d5	19%		10-64%
118-79-6	2,4,6-Tribromophenol	73%		31-130%
4165-60-0	Nitrobenzene-d5	65%		28-126%
321-60-8	2-Fluorobiphenyl	71%		26-114%
1718-51-0	Terphenyl-d14	52%		16-122%

(a) Sample extracted outside the holding time.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-3		
Lab Sample ID:	JD36682-3	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4P50567.D	1	01/07/22 18:07	NAP	01/06/22 09:56	OP37474A	E4P2645
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.077	0.038	ug/l	
208-96-8	Acenaphthylene	ND	0.077	0.038	ug/l	
120-12-7	Anthracene	0.0508	0.077	0.038	ug/l	J
56-55-3	Benzo(a)anthracene	0.258	0.038	0.023	ug/l	
50-32-8	Benzo(a)pyrene	0.232	0.038	0.023	ug/l	
205-99-2	Benzo(b)fluoranthene	0.339	0.038	0.023	ug/l	
191-24-2	Benzo(g,h,i)perylene [b]	0.158	0.077	0.038	ug/l	
207-08-9	Benzo(k)fluoranthene	0.115	0.077	0.038	ug/l	
218-01-9	Chrysene	0.142	0.077	0.038	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.0431	0.077	0.038	ug/l	J
206-44-0	Fluoranthene	0.263	0.077	0.038	ug/l	
86-73-7	Fluorene	ND	0.077	0.038	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene [b]	0.142	0.077	0.038	ug/l	
91-20-3	Naphthalene [c]	ND	0.077	0.038	ug/l	
85-01-8	Phenanthrene	0.136	0.077	0.038	ug/l	
129-00-0	Pyrene	0.268	0.077	0.038	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	113%		29-124%
321-60-8	2-Fluorobiphenyl	92%		23-122%
1718-51-0	Terphenyl-d14	67%		22-130%

(a) Sample extracted outside the holding time.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-3		
Lab Sample ID:	JD36682-3	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81310.D	1	12/20/21 05:56	CP	12/17/21 20:48	OP37193	G6G2876
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	64%		10-190%
877-09-8	Tetrachloro-m-xylene	59%		10-190%
2051-24-3	Decachlorobiphenyl	42%		10-156%
2051-24-3	Decachlorobiphenyl	42%		10-156%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF SW-3
Lab Sample ID: JD36682-3
Matrix: AQ - Surface Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/13/21
Date Received: 12/13/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	528	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	31.9	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	60800	2500	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	808	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	1.1	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	22700	2500	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Manganese	81.9	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/17/21	12/17/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	2.5	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	3650	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	31000	2500	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	2.9	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51616
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Prep QC Batch: MP30421
(5) Prep QC Batch: MP30441

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-2		
Lab Sample ID:	JD36682-4	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167542.D	1	12/23/21 14:09	BK	n/a	n/a	V3A7273
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	1.3	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	135%		39-174%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-2		
Lab Sample ID:	JD36682-4	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L336261.D	1	12/21/21 18:16	JS	n/a	n/a	VL10113
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	13.2	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	7.9	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	1.9	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	1.7	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	4.6	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	3.8	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

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Report of Analysis

Client Sample ID:	HOFF SW-2		
Lab Sample ID:	JD36682-4	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK [b]	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol [a]	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [b]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	6.9	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	3.4	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SW-2		
Lab Sample ID:	JD36682-4	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%		80-120%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	99%		82-114%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(b) Associated CCV outside of control limits high, sample was ND.

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-2		
Lab Sample ID:	JD36682-4	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5P80856.D	1	01/07/22 10:38	KLS	01/06/22 09:56	OP37474	E5P3826
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.7	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.7	0.49	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.48	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.7	0.62	ug/l	
51-28-5	2,4-Dinitrophenol [b]	ND	3.7	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.7	0.42	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.7	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.43	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.7	0.37	ug/l	
100-02-7	4-Nitrophenol [b]	ND	7.4	0.42	ug/l	
87-86-5	Pentachlorophenol	ND	3.7	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.7	0.59	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.7	0.45	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.7	0.55	ug/l	
98-86-2	Acetophenone	ND	1.9	0.48	ug/l	
62-53-3	Aniline	ND	1.9	0.70	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.51	ug/l	
85-68-7	Butyl benzyl phthalate [b]	ND	1.9	0.80	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.91	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.40	ug/l	
106-47-8	4-Chloroaniline	ND	3.7	0.49	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.42	ug/l	
111-44-4	bis(2-Chloroethyl)ether [c]	ND	1.9	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.55	ug/l	
121-14-2	2,4-Dinitrotoluene [b]	ND	0.93	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.93	0.52	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.0	ug/l	
132-64-9	Dibenzofuran	ND	3.7	0.67	ug/l	
84-74-2	Di-n-butyl phthalate [b]	ND	1.9	0.49	ug/l	
117-84-0	Di-n-octyl phthalate [b]	ND	1.9	1.5	ug/l	

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SW-2		
Lab Sample ID:	JD36682-4	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate [b]	ND	1.9	0.54	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.51	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate [b]	ND	1.9	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.93	0.50	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.93	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.4	0.91	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.51	ug/l	
78-59-1	Isophorone	ND	1.9	0.36	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.93	0.60	ug/l	
88-74-4	2-Nitroaniline	ND	3.7	0.57	ug/l	
99-09-2	3-Nitroaniline	ND	3.7	0.59	ug/l	
100-01-6	4-Nitroaniline	ND	3.7	0.69	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine [c]	ND	1.9	0.29	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.60	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.7	0.39	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.7		ug/l	
110-86-1	Pyridine	ND	1.9	0.29	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.45	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.93	0.33	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	22%		10-73%
4165-62-2	Phenol-d5	13%		10-64%
118-79-6	2,4,6-Tribromophenol	49%		31-130%
4165-60-0	Nitrobenzene-d5	45%		28-126%
321-60-8	2-Fluorobiphenyl	50%		26-114%
1718-51-0	Terphenyl-d14	32%		16-122%

(a) Sample extracted outside the holding time.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-2		
Lab Sample ID:	JD36682-4	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4P50568.D	1	01/07/22 18:30	NAP	01/06/22 09:56	OP37474A	E4P2645
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.074	0.037	ug/l	
208-96-8	Acenaphthylene	ND	0.074	0.037	ug/l	
120-12-7	Anthracene	ND	0.074	0.037	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.037	0.022	ug/l	
50-32-8	Benzo(a)pyrene	0.0534	0.037	0.022	ug/l	
205-99-2	Benzo(b)fluoranthene	0.0504	0.037	0.022	ug/l	
191-24-2	Benzo(g,h,i)perylene [b]	0.0424	0.074	0.037	ug/l	J
207-08-9	Benzo(k)fluoranthene	ND	0.074	0.037	ug/l	
218-01-9	Chrysene	ND	0.074	0.037	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.074	0.037	ug/l	
206-44-0	Fluoranthene	0.0610	0.074	0.037	ug/l	J
86-73-7	Fluorene	ND	0.074	0.037	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene [b]	0.0392	0.074	0.037	ug/l	J
91-20-3	Naphthalene [b]	0.0712	0.074	0.037	ug/l	J
85-01-8	Phenanthrene	0.0608	0.074	0.037	ug/l	J
129-00-0	Pyrene	0.0572	0.074	0.037	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		29-124%
321-60-8	2-Fluorobiphenyl	65%		23-122%
1718-51-0	Terphenyl-d14	42%		22-130%

(a) Sample extracted outside the holding time.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-2		
Lab Sample ID:	JD36682-4	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81311.D	1	12/20/21 06:14	CP	12/17/21 20:48	OP37193	G6G2876
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		10-190%
877-09-8	Tetrachloro-m-xylene	70%		10-190%
2051-24-3	Decachlorobiphenyl	34%		10-156%
2051-24-3	Decachlorobiphenyl	41%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF SW-2
Lab Sample ID: JD36682-4
Matrix: AQ - Surface Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/13/21
Date Received: 12/13/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7600	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	4.2	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	120	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	67600	2500	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Chromium	17.3	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	7.4	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	26.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	12900	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	19.2	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	26600	2500	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Manganese	2280	50	ug/l	50	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/17/21	12/17/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	12.3	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	5970	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	31800	2500	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	30.1	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	89.4	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51616
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Prep QC Batch: MP30421
(5) Prep QC Batch: MP30441

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-1		
Lab Sample ID:	JD36682-5	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167543.D	1	12/23/21 14:38	BK	n/a	n/a	V3A7273
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	101%		39-174%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-1		
Lab Sample ID:	JD36682-5	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L336262.D	1	12/21/21 18:37	JS	n/a	n/a	VL10113
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SW-1		
Lab Sample ID:	JD36682-5	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK [b]	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol [a]	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [b]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		80-120%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SW-1		
Lab Sample ID:	JD36682-5	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%		80-120%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	97%		82-114%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-1		
Lab Sample ID:	JD36682-5	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5P80857.D	1	01/07/22 11:05	KLS	01/06/22 09:56	OP37474	E5P3826
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.7	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.7	0.49	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.48	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.7	0.62	ug/l	
51-28-5	2,4-Dinitrophenol [b]	ND	3.7	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.7	0.42	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.7	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.43	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.7	0.37	ug/l	
100-02-7	4-Nitrophenol [b]	ND	7.4	0.42	ug/l	
87-86-5	Pentachlorophenol	ND	3.7	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.7	0.59	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.7	0.45	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.7	0.55	ug/l	
98-86-2	Acetophenone	ND	1.9	0.48	ug/l	
62-53-3	Aniline	ND	1.9	0.70	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.51	ug/l	
85-68-7	Butyl benzyl phthalate [b]	ND	1.9	0.80	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.91	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.40	ug/l	
106-47-8	4-Chloroaniline	ND	3.7	0.49	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.42	ug/l	
111-44-4	bis(2-Chloroethyl)ether [c]	ND	1.9	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.55	ug/l	
121-14-2	2,4-Dinitrotoluene [b]	ND	0.93	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.93	0.52	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.0	ug/l	
132-64-9	Dibenzofuran	ND	3.7	0.67	ug/l	
84-74-2	Di-n-butyl phthalate [b]	ND	1.9	0.49	ug/l	
117-84-0	Di-n-octyl phthalate [b]	ND	1.9	1.5	ug/l	

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SW-1		
Lab Sample ID:	JD36682-5	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate [b]	ND	1.9	0.54	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.51	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate [b]	ND	1.9	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.93	0.50	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.93	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.4	0.91	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.51	ug/l	
78-59-1	Isophorone	ND	1.9	0.36	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.93	0.60	ug/l	
88-74-4	2-Nitroaniline	ND	3.7	0.57	ug/l	
99-09-2	3-Nitroaniline	ND	3.7	0.59	ug/l	
100-01-6	4-Nitroaniline	ND	3.7	0.69	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine [c]	ND	1.9	0.29	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.60	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.7	0.39	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.7		ug/l	
110-86-1	Pyridine	ND	1.9	0.29	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.45	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.93	0.33	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	22%		10-73%
4165-62-2	Phenol-d5	12%		10-64%
118-79-6	2,4,6-Tribromophenol	54%		31-130%
4165-60-0	Nitrobenzene-d5	48%		28-126%
321-60-8	2-Fluorobiphenyl	54%		26-114%
1718-51-0	Terphenyl-d14	41%		16-122%

(a) Sample extracted outside the holding time.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-1		
Lab Sample ID:	JD36682-5	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4P50569.D	1	01/07/22 18:53	NAP	01/06/22 09:56	OP37474A	E4P2645
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.074	0.037	ug/l	
208-96-8	Acenaphthylene	ND	0.074	0.037	ug/l	
120-12-7	Anthracene	ND	0.074	0.037	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.037	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.037	0.022	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.037	0.022	ug/l	
191-24-2	Benzo(g,h,i)perylene [b]	ND	0.074	0.037	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.074	0.037	ug/l	
218-01-9	Chrysene	ND	0.074	0.037	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.074	0.037	ug/l	
206-44-0	Fluoranthene	ND	0.074	0.037	ug/l	
86-73-7	Fluorene	ND	0.074	0.037	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene [b]	ND	0.074	0.037	ug/l	
91-20-3	Naphthalene [c]	0.0421	0.074	0.037	ug/l	J
85-01-8	Phenanthrene	0.0371	0.074	0.037	ug/l	J
129-00-0	Pyrene	ND	0.074	0.037	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		29-124%
321-60-8	2-Fluorobiphenyl	67%		23-122%
1718-51-0	Terphenyl-d14	52%		22-130%

(a) Sample extracted outside the holding time.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SW-1		
Lab Sample ID:	JD36682-5	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81312.D	1	12/20/21 06:32	CP	12/17/21 20:48	OP37193	G6G2876
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		10-190%
877-09-8	Tetrachloro-m-xylene	66%		10-190%
2051-24-3	Decachlorobiphenyl	45%		10-156%
2051-24-3	Decachlorobiphenyl	55%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF SW-1
Lab Sample ID: JD36682-5
Matrix: AQ - Surface Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/13/21
Date Received: 12/13/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	27.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	55300	5000	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	1620	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	19100	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Manganese	1180	20	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/17/21	12/17/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	2.2	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	3230	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	29200	5000	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	< 2.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51616
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Prep QC Batch: MP30421
(5) Prep QC Batch: MP30441

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF-DUP-121321SW		
Lab Sample ID:	JD36682-6	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167544.D	1	12/23/21 15:07	BK	n/a	n/a	V3A7273
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	109%		39-174%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF-DUP-121321SW		
Lab Sample ID:	JD36682-6	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L336263.D	1	12/21/21 18:58	JS	n/a	n/a	VL10113
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF-DUP-121321SW		
Lab Sample ID:	JD36682-6	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK [b]	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol [a]	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [b]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF-DUP-121321SW		
Lab Sample ID:	JD36682-6	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%		80-120%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	97%		82-114%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF-DUP-121321SW		
Lab Sample ID:	JD36682-6	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5P80858.D	1	01/07/22 11:31	KLS	01/06/22 09:56	OP37474	E5P3826
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.6	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.6	0.47	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.8	0.46	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.6	0.60	ug/l	
51-28-5	2,4-Dinitrophenol [b]	ND	3.6	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.6	0.41	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.8	0.42	ug/l	
	3&4-Methylphenol	ND	1.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.6	0.35	ug/l	
100-02-7	4-Nitrophenol [b]	ND	7.1	0.40	ug/l	
87-86-5	Pentachlorophenol	ND	3.6	1.0	ug/l	
108-95-2	Phenol	ND	1.8	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.6	0.57	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.6	0.44	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.6	0.53	ug/l	
98-86-2	Acetophenone	ND	1.8	0.46	ug/l	
62-53-3	Aniline	ND	1.8	0.68	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.8	0.49	ug/l	
85-68-7	Butyl benzyl phthalate [b]	ND	1.8	0.77	ug/l	
100-51-6	Benzyl Alcohol	ND	1.8	0.88	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.8	0.39	ug/l	
106-47-8	4-Chloroaniline	ND	3.6	0.48	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.8	0.41	ug/l	
111-44-4	bis(2-Chloroethyl)ether [c]	ND	1.8	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.8	0.53	ug/l	
121-14-2	2,4-Dinitrotoluene [b]	ND	0.89	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.89	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.8	0.98	ug/l	
132-64-9	Dibenzofuran	ND	3.6	0.65	ug/l	
84-74-2	Di-n-butyl phthalate [b]	ND	1.8	0.48	ug/l	
117-84-0	Di-n-octyl phthalate [b]	ND	1.8	1.5	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF-DUP-121321SW		
Lab Sample ID:	JD36682-6	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate [b]	ND	1.8	0.52	ug/l	
131-11-3	Dimethyl phthalate	ND	1.8	0.49	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate [b]	ND	1.8	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.89	0.48	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.89	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.1	0.88	ug/l	
67-72-1	Hexachloroethane	ND	1.8	0.49	ug/l	
78-59-1	Isophorone	ND	1.8	0.35	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.89	0.58	ug/l	
88-74-4	2-Nitroaniline	ND	3.6	0.55	ug/l	
99-09-2	3-Nitroaniline	ND	3.6	0.57	ug/l	
100-01-6	4-Nitroaniline	ND	3.6	0.67	ug/l	
98-95-3	Nitrobenzene	ND	1.8	0.38	ug/l	
62-75-9	n-Nitrosodimethylamine [c]	ND	1.8	0.28	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.8	0.58	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.6	0.38	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.6		ug/l	
110-86-1	Pyridine	ND	1.8	0.28	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.8	0.43	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.89	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	26%		10-73%
4165-62-2	Phenol-d5	16%		10-64%
118-79-6	2,4,6-Tribromophenol	69%		31-130%
4165-60-0	Nitrobenzene-d5	63%		28-126%
321-60-8	2-Fluorobiphenyl	70%		26-114%
1718-51-0	Terphenyl-d14	56%		16-122%

(a) Sample extracted outside the holding time.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF-DUP-121321SW		
Lab Sample ID:	JD36682-6	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4P50570.D	1	01/07/22 19:17	NAP	01/06/22 09:56	OP37474A	E4P2645
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.071	0.036	ug/l	
208-96-8	Acenaphthylene	ND	0.071	0.036	ug/l	
120-12-7	Anthracene	ND	0.071	0.036	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.036	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.036	0.021	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.036	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene [b]	ND	0.071	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.071	0.036	ug/l	
218-01-9	Chrysene	ND	0.071	0.036	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.071	0.036	ug/l	
206-44-0	Fluoranthene	ND	0.071	0.036	ug/l	
86-73-7	Fluorene	ND	0.071	0.036	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene [b]	ND	0.071	0.036	ug/l	
91-20-3	Naphthalene [b]	ND	0.071	0.036	ug/l	
85-01-8	Phenanthrene	ND	0.071	0.036	ug/l	
129-00-0	Pyrene	ND	0.071	0.036	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	108%		29-124%
321-60-8	2-Fluorobiphenyl	88%		23-122%
1718-51-0	Terphenyl-d14	73%		22-130%

(a) Sample extracted outside the holding time.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF-DUP-121321SW		
Lab Sample ID:	JD36682-6	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81313.D	1	12/20/21 06:50	CP	12/17/21 20:48	OP37193	G6G2876
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%		10-190%
877-09-8	Tetrachloro-m-xylene	60%		10-190%
2051-24-3	Decachlorobiphenyl	45%		10-156%
2051-24-3	Decachlorobiphenyl	52%		10-156%

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Report of Analysis

Client Sample ID:	HOFF-DUP-121321SW		
Lab Sample ID:	JD36682-6	**Date Sampled:**	12/13/21
Matrix:	AQ - Surface Water	**Date Received:**	12/13/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	60.4	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	26.8	2.0	ug/l	2	12/20/21	01/11/22	NV	SW846 6020B [3]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	45500	5000	ug/l	20	12/20/21	01/11/22	NV	SW846 6020B [3]	SW846 3010A [5]
Chromium	8.7	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	1680	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	18400	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Manganese	1240	20	ug/l	20	12/20/21	01/11/22	NV	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/17/21	12/17/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	6.9	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	3110	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	29600	5000	ug/l	20	12/20/21	01/11/22	NV	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	< 2.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	13.3	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51616
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Prep QC Batch: MP30421
(5) Prep QC Batch: MP30441

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SED-4		
Lab Sample ID:	JD36682-7	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	73.9
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C183331.D	1	12/21/21 22:26	PS	n/a	n/a	V1C7983
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	12	5.0	ug/kg	
71-43-2	Benzene	ND	0.60	0.55	ug/kg	
108-86-1	Bromobenzene	ND	6.0	0.67	ug/kg	
74-97-5	Bromochloromethane	ND	6.0	0.68	ug/kg	
75-27-4	Bromodichloromethane	ND	2.4	0.52	ug/kg	
75-25-2	Bromoform	ND	6.0	1.6	ug/kg	
74-83-9	Bromomethane	ND	6.0	0.92	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	2.9	ug/kg	
104-51-8	n-Butylbenzene	ND	2.4	0.49	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.4	0.52	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.4	0.60	ug/kg	
75-15-0	Carbon disulfide	ND	2.4	0.65	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.4	0.75	ug/kg	
108-90-7	Chlorobenzene	0.75	2.4	0.55	ug/kg	J
75-00-3	Chloroethane	ND	6.0	0.71	ug/kg	
67-66-3	Chloroform	ND	2.4	0.63	ug/kg	
74-87-3	Chloromethane	ND	6.0	2.4	ug/kg	
95-49-8	o-Chlorotoluene	ND	2.4	0.65	ug/kg	
106-43-4	p-Chlorotoluene	ND	2.4	0.53	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.4	0.84	ug/kg	
124-48-1	Dibromochloromethane	ND	2.4	0.68	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.2	0.51	ug/kg	
95-50-1	1,2-Dichlorobenzene	4.2	1.2	0.66	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.2	0.60	ug/kg	
106-46-7	1,4-Dichlorobenzene	1.1	1.2	0.60	ug/kg	J
75-71-8	Dichlorodifluoromethane	ND	6.0	0.88	ug/kg	
75-34-3	1,1-Dichloroethane	2.4	1.2	0.60	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.2	0.57	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.2	0.79	ug/kg	
156-59-2	cis-1,2-Dichloroethene	7.0	1.2	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.2	0.74	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.4	0.57	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-4		
Lab Sample ID:	JD36682-7	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	73.9
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.4	0.63	ug/kg	
594-20-7	2,2-Dichloropropane	ND	2.4	0.52	ug/kg	
563-58-6	1,1-Dichloropropene	ND	2.4	0.56	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.4	0.57	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.4	0.55	ug/kg	
123-91-1	1,4-Dioxane	ND	150	44	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.55	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6.0	0.79	ug/kg	
591-78-6	2-Hexanone	ND	6.0	2.6	ug/kg	
98-82-8	Isopropylbenzene	ND	2.4	1.7	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2.4	0.48	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.2	0.57	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.0	2.7	ug/kg	
74-95-3	Methylene bromide	ND	6.0	0.64	ug/kg	
75-09-2	Methylene chloride	ND	6.0	3.2	ug/kg	
91-20-3	Naphthalene	ND	6.0	3.0	ug/kg	
103-65-1	n-Propylbenzene	ND	2.4	0.57	ug/kg	
100-42-5	Styrene	ND	2.4	0.49	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	30	5.5	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.4	0.51	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	0.72	ug/kg	
127-18-4	Tetrachloroethene	ND	2.4	0.70	ug/kg	
109-99-9	Tetrahydrofuran	ND	12	3.6	ug/kg	
108-88-3	Toluene	3.2	1.2	0.63	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.0	3.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.0	3.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.4	0.58	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.4	0.67	ug/kg	
79-01-6	Trichloroethene	ND	1.2	0.92	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.0	0.83	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.0	0.67	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.4	0.60	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.4	0.52	ug/kg	
108-05-4	Vinyl Acetate	ND	12	2.4	ug/kg	
75-01-4	Vinyl chloride	ND	2.4	0.58	ug/kg	
	m,p-Xylene	ND	1.2	1.1	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.55	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-4		
Lab Sample ID:	JD36682-7	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	73.9
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		72-130%
17060-07-0	1,2-Dichloroethane-D4	106%		75-131%
2037-26-5	Toluene-D8	100%		81-121%
460-00-4	4-Bromofluorobenzene	99%		60-141%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SED-4		
Lab Sample ID:	JD36682-7	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	73.9
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204546.D	1	12/23/21 11:25	CS	12/21/21 10:30	OP37283	EF8967
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	90	22	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	220	27	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	220	38	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	220	80	ug/kg	
51-28-5	2,4-Dinitrophenol [a]	ND	220	170	ug/kg	
87-65-0	2,6-Dichlorophenol	ND	220	30	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	220	48	ug/kg	
	3&4-Methylphenol	ND	90	37	ug/kg	
88-75-5	2-Nitrophenol	ND	220	30	ug/kg	
100-02-7	4-Nitrophenol	ND	450	120	ug/kg	
87-86-5	Pentachlorophenol	ND	180	42	ug/kg	
108-95-2	Phenol	ND	90	23	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	220	30	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	220	34	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	220	27	ug/kg	
53-96-3	2-Acetylaminofluorene [a]	ND	220	26	ug/kg	
92-67-1	4-Aminobiphenyl	ND	220	16	ug/kg	
98-86-2	Acetophenone	ND	220	9.6	ug/kg	
62-53-3	Aniline	ND	90	20	ug/kg	
140-57-8	Aramite [a]	ND	220		ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	90	17	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	90	11	ug/kg	
100-51-6	Benzyl Alcohol	ND	90	16	ug/kg	
91-58-7	2-Chloronaphthalene	ND	90	11	ug/kg	
106-47-8	4-Chloroaniline	ND	220	16	ug/kg	
510-15-6	Chlorobenzilate	ND	220	8.3	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	90	9.6	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	90	19	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	90	15	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	45	14	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	45	22	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	90	37	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF SED-4
Lab Sample ID: JD36682-7
Matrix: SO - Sediment
Method: SW846 8270E SW846 3546
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/13/21
Date Received: 12/13/21
Percent Solids: 73.9

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
2303-16-4	Diallate	ND	220	19	ug/kg	
132-64-9	Dibenzofuran	38.0	90	18	ug/kg	J
60-51-5	Dimethoate [a]	ND	220	7.9	ug/kg	
122-39-4	Diphenylamine	ND	220	5.2	ug/kg	
298-04-4	Disulfoton	ND	220	13	ug/kg	
99-65-0	m-Dinitrobenzene [a]	ND	220		ug/kg	
60-11-7	p-(Dimethylamine)azobenzene	ND	220	9.0	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	90	7.3	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	90	11	ug/kg	
84-66-2	Diethyl phthalate	ND	90	9.5	ug/kg	
131-11-3	Dimethyl phthalate	ND	90	8.0	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	90	10	ug/kg	
62-50-0	Ethyl methanesulfonate	ND	220	10	ug/kg	
118-74-1	Hexachlorobenzene	ND	90	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	45	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	450	18	ug/kg	
67-72-1	Hexachloroethane	ND	220	22	ug/kg	
1888-71-7	Hexachloropropene	ND	220	30	ug/kg	
465-73-6	Isodrin	ND	220	15	ug/kg	
78-59-1	Isophorone	ND	90	9.6	ug/kg	
120-58-1	Isosafrole [b]	ND	220	22	ug/kg	
91-57-6	2-Methylnaphthalene	ND	45	10	ug/kg	
66-27-3	Methyl methanesulfonate	ND	220	10	ug/kg	
298-00-0	Methyl parathion	ND	220	8.3	ug/kg	
130-15-4	1,4-Naphthoquinone [a]	ND	220	11	ug/kg	
88-74-4	2-Nitroaniline	ND	220	11	ug/kg	
99-09-2	3-Nitroaniline	ND	220	11	ug/kg	
100-01-6	4-Nitroaniline	ND	220	12	ug/kg	
99-55-8	5-Nitro-o-toluidine [a]	ND	220	12	ug/kg	
98-95-3	Nitrobenzene	ND	90	17	ug/kg	
62-75-9	n-Nitrosodimethylamine [c]	ND	90	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	90	13	ug/kg	
924-16-3	N-Nitrosodi-n-butylamine	ND	220	27	ug/kg	
55-18-5	N-Nitrosodiethylamine	ND	220	13	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	220	16	ug/kg	
10595-95-6	N-Nitrosomethylethylamine	ND	220	53	ug/kg	
59-89-2	N-Nitrosomorpholine	ND	220	16	ug/kg	
100-75-4	N-Nitrosopiperidine	ND	220	21	ug/kg	
930-55-2	N-Nitrosopyrrolidine [a]	ND	220	29	ug/kg	
126-68-1	O,O,O-Triethyl phosphorothio	ND	220	11	ug/kg	

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-4		
Lab Sample ID:	JD36682-7	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	73.9
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
109-06-8	2-Picoline	ND	220	7.6	ug/kg	
56-38-2	Parathion	ND	220	8.7	ug/kg	
76-01-7	Pentachloroethane	ND	220	12	ug/kg	
608-93-5	Pentachlorobenzene	ND	220	13	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	220	120	ug/kg	
298-02-2	Phorate	ND	220	10	ug/kg	
23950-58-5	Pronamide	ND	220	13	ug/kg	
110-86-1	Pyridine	ND	90	15	ug/kg	
94-59-7	Safrole	ND	220	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	220	11	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	90	12	ug/kg	
297-97-2	Thionazin	ND	220	21	ug/kg	
3689-24-5	Tetraethyl dithiopyrophospha [a]	ND	220	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	78%		10-109%
4165-62-2	Phenol-d5	76%		10-105%
118-79-6	2,4,6-Tribromophenol	87%		10-135%
4165-60-0	Nitrobenzene-d5	69%		10-119%
321-60-8	2-Fluorobiphenyl	80%		18-112%
1718-51-0	Terphenyl-d14	89%		18-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) This compound does not meet the < 30% method criteria in the preceding ICV. Result is bias high.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SED-4		
Lab Sample ID:	JD36682-7	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8081B SW846 3546	**Percent Solids:**	73.9
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G172326.D	1	12/23/21 06:35	CP	12/17/21 14:30	OP37171	G1G5947
Run #2							

	Initial Weight	Final Volume
Run #1	16.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.83	0.68	ug/kg	
319-84-6	alpha-BHC	ND	0.83	0.67	ug/kg	
319-85-7	beta-BHC	ND	0.83	0.75	ug/kg	
319-86-8	delta-BHC	ND	0.83	0.79	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.83	0.61	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.83	0.67	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.83	0.37	ug/kg	
60-57-1	Dieldrin	ND	0.83	0.57	ug/kg	
72-54-8	4,4'-DDD	ND	0.83	0.76	ug/kg	
72-55-9	4,4'-DDE [a]	1.3	0.83	0.72	ug/kg	
50-29-3	4,4'-DDT [a]	3.0	0.83	0.73	ug/kg	
72-20-8	Endrin	ND	0.83	0.64	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.83	0.64	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.83	0.47	ug/kg	
959-98-8	Endosulfan-I	ND	0.83	0.48	ug/kg	
33213-65-9	Endosulfan-II	ND	0.83	0.51	ug/kg	
76-44-8	Heptachlor	ND	0.83	0.71	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.83	0.58	ug/kg	
72-43-5	Methoxychlor	ND	1.7	0.66	ug/kg	
53494-70-5	Endrin ketone	ND	0.83	0.60	ug/kg	
8001-35-2	Toxaphene	ND	21	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		14-145%
877-09-8	Tetrachloro-m-xylene	84%		14-145%
2051-24-3	Decachlorobiphenyl	76%		10-197%
2051-24-3	Decachlorobiphenyl	132%		10-197%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF SED-4
Lab Sample ID: JD36682-7
Matrix: SO - Sediment
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/13/21
Date Received: 12/13/21
Percent Solids: 73.9

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	23400	230	mg/kg	50	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Antimony	< 0.92	0.92	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Arsenic	14.3	0.23	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Barium	70.4	0.92	mg/kg	10	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Beryllium	1.8	0.23	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Cadmium	< 0.23	0.23	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Calcium	7350	230	mg/kg	10	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Chromium	58.6	1.8	mg/kg	10	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Cobalt	22.1	0.23	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Copper	19.3	0.92	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Iron	48900	1200	mg/kg	250	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Lead	29.8	0.23	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Magnesium	13100	1200	mg/kg	50	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Manganese	1300	23	mg/kg	250	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Mercury	< 0.035	0.035	mg/kg	1	12/16/21	12/16/21	SB	SW846 7471B [1]	SW846 7471B [5]
Nickel	34.5	0.92	mg/kg	5	12/21/21	12/27/21	MET	SW846 6020B [3]	SW846 3050B [6]
Potassium	2010	120	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Selenium	0.74	0.23	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Silver	< 0.23	0.23	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Sodium	167	120	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Thallium	< 0.23	0.23	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Vanadium	101	9.2	mg/kg	50	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Zinc	107	46	mg/kg	50	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]

(1) Instrument QC Batch: MA51605
(2) Instrument QC Batch: MA51651
(3) Instrument QC Batch: MA51659
(4) Instrument QC Batch: MA51679
(5) Prep QC Batch: MP30399
(6) Prep QC Batch: MP30463

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SED-3		
Lab Sample ID:	JD36682-8	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	82.0
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C183332.D	1	12/21/21 22:53	PS	n/a	n/a	V1C7983
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	5.3	11	4.4	ug/kg	J
71-43-2	Benzene	ND	0.53	0.48	ug/kg	
108-86-1	Bromobenzene	ND	5.3	0.58	ug/kg	
74-97-5	Bromochloromethane	ND	5.3	0.59	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.45	ug/kg	
75-25-2	Bromoform	ND	5.3	1.4	ug/kg	
74-83-9	Bromomethane	ND	5.3	0.80	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
104-51-8	n-Butylbenzene	ND	2.1	0.43	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.1	0.45	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.1	0.53	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.56	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.48	ug/kg	
75-00-3	Chloroethane	ND	5.3	0.62	ug/kg	
67-66-3	Chloroform	ND	2.1	0.55	ug/kg	
74-87-3	Chloromethane	ND	5.3	2.1	ug/kg	
95-49-8	o-Chlorotoluene	ND	2.1	0.57	ug/kg	
106-43-4	p-Chlorotoluene	ND	2.1	0.46	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.73	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.59	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.44	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.57	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.52	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.3	0.76	ug/kg	
75-34-3	1,1-Dichloroethane	6.8	1.1	0.52	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	3.2	1.1	0.69	ug/kg	
156-59-2	cis-1,2-Dichloroethene	48.5	1.1	0.88	ug/kg	
156-60-5	trans-1,2-Dichloroethene	0.90	1.1	0.64	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	2.1	0.50	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-3		
Lab Sample ID:	JD36682-8	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	82.0
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.1	0.55	ug/kg	
594-20-7	2,2-Dichloropropane	ND	2.1	0.45	ug/kg	
563-58-6	1,1-Dichloropropene	ND	2.1	0.49	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.48	ug/kg	
123-91-1	1,4-Dioxane	ND	130	38	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.48	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.3	0.69	ug/kg	
591-78-6	2-Hexanone	ND	5.3	2.2	ug/kg	
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2.1	0.42	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	2.4	ug/kg	
74-95-3	Methylene bromide	ND	5.3	0.55	ug/kg	
75-09-2	Methylene chloride	ND	5.3	2.7	ug/kg	
91-20-3	Naphthalene	ND	5.3	2.6	ug/kg	
103-65-1	n-Propylbenzene	ND	2.1	0.49	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	26	4.8	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.1	0.44	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.63	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.61	ug/kg	
109-99-9	Tetrahydrofuran	ND	11	3.1	ug/kg	
108-88-3	Toluene	ND	1.1	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.3	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	1.0	2.1	0.51	ug/kg	J
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.58	ug/kg	
79-01-6	Trichloroethene	11.7	1.1	0.80	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.3	0.72	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.3	0.58	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.1	0.53	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	0.45	ug/kg	
108-05-4	Vinyl Acetate	ND	11	2.1	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.51	ug/kg	
	m,p-Xylene	ND	1.1	0.94	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.48	ug/kg	

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-3		
Lab Sample ID:	JD36682-8	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	82.0
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		72-130%
17060-07-0	1,2-Dichloroethane-D4	102%		75-131%
2037-26-5	Toluene-D8	101%		81-121%
460-00-4	4-Bromofluorobenzene	101%		60-141%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SED-3		
Lab Sample ID:	JD36682-8	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	82.0
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204543.D	1	12/23/21 10:10	CS	12/21/21 10:30	OP37283	EF8967
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	80	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	25	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	71	ug/kg	
51-28-5	2,4-Dinitrophenol [a]	ND	200	150	ug/kg	
87-65-0	2,6-Dichlorophenol	ND	200	27	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	43	ug/kg	
	3&4-Methylphenol	ND	80	33	ug/kg	
88-75-5	2-Nitrophenol	ND	200	27	ug/kg	
100-02-7	4-Nitrophenol	ND	400	110	ug/kg	
87-86-5	Pentachlorophenol	ND	160	38	ug/kg	
108-95-2	Phenol	ND	80	21	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	30	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	24	ug/kg	
53-96-3	2-Acetylaminofluorene [a]	ND	200	24	ug/kg	
92-67-1	4-Aminobiphenyl	ND	200	14	ug/kg	
98-86-2	Acetophenone	ND	200	8.6	ug/kg	
62-53-3	Aniline	ND	80	18	ug/kg	
140-57-8	Aramite [a]	ND	200		ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	80	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	80	9.8	ug/kg	
100-51-6	Benzyl Alcohol	ND	80	14	ug/kg	
91-58-7	2-Chloronaphthalene	ND	80	9.5	ug/kg	
106-47-8	4-Chloroaniline	ND	200	14	ug/kg	
510-15-6	Chlorobenzilate	ND	200	7.4	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	80	8.6	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	80	17	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	80	13	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	40	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	40	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	80	33	ug/kg	

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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-3		
Lab Sample ID:	JD36682-8	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	82.0
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
2303-16-4	Diallate	ND	200	17	ug/kg	
132-64-9	Dibenzofuran	95.2	80	16	ug/kg	
60-51-5	Dimethoate [a]	ND	200	7.1	ug/kg	
122-39-4	Diphenylamine	ND	200	4.7	ug/kg	
298-04-4	Disulfoton	ND	200	12	ug/kg	
99-65-0	m-Dinitrobenzene [a]	ND	200		ug/kg	
60-11-7	p-(Dimethylamine)azobenzene	ND	200	8.1	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	80	6.5	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	80	10	ug/kg	
84-66-2	Diethyl phthalate	ND	80	8.5	ug/kg	
131-11-3	Dimethyl phthalate	ND	80	7.1	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	53.3	80	9.4	ug/kg	J
62-50-0	Ethyl methanesulfonate	ND	200	9.3	ug/kg	
118-74-1	Hexachlorobenzene	ND	80	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	40	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	400	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	20	ug/kg	
1888-71-7	Hexachloropropene	ND	200	27	ug/kg	
465-73-6	Isodrin	ND	200	14	ug/kg	
78-59-1	Isophorone	ND	80	8.6	ug/kg	
120-58-1	Isosafrole [b]	ND	200	19	ug/kg	
91-57-6	2-Methylnaphthalene	ND	40	9.1	ug/kg	
66-27-3	Methyl methanesulfonate	ND	200	9.3	ug/kg	
298-00-0	Methyl parathion	ND	200	7.4	ug/kg	
130-15-4	1,4-Naphthoquinone [a]	ND	200	9.6	ug/kg	
88-74-4	2-Nitroaniline	ND	200	9.5	ug/kg	
99-09-2	3-Nitroaniline	ND	200	10	ug/kg	
100-01-6	4-Nitroaniline	ND	200	10	ug/kg	
99-55-8	5-Nitro-o-toluidine [a]	ND	200	11	ug/kg	
98-95-3	Nitrobenzene	ND	80	15	ug/kg	
62-75-9	n-Nitrosodimethylamine [c]	ND	80	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	80	12	ug/kg	
924-16-3	N-Nitrosodi-n-butylamine	ND	200	24	ug/kg	
55-18-5	N-Nitrosodiethylamine	ND	200	12	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	15	ug/kg	
10595-95-6	N-Nitrosomethylethylamine	ND	200	47	ug/kg	
59-89-2	N-Nitrosomorpholine	ND	200	14	ug/kg	
100-75-4	N-Nitrosopiperidine	ND	200	18	ug/kg	
930-55-2	N-Nitrosopyrrolidine [a]	ND	200	26	ug/kg	
126-68-1	O,O,O-Triethyl phosphorothio	ND	200	9.8	ug/kg	

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E = Indicates value exceeds calibration range
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-3		
Lab Sample ID:	JD36682-8	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	82.0
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
109-06-8	2-Picoline	ND	200	6.8	ug/kg	
56-38-2	Parathion	ND	200	7.8	ug/kg	
76-01-7	Pentachloroethane	ND	200	10	ug/kg	
608-93-5	Pentachlorobenzene	ND	200	12	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	200	110	ug/kg	
298-02-2	Phorate	ND	200	9.3	ug/kg	
23950-58-5	Pronamide	ND	200	11	ug/kg	
110-86-1	Pyridine	ND	80	14	ug/kg	
94-59-7	Safrole	ND	200	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	10	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	80	11	ug/kg	
297-97-2	Thionazin	ND	200	19	ug/kg	
3689-24-5	Tetraethyl dithiopyrophospha [a]	ND	200	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	80%		10-109%
4165-62-2	Phenol-d5	79%		10-105%
118-79-6	2,4,6-Tribromophenol	86%		10-135%
4165-60-0	Nitrobenzene-d5	72%		10-119%
321-60-8	2-Fluorobiphenyl	82%		18-112%
1718-51-0	Terphenyl-d14	89%		18-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) This compound does not meet the < 30% method criteria in the preceding ICV. Result is bias high.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SED-3		
Lab Sample ID:	JD36682-8	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8081B SW846 3546	**Percent Solids:**	82.0
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G172358.D	1	12/23/21 20:20	TL	12/17/21 14:30	OP37171	G1G5948
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.79	0.65	ug/kg	
319-84-6	alpha-BHC	ND	0.79	0.64	ug/kg	
319-85-7	beta-BHC	ND	0.79	0.72	ug/kg	
319-86-8	delta-BHC	ND	0.79	0.76	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.79	0.58	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.79	0.64	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.79	0.36	ug/kg	
60-57-1	Dieldrin	ND	0.79	0.54	ug/kg	
72-54-8	4,4'-DDD	ND	0.79	0.73	ug/kg	
72-55-9	4,4'-DDE	ND	0.79	0.69	ug/kg	
50-29-3	4,4'-DDT [a]	3.2	0.79	0.70	ug/kg	
72-20-8	Endrin	ND	0.79	0.62	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.79	0.62	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.79	0.45	ug/kg	
959-98-8	Endosulfan-I	ND	0.79	0.46	ug/kg	
33213-65-9	Endosulfan-II	ND	0.79	0.49	ug/kg	
76-44-8	Heptachlor	ND	0.79	0.68	ug/kg	
1024-57-3	Heptachlor epoxide	1.6	0.79	0.56	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.63	ug/kg	
53494-70-5	Endrin ketone	ND	0.79	0.57	ug/kg	
8001-35-2	Toxaphene	ND	20	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		14-145%
877-09-8	Tetrachloro-m-xylene	70%		14-145%
2051-24-3	Decachlorobiphenyl	80%		10-197%
2051-24-3	Decachlorobiphenyl	105%		10-197%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF SED-3
Lab Sample ID: JD36682-8
Matrix: SO - Sediment
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/13/21
Date Received: 12/13/21
Percent Solids: 82.0

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	16300	200	mg/kg	50	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Antimony	< 0.81	0.81	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Arsenic	10.7	0.20	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Barium	56.1	0.81	mg/kg	10	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Beryllium	1.5	0.20	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Cadmium	< 0.20	0.20	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Calcium	5410	200	mg/kg	10	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Chromium	44.2	1.6	mg/kg	10	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Cobalt	13.9	0.20	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Copper	17.0	0.81	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Iron	32400	200	mg/kg	50	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Lead	21.4	0.20	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Magnesium	9200	1000	mg/kg	50	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Manganese	963	16	mg/kg	200	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Mercury	< 0.038	0.038	mg/kg	1	12/16/21	12/16/21	SB	SW846 7471B [1]	SW846 7471B [5]
Nickel	22.0	0.81	mg/kg	5	12/21/21	12/27/21	MET	SW846 6020B [3]	SW846 3050B [6]
Potassium	1100	100	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Selenium	0.63	0.20	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Silver	< 0.20	0.20	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Sodium	113	100	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Thallium	< 0.20	0.20	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Vanadium	70.5	1.6	mg/kg	10	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Zinc	68.9	8.1	mg/kg	10	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]

(1) Instrument QC Batch: MA51605
(2) Instrument QC Batch: MA51651
(3) Instrument QC Batch: MA51659
(4) Instrument QC Batch: MA51679
(5) Prep QC Batch: MP30399
(6) Prep QC Batch: MP30463

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SED-2		
Lab Sample ID:	JD36682-9	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	77.6
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C183221.D	1	12/16/21 23:29	PS	n/a	n/a	V1C7979
Run #2							

	Initial Weight
Run #1	5.1 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	8.0	13	5.2	ug/kg	J
71-43-2	Benzene	ND	0.63	0.57	ug/kg	
108-86-1	Bromobenzene	ND	6.3	0.70	ug/kg	
74-97-5	Bromochloromethane	ND	6.3	0.71	ug/kg	
75-27-4	Bromodichloromethane	ND	2.5	0.54	ug/kg	
75-25-2	Bromoform	ND	6.3	1.7	ug/kg	
74-83-9	Bromomethane	ND	6.3	0.97	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.1	ug/kg	
104-51-8	n-Butylbenzene	ND	2.5	0.51	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.5	0.54	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.5	0.63	ug/kg	
75-15-0	Carbon disulfide	1.3	2.5	0.68	ug/kg	J
56-23-5	Carbon tetrachloride	ND	2.5	0.78	ug/kg	
108-90-7	Chlorobenzene	ND	2.5	0.58	ug/kg	
75-00-3	Chloroethane	ND	6.3	0.75	ug/kg	
67-66-3	Chloroform	ND	2.5	0.66	ug/kg	
74-87-3	Chloromethane	ND	6.3	2.5	ug/kg	
95-49-8	o-Chlorotoluene	ND	2.5	0.68	ug/kg	
106-43-4	p-Chlorotoluene	ND	2.5	0.56	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.88	ug/kg	
124-48-1	Dibromochloromethane	ND	2.5	0.71	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.53	ug/kg	
95-50-1	1,2-Dichlorobenzene	1.7	1.3	0.69	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.3	0.63	ug/kg	
106-46-7	1,4-Dichlorobenzene	1.1	1.3	0.62	ug/kg	J
75-71-8	Dichlorodifluoromethane	ND	6.3	0.92	ug/kg	
75-34-3	1,1-Dichloroethane [a]	ND	1.3	0.63	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.59	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.3	0.83	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.3	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.3	0.77	ug/kg	
78-87-5	1,2-Dichloropropane [a]	ND	2.5	0.60	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-2		
Lab Sample ID:	JD36682-9	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	77.6
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.5	0.66	ug/kg	
594-20-7	2,2-Dichloropropane	ND	2.5	0.54	ug/kg	
563-58-6	1,1-Dichloropropene	ND	2.5	0.59	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.60	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	0.58	ug/kg	
123-91-1	1,4-Dioxane	ND	160	46	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.57	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6.3	0.83	ug/kg	
591-78-6	2-Hexanone	ND	6.3	2.7	ug/kg	
98-82-8	Isopropylbenzene	ND	2.5	1.8	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2.5	0.50	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.59	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.3	2.9	ug/kg	
74-95-3	Methylene bromide	ND	6.3	0.66	ug/kg	
75-09-2	Methylene chloride	ND	6.3	3.3	ug/kg	
91-20-3	Naphthalene	ND	6.3	3.2	ug/kg	
103-65-1	n-Propylbenzene	ND	2.5	0.59	ug/kg	
100-42-5	Styrene	ND	2.5	0.51	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	32	5.8	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.53	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	0.76	ug/kg	
127-18-4	Tetrachloroethene	ND	2.5	0.73	ug/kg	
109-99-9	Tetrahydrofuran	ND	13	3.7	ug/kg	
108-88-3	Toluene	1.5	1.3	0.66	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.3	3.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.3	3.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.61	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.5	0.70	ug/kg	
79-01-6	Trichloroethene	ND	1.3	0.96	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.3	0.86	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.3	0.70	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.63	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.54	ug/kg	
108-05-4	Vinyl Acetate	ND	13	2.5	ug/kg	
75-01-4	Vinyl chloride	ND	2.5	0.61	ug/kg	
	m,p-Xylene	ND	1.3	1.1	ug/kg	
95-47-6	o-Xylene	ND	1.3	0.58	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-2		
Lab Sample ID:	JD36682-9	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	77.6
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		72-130%
17060-07-0	1,2-Dichloroethane-D4	113%		75-131%
2037-26-5	Toluene-D8	101%		81-121%
460-00-4	4-Bromofluorobenzene	101%		60-141%

(a) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SED-2		
Lab Sample ID:	JD36682-9	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	77.6
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204542.D	1	12/23/21 09:45	CS	12/21/21 10:30	OP37283	EF8967
Run #2							

	Initial Weight	Final Volume
Run #1	31.6 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	82	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	25	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	35	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	73	ug/kg	
51-28-5	2,4-Dinitrophenol [a]	ND	200	150	ug/kg	
87-65-0	2,6-Dichlorophenol	ND	200	27	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	44	ug/kg	
	3&4-Methylphenol	ND	82	34	ug/kg	
88-75-5	2-Nitrophenol	ND	200	27	ug/kg	
100-02-7	4-Nitrophenol	ND	410	110	ug/kg	
87-86-5	Pentachlorophenol	ND	160	38	ug/kg	
108-95-2	Phenol	ND	82	21	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	31	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	24	ug/kg	
53-96-3	2-Acetylaminofluorene [a]	ND	200	24	ug/kg	
92-67-1	4-Aminobiphenyl	ND	200	14	ug/kg	
98-86-2	Acetophenone	ND	200	8.8	ug/kg	
62-53-3	Aniline	ND	82	18	ug/kg	
140-57-8	Aramite [a]	ND	200		ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	82	16	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	82	10	ug/kg	
100-51-6	Benzyl Alcohol	ND	82	15	ug/kg	
91-58-7	2-Chloronaphthalene	ND	82	9.7	ug/kg	
106-47-8	4-Chloroaniline	ND	200	15	ug/kg	
510-15-6	Chlorobenzilate	ND	200	7.5	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	82	8.7	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	82	18	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	82	13	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	41	13	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	41	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	82	34	ug/kg	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-2		
Lab Sample ID:	JD36682-9	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	77.6
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
2303-16-4	Diallate	ND	200	17	ug/kg	
132-64-9	Dibenzofuran	ND	82	17	ug/kg	
60-51-5	Dimethoate [a]	ND	200	7.2	ug/kg	
122-39-4	Diphenylamine	ND	200	4.7	ug/kg	
298-04-4	Disulfoton	ND	200	12	ug/kg	
99-65-0	m-Dinitrobenzene [a]	ND	200		ug/kg	
60-11-7	p-(Dimethylamine)azobenzene	ND	200	8.2	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	82	6.6	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	82	10	ug/kg	
84-66-2	Diethyl phthalate	ND	82	8.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	82	7.3	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	82	9.5	ug/kg	
62-50-0	Ethyl methanesulfonate	ND	200	9.5	ug/kg	
118-74-1	Hexachlorobenzene	ND	82	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	41	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	410	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	20	ug/kg	
1888-71-7	Hexachloropropene	ND	200	28	ug/kg	
465-73-6	Isodrin	ND	200	14	ug/kg	
78-59-1	Isophorone	ND	82	8.7	ug/kg	
120-58-1	Isosafrole [b]	ND	200	20	ug/kg	
91-57-6	2-Methylnaphthalene	ND	41	9.2	ug/kg	
66-27-3	Methyl methanesulfonate	ND	200	9.5	ug/kg	
298-00-0	Methyl parathion	ND	200	7.5	ug/kg	
130-15-4	1,4-Naphthoquinone [a]	ND	200	9.7	ug/kg	
88-74-4	2-Nitroaniline	ND	200	9.6	ug/kg	
99-09-2	3-Nitroaniline	ND	200	10	ug/kg	
100-01-6	4-Nitroaniline	ND	200	11	ug/kg	
99-55-8	5-Nitro-o-toluidine [a]	ND	200	11	ug/kg	
98-95-3	Nitrobenzene	ND	82	16	ug/kg	
62-75-9	n-Nitrosodimethylamine [c]	ND	82	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	82	12	ug/kg	
924-16-3	N-Nitrosodi-n-butylamine	ND	200	25	ug/kg	
55-18-5	N-Nitrosodiethylamine	ND	200	12	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	15	ug/kg	
10595-95-6	N-Nitrosomethylethylamine	ND	200	48	ug/kg	
59-89-2	N-Nitrosomorpholine	ND	200	15	ug/kg	
100-75-4	N-Nitrosopiperidine	ND	200	19	ug/kg	
930-55-2	N-Nitrosopyrrolidine [a]	ND	200	27	ug/kg	
126-68-1	O,O,O-Triethyl phosphorothio	ND	200	10	ug/kg	

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-2		
Lab Sample ID:	JD36682-9	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	77.6
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
109-06-8	2-Picoline	ND	200	6.9	ug/kg	
56-38-2	Parathion	ND	200	8.0	ug/kg	
76-01-7	Pentachloroethane	ND	200	10	ug/kg	
608-93-5	Pentachlorobenzene	ND	200	12	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	200	110	ug/kg	
298-02-2	Phorate	ND	200	9.5	ug/kg	
23950-58-5	Pronamide	ND	200	12	ug/kg	
110-86-1	Pyridine	ND	82	14	ug/kg	
94-59-7	Safrole	ND	200	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	10	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	11.5	82	11	ug/kg	J
297-97-2	Thionazin	ND	200	19	ug/kg	
3689-24-5	Tetraethyl dithiopyrophospha [a]	ND	200	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	77%		10-109%
4165-62-2	Phenol-d5	75%		10-105%
118-79-6	2,4,6-Tribromophenol	85%		10-135%
4165-60-0	Nitrobenzene-d5	70%		10-119%
321-60-8	2-Fluorobiphenyl	80%		18-112%
1718-51-0	Terphenyl-d14	91%		18-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) This compound does not meet the < 30% method criteria in the preceding ICV. Result is bias high.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SED-2		
Lab Sample ID:	JD36682-9	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8081B SW846 3546	**Percent Solids:**	77.6
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1G172470.D	1	12/31/21 01:37	RK	12/17/21 14:30	OP37171	G1G5954
Run #2							

	Initial Weight	Final Volume
Run #1	16.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.79	0.65	ug/kg	
319-84-6	alpha-BHC	ND	0.79	0.64	ug/kg	
319-85-7	beta-BHC	ND	0.79	0.71	ug/kg	
319-86-8	delta-BHC	ND	0.79	0.75	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.79	0.58	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.79	0.63	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.79	0.36	ug/kg	
60-57-1	Dieldrin	ND	0.79	0.54	ug/kg	
72-54-8	4,4'-DDD	ND	0.79	0.72	ug/kg	
72-55-9	4,4'-DDE	ND	0.79	0.69	ug/kg	
50-29-3	4,4'-DDT [b]	1.5	0.79	0.70	ug/kg	
72-20-8	Endrin	ND	0.79	0.61	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.79	0.61	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.79	0.45	ug/kg	
959-98-8	Endosulfan-I	ND	0.79	0.45	ug/kg	
33213-65-9	Endosulfan-II	ND	0.79	0.49	ug/kg	
76-44-8	Heptachlor	ND	0.79	0.68	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.79	0.55	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.62	ug/kg	
53494-70-5	Endrin ketone	ND	0.79	0.57	ug/kg	
8001-35-2	Toxaphene	ND	20	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	102%		14-145%
877-09-8	Tetrachloro-m-xylene	99%		14-145%
2051-24-3	Decachlorobiphenyl	77%		10-197%
2051-24-3	Decachlorobiphenyl	91%		10-197%

(a) Had TBA cleanup.
(b) More than 40 % RPD for detected concentrations between the two GC columns.

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF SED-2
Lab Sample ID: JD36682-9
Matrix: SO - Sediment
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/13/21
Date Received: 12/13/21
Percent Solids: 77.6

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	19800	120	mg/kg	20	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Antimony	< 1.2	1.2	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Arsenic	10.0	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Barium	66.2	2.5	mg/kg	20	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Beryllium	1.8	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Cadmium	< 0.31	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Calcium	13500	610	mg/kg	20	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Chromium	60.6	4.9	mg/kg	20	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Cobalt	17.7	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Copper	24.7	1.2	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Iron	45800	610	mg/kg	100	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Lead	20.4	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Magnesium	12400	610	mg/kg	20	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Manganese	818	12	mg/kg	100	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Mercury	< 0.038	0.038	mg/kg	1	12/16/21	12/16/21	SB	SW846 7471B [1]	SW846 7471B [5]
Nickel	25.9	1.2	mg/kg	5	12/21/21	12/27/21	MET	SW846 6020B [3]	SW846 3050B [6]
Potassium	973	150	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Selenium	0.83	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Silver	< 0.31	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Sodium	< 150	150	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Thallium	< 0.31	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Vanadium	101	4.9	mg/kg	20	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Zinc	105	25	mg/kg	20	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]

(1) Instrument QC Batch: MA51605
(2) Instrument QC Batch: MA51651
(3) Instrument QC Batch: MA51659
(4) Instrument QC Batch: MA51679
(5) Prep QC Batch: MP30399
(6) Prep QC Batch: MP30463

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SED-1		
Lab Sample ID:	JD36682-10	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	78.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C183222.D	1	12/16/21 23:56	PS	n/a	n/a	V1C7979
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	6.4	11	4.7	ug/kg	J
71-43-2	Benzene	ND	0.57	0.52	ug/kg	
108-86-1	Bromobenzene	ND	5.7	0.63	ug/kg	
74-97-5	Bromochloromethane	ND	5.7	0.64	ug/kg	
75-27-4	Bromodichloromethane	ND	2.3	0.49	ug/kg	
75-25-2	Bromoform	ND	5.7	1.5	ug/kg	
74-83-9	Bromomethane	ND	5.7	0.87	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.8	ug/kg	
104-51-8	n-Butylbenzene	ND	2.3	0.46	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.3	0.49	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.3	0.57	ug/kg	
75-15-0	Carbon disulfide	ND	2.3	0.61	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.3	0.70	ug/kg	
108-90-7	Chlorobenzene	ND	2.3	0.52	ug/kg	
75-00-3	Chloroethane	ND	5.7	0.67	ug/kg	
67-66-3	Chloroform	ND	2.3	0.59	ug/kg	
74-87-3	Chloromethane	ND	5.7	2.2	ug/kg	
95-49-8	o-Chlorotoluene	ND	2.3	0.61	ug/kg	
106-43-4	p-Chlorotoluene	ND	2.3	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.3	0.79	ug/kg	
124-48-1	Dibromochloromethane	ND	2.3	0.64	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.48	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.62	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.56	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.56	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.7	0.82	ug/kg	
75-34-3	1,1-Dichloroethane [a]	ND	1.1	0.56	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.53	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.74	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.95	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.69	ug/kg	
78-87-5	1,2-Dichloropropane [a]	ND	2.3	0.54	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-1		
Lab Sample ID:	JD36682-10	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	78.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.3	0.59	ug/kg	
594-20-7	2,2-Dichloropropane	ND	2.3	0.49	ug/kg	
563-58-6	1,1-Dichloropropene	ND	2.3	0.53	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.54	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	0.52	ug/kg	
123-91-1	1,4-Dioxane	ND	140	41	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.51	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.7	0.74	ug/kg	
591-78-6	2-Hexanone	ND	5.7	2.4	ug/kg	
98-82-8	Isopropylbenzene	ND	2.3	1.6	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2.3	0.45	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.53	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.7	2.6	ug/kg	
74-95-3	Methylene bromide	ND	5.7	0.60	ug/kg	
75-09-2	Methylene chloride	ND	5.7	3.0	ug/kg	
91-20-3	Naphthalene	ND	5.7	2.8	ug/kg	
103-65-1	n-Propylbenzene	ND	2.3	0.53	ug/kg	
100-42-5	Styrene	ND	2.3	0.46	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	28	5.2	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.3	0.48	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	0.68	ug/kg	
127-18-4	Tetrachloroethene	ND	2.3	0.66	ug/kg	
109-99-9	Tetrahydrofuran	ND	11	3.3	ug/kg	
108-88-3	Toluene	3.1	1.1	0.60	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.7	2.8	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.7	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.3	0.55	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.3	0.63	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.86	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.7	0.78	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.7	0.63	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.3	0.57	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.3	0.49	ug/kg	
108-05-4	Vinyl Acetate	ND	11	2.3	ug/kg	
75-01-4	Vinyl chloride	ND	2.3	0.55	ug/kg	
	m,p-Xylene	ND	1.1	1.0	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.52	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-1		
Lab Sample ID:	JD36682-10	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	78.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		72-130%
17060-07-0	1,2-Dichloroethane-D4	112%		75-131%
2037-26-5	Toluene-D8	100%		81-121%
460-00-4	4-Bromofluorobenzene	98%		60-141%

(a) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SED-1		
Lab Sample ID:	JD36682-10	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	78.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204541.D	1	12/23/21 09:20	CS	12/21/21 10:30	OP37283	EF8967
Run #2							

	Initial Weight	Final Volume
Run #1	31.1 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	82	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	25	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	35	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	73	ug/kg	
51-28-5	2,4-Dinitrophenol [a]	ND	200	150	ug/kg	
87-65-0	2,6-Dichlorophenol	ND	200	27	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	44	ug/kg	
	3&4-Methylphenol	ND	82	34	ug/kg	
88-75-5	2-Nitrophenol	ND	200	27	ug/kg	
100-02-7	4-Nitrophenol	ND	410	110	ug/kg	
87-86-5	Pentachlorophenol	ND	160	38	ug/kg	
108-95-2	Phenol	ND	82	21	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	31	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	24	ug/kg	
53-96-3	2-Acetylaminofluorene [a]	ND	200	24	ug/kg	
92-67-1	4-Aminobiphenyl	ND	200	14	ug/kg	
98-86-2	Acetophenone	ND	200	8.8	ug/kg	
62-53-3	Aniline	ND	82	18	ug/kg	
140-57-8	Aramite [a]	ND	200		ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	82	16	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	82	10	ug/kg	
100-51-6	Benzyl Alcohol	ND	82	15	ug/kg	
91-58-7	2-Chloronaphthalene	ND	82	9.7	ug/kg	
106-47-8	4-Chloroaniline	ND	200	15	ug/kg	
510-15-6	Chlorobenzilate	ND	200	7.6	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	82	8.7	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	82	18	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	82	13	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	41	13	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	41	21	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	82	34	ug/kg	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-1		
Lab Sample ID:	JD36682-10	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	78.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
2303-16-4	Diallate	ND	200	17	ug/kg	
132-64-9	Dibenzofuran	ND	82	17	ug/kg	
60-51-5	Dimethoate [a]	ND	200	7.2	ug/kg	
122-39-4	Diphenylamine	ND	200	4.7	ug/kg	
298-04-4	Disulfoton	ND	200	12	ug/kg	
99-65-0	m-Dinitrobenzene [a]	ND	200		ug/kg	
60-11-7	p-(Dimethylamine)azobenzene	ND	200	8.2	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	82	6.7	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	82	10	ug/kg	
84-66-2	Diethyl phthalate	ND	82	8.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	82	7.3	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	82	9.6	ug/kg	
62-50-0	Ethyl methanesulfonate	ND	200	9.5	ug/kg	
118-74-1	Hexachlorobenzene	ND	82	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	41	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	410	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	20	ug/kg	
1888-71-7	Hexachloropropene	ND	200	28	ug/kg	
465-73-6	Isodrin	ND	200	14	ug/kg	
78-59-1	Isophorone	ND	82	8.7	ug/kg	
120-58-1	Isosafrole [b]	ND	200	20	ug/kg	
91-57-6	2-Methylnaphthalene	ND	41	9.2	ug/kg	
66-27-3	Methyl methanesulfonate	ND	200	9.5	ug/kg	
298-00-0	Methyl parathion	ND	200	7.6	ug/kg	
130-15-4	1,4-Naphthoquinone [a]	ND	200	9.8	ug/kg	
88-74-4	2-Nitroaniline	ND	200	9.6	ug/kg	
99-09-2	3-Nitroaniline	ND	200	10	ug/kg	
100-01-6	4-Nitroaniline	ND	200	11	ug/kg	
99-55-8	5-Nitro-o-toluidine [a]	ND	200	11	ug/kg	
98-95-3	Nitrobenzene	ND	82	16	ug/kg	
62-75-9	n-Nitrosodimethylamine [c]	ND	82	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	82	12	ug/kg	
924-16-3	N-Nitrosodi-n-butylamine	ND	200	25	ug/kg	
55-18-5	N-Nitrosodiethylamine	ND	200	12	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	15	ug/kg	
10595-95-6	N-Nitrosomethylethylamine	ND	200	48	ug/kg	
59-89-2	N-Nitrosomorpholine	ND	200	15	ug/kg	
100-75-4	N-Nitrosopiperidine	ND	200	19	ug/kg	
930-55-2	N-Nitrosopyrrolidine [a]	ND	200	27	ug/kg	
126-68-1	O,O,O-Triethyl phosphorothio	ND	200	10	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF SED-1		
Lab Sample ID:	JD36682-10	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	78.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
109-06-8	2-Picoline	ND	200	6.9	ug/kg	
56-38-2	Parathion	ND	200	8.0	ug/kg	
76-01-7	Pentachloroethane	ND	200	11	ug/kg	
608-93-5	Pentachlorobenzene	ND	200	12	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	200	110	ug/kg	
298-02-2	Phorate	ND	200	9.5	ug/kg	
23950-58-5	Pronamide	ND	200	12	ug/kg	
110-86-1	Pyridine	ND	82	14	ug/kg	
94-59-7	Safrole	ND	200	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	10	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	82	11	ug/kg	
297-97-2	Thionazin	ND	200	19	ug/kg	
3689-24-5	Tetraethyl dithiopyrophospha [a]	ND	200	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	81%		10-109%
4165-62-2	Phenol-d5	78%		10-105%
118-79-6	2,4,6-Tribromophenol	92%		10-135%
4165-60-0	Nitrobenzene-d5	76%		10-119%
321-60-8	2-Fluorobiphenyl	83%		18-112%
1718-51-0	Terphenyl-d14	91%		18-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) This compound does not meet the < 30% method criteria in the preceding ICV. Result is bias high.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF SED-1		
Lab Sample ID:	JD36682-10	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8081B SW846 3546	**Percent Solids:**	78.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G172360.D	1	12/23/21 20:56	TL	12/17/21 14:30	OP37171	G1G5948
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.84	0.69	ug/kg	
319-84-6	alpha-BHC	ND	0.84	0.68	ug/kg	
319-85-7	beta-BHC	ND	0.84	0.76	ug/kg	
319-86-8	delta-BHC	ND	0.84	0.81	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.84	0.62	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.84	0.68	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.84	0.38	ug/kg	
60-57-1	Dieldrin	ND	0.84	0.58	ug/kg	
72-54-8	4,4'-DDD	ND	0.84	0.77	ug/kg	
72-55-9	4,4'-DDE	ND	0.84	0.74	ug/kg	
50-29-3	4,4'-DDT	ND	0.84	0.75	ug/kg	
72-20-8	Endrin	ND	0.84	0.65	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.84	0.66	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.84	0.48	ug/kg	
959-98-8	Endosulfan-I	ND	0.84	0.48	ug/kg	
33213-65-9	Endosulfan-II	ND	0.84	0.53	ug/kg	
76-44-8	Heptachlor	ND	0.84	0.73	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.84	0.59	ug/kg	
72-43-5	Methoxychlor	ND	1.7	0.67	ug/kg	
53494-70-5	Endrin ketone	ND	0.84	0.61	ug/kg	
8001-35-2	Toxaphene	ND	21	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	54%		14-145%
877-09-8	Tetrachloro-m-xylene	53%		14-145%
2051-24-3	Decachlorobiphenyl	49%		10-197%
2051-24-3	Decachlorobiphenyl	49%		10-197%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF SED-1
Lab Sample ID: JD36682-10
Matrix: SO - Sediment
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/13/21
Date Received: 12/13/21
Percent Solids: 78.7

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	22600	160	mg/kg	25	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Antimony	< 1.2	1.2	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Arsenic	3.4	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Barium	89.8	3.1	mg/kg	25	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Beryllium	0.75	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Cadmium	< 0.31	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Calcium	4300	160	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Chromium	34.1	1.2	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Cobalt	6.8	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Copper	10.8	1.2	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Iron	28200	160	mg/kg	25	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Lead	8.7	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Magnesium	3790	160	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Manganese	3310	62	mg/kg	500	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Mercury	< 0.033	0.033	mg/kg	1	12/16/21	12/16/21	SB	SW846 7471B [1]	SW846 7471B [5]
Nickel	15.9	1.2	mg/kg	5	12/21/21	12/27/21	MET	SW846 6020B [3]	SW846 3050B [6]
Potassium	1380	160	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Selenium	0.57	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Silver	< 0.31	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Sodium	< 160	160	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Thallium	< 0.31	0.31	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Vanadium	35.8	1.2	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Zinc	39.9	6.2	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]

(1) Instrument QC Batch: MA51605
(2) Instrument QC Batch: MA51651
(3) Instrument QC Batch: MA51659
(4) Instrument QC Batch: MA51679
(5) Prep QC Batch: MP30399
(6) Prep QC Batch: MP30463

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF DUP-121321SED		
Lab Sample ID:	JD36682-11	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	73.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1C183223.D	1	12/17/21 00:22	PS	n/a	n/a	V1C7979
Run #2							

	Initial Weight
Run #1	5.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	9.6	13	5.4	ug/kg	J
71-43-2	Benzene	ND	0.65	0.59	ug/kg	
108-86-1	Bromobenzene	ND	6.5	0.72	ug/kg	
74-97-5	Bromochloromethane	ND	6.5	0.73	ug/kg	
75-27-4	Bromodichloromethane	ND	2.6	0.56	ug/kg	
75-25-2	Bromoform	ND	6.5	1.8	ug/kg	
74-83-9	Bromomethane	ND	6.5	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	3.2	ug/kg	
104-51-8	n-Butylbenzene	ND	2.6	0.53	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.6	0.56	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.6	0.65	ug/kg	
75-15-0	Carbon disulfide	ND	2.6	0.70	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.6	0.81	ug/kg	
108-90-7	Chlorobenzene	ND	2.6	0.60	ug/kg	
75-00-3	Chloroethane	ND	6.5	0.77	ug/kg	
67-66-3	Chloroform	ND	2.6	0.68	ug/kg	
74-87-3	Chloromethane	ND	6.5	2.6	ug/kg	
95-49-8	o-Chlorotoluene	ND	2.6	0.70	ug/kg	
106-43-4	p-Chlorotoluene	ND	2.6	0.58	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.6	0.91	ug/kg	
124-48-1	Dibromochloromethane	ND	2.6	0.73	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.3	0.55	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.3	0.71	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.3	0.65	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.3	0.64	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.5	0.95	ug/kg	
75-34-3	1,1-Dichloroethane [a]	ND	1.3	0.65	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.3	0.61	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.3	0.85	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.3	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.3	0.80	ug/kg	
78-87-5	1,2-Dichloropropane [a]	ND	2.6	0.62	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF DUP-121321SED		
Lab Sample ID:	JD36682-11	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	73.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.6	0.68	ug/kg	
594-20-7	2,2-Dichloropropane	ND	2.6	0.56	ug/kg	
563-58-6	1,1-Dichloropropene	ND	2.6	0.61	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.6	0.62	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.6	0.60	ug/kg	
123-91-1	1,4-Dioxane	ND	160	48	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.59	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6.5	0.86	ug/kg	
591-78-6	2-Hexanone	ND	6.5	2.8	ug/kg	
98-82-8	Isopropylbenzene	ND	2.6	1.9	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2.6	0.52	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.3	0.61	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.5	3.0	ug/kg	
74-95-3	Methylene bromide	ND	6.5	0.69	ug/kg	
75-09-2	Methylene chloride	ND	6.5	3.4	ug/kg	
91-20-3	Naphthalene	ND	6.5	3.3	ug/kg	
103-65-1	n-Propylbenzene	ND	2.6	0.61	ug/kg	
100-42-5	Styrene	ND	2.6	0.52	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	33	6.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.6	0.55	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.6	0.78	ug/kg	
127-18-4	Tetrachloroethene	ND	2.6	0.76	ug/kg	
109-99-9	Tetrahydrofuran	ND	13	3.8	ug/kg	
108-88-3	Toluene	2.0	1.3	0.68	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.5	3.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.5	3.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.6	0.63	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.6	0.72	ug/kg	
79-01-6	Trichloroethene	ND	1.3	0.99	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.5	0.89	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.5	0.72	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.6	0.65	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.6	0.56	ug/kg	
108-05-4	Vinyl Acetate	ND	13	2.6	ug/kg	
75-01-4	Vinyl chloride	ND	2.6	0.63	ug/kg	
	m,p-Xylene	ND	1.3	1.2	ug/kg	
95-47-6	o-Xylene	ND	1.3	0.60	ug/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF DUP-121321SED		
Lab Sample ID:	JD36682-11	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8260D	**Percent Solids:**	73.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		72-130%
17060-07-0	1,2-Dichloroethane-D4	112%		75-131%
2037-26-5	Toluene-D8	100%		81-121%
460-00-4	4-Bromofluorobenzene	99%		60-141%

(a) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF DUP-121321SED		
Lab Sample ID:	JD36682-11	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	73.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F204540.D	1	12/23/21 08:56	CS	12/21/21 10:30	OP37283	EF8967
Run #2							

	Initial Weight	Final Volume
Run #1	31.6 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	86	21	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	26	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	37	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	76	ug/kg	
51-28-5	2,4-Dinitrophenol [a]	ND	210	160	ug/kg	
87-65-0	2,6-Dichlorophenol	ND	210	29	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	210	46	ug/kg	
	3&4-Methylphenol	ND	86	35	ug/kg	
88-75-5	2-Nitrophenol	ND	210	28	ug/kg	
100-02-7	4-Nitrophenol	ND	430	110	ug/kg	
87-86-5	Pentachlorophenol	ND	170	40	ug/kg	
108-95-2	Phenol	ND	86	22	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	210	28	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	32	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	26	ug/kg	
53-96-3	2-Acetylaminofluorene [a]	ND	210	25	ug/kg	
92-67-1	4-Aminobiphenyl	ND	210	15	ug/kg	
98-86-2	Acetophenone	ND	210	9.2	ug/kg	
62-53-3	Aniline	ND	86	19	ug/kg	
140-57-8	Aramite [a]	ND	210		ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	86	17	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	86	10	ug/kg	
100-51-6	Benzyl Alcohol	ND	86	15	ug/kg	
91-58-7	2-Chloronaphthalene	ND	86	10	ug/kg	
106-47-8	4-Chloroaniline	ND	210	15	ug/kg	
510-15-6	Chlorobenzilate	ND	210	7.9	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	86	9.2	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	86	19	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	86	14	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	43	13	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	43	22	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	86	36	ug/kg	

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF DUP-121321SED		
Lab Sample ID:	JD36682-11	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	73.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
2303-16-4	Diallate	ND	210	18	ug/kg	
132-64-9	Dibenzofuran	ND	86	17	ug/kg	
60-51-5	Dimethoate [a]	ND	210	7.6	ug/kg	
122-39-4	Diphenylamine	ND	210	5.0	ug/kg	
298-04-4	Disulfoton	ND	210	13	ug/kg	
99-65-0	m-Dinitrobenzene [a]	ND	210		ug/kg	
60-11-7	p-(Dimethylamine)azobenzene	ND	210	8.6	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	86	7.0	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	86	11	ug/kg	
84-66-2	Diethyl phthalate	ND	86	9.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	86	7.6	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	86	10	ug/kg	
62-50-0	Ethyl methanesulfonate	ND	210	10	ug/kg	
118-74-1	Hexachlorobenzene	ND	86	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	43	17	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	430	17	ug/kg	
67-72-1	Hexachloroethane	ND	210	21	ug/kg	
1888-71-7	Hexachloropropene	ND	210	29	ug/kg	
465-73-6	Isodrin	ND	210	14	ug/kg	
78-59-1	Isophorone	ND	86	9.2	ug/kg	
120-58-1	Isosafrole [b]	ND	210	21	ug/kg	
91-57-6	2-Methylnaphthalene	ND	43	9.7	ug/kg	
66-27-3	Methyl methanesulfonate	ND	210	10	ug/kg	
298-00-0	Methyl parathion	ND	210	7.9	ug/kg	
130-15-4	1,4-Naphthoquinone [a]	ND	210	10	ug/kg	
88-74-4	2-Nitroaniline	ND	210	10	ug/kg	
99-09-2	3-Nitroaniline	ND	210	11	ug/kg	
100-01-6	4-Nitroaniline	ND	210	11	ug/kg	
99-55-8	5-Nitro-o-toluidine [a]	ND	210	12	ug/kg	
98-95-3	Nitrobenzene	ND	86	17	ug/kg	
62-75-9	n-Nitrosodimethylamine [c]	ND	86	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	86	12	ug/kg	
924-16-3	N-Nitrosodi-n-butylamine	ND	210	26	ug/kg	
55-18-5	N-Nitrosodiethylamine	ND	210	13	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	16	ug/kg	
10595-95-6	N-Nitrosomethylethylamine	ND	210	51	ug/kg	
59-89-2	N-Nitrosomorpholine	ND	210	15	ug/kg	
100-75-4	N-Nitrosopiperidine	ND	210	20	ug/kg	
930-55-2	N-Nitrosopyrrolidine [a]	ND	210	28	ug/kg	
126-68-1	O,O,O-Triethyl phosphorothio	ND	210	10	ug/kg	

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF DUP-121321SED		
Lab Sample ID:	JD36682-11	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8270E SW846 3546	**Percent Solids:**	73.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
109-06-8	2-Picoline	ND	210	7.3	ug/kg	
56-38-2	Parathion	ND	210	8.4	ug/kg	
76-01-7	Pentachloroethane	ND	210	11	ug/kg	
608-93-5	Pentachlorobenzene	ND	210	12	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	210	120	ug/kg	
298-02-2	Phorate	ND	210	10	ug/kg	
23950-58-5	Pronamide	ND	210	12	ug/kg	
110-86-1	Pyridine	ND	86	15	ug/kg	
94-59-7	Safrole	ND	210	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	210	11	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	86	11	ug/kg	
297-97-2	Thionazin	ND	210	20	ug/kg	
3689-24-5	Tetraethyl dithiopyrophospha [a]	ND	210	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		10-109%
4165-62-2	Phenol-d5	65%		10-105%
118-79-6	2,4,6-Tribromophenol	74%		10-135%
4165-60-0	Nitrobenzene-d5	62%		10-119%
321-60-8	2-Fluorobiphenyl	68%		18-112%
1718-51-0	Terphenyl-d14	80%		18-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) This compound does not meet the < 30% method criteria in the preceding ICV. Result is bias high.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF DUP-121321SED		
Lab Sample ID:	JD36682-11	**Date Sampled:**	12/13/21
Matrix:	SO - Sediment	**Date Received:**	12/13/21
Method:	SW846 8081B SW846 3546	**Percent Solids:**	73.7
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G172361.D	1	12/23/21 21:14	TL	12/17/21 14:30	OP37171	G1G5948
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.89	0.73	ug/kg	
319-84-6	alpha-BHC	ND	0.89	0.72	ug/kg	
319-85-7	beta-BHC	ND	0.89	0.80	ug/kg	
319-86-8	delta-BHC	ND	0.89	0.85	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.89	0.65	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.89	0.72	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.89	0.40	ug/kg	
60-57-1	Dieldrin	ND	0.89	0.61	ug/kg	
72-54-8	4,4'-DDD	ND	0.89	0.81	ug/kg	
72-55-9	4,4'-DDE	ND	0.89	0.78	ug/kg	
50-29-3	4,4'-DDT	ND	0.89	0.79	ug/kg	
72-20-8	Endrin	ND	0.89	0.69	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.89	0.69	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.89	0.50	ug/kg	
959-98-8	Endosulfan-I	ND	0.89	0.51	ug/kg	
33213-65-9	Endosulfan-II	ND	0.89	0.55	ug/kg	
76-44-8	Heptachlor	ND	0.89	0.76	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.89	0.62	ug/kg	
72-43-5	Methoxychlor	ND	1.8	0.71	ug/kg	
53494-70-5	Endrin ketone	ND	0.89	0.64	ug/kg	
8001-35-2	Toxaphene	ND	22	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		14-145%
877-09-8	Tetrachloro-m-xylene	87%		14-145%
2051-24-3	Decachlorobiphenyl	70%		10-197%
2051-24-3	Decachlorobiphenyl	84%		10-197%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF DUP-121321SED
Lab Sample ID: JD36682-11
Matrix: SO - Sediment
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/13/21
Date Received: 12/13/21
Percent Solids: 73.7

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	23800	340	mg/kg	50	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Antimony	< 1.3	1.3	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Arsenic	5.9	0.34	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Barium	94.9	1.3	mg/kg	10	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Beryllium	1.0	0.34	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Cadmium	< 0.34	0.34	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Calcium	4050	170	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Chromium	50.6	1.3	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Cobalt	9.2	0.34	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Copper	15.4	1.3	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Iron	36000	340	mg/kg	50	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Lead	13.4	0.34	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Magnesium	6410	170	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Manganese	2310	34	mg/kg	250	12/21/21	12/31/21	NV	SW846 6020B [4]	SW846 3050B [6]
Mercury	< 0.038	0.038	mg/kg	1	12/16/21	12/16/21	SB	SW846 7471B [1]	SW846 7471B [5]
Nickel	21.8	1.3	mg/kg	5	12/21/21	12/27/21	MET	SW846 6020B [3]	SW846 3050B [6]
Potassium	1930	170	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Selenium	0.61	0.34	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Silver	< 0.34	0.34	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Sodium	< 170	170	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Thallium	< 0.34	0.34	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Vanadium	67.0	1.3	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]
Zinc	53.0	6.7	mg/kg	5	12/21/21	12/23/21	NV	SW846 6020B [2]	SW846 3050B [6]

(1) Instrument QC Batch: MA51605
(2) Instrument QC Batch: MA51651
(3) Instrument QC Batch: MA51659
(4) Instrument QC Batch: MA51679
(5) Prep QC Batch: MP30399
(6) Prep QC Batch: MP30463

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

SW
SO
SLL

2 COOLERS

CHAIN OF CUSTODY

Page 1 of 1

SGS

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

EHSA-QAC-0023-04-FORM-Standard COC

FED-EX Tracking #	Bottle Order Control # JS 112321-185
SGS Quote #	SGS Job # JD 36682

Client / Reporting Information

Company Name: TETRA TECH INC
Street Address: One Oxford Valley, Ste 200
City State Zip: LANGHORNE PA 19047
Project Contact E-mail: JONATHAN DZIEKAN
Phone #: 610 842-4756
Sampler(s) Name(s) Phone #: N. DEDIC

Project Information

Project Name: HOFF VC
Street
City State
Project #
Client Purchase Order #
Project Manager: JONATHAN DZIEKAN

Billing Information (if different from Report to)
Company Name
Street Address
City State Zip
Attention:

Requested Analysis

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	V8260SL VOLATILES	V8260SIM DIOX 1,4 DIOXANE	SVOCs	Pesticides	METALS	LAB USE ONLY
1	TB-121321		12-13-21	0700	ND	G		TB	4	4								X	X				V1047
2	HOFF SW-4			1015	ND	G		SW	11	6		1		4				X	X	X	X	X	E98
3	HOFF SW-3			1035	ND	G		SW	11	6		1		4				X	X	X	X	X	A17
4	HOFF SW-2			1120	ND	G		SW	11	6		1		4				X	X	X	X	X	
5	HOFF SW-1			1140	ND	G		SW	11	6		1		4				X	X	X	X	X	B11
6	HOFF DUP-121321SW			1200	ND	G		SW	11	6		1		4				X	X	X	X	X	D41
7	HOFF SED-4	1		1020	ND	G		SED	5					4		1		X	X	X	X	X	14I6
8	HOFF SED-3	1		1040	ND	G		SED	5					4		1		X	X	X	X	X	49111
9	HOFF SED-2	1		1125	ND	G		SED	5					4		1		X	X	X	X	X	
10	HOFF SED-1	1		1145	ND	G		SED	5					4		1		X	X	X	X	X	
11	HOFF DUP-121321SED	1	12-13-21	1200	ND	G		SED	5					4		1		X	X	X	X	X	
						G																	

pH Check (Lab Use Only)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [x] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other

All data available via Lablink
* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [ ] EDD Format
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 [signature]	12-13-21/1440	1 Mike Gonnella	2 Mike Gonnella	12/13/21 1750	2 Jeemit Patel
3		3	4		4
5		5	Custody Seal #		

Custody Seal # ☐ intact ☐ Not intact ☐ Absent ☐ Therm ID: On Ice Cooler Temp. °C
See Sample Receipt Summary ☐ 3.0 C/P
2.9 C/P

5.1
5

JD36682: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD36682 **Client:** TETRA TECH EC INC. **Project:** HOFF VC- 336 LAYFIELD ROAD, PERKIOMENV

Date / Time Received: 12/13/2021 5:50:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.0); Cooler 2: (2.9);

Cooler Temps (Corrected) °C: Cooler 1: (1.6); Cooler 2: (1.5);

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	2	

Quality Control Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☑	☐	☐
2. Trip Blank listed on COC:	☑	☐	☐
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☑	☐	☐

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD36682: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36682

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36682-1 TB-121321	Collected: 13-DEC-21 12:00 By: ND		Received: 13-DEC-21 By: JP			
JD36682-1	SW846 8260D	21-DEC-21 15:28	JS			V8260SL
JD36682-1	SW846 8260D BY SIM	23-DEC-21 16:05	BK			V8260SIMDIOX
JD36682-2 HOFF SW-4	Collected: 13-DEC-21 10:15 By: ND		Received: 13-DEC-21 By: JP			
JD36682-2	SW846 7470A	17-DEC-21 10:52	SB	17-DEC-21	SB	HG
JD36682-2	SW846 8081B	20-DEC-21 05:38	CP	17-DEC-21	TG	P8081PESTTCL
JD36682-2	SW846 8260D	21-DEC-21 17:34	JS			V8260SL
JD36682-2	SW846 8260D BY SIM	23-DEC-21 13:12	BK			V8260SIMDIOX
JD36682-2	SW846 8270E	07-JAN-22 09:46	KLS	06-JAN-22	JL	ABLV8270SL1
JD36682-2	SW846 6020B	07-JAN-22 18:27	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BAMS,BEMS, CDMS,COMS,CRMS,CUMS,FEMS, KMS,MNMS,NIMS,PBMS,SBMS, SEMS,TLMS,VMS,ZNMS
JD36682-2	SW846 6020B	10-JAN-22 23:27	NV	20-DEC-21	SF	CAMS,MGMS,NAMS
JD36682-2	SW846 8270E BY SIM	11-JAN-22 13:23	KLS	06-JAN-22	JL	BLV8270SIMPAH
JD36682-3 HOFF SW-3	Collected: 13-DEC-21 10:35 By: ND		Received: 13-DEC-21 By: JP			
JD36682-3	SW846 7470A	17-DEC-21 10:53	SB	17-DEC-21	SB	HG
JD36682-3	SW846 8081B	20-DEC-21 05:56	CP	17-DEC-21	TG	P8081PESTTCL
JD36682-3	SW846 8260D	21-DEC-21 17:55	JS			V8260SL
JD36682-3	SW846 8260D BY SIM	23-DEC-21 13:41	BK			V8260SIMDIOX
JD36682-3	SW846 8270E	07-JAN-22 10:12	KLS	06-JAN-22	JL	ABLV8270SL1
JD36682-3	SW846 8270E BY SIM	07-JAN-22 18:07	NAP	06-JAN-22	JL	BLV8270SIMPAH
JD36682-3	SW846 6020B	07-JAN-22 18:33	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BAMS,BEMS, CDMS,COMS,CRMS,CUMS,FEMS, KMS,MNMS,NIMS,PBMS,SBMS, SEMS,TLMS,VMS,ZNMS
JD36682-3	SW846 6020B	10-JAN-22 23:33	NV	20-DEC-21	SF	CAMS,MGMS,NAMS
JD36682-4 HOFF SW-2	Collected: 13-DEC-21 11:20 By: ND		Received: 13-DEC-21 By: JP			
JD36682-4	SW846 7470A	17-DEC-21 10:55	SB	17-DEC-21	SB	HG

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36682

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36682-4	SW846 8081B	20-DEC-21 06:14	CP	17-DEC-21	TG	P8081PESTTCL
JD36682-4	SW846 8260D	21-DEC-21 18:16	JS			V8260SL
JD36682-4	SW846 8260D BY SIM	23-DEC-21 14:09	BK			V8260SIMDIOX
JD36682-4	SW846 8270E	07-JAN-22 10:38	KLS	06-JAN-22	JL	ABLV8270SL1
JD36682-4	SW846 8270E BY SIM	07-JAN-22 18:30	NAP	06-JAN-22	JL	BLV8270SIMPAH
JD36682-4	SW846 6020B	07-JAN-22 18:38	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36682-4	SW846 6020B	10-JAN-22 23:38	NV	20-DEC-21	SF	CAMS, MGMS, NAMS
JD36682-4	SW846 6020B	10-JAN-22 23:44	NV	20-DEC-21	SF	MNMS
JD36682-5 Collected: 13-DEC-21 11:40 By: ND Received: 13-DEC-21 By: JP HOFF SW-1						
JD36682-5	SW846 7470A	17-DEC-21 10:59	SB	17-DEC-21	SB	HG
JD36682-5	SW846 8081B	20-DEC-21 06:32	CP	17-DEC-21	TG	P8081PESTTCL
JD36682-5	SW846 8260D	21-DEC-21 18:37	JS			V8260SL
JD36682-5	SW846 8260D BY SIM	23-DEC-21 14:38	BK			V8260SIMDIOX
JD36682-5	SW846 8270E	07-JAN-22 11:05	KLS	06-JAN-22	JL	ABLV8270SL1
JD36682-5	SW846 6020B	07-JAN-22 18:44	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MGMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36682-5	SW846 8270E BY SIM	07-JAN-22 18:53	NAP	06-JAN-22	JL	BLV8270SIMPAH
JD36682-5	SW846 6020B	10-JAN-22 23:55	NV	20-DEC-21	SF	CAMS, MNMS, NAMS
JD36682-6 Collected: 13-DEC-21 12:00 By: ND Received: 13-DEC-21 By: JP HOFF-DUP-121321SW						
JD36682-6	SW846 7470A	17-DEC-21 11:01	SB	17-DEC-21	SB	HG
JD36682-6	SW846 8081B	20-DEC-21 06:50	CP	17-DEC-21	TG	P8081PESTTCL
JD36682-6	SW846 8260D	21-DEC-21 18:58	JS			V8260SL
JD36682-6	SW846 8260D BY SIM	23-DEC-21 15:07	BK			V8260SIMDIOX
JD36682-6	SW846 8270E	07-JAN-22 11:31	KLS	06-JAN-22	JL	ABLV8270SL1
JD36682-6	SW846 6020B	07-JAN-22 18:50	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MGMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36682-6	SW846 8270E BY SIM	07-JAN-22 19:17	NAP	06-JAN-22	JL	BLV8270SIMPAH

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36682

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36682-6	SW846 6020B	11-JAN-22 00:01	NV	20-DEC-21	SF	BAMS
JD36682-6	SW846 6020B	11-JAN-22 00:06	NV	20-DEC-21	SF	CAMS,MNMS,NAMS
JD36682-7	Collected: 13-DEC-21 10:20 By: ND			Received: 13-DEC-21 By: JP		
HOFF SED-4						
JD36682-7	SM2540 G 18TH ED MOD	04-DEC-21 16:34	BG			SOL104
JD36682-7	SW846 7471B	16-DEC-21 10:58	SB	16-DEC-21	SB	HG
JD36682-7	SW846 8260D	21-DEC-21 22:26	PS			V8260SL
JD36682-7	SW846 8081B	23-DEC-21 06:35	CP	17-DEC-21	SO	P8081PESTTCL
JD36682-7	SW846 8270E	23-DEC-21 11:25	CS	21-DEC-21	ED	AB8270SL
JD36682-7	SW846 6020B	23-DEC-21 17:46	NV	21-DEC-21	AK	AGMS,ASMS,BEMS,CDMS,COMS, CUMS,KMS,NAMS,PBMS,SBMS, SEMS,TLMS
JD36682-7	SW846 6020B	27-DEC-21 17:23	MET	21-DEC-21	AK	NIMS
JD36682-7	SW846 6020B	31-DEC-21 21:36	NV	21-DEC-21	AK	BAMS,CAMS,CRMS
JD36682-7	SW846 6020B	31-DEC-21 21:41	NV	21-DEC-21	AK	ALMS,MGMS,VMS,ZNMS
JD36682-7	SW846 6020B	31-DEC-21 21:47	NV	21-DEC-21	AK	FEMS,MNMS
JD36682-8	Collected: 13-DEC-21 10:40 By: ND			Received: 13-DEC-21 By: JP		
HOFF SED-3						
JD36682-8	SM2540 G 18TH ED MOD	04-DEC-21 16:34	BG			SOL104
JD36682-8	SW846 7471B	16-DEC-21 10:59	SB	16-DEC-21	SB	HG
JD36682-8	SW846 8260D	21-DEC-21 22:53	PS			V8260SL
JD36682-8	SW846 8270E	23-DEC-21 10:10	CS	21-DEC-21	ED	AB8270SL
JD36682-8	SW846 6020B	23-DEC-21 17:52	NV	21-DEC-21	AK	AGMS,ASMS,BEMS,CDMS,COMS, CUMS,KMS,NAMS,PBMS,SBMS, SEMS,TLMS
JD36682-8	SW846 8081B	23-DEC-21 20:20	TL	17-DEC-21	SO	P8081PESTTCL
JD36682-8	SW846 6020B	27-DEC-21 17:29	MET	21-DEC-21	AK	NIMS
JD36682-8	SW846 6020B	31-DEC-21 21:52	NV	21-DEC-21	AK	BAMS,CAMS,CRMS,VMS,ZNMS
JD36682-8	SW846 6020B	31-DEC-21 22:09	NV	21-DEC-21	AK	ALMS,FEMS,MGMS
JD36682-8	SW846 6020B	31-DEC-21 22:15	NV	21-DEC-21	AK	MNMS
JD36682-9	Collected: 13-DEC-21 11:25 By: ND			Received: 13-DEC-21 By: JP		
HOFF SED-2						
JD36682-9	SM2540 G 18TH ED MOD	04-DEC-21 16:34	BG			SOL104
JD36682-9	SW846 7471B	16-DEC-21 11:01	SB	16-DEC-21	SB	HG

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36682

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36682-9	SW846 8260D	16-DEC-21 23:29	PS			V8260SL
JD36682-9	SW846 8270E	23-DEC-21 09:45	CS	21-DEC-21	ED	AB8270SL
JD36682-9	SW846 6020B	23-DEC-21 17:22	NV	21-DEC-21	AK	AGMS,ASMS,BEMS,CDMS,COMS,CUMS,KMS,NAMS,PBMS,SBMS,SEMS,TLMS
JD36682-9	SW846 6020B	27-DEC-21 16:54	MET	21-DEC-21	AK	NIMS
JD36682-9	SW846 8081B	31-DEC-21 01:37	RK	17-DEC-21	SO	P8081PESTTCL
JD36682-9	SW846 6020B	31-DEC-21 20:45	NV	21-DEC-21	AK	ALMS,BAMS,CAMS,CRMS,MGMS,VMS,ZNMS
JD36682-9	SW846 6020B	31-DEC-21 21:24	NV	21-DEC-21	AK	FEMS,MNMS
JD36682-10	Collected: 13-DEC-21 11:45 By: ND		Received: 13-DEC-21 By: JP			
HOFF SED-1						
JD36682-10	SM2540 G 18TH ED MOD	04-DEC-21 16:34	BG			SOL104
JD36682-10	SW846 7471B	16-DEC-21 11:02	SB	16-DEC-21	SB	HG
JD36682-10	SW846 8260D	16-DEC-21 23:56	PS			V8260SL
JD36682-10	SW846 8270E	23-DEC-21 09:20	CS	21-DEC-21	ED	AB8270SL
JD36682-10	SW846 6020B	23-DEC-21 17:58	NV	21-DEC-21	AK	AGMS,ASMS,BEMS,CAMS,CDMS,COMS,CRMS,CUMS,KMS,MGMS,NAMS,PBMS,SBMS,SEMS,TLMS,VMS,ZNMS
JD36682-10	SW846 8081B	23-DEC-21 20:56	TL	17-DEC-21	SO	P8081PESTTCL
JD36682-10	SW846 6020B	27-DEC-21 17:35	MET	21-DEC-21	AK	NIMS
JD36682-10	SW846 6020B	31-DEC-21 22:20	NV	21-DEC-21	AK	ALMS,BAMS,FEMS
JD36682-10	SW846 6020B	31-DEC-21 22:26	NV	21-DEC-21	AK	MNMS
JD36682-11	Collected: 13-DEC-21 12:00 By: ND		Received: 13-DEC-21 By: JP			
HOFF DUP-121321SED						
JD36682-11	SM2540 G 18TH ED MOD	04-DEC-21 16:34	BG			SOL104
JD36682-11	SW846 7471B	16-DEC-21 11:04	SB	16-DEC-21	SB	HG
JD36682-11	SW846 8260D	17-DEC-21 00:22	PS			V8260SL
JD36682-11	SW846 8270E	23-DEC-21 08:56	CS	21-DEC-21	ED	AB8270SL
JD36682-11	SW846 6020B	23-DEC-21 18:04	NV	21-DEC-21	AK	AGMS,ASMS,BEMS,CAMS,CDMS,COMS,CRMS,CUMS,KMS,MGMS,NAMS,PBMS,SBMS,SEMS,TLMS,VMS,ZNMS
JD36682-11	SW846 8081B	23-DEC-21 21:14	TL	17-DEC-21	SO	P8081PESTTCL
JD36682-11	SW846 6020B	27-DEC-21 17:41	MET	21-DEC-21	AK	NIMS

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36682

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36682-11	SW846 6020B	31-DEC-21 22:31	NV	21-DEC-21	AK	BAMS
JD36682-11	SW846 6020B	31-DEC-21 22:37	NV	21-DEC-21	AK	ALMS,FEMS
JD36682-11	SW846 6020B	31-DEC-21 22:42	NV	21-DEC-21	AK	MNMS

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-1.2	Secured Storage	Bridget Kelly	12/22/21 17:44	Retrieve from Storage
JD36682-1.2	Bridget Kelly	GCMS3A	12/22/21 17:44	Load on Instrument
JD36682-1.2	GCMS3A	Bridget Kelly	12/23/21 09:34	Unload from Instrument
JD36682-1.2	Bridget Kelly	Secured Storage	12/23/21 09:34	Return to Storage
JD36682-1.2	Secured Storage	Bridget Kelly	12/23/21 15:28	Retrieve from Storage
JD36682-1.2	Bridget Kelly	GCMS3A	12/23/21 15:28	Load on Instrument
JD36682-1.2	GCMS3A	Bridget Kelly	12/27/21 13:46	Unload from Instrument
JD36682-1.2	Bridget Kelly	Secured Storage	12/27/21 13:46	Return to Storage
JD36682-1.4	Secured Storage	Taylor Sauter	12/21/21 17:20	Retrieve from Storage
JD36682-1.4	Taylor Sauter	GCMSL	12/21/21 17:20	Load on Instrument
JD36682-1.4	GCMSL	Jonathan Santos	12/22/21 10:20	Unload from Instrument
JD36682-1.4	Jonathan Santos	Secured Storage	12/22/21 10:20	Return to Storage
JD36682-2.1	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-2.1	Secured Storage	Edward Rue	12/17/21 12:42	Retrieve from Storage
JD36682-2.1	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36682-2.1	Rocquan Salters		12/17/21 23:08	Depleted
JD36682-2.1.1	Edward Rue	Organics Prep	12/17/21 12:43	Extract from JD36682-2.1
JD36682-2.1.1	Organics Prep	Taylor Gorman	12/18/21 01:00	Extract from JD36682-2.1
JD36682-2.1.1	Taylor Gorman	Extract Storage	12/18/21 01:00	Return to Storage
JD36682-2.1.1	Extract Storage	Christine Phillips	12/20/21 03:17	Retrieve from Storage
JD36682-2.1.1	Christine Phillips	GC6G	12/20/21 03:17	Load on Instrument
JD36682-2.2	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-2.2	Tyler Strong	Secured Staging Area	12/14/21 23:19	Return to Storage
stage				
JD36682-2.2	Secured Staging Area	Edward Rue	12/15/21 08:06	Retrieve from Storage
JD36682-2.2	Edward Rue	Rocquan Salters	12/15/21 14:38	Custody Transfer
JD36682-2.2	Rocquan Salters	Secured Storage	12/15/21 23:00	Return to Storage
JD36682-2.2	Naisha Torres	Secured Storage	12/22/21 09:46	Return to Storage
Analyst chain of custody update error.				
JD36682-2.2.1	Edward Rue	Organics Prep	12/15/21 09:22	Extract from JD36682-2.2
JD36682-2.2.1	Organics Prep	Naisha Torres	12/16/21 11:19	Extract from JD36682-2.2
JD36682-2.2.1	Naisha Torres	Extract Storage	12/16/21 11:19	Return to Storage
JD36682-2.3	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-2.4	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-2.4	Secured Storage	Dave Hunkele	01/06/22 07:30	Retrieve from Storage
JD36682-2.4	Dave Hunkele	Secured Staging Area	01/06/22 07:33	Return to Storage
JD36682-2.4	Secured Staging Area	Edward Rue	01/06/22 08:36	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-2.4	Edward Rue		01/06/22 16:58	Depleted
JD36682-2.4.1	Edward Rue	Organics Prep	01/06/22 08:46	Extract from JD36682-2.4
JD36682-2.4.1	Organics Prep	Jesse Li	01/06/22 17:44	Extract from JD36682-2.4
JD36682-2.4.1	Jesse Li	Extract Storage	01/06/22 17:44	Return to Storage
JD36682-2.4.1	Extract Storage	Christopher Sowa	01/07/22 04:25	Retrieve from Storage
JD36682-2.4.1	Christopher Sowa	GCMS5P	01/07/22 04:25	Load on Instrument
JD36682-2.5	Tyler Strong	Secured Storage	12/13/21 23:26	Return to Storage
JD36682-2.5	Secured Storage	Todd Shoemaker	12/16/21 14:06	Retrieve from Storage
JD36682-2.5	Todd Shoemaker	Secured Staging Area	12/16/21 14:07	Return to Storage
JD36682-2.5	Secured Staging Area	Sarah Betts	12/16/21 14:13	Retrieve from Storage
JD36682-2.5	Sarah Betts	Secured Staging Area	12/16/21 17:50	Return to Storage
JD36682-2.5	Secured Storage	Alyssa Koshy	12/20/21 10:08	Retrieve from Storage
Analyst chain of custody update error.				
JD36682-2.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36682-2.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:09	Digestate from JD36682-2.5
JD36682-2.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36682-2.5
JD36682-2.5.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36682-2.6	Secured Storage	Taylor Sauter	12/21/21 17:20	Retrieve from Storage
JD36682-2.6	Taylor Sauter	GCMSL	12/21/21 17:20	Load on Instrument
JD36682-2.6	GCMSL	Jonathan Santos	12/22/21 10:20	Unload from Instrument
JD36682-2.6	Jonathan Santos	Secured Storage	12/22/21 10:20	Return to Storage
JD36682-2.7	Secured Storage	Bridget Kelly	12/23/21 15:28	Retrieve from Storage
JD36682-2.7	Bridget Kelly	GCMS3A	12/23/21 15:28	Load on Instrument
JD36682-2.7	GCMS3A	Bridget Kelly	12/27/21 13:46	Unload from Instrument
JD36682-2.7	Bridget Kelly	Secured Storage	12/27/21 13:46	Return to Storage
JD36682-2.8	Secured Storage	Bridget Kelly	12/22/21 17:44	Retrieve from Storage
JD36682-2.8	Bridget Kelly	GCMS3A	12/22/21 17:44	Load on Instrument
JD36682-2.8	GCMS3A	Bridget Kelly	12/23/21 09:34	Unload from Instrument
JD36682-2.8	Bridget Kelly	Secured Storage	12/23/21 09:34	Return to Storage
JD36682-2.8	Secured Storage	Bridget Kelly	12/23/21 15:28	Retrieve from Storage
JD36682-2.8	Bridget Kelly	GCMS3A	12/23/21 15:28	Load on Instrument
JD36682-2.8	GCMS3A	Bridget Kelly	12/27/21 13:46	Unload from Instrument
JD36682-2.8	Bridget Kelly	Secured Storage	12/27/21 13:46	Return to Storage
JD36682-3.1	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-3.1	Tyler Strong	Secured Staging Area	12/14/21 23:19	Return to Storage
stage				
JD36682-3.1	Secured Staging Area	Edward Rue	12/15/21 08:06	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-3.1	Edward Rue	Rocquan Salters	12/15/21 14:38	Custody Transfer
JD36682-3.1	Rocquan Salters	Secured Storage	12/15/21 23:00	Return to Storage
JD36682-3.1	Naisha Torres	Secured Storage	12/22/21 09:46	Return to Storage
Analyst chain of custody update error.				
JD36682-3.1.1	Edward Rue	Organics Prep	12/15/21 09:22	Extract from JD36682-3.1
JD36682-3.1.1	Naisha Torres	Extract Storage	12/16/21 11:19	Return to Storage
JD36682-3.1.1	Organics Prep	Naisha Torres	12/16/21 11:19	Extract from JD36682-3.1
JD36682-3.2	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-3.2	Secured Storage	Edward Rue	12/17/21 12:42	Retrieve from Storage
JD36682-3.2	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36682-3.2	Rocquan Salters		12/17/21 23:08	Depleted
JD36682-3.2.1	Edward Rue	Organics Prep	12/17/21 12:43	Extract from JD36682-3.2
JD36682-3.2.1	Organics Prep	Taylor Gorman	12/18/21 01:00	Extract from JD36682-3.2
JD36682-3.2.1	Taylor Gorman	Extract Storage	12/18/21 01:00	Return to Storage
JD36682-3.2.1	Extract Storage	Christine Phillips	12/20/21 03:17	Retrieve from Storage
JD36682-3.2.1	Christine Phillips	GC6G	12/20/21 03:17	Load on Instrument
JD36682-3.3	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-3.4	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-3.4	Secured Storage	Dave Hunkele	01/06/22 07:30	Retrieve from Storage
JD36682-3.4	Dave Hunkele	Secured Staging Area	01/06/22 07:33	Return to Storage
JD36682-3.4	Secured Staging Area	Edward Rue	01/06/22 08:36	Retrieve from Storage
JD36682-3.4	Edward Rue		01/06/22 16:58	Depleted
JD36682-3.4.1	Edward Rue	Organics Prep	01/06/22 08:46	Extract from JD36682-3.4
JD36682-3.4.1	Organics Prep	Jesse Li	01/06/22 17:44	Extract from JD36682-3.4
JD36682-3.4.1	Jesse Li	Extract Storage	01/06/22 17:44	Return to Storage
JD36682-3.4.1	Extract Storage	Christopher Sowa	01/07/22 04:25	Retrieve from Storage
JD36682-3.4.1	Christopher Sowa	GCMS5P	01/07/22 04:25	Load on Instrument
JD36682-3.5	Tyler Strong	Secured Storage	12/13/21 23:26	Return to Storage
JD36682-3.5	Secured Storage	Todd Shoemaker	12/16/21 14:06	Retrieve from Storage
JD36682-3.5	Todd Shoemaker	Secured Staging Area	12/16/21 14:07	Return to Storage
JD36682-3.5	Secured Staging Area	Sarah Betts	12/16/21 14:13	Retrieve from Storage
JD36682-3.5	Sarah Betts	Secured Staging Area	12/16/21 17:50	Return to Storage
JD36682-3.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD36682-3.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36682-3.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36682-3.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-3.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36682-3.5
JD36682-3.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36682-3.5
JD36682-3.5.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36682-3.6	Secured Storage	Bridget Kelly	12/22/21 17:44	Retrieve from Storage
JD36682-3.6	Bridget Kelly	GCMS3A	12/22/21 17:44	Load on Instrument
JD36682-3.6	GCMS3A	Bridget Kelly	12/23/21 09:34	Unload from Instrument
JD36682-3.6	Bridget Kelly	Secured Storage	12/23/21 09:34	Return to Storage
JD36682-3.6	Secured Storage	Bridget Kelly	12/23/21 15:28	Retrieve from Storage
JD36682-3.6	Bridget Kelly	GCMS3A	12/23/21 15:28	Load on Instrument
JD36682-3.6	GCMS3A	Bridget Kelly	12/27/21 13:46	Unload from Instrument
JD36682-3.6	Bridget Kelly	Secured Storage	12/27/21 13:46	Return to Storage
JD36682-3.7	Secured Storage	Taylor Sauter	12/21/21 17:20	Retrieve from Storage
JD36682-3.7	Taylor Sauter	GCMSL	12/21/21 17:20	Load on Instrument
JD36682-3.7	GCMSL	Jonathan Santos	12/22/21 10:20	Unload from Instrument
JD36682-3.7	Jonathan Santos	Secured Storage	12/22/21 10:20	Return to Storage
JD36682-3.8	Secured Storage	Bridget Kelly	12/23/21 15:28	Retrieve from Storage
JD36682-3.8	Bridget Kelly	GCMS3A	12/23/21 15:28	Load on Instrument
JD36682-3.8	GCMS3A	Bridget Kelly	12/27/21 13:46	Unload from Instrument
JD36682-3.8	Bridget Kelly	Secured Storage	12/27/21 13:46	Return to Storage
JD36682-4.1	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-4.1	Tyler Strong	Secured Staging Area	12/14/21 23:19	Return to Storage
stage				
JD36682-4.1	Secured Staging Area	Edward Rue	12/15/21 08:06	Retrieve from Storage
JD36682-4.1	Edward Rue	Rocquan Salters	12/15/21 14:38	Custody Transfer
JD36682-4.1	Rocquan Salters	Secured Storage	12/15/21 23:00	Return to Storage
JD36682-4.1	Naisha Torres	Secured Storage	12/22/21 09:46	Return to Storage
Analyst chain of custody update error.				
JD36682-4.1.1	Edward Rue	Organics Prep	12/15/21 09:22	Extract from JD36682-4.1
JD36682-4.1.1	Naisha Torres	Extract Storage	12/16/21 11:19	Return to Storage
JD36682-4.1.1	Organics Prep	Naisha Torres	12/16/21 11:19	Extract from JD36682-4.1
JD36682-4.2	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-4.2	Secured Storage	Dave Hunkele	01/06/22 07:30	Retrieve from Storage
JD36682-4.2	Dave Hunkele	Secured Staging Area	01/06/22 07:33	Return to Storage
JD36682-4.2	Secured Staging Area	Edward Rue	01/06/22 08:36	Retrieve from Storage
JD36682-4.2	Edward Rue		01/06/22 16:58	Depleted
JD36682-4.2.1	Edward Rue	Organics Prep	01/06/22 08:46	Extract from JD36682-4.2

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-4.2.1	Organics Prep	Jesse Li	01/06/22 17:44	Extract from JD36682-4.2
JD36682-4.2.1	Jesse Li	Extract Storage	01/06/22 17:44	Return to Storage
JD36682-4.2.1	Extract Storage	Christopher Sowa	01/07/22 04:25	Retrieve from Storage
JD36682-4.2.1	Christopher Sowa	GCMS5P	01/07/22 04:25	Load on Instrument
JD36682-4.3	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-4.3	Secured Storage	Edward Rue	12/17/21 12:42	Retrieve from Storage
JD36682-4.3	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36682-4.3	Rocquan Salters		12/17/21 23:08	Depleted
JD36682-4.3.1	Edward Rue	Organics Prep	12/17/21 12:43	Extract from JD36682-4.3
JD36682-4.3.1	Organics Prep	Taylor Gorman	12/18/21 01:00	Extract from JD36682-4.3
JD36682-4.3.1	Taylor Gorman	Extract Storage	12/18/21 01:00	Return to Storage
JD36682-4.3.1	Extract Storage	Christine Phillips	12/20/21 03:17	Retrieve from Storage
JD36682-4.3.1	Christine Phillips	GC6G	12/20/21 03:17	Load on Instrument
JD36682-4.4	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-4.5	Tyler Strong	Secured Storage	12/13/21 23:26	Return to Storage
JD36682-4.5	Secured Storage	Todd Shoemaker	12/16/21 14:06	Retrieve from Storage
JD36682-4.5	Todd Shoemaker	Secured Staging Area	12/16/21 14:07	Return to Storage
JD36682-4.5	Secured Staging Area	Sarah Betts	12/16/21 14:13	Retrieve from Storage
JD36682-4.5	Sarah Betts	Secured Staging Area	12/16/21 17:50	Return to Storage
JD36682-4.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD36682-4.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36682-4.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36682-4.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36682-4.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36682-4.5
JD36682-4.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36682-4.5
JD36682-4.5.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36682-4.6	Secured Storage	Bridget Kelly	12/22/21 17:44	Retrieve from Storage
JD36682-4.6	Bridget Kelly	GCMS3A	12/22/21 17:44	Load on Instrument
JD36682-4.6	GCMS3A	Bridget Kelly	12/23/21 09:34	Unload from Instrument
JD36682-4.6	Bridget Kelly	Secured Storage	12/23/21 09:34	Return to Storage
JD36682-4.6	Secured Storage	Bridget Kelly	12/23/21 15:28	Retrieve from Storage
JD36682-4.6	Bridget Kelly	GCMS3A	12/23/21 15:28	Load on Instrument
JD36682-4.6	GCMS3A	Bridget Kelly	12/27/21 13:46	Unload from Instrument
JD36682-4.6	Bridget Kelly	Secured Storage	12/27/21 13:46	Return to Storage
JD36682-4.8	Secured Storage	Taylor Sauter	12/21/21 17:20	Retrieve from Storage
JD36682-4.8	Taylor Sauter	GCMSL	12/21/21 17:20	Load on Instrument

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-4.8	GCMSL	Jonathan Santos	12/22/21 10:20	Unload from Instrument
JD36682-4.8	Jonathan Santos	Secured Storage	12/22/21 10:20	Return to Storage
JD36682-5.1	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-5.1	Secured Storage	Dave Hunkele	01/06/22 07:30	Retrieve from Storage
JD36682-5.1	Dave Hunkele	Secured Staging Area	01/06/22 07:33	Return to Storage
JD36682-5.1	Secured Staging Area	Edward Rue	01/06/22 08:36	Retrieve from Storage
JD36682-5.1	Edward Rue		01/06/22 16:58	Depleted
JD36682-5.1.1	Edward Rue	Organics Prep	01/06/22 08:46	Extract from JD36682-5.1
JD36682-5.1.1	Organics Prep	Jesse Li	01/06/22 17:44	Extract from JD36682-5.1
JD36682-5.1.1	Jesse Li	Extract Storage	01/06/22 17:44	Return to Storage
JD36682-5.1.1	Extract Storage	Christopher Sowa	01/07/22 04:25	Retrieve from Storage
JD36682-5.1.1	Christopher Sowa	GCMS5P	01/07/22 04:25	Load on Instrument
JD36682-5.2	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-5.2	Tyler Strong	Secured Staging Area	12/14/21 23:19	Return to Storage
stage				
JD36682-5.2	Secured Staging Area	Edward Rue	12/15/21 08:06	Retrieve from Storage
JD36682-5.2	Edward Rue	Rocquan Salters	12/15/21 14:38	Custody Transfer
JD36682-5.2	Rocquan Salters	Secured Storage	12/15/21 23:00	Return to Storage
JD36682-5.2	Naisha Torres	Secured Storage	12/22/21 09:46	Return to Storage
Analyst chain of custody update error.				
JD36682-5.2.1	Edward Rue	Organics Prep	12/15/21 09:22	Extract from JD36682-5.2
JD36682-5.2.1	Organics Prep	Naisha Torres	12/16/21 11:19	Extract from JD36682-5.2
JD36682-5.2.1	Naisha Torres	Extract Storage	12/16/21 11:19	Return to Storage
JD36682-5.3	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-5.4	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-5.4	Secured Storage	Edward Rue	12/17/21 12:42	Retrieve from Storage
JD36682-5.4	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36682-5.4	Rocquan Salters		12/17/21 23:08	Depleted
JD36682-5.4.1	Edward Rue	Organics Prep	12/17/21 12:43	Extract from JD36682-5.4
JD36682-5.4.1	Organics Prep	Taylor Gorman	12/18/21 01:00	Extract from JD36682-5.4
JD36682-5.4.1	Taylor Gorman	Extract Storage	12/18/21 01:00	Return to Storage
JD36682-5.4.1	Extract Storage	Christine Phillips	12/20/21 03:17	Retrieve from Storage
JD36682-5.4.1	Christine Phillips	GC6G	12/20/21 03:17	Load on Instrument
JD36682-5.5	Tyler Strong	Secured Storage	12/13/21 23:26	Return to Storage
JD36682-5.5	Secured Storage	Todd Shoemaker	12/16/21 14:06	Retrieve from Storage
JD36682-5.5	Todd Shoemaker	Secured Staging Area	12/16/21 14:07	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-5.5	Secured Staging Area	Sarah Betts	12/16/21 14:13	Retrieve from Storage
JD36682-5.5	Sarah Betts	Secured Staging Area	12/16/21 17:50	Return to Storage
JD36682-5.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD36682-5.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36682-5.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36682-5.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36682-5.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36682-5.5
JD36682-5.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36682-5.5
JD36682-5.5.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36682-5.6	Secured Storage	Bridget Kelly	12/22/21 17:44	Retrieve from Storage
JD36682-5.6	Bridget Kelly	GCMS3A	12/22/21 17:44	Load on Instrument
JD36682-5.6	GCMS3A	Bridget Kelly	12/23/21 09:34	Unload from Instrument
JD36682-5.6	Bridget Kelly	Secured Storage	12/23/21 09:34	Return to Storage
JD36682-5.6	Secured Storage	Bridget Kelly	12/23/21 15:28	Retrieve from Storage
JD36682-5.6	Bridget Kelly	GCMS3A	12/23/21 15:28	Load on Instrument
JD36682-5.6	GCMS3A	Bridget Kelly	12/27/21 13:46	Unload from Instrument
JD36682-5.6	Bridget Kelly	Secured Storage	12/27/21 13:46	Return to Storage
JD36682-5.8	Secured Storage	Taylor Sauter	12/21/21 17:20	Retrieve from Storage
JD36682-5.8	Taylor Sauter	GCMSL	12/21/21 17:20	Load on Instrument
JD36682-5.8	GCMSL	Jonathan Santos	12/22/21 10:20	Unload from Instrument
JD36682-5.8	Jonathan Santos	Secured Storage	12/22/21 10:20	Return to Storage
JD36682-6.1	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-6.2	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-6.2	Secured Storage	Dave Hunkele	01/06/22 07:30	Retrieve from Storage
JD36682-6.2	Dave Hunkele	Secured Staging Area	01/06/22 07:33	Return to Storage
JD36682-6.2	Secured Staging Area	Edward Rue	01/06/22 08:36	Retrieve from Storage
JD36682-6.2	Edward Rue		01/06/22 16:58	Depleted
JD36682-6.2.1	Edward Rue	Organics Prep	01/06/22 08:46	Extract from JD36682-6.2
JD36682-6.2.1	Organics Prep	Jesse Li	01/06/22 17:44	Extract from JD36682-6.2
JD36682-6.2.1	Jesse Li	Extract Storage	01/06/22 17:44	Return to Storage
JD36682-6.2.1	Extract Storage	Christopher Sowa	01/07/22 04:25	Retrieve from Storage
JD36682-6.2.1	Christopher Sowa	GCMS5P	01/07/22 04:25	Load on Instrument
JD36682-6.3	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-6.3	Secured Storage	Edward Rue	12/17/21 12:42	Retrieve from Storage
JD36682-6.3	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36682-6.3	Rocquan Salters		12/17/21 23:08	Depleted

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-6.3.1	Edward Rue	Organics Prep	12/17/21 12:43	Extract from JD36682-6.3
JD36682-6.3.1	Organics Prep	Taylor Gorman	12/18/21 01:00	Extract from JD36682-6.3
JD36682-6.3.1	Taylor Gorman	Extract Storage	12/18/21 01:00	Return to Storage
JD36682-6.3.1	Extract Storage	Christine Phillips	12/20/21 03:17	Retrieve from Storage
JD36682-6.3.1	Christine Phillips	GC6G	12/20/21 03:17	Load on Instrument
JD36682-6.4	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-6.4	Tyler Strong	Secured Staging Area	12/14/21 23:19	Return to Storage
stage				
JD36682-6.4	Secured Staging Area	Edward Rue	12/15/21 08:06	Retrieve from Storage
JD36682-6.4	Edward Rue	Rocquan Salters	12/15/21 14:38	Custody Transfer
JD36682-6.4	Rocquan Salters	Secured Storage	12/15/21 23:00	Return to Storage
JD36682-6.4	Naisha Torres	Secured Storage	12/22/21 09:46	Return to Storage
Analyst chain of custody update error.				
JD36682-6.4.1	Edward Rue	Organics Prep	12/15/21 09:22	Extract from JD36682-6.4
JD36682-6.4.1	Organics Prep	Naisha Torres	12/16/21 11:19	Extract from JD36682-6.4
JD36682-6.4.1	Naisha Torres	Extract Storage	12/16/21 11:19	Return to Storage
JD36682-6.5	Tyler Strong	Secured Storage	12/13/21 23:26	Return to Storage
JD36682-6.5	Secured Storage	Todd Shoemaker	12/16/21 14:06	Retrieve from Storage
JD36682-6.5	Todd Shoemaker	Secured Staging Area	12/16/21 14:07	Return to Storage
JD36682-6.5	Secured Staging Area	Sarah Betts	12/16/21 14:13	Retrieve from Storage
JD36682-6.5	Sarah Betts	Secured Staging Area	12/16/21 17:50	Return to Storage
JD36682-6.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD36682-6.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36682-6.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36682-6.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36682-6.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36682-6.5
JD36682-6.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36682-6.5
JD36682-6.5.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36682-6.6	Secured Storage	Bridget Kelly	12/22/21 17:44	Retrieve from Storage
JD36682-6.6	Bridget Kelly	GCMS3A	12/22/21 17:44	Load on Instrument
JD36682-6.6	GCMS3A	Bridget Kelly	12/23/21 09:34	Unload from Instrument
JD36682-6.6	Bridget Kelly	Secured Storage	12/23/21 09:34	Return to Storage
JD36682-6.6	Secured Storage	Bridget Kelly	12/23/21 15:28	Retrieve from Storage
JD36682-6.6	Bridget Kelly	GCMS3A	12/23/21 15:28	Load on Instrument
JD36682-6.6	GCMS3A	Bridget Kelly	12/27/21 13:46	Unload from Instrument
JD36682-6.6	Bridget Kelly	Secured Storage	12/27/21 13:46	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-6.8	Secured Storage	Taylor Sauter	12/21/21 17:20	Retrieve from Storage
JD36682-6.8	Taylor Sauter	GCMSL	12/21/21 17:20	Load on Instrument
JD36682-6.8	GCMSL	Jonathan Santos	12/22/21 10:20	Unload from Instrument
JD36682-6.8	Jonathan Santos	Secured Storage	12/22/21 10:20	Return to Storage
JD36682-7.1	Tyler Strong	Secured Storage	12/13/21 23:11	Return to Storage
JD36682-7.1	Tyler Strong	Secured Staging Area	12/14/21 21:59	Return to Storage
stage				
JD36682-7.1	Secured Staging Area	Ellen Dondeo	12/15/21 07:59	Retrieve from Storage
JD36682-7.1	Ellen Dondeo	Secured Storage	12/16/21 16:35	Return to Storage
JD36682-7.1	Secured Storage	Joshua Reitan	12/16/21 20:54	Retrieve from Storage
JD36682-7.1	Joshua Reitan	Secured Staging Area	12/16/21 20:54	Return to Storage
JD36682-7.1	Secured Staging Area	Ellen Dondeo	12/17/21 09:01	Retrieve from Storage
JD36682-7.1	Ellen Dondeo	Secured Storage	12/18/21 07:30	Return to Storage
JD36682-7.1	Secured Storage	Dave Hunkele	12/21/21 10:48	Retrieve from Storage
JD36682-7.1	Dave Hunkele	Secured Staging Area	12/21/21 10:49	Return to Storage
JD36682-7.1	Secured Staging Area	Alyssa Koshy	12/21/21 10:58	Retrieve from Storage
JD36682-7.1	Alyssa Koshy	Secured Storage	12/21/21 13:44	Return to Storage
JD36682-7.1	Tyler Strong	Secured Staging Area	12/21/21 22:33	Return to Storage
stage				
JD36682-7.1	Secured Staging Area	Taylor Sauter	12/22/21 07:21	Retrieve from Storage
JD36682-7.1	Taylor Sauter	Secured Storage	12/22/21 15:22	Return to Storage
JD36682-7.1.1	Ellen Dondeo	Organics Prep	12/15/21 08:36	Extract from JD36682-7.1
JD36682-7.1.1	Organics Prep	Christopher Sowa	12/16/21 03:31	Extract from JD36682-7.1
JD36682-7.1.1	Christopher Sowa	Extract Storage	12/16/21 03:31	Return to Storage
JD36682-7.1.1	Extract Storage	Christopher Sowa	12/16/21 05:34	Retrieve from Storage
JD36682-7.1.1	Christopher Sowa	GCMS2P	12/16/21 05:34	Load on Instrument
JD36682-7.1.1	GCMS2P	Kristi Schollenberger	12/16/21 18:29	Unload from Instrument
JD36682-7.1.1	Kristi Schollenberger	Extract Freezer	12/16/21 18:29	Return to Storage
JD36682-7.1.2	Ellen Dondeo	Organics Prep	12/17/21 09:21	Extract from JD36682-7.1
JD36682-7.1.2	Organics Prep	Shannon OMara	12/17/21 21:28	Extract from JD36682-7.1
JD36682-7.1.2	Shannon OMara	Extract Storage	12/17/21 21:29	Return to Storage
JD36682-7.1.2	Extract Storage	Christine Phillips	12/23/21 04:26	Retrieve from Storage
JD36682-7.1.2	Christine Phillips	GC1G	12/23/21 04:26	Load on Instrument
JD36682-7.1.3	Alyssa Koshy	Metals Digestion	12/21/21 11:44	Digestate from JD36682-7.1
JD36682-7.1.3	Metals Digestion	Alyssa Koshy	12/21/21 11:45	Digestate from JD36682-7.1
JD36682-7.1.3	Alyssa Koshy	Metals Digestate Storage	12/21/21 11:45	Return to Storage
JD36682-7.1.4	Taylor Sauter	Organics Prep	12/22/21 07:58	Extract from JD36682-7.1
JD36682-7.1.4	Organics Prep	Christopher Sowa	12/23/21 04:18	Extract from JD36682-7.1
JD36682-7.1.4	Christopher Sowa	GCMSF	12/23/21 08:29	Load on Instrument

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-7.1.4	GCMSF	Kristi Schollenberger	12/27/21 18:12	Unload from Instrument
JD36682-7.1.4	Kristi Schollenberger	Extract Freezer	12/27/21 18:12	Return to Storage
JD36682-7.2	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-7.2	Secured Storage	Benjamin Gaines	12/14/21 10:11	Retrieve from Storage
JD36682-7.2	Benjamin Gaines	Secured Staging Area	12/14/21 10:11	Return to Storage
JD36682-7.2	Secured Staging Area	Benjamin Gaines	12/14/21 10:13	Retrieve from Storage
JD36682-7.2	Benjamin Gaines	Secured Storage	12/14/21 12:24	Return to Storage
JD36682-7.2	Secured Storage	Joshua Reitan	12/17/21 00:10	Retrieve from Storage
JD36682-7.2	Joshua Reitan	Secured Staging Area	12/17/21 00:10	Return to Storage
JD36682-7.2	Secured Staging Area	Ellen Dondeo	12/17/21 08:54	Retrieve from Storage
JD36682-7.2	Ellen Dondeo	Secured Storage	12/18/21 07:30	Return to Storage
JD36682-7.2.1	Ellen Dondeo	Organics Prep	12/17/21 09:21	Extract from JD36682-7.2
JD36682-7.2.1	Organics Prep	Shannon OMara	12/17/21 21:28	Extract from JD36682-7.2
JD36682-7.2.1	Shannon OMara	Extract Storage	12/17/21 21:29	Return to Storage
JD36682-7.2.1	Extract Storage	Christine Phillips	12/23/21 04:26	Retrieve from Storage
JD36682-7.2.1	Christine Phillips	GC1G	12/23/21 04:26	Load on Instrument
JD36682-7.4	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage
JD36682-7.4	Secured Storage	Prashant Shukla	12/16/21 18:11	Retrieve from Storage
JD36682-7.4	Prashant Shukla	GCMS1C	12/16/21 18:11	Load on Instrument
JD36682-7.4	GCMS1C	Prashant Shukla	12/20/21 12:46	Unload from Instrument
JD36682-7.4	Prashant Shukla		12/20/21 12:47	Depleted
JD36682-7.5	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage
JD36682-7.5	Secured Storage	Prashant Shukla	12/21/21 16:47	Retrieve from Storage
JD36682-7.5	Prashant Shukla	GCMS1C	12/21/21 16:47	Load on Instrument
JD36682-7.5	GCMS1C	Prashant Shukla	12/22/21 13:52	Unload from Instrument
JD36682-7.5	Prashant Shukla		12/22/21 13:52	Depleted
JD36682-8.1	Tyler Strong	Secured Storage	12/13/21 23:11	Return to Storage
JD36682-8.1	Tyler Strong	Secured Staging Area	12/14/21 21:59	Return to Storage
stage				
JD36682-8.1	Secured Staging Area	Ellen Dondeo	12/15/21 07:59	Retrieve from Storage
JD36682-8.1	Ellen Dondeo	Secured Storage	12/16/21 16:35	Return to Storage
JD36682-8.1	Secured Storage	Joshua Reitan	12/16/21 20:54	Retrieve from Storage
JD36682-8.1	Joshua Reitan	Secured Staging Area	12/16/21 20:54	Return to Storage
JD36682-8.1	Secured Staging Area	Ellen Dondeo	12/17/21 09:01	Retrieve from Storage
JD36682-8.1	Ellen Dondeo	Secured Storage	12/18/21 07:30	Return to Storage
JD36682-8.1	Secured Storage	Dave Hunkele	12/21/21 10:48	Retrieve from Storage
JD36682-8.1	Dave Hunkele	Secured Staging Area	12/21/21 10:49	Return to Storage
JD36682-8.1	Secured Staging Area	Alyssa Koshy	12/21/21 10:58	Retrieve from Storage
JD36682-8.1	Alyssa Koshy	Secured Storage	12/21/21 13:44	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-8.1 stage	Tyler Strong	Secured Staging Area	12/21/21 22:33	Return to Storage
JD36682-8.1	Secured Staging Area	Taylor Sauter	12/22/21 07:21	Retrieve from Storage
JD36682-8.1	Taylor Sauter	Secured Storage	12/22/21 15:22	Return to Storage
JD36682-8.1.1	Ellen Dondeo	Organics Prep	12/15/21 08:36	Extract from JD36682-8.1
JD36682-8.1.1	Organics Prep	Christopher Sowa	12/16/21 03:31	Extract from JD36682-8.1
JD36682-8.1.1	Christopher Sowa	Extract Storage	12/16/21 03:31	Return to Storage
JD36682-8.1.2	Ellen Dondeo	Organics Prep	12/17/21 09:21	Extract from JD36682-8.1
JD36682-8.1.2	Organics Prep	Shannon OMara	12/17/21 21:28	Extract from JD36682-8.1
JD36682-8.1.2	Shannon OMara	Extract Storage	12/17/21 21:29	Return to Storage
JD36682-8.1.2	Extract Storage	Christine Phillips	12/23/21 04:26	Retrieve from Storage
JD36682-8.1.2	Christine Phillips	GC1G	12/23/21 04:26	Load on Instrument
JD36682-8.1.3	Alyssa Koshy	Metals Digestion	12/21/21 11:44	Digestate from JD36682-8.1
JD36682-8.1.3	Metals Digestion	Alyssa Koshy	12/21/21 11:45	Digestate from JD36682-8.1
JD36682-8.1.3	Alyssa Koshy	Metals Digestate Storage	12/21/21 11:45	Return to Storage
JD36682-8.1.4	Taylor Sauter	Organics Prep	12/22/21 07:58	Extract from JD36682-8.1
JD36682-8.1.4	Organics Prep	Christopher Sowa	12/23/21 04:18	Extract from JD36682-8.1
JD36682-8.1.4	Christopher Sowa	GCMSF	12/23/21 08:29	Load on Instrument
JD36682-8.1.4	GCMSF	Kristi Schollenberger	12/27/21 18:12	Unload from Instrument
JD36682-8.1.4	Kristi Schollenberger	Extract Freezer	12/27/21 18:12	Return to Storage
JD36682-8.2	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-8.2	Secured Storage	Benjamin Gaines	12/14/21 10:11	Retrieve from Storage
JD36682-8.2	Benjamin Gaines	Secured Staging Area	12/14/21 10:11	Return to Storage
JD36682-8.2	Secured Staging Area	Benjamin Gaines	12/14/21 10:13	Retrieve from Storage
JD36682-8.2	Benjamin Gaines	Secured Storage	12/14/21 12:24	Return to Storage
JD36682-8.2	Secured Storage	Joshua Reitan	12/17/21 00:10	Retrieve from Storage
JD36682-8.2	Joshua Reitan	Secured Staging Area	12/17/21 00:10	Return to Storage
JD36682-8.2	Secured Staging Area	Ellen Dondeo	12/17/21 08:54	Retrieve from Storage
JD36682-8.2	Ellen Dondeo	Secured Storage	12/18/21 07:30	Return to Storage
JD36682-8.2.1	Ellen Dondeo	Organics Prep	12/17/21 09:21	Extract from JD36682-8.2
JD36682-8.2.1	Organics Prep	Shannon OMara	12/17/21 21:28	Extract from JD36682-8.2
JD36682-8.2.1	Shannon OMara	Extract Storage	12/17/21 21:29	Return to Storage
JD36682-8.2.1	Extract Storage	Christine Phillips	12/23/21 04:26	Retrieve from Storage
JD36682-8.2.1	Christine Phillips	GC1G	12/23/21 04:26	Load on Instrument
JD36682-8.3	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage
JD36682-8.4	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-8.4	Secured Storage	Prashant Shukla	12/16/21 18:11	Retrieve from Storage
JD36682-8.4	Prashant Shukla	GCMS1C	12/16/21 18:11	Load on Instrument
JD36682-8.4	GCMS1C	Prashant Shukla	12/20/21 12:46	Unload from Instrument
JD36682-8.4	Prashant Shukla		12/20/21 12:47	Depleted
JD36682-8.5	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage
JD36682-8.5	Secured Storage	Prashant Shukla	12/21/21 16:47	Retrieve from Storage
JD36682-8.5	Prashant Shukla	GCMS1C	12/21/21 16:47	Load on Instrument
JD36682-8.5	GCMS1C	Prashant Shukla	12/22/21 13:52	Unload from Instrument
JD36682-8.5	Prashant Shukla		12/22/21 13:52	Depleted
JD36682-9.1	Tyler Strong	Secured Storage	12/13/21 23:11	Return to Storage
JD36682-9.1	Tyler Strong	Secured Staging Area	12/14/21 21:59	Return to Storage
stage				
JD36682-9.1	Secured Staging Area	Ellen Dondeo	12/15/21 07:59	Retrieve from Storage
JD36682-9.1	Ellen Dondeo	Secured Storage	12/16/21 16:35	Return to Storage
JD36682-9.1	Secured Storage	Joshua Reitan	12/16/21 20:54	Retrieve from Storage
JD36682-9.1	Joshua Reitan	Secured Staging Area	12/16/21 20:54	Return to Storage
JD36682-9.1	Secured Staging Area	Ellen Dondeo	12/17/21 09:01	Retrieve from Storage
JD36682-9.1	Ellen Dondeo	Secured Storage	12/18/21 07:30	Return to Storage
JD36682-9.1	Secured Storage	Dave Hunkele	12/21/21 10:48	Retrieve from Storage
JD36682-9.1	Dave Hunkele	Secured Staging Area	12/21/21 10:49	Return to Storage
JD36682-9.1	Secured Staging Area	Alyssa Koshy	12/21/21 10:58	Retrieve from Storage
JD36682-9.1	Alyssa Koshy	Secured Storage	12/21/21 13:44	Return to Storage
JD36682-9.1	Tyler Strong	Secured Staging Area	12/21/21 22:33	Return to Storage
stage				
JD36682-9.1	Secured Staging Area	Taylor Sauter	12/22/21 07:21	Retrieve from Storage
JD36682-9.1	Taylor Sauter	Secured Storage	12/22/21 15:22	Return to Storage
JD36682-9.1.1	Ellen Dondeo	Organics Prep	12/15/21 08:36	Extract from JD36682-9.1
JD36682-9.1.1	Organics Prep	Christopher Sowa	12/16/21 03:31	Extract from JD36682-9.1
JD36682-9.1.1	Christopher Sowa	Extract Storage	12/16/21 03:31	Return to Storage
JD36682-9.1.2	Ellen Dondeo	Organics Prep	12/17/21 09:21	Extract from JD36682-9.1
JD36682-9.1.2	Organics Prep	Shannon OMara	12/17/21 21:28	Extract from JD36682-9.1
JD36682-9.1.2	Shannon OMara	Extract Storage	12/17/21 21:29	Return to Storage
JD36682-9.1.2	Extract Storage	Christine Phillips	12/23/21 04:26	Retrieve from Storage
JD36682-9.1.2	Christine Phillips	GC1G	12/23/21 04:26	Load on Instrument
JD36682-9.1.3	Alyssa Koshy	Metals Digestion	12/21/21 11:44	Digestate from JD36682-9.1
JD36682-9.1.3	Metals Digestion	Alyssa Koshy	12/21/21 11:45	Digestate from JD36682-9.1
JD36682-9.1.3	Alyssa Koshy	Metals Digestate Storage	12/21/21 11:45	Return to Storage
JD36682-9.1.4	Taylor Sauter	Organics Prep	12/22/21 07:58	Extract from JD36682-9.1

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-9.1.4	Organics Prep	Christopher Sowa	12/23/21 04:18	Extract from JD36682-9.1
JD36682-9.1.4	Christopher Sowa	GCMSF	12/23/21 08:29	Load on Instrument
JD36682-9.1.4	GCMSF	Kristi Schollenberger	12/27/21 18:12	Unload from Instrument
JD36682-9.1.4	Kristi Schollenberger	Extract Freezer	12/27/21 18:12	Return to Storage
JD36682-9.2	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-9.2	Secured Storage	Benjamin Gaines	12/14/21 10:11	Retrieve from Storage
JD36682-9.2	Benjamin Gaines	Secured Staging Area	12/14/21 10:11	Return to Storage
JD36682-9.2	Secured Staging Area	Benjamin Gaines	12/14/21 10:13	Retrieve from Storage
JD36682-9.2	Benjamin Gaines	Secured Storage	12/14/21 12:24	Return to Storage
JD36682-9.2	Secured Storage	Joshua Reitan	12/17/21 00:10	Retrieve from Storage
JD36682-9.2	Joshua Reitan	Secured Staging Area	12/17/21 00:10	Return to Storage
JD36682-9.2	Secured Staging Area	Ellen Dondeo	12/17/21 08:54	Retrieve from Storage
JD36682-9.2	Ellen Dondeo	Secured Storage	12/18/21 07:30	Return to Storage
JD36682-9.2.1	Ellen Dondeo	Organics Prep	12/17/21 09:21	Extract from JD36682-9.2
JD36682-9.2.1	Organics Prep	Shannon OMara	12/17/21 21:28	Extract from JD36682-9.2
JD36682-9.2.1	Shannon OMara	Extract Storage	12/17/21 21:29	Return to Storage
JD36682-9.2.1	Extract Storage	Christine Phillips	12/23/21 04:26	Retrieve from Storage
JD36682-9.2.1	Christine Phillips	GC1G	12/23/21 04:26	Load on Instrument
JD36682-9.3	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage
JD36682-9.4	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage
JD36682-9.4	Secured Storage	Prashant Shukla	12/16/21 18:11	Retrieve from Storage
JD36682-9.4	Prashant Shukla	GCMS1C	12/16/21 18:11	Load on Instrument
JD36682-9.4	GCMS1C	Prashant Shukla	12/20/21 12:46	Unload from Instrument
JD36682-9.4	Prashant Shukla		12/20/21 12:47	Depleted
JD36682-9.5	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage
JD36682-10.1	Tyler Strong	Secured Storage	12/13/21 23:11	Return to Storage
JD36682-10.1	Tyler Strong	Secured Staging Area	12/14/21 21:59	Return to Storage
stage				
JD36682-10.1	Secured Staging Area	Ellen Dondeo	12/15/21 07:59	Retrieve from Storage
JD36682-10.1	Ellen Dondeo	Secured Storage	12/16/21 16:35	Return to Storage
JD36682-10.1	Secured Storage	Joshua Reitan	12/16/21 20:54	Retrieve from Storage
JD36682-10.1	Joshua Reitan	Secured Staging Area	12/16/21 20:54	Return to Storage
JD36682-10.1	Secured Staging Area	Ellen Dondeo	12/17/21 09:01	Retrieve from Storage
JD36682-10.1	Ellen Dondeo	Secured Storage	12/18/21 07:30	Return to Storage
JD36682-10.1	Secured Storage	Dave Hunkele	12/21/21 10:48	Retrieve from Storage
JD36682-10.1	Dave Hunkele	Secured Staging Area	12/21/21 10:49	Return to Storage
JD36682-10.1	Secured Staging Area	Alyssa Koshy	12/21/21 10:58	Retrieve from Storage
JD36682-10.1	Alyssa Koshy	Secured Storage	12/21/21 13:44	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-10.1 stage	Tyler Strong	Secured Staging Area	12/21/21 22:33	Return to Storage
JD36682-10.1	Secured Staging Area	Taylor Sauter	12/22/21 07:21	Retrieve from Storage
JD36682-10.1	Taylor Sauter	Secured Storage	12/22/21 15:22	Return to Storage
JD36682-10.1.1	Ellen Dondeo	Organics Prep	12/15/21 08:36	Extract from JD36682-10.1
JD36682-10.1.1	Organics Prep	Christopher Sowa	12/16/21 03:31	Extract from JD36682-10.1
JD36682-10.1.1	Christopher Sowa	Extract Storage	12/16/21 03:31	Return to Storage
JD36682-10.1.2	Ellen Dondeo	Organics Prep	12/17/21 09:21	Extract from JD36682-10.1
JD36682-10.1.2	Organics Prep	Shannon OMara	12/17/21 21:28	Extract from JD36682-10.1
JD36682-10.1.2	Shannon OMara	Extract Storage	12/17/21 21:29	Return to Storage
JD36682-10.1.2	Extract Storage	Christine Phillips	12/23/21 04:26	Retrieve from Storage
JD36682-10.1.2	Christine Phillips	GC1G	12/23/21 04:26	Load on Instrument
JD36682-10.1.3	Alyssa Koshy	Metals Digestion	12/21/21 11:44	Digestate from JD36682-10.1
JD36682-10.1.3	Metals Digestion	Alyssa Koshy	12/21/21 11:45	Digestate from JD36682-10.1
JD36682-10.1.3	Alyssa Koshy	Metals Digestate Storage	12/21/21 11:45	Return to Storage
JD36682-10.1.4	Taylor Sauter	Organics Prep	12/22/21 07:58	Extract from JD36682-10.1
JD36682-10.1.4	Organics Prep	Christopher Sowa	12/23/21 04:18	Extract from JD36682-10.1
JD36682-10.1.4	Christopher Sowa	GCMSF	12/23/21 08:29	Load on Instrument
JD36682-10.1.4	GCMSF	Kristi Schollenberger	12/27/21 18:12	Unload from Instrument
JD36682-10.1.4	Kristi Schollenberger	Extract Freezer	12/27/21 18:12	Return to Storage
JD36682-10.2	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-10.2	Secured Storage	Benjamin Gaines	12/14/21 10:11	Retrieve from Storage
JD36682-10.2	Benjamin Gaines	Secured Staging Area	12/14/21 10:11	Return to Storage
JD36682-10.2	Secured Staging Area	Benjamin Gaines	12/14/21 10:13	Retrieve from Storage
JD36682-10.2	Benjamin Gaines	Secured Storage	12/14/21 12:24	Return to Storage
JD36682-10.2	Secured Storage	Joshua Reitan	12/17/21 00:10	Retrieve from Storage
JD36682-10.2	Joshua Reitan	Secured Staging Area	12/17/21 00:10	Return to Storage
JD36682-10.2	Secured Staging Area	Ellen Dondeo	12/17/21 08:54	Retrieve from Storage
JD36682-10.2	Ellen Dondeo	Secured Storage	12/18/21 07:30	Return to Storage
JD36682-10.2.1	Ellen Dondeo	Organics Prep	12/17/21 09:21	Extract from JD36682-10.2
JD36682-10.2.1	Organics Prep	Shannon OMara	12/17/21 21:28	Extract from JD36682-10.2
JD36682-10.2.1	Shannon OMara	Extract Storage	12/17/21 21:29	Return to Storage
JD36682-10.2.1	Extract Storage	Christine Phillips	12/23/21 04:26	Retrieve from Storage
JD36682-10.2.1	Christine Phillips	GC1G	12/23/21 04:26	Load on Instrument
JD36682-10.3	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage
JD36682-10.4	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-10.4	Secured Storage	Prashant Shukla	12/16/21 18:11	Retrieve from Storage
JD36682-10.4	Prashant Shukla	GCMS1C	12/16/21 18:11	Load on Instrument
JD36682-10.4	GCMS1C	Prashant Shukla	12/20/21 12:46	Unload from Instrument
JD36682-10.4	Prashant Shukla		12/20/21 12:47	Depleted
JD36682-10.5	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage
JD36682-11.1	Tyler Strong	Secured Storage	12/13/21 23:11	Return to Storage
JD36682-11.1	Tyler Strong	Secured Staging Area	12/14/21 21:59	Return to Storage
stage				
JD36682-11.1	Secured Staging Area	Ellen Dondeo	12/15/21 07:59	Retrieve from Storage
JD36682-11.1	Ellen Dondeo	Secured Storage	12/16/21 16:35	Return to Storage
JD36682-11.1	Secured Storage	Joshua Reitan	12/16/21 20:54	Retrieve from Storage
JD36682-11.1	Joshua Reitan	Secured Staging Area	12/16/21 20:54	Return to Storage
JD36682-11.1	Secured Staging Area	Ellen Dondeo	12/17/21 09:01	Retrieve from Storage
JD36682-11.1	Ellen Dondeo	Secured Storage	12/18/21 07:30	Return to Storage
JD36682-11.1	Secured Storage	Dave Hunkele	12/21/21 10:48	Retrieve from Storage
JD36682-11.1	Dave Hunkele	Secured Staging Area	12/21/21 10:49	Return to Storage
JD36682-11.1	Secured Staging Area	Alyssa Koshy	12/21/21 10:58	Retrieve from Storage
JD36682-11.1	Alyssa Koshy	Secured Storage	12/21/21 13:44	Return to Storage
JD36682-11.1	Tyler Strong	Secured Staging Area	12/21/21 22:33	Return to Storage
stage				
JD36682-11.1	Secured Staging Area	Taylor Sauter	12/22/21 07:21	Retrieve from Storage
JD36682-11.1	Taylor Sauter	Secured Storage	12/22/21 15:22	Return to Storage
JD36682-11.1.1	Ellen Dondeo	Organics Prep	12/15/21 08:36	Extract from JD36682-11.1
JD36682-11.1.1	Organics Prep	Christopher Sowa	12/16/21 03:31	Extract from JD36682-11.1
JD36682-11.1.1	Christopher Sowa	Extract Storage	12/16/21 03:31	Return to Storage
JD36682-11.1.2	Ellen Dondeo	Organics Prep	12/17/21 09:21	Extract from JD36682-11.1
JD36682-11.1.2	Organics Prep	Shannon OMara	12/17/21 21:28	Extract from JD36682-11.1
JD36682-11.1.2	Shannon OMara	Extract Storage	12/17/21 21:29	Return to Storage
JD36682-11.1.2	Extract Storage	Christine Phillips	12/23/21 04:26	Retrieve from Storage
JD36682-11.1.2	Christine Phillips	GC1G	12/23/21 04:26	Load on Instrument
JD36682-11.1.3	Alyssa Koshy	Metals Digestion	12/21/21 11:44	Digestate from JD36682-11.1
JD36682-11.1.3	Metals Digestion	Alyssa Koshy	12/21/21 11:45	Digestate from JD36682-11.1
JD36682-11.1.3	Alyssa Koshy	Metals Digestate Storage	12/21/21 11:45	Return to Storage
JD36682-11.1.4	Taylor Sauter	Organics Prep	12/22/21 07:58	Extract from JD36682-11.1
JD36682-11.1.4	Organics Prep	Christopher Sowa	12/23/21 04:18	Extract from JD36682-11.1
JD36682-11.1.4	Christopher Sowa	GCMSF	12/23/21 08:29	Load on Instrument
JD36682-11.1.4	GCMSF	Kristi Schollenberger	12/27/21 18:12	Unload from Instrument
JD36682-11.1.4	Kristi Schollenberger	Extract Freezer	12/27/21 18:12	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/13/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36682-11.2	Tyler Strong	Secured Storage	12/13/21 23:17	Return to Storage
JD36682-11.2	Secured Storage	Benjamin Gaines	12/14/21 10:11	Retrieve from Storage
JD36682-11.2	Benjamin Gaines	Secured Staging Area	12/14/21 10:11	Return to Storage
JD36682-11.2	Secured Staging Area	Benjamin Gaines	12/14/21 10:13	Retrieve from Storage
JD36682-11.2	Benjamin Gaines	Secured Storage	12/14/21 12:24	Return to Storage
JD36682-11.2	Secured Storage	Joshua Reitan	12/17/21 00:10	Retrieve from Storage
JD36682-11.2	Joshua Reitan	Secured Staging Area	12/17/21 00:10	Return to Storage
JD36682-11.2	Secured Staging Area	Ellen Dondeo	12/17/21 08:54	Retrieve from Storage
JD36682-11.2	Ellen Dondeo	Secured Storage	12/18/21 07:30	Return to Storage
JD36682-11.2.1	Ellen Dondeo	Organics Prep	12/17/21 09:21	Extract from JD36682-11.2
JD36682-11.2.1	Organics Prep	Shannon OMara	12/17/21 21:28	Extract from JD36682-11.2
JD36682-11.2.1	Shannon OMara	Extract Storage	12/17/21 21:29	Return to Storage
JD36682-11.2.1	Extract Storage	Christine Phillips	12/23/21 04:26	Retrieve from Storage
JD36682-11.2.1	Christine Phillips	GC1G	12/23/21 04:26	Load on Instrument
JD36682-11.3	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage
JD36682-11.4	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage
JD36682-11.4	Secured Storage	Prashant Shukla	12/16/21 18:11	Retrieve from Storage
JD36682-11.4	Prashant Shukla	GCMS1C	12/16/21 18:11	Load on Instrument
JD36682-11.4	GCMS1C	Prashant Shukla	12/20/21 12:46	Unload from Instrument
JD36682-11.4	Prashant Shukla		12/20/21 12:47	Depleted
JD36682-11.5	Aleandi Rodriguez	Secured Storage	12/13/21 23:27	Return to Storage

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7273-MB	3A167534.D	1	12/23/21	BK	n/a	n/a	V3A7273

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries		Limits
17647-74-4	1,4-Dioxane-D8	90%	39-174%

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C7979-MB	1C183202.D	1	12/16/21	PS	n/a	n/a	V1C7979

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.1	ug/kg	
71-43-2	Benzene	ND	0.50	0.46	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.55	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	5.0	1.4	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.76	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.41	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.43	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.50	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.62	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.46	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.59	ug/kg	
67-66-3	Chloroform	ND	2.0	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.0	2.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	2.0	0.54	ug/kg	
106-43-4	p-Chlorotoluene	ND	2.0	0.44	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.56	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.55	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.61	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.47	ug/kg	
142-28-9	1,3-Dichloropropane	ND	2.0	0.52	ug/kg	
594-20-7	2,2-Dichloropropane	ND	2.0	0.43	ug/kg	
563-58-6	1,1-Dichloropropene	ND	2.0	0.47	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C7979-MB	1C183202.D	1	12/16/21	PS	n/a	n/a	V1C7979

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
123-91-1	1,4-Dioxane	ND	130	37	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.45	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	0.66	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.1	ug/kg	
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2.0	0.40	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.3	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.53	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.6	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.5	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.47	ug/kg	
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	25	4.6	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.58	ug/kg	
109-99-9	Tetrahydrofuran	ND	10	3.0	ug/kg	
108-88-3	Toluene	ND	1.0	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.55	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.76	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.68	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.56	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.50	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.43	ug/kg	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.48	ug/kg	
	m,p-Xylene	ND	1.0	0.90	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.46	ug/kg	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C7979-MB	1C183202.D	1	12/16/21	PS	n/a	n/a	V1C7979

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-9, JD36682-10, JD36682-11

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	72-130%
17060-07-0	1,2-Dichloroethane-D4	103%	75-131%
2037-26-5	Toluene-D8	101%	81-121%
460-00-4	4-Bromofluorobenzene	100%	60-141%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10113-MB	L336242.D	1	12/21/21	JS	n/a	n/a	VL10113

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane [a]	ND	0.50	0.41	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.47	ug/l	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10113-MB	L336242.D	1	12/21/21	JS	n/a	n/a	VL10113

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane [a]	ND	0.50	0.17	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10113-MB	L336242.D	1	12/21/21	JS	n/a	n/a	VL10113

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	80-120%
17060-07-0	1,2-Dichloroethane-D4	110%	80-120%
2037-26-5	Toluene-D8	97%	80-120%
460-00-4	4-Bromofluorobenzene	104%	82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) MDL from current instrument.

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C7983-MB	1C183313.D	1	12/21/21	PS	n/a	n/a	V1C7983

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-7, JD36682-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.1	ug/kg	
71-43-2	Benzene	ND	0.50	0.46	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.55	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	5.0	1.4	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.76	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.41	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.43	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.50	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.62	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.46	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.59	ug/kg	
67-66-3	Chloroform	ND	2.0	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.0	2.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	2.0	0.54	ug/kg	
106-43-4	p-Chlorotoluene	ND	2.0	0.44	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.56	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.55	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.61	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.47	ug/kg	
142-28-9	1,3-Dichloropropane	ND	2.0	0.52	ug/kg	
594-20-7	2,2-Dichloropropane	ND	2.0	0.43	ug/kg	
563-58-6	1,1-Dichloropropene	ND	2.0	0.47	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C7983-MB	1C183313.D	1	12/21/21	PS	n/a	n/a	V1C7983

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-7, JD36682-8

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
123-91-1	1,4-Dioxane	ND	130	37	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.45	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	0.66	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.1	ug/kg	
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2.0	0.40	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.3	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.53	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.6	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.5	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.47	ug/kg	
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	25	4.6	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.58	ug/kg	
109-99-9	Tetrahydrofuran	ND	10	3.0	ug/kg	
108-88-3	Toluene	ND	1.0	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.55	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.76	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.68	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.56	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.50	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.43	ug/kg	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.48	ug/kg	
	m,p-Xylene	ND	1.0	0.90	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.46	ug/kg	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C7983-MB	1C183313.D	1	12/21/21	PS	n/a	n/a	V1C7983

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-7, JD36682-8

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	72-130%
17060-07-0	1,2-Dichloroethane-D4	98%	75-131%
2037-26-5	Toluene-D8	101%	81-121%
460-00-4	4-Bromofluorobenzene	99%	60-141%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7273-BS	3A167533.D	1	12/23/21	BK	n/a	n/a	V3A7273

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
123-91-1	1,4-Dioxane	20	17.3	87	61-125

CAS No.	Surrogate Recoveries	BSP	Limits
17647-74-4	1,4-Dioxane-D8	94%	39-174%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C7979-BS	1C183200.D	1	12/16/21	PS	n/a	n/a	V1C7979

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	200	145	73	67-130
71-43-2	Benzene	50	56.0	112	80-115
108-86-1	Bromobenzene	50	53.9	108	80-116
74-97-5	Bromochloromethane	50	49.5	99	82-121
75-27-4	Bromodichloromethane	50	52.2	104	83-121
75-25-2	Bromoform	50	48.8	98	80-141
74-83-9	Bromomethane	50	48.9	98	56-146
78-93-3	2-Butanone (MEK)	200	196	98	72-134
104-51-8	n-Butylbenzene	50	56.1	112	73-124
135-98-8	sec-Butylbenzene	50	55.3	111	73-121
98-06-6	tert-Butylbenzene	50	55.4	111	74-122
75-15-0	Carbon disulfide	50	58.7	117	65-125
56-23-5	Carbon tetrachloride	50	55.9	112	75-126
108-90-7	Chlorobenzene	50	53.6	107	81-115
75-00-3	Chloroethane	50	58.7	117	72-133
67-66-3	Chloroform	50	52.1	104	75-114
74-87-3	Chloromethane	50	54.7	109	57-135
95-49-8	o-Chlorotoluene	50	52.3	105	78-117
106-43-4	p-Chlorotoluene	50	54.6	109	77-114
96-12-8	1,2-Dibromo-3-chloropropane	50	46.8	94	72-129
124-48-1	Dibromochloromethane	50	51.1	102	82-133
106-93-4	1,2-Dibromoethane	50	52.2	104	81-126
95-50-1	1,2-Dichlorobenzene	50	51.5	103	83-114
541-73-1	1,3-Dichlorobenzene	50	52.0	104	81-112
106-46-7	1,4-Dichlorobenzene	50	50.3	101	79-113
75-71-8	Dichlorodifluoromethane	50	49.1	98	50-150
75-34-3	1,1-Dichloroethane	50	63.5	127* [a]	75-120
107-06-2	1,2-Dichloroethane	50	51.0	102	72-117
75-35-4	1,1-Dichloroethene	50	53.3	107	69-124
156-59-2	cis-1,2-Dichloroethene	50	51.9	104	73-119
156-60-5	trans-1,2-Dichloroethene	50	53.3	107	70-123
78-87-5	1,2-Dichloropropane	50	60.8	122* [a]	80-118
142-28-9	1,3-Dichloropropane	50	54.7	109	81-116
594-20-7	2,2-Dichloropropane	50	55.0	110	74-126
563-58-6	1,1-Dichloropropene	50	57.7	115	75-119
10061-01-5	cis-1,3-Dichloropropene	50	56.3	113	83-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C7979-BS	1C183200.D	1	12/16/21	PS	n/a	n/a	V1C7979

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	55.4	111	83-125
123-91-1	1,4-Dioxane	1250	1400	112	71-136
100-41-4	Ethylbenzene	50	54.0	108	80-114
87-68-3	Hexachlorobutadiene	50	57.6	115	71-125
591-78-6	2-Hexanone	200	188	94	77-126
98-82-8	Isopropylbenzene	50	53.7	107	76-121
99-87-6	p-Isopropyltoluene	50	54.3	109	74-122
1634-04-4	Methyl Tert Butyl Ether	50	53.5	107	76-127
108-10-1	4-Methyl-2-pentanone(MIBK)	200	193	97	75-129
74-95-3	Methylene bromide	50	50.7	101	83-119
75-09-2	Methylene chloride	50	50.9	102	71-120
91-20-3	Naphthalene	50	47.2	94	73-131
103-65-1	n-Propylbenzene	50	55.2	110	74-116
100-42-5	Styrene	50	52.8	106	83-118
75-65-0	Tert Butyl Alcohol	250	268	107	77-123
630-20-6	1,1,1,2-Tetrachloroethane	50	52.4	105	82-128
79-34-5	1,1,2,2-Tetrachloroethane	50	50.1	100	76-120
127-18-4	Tetrachloroethene	50	54.2	108	75-125
109-99-9	Tetrahydrofuran	50	44.1	88	64-127
108-88-3	Toluene	50	54.6	109	79-115
87-61-6	1,2,3-Trichlorobenzene	50	52.1	104	75-131
120-82-1	1,2,4-Trichlorobenzene	50	53.6	107	76-130
71-55-6	1,1,1-Trichloroethane	50	55.5	111	77-122
79-00-5	1,1,2-Trichloroethane	50	52.2	104	82-119
79-01-6	Trichloroethene	50	54.4	109	82-119
75-69-4	Trichlorofluoromethane	50	55.2	110	70-134
96-18-4	1,2,3-Trichloropropane	50	49.2	98	80-118
95-63-6	1,2,4-Trimethylbenzene	50	53.4	107	77-116
108-67-8	1,3,5-Trimethylbenzene	50	54.3	109	76-118
108-05-4	Vinyl Acetate	50	53.7	107	75-124
75-01-4	Vinyl chloride	50	54.9	110	60-139
	m,p-Xylene	100	105	105	81-115
95-47-6	o-Xylene	50	52.9	106	82-117

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C7979-BS	1C183200.D	1	12/16/21	PS	n/a	n/a	V1C7979

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-9, JD36682-10, JD36682-11

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	72-130%
17060-07-0	1,2-Dichloroethane-D4	102%	75-131%
2037-26-5	Toluene-D8	102%	81-121%
460-00-4	4-Bromofluorobenzene	102%	60-141%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10113-BS	L336240.D	1	12/21/21	JS	n/a	n/a	VL10113

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	174	87	27-175
71-43-2	Benzene	50	46.5	93	80-115
108-86-1	Bromobenzene	50	46.8	94	79-119
74-97-5	Bromochloromethane	50	45.0	90	83-122
75-27-4	Bromodichloromethane	50	49.8	100	82-119
75-25-2	Bromoform	50	52.6	105	77-135
74-83-9	Bromomethane	50	50.8	102	40-162
78-93-3	2-Butanone (MEK)	200	252	126	61-150
104-51-8	n-Butylbenzene	50	48.0	96	77-124
135-98-8	sec-Butylbenzene	50	46.0	92	75-121
98-06-6	tert-Butylbenzene	50	44.4	89	74-120
75-15-0	Carbon disulfide	50	42.5	85	64-130
56-23-5	Carbon tetrachloride	50	49.6	99	75-127
108-90-7	Chlorobenzene	50	43.7	87	80-115
75-00-3	Chloroethane	50	54.1	108	56-144
67-66-3	Chloroform	50	53.4	107	75-116
74-87-3	Chloromethane	50	46.7	93	41-153
95-49-8	o-Chlorotoluene	50	45.0	90	79-119
106-43-4	p-Chlorotoluene	50	48.8	98	77-117
96-12-8	1,2-Dibromo-3-chloropropane	50	63.6	127	69-134
124-48-1	Dibromochloromethane	50	49.2	98	81-123
106-93-4	1,2-Dibromoethane	50	47.9	96	67-138
95-50-1	1,2-Dichlorobenzene	50	46.6	93	81-117
541-73-1	1,3-Dichlorobenzene	50	47.3	95	81-115
106-46-7	1,4-Dichlorobenzene	50	46.1	92	80-114
75-71-8	Dichlorodifluoromethane	50	50.5	101	43-152
75-34-3	1,1-Dichloroethane	50	47.9	96	75-125
107-06-2	1,2-Dichloroethane	50	47.1	94	73-117
75-35-4	1,1-Dichloroethene	50	45.9	92	70-124
156-59-2	cis-1,2-Dichloroethene	50	46.8	94	80-120
156-60-5	trans-1,2-Dichloroethene	50	46.5	93	77-121
78-87-5	1,2-Dichloropropane	50	49.5	99	79-121
142-28-9	1,3-Dichloropropane	50	47.1	94	81-117
594-20-7	2,2-Dichloropropane	50	48.4	97	70-131
563-58-6	1,1-Dichloropropene	50	45.2	90	77-122
10061-01-5	cis-1,3-Dichloropropene	50	49.0	98	83-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10113-BS	L336240.D	1	12/21/21	JS	n/a	n/a	VL10113

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	48.6	97	83-122
100-41-4	Ethylbenzene	50	43.5	87	78-116
87-68-3	Hexachlorobutadiene	50	48.9	98	55-136
591-78-6	2-Hexanone	200	229	115	66-136
98-82-8	Isopropylbenzene	50	43.8	88	78-121
99-87-6	p-Isopropyltoluene	50	45.2	90	78-121
1634-04-4	Methyl Tert Butyl Ether	50	47.2	94	76-123
108-10-1	4-Methyl-2-pentanone(MIBK)	200	256	128	73-134
74-95-3	Methylene bromide	50	49.7	99	82-117
75-09-2	Methylene chloride	50	46.6	93	73-123
91-20-3	Naphthalene	50	55.7	111	64-136
103-65-1	n-Propylbenzene	50	45.1	90	75-121
100-42-5	Styrene	50	43.4	87	81-125
75-65-0	Tert Butyl Alcohol	250	201	80	75-123
630-20-6	1,1,1,2-Tetrachloroethane	50	46.7	93	81-124
79-34-5	1,1,2,2-Tetrachloroethane	50	55.3	111	73-126
127-18-4	Tetrachloroethene	50	42.9	86	73-119
109-99-9	Tetrahydrofuran	50	64.5	129	63-133
108-88-3	Toluene	50	41.6	83	79-116
87-61-6	1,2,3-Trichlorobenzene	50	48.7	97	63-137
120-82-1	1,2,4-Trichlorobenzene	50	51.1	102	68-135
71-55-6	1,1,1-Trichloroethane	50	48.1	96	76-124
79-00-5	1,1,2-Trichloroethane	50	47.8	96	83-117
79-01-6	Trichloroethene	50	49.1	98	80-118
75-69-4	Trichlorofluoromethane	50	50.7	101	67-134
96-18-4	1,2,3-Trichloropropane	50	54.7	109	75-123
95-63-6	1,2,4-Trimethylbenzene	50	44.3	89	78-120
108-67-8	1,3,5-Trimethylbenzene	50	45.7	91	77-120
108-05-4	Vinyl Acetate	50	57.1	114	54-177
75-01-4	Vinyl chloride	50	45.4	91	52-146
	m,p-Xylene	100	84.6	85	79-119
95-47-6	o-Xylene	50	44.1	88	81-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10113-BS	L336240.D	1	12/21/21	JS	n/a	n/a	VL10113

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	103%	80-120%
2037-26-5	Toluene-D8	91%	80-120%
460-00-4	4-Bromofluorobenzene	105%	82-114%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C7983-BS	1C183311.D	1	12/21/21	PS	n/a	n/a	V1C7983

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-7, JD36682-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	200	191	96	67-130
71-43-2	Benzene	50	47.0	94	80-115
108-86-1	Bromobenzene	50	44.7	89	80-116
74-97-5	Bromochloromethane	50	44.0	88	82-121
75-27-4	Bromodichloromethane	50	44.7	89	83-121
75-25-2	Bromoform	50	44.2	88	80-141
74-83-9	Bromomethane	50	44.9	90	56-146
78-93-3	2-Butanone (MEK)	200	203	102	72-134
104-51-8	n-Butylbenzene	50	44.5	89	73-124
135-98-8	sec-Butylbenzene	50	43.4	87	73-121
98-06-6	tert-Butylbenzene	50	43.0	86	74-122
75-15-0	Carbon disulfide	50	46.8	94	65-125
56-23-5	Carbon tetrachloride	50	46.5	93	75-126
108-90-7	Chlorobenzene	50	44.1	88	81-115
75-00-3	Chloroethane	50	50.4	101	72-133
67-66-3	Chloroform	50	44.2	88	75-114
74-87-3	Chloromethane	50	48.0	96	57-135
95-49-8	o-Chlorotoluene	50	41.4	83	78-117
106-43-4	p-Chlorotoluene	50	43.8	88	77-114
96-12-8	1,2-Dibromo-3-chloropropane	50	44.3	89	72-129
124-48-1	Dibromochloromethane	50	44.3	89	82-133
106-93-4	1,2-Dibromoethane	50	46.8	94	81-126
95-50-1	1,2-Dichlorobenzene	50	42.7	85	83-114
541-73-1	1,3-Dichlorobenzene	50	42.7	85	81-112
106-46-7	1,4-Dichlorobenzene	50	42.1	84	79-113
75-71-8	Dichlorodifluoromethane	50	42.5	85	50-150
75-34-3	1,1-Dichloroethane	50	53.3	107	75-120
107-06-2	1,2-Dichloroethane	50	44.7	89	72-117
75-35-4	1,1-Dichloroethene	50	43.5	87	69-124
156-59-2	cis-1,2-Dichloroethene	50	43.8	88	73-119
156-60-5	trans-1,2-Dichloroethene	50	44.4	89	70-123
78-87-5	1,2-Dichloropropane	50	51.5	103	80-118
142-28-9	1,3-Dichloropropane	50	48.5	97	81-116
594-20-7	2,2-Dichloropropane	50	45.5	91	74-126
563-58-6	1,1-Dichloropropene	50	48.2	96	75-119
10061-01-5	cis-1,3-Dichloropropene	50	47.9	96	83-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C7983-BS	1C183311.D	1	12/21/21	PS	n/a	n/a	V1C7983

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-7, JD36682-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	48.2	96	83-125
123-91-1	1,4-Dioxane	1250	1150	92	71-136
100-41-4	Ethylbenzene	50	43.8	88	80-114
87-68-3	Hexachlorobutadiene	50	47.0	94	71-125
591-78-6	2-Hexanone	200	192	96	77-126
98-82-8	Isopropylbenzene	50	43.3	87	76-121
99-87-6	p-Isopropyltoluene	50	43.9	88	74-122
1634-04-4	Methyl Tert Butyl Ether	50	48.5	97	76-127
108-10-1	4-Methyl-2-pentanone(MIBK)	200	194	97	75-129
74-95-3	Methylene bromide	50	45.5	91	83-119
75-09-2	Methylene chloride	50	43.8	88	71-120
91-20-3	Naphthalene	50	43.3	87	73-131
103-65-1	n-Propylbenzene	50	44.0	88	74-116
100-42-5	Styrene	50	43.7	87	83-118
75-65-0	Tert Butyl Alcohol	250	221	88	77-123
630-20-6	1,1,1,2-Tetrachloroethane	50	44.4	89	82-128
79-34-5	1,1,2,2-Tetrachloroethane	50	45.6	91	76-120
127-18-4	Tetrachloroethene	50	43.9	88	75-125
109-99-9	Tetrahydrofuran	50	46.5	93	64-127
108-88-3	Toluene	50	45.7	91	79-115
87-61-6	1,2,3-Trichlorobenzene	50	44.9	90	75-131
120-82-1	1,2,4-Trichlorobenzene	50	44.4	89	76-130
71-55-6	1,1,1-Trichloroethane	50	46.0	92	77-122
79-00-5	1,1,2-Trichloroethane	50	46.0	92	82-119
79-01-6	Trichloroethene	50	45.4	91	82-119
75-69-4	Trichlorofluoromethane	50	47.3	95	70-134
96-18-4	1,2,3-Trichloropropane	50	45.5	91	80-118
95-63-6	1,2,4-Trimethylbenzene	50	43.0	86	77-116
108-67-8	1,3,5-Trimethylbenzene	50	43.1	86	76-118
108-05-4	Vinyl Acetate	50	49.4	99	75-124
75-01-4	Vinyl chloride	50	48.0	96	60-139
	m,p-Xylene	100	86.9	87	81-115
95-47-6	o-Xylene	50	43.9	88	82-117

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1C7983-BS	1C183311.D	1	12/21/21	PS	n/a	n/a	V1C7983

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-7, JD36682-8

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	72-130%
17060-07-0	1,2-Dichloroethane-D4	105%	75-131%
2037-26-5	Toluene-D8	100%	81-121%
460-00-4	4-Bromofluorobenzene	98%	60-141%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36682-2MS	3A167547.D	1	12/23/21	BK	n/a	n/a	V3A7273
JD36682-2	3A167540.D	1	12/23/21	BK	n/a	n/a	V3A7273

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	JD36682-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
123-91-1	1,4-Dioxane	3.6		20	19.8	81	36-157

CAS No.	Surrogate Recoveries	MS	JD36682-2	Limits
17647-74-4	1,4-Dioxane-D8	115%	127%	39-174%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36688-1MS	1C183210.D	1	12/16/21	PS	n/a	n/a	V1C7979
JD36688-1	1C183204.D	1	12/16/21	PS	n/a	n/a	V1C7979

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	JD36688-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	9.6	J	192	143	70	31-142
71-43-2	Benzene	ND		48	49.0	102	62-126
108-86-1	Bromobenzene	ND		48	41.4	86	56-126
74-97-5	Bromochloromethane	ND		48	44.0	92	68-125
75-27-4	Bromodichloromethane	ND		48	45.9	96	63-132
75-25-2	Bromoform	ND		48	41.2	86	59-138
74-83-9	Bromomethane	ND		48	40.6	85	13-164
78-93-3	2-Butanone (MEK)	ND		192	178	93	51-135
104-51-8	n-Butylbenzene	ND		48	33.5	70	23-148
135-98-8	sec-Butylbenzene	ND		48	38.6	80	34-142
98-06-6	tert-Butylbenzene	ND		48	41.2	86	46-136
75-15-0	Carbon disulfide	ND		48	44.4	93	49-134
56-23-5	Carbon tetrachloride	ND		48	47.9	100	60-133
108-90-7	Chlorobenzene	ND		48	42.9	89	58-126
75-00-3	Chloroethane	ND		48	48.8	102	18-165
67-66-3	Chloroform	ND		48	47.0	98	60-125
74-87-3	Chloromethane	ND		48	48.0	100	43-145
95-49-8	o-Chlorotoluene	ND		48	39.7	83	53-128
106-43-4	p-Chlorotoluene	ND		48	39.0	81	49-126
96-12-8	1,2-Dibromo-3-chloropropane	ND		48	38.5	80	43-133
124-48-1	Dibromochloromethane	ND		48	43.9	92	68-131
106-93-4	1,2-Dibromoethane	ND		48	42.6	89	63-127
95-50-1	1,2-Dichlorobenzene	0.91	J	48	38.1	78	46-130
541-73-1	1,3-Dichlorobenzene	0.56	J	48	36.0	74	45-129
106-46-7	1,4-Dichlorobenzene	0.77	J	48	35.3	72	43-129
75-71-8	Dichlorodifluoromethane	ND		48	40.8	85	35-157
75-34-3	1,1-Dichloroethane	ND		48	56.3	117	63-130
107-06-2	1,2-Dichloroethane	ND		48	45.5	95	61-118
75-35-4	1,1-Dichloroethene	ND		48	44.7	93	55-135
156-59-2	cis-1,2-Dichloroethene	ND		48	44.1	92	55-131
156-60-5	trans-1,2-Dichloroethene	ND		48	42.7	89	54-135
78-87-5	1,2-Dichloropropane	ND		48	54.1	113	68-123
142-28-9	1,3-Dichloropropane	ND		48	47.4	99	67-119
594-20-7	2,2-Dichloropropane	ND		48	43.5	91	50-131
563-58-6	1,1-Dichloropropene	ND		48	46.5	97	60-129
10061-01-5	cis-1,3-Dichloropropene	ND		48	44.9	94	65-123

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36688-1MS	1C183210.D	1	12/16/21	PS	n/a	n/a	V1C7979
JD36688-1	1C183204.D	1	12/16/21	PS	n/a	n/a	V1C7979

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	JD36688-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
10061-02-6	trans-1,3-Dichloropropene	ND		48	42.9	89	63-128
123-91-1	1,4-Dioxane	ND		1200	1480	123	52-153
100-41-4	Ethylbenzene	ND		48	43.4	91	48-135
87-68-3	Hexachlorobutadiene	ND		48	26.5	55	10-151
591-78-6	2-Hexanone	ND		192	165	86	55-127
98-82-8	Isopropylbenzene	ND		48	41.6	87	46-139
99-87-6	p-Isopropyltoluene	ND		48	38.4	80	36-142
1634-04-4	Methyl Tert Butyl Ether	ND		48	49.8	104	62-128
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		192	178	93	59-125
74-95-3	Methylene bromide	ND		48	43.4	91	68-120
75-09-2	Methylene chloride	ND		48	45.1	94	59-127
91-20-3	Naphthalene	ND		48	33.0	69	10-160
103-65-1	n-Propylbenzene	ND		48	40.1	84	35-140
100-42-5	Styrene	ND		48	41.3	86	52-136
75-65-0	Tert Butyl Alcohol	ND		240	302	126	63-136
630-20-6	1,1,1,2-Tetrachloroethane	ND		48	46.0	96	68-132
79-34-5	1,1,2,2-Tetrachloroethane	ND		48	42.8	89	53-127
127-18-4	Tetrachloroethene	ND		48	41.1	86	50-138
109-99-9	Tetrahydrofuran	ND		48	36.6	76	47-127
108-88-3	Toluene	ND		48	45.2	94	57-129
87-61-6	1,2,3-Trichlorobenzene	5.6		48	30.1	51	13-152
120-82-1	1,2,4-Trichlorobenzene	3.5	J	48	29.2	54	15-153
71-55-6	1,1,1-Trichloroethane	ND		48	47.9	100	60-134
79-00-5	1,1,2-Trichloroethane	ND		48	45.2	94	56-137
79-01-6	Trichloroethene	ND		48	44.4	93	52-144
75-69-4	Trichlorofluoromethane	ND		48	46.0	96	48-144
96-18-4	1,2,3-Trichloropropane	ND		48	42.3	88	57-126
95-63-6	1,2,4-Trimethylbenzene	ND		48	40.9	85	38-137
108-67-8	1,3,5-Trimethylbenzene	ND		48	41.3	86	39-139
108-05-4	Vinyl Acetate	ND		48	2.8	6* [a]	17-143
75-01-4	Vinyl chloride	ND		48	45.5	95	44-152
	m,p-Xylene	1.2		95.9	85.1	87	53-130
95-47-6	o-Xylene	0.58	J	48	43.7	90	52-135

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36688-1MS	1C183210.D	1	12/16/21	PS	n/a	n/a	V1C7979
JD36688-1	1C183204.D	1	12/16/21	PS	n/a	n/a	V1C7979

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-9, JD36682-10, JD36682-11

CAS No.	Surrogate Recoveries	MS	JD36688-1	Limits
1868-53-7	Dibromofluoromethane	103%	103%	72-130%
17060-07-0	1,2-Dichloroethane-D4	103%	113%	75-131%
2037-26-5	Toluene-D8	101%	102%	81-121%
460-00-4	4-Bromofluorobenzene	101%	103%	60-141%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36756-7MS	1C183319.D	1	12/21/21	PS	n/a	n/a	V1C7983
JD36756-7	1C183315.D	1	12/21/21	PS	n/a	n/a	V1C7983

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-7, JD36682-8

CAS No.	Compound	JD36756-7 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	ND		258	193	75	31-142
71-43-2	Benzene	ND		64.5	69.4	108	62-126
108-86-1	Bromobenzene	ND		64.5	50.9	79	56-126
74-97-5	Bromochloromethane	ND		64.5	61.5	95	68-125
75-27-4	Bromodichloromethane	ND		64.5	62.1	96	63-132
75-25-2	Bromoform	ND		64.5	50.8	79	59-138
74-83-9	Bromomethane	ND		64.5	65.2	101	13-164
78-93-3	2-Butanone (MEK)	ND		258	232	90	51-135
104-51-8	n-Butylbenzene	ND		64.5	31.9	49	23-148
135-98-8	sec-Butylbenzene	ND		64.5	36.1	56	34-142
98-06-6	tert-Butylbenzene	ND		64.5	40.4	63	46-136
75-15-0	Carbon disulfide	0.98	J	64.5	70.1	107	49-134
56-23-5	Carbon tetrachloride	ND		64.5	64.6	100	60-133
108-90-7	Chlorobenzene	ND		64.5	54.7	85	58-126
75-00-3	Chloroethane	ND		64.5	77.3	120	18-165
67-66-3	Chloroform	ND		64.5	65.0	101	60-125
74-87-3	Chloromethane	ND		64.5	74.0	115	43-145
95-49-8	o-Chlorotoluene	ND		64.5	43.5	67	53-128
106-43-4	p-Chlorotoluene	ND		64.5	45.3	70	49-126
96-12-8	1,2-Dibromo-3-chloropropane	ND		64.5	43.7	68	43-133
124-48-1	Dibromochloromethane	ND		64.5	56.5	88	68-131
106-93-4	1,2-Dibromoethane	ND		64.5	58.2	90	63-127
95-50-1	1,2-Dichlorobenzene	ND		64.5	39.6	61	46-130
541-73-1	1,3-Dichlorobenzene	ND		64.5	39.9	62	45-129
106-46-7	1,4-Dichlorobenzene	ND		64.5	39.4	61	43-129
75-71-8	Dichlorodifluoromethane	ND		64.5	63.7	99	35-157
75-34-3	1,1-Dichloroethane	ND		64.5	79.9	124	63-130
107-06-2	1,2-Dichloroethane	ND		64.5	62.4	97	61-118
75-35-4	1,1-Dichloroethene	ND		64.5	67.3	104	55-135
156-59-2	cis-1,2-Dichloroethene	ND		64.5	64.6	100	55-131
156-60-5	trans-1,2-Dichloroethene	ND		64.5	67.0	104	54-135
78-87-5	1,2-Dichloropropane	ND		64.5	73.8	114	68-123
142-28-9	1,3-Dichloropropane	ND		64.5	63.2	98	67-119
594-20-7	2,2-Dichloropropane	ND		64.5	62.0	96	50-131
563-58-6	1,1-Dichloropropene	ND		64.5	65.5	102	60-129
10061-01-5	cis-1,3-Dichloropropene	ND		64.5	64.1	99	65-123

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36756-7MS	1C183319.D	1	12/21/21	PS	n/a	n/a	V1C7983
JD36756-7	1C183315.D	1	12/21/21	PS	n/a	n/a	V1C7983

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-7, JD36682-8

CAS No.	Compound	JD36756-7 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
10061-02-6	trans-1,3-Dichloropropene	ND		64.5	61.4	95	63-128
123-91-1	1,4-Dioxane	ND		1610	1800	112	52-153
100-41-4	Ethylbenzene	ND		64.5	53.4	83	48-135
87-68-3	Hexachlorobutadiene	ND		64.5	21.8	34	10-151
591-78-6	2-Hexanone	ND		258	214	83	55-127
98-82-8	Isopropylbenzene	ND		64.5	45.3	70	46-139
99-87-6	p-Isopropyltoluene	ND		64.5	36.4	56	36-142
1634-04-4	Methyl Tert Butyl Ether	ND		64.5	64.3	100	62-128
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		258	226	88	59-125
74-95-3	Methylene bromide	ND		64.5	60.7	94	68-120
75-09-2	Methylene chloride	ND		64.5	64.1	99	59-127
91-20-3	Naphthalene	ND		64.5	29.9	46	10-160
103-65-1	n-Propylbenzene	ND		64.5	43.6	68	35-140
100-42-5	Styrene	ND		64.5	50.4	78	52-136
75-65-0	Tert Butyl Alcohol	ND		322	352	109	63-136
630-20-6	1,1,1,2-Tetrachloroethane	ND		64.5	56.3	87	68-132
79-34-5	1,1,2,2-Tetrachloroethane	ND		64.5	50.9	79	53-127
127-18-4	Tetrachloroethene	ND		64.5	50.6	78	50-138
109-99-9	Tetrahydrofuran	ND		64.5	51.1	79	47-127
108-88-3	Toluene	ND		64.5	60.9	94	57-129
87-61-6	1,2,3-Trichlorobenzene	ND		64.5	25.0	39	13-152
120-82-1	1,2,4-Trichlorobenzene	ND		64.5	27.0	42	15-153
71-55-6	1,1,1-Trichloroethane	ND		64.5	66.8	104	60-134
79-00-5	1,1,2-Trichloroethane	ND		64.5	59.9	93	56-137
79-01-6	Trichloroethene	ND		64.5	62.9	98	52-144
75-69-4	Trichlorofluoromethane	ND		64.5	68.8	107	48-144
96-18-4	1,2,3-Trichloropropane	ND		64.5	52.2	81	57-126
95-63-6	1,2,4-Trimethylbenzene	ND		64.5	41.9	65	38-137
108-67-8	1,3,5-Trimethylbenzene	ND		64.5	42.5	66	39-139
108-05-4	Vinyl Acetate	ND		64.5	43.7	68	17-143
75-01-4	Vinyl chloride	ND		64.5	75.8	118	44-152
	m,p-Xylene	ND		129	103	80	53-130
95-47-6	o-Xylene	ND		64.5	51.5	80	52-135

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36756-7MS	1C183319.D	1	12/21/21	PS	n/a	n/a	V1C7983
JD36756-7	1C183315.D	1	12/21/21	PS	n/a	n/a	V1C7983

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-7, JD36682-8

CAS No.	Surrogate Recoveries	MS	JD36756-7	Limits
1868-53-7	Dibromofluoromethane	104%	103%	72-130%
17060-07-0	1,2-Dichloroethane-D4	102%	105%	75-131%
2037-26-5	Toluene-D8	101%	101%	81-121%
460-00-4	4-Bromofluorobenzene	100%	100%	60-141%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36655-4MS	L336250.D	10	12/21/21	JS	n/a	n/a	VL10113
JD36655-4MSD	L336251.D	10	12/21/21	JS	n/a	n/a	VL10113
JD36655-4 [a]	L336249.D	10	12/21/21	JS	n/a	n/a	VL10113
JD36655-4	L336248.D	100	12/21/21	JS	n/a	n/a	VL10113

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	JD36655-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		2000	1530	77	2000	1600	80	4	22-134/19
71-43-2	Benzene	ND		500	457	91	500	464	93	2	49-137/12
108-86-1	Bromobenzene	ND		500	471	94	500	484	97	3	72-122/13
74-97-5	Bromochloromethane	ND		500	448	90	500	460	92	3	78-122/12
75-27-4	Bromodichloromethane	ND		500	499	100	500	509	102	2	76-121/12
75-25-2	Bromoform	ND		500	539	108	500	545	109	1	70-133/13
74-83-9	Bromomethane	ND		500	483	97	500	565	113	16	27-164/38
78-93-3	2-Butanone (MEK)	ND		2000	2610	131	2000	2680	134	3	52-137/17
104-51-8	n-Butylbenzene	ND		500	496	99	500	504	101	2	70-130/14
135-98-8	sec-Butylbenzene	ND		500	458	92	500	465	93	2	69-127/14
98-06-6	tert-Butylbenzene	ND		500	448	90	500	459	92	2	69-124/14
75-15-0	Carbon disulfide	ND		500	420	84	500	436	87	4	54-136/16
56-23-5	Carbon tetrachloride	ND		500	492	98	500	506	101	3	70-132/13
108-90-7	Chlorobenzene	ND		500	453	91	500	465	93	3	68-123/12
75-00-3	Chloroethane	ND		500	511	102	500	530	106	4	48-152/17
67-66-3	Chloroform	ND		500	523	105	500	545	109	4	68-120/13
74-87-3	Chloromethane	ND		500	445	89	500	464	93	4	35-156/18
95-49-8	o-Chlorotoluene	ND		500	459	92	500	471	94	3	73-123/13
106-43-4	p-Chlorotoluene	ND		500	489	98	500	485	97	1	71-120/13
96-12-8	1,2-Dibromo-3-chloropropane	ND		500	643	129	500	660	132	3	63-134/16
124-48-1	Dibromochloromethane	ND		500	512	102	500	514	103	0	75-122/12
106-93-4	1,2-Dibromoethane	ND		500	501	100	500	517	103	3	63-134/12
95-50-1	1,2-Dichlorobenzene	ND		500	480	96	500	483	97	1	74-119/12
541-73-1	1,3-Dichlorobenzene	ND		500	474	95	500	487	97	3	75-117/12
106-46-7	1,4-Dichlorobenzene	ND		500	463	93	500	476	95	3	72-117/12
75-71-8	Dichlorodifluoromethane	ND		500	476	95	500	503	101	6	34-163/16
75-34-3	1,1-Dichloroethane	ND		500	455	91	500	478	96	5	68-129/13
107-06-2	1,2-Dichloroethane	ND		500	463	93	500	464	93	0	66-120/13
75-35-4	1,1-Dichloroethene	ND		500	439	88	500	465	93	6	59-133/15
156-59-2	cis-1,2-Dichloroethene	2900 [c]		500	2740	-32* [b]	500	2800	-20* [b]	2	52-140/12
156-60-5	trans-1,2-Dichloroethene	18.1		500	454	87	500	485	93	7	70-125/13
78-87-5	1,2-Dichloropropane	ND		500	482	96	500	494	99	2	73-124/12
142-28-9	1,3-Dichloropropane	ND		500	489	98	500	502	100	3	74-117/11
594-20-7	2,2-Dichloropropane	ND		500	436	87	500	457	91	5	62-138/13
563-58-6	1,1-Dichloropropene	ND		500	460	92	500	472	94	3	71-129/13
10061-01-5	cis-1,3-Dichloropropene	ND		500	501	100	500	515	103	3	75-125/13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36655-4MS	L336250.D	10	12/21/21	JS	n/a	n/a	VL10113
JD36655-4MSD	L336251.D	10	12/21/21	JS	n/a	n/a	VL10113
JD36655-4 [a]	L336249.D	10	12/21/21	JS	n/a	n/a	VL10113
JD36655-4	L336248.D	100	12/21/21	JS	n/a	n/a	VL10113

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	JD36655-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		500	499	100	500	513	103	3	75-122/12
100-41-4	Ethylbenzene	ND		500	453	91	500	456	91	1	37-144/12
87-68-3	Hexachlorobutadiene	ND		500	485	97	500	492	98	1	49-141/19
591-78-6	2-Hexanone	ND		2000	2300	115	2000	2350	118	2	56-132/16
98-82-8	Isopropylbenzene	ND		500	457	91	500	459	92	0	71-126/13
99-87-6	p-Isopropyltoluene	ND		500	451	90	500	460	92	2	71-126/13
1634-04-4	Methyl Tert Butyl Ether	ND		500	460	92	500	483	97	5	66-124/12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		2000	2470	124	2000	2570	129	4	65-135/14
74-95-3	Methylene bromide	ND		500	501	100	500	503	101	0	76-116/12
75-09-2	Methylene chloride	ND		500	460	92	500	475	95	3	66-125/14
91-20-3	Naphthalene	ND		500	558	112	500	573	115	3	49-146/18
103-65-1	n-Propylbenzene	ND		500	450	90	500	458	92	2	60-131/14
100-42-5	Styrene	ND		500	459	92	500	469	94	2	71-133/12
75-65-0	Tert Butyl Alcohol	ND		2500	2070	83	2500	2080	83	0	63-133/15
630-20-6	1,1,1,2-Tetrachloroethane	ND		500	497	99	500	500	100	1	75-125/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		500	555	111	500	568	114	2	68-127/14
127-18-4	Tetrachloroethene	ND		500	439	88	500	460	92	5	58-132/13
109-99-9	Tetrahydrofuran	ND		500	624	125	500	700	140* [d]	11	54-134/18
108-88-3	Toluene	ND		500	428	86	500	440	88	3	46-139/12
87-61-6	1,2,3-Trichlorobenzene	ND		500	501	100	500	524	105	4	57-136/17
120-82-1	1,2,4-Trichlorobenzene	ND		500	518	104	500	544	109	5	61-137/16
71-55-6	1,1,1-Trichloroethane	ND		500	472	94	500	496	99	5	67-132/13
79-00-5	1,1,2-Trichloroethane	ND		500	498	100	500	514	103	3	75-120/12
79-01-6	Trichloroethene	243		500	711	94	500	723	96	2	56-136/12
75-69-4	Trichlorofluoromethane	ND		500	500	100	500	514	103	3	61-145/16
96-18-4	1,2,3-Trichloropropane	ND		500	550	110	500	561	112	2	68-124/14
95-63-6	1,2,4-Trimethylbenzene	ND		500	447	89	500	452	90	1	39-147/13
108-67-8	1,3,5-Trimethylbenzene	ND		500	462	92	500	465	93	1	56-136/14
108-05-4	Vinyl Acetate	ND		500	571	114	500	598	120	5	68-167/16
75-01-4	Vinyl chloride	259		500	668	82	500	685	85	3	41-156/16
	m,p-Xylene	ND		1000	890	89	1000	904	90	2	32-151/12
95-47-6	o-Xylene	ND		500	463	93	500	466	93	1	50-139/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36655-4MS	L336250.D	10	12/21/21	JS	n/a	n/a	VL10113
JD36655-4MSD	L336251.D	10	12/21/21	JS	n/a	n/a	VL10113
JD36655-4 [a]	L336249.D	10	12/21/21	JS	n/a	n/a	VL10113
JD36655-4	L336248.D	100	12/21/21	JS	n/a	n/a	VL10113

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Surrogate Recoveries	MS	MSD	JD36655-4	JD36655-4	Limits
1868-53-7	Dibromofluoromethane	104%	106%	102%	102%	80-120%
17060-07-0	1,2-Dichloroethane-D4	102%	103%	110%	110%	80-120%
2037-26-5	Toluene-D8	94%	93%	99%	98%	80-120%
460-00-4	4-Bromofluorobenzene	103%	102%	102%	104%	82-114%

(a) Dilution required due to high concentration of target compound.
(b) Outside control limits due to high level in sample relative to spike amount.
(c) Result is from Run #2.
(d) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36682-3DUP	3A167548.D	1	12/23/21	BK	n/a	n/a	V3A7273
JD36682-3	3A167541.D	1	12/23/21	BK	n/a	n/a	V3A7273

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36682-1, JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	JD36682-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
123-91-1	1,4-Dioxane	3.6		3.7		3	36

CAS No.	Surrogate Recoveries	DUP	JD36682-3	Limits
17647-74-4	1,4-Dioxane-D8	111%	114%	39-174%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36688-2DUP	1C183211.D	1	12/16/21	PS	n/a	n/a	V1C7979
JD36688-2	1C183205.D	1	12/16/21	PS	n/a	n/a	V1C7979

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	JD36688-2 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	108
71-43-2	Benzene	ND		ND		nc	27
108-86-1	Bromobenzene	ND		ND		nc	30
74-97-5	Bromochloromethane	ND		ND		nc	30
75-27-4	Bromodichloromethane	ND		ND		nc	22
75-25-2	Bromoform	ND		ND		nc	30
74-83-9	Bromomethane	ND		ND		nc	6
78-93-3	2-Butanone (MEK)	ND		ND		nc	32
104-51-8	n-Butylbenzene	ND		ND		nc	17
135-98-8	sec-Butylbenzene	ND		ND		nc	17
98-06-6	tert-Butylbenzene	ND		ND		nc	8
75-15-0	Carbon disulfide	ND		ND		nc	31
56-23-5	Carbon tetrachloride	ND		ND		nc	30
108-90-7	Chlorobenzene	ND		ND		nc	30
75-00-3	Chloroethane	ND		ND		nc	0
67-66-3	Chloroform	ND		ND		nc	30
74-87-3	Chloromethane	ND		ND		nc	30
95-49-8	o-Chlorotoluene	ND		ND		nc	30
106-43-4	p-Chlorotoluene	ND		ND		nc	30
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	30
124-48-1	Dibromochloromethane	ND		ND		nc	1
106-93-4	1,2-Dibromoethane	ND		ND		nc	30
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	30
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	30
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	2
75-71-8	Dichlorodifluoromethane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	7
107-06-2	1,2-Dichloroethane	ND		ND		nc	7
75-35-4	1,1-Dichloroethene	ND		ND		nc	10
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	27
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	16
78-87-5	1,2-Dichloropropane	ND		ND		nc	30
142-28-9	1,3-Dichloropropane	ND		ND		nc	30
594-20-7	2,2-Dichloropropane	ND		ND		nc	30
563-58-6	1,1-Dichloropropene	ND		ND		nc	30
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36688-2DUP	1C183211.D	1	12/16/21	PS	n/a	n/a	V1C7979
JD36688-2	1C183205.D	1	12/16/21	PS	n/a	n/a	V1C7979

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	JD36688-2 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	30
123-91-1	1,4-Dioxane	ND		ND		nc	30
100-41-4	Ethylbenzene	ND		ND		nc	36
87-68-3	Hexachlorobutadiene	ND		ND		nc	30
591-78-6	2-Hexanone	ND		ND		nc	30
98-82-8	Isopropylbenzene	ND		ND		nc	13
99-87-6	p-Isopropyltoluene	ND		ND		nc	12
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	30
74-95-3	Methylene bromide	ND		ND		nc	30
75-09-2	Methylene chloride	ND		ND		nc	31
91-20-3	Naphthalene	ND		ND		nc	26
103-65-1	n-Propylbenzene	ND		ND		nc	25
100-42-5	Styrene	ND		ND		nc	30
75-65-0	Tert Butyl Alcohol	ND		ND		nc	19
630-20-6	1,1,1,2-Tetrachloroethane	ND		ND		nc	30
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	30
127-18-4	Tetrachloroethene	ND		ND		nc	44
109-99-9	Tetrahydrofuran	ND		ND		nc	18
108-88-3	Toluene	ND		ND		nc	39
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	30
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	30
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	9
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	30
79-01-6	Trichloroethene	ND		ND		nc	29
75-69-4	Trichlorofluoromethane	ND		ND		nc	30
96-18-4	1,2,3-Trichloropropane	ND		ND		nc	30
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	35
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	31
108-05-4	Vinyl Acetate	ND		ND		nc	30
75-01-4	Vinyl chloride	ND		ND		nc	14
	m,p-Xylene	ND		ND		nc	39
95-47-6	o-Xylene	ND		ND		nc	36

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36688-2DUP	1C183211.D	1	12/16/21	PS	n/a	n/a	V1C7979
JD36688-2	1C183205.D	1	12/16/21	PS	n/a	n/a	V1C7979

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-9, JD36682-10, JD36682-11

CAS No.	Surrogate Recoveries	DUP	JD36688-2	Limits
1868-53-7	Dibromofluoromethane	103%	102%	72-130%
17060-07-0	1,2-Dichloroethane-D4	112%	110%	75-131%
2037-26-5	Toluene-D8	102%	102%	81-121%
460-00-4	4-Bromofluorobenzene	103%	102%	60-141%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36756-8DUP	1C183320.D	1	12/21/21	PS	n/a	n/a	V1C7983
JD36756-8	1C183316.D	1	12/21/21	PS	n/a	n/a	V1C7983

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-7, JD36682-8

CAS No.	Compound	JD36756-8 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
67-64-1	Acetone	25.8		33.3		25	108
71-43-2	Benzene	ND		ND		nc	27
108-86-1	Bromobenzene	ND		ND		nc	30
74-97-5	Bromochloromethane	ND		ND		nc	30
75-27-4	Bromodichloromethane	ND		ND		nc	22
75-25-2	Bromoform	ND		ND		nc	30
74-83-9	Bromomethane	ND		ND		nc	6
78-93-3	2-Butanone (MEK)	3.8	J	6.7	J	55* [a]	32
104-51-8	n-Butylbenzene	ND		ND		nc	17
135-98-8	sec-Butylbenzene	ND		ND		nc	17
98-06-6	tert-Butylbenzene	ND		ND		nc	8
75-15-0	Carbon disulfide	0.94	J	ND		200* [a]	31
56-23-5	Carbon tetrachloride	ND		ND		nc	30
108-90-7	Chlorobenzene	ND		ND		nc	30
75-00-3	Chloroethane	ND		ND		nc	0
67-66-3	Chloroform	ND		ND		nc	30
74-87-3	Chloromethane	ND		ND		nc	30
95-49-8	o-Chlorotoluene	ND		ND		nc	30
106-43-4	p-Chlorotoluene	ND		ND		nc	30
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	30
124-48-1	Dibromochloromethane	ND		ND		nc	1
106-93-4	1,2-Dibromoethane	ND		ND		nc	30
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	30
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	30
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	2
75-71-8	Dichlorodifluoromethane	ND		ND		nc	30
75-34-3	1,1-Dichloroethane	ND		ND		nc	7
107-06-2	1,2-Dichloroethane	ND		ND		nc	7
75-35-4	1,1-Dichloroethene	ND		ND		nc	10
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	27
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	16
78-87-5	1,2-Dichloropropane	ND		ND		nc	30
142-28-9	1,3-Dichloropropane	ND		ND		nc	30
594-20-7	2,2-Dichloropropane	ND		ND		nc	30
563-58-6	1,1-Dichloropropene	ND		ND		nc	30
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36756-8DUP	1C183320.D	1	12/21/21	PS	n/a	n/a	V1C7983
JD36756-8	1C183316.D	1	12/21/21	PS	n/a	n/a	V1C7983

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-7, JD36682-8

CAS No.	Compound	JD36756-8 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	30
123-91-1	1,4-Dioxane	ND		ND		nc	30
100-41-4	Ethylbenzene	ND		ND		nc	36
87-68-3	Hexachlorobutadiene	ND		ND		nc	30
591-78-6	2-Hexanone	ND		ND		nc	30
98-82-8	Isopropylbenzene	ND		ND		nc	13
99-87-6	p-Isopropyltoluene	ND		ND		nc	12
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	30
74-95-3	Methylene bromide	ND		ND		nc	30
75-09-2	Methylene chloride	ND		ND		nc	31
91-20-3	Naphthalene	ND		ND		nc	26
103-65-1	n-Propylbenzene	ND		ND		nc	25
100-42-5	Styrene	ND		ND		nc	30
75-65-0	Tert Butyl Alcohol	ND		ND		nc	19
630-20-6	1,1,1,2-Tetrachloroethane	ND		ND		nc	30
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	30
127-18-4	Tetrachloroethene	ND		ND		nc	44
109-99-9	Tetrahydrofuran	ND		ND		nc	18
108-88-3	Toluene	ND		ND		nc	39
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	30
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	30
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	9
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	30
79-01-6	Trichloroethene	ND		ND		nc	29
75-69-4	Trichlorofluoromethane	ND		ND		nc	30
96-18-4	1,2,3-Trichloropropane	ND		ND		nc	30
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	35
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	31
108-05-4	Vinyl Acetate	ND		ND		nc	30
75-01-4	Vinyl chloride	ND		ND		nc	14
	m,p-Xylene	ND		ND		nc	39
95-47-6	o-Xylene	ND		ND		nc	36

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36756-8DUP	1C183320.D	1	12/21/21	PS	n/a	n/a	V1C7983
JD36756-8	1C183316.D	1	12/21/21	PS	n/a	n/a	V1C7983

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36682-7, JD36682-8

CAS No.	Surrogate Recoveries	DUP	JD36756-8	Limits
1868-53-7	Dibromofluoromethane	103%	103%	72-130%
17060-07-0	1,2-Dichloroethane-D4	107%	107%	75-131%
2037-26-5	Toluene-D8	101%	100%	81-121%
460-00-4	4-Bromofluorobenzene	103%	100%	60-141%

(a) RPD acceptable due to low DUP and sample concentrations.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1C7937-BFB
Lab File ID: 1C182306.D
Instrument ID: GCMS1C
Injection Date: 10/29/21
Injection Time: 13:18

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	18760	19.6		Pass
75	30.0 - 60.0% of mass 95	42717	44.6		Pass
95	Base peak, 100% relative abundance	95778	100.0		Pass
96	5.0 - 9.0% of mass 95	6517	6.80		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	91880	95.9		Pass
175	5.0 - 9.0% of mass 174	6981	7.29	(7.60) [a]	Pass
176	95.0 - 101.0% of mass 174	88997	92.9	(96.9) [a]	Pass
177	5.0 - 9.0% of mass 176	5962	6.22	(6.70) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1C7937-IC7937	1C182307.D	10/29/21	13:47	00:29	Initial cal 0.2
V1C7937-IC7937	1C182308.D	10/29/21	14:14	00:56	Initial cal 0.5
V1C7937-IC7937	1C182309.D	10/29/21	14:41	01:23	Initial cal 1
V1C7937-IC7937	1C182310.D	10/29/21	15:08	01:50	Initial cal 2
V1C7937-IC7937	1C182311.D	10/29/21	15:35	02:17	Initial cal 4
V1C7937-IC7937	1C182312.D	10/29/21	16:02	02:44	Initial cal 8
V1C7937-IC7937	1C182313.D	10/29/21	16:29	03:11	Initial cal 20
V1C7937-ICC7937	1C182314.D	10/29/21	16:56	03:38	Initial cal 50
V1C7937-IC7937	1C182315.D	10/29/21	17:23	04:05	Initial cal 100
V1C7937-IC7937	1C182316.D	10/29/21	17:50	04:32	Initial cal 200
V1C7937-ICV7937	1C182319.D	10/29/21	19:10	05:52	Initial cal verification 50
V1C7937-ICV7937	1C182320.D	10/29/21	19:37	06:19	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1C7979-BFB
Lab File ID: 1C183199.D
Instrument ID: GCMS1C
Injection Date: 12/16/21
Injection Time: 12:28

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	12500	18.5		Pass
75	30.0 - 60.0% of mass 95	30472	45.0		Pass
95	Base peak, 100% relative abundance	67683	100.0		Pass
96	5.0 - 9.0% of mass 95	4434	6.55		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	65373	96.6		Pass
175	5.0 - 9.0% of mass 174	5007	7.40	(7.66) [a]	Pass
176	95.0 - 101.0% of mass 174	64456	95.2	(98.6) [a]	Pass
177	5.0 - 9.0% of mass 176	4363	6.45	(6.77) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1C7979-CC7937	1C183199.D	12/16/21	12:28	00:00	Continuing cal 50
V1C7979-BS	1C183200.D	12/16/21	13:22	00:54	Blank Spike
V1C7979-MB	1C183202.D	12/16/21	14:57	02:29	Method Blank
ZZZZZZ	1C183203.D	12/16/21	15:24	02:56	(unrelated sample)
JD36688-1	1C183204.D	12/16/21	15:52	03:24	(used for QC only; not part of job JD36682)
JD36688-2	1C183205.D	12/16/21	16:19	03:51	(used for QC only; not part of job JD36682)
ZZZZZZ	1C183206.D	12/16/21	16:45	04:17	(unrelated sample)
ZZZZZZ	1C183207.D	12/16/21	17:12	04:44	(unrelated sample)
ZZZZZZ	1C183208.D	12/16/21	17:39	05:11	(unrelated sample)
ZZZZZZ	1C183209.D	12/16/21	18:06	05:38	(unrelated sample)
JD36688-1MS	1C183210.D	12/16/21	18:33	06:05	Matrix Spike
JD36688-2DUP	1C183211.D	12/16/21	19:00	06:32	Duplicate
ZZZZZZ	1C183212.D	12/16/21	19:26	06:58	(unrelated sample)
ZZZZZZ	1C183213.D	12/16/21	19:53	07:25	(unrelated sample)
ZZZZZZ	1C183214.D	12/16/21	20:20	07:52	(unrelated sample)
ZZZZZZ	1C183215.D	12/16/21	20:47	08:19	(unrelated sample)
ZZZZZZ	1C183216.D	12/16/21	21:14	08:46	(unrelated sample)
ZZZZZZ	1C183217.D	12/16/21	21:41	09:13	(unrelated sample)
ZZZZZZ	1C183218.D	12/16/21	22:08	09:40	(unrelated sample)
JD36682-9	1C183221.D	12/16/21	23:29	11:01	HOFF SED-2
JD36682-10	1C183222.D	12/16/21	23:56	11:28	HOFF SED-1
JD36682-11	1C183223.D	12/17/21	00:22	11:54	HOFF DUP-121321SED

Instrument Performance Check (BFB)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1C7983-BFB
Lab File ID: 1C183310.D
Instrument ID: GCMS1C
Injection Date: 12/21/21
Injection Time: 12:30

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	12954	18.5		Pass
75	30.0 - 60.0% of mass 95	31704	45.2		Pass
95	Base peak, 100% relative abundance	70131	100.0		Pass
96	5.0 - 9.0% of mass 95	4682	6.68		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	69608	99.3		Pass
175	5.0 - 9.0% of mass 174	5179	7.38	(7.44) [a]	Pass
176	95.0 - 101.0% of mass 174	68829	98.1	(98.9) [a]	Pass
177	5.0 - 9.0% of mass 176	4534	6.47	(6.59) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1C7983-CC7937	1C183310.D	12/21/21	12:30	00:00	Continuing cal 50
V1C7983-BS	1C183311.D	12/21/21	13:08	00:38	Blank Spike
V1C7983-MB	1C183313.D	12/21/21	14:21	01:51	Method Blank
ZZZZZZ	1C183313A.D	12/21/21	14:21	01:51	(unrelated sample)
ZZZZZZ	1C183314.D	12/21/21	14:48	02:18	(unrelated sample)
JD36756-7	1C183315.D	12/21/21	15:15	02:45	(used for QC only; not part of job JD36682)
JD36756-8	1C183316.D	12/21/21	15:42	03:12	(used for QC only; not part of job JD36682)
ZZZZZZ	1C183317.D	12/21/21	16:09	03:39	(unrelated sample)
ZZZZZZ	1C183318.D	12/21/21	16:36	04:06	(unrelated sample)
JD36756-7MS	1C183319.D	12/21/21	17:03	04:33	Matrix Spike
JD36756-8DUP	1C183320.D	12/21/21	17:30	05:00	Duplicate
ZZZZZZ	1C183321.D	12/21/21	17:57	05:27	(unrelated sample)
ZZZZZZ	1C183322.D	12/21/21	18:24	05:54	(unrelated sample)
ZZZZZZ	1C183323.D	12/21/21	18:51	06:21	(unrelated sample)
ZZZZZZ	1C183324.D	12/21/21	19:18	06:48	(unrelated sample)
ZZZZZZ	1C183325.D	12/21/21	19:44	07:14	(unrelated sample)
ZZZZZZ	1C183326.D	12/21/21	20:11	07:41	(unrelated sample)
ZZZZZZ	1C183327.D	12/21/21	20:38	08:08	(unrelated sample)
ZZZZZZ	1C183328.D	12/21/21	21:05	08:35	(unrelated sample)
ZZZZZZ	1C183329.D	12/21/21	21:32	09:02	(unrelated sample)
ZZZZZZ	1C183330.D	12/21/21	21:59	09:29	(unrelated sample)
JD36682-7	1C183331.D	12/21/21	22:26	09:56	HOFF SED-4
JD36682-8	1C183332.D	12/21/21	22:53	10:23	HOFF SED-3
ZZZZZZ	1C183333.D	12/21/21	23:20	10:50	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V1C7983-BFB	**Injection Date:**	12/21/21
Lab File ID:	1C183310.D	**Injection Time:**	12:30
Instrument ID:	GCMS1C		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	1C183334.D	12/21/21	23:47	11:17	(unrelated sample)
ZZZZZZ	1C183335.D	12/22/21	00:14	11:44	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V3A7257-BFB	**Injection Date:**	12/06/21
Lab File ID:	3A167227.D	**Injection Time:**	09:39
Instrument ID:	GCMS3A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	7175	21.9		Pass
75	30.0 - 60.0% of mass 95	17383	53.0		Pass
95	Base peak, 100% relative abundance	32826	100.0		Pass
96	5.0 - 9.0% of mass 95	1848	5.63		Pass
173	Less than 2.0% of mass 174	448	1.36	(1.39) [a]	Pass
174	50.0 - 120.0% of mass 95	32168	98.0		Pass
175	5.0 - 9.0% of mass 174	2750	8.38	(8.55) [a]	Pass
176	95.0 - 101.0% of mass 174	32485	99.0	(101.0) [a]	Pass
177	5.0 - 9.0% of mass 176	2405	7.33	(7.40) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7257-IC7257	3A167232.D	12/06/21	13:29	03:50	Initial cal 1
V3A7257-IC7257	3A167233.D	12/06/21	13:58	04:19	Initial cal 2
V3A7257-IC7257	3A167234.D	12/06/21	14:27	04:48	Initial cal 5
V3A7257-ICC7257	3A167235.D	12/06/21	14:56	05:17	Initial cal 20
V3A7257-IC7257	3A167236.D	12/06/21	15:25	05:46	Initial cal 50
V3A7257-IC7257	3A167237.D	12/06/21	15:54	06:15	Initial cal 100
V3A7257-IC7257	3A167242.D	12/06/21	18:20	08:41	Initial cal 0.25
V3A7257-IC7257	3A167243.D	12/06/21	18:49	09:10	Initial cal 0.40
V3A7257-IC7257	3A167245.D	12/06/21	19:47	10:08	Initial cal 200
V3A7257-ICV7257	3A167248.D	12/06/21	21:13	11:34	Initial cal verification 20

Instrument Performance Check (BFB)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7273-BFB
Lab File ID: 3A167531.D
Instrument ID: GCMS3A
Injection Date: 12/23/21
Injection Time: 08:46

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	55496	19.2		Pass
75	30.0 - 60.0% of mass 95	148477	51.3		Pass
95	Base peak, 100% relative abundance	289514	100.0		Pass
96	5.0 - 9.0% of mass 95	18705	6.46		Pass
173	Less than 2.0% of mass 174	3318	1.15	(1.22) [a]	Pass
174	50.0 - 120.0% of mass 95	270869	93.6		Pass
175	5.0 - 9.0% of mass 174	21357	7.38	(7.88) [a]	Pass
176	95.0 - 101.0% of mass 174	267029	92.2	(98.6) [a]	Pass
177	5.0 - 9.0% of mass 176	17806	6.15	(6.67) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7273-CC7257	3A167532.D	12/23/21	09:16	00:30	Continuing cal 5
V3A7269-BS2	3A167533A.D	12/23/21	09:45	00:59	Blank Spike
V3A7273-BS	3A167533.D	12/23/21	09:45	00:59	Blank Spike
V3A7273-MB	3A167534.D	12/23/21	10:14	01:28	Method Blank
V3A7269-MB2	3A167534A.D	12/23/21	10:14	01:28	Method Blank
JD36617-4DUP	3A167535.D	12/23/21	10:49	02:03	Duplicate
ZZZZZZ	3A167538.D	12/23/21	12:15	03:29	(unrelated sample)
ZZZZZZ	3A167539.D	12/23/21	12:44	03:58	(unrelated sample)
JD36682-2	3A167540.D	12/23/21	13:12	04:26	HOFF SW-4
JD36682-3	3A167541.D	12/23/21	13:41	04:55	HOFF SW-3
JD36682-4	3A167542.D	12/23/21	14:09	05:23	HOFF SW-2
JD36682-5	3A167543.D	12/23/21	14:38	05:52	HOFF SW-1
JD36682-6	3A167544.D	12/23/21	15:07	06:21	HOFF-DUP-121321SW
ZZZZZZ	3A167545.D	12/23/21	15:36	06:50	(unrelated sample)
JD36682-1	3A167546.D	12/23/21	16:05	07:19	TB-121321
JD36682-2MS	3A167547.D	12/23/21	16:34	07:48	Matrix Spike
JD36682-3DUP	3A167548.D	12/23/21	17:03	08:17	Duplicate
ZZZZZZ	3A167549.D	12/23/21	17:31	08:45	(unrelated sample)
ZZZZZZ	3A167550.D	12/23/21	18:01	09:15	(unrelated sample)
ZZZZZZ	3A167551.D	12/23/21	18:29	09:43	(unrelated sample)
ZZZZZZ	3A167552.D	12/23/21	18:59	10:13	(unrelated sample)
ZZZZZZ	3A167553.D	12/23/21	19:28	10:42	(unrelated sample)
ZZZZZZ	3A167554.D	12/23/21	19:56	11:10	(unrelated sample)
ZZZZZZ	3A167555.D	12/23/21	20:25	11:39	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	VL10004-BFB	**Injection Date:**	10/05/21
Lab File ID:	L333150.D	**Injection Time:**	18:43
Instrument ID:	GCMSL		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	25427	18.8		Pass
75	30.0 - 60.0% of mass 95	70245	52.0		Pass
95	Base peak, 100% relative abundance	135176	100.0		Pass
96	5.0 - 9.0% of mass 95	8845	6.54		Pass
173	Less than 2.0% of mass 174	430	0.32	(0.40) [a]	Pass
174	50.0 - 120.0% of mass 95	108003	79.9		Pass
175	5.0 - 9.0% of mass 174	7964	5.89	(7.37) [a]	Pass
176	95.0 - 101.0% of mass 174	105403	78.0	(97.6) [a]	Pass
177	5.0 - 9.0% of mass 176	7285	5.39	(6.91) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL10004-IC10004	L333151.D	10/05/21	19:12	00:29	Initial cal 0.2
VL10004-IC10004	L333152.D	10/05/21	19:33	00:50	Initial cal 0.5
VL10004-IC10004	L333153.D	10/05/21	19:54	01:11	Initial cal 1
VL10004-IC10004	L333154.D	10/05/21	20:15	01:32	Initial cal 2
VL10004-IC10004	L333155.D	10/05/21	20:36	01:53	Initial cal 4
VL10004-IC10004	L333156.D	10/05/21	20:57	02:14	Initial cal 8
VL10004-IC10004	L333157.D	10/05/21	21:18	02:35	Initial cal 20
VL10004-ICC10004	L333158.D	10/05/21	21:39	02:56	Initial cal 50
VL10004-IC10004	L333159.D	10/05/21	22:00	03:17	Initial cal 100
VL10004-IC10004	L333160.D	10/05/21	22:21	03:38	Initial cal 200
VL10004-ICV10004	L333163.D	10/05/21	23:24	04:41	Initial cal verification 50
VL10004-ICV10004	L333164.D	10/05/21	23:45	05:02	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	VL10004-BFB2	**Injection Date:**	10/06/21
Lab File ID:	L333167.D	**Injection Time:**	15:12
Instrument ID:	GCMSL		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	24885	19.2		Pass
75	30.0 - 60.0% of mass 95	71893	55.6		Pass
95	Base peak, 100% relative abundance	129304	100.0		Pass
96	5.0 - 9.0% of mass 95	8996	6.96		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	109248	84.5		Pass
175	5.0 - 9.0% of mass 174	8699	6.73	(7.96) [a]	Pass
176	95.0 - 101.0% of mass 174	104085	80.5	(95.3) [a]	Pass
177	5.0 - 9.0% of mass 176	6724	5.20	(6.46) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL10004-ICV10004	L333168.D	10/06/21	16:01	00:49	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: VL10113-BFB
Lab File ID: L336238.D
Instrument ID: GCMSL
Injection Date: 12/21/21
Injection Time: 09:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	26875	18.0		Pass
75	30.0 - 60.0% of mass 95	77920	52.1		Pass
95	Base peak, 100% relative abundance	149696	100.0		Pass
96	5.0 - 9.0% of mass 95	10628	7.10		Pass
173	Less than 2.0% of mass 174	583	0.39	(0.48) [a]	Pass
174	50.0 - 120.0% of mass 95	121811	81.4		Pass
175	5.0 - 9.0% of mass 174	10553	7.05	(8.66) [a]	Pass
176	95.0 - 101.0% of mass 174	117379	78.4	(96.4) [a]	Pass
177	5.0 - 9.0% of mass 176	7801	5.21	(6.65) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL10113-CC10004	L336238.D	12/21/21	09:48	00:00	Continuing cal 20
VL10113-BS	L336240.D	12/21/21	10:51	01:03	Blank Spike
VL10113-MB	L336242.D	12/21/21	11:33	01:45	Method Blank
ZZZZZZ	L336243.D	12/21/21	11:59	02:11	(unrelated sample)
ZZZZZZ	L336244.D	12/21/21	12:20	02:32	(unrelated sample)
ZZZZZZ	L336245.D	12/21/21	12:41	02:53	(unrelated sample)
ZZZZZZ	L336246.D	12/21/21	13:02	03:14	(unrelated sample)
ZZZZZZ	L336247.D	12/21/21	13:23	03:35	(unrelated sample)
JD36655-4	L336248.D	12/21/21	13:44	03:56	(used for QC only; not part of job JD36682)
JD36655-4	L336249.D	12/21/21	14:04	04:16	(used for QC only; not part of job JD36682)
JD36655-4MS	L336250.D	12/21/21	14:25	04:37	Matrix Spike
JD36655-4MSD	L336251.D	12/21/21	14:46	04:58	Matrix Spike Duplicate
ZZZZZZ	L336252.D	12/21/21	15:07	05:19	(unrelated sample)
JD36682-1	L336253.D	12/21/21	15:28	05:40	TB-121321
ZZZZZZ	L336254.D	12/21/21	15:49	06:01	(unrelated sample)
ZZZZZZ	L336255.D	12/21/21	16:10	06:22	(unrelated sample)
ZZZZZZ	L336256.D	12/21/21	16:31	06:43	(unrelated sample)
ZZZZZZ	L336257.D	12/21/21	16:52	07:04	(unrelated sample)
ZZZZZZ	L336258.D	12/21/21	17:13	07:25	(unrelated sample)
JD36682-2	L336259.D	12/21/21	17:34	07:46	HOFF SW-4
JD36682-3	L336260.D	12/21/21	17:55	08:07	HOFF SW-3
JD36682-4	L336261.D	12/21/21	18:16	08:28	HOFF SW-2
JD36682-5	L336262.D	12/21/21	18:37	08:49	HOFF SW-1
JD36682-6	L336263.D	12/21/21	18:58	09:10	HOFF-DUP-121321SW

Instrument Performance Check (BFB)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	VL10113-BFB	**Injection Date:**	12/21/21
Lab File ID:	L336238.D	**Injection Time:**	09:48
Instrument ID:	GCMSL		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	L336264.D	12/21/21	19:19	09:31	(unrelated sample)
ZZZZZZ	L336265.D	12/21/21	19:40	09:52	(unrelated sample)

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V1C7979-CC7937	**Injection Date:**	12/16/21
Lab File ID:	1C183199.D	**Injection Time:**	12:28
Instrument ID:	GCMS1C	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	72291	7.20	228978	9.45	315780	10.36	253756	13.51	126690	15.83
Upper Limit [a]	144582	7.70	457956	9.95	631560	10.86	507512	14.01	253380	16.33
Lower Limit [b]	36146	6.70	114489	8.95	157890	9.86	126878	13.01	63345	15.33

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V1C7979-BS	63056	7.20	232287	9.45	319803	10.36	256471	13.51	125202	15.83
V1C7979-MB	58982	7.21	240477	9.45	312382	10.37	259421	13.51	128823	15.83
ZZZZZZ	65690	7.21	240871	9.45	316312	10.37	263536	13.51	131691	15.84
JD36688-1	72436	7.21	237826	9.45	314347	10.37	262056	13.51	125893	15.83
JD36688-2	68272	7.21	238573	9.45	319318	10.37	264668	13.51	129321	15.84
ZZZZZZ	67439	7.20	232808	9.45	310720	10.37	259478	13.51	128425	15.84
ZZZZZZ	60600	7.21	235603	9.45	312848	10.37	261256	13.51	129981	15.83
ZZZZZZ	64462	7.21	237071	9.45	317199	10.37	258934	13.51	123351	15.83
ZZZZZZ	62782	7.20	232761	9.45	310736	10.37	258557	13.51	127940	15.83
JD36688-1MS	56102	7.21	226053	9.45	315007	10.36	254362	13.51	125215	15.84
JD36688-2DUP	73100	7.20	240986	9.45	322101	10.37	268408	13.51	131069	15.83
ZZZZZZ	65916	7.20	225530	9.45	298831	10.37	246354	13.51	108256	15.84
ZZZZZZ	67022	7.20	236510	9.45	317509	10.37	266282	13.51	133721	15.83
ZZZZZZ	51686	7.20	232079	9.45	309069	10.37	251241	13.51	118955	15.84
ZZZZZZ	67818	7.20	237506	9.45	318377	10.37	265455	13.51	132988	15.83
ZZZZZZ	39469	7.21	219472	9.45	290840	10.37	230951	13.51	108548	15.83
ZZZZZZ	73451	7.20	228839	9.45	310574	10.36	256933	13.51	129995	15.83
ZZZZZZ	73739	7.20	228275	9.45	308761	10.37	257840	13.51	129383	15.83
JD36682-9	68531	7.20	232524	9.45	310747	10.37	260737	13.51	129849	15.83
JD36682-10	66509	7.20	234226	9.45	315870	10.37	267081	13.51	134583	15.83
JD36682-11	65437	7.21	238183	9.45	317614	10.37	266952	13.51	135358	15.83

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V1C7983-CC7937	**Injection Date:**	12/21/21
Lab File ID:	1C183310.D	**Injection Time:**	12:30
Instrument ID:	GCMS1C	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	75599	7.20	229926	9.45	321026	10.36	263827	13.51	131878	15.83
Upper Limit [a]	151198	7.70	459852	9.95	642052	10.86	527654	14.01	263756	16.33
Lower Limit [b]	37800	6.70	114963	8.95	160513	9.86	131914	13.01	65939	15.33

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V1C7983-BS	80141	7.21	230986	9.45	321706	10.36	262261	13.51	131262	15.83
V1C7983-MB	55188	7.20	240316	9.45	314079	10.36	259395	13.51	129171	15.83
ZZZZZZ	55188	7.20	240316	9.45	314079	10.36	259395	13.51	129171	15.83
ZZZZZZ	65708	7.21	235924	9.45	309765	10.37	261160	13.51	132334	15.83
JD36756-7	59264	7.20	241657	9.45	318417	10.37	264553	13.51	130043	15.83
JD36756-8	60153	7.20	237119	9.45	316724	10.37	264947	13.51	130195	15.83
ZZZZZZ	67684	7.21	237707	9.45	316292	10.36	262964	13.51	132394	15.83
ZZZZZZ	63488	7.20	239728	9.45	319890	10.37	266839	13.51	136246	15.83
JD36756-7MS	54318	7.20	225358	9.45	310981	10.36	252358	13.51	123811	15.83
JD36756-8DUP	62596	7.20	234142	9.45	313912	10.36	259076	13.51	122484	15.83
ZZZZZZ	68710	7.20	243143	9.45	325420	10.37	273064	13.51	136435	15.83
ZZZZZZ	67349	7.20	242903	9.45	322641	10.36	272007	13.51	136884	15.83
ZZZZZZ	71806	7.20	234509	9.45	327478	10.36	264228	13.51	132961	15.83
ZZZZZZ	61437	7.20	234502	9.45	316073	10.36	264956	13.51	132848	15.83
ZZZZZZ	70174	7.21	234697	9.44	311176	10.36	261398	13.51	126094	15.83
ZZZZZZ	65852	7.20	237289	9.45	319060	10.36	266776	13.51	133188	15.83
ZZZZZZ	68539	7.20	231045	9.45	310747	10.37	252787	13.51	118478	15.83
ZZZZZZ	61200	7.20	237949	9.45	319295	10.37	267354	13.51	132313	15.83
ZZZZZZ	83293	7.20	234907	9.45	317171	10.36	271478	13.51	139290	15.83
ZZZZZZ	67251	7.20	231554	9.45	311472	10.37	260671	13.51	134817	15.83
JD36682-7	57402	7.20	233698	9.45	311355	10.37	265023	13.51	130250	15.84
JD36682-8	50029	7.20	225961	9.45	298857	10.37	246904	13.51	115997	15.83
ZZZZZZ	67069	7.20	234438	9.45	315560	10.36	269940	13.51	133332	15.83
ZZZZZZ	66253	7.20	233921	9.45	313966	10.36	261822	13.51	133089	15.83
ZZZZZZ	61024	7.21	237483	9.45	318766	10.36	262008	13.51	129818	15.83

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V3A7273-CC7257	**Injection Date:**	12/23/21
Lab File ID:	3A167532.D	**Injection Time:**	09:16
Instrument ID:	GCMS3A	**Method:**	SW846 8260D BY SIM

	IS 1 AREA	RT
Check Std	18213	15.60
Upper Limit [a]	36426	16.10
Lower Limit [b]	9107	15.10

Lab Sample ID	IS 1 AREA	RT
V3A7273-BS	16572	15.60
V3A7269-BS2	16572	15.60
V3A7269-MB2	15713	15.60
V3A7273-MB	15713	15.60
JD36617-4DUP	12196	15.60
ZZZZZZ	9253	15.60
ZZZZZZ	5615[c]	15.60
JD36682-2	12264	15.60
JD36682-3	12535	15.60
JD36682-4	11175	15.60
JD36682-5	13817	15.60
JD36682-6	13409	15.60
ZZZZZZ	6651[c]	15.60
JD36682-1	13990	15.60
JD36682-2MS	14465	15.60
JD36682-3DUP	11947	15.60
ZZZZZZ	13776	15.60
ZZZZZZ	11070	15.60
ZZZZZZ	11396	15.60
ZZZZZZ	10558	15.60
ZZZZZZ	13423	15.60
ZZZZZZ	11305	15.60
ZZZZZZ	11956	15.60

IS 1 = 4-Bromofluorobenzene

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to matrix interference.

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	VL10113-CC10004	**Injection Date:**	12/21/21
Lab File ID:	L336238.D	**Injection Time:**	09:48
Instrument ID:	GCMSL	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	306117	3.15	392313	4.37	587712	4.95	548167	7.35	225091	9.54
Upper Limit [a]	612234	3.65	784626	4.87	1175424	5.45	1096334	7.85	450182	10.04
Lower Limit [b]	153059	2.65	196157	3.87	293856	4.45	274084	6.85	112546	9.04

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VL10113-BS	313757	3.15	407446	4.37	610487	4.95	577684	7.35	230125	9.54
VL10113-MB	354071	3.14	448260	4.38	644892	4.95	562396	7.35	220536	9.55
ZZZZZZ	326667	3.14	435387	4.37	619920	4.95	529464	7.35	217793	9.54
ZZZZZZ	344390	3.15	445192	4.38	620420	4.95	544363	7.35	221761	9.54
ZZZZZZ	344443	3.15	445644	4.37	637954	4.94	560498	7.35	229680	9.54
ZZZZZZ	324486	3.14	428642	4.37	595716	4.95	538595	7.35	220862	9.54
ZZZZZZ	327345	3.14	396991	4.37	599555	4.95	564863	7.35	237972	9.54
JD36655-4	341035	3.15	443477	4.38	627709	4.95	548991	7.35	219226	9.55
JD36655-4	344123	3.15	429478	4.38	632209	4.94	559506	7.35	226590	9.54
JD36655-4MS	317583	3.15	416621	4.37	628879	4.94	573187	7.35	235181	9.54
JD36655-4MSD	333114	3.14	416310	4.38	634773	4.95	578222	7.35	239677	9.55
ZZZZZZ	336216	3.15	471710	4.38	667320	4.95	562184	7.35	225219	9.54
JD36682-1	360706	3.15	465057	4.38	666071	4.95	565633	7.35	233241	9.55
ZZZZZZ	349850	3.15	457807	4.38	663209	4.95	578438	7.35	238017	9.54
ZZZZZZ	353388	3.15	452580	4.38	640671	4.95	567285	7.35	230988	9.55
ZZZZZZ	340183	3.14	425815	4.37	621617	4.95	535781	7.35	226605	9.54
ZZZZZZ	280361	3.15	435180	4.38	617547	4.95	510653	7.35	200087	9.54
ZZZZZZ	334425	3.15	440407	4.38	643525	4.95	557997	7.35	228627	9.55
JD36682-2	330606	3.15	433827	4.38	626388	4.95	540909	7.35	228989	9.54
JD36682-3	340285	3.15	430970	4.38	630421	4.95	549143	7.35	228854	9.54
JD36682-4	318102	3.15	419995	4.38	606461	4.95	528589	7.35	215857	9.54
JD36682-5	328056	3.15	434623	4.38	620145	4.95	535428	7.35	225532	9.55
JD36682-6	322994	3.14	433492	4.37	620676	4.95	523969	7.35	218758	9.55
ZZZZZZ	313808	3.14	440746	4.37	630658	4.94	530945	7.35	221002	9.55
ZZZZZZ	311959	3.14	411439	4.37	610051	4.94	542567	7.35	235436	9.54

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
JD36682-1	3A167546.D	136
JD36682-2	3A167540.D	127
JD36682-3	3A167541.D	114
JD36682-4	3A167542.D	135
JD36682-5	3A167543.D	101
JD36682-6	3A167544.D	109
JD36682-2MS	3A167547.D	115
JD36682-3DUP	3A167548.D	111
V3A7273-BS	3A167533.D	94
V3A7273-MB	3A167534.D	90

Surrogate Compounds	Recovery Limits
S1 = 1,4-Dioxane-D8	39-174%

Surrogate Recovery Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD36682-1	L336253.D	105	109	99	98
JD36682-2	L336259.D	105	109	99	95
JD36682-3	L336260.D	108	110	99	97
JD36682-4	L336261.D	105	110	99	99
JD36682-5	L336262.D	106	111	99	97
JD36682-6	L336263.D	102	111	101	97
JD36655-4MS	L336250.D	104	102	94	103
JD36655-4MSD	L336251.D	106	103	93	102
VL10113-BS	L336240.D	106	103	91	105
VL10113-MB	L336242.D	103	110	97	104

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	80-120%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	82-114%

Surrogate Recovery Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD36682-7	1C183331.D	103	106	100	99
JD36682-8	1C183332.D	101	102	101	101
JD36682-9	1C183221.D	105	113	101	101
JD36682-10	1C183222.D	104	112	100	98
JD36682-11	1C183223.D	105	112	100	99
JD36688-1MS	1C183210.D	103	103	101	101
JD36688-2DUP	1C183211.D	103	112	102	103
JD36756-7MS	1C183319.D	104	102	101	100
JD36756-8DUP	1C183320.D	103	107	101	103
V1C7979-BS	1C183200.D	101	102	102	102
V1C7979-MB	1C183202.D	99	103	101	100
V1C7983-BS	1C183311.D	103	105	100	98
V1C7983-MB	1C183313.D	98	98	101	99

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	72-130%
S2 = 1,2-Dichloroethane-D4	75-131%
S3 = Toluene-D8	81-121%
S4 = 4-Bromofluorobenzene	60-141%

Initial Calibration Summary

Job Number: JD36682 **Sample:** V1C7937-ICC7937
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1C182314.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report GCMS1C

Method : C:\MSDCHEM\1\METHODS\M1CS7937.M (RTE Integrator)
Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Wed Dec 01 16:16:33 2021
Response via : Initial Calibration

Calibration Files
1 =1C182309.D 0.5 =1C182308.D 100 =1C182315.D 50 =1C182314.D
20 =1C182313.D 200 =1C182316.D 4 =1C182311.D 2 =1C182310.D
8 =1C182312.D 0.2 =1C182307.D = =

Compound	1	0.5	100	50	20	200	4	2	8	0.2	Avg	%RSD
1) tert butyl alcohol-d9 ----------ISTD----------												
2) tertiary butyl alcohol	1.688	1.438	1.505	1.483	1.417	1.434	1.524	1.457			1.493	5.81
3) ethanol	0.145	0.160	0.157	0.152	0.136	0.128	0.134	0.132			0.143	8.58
4) 1,4-dioxane	0.109	0.144	0.145	0.149	0.140	0.129	0.121	0.140			0.135	10.21
5) I pentafluorobenzene ----------ISTD----------												
6) dichlorodifluoromethane	0.667	0.533	0.694	0.744	0.655	0.662	0.669	0.680	0.655	0.854	0.681	11.77
7) chlorodifluoromethane	0.585	0.614	0.491	0.529	0.490	0.471	0.488	0.557	0.494		0.524	9.56
8) chloromethane	0.792	0.809	0.666	0.722	0.675	0.645	0.735	0.735	0.701		0.720	7.69
9) vinyl chloride	0.536	0.451	0.570	0.608	0.546	0.546	0.554	0.549	0.546	0.574	0.548	7.27
10) 1,3-butadiene	0.453	0.469	0.396	0.428	0.396	0.371	0.418	0.409	0.402		0.416	7.33
11) bromomethane		0.343	0.354	0.348	0.318	0.425	0.457	0.399			0.378	13.32
12) chloroethane	0.283	0.286	0.300	0.268	0.276	0.283	0.275	0.272			0.280	3.64
13) trichlorofluoromethane	0.669	0.701	0.751	0.673	0.669	0.686	0.677	0.681			0.688	3.98
14) ethyl ether	0.175	0.199	0.198	0.186	0.189	0.171	0.189	0.185			0.186	5.25
15) acrolein		0.067	0.068	0.066	0.066	0.072	0.057	0.065			0.066	7.26
16) freon 113	0.362	0.293	0.343	0.358	0.334	0.318	0.334	0.365	0.330		0.337	6.86
17) 1,1-dichloroethene	0.515	0.482	0.345	0.372	0.354	0.327	0.362	0.417	0.369		0.394	16.45
18) acetone	0.164	0.118	0.118	0.122	0.113	0.142	0.138	0.121			0.129	13.28
19) acetonitrile	0.053	0.051	0.052	0.052	0.050	0.047	0.057	0.050			0.052	5.76
20) iodomethane		0.569	0.568	0.388	0.567	0.213		0.265			0.428	38.06
----- Linear regression ----- Coefficient = 0.9969												
Response Ratio = -0.03931 + 0.57918 *A												
21) carbon disulfide	1.389	1.285	1.235	1.320	1.214	1.179	1.201	1.266	1.232		1.258	5.22

Initial Calibration Summary

Job Number: JD36682 **Sample:** V1C7937-ICC7937
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1C182314.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

22) methylene chloride
0.400 0.429 0.435 0.384 0.525 0.480 0.442 11.76
23) methyl acetate
0.334 0.306 0.309 0.299 0.293 0.263 0.325 0.258 0.298 9.02
24) methyl tert butyl ether
1.064 0.907 1.024 1.039 0.994 0.976 0.943 1.017 0.951 1.006 0.992 4.86
25) trans-1,2-dichloroethene
0.540 0.397 0.429 0.401 0.375 0.438 0.476 0.418 0.434 12.10
26) di-isopropyl ether
1.587 1.577 1.555 1.589 1.507 1.480 1.467 1.550 1.481 1.828 1.562 6.67
27) 2-butanone
0.032 0.038 0.038 0.037 0.037 0.033 0.031 0.035 0.035 8.06
28) 1,1-dichloroethane
0.753 0.593 0.706 0.756 0.713 0.654 0.714 0.752 0.720 0.603 0.696 8.58
29) chloroprene
0.658 0.560 0.643 0.689 0.645 0.607 0.619 0.640 0.633 0.647 0.634 5.34
30) acrylonitrile
0.147 0.149 0.139 0.141 0.129 0.112 0.132 0.136 9.34
31) hexane
0.967 0.722 0.757 0.705 0.682 0.712 0.789 0.706 0.755 12.20
32) vinyl acetate
0.065 0.068 0.061 0.062 0.052 0.057 0.061 8.90
33) ethyl tert-butyl ether
1.305 1.132 1.360 1.373 1.298 1.299 1.245 1.313 1.262 1.154 1.274 6.21
34) ethyl acetate
0.060 0.062 0.062 0.058 0.066 0.062 0.062 4.60
35) 2,2-dichloropropane
0.694 0.606 0.585 0.628 0.598 0.546 0.591 0.656 0.599 0.735 0.624 9.04
36) cis-1,2-dichloroethene
0.512 0.574 0.431 0.469 0.445 0.406 0.472 0.512 0.457 0.475 10.67
37) methyl acrylate
0.054 0.056 0.054 0.052 0.042 0.046 0.051 10.59
38) propionitrile
0.052 0.053 0.055 0.052 0.052 0.049 0.052 0.051 0.052 3.31
39) bromochloromethane
0.244 0.205 0.227 0.241 0.235 0.213 0.227 0.256 0.228 0.231 6.71
40) tetrahydrofuran
0.133 0.140 0.140 0.126 0.158 0.140 0.139 7.77
41) chloroform
0.594 0.585 0.466 0.496 0.478 0.440 0.498 0.529 0.473 0.506 10.47
42) t-butyl formate
0.294 0.266 0.321 0.337 0.319 0.316 0.299 0.314 0.292 0.307 6.78
43) dibromofluoromethane (s)
0.427 0.431 0.438 0.439 0.435 0.440 0.427 0.422 0.431 0.429 0.432 1.38
44) methacrylonitrile
0.124 0.147 0.145 0.135 0.140 0.133 0.154 0.128 0.138 7.50
45) 1,1,1-trichloroethane
0.665 0.648 0.652 0.691 0.647 0.617 0.638 0.680 0.639 0.677 0.655 3.45
46) cyclohexane
0.572 0.576 0.617 0.553 0.535 0.573 0.547 0.571 0.568 4.35
47) 1,1-dichloropropene
0.546 0.483 0.543 0.580 0.540 0.511 0.515 0.539 0.531 0.516 0.530 4.95
48) iso-butyl alcohol
0.018 0.017 0.016 0.017 0.015 0.014 0.014 0.016 9.34
49) carbon tetrachloride
0.619 0.561 0.596 0.651 0.606 0.554 0.604 0.613 0.618 0.594 0.602 4.70
50) tert amyl alcohol *This compound fails Initial Calibration criteria*
0.015 0.014 0.015 0.015 0.017 0.027 0.017 0.017 25.12
----- Linear regression ----- Coefficient = 0.9998
Response Ratio = 0.00127 + 0.01476 *A

51) I 1,4-difluorobenzene ----------ISTD----------

52)	1,2-dichloroethane-d4 (s)												
	0.302	0.299	0.289	0.292	0.297	0.281	0.305	0.304	0.298	0.301	0.297		2.51
53)	n-butyl alcohol												
	0.008		0.009	0.009	0.008	0.009	0.008	0.008	0.008		0.008#		6.27
54)	2,2,4-trimethylpentane												
	1.522	1.447	1.261	1.355	1.290	1.165	1.354	1.381	1.314		1.343		7.73
55)	benzene												
	1.155	1.116	1.035	1.130	1.080	0.972	1.098	1.168	1.113	1.208	1.108		6.09
56)	tert-amyl methyl ether												
	0.194		0.192	0.201	0.198	0.179	0.199	0.194	0.200		0.195		3.65
57)	heptane												
	0.319	0.235	0.244	0.259	0.241	0.224	0.241	0.271	0.253		0.254		10.94
58)	isopropyl acetate												
			0.054	0.054	0.055	0.052	0.050	0.046	0.050		0.052		5.99
59)	1,2-dichloroethane												
	0.444	0.374	0.338	0.367	0.364	0.311	0.384	0.413	0.375	0.444	0.381		11.14
60)	trichloroethene												
	0.372	0.305	0.344	0.370	0.354	0.316	0.350	0.358	0.351	0.312	0.343		6.97
61)	ethyl acrylate												
	0.408		0.342	0.344	0.335	0.317	0.305	0.366	0.352		0.346		9.09
62)	2-nitropropane												
											0.000#		-1.00
63)	2-chloroethyl vinyl ether												
	0.162	0.144	0.166	0.174	0.164	0.153	0.155	0.160	0.157		0.159		5.34
64)	methyl methacrylate												
			0.066	0.068	0.065	0.061	0.060	0.059	0.062		0.063		5.50
65)	1,2-dichloropropane												
	0.325	0.270	0.288	0.304	0.293	0.274	0.300	0.319	0.299	0.271	0.294		6.51
66)	dibromomethane												
	0.202	0.180	0.174	0.182	0.176	0.165	0.178	0.188	0.180		0.181		5.50
67)	methylcyclohexane												
	0.549	0.484	0.501	0.530	0.493	0.464	0.496	0.536	0.503		0.506		5.38
68)	bromodichloromethane												
	0.474	0.401	0.399	0.416	0.404	0.378	0.408	0.431	0.404		0.413		6.48
69)	epichlorohydrin												
	0.034		0.028	0.029	0.029	0.028	0.031	0.032	0.029		0.030		6.95
70)	cis-1,3-dichloropropene												
	0.504	0.410	0.484	0.502	0.482	0.453	0.481	0.492	0.479	0.421	0.471		6.87
71)	4-methyl-2-pentanone												
	0.100		0.097	0.100	0.099	0.090	0.096	0.101	0.098		0.098		3.54
72)	3-methyl-1-butanol												
	0.011		0.013	0.014	0.013	0.012	0.014	0.016	0.014		0.013		10.37

73) I chlorobenzene-d5 ----------ISTD----------

74)	toluene-d8 (s)												
	1.377	1.370	1.372	1.374	1.348	1.376	1.369	1.359	1.360	1.350	1.365		0.78
75)	toluene												
	0.892	0.771	0.856	0.912	0.845	0.803	0.866	0.907	0.857	0.900	0.861		5.33
76)	trans-1,3-dichloropropene												
	0.555	0.446	0.505	0.531	0.497	0.473	0.487	0.499	0.485	0.417	0.489		8.03
77)	ethyl methacrylate												
	0.432	0.375	0.394	0.403	0.382	0.369	0.387	0.391	0.374		0.390		4.91
78)	1,1,2-trichloroethane												
	0.276	0.229	0.256	0.262	0.246	0.245	0.240	0.257	0.242	0.227	0.248		6.08
79)	tetrachloroethene												
	0.377	0.321	0.327	0.350	0.327	0.300	0.341	0.343	0.338	0.388	0.341		7.65
80)	1,3-dichloropropane												

0.488 0.363 0.440 0.467 0.447 0.414 0.461 0.476 0.441 0.361 0.436 10.11

81) 2-hexanone
0.120 0.118 0.123 0.119 0.108 0.116 0.119 0.118 0.118 3.85

82) butyl acetate
0.248 0.224 0.230 0.220 0.209 0.229 0.270 0.226 0.232 8.14

83) dibromochloromethane
0.414 0.363 0.418 0.434 0.402 0.407 0.399 0.402 0.402 0.446 0.409 5.43

84) 1,2-dibromoethane
0.336 0.271 0.329 0.337 0.309 0.317 0.310 0.314 0.304 0.262 0.309 8.16

85) n-butyl ether
1.774 1.586 1.646 1.710 1.608 1.555 1.631 1.671 1.615 1.644 4.06

86) chlorobenzene
1.047 0.875 0.935 0.996 0.951 0.885 0.950 0.995 0.948 0.929 0.951 5.45

87) 1,1,1,2-tetrachloroethane
0.386 0.323 0.362 0.386 0.365 0.347 0.370 0.378 0.369 0.301 0.359 7.72

88) ethylbenzene
1.712 1.574 1.473 1.603 1.510 1.380 1.554 1.601 1.564 1.733 1.570 6.66

89) m,p-xylene
0.672 0.596 0.586 0.622 0.604 0.547 0.625 0.651 0.620 0.628 0.615 5.64

90) o-xylene
0.665 0.603 0.605 0.641 0.617 0.576 0.629 0.672 0.619 0.635 0.626 4.61

91) styrene
1.145 0.930 0.998 1.058 1.035 0.933 1.039 1.083 1.033 0.998 1.025 6.35

92) bromoform
0.279 0.290 0.291 0.266 0.288 0.252 0.285 0.258 0.276 5.50

93) butyl acrylate
0.852 0.800 0.693 0.697 0.664 0.660 0.672 0.771 0.661 0.719 9.86

94) isopropylbenzene
1.741 1.502 1.561 1.652 1.559 1.478 1.624 1.684 1.587 1.658 1.605 5.14

95) cis-1,4-dichloro-2-butene
0.127 0.133 0.135 0.122 0.130 0.120 0.110 0.116 0.124 6.91

96) I 1,4-dichlorobenzene-d ----------ISTD----------

97) 4-bromofluorobenzene (s)
0.917 0.930 0.960 0.954 0.914 1.010 0.928 0.912 0.916 0.925 0.937 3.25

98) bromobenzene
0.855 0.797 0.822 0.884 0.854 0.791 0.893 0.899 0.862 0.791 0.845 4.96

99) 1,1,2,2-tetrachloroethane
0.756 0.626 0.743 0.752 0.701 0.739 0.691 0.732 0.685 0.648 0.707 6.35

100) trans-1,4-dichloro-2-butene
0.221 0.211 0.233 0.241 0.240 0.226 0.227 0.252 0.225 0.231 5.28

101) 1,2,3-trichloropropane
0.165 0.176 0.185 0.177 0.168 0.182 0.183 0.175 0.177 4.07

102) n-propylbenzene
4.003 3.565 3.420 3.712 3.534 3.210 3.730 3.848 3.587 4.317 3.693 8.43

103) 2-chlorotoluene
0.855 0.766 0.736 0.796 0.780 0.703 0.783 0.818 0.795 0.781 5.64

104) 4-chlorotoluene
2.415 2.231 2.117 2.241 2.149 2.058 2.191 2.306 2.179 2.210 4.78

105) 1,3,5-trimethylbenzene
2.746 2.367 2.459 2.630 2.496 2.278 2.553 2.701 2.571 2.845 2.565 6.78

106) tert-butylbenzene
0.512 0.475 0.506 0.536 0.500 0.478 0.488 0.505 0.502 0.501 0.500 3.49

107) 1,2,4-trimethylbenzene
2.763 2.458 2.523 2.696 2.552 2.381 2.645 2.697 2.563 3.193 2.647 8.49

108) sec-butylbenzene
3.549 3.229 3.370 3.623 3.333 3.108 3.391 3.426 3.330 3.715 3.407 5.32

109) 1,3-dichlorobenzene
1.706 1.464 1.563 1.645 1.564 1.474 1.629 1.665 1.599 1.873 1.618 7.34

110) p-isopropyltoluene

```
       3.024 2.548 2.877 3.046 2.837 2.630 2.953 3.013 2.858 3.272  2.906    7.19
111)  1,2,3-trimethylbenzene
       2.690 2.401 2.390 2.513 2.404 2.168 2.490 2.613 2.390 2.923  2.498    8.24
112)  1,4-dichlorobenzene
       1.762 1.536 1.492 1.566 1.531 1.376 1.538 1.609 1.546 1.838  1.579    8.37
113)  benzyl chloride
       1.662 1.427 1.444 1.496 1.394 1.362 1.403 1.497 1.367        1.450    6.45
114)  1,2-dichlorobenzene
       1.605 1.426 1.532 1.605 1.498 1.410 1.508 1.517 1.492 1.712  1.530    5.86
115)  n-butylbenzene
       1.468 1.313 1.484 1.552 1.440 1.334 1.467 1.488 1.423 1.741  1.471    8.07
116)  1,2-dibromo-3-chloropropane
       0.158       0.143 0.148 0.133 0.133 0.135 0.153 0.131        0.142    7.29
117)  1,3,5-trichlorobenzene
       1.230 1.174 1.184 1.234 1.172 1.057 1.160 1.227 1.178 1.469  1.208    8.67
118)  2-ethylhexyl acrylate  *This compound fails Initial Calibration criteria*
                   0.676 0.691 0.622 0.626 0.660 0.614 0.596        0.641    5.47
119)  1,2,4-trichlorobenzene
       1.064 0.929 0.985 1.018 0.961 0.872 0.964 1.030 0.931 1.101  0.985    7.00
120)  hexachlorobutadiene
       0.637 0.599 0.575 0.615 0.606 0.507 0.615 0.620 0.604 0.677  0.606    7.19
121)  naphthalene
       2.125 1.788 2.079 2.123 2.047 1.890 1.977 2.062 1.929 2.547  2.057    9.90
122)  1,2,3-trichlorobenzene
       0.904 0.886 0.906 0.945 0.890 0.825 0.859 0.899 0.864 0.964  0.894    4.51
123)  hexachloroethane
       0.576 0.396 0.578 0.595 0.537 0.546 0.505 0.523 0.531        0.532   11.01
124)  2-methylnaphthalene
                   1.368 1.393 1.195 1.250 1.033 0.999 1.068        1.187   13.43

125)     pentafluorobenzene(a) ----------------ISTD---------------------
126)  Freon 142B
                   0.589 0.563 0.533 0.563 0.569       0.561        0.563    3.19
127)  vinyl bromide
                   0.449 0.431 0.403 0.424 0.415       0.429        0.425    3.62
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M1CS7937.M        Wed Dec 01 16:17:05 2021
```

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1C7937-ICV7937
Lab FileID: 1C182319.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V1C7937\1C182319.D Vial: 14
Acq On : 29 Oct 2021 7:10 pm Operator: PrashanS
Sample : ICV7937-50 Inst : GCMS1C
Misc : MS54469,V1C7937,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M1CS7937.M (RTE Integrator)
Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Sat Oct 30 13:00:17 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	104	0.00	7.21
2	M	tertiary butyl alcohol	1.493	1.485	0.5	102	0.00	7.33
3		ethanol	0.143	0.153	-7.0	101	0.00	5.98
4	M	1,4-dioxane	0.135	0.148	-9.6	106	0.00	11.10
5	I	pentafluorobenzene	1.000	1.000	0.0	106	0.00	9.45
6	M	dichlorodifluoromethane	0.681	0.598	12.2	85	0.01	3.77
7		chlorodifluoromethane		----------NA----------				
8	M	chloromethane	0.720	0.723	-0.4	106	0.00	4.18
9	M	vinyl chloride	0.548	0.605	-10.4	105	0.00	4.40
10		1,3-butadiene	0.416	0.434	-4.3	107	0.00	4.47
11	M	bromomethane	0.378	0.394	-4.2	118	0.02	5.06
12	M	chloroethane	0.280	0.293	-4.6	103	0.01	5.24
13	M	trichlorofluoromethane	0.688	0.737	-7.1	104	0.01	5.67
14	M	ethyl ether	0.186	0.204	-9.7	109	0.00	6.11
15	M	acrolein	0.066	0.068	-3.0	105	0.00	6.39
16		freon 113	0.337	0.369	-9.5	109	0.00	6.47
17	M	1,1-dichloroethene	0.394	0.357	9.4	102	0.00	6.53
18	M	acetone	0.129	0.112	13.2	100	0.00	6.60
19	M	acetonitrile		----------NA----------				
		----------	True	Calc.	% Drift	----------		
20	M	iodomethane	50.000	46.966	6.1	94	0.00	6.81
		----------	AvgRF	CCRF	% Dev	----------		
21	M	carbon disulfide	1.258	1.225	2.6	98	0.01	6.93
22	M	methylene chloride	0.442	0.442	0.0	109	0.00	7.26
23	M	methyl acetate	0.298	0.278	6.7	95	0.01	7.06
24	M	methyl tert butyl ether	0.992	1.065	-7.4	109	0.00	7.56
25	M	trans-1,2-dichloroethene	0.434	0.421	3.0	104	0.00	7.63
26	M	di-isopropyl ether	1.562	1.474	5.6	98	0.00	8.15
27	M	2-butanone	0.035	0.039	-11.4	109	0.00	8.90
28	M	1,1-dichloroethane	0.696	0.727	-4.5	102	0.00	8.20
29	M	chloroprene	0.634	0.692	-9.1	106	0.00	8.31
30	M	acrylonitrile	0.136	0.141	-3.7	101	0.00	7.60
31		hexane	0.755	0.795	-5.3	111	0.00	7.91
32	M	vinyl acetate	0.061	0.064	-4.9	99	0.00	8.18
33	M	ethyl tert-butyl ether	1.274	1.302	-2.2	100	0.00	8.62
34	M	ethyl acetate	0.062	0.063	-1.6	107	0.00	8.92
35	M	2,2-dichloropropane	0.624	0.635	-1.8	107	0.00	8.92
36	M	cis-1,2-dichloroethene	0.475	0.472	0.6	107	0.00	8.94
37		methyl acrylate	0.051	0.054	-5.9	103	0.00	9.00

Initial Calibration Verification

Job Number: JD36682 **Sample:** V1C7937-ICV7937
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1C182319.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

38	M	propionitrile	0.052	0.052	0.0	100	0.00	9.02
39	M	bromochloromethane	0.231	0.250	-8.2	110	0.00	9.25
40	M	tetrahydrofuran	0.139	0.128	7.9	97	0.00	9.29
41	M	chloroform	0.506	0.489	3.4	104	0.00	9.30
42	M	t-butyl formate	0.307	0.273	11.1	86	0.00	9.32
43	S	dibromofluoromethane (s)	0.432	0.442	-2.3	107	0.00	9.51
44	M	methacrylonitrile	0.138	0.146	-5.8	107	0.00	9.19
45	M	1,1,1-trichloroethane	0.655	0.674	-2.9	103	0.00	9.54
46		cyclohexane	0.568	0.678	-19.4	116	0.00	9.60
47		1,1-dichloropropene	0.530	0.575	-8.5	105	0.00	9.73
48		iso-butyl alcohol	0.016	0.017	-6.3	101	0.00	9.75
49		carbon tetrachloride	0.602	0.635	-5.5	103	0.00	9.74
			True	Calc.	% Drift			
50		tert amyl alcohol	250.000	252.811	-1.1	112	0.00	9.86
			AvgRF	CCRF	% Dev			
51	I	1,4-difluorobenzene	1.000	1.000	0.0	107	0.00	10.37
52	S	1,2-dichloroethane-d4 (s)	0.297	0.286	3.7	105	0.00	9.93
53	M	n-butyl alcohol	0.008	0.008#	0.0	102	0.00	10.50
54		2,2,4-trimethylpentane	1.343	1.209	10.0	95	0.00	9.96
55	M	benzene	1.108	1.124	-1.4	106	0.00	9.99
56	M	tert-amyl methyl ether	0.195	0.178	8.7	94	0.00	10.00
57	M	heptane	0.254	0.266	-4.7	109	0.00	10.14
58	M	isopropyl acetate	0.052	0.051	1.9	99	0.00	9.91
59	M	1,2-dichloroethane	0.381	0.362	5.0	105	0.00	10.02
60	M	trichloroethene	0.343	0.369	-7.6	106	0.00	10.71
61		ethyl acrylate	0.346	0.305	11.8	95	0.00	10.71
62	M	2-nitropropane		----------NA----------				
63	M	2-chloroethyl vinyl ether	0.159	0.178	-11.9	110	0.00	11.50
64	M	methyl methacrylate	0.063	0.068	-7.9	107	0.00	10.98
65	M	1,2-dichloropropane	0.294	0.304	-3.4	107	0.00	10.98
66	M	dibromomethane	0.181	0.180	0.6	106	0.00	11.15
67	M	methylcyclohexane	0.506	0.524	-3.6	105	0.00	10.91
68	M	bromodichloromethane	0.413	0.410	0.7	105	0.00	11.27
69		epichlorohydrin	0.030	0.030	0.0	110	0.00	11.64
70	M	cis-1,3-dichloropropene	0.471	0.492	-4.5	105	0.00	11.73
71	M	4-methyl-2-pentanone	0.098	0.097	1.0	104	0.00	11.81
72	M	3-methyl-1-butanol	0.013	0.013	0.0	97	0.00	11.84
73	I	chlorobenzene-d5	1.000	1.000	0.0	107	0.00	13.52
74	S	toluene-d8 (s)	1.365	1.363	0.1	107	0.00	12.00
75		toluene	0.861	0.906	-5.2	107	0.00	12.08
76		trans-1,3-dichloropropene	0.489	0.541	-10.6	109	0.00	12.29
77		ethyl methacrylate	0.390	0.397	-1.8	106	0.00	12.26
78		1,1,2-trichloroethane	0.248	0.265	-6.9	109	0.00	12.50
79	M	tetrachloroethene	0.341	0.399	-17.0	122	0.00	12.66
80	M	1,3-dichloropropane	0.436	0.467	-7.1	108	0.00	12.68
81		2-hexanone	0.118	0.119	-0.8	104	0.00	12.66
82	M	butyl acetate	0.232	0.220	5.2	103	0.00	12.74
83	M	dibromochloromethane	0.409	0.446	-9.0	111	0.00	12.95
84	M	1,2-dibromoethane	0.309	0.338	-9.4	108	0.00	13.10
85		n-butyl ether	1.644	1.486	9.6	93	0.00	13.45
86	M	chlorobenzene	0.951	0.985	-3.6	106	0.00	13.55
87	M	1,1,1,2-tetrachloroethane	0.359	0.376	-4.7	105	0.00	13.61
88	M	ethylbenzene	1.570	1.578	-0.5	106	0.00	13.60
89	M	m,p-xylene	0.615	0.621	-1.0	107	0.00	13.70
90	M	o-xylene	0.626	0.621	0.8	104	0.00	14.12
91	M	styrene	1.025	1.044	-1.9	106	0.00	14.13

Initial Calibration Verification

Job Number: JD36682 **Sample:** V1C7937-ICV7937
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1C182319.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

92	M	bromoform	0.276	0.292	-5.8	108	0.00	14.41
93		butyl acrylate	0.719	0.667	7.2	103	0.00	13.94
94		isopropylbenzene	1.605	1.617	-0.7	105	0.00	14.46
95		cis-1,4-dichloro-2-butene	0.124	0.135	-8.9	108	0.00	14.54
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	108	0.00	15.84
97	S	4-bromofluorobenzene (s)	0.937	0.936	0.1	106	0.00	14.67
98	M	bromobenzene	0.845	0.884	-4.6	108	0.00	14.86
99	M	1,1,2,2-tetrachloroethane	0.707	0.741	-4.8	106	0.00	14.78
100	M	trans-1,4-dichloro-2-bute	0.231	0.228	1.3	102	0.00	14.82
101	M	1,2,3-trichloropropane	0.177	0.181	-2.3	105	0.00	14.85
102	M	n-propylbenzene	3.693	3.620	2.0	105	0.00	14.86
103	M	2-chlorotoluene	0.781	0.775	0.8	105	0.00	15.02
104	M	4-chlorotoluene	2.210	2.208	0.1	106	0.00	15.11
105	M	1,3,5-trimethylbenzene	2.565	2.588	-0.9	106	0.00	15.02
106	M	tert-butylbenzene	0.500	0.513	-2.6	103	0.00	15.36
107	M	1,2,4-trimethylbenzene	2.647	2.660	-0.5	106	0.00	15.41
108	M	sec-butylbenzene	3.407	3.422	-0.4	102	0.00	15.58
109	M	1,3-dichlorobenzene	1.618	1.652	-2.1	108	0.00	15.78
110	M	p-isopropyltoluene	2.906	2.990	-2.9	106	0.00	15.70
111		1,2,3-trimethylbenzene		----------NA----------				
112	M	1,4-dichlorobenzene	1.579	1.616	-2.3	111	0.00	15.86
113		benzyl chloride	1.450	1.558	-7.4	112	0.00	15.98
114	M	1,2-dichlorobenzene	1.530	1.606	-5.0	108	0.00	16.27
115	M	n-butylbenzene	1.471	1.543	-4.9	107	0.00	16.12
116	M	1,2-dibromo-3-chloropropa	0.142	0.144	-1.4	104	0.00	17.06
117		1,3,5-trichlorobenzene	1.208	1.282	-6.1	112	0.00	17.22
118		2-ethylhexyl acrylate	0.641	0.850	-32.6#	133	0.00	17.77
119	M	1,2,4-trichlorobenzene	0.985	1.045	-6.1	111	0.00	17.80
120	M	hexachlorobutadiene	0.606	0.584	3.6	102	0.00	17.89
121	M	naphthalene	2.057	2.202	-7.0	112	0.00	18.04
122	M	1,2,3-trichlorobenzene	0.894	0.965	-7.9	110	0.00	18.26
123	m	hexachloroethane	0.532	0.585	-10.0	106	0.00	16.52
124		2-methylnaphthalene	1.187	1.511	-27.3	117	0.00	19.01
125		pentafluorobenzene(a)	1.000	1.000	0.0	106	0.00	9.45
126		vinyl bromide		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1C182314.D M1CS7937.M Sat Oct 30 13:23:57 2021

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1C7937-ICV7937
Lab FileID: 1C182320.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V1C7937\1C182320.D Vial: 15
Acq On : 29 Oct 2021 7:37 pm Operator: PrashanS
Sample : ICV7937-50 Inst : GCMS1C
Misc : MS54469,V1C7937,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M1CS7937.M (RTE Integrator)
Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Sat Oct 30 13:00:17 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	100	-0.01	7.21
2	M	tertiary butyl alcohol		----------NA----------				
3		ethanol		----------NA----------				
4	M	1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	108	0.00	9.45
6	M	dichlorodifluoromethane		----------NA----------				
7		chlorodifluoromethane	0.524	0.665	-26.9	136	0.00	3.80
8	M	chloromethane		----------NA----------				
9	M	vinyl chloride		----------NA----------				
10		1,3-butadiene		----------NA----------				
11	M	bromomethane		----------NA----------				
12	M	chloroethane		----------NA----------				
13	M	trichlorofluoromethane		----------NA----------				
14	M	ethyl ether		----------NA----------				
15	M	acrolein		----------NA----------				
16		freon 113		----------NA----------				
17	M	1,1-dichloroethene		----------NA----------				
18	M	acetone		----------NA----------				
19	M	acetonitrile	0.052	0.051	1.9	106	0.00	7.04
		----------	True	Calc.	% Drift	----------		
20	M	iodomethane		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
21	M	carbon disulfide		----------NA----------				
22	M	methylene chloride		----------NA----------				
23	M	methyl acetate		----------NA----------				
24	M	methyl tert butyl ether		----------NA----------				
25	M	trans-1,2-dichloroethene		----------NA----------				
26	M	di-isopropyl ether		----------NA----------				
27	M	2-butanone		----------NA----------				
28	M	1,1-dichloroethane		----------NA----------				
29	M	chloroprene		----------NA----------				
30	M	acrylonitrile		----------NA----------				
31		hexane		----------NA----------				
32	M	vinyl acetate		----------NA----------				
33	M	ethyl tert-butyl ether		----------NA----------				
34	M	ethyl acetate		----------NA----------				
35	M	2,2-dichloropropane		----------NA----------				
36	M	cis-1,2-dichloroethene		----------NA----------				
37		methyl acrylate		----------NA----------				

Initial Calibration Verification

Job Number: JD36682 **Sample:** V1C7937-ICV7937
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1C182320.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

38	M	propionitrile		----------NA----------					
39	M	bromochloromethane		----------NA----------					
40	M	tetrahydrofuran		----------NA----------					
41	M	chloroform		----------NA----------					
42	M	t-butyl formate		----------NA----------					
43	S	dibromofluoromethane (s)	0.432	0.432	0.0	106	0.00	9.51	
44	M	methacrylonitrile		----------NA----------					
45	M	1,1,1-trichloroethane		----------NA----------					
46		cyclohexane		----------NA----------					
47		1,1-dichloropropene		----------NA----------					
48		iso-butyl alcohol		----------NA----------					
49		carbon tetrachloride		----------NA----------					
		----------	True	Calc.	% Drift	----------			
50		tert amyl alcohol		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
51	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	10.37	
52	S	1,2-dichloroethane-d4 (s)	0.297	0.296	0.3	104	0.00	9.93	
53	M	n-butyl alcohol		----------NA----------					
54		2,2,4-trimethylpentane		----------NA----------					
55	M	benzene		----------NA----------					
56	M	tert-amyl methyl ether		----------NA----------					
57	M	heptane		----------NA----------					
58	M	isopropyl acetate		----------NA----------					
59	M	1,2-dichloroethane		----------NA----------					
60	M	trichloroethene		----------NA----------					
61		ethyl acrylate		----------NA----------					
62	M	2-nitropropane		----------NA----------					
63	M	2-chloroethyl vinyl ether		----------NA----------					
64	M	methyl methacrylate		----------NA----------					
65	M	1,2-dichloropropane		----------NA----------					
66	M	dibromomethane		----------NA----------					
67	M	methylcyclohexane		----------NA----------					
68	M	bromodichloromethane		----------NA----------					
69		epichlorohydrin		----------NA----------					
70	M	cis-1,3-dichloropropene		----------NA----------					
71	M	4-methyl-2-pentanone		----------NA----------					
72	M	3-methyl-1-butanol		----------NA----------					
73	I	chlorobenzene-d5	1.000	1.000	0.0	109	0.00	13.52	
74	S	toluene-d8 (s)	1.365	1.360	0.4	108	0.00	12.00	
75		toluene		----------NA----------					
76		trans-1,3-dichloropropene		----------NA----------					
77		ethyl methacrylate		----------NA----------					
78		1,1,2-trichloroethane		----------NA----------					
79	M	tetrachloroethene		----------NA----------					
80	M	1,3-dichloropropane		----------NA----------					
81		2-hexanone		----------NA----------					
82	M	butyl acetate		----------NA----------					
83	M	dibromochloromethane		----------NA----------					
84	M	1,2-dibromoethane		----------NA----------					
85		n-butyl ether		----------NA----------					
86	M	chlorobenzene		----------NA----------					
87	M	1,1,1,2-tetrachloroethane		----------NA----------					
88	M	ethylbenzene		----------NA----------					
89	M	m,p-xylene		----------NA----------					
90	M	o-xylene		----------NA----------					
91	M	styrene		----------NA----------					

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1C7937-ICV7937
Lab FileID: 1C182320.D

92	M	bromoform		----------NA----------				
93		butyl acrylate		----------NA----------				
94		isopropylbenzene		----------NA----------				
95		cis-1,4-dichloro-2-butene		----------NA----------				
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	111	0.00	15.84
97	S	4-bromofluorobenzene (s)	0.937	0.905	3.4	105	0.00	14.67
98	M	bromobenzene		----------NA----------				
99	M	1,1,2,2-tetrachloroethane		----------NA----------				
100	M	trans-1,4-dichloro-2-bute		----------NA----------				
101	M	1,2,3-trichloropropane		----------NA----------				
102	M	n-propylbenzene		----------NA----------				
103	M	2-chlorotoluene		----------NA----------				
104	M	4-chlorotoluene		----------NA----------				
105	M	1,3,5-trimethylbenzene		----------NA----------				
106	M	tert-butylbenzene		----------NA----------				
107	M	1,2,4-trimethylbenzene		----------NA----------				
108	M	sec-butylbenzene		----------NA----------				
109	M	1,3-dichlorobenzene		----------NA----------				
110	M	p-isopropyltoluene		----------NA----------				
111		1,2,3-trimethylbenzene		----------NA----------				
112	M	1,4-dichlorobenzene		----------NA----------				
113		benzyl chloride		----------NA----------				
114	M	1,2-dichlorobenzene		----------NA----------				
115	M	n-butylbenzene		----------NA----------				
116	M	1,2-dibromo-3-chloropropa		----------NA----------				
117		1,3,5-trichlorobenzene		----------NA----------				
118		2-ethylhexyl acrylate		----------NA----------				
119	M	1,2,4-trichlorobenzene		----------NA----------				
120	M	hexachlorobutadiene		----------NA----------				
121	M	naphthalene		----------NA----------				
122	M	1,2,3-trichlorobenzene		----------NA----------				
123	m	hexachloroethane		----------NA----------				
124		2-methylnaphthalene		----------NA----------				
125		pentafluorobenzene(a)	1.000	1.000	0.0	108	0.00	9.45
126		vinyl bromide		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1C182314.D M1CS7937.M Sat Oct 30 13:24:00 2021

Continuing Calibration Summary

Job Number: JD36682 **Sample:** V1C7979-CC7937
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1C183199.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ne...21\v1c7979\1c183199.d Vial: 2
Acq On : 16 Dec 2021 12:28 pm Operator: PrashanS
Sample : CC7937-50 Inst : GCMS1C
Misc : MS55576,V1C7979,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M1CS7937.M (RTE Integrator)
Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Tue Dec 14 17:38:23 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	74	-0.02	7.20
2	M	tertiary butyl alcohol	1.493	1.590	-6.5	79	-0.02	7.32
3		ethanol	0.143	0.168	-17.5	79	-0.02	5.96
4	M	1,4-dioxane	0.135	0.148	-9.6	76	-0.02	11.09
5	I	pentafluorobenzene	1.000	1.000	0.0	74	0.00	9.45
6	M	dichlorodifluoromethane	0.681	0.678	0.4	68	0.00	3.76
7		chlorodifluoromethane	0.524	0.745	-42.2#	105	0.00	3.80
8	M	chloromethane	0.720	0.781	-8.5	80	0.00	4.17
9	M	vinyl chloride	0.548	0.598	-9.1	73	0.00	4.39
10		1,3-butadiene	0.416	0.454	-9.1	79	0.00	4.47
11	M	bromomethane	0.378	0.381	-0.8	80	0.01	5.06
12	M	chloroethane	0.280	0.324	-15.7	80	0.00	5.23
13	M	trichlorofluoromethane	0.688	0.763	-10.9	76	0.00	5.67
14	M	ethyl ether	0.186	0.232	-24.7#	87	0.00	6.11
15	M	acrolein	0.066	0.074	-12.1	80	0.00	6.37
16		freon 113	0.337	0.406	-20.5#	84	0.00	6.47
17	M	1,1-dichloroethene	0.394	0.426	-8.1	85	0.00	6.53
18	M	acetone	0.129	0.114	11.6	72	0.00	6.59
19	M	acetonitrile	0.052	0.051	1.9	74	-0.01	7.04
		----------	True	Calc.	% Drift	----------		
20	M	iodomethane	50.000	54.539	-9.1	77	0.00	6.81
		----------	AvgRF	CCRF	% Dev	----------		
21	M	carbon disulfide	1.258	1.490	-18.4	84	0.00	6.92
22	M	methylene chloride	0.442	0.458	-3.6	79	0.00	7.25
23	M	methyl acetate	0.298	0.315	-5.7	76	0.00	7.05
24	M	methyl tert butyl ether	0.992	1.132	-14.1	81	0.00	7.55
25	M	trans-1,2-dichloroethene	0.434	0.467	-7.6	81	0.00	7.62
26	M	di-isopropyl ether	1.562	1.702	-9.0	80	0.00	8.15
27	M	2-butanone	0.035	0.039	-11.4	76	0.00	8.90
28	M	1,1-dichloroethane	0.696	0.889	-27.7#	87	0.00	8.20
29	M	chloroprene	0.634	0.756	-19.2	82	0.00	8.29
30	M	acrylonitrile	0.136	0.158	-16.2	79	0.00	7.60
31		hexane	0.755	0.870	-15.2	85	0.00	7.91
32	M	vinyl acetate	0.061	0.071	-16.4	78	0.00	8.17
33	M	ethyl tert-butyl ether	1.274	1.541	-21.0#	83	0.00	8.61
34	M	ethyl acetate	0.062	0.060	3.2	72	0.00	8.91
35	M	2,2-dichloropropane	0.624	0.697	-11.7	82	0.00	8.92
36	M	cis-1,2-dichloroethene	0.475	0.498	-4.8	79	0.00	8.93
37		methyl acrylate	0.051	0.057	-11.8	76	-0.01	8.99

Continuing Calibration Summary

Job Number: JD36682 **Sample:** V1C7979-CC7937
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1C183199.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

38	M	propionitrile	0.052	0.057	-9.6	77	0.00	9.01
39	M	bromochloromethane	0.231	0.239	-3.5	74	0.00	9.25
40	M	tetrahydrofuran	0.139	0.139	0.0	73	0.00	9.28
41	M	chloroform	0.506	0.545	-7.7	82	0.00	9.30
42	M	t-butyl formate	0.307	0.414	-34.9#	91	0.00	9.31
43	S	dibromofluoromethane (s)	0.432	0.433	-0.2	73	0.00	9.50
44	M	methacrylonitrile	0.138	0.147	-6.5	75	0.00	9.19
45	M	1,1,1-trichloroethane	0.655	0.735	-12.2	79	0.00	9.54
46		cyclohexane	0.568	0.668	-17.6	80	0.00	9.60
47		1,1-dichloropropene	0.530	0.625	-17.9	80	0.00	9.72
48		iso-butyl alcohol	0.016	0.017	-6.3	71	-0.01	9.74
49		carbon tetrachloride	0.602	0.688	-14.3	79	0.00	9.74
			True	Calc.	% Drift			
50		tert amyl alcohol	250.000	275.300	-10.1	85	-0.01	9.85
			AvgRF	CCRF	% Dev			
51	I	1,4-difluorobenzene	1.000	1.000	0.0	73	0.00	10.36
52	S	1,2-dichloroethane-d4 (s)	0.297	0.306	-3.0	76	0.00	9.92
53	M	n-butyl alcohol	0.008	0.009#	-12.5	76	-0.01	10.49
54		2,2,4-trimethylpentane	1.343	1.540	-14.7	83	0.00	9.96
55	M	benzene	1.108	1.270	-14.6	82	0.00	9.98
56	M	tert-amyl methyl ether	0.195	0.206	-5.6	75	0.00	10.00
57	M	heptane	0.254	0.297	-16.9	83	0.00	10.14
58	M	isopropyl acetate	0.052	0.058	-11.5	78	0.00	9.90
59	M	1,2-dichloroethane	0.381	0.404	-6.0	80	0.00	10.01
60	M	trichloroethene	0.343	0.384	-12.0	76	0.00	10.70
61		ethyl acrylate	0.346	0.374	-8.1	79	0.00	10.71
62	M	2-nitropropane		----------NA----------				
63	M	2-chloroethyl vinyl ether	0.159	0.203	-27.7#	85	0.00	11.50
64	M	methyl methacrylate	0.063	0.069	-9.5	74	0.00	10.97
65	M	1,2-dichloropropane	0.294	0.360	-22.4#	86	0.00	10.97
66	M	dibromomethane	0.181	0.194	-7.2	78	0.00	11.13
67	M	methylcyclohexane	0.506	0.582	-15.0	80	0.00	10.90
68	M	bromodichloromethane	0.413	0.443	-7.3	78	0.00	11.27
69		epichlorohydrin	0.030	0.031	-3.3	77	0.00	11.63
70	M	cis-1,3-dichloropropene	0.471	0.547	-16.1	79	0.00	11.72
71	M	4-methyl-2-pentanone	0.098	0.108	-10.2	78	0.00	11.80
72	M	3-methyl-1-butanol	0.013	0.013	0.0	69	0.00	11.83
73	I	chlorobenzene-d5	1.000	1.000	0.0	74	0.00	13.51
74	S	toluene-d8 (s)	1.365	1.370	-0.4	73	0.00	12.00
75		toluene	0.861	0.973	-13.0	78	0.00	12.08
76		trans-1,3-dichloropropene	0.489	0.564	-15.3	78	0.00	12.29
77		ethyl methacrylate	0.390	0.410	-5.1	75	0.00	12.26
78		1,1,2-trichloroethane	0.248	0.274	-10.5	77	0.00	12.50
79	M	tetrachloroethene	0.341	0.377	-10.6	79	0.00	12.66
80	M	1,3-dichloropropane	0.436	0.503	-15.4	79	0.00	12.68
81		2-hexanone	0.118	0.128	-8.5	77	0.00	12.66
82	M	butyl acetate	0.232	0.241	-3.9	77	0.00	12.73
83	M	dibromochloromethane	0.409	0.441	-7.8	75	0.00	12.94
84	M	1,2-dibromoethane	0.309	0.345	-11.7	75	0.00	13.09
85		n-butyl ether	1.644	1.913	-16.4	82	0.00	13.44
86	M	chlorobenzene	0.951	1.045	-9.9	77	0.00	13.55
87	M	1,1,1,2-tetrachloroethane	0.359	0.389	-8.4	74	0.00	13.61
88	M	ethylbenzene	1.570	1.747	-11.3	80	0.00	13.59
89	M	m,p-xylene	0.615	0.666	-8.3	79	0.00	13.70
90	M	o-xylene	0.626	0.682	-8.9	78	0.00	14.12
91	M	styrene	1.025	1.111	-8.4	77	0.00	14.13

Continuing Calibration Summary

Job Number: JD36682 **Sample:** V1C7979-CC7937
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1C183199.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

92	M	bromoform	0.276	0.298	-8.0	75	0.00	14.40
93		butyl acrylate	0.719	0.714	0.7	75	0.00	13.94
94		isopropylbenzene	1.605	1.751	-9.1	78	0.00	14.46
95		cis-1,4-dichloro-2-butene	0.124	0.139	-12.1	76	0.00	14.54
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	73	0.00	15.83
97	S	4-bromofluorobenzene (s)	0.937	0.947	-1.1	73	0.00	14.67
98	M	bromobenzene	0.845	0.939	-11.1	78	0.00	14.86
99	M	1,1,2,2-tetrachloroethane	0.707	0.759	-7.4	74	0.00	14.77
100	M	trans-1,4-dichloro-2-bute	0.231	0.243	-5.2	74	0.00	14.82
101	M	1,2,3-trichloropropane	0.177	0.188	-6.2	75	0.00	14.85
102	M	n-propylbenzene	3.693	4.059	-9.9	80	0.00	14.86
103	M	2-chlorotoluene	0.781	0.823	-5.4	76	0.00	15.02
104	M	4-chlorotoluene	2.210	2.436	-10.2	80	0.00	15.11
105	M	1,3,5-trimethylbenzene	2.565	2.817	-9.8	79	0.00	15.01
106	M	tert-butylbenzene	0.500	0.559	-11.8	77	0.00	15.36
107	M	1,2,4-trimethylbenzene	2.647	2.864	-8.2	78	0.00	15.41
108	M	sec-butylbenzene	3.407	3.792	-11.3	77	0.00	15.57
109	M	1,3-dichlorobenzene	1.618	1.707	-5.5	76	0.00	15.77
110	M	p-isopropyltoluene	2.906	3.202	-10.2	77	0.00	15.70
111		1,2,3-trimethylbenzene	2.498	2.720	-8.9	80	0.00	15.86
112	M	1,4-dichlorobenzene	1.579	1.634	-3.5	77	0.00	15.86
113		benzyl chloride	1.450	1.516	-4.6	74	0.00	15.98
114	M	1,2-dichlorobenzene	1.530	1.633	-6.7	75	0.00	16.26
115	M	n-butylbenzene	1.471	1.672	-13.7	79	0.00	16.11
116	M	1,2-dibromo-3-chloropropa	0.142	0.149	-4.9	74	0.00	17.06
117		1,3,5-trichlorobenzene	1.208	1.359	-12.5	81	0.00	17.22
118		2-ethylhexyl acrylate	0.641	0.713	-11.2	76	0.00	17.77
119	M	1,2,4-trichlorobenzene	0.985	1.084	-10.1	78	0.00	17.80
120	M	hexachlorobutadiene	0.606	0.711	-17.3	85	0.00	17.89
121	M	naphthalene	2.057	2.101	-2.1	73	0.00	18.04
122	M	1,2,3-trichlorobenzene	0.894	0.998	-11.6	78	0.00	18.26
123	m	hexachloroethane	0.532	0.623	-17.1	77	0.00	16.52
124		2-methylnaphthalene	1.187	1.361	-14.7	72	0.00	19.01
125		pentafluorobenzene(a)	1.000	1.000	0.0	61	0.00	9.45
126		Freon 142B		----------NA----------				
127		vinyl bromide		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1C182314.D M1CS7937.M Tue Dec 21 01:15:20 2021

Continuing Calibration Summary

Job Number: JD36682 **Sample:** V1C7983-CC7937
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1C183310.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\da...21\v1c7983\1c183310.d Vial: 1
Acq On : 21 Dec 2021 12:30 pm Operator: PrashanS
Sample : CC7937-50 Inst : GCMS1C
Misc : MS55720,V1C7983,5.0,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M1CS7937.M (RTE Integrator)
Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Tue Dec 14 17:38:23 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	78	-0.02	7.20
2	M	tertiary butyl alcohol	1.493	1.362	8.8	70	-0.02	7.32
3		ethanol	0.143	0.153	-7.0	76	-0.02	5.96
4	M	1,4-dioxane	0.135	0.130	3.7	70	-0.01	11.09
5	I	pentafluorobenzene	1.000	1.000	0.0	75	0.00	9.45
6	M	dichlorodifluoromethane	0.681	0.584	14.2	59	0.00	3.76
7		chlorodifluoromethane	0.524	0.553	-5.5	78	0.00	3.80
8	M	chloromethane	0.720	0.708	1.7	73	0.00	4.17
9	M	vinyl chloride	0.548	0.524	4.4	64	0.00	4.39
10		1,3-butadiene	0.416	0.347	16.6	60	0.00	4.47
11	M	bromomethane	0.378	0.331	12.4	70	0.01	5.06
12	M	chloroethane	0.280	0.284	-1.4	71	0.01	5.24
13	M	trichlorofluoromethane	0.688	0.653	5.1	65	0.00	5.67
14	M	ethyl ether	0.186	0.195	-4.8	73	0.00	6.11
15	M	acrolein	0.066	0.069	-4.5	75	0.00	6.38
16		freon 113	0.337	0.323	4.2	67	0.00	6.47
17	M	1,1-dichloroethene	0.394	0.348	11.7	70	0.00	6.53
18	M	acetone	0.129	0.125	3.1	79	0.00	6.59
19	M	acetonitrile	0.052	0.049	5.8	71	-0.01	7.04
		----------	True	Calc.	% Drift	----------		
20	M	iodomethane	50.000	42.172	15.7	59	0.00	6.81
		----------	AvgRF	CCRF	% Dev	----------		
21	M	carbon disulfide	1.258	1.187	5.6	67	0.00	6.92
22	M	methylene chloride	0.442	0.391	11.5	68	0.00	7.25
23	M	methyl acetate	0.298	0.289	3.0	70	0.00	7.05
24	M	methyl tert butyl ether	0.992	0.967	2.5	69	0.00	7.55
25	M	trans-1,2-dichloroethene	0.434	0.385	11.3	67	0.00	7.62
26	M	di-isopropyl ether	1.562	1.468	6.0	69	0.00	8.15
27	M	2-butanone	0.035	0.036	-2.9	70	0.00	8.90
28	M	1,1-dichloroethane	0.696	0.737	-5.9	73	0.00	8.20
29	M	chloroprene	0.634	0.617	2.7	67	0.00	8.29
30	M	acrylonitrile	0.136	0.152	-11.8	76	0.00	7.60
31		hexane	0.755	0.701	7.2	69	0.00	7.91
32	M	vinyl acetate	0.061	0.063	-3.3	69	0.00	8.18
33	M	ethyl tert-butyl ether	1.274	1.306	-2.5	71	0.00	8.61
34	M	ethyl acetate	0.062	0.057	8.1	68	0.00	8.91
35	M	2,2-dichloropropane	0.624	0.575	7.9	68	0.00	8.92
36	M	cis-1,2-dichloroethene	0.475	0.425	10.5	68	0.00	8.93
37		methyl acrylate	0.051	0.050	2.0	67	0.00	9.00

Continuing Calibration Summary

Job Number: JD36682 **Sample:** V1C7983-CC7937
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1C183310.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

38	M	propionitrile	0.052	0.053	-1.9	72	0.00	9.01
39	M	bromochloromethane	0.231	0.204	11.7	63	0.00	9.25
40	M	tetrahydrofuran	0.139	0.129	7.2	68	0.00	9.28
41	M	chloroform	0.506	0.457	9.7	69	0.00	9.30
42	M	t-butyl formate	0.307	0.365	-18.9	81	0.00	9.31
43	S	dibromofluoromethane (s)	0.432	0.449	-3.9	76	0.00	9.50
44	M	methacrylonitrile	0.138	0.130	5.8	67	0.00	9.19
45	M	1,1,1-trichloroethane	0.655	0.607	7.3	66	0.00	9.54
46		cyclohexane	0.568	0.528	7.0	64	0.00	9.60
47		1,1-dichloropropene	0.530	0.509	4.0	65	0.00	9.72
48		iso-butyl alcohol	0.016	0.015	6.3	65	-0.01	9.74
49		carbon tetrachloride	0.602	0.568	5.6	65	0.00	9.74
			True	Calc.	% Drift			
50		tert amyl alcohol	250.000	243.532	2.6	76	0.00	9.85
			AvgRF	CCRF	% Dev			
51	I	1,4-difluorobenzene	1.000	1.000	0.0	74	0.00	10.36
52	S	1,2-dichloroethane-d4 (s)	0.297	0.310	-4.4	79	0.00	9.92
53	M	n-butyl alcohol	0.008	0.008#	0.0	70	-0.01	10.49
54		2,2,4-trimethylpentane	1.343	1.236	8.0	68	0.00	9.96
55	M	benzene	1.108	1.042	6.0	68	0.00	9.98
56	M	tert-amyl methyl ether	0.195	0.170	12.8	63	0.00	10.00
57	M	heptane	0.254	0.233	8.3	67	0.00	10.14
58	M	isopropyl acetate	0.052	0.049	5.8	68	0.00	9.91
59	M	1,2-dichloroethane	0.381	0.345	9.4	70	0.00	10.02
60	M	trichloroethene	0.343	0.307	10.5	62	0.00	10.70
61		ethyl acrylate	0.346	0.325	6.1	70	0.00	10.71
62	M	2-nitropropane		----------NA----------				
63	M	2-chloroethyl vinyl ether	0.159	0.175	-10.1	75	0.00	11.50
64	M	methyl methacrylate	0.063	0.059	6.3	64	0.00	10.97
65	M	1,2-dichloropropane	0.294	0.301	-2.4	74	0.00	10.97
66	M	dibromomethane	0.181	0.166	8.3	68	0.00	11.14
67	M	methylcyclohexane	0.506	0.465	8.1	65	0.00	10.90
68	M	bromodichloromethane	0.413	0.369	10.7	66	0.00	11.27
69		epichlorohydrin	0.030	0.028	6.7	71	0.00	11.63
70	M	cis-1,3-dichloropropene	0.471	0.452	4.0	67	0.00	11.72
71	M	4-methyl-2-pentanone	0.098	0.095	3.1	70	0.00	11.81
72	M	3-methyl-1-butanol	0.013	0.012	7.7	63	0.00	11.83
73	I	chlorobenzene-d5	1.000	1.000	0.0	76	0.00	13.51
74	S	toluene-d8 (s)	1.365	1.356	0.7	75	0.00	12.00
75		toluene	0.861	0.772	10.3	65	0.00	12.08
76		trans-1,3-dichloropropene	0.489	0.469	4.1	68	0.00	12.29
77		ethyl methacrylate	0.390	0.344	11.8	65	0.00	12.26
78		1,1,2-trichloroethane	0.248	0.230	7.3	67	0.00	12.50
79	M	tetrachloroethene	0.341	0.300	12.0	66	0.00	12.66
80	M	1,3-dichloropropane	0.436	0.420	3.7	69	0.00	12.68
81		2-hexanone	0.118	0.111	5.9	69	0.00	12.66
82	M	butyl acetate	0.232	0.206	11.2	69	0.00	12.73
83	M	dibromochloromethane	0.409	0.362	11.5	64	0.00	12.94
84	M	1,2-dibromoethane	0.309	0.286	7.4	65	0.00	13.10
85		n-butyl ether	1.644	1.526	7.2	68	0.00	13.44
86	M	chlorobenzene	0.951	0.843	11.4	65	0.00	13.55
87	M	1,1,1,2-tetrachloroethane	0.359	0.317	11.7	63	0.00	13.61
88	M	ethylbenzene	1.570	1.392	11.3	66	0.00	13.59
89	M	m,p-xylene	0.615	0.535	13.0	66	0.00	13.70
90	M	o-xylene	0.626	0.545	12.9	65	0.00	14.12
91	M	styrene	1.025	0.891	13.1	64	0.00	14.13

Continuing Calibration Summary

Job Number: JD36682 **Sample:** V1C7983-CC7937
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1C183310.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

92	M	bromoform	0.276	0.248	10.1	65	0.00	14.40
93		butyl acrylate	0.719	0.579	19.5	63	0.00	13.94
94		isopropylbenzene	1.605	1.378	14.1	64	0.00	14.46
95		cis-1,4-dichloro-2-butene	0.124	0.117	5.6	67	0.00	14.54
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	76	0.00	15.83
97	S	4-bromofluorobenzene (s)	0.937	0.926	1.2	74	0.00	14.67
98	M	bromobenzene	0.845	0.756	10.5	65	0.00	14.86
99	M	1,1,2,2-tetrachloroethane	0.707	0.650	8.1	66	0.00	14.78
100	M	trans-1,4-dichloro-2-bute	0.231	0.208	10.0	66	0.00	14.82
101	M	1,2,3-trichloropropane	0.177	0.158	10.7	65	0.00	14.85
102	M	n-propylbenzene	3.693	3.227	12.6	66	0.00	14.86
103	M	2-chlorotoluene	0.781	0.661	15.4	63	0.00	15.02
104	M	4-chlorotoluene	2.210	1.932	12.6	66	0.00	15.11
105	M	1,3,5-trimethylbenzene	2.565	2.216	13.6	64	0.00	15.02
106	M	tert-butylbenzene	0.500	0.434	13.2	62	0.00	15.36
107	M	1,2,4-trimethylbenzene	2.647	2.252	14.9	64	0.00	15.41
108	M	sec-butylbenzene	3.407	2.979	12.6	63	0.00	15.57
109	M	1,3-dichlorobenzene	1.618	1.382	14.6	64	0.00	15.77
110	M	p-isopropyltoluene	2.906	2.522	13.2	63	0.00	15.70
111		1,2,3-trimethylbenzene	2.498	2.198	12.0	67	0.00	15.86
112	M	1,4-dichlorobenzene	1.579	1.333	15.6	65	0.00	15.86
113		benzyl chloride	1.450	1.290	11.0	66	0.00	15.98
114	M	1,2-dichlorobenzene	1.530	1.325	13.4	63	0.00	16.26
115	M	n-butylbenzene	1.471	1.309	11.0	64	0.00	16.11
116	M	1,2-dibromo-3-chloropropa	0.142	0.126	11.3	65	0.00	17.06
117		1,3,5-trichlorobenzene	1.208	1.109	8.2	69	0.00	17.22
118		2-ethylhexyl acrylate	0.641	0.536	16.4	59	0.00	17.77
119	M	1,2,4-trichlorobenzene	0.985	0.868	11.9	65	0.00	17.80
120	M	hexachlorobutadiene	0.606	0.555	8.4	69	0.00	17.89
121	M	naphthalene	2.057	1.706	17.1	61	0.00	18.04
122	M	1,2,3-trichlorobenzene	0.894	0.791	11.5	64	0.00	18.25
123	m	hexachloroethane	0.532	0.500	6.0	64	0.00	16.52
124		2-methylnaphthalene	1.187	1.061	10.6	58	0.00	19.01
125		pentafluorobenzene(a)	1.000	1.000	0.0	61	0.00	9.45
126		Freon 142B		----------NA----------				
127		vinyl bromide		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1C182314.D M1CS7937.M Wed Dec 22 18:11:06 2021

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7257-ICC7257
Lab FileID: 3A167235.D

Response Factor Report MS3A

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

Calibration Files
0.4 =3A167243.D 1 =3A167232.D 2 =3A167233.D 5 =3A167234.D
0.25=3A167242.D 20 =3A167235.D 50 =3A167236.D 200 =3A167245.D
100 =3A167237.D = = =

Compound	0.4	1	2	5	0.25	20	50	200	100	Avg	%RSD
1) I 4-bromofluorobenzene	----------ISTD----------										
2) 1,4-dioxane-d8	0.034	0.030	0.028	0.029	0.023	0.025	0.034	0.021	0.026	0.028	16.15
3) 1,4-dioxane	0.038	0.037	0.034	0.030	0.038	0.025	0.032	0.020	0.026	0.031	19.97

(#) = Out of Range ### Number of calibration levels exceeded format ###

M3A7257.M Tue Dec 07 12:07:20 2021 ACCUNJ

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7257-ICV7257
Lab FileID: 3A167248.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7257\3A167248.D Vial: 24
Acq On : 6 Dec 2021 9:13 pm Operator: BridgetK
Sample : icv7257-20 Inst : MS3A
Misc : MS32930,V3A7257,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	116	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.024	14.3	116	0.00	11.85
3 M	1,4-dioxane	0.031	0.025	19.4	114	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167235.D M3A7257.M Tue Dec 07 12:07:06 2021 ACCUNJ

6.9.7

6

Continuing Calibration Summary

Job Number: JD36682 **Sample:** V3A7273-CC7257
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3A167532.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7273\3A167532.D Vial: 3
Acq On : 23 Dec 2021 9:16 am Operator: BridgetK
Sample : cc7257-5 Inst : MS3A
Misc : MS55558,V3A7273,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	163	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.026	7.1	145	0.00	11.85
3 M	1,4-dioxane	0.031	0.030	3.2	167	-0.01	11.90

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167234.D M3A7257.M Thu Dec 23 11:15:38 2021 ACCUNJ

Initial Calibration Summary

Job Number: JD36682 **Sample:** VL10004-ICC10004
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** L333158.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report GCMSL

Method : C:\MSDCHEM\1\METHODS\ML10004.M (RTE Integrator)
Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Wed Oct 06 12:08:10 2021
Response via : Initial Calibration

Calibration Files
8 =L333156.D 0.5 =L333152.D 4 =L333155.D 50 =L333158.D
100 =L333159.D 1 =L333153.D 200 =L333160.D 20 =L333157.D
2 =L333154.D 0.2 =L333151.D = =

Compound	8	0.5	4	50	100	1	200	20	2	0.2	Avg	%RSD
1) I tert butyl alcohol-d9	----------ISTD----------											
2) 1,4-dioxane	0.139	0.148	0.134	0.131	0.193	0.140	0.136	0.159			0.147	13.82
3) ethanol	0.127	0.136	0.134	0.127	0.138	0.121	0.130	0.141			0.132	4.98
4) tertiary butyl alcohol	1.247	1.638	1.321	1.269	1.238	1.420	1.202	1.204	1.507		1.339	11.36
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	*This compound fails initial calibration criteria.*											
	0.453	0.455	0.512	0.467	0.453	0.519	0.415	0.476	0.483		0.470	6.78
7) dichlorodifluoromethane	0.788	0.806	0.765	0.807	0.808	0.797	0.742	0.806	0.841	0.796	0.796	3.37
8) chloromethane	0.580	0.621	0.578	0.548	0.839	0.495	0.578	0.686			0.616	17.15
9) vinyl chloride	0.660	0.704	0.661	0.664	0.637	0.690	0.575	0.672	0.685	0.770	0.672	7.36
10) bromomethane	0.211	0.227	0.206	0.247	0.289	0.213	0.314	0.230	0.237		0.241	15.26
11) chloroethane	0.379	0.391	0.365	0.360	0.437	0.336	0.360	0.349			0.372	8.38
12) trichlorofluoromethane	0.840	0.989	0.811	0.858	0.822	0.797	0.754	0.831	0.872	0.947	0.852	8.19
13) ethyl ether	0.271	0.307	0.288	0.292	0.271	0.326	0.265	0.273	0.282		0.286	6.95
14) acrolein	0.083	0.094	0.082	0.081	0.079	0.073	0.086				0.083	8.08
15) freon 113	0.364	0.399	0.396	0.347	0.343	0.405	0.317	0.360	0.371		0.367	7.98
16) 1,1-dichloroethene	0.405	0.450	0.436	0.385	0.371	0.463	0.343	0.403	0.496	0.365	0.412	11.79
17) acetone	0.065	0.074	0.060	0.060	0.074	0.057	0.071	0.080			0.068	12.52
18) acetonitrile	0.031	0.034	0.033	0.030	0.028	0.033	0.034				0.032	7.25
19) iodomethane	*This compound fails initial calibration criteria.*											
	0.287	0.284	0.270	0.384	0.389	0.250	0.378	0.365	0.251		0.318	18.88
20) iso-butyl alcohol	0.021	0.021	0.019	0.021	0.018	0.018	0.025				0.020	11.70
21) carbon disulfide	1.264	1.345	1.170	1.104	1.743	1.022	1.243	1.435			1.291	17.40
22) methylene chloride	0.462	0.500	0.436	0.412	0.392	0.448	0.569				0.460	12.92

Initial Calibration Summary

Job Number: JD36682 **Sample:** VL10004-ICC10004
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** L333158.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

23) methyl acetate
0.098 0.093 0.096 0.090 0.120 0.091 0.100 0.094 0.098 9.89
24) methyl tert butyl ether
1.407 1.700 1.448 1.371 1.303 1.547 1.182 1.391 1.502 1.282 1.413 10.40
25) trans-1,2-dichloroethene
0.441 0.536 0.473 0.419 0.406 0.492 0.386 0.442 0.515 0.446 0.456 10.53
26) hexane
0.623 0.768 0.685 0.629 0.624 0.732 0.587 0.650 0.643 0.660 8.75
27) di-isopropyl ether
1.446 1.615 1.532 1.353 1.271 1.649 1.119 1.450 1.632 1.520 1.459 11.69
28) ethyl tert-butyl ether
1.270 1.484 1.298 1.244 1.202 1.385 1.113 1.280 1.355 1.332 1.296 7.88
29) 2-butanone
0.074 0.068 0.072 0.071 0.073 0.067 0.070 0.073 0.076 0.072 3.87
30) 1,1-dichloroethane
0.814 1.001 0.840 0.781 0.747 0.945 0.688 0.797 0.874 0.739 0.823 11.66
31) chloroprene
0.646 0.705 0.674 0.618 0.611 0.671 0.582 0.623 0.679 0.606 0.642 6.13
32) acrylonitrile
0.178 0.175 0.177 0.171 0.168 0.166 0.180 0.182 0.175 3.34
33) vinyl acetate
0.107 0.104 0.111 0.103 0.135 0.103 0.101 0.120 0.110 10.61
34) ethyl acetate
0.091 0.093 0.075 0.075 0.105 0.069 0.074 0.091 0.084 14.80
35) 2,2-dichloropropane
0.693 0.703 0.731 0.687 0.665 0.801 0.622 0.682 0.728 0.794 0.711 7.79
36) cis-1,2-dichloroethene
0.504 0.611 0.507 0.470 0.454 0.554 0.422 0.481 0.535 0.504 11.24
37) propionitrile
0.068 0.069 0.070 0.065 0.060 0.084 0.054 0.066 0.071 0.067 12.03
38) methyl acrylate
0.093 0.088 0.084 0.080 0.078 0.080 0.103 0.087 10.32
39) bromochloromethane
0.252 0.267 0.247 0.235 0.226 0.260 0.219 0.229 0.270 0.285 0.249 8.61
40) tetrahydrofuran
0.071 0.084 0.070 0.073 0.071 0.068 0.079 0.074 7.68
41) chloroform
0.905 0.955 0.834 0.789 1.450 0.739 0.854 1.141 0.958 24.34
----- Linear regression ----- Coefficient = 0.9980
Response Ratio = 0.01591 + 0.76349 *A

42) dibromofluoromethane (s)
0.432 0.434 0.421 0.433 0.432 0.415 0.444 0.441 0.425 0.424 0.430 2.11
43) methacrylonitrile
0.216 0.220 0.221 0.217 0.196 0.214 0.211 0.232 0.216 4.70
44) 1,1,1-trichloroethane
0.684 0.940 0.709 0.708 0.703 0.771 0.673 0.709 0.734 0.737 11.03
45) cyclohexane
0.639 0.811 0.649 0.658 0.647 0.669 0.606 0.649 0.677 0.667 8.60
46) 1,1-dichloropropene
0.646 0.800 0.681 0.625 0.620 0.730 0.580 0.639 0.689 0.615 0.662 9.75
47) carbon tetrachloride
0.593 0.666 0.593 0.605 0.609 0.639 0.580 0.611 0.619 0.613 4.29
48) isopropyl acetate
0.113 0.121 0.119 0.120 0.122 0.118 0.121 0.106 0.117 4.55
49) tert amyl alcohol
0.018 0.020 0.020 0.020 0.019 0.019 0.021 0.020 4.14

50) I 1,4-difluorobenzene ----------ISTD----------
51) 1,2-dichloroethane-d4 (s)

Initial Calibration Summary

Job Number: JD36682 **Sample:** VL10004-ICC10004
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** L333158.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
      0.347 0.349 0.349 0.342 0.333 0.351 0.325 0.349 0.347 0.343  0.344    2.44
52)  tert-amyl methyl ether
      0.876 1.026 0.926 0.848 0.840 1.031 0.727 0.861 0.961        0.899   10.83
53)  2,2,4-trimethylpentane
      0.603 0.670 0.637 0.582 0.585 0.643 0.527 0.595 0.689 0.638  0.617    7.76
54)  n-butyl alcohol
      0.008       0.009 0.010 0.010 0.008 0.009 0.009 0.007        0.009   10.15
55)  benzene
      1.193 1.382 1.265 1.134 1.083 1.398 0.922 1.159 1.288 1.381  1.220   12.52
56)  heptane
      0.175 0.185 0.195 0.163 0.174 0.216 0.167 0.176 0.174        0.180    8.90
57)  1,2-dichloroethane
      0.438 0.583 0.455 0.412 0.415 0.514 0.374 0.423 0.470        0.454   13.83
58)  trichloroethene
      0.321 0.356 0.326 0.315 0.322 0.347 0.297 0.325 0.325 0.354  0.329    5.62
59)  ethyl acrylate
      0.397 0.445 0.408 0.393 0.380 0.453 0.340 0.395 0.424        0.404    8.52
60)  2-nitropropane
      0.090       0.095 0.108 0.108       0.116 0.111              0.105    9.60
61)  2-chloroethyl vinyl ether
      0.162 0.177 0.165 0.158 0.151 0.164 0.131 0.158 0.178 0.137  0.158    9.56
62)  methyl methacrylate
      0.093       0.094 0.093 0.094 0.099 0.086 0.092 0.097        0.094    4.12
63)  1,2-dichloropropane
      0.300 0.307 0.312 0.294 0.281 0.353 0.256 0.302 0.334        0.304    9.22
64)  methylcyclohexane
      0.534 0.604 0.549 0.523 0.526 0.590 0.477 0.530 0.584 0.623  0.554    8.12
65)  dibromomethane
      0.206 0.246 0.218 0.199 0.199 0.234 0.186 0.201 0.235        0.214    9.53
66)  bromodichloromethane
      0.447 0.597 0.436 0.428 0.429 0.522 0.390 0.425 0.478        0.461   13.68
67)  cis-1,3-dichloropropene
      0.545 0.656 0.534 0.527 0.523 0.591 0.475 0.525 0.533 0.694  0.560   11.99
68)  epichlorohydrin
      0.032       0.033 0.029 0.030 0.032 0.028 0.030 0.032        0.031    5.71
69)  4-methyl-2-pentanone
      0.130 0.145 0.138 0.125 0.120 0.145 0.104 0.123 0.146 0.121  0.130   10.53
70)  3-methyl-1-butanol
      0.009       0.009 0.010 0.010 0.007 0.009 0.009 0.008        0.009   10.92

71) I   chlorobenzene-d5      ----------------ISTD---------------------
72)  toluene-d8 (s)
      1.371 1.418 1.395 1.326 1.293 1.402 1.311 1.357 1.390 1.393  1.365    3.11
73)  toluene
      0.869 1.133 0.885 0.849 0.821 1.071 0.745 0.879 0.982 1.164  0.940   14.98
74)  trans-1,3-dichloropropene
      0.540 0.661 0.550 0.555 0.547 0.595 0.516 0.564 0.592        0.569    7.45
75)  ethyl methacrylate
      0.537 0.528 0.531 0.512 0.491 0.550 0.449 0.533 0.588        0.524    7.37
76)  1,1,2-trichloroethane
      0.287 0.266 0.325 0.279 0.268 0.333 0.248 0.289 0.340 0.309  0.294   10.62
77)  2-hexanone
      0.152 0.178 0.164 0.142 0.133 0.162 0.117 0.155 0.175 0.128  0.150   13.49
78)  tetrachloroethene
      0.429 0.467 0.423 0.377 0.366 0.450 0.343 0.396 0.470 0.490  0.421   11.70
79)  1,3-dichloropropane
      0.591 0.632 0.643 0.547 0.524 0.689 0.477 0.578 0.634        0.590   11.28
80)  butyl acetate
      0.268 0.316 0.258 0.250 0.238 0.306 0.222 0.251 0.293        0.267   11.90
81)  dibromochloromethane
```

```
      0.388 0.405 0.368 0.365 0.361 0.450 0.337 0.376 0.420        0.386    8.92
 82)  1,2-dibromoethane
      0.379 0.401 0.373 0.352 0.345 0.392 0.323 0.355 0.416        0.371    8.00
 83)  n-butyl ether
      1.334 1.596 1.440 1.264 1.190 1.520 1.026 1.310 1.436 1.302  1.342   12.34
 84)  chlorobenzene
      0.919 1.212 0.945 0.893 0.874 1.029 0.787 0.903 1.044 1.058  0.966   12.51
 85)  1,1,1,2-tetrachloroethane
      0.327 0.351 0.364 0.332 0.323 0.396 0.300 0.334 0.360 0.261  0.335   11.08
 86)  ethylbenzene
      1.611 2.035 1.716 1.481 1.334 1.718 1.139 1.580 1.800 1.626  1.604   15.49
 87)  m,p-xylene
      0.614 0.750 0.641 0.594 0.535 0.771 0.494 0.606 0.640 0.689  0.633   13.64
 88)  o-xylene
      0.638 0.654 0.677 0.614 0.585 0.695 0.537 0.621 0.716 0.682  0.642    8.50
 89)  butyl acrylate
      0.623 0.622 0.687 0.691 0.663 0.785 0.599 0.704 0.706        0.676    8.39
 90)  styrene
      1.011 1.243 1.063 0.983 0.908 1.161 0.811 1.004 1.126        1.034   12.72
 91)  bromoform
      0.276 0.325 0.270 0.266 0.262 0.336 0.264 0.257 0.260        0.280   10.55
 92)  isopropylbenzene
      1.572 1.813 1.642 1.512 1.412 1.812 1.221 1.570 1.779 1.798  1.613   12.23
 93)  cis-1,4-dichloro-2-butene
      0.147       0.162 0.173 0.169 0.168 0.170 0.160 0.150        0.162    5.80

 94) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 95)  4-bromofluorobenzene (s)
      1.106 1.089 1.126 1.134 1.124 1.098 1.141 1.136 1.098 1.112  1.116    1.64
 96)  bromobenzene
      0.944 0.961 1.007 0.924 0.918 1.068 0.847 0.938 1.065 0.996  0.967    7.10
 97)  1,1,2,2-tetrachloroethane
      1.095 1.143 1.100 1.074 1.050 1.224 0.944 1.062 1.218 1.374  1.129   10.54
 98)  trans-1,4-dichloro-2-butene
      0.286       0.286 0.286 0.283 0.265 0.265 0.278 0.291        0.280    3.54
 99)  1,2,3-trichloropropane
      0.330       0.354 0.314 0.295 0.382 0.275 0.307 0.315        0.322   10.44
100)  n-propylbenzene
      4.293 4.892 4.564 4.050 3.766 4.878 3.217 4.253 4.769 5.074  4.376   13.28
101)  2-chlorotoluene
      0.908 1.036 0.914 0.872 0.856 1.020 0.804 0.882 0.879 0.935  0.911    7.83
102)  4-chlorotoluene
      0.898 0.868 0.965 0.855 0.846 0.863 0.795 0.882 0.918 0.749  0.864    7.00
103)  1,3,5-trimethylbenzene
      2.891 3.430 2.993 2.794 2.706 3.184 2.391 2.888 3.119        2.933   10.20
104)  tert-butylbenzene
      2.538 2.967 2.715 2.508 2.436 2.926 2.184 2.493 2.753 3.362  2.688   12.43
105)  1,2,4-trimethylbenzene
      2.947 3.488 3.067 2.818 2.707 3.359 2.408 2.911 3.077 3.860  3.064   13.57
106)  sec-butylbenzene
      3.554 4.135 3.789 3.525 3.371 4.179 2.935 3.561 3.851 4.231  3.713   10.97
107)  1,3-dichlorobenzene
      1.662 1.723 1.725 1.589 1.566 1.807 1.439 1.609 1.713 1.913  1.675    7.96
108)  p-isopropyltoluene
      2.915 3.401 3.070 2.827 2.689 3.203 2.326 2.845 3.134 3.457  2.987   11.41
109)  1,4-dichlorobenzene
      1.573 1.869 1.615 1.537 1.495 1.935 1.386 1.493 1.672 1.839  1.641   11.17
110)  1,2,3-trimethylbenzene
      2.736 3.259 2.831 2.684 2.551 2.966 2.239 2.735 2.869 3.131  2.800   10.33
111)  1,2-dichlorobenzene
```

Initial Calibration Summary

Job Number: JD36682 **Sample:** VL10004-ICC10004
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** L333158.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
       1.548 1.793 1.580 1.480 1.445 1.678 1.324 1.505 1.630 1.670  1.565    8.62
112)  n-butylbenzene
       1.374 1.574 1.357 1.426 1.435 1.351 1.342 1.393 1.471 1.842  1.456   10.47
113)  1,2-dibromo-3-chloropropane
       0.240       0.254 0.263 0.254 0.251 0.252 0.231 0.265        0.251    4.38
114)  1,3,5-trichlorobenzene
       1.008 1.070 1.036 1.051 1.051 1.174 0.998 1.047 0.993 0.931  1.036    6.10
115)  1,2,4-trichlorobenzene
       0.896 0.915 0.844 0.907 0.914 0.953 0.898 0.890 0.902 0.672  0.879    8.84
116)  hexachlorobutadiene
       0.346 0.487 0.372 0.346 0.345 0.505 0.337 0.354 0.379        0.386   16.65
117)  naphthalene
       2.201 2.445 2.256 2.350 2.309 2.078 2.139 2.349 2.245 2.031  2.240    5.82
118)  1,2,3-trichlorobenzene
       0.739 0.929 0.795 0.787 0.795 0.869 0.789 0.790 0.786        0.809    6.91
119)  hexachloroethane
       0.457 0.490 0.466 0.527 0.542 0.441 0.524 0.496 0.517        0.496    7.07
120)  benzyl chloride
       1.593 1.506 1.560 1.733 1.733 1.614 1.666 1.586 1.491        1.609    5.45
121)  2-methylnaphthalene   *This compound fails initial calibration criteria.*
       0.644       0.410 0.997 1.129       1.155 0.816              0.858   34.11
             ----- Linear regression -----  Coefficient =  0.9974
               Response Ratio = -0.03816 + 1.15093 *A

 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           ML10004.M         Thu Oct 07 09:18:00 2021   1
```

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: VL10004-ICV10004
Lab FileID: L333163.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\VL10004\L333163.D Vial: 19
Acq On : 5 Oct 2021 11:24 pm Operator: brittank
Sample : icv10004-50 Inst : GCMSL
Misc : MS53436,VL10004,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\ML10004.M (RTE Integrator)
Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Wed Oct 06 12:08:10 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	93	0.00	3.15
2		1,4-dioxane	0.147	0.140	4.8	97	0.00	5.38
3		ethanol	0.132	0.141	-6.8	98	0.00	2.56
4	M	tertiary butyl alcohol	1.339	1.197	10.6	88	0.00	3.21
5	I	pentafluorobenzene	1.000	1.000	0.0	99	0.00	4.38
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane	0.796	0.706	11.3	86	0.00	1.70
8		chloromethane	0.616	0.596	3.2	102	0.00	1.87
9		vinyl chloride	0.672	0.705	-4.9	105	0.00	1.95
10		bromomethane	0.241	0.277	-14.9	111	0.00	2.21
11		chloroethane	0.372	0.387	-4.0	105	0.00	2.29
12		trichlorofluoromethane	0.852	0.883	-3.6	102	0.00	2.47
13		ethyl ether	0.286	0.306	-7.0	104	0.00	2.66
14		acrolein	0.083	0.083	0.0	101	0.00	2.76
15		freon 113	0.367	0.375	-2.2	107	0.00	2.83
16		1,1-dichloroethene	0.412	0.416	-1.0	107	0.00	2.84
17		acetone	0.068	0.049	27.9	81	0.00	2.85
18		acetonitrile	0.032	0.032	0.0	97	0.00	3.05
19		iodomethane	0.318	0.434	-36.5#	112	0.00	2.96
20		iso-butyl alcohol	0.020	0.020	0.0	102	0.00	4.53
21		carbon disulfide	1.291	1.280	0.9	108	0.00	3.02
22		methylene chloride	0.460	0.446	3.0	101	0.00	3.18
23		methyl acetate	0.098	0.086	12.2	89	0.00	3.06
24		methyl tert butyl ether	1.413	1.436	-1.6	103	0.00	3.35
25		trans-1,2-dichloroethene	0.456	0.436	4.4	103	0.00	3.37
26		hexane	0.660	0.674	-2.1	106	0.00	3.54
27		di-isopropyl ether	1.459	1.308	10.3	95	0.00	3.65
28		ethyl tert-butyl ether	1.296	1.338	-3.2	106	0.00	3.90
29		2-butanone	0.072	0.067	6.9	94	0.00	4.02
30	M	1,1-dichloroethane	0.823	0.788	4.3	100	0.00	3.66
31		chloroprene	0.642	0.659	-2.6	105	0.00	3.72
32		acrylonitrile	0.175	0.180	-2.9	100	0.00	3.32
33		vinyl acetate	0.110	0.096	12.7	85	0.00	3.64
34		ethyl acetate	0.084	0.075	10.7	98	0.00	4.03
35		2,2-dichloropropane	0.711	0.680	4.4	98	0.00	4.07
36		cis-1,2-dichloroethene	0.504	0.488	3.2	103	0.00	4.05
37		propionitrile	0.067	0.061	9.0	93	0.00	4.07
38		methyl acrylate	0.087	0.082	5.7	97	0.00	4.08
39		bromochloromethane	0.249	0.241	3.2	101	0.00	4.22
40		tetrahydrofuran	0.074	0.072	2.7	101	0.00	4.23

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: VL10004-ICV10004
Lab FileID: L333163.D

			True	Calc.	% Drift			
41		chloroform	50.000	54.180	-8.4	100	0.00	4.28
			AvgRF	CCRF	% Dev			
42	S	dibromofluoromethane (s)	0.430	0.429	0.2	98	0.00	4.39
43		methacrylonitrile	0.216	0.216	0.0	96	0.00	4.18
44		1,1,1-trichloroethane	0.737	0.717	2.7	100	0.00	4.42
45		cyclohexane	0.667	0.738	-10.6	111	0.00	4.48
46		1,1-dichloropropene	0.662	0.648	2.1	102	0.00	4.53
47		carbon tetrachloride	0.613	0.617	-0.7	101	0.00	4.53
48		isopropyl acetate	0.117	0.115	1.7	95	0.00	4.64
49		tert amyl alcohol	0.020	0.020	0.0	96	0.00	4.62
50	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	4.95
51	S	1,2-dichloroethane-d4 (s)	0.344	0.340	1.2	97	0.00	4.64
52		tert-amyl methyl ether	0.899	0.850	5.5	98	0.00	4.73
53		2,2,4-trimethylpentane	0.617	0.786	-27.4	133	0.00	4.74
54		n-butyl alcohol	0.009	0.009	0.0	94	0.00	5.00
55	M	benzene	1.220	1.178	3.4	102	0.00	4.68
56		heptane	0.180	0.183	-1.7	109	0.00	4.85
57		1,2-dichloroethane	0.454	0.432	4.8	103	0.00	4.70
58		trichloroethene	0.329	0.336	-2.1	105	0.00	5.15
59		ethyl acrylate	0.404	0.350	13.4	87	0.00	5.16
60		2-nitropropane	0.105	0.112	-6.7	101	0.00	5.70
61		2-chloroethyl vinyl ether	0.158	0.190	-20.3	118	0.00	5.73
62		methyl methacrylate	0.094	0.094	0.0	100	0.00	5.34
63		1,2-dichloropropane	0.304	0.292	3.9	97	0.00	5.34
64		methylcyclohexane	0.554	0.530	4.3	99	0.00	5.33
65		dibromomethane	0.214	0.195	8.9	96	0.00	5.42
66		bromodichloromethane	0.461	0.434	5.9	99	0.00	5.53
67		cis-1,3-dichloropropene	0.560	0.523	6.6	97	0.00	5.87
68		epichlorohydrin	0.031	0.032	-3.2	106	0.00	5.78
69		4-methyl-2-pentanone	0.130	0.123	5.4	96	0.00	5.97
70		3-methyl-1-butanol	0.009	0.010	-11.1	91	0.00	5.99
71	I	chlorobenzene-d5	1.000	1.000	0.0	99	0.00	7.35
72	S	toluene-d8 (s)	1.365	1.310	4.0	98	0.00	6.10
73		toluene	0.940	0.873	7.1	102	0.00	6.16
74		trans-1,3-dichloropropene	0.569	0.584	-2.6	104	0.00	6.33
75		ethyl methacrylate	0.524	0.519	1.0	100	0.00	6.34
76		1,1,2-trichloroethane	0.294	0.284	3.4	101	0.00	6.50
77		2-hexanone	0.150	0.133	11.3	93	0.00	6.66
78		tetrachloroethene	0.421	0.554	-31.6#	145	0.00	6.60
79		1,3-dichloropropane	0.590	0.560	5.1	101	0.00	6.64
80		butyl acetate	0.267	0.239	10.5	95	0.00	6.74
81		dibromochloromethane	0.386	0.382	1.0	103	0.00	6.84
82		1,2-dibromoethane	0.371	0.361	2.7	101	0.00	6.95
83		n-butyl ether	1.342	1.152	14.2	90	0.00	7.42
84		chlorobenzene	0.966	0.916	5.2	101	0.00	7.38
85		1,1,1,2-tetrachloroethane	0.335	0.338	-0.9	100	0.00	7.45
86		ethylbenzene	1.604	1.518	5.4	101	0.00	7.46
87		m,p-xylene	0.633	0.609	3.8	101	0.00	7.57
88		o-xylene	0.642	0.617	3.9	99	0.00	7.93
89		butyl acrylate	0.676	0.667	1.3	95	0.00	7.84
90		styrene	1.034	0.995	3.8	100	0.00	7.94
91		bromoform	0.280	0.268	4.3	99	0.00	8.12
92		isopropylbenzene	1.613	1.544	4.3	101	0.00	8.26
93		cis-1,4-dichloro-2-butene	0.162	0.165	-1.9	94	0.00	8.31
94	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	96	0.00	9.55

Initial Calibration Verification

Job Number: JD36682 **Sample:** VL10004-ICV10004
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** L333163.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

95	S	4-bromofluorobenzene (s)	1.116	1.169	-4.7	99	0.00	8.43
96		bromobenzene	0.967	0.981	-1.4	102	0.00	8.58
97		1,1,2,2-tetrachloroethane	1.129	1.080	4.3	96	0.00	8.55
98		trans-1,4-dichloro-2-bute	0.280	0.290	-3.6	97	0.00	8.58
99		1,2,3-trichloropropane	0.322	0.306	5.0	93	0.00	8.61
100		n-propylbenzene	4.376	4.242	3.1	100	0.00	8.66
101		2-chlorotoluene	0.911	0.915	-0.4	100	0.00	8.76
102		4-chlorotoluene	0.864	0.904	-4.6	101	0.00	8.87
103		1,3,5-trimethylbenzene	2.933	2.946	-0.4	101	0.00	8.82
104		tert-butylbenzene	2.688	2.608	3.0	100	0.00	9.13
105		1,2,4-trimethylbenzene	3.064	2.940	4.0	100	0.00	9.19
106		sec-butylbenzene	3.713	3.681	0.9	100	0.00	9.35
107		1,3-dichlorobenzene	1.675	1.667	0.5	100	0.00	9.48
108		p-isopropyltoluene	2.987	2.897	3.0	98	0.00	9.49
109		1,4-dichlorobenzene	1.641	1.563	4.8	97	0.00	9.57
110		1,2,3-trimethylbenzene		----------NA----------				
111		1,2-dichlorobenzene	1.565	1.527	2.4	99	0.00	9.93
112		n-butylbenzene	1.456	1.455	0.1	98	0.00	9.89
113		1,2-dibromo-3-chloropropa	0.251	0.252	-0.4	92	0.00	10.69
114		1,3,5-trichlorobenzene	1.036	1.093	-5.5	100	0.00	10.88
115		1,2,4-trichlorobenzene	0.879	0.935	-6.4	99	0.00	11.51
116		hexachlorobutadiene	0.386	0.359	7.0	99	0.00	11.65
117		naphthalene	2.240	2.330	-4.0	95	0.00	11.78
118		1,2,3-trichlorobenzene	0.809	0.813	-0.5	99	0.00	12.00
119		hexachloroethane	0.496	0.547	-10.3	99	0.00	10.20
120		benzyl chloride	1.609	1.654	-2.8	91	0.00	9.68
		----------	True	Calc.	% Drift	----------		
121		2-methylnaphthalene	25.000	25.239	-1.0	104	0.00	12.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
L333158.D ML10004.M Thu Oct 07 09:13:59 2021 1

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: VL10004-ICV10004
Lab FileID: L333164.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\VL10004\L333164.D Vial: 20
Acq On : 5 Oct 2021 11:45 pm Operator: brittank
Sample : icv10004-50 Inst : GCMSL
Misc : MS53436,VL10004,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\ML10004.M (RTE Integrator)
Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Wed Oct 06 12:08:10 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	108	0.00	3.15
2		1,4-dioxane		----------NA----------				
3		ethanol		----------NA----------				
4	M	tertiary butyl alcohol		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	107	0.00	4.38
6		chlorodifluoromethane	0.470	0.651	-38.5#	149	0.00	1.72
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		ethyl ether		----------NA----------				
14		acrolein		----------NA----------				
15		freon 113		----------NA----------				
16		1,1-dichloroethene		----------NA----------				
17		acetone		----------NA----------				
18		acetonitrile	0.032	0.035	-9.4	115	0.00	3.05
19		iodomethane		----------NA----------				
20		iso-butyl alcohol		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		di-isopropyl ether		----------NA----------				
28		ethyl tert-butyl ether		----------NA----------				
29		2-butanone		----------NA----------				
30	M	1,1-dichloroethane		----------NA----------				
31		chloroprene		----------NA----------				
32		acrylonitrile	0.175	0.185	-5.7	112	0.00	3.33
33		vinyl acetate		----------NA----------				
34		ethyl acetate		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		propionitrile		----------NA----------				
38		methyl acrylate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: VL10004-ICV10004
Lab FileID: L333164.D

			True	Calc.	% Drift			
41		chloroform		NA				
			AvgRF	CCRF	% Dev			
42	S	dibromofluoromethane (s)	0.430	0.435	-1.2	108	0.00	4.39
43		methacrylonitrile		NA				
44		1,1,1-trichloroethane		NA				
45		cyclohexane		NA				
46		1,1-dichloropropene		NA				
47		carbon tetrachloride		NA				
48		isopropyl acetate		NA				
49		tert amyl alcohol		NA				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	4.95
51	S	1,2-dichloroethane-d4 (s)	0.344	0.353	-2.6	107	0.00	4.64
52		tert-amyl methyl ether		NA				
53		2,2,4-trimethylpentane		NA				
54		n-butyl alcohol		NA				
55	M	benzene		NA				
56		heptane		NA				
57		1,2-dichloroethane		NA				
58		trichloroethene		NA				
59		ethyl acrylate		NA				
60		2-nitropropane		NA				
61		2-chloroethyl vinyl ether		NA				
62		methyl methacrylate		NA				
63		1,2-dichloropropane		NA				
64		methylcyclohexane		NA				
65		dibromomethane		NA				
66		bromodichloromethane		NA				
67		cis-1,3-dichloropropene		NA				
68		epichlorohydrin		NA				
69		4-methyl-2-pentanone		NA				
70		3-methyl-1-butanol		NA				
71	I	chlorobenzene-d5	1.000	1.000	0.0	97	0.00	7.36
72	S	toluene-d8 (s)	1.365	1.444	-5.8	106	0.00	6.10
73		toluene		NA				
74		trans-1,3-dichloropropene		NA				
75		ethyl methacrylate		NA				
76		1,1,2-trichloroethane		NA				
77		2-hexanone		NA				
78		tetrachloroethene	0.421	0.571	-35.6#	147	0.00	6.60
79		1,3-dichloropropane		NA				
80		butyl acetate		NA				
81		dibromochloromethane		NA				
82		1,2-dibromoethane		NA				
83		n-butyl ether		NA				
84		chlorobenzene		NA				
85		1,1,1,2-tetrachloroethane		NA				
86		ethylbenzene		NA				
87		m,p-xylene		NA				
88		o-xylene		NA				
89		butyl acrylate		NA				
90		styrene		NA				
91		bromoform		NA				
92		isopropylbenzene		NA				
93		cis-1,4-dichloro-2-butene		NA				
94	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	9.55

Initial Calibration Verification

Job Number: JD36682 **Sample:** VL10004-ICV10004
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** L333164.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

95	S	4-bromofluorobenzene (s)	1.116	1.103	1.2	100	0.00	8.43
96		bromobenzene		----------NA----------				
97		1,1,2,2-tetrachloroethane		----------NA----------				
98		trans-1,4-dichloro-2-bute		----------NA----------				
99		1,2,3-trichloropropane		----------NA----------				
100		n-propylbenzene		----------NA----------				
101		2-chlorotoluene		----------NA----------				
102		4-chlorotoluene		----------NA----------				
103		1,3,5-trimethylbenzene		----------NA----------				
104		tert-butylbenzene		----------NA----------				
105		1,2,4-trimethylbenzene		----------NA----------				
106		sec-butylbenzene		----------NA----------				
107		1,3-dichlorobenzene		----------NA----------				
108		p-isopropyltoluene		----------NA----------				
109		1,4-dichlorobenzene		----------NA----------				
110		1,2,3-trimethylbenzene	2.800	2.881	-2.9	110	0.00	9.60
111		1,2-dichlorobenzene		----------NA----------				
112		n-butylbenzene		----------NA----------				
113		1,2-dibromo-3-chloropropa		----------NA----------				
114		1,3,5-trichlorobenzene		----------NA----------				
115		1,2,4-trichlorobenzene		----------NA----------				
116		hexachlorobutadiene		----------NA----------				
117		naphthalene		----------NA----------				
118		1,2,3-trichlorobenzene		----------NA----------				
119		hexachloroethane		----------NA----------				
120		benzyl chloride		----------NA----------				

		----------	True	Calc.	% Drift	----------		
121		2-methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
L333158.D ML10004.M Thu Oct 07 09:17:19 2021 1

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: VL10004-ICV10004
Lab FileID: L333168.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\VL10004\L333168.D Vial: 24
Acq On : 6 Oct 2021 4:01 pm Operator: brittank
Sample : icv10004-50 Inst : GCMSL
Misc : MS53436,VL10004,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\ML10004.M (RTE Integrator)
Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Wed Oct 06 12:08:10 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	90	0.00	3.15
2		1,4-dioxane		----------NA----------				
3		ethanol		----------NA----------				
4	M	tertiary butyl alcohol		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	104	0.00	4.38
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		ethyl ether		----------NA----------				
14		acrolein		----------NA----------				
15		freon 113		----------NA----------				
16		1,1-dichloroethene		----------NA----------				
17		acetone		----------NA----------				
18		acetonitrile		----------NA----------				
19		iodomethane		----------NA----------				
20		iso-butyl alcohol		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		di-isopropyl ether		----------NA----------				
28		ethyl tert-butyl ether		----------NA----------				
29		2-butanone		----------NA----------				
30	M	1,1-dichloroethane		----------NA----------				
31		chloroprene		----------NA----------				
32		acrylonitrile		----------NA----------				
33		vinyl acetate		----------NA----------				
34		ethyl acetate		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		propionitrile		----------NA----------				
38		methyl acrylate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: VL10004-ICV10004
Lab FileID: L333168.D

			True	Calc.	% Drift			
41		chloroform		NA				
			AvgRF	CCRF	% Dev			
42	S	dibromofluoromethane (s)	0.430	0.444	-3.3	107	0.00	4.39
43		methacrylonitrile		NA				
44		1,1,1-trichloroethane		NA				
45		cyclohexane		NA				
46		1,1-dichloropropene		NA				
47		carbon tetrachloride		NA				
48		isopropyl acetate		NA				
49		tert amyl alcohol		NA				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	102	0.00	4.95
51	S	1,2-dichloroethane-d4 (s)	0.344	0.346	-0.6	103	0.00	4.65
52		tert-amyl methyl ether		NA				
53		2,2,4-trimethylpentane		NA				
54		n-butyl alcohol		NA				
55	M	benzene		NA				
56		heptane		NA				
57		1,2-dichloroethane		NA				
58		trichloroethene		NA				
59		ethyl acrylate		NA				
60		2-nitropropane		NA				
61		2-chloroethyl vinyl ether		NA				
62		methyl methacrylate		NA				
63		1,2-dichloropropane		NA				
64		methylcyclohexane		NA				
65		dibromomethane		NA				
66		bromodichloromethane		NA				
67		cis-1,3-dichloropropene		NA				
68		epichlorohydrin		NA				
69		4-methyl-2-pentanone		NA				
70		3-methyl-1-butanol		NA				
71	I	chlorobenzene-d5	1.000	1.000	0.0	96	0.00	7.36
72	S	toluene-d8 (s)	1.365	1.422	-4.2	103	0.00	6.10
73		toluene		NA				
74		trans-1,3-dichloropropene		NA				
75		ethyl methacrylate		NA				
76		1,1,2-trichloroethane		NA				
77		2-hexanone		NA				
78		tetrachloroethene	0.421	0.369	12.4	94	0.00	6.60
79		1,3-dichloropropane		NA				
80		butyl acetate		NA				
81		dibromochloromethane		NA				
82		1,2-dibromoethane		NA				
83		n-butyl ether		NA				
84		chlorobenzene		NA				
85		1,1,1,2-tetrachloroethane		NA				
86		ethylbenzene		NA				
87		m,p-xylene		NA				
88		o-xylene		NA				
89		butyl acrylate		NA				
90		styrene		NA				
91		bromoform		NA				
92		isopropylbenzene		NA				
93		cis-1,4-dichloro-2-butene		NA				
94	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	9.55

Initial Calibration Verification

Job Number: JD36682 **Sample:** VL10004-ICV10004
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** L333168.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

95	S	4-bromofluorobenzene (s)	1.116	1.123	-0.6	99	0.00	8.44
96		bromobenzene		----------NA----------				
97		1,1,2,2-tetrachloroethane		----------NA----------				
98		trans-1,4-dichloro-2-bute		----------NA----------				
99		1,2,3-trichloropropane		----------NA----------				
100		n-propylbenzene		----------NA----------				
101		2-chlorotoluene		----------NA----------				
102		4-chlorotoluene		----------NA----------				
103		1,3,5-trimethylbenzene		----------NA----------				
104		tert-butylbenzene		----------NA----------				
105		1,2,4-trimethylbenzene		----------NA----------				
106		sec-butylbenzene		----------NA----------				
107		1,3-dichlorobenzene		----------NA----------				
108		p-isopropyltoluene		----------NA----------				
109		1,4-dichlorobenzene		----------NA----------				
110		1,2,3-trimethylbenzene		----------NA----------				
111		1,2-dichlorobenzene		----------NA----------				
112		n-butylbenzene		----------NA----------				
113		1,2-dibromo-3-chloropropa		----------NA----------				
114		1,3,5-trichlorobenzene		----------NA----------				
115		1,2,4-trichlorobenzene		----------NA----------				
116		hexachlorobutadiene		----------NA----------				
117		naphthalene		----------NA----------				
118		1,2,3-trichlorobenzene		----------NA----------				
119		hexachloroethane		----------NA----------				
120		benzyl chloride		----------NA----------				

		----------	True	Calc.	% Drift	----------		
121		2-methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
L333158.D ML10004.M Thu Oct 07 09:27:53 2021 1

Continuing Calibration Summary

Job Number: JD36682 **Sample:** VL10113-CC10004
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** L336238.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kr...021\vl10113\l336238.d Vial: 3
Acq On : 21 Dec 2021 9:48 am Operator: jons2
Sample : cc10004-20 Inst : GCMSL
Misc : MS55595,VL10113,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\ML10004.M (RTE Integrator)
Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Wed Oct 06 12:08:10 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	157	0.00	3.15
2		1,4-dioxane	0.147	0.111	24.5#	128	0.00	5.38
3		ethanol	0.132	0.115	12.9	140	0.00	2.56
4	M	tertiary butyl alcohol	1.339	1.025	23.5#	133	0.00	3.20
5	I	pentafluorobenzene	1.000	1.000	0.0	101	0.00	4.37
6		chlorodifluoromethane	0.470	0.405	13.8	86	0.00	1.72
7		dichlorodifluoromethane	0.796	0.811	-1.9	102	0.00	1.70
8		chloromethane	0.616	0.586	4.9	103	0.00	1.87
9		vinyl chloride	0.672	0.629	6.4	95	0.00	1.95
10		bromomethane	0.241	0.194	19.5	85	0.00	2.20
11		chloroethane	0.372	0.420	-12.9	118	0.00	2.28
12		trichlorofluoromethane	0.852	0.840	1.4	102	0.00	2.47
13		ethyl ether	0.286	0.292	-2.1	108	0.00	2.66
14		acrolein	0.083	0.096	-15.7	133	0.00	2.76
15		freon 113	0.367	0.328	10.6	92	0.00	2.84
16		1,1-dichloroethene	0.412	0.380	7.8	96	0.00	2.84
17		acetone	0.068	0.054	20.6#	77	0.00	2.85
18		acetonitrile	0.032	0.040	-25.0#	125	0.00	3.05
19		iodomethane	0.318	0.169	46.9#	47#	0.00	2.96
20		iso-butyl alcohol	0.020	0.031	-55.0#	172	0.00	4.52
21		carbon disulfide	1.291	1.112	13.9	91	0.00	3.02
22		methylene chloride	0.460	0.437	5.0	99	0.00	3.18
23		methyl acetate	0.098	0.121	-23.5#	122	0.00	3.06
24		methyl tert butyl ether	1.413	1.358	3.9	99	0.00	3.35
25		trans-1,2-dichloroethene	0.456	0.442	3.1	101	0.00	3.36
26		hexane	0.660	0.529	19.8	82	0.00	3.54
27		di-isopropyl ether	1.459	1.333	8.6	93	0.00	3.65
28		ethyl tert-butyl ether	1.296	1.246	3.9	99	0.00	3.90
29		2-butanone	0.072	0.086	-19.4	118	0.00	4.02
30	M	1,1-dichloroethane	0.823	0.780	5.2	99	0.00	3.66
31		chloroprene	0.642	0.563	12.3	92	0.00	3.71
32		acrylonitrile	0.175	0.209	-19.4	118	0.00	3.32
33		vinyl acetate	0.110	0.122	-10.9	123	0.00	3.63
34		ethyl acetate	0.084	0.093	-10.7	128	0.00	4.03
35		2,2-dichloropropane	0.711	0.682	4.1	101	0.00	4.06
36		cis-1,2-dichloroethene	0.504	0.473	6.2	99	0.00	4.05
37		propionitrile	0.067	0.085	-26.9#	130	0.00	4.07
38		methyl acrylate	0.087	0.106	-21.8#	135	0.00	4.07
39		bromochloromethane	0.249	0.224	10.0	99	0.00	4.22
40		tetrahydrofuran	0.074	0.102	-37.8#	152	0.00	4.23

Continuing Calibration Summary

Job Number: JD36682 **Sample:** VL10113-CC10004
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** L336238.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

			True	Calc.	% Drift			
41		chloroform	20.000	21.246	-6.2	101	0.00	4.27
			AvgRF	CCRF	% Dev			
42	S	dibromofluoromethane (s)	0.430	0.458	-6.5	105	0.00	4.38
43		methacrylonitrile	0.216	0.247	-14.4	118	0.00	4.18
44		1,1,1-trichloroethane	0.737	0.688	6.6	98	0.00	4.42
45		cyclohexane	0.667	0.601	9.9	94	0.00	4.48
46		1,1-dichloropropene	0.662	0.586	11.5	93	0.00	4.52
47		carbon tetrachloride	0.613	0.593	3.3	98	0.00	4.53
48		isopropyl acetate	0.117	0.132	-12.8	110	0.00	4.64
49		tert amyl alcohol	0.020	0.037	-85.0#	192	0.00	4.61
50	I	1,4-difluorobenzene	1.000	1.000	0.0	102	0.00	4.95
51	S	1,2-dichloroethane-d4 (s)	0.344	0.361	-4.9	105	0.00	4.64
52		tert-amyl methyl ether	0.899	0.851	5.3	101	0.00	4.73
53		2,2,4-trimethylpentane	0.617	0.703	-13.9	120	0.00	4.73
54		n-butyl alcohol	0.009	0.014	-55.6#	157	0.00	5.00
55	M	benzene	1.220	1.129	7.5	99	0.00	4.67
56		heptane	0.180	0.152	15.6	88	0.00	4.84
57		1,2-dichloroethane	0.454	0.423	6.8	102	0.00	4.70
58		trichloroethene	0.329	0.308	6.4	97	0.00	5.14
59		ethyl acrylate	0.404	0.457	-13.1	118	0.00	5.16
60		2-nitropropane	0.105	0.117	-11.4	107	0.00	5.70
61		2-chloroethyl vinyl ether	0.158	0.128	19.0	82	0.00	5.72
62		methyl methacrylate	0.094	0.111	-18.1	123	0.00	5.33
63		1,2-dichloropropane	0.304	0.291	4.3	98	0.00	5.34
64		methylcyclohexane	0.554	0.471	15.0	91	0.00	5.33
65		dibromomethane	0.214	0.203	5.1	103	0.00	5.41
66		bromodichloromethane	0.461	0.442	4.1	106	0.00	5.53
67		cis-1,3-dichloropropene	0.560	0.521	7.0	101	0.00	5.87
68		epichlorohydrin	0.031	0.043	-38.7#	146	0.00	5.77
69		4-methyl-2-pentanone	0.130	0.159	-22.3#	132	0.00	5.97
70		3-methyl-1-butanol	0.009	0.015	-66.7#	171	0.00	5.98
71	I	chlorobenzene-d5	1.000	1.000	0.0	114	0.00	7.35
72	S	toluene-d8 (s)	1.365	1.264	7.4	106	0.00	6.10
73		toluene	0.940	0.755	19.7	98	0.00	6.16
74		trans-1,3-dichloropropene	0.569	0.512	10.0	103	0.00	6.33
75		ethyl methacrylate	0.524	0.525	-0.2	112	0.00	6.34
76		1,1,2-trichloroethane	0.294	0.276	6.1	109	0.00	6.50
77		2-hexanone	0.150	0.164	-9.3	121	0.00	6.66
78		tetrachloroethene	0.421	0.349	17.1	100	0.00	6.60
79		1,3-dichloropropane	0.590	0.538	8.8	106	0.00	6.64
80		butyl acetate	0.267	0.254	4.9	115	0.00	6.74
81		dibromochloromethane	0.386	0.364	5.7	110	0.00	6.83
82		1,2-dibromoethane	0.371	0.349	5.9	112	0.00	6.95
83		n-butyl ether	1.342	1.102	17.9	96	0.00	7.42
84		chlorobenzene	0.966	0.818	15.3	103	0.00	7.38
85		1,1,1,2-tetrachloroethane	0.335	0.318	5.1	108	0.00	7.45
86		ethylbenzene	1.604	1.435	10.5	103	0.00	7.45
87		m,p-xylene	0.633	0.537	15.2	101	0.00	7.57
88		o-xylene	0.642	0.545	15.1	100	0.00	7.92
89		butyl acrylate	0.676	0.645	4.6	104	0.00	7.83
90		styrene	1.034	0.918	11.2	104	0.00	7.94
91		bromoform	0.280	0.281	-0.4	124	0.00	8.12
92		isopropylbenzene	1.613	1.366	15.3	99	0.00	8.26
93		cis-1,4-dichloro-2-butene	0.162	0.147	9.3	105	0.00	8.31
94	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	115	0.00	9.54

Continuing Calibration Summary

Job Number: JD36682 **Sample:** VL10113-CC10004
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** L336238.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

				True	Calc.	% Drift			
95	S	4-bromofluorobenzene (s)		1.116	1.170	-4.8	118	0.00	8.43
96		bromobenzene		0.967	0.865	10.5	106	0.00	8.58
97		1,1,2,2-tetrachloroethane		1.129	1.206	-6.8	130	0.00	8.54
98		trans-1,4-dichloro-2-bute		0.280	0.267	4.6	110	0.00	8.58
99		1,2,3-trichloropropane		0.322	0.365	-13.4	136	0.00	8.61
100		n-propylbenzene		4.376	3.823	12.6	103	0.00	8.65
101		2-chlorotoluene		0.911	0.765	16.0	100	0.00	8.75
102		4-chlorotoluene		0.864	0.748	13.4	97	0.00	8.86
103		1,3,5-trimethylbenzene		2.933	2.562	12.6	102	0.00	8.82
104		tert-butylbenzene		2.688	2.183	18.8	101	0.00	9.13
105		1,2,4-trimethylbenzene		3.064	2.572	16.1	101	0.00	9.19
106		sec-butylbenzene		3.713	3.137	15.5	101	0.00	9.35
107		1,3-dichlorobenzene		1.675	1.493	10.9	107	0.00	9.47
108		p-isopropyltoluene		2.987	2.548	14.7	103	0.00	9.49
109		1,4-dichlorobenzene		1.641	1.447	11.8	111	0.00	9.57
110		1,2,3-trimethylbenzene		2.800	2.482	11.4	104	0.00	9.59
111		1,2-dichlorobenzene		1.565	1.428	8.8	109	0.00	9.93
112		n-butylbenzene		1.456	1.259	13.5	104	0.00	9.89
113		1,2-dibromo-3-chloropropa		0.251	0.283	-12.7	140	0.00	10.70
114		1,3,5-trichlorobenzene		1.036	0.969	6.5	106	0.00	10.88
115		1,2,4-trichlorobenzene		0.879	0.798	9.2	103	0.00	11.51
116		hexachlorobutadiene		0.386	0.336	13.0	109	0.00	11.65
117		naphthalene		2.240	2.145	4.2	105	0.00	11.78
118		1,2,3-trichlorobenzene		0.809	0.739	8.7	107	0.00	12.00
119		hexachloroethane		0.496	0.514	-3.6	119	0.00	10.20
120		benzyl chloride		1.609	1.864	-15.8	135	0.00	9.68
121		2-methylnaphthalene		10.000	6.718	32.8#	82	0.00	12.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
L333157.D ML10004.M Wed Dec 22 11:42:47 2021

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V1C7937	**Method:** SW846 8260D	**Instrument ID:** GCMS1C

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1C7937-BFB	1C182306.D	10/29/21 13:18	n/a	BFB Tune
V1C7937-IC7937	1C182307.D	10/29/21 13:47	n/a	Initial cal 0.2
V1C7937-IC7937	1C182308.D	10/29/21 14:14	n/a	Initial cal 0.5
V1C7937-IC7937	1C182309.D	10/29/21 14:41	n/a	Initial cal 1
V1C7937-IC7937	1C182310.D	10/29/21 15:08	n/a	Initial cal 2
V1C7937-IC7937	1C182311.D	10/29/21 15:35	n/a	Initial cal 4
V1C7937-IC7937	1C182312.D	10/29/21 16:02	n/a	Initial cal 8
V1C7937-IC7937	1C182313.D	10/29/21 16:29	n/a	Initial cal 20
V1C7937-ICC7937	1C182314.D	10/29/21 16:56	n/a	Initial cal 50
V1C7937-IC7937	1C182315.D	10/29/21 17:23	n/a	Initial cal 100
V1C7937-IC7937	1C182316.D	10/29/21 17:50	n/a	Initial cal 200
V1C7937-ICV7937	1C182319.D	10/29/21 19:10	n/a	Initial cal verification 50
V1C7937-ICV7937	1C182320.D	10/29/21 19:37	n/a	Initial cal verification 50
V1C7937-BFB	1C182789.D	11/22/21 08:05	n/a	BFB Tune

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V1C7979	**Method:** SW846 8260D	**Instrument ID:** GCMS1C

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1C7979-BFB	1C183199.D	12/16/21 12:28	n/a	BFB Tune
V1C7979-CC7937	1C183199.D	12/16/21 12:28	n/a	Continuing cal 50
V1C7979-BS	1C183200.D	12/16/21 13:22	n/a	Blank Spike
V1C7979-MB	1C183202.D	12/16/21 14:57	n/a	Method Blank
ZZZZZZ	1C183203.D	12/16/21 15:24	n/a	(unrelated sample)
JD36688-1	1C183204.D	12/16/21 15:52	n/a	(used for QC only; not part of job JD36682)
JD36688-2	1C183205.D	12/16/21 16:19	n/a	(used for QC only; not part of job JD36682)
ZZZZZZ	1C183206.D	12/16/21 16:45	n/a	(unrelated sample)
ZZZZZZ	1C183207.D	12/16/21 17:12	n/a	(unrelated sample)
ZZZZZZ	1C183208.D	12/16/21 17:39	n/a	(unrelated sample)
ZZZZZZ	1C183209.D	12/16/21 18:06	n/a	(unrelated sample)
JD36688-1MS	1C183210.D	12/16/21 18:33	n/a	Matrix Spike
JD36688-2DUP	1C183211.D	12/16/21 19:00	n/a	Duplicate
ZZZZZZ	1C183212.D	12/16/21 19:26	n/a	(unrelated sample)
ZZZZZZ	1C183213.D	12/16/21 19:53	n/a	(unrelated sample)
ZZZZZZ	1C183214.D	12/16/21 20:20	n/a	(unrelated sample)
ZZZZZZ	1C183215.D	12/16/21 20:47	n/a	(unrelated sample)
ZZZZZZ	1C183216.D	12/16/21 21:14	n/a	(unrelated sample)
ZZZZZZ	1C183217.D	12/16/21 21:41	n/a	(unrelated sample)
ZZZZZZ	1C183218.D	12/16/21 22:08	n/a	(unrelated sample)
JD36682-9	1C183221.D	12/16/21 23:29	n/a	HOFF SED-2
JD36682-10	1C183222.D	12/16/21 23:56	n/a	HOFF SED-1
JD36682-11	1C183223.D	12/17/21 00:22	n/a	HOFF DUP-121321SED

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V1C7983	**Method:** SW846 8260D	**Instrument ID:** GCMS1C

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1C7983-BFB	1C183310.D	12/21/21 12:30	n/a	BFB Tune
V1C7983-CC7937	1C183310.D	12/21/21 12:30	n/a	Continuing cal 50
V1C7983-BS	1C183311.D	12/21/21 13:08	n/a	Blank Spike
V1C7983-MB	1C183313.D	12/21/21 14:21	n/a	Method Blank
ZZZZZZ	1C183313A.D	12/21/21 14:21	n/a	(unrelated sample)
ZZZZZZ	1C183314.D	12/21/21 14:48	n/a	(unrelated sample)
JD36756-7	1C183315.D	12/21/21 15:15	n/a	(used for QC only; not part of job JD36682)
JD36756-8	1C183316.D	12/21/21 15:42	n/a	(used for QC only; not part of job JD36682)
ZZZZZZ	1C183317.D	12/21/21 16:09	n/a	(unrelated sample)
ZZZZZZ	1C183318.D	12/21/21 16:36	n/a	(unrelated sample)
JD36756-7MS	1C183319.D	12/21/21 17:03	n/a	Matrix Spike
JD36756-8DUP	1C183320.D	12/21/21 17:30	n/a	Duplicate
ZZZZZZ	1C183321.D	12/21/21 17:57	n/a	(unrelated sample)
ZZZZZZ	1C183322.D	12/21/21 18:24	n/a	(unrelated sample)
ZZZZZZ	1C183323.D	12/21/21 18:51	n/a	(unrelated sample)
ZZZZZZ	1C183324.D	12/21/21 19:18	n/a	(unrelated sample)
ZZZZZZ	1C183325.D	12/21/21 19:44	n/a	(unrelated sample)
ZZZZZZ	1C183326.D	12/21/21 20:11	n/a	(unrelated sample)
ZZZZZZ	1C183327.D	12/21/21 20:38	n/a	(unrelated sample)
ZZZZZZ	1C183328.D	12/21/21 21:05	n/a	(unrelated sample)
ZZZZZZ	1C183329.D	12/21/21 21:32	n/a	(unrelated sample)
ZZZZZZ	1C183330.D	12/21/21 21:59	n/a	(unrelated sample)
JD36682-7	1C183331.D	12/21/21 22:26	n/a	HOFF SED-4
JD36682-8	1C183332.D	12/21/21 22:53	n/a	HOFF SED-3
ZZZZZZ	1C183333.D	12/21/21 23:20	n/a	(unrelated sample)
ZZZZZZ	1C183334.D	12/21/21 23:47	n/a	(unrelated sample)
ZZZZZZ	1C183335.D	12/22/21 00:14	n/a	(unrelated sample)

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7257 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7257-BFB	3A167227.D	12/06/21 09:39	n/a	BFB Tune
V3A7257-IC7257	3A167232.D	12/06/21 13:29	n/a	Initial cal 1
V3A7257-IC7257	3A167233.D	12/06/21 13:58	n/a	Initial cal 2
V3A7257-IC7257	3A167234.D	12/06/21 14:27	n/a	Initial cal 5
V3A7257-ICC7257	3A167235.D	12/06/21 14:56	n/a	Initial cal 20
V3A7257-IC7257	3A167236.D	12/06/21 15:25	n/a	Initial cal 50
V3A7257-IC7257	3A167237.D	12/06/21 15:54	n/a	Initial cal 100
V3A7257-IC7257	3A167242.D	12/06/21 18:20	n/a	Initial cal 0.25
V3A7257-IC7257	3A167243.D	12/06/21 18:49	n/a	Initial cal 0.40
V3A7257-IC7257	3A167245.D	12/06/21 19:47	n/a	Initial cal 200
V3A7257-ICV7257	3A167248.D	12/06/21 21:13	n/a	Initial cal verification 20

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7273 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7273-BFB	3A167531.D	12/23/21 08:46	n/a	BFB Tune
V3A7273-CC7257	3A167532.D	12/23/21 09:16	n/a	Continuing cal 5
V3A7273-BS	3A167533.D	12/23/21 09:45	n/a	Blank Spike
V3A7273-MB	3A167534.D	12/23/21 10:14	n/a	Method Blank
ZZZZZZ	3A167538.D	12/23/21 12:15	n/a	(unrelated sample)
ZZZZZZ	3A167539.D	12/23/21 12:44	n/a	(unrelated sample)
JD36682-2	3A167540.D	12/23/21 13:12	n/a	HOFF SW-4
JD36682-3	3A167541.D	12/23/21 13:41	n/a	HOFF SW-3
JD36682-4	3A167542.D	12/23/21 14:09	n/a	HOFF SW-2
JD36682-5	3A167543.D	12/23/21 14:38	n/a	HOFF SW-1
JD36682-6	3A167544.D	12/23/21 15:07	n/a	HOFF-DUP-121321SW
ZZZZZZ	3A167545.D	12/23/21 15:36	n/a	(unrelated sample)
JD36682-1	3A167546.D	12/23/21 16:05	n/a	TB-121321
JD36682-2MS	3A167547.D	12/23/21 16:34	n/a	Matrix Spike
JD36682-3DUP	3A167548.D	12/23/21 17:03	n/a	Duplicate
ZZZZZZ	3A167549.D	12/23/21 17:31	n/a	(unrelated sample)
ZZZZZZ	3A167550.D	12/23/21 18:01	n/a	(unrelated sample)
ZZZZZZ	3A167551.D	12/23/21 18:29	n/a	(unrelated sample)
ZZZZZZ	3A167552.D	12/23/21 18:59	n/a	(unrelated sample)
ZZZZZZ	3A167553.D	12/23/21 19:28	n/a	(unrelated sample)
ZZZZZZ	3A167554.D	12/23/21 19:56	n/a	(unrelated sample)
ZZZZZZ	3A167555.D	12/23/21 20:25	n/a	(unrelated sample)

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: VL10004	**Method:** SW846 8260D	**Instrument ID:** GCMSL

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VL10004-BFB	L333150.D	10/05/21 18:43	n/a	BFB Tune
VL10004-IC10004	L333151.D	10/05/21 19:12	n/a	Initial cal 0.2
VL10004-IC10004	L333152.D	10/05/21 19:33	n/a	Initial cal 0.5
VL10004-IC10004	L333153.D	10/05/21 19:54	n/a	Initial cal 1
VL10004-IC10004	L333154.D	10/05/21 20:15	n/a	Initial cal 2
VL10004-IC10004	L333155.D	10/05/21 20:36	n/a	Initial cal 4
VL10004-IC10004	L333156.D	10/05/21 20:57	n/a	Initial cal 8
VL10004-IC10004	L333157.D	10/05/21 21:18	n/a	Initial cal 20
VL10004-ICC10004	L333158.D	10/05/21 21:39	n/a	Initial cal 50
VL10004-IC10004	L333159.D	10/05/21 22:00	n/a	Initial cal 100
VL10004-IC10004	L333160.D	10/05/21 22:21	n/a	Initial cal 200
VL10004-ICV10004	L333163.D	10/05/21 23:24	n/a	Initial cal verification 50
VL10004-ICV10004	L333164.D	10/05/21 23:45	n/a	Initial cal verification 50
VL10004-BFB2	L333167.D	10/06/21 15:12	n/a	BFB Tune
VL10004-ICV10004	L333168.D	10/06/21 16:01	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: VL10113	**Method:** SW846 8260D	**Instrument ID:** GCMSL

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VL10113-BFB	L336238.D	12/21/21 09:48	n/a	BFB Tune
VL10113-CC10004	L336238.D	12/21/21 09:48	n/a	Continuing cal 20
VL10113-BS	L336240.D	12/21/21 10:51	n/a	Blank Spike
VL10113-MB	L336242.D	12/21/21 11:33	n/a	Method Blank
ZZZZZZ	L336243.D	12/21/21 11:59	n/a	(unrelated sample)
ZZZZZZ	L336244.D	12/21/21 12:20	n/a	(unrelated sample)
ZZZZZZ	L336245.D	12/21/21 12:41	n/a	(unrelated sample)
ZZZZZZ	L336246.D	12/21/21 13:02	n/a	(unrelated sample)
ZZZZZZ	L336247.D	12/21/21 13:23	n/a	(unrelated sample)
JD36655-4	L336248.D	12/21/21 13:44	n/a	(used for QC only; not part of job JD36682)
JD36655-4	L336249.D	12/21/21 14:04	n/a	(used for QC only; not part of job JD36682)
JD36655-4MS	L336250.D	12/21/21 14:25	n/a	Matrix Spike
JD36655-4MSD	L336251.D	12/21/21 14:46	n/a	Matrix Spike Duplicate
ZZZZZZ	L336252.D	12/21/21 15:07	n/a	(unrelated sample)
JD36682-1	L336253.D	12/21/21 15:28	n/a	TB-121321
ZZZZZZ	L336254.D	12/21/21 15:49	n/a	(unrelated sample)
ZZZZZZ	L336255.D	12/21/21 16:10	n/a	(unrelated sample)
ZZZZZZ	L336256.D	12/21/21 16:31	n/a	(unrelated sample)
ZZZZZZ	L336257.D	12/21/21 16:52	n/a	(unrelated sample)
ZZZZZZ	L336258.D	12/21/21 17:13	n/a	(unrelated sample)
JD36682-2	L336259.D	12/21/21 17:34	n/a	HOFF SW-4
JD36682-3	L336260.D	12/21/21 17:55	n/a	HOFF SW-3
JD36682-4	L336261.D	12/21/21 18:16	n/a	HOFF SW-2
JD36682-5	L336262.D	12/21/21 18:37	n/a	HOFF SW-1
JD36682-6	L336263.D	12/21/21 18:58	n/a	HOFF-DUP-121321SW
ZZZZZZ	L336264.D	12/21/21 19:19	n/a	(unrelated sample)
ZZZZZZ	L336265.D	12/21/21 19:40	n/a	(unrelated sample)

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7273\
Data File : 3A167546.D
Acq On : 23 Dec 2021 4:05 pm
Operator : BridgetK
Sample : jd36682-1
Misc : MS55558,V3A7273,5.0,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 23 16:23:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

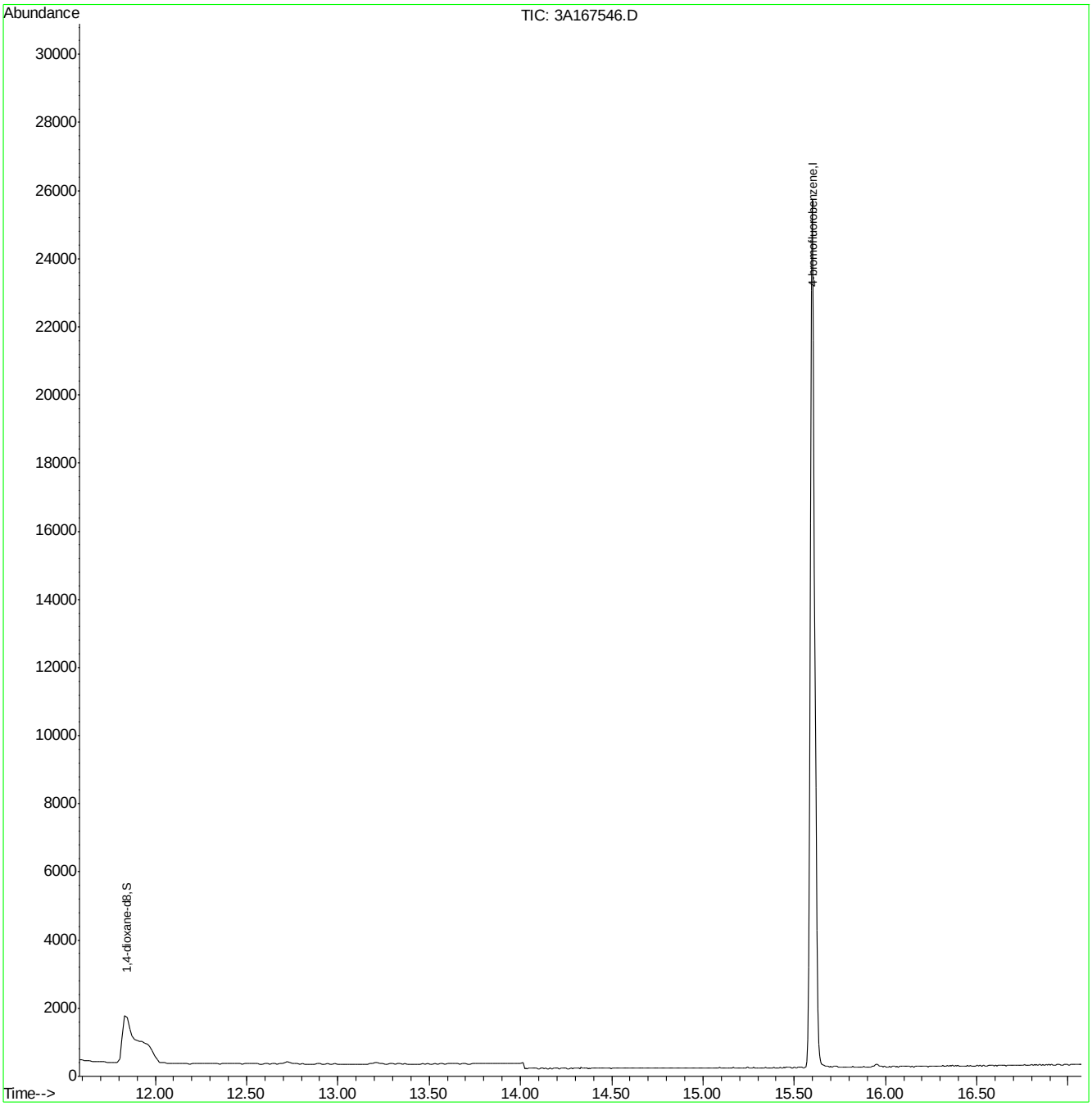
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	13990	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	5283	13.64	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 136.40%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7273\
Data File : 3A167546.D
Acq On : 23 Dec 2021 4:05 pm
Operator : BridgetK
Sample : jd36682-1
Misc : MS55558,V3A7273,5.0,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 23 16:23:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167540.D
Acq On : 23 Dec 2021 1:12 pm
Operator : BridgetK
Sample : jd36682-2
Misc : MS55601,V3A7273,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 23 15:02:47 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

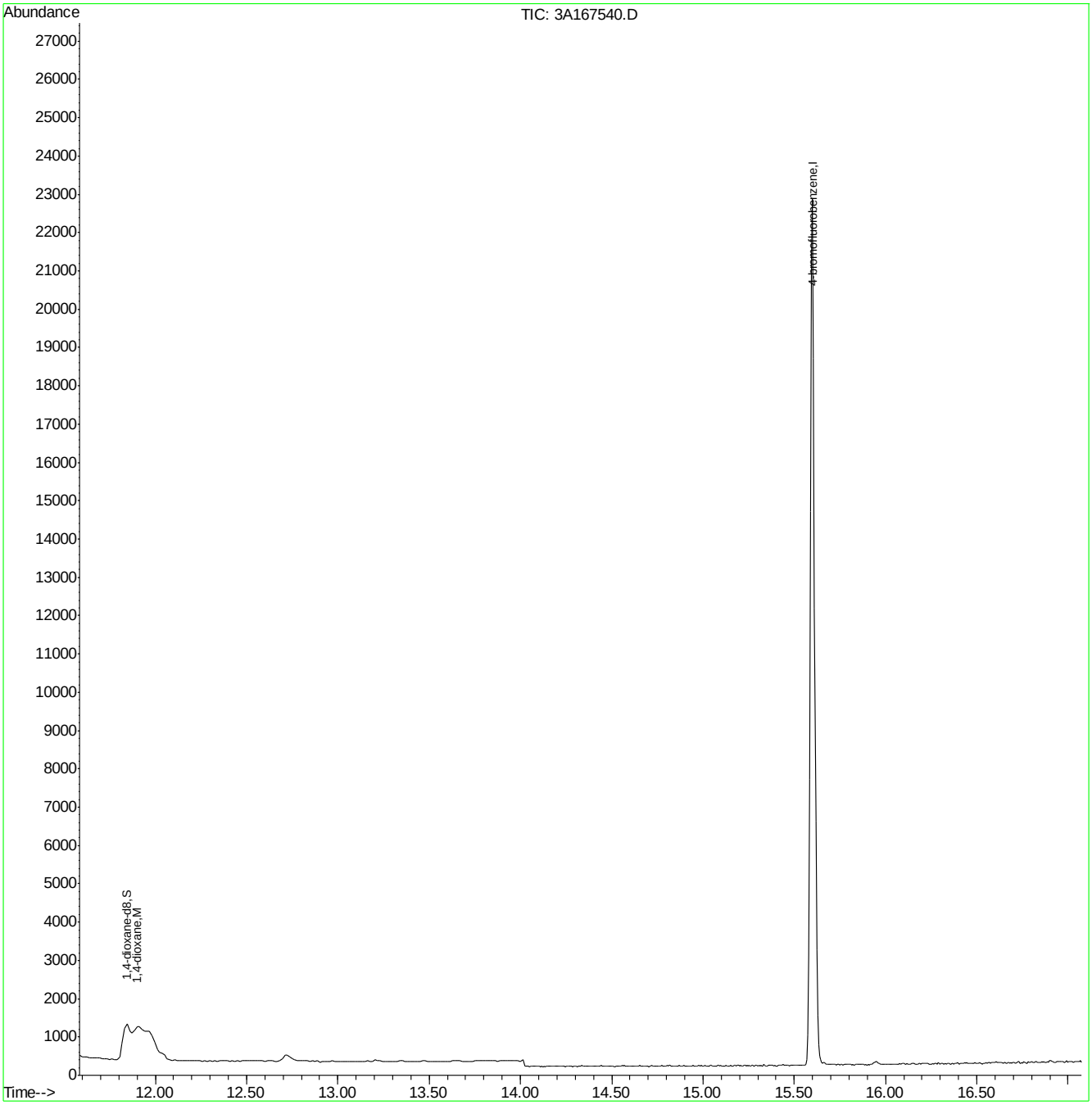
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	12264	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4318	12.72	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 127.20%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	1381	3.62	ug/L	87

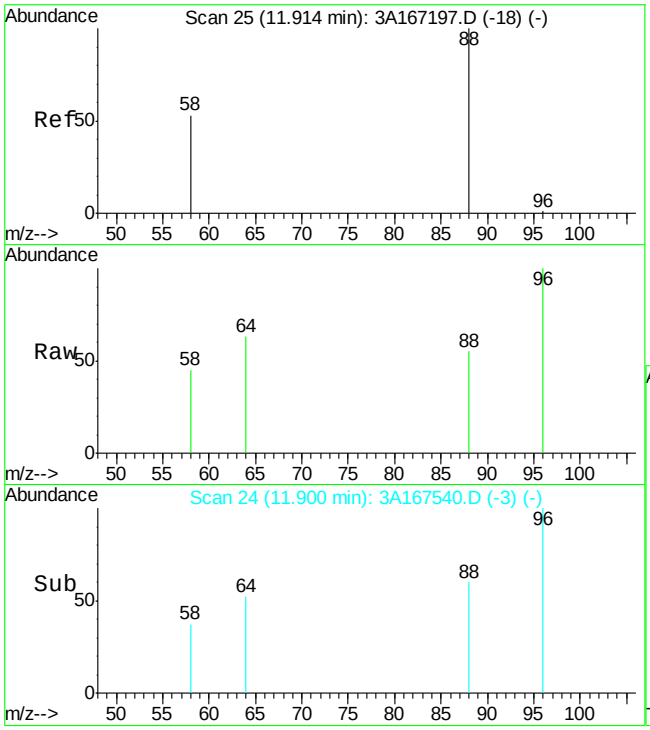
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167540.D
Acq On : 23 Dec 2021 1:12 pm
Operator : BridgetK
Sample : jd36682-2
Misc : MS55601,V3A7273,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 23 15:02:47 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

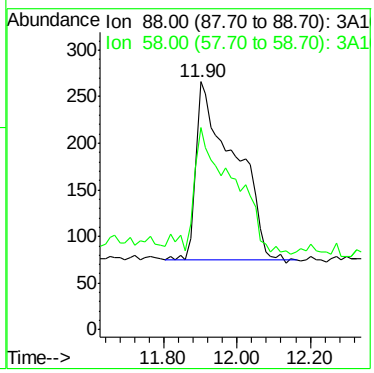




#3
1,4-dioxane
Concen: 3.62 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167540.D
Acq: 23 Dec 2021 1:12 pm

Tgt Ion: 88 Resp: 1381

Ion	Ratio	Lower	Upper
88	100		
58	70.2	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167541.D
Acq On : 23 Dec 2021 1:41 pm
Operator : BridgetK
Sample : jd36682-3
Misc : MS55601,V3A7273,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 23 15:02:48 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

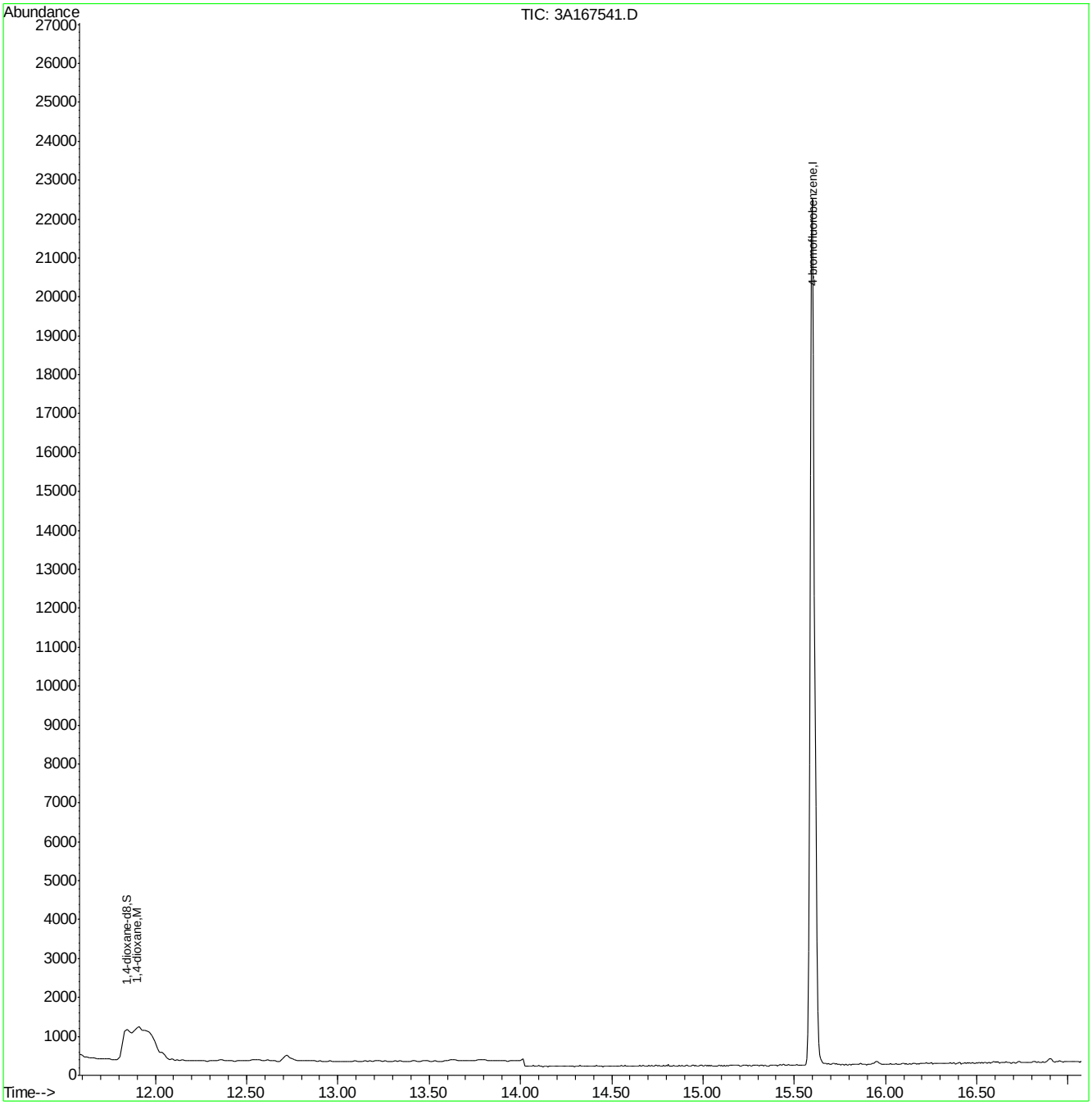
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	12535	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3956	11.40	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 114.00%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	1411	3.61	ug/L	93

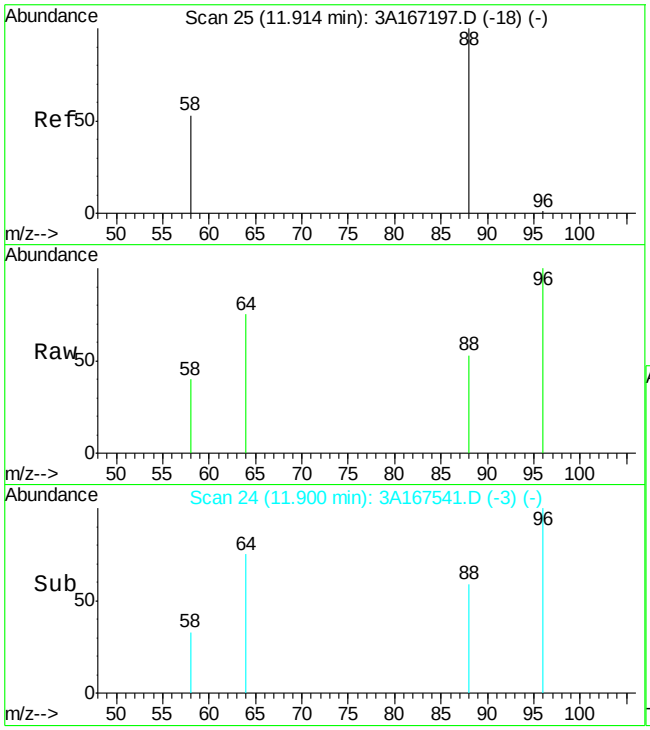
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167541.D
Acq On : 23 Dec 2021 1:41 pm
Operator : BridgetK
Sample : jd36682-3
Misc : MS55601,V3A7273,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 23 15:02:48 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

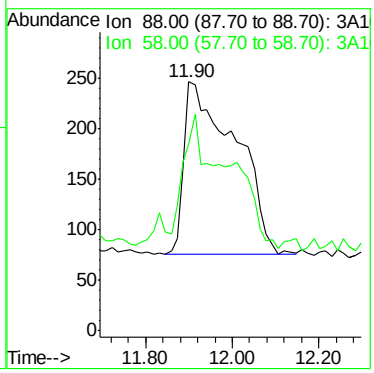




#3
1,4-dioxane
Concen: 3.61 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167541.D
Acq: 23 Dec 2021 1:41 pm

Tgt Ion: 88 Resp: 1411

Ion	Ratio	Lower	Upper
88	100		
58	54.4	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167542.D
Acq On : 23 Dec 2021 2:09 pm
Operator : BridgetK
Sample : jd36682-4
Misc : MS55601,V3A7273,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 23 15:02:49 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

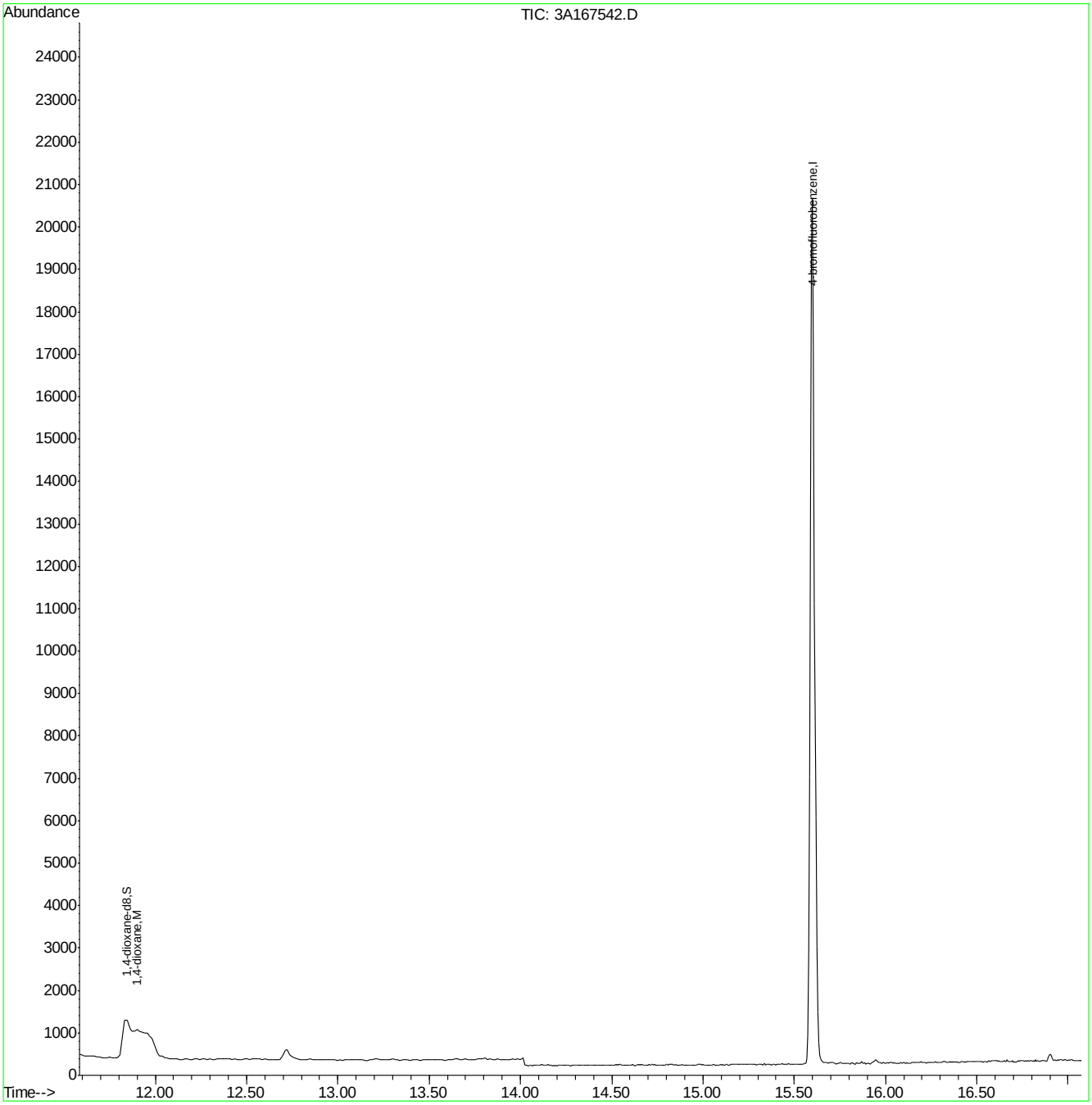
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	11175	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4167	13.47	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 134.70%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	462	1.33	ug/L	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed

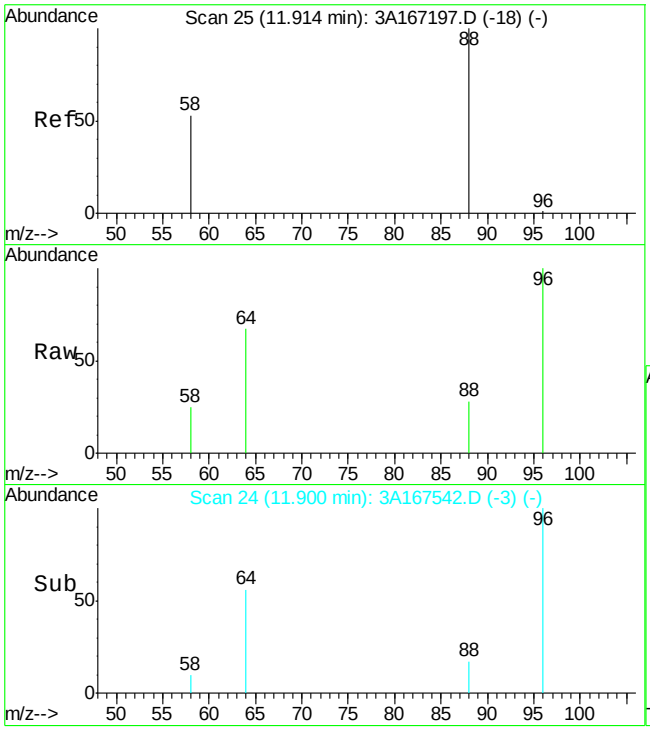
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167542.D
Acq On : 23 Dec 2021 2:09 pm
Operator : BridgetK
Sample : jd36682-4
Misc : MS55601,V3A7273,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 23 15:02:49 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



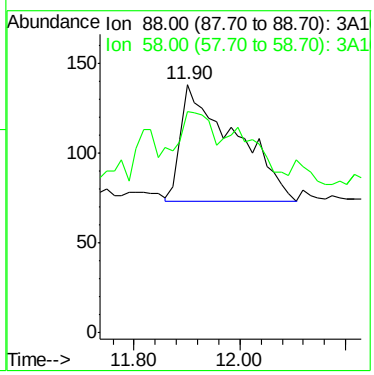
M3A7257.M Thu Dec 23 15:03:48 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 1.33 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167542.D
Acq: 23 Dec 2021 2:09 pm

Tgt Ion: 88 Resp: 462

Ion	Ratio	Lower	Upper
88	100		
58	41.5	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167543.D
Acq On : 23 Dec 2021 2:38 pm
Operator : BridgetK
Sample : jd36682-5
Misc : MS55601,V3A7273,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 23 15:02:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

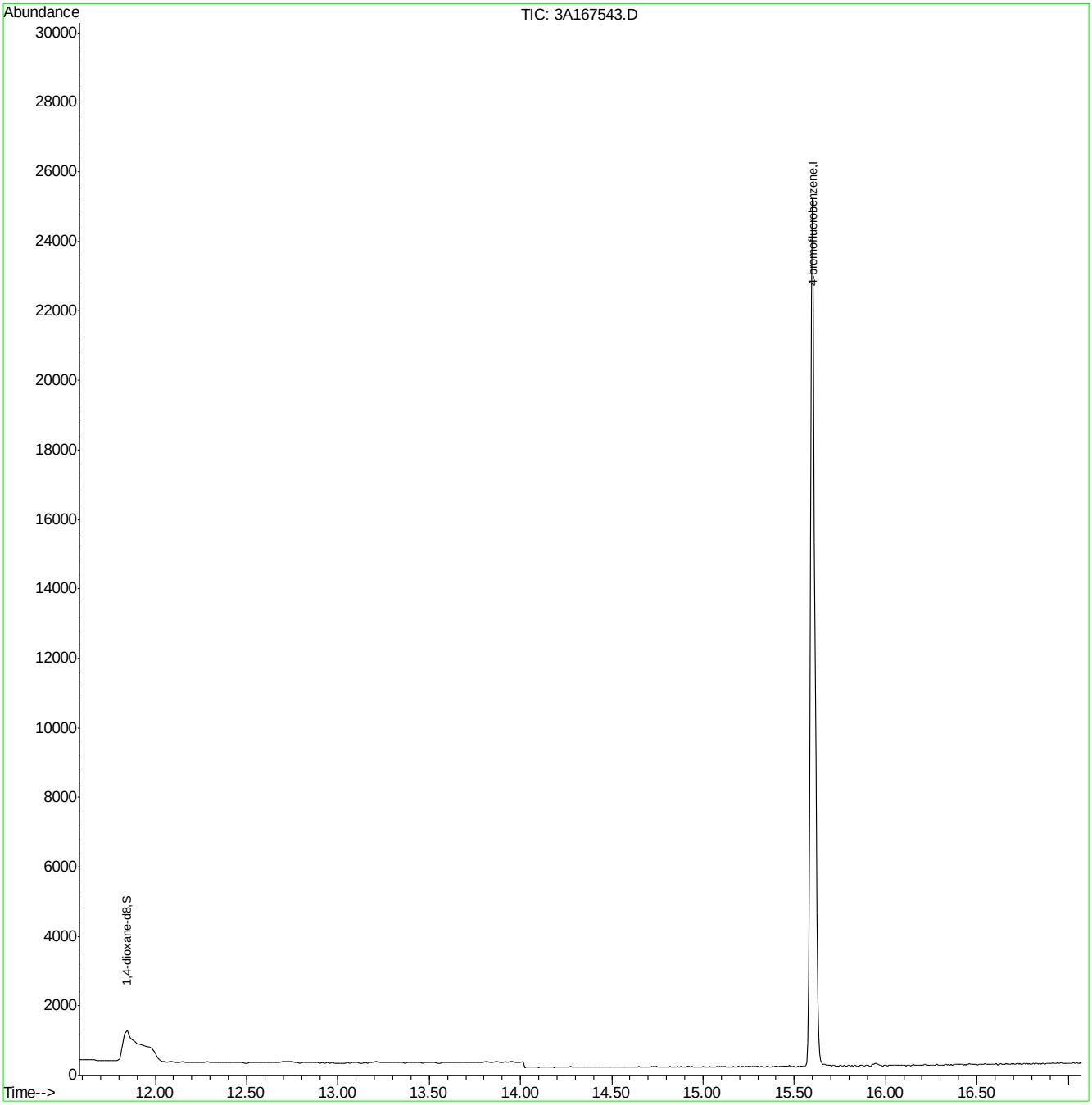
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	13817	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3876	10.13	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 101.30%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167543.D
Acq On : 23 Dec 2021 2:38 pm
Operator : BridgetK
Sample : jd36682-5
Misc : MS55601,V3A7273,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 23 15:02:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7273\
Data File : 3A167544.D
Acq On : 23 Dec 2021 3:07 pm
Operator : BridgetK
Sample : jd36682-6
Misc : MS55601,V3A7273,5.0,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 23 16:23:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

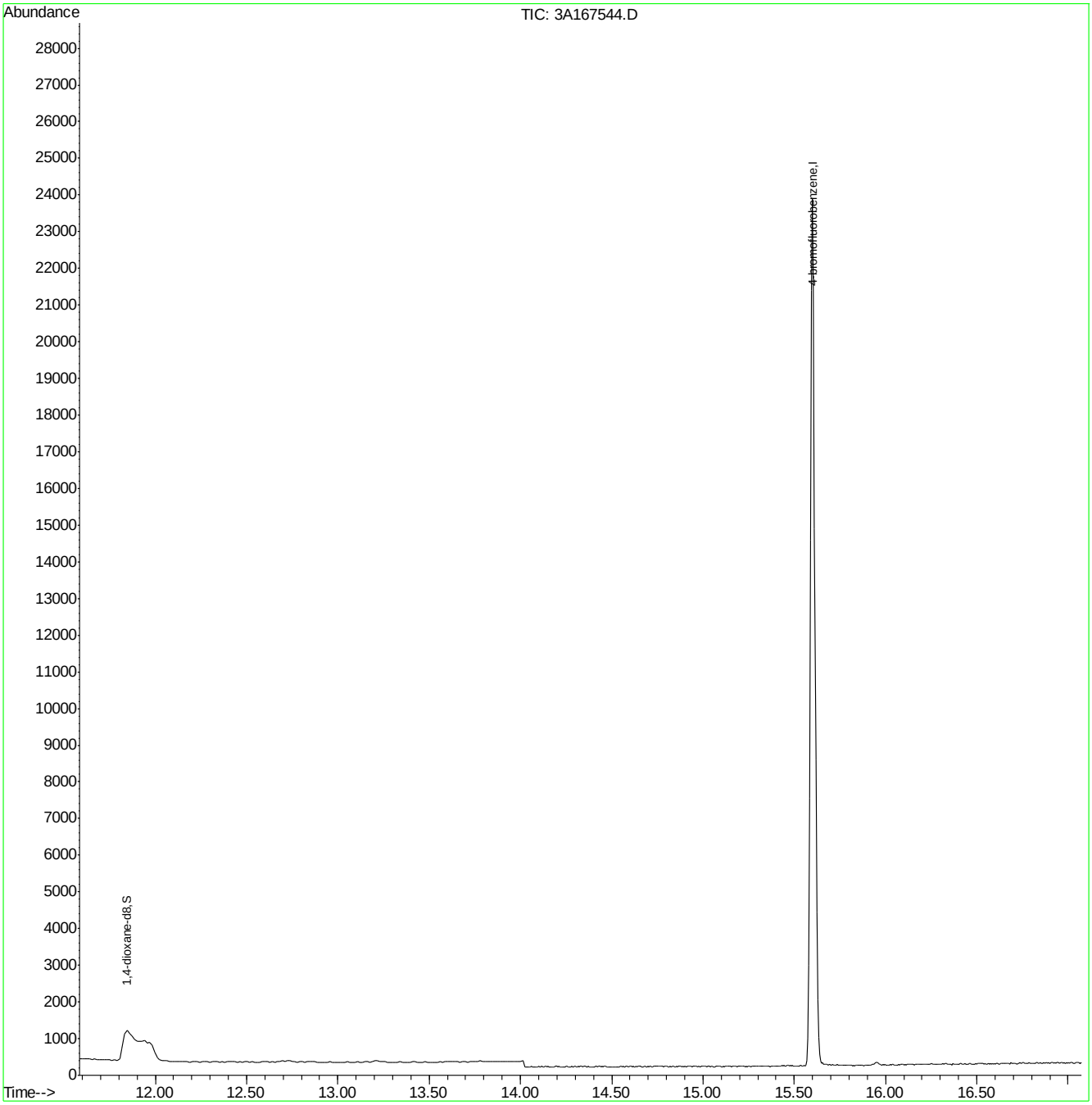
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	13409	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4035	10.87	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 108.70%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7273\
Data File : 3A167544.D
Acq On : 23 Dec 2021 3:07 pm
Operator : BridgetK
Sample : jd36682-6
Misc : MS55601,V3A7273,5.0,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 23 16:23:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-24-2021\vl10113\
Data File : l336253.d
Acq On : 21 Dec 2021 3:28 pm
Operator : jons2
Sample : jd36682-1 Inst : GCMSL
Misc : MS55598,VL10113,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 24 09:04:01 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 11:57:51 2021
Response via : Initial Calibration

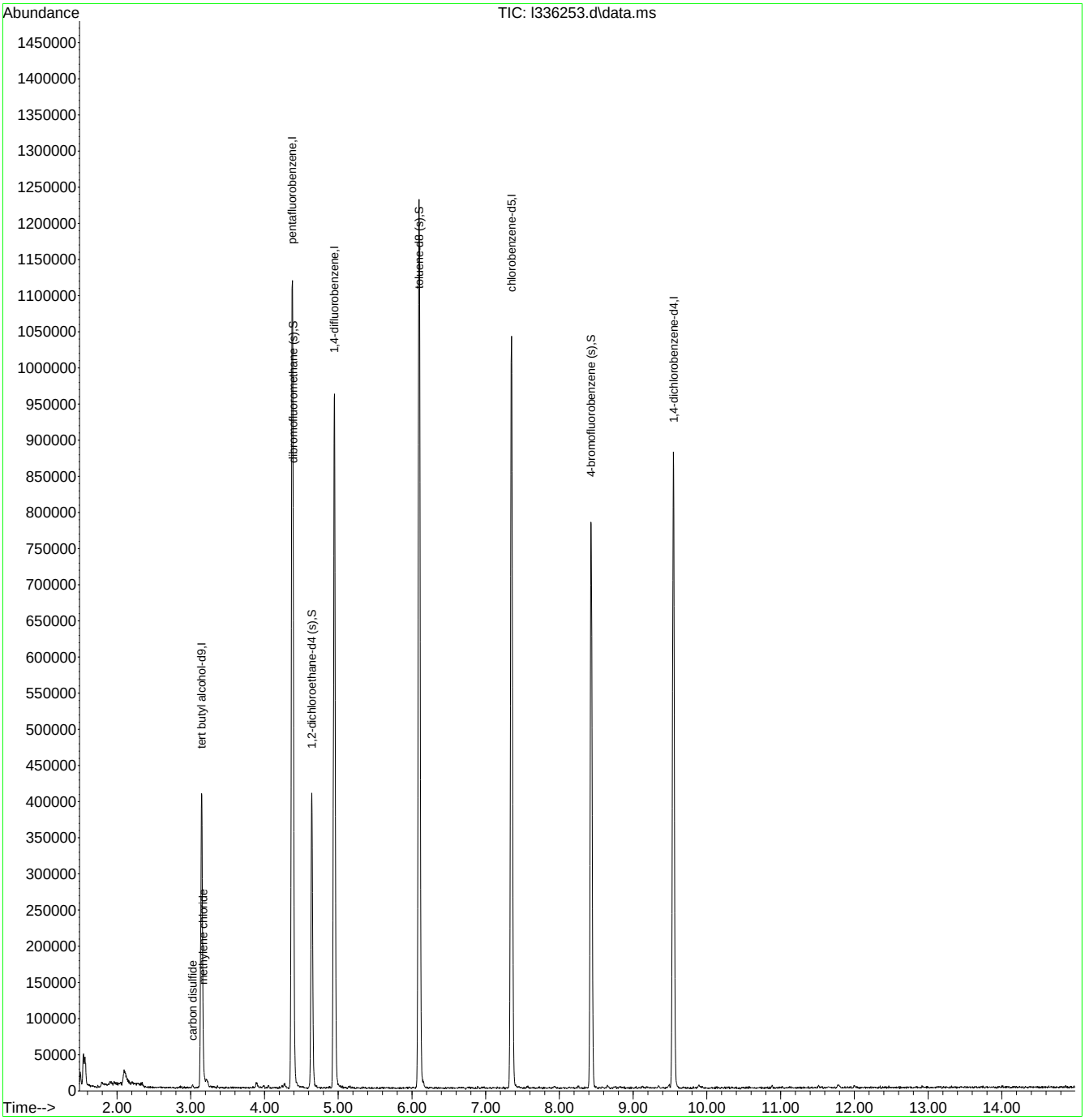
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.146	65	360706	500.00	ug/L	0.00
5) pentafluorobenzene	4.375	168	465057	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.946	114	666071	50.00	ug/L	0.00
71) chlorobenzene-d5	7.350	117	565633	50.00	ug/L	0.00
94) 1,4-dichlorobenzene-d4	9.548	152	233241	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	4.388	113	209315	52.33	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.66%			
51) 1,2-dichloroethane-d4 (s)	4.642	65	249208	54.45	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 108.90%			
72) toluene-d8 (s)	6.098	98	766452	49.62	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.24%			
95) 4-bromofluorobenzene (s)	8.428	95	256046	49.17	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.34%			
Target Compounds						Qvalue
21) carbon disulfide	3.024	76	3689	0.31	ug/L	78
22) methylene chloride	3.169	84	1602	0.37	ug/L #	47

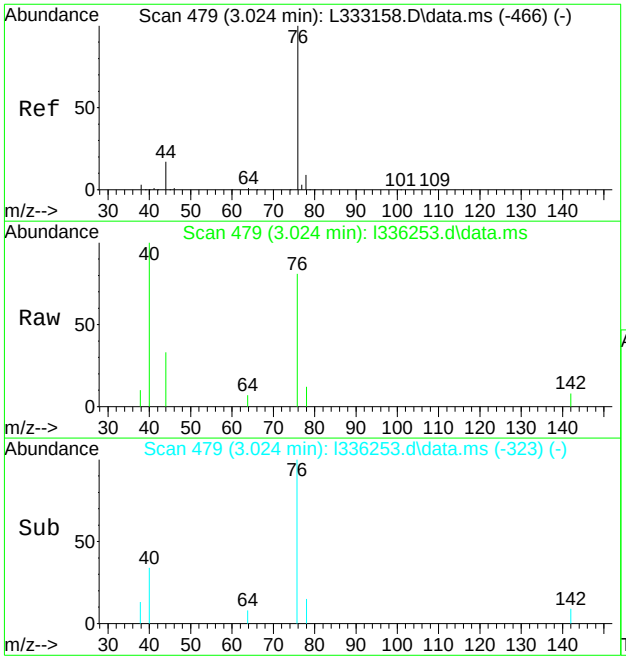
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-24-2021\vl10113\
Data File : l336253.d
Acq On : 21 Dec 2021 3:28 pm
Operator : jons2
Sample : jd36682-1 Inst : GCMSL
Misc : MS55598,VL10113,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 24 09:04:01 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 11:57:51 2021
Response via : Initial Calibration

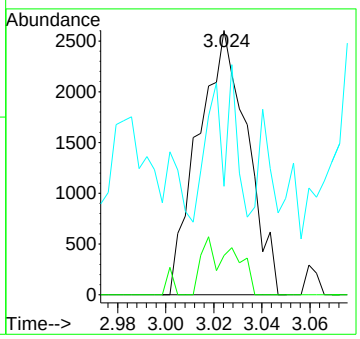


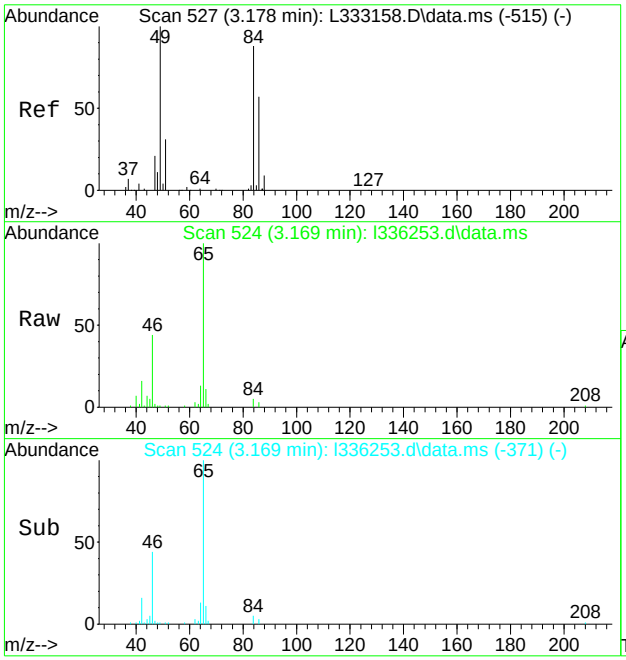


#21
carbon disulfide
Concen: 0.31 ug/L
RT: 3.024 min Scan# 479
Delta R.T. 0.000 min
Lab File: l336253.d
Acq: 21 Dec 2021 3:28 pm

Tgt Ion: 76 Resp: 3689

Ion	Ratio	Lower	Upper
76	100		
78	14.8	0.0	38.7
44	6.2	0.0	46.9

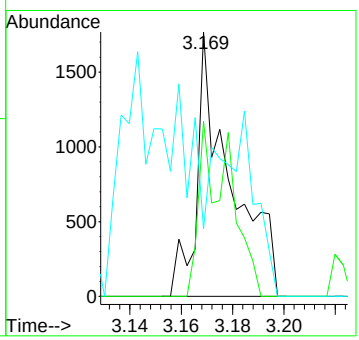




#22
methylene chloride
Concen: 0.37 ug/L
RT: 3.169 min Scan# 524
Delta R.T. -0.009 min
Lab File: l336253.d
Acq: 21 Dec 2021 3:28 pm

Tgt Ion: 84 Resp: 1602

Ion	Ratio	Lower	Upper
84	100		
86	66.3	35.1	95.1
49	25.6	84.3	144.3#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-24-2021\vl10113\
Data File : l336259.d
Acq On : 21 Dec 2021 5:34 pm
Operator : jons2
Sample : jd36682-2 Inst : GCMSL
Misc : MS55598,VL10113,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 24 09:15:44 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 12:08:10 2021
Response via : Initial Calibration

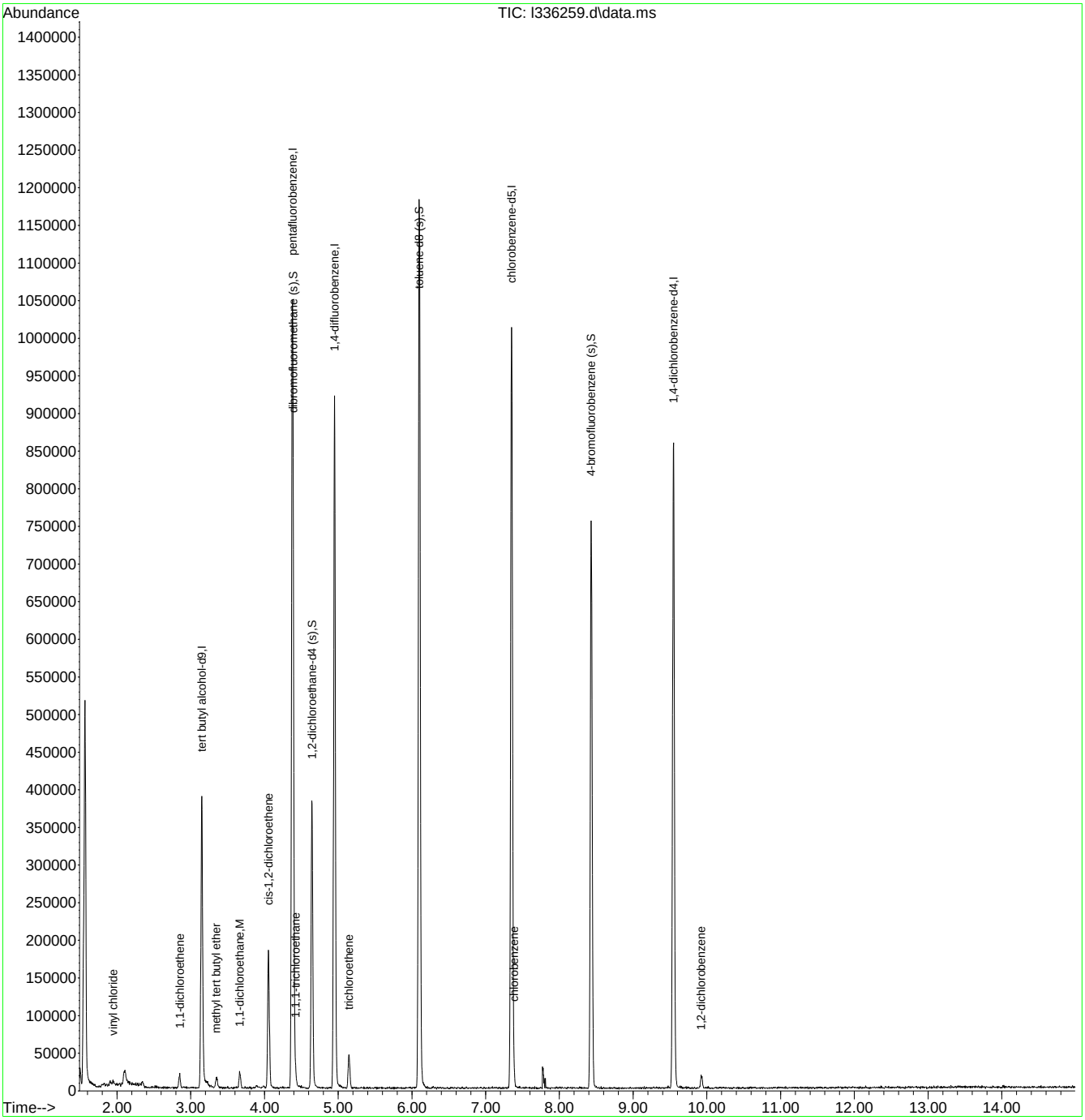
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.150	65	330606	500.00	ug/L	0.00
5) pentafluorobenzene	4.379	168	433827	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.950	114	626388	50.00	ug/L	0.00
71) chlorobenzene-d5	7.350	117	540909	50.00	ug/L	0.00
94) 1,4-dichlorobenzene-d4	9.545	152	228989	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	4.388	113	196812	52.75	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.50%			
51) 1,2-dichloroethane-d4 (s)	4.645	65	235636	54.75	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 109.50%			
72) toluene-d8 (s)	6.099	98	733955	49.69	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.38%			
95) 4-bromofluorobenzene (s)	8.431	95	242859	47.50	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.00%			
Target Compounds						Qvalue
9) vinyl chloride	1.946	62	2250	0.39	ug/L	59
16) 1,1-dichloroethene	2.851	96	4987	1.40	ug/L	93
24) methyl tert butyl ether	3.345	73	9137	0.75	ug/L	74
30) 1,1-dichloroethane	3.663	63	15744	2.21	ug/L	95
36) cis-1,2-dichloroethene	4.055	96	65651	15.01	ug/L	94
44) 1,1,1-trichloroethane	4.420	97	5898	0.92	ug/L	93
58) trichloroethene	5.146	95	13972	3.39	ug/L #	78
84) chlorobenzene	7.382	112	6031	0.58	ug/L	86
111) 1,2-dichlorobenzene	9.924	146	7374	1.03	ug/L	74

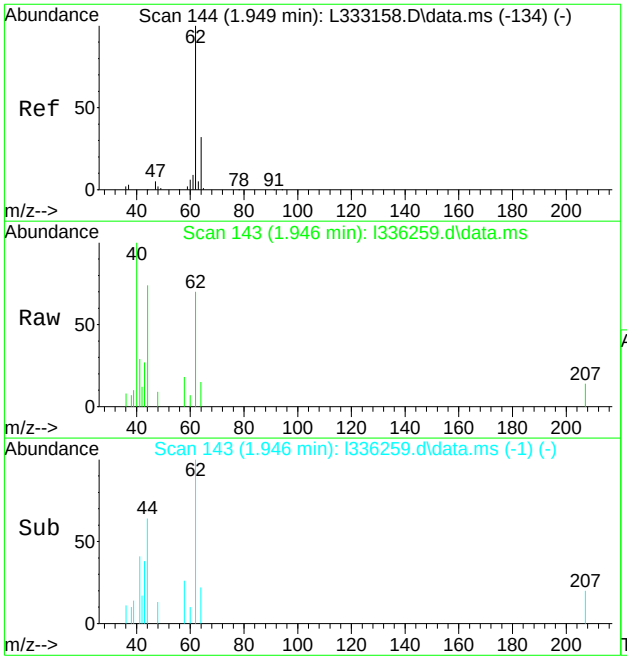
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-24-2021\vl10113\
Data File : l336259.d
Acq On : 21 Dec 2021 5:34 pm
Operator : jons2
Sample : jd36682-2 Inst : GCMSL
Misc : MS55598,VL10113,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 24 09:15:44 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 12:08:10 2021
Response via : Initial Calibration

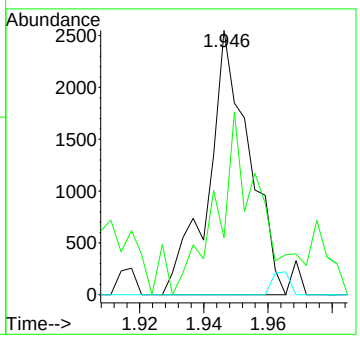


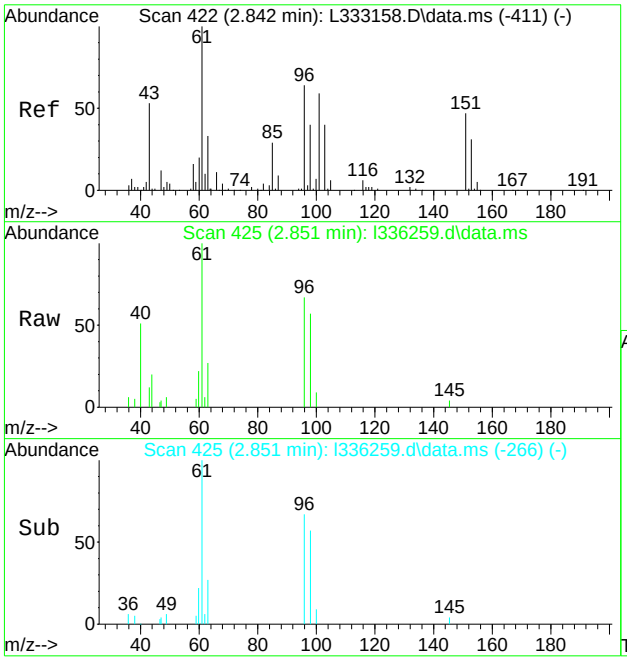


#9
vinyl chloride
Concen: 0.39 ug/L
RT: 1.946 min Scan# 143
Delta R.T. -0.003 min
Lab File: l336259.d
Acq: 21 Dec 2021 5:34 pm

Tgt Ion: 62 Resp: 2250

Ion	Ratio	Lower	Upper
62	100		
64	6.4	1.9	61.9
61	0.0	0.0	38.8

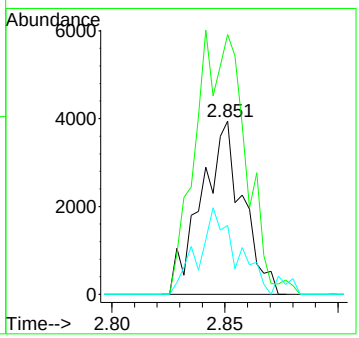


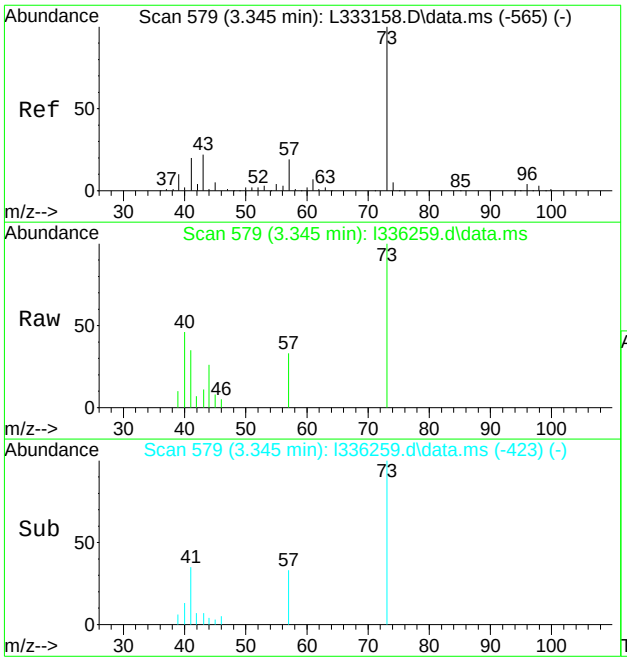


#16
1,1-dichloroethene
Concen: 1.40 ug/L
RT: 2.851 min Scan# 425
Delta R.T. 0.009 min
Lab File: l336259.d
Acq: 21 Dec 2021 5:34 pm

Tgt Ion: 96 Resp: 4987

Ion	Ratio	Lower	Upper
96	100		
61	149.9	125.3	185.3
63	39.7	20.7	80.7

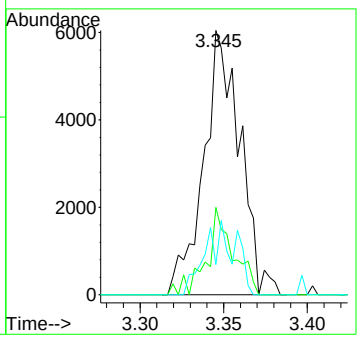


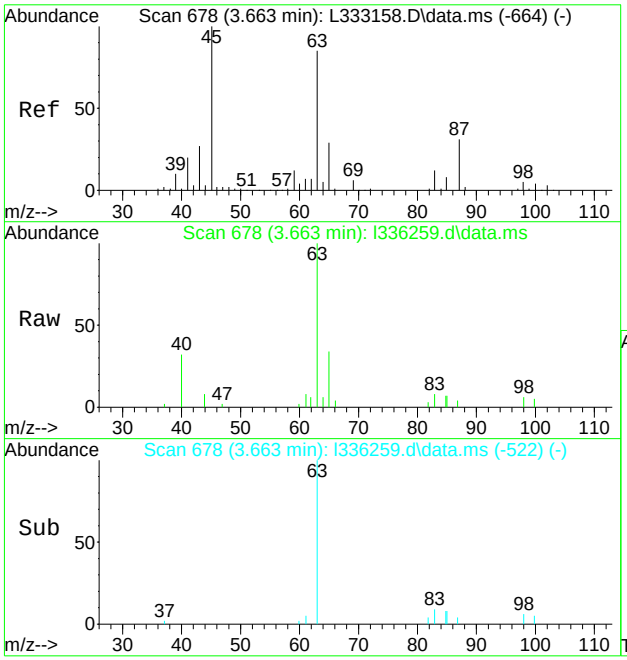


#24
methyl tert butyl ether
Concen: 0.75 ug/L
RT: 3.345 min Scan# 579
Delta R.T. 0.000 min
Lab File: l336259.d
Acq: 21 Dec 2021 5:34 pm

Tgt Ion: 73 Resp: 9137

Ion	Ratio	Lower	Upper
73	100		
57	33.1	0.0	49.3
43	11.5	0.0	51.6

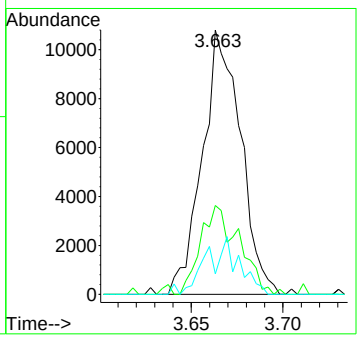


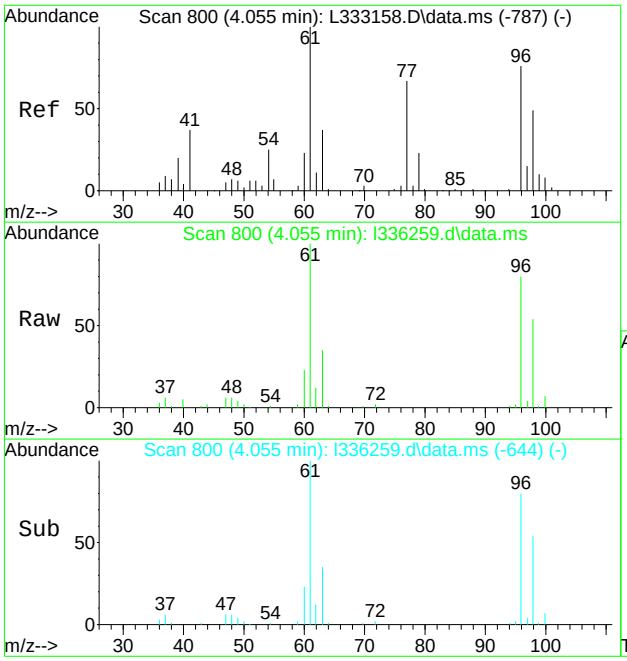


#30
1,1-dichloroethane
Concen: 2.21 ug/L
RT: 3.663 min Scan# 678
Delta R.T. 0.000 min
Lab File: l336259.d
Acq: 21 Dec 2021 5:34 pm

Tgt Ion: 63 Resp: 15744

Ion	Ratio	Lower	Upper
63	100		
65	33.6	4.2	64.2
83	7.8	0.0	44.2

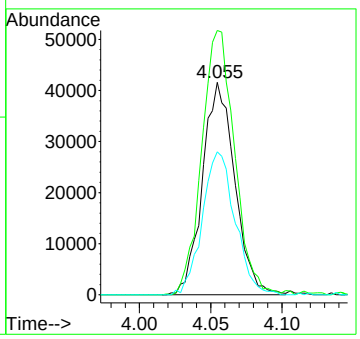


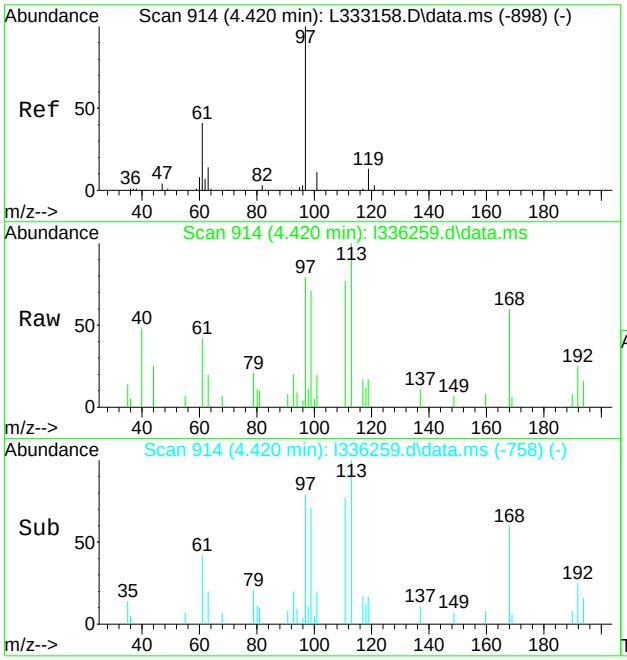


#36
cis-1,2-dichloroethene
Concen: 15.01 ug/L
RT: 4.055 min Scan# 800
Delta R.T. -0.000 min
Lab File: l336259.d
Acq: 21 Dec 2021 5:34 pm

Tgt Ion: 96 Resp: 65651

Ion	Ratio	Lower	Upper
96	100		
61	124.5	103.3	163.3
98	67.3	34.8	94.8

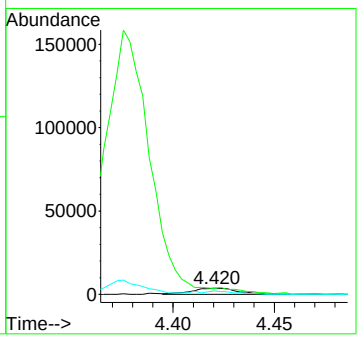


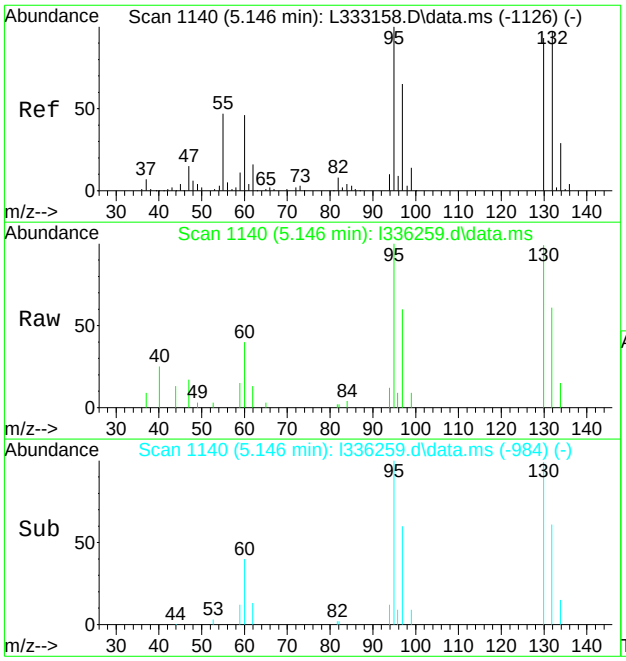


#44
1,1,1-trichloroethane
Concen: 0.92 ug/L
RT: 4.420 min Scan# 914
Delta R.T. 0.000 min
Lab File: l336259.d
Acq: 21 Dec 2021 5:34 pm

Tgt Ion: 97 Resp: 5898

Ion	Ratio	Lower	Upper
97	100		
99	61.9	34.5	94.5
61	52.9	15.1	75.1

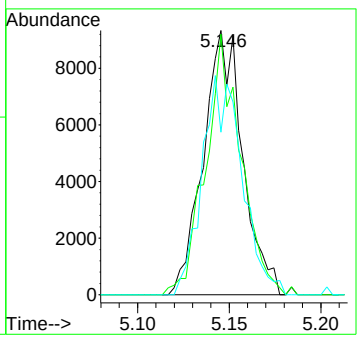


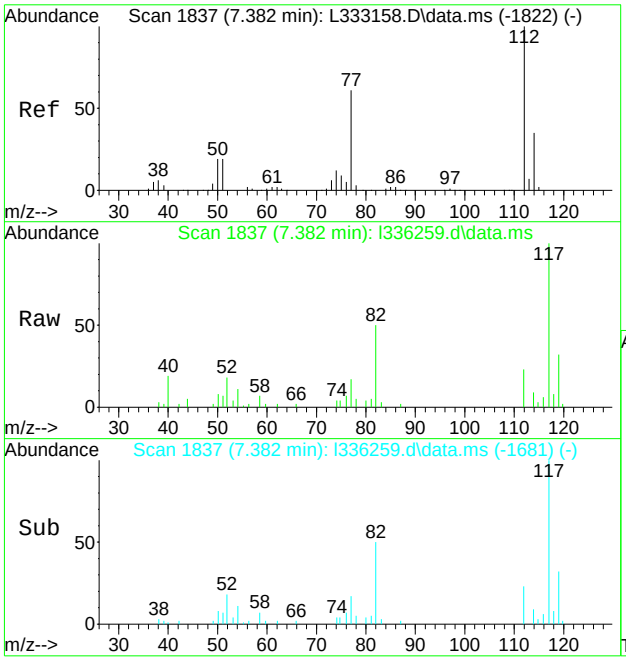


#58
trichloroethene
Concen: 3.39 ug/L
RT: 5.146 min Scan# 1140
Delta R.T. -0.000 min
Lab File: l336259.d
Acq: 21 Dec 2021 5:34 pm

Tgt Ion: 95 Resp: 13972

Ion	Ratio	Lower	Upper
95	100		
130	98.6	62.6	122.6
132	61.5	67.1	127.1#

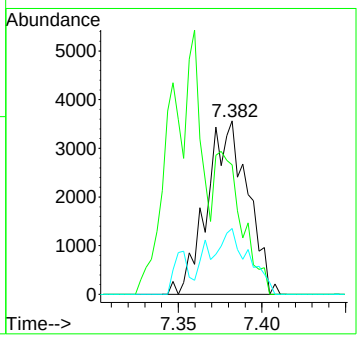


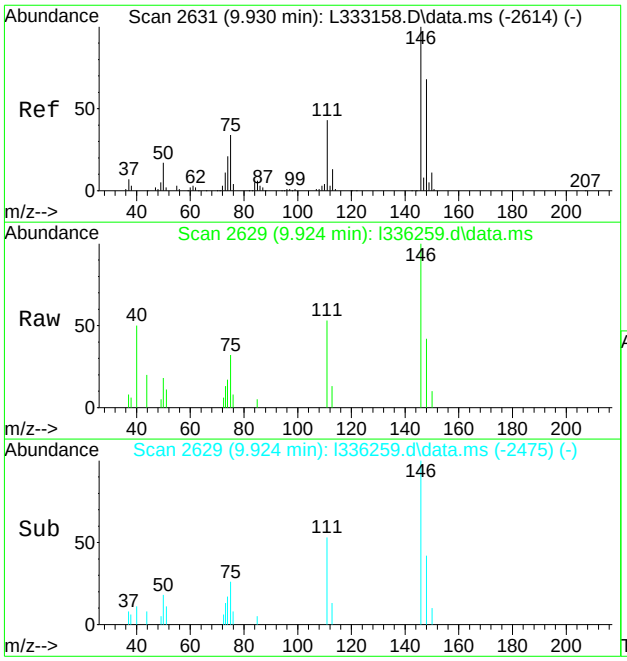


#84
chlorobenzene
Concen: 0.58 ug/L
RT: 7.382 min Scan# 1837
Delta R.T. 0.000 min
Lab File: l336259.d
Acq: 21 Dec 2021 5:34 pm

Tgt Ion:112 Resp: 6031

Ion	Ratio	Lower	Upper
112	100		
77	74.7	30.8	90.8
114	37.9	4.8	64.8

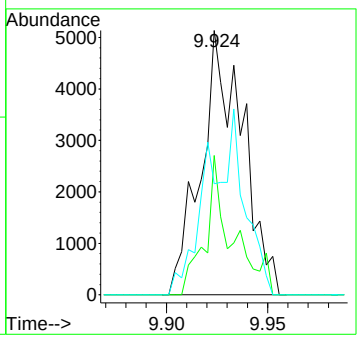




#111
1,2-dichlorobenzene
Concen: 1.03 ug/L
RT: 9.924 min Scan# 2629
Delta R.T. -0.006 min
Lab File: l336259.d
Acq: 21 Dec 2021 5:34 pm

Tgt Ion:146 Resp: 7374

Ion	Ratio	Lower	Upper
146	100		
111	52.7	12.7	72.7
148	42.0	37.7	97.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-24-2021\vl10113\
Data File : l336260.d
Acq On : 21 Dec 2021 5:55 pm
Operator : jons2
Sample : jd36682-3 Inst : GCMSL
Misc : MS55598,VL10113,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 24 09:18:51 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 12:08:10 2021
Response via : Initial Calibration

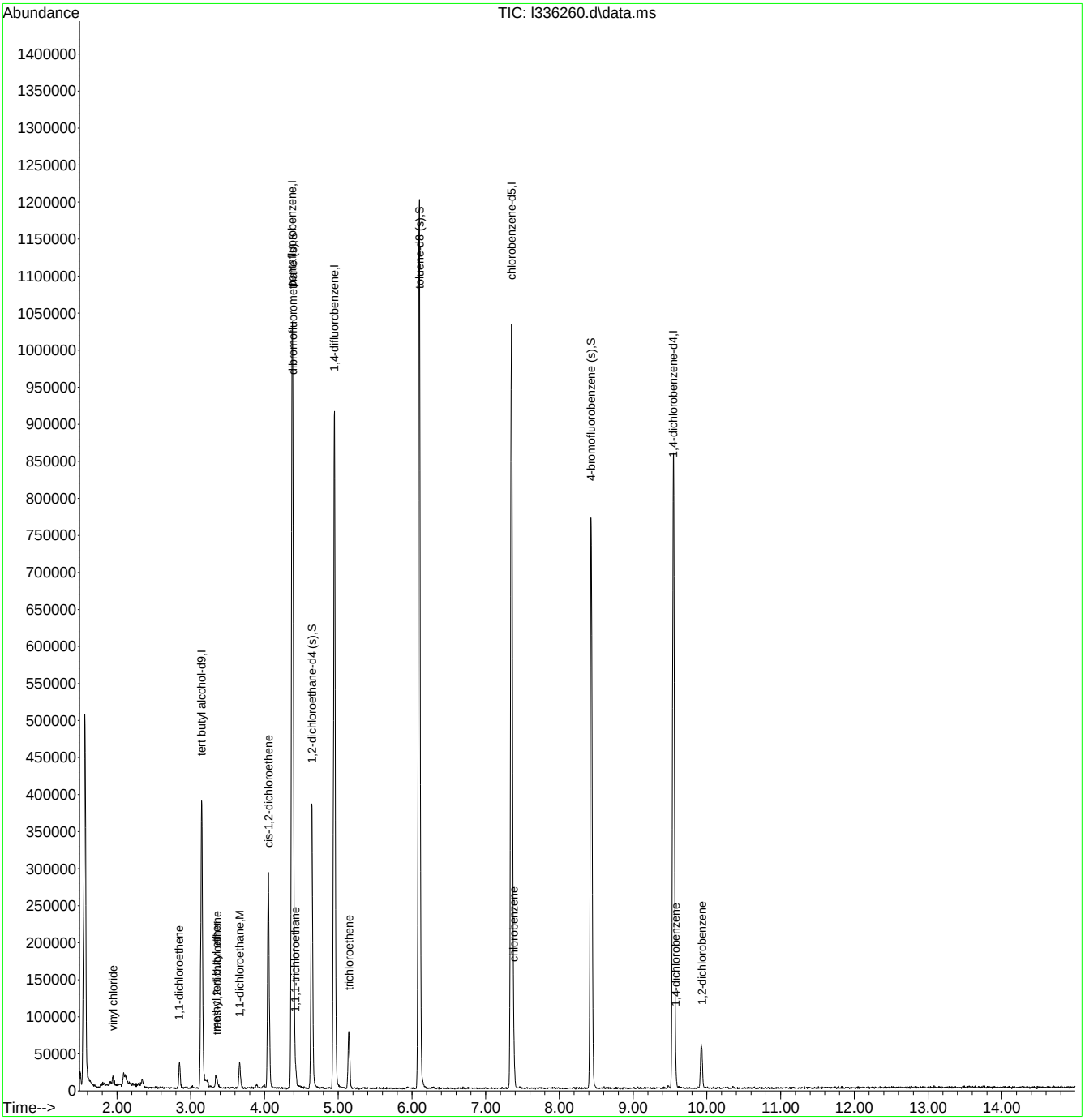
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.146	65	340285	500.00	ug/L	0.00
5) pentafluorobenzene	4.375	168	430970	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.946	114	630421	50.00	ug/L	0.00
71) chlorobenzene-d5	7.350	117	549143	50.00	ug/L	0.00
94) 1,4-dichlorobenzene-d4	9.542	152	228854	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	4.385	113	200563	54.11	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 108.22%			
51) 1,2-dichloroethane-d4 (s)	4.645	65	237755	54.89	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 109.78%			
72) toluene-d8 (s)	6.102	98	738995	49.28	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.56%			
95) 4-bromofluorobenzene (s)	8.431	95	248821	48.70	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.40%			
Target Compounds						Qvalue
9) vinyl chloride	1.946	62	3666	0.63	ug/L #	41
16) 1,1-dichloroethene	2.841	96	9066	2.55	ug/L #	75
24) methyl tert butyl ether	3.348	73	12553	1.03	ug/L	90
25) trans-1,2-dichloroethene	3.361	96	1464	0.37	ug/L #	70
30) 1,1-dichloroethane	3.663	63	25172	3.55	ug/L	95
36) cis-1,2-dichloroethene	4.058	96	105723	24.32	ug/L	87
44) 1,1,1-trichloroethane	4.417	97	10322	1.63	ug/L	97
58) trichloroethene	5.149	95	21437	5.17	ug/L	88
84) chlorobenzene	7.379	112	24745	2.33	ug/L	80
109) 1,4-dichlorobenzene	9.577	146	10700	1.42	ug/L	86
111) 1,2-dichlorobenzene	9.933	146	26218	3.66	ug/L	86

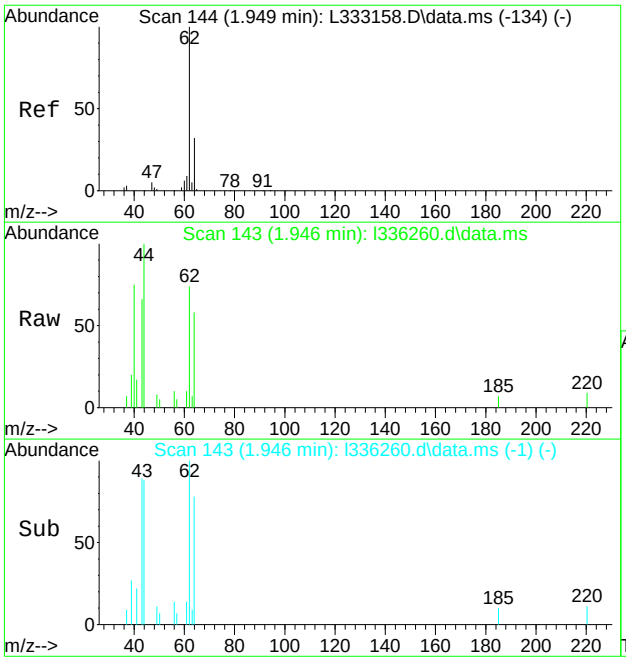
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-24-2021\vl10113\
Data File : l336260.d
Acq On : 21 Dec 2021 5:55 pm
Operator : jons2
Sample : jd36682-3 Inst : GCMSL
Misc : MS55598,VL10113,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 24 09:18:51 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 12:08:10 2021
Response via : Initial Calibration

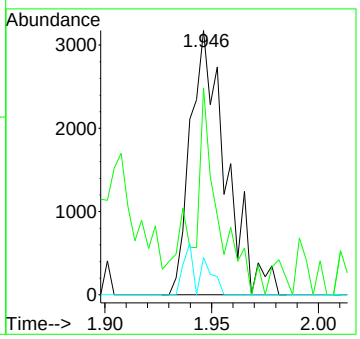


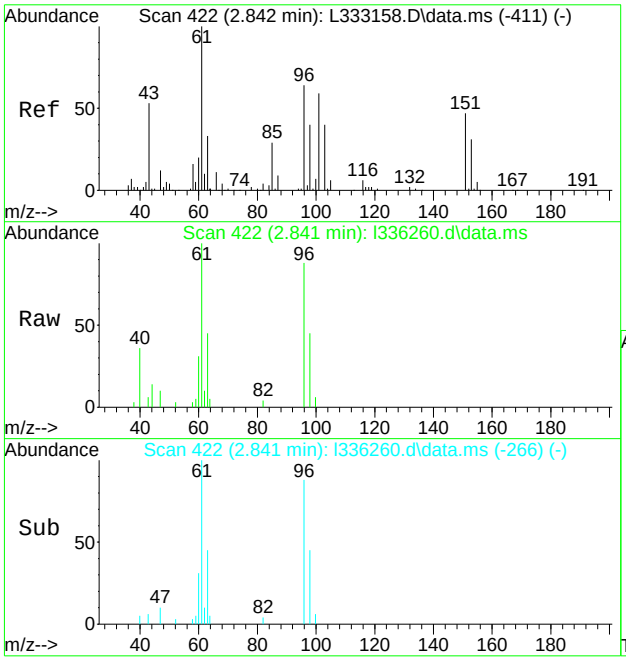


#9
vinyl chloride
Concen: 0.63 ug/L
RT: 1.946 min Scan# 143
Delta R.T. -0.003 min
Lab File: l336260.d
Acq: 21 Dec 2021 5:55 pm

Tgt Ion: 62 Resp: 3666

Ion	Ratio	Lower	Upper
62	100		
64	71.3	1.9	61.9#
61	14.1	0.0	38.8

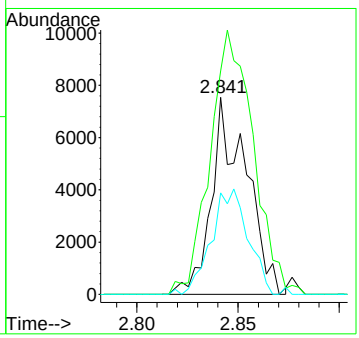


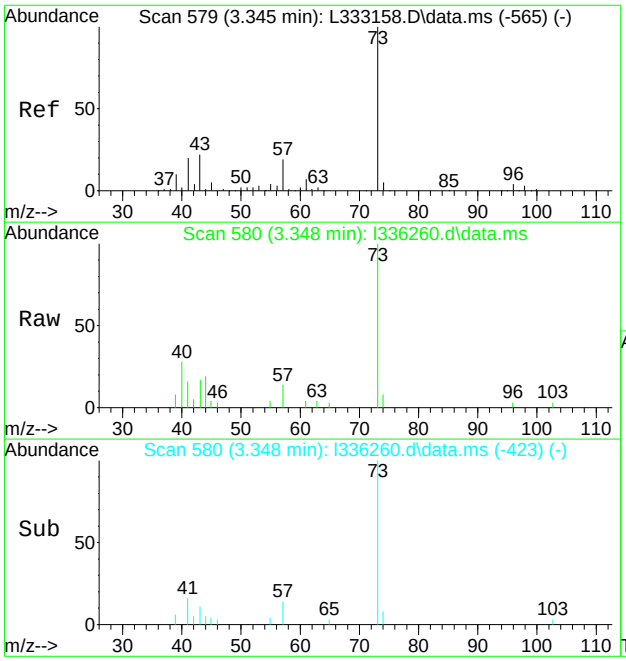


#16
1,1-dichloroethene
Concen: 2.55 ug/L
RT: 2.841 min Scan# 422
Delta R.T. -0.001 min
Lab File: l336260.d
Acq: 21 Dec 2021 5:55 pm

Tgt Ion: 96 Resp: 9066

Ion	Ratio	Lower	Upper
96	100		
61	113.4	125.3	185.3#
63	51.5	20.7	80.7

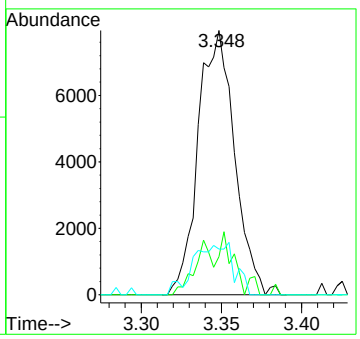


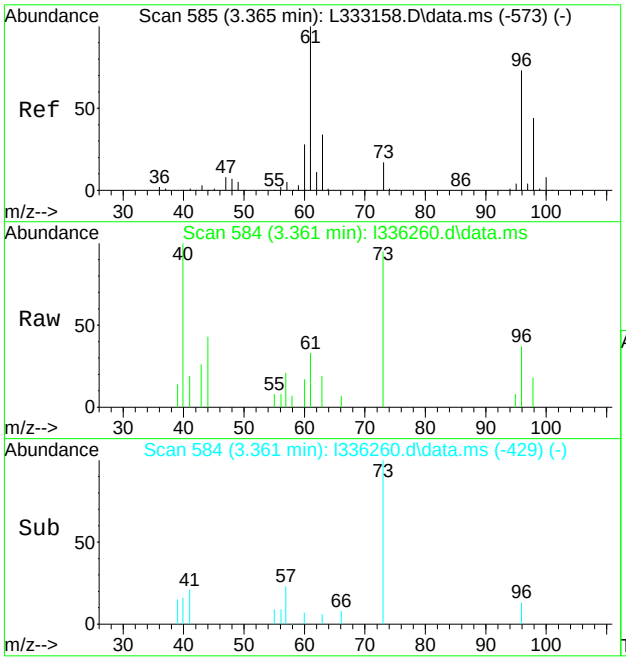


#24
methyl tert butyl ether
Concen: 1.03 ug/L
RT: 3.348 min Scan# 580
Delta R.T. 0.003 min
Lab File: l336260.d
Acq: 21 Dec 2021 5:55 pm

Tgt Ion: 73 Resp: 12553

Ion	Ratio	Lower	Upper
73	100		
57	14.5	0.0	49.3
43	17.3	0.0	51.6

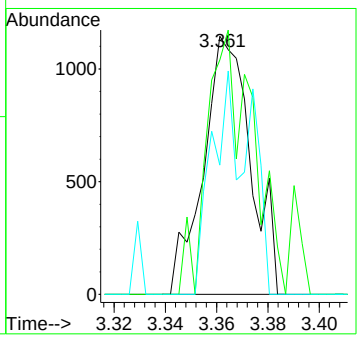


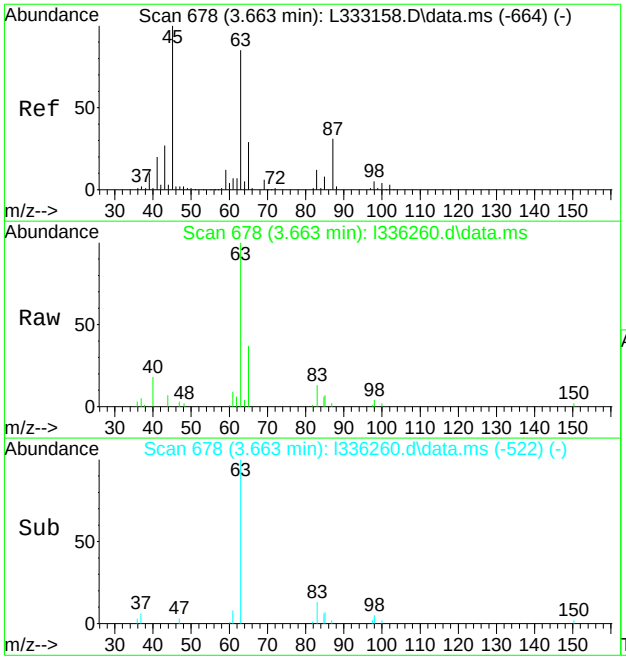


#25
trans-1,2-dichloroethene
Concen: 0.37 ug/L
RT: 3.361 min Scan# 584
Delta R.T. -0.004 min
Lab File: l336260.d
Acq: 21 Dec 2021 5:55 pm

Tgt Ion: 96 Resp: 1464

Ion	Ratio	Lower	Upper
96	100		
61	90.8	106.1	166.1#
98	50.0	30.5	90.5

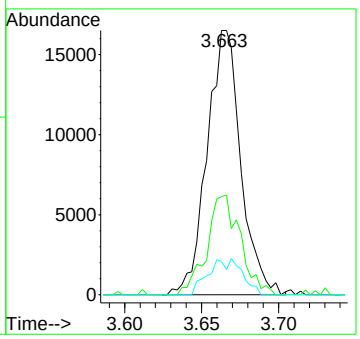


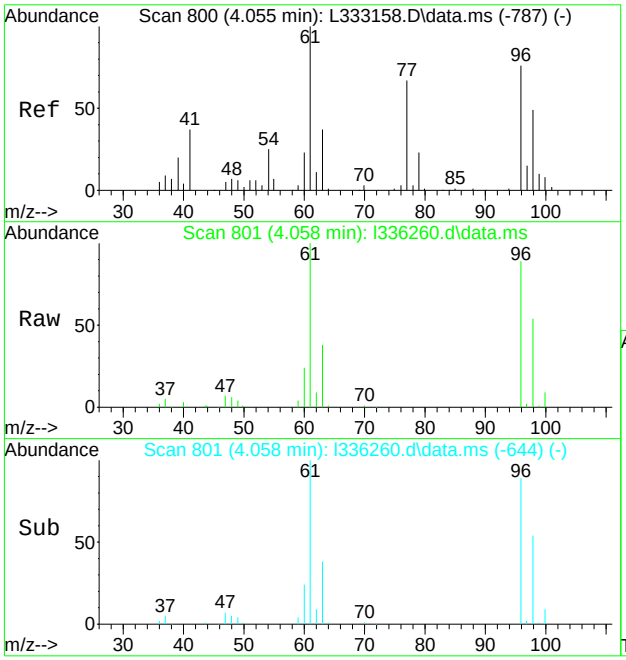


#30
1,1-dichloroethane
Concen: 3.55 ug/L
RT: 3.663 min Scan# 678
Delta R.T. -0.000 min
Lab File: l336260.d
Acq: 21 Dec 2021 5:55 pm

Tgt Ion: 63 Resp: 25172

Ion	Ratio	Lower	Upper
63	100		
65	37.1	4.2	64.2
83	12.7	0.0	44.2

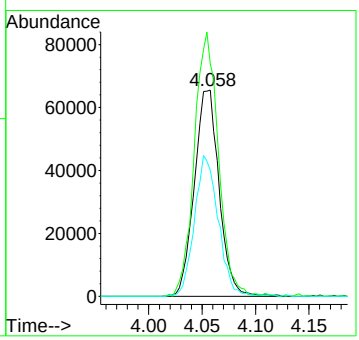


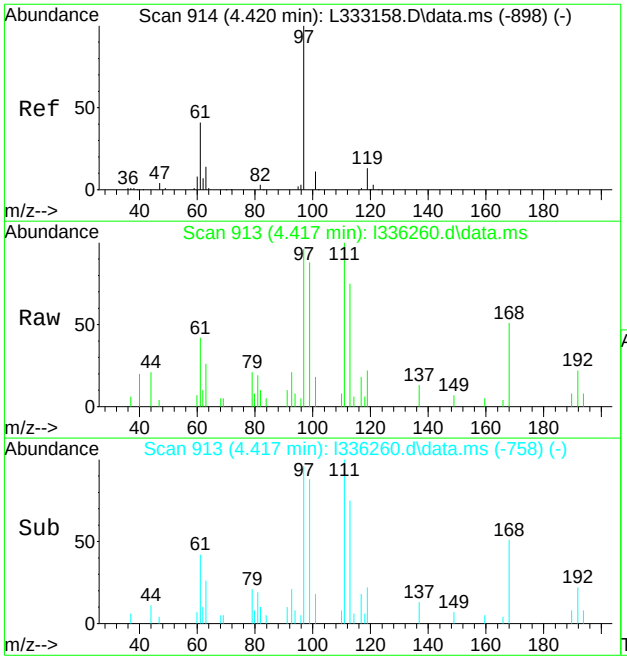


#36
cis-1,2-dichloroethene
Concen: 24.32 ug/L
RT: 4.058 min Scan# 801
Delta R.T. 0.003 min
Lab File: l336260.d
Acq: 21 Dec 2021 5:55 pm

Tgt Ion: 96 Resp: 105723

Ion	Ratio	Lower	Upper
96	100		
61	112.7	103.3	163.3
98	61.2	34.8	94.8

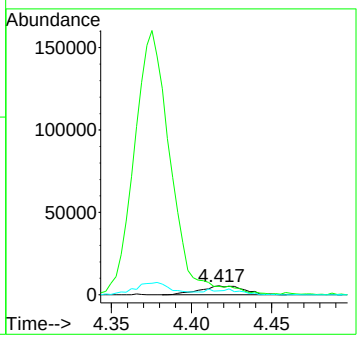


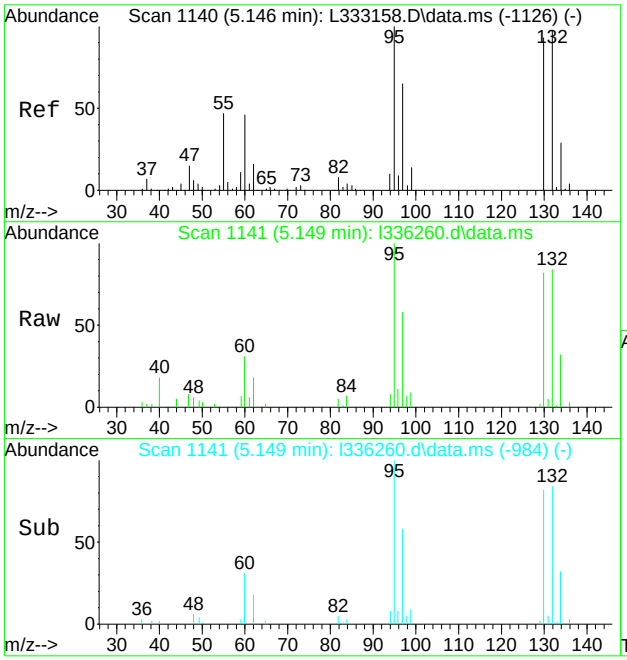


#44
1,1,1-trichloroethane
Concen: 1.63 ug/L
RT: 4.417 min Scan# 913
Delta R.T. -0.003 min
Lab File: l336260.d
Acq: 21 Dec 2021 5:55 pm

Tgt Ion: 97 Resp: 10322

Ion	Ratio	Lower	Upper
97	100		
99	67.3	34.5	94.5
61	43.8	15.1	75.1

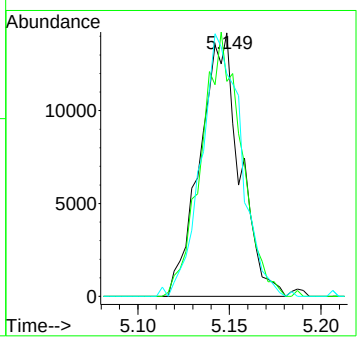


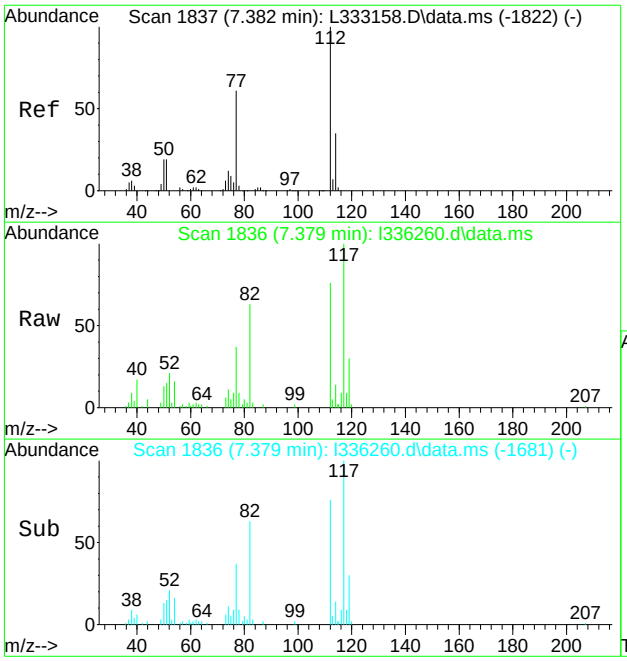


#58
trichloroethene
Concen: 5.17 ug/L
RT: 5.149 min Scan# 1141
Delta R.T. 0.003 min
Lab File: l336260.d
Acq: 21 Dec 2021 5:55 pm

Tgt Ion: 95 Resp: 21437

Ion	Ratio	Lower	Upper
95	100		
130	81.5	62.6	122.6
132	84.4	67.1	127.1

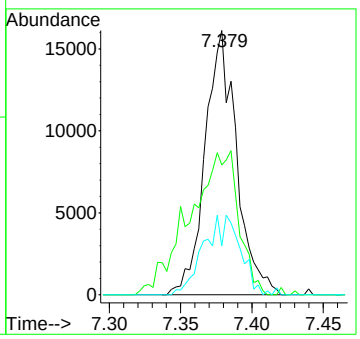


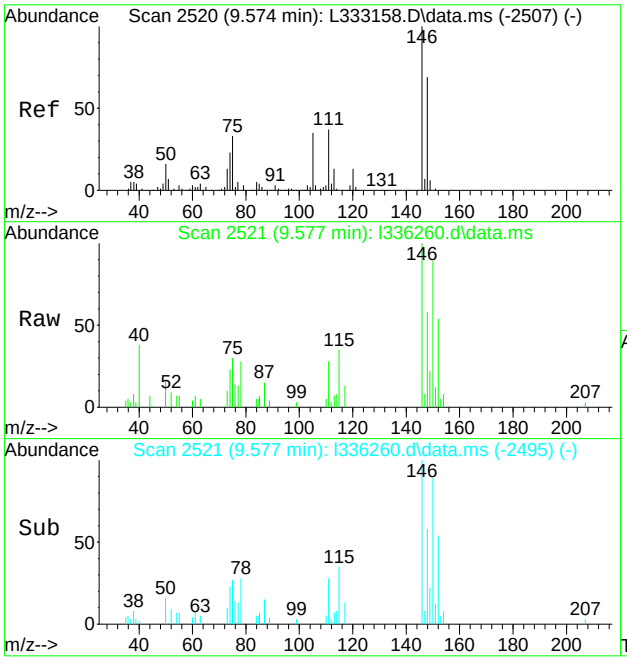


#84
chlorobenzene
Concen: 2.33 ug/L
RT: 7.379 min Scan# 1836
Delta R.T. -0.003 min
Lab File: l336260.d
Acq: 21 Dec 2021 5:55 pm

Tgt Ion:112 Resp: 24745

Ion	Ratio	Lower	Upper
112	100		
77	49.1	30.8	90.8
114	18.4	4.8	64.8

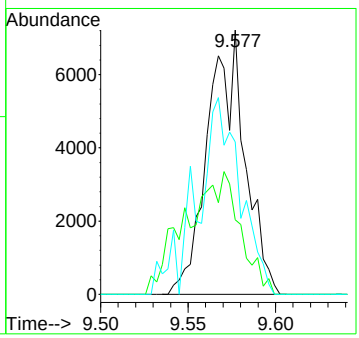


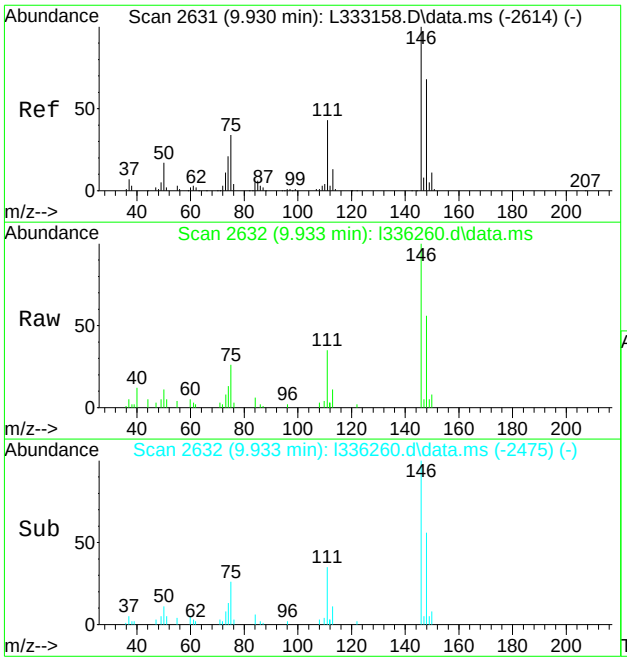


#109
1,4-dichlorobenzene
Concen: 1.42 ug/L
RT: 9.577 min Scan# 2521
Delta R.T. 0.003 min
Lab File: l336260.d
Acq: 21 Dec 2021 5:55 pm

Tgt Ion:146 Resp: 10700

Ion	Ratio	Lower	Upper
146	100		
111	28.2	7.9	67.9
148	57.7	38.3	98.3

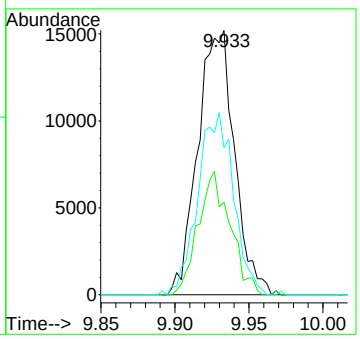




#111
1,2-dichlorobenzene
Concen: 3.66 ug/L
RT: 9.933 min Scan# 2632
Delta R.T. 0.003 min
Lab File: l336260.d
Acq: 21 Dec 2021 5:55 pm

Tgt Ion:146 Resp: 26218

Ion	Ratio	Lower	Upper
146	100		
111	35.0	12.7	72.7
148	55.5	37.7	97.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-24-2021\vl10113\
Data File : l336261.d
Acq On : 21 Dec 2021 6:16 pm
Operator : jons2
Sample : jd36682-4 Inst : GCMSL
Misc : MS55598,VL10113,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 24 09:20:43 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 12:08:10 2021
Response via : Initial Calibration

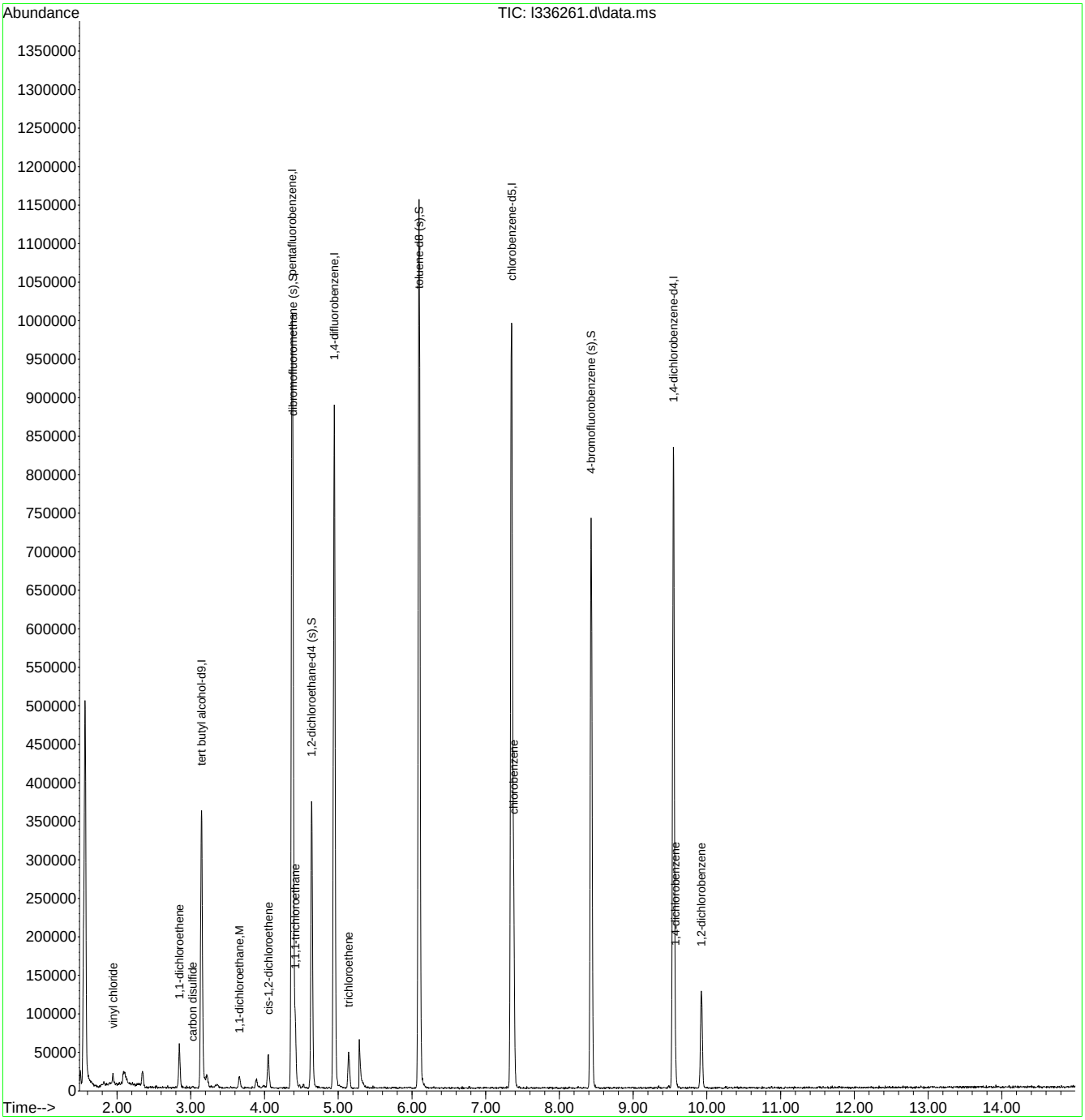
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.146	65	318102	500.00	ug/L	0.00
5) pentafluorobenzene	4.375	168	419995	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.947	114	606461	50.00	ug/L	0.00
71) chlorobenzene-d5	7.353	117	528589	50.00	ug/L	0.00
94) 1,4-dichlorobenzene-d4	9.545	152	215857	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	4.385	113	190365	52.70	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.40%			
51) 1,2-dichloroethane-d4 (s)	4.639	65	229956	55.18	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 110.36%			
72) toluene-d8 (s)	6.099	98	711623	49.30	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.60%			
95) 4-bromofluorobenzene (s)	8.431	95	237870	49.36	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.72%			
Target Compounds						Qvalue
9) vinyl chloride	1.946	62	4318	0.77	ug/L	95
16) 1,1-dichloroethene	2.845	96	15889	4.59	ug/L	79
21) carbon disulfide	3.024	76	2280	0.21	ug/L	47
30) 1,1-dichloroethane	3.660	63	11932	1.73	ug/L	95
36) cis-1,2-dichloroethene	4.058	96	15899	3.75	ug/L #	73
44) 1,1,1-trichloroethane	4.417	97	42508	6.87	ug/L	97
58) trichloroethene	5.142	95	13411	3.36	ug/L	84
84) chlorobenzene	7.379	112	135274	13.24	ug/L	97
109) 1,4-dichlorobenzene	9.571	146	13340	1.88	ug/L	96
111) 1,2-dichlorobenzene	9.927	146	53212	7.87	ug/L	88

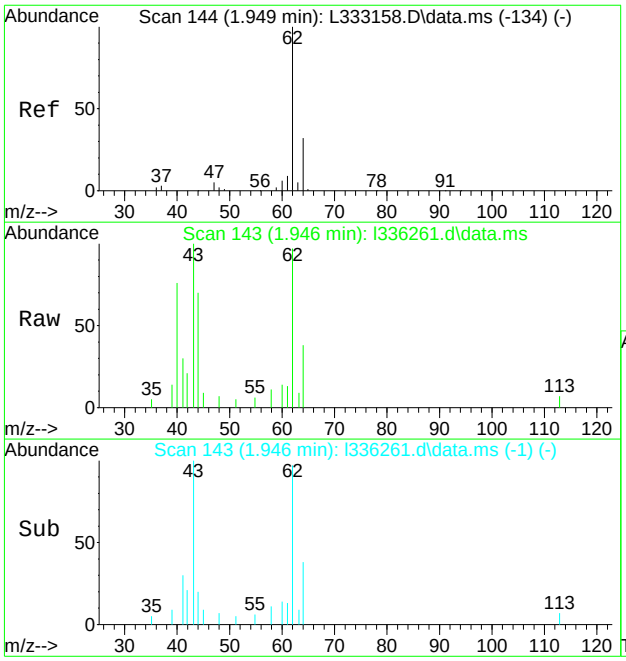
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-24-2021\vl10113\
Data File : l336261.d
Acq On : 21 Dec 2021 6:16 pm
Operator : jons2
Sample : jd36682-4 Inst : GCMSL
Misc : MS55598,VL10113,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 24 09:20:43 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 12:08:10 2021
Response via : Initial Calibration

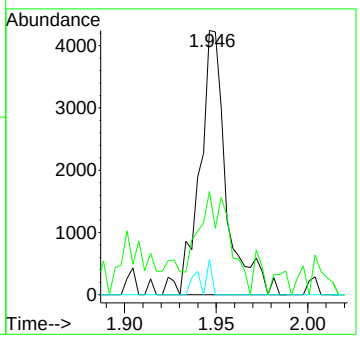


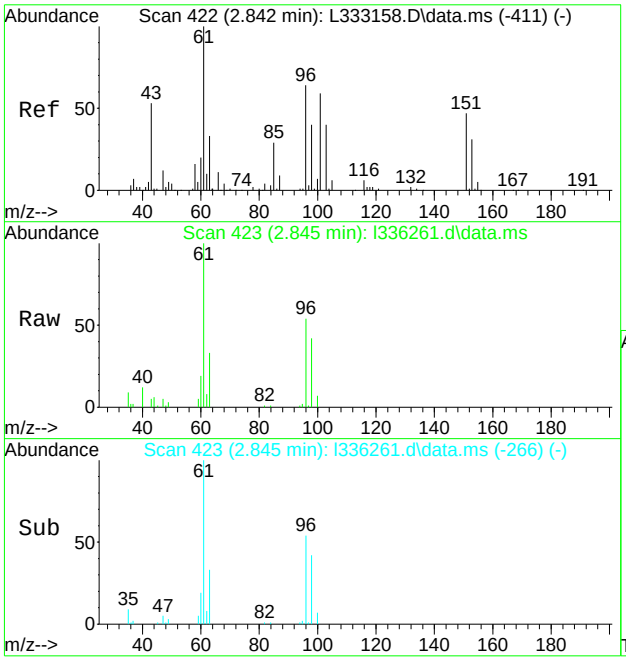


#9
vinyl chloride
Concen: 0.77 ug/L
RT: 1.946 min Scan# 143
Delta R.T. -0.003 min
Lab File: l336261.d
Acq: 21 Dec 2021 6:16 pm

Tgt Ion: 62 Resp: 4318

Ion	Ratio	Lower	Upper
62	100		
64	30.2	1.9	61.9
61	13.4	0.0	38.8

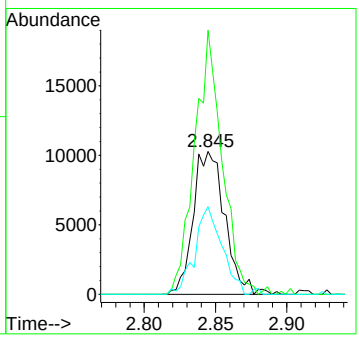


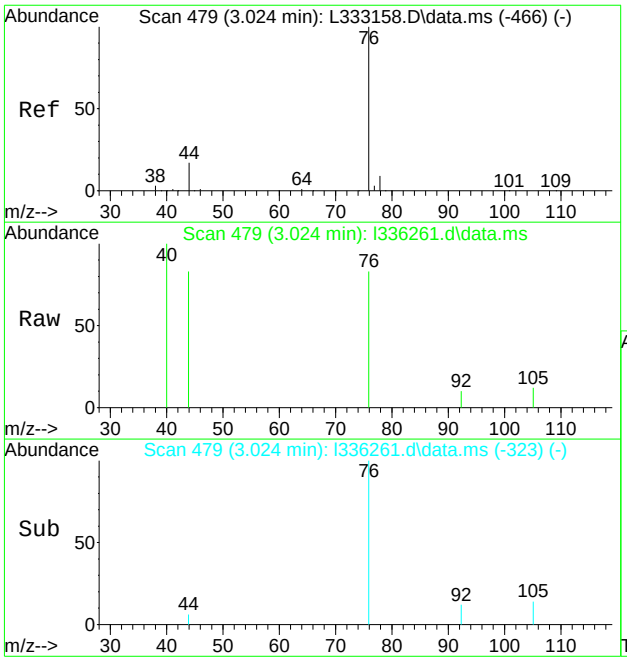


#16
1,1-dichloroethene
Concen: 4.59 ug/L
RT: 2.845 min Scan# 423
Delta R.T. 0.003 min
Lab File: l336261.d
Acq: 21 Dec 2021 6:16 pm

Tgt Ion: 96 Resp: 15889

Ion	Ratio	Lower	Upper
96	100		
61	184.8	125.3	185.3
63	61.3	20.7	80.7

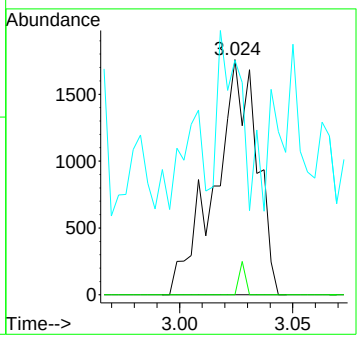


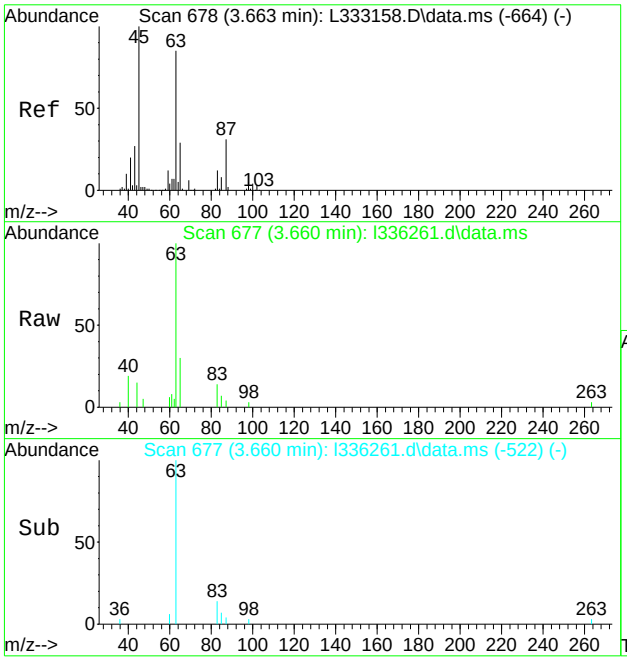


#21
carbon disulfide
Concen: 0.21 ug/L
RT: 3.024 min Scan# 479
Delta R.T. 0.000 min
Lab File: l336261.d
Acq: 21 Dec 2021 6:16 pm

Tgt Ion: 76 Resp: 2280

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	38.7
44	46.4	0.0	46.9

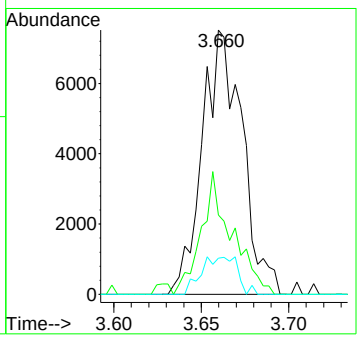


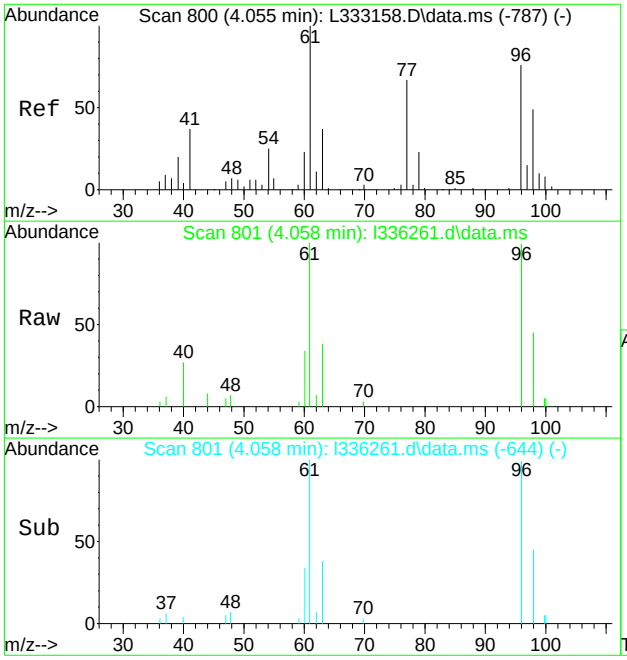


#30
1,1-dichloroethane
Concen: 1.73 ug/L
RT: 3.660 min Scan# 677
Delta R.T. -0.003 min
Lab File: l336261.d
Acq: 21 Dec 2021 6:16 pm

Tgt Ion: 63 Resp: 11932

Ion	Ratio	Lower	Upper
63	100		
65	30.0	4.2	64.2
83	13.7	0.0	44.2

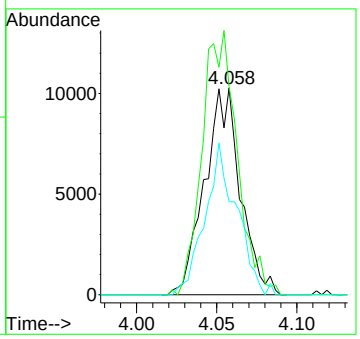


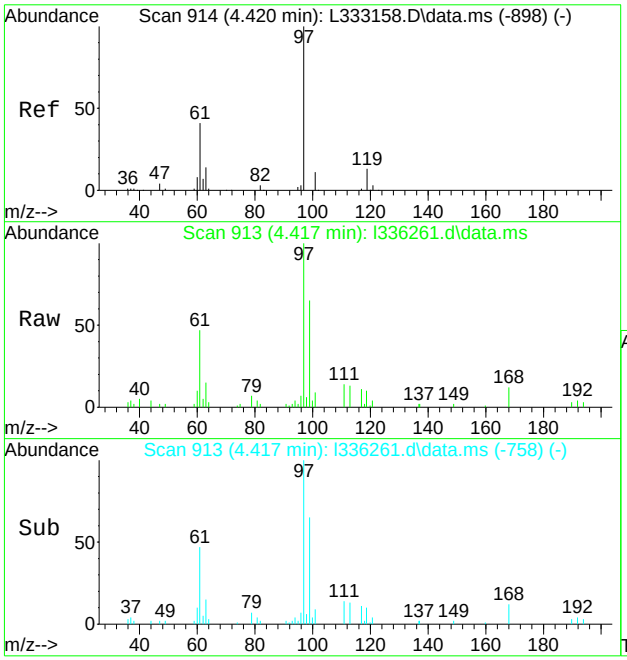


#36
cis-1,2-dichloroethene
Concen: 3.75 ug/L
RT: 4.058 min Scan# 801
Delta R.T. 0.003 min
Lab File: l336261.d
Acq: 21 Dec 2021 6:16 pm

Tgt Ion: 96 Resp: 15899

Ion	Ratio	Lower	Upper
96	100		
61	100.7	103.3	163.3#
98	45.0	34.8	94.8

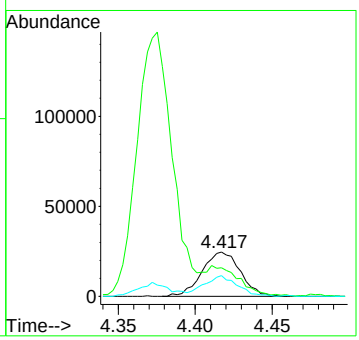


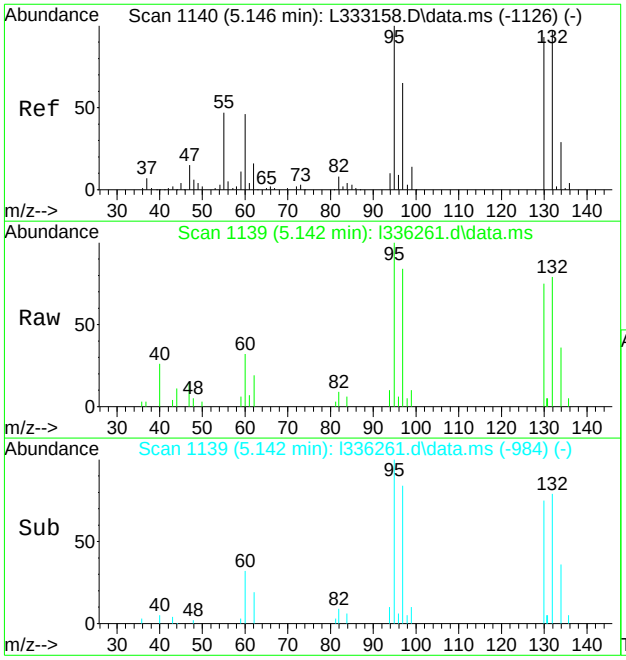


#44
1,1,1-trichloroethane
Concen: 6.87 ug/L
RT: 4.417 min Scan# 913
Delta R.T. -0.003 min
Lab File: l336261.d
Acq: 21 Dec 2021 6:16 pm

Tgt Ion: 97 Resp: 42508

Ion	Ratio	Lower	Upper
97	100		
99	61.0	34.5	94.5
61	44.6	15.1	75.1

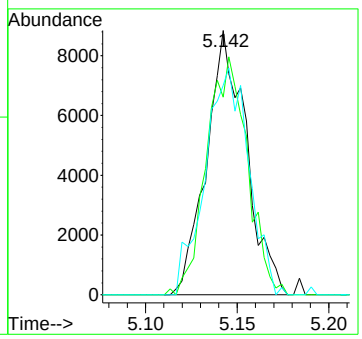


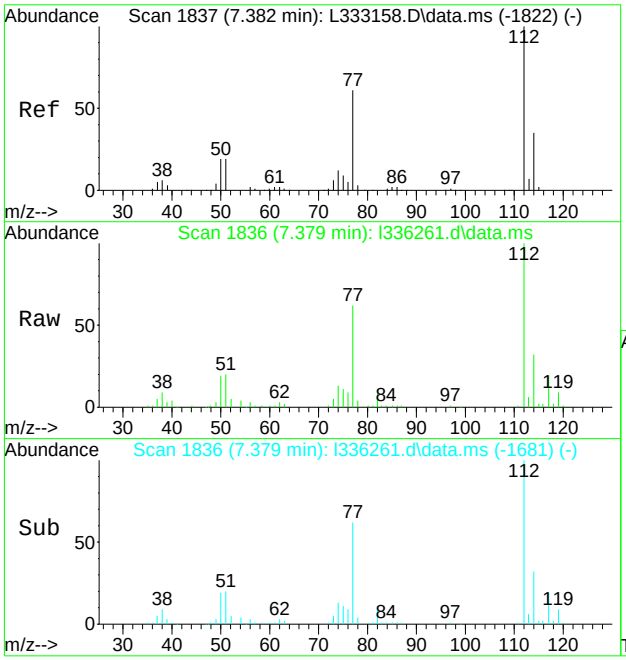


#58
trichloroethene
Concen: 3.36 ug/L
RT: 5.142 min Scan# 1139
Delta R.T. -0.004 min
Lab File: l336261.d
Acq: 21 Dec 2021 6:16 pm

Tgt Ion: 95 Resp: 13411

Ion	Ratio	Lower	Upper
95	100		
130	79.6	62.6	122.6
132	79.2	67.1	127.1

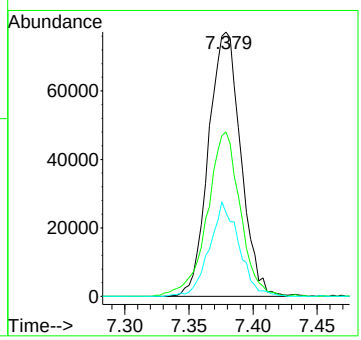


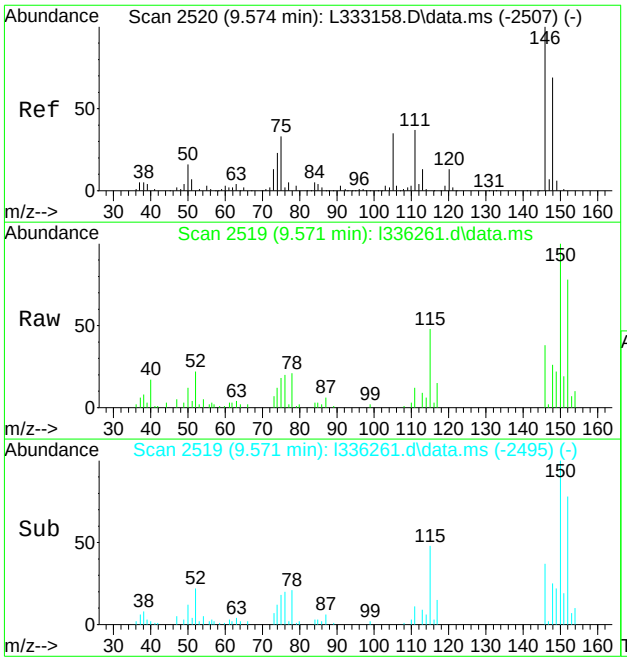


#84
chlorobenzene
Concen: 13.24 ug/L
RT: 7.379 min Scan# 1836
Delta R.T. -0.003 min
Lab File: l336261.d
Acq: 21 Dec 2021 6:16 pm

Tgt Ion:112 Resp: 135274

Ion	Ratio	Lower	Upper
112	100		
77	62.3	30.8	90.8
114	31.7	4.8	64.8

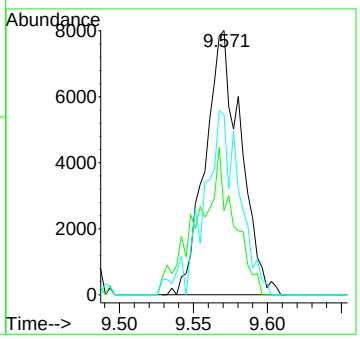


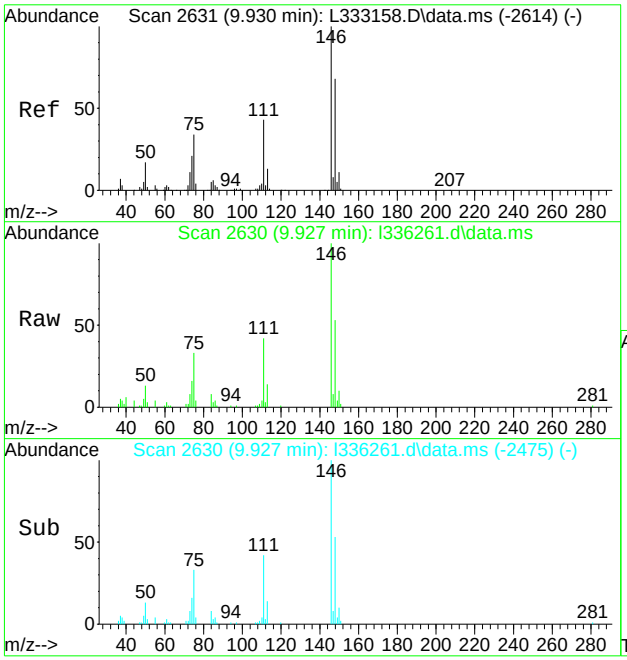


#109
1,4-dichlorobenzene
Concen: 1.88 ug/L
RT: 9.571 min Scan# 2519
Delta R.T. -0.003 min
Lab File: l336261.d
Acq: 21 Dec 2021 6:16 pm

Tgt Ion:146 Resp: 13340

Ion	Ratio	Lower	Upper
146	100		
111	31.7	7.9	67.9
148	68.1	38.3	98.3

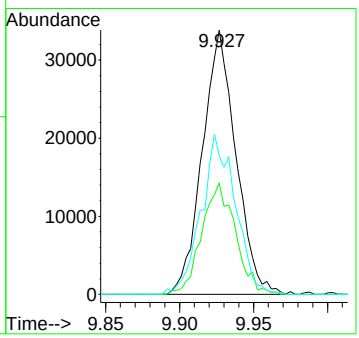




#111
1,2-dichlorobenzene
Concen: 7.87 ug/L
RT: 9.927 min Scan# 2630
Delta R.T. -0.003 min
Lab File: l336261.d
Acq: 21 Dec 2021 6:16 pm

Tgt Ion:146 Resp: 53212

Ion	Ratio	Lower	Upper
146	100		
111	42.2	12.7	72.7
148	52.5	37.7	97.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-24-2021\vl10113\
Data File : l336262.d
Acq On : 21 Dec 2021 6:37 pm
Operator : jons2
Sample : jd36682-5 Inst : GCMSL
Misc : MS55598,VL10113,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 24 09:22:11 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 12:08:10 2021
Response via : Initial Calibration

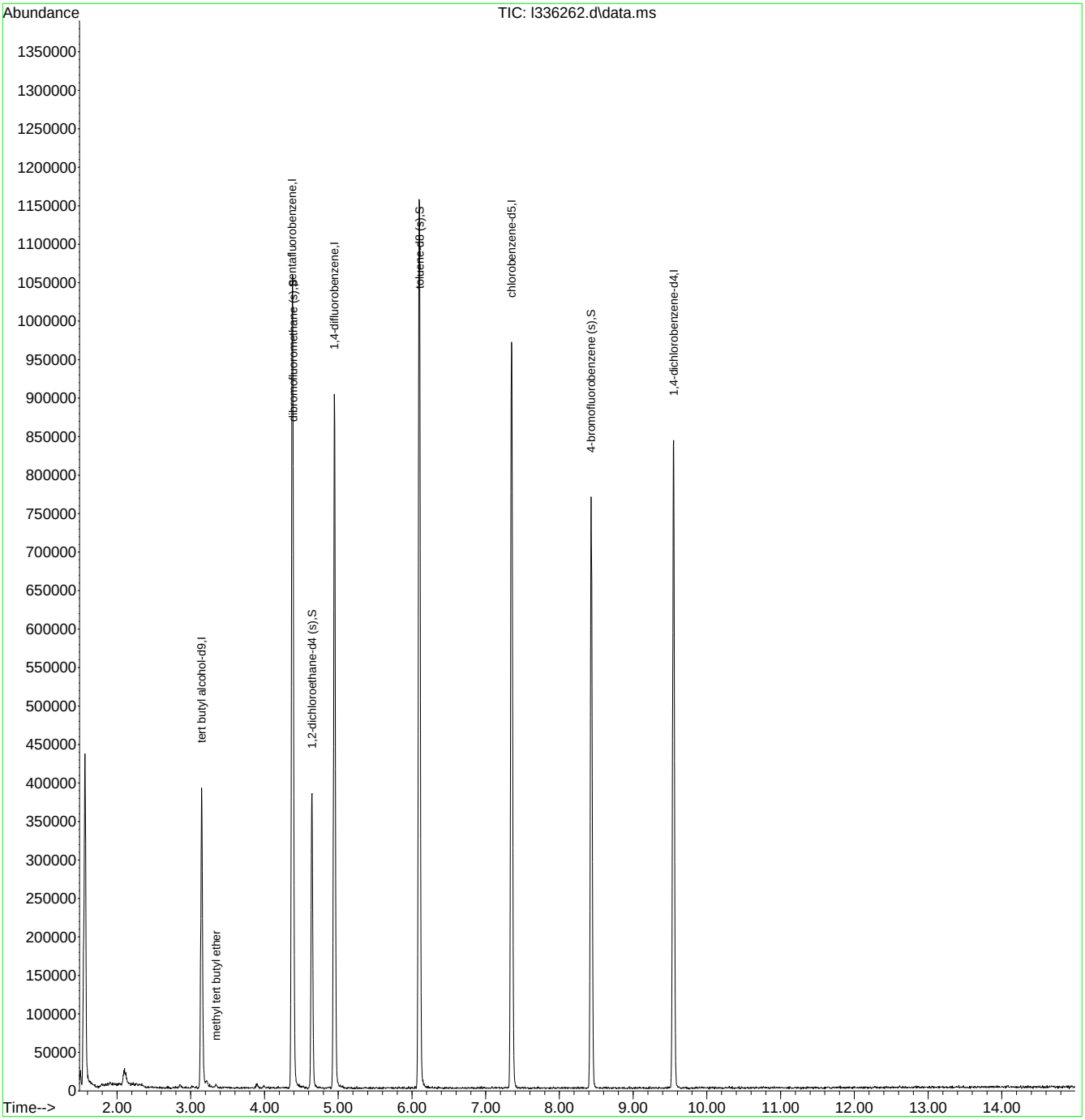
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.146	65	328056	500.00	ug/L	0.00
5) pentafluorobenzene	4.375	168	434623	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.947	114	620145	50.00	ug/L	0.00
71) chlorobenzene-d5	7.350	117	535428	50.00	ug/L	0.00
94) 1,4-dichlorobenzene-d4	9.548	152	225532	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	4.388	113	197316	52.79	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.58%			
51) 1,2-dichloroethane-d4 (s)	4.645	65	236787	55.57	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 111.14%			
72) toluene-d8 (s)	6.102	98	725333	49.61	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.22%			
95) 4-bromofluorobenzene (s)	8.431	95	244950	48.65	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.30%			
Target Compounds						Qvalue
24) methyl tert butyl ether	3.345	73	3041	0.25	ug/L	80

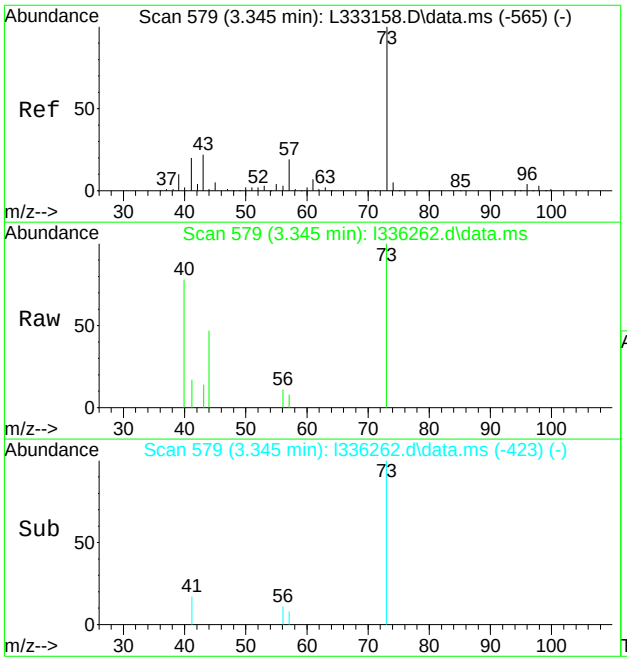
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-24-2021\vl10113\
Data File : l336262.d
Acq On : 21 Dec 2021 6:37 pm
Operator : jons2
Sample : jd36682-5 Inst : GCMSL
Misc : MS55598,VL10113,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 24 09:22:11 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 12:08:10 2021
Response via : Initial Calibration

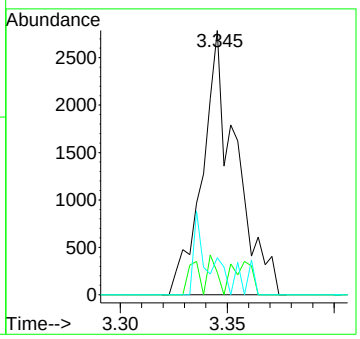




#24
methyl tert butyl ether
Concen: 0.25 ug/L
RT: 3.345 min Scan# 579
Delta R.T. 0.000 min
Lab File: l336262.d
Acq: 21 Dec 2021 6:37 pm

Tgt Ion: 73 Resp: 3041

Ion	Ratio	Lower	Upper
73	100		
57	8.5	0.0	49.3
43	14.0	0.0	51.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-24-2021\vl10113\
Data File : l336263.d
Acq On : 21 Dec 2021 6:58 pm
Operator : jons2
Sample : jd36682-6 Inst : GCMSL
Misc : MS55598,VL10113,5,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 24 09:23:06 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 12:08:10 2021
Response via : Initial Calibration

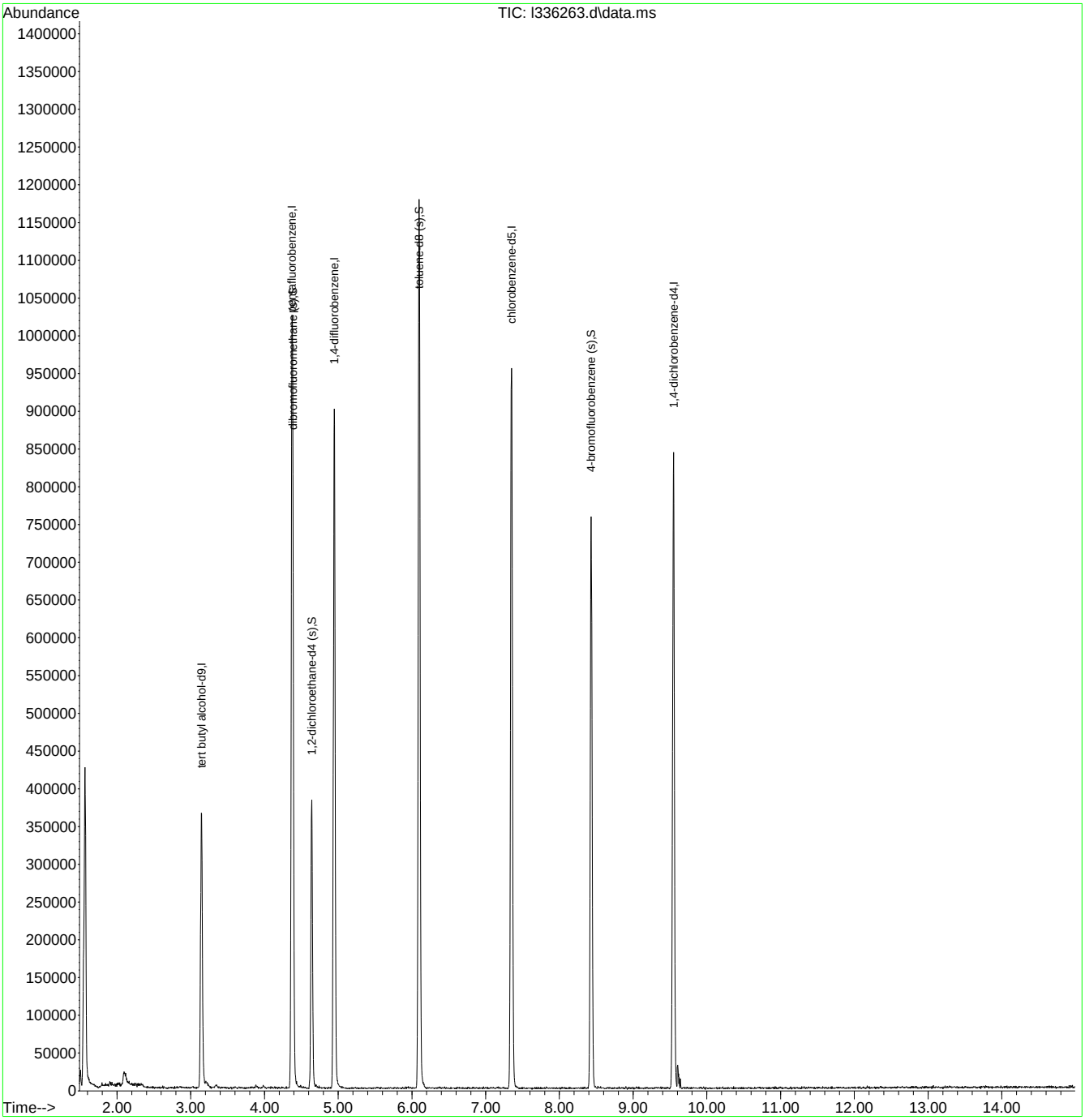
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.143	65	322994	500.00	ug/L	0.00
5) pentafluorobenzene	4.372	168	433492	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.946	114	620676	50.00	ug/L	0.00
71) chlorobenzene-d5	7.350	117	523969	50.00	ug/L	0.00
94) 1,4-dichlorobenzene-d4	9.548	152	218758	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	4.385	113	190179	51.01	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.02%			
51) 1,2-dichloroethane-d4 (s)	4.642	65	236010	55.34	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 110.68%			
72) toluene-d8 (s)	6.098	98	721347	50.41	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.82%			
95) 4-bromofluorobenzene (s)	8.431	95	236568	48.44	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.88%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-24-2021\vl10113\
Data File : l336263.d
Acq On : 21 Dec 2021 6:58 pm
Operator : jons2
Sample : jd36682-6 Inst : GCMSL
Misc : MS55598,VL10113,5,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 24 09:23:06 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 12:08:10 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-23-21\v1c7983\
Data File : 1c183331.d
Acq On : 21 Dec 2021 10:26 pm
Operator : PrashanS
Sample : JD36682-7 Inst : GCMS1C
Misc : MS55600,V1C7983,5.6,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 22 18:30:44 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

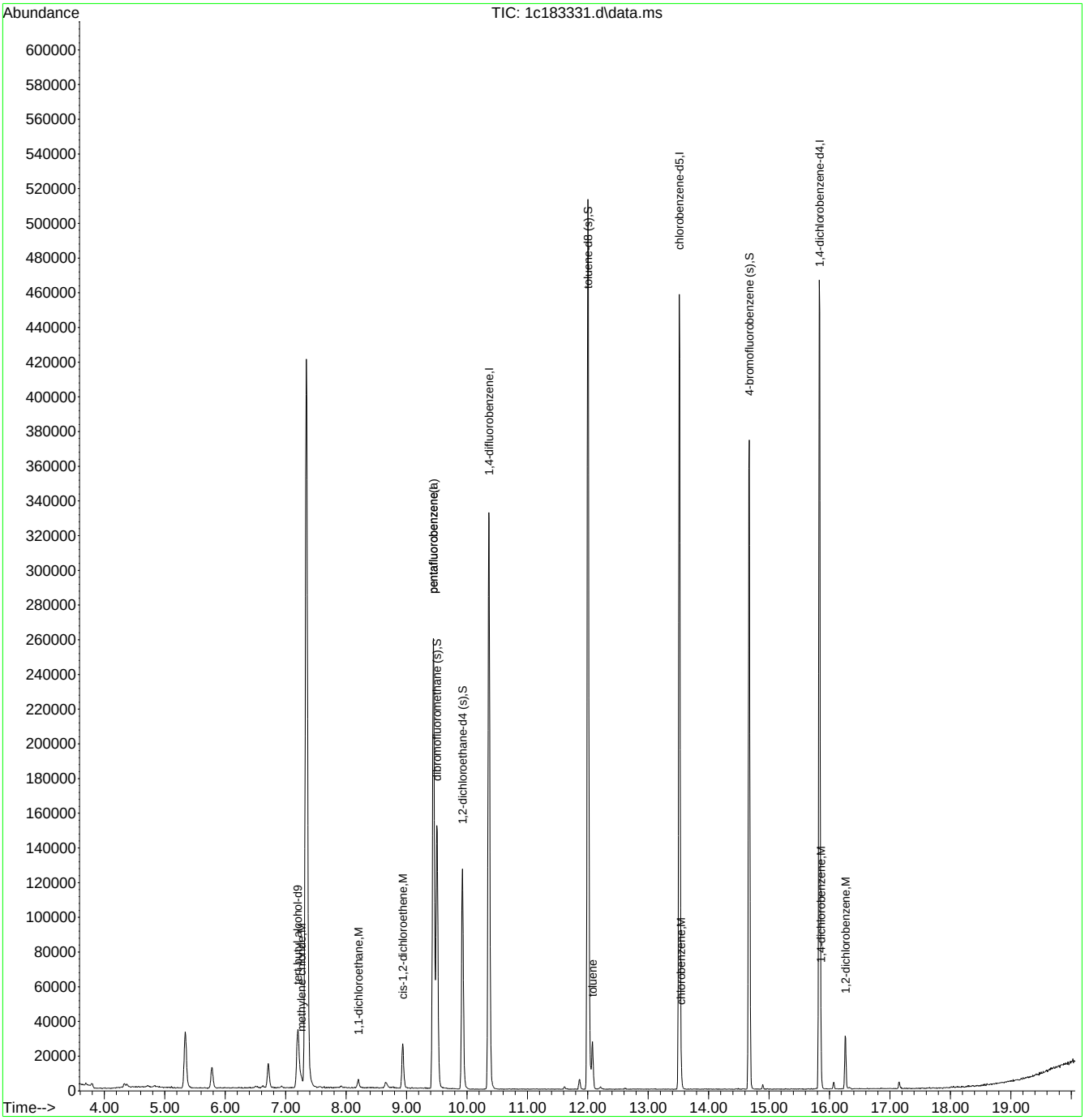
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.201	65	57402	500.00	ug/L	-0.02
5) pentafluorobenzene	9.445	168	233698	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.366	114	311355	50.00	ug/L	0.00
73) chlorobenzene-d5	13.514	117	265023	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.836	152	130250	50.00	ug/L	0.00
125) pentafluorobenzene(a)	9.445	168	233698	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.503	113	104142	51.58	ug/L	0.00
Spiked Amount 50.000	Range 72 - 130		Recovery = 103.16%			
52) 1,2-dichloroethane-d4 (s)	9.926	65	97776	52.89	ug/L	0.00
Spiked Amount 50.000	Range 75 - 131		Recovery = 105.78%			
74) toluene-d8 (s)	12.003	98	362155	50.04	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 100.08%			
97) 4-bromofluorobenzene (s)	14.670	95	120819	49.52	ug/L	0.00
Spiked Amount 50.000	Range 60 - 141		Recovery = 99.04%			
Target Compounds						Qvalue
22) methylene chloride	7.259	84	1913	0.93	ug/L	83
28) 1,1-dichloroethane	8.206	63	6436	1.98	ug/L	96
36) cis-1,2-dichloroethene	8.938	96	12895	5.81	ug/L	96
75) toluene	12.076	92	12113	2.65	ug/L	94
86) chlorobenzene	13.546	112	3132	0.62	ug/L	93
112) 1,4-dichlorobenzene	15.857	146	3817	0.93	ug/L	92
114) 1,2-dichlorobenzene	16.265	146	13814	3.46	ug/L	96

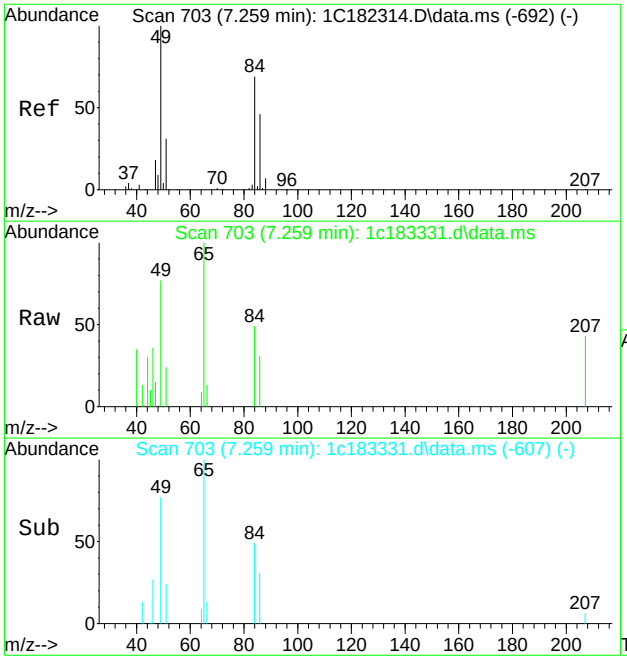
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-23-21\v1c7983\
Data File : 1c183331.d
Acq On : 21 Dec 2021 10:26 pm
Operator : PrashanS
Sample : JD36682-7 Inst : GCMS1C
Misc : MS55600,V1C7983,5.6,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 22 18:30:44 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

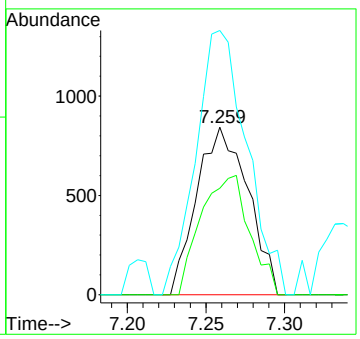


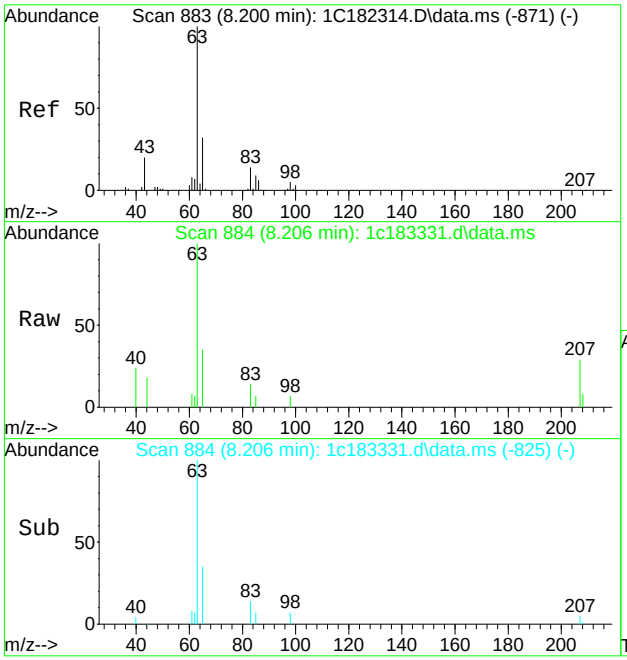


#22
methylene chloride
Concen: 0.93 ug/L
RT: 7.259 min Scan# 703
Delta R.T. 0.001 min
Lab File: 1c183331.d
Acq: 21 Dec 2021 10:26 pm

Tgt Ion: 84 Resp: 1913

Ion	Ratio	Lower	Upper
84	100		
86	63.5	32.9	92.9
49	157.7	99.1	159.1

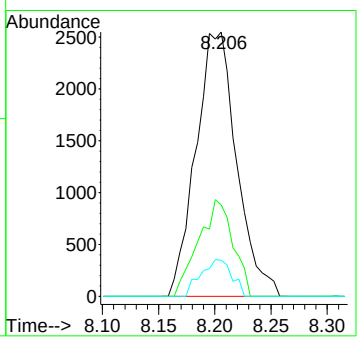


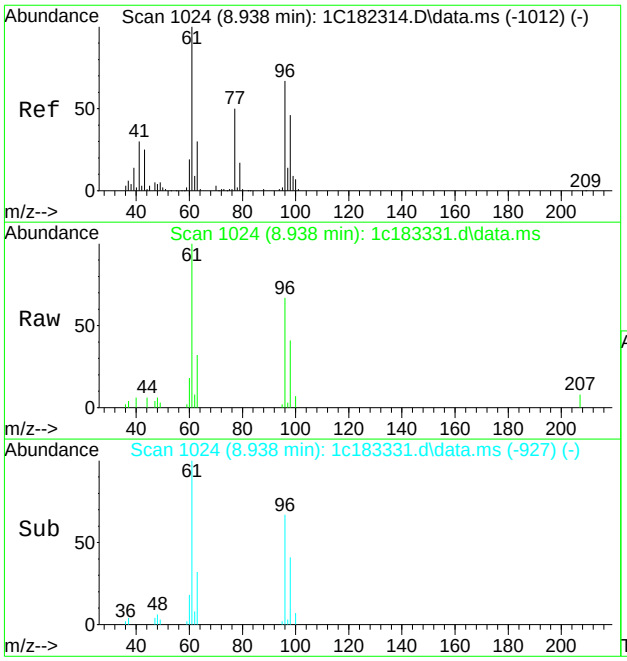


#28
1,1-dichloroethane
Concen: 1.98 ug/L
RT: 8.206 min Scan# 884
Delta R.T. 0.010 min
Lab File: 1c183331.d
Acq: 21 Dec 2021 10:26 pm

Tgt Ion: 63 Resp: 6436

Ion	Ratio	Lower	Upper
63	100		
65	34.5	1.6	61.6
83	13.7	0.0	43.2

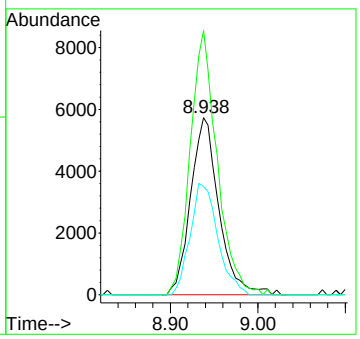


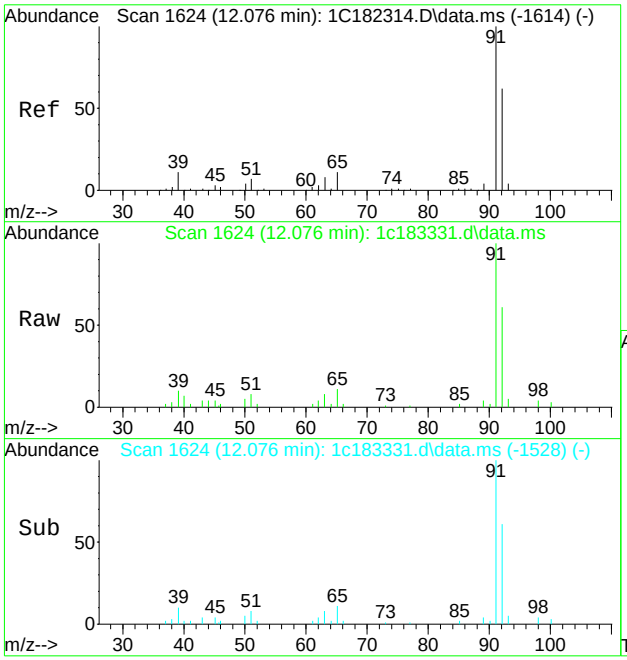


#36
cis-1,2-dichloroethene
Concen: 5.81 ug/L
RT: 8.938 min Scan# 1024
Delta R.T. 0.005 min
Lab File: 1c183331.d
Acq: 21 Dec 2021 10:26 pm

Tgt Ion: 96 Resp: 12895

Ion	Ratio	Lower	Upper
96	100		
61	149.2	115.4	175.4
98	61.1	35.3	95.3

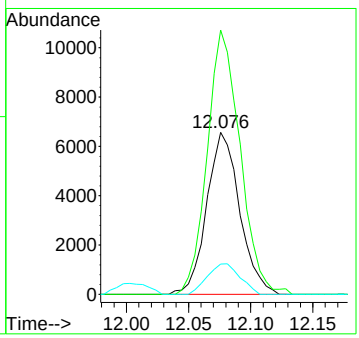


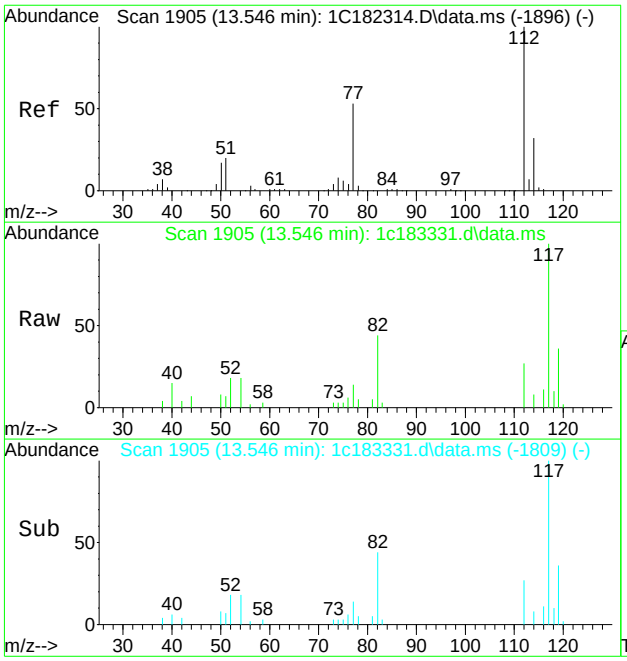


#75
toluene
Concen: 2.65 ug/L
RT: 12.076 min Scan# 1624
Delta R.T. -0.000 min
Lab File: 1c183331.d
Acq: 21 Dec 2021 10:26 pm

Tgt Ion: 92 Resp: 12113

Ion	Ratio	Lower	Upper
92	100		
91	163.2	152.9	192.9
65	18.7	0.0	39.2

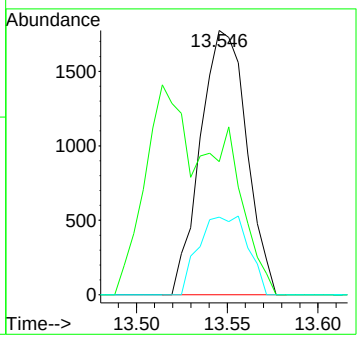


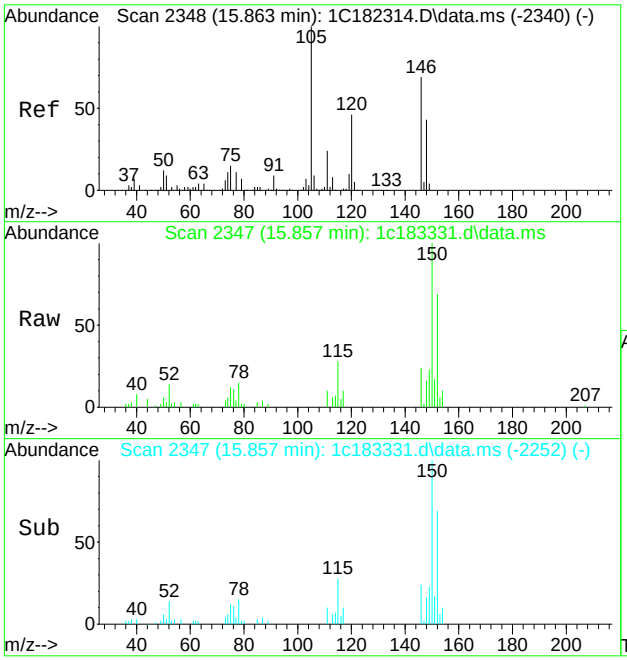


#86
chlorobenzene
Concen: 0.62 ug/L
RT: 13.546 min Scan# 1905
Delta R.T. -0.000 min
Lab File: 1c183331.d
Acq: 21 Dec 2021 10:26 pm

Tgt Ion:112 Resp: 3132

Ion	Ratio	Lower	Upper
112	100		
77	50.4	26.8	86.8
114	29.4	2.3	62.3

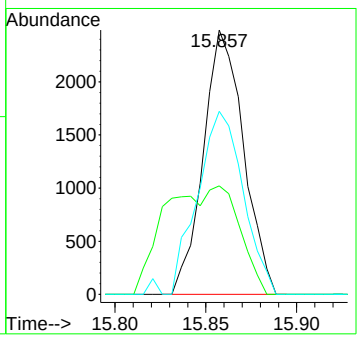


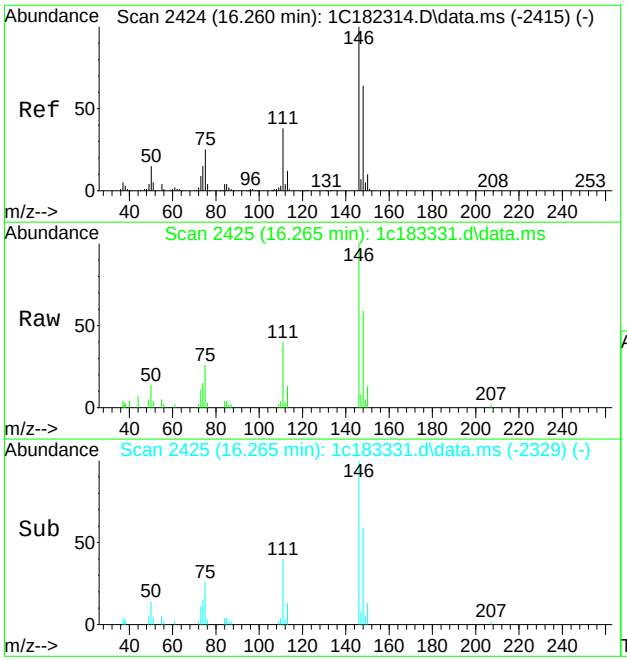


#112
1,4-dichlorobenzene
Concen: 0.93 ug/L
RT: 15.857 min Scan# 2347
Delta R.T. -0.005 min
Lab File: 1c183331.d
Acq: 21 Dec 2021 10:26 pm

Tgt Ion:146 Resp: 3817

Ion	Ratio	Lower	Upper
146	100		
111	41.1	5.7	65.7
148	69.2	33.9	93.9

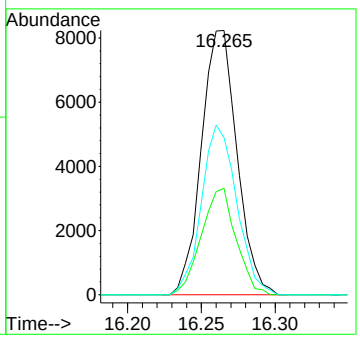




#114
1,2-dichlorobenzene
Concen: 3.46 ug/L
RT: 16.265 min Scan# 2425
Delta R.T. -0.000 min
Lab File: 1c183331.d
Acq: 21 Dec 2021 10:26 pm

Tgt Ion:146 Resp: 13814

Ion	Ratio	Lower	Upper
146	100		
111	40.3	8.9	68.9
148	59.5	33.7	93.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-23-21\v1c7983\
Data File : 1c183332.d
Acq On : 21 Dec 2021 10:53 pm
Operator : PrashanS
Sample : JD36682-8 Inst : GCMS1C
Misc : MS55600,V1C7983,5.8,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 22 18:32:25 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

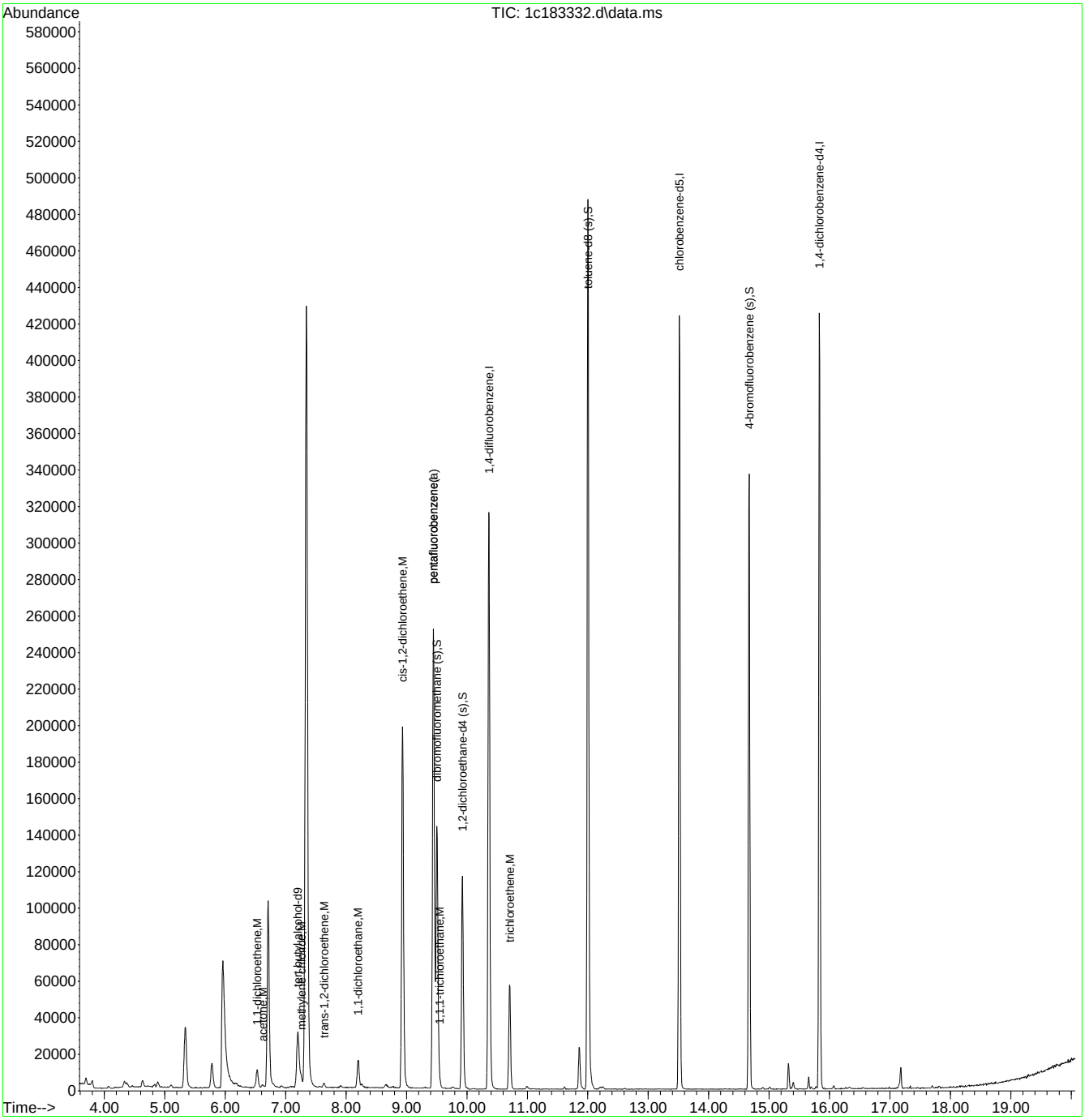
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.201	65	50029	500.00	ug/L	-0.02
5) pentafluorobenzene	9.445	168	225961	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.366	114	298857	50.00	ug/L	0.00
73) chlorobenzene-d5	13.514	117	246904	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.831	152	115997	50.00	ug/L	0.00
125) pentafluorobenzene(a)	9.445	168	225961	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.503	113	98517	50.46	ug/L	0.00
Spiked Amount 50.000	Range 72 - 130		Recovery = 100.92%			
52) 1,2-dichloroethane-d4 (s)	9.926	65	90348	50.92	ug/L	0.00
Spiked Amount 50.000	Range 75 - 131		Recovery = 101.84%			
74) toluene-d8 (s)	12.003	98	340915	50.56	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 101.12%			
97) 4-bromofluorobenzene (s)	14.670	95	109481	50.38	ug/L	0.00
Spiked Amount 50.000	Range 60 - 141		Recovery = 100.76%			
Target Compounds						Qvalue
17) 1,1-dichloroethene	6.532	96	5407	3.04	ug/L	90
18) acetone	6.621	43	2956	5.05	ug/L	86
22) methylene chloride	7.259	84	2055	1.03	ug/L	89
25) trans-1,2-dichloroethene	7.635	96	1688	0.86	ug/L	90
28) 1,1-dichloroethane	8.195	63	20257	6.44	ug/L	98
36) cis-1,2-dichloroethene	8.933	96	99071	46.13	ug/L	98
45) 1,1,1-trichloroethane	9.545	97	2902	0.98	ug/L	85
60) trichloroethene	10.711	130	22756	11.09	ug/L	98

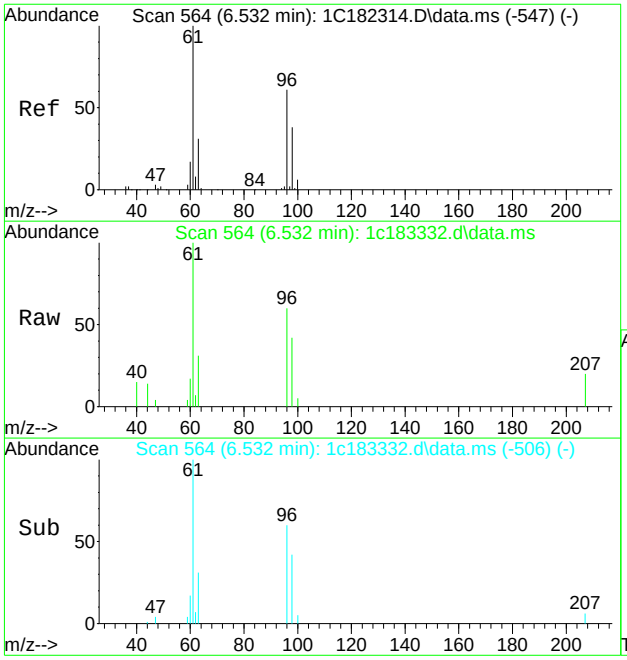
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-23-21\v1c7983\
Data File : 1c183332.d
Acq On : 21 Dec 2021 10:53 pm
Operator : PrashanS
Sample : JD36682-8 Inst : GCMS1C
Misc : MS55600,V1C7983,5.8,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 22 18:32:25 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

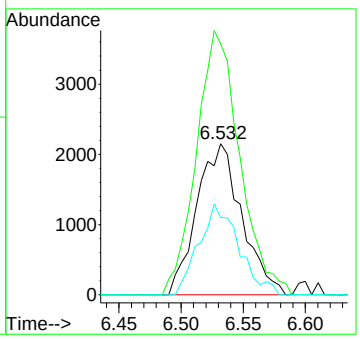


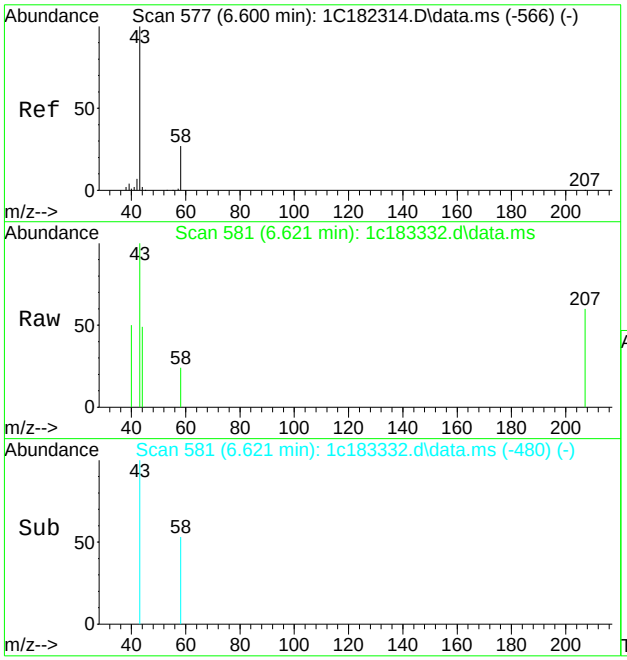


#17
1,1-dichloroethene
Concen: 3.04 ug/L
RT: 6.532 min Scan# 564
Delta R.T. 0.005 min
Lab File: 1c183332.d
Acq: 21 Dec 2021 10:53 pm

Tgt Ion: 96 Resp: 5407

Ion	Ratio	Lower	Upper
96	100		
61	165.9	119.9	179.9
63	51.2	19.9	79.9

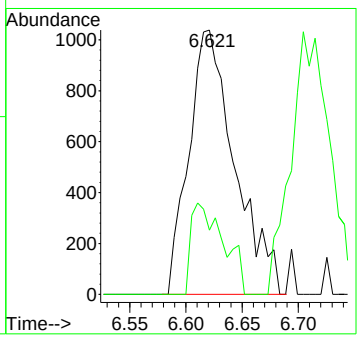


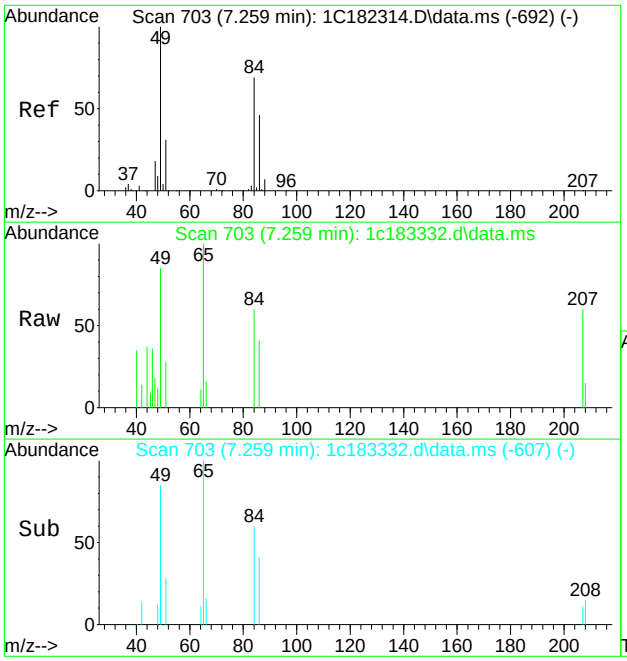


#18
acetone
Concen: 5.05 ug/L
RT: 6.621 min Scan# 581
Delta R.T. 0.026 min
Lab File: 1c183332.d
Acq: 21 Dec 2021 10:53 pm

Tgt Ion: 43 Resp: 2956

Ion	Ratio	Lower	Upper
43	100		
58	24.4	2.0	62.0

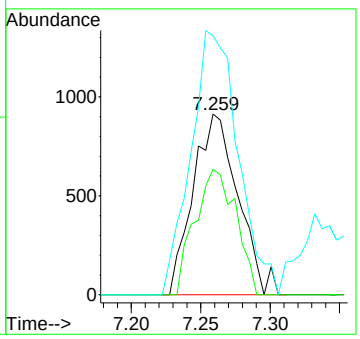


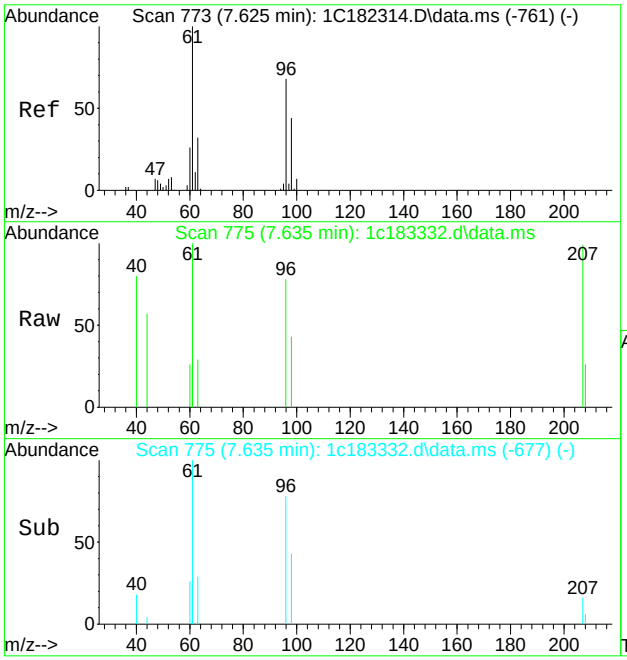


#22
methylene chloride
Concen: 1.03 ug/L
RT: 7.259 min Scan# 703
Delta R.T. 0.001 min
Lab File: 1c183332.d
Acq: 21 Dec 2021 10:53 pm

Tgt Ion: 84 Resp: 2055

Ion	Ratio	Lower	Upper
84	100		
86	69.5	32.9	92.9
49	143.1	99.1	159.1

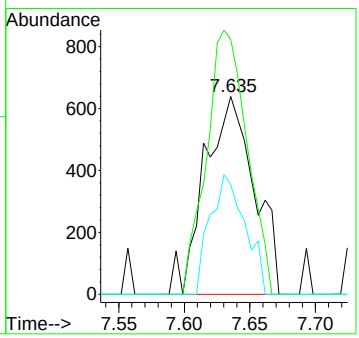


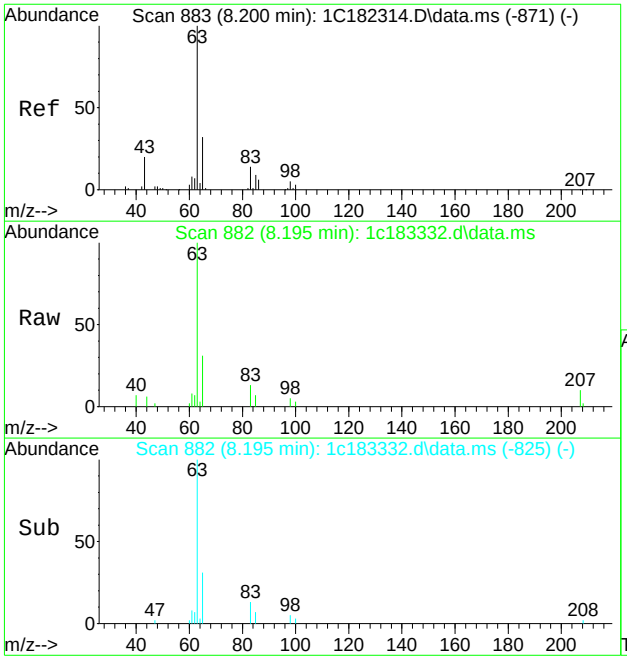


#25
trans-1,2-dichloroethene
Concen: 0.86 ug/L
RT: 7.635 min Scan# 775
Delta R.T. 0.010 min
Lab File: 1c183332.d
Acq: 21 Dec 2021 10:53 pm

Tgt Ion: 96 Resp: 1688

Ion	Ratio	Lower	Upper
96	100		
61	129.0	111.0	171.0
98	55.6	32.5	92.5

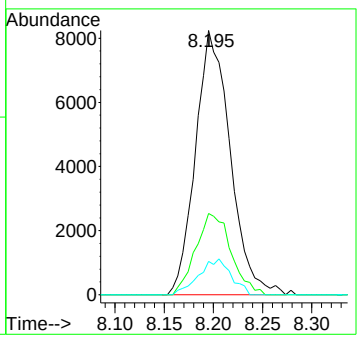


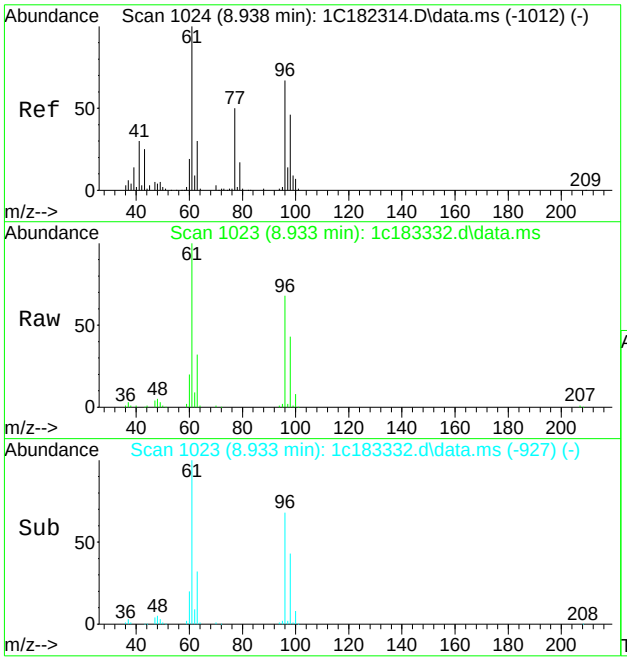


#28
1,1-dichloroethane
Concen: 6.44 ug/L
RT: 8.195 min Scan# 882
Delta R.T. -0.000 min
Lab File: 1c183332.d
Acq: 21 Dec 2021 10:53 pm

Tgt Ion: 63 Resp: 20257

Ion	Ratio	Lower	Upper
63	100		
65	30.7	1.6	61.6
83	12.7	0.0	43.2

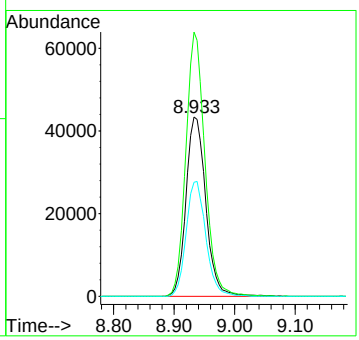


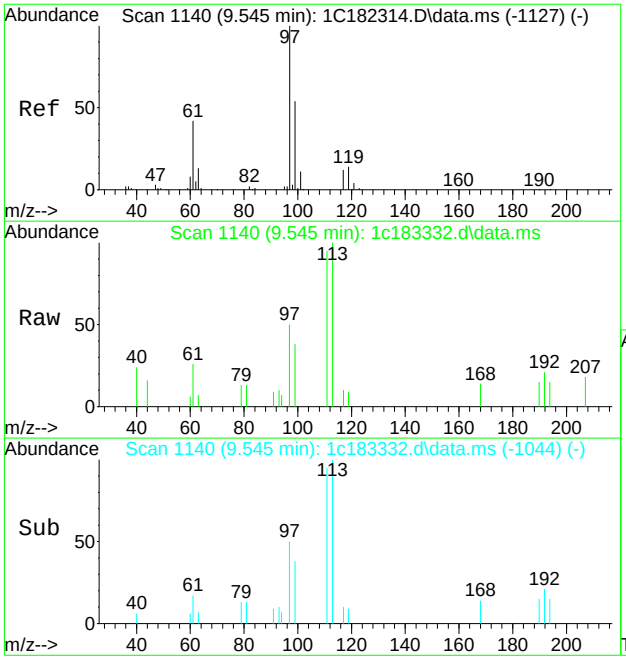


#36
cis-1,2-dichloroethene
Concen: 46.13 ug/L
RT: 8.933 min Scan# 1023
Delta R.T. -0.000 min
Lab File: 1c183332.d
Acq: 21 Dec 2021 10:53 pm

Tgt Ion: 96 Resp: 99071

Ion	Ratio	Lower	Upper
96	100		
61	147.4	115.4	175.4
98	63.7	35.3	95.3

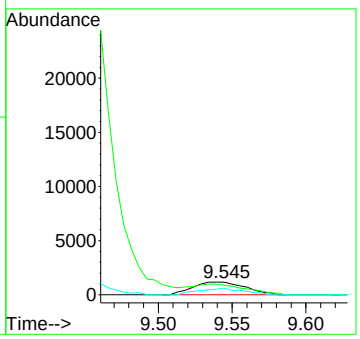


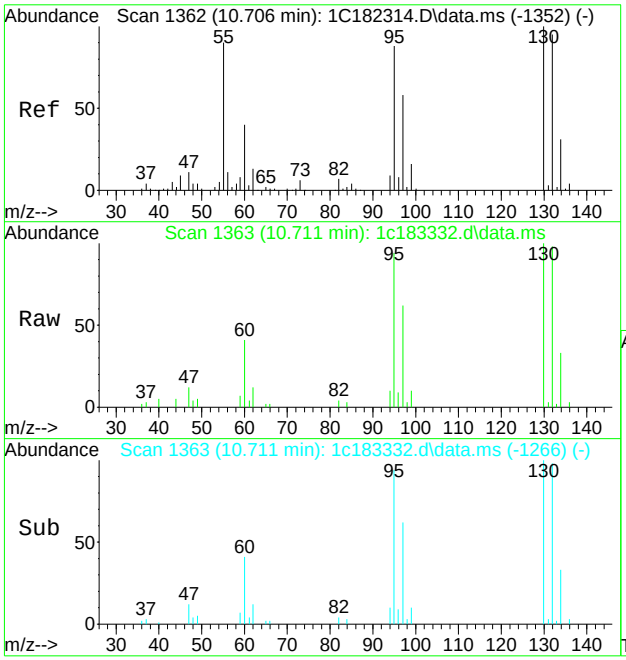


#45
1,1,1-trichloroethane
Concen: 0.98 ug/L
RT: 9.545 min Scan# 1140
Delta R.T. -0.000 min
Lab File: 1c183332.d
Acq: 21 Dec 2021 10:53 pm

Tgt Ion: 97 Resp: 2902

Ion	Ratio	Lower	Upper
97	100		
99	74.9	35.1	95.1
61	52.5	10.4	70.4

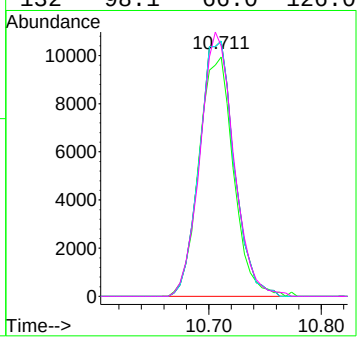




#60
trichloroethene
Concen: 11.09 ug/L
RT: 10.711 min Scan# 1363
Delta R.T. 0.005 min
Lab File: 1c183332.d
Acq: 21 Dec 2021 10:53 pm

Tgt Ion:130 Resp: 22756

Ion	Ratio	Lower	Upper
130	100		
95	93.8	68.7	128.7
130	100.0	70.0	130.0
132	98.1	66.0	126.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\December\12-21\v1c7979\
Data File : 1c183221.d
Acq On : 16 Dec 2021 11:29 pm
Operator : PrashanS
Sample : JD36682-9 Inst : GCMS1C
Misc : MS55600,V1C7979,5.1,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 21 01:09:18 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

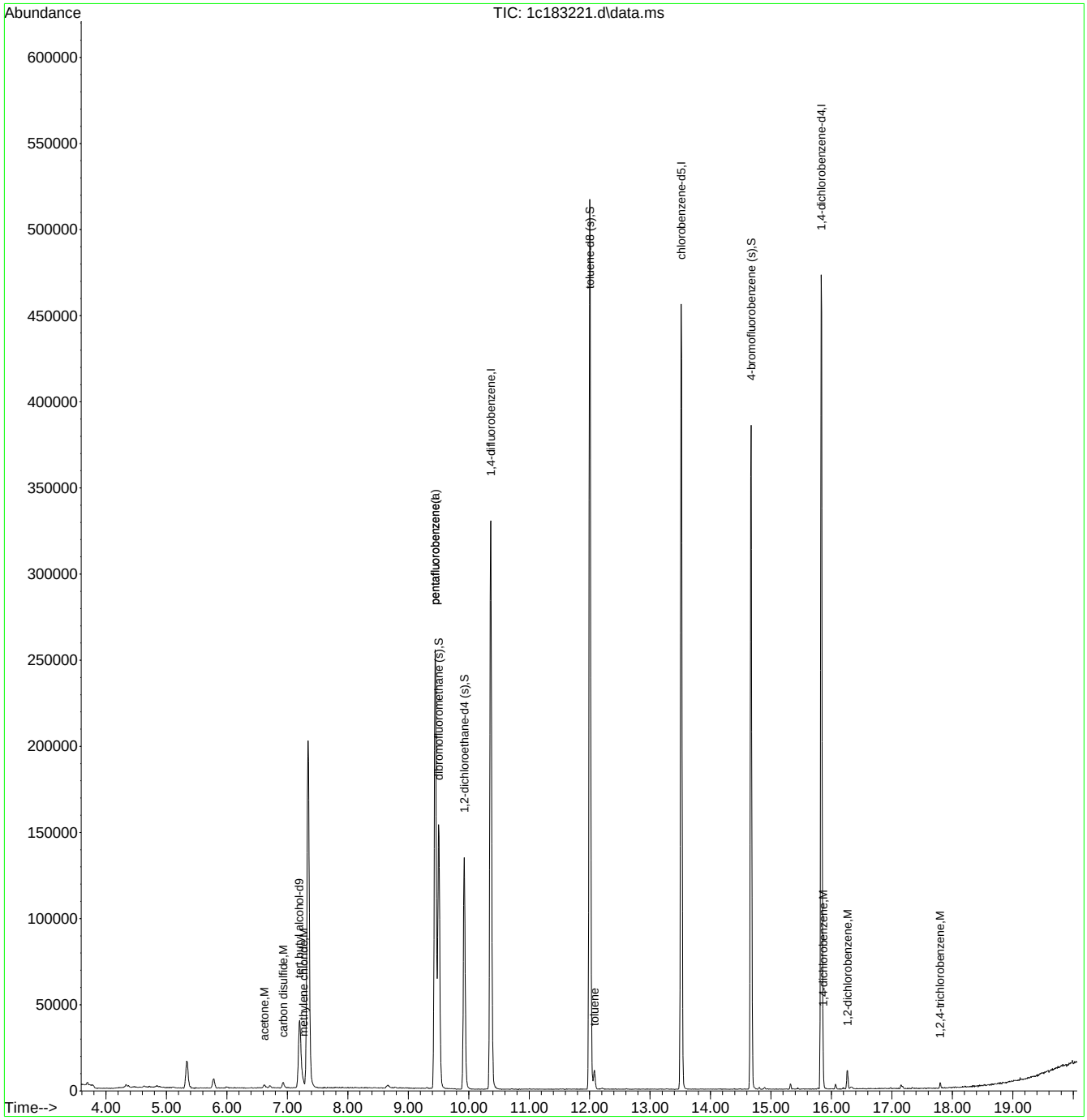
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.196	65	68531	500.00	ug/L	-0.02
5) pentafluorobenzene	9.445	168	232524	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.366	114	310747	50.00	ug/L	0.00
73) chlorobenzene-d5	13.514	117	260737	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.831	152	129849	50.00	ug/L	0.00
125) pentafluorobenzene(a)	9.445	168	232524	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.503	113	105700	52.61	ug/L	0.00
Spiked Amount 50.000	Range 72 - 130		Recovery = 105.22%			
52) 1,2-dichloroethane-d4 (s)	9.926	65	103942	56.34	ug/L	0.00
Spiked Amount 50.000	Range 75 - 131		Recovery = 112.68%			
74) toluene-d8 (s)	12.003	98	359807	50.53	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 101.06%			
97) 4-bromofluorobenzene (s)	14.670	95	122579	50.39	ug/L	0.00
Spiked Amount 50.000	Range 60 - 141		Recovery = 100.78%			
Target Compounds						Qvalue
18) acetone	6.616	43	3834	6.37	ug/L	85
21) carbon disulfide	6.929	76	5844	1.00	ug/L	94
22) methylene chloride	7.269	84	1201	0.58	ug/L	84
75) toluene	12.081	92	5161	1.15	ug/L	97
112) 1,4-dichlorobenzene	15.863	146	3682	0.90	ug/L	96
114) 1,2-dichlorobenzene	16.265	146	5291	1.33	ug/L	98
119) 1,2,4-trichlorobenzene	17.798	180	1288	0.50	ug/L	92

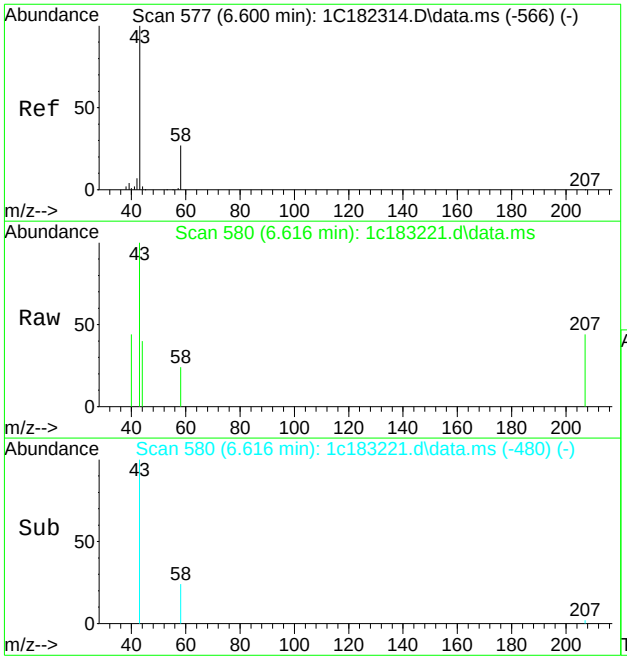
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\December\12-21\v1c7979\
Data File : 1c183221.d
Acq On : 16 Dec 2021 11:29 pm
Operator : PrashanS
Sample : JD36682-9 Inst : GCMS1C
Misc : MS55600,V1C7979,5.1,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 21 01:09:18 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

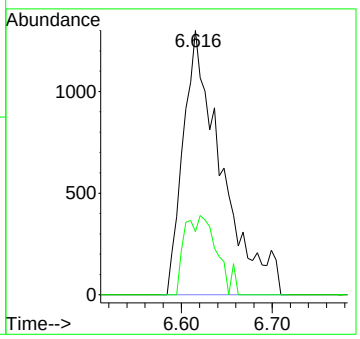


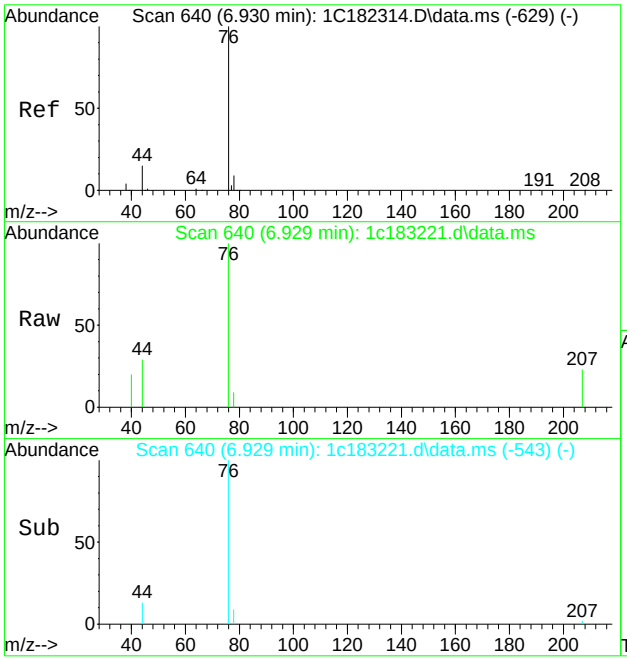


#18
acetone
Concen: 6.37 ug/L
RT: 6.616 min Scan# 580
Delta R.T. 0.021 min
Lab File: 1c183221.d
Acq: 16 Dec 2021 11:29 pm

Tgt Ion: 43 Resp: 3834

Ion	Ratio	Lower	Upper
43	100		
58	23.8	2.0	62.0

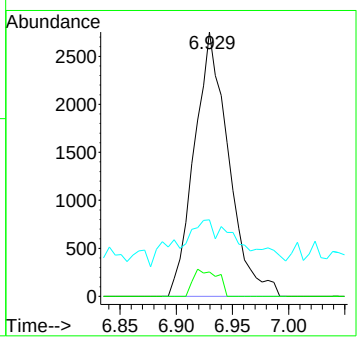


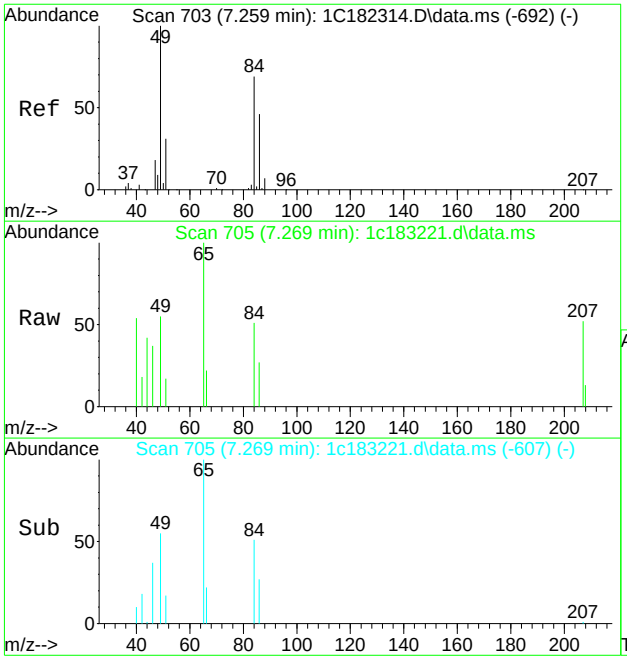


#21
carbon disulfide
Concen: 1.00 ug/L
RT: 6.929 min Scan# 640
Delta R.T. 0.005 min
Lab File: 1c183221.d
Acq: 16 Dec 2021 11:29 pm

Tgt Ion: 76 Resp: 5844

Ion	Ratio	Lower	Upper
76	100		
78	9.2	0.0	39.2
44	15.5	0.0	41.7

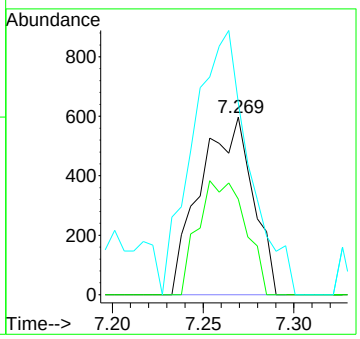


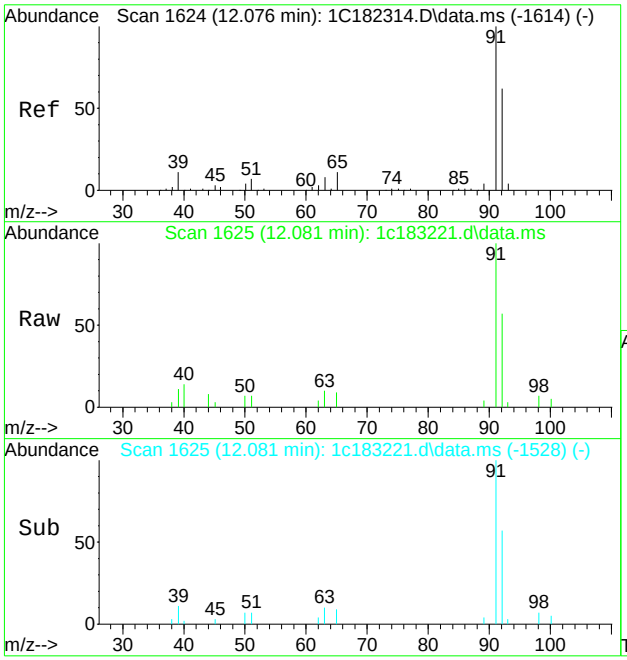


#22
methylene chloride
Concen: 0.58 ug/L
RT: 7.269 min Scan# 705
Delta R.T. 0.011 min
Lab File: 1c183221.d
Acq: 16 Dec 2021 11:29 pm

Tgt Ion: 84 Resp: 1201

Ion	Ratio	Lower	Upper
84	100		
86	53.8	32.9	92.9
49	108.0	99.1	159.1

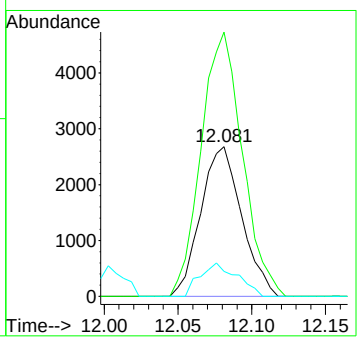


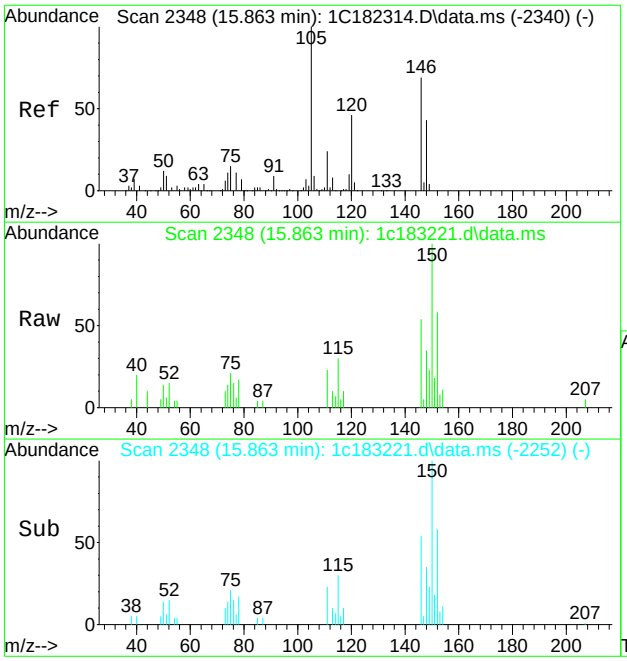


#75
toluene
Concen: 1.15 ug/L
RT: 12.081 min Scan# 1625
Delta R.T. 0.005 min
Lab File: 1c183221.d
Acq: 16 Dec 2021 11:29 pm

Tgt Ion: 92 Resp: 5161

Ion	Ratio	Lower	Upper
92	100		
91	176.8	152.9	192.9
65	16.7	0.0	39.2

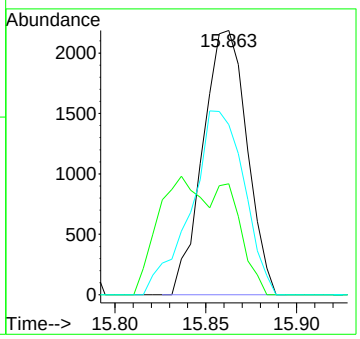


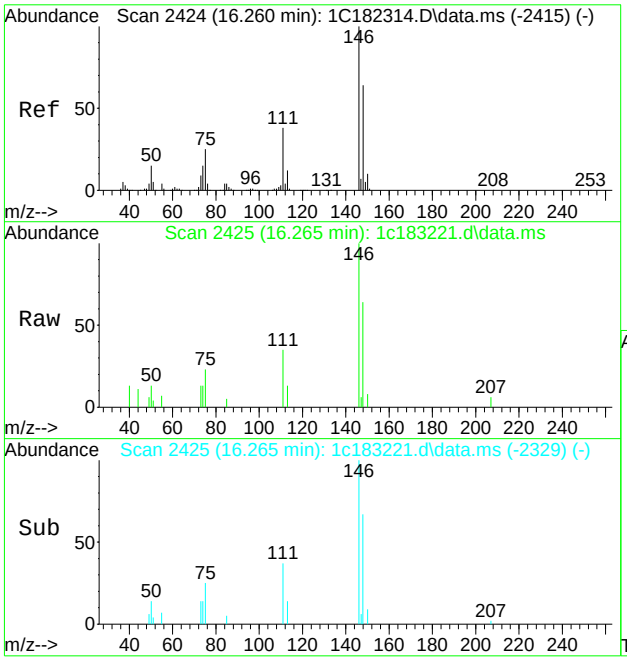


#112
1,4-dichlorobenzene
Concen: 0.90 ug/L
RT: 15.863 min Scan# 2348
Delta R.T. -0.000 min
Lab File: 1c183221.d
Acq: 16 Dec 2021 11:29 pm

Tgt Ion:146 Resp: 3682

Ion	Ratio	Lower	Upper
146	100		
111	42.0	5.7	65.7
148	64.3	33.9	93.9

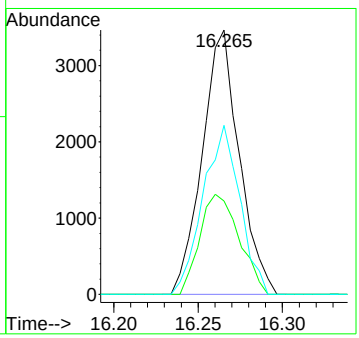


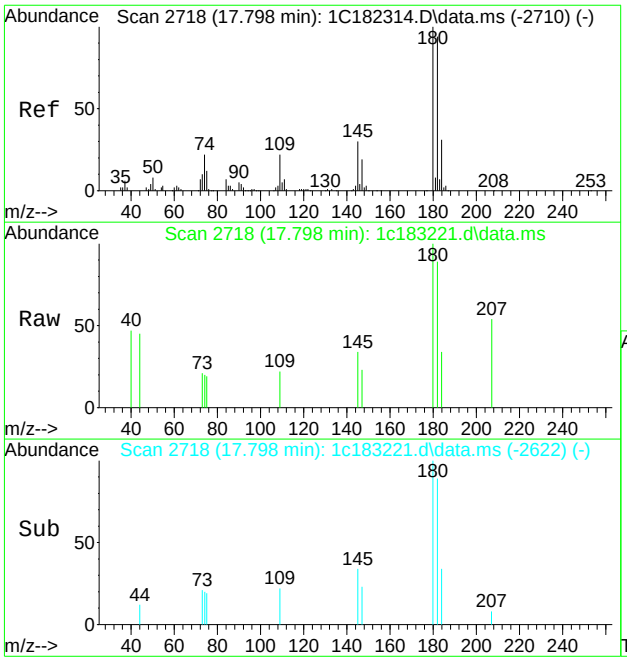


#114
1,2-dichlorobenzene
Concen: 1.33 ug/L
RT: 16.265 min Scan# 2425
Delta R.T. -0.000 min
Lab File: 1c183221.d
Acq: 16 Dec 2021 11:29 pm

Tgt Ion:146 Resp: 5291

Ion	Ratio	Lower	Upper
146	100		
111	35.3	8.9	68.9
148	63.9	33.7	93.7

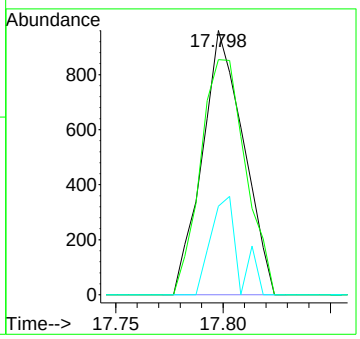




#119
1,2,4-trichlorobenzene
Concen: 0.50 ug/L
RT: 17.798 min Scan# 2718
Delta R.T. -0.000 min
Lab File: 1c183221.d
Acq: 16 Dec 2021 11:29 pm

Tgt Ion:180 Resp: 1288

Ion	Ratio	Lower	Upper
180	100		
182	89.0	66.8	126.8
145	33.5	0.0	58.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\December\12-21\v1c7979\
Data File : 1c183222.d
Acq On : 16 Dec 2021 11:56 pm
Operator : PrashanS
Sample : JD36682-10 Inst : GCMS1C
Misc : MS55600,V1C7979,5.6,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 21 01:11:20 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

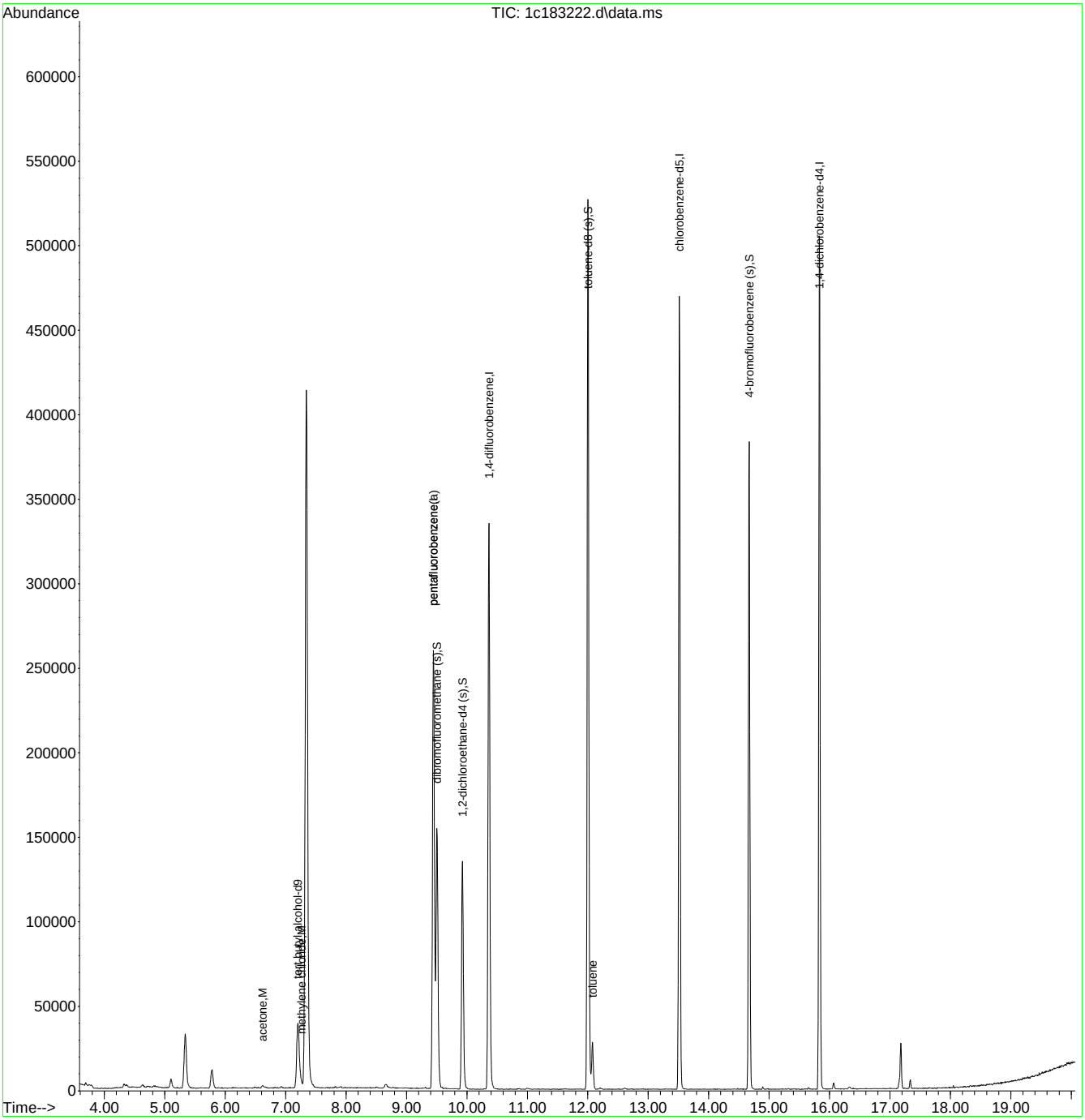
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.201	65	66509	500.00	ug/L	-0.02
5) pentafluorobenzene	9.445	168	234226	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.366	114	315870	50.00	ug/L	0.00
73) chlorobenzene-d5	13.514	117	267081	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.831	152	134583	50.00	ug/L	0.00
125) pentafluorobenzene(a)	9.445	168	234226	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.503	113	105648	52.21	ug/L	0.00
Spiked Amount 50.000	Range 72 - 130		Recovery = 104.42%			
52) 1,2-dichloroethane-d4 (s)	9.926	65	105168	56.08	ug/L	0.00
Spiked Amount 50.000	Range 75 - 131		Recovery = 112.16%			
74) toluene-d8 (s)	12.003	98	363131	49.79	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 99.58%			
97) 4-bromofluorobenzene (s)	14.670	95	123013	48.79	ug/L	0.00
Spiked Amount 50.000	Range 60 - 141		Recovery = 97.58%			
Target Compounds						Qvalue
18) acetone	6.616	43	3441	5.67	ug/L	82
22) methylene chloride	7.259	84	641	0.31	ug/L	97
75) toluene	12.076	92	12608	2.74	ug/L	94

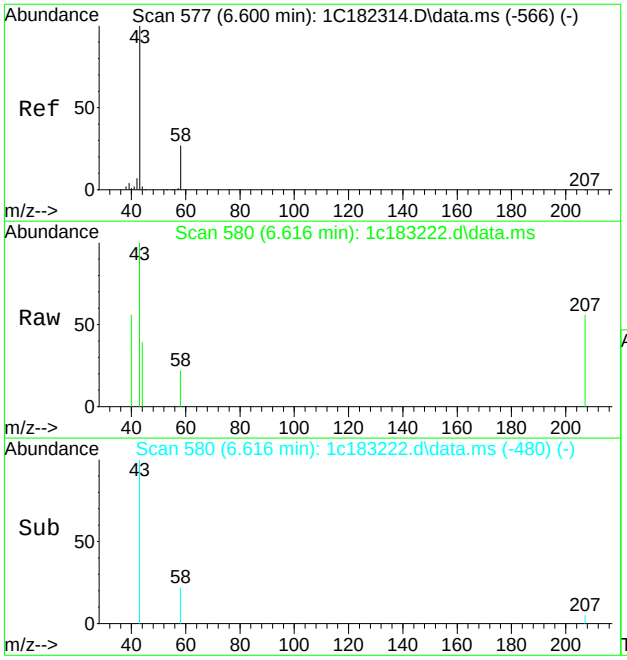
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\December\12-21\v1c7979\
Data File : 1c183222.d
Acq On : 16 Dec 2021 11:56 pm
Operator : PrashanS
Sample : JD36682-10 Inst : GCMS1C
Misc : MS55600,V1C7979,5.6,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 21 01:11:20 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

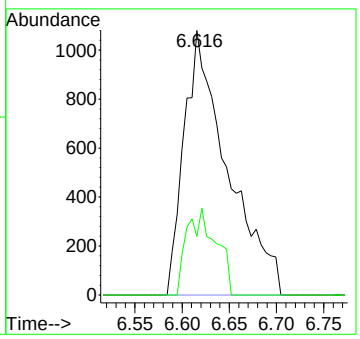


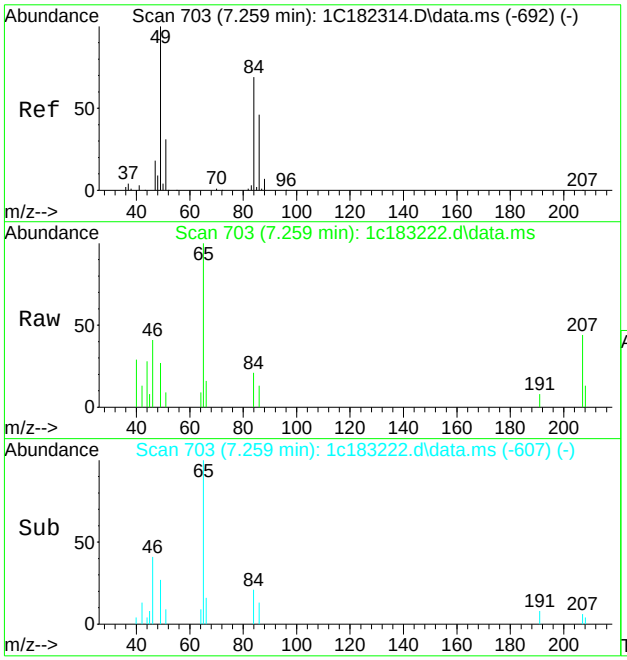


#18
acetone
Concen: 5.67 ug/L
RT: 6.616 min Scan# 580
Delta R.T. 0.021 min
Lab File: 1c183222.d
Acq: 16 Dec 2021 11:56 pm

Tgt Ion: 43 Resp: 3441

Ion	Ratio	Lower	Upper
43	100		
58	22.1	2.0	62.0

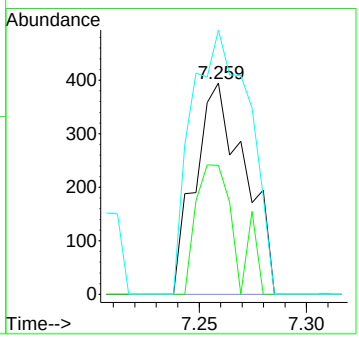


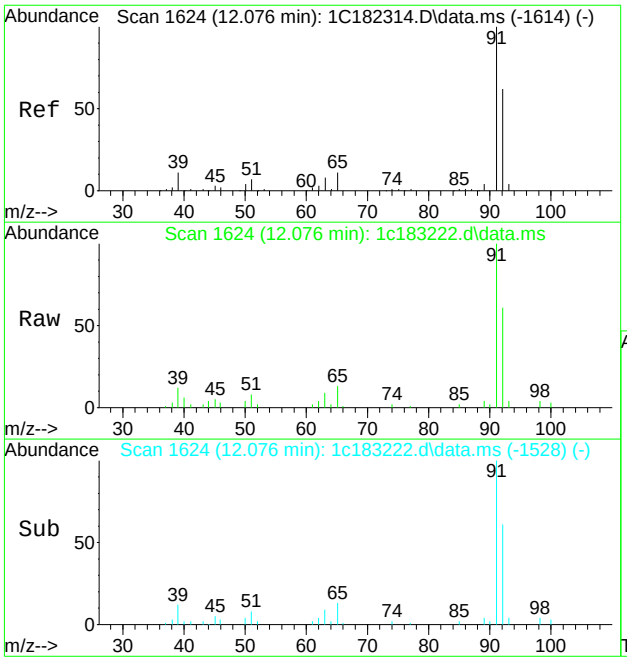


#22
methylene chloride
Concen: 0.31 ug/L
RT: 7.259 min Scan# 703
Delta R.T. 0.001 min
Lab File: 1c183222.d
Acq: 16 Dec 2021 11:56 pm

Tgt Ion: 84 Resp: 641

Ion	Ratio	Lower	Upper
84	100		
86	61.0	32.9	92.9
49	125.1	99.1	159.1

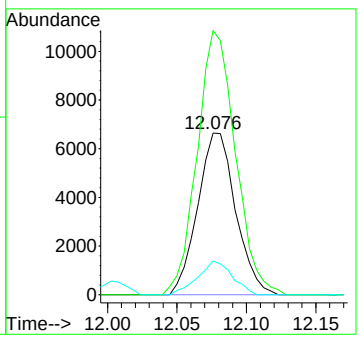




#75
toluene
Concen: 2.74 ug/L
RT: 12.076 min Scan# 1624
Delta R.T. 0.000 min
Lab File: 1c183222.d
Acq: 16 Dec 2021 11:56 pm

Tgt Ion: 92 Resp: 12608

Ion	Ratio	Lower	Upper
92	100		
91	163.5	152.9	192.9
65	21.0	0.0	39.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\December\12-21\v1c7979\
Data File : 1c183223.d
Acq On : 17 Dec 2021 12:22 am
Operator : PrashanS
Sample : JD36682-11 Inst : GCMS1C
Misc : MS55600,V1C7979,5.2,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 21 01:12:29 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

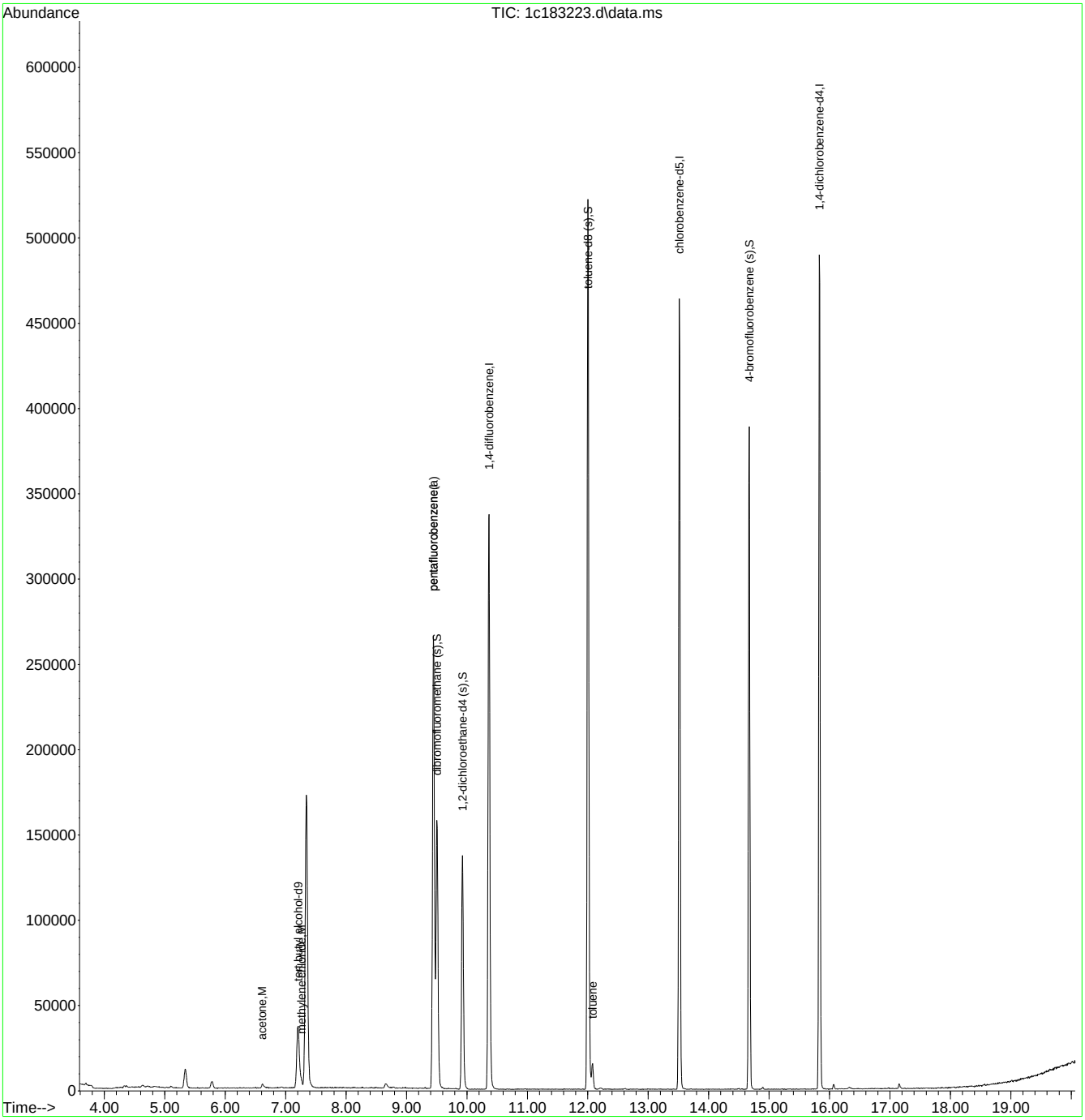
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.207	65	65437	500.00	ug/L	-0.01
5) pentafluorobenzene	9.445	168	238183	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.366	114	317614	50.00	ug/L	0.00
73) chlorobenzene-d5	13.514	117	266952	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.831	152	135358	50.00	ug/L	0.00
125) pentafluorobenzene(a)	9.445	168	238183	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.503	113	107905	52.44	ug/L	0.00
Spiked Amount 50.000	Range 72 - 130		Recovery = 104.88%			
52) 1,2-dichloroethane-d4 (s)	9.926	65	105500	55.95	ug/L	0.00
Spiked Amount 50.000	Range 75 - 131		Recovery = 111.90%			
74) toluene-d8 (s)	12.003	98	365495	50.14	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 100.28%			
97) 4-bromofluorobenzene (s)	14.670	95	125729	49.58	ug/L	0.00
Spiked Amount 50.000	Range 60 - 141		Recovery = 99.16%			
Target Compounds						Qvalue
18) acetone	6.610	43	4562	7.40	ug/L	94
22) methylene chloride	7.259	84	909	0.43	ug/L #	73
75) toluene	12.081	92	7142	1.55	ug/L	95

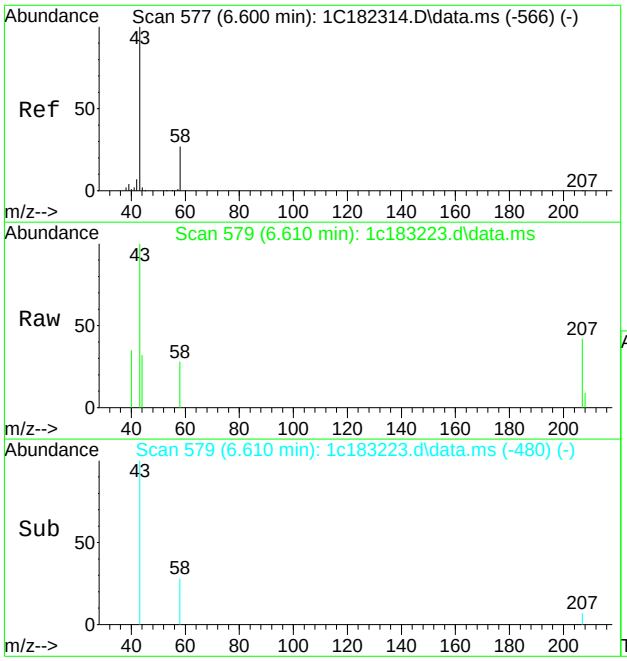
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\December\12-21\v1c7979\
Data File : 1c183223.d
Acq On : 17 Dec 2021 12:22 am
Operator : PrashanS
Sample : JD36682-11 Inst : GCMS1C
Misc : MS55600,V1C7979,5.2,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 21 01:12:29 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

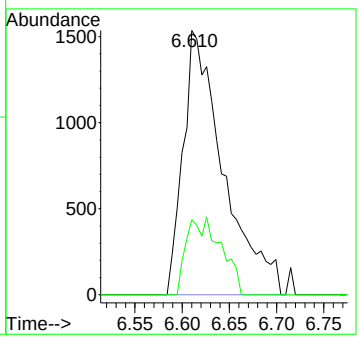


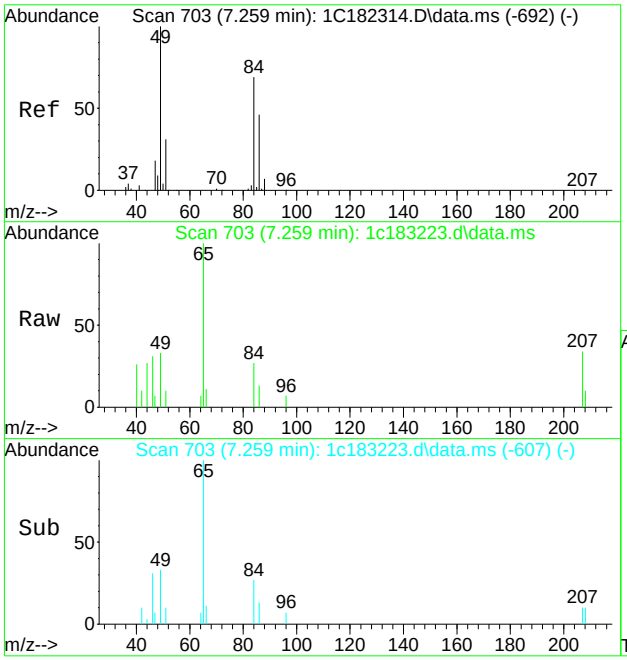


#18
acetone
Concen: 7.40 ug/L
RT: 6.610 min Scan# 579
Delta R.T. 0.016 min
Lab File: 1c183223.d
Acq: 17 Dec 2021 12:22 am

Tgt Ion: 43 Resp: 4562

Ion	Ratio	Lower	Upper
43	100		
58	28.5	2.0	62.0

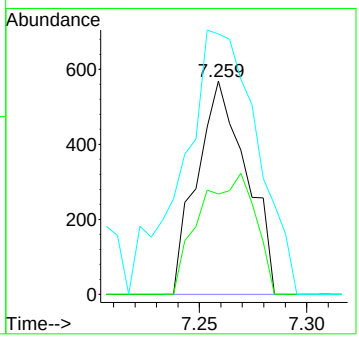


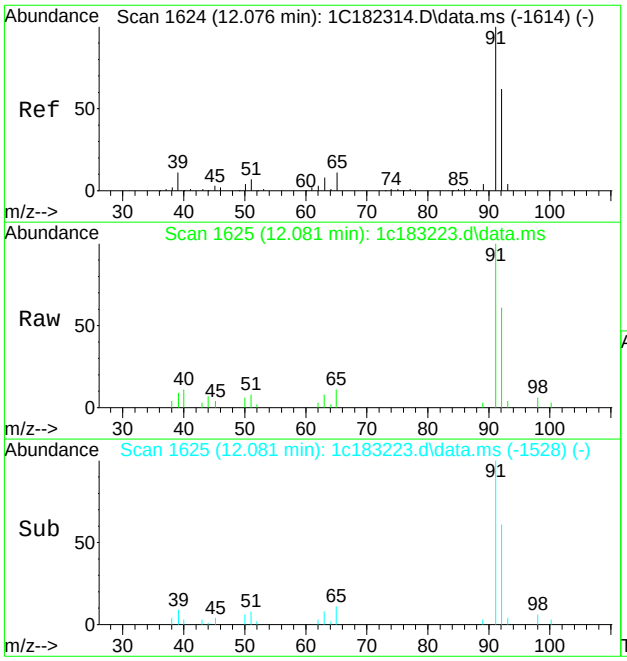


#22
methylene chloride
Concen: 0.43 ug/L
RT: 7.259 min Scan# 703
Delta R.T. 0.001 min
Lab File: 1c183223.d
Acq: 17 Dec 2021 12:22 am

Tgt Ion: 84 Resp: 909

Ion	Ratio	Lower	Upper
84	100		
86	47.1	32.9	92.9
49	93.8	99.1	159.1#

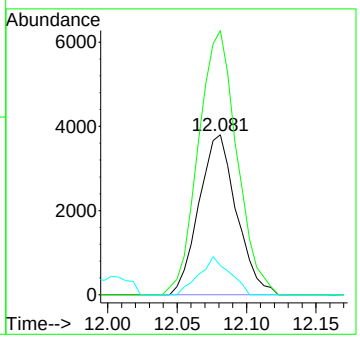




#75
toluene
Concen: 1.55 ug/L
RT: 12.081 min Scan# 1625
Delta R.T. 0.005 min
Lab File: 1c183223.d
Acq: 17 Dec 2021 12:22 am

Tgt Ion: 92 Resp: 7142

Ion	Ratio	Lower	Upper
92	100		
91	165.1	152.9	192.9
65	18.2	0.0	39.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\December\12-21\v1c7979\
Data File : 1c183202.d
Acq On : 16 Dec 2021 2:57 pm
Operator : PrashanS
Sample : MB Inst : GCMS1C
Misc : MS46186,V1C7979,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 21 02:11:45 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

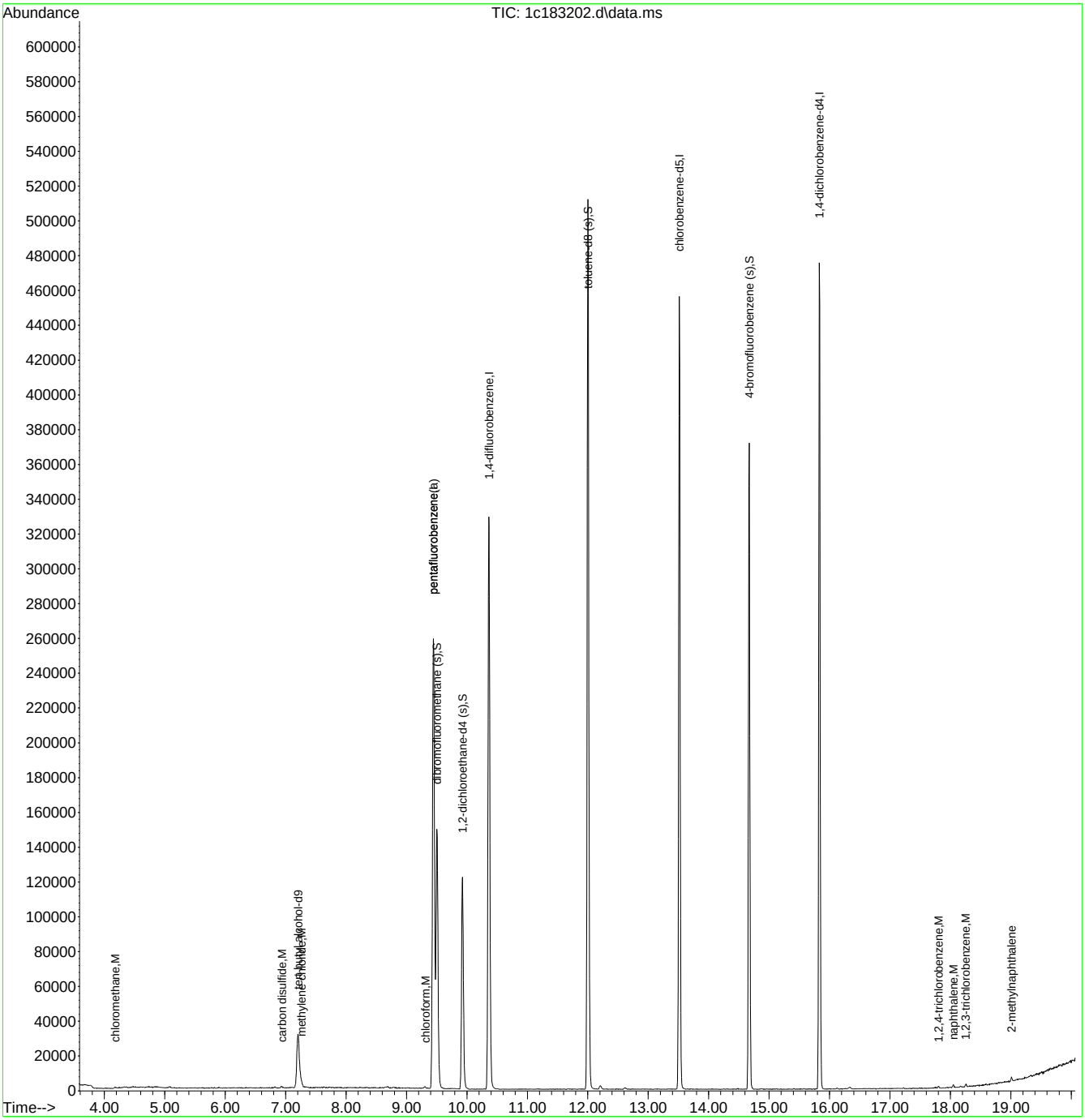
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.207	65	58982	500.00	ug/L	-0.01
5) pentafluorobenzene	9.445	168	240477	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.366	114	312382	50.00	ug/L	0.00
73) chlorobenzene-d5	13.514	117	259421	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.831	152	128823	50.00	ug/L	0.00
125) pentafluorobenzene(a)	9.445	168	240477	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.503	113	102678	49.42	ug/L	0.00
Spiked Amount 50.000	Range 72 - 130		Recovery = 98.84%			
52) 1,2-dichloroethane-d4 (s)	9.926	65	95966	51.74	ug/L	0.00
Spiked Amount 50.000	Range 75 - 131		Recovery = 103.48%			
74) toluene-d8 (s)	12.003	98	357150	50.41	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 100.82%			
97) 4-bromofluorobenzene (s)	14.670	95	120559	49.96	ug/L	0.00
Spiked Amount 50.000	Range 60 - 141		Recovery = 99.92%			
Target Compounds						Qvalue
8) chloromethane	4.178	50	558	0.16	ug/L	84
21) carbon disulfide	6.940	76	936	0.15	ug/L	66
22) methylene chloride	7.264	84	938	0.44	ug/L	86
41) chloroform	9.314	85	548	0.22	ug/L #	72
119) 1,2,4-trichlorobenzene	17.803	180	534	0.21	ug/L	80
121) naphthalene	18.049	128	1668	0.31	ug/L	94
122) 1,2,3-trichlorobenzene	18.253	180	567	0.25	ug/L #	66
124) 2-methylnaphthalene	19.011	142	1284	0.42	ug/L	99

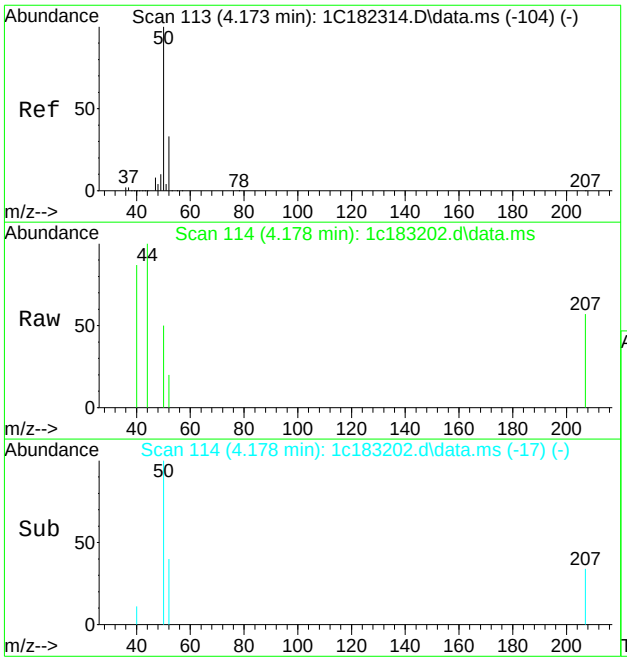
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\December\12-21\v1c7979\
Data File : 1c183202.d
Acq On : 16 Dec 2021 2:57 pm
Operator : PrashanS
Sample : MB Inst : GCMS1C
Misc : MS46186,V1C7979,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 21 02:11:45 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

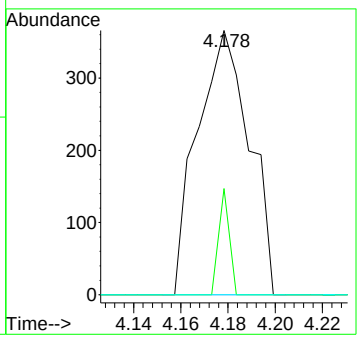


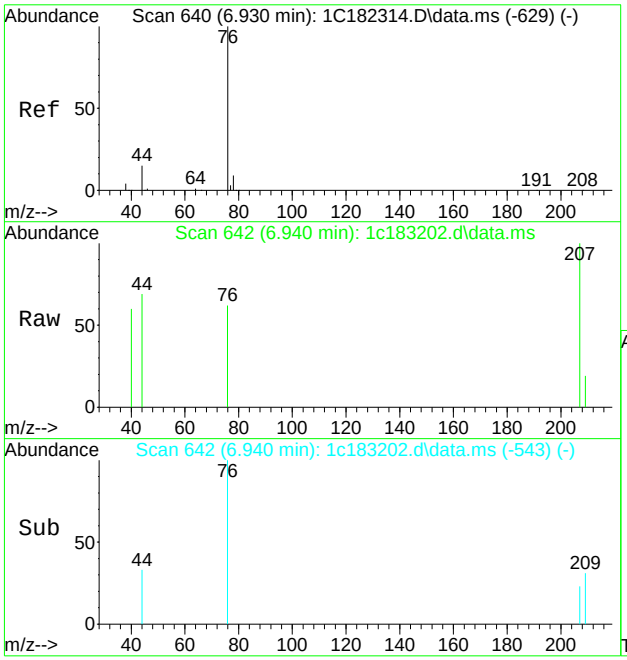


#8
chloromethane
Concen: 0.16 ug/L
RT: 4.178 min Scan# 114
Delta R.T. 0.005 min
Lab File: 1c183202.d
Acq: 16 Dec 2021 2:57 pm

Tgt Ion: 50 Resp: 558

Ion	Ratio	Lower	Upper
50	100		
52	40.2	2.8	62.8
49	0.0	0.0	39.7

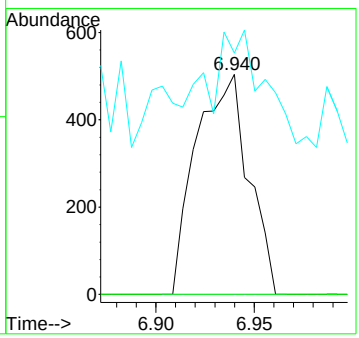


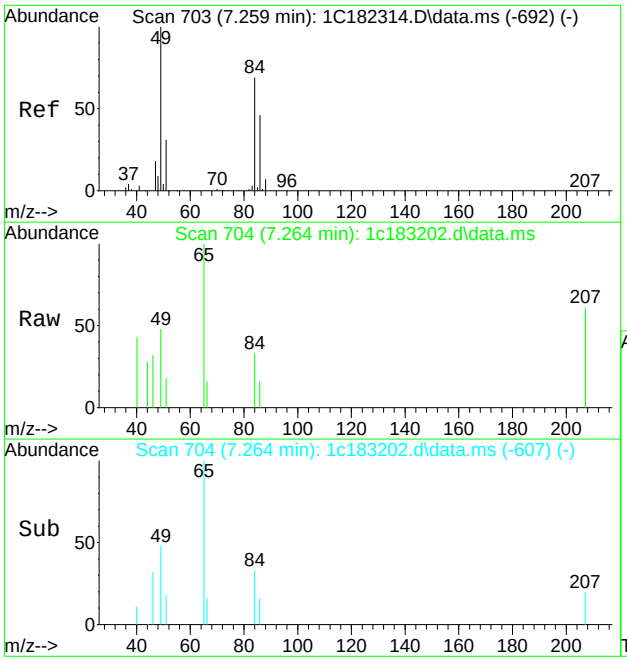


#21
carbon disulfide
Concen: 0.15 ug/L
RT: 6.940 min Scan# 642
Delta R.T. 0.016 min
Lab File: 1c183202.d
Acq: 16 Dec 2021 2:57 pm

Tgt Ion: 76 Resp: 936

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	39.2
44	27.6	0.0	41.7

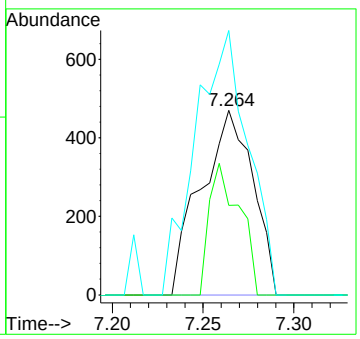


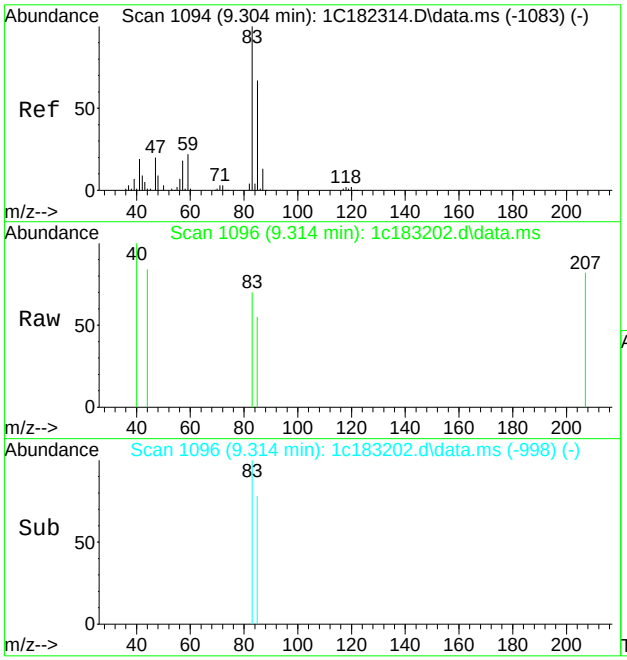


#22
methylene chloride
Concen: 0.44 ug/L
RT: 7.264 min Scan# 704
Delta R.T. 0.006 min
Lab File: 1c183202.d
Acq: 16 Dec 2021 2:57 pm

Tgt Ion: 84 Resp: 938

Ion	Ratio	Lower	Upper
84	100		
86	48.5	32.9	92.9
49	143.4	99.1	159.1

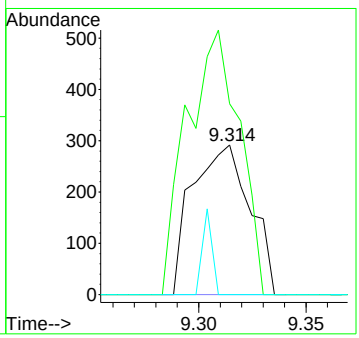


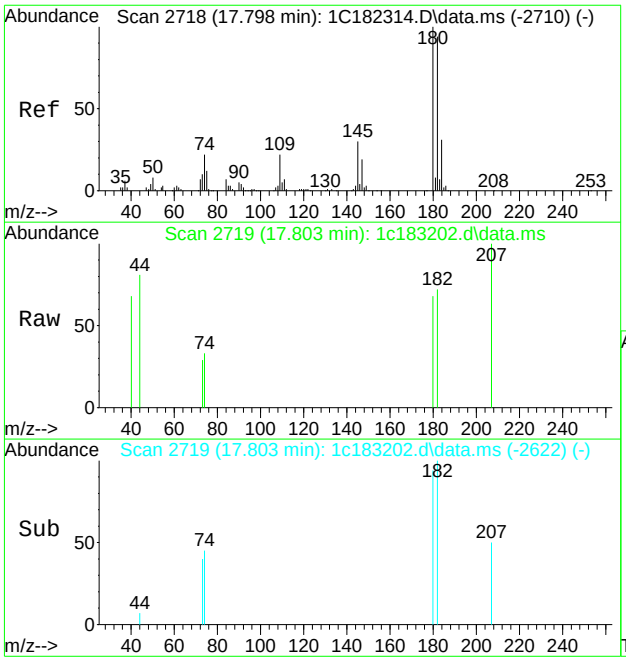


#41
chloroform
Concen: 0.22 ug/L
RT: 9.314 min Scan# 1096
Delta R.T. 0.010 min
Lab File: 1c183202.d
Acq: 16 Dec 2021 2:57 pm

Tgt Ion: 85 Resp: 548

Ion	Ratio	Lower	Upper
85	100		
83	127.4	124.3	184.3
47	0.0	3.6	63.6#

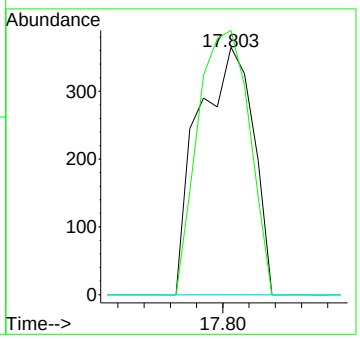


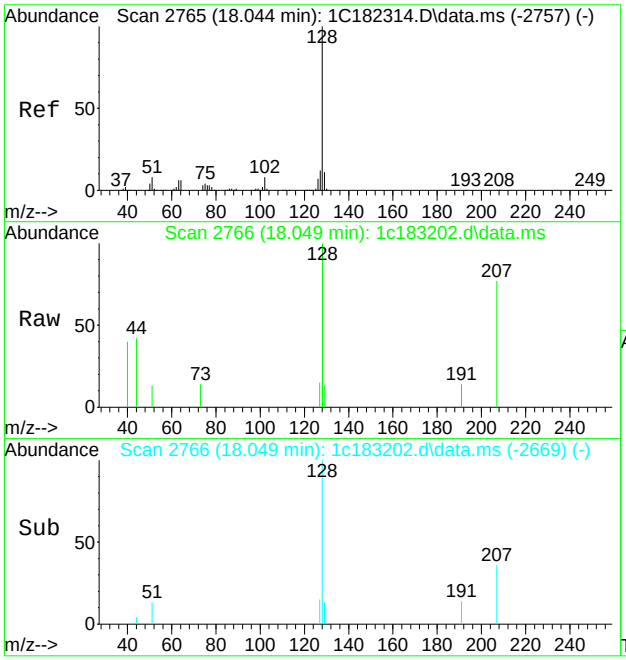


#119
1,2,4-trichlorobenzene
Concen: 0.21 ug/L
RT: 17.803 min Scan# 2719
Delta R.T. 0.005 min
Lab File: 1c183202.d
Acq: 16 Dec 2021 2:57 pm

Tgt Ion:180 Resp: 534

Ion	Ratio	Lower	Upper
180	100		
182	106.8	66.8	126.8
145	0.0	0.0	58.5

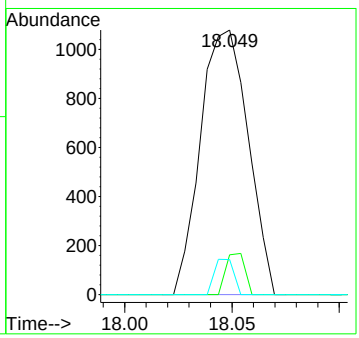


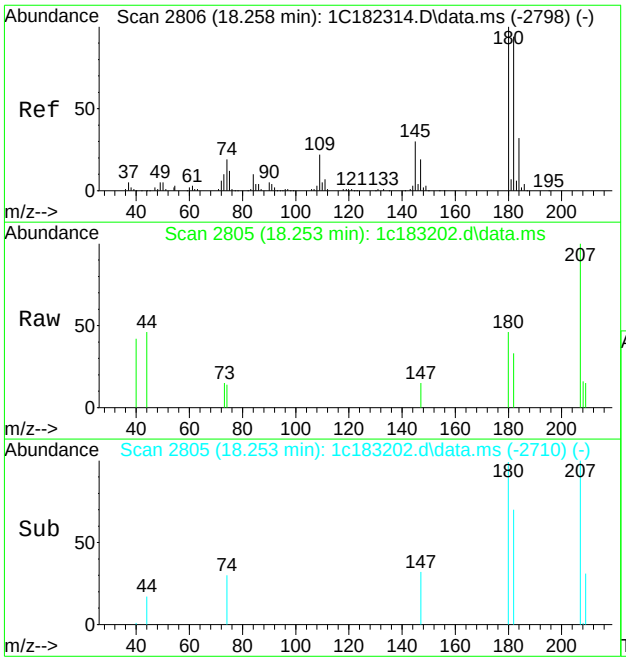


#121
naphthalene
Concen: 0.31 ug/L
RT: 18.049 min Scan# 2766
Delta R.T. 0.005 min
Lab File: 1c183202.d
Acq: 16 Dec 2021 2:57 pm

Tgt Ion:128 Resp: 1668

Ion	Ratio	Lower	Upper
128	100		
127	15.0	0.0	42.7
129	13.2	0.0	41.1

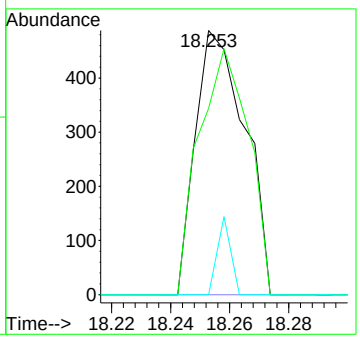


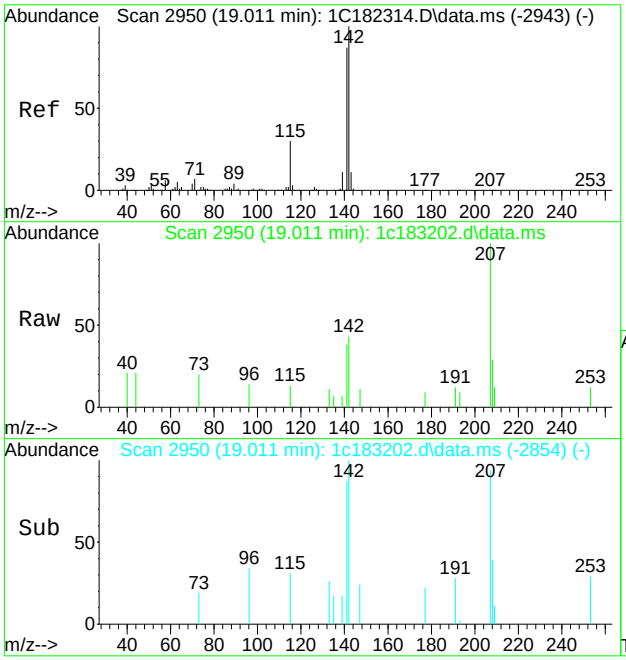


#122
1,2,3-trichlorobenzene
Concen: 0.25 ug/L
RT: 18.253 min Scan# 2805
Delta R.T. -0.005 min
Lab File: 1c183202.d
Acq: 16 Dec 2021 2:57 pm

Tgt Ion:180 Resp: 567

Ion	Ratio	Lower	Upper
180	100		
182	70.5	67.2	127.2
145	0.0	1.0	61.0#

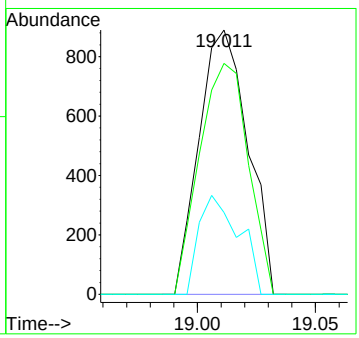




#124
2-methylnaphthalene
Concen: 0.42 ug/L
RT: 19.011 min Scan# 2950
Delta R.T. 0.000 min
Lab File: 1c183202.d
Acq: 16 Dec 2021 2:57 pm

Tgt Ion:142 Resp: 1284

Ion	Ratio	Lower	Upper
142	100		
141	87.3	67.5	107.5
115	30.9	12.3	52.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-23-21\v1c7983\
Data File : 1c183313.d
Acq On : 21 Dec 2021 2:21 pm
Operator : PrashanS
Sample : MB Inst : GCMS1C
Misc : MS55720,V1C7983,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 22 18:06:35 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

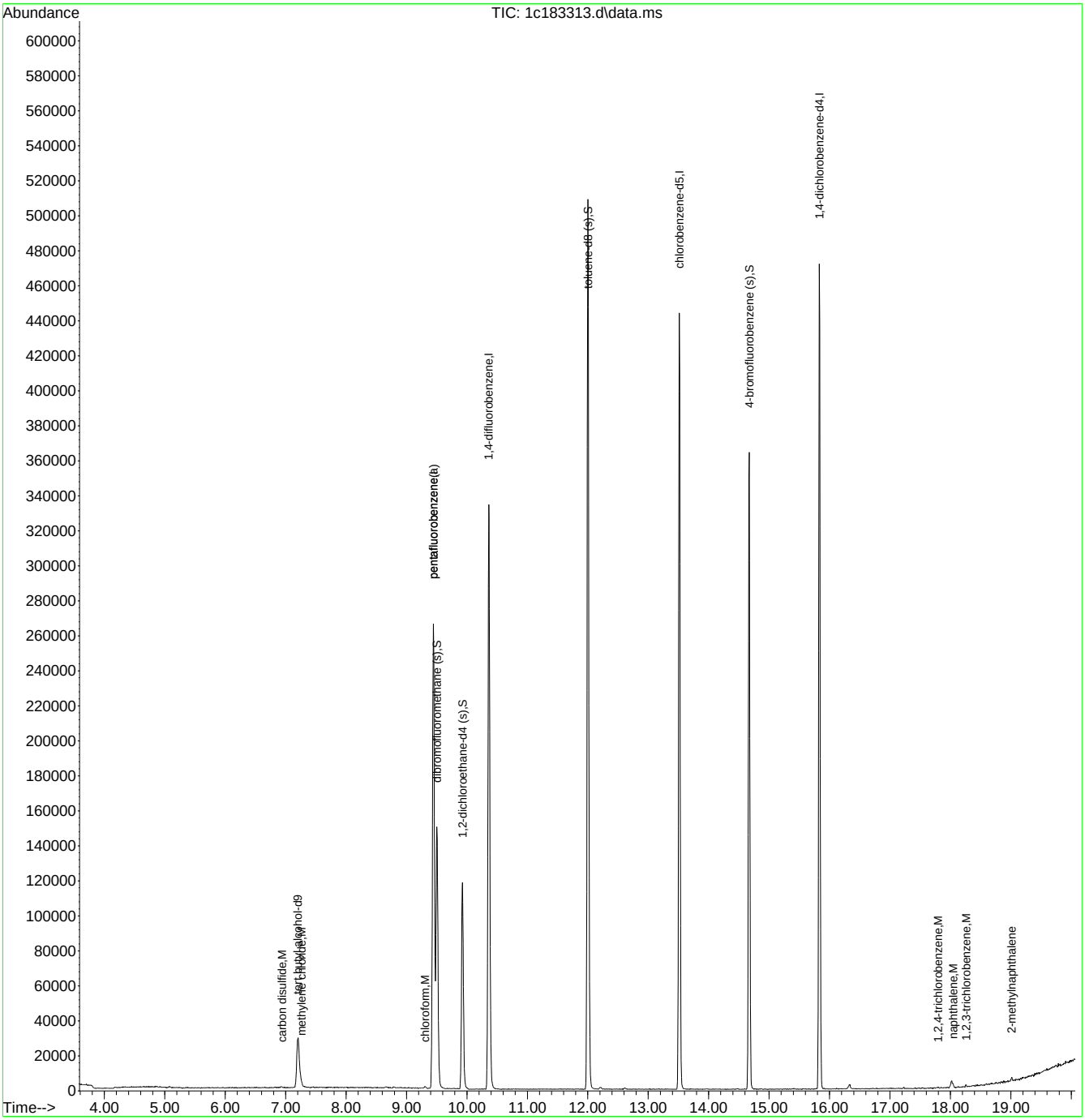
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.201	65	55188	500.00	ug/L	-0.02
5) pentafluorobenzene	9.445	168	240316	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.360	114	314079	50.00	ug/L	0.00
73) chlorobenzene-d5	13.514	117	259395	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.831	152	129171	50.00	ug/L	0.00
125) pentafluorobenzene(a)	9.445	168	240316	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.503	113	101804	49.03	ug/L	0.00
Spiked Amount 50.000	Range 72 - 130		Recovery = 98.06%			
52) 1,2-dichloroethane-d4 (s)	9.926	65	91553	49.10	ug/L	0.00
Spiked Amount 50.000	Range 75 - 131		Recovery = 98.20%			
74) toluene-d8 (s)	12.003	98	358627	50.63	ug/L	0.00
Spiked Amount 50.000	Range 81 - 121		Recovery = 101.26%			
97) 4-bromofluorobenzene (s)	14.670	95	119879	49.54	ug/L	0.00
Spiked Amount 50.000	Range 60 - 141		Recovery = 99.08%			
Target Compounds						Qvalue
21) carbon disulfide	6.940	76	1152	0.19	ug/L	72
22) methylene chloride	7.259	84	711	0.33	ug/L	87
41) chloroform	9.304	85	574	0.24	ug/L #	66
119) 1,2,4-trichlorobenzene	17.798	180	401	0.16	ug/L	74
121) naphthalene	18.044	128	1408	0.26	ug/L	81
122) 1,2,3-trichlorobenzene	18.258	180	411	0.18	ug/L	96
124) 2-methylnaphthalene	19.011	142	1037	0.34	ug/L	99

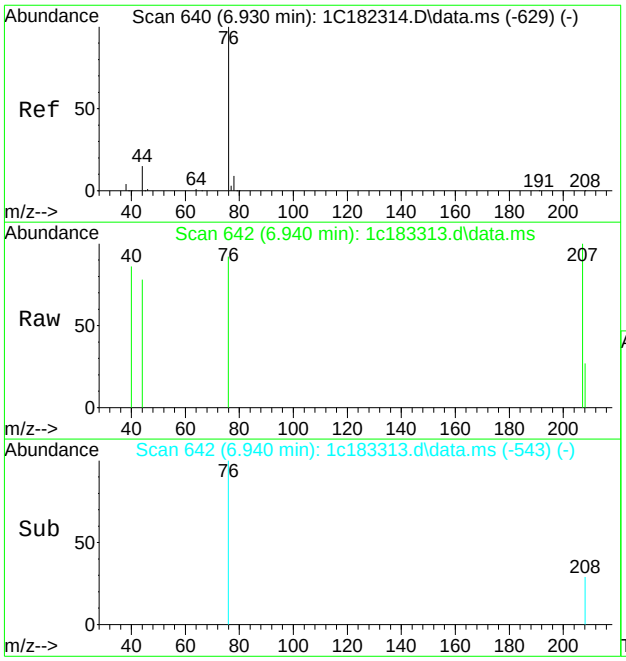
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-23-21\v1c7983\
Data File : 1c183313.d
Acq On : 21 Dec 2021 2:21 pm
Operator : PrashanS
Sample : MB Inst : GCMS1C
Misc : MS55720,V1C7983,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1CS7937.M
Quant Results File: M1CS7937.RES
Quant Time: Dec 22 18:06:35 2021
Quant Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Dec 14 17:38:23 2021
Response via : Initial Calibration

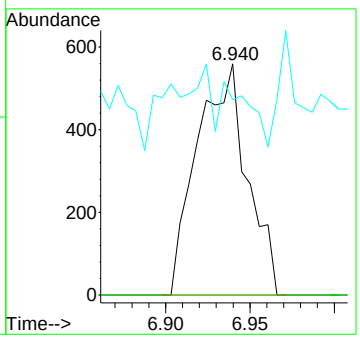


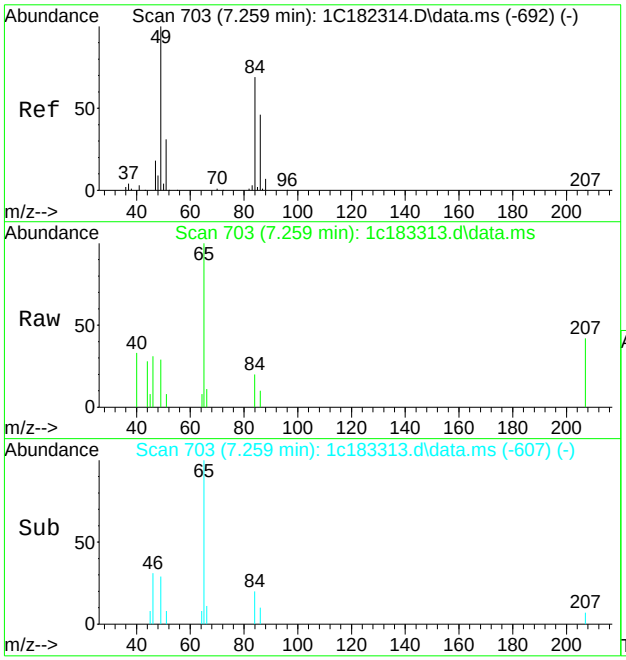


#21
carbon disulfide
Concen: 0.19 ug/L
RT: 6.940 min Scan# 642
Delta R.T. 0.016 min
Lab File: 1c183313.d
Acq: 21 Dec 2021 2:21 pm

Tgt Ion: 76 Resp: 1152

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	39.2
44	0.0	0.0	41.7

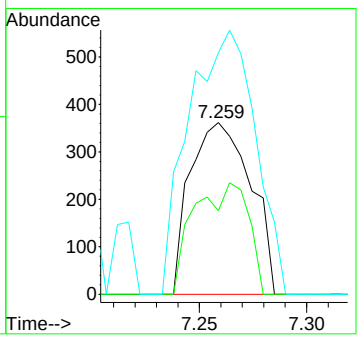


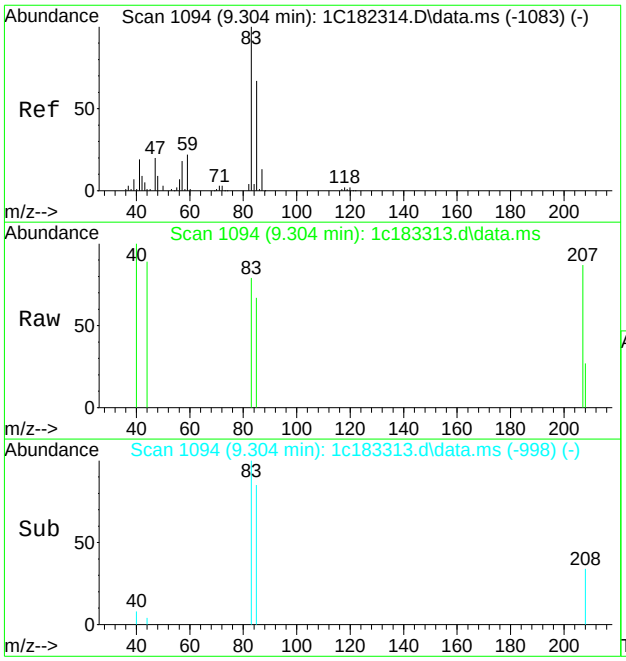


#22
methylene chloride
Concen: 0.33 ug/L
RT: 7.259 min Scan# 703
Delta R.T. 0.001 min
Lab File: 1c183313.d
Acq: 21 Dec 2021 2:21 pm

Tgt Ion: 84 Resp: 711

Ion	Ratio	Lower	Upper
84	100		
86	48.6	32.9	92.9
49	140.6	99.1	159.1

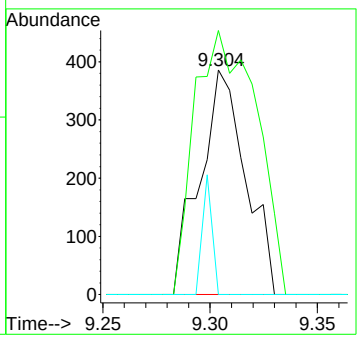


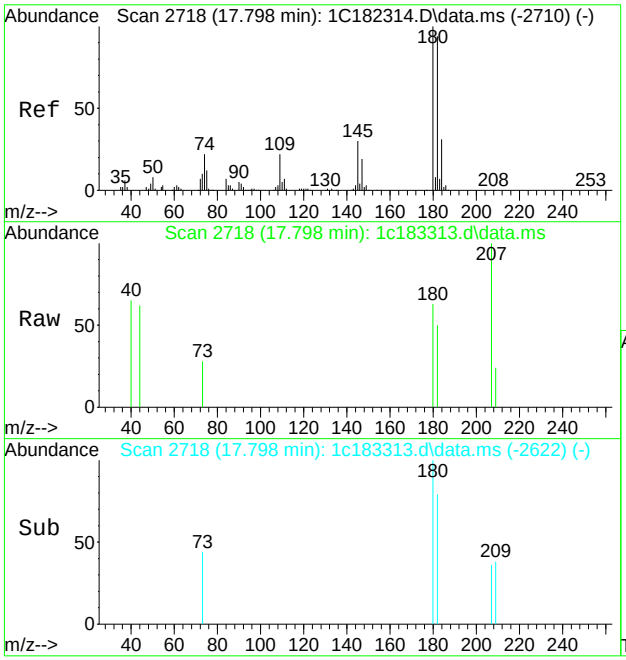


#41
chloroform
Concen: 0.24 ug/L
RT: 9.304 min Scan# 1094
Delta R.T. -0.000 min
Lab File: 1c183313.d
Acq: 21 Dec 2021 2:21 pm

Tgt Ion: 85 Resp: 574

Ion	Ratio	Lower	Upper
85	100		
83	117.6	124.3	184.3#
47	0.0	3.6	63.6#

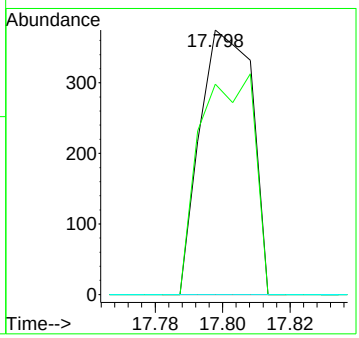


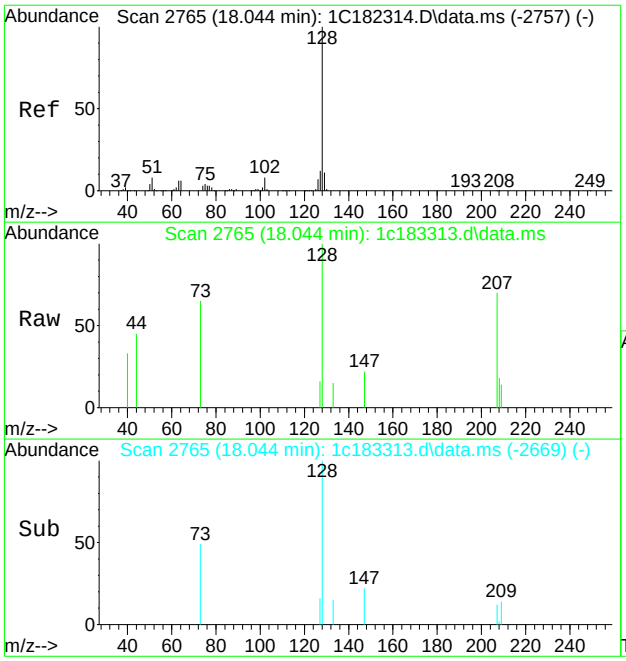


#119
1,2,4-trichlorobenzene
Concen: 0.16 ug/L
RT: 17.798 min Scan# 2718
Delta R.T. -0.000 min
Lab File: 1c183313.d
Acq: 21 Dec 2021 2:21 pm

Tgt Ion:180 Resp: 401

Ion	Ratio	Lower	Upper
180	100		
182	79.5	66.8	126.8
145	0.0	0.0	58.5

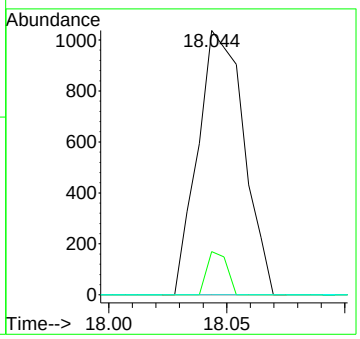


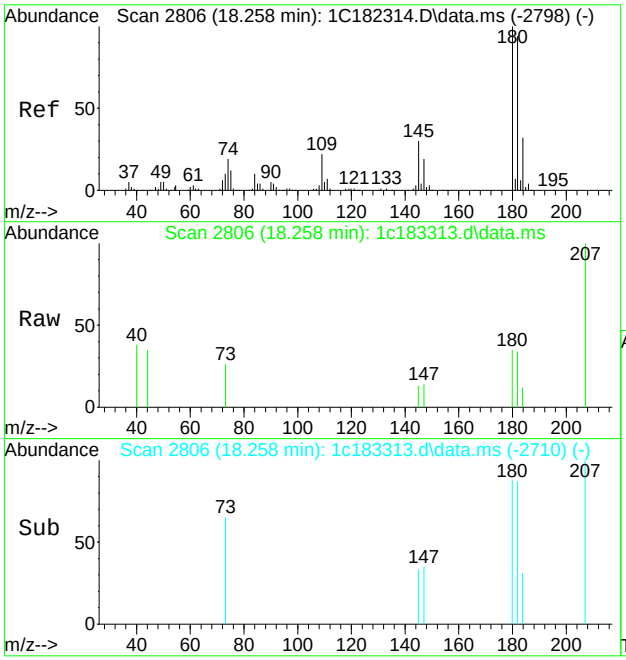


#121
naphthalene
Concen: 0.26 ug/L
RT: 18.044 min Scan# 2765
Delta R.T. -0.000 min
Lab File: 1c183313.d
Acq: 21 Dec 2021 2:21 pm

Tgt Ion:128 Resp: 1408

Ion	Ratio	Lower	Upper
128	100		
127	16.4	0.0	42.7
129	0.0	0.0	41.1

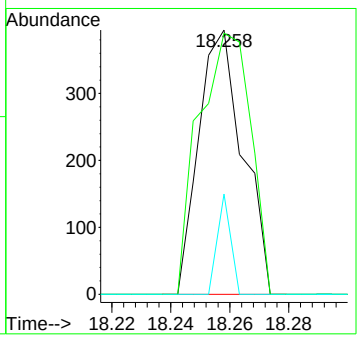


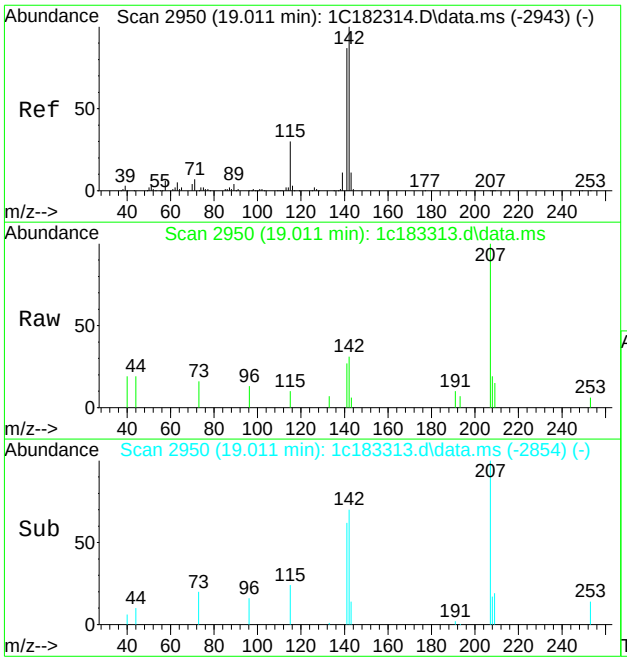


#122
1,2,3-trichlorobenzene
Concen: 0.18 ug/L
RT: 18.258 min Scan# 2806
Delta R.T. -0.000 min
Lab File: 1c183313.d
Acq: 21 Dec 2021 2:21 pm

Tgt Ion:180 Resp: 411

Ion	Ratio	Lower	Upper
180	100		
182	98.7	67.2	127.2
145	38.0	1.0	61.0

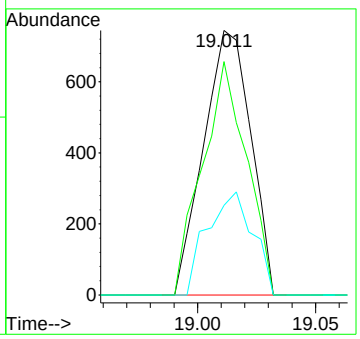




#124
2-methylnaphthalene
Concen: 0.34 ug/L
RT: 19.011 min Scan# 2950
Delta R.T. 0.000 min
Lab File: 1c183313.d
Acq: 21 Dec 2021 2:21 pm

Tgt Ion:142 Resp: 1037

Ion	Ratio	Lower	Upper
142	100		
141	88.2	67.5	107.5
115	33.8	12.3	52.3



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167534.D
Acq On : 23 Dec 2021 10:14 am
Operator : BridgetK
Sample : mb
Misc : MS55558,V3A7273,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 23 11:14:11 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

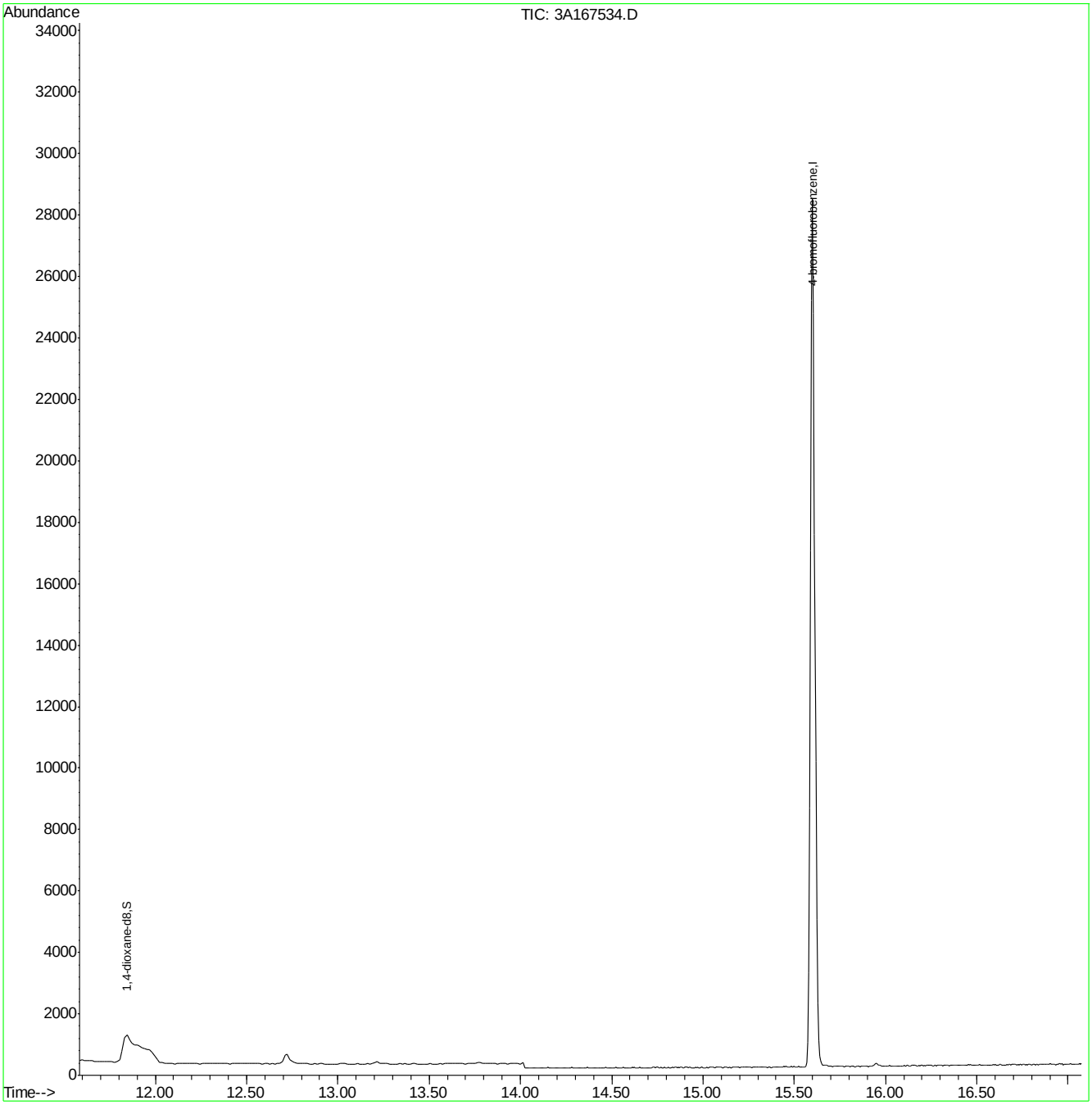
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15713	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3904	8.97	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 89.70%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167534.D
Acq On : 23 Dec 2021 10:14 am
Operator : BridgetK
Sample : mb
Misc : MS55558,V3A7273,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 23 11:14:11 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\voa-gcms\complete\2021\dayton 202112\12-22-2021\kristelv\vl10113 halfway\
Data File : l336242.d
Acq On : 21 Dec 2021 11:33 am
Operator : jons2
Sample : mb Inst : GCMSL
Misc : MS37677,VL10113,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 23 14:00:05 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 11:57:51 2021
Response via : Initial Calibration

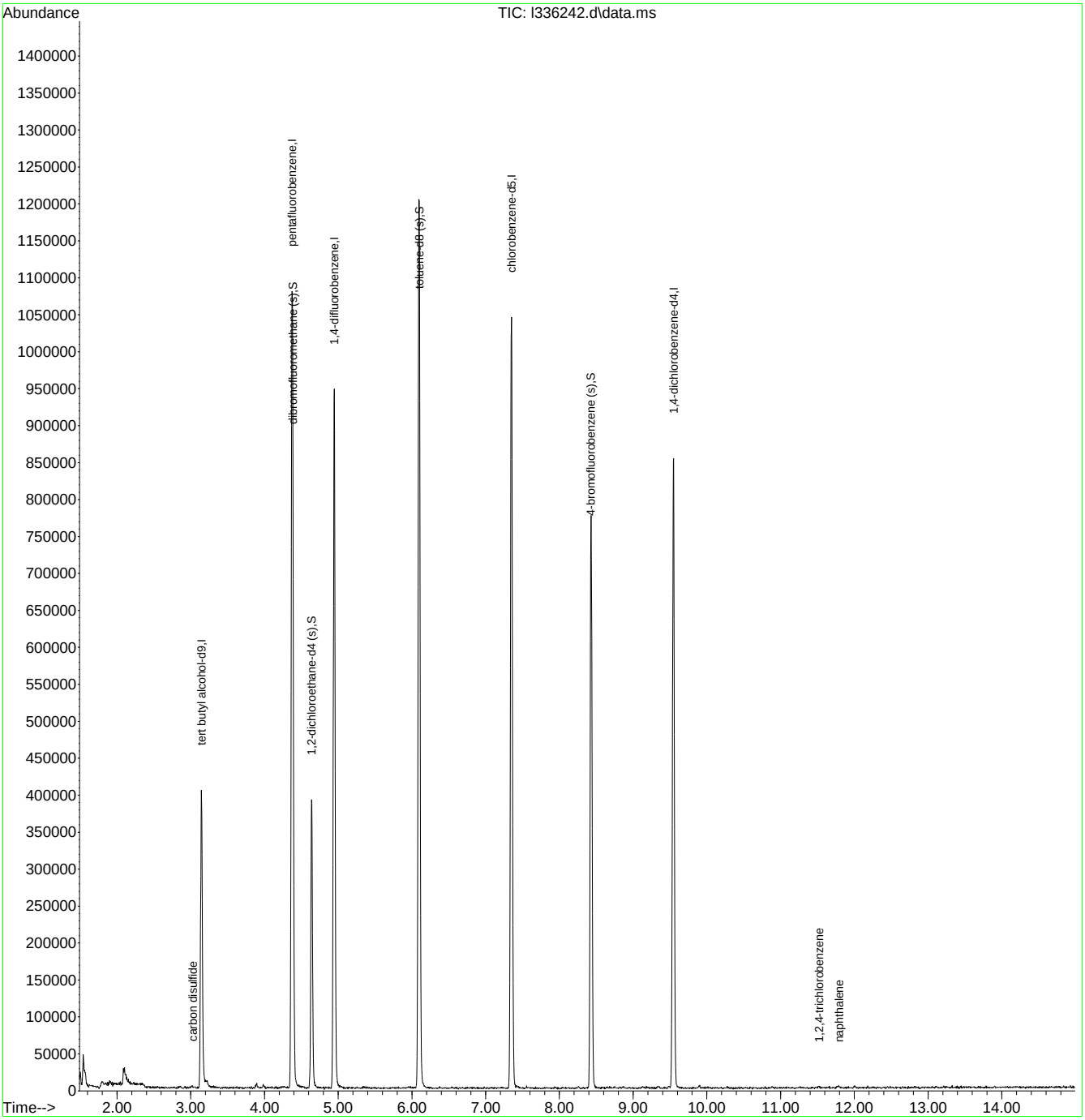
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	3.143	65	354071	500.00	ug/L	0.00
5) pentafluorobenzene	4.375	168	448260	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.946	114	644892	50.00	ug/L	0.00
71) chlorobenzene-d5	7.350	117	562396	50.00	ug/L	0.00
94) 1,4-dichlorobenzene-d4	9.548	152	220536	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	4.385	113	199036	51.63	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.26%			
51) 1,2-dichloroethane-d4 (s)	4.638	65	243597	54.97	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 109.94%			
72) toluene-d8 (s)	6.098	98	747380	48.66	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.32%			
95) 4-bromofluorobenzene (s)	8.425	95	256617	52.12	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.24%			
Target Compounds						Qvalue
21) carbon disulfide	3.027	76	2904	0.25	ug/L	67
115) 1,2,4-trichlorobenzene	11.521	180	856	0.22	ug/L #	44
117) naphthalene	11.794	128	3299	0.33	ug/L	67

(#) = qualifier out of range (m) = manual integration (+) = signals summed

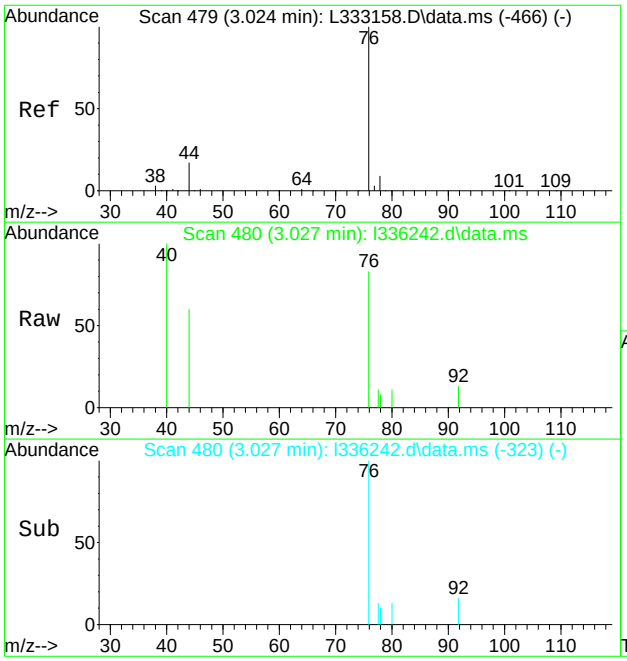
Quantitation Report (QT Reviewed)

Data Path : X:\voa-gcms\complete\2021\dayton 202112\12-22-2021\kristelv\vl10113 halfway\
Data File : l336242.d
Acq On : 21 Dec 2021 11:33 am
Operator : jons2
Sample : mb Inst : GCMSL
Misc : MS37677,VL10113,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\ML10004.M
Quant Results File: ML10004.RES
Quant Time: Dec 23 14:00:05 2021
Quant Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
QLast Update : Wed Oct 06 11:57:51 2021
Response via : Initial Calibration



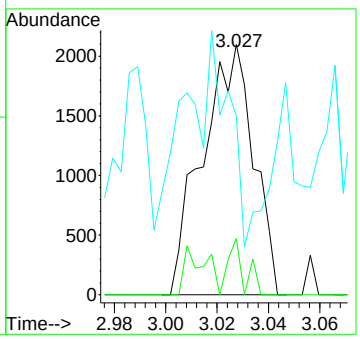
ML10004.M Thu Dec 23 14:06:35 2021 RT1 Page: 2

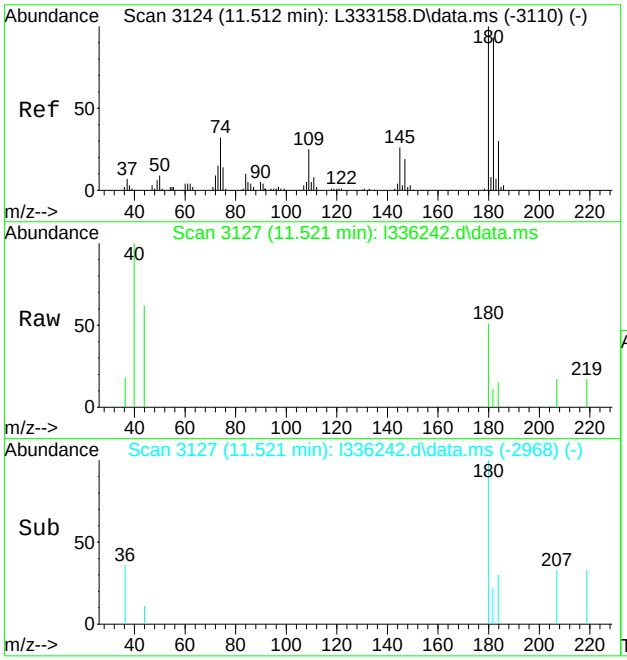


#21
carbon disulfide
Concen: 0.25 ug/L
RT: 3.027 min Scan# 480
Delta R.T. 0.003 min
Lab File: l336242.d
Acq: 21 Dec 2021 11:33 am

Tgt Ion: 76 Resp: 2904

Ion	Ratio	Lower	Upper
76	100		
78	22.6	0.0	38.7
44	29.6	0.0	46.9

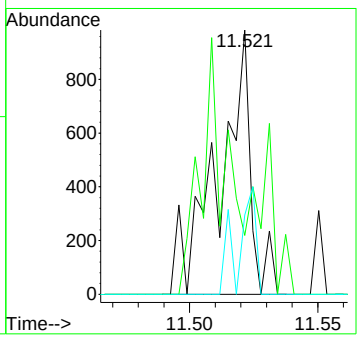


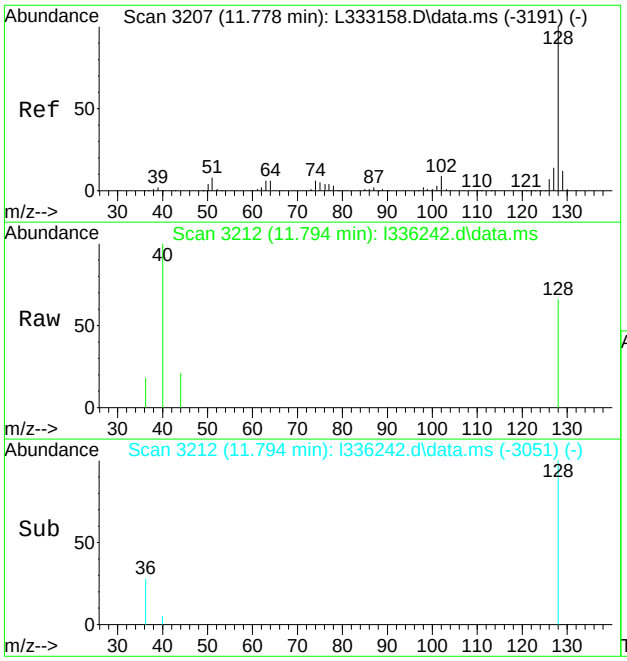


#115
1,2,4-trichlorobenzene
Concen: 0.22 ug/L
RT: 11.521 min Scan# 3127
Delta R.T. 0.009 min
Lab File: l336242.d
Acq: 21 Dec 2021 11:33 am

Tgt Ion:180 Resp: 856

Ion	Ratio	Lower	Upper
180	100		
182	22.3	63.3	123.3#
184	30.0	0.0	60.0

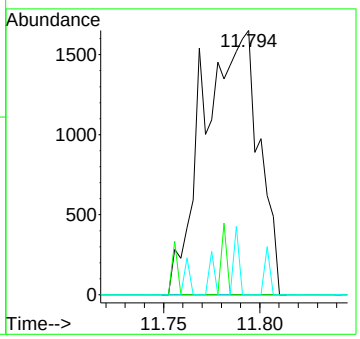




#117
naphthalene
Concen: 0.33 ug/L
RT: 11.794 min Scan# 3212
Delta R.T. 0.016 min
Lab File: l336242.d
Acq: 21 Dec 2021 11:33 am

Tgt Ion:128 Resp: 3299

Ion	Ratio	Lower	Upper
128	100		
129	0.0	0.0	42.0
127	0.0	0.0	43.8



MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37283-MB1	2P104915.D	1	12/23/21	CS	12/21/21	OP37283	E2P4709

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	67	16	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	20	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	28	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	59	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	130	ug/kg	
87-65-0	2,6-Dichlorophenol	ND	170	22	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	36	ug/kg	
	3&4-Methylphenol	ND	67	27	ug/kg	
88-75-5	2-Nitrophenol	ND	170	22	ug/kg	
100-02-7	4-Nitrophenol	ND	330	89	ug/kg	
87-86-5	Pentachlorophenol	ND	130	31	ug/kg	
108-95-2	Phenol	ND	67	17	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	22	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	20	ug/kg	
98-86-2	Acetophenone	ND	170	7.2	ug/kg	
62-53-3	Aniline	ND	67	15	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	8.1	ug/kg	
100-51-6	Benzyl Alcohol	ND	67	12	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	7.9	ug/kg	
106-47-8	4-Chloroaniline	ND	170	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	7.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	10	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	17	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	67	28	ug/kg	
132-64-9	Dibenzofuran	ND	67	14	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	67	5.4	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	8.3	ug/kg	
84-66-2	Diethyl phthalate	ND	67	7.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	5.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	7.8	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	8.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	13	ug/kg	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37283-MB1	2P104915.D	1	12/23/21	CS	12/21/21	OP37283	E2P4709

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	330	13	ug/kg	
67-72-1	Hexachloroethane	ND	170	16	ug/kg	
78-59-1	Isophorone	ND	67	7.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	33	7.5	ug/kg	
88-74-4	2-Nitroaniline	ND	170	7.9	ug/kg	
99-09-2	3-Nitroaniline	ND	170	8.3	ug/kg	
100-01-6	4-Nitroaniline	ND	170	8.6	ug/kg	
98-95-3	Nitrobenzene	ND	67	13	ug/kg	
62-75-9	n-Nitrosodimethylamine	ND	67	12	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	9.6	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	12	ug/kg	
109-06-8	2-Picoline	ND	170	5.7	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	170	90	ug/kg	
110-86-1	Pyridine	ND	67	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	8.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	67	8.7	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	74%	10-109%
4165-62-2	Phenol-d5	76%	10-105%
118-79-6	2,4,6-Tribromophenol	77%	10-135%
4165-60-0	Nitrobenzene-d5	74%	10-119%
321-60-8	2-Fluorobiphenyl	75%	18-112%
1718-51-0	Terphenyl-d14	95%	18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact	3.20	190	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37283-MB1	F204538A.D	1	12/23/21	CS	12/21/21	OP37283	EF8967

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	67	16	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	20	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	28	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	59	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	130	ug/kg	
87-65-0	2,6-Dichlorophenol	ND	170	22	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	36	ug/kg	
	3&4-Methylphenol	ND	67	27	ug/kg	
88-75-5	2-Nitrophenol	ND	170	22	ug/kg	
100-02-7	4-Nitrophenol	ND	330	89	ug/kg	
87-86-5	Pentachlorophenol	ND	130	31	ug/kg	
108-95-2	Phenol	ND	67	17	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	22	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	20	ug/kg	
53-96-3	2-Acetylaminofluorene	ND	170	20	ug/kg	
92-67-1	4-Aminobiphenyl	ND	170	12	ug/kg	
98-86-2	Acetophenone	ND	170	7.2	ug/kg	
62-53-3	Aniline	ND	67	15	ug/kg	
140-57-8	Aramite	ND	170		ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	8.1	ug/kg	
100-51-6	Benzyl Alcohol	ND	67	12	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	7.9	ug/kg	
106-47-8	4-Chloroaniline	ND	170	12	ug/kg	
510-15-6	Chlorobenzilate	ND	170	6.2	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	7.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	10	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	17	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	67	28	ug/kg	
2303-16-4	Diallate	ND	170	14	ug/kg	
132-64-9	Dibenzofuran	ND	67	14	ug/kg	
60-51-5	Dimethoate	ND	170	5.9	ug/kg	
122-39-4	Diphenylamine	ND	170	3.9	ug/kg	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37283-MB1	F204538A.D	1	12/23/21	CS	12/21/21	OP37283	EF8967

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Result	RL	MDL	Units	Q
298-04-4	Disulfoton	ND	170	10	ug/kg	
99-65-0	m-Dinitrobenzene	ND	170		ug/kg	
60-11-7	p-(Dimethylamine)azobenzene	ND	170	6.7	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	67	5.4	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	8.3	ug/kg	
84-66-2	Diethyl phthalate	ND	67	7.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	5.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	7.8	ug/kg	
62-50-0	Ethyl methanesulfonate	ND	170	7.7	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	8.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	13	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	13	ug/kg	
67-72-1	Hexachloroethane	ND	170	16	ug/kg	
1888-71-7	Hexachloropropene	ND	170	22	ug/kg	
465-73-6	Isodrin	ND	170	11	ug/kg	
78-59-1	Isophorone	ND	67	7.1	ug/kg	
120-58-1	Isosafrole	ND	170	16	ug/kg	
91-57-6	2-Methylnaphthalene	ND	33	7.5	ug/kg	
66-27-3	Methyl methanesulfonate	ND	170	7.8	ug/kg	
298-00-0	Methyl parathion	ND	170	6.2	ug/kg	
130-15-4	1,4-Naphthoquinone	ND	170	8.0	ug/kg	
88-74-4	2-Nitroaniline	ND	170	7.9	ug/kg	
99-09-2	3-Nitroaniline	ND	170	8.3	ug/kg	
100-01-6	4-Nitroaniline	ND	170	8.6	ug/kg	
99-55-8	5-Nitro-o-toluidine	ND	170	9.1	ug/kg	
98-95-3	Nitrobenzene	ND	67	13	ug/kg	
62-75-9	n-Nitrosodimethylamine	ND	67	12	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	9.6	ug/kg	
924-16-3	N-Nitrosodi-n-butylamine	ND	170	20	ug/kg	
55-18-5	N-Nitrosodiethylamine	ND	170	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	12	ug/kg	
10595-95-6	N-Nitrosomethylethylamine	ND	170	39	ug/kg	
59-89-2	N-Nitrosomorpholine	ND	170	12	ug/kg	
100-75-4	N-Nitrosopiperidine	ND	170	15	ug/kg	
930-55-2	N-Nitrosopyrrolidine	ND	170	22	ug/kg	
126-68-1	O,O,O-Triethyl phosphorothio	ND	170	8.1	ug/kg	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37283-MB1	F204538A.D	1	12/23/21	CS	12/21/21	OP37283	EF8967

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Result	RL	MDL	Units	Q
109-06-8	2-Picoline	ND	170	5.7	ug/kg	
56-38-2	Parathion	ND	170	6.5	ug/kg	
76-01-7	Pentachloroethane	ND	170	8.6	ug/kg	
608-93-5	Pentachlorobenzene	ND	170	9.6	ug/kg	
82-68-8	Pentachloronitrobenzene	ND	170	90	ug/kg	
298-02-2	Phorate	ND	170	7.8	ug/kg	
23950-58-5	Pronamide	ND	170	9.5	ug/kg	
110-86-1	Pyridine	ND	67	11	ug/kg	
94-59-7	Safrole	ND	170	9.8	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	8.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	67	8.7	ug/kg	
297-97-2	Thionazin	ND	170	16	ug/kg	
3689-24-5	Tetraethyl dithiopyrophosphate	ND	170	13	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	77%	10-109%
4165-62-2	Phenol-d5	73%	10-105%
118-79-6	2,4,6-Tribromophenol	79%	10-135%
4165-60-0	Nitrobenzene-d5	68%	10-119%
321-60-8	2-Fluorobiphenyl	75%	18-112%
1718-51-0	Terphenyl-d14	85%	18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact	3.27	260	ug/kg	J
	System artifact/aldol-condensation	3.33	160	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37474-MB1	5P80851.D	1	01/07/22	KLS	01/06/22	OP37474	E5P3826

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.53	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37474-MB1	5P80851.D	1	01/07/22	KLS	01/06/22	OP37474	E5P3826

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	29%	10-73%
4165-62-2	Phenol-d5	17%	10-64%
118-79-6	2,4,6-Tribromophenol	59%	31-130%
4165-60-0	Nitrobenzene-d5	52%	28-126%
321-60-8	2-Fluorobiphenyl	57%	26-114%
1718-51-0	Terphenyl-d14	56%	16-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	7.03	3.4	ug/l	J
	system artifact	8.18	5.4	ug/l	J
	system artifact	9.24	3.6	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37474A-MB1	4P50563.D	1	01/07/22	NAP	01/06/22	OP37474A	E4P2645

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	ND	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	ND	0.080	0.040	ug/l	
86-73-7	Fluorene	ND	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	ND	0.080	0.040	ug/l	
85-01-8	Phenanthrene	ND	0.080	0.040	ug/l	
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	29%	15-110%
4165-62-2	Phenol-d5	22%	12-110%
118-79-6	2,4,6-Tribromophenol	82%	32-143%
4165-60-0	Nitrobenzene-d5	80%	29-124%
321-60-8	2-Fluorobiphenyl	60%	23-122%
1718-51-0	Terphenyl-d14	65%	22-130%

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37283-BS1	2P104916.D	1	12/23/21	CS	12/21/21	OP37283	E2P4709

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	1670	1090	65	16-146
59-50-7	4-Chloro-3-methyl phenol	1670	1100	66	21-149
120-83-2	2,4-Dichlorophenol	1670	1050	63	18-152
105-67-9	2,4-Dimethylphenol	1670	1040	62	21-153
51-28-5	2,4-Dinitrophenol	3330	2050	62	12-141
87-65-0	2,6-Dichlorophenol	1670	1030	62	22-147
534-52-1	4,6-Dinitro-o-cresol	1670	1020	61	10-167
	3&4-Methylphenol	3330	2220	67	10-197
88-75-5	2-Nitrophenol	1670	976	59	19-154
100-02-7	4-Nitrophenol	1670	1000	60	10-160
87-86-5	Pentachlorophenol	3330	1830	55	10-187
108-95-2	Phenol	1670	1030	62	36-117
58-90-2	2,3,4,6-Tetrachlorophenol	1670	1040	62	18-154
95-95-4	2,4,5-Trichlorophenol	1670	1030	62	20-153
88-06-2	2,4,6-Trichlorophenol	1670	1040	62	19-153
98-86-2	Acetophenone	1670	1100	66	38-114
62-53-3	Aniline	1670	787	47	10-119
101-55-3	4-Bromophenyl phenyl ether	1670	1110	67	14-159
85-68-7	Butyl benzyl phthalate	1670	1170	70	14-165
100-51-6	Benzyl Alcohol	1670	1100	66	17-151
91-58-7	2-Chloronaphthalene	1670	1010	61	16-147
106-47-8	4-Chloroaniline	1670	549	33	10-113
111-91-1	bis(2-Chloroethoxy)methane	1670	1020	61	19-139
111-44-4	bis(2-Chloroethyl)ether	1670	1090	65	18-135
7005-72-3	4-Chlorophenyl phenyl ether	1670	1100	66	17-146
121-14-2	2,4-Dinitrotoluene	1670	1170	70	19-159
606-20-2	2,6-Dinitrotoluene	1670	1190	71	17-161
91-94-1	3,3'-Dichlorobenzidine	1670	554	34	10-114
132-64-9	Dibenzofuran	1670	1040	62	16-150
84-74-2	Di-n-butyl phthalate	1670	1120	67	19-156
117-84-0	Di-n-octyl phthalate	1670	1100	66	14-167
84-66-2	Diethyl phthalate	1670	1130	68	17-149
131-11-3	Dimethyl phthalate	1670	1090	65	18-148
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1120	67	50-124
118-74-1	Hexachlorobenzene	1670	1130	68	12-162
87-68-3	Hexachlorobutadiene	1670	988	59	15-148

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37283-BS1	2P104916.D	1	12/23/21	CS	12/21/21	OP37283	E2P4709

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	3330	1640	49	19-144
67-72-1	Hexachloroethane	1670	968	58	13-142
78-59-1	Isophorone	1670	1030	62	21-141
91-57-6	2-Methylnaphthalene	1670	1050	63	17-149
88-74-4	2-Nitroaniline	1670	1060	64	14-165
99-09-2	3-Nitroaniline	1670	660	40	10-133
100-01-6	4-Nitroaniline	1670	1060	64	13-154
98-95-3	Nitrobenzene	1670	954	57	17-146
62-75-9	n-Nitrosodimethylamine	1670	962	58	10-147
621-64-7	N-Nitroso-di-n-propylamine	1670	1110	67	14-143
86-30-6	N-Nitrosodiphenylamine	1670	1060	64	12-169
109-06-8	2-Picoline	1670	ND	0*	10-63
82-68-8	Pentachloronitrobenzene	1670	1130	68	10-192
110-86-1	Pyridine	1670	688	41	10-123
95-94-3	1,2,4,5-Tetrachlorobenzene	1670	998	60	13-149
120-82-1	1,2,4-Trichlorobenzene	1670	973	58	15-147

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	59%	10-109%
4165-62-2	Phenol-d5	62%	10-105%
118-79-6	2,4,6-Tribromophenol	66%	10-135%
4165-60-0	Nitrobenzene-d5	57%	10-119%
321-60-8	2-Fluorobiphenyl	58%	18-112%
1718-51-0	Terphenyl-d14	73%	18-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37283-BS13	F204539.D	1	12/23/21	CS	12/21/21	OP37283	EF8967

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
53-96-3	2-Acetylaminofluorene	1670	1650	99	10-152
92-67-1	4-Aminobiphenyl	1670	723	43	10-83
140-57-8	Aramite	3330	1880	56	10-200
510-15-6	Chlorobenzilate	1670	1560	94	10-156
2303-16-4	Diallate	1670	1400	84	10-145
60-51-5	Dimethoate	1670	1570	94	10-139
122-39-4	Diphenylamine	3330	1620	49	10-80
298-04-4	Disulfoton	1670	1660	100	10-166
99-65-0	m-Dinitrobenzene	1670	1590	95	10-114
60-11-7	p-(Dimethylamine)azobenzene	1670	1540	92	10-161
62-50-0	Ethyl methanesulfonate	1670	1300	78	10-152
1888-71-7	Hexachloropropene	1670	1210	73	10-125
465-73-6	Isodrin	1670	1450	87	10-153
120-58-1	Isosafrole	1670	2730	164	10-200
66-27-3	Methyl methanesulfonate	1670	1160	70	10-82
298-00-0	Methyl parathion	1670	1410	85	10-130
130-15-4	1,4-Naphthoquinone	1670	2220	133* [a]	10-113
99-55-8	5-Nitro-o-toluidine	1670	1250	75	10-125
924-16-3	N-Nitrosodi-n-butylamine	1670	1630	98	10-172
55-18-5	N-Nitrosodiethylamine	1670	1330	80	10-136
10595-95-6	N-Nitrosomethylethylamine	1670	1050	63	10-133
59-89-2	N-Nitrosomorpholine	1670	1160	70	10-124
100-75-4	N-Nitrosopiperidine	1670	1120	67	10-137
930-55-2	N-Nitrosopyrrolidine	1670	279	17	10-134
126-68-1	O,O,O-Triethyl phosphorothio	1670	1240	74	10-128
109-06-8	2-Picoline	1670	1110	67* [a]	10-63
56-38-2	Parathion	1670	1380	83	10-155
76-01-7	Pentachloroethane	1670	1130	68	10-96
608-93-5	Pentachlorobenzene	1670	1230	74	10-130
82-68-8	Pentachloronitrobenzene	1670	1390	83	10-192
298-02-2	Phorate	1670	2070	124	10-138
23950-58-5	Pronamide	1670	1510	91	10-200
94-59-7	Safrole	1670	1360	82	10-140
297-97-2	Thionazin	1670	1380	83	10-142
3689-24-5	Tetraethyl dithiopyrophosphate	1670	1690	101	10-138

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37283-BS13	F204539.D	1	12/23/21	CS	12/21/21	OP37283	EF8967

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	80%	10-109%
4165-62-2	Phenol-d5	76%	10-105%
118-79-6	2,4,6-Tribromophenol	86%	10-135%
4165-60-0	Nitrobenzene-d5	73%	10-119%
321-60-8	2-Fluorobiphenyl	80%	18-112%
1718-51-0	Terphenyl-d14	91%	18-125%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37474-BS1	5P80852.D	1	01/07/22	KLS	01/06/22	OP37474	E5P3826
OP37474-BSD	5P80853.D	1	01/07/22	KLS	01/06/22	OP37474	E5P3826

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	40	20.8	52	21.1	53	1	33-102/34
59-50-7	4-Chloro-3-methyl phenol	40	29.1	73	28.9	72	1	46-113/28
120-83-2	2,4-Dichlorophenol	40	26.9	67	26.2	66	3	45-111/31
105-67-9	2,4-Dimethylphenol	40	28.2	71	25.9	65	9	39-124/30
51-28-5	2,4-Dinitrophenol	80	69.6	87	69.9	87	0	30-156/30
87-65-0	2,6-Dichlorophenol	40	27.9	70	26.4	66	6	45-114/28
534-52-1	4,6-Dinitro-o-cresol	40	34.1	85	32.3	81	5	41-138/29
95-48-7	2-Methylphenol	40	18.6	47	18.4	46	1	26-101/32
	3&4-Methylphenol	80	37.6	47	35.1	44	7	23-98/32
88-75-5	2-Nitrophenol	40	25.3	63	25.2	63	0	42-125/34
100-02-7	4-Nitrophenol	40	32.5	81	32.0	80	2	10-91/35
87-86-5	Pentachlorophenol	80	52.4	66	49.9	63	5	37-147/31
108-95-2	Phenol	40	9.5	24	9.8	25	3	10-77/35
58-90-2	2,3,4,6-Tetrachlorophenol	40	27.9	70	27.9	70	0	41-131/29
95-95-4	2,4,5-Trichlorophenol	40	28.5	71	27.2	68	5	39-125/28
88-06-2	2,4,6-Trichlorophenol	40	29.1	73	28.4	71	2	40-127/28
98-86-2	Acetophenone	40	24.5	61	24.5	61	0	44-110/30
62-53-3	Aniline	40	13.8	35	15.9	40	14	10-109/44
101-55-3	4-Bromophenyl phenyl ether	40	28.8	72	27.8	70	4	44-115/29
85-68-7	Butyl benzyl phthalate	40	33.9	85	32.7	82	4	49-121/29
100-51-6	Benzyl Alcohol	40	17.2	43	17.1	43	1	31-110/31
91-58-7	2-Chloronaphthalene	40	24.3	61	23.7	59	3	29-112/29
106-47-8	4-Chloroaniline	40	25.1	63	25.3	63	1	15-88/48
111-91-1	bis(2-Chloroethoxy)methane	40	20.5	51	19.8	50	3	44-115/29
111-44-4	bis(2-Chloroethyl)ether	40	17.7	44	17.0	43	4	38-116/32
7005-72-3	4-Chlorophenyl phenyl ether	40	25.1	63	25.1	63	0	35-119/28
121-14-2	2,4-Dinitrotoluene	40	31.0	78	30.3	76	2	47-128/27
606-20-2	2,6-Dinitrotoluene	40	30.4	76	29.9	75	2	48-127/28
91-94-1	3,3'-Dichlorobenzidine	40	28.3	70	26.2	66	8	18-103/38
132-64-9	Dibenzofuran	40	26.1	65	25.6	64	2	35-119/27
84-74-2	Di-n-butyl phthalate	40	33.2	83	32.3	81	3	50-122/29
117-84-0	Di-n-octyl phthalate	40	36.7	92	36.0	90	2	40-127/28
84-66-2	Diethyl phthalate	40	32.1	80	32.4	81	1	49-117/28
131-11-3	Dimethyl phthalate	40	29.0	73	28.5	71	2	49-114/28
117-81-7	bis(2-Ethylhexyl)phthalate	40	35.2	88	34.0	85	3	44-127/29
118-74-1	Hexachlorobenzene	40	26.1	65	25.5	64	2	46-113/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37474-BS1	5P80852.D	1	01/07/22	KLS	01/06/22	OP37474	E5P3826
OP37474-BSD	5P80853.D	1	01/07/22	KLS	01/06/22	OP37474	E5P3826

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	40	25.4	64	25.5	64	0	17-111/37
77-47-4	Hexachlorocyclopentadiene	80	43.3	54	41.9	52	3	10-112/40
67-72-1	Hexachloroethane	40	20.4	51	22.0	55	8	18-101/38
78-59-1	Isophorone	40	22.6	57	22.6	57	0	47-119/28
91-57-6	2-Methylnaphthalene	40	26.2	66	25.3	63	3	30-116/32
88-74-4	2-Nitroaniline	40	28.2	71	28.1	70	0	35-133/28
99-09-2	3-Nitroaniline	40	26.1	65	25.4	64	3	31-102/39
100-01-6	4-Nitroaniline	40	29.6	74	28.7	72	3	51-118/30
98-95-3	Nitrobenzene	40	24.3	61	25.2	63	4	36-120/29
62-75-9	n-Nitrosodimethylamine	40	8.8	22	10.9	27	21	10-85/37
621-64-7	N-Nitroso-di-n-propylamine	40	21.4	54	21.2	53	1	41-118/30
86-30-6	N-Nitrosodiphenylamine	40	27.2	68	27.0	68	1	46-112/29
82-68-8	Pentachloronitrobenzene	40	27.9	70	28.0	70	0	43-126/28
110-86-1	Pyridine	40	3.5	9* [a]	7.0	18	67* [b]	10-78/57
95-94-3	1,2,4,5-Tetrachlorobenzene	40	24.3	61	23.9	60	2	20-114/31
120-82-1	1,2,4-Trichlorobenzene	40	23.5	59	22.8	57	3	24-104/33

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	31%	31%	10-73%
4165-62-2	Phenol-d5	19%	21%	10-64%
118-79-6	2,4,6-Tribromophenol	74%	68%	31-130%
4165-60-0	Nitrobenzene-d5	60%	59%	28-126%
321-60-8	2-Fluorobiphenyl	60%	59%	26-114%
1718-51-0	Terphenyl-d14	65%	62%	16-122%

(a) Outside of in house control limits.
(b) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37474A-BS12	4P50564.D	1	01/07/22	NAP	01/06/22	OP37474A	E4P2645
OP37474A-BSD12	4P50565.D	1	01/07/22	NAP	01/06/22	OP37474A	E4P2645

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	0.8	0.608	76	0.642	80	5	31-135/38
208-96-8	Acenaphthylene	0.8	0.421	53	0.446	56	6	28-130/42
120-12-7	Anthracene	0.8	0.618	77	0.623	78	1	40-125/32
56-55-3	Benzo(a)anthracene	0.8	0.553	69	0.639	80	14	38-132/31
50-32-8	Benzo(a)pyrene	0.8	0.764	96	0.765	96	0	31-110/37
205-99-2	Benzo(b)fluoranthene	0.8	0.820	103	0.866	108	5	31-113/37
191-24-2	Benzo(g,h,i)perylene	0.8	0.624	78	0.629	79	1	18-110/54
207-08-9	Benzo(k)fluoranthene	0.8	0.724	91	0.716	90	1	31-119/43
218-01-9	Chrysene	0.8	0.571	71	0.639	80	11	43-119/33
53-70-3	Dibenzo(a,h)anthracene	0.8	0.640	80	0.671	84	5	20-112/50
206-44-0	Fluoranthene	0.8	0.634	79	0.694	87	9	48-118/27
86-73-7	Fluorene	0.8	0.643	80	0.670	84	4	42-123/34
193-39-5	Indeno(1,2,3-cd)pyrene	0.8	0.598	75	0.616	77	3	18-113/49
91-20-3	Naphthalene	0.8	0.513	64	0.538	67	5	30-114/40
85-01-8	Phenanthrene	0.8	0.605	76	0.616	77	2	45-125/31
129-00-0	Pyrene	0.8	0.584	73	0.639	80	9	48-125/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	39%	31%	15-110%
4165-62-2	Phenol-d5	29%	23%	12-110%
118-79-6	2,4,6-Tribromophenol	135%	136%	32-143%
4165-60-0	Nitrobenzene-d5	120%	129%* [a]	29-124%
321-60-8	2-Fluorobiphenyl	94%	96%	23-122%
1718-51-0	Terphenyl-d14	100%	109%	22-130%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37283-MS	F204544.D	1	12/23/21	CS	12/21/21	OP37283	EF8967
OP37283-MSD	F204545.D	1	12/23/21	CS	12/21/21	OP37283	EF8967
JD36682-7	F204546.D	1	12/23/21	CS	12/21/21	OP37283	EF8967

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	JD36682-7 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		2130	1450	68	2120	1460	69	1	10-148/50
59-50-7	4-Chloro-3-methyl phenol	ND		2130	1580	74	2120	1470	69	7	10-157/50
120-83-2	2,4-Dichlorophenol	ND		2130	1600	75	2120	1520	72	5	10-153/50
105-67-9	2,4-Dimethylphenol	ND		2130	1420	67	2120	1370	65	4	10-163/50
51-28-5	2,4-Dinitrophenol	ND		4270	2520	59	4240	2010	47	23	10-107/50
87-65-0	2,6-Dichlorophenol	ND		2130	1560	73	2120	1500	71	4	10-155/50
534-52-1	4,6-Dinitro-o-cresol	ND		2130	1360	64	2120	1170	55	15	10-156/50
	3&4-Methylphenol	ND		4270	3100	73	4240	3000	71	3	10-199/50
88-75-5	2-Nitrophenol	ND		2130	1660	78	2120	1590	75	4	10-161/50
100-02-7	4-Nitrophenol	ND		2130	1460	68	2120	1400	66	4	10-159/50
87-86-5	Pentachlorophenol	ND		4270	3030	71	4240	2680	63	12	10-171/50
108-95-2	Phenol	ND		2130	1550	73	2120	1590	75	3	10-120/50
58-90-2	2,3,4,6-Tetrachlorophenol	ND		2130	1620	76	2120	1470	69	10	10-165/50
95-95-4	2,4,5-Trichlorophenol	ND		2130	1750	82	2120	1570	74	11	10-158/50
88-06-2	2,4,6-Trichlorophenol	ND		2130	1630	76	2120	1490	70	9	10-166/50
53-96-3	2-Acetylaminofluorene	ND			ND			ND		nc	50-150/30
92-67-1	4-Aminobiphenyl	ND			ND			ND		nc	50-150/30
98-86-2	Acetophenone	ND		2130	1420	67	2120	1410	66	1	10-126/50
62-53-3	Aniline	ND		2130	988	46	2120	611	29	47	10-100/50
140-57-8	Aramite	ND			ND			ND		nc	50-150/30
101-55-3	4-Bromophenyl phenyl ether	ND		2130	1670	78	2120	1530	72	9	10-187/50
85-68-7	Butyl benzyl phthalate	ND		2130	1860	87	2120	1730	82	7	10-173/50
100-51-6	Benzyl Alcohol	ND		2130	1540	72	2120	1510	71	2	10-158/50
91-58-7	2-Chloronaphthalene	ND		2130	1730	81	2120	1540	73	12	10-155/50
106-47-8	4-Chloroaniline	ND		2130	1060	50	2120	765	36	32	10-113/50
510-15-6	Chlorobenzilate	ND			ND			ND		nc	50-150/30
111-91-1	bis(2-Chloroethoxy)methane	ND		2130	1490	70	2120	1450	68	3	10-143/50
111-44-4	bis(2-Chloroethyl)ether	ND		2130	1390	65	2120	1420	67	2	10-136/50
7005-72-3	4-Chlorophenyl phenyl ether	ND		2130	1690	79	2120	1550	73	9	10-173/50
121-14-2	2,4-Dinitrotoluene	ND		2130	1740	82	2120	1560	74	11	10-187/50
606-20-2	2,6-Dinitrotoluene	ND		2130	1780	83	2120	1620	76	9	10-192/50
91-94-1	3,3'-Dichlorobenzidine	ND		2130	1360	64	2120	1090	52	22	10-116/50
2303-16-4	Diallate	ND			ND			ND		nc	50-150/30
132-64-9	Dibenzofuran	38.0	J	2130	1750	80	2120	1680	77	4	10-159/50
60-51-5	Dimethoate	ND			ND			ND		nc	50-150/30
122-39-4	Diphenylamine	ND			ND			ND		nc	50-150/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37283-MS	F204544.D	1	12/23/21	CS	12/21/21	OP37283	EF8967
OP37283-MSD	F204545.D	1	12/23/21	CS	12/21/21	OP37283	EF8967
JD36682-7	F204546.D	1	12/23/21	CS	12/21/21	OP37283	EF8967

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	JD36682-7 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
298-04-4	Disulfoton	ND			ND			ND		nc	50-150/30
99-65-0	m-Dinitrobenzene	ND			ND			ND		nc	50-150/30
60-11-7	p-(Dimethylamine)azobenzene	ND			ND			ND		nc	50-150/30
84-74-2	Di-n-butyl phthalate	ND		2130	1720	81	2120	1580	74	8	10-170/50
117-84-0	Di-n-octyl phthalate	ND		2130	1840	86	2120	1670	79	10	10-179/50
84-66-2	Diethyl phthalate	ND		2130	1710	80	2120	1560	74	9	10-167/50
131-11-3	Dimethyl phthalate	ND		2130	1690	79	2120	1570	74	7	10-156/50
117-81-7	bis(2-Ethylhexyl)phthalate	ND		2130	1960	92	2120	1840	87	6	10-145/50
62-50-0	Ethyl methanesulfonate	ND			ND			ND		nc	50-150/30
118-74-1	Hexachlorobenzene	ND		2130	1650	77	2120	1520	72	8	10-159/50
87-68-3	Hexachlorobutadiene	ND		2130	1370	64	2120	1290	61	6	10-148/50
77-47-4	Hexachlorocyclopentadiene	ND		4270	989	23	4240	857	20	14	10-143/50
67-72-1	Hexachloroethane	ND		2130	1180	55	2120	1100	52	7	10-142/50
1888-71-7	Hexachloropropene	ND			ND			ND		nc	50-150/30
465-73-6	Isodrin	ND			ND			ND		nc	50-150/30
78-59-1	Isophorone	ND		2130	1460	68	2120	1370	65	6	10-148/50
120-58-1	Isosafrole	ND			ND			ND		nc	50-150/30
91-57-6	2-Methylnaphthalene	ND		2130	1570	74	2120	1460	69	7	10-160/50
66-27-3	Methyl methanesulfonate	ND			ND			ND		nc	50-150/30
298-00-0	Methyl parathion	ND			ND			ND		nc	50-150/30
130-15-4	1,4-Naphthoquinone	ND			ND			ND		nc	50-150/30
88-74-4	2-Nitroaniline	ND		2130	1810	85	2120	1610	76	12	10-170/50
99-09-2	3-Nitroaniline	ND		2130	1670	78	2120	1440	68	15	10-144/50
100-01-6	4-Nitroaniline	ND		2130	1620	76	2120	1420	67	13	10-143/50
99-55-8	5-Nitro-o-toluidine	ND			ND			ND		nc	50-150/30
98-95-3	Nitrobenzene	ND		2130	1450	68	2120	1370	65	6	10-152/50
62-75-9	n-Nitrosodimethylamine	ND		2130	970	45	2120	950	45	2	10-140/50
621-64-7	N-Nitroso-di-n-propylamine	ND		2130	1470	69	2120	1450	68	1	10-154/50
924-16-3	N-Nitrosodi-n-butylamine	ND			ND			ND		nc	50-150/30
55-18-5	N-Nitrosodiethylamine	ND			ND			ND		nc	50-150/30
86-30-6	N-Nitrosodiphenylamine	ND		2130	1800	84	2120	1620	76	11	10-184/50
10595-95-6	N-Nitrosomethylethylamine	ND			ND			ND		nc	50-150/30
59-89-2	N-Nitrosomorpholine	ND			ND			ND		nc	50-150/30
100-75-4	N-Nitrosopiperidine	ND			ND			ND		nc	50-150/30
930-55-2	N-Nitrosopyrrolidine	ND			ND			ND		nc	50-150/30
126-68-1	O,O,O-Triethyl phosphorothio	ND			ND			ND		nc	50-150/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37283-MS	F204544.D	1	12/23/21	CS	12/21/21	OP37283	EF8967
OP37283-MSD	F204545.D	1	12/23/21	CS	12/21/21	OP37283	EF8967
JD36682-7	F204546.D	1	12/23/21	CS	12/21/21	OP37283	EF8967

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	JD36682-7 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
109-06-8	2-Picoline	ND			ND			ND		nc	50-150/30
56-38-2	Parathion	ND			ND			ND		nc	50-150/30
76-01-7	Pentachloroethane	ND			ND			ND		nc	50-150/30
608-93-5	Pentachlorobenzene	ND			ND			ND		nc	50-150/30
82-68-8	Pentachloronitrobenzene	ND		2130	1760	82	2120	1510	71	15	10-193/50
298-02-2	Phorate	ND			ND			ND		nc	50-150/30
23950-58-5	Pronamide	ND			ND			ND		nc	50-150/30
110-86-1	Pyridine	ND		2130	916	43	2120	861	41	6	10-108/50
94-59-7	Safrole	ND			ND			ND		nc	50-150/30
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		2130	1620	76	2120	1500	71	8	10-150/50
120-82-1	1,2,4-Trichlorobenzene	ND		2130	1440	67	2120	1390	66	4	10-147/50
297-97-2	Thionazin	ND			ND			ND		nc	50-150/30
3689-24-5	Tetraethyl dithiopyrophosphate	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JD36682-7	Limits
367-12-4	2-Fluorophenol	76%	77%	78%	10-109%
4165-62-2	Phenol-d5	76%	75%	76%	10-105%
118-79-6	2,4,6-Tribromophenol	93%	86%	87%	10-135%
4165-60-0	Nitrobenzene-d5	71%	69%	69%	10-119%
321-60-8	2-Fluorobiphenyl	85%	81%	80%	18-112%
1718-51-0	Terphenyl-d14	90%	87%	89%	18-125%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4696-DFTPP
Lab File ID: 2P104590.D
Instrument ID: GCMS2P
Injection Date: 12/04/21
Injection Time: 05:06

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	208814	34.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	262778	43.6		Pass
70	Less than 2.0% of mass 69	923	0.15	(0.35) [a]	Pass
127	40.0 - 60.0% of mass 198	297561	49.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	603392	100.0		Pass
199	5.0 - 9.0% of mass 198	40906	6.78		Pass
275	10.0 - 30.0% of mass 198	140517	23.3		Pass
365	1.0 - 100.0% of mass 198	12185	2.02		Pass
441	Present, but less than mass 443	53096	8.80	(80.5) [b]	Pass
442	40.0 - 100.0% of mass 198	339632	56.3		Pass
443	17.0 - 23.0% of mass 442	65941	10.9	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P4696-IC4696	2P104591.D	12/04/21	06:08	01:02	Initial cal 1
E2P4696-IC4696	2P104592A.D	12/04/21	07:03	01:57	Initial cal 2
E2P4696-IC4696	2P104593.D	12/04/21	07:27	02:21	Initial cal 5
E2P4696-IC4696	2P104594.D	12/04/21	07:51	02:45	Initial cal 10
E2P4696-IC4696	2P104595.D	12/04/21	08:16	03:10	Initial cal 25
E2P4696-ICC4696	2P104596.D	12/04/21	08:40	03:34	Initial cal 50
E2P4696-IC4696	2P104597.D	12/04/21	09:05	03:59	Initial cal 80
E2P4696-IC4696	2P104598.D	12/04/21	09:29	04:23	Initial cal 100
E2P4696-ICV4696	2P104599.D	12/04/21	09:53	04:47	Initial cal verification 50
E2P4696-ICV4696	2P104600.D	12/04/21	10:18	05:12	Initial cal verification 50
E2P4696-ICV4696	2P104601.D	12/04/21	10:42	05:36	Initial cal verification 50
E2P4696-ICV4696	2P104602.D	12/04/21	11:07	06:01	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4697-DFTPP
Lab File ID: 2P104603.D
Instrument ID: GCMS2P
Injection Date: 12/04/21
Injection Time: 11:28

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	253384	37.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	313753	46.1		Pass
70	Less than 2.0% of mass 69	1533	0.23	(0.49) [a]	Pass
127	40.0 - 60.0% of mass 198	341205	50.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	680747	100.0		Pass
199	5.0 - 9.0% of mass 198	46653	6.85		Pass
275	10.0 - 30.0% of mass 198	165035	24.2		Pass
365	1.0 - 100.0% of mass 198	15659	2.30		Pass
441	Present, but less than mass 443	68229	10.0	(87.6) [b]	Pass
442	40.0 - 100.0% of mass 198	422549	62.1		Pass
443	17.0 - 23.0% of mass 442	77888	11.4	(18.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P4697-IC4697	2P104604.D	12/04/21	11:39	00:11	Initial cal 100
E2P4697-IC4697	2P104605.D	12/04/21	12:03	00:35	Initial cal 80
E2P4697-ICC4697	2P104606.D	12/04/21	12:28	01:00	Initial cal 50
E2P4697-IC4697	2P104607.D	12/04/21	12:53	01:25	Initial cal 25
E2P4697-IC4697	2P104608.D	12/04/21	13:17	01:49	Initial cal 10
E2P4697-IC4697	2P104609.D	12/04/21	13:41	02:13	Initial cal 5
E2P4697-IC4697	2P104610.D	12/04/21	14:06	02:38	Initial cal 2
E2P4697-IC4697	2P104611.D	12/04/21	14:30	03:02	Initial cal 1
E2P4697-ICV4697	2P104612.D	12/04/21	14:54	03:26	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4698-DFTPP
Lab File ID: 2P104613.D
Instrument ID: GCMS2P
Injection Date: 12/09/21
Injection Time: 04:24

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	70810	37.7		Pass
68	Less than 2.0% of mass 69	834	0.44	(0.95) [a]	Pass
69	Mass 69 relative abundance	87799	46.7		Pass
70	Less than 2.0% of mass 69	543	0.29	(0.62) [a]	Pass
127	40.0 - 60.0% of mass 198	95880	51.0		Pass
197	Less than 1.0% of mass 198	676	0.36		Pass
198	Base peak, 100% relative abundance	187941	100.0		Pass
199	5.0 - 9.0% of mass 198	12528	6.67		Pass
275	10.0 - 30.0% of mass 198	42144	22.4		Pass
365	1.0 - 100.0% of mass 198	4225	2.25		Pass
441	Present, but less than mass 443	17047	9.07	(82.9) [b]	Pass
442	40.0 - 100.0% of mass 198	110136	58.6		Pass
443	17.0 - 23.0% of mass 442	20553	10.9	(18.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P4698-ICV4696	2P104615.D	12/09/21	06:01	01:37	Initial cal verification 50
E2P4698-CC4696	2P104616.D	12/09/21	06:25	02:01	Continuing cal 50
E2P4698-CC4697	2P104617.D	12/09/21	06:50	02:26	Continuing cal 50
OP36737-MB3	2P104618.D	12/09/21	07:35	03:11	Method Blank
ZZZZZZ	2P104619.D	12/09/21	07:59	03:35	(unrelated sample)
ZZZZZZ	2P104620.D	12/09/21	08:23	03:59	(unrelated sample)
ZZZZZZ	2P104621.D	12/09/21	08:47	04:23	(unrelated sample)
ZZZZZZ	2P104622.D	12/09/21	09:11	04:47	(unrelated sample)
ZZZZZZ	2P104623.D	12/09/21	09:36	05:12	(unrelated sample)
OP36982-BS1	2P104625.D	12/09/21	10:24	06:00	Blank Spike
ZZZZZZ	2P104627.D	12/09/21	11:13	06:49	(unrelated sample)
ZZZZZZ	2P104630.D	12/09/21	12:26	08:02	(unrelated sample)
ZZZZZZ	2P104632.D	12/09/21	13:15	08:51	(unrelated sample)
OP36982-MSD	2P104639.D	12/09/21	16:06	11:42	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4704-DFTPP
Lab File ID: 2P104780.D
Instrument ID: GCMS2P
Injection Date: 12/16/21
Injection Time: 03:42

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	102966	38.5		Pass
68	Less than 2.0% of mass 69	846	0.32	(0.66) [a]	Pass
69	Mass 69 relative abundance	127672	47.7		Pass
70	Less than 2.0% of mass 69	207	0.08	(0.16) [a]	Pass
127	40.0 - 60.0% of mass 198	145461	54.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	267776	100.0		Pass
199	5.0 - 9.0% of mass 198	18185	6.79		Pass
275	10.0 - 30.0% of mass 198	62933	23.5		Pass
365	1.0 - 100.0% of mass 198	6269	2.34		Pass
441	Present, but less than mass 443	23952	8.94	(76.7) [b]	Pass
442	40.0 - 100.0% of mass 198	166029	62.0		Pass
443	17.0 - 23.0% of mass 442	31248	11.7	(18.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P4704-CC4696	2P104781.D	12/16/21	03:55	00:13	Continuing cal 50
E2P4704-CC4697	2P104782.D	12/16/21	04:20	00:38	Continuing cal 50
OP37154-MB1	2P104783.D	12/16/21	04:53	01:11	Method Blank
OP37154-BS1	2P104784.D	12/16/21	05:31	01:49	Blank Spike
OP37131-MB1	2P104785.D	12/16/21	05:56	02:14	Method Blank
OP37131-BS1	2P104786.D	12/16/21	06:21	02:39	Blank Spike
ZZZZZZ	2P104788.D	12/16/21	06:47	03:05	(unrelated sample)
ZZZZZZ	2P104789.D	12/16/21	07:13	03:31	(unrelated sample)
ZZZZZZ	2P104790.D	12/16/21	07:38	03:56	(unrelated sample)
ZZZZZZ	2P104791.D	12/16/21	08:04	04:22	(unrelated sample)
ZZZZZZ	2P104787.D	12/16/21	08:30	04:48	(unrelated sample)
OP37154-MS	2P104792.D	12/16/21	08:56	05:14	Matrix Spike
OP37154-MSD	2P104793.D	12/16/21	09:21	05:39	Matrix Spike Duplicate
JD36682-7	2P104794.D	12/16/21	09:47	06:05	HOFF SED-4
OP37131-MS	2P104795.D	12/16/21	10:12	06:30	Matrix Spike
OP37131-MSD	2P104796.D	12/16/21	10:38	06:56	Matrix Spike Duplicate
JD36621-1	2P104797.D	12/16/21	11:04	07:22	(used for QC only; not part of job JD36682)
ZZZZZZ	2P104798.D	12/16/21	11:29	07:47	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4709-DFTPP
Lab File ID: 2P104909.D
Instrument ID: GCMS2P
Injection Date: 12/22/21
Injection Time: 22:35

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	70203	38.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	88013	48.5		Pass
70	Less than 2.0% of mass 69	364	0.20	(0.41) [a]	Pass
127	40.0 - 60.0% of mass 198	96224	53.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	181528	100.0		Pass
199	5.0 - 9.0% of mass 198	12440	6.85		Pass
275	10.0 - 30.0% of mass 198	41444	22.8		Pass
365	1.0 - 100.0% of mass 198	4051	2.23		Pass
441	Present, but less than mass 443	17411	9.59	(82.0) [b]	Pass
442	40.0 - 100.0% of mass 198	108844	60.0		Pass
443	17.0 - 23.0% of mass 442	21243	11.7	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P4709-CC4696	2P104910.D	12/22/21	22:48	00:13	Continuing cal 25
E2P4709-CC4697	2P104911.D	12/22/21	23:12	00:37	Continuing cal 25
E2P4709-CC4696	2P104912.D	12/23/21	00:28	01:53	Continuing cal 5
OP37283-MB1	2P104915.D	12/23/21	02:08	03:33	Method Blank
OP37283-BS1	2P104916.D	12/23/21	02:32	03:57	Blank Spike
OP37044B-MB1	2P104917.D	12/23/21	03:00	04:25	Method Blank
OP37044B-BSD	2P104918.D	12/23/21	03:24	04:49	Blank Spike Duplicate
ZZZZZZ	2P104919.D	12/23/21	03:48	05:13	(unrelated sample)
ZZZZZZ	2P104920.D	12/23/21	04:12	05:37	(unrelated sample)
ZZZZZZ	2P104923.D	12/23/21	05:26	06:51	(unrelated sample)
ZZZZZZ	2P104925.D	12/23/21	06:14	07:39	(unrelated sample)
ZZZZZZ	2P104926.D	12/23/21	06:38	08:03	(unrelated sample)
ZZZZZZ	2P104927.D	12/23/21	07:02	08:27	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-DFTPP
Lab File ID: 4P48502.D
Instrument ID: GCMS4P
Injection Date: 10/20/21
Injection Time: 22:19

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	23059	30.3		Pass
68	Less than 2.0% of mass 69	101	0.13	(0.34) [a]	Pass
69	Mass 69 relative abundance	29864	39.3		Pass
70	Less than 2.0% of mass 69	124	0.16	(0.42) [a]	Pass
127	40.0 - 60.0% of mass 198	30794	40.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	76018	100.0		Pass
199	5.0 - 9.0% of mass 198	5791	7.62		Pass
275	10.0 - 30.0% of mass 198	18191	23.9		Pass
365	1.0 - 100.0% of mass 198	1857	2.44		Pass
441	Present, but less than mass 443	4086	5.38	(39.2) [b]	Pass
442	40.0 - 100.0% of mass 198	51528	67.8		Pass
443	17.0 - 23.0% of mass 442	10411	13.7	(20.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2551-IC2551	4P48504.D	10/20/21	22:59	00:40	Initial cal 1
E4P2551-ICC2551	4P48505.D	10/20/21	23:23	01:04	Initial cal 0.2
E4P2551-IC2551	4P48506.D	10/20/21	23:46	01:27	Initial cal 0.02
E4P2551-IC2551	4P48507.D	10/21/21	00:10	01:51	Initial cal 0.5
E4P2551-IC2551	4P48508.D	10/21/21	00:33	02:14	Initial cal 0.1
E4P2551-IC2551	4P48509.D	10/21/21	00:57	02:38	Initial cal 0.004
E4P2551-IC2551	4P48511.D	10/21/21	01:44	03:25	Initial cal 0.04
E4P2551-IC2551	4P48513.D	10/21/21	02:16	03:57	Initial cal 0.002
E4P2551-IC2551	4P48514.D	10/21/21	02:39	04:20	Initial cal 0.01
E4P2551-ICV2551	4P48512.D	10/21/21	03:15	04:56	Initial cal verification 0.2
OP35848A-BSD12	4P48515.D	10/21/21	03:45	05:26	Blank Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2645-DFTPP
Lab File ID: 4P50560.D
Instrument ID: GCMS4P
Injection Date: 01/07/22
Injection Time: 15:36

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	65426	43.7		Pass
68	Less than 2.0% of mass 69	659	0.44	(0.85) [a]	Pass
69	Mass 69 relative abundance	77377	51.7		Pass
70	Less than 2.0% of mass 69	454	0.30	(0.59) [a]	Pass
127	40.0 - 60.0% of mass 198	71796	48.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	149728	100.0		Pass
199	5.0 - 9.0% of mass 198	9441	6.31		Pass
275	10.0 - 30.0% of mass 198	37504	25.0		Pass
365	1.0 - 100.0% of mass 198	6625	4.42		Pass
441	Present, but less than mass 443	10935	7.30	(81.5) [b]	Pass
442	40.0 - 100.0% of mass 198	69560	46.5		Pass
443	17.0 - 23.0% of mass 442	13416	8.96	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2645-CC2551	4P50561.D	01/07/22	15:47	00:11	Continuing cal 0.1
OP37474A-MB1	4P50563.D	01/07/22	16:34	00:58	Method Blank
OP37474A-BS12	4P50564.D	01/07/22	16:57	01:21	Blank Spike
OP37474A-BSD12	4P50565.D	01/07/22	17:20	01:44	Blank Spike Duplicate
JD36682-3	4P50567.D	01/07/22	18:07	02:31	HOFF SW-3
JD36682-4	4P50568.D	01/07/22	18:30	02:54	HOFF SW-2
JD36682-5	4P50569.D	01/07/22	18:53	03:17	HOFF SW-1
JD36682-6	4P50570.D	01/07/22	19:17	03:41	HOFF-DUP-121321SW
ZZZZZZ	4P50571.D	01/07/22	19:40	04:04	(unrelated sample)
ZZZZZZ	4P50573.D	01/07/22	20:26	04:50	(unrelated sample)
ZZZZZZ	4P50574.D	01/07/22	20:49	05:13	(unrelated sample)
ZZZZZZ	4P50575.D	01/07/22	21:13	05:37	(unrelated sample)
ZZZZZZ	4P50576.D	01/07/22	21:36	06:00	(unrelated sample)
ZZZZZZ	4P50577.D	01/07/22	21:59	06:23	(unrelated sample)
ZZZZZZ	4P50578.D	01/07/22	22:22	06:46	(unrelated sample)
ZZZZZZ	4P50579.D	01/07/22	22:45	07:09	(unrelated sample)
ZZZZZZ	4P50580.D	01/07/22	23:08	07:32	(unrelated sample)
ZZZZZZ	4P50581.D	01/07/22	23:31	07:55	(unrelated sample)
ZZZZZZ	4P50582.D	01/07/22	23:54	08:18	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2645-DFTPP	**Injection Date:**	01/07/22
Lab File ID:	4P50560.D	**Injection Time:**	15:36
Instrument ID:	GCMS4P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4P50583.D	01/08/22	00:17	08:41	(unrelated sample)
ZZZZZZ	4P50584.D	01/08/22	00:40	09:04	(unrelated sample)
ZZZZZZ	4P50585.D	01/08/22	01:03	09:27	(unrelated sample)
ZZZZZZ	4P50586.D	01/08/22	01:26	09:50	(unrelated sample)
ZZZZZZ	4P50587.D	01/08/22	01:48	10:12	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2647-DFTPP
Lab File ID: 4P50618.D
Instrument ID: GCMS4P
Injection Date: 01/10/22
Injection Time: 18:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	85280	35.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	111605	46.9		Pass
70	Less than 2.0% of mass 69	695	0.29	(0.62) [a]	Pass
127	40.0 - 60.0% of mass 198	109603	46.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	237789	100.0		Pass
199	5.0 - 9.0% of mass 198	16930	7.12		Pass
275	10.0 - 30.0% of mass 198	71010	29.9		Pass
365	1.0 - 100.0% of mass 198	11816	4.97		Pass
441	Present, but less than mass 443	33602	14.1	(88.4) [b]	Pass
442	40.0 - 100.0% of mass 198	190933	80.3		Pass
443	17.0 - 23.0% of mass 442	38008	16.0	(19.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2647-IC2647	4P50619.D	01/10/22	19:04	00:16	Initial cal 0.2
E4P2647-IC2647	4P50620.D	01/10/22	19:27	00:39	Initial cal 1
E4P2647-IC2647	4P50621.D	01/10/22	19:50	01:02	Initial cal 0.01
E4P2647-IC2647	4P50622.D	01/10/22	20:13	01:25	Initial cal 0.5
E4P2647-IC2647	4P50623.D	01/10/22	20:36	01:48	Initial cal 0.02
E4P2647-ICC2647	4P50624.D	01/10/22	20:59	02:11	Initial cal 0.1
E4P2647-IC2647	4P50625.D	01/10/22	21:22	02:34	Initial cal 0.04
E4P2647-IC2647	4P50626.D	01/10/22	21:45	02:57	Initial cal 0.004
E4P2647-IC2647	4P50627.D	01/10/22	22:08	03:20	Initial cal 0.002
E4P2647-ICV2647	4P50628.D	01/10/22	22:31	03:43	Initial cal verification 0.2

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2648-DFTPP
Lab File ID: 4P50633.D
Instrument ID: GCMS4P
Injection Date: 01/11/22
Injection Time: 11:37

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	143127	35.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	186098	45.8		Pass
70	Less than 2.0% of mass 69	1094	0.27	(0.59) [a]	Pass
127	40.0 - 60.0% of mass 198	178136	43.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	406357	100.0		Pass
199	5.0 - 9.0% of mass 198	28980	7.13		Pass
275	10.0 - 30.0% of mass 198	116845	28.8		Pass
365	1.0 - 100.0% of mass 198	17091	4.21		Pass
441	Present, but less than mass 443	52740	13.0	(88.8) [b]	Pass
442	40.0 - 100.0% of mass 198	297381	73.2		Pass
443	17.0 - 23.0% of mass 442	59384	14.6	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2648-CC2647	4P50634.D	01/11/22	11:50	00:13	Continuing cal 0.2
OP37448-MB1	4P50635.D	01/11/22	12:13	00:36	Method Blank
OP37448-BS1	4P50636.D	01/11/22	12:36	00:59	Blank Spike
OP37448-BSD	4P50637.D	01/11/22	12:58	01:21	Blank Spike Duplicate
JD36682-2	4P50638.D	01/11/22	13:23	01:46	HOFF SW-4
ZZZZZZ	4P50639.D	01/11/22	13:45	02:08	(unrelated sample)
ZZZZZZ	4P50640.D	01/11/22	14:14	02:37	(unrelated sample)
ZZZZZZ	4P50641.D	01/11/22	14:36	02:59	(unrelated sample)
ZZZZZZ	4P50642.D	01/11/22	14:59	03:22	(unrelated sample)
ZZZZZZ	4P50643.D	01/11/22	15:22	03:45	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-DFTPP
Lab File ID: 5P79956.D
Instrument ID: GCMS5P
Injection Date: 12/01/21
Injection Time: 21:49

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	91864	30.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	101906	33.7		Pass
70	Less than 2.0% of mass 69	672	0.22	(0.66) [a]	Pass
127	40.0 - 60.0% of mass 198	141221	46.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	302357	100.0		Pass
199	5.0 - 9.0% of mass 198	20705	6.85		Pass
275	10.0 - 30.0% of mass 198	84325	27.9		Pass
365	1.0 - 100.0% of mass 198	10108	3.34		Pass
441	Present, but less than mass 443	30682	10.1	(84.2) [b]	Pass
442	40.0 - 100.0% of mass 198	191162	63.2		Pass
443	17.0 - 23.0% of mass 442	36428	12.0	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3785-IC3785	5P79957.D	12/01/21	22:09	00:20	Initial cal 20
E5P3785-IC3785	5P79958.D	12/01/21	22:36	00:47	Initial cal 16
E5P3785-ICC3785	5P79959.D	12/01/21	23:02	01:13	Initial cal 10
E5P3785-IC3785	5P79960.D	12/01/21	23:30	01:41	Initial cal 5
E5P3785-IC3785	5P79961.D	12/01/21	23:57	02:08	Initial cal 2
E5P3785-IC3785	5P79962.D	12/02/21	00:24	02:35	Initial cal 1
E5P3785-IC3785	5P79963.D	12/02/21	00:51	03:02	Initial cal 0.4
E5P3785-IC3785	5P79964.D	12/02/21	01:17	03:28	Initial cal 0.2
E5P3785-ICV3785	5P79965.D	12/02/21	01:45	03:56	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-DFTPP
Lab File ID: 5P80176.D
Instrument ID: GCMS5P
Injection Date: 12/09/21
Injection Time: 00:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18190	31.0		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	21015	35.8		Pass
70	Less than 2.0% of mass 69	84	0.14	(0.40) [a]	Pass
127	40.0 - 60.0% of mass 198	29550	50.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	58650	100.0		Pass
199	5.0 - 9.0% of mass 198	3881	6.62		Pass
275	10.0 - 30.0% of mass 198	14712	25.1		Pass
365	1.0 - 100.0% of mass 198	1822	3.11		Pass
441	Present, but less than mass 443	5848	9.97	(82.8) [b]	Pass
442	40.0 - 100.0% of mass 198	36738	62.6		Pass
443	17.0 - 23.0% of mass 442	7065	12.0	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3794-IC3794	5P80177.D	12/09/21	01:11	00:18	Initial cal 0.2
E5P3794-IC3794	5P80178.D	12/09/21	01:38	00:45	Initial cal 0.4
E5P3794-IC3794	5P80179.D	12/09/21	02:05	01:12	Initial cal 1
E5P3794-IC3794	5P80180.D	12/09/21	02:32	01:39	Initial cal 2
E5P3794-IC3794	5P80181.D	12/09/21	02:59	02:06	Initial cal 5
E5P3794-ICC3794	5P80182.D	12/09/21	03:26	02:33	Initial cal 10
E5P3794-IC3794	5P80183.D	12/09/21	03:53	03:00	Initial cal 16
E5P3794-IC3794	5P80184.D	12/09/21	04:19	03:26	Initial cal 20
E5P3794-ICV3794	5P80185.D	12/09/21	04:47	03:54	Initial cal verification 10
E5P3794-ICV3794	5P80186.D	12/09/21	05:13	04:20	Initial cal verification 10
E5P3794-ICV3794	5P80187.D	12/09/21	05:40	04:47	Initial cal verification 10
E5P3794-ICV3794	5P80188.D	12/09/21	06:07	05:14	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3795-DFTPP	**Injection Date:**	12/09/21
Lab File ID:	5P80191.D	**Injection Time:**	12:44
Instrument ID:	GCMS5P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18799	32.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	21518	37.4		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	28913	50.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	57581	100.0		Pass
199	5.0 - 9.0% of mass 198	3946	6.85		Pass
275	10.0 - 30.0% of mass 198	14549	25.3		Pass
365	1.0 - 100.0% of mass 198	1899	3.30		Pass
441	Present, but less than mass 443	5422	9.42	(86.8) [b]	Pass
442	40.0 - 100.0% of mass 198	32893	57.1		Pass
443	17.0 - 23.0% of mass 442	6248	10.9	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3795-ICV3794	5P80192.D	12/09/21	12:58	00:14	Initial cal verification 10
E5P3795-CC3794	5P80193.D	12/09/21	13:25	00:41	Continuing cal 10
E5P3795-CC3785	5P80194.D	12/09/21	13:51	01:07	Continuing cal 10
OP36390-MB1	5P80195.D	12/09/21	14:46	02:02	Method Blank
OP36390-BS1	5P80196.D	12/09/21	15:13	02:29	Blank Spike
OP36390-BSD	5P80197.D	12/09/21	15:40	02:56	Blank Spike Duplicate
ZZZZZZ	5P80198.D	12/09/21	16:07	03:23	(unrelated sample)
E5P3795-ECC3794	5P80199.D	12/09/21	16:57	04:13	Ending cal 10
E5P3795-ECC3785	5P80200.D	12/09/21	17:36	04:52	Ending cal 10

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3826-DFTPP	**Injection Date:**	01/07/22
Lab File ID:	5P80846.D	**Injection Time:**	02:45
Instrument ID:	GCMS5P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	24316	34.6		Pass
68	Less than 2.0% of mass 69	72	0.10	(0.26) [a]	Pass
69	Mass 69 relative abundance	27748	39.5		Pass
70	Less than 2.0% of mass 69	144	0.20	(0.52) [a]	Pass
127	40.0 - 60.0% of mass 198	41122	58.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	70269	100.0		Pass
199	5.0 - 9.0% of mass 198	4978	7.08		Pass
275	10.0 - 30.0% of mass 198	19060	27.1		Pass
365	1.0 - 100.0% of mass 198	3088	4.39		Pass
441	Present, but less than mass 443	1514	2.15	(24.8) [b]	Pass
442	40.0 - 100.0% of mass 198	29282	41.7		Pass
443	17.0 - 23.0% of mass 442	6102	8.68	(20.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3826-CC3794	5P80847.D	01/07/22	02:59	00:14	Continuing cal 10
E5P3826-CC3785	5P80848.D	01/07/22	03:25	00:40	Continuing cal 10
OP37474-MB1	5P80851.D	01/07/22	05:11	02:26	Method Blank
OP37474-BS1	5P80852.D	01/07/22	05:37	02:52	Blank Spike
OP37474-BSD	5P80853.D	01/07/22	06:03	03:18	Blank Spike Duplicate
JD36682-2	5P80854A.D	01/07/22	09:46	07:01	HOFF SW-4
JD36682-3	5P80855.D	01/07/22	10:12	07:27	HOFF SW-3
JD36682-4	5P80856.D	01/07/22	10:38	07:53	HOFF SW-2
JD36682-5	5P80857.D	01/07/22	11:05	08:20	HOFF SW-1
JD36682-6	5P80858.D	01/07/22	11:31	08:46	HOFF-DUP-121321SW

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8913-DFTPP
Lab File ID: F203410.D
Instrument ID: GCMSF
Injection Date: 11/10/21
Injection Time: 03:18

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	60680	39.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	74819	49.2		Pass
70	Less than 2.0% of mass 69	267	0.18	(0.36) [a]	Pass
127	40.0 - 60.0% of mass 198	70330	46.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	151930	100.0		Pass
199	5.0 - 9.0% of mass 198	10548	6.94		Pass
275	10.0 - 30.0% of mass 198	43138	28.4		Pass
365	1.0 - 100.0% of mass 198	4638	3.05		Pass
441	Present, but less than mass 443	15889	10.5	(82.3) [b]	Pass
442	40.0 - 100.0% of mass 198	100954	66.4		Pass
443	17.0 - 23.0% of mass 442	19303	12.7	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8913-IC8913	F203411.D	11/10/21	03:41	00:23	Initial cal 1
EF8913-IC8913	F203412.D	11/10/21	04:09	00:51	Initial cal 2
EF8913-IC8913	F203413.D	11/10/21	04:37	01:19	Initial cal 5
EF8913-IC8913	F203414.D	11/10/21	05:04	01:46	Initial cal 10
EF8913-IC8913	F203415.D	11/10/21	05:32	02:14	Initial cal 25
EF8913-ICC8913	F203416.D	11/10/21	06:00	02:42	Initial cal 50
EF8913-IC8913	F203417.D	11/10/21	06:27	03:09	Initial cal 80
EF8913-IC8913	F203418.D	11/10/21	06:55	03:37	Initial cal 100
EF8913-ICV8913	F203419.D	11/10/21	07:22	04:04	Initial cal verification 50
EF8913-ICV8913	F203420.D	11/10/21	07:50	04:32	Initial cal verification 50
EF8913-ICV8913	F203421.D	11/10/21	08:17	04:59	Initial cal verification 50
EF8913-ICV8913	F203422.D	11/10/21	08:44	05:26	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8914-DFTPP
Lab File ID: F203423.D
Instrument ID: GCMSF
Injection Date: 11/10/21
Injection Time: 09:08

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	63540	40.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	78744	50.6		Pass
70	Less than 2.0% of mass 69	687	0.44	(0.87) [a]	Pass
127	40.0 - 60.0% of mass 198	73872	47.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	155549	100.0		Pass
199	5.0 - 9.0% of mass 198	10181	6.55		Pass
275	10.0 - 30.0% of mass 198	44115	28.4		Pass
365	1.0 - 100.0% of mass 198	5329	3.43		Pass
441	Present, but less than mass 443	14302	9.19	(77.3) [b]	Pass
442	40.0 - 100.0% of mass 198	92789	59.7		Pass
443	17.0 - 23.0% of mass 442	18500	11.9	(19.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8914-IC8914	F203424.D	11/10/21	09:20	00:12	Initial cal 80
EF8914-ICC8914	F203425.D	11/10/21	09:48	00:40	Initial cal 50
EF8914-IC8914	F203426.D	11/10/21	10:15	01:07	Initial cal 25
EF8914-IC8914	F203427.D	11/10/21	10:43	01:35	Initial cal 10
EF8914-IC8914	F203428.D	11/10/21	11:10	02:02	Initial cal 5
EF8914-IC8914	F203429.D	11/10/21	11:38	02:30	Initial cal 2
EF8914-IC8914	F203430.D	11/10/21	12:05	02:57	Initial cal 1
EF8914-IC8914	F203433.D	11/10/21	14:29	05:21	Initial cal 100
EF8914-ICV8914	F203434.D	11/10/21	14:57	05:49	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8915-DFTPP
Lab File ID: F203435.D
Instrument ID: GCMSF
Injection Date: 11/10/21
Injection Time: 22:06

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	64133	37.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	80909	47.1		Pass
70	Less than 2.0% of mass 69	264	0.15	(0.33) [a]	Pass
127	40.0 - 60.0% of mass 198	79522	46.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	171602	100.0		Pass
199	5.0 - 9.0% of mass 198	11769	6.86		Pass
275	10.0 - 30.0% of mass 198	47634	27.8		Pass
365	1.0 - 100.0% of mass 198	5729	3.34		Pass
441	Present, but less than mass 443	16520	9.63	(77.5) [b]	Pass
442	40.0 - 100.0% of mass 198	113189	66.0		Pass
443	17.0 - 23.0% of mass 442	21307	12.4	(18.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8915-IC8915	F203436.D	11/10/21	22:29	00:23	Initial cal 100
EF8915-IC8915	F203437.D	11/10/21	22:57	00:51	Initial cal 80
EF8915-ICC8915	F203438.D	11/10/21	23:24	01:18	Initial cal 50
EF8915-IC8915	F203439.D	11/10/21	23:51	01:45	Initial cal 25
EF8915-IC8915	F203440.D	11/11/21	00:18	02:12	Initial cal 10
EF8915-IC8915	F203441.D	11/11/21	00:46	02:40	Initial cal 5
EF8915-IC8915	F203442.D	11/11/21	01:13	03:07	Initial cal 2
EF8915-IC8915	F203443.D	11/11/21	01:40	03:34	Initial cal 1
EF8915-ICV8915	F203444.D	11/11/21	03:10	05:04	Initial cal verification 50
EF8915-ICV8915	F203445.D	11/11/21	04:04	05:58	Initial cal verification 50
EF8915-ICV8915	F203446.D	11/11/21	04:31	06:25	Initial cal verification 50
EF8915-ICV8915	F203447.D	11/11/21	04:58	06:52	Initial cal verification 50
EF8915-ICV8915	F203448.D	11/11/21	05:25	07:19	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8967-DFTPP
Lab File ID: F204532.D
Instrument ID: GCMSF
Injection Date: 12/23/21
Injection Time: 05:45

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	40930	34.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	52635	43.9		Pass
70	Less than 2.0% of mass 69	333	0.28	(0.63) [a]	Pass
127	40.0 - 60.0% of mass 198	53973	45.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	120000	100.0		Pass
199	5.0 - 9.0% of mass 198	7991	6.66		Pass
275	10.0 - 30.0% of mass 198	34205	28.5		Pass
365	1.0 - 100.0% of mass 198	4053	3.38		Pass
441	Present, but less than mass 443	14519	12.1	(81.8) [b]	Pass
442	40.0 - 100.0% of mass 198	92672	77.2		Pass
443	17.0 - 23.0% of mass 442	17750	14.8	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF8967-CC8913	F204533.D	12/23/21	06:01	00:16	Continuing cal 25
EF8967-CC8914	F204534.D	12/23/21	06:26	00:41	Continuing cal 25
EF8967-CC8915	F204535.D	12/23/21	06:51	01:06	Continuing cal 25
OP37283-MB1	F204538A.D	12/23/21	08:06	02:21	Method Blank
OP37283-BS13	F204539.D	12/23/21	08:31	02:46	Blank Spike
JD36682-11	F204540.D	12/23/21	08:56	03:11	HOFF DUP-121321SED
JD36682-10	F204541.D	12/23/21	09:20	03:35	HOFF SED-1
JD36682-9	F204542.D	12/23/21	09:45	04:00	HOFF SED-2
JD36682-8	F204543.D	12/23/21	10:10	04:25	HOFF SED-3
OP37283-MS	F204544.D	12/23/21	10:35	04:50	Matrix Spike
OP37283-MSD	F204545.D	12/23/21	11:00	05:15	Matrix Spike Duplicate
JD36682-7	F204546.D	12/23/21	11:25	05:40	HOFF SED-4
ZZZZZZ	F204547.D	12/23/21	11:50	06:05	(unrelated sample)
ZZZZZZ	F204548.D	12/23/21	12:14	06:29	(unrelated sample)
ZZZZZZ	F204549.D	12/23/21	12:39	06:54	(unrelated sample)
ZZZZZZ	F204550.D	12/23/21	13:04	07:19	(unrelated sample)
ZZZZZZ	F204551.D	12/23/21	13:29	07:44	(unrelated sample)
ZZZZZZ	F204552.D	12/23/21	13:54	08:09	(unrelated sample)

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E2P4704-CC4696	**Injection Date:**	12/16/21
Lab File ID:	2P104781.D	**Injection Time:**	03:55
Instrument ID:	GCMS2P	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	514335	4.54	1830485	5.55	1004832	7.51	1795706	9.63	1551628	13.77	1597166	15.86
Check Std [b]	802868	4.49	2888554	5.49	1592375	7.44	2809638	9.56	2281000	13.70	2514710	15.80
Upper Limit [c]	1605736	4.66	5777108	5.66	3184750	7.61	5619276	9.73	4562000	13.87	5029420	15.97
Lower Limit [d]	401434	4.32	1444277	5.32	796188	7.27	1404819	9.39	1140500	13.53	1257355	15.63

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP37154-MB1	899282	4.49	3325657	5.49	1716296	7.43	2950754	9.55	2271292	13.69	2183512	15.79
OP37154-BS1	866324	4.49	3077565	5.49	1647137	7.44	2868093	9.56	2354176	13.70	2305810	15.79
OP37131-MB1	892816	4.49	3302366	5.49	1689955	7.43	2939733	9.55	2277652	13.69	2155713	15.79
OP37131-BS1	833964	4.49	3041672	5.49	1667459	7.44	2961326	9.56	2404903	13.70	2308513	15.79
ZZZZZZ	965115	4.51	3524110	5.49	1841085	7.44	3424231	9.55	2794699	13.69	2618293	15.79
ZZZZZZ	950939	4.52	3296397	5.50	1912779	7.44	3351296	9.55	2602400	13.69	2491163	15.79
ZZZZZZ	908216	4.49	3314989	5.49	1819725	7.44	3032615	9.56	2357480	13.72	2351106	15.81
ZZZZZZ	1040044	4.49	3802974	5.49	1933049	7.44	3285966	9.55	2455917	13.69	2300983	15.79
ZZZZZZ	928414	4.49	3506643	5.49	1698246	7.44	2982971	9.55	2320059	13.69	2227681	15.79
OP37154-MS	855874	4.49	3147780	5.49	1681696	7.44	2961912	9.56	2252494	13.70	2214843	15.80
OP37154-MSD	959477	4.49	3466023	5.49	1871356	7.44	3230851	9.56	2446947	13.70	2422893	15.80
JD36682-7 [e]	987704	4.49	3633609	5.49	1876393	7.44	3228483	9.56	2316210	13.70	2237201	15.80
OP37131-MS	928903	4.49	3412688	5.49	1870261	7.44	3227632	9.56	2361182	13.71	2427392	15.81
OP37131-MSD	978469	4.49	3509295	5.49	1886645	7.44	3298723	9.56	2462700	13.71	2400959	15.80
JD36621-1	1002018	4.49	3772831	5.49	1963896	7.44	3247582	9.56	2362438	13.70	2392931	15.80
ZZZZZZ	936033	4.49	3465856	5.49	1737050	7.44	3013745	9.56	2278258	13.72	2391026	15.83

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: E2P4696-ICC4696 2P104596.D 12/04/21 08:40
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
(e) Sample used for QC purposes only.

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E2P4709-CC4696	**Injection Date:**	12/22/21
Lab File ID:	2P104910.D	**Injection Time:**	22:48
Instrument ID:	GCMS2P	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	514335	4.54	1830485	5.55	1004832	7.51	1795706	9.63	1551628	13.77	1597166	15.86
Check Std [b]	557568	4.45	2221184	5.45	1302783	7.39	2235171	9.50	1405686	13.64	1240786	15.73
Upper Limit [c]	1115136	4.62	4442368	5.62	2605566	7.56	4470342	9.67	2811372	13.81	2481572	15.90
Lower Limit [d]	278784	4.28	1110592	5.28	651392	7.22	1117586	9.33	702843	13.47	620393	15.56

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP37283-MB1	388105	4.45	1561616	5.44	921527	7.38	1750408	9.50	1179251	13.64	1001597	15.74
OP37283-BS1	341649	4.45	1364180	5.45	794328	7.39	1388611	9.50	944606	13.64	841333	15.74
OP37044B-MB1	347434	4.45	1395416	5.44	814236	7.39	1495125	9.50	1111613	13.64	1014037	15.74
OP37044B-BSD	319558	4.45	1234836	5.45	686000	7.39	1154581	9.50	761008	13.64	698421	15.74
ZZZZZZ	449946	4.46	1737235	5.45	925729	7.39	1487797	9.51	1034556	13.64	1011158	15.74
ZZZZZZ	347061	4.45	1431565	5.44	799877	7.39	1329863	9.50	777848	13.64	768464	15.74
ZZZZZZ	382862	4.46	1581059	5.45	850287	7.40	1331381	9.51	707787	13.66	792267	15.76
ZZZZZZ	413074	4.46	1632414	5.45	831645	7.39	1181726	9.51	706685	13.65	766675	15.76
ZZZZZZ	412440	4.46	1657273	5.45	880370	7.39	1336239	9.51	778495	13.65	790617	15.75
ZZZZZZ	438008	4.46	1730542	5.45	873177	7.39	1213899	9.51	799791	13.66	836947	15.76

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: E2P4696-ICC4696 2P104596.D 12/04/21 08:40
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2645-CC2551	**Injection Date:**	01/07/22
Lab File ID:	4P50561.D	**Injection Time:**	15:47
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	21663	6.68	32433	8.16	58173	10.28	30360	12.93
Upper Limit [a]	43326	7.18	64866	8.66	116346	10.78	60720	13.43
Lower Limit [b]	10832	6.18	16217	7.66	29087	9.78	15180	12.43

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37474A-MB1	16715	6.68	25062	8.16	46626	10.27	23016	12.93
OP37474A-BS12	17523	6.68	26235	8.15	47498	10.27	21406	12.93
OP37474A-BSD12	14952	6.68	22742	8.15	41226	10.27	20409	12.93
JD36682-3 [c]	14761	6.68	21129	8.15	37272	10.27	18046	12.93
JD36682-4 [c]	15003	6.68	21348	8.15	37684	10.27	18463	12.93
JD36682-5 [c]	14743	6.68	22083	8.15	37385	10.27	17718	12.93
JD36682-6 [c]	16133	6.68	23464	8.15	40101	10.27	19562	12.93
ZZZZZZ	15183	6.67	22282	8.15	40106	10.27	20294	12.93
ZZZZZZ	13406	6.68	19581	8.15	33642	10.27	15306	12.93
ZZZZZZ	14729	6.68	22132	8.15	37006	10.27	16641	12.93
ZZZZZZ	17552	6.67	25688	8.15	41255	10.27	19245	12.92
ZZZZZZ	15436	6.67	23010	8.15	38681	10.27	18064	12.92
ZZZZZZ	16478	6.67	23551	8.15	41814	10.27	19506	12.92
ZZZZZZ	14076	6.67	20446	8.15	33909	10.27	17276	12.92
ZZZZZZ	16063	6.68	57007	8.15	33941	10.27	16572	12.92
ZZZZZZ	15875	6.67	22889	8.15	38792	10.27	18335	12.92
ZZZZZZ	18676	6.67	26865	8.15	42759	10.27	22425	12.93
ZZZZZZ	789*	6.68	668*	8.15	735*	10.27	338*	12.93
ZZZZZZ	16807	6.67	22766	8.15	40540	10.27	19275	12.93
ZZZZZZ	17730	6.67	26105	8.15	41674	10.27	20479	12.92
ZZZZZZ	103245*	6.70	162867*	8.19	82103	10.31	22143	12.93
ZZZZZZ	16476	6.68	45823	8.15	46735	10.27	22769	12.92
ZZZZZZ	17301	6.68	30506	8.17	49761	10.28	22357	12.93

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Sample extracted outside the holding time.

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2648-CC2647	**Injection Date:**	01/11/22
Lab File ID:	4P50634.D	**Injection Time:**	11:50
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	99135	6.66	147991	8.12	258690	10.24	147663	12.90
Upper Limit [a]	198270	7.16	295982	8.62	517380	10.74	295326	13.40
Lower Limit [b]	49568	6.16	73996	7.62	129345	9.74	73832	12.40

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37448-MB1	72483	6.66	106581	8.12	192052	10.24	107694	12.90
OP37448-BS1	72466	6.66	109209	8.12	199461	10.24	111348	12.90
OP37448-BSD	77831	6.66	117181	8.12	210104	10.24	117880	12.90
JD36682-2 [c]	78857	6.66	113322	8.12	187891	10.24	101106	12.90
ZZZZZZ	73781	6.66	109115	8.12	187997	10.24	105243	12.90
ZZZZZZ	78820	6.66	115203	8.12	202707	10.24	115211	12.90
ZZZZZZ	77512	6.66	113387	8.12	204699	10.24	113864	12.90
ZZZZZZ	80051	6.66	115990	8.12	204112	10.24	115675	12.90
ZZZZZZ	88605	6.66	125540	8.12	206973	10.24	109388	12.90

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Sample extracted outside the holding time.

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E5P3826-CC3794	**Injection Date:**	01/07/22
Lab File ID:	5P80847.D	**Injection Time:**	02:59
Instrument ID:	GCMS5P	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	70269	4.37	274509	5.40	176145	7.38	311284	9.52	287057	13.68	271085	15.78
Upper Limit [a]	140538	4.87	549018	5.90	352290	7.88	622568	10.02	574114	14.18	542170	16.28
Lower Limit [b]	35135	3.87	137255	4.90	88073	6.88	155642	9.02	143529	13.18	135543	15.28

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP37474-MB1	68134	4.37	270421	5.40	155806	7.38	285595	9.52	275449	13.67	270447	15.77
OP37474-BS1	62403	4.37	230999	5.40	140724	7.38	235546	9.52	227532	13.67	224572	15.77
OP37474-BSD	66076	4.37	249478	5.40	149296	7.38	252062	9.52	245754	13.67	242865	15.77
JD36682-2 [c]	76043	4.37	294242	5.40	185363	7.38	300222	9.52	272713	13.67	254629	15.78
JD36682-3 [c]	74466	4.37	294138	5.40	169915	7.38	302061	9.52	275331	13.67	260646	15.77
JD36682-4 [c]	77003	4.37	304386	5.40	177172	7.38	316096	9.52	291115	13.67	266977	15.77
JD36682-5 [c]	71336	4.37	291310	5.40	164813	7.38	298026	9.52	278817	13.67	259545	15.77
JD36682-6 [c]	77510	4.37	294078	5.40	165806	7.38	287521	9.52	269829	13.67	254516	15.77

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-d10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Sample extracted outside the holding time.

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	EF8967-CC8913	**Injection Date:**	12/23/21
Lab File ID:	F204533.D	**Injection Time:**	06:01
Instrument ID:	GCMSF	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	173587	4.65	647273	5.57	376883	6.98	698592	8.86	689214	14.15	678962	17.20
Check Std [b]	172666	4.59	678794	5.51	394821	6.90	749019	8.76	773845	14.03	784802	17.07
Upper Limit [c]	345332	4.76	1357588	5.68	789642	7.07	1498038	8.93	1547690	14.20	1569604	17.24
Lower Limit [d]	86333	4.42	339397	5.34	197411	6.73	374510	8.59	386923	13.86	392401	16.90

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP37283-MB1	178886	4.59	704294	5.51	394790	6.90	744531	8.75	704246	14.02	696127	17.07
OP37283-BS13	187410	4.59	721020	5.51	402179	6.90	740404	8.76	680723	14.01	687308	17.06
JD36682-11	193171	4.59	753583	5.51	419498	6.90	779448	8.75	710040	14.01	685478	17.06
JD36682-10	162318	4.59	624130	5.51	356249	6.89	667503	8.75	664972	14.01	683898	17.06
JD36682-9	185529	4.59	718366	5.51	396731	6.89	718208	8.75	627614	14.01	627752	17.06
JD36682-8	178161	4.59	688923	5.51	382324	6.90	699133	8.76	612158	14.03	653802	17.08
OP37283-MS	176036	4.59	662263	5.51	359010	6.90	662299	8.76	636152	14.03	665019	17.08
OP37283-MSD	169291	4.59	653072	5.51	358228	6.90	643558	8.76	582367	14.03	630493	17.08
JD36682-7	170357	4.59	671100	5.51	362607	6.90	654154	8.76	575519	14.02	613235	17.07
ZZZZZZ	182868	4.59	691997	5.51	366180	6.90	648212	8.76	604856	14.03	647153	17.09
ZZZZZZ	166237	4.59	643838	5.51	355229	6.90	628356	8.76	593091	14.04	621824	17.10
ZZZZZZ	168838	4.59	646703	5.51	348980	6.90	629960	8.76	610157	14.04	632175	17.09
ZZZZZZ	176906	4.59	691236	5.51	381596	6.91	698556	8.76	648622	14.04	674979	17.10
ZZZZZZ	160668	4.59	608452	5.51	333731	6.91	603931	8.76	576044	14.04	603052	17.10
ZZZZZZ	174614	4.59	687084	5.51	375247	6.91	687638	8.77	647978	14.04	668818	17.10

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: EF8913-ICC8913 F203416.D 11/10/21 06:00
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Surrogate Recovery Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8270E **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD36682-7	F204546.D	78	76	87	69	80	89
JD36682-7	2P104794.D						
JD36682-8	F204543.D	80	79	86	72	82	89
JD36682-9	F204542.D	77	75	85	70	80	91
JD36682-10	F204541.D	81	78	92	76	83	91
JD36682-11	F204540.D	66	65	74	62	68	80
OP37283-BS1	2P104916.D	59	62	66	57	58	73
OP37283-BS13	F204539.D	80	76	86	73	80	91
OP37283-MB1	2P104915.D	74	76	77	74	75	95
OP37283-MB1	F204538A.D	77	73	79	68	75	85
OP37283-MS	F204544.D	76	76	93	71	85	90
OP37283-MSD	F204545.D	77	75	86	69	81	87

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-109%
S2 = Phenol-d5	10-105%
S3 = 2,4,6-Tribromophenol	10-135%
S4 = Nitrobenzene-d5	10-119%
S5 = 2-Fluorobiphenyl	18-112%
S6 = Terphenyl-d14	18-125%

Surrogate Recovery Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8270E **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD36682-2	5P80854A.D	39	25	100	92	88	67
JD36682-3	5P80855.D	31	19	73	65	71	52
JD36682-4	5P80856.D	22	13	49	45	50	32
JD36682-5	5P80857.D	22	12	54	48	54	41
JD36682-6	5P80858.D	26	16	69	63	70	56
OP37474-BS1	5P80852.D	31	19	74	60	60	65
OP37474-BSD	5P80853.D	31	21	68	59	59	62
OP37474-MB1	5P80851.D	29	17	59	52	57	56

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-73%
S2 = Phenol-d5	10-64%
S3 = 2,4,6-Tribromophenol	31-130%
S4 = Nitrobenzene-d5	28-126%
S5 = 2-Fluorobiphenyl	26-114%
S6 = Terphenyl-d14	16-122%

Surrogate Recovery Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8270E BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JD36682-2	4P50638.D	107	107	84
JD36682-3	4P50567.D	113	92	67
JD36682-4	4P50568.D	81	65	42
JD36682-5	4P50569.D	84	67	52
JD36682-6	4P50570.D	108	88	73
OP37474A-BS12	4P50564.D	120	94	100
OP37474A-BSD12	4P50565.D	129* [a]	96	109
OP37474A-MB1	4P50563.D	80	60	65

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	29-124%
S2 = 2-Fluorobiphenyl	23-122%
S3 = Terphenyl-d14	22-130%

(a) Outside of in house control limits.

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4696-ICC4696
Lab FileID: 2P104596.D

Response Factor Report MS2P

Method : Z:\svoa-gcms\cur...ethods\m2p4696.m (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Dec 07 12:23:28 2021
Response via : Initial Calibration

Calibration Files
2 =2p104592a.D 5 =2p104593.D 25 =2p104595.D 80 =2p104597.D
100 =2p104598.D 50 =2p104596.D 1 =2p104591.D 10 =2p104594.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.477	0.467	0.520	0.571	0.571	0.531	0.523	0.478	0.517	7.85
3) Pyridine	1.069	1.101	1.169	1.467	1.446	1.284		1.175	1.245	12.86
4) N-Nitrosodim	0.602	0.597	0.695	0.773	0.778	0.748	0.627	0.626	0.681	11.36
5) 2-Fluorophen	1.128	1.091	1.205	1.346	1.356	1.266	1.152	1.164	1.213	8.19
6) Indene	1.952	2.060	2.140	2.222	2.204	2.157	2.005	2.031	2.096	4.70
7) Cumene	2.572	2.730	2.918	3.120	3.055	2.998	2.762	2.789	2.868	6.48
8) Phenol-d5	1.377	1.453	1.558	1.675	1.662	1.599	1.354	1.448	1.516	8.26
9) Phenol	1.556	1.525	1.651	1.745	1.732	1.701	1.587	1.547	1.630	5.40
10) Aniline	1.649	1.776	1.903	2.055	2.061	1.970	1.619	1.814	1.856	9.20
11) bis(2-Chloro	1.018	1.088	1.115	1.138	1.120	1.122	1.001	1.083	1.086	4.65
12) 2-Chlorophen	1.225	1.233	1.290	1.345	1.354	1.308	1.167	1.232	1.269	5.16
13) Decane	1.123	1.147	1.217	1.274	1.253	1.229	1.234	1.184	1.208	4.32
14) 1,3-Dichloro	1.421	1.479	1.509	1.561	1.519	1.513	1.415	1.437	1.482	3.56
15) 1,4-Dichloro	1.392	1.440	1.500	1.547	1.543	1.521	1.480	1.441	1.483	3.72
16) Benzyl alcoh	0.709	0.735	0.794	0.823	0.828	0.793	0.666	0.735	0.760	7.62
17) 1,2-Dichloro	1.285	1.377	1.416	1.458	1.470	1.426	1.420	1.374	1.403	4.16
18) Acetophenone	1.435	1.536	1.623	1.665	1.686	1.617	1.461	1.548	1.571	5.85
19) 2-Methylphen	1.015	1.077	1.100	1.151	1.160	1.121	1.052	1.096	1.096	4.44
20) 2,2'-oxybis(	0.321	0.316	0.329	0.344	0.342	0.327	0.318	0.317	0.327	3.40
21) 3&4-Methylph	1.052	1.122	1.175	1.205	1.208	1.162	1.073	1.110	1.138	5.14
22) n-Nitroso-di	0.679	0.766	0.775	0.776	0.778	0.778	0.700	0.736	0.748	5.28
23) Hexachloroet	0.465	0.470	0.490	0.522	0.521	0.495	0.494	0.475	0.492	4.39
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.291	0.307	0.328	0.333	0.328	0.332	0.283	0.306	0.313	6.24
26) Nitrobenzene	0.306	0.313	0.317	0.321	0.320	0.323	0.288	0.301	0.311	3.88
27) Quinoline	0.545	0.587	0.622	0.662	0.659	0.642	0.541	0.580	0.605	8.04
28) Isophorone	0.513	0.560	0.587	0.611	0.609	0.604	0.518	0.556	0.570	6.92
29) 2-Nitropheno	0.180	0.175	0.195	0.201	0.204	0.199	0.166	0.178	0.187	7.70
30) 2,4-Dimethyl	0.312	0.312	0.329	0.331	0.325	0.332	0.281	0.313	0.317	5.29
31) Benzoic acid		0.091	0.215	0.267	0.268	0.244		0.145	0.205	35.10
---- Quadratic regression ---- Coefficient = 0.9995										
Response Ratio = -0.02061 + 0.23948 *A + 0.01611 *A^2										
32) bis(2-Chloro	0.328	0.345	0.361	0.373	0.367	0.363	0.325	0.340	0.350	5.25
33) 2,4-Dichloro	0.287	0.275	0.294	0.302	0.302	0.299	0.248	0.278	0.286	6.46
34) 2,6-Dichloro	0.270	0.278	0.283	0.294	0.293	0.288	0.243	0.273	0.278	6.02
35) 1,3,5-Trichl	0.343	0.333	0.340	0.348	0.342	0.350	0.330	0.328	0.339	2.44
36) 1,2,4-Trichl	0.315	0.314	0.326	0.334	0.327	0.329	0.298	0.313	0.319	3.68
37) 1,2,3-Trichl	0.297	0.301	0.304	0.316	0.310	0.310	0.272	0.299	0.301	4.41
38) Naphthalene	0.919	0.930	0.964	0.994	0.965	0.987	0.919	0.913	0.949	3.42
39) 4-Chloroanil	0.353	0.379	0.410	0.435	0.429	0.428	0.372	0.379	0.398	7.80
40) 2,3-Dichloro	0.314	0.324	0.350	0.369	0.364	0.358	0.319	0.324	0.340	6.49
41) Hydroquinone	0.243	0.268	0.304	0.310	0.312	0.315	0.222	0.260	0.279	12.89
42) Hexachlorobu	0.149	0.153	0.163	0.172	0.171	0.168	0.147	0.161	0.160	6.10

Initial Calibration Summary

Job Number: JD36682 **Sample:** E2P4696-ICC4696
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2P104596.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

43)	4-Chloro-3-m	0.236	0.260	0.279	0.293	0.291	0.291	0.243	0.259	0.269	8.36
44)	2-Methylnaph	0.536	0.568	0.606	0.633	0.627	0.623	0.557	0.562	0.589	6.35
45)	1-Methylnaph	0.538	0.547	0.570	0.601	0.591	0.592	0.514	0.546	0.562	5.46
46)	I Acenaphthene-d10	----------ISTD----------									
47)	Hexachlorocy	0.159	0.166	0.259	0.302	0.313	0.291		0.215	0.243	26.39
	---- Quadratic regression ---- Coefficient = 0.9990										
	Response Ratio = -0.01448 + 0.25588 *A + 0.01242 *A^2										
48)	1,2,4,5-Tetr	0.528	0.556	0.574	0.589	0.584	0.590	0.541	0.568	0.566	4.02
49)	2,4,6-Trichl	0.349	0.356	0.381	0.390	0.395	0.386	0.334	0.370	0.370	5.92
50)	2,4,5-Trichl	0.375	0.385	0.401	0.414	0.407	0.414	0.404	0.395	0.399	3.49
51)	2-Fluorobiph	1.255	1.262	1.309	1.323	1.321	1.335	1.285	1.273	1.295	2.35
52)	2-Chloronaph	1.094	1.096	1.132	1.118	1.138	1.143	1.082	1.104	1.113	2.03
53)	Biphenyl	1.401	1.466	1.485	1.518	1.507	1.517	1.418	1.430	1.468	3.18
54)	2-Nitroanili	0.265	0.282	0.313	0.319	0.319	0.317	0.234	0.292	0.293	10.55
55)	Dimethylphth	1.131	1.191	1.244	1.296	1.300	1.252	1.112	1.202	1.216	5.77
56)	Acenaphthyle	1.484	1.564	1.638	1.649	1.659	1.663	1.434	1.588	1.585	5.43
57)	2,6-Dinitrot	0.219	0.246	0.286	0.303	0.306	0.302	0.204	0.263	0.266	14.92
58)	3-Nitroanili	0.259	0.284	0.330	0.353	0.352	0.338	0.237	0.302	0.307	14.24
59)	Acenaphthene	1.026	1.118	1.151	1.182	1.176	1.178	1.050	1.110	1.124	5.33
60)	2,4-Dinitrop	0.082	0.093	0.174	0.221	0.222	0.201		0.122	0.159	37.59
	---- Quadratic regression ---- Coefficient = 0.9978										
	Response Ratio = -0.01340 + 0.16950 *A + 0.01205 *A^2										
61)	4-Nitropheno	0.117	0.152	0.166	0.164	0.163		0.126	0.148		14.62
62)	Dibenzofuran	1.528	1.548	1.612	1.650	1.641	1.645	1.513	1.547	1.585	3.62
63)	2,4-Dinitrot	0.286	0.330	0.386	0.397	0.395	0.399	0.264	0.353	0.351	15.09
64)	2,3,4,6-Tetr	0.256	0.281	0.310	0.329	0.335	0.320	0.253	0.282	0.296	10.90
65)	Diethylphtha	1.078	1.171	1.223	1.278	1.269	1.263	1.040	1.124	1.181	7.80
66)	Fluorene	1.162	1.234	1.292	1.343	1.319	1.339	1.178	1.243	1.264	5.58
67)	4-Chlorophen	0.559	0.581	0.612	0.618	0.615	0.612	0.563	0.587	0.593	4.09
68)	4-Nitroanili	0.209	0.261	0.322	0.343	0.333	0.327		0.282	0.297	16.36
69)	I Phenanthrene-d10	----------ISTD----------									
70)	4,6-Dinitro-	0.099	0.128	0.141	0.142	0.136		0.106	0.125		14.82
71)	n-Nitrosodip	0.615	0.624	0.637	0.644	0.645	0.641	0.589	0.628	0.628	3.01
72)	Pentachloron	0.029	0.036	0.038	0.038	0.037		0.037	0.036#		9.34
73)	1,2-Diphenyl	0.610	0.606	0.647	0.641	0.635	0.641	0.567	0.635	0.623	4.35
74)	2,4,6-Tribro	0.087	0.093	0.106	0.113	0.117	0.109	0.095	0.099	0.102	10.21
75)	4-Bromopheny	0.174	0.188	0.201	0.208	0.213	0.205	0.177	0.195	0.195	7.29
76)	Hexachlorobe	0.221	0.205	0.223	0.233	0.235	0.225	0.194	0.222	0.220	6.35
77)	Pentachlorop	0.122	0.129	0.149	0.168	0.170	0.162	0.144	0.133	0.147	12.43
78)	Phenanthrene	1.012	1.024	1.053	1.052	1.046	1.067	1.008	1.030	1.037	2.05
79)	Anthracene	0.978	1.022	1.078	1.096	1.084	1.098	0.934	1.045	1.042	5.77
80)	Carbazole	0.867	0.947	1.020	1.051	1.030	1.026	0.915	0.956	0.977	6.67
81)	Di-n-butylph	0.955	1.058	1.217	1.287	1.248	1.260	0.916	1.126	1.133	12.69
82)	Fluoranthene	0.986	1.067	1.150	1.200	1.176	1.192	0.985	1.081	1.105	7.96
83)	Octadecane	0.251	0.260	0.261	0.263	0.263	0.262	0.275	0.253	0.261	2.80
84)	I Chrysene-d12	----------ISTD----------									
85)	Benzidine	0.412	0.572	0.796	0.848	0.706		0.453	0.631		28.61
	---- Quadratic regression ---- Coefficient = 0.9996										
	Response Ratio = -0.02446 + 0.55394 *A + 0.12422 *A^2										
86)	Pyrene	1.333	1.345	1.408	1.383	1.371	1.389	1.211	1.352	1.349	4.54
87)	Terphenyl-d1	0.926	0.949	0.992	1.015	1.010	0.982	0.891	0.916	0.960	4.81
88)	Butylbenzylp	0.465	0.504	0.614	0.658	0.647	0.636		0.548	0.582	13.09
89)	Benzo[a]anth	1.105	1.111	1.222	1.271	1.266	1.235	1.075	1.129	1.177	6.76
90)	3,3'-Dichlor	0.330	0.367	0.448	0.488	0.488	0.459		0.391	0.424	14.62

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4696-ICC4696
Lab FileID: 2P104596.D

```
 91) Chrysene     1.114 1.078 1.147 1.157 1.127 1.156 1.089 1.083 1.119   2.92
 92) bis(2-Ethylh 0.575 0.687 0.845 0.893 0.887 0.872       0.753 0.788  15.37

 93) I   Perylene-d12          ----------------ISTD--------------------
 94) Di-n-octylph 0.822 1.042 1.381 1.517 1.478 1.466       1.183 1.270  20.73
             ---- Quadratic regression ----  Coefficient =  0.9992
               Response Ratio = -0.03838 + 1.42752 *A + 0.03682 *A^2

 95) Benzo[b]fluo 1.067 1.131 1.220 1.455 1.462 1.258 1.030 1.154 1.222  13.36
 96) Benzo[k]fluo 1.021 1.078 1.140 0.999 0.955 1.126 0.970 1.096 1.048   6.81
 97) Benzo[a]pyre 0.913 1.006 1.135 1.219 1.200 1.164 0.887 1.035 1.070  12.02
 98) Indeno[1,2,3 0.746 0.839 1.013 1.083 1.120 1.071 0.756 0.878 0.938  16.17
 99) Dibenz(a,h)a       0.776 0.945 1.027 1.026 0.994       0.847 0.936  11.04
100) Dibenz[a,h]a 0.844 0.933 1.123 1.148 1.145 1.146 0.809 0.969 1.014  14.14
101) 7,12-Dimethy 0.428 0.446 0.523 0.571 0.567 0.539 0.420 0.465 0.495  12.62
102) Benzo[g,h,i] 0.914 0.993 1.144 1.159 1.163 1.151 0.920 1.031 1.059  10.22


 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           m2p4696.m         Tue Dec 07 12:39:24 2021
```

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4696-ICV4696
Lab FileID: 2P104599.D

Evaluate Continuing Calibration Report

Data File : Z:\svoa-gcms\completed\e2p4696\2p104599.d Vial: 10
Acq On : 4 Dec 2021 9:53 am Operator: chriss2
Sample : icv4696-50 Inst : MS2P
Misc : op35710,e2p4696,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4696.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Dec 07 13:20:33 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	125	0.00	4.54
2	t	1,4-Dioxane	0.517	0.458	11.4	107	0.00	2.05
6	t	Indene	2.096	1.804	13.9	104	0.00	4.73
7	t	Cumene	2.868	2.722	5.1	113	0.00	3.97
11	t	bis(2-Chloroethyl)ether	1.086	1.042	4.1	116	0.00	4.35
13	t	Decane	1.208	1.090	9.8	110	0.00	4.44
14	t	1,3-Dichlorobenzene	1.482	1.359	8.3	112	0.00	4.50
15	t	1,4-Dichlorobenzene	1.483	1.357	8.5	111	0.00	4.55
16	t	Benzyl alcohol	0.760	0.703	7.5	110	0.00	4.65
17	t	1,2-Dichlorobenzene	1.403	1.264	9.9	110	0.00	4.66
18	t	Acetophenone	1.571	1.443	8.1	111	0.00	4.83
20	t	2,2'-oxybis(1-Chloropropa	0.327	0.298	8.9	114	0.00	4.74
23	t	Hexachloroethane	0.492	0.456	7.3	115	0.00	4.91
24	I	Naphthalene-d8	1.000	1.000	0.0	127	0.00	5.55
26	t	Nitrobenzene	0.311	0.284	8.7	112	0.00	4.96
27	t	Quinoline	0.605	0.563	6.9	112	-0.02	5.88
28	t	Isophorone	0.570	0.535	6.1	113	-0.01	5.15

		----------	AvgRF	CCRF	% Dev	----------		
32	t	bis(2-Chloroethoxy)methan	0.350	0.323	7.7	113	0.00	5.34
35		1,3,5-Trichlorobenzene	0.339	0.305	10.0	111	0.00	5.23
36	t	1,2,4-Trichlorobenzene	0.319	0.291	8.8	112	0.00	5.50
37		1,2,3-Trichlorobenzene	0.301	0.273	9.3	112	0.00	5.70
38	t	Naphthalene	0.949	0.871	8.2	112	0.00	5.57
40	t	2,3-Dichloroaniline	0.340	0.297	12.6	105	0.00	6.57
42	t	Hexachlorobutadiene	0.160	0.147	8.1	111	0.00	5.70
44	t	2-Methylnaphthalene	0.589	0.537	8.8	110	0.00	6.26
45	t	1-Methylnaphthalene	0.562	0.508	9.6	109	0.00	6.36
46	I	Acenaphthene-d10	1.000	1.000	0.0	122	0.00	7.51

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4696-ICV4696
Lab FileID: 2P104599.D

			AvgRF	CCRF	% Dev			
48	t	1,2,4,5-Tetrachlorobenzen	0.566	0.530	6.4	109	0.00	6.45
52	t	2-Chloronaphthalene	1.113	1.036	6.9	110	0.00	6.81
53	t	Biphenyl	1.468	1.382	5.9	111	0.00	6.80
55	t	Dimethylphthalate	1.216	1.143	6.0	111	0.00	7.20
57	t	2,6-Dinitrotoluene	0.266	0.266	0.0	108	0.00	7.26
59	t	Acenaphthene	1.124	1.057	6.0	109	0.00	7.56
62	t	Dibenzofuran	1.585	1.491	5.9	110	0.00	7.79
63	t	2,4-Dinitrotoluene	0.351	0.345	1.7	105	0.00	7.79
65	t	Diethylphthalate	1.181	1.138	3.6	110	-0.01	8.17
66	t	Fluorene	1.264	1.187	6.1	108	0.00	8.26
67	t	4-Chlorophenyl-phenylethe	0.593	0.545	8.1	108	0.00	8.29
69	I	Phenanthrene-d10	1.000	1.000	0.0	122	0.00	9.63
72	t	Pentachloronitrobenzene	0.036	0.034#	5.6	110	0.00	9.40
73	t	1,2-Diphenylhydrazine	0.623	0.581	6.7	111	0.00	8.51
75	t	4-Bromophenyl-phenylether	0.195	0.180	7.7	107	0.00	9.00
76	t	Hexachlorobenzene	0.220	0.200	9.1	109	0.00	9.08
78	t	Phenanthrene	1.037	0.935	9.8	107	0.00	9.66
79	t	Anthracene	1.042	0.940	9.8	104	0.00	9.74
80	t	Carbazole	0.977	0.892	8.7	106	0.00	10.02
81	t	Di-n-butylphthalate	1.133	1.091	3.7	106	0.00	10.67
82	t	Fluoranthene	1.105	1.037	6.2	106	0.00	11.50
83	t	Octadecane	0.261	0.226	13.4	105	0.00	9.65
84	I	Chrysene-d12	1.000	1.000	0.0	118	0.00	13.77

			AvgRF	CCRF	% Dev			
86	t	Pyrene	1.349	1.256	6.9	106	0.00	11.84
88	t	Butylbenzylphthalate	0.582	0.567	2.6	105	0.00	13.02
89	t	Benzo[a]anthracene	1.177	1.086	7.7	103	0.00	13.76
91	t	Chrysene	1.119	1.019	8.9	104	0.00	13.81
92	t	bis(2-Ethylhexyl)phthalat	0.788	0.766	2.8	103	0.00	14.01
93	I	Perylene-d12	1.000	1.000	0.0	117	0.00	15.86

			True	Calc.	% Drift			
94	t	Di-n-octylphthalate	50.000	45.537	8.9	104	0.00	14.99

			AvgRF	CCRF	% Dev			
95	t	Benzo[b]fluoranthene	1.222	1.136	7.0	105	0.00	15.35
96	t	Benzo[k]fluoranthene	1.048	0.997	4.9	103	0.00	15.39

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4696-ICV4696
Lab FileID: 2P104599.D

97	t	Benzo[a]pyrene	1.070	1.028	3.9	103	0.00	15.78
98	t	Indeno[1,2,3-cd]pyrene	0.938	0.933	0.5	102	0.00	17.22
99	t	Dibenz(a,h)acridine	0.936	0.877	6.3	103	0.00	16.93
100	t	Dibenz[a,h]anthracene	1.014	1.007	0.7	103	0.00	17.26
101	t	7,12-Dimethylbenz(a)anthr	0.495	0.394	20.4	85	0.00	15.36
102	t	Benzo[g,h,i]perylene	1.059	1.037	2.1	105	0.00	17.58

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p104606a.D M2P4696.M Mon Dec 13 18:14:24 2021

8.8.2
8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4696-ICV4696
Lab FileID: 2P104600.D

Evaluate Continuing Calibration Report

Data File : Z:\svoa-gcms\completed\e2p4696\2p104600.d Vial: 11
Acq On : 4 Dec 2021 10:18 am Operator: chriss2
Sample : icv4696-50 Inst : MS2P
Misc : op35710,e2p4696,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : Z:\svoa-gcms\cur...ethods\m2p4696.m (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Dec 07 12:23:28 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	130	0.00	4.53
9	t	Phenol	1.630	1.382	15.2	106	-0.01	4.30
12	t	2-Chlorophenol	1.269	1.181	6.9	117	0.00	4.39
19	t	2-Methylphenol	1.096	0.979	10.7	114	0.00	4.73
21	t	3&4-Methylphenol	1.138	1.058	7.0	118	0.00	4.85
24	I	Naphthalene-d8	1.000	1.000	0.0	131	0.00	5.55
29	t	2-Nitrophenol	0.187	0.175	6.4	115	0.00	5.21
30	t	2,4-Dimethylphenol	0.317	0.290	8.5	114	0.00	5.26
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	50.000	40.028	19.9	101	-0.02	5.38
		----------	AvgRF	CCRF	% Dev	----------		
33	t	2,4-Dichlorophenol	0.286	0.257	10.1	112	0.00	5.42
34	t	2,6-Dichlorophenol	0.278	0.251	9.7	114	0.00	5.63
41	t	Hydroquinone	0.279	0.270	3.2	112	0.01	5.97
43	t	4-Chloro-3-methylphenol	0.269	0.245	8.9	110	0.00	6.11
46	I	Acenaphthene-d10	1.000	1.000	0.0	128	0.00	7.51
49	t	2,4,6-Trichlorophenol	0.370	0.348	5.9	116	0.00	6.58
50	t	2,4,5-Trichlorophenol	0.399	0.358	10.3	111	0.00	6.62
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	89.371	10.6	109	-0.01	7.60
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.148	0.131	11.5	103	0.00	7.74

8.8.3

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4696-ICV4696
Lab FileID: 2P104600.D

64		2,3,4,6-Tetrachlorophenol	0.296	0.271	8.4	109	0.00	7.97
69	I	Phenanthrene-d10	1.000	1.000	0.0	123	0.00	9.63
70	t	4,6-Dinitro-2-methylpheno	0.125	0.116	7.2	105	-0.01	8.36
77	t	Pentachlorophenol	0.147	0.137	6.8	104	0.00	9.38
118		2,3,7,8-tcdd	----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p104596.D m2p4696.m Tue Dec 07 12:47:43 2021

8.8.3

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4696-ICV4696
Lab FileID: 2P104601.D

Evaluate Continuing Calibration Report

Data File : Z:\svoa-gcms\completed\e2p4696\2p104601.d Vial: 12
Acq On : 4 Dec 2021 10:42 am Operator: chriss2
Sample : icv4696-50 Inst : MS2P
Misc : op35710,e2p4696,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : Z:\svoa-gcms\cur...ethods\m2p4696.m (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Dec 07 12:23:28 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	116	0.00	4.53
3	t	Pyridine	1.245	1.227	1.4	110	0.00	2.40
4	t	N-Nitrosodimethylamine	0.681	0.680	0.1	105	0.00	2.37
10		Aniline	1.856	1.801	3.0	106	0.00	4.30
22	t	n-Nitroso-di-n-propylamin	0.748	0.753	-0.7	112	-0.01	4.83
24	I	Naphthalene-d8	1.000	1.000	0.0	119	0.00	5.54
39	t	4-Chloroaniline	0.398	0.392	1.5	109	0.00	5.61
46	I	Acenaphthene-d10	1.000	1.000	0.0	110	0.00	7.51
54	t	2-Nitroaniline	0.293	0.317	-8.2	110	0.00	6.94
58	t	3-Nitroaniline	0.307	0.333	-8.5	108	0.00	7.47
68	t	4-Nitroaniline	0.297	0.321	-8.1	107	-0.02	8.31
69	I	Phenanthrene-d10	1.000	1.000	0.0	107	0.00	9.63
71	t	n-Nitrosodiphenylamine	0.628	0.635	-1.1	106	0.00	8.47
84	I	Chrysene-d12	1.000	1.000	0.0	102	-0.01	13.76
			True	Calc.	% Drift			
85	t	Benzidine	50.000	47.073	5.9	92	0.00	11.77
90	t	3,3'-Dichlorobenzidine	0.424	0.446	-5.2	99	0.00	13.77

8.8.4

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4696-ICV4696
Lab FileID: 2P104601.D

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 2p104596.D m2p4696.m         Tue Dec 07 12:47:13 2021
```

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4696-ICV4696
Lab FileID: 2P104602.D

Evaluate Continuing Calibration Report

Data File : Z:\svoa-gcms\completed\e2p4696\2p104602.d Vial: 13
Acq On : 4 Dec 2021 11:07 am Operator: chriss2
Sample : icv4696-50 Inst : MS2P
Misc : op35710,e2p4696,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : Z:\svoa-gcms\cur...ethods\m2p4696.m (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Dec 07 12:23:28 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	158	0.00	4.53
5	S	2-Fluorophenol	1.213	1.122	7.5	140	0.01	3.60
8	S	Phenol-d5	1.516	1.400	7.7	138	0.00	4.29
24	I	Naphthalene-d8	1.000	1.000	0.0	163	0.00	5.54
25	S	Nitrobenzene-d5	0.313	0.298	4.8	147	0.00	4.94
46	I	Acenaphthene-d10	1.000	1.000	0.0	157	0.00	7.51
51	S	2-Fluorobiphenyl	1.295	1.205	6.9	142	0.00	6.68
69	I	Phenanthrene-d10	1.000	1.000	0.0	153	0.00	9.63
74	S	2,4,6-Tribromophenol	0.102	0.094	7.8	132	0.00	8.60
84	I	Chrysene-d12	1.000	1.000	0.0	138	-0.01	13.76
87	S	Terphenyl-d14	0.960	0.945	1.6	133	0.00	12.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p104596.D m2p4696.m Tue Dec 07 12:48:16 2021

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4697-ICC4697
Lab FileID: 2P104606.D

Response Factor Report MS2P

Method : Z:\svoa-gcms\cur...ethods\m2p4697.m (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Dec 07 13:20:33 2021
Response via : Initial Calibration

Calibration Files
2 =2p104610.D 5 =2p104609.D 25 =2p104607.D 80 =2p104605.D
100 =2p104604.D 50 =2p104606.D 1 =2p104611.D 10 =2p104608.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
103) I 1,4-Dichlorobenzene-d	ISTD									
104) Benzaldehyde	0.916	0.898	1.010	0.993	1.100	1.049	0.888	0.917	0.971	8.06
105) I Naphthalene-d8a	ISTD									
106) Caprolactam	0.070	0.082	0.107	0.106	0.113	0.111		0.095	0.098	16.59
107) I Phenanthrene-d10a	ISTD									
108) Atrazine	0.084	0.092	0.106	0.104	0.109	0.107	0.063	0.092	0.095	16.70
114) I Phenanthrene-d10b	ISTD									
115) 1-Chloroocta	0.204	0.225	0.264	0.261	0.277	0.271	0.185	0.243	0.241	13.84
116) o-terphenyl	0.500	0.500	0.525	0.511	0.537	0.536	0.490	0.507	0.513	3.41

(#) = Out of Range ### Number of calibration levels exceeded format ###

m2p4696.m Tue Dec 07 13:30:09 2021

8.8.6

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4697-ICV4697
Lab FileID: 2P104612.D

Evaluate Continuing Calibration Report

Data File : Z:\svoa-gcms\completed\e2p4696\2p104612.d Vial: 22
Acq On : 4 Dec 2021 2:54 pm Operator: chriss2
Sample : icv4697-50 Inst : MS2P
Misc : op35710,e2p4697,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : Z:\svoa-gcms\cur...ethods\m2p4696.m (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Dec 07 13:20:33 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	103	0.00	4.53
104		Benzaldehyde	0.971	0.989	-1.9	97	0.00	4.22
105	I	Naphthalene-d8a	1.000	1.000	0.0	103	0.00	5.54
106	t	Caprolactam	0.098	0.105	-7.1	97	0.00	5.94
107	I	Phenanthrene-d10a	1.000	1.000	0.0	101	0.00	9.63
108		Atrazine	0.095	0.104	-9.5	98	0.00	9.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p104606a.D m2p4696.m Tue Dec 07 13:33:11 2021

8.8.7

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4698-ICV4696
Lab FileID: 2P104615.D

Evaluate Continuing Calibration Report

Data File : Z:\svoa-gcms\completed\e2p4696\2p104615.d Vial: 3
Acq On : 9 Dec 2021 6:01 am Operator: chriss2
Sample : icv4696-50 Inst : MS2P
Misc : op35710,e2p4698,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4696.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Dec 07 13:20:33 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
46 I	Acenaphthene-d10	1.000	1.000	0.0	90	-0.02	7.50
		True	Calc.	% Drift			
47 t	Hexachlorocyclopentadiene	50.000	58.776	-17.5	96	-0.02	6.43
56 t	Acenaphthylene	1.585	1.662	-4.9	90	-0.02	7.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p104606a.D M2P4696.M Mon Dec 13 18:13:56 2021

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4704-CC4696
Lab FileID: 2P104781.D

Evaluate Continuing Calibration Report

Data File : Z:\svoa-gcms\completed\e2p4704\2p104781.d Vial: 2
Acq On : 16 Dec 2021 3:55 am Operator: chriss2
Sample : cc4696-50 Inst : MS2P
Misc : op35710,e2p4704,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4696.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Dec 07 13:20:33 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	156	-0.05	4.49
2	t	1,4-Dioxane	0.517	0.621	-20.1#	183	-0.05	1.99
3	t	Pyridine	1.245	1.513	-21.5#	184	-0.06	2.34
4	t	N-Nitrosodimethylamine	0.681	0.807	-18.5	169	-0.04	2.33
5	S	2-Fluorophenol	1.213	1.360	-12.1	168	-0.04	3.55
6	t	Indene	2.096	2.160	-3.1	156	-0.05	4.68
7	t	Cumene	2.868	3.160	-10.2	165	-0.05	3.91
8	S	Phenol-d5	1.516	1.679	-10.8	164	-0.04	4.26
9	t	Phenol	1.630	1.691	-3.7	155	-0.04	4.27
10		Aniline	1.856	2.080	-12.1	165	-0.04	4.26
11	t	bis(2-Chloroethyl)ether	1.086	1.155	-6.4	161	-0.05	4.31
12	t	2-Chlorophenol	1.269	1.334	-5.1	159	-0.04	4.35
13	t	Decane	1.208	1.293	-7.0	164	-0.05	4.40
14	t	1,3-Dichlorobenzene	1.482	1.517	-2.4	157	-0.04	4.45
15	t	1,4-Dichlorobenzene	1.483	1.505	-1.5	154	-0.05	4.50
16	t	Benzyl alcohol	0.760	0.812	-6.8	160	-0.04	4.60
17	t	1,2-Dichlorobenzene	1.403	1.440	-2.6	158	-0.05	4.61
18	t	Acetophenone	1.571	1.628	-3.6	157	-0.05	4.79
19	t	2-Methylphenol	1.096	1.126	-2.7	157	-0.04	4.69
20	t	2,2'-oxybis(1-Chloropropa	0.327	0.338	-3.4	162	-0.05	4.69
21	t	3&4-Methylphenol	1.138	1.166	-2.5	157	-0.04	4.82
22	t	n-Nitroso-di-n-propylamin	0.748	0.769	-2.8	154	-0.04	4.80
23	t	Hexachloroethane	0.492	0.502	-2.0	158	-0.05	4.86
24	I	Naphthalene-d8	1.000	1.000	0.0	158	-0.05	5.49
25	S	Nitrobenzene-d5	0.313	0.333	-6.4	158	-0.04	4.90
26	t	Nitrobenzene	0.311	0.319	-2.6	155	-0.05	4.91
27	t	Quinoline	0.605	0.637	-5.3	157	-0.05	5.84
28	t	Isophorone	0.570	0.596	-4.6	156	-0.05	5.11
29	t	2-Nitrophenol	0.187	0.206	-10.2	164	-0.05	5.17
30	t	2,4-Dimethylphenol	0.317	0.325	-2.5	155	-0.05	5.22
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	50.000	50.964	-1.9	161	-0.02	5.38
		----------	AvgRF	CCRF	% Dev	----------		
32	t	bis(2-Chloroethoxy)methan	0.350	0.368	-5.1	160	-0.05	5.29
33	t	2,4-Dichlorophenol	0.286	0.296	-3.5	156	-0.05	5.38
34	t	2,6-Dichlorophenol	0.278	0.288	-3.6	158	-0.05	5.58
35		1,3,5-Trichlorobenzene	0.339	0.344	-1.5	155	-0.05	5.18
36	t	1,2,4-Trichlorobenzene	0.319	0.326	-2.2	156	-0.05	5.44
37		1,2,3-Trichlorobenzene	0.301	0.307	-2.0	156	-0.06	5.65

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E2P4704-CC4696
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2P104781.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

38	t	Naphthalene	0.949	0.961	-1.3	154	-0.05	5.51
39	t	4-Chloroaniline	0.398	0.423	-6.3	156	-0.05	5.57
40	t	2,3-Dichloroaniline	0.340	0.350	-2.9	154	-0.06	6.51
41	t	Hydroquinone	0.279	0.308	-10.4	154	-0.04	5.91
42	t	Hexachlorobutadiene	0.160	0.166	-3.8	156	-0.06	5.64
43	t	4-Chloro-3-methylphenol	0.269	0.288	-7.1	156	-0.05	6.06
44	t	2-Methylnaphthalene	0.589	0.616	-4.6	156	-0.06	6.19
45	t	1-Methylnaphthalene	0.562	0.585	-4.1	156	-0.06	6.30
46	I	Acenaphthene-d10	1.000	1.000	0.0	158	-0.07	7.44
		----------	True	Calc.	% Drift	----------		
47	t	Hexachlorocyclopentadiene	100.000	112.253	-12.3	174	-0.06	6.39
		----------	AvgRF	CCRF	% Dev	----------		
48	t	1,2,4,5-Tetrachlorobenzen	0.566	0.572	-1.1	154	-0.06	6.39
49	t	2,4,6-Trichlorophenol	0.370	0.381	-3.0	156	-0.06	6.52
50	t	2,4,5-Trichlorophenol	0.399	0.402	-0.8	154	-0.05	6.57
51	S	2-Fluorobiphenyl	1.295	1.305	-0.8	155	-0.07	6.62
52	t	2-Chloronaphthalene	1.113	1.122	-0.8	156	-0.07	6.74
53	t	Biphenyl	1.468	1.505	-2.5	157	-0.06	6.73
54	t	2-Nitroaniline	0.293	0.309	-5.5	155	-0.06	6.88
55	t	Dimethylphthalate	1.216	1.260	-3.6	160	-0.06	7.14
56	t	Acenaphthylene	1.585	1.644	-3.7	157	-0.07	7.25
57	t	2,6-Dinitrotoluene	0.266	0.298	-12.0	156	-0.06	7.20
58	t	3-Nitroaniline	0.307	0.337	-9.8	158	-0.06	7.42
59	t	Acenaphthene	1.124	1.152	-2.5	155	-0.07	7.49
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	103.342	-3.3	159	-0.05	7.56
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.148	0.159	-7.4	154	-0.04	7.70
62	t	Dibenzofuran	1.585	1.607	-1.4	155	-0.07	7.72
63	t	2,4-Dinitrotoluene	0.351	0.385	-9.7	153	-0.06	7.74
64		2,3,4,6-Tetrachlorophenol	0.296	0.314	-6.1	155	-0.06	7.91
65	t	Diethylphthalate	1.181	1.236	-4.7	155	-0.07	8.11
66	t	Fluorene	1.264	1.303	-3.1	154	-0.07	8.19
67	t	4-Chlorophenyl-phenylethe	0.593	0.606	-2.2	157	-0.07	8.22
68	t	4-Nitroaniline	0.297	0.320	-7.7	155	-0.06	8.27
69	I	Phenanthrene-d10	1.000	1.000	0.0	156	-0.08	9.56
70	t	4,6-Dinitro-2-methylpheno	0.125	0.134	-7.2	155	-0.05	8.32
71	t	n-Nitrosodiphenylamine	0.628	0.637	-1.4	155	-0.07	8.40
72	t	Pentachloronitrobenzene	0.036	0.038#	-5.6	157	-0.06	9.34
73	t	1,2-Diphenylhydrazine	0.623	0.634	-1.8	155	-0.07	8.45
74	S	2,4,6-Tribromophenol	0.102	0.109	-6.9	157	-0.07	8.54
75	t	4-Bromophenyl-phenylether	0.195	0.206	-5.6	157	-0.07	8.93
76	t	Hexachlorobenzene	0.220	0.228	-3.6	158	-0.07	9.01
77	t	Pentachlorophenol	0.147	0.156	-6.1	151	-0.06	9.32
78	t	Phenanthrene	1.037	1.021	1.5	150	-0.07	9.59
79	t	Anthracene	1.042	1.070	-2.7	152	-0.07	9.67
80	t	Carbazole	0.977	1.010	-3.4	154	-0.07	9.95
81	t	Di-n-butylphthalate	1.133	1.250	-10.3	155	-0.07	10.60
82	t	Fluoranthene	1.105	1.165	-5.4	153	-0.07	11.43
83	t	Octadecane	0.261	0.260	0.4	155	-0.07	9.57
84	I	Chrysene-d12	1.000	1.000	0.0	147	-0.07	13.70
		----------	True	Calc.	% Drift	----------		

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E2P4704-CC4696
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2P104781.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

85	t	Benzidine	50.000	50.872	-1.7	147	-0.07	11.70
		----------	AvgRF	CCRF	% Dev	----------		
86	t	Pyrene	1.349	1.411	-4.6	149	-0.07	11.77
87	S	Terphenyl-d14	0.960	1.021	-6.4	153	-0.07	12.10
88	t	Butylbenzylphthalate	0.582	0.672	-15.5	155	-0.07	12.95
89	t	Benzo[a]anthracene	1.177	1.276	-8.4	152	-0.07	13.68
90	t	3,3'-Dichlorobenzidine	0.424	0.491	-15.8	157	-0.07	13.71
91	t	Chrysene	1.119	1.152	-2.9	147	-0.06	13.74
92	t	bis(2-Ethylhexyl)phthalat	0.788	0.915	-16.1	154	-0.07	13.93
93	I	Perylene-d12	1.000	1.000	0.0	157	-0.06	15.80
		----------	True	Calc.	% Drift	----------		
94	t	Di-n-octylphthalate	50.000	51.688	-3.4	160	-0.08	14.91
		----------	AvgRF	CCRF	% Dev	----------		
95	t	Benzo[b]fluoranthene	1.222	1.330	-8.8	166	-0.05	15.30
96	t	Benzo[k]fluoranthene	1.048	1.024	2.3	143	-0.06	15.33
97	t	Benzo[a]pyrene	1.070	1.169	-9.3	158	-0.06	15.72
98	t	Indeno[1,2,3-cd]pyrene	0.938	1.153	-22.9#	169	-0.07	17.15
99	t	Dibenz(a,h)acridine	0.936	1.061	-13.4	168	-0.07	16.87
100	t	Dibenz[a,h]anthracene	1.014	1.187	-17.1	163	-0.07	17.19
101	t	7,12-Dimethylbenz(a)anthr	0.495	0.556	-12.3	162	-0.07	15.30
102	t	Benzo[g,h,i]perylene	1.059	1.175	-11.0	161	-0.08	17.50

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p104606a.D M2P4696.M Thu Dec 16 10:00:49 2021

8.8.9

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E2P4704-CC4697
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2P104782.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : Z:\svoa-gcms\completed\e2p4704\2p104782.d Vial: 3
Acq On : 16 Dec 2021 4:20 am Operator: chriss2
Sample : cc4697-50 Inst : MS2P
Misc : op35710,e2p4704,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4696.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Dec 07 13:20:33 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	138	-0.05	4.49
104		Benzaldehyde	0.971	1.063	-9.5	139	-0.05	4.17
105	I	Naphthalene-d8a	1.000	1.000	0.0	141	-0.05	5.49
106	t	Caprolactam	0.098	0.112	-14.3	141	-0.05	5.89
107	I	Phenanthrene-d10a	1.000	1.000	0.0	138	-0.07	9.55
108		Atrazine	0.095	0.112	-17.9	144	-0.07	9.25
114	I	Phenanthrene-d10b	1.000	1.000	0.0	138	-0.08	9.55
115	s	1-Chlorooctadecane	0.241	0.286	-18.7	146	-0.08	11.44
116	s	o-terphenyl	0.513	0.542	-5.7	140	-0.08	10.21

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p104606a.D M2P4696.M Thu Dec 16 10:00:27 2021

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E2P4709-CC4696
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2P104910.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e2p4709\2p104910.d Vial: 2
Acq On : 22 Dec 2021 10:48 pm Operator: chriss2
Sample : cc4696-25 Inst : MS2P
Misc : op35710,e2p4709,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4696.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Dec 24 00:33:17 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	0.00	4.45
2	t	1,4-Dioxane	0.517	0.488	5.6	111	0.00	1.91
3	t	Pyridine	1.245	1.341	-7.7	136	0.00	2.26
4	t	N-Nitrosodimethylamine	0.681	0.765	-12.3	130	0.00	2.25
5	S	2-Fluorophenol	1.213	1.176	3.1	116	0.00	3.51
6	t	Indene	2.096	2.223	-6.1	123	0.00	4.63
7	t	Cumene	2.868	2.849	0.7	116	0.00	3.87
8	S	Phenol-d5	1.516	1.626	-7.3	124	0.00	4.22
9	t	Phenol	1.630	1.685	-3.4	121	0.00	4.23
10		Aniline	1.856	2.032	-9.5	127	0.00	4.22
11	t	bis(2-Chloroethyl)ether	1.086	1.192	-9.8	127	0.00	4.27
12	t	2-Chlorophenol	1.269	1.371	-8.0	126	0.00	4.31
13	t	Decane	1.208	1.165	3.6	113	0.00	4.36
14	t	1,3-Dichlorobenzene	1.482	1.510	-1.9	119	0.00	4.41
15	t	1,4-Dichlorobenzene	1.483	1.517	-2.3	120	0.00	4.46
16	t	Benzyl alcohol	0.760	0.851	-12.0	127	0.00	4.56
17	t	1,2-Dichlorobenzene	1.403	1.445	-3.0	121	0.00	4.57
18	t	Acetophenone	1.571	1.778	-13.2	130	0.00	4.75
19	t	2-Methylphenol	1.096	1.181	-7.8	127	0.00	4.66
20	t	2,2'-oxybis(1-Chloropropa	0.327	0.365	-11.6	131	0.00	4.66
21	t	3&4-Methylphenol	1.138	1.252	-10.0	126	0.00	4.77
22	t	n-Nitroso-di-n-propylamin	0.748	0.891	-19.1	136	0.00	4.76
23	t	Hexachloroethane	0.492	0.518	-5.3	125	0.00	4.82
24	I	Naphthalene-d8	1.000	1.000	0.0	131	0.00	5.45
25	S	Nitrobenzene-d5	0.313	0.319	-1.9	128	0.00	4.86
26	t	Nitrobenzene	0.311	0.309	0.6	128	0.00	4.87
27	t	Quinoline	0.605	0.655	-8.3	138	0.00	5.79
28	t	Isophorone	0.570	0.604	-6.0	135	0.00	5.06
29	t	2-Nitrophenol	0.187	0.197	-5.3	132	0.00	5.13
30	t	2,4-Dimethylphenol	0.317	0.324	-2.2	129	0.00	5.17
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	25.000	16.667	33.3#	80	0.00	5.31
		----------	AvgRF	CCRF	% Dev	----------		
32	t	bis(2-Chloroethoxy)methan	0.350	0.373	-6.6	136	0.00	5.24
33	t	2,4-Dichlorophenol	0.286	0.292	-2.1	130	0.00	5.33
34	t	2,6-Dichlorophenol	0.278	0.282	-1.4	130	0.00	5.53
35		1,3,5-Trichlorobenzene	0.339	0.334	1.5	129	0.00	5.14
36	t	1,2,4-Trichlorobenzene	0.319	0.327	-2.5	132	0.00	5.40
37		1,2,3-Trichlorobenzene	0.301	0.305	-1.3	132	0.00	5.60

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E2P4709-CC4696
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2P104910.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

38	t	Naphthalene	0.949	0.952	-0.3	129	0.00	5.46
39	t	4-Chloroaniline	0.398	0.432	-8.5	138	0.00	5.52
40	t	2,3-Dichloroaniline	0.340	0.361	-6.2	135	0.00	6.46
41	t	Hydroquinone	0.279	0.301	-7.9	130	0.00	5.87
42	t	Hexachlorobutadiene	0.160	0.166	-3.8	133	0.00	5.59
43	t	4-Chloro-3-methylphenol	0.269	0.285	-5.9	134	0.00	6.01
44	t	2-Methylnaphthalene	0.589	0.629	-6.8	136	0.00	6.14
45	t	1-Methylnaphthalene	0.562	0.591	-5.2	136	0.00	6.25
46	I	Acenaphthene-d10	1.000	1.000	0.0	141	0.00	7.39
		----------	True	Calc.	% Drift	----------		
47	t	Hexachlorocyclopentadiene	50.000	54.310	-8.6	155	0.00	6.33
		----------	AvgRF	CCRF	% Dev	----------		
48	t	1,2,4,5-Tetrachlorobenzen	0.566	0.565	0.2	139	0.00	6.33
49	t	2,4,6-Trichlorophenol	0.370	0.363	1.9	135	0.00	6.47
50	t	2,4,5-Trichlorophenol	0.399	0.387	3.0	136	0.00	6.51
51	S	2-Fluorobiphenyl	1.295	1.276	1.5	138	0.00	6.56
52	t	2-Chloronaphthalene	1.113	1.118	-0.4	139	0.00	6.69
53	t	Biphenyl	1.468	1.446	1.5	137	0.00	6.68
54	t	2-Nitroaniline	0.293	0.288	1.7	130	0.00	6.83
55	t	Dimethylphthalate	1.216	1.239	-1.9	141	0.00	7.08
56	t	Acenaphthylene	1.585	1.600	-0.9	138	0.00	7.20
57	t	2,6-Dinitrotoluene	0.266	0.298	-12.0	147	0.00	7.14
58	t	3-Nitroaniline	0.307	0.334	-8.8	142	0.00	7.36
59	t	Acenaphthene	1.124	1.124	0.0	138	0.00	7.43
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	53.257	-6.5	152	0.00	7.51
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.148	0.133	10.1	123	0.00	7.64
62	t	Dibenzofuran	1.585	1.578	0.4	138	0.00	7.66
63	t	2,4-Dinitrotoluene	0.351	0.382	-8.8	140	0.00	7.68
64		2,3,4,6-Tetrachlorophenol	0.296	0.287	3.0	131	0.00	7.85
65	t	Diethylphthalate	1.181	1.225	-3.7	141	0.00	8.05
66	t	Fluorene	1.264	1.283	-1.5	140	0.00	8.14
67	t	4-Chlorophenyl-phenylethe	0.593	0.615	-3.7	142	0.00	8.16
68	t	4-Nitroaniline	0.297	0.303	-2.0	133	0.00	8.21
69	I	Phenanthrene-d10	1.000	1.000	0.0	138	0.00	9.50
70	t	4,6-Dinitro-2-methylpheno	0.125	0.125	0.0	134	0.00	8.26
71	t	n-Nitrosodiphenylamine	0.628	0.637	-1.4	138	0.00	8.35
72	t	Pentachloronitrobenzene	0.036	0.040#	-11.1	156	0.00	9.28
73	t	1,2-Diphenylhydrazine	0.623	0.638	-2.4	136	0.00	8.39
74	S	2,4,6-Tribromophenol	0.102	0.107	-4.9	140	0.00	8.48
75	t	4-Bromophenyl-phenylether	0.195	0.206	-5.6	141	0.00	8.86
76	t	Hexachlorobenzene	0.220	0.239	-8.6	148	0.00	8.94
77	t	Pentachlorophenol	0.147	0.130	11.6	121	0.00	9.26
78	t	Phenanthrene	1.037	1.022	1.4	134	0.00	9.53
79	t	Anthracene	1.042	1.056	-1.3	135	0.00	9.61
80	t	Carbazole	0.977	0.962	1.5	130	0.00	9.89
81	t	Di-n-butylphthalate	1.133	1.192	-5.2	135	0.00	10.54
82	t	Fluoranthene	1.105	1.077	2.5	129	0.00	11.37
83	t	Octadecane	0.261	0.260	0.4	137	0.00	9.52
84	I	Chrysene-d12	1.000	1.000	0.0	104	0.00	13.64
		----------	True	Calc.	% Drift	----------		

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E2P4709-CC4696
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2P104910.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

85	t	Benzidine	25.000	36.177	-44.7#	168	0.00	11.64
		----------	AvgRF	CCRF	% Dev	----------		
86	t	Pyrene	1.349	1.677	-24.3#	124	0.00	11.70
87	S	Terphenyl-d14	0.960	1.198	-24.8#	125	0.00	12.04
88	t	Butylbenzylphthalate	0.582	0.673	-15.6	114	0.00	12.89
89	t	Benzo[a]anthracene	1.177	1.238	-5.2	105	0.00	13.62
90	t	3,3'-Dichlorobenzidine	0.424	0.452	-6.6	105	0.00	13.64
91	t	Chrysene	1.119	1.144	-2.2	104	0.00	13.68
92	t	bis(2-Ethylhexyl)phthalat	0.788	0.835	-6.0	103	0.00	13.87
93	I	Perylene-d12	1.000	1.000	0.0	88	0.00	15.73
		----------	True	Calc.	% Drift	----------		
94	t	Di-n-octylphthalate	25.000	25.743	-3.0	92	0.00	14.85
		----------	AvgRF	CCRF	% Dev	----------		
95	t	Benzo[b]fluoranthene	1.222	1.282	-4.9	93	0.00	15.22
96	t	Benzo[k]fluoranthene	1.048	1.139	-8.7	88	0.00	15.26
97	t	Benzo[a]pyrene	1.070	1.151	-7.6	89	0.00	15.65
98	t	Indeno[1,2,3-cd]pyrene	0.938	1.194	-27.3#	104	0.00	17.08
99	t	Dibenz(a,h)acridine	0.936	1.058	-13.0	99	0.00	16.80
100	t	Dibenz[a,h]anthracene	1.014	1.237	-22.0#	97	0.00	17.11
101	t	7,12-Dimethylbenz(a)anthr	0.495	0.528	-6.7	89	0.00	15.22
102	t	Benzo[g,h,i]perylene	1.059	1.270	-19.9	98	0.00	17.42

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p104911.d M2P4696.M Fri Dec 24 00:44:39 2021

8.8.11

8

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4709-CC4697
Lab FileID: 2P104911.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e2p4709\2p104911.d Vial: 3
Acq On : 22 Dec 2021 11:12 pm Operator: chriss2
Sample : cc4697-25 Inst : MS2P
Misc : op35710,e2p4709,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4696.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Dec 24 00:33:17 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	81	0.00	4.45
104		Benzaldehyde	0.971	0.995	-2.5	80	0.00	4.13
105	I	Naphthalene-d8a	1.000	1.000	0.0	87	0.00	5.44
106	t	Caprolactam	0.098	0.114	-16.3	93	0.00	5.83
107	I	Phenanthrene-d10a	1.000	1.000	0.0	104	0.00	9.50
108		Atrazine	0.095	0.105	-10.5	102	0.00	9.19
114	I	Phenanthrene-d10b	1.000	1.000	0.0	104	0.00	9.50
115	s	1-Chlorooctadecane	0.241	0.261	-8.3	103	0.00	11.38
116	s	o-terphenyl	0.513	0.536	-4.5	106	0.00	10.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p104911.d M2P4696.M Fri Dec 24 00:45:14 2021

8.8.12

8

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2P4709-CC4696
Lab FileID: 2P104912.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e2p4709\2p104912.d Vial: 4
Acq On : 23 Dec 2021 12:28 am Operator: chriss2
Sample : cc4696-5 Inst : MS2P
Misc : op35710,e2p4709,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4696.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Dec 24 00:33:17 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
117	Chrysene-d12a	1.000	1.000	0.0	100	0.00	13.64
118	2,3,7,8-tcdd	0.148	0.148	0.0	100	0.00	13.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p104912.d M2P4696.M Fri Dec 24 00:48:33 2021

8.8.13

8

Initial Calibration Summary

Job Number: JD36682 **Sample:** E4P2551-ICC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P48505.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report MS4P

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Oct 21 09:41:06 2021
Response via : Initial Calibration

Calibration Files
1.0 =4p48504.D 0.5 =4p48507.D 0.2 =4p48505.D 0.1 =4p48508.D
0.04=4p48511.D 0.02=4p48506.D 0.01=4p48514.D .004=4p48509.D
.002=4p48513.D = = =

Compound	1.0	0.5	0.2	0.1	0.04	0.02	0.01	.004	.002	Avg	%RSD
1) I 1-Methylnaphthalene-d	----------ISTD----------										
2) 1,4-Dioxane	0.206	0.203	0.178	0.181	0.174	0.202	0.164			0.187	9.04
3) 2-Fluorophenol	0.582	0.514	0.506	0.461	0.513	0.470	0.501	0.454	0.465	0.496	8.04
4) Phenol-d5	1.054	0.987	0.918	0.896	0.920	0.922	0.940	0.923	0.913	0.941	5.21
5) Phenol	1.131	1.056	0.970	0.946	0.993	0.960	0.986	0.979	0.971	0.999	5.84
6) bis(2-Chloroethyl)ether										0.000#	-1.00
7) Nitrobenzene-d5	0.849	0.801	0.721	0.721	0.760	0.730	0.787	0.768	0.777	0.768	5.43
8) Naphthalene	2.530	2.312	2.144	2.041	2.083	2.189	2.226	2.349	2.732	2.290	9.73
9) Hexachlorobutadiene	0.572	0.534	0.492	0.481	0.506	0.580	0.602	0.705		0.559	13.17
10) 2-Methylnaphthalene	1.361	1.251	1.150	1.078	1.084	1.156	1.168	1.239	1.280	1.196	7.83
11) 1-Methylnaphthalene	1.306	1.184	1.089	0.986	1.066	1.129	1.180	1.328	1.095	1.152	9.68
12) Hexachlorocyclopentadiene	0.537	0.468	0.399	0.381	0.419	0.447	0.424	0.637		0.464	18.25
13) I Fluorene-d10	----------ISTD----------										
14) 2-Fluorobiphenyl	1.149	1.054	0.968	0.971	0.989	0.997	1.031	1.011	1.014	1.020	5.44
15) Acenaphthylene	1.752	1.539	1.377	1.378	1.378	1.346	1.456	1.556	1.630	1.490	9.33
16) Acenaphthene	1.065	0.980	0.889	0.882	0.884	0.874	0.892	0.974	1.120	0.951	9.49
17) Fluorene	1.302	1.154	1.064	1.043	1.101	1.078	1.121	1.145	1.320	1.148	8.67
18) 4,6-dinitro-2-methylphenol	0.192	0.150	0.113	0.103	0.094	0.074	0.065			0.113	39.49
---- Quadratic regression ---- Coefficient = 0.9997											
Response Ratio = -0.00290 + 0.10101 *A + 0.01473 *A^2											
19) 2,4,6-Tribromophenol	0.189	0.168	0.150	0.149	0.146	0.142	0.142	0.144	0.143	0.153	10.33
20) Fluoranthene-d10	----------ISTD----------										
21) Hexachlorobenzene	0.261	0.232	0.215	0.219	0.214	0.222	0.266	0.297	0.347	0.252	17.96

Initial Calibration Summary

Job Number: JD36682 **Sample:** E4P2551-ICC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P48505.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
22)  Pentachlorophenol
          0.171 0.155 0.133 0.126 0.130 0.127 0.113 0.151 0.172        0.142   14.84
23)  Phenanthrene
          1.135 1.022 0.940 0.910 0.908 0.975 1.076 1.203 1.528        1.078   18.32
24)  Anthracene
          1.127 1.034 0.934 0.935 0.964 0.927 1.010 1.240 1.129        1.033   10.65
25)  Fluoranthene
          1.239 1.113 1.027 0.988 1.079 1.160 1.248                    1.122    8.91
26)  Pyrene
          1.313 1.175 1.083 1.036 1.087 1.149 1.179 1.460 1.628        1.235   15.94
27)  Terphenyl-d14
          0.682 0.592 0.555 0.540 0.559 0.567 0.552 0.563 0.547        0.573    7.57
28)  Benzo[a]anthracene
          1.216 1.049 0.962 0.917 0.938 1.073 1.091 1.579              1.103   19.55
29)  Chrysene
          1.148 1.037 0.956 0.957 1.011 1.204 1.251                    1.081   11.10

30) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
31)  Benzo[b]fluoranthene
          1.819 1.630 1.574 1.645 2.088 2.859 3.428                    2.149   33.48
           ---- Quadratic regression ----  Coefficient =  0.9993
             Response Ratio = 0.02961 + 1.38761 *A + 0.32444 *A^2

32)  Benzo[k]fluoranthene
          1.573 1.493 1.446 1.446 1.587 1.734 2.278                    1.651   17.81
33)  Benzo[a]pyrene
          1.653 1.484 1.407 1.384 1.502 1.546 1.622                    1.514    6.69
34)  Indeno[1,2,3-cd]pyrene
          1.699 1.573 1.519 1.552 1.726 2.156 2.405                    1.804   18.94
35)  Dibenz[a,h]anthracene
          1.463 1.337 1.258 1.292 1.351 1.563 1.572                    1.405    9.11
36)  Benzo[g,h,i]perylene
          1.512 1.390 1.353 1.403 1.573 1.942                          1.529   14.31
------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4P2551SIMLVI.M        Thu Oct 21 09:57:50 2021   YING
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8.8.14

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICV2551
Lab FileID: 4P48512.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2551\4p48512.D Vial: 11
Acq On : 21 Oct 2021 3:15 am Operator: chriss2
Sample : icv2551-0.2 Inst : MS4P
Misc : op35776a,e4p2551,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Oct 21 09:41:06 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	100	0.00	7.10
2	t	1,4-Dioxane	0.187	0.187	0.0	105	0.02	2.16
5		Phenol	0.999	0.997	0.2	103	0.00	4.73
8	t	Naphthalene	2.290	1.983	13.4	92	0.00	6.35
9	t	Hexachlorobutadiene	0.559	0.471	15.7	96	0.00	6.47
10	t	2-Methylnaphthalene	1.196	1.097	8.3	95	0.00	7.04
11	t	1-Methylnaphthalene	1.152	1.045	9.3	96	0.00	7.13
12		Hexachlorocyclopentadiene	0.464	0.814	-75.4#	204#	0.00	7.19
13	I	Fluorene-d10	1.000	1.000	0.0	94	0.00	8.58
15	t	Acenaphthylene	1.490	1.201	19.4	82	0.00	7.92
16	t	Acenaphthene	0.951	0.830	12.7	88	0.00	8.09
17	t	Fluorene	1.148	1.009	12.1	89	0.00	8.60
			True	Calc.	% Drift			
18		4,6-dinitro-2-methylpheno	1000.000	1168.570	-16.9	117	0.00	8.66
			AvgRF	CCRF	% Dev			
20		Fluoranthene-d10	1.000	1.000	0.0	95	0.00	10.71
21	t	Hexachlorobenzene	0.252	0.210	16.7	93	0.01	9.15
22	t	Pentachlorophenol	0.142	0.152	-7.0	109	0.00	9.34
23	t	Phenanthrene	1.078	0.903	16.2	91	0.01	9.55
24	t	Anthracene	1.033	0.890	13.8	91	0.00	9.60
25	t	Fluoranthene	1.122	0.964	14.1	89	0.00	10.73
26	t	Pyrene	1.235	0.963	22.0	85	0.00	10.95
28	t	Benzo[a]anthracene	1.103	0.838	24.0	83	0.00	12.14
29	t	Chrysene	1.081	0.868	19.7	86	0.00	12.17
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	85	0.00	13.40
			True	Calc.	% Drift			
31	t	Benzo[b]fluoranthene	200.000	215.764	-7.9	92	0.00	13.13
			AvgRF	CCRF	% Dev			
32	t	Benzo[k]fluoranthene	1.651	1.458	11.7	86	0.00	13.15
33	t	Benzo[a]pyrene	1.514	1.429	5.6	86	0.00	13.42
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.458	19.2	82	0.00	14.60
35	t	Dibenz[a,h]anthracene	1.405	1.209	14.0	82	0.00	14.62
36	t	Benzo[g,h,i]perylene	1.529	1.345	12.0	85	0.00	14.93

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICV2551
Lab FileID: 4P48512.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p48505.D M4P2551SIMLVI.M Thu Oct 21 09:55:50 2021 YING

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E4P2645-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50561.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...022\e4p2645\4p50561.d Vial: 2
Acq On : 7 Jan 2022 3:47 pm Operator: ninap
Sample : cc2551-0.1 Inst : MS4P
Misc : op37226a,e4p2645,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Jan 07 05:22:32 2022
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	81	-0.01	6.68
2	t	1,4-Dioxane	0.187	0.230	-23.0#	103	0.03	1.71
3	S	2-Fluorophenol	0.496	0.444	10.5	78	0.02	3.42
4	S	Phenol-d5	0.941	0.832	11.6	75	0.02	4.39
5		Phenol	0.999	0.872	12.7	75	0.02	4.40
7	S	Nitrobenzene-d5	0.768	1.022	-33.1#	115	0.00	5.22
8	t	Naphthalene	2.290	1.788	21.9#	71	0.00	5.93
9	t	Hexachlorobutadiene	0.559	0.737	-31.8#	124	-0.01	6.06
10	t	2-Methylnaphthalene	1.196	1.011	15.5	76	-0.01	6.62
11	t	1-Methylnaphthalene	1.152	0.976	15.3	80	0.00	6.72
12		Hexachlorocyclopentadiene	0.464	0.502	-8.2	107	0.00	6.77
13	I	Fluorene-d10	1.000	1.000	0.0	81	0.00	8.16
14	S	2-Fluorobiphenyl	1.020	0.971	4.8	81	0.00	7.00
15	t	Acenaphthylene	1.490	1.297	13.0	76	0.00	7.50
16	t	Acenaphthene	0.951	0.898	5.6	83	0.00	7.67
17	t	Fluorene	1.148	1.030	10.3	80	0.00	8.18
		----------	True	Calc.	% Drift	----------		
18		4,6-dinitro-2-methylpheno	500.000	609.662	-21.9#	105	0.00	8.26
		----------	AvgRF	CCRF	% Dev	----------		
19	S	2,4,6-Tribromophenol	0.153	0.181	-18.3	99	0.00	8.43
20		Fluoranthene-d10	1.000	1.000	0.0	85	0.00	10.28
21	t	Hexachlorobenzene	0.252	0.248	1.6	96	-0.01	8.71
22	t	Pentachlorophenol	0.142	0.124	12.7	83	0.00	8.93
23	t	Phenanthrene	1.078	0.908	15.8	84	0.00	9.12
24	t	Anthracene	1.033	0.854	17.3	77	0.00	9.18
25	t	Fluoranthene	1.122	0.978	12.8	84	0.00	10.30
26	t	Pyrene	1.235	1.025	17.0	84	-0.01	10.51
27	S	Terphenyl-d14	0.573	0.520	9.2	81	0.00	10.70
28	t	Benzo[a]anthracene	1.103	0.944	14.4	87	0.00	11.69
29	t	Chrysene	1.081	0.879	18.7	78	0.00	11.73
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	71	0.00	12.93
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[b]fluoranthene	100.000	100.722	-0.7	72	0.00	12.68
		----------	AvgRF	CCRF	% Dev	----------		

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E4P2645-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50561.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

32	t	Benzo[k]fluoranthene	1.651	1.439	12.8	70	0.00	12.71
33	t	Benzo[a]pyrene	1.514	1.502	0.8	77	0.00	12.95
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.395	22.7#	64	0.00	13.94
35	t	Dibenz[a,h]anthracene	1.405	1.132	19.4	62	0.00	13.97
36	t	Benzo[g,h,i]perylene	1.529	1.186	22.4#	60	0.00	14.21

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p50101.d M4P2551SIMLVI.M Mon Jan 10 03:51:03 2022

8.8.16

8

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2647-ICC2647
Lab FileID: 4P50624.D

Response Factor Report MS4P

Method : C:\MSDCHEM\1\MET...\M4P2647SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Jan 11 08:30:56 2022
Response via : Initial Calibration

Calibration Files
1.0 =4p50620.D 0.5 =4p50622.D 0.2 =4p50619.D 0.1 =4p50624.D
0.04=4p50625.D 0.02=4p50623.D 0.01=4p50621.D .004=4p50626.D
.002=4p50627.D = = =

Compound	1.0	0.5	0.2	0.1	0.04	0.02	0.01	.004	.002	Avg	%RSD
1) I 1-Methylnaphthalene-d ----------ISTD----------											
2) 1,4-Dioxane	0.230	0.173	0.159	0.119	0.158	0.150	0.111	0.070		0.146	32.50
---- Quadratic regression ---- Coefficient = 0.9983											
Response Ratio = -0.00013 + 0.12860 *A + 0.08029 *A^2											
3) 2-Fluorophenol	0.497	0.386	0.405	0.343	0.354	0.373	0.386	0.361	0.370	0.386	11.78
4) Phenol-d5	0.990	0.818	0.783	0.722	0.744	0.726	0.756	0.670	0.707	0.769	12.17
5) Phenol	0.966	0.801	0.768	0.707	0.729	0.708	0.744	0.659	0.745	0.758	11.54
6) bis(2-Chloroethyl)ether										0.000#	-1.00
7) Nitrobenzene-d5	0.940	0.796	0.752	0.662	0.664	0.643	0.663	0.609	0.607	0.704	15.39
8) Naphthalene	2.148	1.916	1.800	1.742	1.775	1.745	1.836	1.799	2.153	1.879	8.65
9) Hexachlorobutadiene	0.611	0.555	0.501	0.512	0.533	0.520	0.538	0.550	0.571	0.543	6.19
10) 2-Methylnaphthalene	1.272	1.158	1.065	1.027	1.070	0.987	1.133	1.076	1.197	1.109	8.04
11) 1-Methylnaphthalene	1.230	1.096	1.006	0.992	1.016	1.020	1.081	1.091	1.200	1.081	7.90
12) Hexachlorocyclopentadiene										0.000#	-1.00
13) I Fluorene-d10 ----------ISTD----------											
14) 2-Fluorobiphenyl	1.250	1.095	0.980	0.921	0.942	0.956	0.983	0.956	1.004	1.010	10.20
15) Acenaphthylene	1.548	1.332	1.178	1.062	1.020	1.006	1.077	1.006	1.033	1.140	16.31
16) Acenaphthene	1.057	0.950	0.866	0.817	0.809	0.812	0.836	0.861	0.888	0.877	9.22
17) Fluorene	1.257	1.089	1.019	0.947	0.954	0.968	1.008	0.922	0.990	1.017	10.07
18) 4,6-dinitro-2-methylphenol	0.209	0.160	0.119	0.085	0.069	0.059	0.064	0.047		0.102	56.30
---- Quadratic regression ---- Coefficient = 0.9984											
Response Ratio = -0.00225 + 0.09388 *A + 0.01885 *A^2											
19) 2,4,6-Tribromophenol	0.173	0.150	0.138	0.127	0.114	0.118	0.106	0.112		0.130	17.62

8.8.17

8

Initial Calibration Summary

Job Number: JD36682 **Sample:** E4P2647-ICC2647
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50624.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
20)     Fluoranthene-d10      ----------------ISTD---------------------
21)  Hexachlorobenzene
           0.294 0.259 0.228 0.218 0.226 0.231 0.235 0.219 0.259        0.241   10.42
22)  Pentachlorophenol
           0.137 0.101 0.094 0.069 0.054 0.047 0.061 0.029              0.074   46.86
            ---- Quadratic regression ----  Coefficient =  0.9982
              Response Ratio = -0.00135 + 0.07032 *A + 0.01066 *A^2

23)  Phenanthrene
           1.086 0.951 0.849 0.774 0.807 0.813 0.857 0.800 0.949        0.876   11.48
24)  Anthracene
           1.048 0.869 0.745 0.657 0.696 0.636 0.725 0.663 0.682        0.747   17.73
25)  Fluoranthene
           1.211 1.053 0.971 0.915 0.964 0.999 1.097 1.166 1.442        1.091   15.03
26)  Pyrene
           1.247 1.054 0.967 0.864 0.889 0.901 0.962 0.921 1.011        0.980   11.97
27)  Terphenyl-d14
           0.819 0.636 0.569 0.538 0.556 0.541 0.582 0.532 0.586        0.596   15.06
28)  Benzo[a]anthracene
           1.150 0.960 0.886 0.740 0.705 0.712 0.821 0.682 0.721        0.820   18.95
29)  Chrysene
           1.130 0.988 0.898 0.856 0.851 0.826 0.901 0.799 0.895        0.905   11.08

30) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
31)  Benzo[b]fluoranthene
           1.848 1.566 1.470 1.341 1.401 1.326 1.533 1.289 1.402        1.464   11.72
32)  Benzo[k]fluoranthene
           1.641 1.497 1.345 1.302 1.284 1.302 1.362 1.078 1.469        1.364   11.64
33)  Benzo[a]pyrene
           1.640 1.461 1.344 1.295 1.373 1.257 1.400 1.205 1.377        1.372    9.24
34)  Indeno[1,2,3-cd]pyrene
           1.814 1.600 1.466 1.358 1.359 1.429 1.523 1.285 1.550        1.487   10.69
35)  Dibenz[a,h]anthracene
           1.517 1.324 1.223 1.155 1.184 1.190 1.282 1.181 1.448        1.278   10.06
36)  Benzo[g,h,i]perylene
           1.545 1.367 1.271 1.211 1.252 1.255 1.367 1.289 1.371        1.325    7.61
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4P2647SIMLVI.M       Tue Jan 11 15:35:16 2022   YING
```

8.8.17

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2647-ICV2647
Lab FileID: 4P50628.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2647\4p50628.D Vial: 11
Acq On : 10 Jan 2022 10:31 pm Operator: kristis
Sample : icv2647-0.2 Inst : MS4P
Misc : op37226a,e4p2647,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2647SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Jan 11 08:30:56 2022
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	89	0.00	6.66
			True	Calc.	% Drift			
2	t	1,4-Dioxane	200.000	234.459	-17.2	100	0.04	1.75
			AvgRF	CCRF	% Dev			
5		Phenol	0.758	0.729	3.8	85	0.00	4.39
8	t	Naphthalene	1.879	1.668	11.2	83	0.00	5.91
9	t	Hexachlorobutadiene	0.543	0.491	9.6	87	0.00	6.04
10	t	2-Methylnaphthalene	1.109	1.011	8.8	85	0.00	6.60
11	t	1-Methylnaphthalene	1.081	0.969	10.4	86	0.00	6.69
13	I	Fluorene-d10	1.000	1.000	0.0	95	0.00	8.13
15	t	Acenaphthylene	1.140	0.938	17.7	75	0.00	7.48
16	t	Acenaphthene	0.877	0.760	13.3	83	0.00	7.65
17	t	Fluorene	1.017	0.909	10.6	84	0.00	8.16
			True	Calc.	% Drift			
18		4,6-dinitro-2-methylpheno	1000.000	1135.867	-13.6	107	0.00	8.24
			AvgRF	CCRF	% Dev			
20		Fluoranthene-d10	1.000	1.000	0.0	97	0.00	10.25
21	t	Hexachlorobenzene	0.241	0.213	11.6	91	0.00	8.70
			True	Calc.	% Drift			
22	t	Pentachlorophenol	1000.000	926.035	7.4	78	0.00	8.91
			AvgRF	CCRF	% Dev			
23	t	Phenanthrene	0.876	0.770	12.1	88	0.00	9.10
24	t	Anthracene	0.747	0.649	13.1	85	-0.01	9.14
25	t	Fluoranthene	1.091	0.880	19.3	88	0.00	10.27
26	t	Pyrene	0.980	0.831	15.2	84	0.00	10.48
28	t	Benzo[a]anthracene	0.820	0.743	9.4	82	0.00	11.67
29	t	Chrysene	0.905	0.852	5.9	92	0.00	11.70
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	90	0.00	12.91
31	t	Benzo[b]fluoranthene	1.464	1.529	-4.4	94	0.00	12.66
32	t	Benzo[k]fluoranthene	1.364	1.373	-0.7	92	0.00	12.68
33	t	Benzo[a]pyrene	1.372	1.344	2.0	90	0.00	12.93
34	t	Indeno[1,2,3-cd]pyrene	1.487	1.373	7.7	85	0.00	13.91
35	t	Dibenz[a,h]anthracene	1.278	1.199	6.2	88	0.00	13.94
36	t	Benzo[g,h,i]perylene	1.325	1.246	6.0	88	0.00	14.17

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2647-ICV2647
Lab FileID: 4P50628.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p50619.D M4P2647SIMLVI.M Tue Jan 11 15:35:33 2022 YING

8.8.18

8

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2648-CC2647
Lab FileID: 4P50634.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2648\4p50634.D Vial: 2
Acq On : 11 Jan 2022 11:50 am Operator: kristis
Sample : cc2647-0.2 Inst : MS4P
Misc : op37226a,e4p2648,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2647SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Jan 11 08:30:56 2022
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	103	0.00	6.66
		---------- True	Calc.	% Drift	----------			
2	t	1,4-Dioxane	200.000	189.241	5.4	90	-0.02	1.69
		---------- AvgRF	CCRF	% Dev	----------			
3	S	2-Fluorophenol	0.386	0.378	2.1	96	-0.02	3.39
4	S	Phenol-d5	0.769	0.780	-1.4	103	-0.02	4.36
5		Phenol	0.758	0.763	-0.7	102	-0.02	4.37
6	t	bis(2-Chloroethyl)ether	----------NA----------					
7	S	Nitrobenzene-d5	0.704	0.740	-5.1	101	-0.01	5.19
8	t	Naphthalene	1.879	1.827	2.8	105	-0.01	5.91
9	t	Hexachlorobutadiene	0.543	0.535	1.5	110	-0.01	6.03
10	t	2-Methylnaphthalene	1.109	1.073	3.2	104	0.00	6.60
11	t	1-Methylnaphthalene	1.081	1.029	4.8	105	-0.01	6.69
12		Hexachlorocyclopentadiene	----------NA----------					
13	I	Fluorene-d10	1.000	1.000	0.0	107	0.00	8.12
14	S	2-Fluorobiphenyl	1.010	0.940	6.9	103	-0.02	6.97
15	t	Acenaphthylene	1.140	1.140	0.0	103	-0.02	7.47
16	t	Acenaphthene	0.877	0.860	1.9	106	0.00	7.64
17	t	Fluorene	1.017	1.010	0.7	106	0.00	8.15
		---------- True	Calc.	% Drift	----------			
18		4,6-dinitro-2-methylpheno	1000.000	945.797	5.4	97	-0.02	8.24
		---------- AvgRF	CCRF	% Dev	----------			
19	S	2,4,6-Tribromophenol	0.130	0.157	-20.8#	112	0.00	8.40
20		Fluoranthene-d10	1.000	1.000	0.0	101	0.00	10.24
21	t	Hexachlorobenzene	0.241	0.247	-2.5	109	-0.01	8.68
		---------- True	Calc.	% Drift	----------			
22	t	Pentachlorophenol	1000.000	1003.461	-0.3	89	-0.01	8.90
		---------- AvgRF	CCRF	% Dev	----------			
23	t	Phenanthrene	0.876	0.868	0.9	103	-0.01	9.09
24	t	Anthracene	0.747	0.759	-1.6	102	-0.01	9.14
25	t	Fluoranthene	1.091	1.000	8.3	104	0.00	10.26
26	t	Pyrene	0.980	0.980	0.0	102	0.00	10.48
27	S	Terphenyl-d14	0.596	0.580	2.7	103	0.00	10.67
28	t	Benzo[a]anthracene	0.820	0.819	0.1	93	0.00	11.66

8.8.19

8

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E4P2648-CC2647
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50634.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

29	t	Chrysene	0.905	0.935	-3.3	105	-0.01	11.69
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	98	0.00	12.90
31	t	Benzo[b]fluoranthene	1.464	1.457	0.5	97	-0.01	12.65
32	t	Benzo[k]fluoranthene	1.364	1.375	-0.8	100	-0.01	12.67
33	t	Benzo[a]pyrene	1.372	1.371	0.1	100	0.00	12.92
34	t	Indeno[1,2,3-cd]pyrene	1.487	1.438	3.3	96	-0.02	13.90
35	t	Dibenz[a,h]anthracene	1.278	1.205	5.7	96	-0.02	13.92
36	t	Benzo[g,h,i]perylene	1.325	1.277	3.6	98	-0.02	14.17

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p50619.D M4P2647SIMLVI.M Tue Jan 11 15:55:27 2022 YING

8.8.19

8

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-ICC3785
Lab FileID: 5P79959.D

Response Factor Report MS5P

Method : C:\MSDCHEM\1\METHODS\M5P3785LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 02 08:35:47 2021
Response via : Initial Calibration

Calibration Files
10 =5p79959.D 20 =5p79957.D 16 =5p79958.D 5 =5p79960.D
2 =5p79961.D 1 =5p79962.D 0.4 =5p79963.D 0.2 =5p79964.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
103) 1,4-Dichlorobenzene-d	ISTD									
104) Benzaldehyde	1.130	1.121	1.071	1.171	1.072	1.054	1.154	1.095	1.108	3.80
105) Phenanthrene-d10a	ISTD									
106) Atrazine	0.099	0.101	0.093	0.094	0.087	0.088	0.074	0.070	0.088	12.63
107) Naphthalene-d8a	ISTD									
108) Caprolactam	0.124	0.126	0.117	0.121	0.115	0.102	0.130	0.114	0.119	7.17
111) Phenanthrene-d10b	ISTD									
112) 1-chloroocta	0.269	0.270	0.249	0.264	0.229	0.224	0.230	0.244	0.247	7.49
113) o-terphenyl	0.564	0.558	0.522	0.567	0.547	0.536	0.546	0.552	0.549	2.72

(#) = Out of Range ### Number of calibration levels exceeded format ###

M5P3784LVI.M Thu Dec 02 08:37:46 2021 RPT1

8.8.20

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-ICV3785
Lab FileID: 5P79965.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3785\5p79965.D Vial: 10
Acq On : 2 Dec 2021 1:45 am Operator: chriss2
Sample : icv3785-10 Inst : MS5P
Misc : op35621,e5p3785,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 02 08:35:47 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	100	0.00	4.70
104	Benzaldehyde	1.108	1.224	-10.5	109	0.00	4.37
105	Phenanthrene-d10a	1.000	1.000	0.0	102	0.00	10.09
106	Atrazine	0.088	0.103	-17.0	107	0.00	9.74
107	Naphthalene-d8a	1.000	1.000	0.0	101	0.00	5.81
108 t	Caprolactam	0.119	0.138	-16.0	113	0.00	6.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3784LVI.M Thu Dec 02 08:37:36 2021 RPT1

8.8.21

8

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICC3794
Lab FileID: 5P80182.D

Response Factor Report MS5P

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Initial Calibration

Calibration Files
10 =5p80182.D 20 =5p80184.D 16 =5p80183.D 5 =5p80181.D
2 =5p80180.D 1 =5p80179.D 0.4 =5p80178.D 0.2 =5p80177.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.589	0.611	0.601	0.550	0.503	0.549	0.500	0.594	0.562	7.76
3) Pyridine	1.480	1.544	1.539	1.496	1.341	1.276	1.283	1.042	1.375	12.64
4) N-Nitrosodim	0.892	0.937	0.929	0.865	0.749	0.721	0.731	0.729	0.819	11.67
5) 2-Fluorophen	1.383	1.453	1.458	1.390	1.244	1.188	1.095	1.147	1.295	11.08
6) Indene	2.149	2.056	2.102	2.202	2.229	2.197	2.273	2.093	2.162	3.47
7) Cumene	3.138	3.101	3.193	3.070	2.902	2.865	2.808	2.783	2.982	5.38
8) Phenol-d5	1.748	1.794	1.808	1.740	1.616	1.535	1.549	1.505	1.662	7.46
9) Phenol	1.816	1.781	1.822	1.836	1.730	1.701	1.720	1.647	1.756	3.84
10) Aniline	2.023	1.927	1.990	2.044	2.012	1.893	1.931	1.894	1.964	3.06
11) bis(2-Chloro	1.241	1.185	1.217	1.249	1.242	1.186	1.262	1.177	1.220	2.73
12) 2-Chlorophen	1.427	1.385	1.419	1.454	1.398	1.372	1.295	1.399	1.394	3.39
13) Decane	1.044	0.977	1.018	1.106	1.141	1.133	1.161	1.235	1.102	7.64
14) 1,3-Dichloro	1.553	1.521	1.545	1.591	1.525	1.489	1.539	1.524	1.536	1.93
15) 1,4-Dichloro	1.495	1.458	1.496	1.506	1.471	1.480	1.460	1.461	1.479	1.25
16) Benzyl alcoh	0.887	0.895	0.907	0.885	0.849	0.805	0.783	0.779	0.849	6.21
17) 1,2-Dichloro	1.421	1.385	1.417	1.466	1.438	1.401	1.410	1.305	1.405	3.36
18) Acetophenone	1.600	1.549	1.588	1.676	1.738	1.705	1.774	1.669	1.662	4.69
19) 2-Methylphen	1.153	1.109	1.126	1.192	1.161	1.160	1.076	1.056	1.129	4.11
20) 2,2'-oxybis(	1.364	1.262	1.302	1.454	1.471	1.526	1.577	1.613	1.446	8.80
21) 3&4-Methylph	1.146	1.091	1.117	1.216	1.221	1.183	1.160	1.164	1.162	3.87
22) n-Nitroso-di	0.753	0.700	0.726	0.790	0.839	0.792	0.876	0.833	0.789	7.61
23) Hexachloroet	0.487	0.500	0.491	0.486	0.490	0.493	0.499	0.525	0.496	2.55
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.298	0.294	0.304	0.302	0.301	0.304	0.297	0.307	0.301	1.46
26) Nitrobenzene	0.299	0.292	0.303	0.308	0.314	0.318	0.319	0.317	0.309	3.24
27) Quinoline	0.734	0.732	0.743	0.715	0.714	0.686	0.688	0.650	0.708	4.42
28) Isophorone	0.613	0.608	0.629	0.612	0.600	0.593	0.583	0.574	0.601	2.96
29) 2-Nitropheno	0.194	0.195	0.199	0.186	0.178	0.174	0.173	0.174	0.184	5.84
30) 2,4-Dimethyl	0.315	0.302	0.312	0.324	0.330	0.326	0.300	0.317	0.316	3.50
31) Benzoic acid	0.224	0.240	0.247	0.199	0.150				0.212	18.47
32) bis(2-Chloro	0.367	0.359	0.370	0.377	0.376	0.389	0.375	0.351	0.371	3.20
33) 2,4-Dichloro	0.298	0.301	0.306	0.298	0.296	0.269	0.273	0.270	0.289	5.36
34) 2,6-Dichloro	0.278	0.276	0.286	0.277	0.273	0.271	0.270	0.252	0.273	3.53
35) 1,3,5-Trichl	0.321	0.313	0.326	0.321	0.319	0.318	0.316	0.325	0.320	1.39
36) 1,2,4-Trichl	0.311	0.311	0.322	0.320	0.313	0.315	0.296	0.313	0.313	2.50
37) 1,2,3-Trichl	0.285	0.279	0.289	0.288	0.294	0.294	0.274	0.292	0.287	2.51
38) Naphthalene	0.986	0.970	1.007	0.998	0.998	0.986	0.990	1.004	0.992	1.22
39) 4-Chloroanil	0.419	0.409	0.424	0.424	0.420	0.415	0.401	0.400	0.414	2.33
40) 2,3-Dichloro	0.352	0.350	0.363	0.358	0.360	0.349	0.352	0.320	0.350	3.81
41) Hydroquinone	0.316	0.312	0.324	0.313	0.291	0.253	0.222		0.290	13.20
42) Hexachlorobu	0.167	0.169	0.174	0.171	0.169	0.172	0.158	0.176	0.169	3.24
43) 4-Chloro-3-m	0.283	0.287	0.295	0.286	0.270	0.256	0.255	0.242	0.272	7.01
44) 2-Methylnaph	0.648	0.640	0.661	0.646	0.639	0.633	0.626	0.618	0.639	2.11
45) 1-Methylnaph	0.606	0.588	0.613	0.610	0.611	0.617	0.602	0.602	0.606	1.46

8.8.22
8

Initial Calibration Summary

Job Number: JD36682 **Sample:** E5P3794-ICC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80182.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

46)	I Acenaphthene-d10	----------ISTD----------									
47)	Hexachlorocy	0.336	0.337	0.343	0.330	0.308	0.308	0.287	0.284	0.317	7.36
48)	1,2,4,5-Tetr	0.525	0.507	0.518	0.533	0.527	0.529	0.536	0.542	0.527	2.05
49)	2,4,6-Trichl	0.359	0.362	0.363	0.355	0.334	0.339	0.327	0.303	0.343	6.17
50)	2,4,5-Trichl	0.381	0.376	0.382	0.378	0.368	0.361	0.354	0.314	0.364	6.24
51)	2-Fluorobiph	1.318	1.299	1.318	1.322	1.294	1.320	1.367	1.261	1.312	2.30
52)	2-Chloronaph	1.075	1.048	1.067	1.090	1.109	1.137	1.131	1.094	1.094	2.83
53)	Biphenyl	1.495	1.461	1.504	1.505	1.470	1.519	1.464	1.465	1.485	1.54
54)	2-Nitroanili	0.268	0.270	0.275	0.265	0.252	0.236	0.248	0.234	0.256	6.20
55)	Dimethylphth	1.362	1.345	1.354	1.337	1.300	1.286	1.319	1.290	1.324	2.24
56)	Acenaphthyle	1.707	1.651	1.689	1.689	1.651	1.630	1.648	1.571	1.654	2.58
57)	2,6-Dinitrot	0.301	0.308	0.307	0.287	0.275	0.262	0.236	0.248	0.278	9.87
58)	3-Nitroanili	0.355	0.358	0.359	0.334	0.315	0.311	0.283	0.262	0.322	11.27
59)	Acenaphthene	1.137	1.123	1.145	1.127	1.131	1.129	1.112	1.096	1.125	1.34
60)	2,4-Dinitrop	0.163	0.187	0.179	0.143	0.105	0.094	0.062		0.133	35.44
	----- Quadratic regression -----									Coefficient =	0.9992
	Response Ratio = -0.00941 + 0.13575 *A + 0.01103 *A^2										
61)	4-Nitropheno	0.139	0.143	0.145	0.134	0.120	0.118	0.109		0.130	10.78
62)	Dibenzofuran	1.641	1.610	1.633	1.637	1.600	1.634	1.630	1.572	1.619	1.46
63)	2,4-Dinitrot	0.375	0.369	0.377	0.373	0.359	0.324	0.331	0.306	0.352	7.87
64)	2,3,4,6-Tetr	0.321	0.325	0.326	0.311	0.294	0.285	0.246	0.251	0.295	10.91
65)	Diethylphtha	1.307	1.291	1.323	1.302	1.268	1.250	1.244	1.198	1.273	3.24
66)	Fluorene	1.338	1.310	1.325	1.318	1.312	1.290	1.295	1.225	1.302	2.65
67)	4-Chlorophen	0.580	0.559	0.574	0.588	0.604	0.588	0.596	0.629	0.590	3.54
68)	4-Nitroanili	0.306	0.310	0.315	0.298	0.283	0.285	0.274	0.273	0.293	5.58
69)	I Phenanthrene-d10	----------ISTD----------									
70)	4,6-Dinitro-	0.119	0.131	0.129	0.108	0.086	0.075	0.059		0.101	27.93
	----- Quadratic regression -----									Coefficient =	0.9993
	Response Ratio = -0.00302 + 0.10458 *A + 0.01184 *A^2										
71)	n-Nitrosodip	0.667	0.666	0.670	0.659	0.630	0.631	0.602	0.596	0.640	4.66
72)	Pentachloron	0.039	0.039	0.039	0.039	0.034	0.033	0.032	0.031	0.036#	10.11
73)	1,2-Diphenyl	0.647	0.627	0.646	0.662	0.647	0.662	0.639	0.677	0.651	2.37
74)	2,4,6-Tribro	0.111	0.115	0.115	0.109	0.097	0.096	0.087	0.082	0.102	12.55
75)	4-Bromopheny	0.228	0.237	0.235	0.221	0.204	0.196	0.189	0.199	0.214	8.79
76)	Hexachlorobe	0.240	0.244	0.244	0.236	0.231	0.231	0.217	0.247	0.236	4.13
77)	Pentachlorop	0.164	0.175	0.173	0.155	0.136	0.120	0.114		0.148	16.88
	----- Quadratic regression -----									Coefficient =	0.9996
	Response Ratio = -0.00553 + 0.15251 *A + 0.00501 *A^2										
78)	Phenanthrene	1.043	1.042	1.053	1.039	1.004	1.027	1.038	1.046	1.037	1.46
79)	Anthracene	1.074	1.071	1.086	1.066	1.037	1.049	1.004	1.024	1.051	2.69
80)	Carbazole	1.066	1.081	1.095	1.049	0.994	0.975	0.958	0.948	1.021	5.75
81)	Di-n-butylph	1.398	1.419	1.427	1.344	1.235	1.197	1.122	1.105	1.281	10.37
82)	Fluoranthene	1.239	1.264	1.278	1.206	1.130	1.134	1.088	1.053	1.174	7.18
83)	Octadecane	0.421	0.415	0.418	0.414	0.386	0.388	0.365	0.396	0.400	4.93
84)	I Chrysene-d12	----------ISTD----------									
85)	Benzidine	0.785	0.880	0.824	0.682	0.684	0.608			0.744	13.77
86)	Pyrene	1.367	1.243	1.330	1.428	1.424	1.408	1.361	1.393	1.369	4.46
87)	Terphenyl-d1	1.012	0.966	1.009	1.026	0.993	0.985	0.998	0.985	0.997	1.87
88)	Butylbenzylp	0.676	0.682	0.698	0.652	0.598	0.571	0.543	0.519	0.617	11.12
89)	Benzo[a]anth	1.294	1.340	1.355	1.254	1.190	1.171	1.198	1.261	1.258	5.48
90)	3,3'-Dichlor	0.479	0.499	0.503	0.451	0.419	0.390	0.370	0.343	0.432	14.10
91)	Chrysene	1.136	1.147	1.151	1.125	1.098	1.108	1.137	1.096	1.125	1.91
92)	bis(2-Ethylh	0.896	0.906	0.925	0.879	0.817	0.776	0.695	0.651	0.818	12.55

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICC3794
Lab FileID: 5P80182.D

```
 93) I   Perylene-d12          ----------------ISTD--------------------
 94) Di-n-octylph 1.515 1.668 1.636 1.349 1.267 1.237 1.143       1.402  14.65
 95) Benzo[b]fluo 1.301 1.296 1.294 1.245 1.159 1.159 1.122 1.120 1.212   6.61
 96) Benzo[k]fluo 1.070 1.003 1.064 1.077 1.063 1.061 1.087 1.052 1.060   2.38
 97) Benzo[a]pyre 1.180 1.200 1.208 1.153 1.077 1.050 1.015 0.990 1.109   7.81
 98) Indeno[1,2,3 1.069 1.115 1.114 0.982 0.997 0.945 0.919 0.834 0.997   9.93
 99) Dibenz(a,h)a 1.013 1.080 1.094 0.963 0.927 0.888 0.867 0.852 0.960   9.77
100) Dibenz[a,h]a 1.126 1.129 1.161 1.040 1.076 0.990 1.027 0.910 1.057   7.88
101) 7,12-Dimethy 0.522 0.526 0.529 0.488 0.464 0.464 0.484 0.461 0.492   5.92
102) Benzo[g,h,i] 1.193 1.220 1.241 1.130 1.161 1.101 1.085 1.067 1.150   5.60

 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M5P3794LVI.M        Thu Dec 09 17:39:33 2021   RPT1
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8.8.22

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80185.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80185.D Vial: 10
Acq On : 9 Dec 2021 4:47 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	-0.03	4.64
2	t	1,4-Dioxane	0.562	0.457	18.7	79	-0.05	2.20
6	t	Indene	2.162	1.832	15.3	87	-0.03	4.84
7	t	Cumene	2.982	2.689	9.8	88	-0.03	4.04
11	t	bis(2-Chloroethyl)ether	1.220	1.162	4.8	96	-0.03	4.44
13	t	Decane	1.102	0.971	11.9	95	-0.02	4.52
14	t	1,3-Dichlorobenzene	1.536	1.393	9.3	92	-0.02	4.60
15	t	1,4-Dichlorobenzene	1.479	1.331	10.0	91	-0.02	4.66
16	t	Benzyl alcohol	0.849	0.762	10.2	88	-0.02	4.75
17	t	1,2-Dichlorobenzene	1.405	1.267	9.8	91	-0.03	4.77
18	t	Acetophenone	1.662	1.514	8.9	97	-0.03	4.96
20	t	2,2'-oxybis(1-Chloropropa	1.446	1.227	15.1	92	-0.03	4.85
23	t	Hexachloroethane	0.496	0.450	9.3	94	-0.03	5.05
24	I	Naphthalene-d8	1.000	1.000	0.0	102	-0.03	5.74
26	t	Nitrobenzene	0.309	0.280	9.4	95	-0.03	5.10
27	t	Quinoline	0.708	0.632	10.7	88	-0.04	6.09
28	t	Isophorone	0.601	0.542	9.8	90	-0.03	5.30
32	t	bis(2-Chloroethoxy)methan	0.371	0.343	7.5	95	-0.03	5.50
35		1,3,5-Trichlorobenzene	0.320	0.292	8.8	92	-0.03	5.38
36	t	1,2,4-Trichlorobenzene	0.313	0.284	9.3	93	-0.03	5.68
37		1,2,3-Trichlorobenzene	0.287	0.262	8.7	93	-0.03	5.90
38	t	Naphthalene	0.992	0.903	9.0	93	-0.03	5.76
40	t	2,3-Dichloroaniline	0.350	0.319	8.9	92	-0.04	6.83
42	t	Hexachlorobutadiene	0.169	0.154	8.9	94	-0.03	5.88
44	t	2-Methylnaphthalene	0.639	0.584	8.6	92	-0.03	6.49
45	t	1-Methylnaphthalene	0.606	0.540	10.9	91	-0.04	6.61
46	I	Acenaphthene-d10	1.000	1.000	0.0	105	-0.04	7.81
47	t	Hexachlorocyclopentadiene	0.317	0.367	-15.8	108	-0.04	6.68
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.463	12.1	92	-0.04	6.69
52	t	2-Chloronaphthalene	1.094	0.968	11.5	94	-0.04	7.08
53	t	Biphenyl	1.485	1.345	9.4	94	-0.03	7.07
55	t	Dimethylphthalate	1.324	1.195	9.7	92	-0.04	7.48
57	t	2,6-Dinitrotoluene	0.278	0.257	7.6	90	-0.04	7.55
59	t	Acenaphthene	1.125	1.000	11.1	92	-0.04	7.86
62	t	Dibenzofuran	1.619	1.451	10.4	93	-0.04	8.10
63	t	2,4-Dinitrotoluene	0.352	0.324	8.0	91	-0.04	8.10
65	t	Diethylphthalate	1.273	1.177	7.5	94	-0.04	8.49
66	t	Fluorene	1.302	1.172	10.0	92	-0.04	8.59
67	t	4-Chlorophenyl-phenylethe	0.590	0.504	14.6	91	-0.04	8.62

Initial Calibration Verification

Job Number: JD36682 **Sample:** E5P3794-ICV3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80185.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

69	I	Phenanthrene-d10	1.000	1.000	0.0	105	-0.04	10.00
72	t	Pentachloronitrobenzene	0.036	0.036#	0.0	98	-0.04	9.73
73	t	1,2-Diphenylhydrazine	0.651	0.607	6.8	99	-0.04	8.85
75	t	4-Bromophenyl-phenylether	0.214	0.198	7.5	91	-0.04	9.35
76	t	Hexachlorobenzene	0.236	0.214	9.3	94	-0.04	9.40
78	t	Phenanthrene	1.037	0.923	11.0	93	-0.04	10.04
79	t	Anthracene	1.051	0.941	10.5	92	-0.04	10.11
80	t	Carbazole	1.021	0.929	9.0	92	-0.04	10.39
81	t	Di-n-butylphthalate	1.281	1.214	5.2	91	-0.04	11.04
82	t	Fluoranthene	1.174	1.122	4.4	95	-0.04	11.90
83	t	Octadecane	0.400	0.372	7.0	93	-0.04	9.97
84	I	Chrysene-d12	1.000	1.000	0.0	107	-0.04	14.19
86	t	Pyrene	1.369	1.235	9.8	97	-0.04	12.25
88	t	Butylbenzylphthalate	0.617	0.592	4.1	94	-0.04	13.42
89	t	Benzo[a]anthracene	1.258	1.123	10.7	93	-0.04	14.18
91	t	Chrysene	1.125	1.004	10.8	95	-0.04	14.23
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.779	4.8	93	-0.04	14.40
93	I	Perylene-d12	1.000	1.000	0.0	108	-0.04	16.30
94	t	Di-n-octylphthalate	1.402	1.262	10.0	90	-0.04	15.39
95	t	Benzo[b]fluoranthene	1.212	1.173	3.2	98	-0.04	15.78
96	t	Benzo[k]fluoranthene	1.060	0.957	9.7	97	-0.04	15.83
97	t	Benzo[a]pyrene	1.109	1.052	5.1	97	-0.04	16.22
98	t	Indeno[1,2,3-cd]pyrene	0.997	0.902	9.5	91	-0.05	17.84
99	t	Dibenz(a,h)acridine	0.960	0.865	9.9	93	-0.05	17.50
100	t	Dibenz[a,h]anthracene	1.057	0.968	8.4	93	-0.05	17.90
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.441	10.4	92	-0.04	15.79
102	t	Benzo[g,h,i]perylene	1.150	1.017	11.6	92	-0.05	18.28

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:13 2021 RPT1

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80186.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80186.D Vial: 11
Acq On : 9 Dec 2021 5:13 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	-0.03	4.64
9	t	Phenol	1.756	1.433	18.4	86	-0.02	4.37
12	t	2-Chlorophenol	1.394	1.249	10.4	95	-0.02	4.48
19	t	2-Methylphenol	1.129	1.043	7.6	99	-0.02	4.83
21	t	3&4-Methylphenol	1.162	1.081	7.0	103	-0.02	4.96
24	I	Naphthalene-d8	1.000	1.000	0.0	106	-0.03	5.74
29	t	2-Nitrophenol	0.184	0.175	4.9	96	-0.03	5.38
30	t	2,4-Dimethylphenol	0.316	0.296	6.3	100	-0.02	5.41
31	t	Benzoic acid	0.212	0.183	13.7	86	-0.01	5.50
33	t	2,4-Dichlorophenol	0.289	0.259	10.4	92	-0.02	5.60
34	t	2,6-Dichlorophenol	0.273	0.257	5.9	98	-0.03	5.82
41	t	Hydroquinone	0.290	0.315	-8.6	106	-0.02	6.15
43	t	4-Chloro-3-methylphenol	0.272	0.258	5.1	97	-0.03	6.32
46	I	Acenaphthene-d10	1.000	1.000	0.0	114	-0.04	7.81
49	t	2,4,6-Trichlorophenol	0.343	0.319	7.0	101	-0.04	6.83
50	t	2,4,5-Trichlorophenol	0.364	0.331	9.1	99	-0.03	6.87
		----------	True	Calc.	% Drift		----------	
60	t	2,4-Dinitrophenol	20.000	18.164	9.2	99	-0.03	7.92
		----------	AvgRF	CCRF	% Dev		----------	
61	t	4-Nitrophenol	0.130	0.122	6.2	100	-0.03	8.02
64		2,3,4,6-Tetrachlorophenol	0.295	0.271	8.1	96	-0.04	8.28
69	I	Phenanthrene-d10	1.000	1.000	0.0	119	-0.04	10.00
		----------	True	Calc.	% Drift		----------	
70	t	4,6-Dinitro-2-methylpheno	10.000	8.933	10.7	103	-0.04	8.69
		----------	True	Calc.	% Drift		----------	
77	t	Pentachlorophenol	20.000	16.597	17.0	96	-0.04	9.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:15 2021 RPT1

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80187.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80187.D Vial: 12
Acq On : 9 Dec 2021 5:40 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	-0.03	4.64
3	t	Pyridine	1.375	1.229	10.6	85	-0.05	2.51
4	t	N-Nitrosodimethylamine	0.819	0.755	7.8	87	-0.04	2.48
10		Aniline	1.964	1.892	3.7	96	-0.02	4.40
22	t	n-Nitroso-di-n-propylamin	0.789	0.845	-7.1	115	-0.03	4.96
24	I	Naphthalene-d8	1.000	1.000	0.0	105	-0.03	5.74
39	t	4-Chloroaniline	0.414	0.409	1.2	103	-0.03	5.81
46	I	Acenaphthene-d10	1.000	1.000	0.0	100	-0.04	7.81
54	t	2-Nitroaniline	0.256	0.295	-15.2	110	-0.03	7.22
58	t	3-Nitroaniline	0.322	0.368	-14.3	103	-0.03	7.77
68	t	4-Nitroaniline	0.293	0.347	-18.4	113	-0.04	8.64
69	I	Phenanthrene-d10	1.000	1.000	0.0	112	-0.05	9.99
71	t	n-Nitrosodiphenylamine	0.640	0.618	3.4	104	-0.04	8.80
84	I	Chrysene-d12	1.000	1.000	0.0	105	-0.05	14.18
85	t	Benzidine	0.744	0.658	11.6	88	-0.04	12.17
90	t	3,3'-Dichlorobenzidine	0.432	0.432	0.0	95	-0.04	14.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:17 2021 RPT1

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80188.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80188.D Vial: 13
Acq On : 9 Dec 2021 6:07 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	131	-0.03	4.64
5	S	2-Fluorophenol	1.295	1.365	-5.4	129	-0.02	3.65
8	S	Phenol-d5	1.662	1.608	3.2	120	-0.02	4.36
24	I	Naphthalene-d8	1.000	1.000	0.0	134	-0.03	5.74
25	S	Nitrobenzene-d5	0.301	0.318	-5.6	143	-0.03	5.08
46	I	Acenaphthene-d10	1.000	1.000	0.0	139	-0.04	7.81
51	S	2-Fluorobiphenyl	1.312	1.309	0.2	138	-0.04	6.94
69	I	Phenanthrene-d10	1.000	1.000	0.0	154	-0.05	9.99
74	S	2,4,6-Tribromophenol	0.102	0.102	0.0	142	-0.04	8.95
84	I	Chrysene-d12	1.000	1.000	0.0	150	-0.04	14.19
87	S	Terphenyl-d14	0.997	1.017	-2.0	151	-0.04	12.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:19 2021 RPT1

8.8.26

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3795-ICV3794
Lab FileID: 5P80192.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3795\5p80192.D Vial: 2
Acq On : 9 Dec 2021 12:58 pm Operator: kristis
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3795,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
46 I	Acenaphthene-d10	1.000	1.000	0.0	110	-0.04	7.81
56 t	Acenaphthylene	1.654	1.509	8.8	97	-0.04	7.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:53:36 2021 RPT1

8.8.27

8

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E5P3826-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80847.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e5p3826\5p80847.D Vial: 2
Acq On : 7 Jan 2022 2:59 am Operator: chriss2
Sample : cc3794-10 Inst : MS5P
Misc : op35622,e5p3826,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Jan 06 15:40:04 2022
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	-0.02	4.37
2	t	1,4-Dioxane	0.562	0.458	18.5	71	0.00	1.91
3	t	Pyridine	1.375	1.113	19.1	69	0.00	2.26
4	t	N-Nitrosodimethylamine	0.819	0.625	23.7#	64	0.00	2.23
5	S	2-Fluorophenol	1.295	1.236	4.6	82	-0.03	3.43
6	t	Indene	2.162	2.034	5.9	87	-0.02	4.56
7	t	Cumene	2.982	3.107	-4.2	91	-0.02	3.77
8	S	Phenol-d5	1.662	1.430	14.0	75	-0.03	4.16
9	t	Phenol	1.756	1.491	15.1	75	-0.03	4.18
10		Aniline	1.964	1.735	11.7	79	-0.02	4.15
11	t	bis(2-Chloroethyl)ether	1.220	0.931	23.7#	69	-0.02	4.20
12	t	2-Chlorophenol	1.394	1.417	-1.6	91	-0.03	4.23
13	t	Decane	1.102	0.718	34.8#	63	-0.02	4.24
14	t	1,3-Dichlorobenzene	1.536	1.541	-0.3	91	-0.03	4.32
15	t	1,4-Dichlorobenzene	1.479	1.489	-0.7	91	-0.02	4.38
16	t	Benzyl alcohol	0.849	0.741	12.7	76	-0.03	4.50
17	t	1,2-Dichlorobenzene	1.405	1.565	-11.4	101	-0.02	4.50
18	t	Acetophenone	1.662	1.737	-4.5	100	-0.02	4.69
19	t	2-Methylphenol	1.129	0.976	13.6	78	-0.03	4.60
20	t	2,2'-oxybis(1-Chloropropa	1.446	0.733	49.3#	49#	-0.02	4.58
21	t	3&4-Methylphenol	1.162	1.060	8.8	85	-0.03	4.73
22	t	n-Nitroso-di-n-propylamin	0.789	0.717	9.1	87	-0.02	4.69
23	t	Hexachloroethane	0.496	0.525	-5.8	99	-0.02	4.75
24	I	Naphthalene-d8	1.000	1.000	0.0	93	-0.03	5.40
25	S	Nitrobenzene-d5	0.301	0.307	-2.0	96	-0.03	4.81
26	t	Nitrobenzene	0.309	0.290	6.1	90	-0.03	4.82
27	t	Quinoline	0.708	0.778	-9.9	99	-0.03	5.76
28	t	Isophorone	0.601	0.561	6.7	85	-0.03	5.01
29	t	2-Nitrophenol	0.184	0.194	-5.4	93	-0.03	5.08
30	t	2,4-Dimethylphenol	0.316	0.352	-11.4	104	-0.03	5.14
31	t	Benzoic acid	0.212	0.195	8.0	81	-0.03	5.27
32	t	bis(2-Chloroethoxy)methan	0.371	0.306	17.5	78	-0.03	5.20
33	t	2,4-Dichlorophenol	0.289	0.314	-8.7	98	-0.03	5.30
34	t	2,6-Dichlorophenol	0.273	0.318	-16.5	106	-0.03	5.50
35		1,3,5-Trichlorobenzene	0.320	0.334	-4.4	97	-0.02	5.07
36	t	1,2,4-Trichlorobenzene	0.313	0.327	-4.5	98	-0.03	5.35
37		1,2,3-Trichlorobenzene	0.287	0.281	2.1	92	-0.03	5.56
38	t	Naphthalene	0.992	0.992	0.0	93	-0.03	5.42
39	t	4-Chloroaniline	0.414	0.424	-2.4	94	-0.03	5.51
40	t	2,3-Dichloroaniline	0.350	0.402	-14.9	106	-0.04	6.46
41	t	Hydroquinone	0.290	0.319	-10.0	94	-0.04	5.90

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E5P3826-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80847.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	t	Hexachlorobutadiene	0.169	0.186	-10.1	103	-0.03	5.53
43	t	4-Chloro-3-methylphenol	0.272	0.323	-18.7	106	-0.04	6.02
44	t	2-Methylnaphthalene	0.639	0.686	-7.4	98	-0.04	6.11
45	t	1-Methylnaphthalene	0.606	0.644	-6.3	99	-0.03	6.23
46	I	Acenaphthene-d10	1.000	1.000	0.0	106	-0.04	7.38
47	t	Hexachlorocyclopentadiene	0.317	0.368	-16.1	116	-0.03	6.29
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.482	8.5	97	-0.04	6.30
49	t	2,4,6-Trichlorophenol	0.343	0.378	-10.2	111	-0.04	6.46
50	t	2,4,5-Trichlorophenol	0.364	0.370	-1.6	103	-0.04	6.52
51	S	2-Fluorobiphenyl	1.312	1.195	8.9	96	-0.04	6.55
52	t	2-Chloronaphthalene	1.094	1.011	7.6	99	-0.04	6.68
53	t	Biphenyl	1.485	1.416	4.6	100	-0.04	6.66
54	t	2-Nitroaniline	0.256	0.278	-8.6	109	-0.04	6.86
55	t	Dimethylphthalate	1.324	1.459	-10.2	113	-0.04	7.09
56	t	Acenaphthylene	1.654	1.562	5.6	97	-0.04	7.20
57	t	2,6-Dinitrotoluene	0.278	0.318	-14.4	112	-0.04	7.17
58	t	3-Nitroaniline	0.322	0.338	-5.0	101	-0.04	7.41
59	t	Acenaphthene	1.125	1.094	2.8	102	-0.04	7.42
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	20.000	25.983	-29.9#	142	-0.04	7.54
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.130	0.269	-106.9#	205#	-0.05	7.73
62	t	Dibenzofuran	1.619	1.621	-0.1	104	-0.04	7.66
63	t	2,4-Dinitrotoluene	0.352	0.424	-20.5#	119	-0.04	7.71
64		2,3,4,6-Tetrachlorophenol	0.295	0.331	-12.2	109	-0.05	7.87
65	t	Diethylphthalate	1.273	1.617	-27.0#	131	-0.04	8.06
66	t	Fluorene	1.302	1.350	-3.7	107	-0.04	8.14
67	t	4-Chlorophenyl-phenylethe	0.590	0.563	4.6	103	-0.04	8.17
68	t	4-Nitroaniline	0.293	0.345	-17.7	119	-0.05	8.28
69	I	Phenanthrene-d10	1.000	1.000	0.0	112	-0.05	9.52
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	10.000	11.872	-18.7	134	-0.04	8.28
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.640	0.635	0.8	106	-0.05	8.36
72	t	Pentachloronitrobenzene	0.036	0.041#	-13.9	119	-0.05	9.26
73	t	1,2-Diphenylhydrazine	0.651	0.610	6.3	105	-0.04	8.40
74	S	2,4,6-Tribromophenol	0.102	0.105	-2.9	106	-0.04	8.50
75	t	4-Bromophenyl-phenylether	0.214	0.219	-2.3	107	-0.04	8.88
76	t	Hexachlorobenzene	0.236	0.224	5.1	104	-0.04	8.92
		----------	True	Calc.	% Drift	----------		
77	t	Pentachlorophenol	20.000	19.216	3.9	106	-0.05	9.28
		----------	AvgRF	CCRF	% Dev	----------		
78	t	Phenanthrene	1.037	1.023	1.4	110	-0.05	9.56
79	t	Anthracene	1.051	1.044	0.7	109	-0.05	9.64
80	t	Carbazole	1.021	1.106	-8.3	116	-0.05	9.95
81	t	Di-n-butylphthalate	1.281	1.585	-23.7#	127	-0.04	10.55
82	t	Fluoranthene	1.174	1.305	-11.2	118	-0.05	11.40
83	t	Octadecane	0.400	0.283	29.3#	75	-0.04	9.45
84	I	Chrysene-d12	1.000	1.000	0.0	118	-0.05	13.68
85	t	Benzidine	0.744	0.842	-13.2	126	-0.05	11.72
86	t	Pyrene	1.369	1.328	3.0	114	-0.05	11.75

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E5P3826-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80847.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

87	S	Terphenyl-d14	0.997	0.994	0.3	116	-0.05	12.07
88	t	Butylbenzylphthalate	0.617	0.827	-34.0#	144	-0.05	12.92
89	t	Benzo[a]anthracene	1.258	1.335	-6.1	122	-0.05	13.66
90	t	3,3'-Dichlorobenzidine	0.432	0.460	-6.5	113	-0.05	13.71
91	t	Chrysene	1.125	1.084	3.6	112	-0.05	13.72
92	t	bis(2-Ethylhexyl)phthalat	0.818	1.089	-33.1#	143	-0.04	13.86
93	I	Perylene-d12	1.000	1.000	0.0	99	-0.05	15.78
94	t	Di-n-octylphthalate	1.402	2.119	-51.1#	138	-0.04	14.85
95	t	Benzo[b]fluoranthene	1.212	1.323	-9.2	101	-0.05	15.26
96	t	Benzo[k]fluoranthene	1.060	1.058	0.2	98	-0.05	15.30
97	t	Benzo[a]pyrene	1.109	1.211	-9.2	101	-0.05	15.70
98	t	Indeno[1,2,3-cd]pyrene	0.997	1.039	-4.2	96	-0.06	17.16
99	t	Dibenz(a,h)acridine	0.960	0.959	0.1	94	-0.05	16.86
100	t	Dibenz[a,h]anthracene	1.057	1.039	1.7	91	-0.06	17.19
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.546	-11.0	103	-0.05	15.27
102	t	Benzo[g,h,i]perylene	1.150	1.119	2.7	93	-0.06	17.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p80789.D M5P3794LVI.M Fri Jan 07 11:24:31 2022 RPT1

8.8.28

8

Continuing Calibration Summary

Job Number: JD36682 **Sample:** E5P3826-CC3785
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80848.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e5p3826\5p80848.D Vial: 3
Acq On : 7 Jan 2022 3:25 am Operator: chriss2
Sample : cc3785-10 Inst : MS5P
Misc : op35622,e5p3826,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Fri Jan 07 11:26:03 2022
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103		1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	111	0.00	4.37
104		Benzaldehyde	1.108	0.913	17.6	89	-0.04	4.06
105		Phenanthrene-d10a	1.000	1.000	0.0	113	0.00	9.52
106		Atrazine	0.088	0.106	-20.5#	122	-0.06	9.22
107		Naphthalene-d8a	1.000	1.000	0.0	101	0.00	5.40
108	t	Caprolactam	0.119	0.093	21.8#	76	-0.05	5.85
111		Phenanthrene-d10b	1.000	1.000	0.0	113	0.00	9.52
112	s	1-chlorooctadecane	0.247	0.216	12.6	91	-0.06	11.34
113	s	o-terphenyl	0.549	0.562	-2.4	113	-0.06	10.17

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p80847.D M5P3794LVI.M Fri Jan 07 11:27:03 2022 RPT1

8.8.29

8

Initial Calibration Summary

Job Number: JD36682 **Sample:** EF8913-ICC8913
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** F203416.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report GCMSF

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Nov 10 10:17:53 2021
Response via : Initial Calibration

Calibration Files
2 =F203412.D 5 =F203413.D 25 =F203415.D 80 =F203417.D
100 =F203418.D 50 =F203416.D 10 =F203414.D 1 =F203411.D

Compound	2	5	25	80	100	50	10	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.639	0.539	0.557	0.567	0.563	0.545	0.575	0.567	0.569	5.43
3) Pyridine	1.200	1.399	1.572	1.573	1.579	1.539	1.477	1.453	1.474	8.73
4) N-Nitrosodim	0.814	0.730	0.775	0.789	0.785	0.782	0.757	0.852	0.785	4.66
5) 2-Fluorophen	1.136	1.156	1.319	1.341	1.364	1.287	1.206	1.236	1.256	6.81
6) Indene	2.209	2.260	2.329	2.388	2.363	2.284	2.255	2.245	2.292	2.72
7) Cumene	3.115	3.143	3.298	3.353	3.374	3.274	3.162	3.277	3.249	3.02
8) Phenol-d5	1.549	1.681	1.780	1.785	1.802	1.765	1.666	1.556	1.698	6.03
9) Phenol	1.580	1.630	1.741	1.799	1.794	1.739	1.641	1.565	1.686	5.56
10) Aniline	1.979	2.007	2.217	2.199	2.236	2.146	2.088	2.009	2.110	4.90
11) bis(2-Chloro	1.225	1.202	1.264	1.261	1.278	1.236	1.231	1.329	1.253	3.14
12) 2-Chlorophen	1.306	1.267	1.400	1.381	1.381	1.343	1.301	1.247	1.328	4.26
13) Decane	1.434	1.289	1.277	1.285	1.292	1.252	1.234	1.547	1.326	8.11
14) 1,3-Dichloro	1.500	1.517	1.577	1.577	1.587	1.525	1.490	1.418	1.524	3.74
15) 1,4-Dichloro	1.528	1.468	1.576	1.565	1.568	1.528	1.512	1.511	1.532	2.37
16) Benzyl alcoh	0.784	0.820	0.906	0.917	0.934	0.898	0.849	0.710	0.852	9.05
17) 1,2-Dichloro	1.407	1.402	1.474	1.486	1.489	1.447	1.421	1.347	1.434	3.43
18) Acetophenone	1.859	1.849	1.913	1.867	1.871	1.889	1.797	1.792	1.855	2.26
19) 2-Methylphen	1.197	1.209	1.279	1.292	1.272	1.253	1.217	1.036	1.219	6.71
20) 2,2'-oxybis(	0.379	0.383	0.377	0.357	0.366	0.362	0.350	0.359	0.367	3.19
21) 3&4-Methylph	1.242	1.276	1.348	1.337	1.322	1.323	1.289	1.163	1.287	4.75
22) n-Nitroso-di	0.984	0.974	1.051	1.027	1.017	1.039	1.034	1.107	1.029	4.02
23) Hexachloroet	0.561	0.539	0.584	0.566	0.571	0.551	0.519	0.472	0.545	6.58
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.388	0.394	0.402	0.420	0.425	0.412	0.382	0.371	0.399	4.75
26) Nitrobenzene	0.400	0.406	0.422	0.422	0.421	0.416	0.407	0.398	0.411	2.41
27) Quinoline	0.637	0.619	0.672	0.685	0.693	0.685	0.628	0.617	0.655	4.92
28) Isophorone	0.704	0.709	0.748	0.757	0.769	0.768	0.709	0.720	0.735	3.80
29) 2-Nitropheno	0.157	0.151	0.181	0.186	0.197	0.183	0.162	0.128	0.168	13.53
30) 2,4-Dimethyl	0.377	0.370	0.395	0.400	0.399	0.391	0.374	0.385	0.387	3.01
31) Benzoic acid	0.121	0.152	0.244	0.296	0.305	0.282	0.180		0.226	32.90
----- Quadratic regression -----									Coefficient =	0.9985
Response Ratio = -0.00844 + 0.24021 *A + 0.02879 *A^2										
32) bis(2-Chloro	0.399	0.378	0.413	0.416	0.420	0.412	0.393	0.393	0.403	3.62
33) 2,4-Dichloro	0.262	0.284	0.303	0.305	0.310	0.302	0.290	0.268	0.290	6.22
34) 2,6-Dichloro	0.288	0.264	0.293	0.302	0.306	0.298	0.281	0.286	0.290	4.64
35) 1,3,5-Trichl	0.361	0.344	0.356	0.351	0.354	0.347	0.334	0.330	0.347	3.08
36) 1,2,4-Trichl	0.333	0.325	0.336	0.342	0.342	0.333	0.328	0.322	0.333	2.27
37) 1,2,3-Trichl	0.311	0.306	0.327	0.323	0.320	0.318	0.307	0.317	0.316	2.42
38) Naphthalene	1.007	1.021	1.032	1.063	1.069	1.046	0.990	1.055	1.035	2.70
39) 4-Chloroanil	0.406	0.405	0.432	0.448	0.446	0.437	0.407	0.425	0.426	4.17
40) 2,3-Dichloro	0.340	0.362	0.370	0.373	0.375	0.383	0.350	0.346	0.363	4.28
41) Hydroquinone	0.262	0.265	0.332	0.354	0.368	0.348	0.300		0.318	13.51
42) Hexachlorobu	0.193	0.208	0.217	0.217	0.217	0.212	0.204	0.197	0.208	4.52

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8913-ICC8913
Lab FileID: F203416.D

```
43) 4-Chloro-3-m 0.278 0.301 0.327 0.331 0.340 0.327 0.308 0.288 0.313   7.16
44) 2-Methylnaph 0.609 0.592 0.607 0.625 0.634 0.614 0.575 0.591 0.606   3.20
45) 1-Methylnaph 0.634 0.615 0.661 0.664 0.675 0.669 0.629 0.620 0.646   3.64

46) I   Acenaphthene-d10      ----------------ISTD--------------------
47) Hexachlorocy 0.300 0.325 0.370 0.397 0.393 0.388 0.341 0.330 0.356  10.20
48) 1,2,4,5-tetr 0.583 0.636 0.601 0.610 0.589 0.595 0.584 0.590 0.598   2.93
49) 2,4,6-Trichl 0.377 0.394 0.386 0.406 0.404 0.395 0.389 0.360 0.389   3.86
50) 2,4,5-Trichl 0.385 0.391 0.417 0.438 0.413 0.425 0.382 0.396 0.406   5.04
51) 2-Fluorobiph 1.320 1.341 1.378 1.417 1.363 1.386 1.308 1.232 1.343   4.29
52) 2-Chloronaph 1.079 1.096 1.138 1.159 1.119 1.151 1.110 1.075 1.116   2.85
53) Biphenyl     1.412 1.403 1.437 1.504 1.469 1.471 1.422 1.451 1.446   2.37
54) 2-Nitroanili 0.260 0.323 0.370 0.392 0.383 0.387 0.342 0.306 0.345  13.55
55) Dimethylphth 1.231 1.230 1.272 1.333 1.313 1.310 1.224 1.198 1.264   3.97
56) Acenaphthyle 1.435 1.549 1.600 1.691 1.655 1.632 1.529 1.550 1.580   5.15
57) 2,6-Dinitrot 0.200 0.208 0.275 0.297 0.291 0.292 0.244 0.160 0.246  20.99
         ----- Quadratic regression -----              Coefficient =  0.9990
              Response Ratio = -0.00403 + 0.27646 *A + 0.00852 *A^2

58) 3-Nitroanili 0.245 0.259 0.302 0.328 0.327 0.318 0.276       0.293  11.54
59) Acenaphthene 1.091 1.119 1.148 1.190 1.147 1.171 1.114 1.112 1.136   2.94
60) 2,4-Dinitrop 0.055 0.088 0.164 0.209 0.212 0.190 0.123       0.149  41.33
         ----- Quadratic regression -----              Coefficient =  0.9987
              Response Ratio = -0.01415 + 0.16243 *A + 0.01125 *A^2

61) 4-Nitropheno       0.152 0.189 0.210 0.210 0.204 0.164       0.188  13.26
62) Dibenzofuran 1.588 1.565 1.604 1.657 1.635 1.634 1.580 1.555 1.602   2.28
63) 2,4-Dinitrot 0.261 0.321 0.381 0.411 0.405 0.404 0.350 0.238 0.346  19.46
         ----- Quadratic regression -----              Coefficient =  0.9995
              Response Ratio = -0.00515 + 0.38533 *A + 0.01095 *A^2

64) 2,3,4,6-Tetr 0.297 0.330 0.349 0.373 0.365 0.372 0.330 0.307 0.340   8.61
65) Diethylphtha 1.174 1.244 1.290 1.324 1.299 1.309 1.237 1.068 1.243   6.91
66) Fluorene     1.222 1.295 1.311 1.353 1.332 1.347 1.285 1.267 1.301   3.40
67) 4-Chlorophen 0.628 0.649 0.662 0.676 0.660 0.670 0.645 0.664 0.657   2.32
68) 4-Nitroanili       0.262 0.323 0.336 0.333 0.332 0.282       0.311  10.11

69) I   Phenanthrene-d10      ----------------ISTD--------------------
70) 4,6-Dinitro- 0.051 0.073 0.117 0.134 0.138 0.127 0.090       0.104  32.09
         ----- Quadratic regression -----              Coefficient =  0.9993
              Response Ratio = -0.00404 + 0.11450 *A + 0.01061 *A^2

71) n-Nitrosodip 0.626 0.625 0.634 0.651 0.646 0.647 0.610 0.636 0.634   2.18
72) 1,2-Diphenyl 0.754 0.756 0.781 0.792 0.783 0.774 0.754 0.720 0.764   3.03
73) 2,4,6-Tribro 0.098 0.108 0.121 0.127 0.125 0.125 0.107 0.109 0.115   9.27
74) 4-Bromopheny 0.232 0.225 0.236 0.242 0.241 0.241 0.224 0.219 0.232   3.84
75) Hexachlorobe 0.240 0.256 0.258 0.260 0.257 0.256 0.243 0.242 0.251   3.26
76) Pentachlorop 0.133 0.149 0.170 0.183 0.180 0.176 0.155 0.151 0.162  10.87
77) Phenanthrene 0.993 1.005 1.054 1.070 1.062 1.053 0.999 1.007 1.030   3.12
78) Anthracene   1.002 1.036 1.079 1.101 1.084 1.083 1.041 1.023 1.056   3.34
79) Carbazole    0.893 0.950 0.968 1.000 0.989 0.989 0.949 0.869 0.951   4.96
80) Di-n-butylph 1.041 1.077 1.170 1.219 1.209 1.217 1.107 1.048 1.136   6.73
81) Fluoranthene 1.059 1.129 1.198 1.228 1.223 1.227 1.127 1.111 1.163   5.53
82) Octadecane   0.401 0.398 0.400 0.420 0.414 0.410 0.384 0.376 0.400   3.67

83) I   Chrysene-d12          ----------------ISTD--------------------
84) Benzidine    0.534 0.597 0.732 0.811 0.961 0.773 0.619       0.718  20.43
         ----- Quadratic regression -----              Coefficient =  0.9976
              Response Ratio = -0.00326 + 0.60934 *A + 0.12887 *A^2
```

8.8.30

8

Initial Calibration Summary

Job Number: JD36682 **Sample:** EF8913-ICC8913
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** F203416.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
 85) Pyrene       1.182 1.264 1.267 1.287 1.303 1.264 1.210 1.202 1.247   3.49
 86) Terphenyl-d1 0.925 0.956 0.991 1.033 1.041 1.008 0.944 0.904 0.975   5.17
 87) Butylbenzylp 0.422 0.432 0.504 0.548 0.549 0.529 0.470 0.435 0.486  10.93
 88) Benzo[a]anth 1.145 1.143 1.194 1.246 1.251 1.225 1.158 1.127 1.186   4.19
 89) 3,3'-Dichlor 0.332 0.367 0.433 0.479 0.481 0.462 0.399       0.422  13.75
 90) Chrysene     1.109 1.140 1.185 1.209 1.202 1.204 1.140 1.119 1.164   3.51
 91) bis(2-Ethylh 0.548 0.591 0.687 0.750 0.752 0.728 0.615 0.534 0.650  13.79

 92) I   Perylene-d12          -----------------ISTD---------------------
 93) Di-n-octylph 0.680 0.831 1.127 1.310 1.305 1.218 0.946 0.725 1.018  25.19
          ----- Quadratic regression -----                Coefficient =  0.9989
               Response Ratio = -0.01555 + 1.07405 *A + 0.10545 *A^2

 94) Benzo[b]fluo 1.029 1.081 1.208 1.314 1.290 1.235 1.082 0.895 1.142  12.64
 95) Benzo[k]fluo 1.067 1.067 1.201 1.218 1.202 1.197 1.109 1.069 1.141   6.06
 96) Benzo[a]pyre 0.909 0.996 1.128 1.213 1.185 1.153 1.003 0.862 1.056  12.47
 97) Indeno[1,2,3 0.641 0.709 0.876 1.004 1.009 0.939 0.733 0.571 0.810  20.88
          ----- Quadratic regression -----                Coefficient =  0.9993
               Response Ratio = -0.00948 + 0.83231 *A + 0.07851 *A^2

 98) Dibenz(a,h)a 0.475 0.622 0.845 0.988 0.984 0.914 0.727       0.794  24.48
          ----- Quadratic regression -----                Coefficient =  0.9995
               Response Ratio = -0.02262 + 0.84329 *A + 0.06616 *A^2

 99) Dibenz[a,h]a 0.716 0.817 1.004 1.126 1.127 1.040 0.878 0.698 0.926  18.71
          ----- Quadratic regression -----                Coefficient =  0.9995
               Response Ratio = -0.00973 + 0.95029 *A + 0.07844 *A^2

100) 7,12-Dimethy 0.462 0.503 0.569 0.600 0.592 0.582 0.518 0.432 0.532  11.91
101) Benzo[g,h,i] 0.847 0.960 1.110 1.216 1.182 1.142 1.018 0.895 1.046  13.10


 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MF8913.M          Wed Nov 10 10:36:36 2021
```

8.8.30

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8913-ICV8913
Lab FileID: F203419.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF8913\F203419.D Vial: 10
Acq On : 10 Nov 2021 7:22 am Operator: chriss2
Sample : icv8913-50 Inst : GCMSF
Misc : op35661,ef8913,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Nov 10 10:17:53 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	121	0.00	4.65
2	t	1,4-Dioxane	0.569	0.558	1.9	124	0.00	2.18
6	t	Indene	2.292	2.309	-0.7	122	0.00	4.83
7	t	Cumene	3.249	3.324	-2.3	123	0.00	4.05
11	t	bis(2-Chloroethyl)ether	1.253	1.237	1.3	121	0.00	4.45
13	t	Decane	1.326	1.254	5.4	121	0.00	4.52
14	t	1,3-Dichlorobenzene	1.524	1.539	-1.0	122	0.00	4.60
15	t	1,4-Dichlorobenzene	1.532	1.555	-1.5	123	0.00	4.66
16	t	Benzyl alcohol	0.852	0.887	-4.1	120	0.00	4.74
17	t	1,2-Dichlorobenzene	1.434	1.472	-2.6	123	0.00	4.77
18	t	Acetophenone	1.855	1.877	-1.2	120	0.00	4.94
20	t	2,2'-oxybis(1-Chloropropa	0.367	0.360	1.9	121	0.00	4.84
23	t	Hexachloroethane	0.545	0.571	-4.8	125	0.00	5.01
24	I	Naphthalene-d8	1.000	1.000	0.0	120	0.00	5.57
26	t	Nitrobenzene	0.411	0.424	-3.2	122	0.00	5.06
27	t	Quinoline	0.655	0.675	-3.1	118	0.00	5.82
28	t	Isophorone	0.735	0.767	-4.4	120	0.00	5.23

		----------	AvgRF	CCRF	% Dev	----------		
32	t	bis(2-Chloroethoxy)methan	0.403	0.408	-1.2	119	0.00	5.39
35		1,3,5-Trichlorobenzene	0.347	0.356	-2.6	123	0.00	5.30
36	t	1,2,4-Trichlorobenzene	0.333	0.338	-1.5	122	0.00	5.52
37		1,2,3-Trichlorobenzene	0.316	0.319	-0.9	121	0.00	5.68
38	t	Naphthalene	1.035	1.066	-3.0	122	0.00	5.58
40	t	2,3-Dichloroaniline	0.363	0.357	1.7	112	0.00	6.30
42	t	Hexachlorobutadiene	0.208	0.214	-2.9	121	0.00	5.67
44	t	2-Methylnaphthalene	0.606	0.613	-1.2	120	0.00	6.08
45	t	1-Methylnaphthalene	0.646	0.652	-0.9	117	0.00	6.16

8.8.31

8

Initial Calibration Verification

Job Number: JD36682 **Sample:** EF8913-ICV8913
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** F203419.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

46	I	Acenaphthene-d10	1.000	1.000	0.0	118	0.00	6.98
47	t	Hexachlorocyclopentadiene	0.356	0.329	7.6	100	0.00	6.20
48	t	1,2,4,5-tetrachlorobenzen	0.598	0.609	-1.8	121	0.00	6.21
52	t	2-Chloronaphthalene	1.116	1.149	-3.0	118	0.00	6.47
53	t	Biphenyl	1.446	1.476	-2.1	119	0.00	6.45
55	t	Dimethylphthalate	1.264	1.308	-3.5	118	0.00	6.71
56	t	Acenaphthylene	1.580	1.454	8.0	105	0.00	6.84
		----------	True	Calc.	% Drift	----------		
57	t	2,6-Dinitrotoluene	50.000	48.876	2.2	112	0.00	6.77
		----------	AvgRF	CCRF	% Dev	----------		
59	t	Acenaphthene	1.136	1.153	-1.5	117	0.00	7.01
		----------	AvgRF	CCRF	% Dev	----------		
62	t	Dibenzofuran	1.602	1.634	-2.0	118	0.00	7.19
		----------	True	Calc.	% Drift	----------		
63	t	2,4-Dinitrotoluene	50.000	47.633	4.7	110	0.00	7.17
		----------	AvgRF	CCRF	% Dev	----------		
65	t	Diethylphthalate	1.243	1.299	-4.5	117	0.00	7.45
66	t	Fluorene	1.301	1.336	-2.7	117	0.00	7.57
67	t	4-Chlorophenyl-phenylethe	0.657	0.662	-0.8	117	0.00	7.57
69	I	Phenanthrene-d10	1.000	1.000	0.0	117	0.00	8.86
		----------	AvgRF	CCRF	% Dev	----------		
72	t	1,2-Diphenylhydrazine	0.764	0.784	-2.6	118	0.00	7.77
74	t	4-Bromophenyl-phenylether	0.232	0.232	0.0	113	0.00	8.21
75	t	Hexachlorobenzene	0.251	0.260	-3.6	119	0.00	8.27
77	t	Phenanthrene	1.030	1.050	-1.9	117	0.00	8.90
78	t	Anthracene	1.056	1.088	-3.0	117	0.00	8.98
79	t	Carbazole	0.951	0.980	-3.0	116	0.00	9.26
80	t	Di-n-butylphthalate	1.136	1.171	-3.1	112	0.00	9.98
81	t	Fluoranthene	1.163	1.226	-5.4	117	0.00	11.05
82	t	Octadecane	0.400	0.407	-1.7	116	0.00	8.78
83	I	Chrysene-d12	1.000	1.000	0.0	116	0.00	14.15
		----------	AvgRF	CCRF	% Dev	----------		
85	t	Pyrene	1.247	1.258	-0.9	116	0.00	11.49
87	t	Butylbenzylphthalate	0.486	0.520	-7.0	114	0.00	13.14
88	t	Benzo[a]anthracene	1.186	1.192	-0.5	113	0.00	14.13
90	t	Chrysene	1.164	1.171	-0.6	113	0.00	14.21

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8913-ICV8913
Lab FileID: F203419.D

91	t	bis(2-Ethylhexyl)phthalat	0.650	0.696	-7.1	111	0.00	14.56
92	I	Perylene-d12	1.000	1.000	0.0	114	0.00	17.20
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	50.000	50.224	-0.4	112	0.00	16.03
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.142	1.263	-10.6	117	0.00	16.45
95	t	Benzo[k]fluoranthene	1.141	1.178	-3.2	112	0.00	16.51
96	t	Benzo[a]pyrene	1.056	1.149	-8.8	114	0.00	17.08
		----------	True	Calc.	% Drift	----------		
97	t	Indeno[1,2,3-cd]pyrene	50.000	50.601	-1.2	114	0.00	19.14
98	t	Dibenz(a,h)acridine	50.000	50.596	-1.2	115	0.00	18.79
99	t	Dibenz[a,h]anthracene	50.000	50.425	-0.8	115	0.00	19.21
		----------	AvgRF	CCRF	% Dev	----------		
100	t	7,12-Dimethylbenz(a)anthr	0.532	0.549	-3.2	108	0.00	16.47
101	t	Benzo[g,h,i]perylene	1.046	1.148	-9.8	115	0.00	19.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F203416.D MF8913.M Wed Nov 10 10:37:11 2021

8.8.31

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8913-ICV8913
Lab FileID: F203420.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF8913\F203420.D Vial: 11
Acq On : 10 Nov 2021 7:50 am Operator: chriss2
Sample : icv8913-50 Inst : GCMSF
Misc : op35661,ef8913,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Nov 10 10:17:53 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	125	0.00	4.65
9	t	Phenol	1.686	1.695	-0.5	122	0.00	4.37
12	t	2-Chlorophenol	1.328	1.303	1.9	121	0.00	4.49
19	t	2-Methylphenol	1.219	1.228	-0.7	122	0.00	4.82
21	t	3&4-Methylphenol	1.287	1.284	0.2	121	0.00	4.93
24	I	Naphthalene-d8	1.000	1.000	0.0	124	0.00	5.56
29	t	2-Nitrophenol	0.168	0.180	-7.1	121	0.00	5.29
30	t	2,4-Dimethylphenol	0.387	0.380	1.8	120	0.00	5.31
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	50.000	40.315	19.4	92	-0.01	5.38
		----------	AvgRF	CCRF	% Dev	----------		
33	t	2,4-Dichlorophenol	0.290	0.299	-3.1	123	0.00	5.46
34		2,6-Dichlorophenol	0.290	0.297	-2.4	123	0.00	5.62
41	t	Hydroquinone	0.318	0.349	-9.7	124	0.00	5.84
43	t	4-Chloro-3-methylphenol	0.313	0.322	-2.9	122	0.00	5.95
46	I	Acenaphthene-d10	1.000	1.000	0.0	124	0.00	6.98
49	t	2,4,6-Trichlorophenol	0.389	0.398	-2.3	125	0.00	6.30
50	t	2,4,5-Trichlorophenol	0.406	0.422	-3.9	123	0.00	6.32
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	98.002	2.0	117	0.00	7.03
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.188	0.190	-1.1	115	0.00	7.08
		----------	AvgRF	CCRF	% Dev	----------		
64		2,3,4,6-Tetrachlorophenol	0.340	0.348	-2.4	116	0.00	7.31

8.8.32

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8913-ICV8913
Lab FileID: F203420.D

69	I	Phenanthrene-d10	1.000	1.000	0.0	123	0.00	8.86
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylpheno	50.000	48.167	3.7	116	0.00	7.62
76	t	Pentachlorophenol	0.162	0.162	0.0	114	0.00	8.56
17.19								
179		4,4-Methylene-bis-(2-chlo		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F203416.D MF8913.M Wed Nov 10 10:37:13 2021

8.8.32

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8913-ICV8913
Lab FileID: F203421.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF8913\F203421.D Vial: 12
Acq On : 10 Nov 2021 8:17 am Operator: chriss2
Sample : icv8913-50 Inst : GCMSF
Misc : op35661,ef8913,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Nov 10 10:17:53 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	132	0.00	4.65
3	t	Pyridine	1.474	1.458	1.1	125	0.00	2.50
4	t	N-Nitrosodimethylamine	0.785	0.721	8.2	122	0.00	2.47
10	t	Aniline	2.110	2.073	1.8	127	0.00	4.40
22		n-Nitroso-di-n-propylamin	1.029	1.029	0.0	131	0.00	4.93
24	I	Naphthalene-d8	1.000	1.000	0.0	132	0.00	5.56
39	t	4-Chloroaniline	0.426	0.413	3.1	125	0.00	5.62
46	I	Acenaphthene-d10	1.000	1.000	0.0	129	0.00	6.98
54	t	2-Nitroaniline	0.345	0.362	-4.9	121	0.00	6.55
		----------	AvgRF	CCRF	% Dev	----------		
58	t	3-Nitroaniline	0.293	0.301	-2.7	122	0.00	6.93
68	t	4-Nitroaniline	0.311	0.298	4.2	116	0.00	7.59
69	I	Phenanthrene-d10	1.000	1.000	0.0	127	0.00	8.86
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.634	0.619	2.4	121	0.00	7.72
83	I	Chrysene-d12	1.000	1.000	0.0	123	-0.01	14.14
		----------	True	Calc.	% Drift	----------		
84	t	Benzidine	50.000	47.078	5.8	113	0.00	11.40
89	t	3,3'-Dichlorobenzidine	0.422	0.447	-5.9	119	0.00	14.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

8.8.33

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8913-ICV8913
Lab FileID: F203421.D

F203416.D MF8913.M Wed Nov 10 10:37:15 2021

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8913-ICV8913
Lab FileID: F203422.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF8913\F203422.D Vial: 13
Acq On : 10 Nov 2021 8:44 am Operator: chriss2
Sample : icv8913-50 Inst : GCMSF
Misc : op35661,ef8913,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Nov 10 10:17:53 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	149	0.00	4.65
5	S	2-Fluorophenol	1.256	1.194	4.9	139	0.00	3.65
8	S	Phenol-d5	1.698	1.549	8.8	131	0.00	4.36
24	I	Naphthalene-d8	1.000	1.000	0.0	156	0.00	5.57
25	S	Nitrobenzene-d5	0.399	0.357	10.5	135	0.00	5.05
46	I	Acenaphthene-d10	1.000	1.000	0.0	151	0.00	6.98
51	S	2-Fluorobiphenyl	1.343	1.224	8.9	134	0.00	6.37
69	I	Phenanthrene-d10	1.000	1.000	0.0	142	0.00	8.86
73	S	2,4,6-Tribromophenol	0.115	0.104	9.6	119	0.00	7.86
83	I	Chrysene-d12	1.000	1.000	0.0	124	-0.01	14.14
86	S	Terphenyl-d14	0.975	0.958	1.7	118	0.00	11.94

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F203416.D MF8913.M Wed Nov 10 10:37:17 2021

8.8.34

8

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8914-ICC8914
Lab FileID: F203425.D

Response Factor Report GCMSF

Method : C:\MSDCHEM\1\METHODS\MF8914.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Nov 10 15:10:40 2021
Response via : Initial Calibration

Calibration Files
2 =F203429.D 5 =F203428.D 25 =F203426.D 80 =F203424.D
100 =F203433.D 50 =F203425.D 10 =F203427.D 1 =F203430.D

Compound	2	5	25	80	100	50	10	1	Avg	%RSD
157) I 1,4-Dichlorobenzene-d	ISTD									
158) Benzaldehyde	1.054	1.064	1.087	1.100	1.102	1.105	1.146	1.070	1.091	2.66
159) I Phenanthrene-d10b	ISTD									
160) Atrazine	0.151	0.176	0.199	0.204	0.204	0.203	0.193	0.151	0.185	12.38
161) I Naphthalene-d8b	ISTD									
162) Caprolactam	0.103	0.107	0.132	0.126	0.126	0.132	0.118		0.120	9.59

(#) = Out of Range ### Number of calibration levels exceeded format ###

MF8913.M Wed Nov 10 15:13:30 2021

8.8.35

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8914-ICV8914
Lab FileID: F203434.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF8913\F203434.D Vial: 23
Acq On : 10 Nov 2021 2:57 pm Operator: chriss2
Sample : icv8914-50 Inst : GCMSF
Misc : op35661,ef8914,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Nov 10 15:10:40 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
157 I	1,4-Dichlorobenzene-d4b	1.000	1.000	0.0	105	0.00	4.65
158	Benzaldehyde	1.091	1.212	-11.1	115	0.00	4.32
159 I	Phenanthrene-d10b	1.000	1.000	0.0	104	0.00	8.86
160	Atrazine	0.185	0.219	-18.4	113	0.00	8.47
161 I	Naphthalene-d8b	1.000	1.000	0.0	103	0.00	5.56
162	Caprolactam	0.120	0.142	-18.3	112	0.00	5.86

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F203425A.D MF8913.M Wed Nov 10 15:23:15 2021

8.8.36

8

Initial Calibration Summary

Job Number: JD36682 **Sample:** EF8915-ICC8915
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** F203438.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report GCMSF

Method : C:\MSDCHEM\1\METHODS\MF8915.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Nov 11 10:26:35 2021
Response via : Initial Calibration

Calibration Files
2 =F203442.D 5 =F203441.D 25 =F203439.D 80 =F203437.D
100 =F203436.D 50 =F203438.D 10 =F203440.D 1 =F203443.D

Compound	2	5	25	80	100	50	10	1	Avg	%RSD
102) I 1,4-Dichlorobenzene-d	ISTD									
103) 2-Picoline	1.470	1.459	1.486	1.520	1.466	1.501	1.487	1.410	1.475	2.23
104) Pentachloroe	0.552	0.515	0.557	0.570	0.539	0.550	0.531	0.541	0.544	3.09
105) Methyl metha	0.852	0.869	0.869	0.849	0.833	0.848	0.868	0.834	0.853	1.74
106) N-Nitrosodie	0.581	0.572	0.600	0.626	0.596	0.599	0.580	0.484	0.580	7.27
107) N-Nitrosomet	0.756	0.728	0.761	0.754	0.735	0.738	0.746	0.779	0.750	2.18
108) Ethyl methan	0.966	0.989	1.048	1.053	1.028	1.045	1.040	0.995	1.020	3.20
109) N-Nitrosopyr	0.541	0.554	0.593	0.671	0.707	0.617	0.646	0.551	0.610	10.01
110) N-Nitrosomor	0.762	0.776	0.842	0.799	0.758	0.792	0.815	0.768	0.789	3.68
111) o-Toluidine	2.228	2.036	2.087	1.845	1.759	1.883	2.074	1.956	1.983	7.67
112) I Naphthalene-d8A	ISTD									
113) O,O,O-Trieth	0.166	0.173	0.178	0.175	0.172	0.179	0.176	0.164	0.173	3.10
114) N-Nitrosopip	0.226	0.244	0.254	0.248	0.253	0.252	0.254	0.218	0.244	5.69
115) A,A-Dimethyl	0.777	0.714	0.757	0.729	0.772	0.768	0.534	0.872	0.740	12.92
116) Hexachloropr	0.202	0.205	0.247	0.253	0.247	0.254	0.232	0.175	0.227	12.95
117) N-Nitrosodi-	0.213	0.251	0.253	0.248	0.250	0.252	0.249	0.253	0.246	5.46
118) p-Phenylened		0.154	0.087	0.105	0.103	0.088	0.132		0.111	23.80
----- Quadratic regression -----								Coefficient =		0.9949
Response Ratio = 0.01242 + 0.06291 *A + 0.01498 *A^2										
119) Safrole	0.260	0.270	0.271	0.268	0.271	0.275	0.264	0.227	0.263	5.89
120) Isosafrole	0.122	0.125	0.138	0.137	0.139	0.141	0.129	0.121	0.132	6.12
121) Acenaphthene-d10A	ISTD									
122) Thionazin	0.125	0.141	0.154	0.152	0.155	0.150	0.158	0.114	0.144	11.10
123) Tetraethyl d	0.165	0.184	0.213	0.223	0.221	0.218	0.203	0.130	0.195	16.91
124) Phorate	0.642	0.708	0.781	0.767	0.757	0.768	0.752	0.521	0.712	12.54
125) Phenacetin	0.468	0.555	0.650	0.658	0.648	0.654	0.628	0.365	0.578	18.78
126) 1,4-Naphthoq	0.207	0.240	0.299	0.301	0.277	0.303	0.282	0.192	0.263	16.82
127) m-Dinitroben		0.129	0.179	0.193	0.185	0.186	0.158		0.172	13.85
128) Pentachlorob	0.535	0.543	0.545	0.557	0.551	0.546	0.553	0.535	0.546	1.49
129) 2-Naphthylam	1.068	1.106	1.084	1.010	0.992	1.018	1.068	0.968	1.039	4.71
130) 1-Naphthylam	0.979	0.992	0.979	0.946	0.927	0.933	1.015	0.880	0.956	4.51
131) 5-Nitro-o-to	0.248	0.298	0.359	0.351	0.336	0.352	0.343		0.327	12.30
132) I Phenanthrene-d10A	ISTD									
133) Disulfoton	0.266	0.291	0.310	0.308	0.304	0.307	0.304	0.209	0.287	12.17
134) Dinoseb		0.077	0.156	0.189	0.184	0.182	0.114		0.151	30.28
----- Quadratic regression -----								Coefficient =		0.9989
Response Ratio = -0.01537 + 0.18620 *A + 0.00311 *A^2										
135) Dimethoate	0.189	0.227	0.263	0.243	0.236	0.256	0.257	0.149	0.227	17.41
136) 4-Aminobiphe	0.683	0.727	0.766	0.718	0.700	0.742	0.772	0.609	0.715	7.34
137) Methyl parat		0.136	0.180	0.173	0.167	0.181	0.166		0.167	9.76

Initial Calibration Summary

Job Number: JD36682 **Sample:** EF8915-ICC8915
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** F203438.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
138) Parathion    0.102 0.124 0.149 0.146 0.146 0.148 0.141       0.137  12.92
139) Diphenylamin 0.527 0.540 0.551 0.543 0.536 0.548 0.558 0.474 0.535   4.92
140) Isodrin      0.104 0.109 0.120 0.116 0.116 0.120 0.113 0.089 0.111   9.22
141) Diallate     0.066 0.074 0.074 0.070 0.071 0.068 0.070 0.091 0.073  10.56
142) Pentachloron 0.036 0.042 0.046 0.044 0.044 0.043 0.042       0.042#  7.46
143) Pronamide    0.237 0.274 0.312 0.311 0.308 0.315 0.297       0.293   9.80
144) 4-Nitroquino 0.023 0.043 0.100 0.118 0.113 0.115 0.069       0.083  46.28
          ----- Quadratic regression -----                Coefficient =  0.9961
               Response Ratio = -0.02350 + 0.10849 *A + 0.00107 *A^2

145) Methapyrilin 0.215 0.294 0.325 0.213       0.260 0.336       0.274  19.51
146) sym-Trinitro       0.031 0.059 0.072 0.073 0.067 0.043       0.058  29.37
          ----- Quadratic regression -----                Coefficient =  0.9996
               Response Ratio = -0.00468 + 0.06451 *A + 0.00438 *A^2


147) I   Chrysene-d12A         ----------------ISTD---------------------
148) Aramite            0.042 0.065 0.071 0.072 0.069 0.052       0.062  19.83
149) p-(Dimethyla 0.182 0.243 0.308 0.312 0.313 0.313 0.278       0.278  17.94
150) Kepone       0.115 0.125 0.109 0.073       0.087 0.119 0.101 0.104  17.87
151) Famphur      0.416 0.469 0.407 0.246 0.217 0.309 0.478       0.363  29.16
          ----- Quadratic regression -----                Coefficient =  0.9949
               Response Ratio = 0.00919 + 0.45022 *A + -0.01627 *A^2

152) 2-Acetylamin       0.289 0.443 0.497 0.485 0.484 0.377       0.429  19.02
153) Chlorobenzil 0.231 0.291 0.358 0.365 0.368 0.375 0.344       0.334  15.93

154) I   Perylene-d12A         ----------------ISTD---------------------
155) Hexachloroph       0.011 0.055 0.096 0.101 0.084 0.022       0.061  62.32
          ----- Quadratic regression -----                Coefficient =  0.9969
               Response Ratio = -0.04313 + 0.06475 *A + 0.00332 *A^2

156) 3-Methylchol       0.139 0.178 0.196 0.198 0.192 0.158       0.177  13.56


 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MF8913.M          Thu Nov 11 11:38:23 2021
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8.8.37

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8915-ICV8915
Lab FileID: F203444.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF8915\F203444.D Vial: 10
Acq On : 11 Nov 2021 3:10 am Operator: chriss2
Sample : icv8915-50 Inst : GCMSF
Misc : op35661,ef8915,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Nov 11 10:26:35 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	114	0.00	4.65
103	M	2-Picoline	1.475	1.349	8.5	102	0.00	3.17
106	M	N-Nitrosodiethylamine	0.580	0.539	7.1	102	0.00	3.84
107	M	N-Nitrosomethylethylamine	0.750	0.636	15.2	98	0.00	3.27
108	M	Ethyl methanesulfonate	1.020	0.918	10.0	100	0.00	4.07
109	M	N-Nitrosopyrrolidine	0.610	0.501	17.9	92	0.00	4.92
110	M	N-Nitrosomorpholine	0.789	0.653	17.2	94	0.00	4.96
112	I	Naphthalene-d8A	1.000	1.000	0.0	111	0.00	5.57
113	M	O,O,O-Triethyl phosphorot	0.173	0.165	4.6	102	0.00	5.37
114	M	N-Nitrosopiperidine	0.244	0.222	9.0	97	0.00	5.17
115	M	A,A-Dimethylphenethylamin	0.740	0.584	21.1	84	0.00	5.44
116	M	Hexachloropropene	0.227	0.216	4.8	94	0.00	5.65
117	M	N-Nitrosodi-n-butylamine	0.246	0.276	-12.2	121	0.00	5.86
			True	Calc.	% Drift			
118		p-Phenylenediamine	50.000	48.215	3.6	111	0.00	5.87
			AvgRF	CCRF	% Dev			
119	M	Safrole	0.263	0.255	3.0	103	0.00	6.01
120		Isosafrole	0.132	0.247	-87.1#	193	0.00	6.42
121		Acenaphthene-d10A	1.000	1.000	0.0	105	0.00	6.98
122	M	Thionazin	0.144	0.135	6.2	95	0.00	7.54
123	M	Tetraethyl dithiopyrophos	0.195	0.192	1.5	93	0.00	7.94
124	M	Phorate	0.712	0.675	5.2	92	0.00	8.12
125	M	Phenacetin	0.578	0.525	9.2	84	0.00	8.15
126	M	1,4-Naphthoquinone	0.263	0.239	9.1	83	0.00	6.62
128	M	Pentachlorobenzene	0.546	0.526	3.7	101	0.00	7.14
131	M	5-Nitro-o-toluidine	0.327	0.250	23.5	75	0.00	7.59
132	I	Phenanthrene-d10A	1.000	1.000	0.0	104	0.00	8.87
133	M	Disulfoton	0.287	0.297	-3.5	100	0.00	8.92

8.8.38

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8915-ICV8915
Lab FileID: F203444.D

			AvgRF	CCRF	% Dev			
135	M	Dimethoate	0.227	0.191	15.9	77	0.00	8.36
138	M	Parathion	0.137	0.126	8.0	88	0.00	10.29
139	M	Diphenylamine	0.535	0.576	7.7	110	0.00	7.72
140	M	Isodrin	0.111	0.113	-1.8	98	0.00	10.75
141	M	Diallate	0.073	0.064	12.3	98	0.00	8.24
142	M	Pentachloronitrobenzene	0.042	0.038	9.5	92	0.00	8.59
143	M	Pronamide	0.293	0.276	5.8	91	0.00	8.71
			True	Calc.	% Drift			
144	M	4-Nitroquinoline 1-oxide	200.000	143.112	28.4	52	-0.02	10.27
			AvgRF	CCRF	% Dev			
145	M	Methapyriline	0.274	0.126	54.0#	50	0.00	10.50
			True	Calc.	% Drift			
146	M	sym-Trinitrobenzene	50.000	40.839	18.3	81	0.00	8.07
			AvgRF	CCRF	% Dev			
147	I	Chrysene-d12A	1.000	1.000	0.0	95	0.00	14.15
148		Aramite	0.062	0.060	3.2	82	0.01	12.19
149	M	p-(Dimethylamine)azobenze	0.278	0.271	2.5	83	0.00	12.26
			AvgRF	CCRF	% Dev			
152	M	2-Acetylaminofluorene	0.429	0.420	2.1	83	0.00	13.55
153	M	Chlorobenzilate	0.334	0.319	4.5	81	0.00	12.41
154	I	Perylene-d12A	1.000	1.000	0.0	92	0.00	17.19
			AvgRF	CCRF	% Dev			
156		3-Methylcholanthrene	0.177	0.206	-16.4	98	0.00	17.80

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F203438A.D MF8913.M Thu Nov 11 11:38:40 2021

8.8.38

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8915-ICV8915
Lab FileID: F203445.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF8915\F203445.D Vial: 11
Acq On : 11 Nov 2021 4:04 am Operator: chriss2
Sample : icv8915-50 Inst : GCMSF
Misc : op35661,ef8915,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Nov 11 10:26:35 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	103	0.00	4.65
111	M	o-Toluidine	1.983	1.911	3.6	105	0.00	4.97
121		Acenaphthene-d10A	1.000	1.000	0.0	104	0.00	6.98
129	M	2-Naphthylamine	1.039	1.084	-4.3	110	0.00	7.36
130	M	1-Naphthylamine	0.956	1.050	-9.8	117	0.00	7.27
132	I	Phenanthrene-d10A	1.000	1.000	0.0	104	0.00	8.87
136	M	4-Aminobiphenyl	0.715	0.736	-2.9	103	0.00	8.59

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F203438A.D MF8913.M Thu Nov 11 11:38:42 2021

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8915-ICV8915
Lab FileID: F203446.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF8915\F203446.D Vial: 12
Acq On : 11 Nov 2021 4:31 am Operator: chriss2
Sample : icv8915-50 Inst : GCMSF
Misc : op35661,ef8915,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Nov 11 10:26:35 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	100	0.00	4.65
104	Pentachloroethane	0.544	0.511	6.1	93	0.00	4.44
105 M	Methyl methanesulfonate	0.853	0.793	7.0	94	0.00	3.52

	Compound	AvgRF	CCRF	% Dev			
147 I	Chrysene-d12A	1.000	1.000	0.0	99	0.00	14.14
150	Kepone	0.104	0.108	3.8	120	0.00	12.95

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F203438A.D MF8913.M Thu Nov 11 11:38:44 2021

8.8.40

8

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8915-ICV8915
Lab FileID: F203447.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF8915\F203447.D Vial: 13
Acq On : 11 Nov 2021 4:58 am Operator: chriss2
Sample : icv8915-50 Inst : GCMSF
Misc : op35661,ef8915,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Nov 11 10:26:35 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
121	Acenaphthene-d10A	1.000	1.000	0.0	94	0.00	6.98
127 M	m-Dinitrobenzene	0.172	0.186	-8.1	94	0.00	6.74

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F203438A.D MF8913.M Thu Nov 11 11:38:46 2021

8.8.41

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8915-ICV8915
Lab FileID: F203448.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF8915\F203448.D Vial: 14
Acq On : 11 Nov 2021 5:25 am Operator: chriss2
Sample : icv8915-50 Inst : GCMSF
Misc : op35661,ef8915,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Nov 11 10:26:35 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
132	I	Phenanthrene-d10A	1.000	1.000	0.0	103	0.00	8.86
137	M	Methyl parathion	0.167	0.156	6.6	89	0.00	9.54
147	I	Chrysene-d12A	1.000	1.000	0.0	99	0.00	14.14
			True	Calc.	% Drift			
151	M	Famphur	300.000	307.452	2.5	144	-0.03	12.94

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F203438A.D MF8913.M Thu Nov 11 11:38:48 2021

8.8.42

8

Continuing Calibration Summary

Job Number: JD36682 **Sample:** EF8967-CC8913
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** F204533.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\ef8967\f204533.d Vial: 2
Acq On : 23 Dec 2021 6:01 am Operator: chriss2
Sample : cc8913-25 Inst : GCMSF
Misc : op36605,ef8967,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 27 21:28:54 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	4.59
2	t	1,4-Dioxane	0.569	0.579	-1.8	103	0.00	2.10
3	t	Pyridine	1.474	1.424	3.4	90	0.00	2.44
4	t	N-Nitrosodimethylamine	0.785	0.612	22.0#	78	0.00	2.41
5	S	2-Fluorophenol	1.256	1.290	-2.7	97	0.00	3.60
6	t	Indene	2.292	2.351	-2.6	100	0.00	4.77
7	t	Cumene	3.249	3.136	3.5	94	0.00	3.99
8	S	Phenol-d5	1.698	1.748	-2.9	97	0.00	4.33
9	t	Phenol	1.686	1.889	-12.0	107	0.00	4.34
10	t	Aniline	2.110	2.234	-5.9	100	0.00	4.35
11	t	bis(2-Chloroethyl)ether	1.253	1.299	-3.7	102	0.00	4.39
12	t	2-Chlorophenol	1.328	1.368	-3.0	97	0.00	4.43
13	t	Decane	1.326	1.167	12.0	90	0.00	4.46
14	t	1,3-Dichlorobenzene	1.524	1.524	0.0	96	0.00	4.54
15	t	1,4-Dichlorobenzene	1.532	1.578	-3.0	99	0.00	4.60
16	t	Benzyl alcohol	0.852	0.927	-8.8	101	0.00	4.69
17	t	1,2-Dichlorobenzene	1.434	1.463	-2.0	98	0.00	4.71
18	t	Acetophenone	1.855	1.854	0.1	96	0.00	4.88
19	t	2-Methylphenol	1.219	1.276	-4.7	99	0.00	4.77
20	t	2,2'-oxybis(1-Chloropropa	0.367	0.389	-6.0	102	0.00	4.79
21	t	3&4-Methylphenol	1.287	1.380	-7.2	101	0.00	4.89
22		n-Nitroso-di-n-propylamin	1.029	1.080	-5.0	102	0.00	4.88
23	t	Hexachloroethane	0.545	0.529	2.9	90	0.00	4.96
24	I	Naphthalene-d8	1.000	1.000	0.0	103	0.00	5.51
25	S	Nitrobenzene-d5	0.399	0.384	3.8	98	0.00	4.99
26	t	Nitrobenzene	0.411	0.382	7.1	93	0.00	5.01
27	t	Quinoline	0.655	0.687	-4.9	105	0.00	5.77
28	t	Isophorone	0.735	0.720	2.0	99	0.00	5.18
29	t	2-Nitrophenol	0.168	0.189	-12.5	107	0.00	5.24
30	t	2,4-Dimethylphenol	0.387	0.371	4.1	96	0.00	5.27
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	25.000	28.188	-12.8	118	0.00	5.34
		----------	AvgRF	CCRF	% Dev	----------		
32	t	bis(2-Chloroethoxy)methan	0.403	0.397	1.5	99	0.00	5.34
33	t	2,4-Dichlorophenol	0.290	0.297	-2.4	100	0.00	5.41
34		2,6-Dichlorophenol	0.290	0.298	-2.8	104	0.00	5.57
35		1,3,5-Trichlorobenzene	0.347	0.332	4.3	96	0.00	5.24
36	t	1,2,4-Trichlorobenzene	0.333	0.323	3.0	99	0.00	5.47
37		1,2,3-Trichlorobenzene	0.316	0.301	4.7	95	0.00	5.63

Continuing Calibration Summary

Job Number: JD36682 **Sample:** EF8967-CC8913
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** F204533.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

38	t	Naphthalene	1.035	1.032	0.3	103	0.00	5.53
39	t	4-Chloroaniline	0.426	0.434	-1.9	103	0.00	5.56
40	t	2,3-Dichloroaniline	0.363	0.353	2.8	98	0.00	6.24
41	t	Hydroquinone	0.318	0.344	-8.2	106	0.00	5.80
42	t	Hexachlorobutadiene	0.208	0.193	7.2	91	0.00	5.61
43	t	4-Chloro-3-methylphenol	0.313	0.317	-1.3	99	0.00	5.91
44	t	2-Methylnaphthalene	0.606	0.620	-2.3	105	0.00	6.02
45	t	1-Methylnaphthalene	0.646	0.661	-2.3	103	0.00	6.09
46	I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00	6.90
47	t	Hexachlorocyclopentadiene	0.356	0.324	9.0	89	0.00	6.14
48	t	1,2,4,5-tetrachlorobenzen	0.598	0.571	4.5	97	0.00	6.15
49	t	2,4,6-Trichlorophenol	0.389	0.387	0.5	102	0.00	6.24
50	t	2,4,5-Trichlorophenol	0.406	0.409	-0.7	100	0.00	6.27
51	S	2-Fluorobiphenyl	1.343	1.360	-1.3	101	0.00	6.30
52	t	2-Chloronaphthalene	1.116	1.118	-0.2	101	0.00	6.40
53	t	Biphenyl	1.446	1.486	-2.8	106	0.00	6.38
54	t	2-Nitroaniline	0.345	0.361	-4.6	100	0.00	6.49
55	t	Dimethylphthalate	1.264	1.292	-2.2	104	0.00	6.64
56	t	Acenaphthylene	1.580	1.626	-2.9	104	0.00	6.77
		----------	True	Calc.	% Drift	----------		
57	t	2,6-Dinitrotoluene	25.000	26.638	-6.6	109	0.00	6.70
		----------	AvgRF	CCRF	% Dev	----------		
58	t	3-Nitroaniline	0.293	0.341	-16.4	116	0.00	6.86
59	t	Acenaphthene	1.136	1.157	-1.8	103	0.00	6.93
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	62.682	-25.4#	134	0.00	6.97
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.188	0.177	5.9	95	0.00	7.03
62	t	Dibenzofuran	1.602	1.648	-2.9	105	0.00	7.11
		----------	True	Calc.	% Drift	----------		
63	t	2,4-Dinitrotoluene	25.000	26.675	-6.7	110	0.00	7.10
		----------	AvgRF	CCRF	% Dev	----------		
64		2,3,4,6-Tetrachlorophenol	0.340	0.359	-5.6	105	0.00	7.24
65	t	Diethylphthalate	1.243	1.279	-2.9	101	0.00	7.36
66	t	Fluorene	1.301	1.348	-3.6	105	0.00	7.49
67	t	4-Chlorophenyl-phenylethe	0.657	0.668	-1.7	103	0.00	7.49
68	t	4-Nitroaniline	0.311	0.358	-15.1	113	0.00	7.51
69	I	Phenanthrene-d10	1.000	1.000	0.0	106	0.00	8.76
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	29.148	-16.6	124	0.00	7.55
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.634	0.646	-1.9	108	0.00	7.63
72	t	1,2-Diphenylhydrazine	0.764	0.700	8.4	95	0.00	7.68
73	S	2,4,6-Tribromophenol	0.115	0.117	-1.7	103	0.00	7.78
74	t	4-Bromophenyl-phenylether	0.232	0.223	3.9	100	0.00	8.12
75	t	Hexachlorobenzene	0.251	0.247	1.6	102	0.00	8.18
76	t	Pentachlorophenol	0.162	0.158	2.5	99	0.00	8.48
77	t	Phenanthrene	1.030	1.046	-1.6	106	0.00	8.80
78	t	Anthracene	1.056	1.089	-3.1	107	0.00	8.88
79	t	Carbazole	0.951	1.015	-6.7	111	0.00	9.16

Continuing Calibration Summary

Job Number: JD36682 **Sample:** EF8967-CC8913
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** F204533.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

80	t	Di-n-butylphthalate	1.136	1.192	-4.9	108	0.00	9.87
81	t	Fluoranthene	1.163	1.240	-6.6	110	0.00	10.93
82	t	Octadecane	0.400	0.385	3.8	102	0.00	8.66
83	I	Chrysene-d12	1.000	1.000	0.0	112	0.01	14.03
		----------	True	Calc.	% Drift		----------	
84	t	Benzidine	25.000	27.514	-10.1	116	0.00	11.29
		----------	AvgRF	CCRF	% Dev		----------	
85	t	Pyrene	1.247	1.227	1.6	108	0.00	11.37
86	S	Terphenyl-d14	0.975	0.989	-1.4	111	0.00	11.81
87	t	Butylbenzylphthalate	0.486	0.523	-7.6	116	0.00	13.00
88	t	Benzo[a]anthracene	1.186	1.216	-2.5	114	0.00	14.01
89	t	3,3'-Dichlorobenzidine	0.422	0.492	-16.6	127	0.00	14.06
90	t	Chrysene	1.164	1.177	-1.1	111	0.00	14.08
91	t	bis(2-Ethylhexyl)phthalat	0.650	0.727	-11.8	118	0.00	14.42
92	I	Perylene-d12	1.000	1.000	0.0	116	0.00	17.07
		----------	True	Calc.	% Drift		----------	
93	t	Di-n-octylphthalate	25.000	28.677	-14.7	133	0.00	15.88
		----------	AvgRF	CCRF	% Dev		----------	
94	t	Benzo[b]fluoranthene	1.142	1.248	-9.3	120	0.00	16.32
95	t	Benzo[k]fluoranthene	1.141	1.138	0.3	110	0.00	16.38
96	t	Benzo[a]pyrene	1.056	1.168	-10.6	120	0.00	16.95
		----------	True	Calc.	% Drift		----------	
97	t	Indeno[1,2,3-cd]pyrene	25.000	28.392	-13.6	132	0.00	19.01
98	t	Dibenz(a,h)acridine	25.000	27.960	-11.8	132	0.00	18.66
99	t	Dibenz[a,h]anthracene	25.000	26.774	-7.1	123	0.00	19.08
		----------	AvgRF	CCRF	% Dev		----------	
100	t	7,12-Dimethylbenz(a)anthr	0.532	0.527	0.9	108	0.00	16.33
101	t	Benzo[g,h,i]perylene	1.046	1.091	-4.3	114	0.00	19.44

(#) = Out of Range SPCC's out = 0 CCC's out = 0
f204534.d MF8913.M Mon Dec 27 21:29:16 2021

8.8.43

8

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: EF8967-CC8914
Lab FileID: F204534.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\ef8967\f204534.d Vial: 3
Acq On : 23 Dec 2021 6:26 am Operator: chriss2
Sample : cc8914-25 Inst : GCMSF
Misc : op36605,ef8967,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 27 21:28:54 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4b	1.000	1.000	0.0	80	0.00	4.59
103	Benzaldehyde	1.091	1.094	-0.3	80	0.00	4.27
104 I	Phenanthrene-d10b	1.000	1.000	0.0	85	0.00	8.75
105	Atrazine	0.185	0.213	-15.1	91	0.00	8.37
106 I	Naphthalene-d8b	1.000	1.000	0.0	84	0.00	5.51
107	Caprolactam	0.116	0.135	-16.4	86	0.00	5.80

(#) = Out of Range SPCC's out = 0 CCC's out = 0
f204534.d MF8913.M Mon Dec 27 21:29:21 2021

8.8.44

Continuing Calibration Summary

Job Number: JD36682 **Sample:** EF8967-CC8915
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** F204535.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\ef8967\f204535.d Vial: 4
Acq On : 23 Dec 2021 6:51 am Operator: chriss2
Sample : cc8915-25 Inst : GCMSF
Misc : op36605,ef8967,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 27 23:44:25 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	85	0.00	4.59
103	M	2-Picoline	1.475	1.465	0.7	83	0.00	3.11
104		Pentachloroethane	0.544	0.536	1.5	81	0.00	4.38
105	M	Methyl methanesulfonate	0.853	0.782	8.3	76	0.00	3.47
106	M	N-Nitrosodiethylamine	0.580	0.611	-5.3	86	0.00	3.78
107	M	N-Nitrosomethylethylamine	0.750	0.687	8.4	76	0.00	3.21
108	M	Ethyl methanesulfonate	1.020	1.015	0.5	82	0.00	4.02
109	M	N-Nitrosopyrrolidine	0.610	1.159	-90.0#	165	0.00	4.88
110	M	N-Nitrosomorpholine	0.789	0.794	-0.6	80	0.00	4.90
111	M	o-Toluidine	1.983	2.081	-4.9	84	0.00	4.91
112	I	Naphthalene-d8A	1.000	1.000	0.0	87	0.00	5.51
113	M	O,O,O-Triethyl phosphorot	0.173	0.179	-3.5	88	0.00	5.31
114	M	N-Nitrosopiperidine	0.244	0.227	7.0	78	0.00	5.12
115	M	A,A-Dimethylphenethylamin	0.740	0.725	2.0	84	0.00	5.43
116	M	Hexachloropropene	0.227	0.231	-1.8	82	0.00	5.58
117	M	N-Nitrosodi-n-butylamine	0.246	0.264	-7.3	91	0.00	5.79
		----------	True	Calc.	% Drift	----------		
118		p-Phenylenediamine	25.000	21.717	13.1	82	0.00	5.82
		----------	AvgRF	CCRF	% Dev	----------		
119	M	Safrole	0.263	0.279	-6.1	90	0.00	5.95
120		Isosafrole	0.132	0.143	-8.3	91	0.00	6.35
121		Acenaphthene-d10A	1.000	1.000	0.0	89	0.00	6.90
122	M	Thionazin	0.144	0.162	-12.5	94	0.00	7.45
123	M	Tetraethyl dithiopyrophos	0.195	0.261	-33.8#	110	0.00	7.84
124	M	Phorate	0.712	1.117	-56.9#	128	0.00	8.02
125	M	Phenacetin	0.578	0.709	-22.7#	98	0.00	8.05
126	M	1,4-Naphthoquinone	0.263	0.316	-20.2#	95	0.00	6.55
127	M	m-Dinitrobenzene	0.172	0.209	-21.5#	105	0.00	6.68
128	M	Pentachlorobenzene	0.546	0.526	3.7	86	0.00	7.06
129	M	2-Naphthylamine	1.039	1.115	-7.3	92	0.00	7.28
130	M	1-Naphthylamine	0.956	0.988	-3.3	90	0.00	7.19
131	M	5-Nitro-o-toluidine	0.327	0.395	-20.8#	98	0.00	7.50
132	I	Phenanthrene-d10A	1.000	1.000	0.0	93	0.00	8.76
133	M	Disulfoton	0.287	0.312	-8.7	94	0.00	8.80
		----------	True	Calc.	% Drift	----------		

8.8.45

8

Continuing Calibration Summary

Job Number: JD36682 **Sample:** EF8967-CC8915
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** F204535.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

134	M	Dinoseb	25.000	28.237	-12.9	112	0.00	8.78
			AvgRF	CCRF	% Dev			
135	M	Dimethoate	0.227	0.290	-27.8#	103	0.00	8.26
136	M	4-Aminobiphenyl	0.715	0.776	-8.5	94	0.00	8.49
137	M	Methyl parathion	0.167	0.192	-15.0	99	0.00	9.43
138	M	Parathion	0.137	0.150	-9.5	94	0.00	10.16
139	M	Diphenylamine	0.535	0.554	-3.6	94	0.00	7.63
140	M	Isodrin	0.111	0.112	-0.9	87	0.00	10.61
141	M	Diallate	0.073	0.070	4.1	88	0.00	8.13
142	M	Pentachloronitrobenzene	0.042	0.046#	-9.5	92	0.00	8.48
143	M	Pronamide	0.293	0.313	-6.8	93	0.00	8.60
			True	Calc.	% Drift			
144	M	4-Nitroquinoline 1-oxide	100.000	103.109	-3.1	98	0.00	10.17
			AvgRF	CCRF	% Dev			
145	M	Methapyriline	0.274	0.342	-24.8#	98	0.00	10.36
			True	Calc.	% Drift			
146	M	sym-Trinitrobenzene	25.000	29.583	-18.3	115	0.00	8.01
			AvgRF	CCRF	% Dev			
147	I	Chrysene-d12A	1.000	1.000	0.0	97	0.00	14.02
148		Aramite	0.062	0.078	-25.8#	116	0.00	12.05
149	M	p-(Dimethylamine)azobenze	0.278	0.319	-14.7	100	0.00	12.13
150		Kepone	0.104	0.066	36.5#	59	0.00	12.81
			True	Calc.	% Drift			
151	M	Famphur	150.000	153.631	-2.4	95	0.00	12.84
			AvgRF	CCRF	% Dev			
152	M	2-Acetylaminofluorene	0.429	0.537	-25.2#	117	0.00	13.42
153	M	Chlorobenzilate	0.334	0.366	-9.6	99	0.00	12.27
154	I	Perylene-d12A	1.000	1.000	0.0	101	0.00	17.07
			True	Calc.	% Drift			
155		Hexachlorophene	125.000	85.644	31.5#	65	0.00	16.83
			AvgRF	CCRF	% Dev			
156		3-Methylcholanthrene	0.177	0.198	-11.9	113	0.00	17.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
f204535.d MF8913AP9.M Mon Dec 27 23:44:48 2021

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E2P4696	**Method:** SW846 8270E	**Instrument ID:** GCMS2P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E2P4696-DFTPP	2P104590.D	12/04/21 05:06	n/a	DFTPP Tune
E2P4696-IC4696	2P104591.D	12/04/21 06:08	n/a	Initial cal 1
E2P4696-IC4696	2P104592A.D	12/04/21 07:03	n/a	Initial cal 2
E2P4696-IC4696	2P104593.D	12/04/21 07:27	n/a	Initial cal 5
E2P4696-IC4696	2P104594.D	12/04/21 07:51	n/a	Initial cal 10
E2P4696-IC4696	2P104595.D	12/04/21 08:16	n/a	Initial cal 25
E2P4696-ICC4696	2P104596.D	12/04/21 08:40	n/a	Initial cal 50
E2P4696-IC4696	2P104597.D	12/04/21 09:05	n/a	Initial cal 80
E2P4696-IC4696	2P104598.D	12/04/21 09:29	n/a	Initial cal 100
E2P4696-ICV4696	2P104599.D	12/04/21 09:53	n/a	Initial cal verification 50
E2P4696-ICV4696	2P104600.D	12/04/21 10:18	n/a	Initial cal verification 50
E2P4696-ICV4696	2P104601.D	12/04/21 10:42	n/a	Initial cal verification 50
E2P4696-ICV4696	2P104602.D	12/04/21 11:07	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E2P4697	**Method:** SW846 8270E	**Instrument ID:** GCMS2P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E2P4697-DFTPP	2P104603.D	12/04/21 11:28	n/a	DFTPP Tune
E2P4697-IC4697	2P104604.D	12/04/21 11:39	n/a	Initial cal 100
E2P4697-IC4697	2P104605.D	12/04/21 12:03	n/a	Initial cal 80
E2P4697-ICC4697	2P104606.D	12/04/21 12:28	n/a	Initial cal 50
E2P4697-IC4697	2P104607.D	12/04/21 12:53	n/a	Initial cal 25
E2P4697-IC4697	2P104608.D	12/04/21 13:17	n/a	Initial cal 10
E2P4697-IC4697	2P104609.D	12/04/21 13:41	n/a	Initial cal 5
E2P4697-IC4697	2P104610.D	12/04/21 14:06	n/a	Initial cal 2
E2P4697-IC4697	2P104611.D	12/04/21 14:30	n/a	Initial cal 1
E2P4697-ICV4697	2P104612.D	12/04/21 14:54	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E2P4698	**Method:** SW846 8270E	**Instrument ID:** GCMS2P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E2P4698-DFTPP	2P104613.D	12/09/21 04:24	n/a	DFTPP Tune
E2P4698-ICV4696	2P104615.D	12/09/21 06:01	n/a	Initial cal verification 50
E2P4698-CC4696	2P104616.D	12/09/21 06:25	n/a	Continuing cal 50
E2P4698-CC4697	2P104617.D	12/09/21 06:50	n/a	Continuing cal 50
OP36737-MB3	2P104618.D	12/09/21 07:35	OP36737	Method Blank
ZZZZZZ	2P104619.D	12/09/21 07:59	OP36737	(unrelated sample)
ZZZZZZ	2P104620.D	12/09/21 08:23	OP36737	(unrelated sample)
ZZZZZZ	2P104621.D	12/09/21 08:47	OP36737	(unrelated sample)
ZZZZZZ	2P104622.D	12/09/21 09:11	OP36737	(unrelated sample)
ZZZZZZ	2P104623.D	12/09/21 09:36	OP36737	(unrelated sample)
OP36982-BS1	2P104625.D	12/09/21 10:24	OP36982	Blank Spike
ZZZZZZ	2P104627.D	12/09/21 11:13	OP36982	(unrelated sample)
ZZZZZZ	2P104630.D	12/09/21 12:26	OP36982	(unrelated sample)
ZZZZZZ	2P104632.D	12/09/21 13:15	OP36982	(unrelated sample)
OP36982-MSD	2P104639.D	12/09/21 16:06	OP36982	Matrix Spike Duplicate

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E2P4704	**Method:** SW846 8270E	**Instrument ID:** GCMS2P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E2P4704-DFTPP	2P104780.D	12/16/21 03:42	n/a	DFTPP Tune
E2P4704-CC4696	2P104781.D	12/16/21 03:55	n/a	Continuing cal 50
E2P4704-CC4697	2P104782.D	12/16/21 04:20	n/a	Continuing cal 50
OP37154-MB1	2P104783.D	12/16/21 04:53	OP37154	Method Blank
OP37154-BS1	2P104784.D	12/16/21 05:31	OP37154	Blank Spike
OP37131-MB1	2P104785.D	12/16/21 05:56	OP37131	Method Blank
OP37131-BS1	2P104786.D	12/16/21 06:21	OP37131	Blank Spike
ZZZZZZ	2P104788.D	12/16/21 06:47	OP37154	(unrelated sample)
ZZZZZZ	2P104789.D	12/16/21 07:13	OP37154	(unrelated sample)
ZZZZZZ	2P104790.D	12/16/21 07:38	OP37154	(unrelated sample)
ZZZZZZ	2P104791.D	12/16/21 08:04	OP37154	(unrelated sample)
ZZZZZZ	2P104787.D	12/16/21 08:30	OP37131	(unrelated sample)
OP37154-MS	2P104792.D	12/16/21 08:56	OP37154	Matrix Spike
OP37154-MSD	2P104793.D	12/16/21 09:21	OP37154	Matrix Spike Duplicate
JD36682-7	2P104794.D	12/16/21 09:47	OP37154	HOFF SED-4
OP37131-MS	2P104795.D	12/16/21 10:12	OP37131	Matrix Spike
OP37131-MSD	2P104796.D	12/16/21 10:38	OP37131	Matrix Spike Duplicate
JD36621-1	2P104797.D	12/16/21 11:04	OP37131	(used for QC only; not part of job JD36682)
ZZZZZZ	2P104798.D	12/16/21 11:29	OP37131	(unrelated sample)

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E2P4709	**Method:** SW846 8270E	**Instrument ID:** GCMS2P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E2P4709-DFTPP	2P104909.D	12/22/21 22:35	n/a	DFTPP Tune
E2P4709-CC4696	2P104910.D	12/22/21 22:48	n/a	Continuing cal 25
E2P4709-CC4697	2P104911.D	12/22/21 23:12	n/a	Continuing cal 25
E2P4709-CC4696	2P104912.D	12/23/21 00:28	n/a	Continuing cal 5
OP37283-MB1	2P104915.D	12/23/21 02:08	OP37283	Method Blank
OP37283-BS1	2P104916.D	12/23/21 02:32	OP37283	Blank Spike
OP37044B-MB1	2P104917.D	12/23/21 03:00	OP37044B	Method Blank
OP37044B-BSD	2P104918.D	12/23/21 03:24	OP37044B	Blank Spike Duplicate
ZZZZZZ	2P104919.D	12/23/21 03:48	OP37044B	(unrelated sample)
ZZZZZZ	2P104920.D	12/23/21 04:12	OP37283	(unrelated sample)
ZZZZZZ	2P104923.D	12/23/21 05:26	OP37283	(unrelated sample)
ZZZZZZ	2P104925.D	12/23/21 06:14	OP37283	(unrelated sample)
ZZZZZZ	2P104926.D	12/23/21 06:38	OP37283	(unrelated sample)
ZZZZZZ	2P104927.D	12/23/21 07:02	OP37283	(unrelated sample)

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2551 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2551-DFTPP	4P48502.D	10/20/21 22:19	n/a	DFTPP Tune
E4P2551-IC2551	4P48504.D	10/20/21 22:59	n/a	Initial cal 1
E4P2551-ICC2551	4P48505.D	10/20/21 23:23	n/a	Initial cal 0.2
E4P2551-IC2551	4P48506.D	10/20/21 23:46	n/a	Initial cal 0.02
E4P2551-IC2551	4P48507.D	10/21/21 00:10	n/a	Initial cal 0.5
E4P2551-IC2551	4P48508.D	10/21/21 00:33	n/a	Initial cal 0.1
E4P2551-IC2551	4P48509.D	10/21/21 00:57	n/a	Initial cal 0.004
E4P2551-IC2551	4P48511.D	10/21/21 01:44	n/a	Initial cal 0.04
E4P2551-IC2551	4P48513.D	10/21/21 02:16	n/a	Initial cal 0.002
E4P2551-IC2551	4P48514.D	10/21/21 02:39	n/a	Initial cal 0.01
E4P2551-ICV2551	4P48512.D	10/21/21 03:15	n/a	Initial cal verification 0.2
OP35848A-BSD12	4P48515.D	10/21/21 03:45	OP35848A	Blank Spike Duplicate

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2645 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2645-DFTPP	4P50560.D	01/07/22 15:36	n/a	DFTPP Tune
E4P2645-CC2551	4P50561.D	01/07/22 15:47	n/a	Continuing cal 0.1
OP37474A-MB1	4P50563.D	01/07/22 16:34	OP37474A	Method Blank
OP37474A-BS12	4P50564.D	01/07/22 16:57	OP37474A	Blank Spike
OP37474A-BSD12	4P50565.D	01/07/22 17:20	OP37474A	Blank Spike Duplicate
JD36682-3	4P50567.D	01/07/22 18:07	OP37474A	HOFF SW-3
JD36682-4	4P50568.D	01/07/22 18:30	OP37474A	HOFF SW-2
JD36682-5	4P50569.D	01/07/22 18:53	OP37474A	HOFF SW-1
JD36682-6	4P50570.D	01/07/22 19:17	OP37474A	HOFF-DUP-121321SW
ZZZZZZ	4P50571.D	01/07/22 19:40	OP37474A	(unrelated sample)
ZZZZZZ	4P50573.D	01/07/22 20:26	OP37474A	(unrelated sample)
ZZZZZZ	4P50574.D	01/07/22 20:49	OP37474A	(unrelated sample)
ZZZZZZ	4P50575.D	01/07/22 21:13	OP37474A	(unrelated sample)
ZZZZZZ	4P50576.D	01/07/22 21:36	OP37474A	(unrelated sample)
ZZZZZZ	4P50577.D	01/07/22 21:59	OP37474A	(unrelated sample)
ZZZZZZ	4P50578.D	01/07/22 22:22	OP37474A	(unrelated sample)
ZZZZZZ	4P50579.D	01/07/22 22:45	OP37474A	(unrelated sample)
ZZZZZZ	4P50580.D	01/07/22 23:08	OP37474A	(unrelated sample)
ZZZZZZ	4P50581.D	01/07/22 23:31	OP37272A	(unrelated sample)
ZZZZZZ	4P50582.D	01/07/22 23:54	OP37272A	(unrelated sample)
ZZZZZZ	4P50583.D	01/08/22 00:17	OP37349A	(unrelated sample)
ZZZZZZ	4P50584.D	01/08/22 00:40	OP37349A	(unrelated sample)
ZZZZZZ	4P50585.D	01/08/22 01:03	OP37385A	(unrelated sample)
ZZZZZZ	4P50586.D	01/08/22 01:26	OP37349A	(unrelated sample)
ZZZZZZ	4P50587.D	01/08/22 01:48	OP37349A	(unrelated sample)

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2647 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2647-DFTPP	4P50618.D	01/10/22 18:48	n/a	DFTPP Tune
E4P2647-IC2647	4P50619.D	01/10/22 19:04	n/a	Initial cal 0.2
E4P2647-IC2647	4P50620.D	01/10/22 19:27	n/a	Initial cal 1
E4P2647-IC2647	4P50621.D	01/10/22 19:50	n/a	Initial cal 0.01
E4P2647-IC2647	4P50622.D	01/10/22 20:13	n/a	Initial cal 0.5
E4P2647-IC2647	4P50623.D	01/10/22 20:36	n/a	Initial cal 0.02
E4P2647-ICC2647	4P50624.D	01/10/22 20:59	n/a	Initial cal 0.1
E4P2647-IC2647	4P50625.D	01/10/22 21:22	n/a	Initial cal 0.04
E4P2647-IC2647	4P50626.D	01/10/22 21:45	n/a	Initial cal 0.004
E4P2647-IC2647	4P50627.D	01/10/22 22:08	n/a	Initial cal 0.002
E4P2647-ICV2647	4P50628.D	01/10/22 22:31	n/a	Initial cal verification 0.2

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2648 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2648-DFTPP	4P50633.D	01/11/22 11:37	n/a	DFTPP Tune
E4P2648-CC2647	4P50634.D	01/11/22 11:50	n/a	Continuing cal 0.2
OP37448-MB1	4P50635.D	01/11/22 12:13	OP37448	Method Blank
OP37448-BS1	4P50636.D	01/11/22 12:36	OP37448	Blank Spike
OP37448-BSD	4P50637.D	01/11/22 12:58	OP37448	Blank Spike Duplicate
JD36682-2	4P50638.D	01/11/22 13:23	OP37474A	HOFF SW-4
ZZZZZZ	4P50639.D	01/11/22 13:45	OP37474A	(unrelated sample)
ZZZZZZ	4P50640.D	01/11/22 14:14	OP37474A	(unrelated sample)
ZZZZZZ	4P50641.D	01/11/22 14:36	OP37474A	(unrelated sample)
ZZZZZZ	4P50642.D	01/11/22 14:59	OP37474A	(unrelated sample)
ZZZZZZ	4P50643.D	01/11/22 15:22	OP37474A	(unrelated sample)

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3785	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3785-DFTPP	5P79956.D	12/01/21 21:49	n/a	DFTPP Tune
E5P3785-IC3785	5P79957.D	12/01/21 22:09	n/a	Initial cal 20
E5P3785-IC3785	5P79958.D	12/01/21 22:36	n/a	Initial cal 16
E5P3785-ICC3785	5P79959.D	12/01/21 23:02	n/a	Initial cal 10
E5P3785-IC3785	5P79960.D	12/01/21 23:30	n/a	Initial cal 5
E5P3785-IC3785	5P79961.D	12/01/21 23:57	n/a	Initial cal 2
E5P3785-IC3785	5P79962.D	12/02/21 00:24	n/a	Initial cal 1
E5P3785-IC3785	5P79963.D	12/02/21 00:51	n/a	Initial cal 0.4
E5P3785-IC3785	5P79964.D	12/02/21 01:17	n/a	Initial cal 0.2
E5P3785-ICV3785	5P79965.D	12/02/21 01:45	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3794	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3794-DFTPP	5P80176.D	12/09/21 00:53	n/a	DFTPP Tune
E5P3794-IC3794	5P80177.D	12/09/21 01:11	n/a	Initial cal 0.2
E5P3794-IC3794	5P80178.D	12/09/21 01:38	n/a	Initial cal 0.4
E5P3794-IC3794	5P80179.D	12/09/21 02:05	n/a	Initial cal 1
E5P3794-IC3794	5P80180.D	12/09/21 02:32	n/a	Initial cal 2
E5P3794-IC3794	5P80181.D	12/09/21 02:59	n/a	Initial cal 5
E5P3794-ICC3794	5P80182.D	12/09/21 03:26	n/a	Initial cal 10
E5P3794-IC3794	5P80183.D	12/09/21 03:53	n/a	Initial cal 16
E5P3794-IC3794	5P80184.D	12/09/21 04:19	n/a	Initial cal 20
E5P3794-ICV3794	5P80185.D	12/09/21 04:47	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80186.D	12/09/21 05:13	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80187.D	12/09/21 05:40	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80188.D	12/09/21 06:07	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3795	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3795-DFTPP	5P80191.D	12/09/21 12:44	n/a	DFTPP Tune
E5P3795-ICV3794	5P80192.D	12/09/21 12:58	n/a	Initial cal verification 10
E5P3795-CC3794	5P80193.D	12/09/21 13:25	n/a	Continuing cal 10
E5P3795-CC3785	5P80194.D	12/09/21 13:51	n/a	Continuing cal 10
OP36390-MB1	5P80195.D	12/09/21 14:46	OP36390	Method Blank
OP36390-BS1	5P80196.D	12/09/21 15:13	OP36390	Blank Spike
OP36390-BSD	5P80197.D	12/09/21 15:40	OP36390	Blank Spike Duplicate
ZZZZZZ	5P80198.D	12/09/21 16:07	OP36390	(unrelated sample)
E5P3795-ECC3794	5P80199.D	12/09/21 16:57	n/a	Ending cal 10
E5P3795-ECC3785	5P80200.D	12/09/21 17:36	n/a	Ending cal 10

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3826	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3826-DFTPP	5P80846.D	01/07/22 02:45	n/a	DFTPP Tune
E5P3826-CC3794	5P80847.D	01/07/22 02:59	n/a	Continuing cal 10
E5P3826-CC3785	5P80848.D	01/07/22 03:25	n/a	Continuing cal 10
OP37474-MB1	5P80851.D	01/07/22 05:11	OP37474	Method Blank
OP37474-BS1	5P80852.D	01/07/22 05:37	OP37474	Blank Spike
OP37474-BSD	5P80853.D	01/07/22 06:03	OP37474	Blank Spike Duplicate
JD36682-2	5P80854A.D	01/07/22 09:46	OP37474	HOFF SW-4
JD36682-3	5P80855.D	01/07/22 10:12	OP37474	HOFF SW-3
JD36682-4	5P80856.D	01/07/22 10:38	OP37474	HOFF SW-2
JD36682-5	5P80857.D	01/07/22 11:05	OP37474	HOFF SW-1
JD36682-6	5P80858.D	01/07/22 11:31	OP37474	HOFF-DUP-121321SW

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: EF8913	**Method:** SW846 8270E	**Instrument ID:** GCMSF

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
EF8913-DFTPP	F203410.D	11/10/21 03:18	n/a	DFTPP Tune
EF8913-IC8913	F203411.D	11/10/21 03:41	n/a	Initial cal 1
EF8913-IC8913	F203412.D	11/10/21 04:09	n/a	Initial cal 2
EF8913-IC8913	F203413.D	11/10/21 04:37	n/a	Initial cal 5
EF8913-IC8913	F203414.D	11/10/21 05:04	n/a	Initial cal 10
EF8913-IC8913	F203415.D	11/10/21 05:32	n/a	Initial cal 25
EF8913-ICC8913	F203416.D	11/10/21 06:00	n/a	Initial cal 50
EF8913-IC8913	F203417.D	11/10/21 06:27	n/a	Initial cal 80
EF8913-IC8913	F203418.D	11/10/21 06:55	n/a	Initial cal 100
EF8913-ICV8913	F203419.D	11/10/21 07:22	n/a	Initial cal verification 50
EF8913-ICV8913	F203420.D	11/10/21 07:50	n/a	Initial cal verification 50
EF8913-ICV8913	F203421.D	11/10/21 08:17	n/a	Initial cal verification 50
EF8913-ICV8913	F203422.D	11/10/21 08:44	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: EF8914	**Method:** SW846 8270E	**Instrument ID:** GCMSF

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
EF8914-DFTPP	F203423.D	11/10/21 09:08	n/a	DFTPP Tune
EF8914-IC8914	F203424.D	11/10/21 09:20	n/a	Initial cal 80
EF8914-ICC8914	F203425.D	11/10/21 09:48	n/a	Initial cal 50
EF8914-IC8914	F203426.D	11/10/21 10:15	n/a	Initial cal 25
EF8914-IC8914	F203427.D	11/10/21 10:43	n/a	Initial cal 10
EF8914-IC8914	F203428.D	11/10/21 11:10	n/a	Initial cal 5
EF8914-IC8914	F203429.D	11/10/21 11:38	n/a	Initial cal 2
EF8914-IC8914	F203430.D	11/10/21 12:05	n/a	Initial cal 1
EF8914-IC8914	F203433.D	11/10/21 14:29	n/a	Initial cal 100
EF8914-ICV8914	F203434.D	11/10/21 14:57	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: EF8915	**Method:** SW846 8270E	**Instrument ID:** GCMSF

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
EF8915-DFTPP	F203435.D	11/10/21 22:06	n/a	DFTPP Tune
EF8915-IC8915	F203436.D	11/10/21 22:29	n/a	Initial cal 100
EF8915-IC8915	F203437.D	11/10/21 22:57	n/a	Initial cal 80
EF8915-ICC8915	F203438.D	11/10/21 23:24	n/a	Initial cal 50
EF8915-IC8915	F203439.D	11/10/21 23:51	n/a	Initial cal 25
EF8915-IC8915	F203440.D	11/11/21 00:18	n/a	Initial cal 10
EF8915-IC8915	F203441.D	11/11/21 00:46	n/a	Initial cal 5
EF8915-IC8915	F203442.D	11/11/21 01:13	n/a	Initial cal 2
EF8915-IC8915	F203443.D	11/11/21 01:40	n/a	Initial cal 1
EF8915-ICV8915	F203444.D	11/11/21 03:10	n/a	Initial cal verification 50
EF8915-ICV8915	F203445.D	11/11/21 04:04	n/a	Initial cal verification 50
EF8915-ICV8915	F203446.D	11/11/21 04:31	n/a	Initial cal verification 50
EF8915-ICV8915	F203447.D	11/11/21 04:58	n/a	Initial cal verification 50
EF8915-ICV8915	F203448.D	11/11/21 05:25	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: EF8967	**Method:** SW846 8270E	**Instrument ID:** GCMSF

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
EF8967-DFTPP	F204532.D	12/23/21 05:45	n/a	DFTPP Tune
EF8967-CC8913	F204533.D	12/23/21 06:01	n/a	Continuing cal 25
EF8967-CC8914	F204534.D	12/23/21 06:26	n/a	Continuing cal 25
EF8967-CC8915	F204535.D	12/23/21 06:51	n/a	Continuing cal 25
OP37283-MB1	F204538A.D	12/23/21 08:06	OP37283	Method Blank
OP37283-BS13	F204539.D	12/23/21 08:31	OP37283	Blank Spike
JD36682-11	F204540.D	12/23/21 08:56	OP37283	HOFF DUP-121321SED
JD36682-10	F204541.D	12/23/21 09:20	OP37283	HOFF SED-1
JD36682-9	F204542.D	12/23/21 09:45	OP37283	HOFF SED-2
JD36682-8	F204543.D	12/23/21 10:10	OP37283	HOFF SED-3
OP37283-MS	F204544.D	12/23/21 10:35	OP37283	Matrix Spike
OP37283-MSD	F204545.D	12/23/21 11:00	OP37283	Matrix Spike Duplicate
JD36682-7	F204546.D	12/23/21 11:25	OP37283	HOFF SED-4
ZZZZZZ	F204547.D	12/23/21 11:50	OP37283	(unrelated sample)
ZZZZZZ	F204548.D	12/23/21 12:14	OP37283	(unrelated sample)
ZZZZZZ	F204549.D	12/23/21 12:39	OP37283	(unrelated sample)
ZZZZZZ	F204550.D	12/23/21 13:04	OP37283	(unrelated sample)
ZZZZZZ	F204551.D	12/23/21 13:29	OP37283	(unrelated sample)
ZZZZZZ	F204552.D	12/23/21 13:54	OP37283	(unrelated sample)

MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204546.d
Acq On : 23 Dec 2021 11:25 am
Operator : chriss2
Sample : jd36682-7 Inst : GCMSF
Misc : op37283,ef8967,30.2,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 28 00:44:23 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.587	152	170357	40.00	ppm	0.00
24) Naphthalene-d8	5.511	136	671100	40.00	ppm	0.00
46) Acenaphthene-d10	6.900	164	362607	40.00	ppm	0.00
69) Phenanthrene-d10	8.759	188	654154	40.00	ppm	0.00
83) Chrysene-d12	14.022	240	575519	40.00	ppm	0.00
92) Perylene-d12	17.072	264	613235	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.587	152	170357	40.00	ppm	0.00
112) Naphthalene-d8A	5.511	136	671100	40.00	ppm	0.00
121) Acenaphthene-d10A	6.900	164	362607	40.00	ppm	0.00
132) Phenanthrene-d10A	8.759	188	654154	40.00	ppm	0.00
147) Chrysene-d12A	14.022	240	575519	40.00	ppm	0.00
154) Perylene-d12A	17.072	264	613235	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.587	152	170357	40.00	ppm	0.00
159) Phenanthrene-d10b	8.759	188	654154	40.00	ppm	0.00
161) Naphthalene-d8b	5.511	136	671100	40.00	ppm	0.00
163) Naphthalene-d8c	5.511	136	671100	40.00	ppm	0.00
168) 1,4-Dichlorobenzene-d4c	4.587	152	170357	40.00	ppm	0.00
170) Chrysene-d12c	14.022	240	575519	40.00	ppm	0.00
172) Chrysene-d12d	14.022	240	575519	40.00	ppm	0.00
174) Naphthalene-d8d	5.511	136	671100	40.00	ppm	0.00
176) Chrysene-d12e	14.022	240	575519	40.00	ppm	0.00
178) Perylene-d12b	17.072	264	613235	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.604	112	208590	39.01	ppm	0.00
Spiked Amount 50.000			Recovery = 78.02%			
8) Phenol-d5	4.325	99	276302	38.21	ppm	0.00
Spiked Amount 50.000			Recovery = 76.42%			
25) Nitrobenzene-d5	4.993	82	229574	34.27	ppm	0.00
Spiked Amount 50.000			Recovery = 68.54%			
51) 2-Fluorobiphenyl	6.302	172	489714	40.22	ppm	0.00
Spiked Amount 50.000			Recovery = 80.44%			
73) 2,4,6-Tribromophenol	7.776	330	82108	43.67	ppm	0.00
Spiked Amount 50.000			Recovery = 87.34%			
86) Terphenyl-d14	11.810	244	625535	44.58	ppm	0.00
Spiked Amount 50.000			Recovery = 89.16%			
Target Compounds						Qvalue
15) 1,4-Dichlorobenzene	4.598	146	1218	0.19	ppm	92
17) 1,2-Dichlorobenzene	4.710	146	1976	0.32	ppm	97
38) Naphthalene	5.522	128	3394	0.20	ppm	91
44) 2-Methylnaphthalene	6.019	141	1910	0.19	ppm	85
52) 2-Chloronaphthalene	6.403	162	983	0.10	ppm	90
53) Biphenyl	6.382	154	2945	0.22	ppm	91
56) Acenaphthylene	6.767	152	2381	0.17	ppm	88
59) Acenaphthene	6.932	153	27890	2.71	ppm	95
62) Dibenzofuran	7.109	168	12326	0.85	ppm	96
66) Fluorene	7.483	166	19849	1.68	ppm	96
77) Phenanthrene	8.797	178	370422	21.99	ppm	100
78) Anthracene	8.872	178	105949	6.13	ppm	98
79) Carbazole	9.155	167	62396	4.01	ppm	96
81) Fluoranthene	10.928	202	678806	35.69	ppm	97
85) Pyrene	11.372	202	598934	33.37	ppm	97
88) Benzo[a]anthracene	14.005	228	315434	18.48	ppm	96
90) Chrysene	14.075	228	292782	17.49	ppm	99
94) Benzo[b]fluoranthene	16.324	252	391451	22.36	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204546.d
Acq On : 23 Dec 2021 11:25 am
Operator : chriss2
Sample : jd36682-7 Inst : GCMSF
Misc : op37283,ef8967,30.2,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 28 00:44:23 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

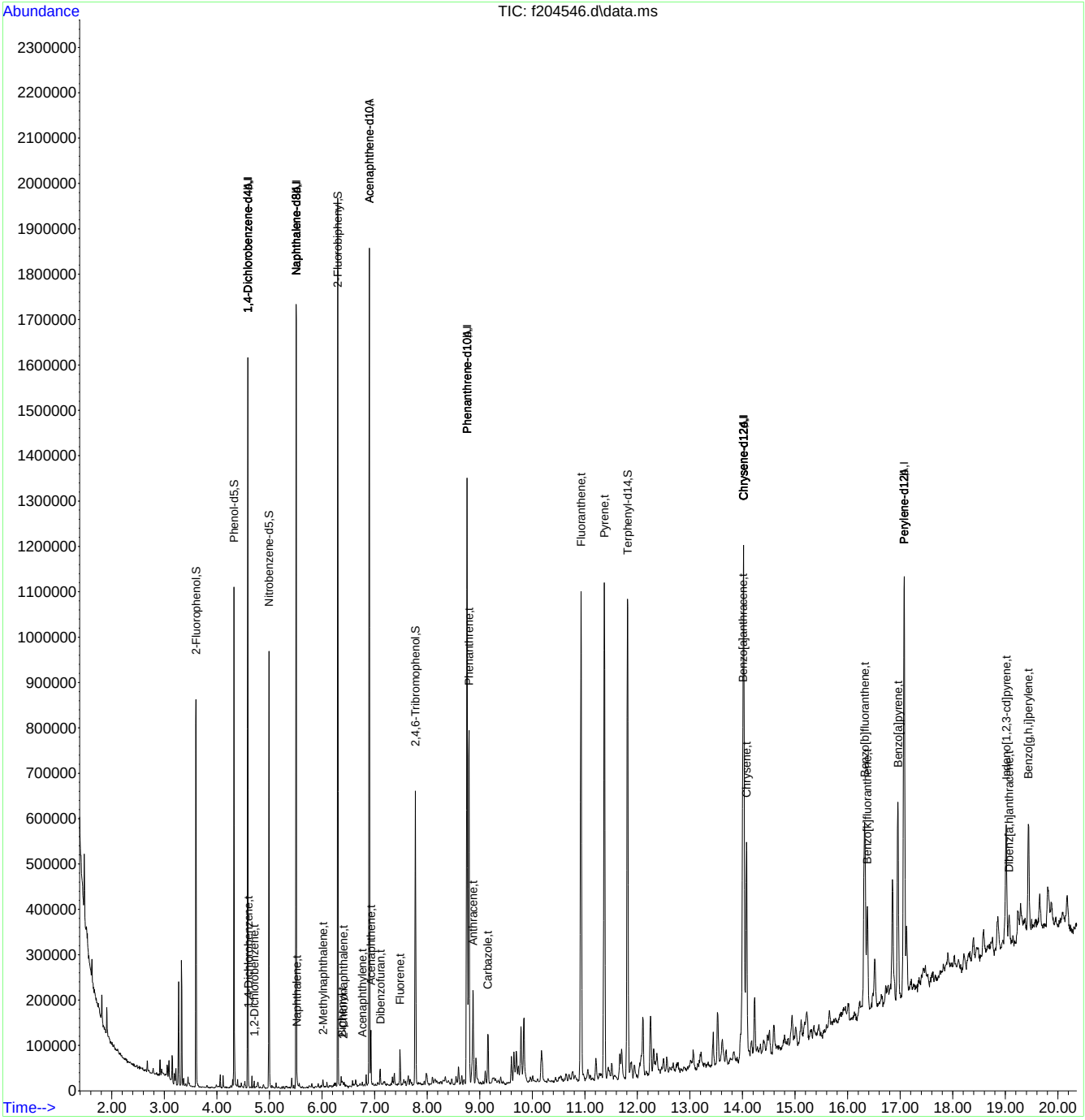
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Benzo[k]fluoranthene	16.372	252	145264	8.30	ppm	97
96) Benzo[a]pyrene	16.960	252	296530	18.31	ppm	99
97) Indeno[1,2,3-cd]pyrene	19.017	276	198220	15.43	ppm	99
99) Dibenz[a,h]anthracene	19.070	278	44416	3.43	ppm	95
101) Benzo[g,h,i]perylene	19.439	276	177343	11.06	ppm	97

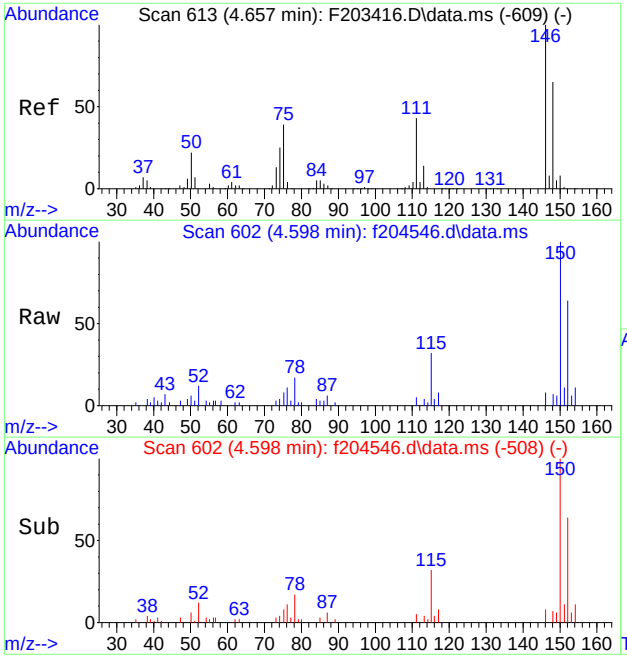
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204546.d
Acq On : 23 Dec 2021 11:25 am
Operator : chriss2
Sample : jd36682-7 Inst : GCMSF
Misc : op37283,ef8967,30.2,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 28 00:44:23 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

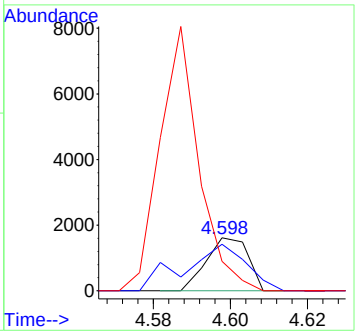


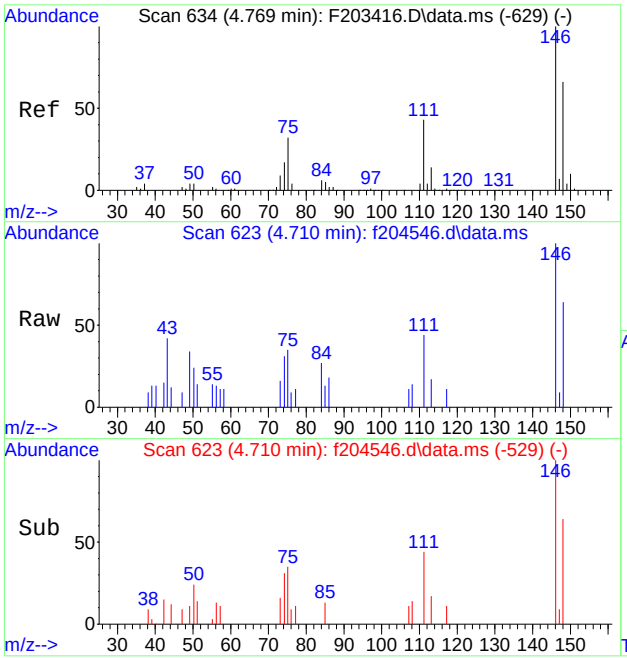


#15
1,4-Dichlorobenzene
Concen: 0.19 ppm
RT: 4.598 min Scan# 602
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:146 Resp: 1218

Ion	Ratio	Lower	Upper
146	100		
148	60.9	32.9	92.9
113	0.0	0.0	43.2

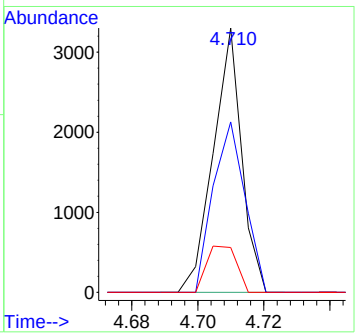


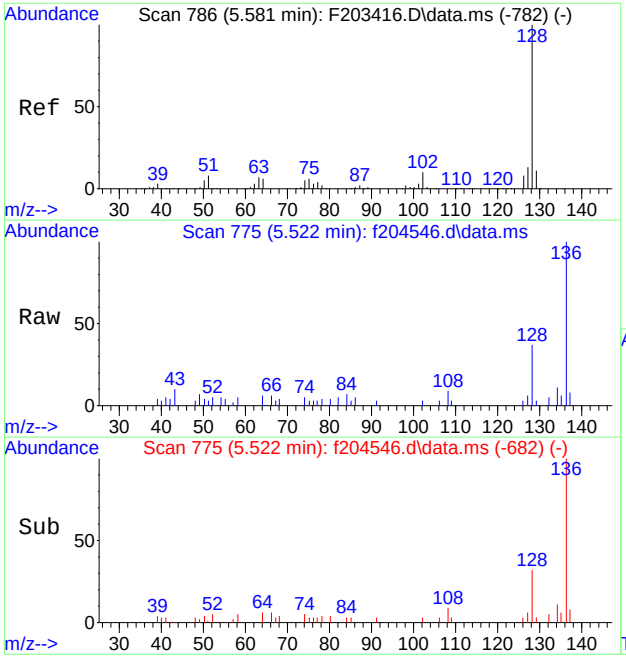


#17
1,2-Dichlorobenzene
Concen: 0.32 ppm
RT: 4.710 min Scan# 623
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:146 Resp: 1976

Ion	Ratio	Lower	Upper
146	100		
148	64.4	32.9	92.9
113	17.0	0.0	43.2

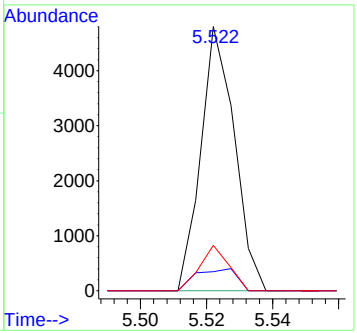


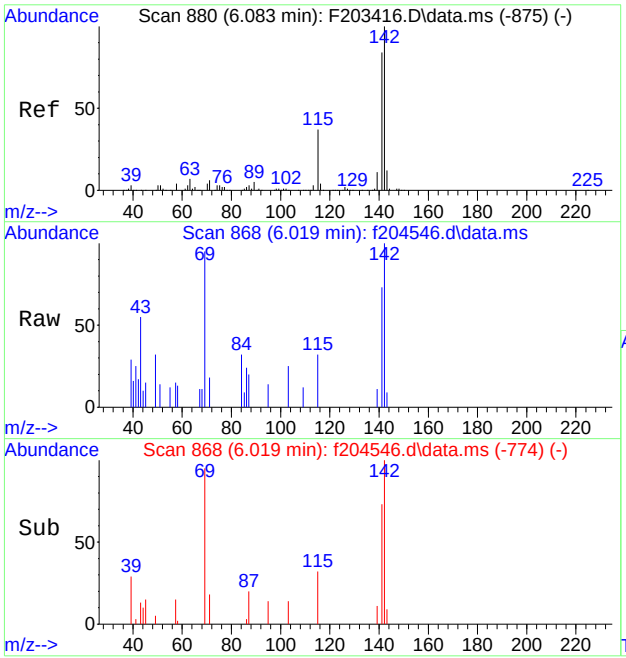


#38
Naphthalene
Concen: 0.20 ppm
RT: 5.522 min Scan# 775
Delta R.T. -0.005 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:128 Resp: 3394

Ion	Ratio	Lower	Upper
128	100		
129	7.3	0.0	41.2
127	17.2	0.0	43.7

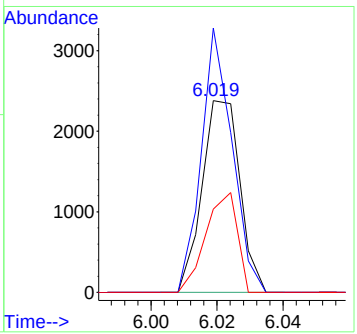


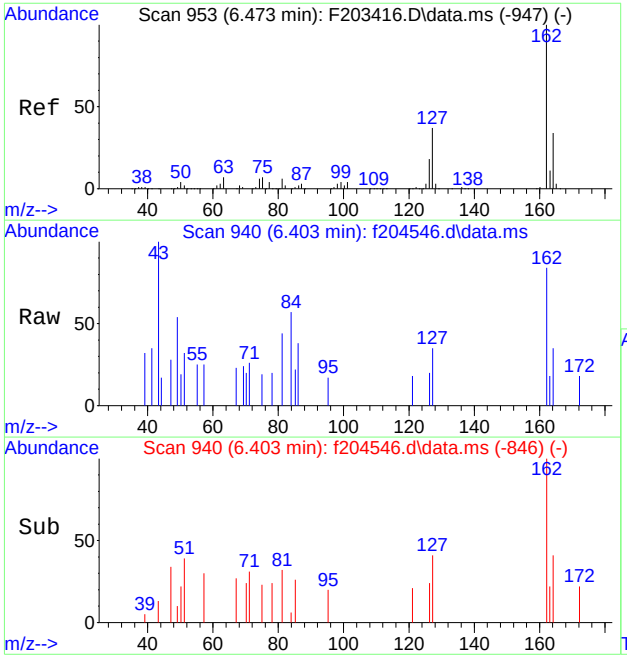


#44
2-Methylnaphthalene
Concen: 0.19 ppm
RT: 6.019 min Scan# 868
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:141 Resp: 1910

Ion	Ratio	Lower	Upper
141	100		
142	137.8	87.2	147.2
115	43.4	10.6	70.6

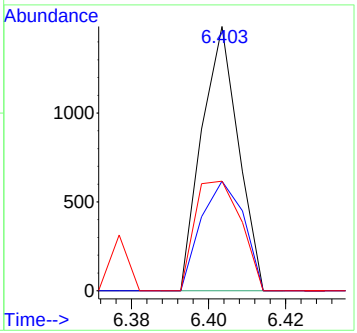


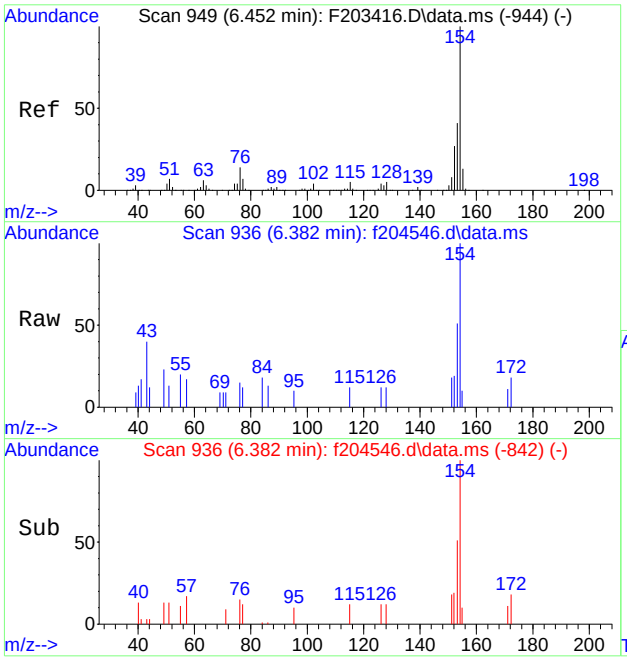


#52
2-Chloronaphthalene
Concen: 0.10 ppm
RT: 6.403 min Scan# 940
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:162 Resp: 983

Ion	Ratio	Lower	Upper
162	100		
164	41.5	2.6	62.6
127	41.5	8.6	68.6

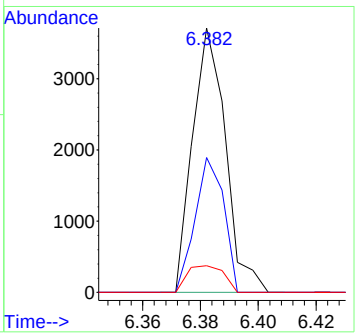


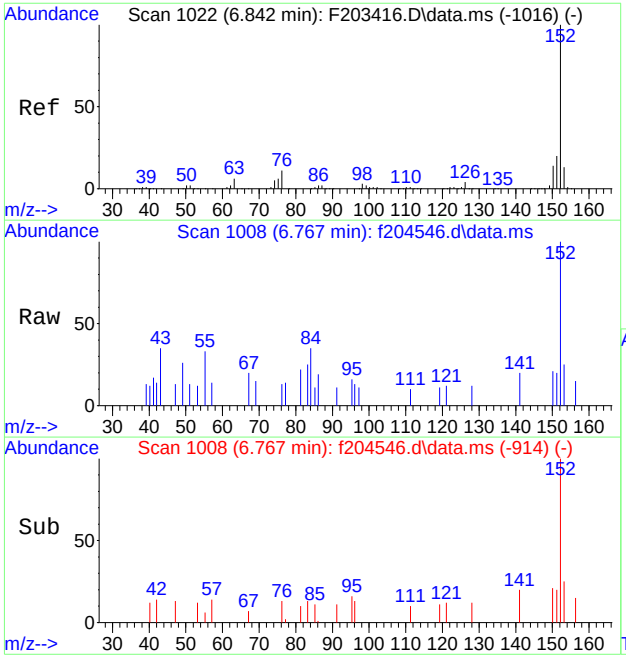


#53
Biphenyl
Concen: 0.22 ppm
RT: 6.382 min Scan# 936
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:154 Resp: 2945

Ion	Ratio	Lower	Upper
154	100		
153	46.4	10.7	70.7
155	9.1	0.0	43.2

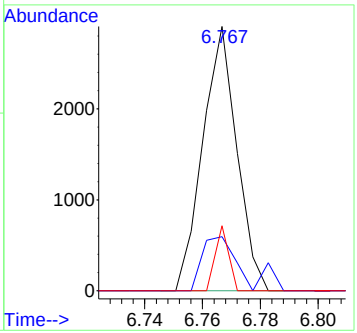


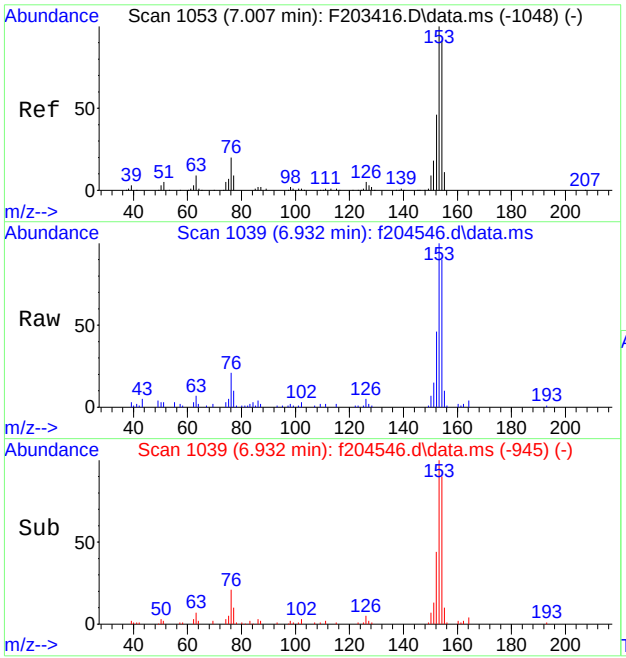


#56
Acenaphthylene
Concen: 0.17 ppm
RT: 6.767 min Scan# 1008
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:152 Resp: 2381

Ion	Ratio	Lower	Upper
152	100		
151	20.5	0.0	50.3
153	24.6	0.0	42.6

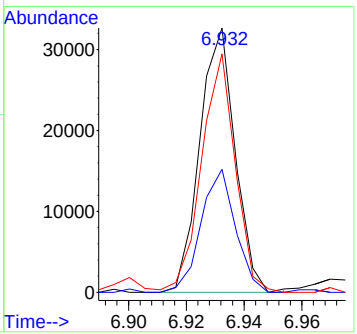


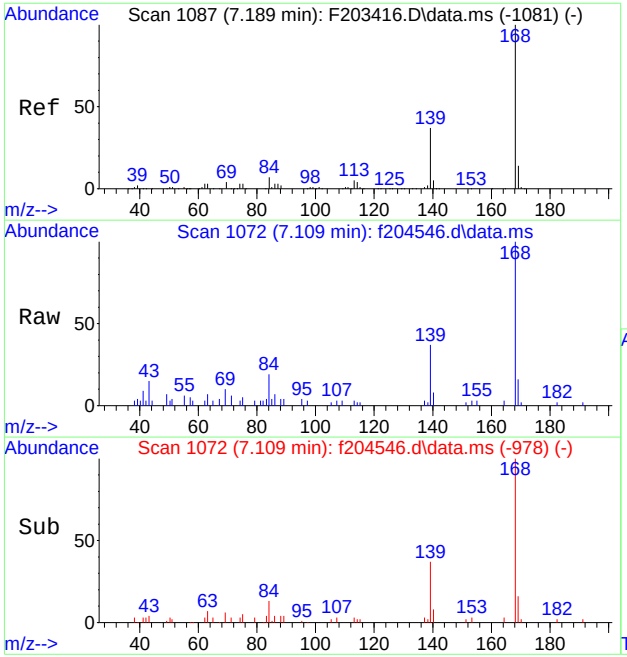


#59
Acenaphthene
Concen: 2.71 ppm
RT: 6.932 min Scan# 1039
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:153 Resp: 27890

Ion	Ratio	Lower	Upper
153	100		
152	46.8	15.3	75.3
154	90.3	54.4	114.4

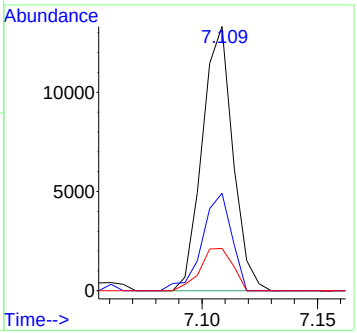


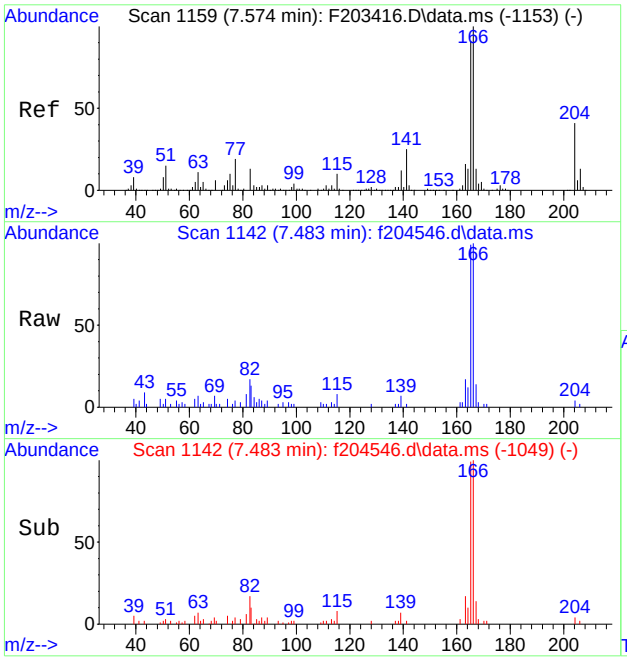


#62
Dibenzofuran
Concen: 0.85 ppm
RT: 7.109 min Scan# 1072
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:168 Resp: 12326

Ion	Ratio	Lower	Upper
168	100		
139	36.8	4.7	64.7
169	16.0	0.0	43.7

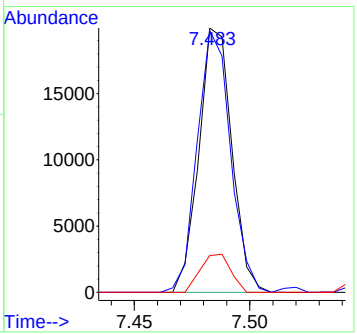


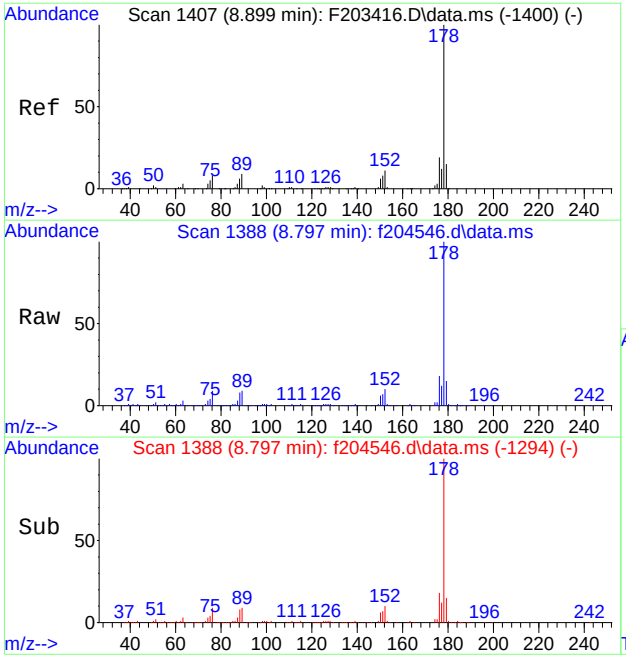


#66
Fluorene
Concen: 1.68 ppm
RT: 7.483 min Scan# 1142
Delta R.T. -0.005 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:166 Resp: 19849

Ion	Ratio	Lower	Upper
166	100		
165	98.3	63.8	123.8
167	13.9	0.0	43.7

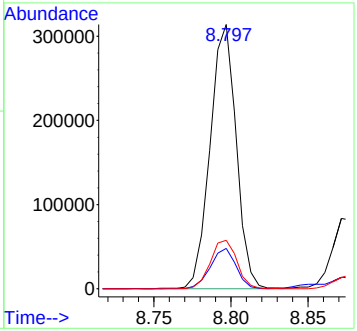


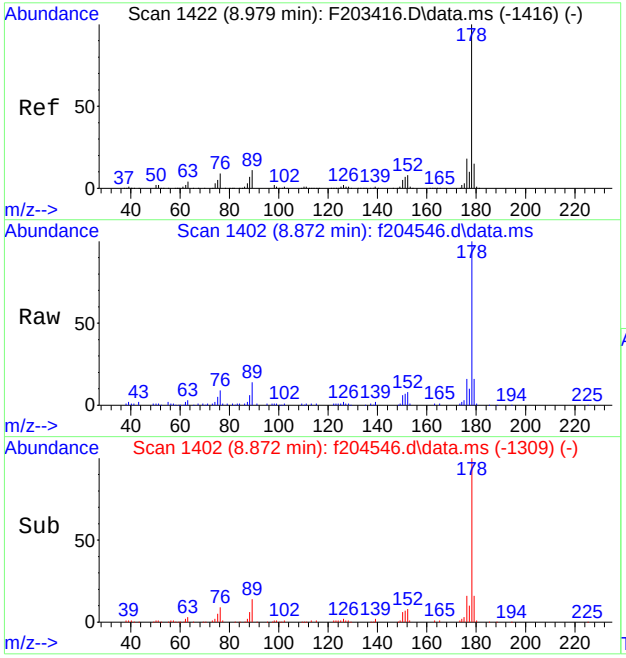


#77
Phenanthrene
Concen: 21.99 ppm
RT: 8.797 min Scan# 1388
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:178 Resp: 370422

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.1
176	18.4	0.0	48.7

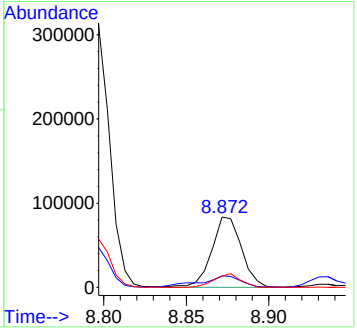


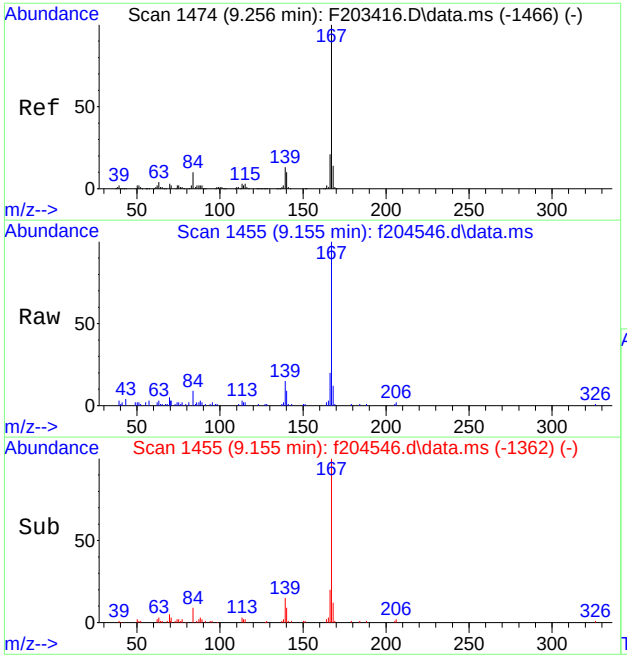


#78
Anthracene
Concen: 6.13 ppm
RT: 8.872 min Scan# 1402
Delta R.T. -0.005 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:178 Resp: 105949

Ion	Ratio	Lower	Upper
178	100		
179	16.0	0.0	46.0
176	16.3	0.0	47.9

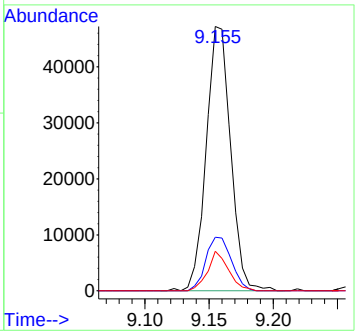


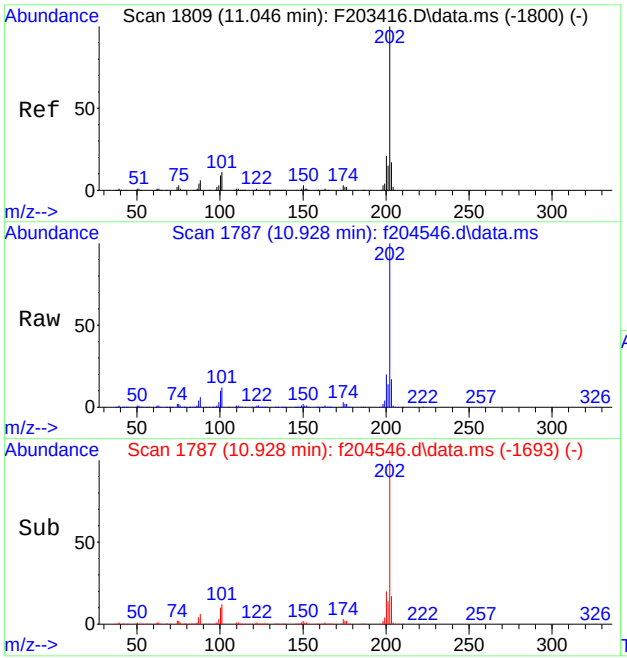


#79
Carbazole
Concen: 4.01 ppm
RT: 9.155 min Scan# 1455
Delta R.T. -0.005 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:167 Resp: 62396

Ion	Ratio	Lower	Upper
167	100		
166	20.3	0.0	51.1
139	14.9	0.0	41.7

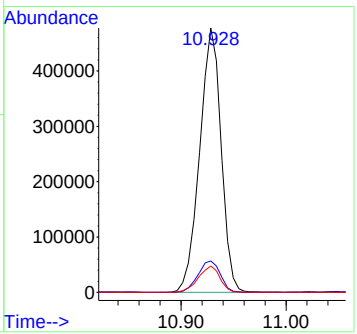


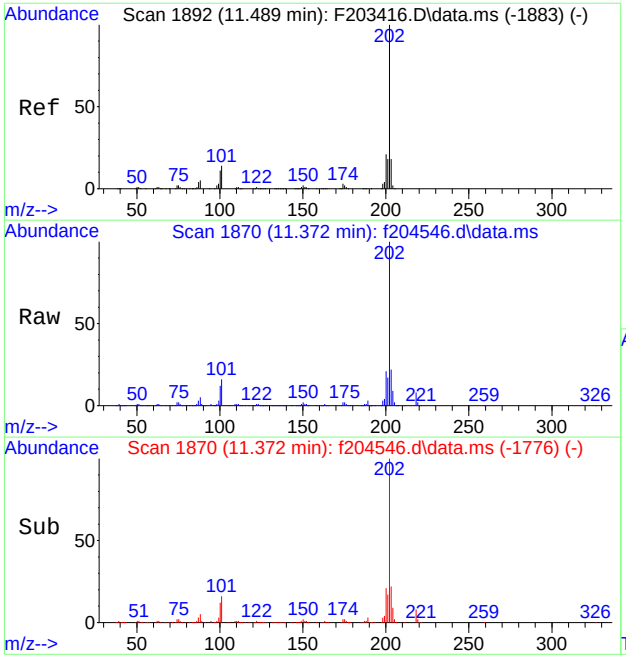


#81
Fluoranthene
Concen: 35.69 ppm
RT: 10.928 min Scan# 1787
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:202 Resp: 678806

Ion	Ratio	Lower	Upper
202	100		
101	11.8	0.0	43.2
100	10.0	0.0	38.9

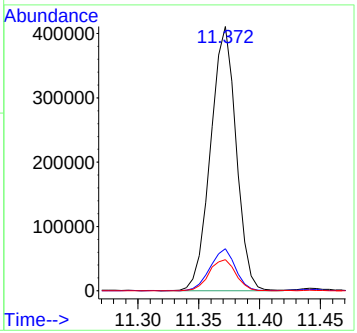


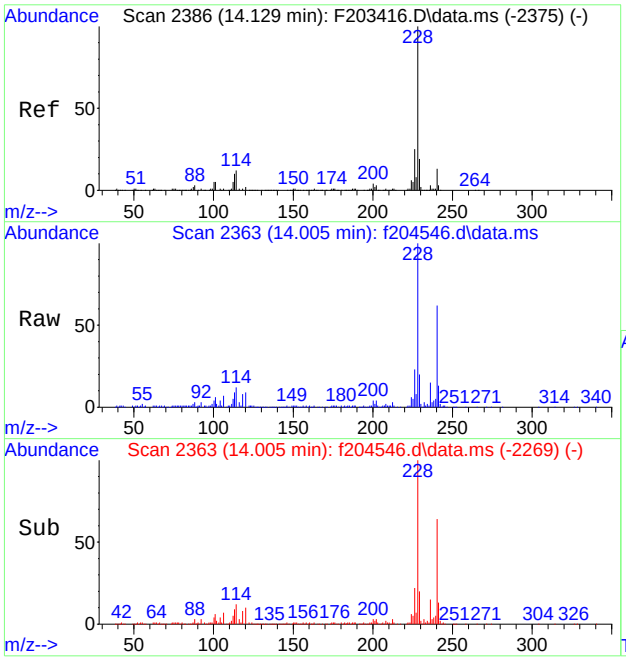


#85
Pyrene
Concen: 33.37 ppm
RT: 11.372 min Scan# 1870
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:202 Resp: 598934

Ion	Ratio	Lower	Upper
202	100		
101	15.9	0.0	43.8
100	11.7	0.0	42.3

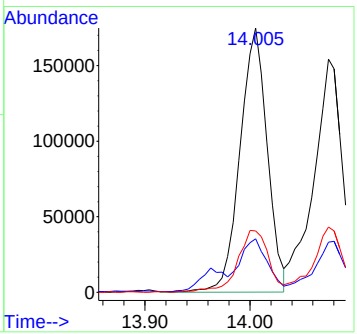


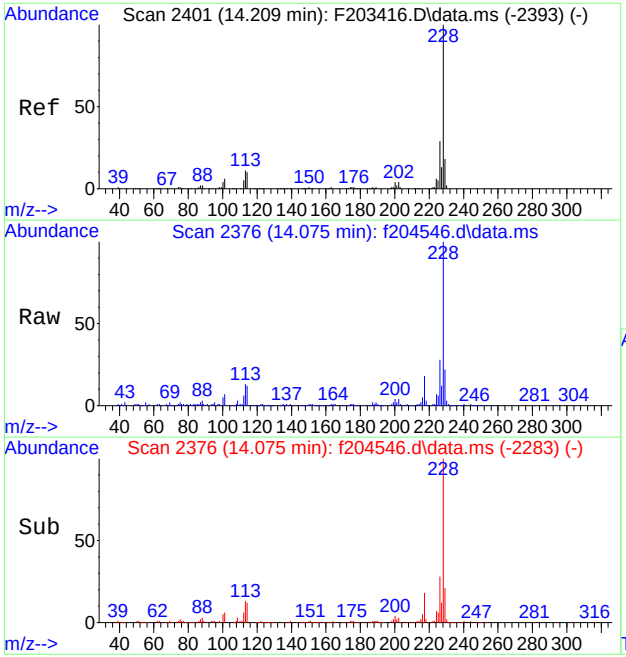


#88
Benzo[a]anthracene
Concen: 18.48 ppm
RT: 14.005 min Scan# 2363
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:228 Resp: 315434

Ion	Ratio	Lower	Upper
228	100		
229	19.8	0.0	49.7
226	22.7	0.0	55.8

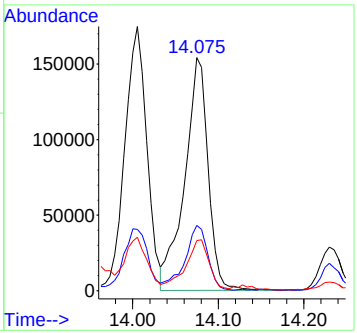


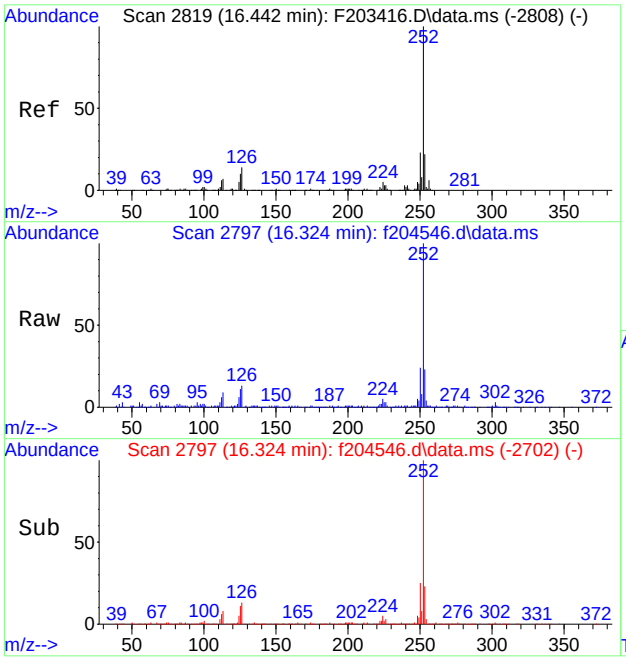


#90
Chrysene
Concen: 17.49 ppm
RT: 14.075 min Scan# 2376
Delta R.T. -0.005 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:228 Resp: 292782

Ion	Ratio	Lower	Upper
228	100		
226	27.7	0.0	57.7
229	21.0	0.0	49.6

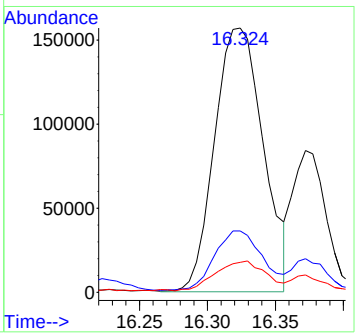


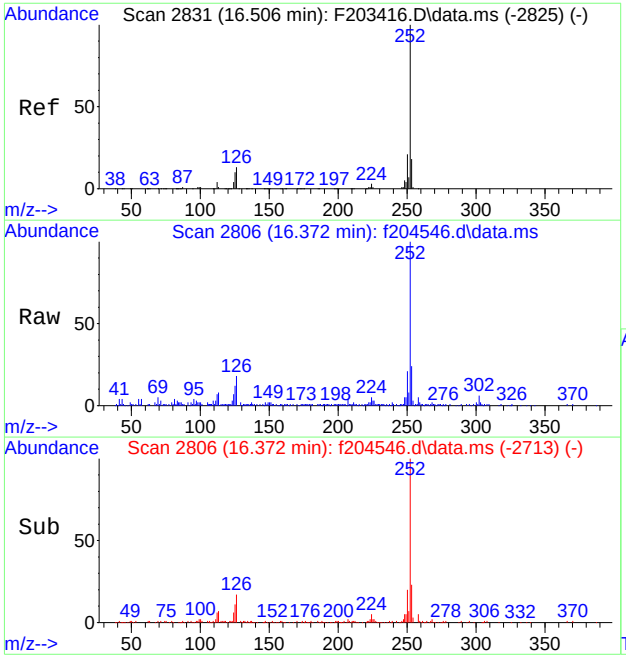


#94
Benzo[b]fluoranthene
Concen: 22.36 ppm
RT: 16.324 min Scan# 2797
Delta R.T. 0.005 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:252 Resp: 391451

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	53.5
125	10.5	0.0	41.5

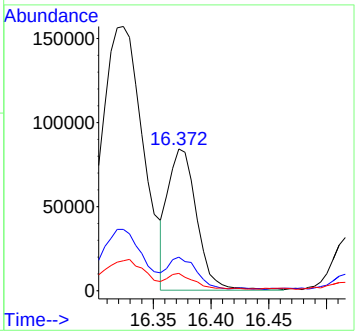


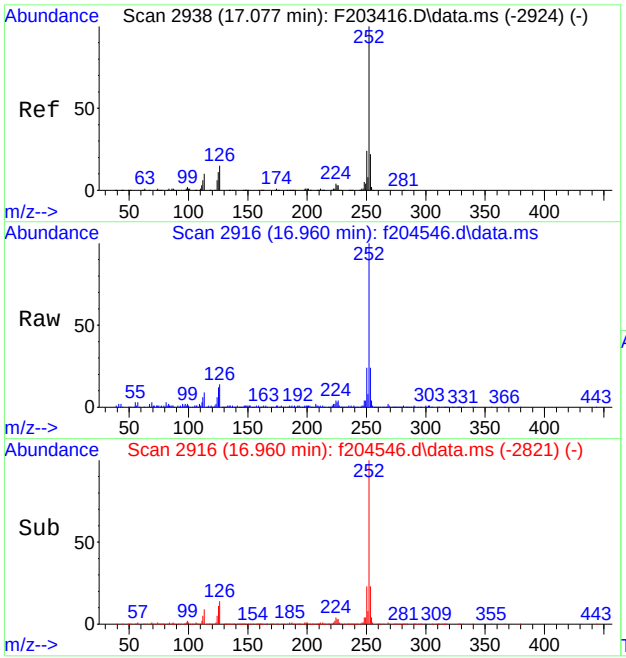


#95
Benzo[k]fluoranthene
Concen: 8.30 ppm
RT: 16.372 min Scan# 2806
Delta R.T. -0.005 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:252 Resp: 145264

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	50.7
125	10.9	0.0	39.8

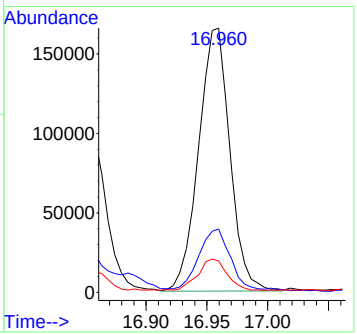


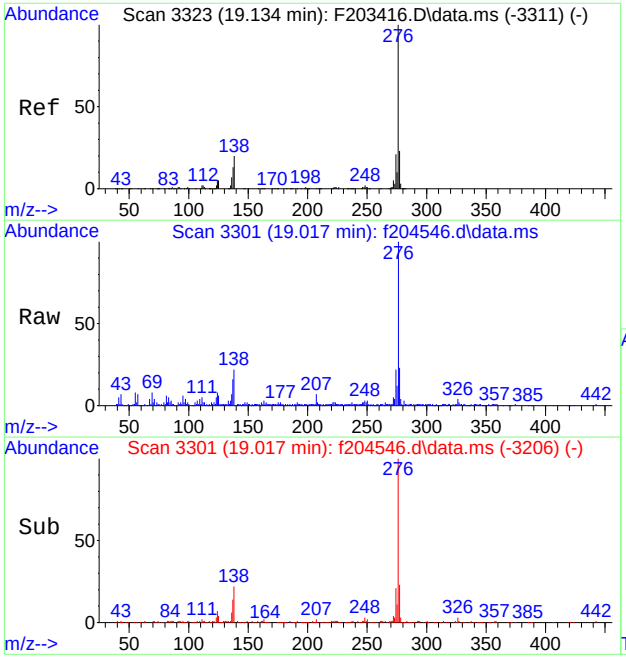


#96
Benzo[a]pyrene
Concen: 18.31 ppm
RT: 16.960 min Scan# 2916
Delta R.T. 0.005 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:252 Resp: 296530

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	52.3
125	11.1	0.0	41.7

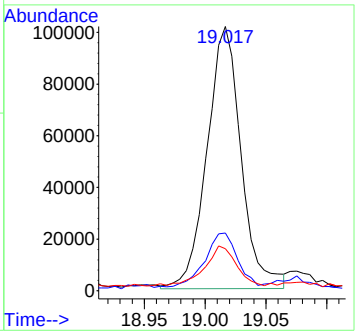


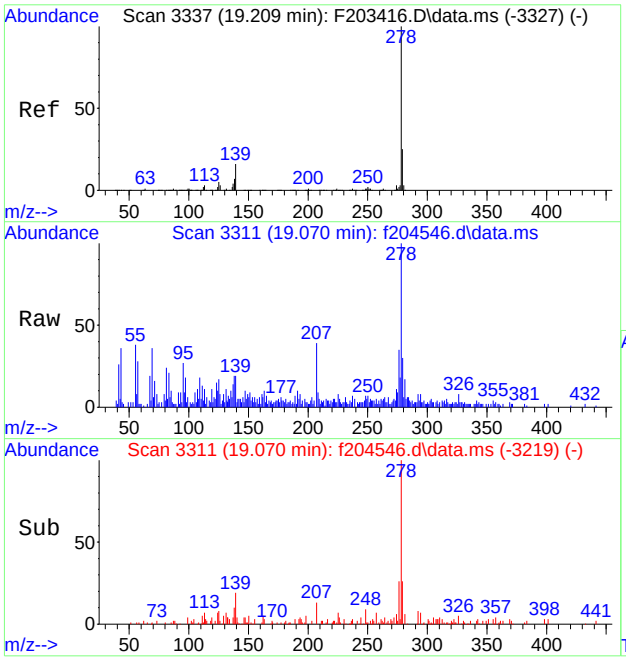


#97
Indeno[1,2,3-cd]pyrene
Concen: 15.43 ppm
RT: 19.017 min Scan# 3301
Delta R.T. 0.005 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:276 Resp: 198220

Ion	Ratio	Lower	Upper
276	100		
138	19.9	0.0	50.1
137	13.6	0.0	44.0

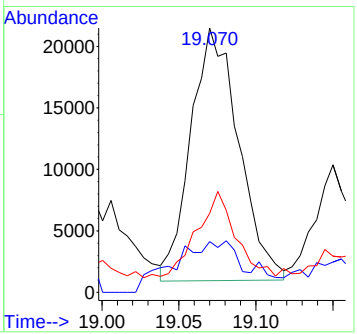


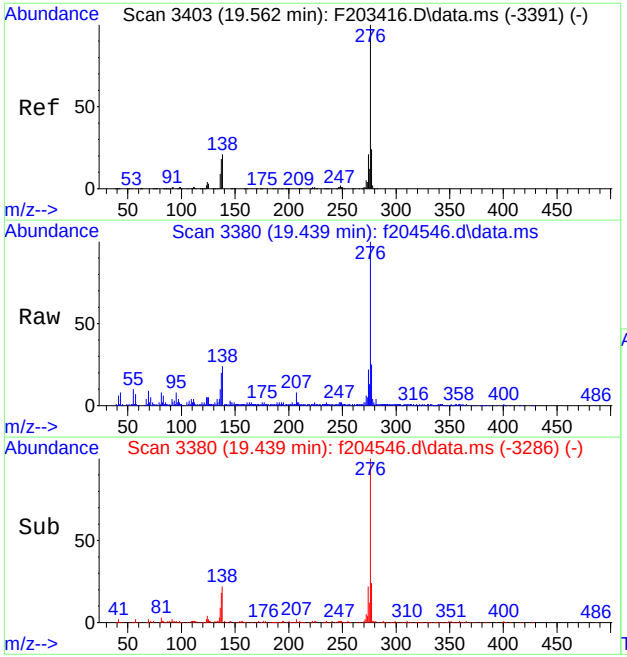


#99
Dibenz[a,h]anthracene
Concen: 3.43 ppm
RT: 19.070 min Scan# 3311
Delta R.T. -0.011 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:278 Resp: 44416

Ion	Ratio	Lower	Upper
278	100		
139	13.0	0.0	46.5
279	24.6	0.0	55.8

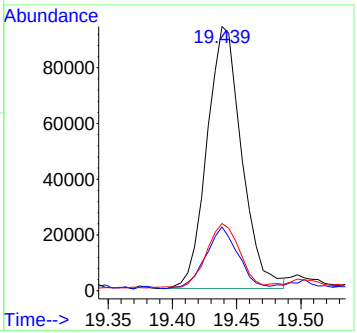




#101
Benzo[g,h,i]perylene
Concen: 11.06 ppm
RT: 19.439 min Scan# 3380
Delta R.T. -0.000 min
Lab File: f204546.d
Acq: 23 Dec 2021 11:25 am

Tgt Ion:276 Resp: 177343

Ion	Ratio	Lower	Upper
276	100		
138	23.3	0.0	52.2
277	24.2	0.0	52.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2P4704\
Data File : 2p104794.D
Acq On : 16 Dec 2021 9:47 am
Operator : chriss2
Sample : jd36682-7
Misc : op37154,e2p4704,30.2,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 16 10:49:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\M2P4696.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Dec 16 09:23:10 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.492	152	987704	40.00	ppm	0.00
24) Naphthalene-d8	5.486	136	3633609	40.00	ppm	0.00
46) Acenaphthene-d10	7.439	164	1876393	40.00	ppm	0.00
69) Phenanthrene-d10	9.557	188	3228483	40.00	ppm	0.00
84) Chrysene-d12	13.697	240	2316210	40.00	ppm	0.00
93) Perylene-d12	15.799	264	2237201	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.492	152	987704	40.00	ppm	0.00
105) Naphthalene-d8a	5.486	136	3633609	40.00	ppm	0.00
107) Phenanthrene-d10a	9.557	188	3228483	40.00	ppm	0.00
109) 1,4-Dichlorobenzene-d4b	4.492	152	987704	40.00	ppm	0.00
112) Acenaphthene-d10a	7.439	164	1876393	40.00	ppm	0.00
114) Phenanthrene-d10b	9.557	188	3228483	40.00	ppm	0.00
117) Chrysene-d12a	13.697	240	2316210	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.561	112	1005195	33.55	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 67.10%#			
8) Phenol-d5	4.262	99	1260809	33.69	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 67.38%#			
25) Nitrobenzene-d5	4.893	82	965916	33.93	ppm	-0.01
Spiked Amount 50.000	Range 19 - 61		Recovery = 67.86%#			
51) 2-Fluorobiphenyl	6.610	172	2206843	36.32	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 72.64%#			
74) 2,4,6-Tribromophenol	8.535	330	327381	39.64	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 79.28%#			
87) Terphenyl-d14	12.103	244	2325352	41.83	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery = 83.66%#			
115) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000	Range 15 - 64		Recovery = 0.00%#			
116) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 15 - 64		Recovery = 0.00%#			
Target Compounds						Qvalue
53) Biphenyl	6.722	154	6560	0.10	ppm	96
59) Acenaphthene	7.476	153	75945	1.44	ppm	99
62) Dibenzofuran	7.711	168	24567	0.33	ppm	84
66) Fluorene	8.182	166	52356	0.88	ppm	88
78) Phenanthrene	9.589	178	1074271	12.84	ppm	99
79) Anthracene	9.658	178	288930	3.44	ppm	99
80) Carbazole	9.937	167	187546	2.38	ppm	99
82) Fluoranthene	11.429	202	2345427	26.30	ppm	99
86) Pyrene	11.766	202	2018787	25.84	ppm	95
89) Benzo[a]anthracene	13.681	228	916567	13.45	ppm	98
91) Chrysene	13.734	228	848554	13.10	ppm	96
92) bis(2-Ethylhexyl)phtha...	13.927	149	28958	0.64	ppm	97
95) Benzo[b]fluoranthene	15.280	252	1124542	16.45	ppm	99
96) Benzo[k]fluoranthene	15.312	252	342255	5.84	ppm	95
97) Benzo[a]pyrene	15.708	252	822088	13.74	ppm	99
98) Indeno[1,2,3-cd]pyrene	17.136	276	553688	10.55	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2P4704\
Data File : 2p104794.D
Acq On : 16 Dec 2021 9:47 am
Operator : chriss2
Sample : jd36682-7
Misc : op37154,e2p4704,30.2,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 16 10:49:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\M2P4696.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Dec 16 09:23:10 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Dibenz[a,h]anthracene	17.173	278	121888	2.15	ppm	94
102) Benzo[g,h,i]perylene	17.489	276	509560	8.60	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

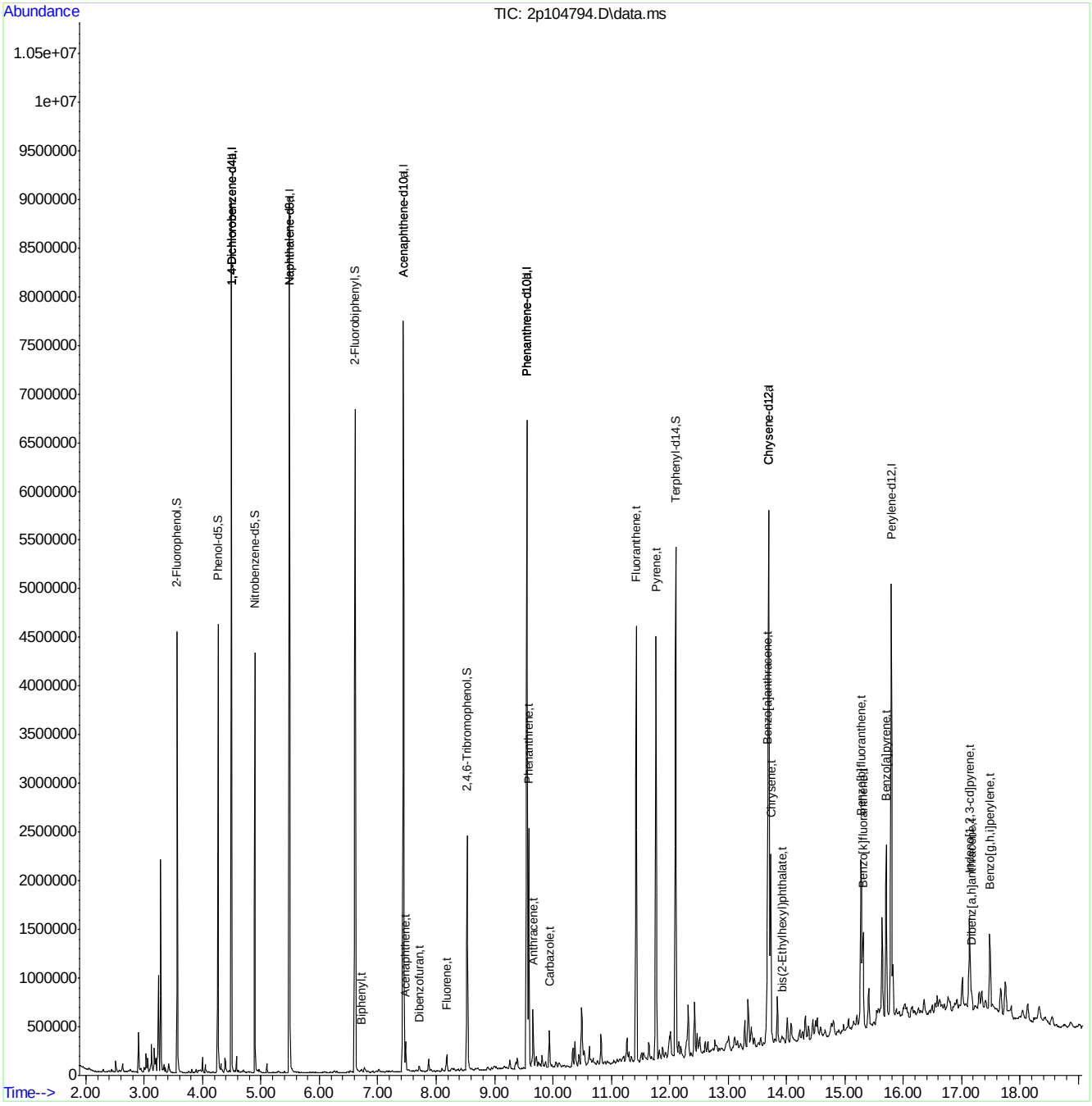
9.1.2

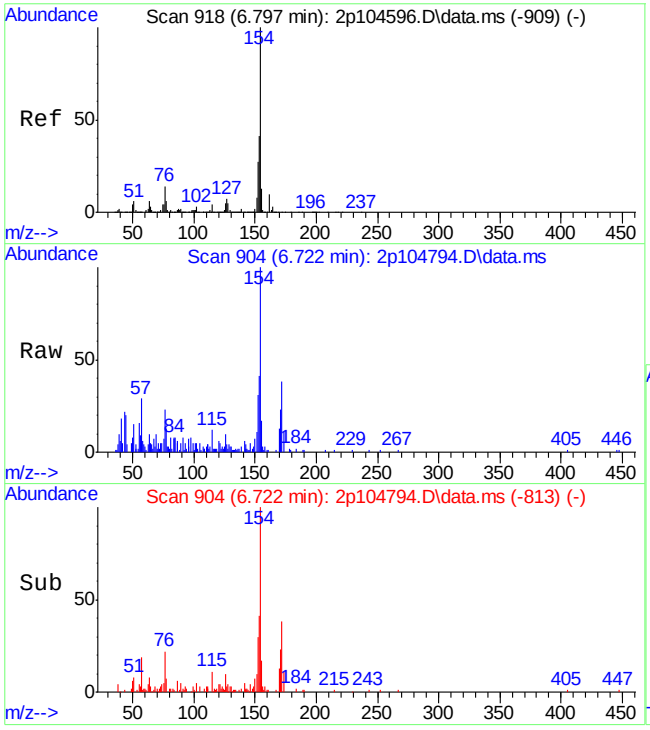
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2P4704\
Data File : 2p104794.D
Acq On : 16 Dec 2021 9:47 am
Operator : chriss2
Sample : jd36682-7
Misc : op37154,e2p4704,30.2,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 16 10:49:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\M2P4696.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Dec 16 09:23:10 2021
Response via : Initial Calibration

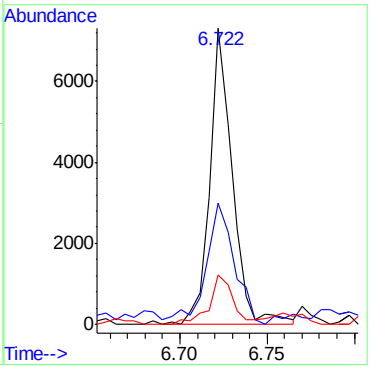


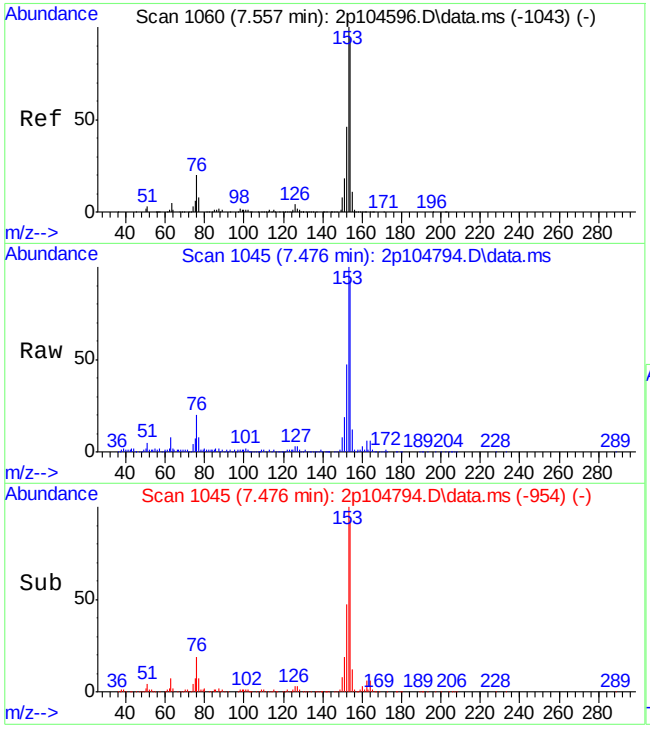


#53
Biphenyl
Concen: 0.10 ppm
RT: 6.722 min Scan# 904
Delta R.T. -0.011 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:154 Resp: 6560

Ion	Ratio	Lower	Upper
154	100		
153	38.5	10.9	70.9
155	15.5	0.0	43.0

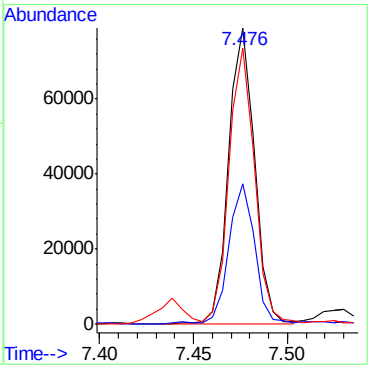


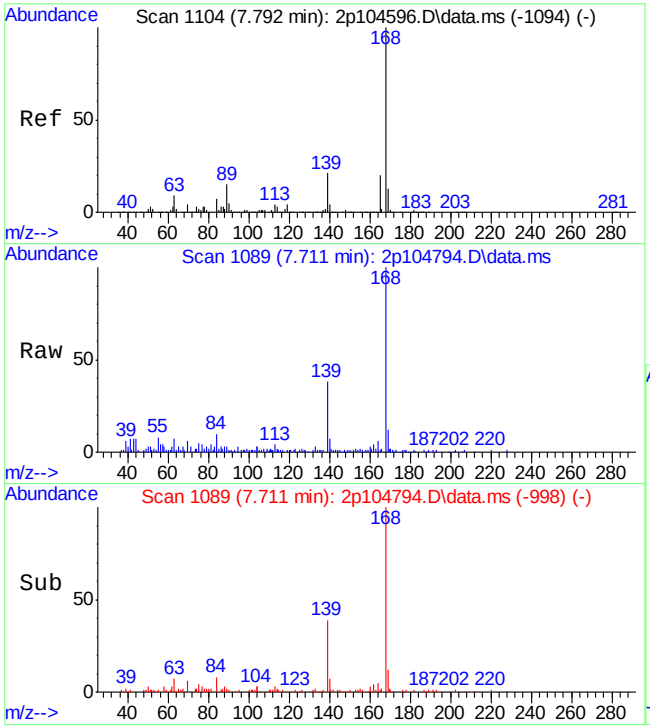


#59
Acenaphthene
Concen: 1.44 ppm
RT: 7.476 min Scan# 1045
Delta R.T. -0.011 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:153 Resp: 75945

Ion	Ratio	Lower	Upper
153	100		
152	47.3	16.4	76.4
154	90.5	60.3	120.3

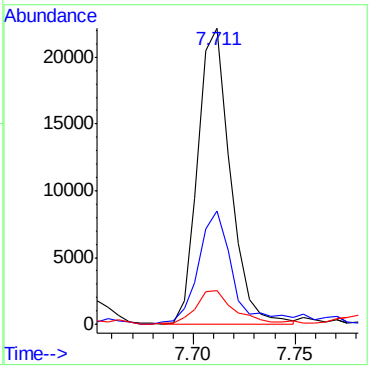


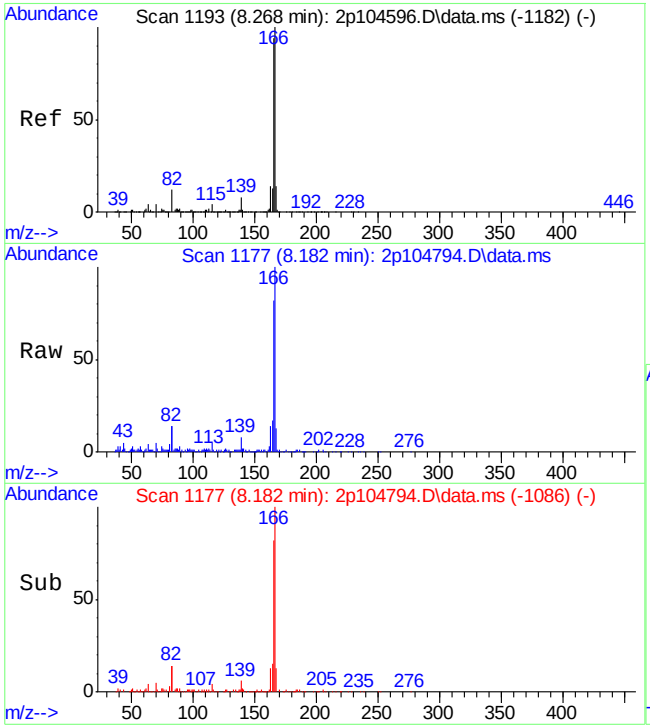


#62
Dibenzofuran
Concen: 0.33 ppm
RT: 7.711 min Scan# 1089
Delta R.T. -0.011 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:168 Resp: 24567

Ion	Ratio	Lower	Upper
168	100		
139	37.0	0.0	56.4
169	10.9	0.0	42.9

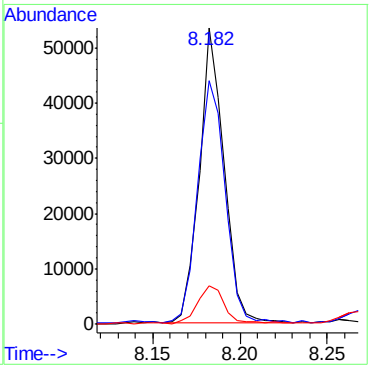


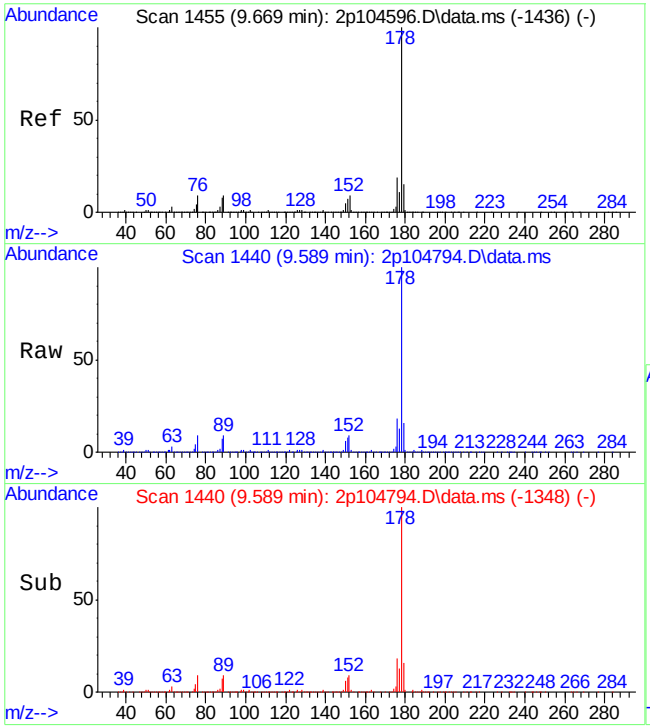


#66
Fluorene
Concen: 0.88 ppm
RT: 8.182 min Scan# 1177
Delta R.T. -0.011 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:166 Resp: 52356

Ion	Ratio	Lower	Upper
166	100		
165	82.0	64.4	124.4
167	12.5	0.0	43.8

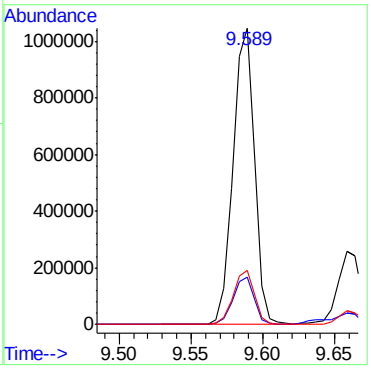


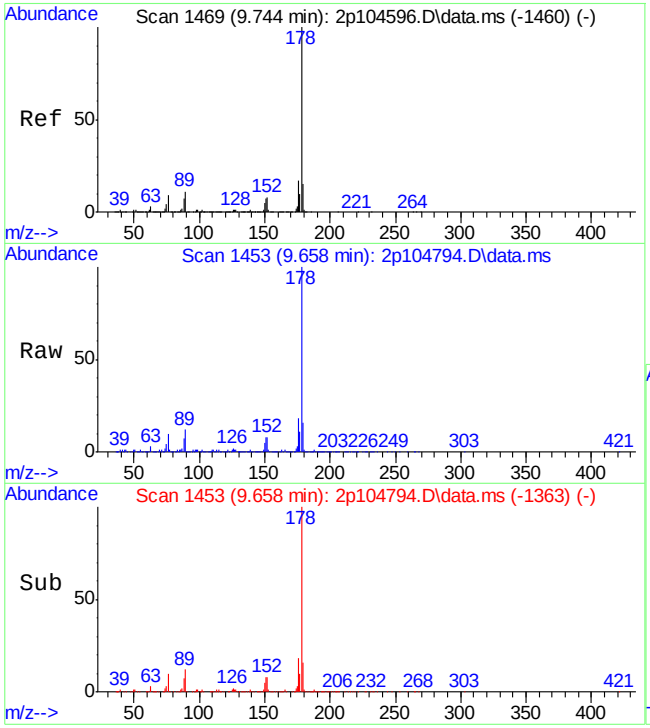


#78
Phenanthrene
Concen: 12.84 ppm
RT: 9.589 min Scan# 1440
Delta R.T. -0.005 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:178 Resp: 1074271

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.2
176	18.1	0.0	48.7

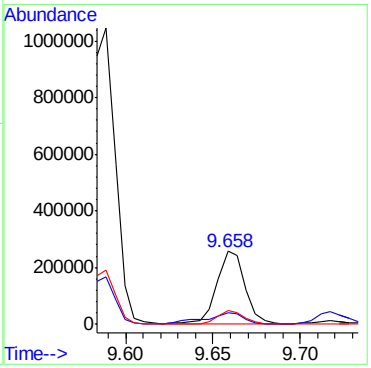


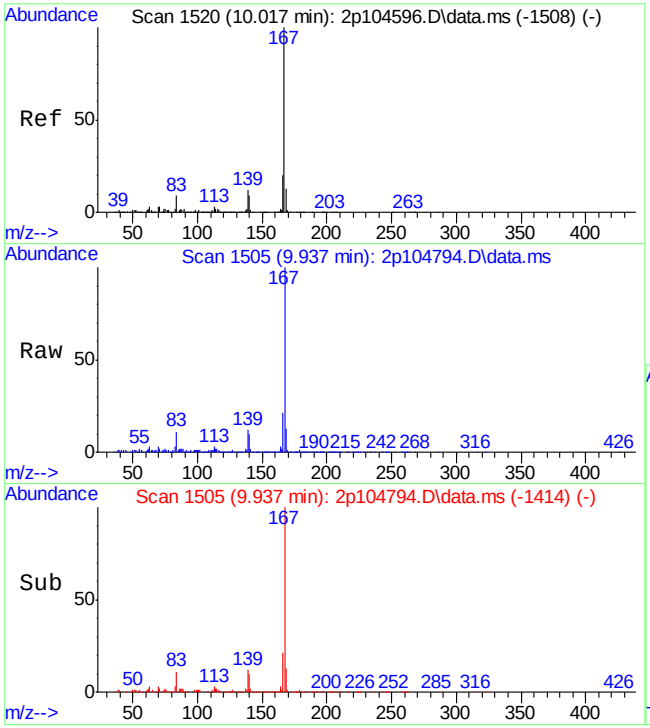


#79
Anthracene
Concen: 3.44 ppm
RT: 9.658 min Scan# 1453
Delta R.T. -0.016 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:178 Resp: 288930

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.0
176	18.0	0.0	47.5

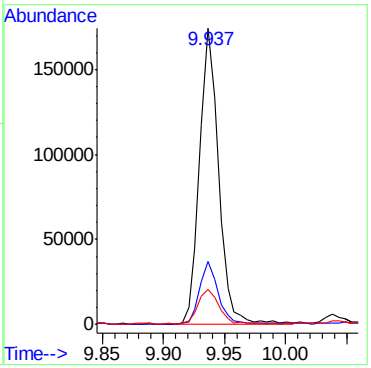


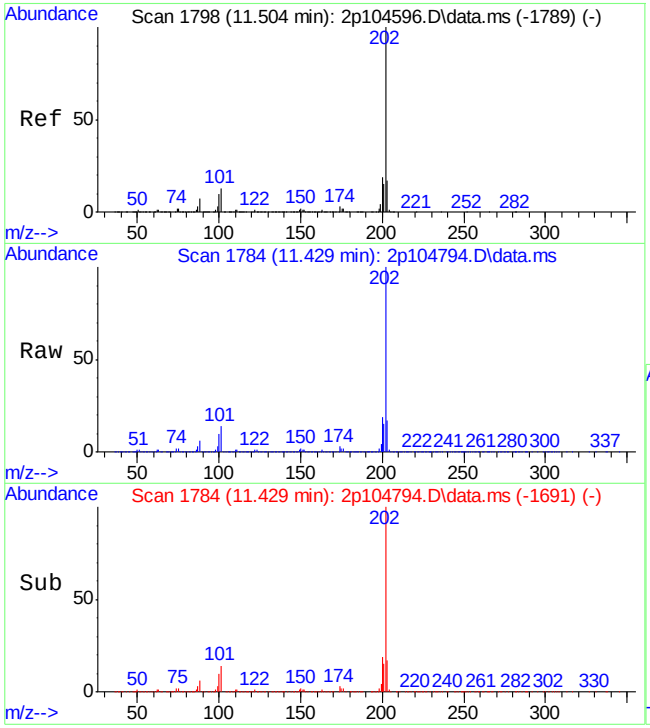


#80
Carbazole
Concen: 2.38 ppm
RT: 9.937 min Scan# 1505
Delta R.T. -0.011 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:167 Resp: 187546

Ion	Ratio	Lower	Upper
167	100		
166	21.0	0.0	50.5
139	11.8	0.0	42.0

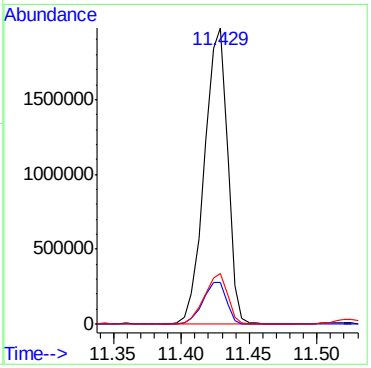


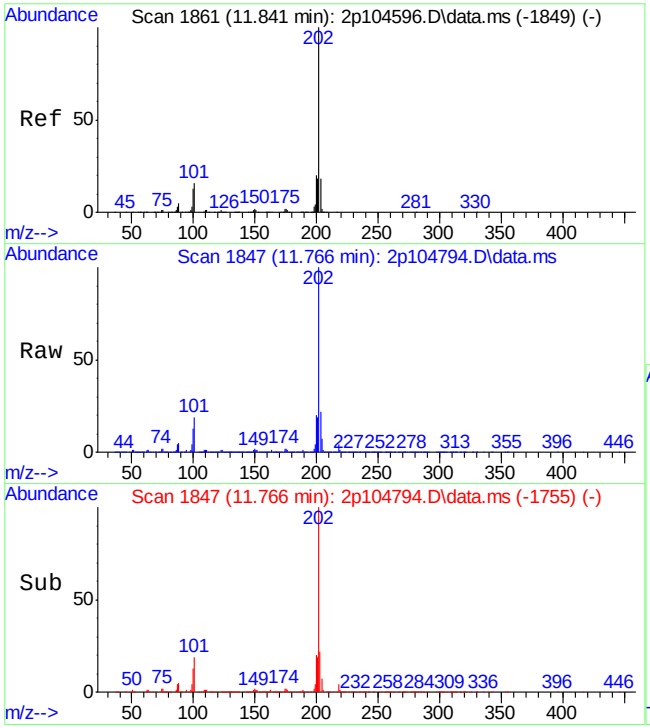


#82
Fluoranthene
Concen: 26.30 ppm
RT: 11.429 min Scan# 1784
Delta R.T. -0.000 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:202 Resp: 2345427

Ion	Ratio	Lower	Upper
202	100		
101	13.9	0.0	43.4
203	17.3	0.0	47.1

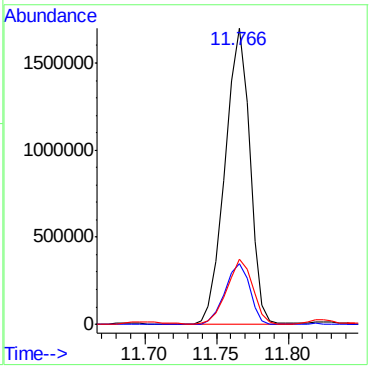


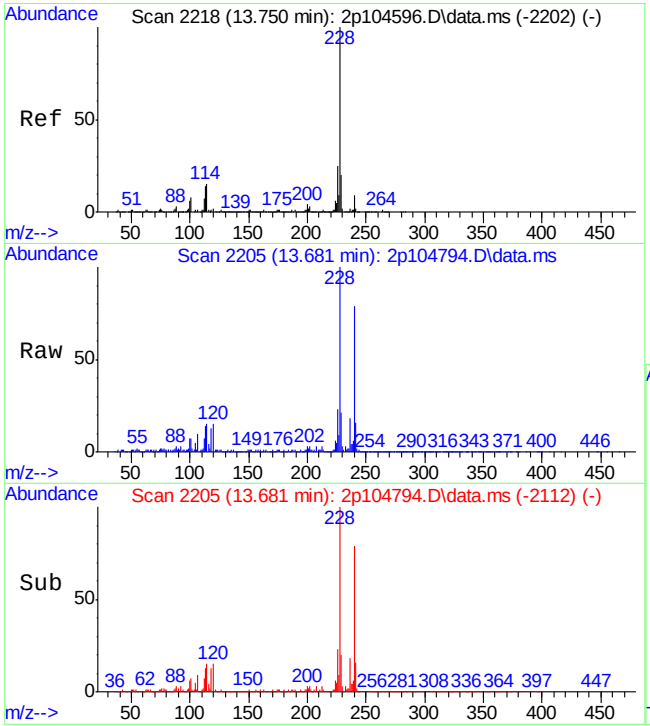


#86
Pyrene
Concen: 25.84 ppm
RT: 11.766 min Scan# 1847
Delta R.T. -0.005 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:202 Resp: 2018787

Ion	Ratio	Lower	Upper
202	100		
200	20.4	0.0	49.7
203	21.7	0.0	47.8

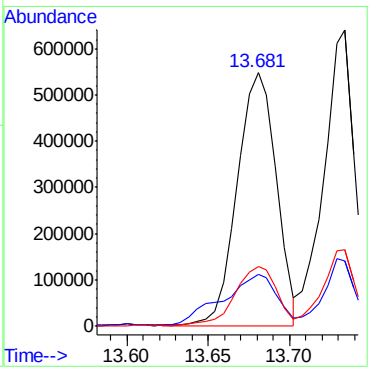


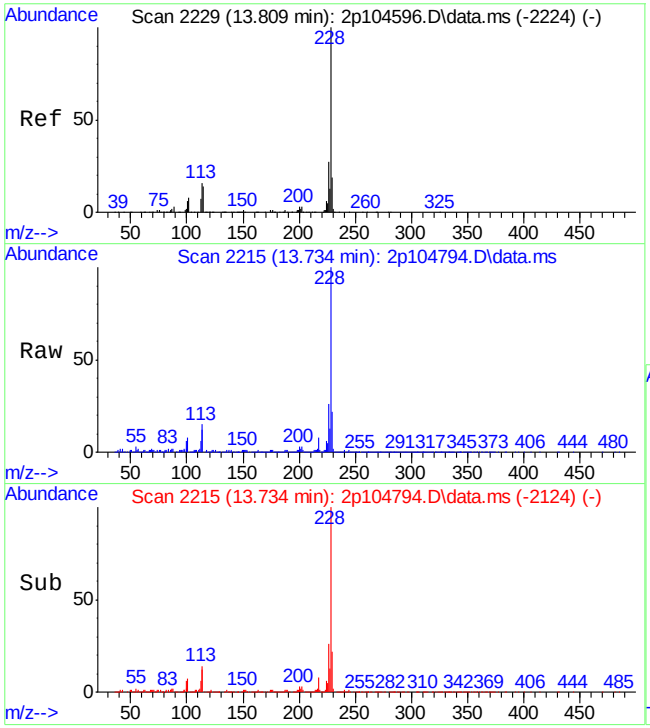


#89
Benzo[a]anthracene
Concen: 13.45 ppm
RT: 13.681 min Scan# 2205
Delta R.T. -0.000 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:228 Resp: 916567

Ion	Ratio	Lower	Upper
228	100		
229	19.8	0.0	49.8
226	23.3	0.0	54.9

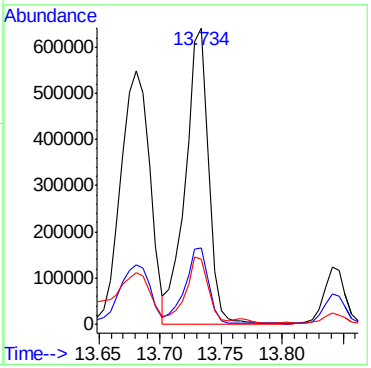


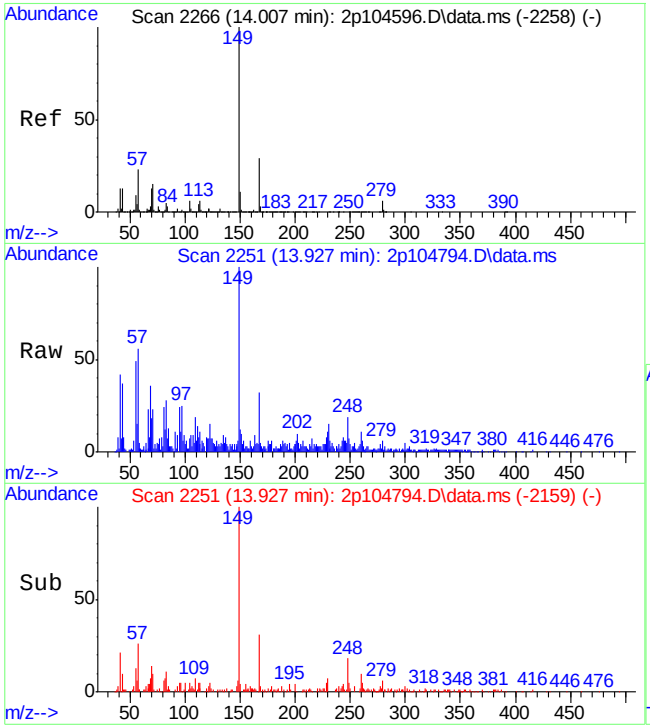


#91
Chrysene
Concen: 13.10 ppm
RT: 13.734 min Scan# 2215
Delta R.T. -0.011 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:228 Resp: 848554

Ion	Ratio	Lower	Upper
228	100		
226	25.9	0.0	57.5
229	21.5	0.0	49.3

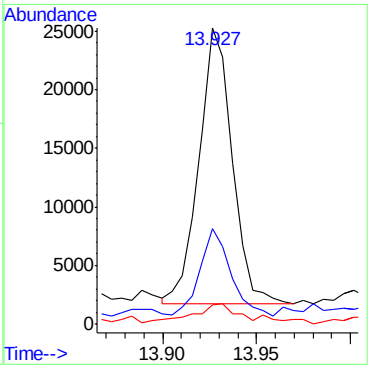


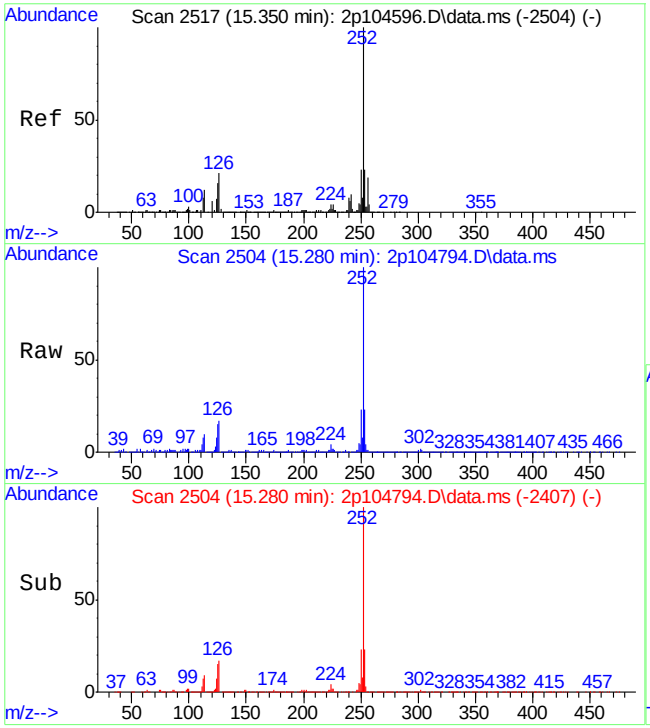


#92
bis(2-Ethylhexyl)phthalate
Concen: 0.64 ppm
RT: 13.927 min Scan# 2251
Delta R.T. -0.005 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:149 Resp: 28958

Ion	Ratio	Lower	Upper
149	100		
167	30.6	0.0	59.3
279	4.5	0.0	36.0

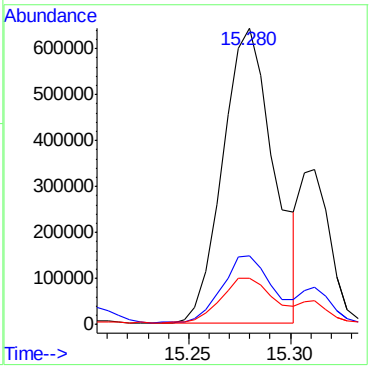


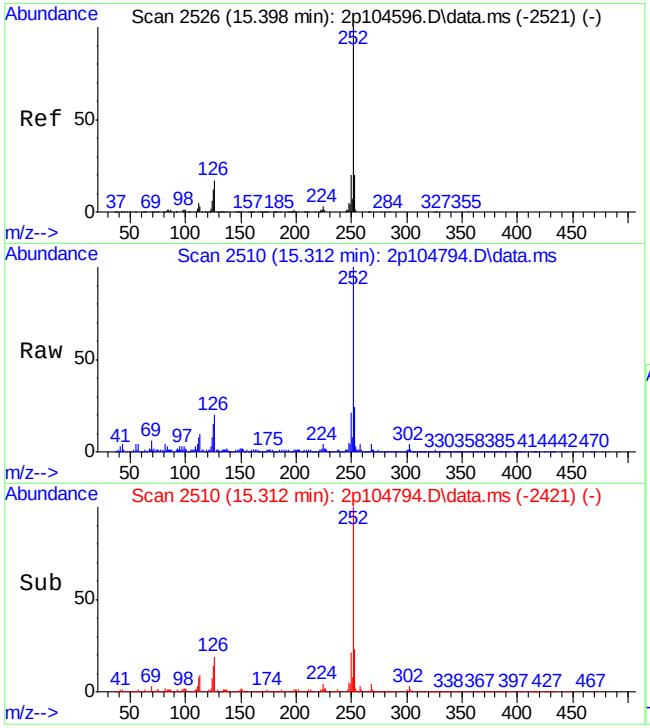


#95
Benzo[b]fluoranthene
Concen: 16.45 ppm
RT: 15.280 min Scan# 2504
Delta R.T. 0.020 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:252 Resp: 1124542

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.8
125	15.0	0.0	45.0

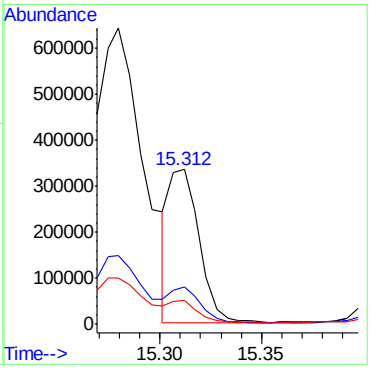


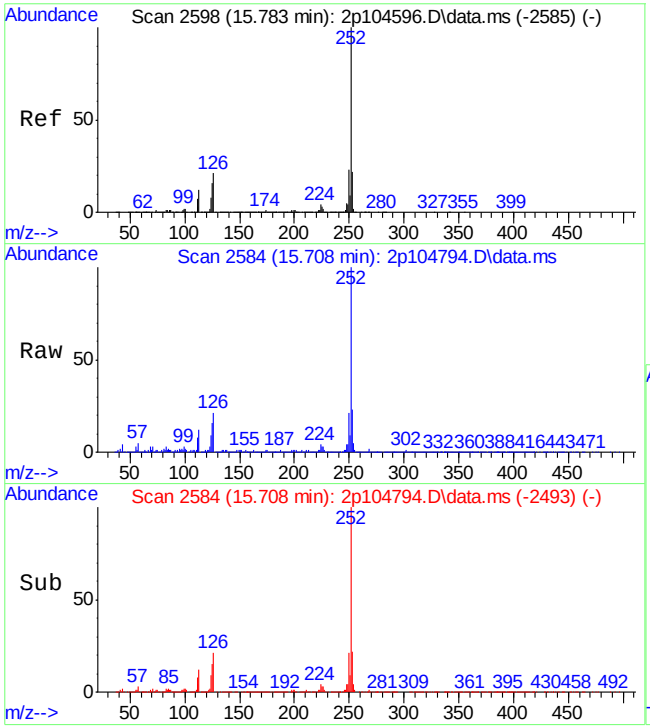


#96
Benzo[k]fluoranthene
Concen: 5.84 ppm
RT: 15.312 min Scan# 2510
Delta R.T. -0.021 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:252 Resp: 342255

Ion	Ratio	Lower	Upper
252	100		
253	23.6	0.0	51.0
125	13.9	0.0	42.7

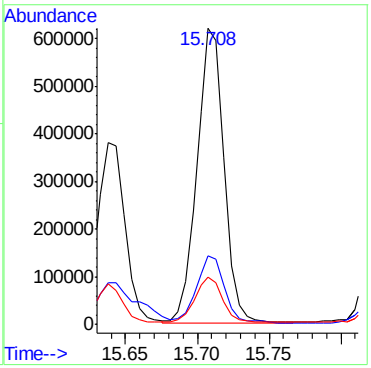


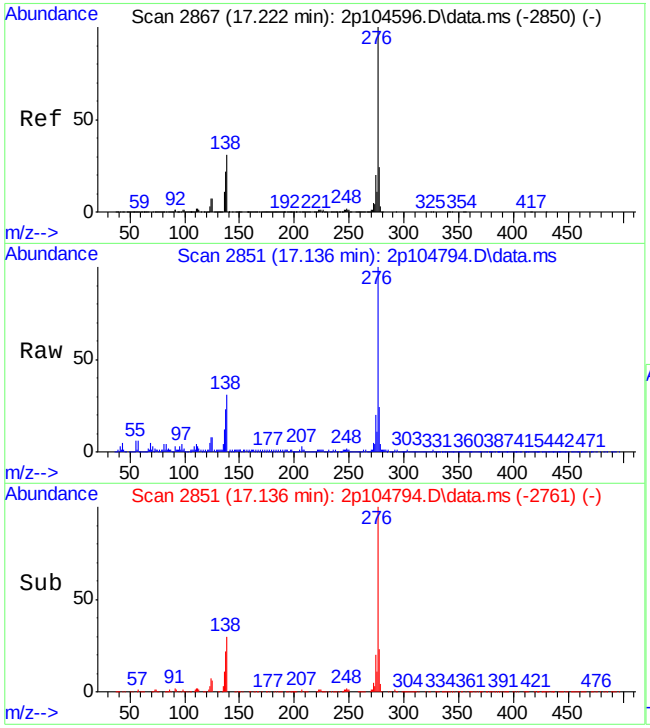


#97
Benzo[a]pyrene
Concen: 13.74 ppm
RT: 15.708 min Scan# 2584
Delta R.T. -0.011 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:252 Resp: 822088

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	52.0
125	15.3	0.0	45.5

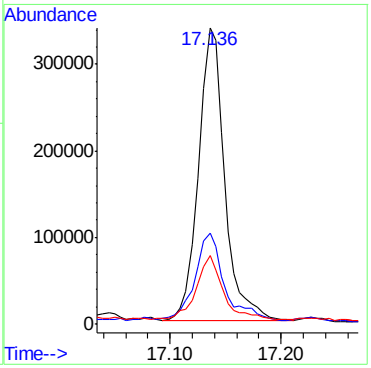


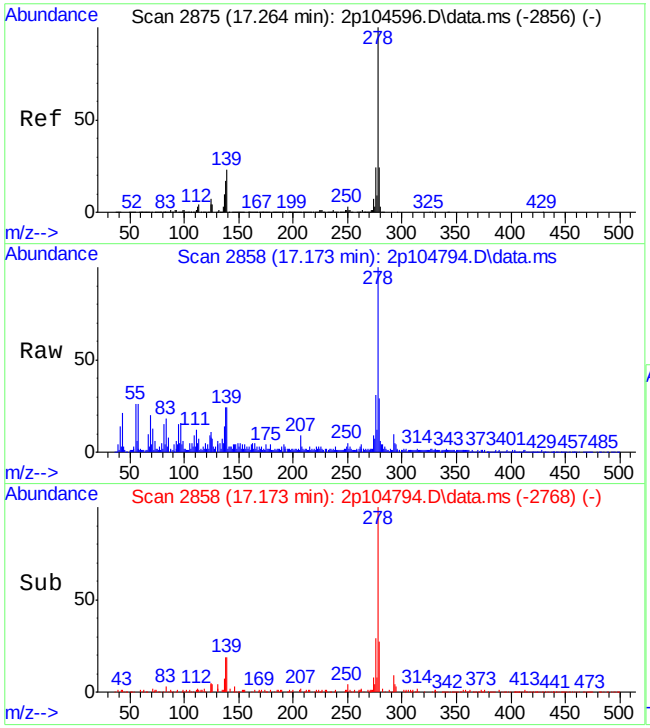


#98
Indeno[1,2,3-cd]pyrene
Concen: 10.55 ppm
RT: 17.136 min Scan# 2851
Delta R.T. -0.016 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:276 Resp: 553688

Ion	Ratio	Lower	Upper
276	100		
138	29.3	0.0	57.3
137	21.9	0.0	50.1

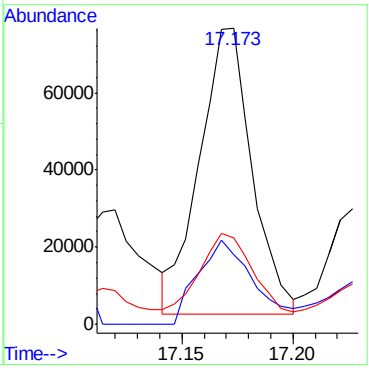


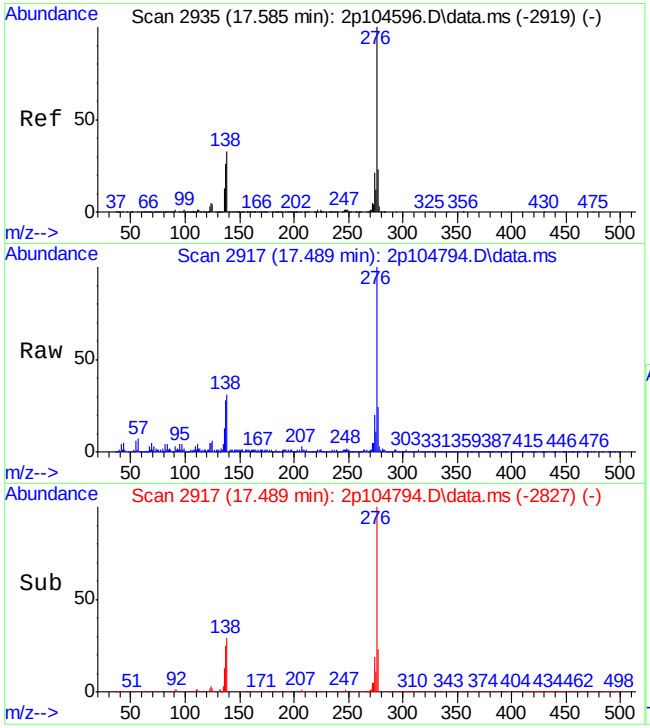


#100
Dibenz[a,h]anthracene
Concen: 2.15 ppm
RT: 17.173 min Scan# 2858
Delta R.T. -0.016 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:278 Resp: 121888

Ion	Ratio	Lower	Upper
278	100		
139	24.0	0.0	52.9
279	28.3	0.0	54.0

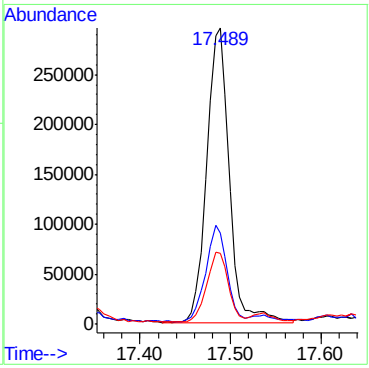




#102
Benzo[g,h,i]perylene
Concen: 8.60 ppm
RT: 17.489 min Scan# 2917
Delta R.T. -0.016 min
Lab File: 2p104794.D
Acq: 16 Dec 2021 9:47 am

Tgt Ion:276 Resp: 509560

Ion	Ratio	Lower	Upper
276	100		
138	30.0	2.5	62.5
277	23.3	0.0	53.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204543.d
Acq On : 23 Dec 2021 10:10 am
Operator : chriss2
Sample : jd36682-8 Inst : GCMSF
Misc : op37283,ef8967,30.4,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 28 00:43:46 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.587	152	178161	40.00	ppm	0.00
24) Naphthalene-d8	5.506	136	688923	40.00	ppm	0.00
46) Acenaphthene-d10	6.895	164	382324	40.00	ppm	0.00
69) Phenanthrene-d10	8.760	188	699133	40.00	ppm	0.00
83) Chrysene-d12	14.027	240	612158	40.00	ppm	0.01
92) Perylene-d12	17.078	264	653802	40.00	ppm	0.01
102) 1,4-Dichlorobenzene-d4A	4.587	152	178161	40.00	ppm	0.00
112) Naphthalene-d8A	5.506	136	688923	40.00	ppm	0.00
121) Acenaphthene-d10A	6.895	164	382324	40.00	ppm	0.00
132) Phenanthrene-d10A	8.760	188	699133	40.00	ppm	0.00
147) Chrysene-d12A	14.027	240	612158	40.00	ppm	0.01
154) Perylene-d12A	17.078	264	653802	40.00	ppm	0.01
157) 1,4-Dichlorobenzene-d4b	4.587	152	178161	40.00	ppm	0.00
159) Phenanthrene-d10b	8.760	188	699133	40.00	ppm	0.00
161) Naphthalene-d8b	5.506	136	688923	40.00	ppm	0.00
163) Naphthalene-d8c	5.506	136	688923	40.00	ppm	0.00
168) 1,4-Dichlorobenzene-d4c	4.587	152	178161	40.00	ppm	0.00
170) Chrysene-d12c	14.027	240	612158	40.00	ppm	0.01
172) Chrysene-d12d	14.027	240	612158	40.00	ppm	0.01
174) Naphthalene-d8d	5.506	136	688923	40.00	ppm	0.00
176) Chrysene-d12e	14.027	240	612158	40.00	ppm	0.01
178) Perylene-d12b	17.078	264	653802	40.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.599	112	222398	39.77	ppm	0.00
Spiked Amount 50.000			Recovery = 79.54%			
8) Phenol-d5	4.326	99	300286	39.71	ppm	0.00
Spiked Amount 50.000			Recovery = 79.42%			
25) Nitrobenzene-d5	4.988	82	246652	35.87	ppm	0.00
Spiked Amount 50.000			Recovery = 71.74%			
51) 2-Fluorobiphenyl	6.297	172	527608	41.10	ppm	0.00
Spiked Amount 50.000			Recovery = 82.20%			
73) 2,4,6-Tribromophenol	7.777	330	86848	43.22	ppm	0.00
Spiked Amount 50.000			Recovery = 86.44%			
86) Terphenyl-d14	11.810	244	660822	44.28	ppm	0.00
Spiked Amount 50.000			Recovery = 88.56%			
Target Compounds						Qvalue
17) 1,2-Dichlorobenzene	4.705	146	2122	0.33	ppm	98
38) Naphthalene	5.522	128	4113	0.23	ppm	97
44) 2-Methylnaphthalene	6.019	141	2092	0.20	ppm	86
53) Biphenyl	6.382	154	2350	0.17	ppm	95
56) Acenaphthylene	6.767	152	1535	0.10	ppm	83
59) Acenaphthene	6.927	153	87401	8.05	ppm	94
62) Dibenzofuran	7.104	168	36357	2.37	ppm	98
66) Fluorene	7.483	166	70563	5.67	ppm	98
77) Phenanthrene	8.797	178	1509473	83.84	ppm	100
78) Anthracene	8.872	178	420682	22.79	ppm	99
79) Carbazole	9.155	167	266455	16.03	ppm	99
81) Fluoranthene	10.934	202	2512947	123.64	ppm	98
85) Pyrene	11.377	202	2103211	110.18	ppm	94
88) Benzo[a]anthracene	14.006	228	1151837	63.45	ppm	99
90) Chrysene	14.081	228	1044819	58.67	ppm	97
91) bis(2-Ethylhexyl)phtha...	14.412	149	13238	1.33	ppm	85
94) Benzo[b]fluoranthene	16.330	252	1331941	71.37	ppm	99
95) Benzo[k]fluoranthene	16.378	252	463947	24.87	ppm	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204543.d
Acq On : 23 Dec 2021 10:10 am
Operator : chriss2
Sample : jd36682-8 Inst : GCMSF
Misc : op37283,ef8967,30.4,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 28 00:43:46 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

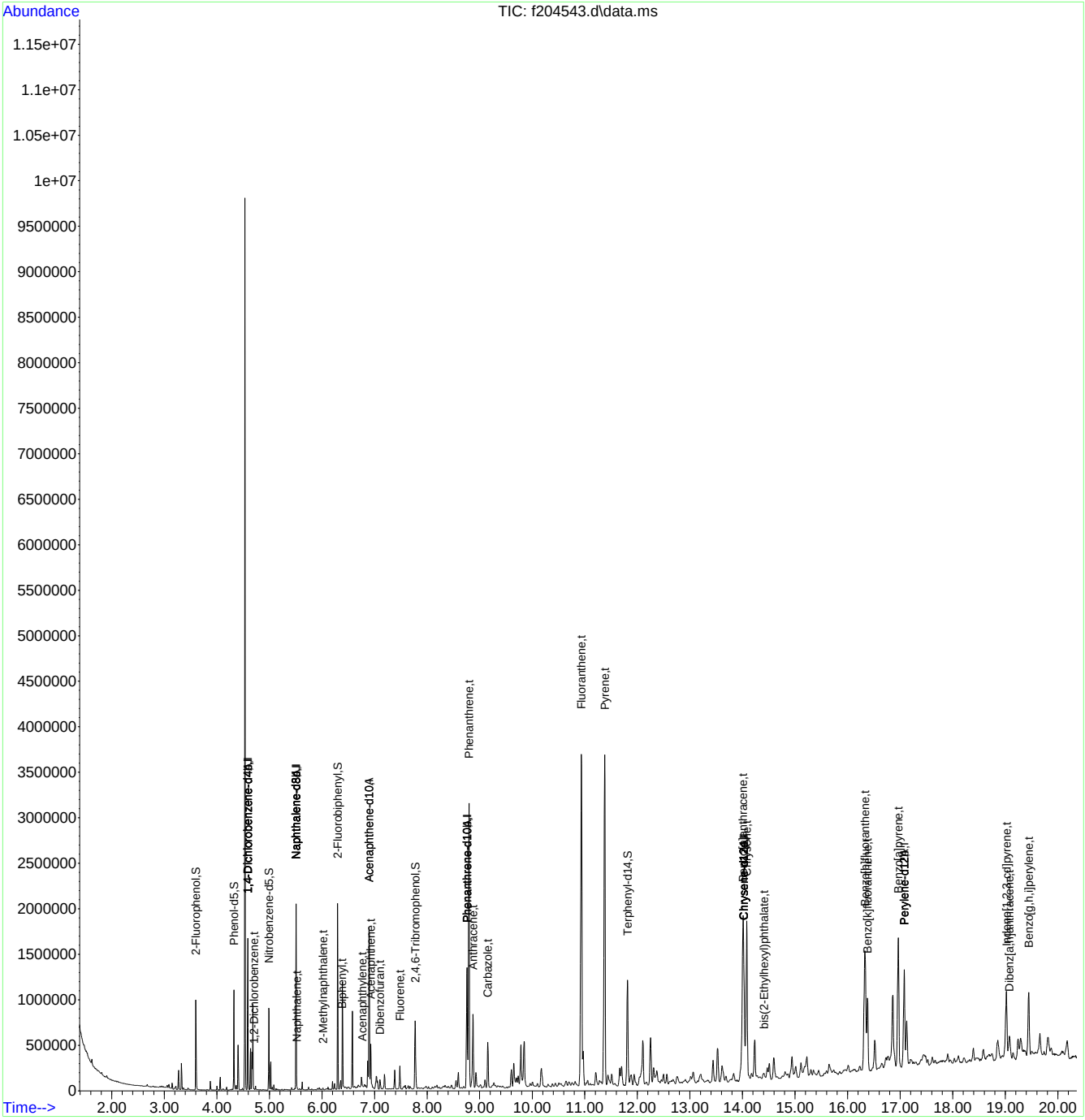
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) Benzo[a]pyrene	16.965	252	1018442	59.00	ppm	99
97) Indeno[1,2,3-cd]pyrene	19.022	276	572315	38.95	ppm	98
99) Dibenz[a,h]anthracene	19.076	278	135988	9.00	ppm	93
101) Benzo[g,h,i]perylene	19.444	276	491212	28.72	ppm	98

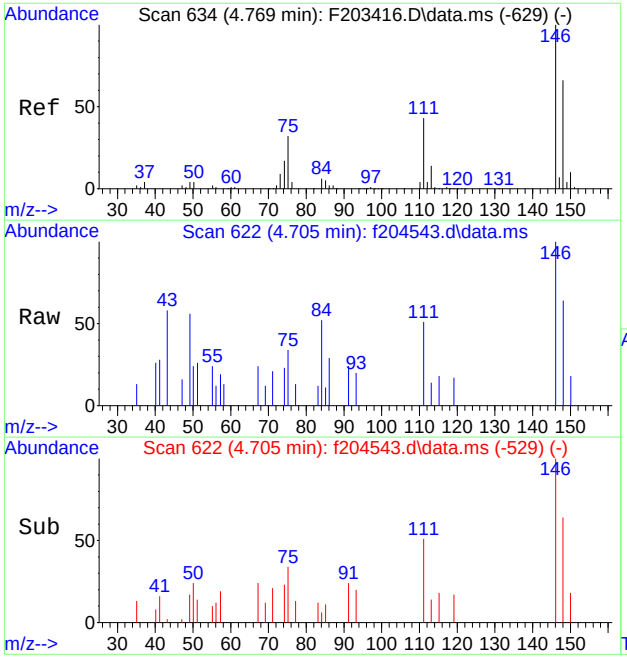
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204543.d
Acq On : 23 Dec 2021 10:10 am
Operator : chriss2
Sample : jd36682-8 Inst : GCMSF
Misc : op37283,ef8967,30.4,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 28 00:43:46 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

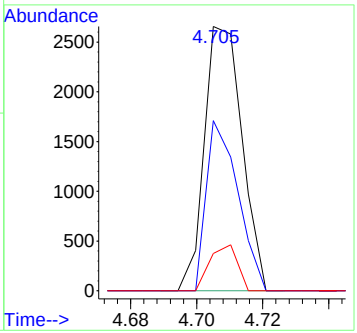


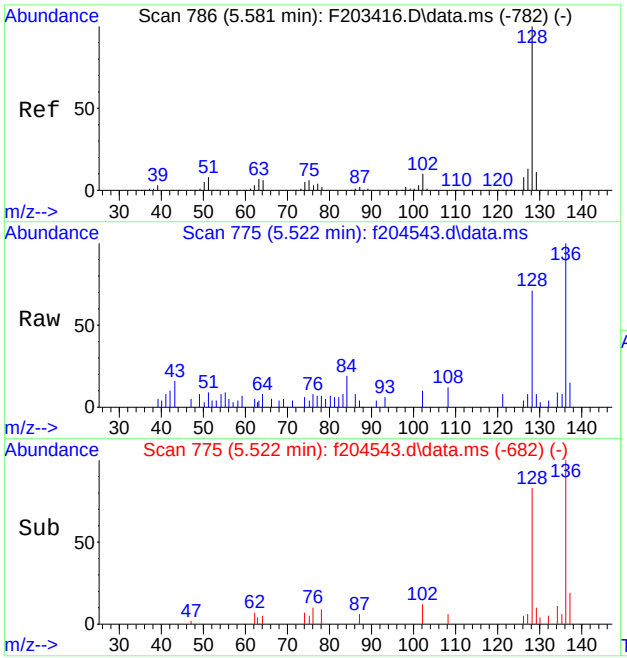


#17
1,2-Dichlorobenzene
Concen: 0.33 ppm
RT: 4.705 min Scan# 622
Delta R.T. -0.005 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:146 Resp: 2122

Ion	Ratio	Lower	Upper
146	100		
148	64.3	32.9	92.9
113	14.1	0.0	43.2

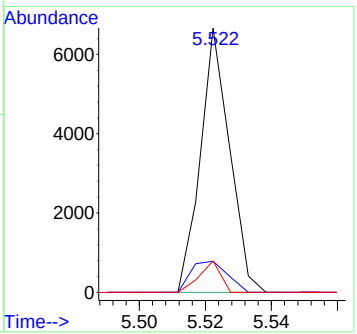


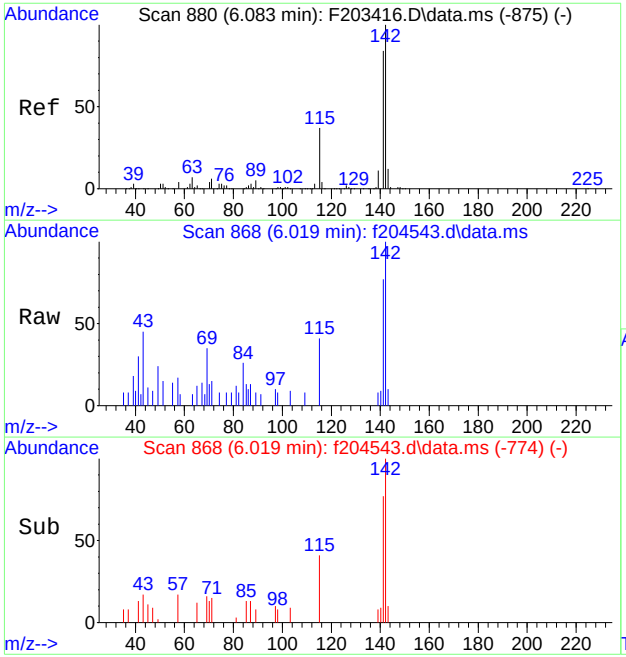


#38
Naphthalene
Concen: 0.23 ppm
RT: 5.522 min Scan# 775
Delta R.T. -0.005 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:128 Resp: 4113

Ion	Ratio	Lower	Upper
128	100		
129	11.8	0.0	41.2
127	11.9	0.0	43.7

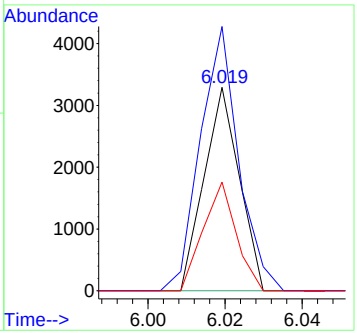


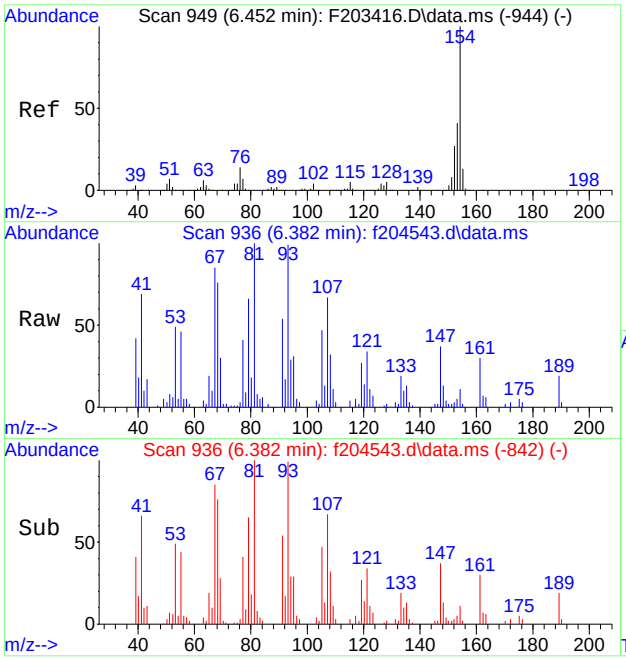


#44
2-Methylnaphthalene
Concen: 0.20 ppm
RT: 6.019 min Scan# 868
Delta R.T. 0.000 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:141 Resp: 2092

Ion	Ratio	Lower	Upper
141	100		
142	129.9	87.2	147.2
115	53.4	10.6	70.6

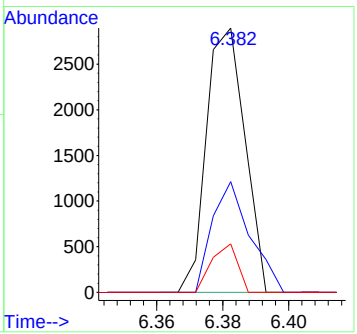


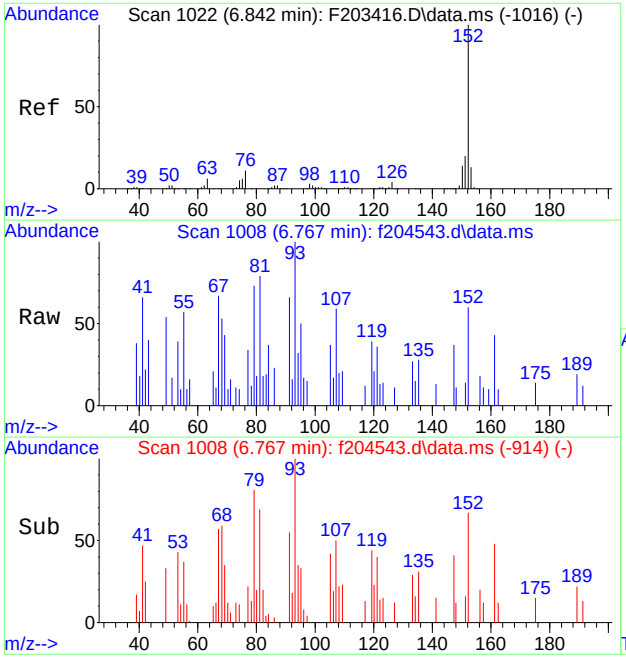


#53
Biphenyl
Concen: 0.17 ppm
RT: 6.382 min Scan# 936
Delta R.T. 0.000 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:154 Resp: 2350

Ion	Ratio	Lower	Upper
154	100		
153	41.8	10.7	70.7
155	18.4	0.0	43.2

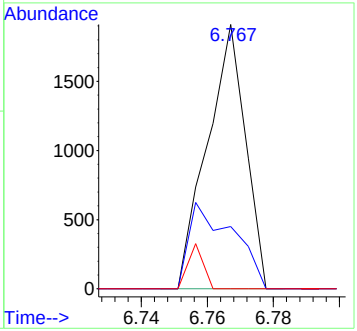


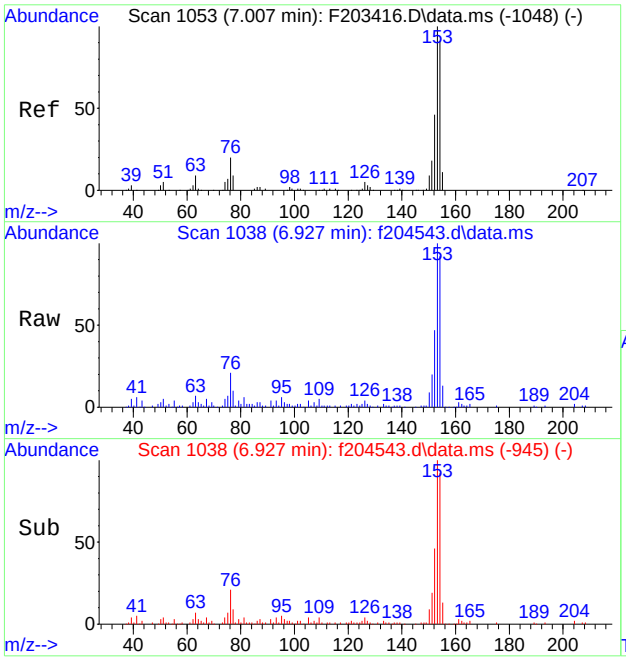


#56
Acenaphthylene
Concen: 0.10 ppm
RT: 6.767 min Scan# 1008
Delta R.T. 0.000 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:152 Resp: 1535

Ion	Ratio	Lower	Upper
152	100		
151	23.5	0.0	50.3
153	0.0	0.0	42.6

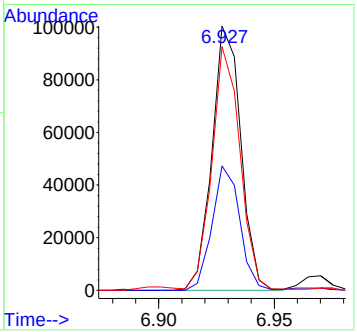


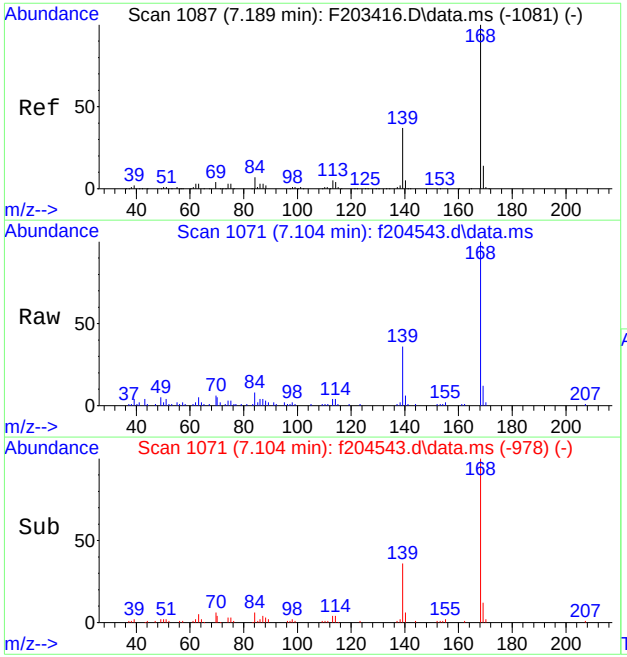


#59
Acenaphthene
Concen: 8.05 ppm
RT: 6.927 min Scan# 1038
Delta R.T. -0.005 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:153 Resp: 87401

Ion	Ratio	Lower	Upper
153	100		
152	47.1	15.3	75.3
154	91.6	54.4	114.4

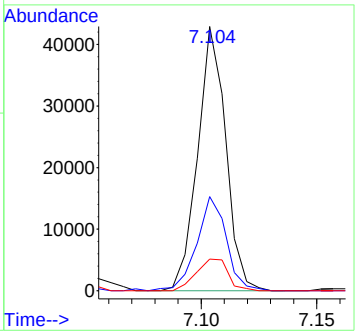


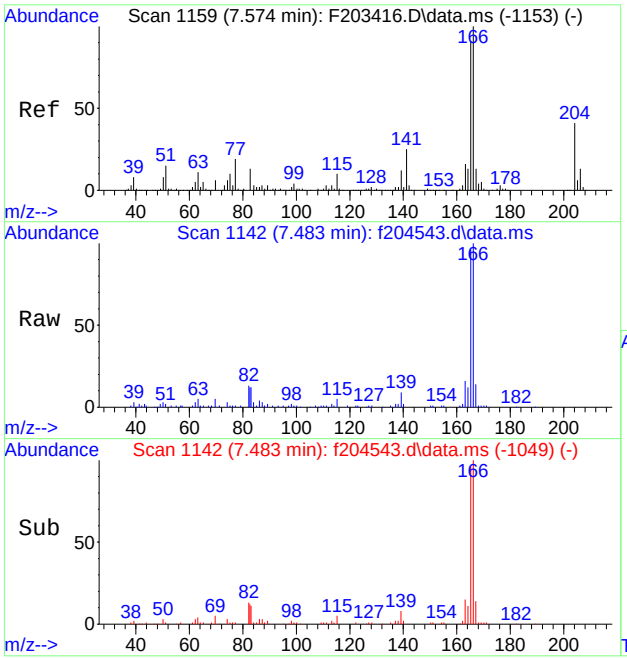


#62
Dibenzofuran
Concen: 2.37 ppm
RT: 7.104 min Scan# 1071
Delta R.T. -0.005 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:168 Resp: 36357

Ion	Ratio	Lower	Upper
168	100		
139	35.3	4.7	64.7
169	12.0	0.0	43.7

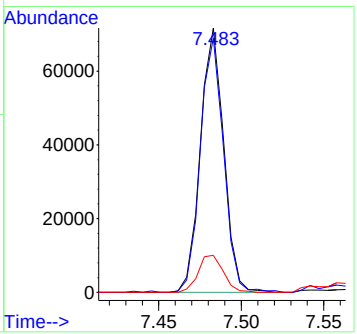


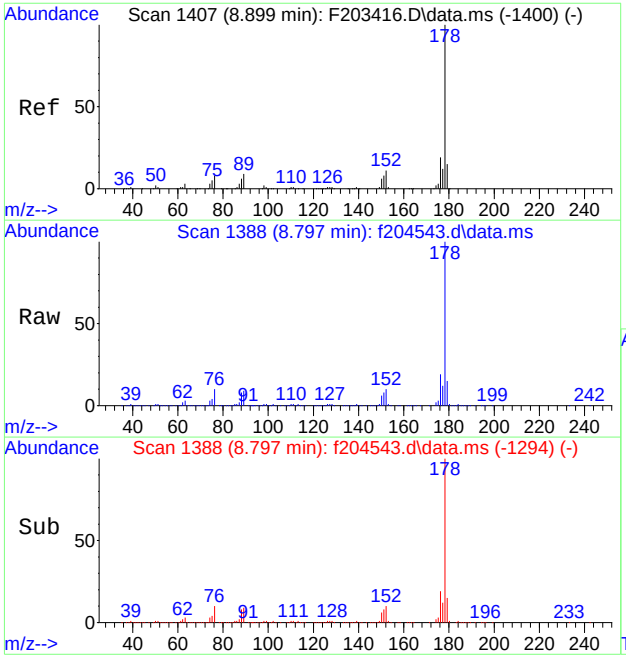


#66
Fluorene
Concen: 5.67 ppm
RT: 7.483 min Scan# 1142
Delta R.T. -0.005 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:166 Resp: 70563

Ion	Ratio	Lower	Upper
166	100		
165	96.2	63.8	123.8
167	14.1	0.0	43.7

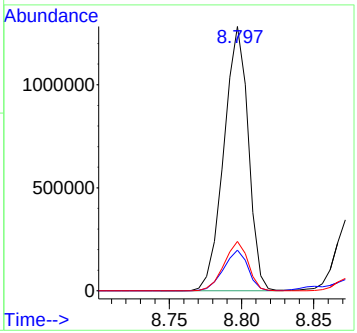


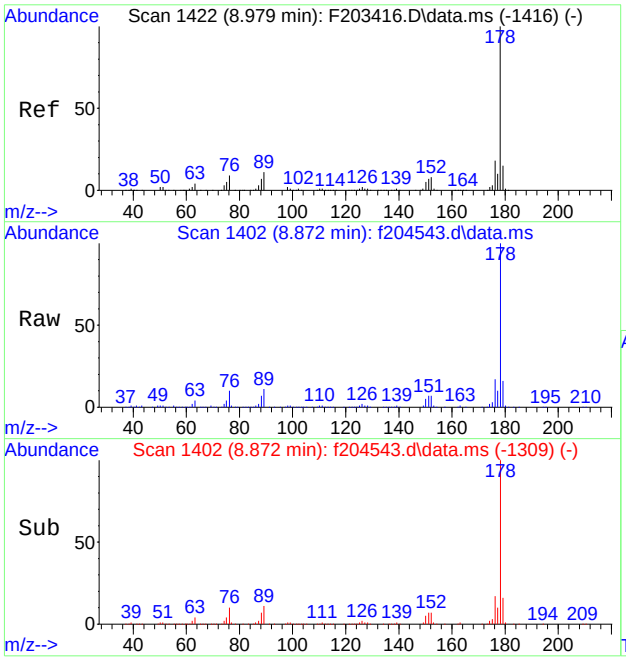


#77
Phenanthrene
Concen: 83.84 ppm
RT: 8.797 min Scan# 1388
Delta R.T. 0.000 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:178 Resp: 1509473

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.1
176	18.7	0.0	48.7

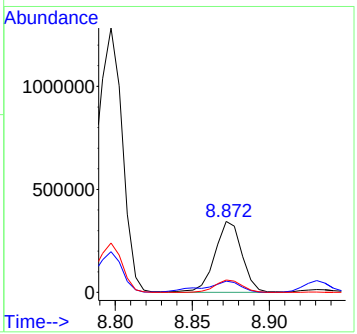


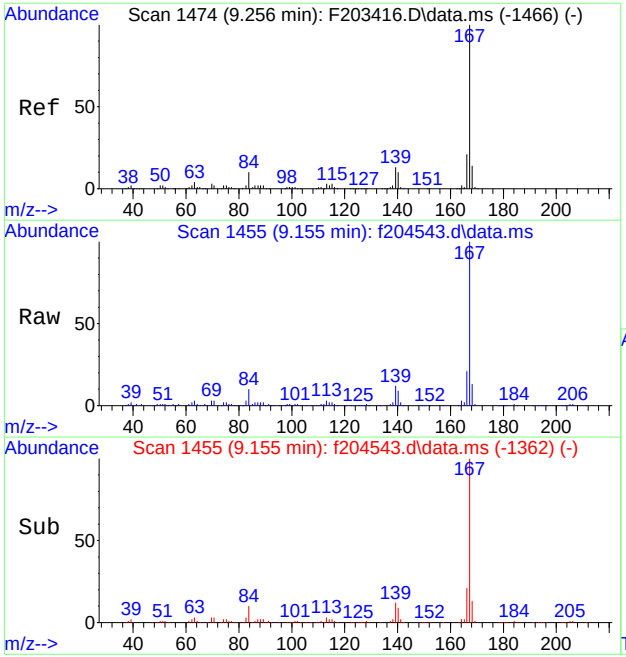


#78
Anthracene
Concen: 22.79 ppm
RT: 8.872 min Scan# 1402
Delta R.T. -0.005 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:178 Resp: 420682

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	46.0
176	17.3	0.0	47.9

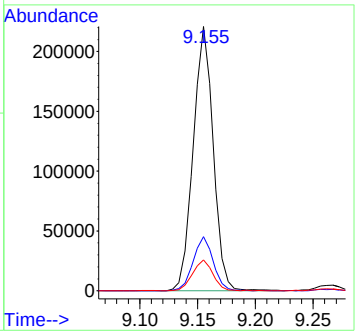


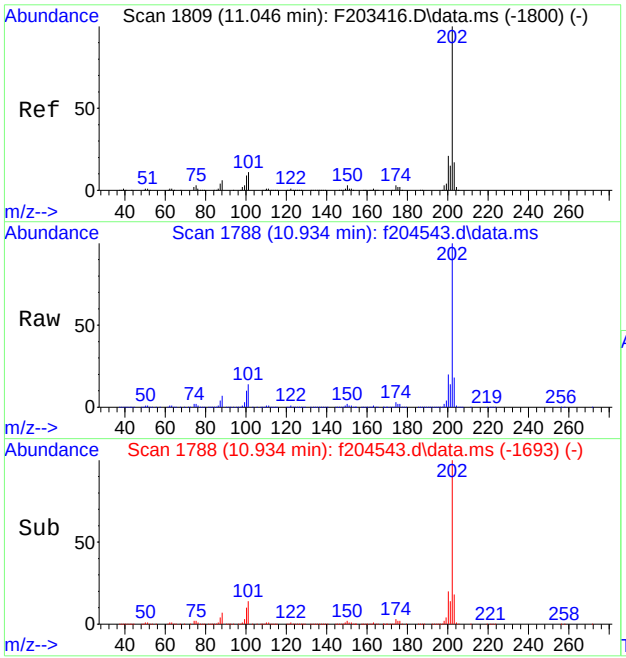


#79
Carbazole
Concen: 16.03 ppm
RT: 9.155 min Scan# 1455
Delta R.T. -0.005 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:167 Resp: 266455

Ion	Ratio	Lower	Upper
167	100		
166	20.5	0.0	51.1
139	11.7	0.0	41.7

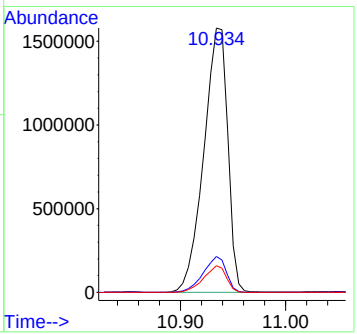


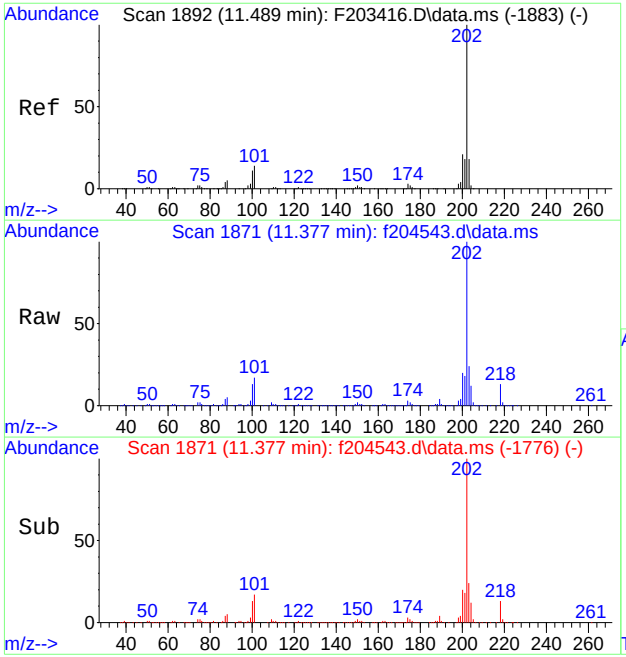


#81
Fluoranthene
Concen: 123.64 ppm
RT: 10.934 min Scan# 1788
Delta R.T. 0.006 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:202 Resp: 2512947

Ion	Ratio	Lower	Upper
202	100		
101	13.6	0.0	43.2
100	10.1	0.0	38.9

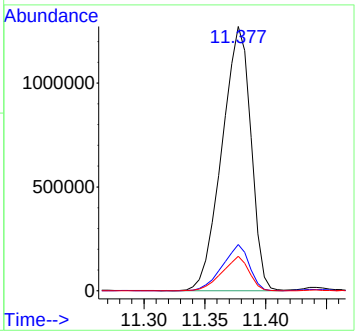


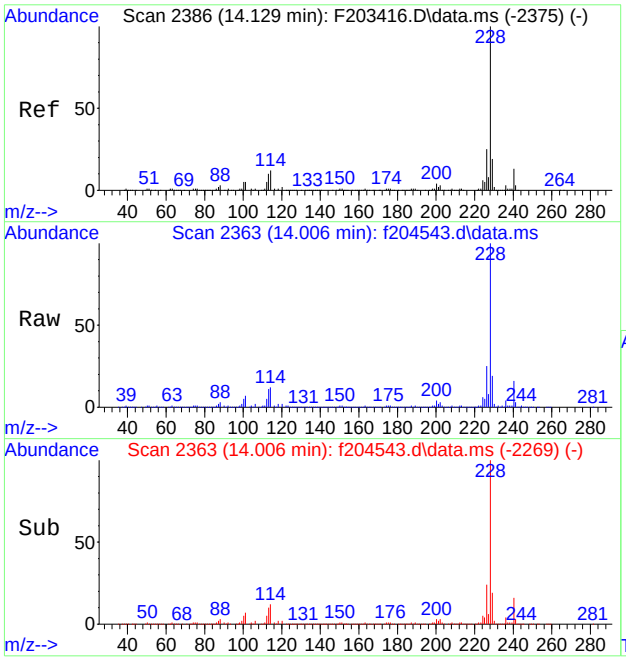


#85
Pyrene
Concen: 110.18 ppm
RT: 11.377 min Scan# 1871
Delta R.T. 0.006 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:202 Resp: 2103211

Ion	Ratio	Lower	Upper
202	100		
101	17.4	0.0	43.8
100	13.1	0.0	42.3

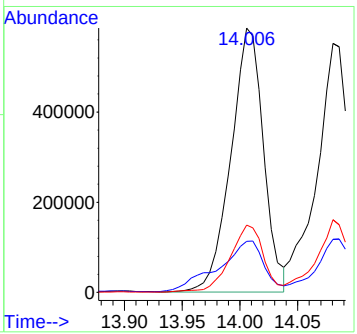


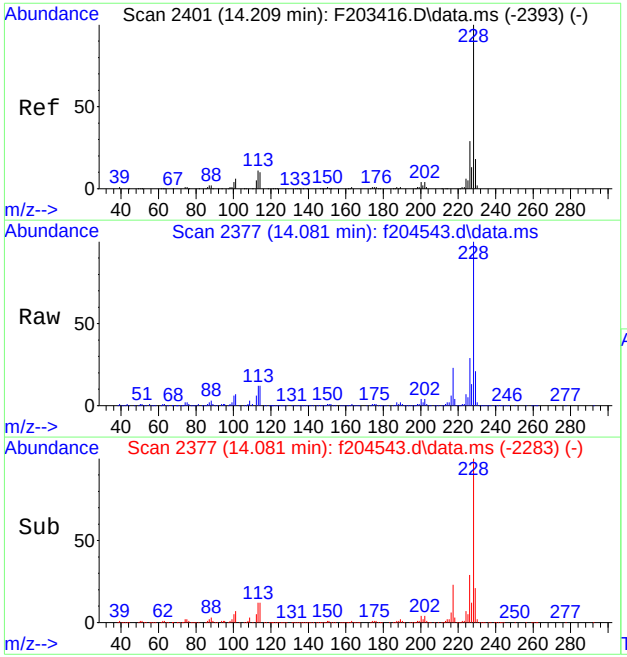


#88
Benzo[a]anthracene
Concen: 63.45 ppm
RT: 14.006 min Scan# 2363
Delta R.T. 0.000 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:228 Resp: 1151837

Ion	Ratio	Lower	Upper
228	100		
229	18.8	0.0	49.7
226	25.2	0.0	55.8

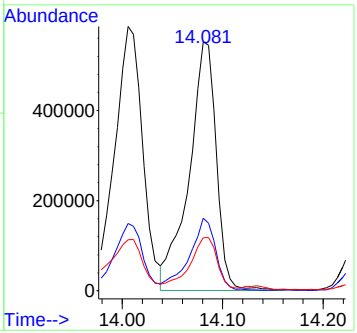


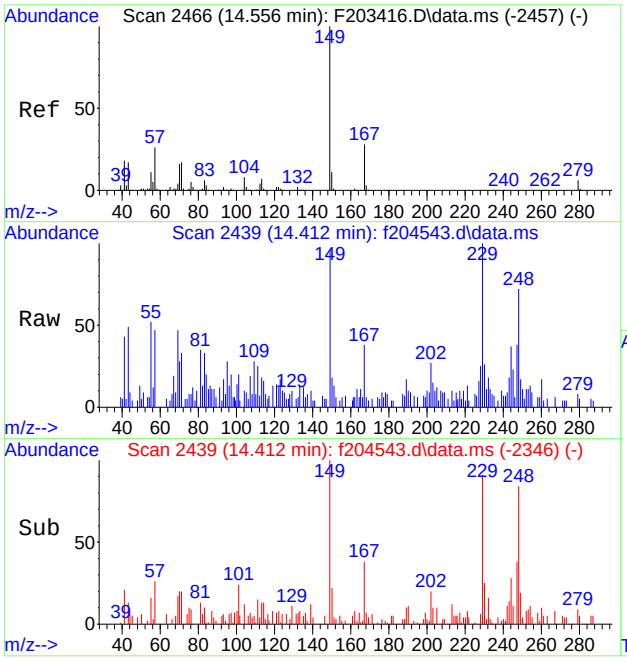


#90
Chrysene
Concen: 58.67 ppm
RT: 14.081 min Scan# 2377
Delta R.T. 0.000 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:228 Resp: 1044819

Ion	Ratio	Lower	Upper
228	100		
226	29.1	0.0	57.7
229	20.8	0.0	49.6

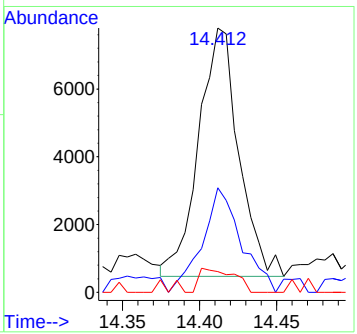


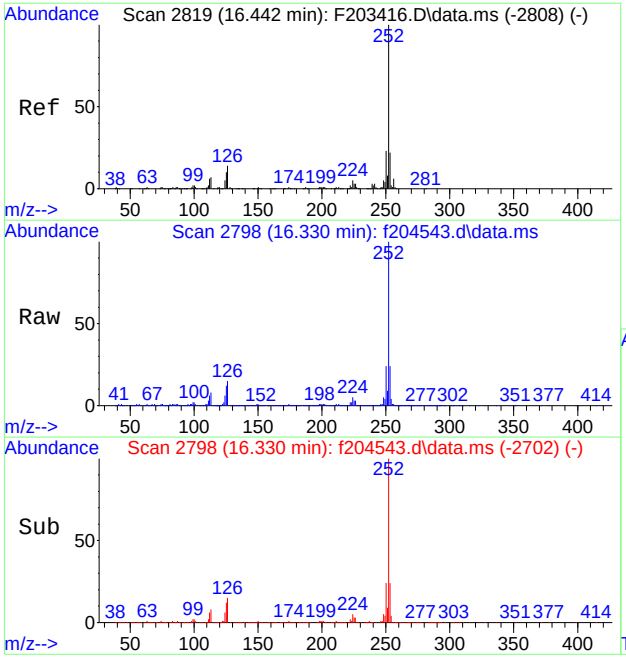


#91
bis(2-Ethylhexyl)phthalate
Concen: 1.33 ppm
RT: 14.412 min Scan# 2439
Delta R.T. -0.005 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:149 Resp: 13238

Ion	Ratio	Lower	Upper
149	100		
167	37.3	0.0	57.8
279	6.0	0.0	38.3

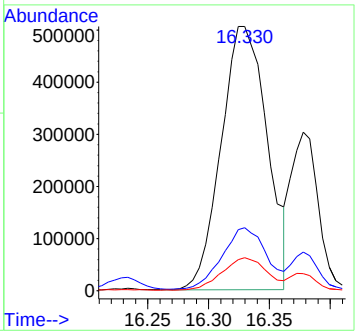


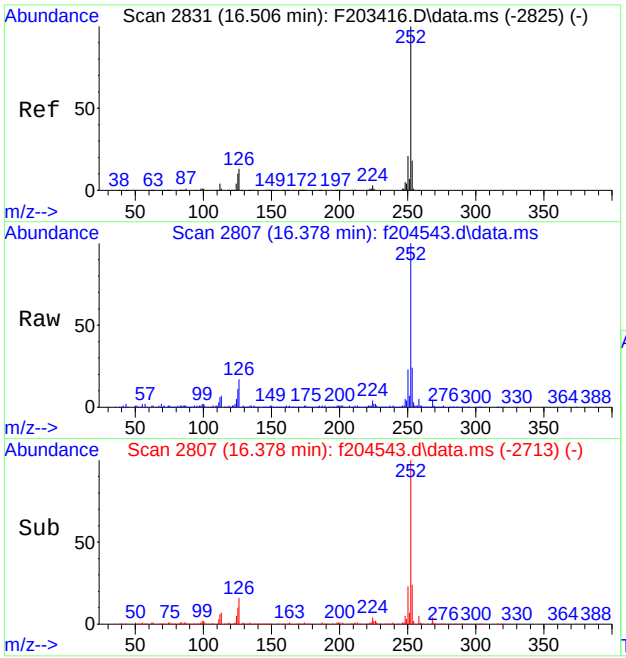


#94
Benzo[b]fluoranthene
Concen: 71.37 ppm
RT: 16.330 min Scan# 2798
Delta R.T. 0.011 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:252 Resp: 1331941

Ion	Ratio	Lower	Upper
252	100		
253	23.5	0.0	53.5
125	12.4	0.0	41.5

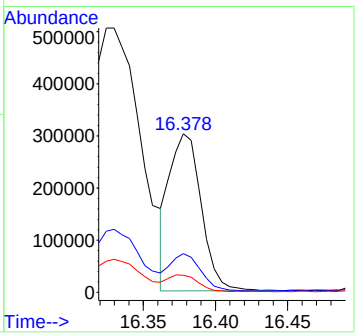


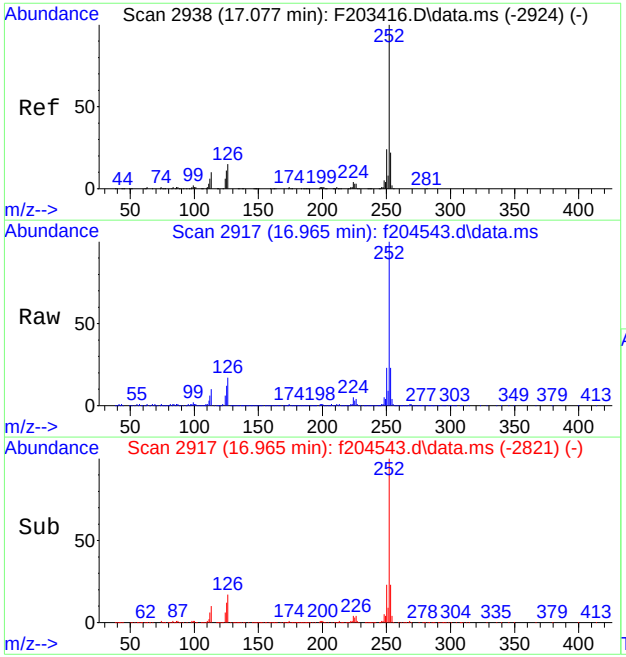


#95
Benzo[k]fluoranthene
Concen: 24.87 ppm
RT: 16.378 min Scan# 2807
Delta R.T. 0.000 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:252 Resp: 463947

Ion	Ratio	Lower	Upper
252	100		
253	24.2	0.0	50.7
125	10.0	0.0	39.8

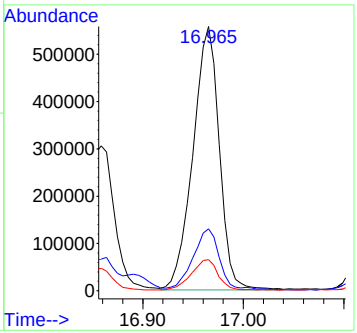


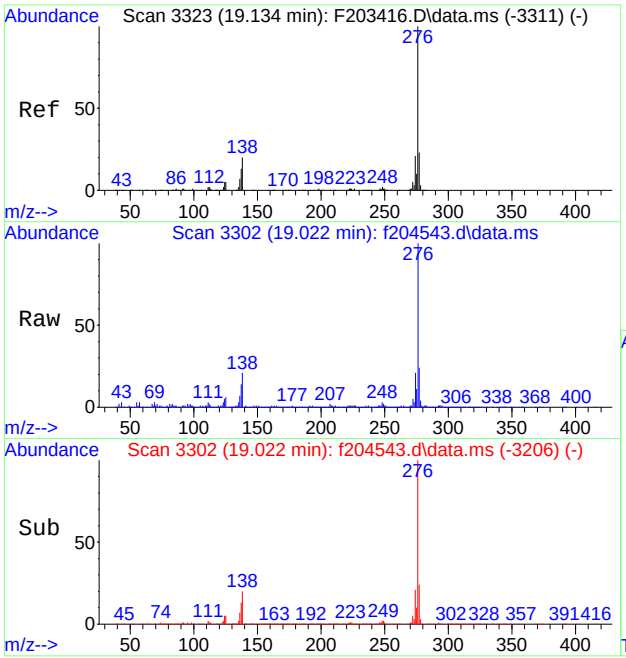


#96
Benzo[a]pyrene
Concen: 59.00 ppm
RT: 16.965 min Scan# 2917
Delta R.T. 0.011 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:252 Resp: 1018442

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	52.3
125	11.6	0.0	41.7

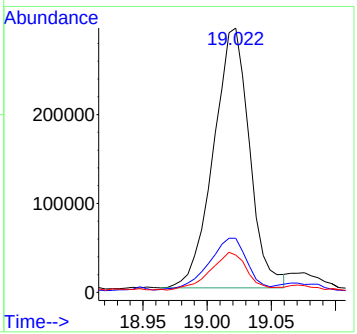


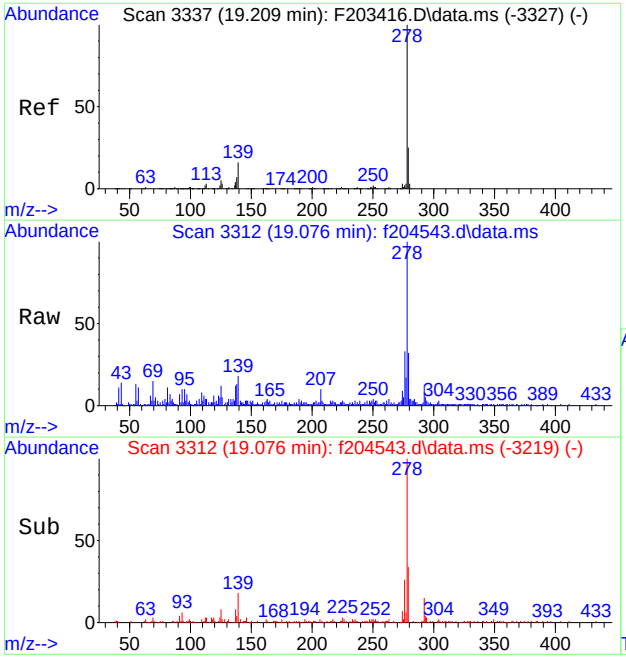


#97
Indeno[1,2,3-cd]pyrene
Concen: 38.95 ppm
RT: 19.022 min Scan# 3302
Delta R.T. 0.011 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:276 Resp: 572315

Ion	Ratio	Lower	Upper
276	100		
138	19.2	0.0	50.1
137	13.1	0.0	44.0

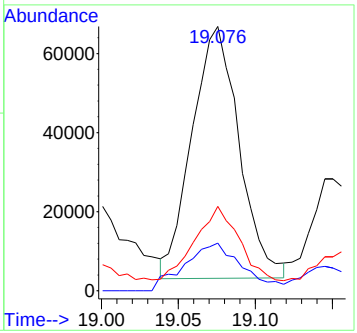


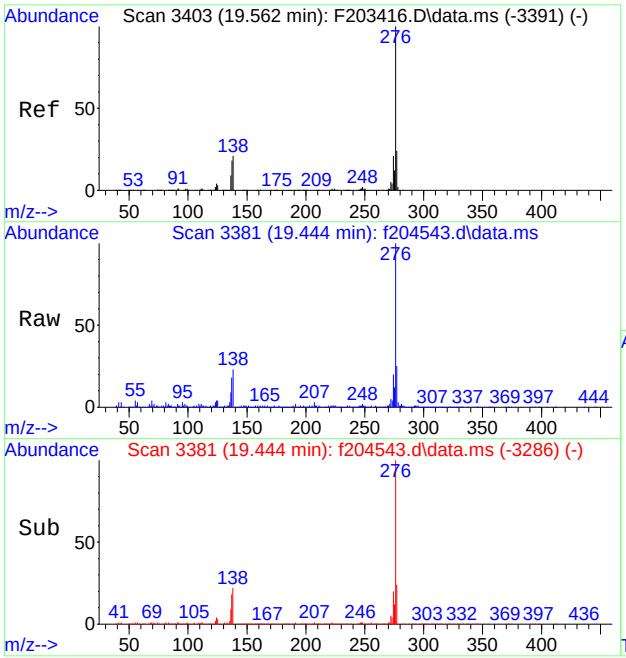


#99
Dibenz[a,h]anthracene
Concen: 9.00 ppm
RT: 19.076 min Scan# 3312
Delta R.T. -0.005 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:278 Resp: 135988

Ion	Ratio	Lower	Upper
278	100		
139	15.9	0.0	46.5
279	31.3	0.0	55.8

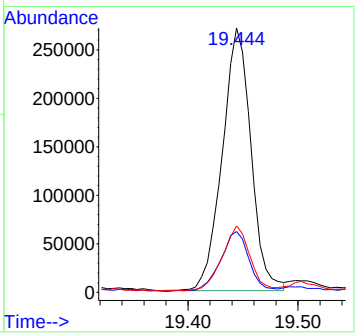




#101
Benzo[g,h,i]perylene
Concen: 28.72 ppm
RT: 19.444 min Scan# 3381
Delta R.T. 0.006 min
Lab File: f204543.d
Acq: 23 Dec 2021 10:10 am

Tgt Ion:276 Resp: 491212

Ion	Ratio	Lower	Upper
276	100		
138	22.4	0.0	52.2
277	24.3	0.0	52.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204542.d
Acq On : 23 Dec 2021 9:45 am
Operator : chriss2
Sample : jd36682-9 Inst : GCMSF
Misc : op37283,ef8967,31.6,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 28 00:09:14 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.587	152	185529	40.00	ppm	0.00
24) Naphthalene-d8	5.506	136	718366	40.00	ppm	0.00
46) Acenaphthene-d10	6.895	164	396731	40.00	ppm	0.00
69) Phenanthrene-d10	8.754	188	718208	40.00	ppm	0.00
83) Chrysene-d12	14.011	240	627614	40.00	ppm	0.00
92) Perylene-d12	17.061	264	627752	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.587	152	185529	40.00	ppm	0.00
112) Naphthalene-d8A	5.506	136	718366	40.00	ppm	0.00
121) Acenaphthene-d10A	6.895	164	396731	40.00	ppm	0.00
132) Phenanthrene-d10A	8.754	188	718208	40.00	ppm	0.00
147) Chrysene-d12A	14.011	240	627614	40.00	ppm	0.00
154) Perylene-d12A	17.061	264	627752	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.587	152	185529	40.00	ppm	0.00
159) Phenanthrene-d10b	8.754	188	718208	40.00	ppm	0.00
161) Naphthalene-d8b	5.506	136	718366	40.00	ppm	0.00
163) Naphthalene-d8c	5.506	136	718366	40.00	ppm	0.00
168) 1,4-Dichlorobenzene-d4c	4.587	152	185529	40.00	ppm	0.00
170) Chrysene-d12c	14.011	240	627614	40.00	ppm	0.00
172) Chrysene-d12d	14.011	240	627614	40.00	ppm	0.00
174) Naphthalene-d8d	5.506	136	718366	40.00	ppm	0.00
176) Chrysene-d12e	14.011	240	627614	40.00	ppm	0.00
178) Perylene-d12b	17.061	264	627752	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.599	112	224737	38.59	ppm	0.00
Spiked Amount 50.000			Recovery = 77.18%			
8) Phenol-d5	4.325	99	296724	37.68	ppm	0.00
Spiked Amount 50.000			Recovery = 75.36%			
25) Nitrobenzene-d5	4.988	82	250128	34.88	ppm	0.00
Spiked Amount 50.000			Recovery = 69.76%			
51) 2-Fluorobiphenyl	6.297	172	535248	40.18	ppm	0.00
Spiked Amount 50.000			Recovery = 80.36%			
73) 2,4,6-Tribromophenol	7.776	330	87748	42.51	ppm	0.00
Spiked Amount 50.000			Recovery = 85.02%			
86) Terphenyl-d14	11.810	244	695792	45.47	ppm	0.00
Spiked Amount 50.000			Recovery = 90.94%			
Target Compounds						Qvalue
15) 1,4-Dichlorobenzene	4.598	146	2485	0.35	ppm	88
17) 1,2-Dichlorobenzene	4.710	146	6343	0.95	ppm	91
36) 1,2,4-Trichlorobenzene	5.463	180	1682	0.28	ppm	86
53) Biphenyl	6.382	154	1599	0.11	ppm	90
59) Acenaphthene	6.927	153	3246	0.29	ppm	78
62) Dibenzofuran	7.103	168	1116	0.07	ppm	81
66) Fluorene	7.483	166	1739	0.13	ppm #	62
77) Phenanthrene	8.791	178	46965	2.54	ppm	97
78) Anthracene	8.872	178	12245	0.65	ppm	92
79) Carbazole	9.155	167	7564	0.44	ppm	97
81) Fluoranthene	10.918	202	92865	4.45	ppm	99
85) Pyrene	11.361	202	82339	4.21	ppm	94
88) Benzo[a]anthracene	13.995	228	44415	2.39	ppm	95
90) Chrysene	14.064	228	41369	2.27	ppm	94
94) Benzo[b]fluoranthene	16.308	252	56102	3.13	ppm	91
95) Benzo[k]fluoranthene	16.361	252	22434	1.25	ppm	89
96) Benzo[a]pyrene	16.938	252	40775	2.46	ppm	98
97) Indeno[1,2,3-cd]pyrene	19.000	276	29230	2.68	ppm	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204542.d
Acq On : 23 Dec 2021 9:45 am
Operator : chriss2
Sample : jd36682-9 Inst : GCMSF
Misc : op37283,ef8967,31.6,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 28 00:09:14 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

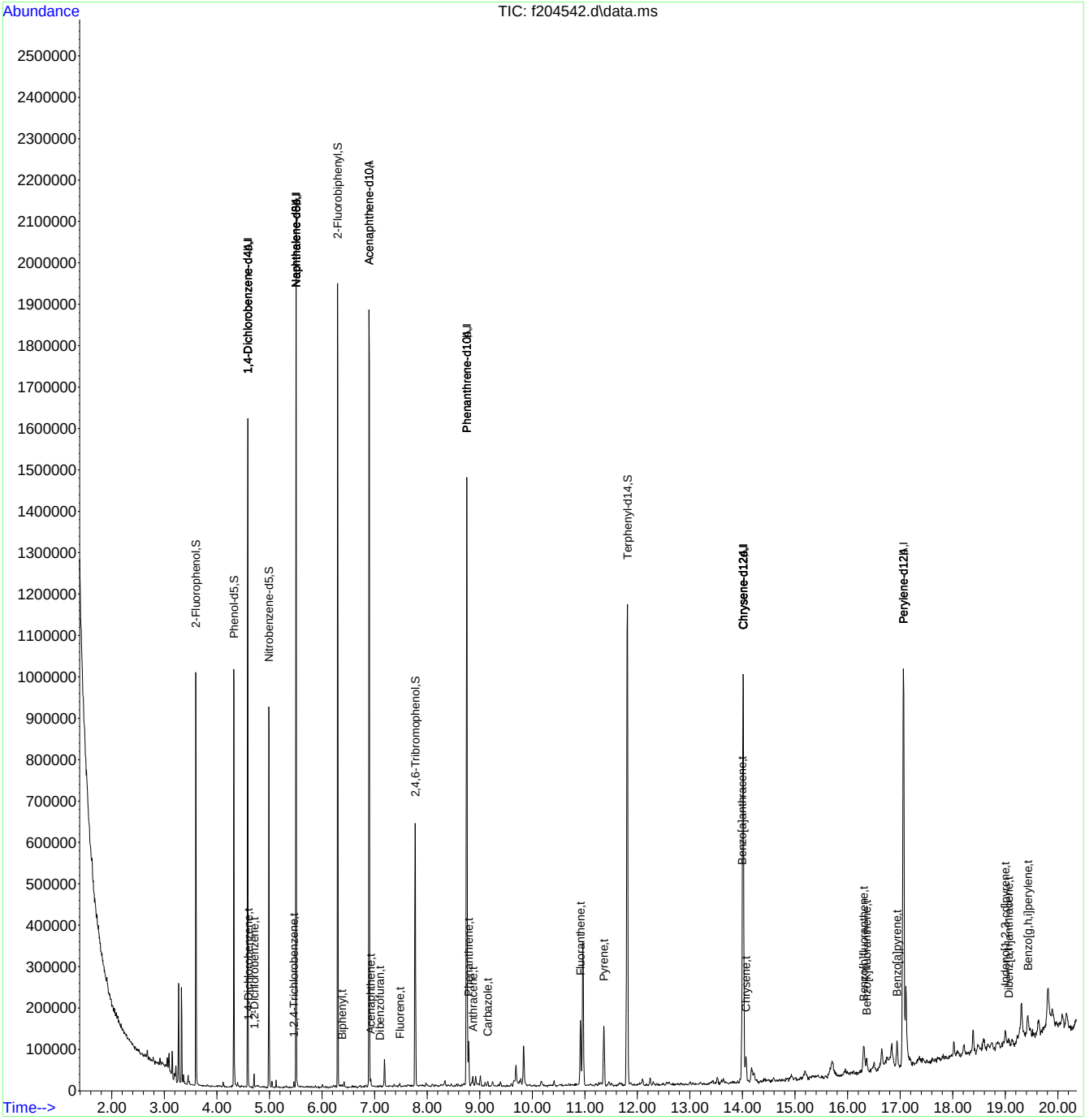
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	Dibenz[a,h]anthracene	19.065	278	7580	0.92	ppm	75
101)	Benzo[g,h,i]perylene	19.428	276	27817	1.69	ppm	96

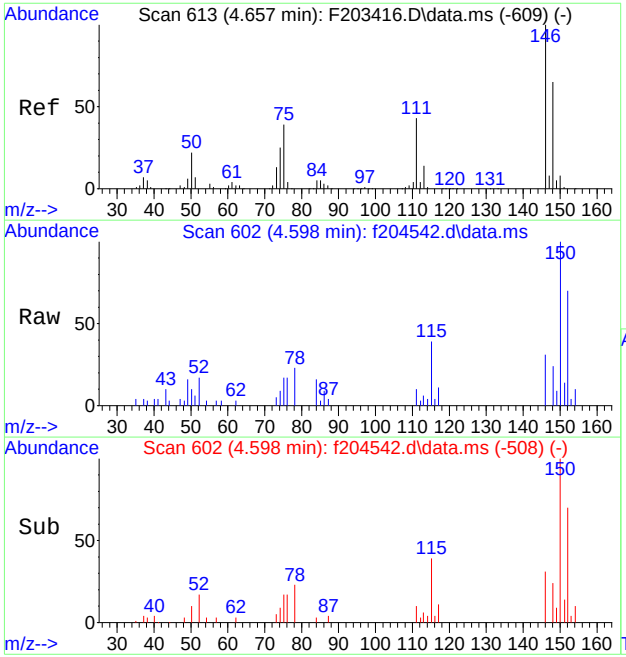
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204542.d
Acq On : 23 Dec 2021 9:45 am
Operator : chriss2
Sample : jd36682-9 Inst : GCMSF
Misc : op37283,ef8967,31.6,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 28 00:09:14 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

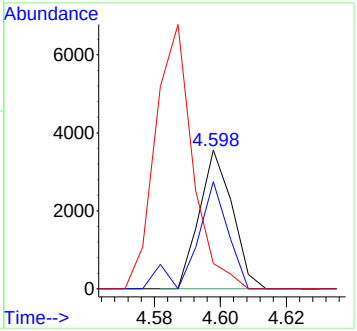


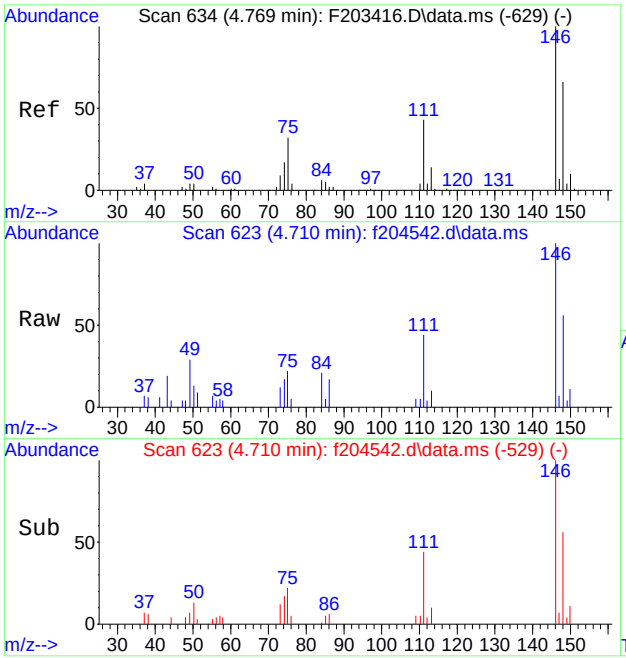


#15
1,4-Dichlorobenzene
Concen: 0.35 ppm
RT: 4.598 min Scan# 602
Delta R.T. -0.000 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:146 Resp: 2485

Ion	Ratio	Lower	Upper
146	100		
148	68.4	32.9	92.9
113	0.0	0.0	43.2

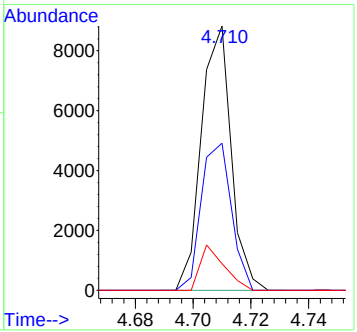


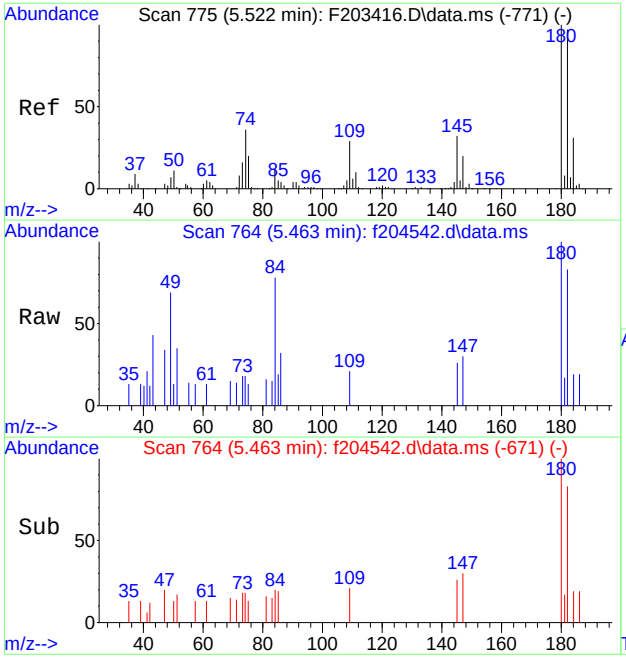


#17
1,2-Dichlorobenzene
Concen: 0.95 ppm
RT: 4.710 min Scan# 623
Delta R.T. -0.000 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:146 Resp: 6343

Ion	Ratio	Lower	Upper
146	100		
148	55.7	32.9	92.9
113	10.1	0.0	43.2

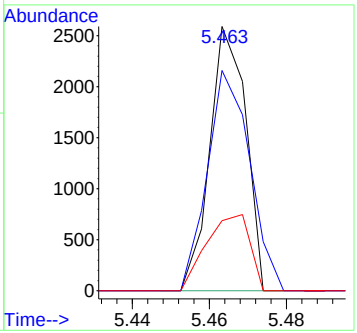


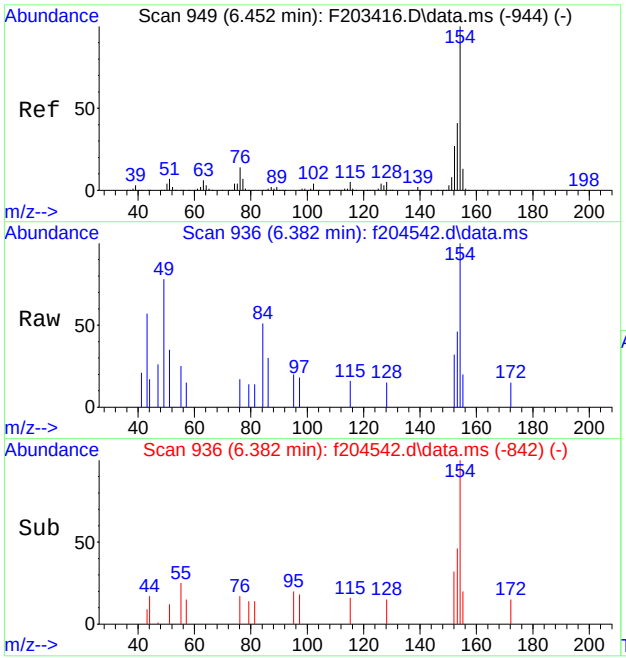


#36
1,2,4-Trichlorobenzene
Concen: 0.28 ppm
RT: 5.463 min Scan# 764
Delta R.T. -0.005 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:180 Resp: 1682

Ion	Ratio	Lower	Upper
180	100		
182	83.3	69.1	129.1
145	26.5	0.0	60.0

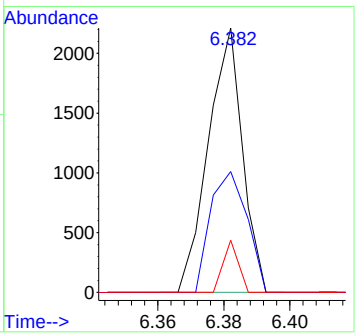


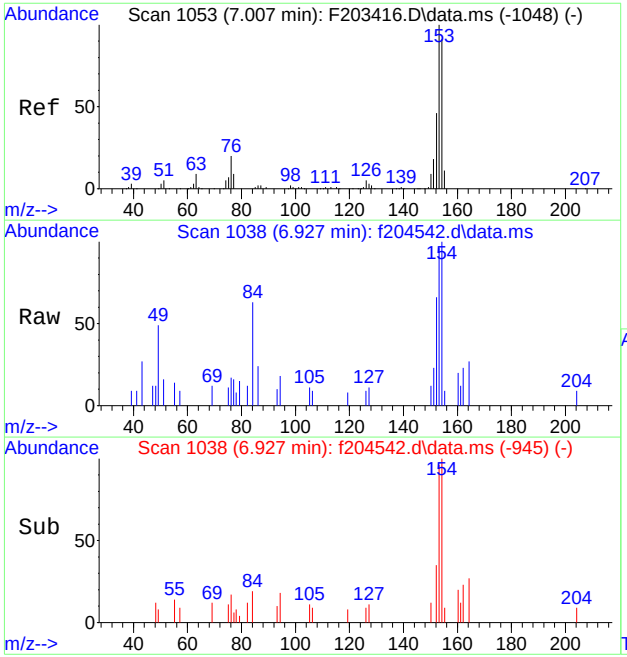


#53
Biphenyl
Concen: 0.11 ppm
RT: 6.382 min Scan# 936
Delta R.T. -0.000 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:154 Resp: 1599

Ion	Ratio	Lower	Upper
154	100		
153	45.7	10.7	70.7
155	19.8	0.0	43.2

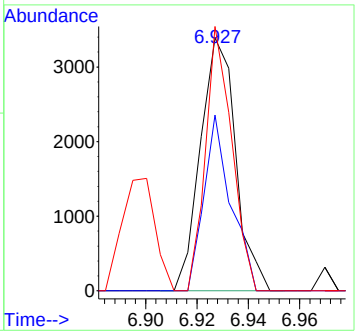


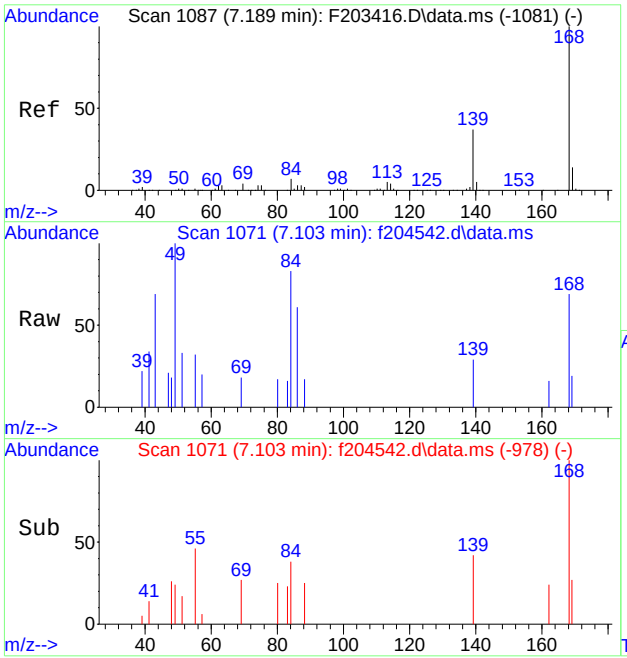


#59
Acenaphthene
Concen: 0.29 ppm
RT: 6.927 min Scan# 1038
Delta R.T. -0.005 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:153 Resp: 3246

Ion	Ratio	Lower	Upper
153	100		
152	69.5	15.3	75.3
154	97.4	54.4	114.4

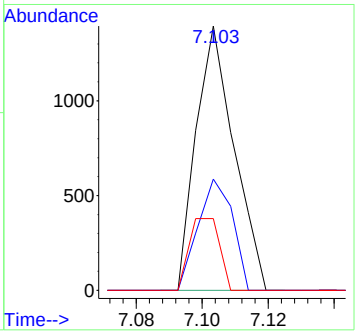


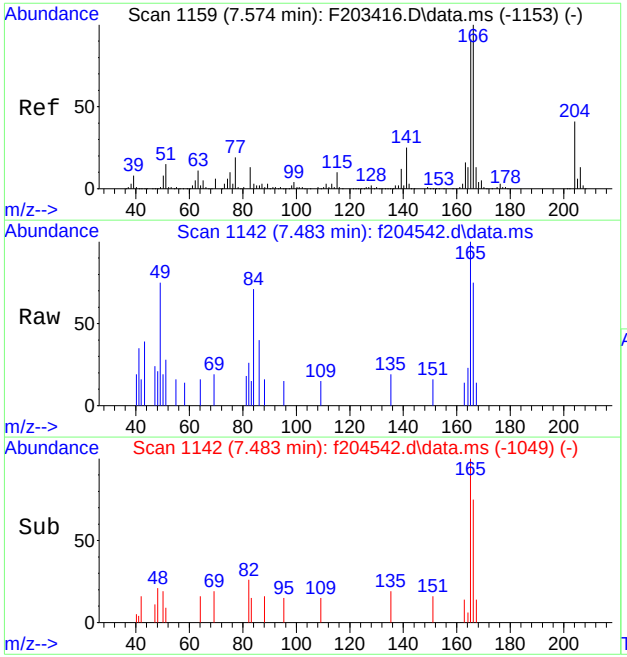


#62
Dibenzofuran
Concen: 0.07 ppm
RT: 7.103 min Scan# 1071
Delta R.T. -0.005 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:168 Resp: 1116

Ion	Ratio	Lower	Upper
168	100		
139	42.1	4.7	64.7
169	27.1	0.0	43.7

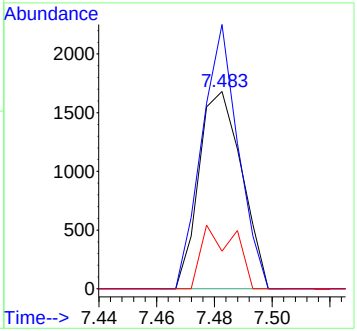


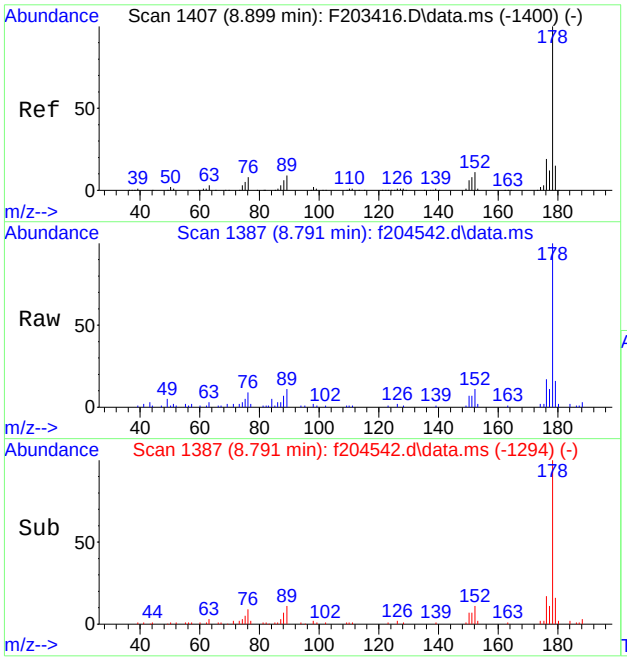


#66
Fluorene
Concen: 0.13 ppm
RT: 7.483 min Scan# 1142
Delta R.T. -0.005 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:166 Resp: 1739

Ion	Ratio	Lower	Upper
166	100		
165	133.9	63.8	123.8#
167	19.0	0.0	43.7

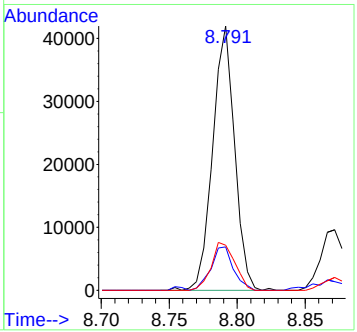


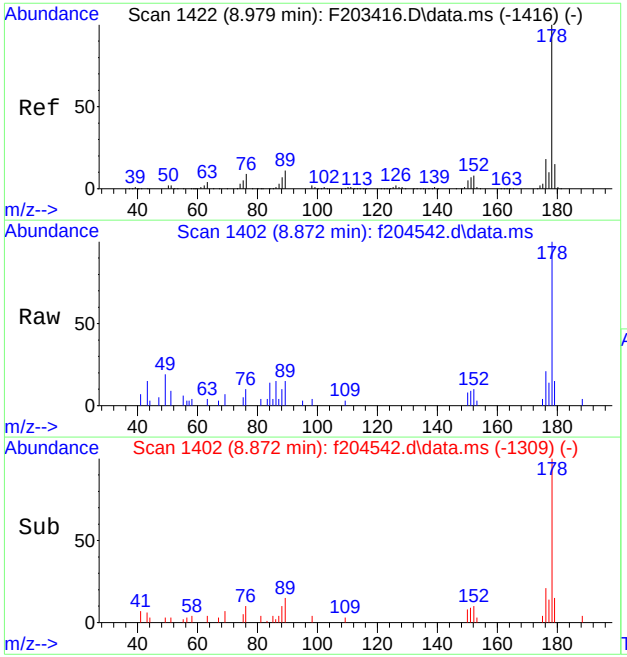


#77
Phenanthrene
Concen: 2.54 ppm
RT: 8.791 min Scan# 1387
Delta R.T. -0.005 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:178 Resp: 46965

Ion	Ratio	Lower	Upper
178	100		
179	16.5	0.0	45.1
176	17.1	0.0	48.7

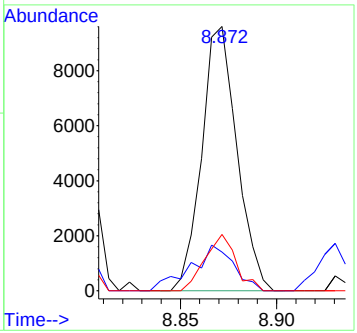


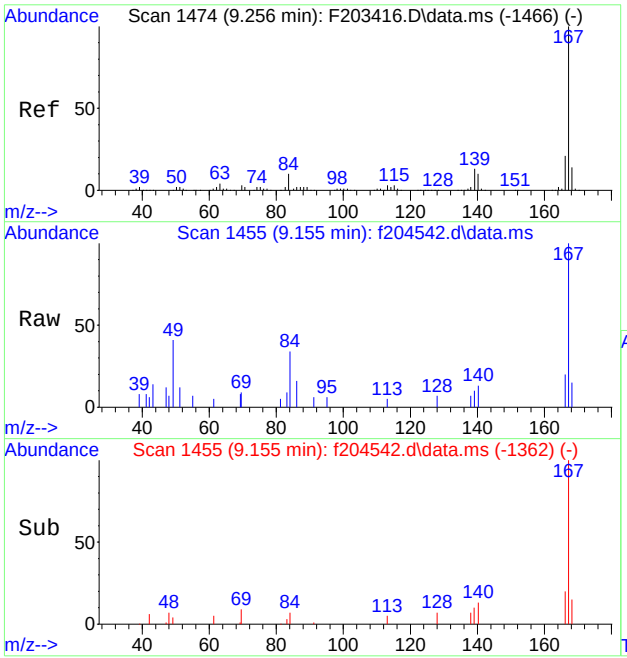


#78
Anthracene
Concen: 0.65 ppm
RT: 8.872 min Scan# 1402
Delta R.T. -0.005 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:178 Resp: 12245

Ion	Ratio	Lower	Upper
178	100		
179	12.8	0.0	46.0
176	21.3	0.0	47.9

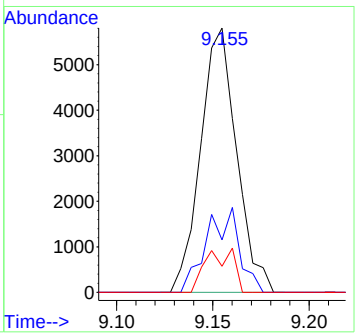


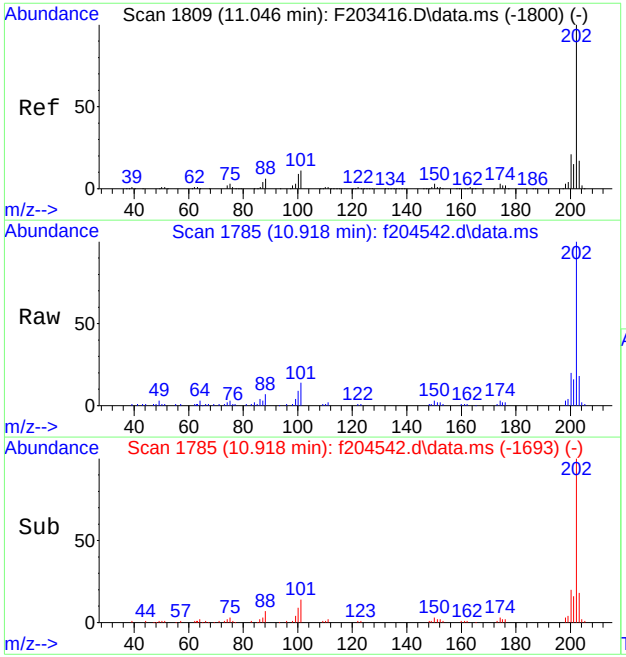


#79
Carbazole
Concen: 0.44 ppm
RT: 9.155 min Scan# 1455
Delta R.T. -0.005 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:167 Resp: 7564

Ion	Ratio	Lower	Upper
167	100		
166	19.8	0.0	51.1
139	9.8	0.0	41.7

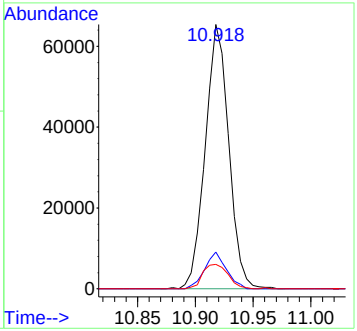


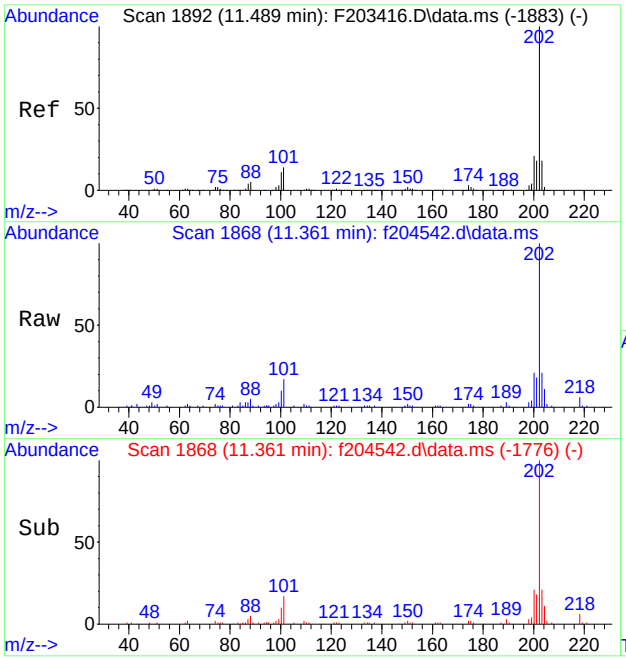


#81
Fluoranthene
Concen: 4.45 ppm
RT: 10.918 min Scan# 1785
Delta R.T. -0.011 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:202 Resp: 92865

Ion	Ratio	Lower	Upper
202	100		
101	13.9	0.0	43.2
100	9.2	0.0	38.9

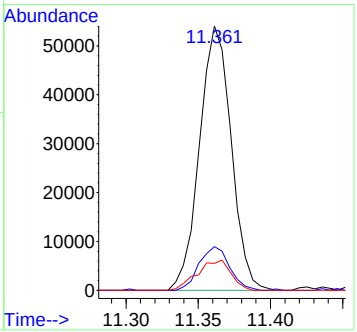


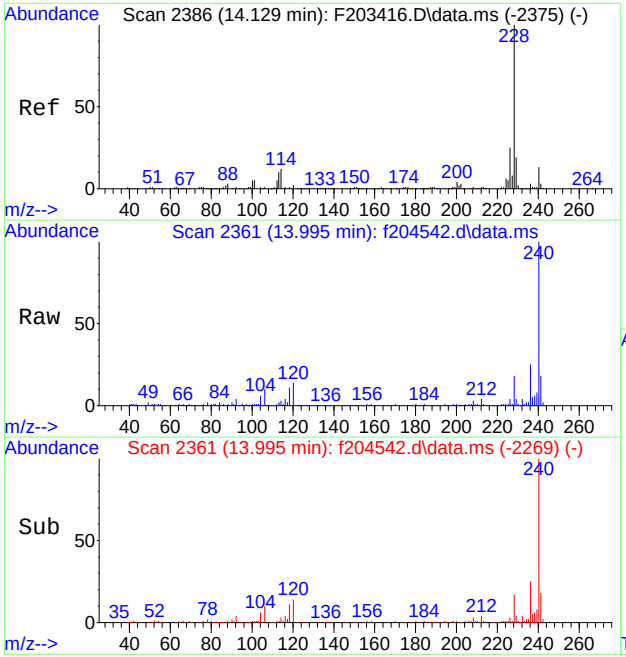


#85
Pyrene
Concen: 4.21 ppm
RT: 11.361 min Scan# 1868
Delta R.T. -0.011 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:202 Resp: 82339

Ion	Ratio	Lower	Upper
202	100		
101	16.6	0.0	43.8
100	10.2	0.0	42.3

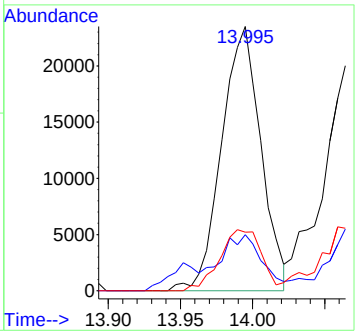


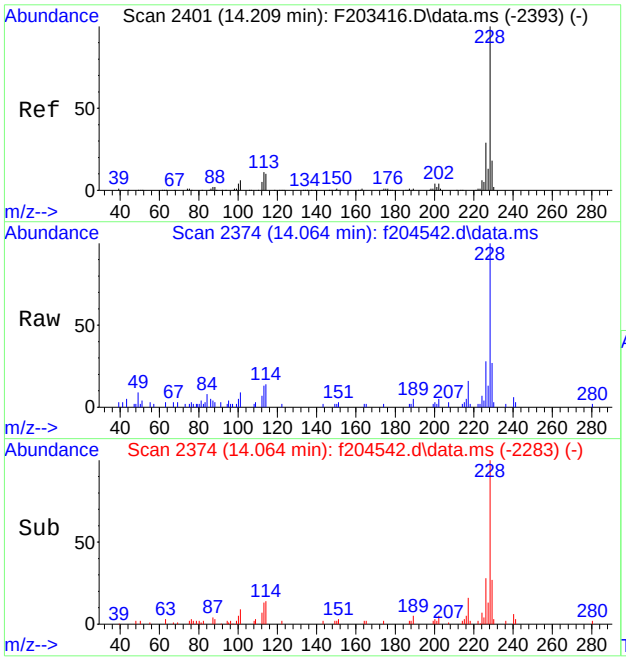


#88
Benzo[a]anthracene
Concen: 2.39 ppm
RT: 13.995 min Scan# 2361
Delta R.T. -0.011 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:228 Resp: 44415

Ion	Ratio	Lower	Upper
228	100		
229	18.8	0.0	49.7
226	21.7	0.0	55.8

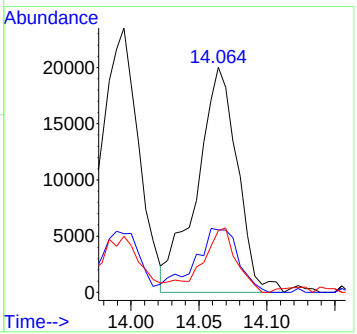


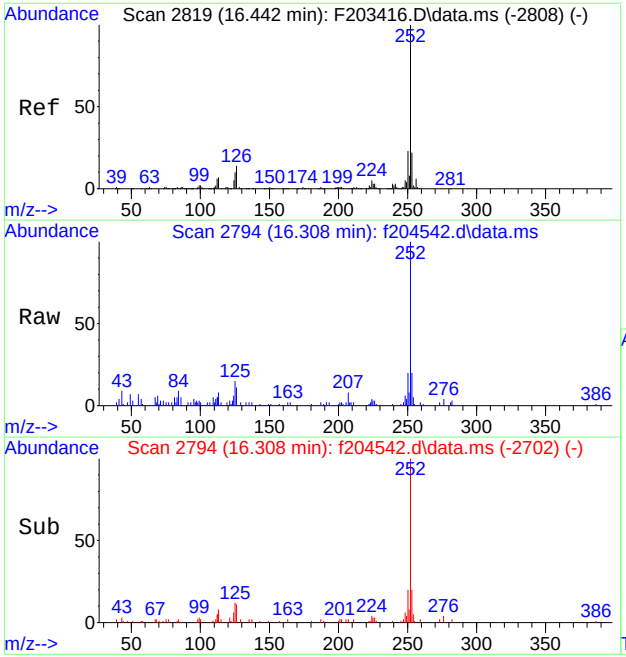


#90
Chrysene
Concen: 2.27 ppm
RT: 14.064 min Scan# 2374
Delta R.T. -0.016 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:228 Resp: 41369

Ion	Ratio	Lower	Upper
228	100		
226	27.6	0.0	57.7
229	26.1	0.0	49.6

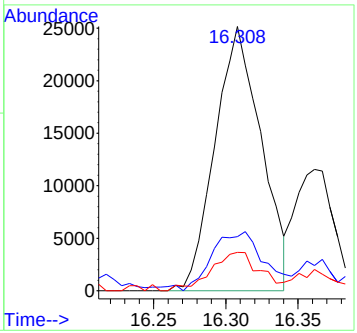


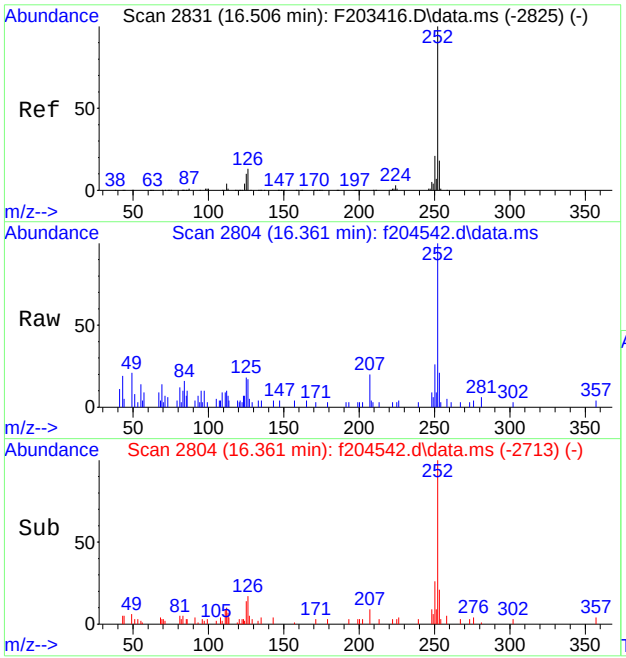


#94
Benzo[b]fluoranthene
Concen: 3.13 ppm
RT: 16.308 min Scan# 2794
Delta R.T. -0.011 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:252 Resp: 56102

Ion	Ratio	Lower	Upper
252	100		
253	18.5	0.0	53.5
125	14.5	0.0	41.5

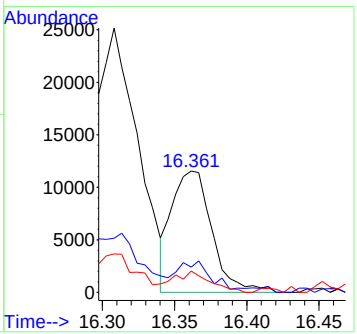


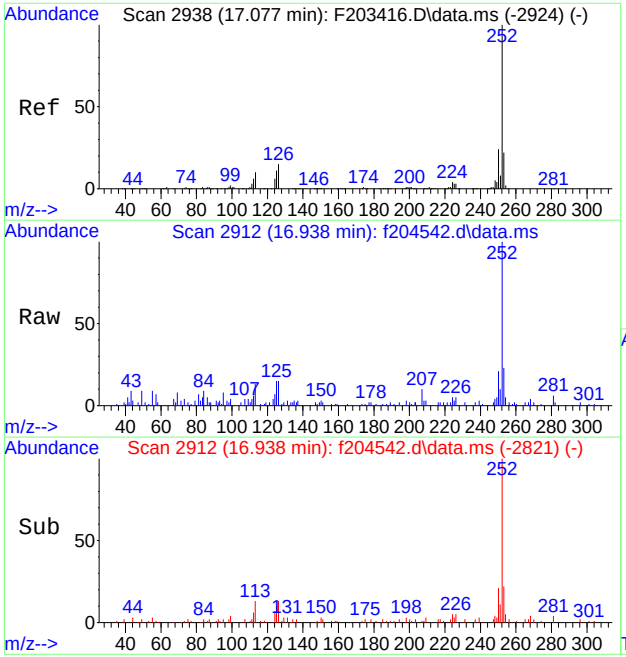


#95
Benzo[k]fluoranthene
Concen: 1.25 ppm
RT: 16.361 min Scan# 2804
Delta R.T. -0.016 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:252 Resp: 22434

Ion	Ratio	Lower	Upper
252	100		
253	18.0	0.0	50.7
125	18.1	0.0	39.8

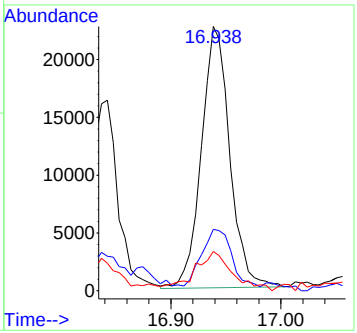


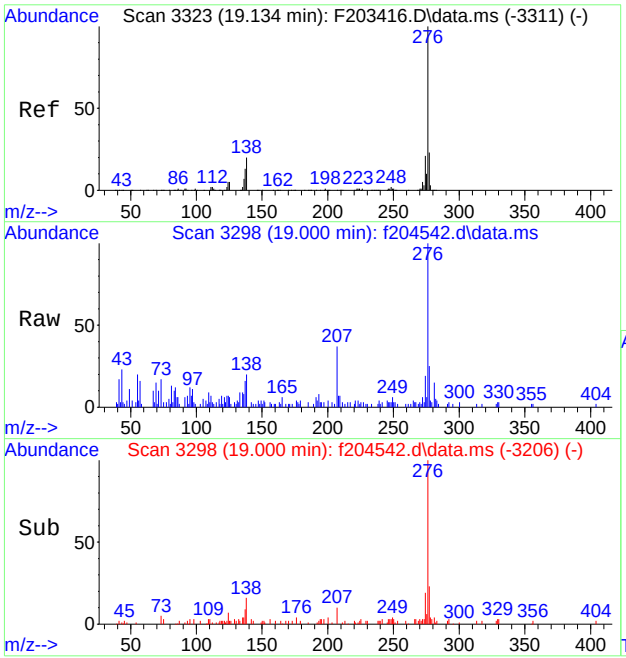


#96
Benzo[a]pyrene
Concen: 2.46 ppm
RT: 16.938 min Scan# 2912
Delta R.T. -0.016 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:252 Resp: 40775

Ion	Ratio	Lower	Upper
252	100		
253	21.4	0.0	52.3
125	13.1	0.0	41.7

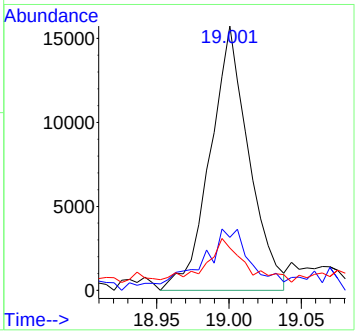


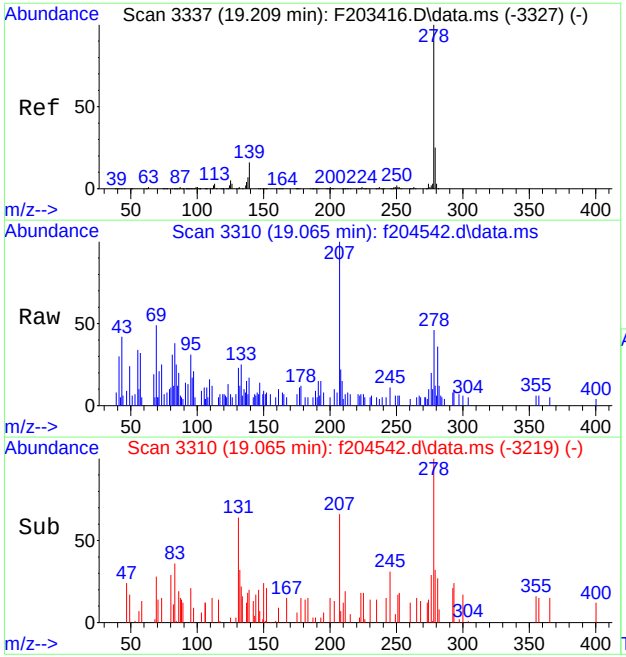


#97
Indeno[1,2,3-cd]pyrene
Concen: 2.68 ppm
RT: 19.000 min Scan# 3298
Delta R.T. -0.011 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:276 Resp: 29230

Ion	Ratio	Lower	Upper
276	100		
138	17.9	0.0	50.1
137	11.4	0.0	44.0

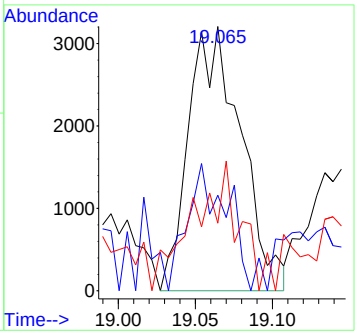


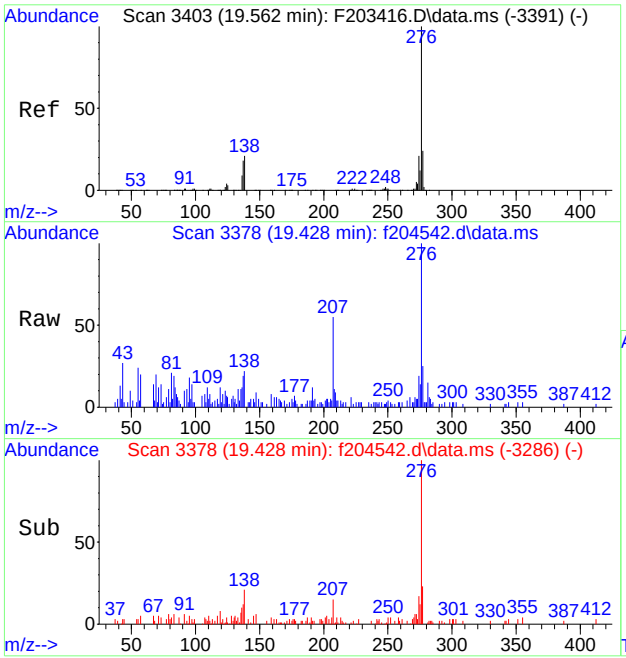


#99
Dibenz[a,h]anthracene
Concen: 0.92 ppm
RT: 19.065 min Scan# 3310
Delta R.T. -0.016 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:278 Resp: 7580

Ion	Ratio	Lower	Upper
278	100		
139	20.2	0.0	46.5
279	7.5	0.0	55.8

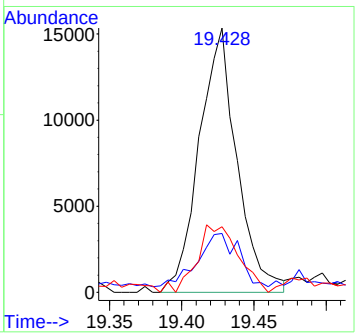




#101
Benzo[g,h,i]perylene
Concen: 1.69 ppm
RT: 19.428 min Scan# 3378
Delta R.T. -0.011 min
Lab File: f204542.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:276 Resp: 27817

Ion	Ratio	Lower	Upper
276	100		
138	20.2	0.0	52.2
277	23.8	0.0	52.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204541.d
Acq On : 23 Dec 2021 9:20 am
Operator : chriss2
Sample : jd36682-10 Inst : GCMSF
Misc : op37283,ef8967,31.1,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 28 00:05:34 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

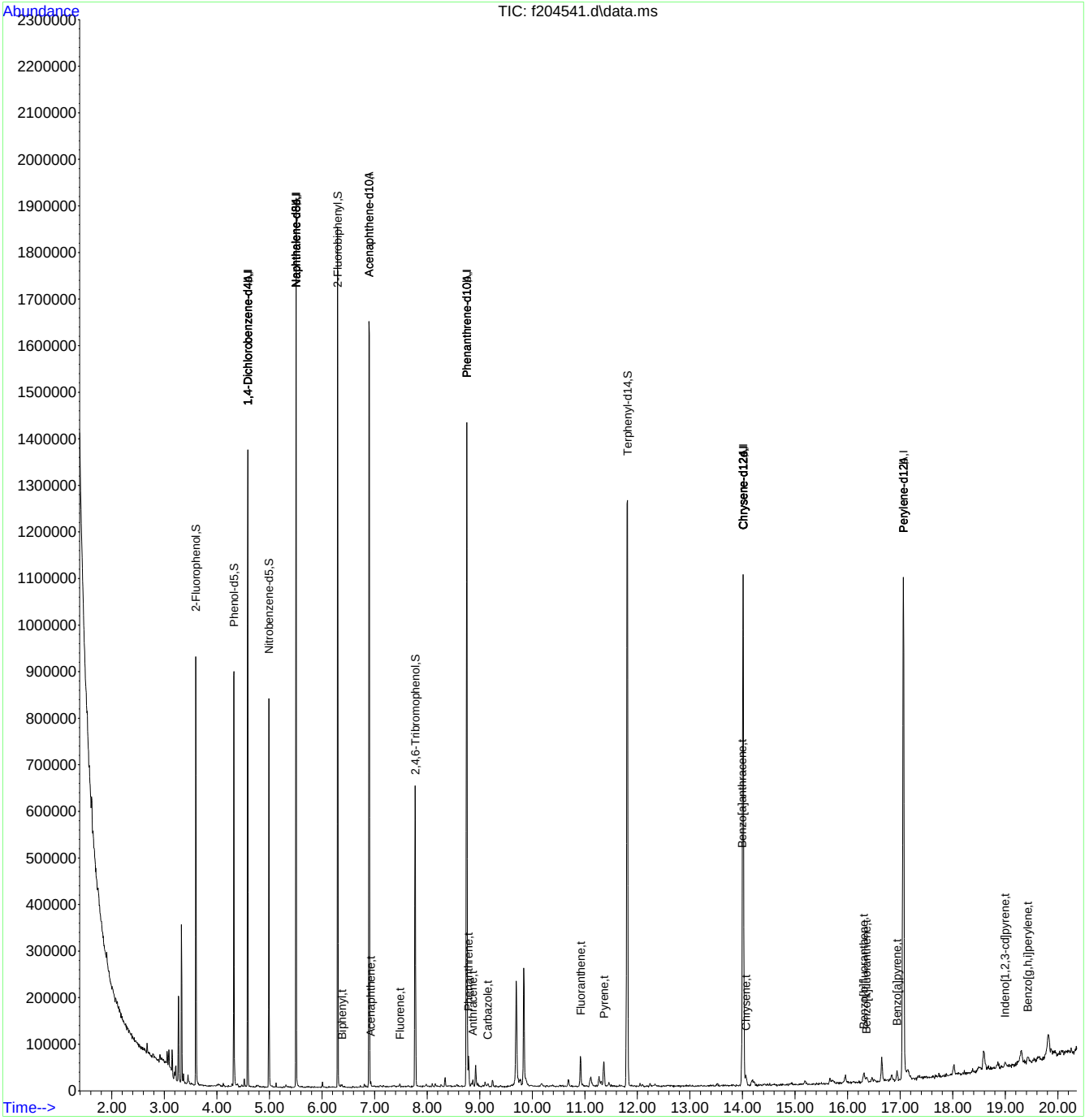
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.587	152	162318	40.00	ppm	0.00
24) Naphthalene-d8	5.506	136	624130	40.00	ppm	0.00
46) Acenaphthene-d10	6.895	164	356249	40.00	ppm	0.00
69) Phenanthrene-d10	8.754	188	667503	40.00	ppm	0.00
83) Chrysene-d12	14.011	240	664972	40.00	ppm	0.00
92) Perylene-d12	17.061	264	683898	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.587	152	162318	40.00	ppm	0.00
112) Naphthalene-d8A	5.506	136	624130	40.00	ppm	0.00
121) Acenaphthene-d10A	6.895	164	356249	40.00	ppm	0.00
132) Phenanthrene-d10A	8.754	188	667503	40.00	ppm	0.00
147) Chrysene-d12A	14.011	240	664972	40.00	ppm	0.00
154) Perylene-d12A	17.061	264	683898	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.587	152	162318	40.00	ppm	0.00
159) Phenanthrene-d10b	8.754	188	667503	40.00	ppm	0.00
161) Naphthalene-d8b	5.506	136	624130	40.00	ppm	0.00
163) Naphthalene-d8c	5.506	136	624130	40.00	ppm	0.00
168) 1,4-Dichlorobenzene-d4c	4.587	152	162318	40.00	ppm	0.00
170) Chrysene-d12c	14.011	240	664972	40.00	ppm	0.00
172) Chrysene-d12d	14.011	240	664972	40.00	ppm	0.00
174) Naphthalene-d8d	5.506	136	624130	40.00	ppm	0.00
176) Chrysene-d12e	14.011	240	664972	40.00	ppm	0.00
178) Perylene-d12b	17.061	264	683898	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.599	112	206708	40.57	ppm	0.00
Spiked Amount 50.000			Recovery = 81.14%			
8) Phenol-d5	4.325	99	268168	38.92	ppm	0.00
Spiked Amount 50.000			Recovery = 77.84%			
25) Nitrobenzene-d5	4.993	82	236150	37.90	ppm	0.00
Spiked Amount 50.000			Recovery = 75.80%			
51) 2-Fluorobiphenyl	6.297	172	494659	41.35	ppm	0.00
Spiked Amount 50.000			Recovery = 82.70%			
73) 2,4,6-Tribromophenol	7.776	330	88192	45.97	ppm	0.00
Spiked Amount 50.000			Recovery = 91.94%			
86) Terphenyl-d14	11.810	244	736054	45.40	ppm	0.00
Spiked Amount 50.000			Recovery = 90.80%			
Target Compounds						Qvalue
53) Biphenyl	6.382	154	1209	0.09	ppm	89
59) Acenaphthene	6.927	153	1985	0.20	ppm	90
66) Fluorene	7.483	166	1569	0.14	ppm	89
77) Phenanthrene	8.786	178	27941	1.63	ppm	97
78) Anthracene	8.866	178	7324	0.42	ppm	95
79) Carbazole	9.155	167	3844	0.24	ppm	79
81) Fluoranthene	10.923	202	37672	1.94	ppm	97
85) Pyrene	11.366	202	32588	1.57	ppm	97
88) Benzo[a]anthracene	13.995	228	16624	0.84	ppm	95
90) Chrysene	14.064	228	14188	0.73	ppm	92
94) Benzo[b]fluoranthene	16.308	252	17873	0.92	ppm	90
95) Benzo[k]fluoranthene	16.356	252	6148	0.32	ppm	91
96) Benzo[a]pyrene	16.938	252	13708	0.76	ppm	90
97) Indeno[1,2,3-cd]pyrene	18.995	276	8533	1.05	ppm	85
101) Benzo[g,h,i]perylene	19.423	276	7689	0.43	ppm	85

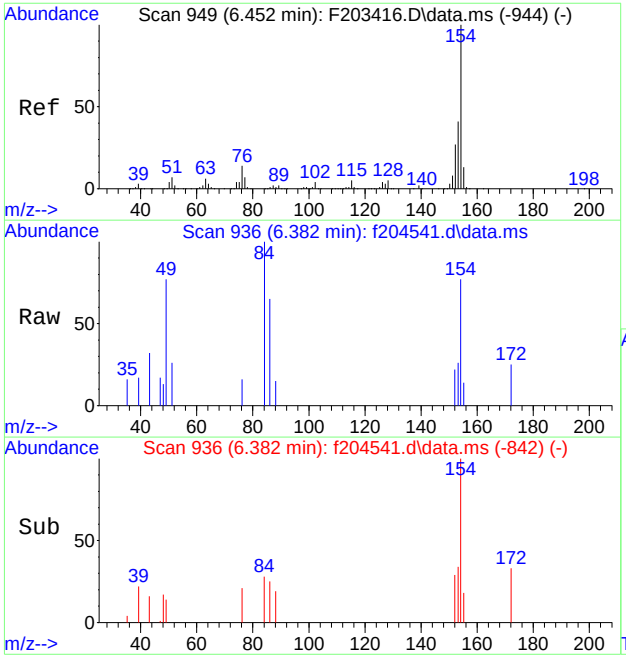
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204541.d
Acq On : 23 Dec 2021 9:20 am
Operator : chriss2
Sample : jd36682-10 Inst : GCMSF
Misc : op37283,ef8967,31.1,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 28 00:05:34 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

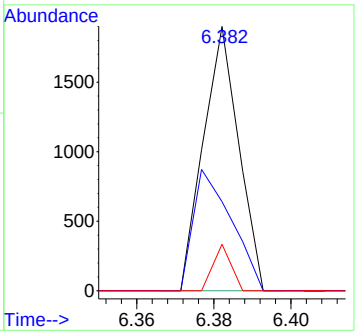


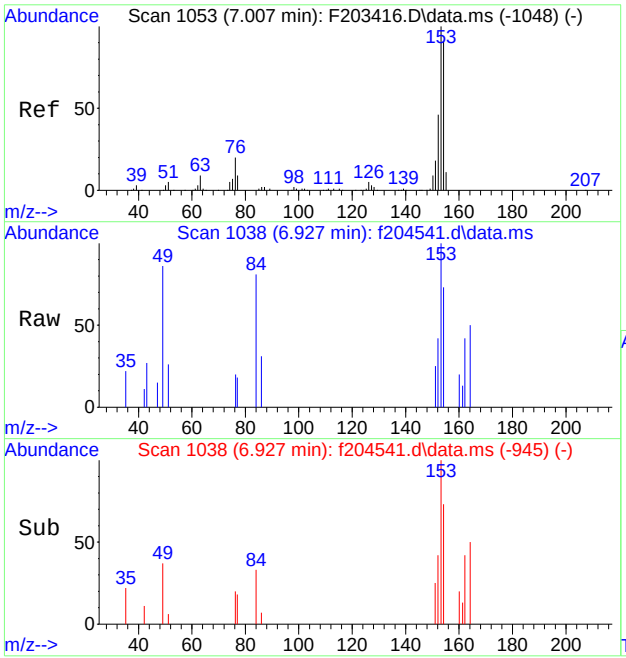


#53
Biphenyl
Concen: 0.09 ppm
RT: 6.382 min Scan# 936
Delta R.T. -0.000 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:154 Resp: 1209

Ion	Ratio	Lower	Upper
154	100		
153	33.8	10.7	70.7
155	17.6	0.0	43.2

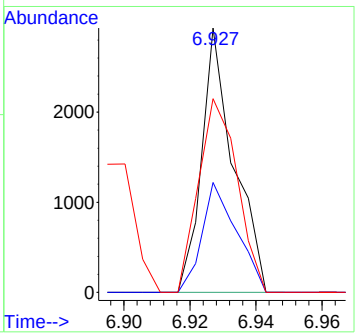


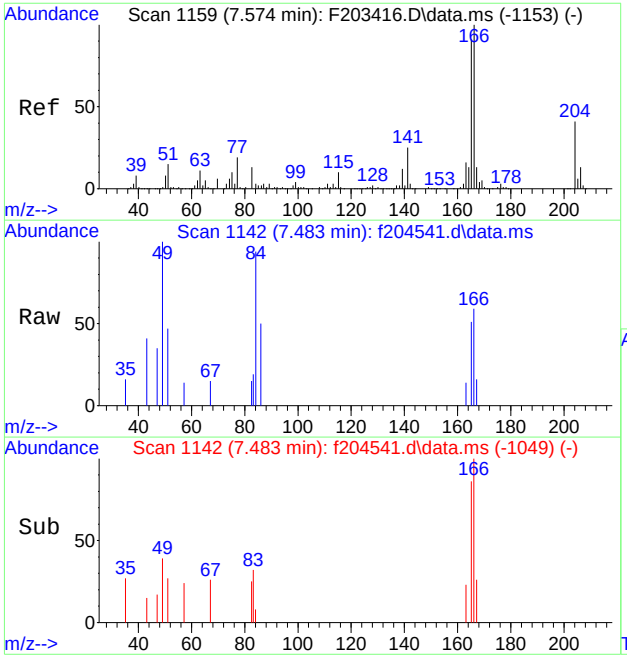


#59
Acenaphthene
Concen: 0.20 ppm
RT: 6.927 min Scan# 1038
Delta R.T. -0.005 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:153 Resp: 1985

Ion	Ratio	Lower	Upper
153	100		
152	41.6	15.3	75.3
154	73.3	54.4	114.4

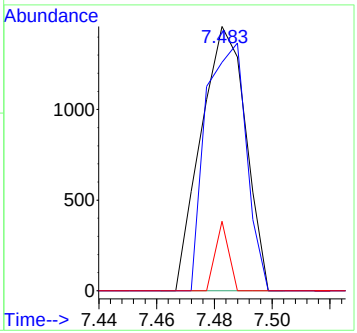


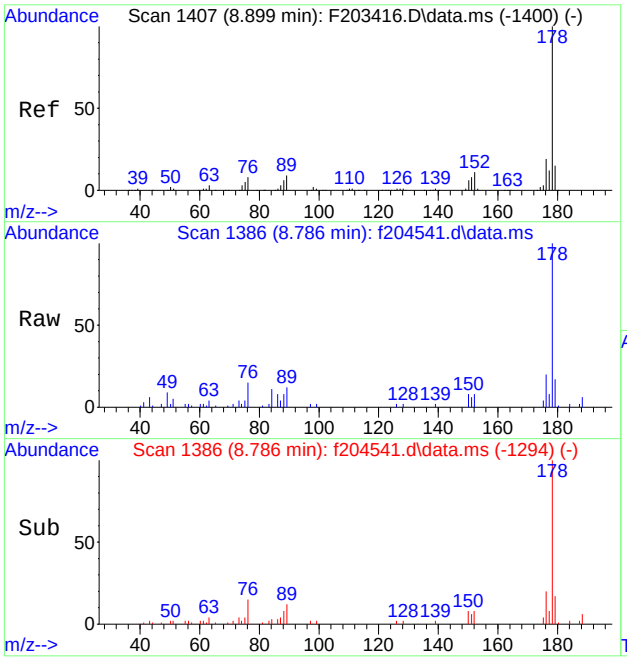


#66
Fluorene
Concen: 0.14 ppm
RT: 7.483 min Scan# 1142
Delta R.T. -0.005 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:166 Resp: 1569

Ion	Ratio	Lower	Upper
166	100		
165	86.4	63.8	123.8
167	26.3	0.0	43.7

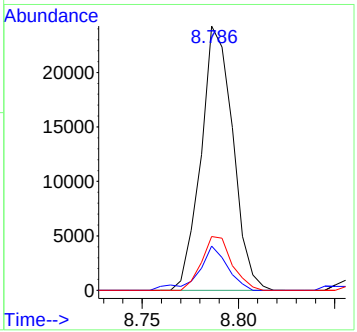


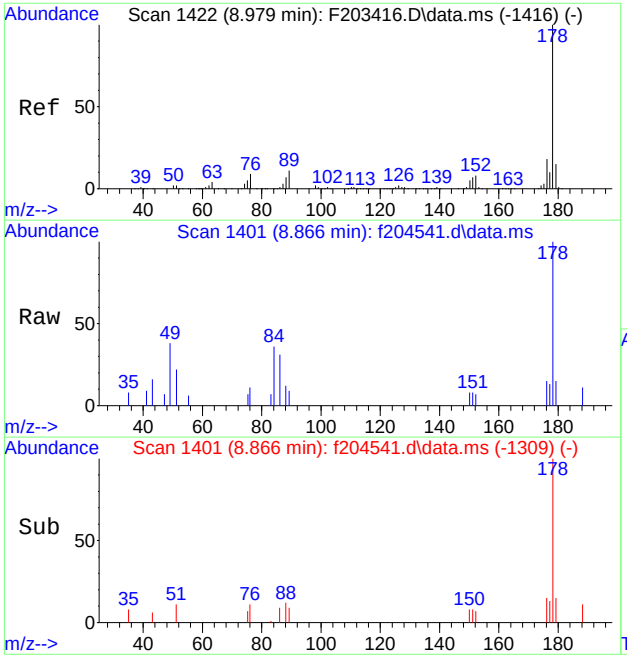


#77
Phenanthrene
Concen: 1.63 ppm
RT: 8.786 min Scan# 1386
Delta R.T. -0.011 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:178 Resp: 27941

Ion	Ratio	Lower	Upper
178	100		
179	16.0	0.0	45.1
176	20.4	0.0	48.7

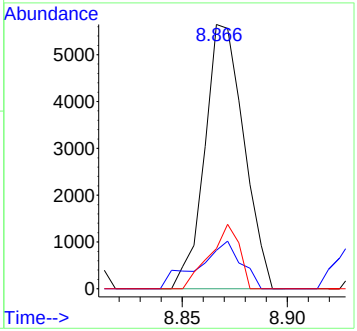


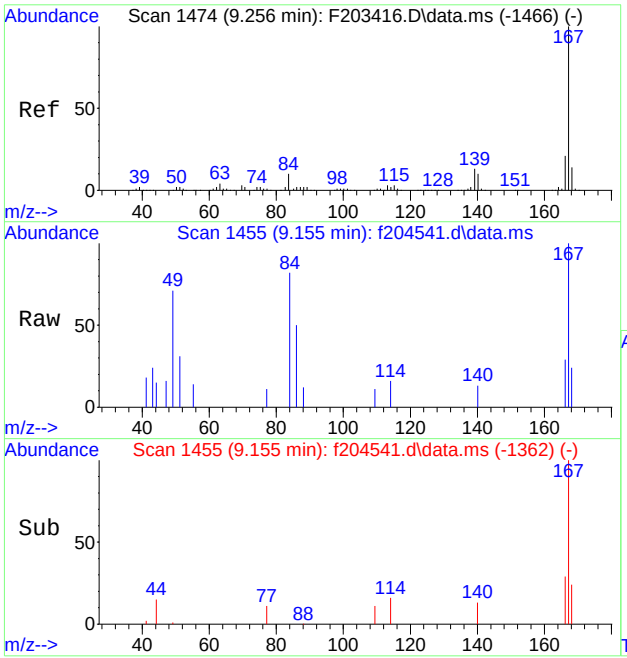


#78
Anthracene
Concen: 0.42 ppm
RT: 8.866 min Scan# 1401
Delta R.T. -0.011 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:178 Resp: 7324

Ion	Ratio	Lower	Upper
178	100		
179	14.6	0.0	46.0
176	15.2	0.0	47.9

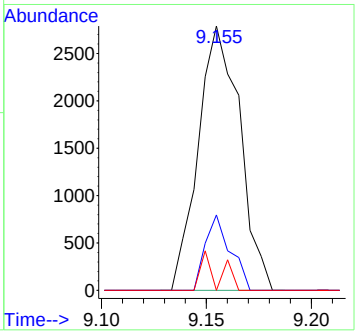


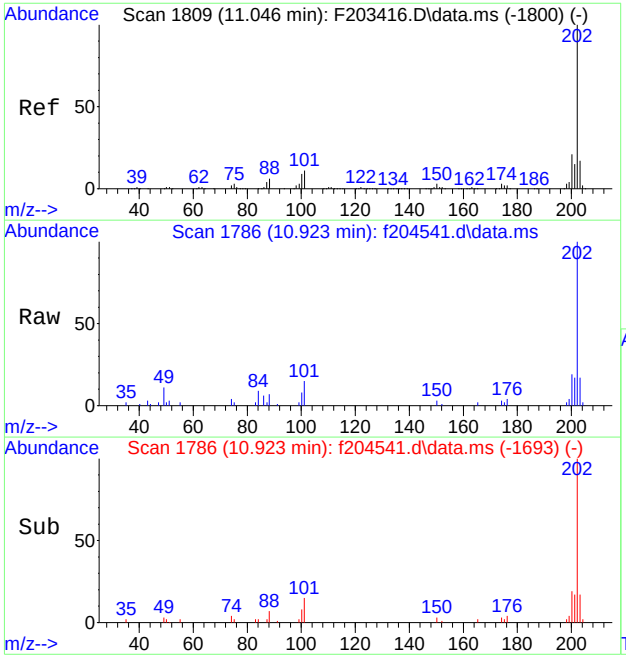


#79
Carbazole
Concen: 0.24 ppm
RT: 9.155 min Scan# 1455
Delta R.T. -0.005 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:167 Resp: 3844

Ion	Ratio	Lower	Upper
167	100		
166	28.6	0.0	51.1
139	0.0	0.0	41.7

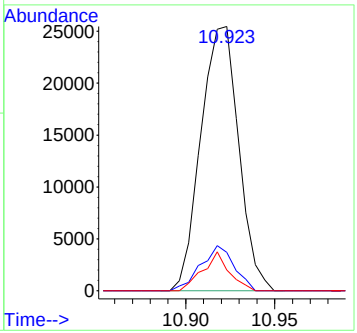


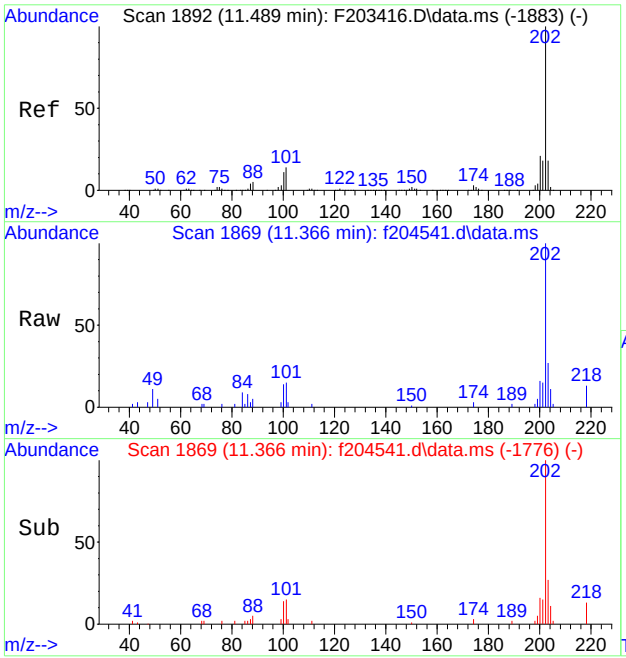


#81
Fluoranthene
Concen: 1.94 ppm
RT: 10.923 min Scan# 1786
Delta R.T. -0.005 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:202 Resp: 37672

Ion	Ratio	Lower	Upper
202	100		
101	14.5	0.0	43.2
100	7.8	0.0	38.9

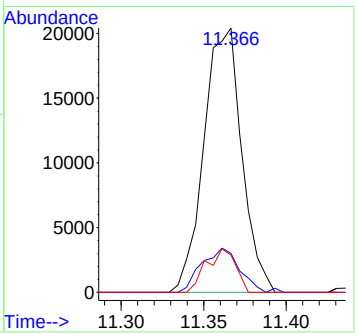


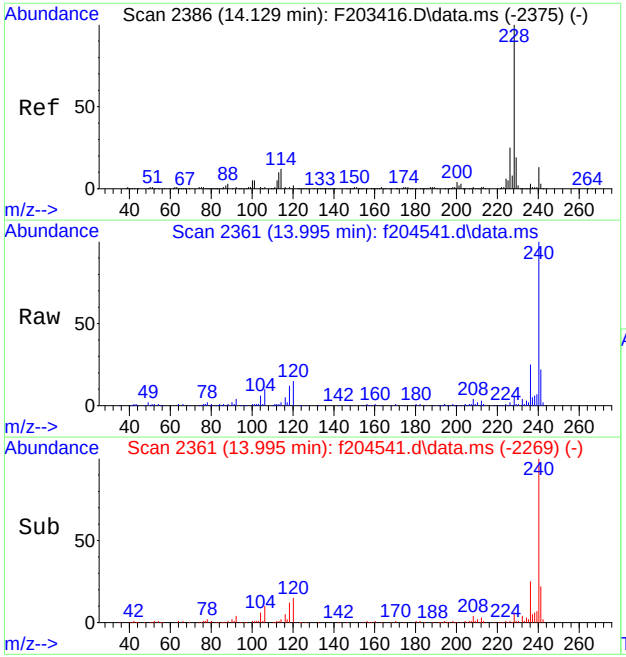


#85
Pyrene
Concen: 1.57 ppm
RT: 11.366 min Scan# 1869
Delta R.T. -0.005 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:202 Resp: 32588

Ion	Ratio	Lower	Upper
202	100		
101	14.8	0.0	43.8
100	14.1	0.0	42.3

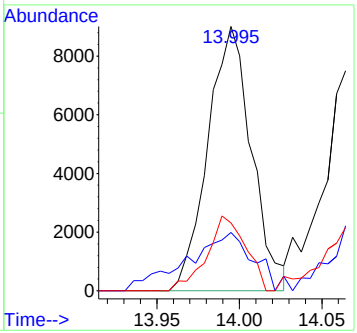


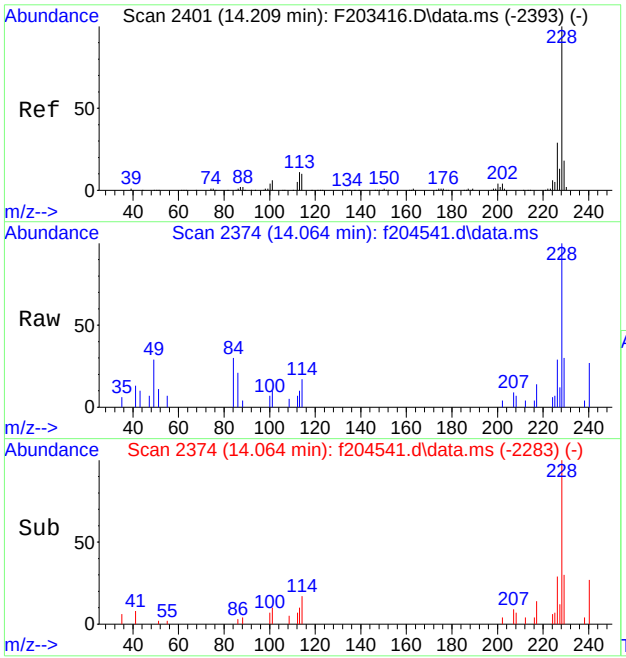


#88
Benzo[a]anthracene
Concen: 0.84 ppm
RT: 13.995 min Scan# 2361
Delta R.T. -0.011 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:228 Resp: 16624

Ion	Ratio	Lower	Upper
228	100		
229	16.4	0.0	49.7
226	24.1	0.0	55.8

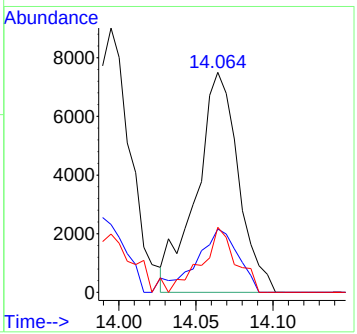


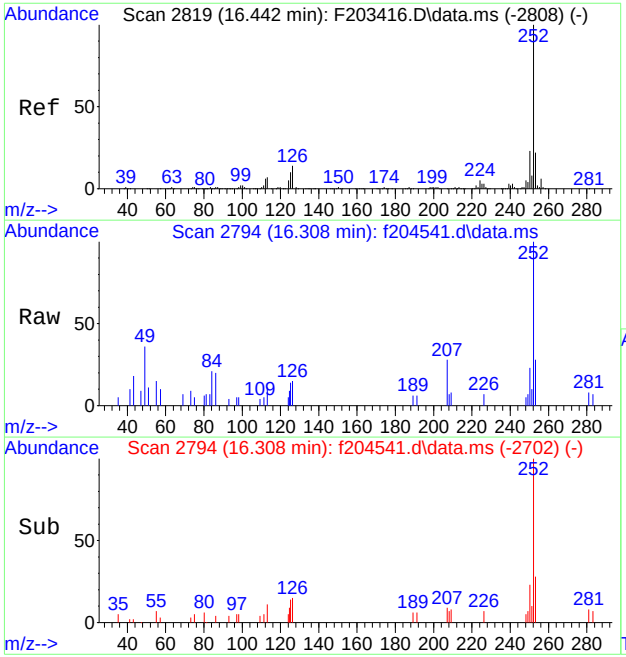


#90
Chrysene
Concen: 0.73 ppm
RT: 14.064 min Scan# 2374
Delta R.T. -0.016 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:228 Resp: 14188

Ion	Ratio	Lower	Upper
228	100		
226	27.1	0.0	57.7
229	27.9	0.0	49.6

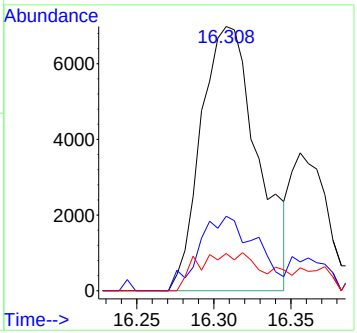


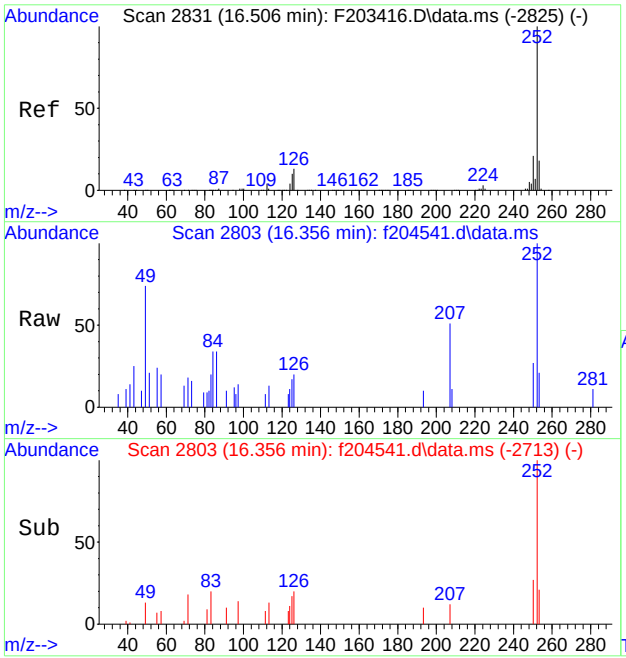


#94
Benzo[b]fluoranthene
Concen: 0.92 ppm
RT: 16.308 min Scan# 2794
Delta R.T. -0.011 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:252 Resp: 17873

Ion	Ratio	Lower	Upper
252	100		
253	30.7	0.0	53.5
125	12.2	0.0	41.5

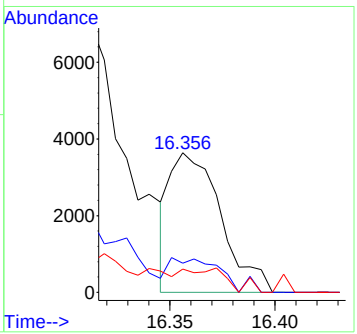


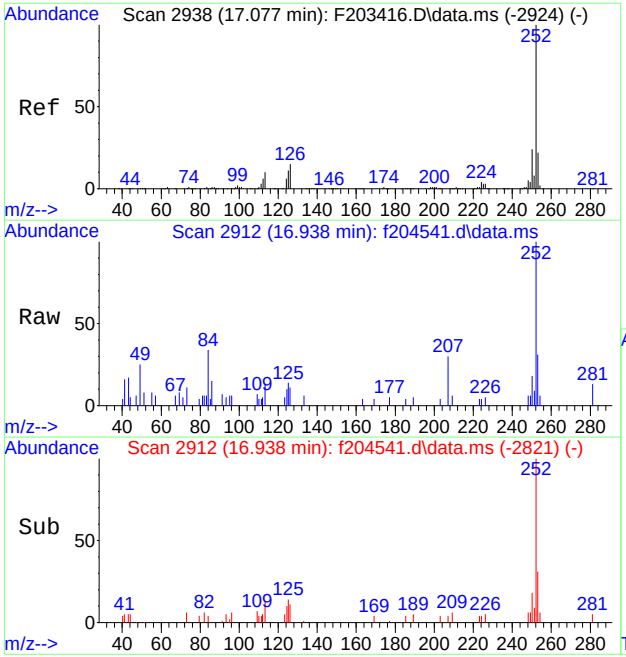


#95
Benzo[k]fluoranthene
Concen: 0.32 ppm
RT: 16.356 min Scan# 2803
Delta R.T. -0.021 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:252 Resp: 6148

Ion	Ratio	Lower	Upper
252	100		
253	23.4	0.0	50.7
125	3.6	0.0	39.8

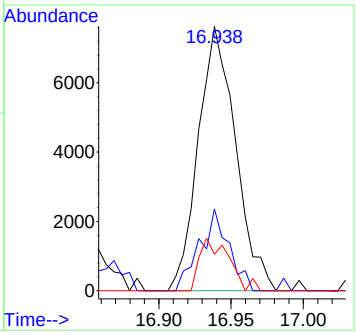


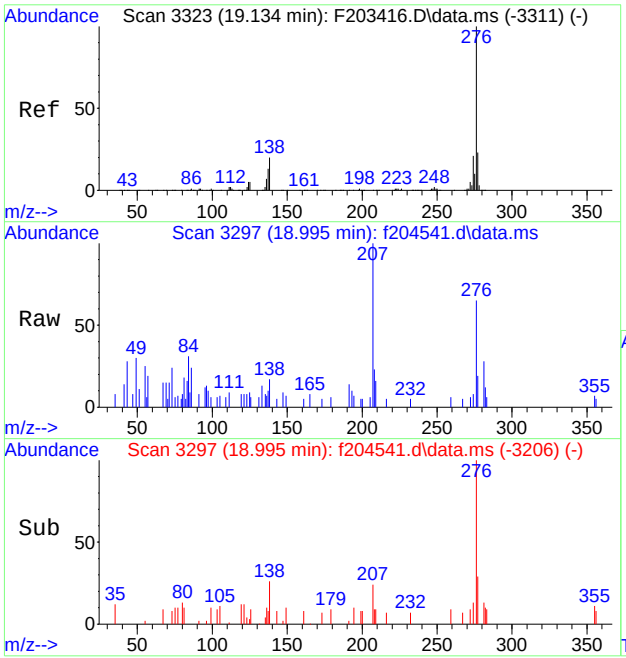


#96
Benzo[a]pyrene
Concen: 0.76 ppm
RT: 16.938 min Scan# 2912
Delta R.T. -0.016 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:252 Resp: 13708

Ion	Ratio	Lower	Upper
252	100		
253	28.6	0.0	52.3
125	13.8	0.0	41.7

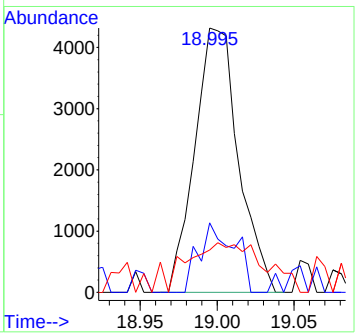


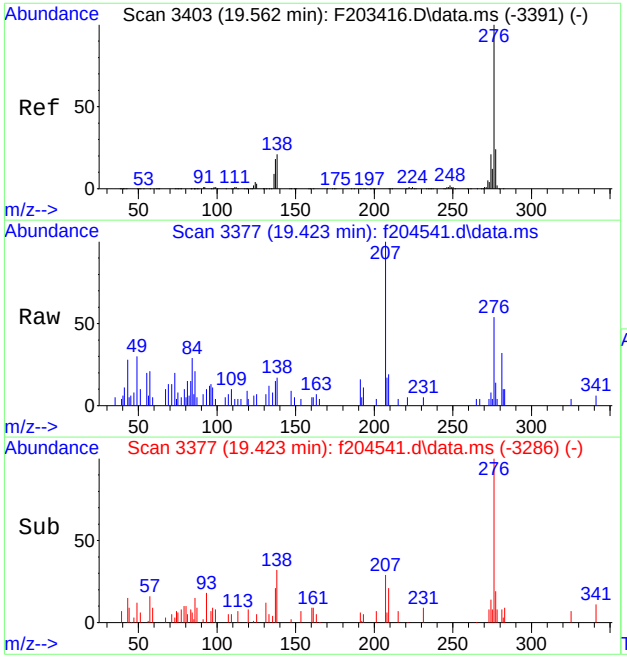


#97
Indeno[1,2,3-cd]pyrene
Concen: 1.05 ppm
RT: 18.995 min Scan# 3297
Delta R.T. -0.016 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:276 Resp: 8533

Ion	Ratio	Lower	Upper
276	100		
138	26.3	0.0	50.1
137	6.6	0.0	44.0

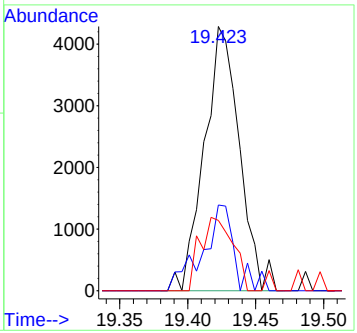




#101
Benzo[g,h,i]perylene
Concen: 0.43 ppm
RT: 19.423 min Scan# 3377
Delta R.T. -0.016 min
Lab File: f204541.d
Acq: 23 Dec 2021 9:20 am

Tgt Ion:276 Resp: 7689

Ion	Ratio	Lower	Upper
276	100		
138	32.4	0.0	52.2
277	26.6	0.0	52.4



Quantitation Report (QT Reviewed)

Data Path : Z:\svoa-gcms\completed\00_2021\12_dec\12-28-2021\altheam\ef8967\
Data File : f204540.d
Acq On : 23 Dec 2021 8:56 am
Operator : chriss2
Sample : jd36682-11
Misc : op37283,ef8967,31.6,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 29 10:51:25 2021
Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

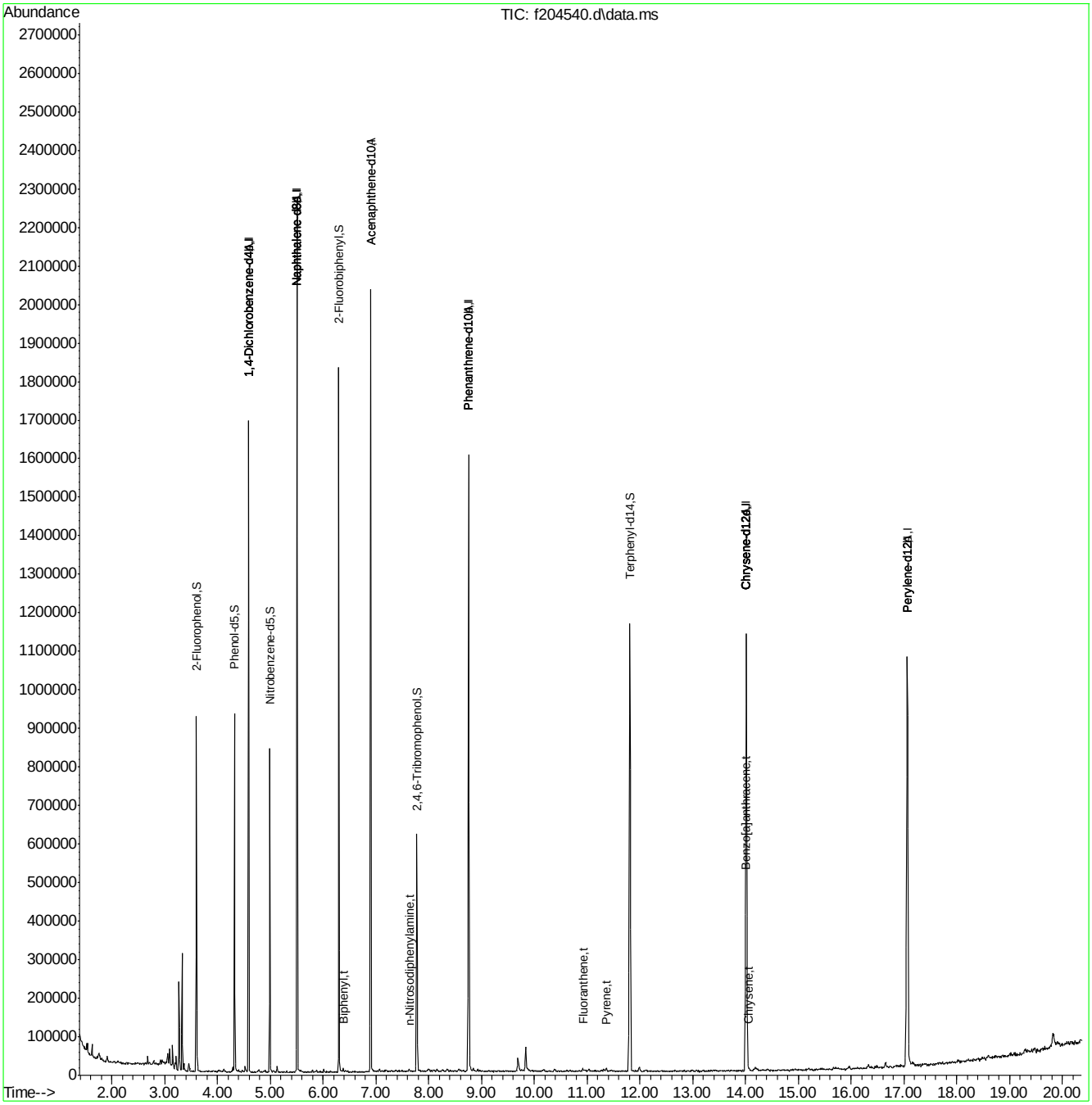
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.587	152	193171	40.00	ppm	0.00
24) Naphthalene-d8	5.506	136	753583	40.00	ppm	0.00
46) Acenaphthene-d10	6.900	164	419498	40.00	ppm	0.00
69) Phenanthrene-d10	8.754	188	779448	40.00	ppm	0.00
83) Chrysene-d12	14.011	240	710040	40.00	ppm	0.00
92) Perylene-d12	17.061	264	685478	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.587	152	193171	40.00	ppm	0.00
112) Naphthalene-d8A	5.506	136	753583	40.00	ppm	0.00
121) Acenaphthene-d10A	6.900	164	419498	40.00	ppm	0.00
132) Phenanthrene-d10A	8.754	188	779448	40.00	ppm	0.00
147) Chrysene-d12A	14.011	240	710040	40.00	ppm	0.00
154) Perylene-d12A	17.061	264	685478	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.587	152	193171	40.00	ppm	0.00
159) Phenanthrene-d10b	8.754	188	779448	40.00	ppm	0.00
161) Naphthalene-d8b	5.506	136	753583	40.00	ppm	0.00
163) Naphthalene-d8c	5.506	136	753583	40.00	ppm	0.00
168) 1,4-Dichlorobenzene-d4c	4.587	152	193171	40.00	ppm	0.00
170) Chrysene-d12c	14.011	240	710040	40.00	ppm	0.00
172) Chrysene-d12d	14.011	240	710040	40.00	ppm	0.00
174) Naphthalene-d8d	5.506	136	753583	40.00	ppm	0.00
176) Chrysene-d12e	14.011	240	710040	40.00	ppm	0.00
178) Perylene-d12b	17.061	264	685478	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.599	112	201374	33.21	ppm	0.00
Spiked Amount 50.000			Recovery = 66.42%			
8) Phenol-d5	4.320	99	267034	32.57	ppm	0.00
Spiked Amount 50.000			Recovery = 65.14%			
25) Nitrobenzene-d5	4.988	82	232220	30.87	ppm	0.00
Spiked Amount 50.000			Recovery = 61.74%			
51) 2-Fluorobiphenyl	6.297	172	480898	34.14	ppm	0.00
Spiked Amount 50.000			Recovery = 68.28%			
73) 2,4,6-Tribromophenol	7.777	330	83065	37.08	ppm	0.00
Spiked Amount 50.000			Recovery = 74.16%			
86) Terphenyl-d14	11.805	244	693053	40.03	ppm	0.00
Spiked Amount 50.000			Recovery = 80.06%			
Target Compounds						Qvalue
53) Biphenyl	6.382	154	2588	0.17	ppm	94
71) n-Nitrosodiphenylamine	7.632	169	1540	0.12	ppm	93
81) Fluoranthene	10.918	202	5499	0.24	ppm	98
85) Pyrene	11.356	202	4645	0.21	ppm	90
88) Benzo[a]anthracene	13.995	228	4683	0.22	ppm	71
90) Chrysene	14.059	228	2858	0.14	ppm	72

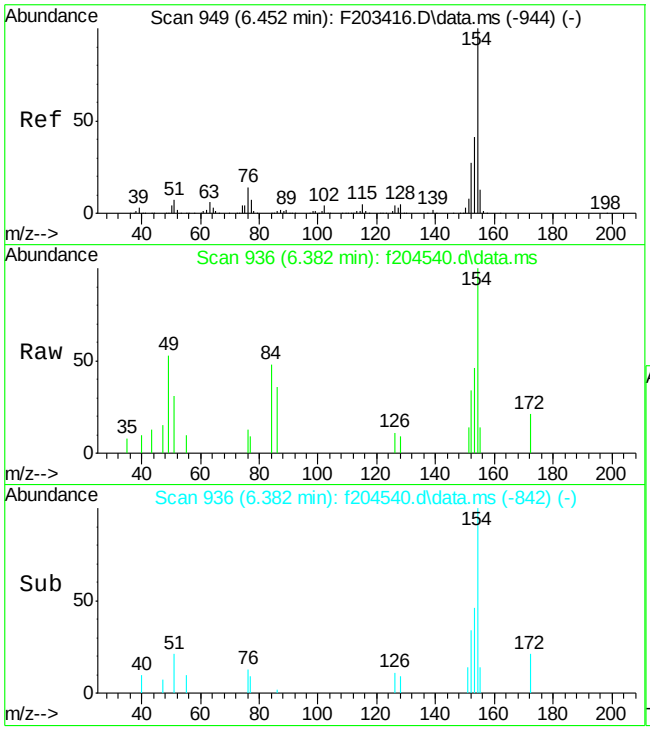
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\svoa-gcms\completed\00_2021\12_dec\12-28-2021\altheam\ef8967\
Data File : f204540.d
Acq On : 23 Dec 2021 8:56 am
Operator : chriss2
Sample : jd36682-11
Misc : op37283,ef8967,31.6,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 29 10:51:25 2021
Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

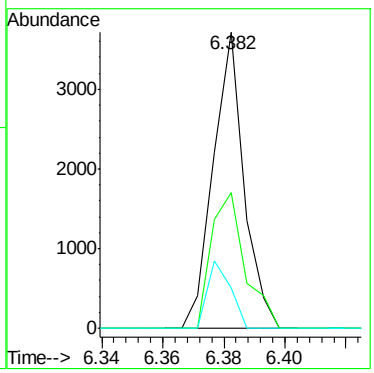


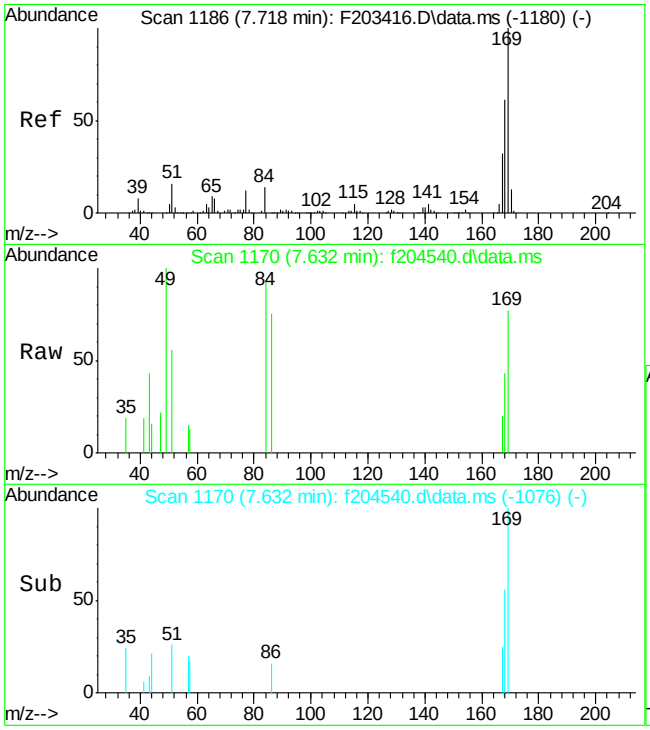


#53
Biphenyl
Concen: 0.17 ppm
RT: 6.382 min Scan# 936
Delta R.T. 0.000 min
Lab File: f204540.d
Acq: 23 Dec 2021 8:56 am

Tgt Ion:154 Resp: 2588

Ion	Ratio	Lower	Upper
154	100		
153	45.8	10.7	70.7
155	13.6	0.0	43.2

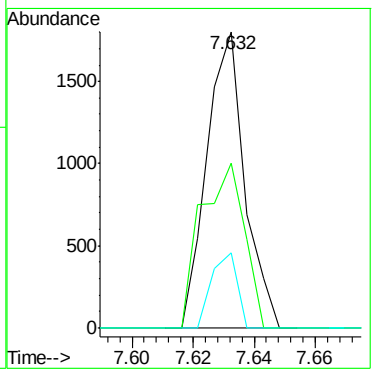


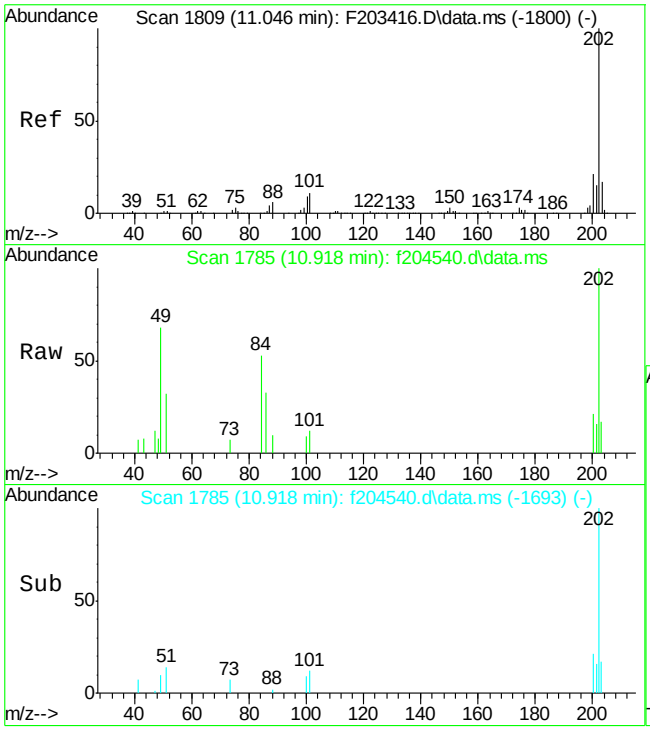


#71
n-Nitrosodiphenylamine
Concen: 0.12 ppm
RT: 7.632 min Scan# 1170
Delta R.T. 0.000 min
Lab File: f204540.d
Acq: 23 Dec 2021 8:56 am

Tgt Ion:169 Resp: 1540

Ion	Ratio	Lower	Upper
169	100		
168	55.6	29.2	89.2
167	25.5	2.3	62.3

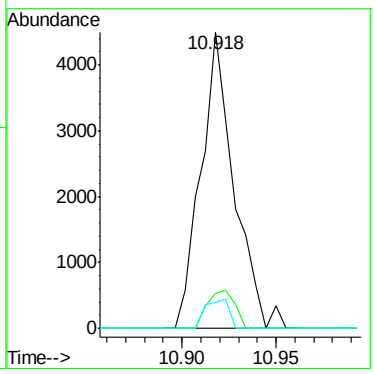


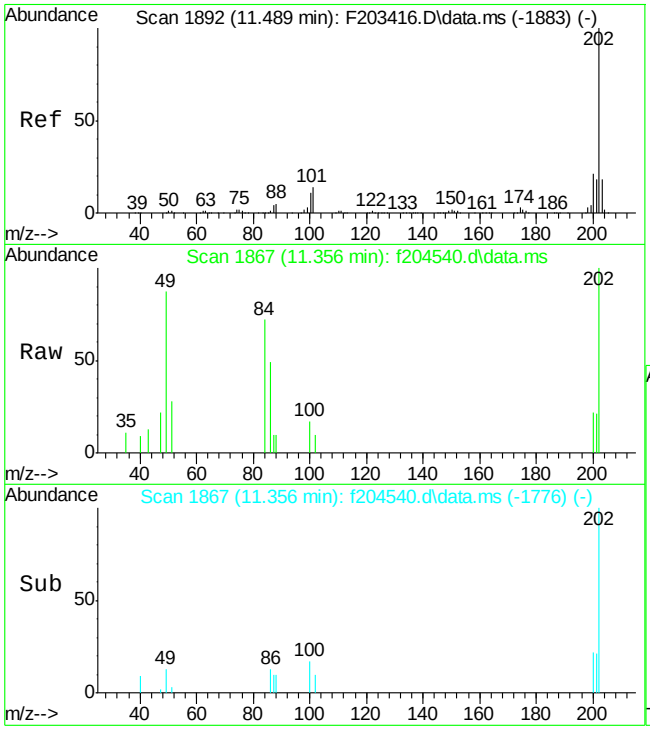


#81
Fluoranthene
Concen: 0.24 ppm
RT: 10.918 min Scan# 1785
Delta R.T. -0.011 min
Lab File: f204540.d
Acq: 23 Dec 2021 8:56 am

Tgt Ion:202 Resp: 5499

Ion	Ratio	Lower	Upper
202	100		
101	11.9	0.0	43.2
100	8.7	0.0	38.9

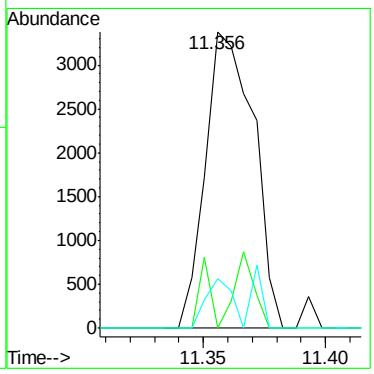


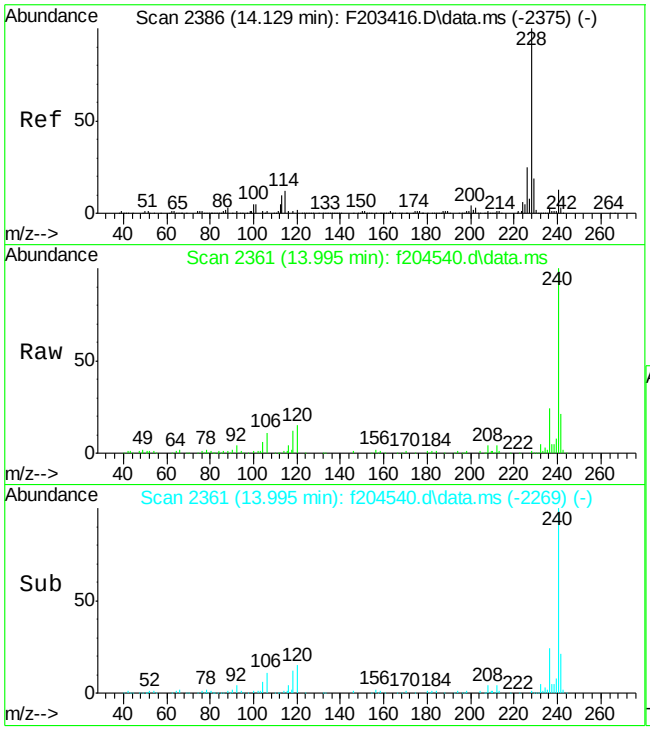


#85
Pyrene
Concen: 0.21 ppm
RT: 11.356 min Scan# 1867
Delta R.T. -0.016 min
Lab File: f204540.d
Acq: 23 Dec 2021 8:56 am

Tgt Ion:202 Resp: 4645

Ion	Ratio	Lower	Upper
202	100		
101	10.3	0.0	43.8
100	16.8	0.0	42.3

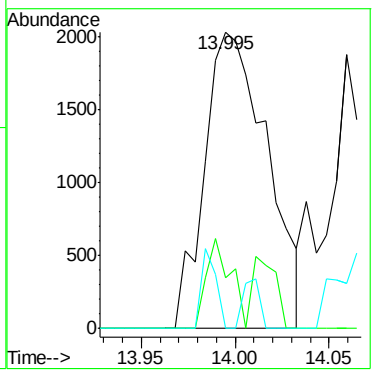


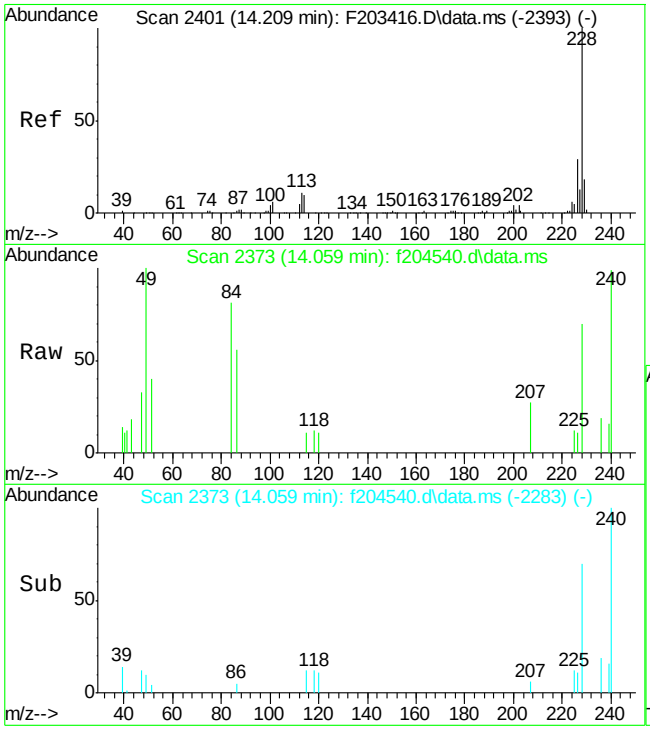


#88
Benzo[a]anthracene
Concen: 0.22 ppm
RT: 13.995 min Scan# 2361
Delta R.T. -0.011 min
Lab File: f204540.d
Acq: 23 Dec 2021 8:56 am

Tgt Ion:228 Resp: 4683

Ion	Ratio	Lower	Upper
228	100		
229	20.0	0.0	49.7
226	0.0	0.0	55.8

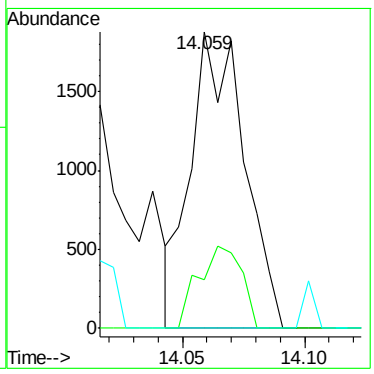




#90
Chrysene
Concen: 0.14 ppm
RT: 14.059 min Scan# 2373
Delta R.T. -0.021 min
Lab File: f204540.d
Acq: 23 Dec 2021 8:56 am

Tgt Ion:228 Resp: 2858

Ion	Ratio	Lower	Upper
228	100		
226	18.9	0.0	57.7
229	0.0	0.0	49.6



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/10/22 17:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p3826\
Data File : 5p80854a.D
Acq On : 7 Jan 2022 9:46 am
Operator : chriss2
Sample : jd36682-2
Misc : op37474,e5p3826,270,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:47:00 2022
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Jan 07 11:27:13 2022
Response via : Initial Calibration

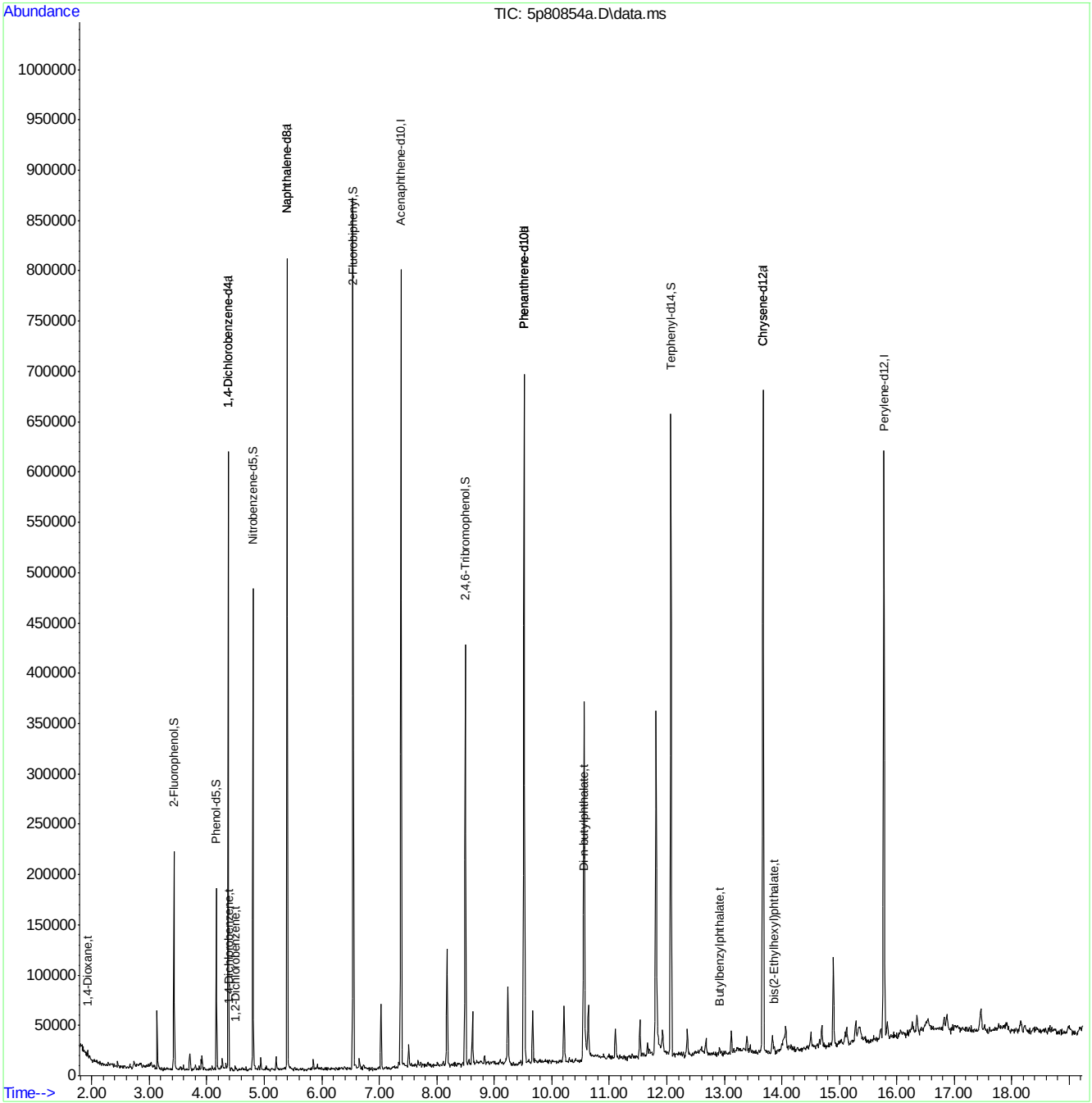
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.373	152	76043	8.00	ppm	0.00
24) Naphthalene-d8	5.399	136	294242	8.00	ppm	0.00
46) Acenaphthene-d10	7.381	164	185363	8.00	ppm	0.00
69) Phenanthrene-d10	9.518	188	300222	8.00	ppm	0.00
84) Chrysene-d12	13.674	240	272713	8.00	ppm	0.00
93) Perylene-d12	15.779	264	254629	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.373	152	76043	8.00	ppm	0.00
105) Phenanthrene-d10a	9.518	188	300222	8.00	ppm	0.00
107) Naphthalene-d8a	5.399	136	294242	8.00	ppm	0.00
109) Chrysene-d12a	13.674	240	272713	8.00	ppm	0.00
111) Phenanthrene-d10b	9.518	188	300222	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.427	112	48383	3.93	ppm	0.00
Spiked Amount 10.000			Recovery = 39.30%			
8) Phenol-d5	4.165	99	39109	2.48	ppm	0.00
Spiked Amount 10.000			Recovery = 24.80%			
25) Nitrobenzene-d5	4.800	82	101356	9.15	ppm	0.00
Spiked Amount 10.000			Recovery = 91.50%			
51) 2-Fluorobiphenyl	6.547	172	267611	8.80	ppm	0.00
Spiked Amount 10.000			Recovery = 88.00%			
74) 2,4,6-Tribromophenol	8.497	330	38238	10.02	ppm	0.00
Spiked Amount 10.000			Recovery = 100.20%			
87) Terphenyl-d14	12.071	244	226941	6.68	ppm	0.00
Spiked Amount 10.000			Recovery = 66.80%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.926	88	1338m	0.25	ppm	
15) 1,4-Dichlorobenzene	4.384	146	1547	0.11	ppm	85
17) 1,2-Dichlorobenzene	4.496	146	689m	0.05	ppm	
81) Di-n-butylphthalate	10.549	149	2942	0.06	ppm	92
88) Butylbenzylphthalate	12.921	149	2206	0.10	ppm	65
92) bis(2-Ethylhexyl)phtha...	13.866	149	3588	0.13	ppm	84

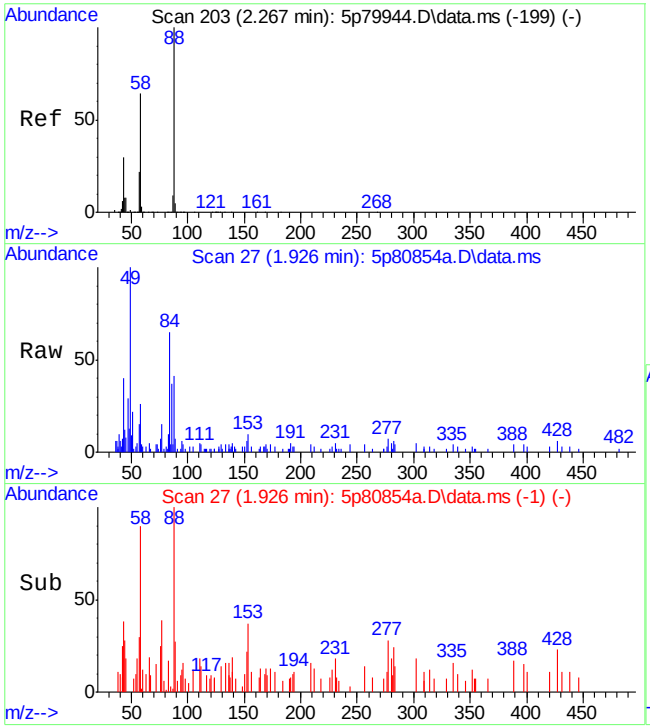
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p3826\
Data File : 5p80854a.D
Acq On : 7 Jan 2022 9:46 am
Operator : chriss2
Sample : jd36682-2
Misc : op37474,e5p3826,270,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 07 11:47:00 2022
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Jan 07 11:27:13 2022
Response via : Initial Calibration

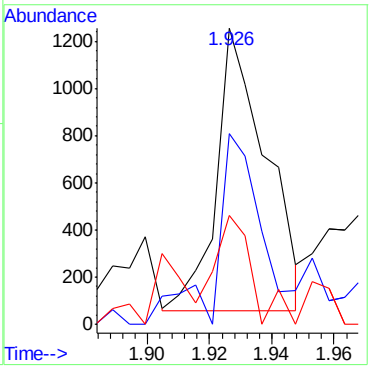


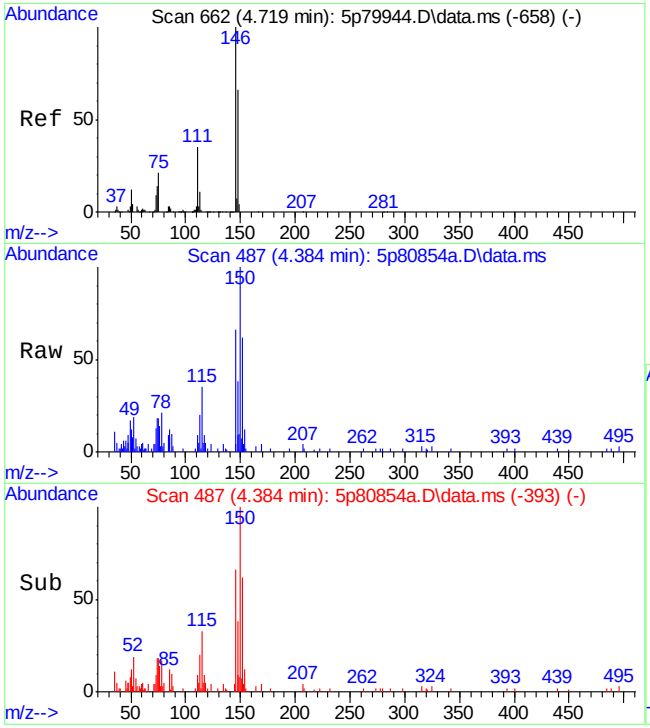


#2
1,4-Dioxane
Concen: 0.25 ppm m
RT: 1.926 min Scan# 27
Delta R.T. 0.016 min
Lab File: 5p80854a.D
Acq: 7 Jan 22 9:46 am

Tgt Ion: 88 Resp: 1338

Ion	Ratio	Lower	Upper
88	100		
58	64.4	33.6	93.6
57	36.6	0.0	52.3

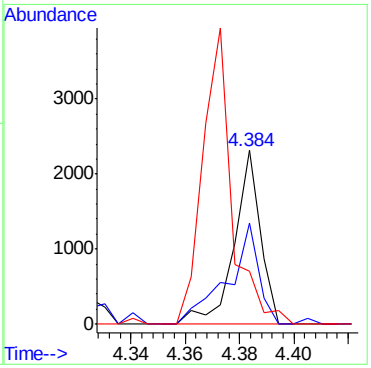


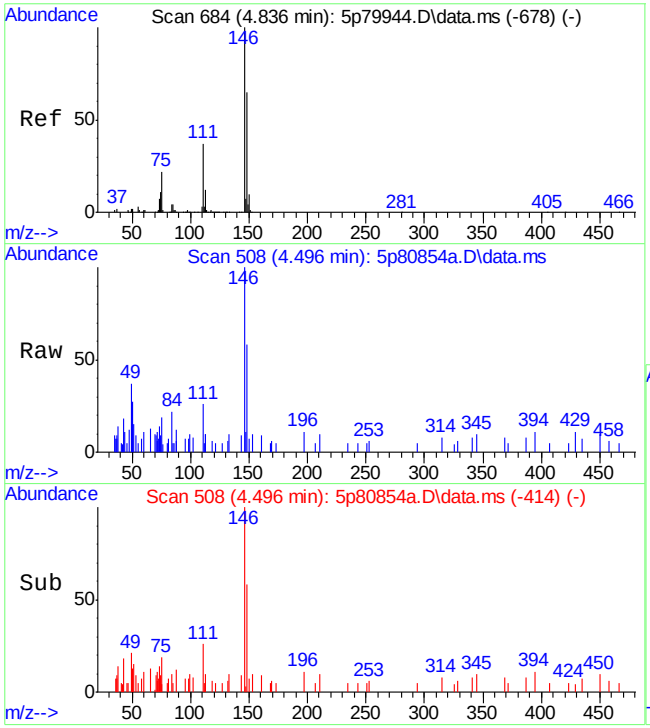


#15
1,4-Dichlorobenzene
Concen: 0.11 ppm
RT: 4.384 min Scan# 487
Delta R.T. -0.000 min
Lab File: 5p80854a.D
Acq: 7 Jan 22 9:46 am

Tgt Ion:146 Resp: 1547

Ion	Ratio	Lower	Upper
146	100		
148	58.9	36.2	96.2
113	30.9	0.0	41.1

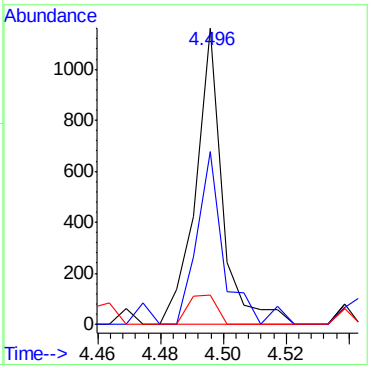


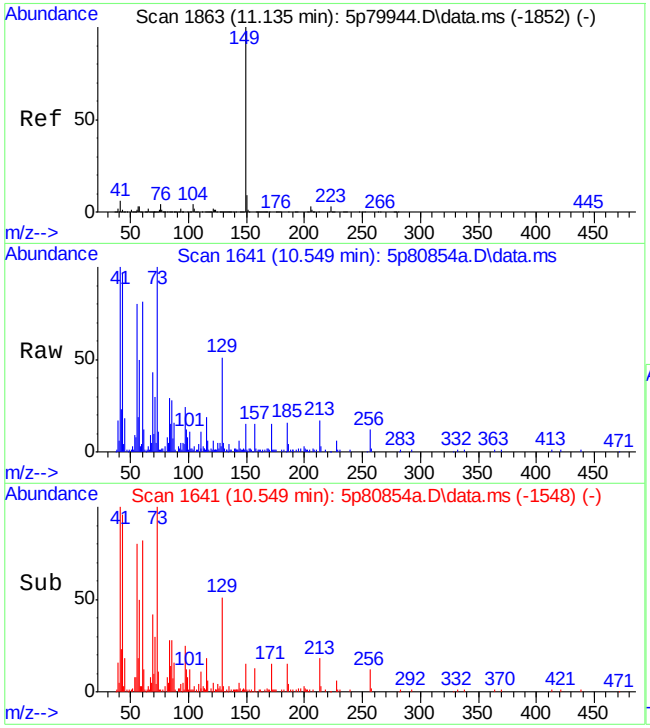


#17
1,2-Dichlorobenzene
Concen: 0.05 ppm m
RT: 4.496 min Scan# 508
Delta R.T. -0.000 min
Lab File: 5p80854a.D
Acq: 7 Jan 22 9:46 am

Tgt Ion:146 Resp: 689

Ion	Ratio	Lower	Upper
146	100		
148	58.4	35.5	95.5
113	10.0	0.0	41.5

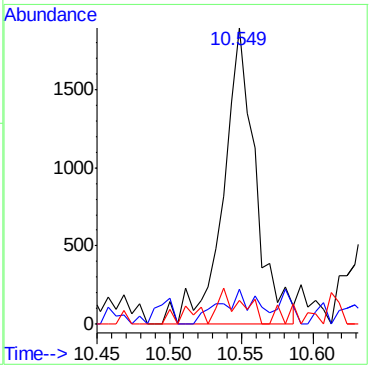


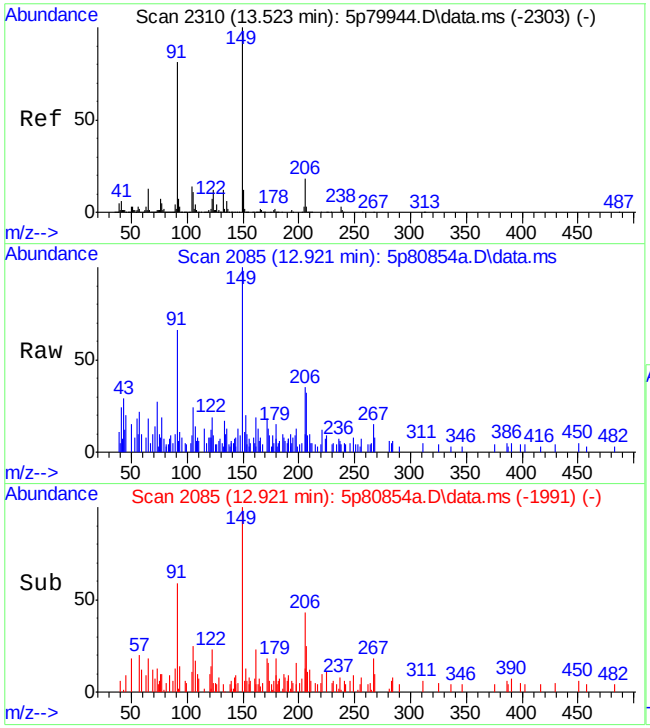


#81
Di-n-butylphthalate
Concen: 0.06 ppm
RT: 10.549 min Scan# 1641
Delta R.T. -0.005 min
Lab File: 5p80854a.D
Acq: 7 Jan 22 9:46 am

Tgt Ion:149 Resp: 2942

Ion	Ratio	Lower	Upper
149	100		
150	5.4	0.0	38.9
104	2.3	0.0	34.2

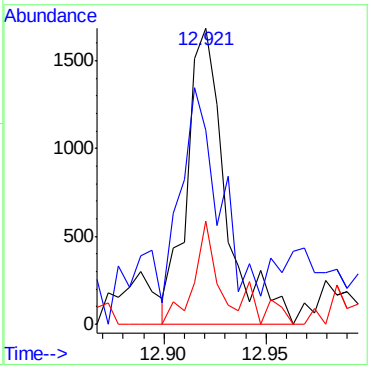


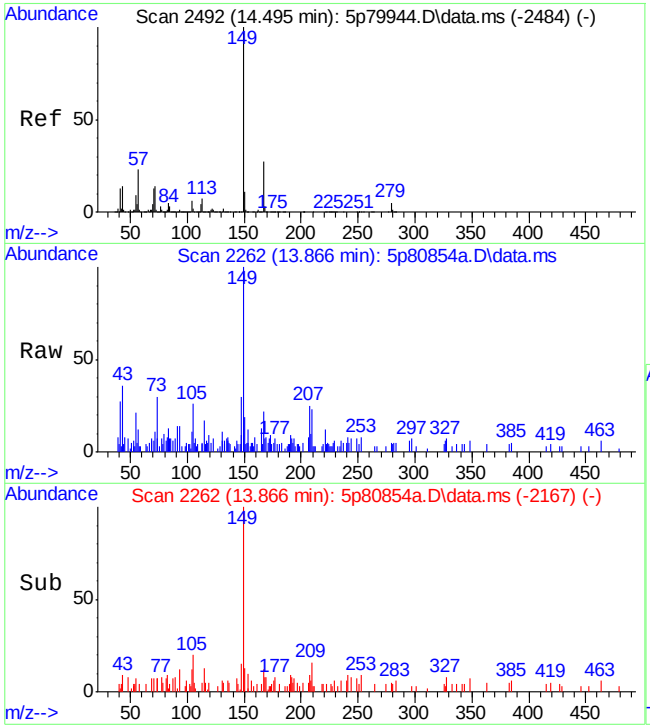


#88
Butylbenzylphthalate
Concen: 0.10 ppm
RT: 12.921 min Scan# 2085
Delta R.T. -0.000 min
Lab File: 5p80854a.D
Acq: 7 Jan 22 9:46 am

Tgt Ion:149 Resp: 2206

Ion	Ratio	Lower	Upper
149	100		
91	52.0	51.5	111.5
206	36.5	0.0	48.1

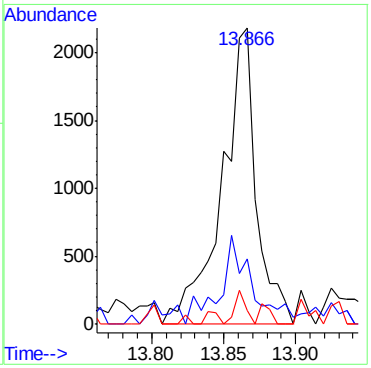




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.13 ppm
RT: 13.866 min Scan# 2262
Delta R.T. 0.005 min
Lab File: 5p80854a.D
Acq: 7 Jan 22 9:46 am

Tgt Ion:149 Resp: 3588

Ion	Ratio	Lower	Upper
149	100		
167	17.0	0.0	57.0
279	4.5	0.0	34.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p3826\
Data File : 5p80855.D
Acq On : 7 Jan 2022 10:12 am
Operator : chriss2
Sample : jd36682-3
Misc : op37474,e5p3826,260,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:48:23 2022
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Jan 07 11:27:13 2022
Response via : Initial Calibration

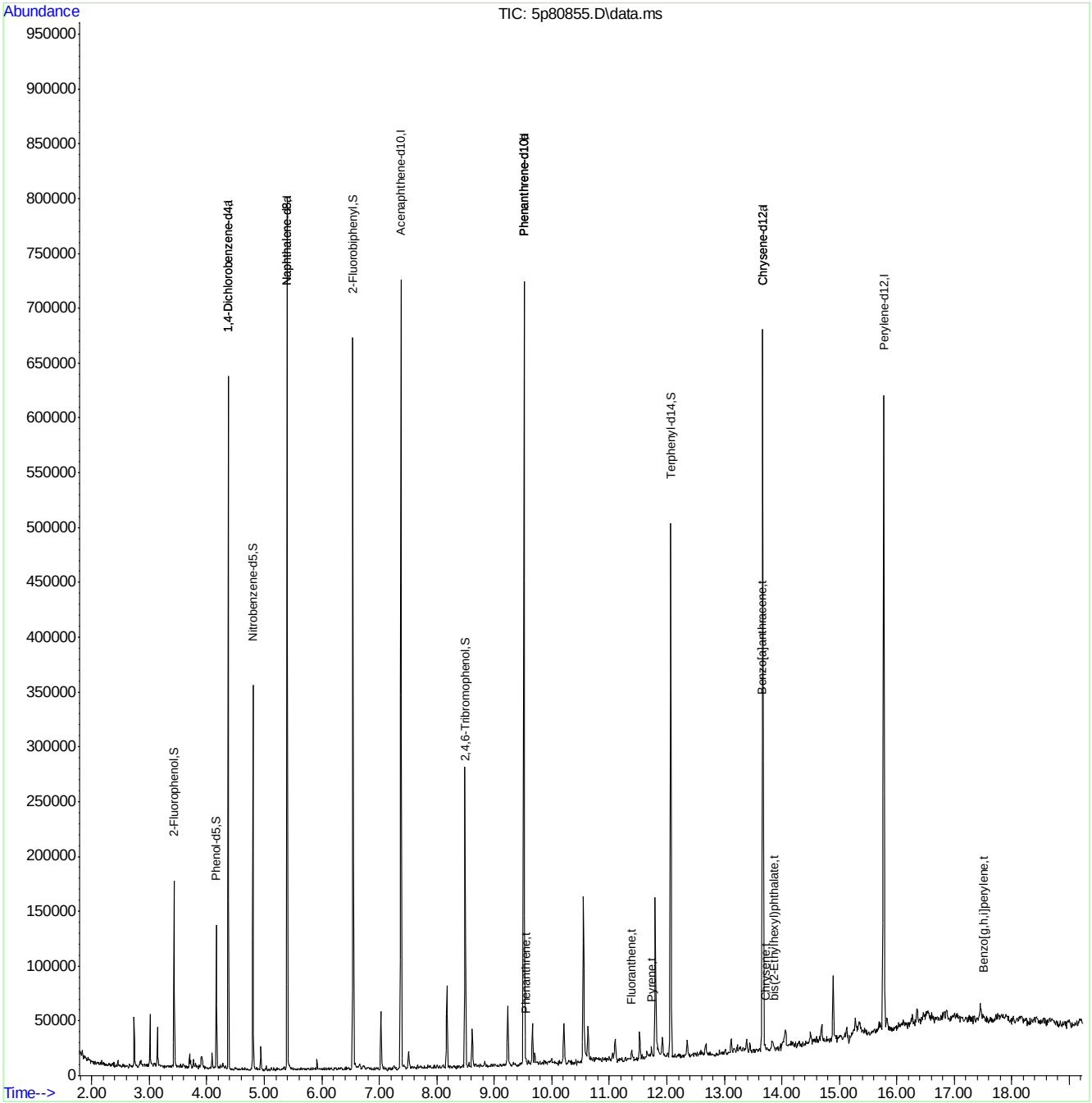
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.373	152	74466	8.00	ppm	0.00
24) Naphthalene-d8	5.399	136	294138	8.00	ppm	0.00
46) Acenaphthene-d10	7.381	164	169915	8.00	ppm	0.00
69) Phenanthrene-d10	9.518	188	302061	8.00	ppm	0.00
84) Chrysene-d12	13.669	240	275331	8.00	ppm	0.00
93) Perylene-d12	15.773	264	260646	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.373	152	74466	8.00	ppm	0.00
105) Phenanthrene-d10a	9.518	188	302061	8.00	ppm	0.00
107) Naphthalene-d8a	5.399	136	294138	8.00	ppm	0.00
109) Chrysene-d12a	13.669	240	275331	8.00	ppm	0.00
111) Phenanthrene-d10b	9.518	188	302061	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.433	112	37503	3.11	ppm	0.00
Spiked Amount 10.000			Recovery = 31.10%			
8) Phenol-d5	4.165	99	29121	1.88	ppm	0.00
Spiked Amount 10.000			Recovery = 18.80%			
25) Nitrobenzene-d5	4.800	82	71464	6.46	ppm	0.00
Spiked Amount 10.000			Recovery = 64.60%			
51) 2-Fluorobiphenyl	6.542	172	197934	7.10	ppm	0.00
Spiked Amount 10.000			Recovery = 71.00%			
74) 2,4,6-Tribromophenol	8.497	330	27904	7.27	ppm	0.00
Spiked Amount 10.000			Recovery = 72.70%			
87) Terphenyl-d14	12.066	244	177033	5.16	ppm	0.00
Spiked Amount 10.000			Recovery = 51.60%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
78) Phenanthrene	9.544	178	1289	0.03	ppm	85
82) Fluoranthene	11.393	202	3614	0.08	ppm	84
86) Pyrene	11.735	202	3455	0.07	ppm	94
89) Benzo[a]anthracene	13.658	228	2683	0.06	ppm	88
91) Chrysene	13.711	228	1498	0.04	ppm	69
92) bis(2-Ethylhexyl)phtha...	13.856	149	2474	0.09	ppm	81
102) Benzo[g,h,i]perylene	17.510	276	1561	0.04	ppm	75

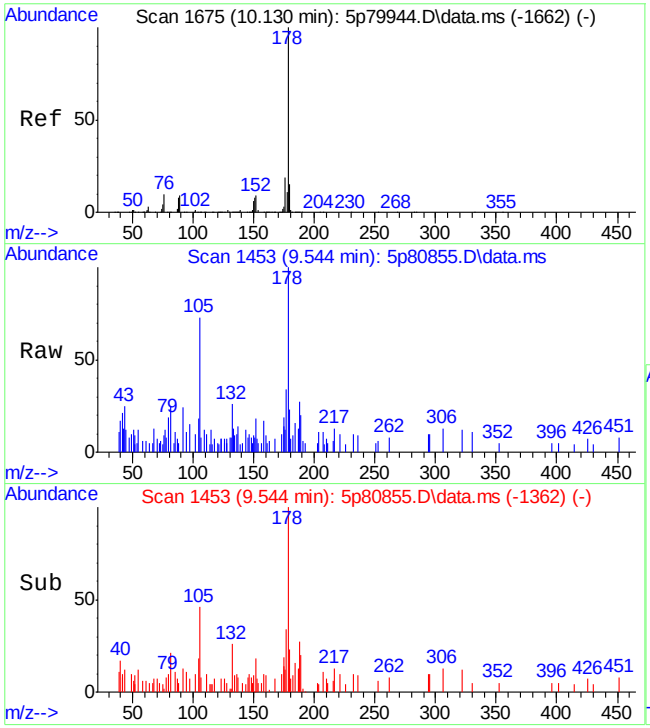
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p3826\
Data File : 5p80855.D
Acq On : 7 Jan 2022 10:12 am
Operator : chriss2
Sample : jd36682-3
Misc : op37474,e5p3826,260,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 07 11:48:23 2022
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Jan 07 11:27:13 2022
Response via : Initial Calibration

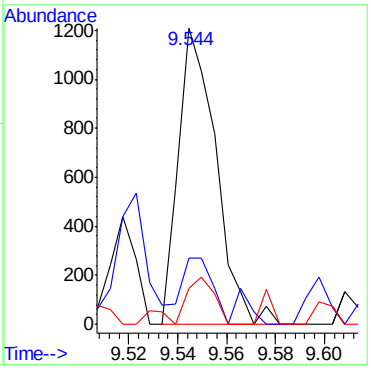


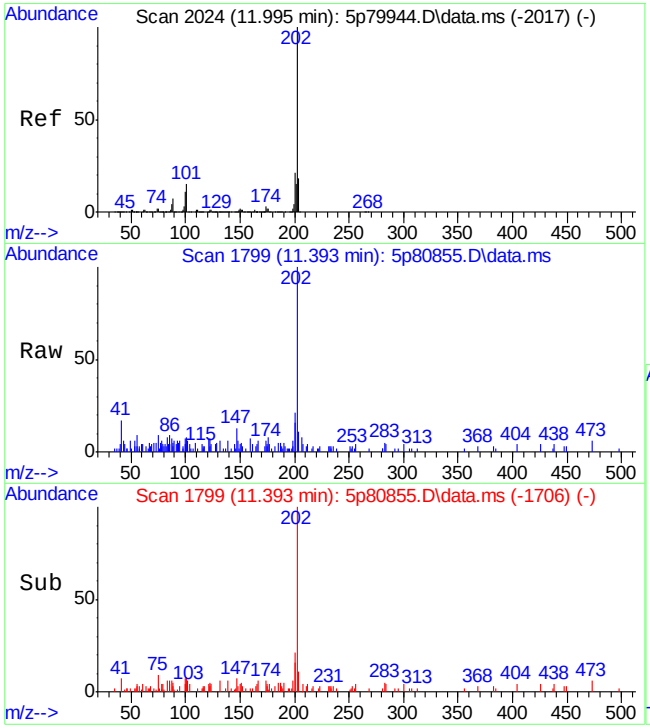


#78
Phenanthrene
Concen: 0.03 ppm
RT: 9.544 min Scan# 1453
Delta R.T. -0.016 min
Lab File: 5p80855.D
Acq: 7 Jan 22 10:12 am

Tgt Ion:178 Resp: 1289

Ion	Ratio	Lower	Upper
178	100		
179	19.2	0.0	45.4
176	9.9	0.0	49.0

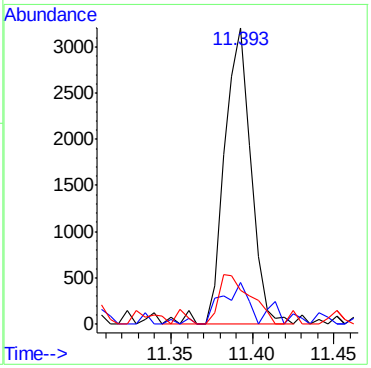


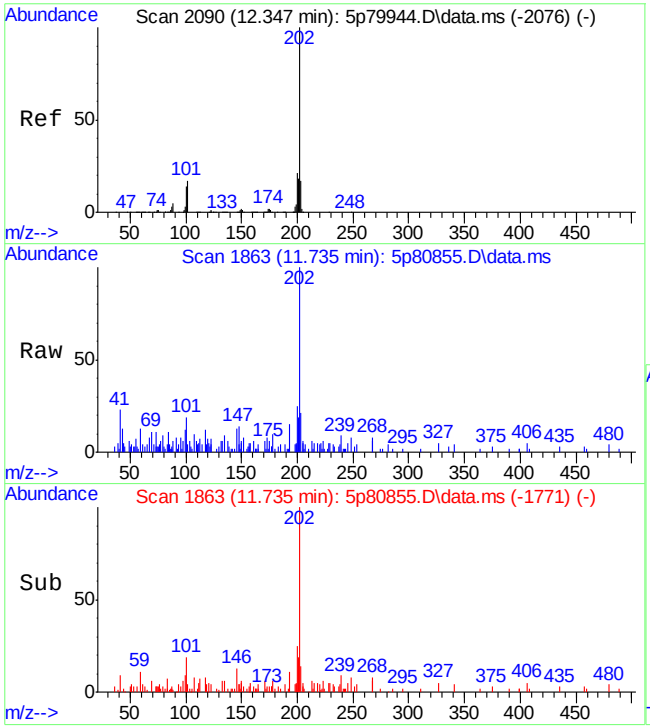


#82
Fluoranthene
Concen: 0.08 ppm
RT: 11.393 min Scan# 1799
Delta R.T. -0.005 min
Lab File: 5p80855.D
Acq: 7 Jan 22 10:12 am

Tgt Ion:202 Resp: 3614

Ion	Ratio	Lower	Upper
202	100		
101	12.4	0.0	45.2
203	7.5	0.0	47.9

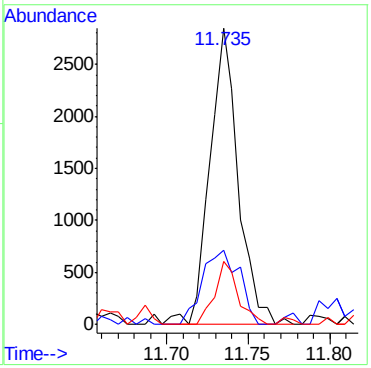


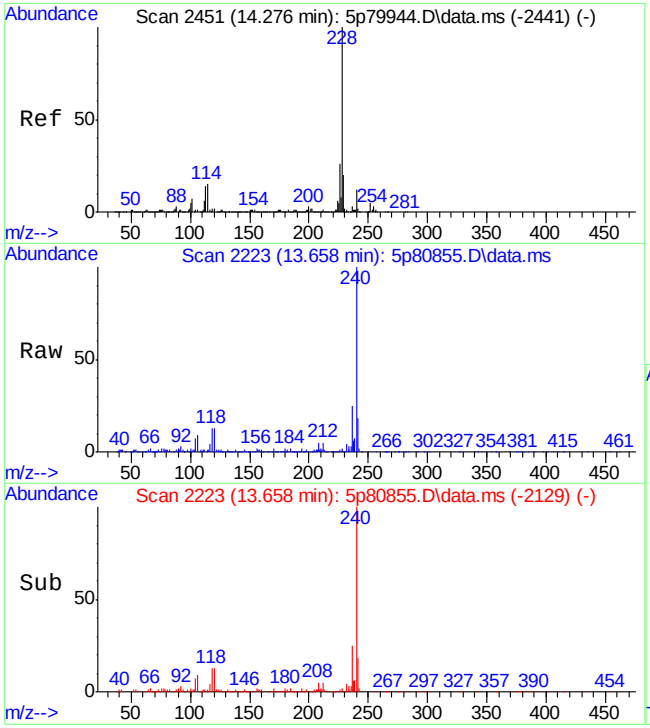


#86
Pyrene
Concen: 0.07 ppm
RT: 11.735 min Scan# 1863
Delta R.T. -0.011 min
Lab File: 5p80855.D
Acq: 7 Jan 22 10:12 am

Tgt Ion:202 Resp: 3455

Ion	Ratio	Lower	Upper
202	100		
200	23.2	0.0	50.6
203	20.5	0.0	47.3

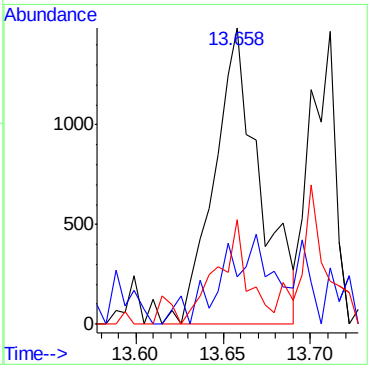


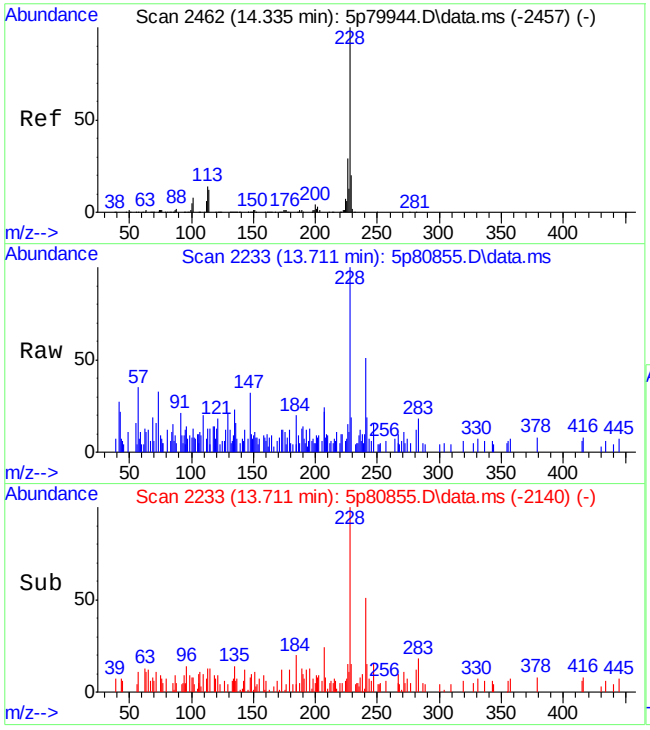


#89
Benzo[a]anthracene
Concen: 0.06 ppm
RT: 13.658 min Scan# 2223
Delta R.T. 0.000 min
Lab File: 5p80855.D
Acq: 7 Jan 22 10:12 am

Tgt Ion:228 Resp: 2683

Ion	Ratio	Lower	Upper
228	100		
229	10.7	0.0	49.7
226	29.3	0.0	56.0

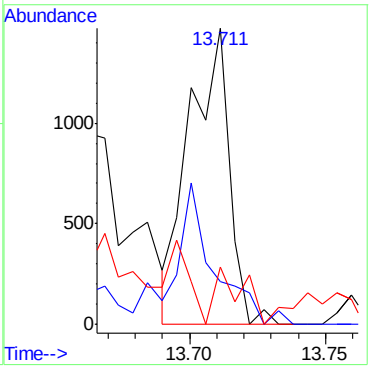


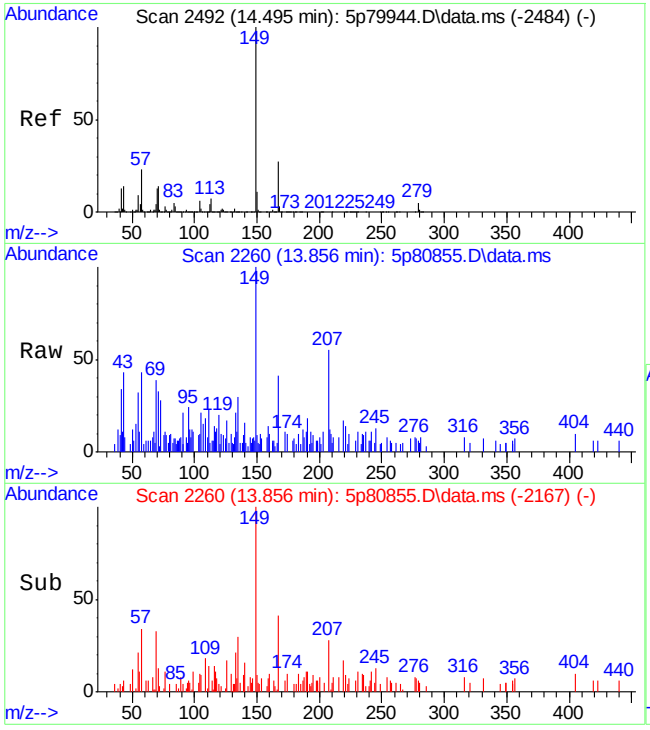


#91
Chrysene
Concen: 0.04 ppm
RT: 13.711 min Scan# 2233
Delta R.T. -0.005 min
Lab File: 5p80855.D
Acq: 7 Jan 22 10:12 am

Tgt Ion:228 Resp: 1498

Ion	Ratio	Lower	Upper
228	100		
226	8.0	0.0	59.3
229	11.5	0.0	50.0

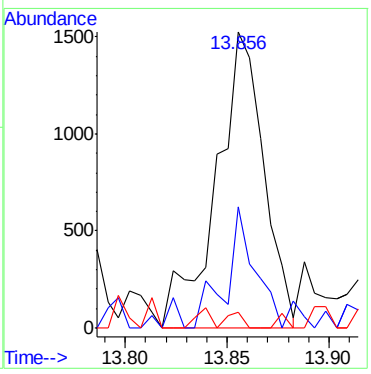


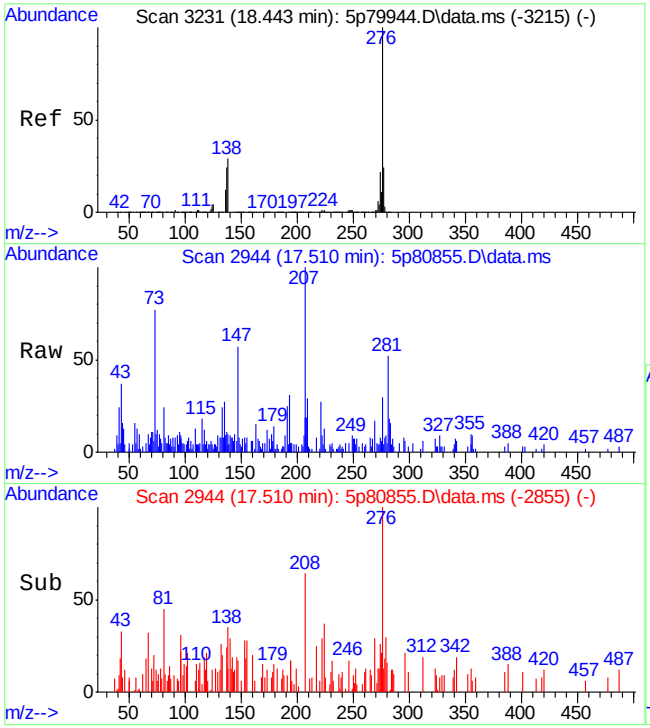


#92
bis(2-Ethylhexyl)phthalate
Concen: 0.09 ppm
RT: 13.856 min Scan# 2260
Delta R.T. -0.005 min
Lab File: 5p80855.D
Acq: 7 Jan 22 10:12 am

Tgt Ion:149 Resp: 2474

Ion	Ratio	Lower	Upper
149	100		
167	37.0	0.0	57.0
279	11.0	0.0	34.6

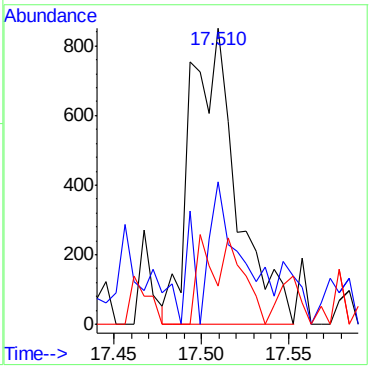




#102
Benzo[g,h,i]perylene
Concen: 0.04 ppm
RT: 17.510 min Scan# 2944
Delta R.T. -0.027 min
Lab File: 5p80855.D
Acq: 7 Jan 22 10:12 am

Tgt Ion:276 Resp: 1561

Ion	Ratio	Lower	Upper
276	100		
138	35.8	0.0	58.8
277	5.0	0.0	53.8



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/10/22 17:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p3826\
Data File : 5p80856.D
Acq On : 7 Jan 2022 10:38 am
Operator : chriss2
Sample : jd36682-4
Misc : op37474,e5p3826,270,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:49:48 2022
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Jan 07 11:27:13 2022
Response via : Initial Calibration

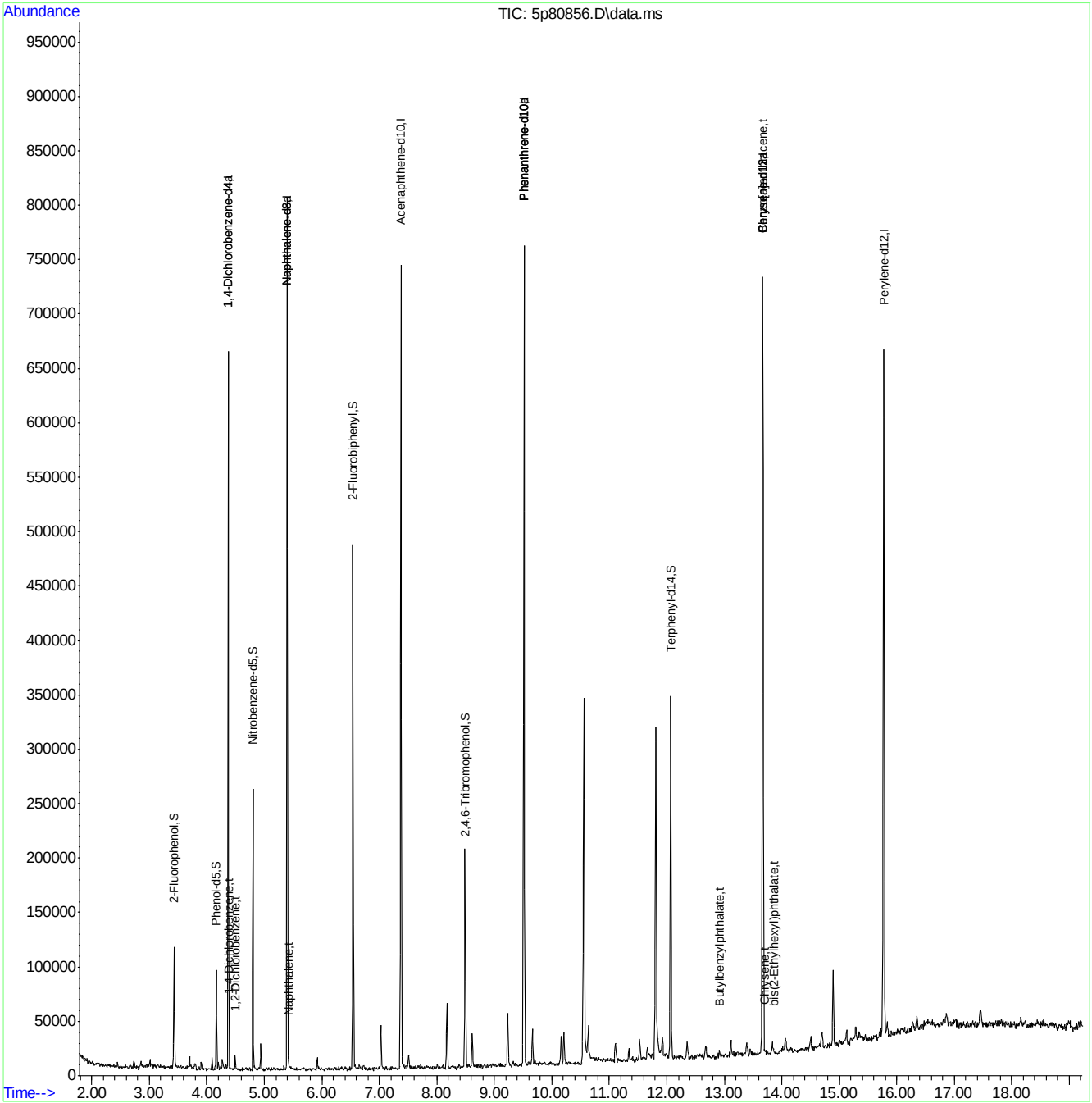
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.373	152	77003	8.00	ppm	0.00
24) Naphthalene-d8	5.399	136	304386	8.00	ppm	0.00
46) Acenaphthene-d10	7.381	164	177172	8.00	ppm	0.00
69) Phenanthrene-d10	9.518	188	316096	8.00	ppm	0.00
84) Chrysene-d12	13.669	240	291115	8.00	ppm	0.00
93) Perylene-d12	15.773	264	266977	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.373	152	77003	8.00	ppm	0.00
105) Phenanthrene-d10a	9.518	188	316096	8.00	ppm	0.00
107) Naphthalene-d8a	5.399	136	304386	8.00	ppm	0.00
109) Chrysene-d12a	13.669	240	291115	8.00	ppm	0.00
111) Phenanthrene-d10b	9.518	188	316096	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.433	112	27567	2.21	ppm	0.00
Spiked Amount 10.000			Recovery	=	22.10%	
8) Phenol-d5	4.165	99	20682	1.29	ppm	0.00
Spiked Amount 10.000			Recovery	=	12.90%	
25) Nitrobenzene-d5	4.800	82	51721	4.52	ppm	0.00
Spiked Amount 10.000			Recovery	=	45.20%	
51) 2-Fluorobiphenyl	6.542	172	144571	4.97	ppm	0.00
Spiked Amount 10.000			Recovery	=	49.70%	
74) 2,4,6-Tribromophenol	8.497	330	19693	4.90	ppm	0.00
Spiked Amount 10.000			Recovery	=	49.00%	
87) Terphenyl-d14	12.066	244	114733	3.16	ppm	0.00
Spiked Amount 10.000			Recovery	=	31.60%	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery	=	0.00%	
113) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
15) 1,4-Dichlorobenzene	4.384	146	1672	0.12	ppm	97
17) 1,2-Dichlorobenzene	4.496	146	2001	0.15	ppm	89
38) Naphthalene	5.420	128	1032	0.03	ppm	84
88) Butylbenzylphthalate	12.915	149	1608	0.07	ppm	86
89) Benzo[a]anthracene	13.669	228	1387	0.03	ppm	65
91) Chrysene	13.701	228	557m	0.01	ppm	
92) bis(2-Ethylhexyl)phtha...	13.861	149	1575	0.05	ppm	68

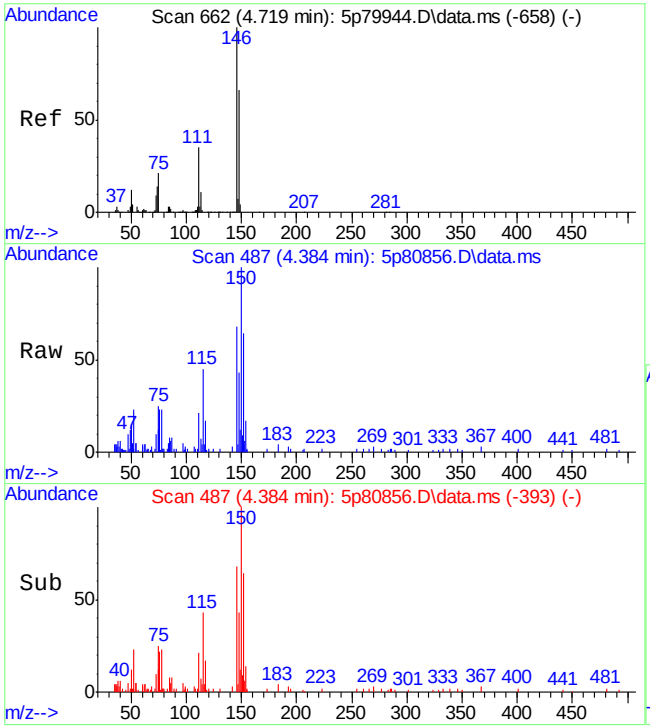
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p3826\
Data File : 5p80856.D
Acq On : 7 Jan 2022 10:38 am
Operator : chriss2
Sample : jd36682-4
Misc : op37474,e5p3826,270,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 07 11:49:48 2022
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Jan 07 11:27:13 2022
Response via : Initial Calibration

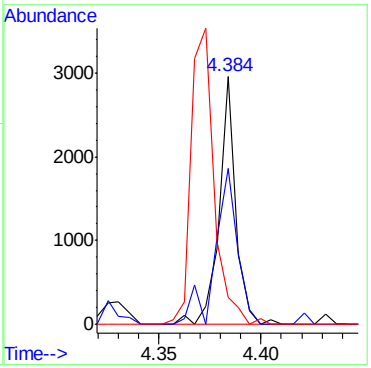


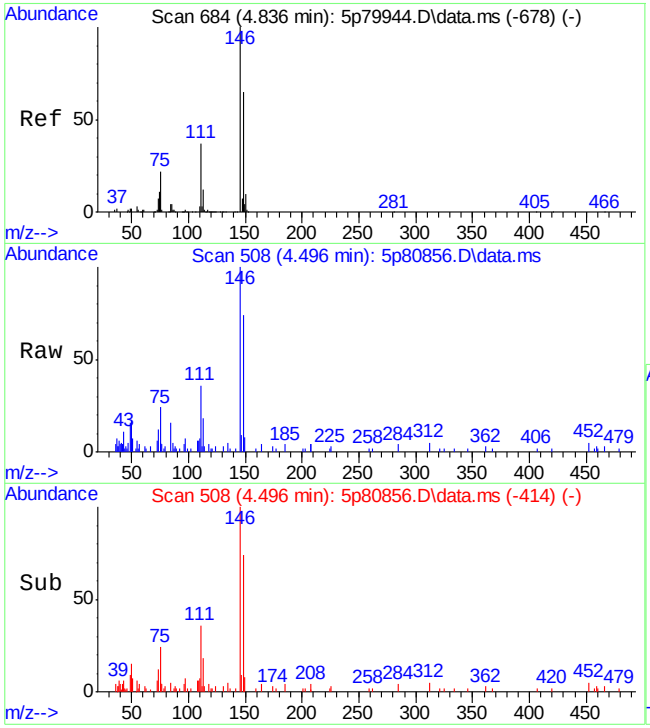


#15
1,4-Dichlorobenzene
Concen: 0.12 ppm
RT: 4.384 min Scan# 487
Delta R.T. -0.000 min
Lab File: 5p80856.D
Acq: 7 Jan 22 10:38 am

Tgt Ion:146 Resp: 1672

Ion	Ratio	Lower	Upper
146	100		
148	63.3	36.2	96.2
113	10.9	0.0	41.1

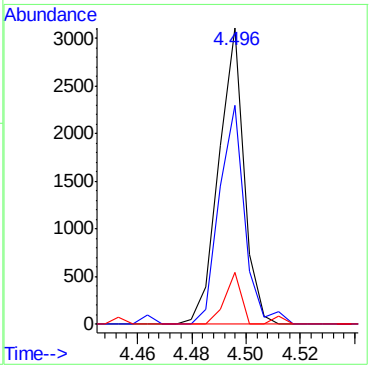


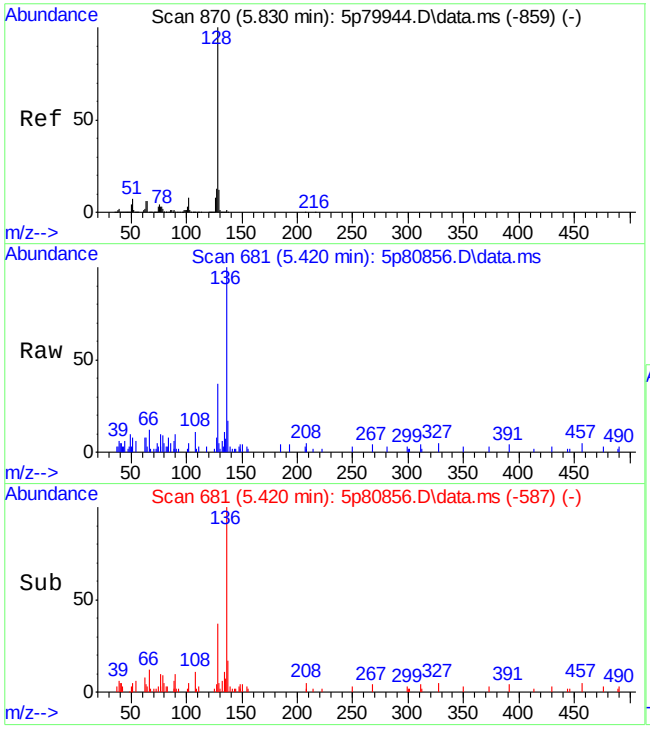


#17
1,2-Dichlorobenzene
Concen: 0.15 ppm
RT: 4.496 min Scan# 508
Delta R.T. -0.000 min
Lab File: 5p80856.D
Acq: 7 Jan 22 10:38 am

Tgt Ion:146 Resp: 2001

Ion	Ratio	Lower	Upper
146	100		
148	73.8	35.5	95.5
113	17.6	0.0	41.5

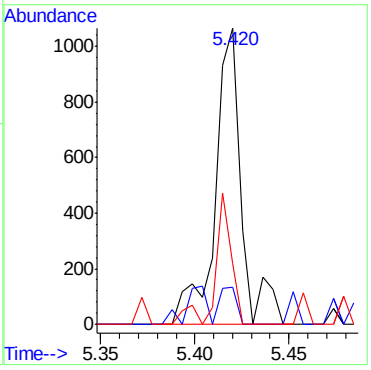


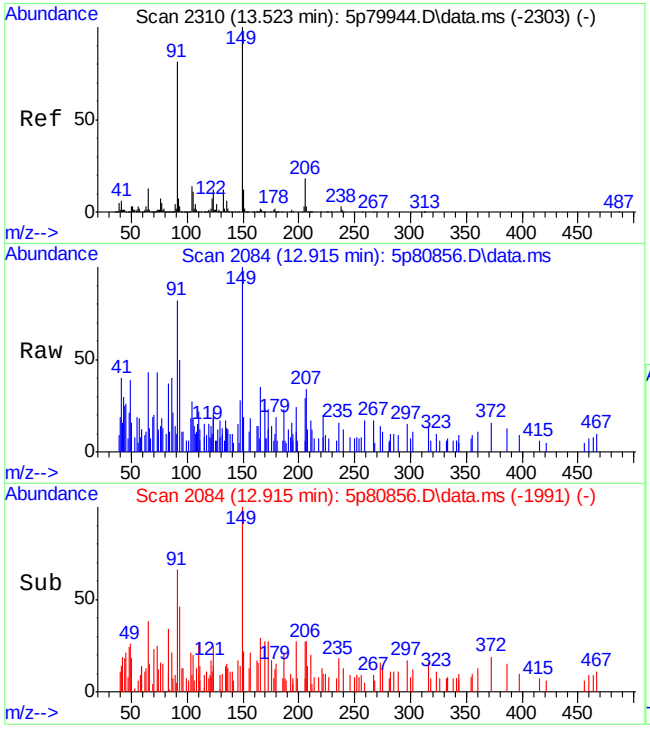


#38
Naphthalene
Concen: 0.03 ppm
RT: 5.420 min Scan# 681
Delta R.T. -0.000 min
Lab File: 5p80856.D
Acq: 7 Jan 22 10:38 am

Tgt Ion:128 Resp: 1032

Ion	Ratio	Lower	Upper
128	100		
129	6.9	0.0	41.4
127	20.6	0.0	42.5

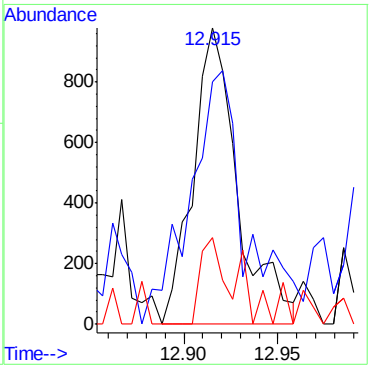


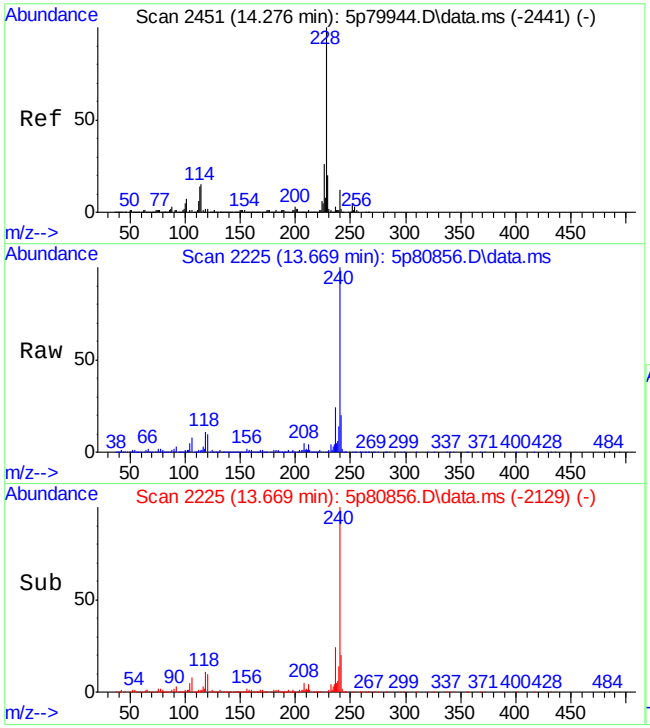


#88
Butylbenzylphthalate
Concen: 0.07 ppm
RT: 12.915 min Scan# 2084
Delta R.T. -0.005 min
Lab File: 5p80856.D
Acq: 7 Jan 22 10:38 am

Tgt Ion:149 Resp: 1608

Ion	Ratio	Lower	Upper
149	100		
91	71.4	51.5	111.5
206	30.1	0.0	48.1

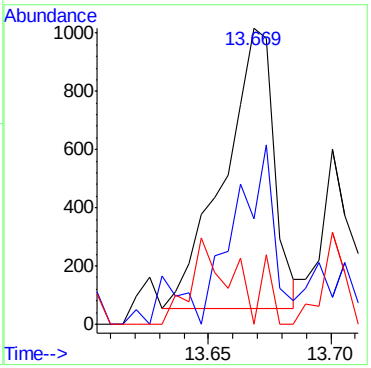


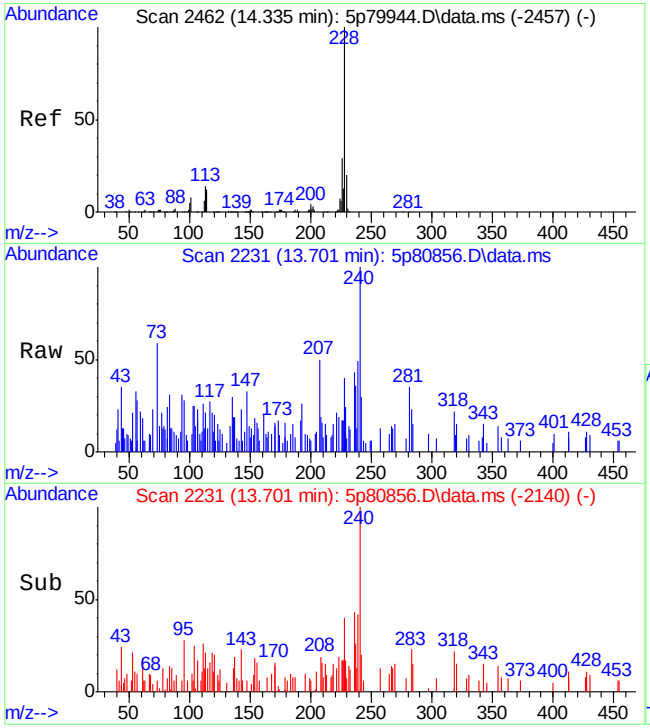


#89
Benzo[a]anthracene
Concen: 0.03 ppm
RT: 13.669 min Scan# 2225
Delta R.T. 0.011 min
Lab File: 5p80856.D
Acq: 7 Jan 22 10:38 am

Tgt Ion:228 Resp: 1387

Ion	Ratio	Lower	Upper
228	100		
229	26.4	0.0	49.7
226	0.0	0.0	56.0

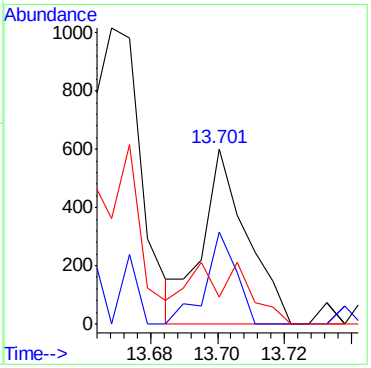


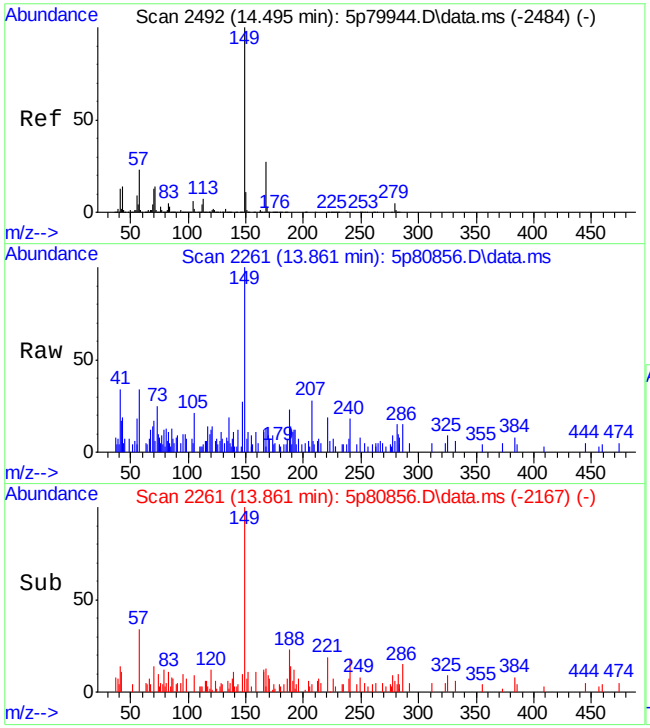


#91
Chrysene
Concen: 0.01 ppm m
RT: 13.701 min Scan# 2231
Delta R.T. -0.016 min
Lab File: 5p80856.D
Acq: 7 Jan 22 10:38 am

Tgt Ion:228 Resp: 557

Ion	Ratio	Lower	Upper
228	100		
226	42.2	0.0	59.3
229	24.7	0.0	50.0

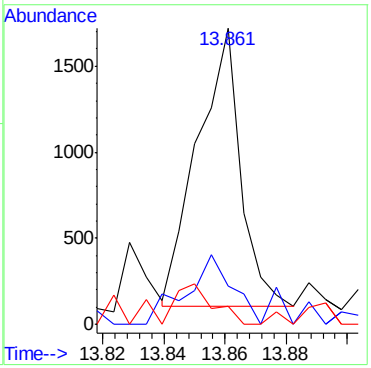




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.05 ppm
RT: 13.861 min Scan# 2261
Delta R.T. -0.000 min
Lab File: 5p80856.D
Acq: 7 Jan 22 10:38 am

Tgt Ion:149 Resp: 1575

Ion	Ratio	Lower	Upper
149	100		
167	8.3	0.0	57.0
279	6.4	0.0	34.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p3826\
Data File : 5p80857.D
Acq On : 7 Jan 2022 11:05 am
Operator : chriss2
Sample : jd36682-5
Misc : op37474,e5p3826,270,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:50:42 2022
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Jan 07 11:27:13 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.373	152	71336	8.00	ppm	0.00
24) Naphthalene-d8	5.399	136	291310	8.00	ppm	0.00
46) Acenaphthene-d10	7.375	164	164813	8.00	ppm	0.00
69) Phenanthrene-d10	9.518	188	298026	8.00	ppm	0.00
84) Chrysene-d12	13.669	240	278817	8.00	ppm	0.00
93) Perylene-d12	15.773	264	259545	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.373	152	71336	8.00	ppm	0.00
105) Phenanthrene-d10a	9.518	188	298026	8.00	ppm	0.00
107) Naphthalene-d8a	5.399	136	291310	8.00	ppm	0.00
109) Chrysene-d12a	13.669	240	278817	8.00	ppm	0.00
111) Phenanthrene-d10b	9.518	188	298026	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.433	112	24898	2.16	ppm	0.00
Spiked Amount 10.000			Recovery = 21.60%			
8) Phenol-d5	4.165	99	18011	1.22	ppm	0.00
Spiked Amount 10.000			Recovery = 12.20%			
25) Nitrobenzene-d5	4.800	82	52126	4.76	ppm	0.00
Spiked Amount 10.000			Recovery = 47.60%			
51) 2-Fluorobiphenyl	6.542	172	146027	5.40	ppm	0.00
Spiked Amount 10.000			Recovery = 54.00%			
74) 2,4,6-Tribromophenol	8.497	330	20563	5.43	ppm	0.00
Spiked Amount 10.000			Recovery = 54.30%			
87) Terphenyl-d14	12.066	244	143200	4.12	ppm	0.00
Spiked Amount 10.000			Recovery = 41.20%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			

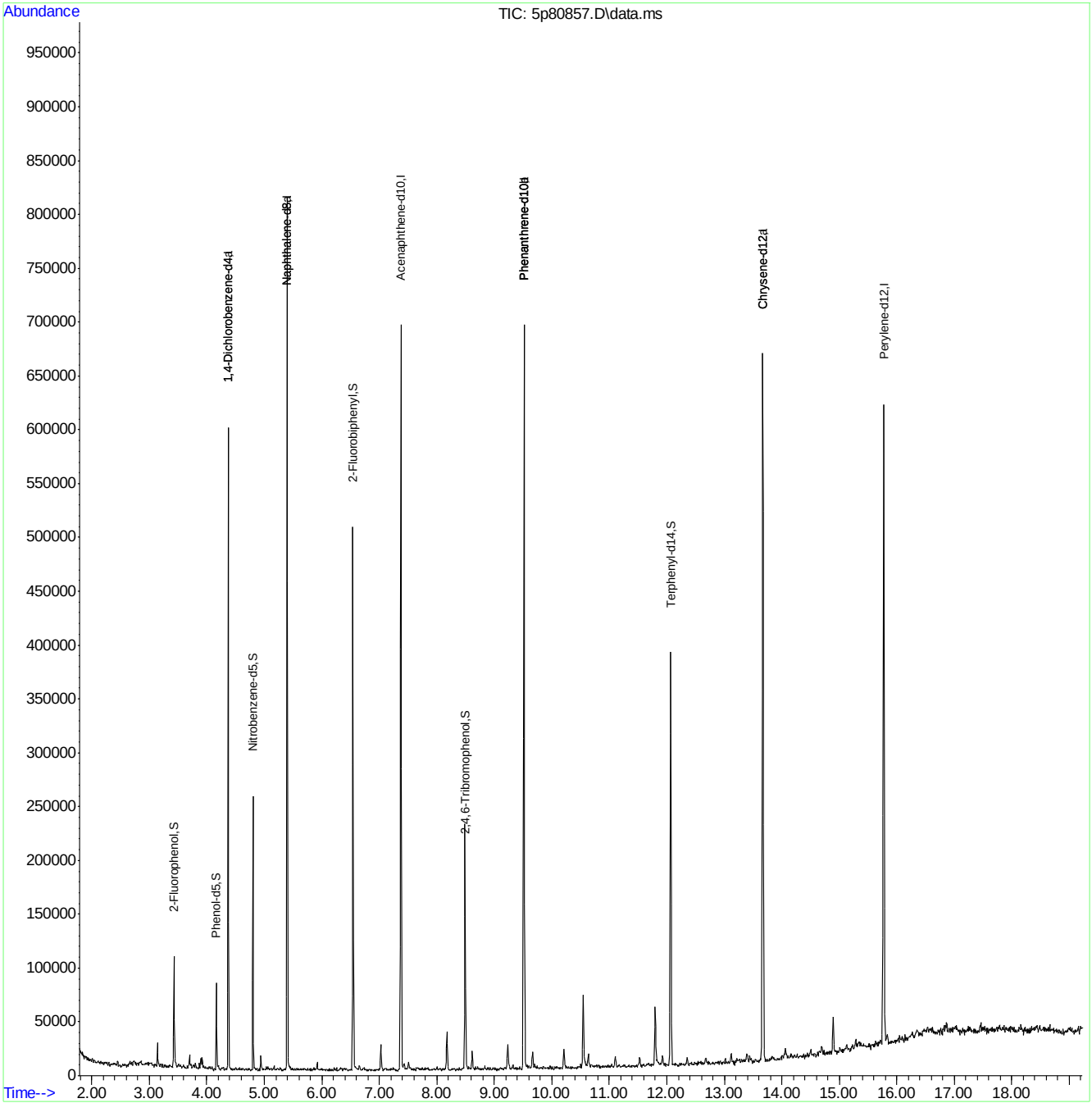
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p3826\
Data File : 5p80857.D
Acq On : 7 Jan 2022 11:05 am
Operator : chriss2
Sample : jd36682-5
Misc : op37474,e5p3826,270,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 07 11:50:42 2022
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Jan 07 11:27:13 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p3826\
Data File : 5p80858.D
Acq On : 7 Jan 2022 11:31 am
Operator : chriss2
Sample : jd36682-6
Misc : op37474,e5p3826,280,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 07 11:52:40 2022
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Jan 07 11:27:13 2022
Response via : Initial Calibration

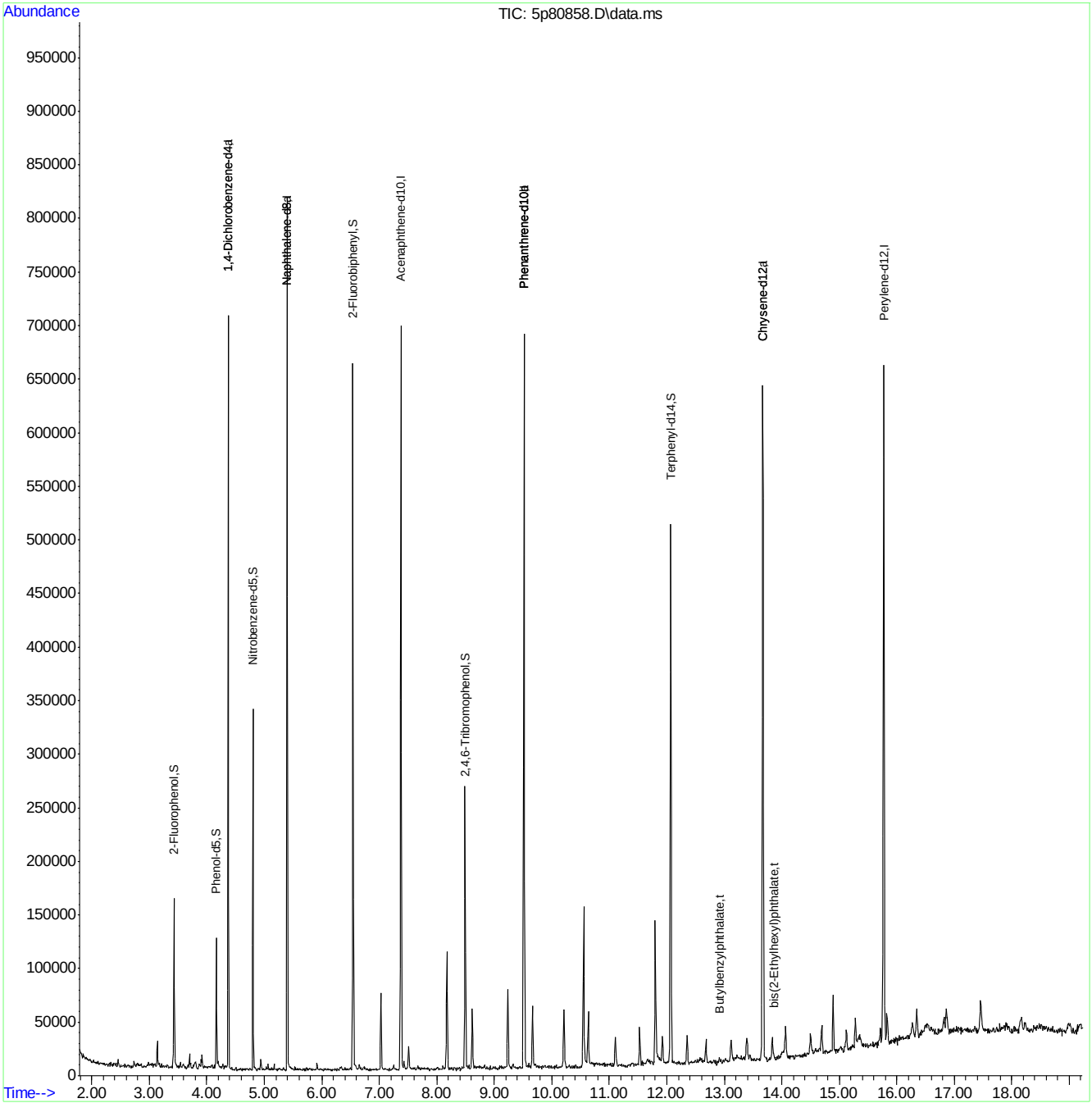
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.373	152	77510	8.00	ppm	0.00
24) Naphthalene-d8	5.399	136	294078	8.00	ppm	0.00
46) Acenaphthene-d10	7.381	164	165806	8.00	ppm	0.00
69) Phenanthrene-d10	9.518	188	287521	8.00	ppm	0.00
84) Chrysene-d12	13.669	240	269829	8.00	ppm	0.00
93) Perylene-d12	15.773	264	254516	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.373	152	77510	8.00	ppm	0.00
105) Phenanthrene-d10a	9.518	188	287521	8.00	ppm	0.00
107) Naphthalene-d8a	5.399	136	294078	8.00	ppm	0.00
109) Chrysene-d12a	13.669	240	269829	8.00	ppm	0.00
111) Phenanthrene-d10b	9.518	188	287521	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.433	112	32723	2.61	ppm	0.00
Spiked Amount 10.000			Recovery	=	26.10%	
8) Phenol-d5	4.165	99	26312	1.63	ppm	0.00
Spiked Amount 10.000			Recovery	=	16.30%	
25) Nitrobenzene-d5	4.800	82	69164	6.25	ppm	0.00
Spiked Amount 10.000			Recovery	=	62.50%	
51) 2-Fluorobiphenyl	6.542	172	190902	7.02	ppm	0.00
Spiked Amount 10.000			Recovery	=	70.20%	
74) 2,4,6-Tribromophenol	8.497	330	25058	6.86	ppm	0.00
Spiked Amount 10.000			Recovery	=	68.60%	
87) Terphenyl-d14	12.066	244	187953	5.59	ppm	0.00
Spiked Amount 10.000			Recovery	=	55.90%	
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery	=	0.00%	
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
88) Butylbenzylphthalate	12.915	149	1273	0.06	ppm	# 63
92) bis(2-Ethylhexyl)phtha...	13.855	149	2490	0.09	ppm	98

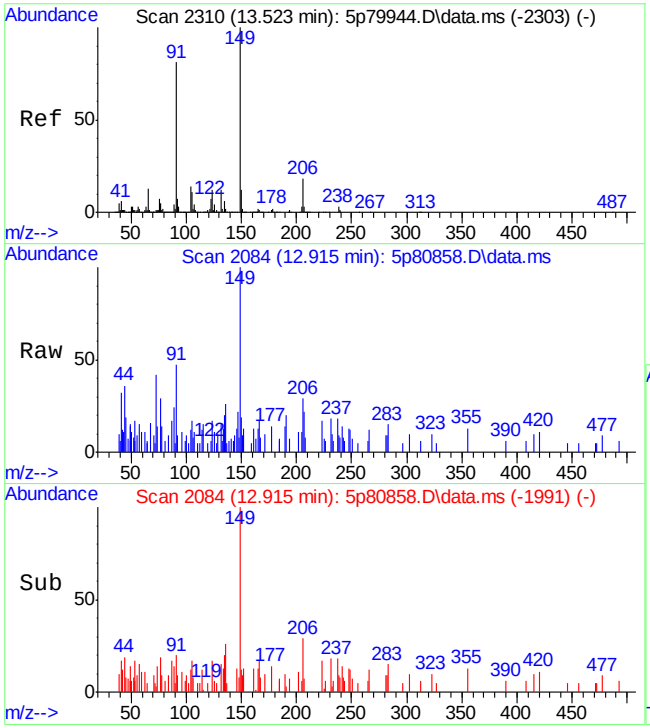
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p3826\
Data File : 5p80858.D
Acq On : 7 Jan 2022 11:31 am
Operator : chriss2
Sample : jd36682-6
Misc : op37474,e5p3826,280,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 07 11:52:40 2022
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Jan 07 11:27:13 2022
Response via : Initial Calibration

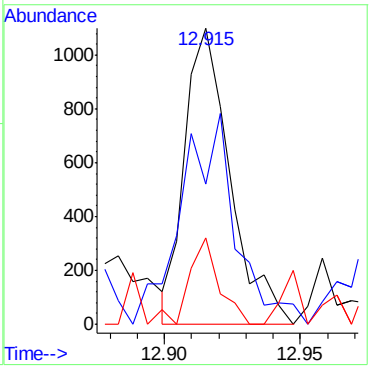


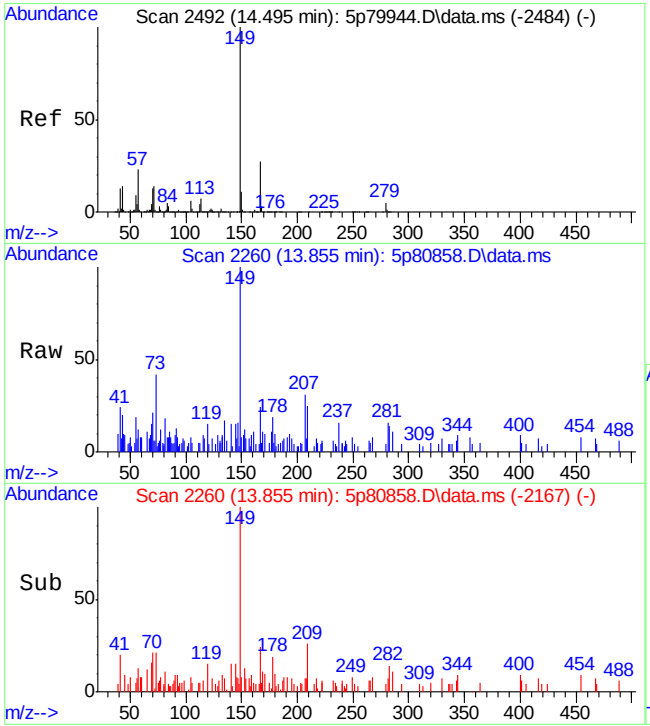


#88
Butylbenzylphthalate
Concen: 0.06 ppm
RT: 12.915 min Scan# 2084
Delta R.T. -0.005 min
Lab File: 5p80858.D
Acq: 7 Jan 22 11:31 am

Tgt Ion:149 Resp: 1273

Ion	Ratio	Lower	Upper
149	100		
91	42.0	51.5	111.5#
206	19.9	0.0	48.1

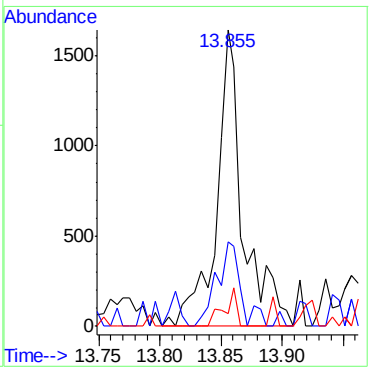




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.09 ppm
RT: 13.855 min Scan# 2260
Delta R.T. -0.005 min
Lab File: 5p80858.D
Acq: 7 Jan 22 11:31 am

Tgt Ion:149 Resp: 2490

Ion	Ratio	Lower	Upper
149	100		
167	28.4	0.0	57.0
279	4.3	0.0	34.6



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/11/22 16:24

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2648\
Data File : 4p50638.D
Acq On : 11 Jan 2022 1:23 pm
Operator : kristis
Sample : jd36682-2
Misc : op37474a,e4p2648,270,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 11 15:47:42 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4P2647SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jan 11 08:30:56 2022
Response via : Initial Calibration

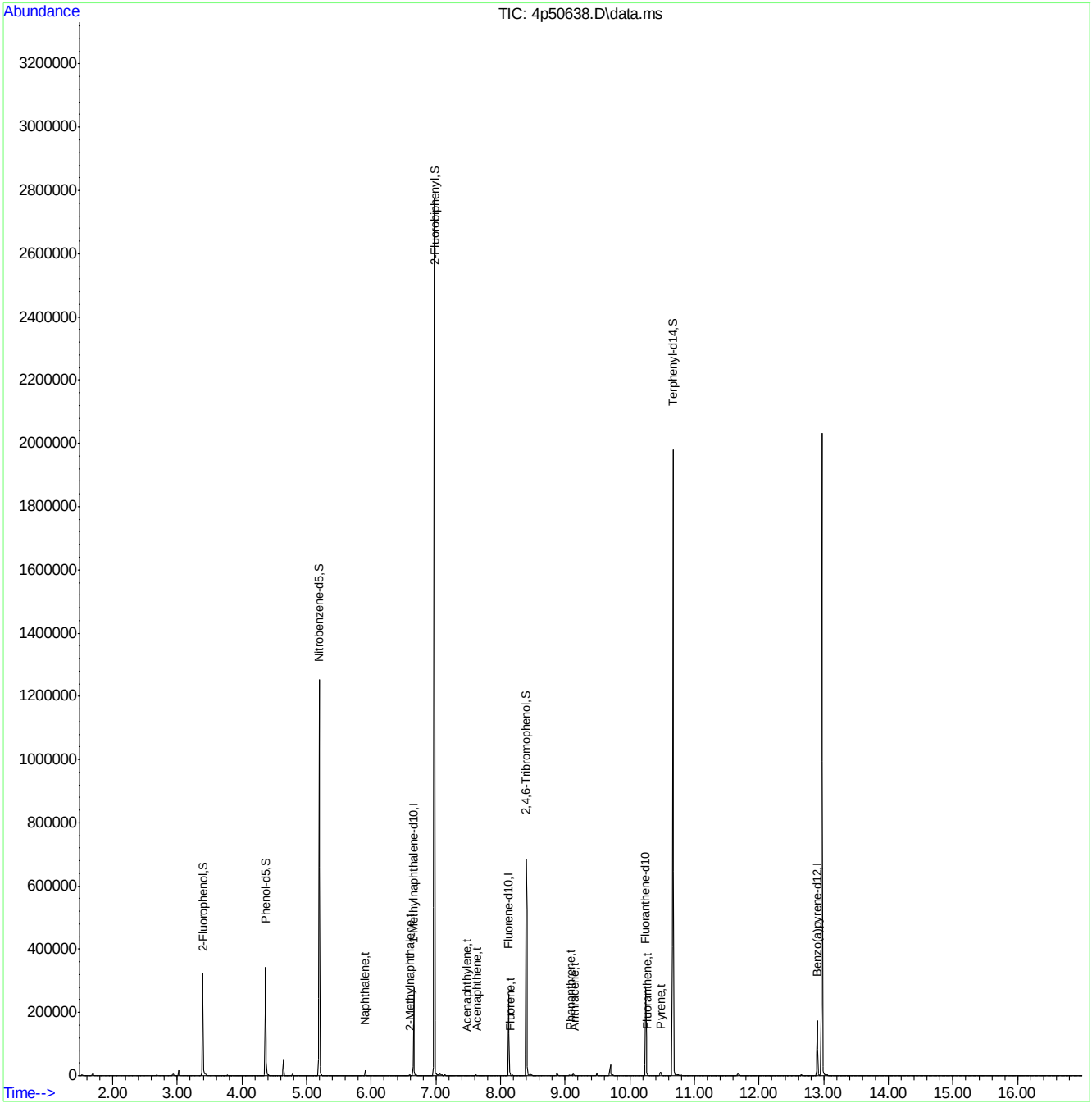
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.656	150	78857	800.00	ppm	0.00
13) Fluorene-d10	8.125	176	113322	800.00	ppm	0.00
20) Fluoranthene-d10	10.243	212	187891	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	12.903	264	101106	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.398	112	184129	4839.28	ppm	-0.01
Spiked Amount 50.000			Recovery	= 9678.56%		
4) Phenol-d5	4.361	99	266370	3516.05	ppm	-0.02
Spiked Amount 50.000			Recovery	= 7032.10%		
7) Nitrobenzene-d5	5.194	82	742270	10696.88	ppm	-0.01
Spiked Amount 50.000			Recovery	= 21393.76%		
14) 2-Fluorobiphenyl	6.977	172	1530521	10702.16	ppm	0.00
Spiked Amount 50.000			Recovery	= 21404.32%		
19) 2,4,6-Tribromophenol	8.397	330	273668	14895.54	ppm	0.00
Spiked Amount 50.000			Recovery	= 29791.08%		
27) Terphenyl-d14	10.667	244	1171447	8375.19	ppm	0.00
Spiked Amount 50.000			Recovery	= 16750.38%		
Target Compounds						Qvalue
8) Naphthalene	5.907	128	11691	63.12	ppm	99
10) 2-Methylnaphthalene	6.596	141	990	9.05	ppm	87
15) Acenaphthylene	7.477	152	154	0.95	ppm	79
16) Acenaphthene	7.643	153	340	2.74	ppm	76
17) Fluorene	8.150	166	553	3.84	ppm	91
23) Phenanthrene	9.090	178	2153m	10.46	ppm	
24) Anthracene	9.145	178	756m	4.31	ppm	
25) Fluoranthene	10.262	202	2650	10.34	ppm	99
26) Pyrene	10.483	202	3923	17.05	ppm	98

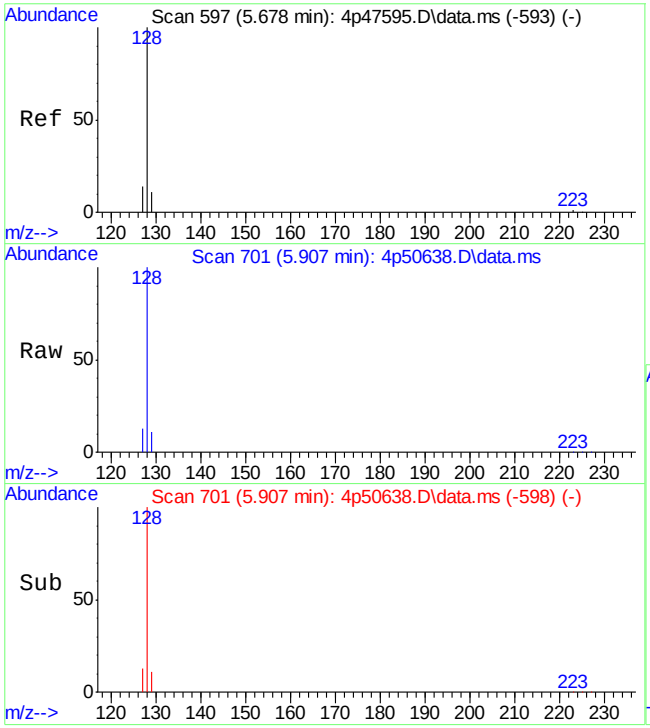
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2648\
Data File : 4p50638.D
Acq On : 11 Jan 2022 1:23 pm
Operator : kristis
Sample : jd36682-2
Misc : op37474a,e4p2648,270,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 11 15:47:42 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4P2647SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jan 11 08:30:56 2022
Response via : Initial Calibration

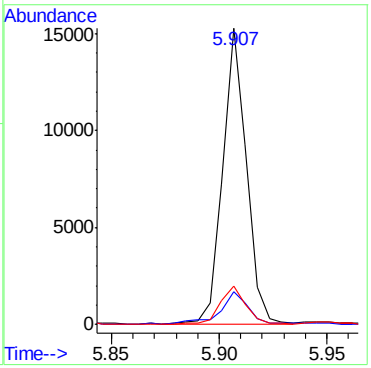


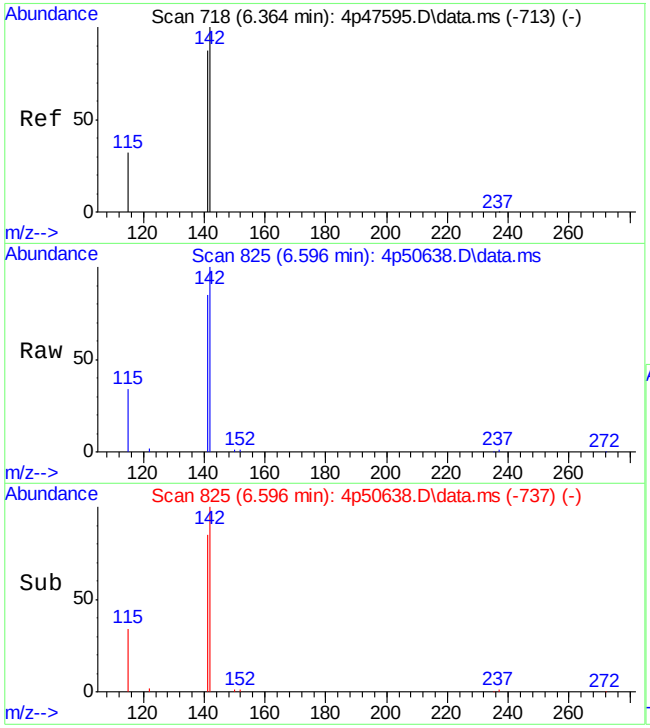


#8
Naphthalene
Concen: 63.12 ppm
RT: 5.907 min Scan# 701
Delta R.T. -0.011 min
Lab File: 4p50638.D
Acq: 11 Jan 2022 1:23 pm

Tgt Ion:128 Resp: 11691

Ion	Ratio	Lower	Upper
128	100		
129	10.7	0.0	41.2
127	12.7	0.0	42.4

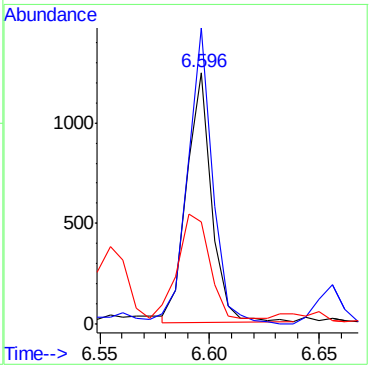


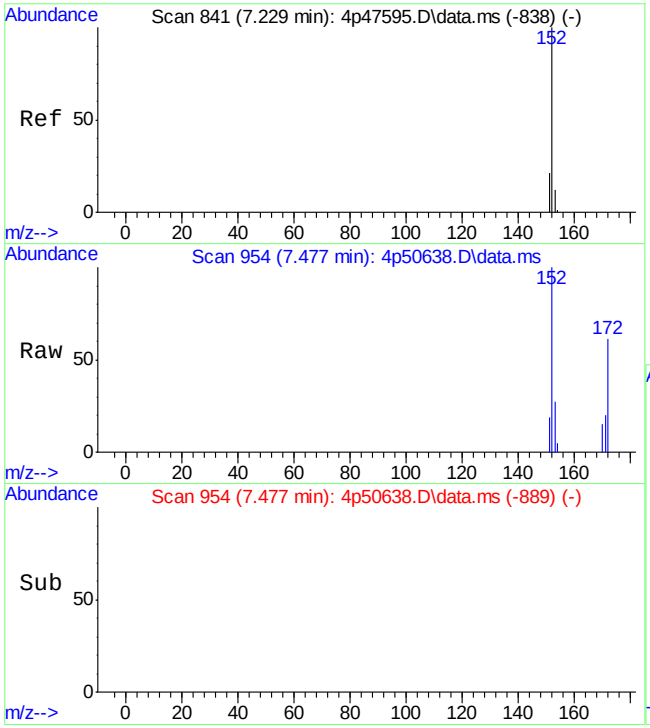


#10
2-Methylnaphthalene
Concen: 9.05 ppm
RT: 6.596 min Scan# 825
Delta R.T. -0.006 min
Lab File: 4p50638.D
Acq: 11 Jan 2022 1:23 pm

Tgt Ion:141 Resp: 990

Ion	Ratio	Lower	Upper
141	100		
142	118.0	81.0	141.0
115	35.3	23.2	83.2

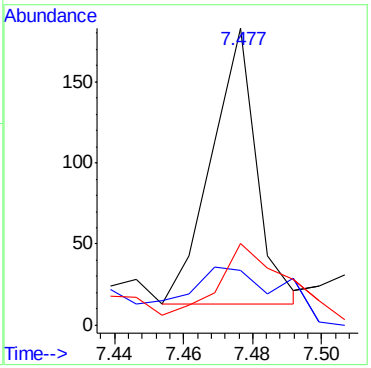


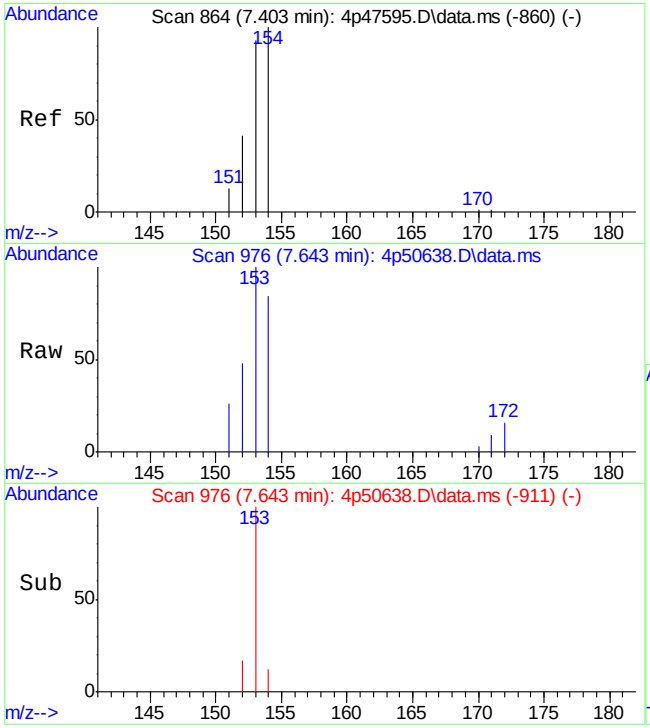


#15
Acenaphthylene
Concen: 0.95 ppm
RT: 7.477 min Scan# 954
Delta R.T. -0.008 min
Lab File: 4p50638.D
Acq: 11 Jan 2022 1:23 pm

Tgt Ion:152 Resp: 154

Ion	Ratio	Lower	Upper
152	100		
151	7.2	0.0	48.5
153	19.9	0.0	43.9

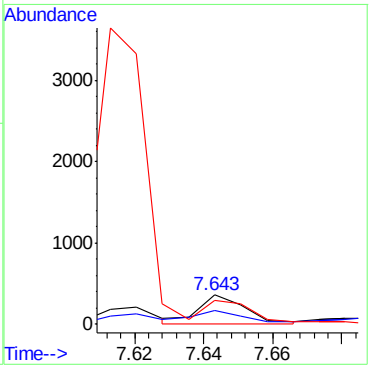


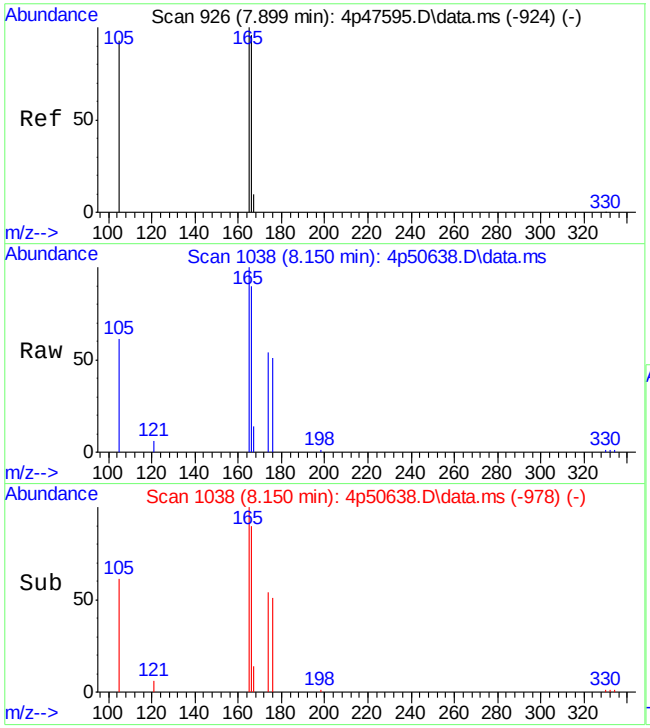


#16
Acenaphthene
Concen: 2.74 ppm
RT: 7.643 min Scan# 976
Delta R.T. -0.007 min
Lab File: 4p50638.D
Acq: 11 Jan 2022 1:23 pm

Tgt Ion:153 Resp: 340

Ion	Ratio	Lower	Upper
153	100		
152	41.3	23.2	83.2
154	52.4	47.4	107.4

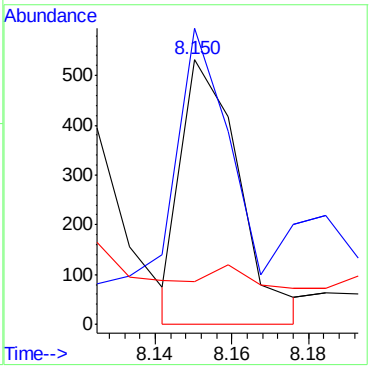


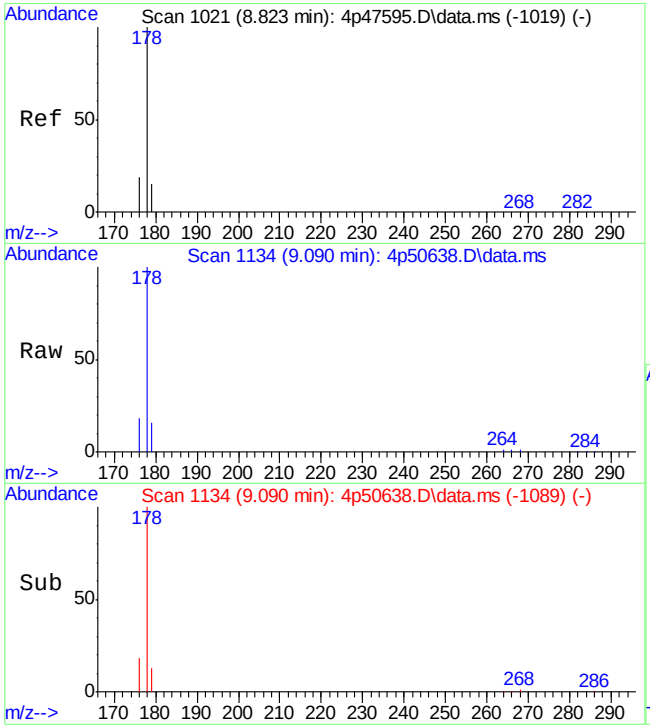


#17
Fluorene
Concen: 3.84 ppm
RT: 8.150 min Scan# 1038
Delta R.T. -0.008 min
Lab File: 4p50638.D
Acq: 11 Jan 2022 1:23 pm

Tgt Ion:166 Resp: 553

Ion	Ratio	Lower	Upper
166	100		
165	90.5	55.3	115.3
167	1.2	0.0	44.1

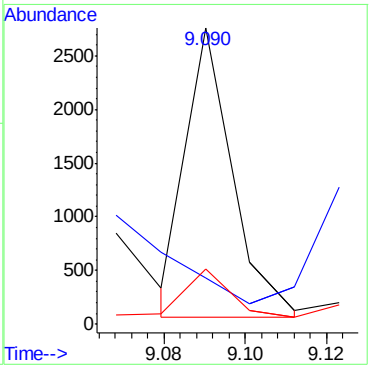


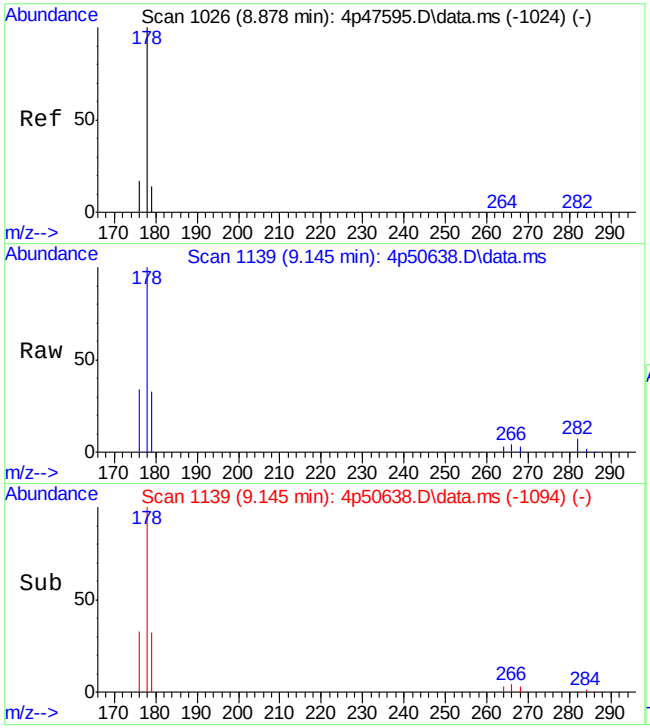


#23
Phenanthrene
Concen: 10.46 ppm m
RT: 9.090 min Scan# 1134
Delta R.T. -0.011 min
Lab File: 4p50638.D
Acq: 11 Jan 2022 1:23 pm

Tgt Ion:178 Resp: 2153

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	45.2
176	18.5	0.0	48.2

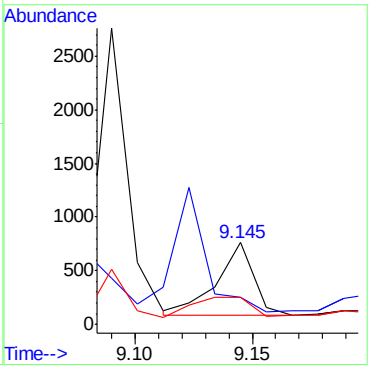


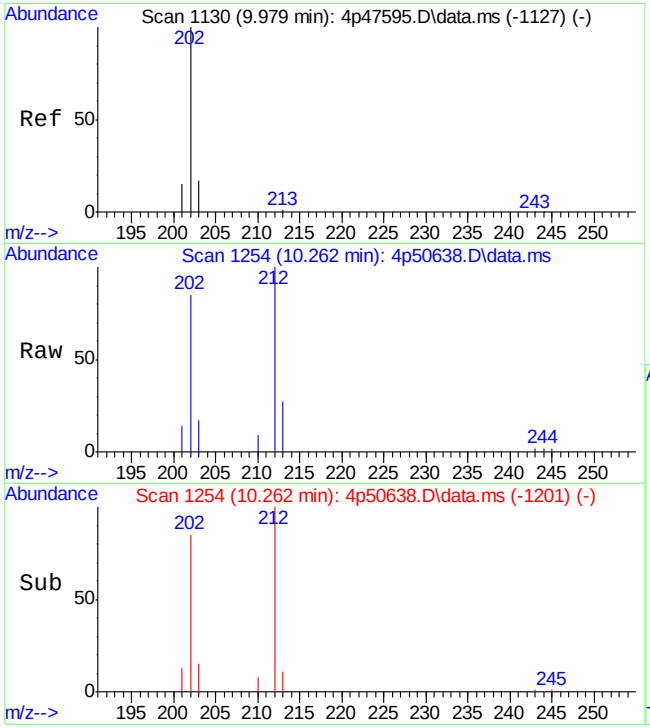


#24
Anthracene
Concen: 4.31 ppm m
RT: 9.145 min Scan# 1139
Delta R.T. -0.011 min
Lab File: 4p50638.D
Acq: 11 Jan 2022 1:23 pm

Tgt Ion:178 Resp: 756

Ion	Ratio	Lower	Upper
178	100		
179	32.5	0.0	46.6
176	33.7	0.0	46.0

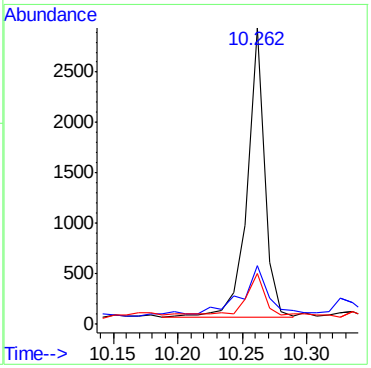


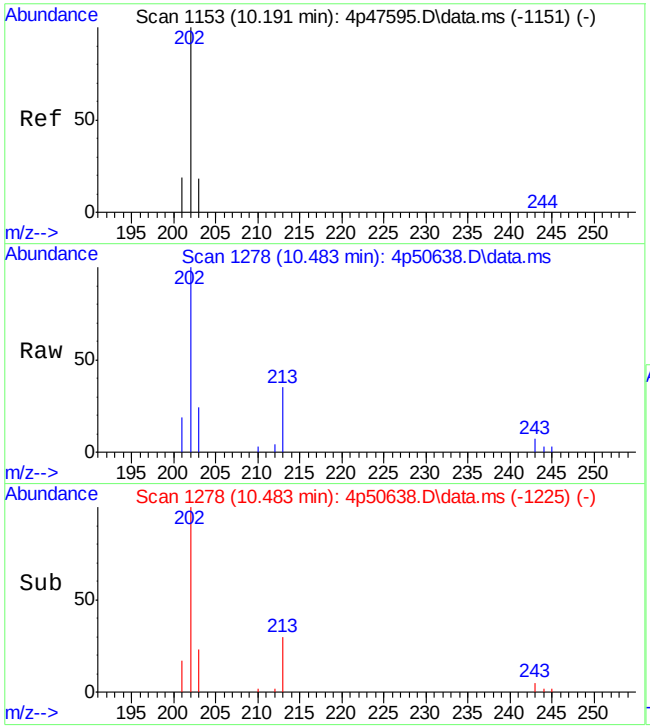


#25
Fluoranthene
Concen: 10.34 ppm
RT: 10.262 min Scan# 1254
Delta R.T. -0.009 min
Lab File: 4p50638.D
Acq: 11 Jan 2022 1:23 pm

Tgt Ion:202 Resp: 2650

Ion	Ratio	Lower	Upper
202	100		
203	16.2	0.0	47.2
201	14.0	0.0	44.0

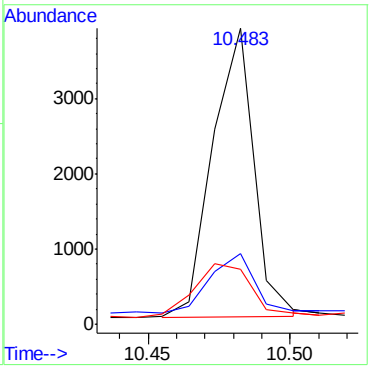




#26
Pyrene
Concen: 17.05 ppm
RT: 10.483 min Scan# 1278
Delta R.T. -0.009 min
Lab File: 4p50638.D
Acq: 11 Jan 2022 1:23 pm

Tgt Ion:202 Resp: 3923

Ion	Ratio	Lower	Upper
202	100		
203	20.6	0.0	49.0
201	15.7	0.0	45.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\011022\e4p2645\
Data File : 4p50567.d
Acq On : 7 Jan 2022 6:07 pm
Operator : ninap
Sample : jd36682-3 Inst : MS4P
Misc : op37474a,e4p2645,260,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Jan 10 04:08:29 2022
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jan 10 03:53:43 2022
Response via : Initial Calibration

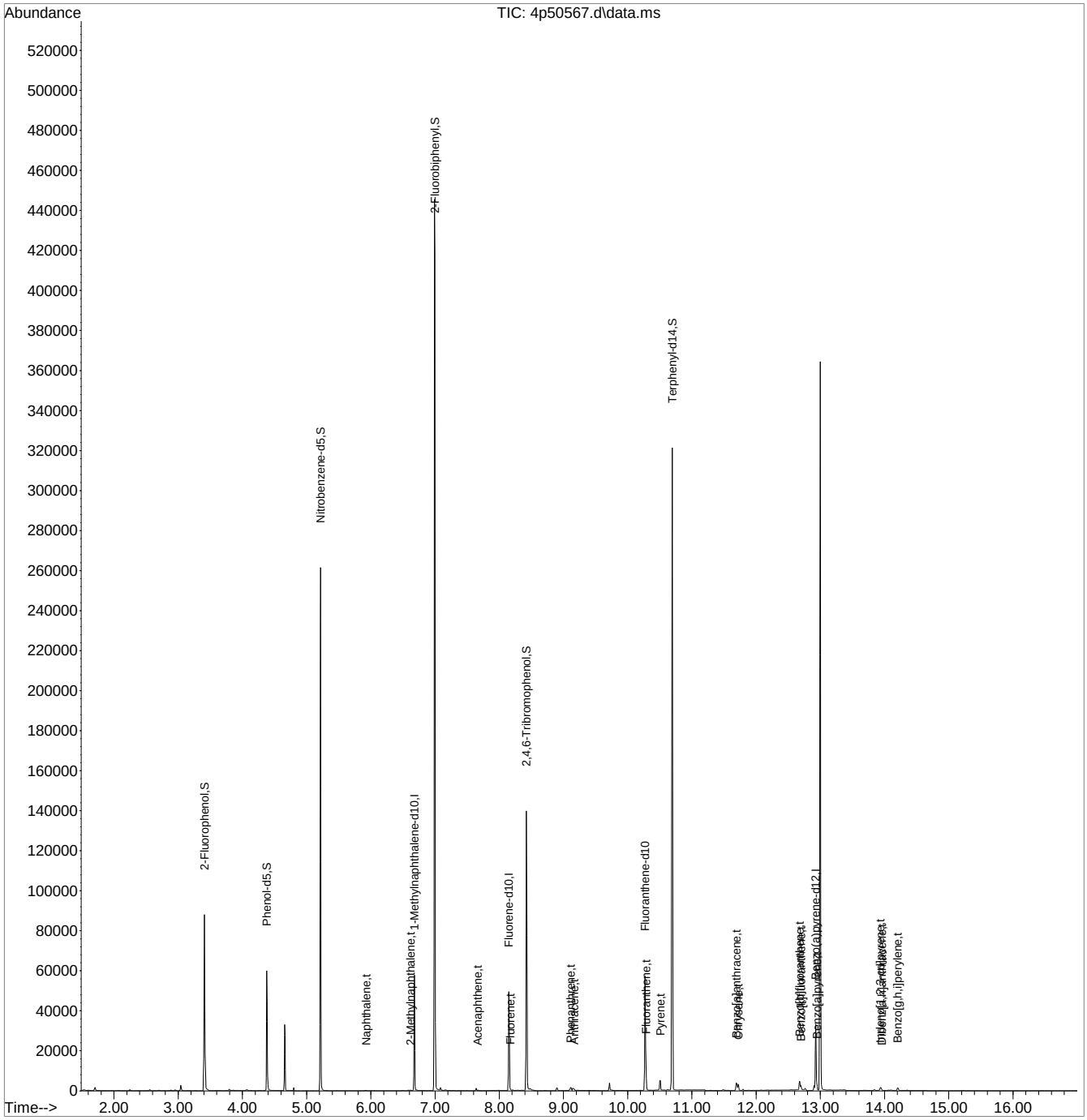
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.680	150	14761	800.00	ppm	# 0.00
13) Fluorene-d10	8.150	176	21129	800.00	ppm	0.00
20) Fluoranthene-d10	10.271	212	37272	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	12.928	264	18046	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.409	112	33046	3608.95	ppm	-0.01
Spiked Amount 50.000			Recovery	= 7217.90%		
4) Phenol-d5	4.380	99	42929	2471.23	ppm	0.00
Spiked Amount 50.000			Recovery	= 4942.46%		
7) Nitrobenzene-d5	5.217	82	160517	11323.10	ppm	0.00
Spiked Amount 50.000			Recovery	= 22646.20%		
14) 2-Fluorobiphenyl	6.999	172	248107	9205.76	ppm	0.00
Spiked Amount 50.000			Recovery	= 18411.52%		
19) 2,4,6-Tribromophenol	8.423	330	50951	12635.30	ppm	0.00
Spiked Amount 50.000			Recovery	= 25270.60%		
27) Terphenyl-d14	10.694	244	180043	6743.99	ppm	0.00
Spiked Amount 50.000			Recovery	= 13487.98%		
Target Compounds						Qvalue
8) Naphthalene	5.929	128	170	4.02	ppm	86
10) 2-Methylnaphthalene	6.620	141	120	5.44	ppm	74
16) Acenaphthene	7.666	153	135	5.37	ppm	80
17) Fluorene	8.176	166	205	6.76	ppm	95
23) Phenanthrene	9.112	178	1773	35.32	ppm	94
24) Anthracene	9.167	178	636	13.21	ppm	90
25) Fluoranthene	10.289	202	3572	68.33	ppm	97
26) Pyrene	10.510	202	4012	69.75	ppm	92
28) Benzo[a]anthracene	11.695	228	3452	67.17	ppm	87
29) Chrysene	11.723	228	1862	36.99	ppm	99
31) Benzo[b]fluoranthene	12.676	252	3360	88.01	ppm	94
32) Benzo[k]fluoranthene	12.700	252	1110	29.81	ppm	93
33) Benzo[a]pyrene	12.948	252	2059	60.28	ppm	98
34) Indeno[1,2,3-cd]pyrene	13.935	276	1506	37.01	ppm	96
35) Dibenz[a,h]anthracene	13.959	278	355	11.20	ppm	77
36) Benzo[g,h,i]perylene	14.205	276	1420	41.17	ppm	99

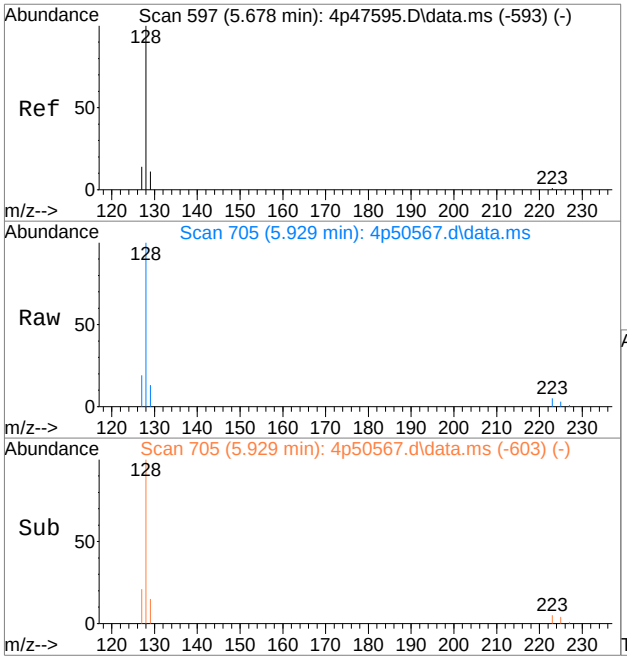
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\011022\e4p2645\
Data File : 4p50567.d
Acq On : 7 Jan 2022 6:07 pm
Operator : ninap
Sample : jd36682-3 Inst : MS4P
Misc : op37474a,e4p2645,260,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Jan 10 04:08:29 2022
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jan 10 03:53:43 2022
Response via : Initial Calibration

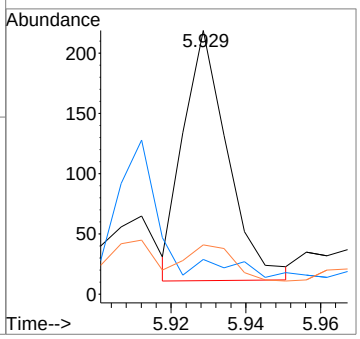


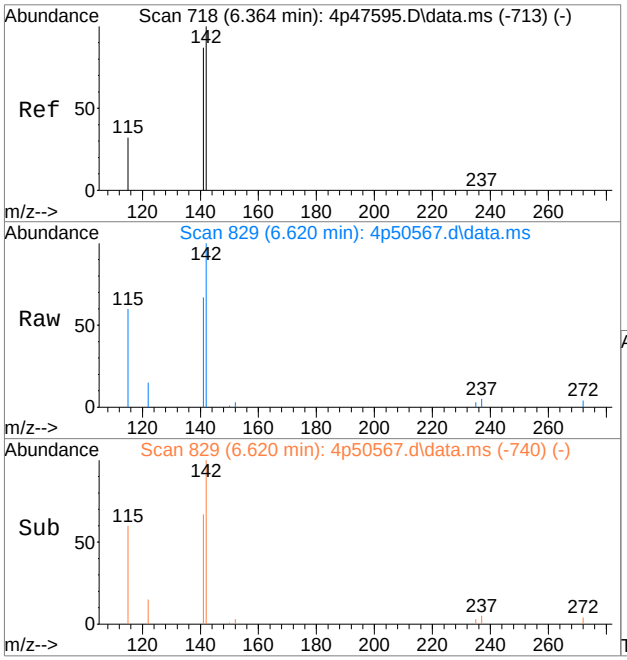


#8
Naphthalene
Concen: 4.02 ppm
RT: 5.929 min Scan# 705
Delta R.T. -0.005 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:128 Resp: 170

Ion	Ratio	Lower	Upper
128	100		
129	0.0	0.0	40.8
127	13.3	0.0	42.9

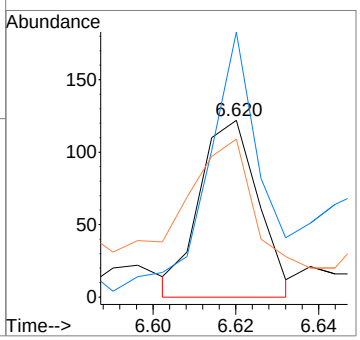


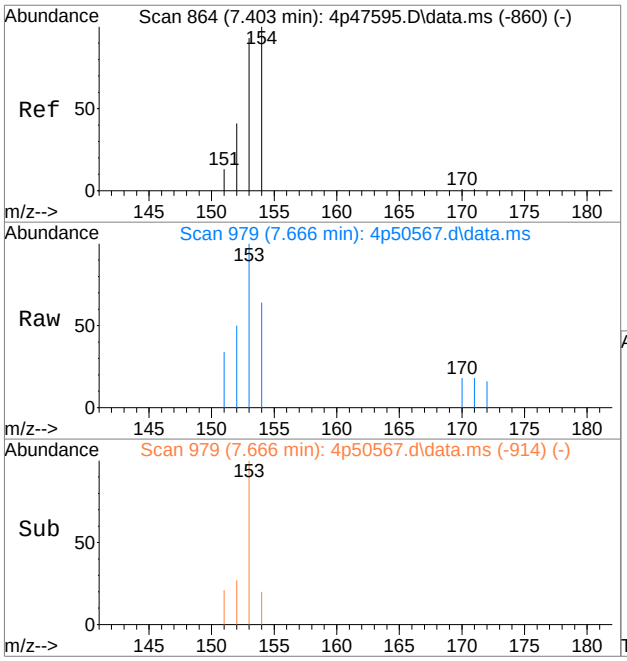


#10
2-Methylnaphthalene
Concen: 5.44 ppm
RT: 6.620 min Scan# 829
Delta R.T. 0.000 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:141 Resp: 120

Ion	Ratio	Lower	Upper
141	100		
142	141.3	82.9	142.9
115	69.7	64.3	124.3

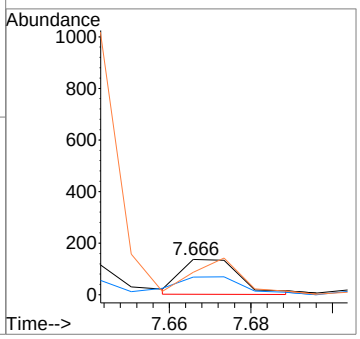


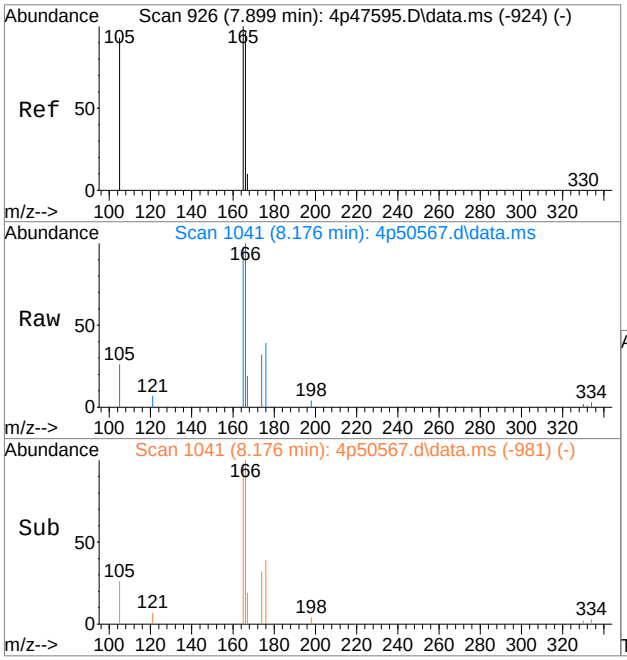


#16
Acenaphthene
Concen: 5.37 ppm
RT: 7.666 min Scan# 979
Delta R.T. -0.007 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:153 Resp: 135

Ion	Ratio	Lower	Upper
153	100		
152	42.6	15.1	75.1
154	62.0	58.8	118.8

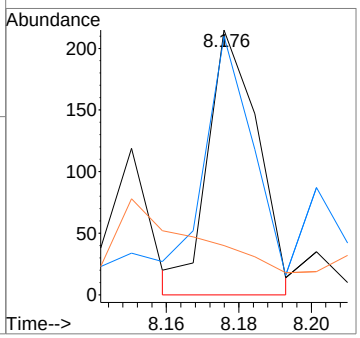


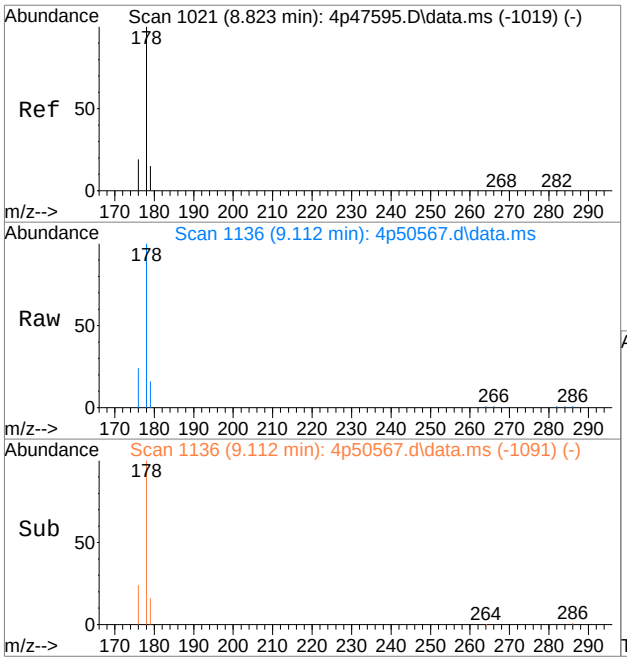


#17
Fluorene
Concen: 6.76 ppm
RT: 8.176 min Scan# 1041
Delta R.T. -0.008 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:166 Resp: 205

Ion	Ratio	Lower	Upper
166	100		
165	95.2	64.3	124.3
167	2.5	0.0	44.5

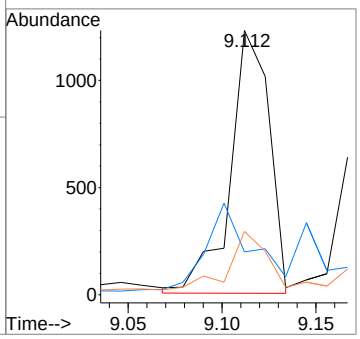


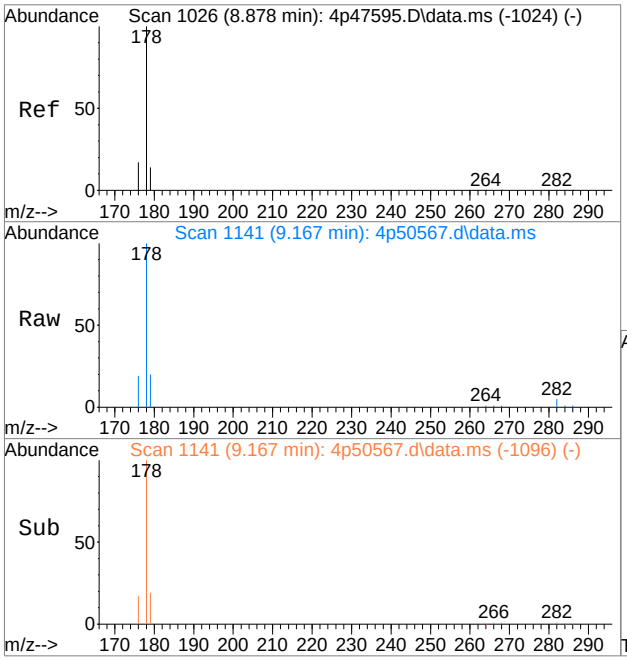


#23
Phenanthrene
Concen: 35.32 ppm
RT: 9.112 min Scan# 1136
Delta R.T. -0.008 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:178 Resp: 1773

Ion	Ratio	Lower	Upper
178	100		
179	12.1	0.0	45.3
176	22.2	0.0	49.8

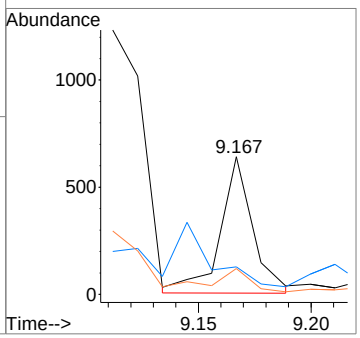


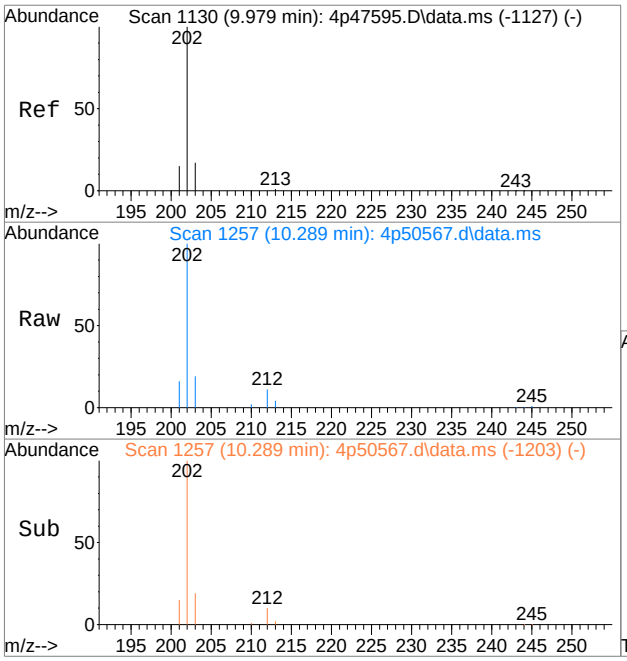


#24
Anthracene
Concen: 13.21 ppm
RT: 9.167 min Scan# 1141
Delta R.T. -0.008 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:178 Resp: 636

Ion	Ratio	Lower	Upper
178	100		
179	11.2	0.0	47.2
176	15.9	0.0	48.5

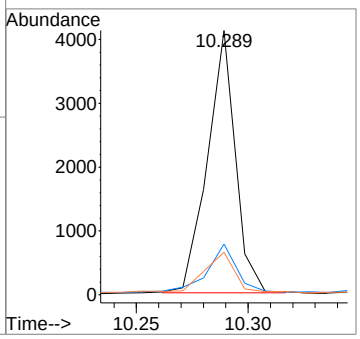


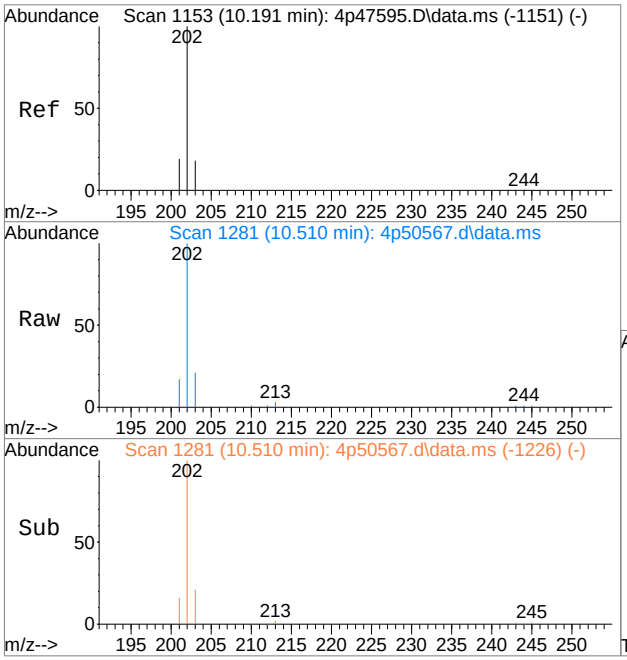


#25
Fluoranthene
Concen: 68.33 ppm
RT: 10.289 min Scan# 1257
Delta R.T. -0.007 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:202 Resp: 3572

Ion	Ratio	Lower	Upper
202	100		
203	18.1	0.0	47.9
201	15.0	0.0	42.6

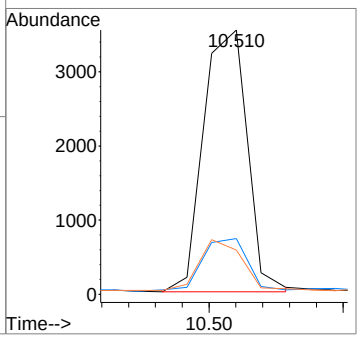


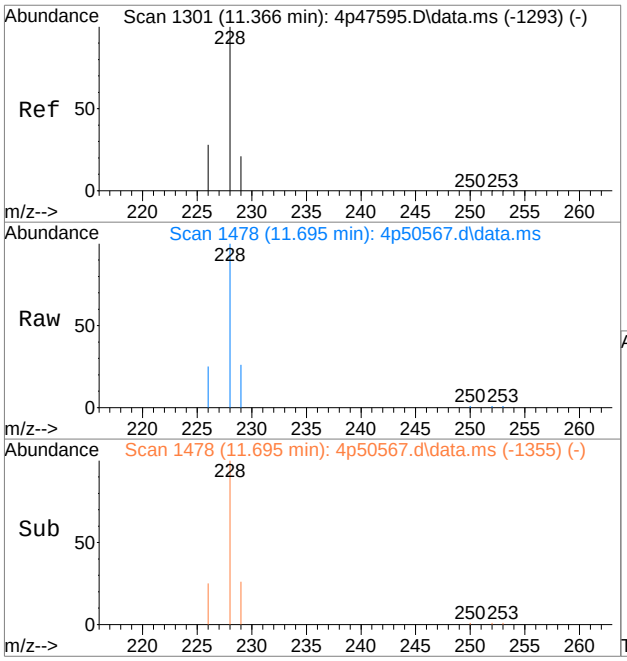


#26
Pyrene
Concen: 69.75 ppm
RT: 10.510 min Scan# 1281
Delta R.T. 0.003 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:202 Resp: 4012

Ion	Ratio	Lower	Upper
202	100		
203	19.8	0.0	46.3
201	15.2	0.0	49.2

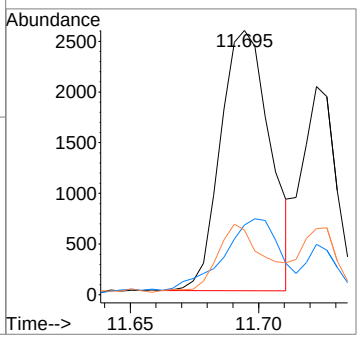


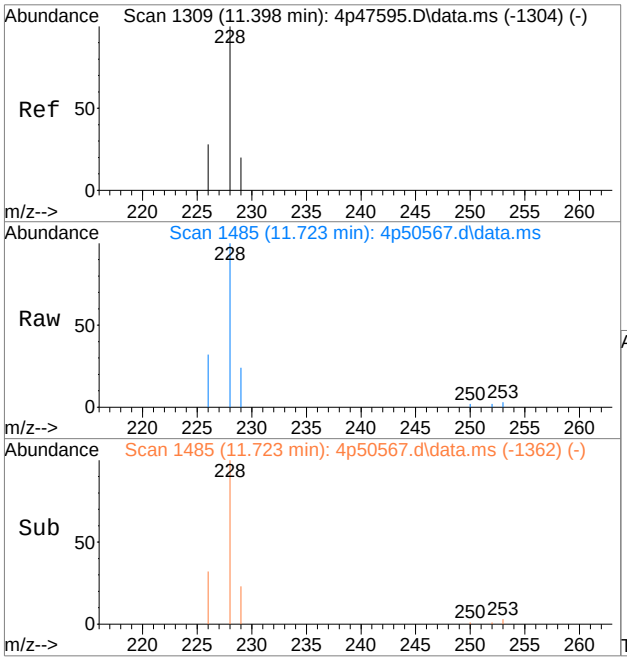


#28
Benzo[a]anthracene
Concen: 67.17 ppm
RT: 11.695 min Scan# 1478
Delta R.T. 0.003 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:228 Resp: 3452

Ion	Ratio	Lower	Upper
228	100		
229	24.0	0.0	47.8
226	21.7	0.0	57.9

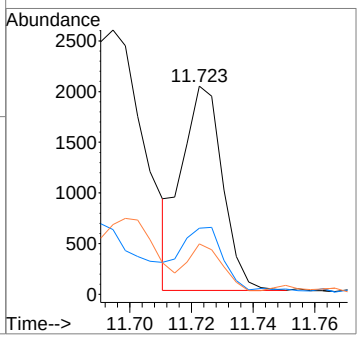


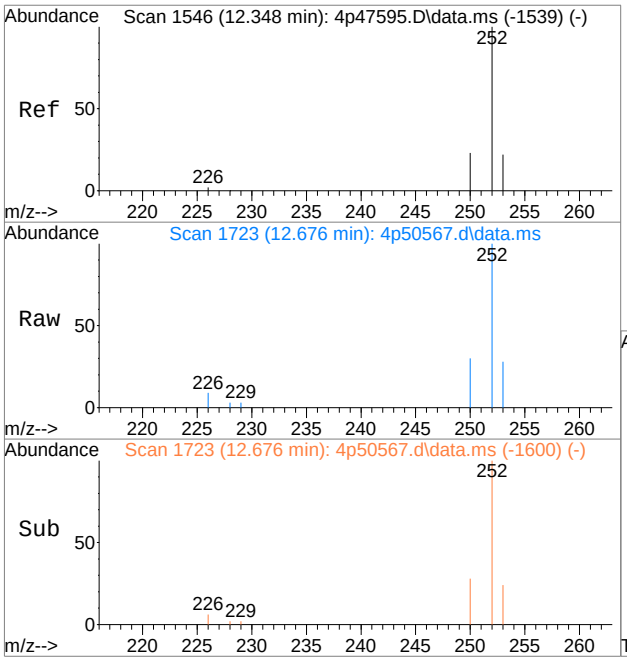


#29
Chrysene
Concen: 36.99 ppm
RT: 11.723 min Scan# 1485
Delta R.T. -0.005 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:228 Resp: 1862

Ion	Ratio	Lower	Upper
228	100		
226	29.9	0.0	59.7
229	18.9	0.0	49.3

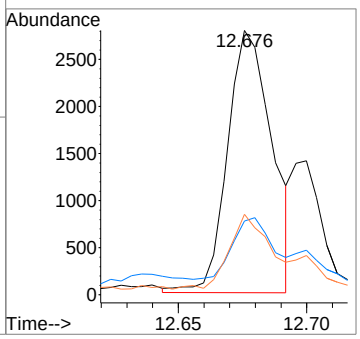


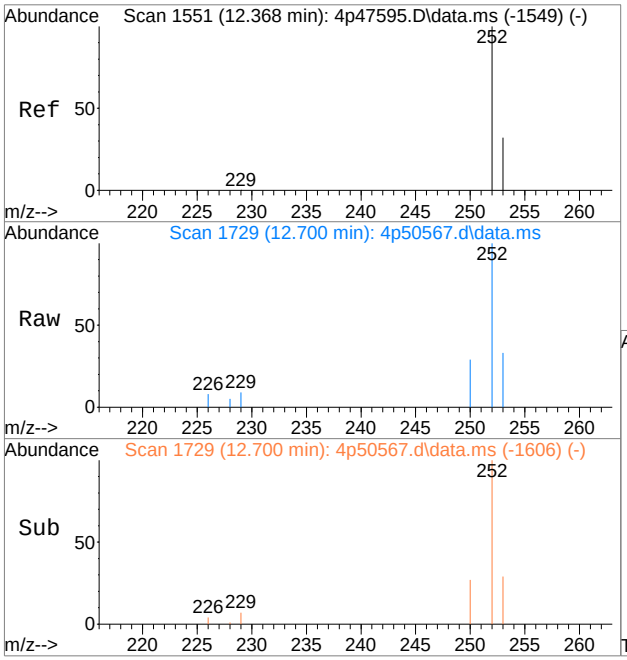


#31
Benzo[b]fluoranthene
Concen: 88.01 ppm
RT: 12.676 min Scan# 1723
Delta R.T. -0.005 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:252 Resp: 3360

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	52.4
250	29.0	0.0	53.8

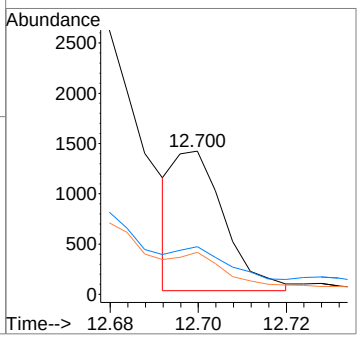


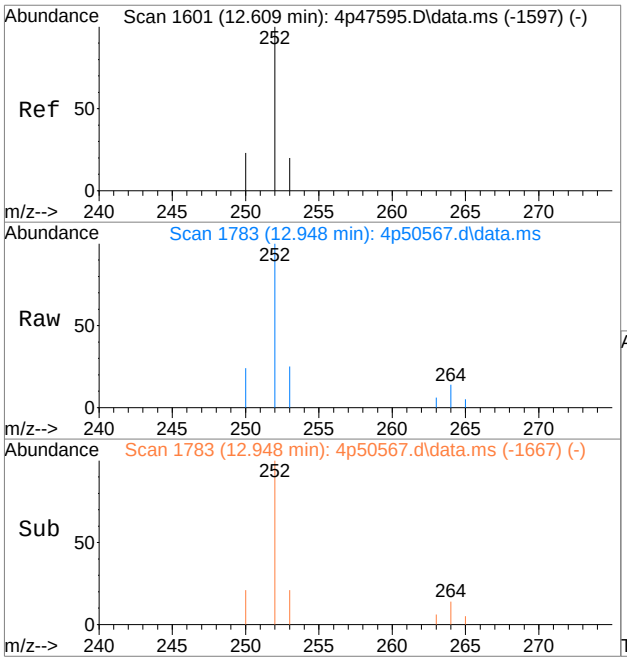


#32
Benzo[k]fluoranthene
Concen: 29.81 ppm
RT: 12.700 min Scan# 1729
Delta R.T. -0.005 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:252 Resp: 1110

Ion	Ratio	Lower	Upper
252	100		
253	25.4	0.0	51.2
250	25.2	0.0	52.4

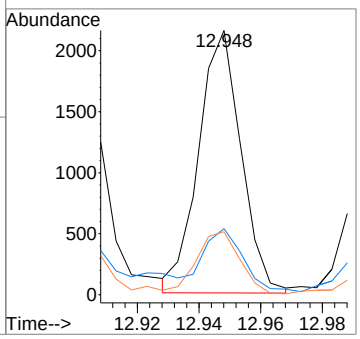


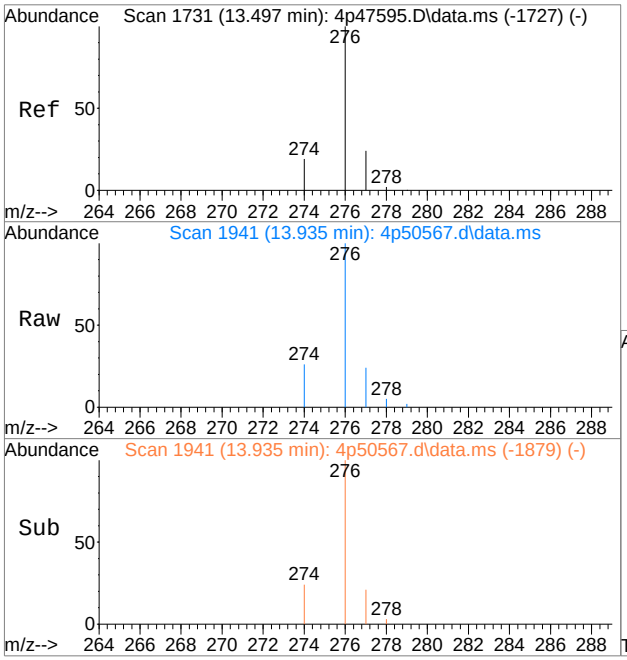


#33
Benzo[a]pyrene
Concen: 60.28 ppm
RT: 12.948 min Scan# 1783
Delta R.T. -0.001 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:252 Resp: 2059

Ion	Ratio	Lower	Upper
252	100		
253	20.9	0.0	51.5
250	23.9	0.0	55.0

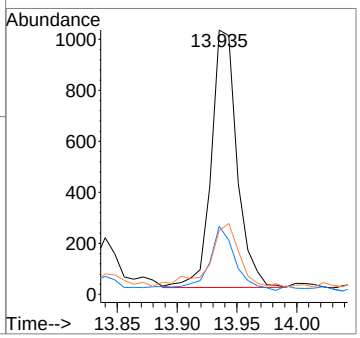


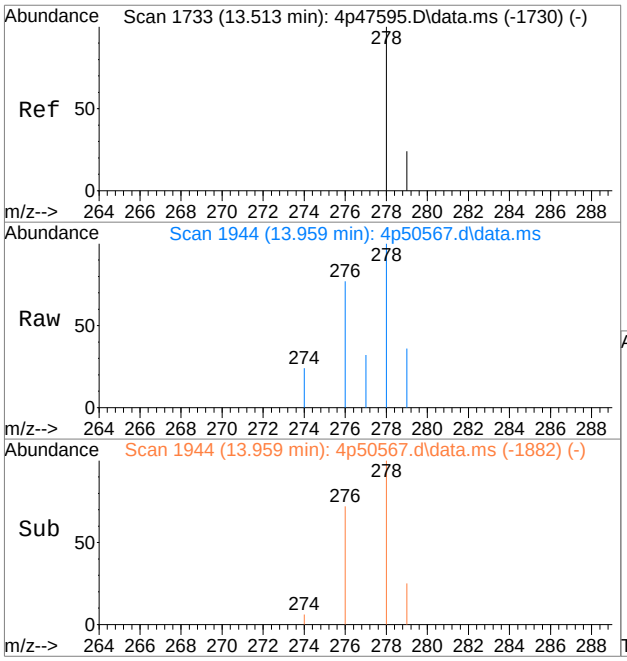


#34
Indeno[1,2,3-cd]pyrene
Concen: 37.01 ppm
RT: 13.935 min Scan# 1941
Delta R.T. -0.009 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:276 Resp: 1506

Ion	Ratio	Lower	Upper
276	100		
274	23.3	0.0	51.4
277	21.0	0.0	52.5

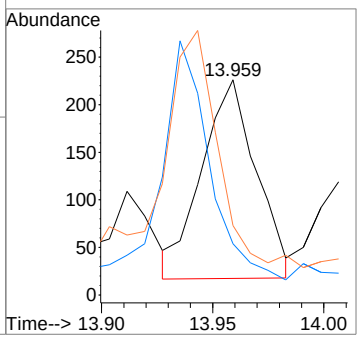


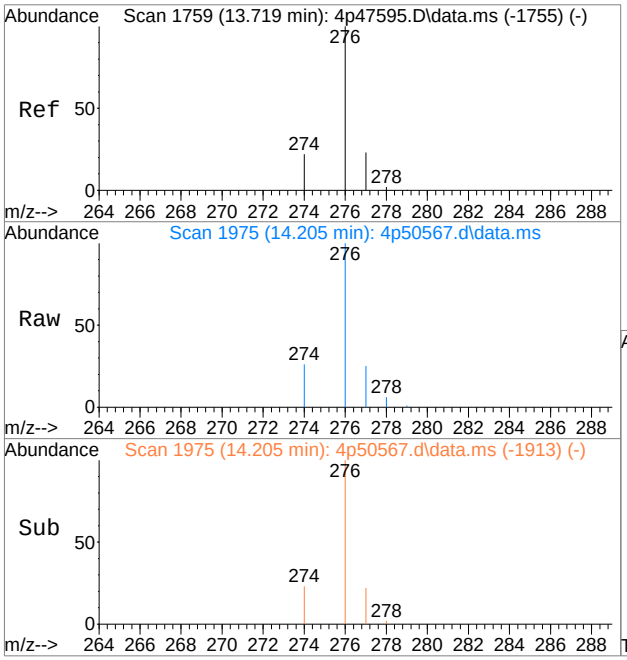


#35
Dibenz[a,h]anthracene
Concen: 11.20 ppm
RT: 13.959 min Scan# 1944
Delta R.T. -0.009 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:278 Resp: 355

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	36.8
277	0.0	0.0	39.1

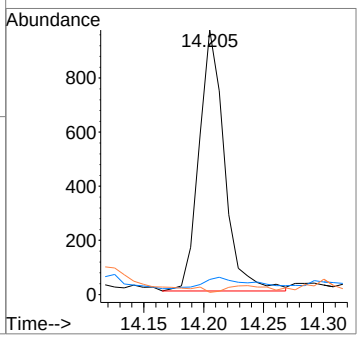




#36
Benzo[g,h,i]perylene
Concen: 41.17 ppm
RT: 14.205 min Scan# 1975
Delta R.T. -0.009 min
Lab File: 4p50567.d
Acq: 7 Jan 2022 6:07 pm

Tgt Ion:276 Resp: 1420

Ion	Ratio	Lower	Upper
276	100		
278	2.9	0.0	33.1
279	0.0	0.0	30.2



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/10/22 17:24

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\011022\e4p2645\
Data File : 4p50568.d
Acq On : 7 Jan 2022 6:30 pm
Operator : ninap
Sample : jd36682-4 Inst : MS4P
Misc : op37474a,e4p2645,270,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Jan 10 04:09:59 2022
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jan 10 03:53:43 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.680	150	15003	800.00	ppm	# 0.00
13) Fluorene-d10	8.150	176	21348	800.00	ppm	0.00
20) Fluoranthene-d10	10.271	212	37684	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	12.928	264	18463	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.409	112	24592	2642.37	ppm	-0.01
Spiked Amount 50.000			Recovery = 5284.74%			
4) Phenol-d5	4.380	99	32802	1857.81	ppm	0.00
Spiked Amount 50.000			Recovery = 3715.62%			
7) Nitrobenzene-d5	5.213	82	116666	8097.04	ppm	0.00
Spiked Amount 50.000			Recovery = 16194.08%			
14) 2-Fluorobiphenyl	6.992	172	176293	6474.07	ppm	0.00
Spiked Amount 50.000			Recovery = 12948.14%			
19) 2,4,6-Tribromophenol	8.423	330	35165	8631.08	ppm	0.00
Spiked Amount 50.000			Recovery = 17262.16%			
27) Terphenyl-d14	10.694	244	114015	4224.05	ppm	0.00
Spiked Amount 50.000			Recovery = 8448.10%			
Target Compounds						Qvalue
8) Naphthalene	5.929	128	826	19.24	ppm	91
10) 2-Methylnaphthalene	6.614	141	220m	9.81	ppm	
23) Phenanthrene	9.112	178	833	16.41	ppm	90
24) Anthracene	9.167	178	182	3.74	ppm	79
25) Fluoranthene	10.289	202	870	16.46	ppm	94
26) Pyrene	10.501	202	898	15.44	ppm	96
31) Benzo[b]fluoranthene	12.676	252	984	13.60	ppm	77
32) Benzo[k]fluoranthene	12.696	252	364	9.55	ppm	93
33) Benzo[a]pyrene	12.948	252	504	14.42	ppm	95
34) Indeno[1,2,3-cd]pyrene	13.935	276	441	10.59	ppm	99
36) Benzo[g,h,i]perylene	14.205	276	404	11.45	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

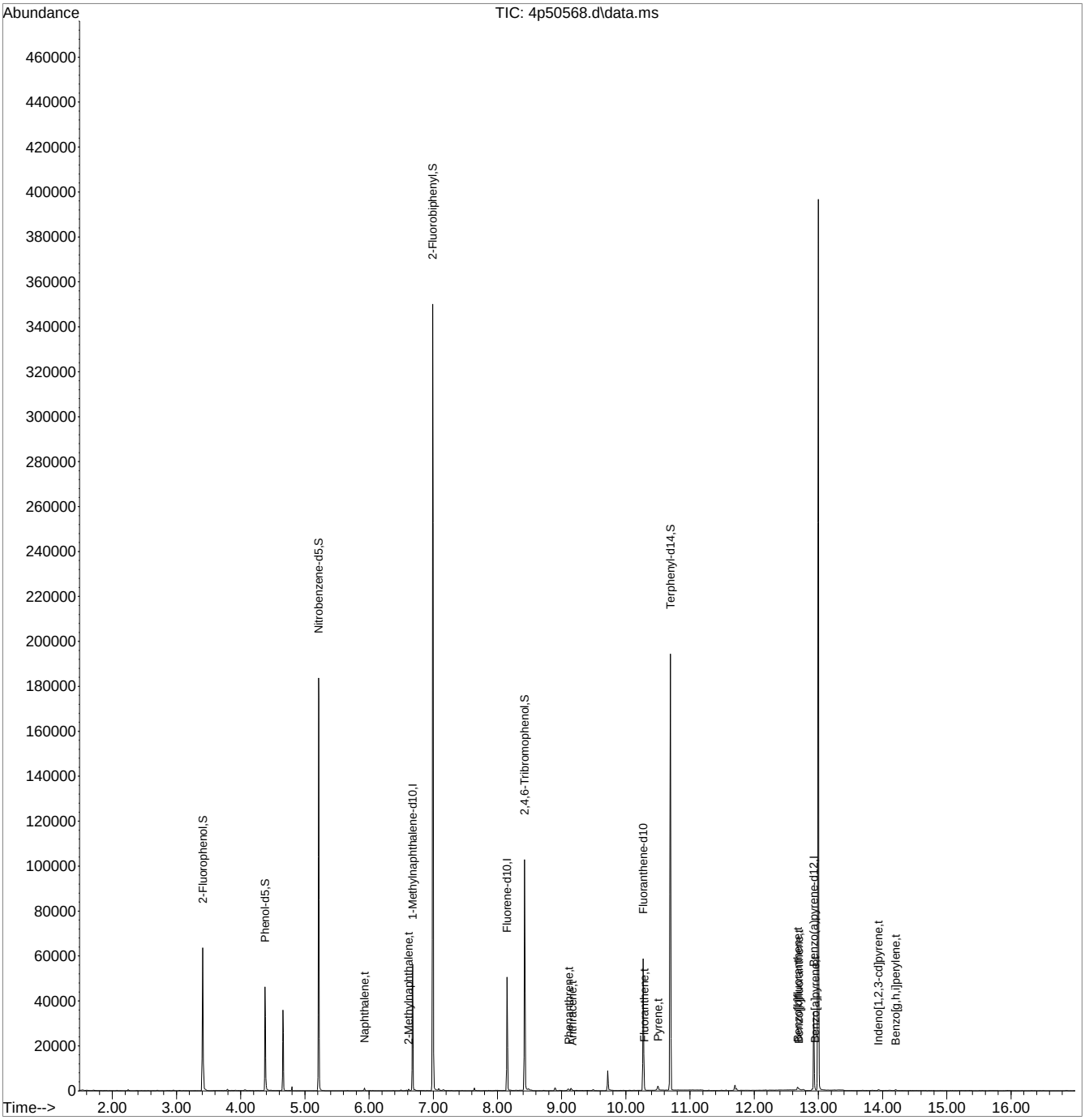
9.1.14

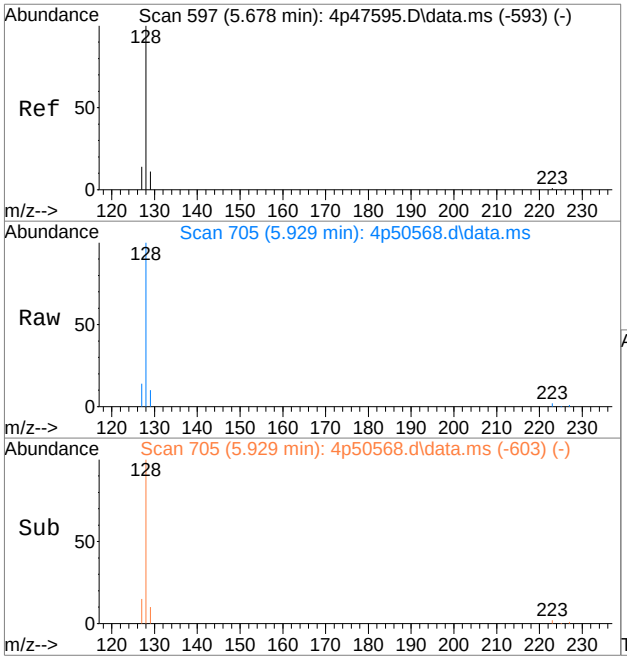
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\011022\e4p2645\
Data File : 4p50568.d
Acq On : 7 Jan 2022 6:30 pm
Operator : ninap
Sample : jd36682-4 Inst : MS4P
Misc : op37474a,e4p2645,270,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Jan 10 04:09:59 2022
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jan 10 03:53:43 2022
Response via : Initial Calibration

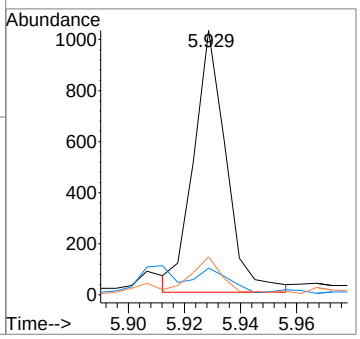


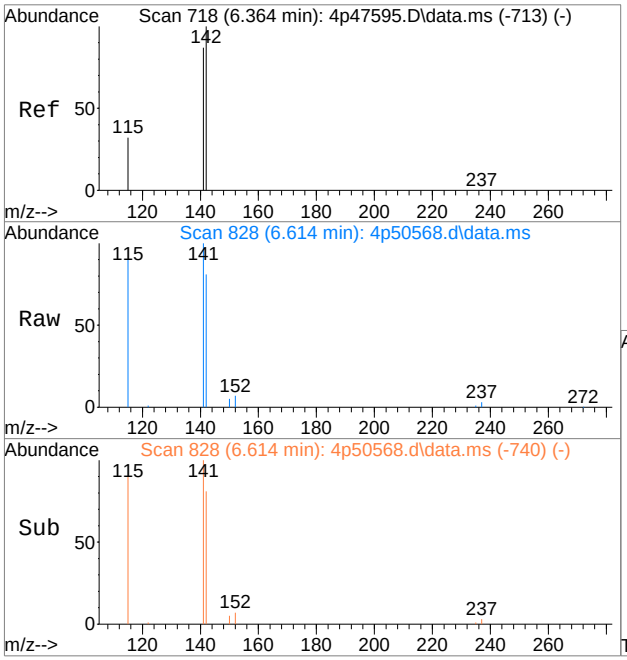


#8
Naphthalene
Concen: 19.24 ppm
RT: 5.929 min Scan# 705
Delta R.T. -0.005 min
Lab File: 4p50568.d
Acq: 7 Jan 2022 6:30 pm

Tgt Ion:128 Resp: 826

Ion	Ratio	Lower	Upper
128	100		
129	3.8	0.0	40.8
127	13.3	0.0	42.9

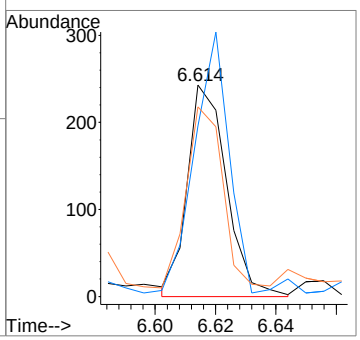


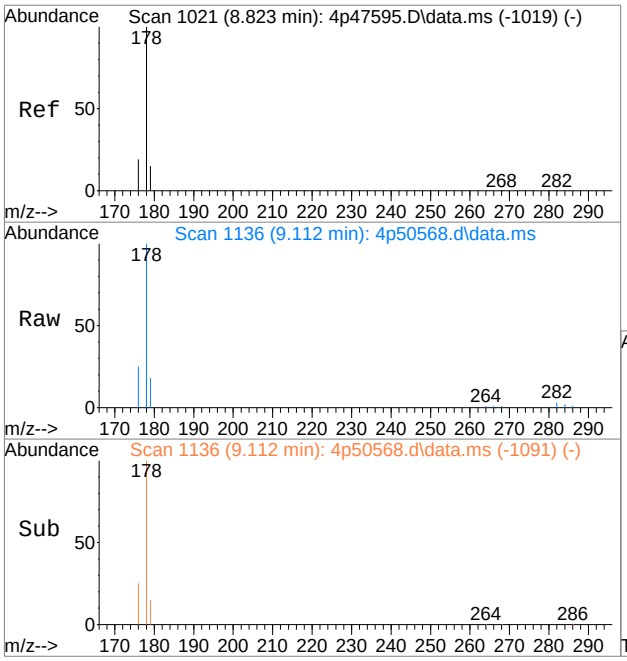


#10
2-Methylnaphthalene
Concen: 9.81 ppm m
RT: 6.614 min Scan# 828
Delta R.T. -0.006 min
Lab File: 4p50568.d
Acq: 7 Jan 2022 6:30 pm

Tgt Ion:141 Resp: 220

Ion	Ratio	Lower	Upper
141	100		
142	80.7	82.9	142.9#
115	89.7	64.3	124.3

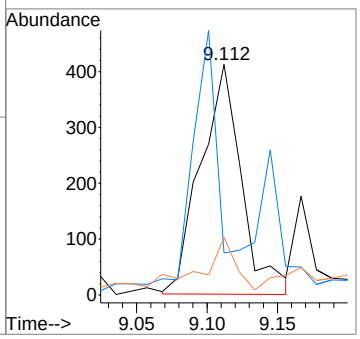


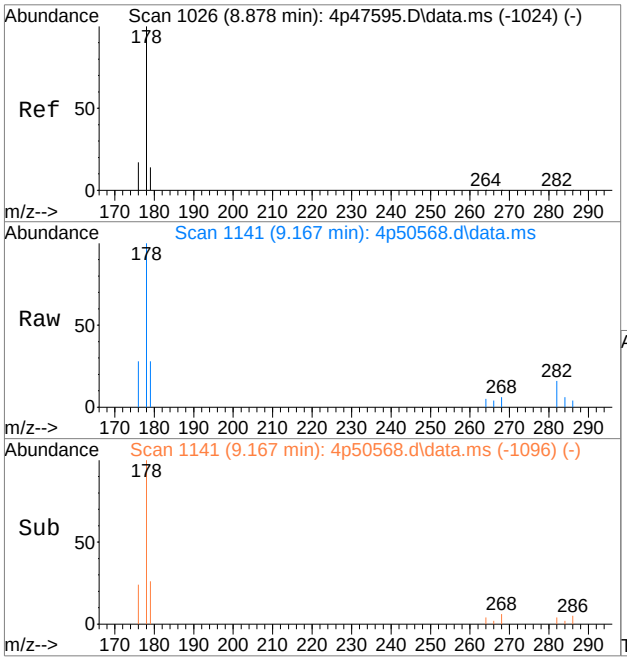


#23
Phenanthrene
Concen: 16.41 ppm
RT: 9.112 min Scan# 1136
Delta R.T. -0.008 min
Lab File: 4p50568.d
Acq: 7 Jan 2022 6:30 pm

Tgt Ion:178 Resp: 833

Ion	Ratio	Lower	Upper
178	100		
179	8.9	0.0	45.3
176	17.0	0.0	49.8

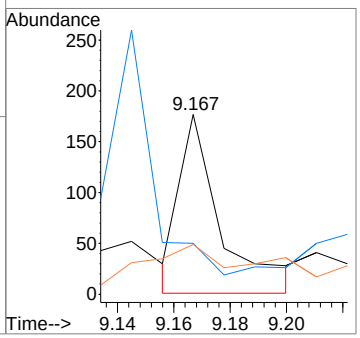


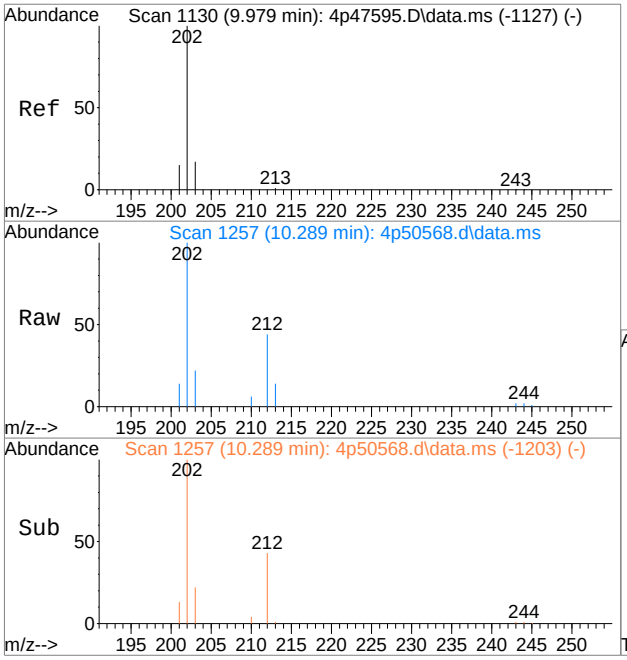


#24
Anthracene
Concen: 3.74 ppm
RT: 9.167 min Scan# 1141
Delta R.T. -0.008 min
Lab File: 4p50568.d
Acq: 7 Jan 2022 6:30 pm

Tgt Ion:178 Resp: 182

Ion	Ratio	Lower	Upper
178	100		
179	7.8	0.0	47.2
176	9.1	0.0	48.5

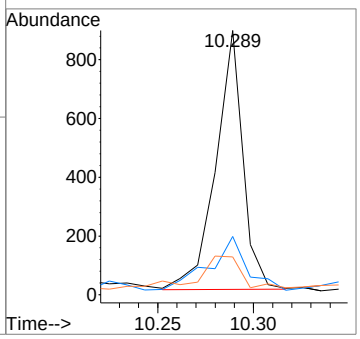


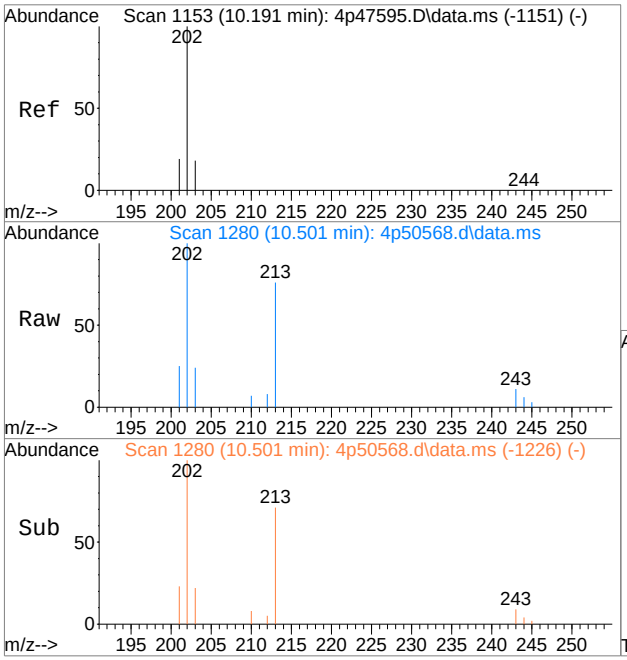


#25
Fluoranthene
Concen: 16.46 ppm
RT: 10.289 min Scan# 1257
Delta R.T. -0.007 min
Lab File: 4p50568.d
Acq: 7 Jan 2022 6:30 pm

Tgt Ion:202 Resp: 870

Ion	Ratio	Lower	Upper
202	100		
203	20.8	0.0	47.9
201	10.6	0.0	42.6

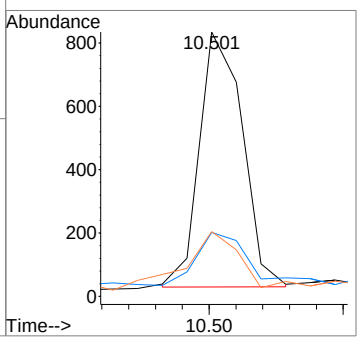


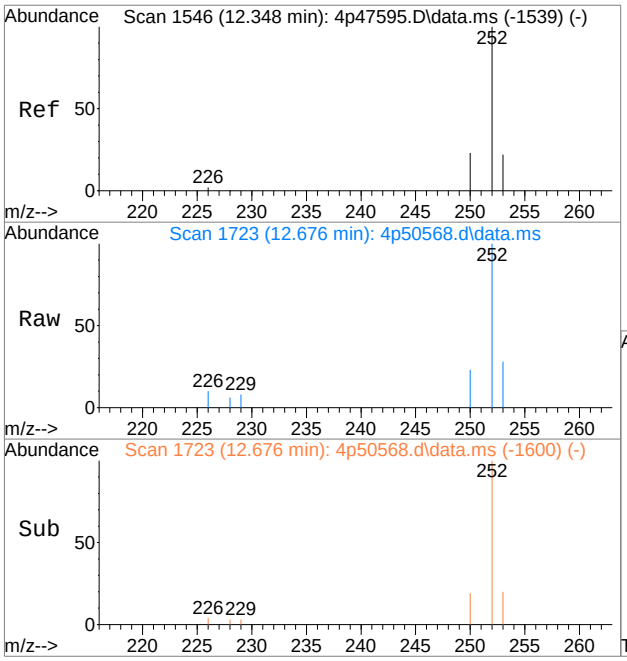


#26
Pyrene
Concen: 15.44 ppm
RT: 10.501 min Scan# 1280
Delta R.T. -0.007 min
Lab File: 4p50568.d
Acq: 7 Jan 2022 6:30 pm

Tgt Ion:202 Resp: 898

Ion	Ratio	Lower	Upper
202	100		
203	19.5	0.0	46.3
201	18.5	0.0	49.2

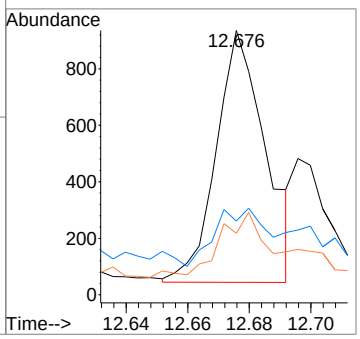


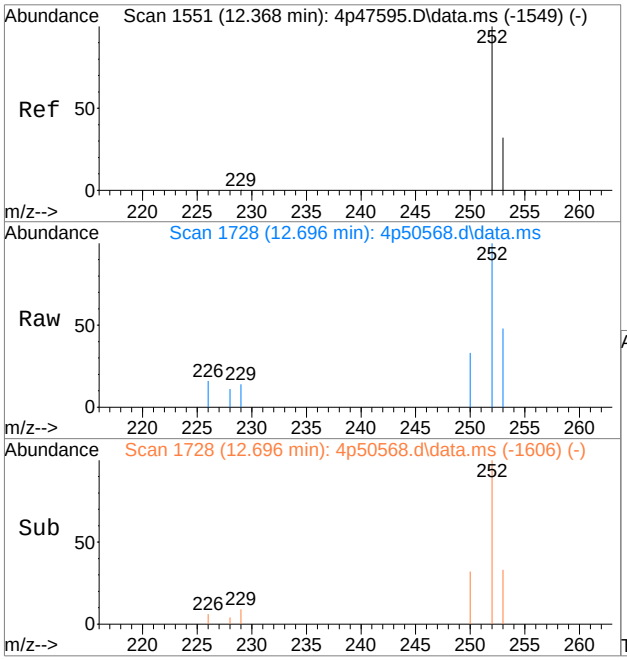


#31
Benzo[b]fluoranthene
Concen: 13.60 ppm
RT: 12.676 min Scan# 1723
Delta R.T. -0.005 min
Lab File: 4p50568.d
Acq: 7 Jan 2022 6:30 pm

Tgt Ion:252 Resp: 984

Ion	Ratio	Lower	Upper
252	100		
253	10.3	0.0	52.4
250	13.7	0.0	53.8

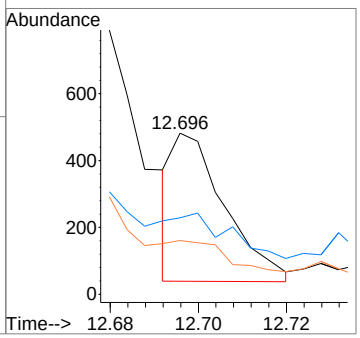


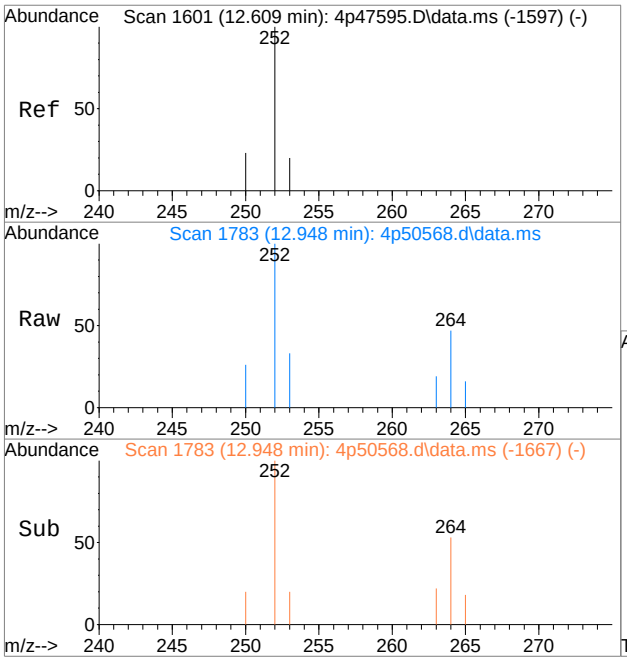


#32
Benzo[k]fluoranthene
Concen: 9.55 ppm
RT: 12.696 min Scan# 1728
Delta R.T. -0.009 min
Lab File: 4p50568.d
Acq: 7 Jan 2022 6:30 pm

Tgt Ion:252 Resp: 364

Ion	Ratio	Lower	Upper
252	100		
253	25.0	0.0	51.2
250	19.4	0.0	52.4

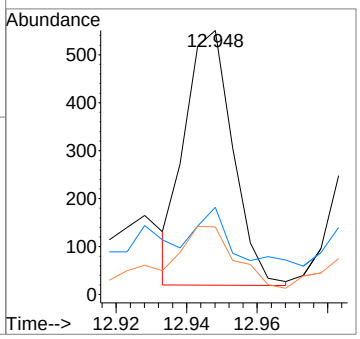


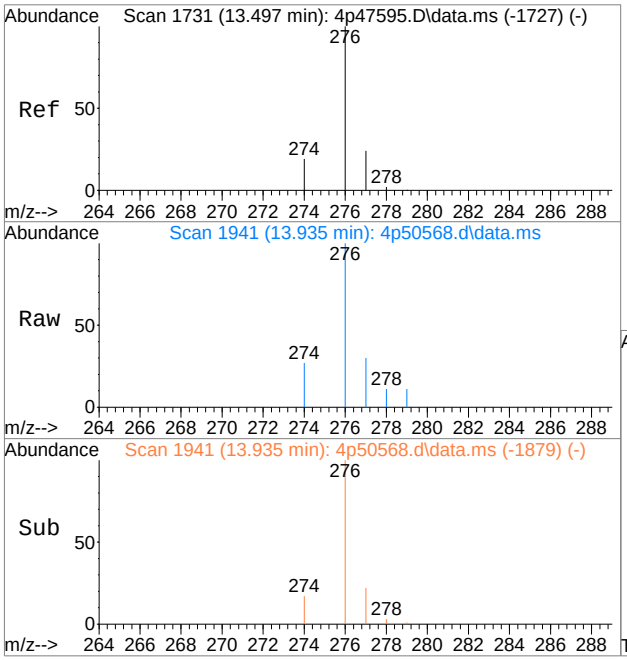


#33
Benzo[a]pyrene
Concen: 14.42 ppm
RT: 12.948 min Scan# 1783
Delta R.T. -0.001 min
Lab File: 4p50568.d
Acq: 7 Jan 2022 6:30 pm

Tgt Ion:252 Resp: 504

Ion	Ratio	Lower	Upper
252	100		
253	18.9	0.0	51.5
250	23.2	0.0	55.0

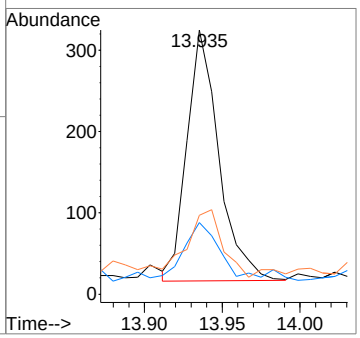


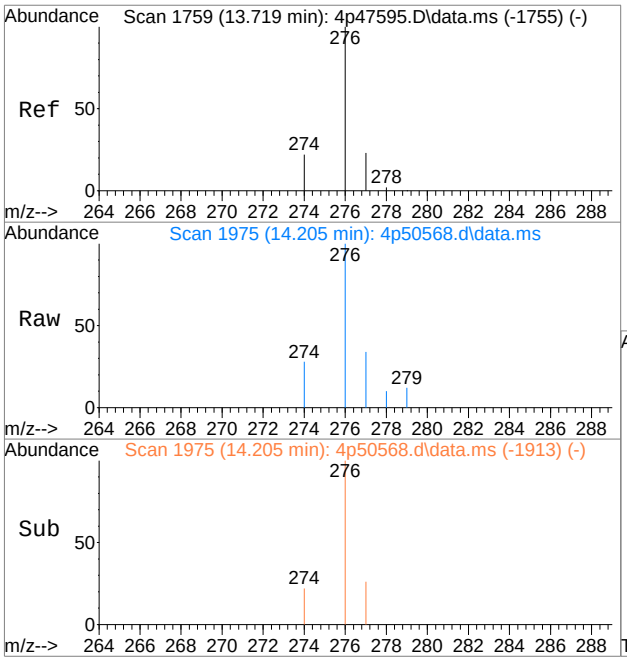


#34
Indeno[1,2,3-cd]pyrene
Concen: 10.59 ppm
RT: 13.935 min Scan# 1941
Delta R.T. -0.009 min
Lab File: 4p50568.d
Acq: 7 Jan 2022 6:30 pm

Tgt Ion:276 Resp: 441

Ion	Ratio	Lower	Upper
276	100		
274	21.9	0.0	51.4
277	22.8	0.0	52.5

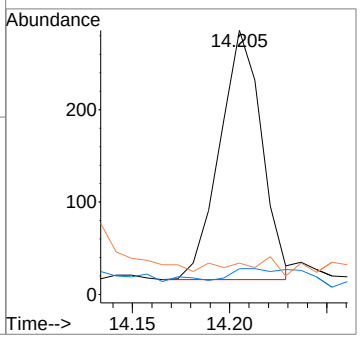




#36
Benzo[g,h,i]perylene
Concen: 11.45 ppm
RT: 14.205 min Scan# 1975
Delta R.T. -0.009 min
Lab File: 4p50568.d
Acq: 7 Jan 2022 6:30 pm

Tgt Ion:276 Resp: 404

Ion	Ratio	Lower	Upper
276	100		
278	2.9	0.0	33.1
279	3.0	0.0	30.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\011022\e4p2645\
Data File : 4p50569.d
Acq On : 7 Jan 2022 6:53 pm
Operator : ninap
Sample : jd36682-5 Inst : MS4P
Misc : op37474a,e4p2645,270,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Jan 10 04:11:15 2022
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jan 10 03:53:43 2022
Response via : Initial Calibration

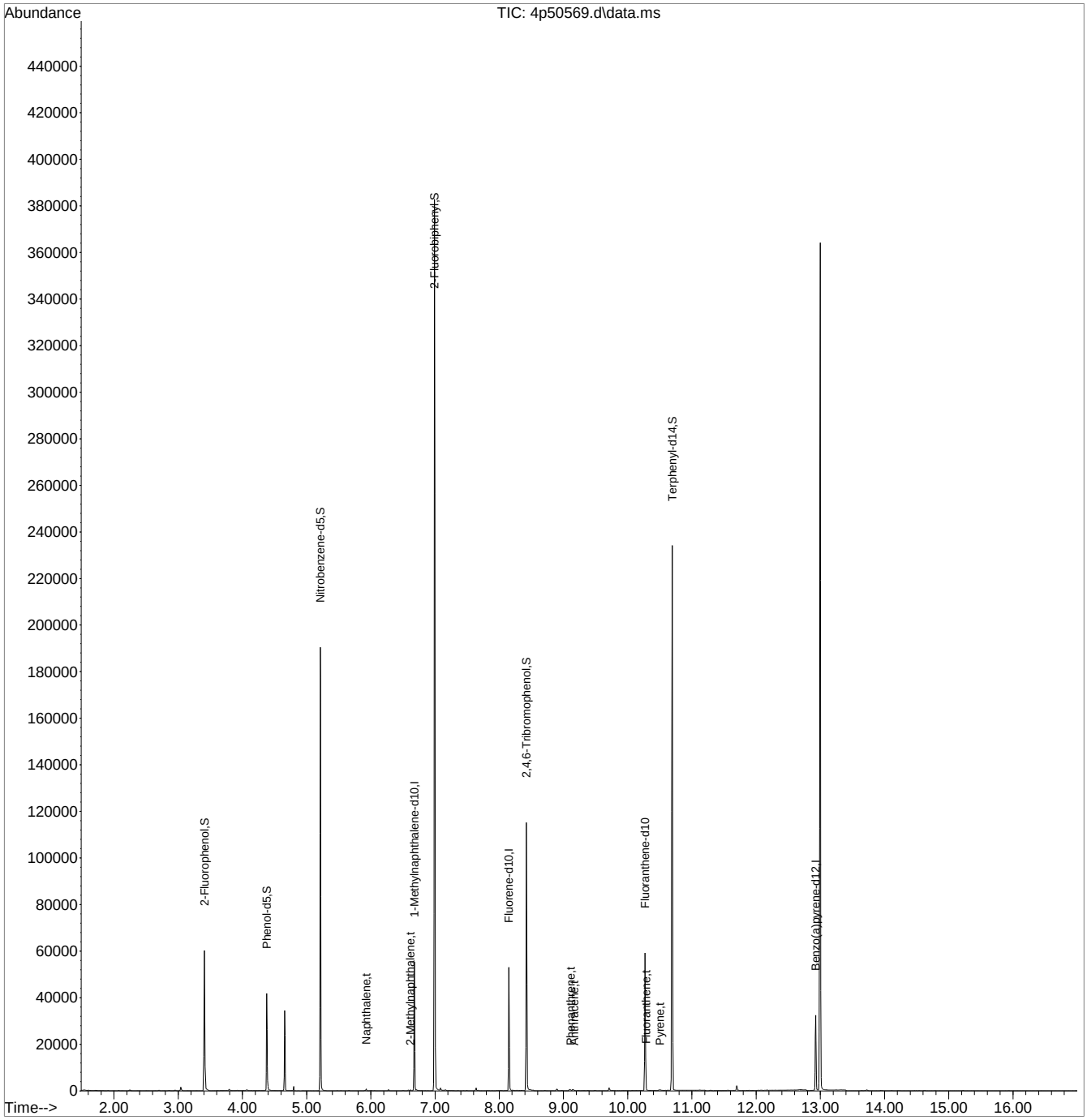
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.680	150	14743	800.00	ppm	# 0.00
13) Fluorene-d10	8.150	176	22083	800.00	ppm	0.00
20) Fluoranthene-d10	10.271	212	37385	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	12.928	264	17718	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.409	112	23101	2525.94	ppm	-0.01
Spiked Amount 50.000			Recovery = 5051.88%			
4) Phenol-d5	4.380	99	30165	1738.59	ppm	0.00
Spiked Amount 50.000			Recovery = 3477.18%			
7) Nitrobenzene-d5	5.213	82	119402	8433.07	ppm	0.00
Spiked Amount 50.000			Recovery = 16866.14%			
14) 2-Fluorobiphenyl	6.992	172	187647	6661.67	ppm	0.00
Spiked Amount 50.000			Recovery = 13323.34%			
19) 2,4,6-Tribromophenol	8.423	330	39053	9266.34	ppm	0.00
Spiked Amount 50.000			Recovery = 18532.68%			
27) Terphenyl-d14	10.694	244	140150	5233.83	ppm	0.00
Spiked Amount 50.000			Recovery = 10467.66%			
Target Compounds						Qvalue
8) Naphthalene	5.929	128	480	11.38	ppm	95
10) 2-Methylnaphthalene	6.614	141	104	4.72	ppm	81
23) Phenanthrene	9.112	178	505	10.03	ppm	94
24) Anthracene	9.167	178	219	4.53	ppm	84
25) Fluoranthene	10.289	202	256	4.88	ppm	90
26) Pyrene	10.501	202	207	3.59	ppm	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

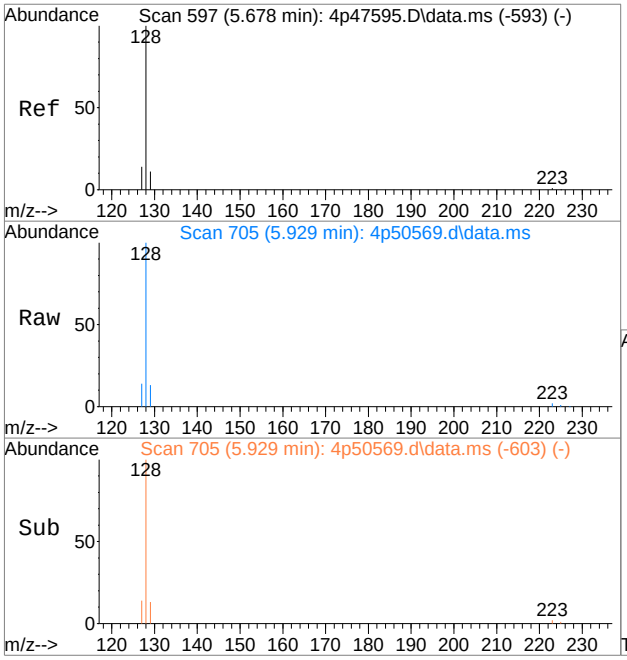
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\011022\e4p2645\
Data File : 4p50569.d
Acq On : 7 Jan 2022 6:53 pm
Operator : ninap
Sample : jd36682-5 Inst : MS4P
Misc : op37474a,e4p2645,270,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Jan 10 04:11:15 2022
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jan 10 03:53:43 2022
Response via : Initial Calibration



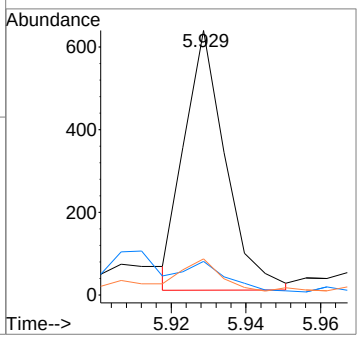
M4P2551SIMLVI.M Mon Jan 10 04:57:33 2022 Page: 2

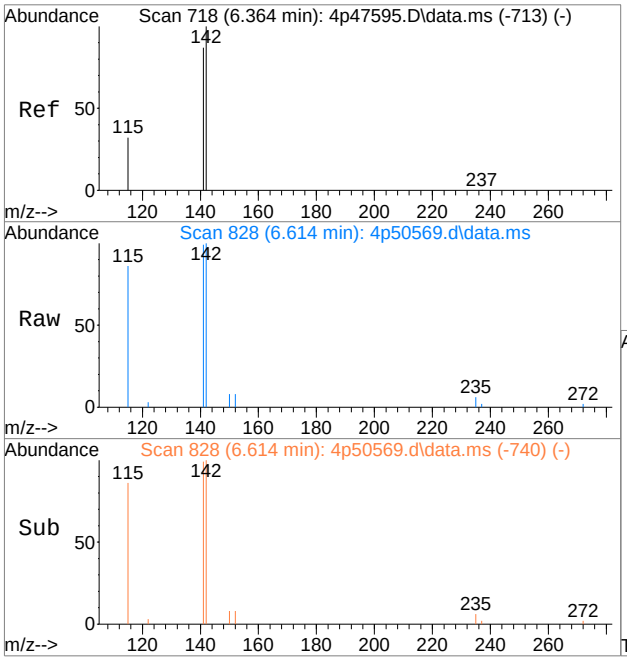


#8
Naphthalene
Concen: 11.38 ppm
RT: 5.929 min Scan# 705
Delta R.T. -0.005 min
Lab File: 4p50569.d
Acq: 7 Jan 2022 6:53 pm

Tgt Ion:128 Resp: 480

Ion	Ratio	Lower	Upper
128	100		
129	9.0	0.0	40.8
127	11.0	0.0	42.9

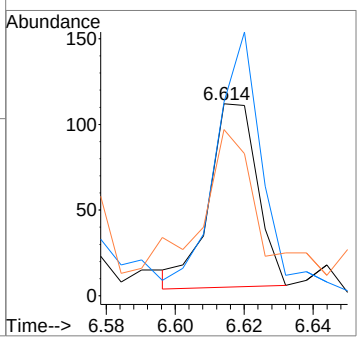


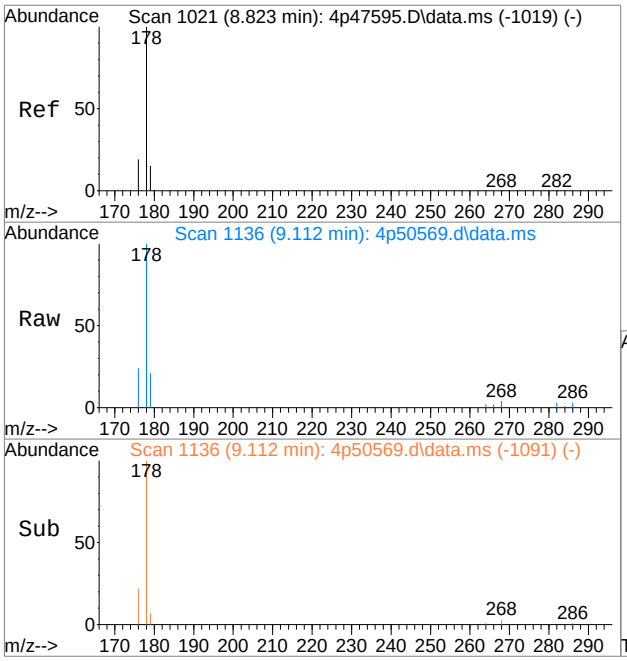


#10
2-Methylnaphthalene
Concen: 4.72 ppm
RT: 6.614 min Scan# 828
Delta R.T. -0.006 min
Lab File: 4p50569.d
Acq: 7 Jan 2022 6:53 pm

Tgt Ion:141 Resp: 104

Ion	Ratio	Lower	Upper
141	100		
142	101.0	82.9	142.9
115	66.5	64.3	124.3

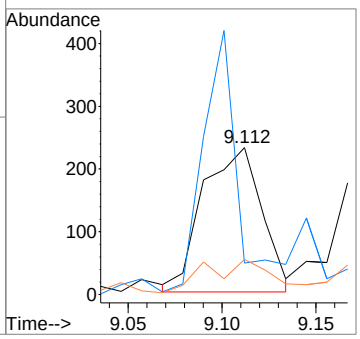


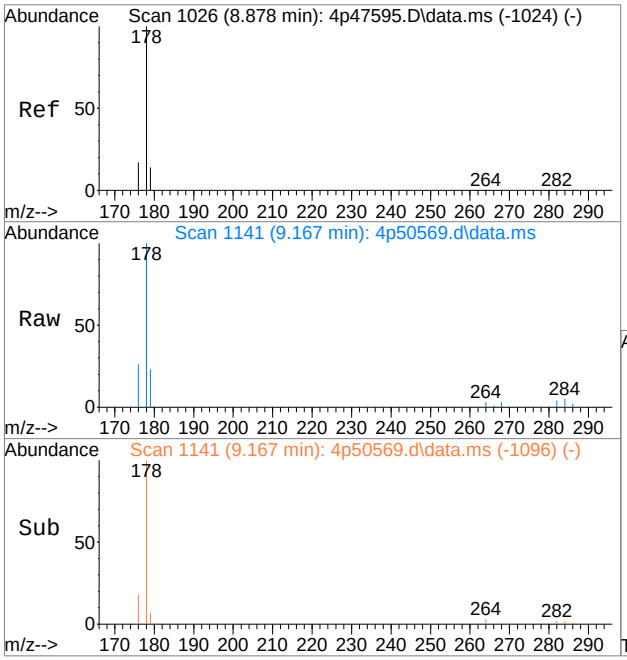


#23
Phenanthrene
Concen: 10.03 ppm
RT: 9.112 min Scan# 1136
Delta R.T. -0.008 min
Lab File: 4p50569.d
Acq: 7 Jan 2022 6:53 pm

Tgt Ion:178 Resp: 505

Ion	Ratio	Lower	Upper
178	100		
179	11.2	0.0	45.3
176	21.5	0.0	49.8

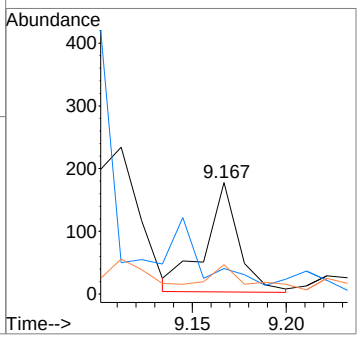


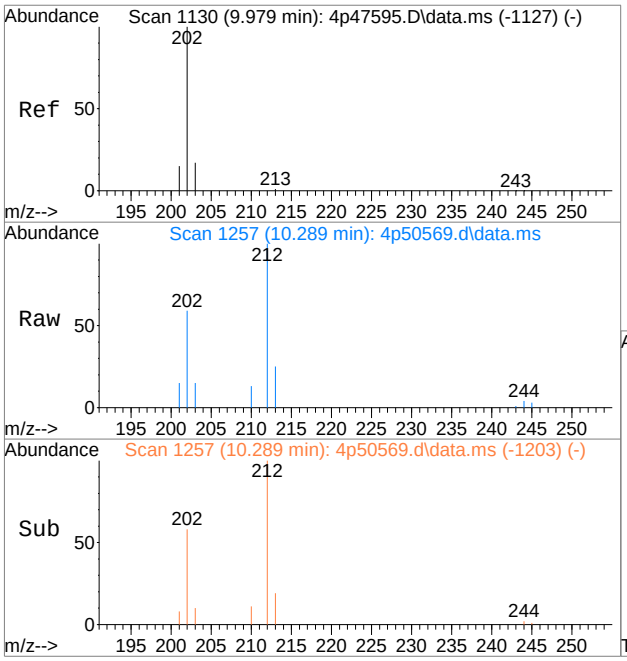


#24
Anthracene
Concen: 4.53 ppm
RT: 9.167 min Scan# 1141
Delta R.T. -0.008 min
Lab File: 4p50569.d
Acq: 7 Jan 2022 6:53 pm

Tgt Ion:178 Resp: 219

Ion	Ratio	Lower	Upper
178	100		
179	3.1	0.0	47.2
176	18.9	0.0	48.5

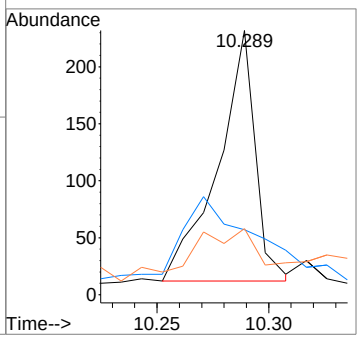


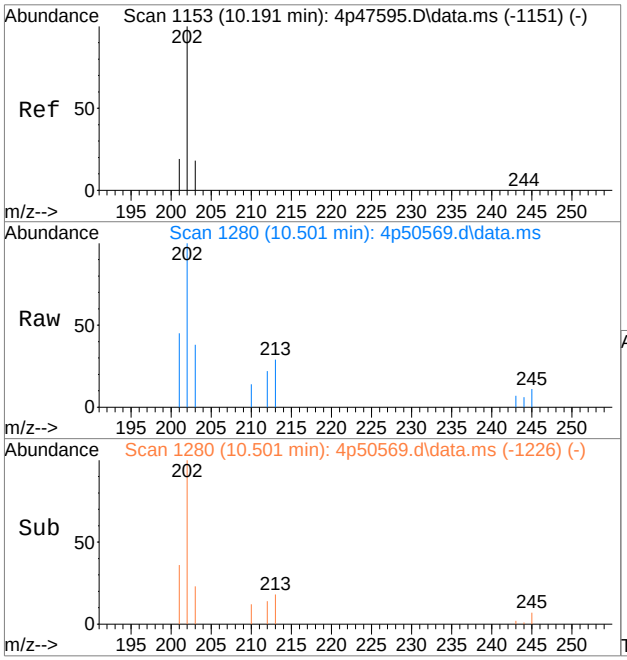


#25
Fluoranthene
Concen: 4.88 ppm
RT: 10.289 min Scan# 1257
Delta R.T. -0.007 min
Lab File: 4p50569.d
Acq: 7 Jan 2022 6:53 pm

Tgt Ion:202 Resp: 256

Ion	Ratio	Lower	Upper
202	100		
203	13.1	0.0	47.9
201	15.7	0.0	42.6

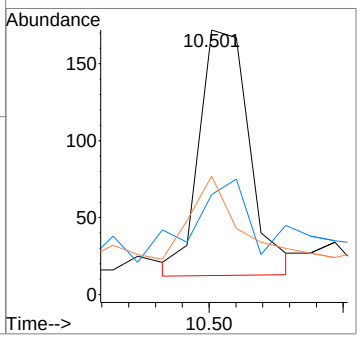




#26
Pyrene
Concen: 3.59 ppm
RT: 10.501 min Scan# 1280
Delta R.T. -0.007 min
Lab File: 4p50569.d
Acq: 7 Jan 2022 6:53 pm

Tgt Ion:202 Resp: 207

Ion	Ratio	Lower	Upper
202	100		
203	14.5	0.0	46.3
201	34.1	0.0	49.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\011022\e4p2645\
Data File : 4p50570.d
Acq On : 7 Jan 2022 7:17 pm
Operator : ninap
Sample : jd36682-6 Inst : MS4P
Misc : op37474a,e4p2645,280,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Jan 10 04:12:40 2022
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jan 10 03:53:43 2022
Response via : Initial Calibration

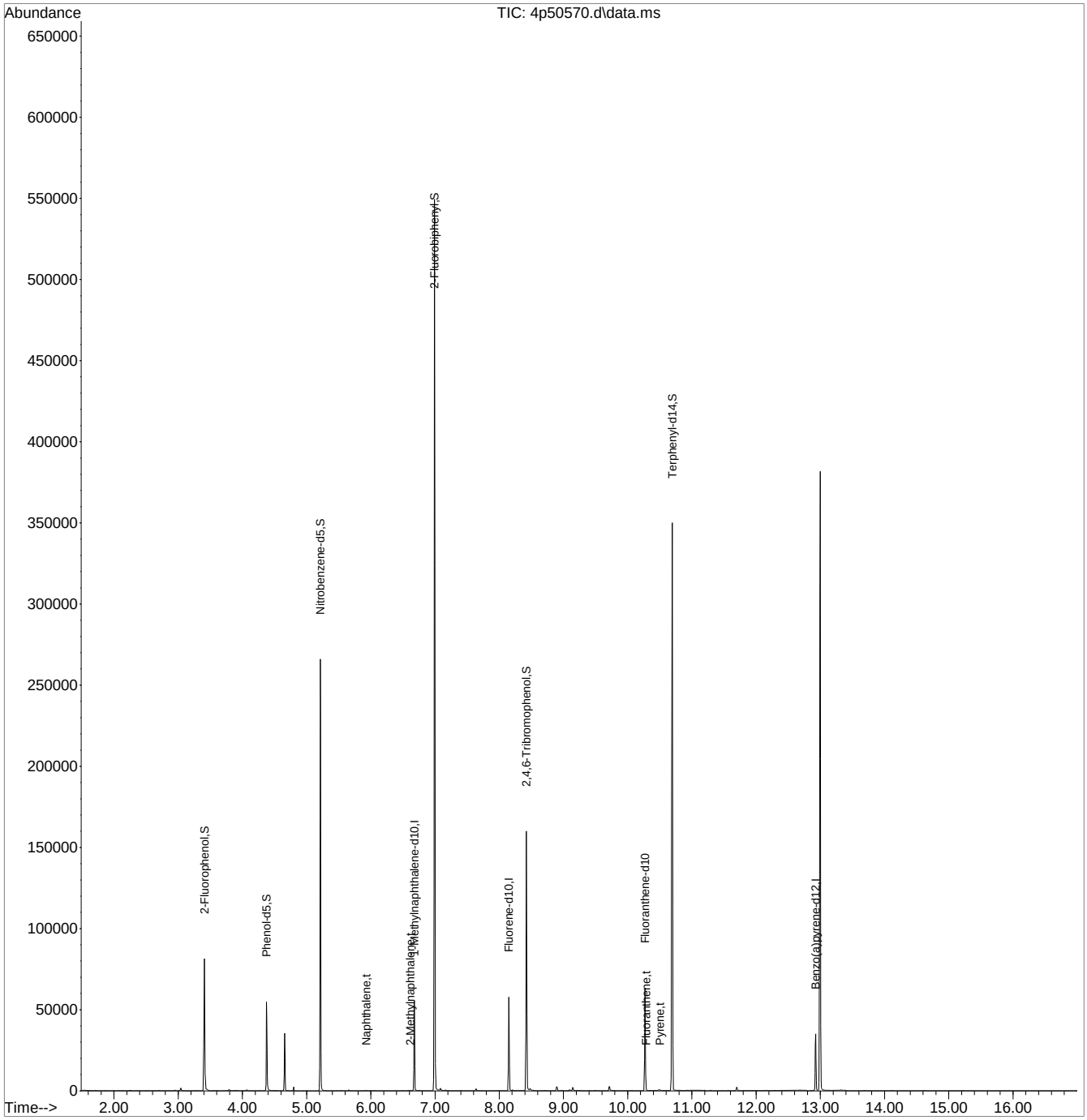
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.680	150	16133	800.00	ppm	# 0.00
13) Fluorene-d10	8.150	176	23464	800.00	ppm	0.00
20) Fluoranthene-d10	10.271	212	40101	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	12.928	264	19562	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.409	112	32884	3285.84	ppm	-0.01
Spiked Amount 50.000			Recovery	= 6571.68%		
4) Phenol-d5	4.375	99	40606	2138.72	ppm	-0.01
Spiked Amount 50.000			Recovery	= 4277.44%		
7) Nitrobenzene-d5	5.213	82	166722	10760.63	ppm	0.00
Spiked Amount 50.000			Recovery	= 21521.26%		
14) 2-Fluorobiphenyl	6.992	172	262064	8755.98	ppm	0.00
Spiked Amount 50.000			Recovery	= 17511.96%		
19) 2,4,6-Tribromophenol	8.423	330	52341	11688.31	ppm	0.00
Spiked Amount 50.000			Recovery	= 23376.62%		
27) Terphenyl-d14	10.694	244	208348	7253.67	ppm	0.00
Spiked Amount 50.000			Recovery	= 14507.34%		
Target Compounds						Qvalue
8) Naphthalene	5.928	128	195	4.22	ppm	82
10) 2-Methylnaphthalene	6.614	141	101	4.19	ppm	# 52
25) Fluoranthene	10.289	202	255	4.53	ppm	76
26) Pyrene	10.501	202	186	3.01	ppm	86

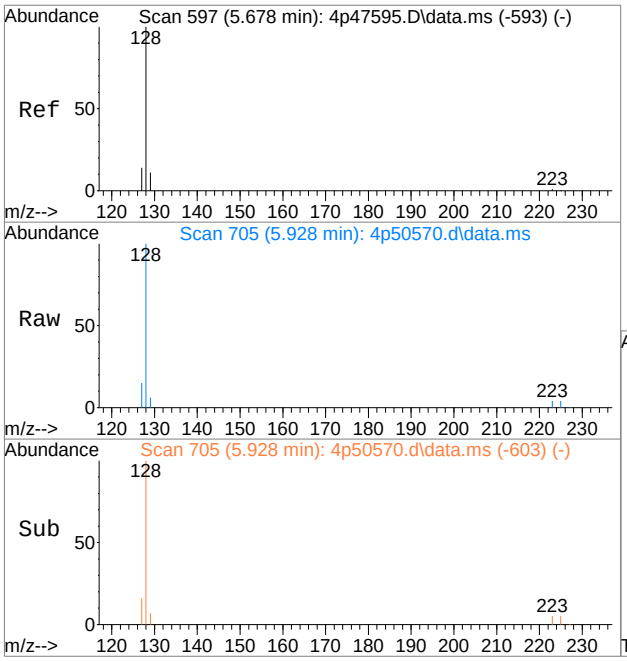
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\011022\e4p2645\
Data File : 4p50570.d
Acq On : 7 Jan 2022 7:17 pm
Operator : ninap
Sample : jd36682-6 Inst : MS4P
Misc : op37474a,e4p2645,280,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Jan 10 04:12:40 2022
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jan 10 03:53:43 2022
Response via : Initial Calibration

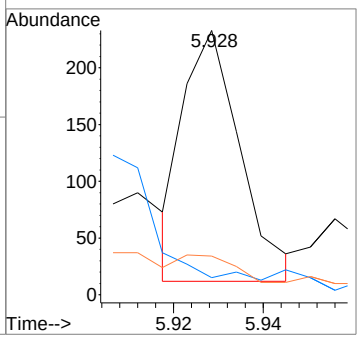


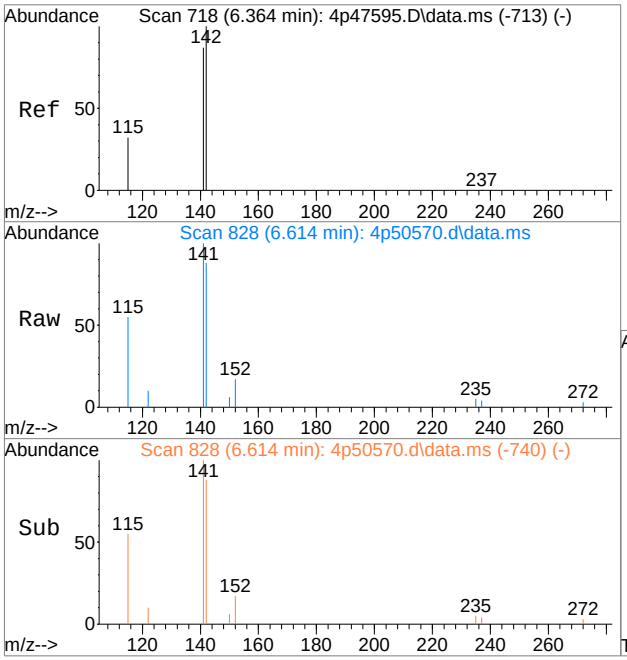


#8
Naphthalene
Concen: 4.22 ppm
RT: 5.928 min Scan# 705
Delta R.T. -0.006 min
Lab File: 4p50570.d
Acq: 7 Jan 2022 7:17 pm

Tgt Ion:128 Resp: 195

Ion	Ratio	Lower	Upper
128	100		
129	0.0	0.0	40.8
127	9.2	0.0	42.9

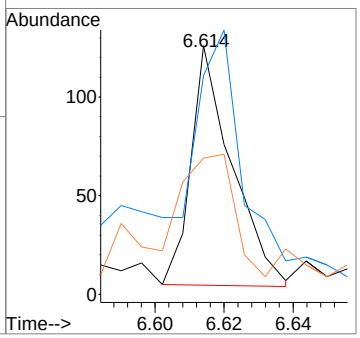


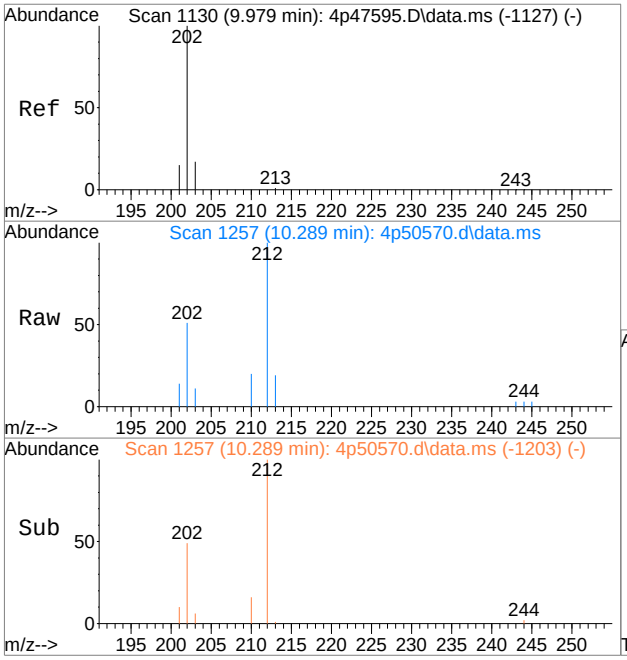


#10
2-Methylnaphthalene
Concen: 4.19 ppm
RT: 6.614 min Scan# 828
Delta R.T. -0.006 min
Lab File: 4p50570.d
Acq: 7 Jan 2022 7:17 pm

Tgt Ion:141 Resp: 101

Ion	Ratio	Lower	Upper
141	100		
142	69.2	82.9	142.9#
115	38.8	64.3	124.3#

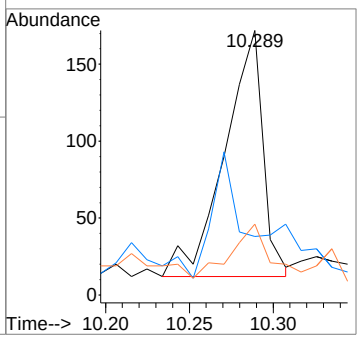


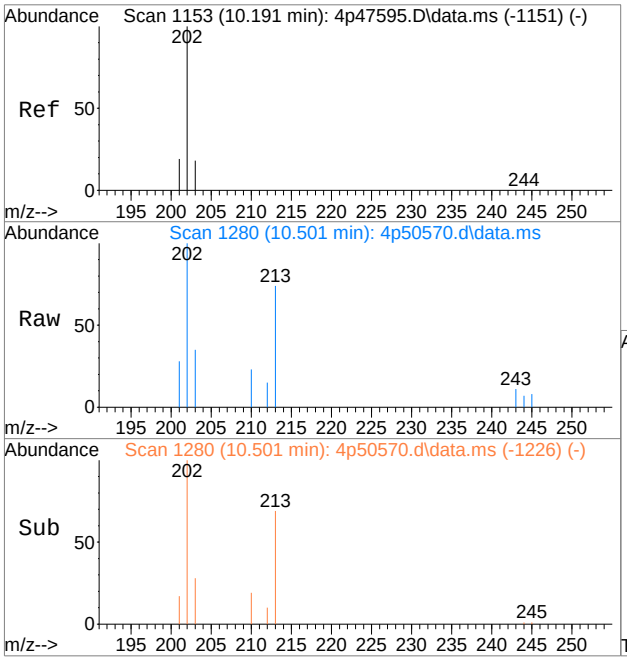


#25
Fluoranthene
Concen: 4.53 ppm
RT: 10.289 min Scan# 1257
Delta R.T. -0.007 min
Lab File: 4p50570.d
Acq: 7 Jan 2022 7:17 pm

Tgt Ion:202 Resp: 255

Ion	Ratio	Lower	Upper
202	100		
203	3.5	0.0	47.9
201	16.9	0.0	42.6

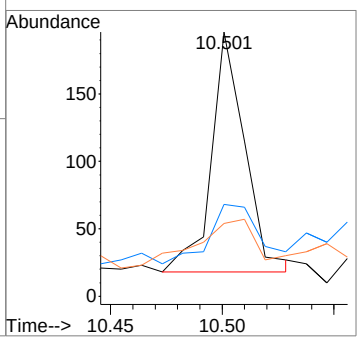




#26
Pyrene
Concen: 3.01 ppm
RT: 10.501 min Scan# 1280
Delta R.T. -0.007 min
Lab File: 4p50570.d
Acq: 7 Jan 2022 7:17 pm

Tgt Ion:202 Resp: 186

Ion	Ratio	Lower	Upper
202	100		
203	22.8	0.0	46.3
201	13.3	0.0	49.2



Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2p4709\
Data File : 2p104915.d
Acq On : 23 Dec 2021 2:08 am
Operator : chriss2
Sample : op37283-mb1 Inst : MS2P
Misc : op37283,e2p4709,30.0,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4696.M
Quant Results File: M2P4696.RES
Quant Time: Dec 24 00:57:57 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 24 00:33:17 2021
Response via : Initial Calibration

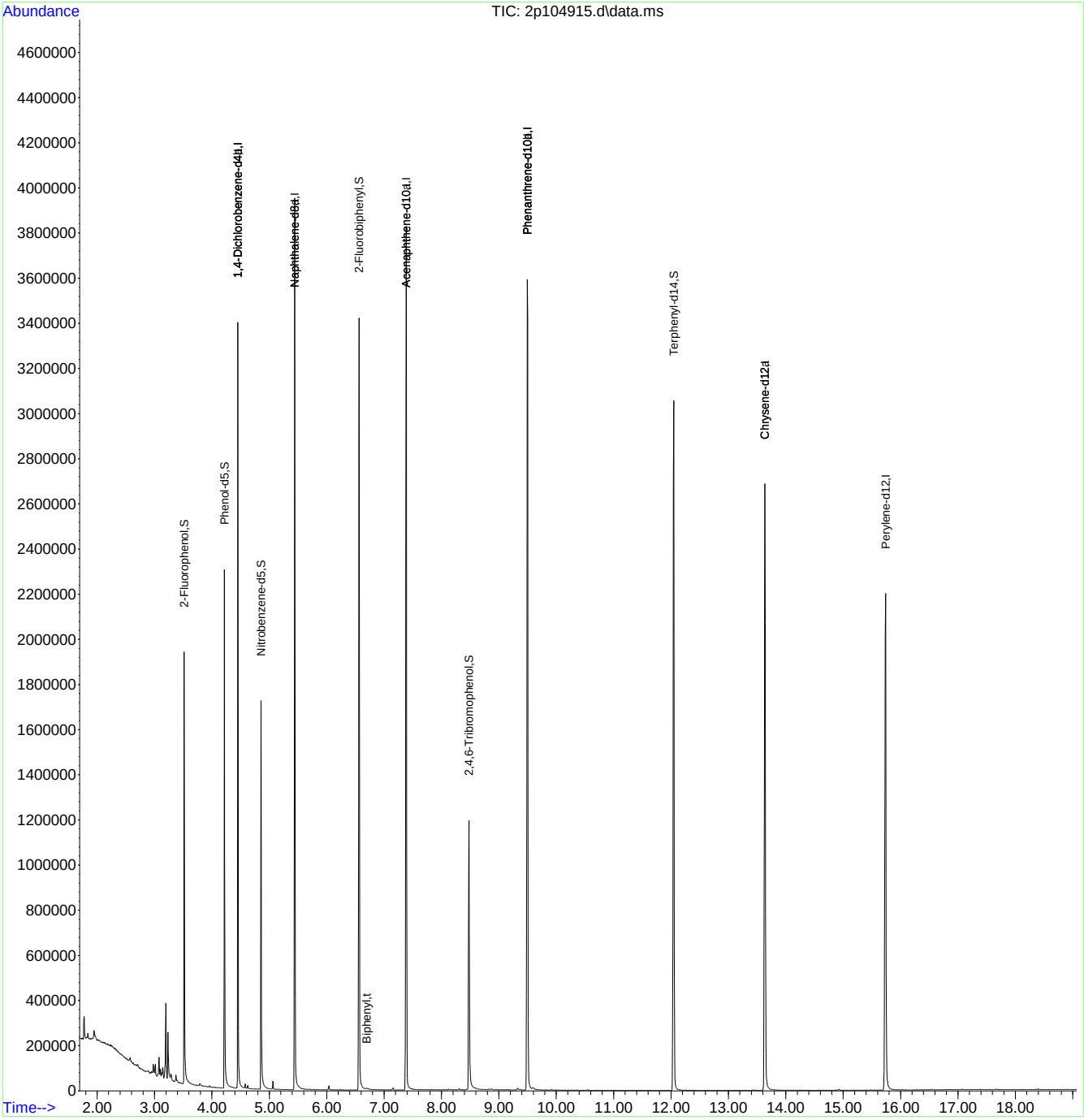
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.452	152	388105	40.00	ppm	0.00
24) Naphthalene-d8	5.442	136	1561616	40.00	ppm	0.00
46) Acenaphthene-d10	7.383	164	921527	40.00	ppm	0.00
69) Phenanthrene-d10	9.496	188	1750408	40.00	ppm	0.00
84) Chrysene-d12	13.636	240	1179251	40.00	ppm	0.00
93) Perylene-d12	15.738	264	1001597	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.452	152	388105	40.00	ppm	0.00
105) Naphthalene-d8a	5.442	136	1561616	40.00	ppm	0.00
107) Phenanthrene-d10a	9.496	188	1750408	40.00	ppm	0.00
109) 1,4-Dichlorobenzene-d4b	4.452	152	388105	40.00	ppm	0.00
112) Acenaphthene-d10a	7.383	164	921527	40.00	ppm	0.00
114) Phenanthrene-d10b	9.496	188	1750408	40.00	ppm	0.00
117) Chrysene-d12a	13.636	240	1179251	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.516	112	434155	36.88	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 73.76%#			
8) Phenol-d5	4.217	99	556982	37.87	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 75.74%#			
25) Nitrobenzene-d5	4.853	82	449697	36.75	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 73.50%#			
51) 2-Fluorobiphenyl	6.565	172	1122470	37.61	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 75.22%#			
74) 2,4,6-Tribromophenol	8.480	330	172836	38.60	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 77.20%#			
87) Terphenyl-d14	12.047	244	1347617	47.62	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery = 95.24%#			
115) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 15 - 64		Recovery = 0.00%#			
116) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 15 - 64		Recovery = 0.00%#			
Target Compounds						Qvalue
53) Biphenyl	6.693	154	2694	0.08	ppm	77

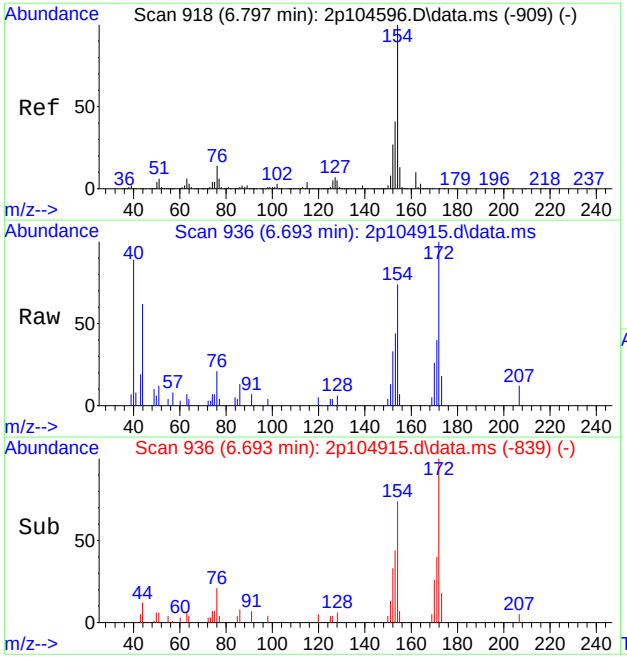
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2p4709\
Data File : 2p104915.d
Acq On : 23 Dec 2021 2:08 am
Operator : chriss2
Sample : op37283-mb1 Inst : MS2P
Misc : op37283,e2p4709,30.0,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4696.M
Quant Results File: M2P4696.RES
Quant Time: Dec 24 00:57:57 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 24 00:33:17 2021
Response via : Initial Calibration

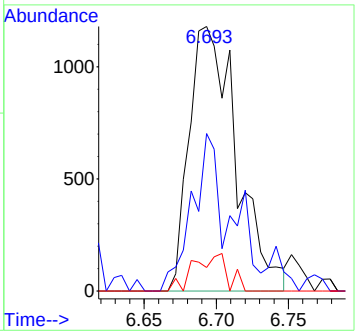




#53
Biphenyl
Concen: 0.08 ppm
RT: 6.693 min Scan# 936
Delta R.T. 0.016 min
Lab File: 2p104915.d
Acq: 23 Dec 2021 2:08 am

Tgt Ion:154 Resp: 2694

Ion	Ratio	Lower	Upper
154	100		
153	58.3	11.5	71.5
155	9.3	0.0	43.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\011022\e4p2645\
Data File : 4p50563.d
Acq On : 7 Jan 2022 4:34 pm
Operator : ninap
Sample : op37474a-mb1 Inst : MS4P
Misc : op37474a,e4p2645,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Jan 10 04:02:08 2022
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jan 10 03:53:43 2022
Response via : Initial Calibration

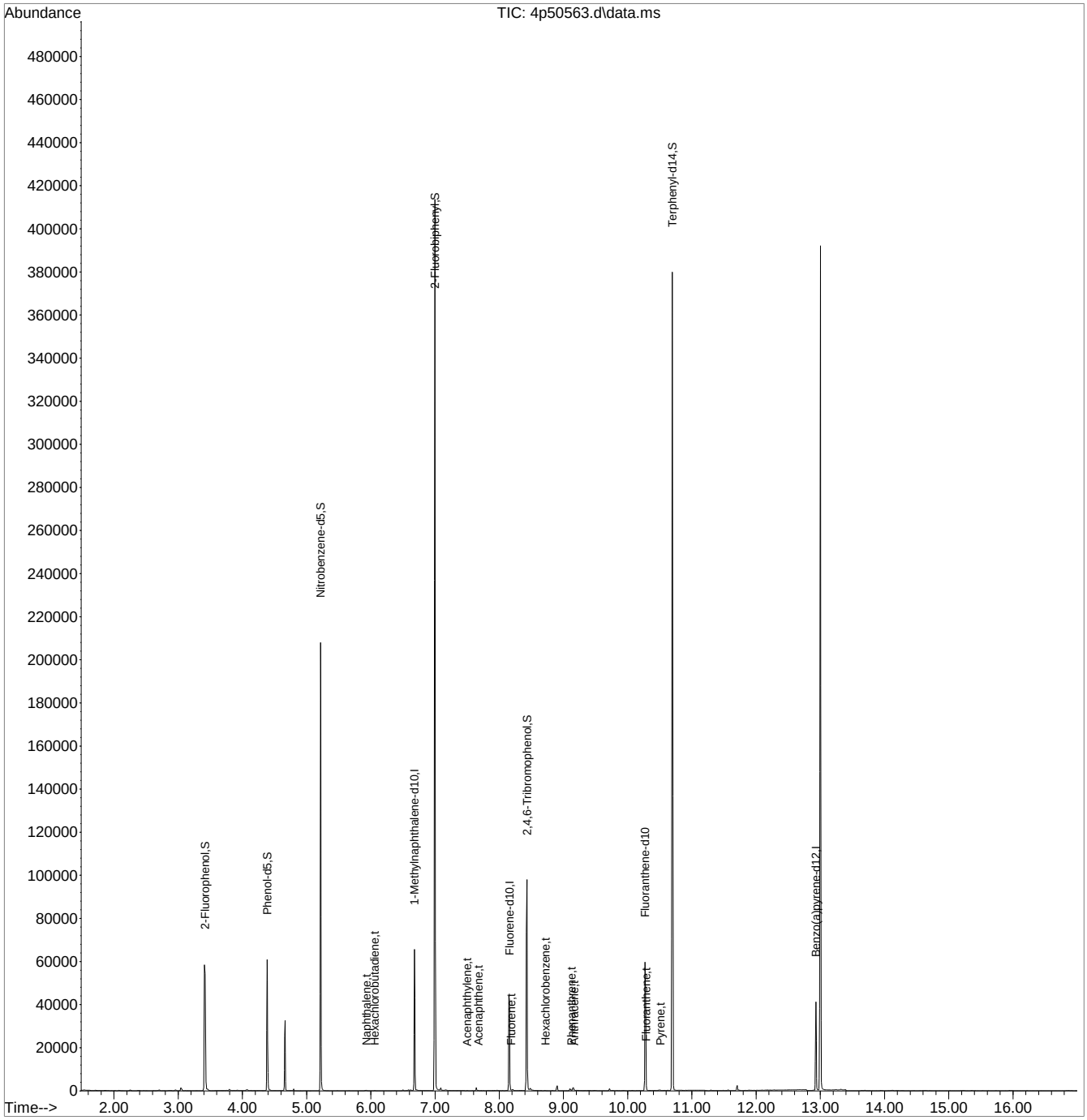
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.680	150	16715	800.00	ppm	0.00
13) Fluorene-d10	8.159	176	25062	800.00	ppm	0.00
20) Fluoranthene-d10	10.271	212	46626	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	12.933	264	23016	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.420	112	30412	2933.03	ppm	0.00
Spiked Amount 50.000			Recovery = 5866.06%			
4) Phenol-d5	4.384	99	43795	2226.37	ppm	0.00
Spiked Amount 50.000			Recovery = 4452.74%			
7) Nitrobenzene-d5	5.217	82	127846	7964.18	ppm	0.00
Spiked Amount 50.000			Recovery = 15928.36%			
14) 2-Fluorobiphenyl	6.999	172	191217	5981.50	ppm	0.00
Spiked Amount 50.000			Recovery = 11963.00%			
19) 2,4,6-Tribromophenol	8.431	330	39352	8227.41	ppm	0.00
Spiked Amount 50.000			Recovery = 16454.82%			
27) Terphenyl-d14	10.694	244	216966	6496.62	ppm	0.00
Spiked Amount 50.000			Recovery = 12993.24%			
Target Compounds						Qvalue
8) Naphthalene	5.934	128	168	3.51	ppm	85
9) Hexachlorobutadiene	6.061	225	46	3.94	ppm	93
15) Acenaphthylene	7.499	152	105	2.25	ppm	93
16) Acenaphthene	7.673	153	82	2.75	ppm	79
17) Fluorene	8.184	166	101	2.81	ppm	86
21) Hexachlorobenzene	8.717	284	65	4.42	ppm	85
23) Phenanthrene	9.123	178	226	3.60	ppm	78
24) Anthracene	9.167	178	241	4.00	ppm	70
25) Fluoranthene	10.289	202	219	3.35	ppm	95
26) Pyrene	10.510	202	162	2.25	ppm	76

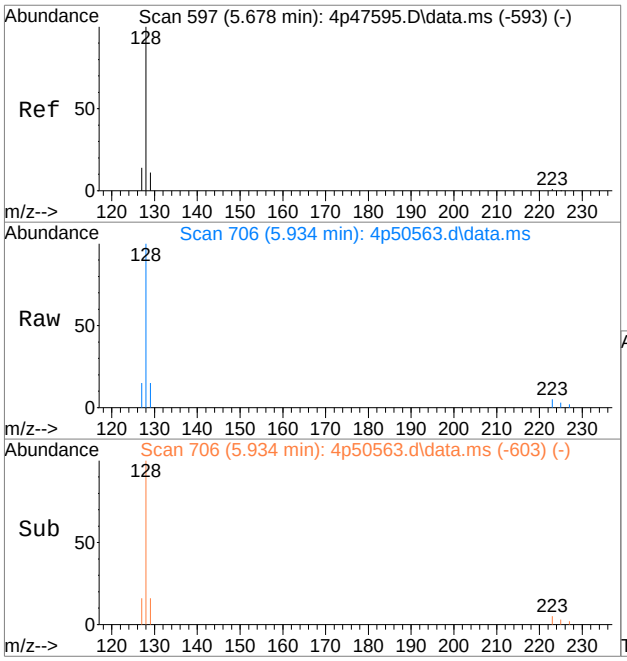
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\011022\e4p2645\
Data File : 4p50563.d
Acq On : 7 Jan 2022 4:34 pm
Operator : ninap
Sample : op37474a-mb1 Inst : MS4P
Misc : op37474a,e4p2645,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Jan 10 04:02:08 2022
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jan 10 03:53:43 2022
Response via : Initial Calibration

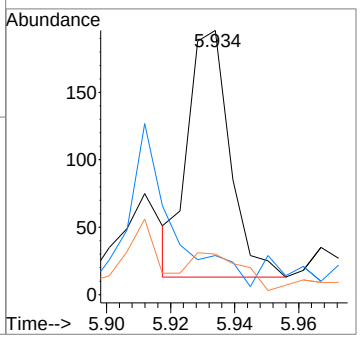


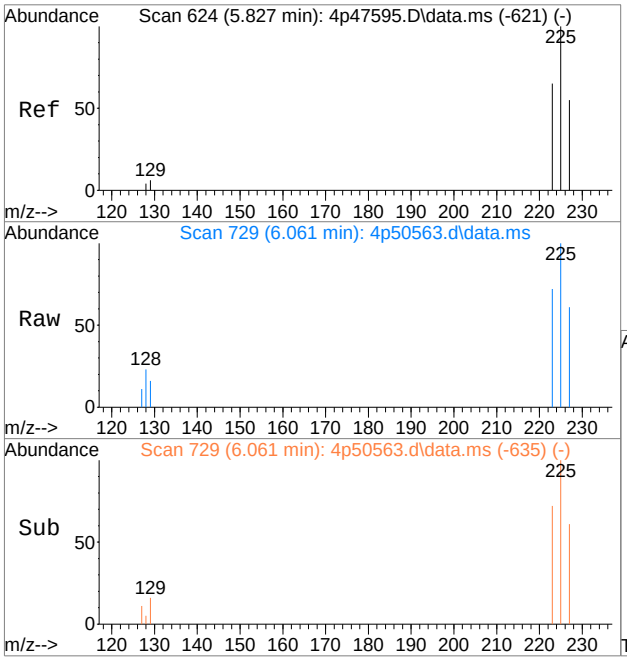


#8
Naphthalene
Concen: 3.51 ppm
RT: 5.934 min Scan# 706
Delta R.T. -0.000 min
Lab File: 4p50563.d
Acq: 7 Jan 2022 4:34 pm

Tgt Ion:128 Resp: 168

Ion	Ratio	Lower	Upper
128	100		
129	0.0	0.0	40.8
127	11.3	0.0	42.9

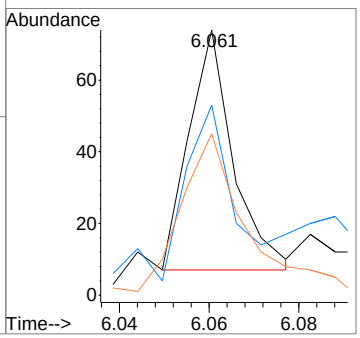


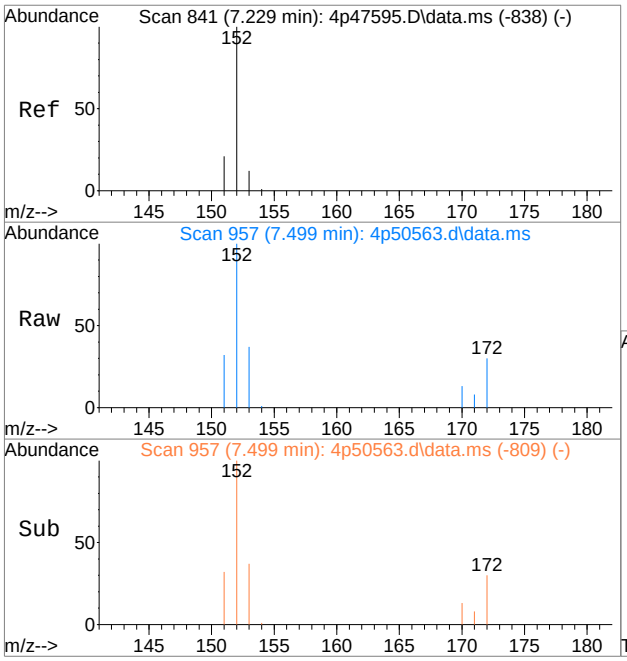


#9
Hexachlorobutadiene
Concen: 3.94 ppm
RT: 6.061 min Scan# 729
Delta R.T. -0.000 min
Lab File: 4p50563.d
Acq: 7 Jan 2022 4:34 pm

Tgt Ion:225 Resp: 46

Ion	Ratio	Lower	Upper
225	100		
223	64.9	30.8	90.8
227	55.0	32.2	92.2

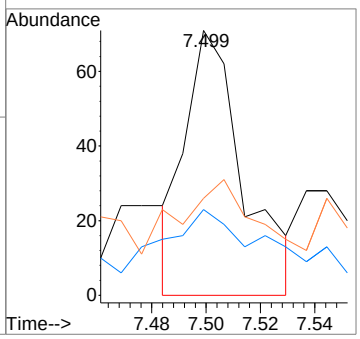


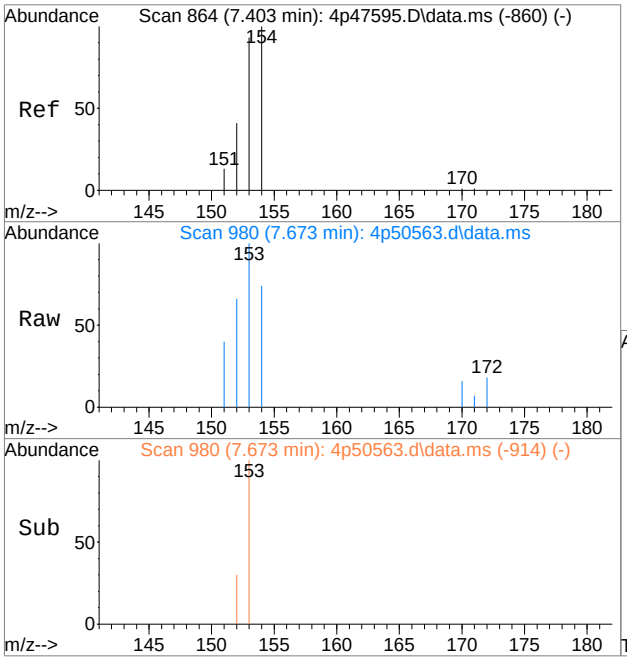


#15
Acenaphthylene
Concen: 2.25 ppm
RT: 7.499 min Scan# 957
Delta R.T. -0.000 min
Lab File: 4p50563.d
Acq: 7 Jan 2022 4:34 pm

Tgt Ion:152 Resp: 105

Ion	Ratio	Lower	Upper
152	100		
151	17.6	0.0	51.2
153	13.7	0.0	41.7

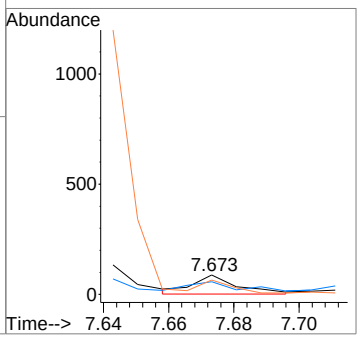


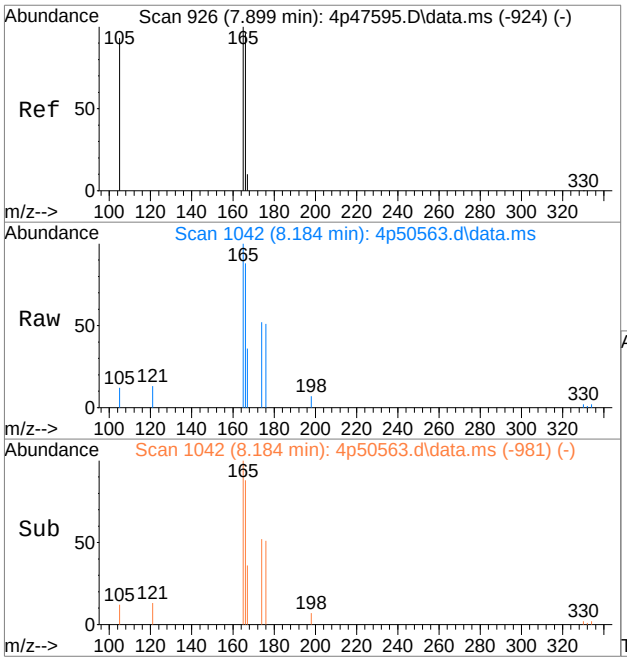


#16
Acenaphthene
Concen: 2.75 ppm
RT: 7.673 min Scan# 980
Delta R.T. -0.000 min
Lab File: 4p50563.d
Acq: 7 Jan 2022 4:34 pm

Tgt Ion:153 Resp: 82

Ion	Ratio	Lower	Upper
153	100		
152	58.9	15.1	75.1
154	69.5	58.8	118.8

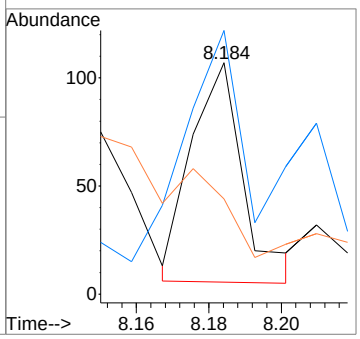


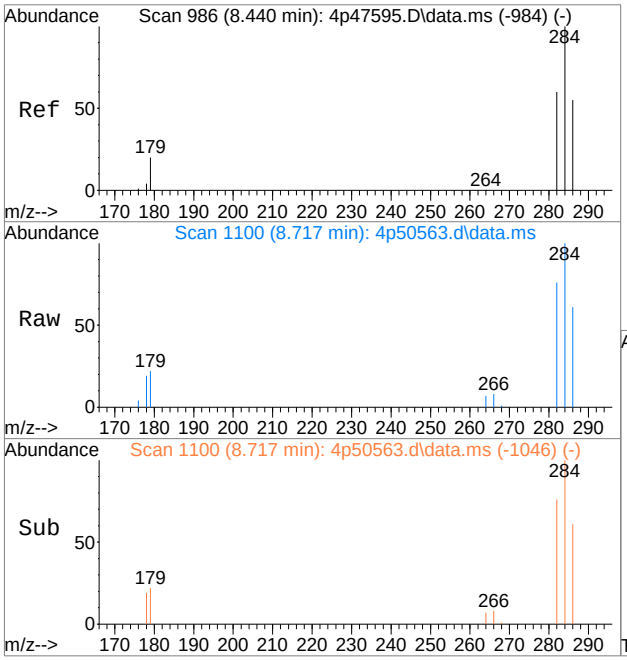


#17
Fluorene
Concen: 2.81 ppm
RT: 8.184 min Scan# 1042
Delta R.T. -0.000 min
Lab File: 4p50563.d
Acq: 7 Jan 2022 4:34 pm

Tgt Ion:166 Resp: 101

Ion	Ratio	Lower	Upper
166	100		
165	79.1	64.3	124.3
167	12.6	0.0	44.5

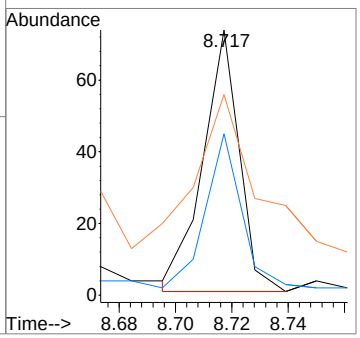


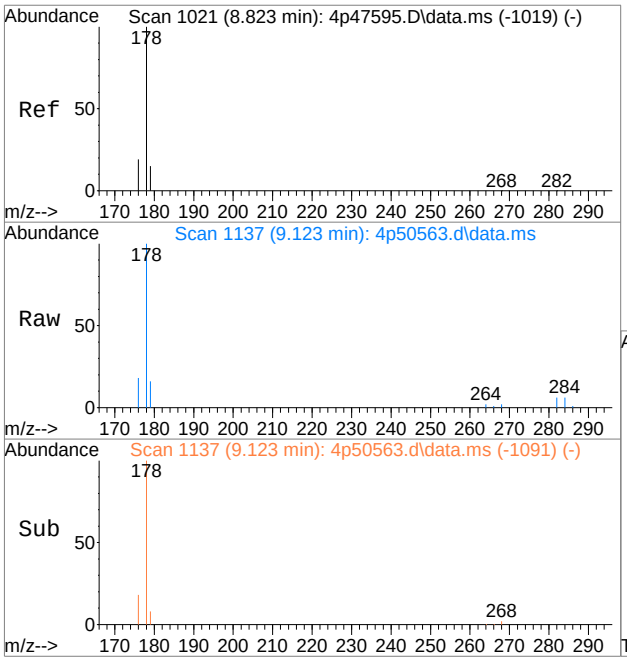


#21
Hexachlorobenzene
Concen: 4.42 ppm
RT: 8.717 min Scan# 1100
Delta R.T. 0.002 min
Lab File: 4p50563.d
Acq: 7 Jan 2022 4:34 pm

Tgt Ion:284 Resp: 65

Ion	Ratio	Lower	Upper
284	100		
286	59.4	43.7	103.7
282	46.9	26.6	86.6

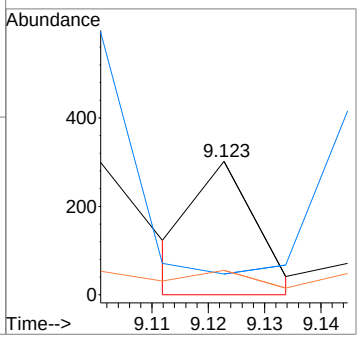


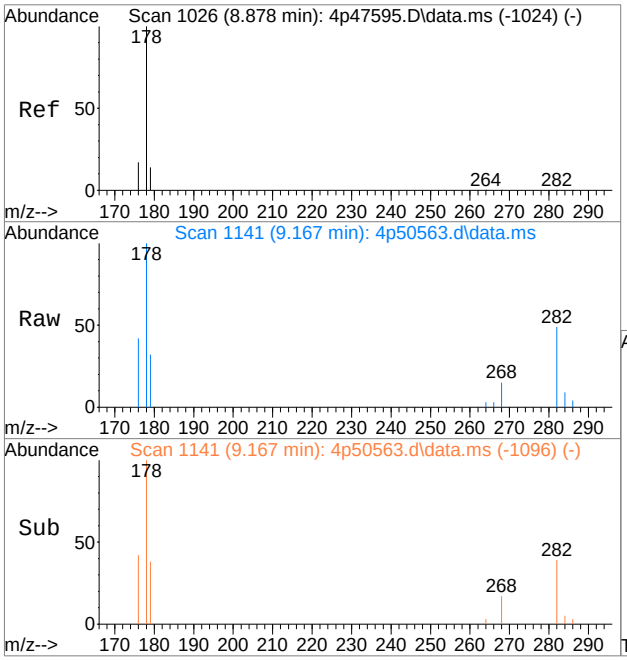


#23
Phenanthrene
Concen: 3.60 ppm
RT: 9.123 min Scan# 1137
Delta R.T. 0.002 min
Lab File: 4p50563.d
Acq: 7 Jan 2022 4:34 pm

Tgt Ion:178 Resp: 226

Ion	Ratio	Lower	Upper
178	100		
179	0.0	0.0	45.3
176	14.5	0.0	49.8

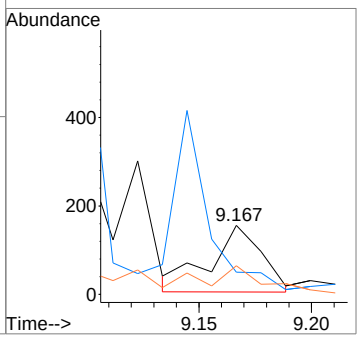


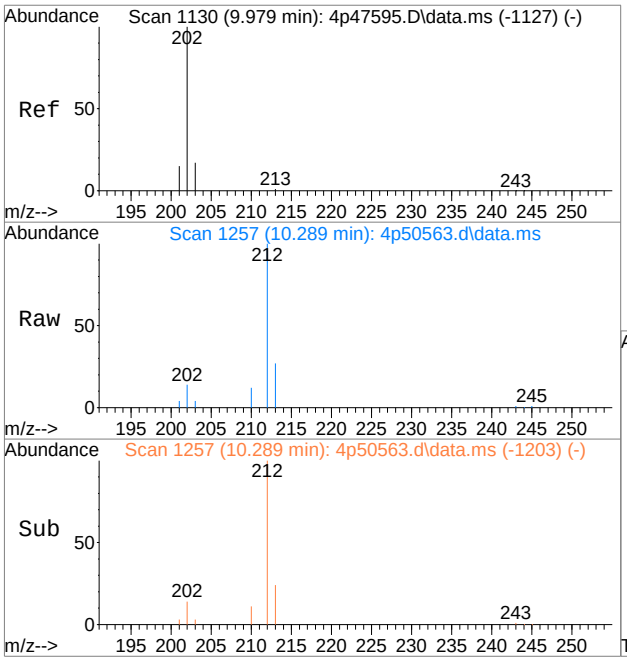


#24
Anthracene
Concen: 4.00 ppm
RT: 9.167 min Scan# 1141
Delta R.T. -0.009 min
Lab File: 4p50563.d
Acq: 7 Jan 2022 4:34 pm

Tgt Ion:178 Resp: 241

Ion	Ratio	Lower	Upper
178	100		
179	8.7	0.0	47.2
176	36.1	0.0	48.5

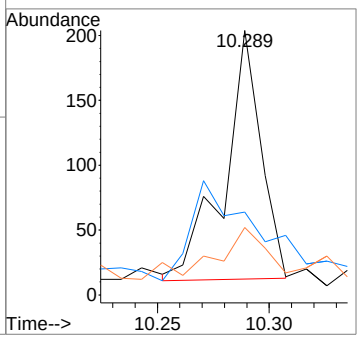


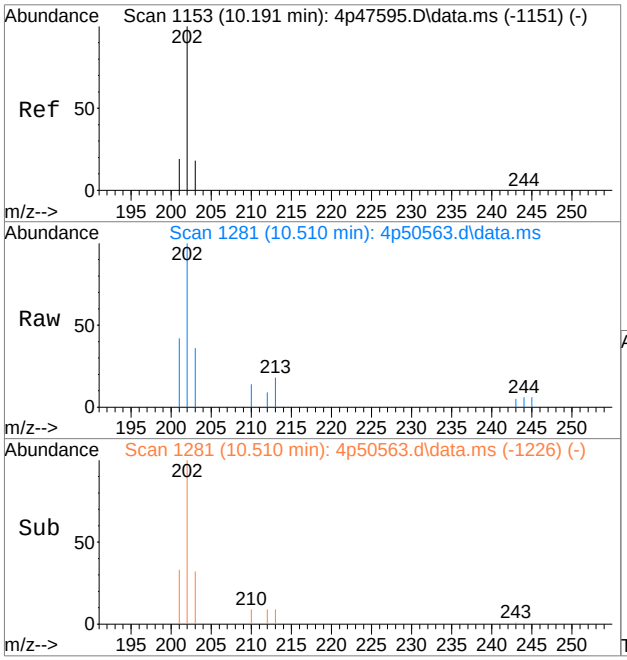


#25
Fluoranthene
Concen: 3.35 ppm
RT: 10.289 min Scan# 1257
Delta R.T. -0.007 min
Lab File: 4p50563.d
Acq: 7 Jan 2022 4:34 pm

Tgt Ion:202 Resp: 219

Ion	Ratio	Lower	Upper
202	100		
203	18.8	0.0	47.9
201	16.4	0.0	42.6

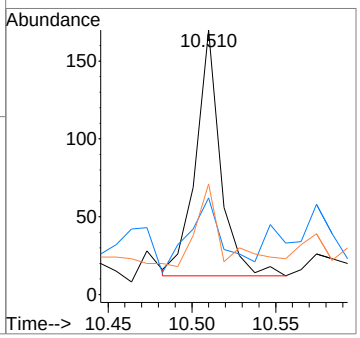




#26
Pyrene
Concen: 2.25 ppm
RT: 10.510 min Scan# 1281
Delta R.T. 0.002 min
Lab File: 4p50563.d
Acq: 7 Jan 2022 4:34 pm

Tgt Ion:202 Resp: 162

Ion	Ratio	Lower	Upper
202	100		
203	24.7	0.0	46.3
201	31.7	0.0	49.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p3826\
Data File : 5p80851.D
Acq On : 7 Jan 2022 5:11 am
Operator : chriss2
Sample : op37474-mb1
Misc : op37474,e5p3826,250,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 07 11:42:09 2022
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Jan 07 11:27:13 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.373	152	68134	8.00	ppm	0.00
24) Naphthalene-d8	5.399	136	270421	8.00	ppm	0.00
46) Acenaphthene-d10	7.381	164	155806	8.00	ppm	0.00
69) Phenanthrene-d10	9.518	188	285595	8.00	ppm	0.00
84) Chrysene-d12	13.669	240	275449	8.00	ppm	0.00
93) Perylene-d12	15.773	264	270447	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.373	152	68134	8.00	ppm	0.00
105) Phenanthrene-d10a	9.518	188	285595	8.00	ppm	0.00
107) Naphthalene-d8a	5.399	136	270421	8.00	ppm	0.00
109) Chrysene-d12a	13.669	240	275449	8.00	ppm	0.00
111) Phenanthrene-d10b	9.518	188	285595	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.433	112	31852	2.89	ppm	0.00
Spiked Amount 10.000			Recovery = 28.90%			
8) Phenol-d5	4.165	99	24366	1.72	ppm	0.00
Spiked Amount 10.000			Recovery = 17.20%			
25) Nitrobenzene-d5	4.800	82	52501	5.16	ppm	0.00
Spiked Amount 10.000			Recovery = 51.60%			
51) 2-Fluorobiphenyl	6.542	172	144637	5.66	ppm	0.00
Spiked Amount 10.000			Recovery = 56.60%			
74) 2,4,6-Tribromophenol	8.497	330	21371	5.89	ppm	0.00
Spiked Amount 10.000			Recovery = 58.90%			
87) Terphenyl-d14	12.066	244	190765	5.56	ppm	0.00
Spiked Amount 10.000			Recovery = 55.60%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			

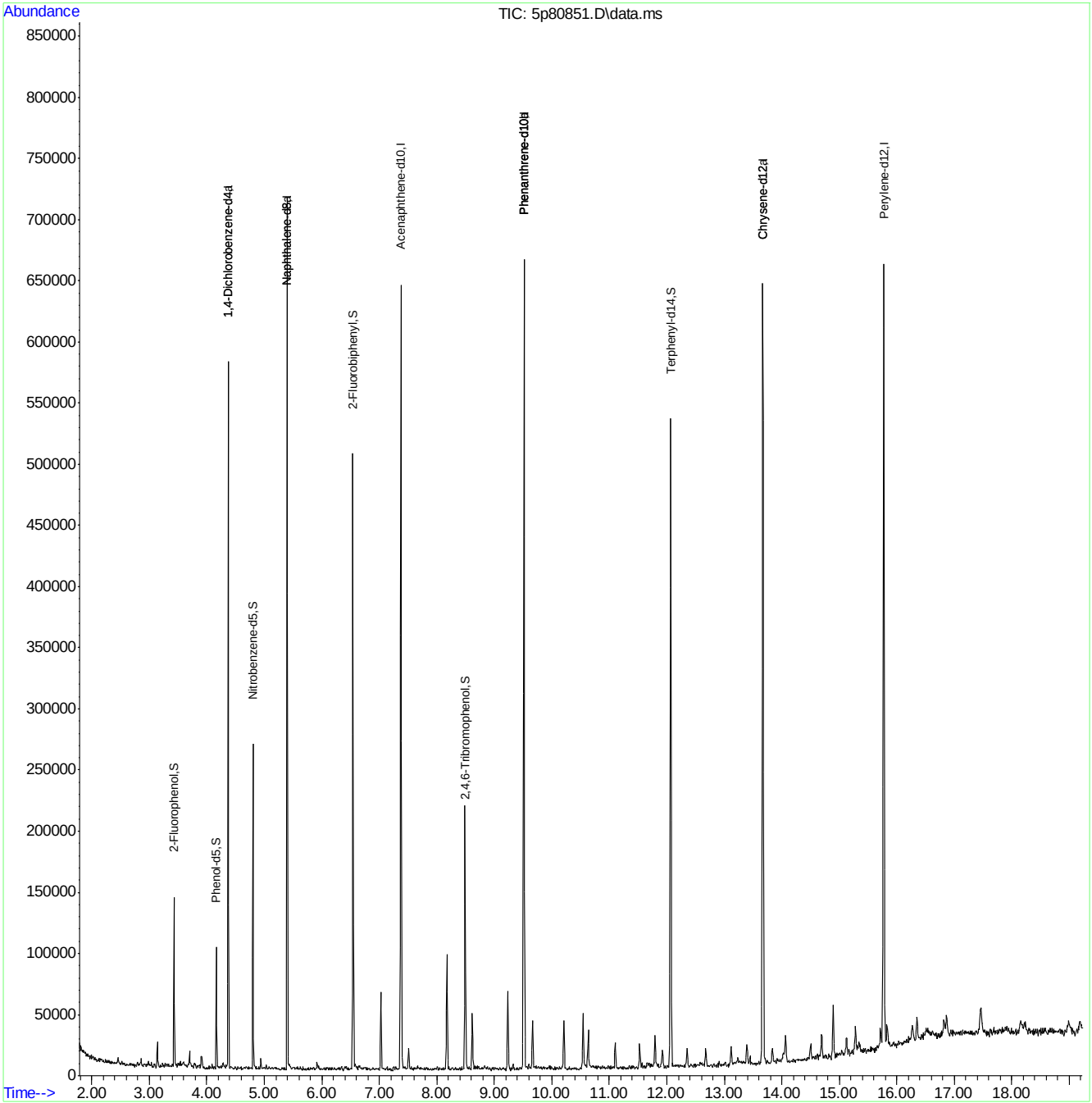
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p3826\
Data File : 5p80851.D
Acq On : 7 Jan 2022 5:11 am
Operator : chriss2
Sample : op37474-mb1
Misc : op37474,e5p3826,250,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 07 11:42:09 2022
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Jan 07 11:27:13 2022
Response via : Initial Calibration



Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204538a.d
Acq On : 23 Dec 2021 8:06 am
Operator : chriss2
Sample : op37283-mb1 Inst : GCMSF
Misc : op37283,ef8967,30.0,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 27 23:53:25 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration

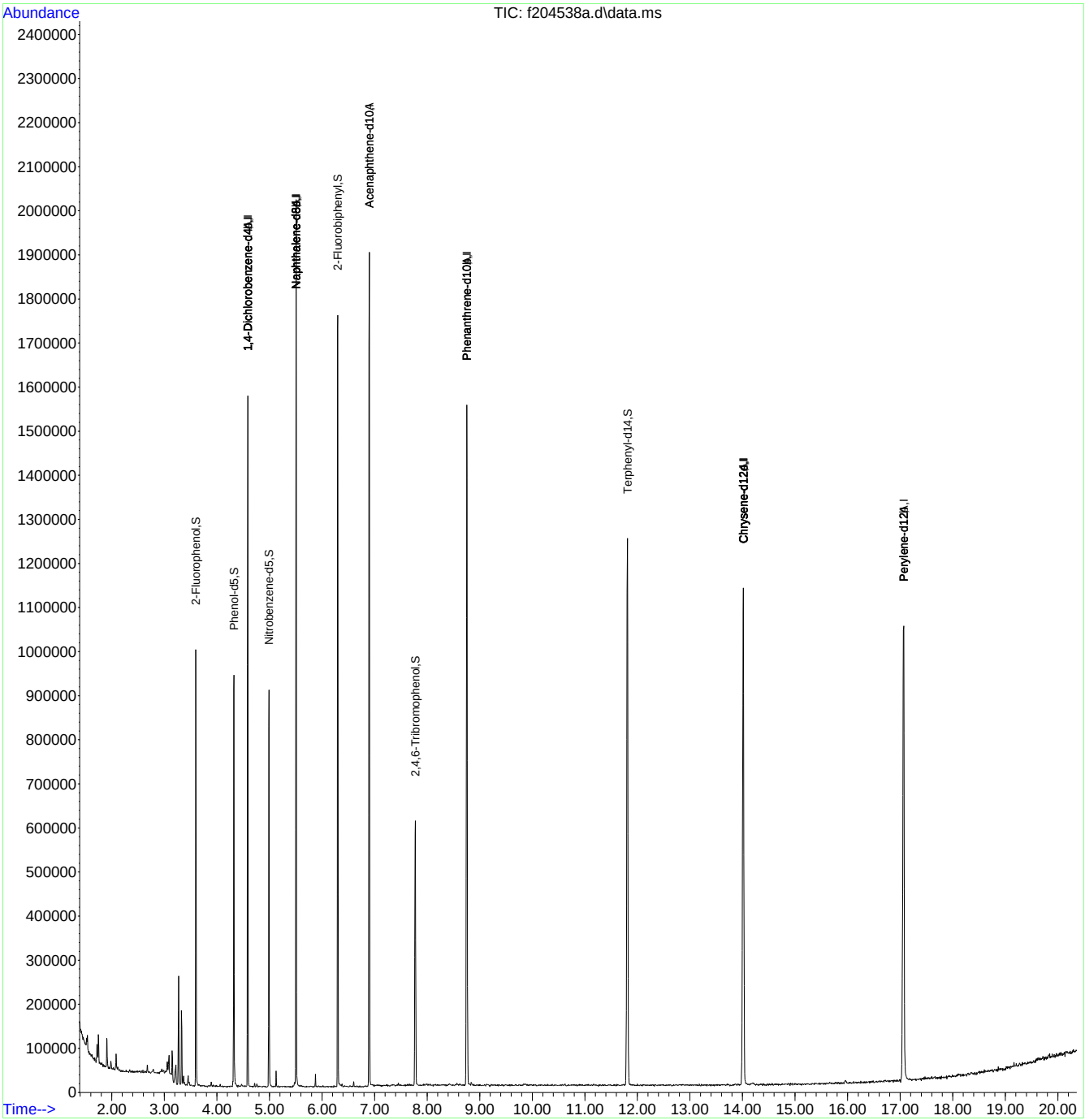
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.587	152	178886	40.00	ppm	0.00
24) Naphthalene-d8	5.506	136	704294	40.00	ppm	0.00
46) Acenaphthene-d10	6.900	164	394790	40.00	ppm	0.00
69) Phenanthrene-d10	8.754	188	744531	40.00	ppm	0.00
83) Chrysene-d12	14.016	240	704246	40.00	ppm	0.00
92) Perylene-d12	17.067	264	696127	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.587	152	178886	40.00	ppm	0.00
112) Naphthalene-d8A	5.506	136	704294	40.00	ppm	0.00
121) Acenaphthene-d10A	6.900	164	394790	40.00	ppm	0.00
132) Phenanthrene-d10A	8.754	188	744531	40.00	ppm	0.00
147) Chrysene-d12A	14.016	240	704246	40.00	ppm	0.00
154) Perylene-d12A	17.067	264	696127	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.587	152	178886	40.00	ppm	0.00
159) Phenanthrene-d10b	8.754	188	744531	40.00	ppm	0.00
161) Naphthalene-d8b	5.506	136	704294	40.00	ppm	0.00
163) Naphthalene-d8c	5.506	136	704294	40.00	ppm	0.00
168) 1,4-Dichlorobenzene-d4c	4.587	152	178886	40.00	ppm	0.00
170) Chrysene-d12c	14.016	240	704246	40.00	ppm	0.00
172) Chrysene-d12d	14.016	240	704246	40.00	ppm	0.00
174) Naphthalene-d8d	5.506	136	704294	40.00	ppm	0.00
176) Chrysene-d12e	14.016	240	704246	40.00	ppm	0.00
178) Perylene-d12b	17.067	264	696127	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.599	112	216608	38.57	ppm	0.00
Spiked Amount 50.000			Recovery = 77.14%			
8) Phenol-d5	4.325	99	278636	36.70	ppm	0.00
Spiked Amount 50.000			Recovery = 73.40%			
25) Nitrobenzene-d5	4.993	82	240651	34.23	ppm	0.00
Spiked Amount 50.000			Recovery = 68.46%			
51) 2-Fluorobiphenyl	6.302	172	500000	37.72	ppm	0.00
Spiked Amount 50.000			Recovery = 75.44%			
73) 2,4,6-Tribromophenol	7.776	330	84170	39.34	ppm	0.00
Spiked Amount 50.000			Recovery = 78.68%			
86) Terphenyl-d14	11.810	244	725565	42.26	ppm	0.00
Spiked Amount 50.000			Recovery = 84.52%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\altheam\ef8967\
Data File : f204538a.d
Acq On : 23 Dec 2021 8:06 am
Operator : chriss2
Sample : op37283-mb1 Inst : GCMSF
Misc : op37283,ef8967,30.0,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MF8913AP9.M
Quant Results File: MF8913AP9.RES
Quant Time: Dec 27 23:53:25 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 27 23:45:55 2021
Response via : Initial Calibration



GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- DDT/Endrin Breakdown Checks
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37171-MB1	1G172323.D	1	12/23/21	CP	12/17/21	OP37171	G1G5947

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.67	0.55	ug/kg	
319-84-6	alpha-BHC	ND	0.67	0.54	ug/kg	
319-85-7	beta-BHC	ND	0.67	0.60	ug/kg	
319-86-8	delta-BHC	ND	0.67	0.64	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.67	0.49	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.67	0.54	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.67	0.30	ug/kg	
60-57-1	Dieldrin	ND	0.67	0.46	ug/kg	
72-54-8	4,4'-DDD	ND	0.67	0.61	ug/kg	
72-55-9	4,4'-DDE	ND	0.67	0.58	ug/kg	
50-29-3	4,4'-DDT	ND	0.67	0.59	ug/kg	
72-20-8	Endrin	ND	0.67	0.52	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.67	0.52	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.67	0.38	ug/kg	
959-98-8	Endosulfan-I	ND	0.67	0.38	ug/kg	
33213-65-9	Endosulfan-II	ND	0.67	0.42	ug/kg	
76-44-8	Heptachlor	ND	0.67	0.57	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.67	0.47	ug/kg	
72-43-5	Methoxychlor	ND	1.3	0.53	ug/kg	
53494-70-5	Endrin ketone	ND	0.67	0.48	ug/kg	
8001-35-2	Toxaphene	ND	17	16	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	108%	14-145%
877-09-8	Tetrachloro-m-xylene	104%	14-145%
2051-24-3	Decachlorobiphenyl	104%	10-197%
2051-24-3	Decachlorobiphenyl	100%	10-197%

Method Blank Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37193-MB1	6G81301.D	1	12/20/21	CP	12/17/21	OP37193	G6G2876

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	55%	10-190%
877-09-8	Tetrachloro-m-xylene	49%	10-190%
2051-24-3	Decachlorobiphenyl	38%	10-156%
2051-24-3	Decachlorobiphenyl	45%	10-156%

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37171-BS1	1G172324.D	1	12/23/21	CP	12/17/21	OP37171	G1G5947

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	16.7	18.1	109	41-146
319-84-6	alpha-BHC	16.7	15.7	94	39-138
319-85-7	beta-BHC	16.7	15.8	95	44-134
319-86-8	delta-BHC	16.7	15.1	91	10-147
58-89-9	gamma-BHC (Lindane)	16.7	15.0	90	42-133
5103-71-9	alpha-Chlordane	16.7	16.0	96	43-140
5103-74-2	gamma-Chlordane	16.7	16.0	96	45-135
60-57-1	Dieldrin	16.7	17.1	103	40-151
72-54-8	4,4'-DDD	16.7	15.0	90	42-133
72-55-9	4,4'-DDE	16.7	16.6	100	43-139
50-29-3	4,4'-DDT	16.7	14.6	88	44-150
72-20-8	Endrin	16.7	16.8	101	43-145
1031-07-8	Endosulfan sulfate	16.7	14.1	85	27-131
7421-93-4	Endrin aldehyde	16.7	17.4	104	34-139
959-98-8	Endosulfan-I	16.7	16.0	96	41-137
33213-65-9	Endosulfan-II	16.7	15.8	95	35-143
76-44-8	Heptachlor	16.7	16.3	98	44-136
1024-57-3	Heptachlor epoxide	16.7	16.8	101	45-138
72-43-5	Methoxychlor	16.7	15.8	95	39-149
53494-70-5	Endrin ketone	16.7	11.3	68	41-153

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	98%	14-145%
877-09-8	Tetrachloro-m-xylene	92%	14-145%
2051-24-3	Decachlorobiphenyl	98%	10-197%
2051-24-3	Decachlorobiphenyl	90%	10-197%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37171-BS13	1G172325.D	1	12/23/21	CP	12/17/21	OP37171	G1G5947

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	96%	14-145%
877-09-8	Tetrachloro-m-xylene	88%	14-145%
2051-24-3	Decachlorobiphenyl	90%	10-197%
2051-24-3	Decachlorobiphenyl	87%	10-197%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37193-BS1	6G81302.D	1	12/20/21	CP	12/17/21	OP37193	G6G2876
OP37193-BSD	6G81303.D	1	12/20/21	CP	12/17/21	OP37193	G6G2876

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.2	0.14	70	0.19	95	30	54-152/36
319-84-6	alpha-BHC	0.2	0.13	65	0.17	85	27	50-161/35
319-85-7	beta-BHC	0.2	0.16	80	0.19	95	17	56-150/36
319-86-8	delta-BHC	0.2	0.15	75	0.20	100	29	10-183/39
58-89-9	gamma-BHC (Lindane)	0.2	0.15	75	0.18	90	18	53-157/36
5103-71-9	alpha-Chlordane	0.2	0.15	75	0.19	95	24	57-152/37
5103-74-2	gamma-Chlordane	0.2	0.14	70	0.20	100	35	55-153/37
60-57-1	Dieldrin	0.2	0.12	60	0.20	100	50* [a]	56-163/36
72-54-8	4,4'-DDD	0.2	0.14	70	0.21	105	27	50-154/37
72-55-9	4,4'-DDE	0.2	0.098	49	0.16	80	48* [a]	47-157/43
50-29-3	4,4'-DDT	0.2	0.14	70	0.19	95	30	52-167/42
72-20-8	Endrin	0.2	0.15	75	0.20	100	29	55-165/36
1031-07-8	Endosulfan sulfate	0.2	0.13	65	0.17	85	19	43-150/36
7421-93-4	Endrin aldehyde	0.2	0.14	70	0.23	115	49* [a]	33-163/41
53494-70-5	Endrin ketone	0.2	0.17	85	0.21	105	15	42-178/38
959-98-8	Endosulfan-I	0.2	0.15	75	0.19	95	24	57-154/37
33213-65-9	Endosulfan-II	0.2	0.15	75 [b]	0.15	75	0	54-160/38
76-44-8	Heptachlor	0.2	0.15	75	0.18	90	18	55-151/37
1024-57-3	Heptachlor epoxide	0.2	0.12	60	0.19	95	45* [a]	58-157/36
72-43-5	Methoxychlor	0.2	0.12	60	0.18	90	32	55-155/39

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	54%	68%	10-190%
877-09-8	Tetrachloro-m-xylene	50%	62%	10-190%
2051-24-3	Decachlorobiphenyl	53%	51%	10-156%
2051-24-3	Decachlorobiphenyl	43%	66%	10-156%

(a) Analytical precision exceeds in-house control limits.
(b) Reported from 2nd signal. 1st signal used for confirmation.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37171-MS	1G172327.D	1	12/23/21	CP	12/17/21	OP37171	G1G5947
OP37171-MSD	1G172328.D	1	12/23/21	CP	12/17/21	OP37171	G1G5947
JD36682-7	1G172326.D	1	12/23/21	CP	12/17/21	OP37171	G1G5947

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

CAS No.	Compound	JD36682-7 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		20.4	20.9	103	22.4	22.0	98	5	23-156/72
319-84-6	alpha-BHC	ND		20.4	17.9	88	22.4	22.7	101	24	15-162/63
319-85-7	beta-BHC	ND		20.4	17.8	87	22.4	16.8	75	6	17-148/79
319-86-8	delta-BHC	ND		20.4	21.8	107	22.4	21.3	95	2	10-159/81
58-89-9	gamma-BHC (Lindane)	ND		20.4	19.9	98	22.4	20.7	92	4	30-139/67
5103-71-9	alpha-Chlordane	ND		20.4	17.6	86	22.4	20.0	89	13	12-167/63
5103-74-2	gamma-Chlordane	ND		20.4	20.4	100	22.4	21.3	95	4	10-184/65
60-57-1	Dieldrin	ND		20.4	30.7	151	22.4	29.5	132	4	10-266/78
72-54-8	4,4'-DDD	ND		20.4	18.4	90	22.4	24.4	109	28	24-143/82
72-55-9	4,4'-DDE	1.3		20.4	16.3	74	22.4	17.2	71	5	10-172/71
50-29-3	4,4'-DDT	3.0		20.4	23.4	100	22.4	20.8	79	12	10-191/84
72-20-8	Endrin	ND		20.4	20.9	103	22.4	24.9	111	17	10-200/74
1031-07-8	Endosulfan sulfate	ND		20.4	12.6	62	22.4	13.2	59	5	10-149/69
7421-93-4	Endrin aldehyde	ND		20.4	18.8	92	22.4	17.8	79	5	10-165/81
959-98-8	Endosulfan-I	ND		20.4	20.2	99	22.4	21.5	96	6	10-171/75
33213-65-9	Endosulfan-II	ND		20.4	14.4	71	22.4	18.6	83	25	10-153/76
76-44-8	Heptachlor	ND		20.4	22.9	112	22.4	21.3	95	7	15-162/77
1024-57-3	Heptachlor epoxide	ND		20.4	19.3	95	22.4	20.1	90	4	26-151/66
72-43-5	Methoxychlor	ND		20.4	14.2	70	22.4	17.5	78	21	10-172/85
53494-70-5	Endrin ketone	ND		20.4	12.1	59	22.4	14.7	66	19	10-182/72
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JD36682-7	Limits
877-09-8	Tetrachloro-m-xylene	87%	94%	85%	14-145%
877-09-8	Tetrachloro-m-xylene	79%	87%	84%	14-145%
2051-24-3	Decachlorobiphenyl	71%	62%	76%	10-197%
2051-24-3	Decachlorobiphenyl	117%	97%	132%	10-197%

* = Outside of Control Limits.

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G1G5947-CC5915	**Injection Date:**	12/23/21
Lab File ID:	1G172315.D	**Injection Time:**	03:14
Instrument ID:	GC1G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	146462696	1.92	1011129210	1.70
Upper Limit [a]	292925392	2.42	2022258420	2.20
Lower Limit [b]	73231348	1.42	505564605	1.20

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
ZZZZZZ	139906147	1.92	839995538	1.70
ZZZZZZ	129148214	1.92	624269625	1.70
ZZZZZZ	142403938	1.92	715138512	1.70
ZZZZZZ	136238212	1.92	723138153	1.70
ZZZZZZ	147449310	1.92	871154705	1.70
OP37171-MB1	161095702	1.92	1028738856	1.70
OP37171-BS1	163918827	1.92	1021624440	1.70
OP37171-BS13	171068788	1.92	1038299326	1.70
JD36682-7	163053656	1.92	1036309110	1.70
OP37171-MS	171071752	1.92	1015641356	1.70
OP37171-MSD	173311773	1.92	1047646192	1.70
ZZZZZZ	162951290	1.92	980197937	1.70
ZZZZZZ	164138365	1.92	981265546	1.70

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G1G5948-CC5915	**Injection Date:**	12/23/21
Lab File ID:	1G172349.D	**Injection Time:**	17:08
Instrument ID:	GC1G	**Method:**	SW846 8081B

	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT
Check Std	156207684	1.91	949891572	1.70
Upper Limit [a]	312415368	2.41	1899783144	2.20
Lower Limit [b]	78103842	1.41	474945786	1.20

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT
OP37216-MB1	134048367	1.92	809361392	1.70
OP37216-BS1	131734393	1.91	827041155	1.70
ZZZZZZ	161587501	1.91	1001460828	1.69
ZZZZZZ	150166097	1.91	903555722	1.70
ZZZZZZ	154918838	1.91	989201961	1.69
JD36682-8	152876690	1.91	939883380	1.70
JD36682-10	158286464	1.92	1018372164	1.70
JD36682-11	161268769	1.92	1041402856	1.70
JD36811-1	144423491	1.92	706254476	1.70
OP37216-MS	142350328	1.91	871470702	1.70
OP37216-MSD	140276423	1.91	885210740	1.70
ZZZZZZ	140040245	1.91	900484651	1.70
ZZZZZZ	141935710	1.91	920808799	1.70
ZZZZZZ	139426632	1.91	877822406	1.70
ZZZZZZ	140006803	1.92	906046992	1.70
ZZZZZZ	135232963	1.92	843652421	1.70

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G1G5954-CC5950	**Injection Date:**	12/30/21
Lab File ID:	1G172455.D	**Injection Time:**	21:04
Instrument ID:	GC1G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	147176120	1.91	882622901	1.68
Upper Limit [a]	294352240	2.41	1765245802	2.18
Lower Limit [b]	73588060	1.41	441311451	1.18

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
ZZZZZZ	159857533	1.91	1064726222	1.68
ZZZZZZ	157216296	1.91	940184154	1.68
JD36956-5	151263039	1.90	930655307	1.68
ZZZZZZ	159065651	1.90	829123833	1.68
OP37175-MB1 [c]	157489328	1.91	961833201	1.68
OP37175-BS1 [c]	173409808	1.91	1080216894	1.68
OP37175-BSD [c]	163279958	1.91	981476288	1.68
JD36690-1	144924514	1.91	838562878	1.68
OP37175-MS	152734962	1.91	881256067	1.68
OP37175-MSD	185816228	1.91	1055469324	1.68
ZZZZZZ	157281010	1.91	839967796	1.68
ZZZZZZ	129745541	1.91	694765348	1.68
ZZZZZZ	174466165	1.91	1023462838	1.68
JD36682-9 [c]	186445178	1.91	1110955186	1.69

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Had TBA cleanup.

Internal Standard Area Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2876-CC2867	**Injection Date:**	12/20/21
Lab File ID:	6G81299.D	**Injection Time:**	02:19
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	560769371	2.06	778610753	1.68
Upper Limit [a]	1121538742	2.56	1557221506	2.18
Lower Limit [b]	280384686	1.56	389305377	1.18

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP37193-MB1	621981065	2.06	860082544	1.69
OP37193-BS1	630639341	2.06	889109184	1.68
OP37193-BSD	643271139	2.06	915594386	1.68
ZZZZZZ	682025264	2.06	939771989	1.68
ZZZZZZ	688877304	2.06	943422164	1.69
ZZZZZZ	659992612	2.06	916247360	1.69
ZZZZZZ	671506729	2.06	930512524	1.69
ZZZZZZ	643072634	2.06	921375160	1.69
JD36682-2	626065291	2.06	906885398	1.68
JD36682-3	689209848	2.06	970985960	1.69
JD36682-4	675553933	2.06	946169357	1.68
JD36682-5	666835188	2.06	930262074	1.69
JD36682-6	711929080	2.06	1011185299	1.69
ZZZZZZ	651924010	2.06	932733403	1.69
ZZZZZZ	609228829	2.06	723559233	1.69
ZZZZZZ	597732038	2.06	813590560	1.69

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

DDT/Endrin Breakdown Check

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-DDT
Lab File ID: 1G171495.D
Instrument ID: GC1G
Injection Date: 11/23/21
Injection Time: 09:36

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	18903539	3255652
4,4'-DDE	34642663	6767477
4,4'-DDT	1339710199	218130515
DDT Breakdown [a]	3.8 %	4.4 %
Endrin aldehyde	5381050	525527
Endrin ketone	6670102	2399992
Endrin	758755678	144473035
Endrin Breakdown [b]	1.6 %	2 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G5915-IC5915	1G171497.D	11/23/21	10:12	00:36	Initial cal 1
G1G5915-IC5915	1G171498.D	11/23/21	10:30	00:54	Initial cal 2
G1G5915-IC5915	1G171499.D	11/23/21	10:48	01:12	Initial cal 5
G1G5915-IC5915	1G171500.D	11/23/21	11:06	01:30	Initial cal 10
G1G5915-ICC5915	1G171501.D	11/23/21	11:24	01:48	Initial cal 25
G1G5915-IC5915	1G171502.D	11/23/21	11:43	02:07	Initial cal 50
G1G5915-IC5915	1G171503.D	11/23/21	12:01	02:25	Initial cal 75
G1G5915-IC5915	1G171504.D	11/23/21	12:19	02:43	Initial cal 100
G1G5915-IC5915	1G171505.D	11/23/21	12:37	03:01	Initial cal 500
G1G5915-IC5915	1G171506.D	11/23/21	12:55	03:19	Initial cal 500
G1G5915-ICV5915	1G171507.D	11/23/21	13:14	03:38	Initial cal verification 25
G1G5915-ICV5915	1G171508.D	11/23/21	13:32	03:56	Initial cal verification 500
G1G5915-ICV5915	1G171509.D	11/23/21	13:50	04:14	Initial cal verification 500
G1G5915-ICV5915	1G171510.D	11/23/21	14:08	04:32	Initial cal verification 25
G1G5915-ICV5915	1G171511.D	11/23/21	14:26	04:50	Initial cal verification 25

DDT/Endrin Breakdown Check

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5947-DDT
Lab File ID: 1G172303.D
Instrument ID: GC1G
Injection Date: 12/22/21
Injection Time: 22:43

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	17683338	2692317
4,4'-DDE	28986451	4802509
4,4'-DDT	1250626815	171728991
DDT Breakdown [a]	3.6 %	4.2 %
Endrin aldehyde	0	0
Endrin ketone	3582678	1290668
Endrin	767745779	123527594
Endrin Breakdown [b]	0.5 %	1 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G5947-CC5915	1G172304.D	12/22/21	23:02	00:19	Continuing cal 50
OP37098-MB1	1G172306.D	12/22/21	23:38	00:55	Method Blank
OP37098-BS1	1G172307.D	12/22/21	23:56	01:13	Blank Spike
OP37098-BSD	1G172308.D	12/23/21	00:14	01:31	Blank Spike Duplicate
OP37098-BS13	1G172309.D	12/23/21	00:32	01:49	Blank Spike
OP37098-BS14	1G172310.D	12/23/21	00:51	02:08	Blank Spike
ZZZZZZ	1G172311.D	12/23/21	01:09	02:26	(unrelated sample)
ZZZZZZ	1G172312.D	12/23/21	01:27	02:44	(unrelated sample)
ZZZZZZ	1G172313.D	12/23/21	01:45	03:02	(unrelated sample)
ZZZZZZ	1G172314.D	12/23/21	02:04	03:21	(unrelated sample)
G1G5947-CC5915	1G172315.D	12/23/21	03:14	04:31	Continuing cal 25
ZZZZZZ	1G172317.D	12/23/21	03:51	05:08	(unrelated sample)
ZZZZZZ	1G172318.D	12/23/21	04:09	05:26	(unrelated sample)
ZZZZZZ	1G172319.D	12/23/21	04:28	05:45	(unrelated sample)
ZZZZZZ	1G172320.D	12/23/21	04:46	06:03	(unrelated sample)
ZZZZZZ	1G172321.D	12/23/21	05:04	06:21	(unrelated sample)
OP37171-MB1	1G172323.D	12/23/21	05:40	06:57	Method Blank
OP37171-BS1	1G172324.D	12/23/21	05:58	07:15	Blank Spike
OP37171-BS13	1G172325.D	12/23/21	06:17	07:34	Blank Spike
JD36682-7	1G172326.D	12/23/21	06:35	07:52	HOFF SED-4
OP37171-MS	1G172327.D	12/23/21	06:53	08:10	Matrix Spike
OP37171-MSD	1G172328.D	12/23/21	07:11	08:28	Matrix Spike Duplicate
ZZZZZZ	1G172332.D	12/23/21	08:24	09:41	(unrelated sample)
ZZZZZZ	1G172333.D	12/23/21	08:42	09:59	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	G1G5947-DDT	**Injection Date:**	12/22/21
Lab File ID:	1G172303.D	**Injection Time:**	22:43
Instrument ID:	GC1G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G5947-CC5915	1G172336.D	12/23/21	09:36	10:53	Continuing cal 50
ZZZZZZ	1G172341.D	12/23/21	11:07	12:24	(unrelated sample)
ZZZZZZ	1G172342.D	12/23/21	11:25	12:42	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5948-DDT
Lab File ID: 1G172348.D
Instrument ID: GC1G
Injection Date: 12/23/21
Injection Time: 16:50

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	11354292	1593799
4,4'-DDE	17779450	3130495
4,4'-DDT	1367941215	191394816
DDT Breakdown [a]	2.1 %	2.4 %
Endrin aldehyde	0	0
Endrin ketone	31070420	4629021
Endrin	806067053	130181882
Endrin Breakdown [b]	3.7 %	3.4 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G5948-CC5915	1G172349.D	12/23/21	17:08	00:18	Continuing cal 50
OP37216-MB1	1G172351.D	12/23/21	18:12	01:22	Method Blank
OP37216-BS1	1G172352.D	12/23/21	18:30	01:40	Blank Spike
ZZZZZZ	1G172353.D	12/23/21	18:49	01:59	(unrelated sample)
ZZZZZZ	1G172354.D	12/23/21	19:07	02:17	(unrelated sample)
ZZZZZZ	1G172355.D	12/23/21	19:25	02:35	(unrelated sample)
JD36682-8	1G172358.D	12/23/21	20:20	03:30	HOFF SED-3
JD36682-10	1G172360.D	12/23/21	20:56	04:06	HOFF SED-1
JD36682-11	1G172361.D	12/23/21	21:14	04:24	HOFF DUP-121321SED
JD36811-1	1G172362.D	12/23/21	21:57	05:07	(used for QC only; not part of job JD36682)
OP37216-MS	1G172363.D	12/23/21	22:15	05:25	Matrix Spike
OP37216-MSD	1G172364.D	12/23/21	22:34	05:44	Matrix Spike Duplicate
ZZZZZZ	1G172365.D	12/23/21	22:52	06:02	(unrelated sample)
ZZZZZZ	1G172366.D	12/23/21	23:10	06:20	(unrelated sample)
ZZZZZZ	1G172367.D	12/23/21	23:28	06:38	(unrelated sample)
ZZZZZZ	1G172368.D	12/23/21	23:46	06:56	(unrelated sample)
ZZZZZZ	1G172369.D	12/24/21	00:04	07:14	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5950-DDT
Lab File ID: 1G172383.D
Instrument ID: GC1G
Injection Date: 12/28/21
Injection Time: 00:07

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	17997593	3027820
4,4'-DDE	24758650	4125740
4,4'-DDT	1544285341	234912431
DDT Breakdown [a]	2.7 %	3 %
Endrin aldehyde	0	0
Endrin ketone	5880515	11265113
Endrin	939727202	161141856
Endrin Breakdown [b]	0.6 %	6.5 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G5950-IC5950	1G172385.D	12/28/21	00:49	00:42	Initial cal 100
G1G5950-IC5950	1G172386.D	12/28/21	01:07	01:00	Initial cal 75
G1G5950-IC5950	1G172387.D	12/28/21	01:43	01:36	Initial cal 50
G1G5950-ICC5950	1G172388.D	12/28/21	02:01	01:54	Initial cal 25
G1G5950-IC5950	1G172389.D	12/28/21	02:19	02:12	Initial cal 10
G1G5950-IC5950	1G172390.D	12/28/21	02:38	02:31	Initial cal 5
G1G5950-IC5950	1G172391.D	12/28/21	02:56	02:49	Initial cal 2
G1G5950-IC5950	1G172392.D	12/28/21	03:14	03:07	Initial cal 1
G1G5950-IC5950	1G172393.D	12/28/21	03:32	03:25	Initial cal 500
G1G5950-IC5950	1G172394.D	12/28/21	03:50	03:43	Initial cal 500
G1G5950-ICV5950	1G172396.D	12/28/21	04:27	04:20	Initial cal verification 500
G1G5950-ICV5950	1G172397.D	12/28/21	04:45	04:38	Initial cal verification 500
G1G5950-ICV5950	1G172398.D	12/28/21	05:03	04:56	Initial cal verification 25
G1G5950-ICV5950	1G172399.D	12/28/21	05:21	05:14	Initial cal verification 25

DDT/Endrin Breakdown Check

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5954-DDT
Lab File ID: 1G172454.D
Instrument ID: GC1G
Injection Date: 12/30/21
Injection Time: 20:46

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	18480108	1880918
4,4'-DDE	24886064	2639044
4,4'-DDT	1537183177	241559528
DDT Breakdown [a]	2.7 %	1.8 %
Endrin aldehyde	0	0
Endrin ketone	7738842	515498
Endrin	930205272	159555659
Endrin Breakdown [b]	0.8 %	0.3 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G5954-CC5950	1G172455.D	12/30/21	21:04	00:18	Continuing cal 25
ZZZZZZ	1G172457.D	12/30/21	21:41	00:55	(unrelated sample)
ZZZZZZ	1G172458.D	12/30/21	21:59	01:13	(unrelated sample)
JD36956-5	1G172459.D	12/30/21	22:17	01:31	(used for QC only; not part of job JD36682)
ZZZZZZ	1G172460.D	12/30/21	22:35	01:49	(unrelated sample)
OP37175-MB1	1G172461.D	12/30/21	22:53	02:07	Method Blank
OP37175-BS1	1G172462.D	12/30/21	23:12	02:26	Blank Spike
OP37175-BSD	1G172463.D	12/30/21	23:30	02:44	Blank Spike Duplicate
JD36690-1	1G172464.D	12/30/21	23:48	03:02	(used for QC only; not part of job JD36682)
OP37175-MS	1G172465.D	12/31/21	00:06	03:20	Matrix Spike
OP37175-MSD	1G172466.D	12/31/21	00:24	03:38	Matrix Spike Duplicate
ZZZZZZ	1G172467.D	12/31/21	00:43	03:57	(unrelated sample)
ZZZZZZ	1G172468.D	12/31/21	01:01	04:15	(unrelated sample)
ZZZZZZ	1G172469.D	12/31/21	01:19	04:33	(unrelated sample)
JD36682-9	1G172470.D	12/31/21	01:37	04:51	HOFF SED-2

DDT/Endrin Breakdown Check

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	G6G2876-DDT	**Injection Date:**	12/20/21
Lab File ID:	6G81298.D	**Injection Time:**	02:01
Instrument ID:	GC6G		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	21554212	11874748
4,4'-DDE	13205104	7634208
4,4'-DDT	1383032291	920717800
DDT Breakdown [a]	2.5 %	2.1 %
Endrin aldehyde	4264741	1513293
Endrin ketone	4537110	8963963
Endrin	843926758	544226950
Endrin Breakdown [b]	1 %	1.9 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G2876-CC2867	6G81299.D	12/20/21	02:19	00:18	Continuing cal 50
OP37193-MB1	6G81301.D	12/20/21	03:16	01:15	Method Blank
OP37193-BS1	6G81302.D	12/20/21	03:34	01:33	Blank Spike
OP37193-BSD	6G81303.D	12/20/21	03:51	01:50	Blank Spike Duplicate
ZZZZZZ	6G81304.D	12/20/21	04:09	02:08	(unrelated sample)
ZZZZZZ	6G81305.D	12/20/21	04:26	02:26	(unrelated sample)
ZZZZZZ	6G81306.D	12/20/21	04:44	02:43	(unrelated sample)
ZZZZZZ	6G81307.D	12/20/21	05:02	03:01	(unrelated sample)
ZZZZZZ	6G81308.D	12/20/21	05:20	03:19	(unrelated sample)
JD36682-2	6G81309.D	12/20/21	05:38	03:37	HOFF SW-4
JD36682-3	6G81310.D	12/20/21	05:56	03:55	HOFF SW-3
JD36682-4	6G81311.D	12/20/21	06:14	04:13	HOFF SW-2
JD36682-5	6G81312.D	12/20/21	06:32	04:31	HOFF SW-1
JD36682-6	6G81313.D	12/20/21	06:50	04:49	HOFF-DUP-121321SW
ZZZZZZ	6G81314.D	12/20/21	07:08	05:07	(unrelated sample)
ZZZZZZ	6G81315.D	12/20/21	07:25	05:24	(unrelated sample)
ZZZZZZ	6G81318.D	12/20/21	08:19	06:18	(unrelated sample)

GC Identification Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G1G5947-CC5915	**Injection Date:**	12/23/21
Lab File ID:	1G172315.D	**Injection Time:**	03:14
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	JD36682-7	**Injection Date:**	12/23/21
Lab File ID:	1G172326.D	**Injection Time:**	06:35
Client ID:	HOFF SED-4		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
4,4'-DDE	1	4.96	4.98	2.7		ug/kg	70.0
4,4'-DDE [a]	2 [b]	6.60	6.61	1.3		ug/kg	
4,4'-DDT [a]	1 [b]	6.31	6.31	3.0		ug/kg	53.7
4,4'-DDT [c]	2	8.23	8.23	5.2		ug/kg	

(a) More than 40 % RPD for detected concentrations between the two GC columns.
(b) Final result reported from this column.
(c) Associated CCV outside of control limits low.

GC Identification Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G1G5948-CC5915	**Injection Date:**	12/23/21
Lab File ID:	1G172349.D	**Injection Time:**	17:08
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	JD36682-8	**Injection Date:**	12/23/21
Lab File ID:	1G172358.D	**Injection Time:**	20:20
Client ID:	HOFF SED-3		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
4,4'-DDT [a]	1 [b]	6.30	6.31	3.2		ug/kg	52.9
4,4'-DDT [a]	2	8.24	8.23	5.5		ug/kg	
Heptachlor epoxide	1	4.52	4.52	1.8		ug/kg	11.8
Heptachlor epoxide	2 [b]	5.77	5.79	1.6		ug/kg	

(a) More than 40 % RPD for detected concentrations between the two GC columns.
(b) Final result reported from this column.

GC Identification Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G1G5954-CC5950	**Injection Date:**	12/30/21
Lab File ID:	1G172455.D	**Injection Time:**	21:04
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	JD36682-9	**Injection Date:**	12/31/21
Lab File ID:	1G172470.D	**Injection Time:**	01:37
Client ID:	HOFF SED-2		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
4,4'-DDT [a]	1 [b]	6.28	6.28	1.5		ug/kg	42.1
4,4'-DDT [c]	2	8.20	8.20	2.3		ug/kg	

(a) More than 40 % RPD for detected concentrations between the two GC columns.
(b) Final result reported from this column.
(c) Associated CCV outside of control limits high.

GC Identification Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G1G5947-CC5915	**Injection Date:**	12/23/21
Lab File ID:	1G172315.D	**Injection Time:**	03:14
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP37171-BS1	**Injection Date:**	12/23/21
Lab File ID:	1G172324.D	**Injection Time:**	05:58
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.78	3.78	18.1		ug/kg	18.5
Aldrin	2	4.90	4.90	21.8		ug/kg	
alpha-BHC	1	2.66	2.66	17.8		ug/kg	12.5
alpha-BHC	2 [a]	3.36	3.36	15.7		ug/kg	
beta-BHC	1	3.02	3.01	18.1		ug/kg	13.6
beta-BHC	2 [a]	3.89	3.89	15.8		ug/kg	
delta-BHC	1	3.20	3.20	16.5		ug/kg	8.9
delta-BHC	2 [a]	4.31	4.31	15.1		ug/kg	
gamma-BHC (Lindane)	1	2.95	2.94	16.7		ug/kg	10.7
gamma-BHC (Lindane)	2 [a]	3.81	3.80	15.0		ug/kg	
alpha-Chlordane	1	4.87	4.86	18.1		ug/kg	12.3
alpha-Chlordane	2 [a]	6.34	6.34	16.0		ug/kg	
gamma-Chlordane	1	4.69	4.69	18.2		ug/kg	12.9
gamma-Chlordane	2 [a]	6.09	6.09	16.0		ug/kg	
Dieldrin	1	5.41	5.40	28.8		ug/kg	51.0
Dieldrin	2 [a]	6.92	6.92	17.1		ug/kg	
4,4'-DDD	1	5.87	5.86	17.3		ug/kg	14.2
4,4'-DDD	2 [a]	7.65	7.65	15.0		ug/kg	
4,4'-DDE	1	4.98	4.98	17.7		ug/kg	6.4
4,4'-DDE	2 [a]	6.62	6.61	16.6		ug/kg	
4,4'-DDT	1	6.32	6.31	18.6		ug/kg	24.1
4,4'-DDT	2 [a]	8.24	8.23	14.6		ug/kg	
Endrin	1	5.75	5.74	20.3		ug/kg	18.9
Endrin	2 [a]	7.47	7.47	16.8		ug/kg	
Endosulfan sulfate	1 [a]	7.51	7.51	14.1		ug/kg	6.8
Endosulfan sulfate	2	8.99	8.99	15.1		ug/kg	
Endrin aldehyde	1	6.77	6.77	18.4		ug/kg	5.6
Endrin aldehyde	2 [a]	8.48	8.47	17.4		ug/kg	
Endosulfan-I	1	5.06	5.06	17.7		ug/kg	10.1
Endosulfan-I	2 [a]	6.45	6.44	16.0		ug/kg	
Endosulfan-II	1	6.09	6.09	18.4		ug/kg	15.2
Endosulfan-II	2 [a]	7.85	7.85	15.8		ug/kg	
Heptachlor	1	3.44	3.44	18.2		ug/kg	11.0
Heptachlor	2 [a]	4.42	4.42	16.3		ug/kg	
Heptachlor epoxide	1 [a]	4.52	4.52	16.8		ug/kg	2.9
Heptachlor epoxide	2	5.79	5.78	17.3		ug/kg	
Methoxychlor	1	7.15	7.15	19.0		ug/kg	18.4
Methoxychlor	2 [a]	9.56	9.56	15.8		ug/kg	
Endrin ketone	1	7.99	7.98	12.7		ug/kg	11.7
Endrin ketone	2 [a]	9.95	9.94	11.3		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2876-CC2867	**Injection Date:**	12/20/21
Lab File ID:	6G81299.D	**Injection Time:**	02:19
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37193-BS1	**Injection Date:**	12/20/21
Lab File ID:	6G81302.D	**Injection Time:**	03:34
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.77	3.77	0.16		ug/l	13.3
Aldrin	2 [a]	5.01	5.01	0.14		ug/l	
alpha-BHC	1	2.71	2.71	0.14		ug/l	7.4
alpha-BHC	2 [a]	3.55	3.55	0.13		ug/l	
beta-BHC	1	3.06	3.06	0.17		ug/l	6.1
beta-BHC	2 [a]	4.07	4.07	0.16		ug/l	
delta-BHC	1	3.23	3.23	0.17		ug/l	12.5
delta-BHC	2 [a]	4.46	4.46	0.15		ug/l	
gamma-BHC (Lindane)	1	2.99	2.98	0.17		ug/l	12.5
gamma-BHC (Lindane)	2 [a]	3.98	3.98	0.15		ug/l	
alpha-Chlordane	1	4.76	4.76	0.18		ug/l	18.2
alpha-Chlordane	2 [a]	6.35	6.35	0.15		ug/l	
gamma-Chlordane	1	4.60	4.60	0.17		ug/l	19.4
gamma-Chlordane	2 [a]	6.12	6.12	0.14		ug/l	
Dieldrin	1	5.24	5.24	0.16		ug/l	28.6
Dieldrin	2 [a]	6.88	6.88	0.12		ug/l	
4,4'-DDD	1	5.69	5.69	0.16		ug/l	13.3
4,4'-DDD	2 [a]	7.56	7.56	0.14		ug/l	
4,4'-DDE	1 [a]	4.89	4.88	0.098		ug/l	28.1
4,4'-DDE	2	6.61	6.61	0.13		ug/l	
4,4'-DDT	1	6.09	6.09	0.15		ug/l	6.9
4,4'-DDT	2 [a]	8.10	8.10	0.14		ug/l	
Endrin	1	5.55	5.54	0.16		ug/l	6.5
Endrin	2 [a]	7.38	7.38	0.15		ug/l	
Endosulfan sulfate	1 [a]	7.12	7.12	0.13		ug/l	7.4
Endosulfan sulfate	2	8.78	8.78	0.14		ug/l	
Endrin aldehyde	1 [a]	6.46	6.46	0.14		ug/l	6.9
Endrin aldehyde	2	8.31	8.31	0.15		ug/l	
Endrin ketone	1 [a]	7.54	7.54	0.17		ug/l	5.7
Endrin ketone	2	9.74	9.74	0.18		ug/l	
Endosulfan-I	1 [a]	4.93	4.93	0.15		ug/l	0.0
Endosulfan-I	2	6.44	6.44	0.15		ug/l	
Endosulfan-II	1	5.85	5.86	0.080		ug/l	60.9
Endosulfan-II [b]	2 [a]	7.73	7.74	0.15		ug/l	
Heptachlor	1	3.45	3.45	0.16		ug/l	6.5
Heptachlor	2 [a]	4.56	4.56	0.15		ug/l	
Heptachlor epoxide	1	4.44	4.44	0.17		ug/l	34.5
Heptachlor epoxide	2 [a]	5.83	5.84	0.12		ug/l	
Methoxychlor	1 [a]	6.87	6.87	0.12		ug/l	8.0
Methoxychlor	2	9.34	9.34	0.13		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2876-CC2867	**Injection Date:**	12/20/21
Lab File ID:	6G81299.D	**Injection Time:**	02:19
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37193-BS1	**Injection Date:**	12/20/21
Lab File ID:	6G81302.D	**Injection Time:**	03:34
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(b) Reported from 2nd signal. 1st signal used for confirmation.

GC Identification Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2876-CC2867	**Injection Date:**	12/20/21
Lab File ID:	6G81299.D	**Injection Time:**	02:19
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37193-BSD	**Injection Date:**	12/20/21
Lab File ID:	6G81303.D	**Injection Time:**	03:51
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.77	3.77	0.20		ug/l	5.1
Aldrin	2 [a]	5.01	5.01	0.19		ug/l	
alpha-BHC	1	2.71	2.71	0.19		ug/l	11.1
alpha-BHC	2 [a]	3.55	3.55	0.17		ug/l	
beta-BHC	1	3.06	3.06	0.25		ug/l	27.3
beta-BHC	2 [a]	4.07	4.07	0.19		ug/l	
delta-BHC	1	3.23	3.23	0.21		ug/l	4.9
delta-BHC	2 [a]	4.46	4.46	0.20		ug/l	
gamma-BHC (Lindane)	1	2.98	2.98	0.20		ug/l	10.5
gamma-BHC (Lindane)	2 [a]	3.98	3.98	0.18		ug/l	
alpha-Chlordane	1	4.76	4.76	0.23		ug/l	19.0
alpha-Chlordane	2 [a]	6.35	6.35	0.19		ug/l	
gamma-Chlordane	1	4.60	4.60	0.25		ug/l	22.2
gamma-Chlordane	2 [a]	6.12	6.12	0.20		ug/l	
Dieldrin	1	5.24	5.24	0.21		ug/l	4.9
Dieldrin	2 [a]	6.88	6.88	0.20		ug/l	
4,4'-DDD	1 [a]	5.69	5.69	0.21		ug/l	50.0
4,4'-DDD	2	7.59	7.56	0.35		ug/l	
4,4'-DDE	1 [a]	4.89	4.88	0.16		ug/l	11.8
4,4'-DDE	2	6.61	6.61	0.18		ug/l	
4,4'-DDT	1	6.09	6.09	0.20		ug/l	5.1
4,4'-DDT	2 [a]	8.10	8.10	0.19		ug/l	
Endrin	1	5.54	5.54	0.20		ug/l	0.0
Endrin	2 [a]	7.38	7.38	0.20		ug/l	
Endosulfan sulfate	1	7.12	7.12	0.19		ug/l	11.1
Endosulfan sulfate	2 [a]	8.78	8.78	0.17		ug/l	
Endrin aldehyde	1 [a]	6.46	6.46	0.23		ug/l	0.0
Endrin aldehyde	2	8.31	8.31	0.23		ug/l	
Endrin ketone	1	7.54	7.54	0.23		ug/l	9.1
Endrin ketone	2 [a]	9.74	9.74	0.21		ug/l	
Endosulfan-I	1	4.93	4.93	0.20		ug/l	5.1
Endosulfan-I	2 [a]	6.44	6.44	0.19		ug/l	
Endosulfan-II	1 [a]	5.85	5.86	0.15		ug/l	23.5
Endosulfan-II	2	7.73	7.74	0.19		ug/l	
Heptachlor	1	3.45	3.45	0.21		ug/l	15.4
Heptachlor	2 [a]	4.56	4.56	0.18		ug/l	
Heptachlor epoxide	1	4.44	4.44	0.22		ug/l	14.6
Heptachlor epoxide	2 [a]	5.83	5.84	0.19		ug/l	
Methoxychlor	1	6.88	6.87	0.18		ug/l	0.0
Methoxychlor	2 [a]	9.34	9.34	0.18		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G1G5947-CC5915	**Injection Date:**	12/23/21
Lab File ID:	1G172315.D	**Injection Time:**	03:14
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP37171-MS	**Injection Date:**	12/23/21
Lab File ID:	1G172327.D	**Injection Time:**	06:53
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.78	3.78	20.9		ug/kg	40.2
Aldrin	2	4.91	4.90	31.4		ug/kg	
alpha-BHC	1 [a]	2.66	2.66	17.9		ug/kg	2.3
alpha-BHC	2	3.36	3.36	17.5		ug/kg	
beta-BHC	1 [a]	3.02	3.01	17.8		ug/kg	1.7
beta-BHC	2	3.89	3.89	17.5		ug/kg	
delta-BHC	1 [a]	3.21	3.20	21.8		ug/kg	38.3
delta-BHC	2	4.31	4.31	14.8		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.95	2.94	19.9		ug/kg	2.5
gamma-BHC (Lindane)	2	3.81	3.80	19.4		ug/kg	
alpha-Chlordane	1 [a]	4.87	4.86	17.6		ug/kg	1.7
alpha-Chlordane	2	6.34	6.34	17.9		ug/kg	
gamma-Chlordane	1 [a]	4.69	4.69	20.4		ug/kg	19.9
gamma-Chlordane	2	6.10	6.09	16.7		ug/kg	
Dieldrin	1 [a]	5.41	5.40	30.7		ug/kg	52.2
Dieldrin	2	6.92	6.92	18.0		ug/kg	
4,4'-DDD	1 [a]	5.87	5.86	18.4		ug/kg	22.4
4,4'-DDD	2	7.65	7.65	14.7		ug/kg	
4,4'-DDE	1	4.98	4.98	13.5		ug/kg	18.8
4,4'-DDE	2 [a]	6.62	6.61	16.3		ug/kg	
4,4'-DDT	1 [a]	6.32	6.31	23.4		ug/kg	13.2
4,4'-DDT	2	8.24	8.23	20.5		ug/kg	
Endrin	1 [a]	5.75	5.74	20.9		ug/kg	17.7
Endrin	2	7.47	7.47	17.5		ug/kg	
Endosulfan sulfate	1 [a]	7.51	7.51	12.6		ug/kg	20.1
Endosulfan sulfate	2	8.99	8.99	10.3		ug/kg	
Endrin aldehyde	1 [a]	6.77	6.77	18.8		ug/kg	17.3
Endrin aldehyde	2	8.48	8.47	15.8		ug/kg	
Endosulfan-I	1 [a]	5.07	5.06	20.2		ug/kg	20.8
Endosulfan-I	2	6.45	6.44	16.4		ug/kg	
Endosulfan-II	1 [a]	6.09	6.09	14.4		ug/kg	6.7
Endosulfan-II	2	7.85	7.85	15.4		ug/kg	
Heptachlor	1 [a]	3.44	3.44	22.9		ug/kg	33.1
Heptachlor	2	4.42	4.42	16.4		ug/kg	
Heptachlor epoxide	1 [a]	4.52	4.52	19.3		ug/kg	0.0
Heptachlor epoxide	2	5.79	5.78	19.3		ug/kg	
Methoxychlor	1 [a]	7.15	7.15	14.2		ug/kg	15.6
Methoxychlor	2	9.56	9.56	16.6		ug/kg	
Endrin ketone	1 [a]	7.99	7.98	12.1		ug/kg	10.2
Endrin ketone	2	9.95	9.94	13.4		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G1G5947-CC5915	**Injection Date:**	12/23/21
Lab File ID:	1G172315.D	**Injection Time:**	03:14
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP37171-MSD	**Injection Date:**	12/23/21
Lab File ID:	1G172328.D	**Injection Time:**	07:11
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.78	3.78	22.0		ug/kg	39.1
Aldrin	2	4.91	4.90	32.7		ug/kg	
alpha-BHC	1 [a]	2.66	2.66	22.7		ug/kg	10.7
alpha-BHC	2	3.36	3.36	20.4		ug/kg	
beta-BHC	1 [a]	3.02	3.01	16.8		ug/kg	10.2
beta-BHC	2	3.89	3.89	18.6		ug/kg	
delta-BHC	1 [a]	3.21	3.20	21.3		ug/kg	10.9
delta-BHC	2	4.31	4.31	19.1		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.95	2.94	20.7		ug/kg	3.3
gamma-BHC (Lindane)	2	3.81	3.80	21.4		ug/kg	
alpha-Chlordane	1 [a]	4.87	4.86	20.0		ug/kg	3.0
alpha-Chlordane	2	6.34	6.34	19.4		ug/kg	
gamma-Chlordane	1 [a]	4.69	4.69	21.3		ug/kg	14.1
gamma-Chlordane	2	6.10	6.09	18.5		ug/kg	
Dieldrin	1 [a]	5.41	5.40	29.5		ug/kg	40.3
Dieldrin	2	6.92	6.92	19.6		ug/kg	
4,4'-DDD	1 [a]	5.87	5.86	24.4		ug/kg	38.0
4,4'-DDD	2	7.65	7.65	16.6		ug/kg	
4,4'-DDE	1	4.98	4.98	15.3		ug/kg	11.7
4,4'-DDE	2 [a]	6.62	6.61	17.2		ug/kg	
4,4'-DDT	1 [a]	6.32	6.31	20.8		ug/kg	12.2
4,4'-DDT	2	8.24	8.23	23.5		ug/kg	
Endrin	1 [a]	5.75	5.74	24.9		ug/kg	30.0
Endrin	2	7.47	7.47	18.4		ug/kg	
Endosulfan sulfate	1 [a]	7.51	7.51	13.2		ug/kg	5.9
Endosulfan sulfate	2	8.99	8.99	14.0		ug/kg	
Endrin aldehyde	1 [a]	6.77	6.77	17.8		ug/kg	4.6
Endrin aldehyde	2	8.48	8.47	17.0		ug/kg	
Endosulfan-I	1 [a]	5.07	5.06	21.5		ug/kg	17.2
Endosulfan-I	2	6.45	6.44	18.1		ug/kg	
Endosulfan-II	1 [a]	6.09	6.09	18.6		ug/kg	2.7
Endosulfan-II	2	7.85	7.85	19.1		ug/kg	
Heptachlor	1 [a]	3.44	3.44	21.3		ug/kg	9.9
Heptachlor	2	4.42	4.42	19.3		ug/kg	
Heptachlor epoxide	1 [a]	4.52	4.52	20.1		ug/kg	6.7
Heptachlor epoxide	2	5.79	5.78	21.5		ug/kg	
Methoxychlor	1 [a]	7.15	7.15	17.5		ug/kg	4.5
Methoxychlor	2	9.56	9.56	18.3		ug/kg	
Endrin ketone	1 [a]	7.99	7.98	14.7		ug/kg	8.5
Endrin ketone	2	9.95	9.94	16.0		ug/kg	

(a) QC results reported from this column.

Surrogate Recovery Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8081B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JD36682-2	6G81309.D	64	63	46	56
JD36682-3	6G81310.D	64	59	42	42
JD36682-4	6G81311.D	75	70	34	41
JD36682-5	6G81312.D	73	66	45	55
JD36682-6	6G81313.D	65	60	45	52
OP37193-BS1	6G81302.D	54	50	53	43
OP37193-BSD	6G81303.D	68	62	51	66
OP37193-MB1	6G81301.D	55	49	38	45

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	10-190%
S2 = Decachlorobiphenyl	10-156%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Surrogate Recovery Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8081B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JD36682-7	1G172326.D	85	84	76	132
JD36682-8	1G172358.D	76	70	80	105
JD36682-9	1G172470.D	102	99	77	91
JD36682-10	1G172360.D	54	53	49	49
JD36682-11	1G172361.D	88	87	70	84
OP37171-BS1	1G172324.D	98	92	98	90
OP37171-BS13	1G172325.D	96	88	90	87
OP37171-MB1	1G172323.D	108	104	104	100
OP37171-MS	1G172327.D	87	79	71	117
OP37171-MSD	1G172328.D	94	87	62	97

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	14-145%
S2 = Decachlorobiphenyl	10-197%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std: G1G5947-CC5915
Lab File ID: 1G172315.D
Instrument ID: GC1G
Injection Date: 12/23/21
Injection Time: 03:14
Method: SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.21	2.69	9.84	11.82

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	1G172317.D	12/23/21	03:51	2.21	2.69	9.84	11.82
ZZZZZZ	1G172318.D	12/23/21	04:09	2.21	2.69	9.83	11.76
ZZZZZZ	1G172319.D	12/23/21	04:28	2.21	2.69	9.84	11.76
ZZZZZZ	1G172320.D	12/23/21	04:46	2.21	2.69	9.84	11.76
ZZZZZZ	1G172321.D	12/23/21	05:04	2.21	2.69	9.84	11.82
OP37171-MB1	1G172323.D	12/23/21	05:40	2.21	2.69	9.84	11.82
OP37171-BS1	1G172324.D	12/23/21	05:58	2.21	2.69	9.84	11.82
OP37171-BS13	1G172325.D	12/23/21	06:17	2.21	2.69	9.84	11.82
JD36682-7	1G172326.D	12/23/21	06:35	2.21	2.69	9.83	11.82
OP37171-MS	1G172327.D	12/23/21	06:53	2.21	2.69	9.84	11.83
OP37171-MSD	1G172328.D	12/23/21	07:11	2.22	2.69	9.84	11.83
ZZZZZZ	1G172332.D	12/23/21	08:24	2.21	2.69	9.84	11.82
ZZZZZZ	1G172333.D	12/23/21	08:42	2.22	2.69	9.84	11.83

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G1G5948-CC5915	**Injection Date:**	12/23/21
Lab File ID:	1G172349.D	**Injection Time:**	17:08
Instrument ID:	GC1G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.21	2.69	9.84	11.82

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP37216-MB1	1G172351.D	12/23/21	18:12	2.21	2.69	9.85	11.83
OP37216-BS1	1G172352.D	12/23/21	18:30	2.21	2.69	9.84	11.82
ZZZZZZ	1G172353.D	12/23/21	18:49	2.21	2.69	9.83	11.82
ZZZZZZ	1G172354.D	12/23/21	19:07	2.21	2.69	9.84	11.82
ZZZZZZ	1G172355.D	12/23/21	19:25	2.21	2.69	9.84	11.82
JD36682-8	1G172358.D	12/23/21	20:20	2.21	2.69	9.84	11.83
JD36682-10	1G172360.D	12/23/21	20:56	2.21	2.69	9.83	11.82
JD36682-11	1G172361.D	12/23/21	21:14	2.21	2.69	9.83	11.82
JD36811-1	1G172362.D	12/23/21	21:57	2.22	2.69	9.85	11.83
OP37216-MS	1G172363.D	12/23/21	22:15	2.21	2.69	9.84	11.82
OP37216-MSD	1G172364.D	12/23/21	22:34	2.21	2.69	9.84	11.82
ZZZZZZ	1G172365.D	12/23/21	22:52	2.21	2.69	9.83	11.82
ZZZZZZ	1G172366.D	12/23/21	23:10	2.21	2.69	9.84	11.83
ZZZZZZ	1G172367.D	12/23/21	23:28	2.21	2.69	9.84	11.82
ZZZZZZ	1G172368.D	12/23/21	23:46	2.21	2.69	9.84	11.82
ZZZZZZ	1G172369.D	12/24/21	00:04	2.21	2.69	9.83	11.82

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G1G5954-CC5950	**Injection Date:**	12/30/21
Lab File ID:	1G172455.D	**Injection Time:**	21:04
Instrument ID:	GC1G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.19	2.68	9.81	11.79

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	1G172457.D	12/30/21	21:41	2.19	2.69	9.81	11.79
ZZZZZZ	1G172458.D	12/30/21	21:59	2.19	2.68	9.81	11.78
JD36956-5	1G172459.D	12/30/21	22:17	2.19	2.68	9.81	11.79
ZZZZZZ	1G172460.D	12/30/21	22:35	2.19	2.68	9.81	11.79
OP37175-MB1	1G172461.D	12/30/21	22:53	2.19	2.68	9.81	11.79
OP37175-BS1	1G172462.D	12/30/21	23:12	2.19	2.68	9.81	11.78
OP37175-BSD	1G172463.D	12/30/21	23:30	2.19	2.68	9.81	11.79
JD36690-1	1G172464.D	12/30/21	23:48	2.20	2.68	9.81	11.79
OP37175-MS	1G172465.D	12/31/21	00:06	2.20	2.68	9.81	11.79
OP37175-MSD	1G172466.D	12/31/21	00:24	2.20	2.68	9.81	11.79
ZZZZZZ	1G172467.D	12/31/21	00:43	2.20	2.68	9.81	11.79
ZZZZZZ	1G172468.D	12/31/21	01:01	2.20	2.68	9.81	11.79
ZZZZZZ	1G172469.D	12/31/21	01:19	2.20	2.68	9.81	11.79
JD36682-9	1G172470.D	12/31/21	01:37	2.20	2.68	9.81	11.78

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2876-CC2867	**Injection Date:**	12/20/21
Lab File ID:	6G81299.D	**Injection Time:**	02:19
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.26	2.89	9.35	11.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP37193-MB1	6G81301.D	12/20/21	03:16	2.27	2.88	9.36	11.84
OP37193-BS1	6G81302.D	12/20/21	03:34	2.26	2.89	9.35	11.85
OP37193-BSD	6G81303.D	12/20/21	03:51	2.26	2.89	9.35	11.85
ZZZZZZ	6G81304.D	12/20/21	04:09	2.26	2.89	9.35	11.85
ZZZZZZ	6G81305.D	12/20/21	04:26	2.26	2.89	9.35	11.84
ZZZZZZ	6G81306.D	12/20/21	04:44	2.26	2.89	9.35	11.85
ZZZZZZ	6G81307.D	12/20/21	05:02	2.26	2.89	9.35	11.85
ZZZZZZ	6G81308.D	12/20/21	05:20	2.26	2.89	9.35	11.84
JD36682-2	6G81309.D	12/20/21	05:38	2.26	2.89	9.35	11.85
JD36682-3	6G81310.D	12/20/21	05:56	2.26	2.89	9.35	11.84
JD36682-4	6G81311.D	12/20/21	06:14	2.26	2.89	9.35	11.84
JD36682-5	6G81312.D	12/20/21	06:32	2.27	2.89	9.35	11.84
JD36682-6	6G81313.D	12/20/21	06:50	2.26	2.89	9.35	11.84
ZZZZZZ	6G81314.D	12/20/21	07:08	2.26	2.89	9.35	11.85
ZZZZZZ	6G81315.D	12/20/21	07:25	2.27	2.89	9.35	11.85
ZZZZZZ	6G81318.D	12/20/21	08:19	2.27	2.89	9.35	11.84

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-ICC5915
Lab FileID: 1G171501.D

Response Factor Report HP G1530A

Method : C:\MSDCHEM\1\METHODS\1PST5915.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Nov 24 21:01:11 2021
Response via : Initial Calibration

Calibration Files
2 =1g171498.D 5 =1g171499.D 10 =1g171500.D 25 =1g171501.D
50 =1g171502.D 100 =1g171504.D 1 =1g171497.D 75 =1g171503.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	1.027	0.958	0.941	1.064	1.025	0.927	1.013	0.903	0.982	5.83
3) Hexachlorobe	1.640	1.505	1.446	1.575	1.519	1.371	1.766	1.343	1.521	9.21
4) alpha-BHC	1.440	1.354	1.326	1.511	1.514	1.408	1.474	1.366	1.424	5.08
5) gamma-BHC	1.323	1.241	1.215	1.369	1.363	1.260	1.449	1.227	1.306	6.40
6) Heptachlor	1.334	1.214	1.187	1.309	1.276	1.159	1.301	1.139	1.240	6.02
7) beta-BHC	0.618	0.553	0.530	0.594	0.576	0.526	0.545	0.516	0.557	6.41
8) delta-BHC	1.053	1.030	1.038	1.216	1.245	1.185	1.152	1.146	1.133	7.35
9) Aldrin	1.247	1.141	1.119	1.239	1.208	1.101	1.241	1.080	1.172	5.88
10) Alachlor		0.149	0.144	0.155	0.147	0.126		0.126	0.141	8.83
11) Heptachlor E	1.508	1.121	1.090	1.173	1.114	1.000	1.647	0.988	1.205	19.98
12) gamma-Chlord	1.067	1.026	1.024	1.153	1.121	1.031	1.095	1.005	1.065	4.97
13) alpha-Chlord	1.084	0.987	0.986	1.075	1.054	0.966	1.115	0.945	1.027	6.12
14) Endosulfan I	1.104	0.996	0.978	1.075	1.037	0.937	1.124	0.925	1.022	7.34
15) 4,4'-DDE	1.185	1.069	1.048	1.152	1.119	1.024	1.230	1.003	1.104	7.32
16) Dieldrin	1.161	1.049	1.040	1.182	1.137	1.026	1.202	1.008	1.101	7.07
17) Endrin	0.990	0.922	0.917	1.000	0.967	0.875	1.043	0.860	0.947	6.76
18) 4,4'-DDD	0.974	0.832	0.837	0.927	0.914	0.837	0.883	0.824	0.879	6.28
19) Endosulfan I	1.036	0.908	0.891	0.992	0.965	0.866	1.061	0.855	0.947	8.26
20) 4,4'-DDT	0.873	0.789	0.813	0.903	0.881	0.809	0.990	0.794	0.856	8.09
21) Endrin Aldeh	0.786	0.665	0.644	0.706	0.701	0.634	0.798	0.621	0.695	9.71
22) Endosulfan S	0.895	0.777	0.742	0.856	0.857	0.737	0.925	0.731	0.815	9.50
23) Methoxychlor	0.562	0.463	0.455	0.494	0.479	0.417	0.611	0.412	0.487	14.15
24) Mirex	0.817	0.748	0.725	0.793	0.746	0.650	0.816	0.647	0.743	9.07
25) Endrin Keton	0.775	0.724	0.705	0.822	0.794	0.724	0.817	0.712	0.759	6.38
26) Decachlorobi		0.889	0.807	0.849	0.790	0.694		0.692	0.787	10.26
27) I 1-bromo-2-nitrobenzen	ISTD									
28) Toxaphene{A}				0.010					0.010	0.00
29) Toxaphene{B}				0.027					0.027	0.00
30) Toxaphene{C}				0.025					0.025	0.00
31) Toxaphene{D}				0.018					0.018	0.00
32) Toxaphene{E}				0.022					0.022	0.00
33) I 1-bromo-2-nitrobenzen	ISTD									
34) Chlordane {A				0.065					0.065	0.00
35) Chlordane {B				0.039					0.039	0.00
36) Chlordane {C				0.139					0.139	0.00
37) Chlordane {D				0.207					0.207	0.00
38) Chlordane {E				0.034					0.034	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.683	0.653	0.645	0.656	0.660	0.641	0.727	0.628	0.662	4.65

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-ICC5915
Lab FileID: 1G171501.D

3)	Hexachlorobe	1.644	1.544	1.506	1.556	1.565	1.544	1.655	1.506	1.565	3.60
4)	alpha-BHC	1.249	1.257	1.281	1.376	1.460	1.510	1.267	1.452	1.356	7.83
5)	gamma-BHC	1.204	1.192	1.182	1.284	1.341	1.363	1.275	1.315	1.269	5.50
6)	Heptachlor	1.235	1.190	1.187	1.196	1.238	1.217	1.367	1.190	1.227	4.90
7)	beta-BHC	0.520	0.505	0.483	0.495	0.495	0.487	0.543	0.477	0.501	4.33
8)	delta-BHC	1.013	0.989	1.018	1.140	1.225	1.290	1.094	1.241	1.126	10.32
9)	Aldrin	1.195	1.149	1.132	1.190	1.215	1.212	1.300	1.177	1.196	4.26
10)	Alachlor		0.134	0.123	0.132	0.129	0.117		0.118	0.125	5.61
11)	Heptachlor E	0.950	0.991	1.009	1.079	1.098	1.091	0.950	1.063	1.029	5.97
12)	gamma-Chlord	1.115	1.030	1.025	1.059	1.076	1.079	1.219	1.047	1.081	5.82
13)	alpha-Chlord	1.144	1.032	1.008	1.044	1.055	1.043	1.311	1.015	1.082	9.41
14)	Endosulfan I	1.114	1.034	1.020	1.048	1.052	1.033	1.239	1.010	1.069	7.10
15)	4,4'-DDE	1.107	1.056	1.040	1.069	1.078	1.065	1.128	1.036	1.072	2.96
16)	Dieldrin	1.231	1.100	1.094	1.121	1.138	1.126	1.194	1.095	1.137	4.39
17)	Endrin	1.083	0.998	0.982	0.993	1.002	0.993	1.201	0.962	1.027	7.68
18)	4,4'-DDD	0.875	0.782	0.779	0.799	0.810	0.802	0.984	0.783	0.827	8.52
19)	Endosulfan I	1.074	0.936	0.924	0.943	0.943	0.918	1.012	0.902	0.956	6.01
20)	4,4'-DDT	0.743	0.713	0.724	0.749	0.752	0.743	0.914	0.726	0.758	8.50
21)	Endrin Aldeh	0.665	0.641	0.623	0.647	0.654	0.646	0.829	0.626	0.666	10.06
22)	Endosulfan S	0.853	0.773	0.775	0.795	0.796	0.776	0.934	0.765	0.808	7.13
23)	Methoxychlor	0.415	0.406	0.392	0.400	0.390	0.366	0.391	0.367	0.391	4.37
24)	Mirex	0.914	0.688	0.649	0.629	0.607	0.568	1.286	0.567	0.738	33.51
25)	Endrin Keton	0.898	0.754	0.742	0.773	0.766	0.747	1.016	0.734	0.804	12.49
26)	Decachlorobi	0.875	0.804	0.781	0.770	0.748	0.702	1.029	0.701	0.801	13.49

27)	I 1-bromo-2-nitrobenzen	----------ISTD----------			
28)	Toxaphene{A}		0.012	0.012	0.00
29)	Toxaphene{B}		0.018	0.018	0.00
30)	Toxaphene{C}		0.034	0.034	0.00
31)	Toxaphene{D}		0.018	0.018	0.00
32)	Toxaphene{E}		0.019	0.019	0.00

33)	I 1-bromo-2-nitrobenzen	----------ISTD----------			
34)	Chlordane {A		0.063	0.063	0.00
35)	Chlordane {B		0.036	0.036	0.00
36)	Chlordane {C		0.126	0.126	0.00
37)	Chlordane {D		0.213	0.213	0.00
38)	Chlordane {E		0.033	0.033	0.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

1PST5915.M Wed Nov 24 21:54:39 2021

10.10.1 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-ICV5915
Lab FileID: 1G171507.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\1G5915\1g171507.D\ECD1A.CH Vial: 13
Signal #2 : C:\msdchem\1\DATA\1G5915\1g171507.D\ECD2B.CH
Acq On : 23 Nov 2021 1:14 pm Operator: taylorc
Sample : icv5915-25 Inst : HP G1530A
Misc : op36482,g1g5915,15.0,,,1,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1PST5915.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Nov 24 21:01:11 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	117	0.00	1.68- 1.74
2	SAB	Tetrachloro-m-xylene	0.982	0.942	4.1	103	0.00	2.19- 2.25
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.424	1.334	6.3	103	0.00	2.63- 2.69
5	MA	gamma-BHC	1.306	1.213	7.1	103	0.00	2.92- 2.98
6	MA	Heptachlor	1.240	1.168	5.8	104	0.00	3.41- 3.47
7	B	beta-BHC	0.557	0.514	7.7	101	0.00	2.99- 3.05
8	B	delta-BHC	1.133	1.012	10.7	97	0.00	3.17- 3.23
9	MB	Aldrin	1.172	1.116	4.8	105	0.00	3.75- 3.81
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide	1.205	1.042	13.5	104	0.00	4.50- 4.56
12	B	gamma-Chlordane	1.065	1.047	1.7	106	0.00	4.66- 4.72
13	B	alpha-Chlordane	1.027	0.994	3.2	108	0.00	4.84- 4.90
14	A	Endosulfan I	1.022	0.949	7.1	103	0.00	5.04- 5.10
15	B	4,4'-DDE	1.104	1.033	6.4	105	0.00	4.95- 5.01
16	MA	Dieldrin	1.101	1.039	5.6	103	0.00	5.38- 5.44
17	MA	Endrin	0.947	0.847	10.6	99	0.00	5.72- 5.78
18	A	4,4'-DDD	0.879	0.836	4.9	105	0.00	5.83- 5.90
19	B	Endosulfan II	0.947	0.894	5.6	105	0.00	6.06- 6.12
20	MA	4,4'-DDT	0.856	0.809	5.5	104	0.00	6.28- 6.34
21	B	Endrin Aldehyde	0.695	0.640	7.9	106	0.00	6.74- 6.80
22	B	Endosulfan Sulfate	0.815	0.695	14.7	95	0.00	7.49- 7.55
23	A	Methoxychlor	0.487	0.437	10.3	103	0.00	7.12- 7.18
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.759	0.736	3.0	104	0.00	7.96- 8.02
26	SA	Decachlorobiphenyl	0.787	0.757	3.8	104	0.00	9.81- 9.87
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	117	0.00	1.61- 1.81
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	117	0.00	1.61- 1.81
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-ICV5915
Lab FileID: 1G171507.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.89- 1.95
2	SAB	Tetrachloro-m-xylene	0.662	0.641	3.2	105	0.00	2.66- 2.72
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.356	1.336	1.5	105	0.00	3.32- 3.38
5	MA	gamma-BHC	1.269	1.232	2.9	103	0.00	3.77- 3.83
6	MA	Heptachlor	1.227	1.154	5.9	104	0.00	4.38- 4.44
7	B	beta-BHC	0.501	0.464	7.4	101	0.00	3.85- 3.91
8	B	delta-BHC	1.126	1.031	8.4	98	0.00	4.27- 4.33
9	MB	Aldrin	1.196	1.163	2.8	105	0.00	4.86- 4.92
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide	1.029	1.054	-2.4	105	0.00	5.74- 5.80
12	B	gamma-Chlordane	1.081	1.034	4.3	105	0.00	6.05- 6.11
13	B	alpha-Chlordane	1.082	1.030	4.8	106	0.00	6.29- 6.35
14	A	Endosulfan I	1.069	1.007	5.8	104	0.00	6.40- 6.46
15	B	4,4'-DDE	1.072	1.041	2.9	105	0.00	6.57- 6.63
16	MA	Dieldrin	1.137	1.088	4.3	105	0.00	6.87- 6.93
17	MA	Endrin	1.027	0.913	11.1	99	0.00	7.42- 7.48
18	A	4,4'-DDD	0.827	0.772	6.7	104	0.00	7.60- 7.66
19	B	Endosulfan II	0.956	0.922	3.6	106	0.00	7.80- 7.86
20	MA	4,4'-DDT	0.758	0.720	5.0	104	0.00	8.18- 8.24
21	B	Endrin Aldehyde	0.666	0.636	4.5	106	0.00	8.42- 8.48
22	B	Endosulfan Sulfate	0.808	0.708	12.4	96	0.00	8.93- 8.99
23	A	Methoxychlor	0.391	0.383	2.0	103	0.00	9.51- 9.57
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.804	0.746	7.2	104	0.00	9.89- 9.95
26	SA	Decachlorobiphenyl	0.801	0.738	7.9	103	0.00	11.77-11.83
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.82- 2.02
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.82- 2.02
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g171501.D 1PST5915.M Wed Nov 24 21:50:15 2021

10.10.2 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-ICV5915
Lab FileID: 1G171508.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\1G5915\1g171508.D\ECD1A.CH Vial: 14
Signal #2 : C:\msdchem\1\DATA\1G5915\1g171508.D\ECD2B.CH
Acq On : 23 Nov 2021 1:32 pm Operator: taylorc
Sample : icv5915-500 Inst : HP G1530A
Misc : op36482,g1g5915,15.0,,,1,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1PST5915.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Nov 24 21:01:11 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	0.00	1.67- 1.73
2	SAB	Tetrachloro-m-xylene	0.982	0.970	1.2	107	0.00	2.18- 2.24
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.787	0.761	3.3	109	0.00	9.81- 9.87
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.60- 1.80
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.60- 1.80
34		Chlordane {A}	0.065	0.065	0.0	107	0.00	3.34- 3.54
35		Chlordane {B}	0.039	0.040	-2.6	108	0.00	3.83- 4.03
36		Chlordane {C}	0.139	0.142	-2.2	108	0.00	4.59- 4.79
37		Chlordane {D}	0.207	0.210	-1.4	108	0.00	4.76- 4.96
38		Chlordane {E}	0.034	0.032	5.9	101	0.00	5.89- 6.09

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-ICV5915
Lab FileID: 1G171508.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.89- 1.95
2	SAB	Tetrachloro-m-xylene	0.662	0.668	-0.9	109	0.00	2.66- 2.72
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.801	0.761	5.0	109	0.00	11.76-11.82
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.82- 2.02
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.82- 2.02
34		Chlordane {A}	0.063	0.065	-3.2	107	0.00	4.31- 4.51
35		Chlordane {B}	0.036	0.037	-2.8	104	0.00	4.99- 5.19
36		Chlordane {C}	0.126	0.128	-1.6	106	0.00	5.98- 6.18
37		Chlordane {D}	0.213	0.207	2.8	101	0.00	6.22- 6.42
38		Chlordane {E}	0.033	0.031	6.1	98	0.00	7.82- 8.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g171502.D 1PST5915.M Wed Nov 24 21:53:15 2021

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-ICV5915
Lab FileID: 1G171509.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\1G5915\1g171509.D\ECD1A.CH Vial: 15
Signal #2 : C:\msdchem\1\DATA\1G5915\1g171509.D\ECD2B.CH
Acq On : 23 Nov 2021 1:50 pm Operator: taylorc
Sample : icv5915-500 Inst : HP G1530A
Misc : op36482,g1g5915,15.0,,,1,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1PST5915.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Nov 24 21:01:11 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	0.00	1.67- 1.73
2	SAB	Tetrachloro-m-xylene	0.982	0.972	1.0	107	0.00	2.18- 2.24
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.787	0.771	2.0	110	0.00	9.81- 9.87
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.60- 1.80
28	L8	Toxaphene{A}	0.010	0.009	10.0	100	0.00	5.32- 5.52
29	L8	Toxaphene{B}	0.027	0.027	0.0	107	0.00	5.99- 6.19
30	L8	Toxaphene{C}	0.025	0.026	-4.0	112	0.00	6.18- 6.38
31	L8	Toxaphene{D}	0.018	0.018	0.0	108	0.00	6.53- 6.73
32	L8	Toxaphene{E}	0.022	0.023	-4.5	111	0.00	7.24- 7.44
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.60- 1.80
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-ICV5915
Lab FileID: 1G171509.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.89- 1.95
2	SAB	Tetrachloro-m-xylene	0.662	0.674	-1.8	110	0.00	2.66- 2.72
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.801	0.763	4.7	110	0.00	11.77-11.83
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.82- 2.02
28	L8	Toxaphene{A}	0.012	0.012	0.0	107	0.00	6.76- 6.96
29	L8	Toxaphene{B}	0.018	0.018	0.0	108	0.00	7.70- 7.90
30	L8	Toxaphene{C}	0.034	0.036	-5.9	111	0.00	7.87- 8.07
31	L8	Toxaphene{D}	0.018	0.018	0.0	109	0.00	8.35- 8.55
32	L8	Toxaphene{E}	0.019	0.020	-5.3	111	0.00	9.33- 9.53
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.82- 2.02
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g171502.D 1PST5915.M Wed Nov 24 21:53:16 2021

10.10.4 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-ICV5915
Lab FileID: 1G171510.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\1G5915\1g171510.D\ECD1A.CH Vial: 16
Signal #2 : C:\msdchem\1\DATA\1G5915\1g171510.D\ECD2B.CH
Acq On : 23 Nov 2021 2:08 pm Operator: taylorc
Sample : icv5915-25 Inst : HP G1530A
Misc : op36482,g1g5915,15.0,,,1,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1PST5915.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Nov 24 21:01:11 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.67- 1.73
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex	0.743	0.728	2.0	101	0.00	7.30- 7.36
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.60- 1.80
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.60- 1.80
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-ICV5915
Lab FileID: 1G171510.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.89-	1.95
2	SAB	Tetrachloro-m-xylene		-----	NA	-----			
3		Hexachlorobenzene		-----	NA	-----			
4	A	alpha-BHC		-----	NA	-----			
5	MA	gamma-BHC		-----	NA	-----			
6	MA	Heptachlor		-----	NA	-----			
7	B	beta-BHC		-----	NA	-----			
8	B	delta-BHC		-----	NA	-----			
9	MB	Aldrin		-----	NA	-----			
10		Alachlor		-----	NA	-----			
11	B	Heptachlor Epoxide		-----	NA	-----			
12	B	gamma-Chlordane		-----	NA	-----			
13	B	alpha-Chlordane		-----	NA	-----			
14	A	Endosulfan I		-----	NA	-----			
15	B	4,4'-DDE		-----	NA	-----			
16	MA	Dieldrin		-----	NA	-----			
17	MA	Endrin		-----	NA	-----			
18	A	4,4'-DDD		-----	NA	-----			
19	B	Endosulfan II		-----	NA	-----			
20	MA	4,4'-DDT		-----	NA	-----			
21	B	Endrin Aldehyde		-----	NA	-----			
22	B	Endosulfan Sulfate		-----	NA	-----			
23	A	Methoxychlor		-----	NA	-----			
24		Mirex	0.738	0.645	12.6	107	0.00	9.84-	9.90
25	B	Endrin Ketone		-----	NA	-----			
26	SA	Decachlorobiphenyl		-----	NA	-----			
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.82-	2.02
28	L8	Toxaphene{A}		-----	NA	-----			
29	L8	Toxaphene{B}		-----	NA	-----			
30	L8	Toxaphene{C}		-----	NA	-----			
31	L8	Toxaphene{D}		-----	NA	-----			
32	L8	Toxaphene{E}		-----	NA	-----			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.82-	2.02
34		Chlordane {A}		-----	NA	-----			
35		Chlordane {B}		-----	NA	-----			
36		Chlordane {C}		-----	NA	-----			
37		Chlordane {D}		-----	NA	-----			
38		Chlordane {E}		-----	NA	-----			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g171501.D 1PST5915.M Wed Nov 24 21:50:17 2021

10.10.5 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-ICV5915
Lab FileID: 1G171511.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\1G5915\1g171511.D\ECD1A.CH Vial: 17
Signal #2 : C:\msdchem\1\DATA\1G5915\1g171511.D\ECD2B.CH
Acq On : 23 Nov 2021 2:26 pm Operator: taylorc
Sample : icv5915-25 Inst : HP G1530A
Misc : op36482,g1g5915,15.0,,,1,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1PST5915.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Nov 24 21:01:11 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	111	0.00	1.67- 1.73
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		Hexachlorobenzene	1.521	1.403	7.8	99	0.00	2.50- 2.56
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor	0.141	0.122	13.5	87	0.00	3.90- 3.96
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	111	0.00	1.60- 1.80
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	111	0.00	1.60- 1.80
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5915-ICV5915
Lab FileID: 1G171511.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.89- 1.95
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		Hexachlorobenzene	1.565	1.503	4.0	102	0.00	3.17- 3.23
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor	0.125	0.112	10.4	90	0.00	4.64- 4.70
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.82- 2.02
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.82- 2.02
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g171501.D 1PST5915.M Wed Nov 24 21:50:18 2021

10.10.6 10

Continuing Calibration Summary

Job Number: JD36682 **Sample:** G1G5947-CC5915
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1G172315.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1g5947\1g172315.d\ECD1A.CH Vial: 2
Signal #2 : C:\msdchem\1\data\1g5947\1g172315.d\ECD2B.CH
Acq On : 23 Dec 2021 3:14 am Operator: christp
Sample : cc5915-25 Inst : HP G1530A
Misc : op37098,g1g5947,1030,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\1pst5915.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue Dec 07 13:10:33 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	126	0.00	1.67- 1.73
2	SAB	Tetrachloro-m-xylene	0.982	0.989	-0.7	118	0.00	2.18- 2.24
3		Hexachlorobenzene	1.521	1.495	1.7	120	0.00	2.49- 2.55
4	A	alpha-BHC	1.424	1.418	0.4	119	0.00	2.63- 2.69
5	MA	gamma-BHC	1.306	1.283	1.8	119	0.00	2.91- 2.97
6	MA	Heptachlor	1.240	1.250	-0.8	121	0.00	3.41- 3.47
7	B	beta-BHC	0.557	0.574	-3.1	122	0.00	2.98- 3.04
8	B	delta-BHC	1.133	0.999	11.8	104	0.00	3.17- 3.23
9	MB	Aldrin	1.172	1.186	-1.2	121	0.00	3.75- 3.81
10		Alachlor	0.141	0.147	-4.3	120	0.00	3.89- 3.95
11	B	Heptachlor Epoxide	1.205	1.097	9.0	118	0.00	4.49- 4.55
12	B	gamma-Chlordane	1.065	1.055	0.9	116	0.00	4.66- 4.72
13	B	alpha-Chlordane	1.027	1.030	-0.3	121	0.00	4.83- 4.89
14	A	Endosulfan I	1.022	1.043	-2.1	123	0.00	5.03- 5.09
15	B	4,4'-DDE	1.104	1.110	-0.5	122	0.00	4.95- 5.01
16	MA	Dieldrin	1.101	1.119	-1.6	120	0.00	5.37- 5.43
17	MA	Endrin	0.947	1.099	-16.1	139	0.00	5.71- 5.77
18	A	4,4'-DDD	0.879	0.908	-3.3	124	0.00	5.83- 5.90
19	B	Endosulfan II	0.947	0.943	0.4	120	0.00	6.06- 6.12
20	MA	4,4'-DDT	0.856	0.796	7.0	112	0.00	6.28- 6.34
21	B	Endrin Aldehyde	0.695	0.702	-1.0	126	0.00	6.74- 6.80
22	B	Endosulfan Sulfate	0.815	0.805	1.2	119	0.00	7.48- 7.54
23	A	Methoxychlor	0.487	0.461	5.3	118	0.00	7.12- 7.18
24		Mirex	0.743	0.792	-6.6	126	0.00	7.29- 7.35
25	B	Endrin Ketone	0.759	0.825	-8.7	127	0.00	7.95- 8.01
26	SA	Decachlorobiphenyl	0.787	0.917	-16.5	137	0.00	9.81- 9.87
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	126	0.00	1.60- 1.80
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	126	0.00	1.60- 1.80
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5947-CC5915
Lab FileID: 1G172315.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.89- 1.95
2	SAB	Tetrachloro-m-xylene	0.662	0.636	3.9	101	0.00	2.66- 2.72
3		Hexachlorobenzene	1.565	1.510	3.5	101	0.00	3.17- 3.23
4	A	alpha-BHC	1.356	1.339	1.3	102	0.00	3.33- 3.39
5	MA	gamma-BHC	1.269	1.210	4.6	98	0.00	3.77- 3.83
6	MA	Heptachlor	1.227	1.211	1.3	106	0.00	4.39- 4.45
7	B	beta-BHC	0.501	0.481	4.0	101	0.00	3.86- 3.92
8	B	delta-BHC	1.126	0.984	12.6	90	0.00	4.28- 4.34
9	MB	Aldrin	1.196	1.171	2.1	103	0.00	4.87- 4.93
10		Alachlor	0.125	0.128	-2.4	101	0.00	4.65- 4.71
11	B	Heptachlor Epoxide	1.029	1.057	-2.7	102	0.00	5.75- 5.81
12	B	gamma-Chlordane	1.081	1.042	3.6	103	0.01	6.06- 6.12
13	B	alpha-Chlordane	1.082	1.020	5.7	102	0.01	6.31- 6.37
14	A	Endosulfan I	1.069	1.017	4.9	101	0.01	6.41- 6.47
15	B	4,4'-DDE	1.072	1.073	-0.1	105	0.01	6.58- 6.64
16	MA	Dieldrin	1.137	1.102	3.1	102	0.02	6.89- 6.95
17	MA	Endrin	1.027	1.045	-1.8	110	0.02	7.44- 7.50
18	A	4,4'-DDD	0.827	0.774	6.4	101	0.02	7.62- 7.68
19	B	Endosulfan II	0.956	0.896	6.3	99	0.01	7.82- 7.88
20	MA	4,4'-DDT	0.758	0.574	24.3#	80	0.02	8.20- 8.26
21	B	Endrin Aldehyde	0.666	0.638	4.2	103	0.02	8.44- 8.50
22	B	Endosulfan Sulfate	0.808	0.713	11.8	93	0.02	8.96- 9.02
23	A	Methoxychlor	0.391	0.344	12.0	90	0.02	9.53- 9.59
24		Mirex	0.738	0.606	17.9	100	0.02	9.86- 9.92
25	B	Endrin Ketone	0.804	0.715	11.1	96	0.02	9.91- 9.97
26	SA	Decachlorobiphenyl	0.801	0.785	2.0	106	0.03	11.79-11.85
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.82- 2.02
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.82- 2.02
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g171501.D 1pst5915.m Thu Dec 23 14:08:35 2021

10.10.7 10

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5947-CC5915
Lab FileID: 1G172336.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1g5947\1g172336.d\ECD1A.CH Vial: 4
Signal #2 : C:\msdchem\1\data\1g5947\1g172336.d\ECD2B.CH
Acq On : 23 Dec 2021 9:36 am Operator: christp
Sample : cc5915-50 Inst : HP G1530A
Misc : op37171,g1g5947,16.8,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\1pst5915.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue Dec 07 13:10:33 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	126	0.00	1.67- 1.73
2	SAB	Tetrachloro-m-xylene	0.982	0.931	5.2	114	0.00	2.19- 2.25
3		Hexachlorobenzene	1.521	1.416	6.9	117	0.00	2.50- 2.56
4	A	alpha-BHC	1.424	1.421	0.2	118	0.00	2.63- 2.69
5	MA	gamma-BHC	1.306	1.263	3.3	116	0.00	2.92- 2.98
6	MA	Heptachlor	1.240	1.176	5.2	116	0.00	3.41- 3.47
7	B	beta-BHC	0.557	0.536	3.8	117	0.00	2.99- 3.05
8	B	delta-BHC	1.133	1.155	-1.9	117	0.00	3.18- 3.24
9	MB	Aldrin	1.172	1.116	4.8	116	0.00	3.75- 3.81
10		Alachlor	0.141	0.136	3.5	116	0.00	3.89- 3.95
11	B	Heptachlor Epoxide	1.205	1.012	16.0	114	0.00	4.49- 4.55
12	B	gamma-Chlordane	1.065	0.998	6.3	112	0.00	4.66- 4.72
13	B	alpha-Chlordane	1.027	0.962	6.3	115	0.00	4.84- 4.90
14	A	Endosulfan I	1.022	0.953	6.8	115	0.00	5.03- 5.09
15	B	4,4'-DDE	1.104	1.003	9.1	113	0.00	4.95- 5.01
16	MA	Dieldrin	1.101	1.020	7.4	113	0.00	5.38- 5.44
17	MA	Endrin	0.947	0.970	-2.4	126	0.00	5.72- 5.78
18	A	4,4'-DDD	0.879	0.888	-1.0	122	0.00	5.84- 5.91
19	B	Endosulfan II	0.947	0.836	11.7	109	0.00	6.07- 6.13
20	MA	4,4'-DDT	0.856	0.619	27.7#	88	0.00	6.29- 6.35
21	B	Endrin Aldehyde	0.695	0.642	7.6	115	0.00	6.74- 6.80
22	B	Endosulfan Sulfate	0.815	0.698	14.4	102	0.00	7.48- 7.54
23	A	Methoxychlor	0.487	0.338	30.6#	89	0.00	7.12- 7.18
24		Mirex	0.743	0.615	17.2	104	0.00	7.30- 7.36
25	B	Endrin Ketone	0.759	0.699	7.9	111	0.00	7.96- 8.02
26	SA	Decachlorobiphenyl	0.787	0.541	31.3#	86	0.00	9.81- 9.87
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	119	0.00	1.60- 1.80
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	119	0.00	1.60- 1.80
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5947-CC5915
Lab FileID: 1G172336.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	114	0.00	1.89- 1.95
2	SAB	Tetrachloro-m-xylene	0.662	0.604	8.8	104	0.00	2.67- 2.73
3		Hexachlorobenzene	1.565	1.437	8.2	105	0.00	3.18- 3.24
4	A	alpha-BHC	1.356	1.343	1.0	105	0.00	3.33- 3.39
5	MA	gamma-BHC	1.269	1.208	4.8	103	0.00	3.78- 3.84
6	MA	Heptachlor	1.227	1.150	6.3	106	0.00	4.39- 4.45
7	B	beta-BHC	0.501	0.452	9.8	104	0.01	3.86- 3.92
8	B	delta-BHC	1.126	1.154	-2.5	107	0.01	4.28- 4.34
9	MB	Aldrin	1.196	1.109	7.3	104	0.01	4.88- 4.94
10		Alachlor	0.125	0.118	5.6	104	0.00	4.65- 4.71
11	B	Heptachlor Epoxide	1.029	0.999	2.9	104	0.01	5.76- 5.82
12	B	gamma-Chlordane	1.081	0.970	10.3	103	0.02	6.07- 6.13
13	B	alpha-Chlordane	1.082	0.948	12.4	102	0.02	6.31- 6.37
14	A	Endosulfan I	1.069	0.947	11.4	102	0.02	6.42- 6.48
15	B	4,4'-DDE	1.072	0.955	10.9	101	0.02	6.59- 6.65
16	MA	Dieldrin	1.137	1.009	11.3	101	0.02	6.89- 6.95
17	MA	Endrin	1.027	0.937	8.8	106	0.02	7.44- 7.50
18	A	4,4'-DDD	0.827	0.774	6.4	109	0.02	7.62- 7.68
19	B	Endosulfan II	0.956	0.826	13.6	100	0.01	7.82- 7.88
20	MA	4,4'-DDT	0.758	0.497	34.4#	75	0.02	8.21- 8.27
21	B	Endrin Aldehyde	0.666	0.624	6.3	109	0.02	8.45- 8.51
22	B	Endosulfan Sulfate	0.808	0.684	15.3	98	0.02	8.96- 9.02
23	A	Methoxychlor	0.391	0.279	28.6#	82	0.02	9.53- 9.59
24		Mirex	0.738	0.505	31.6#	95	0.02	9.87- 9.93
25	B	Endrin Ketone	0.804	0.701	12.8	104	0.02	9.92- 9.98
26	SA	Decachlorobiphenyl	0.801	0.609	24.0#	93	0.03	11.79-11.85
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.82- 2.02
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.82- 2.02
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g171502.D 1pst5915.m Thu Dec 23 15:08:10 2021

10.10.8 10

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5948-CC5915
Lab FileID: 1G172349.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1g5948\1g172349.d\ECD1A.CH Vial: 4
Signal #2 : C:\msdchem\1\data\1g5948\1g172349.d\ECD2B.CH
Acq On : 23 Dec 2021 5:08 pm Operator: thomasl
Sample : cc5915-50 Inst : HP G1530A
Misc : op37171,g1g5948,15.3,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\1pst5915.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue Dec 07 13:10:33 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.67- 1.73
2	SAB	Tetrachloro-m-xylene	0.982	0.893	9.1	100	0.00	2.18- 2.24
3		Hexachlorobenzene	1.521	1.344	11.6	101	0.00	2.49- 2.55
4	A	alpha-BHC	1.424	1.367	4.0	104	0.00	2.62- 2.68
5	MA	gamma-BHC	1.306	1.229	5.9	103	0.00	2.91- 2.97
6	MA	Heptachlor	1.240	1.195	3.6	107	0.00	3.41- 3.47
7	B	beta-BHC	0.557	0.512	8.1	102	0.00	2.98- 3.04
8	B	delta-BHC	1.133	1.192	-5.2	110	0.00	3.17- 3.23
9	MB	Aldrin	1.172	1.108	5.5	105	0.00	3.75- 3.81
10		Alachlor	0.141	0.120	14.9	94	0.00	3.89- 3.95
11	B	Heptachlor Epoxide	1.205	0.998	17.2	103	0.00	4.49- 4.55
12	B	gamma-Chlordane	1.065	1.043	2.1	107	0.00	4.66- 4.72
13	B	alpha-Chlordane	1.027	0.999	2.7	109	0.00	4.84- 4.90
14	A	Endosulfan I	1.022	0.983	3.8	109	0.00	5.03- 5.09
15	B	4,4'-DDE	1.104	1.047	5.2	107	0.00	4.95- 5.01
16	MA	Dieldrin	1.101	1.054	4.3	106	0.00	5.37- 5.43
17	MA	Endrin	0.947	1.052	-11.1	125	0.00	5.72- 5.78
18	A	4,4'-DDD	0.879	0.858	2.4	108	0.00	5.83- 5.90
19	B	Endosulfan II	0.947	0.898	5.2	107	0.00	6.06- 6.12
20	MA	4,4'-DDT	0.856	0.869	-1.5	113	0.00	6.28- 6.34
21	B	Endrin Aldehyde	0.695	0.728	-4.7	119	0.00	6.74- 6.80
22	B	Endosulfan Sulfate	0.815	0.847	-3.9	113	0.00	7.48- 7.54
23	A	Methoxychlor	0.487	0.464	4.7	111	0.00	7.12- 7.18
24		Mirex	0.743	0.696	6.3	107	0.00	7.29- 7.35
25	B	Endrin Ketone	0.759	0.902	-18.8	130	0.00	7.95- 8.01
26	SA	Decachlorobiphenyl	0.787	0.758	3.7	110	0.00	9.81- 9.87
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.60- 1.80
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.60- 1.80
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5948-CC5915
Lab FileID: 1G172349.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	109	0.00	1.88- 1.94
2	SAB	Tetrachloro-m-xylene	0.662	0.581	12.2	96	0.00	2.66- 2.72
3		Hexachlorobenzene	1.565	1.413	9.7	99	0.00	3.17- 3.23
4	A	alpha-BHC	1.356	1.350	0.4	101	0.00	3.33- 3.39
5	MA	gamma-BHC	1.269	1.222	3.7	99	0.00	3.77- 3.83
6	MA	Heptachlor	1.227	1.165	5.1	103	0.00	4.39- 4.45
7	B	beta-BHC	0.501	0.441	12.0	97	0.00	3.86- 3.92
8	B	delta-BHC	1.126	1.212	-7.6	108	0.00	4.28- 4.34
9	MB	Aldrin	1.196	1.115	6.8	100	0.00	4.87- 4.93
10		Alachlor	0.125	0.112	10.4	95	0.00	4.65- 4.71
11	B	Heptachlor Epoxide	1.029	1.015	1.4	101	0.00	5.76- 5.82
12	B	gamma-Chlordane	1.081	1.001	7.4	102	0.01	6.06- 6.12
13	B	alpha-Chlordane	1.082	0.970	10.4	100	0.01	6.31- 6.37
14	A	Endosulfan I	1.069	0.977	8.6	101	0.01	6.41- 6.47
15	B	4,4'-DDE	1.072	0.996	7.1	101	0.02	6.59- 6.65
16	MA	Dieldrin	1.137	1.056	7.1	101	0.02	6.89- 6.95
17	MA	Endrin	1.027	1.031	-0.4	112	0.02	7.44- 7.50
18	A	4,4'-DDD	0.827	0.759	8.2	102	0.02	7.62- 7.68
19	B	Endosulfan II	0.956	0.868	9.2	100	0.01	7.82- 7.88
20	MA	4,4'-DDT	0.758	0.714	5.8	104	0.02	8.20- 8.26
21	B	Endrin Aldehyde	0.666	0.662	0.6	110	0.02	8.44- 8.50
22	B	Endosulfan Sulfate	0.808	0.787	2.6	108	0.02	8.96- 9.02
23	A	Methoxychlor	0.391	0.370	5.4	104	0.02	9.53- 9.59
24		Mirex	0.738	0.570	22.8#	103	0.02	9.86- 9.92
25	B	Endrin Ketone	0.804	0.872	-8.5	124	0.02	9.91- 9.97
26	SA	Decachlorobiphenyl	0.801	0.725	9.5	106	0.02	11.79-11.85
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.81- 2.01
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.81- 2.01
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g171502.D 1pst5915.m Mon Dec 27 08:48:58 2021

10.10.9 10

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5950-ICC5950
Lab FileID: 1G172388.D

Response Factor Report HP G1530A

Method : C:\MSDCHEM\1\METHODS\1PST5950.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue Dec 28 23:57:05 2021
Response via : Initial Calibration

Calibration Files
2 =1g172391.D 5 =1g172390.D 10 =1g172389.D 25 =1g172388.D
50 =1g172387.D 100 =1g172385.D 1 =1g172392.D 75 =1g172386.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.833	0.859	0.827	0.897	0.863	0.821	0.989	0.841	0.866	6.38
3) Hexachlorobe	1.395	1.328	1.286	1.348	1.303	1.246	1.582	1.266	1.344	7.96
4) alpha-BHC	1.301	1.263	1.220	1.323	1.313	1.294	1.377	1.301	1.299	3.50
5) gamma-BHC	1.142	1.269	1.111	1.221	1.190	1.151	1.266	1.171	1.190	4.86
6) Heptachlor	1.152	1.156	1.111	1.180	1.139	1.107	1.325	1.120	1.161	6.09
7) beta-BHC	0.567	0.532	0.497	0.512	0.484	0.464	0.527	0.474	0.507	6.78
8) delta-BHC	1.049	1.028	1.012	1.108	1.126	1.114	1.158	1.113	1.089	4.79
9) Aldrin	1.123	1.072	1.016	1.086	1.045	1.030	1.256	1.045	1.084	7.13
10) Alachlor		0.157	0.108	0.121	0.111	0.101		0.104	0.117	17.82
11) Heptachlor E	0.962	1.270	0.931	0.975	0.949	0.913	1.071	0.904	0.997	12.22
12) gamma-Chlord	1.046	1.045	0.978	1.008	0.967	0.924	1.335	0.937	1.030	12.75
13) alpha-Chlord	0.964	0.922	0.903	0.954	0.929	0.883	1.053	0.897	0.938	5.74
14) Endosulfan I	0.962	0.958	0.907	0.959	0.922	0.879	1.077	0.895	0.945	6.57
15) 4,4'-DDE	0.989	0.983	0.956	1.008	0.982	0.936	1.255	0.950	1.008	10.19
16) Dieldrin	1.051	1.003	0.956	1.014	0.990	0.952	1.123	0.966	1.007	5.71
17) Endrin	0.964	0.952	0.935	0.986	0.973	0.928	1.090	0.934	0.970	5.40
18) 4,4'-DDD	0.802	0.785	0.776	0.831	0.804	0.770	0.975	0.779	0.816	8.29
19) Endosulfan I	0.902	0.832	0.820	0.855	0.841	0.792	1.081	0.808	0.866	10.74
20) 4,4'-DDT	0.720	0.693	0.707	0.772	0.780	0.753	0.781	0.758	0.746	4.61
21) Endrin Aldeh	0.852	0.698	0.660	0.695	0.662	0.642	0.976	0.655	0.730	16.41
22) Endosulfan S	0.728	0.700	0.700	0.750	0.730	0.706	0.882	0.712	0.738	8.18
23) Methoxychlor	0.452	0.412	0.377	0.416	0.444	0.392	0.586	0.394	0.434	15.31
24) Mirex	0.736	0.667	0.620	0.653	0.616	0.583	0.731	0.596	0.650	8.96
25) Endrin Keton	0.827	0.778	0.767	0.852	0.829	0.769	0.875	0.788	0.811	5.06
26) Decachlorobi		0.762	0.702	0.710	0.666	0.637		0.646	0.687	6.84
27) I 1-bromo-2-nitrobenzen	ISTD									
28) Toxaphene{A}				0.009					0.009	0.00
29) Toxaphene{B}				0.030					0.030	0.00
30) Toxaphene{C}				0.021					0.021	0.00
31) Toxaphene{D}				0.016					0.016	0.00
32) Toxaphene{E}				0.018					0.018	0.00
33) I 1-bromo-2-nitrobenzen	ISTD									
34) Chlordane {A				0.061					0.061	0.00
35) Chlordane {B				0.034					0.034	0.00
36) Chlordane {C				0.125					0.125	0.00
37) Chlordane {D				0.190					0.190	0.00
38) Chlordane {E				0.029					0.029	0.00

Signal #2

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.639	0.558	0.562	0.586	0.573	0.574	0.635	0.566	0.587	5.50

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5950-ICC5950
Lab FileID: 1G172388.D

3)	Hexachlorobe	1.400	1.344	1.349	1.417	1.384	1.393	1.530	1.372	1.399	4.20
4)	alpha-BHC	1.190	1.164	1.185	1.310	1.331	1.378	1.322	1.337	1.277	6.53
5)	gamma-BHC	1.092	1.058	1.094	1.188	1.202	1.240	1.100	1.207	1.148	5.96
6)	Heptachlor	1.115	1.075	1.085	1.168	1.166	1.154	1.188	1.154	1.138	3.62
7)	beta-BHC	0.452	0.436	0.428	0.444	0.430	0.431	0.521	0.427	0.446	7.01
8)	delta-BHC	1.020	1.007	1.028	1.133	1.185	1.213	1.070	1.179	1.104	7.52
9)	Aldrin	1.073	1.038	1.047	1.110	1.088	1.112	1.138	1.088	1.087	3.09
10)	Alachlor		0.120	0.113	0.117	0.107	0.102		0.102	0.110	6.90
11)	Heptachlor E	0.964	0.923	0.928	1.014	0.989	1.001	1.082	0.982	0.986	5.16
12)	gamma-Chlord	0.969	0.921	0.927	0.976	0.960	0.976	1.079	0.959	0.971	4.96
13)	alpha-Chlord	0.991	0.922	0.905	0.955	0.937	0.941	1.017	0.929	0.950	3.89
14)	Endosulfan I	1.017	0.962	0.919	0.973	0.945	0.950	1.069	0.938	0.971	5.03
15)	4,4'-DDE	0.921	0.934	0.915	0.971	0.961	0.965	1.080	0.945	0.961	5.43
16)	Dieldrin	1.044	0.988	0.979	1.039	1.021	1.029	1.174	1.009	1.035	5.84
17)	Endrin	1.002	0.946	0.932	0.984	0.969	0.988	1.398	0.970	1.024	14.95
18)	4,4'-DDD	0.769	0.722	0.698	0.740	0.734	0.733	0.816	0.721	0.742	4.88
19)	Endosulfan I	0.825	0.840	0.817	0.863	0.836	0.841	1.033	0.832	0.861	8.22
20)	4,4'-DDT	0.424	0.554	0.565	0.648	0.671	0.694	0.506	0.676	0.592	16.25
21)	Endrin Aldeh	0.687	0.638	0.638	0.680	0.647	0.657	0.792	0.650	0.674	7.61
22)	Endosulfan S	0.785	0.728	0.731	0.770	0.763	0.759	0.906	0.748	0.774	7.33
23)	Methoxychlor	0.310	0.301	0.303	0.344	0.341	0.343	0.360	0.337	0.330	6.72
24)	Mirex	0.741	0.605	0.575	0.579	0.554	0.535	0.755	0.533	0.610	14.54
25)	Endrin Keton	1.124	0.892	0.838	0.872	0.835	0.860	1.298	0.836	0.944	18.24
26)	Decachlorobi	0.694	0.712	0.717	0.726	0.714	0.731	0.906	0.691	0.736	9.49

27)	I 1-bromo-2-nitrobenzen	----------ISTD----------			
28)	Toxaphene{A}		0.013	0.013	0.00
29)	Toxaphene{B}		0.019	0.019	0.00
30)	Toxaphene{C}		0.033	0.033	0.00
31)	Toxaphene{D}		0.019	0.019	0.00
32)	Toxaphene{E}		0.016	0.016	0.00

33)	I 1-bromo-2-nitrobenzen	----------ISTD----------			
34)	Chlordane {A		0.063	0.063	0.00
35)	Chlordane {B		0.032	0.032	0.00
36)	Chlordane {C		0.116	0.116	0.00
37)	Chlordane {D		0.196	0.196	0.00
38)	Chlordane {E		0.030	0.030	0.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

1PST5950.M Thu Dec 30 08:22:56 2021

10.10.10 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5950-ICV5950
Lab FileID: 1G172396.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1g5950\1g172396.d\ECD1A.CH Vial: 14
Signal #2 : C:\msdchem\1\data\1g5950\1g172396.d\ECD2B.CH
Acq On : 28 Dec 2021 4:27 am Operator: christp
Sample : icv5950-500 Inst : HP G1530A
Misc : op37216,g1g5950,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1PST5950.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue Dec 28 23:57:05 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.66- 1.72
2	SAB	Tetrachloro-m-xylene	0.866	0.953	-10.0	117	0.00	2.17- 2.23
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.687	0.684	0.4	109	0.00	9.79- 9.85
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.59- 1.79
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.59- 1.79
34		Chlordane {A}	0.061	0.064	-4.9	110	0.00	3.32- 3.52
35		Chlordane {B}	0.034	0.037	-8.8	112	0.00	3.81- 4.01
36		Chlordane {C}	0.125	0.134	-7.2	110	0.00	4.57- 4.77
37		Chlordane {D}	0.190	0.200	-5.3	108	0.00	4.74- 4.94
38		Chlordane {E}	0.029	0.030	-3.4	106	0.00	5.86- 6.06

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5950-ICV5950
Lab FileID: 1G172396.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.88- 1.94
2	SAB	Tetrachloro-m-xylene	0.587	0.649	-10.6	113	0.00	2.65- 2.71
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.736	0.690	6.3	96	0.00	11.76-11.82
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.81- 2.01
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.81- 2.01
34		Chlordane {A}	0.063	0.065	-3.2	107	0.00	4.30- 4.50
35		Chlordane {B}	0.032	0.033	-3.1	108	0.00	4.98- 5.18
36		Chlordane {C}	0.116	0.123	-6.0	110	0.00	5.97- 6.17
37		Chlordane {D}	0.196	0.202	-3.1	107	0.00	6.21- 6.41
38		Chlordane {E}	0.030	0.029	3.3	101	0.00	7.81- 8.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g172387.D 1PST5950.M Thu Dec 30 08:23:35 2021

10.10.11 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5950-ICV5950
Lab FileID: 1G172397.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1g5950\1g172397.d\ECD1A.CH Vial: 15
Signal #2 : C:\msdchem\1\data\1g5950\1g172397.d\ECD2B.CH
Acq On : 28 Dec 2021 4:45 am Operator: christp
Sample : icv5950-500 Inst : HP G1530A
Misc : op37216,g1g5950,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1PST5950.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue Dec 28 23:57:05 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.66- 1.72
2	SAB	Tetrachloro-m-xylene	0.866	0.961	-11.0	120	0.00	2.17- 2.23
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.687	0.690	-0.4	112	0.00	9.78- 9.84
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.59- 1.79
28	L8	Toxaphene{A}	0.009	0.008	11.1	86	0.00	5.29- 5.49
29	L8	Toxaphene{B}	0.030	0.030	0.0	101	0.00	5.96- 6.16
30	L8	Toxaphene{C}	0.021	0.022	-4.8	105	0.00	6.15- 6.35
31	L8	Toxaphene{D}	0.016	0.015	6.3	97	0.00	6.51- 6.71
32	L8	Toxaphene{E}	0.018	0.018	0.0	106	0.00	7.21- 7.41
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.59- 1.79
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5950-ICV5950
Lab FileID: 1G172397.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.88- 1.94
2	SAB	Tetrachloro-m-xylene	0.587	0.670	-14.1	117	0.00	2.65- 2.71
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.736	0.711	3.4	100	0.00	11.76-11.82
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.81- 2.01
28	L8	Toxaphene{A}	0.013	0.011	15.4	90	0.00	6.75- 6.95
29	L8	Toxaphene{B}	0.019	0.019	0.0	102	0.00	7.69- 7.89
30	L8	Toxaphene{C}	0.033	0.033	0.0	101	0.00	7.87- 8.07
31	L8	Toxaphene{D}	0.019	0.019	0.0	103	0.00	8.34- 8.54
32	L8	Toxaphene{E}	0.016	0.016	0.0	107	0.00	9.33- 9.53
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.81- 2.01
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g172387.D 1PST5950.M Thu Dec 30 08:23:53 2021

10.10.12 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5950-ICV5950
Lab FileID: 1G172398.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1g5950\1g172398.d\ECD1A.CH Vial: 16
Signal #2 : C:\msdchem\1\data\1g5950\1g172398.d\ECD2B.CH
Acq On : 28 Dec 2021 5:03 am Operator: christp
Sample : icv5950-25 Inst : HP G1530A
Misc : op37216,g1g5950,15.0,,,10,10 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1PST5950.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue Dec 28 23:57:05 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.66- 1.72
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex	0.650	0.635	2.3	105	0.00	7.27- 7.33
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.59- 1.79
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.59- 1.79
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

10.10.13
10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5950-ICV5950
Lab FileID: 1G172398.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.88-	1.94
2	SAB	Tetrachloro-m-xylene		-----	NA	-----			
3		Hexachlorobenzene		-----	NA	-----			
4	A	alpha-BHC		-----	NA	-----			
5	MA	gamma-BHC		-----	NA	-----			
6	MA	Heptachlor		-----	NA	-----			
7	B	beta-BHC		-----	NA	-----			
8	B	delta-BHC		-----	NA	-----			
9	MB	Aldrin		-----	NA	-----			
10		Alachlor		-----	NA	-----			
11	B	Heptachlor Epoxide		-----	NA	-----			
12	B	gamma-Chlordane		-----	NA	-----			
13	B	alpha-Chlordane		-----	NA	-----			
14	A	Endosulfan I		-----	NA	-----			
15	B	4,4'-DDE		-----	NA	-----			
16	MA	Dieldrin		-----	NA	-----			
17	MA	Endrin		-----	NA	-----			
18	A	4,4'-DDD		-----	NA	-----			
19	B	Endosulfan II		-----	NA	-----			
20	MA	4,4'-DDT		-----	NA	-----			
21	B	Endrin Aldehyde		-----	NA	-----			
22	B	Endosulfan Sulfate		-----	NA	-----			
23	A	Methoxychlor		-----	NA	-----			
24		Mirex	0.610	0.552	9.5	102	0.00	9.84-	9.90
25	B	Endrin Ketone		-----	NA	-----			
26	SA	Decachlorobiphenyl		-----	NA	-----			
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.81-	2.01
28	L8	Toxaphene{A}		-----	NA	-----			
29	L8	Toxaphene{B}		-----	NA	-----			
30	L8	Toxaphene{C}		-----	NA	-----			
31	L8	Toxaphene{D}		-----	NA	-----			
32	L8	Toxaphene{E}		-----	NA	-----			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.81-	2.01
34		Chlordane {A}		-----	NA	-----			
35		Chlordane {B}		-----	NA	-----			
36		Chlordane {C}		-----	NA	-----			
37		Chlordane {D}		-----	NA	-----			
38		Chlordane {E}		-----	NA	-----			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g172388.D 1PST5950.M Thu Dec 30 08:24:12 2021

10.10.13 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5950-ICV5950
Lab FileID: 1G172399.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1g5950\1g172399.d\ECD1A.CH Vial: 17
Signal #2 : C:\msdchem\1\data\1g5950\1g172399.d\ECD2B.CH
Acq On : 28 Dec 2021 5:21 am Operator: christp
Sample : icv5950-25 Inst : HP G1530A
Misc : op37216,g1g5950,15.0,,,10,10 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1PST5950.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue Dec 28 23:57:05 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.66- 1.72
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		Hexachlorobenzene	1.344	1.343	0.1	103	0.00	2.48- 2.54
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		Alachlor	0.117	0.130	-11.1	111	0.00	3.87- 3.93
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.59- 1.79
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.59- 1.79
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

10.10.14
10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5950-ICV5950
Lab FileID: 1G172399.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.88-	1.94
2	SAB	Tetrachloro-m-xylene		----------NA----------					
3		Hexachlorobenzene	1.399	1.436	-2.6	105	0.00	3.16-	3.22
4	A	alpha-BHC		----------NA----------					
5	MA	gamma-BHC		----------NA----------					
6	MA	Heptachlor		----------NA----------					
7	B	beta-BHC		----------NA----------					
8	B	delta-BHC		----------NA----------					
9	MB	Aldrin		----------NA----------					
10		Alachlor	0.110	0.122	-10.9	108	0.00	4.63-	4.69
11	B	Heptachlor Epoxide		----------NA----------					
12	B	gamma-Chlordane		----------NA----------					
13	B	alpha-Chlordane		----------NA----------					
14	A	Endosulfan I		----------NA----------					
15	B	4,4'-DDE		----------NA----------					
16	MA	Dieldrin		----------NA----------					
17	MA	Endrin		----------NA----------					
18	A	4,4'-DDD		----------NA----------					
19	B	Endosulfan II		----------NA----------					
20	MA	4,4'-DDT		----------NA----------					
21	B	Endrin Aldehyde		----------NA----------					
22	B	Endosulfan Sulfate		----------NA----------					
23	A	Methoxychlor		----------NA----------					
24		Mirex		----------NA----------					
25	B	Endrin Ketone		----------NA----------					
26	SA	Decachlorobiphenyl		----------NA----------					
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.81-	2.01
28	L8	Toxaphene{A}		----------NA----------					
29	L8	Toxaphene{B}		----------NA----------					
30	L8	Toxaphene{C}		----------NA----------					
31	L8	Toxaphene{D}		----------NA----------					
32	L8	Toxaphene{E}		----------NA----------					
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.81-	2.01
34		Chlordane {A}		----------NA----------					
35		Chlordane {B}		----------NA----------					
36		Chlordane {C}		----------NA----------					
37		Chlordane {D}		----------NA----------					
38		Chlordane {E}		----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g172388.D 1PST5950.M Thu Dec 30 08:24:28 2021

10.10.14 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5951-ICV5950
Lab FileID: 1G172401.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1g5951\1g172401.d\ECD1A.CH Vial: 5
Signal #2 : C:\msdchem\1\data\1g5951\1g172401.d\ECD2B.CH
Acq On : 28 Dec 2021 9:44 pm Operator: christp
Sample : icv5950-25 Inst : HP G1530A
Misc : op37216,g1g5951,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1PST5950.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue Dec 28 23:57:05 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.65- 1.71
2	SAB	Tetrachloro-m-xylene	0.866	0.895	-3.3	94	0.00	2.17- 2.23
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.299	1.235	4.9	88	0.00	2.61- 2.67
5	MA	gamma-BHC	1.190	1.123	5.6	87	0.00	2.90- 2.96
6	MA	Heptachlor	1.161	1.098	5.4	88	0.00	3.39- 3.45
7	B	beta-BHC	0.507	0.469	7.5	87	0.00	2.97- 3.03
8	B	delta-BHC	1.089	1.097	-0.7	94	0.00	3.15- 3.21
9	MB	Aldrin	1.084	1.025	5.4	89	0.00	3.73- 3.79
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide	0.997	0.873	12.4	85	0.00	4.47- 4.53
12	B	gamma-Chlordane	1.030	0.931	9.6	87	0.00	4.64- 4.70
13	B	alpha-Chlordane	0.938	0.870	7.2	86	0.00	4.82- 4.88
14	A	Endosulfan I	0.945	0.874	7.5	86	0.00	5.01- 5.07
15	B	4,4'-DDE	1.008	0.924	8.3	87	0.00	4.93- 4.99
16	MA	Dieldrin	1.007	0.949	5.8	88	0.00	5.35- 5.41
17	MA	Endrin	0.970	0.901	7.1	86	0.00	5.69- 5.75
18	A	4,4'-DDD	0.816	0.754	7.6	86	0.00	5.81- 5.88
19	B	Endosulfan II	0.866	0.809	6.6	89	0.00	6.04- 6.10
20	MA	4,4'-DDT	0.746	0.761	-2.0	93	0.00	6.26- 6.32
21	B	Endrin Aldehyde	0.730	0.670	8.2	91	0.00	6.71- 6.77
22	B	Endosulfan Sulfate	0.738	0.874	-18.4	110	0.00	7.45- 7.51
23	A	Methoxychlor	0.434	0.412	5.1	94	0.00	7.09- 7.15
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.811	0.790	2.6	88	0.00	7.92- 7.98
26	SA	Decachlorobiphenyl	0.687	0.699	-1.7	93	0.00	9.78- 9.84
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.58- 1.78
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.58- 1.78
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

10.10.15 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5951-ICV5950
Lab FileID: 1G172401.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	-0.01	1.87- 1.93
2	SAB	Tetrachloro-m-xylene	0.587	0.599	-2.0	103	0.00	2.65- 2.71
3		Hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.277	1.215	4.9	93	0.00	3.31- 3.37
5	MA	gamma-BHC	1.148	1.098	4.4	93	0.00	3.75- 3.81
6	MA	Heptachlor	1.138	1.061	6.8	91	0.00	4.37- 4.43
7	B	beta-BHC	0.446	0.409	8.3	92	0.00	3.84- 3.90
8	B	delta-BHC	1.104	1.107	-0.3	98	0.00	4.26- 4.32
9	MB	Aldrin	1.087	1.016	6.5	92	0.00	4.85- 4.91
10		Alachlor		----------NA----------				
11	B	Heptachlor Epoxide	0.986	0.907	8.0	90	0.00	5.73- 5.79
12	B	gamma-Chlordane	0.971	0.970	0.1	100	0.00	6.03- 6.09
13	B	alpha-Chlordane	0.950	0.866	8.8	91	0.00	6.28- 6.34
14	A	Endosulfan I	0.971	0.857	11.7	88	0.00	6.38- 6.44
15	B	4,4'-DDE	0.961	0.872	9.3	90	0.00	6.55- 6.62
16	MA	Dieldrin	1.035	0.940	9.2	91	0.00	6.86- 6.92
17	MA	Endrin	1.024	0.877	14.4	89	0.00	7.41- 7.47
18	A	4,4'-DDD	0.742	0.652	12.1	88	0.00	7.59- 7.65
19	B	Endosulfan II	0.861	0.801	7.0	93	0.00	7.79- 7.85
20	MA	4,4'-DDT	0.592	0.622	-5.1	96	0.00	8.17- 8.23
21	B	Endrin Aldehyde	0.674	0.628	6.8	93	0.00	8.41- 8.47
22	B	Endosulfan Sulfate	0.774	0.705	8.9	92	0.00	8.92- 8.98
23	A	Methoxychlor	0.330	0.320	3.0	93	0.00	9.50- 9.56
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.944	0.929	1.6	107	0.00	9.89- 9.95
26	SA	Decachlorobiphenyl	0.736	0.705	4.2	97	0.00	11.76-11.82
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	-0.01	1.80- 2.00
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	-0.01	1.80- 2.00
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g172388.D 1PST5950.M Thu Dec 30 08:35:00 2021

10.10.15 10

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5954-CC5950
Lab FileID: 1G172455.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\tr...4\1g172455.d\ECD1A.CH Vial: 2
Signal #2 : C:\msdchem\1\data\trude\...g5954\1g172455.d\ECD2B.CH
Acq On : 30 Dec 2021 9:04 pm Operator: rebeccak
Sample : cc5950-25 Inst : HP G1530A
Misc : op37175,g1g5954,15.9,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1pst5950.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Fri Dec 31 01:33:24 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.65- 1.71
2	SAB	Tetrachloro-m-xylene	0.866	0.900	-3.9	95	0.00	2.16- 2.22
3		Hexachlorobenzene	1.344	1.370	-1.9	96	0.00	2.47- 2.53
4	A	alpha-BHC	1.299	1.355	-4.3	97	0.00	2.61- 2.67
5	MA	gamma-BHC	1.190	1.224	-2.9	95	0.00	2.89- 2.95
6	MA	Heptachlor	1.161	1.219	-5.0	98	0.00	3.39- 3.45
7	B	beta-BHC	0.507	0.522	-3.0	97	0.00	2.97- 3.03
8	B	delta-BHC	1.089	1.206	-10.7	103	0.00	3.15- 3.21
9	MB	Aldrin	1.084	1.120	-3.3	98	0.00	3.73- 3.79
10		Alachlor	0.117	0.116	0.9	91	0.00	3.87- 3.93
11	B	Heptachlor Epoxide	0.997	1.021	-2.4	99	0.00	4.46- 4.52
12	B	gamma-Chlordane	1.030	1.065	-3.4	100	0.00	4.63- 4.69
13	B	alpha-Chlordane	0.938	0.985	-5.0	98	0.00	4.81- 4.87
14	A	Endosulfan I	0.945	0.986	-4.3	97	0.00	5.00- 5.06
15	B	4,4'-DDE	1.008	1.080	-7.1	102	0.00	4.92- 4.98
16	MA	Dieldrin	1.007	1.077	-7.0	101	0.00	5.34- 5.40
17	MA	Endrin	0.970	1.033	-6.5	99	0.00	5.69- 5.75
18	A	4,4'-DDD	0.816	0.855	-4.8	97	0.00	5.80- 5.87
19	B	Endosulfan II	0.866	0.866	0.0	96	0.00	6.03- 6.09
20	MA	4,4'-DDT	0.746	0.823	-10.3	101	0.00	6.25- 6.31
21	B	Endrin Aldehyde	0.730	0.691	5.3	94	0.00	6.71- 6.77
22	B	Endosulfan Sulfate	0.738	0.929	-25.9#	117	0.00	7.45- 7.51
23	A	Methoxychlor	0.434	0.435	-0.2	99	0.00	7.09- 7.15
24		Mirex	0.650	0.653	-0.5	95	0.00	7.26- 7.32
25	B	Endrin Ketone	0.811	0.789	2.7	88	0.00	7.92- 7.98
26	SA	Decachlorobiphenyl	0.687	0.659	4.1	88	0.00	9.78- 9.84
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.58- 1.78
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.58- 1.78
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5954-CC5950
Lab FileID: 1G172455.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.88- 1.94
2	SAB	Tetrachloro-m-xylene	0.587	0.589	-0.3	99	0.00	2.65- 2.71
3		Hexachlorobenzene	1.399	1.417	-1.3	99	0.00	3.16- 3.22
4	A	alpha-BHC	1.277	1.319	-3.3	99	0.00	3.31- 3.37
5	MA	gamma-BHC	1.148	1.205	-5.0	100	0.00	3.76- 3.82
6	MA	Heptachlor	1.138	1.203	-5.7	102	0.00	4.37- 4.43
7	B	beta-BHC	0.446	0.449	-0.7	100	0.00	3.84- 3.90
8	B	delta-BHC	1.104	1.226	-11.1	107	0.00	4.26- 4.32
9	MB	Aldrin	1.087	1.127	-3.7	100	0.00	4.85- 4.91
10		Alachlor	0.110	0.120	-9.1	102	0.00	4.63- 4.69
11	B	Heptachlor Epoxide	0.986	1.079	-9.4	105	0.00	5.73- 5.79
12	B	gamma-Chlordane	0.971	1.035	-6.6	105	0.00	6.04- 6.10
13	B	alpha-Chlordane	0.950	1.092	-14.9	113	0.00	6.28- 6.34
14	A	Endosulfan I	0.971	1.024	-5.5	104	0.00	6.39- 6.45
15	B	4,4'-DDE	0.961	0.993	-3.3	101	0.00	6.56- 6.62
16	MA	Dieldrin	1.035	1.062	-2.6	101	0.00	6.86- 6.92
17	MA	Endrin	1.024	1.045	-2.1	105	0.00	7.41- 7.47
18	A	4,4'-DDD	0.742	0.776	-4.6	104	0.00	7.59- 7.65
19	B	Endosulfan II	0.861	0.896	-4.1	102	0.00	7.79- 7.85
20	MA	4,4'-DDT	0.592	0.729	-23.1#	111	0.00	8.17- 8.23
21	B	Endrin Aldehyde	0.674	0.721	-7.0	105	0.00	8.41- 8.47
22	B	Endosulfan Sulfate	0.774	0.824	-6.5	106	0.00	8.93- 8.99
23	A	Methoxychlor	0.330	0.372	-12.7	107	0.00	9.50- 9.56
24		Mirex	0.610	0.714	-17.0	122	0.00	9.84- 9.90
25	B	Endrin Ketone	0.944	0.919	2.6	104	0.00	9.89- 9.95
26	SA	Decachlorobiphenyl	0.736	0.811	-10.2	110	0.00	11.76-11.82
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.81- 2.01
28	L8	Toxaphene{A}	----------NA----------					
29	L8	Toxaphene{B}	----------NA----------					
30	L8	Toxaphene{C}	----------NA----------					
31	L8	Toxaphene{D}	----------NA----------					
32	L8	Toxaphene{E}	----------NA----------					
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.81- 2.01
34		Chlordane {A}	----------NA----------					
35		Chlordane {B}	----------NA----------					
36		Chlordane {C}	----------NA----------					
37		Chlordane {D}	----------NA----------					
38		Chlordane {E}	----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g172388.D 1pst5950.m Fri Dec 31 01:39:14 2021

10.10.16 10

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5955-CC5950
Lab FileID: 1G172472.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1g5955\1g172472.d\ECD1A.CH Vial: 4
Signal #2 : C:\msdchem\1\data\1g5955\1g172472.d\ECD2B.CH
Acq On : 31 Dec 2021 3:14 am Operator: christp
Sample : cc5950-50 Inst : HP G1530A
Misc : op37171,g1g5955,16.4,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\1pst5950.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue Dec 28 23:57:05 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.65- 1.71
2	SAB	Tetrachloro-m-xylene	0.866	0.831	4.0	94	0.00	2.16- 2.22
3		Hexachlorobenzene	1.344	1.274	5.2	95	0.00	2.47- 2.53
4	A	alpha-BHC	1.299	1.280	1.5	95	0.00	2.61- 2.67
5	MA	gamma-BHC	1.190	1.156	2.9	95	0.00	2.89- 2.95
6	MA	Heptachlor	1.161	1.134	2.3	97	0.00	3.39- 3.45
7	B	beta-BHC	0.507	0.470	7.3	95	0.00	2.97- 3.03
8	B	delta-BHC	1.089	1.127	-3.5	97	0.00	3.15- 3.21
9	MB	Aldrin	1.084	1.042	3.9	97	0.00	3.73- 3.79
10		Alachlor	0.117	0.107	8.5	94	0.00	3.87- 3.93
11	B	Heptachlor Epoxide	0.997	0.930	6.7	95	0.00	4.46- 4.52
12	B	gamma-Chlordane	1.030	0.988	4.1	100	0.00	4.63- 4.69
13	B	alpha-Chlordane	0.938	0.899	4.2	94	0.00	4.81- 4.87
14	A	Endosulfan I	0.945	0.900	4.8	95	0.00	5.00- 5.06
15	B	4,4'-DDE	1.008	0.962	4.6	95	0.00	4.92- 4.98
16	MA	Dieldrin	1.007	0.995	1.2	98	0.00	5.34- 5.40
17	MA	Endrin	0.970	0.971	-0.1	97	0.00	5.69- 5.75
18	A	4,4'-DDD	0.816	0.793	2.8	96	0.00	5.80- 5.87
19	B	Endosulfan II	0.866	0.809	6.6	94	0.00	6.03- 6.09
20	MA	4,4'-DDT	0.746	0.765	-2.5	95	-0.01	6.25- 6.31
21	B	Endrin Aldehyde	0.730	0.660	9.6	97	-0.01	6.70- 6.76
22	B	Endosulfan Sulfate	0.738	0.900	-22.0#	120	-0.01	7.44- 7.50
23	A	Methoxychlor	0.434	0.404	6.9	89	-0.01	7.08- 7.14
24		Mirex	0.650	0.617	5.1	97	-0.01	7.26- 7.32
25	B	Endrin Ketone	0.811	0.754	7.0	89	-0.01	7.92- 7.98
26	SA	Decachlorobiphenyl	0.687	0.704	-2.5	103	0.00	9.78- 9.84
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.58- 1.78
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.58- 1.78
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G1G5955-CC5950
Lab FileID: 1G172472.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.88- 1.94
2	SAB	Tetrachloro-m-xylene	0.587	0.574	2.2	98	0.00	2.65- 2.71
3		Hexachlorobenzene	1.399	1.371	2.0	97	0.00	3.16- 3.22
4	A	alpha-BHC	1.277	1.315	-3.0	96	0.00	3.31- 3.37
5	MA	gamma-BHC	1.148	1.196	-4.2	97	0.00	3.76- 3.82
6	MA	Heptachlor	1.138	1.159	-1.8	97	0.00	4.37- 4.43
7	B	beta-BHC	0.446	0.432	3.1	98	0.00	3.84- 3.90
8	B	delta-BHC	1.104	1.192	-8.0	98	0.00	4.26- 4.32
9	MB	Aldrin	1.087	1.095	-0.7	98	0.00	4.85- 4.91
10		Alachlor	0.110	0.111	-0.9	101	0.00	4.63- 4.69
11	B	Heptachlor Epoxide	0.986	0.987	-0.1	97	0.00	5.73- 5.79
12	B	gamma-Chlordane	0.971	0.984	-1.3	100	0.00	6.04- 6.10
13	B	alpha-Chlordane	0.950	0.979	-3.1	102	0.00	6.28- 6.34
14	A	Endosulfan I	0.971	0.975	-0.4	101	0.00	6.39- 6.45
15	B	4,4'-DDE	0.961	0.949	1.2	96	0.00	6.56- 6.62
16	MA	Dieldrin	1.035	1.016	1.8	97	0.00	6.86- 6.92
17	MA	Endrin	1.024	0.994	2.9	100	0.00	7.41- 7.47
18	A	4,4'-DDD	0.742	0.737	0.7	98	0.00	7.59- 7.65
19	B	Endosulfan II	0.861	0.843	2.1	98	0.00	7.79- 7.85
20	MA	4,4'-DDT	0.592	0.684	-15.5	99	0.00	8.17- 8.23
21	B	Endrin Aldehyde	0.674	0.665	1.3	100	0.00	8.41- 8.47
22	B	Endosulfan Sulfate	0.774	0.792	-2.3	101	0.00	8.92- 8.98
23	A	Methoxychlor	0.330	0.347	-5.2	99	0.00	9.50- 9.56
24		Mirex	0.610	0.682	-11.8	120	0.00	9.84- 9.90
25	B	Endrin Ketone	0.944	0.871	7.7	102	0.00	9.89- 9.95
26	SA	Decachlorobiphenyl	0.736	0.690	6.3	94	0.00	11.75-11.81
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.81- 2.01
28	L8	Toxaphene{A}	----------NA----------					
29	L8	Toxaphene{B}	----------NA----------					
30	L8	Toxaphene{C}	----------NA----------					
31	L8	Toxaphene{D}	----------NA----------					
32	L8	Toxaphene{E}	----------NA----------					
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.81- 2.01
34		Chlordane {A}	----------NA----------					
35		Chlordane {B}	----------NA----------					
36		Chlordane {C}	----------NA----------					
37		Chlordane {D}	----------NA----------					
38		Chlordane {E}	----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1g172387.D 1pst5950.m Fri Dec 31 15:38:44 2021

10.10.17 10

Initial Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICC2867
Lab FileID: 6G81077.D

Response Factor Report GC6G

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration

Calibration Files
5 =6g81079.d 10 =6g81078.d 25 =6g81077.d 50 =6g81076.d
100 =6g81074.d 1 =6g81081.d 75 =6g81075.d 2 =6g81080.d
= =

Compound	5	10	25	50	100	1	75	2	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-m-xylene	0.595	0.614	0.640	0.654	0.654	0.555	0.651	0.605	0.621	5.68
3) hexachlorobenzene	1.747	1.786	1.705	1.723	1.704	1.927	1.729	1.787	1.763	4.18
4) alpha-BHC	1.188	1.251	1.286	1.411	1.480	1.196	1.510	1.149	1.309	10.68
5) gamma-BHC	1.330	1.053	1.086	1.146	1.196	1.131	1.165	1.001	1.139	8.75
6) Heptachlor	0.991	1.016	1.043	1.083	1.169	0.862	1.118	1.111	1.049	9.08
7) beta-BHC	0.422	0.445	0.433	0.445	0.440	0.525	0.438	0.452	0.450	7.05
8) delta-BHC	0.893	0.947	1.017	1.122	1.183	1.167	1.135	0.910	1.047	11.41
9) Aldrin	1.064	0.990	1.101	1.091	1.168	1.025	1.125	1.313	1.110	8.96
10) alachlor	0.129	0.108	0.110	0.108	0.098		0.103		0.109	9.90
11) Heptachlor Epoxide	0.920	0.928	0.944	0.977	1.004	1.172	0.975	0.869	0.974	9.28
12) gamma-Chlordane	0.882	0.939	0.965	1.077	1.031	1.017	1.025	0.967	0.988	6.25
13) alpha-Chlordane	0.849	0.922	0.983	0.992	1.032	0.872	1.020	0.920	0.949	7.15
14) Endosulfan I	0.992	1.014	1.038	1.084	1.122	0.968	1.117	1.134	1.059	6.06
15) 4,4'-DDE	0.933	0.943	0.953	0.987	1.025	1.015	1.009	1.102	0.996	5.52
16) Dieldrin	1.039	1.097	1.046	1.091	1.132	1.061	1.113	0.983	1.070	4.48
17) Endrin	1.098	0.986	1.012	1.060	1.108	1.128	1.106	0.955	1.057	6.10
18) 4,4'-DDD	0.760	0.751	0.771	0.818	0.839	0.757	0.843	0.765	0.788	4.90
19) Endosulfan II	1.209	0.924	0.909	0.963	0.991	1.051	0.989	0.929	0.996	9.80
20) 4,4'-DDT	0.792	0.793	0.801	0.828	0.890	0.978	0.870	0.802	0.844	7.76
21) Endrin Aldehyde	0.708	0.688	0.698	0.731	0.727	0.878	0.730	0.929	0.761	11.84
22) Endosulfan Sulfate	1.073	0.950	0.911	0.989	0.995	0.864	0.988	1.019	0.973	6.63
23) Methoxychlor										

Initial Calibration Summary

Job Number: JD36682 **Sample:** G6G2867-ICC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81077.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

	0.464	0.458	0.460	0.485	0.467	0.408	0.472	0.464	0.460	4.85
24) Mirex										
	0.759	0.765	0.762	0.775	0.756	0.843	0.756	0.833	0.781	4.55
25) Endrin Ketone										
	0.923	0.859	0.846	0.953	0.958	0.873	0.985	1.140	0.942	10.06
26) Decachlorobiphenyl										
	1.228	1.217	1.097	1.158		1.303	1.083	1.283	1.195	7.19
27) I 1-bromo-2-nitrobenzen ----------ISTD----------										
28) Toxaphene{A}										
				0.020					0.020	0.00
29) Toxaphene{B}										
				0.026					0.026	0.00
30) Toxaphene{C}										
				0.024					0.024	0.00
31) Toxaphene{D}										
				0.021					0.021	0.00
32) Toxaphene{E}										
				0.023					0.023	0.00
33) I 1-bromo-2-nitrobenzen ----------ISTD----------										
34) Chlordane {A}										
				0.073					0.073	0.00
35) Chlordane {B}										
				0.044					0.044	0.00
36) Chlordane {C}										
				0.138					0.138	0.00
37) Chlordane {D}										
				0.226					0.226	0.00
38) Chlordane {E}										
				0.035					0.035	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen ----------ISTD----------										
2) Tetrachloro-m-xylene										
	0.916	0.913	0.897	0.888	0.878	0.920	0.884	0.974	0.909	3.38
3) hexachlorobenzene										
	1.093	1.079	1.034	1.003	0.980	1.262	0.986	1.153	1.074	8.96
4) alpha-BHC										
	1.293	1.319	1.325	1.346	1.356	1.514	1.356	1.330	1.355	5.00
5) gamma-BHC										
	1.115	1.114	1.112	1.109	1.098	1.222	1.103	1.140	1.127	3.60
6) Heptachlor										
	1.148	1.137	1.142	1.116	1.124	1.240	1.131	1.163	1.150	3.40
7) beta-BHC										
	0.522	0.508	0.489	0.468	0.448	0.612	0.456	0.550	0.507	10.84
8) delta-BHC										
	0.996	1.021	1.024	1.069	1.081	0.979	1.080	0.998	1.031	3.92
9) Aldrin										
	1.063	1.035	1.029	1.027	1.025	1.113	1.021	1.054	1.046	2.94
10) alachlor										
	0.149	0.148	0.148	0.140	0.128		0.132		0.141	6.48
11) Heptachlor Epoxide										
	0.976	0.987	0.989	0.972	0.970	1.101	0.967	1.007	0.996	4.44
12) gamma-Chlordane										
	1.016	1.029	1.008	1.008	1.000	1.140	1.005	1.065	1.034	4.63
13) alpha-Chlordane										
	0.999	0.992	0.971	0.961	0.952	1.003	0.957	0.997	0.979	2.16

Initial Calibration Summary

Job Number: JD36682 **Sample:** G6G2867-ICC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81077.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
14)  Endosulfan I
          0.955 0.962 0.941 0.929 0.922 1.057 0.926 0.979          0.959    4.63
15)  4,4'-DDE
          0.967 1.016 0.981 0.980 0.986 1.126 0.983 0.991          1.004    5.12
16)  Dieldrin
          1.007 1.020 1.017 1.012 1.013 1.126 1.014 1.040          1.031    3.84
17)  Endrin
          0.967 0.981 0.988 0.966 0.994 1.078 0.976 0.977          0.991    3.69
18)  4,4'-DDD
          0.829 0.837 0.829 0.828 0.831 0.954 0.831 0.847          0.848    5.11
19)  Endosulfan II
          0.906 0.905 0.884 0.872 0.869 1.015 0.872 0.927          0.906    5.37
20)  4,4'-DDT
          0.790 0.821 0.825 0.840 0.845 0.805 0.845 0.779          0.819    3.10
21)  Endrin Aldehyde
          0.649 0.645 0.629 0.656 0.646 0.650 0.645 0.634          0.644    1.32
22)  Endosulfan Sulfate
          0.871 0.890 0.863 0.876 0.866 0.916 0.871 0.896          0.881    2.06
23)  Methoxychlor
          0.446 0.460 0.456 0.444 0.433 0.492 0.439 0.460          0.454    4.03
24)  Mirex
          0.751 0.733 0.722 0.688 0.661 0.850 0.672 0.792          0.734    8.73
25)  Endrin Ketone
          0.816 0.817 0.789 0.838 0.836 0.804 0.838 0.826          0.820    2.15
26)  Decachlorobiphenyl
          0.788 0.763 0.733 0.699       0.911 0.686 0.876          0.779   11.01

27) I   1-bromo-2-nitrobenzen ----------------ISTD--------------------
28)  Toxaphene{A}
                              0.013                                0.013    0.00
29)  Toxaphene{B}
                              0.021                                0.021    0.00
30)  Toxaphene{C}
                              0.040                                0.040    0.00
31)  Toxaphene{D}
                              0.019                                0.019    0.00
32)  Toxaphene{E}
                              0.024                                0.024    0.00

33) I   1-bromo-2-nitrobenzen ----------------ISTD--------------------
34)  Chlordane {A}
                              0.066                                0.066    0.00
35)  Chlordane {B}
                              0.036                                0.036    0.00
36)  Chlordane {C}
                              0.133                                0.133    0.00
37)  Chlordane {D}
                              0.217                                0.217    0.00
38)  Chlordane {E}
                              0.033                                0.033    0.00
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          6pst2867.m        Sun Dec 12 10:40:46 2021
```

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81084.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81084.d\ECD1A.CH Vial: 13
Acq On : 10 Dec 2021 6:57 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81084.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 6:57 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene	0.621	0.698	-12.4	110	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.309	1.505	-15.0	118	0.00	2.69- 2.75
5	MA	gamma-BHC	1.139	1.342	-17.8	125	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.210	-15.3	117	0.00	3.43- 3.49
7	B	beta-BHC	0.450	0.521	-15.8	121	0.00	3.04- 3.10
8	B	delta-BHC	1.047	1.157	-10.5	115	0.00	3.21- 3.27
9	MB	Aldrin	1.110	1.219	-9.8	112	0.00	3.75- 3.81
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide	0.974	1.139	-16.9	122	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	1.145	-15.9	120	0.00	4.58- 4.64
13	B	alpha-Chlordane	0.949	1.111	-17.1	114	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.178	-11.2	114	0.00	4.91- 4.97
15	B	4,4'-DDE	0.996	1.098	-10.2	116	0.00	4.87- 4.93
16	MA	Dieldrin	1.070	1.195	-11.7	115	0.00	5.22- 5.28
17	MA	Endrin	1.057	1.040	1.6	104	0.00	5.53- 5.59
18	A	4,4'-DDD	0.788	0.877	-11.3	115	0.00	5.67- 5.73
19	B	Endosulfan II	0.996	1.056	-6.0	117	0.00	5.84- 5.90
20	MA	4,4'-DDT	0.844	0.928	-10.0	117	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.752	1.2	109	0.00	6.44- 6.50
22	B	Endosulfan Sulfate	0.973	0.984	-1.1	109	0.00	7.10- 7.16
23	A	Methoxychlor	0.460	0.529	-15.0	116	0.00	6.85- 6.91
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.942	0.938	0.4	112	0.00	7.53- 7.59
26	SA	Decachlorobiphenyl	1.195	1.211	-1.3	111	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81084.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	0.990	-8.9	110	0.00	2.86- 2.92
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC	1.355	1.524	-12.5	114	0.00	3.53- 3.59
5	MA	gamma-BHC	1.127	1.309	-16.1	117	0.00	3.96- 4.02
6	MA	Heptachlor	1.150	1.330	-15.7	116	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.570	-12.4	116	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.193	-15.7	116	0.00	4.44- 4.50
9	MB	Aldrin	1.046	1.214	-16.1	117	0.00	4.98- 5.04
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide	0.996	1.144	-14.9	115	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.172	-13.3	116	0.00	6.10- 6.16
13	B	alpha-Chlordane	0.979	1.127	-15.1	115	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	1.067	-11.3	113	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	1.115	-11.1	113	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	1.171	-13.6	114	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.044	-5.3	105	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.943	-11.2	113	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	1.017	-12.3	114	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.946	-15.5	114	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.690	-7.1	109	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.944	-7.2	109	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.530	-16.7	116	0.00	9.32- 9.38
24		Mirex			----------NA----------			
25	B	Endrin Ketone	0.820	0.882	-7.6	111	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.848	-8.9	115	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
28	L8	Toxaphene{A}			----------NA----------			
29	L8	Toxaphene{B}			----------NA----------			
30	L8	Toxaphene{C}			----------NA----------			
31	L8	Toxaphene{D}			----------NA----------			
32	L8	Toxaphene{E}			----------NA----------			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Sun Dec 12 10:39:03 2021

10.10.19 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81085.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81085.d\ECD1A.CH Vial: 14
Acq On : 10 Dec 2021 7:15 am Operator: christp
Sample : icv2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81085.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:15 am Operator: christp
Sample : icc2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene	0.621	0.760	-22.4#	115	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	1.195	1.187	0.7	101	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.19- 2.19
34		Chlordane {A}	0.073	0.067	8.2	89	0.00	3.36- 3.56

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81085.D

35		Chlordane {B}	0.044	0.040	9.1	88	0.00	3.81- 4.01
36		Chlordane {C}	0.138	0.151	-9.4	106	0.00	4.51- 4.71
37		Chlordane {D}	0.226	0.232	-2.7	99	0.00	4.67- 4.87
38		Chlordane {E}	0.035	0.038	-8.6	106	0.00	5.68- 5.88
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	1.024	-12.7	114	0.00	2.86- 2.92
3		hexachlorobenzene	----------NA----------					
4	A	alpha-BHC	----------NA----------					
5	MA	gamma-BHC	----------NA----------					
6	MA	Heptachlor	----------NA----------					
7	B	beta-BHC	----------NA----------					
8	B	delta-BHC	----------NA----------					
9	MB	Aldrin	----------NA----------					
10		alachlor	----------NA----------					
11	B	Heptachlor Epoxide	----------NA----------					
12	B	gamma-Chlordane	----------NA----------					
13	B	alpha-Chlordane	----------NA----------					
14	A	Endosulfan I	----------NA----------					
15	B	4,4'-DDE	----------NA----------					
16	MA	Dieldrin	----------NA----------					
17	MA	Endrin	----------NA----------					
18	A	4,4'-DDD	----------NA----------					
19	B	Endosulfan II	----------NA----------					
20	MA	4,4'-DDT	----------NA----------					
21	B	Endrin Aldehyde	----------NA----------					
22	B	Endosulfan Sulfate	----------NA----------					
23	A	Methoxychlor	----------NA----------					
24		Mirex	----------NA----------					
25	B	Endrin Ketone	----------NA----------					
26	SA	Decachlorobiphenyl	0.779	0.774	0.6	109	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.57- 2.57
28	L8	Toxaphene{A}	----------NA----------					
29	L8	Toxaphene{B}	----------NA----------					
30	L8	Toxaphene{C}	----------NA----------					
31	L8	Toxaphene{D}	----------NA----------					
32	L8	Toxaphene{E}	----------NA----------					
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
34		Chlordane {A}	0.066	0.070	-6.1	105	0.00	4.46- 4.66
35		Chlordane {B}	0.036	0.038	-5.6	103	0.00	5.11- 5.31
36		Chlordane {C}	0.133	0.136	-2.3	102	0.00	6.02- 6.22
37		Chlordane {D}	0.217	0.222	-2.3	101	0.00	6.25- 6.45
38		Chlordane {E}	0.033	0.036	-9.1	109	0.00	7.72- 7.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6pst2867.m Sun Dec 12 10:40:04 2021

10.10.20 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81086.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81086.d\ECD1A.CH Vial: 15
Acq On : 10 Dec 2021 7:33 am Operator: christp
Sample : icv2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81086.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:33 am Operator: christp
Sample : icc2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene	0.621	0.768	-23.7#	116	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	1.195	1.146	4.1	98	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.20- 2.20
28	L8	Toxaphene{A}	0.020	0.018	10.0	89	0.00	5.51- 5.71
29	L8	Toxaphene{B}	0.026	0.024	7.7	92	0.00	5.75- 5.95
30	L8	Toxaphene{C}	0.024	0.023	4.2	96	0.00	5.93- 6.13
31	L8	Toxaphene{D}	0.021	0.022	-4.8	102	0.00	6.26- 6.46
32	L8	Toxaphene{E}	0.023	0.021	8.7	91	0.00	6.88- 7.08
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

10.10.21
10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81086.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	1.059	-16.5	116	0.00	2.86- 2.92
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC			----------NA----------			
5	MA	gamma-BHC			----------NA----------			
6	MA	Heptachlor			----------NA----------			
7	B	beta-BHC			----------NA----------			
8	B	delta-BHC			----------NA----------			
9	MB	Aldrin			----------NA----------			
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide			----------NA----------			
12	B	gamma-Chlordane			----------NA----------			
13	B	alpha-Chlordane			----------NA----------			
14	A	Endosulfan I			----------NA----------			
15	B	4,4'-DDE			----------NA----------			
16	MA	Dieldrin			----------NA----------			
17	MA	Endrin			----------NA----------			
18	A	4,4'-DDD			----------NA----------			
19	B	Endosulfan II			----------NA----------			
20	MA	4,4'-DDT			----------NA----------			
21	B	Endrin Aldehyde			----------NA----------			
22	B	Endosulfan Sulfate			----------NA----------			
23	A	Methoxychlor			----------NA----------			
24		Mirex			----------NA----------			
25	B	Endrin Ketone			----------NA----------			
26	SA	Decachlorobiphenyl	0.779	0.805	-3.3	112	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.57- 2.57
28	L8	Toxaphene{A}	0.013	0.014	-7.7	107	0.00	6.75- 6.95
29	L8	Toxaphene{B}	0.021	0.021	0.0	103	0.00	7.61- 7.81
30	L8	Toxaphene{C}	0.040	0.041	-2.5	104	0.00	7.77- 7.97
31	L8	Toxaphene{D}	0.019	0.019	0.0	104	0.00	8.21- 8.41
32	L8	Toxaphene{E}	0.024	0.024	0.0	100	0.00	9.11- 9.31
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6pst2867.m Sun Dec 12 10:40:25 2021

10.10.21 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81087.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81087.d\ECD1A.CH Vial: 16
Acq On : 10 Dec 2021 7:52 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81087.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:52 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex	0.781	0.804	-2.9	113	0.00	6.96- 7.02
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

10.10.22 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81087.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene			----------NA----------			
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC			----------NA----------			
5	MA	gamma-BHC			----------NA----------			
6	MA	Heptachlor			----------NA----------			
7	B	beta-BHC			----------NA----------			
8	B	delta-BHC			----------NA----------			
9	MB	Aldrin			----------NA----------			
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide			----------NA----------			
12	B	gamma-Chlordane			----------NA----------			
13	B	alpha-Chlordane			----------NA----------			
14	A	Endosulfan I			----------NA----------			
15	B	4,4'-DDE			----------NA----------			
16	MA	Dieldrin			----------NA----------			
17	MA	Endrin			----------NA----------			
18	A	4,4'-DDD			----------NA----------			
19	B	Endosulfan II			----------NA----------			
20	MA	4,4'-DDT			----------NA----------			
21	B	Endrin Aldehyde			----------NA----------			
22	B	Endosulfan Sulfate			----------NA----------			
23	A	Methoxychlor			----------NA----------			
24		Mirex	0.734	0.756	-3.0	112	0.00	9.64- 9.70
25	B	Endrin Ketone			----------NA----------			
26	SA	Decachlorobiphenyl			----------NA----------			
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
28	L8	Toxaphene{A}			----------NA----------			
29	L8	Toxaphene{B}			----------NA----------			
30	L8	Toxaphene{C}			----------NA----------			
31	L8	Toxaphene{D}			----------NA----------			
32	L8	Toxaphene{E}			----------NA----------			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Sun Dec 12 10:39:23 2021

10.10.22 10

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81088.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81088.d\ECD1A.CH Vial: 17
Acq On : 10 Dec 2021 8:10 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81088.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 8:10 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene	1.763	1.832	-3.9	112	0.00	2.55- 2.61
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor	0.109	0.105	3.7	100	0.00	3.89- 3.95
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
34		Chlordane {A}		----------NA----------				

Initial Calibration Verification

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81088.D

35		Chlordane {B}			----------NA----------				
36		Chlordane {C}			----------NA----------				
37		Chlordane {D}			----------NA----------				
38		Chlordane {E}			----------NA----------				
*****		Signal #2 *****							
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
2	SAB	Tetrachloro-m-xylene			----------NA----------				
3		hexachlorobenzene	1.074	1.092	-1.7	112	0.00	3.37-	3.43
4	A	alpha-BHC			----------NA----------				
5	MA	gamma-BHC			----------NA----------				
6	MA	Heptachlor			----------NA----------				
7	B	beta-BHC			----------NA----------				
8	B	delta-BHC			----------NA----------				
9	MB	Aldrin			----------NA----------				
10		alachlor	0.141	0.133	5.7	95	0.00	4.79-	4.85
11	B	Heptachlor Epoxide			----------NA----------				
12	B	gamma-Chlordane			----------NA----------				
13	B	alpha-Chlordane			----------NA----------				
14	A	Endosulfan I			----------NA----------				
15	B	4,4'-DDE			----------NA----------				
16	MA	Dieldrin			----------NA----------				
17	MA	Endrin			----------NA----------				
18	A	4,4'-DDD			----------NA----------				
19	B	Endosulfan II			----------NA----------				
20	MA	4,4'-DDT			----------NA----------				
21	B	Endrin Aldehyde			----------NA----------				
22	B	Endosulfan Sulfate			----------NA----------				
23	A	Methoxychlor			----------NA----------				
24		Mirex			----------NA----------				
25	B	Endrin Ketone			----------NA----------				
26	SA	Decachlorobiphenyl			----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
28	L8	Toxaphene{A}			----------NA----------				
29	L8	Toxaphene{B}			----------NA----------				
30	L8	Toxaphene{C}			----------NA----------				
31	L8	Toxaphene{D}			----------NA----------				
32	L8	Toxaphene{E}			----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
34		Chlordane {A}			----------NA----------				
35		Chlordane {B}			----------NA----------				
36		Chlordane {C}			----------NA----------				
37		Chlordane {D}			----------NA----------				
38		Chlordane {E}			----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Thu Dec 16 14:12:47 2021

10.10.23 10

Continuing Calibration Summary

Job Number: JD36682 **Sample:** G6G2876-CC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81299.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\sy...76\6g81299.d\ECD1A.CH Vial: 4
Signal #2 : C:\msdchem\1\data\syrap\g6g2876\6g81299.d\ECD2B.CH
Acq On : 20-Dec-21, 02:19:09 Operator: christp
Sample : cc2867-50 Inst : GC6G
Misc : op37120,g6g2876,250,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6PST2867.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Mon Dec 20 22:28:16 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.18- 2.18
2	SAB	Tetrachloro-m-xylene	0.621	0.621	0.0	92	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.617	8.3	91	0.00	2.54- 2.60
4	A	alpha-BHC	1.309	1.407	-7.5	96	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.285	-12.8	108	0.00	2.95- 3.01
6	MA	Heptachlor	1.049	1.224	-16.7	109	0.00	3.42- 3.48
7	B	beta-BHC	0.450	0.489	-8.7	106	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.300	-24.2#	112	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.189	-7.1	105	0.00	3.74- 3.80
10		alachlor	0.109	0.102	6.4	92	0.00	3.88- 3.94
11	B	Heptachlor Epoxide	0.974	1.097	-12.6	109	0.00	4.41- 4.47
12	B	gamma-Chlordane	0.988	1.103	-11.6	99	0.00	4.57- 4.63
13	B	alpha-Chlordane	0.949	1.052	-10.9	103	0.00	4.73- 4.79
14	A	Endosulfan I	1.059	1.120	-5.8	100	0.00	4.90- 4.96
15	B	4,4'-DDE	0.996	1.031	-3.5	101	0.00	4.85- 4.91
16	MA	Dieldrin	1.070	1.140	-6.5	101	0.00	5.21- 5.27
17	MA	Endrin	1.057	1.124	-6.3	103	0.00	5.51- 5.57
18	A	4,4'-DDD	0.788	0.844	-7.1	100	0.00	5.66- 5.72
19	B	Endosulfan II	0.996	0.977	1.9	98	0.00	5.83- 5.89
20	MA	4,4'-DDT	0.844	0.851	-0.8	99	0.00	6.06- 6.12
21	B	Endrin Aldehyde	0.761	0.802	-5.4	106	0.00	6.43- 6.49
22	B	Endosulfan Sulfate	0.973	0.939	3.5	92	0.00	7.09- 7.15
23	A	Methoxychlor	0.460	0.461	-0.2	92	0.00	6.84- 6.90
24		Mirex	0.781	0.729	6.7	91	0.00	6.95- 7.01
25	B	Endrin Ketone	0.942	1.037	-10.1	105	0.00	7.51- 7.57
26	SA	Decachlorobiphenyl	1.195	1.308	-9.5	109	0.00	9.32- 9.38
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.18- 2.18
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.18- 2.18
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2876-CC2867
Lab FileID: 6G81299.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.811	10.8	90	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.929	13.5	91	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.246	8.0	91	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.131	-0.4	100	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.122	2.4	99	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.479	5.5	101	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.127	-9.3	104	0.00	4.43- 4.49
9	MB	Aldrin	1.046	1.032	1.3	99	0.00	4.98- 5.04
10		alachlor	0.141	0.129	8.5	91	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	0.971	2.5	98	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.002	3.1	98	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	0.932	4.8	95	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.917	4.4	97	0.00	6.41- 6.47
15	B	4,4'-DDE	1.004	0.960	4.4	97	0.00	6.58- 6.64
16	MA	Dieldrin	1.031	0.997	3.3	97	0.00	6.85- 6.91
17	MA	Endrin	0.991	0.982	0.9	100	0.00	7.35- 7.41
18	A	4,4'-DDD	0.848	0.822	3.1	98	0.00	7.53- 7.59
19	B	Endosulfan II	0.906	0.855	5.6	97	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.808	1.3	95	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.718	-11.5	108	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.819	7.0	92	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.384	15.4	85	0.00	9.31- 9.37
24		Mirex	0.734	0.638	13.1	91	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.894	-9.0	105	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.662	15.0	93	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.56- 2.56
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.56- 2.56
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6PST2867.M Mon Dec 20 22:31:04 2021

10.10.24 10

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2877-CC2867
Lab FileID: 6G81320.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\sy...77\6g81320.d\ECD1A.CH Vial: 2
Signal #2 : C:\msdchem\1\data\syrap\g6g2877\6g81320.d\ECD2B.CH
Acq On : 20-Dec-21, 16:39:43 Operator: thomasl
Sample : cc2867-25 Inst : GC6G
Misc : op37193,g6g2877,250,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue Dec 21 02:41:19 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.18- 2.18
2	SAB	Tetrachloro-m-xylene	0.621	0.562	9.5	101	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.593	9.6	107	0.00	2.55- 2.61
4	A	alpha-BHC	1.309	1.348	-3.0	120	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.266	-11.2	134	0.00	2.95- 3.01
6	MA	Heptachlor	1.049	1.207	-15.1	133	0.00	3.42- 3.48
7	B	beta-BHC	0.450	0.469	-4.2	124	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.212	-15.8	137	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.128	-1.6	117	0.00	3.74- 3.80
10		alachlor	0.109	0.086	21.1#	90	0.00	3.88- 3.94
11	B	Heptachlor Epoxide	0.974	1.111	-14.1	135	0.00	4.41- 4.47
12	B	gamma-Chlordane	0.988	1.097	-11.0	130	0.00	4.57- 4.63
13	B	alpha-Chlordane	0.949	1.005	-5.9	117	0.00	4.73- 4.79
14	A	Endosulfan I	1.059	1.121	-5.9	124	0.00	4.90- 4.96
15	B	4,4'-DDE	0.996	1.025	-2.9	123	0.00	4.85- 4.91
16	MA	Dieldrin	1.070	1.121	-4.8	123	0.00	5.21- 5.27
17	MA	Endrin	1.057	1.071	-1.3	121	0.00	5.51- 5.57
18	A	4,4'-DDD	0.788	0.828	-5.1	123	0.00	5.65- 5.71
19	B	Endosulfan II	0.996	0.972	2.4	123	0.00	5.83- 5.89
20	MA	4,4'-DDT	0.844	0.871	-3.2	125	0.00	6.06- 6.12
21	B	Endrin Aldehyde	0.761	0.799	-5.0	131	0.00	6.43- 6.49
22	B	Endosulfan Sulfate	0.973	0.989	-1.6	125	0.00	7.09- 7.15
23	A	Methoxychlor	0.460	0.444	3.5	111	0.00	6.84- 6.90
24		Mirex	0.781	0.792	-1.4	119	0.00	6.95- 7.01
25	B	Endrin Ketone	0.942	1.164	-23.6#	158#	0.00	7.51- 7.57
26	SA	Decachlorobiphenyl	1.195	1.202	-0.6	126	0.00	9.32- 9.38
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.18- 2.18
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.18- 2.18
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2877-CC2867
Lab FileID: 6G81320.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	114	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.831	8.6	106	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.976	9.1	108	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.310	3.3	113	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.176	-4.3	121	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.176	-2.3	117	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.505	0.4	118	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.181	-14.5	132	0.00	4.43- 4.49
9	MB	Aldrin	1.046	1.086	-3.8	120	0.00	4.98- 5.04
10		alachlor	0.141	0.137	2.8	106	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	1.025	-2.9	118	0.00	5.80- 5.86
12	B	gamma-Chlordane	1.034	1.046	-1.2	118	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	0.995	-1.6	117	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.972	-1.4	118	0.00	6.41- 6.47
15	B	4,4'-DDE	1.004	1.017	-1.3	118	0.00	6.58- 6.64
16	MA	Dieldrin	1.031	1.054	-2.2	118	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.036	-4.5	120	0.00	7.35- 7.41
18	A	4,4'-DDD	0.848	0.870	-2.6	120	0.00	7.53- 7.59
19	B	Endosulfan II	0.906	0.918	-1.3	118	0.00	7.70- 7.76
20	MA	4,4'-DDT	0.819	0.848	-3.5	117	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.744	-15.5	135	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.902	-2.4	119	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.453	0.2	113	0.00	9.31- 9.37
24		Mirex	0.734	0.705	4.0	111	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.976	-19.0	141	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.763	2.1	119	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	114	0.00	1.56- 2.56
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	114	0.00	1.56- 2.56
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81299.d 6pst2867.m Tue Dec 21 02:54:53 2021

10.10.25 10

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G1G5915	**Method:** SW846 8081B	**Instrument ID:** GC1G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G1G5915-DDT	1G171495.D	11/23/21 09:36	n/a	DDT/Endrin Breakdown Check
G1G5915-IC5915	1G171497.D	11/23/21 10:12	n/a	Initial cal 1
G1G5915-IC5915	1G171498.D	11/23/21 10:30	n/a	Initial cal 2
G1G5915-IC5915	1G171499.D	11/23/21 10:48	n/a	Initial cal 5
G1G5915-IC5915	1G171500.D	11/23/21 11:06	n/a	Initial cal 10
G1G5915-ICC5915	1G171501.D	11/23/21 11:24	n/a	Initial cal 25
G1G5915-IC5915	1G171502.D	11/23/21 11:43	n/a	Initial cal 50
G1G5915-IC5915	1G171503.D	11/23/21 12:01	n/a	Initial cal 75
G1G5915-IC5915	1G171504.D	11/23/21 12:19	n/a	Initial cal 100
G1G5915-IC5915	1G171505.D	11/23/21 12:37	n/a	Initial cal 500
G1G5915-IC5915	1G171506.D	11/23/21 12:55	n/a	Initial cal 500
G1G5915-ICV5915	1G171507.D	11/23/21 13:14	n/a	Initial cal verification 25
G1G5915-ICV5915	1G171508.D	11/23/21 13:32	n/a	Initial cal verification 500
G1G5915-ICV5915	1G171509.D	11/23/21 13:50	n/a	Initial cal verification 500
G1G5915-ICV5915	1G171510.D	11/23/21 14:08	n/a	Initial cal verification 25
G1G5915-ICV5915	1G171511.D	11/23/21 14:26	n/a	Initial cal verification 25

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G1G5947	**Method:** SW846 8081B	**Instrument ID:** GC1G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G1G5947-DDT	1G172303.D	12/22/21 22:43	n/a	DDT/Endrin Breakdown Check
G1G5947-CC5915	1G172304.D	12/22/21 23:02	n/a	Continuing cal 50
OP37098-MB1	1G172306.D	12/22/21 23:38	OP37098	Method Blank
OP37098-BS1	1G172307.D	12/22/21 23:56	OP37098	Blank Spike
OP37098-BSD	1G172308.D	12/23/21 00:14	OP37098	Blank Spike Duplicate
OP37098-BS13	1G172309.D	12/23/21 00:32	OP37098	Blank Spike
OP37098-BS14	1G172310.D	12/23/21 00:51	OP37098	Blank Spike
ZZZZZZ	1G172311.D	12/23/21 01:09	OP37098	(unrelated sample)
ZZZZZZ	1G172312.D	12/23/21 01:27	OP37098	(unrelated sample)
ZZZZZZ	1G172313.D	12/23/21 01:45	OP37098	(unrelated sample)
ZZZZZZ	1G172314.D	12/23/21 02:04	OP37098	(unrelated sample)
G1G5947-CC5915	1G172315.D	12/23/21 03:14	n/a	Continuing cal 25
ZZZZZZ	1G172317.D	12/23/21 03:51	OP37139	(unrelated sample)
ZZZZZZ	1G172318.D	12/23/21 04:09	OP37139	(unrelated sample)
ZZZZZZ	1G172319.D	12/23/21 04:28	OP37139	(unrelated sample)
ZZZZZZ	1G172320.D	12/23/21 04:46	OP37139	(unrelated sample)
ZZZZZZ	1G172321.D	12/23/21 05:04	OP37139	(unrelated sample)
OP37171-MB1	1G172323.D	12/23/21 05:40	OP37171	Method Blank
OP37171-BS1	1G172324.D	12/23/21 05:58	OP37171	Blank Spike
OP37171-BS13	1G172325.D	12/23/21 06:17	OP37171	Blank Spike
JD36682-7	1G172326.D	12/23/21 06:35	OP37171	HOFF SED-4
OP37171-MS	1G172327.D	12/23/21 06:53	OP37171	Matrix Spike
OP37171-MSD	1G172328.D	12/23/21 07:11	OP37171	Matrix Spike Duplicate
ZZZZZZ	1G172332.D	12/23/21 08:24	OP37171	(unrelated sample)
ZZZZZZ	1G172333.D	12/23/21 08:42	OP37171	(unrelated sample)
G1G5947-CC5915	1G172336.D	12/23/21 09:36	n/a	Continuing cal 50
ZZZZZZ	1G172341.D	12/23/21 11:07	OP37171	(unrelated sample)
ZZZZZZ	1G172342.D	12/23/21 11:25	OP37171	(unrelated sample)

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G1G5948	**Method:** SW846 8081B	**Instrument ID:** GC1G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G1G5948-DDT	1G172348.D	12/23/21 16:50	n/a	DDT/Endrin Breakdown Check
G1G5948-CC5915	1G172349.D	12/23/21 17:08	n/a	Continuing cal 50
OP37216-MB1	1G172351.D	12/23/21 18:12	OP37216	Method Blank
OP37216-BS1	1G172352.D	12/23/21 18:30	OP37216	Blank Spike
ZZZZZZ	1G172353.D	12/23/21 18:49	OP37171	(unrelated sample)
ZZZZZZ	1G172354.D	12/23/21 19:07	OP37171	(unrelated sample)
ZZZZZZ	1G172355.D	12/23/21 19:25	OP37171	(unrelated sample)
JD36682-8	1G172358.D	12/23/21 20:20	OP37171	HOFF SED-3
JD36682-10	1G172360.D	12/23/21 20:56	OP37171	HOFF SED-1
JD36682-11	1G172361.D	12/23/21 21:14	OP37171	HOFF DUP-121321SED
JD36811-1	1G172362.D	12/23/21 21:57	OP37216	(used for QC only; not part of job JD36682)
OP37216-MS	1G172363.D	12/23/21 22:15	OP37216	Matrix Spike
OP37216-MSD	1G172364.D	12/23/21 22:34	OP37216	Matrix Spike Duplicate
ZZZZZZ	1G172365.D	12/23/21 22:52	OP37216	(unrelated sample)
ZZZZZZ	1G172366.D	12/23/21 23:10	OP37216	(unrelated sample)
ZZZZZZ	1G172367.D	12/23/21 23:28	OP37216	(unrelated sample)
ZZZZZZ	1G172368.D	12/23/21 23:46	OP37216	(unrelated sample)
ZZZZZZ	1G172369.D	12/24/21 00:04	OP37216	(unrelated sample)

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G1G5950	**Method:** SW846 8081B	**Instrument ID:** GC1G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G1G5950-DDT	1G172383.D	12/28/21 00:07	n/a	DDT/Endrin Breakdown Check
G1G5950-IC5950	1G172385.D	12/28/21 00:49	n/a	Initial cal 100
G1G5950-IC5950	1G172386.D	12/28/21 01:07	n/a	Initial cal 75
G1G5950-IC5950	1G172387.D	12/28/21 01:43	n/a	Initial cal 50
G1G5950-ICC5950	1G172388.D	12/28/21 02:01	n/a	Initial cal 25
G1G5950-IC5950	1G172389.D	12/28/21 02:19	n/a	Initial cal 10
G1G5950-IC5950	1G172390.D	12/28/21 02:38	n/a	Initial cal 5
G1G5950-IC5950	1G172391.D	12/28/21 02:56	n/a	Initial cal 2
G1G5950-IC5950	1G172392.D	12/28/21 03:14	n/a	Initial cal 1
G1G5950-IC5950	1G172393.D	12/28/21 03:32	n/a	Initial cal 500
G1G5950-IC5950	1G172394.D	12/28/21 03:50	n/a	Initial cal 500
G1G5950-ICV5950	1G172396.D	12/28/21 04:27	n/a	Initial cal verification 500
G1G5950-ICV5950	1G172397.D	12/28/21 04:45	n/a	Initial cal verification 500
G1G5950-ICV5950	1G172398.D	12/28/21 05:03	n/a	Initial cal verification 25
G1G5950-ICV5950	1G172399.D	12/28/21 05:21	n/a	Initial cal verification 25

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G1G5951	**Method:** SW846 8081B	**Instrument ID:** GC1G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G1G5951-DDT	1G172400.D	12/28/21 21:23	n/a	DDT/Endrin Breakdown Check
G1G5951-ICV5950	1G172401.D	12/28/21 21:44	n/a	Initial cal verification 25

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G1G5954	**Method:** SW846 8081B	**Instrument ID:** GC1G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G1G5954-DDT	1G172454.D	12/30/21 20:46	n/a	DDT/Endrin Breakdown Check
G1G5954-CC5950	1G172455.D	12/30/21 21:04	n/a	Continuing cal 25
ZZZZZZ	1G172457.D	12/30/21 21:41	OP37246	(unrelated sample)
ZZZZZZ	1G172458.D	12/30/21 21:59	OP37175	(unrelated sample)
JD36956-5	1G172459.D	12/30/21 22:17	OP37293	(used for QC only; not part of job JD36682)
ZZZZZZ	1G172460.D	12/30/21 22:35	OP37139	(unrelated sample)
OP37175-MB1	1G172461.D	12/30/21 22:53	OP37175	Method Blank
OP37175-BS1	1G172462.D	12/30/21 23:12	OP37175	Blank Spike
OP37175-BSD	1G172463.D	12/30/21 23:30	OP37175	Blank Spike Duplicate
JD36690-1	1G172464.D	12/30/21 23:48	OP37175	(used for QC only; not part of job JD36682)
OP37175-MS	1G172465.D	12/31/21 00:06	OP37175	Matrix Spike
OP37175-MSD	1G172466.D	12/31/21 00:24	OP37175	Matrix Spike Duplicate
ZZZZZZ	1G172467.D	12/31/21 00:43	OP37171	(unrelated sample)
ZZZZZZ	1G172468.D	12/31/21 01:01	OP37171	(unrelated sample)
ZZZZZZ	1G172469.D	12/31/21 01:19	OP37171	(unrelated sample)
JD36682-9	1G172470.D	12/31/21 01:37	OP37171	HOFF SED-2

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G1G5955	**Method:** SW846 8081B	**Instrument ID:** GC1G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G1G5955-DDT	1G172471.D	12/31/21 02:56	n/a	DDT/Endrin Breakdown Check
G1G5955-CC5950	1G172472.D	12/31/21 03:14	n/a	Continuing cal 50
OP37261-MB1	1G172474.D	12/31/21 03:50	OP37261	Method Blank
OP37261-BS1	1G172475.D	12/31/21 04:09	OP37261	Blank Spike
JD36933-1	1G172477.D	12/31/21 04:45	OP37261	(used for QC only; not part of job JD36682)
OP37261-MS	1G172478.D	12/31/21 05:03	OP37261	Matrix Spike
OP37261-MSD	1G172479.D	12/31/21 05:21	OP37261	Matrix Spike Duplicate
ZZZZZZ	1G172480.D	12/31/21 05:39	OP37261	(unrelated sample)
ZZZZZZ	1G172481.D	12/31/21 05:58	OP37261	(unrelated sample)
ZZZZZZ	1G172482.D	12/31/21 06:16	OP37261	(unrelated sample)
ZZZZZZ	1G172483.D	12/31/21 06:34	OP37261	(unrelated sample)
ZZZZZZ	1G172484.D	12/31/21 06:52	OP37261	(unrelated sample)
ZZZZZZ	1G172485.D	12/31/21 07:10	OP37261	(unrelated sample)
ZZZZZZ	1G172486.D	12/31/21 07:28	OP37261	(unrelated sample)
ZZZZZZ	1G172487.D	12/31/21 07:47	OP37261	(unrelated sample)
ZZZZZZ	1G172488.D	12/31/21 08:05	OP37261	(unrelated sample)
ZZZZZZ	1G172489.D	12/31/21 08:23	OP37261	(unrelated sample)
ZZZZZZ	1G172490.D	12/31/21 08:41	OP37261	(unrelated sample)
G1G5955-CC5950	1G172493.D	12/31/21 09:35	n/a	Continuing cal 25
ZZZZZZ	1G172495.D	12/31/21 10:12	OP37261	(unrelated sample)

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2867	**Method:** EPA 608.3	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2867-IC2867	6G81074.D	12/10/21 03:54	n/a	Initial cal 100
G6G2867-IC2867	6G81075.D	12/10/21 04:13	n/a	Initial cal 75
G6G2867-IC2867	6G81076.D	12/10/21 04:31	n/a	Initial cal 50
G6G2867-ICC2867	6G81077.D	12/10/21 04:49	n/a	Initial cal 25
G6G2867-IC2867	6G81078.D	12/10/21 05:08	n/a	Initial cal 10
G6G2867-IC2867	6G81079.D	12/10/21 05:25	n/a	Initial cal 5
G6G2867-IC2867	6G81080.D	12/10/21 05:43	n/a	Initial cal 2
G6G2867-IC2867	6G81081.D	12/10/21 06:02	n/a	Initial cal 1
G6G2867-IC2867	6G81082.D	12/10/21 06:20	n/a	Initial cal 500
G6G2867-IC2867	6G81083.D	12/10/21 06:38	n/a	Initial cal 500
G6G2867-ICV2867	6G81084.D	12/10/21 06:57	n/a	Initial cal verification 25
G6G2867-ICV2867	6G81085.D	12/10/21 07:15	n/a	Initial cal verification 500
G6G2867-ICV2867	6G81086.D	12/10/21 07:33	n/a	Initial cal verification 500
G6G2867-ICV2867	6G81087.D	12/10/21 07:52	n/a	Initial cal verification 25
G6G2867-ICV2867	6G81088.D	12/10/21 08:10	n/a	Initial cal verification 25

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2876	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2876-DDT	6G81298.D	12/20/21 02:01	n/a	DDT/Endrin Breakdown Check
G6G2876-CC2867	6G81299.D	12/20/21 02:19	n/a	Continuing cal 50
OP37193-MB1	6G81301.D	12/20/21 03:16	OP37193	Method Blank
OP37193-BS1	6G81302.D	12/20/21 03:34	OP37193	Blank Spike
OP37193-BSD	6G81303.D	12/20/21 03:51	OP37193	Blank Spike Duplicate
ZZZZZZ	6G81304.D	12/20/21 04:09	OP37193	(unrelated sample)
ZZZZZZ	6G81305.D	12/20/21 04:26	OP37193	(unrelated sample)
ZZZZZZ	6G81306.D	12/20/21 04:44	OP37193	(unrelated sample)
ZZZZZZ	6G81307.D	12/20/21 05:02	OP37193	(unrelated sample)
ZZZZZZ	6G81308.D	12/20/21 05:20	OP37193	(unrelated sample)
JD36682-2	6G81309.D	12/20/21 05:38	OP37193	HOFF SW-4
JD36682-3	6G81310.D	12/20/21 05:56	OP37193	HOFF SW-3
JD36682-4	6G81311.D	12/20/21 06:14	OP37193	HOFF SW-2
JD36682-5	6G81312.D	12/20/21 06:32	OP37193	HOFF SW-1
JD36682-6	6G81313.D	12/20/21 06:50	OP37193	HOFF-DUP-121321SW
ZZZZZZ	6G81314.D	12/20/21 07:08	OP37193	(unrelated sample)
ZZZZZZ	6G81315.D	12/20/21 07:25	OP37120	(unrelated sample)
ZZZZZZ	6G81318.D	12/20/21 08:19	OP37120	(unrelated sample)

Run Sequence Report

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2877	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2877-DDT	6G81319.D	12/20/21 16:21	n/a	DDT/Endrin Breakdown Check
G6G2877-CC2867	6G81320.D	12/20/21 16:39	n/a	Continuing cal 25
OP37121-MB1	6G81322.D	12/20/21 18:11	OP37121	Method Blank
OP37121-BS1	6G81323.D	12/20/21 18:29	OP37121	Blank Spike
OP37121-BSD	6G81324.D	12/20/21 18:46	OP37121	Blank Spike Duplicate
ZZZZZZ	6G81325.D	12/20/21 19:04	OP37121	(unrelated sample)
ZZZZZZ	6G81327.D	12/20/21 19:40	OP37121	(unrelated sample)
ZZZZZZ	6G81329.D	12/20/21 20:16	OP37121	(unrelated sample)
ZZZZZZ	6G81331.D	12/20/21 20:52	OP37121	(unrelated sample)
ZZZZZZ	6G81337.D	12/20/21 22:39	OP37121	(unrelated sample)
ZZZZZZ	6G81338.D	12/20/21 22:57	OP37121	(unrelated sample)
ZZZZZZ	6G81339.D	12/20/21 23:15	OP37121	(unrelated sample)
ZZZZZZ	6G81340.D	12/20/21 23:32	OP37121	(unrelated sample)
G6G2877-CC2867	6G81343.D	12/21/21 00:25	n/a	Continuing cal 50

GC/LC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/21/21 09:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81309.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 05:38:40
Operator : christp
Sample : jd36682-2
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:48:10 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.684	2.060	906.9E6	626.1E6	50.000	50.000
27) I 1-bromo-2...	1.684	2.060	906.9E6	626.1E6	50.000	50.000
33) I 1-bromo-2...	1.684	2.060	906.9E6	626.1E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.261	2.887	288.0E6	286.4E6	25.572m	25.174
Spiked Amount	40.000 Range	30 - 150	Recovery	=	63.93%	62.93%
26) SA Decachlor...	9.350	11.845	394.9E6	217.2E6	18.212m	22.258m
Spiked Amount	40.000		Recovery	=	45.53%	55.65%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

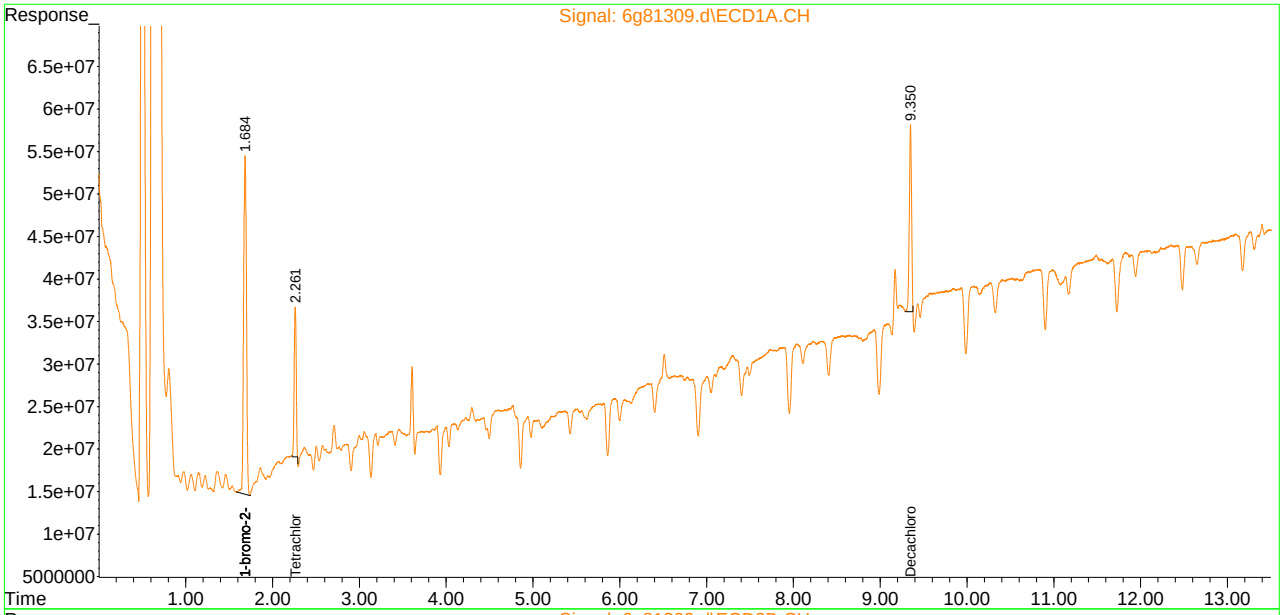
11.1.1 11

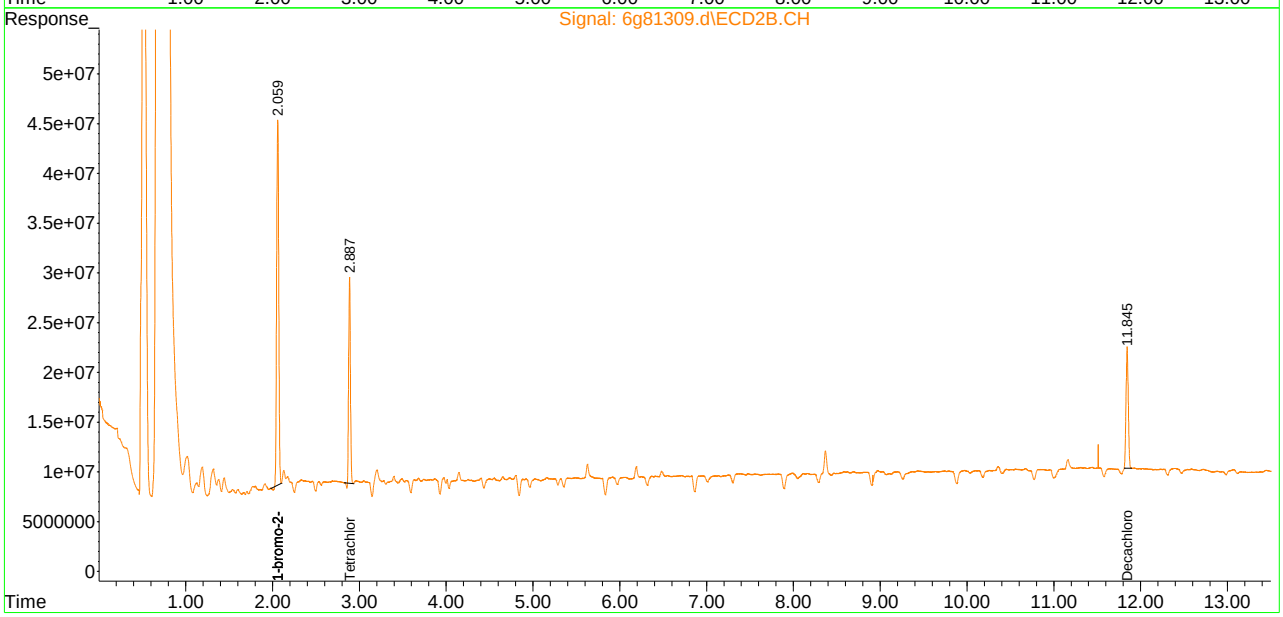
Quantitation Report (QT Reviewed)

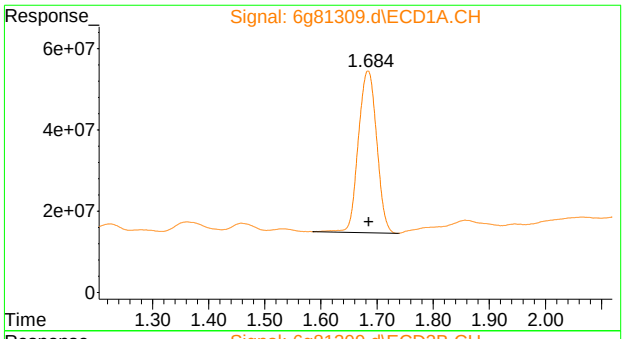
Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81309.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 05:38:40
Operator : christp
Sample : jd36682-2
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:48:10 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

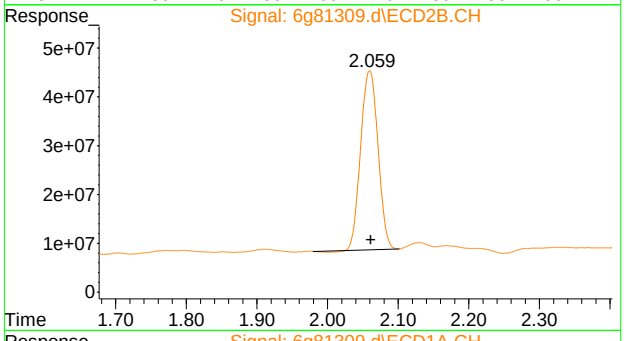






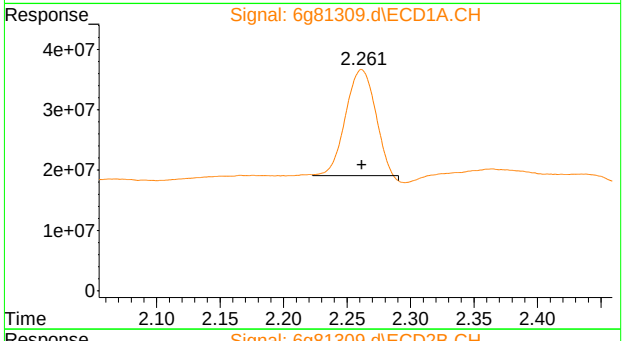
#1 1-bromo-2-nitrobenzene

R.T.: 1.684 min
Delta R.T.: 0.000 min
Response: 906885398
Conc: 50.00 PPB



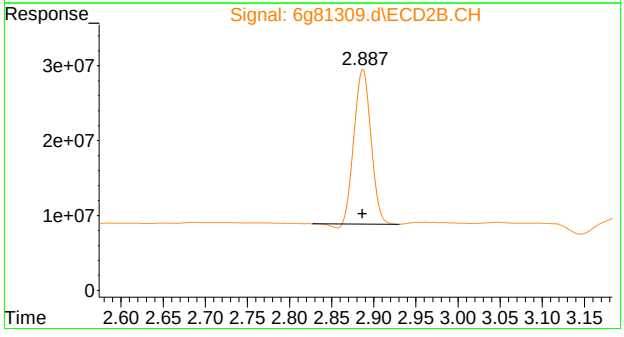
#1 1-bromo-2-nitrobenzene

R.T.: 2.060 min
Delta R.T.: -0.002 min
Response: 626065291
Conc: 50.00 PPB



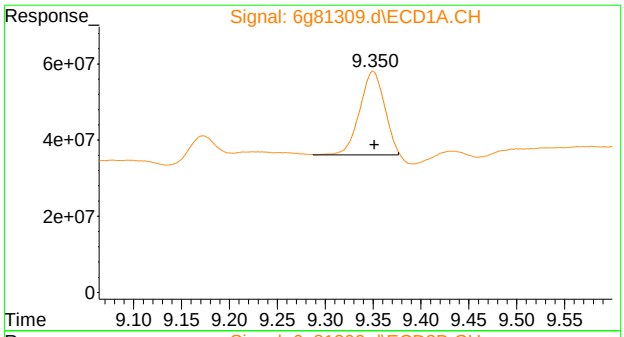
#2 Tetrachloro-m-xylene

R.T.: 2.261 min
Delta R.T.: 0.000 min
Response: 287999261
Conc: 25.57 PPB m



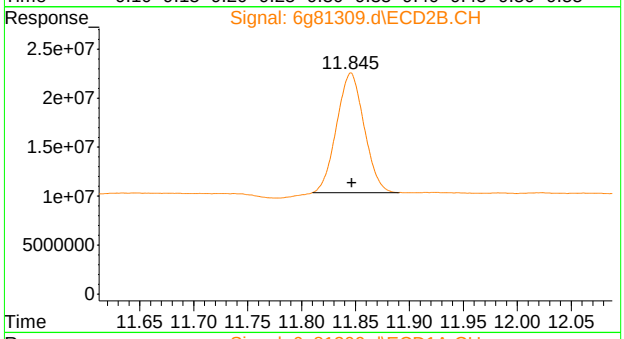
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: 0.000 min
Response: 286405381
Conc: 25.17 PPB



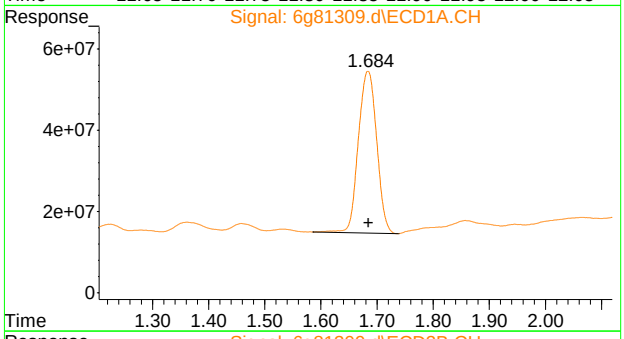
#26 Decachlorobiphenyl

R.T.: 9.350 min
Delta R.T.: -0.002 min
Response: 394903158
Conc: 18.21 PPB m



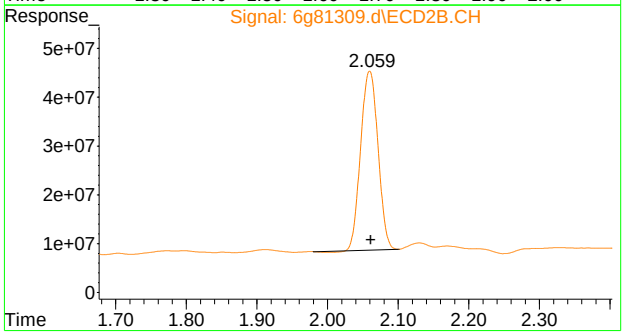
#26 Decachlorobiphenyl

R.T.: 11.845 min
Delta R.T.: -0.001 min
Response: 217203816
Conc: 22.26 PPB m



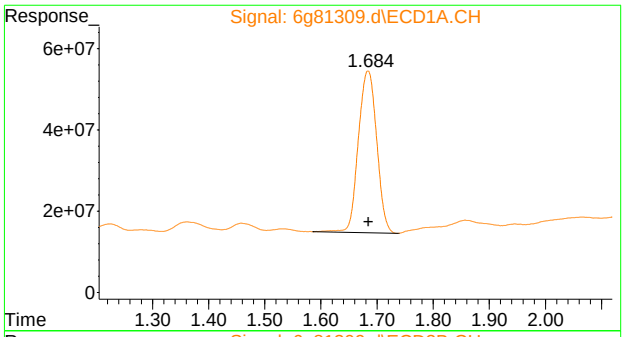
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.684 min
Delta R.T.: 0.000 min
Response: 906885398
Conc: 50.00 PPB



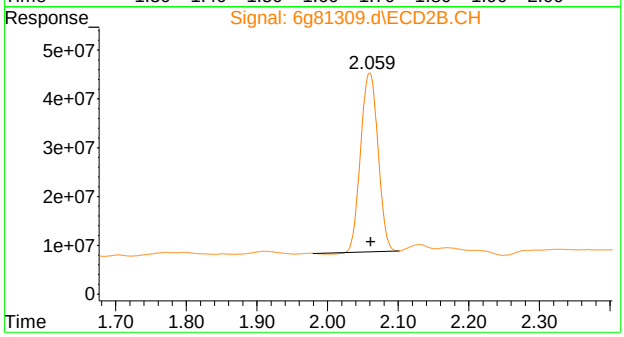
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.060 min
Delta R.T.: -0.002 min
Response: 626065291
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.684 min
Delta R.T.: 0.000 min
Response: 906885398
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.060 min
Delta R.T.: -0.002 min
Response: 626065291
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/21/21 09:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81310.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 05:56:27
Operator : christp
Sample : jd36682-3
Misc : op37193,g6g2876,260,,,2,1
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:49:00 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.690	2.064	971.0E6	689.2E6	50.000	50.000
27) I 1-bromo-2...	1.690	2.064	971.0E6	689.2E6	50.000	50.000
33) I 1-bromo-2...	1.690	2.064	971.0E6	689.2E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.265	2.889	307.1E6	297.3E6	25.467m	23.741
Spiked Amount	40.000 Range	30 - 150	Recovery	=	63.67%	59.35%
26) SA Decachlor...	9.349	11.845	391.4E6	182.0E6	16.860	16.944
Spiked Amount	40.000		Recovery	=	42.15%	42.36%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

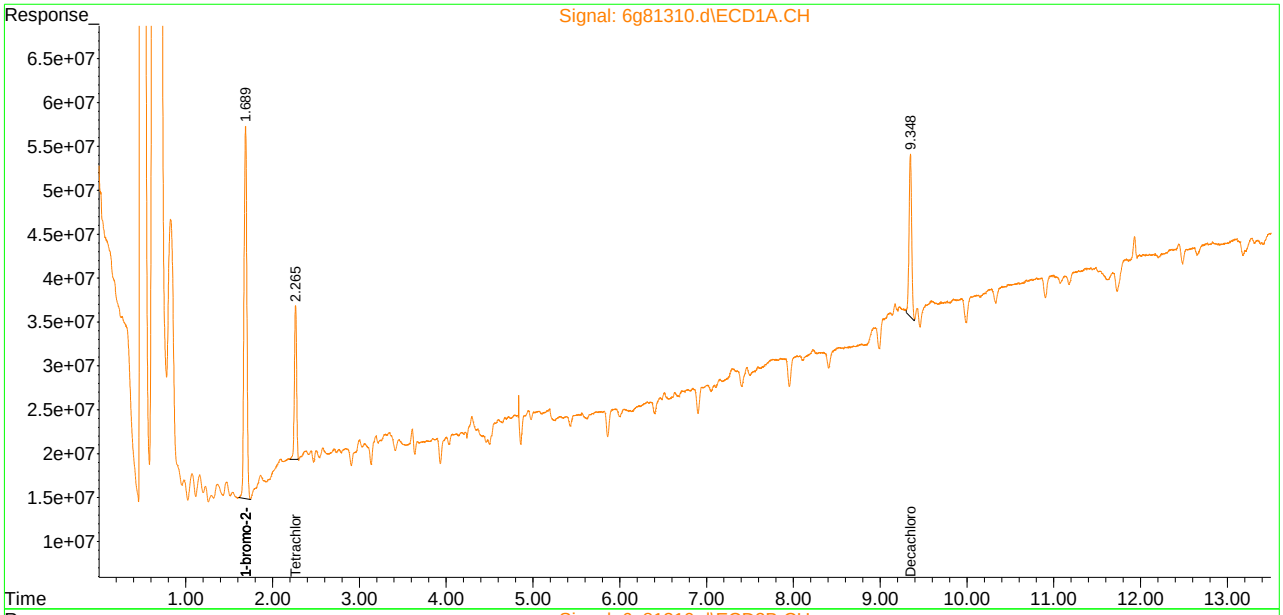
11.1.2 11

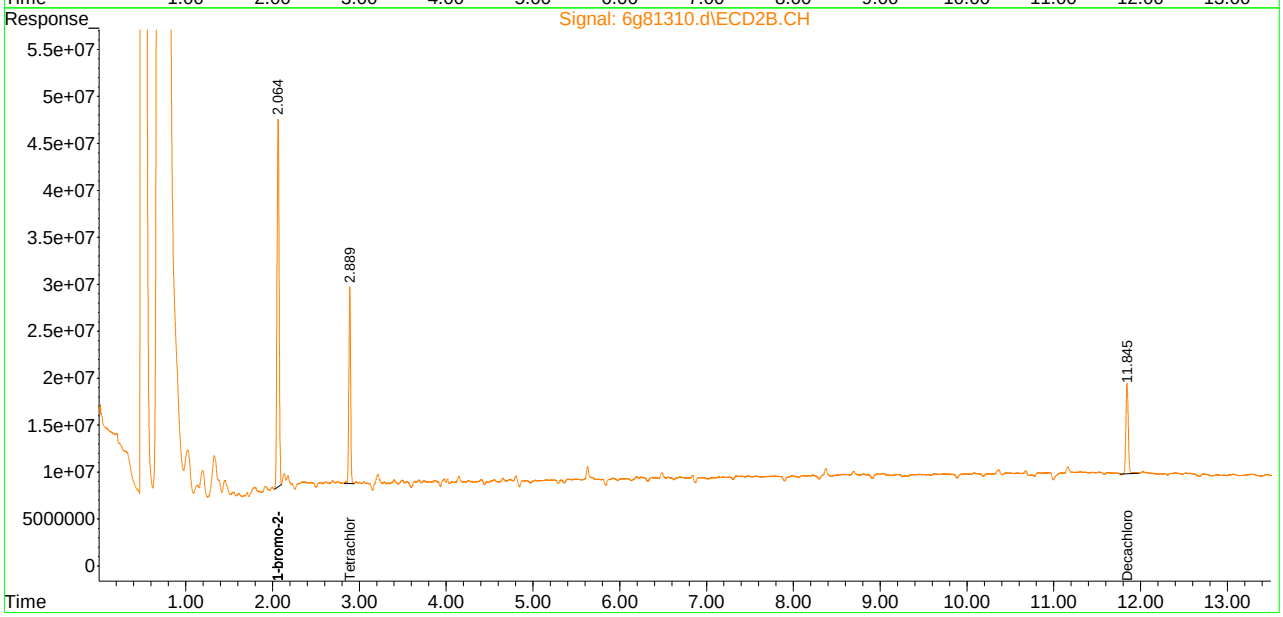
Quantitation Report (QT Reviewed)

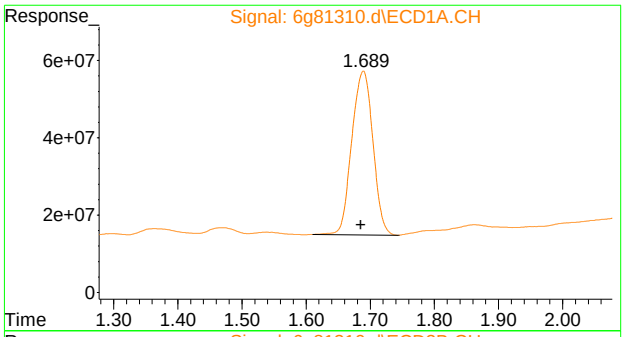
Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81310.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 05:56:27
Operator : christp
Sample : jd36682-3
Misc : op37193,g6g2876,260,,,2,1
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:49:00 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

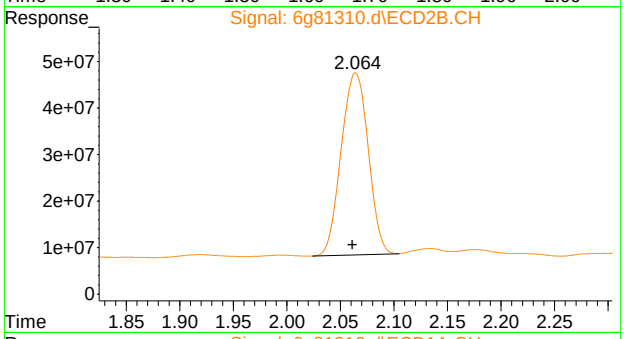






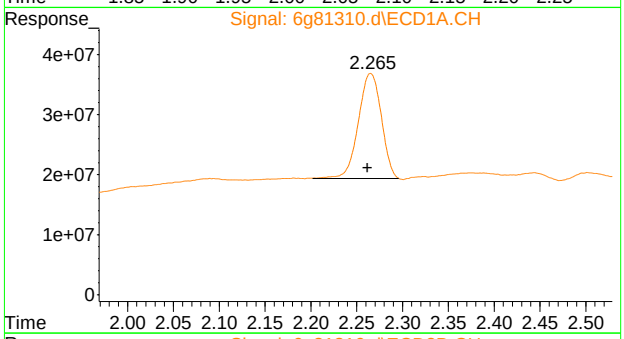
#1 1-bromo-2-nitrobenzene

R.T.: 1.690 min
Delta R.T.: 0.004 min
Response: 970985960
Conc: 50.00 PPB



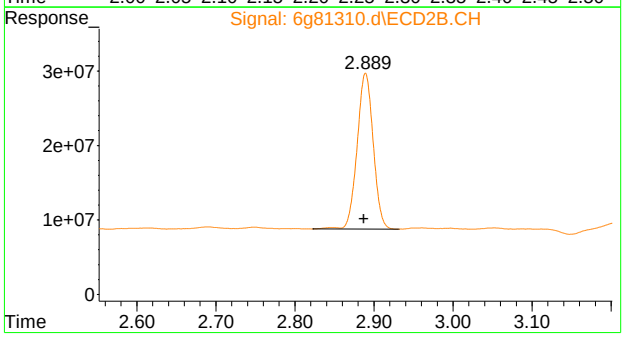
#1 1-bromo-2-nitrobenzene

R.T.: 2.064 min
Delta R.T.: 0.003 min
Response: 689209848
Conc: 50.00 PPB



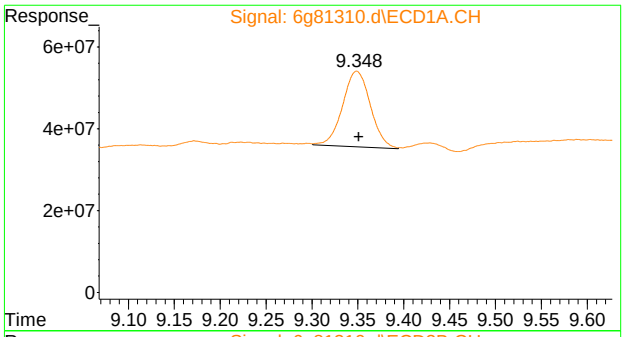
#2 Tetrachloro-m-xylene

R.T.: 2.265 min
Delta R.T.: 0.003 min
Response: 307089130
Conc: 25.47 PPB m



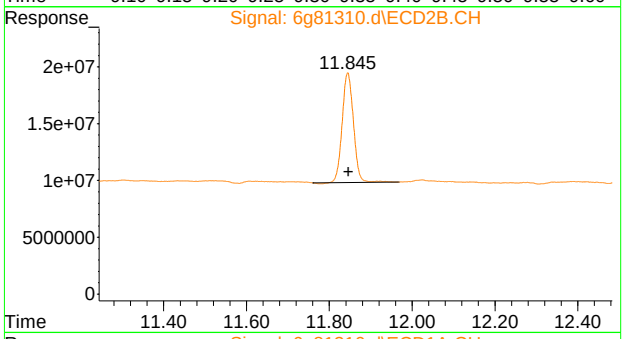
#2 Tetrachloro-m-xylene

R.T.: 2.889 min
Delta R.T.: 0.003 min
Response: 297338184
Conc: 23.74 PPB



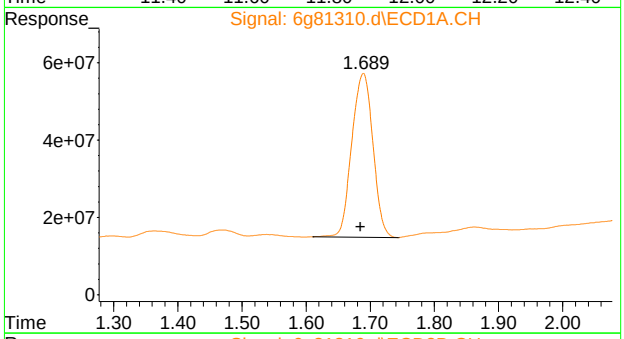
#26 Decachlorobiphenyl

R.T.: 9.349 min
Delta R.T.: -0.002 min
Response: 391430720
Conc: 16.86 PPB



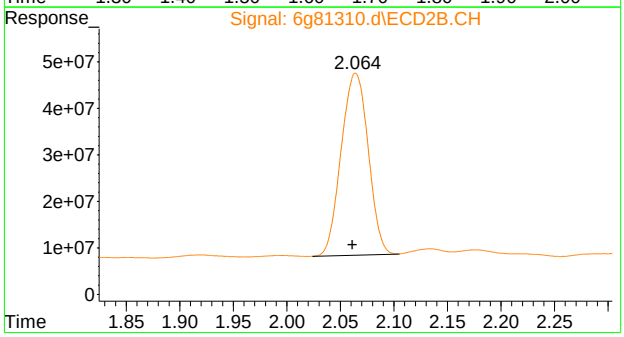
#26 Decachlorobiphenyl

R.T.: 11.845 min
Delta R.T.: -0.002 min
Response: 182028696
Conc: 16.94 PPB



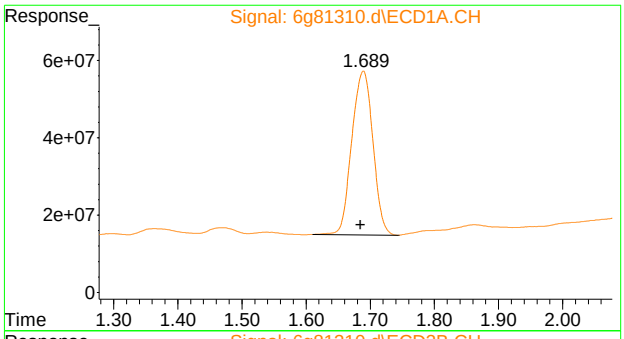
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.690 min
Delta R.T.: 0.005 min
Response: 970985960
Conc: 50.00 PPB



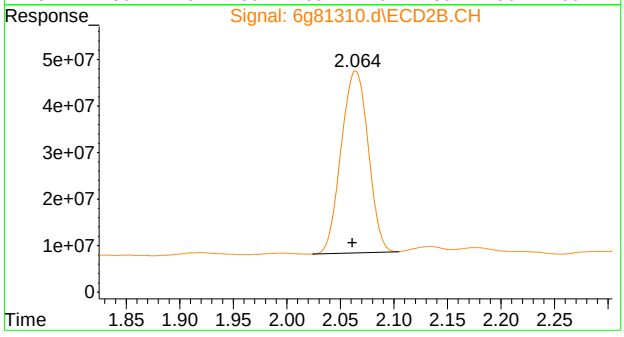
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.064 min
Delta R.T.: 0.003 min
Response: 689209848
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.690 min
Delta R.T.: 0.005 min
Response: 970985960
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.064 min
Delta R.T.: 0.003 min
Response: 689209848
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/21/21 09:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81311.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 06:14:14
Operator : christp
Sample : jd36682-4
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:49:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.682	2.060	946.2E6	675.6E6	50.000	50.000
27) I 1-bromo-2...	1.682	2.060	946.2E6	675.6E6	50.000	50.000
33) I 1-bromo-2...	1.682	2.060	946.2E6	675.6E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.262	2.886	352.6E6	341.8E6	30.004	27.844
Spiked Amount 40.000	Range 30 - 150		Recovery =		75.01%	69.61%
26) SA Decachlor...	9.350	11.845	304.3E6	172.5E6	13.451m	16.386
Spiked Amount 40.000			Recovery =		33.63%	40.96%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

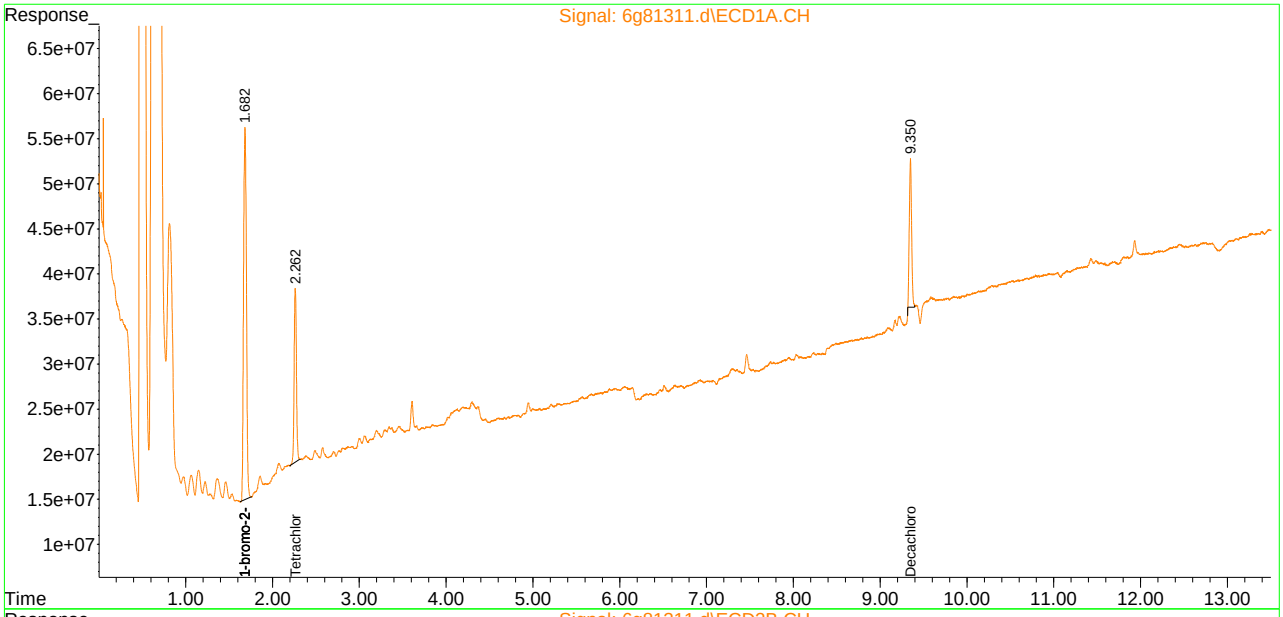
11.1.3 11

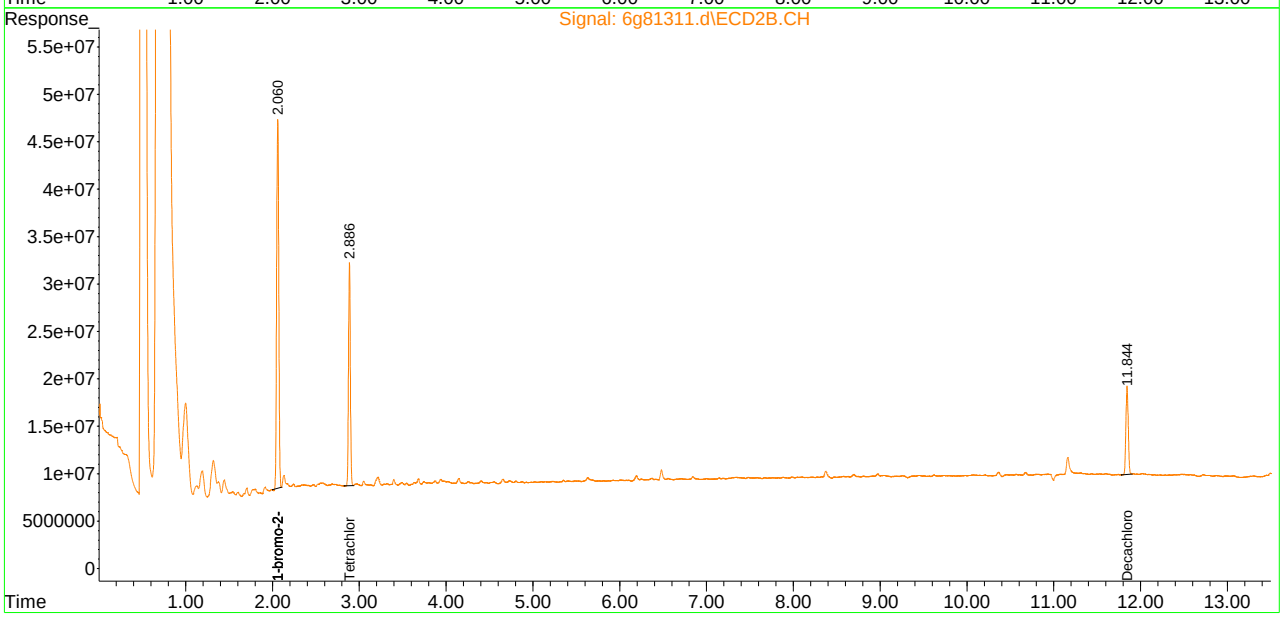
Quantitation Report (QT Reviewed)

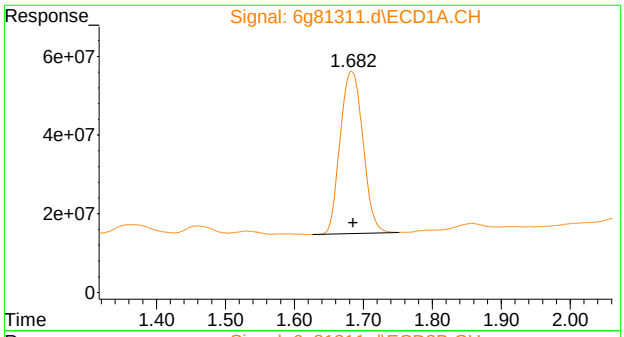
Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81311.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 06:14:14
Operator : christp
Sample : jd36682-4
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:49:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

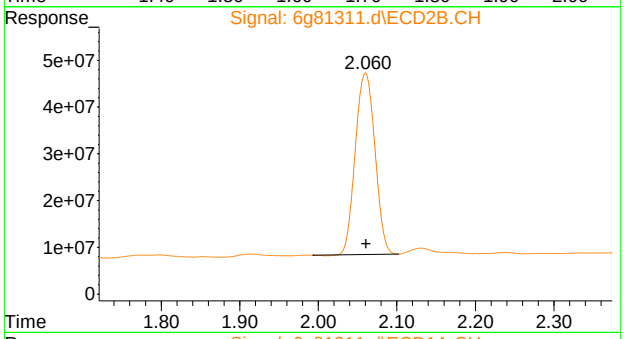






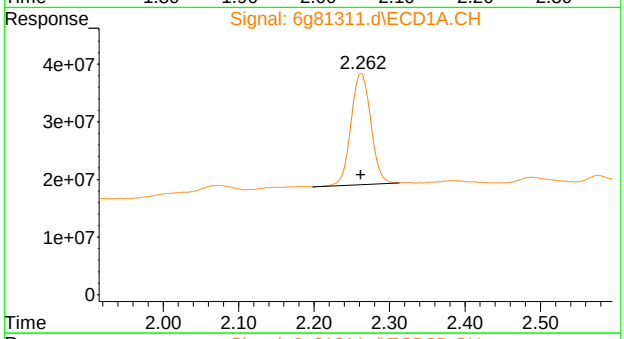
#1 1-bromo-2-nitrobenzene

R.T.: 1.682 min
Delta R.T.: -0.003 min
Response: 946169357
Conc: 50.00 PPB



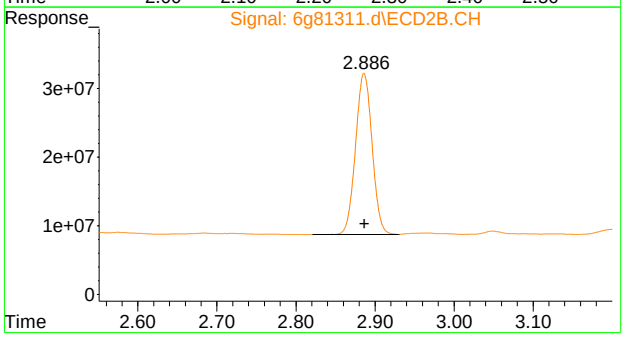
#1 1-bromo-2-nitrobenzene

R.T.: 2.060 min
Delta R.T.: -0.001 min
Response: 675553933
Conc: 50.00 PPB



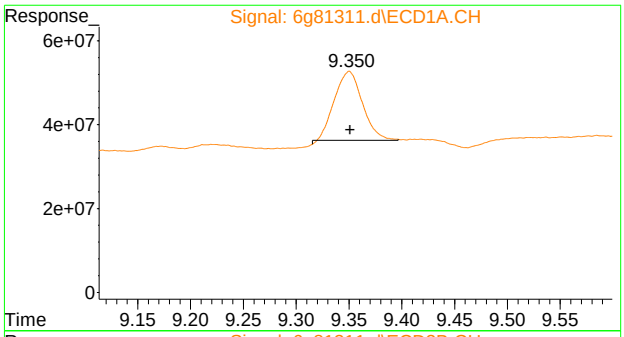
#2 Tetrachloro-m-xylene

R.T.: 2.262 min
Delta R.T.: 0.000 min
Response: 352558841
Conc: 30.00 PPB



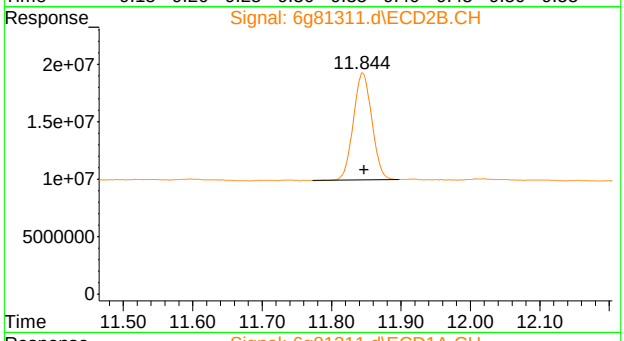
#2 Tetrachloro-m-xylene

R.T.: 2.886 min
Delta R.T.: 0.000 min
Response: 341825917
Conc: 27.84 PPB



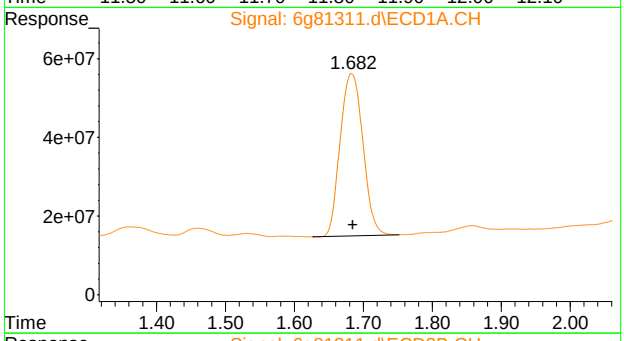
#26 Decachlorobiphenyl

R.T.: 9.350 min
Delta R.T.: -0.001 min
Response: 304293654
Conc: 13.45 PPB m



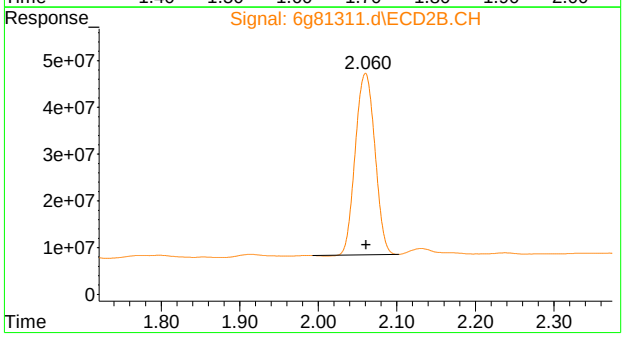
#26 Decachlorobiphenyl

R.T.: 11.845 min
Delta R.T.: -0.002 min
Response: 172547215
Conc: 16.39 PPB



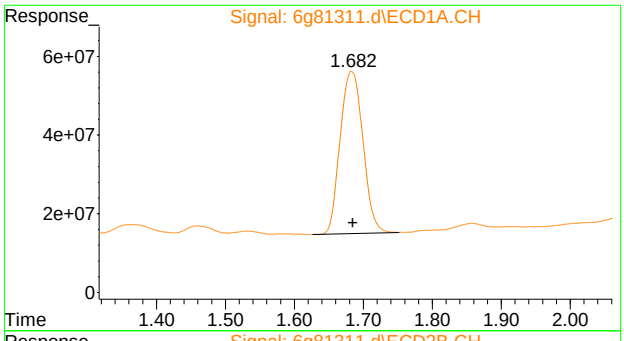
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.682 min
Delta R.T.: -0.002 min
Response: 946169357
Conc: 50.00 PPB



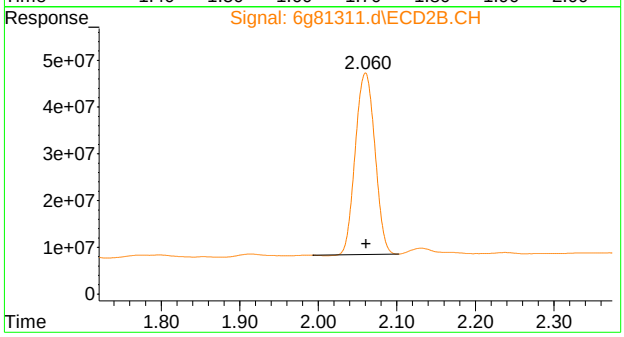
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.060 min
Delta R.T.: -0.001 min
Response: 675553933
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.682 min
Delta R.T.: -0.002 min
Response: 946169357
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.060 min
Delta R.T.: -0.001 min
Response: 675553933
Conc: 50.00 PPB

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81312.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 06:32:34
Operator : christp
Sample : jd36682-5
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:50:07 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.688	2.062	930.3E6	666.8E6	50.000	50.000
27) I 1-bromo-2...	1.688	2.062	930.3E6	666.8E6	50.000	50.000
33) I 1-bromo-2...	1.688	2.062	930.3E6	666.8E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.266	2.887	336.4E6	321.2E6	29.114	26.508
Spiked Amount 40.000	Range 30 - 150		Recovery =		72.78%	66.27%
26) SA Decachlor...	9.350	11.844	403.1E6	229.5E6	18.122	22.078
Spiked Amount 40.000			Recovery =		45.31%	55.19%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

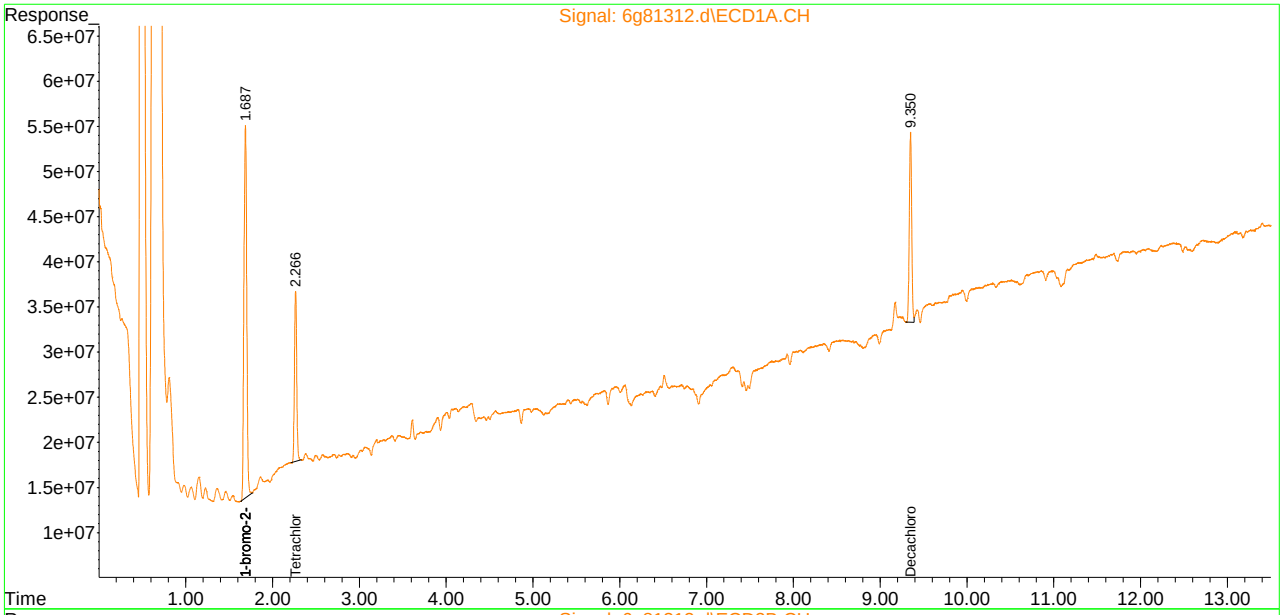
11.1.4 11

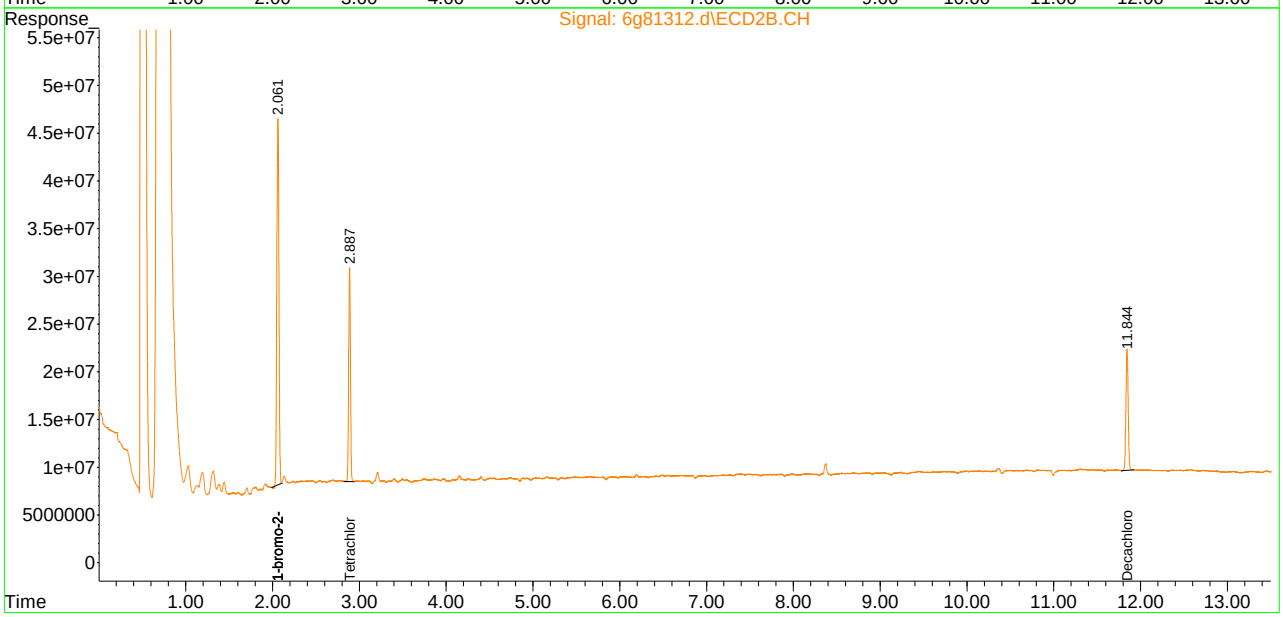
Quantitation Report (QT Reviewed)

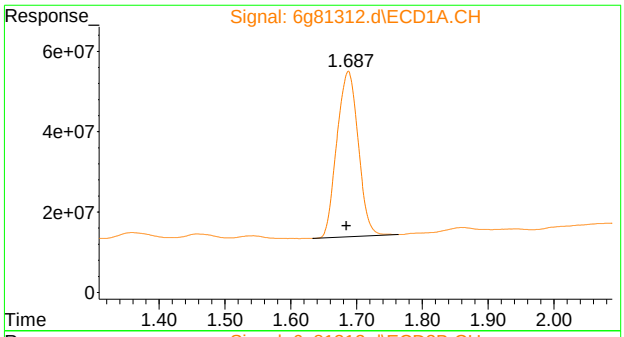
Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81312.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 06:32:34
Operator : christp
Sample : jd36682-5
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:50:07 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

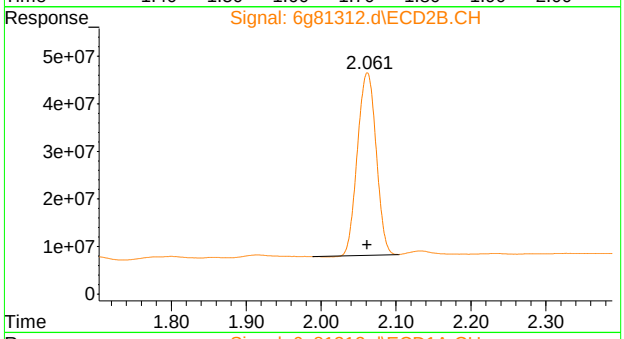






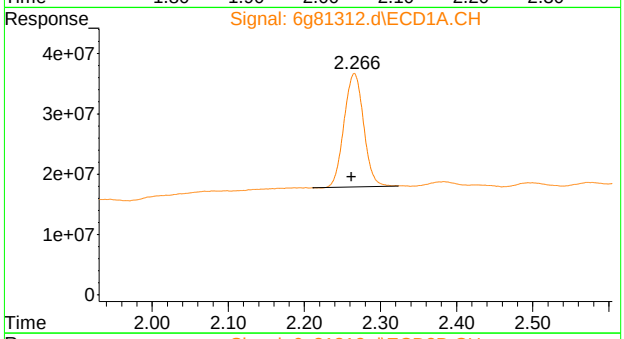
#1 1-bromo-2-nitrobenzene

R.T.: 1.688 min
Delta R.T.: 0.003 min
Response: 930262074
Conc: 50.00 PPB



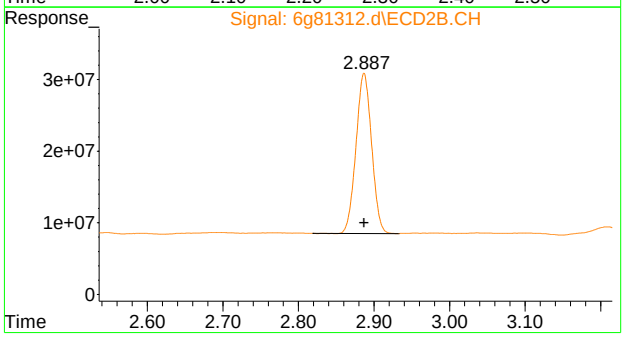
#1 1-bromo-2-nitrobenzene

R.T.: 2.062 min
Delta R.T.: 0.000 min
Response: 666835188
Conc: 50.00 PPB



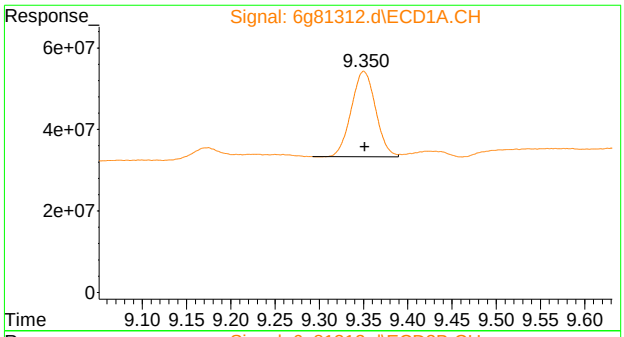
#2 Tetrachloro-m-xylene

R.T.: 2.266 min
Delta R.T.: 0.004 min
Response: 336352953
Conc: 29.11 PPB



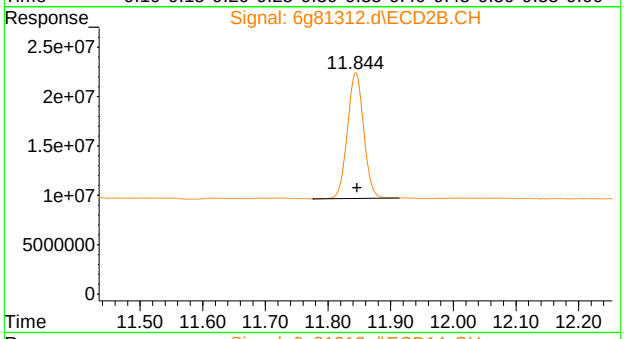
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: 0.000 min
Response: 321224841
Conc: 26.51 PPB



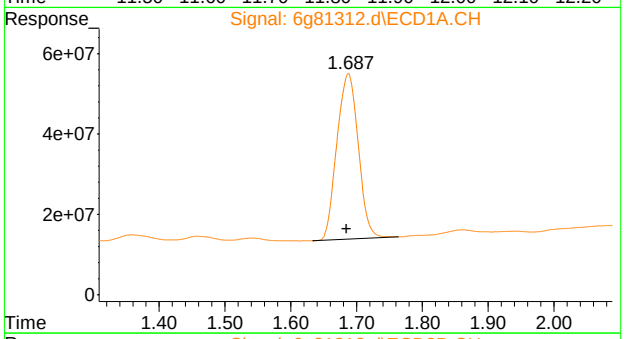
#26 Decachlorobiphenyl

R.T.: 9.350 min
Delta R.T.: 0.000 min
Response: 403086101
Conc: 18.12 PPB



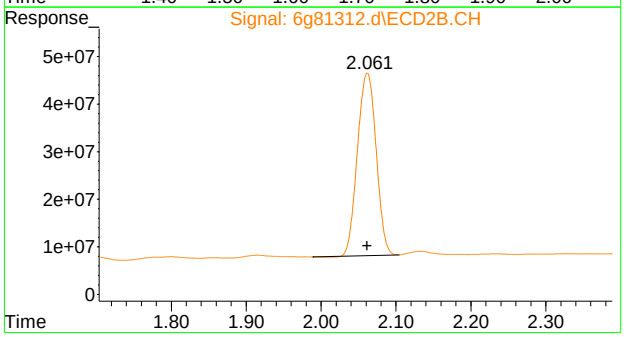
#26 Decachlorobiphenyl

R.T.: 11.844 min
Delta R.T.: -0.002 min
Response: 229476200
Conc: 22.08 PPB



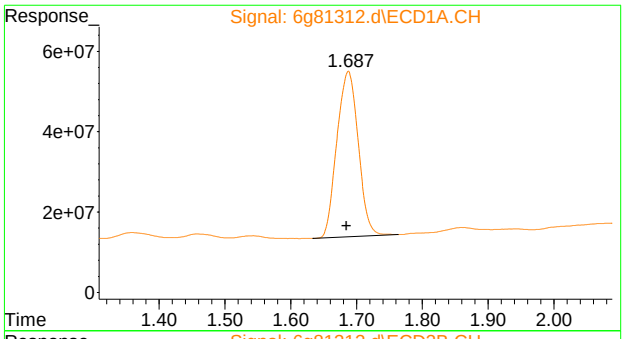
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.688 min
Delta R.T.: 0.003 min
Response: 930262074
Conc: 50.00 PPB



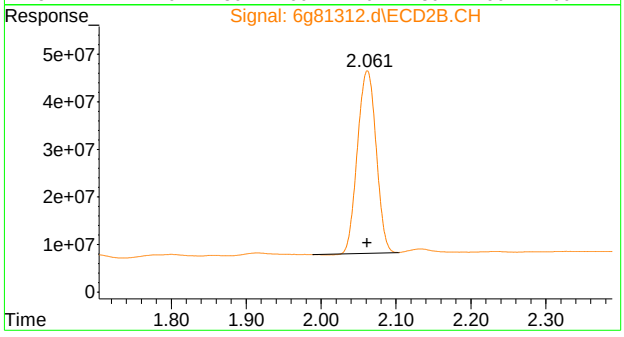
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.062 min
Delta R.T.: 0.000 min
Response: 666835188
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.688 min
Delta R.T.: 0.003 min
Response: 930262074
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.062 min
Delta R.T.: 0.000 min
Response: 666835188
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
12/21/21 09:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81313.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 06:50:26
Operator : christp
Sample : jd36682-6
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:51:22 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.688	2.062	1011.2E6	711.9E6	50.000	50.000
27) I 1-bromo-2...	1.688	2.062	1011.2E6	711.9E6	50.000	50.000
33) I 1-bromo-2...	1.688	2.062	1011.2E6	711.9E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.264	2.888	328.8E6	311.8E6	26.185	24.098
Spiked Amount 40.000	Range 30 - 150		Recovery =		65.46%	60.24%
26) SA Decachlor...	9.350	11.845	434.0E6	232.7E6	17.952m	20.973m
Spiked Amount 40.000			Recovery =		44.88%	52.43%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

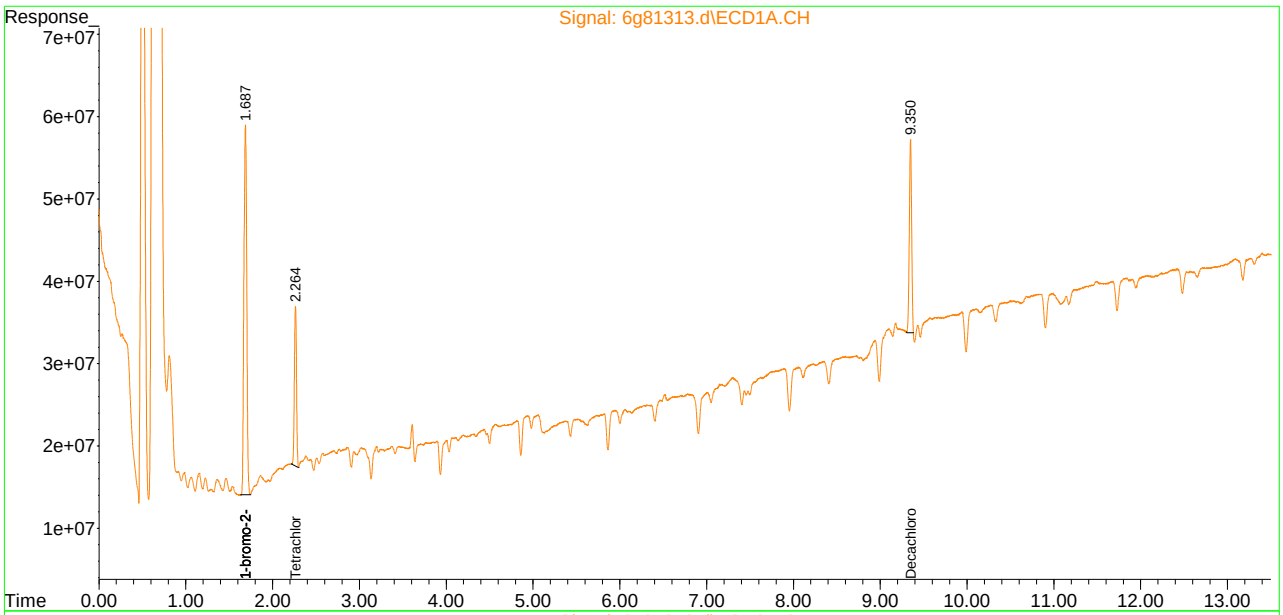
11.1.5 11

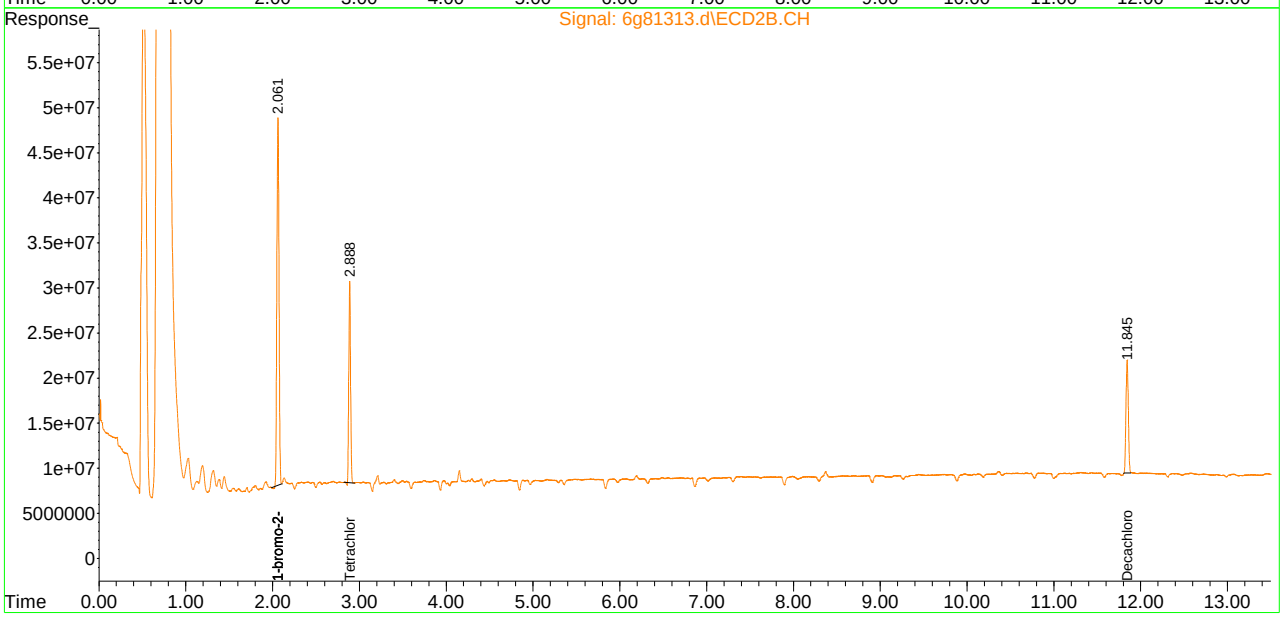
Quantitation Report (QT Reviewed)

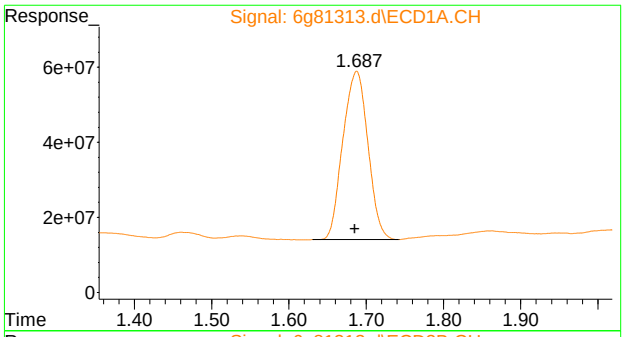
Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81313.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 06:50:26
Operator : christp
Sample : jd36682-6
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:51:22 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

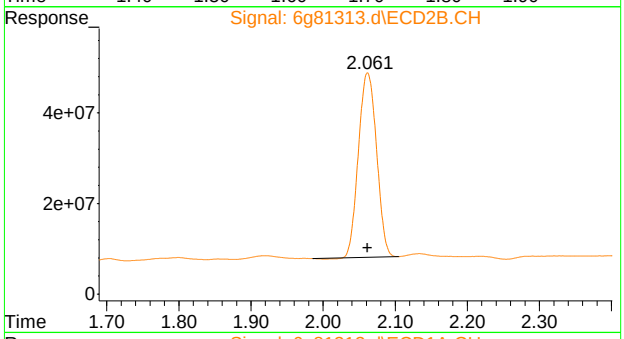






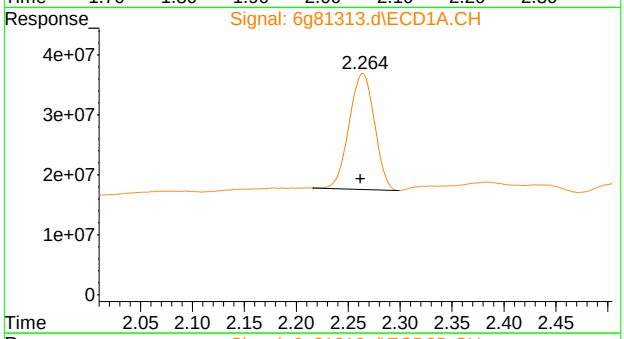
#1 1-bromo-2-nitrobenzene

R.T.: 1.688 min
Delta R.T.: 0.003 min
Response: 1011185299
Conc: 50.00 PPB



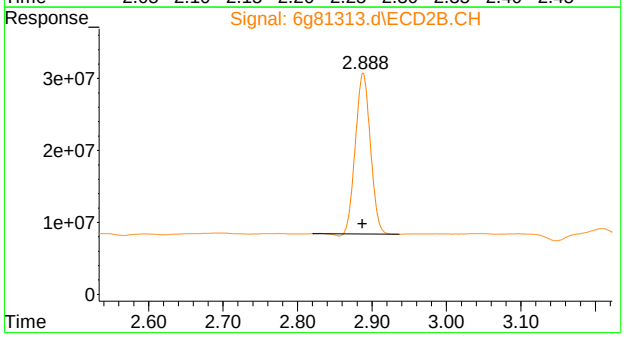
#1 1-bromo-2-nitrobenzene

R.T.: 2.062 min
Delta R.T.: 0.000 min
Response: 711929080
Conc: 50.00 PPB



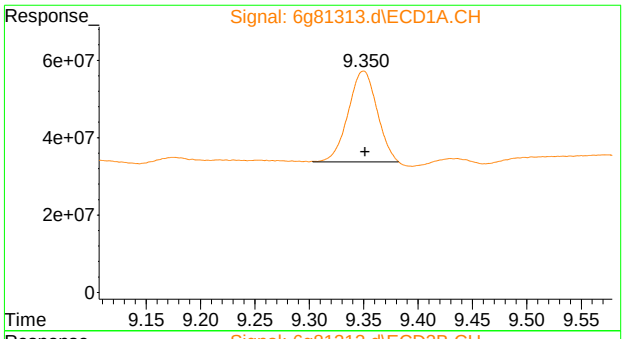
#2 Tetrachloro-m-xylene

R.T.: 2.264 min
Delta R.T.: 0.003 min
Response: 328823816
Conc: 26.18 PPB



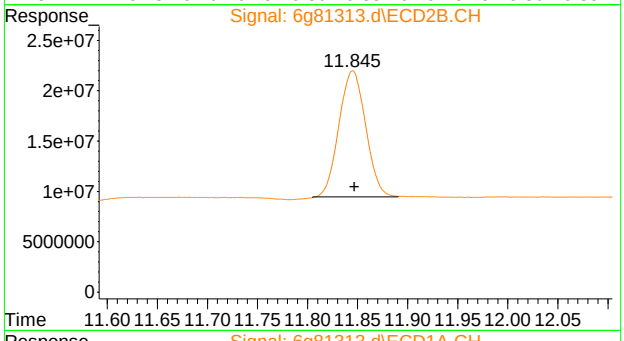
#2 Tetrachloro-m-xylene

R.T.: 2.888 min
Delta R.T.: 0.001 min
Response: 311768848
Conc: 24.10 PPB



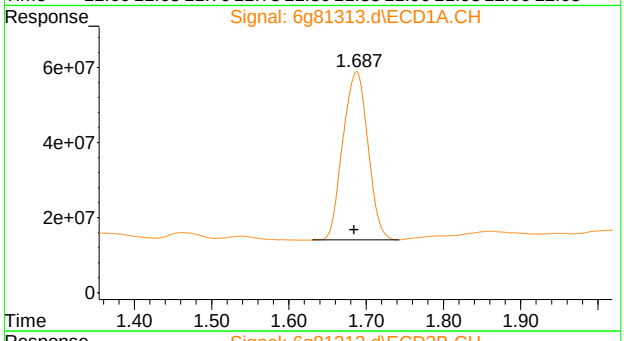
#26 Decachlorobiphenyl

R.T.: 9.350 min
Delta R.T.: -0.001 min
Response: 434039238
Conc: 17.95 PPB m



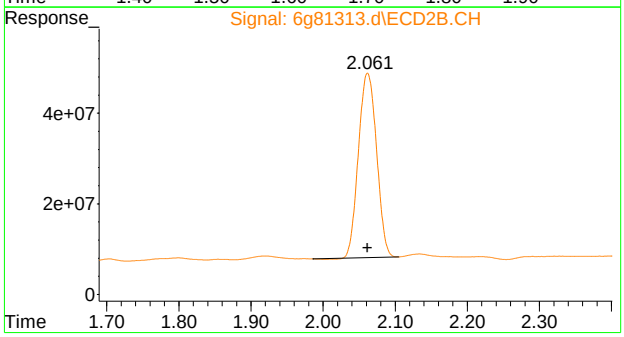
#26 Decachlorobiphenyl

R.T.: 11.845 min
Delta R.T.: -0.002 min
Response: 232739888
Conc: 20.97 PPB m



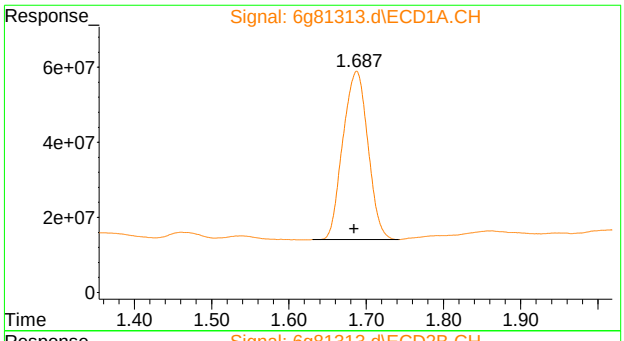
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.688 min
Delta R.T.: 0.003 min
Response: 1011185299
Conc: 50.00 PPB



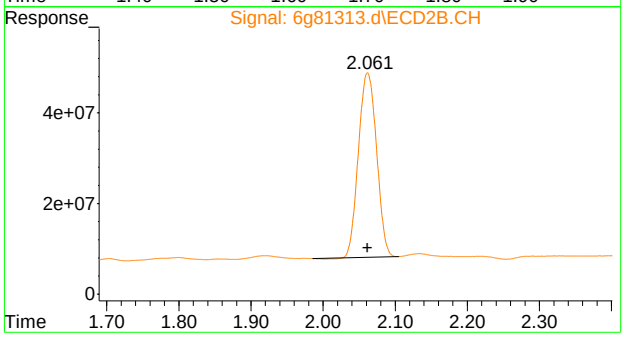
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.062 min
Delta R.T.: 0.000 min
Response: 711929080
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.688 min
Delta R.T.: 0.003 min
Response: 1011185299
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.062 min
Delta R.T.: 0.000 min
Response: 711929080
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/23/21 15:24

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1g5947\
Data File : 1g172326.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2021 6:35 am
Operator : christp
Sample : jd36682-7
Misc : op37171,g1g5947,16.4,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 23 14:53:15 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5915.M
Quant Title : PEST/PCB
QLast Update : Wed Nov 24 21:01:11 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.696	1.916	1036.3E6	163.1E6	50.000m	50.000
27) I	1-bromo-2...	1.696	1.916	1038.9E6	163.1E6	50.000m	50.000
33) I	1-bromo-2...	1.696	1.916	1030.3E6	163.1E6	50.000m	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.211	2.691	694.1E6	72234172	34.094m	33.478
	Spiked Amount 40.000	Range 30 - 150		Recovery =		85.23%	83.70%
26) SA	Decachlor...	9.833	11.822f	494.8E6	138.0E6	30.344m	52.804 #
	Spiked Amount 40.000			Recovery =		75.86%	132.01%
	Target Compounds						
15) B	4,4'-DDE	4.958f	6.596	74136848	5717231	3.241m	1.635m#
20) MA	4,4'-DDT	6.306	8.232f	65520169	15724719	3.692m	6.361 #
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

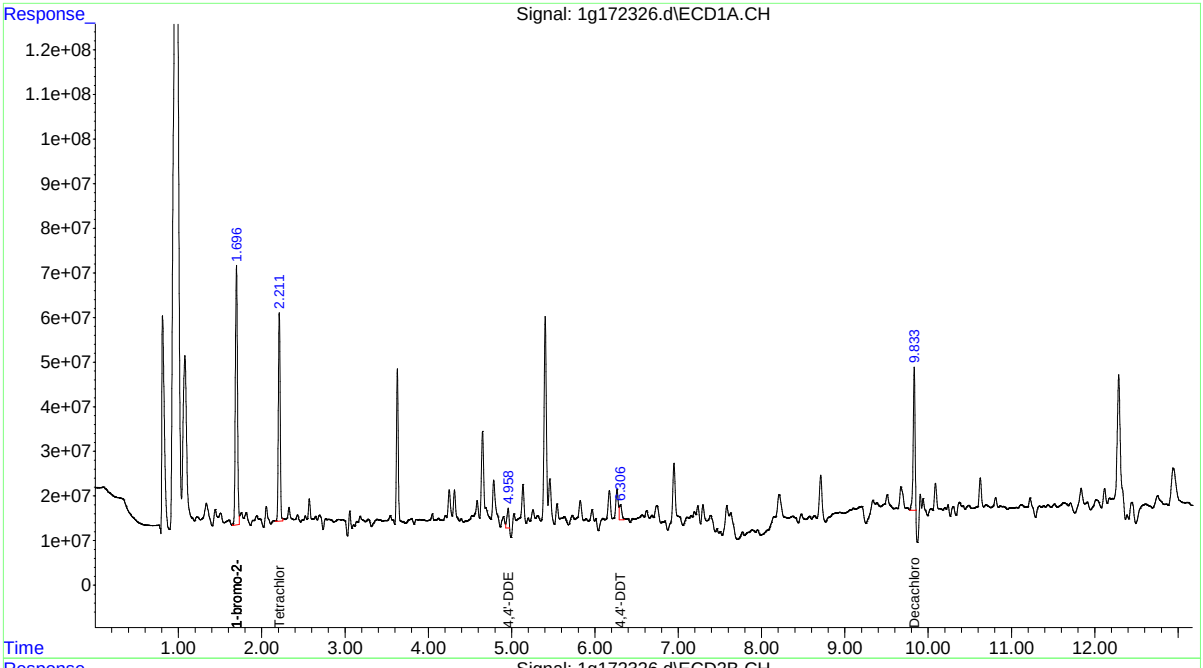
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

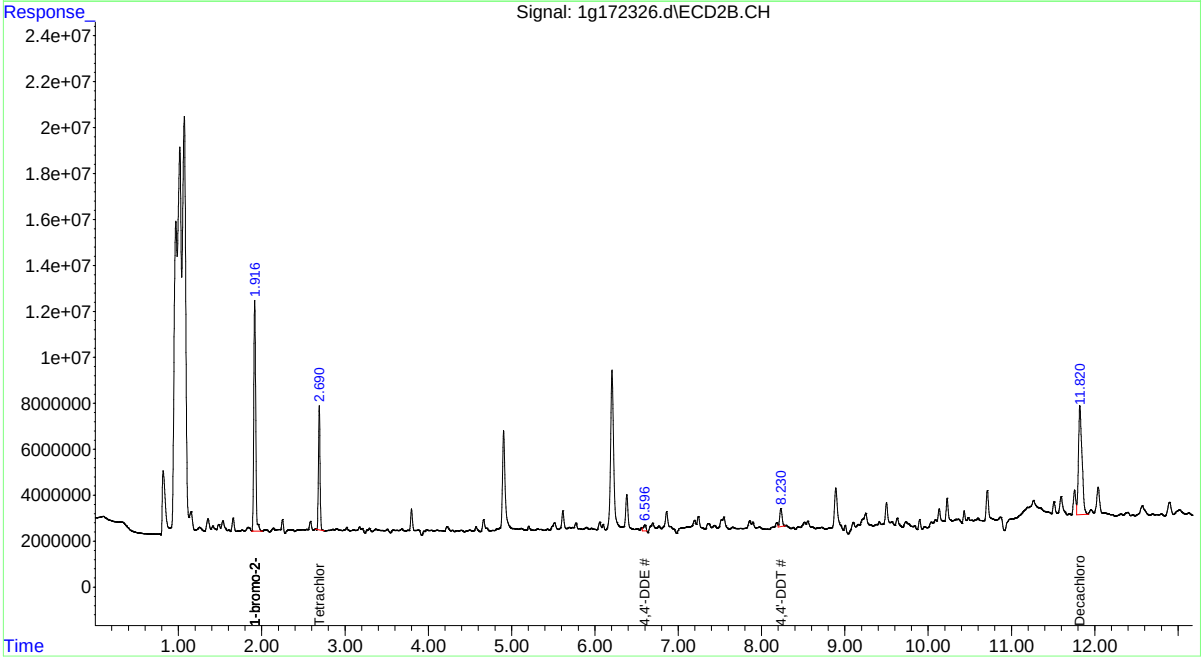
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1g5947\
Data File : 1g172326.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2021 6:35 am
Operator : christp
Sample : jd36682-7
Misc : op37171,g1g5947,16.4,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 23 14:53:15 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5915.M
Quant Title : PEST/PCB
QLast Update : Wed Nov 24 21:01:11 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/27/21 10:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1g5948\
Data File : 1g172358.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2021 8:20 pm
Operator : thomasl
Sample : jd36682-8
Misc : op37171,g1g5948,15.4,,,10,1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 27 10:17:46 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5915.M
Quant Title : PEST/PCB
QLast Update : Wed Nov 24 21:01:11 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.695	1.914	939.9E6	152.9E6	50.000m	50.000m
27) I	1-bromo-2...	1.695	1.914	926.4E6	152.0E6	50.000m	50.000m
33) I	1-bromo-2...	1.695	1.914	942.2E6	152.0E6	50.000m	50.000m
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.210	2.690	557.8E6	56313457	30.209	27.837
	Spiked Amount 40.000	Range 30 - 150		Recovery =		75.52%	69.59%
26) SA	Decachlor...	9.840	11.826f	472.0E6	102.5E6	31.911	41.827m#
	Spiked Amount 40.000			Recovery =		79.78%	104.57%
	Target Compounds						
11) B	Heptachlo...	4.519	5.771	51850669	6317412	2.289m	2.008m
20) MA	4,4'-DDT	6.303	8.235f	65944791	16033919	4.097m	6.917 #
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

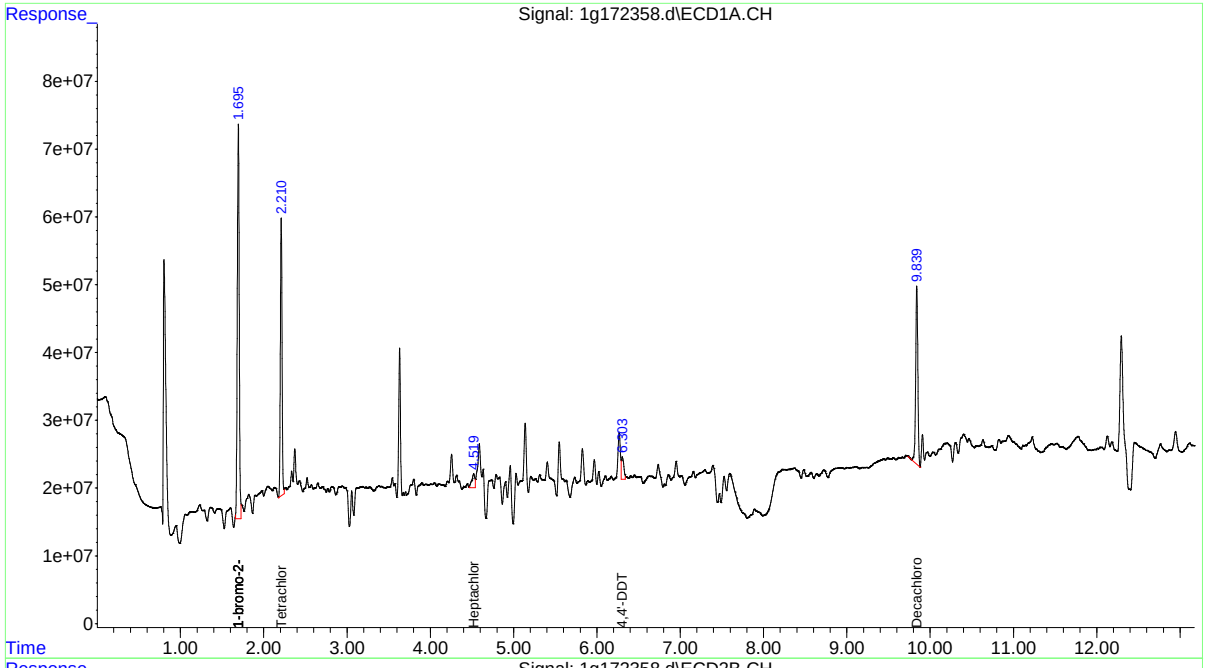
11.1.7
11

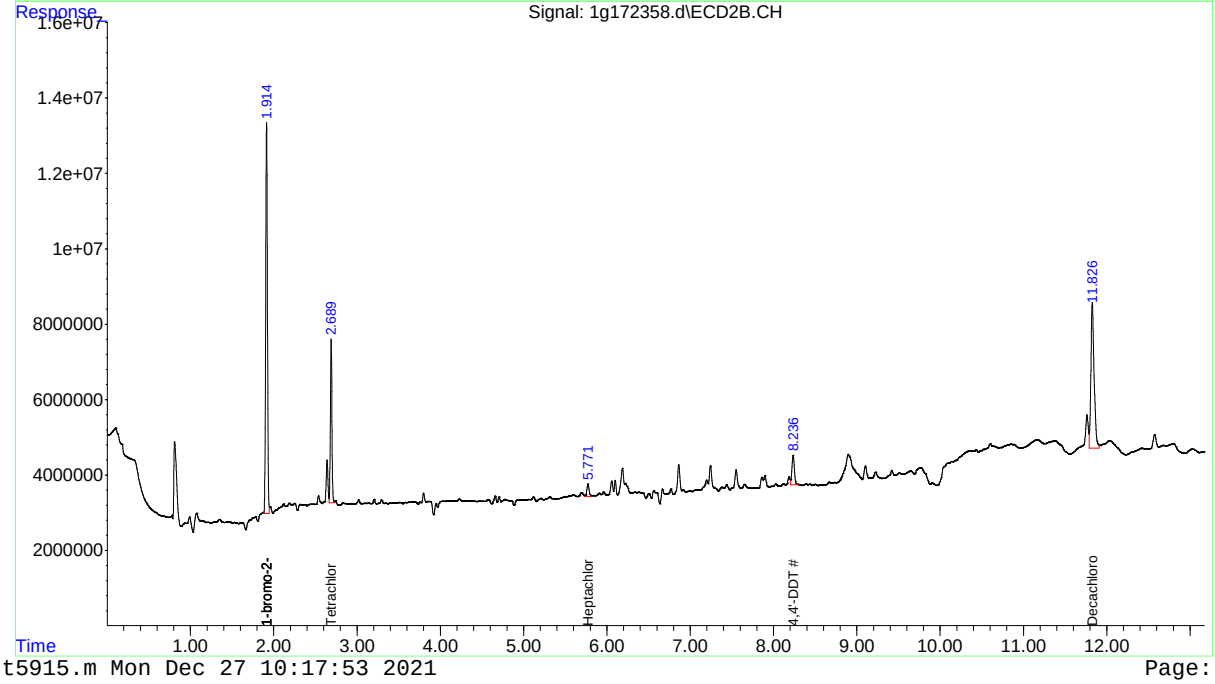
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1g5948\
Data File : 1g172358.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2021 8:20 pm
Operator : thomasl
Sample : jd36682-8
Misc : op37171,g1g5948,15.4,,,10,1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 27 10:17:46 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5915.M
Quant Title : PEST/PCB
QLast Update : Wed Nov 24 21:01:11 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/31/21 11:36

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 1g172470.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Dec 2021 1:37 am
Operator : rebeccak
Sample : jd36682-9
Misc : op37171,g1g5954,16.4,,,10,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 31 11:01:16 2021
Quant Method : C:\msdchem\1\methods\1pst5950.m
Quant Title : PEST/PCB
QLast Update : Tue Dec 28 23:57:05 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.686	1.908	1111.0E6	186.4E6	50.000	50.000
27)	I 1-bromo-2...	1.686	1.908	1111.0E6	186.4E6	50.000	50.000
33)	I 1-bromo-2...	1.686	1.908	1111.0E6	186.4E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.197	2.679	786.1E6	86739800	40.847	39.643
	Spiked Amount 40.000	Range 30 - 150		Recovery =	102.12%	99.11%	
26)	SA Decachlor...	9.806	11.785	472.0E6	99783861	30.907m	36.345
	Spiked Amount 40.000			Recovery =	77.27%	90.86%	
	Target Compounds						
15)	B 4,4'-DDE	4.933f	6.572f	51497888	3135900	2.300m	0.875m#
20)	MA 4,4'-DDT	6.278	8.200	31150116	6439101	1.880m	2.917m#
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

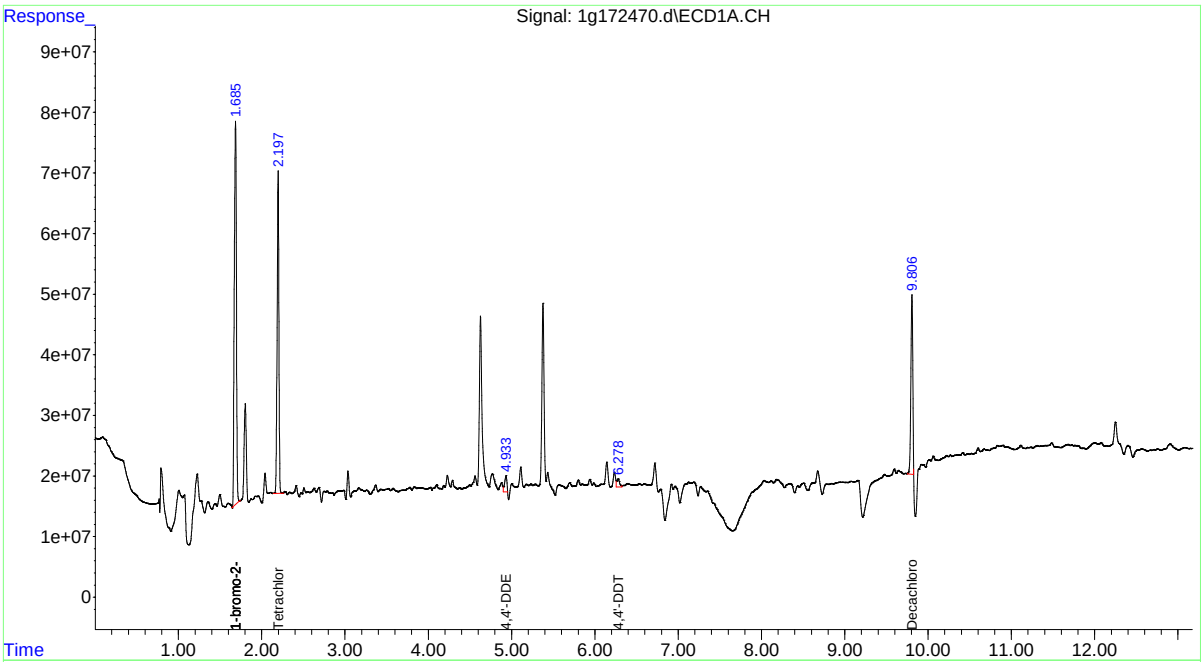
11.1.8 11

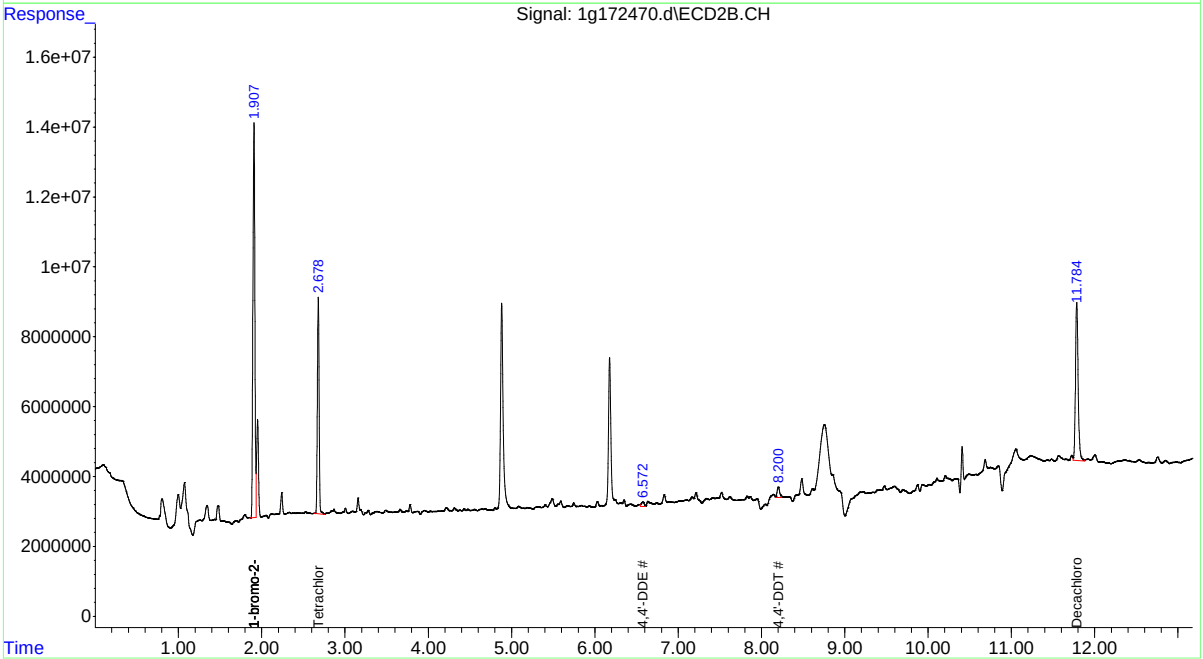
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 1g172470.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Dec 2021 1:37 am
Operator : rebeccak
Sample : jd36682-9
Misc : op37171,g1g5954,16.4,,,10,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 31 11:01:16 2021
Quant Method : C:\msdchem\1\methods\1pst5950.m
Quant Title : PEST/PCB
QLast Update : Tue Dec 28 23:57:05 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/27/21 10:17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1g5948\
Data File : 1g172360.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2021 8:56 pm
Operator : thomasl
Sample : jd36682-10
Misc : op37171,g1g5948,15.1,,,10,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 27 09:10:23 2021
Quant Method : C:\msdchem\1\methods\1pst5915.m
Quant Title : PEST/PCB
QLast Update : Tue Dec 07 13:10:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.697	1.915	1018.4E6	158.3E6	50.000	50.000
27) I	1-bromo-2...	1.697	1.915	1018.4E6	158.3E6	50.000	50.000
33) I	1-bromo-2...	1.697	1.915	1018.4E6	158.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.210	2.690	428.7E6	44667582	21.430	21.326
	Spiked Amount	40.000	Range 30 - 150	Recovery	=	53.57%	53.31%
26) SA	Decachlor...	9.835	11.819f	313.3E6	50070780	19.552m	19.742m
	Spiked Amount	40.000		Recovery	=	48.88%	49.36%
	Target Compounds						
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

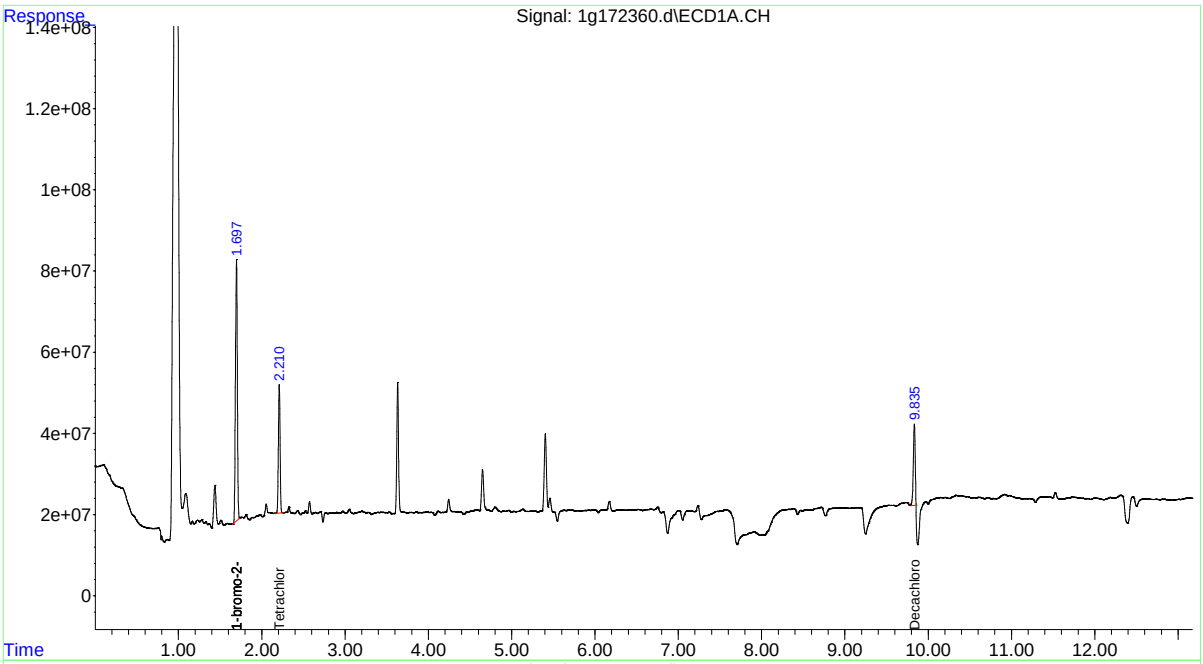
11.1.9 11

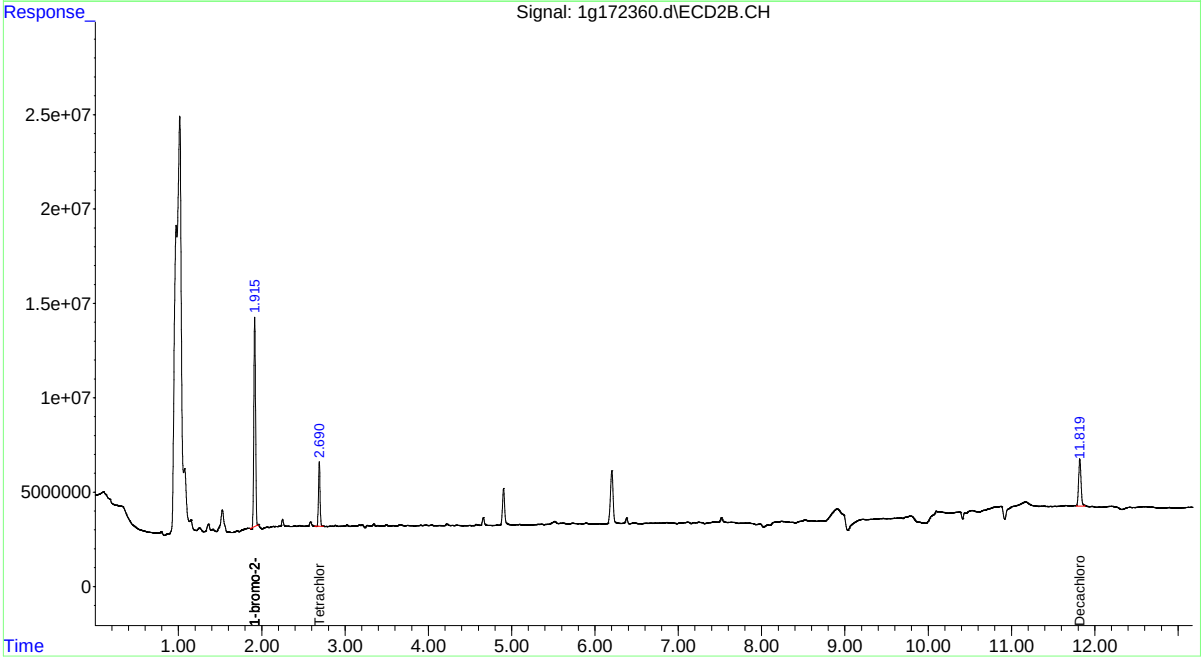
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1g5948\
Data File : 1g172360.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2021 8:56 pm
Operator : thomasl
Sample : jd36682-10
Misc : op37171,g1g5948,15.1,,,10,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 27 09:10:23 2021
Quant Method : C:\msdchem\1\methods\1pst5915.m
Quant Title : PEST/PCB
QLast Update : Tue Dec 07 13:10:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/27/21 10:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1g5948\
Data File : 1g172361.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2021 9:14 pm
Operator : thomasl
Sample : jd36682-11
Misc : op37171,g1g5948,15.3,,,10,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 27 10:16:58 2021
Quant Method : C:\msdchem\1\methods\1pst5915.m
Quant Title : PEST/PCB
QLast Update : Tue Dec 07 13:10:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.697	1.916	1041.4E6	161.3E6	50.000	50.000
27) I	1-bromo-2...	1.697	1.916	1041.4E6	161.3E6	50.000	50.000
33) I	1-bromo-2...	1.697	1.916	1041.4E6	161.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.211	2.691	721.6E6	74111834	35.275	34.729
	Spiked Amount	40.000	Range 30 - 150	Recovery	=	88.19%	86.82%
26) SA	Decachlor...	9.834	11.819f	460.0E6	86678001	28.068m	33.544
	Spiked Amount	40.000		Recovery	=	70.17%	83.86%
	Target Compounds						
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

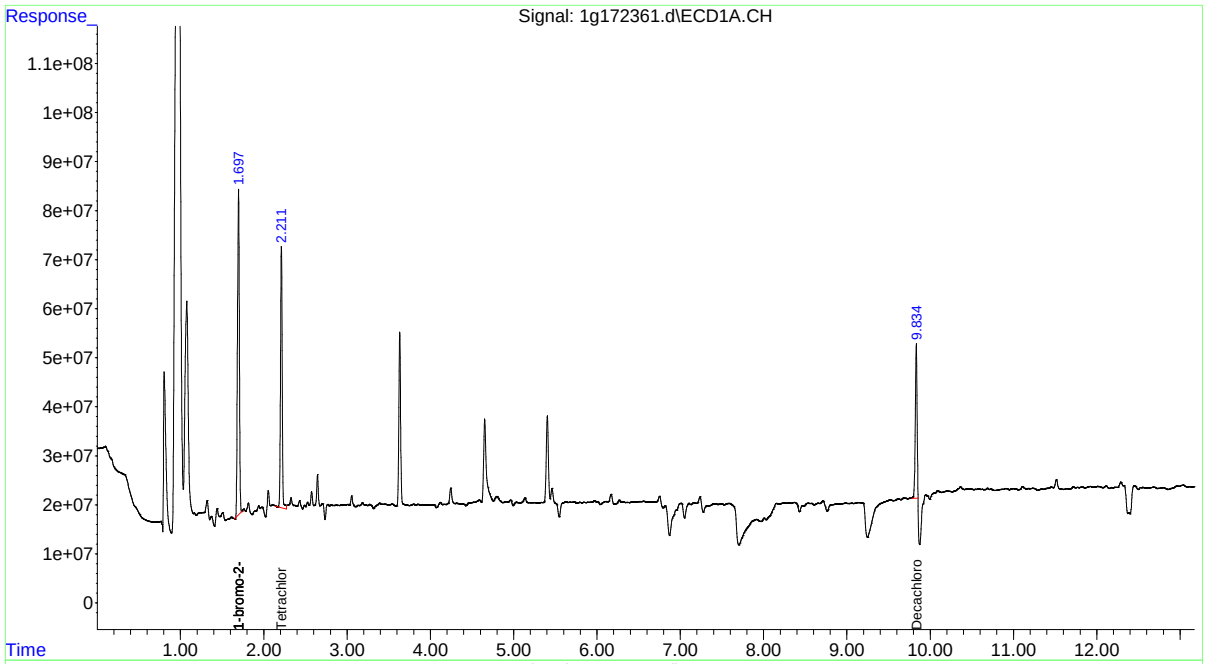
11.1.10 11

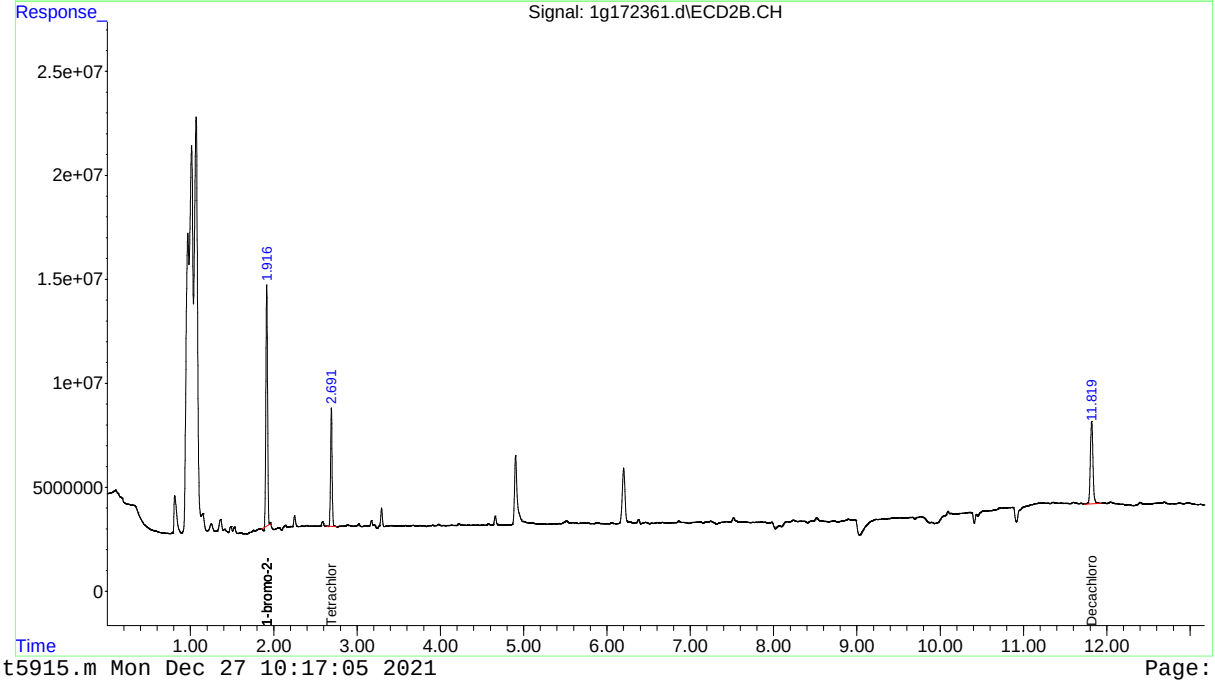
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1g5948\
Data File : 1g172361.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2021 9:14 pm
Operator : thomasl
Sample : jd36682-11
Misc : op37171,g1g5948,15.3,,,10,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 27 10:16:58 2021
Quant Method : C:\msdchem\1\methods\1pst5915.m
Quant Title : PEST/PCB
QLast Update : Tue Dec 07 13:10:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/23/21 15:24

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1g5947\
Data File : 1g172323.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2021 5:40 am
Operator : christp
Sample : op37171-mb1
Misc : op37171,g1g5947,15.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 23 14:46:34 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5915.M
Quant Title : PEST/PCB
QLast Update : Wed Nov 24 21:01:11 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.699	1.917	1028.7E6	161.1E6	50.000	50.000
27) I 1-bromo-2...	1.699	1.917	1028.7E6	161.1E6	50.000	50.000
33) I 1-bromo-2...	1.699	1.917	1028.7E6	161.1E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.211	2.692	870.9E6	88911876	43.097m	41.709
Spiked Amount 40.000	Range 30 - 150		Recovery = 107.74%		104.27%	
26) SA Decachlor...	9.840	11.824f	673.9E6	102.9E6	41.628m	39.848
Spiked Amount 40.000			Recovery = 104.07%		99.62%	
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

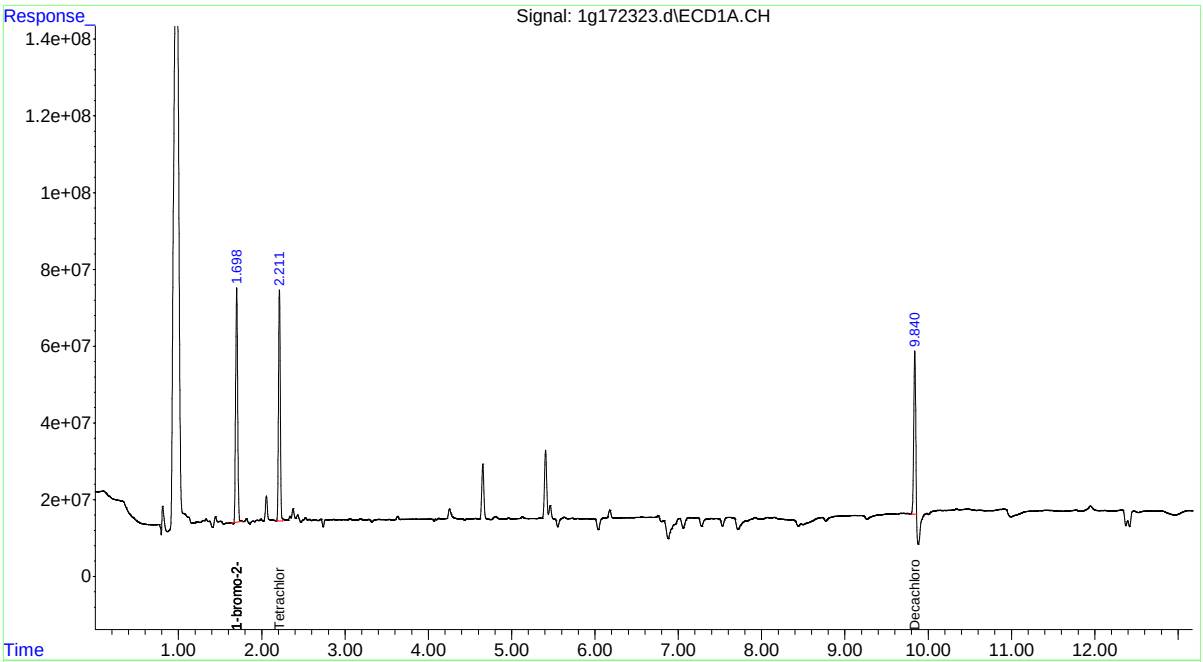
11.2.1 11

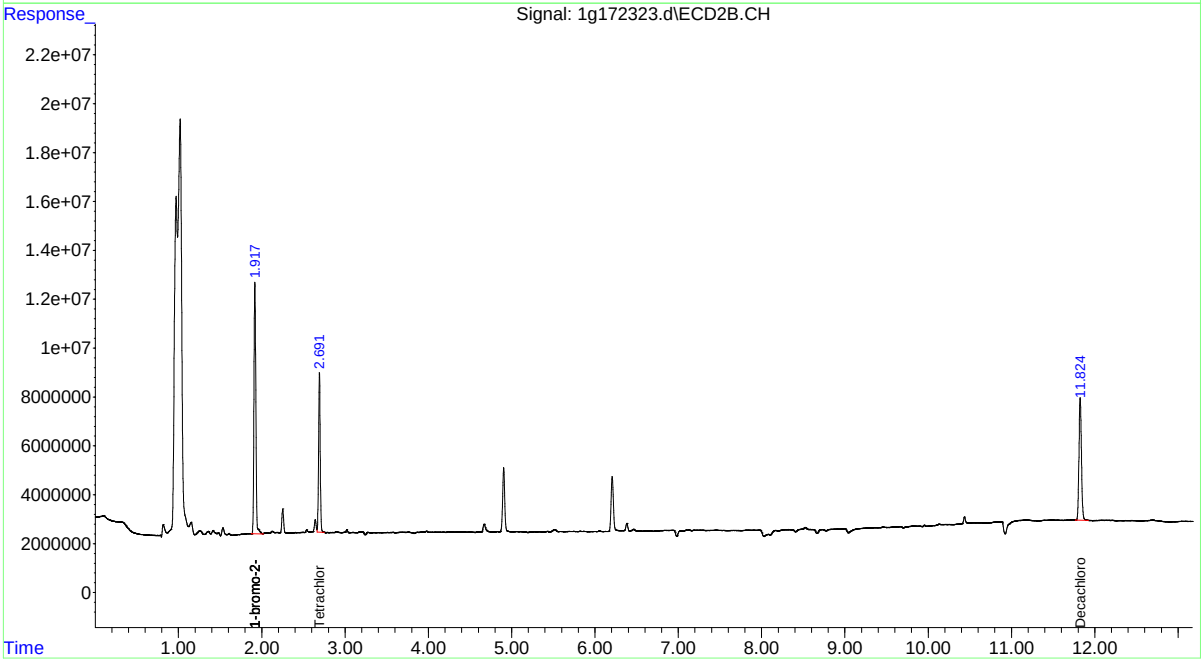
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1g5947\
Data File : 1g172323.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2021 5:40 am
Operator : christp
Sample : op37171-mb1
Misc : op37171,g1g5947,15.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 23 14:46:34 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5915.M
Quant Title : PEST/PCB
QLast Update : Wed Nov 24 21:01:11 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/21/21 08:41

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81301.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 03:16:25
Operator : christp
Sample : op37193-mb1
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:31:38 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.689	2.058	860.1E6	622.0E6	50.000	50.000
27) I 1-bromo-2...	1.689	2.058	860.1E6	622.0E6	50.000	50.000
33) I 1-bromo-2...	1.689	2.058	860.1E6	622.0E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.265	2.883	235.4E6	220.9E6	22.040m	19.544
Spiked Amount	40.000 Range	30 - 150	Recovery	=	55.10%	48.86%
26) SA Decachlor...	9.357	11.845	313.2E6	174.5E6	15.231m	17.998
Spiked Amount	40.000		Recovery	=	38.08%	45.00%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

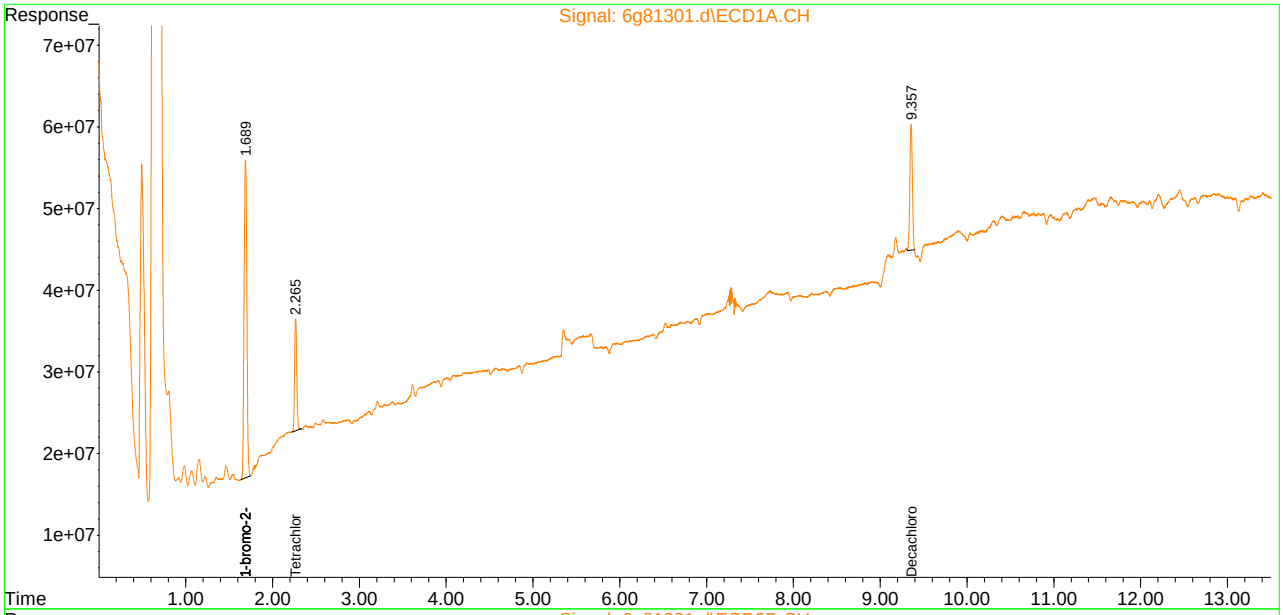
11.2.2 11

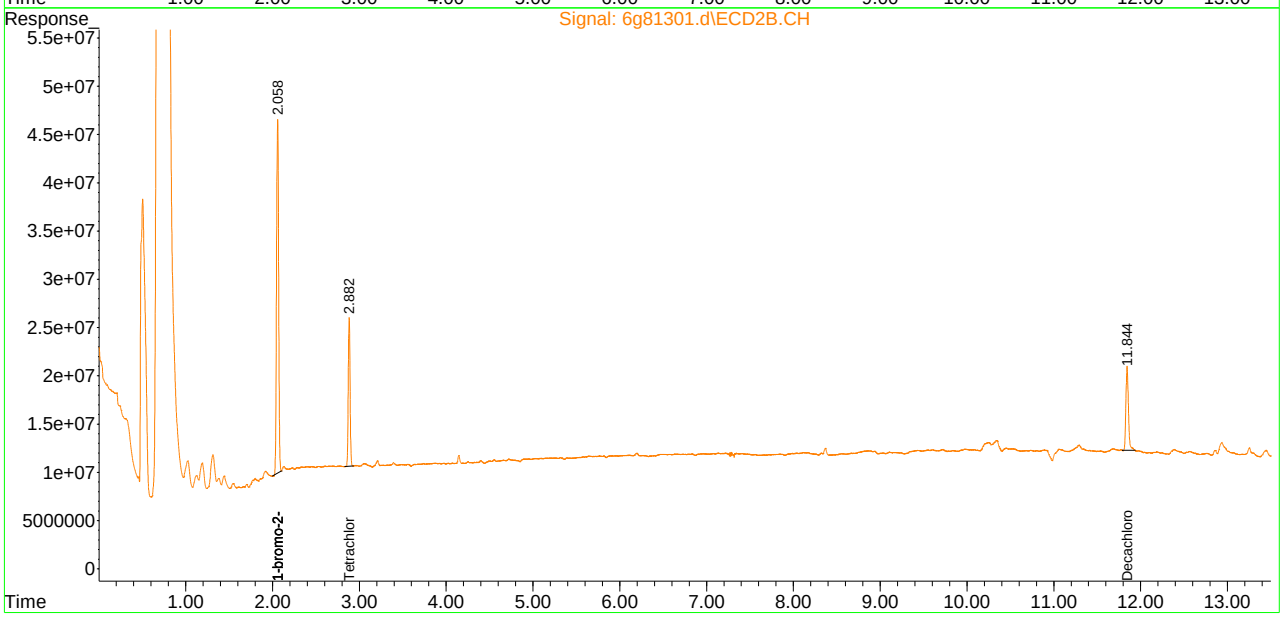
Quantitation Report (QT Reviewed)

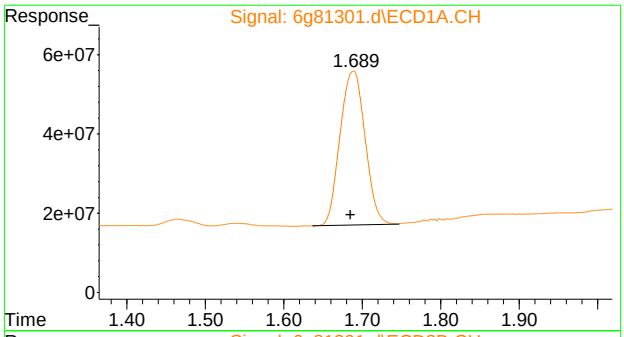
Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81301.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 03:16:25
Operator : christp
Sample : op37193-mb1
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:31:38 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

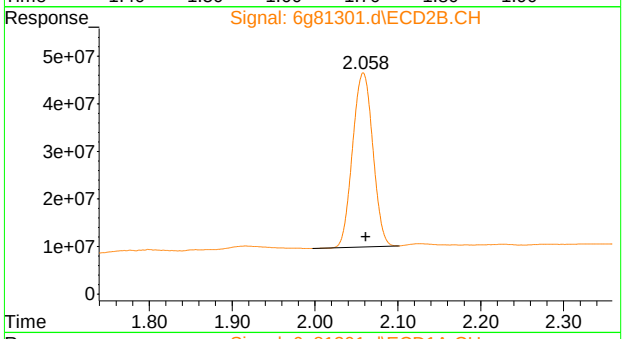






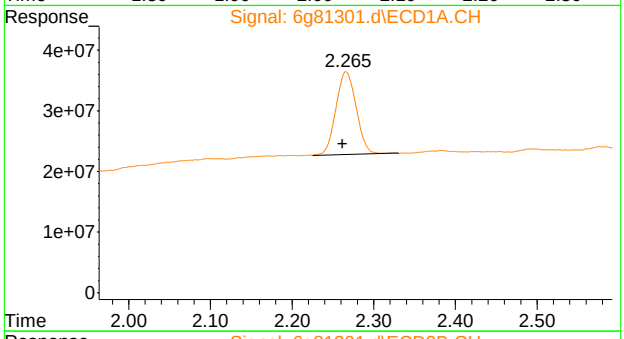
#1 1-bromo-2-nitrobenzene

R.T.: 1.689 min
Delta R.T.: 0.004 min
Response: 860082544
Conc: 50.00 PPB



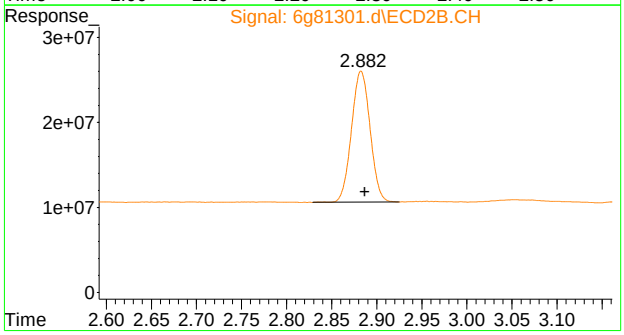
#1 1-bromo-2-nitrobenzene

R.T.: 2.058 min
Delta R.T.: -0.003 min
Response: 621981065
Conc: 50.00 PPB



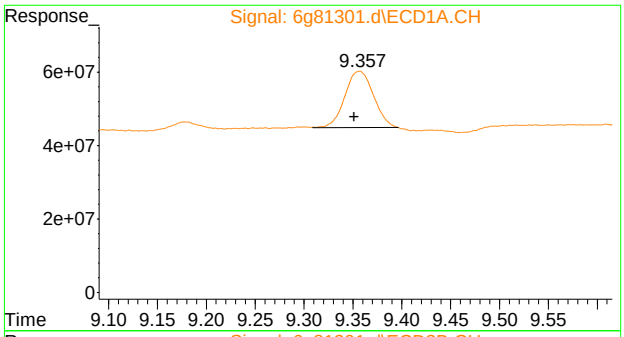
#2 Tetrachloro-m-xylene

R.T.: 2.265 min
Delta R.T.: 0.004 min
Response: 235409700
Conc: 22.04 PPB m



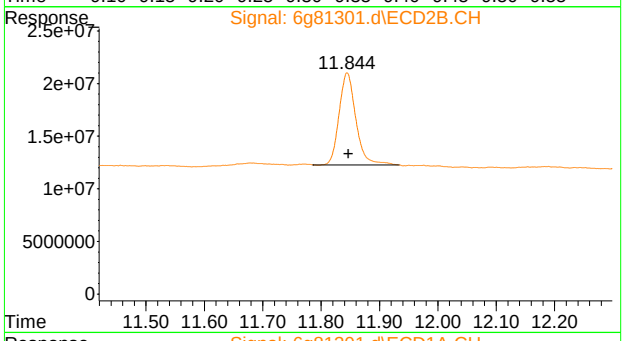
#2 Tetrachloro-m-xylene

R.T.: 2.883 min
Delta R.T.: -0.004 min
Response: 220898168
Conc: 19.54 PPB



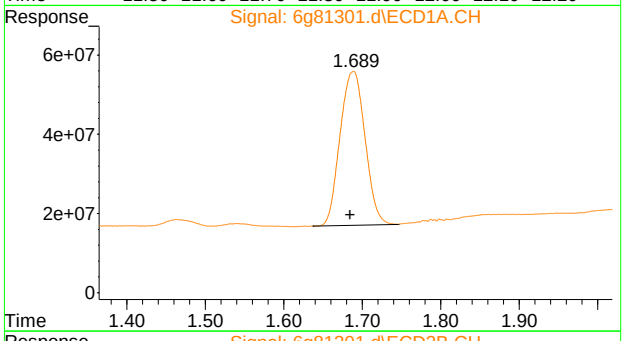
#26 Decachlorobiphenyl

R.T.: 9.357 min
Delta R.T.: 0.006 min
Response: 313215925
Conc: 15.23 PPB m



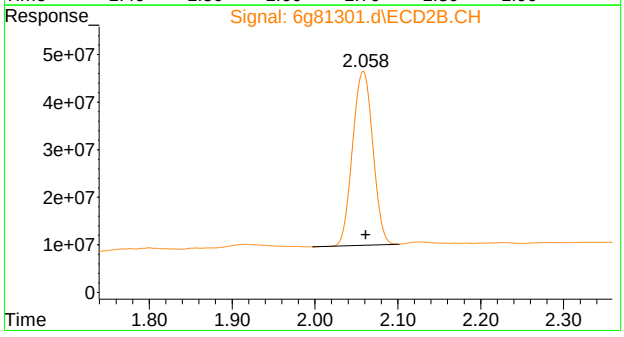
#26 Decachlorobiphenyl

R.T.: 11.845 min
Delta R.T.: -0.002 min
Response: 174485046
Conc: 18.00 PPB



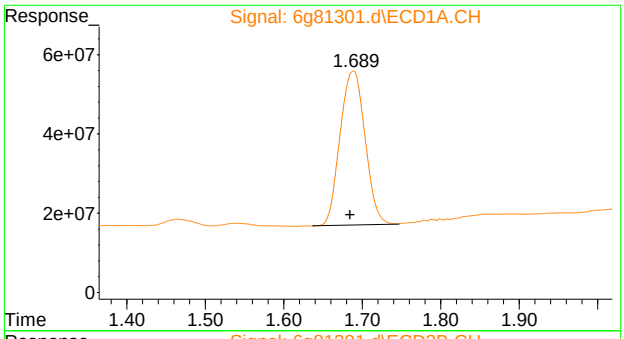
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.689 min
Delta R.T.: 0.005 min
Response: 860082544
Conc: 50.00 PPB



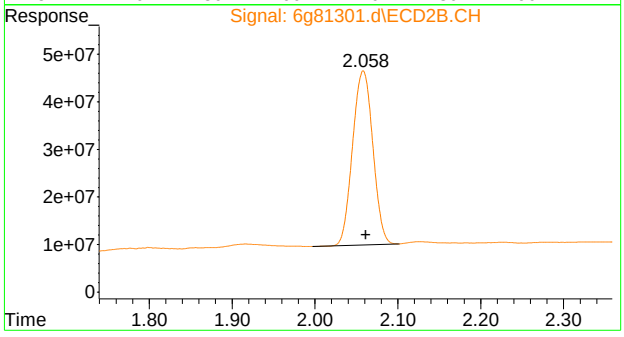
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.058 min
Delta R.T.: -0.003 min
Response: 621981065
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.689 min
Delta R.T.: 0.005 min
Response: 860082544
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.058 min
Delta R.T.: -0.003 min
Response: 621981065
Conc: 50.00 PPB

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
11/29/21 11:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1G5915\
Data File : 1g171501.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Nov 2021 11:24 am
Operator : taylorc
Sample : icc5915-25
Misc : op36482,g1g5915,15.0,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 24 20:21:36 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5915.M
Quant Title : PEST/PCB
QLast Update : Wed Nov 24 20:20:56 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.704	1.919	799.4E6	140.4E6	50.000	50.000
27) I	1-bromo-2...	1.704	1.919	799.4E6	140.4E6	50.000	50.000
33) I	1-bromo-2...	1.704	1.919	799.4E6	140.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.214	2.689	425.1E6	46049141	28.778	26.886
Spiked Amount	40.000	Range	30 - 150	Recovery	=	71.94%	67.22%
26) SA	Decachlor...	9.840	11.803	339.5E6	54057617	22.381	23.278
Spiked Amount	40.000			Recovery	=	55.95%	58.19%
	Target Compounds						
3)	Hexachlor...	2.525	3.200	629.5E6	109.2E6	28.949	26.520
4) A	alpha-BHC	2.662	3.356	604.0E6	96590173	28.102	25.659
5) MA	gamma-BHC	2.949	3.800	547.3E6	90180025	27.904	26.358
6) MA	Heptachlor	3.443	4.413	523.2E6	83963302	27.099	23.532
7) B	beta-BHC	3.017	3.881	237.5E6	34766673	27.892	26.795
8) B	delta-BHC	3.204	4.301	486.1E6	80061625	25.650	23.713
9) MB	Aldrin	3.785	4.896	495.4E6	83563281	27.295	25.067
10)	Alachlor	3.929	4.677	62004594	9274208	29.070	26.647m
11) B	Heptachlo...	4.526	5.777	468.7E6	75728931	26.509	22.798
12) B	gamma-Chl...	4.692	6.083	460.7E6	74369213	24.692	24.610
13) B	alpha-Chl...	4.872	6.327	429.7E6	73330157	25.090	24.859
14) A	Endosulfan I	5.067	6.434	429.8E6	73559305	24.289	24.270
15) B	4,4'-DDE	4.981	6.602	460.4E6	75056291	28.862	25.469
16) MA	Dieldrin	5.409	6.905	472.5E6	78737312	26.515	23.456
17) MA	Endrin	5.754	7.455	399.8E6	69754803	22.471	22.502
18) A	4,4'-DDD	5.869	7.632	370.7E6	56104319	26.533	24.862
19) B	Endosulfa...	6.096	7.835	396.4E6	66181826	24.921	23.828
20) MA	4,4'-DDT	6.316	8.217	360.9E6	52596815	25.136	24.819
21) B	Endrin Al...	6.774	8.458	282.2E6	45419548	21.291	21.550
22) B	Endosulfa...	7.515	8.970	342.3E6	55843752	22.398m	22.755
23) A	Methoxychlor	7.149	9.541	197.6E6	28091672	24.361	26.510
24)	Mirex	7.327	9.880	317.1E6	44171056	25.177	24.022
25) B	Endrin Ke...	7.991	9.929	328.5E6	54264190	20.655	21.111
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

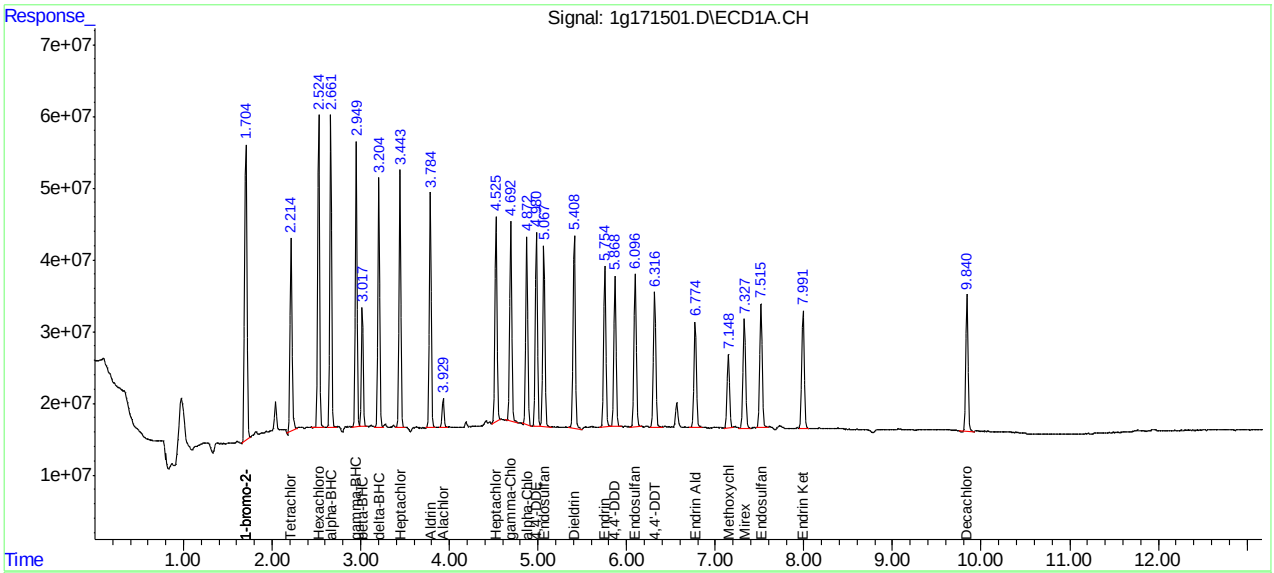
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

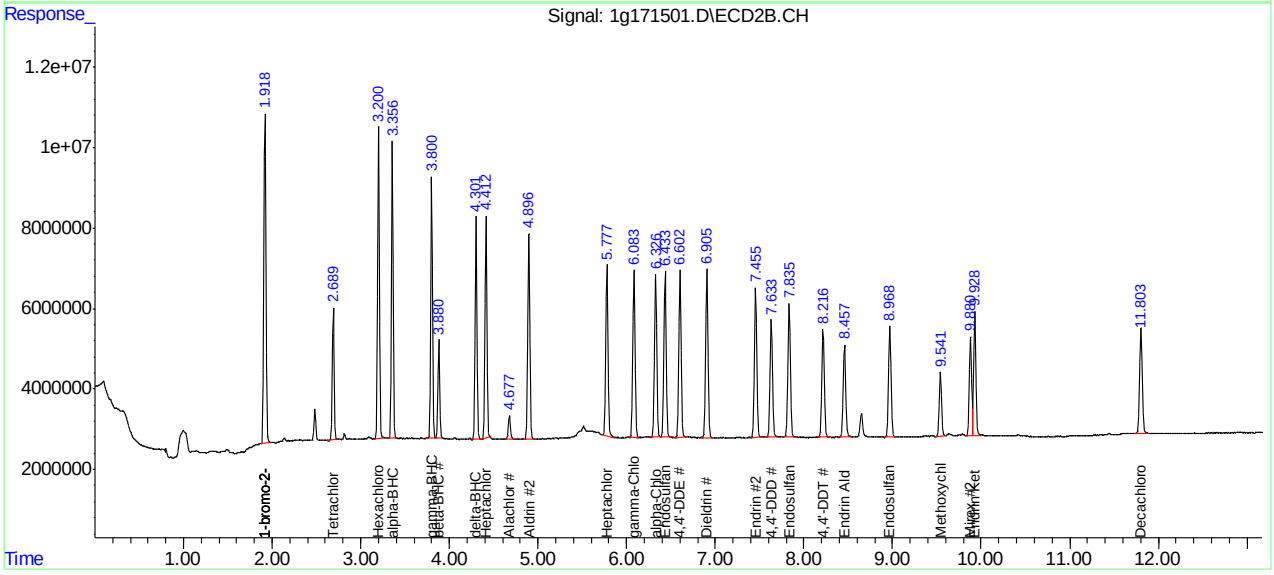
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1G5915\
Data File : 1g171501.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Nov 2021 11:24 am
Operator : taylorc
Sample : icc5915-25
Misc : op36482,g1g5915,15.0,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 24 20:21:36 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5915.M
Quant Title : PEST/PCB
QLast Update : Wed Nov 24 20:20:56 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
11/29/21 11:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1G5915\
Data File : 1g171505.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Nov 2021 12:37 pm
Operator : taylorc
Sample : ic5915-500
Misc : op36482,g1g5915,15.0,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 24 20:48:19 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5915.M
Quant Title : PEST/PCB
QLast Update : Wed Nov 24 20:47:37 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.704	1.918	859.9E6	147.5E6	50.000	50.000
27) I	1-bromo-2...	1.704	1.918	859.9E6	147.5E6	50.000	50.000
33) I	1-bromo-2...	1.704	1.918	859.9E6	147.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.215	2.687	7996.7E6	965.4E6	503.291	536.720
	Spiked Amount 40.000	Range 30 - 150		Recovery = 1258.23%#		1341.80%#	
26) SA	Decachlor...	9.839	11.801	5869.4E6	1052.6E6	359.709	431.608
	Spiked Amount 40.000			Recovery = 899.27%		1079.02%	
	Target Compounds						
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
34)	Chlordane...	3.442	4.411	568.3E6	93706184	1000.262	1063.361
35)	Chlordane...	3.931	5.093	346.1E6	54150261	527.570	603.436
36)	Chlordane...	4.693	6.081	1223.5E6	186.3E6	531.510	562.039
37)	Chlordane...	4.866	6.326	1818.5E6	315.9E6	466.477m	509.873m
38)	Chlordane...	5.992	7.920	301.1E6	49242316	432.064	530.591

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

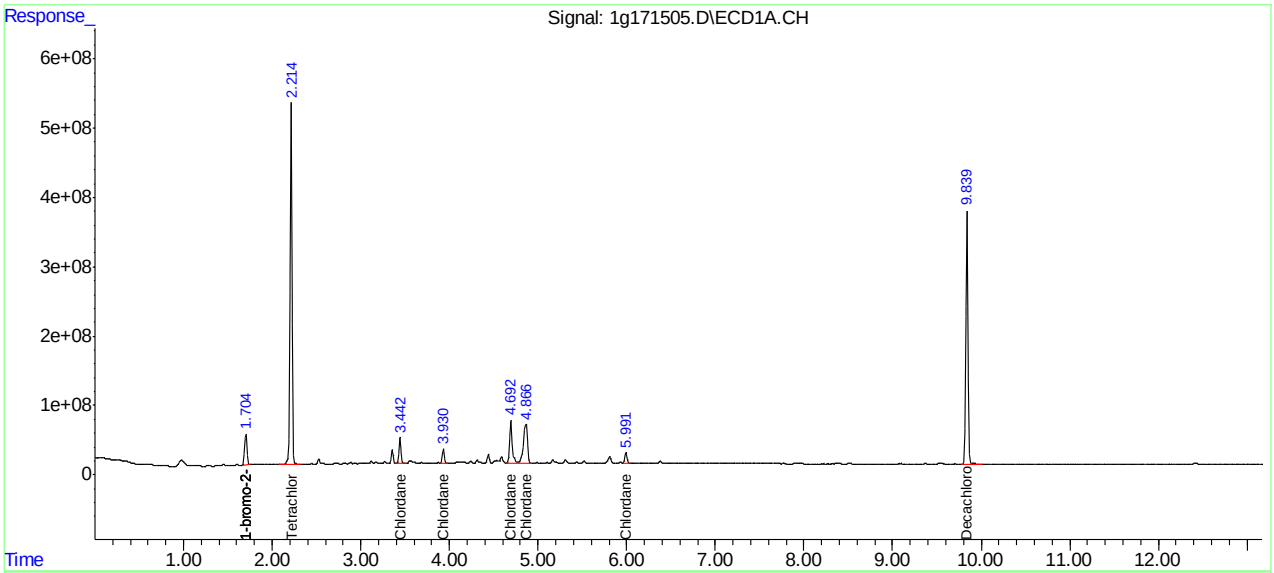
11.3.2
11

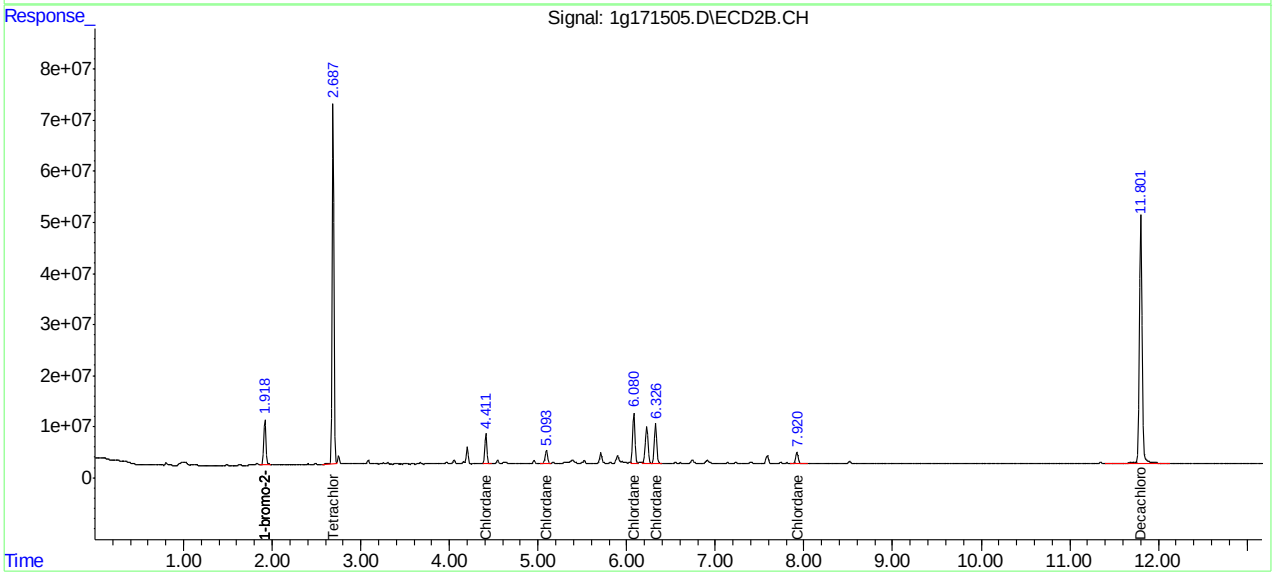
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1G5915\
Data File : 1g171505.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Nov 2021 12:37 pm
Operator : taylorc
Sample : ic5915-500
Misc : op36482,g1g5915,15.0,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 24 20:48:19 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5915.M
Quant Title : PEST/PCB
QLast Update : Wed Nov 24 20:47:37 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
11/29/21 11:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1G5915\
Data File : 1g171506.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Nov 2021 12:55 pm
Operator : taylorc
Sample : ic5915-500
Misc : op36482,g1g5915,15.0,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 24 20:51:03 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5915.M
Quant Title : PEST/PCB
QLast Update : Wed Nov 24 20:49:21 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.705	1.918	877.6E6	148.4E6	50.000	50.000
27) I	1-bromo-2...	1.705	1.918	877.6E6	148.4E6	50.000	50.000
33) I	1-bromo-2...	1.705	1.918	877.6E6	148.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.214	2.687	817.1E6	92867208	50.384	51.314
Spiked Amount	40.000	Range	30 - 150	Recovery	=	125.96%	128.29%
26) SA	Decachlor...	9.839	11.799	650.7E6	106.2E6	39.069	43.270
Spiked Amount	40.000			Recovery	=	97.67%	108.18%
	Target Compounds						
28) L8	Toxaphene{A}	5.416	6.862	86474725	17465795	588.134m	429.952m#
29) L8	Toxaphene{B}	6.083	7.799	232.7E6	26006371	497.306m	458.349
30) L8	Toxaphene{C}	6.277	7.976	217.1E6	50504886	459.877m	450.947m
31) L8	Toxaphene{D}	6.635	8.451	158.6E6	26065229	893.156m	481.903m#
32) L8	Toxaphene{E}	7.336	9.435	190.1E6	28257937	465.629m	490.737m
Sum	Toxaphene			884.9E6	148.3E6	2904.103	2311.889
Average	Toxaphene					580.821	462.378

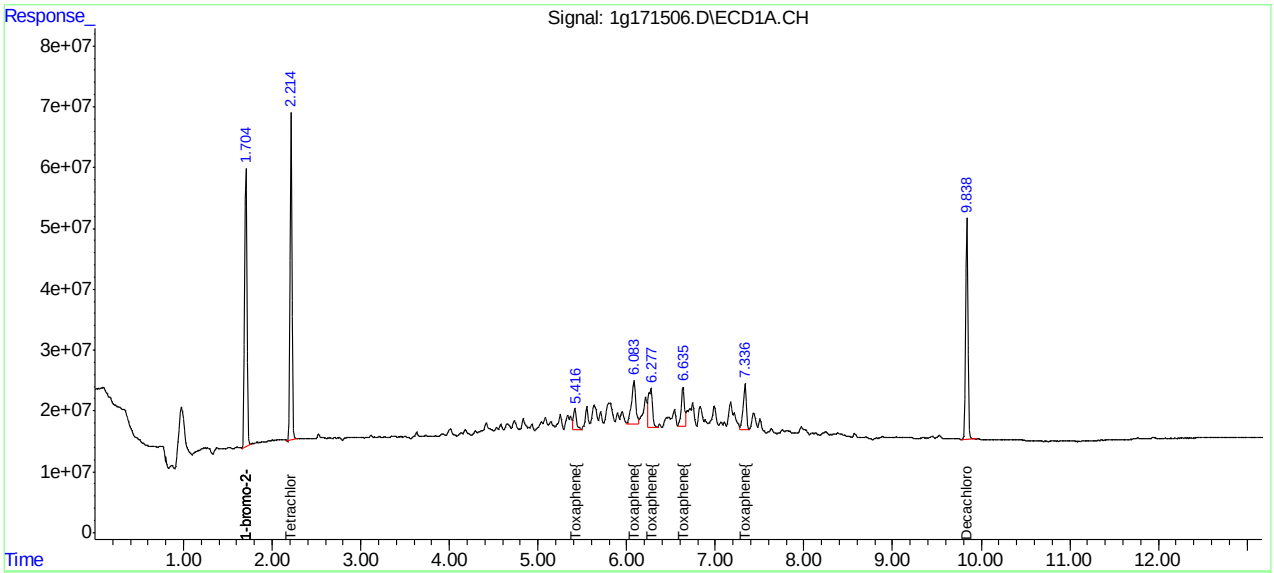
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

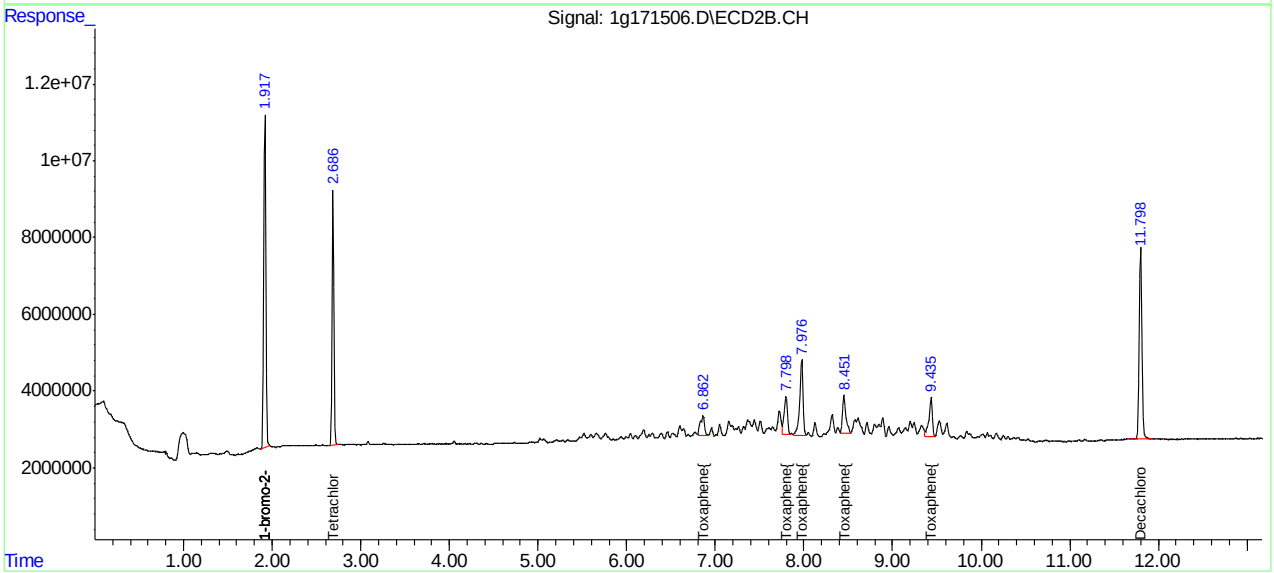
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1G5915\
Data File : 1g171506.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Nov 2021 12:55 pm
Operator : taylorc
Sample : ic5915-500
Misc : op36482,g1g5915,15.0,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 24 20:51:03 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5915.M
Quant Title : PEST/PCB
QLast Update : Wed Nov 24 20:49:21 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1G5950\
Data File : 1g172388.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Dec 2021 2:01 am
Operator : christp
Sample : icc5950-25
Misc : op37216,g1g5950,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 28 22:53:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5950.M
Quant Title : PEST/PCB
QLast Update : Tue Dec 28 04:15:56 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.694	1.914	931.4E6	149.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.201	2.682	417.8E6	43673435	22.836	22.143
	Spiked Amount 40.000	Range 30 - 150		Recovery =		57.09%	55.36%
26) SA	Decachlor...	9.816	11.791	330.8E6	54125720	22.572	22.664
	Spiked Amount 40.000			Recovery =		56.43%	56.66%
	Target Compounds						
3)	Hexachlor...	2.511	3.192	627.7E6	105.6E6	22.159	22.632
4) A	alpha-BHC	2.646	3.347	616.2E6	97639022	23.229	24.147
5) MA	gamma-BHC	2.932	3.789	568.8E6	88497811	23.381	23.386
6) MA	Heptachlor	3.423	4.400	549.5E6	87036200	23.793	23.787
7) B	beta-BHC	3.003	3.873	238.3E6	33068857	22.945	22.155
8) B	delta-BHC	3.188	4.292	516.1E6	84428277	24.447	25.147
9) MB	Aldrin	3.765	4.882	505.6E6	82696875	23.157	23.186
10)	Alachlor	3.907	4.663	56311172	8683857	21.425	23.215
11) B	Heptachlo...	4.502	5.763	454.2E6	75572579	20.229	24.640
12) B	gamma-Chl...	4.670	6.069	469.3E6	72766104	23.647	22.579
13) B	alpha-Chl...	4.850	6.313	444.2E6	71159358	23.231	22.068
14) A	Endosulfan I	5.042	6.421	446.5E6	72477040	23.452	22.752
15) B	4,4'-DDE	4.960	6.590	469.4E6	72392289	22.830	22.644
16) MA	Dieldrin	5.382	6.891	472.2E6	77426602	23.031	22.836
17) MA	Endrin	5.726	7.442	459.1E6	73305645	26.029	23.948
18) A	4,4'-DDD	5.848	7.622	387.2E6	55129981	23.655	22.366
19) B	Endosulfa...	6.069	7.821	398.0E6	64331403	22.569	22.564
20) MA	4,4'-DDT	6.293	8.206	359.7E6	48271944	22.549	21.361
21) B	Endrin Al...	6.744	8.446	323.6E6	50676101	25.007	25.507
22) B	Endosulfa...	7.486	8.959	349.5E6	57359618	23.017	23.803
23) A	Methoxychlor	7.127	9.533	193.8E6	25670479	21.384	22.027
24)	Mirex	7.298	9.870	304.0E6	43165218	21.967	19.612
25) B	Endrin Ke...	7.957	9.921	396.8E6	64994342	28.065	27.130
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

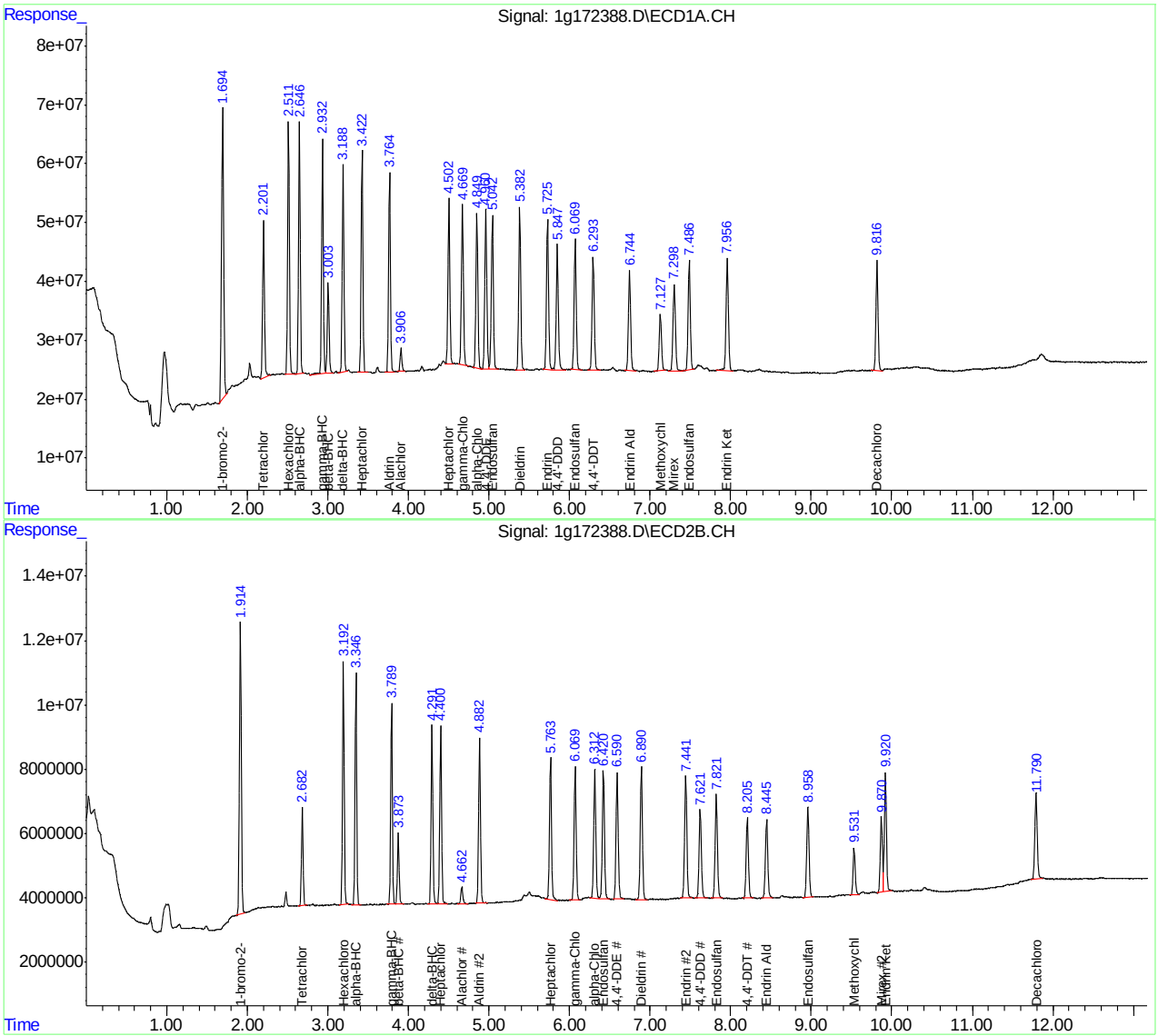
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1G5950\
Data File : 1g172388.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Dec 2021 2:01 am
Operator : christp
Sample : icc5950-25
Misc : op37216,g1g5950,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 28 22:53:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5950.M
Quant Title : PEST/PCB
QLast Update : Tue Dec 28 04:15:56 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/30/21 10:08

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1G5950\
Data File : 1g172393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Dec 2021 3:32 am
Operator : christp
Sample : ic5950-500
Misc : op37216,g1g5950,15.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 28 22:55:15 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5950.M
Quant Title : PEST/PCB
QLast Update : Tue Dec 28 04:15:56 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
33) I	1-bromo-2...	1.694	1.914	960.5E6	149.7E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
34)	Chlordane...	3.423	4.399	582.0E6	94354361	467.821	499.060
35)	Chlordane...	3.909	5.081	331.1E6	47386890	437.036	433.727
36)	Chlordane...	4.668	6.067	1199.7E6	174.0E6	447.981	462.856
37)	Chlordane...	4.840	6.312	1826.6E6	293.3E6	458.865	460.145m
38)	Chlordane...	5.964	7.908	282.7E6	45439416	428.891	457.354

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

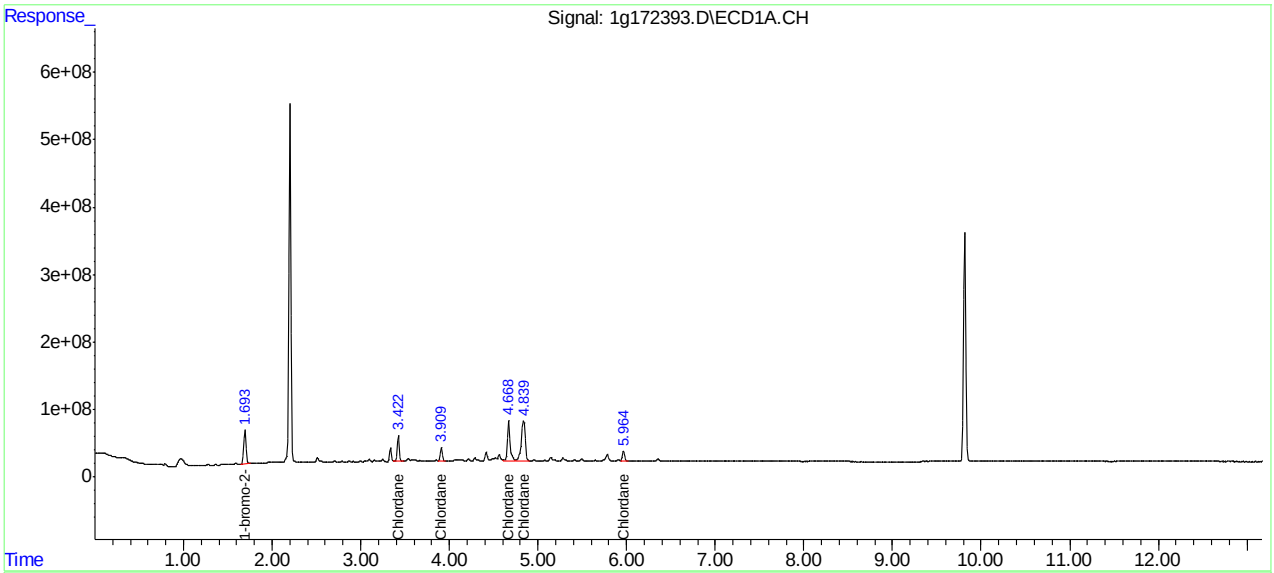
11.3.5
11

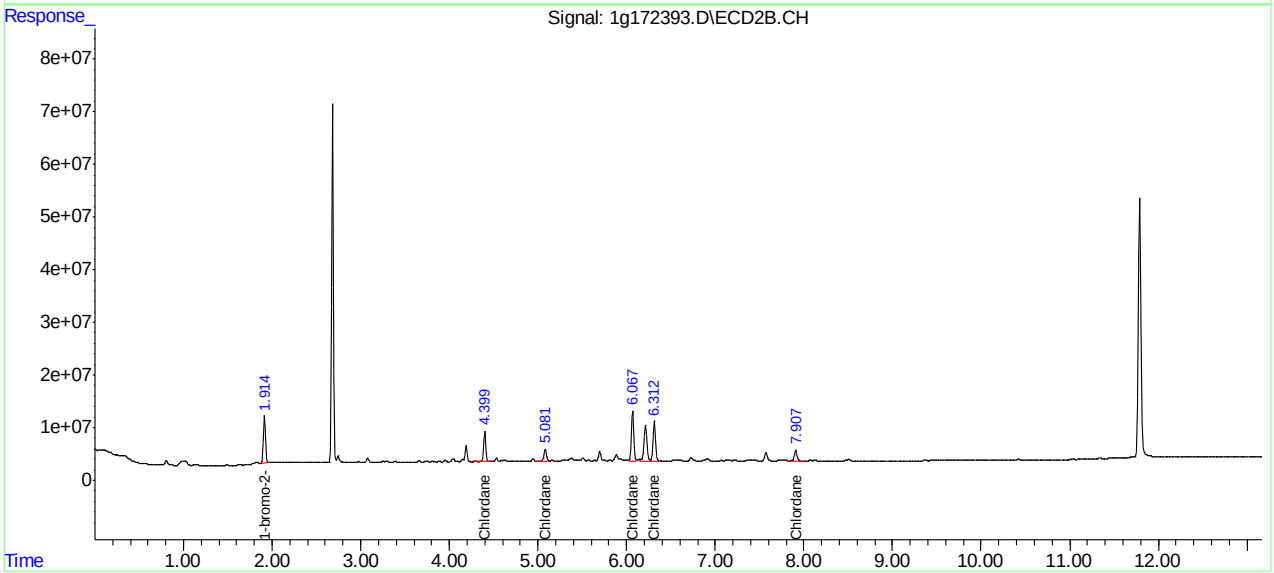
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1G5950\
Data File : 1g172393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Dec 2021 3:32 am
Operator : christp
Sample : ic5950-500
Misc : op37216,g1g5950,15.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 28 22:55:15 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5950.M
Quant Title : PEST/PCB
QLast Update : Tue Dec 28 04:15:56 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/30/21 10:08

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1G5950\
Data File : 1g172394.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Dec 2021 3:50 am
Operator : christp
Sample : ic5950-500
Misc : op37216,g1g5950,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 28 22:55:33 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5950.M
Quant Title : PEST/PCB
QLast Update : Tue Dec 28 22:48:40 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
27) I	1-bromo-2...	1.694	1.914	985.0E6	152.2E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
28) L8	Toxaphene{A}	5.389	6.851	91055684	19831474	469.103	553.580m
29) L8	Toxaphene{B}	6.053	7.788	295.4E6	28892023	565.461	541.642
30) L8	Toxaphene{C}	6.245	7.964	209.9E6	50609362	430.841m	488.553
31) L8	Toxaphene{D}	6.603	8.440	154.5E6	29470655	433.937	551.242 #
32) L8	Toxaphene{E}	7.304	9.426	174.5E6	23669669	408.987	408.381
	Sum Toxaphene			925.3E6	152.5E6	2308.330	2543.397
	Average Toxaphene					461.666	508.679

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

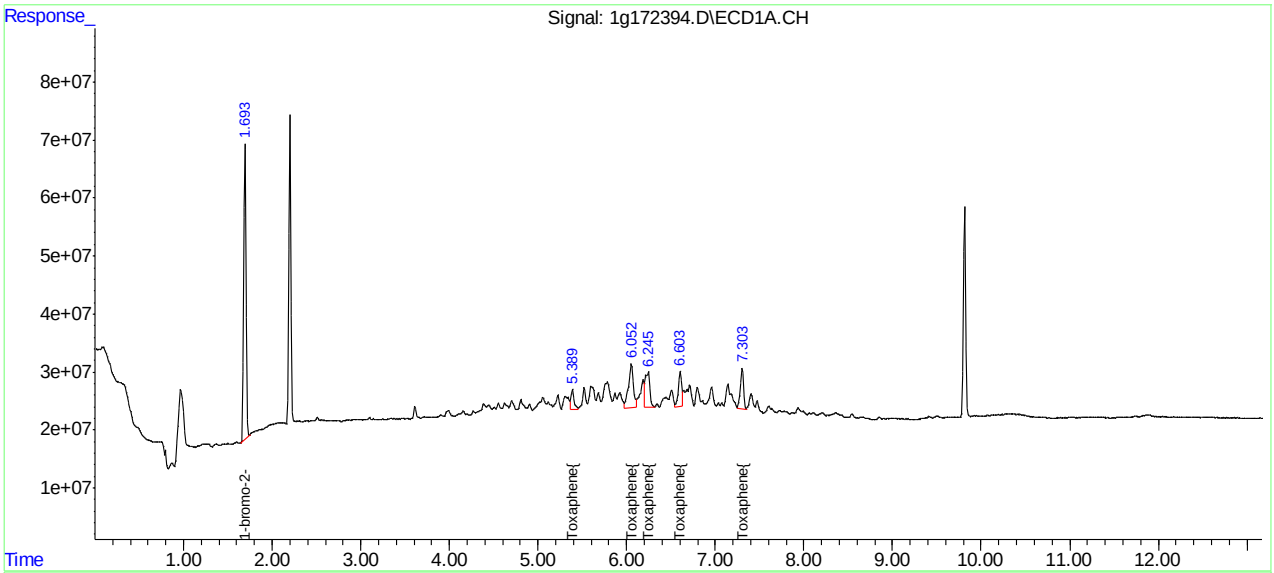
11.3.6 11

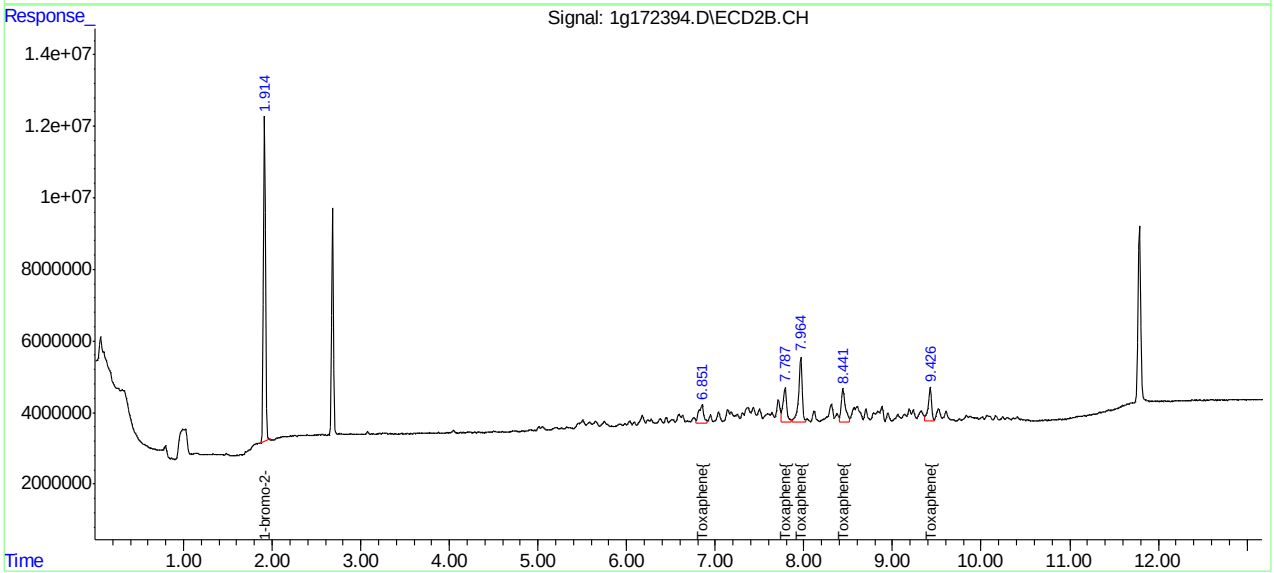
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1G5950\
Data File : 1g172394.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Dec 2021 3:50 am
Operator : christp
Sample : ic5950-500
Misc : op37216,g1g5950,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 28 22:55:33 2021
Quant Method : C:\MSDCHEM\1\METHODS\1PST5950.M
Quant Title : PEST/PCB
QLast Update : Tue Dec 28 22:48:40 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81077.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 4:49 am
Operator : christp
Sample : icc2867-25
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 08:41:06 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 08:39:34 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
1)	I 1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
27)	I 1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
33)	I 1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
	System Monitoring Compounds							
2)	SAB Tetrachlo...	2.268	2.889	255.6E6	247.5E6	27.942	25.988	
	Spiked Amount 40.000	Range 30 - 150		Recovery =		69.86%	64.97%	
26)	SA Decachlor...	9.361	11.853	438.5E6	202.4E6	22.586m	28.026	
	Spiked Amount 40.000			Recovery =		56.46%	70.06%	
	Target Compounds							
3)	hexachlor...	2.581	3.400	681.4E6	285.6E6	26.546	25.055	
4)	A alpha-BHC	2.714	3.555	513.9E6	365.8E6	21.637	25.439	
5)	MA gamma-BHC	2.991	3.985	434.2E6	307.0E6	20.028	23.289	
6)	MA Heptachlor	3.461	4.562	416.9E6	315.4E6	20.067	24.752	
7)	B beta-BHC	3.064	4.070	173.0E6	135.0E6	20.133	21.978	
8)	B delta-BHC	3.236	4.467	406.6E6	282.6E6	19.098m	23.262	
9)	MB Aldrin	3.777	5.014	440.1E6	284.2E6	20.700	22.894	
10)	alachlor	3.922	4.825	43816318	40883081	31.937m	24.986	
11)	B Heptachlo...	4.453	5.841	377.4E6	273.0E6	18.389	23.653	#
12)	B gamma-Chl...	4.611	6.126	385.8E6	278.2E6	18.912	23.081	
13)	B alpha-Chl...	4.774	6.352	392.8E6	268.1E6	19.962	23.729	
14)	A Endosulfan I	4.938	6.447	414.9E6	259.8E6	21.462	23.483	
15)	B 4,4'-DDE	4.896	6.618	380.9E6	270.9E6	19.914	23.459	
16)	MA Dieldrin	5.250	6.885	418.2E6	280.9E6	20.702	24.659	
17)	MA Endrin	5.558	7.388	404.6E6	272.8E6	21.431	25.731	
18)	A 4,4'-DDD	5.697	7.570	308.3E6	228.8E6	20.877	24.816	
19)	B Endosulfa...	5.867	7.741	363.2E6	244.0E6	20.937	24.705	
20)	MA 4,4'-DDT	6.102	8.103	320.0E6	227.7E6	20.678	25.144	
21)	B Endrin Al...	6.473	8.315	279.1E6	173.8E6	19.630	21.385	
22)	B Endosulfa...	7.134	8.782	364.1E6	238.3E6	21.795	25.847	
23)	A Methoxychlor	6.883	9.348	184.0E6	125.9E6	26.356	27.933	
24)	Mirex	6.991	9.675	304.6E6	199.3E6	26.117	25.715	
25)	B Endrin Ke...	7.557	9.742	337.9E6	217.8E6	20.265	21.830	
	Sum Toxaphene			0	0	N.D.	N.D.	
Average	Toxaphene					0.000	0.000	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

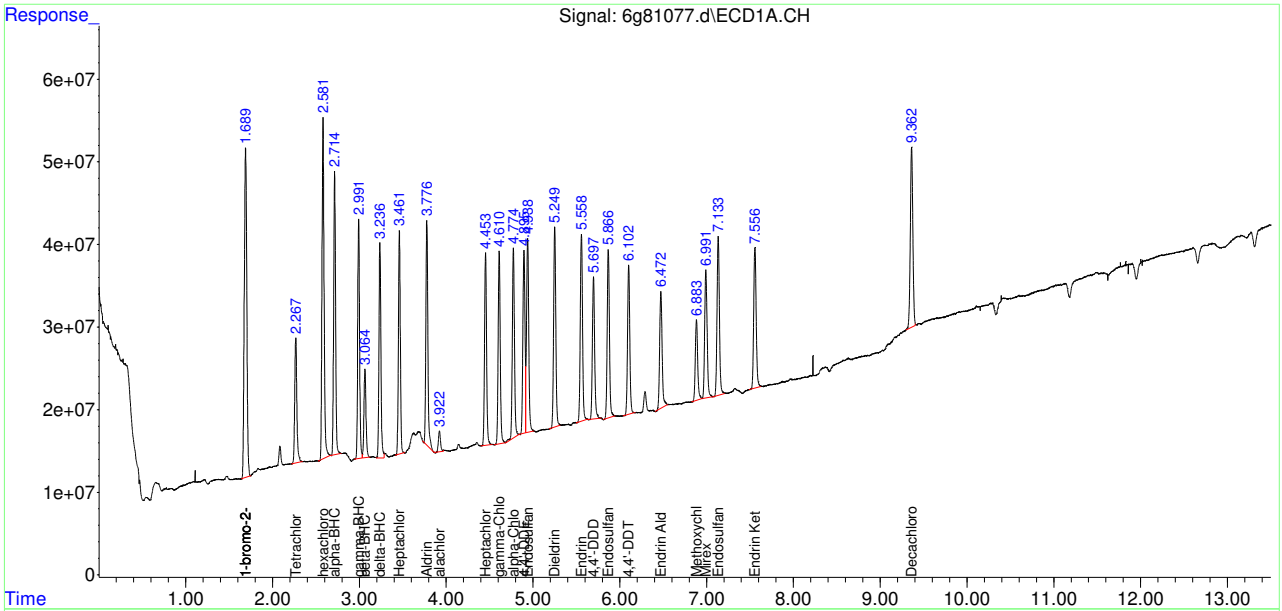
11.3.7 11

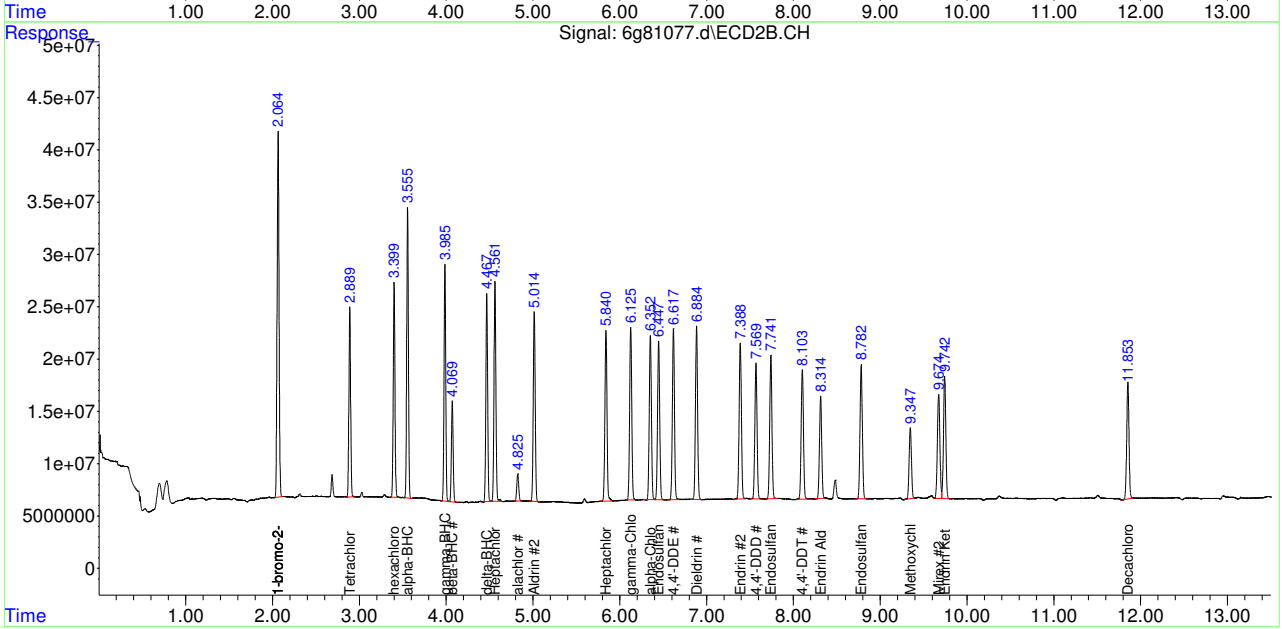
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81077.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 4:49 am
Operator : christp
Sample : icc2867-25
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 08:41:06 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 08:39:34 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81082.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:20 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:03:45 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:02:14 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000
27)	I 1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000
33)	I 1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.268	2.891	5806.8E6	5241.5E6	7.901	7.892
	Spiked Amount 40.000	Range 30 - 150		Recovery =		19.75%#	19.73%#
26)	SA Decachlor...	9.362	11.853	10772.8E6	4000.8E6	6.874m	6.911
	Spiked Amount 40.000			Recovery =		17.18%	17.28%
	Target Compounds						
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
34)	Chlordane...	3.461	4.562	597.5E6	374.1E6	1182.958	1382.044
35)	Chlordane...	3.914	5.209	365.7E6	205.2E6	702.530	688.043
36)	Chlordane...	4.610	6.126	1131.9E6	750.3E6	525.606	715.581 #
37)	Chlordane...	4.768	6.351	1859.4E6	1229.1E6	511.620	639.417m
38)	Chlordane...	5.779	7.818	284.4E6	185.6E6	468.892	682.840 #
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

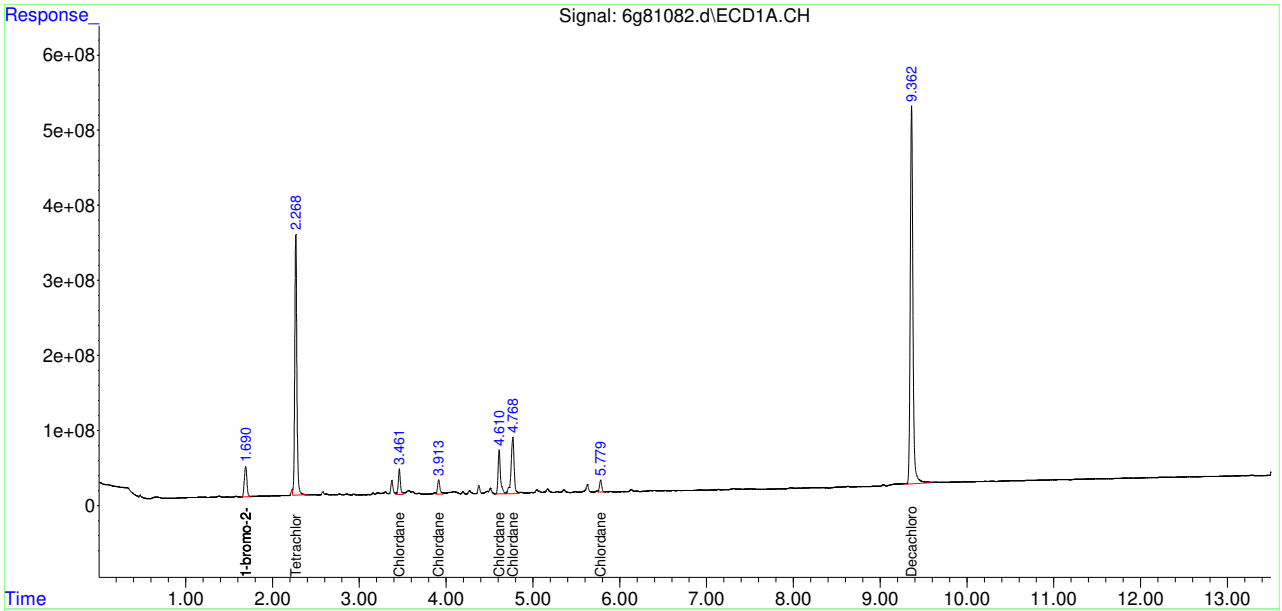
11.3.8 11

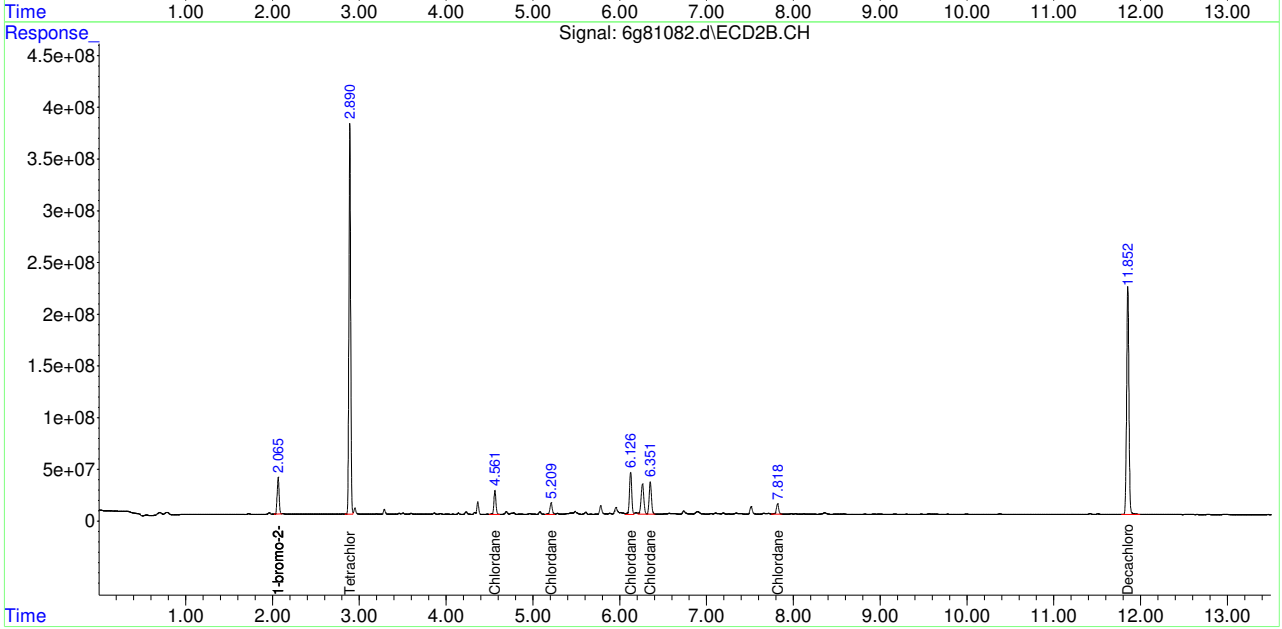
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81082.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:20 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:03:45 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:02:14 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81083.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:38 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:08:38 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:05:38 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
27)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
33)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.271	2.892	526.2E6	509.1E6	0.732	0.787
	Spiked Amount 40.000	Range 30 - 150		Recovery =		1.83%#	1.97%#
26)	SA Decachlor...	9.363	11.852	913.7E6	414.0E6	0.596	0.734
	Spiked Amount 40.000			Recovery =		1.49%	1.83%
	Target Compounds						
28)	L8 Toxaphene{A}	5.613	6.849	163.4E6	71929449	1242.670m	677.901m#
29)	L8 Toxaphene{B}	5.855	7.710	208.7E6	113.3E6	541.393m	632.663m
30)	L8 Toxaphene{C}	6.026	7.872	189.4E6	217.7E6	492.947m	636.971m#
31)	L8 Toxaphene{D}	6.361	8.310	167.8E6	102.1E6	571.511m	556.343m
32)	L8 Toxaphene{E}	6.982	9.214	183.5E6	131.3E6	543.649m	743.268 #
	Sum Toxaphene			912.9E6	636.3E6	3392.168	3247.146
Average Toxaphene						678.434	649.429
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

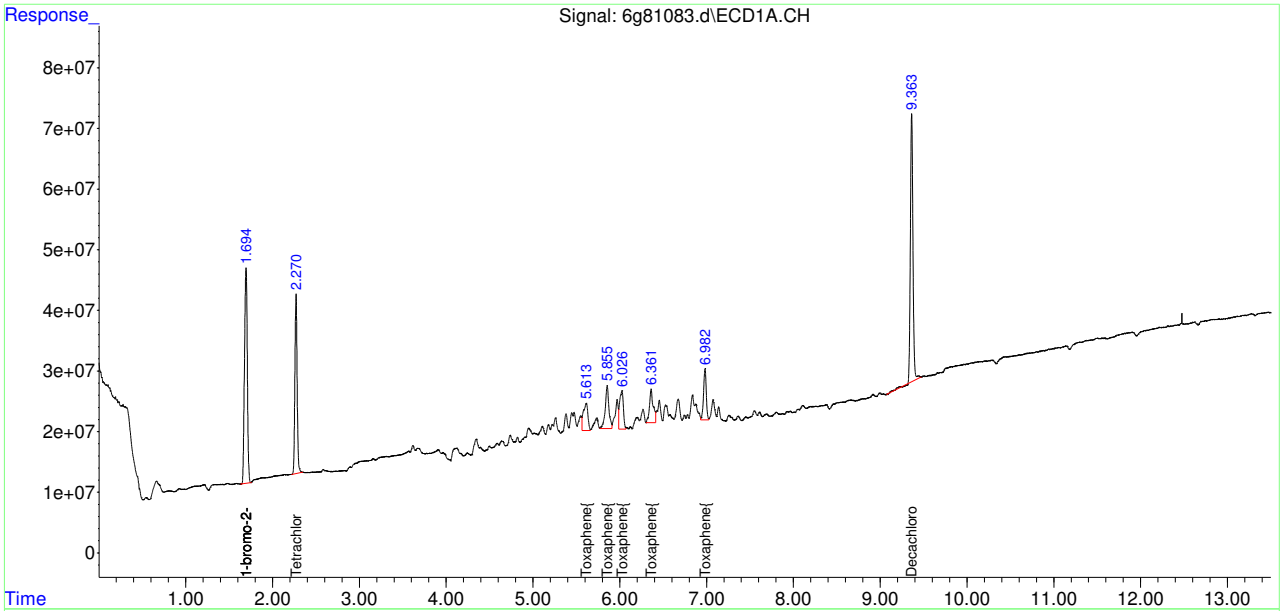
11.3.9 11

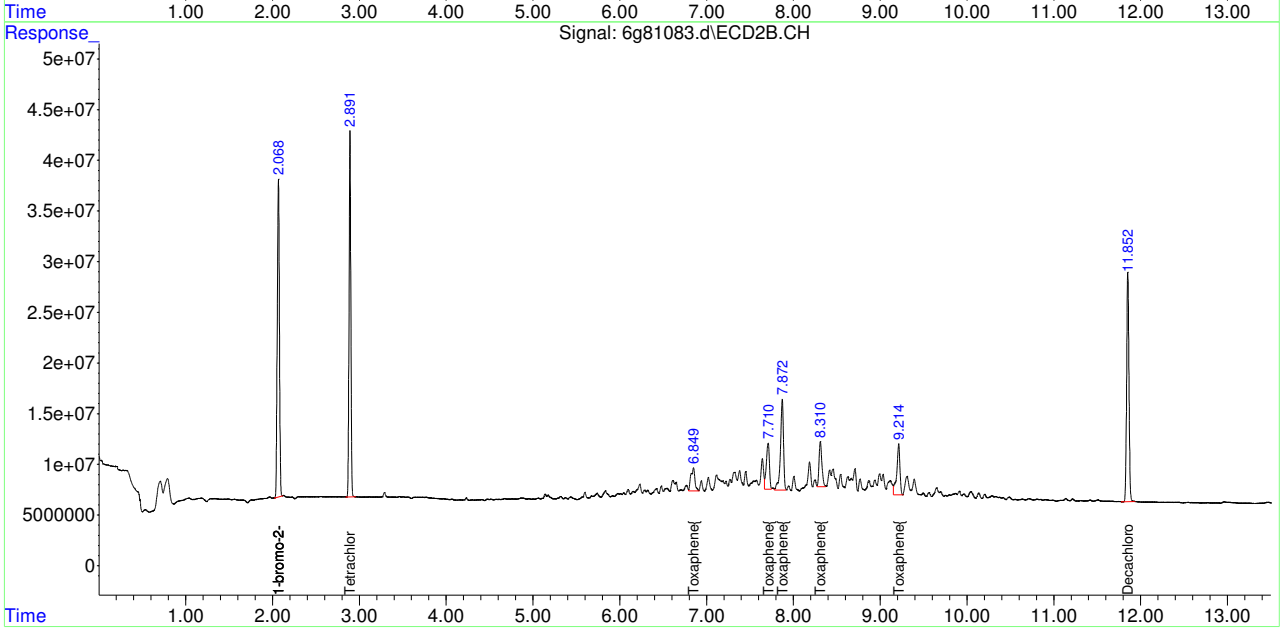
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81083.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:38 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:08:38 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:05:38 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
Analyst: SB Run ID: MA51605
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:15	MA51605-STD1	1		b=1.0724e-004,c=1.2133e-002,rho=0.9995179
09:17	MA51605-STD2	1		STDB
09:18	MA51605-STD3	1		STDC
09:20	MA51605-STD4	1		STDD
09:21	MA51605-STD5	1		STDE
09:23	MA51605-STD6	1		STDF
09:26	MA51605-STD7	1		STDA
09:28	MA51605-STD8	1		STDB
09:30	MA51605-ICV1	1		
09:31	MA51605-ICB1	1		
09:33	MA51605-CCV1	1		
09:35	MA51605-CCB1	1		
09:37	MA51605-CRI1	1		
09:40	MP30398-B1	1		
09:41	MP30398-S1	1		
09:43	MP30398-S2	1		
09:45	MA51605-CCV2	1		
09:47	MA51605-CCB2	1		
09:49	MP30398-MB1	1		
09:50	JD36618-19	1		(sample used for QC only; not part of login JD36682)
09:51	ZZZZZZ	1		
09:53	ZZZZZZ	1		
09:54	ZZZZZZ	1		
09:56	ZZZZZZ	1		
09:57	ZZZZZZ	1		
09:59	ZZZZZZ	1		
10:01	MA51605-CCV3	1		
10:02	MA51605-CCB3	1		
10:04	ZZZZZZ	1		
10:05	ZZZZZZ	1		
10:07	ZZZZZZ	1		
10:08	ZZZZZZ	1		
10:10	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
Analyst: SB Run ID: MA51605
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:12	ZZZZZZ	1		
10:13	ZZZZZZ	1		
10:15	ZZZZZZ	1		
10:16	MA51605-CCV4	1		
10:18	MA51605-CCB4	1		
10:20	ZZZZZZ	1		
10:21	ZZZZZZ	1		
10:23	ZZZZZZ	1		
10:24	ZZZZZZ	1		
10:26	ZZZZZZ	1		
10:29	MP30399-B1	1		
10:30	MP30399-S1	1		
10:32	MP30399-S2	1		
10:34	MA51605-CCV5	1		
10:36	MA51605-CCB5	1		
10:38	MP30399-MB1	1		
10:40	JD36639-25	1		(sample used for QC only; not part of login JD36682)
10:41	ZZZZZZ	1		
10:42	ZZZZZZ	1		
10:44	ZZZZZZ	1		
10:46	ZZZZZZ	1		
10:47	ZZZZZZ	1		
10:49	ZZZZZZ	1		
10:50	MA51605-CCV6	1		
10:51	MA51605-CCB6	1		
10:53	ZZZZZZ	1		
10:55	ZZZZZZ	1		
10:56	ZZZZZZ	1		
10:58	JD36682-7	1		
10:59	JD36682-8	1		
11:01	JD36682-9	1		
11:02	JD36682-10	1		
11:04	JD36682-11	1		

----------> Last reportable sample/prep for job JD36682

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
Analyst: SB Run ID: MA51605
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:05	MA51605-CCV7	1		
11:07	MA51605-CCB7	1		
---------->	Last reportable CCB for job JD36682			
11:09	ZZZZZZ	1		
11:10	ZZZZZZ	1		
11:12	ZZZZZZ	1		
11:14	ZZZZZZ	1		
11:15	ZZZZZZ	1		
11:17	MP30400-B1	1		
11:19	MP30400-S1	1		
11:21	MP30400-S2	1		
11:23	MA51605-CCV8	1		
11:25	MA51605-CCB8	1		
11:27	MP30400-MB1	1		
11:28	JD36081-39R	1		(sample used for QC only; not part of login JD36682)
11:30	ZZZZZZ	1		
11:31	ZZZZZZ	1		
11:33	ZZZZZZ	1		
11:35	ZZZZZZ	1		
11:37	ZZZZZZ	1		
11:39	ZZZZZZ	1		
11:41	MA51605-CCV9	1		
11:42	MA51605-CCB9	1		
11:44	ZZZZZZ	1		
11:46	ZZZZZZ	1		
11:47	ZZZZZZ	1		
11:49	ZZZZZZ	1		
11:50	ZZZZZZ	1		
11:52	ZZZZZZ	1		
11:53	ZZZZZZ	1		
11:55	ZZZZZZ	1		
11:56	MA51605-CCV10	1		
11:58	MA51605-CCB10	1		
12:00	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
Analyst: SB Run ID: MA51605
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:01	ZZZZZZ	1		
12:02	ZZZZZZ	1		
12:04	ZZZZZZ	1		
12:06	ZZZZZZ	1		
12:08	ZZZZZZ	2		
12:09	ZZZZZZ	20		
12:11	ZZZZZZ	5		
12:13	MA51605-CCV11	1		
12:15	MA51605-CCB11	1		
12:17	ZZZZZZ	10		
12:18	ZZZZZZ	10		
12:21	MA51605-CCV12	1		
12:23	MA51605-CCB12	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
Analyst: SB Run ID: MA51605
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
09:30	MA51605-ICV1	1	X	
09:31	MA51605-ICB1	1	X	
09:33	MA51605-CCV1	1	X	
09:35	MA51605-CCB1	1	X	
09:37	MA51605-CRI1	1	X	
09:40	MP30398-B1	1	X	
09:41	MP30398-S1	1	X	
09:43	MP30398-S2	1	X	
09:45	MA51605-CCV2	1	X	
09:47	MA51605-CCB2	1	X	
09:49	MP30398-MB1	1	X	
09:50	JD36618-19	1	X	(a)
09:51	ZZZZZZ	1		
09:53	ZZZZZZ	1		
09:54	ZZZZZZ	1		
09:56	ZZZZZZ	1		
09:57	ZZZZZZ	1		
09:59	ZZZZZZ	1		
10:01	MA51605-CCV3	1	X	
10:02	MA51605-CCB3	1	X	
10:04	ZZZZZZ	1		
10:05	ZZZZZZ	1		
10:07	ZZZZZZ	1		
10:08	ZZZZZZ	1		
10:10	ZZZZZZ	1		
10:12	ZZZZZZ	1		
10:13	ZZZZZZ	1		
10:15	ZZZZZZ	1		
10:16	MA51605-CCV4	1	X	
10:18	MA51605-CCB4	1	X	
10:20	ZZZZZZ	1		
10:21	ZZZZZZ	1		
10:23	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
Analyst: SB Run ID: MA51605
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
10:24	ZZZZZZ	1		
10:26	ZZZZZZ	1		
10:29	MP30399-B1	1	X	
10:30	MP30399-S1	1	X	
10:32	MP30399-S2	1	X	
10:34	MA51605-CCV5	1	X	
10:36	MA51605-CCB5	1	X	
10:38	MP30399-MB1	1	X	
10:40	JD36639-25	1	X	(a)
10:41	ZZZZZZ	1		
10:42	ZZZZZZ	1		
10:44	ZZZZZZ	1		
10:46	ZZZZZZ	1		
10:47	ZZZZZZ	1		
10:49	ZZZZZZ	1		
10:50	MA51605-CCV6	1	X	
10:51	MA51605-CCB6	1	X	
10:53	ZZZZZZ	1		
10:55	ZZZZZZ	1		
10:56	ZZZZZZ	1		
10:58	JD36682-7	1	X	
10:59	JD36682-8	1	X	
11:01	JD36682-9	1	X	
11:02	JD36682-10	1	X	
11:04	JD36682-11	1	X	
11:05	MA51605-CCV7	1	X	
11:07	MA51605-CCB7	1	X	
11:09	ZZZZZZ	1		
11:10	ZZZZZZ	1		
11:12	ZZZZZZ	1		
11:14	ZZZZZZ	1		
11:15	ZZZZZZ	1		
11:17	MP30400-B1	1	X	
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
Analyst: SB Run ID: MA51605
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
11:19	MP30400-S1	1	X	
11:21	MP30400-S2	1	X	
11:23	MA51605-CCV8	1	X	
11:25	MA51605-CCB8	1	X	
11:27	MP30400-MB1	1	X	
11:28	JD36081-39R	1	X	(a)
11:30	ZZZZZZ	1		
11:31	ZZZZZZ	1		
11:33	ZZZZZZ	1		
11:35	ZZZZZZ	1		
11:37	ZZZZZZ	1		
11:39	ZZZZZZ	1		
11:41	MA51605-CCV9	1	X	
11:42	MA51605-CCB9	1	X	
11:44	ZZZZZZ	1		
11:46	ZZZZZZ	1		
11:47	ZZZZZZ	1		
11:49	ZZZZZZ	1		
11:50	ZZZZZZ	1		
11:52	ZZZZZZ	1		
11:53	ZZZZZZ	1		
11:55	ZZZZZZ	1		
11:56	MA51605-CCV10	1	X	
11:58	MA51605-CCB10	1	X	
12:00	ZZZZZZ	1		
12:01	ZZZZZZ	1		
12:02	ZZZZZZ	1		
12:04	ZZZZZZ	1		
12:06	ZZZZZZ	1		
12:08	ZZZZZZ	2		
12:09	ZZZZZZ	20		
12:11	ZZZZZZ	5		
12:13	MA51605-CCV11	1	X	
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
Analyst: SB Run ID: MA51605
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg
12:15	MA51605-CCB11	1	X
12:17	ZZZZZZ	10	
12:18	ZZZZZZ	10	
12:21	MA51605-CCV12	1	X
12:23	MA51605-CCB12	1	X

(a) Sample used for QC only; not part of login JD36682.

Element: Hg

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
QC Limits: result < RL Run ID: MA51605 Units: ug/l

Time:			09:31		09:35		09:47		10:02	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	0.0544	<0.20	0.0345	<0.20	0.0396	<0.20	0.0343	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
QC Limits: result < RL Run ID: MA51605 Units: ug/l

Time: / Sample ID:			10:18 CCB4		10:36 CCB5		10:51 CCB6		11:07 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	0.0384	<0.20	0.0537	<0.20	0.0406	<0.20	0.0285	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
QC Limits: 90 to 110 % Recovery Run ID: MA51605 Units: ug/l

Time:		09:30			09:33			09:45	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.11	103.7	2.5	2.58	103.2	2.5	2.54	101.6

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
QC Limits: 90 to 110 % Recovery Run ID: MA51605 Units: ug/l

Time:		10:01			10:16			10:34	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.56	102.4	2.5	2.58	103.2	2.5	2.60	104.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
QC Limits: 90 to 110 % Recovery Run ID: MA51605 Units: ug/l

Time:		10:50			11:05	
Sample ID:	CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.63	105.2	2.5	2.53	101.2

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621S1.CSV Date Analyzed: 12/16/21 Methods: SW846 7471B
QC Limits: 70 to 130 % Recovery Run ID: MA51605 Units: ug/l

Time:			09:37	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Mercury	0.20		0.244	122.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51616
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:11	MA51616-STD1	1		b=2.2689e-004,c=-3.1927e-002,rho=0.9992417
10:13	MA51616-STD2	1		STDB
10:14	MA51616-STD3	1		STDC
10:16	MA51616-STD4	1		STDD
10:17	MA51616-STD5	1		STDE
10:19	MA51616-STD6	1		STDF
10:21	MA51616-STD7	1		STDF
10:25	MA51616-ICV1	1		
10:27	MA51616-ICB1	1		
10:29	ZZZZZZ	1		
10:31	MA51616-CCV1	1		
10:32	MA51616-CCB1	1		
10:34	MA51616-CRI1	1		
10:36	MP30421-B1	1		
10:37	MP30421-S1	1		
10:39	ZZZZZZ	1		
10:41	MA51616-CCV2	1		
10:43	MA51616-CCB2	1		
10:45	MP30421-MB1	1		
10:46	JD36639-5	1		(sample used for QC only; not part of login JD36682)
10:48	ZZZZZZ	1		
10:49	ZZZZZZ	1		
10:50	ZZZZZZ	1		
10:52	JD36682-2	1		
10:53	JD36682-3	1		
10:55	JD36682-4	1		
10:56	MA51616-CCV3	1		
10:57	MA51616-CCB3	1		
10:59	JD36682-5	1		
11:01	JD36682-6	1		
11:02	ZZZZZZ	1		
11:04	ZZZZZZ	1		
11:05	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51616
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:06	ZZZZZZ	1		
11:08	ZZZZZZ	1		
11:09	ZZZZZZ	1		
11:10	ZZZZZZ	1		
11:12	MA51616-CCV4	1		
11:14	MA51616-CCB4	1		
11:16	ZZZZZZ	1		
11:18	ZZZZZZ	1		
11:19	ZZZZZZ	1		
11:21	MP30422-B1	1		
11:23	ZZZZZZ	1		
11:24	ZZZZZZ	1		
11:27	ZZZZZZ	1		
11:29	ZZZZZZ	1		
11:31	MA51616-CCV5	1		
11:33	MA51616-CCB5	1		
11:35	MP30422-MB1	1		
11:36	JD36803-7	1		(sample used for QC only; not part of login JD36682)
11:38	JD36803-7F	1		(sample used for QC only; not part of login JD36682)
11:40	ZZZZZZ	1		
11:42	ZZZZZZ	1		
11:44	ZZZZZZ	1		
11:45	ZZZZZZ	1		
11:47	ZZZZZZ	1		
11:50	MA51616-CCV6	1		
11:52	MA51616-CCB6	1		
11:54	ZZZZZZ	1		
11:55	ZZZZZZ	1		
11:58	ZZZZZZ	1		
12:00	ZZZZZZ	1		
12:01	ZZZZZZ	1		
12:03	ZZZZZZ	1		
12:05	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51616
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:07	ZZZZZZ	1		
12:09	MA51616-CCV7	1		
12:11	MA51616-CCB7	1		
12:13	ZZZZZZ	1		
12:15	ZZZZZZ	1		
12:17	ZZZZZZ	1		
12:18	ZZZZZZ	1		
12:20	ZZZZZZ	1		
12:21	MP30423-B1	1		
12:23	MP30423-S1	1		
12:25	MP30423-S2	1		
12:26	MA51616-CCV8	1		
12:28	MA51616-CCB8	1		
12:30	MP30423-MB1	1		
12:32	JD35533-9R	1		(sample used for QC only; not part of login JD36682)
12:33	ZZZZZZ	1		
12:35	ZZZZZZ	1		
12:36	ZZZZZZ	1		
12:37	MA51616-CCV9	1		
12:39	MA51616-CCB9	1		
12:41	ZZZZZZ	1		
12:42	ZZZZZZ	1		
12:43	MP30424-B1	1		
12:45	MP30424-S1	1		
12:47	ZZZZZZ	1		
12:49	MA51616-CCV10	1		
12:51	MA51616-CCB10	1		
12:53	MP30424-MB1	1		
12:54	JD35487-5	1		(sample used for QC only; not part of login JD36682)
12:55	MP30425-B1	1		
12:57	MP30425-S1	1		
12:59	MP30425-S2	1		
13:01	MA51616-CCV11	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51616
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:03	MA51616-CCB11	1		
13:05	MP30425-MB1	1		
13:06	ZZZZZZ	1		
13:07	JD33557-14T	1		(sample used for QC only; not part of login JD36682)
13:09	ZZZZZZ	1		
13:10	MP30421-S2	1		
---------->	Last reportable sample/prep for job JD36682			
13:12	ZZZZZZ	5		
13:14	ZZZZZZ	5		
13:16	ZZZZZZ	5		
13:17	MA51616-CCV12	1		
13:19	MA51616-CCB12	1		
---------->	Last reportable CCB for job JD36682			
13:21	MP30422-S2	5		
13:22	ZZZZZZ	5		
13:24	ZZZZZZ	5		
13:26	JD36803-7	2		(sample used for QC only; not part of login JD36682)
13:28	JD36803-7F	2		(sample used for QC only; not part of login JD36682)
13:30	MP30424-S2	1		
13:32	ZZZZZZ	2		
13:34	ZZZZZZ	10		
13:36	MA51616-CCV13	1		
13:38	MA51616-CCB13	1		
13:40	ZZZZZZ	2		
13:41	ZZZZZZ	5		
13:43	ZZZZZZ	5		
13:45	ZZZZZZ	5		
13:47	ZZZZZZ	2		
13:49	ZZZZZZ	2		
13:51	ZZZZZZ	5		
13:53	ZZZZZZ	2		
13:55	MA51616-CCV14	1		
13:57	MA51616-CCB14	1		
13:59	MP30422-S1	5		
14:00	MP30422-S3	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51616
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:02	MP30422-S4	5		
14:04	ZZZZZZ	2		
14:07	MA51616-CCV15	1		
14:09	MA51616-CCB15	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51616
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
10:25	MA51616-ICV1	1	X	
10:27	MA51616-ICB1	1	X	
10:29	ZZZZZZ	1		
10:31	MA51616-CCV1	1	X	
10:32	MA51616-CCB1	1	X	
10:34	MA51616-CRI1	1	X	
10:36	MP30421-B1	1	X	
10:37	MP30421-S1	1	X	
10:39	ZZZZZZ	1		
10:41	MA51616-CCV2	1	X	
10:43	MA51616-CCB2	1	X	
10:45	MP30421-MB1	1	X	
10:46	JD36639-5	1	X	(a)
10:48	ZZZZZZ	1		
10:49	ZZZZZZ	1		
10:50	ZZZZZZ	1		
10:52	JD36682-2	1	X	
10:53	JD36682-3	1	X	
10:55	JD36682-4	1	X	
10:56	MA51616-CCV3	1	X	
10:57	MA51616-CCB3	1	X	
10:59	JD36682-5	1	X	
11:01	JD36682-6	1	X	
11:02	ZZZZZZ	1		
11:04	ZZZZZZ	1		
11:05	ZZZZZZ	1		
11:06	ZZZZZZ	1		
11:08	ZZZZZZ	1		
11:09	ZZZZZZ	1		
11:10	ZZZZZZ	1		
11:12	MA51616-CCV4	1	X	
11:14	MA51616-CCB4	1	X	
11:16	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51616
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
11:18	ZZZZZZ	1		
11:19	ZZZZZZ	1		
11:21	MP30422-B1	1	X	
11:23	ZZZZZZ	1		
11:24	ZZZZZZ	1		
11:27	ZZZZZZ	1		
11:29	ZZZZZZ	1		
11:31	MA51616-CCV5	1	X	
11:33	MA51616-CCB5	1	X	
11:35	MP30422-MB1	1	X	
11:36	JD36803-7	1		(a)
11:38	JD36803-7F	1		(a)
11:40	ZZZZZZ	1		
11:42	ZZZZZZ	1		
11:44	ZZZZZZ	1		
11:45	ZZZZZZ	1		
11:47	ZZZZZZ	1		
11:50	MA51616-CCV6	1	X	
11:52	MA51616-CCB6	1	X	
11:54	ZZZZZZ	1		
11:55	ZZZZZZ	1		
11:58	ZZZZZZ	1		
12:00	ZZZZZZ	1		
12:01	ZZZZZZ	1		
12:03	ZZZZZZ	1		
12:05	ZZZZZZ	1		
12:07	ZZZZZZ	1		
12:09	MA51616-CCV7	1	X	
12:11	MA51616-CCB7	1	X	
12:13	ZZZZZZ	1		
12:15	ZZZZZZ	1		
12:17	ZZZZZZ	1		
12:18	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51616
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
12:20	ZZZZZZ	1		
12:21	MP30423-B1	1	X	
12:23	MP30423-S1	1	X	
12:25	MP30423-S2	1	X	
12:26	MA51616-CCV8	1	X	
12:28	MA51616-CCB8	1	X	
12:30	MP30423-MB1	1	X	
12:32	JD35533-9R	1	X	(a)
12:33	ZZZZZZ	1		
12:35	ZZZZZZ	1		
12:36	ZZZZZZ	1		
12:37	MA51616-CCV9	1	X	
12:39	MA51616-CCB9	1	X	
12:41	ZZZZZZ	1		
12:42	ZZZZZZ	1		
12:43	MP30424-B1	1	X	
12:45	MP30424-S1	1	X	
12:47	ZZZZZZ	1		
12:49	MA51616-CCV10	1	X	
12:51	MA51616-CCB10	1	X	
12:53	MP30424-MB1	1	X	
12:54	JD35487-5	1	X	(a)
12:55	MP30425-B1	1	X	
12:57	MP30425-S1	1	X	
12:59	MP30425-S2	1	X	
13:01	MA51616-CCV11	1	X	
13:03	MA51616-CCB11	1	X	
13:05	MP30425-MB1	1	X	
13:06	ZZZZZZ	1		
13:07	JD33557-14T	1	X	(a)
13:09	ZZZZZZ	1		
13:10	MP30421-S2	1	X	
13:12	ZZZZZZ	5		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51616
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
13:14	ZZZZZZ	5		
13:16	ZZZZZZ	5		
13:17	MA51616-CCV12	1	X	
13:19	MA51616-CCB12	1	X	
13:21	MP30422-S2	5	X	
13:22	ZZZZZZ	5		
13:24	ZZZZZZ	5		
13:26	JD36803-7	2	X	(a)
13:28	JD36803-7F	2	X	(a)
13:30	MP30424-S2	1	X	
13:32	ZZZZZZ	2		
13:34	ZZZZZZ	10		
13:36	MA51616-CCV13	1	X	
13:38	MA51616-CCB13	1	X	
13:40	ZZZZZZ	2		
13:41	ZZZZZZ	5		
13:43	ZZZZZZ	5		
13:45	ZZZZZZ	5		
13:47	ZZZZZZ	2		
13:49	ZZZZZZ	2		
13:51	ZZZZZZ	5		
13:53	ZZZZZZ	2		
13:55	MA51616-CCV14	1	X	
13:57	MA51616-CCB14	1	X	
13:59	MP30422-S1	5	X	
14:00	MP30422-S3	5	X	
14:02	MP30422-S4	5	X	
14:04	ZZZZZZ	2		
14:07	MA51616-CCV15	1	X	
14:09	MA51616-CCB15	1	X	

(a) Sample used for QC only; not part of login JD36682.

	Element:	Hg

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51616 Units: ug/l

Time: / Sample ID:			10:27 ICB1		10:32 CCB1		10:43 CCB2		10:57 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0959	<0.20	-0.100	<0.20	-0.0859	<0.20	-0.0857	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51616 Units: ug/l

Time: / Sample ID:			11:14 CCB4		11:33 CCB5		11:52 CCB6		12:11 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0866	<0.20	-0.0936	<0.20	-0.0800	<0.20	-0.0866	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51616 Units: ug/l

Time:			12:28		12:39		12:51		13:03	
Sample ID:			CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0837	<0.20	-0.0932	<0.20	-0.0932	<0.20	-0.0755	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51616 Units: ug/l

Time:			13:19	
Sample ID:			CCB12	
Metal	RL	IDL	raw	final
Mercury	0.20	.034	-0.0698	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51616 Units: ug/l

Time:		10:25			10:31			10:41	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.21	107.0	2.5	2.66	106.4	2.5	2.61	104.4

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51616 Units: ug/l

Time:		10:56			11:12			11:31	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.61	104.4	2.5	2.57	102.8	2.5	2.61	104.4

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51616 Units: ug/l

Time:		11:50			12:09			12:26	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.55	102.0	2.5	2.53	101.2	2.5	2.48	99.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51616 Units: ug/l

Time:		12:37			12:49			13:01	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.63	105.2	2.5	2.57	102.8	2.5	2.62	104.8

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51616 Units: ug/l

Time:		13:17	
Sample ID:	CCV	CCV12	
Metal	True	Results	% Rec
Mercury	2.5	2.62	104.8

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121721W1.CSV Date Analyzed: 12/17/21 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA51616 Units: ug/l

Time:			10:34	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Mercury	0.20		0.190	95.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:52	MA51651-STD1	1		Sample introduction not stable, see rerun.
10:58	MA51651-STD2	1		Sample introduction not stable, see rerun.
11:04	MA51651-STD3	1		STDA
11:10	MA51651-STD4	1		STDB
11:16	MA51651-STD5	1		STDC
11:21	MA51651-STD6	1		STDD
11:27	MA51651-STD7	1		STDE
11:33	MA51651-STD8	1		STDF
11:39	MA51651-STD9	1		STDF
11:45	MA51651-STD10	1		STDG
11:51	MA51651-STD11	1		STDH
11:57	MA51651-STD12	1		STDI
12:03	MA51651-STD13	1		STDJ
12:09	MA51651-STD14	1		STDA
12:15	ZZZZZZ	1		
12:20	MA51651-ICVA1	1		
12:26	MA51651-ICV1	1		
12:34	MA51651-ICB1	1		
12:40	ZZZZZZ	1		
12:46	MA51651-CCVA1	1		
12:52	MA51651-CCB1	1		
12:58	MA51651-CRI1	1		Cri run again before Ag,Se samples
13:04	MA51651-ICSA1	1		Ni out
13:10	MA51651-ICSAB1	1		
13:16	ZZZZZZ	1		
13:22	MA51651-CCVA2	1		
13:28	MA51651-CCB2	1		
13:34	MP30392-MB1	2		
13:40	ZZZZZZ	2		
13:46	ZZZZZZ	2		
13:52	MP30392-SD1	10		
13:59	MP30392-SD1	10		
14:05	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:11	ZZZZZZ	10		
14:17	MP30397-S1	5		
14:23	MP30397-S2	5		
14:29	MA51651-CCVA3	1		
14:35	MA51651-CCB3	1		
14:40	ZZZZZZ	10		
14:46	ZZZZZZ	2		
14:52	ZZZZZZ	2		
14:58	ZZZZZZ	2		
15:04	ZZZZZZ	2		
15:10	ZZZZZZ	2		
15:16	ZZZZZZ	2		
15:22	ZZZZZZ	1		
15:30	MA51651-CRI2	1		
15:38	MA51651-CCVA4	1		
15:46	MA51651-CCB4	1		
15:52	ZZZZZZ	2		
15:58	MP30389A-B2	2		
16:04	ZZZZZZ	1		
16:09	ZZZZZZ	5		
16:15	MP30463-B1	5		
16:21	ZZZZZZ	5		
16:34	ZZZZZZ	1		
16:40	MA51651-CCVA5	1		
16:46	MA51651-CCB5	1		
16:52	MP30463-MB1	5		
16:58	ZZZZZZ	25		
17:04	ZZZZZZ	5000		
17:10	MP30463-S1	5		multiple high elements. Needs post spike for Pb and Sb 1;5 dilution
17:16	MP30463-S2	5		multiple high elements. Rerun 1;5 for Ni, ICSA out
17:22	JD36682-9	5		multiple high elements. Rerun 1;5 for Ni, ICSA out
17:28	MP30463-SD1	25		multiple high elements. Rerun 1;5 for Ni, ICSA out
17:34	MA51651-CCVA6	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:40	MA51651-CCB6	1		
17:46	JD36682-7	5		multiple high elements. Rerun 1;5 for Ni, ICSA out
17:52	JD36682-8	5		multiple high elements. Rerun 1;5 for Ni, ICSA out
17:58	JD36682-10	5		multiple high elements. Rerun 1;5 for Ni, ICSA out
18:04	JD36682-11	5		multiple high elements. Rerun 1;5 for Ni, ICSA out
---------->	Last reportable sample/prep for job JD36682			
18:10	ZZZZZZ	1		
18:15	MA51651-CCVA7	1		
18:21	MA51651-CCB7	1		
---------->	Last reportable CCB for job JD36682			
18:27	MP30497A-MB1	2		
18:33	MP30497A-B2	2		
18:39	MP30497A-S3	2		
18:45	MP30497A-S4	2		
18:51	JD36841-3	2		(sample used for QC only; not part of login JD36682)
18:57	MP30497A-SD1	10		
19:03	ZZZZZZ	2		
19:09	ZZZZZZ	2		
19:15	ZZZZZZ	1		
19:21	MA51651-CCVA8	1		
19:26	MA51651-CCB8	1		
19:32	ZZZZZZ	2		
19:38	ZZZZZZ	2		
19:44	ZZZZZZ	2		
19:50	ZZZZZZ	2		
19:56	ZZZZZZ	2		
20:02	ZZZZZZ	2		
20:08	ZZZZZZ	2		
20:14	MA51651-CCVA9	1		
20:19	MA51651-CCB9	1		
20:25	ZZZZZZ	2		
20:31	ZZZZZZ	2		
20:37	ZZZZZZ	2		
20:43	ZZZZZZ	2		
20:49	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:55	ZZZZZZ	2		
21:01	ZZZZZZ	2		
21:07	ZZZZZZ	2		
21:13	ZZZZZZ	2		
21:19	MA51651-CCVA10	1		
21:25	MA51651-CCB10	1		
21:31	ZZZZZZ	1		
21:37	ZZZZZZ	1		
21:43	ZZZZZZ	1		
21:49	ZZZZZZ	2		
21:54	ZZZZZZ	2		
22:00	ZZZZZZ	1		
22:06	ZZZZZZ	1		
22:12	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	V	Zn
12:15	ZZZZZZ	1																					
12:20	MA51651-ICVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12:26	MA51651-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12:34	MA51651-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12:40	ZZZZZZ	1																					
12:46	MA51651-CCVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12:52	MA51651-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12:58	MA51651-CRI1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13:04	MA51651-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13:10	MA51651-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13:16	ZZZZZZ	1																					
13:22	MA51651-CCVA2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13:28	MA51651-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13:34	MP30392-MB1	2			X																		
13:40	ZZZZZZ	2																					
13:46	ZZZZZZ	2																					
13:52	MP30392-SD1	10																					
13:59	MP30392-SD1	10			X								X		X								X
14:05	ZZZZZZ	2																					
14:11	ZZZZZZ	10																					
14:17	MP30397-S1	5								X													
14:23	MP30397-S2	5								X													
14:29	MA51651-CCVA3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:35	MA51651-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:40	ZZZZZZ	10																					
14:46	ZZZZZZ	2																					
14:52	ZZZZZZ	2																					
14:58	ZZZZZZ	2																					
15:04	ZZZZZZ	2																					
15:10	ZZZZZZ	2																					
15:16	ZZZZZZ	2																					
15:22	ZZZZZZ	1																					
15:30	MA51651-CRI2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	V	Zn

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	V	Zn	
15:38	MA51651-CCVA4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:46	MA51651-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:52	ZZZZZZ	2																						
15:58	MP30389A-B2	2		X					X					X						X		X		
16:04	ZZZZZZ	1																						
16:09	ZZZZZZ	5																						
16:15	MP30463-B1	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:21	ZZZZZZ	5																						
16:34	ZZZZZZ	1																						
16:40	MA51651-CCVA5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:46	MA51651-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:52	MP30463-MB1	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:58	ZZZZZZ	25																						
17:04	ZZZZZZ	5000																						
17:10	MP30463-S1	5		X	X		X	X			X	X		X			X	X	X	X	X			
17:16	MP30463-S2	5		X	X		X	X			X	X		X			X	X	X	X	X			
17:22	JD36682-9	5		X	X		X	X			X	X		X			X	X	X	X	X			
17:28	MP30463-SD1	25		X	X		X				X	X		X			X	X		X	X			
17:34	MA51651-CCVA6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:40	MA51651-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:46	JD36682-7	5		X	X		X	X			X	X		X			X	X	X	X	X			
17:52	JD36682-8	5		X	X		X	X			X	X		X			X	X	X	X	X			
17:58	JD36682-10	5		X	X		X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	
18:04	JD36682-11	5		X	X		X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	
18:10	ZZZZZZ	1																						
18:15	MA51651-CCVA7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:21	MA51651-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:27	MP30497A-MB1	2			X																X			
18:33	MP30497A-B2	2			X																X			
18:39	MP30497A-S3	2			X																X			
18:45	MP30497A-S4	2			X																X			
18:51	JD36841-3	2			X																X			(a)
18:57	MP30497A-SD1	10			X																X			
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	V	Zn
19:03	ZZZZZZ	2																					
19:09	ZZZZZZ	2																					
19:15	ZZZZZZ	1																					
19:21	MA51651-CCVA8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:26	MA51651-CCB8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:32	ZZZZZZ	2																					
19:38	ZZZZZZ	2																					
19:44	ZZZZZZ	2																					
19:50	ZZZZZZ	2																					
19:56	ZZZZZZ	2																					
20:02	ZZZZZZ	2																					
20:08	ZZZZZZ	2																					
20:14	MA51651-CCVA9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:19	MA51651-CCB9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:25	ZZZZZZ	2																					
20:31	ZZZZZZ	2																					
20:37	ZZZZZZ	2																					
20:43	ZZZZZZ	2																					
20:49	ZZZZZZ	2																					
20:55	ZZZZZZ	2																					
21:01	ZZZZZZ	2																					
21:07	ZZZZZZ	2																					
21:13	ZZZZZZ	2																					
21:19	MA51651-CCVA10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21:25	MA51651-CCB10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21:31	ZZZZZZ	1																					
21:37	ZZZZZZ	1																					
21:43	ZZZZZZ	1																					
21:49	ZZZZZZ	2																					
21:54	ZZZZZZ	2																					
22:00	ZZZZZZ	1																					
22:06	ZZZZZZ	1																					
22:12	ZZZZZZ	1																					
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	V	Zn

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	V	Zn

(a) Sample used for QC only; not part of login JD36682.

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
10:52	MA51651-STD1	100	100	100	100	100	100	100	100
10:58	MA51651-STD2	100	100	100	100	100	100	100	100
11:04	MA51651-STD3	100	100	100	100	100	100	100	100
11:10	MA51651-STD4	105.21	108.03	101.354	99.852	105.962	100.879	100.472	106.297
11:16	MA51651-STD5	109.994	110.047	101.688	100.66	109.359	100.439	99.67	109.394
11:21	MA51651-STD6	109.391	110.686	101.99	100.182	109.608	101.946	100.116	110.753
11:27	MA51651-STD7	108.585	109.628	102.321	100.031	111.009	101.658	99.334	111.605
11:33	MA51651-STD8	102.471	104.245	101.768	99.793	104.418	100.886	99.614	105.315
11:39	MA51651-STD9	108.431	109.046	101.675	99.502	111.464	101.018	100.141	112.14
11:45	MA51651-STD10	107.784	109.065	100.621	99.395	108.33	99.391	99.682	108.228
11:51	MA51651-STD11	110.376	112.809	104.684	101.766	110.303	103.272	101.356	111.806
11:57	MA51651-STD12	110.91	113.475	106.054	102.493	111.892	103.499	101.28	111.07
12:03	MA51651-STD13	111.006	114.797	107.07	102.638	110.771	104.123	100.978	110.567
12:09	MA51651-STD14	100	100	100	100	100	100	100	100
12:15	ZZZZZZ	99.876	99.557	100.977	100.876	100.28	101.046	100.219	99.362
12:20	MA51651-ICVA1	99.488	97.704	96.477	98.911	100.335	97.033	97.368	100.066
12:26	MA51651-ICV1	98.895	97.45	98.09	98.911	98.483	98.332	98.875	97.659
12:34	MA51651-ICB1	99.638	99.198	95.688	98.962	97.615	94.423	97.849	96.972
12:40	ZZZZZZ	98.701	96.421	92.511	99.36	99.397	90.721	96.744	98.494
12:46	MA51651-CCVA1	98.026	95.273	98.761	98.324	99.281	98.688	96.491	98.614
12:52	MA51651-CCB1	99.711	98.183	97.967	98.185	97.859	97.632	97.269	96.876
12:58	MA51651-CRI1	99.623	98.48	99.077	98.342	98.488	99.38	97.632	97.743
13:04	MA51651-ICSA1	89.315	91.933	92.21	94.112	88.239	88.305	89.218	86.307
13:10	MA51651-ICSAB1	88.097	90.213	90.69	94.122	88.553	88.84	89.464	86.55
13:16	ZZZZZZ	94.124	96.046	93.461	98.514	96.717	94.619	97.69	95.671
13:22	MA51651-CCVA2	94.791	97.066	95.447	99.01	98.753	96.584	97.814	98.635
13:28	MA51651-CCB2	96.56	98.973	96.766	101.491	99.51	98.423	99.482	98.783
13:34	MP30392-MB1	98.05	100.323	90.428	100.987	100.836	91.483	100.05	99.525
13:40	ZZZZZZ	94.372	98.031	96.161	102.635	99.538	95.75	100.169	99.555
13:46	ZZZZZZ	88.36	94.52	91.326	97.593	93.13	90.615	96.283	93.131
13:52	MP30392-SD1	No results reported for the elements associated with this internal standard.							
13:59	MP30392-SD1	95.477	98.309	97.152	100.985	98.684	97.527	100.025	97.745
14:05	ZZZZZZ	88.418	92.937	88.907	96.115	92.96	88.64	95.886	92.255

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
14:11	ZZZZZZ	92.71	92.664	89.896	95.392	93.158	92.289	94.84	92.757
14:17	MP30397-S1	94.205	94.292	91.992	97.973	95.702	94.423	96.923	95.491
14:23	MP30397-S2	96.891	96.942	96.539	98.312	98.144	97.547	96.331	98.295
14:29	MA51651-CCVA3	95.473	96.337	95.789	98.061	98.337	95.47	95.803	98.126
14:35	MA51651-CCB3	95.272	93.968	91.575	97.281	93.553	93.141	95.343	93.357
14:40	ZZZZZZ	97.027	96.489	94.936	98.491	96.083	94.755	96.876	95.887
14:46	ZZZZZZ	90.165	93.979	91.924	99.121	92.83	90.852	97.888	91.618
14:52	ZZZZZZ	99.983	101.349	99.204	102.533	100.243	99.463	100.127	99.417
14:58	ZZZZZZ	90.604	95.527	92.658	100.373	96.081	92.593	103.782	95.649
15:04	ZZZZZZ	83.628	94.529	94.448	97.617	89.64	88.75	91.961	88.96
15:10	ZZZZZZ	102.079	103.318	101.464	102.651	102.044	101.332	101.945	101.989
15:16	ZZZZZZ	93.704	98.096	91.604	101.845	97.62	90.9	99.814	97.437
15:22	ZZZZZZ	100.629	102.552	97.316	103.444	101.536	97.574	102.428	100.929
15:30	MA51651-CRI2	101.083	101.819	100.72	101.76	99.361	100.411	100.72	99.584
15:38	MA51651-CCVA4	100.018	101.225	100.644	94.609	101.441	99.792	94.663	100.921
15:46	MA51651-CCB4	100.782	99.538	98.159	99.935	97.575	98.22	98.276	97.272
15:52	ZZZZZZ	101.136	100.097	97.324	98.287	98.704	97.066	98.089	98.32
15:58	MP30389A-B2	95.37	98.195	95.304	100.905	97.678	94.497	102.095	96.665
16:04	ZZZZZZ	99.038	98.332	98.701	101.173	98.177	96.913	98.39	97.373
16:09	ZZZZZZ	95.984	98.468	95.728	98.089	97.015	94.807	101.421	96.584
16:15	MP30463-B1	98.511	100.879	98.814	102.064	100.91	98.162	99.183	100.107
16:21	ZZZZZZ	98.756	102.781	100.729	102.165	99.815	99.389	99.574	98.335
16:34	ZZZZZZ	99.837	100.783	100.85	100.885	96.8	99.76	99.036	96.257
16:40	MA51651-CCVA5	100.414	102.67	104.043	102.255	103.788	103.179	99.245	103.332
16:46	MA51651-CCB5	100.351	101.435	98.293	101.285	100.715	96.737	99.551	100.273
16:52	MP30463-MB1	99.26	100.723	101.038	102.917	100.106	100.767	100.295	99.146
16:58	ZZZZZZ	106.226	104.221	104.649	101.451	102.545	103.622	99.058	102.157
17:04	ZZZZZZ	106.218	101.509	102.133	89.017	101.589	102.989	88.679	101.542
17:10	MP30463-S1	98.055	107.519	107.484	106.412	100.447	99.139	96.748	98.724
17:16	MP30463-S2	98.031	106.391	106.332	106.244	98.943	98.849	96.444	97.947
17:22	JD36682-9	98.409	107.008	103.678	106.816	98.769	95.857	96.99	96.426
17:28	MP30463-SD1	104.573	103.855	103.284	100.925	100.483	101.027	97.647	99.823
17:34	MA51651-CCVA6	102.268	102.578	97.434	99.534	102.64	95.779	97.069	102.358

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
17:40	MA51651-CCB6	102.753	102.973	101.188	101.77	100.169	100.749	99.5	99.129
17:46	JD36682-7	96.877	109.885	109.462	109.19	98.308	98.379	96.188	95.586
17:52	JD36682-8	98.857	109.74	109.026	109.921	99.065	96.315	96.495	96.774
17:58	JD36682-10	101.113	109.248	108.262	109.82	101.33	100.545	99.083	98.693
18:04	JD36682-11	100.41	109.999	109.445	108.05	100.988	99.847	98.135	99.241
18:10	ZZZZZZ	104.041	103.018	100.201	100.919	100.067	98.602	99.324	99.951
18:15	MA51651-CCVA7	102.045	103.277	101.424	101.508	102.518	100.514	98.571	102.362
18:21	MA51651-CCB7	104.942	105.86	102.453	102.274	103.067	101.515	99.84	101.567
18:27	MP30497A-MB1	104.53	104.637	100.318	102.624	102.173	98.815	99.871	101.616
18:33	MP30497A-B2	102.057	103.431	100.627	103.336	101.72	98.366	105.625	101.536
18:39	MP30497A-S3	98.404	101.057	97.925	101.327	100.629	96.757	102.504	99.305
18:45	MP30497A-S4	97.367	101.642	98.295	102.066	99.952	96.467	103.214	99.995
18:51	JD36841-3	88.327	90.848	96.326	101.144	89.364	96.58	104.211	89.123
18:57	MP30497A-SD1	101.247	99.056	108.206	101.227	99.326	104.211	98.86	99.778
19:03	ZZZZZZ	97.619	100.751	92.512	102.191	98.298	91.745	104.613	97.719
19:09	ZZZZZZ	91.671	98.394	99.975	96.42	95.168	99.127	98.86	93.492
19:15	ZZZZZZ	102.211	104.691	102.605	103.647	101.668	100.977	97.453	101.038
19:21	MA51651-CCVA8	100.22	104.185	98.555	100.184	103.028	96.857	96.698	103.151
19:26	MA51651-CCB8	95.182	95.333	100.724	100.308	92.19	99.182	97.828	91.61
19:32	ZZZZZZ	96.943	98.505	93.778	92.073	96.624	93.825	95.089	96.062
19:38	ZZZZZZ	94.745	97.536	91.756	100.678	97.087	91.599	105.135	96.087
19:44	ZZZZZZ	93.887	97.92	95.651	99.911	96.723	95.613	105.021	95.175
19:50	ZZZZZZ	93.432	97.384	87.983	99.679	96.548	87.74	104.583	95.1
19:56	ZZZZZZ	93.988	100.431	96.808	102.613	98.145	95.521	106.175	97.341
20:02	ZZZZZZ	95.539	101.45	97.967	102.371	98.915	96.147	105.466	98.594
20:08	ZZZZZZ	93.868	99.636	96.5	102.599	96.782	95.416	106.968	95.906
20:14	MA51651-CCVA9	101.749	104.753	105.209	103.748	104.452	102.456	99.965	104.44
20:19	MA51651-CCB9	103.102	105.161	103.753	103.281	102.125	101.507	99.626	101.856
20:25	ZZZZZZ	94.783	97.851	96.632	100.227	94.803	95.413	104.01	94.347
20:31	ZZZZZZ	96.111	101.723	99.061	103.014	98.324	98.366	108.256	97.649
20:37	ZZZZZZ	96.093	100.901	97.655	102.218	98.54	95.65	105.841	97.857
20:43	ZZZZZZ	96.036	100.368	97.334	102.117	99.037	95.945	105.03	97.568
20:49	ZZZZZZ	91.15	99.361	96.511	101.009	95.039	92.994	103.45	94.645

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
20:55	ZZZZZZ	96.358	99.868	96.314	102.587	97.31	95.614	106.44	97.125
21:01	ZZZZZZ	95.309	102.133	101.625	105.721	99.215	98.918	106.752	98.095
21:07	ZZZZZZ	91.216	100.47	97.675	101.157	96.964	93.833	103.035	96.025
21:13	ZZZZZZ	96.22	99.285	96.618	101.578	98.409	95.829	105.464	97.39
21:19	MA51651-CCVA10	103.714	107.429	105.889	96.137	105.526	103.417	89.151	105.291
21:25	MA51651-CCB10	104.588	105.929	103.44	101.897	102.386	102.403	99.726	101.193
21:31	ZZZZZZ	104.228	105.931	101.943	103.133	102.355	98.997	100.001	101.558
21:37	ZZZZZZ	104.608	105.868	103.459	102.691	103.143	101.433	99.007	101.676
21:43	ZZZZZZ	104.377	105.609	96.058	101.433	101.891	94.579	99.036	100.552
21:49	ZZZZZZ	105.74	105.598	101.212	102.373	101.593	99.034	98.642	101.285
21:54	ZZZZZZ	106.752	104.877	103.704	99.465	103.296	102.149	97.404	102.159
22:00	ZZZZZZ	105.72	105.13	103.623	101.164	101.796	100.935	98.282	100.423
22:06	ZZZZZZ	105.838	104.911	103.363	101.166	101.643	101.296	97.918	100.783
22:12	ZZZZZZ	105.772	104.061	100.038	100.818	100.078	98.198	97.242	99.535

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (72-3)	60-125 %	60-125 %
Istd#8	Germanium (74-1)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

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Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
10:52	MA51651-STD1	100	100	100	100	100	100	100	100
10:58	MA51651-STD2	100	100	100	100	100	100	100	100
11:04	MA51651-STD3	100	100	100	100	100	100	100	100
11:10	MA51651-STD4	100.35	99.63	107.478	100.282	99.779	107.176	100.969	106.654
11:16	MA51651-STD5	99.947	100.526	110.67	99.904	99.842	110.849	101.02	110.007
11:21	MA51651-STD6	101.564	100.384	110.716	101.178	100.298	110.721	101.452	110.111
11:27	MA51651-STD7	101.303	99.079	109.962	101.126	99.707	110.602	101.766	110.286
11:33	MA51651-STD8	100.853	99.724	103.515	101.214	99.115	103.464	100.942	104.096
11:39	MA51651-STD9	101.516	99.908	108.775	100.947	99.394	109.064	101.584	110.282
11:45	MA51651-STD10	99.005	99.782	108.2	98.584	98.963	110.259	99.43	109.581
11:51	MA51651-STD11	103.603	102.051	110.763	102.735	100.522	112.215	104.27	111.565
11:57	MA51651-STD12	103.873	101.194	110.262	101.6	98.258	111.598	103.121	111.354
12:03	MA51651-STD13	104.404	99.735	108.744	100.072	96.989	110.242	101.982	111.837
12:09	MA51651-STD14	100	100	100	100	100	100	100	100
12:15	ZZZZZZ	100.723	100.794	100.517	100.634	100.556	100.816	100.923	100.37
12:20	MA51651-ICVA1	97.234	98.459	95.584	94.276	96.104	96.452	95.646	97.44
12:26	MA51651-ICV1	99.151	99.657	98.114	97.833	99.668	98.795	98.384	98.17
12:34	MA51651-ICB1	94.482	97.92	98.848	94.177	98.762	98.784	94.916	99.059
12:40	ZZZZZZ	91.05	97.394	94.831	89.044	95.107	96.383	90.509	97.034
12:46	MA51651-CCVA1	98.405	97.101	94.812	95.747	95.51	96.133	97.531	97.547
12:52	MA51651-CCB1	98.363	98.439	98.358	98.079	98.741	97.969	98.074	98.159
12:58	MA51651-CRI1	98.91	97.582	98.16	97.981	98.12	98.177	99.789	98.373
13:04	MA51651-ICSA1	87.957	87.704	83.284	81.763	82.683	84.932	81.388	90.717
13:10	MA51651-ICSAB1	87.437	88.519	83.438	81.574	83.133	84.886	80.771	92.138
13:16	ZZZZZZ	94.978	98.299	98.048	94.949	99.002	99.27	95.222	100.63
13:22	MA51651-CCVA2	96.384	97.922	95.993	95.355	96.336	97.12	95.78	100.115
13:28	MA51651-CCB2	98.407	100.546	100.237	98.009	100.307	100.168	97.758	102.15
13:34	MP30392-MB1	91.428	100.81	100.739	91.649	100.841	101.586	91.301	101.975
13:40	ZZZZZZ	95.814	100.74	98.597	96.79	99.6	99.58	96.026	102.074
13:46	ZZZZZZ	90.35	96.12	90.324	88.286	91.266	93.425	89.205	98.15
13:52	MP30392-SD1	No results reported for the elements associated with this internal standard.							
13:59	MP30392-SD1	98.087	99.879	97.88	95.841	97.82	102.024	98.02	101.5
14:05	ZZZZZZ	88.711	96.22	90.139	87.325	92.249	93.59	87.926	98.252

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
14:11	ZZZZZZ	91.963	94.768	93.838	92.04	95.416	97.335	92.4	99.389
14:17	MP30397-S1	94.423	97.018	92.484	89.699	92.987	96.999	92.338	101.063
14:23	MP30397-S2	97.323	96.806	93.744	92.748	93.334	97.485	95.619	100.987
14:29	MA51651-CCVA3	95.834	96.491	95.571	94.47	95.015	97.056	94.559	99.863
14:35	MA51651-CCB3	92.8	96.1	95.501	92.667	96.47	97.336	92.092	99.356
14:40	ZZZZZZ	94.669	97.07	95.652	93.753	95.317	98.717	94.786	99.71
14:46	ZZZZZZ	91.232	98.111	89.571	88.455	92.638	92.963	89.465	97.897
14:52	ZZZZZZ	99.764	100.338	100.764	98.84	100.594	101.941	98.96	102.446
14:58	ZZZZZZ	93.004	104.331	94.127	92.665	96.49	96.073	91.27	100.148
15:04	ZZZZZZ	88.388	91.96	83.685	81.804	83.244	88.587	85.249	93.774
15:10	ZZZZZZ	101.027	103.013	103.596	100.42	100.908	103.726	100.071	104.312
15:16	ZZZZZZ	91.004	100.468	96.995	91.211	97.191	97.676	90.213	100.791
15:22	ZZZZZZ	97.329	102.174	102.321	96.123	101.394	103.519	96.433	104.205
15:30	MA51651-CRI2	100.532	101.023	102.624	98.951	100.018	103.615	99.847	102.878
15:38	MA51651-CCVA4	99.528	94.872	98.826	97.055	91.985	99.867	98.33	101.445
15:46	MA51651-CCB4	98.327	98.455	100.073	97.143	98.459	100.793	98.166	100.94
15:52	ZZZZZZ	96.251	98.429	100.571	95.308	97.989	100.865	95.551	101.09
15:58	MP30389A-B2	95.263	102.564	96.412	94.528	97.36	97.298	94.036	100.173
16:04	ZZZZZZ	97.227	99.266	99.061	96.292	98.763	109.683	106.224	100.675
16:09	ZZZZZZ	95.397	101.658	98.607	95.181	97.956	100.324	94.937	101.144
16:15	MP30463-B1	98.437	99.493	99.765	96.845	98.141	109.85	106.977	102
16:21	ZZZZZZ	98.749	99.044	99.56	97.467	98.675	110.49	107.439	101.562
16:34	ZZZZZZ	100.519	99.377	101.495	99.059	98.546	101.354	99.494	101.032
16:40	MA51651-CCVA5	102.679	99.493	99.808	98.948	96.815	101.516	100.963	102.494
16:46	MA51651-CCB5	96.897	99.791	101.537	95.88	99.266	102.163	95.992	101.828
16:52	MP30463-MB1	99.935	101.366	101.464	99.315	100.474	101.809	99.507	101.431
16:58	ZZZZZZ	102.729	99.371	103.627	102.571	99.009	104.325	102.422	104.078
17:04	ZZZZZZ	103.175	89.028	103.475	99.782	90.238	103.738	102.09	103.004
17:10	MP30463-S1	97.592	95.754	96.184	94.061	92.912	111.694	110.411	99.26
17:16	MP30463-S2	96.674	95.602	95.29	92.811	92.996	112.909	112.109	99.911
17:22	JD36682-9	94.144	95.937	95.185	90.716	93.037	106.111	101.656	100.766
17:28	MP30463-SD1	100.792	98.166	100.599	98.022	96.518	143.893	!a144.656 !	102.003
17:34	MA51651-CCVA6	95.808	97.551	99.192	92.862	95.275	100.338	94.407	100.833

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
17:40	MA51651-CCB6	100.67	99.978	102.577	99.167	99.537	101.754	99.425	102.758
17:46	JD36682-7	96.046	94.81	94.194	91.705	90.891	105.035	102.537	98.978
17:52	JD36682-8	95.035	95.011	95.292	92.267	91.051	106.462	102.235	100.503
17:58	JD36682-10	98.497	98.028	97.474	95.346	95.427	109.164	106.215	100.289
18:04	JD36682-11	98.439	96.955	98.096	94.833	92.942	109.022	105.389	100.753
18:10	ZZZZZZ	98.521	98.959	102.513	96.848	98.49	102.301	97.061	102.001
18:15	MA51651-CCVA7	100.387	98.684	99.845	97.148	96.817	101.749	98.461	101.016
18:21	MA51651-CCB7	101.437	99.812	103.85	100.134	100.053	103.448	100.347	103.009
18:27	MP30497A-MB1	98.73	100.102	104.056	97.167	99.484	104.63	97.517	103.098
18:33	MP30497A-B2	98.732	106.206	100.624	97.843	99.136	102.122	97.967	102.907
18:39	MP30497A-S3	97.377	103.298	96.817	94.183	95.093	99.872	95.267	101.84
18:45	MP30497A-S4	97.291	103.358	97.539	94.102	96.364	101.346	95.447	102.433
18:51	JD36841-3	95.625	104.317	87.577	93.54	95.68	90.697	94.763	92.201
18:57	MP30497A-SD1	104.341	99.217	99.752	104.939	97.131	108.907	111.603	101.502
19:03	ZZZZZZ	91.501	105.695	101.305	91.276	98.97	102.51	90.842	102.341
19:09	ZZZZZZ	98.7	99.232	93.463	95.165	89.473	96.748	96.782	97.336
19:15	ZZZZZZ	101.459	97.856	104.374	99.205	100.402	104.438	99.899	104.425
19:21	MA51651-CCVA8	96.76	97.174	100.857	93.559	94.686	101.98	94.98	102.484
19:26	MA51651-CCB8	98.872	98.12	94.673	97.473	97.625	94.288	97.55	94.546
19:32	ZZZZZZ	94.032	95.46	96.297	92.321	87.557	99.515	93.537	100.545
19:38	ZZZZZZ	91.807	105.85	95.068	89.306	95.197	98.867	91.061	100.402
19:44	ZZZZZZ	94.766	105.72	94.73	92.727	94.428	98.722	94.508	101.106
19:50	ZZZZZZ	87.938	104.926	95.708	86.205	95.1	99.589	87.45	100.009
19:56	ZZZZZZ	95.395	106.555	97.185	93.745	96.395	100.466	94.432	101.631
20:02	ZZZZZZ	96.172	105.658	98.546	93.034	96.149	101.741	94.761	103.112
20:08	ZZZZZZ	95.451	106.685	96.693	93.226	95.469	100.49	93.928	102.003
20:14	MA51651-CCVA9	102.134	101.109	102.235	99.324	97.583	103.496	99.807	104.292
20:19	MA51651-CCB9	101.558	99.78	104.192	98.73	99.626	104.834	99.722	103.434
20:25	ZZZZZZ	95.164	103.844	94.182	91.601	93.511	97.331	92.87	99.062
20:31	ZZZZZZ	96.976	107.124	96.43	92.754	95.546	99.933	94.356	103.571
20:37	ZZZZZZ	96.065	106.547	97.012	93.256	95.278	100.515	94.701	102.67
20:43	ZZZZZZ	95.504	105.725	97.513	93.367	96.101	100.816	95.271	102.402
20:49	ZZZZZZ	93.517	104.026	92.145	87.874	89.915	97.106	91.265	100.138

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
20:55	ZZZZZZ	95.24	106.787	98.017	93.275	96.648	102.14	94.706	104.197
21:01	ZZZZZZ	98.517	106.992	98.325	96.807	97.159	101.383	96.563	103.244
21:07	ZZZZZZ	93.587	102.97	91.893	87.807	89.626	96.966	91.109	100.959
21:13	ZZZZZZ	96.079	105.546	96.959	93.335	95.828	101.12	94.167	102.884
21:19	MA51651-CCVA10	103.336	89.738	103.913	99.671	87.223	105.168	100.728	105.492
21:25	MA51651-CCB10	102.233	99.706	104.751	99.672	98.756	105.483	100.147	104.507
21:31	ZZZZZZ	99.143	100.105	104.773	97.492	99.38	105.181	98.086	104.048
21:37	ZZZZZZ	102.177	99.131	105.059	99.783	98.897	104.626	100.289	103.983
21:43	ZZZZZZ	94.359	99.108	104.588	92.358	98.547	105.154	92.23	103.792
21:49	ZZZZZZ	98.498	98.68	105.492	96.304	98.64	104.405	96.963	103.866
21:54	ZZZZZZ	103.328	97.886	103.313	99.049	96.119	103.571	101.809	104.276
22:00	ZZZZZZ	101.657	98.16	104.574	98.682	98.174	103.75	99.176	103.48
22:06	ZZZZZZ	101.109	98.348	104.602	98.828	97.755	103.976	100.132	103.376
22:12	ZZZZZZ	98.059	97.368	103.446	96.369	97.954	103.786	96.468	103.298

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#9	Germanium (74-2)	60-125 %	60-125 %
Istd#10	Germanium (74-3)	60-125 %	60-125 %
Istd#11	Rhodium (103-1)	60-125 %	60-125 %
Istd#12	Rhodium (103-2)	60-125 %	60-125 %
Istd#13	Rhodium (103-3)	60-125 %	60-125 %
Istd#14	Indium (115-1)	60-125 %	60-125 %
Istd#15	Indium (115-2)	60-125 %	60-125 %
Istd#16	Terbium (159-1)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
10:52	MA51651-STD1	100	100	100	100	100	100
10:58	MA51651-STD2	100	100	100	100	100	100
11:04	MA51651-STD3	100	100	100	100	100	100
11:10	MA51651-STD4	99.528	100.707	107.198	100.893	107.297	100.561
11:16	MA51651-STD5	100.15	100.404	110.193	100.675	110.518	101.181
11:21	MA51651-STD6	100.83	101.254	110.363	101.696	110.496	102.85
11:27	MA51651-STD7	101.114	100.935	109.601	101.445	110.875	102.438
11:33	MA51651-STD8	101.046	100.958	104.271	101.708	104.958	102.408
11:39	MA51651-STD9	101.484	101.337	110.032	101.86	110.731	103.317
11:45	MA51651-STD10	98.81	101.239	109.544	99.574	110.244	99.567
11:51	MA51651-STD11	102.292	101.372	111.17	103.206	110.158	102.962
11:57	MA51651-STD12	102.458	101.203	111.794	103.122	108.936	101.384
12:03	MA51651-STD13	101.708	101.644	112.488	103.087	107.534	98.519
12:09	MA51651-STD14	100	100	100	100	100	100
12:15	ZZZZZZ	100.733	100.335	100.722	100.683	100.889	100.323
12:20	MA51651-ICVA1	98.204	98.594	98.301	97.72	96.805	96.151
12:26	MA51651-ICV1	98.99	98.936	98.557	98.599	99.018	98.925
12:34	MA51651-ICB1	95.853	99.253	98.903	95.245	99.317	94.385
12:40	ZZZZZZ	92.003	97.508	97.832	91.659	96.039	90.695
12:46	MA51651-CCVA1	99.303	97.757	97.489	99.114	95.906	97.315
12:52	MA51651-CCB1	98.852	99.108	99.033	97.573	99.031	98.091
12:58	MA51651-CRI1	99.319	99.21	98.772	99.095	98.722	98.957
13:04	MA51651-ICSA1	89.953	91.066	91.368	89.842	85.476	82.48
13:10	MA51651-ICSAB1	90.529	91.625	92.558	90.078	86.253	83.379
13:16	ZZZZZZ	97.46	98.73	100.909	97.28	100.732	98.122
13:22	MA51651-CCVA2	99.622	99.143	100.658	99.517	98.766	97.965
13:28	MA51651-CCB2	100.273	100.859	102.473	99.256	101.907	99.81
13:34	MP30392-MB1	93.165	102.57	102.484	92.091	102.647	92.14
13:40	ZZZZZZ	100.524	102.924	102.934	100.286	112.194	105.511
13:46	ZZZZZZ	94.463	99.131	99.253	94.945	95.128	91.835
13:52	MP30392-SD1	No results reported for the elements associated with this internal standard.					
13:59	MP30392-SD1	98.849	100.832	101.992	98.599	100.842	97.746
14:05	ZZZZZZ	93.551	99.963	98.969	93.719	98.136	93.368

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
14:11	ZZZZZZ	96.116	99.569	99.982	96.358	100.671	97.849
14:17	MP30397-S1	95.259	99.744	101.815	95.79	91.74	91.759
14:23	MP30397-S2	99.212	99.56	102.029	99.222	93.139	95.7
14:29	MA51651-CCVA3	98.702	99.315	100.787	98.673	97.4	96.972
14:35	MA51651-CCB3	95.394	99.719	99.891	95.024	99.7	96.019
14:40	ZZZZZZ	97.071	100.08	100.81	97.312	99.79	96.708
14:46	ZZZZZZ	95.042	99.805	98.509	95.138	96.141	91.86
14:52	ZZZZZZ	100.026	102.448	102.868	99.496	102.274	99.63
14:58	ZZZZZZ	97.15	102.379	100.599	96.601	100.698	96.731
15:04	ZZZZZZ	90.598	90.889	95.368	90.491	83.51	79.126
15:10	ZZZZZZ	101.217	102.908	104.478	100.656	103.709	99.671
15:16	ZZZZZZ	94.663	103.012	101.659	94.602	100.059	93.889
15:22	ZZZZZZ	99.021	103.516	104.221	98.731	103.237	96.322
15:30	MA51651-CRI2	100.509	102.408	103.284	99.685	102.278	99.156
15:38	MA51651-CCVA4	100.459	95.108	101.8	100.278	99.384	98.012
15:46	MA51651-CCB4	98.732	100.805	101.282	98.012	101.154	98.033
15:52	ZZZZZZ	95.951	100.348	101.778	95.073	101.264	95.206
15:58	MP30389A-B2	97.324	102.621	100.263	97.17	102.723	97.88
16:04	ZZZZZZ	98.274	102.663	101.429	97.524	101.838	98.116
16:09	ZZZZZZ	96.527	101.409	101.995	96.334	101.453	96.613
16:15	MP30463-B1	99.797	102.32	102.462	99.062	100.47	97.181
16:21	ZZZZZZ	99.659	101.818	103.017	99.253	101.927	99.548
16:34	ZZZZZZ	99.167	101.354	101.969	98.63	100.547	97.824
16:40	MA51651-CCVA5	102.411	101.586	102.647	101.441	99.196	99.107
16:46	MA51651-CCB5	96.51	102.27	101.78	96.396	100.9	94.764
16:52	MP30463-MB1	99.129	103.014	101.934	99.129	101.719	98.55
16:58	ZZZZZZ	103.357	102.304	104.22	102.798	102.492	106.346
17:04	ZZZZZZ	100.958	90.315	103.197	100.323	87.37	95.905
17:10	MP30463-S1	98.479	99.411	99.099	98.197	95.577	94.275
17:16	MP30463-S2	98.468	99.051	100.049	97.51	95.635	93.888
17:22	JD36682-9	95.024	98.974	101.201	95.216	95.614	90.781
17:28	MP30463-SD1	100.966	101.546	102.881	100.703	97.467	99.466
17:34	MA51651-CCVA6	97.024	100.667	101.191	97.212	98.242	92.984

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
17:40	MA51651-CCB6	99.387	102.293	102.65	99.389	101.809	98.757
17:46	JD36682-7	97.056	98.023	99.844	97.257	93.985	91.268
17:52	JD36682-8	97.476	99.421	101.314	96.844	95.509	91.364
17:58	JD36682-10	98.832	101.264	100.832	97.873	97.179	94.516
18:04	JD36682-11	97.711	97.259	101.302	97.575	96.195	93.259
18:10	ZZZZZZ	96.672	100.636	101.605	96.935	100.454	95.438
18:15	MA51651-CCVA7	99.176	101.263	101.578	99.047	98.893	96.616
18:21	MA51651-CCB7	99.755	102.789	103.491	99.117	101.992	98.229
18:27	MP30497A-MB1	99.553	102.056	103.603	99.085	102.87	94.888
18:33	MP30497A-B2	100.514	104.097	103.963	100.182	106.495	100.714
18:39	MP30497A-S3	98.887	102.621	102.456	99.052	99.082	95.335
18:45	MP30497A-S4	98.539	102.836	103.499	98.599	99.154	95.029
18:51	JD36841-3	96.75	102.743	93.064	96.25	90.48	93.906
18:57	MP30497A-SD1	106.872	102.808	102.247	106.802	100.165	105.758
19:03	ZZZZZZ	92.328	103.866	102.876	91.466	102.863	91.408
19:09	ZZZZZZ	98.561	94.083	97.83	97.943	95.241	95.875
19:15	ZZZZZZ	99.931	100.754	104.873	98.996	102.515	98.043
19:21	MA51651-CCVA8	97.982	100.715	103.34	97.751	99.426	92.963
19:26	MA51651-CCB8	97.968	100.752	94.399	97.303	93.364	96.22
19:32	ZZZZZZ	95.864	91.012	100.957	95.622	101.576	95.797
19:38	ZZZZZZ	93.629	102.206	101.183	93.209	99.026	91.7
19:44	ZZZZZZ	99.973	102.849	100.846	99.499	98.849	94.564
19:50	ZZZZZZ	89.32	102.322	101.214	89.451	99.583	88.376
19:56	ZZZZZZ	96.83	104.384	102.745	96.516	98.3	93.942
20:02	ZZZZZZ	97.806	104.457	103.699	97.692	100.649	93.879
20:08	ZZZZZZ	97.288	103.671	103.163	96.984	99.696	94
20:14	MA51651-CCVA9	101.982	103.585	105.47	101.038	101.415	98.323
20:19	MA51651-CCB9	99.187	103.02	104.266	98.88	103.182	97.34
20:25	ZZZZZZ	95.689	101.903	99.805	96.234	96.574	93.022
20:31	ZZZZZZ	99.548	105.056	103.676	99.019	98.391	93.543
20:37	ZZZZZZ	97.079	103.912	103.035	97.333	99.817	93.947
20:43	ZZZZZZ	97.685	104.545	103.799	97.507	100.728	95.222
20:49	ZZZZZZ	96.04	101.732	101.203	96.018	92.507	87.125

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51651
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
20:55	ZZZZZZ	97.768	105.566	104.418	97.671	101.518	95.21
21:01	ZZZZZZ	100.434	105.73	104.547	100.71	99.803	95.533
21:07	ZZZZZZ	94.478	101.08	101.59	94.755	91.605	86.058
21:13	ZZZZZZ	97.735	104.454	103.392	97.203	99.923	94.637
21:19	MA51651-CCVA10	102.298	93.397	106.284	101.579	102.311	98.696
21:25	MA51651-CCB10	99.183	102.785	104.092	98.605	103.663	98.253
21:31	ZZZZZZ	97.038	103.59	104.151	96.422	102.417	96.472
21:37	ZZZZZZ	99.315	103.324	104.169	98.679	103.337	98.136
21:43	ZZZZZZ	94.977	102.985	104.222	94.045	102.832	90.161
21:49	ZZZZZZ	100.964	103.078	104.779	99.065	103.485	94.837
21:54	ZZZZZZ	101.091	101.729	103.837	100.626	100.756	99.615
22:00	ZZZZZZ	99.068	102.819	103.762	98.28	102.419	97.162
22:06	ZZZZZZ	98.697	102.376	104.057	98	102.997	97.117
22:12	ZZZZZZ	97.212	102.679	103.067	96.893	101.846	94.447

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#17	Terbium (159-2)	60-125 %	60-125 %
Istd#18	Terbium (159-3)	60-125 %	60-125 %
Istd#19	Holmium (165-1)	60-125 %	60-125 %
Istd#20	Holmium (165-2)	60-125 %	60-125 %
Istd#21	Bismuth (209-1)	60-125 %	60-125 %
Istd#22	Bismuth (209-2)	60-125 %	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51651 Units: ug/l

Time:			12:34		12:52		13:28		14:35	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	-0.476	<25	-0.489	<25	0.913	<25	-0.261	<25
Antimony	2.0	.085	0.179	<2.0	0.301	<2.0	0.222	<2.0	0.308	<2.0
Arsenic	0.50	.025	-0.00632	<0.50	0.0269	<0.50	0.0233	<0.50	0.0233	<0.50
Barium	1.0	.009	-0.00383	<1.0	0.00432	<1.0	-0.000257	<1.0	0.00353	<1.0
Beryllium	0.50	.005	-0.000829	<0.50	0.00413	<0.50	0.00170	<0.50	-0.000234	<0.50
Boron	25	.85								
Cadmium	0.50	.01	-0.00449	<0.50	0.000230	<0.50	0.00424	<0.50	0.00259	<0.50
Calcium	250	3.6	-0.663	<250	-0.360	<250	0.660	<250	0.292	<250
Chromium	1.0	.018	-0.00804	<1.0	0.00179	<1.0	-0.0106	<1.0	0.00219	<1.0
Cobalt	0.50	.003	0.000516	<0.50	-0.000354	<0.50	0.00220	<0.50	-0.0000246	<0.50
Copper	2.0	.024	-0.166	<2.0	-0.206	<2.0	-0.116	<2.0	-0.189	<2.0
Iron	25	.24	-1.73	<25	-1.27	<25	0.746	<25	-0.703	<25
Lead	0.50	.008	0.000165	<0.50	0.00996	<0.50	0.0110	<0.50	0.0131	<0.50
Magnesium	250	.19	-0.529	<250	-0.550	<250	0.918	<250	-0.249	<250
Manganese	1.0	.012	-0.0688	<1.0	-0.0732	<1.0	-0.0899	<1.0	-0.0931	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	anr							
Potassium	250	.78	-3.71	<250	-4.37	<250	-2.51	<250	-2.55	<250
Selenium	0.50	.044	0.0538	<0.50	0.406	<0.50	0.346	<0.50	0.361	<0.50
Silver	0.50	.004	-0.000014	<0.50	0.00151	<0.50	0.00786	<0.50	0.00733	<0.50
Sodium	250	1.5	-0.600	<250	-0.712	<250	2.30	<250	1.86	<250
Strontium	5.0	.014								
Thallium	0.50	.002	0.00198	<0.50	0.0220	<0.50	0.0204	<0.50	0.0137	<0.50
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	-0.00496	<1.0	-0.00168	<1.0	-0.00676	<1.0	-0.00951	<1.0
Zinc	5.0	.078	0.117	<5.0	0.139	<5.0	0.121	<5.0	0.202	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51651 Units: ug/l

Time: / Sample ID:			15:46 CCB4		16:46 CCB5		17:40 CCB6		18:21 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	-0.355	<25	-0.0369	<25	0.0699	<25	0.966	<25
Antimony	2.0	.085	0.255	<2.0	0.289	<2.0	0.291	<2.0	0.309	<2.0
Arsenic	0.50	.025	0.0219	<0.50	0.0133	<0.50	0.0373	<0.50	0.0222	<0.50
Barium	1.0	.009	0.00999	<1.0	-0.00272	<1.0	0.0147	<1.0	0.00272	<1.0
Beryllium	0.50	.005	-0.00239	<0.50	0.00281	<0.50	0.000620	<0.50	-0.00137	<0.50
Boron	25	.85								
Cadmium	0.50	.01	-0.00419	<0.50	-0.00309	<0.50	-0.00534	<0.50	-0.00196	<0.50
Calcium	250	3.6	-0.0413	<250	0.615	<250	-0.262	<250	-0.596	<250
Chromium	1.0	.018	-0.0202	<1.0	-0.0248	<1.0	-0.0175	<1.0	-0.0157	<1.0
Cobalt	0.50	.003	-0.00256	<0.50	0.00355	<0.50	0.00294	<0.50	0.00468	<0.50
Copper	2.0	.024	-0.221	<2.0	-0.235	<2.0	-0.258	<2.0	-0.251	<2.0
Iron	25	.24	-1.60	<25	-0.788	<25	0.331	<25	1.08	<25
Lead	0.50	.008	0.00411	<0.50	0.0115	<0.50	0.0134	<0.50	0.0123	<0.50
Magnesium	250	.19	-0.355	<250	-0.168	<250	-0.0351	<250	0.339	<250
Manganese	1.0	.012	-0.0881	<1.0	-0.0728	<1.0	-0.0752	<1.0	0.0381	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	anr							
Potassium	250	.78	-2.48	<250	-1.42	<250	-3.33	<250	-2.78	<250
Selenium	0.50	.044	0.179	<0.50	0.349	<0.50	0.382	<0.50	0.367	<0.50
Silver	0.50	.004	0.00321	<0.50	0.00456	<0.50	0.00791	<0.50	0.00501	<0.50
Sodium	250	1.5	2.42	<250	0.442	<250	-0.195	<250	-0.596	<250
Strontium	5.0	.014								
Thallium	0.50	.002	0.00419	<0.50	0.0139	<0.50	0.0122	<0.50	0.0133	<0.50
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	-0.00567	<1.0	-0.00389	<1.0	0.00183	<1.0	0.00170	<1.0
Zinc	5.0	.078	0.161	<5.0	0.762	<5.0	0.315	<5.0	0.157	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51651 Units: ug/l

Time:		12:20			12:26			12:46	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	5570	101.3	60	64.1	106.8	5000	4980	99.6
Antimony	60	64.9	108.2				50	55.3	110.6*(a
Arsenic	60	64.1	106.8				50	52.0	104.0
Barium	60	62.0	103.3				50	51.4	102.8
Beryllium	60	60.8	101.3				50	51.7	103.4
Boron									
Cadmium	60	62.2	103.7				50	50.8	101.6
Calcium	5500	5510	100.2				5000	5160	103.2
Chromium	60	63.3	105.5				50	50.8	101.6
Cobalt	60	62.0	103.3				50	50.0	100.0
Copper	60	60.6	101.0				50	49.2	98.4
Iron	5500	5390	98.0				5000	4800	96.0
Lead	60	62.7	104.5				50	53.0	106.0
Magnesium	5500	5610	102.0				5000	5040	100.8
Manganese	60	62.8	104.7				50	51.2	102.4
Molybdenum									
Nickel	anr								
Potassium	5500	5610	102.0				5000	5000	100.0
Selenium	260	254	97.7				200	203	101.5
Silver	60	60.9	101.5				50	50.5	101.0
Sodium	5500	5620	102.2				5000	5020	100.4
Strontium									
Thallium	60	61.1	101.8				50	50.4	100.8
Tin									
Titanium									
Vanadium	60	63.1	105.2				50	51.2	102.4
Zinc	60	60.6	101.0				50	48.9	97.8

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51651 Units: ug/l

Time:		13:22			14:29			15:38	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4910	98.2	5000	4730	94.6	5000	4730	94.6
Antimony	50	54.3	108.6	50	51.9	103.8	50	51.5	103.0
Arsenic	50	52.8	105.6	50	50.2	100.4	50	50.3	100.6
Barium	50	50.5	101.0	50	49.0	98.0	50	48.5	97.0
Beryllium	50	50.3	100.6	50	48.3	96.6	50	48.1	96.2
Boron									
Cadmium	50	51.0	102.0	50	49.8	99.6	50	49.4	98.8
Calcium	5000	5070	101.4	5000	4860	97.2	5000	4810	96.2
Chromium	50	51.7	103.4	50	49.6	99.2	50	49.2	98.4
Cobalt	50	50.9	101.8	50	48.6	97.2	50	48.4	96.8
Copper	50	50.4	100.8	50	48.0	96.0	50	47.2	94.4
Iron	5000	4890	97.8	5000	4650	93.0	5000	4670	93.4
Lead	50	52.5	105.0	50	50.5	101.0	50	49.5	99.0
Magnesium	5000	5020	100.4	5000	4860	97.2	5000	4850	97.0
Manganese	50	51.9	103.8	50	48.9	97.8	50	48.8	97.6
Molybdenum									
Nickel	anr								
Potassium	5000	5050	101.0	5000	4860	97.2	5000	4890	97.8
Selenium	200	204	102.0	200	197	98.5	200	208	104.0
Silver	50	50.2	100.4	50	48.3	96.6	50	47.7	95.4
Sodium	5000	5080	101.6	5000	4900	98.0	5000	4890	97.8
Strontium									
Thallium	50	50.4	100.8	50	49.2	98.4	50	47.7	95.4
Tin									
Titanium									
Vanadium	50	52.0	104.0	50	49.7	99.4	50	49.5	99.0
Zinc	50	50.0	100.0	50	47.5	95.0	50	46.6	93.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51651 Units: ug/l

Time:		16:40			17:34			18:15	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4690	93.8	5000	4980	99.6	5000	4770	95.4
Antimony	50	51.9	103.8	50	51.1	102.2	50	51.6	103.2
Arsenic	50	49.5	99.0	50	52.3	104.6	50	50.0	100.0
Barium	50	48.9	97.8	50	47.9	95.8	50	48.6	97.2
Beryllium	50	48.8	97.6	50	48.5	97.0	50	48.6	97.2
Boron									
Cadmium	50	48.8	97.6	50	51.3	102.6	50	48.8	97.6
Calcium	5000	4840	96.8	5000	4740	94.8	5000	4840	96.8
Chromium	50	48.6	97.2	50	51.0	102.0	50	49.3	98.6
Cobalt	50	47.7	95.4	50	50.3	100.6	50	48.3	96.6
Copper	50	46.9	93.8	50	49.3	98.6	50	47.6	95.2
Iron	5000	4610	92.2	5000	4890	97.8	5000	4700	94.0
Lead	50	49.8	99.6	50	49.2	98.4	50	49.4	98.8
Magnesium	5000	4760	95.2	5000	5030	100.6	5000	4840	96.8
Manganese	50	48.4	96.8	50	51.1	102.2	50	49.6	99.2
Molybdenum									
Nickel	anr								
Potassium	5000	4850	97.0	5000	5080	101.6	5000	4920	98.4
Selenium	200	196	98.0	200	197	98.5	200	196	98.0
Silver	50	47.6	95.2	50	47.2	94.4	50	47.5	95.0
Sodium	5000	4820	96.4	5000	5130	102.6	5000	4920	98.4
Strontium									
Thallium	50	48.2	96.4	50	47.7	95.4	50	47.6	95.2
Tin									
Titanium									
Vanadium	50	49.1	98.2	50	51.7	103.4	50	49.6	99.2
Zinc	50	47.1	94.2	50	48.8	97.6	50	46.5	93.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51651 Units: ug/l

Time:			12:58		15:30	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	25	25	27.2	108.8	24.6	98.4
Antimony	2.0	0.25	2.26	113.0	1.87	93.5
Arsenic	0.50	0.50	0.496	99.2	0.440	88.0
Barium	1.0	0.50	0.985	98.5	0.859	85.9
Beryllium	0.50	0.25	0.497	99.4	0.426	85.2
Boron	25	2.5				
Cadmium	0.50	0.25	0.505	101.0	0.468	93.6
Calcium	250	125	250	100.0	222	88.8
Chromium	1.0	2.0	0.982	98.2	0.917	91.7
Cobalt	0.50	0.25	0.514	102.8	0.454	90.8
Copper	2.0	2.0	2.31	115.5	1.61	80.5
Iron	25	25	26.0	104.0	21.7	86.8
Lead	0.50	0.25	0.515	103.0	0.450	90.0
Magnesium	250	125	254	101.6	232	92.8
Manganese	1.0	0.25	1.15	115.0	0.840	84.0
Molybdenum	1.0	0.50				
Nickel	1.0	2.0	anr			
Potassium	250	125	250	100.0	235	94.0
Selenium	0.50	0.50	0.601	120.2*(a	0.421	84.2
Silver	0.50	1.0	0.606	121.2*(a	0.503	100.6
Sodium	250	125	251	100.4	236	94.4
Strontium	5.0	0.50				
Thallium	0.50	0.25	0.473	94.6	0.423	84.6
Tin	5.0	0.50				
Titanium	1.0	0.50				
Vanadium	1.0	2.0	1.02	102.0	0.928	92.8
Zinc	5.0	2.0	5.76	115.2	4.87	97.4

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122321M1.CSV Date Analyzed: 12/23/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51651 Units: ug/l

Time:			13:04		13:10	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	95500	95.5	96000	96.0
Antimony			0.298		0.241	
Arsenic		20	0.0805		19.4	97.0
Barium			0.153		0.161	
Beryllium			0.00191		-0.00343	
Boron		50	1.68		49.8	99.6
Cadmium		20	-0.356		19.7	98.5
Calcium	100000	100000	97800	97.8	101000	101.0
Chromium		20	0.939		20.7	103.5
Cobalt		20	0.130		19.1	95.5
Copper		20	0.0589		17.8	89.0
Iron	100000	100000	89900	89.9	91400	91.4
Lead			0.0446		0.0499	
Magnesium	100000	100000	94400	94.4	95200	95.2
Manganese		20	0.185		20.1	100.5
Molybdenum	2000	2000	2290HH	114.5	2310HH	115.5
Nickel		20	1.92*(a)		18.8	94.0
Potassium	100000	100000	97200	97.2	98700	98.7
Selenium		20	0.122		19.8	99.0
Silver		20	0.0218		18.3	91.5
Sodium	100000	100000	96100	96.1	97800	97.8
Strontium	2000	2000	2290HH	114.5	2310HH	115.5
Thallium			0.00914		0.00370	
Tin	2000	2000	2150HH	107.5	2160HH	108.0
Titanium	2000	2000	1890HH	94.5	1920HH	96.0
Vanadium		20	0.0200		21.4	107.0
Zinc		20	0.726		18.5	92.5

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:44	MA51659-STD1	1		STDA
12:50	MA51659-STD2	1		STDA
12:56	MA51659-STD3	1		STDA
13:02	MA51659-STD4	1		STDB
13:10	MA51659-STD5	1		STDC
13:16	MA51659-STD6	1		STDD
13:22	MA51659-STD7	1		STDE
13:27	MA51659-STD8	1		STDF
13:33	MA51659-STD9	1		STDF
13:39	MA51659-STD10	1		STDG
13:45	MA51659-STD11	1		STDH
13:51	MA51659-STD12	1		STDI
13:57	MA51659-STD13	1		STDJ
14:03	ZZZZZZ	1		
14:09	MA51659-ICVA1	1		
14:15	MA51659-ICV1	1		
14:20	MA51659-ICB1	1		
14:26	MA51659-CCVA1	1		
14:32	MA51659-CCB1	1		
14:38	MA51659-CRI1	1		
14:44	MA51659-CRI2	1		
14:50	MA51659-ICSA1	1		
14:56	MA51659-ICSAB1	1		
15:02	ZZZZZZ	1		
15:08	MA51659-CCVA2	1		
15:14	MA51659-CCB2	1		
15:20	MP30451A-MB1	2		
15:25	MP30451A-B2	2		
15:31	MP30451A-S3	2		
15:37	MP30451A-S4	2		
15:43	JD36107-4	2		(sample used for QC only; not part of login JD36682)
15:49	MP30451A-SD1	10		rerun for Cd, IN out
15:55	MP30451A-PS1	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:01	ZZZZZZ	2		
16:07	ZZZZZZ	2		
16:13	ZZZZZZ	1		
16:18	MA51659-CCVA3	1		
16:24	MA51659-CCB3	1		
16:30	MP30463-MB1	5		
16:36	MP30463-B1	5		
16:42	MP30463-S1	5		NI only
16:48	MP30463-S2	5		NI only
16:54	JD36682-9	5		NI only
17:00	MP30463-SD1	25		NI only
17:06	ZZZZZZ	1		
17:12	MA51659-CCVA4	1		
17:17	MA51659-CCB4	1		
17:23	JD36682-7	5		
17:29	JD36682-8	5		
17:35	JD36682-10	5		
17:41	JD36682-11	5		
---------->	Last reportable sample/prep for job JD36682			
17:47	ZZZZZZ	5		
17:53	ZZZZZZ	1		
17:59	MA51659-CCVA5	1		
18:05	MA51659-CCB5	1		
---------->	Last reportable CCB for job JD36682			
18:11	MP30472-MB1	2		
18:17	MP30472-B1	2		
18:22	MP30472-S1	2		
18:28	MP30472-S2	2		
18:34	JD36803-7	2		(sample used for QC only; not part of login JD36682)
18:40	MP30472-SD1	10		
18:46	MP30472-S1	50		
18:52	MP30472-S2	50		
18:58	JD36803-7	50		(sample used for QC only; not part of login JD36682)
19:04	MP30472-SD1	250		
19:10	MA51659-CCVA6	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:15	MA51659-CCB6	1		
19:21	MP30472-S3	2		
19:27	MP30472-S4	2		
19:33	JD36803-7F	2		(sample used for QC only; not part of login JD36682)
19:39	MP30472-SD2	10		
19:45	MP30472-S3	50		
19:51	MP30472-S4	50		
19:57	JD36803-7F	50		(sample used for QC only; not part of login JD36682)
20:02	MP30472-SD2	250		
20:08	ZZZZZZ	2		
20:14	ZZZZZZ	20		
20:20	MA51659-CCVA7	1		
20:26	MA51659-CCB7	1		
20:32	ZZZZZZ	100		
20:38	ZZZZZZ	25		
20:44	ZZZZZZ	20		
20:49	ZZZZZZ	20		
20:55	ZZZZZZ	2		
21:01	ZZZZZZ	20		
21:07	ZZZZZZ	50		
21:13	ZZZZZZ	25		
21:19	ZZZZZZ	50		
21:25	ZZZZZZ	2		
21:31	MA51659-CCVA8	1		
21:37	MA51659-CCB8	1		
21:42	ZZZZZZ	20		
21:48	ZZZZZZ	100		
21:54	ZZZZZZ	25		
22:00	ZZZZZZ	20		
22:06	ZZZZZZ	20		
22:12	ZZZZZZ	2		
22:18	ZZZZZZ	20		
22:24	ZZZZZZ	50		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:30	ZZZZZZ	25		
22:35	ZZZZZZ	50		
22:41	MA51659-CCVA9	1		
22:47	MA51659-CCB9	1		
22:53	ZZZZZZ	1		
22:59	ZZZZZZ	1		
23:05	MP30322-S1	1		CCV out
23:11	MP30322-S2	1		CCV out
23:17	JD36351-1	1		(sample used for QC only; not part of login JD36682)
23:23	ZZZZZZ	1		
23:29	MA51659-CCVA10	1		
23:35	MA51659-CCB10	1		
23:40	ZZZZZZ	1		
23:46	ZZZZZZ	1		
23:52	ZZZZZZ	1		
23:58	ZZZZZZ	1		
00:04	ZZZZZZ	1		
00:10	ZZZZZZ	1		
00:16	MA51659-CCVA11	1		
00:22	MA51659-CCB11	1		
00:28	ZZZZZZ	1		
00:34	ZZZZZZ	1		
00:40	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Element: Dilution	Ni	
14:03	ZZZZZZ	1		
14:09	MA51659-ICVA1	1	X	
14:15	MA51659-ICV1	1	X	
14:20	MA51659-ICB1	1	X	
14:26	MA51659-CCVA1	1	X	
14:32	MA51659-CCB1	1	X	
14:38	MA51659-CRI1	1	X	
14:44	MA51659-CRI2	1	X	
14:50	MA51659-ICSA1	1	X	
14:56	MA51659-ICSAB1	1	X	
15:02	ZZZZZZ	1		
15:08	MA51659-CCVA2	1	X	
15:14	MA51659-CCB2	1	X	
15:20	MP30451A-MB1	2		
15:25	MP30451A-B2	2		
15:31	MP30451A-S3	2		
15:37	MP30451A-S4	2		
15:43	JD36107-4	2		(a)
15:49	MP30451A-SD1	10		
15:55	MP30451A-PS1	2		
16:01	ZZZZZZ	2		
16:07	ZZZZZZ	2		
16:13	ZZZZZZ	1		
16:18	MA51659-CCVA3	1	X	
16:24	MA51659-CCB3	1	X	
16:30	MP30463-MB1	5	X	
16:36	MP30463-B1	5	X	
16:42	MP30463-S1	5	X	
16:48	MP30463-S2	5	X	
16:54	JD36682-9	5	X	
17:00	MP30463-SD1	25	X	
17:06	ZZZZZZ	1		
17:12	MA51659-CCVA4	1	X	
		Element:	Ni	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Element: Dilution	Ni	
17:17	MA51659-CCB4	1	X	
17:23	JD36682-7	5	X	
17:29	JD36682-8	5	X	
17:35	JD36682-10	5	X	
17:41	JD36682-11	5	X	
17:47	ZZZZZZ	5		
17:53	ZZZZZZ	1		
17:59	MA51659-CCVA5	1	X	
18:05	MA51659-CCB5	1	X	
18:11	MP30472-MB1	2		
18:17	MP30472-B1	2		
18:22	MP30472-S1	2		
18:28	MP30472-S2	2		
18:34	JD36803-7	2		(a)
18:40	MP30472-SD1	10		
18:46	MP30472-S1	50		
18:52	MP30472-S2	50		
18:58	JD36803-7	50		(a)
19:04	MP30472-SD1	250		
19:10	MA51659-CCVA6	1	X	
19:15	MA51659-CCB6	1	X	
19:21	MP30472-S3	2		
19:27	MP30472-S4	2		
19:33	JD36803-7F	2		
19:39	MP30472-SD2	10		
19:45	MP30472-S3	50		
19:51	MP30472-S4	50		
19:57	JD36803-7F	50		(a)
20:02	MP30472-SD2	250		
20:08	ZZZZZZ	2		
20:14	ZZZZZZ	20		
20:20	MA51659-CCVA7	1	X	
20:26	MA51659-CCB7	1	X	
		Element:	Ni	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Element: Dilution	Ni	
20:32	ZZZZZZ	100		
20:38	ZZZZZZ	25		
20:44	ZZZZZZ	20		
20:49	ZZZZZZ	20		
20:55	ZZZZZZ	2		
21:01	ZZZZZZ	20		
21:07	ZZZZZZ	50		
21:13	ZZZZZZ	25		
21:19	ZZZZZZ	50		
21:25	ZZZZZZ	2		
21:31	MA51659-CCVA8	1	X	
21:37	MA51659-CCB8	1	X	
21:42	ZZZZZZ	20		
21:48	ZZZZZZ	100		
21:54	ZZZZZZ	25		
22:00	ZZZZZZ	20		
22:06	ZZZZZZ	20		
22:12	ZZZZZZ	2		
22:18	ZZZZZZ	20		
22:24	ZZZZZZ	50		
22:30	ZZZZZZ	25		
22:35	ZZZZZZ	50		
22:41	MA51659-CCVA9	1	X	
22:47	MA51659-CCB9	1	X	
22:53	ZZZZZZ	1		
22:59	ZZZZZZ	1		
23:05	MP30322-S1	1		
23:11	MP30322-S2	1		
23:17	JD36351-1	1		(a)
23:23	ZZZZZZ	1		
23:29	MA51659-CCVA10	1	X	
23:35	MA51659-CCB10	1	X	
23:40	ZZZZZZ	1		
		Element:	Ni	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Element: Dilution	Ni
23:46	ZZZZZZ	1	
23:52	ZZZZZZ	1	
23:58	ZZZZZZ	1	
00:04	ZZZZZZ	1	
00:10	ZZZZZZ	1	
00:16	MA51659-CCVA11	1	X
00:22	MA51659-CCB11	1	X
00:28	ZZZZZZ	1	
00:34	ZZZZZZ	1	
00:40	ZZZZZZ	1	

(a) Sample used for QC only; not part of login JD36682.

	Element:	Ni

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
12:44	MA51659-STD1	100	100	100	100	100	100	100	100
12:50	MA51659-STD2	100	100	100	100	100	100	100	100
12:56	MA51659-STD3	100	100	100	100	100	100	100	100
13:02	MA51659-STD4	99.505	99.401	100.742	100.029	100.195	101.374	100.292	100.274
13:10	MA51659-STD5	99.397	99.878	99.801	99.716	98.99	100.427	99.687	98.983
13:16	MA51659-STD6	99.929	99.204	101.305	98.782	101.291	100.623	98.878	100.878
13:22	MA51659-STD7	99.797	98.439	95.921	97.848	101.446	97.089	98.271	101.116
13:27	MA51659-STD8	99.322	97.957	100.431	98.849	102.146	100.586	97.735	102.36
13:33	MA51659-STD9	100.183	97.76	99.001	98.206	101.618	99.094	97.611	101.805
13:39	MA51659-STD10	91.48	86.459	99.353	98.647	90.581	99.258	99.23	90.961
13:45	MA51659-STD11	101.665	100.444	93.745	100.67	100.885	93.142	100.878	101.162
13:51	MA51659-STD12	101.418	102.123	104.585	101.96	102.178	103.422	100.793	102.055
13:57	MA51659-STD13	101.453	103.585	104.482	101.215	100.59	101.388	99.886	100.831
14:03	ZZZZZZ	103.962	104.468	104.768	102.43	103.834	104.013	101.836	102.967
14:09	MA51659-ICVA1	102.713	103.444	101.392	104.079	104.681	101.95	102.372	105.669
14:15	MA51659-ICV1	103.477	103.89	104.429	102.821	102.566	103.893	101.971	102.492
14:20	MA51659-ICB1	103.411	104.767	105.016	103.04	103.471	104.191	102.095	102.444
14:26	MA51659-CCVA1	93.828	98.354	105.429	102.008	96.766	104.121	99.904	96.581
14:32	MA51659-CCB1	103.318	103.43	104.649	95.226	101.508	104.105	95.878	102.412
14:38	MA51659-CRI1	105.073	104.492	105.48	102.551	102.944	105.507	102.666	102.19
14:44	MA51659-CRI2	104.722	103.801	104.457	101.688	102.874	104.746	101.638	102.817
14:50	MA51659-ICSA1	92.702	96.516	96.151	96.904	90.862	93.292	92.072	89.752
14:56	MA51659-ICSAB1	94.61	95.871	96.34	96.787	92.893	93.839	92.484	91.546
15:02	ZZZZZZ	101.245	102.263	88.684	98.443	101.674	90.883	98.915	101.338
15:08	MA51659-CCVA2	99.264	101.014	97.187	99.211	103.103	95.137	98.006	103.557
15:14	MA51659-CCB2	101.814	102.859	99.147	101.262	101.786	99.696	101.1	101.533
15:20	MP30451A-MB1	102.347	103.999	100.229	102.336	101.65	101.142	101.528	102.3
15:25	MP30451A-B2	96.821	100.973	95.077	101.801	101.226	93.983	100.187	101.726
15:31	MP30451A-S3	95.214	100.49	96.629	96.812	100.57	97.101	95.788	100.08
15:37	MP30451A-S4	93.534	100.824	98.246	104.605	101.285	97.97	104.979	101.796
15:43	JD36107-4	90.699	101.187	98.475	105.663	100.797	99.703	105.097	100.8
15:49	MP30451A-SD1	101.042	109.97	108.153	108.872	108.473	108.395	107.815	109.07
15:55	MP30451A-PS1	293.779 !	274.27 !	142.596 !	199.439 !	304.218 !	135.479 !	188.506 !	309.095 !

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
16:01	ZZZZZZ	92.248	107.858	103.455	108.035	102.482	101.303	104.209	101.618
16:07	ZZZZZZ	95.372	107.493	101.663	108.724	105.113	103.138	110.027	104.738
16:13	ZZZZZZ	101.984	110.612	101.604	109.36	107.795	102.295	108.048	107.916
16:18	MA51659-CCVA3	101.749	106.91	108.317	107.734	108.497	106.948	104.932	108.449
16:24	MA51659-CCB3	103.411	109.225	107.643	107.315	106.692	106.96	105.654	106.84
16:30	MP30463-MB1	99.21	105.848	107.495	107.34	101.347	107.624	105.954	101.02
16:36	MP30463-B1	102.43	108.4	107.059	106.498	107.218	105.088	104.053	107.417
16:42	MP30463-S1	99.719	111.945	110.439	110.306	103.648	101.834	100.365	103.403
16:48	MP30463-S2	99.19	109.985	110.926	109.874	102.115	103.169	100.942	101.247
16:54	JD36682-9	100.473	112.876	108.991	111.958	103.433	100.722	101.775	102.244
17:00	MP30463-SD1	108.443	110.903	95.607	104.838	107.197	95.54	101.995	106.812
17:06	ZZZZZZ	106.837	109.109	106.786	109.525	105.783	105.376	104.762	105.394
17:12	MA51659-CCVA4	106.473	109.738	106.762	103.039	109.063	105.238	100.712	108.79
17:17	MA51659-CCB4	107.699	109.711	105.367	103.954	105.145	104.72	102.408	105.702
17:23	JD36682-7	99.833	115.583	114.115	112.229	102.525	101.988	99.641	100.49
17:29	JD36682-8	102.03	117.048	113.586	112.614	104.099	101.614	100.816	102.186
17:35	JD36682-10	105.846	116.795	113.958	112.734	106.908	105.615	102.83	105.216
17:41	JD36682-11	103.359	116.714	112.326	105.8	105.814	103.35	97.293	104.343
17:47	ZZZZZZ	105.697	106.506	106.056	105.047	105.322	104.29	102.341	104.339
17:53	ZZZZZZ	102.764	103.358	98.192	99.53	100.847	97.652	97.628	100.199
17:59	MA51659-CCVA5	103.689	104.983	103.575	102.952	104.342	101.725	100.719	104.853
18:05	MA51659-CCB5	108.198	110.081	99.529	103.979	105.914	99.419	102.643	105.808
18:11	MP30472-MB1	108.069	111.344	106.361	105.347	106.813	105.664	103.352	106.281
18:17	MP30472-B1	103.838	109.135	104.491	105.991	106.496	102.967	107.033	106.66
18:22	MP30472-S1	96.165	101.129	97.385	100.781	98.459	95.684	101.451	98.528
18:28	MP30472-S2	95.646	103.729	95.235	102.118	99.881	93.257	102.373	100.621
18:34	JD36803-7	96.283	104.171	97.94	103.136	99.231	96.43	103.213	98.978
18:40	MP30472-SD1	107.655	111.72	107.793	117.749	109.448	108.074	111.412	110.213
18:46	MP30472-S1	112.723	114.53	111.587	105.86	113.3	110.828	105.228	112.965
18:52	MP30472-S2	112.114	110.949	114.145	104.337	110.036	111.756	104.24	110.623
18:58	JD36803-7	113.73	110.085	106.248	101.658	109.739	107.488	102.405	109.456
19:04	MP30472-SD1	114.494	111.233	108.159	100.201	109.231	108.792	101.198	108.987
19:10	MA51659-CCVA6	108.392	108.694	105.77	102.121	106.256	103.668	100.024	107.254

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
19:15	MA51659-CCB6	109.541	107.93	91.47	100.366	102.836	91.475	99.015	102.508
19:21	MP30472-S3	No results reported for the elements associated with this internal standard.							
19:27	MP30472-S4	No results reported for the elements associated with this internal standard.							
19:33	JD36803-7F	No results reported for the elements associated with this internal standard.							
19:39	MP30472-SD2	No results reported for the elements associated with this internal standard.							
19:45	MP30472-S3	114.431	112.152	108.358	102.532	109.62	108.537	102.091	109.372
19:51	MP30472-S4	113.577	110.76	107.272	101.747	108.408	107.511	100.98	108.323
19:57	JD36803-7F	113.833	110.115	99.854	100.041	107.573	100.906	100.341	107.027
20:02	MP30472-SD2	114.008	109.527	106.462	99.706	106.708	106.702	99.588	106.511
20:08	ZZZZZZ	102.269	103.81	92.069	99.299	98.152	91.861	104.183	98.106
20:14	ZZZZZZ	113.315	109.87	104.021	97.987	106.559	103.615	98.967	106.453
20:20	MA51659-CCVA7	108.399	106.572	102.351	99.85	103.756	99.484	97.074	104.392
20:26	MA51659-CCB7	94.884	88.462	99.516	99.031	86.457	98.621	98.13	86.729
20:32	ZZZZZZ	113.866	107.166	104.726	98.129	105.474	104.5	98.642	105.831
20:38	ZZZZZZ	110.723	106.072	104.061	98.174	104.455	104.604	97.806	104.55
20:44	ZZZZZZ	108.325	106.608	101.671	96.692	101.241	99.903	95.256	101.27
20:49	ZZZZZZ	109.077	105.42	97.259	97.93	102.563	97.735	97.214	102.244
20:55	ZZZZZZ	85.091	90.263	94.888	93.413	82.818	89.891	94.194	82.45
21:01	ZZZZZZ	108.369	102.601	97.669	95.264	98.525	97.701	94.268	99.169
21:07	ZZZZZZ	112.725	109.694	98.775	96.69	103.896	99.723	96.569	104.157
21:13	ZZZZZZ	108.726	102.775	97.671	95.574	99.495	97.341	95.197	99.508
21:19	ZZZZZZ	110.026	102.805	103.245	96.669	101.381	102.137	96.197	101.265
21:25	ZZZZZZ	97.402	95.425	93.317	97.29	90.58	92.848	103.624	90.62
21:31	MA51659-CCVA8	106.641	105.088	94.202	97.593	102.679	90.489	95.202	103.179
21:37	MA51659-CCB8	107.567	104.164	97.45	98.352	98.93	96.213	96.675	98.445
21:42	ZZZZZZ	109.773	103.857	99.649	98.018	102.128	100.039	97.18	102.412
21:48	ZZZZZZ	110.82	105.078	99.667	90.214	103.548	100.535	89.75	103.413
21:54	ZZZZZZ	111.395	105.551	100.874	96.428	102.262	100.734	96.336	101.727
22:00	ZZZZZZ	107.943	102.859	94.434	95.394	98.532	94.871	94.142	98.574
22:06	ZZZZZZ	109.331	103.319	98.417	95.966	99.878	99.291	95.662	99.951
22:12	ZZZZZZ	92.872	97.073	93.029	90.002	87.165	87.305	94.35	87.241
22:18	ZZZZZZ	108.397	101.711	95.591	94.353	98.616	95.817	93.714	98.779
22:24	ZZZZZZ	109.229	99.85	96.152	97.451	99.927	97.553	93.073	99.717

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
22:30	ZZZZZZ	107.453	102.283	94.424	93.998	98.393	92.802	93.811	98.398
22:35	ZZZZZZ	109.06	102.011	93.852	94.508	99.681	96.164	95.561	98.921
22:41	MA51659-CCVA9	103.487	98.434	97.496	97.346	97.172	96.486	95.052	97.491
22:47	MA51659-CCB9	108.386	104.435	94.34	95.578	98.346	93.514	95.186	97.975
22:53	ZZZZZZ	108.53	104.942	97.216	97.732	99.641	96.432	96.506	99.114
22:59	ZZZZZZ	100.163	97.453	99.328	97.83	95.445	98.274	95.287	95.882
23:05	MP30322-S1	101.598	102.099	93.426	96.309	96.982	90.847	92.76	97.579
23:11	MP30322-S2	104.042	104.396	95.999	98.743	98.849	93.06	94.644	99.796
23:17	JD36351-1	99.179	95.253	96.277	95.672	89.671	94.366	92.13	89.751
23:23	ZZZZZZ	634.89 !	553.912 !	134.734 !	161.989 !	621.435 !	132.357 !	170.355 !	621.791 !
23:29	MA51659-CCVA10	106.279	100.429	90.782	94.798	97.358	90.448	92.127	98.029
23:35	MA51659-CCB10	100.14	93.768	92.475	89.497	87.589	91.913	89.384	87.75
23:40	ZZZZZZ	104.321	100.951	92.758	89.142	94.217	92.086	87.681	94.638
23:46	ZZZZZZ	101.03	101.796	95.842	93.351	92.636	89.869	88.385	92.643
23:52	ZZZZZZ	98.072	95.225	95.266	92.083	87.648	89.888	87.225	87.917
23:58	ZZZZZZ	73.911	85.302	92.68	82.491	69.942	76.378	68.477	70.072
00:04	ZZZZZZ	131.406 !	127.554 !	128.377 !	117.369	114.911	120.554	111.689	113.88
00:10	ZZZZZZ	109.34	118.329	118.458	111.096	101.699	106.571	99.82	100.013
00:16	MA51659-CCVA11	119.26	125.627	134.427	!a124	112.198	126.349	116.041	111.55
00:22	MA51659-CCB11	127.016	129.547	117.746	123.671	117.506	113.48	112.727	116.487
00:28	ZZZZZZ	125.593	128.484	125.044	118.889	116.694	118.047	112.174	116.07
00:34	ZZZZZZ	123.761	120.745	114.098	108.564	110.872	109.757	104.404	110.451
00:40	ZZZZZZ	119.727	109.879	93.202	101.057	102.201	90.874	98.36	102.076

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (72-3)	60-125 %	60-125 %
Istd#8	Germanium (74-1)	60-125 %	60-125 %

(a) No samples reported for this element in the area bracketed by this QC.

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
12:44	MA51659-STD1	100	100	100	100	100	100	100	100
12:50	MA51659-STD2	100	100	100	100	100	100	100	100
12:56	MA51659-STD3	100	100	100	100	100	100	100	100
13:02	MA51659-STD4	100.47	100.601	99.326	100.656	99.47	100.098	100.828	98.929
13:10	MA51659-STD5	99.775	100.391	99.775	99.887	99.007	99.788	100.127	99.399
13:16	MA51659-STD6	100.045	99.587	100.232	100.182	98.169	99.718	99.912	99.008
13:22	MA51659-STD7	97.109	98.739	97.95	96.633	98.301	98.612	96.61	99.222
13:27	MA51659-STD8	99.591	98.807	97.768	100.366	97.777	98.086	100.015	98.404
13:33	MA51659-STD9	99.575	98.289	97.939	99.458	97.345	97.995	98.977	98.204
13:39	MA51659-STD10	99.186	99.986	87.981	98.772	98.294	89.099	99.661	89.576
13:45	MA51659-STD11	93.609	101.89	99.537	92.193	98.977	100.863	93.051	100.05
13:51	MA51659-STD12	102.609	100.782	99.675	99.941	97.666	100.476	102.078	101.143
13:57	MA51659-STD13	101.365	99.31	98.334	98.6	95.436	99.336	99.928	100.187
14:03	ZZZZZZ	103.764	102.98	103.551	102.781	100.69	102.975	102.664	101.838
14:09	MA51659-ICVA1	101.652	103.008	99.03	98.594	99.577	100.632	100.289	101.01
14:15	MA51659-ICV1	103.819	102.547	103.353	103.241	100.793	102.045	103.147	102.529
14:20	MA51659-ICB1	104.353	102.975	103.791	102.589	100.53	102.748	103.065	102.325
14:26	MA51659-CCVA1	103.688	100.746	91.704	100.938	96.573	92.08	101.81	93.075
14:32	MA51659-CCB1	104.063	96.81	102.859	102.083	93.922	102.672	102.487	101.221
14:38	MA51659-CRI1	104.32	102.409	103.255	103.098	100.471	104.044	103.672	102.125
14:44	MA51659-CRI2	104.465	101.886	102.93	102.501	99.515	102.975	103.09	100.993
14:50	MA51659-ICSA1	91.474	91.242	86.672	84.236	83.644	86.694	83.704	93.094
14:56	MA51659-ICSAB1	92.872	91.356	87.726	85.265	83.818	89.791	84.366	96.477
15:02	ZZZZZZ	91.419	99.674	102.61	90.985	98.558	104.114	91.112	105.257
15:08	MA51659-CCVA2	95.776	98.416	99.233	96.352	95.886	101.604	95.128	103.472
15:14	MA51659-CCB2	99.817	101.197	102.963	99.964	100.511	103.371	98.738	104.826
15:20	MP30451A-MB1	101.256	102.197	103.624	100.631	100.662	104.973	100.184	104.731
15:25	MP30451A-B2	94.423	101.037	99.833	94.793	98.034	106.315	98.771	103.064
15:31	MP30451A-S3	96.819	96.684	95.544	94.064	89.27	103.955	99.792	102.809
15:37	MP30451A-S4	97.598	105.527	96.172	94.402	96.095	105.78	100.003	103.47
15:43	JD36107-4	98.969	105.581	97.585	95.462	97.079	106.137	100.2	104.557
15:49	MP30451A-SD1	108.449	108.186	107.377	106.489	103.01	130.33 !a	126.705	109.618
15:55	MP30451A-PS1	134.89 !	189.03 !	276.826 !	141.95 !	192.848 !	282.424 !	130.088 !	286.419 !

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
16:01	ZZZZZZ	100.554	104.327	98.748	95.071	94.907	107.285	100.771	104.578
16:07	ZZZZZZ	103.156	110.175	105.632	102.087	104.011	113.434	104.765	108.315
16:13	ZZZZZZ	102.277	107.877	109.95	100.757	104.754	110.033	99.182	110.323
16:18	MA51659-CCVA3	107.095	105.724	104.521	103.201	100.338	105.817	103.107	107.452
16:24	MA51659-CCB3	106.427	106.626	109.187	105.074	103.098	108.856	103.772	108.566
16:30	MP30463-MB1	105.876	107.023	103.469	105.63	103.548	104.513	104.408	103.376
16:36	MP30463-B1	104.919	105.141	105.442	103.86	100.949	116.881	112.807	106.966
16:42	MP30463-S1	99.909	99.691	99.089	97.039	94.365	115.831	113.017	103.392
16:48	MP30463-S2	100.927	100.137	98.301	97.406	94.707	116.803	115.71	101.431
16:54	JD36682-9	98.643	100.558	99.486	94.214	95.095	111.408	105.631	104.011
17:00	MP30463-SD1	94.997	102.542	106.573	90.643	98.385	154.71 !	139.926 !	108.103
17:06	ZZZZZZ	105.658	105.454	108.133	104.133	106.133	108.686	103.177	107.511
17:12	MA51659-CCVA4	105.244	101.028	105.119	101.576	97.228	106.178	102.424	106.646
17:17	MA51659-CCB4	104.073	103.193	108.55	103.396	100.962	109.062	102.214	108.393
17:23	JD36682-7	99.055	97.542	98.161	94.675	91.434	110.155	105.554	103.611
17:29	JD36682-8	99.096	98.518	100.85	94.483	92.795	111.603	104.993	104.415
17:35	JD36682-10	103.145	101.453	103.711	98.803	96.074	114.558	108.938	105.556
17:41	JD36682-11	101.502	96.447	102.263	97.412	90.008	113.114	107.537	104.202
17:47	ZZZZZZ	103.907	102.744	104.716	102.334	99.253	106.125	101.161	104.242
17:53	ZZZZZZ	97.747	97.962	104.032	97.144	97.095	103.684	95.373	103.833
17:59	MA51659-CCVA5	102.528	101.286	101.392	99.628	97.051	103.742	99.976	105.131
18:05	MA51659-CCB5	99.665	103.191	108.869	101.606	100.509	108.72	96.663	107.902
18:11	MP30472-MB1	105.635	104.199	109.595	104.12	101.53	109.508	102.648	109.168
18:17	MP30472-B1	103.411	108.7	105.179	100.893	99.972	105.785	99.666	107.36
18:22	MP30472-S1	95.749	102.449	93.509	90.082	91.061	97.42	91.095	101.587
18:28	MP30472-S2	93.606	103.099	95.764	87.964	91.275	99.662	88.964	103.72
18:34	JD36803-7	96.126	103.949	96.048	90.527	92.301	100.374	91.768	103.839
18:40	MP30472-SD1	107.873	112.934	108.474	103.331	111.015	111.359	104.224	110.701
18:46	MP30472-S1	110.817	105.604	112.621	106.063	101.236	115.514	107.619	112.931
18:52	MP30472-S2	111.107	104.76	110.228	111.495	100.37	112.628	109.599	109.198
18:58	JD36803-7	107.296	102.824	110.503	103.001	98.723	111.679	104.909	110.132
19:04	MP30472-SD1	108.193	101.341	111.587	104.873	98.568	111.308	106.861	110.026
19:10	MA51659-CCVA6	103.083	100.51	103.778	99.862	96.19	105.336	100.995	105.609

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
19:15	MA51659-CCB6	91.406	98.9	106.287	89.328	97.364	106.34	88.72	105.366
19:21	MP30472-S3	No results reported for the elements associated with this internal standard.							
19:27	MP30472-S4	No results reported for the elements associated with this internal standard.							
19:33	JD36803-7F	No results reported for the elements associated with this internal standard.							
19:39	MP30472-SD2	No results reported for the elements associated with this internal standard.							
19:45	MP30472-S3	108.031	102.727	109.885	104.259	98.876	112.102	105.855	110.436
19:51	MP30472-S4	107.328	101.589	108.723	103.01	97.849	110.757	105.454	108.837
19:57	JD36803-7F	100.453	100.51	108.482	99.462	96.867	110.793	98.323	107.933
20:02	MP30472-SD2	106.666	100.288	108.516	102.839	97.01	108.955	104.807	107.578
20:08	ZZZZZZ	92.983	103.894	97.479	87.496	91.92	101.071	89.454	102.895
20:14	ZZZZZZ	103.179	98.627	107.425	100.212	95.31	109.722	102.353	109.029
20:20	MA51659-CCVA7	100.218	97.51	102.236	97.497	93.873	103.89	97.966	104.98
20:26	MA51659-CCB7	98.189	98.488	88.968	97.221	96.058	89.231	97.011	89.529
20:32	ZZZZZZ	105.231	99.468	107.226	101.25	95.536	109.517	103.828	107.795
20:38	ZZZZZZ	103.36	98.604	105.247	99.363	94.294	106.414	101.737	106.166
20:44	ZZZZZZ	100.503	96.092	100.872	94.749	90.701	103.856	97.929	104.796
20:49	ZZZZZZ	97.228	97.214	103.581	93.487	94.227	105.714	95.685	105.515
20:55	ZZZZZZ	89.83	94.018	79.543	80.533	79.141	83.289	84.881	87.016
21:01	ZZZZZZ	96.92	94.648	99.356	92.199	89.567	103.026	95.032	105.448
21:07	ZZZZZZ	99.04	97.106	110.467	96.507	94.603	113.318	98.841	113.523
21:13	ZZZZZZ	97.695	95.971	102.026	95.232	92.401	105.378	96.976	105.804
21:19	ZZZZZZ	101.063	96.376	104.09	104.075	93.588	106.561	101.035	106.775
21:25	ZZZZZZ	92.531	104.334	90.614	88.782	90.46	94.457	89.966	97.537
21:31	MA51659-CCVA8	90.291	96.146	101.374	88.992	92.681	103.712	89.433	105.888
21:37	MA51659-CCB8	96.037	97.613	104.196	95.408	96.162	105.408	94.61	105.954
21:42	ZZZZZZ	100.128	98.242	104.755	97.121	95.137	107.559	98.428	106.906
21:48	ZZZZZZ	101.447	90.032	105.167	98.041	88.467	107.847	100.214	107.157
21:54	ZZZZZZ	99.984	97.094	103.539	96.968	93.739	105.735	98.733	105.991
22:00	ZZZZZZ	94.691	94.214	98.959	89.425	90.167	102.472	91.918	104.76
22:06	ZZZZZZ	99.125	96.282	102.411	96.026	93.814	104.851	98.053	104.893
22:12	ZZZZZZ	87.0452	94.48	84.638	78.297	77.691	90.666	82.513	94.772
22:18	ZZZZZZ	95.99	93.871	99.392	90.876	89.502	103.475	94.137	106.554
22:24	ZZZZZZ	97.354	93.182	102.929	96.707	93.217	106.041	95.827	106.709

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
22:30	ZZZZZZ	93.098	94.577	101.78	91.907	91.403	105.543	93.477	106.174
22:35	ZZZZZZ	95.903	95.5	102.69	93.75	93.762	106.212	95.279	105.936
22:41	MA51659-CCVA9	96.094	96.142	95.915	94.042	93.122	98.794	95.11	100.475
22:47	MA51659-CCB9	93.058	95.395	103.78	97.36	94.496	105.562	93.148	105.858
22:53	ZZZZZZ	96.475	97.214	105.306	95.434	95.893	106.199	95.578	106.334
22:59	ZZZZZZ	97.912	96.108	95.489	96.18	93.675	97.11	96.761	97.995
23:05	MP30322-S1	90.673	93.519	94.341	85.301	86.856	99.715	88.85	102.342
23:11	MP30322-S2	92.541	95.19	96.432	87.128	88.434	101.085	90.684	104.299
23:17	JD36351-1	93.293	92.676	89.535	87.942	86.902	94.675	92.506	97.693
23:23	ZZZZZZ	131.602 !	171.622 !	555.797 !	145.423 !	192.353 !	572.408 !	128.473 !	593.698 !
23:29	MA51659-CCVA10	90.295	93.646	98.59	88.414	91	101.626	89.221	104.764
23:35	MA51659-CCB10	91.162	89.138	94.17	90.984	88.475	95.704	91.323	97.522
23:40	ZZZZZZ	92.628	87.976	96.552	89.374	84.134	101.187	91.326	103.806
23:46	ZZZZZZ	89.674	88.802	90.405	82.634	81.61	96.551	87.483	101.394
23:52	ZZZZZZ	90.601	88.102	85.759	83.069	80.869	91.692	88.245	96.186
23:58	ZZZZZZ	75.913	68.475	59.153 !	60.796	55.806 !	70.476	70.099	73.256
00:04	ZZZZZZ	119.384	111.429	115.419	107.784	103.089	115.365	111.917	106.862
00:10	ZZZZZZ	104.542	98.549	92.863	86.835	83.705	98.138	94.487	97.615
00:16	MA51659-CCVA11	125.548	116.508	108.516	110.29	104.43	108.346	114.515	102.332
00:22	MA51659-CCB11	112.58	112.737	118.361	102.137	112.606	118.026	103.963	110.19
00:28	ZZZZZZ	117.97	112.986	118.029	108.588	105.551	117.681	110.31	111.209
00:34	ZZZZZZ	109.414	104.47	113.465	102.52	100.126	113.542	103.862	108.996
00:40	ZZZZZZ	90.931	98.607	107.455	87.232	96.117	107.851	87.197	105.803

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#9	Germanium (74-2)	60-125 %	60-125 %
Istd#10	Germanium (74-3)	60-125 %	60-125 %
Istd#11	Rhodium (103-1)	60-125 %	60-125 %
Istd#12	Rhodium (103-2)	60-125 %	60-125 %
Istd#13	Rhodium (103-3)	60-125 %	60-125 %
Istd#14	Indium (115-1)	60-125 %	60-125 %
Istd#15	Indium (115-2)	60-125 %	60-125 %
Istd#16	Terbium (159-1)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
12:44	MA51659-STD1	100	100	100	100	100	100
12:50	MA51659-STD2	100	100	100	100	100	100
12:56	MA51659-STD3	100	100	100	100	100	100
13:02	MA51659-STD4	100.073	100.312	99.893	100.824	98.486	100.554
13:10	MA51659-STD5	99.441	99.529	99.253	99.137	99.065	99.675
13:16	MA51659-STD6	99.522	99.607	99.419	99.541	99.321	100.343
13:22	MA51659-STD7	96.709	99.683	99.725	96.742	99.229	97.7
13:27	MA51659-STD8	100.412	100.638	98.746	100.636	98.464	101.643
13:33	MA51659-STD9	100.117	99.749	98.08	100.539	98.667	100.69
13:39	MA51659-STD10	99.268	100.415	89.38	99.489	89.773	98.985
13:45	MA51659-STD11	93.182	100.503	99.898	91.773	99.347	91.366
13:51	MA51659-STD12	101.495	100.777	101.405	102.29	97.992	99.406
13:57	MA51659-STD13	100.418	99.51	100.854	100.791	96.519	96.435
14:03	ZZZZZZ	101.11	100.887	101.631	101.088	100.78	99.862
14:09	MA51659-ICVA1	100.313	102.955	100.837	100.542	97.884	97.628
14:15	MA51659-ICV1	101.556	101.336	102.534	101.204	100.937	100.5
14:20	MA51659-ICB1	100.787	101.635	102.157	101.327	101.32	101.132
14:26	MA51659-CCVA1	101.706	100.955	93.549	102.46	90.697	99.776
14:32	MA51659-CCB1	100.974	95.598	102.104	100.727	100.702	100.008
14:38	MA51659-CRI1	101.583	102.367	102.139	101.532	100.898	100.915
14:44	MA51659-CRI2	100.314	102.155	101.169	100.642	101.202	100.406
14:50	MA51659-ICSA1	90.339	92.423	93.027	90.674	85.68	82.747
14:56	MA51659-ICSAB1	91.93	93.054	96.445	92.039	88.085	84.725
15:02	ZZZZZZ	90.927	100.71	105.858	91.007	104.541	91.843
15:08	MA51659-CCVA2	98.345	102.354	103.782	98.402	100.807	96.262
15:14	MA51659-CCB2	99.607	104.03	105.054	100.008	103.295	100.332
15:20	MP30451A-MB1	99.593	102.946	104.773	99.781	103.661	100.234
15:25	MP30451A-B2	96.385	104.727	103.738	97.164	112.465	102.061
15:31	MP30451A-S3	99.103	95.16	103.927	99.365	100.197	96.792
15:37	MP30451A-S4	99.129	105.454	104.647	99.711	99.387	95.756
15:43	JD36107-4	98.522	106.462	104.256	99.01	100.485	95.525
15:49	MP30451A-SD1	104.881	108.104	109.797	105.426	106.439	104.152
15:55	MP30451A-PS1	138.51 !	193.713 !	287.262 !	139.123 !	278.188 !	134.323 !

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
16:01	ZZZZZZ	98.744	105.216	105.407	99.366	98.237	92.591
16:07	ZZZZZZ	100.709	109.834	109.301	100.72	107.197	100.263
16:13	ZZZZZZ	101.161	108.465	109.948	98.412	107.526	96.725
16:18	MA51659-CCVA3	103.399	106.335	107.151	104.114	101.273	100.775
16:24	MA51659-CCB3	103.339	107.215	108.667	102.208	105.935	101.329
16:30	MP30463-MB1	102.298	107.104	103.18	102.697	100.932	101.613
16:36	MP30463-B1	102.869	106.898	106.863	102.739	103.83	101.281
16:42	MP30463-S1	99.852	103.441	103.67	100.218	98.136	95.771
16:48	MP30463-S2	99.969	100.293	102.016	100.185	95.955	95.671
16:54	JD36682-9	98.896	102.695	104.669	99.128	98.151	92.423
17:00	MP30463-SD1	92.922	105.871	108.822	93.214	101.594	86.855
17:06	ZZZZZZ	101.08	107.344	106.907	101.203	105.031	100.855
17:12	MA51659-CCVA4	102.226	103.593	107.265	102.732	102.05	99.959
17:17	MA51659-CCB4	100.769	106.093	108.347	104.068	105.691	100.554
17:23	JD36682-7	98.031	99.701	103.452	98.394	97.076	92.544
17:29	JD36682-8	97.454	99.658	105.111	97.828	98.855	92.547
17:35	JD36682-10	100.119	102.178	105.483	100.372	100.01	96.81
17:41	JD36682-11	98.395	95.568	104.303	98.887	99.017	94.601
17:47	ZZZZZZ	100.101	102.709	103.583	100.779	103.178	100.41
17:53	ZZZZZZ	95.524	103.11	103.782	96.142	102.087	95.924
17:59	MA51659-CCVA5	100.527	104.284	105.372	101.199	101.467	98.235
18:05	MA51659-CCB5	98.681	106.159	106.946	99.104	106.181	94.004
18:11	MP30472-MB1	100.742	107.172	108.354	100.941	106.23	99.841
18:17	MP30472-B1	101.43	108.579	107.352	101.519	109.505	102.646
18:22	MP30472-S1	95.585	103.39	102.722	96.502	95.817	90.164
18:28	MP30472-S2	93.274	104.496	103.91	93.827	95.485	87.193
18:34	JD36803-7	95.798	104.38	104.327	96.451	96.567	89.362
18:40	MP30472-SD1	106.008	116.195	110.388	104.001	107.326	101.906
18:46	MP30472-S1	109.9	107.806	113.493	110.29	99.983	103.52
18:52	MP30472-S2	109.699	106.602	110.03	110.328	95.643	109.898
18:58	JD36803-7	101.44	105.716	109.09	101.789	94.279	96.817
19:04	MP30472-SD1	103.712	105.569	108.768	103.612	95.424	98.884
19:10	MA51659-CCVA6	100.673	102.455	105.929	100.99	102.055	98.628

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
19:15	MA51659-CCB6	89.546	104.232	105.546	89.788	103.679	87.514
19:21	MP30472-S3	No results reported for the elements associated with this internal standard.					
19:27	MP30472-S4	No results reported for the elements associated with this internal standard.					
19:33	JD36803-7F	No results reported for the elements associated with this internal standard.					
19:39	MP30472-SD2	No results reported for the elements associated with this internal standard.					
19:45	MP30472-S3	106.149	105.95	110.32	103.235	101.232	101.646
19:51	MP30472-S4	102.338	105.299	108.909	102.836	100.231	101.264
19:57	JD36803-7F	100.247	102.96	107.658	98.949	99.603	94.158
20:02	MP30472-SD2	101.282	102.429	107.076	101.421	91.606	97.682
20:08	ZZZZZZ	91.587	104.842	103.149	91.932	99.85	89.389
20:14	ZZZZZZ	100.206	105.145	109.053	104.328	105.57	100.171
20:20	MA51659-CCVA7	98.955	101.722	105.157	99.173	101.72	96.711
20:26	MA51659-CCB7	96.417	103.979	89.123	96.829	89.11	96.16
20:32	ZZZZZZ	100.728	105.028	107.135	100.899	96.122	99.286
20:38	ZZZZZZ	99.489	104.069	106.078	99.963	99.825	99.07
20:44	ZZZZZZ	98.217	100.267	105.158	98.603	99.225	95.805
20:49	ZZZZZZ	95.94	104.005	105.987	96.235	101.671	93.217
20:55	ZZZZZZ	87.658	88.574	87.128	88.509	73.769	77.715
21:01	ZZZZZZ	96.464	101.804	105.854	97.286	98.141	93.366
21:07	ZZZZZZ	98.191	105.193	113.801	98.441	100.835	98.886
21:13	ZZZZZZ	96.525	104.395	105.778	96.912	102.059	97.47
21:19	ZZZZZZ	104.908	105.14	106.781	105.721	94.082	104.71
21:25	ZZZZZZ	93.981	105.24	97.966	94.563	94.555	91.526
21:31	MA51659-CCVA8	93.111	105.448	105.902	93.47	102.791	90.153
21:37	MA51659-CCB8	95.54	106.447	105.954	95.846	104.735	96.271
21:42	ZZZZZZ	97.835	105.89	106.907	98.146	101.722	98.048
21:48	ZZZZZZ	98.638	96.554	106.977	98.462	96.092	97.391
21:54	ZZZZZZ	97.539	104.898	106.147	98.416	102.793	97.8
22:00	ZZZZZZ	92.543	101.118	104.872	93.228	99.081	91.067
22:06	ZZZZZZ	97.6	105.4	104.996	98.017	101.708	98.214
22:12	ZZZZZZ	85.812	87.743	95.35	86.809	83.874	76.138
22:18	ZZZZZZ	95.483	105.97	106.479	96.403	99.438	93.156
22:24	ZZZZZZ	100.775	105.946	106.52	101.473	90.845	96.52

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51659
Parameters: Ni

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
22:30	ZZZZZZ	97.002	104.127	106.538	97.032	102.942	94.393
22:35	ZZZZZZ	94.961	106.009	106.099	95.173	99.675	95.927
22:41	MA51659-CCVA9	97.164	106.274	101.065	97.977	98.763	96.152
22:47	MA51659-CCB9	97.748	105.982	106.402	98.2	106.065	93.508
22:53	ZZZZZZ	95.598	107.036	106.779	95.918	106.614	97.188
22:59	ZZZZZZ	97.909	106.665	99.145	98.527	96.291	97.855
23:05	MP30322-S1	91.962	95.74	103.348	92.201	95.778	86.269
23:11	MP30322-S2	95.147	101.587	104.282	95.985	96.224	86.94
23:17	JD36351-1	94.585	98.669	97.671	95.098	92.196	89.86
23:23	ZZZZZZ	147.927 !	206.708 !	592.457 !	149.159 !	578.963 !	142.456 !
23:29	MA51659-CCVA10	92.044	104.666	105.011	92.798	102.114	91.652
23:35	MA51659-CCB10	92.182	97.936	97.021	93.481	97.003	94.476
23:40	ZZZZZZ	93.59	99.086	104.601	93.837	101.51	93.361
23:46	ZZZZZZ	90.886	92.151	102.103	91.442	91.126	81.637
23:52	ZZZZZZ	91.74	91.953	96.764	92.306	86.554	83.205
23:58	ZZZZZZ	65.91	62.333	73.414	66.02	47.577 !a	49.667 !
00:04	ZZZZZZ	100.967	109.234	107.05	100.612	102.126	97.653
00:10	ZZZZZZ	89.44	89.673	97.537	89.525	80.953	74.599
00:16	MA51659-CCVA11	111.057	111.44	101.801	103.768	93.746	97.022
00:22	MA51659-CCB11	94.166	110.984	109.068	98.274	104.663	90.182
00:28	ZZZZZZ	108.229	109.535	110.229	107.46	105.082	97.246
00:34	ZZZZZZ	102.997	108.988	108.37	98.758	104.992	96.146
00:40	ZZZZZZ	89.043	107.173	105.863	89.274	103.235	85.404

! = Outside limits.

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	60-125 %	60-125 %
Istd#18	Terbium (159-3)	60-125 %	60-125 %
Istd#19	Holmium (165-1)	60-125 %	60-125 %
Istd#20	Holmium (165-2)	60-125 %	60-125 %
Istd#21	Bismuth (209-1)	60-125 %	60-125 %
Istd#22	Bismuth (209-2)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51659 Units: ug/l

Time: / Sample ID:			14:20 ICB1		14:32 CCB1		15:14 CCB2		16:24 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42								
Antimony	2.0	.085	anr							
Arsenic	0.50	.025	anr							
Barium	1.0	.009								
Beryllium	0.50	.005	anr							
Boron	25	.85								
Cadmium	0.50	.01	anr							
Calcium	250	3.6								
Chromium	1.0	.018								
Cobalt	0.50	.003								
Copper	2.0	.024								
Iron	25	.24	anr							
Lead	0.50	.008	anr							
Magnesium	250	.19								
Manganese	1.0	.012	anr							
Molybdenum	1.0	.017								
Nickel	1.0	.017	-0.110	<1.0	-0.131	<1.0	-0.140	<1.0	-0.143	<4.0
Potassium	250	.78								
Selenium	0.50	.044								
Silver	0.50	.004	anr							
Sodium	250	1.5								
Strontium	5.0	.014								
Thallium	0.50	.002	anr							
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	anr							
Zinc	5.0	.078								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51659 Units: ug/l

Time:			17:17		18:05	
Sample ID:			CCB4		CCB5	
Metal	RL	IDL	raw	final	raw	final
Aluminum	25	.42				
Antimony	2.0	.085	anr			
Arsenic	0.50	.025	anr			
Barium	1.0	.009				
Beryllium	0.50	.005	anr			
Boron	25	.85				
Cadmium	0.50	.01	anr			
Calcium	250	3.6				
Chromium	1.0	.018				
Cobalt	0.50	.003				
Copper	2.0	.024				
Iron	25	.24	anr			
Lead	0.50	.008	anr			
Magnesium	250	.19				
Manganese	1.0	.012	anr			
Molybdenum	1.0	.017				
Nickel	1.0	.017	-0.140	<1.0	-0.137	<1.0
Potassium	250	.78				
Selenium	0.50	.044				
Silver	0.50	.004	anr			
Sodium	250	1.5				
Strontium	5.0	.014				
Thallium	0.50	.002	anr			
Tin	5.0	.041				
Titanium	1.0	.11				
Vanadium	1.0	.013	anr			
Zinc	5.0	.078				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51659 Units: ug/l

Time:		14:09			14:15			14:26	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	anr								
Barium									
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium									
Cobalt									
Copper									
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	60	61.8	103.0				50	48.5	97.0
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51659 Units: ug/l

Time:		15:08			16:18			17:12	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	anr								
Barium									
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium									
Cobalt									
Copper									
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	50	50.4	100.8	50	48.1	96.2	50	48.0	96.0
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51659 Units: ug/l

Time:		17:59	
Sample ID:	CCVA	CCVA5	
Metal	True	Results	% Rec
Aluminum			
Antimony	anr		
Arsenic	anr		
Barium			
Beryllium	anr		
Boron			
Cadmium	anr		
Calcium			
Chromium			
Cobalt			
Copper			
Iron	anr		
Lead	anr		
Magnesium			
Manganese	anr		
Molybdenum			
Nickel	50	47.9	95.8
Potassium			
Selenium			
Silver	anr		
Sodium			
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51659 Units: ug/l

Time:			14:38		14:44	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	25	25				
Antimony	2.0	0.25	anr			
Arsenic	0.50	0.50	anr			
Barium	1.0	0.50				
Beryllium	0.50	0.25	anr			
Boron	25	2.5				
Cadmium	0.50	0.25	anr			
Calcium	250	125				
Chromium	1.0	2.0				
Cobalt	0.50	0.25				
Copper	2.0	2.0				
Iron	25	25	anr			
Lead	0.50	0.25	anr			
Magnesium	250	125				
Manganese	1.0	0.25	anr			
Molybdenum	1.0	0.50				
Nickel	1.0	2.0	0.883	88.3	0.852	85.2
Potassium	250	125				
Selenium	0.50	0.50				
Silver	0.50	1.0	anr			
Sodium	250	125				
Strontium	5.0	0.50				
Thallium	0.50	0.25	anr			
Tin	5.0	0.50				
Titanium	1.0	0.50				
Vanadium	1.0	2.0	anr			
Zinc	5.0	2.0				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA122721M2.CSV Date Analyzed: 12/27/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51659 Units: ug/l

Time:			14:50		14:56	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	94400HH	94.4	92700HH	92.7
Antimony			0.170		0.132	
Arsenic		20	0.0772		18.7	93.5
Barium			0.117		0.105	
Beryllium			0.000765		-0.000480	
Boron		50	3.41		45.2	90.4
Cadmium		20	-0.377		19.3	96.5
Calcium	100000	100000	95000HH	95.0	95800HH	95.8
Chromium		20	1.01*		20.1	100.5
Cobalt		20	0.116		18.4	92.0
Copper		20	-0.546		16.9	84.5
Iron	100000	100000	89200	89.2	88400	88.4
Lead			0.0335		0.0291	
Magnesium	100000	100000	93100HH	93.1	91400HH	91.4
Manganese		20	0.191		19.0	95.0
Molybdenum	2000	2000	2300HH	115.0	2270HH	113.5
Nickel		20	0.427		18.1	90.5
Potassium	100000	100000	97400HH	97.4	95900HH	95.9
Selenium		20	0.179		19.0	95.0
Silver		20	0.0191		18.3	91.5
Sodium	100000	100000	93900HH	93.9	92400HH	92.4
Strontium	2000	2000	2240HH	112.0	2220HH	111.0
Thallium			0.00893		0.00656	
Tin	2000	2000	2110HH	105.5	2100HH	105.0
Titanium	2000	2000	1890HH	94.5	1850HH	92.5
Vanadium		20	0.0130		20.4	102.0
Zinc		20	0.0950		16.3	81.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:33	MA51679-STD1	1		Sample introduction not stable, see rerun.
10:38	MA51679-STD2	1		STDA
10:44	MA51679-STD3	1		STDB
10:49	MA51679-STD4	1		STDB
10:55	MA51679-STD5	1		STDC
11:01	MA51679-STD6	1		STDD
11:06	MA51679-STD7	1		STDE
11:12	MA51679-STD8	1		STDF
11:18	MA51679-STD9	1		STDG
11:24	MA51679-STD10	1		STDH
11:29	MA51679-STD11	1		STDI
11:36	MA51679-STD12	1		STDJ
11:43	MA51679-STD13	1		STDA
11:49	ZZZZZZ	1		
11:55	ZZZZZZ	1		
12:00	MA51679-ICVA1	1		
12:06	MA51679-ICV1	1		
12:17	MA51679-ICB1	1		
12:23	MA51679-CCVA1	1		
12:28	MA51679-CCB1	1		
12:34	ZZZZZZ	1		
12:40	MA51679-CRI1	1		
12:46	MA51679-ICSA1	1		
12:52	MA51679-ICSAB1	1		
13:01	ZZZZZZ	1		
13:06	MA51679-CCVA2	1		
13:12	MA51679-CCB2	1		
13:18	ZZZZZZ	50		
13:23	ZZZZZZ	2		
13:29	ZZZZZZ	5		
13:35	ZZZZZZ	5		
13:41	ZZZZZZ	5		
13:46	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:52	ZZZZZZ	5		
13:58	ZZZZZZ	5		
14:04	MA51679-CCVA3	1		
14:09	MA51679-CCB3	1		
14:15	MP30530-MB1	2		
14:21	MP30530-B1	2		
14:27	ZZZZZZ	2		
14:32	ZZZZZZ	2		
14:38	ZZZZZZ	1		
14:44	MA51679-CCVA4	1		
14:49	MA51679-CCB4	1		
14:55	MP30530-S1	2		
15:01	MP30530-S2	2		
15:06	MP30530-S2	2		
15:12	JD37157-14	2		(sample used for QC only; not part of login JD36682)
15:18	MP30530-SD1	10		
15:24	MP30530-S3	2		
15:29	MP30530-S4	2		
15:35	JD37157-14F	2		(sample used for QC only; not part of login JD36682)
15:41	MP30530-SD2	10		
15:46	MA51679-CCVA5	1		
15:52	MA51679-CCB5	1		
15:58	MP30530-S1	25		
16:03	MP30530-S2	25		
16:09	JD37157-14	25		(sample used for QC only; not part of login JD36682)
16:15	MP30530-SD1	125		
16:21	MP30530-S3	25		
16:26	MP30530-S3	25		
16:32	MP30530-S4	25		
16:37	JD37157-14F	25		(sample used for QC only; not part of login JD36682)
16:43	MP30530-SD2	125		
16:49	MA51679-CCVA6	1		
16:55	MA51679-CCB6	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:00	ZZZZZZ	100		
17:06	ZZZZZZ	500		
17:12	ZZZZZZ	2		
17:17	ZZZZZZ	500		
17:23	ZZZZZZ	2		
17:29	ZZZZZZ	50		
17:34	ZZZZZZ	2		
17:40	ZZZZZZ	200		
17:46	MA51679-CCVA7	1		
17:51	MA51679-CCB7	1		
17:57	ZZZZZZ	2		
18:03	ZZZZZZ	2		
18:08	ZZZZZZ	2		
18:14	ZZZZZZ	2		
18:20	ZZZZZZ	2		
18:26	ZZZZZZ	500		
18:31	ZZZZZZ	2		
18:37	ZZZZZZ	500		
18:43	ZZZZZZ	2		
18:48	ZZZZZZ	50		
18:54	MA51679-CCVA8	1		
19:00	MA51679-CCB8	1		
19:05	MP30605A-MB1	2		
19:11	MP30605A-MB1	2		
19:11	MP30605A-MB1	2		batch to reanalyze for As, high rsd-s on CCV
19:16	MP30605A-B2	2		
19:16	MP30605A-B2	2		
19:22	MP30605A-B3	25		
19:22	MP30605A-B3	25		
19:27	MP30605A-S3	2		
19:27	MP30605A-S3	2		
19:33	MP30605A-S4	2		
19:33	MP30605A-S4	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:38	JD37045-1	2		(sample used for QC only; not part of login JD36682)
19:38	JD37045-1	2		(sample used for QC only; not part of login JD36682)
19:44	MP30605A-SD1	2		
19:44	MP30605A-SD1	2		
19:50	ZZZZZZ	1		
19:50	ZZZZZZ	1		
19:55	MA51679-CCVA9	1		
19:55	MA51679-CCVA17	1		
20:01	MA51679-CCB9	1		
20:01	MA51679-CCB17	1		
20:06	ZZZZZZ	2		
20:06	ZZZZZZ	2		
20:12	ZZZZZZ	2		
20:12	ZZZZZZ	2		
20:17	ZZZZZZ	1		
20:17	ZZZZZZ	1		
20:23	ZZZZZZ	5		
20:23	ZZZZZZ	5		
20:29	ZZZZZZ	5		
20:29	ZZZZZZ	5		
20:34	MP30463-S1	10		
20:40	MP30463-S2	10		
20:45	JD36682-9	20		
20:51	MP30463-SD1	100		
20:57	MA51679-CCVA10	1		
20:57	MA51679-CCVA18	1		
21:02	MA51679-CCB10	1		
21:02	MA51679-CCB18	1		
21:08	MP30463-PS1	5		
21:13	MP30463-S1	50		
21:19	MP30463-S2	50		
21:24	JD36682-9	100		
21:30	MP30463-SD1	500		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
21:36	JD36682-7	10		
21:41	JD36682-7	50		
21:47	JD36682-7	250		
21:52	JD36682-8	10		
21:58	MA51679-CCVA11	1		
21:58	MA51679-CCVA19	1		
22:03	MA51679-CCB11	1		
22:03	MA51679-CCB19	1		
22:09	JD36682-8	50		
22:15	JD36682-8	200		
22:20	JD36682-10	25		
22:26	JD36682-10	500		
22:31	JD36682-11	10		
22:37	JD36682-11	50		
22:42	JD36682-11	250		
---------->	Last reportable sample/prep for job JD36682			
22:48	MA51679-CCVA12	1		
22:48	MA51679-CCVA20	1		
22:54	MA51679-CCB12	1		
---------->	Last reportable CCB for job JD36682			
22:54	MA51679-CCB20	1		
22:59	MP30438A-MB1	2		CCV out
23:05	MP30438A-B2	2		CCV out
23:10	MP30438A-S3	2		CCV out
23:16	MP30438A-S4	2		CCV out
23:22	JD36657-2	2		(sample used for QC only; not part of login JD36682)
23:27	MP30438A-SD1	10		CCV out
23:33	ZZZZZZ	2		
23:39	ZZZZZZ	2		
23:44	ZZZZZZ	2		
23:50	MA51679-CCVA13	1		
23:55	MA51679-CCB13	1		
00:01	MP30606-MB1	2		Batch to reanalyze, checks out
00:07	MP30606-B1	2		high recovery for B
00:12	MP30606-S1	2		Zn high

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
00:18	MP30606-S2	2		Zn high
00:23	JD37409-3	2		(sample used for QC only; not part of login JD36682)
00:29	MP30606-SD1	10		
00:35	ZZZZZZ	2		
00:40	ZZZZZZ	2		
00:46	ZZZZZZ	1		
00:51	MA51679-CCVA14	1		
00:57	MA51679-CCB14	1		
01:02	MP30444-S1	2		
01:08	MP30444-S2	2		
01:13	ZZZZZZ	1		
01:19	ZZZZZZ	1		
01:25	MP30433-S1	2		
01:30	ZZZZZZ	2		
01:36	ZZZZZZ	1		
01:41	ZZZZZZ	1		
01:47	MA51679-CCVA15	1		
01:52	MA51679-CCB15	1		
01:58	ZZZZZZ	2		
02:03	ZZZZZZ	2		
02:09	ZZZZZZ	2		
02:14	ZZZZZZ	2		
02:20	ZZZZZZ	1		
02:25	ZZZZZZ	1		
02:31	ZZZZZZ	1		
02:37	MA51679-CCVA16	1		
02:42	MA51679-CCB16	1		
02:48	ZZZZZZ	1		
02:53	ZZZZZZ	1		
02:59	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	Ba	Cd	Ca	Cr	Fe	Mg	Mn	Ag	V	Zn
11:49	ZZZZZZ	1												
11:55	ZZZZZZ	1												
12:00	MA51679-ICVA1	1	X	X	X	X	X	X	X	X	X	X	X	X
12:06	MA51679-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	X
12:17	MA51679-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X
12:23	MA51679-CCVA1	1	X	X	X	X	X	X	X	X	X	X	X	X
12:28	MA51679-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X
12:34	ZZZZZZ	1												
12:40	MA51679-CRI1	1	X	X	X	X	X	X	X	X	X	X	X	X
12:46	MA51679-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	X
12:52	MA51679-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X
13:01	ZZZZZZ	1												
13:06	MA51679-CCVA2	1	X	X	X	X	X	X	X	X	X	X	X	X
13:12	MA51679-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X
13:18	ZZZZZZ	50												
13:23	ZZZZZZ	2												
13:29	ZZZZZZ	5												
13:35	ZZZZZZ	5												
13:41	ZZZZZZ	5												
13:46	ZZZZZZ	5												
13:52	ZZZZZZ	5												
13:58	ZZZZZZ	5												
14:04	MA51679-CCVA3	1	X	X	X	X	X	X	X	X	X	X	X	X
14:09	MA51679-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X
14:15	MP30530-MB1	2												
14:21	MP30530-B1	2												
14:27	ZZZZZZ	2												
14:32	ZZZZZZ	2												
14:38	ZZZZZZ	1												
14:44	MA51679-CCVA4	1	X	X	X	X	X	X	X	X	X	X	X	X
14:49	MA51679-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X
14:55	MP30530-S1	2												
15:01	MP30530-S2	2												
		Element:	Al	Sb	Ba	Cd	Ca	Cr	Fe	Mg	Mn	Ag	V	Zn

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	Ba	Cd	Ca	Cr	Fe	Mg	Mn	Ag	V	Zn	
15:06	MP30530-S2	2													
15:12	JD37157-14	2													(a)
15:18	MP30530-SD1	10													
15:24	MP30530-S3	2													
15:29	MP30530-S4	2													
15:35	JD37157-14F	2													(a)
15:41	MP30530-SD2	10													
15:46	MA51679-CCVA5	1	X	X	X	X	X	X	X	X	X	X	X	X	
15:52	MA51679-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	
15:58	MP30530-S1	25									X				
16:03	MP30530-S2	25									X				
16:09	JD37157-14	25									X				(a)
16:15	MP30530-SD1	125									X				
16:21	MP30530-S3	25													
16:26	MP30530-S3	25									X				
16:32	MP30530-S4	25									X				
16:37	JD37157-14F	25									X				(a)
16:43	MP30530-SD2	125									X				
16:49	MA51679-CCVA6	1	X	X	X	X	X	X	X	X	X	X	X	X	
16:55	MA51679-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	
17:00	ZZZZZZ	100													
17:06	ZZZZZZ	500													
17:12	ZZZZZZ	2													
17:17	ZZZZZZ	500													
17:23	ZZZZZZ	2													
17:29	ZZZZZZ	50													
17:34	ZZZZZZ	2													
17:40	ZZZZZZ	200													
17:46	MA51679-CCVA7	1	X	X	X	X	X	X	X	X	X	X	X	X	
17:51	MA51679-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	X	
17:57	ZZZZZZ	2													
18:03	ZZZZZZ	2													
18:08	ZZZZZZ	2													
		Element:	Al	Sb	Ba	Cd	Ca	Cr	Fe	Mg	Mn	Ag	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	Ba	Cd	Ca	Cr	Fe	Mg	Mn	Ag	V	Zn	
18:14	ZZZZZZ	2													
18:20	ZZZZZZ	2													
18:26	ZZZZZZ	500													
18:31	ZZZZZZ	2													
18:37	ZZZZZZ	500													
18:43	ZZZZZZ	2													
18:48	ZZZZZZ	50													
18:54	MA51679-CCVA8	1	X	X	X	X	X	X	X	X	X	X	X	X	
19:00	MA51679-CCB8	1	X	X	X	X	X	X	X	X	X	X	X	X	
19:05	MP30605A-MB1	2													
19:11	MP30605A-MB1	2													
19:11	MP30605A-MB1	2													
19:16	MP30605A-B2	2													
19:16	MP30605A-B2	2													
19:22	MP30605A-B3	25													
19:22	MP30605A-B3	25													
19:27	MP30605A-S3	2													
19:27	MP30605A-S3	2													
19:33	MP30605A-S4	2													
19:33	MP30605A-S4	2													
19:38	JD37045-1	2													
19:38	JD37045-1	2													(a)
19:44	MP30605A-SD1	2													
19:44	MP30605A-SD1	2													
19:50	ZZZZZZ	1													
19:50	ZZZZZZ	1													
19:55	MA51679-CCVA9	1	X	X	X	X	X	X	X	X	X	X	X	X	
19:55	MA51679-CCVA17	1	X	X	X	X	X	X	X	X	X	X	X	X	
20:01	MA51679-CCB9	1	X	X	X	X	X	X	X	X	X	X	X	X	
20:01	MA51679-CCB17	1	X	X	X	X	X	X	X	X	X	X	X	X	
20:06	ZZZZZZ	2													
20:06	ZZZZZZ	2													
20:12	ZZZZZZ	2													
		Element:	Al	Sb	Ba	Cd	Ca	Cr	Fe	Mg	Mn	Ag	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	Ba	Cd	Ca	Cr	Fe	Mg	Mn	Ag	V	Zn
20:12	ZZZZZZ	2												
20:17	ZZZZZZ	1												
20:17	ZZZZZZ	1												
20:23	ZZZZZZ	5												
20:23	ZZZZZZ	5												
20:29	ZZZZZZ	5												
20:29	ZZZZZZ	5												
20:34	MP30463-S1	10			X		X	X		X			X	X
20:40	MP30463-S2	10			X		X	X		X			X	X
20:45	JD36682-9	20	X		X		X	X		X			X	X
20:51	MP30463-SD1	100	X		X	X	X	X		X		X	X	X
20:57	MA51679-CCVA10	1	X	X	X	X	X	X	X	X	X	X	X	X
20:57	MA51679-CCVA18	1	X	X	X	X	X	X	X	X	X	X	X	X
21:02	MA51679-CCB10	1	X	X	X	X	X	X	X	X	X	X	X	X
21:02	MA51679-CCB18	1	X	X	X	X	X	X	X	X	X	X	X	X
21:08	MP30463-PS1	5		X										
21:13	MP30463-S1	50	X						X		X			
21:19	MP30463-S2	50	X						X		X			
21:24	JD36682-9	100							X		X			
21:30	MP30463-SD1	500							X		X			
21:36	JD36682-7	10			X		X	X						
21:41	JD36682-7	50	X							X			X	X
21:47	JD36682-7	250							X		X			
21:52	JD36682-8	10			X		X	X					X	X
21:58	MA51679-CCVA11	1	X	X	X	X	X	X	X	X	X	X	X	X
21:58	MA51679-CCVA19	1	X	X	X	X	X	X	X	X	X	X	X	X
22:03	MA51679-CCB11	1	X	X	X	X	X	X	X	X	X	X	X	X
22:03	MA51679-CCB19	1	X	X	X	X	X	X	X	X	X	X	X	X
22:09	JD36682-8	50	X						X	X				
22:15	JD36682-8	200									X			
22:20	JD36682-10	25	X		X				X					
22:26	JD36682-10	500									X			
22:31	JD36682-11	10			X									
		Element:	Al	Sb	Ba	Cd	Ca	Cr	Fe	Mg	Mn	Ag	V	Zn

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	Ba	Cd	Ca	Cr	Fe	Mg	Mn	Ag	V	Zn	
22:37	JD36682-11	50	X						F						
22:42	JD36682-11	250									M				
22:48	MA51679-CCVA12	1	X	X	X	X	X	X	X	X	X	X	X	X	
22:48	MA51679-CCVA20	1	X	X	X	X	X	X	X	X	X	X	X	X	
22:54	MA51679-CCB12	1	X	X	X	X	X	X	X	X	X	X	X	X	
22:54	MA51679-CCB20	1	X	X	X	X	X	X	X	X	X	X	X	X	
22:59	MP30438A-MB1	2													
23:05	MP30438A-B2	2													
23:10	MP30438A-S3	2													
23:16	MP30438A-S4	2													
23:22	JD36657-2	2													(a)
23:27	MP30438A-SD1	10													
23:33	ZZZZZZ	2													
23:39	ZZZZZZ	2													
23:44	ZZZZZZ	2													
23:50	MA51679-CCVA13	1	X	X	X	X	X	X	X	X	X	X	X	X	
23:55	MA51679-CCB13	1	X	X	X	X	X	X	X	X	X	X	X	X	
00:01	MP30606-MB1	2	Batch to reanalyze, checks out												
00:07	MP30606-B1	2	high recovery for B												
00:12	MP30606-S1	2	Zn high												
00:18	MP30606-S2	2	Zn high												
00:23	JD37409-3	2													
00:29	MP30606-SD1	10													
00:35	ZZZZZZ	2													
00:40	ZZZZZZ	2													
00:46	ZZZZZZ	1													
00:51	MA51679-CCVA14	1	X	X	X	X	X	X	X	X	X	X	X	X	
00:57	MA51679-CCB14	1	X	X	X	X	X	X	X	X	X	X	X	X	
01:02	MP30444-S1	2													
01:08	MP30444-S2	2													
01:13	ZZZZZZ	1													
01:19	ZZZZZZ	1													
01:25	MP30433-S1	2													
		Element:	Al	Sb	Ba	Cd	Ca	Cr	Fe	Mg	Mn	Ag	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	Ba	Cd	Ca	Cr	Fe	Mg	Mn	Ag	V	Zn
01:30	ZZZZZZ	2												
01:36	ZZZZZZ	1												
01:41	ZZZZZZ	1												
01:47	MA51679-CCVA15	1	X	X	X	X	X	X	X	X	X	X	X	X
01:52	MA51679-CCB15	1	X	X	X	X	X	X	X	X	X	X	X	X
01:58	ZZZZZZ	2												
02:03	ZZZZZZ	2												
02:09	ZZZZZZ	2												
02:14	ZZZZZZ	2												
02:20	ZZZZZZ	1												
02:25	ZZZZZZ	1												
02:31	ZZZZZZ	1												
02:37	MA51679-CCVA16	1	X	X	X	X	X	X	X	X	X	X	X	X
02:42	MA51679-CCB16	1	X	X	X	X	X	X	X	X	X	X	X	X
02:48	ZZZZZZ	1												
02:53	ZZZZZZ	1												
02:59	ZZZZZZ	1												

(a) Sample used for QC only; not part of login JD36682.

Element: Al Sb Ba Cd Ca Cr Fe Mg Mn Ag V Zn

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
10:33	MA51679-STD1	100	100	100	100	100	100	100	100
10:38	MA51679-STD2	100	100	100	100	100	100	100	100
10:44	MA51679-STD3	100.076	100.481	117.23	100.808	100.404	110.697	100.851	100.551
10:49	MA51679-STD4	101.128	100.138	117.916	102.862	101.27	111.252	101.535	100.901
10:55	MA51679-STD5	100.79	101.216	117.875	101.245	101.472	112.033	100.924	101.085
11:01	MA51679-STD6	100.967	100.512	117.647	101.389	101.919	112.398	100.703	101.132
11:06	MA51679-STD7	99.564	99.246	116.977	100.755	102.012	111.173	100.337	100.377
11:12	MA51679-STD8	100.07	97.107	115.473	99.799	101.702	109.962	99.376	101.986
11:18	MA51679-STD9	100.227	98.185	115.727	99.953	98.798	109.784	99.98	98.089
11:24	MA51679-STD10	100.983	100.167	119.1	102.979	100.407	113.976	102.075	99.606
11:29	MA51679-STD11	97.716	99.105	123.23	104.157	99.5	114.539	102.362	98.419
11:36	MA51679-STD12	101.007	102.871	123.988	104.219	101.316	116.025	102.07	100.05
11:43	MA51679-STD13	100	100	100	100	100	100	100	100
11:49	ZZZZZZ	95.603	86.04	113.106	95.592	94.428	111.113	96.651	94.294
11:55	ZZZZZZ	102.023	97.935	111.983	84.928	98.657	109.509	86.803	99.32
12:00	MA51679-ICVA1	100.227	97.688	113.783	98.155	101.856	109.705	96.821	102.825
12:06	MA51679-ICV1	100.864	98.263	112.384	88.863	99.843	107.979	87.817	100.359
12:17	MA51679-ICB1	100.339	97.507	111.871	97.503	96.559	107.573	96.666	97.449
12:23	MA51679-CCVA1	98.837	98.004	117.188	99.055	101.149	112.339	96.771	101.837
12:28	MA51679-CCB1	100.325	97.595	111.372	101.389	99.161	108.664	96.392	99.802
12:34	ZZZZZZ	100.655	98.064	112.312	97.863	98.838	109.065	97.687	98.988
12:40	MA51679-CRI1	101.181	98.536	108.282	97.139	99.999	104.74	97.384	99.701
12:46	MA51679-ICSA1	90.801	92.99	105.98	91.949	91.553	98.497	87.192	89.9
12:52	MA51679-ICSAB1	88.386	87.972	102.364	90.312	88.959	96.005	86.534	88.425
13:01	ZZZZZZ	93.692	92.609	102.633	97.501	93.628	101.008	97.068	93.887
13:06	MA51679-CCVA2	95.602	98.352	114.202	99.66	102.229	109.712	98.788	103.668
13:12	MA51679-CCB2	97.88	98.066	112.31	100.227	99.634	108.968	99.836	100.803
13:18	ZZZZZZ	101.459	97.528	114.539	98.5	102.582	113.613	99.965	103.313
13:23	ZZZZZZ	91.627	95.781	98.282	99.278	97.534	97.631	98.942	96.431
13:29	ZZZZZZ	96.592	110.132	124.884	110.299	100.681	110.779	99.569	101.595
13:35	ZZZZZZ	96.056	107.665	132.212 !	112.989	102.83	119.029	103.915	101.604
13:41	ZZZZZZ	94.397	108.176	134.638 !	120.144	99.484	115.401	105.635	98.592
13:46	ZZZZZZ	95.254	107.834	124.32	113.446	97.939	107.645	100.88	97.819

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:52	ZZZZZZ	98.202	104.062	120.767	91.934	103.798	115.508	92.44	104.956
13:58	ZZZZZZ	96.421	104.92	114.51	103.68	105.277	109.347	102.246	106.519
14:04	MA51679-CCVA3	97.918	104.637	120.785	107.054	106.716	115.634	102.399	107.905
14:09	MA51679-CCB3	99.449	102.933	120.219	103.677	104.004	115.241	102.59	104.57
14:15	MP30530-MB1	92.05	95.658	108.753	100.022	97.045	106.968	98.208	98.677
14:21	MP30530-B1	91.144	96.81	110.308	102.037	98.906	106.84	99.353	99.221
14:27	ZZZZZZ	88.928	92.918	101.75	95.438	94.007	101.717	96.088	95.437
14:32	ZZZZZZ	86.637	90.362	99.161	95.868	93.179	99.443	95.622	93.173
14:38	ZZZZZZ	95.492	94.509	107.09	93.483	96.14	104.762	93.436	97.129
14:44	MA51679-CCVA4	92.915	93.929	106.369	94.998	96.774	103.041	93.895	97.713
14:49	MA51679-CCB4	95.393	96.532	102.405	92.27	94.031	98.817	92.922	95.361
14:55	MP30530-S1	84.769	86.895	92.973	90.543	89.221	89.897	89.12	90.797
15:01	MP30530-S2	No results reported for the elements associated with this internal standard.							
15:06	MP30530-S2	85.208	87.877	98.731	91.939	90.515	95.997	90.534	91.707
15:12	JD37157-14	86.444	89.628	98.923	91.064	90.346	96.167	90.366	91.081
15:18	MP30530-SD1	87.683	75.179	105.743	94.787	88.208	104.869	95.222	89.071
15:24	MP30530-S3	86.891	89.45	94.249	90.982	89.883	91.236	89.427	91.066
15:29	MP30530-S4	84.677	86.566	97.639	90.336	89.618	95.522	89.973	90.536
15:35	JD37157-14F	86.534	88.133	97.285	91.222	89.599	95.323	91.255	89.917
15:41	MP30530-SD2	97.692	92.925	104.728	94.05	96.432	103.489	94.511	97.505
15:46	MA51679-CCVA5	94.567	89.626	102.907	92.734	93.15	101.276	92.023	94.976
15:52	MA51679-CCB5	96.27	91.19	101.713	92.28	92.069	99.777	92.506	92.603
15:58	MP30530-S1	100.467	91.135	106.786	93.775	96.331	105.375	95.287	97.735
16:03	MP30530-S2	100.139	90.856	106.126	93.368	96.274	105.974	94.171	97.279
16:09	JD37157-14	99.271	90.459	106.713	92.845	94.209	105.592	94.418	95.306
16:15	MP30530-SD1	102.492	91.3	106.727	92.893	97.464	106.621	94.646	99.076
16:21	MP30530-S3	No results reported for the elements associated with this internal standard.							
16:26	MP30530-S3	101.741	93.019	107.449	92.31	96.498	105.912	93.798	97.033
16:32	MP30530-S4	97.715	89.075	106.55	92.472	93.722	105.127	93.673	94.277
16:37	JD37157-14F	101.625	93.039	106.472	92.315	96.187	106.675	93.884	97.732
16:43	MP30530-SD2	103.561	90.937	107.173	92.081	96.841	104.343	93.238	97.989
16:49	MA51679-CCVA6	98.717	93.424	101.017	92.957	95.488	100.766	92.048	97
16:55	MA51679-CCB6	97.141	91.546	105.396	90.9	91.398	101.263	90.552	92.264

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
17:00	ZZZZZZ	103.03	91.689	105.608	90.879	96.247	105.065	92.907	96.949
17:06	ZZZZZZ	104.059	91.436	105.686	90.825	96.965	105.466	92.544	97.971
17:12	ZZZZZZ	86.994	89.069	94.724	88.282	86.968	91.696	88.528	87.935
17:17	ZZZZZZ	104.525	94.188	107.285	88.86	99.024	108.242	90.588	99.715
17:23	ZZZZZZ	84.334	88.751	96.166	85.376	87.126	92.118	83.806	86.703
17:29	ZZZZZZ	104.165	93.343	99.84	89.718	95.169	98.22	90.77	95.66
17:34	ZZZZZZ	88.549	84.918	92.869	86.759	87.19	92.634	88.334	88.095
17:40	ZZZZZZ	104.944	92.956	105.97	82.989	97.153	104.85	83.526	98.971
17:46	MA51679-CCVA7	99.048	94.631	106.582	93.133	96.885	101.485	92.487	98.012
17:51	MA51679-CCB7	99.909	93.86	104.232	94.263	93.862	102.568	93.723	94.552
17:57	ZZZZZZ	92.858	91.417	93.871	92.967	92.715	94.298	93.75	93.774
18:03	ZZZZZZ	85.896	86.897	96.146	87.97	88.045	92.715	87.561	88.908
18:08	ZZZZZZ	86.21	86.544	88.402	81.146	87.426	86.996	81.772	88.185
18:14	ZZZZZZ	86.695	87.356	91.818	87.942	87.065	89.083	86.487	87.941
18:20	ZZZZZZ	84.731	83.992	87.806	86.474	84.664	86.421	86.082	85.18
18:26	ZZZZZZ	105.954	94.093	107.918	93.382	100.19	107.209	95.588	100.128
18:31	ZZZZZZ	84.933	80.955	92.512	87.301	84.587	90.882	85.996	85.023
18:37	ZZZZZZ	105.234	93.042	105.839	91.386	97.767	104.742	93.382	98.992
18:43	ZZZZZZ	83.579	85.519	92.88	85.294	84.179	89.336	83.115	83.733
18:48	ZZZZZZ	104.57	92.296	106.526	92.051	94.665	102.762	92.277	95.38
18:54	MA51679-CCVA8	101.597	93.198	97.355	92.445	95.573	95.245	91.342	96.985
19:00	MA51679-CCB8	98.51	90.777	100.382	90.114	90.797	97.901	90.642	91.465
19:05	MP30605A-MB1	No results reported for the elements associated with this internal standard.							
19:11	MP30605A-MB1	No results reported for the elements associated with this internal standard.							
19:11	MP30605A-MB1	93.47	88.138	94.165	89.999	88.678	93.383	91.245	89.142
19:16	MP30605A-B2	No results reported for the elements associated with this internal standard.							
19:16	MP30605A-B2	92.778	88.746	93.707	92.21	90.106	91.292	91.818	91.65
19:22	MP30605A-B3	No results reported for the elements associated with this internal standard.							
19:22	MP30605A-B3	96.907	86.512	102.971	91.546	90.444	102.953	91.95	91.891
19:27	MP30605A-S3	No results reported for the elements associated with this internal standard.							
19:27	MP30605A-S3	86.1	84.49	94.643	89.63	84.723	93.113	87.849	86.296
19:33	MP30605A-S4	No results reported for the elements associated with this internal standard.							
19:33	MP30605A-S4	87.072	86.488	96.677	88.767	87.268	92.83	86.954	88.664

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
19:38	JD37045-1	No results reported for the elements associated with this internal standard.							
19:38	JD37045-1	86.818	85.933	93.994	88.689	85.847	91.428	87.245	86.798
19:44	MP30605A-SD1	No results reported for the elements associated with this internal standard.							
19:44	MP30605A-SD1	100.326	94.144	104.263	93.535	94.633	102.075	92.788	95.349
19:50	ZZZZZZ	100.611	93.709	102.303	92.085	92.732	99.797	92.114	93.309
19:50	ZZZZZZ	100.611	93.709	102.303	92.085	92.732	99.797	92.114	93.309
19:55	MA51679-CCVA9	100.371	93.433	103.103	92.157	94.642	99.944	90.243	95.738
19:55	MA51679-CCVA17	100.371	93.433	103.103	92.157	94.642	99.944	90.243	95.738
20:01	MA51679-CCB9	99.333	90.943	100.236	91.97	89.931	97.354	91.208	91.643
20:01	MA51679-CCB17	99.333	90.943	100.236	91.97	89.931	97.354	91.208	91.643
20:06	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:06	ZZZZZZ	85.836	87.479	94.29	84.735	84.925	88.823	82.521	85.664
20:12	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:12	ZZZZZZ	83.312	77.528	93.379	85.081	80.465	87.792	83.326	81.031
20:17	ZZZZZZ	105.82	94.853	104.388	92.664	94.547	102.385	92.739	95.378
20:17	ZZZZZZ	105.82	94.853	104.388	92.664	94.547	102.385	92.739	95.378
20:23	ZZZZZZ	104.466	95.137	104.504	92.041	94.377	101.098	91.707	95.07
20:23	ZZZZZZ	104.466	95.137	104.504	92.041	94.377	101.098	91.707	95.07
20:29	ZZZZZZ	100.698	94.128	99.331	90.967	94.05	96.926	89.184	95.467
20:29	ZZZZZZ	100.698	94.128	99.331	90.967	94.05	96.926	89.184	95.467
20:34	MP30463-S1	104.525	100.842	114.1	99.629	97.018	106.847	95.085	97.746
20:40	MP30463-S2	105.046	101.755	113.911	97.386	99.666	106.293	93.4	99.61
20:45	JD36682-9	106.669	99.751	112.743	97.011	98.293	107.177	94.966	98.159
20:51	MP30463-SD1	109.6	96.987	110.566	94.392	99.465	108.115	94.719	101.026
20:57	MA51679-CCVA10	106.55	100.501	107.752	94.627	101.26	104.707	93.683	101.993
20:57	MA51679-CCVA18	106.55	100.501	107.752	94.627	101.26	104.707	93.683	101.993
21:02	MA51679-CCB10	104.383	96.033	105.642	93.991	94.881	102.652	94.083	95.737
21:02	MA51679-CCB18	104.383	96.033	105.642	93.991	94.881	102.652	94.083	95.737
21:08	MP30463-PS1	99.97	104.387	115.604	99.848	97.643	103.713	91.884	96.851
21:13	MP30463-S1	107.121	95.744	107.886	93.298	97.306	105.834	92.712	98.054
21:19	MP30463-S2	108.964	97.238	110.47	80.505	98.685	105.872	79.113	99.452
21:24	JD36682-9	108.516	95.488	109.498	92.568	98.316	106.13	92.362	98.31
21:30	MP30463-SD1	108.833	94.896	103.364	92.884	97.69	99.777	93.158	99.398

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
21:36	JD36682-7	103.443	102.352	113.852	98.07	95.573	104.129	91.866	95.632
21:41	JD36682-7	107.449	96.719	109.793	94.551	97.736	106.542	93.185	98.012
21:47	JD36682-7	109.53	95.956	109.771	92.405	97.352	107.528	93.045	98.753
21:52	JD36682-8	104.259	103.337	115.886	99.687	96.48	104.268	93.778	96.56
21:58	MA51679-CCVA11	102.907	95.773	107.565	93.958	96.953	104.218	93.057	98.506
21:58	MA51679-CCVA19	102.907	95.773	107.565	93.958	96.953	104.218	93.057	98.506
22:03	MA51679-CCB11	104.759	96.799	106.596	94.404	95.377	103.92	94.377	95.768
22:03	MA51679-CCB19	104.759	96.799	106.596	94.404	95.377	103.92	94.377	95.768
22:09	JD36682-8	109	99.678	113.306	95.245	99.123	107.216	93.492	100.171
22:15	JD36682-8	109.671	95.606	99.17	92.205	98.608	97.612	93.779	98.988
22:20	JD36682-10	108.273	99.502	104.622	95.21	98.172	100.166	92.912	98.011
22:26	JD36682-10	110.181	92.873	109.954	92.078	98.693	107.925	93.347	98.591
22:31	JD36682-11	106.442	102.478	115.774	97.967	97.449	106.94	93.179	97.511
22:37	JD36682-11	108.846	98.498	111.479	94.024	98.256	106.927	93.064	98.104
22:42	JD36682-11	110.433	94.934	110.605	92.154	97.712	107.077	93.574	99.095
22:48	MA51679-CCVA12	104.478	97.904	109.744	95.273	97.701	105.964	93.176	99.601
22:48	MA51679-CCVA20	104.478	97.904	109.744	95.273	97.701	105.964	93.176	99.601
22:54	MA51679-CCB12	105.241	99.048	108.576	95.271	96.531	105.071	94.415	97.48
22:54	MA51679-CCB20	105.241	99.048	108.576	95.271	96.531	105.071	94.415	97.48
22:59	MP30438A-MB1	104.096	98.317	109.716	96.292	97.594	106.817	94.762	98.898
23:05	MP30438A-B2	99.082	95.778	105.305	95.636	98.299	104	105.302	98.384
23:10	MP30438A-S3	87.918	89.361	98.177	88.643	88.37	93.868	92.931	90.099
23:16	MP30438A-S4	88.142	87.473	93.139	87.025	86.965	89.306	89.517	87.699
23:22	JD36657-2	87.326	86.113	94.193	85.972	85.274	90.708	88.048	85.969
23:27	MP30438A-SD1	100.132	91.838	100.4	89.465	92.064	96.535	88.848	93.08
23:33	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:39	ZZZZZZ	105.255	86.8	82.785	79.928	87.255	84.99	85.663	88.009
23:44	ZZZZZZ	90.161	72.939	84.129	80.418	80.877	85.531	84.861	81.065
23:50	MA51679-CCVA13	94.536	81.078	79.735	82.909	85.254	80.684	83.514	86.22
23:55	MA51679-CCB13	95.85	80.634	90.011	83.072	84.185	89.454	84.142	85.186
00:01	MP30606-MB1	No results reported for the elements associated with this internal standard.							
00:07	MP30606-B1	No results reported for the elements associated with this internal standard.							
00:12	MP30606-S1	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
00:18	MP30606-S2	No results reported for the elements associated with this internal standard.							
00:23	JD37409-3	No results reported for the elements associated with this internal standard.							
00:29	MP30606-SD1	No results reported for the elements associated with this internal standard.							
00:35	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:40	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:46	ZZZZZZ	100.122	91.81	96.427	89.159	89.495	94.225	89.085	90.538
00:51	MA51679-CCVA14	96.811	89.148	97.364	89.47	89.466	93.897	87.617	90.82
00:57	MA51679-CCB14	97.466	85.482	95.234	89.413	87.391	93.828	89.27	88.311
01:02	MP30444-S1	92.777	85.706	89.555	79.156	85.612	86.634	78.583	86.091
01:08	MP30444-S2	84.445	72.369	81.912	76.82	79.747	81.145	76.231	81.13
01:13	ZZZZZZ	84.854	71.616	82.671	67.479	80.09	82.946	71.065	81.076
01:19	ZZZZZZ	86.627	75.982	87.228	82.197	83.61	86.374	83.013	85.696
01:25	MP30433-S1	89.917	72.142	87.432	75.113	84.247	89.183	77.67	85.998
01:30	ZZZZZZ	91.361	71.675	87.448	78.584	84.798	88.773	80.495	86.232
01:36	ZZZZZZ	87.222	73.6	87.175	78.293	80.077	86.108	78.95	80.919
01:41	ZZZZZZ	89.207	80.007	89.365	82.138	84.953	87.661	81.07	86.315
01:47	MA51679-CCVA15	88.924	75.98	86.827	82.248	83.626	84.78	80.922	84.929
01:52	MA51679-CCB15	81.337	64.589 !a	86.769	80.846	73.592	86.393	80.979	74.831
01:58	ZZZZZZ	92.003	82.466	87.511	82.08	82.708	86.683	81.444	83.956
02:03	ZZZZZZ	85.625	74.639	85.559	83.279	82.187	85.673	85.679	83.772
02:09	ZZZZZZ	93.389	81.383	88.93	83.251	84.247	87.492	83.069	84.992
02:14	ZZZZZZ	78.036	68.081 !	85.525	82.744	75.825	85.932	85.31	76.613
02:20	ZZZZZZ	94.968	88.367	89.104	83.103	84.782	87.665	83.024	86.148
02:25	ZZZZZZ	92.703	78.906	89.524	82.551	86.19	88.601	82.258	87.089
02:31	ZZZZZZ	91.764	77.624	94.265	83.364	85.503	90.651	82.125	86.333
02:37	MA51679-CCVA16	91.308	77.818	90.644	82.249	84.513	87.873	81.541	85.708
02:42	MA51679-CCB16	90.175	76.154	89.047	82.936	81.189	87.713	82.109	81.8
02:48	ZZZZZZ	74.098	57.543 !	90.153	82.669	67.813 !	88.838	83.109	68.399 !
02:53	ZZZZZZ	94.569	84.914	90.658	82.864	84.027	88.771	83.119	84.28
02:59	ZZZZZZ	94.821	84.733	87.885	80.007	83.47	86.95	81.997	84.714

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Lithium	60-125 %
Istd#2	Scandium (45-1)	60-125 %
Istd#3	Scandium (45-2)	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8

Istd#8	Scandium (45-3)	60-125 %
Istd#5	Germanium (72-1)	60-125 %
Istd#6	Germanium (72-2)	60-125 %
Istd#7	Germanium (72-3)	60-125 %
Istd#8	Germanium (74-1)	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
10:33	MA51679-STD1	100	100	100	100	100	100	100	100
10:38	MA51679-STD2	100	100	100	100	100	100	100	100
10:44	MA51679-STD3	110.242	100.982	100.451	111.887	100.295	100.756	111.061	100.909
10:49	MA51679-STD4	111.681	102.052	100.414	112.976	100.664	100.157	113.045	101.344
10:55	MA51679-STD5	111.852	101.499	101.092	112.143	101.033	100.588	112.046	101.442
11:01	MA51679-STD6	112.853	101.117	100.362	112.279	100.544	100.553	112.788	101.106
11:06	MA51679-STD7	111.818	100.435	99.512	111.795	99.935	99.31	112.126	99.873
11:12	MA51679-STD8	110.302	99.624	98.315	111.351	98.842	98.743	110.56	99.228
11:18	MA51679-STD9	109.637	100.277	97.063	110.65	98.881	98.506	111.233	99.63
11:24	MA51679-STD10	113.909	102.862	99.28	112.822	100.54	100.393	114.091	99.856
11:29	MA51679-STD11	114.655	102.256	96.61	113.066	99.084	97.587	115.076	99.075
11:36	MA51679-STD12	115.617	102.168	98.559	112.17	98.279	99.939	114.559	102.001
11:43	MA51679-STD13	100	100	100	100	100	100	100	100
11:49	ZZZZZZ	110.917	97.083	90.21	111.056	97.731	89.803	113.197	91.22
11:55	ZZZZZZ	110.182	87.103	97.611	109.965	87.926	98.219	111.197	99.02
12:00	MA51679-ICVA1	109.987	97.669	94.699	108.763	95.592	96.237	110.735	98.667
12:06	MA51679-ICV1	109.218	88.414	97.345	110.079	89.131	99.005	110.91	98.866
12:17	MA51679-ICB1	107.883	97.689	98.598	108.501	97.845	98.783	109.036	100.202
12:23	MA51679-CCVA1	112.815	97.518	94.965	111.499	95.888	96.158	113.456	98.895
12:28	MA51679-CCB1	108.799	97.452	97.747	109.46	99.96	98.96	109.937	99.81
12:34	ZZZZZZ	108.193	98.389	97.924	109.526	98.514	98.275	110.353	99.487
12:40	MA51679-CRI1	105.243	97.683	98.712	105.989	97.437	99.865	107.234	100.483
12:46	MA51679-ICSA1	98.128	86.356	82.695	92.955	81.576	84.168	93.034	91.953
12:52	MA51679-ICSAB1	96.244	85.656	81.483	90.322	80.606	82.997	90.097	91.026
13:01	ZZZZZZ	101.878	98.649	94.922	104.37	97.933	97.061	104.175	99.613
13:06	MA51679-CCVA2	110.275	99.2	96.799	109.786	97.147	98.436	111.45	102.1
13:12	MA51679-CCB2	109.973	100.675	99.027	111.01	100.185	100.634	111.099	101.35
13:18	ZZZZZZ	113.91	100.789	99.452	112.627	98.952	102.069	115.116	103.166
13:23	ZZZZZZ	96.737	98.545	92.261	95.144	95.804	95.113	95.14	97.857
13:29	ZZZZZZ	110.987	99.57	97.485	109.07	96.453	101.012	110.798	101.669
13:35	ZZZZZZ	117.311	102.161	96.304	112.201	98.306	98.884	114.746	101.282
13:41	ZZZZZZ	114.444	105.028	92.882	109.861	99.396	96.425	112.664	99.427
13:46	ZZZZZZ	106.053	100.518	93.794	103.954	97.189	97.083	105.267	99.929

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
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Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:52	ZZZZZZ	116.117	92.198	101.947	113.978	89.921	103.259	115.284	103.223
13:58	ZZZZZZ	109.375	102.772	100.481	106.618	100.563	101.975	107.94	102.263
14:04	MA51679-CCVA3	114.941	101.939	99.81	112.418	99.326	101.944	114.956	103.85
14:09	MA51679-CCB3	115.542	102.898	102.838	115.141	102.529	103.658	115.224	104.118
14:15	MP30530-MB1	107.537	98.338	98.294	108.256	98.28	98.687	106.848	101.393
14:21	MP30530-B1	107.25	100.28	95.655	107.769	99.482	98.134	107.708	101.515
14:27	ZZZZZZ	101.759	96.883	90.936	101.283	94.283	94.705	101.777	99.872
14:32	ZZZZZZ	100.197	96.442	88.201	98.562	93.777	93.008	100.155	97.995
14:38	ZZZZZZ	104.973	93.458	96.166	106.443	94.718	99.288	107.08	101.354
14:44	MA51679-CCVA4	103.039	94.574	92.645	104.209	93.942	95.525	105.728	99.882
14:49	MA51679-CCB4	99.788	92.791	96.787	102.184	94.36	98.988	102.16	102.444
14:55	MP30530-S1	90.942	90.389	83.287	87.843	85.988	88.172	89.798	94.692
15:01	MP30530-S2	No results reported for the elements associated with this internal standard.							
15:06	MP30530-S2	96.999	91.323	84.123	93.52	86.572	89.4	95.678	95.795
15:12	JD37157-14	96.874	91.248	85.278	93.739	86.78	90.846	97.034	96.485
15:18	MP30530-SD1	105.528	96.248	82.576	104.272	94.314	86.633	107.876	88.75
15:24	MP30530-S3	92.617	90.231	84.148	89.34	86.192	88.956	91.294	95.568
15:29	MP30530-S4	96.061	91.083	82.866	92.409	86.072	88.033	95.142	95.018
15:35	JD37157-14F	96.533	90.889	84.855	92.794	86.983	89.985	96.373	95.914
15:41	MP30530-SD2	104.829	94.949	93.251	103.242	93.457	97.711	106.599	100.557
15:46	MA51679-CCVA5	102.129	93.4	89.631	102.185	92.471	92.346	104.643	96.484
15:52	MA51679-CCB5	100.883	92.994	93.185	103.041	94.195	95.908	103.747	97.69
15:58	MP30530-S1	106.495	95.24	94.951	105.135	94.352	98.207	108.717	100.16
16:03	MP30530-S2	106.291	95.041	94.334	105.188	93.875	98.602	109.188	100.261
16:09	JD37157-14	105.642	95.628	92.698	105.129	93.836	95.817	108.338	97.942
16:15	MP30530-SD1	106.118	95.802	95.532	106.013	94.645	98.134	110.118	100.579
16:21	MP30530-S3	No results reported for the elements associated with this internal standard.							
16:26	MP30530-S3	106.768	94.433	94.75	105.291	93.769	97.56	108.971	99.621
16:32	MP30530-S4	106.118	94.661	91.894	104.935	93.471	94.881	108.735	97.294
16:37	JD37157-14F	106.59	94.955	94.842	105.491	93.338	98.337	109.097	100.142
16:43	MP30530-SD2	104.796	94.024	94.895	103.593	93.687	98.333	107.575	99.88
16:49	MA51679-CCVA6	100.445	92.787	92.256	99.558	92.276	94.07	102.103	97.914
16:55	MA51679-CCB6	102.027	91.715	93.515	104.145	92.201	95.383	105.231	98.02

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
17:00	ZZZZZZ	105.855	93.449	95.248	105.14	92.85	98.151	108.343	99.052
17:06	ZZZZZZ	106	93.446	95.958	105.411	93.215	98.592	108.364	99.744
17:12	ZZZZZZ	92.667	88.789	83.459	88.658	83.118	87.928	91.925	94.281
17:17	ZZZZZZ	107.872	90.619	98.649	106.985	91.428	101.558	110.347	102.971
17:23	ZZZZZZ	92.143	83.322	79.625	86.378	77.489	84.553	89.845	91.666
17:29	ZZZZZZ	97.727	91.398	93.83	96.677	90.251	97.589	100.99	100.63
17:34	ZZZZZZ	93.164	88.628	82.737	89.953	85.228	87.799	93.197	92.856
17:40	ZZZZZZ	105.745	84.729	96.927	105.307	85.873	100.13	108.698	102.01
17:46	MA51679-CCVA7	102.286	92.918	93.108	102.132	92.363	95.755	104.963	99.416
17:51	MA51679-CCB7	102.203	94.289	95.297	103.888	95.859	96.805	104.501	99.245
17:57	ZZZZZZ	94.839	94.411	93.127	95.805	94.225	94.47	95.769	97.856
18:03	ZZZZZZ	93.612	88.183	82.872	90.079	83.353	88.318	93.457	94.973
18:08	ZZZZZZ	87.161	82.52	81.733	83.188	76.975	87.225	86.837	94.074
18:14	ZZZZZZ	89.27	87.639	81.967	84.285	82.09	87.38	87.984	93.394
18:20	ZZZZZZ	86.705	86.548	79.477	82.804	81.767	85.192	86.06	92.899
18:26	ZZZZZZ	107.672	95.956	98.306	107.026	94.809	100.853	110.848	103.182
18:31	ZZZZZZ	91.309	86.436	79.535	87.463	82.402	85.322	90.789	91.742
18:37	ZZZZZZ	104.915	94.53	96.96	104.878	94.031	99.715	108.874	102.241
18:43	ZZZZZZ	89.004	82.801	77.158	83.282	77.283	81.961	87.791	89.309
18:48	ZZZZZZ	103.556	92.968	93.199	102.109	91.91	96.673	106.762	99.753
18:54	MA51679-CCVA8	95.665	92.597	92.625	94.467	91.314	94.969	96.851	98.546
19:00	MA51679-CCB8	97.795	91.394	92.318	99.96	92.385	94.007	101.297	96.755
19:05	MP30605A-MB1	No results reported for the elements associated with this internal standard.							
19:11	MP30605A-MB1	No results reported for the elements associated with this internal standard.							
19:11	MP30605A-MB1	93.842	92.086	89.978	95.566	91.572	92.574	95.296	96.41
19:16	MP30605A-B2	No results reported for the elements associated with this internal standard.							
19:16	MP30605A-B2	91.763	92.76	89.119	92.935	92.026	91.848	93.362	96.643
19:22	MP30605A-B3	No results reported for the elements associated with this internal standard.							
19:22	MP30605A-B3	102.358	92.922	89.108	102.262	92.207	91.94	105.847	94.721
19:27	MP30605A-S3	No results reported for the elements associated with this internal standard.							
19:27	MP30605A-S3	92.606	88.82	79.79	88.448	82.815	85.284	91.907	92.239
19:33	MP30605A-S4	No results reported for the elements associated with this internal standard.							
19:33	MP30605A-S4	93.287	87.663	81.47	88.853	82.316	86.589	92.645	93.559

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
19:38	JD37045-1	No results reported for the elements associated with this internal standard.							
19:38	JD37045-1	92.136	87.489	80.995	87.861	82.768	86.589	91.904	93.455
19:44	MP30605A-SD1	No results reported for the elements associated with this internal standard.							
19:44	MP30605A-SD1	102.358	93.897	92.727	100.98	91.69	97.119	104.383	100.325
19:50	ZZZZZZ	100.602	92.873	94.389	101.835	93.476	96.261	103.272	98.704
19:50	ZZZZZZ	100.602	92.873	94.389	101.835	93.476	96.261	103.272	98.704
19:55	MA51679-CCVA9	100.32	90.951	91.711	99.956	90.327	94.171	102.351	98.066
19:55	MA51679-CCVA17	100.32	90.951	91.711	99.956	90.327	94.171	102.351	98.066
20:01	MA51679-CCB9	98.547	91.985	92.12	99.627	93.507	94.959	101.186	97.466
20:01	MA51679-CCB17	98.547	91.985	92.12	99.627	93.507	94.959	101.186	97.466
20:06	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:06	ZZZZZZ	89.469	82.847	78.526	82.755	75.567	82.938	87.45	89.883
20:12	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:12	ZZZZZZ	88.34	83.77	73.023	82.534	75.799	77.786	87.486	84.673
20:17	ZZZZZZ	102.581	93.406	96.209	102.852	93.773	97.875	105.572	100.596
20:17	ZZZZZZ	102.581	93.406	96.209	102.852	93.773	97.875	105.572	100.596
20:23	ZZZZZZ	101.341	93.071	95.885	101.981	93.817	98.073	103.701	99.34
20:23	ZZZZZZ	101.341	93.071	95.885	101.981	93.817	98.073	103.701	99.34
20:29	ZZZZZZ	97.454	89.252	94.107	98.003	91.14	96.164	100.181	99.073
20:29	ZZZZZZ	97.454	89.252	94.107	98.003	91.14	96.164	100.181	99.073
20:34	MP30463-S1	106.207	94.698	94.342	103.945	92.674	97.522	107.96	100.922
20:40	MP30463-S2	105.853	93.545	95.744	104.441	91.59	98.06	107.857	100.939
20:45	JD36682-9	107.117	94.62	96.01	105.22	93.323	99.163	109.197	101.758
20:51	MP30463-SD1	108.022	94.997	98.232	106.657	93.796	100.768	110.677	101.57
20:57	MA51679-CCVA10	105.417	94.354	98.388	104.099	92.898	101.016	107.357	104.017
20:57	MA51679-CCVA18	105.417	94.354	98.388	104.099	92.898	101.016	107.357	104.017
21:02	MA51679-CCB10	103.237	94.174	97.48	103.737	94.919	98.443	105.444	100.38
21:02	MA51679-CCB18	103.237	94.174	97.48	103.737	94.919	98.443	105.444	100.38
21:08	MP30463-PS1	102.024	91.029	91.839	99.729	88.768	94.865	103.965	98.764
21:13	MP30463-S1	105.703	93.663	96.246	104.237	92.664	98.772	107.883	101.209
21:19	MP30463-S2	106.518	79.397	97.248	104.933	79.205	100.435	108.628	101.363
21:24	JD36682-9	107.845	93.145	97.054	104.907	92.554	99.858	108.884	99.914
21:30	MP30463-SD1	100.398	94.03	96.833	98.103	93.666	99.702	102.286	100.959

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
21:36	JD36682-7	102.871	91.865	93.407	100.541	89.934	95.842	104.719	98.943
21:41	JD36682-7	106.069	93.852	96.244	104.773	92.888	97.887	108.696	100.939
21:47	JD36682-7	107.218	93.409	97.682	105.381	93.46	99.616	109.673	100.881
21:52	JD36682-8	104.302	93.11	94.324	102.366	91.323	97.333	105.964	99.925
21:58	MA51679-CCVA11	104.687	94.04	94.145	103.269	92.282	96.828	106.375	99.643
21:58	MA51679-CCVA19	104.687	94.04	94.145	103.269	92.282	96.828	106.375	99.643
22:03	MA51679-CCB11	103.901	95.007	98.094	104.806	95.55	99.63	106.706	101.251
22:03	MA51679-CCB19	103.901	95.007	98.094	104.806	95.55	99.63	106.706	101.251
22:09	JD36682-8	108.655	93.942	99.284	106.539	93.119	100.876	110.531	101.787
22:15	JD36682-8	97.794	93.339	97.933	95.472	93.104	100.039	99.089	101.723
22:20	JD36682-10	99.891	93.44	97.878	98.014	92.393	99.699	101.893	100.712
22:26	JD36682-10	108.835	93.639	96.496	105.814	93.362	99.413	110.525	99.271
22:31	JD36682-11	106.839	92.864	95.425	104.34	91.638	98.132	108.003	100.161
22:37	JD36682-11	106.808	94.319	97.844	106.118	93.055	100.066	109.944	100.189
22:42	JD36682-11	108.418	94.088	97.828	106.565	93.377	99.744	110.234	101.381
22:48	MA51679-CCVA12	106.447	93.841	95.582	104.711	92.116	97.775	107.953	100.115
22:48	MA51679-CCVA20	106.447	93.841	95.582	104.711	92.116	97.775	107.953	100.115
22:54	MA51679-CCB12	105.473	95.407	98.79	105.492	95.748	100.18	107.965	101.777
22:54	MA51679-CCB20	105.473	95.407	98.79	105.492	95.748	100.18	107.965	101.777
22:59	MP30438A-MB1	106.802	95.582	98.902	106.528	95.799	100.27	108.32	101.162
23:05	MP30438A-B2	104.733	106.395	96.66	102.927	94.415	97.975	103.762	101.219
23:10	MP30438A-S3	94.229	93.629	81.009	86.856	79.913	87.576	92.31	94.251
23:16	MP30438A-S4	90.13	90.556	79.994	82.68	78.715	86.295	87.651	93.315
23:22	JD36657-2	91.049	88.516	79.061	84.567	77.824	85.252	90.142	92.508
23:27	MP30438A-SD1	97.657	89.162	89.413	95.545	87.379	95.633	100.559	99.36
23:33	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:39	ZZZZZZ	84.979	86.557	86.126	81.815	84.263	88.338	85.17	90.573
23:44	ZZZZZZ	84.83	84.36	79.219	83.453	82.139	82.547	87.303	88.433
23:50	MA51679-CCVA13	81.024	84.091	83.747	80.25	84.947	88.033	84.149	92.974
23:55	MA51679-CCB13	89.776	84.213	86.929	91.325	86.771	89.942	94.207	93.02
00:01	MP30606-MB1	No results reported for the elements associated with this internal standard.							
00:07	MP30606-B1	No results reported for the elements associated with this internal standard.							
00:12	MP30606-S1	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
00:18	MP30606-S2	No results reported for the elements associated with this internal standard.							
00:23	JD37409-3	No results reported for the elements associated with this internal standard.							
00:29	MP30606-SD1	No results reported for the elements associated with this internal standard.							
00:35	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:40	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:46	ZZZZZZ	94.697	89.867	93.714	96.604	91.74	95.677	99.049	99.139
00:51	MA51679-CCVA14	94.086	88.771	88.582	94.381	89.024	92.091	97.521	96.439
00:57	MA51679-CCB14	94.426	89.741	89.838	95.403	91.627	92.839	97.795	96.138
01:02	MP30444-S1	87.239	78.736	85.214	87.181	79.397	90.493	91.924	95.415
01:08	MP30444-S2	81.256	77.028	79.906	82.592	78.203	85.542	87.437	91.776
01:13	ZZZZZZ	83.981	71.62	84.039	86.08	72.679	87.536	88.608	91.282
01:19	ZZZZZZ	87.396	83.563	83.81	88.36	84.942	87.651	91.7	92.969
01:25	MP30433-S1	89.363	78.226	82.894	87.166	76.728	88.289	93.234	94.048
01:30	ZZZZZZ	89.292	81.1	82.856	86.661	79.181	88.367	93.627	94.315
01:36	ZZZZZZ	86.537	79.313	83.359	88.485	81.748	86.847	91.007	90.488
01:41	ZZZZZZ	88.079	82.513	84.464	89.144	83.252	88.587	92.669	93.115
01:47	MA51679-CCVA15	85.511	81.78	82.867	86.425	81.978	86.947	89.457	92.771
01:52	MA51679-CCB15	86.8	81.894	75.955	88.568	84.573	79.249	91.046	82.468
01:58	ZZZZZZ	87.256	82.562	87.571	89.132	84.55	90.8	91.439	94.457
02:03	ZZZZZZ	86.185	85.865	82.891	87.219	84.337	86.001	88.135	92.064
02:09	ZZZZZZ	87.711	83.097	87.801	89.784	85.531	91.764	92.216	94.881
02:14	ZZZZZZ	86.65	86.213	74.102	86.463	83.44	77.234	88.324	82.971
02:20	ZZZZZZ	88.22	83.768	89.8	89.525	85.46	92.665	92.157	96.849
02:25	ZZZZZZ	89.347	83.329	86.179	90.93	84.992	90.21	92.448	93.783
02:31	ZZZZZZ	91.539	82.963	85.229	93.226	84.164	89.014	96.214	93.264
02:37	MA51679-CCVA16	88.911	83.034	83.975	89.249	82.178	87.299	92.433	92.361
02:42	MA51679-CCB16	88.436	82.835	83.414	89.409	84.858	86.565	91.728	90.48
02:48	ZZZZZZ	88.895	83.402	66.779 !	90.338	85.25	69.944 !	93.141	72.185
02:53	ZZZZZZ	88.978	83.714	87.818	90.839	85.363	90.67	93.137	93.9
02:59	ZZZZZZ	86.963	82.867	86.936	88.548	84.213	89.991	91.006	94.101

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#9	Germanium (74-2)	60-125 %
Istd#10	Germanium (74-3)	60-125 %
Istd#11	Rhodium (103-1)	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16

Istd#16 Rhodium (103-2)	60-125 %
Istd#13 Rhodium (103-3)	60-125 %
Istd#14 Indium (115-1)	60-125 %
Istd#15 Indium (115-2)	60-125 %
Istd#16 Terbium (159-1)	60-125 %

INTERNAL STANDARD SUMMARY

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Account: TTPAL - Tetra Tech EC Inc.
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File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
10:33	MA51679-STD1	100	100	100	100	100	100
10:38	MA51679-STD2	100	100	100	100	100	100
10:44	MA51679-STD3	112.328	100.94	100.398	112.67	100.824	112.127
10:49	MA51679-STD4	112.917	101.6	100.915	113.628	101.204	112.7
10:55	MA51679-STD5	112.806	101.026	101.349	113.32	100.938	112.844
11:01	MA51679-STD6	112.914	100.807	100.736	113.157	101.044	114.002
11:06	MA51679-STD7	112.533	100.648	100.108	113.112	100.363	113.621
11:12	MA51679-STD8	112.582	100.501	99.11	113.93	100.321	114.06
11:18	MA51679-STD9	111.998	99.914	99.405	112.99	99.486	112.649
11:24	MA51679-STD10	113.821	101.614	100.878	114.242	100.022	113.15
11:29	MA51679-STD11	115.31	101.42	98.924	115.693	95.763	112.473
11:36	MA51679-STD12	114.903	101.013	101.974	116.233	97.801	110.771
11:43	MA51679-STD13	100	100	100	100	100	100
11:49	ZZZZZZ	111.982	97.96	90.944	112.355	83.183	111.431
11:55	ZZZZZZ	110.39	88.208	98.481	110.548	96.305	111.586
12:00	MA51679-ICVA1	112.661	99.041	98.716	113.324	96.802	111.992
12:06	MA51679-ICV1	110.912	88.569	98.931	110.757	99.079	111.199
12:17	MA51679-ICB1	108.839	96.941	100.488	109.478	99.928	110.36
12:23	MA51679-CCVA1	114.741	97.867	99.572	115.634	96.041	113.245
12:28	MA51679-CCB1	109.917	99.79	99.937	110.301	99.708	111.113
12:34	ZZZZZZ	110.401	98.033	99.936	110.659	98.832	111.256
12:40	MA51679-CRI1	107.201	98.471	100.54	107.598	99.925	107.708
12:46	MA51679-ICSA1	102.201	90.331	93.147	102.381	80.886	95.688
12:52	MA51679-ICSAB1	100.334	89.545	91.449	100.724	81.223	93.7
13:01	ZZZZZZ	107.624	98.699	99.817	107.99	100.132	109.953
13:06	MA51679-CCVA2	114.119	99.555	101.786	114.756	98.972	113.204
13:12	MA51679-CCB2	111.539	100.066	101.183	112.429	101.118	113.596
13:18	ZZZZZZ	114.636	99.571	103.039	114.703	95.192	114.099
13:23	ZZZZZZ	99.709	99.472	98.5	100.113	100.367	101.668
13:29	ZZZZZZ	112.886	98.332	102.627	113.136	99.72	111.89
13:35	ZZZZZZ	113.431	98.72	101.498	113.765	97.353	109.886
13:41	ZZZZZZ	112.018	99.645	100.002	112.753	96.065	109.843
13:46	ZZZZZZ	106.793	98.608	100.315	107.136	97.553	105.964

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
13:52	ZZZZZZ	113.068	88.417	102.705	113.118	99.993	112.487
13:58	ZZZZZZ	109.153	100.305	102.829	108.928	99.62	105.88
14:04	MA51679-CCVA3	115.55	99.755	104.025	116.147	99.272	113.955
14:09	MA51679-CCB3	113.714	101.176	104.076	114.007	102.624	113.976
14:15	MP30530-MB1	110.594	98.346	101.693	110.193	104.043	113.007
14:21	MP30530-B1	112.208	102.051	102.491	112.827	100.705	112.868
14:27	ZZZZZZ	107.549	99.163	100.42	108.698	99.246	108.939
14:32	ZZZZZZ	105.958	98.553	99.646	106.78	97.135	105.425
14:38	ZZZZZZ	108.964	95.242	102.101	109.521	102.072	110.725
14:44	MA51679-CCVA4	110.054	97.69	100.525	110.556	98.518	109.736
14:49	MA51679-CCB4	105.503	95.821	102.566	106.05	103.201	108.102
14:55	MP30530-S1	97.311	94.129	95.485	97.43	90.981	93.693
15:01	MP30530-S2	No results reported for the elements associated with this internal standard.					
15:06	MP30530-S2	103.838	95.325	96.827	104.644	91.58	98.954
15:12	JD37157-14	103.202	94.644	97.646	104.167	91.938	99.397
15:18	MP30530-SD1	110.247	97.713	89.152	110.933	85.49	111.232
15:24	MP30530-S3	99.315	94.666	96.539	100.049	90.996	94.859
15:29	MP30530-S4	103.136	94.563	96.151	104.28	89.992	98.427
15:35	JD37157-14F	102.938	95.234	96.743	103.514	90.788	98.842
15:41	MP30530-SD2	109.262	97.134	100.818	109.771	99.654	110.348
15:46	MA51679-CCVA5	108.522	96.846	96.957	108.982	95.335	108.848
15:52	MA51679-CCB5	105.937	96.515	98.831	106.288	99.578	108.688
15:58	MP30530-S1	110.02	96.916	100.166	111.382	96.749	111.789
16:03	MP30530-S2	109.853	96.628	100.621	110.548	95.107	111.786
16:09	JD37157-14	109.806	96.339	98.289	110.16	95.437	112.327
16:15	MP30530-SD1	109.89	96.862	100.361	110.399	81.568	106.25
16:21	MP30530-S3	No results reported for the elements associated with this internal standard.					
16:26	MP30530-S3	110.104	96.221	100.099	110.955	96.556	112.358
16:32	MP30530-S4	109.157	95.991	96.697	110.127	93.583	112.033
16:37	JD37157-14F	109.861	96.587	100.154	110.155	97.546	112.83
16:43	MP30530-SD2	109.281	95.823	100.17	109.715	68.593 !	104.896
16:49	MA51679-CCVA6	105.413	96.147	98.278	105.938	97.387	105.459
16:55	MA51679-CCB6	109.465	94.048	98.11	109.991	98.999	109.754

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
17:00	ZZZZZZ	108.007	95.045	99.845	108.711	87.673	107.436
17:06	ZZZZZZ	108.641	95.564	100.178	109.523	75.619	104.77
17:12	ZZZZZZ	98.494	92.557	95.025	99.488	92.155	96.362
17:17	ZZZZZZ	110.86	93.806	103.03	111.505	80.892	108.581
17:23	ZZZZZZ	97.035	87.2	92.382	98.094	75.727	89.67
17:29	ZZZZZZ	105.068	94.758	100.395	105.657	93.655	102.819
17:34	ZZZZZZ	99.593	93.316	94.058	100.672	92.955	99.912
17:40	ZZZZZZ	109.987	88.84	102.438	109.844	78.965	107.214
17:46	MA51679-CCVA7	108.253	95.672	99.176	108.766	98.952	108.694
17:51	MA51679-CCB7	106.721	97.496	99.805	107.438	99.968	109.145
17:57	ZZZZZZ	99.492	96.636	98.689	99.146	100.149	102.095
18:03	ZZZZZZ	100.129	91.783	95.339	101.149	89.481	96.041
18:08	ZZZZZZ	92.861	87.104	94.215	93.97	89.038	89.291
18:14	ZZZZZZ	94.474	90.4	94.195	95.411	88.105	89.248
18:20	ZZZZZZ	93.4	91.011	93.759	93.919	88.08	90.082
18:26	ZZZZZZ	111.339	97.566	104.076	111.312	67.415 !	101.974
18:31	ZZZZZZ	97.967	91.448	92.816	99.255	88.654	94.871
18:37	ZZZZZZ	108.961	95.97	102.918	109.32	74.345	104.98
18:43	ZZZZZZ	94.836	86.517	89.662	95.939	73.767	86.81
18:48	ZZZZZZ	108.078	96.255	100.27	109.143	85.27	108.275
18:54	MA51679-CCVA8	99.601	95.582	98.709	100.556	96.961	100.678
19:00	MA51679-CCB8	103.529	94.57	97.105	104.258	97.954	106.338
19:05	MP30605A-MB1	No results reported for the elements associated with this internal standard.					
19:11	MP30605A-MB1	No results reported for the elements associated with this internal standard.					
19:11	MP30605A-MB1	99.973	95.285	96.508	100.429	99.053	103.428
19:16	MP30605A-B2	No results reported for the elements associated with this internal standard.					
19:16	MP30605A-B2	99.459	96.692	97.611	99.812	96.771	100.032
19:22	MP30605A-B3	No results reported for the elements associated with this internal standard.					
19:22	MP30605A-B3	109.053	96.492	94.975	109.744	90.097	108.932
19:27	MP30605A-S3	No results reported for the elements associated with this internal standard.					
19:27	MP30605A-S3	99.471	92.064	93.405	100.473	86.344	93.773
19:33	MP30605A-S4	No results reported for the elements associated with this internal standard.					
19:33	MP30605A-S4	100.324	91.216	94.87	101.348	84.81	94.426

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
19:38	JD37045-1	No results reported for the elements associated with this internal standard.					
19:38	JD37045-1	98.271	91.654	94.584	99.267	88.146	92.924
19:44	MP30605A-SD1	No results reported for the elements associated with this internal standard.					
19:44	MP30605A-SD1	107.01	96.656	101.134	107.646	98.188	107.293
19:50	ZZZZZZ	104.324	95.093	99.057	104.848	98.998	106.963
19:50	ZZZZZZ	104.324	95.093	99.057	104.848	98.998	106.963
19:55	MA51679-CCVA9	105.991	96.289	98.891	106.716	97.315	107.304
19:55	MA51679-CCVA17	105.991	96.289	98.891	106.716	97.315	107.304
20:01	MA51679-CCB9	103.002	95.19	97.695	103.593	98.262	106.101
20:01	MA51679-CCB17	103.002	95.19	97.695	103.593	98.262	106.101
20:06	ZZZZZZ	No results reported for the elements associated with this internal standard.					
20:06	ZZZZZZ	94.27	84.831	90.631	94.532	72.507	84.77
20:12	ZZZZZZ	No results reported for the elements associated with this internal standard.					
20:12	ZZZZZZ	94.631	85.988	85.351	94.969	71.375	85.127
20:17	ZZZZZZ	106.986	96.1	100.369	106.967	101.082	109.356
20:17	ZZZZZZ	106.986	96.1	100.369	106.967	101.082	109.356
20:23	ZZZZZZ	106.51	95.385	100.014	106.966	100.252	107.869
20:23	ZZZZZZ	106.51	95.385	100.014	106.966	100.252	107.869
20:29	ZZZZZZ	102.954	96.351	99.567	103.964	98.135	104.556
20:29	ZZZZZZ	102.954	96.351	99.567	103.964	98.135	104.556
20:34	MP30463-S1	110.694	97.166	101.503	110.935	98.008	109.898
20:40	MP30463-S2	109.934	95.818	101.424	110.94	98.195	110.06
20:45	JD36682-9	110.475	96.322	102.567	111.001	93.497	110.817
20:51	MP30463-SD1	110.403	96.346	102.185	110.552	77.258	104.509
20:57	MA51679-CCVA10	109.601	96.424	103.683	110.091	101.88	110.109
20:57	MA51679-CCVA18	109.601	96.424	103.683	110.091	101.88	110.109
21:02	MA51679-CCB10	106.69	96.201	99.926	106.48	100.424	108.581
21:02	MA51679-CCB18	106.69	96.201	99.926	106.48	100.424	108.581
21:08	MP30463-PS1	107.33	95.121	99.953	107.957	95.359	104.76
21:13	MP30463-S1	108.425	95.245	101.232	108.941	85.483	106.871
21:19	MP30463-S2	109.329	82.085	101.385	109.762	85.204	106.932
21:24	JD36682-9	109.396	94.724	100.57	109.143	76.279	103.754
21:30	MP30463-SD1	101.153	95.678	101.574	101.605	59.008 !	97.545

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
21:36	JD36682-7	107.203	94.574	99.348	107.599	96.306	106.092
21:41	JD36682-7	109.035	95.66	100.6	109.601	84.041	106.637
21:47	JD36682-7	109.28	95.678	101.37	109.921	70.473	102.388
21:52	JD36682-8	109.403	95.73	100.801	109.581	97.246	107.778
21:58	MA51679-CCVA11	108.424	96.922	100.672	109.344	98.532	109.198
21:58	MA51679-CCVA19	108.424	96.922	100.672	109.344	98.532	109.198
22:03	MA51679-CCB11	106.78	96.337	101.184	107.256	100.463	108.342
22:03	MA51679-CCB19	106.78	96.337	101.184	107.256	100.463	108.342
22:09	JD36682-8	110.332	95.222	103.388	111.154	89.424	107.878
22:15	JD36682-8	101.503	94.963	101.633	102.354	73.498	87.127
22:20	JD36682-10	101.247	94.929	101.538	101.295	94.2	100.296
22:26	JD36682-10	109.928	94.227	100.183	110.338	58.123 !	94.345
22:31	JD36682-11	108.98	95.011	100.62	109.684	98.217	109.537
22:37	JD36682-11	108.807	94.908	100.812	109.214	89.324	107.129
22:42	JD36682-11	109.849	94.978	100.838	110.543	69.959 !	102.724
22:48	MA51679-CCVA12	109.303	95.328	99.863	109.904	98.539	110.16
22:48	MA51679-CCVA20	109.303	95.328	99.863	109.904	98.539	110.16
22:54	MA51679-CCB12	107.545	95.826	101.02	108.498	101.022	109.505
22:54	MA51679-CCB20	107.545	95.826	101.02	108.498	101.022	109.505
22:59	MP30438A-MB1	108.009	96.116	100.87	108.25	100.457	110.152
23:05	MP30438A-B2	107.927	98.225	101.268	108.635	103.78	110.752
23:10	MP30438A-S3	98.761	89.511	94.966	99.28	89.408	94.505
23:16	MP30438A-S4	94.276	88.886	94.286	95.237	88.293	90.245
23:22	JD36657-2	97.214	88.311	93.327	98.271	83.819	93.019
23:27	MP30438A-SD1	104.315	94.488	100.107	105.22	97.624	104.59
23:33	ZZZZZZ	No results reported for the elements associated with this internal standard.					
23:39	ZZZZZZ	87.968	90.981	90.989	88.289	91.434	90.818
23:44	ZZZZZZ	92.821	90.748	89.237	94.239	88.925	95.453
23:50	MA51679-CCVA13	88.351	92.642	93.391	89.076	92.243	89.779
23:55	MA51679-CCB13	97.072	91.22	93.047	97.179	94.952	100.066
00:01	MP30606-MB1	No results reported for the elements associated with this internal standard.					
00:07	MP30606-B1	No results reported for the elements associated with this internal standard.					
00:12	MP30606-S1	No results reported for the elements associated with this internal standard.					

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
00:18	MP30606-S2	No results reported for the elements associated with this internal standard.					
00:23	JD37409-3	No results reported for the elements associated with this internal standard.					
00:29	MP30606-SD1	No results reported for the elements associated with this internal standard.					
00:35	ZZZZZZ	No results reported for the elements associated with this internal standard.					
00:40	ZZZZZZ	No results reported for the elements associated with this internal standard.					
00:46	ZZZZZZ	101.085	95.918	99.531	101.648	100.463	103.854
00:51	MA51679-CCVA14	102.571	95.502	97.264	103.502	95.521	103.448
00:57	MA51679-CCB14	100.269	95.06	96.911	100.864	97.023	103.474
01:02	MP30444-S1	97.436	87.965	95.839	98.274	93.15	99.299
01:08	MP30444-S2	93.856	87.444	92.657	94.955	89.982	95.722
01:13	ZZZZZZ	93.358	77.595	91.767	94.292	94.577	97.94
01:19	ZZZZZZ	97.198	91.635	93.721	98.064	93.276	100.748
01:25	MP30433-S1	97.99	85.111	94.658	99.318	68.478	92.096
01:30	ZZZZZZ	97.692	87.846	94.124	98.53	60.466	88.321
01:36	ZZZZZZ	95.059	86.555	91.089	95.543	93.534	99.726
01:41	ZZZZZZ	97.145	89.898	93.347	98.359	94.026	100.529
01:47	MA51679-CCVA15	96.472	88.938	93.152	96.794	92.792	95.979
01:52	MA51679-CCB15	94.852	89.052	83.257	95.725	85.006	98.947
01:58	ZZZZZZ	94.941	88.886	95.54	95.465	97.072	98.712
02:03	ZZZZZZ	95.379	90.752	93.189	95.758	93.174	97.288
02:09	ZZZZZZ	96.071	89.54	95.456	96.52	96.662	99.779
02:14	ZZZZZZ	94.458	89.747	83.832	95.426	83.395	96.955
02:20	ZZZZZZ	95.541	89.127	97.621	96.227	98.451	98.967
02:25	ZZZZZZ	96.573	89.083	94.194	97.503	95.987	101.023
02:31	ZZZZZZ	102.232	89.625	93.712	103.284	94.712	103.073
02:37	MA51679-CCVA16	97.268	89.264	93.652	98.309	92.983	98.749
02:42	MA51679-CCB16	95.248	88.763	91.206	95.314	92.526	98.499
02:48	ZZZZZZ	96.171	88.493	71.942	96.871	67.854 !	99.295
02:53	ZZZZZZ	95.973	89.233	94.466	96.249	95.697	99.102
02:59	ZZZZZZ	93.651	88.185	94.038	93.719	95.108	96.489

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#17	Terbium (159-2)	60-125 %
Istd#18	Terbium (159-3)	60-125 %
Istd#19	Holmium (165-1)	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51679
Parameters: Al,Sb,Ba,Cd,Ca,Cr,Fe,Mg,Mn,Ag,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22

Istd#22 Holmium (165-2) 60-125 %
Istd#21 Bismuth (209-1) 60-125 %
Istd#22 Bismuth (209-2) 60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51679 Units: ug/l

Time: / Sample ID:			12:17 ICB1		12:28 CCB1		13:12 CCB2		14:09 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	-0.649	<25	-0.522	<25	-0.252	<25	-0.0327	<25
Antimony	2.0	.085	-0.0943	<2.0	-0.0455	<2.0	-0.0631	<2.0	-0.0520	<2.0
Arsenic	0.50	.025	anr							
Barium	1.0	.009	-0.00306	<1.0	0.00786	<1.0	0.00522	<1.0	0.0238	<1.0
Beryllium	0.50	.005								
Boron	25	.85	anr							
Cadmium	0.50	.01	0.00461	<0.50	0.0100	<0.50	0.00808	<0.50	0.0109	<0.50
Calcium	250	3.6	-0.279	<250	-0.365	<250	0.390	<250	1.09	<250
Chromium	1.0	.018	-0.00853	<1.0	-0.00177	<1.0	-0.0121	<1.0	-0.0160	<1.0
Cobalt	0.50	.003								
Copper	2.0	.024	anr							
Iron	25	.24	-2.65	<25	-1.56	<25	-1.26	<25	-1.43	<25
Lead	0.50	.008	anr							
Magnesium	250	.19	-0.271	<250	-0.0332	<250	0.266	<250	0.332	<250
Manganese	1.0	.012	-0.0702	<1.0	-0.0723	<1.0	-0.102	<1.0	-0.125	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	anr							
Potassium	250	.78								
Selenium	0.50	.044	anr							
Silver	0.50	.004	0.00291	<0.50	0.0137	<0.50	0.00529	<0.50	0.0156	<0.50
Sodium	250	1.5								
Strontium	5.0	.014								
Thallium	0.50	.002	anr							
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	0.0000944	<1.0	0.00122	<1.0	0.00357	<1.0	0.0125	<1.0
Zinc	5.0	.078	-0.177	<5.0	-0.133	<5.0	-0.152	<5.0	-0.133	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51679 Units: ug/l

Time: / Sample ID:			14:49 CCB4		15:52 CCB5		16:55 CCB6		17:51 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	-0.341	<25	-0.627	<25	-0.307	<25	-0.419	<25
Antimony	2.0	.085	-0.0648	<2.0	-0.0720	<2.0	-0.0604	<2.0	-0.0660	<2.0
Arsenic	0.50	.025	anr							
Barium	1.0	.009	0.00719	<1.0	0.00304	<1.0	-0.000348	<1.0	0.00686	<1.0
Beryllium	0.50	.005								
Boron	25	.85	anr							
Cadmium	0.50	.01	0.0132	<0.50	0.00385	<0.50	0.00212	<0.50	0.00563	<0.50
Calcium	250	3.6	-3.87	<250	-4.35	<250	-2.48	<250	-3.16	<250
Chromium	1.0	.018	-0.0160	<1.0	-0.0216	<1.0	-0.0245	<1.0	-0.0209	<1.0
Cobalt	0.50	.003								
Copper	2.0	.024	anr							
Iron	25	.24	-2.18	<25	-2.58	<25	-2.58	<25	-2.34	<25
Lead	0.50	.008	anr							
Magnesium	250	.19	0.0749	<250	0.0687	<250	0.00927	<250	-0.00433	<250
Manganese	1.0	.012	-0.139	<1.0	-0.135	<1.0	-0.149	<1.0	-0.0345	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	anr							
Potassium	250	.78								
Selenium	0.50	.044	anr							
Silver	0.50	.004	0.0111	<0.50	0.00907	<0.50	0.0135	<0.50	0.00929	<0.50
Sodium	250	1.5								
Strontium	5.0	.014								
Thallium	0.50	.002	anr							
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	0.00644	<1.0	0.00665	<1.0	0.00977	<1.0	-0.00106	<1.0
Zinc	5.0	.078	-0.105	<5.0	-0.166	<5.0	-0.0408	<5.0	-0.0337	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51679 Units: ug/l

Time: / Sample ID:			19:00 CCB8		20:01 CCB9		20:01 CCB17		21:02 CCB10	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	-0.335	<25	-0.322	<25	-0.322	<25	-0.196	<25
Antimony	2.0	.085	-0.0794	<2.0	-0.0788	<2.0	-0.0788	<2.0	-0.0727	<2.0
Arsenic	0.50	.025	anr							
Barium	1.0	.009	0.00636	<1.0	0.0158	<1.0	0.0158	<1.0	0.0148	<1.0
Beryllium	0.50	.005								
Boron	25	.85	anr							
Cadmium	0.50	.01	-0.00000723	<0.50	0.00179	<3.0	0.00179	<0.50	0.00437	<3.0
Calcium	250	3.6	-3.13	<250	-2.48	<250	-2.48	<250	-4.05	<250
Chromium	1.0	.018	-0.0239	<1.0	-0.0228	<4.0	-0.0228	<1.0	-0.0245	<4.0
Cobalt	0.50	.003								
Copper	2.0	.024	anr							
Iron	25	.24	-1.23	<25	-2.56	<25	-2.56	<25	-1.55	<25
Lead	0.50	.008	anr							
Magnesium	250	.19	0.704	<250	0.0579	<250	0.0579	<250	0.246	<250
Manganese	1.0	.012	0.0380	<1.0	0.000440	<2.0	0.000440	<1.0	-0.108	<2.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	anr							
Potassium	250	.78								
Selenium	0.50	.044	anr							
Silver	0.50	.004	0.00968	<0.50	0.0117	<1.0	0.0117	<0.50	0.0133	<1.0
Sodium	250	1.5								
Strontium	5.0	.014								
Thallium	0.50	.002	anr							
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	-0.000269	<1.0	0.00404	<1.5	0.00404	<1.0	0.00322	<1.5
Zinc	5.0	.078	-0.0597	<5.0	-0.0826	<10	-0.0826	<5.0	0.00445	<10

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51679 Units: ug/l

Time: / Sample ID:			21:02 CCB18		22:03 CCB11		22:03 CCB19		22:54 CCB12	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	-0.196	<25	0.0668	<25	0.0668	<25	-0.165	<25
Antimony	2.0	.085	-0.0727	<2.0	-0.0689	<2.0	-0.0689	<2.0	-0.0734	<2.0
Arsenic	0.50	.025	anr							
Barium	1.0	.009	0.0148	<1.0	0.0116	<1.0	0.0116	<1.0	0.00319	<1.0
Beryllium	0.50	.005								
Boron	25	.85	anr							
Cadmium	0.50	.01	0.00437	<0.50	0.00533	<3.0	0.00533	<0.50	0.00416	<3.0
Calcium	250	3.6	-4.05	<250	-3.92	<250	-3.92	<250	-4.60	<250
Chromium	1.0	.018	-0.0245	<1.0	-0.0105	<4.0	-0.0105	<1.0	-0.0191	<4.0
Cobalt	0.50	.003								
Copper	2.0	.024	anr							
Iron	25	.24	-1.55	<25	-0.620	<25	-0.620	<25	-1.56	<25
Lead	0.50	.008	anr							
Magnesium	250	.19	0.246	<250	0.264	<250	0.264	<250	0.0554	<250
Manganese	1.0	.012	-0.108	<1.0	-0.122	<2.0	-0.122	<1.0	-0.127	<2.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	anr							
Potassium	250	.78								
Selenium	0.50	.044	anr							
Silver	0.50	.004	0.0133	<0.50	0.0136	<1.0	0.0136	<0.50	0.0161	<1.0
Sodium	250	1.5								
Strontium	5.0	.014								
Thallium	0.50	.002	anr							
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	0.00322	<1.0	0.00969	<1.5	0.00969	<1.0	0.0105	<1.5
Zinc	5.0	.078	0.00445	<5.0	0.0234	<10	0.0234	<5.0	-0.0713	<10

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51679 Units: ug/l

			Time:	22:54
			Sample ID:	CCB20
Metal	RL	IDL	raw	final
Aluminum	25	.42	-0.165	<25
Antimony	2.0	.085	-0.0734	<2.0
Arsenic	0.50	.025	anr	
Barium	1.0	.009	0.00319	<1.0
Beryllium	0.50	.005		
Boron	25	.85	anr	
Cadmium	0.50	.01	0.00416	<0.50
Calcium	250	3.6	-4.60	<250
Chromium	1.0	.018	-0.0191	<1.0
Cobalt	0.50	.003		
Copper	2.0	.024	anr	
Iron	25	.24	-1.56	<25
Lead	0.50	.008	anr	
Magnesium	250	.19	0.0554	<250
Manganese	1.0	.012	-0.127	<1.0
Molybdenum	1.0	.017		
Nickel	1.0	.017	anr	
Potassium	250	.78		
Selenium	0.50	.044	anr	
Silver	0.50	.004	0.0161	<0.50
Sodium	250	1.5		
Strontium	5.0	.014		
Thallium	0.50	.002	anr	
Tin	5.0	.041		
Titanium	1.0	.11		
Vanadium	1.0	.013	0.0105	<1.0
Zinc	5.0	.078	-0.0713	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51679 Units: ug/l

Time:		12:00			12:06			12:23	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	5610	102.0	60	63.8	106.3	5000	4900	98.0
Antimony	60	65.2	108.7				50	55.2	110.4*(a
Arsenic	anr								
Barium	60	60.8	101.3				50	50.5	101.0
Beryllium									
Boron	anr								
Cadmium	60	58.6	97.7				50	48.3	96.6
Calcium	5500	5430	98.7				5000	4920	98.4
Chromium	60	60.2	100.3				50	48.7	97.4
Cobalt									
Copper	anr								
Iron	5500	5470	99.5				5000	4880	97.6
Lead	anr								
Magnesium	5500	5520	100.4				5000	4910	98.2
Manganese	60	59.5	99.2				50	48.6	97.2
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	60	62.8	104.7				50	52.6	105.2
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	60	60.4	100.7				50	49.0	98.0
Zinc	60	57.8	96.3				50	47.8	95.6

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51679 Units: ug/l

Time:		13:06			14:04			14:44	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4790	95.8	5000	4830	96.6	5000	4760	95.2
Antimony	50	52.5	105.0	50	53.2	106.4	50	51.9	103.8
Arsenic	anr								
Barium	50	49.3	98.6	50	48.7	97.4	50	47.7	95.4
Beryllium									
Boron	anr								
Cadmium	50	47.7	95.4	50	47.9	95.8	50	47.9	95.8
Calcium	5000	4780	95.6	5000	4750	95.0	5000	4710	94.2
Chromium	50	48.3	96.6	50	47.9	95.8	50	48.1	96.2
Cobalt									
Copper	anr								
Iron	5000	4790	95.8	5000	4790	95.8	5000	4850	97.0
Lead	anr								
Magnesium	5000	4820	96.4	5000	4830	96.6	5000	4860	97.2
Manganese	50	48.2	96.4	50	47.8	95.6	50	48.1	96.2
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	50	50.4	100.8	50	50.1	100.2	50	49.3	98.6
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	50	48.8	97.6	50	48.5	97.0	50	48.4	96.8
Zinc	50	46.4	92.8	50	46.3	92.6	50	46.8	93.6

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51679 Units: ug/l

Time:		15:46			16:49			17:46	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4830	96.6	5000	5100	102.0	5000	4800	96.0
Antimony	50	53.2	106.4	50	52.0	104.0	50	51.6	103.2
Arsenic	anr								
Barium	50	49.0	98.0	50	47.8	95.6	50	47.9	95.8
Beryllium									
Boron	anr								
Cadmium	50	48.0	96.0	50	49.7	99.4	50	48.0	96.0
Calcium	5000	4870	97.4	5000	4690	93.8	5000	4710	94.2
Chromium	50	48.9	97.8	50	51.1	102.2	50	48.0	96.0
Cobalt									
Copper	anr								
Iron	5000	4970	99.4	5000	5200	104.0	5000	4880	97.6
Lead	anr								
Magnesium	5000	4910	98.2	5000	5130	102.6	5000	4830	96.6
Manganese	50	49.2	98.4	50	51.4	102.8	50	48.4	96.8
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	50	50.6	101.2	50	49.5	99.0	50	49.0	98.0
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	50	49.4	98.8	50	51.7	103.4	50	48.6	97.2
Zinc	50	47.8	95.6	50	50.4	100.8	50	47.0	94.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51679 Units: ug/l

Time:		18:54			19:55			19:55	
Sample ID:	CCVA	CCVA8		CCVA	CCVA9		CCVA	CCVA17	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	5280	105.6	5000	4800	96.0	5000	4800	96.0
Antimony	50	51.6	103.2	50	51.1	102.2	50	51.1	102.2
Arsenic	anr								
Barium	50	47.6	95.2	50	47.3	94.6	50	47.3	94.6
Beryllium									
Boron	anr								
Cadmium	50	52.0	104.0	50	47.8	95.6	50	47.8	95.6
Calcium	5000	4730	94.6	5000	4670	93.4	5000	4670	93.4
Chromium	50	52.6	105.2	50	48.1	96.2	50	48.1	96.2
Cobalt									
Copper	anr								
Iron	5000	5370	107.4	5000	4910	98.2	5000	4910	98.2
Lead	anr								
Magnesium	5000	5280	105.6	5000	4860	97.2	5000	4860	97.2
Manganese	50	53.4	106.8	50	48.5	97.0	50	48.5	97.0
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	50	49.0	98.0	50	48.5	97.0	50	48.5	97.0
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	50	53.1	106.2	50	48.4	96.8	50	48.4	96.8
Zinc	50	51.2	102.4	50	46.8	93.6	50	46.8	93.6

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51679 Units: ug/l

Time:		20:57			20:57			21:58	
Sample ID:	CCVA	CCVA10		CCVA	CCVA18		CCVA	CCVA11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4870	97.4	5000	4870	97.4	5000	4820	96.4
Antimony	50	49.5	99.0	50	49.5	99.0	50	51.2	102.4
Arsenic	anr								
Barium	50	45.9	91.8	50	45.9	91.8	50	47.4	94.8
Beryllium									
Boron	anr								
Cadmium	50	47.2	94.4	50	47.2	94.4	50	47.4	94.8
Calcium	5000	4500	90.0	5000	4500	90.0	5000	4660	93.2
Chromium	50	48.4	96.8	50	48.4	96.8	50	47.8	95.6
Cobalt									
Copper	anr								
Iron	5000	4930	98.6	5000	4930	98.6	5000	4890	97.8
Lead	anr								
Magnesium	5000	4860	97.2	5000	4860	97.2	5000	4850	97.0
Manganese	50	48.3	96.6	50	48.3	96.6	50	47.9	95.8
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	50	46.7	93.4	50	46.7	93.4	50	48.1	96.2
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	50	49.0	98.0	50	49.0	98.0	50	48.5	97.0
Zinc	50	46.9	93.8	50	46.9	93.8	50	46.6	93.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51679 Units: ug/l

Time:		21:58			22:48			22:48	
Sample ID:	CCVA	CCVA19		CCVA	CCVA12		CCVA	CCVA20	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4820	96.4	5000	4780	95.6	5000	4780	95.6
Antimony	50	51.2	102.4	50	51.3	102.6	50	51.3	102.6
Arsenic	anr								
Barium	50	47.4	94.8	50	46.9	93.8	50	46.9	93.8
Beryllium									
Boron	anr								
Cadmium	50	47.4	94.8	50	47.7	95.4	50	47.7	95.4
Calcium	5000	4660	93.2	5000	4670	93.4	5000	4670	93.4
Chromium	50	47.8	95.6	50	47.6	95.2	50	47.6	95.2
Cobalt									
Copper	anr								
Iron	5000	4890	97.8	5000	4920	98.4	5000	4920	98.4
Lead	anr								
Magnesium	5000	4850	97.0	5000	4810	96.2	5000	4810	96.2
Manganese	50	47.9	95.8	50	48.2	96.4	50	48.2	96.4
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	50	48.1	96.2	50	48.6	97.2	50	48.6	97.2
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	50	48.5	97.0	50	48.6	97.2	50	48.6	97.2
Zinc	50	46.6	93.2	50	46.0	92.0	50	46.0	92.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51679 Units: ug/l

Time:			12:40	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	29.1	116.4
Antimony	2.0	0.25	1.98	99.0
Arsenic	0.50	0.50	anr	
Barium	1.0	0.50	0.984	98.4
Beryllium	0.50	0.25		
Boron	25	2.5	anr	
Cadmium	0.50	0.25	0.552	110.4
Calcium	250	125	247	98.8
Chromium	1.0	2.0	1.04	104.0
Cobalt	0.50	0.25		
Copper	2.0	2.0	anr	
Iron	25	25	27.7	110.8
Lead	0.50	0.25	anr	
Magnesium	250	125	272	108.8
Manganese	1.0	0.25	1.06	106.0
Molybdenum	1.0	0.50		
Nickel	1.0	2.0	anr	
Potassium	250	125		
Selenium	0.50	0.50	anr	
Silver	0.50	1.0	0.408	81.6
Sodium	250	125		
Strontium	5.0	0.50		
Thallium	0.50	0.25	anr	
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0	1.06	106.0
Zinc	5.0	2.0	5.71	114.2

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA123121M1.CSV Date Analyzed: 12/31/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51679 Units: ug/l

Time:			12:46		12:52	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	89200	89.2	99800	99.8
Antimony			-0.0518		-0.0504	
Arsenic		20	0.0579		19.3	96.5
Barium			0.115		0.175	
Beryllium			0.00292		0.00281	
Boron		50	1.54		52.1	104.2
Cadmium		20	-0.318		19.5	97.5
Calcium	100000	100000	88100	88.1	103000	103.0
Chromium		20	0.945		20.9	104.5
Cobalt		20	0.113		19.2	96.0
Copper		20	-1.91		15.9	79.5*(a)
Iron	100000	100000	86900	86.9	97800	97.8
Lead			0.0521		0.0471	
Magnesium	100000	100000	87900	87.9	98800	98.8
Manganese		20	0.153		19.9	99.5
Molybdenum	2000	2000	2050HH	102.5	2350HH	117.5
Nickel		20	0.500		18.6	93.0
Potassium	100000	100000	90900HH	90.9	102000HH	102.0
Selenium		20	0.0587		19.6	98.0
Silver		20	0.0162		19.7	98.5
Sodium	100000	100000	88800HH	88.8	99500HH	99.5
Strontium	2000	2000	2010HH	100.5	2280HH	114.0
Thallium			0.00922		0.00862	
Tin	2000	2000	1850HH	92.5	2100HH	105.0
Titanium	2000	2000	1720HH	86.0	1930HH	96.5
Vanadium		20	0.0228		21.4	107.0
Zinc		20	0.628		18.7	93.5

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:50	MA51693-STD1	1		Sample introduction not stable, see rerun.
11:56	MA51693-STD2	1		Sample introduction not stable, see rerun.
12:02	MA51693-STD3	1		STDA
12:08	MA51693-STD4	1		STDB
12:14	MA51693-STD5	1		STDC
12:19	MA51693-STD6	1		STDC
12:25	MA51693-STD7	1		STDD
12:31	MA51693-STD8	1		STDE
12:37	MA51693-STD9	1		STDF
12:43	MA51693-STD10	1		STDG
12:48	MA51693-STD11	1		STDH
12:54	MA51693-STD12	1		STDI
13:00	MA51693-STD13	1		STDJ
13:15	MA51693-STD14	1		STDE
13:20	MA51693-STD15	1		STDG
13:27	MA51693-STD16	1		STDA
13:33	ZZZZZZ	1		
13:39	MA51693-ICVA1	1		
13:45	MA51693-ICV1	1		
14:11	MA51693-ICB1	1		
14:17	MA51693-CCVA1	1		
14:23	MA51693-CCB1	1		
14:28	MA51693-CRI1	1		
14:34	MA51693-ICSA1	1		
14:40	MA51693-ICSAB1	1		
14:48	ZZZZZZ	1		
14:54	MA51693-CCVA2	1		
15:00	MA51693-CCB2	1		
15:05	MP30584A-MB1	5		
15:11	MP30584A-B2	5		
15:17	MP30584A-S3	5		
15:23	MP30584A-S4	5		
15:28	JD37159-1	5		(sample used for QC only; not part of login JD36682)

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:34	MP30584A-SD1	25		
15:40	MP30584A-PS1	5		
15:46	ZZZZZZ	1		
15:52	MA51693-CCVA3	1		
15:58	MA51693-CCB3	1		
16:04	ZZZZZZ	2		
16:09	MP30441-MB1	2		
16:15	MP30441-B1	2		high rsd
16:21	MP30441-S1	2		Na high. Rerun 1;3 for Pb and Tl
16:27	MP30441-S2	2		Na high. Rerun 1;3 for Pb and Tl
16:32	ZZZZZZ	1		
16:38	JD36533-1	2		(sample used for QC only; not part of login JD36682)
16:44	MP30441-SD1	10		Na high
16:50	ZZZZZZ	1		
16:55	MA51693-CCVA4	1		
17:01	MA51693-CCB4	1		
17:07	ZZZZZZ	2		
17:12	ZZZZZZ	2		
17:18	ZZZZZZ	2		
17:24	ZZZZZZ	2		
17:30	ZZZZZZ	2		
17:35	ZZZZZZ	2		
17:41	ZZZZZZ	2		
17:47	ZZZZZZ	2		
17:53	MA51693-CCVA5	1		
17:58	MA51693-CCB5	1		
18:04	ZZZZZZ	2		
18:10	ZZZZZZ	2		
18:16	ZZZZZZ	2		
18:21	ZZZZZZ	2		
18:27	JD36682-2	2		High elements
18:33	JD36682-3	2		High elements
18:38	JD36682-4	2		High elements

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:44	JD36682-5	2		High elements
18:50	JD36682-6	2		High elements. High rsd for Ba
---------->	Last reportable sample/prep for job JD36682			
18:55	MA51693-CCVA6	1		
19:01	MA51693-CCB6	1		
---------->	Last reportable CCB for job JD36682			
19:07	MP30440-MB1	2		CCV out
19:12	MP30440-B1	2		CCV out
19:18	ZZZZZZ	2		
19:23	MP30440-S1	2		high elements. Rerun 1;2 for Se, CCV out
19:29	MP30440-S2	2		high elements. Rerun 1;2 for Se, CCV out
19:35	JD36624-5	2		(sample used for QC only; not part of login JD36682)
19:41	MP30440-SD1	10		high elements. Rerun 1;2 for Se, CCV out
19:46	ZZZZZZ	2		
19:52	ZZZZZZ	2		
19:58	ZZZZZZ	1		
20:03	MA51693-CCVA7	1		
20:09	MA51693-CCB7	1		
20:15	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
13:33	ZZZZZZ	1																							
13:39	MA51693-ICVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:45	MA51693-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:11	MA51693-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:17	MA51693-CCVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:23	MA51693-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:28	MA51693-CRI1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:34	MA51693-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:40	MA51693-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:48	ZZZZZZ	1																							
14:54	MA51693-CCVA2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:00	MA51693-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:05	MP30584A-MB1	5		X	X		X															X			
15:11	MP30584A-B2	5		X	X		X															X			
15:17	MP30584A-S3	5		X	X		X															X			
15:23	MP30584A-S4	5		X	X		X															X			
15:28	JD37159-1	5		X	X		X															X			(a)
15:34	MP30584A-SD1	25		X	X		X															X			
15:40	MP30584A-PS1	5		X																					
15:46	ZZZZZZ	1																							
15:52	MA51693-CCVA3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:58	MA51693-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:04	ZZZZZZ	2																							
16:09	MP30441-MB1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:15	MP30441-B1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
16:21	MP30441-S1	2	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X			X	X	
16:27	MP30441-S2	2	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X			X	X	
16:32	ZZZZZZ	1																							
16:38	JD36533-1	2											X		X			X						X	(a)
16:44	MP30441-SD1	10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	
16:50	ZZZZZZ	1																							
16:55	MA51693-CCVA4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:01	MA51693-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
17:07	ZZZZZZ	2																							
17:12	ZZZZZZ	2																							
17:18	ZZZZZZ	2																							
17:24	ZZZZZZ	2																							
17:30	ZZZZZZ	2																							
17:35	ZZZZZZ	2																							
17:41	ZZZZZZ	2																							
17:47	ZZZZZZ	2																							
17:53	MA51693-CCVA5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:58	MA51693-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:04	ZZZZZZ	2																							
18:10	ZZZZZZ	2																							
18:16	ZZZZZZ	2																							
18:21	ZZZZZZ	2																							
18:27	JD36682-2	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X	
18:33	JD36682-3	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X	
18:38	JD36682-4	2	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X		X	X	X	
18:44	JD36682-5	2	X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X		X	X	X	
18:50	JD36682-6	2	X	X	X		X	X		X	X	X	X	X	X		X	X	X	X		X	X	X	
18:55	MA51693-CCVA6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:01	MA51693-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:07	MP30440-MB1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
19:12	MP30440-B1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
19:18	ZZZZZZ	2																							
19:23	MP30440-S1	2	X	X	X	X	X	X		X	X	X	X	X		X	X		X		X	X	X	X	
19:29	MP30440-S2	2	X	X	X	X	X	X		X	X	X	X	X		X	X		X		X	X	X	X	
19:35	JD36624-5	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X		X		X	X	X	(a)
19:41	MP30440-SD1	10	X	X	X	X	X	X		X	X	X	X	X		X	X	X		X		X	X	X	
19:46	ZZZZZZ	2																							
19:52	ZZZZZZ	2																							
19:58	ZZZZZZ	1																							
20:03	MA51693-CCVA7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:09	MA51693-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: / Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn
20:15	ZZZZZZ	1																						

(a) Sample used for QC only; not part of login JD36682.

Element: Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Ni K Se Ag Na Tl V Zn

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
11:50	MA51693-STD1	100	100	100	100	100	100	100	100
11:56	MA51693-STD2	100	100	100	100	100	100	100	100
12:02	MA51693-STD3	100	100	100	100	100	100	100	100
12:08	MA51693-STD4	100.045	99.887	100.249	96.081	100.156	101.157	98.239	99.691
12:14	MA51693-STD5	101.05	100.425	95.223	101.288	100.382	95.081	101.126	100.491
12:19	MA51693-STD6	100.836	100.347	101.131	101.911	100.331	101.644	101.563	100.705
12:25	MA51693-STD7	92.028	91.659	101.472	100.381	93.458	100.572	100.785	93.443
12:31	MA51693-STD8	91.372	93.825	100.339	100.475	92.974	101.197	100.493	93.065
12:37	MA51693-STD9	98.053	99.343	99.317	99.403	99.969	100.405	99.088	100.249
12:43	MA51693-STD10	98.278	97.857	100.049	78.082	98.245	100.831	81.498	99.143
12:48	MA51693-STD11	92.857	90.886	93.102	90.925	91.407	92.644	90.76	91.505
12:54	MA51693-STD12	93.486	92.601	93.746	90.611	91.324	93.2	90.862	91.838
13:00	MA51693-STD13	95.911	94.963	95.342	93.259	93.51	93.306	92.689	93.001
13:15	MA51693-STD14	95.549	92.095	94.369	91.218	91.173	94.337	92.322	91.467
13:20	MA51693-STD15	93.65	92.302	94.022	91.754	91.869	94.043	92.946	92.701
13:27	MA51693-STD16	100	100	100	100	100	100	100	100
13:33	ZZZZZZ	99.59	100.786	99.894	100.394	101.122	98.94	100.958	101.316
13:39	MA51693-ICVA1	98.421	99.668	99.976	100.214	101.27	99.572	99.908	101.424
13:45	MA51693-ICV1	98.85	99.607	98.645	100.47	101.352	99.923	100.993	100.765
14:11	MA51693-ICB1	101.394	98.87	101.733	101.826	97.821	101.44	102.106	98.091
14:17	MA51693-CCVA1	100.937	104.527	103.865	102.816	103.474	102.65	102.026	103.667
14:23	MA51693-CCB1	100.68	101.077	100.855	103.665	102.325	102.037	103.386	102.004
14:28	MA51693-CRI1	100.422	102.485	101.354	103.089	102.586	101.747	104.139	103.158
14:34	MA51693-ICSA1	93.551	95.73	93.719	95.027	93.555	91.762	92.064	92.402
14:40	MA51693-ICSAB1	87.354	90.104	91.108	92.905	90.069	89.675	90.148	89.731
14:48	ZZZZZZ	83.093	88.397	89.669	93.822	92.139	91.836	95.327	92.483
14:54	MA51693-CCVA2	85.358	91.745	92.062	95.542	93.803	93.493	96.952	95.223
15:00	MA51693-CCB2	87.628	92.864	92.92	97.942	95.837	95.325	98.642	95.869
15:05	MP30584A-MB1	91.304	95.725	95.132	96.941	98.156	96.749	99.362	98.204
15:11	MP30584A-B2	90.366	96.182	95.853	100.336	98.222	97.488	101.308	99.058
15:17	MP30584A-S3	93.685	101.259	93.819	103.853	104.649	94.928	104.808	98.548
15:23	MP30584A-S4	93.412	99.872	97.907	103.753	103.494	98.549	104.422	98.011
15:28	JD37159-1	92.704	97.934	95.192	101.474	100.831	96.462	101.043	97.029

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:34	MP30584A-SD1	95.557	98.533	88.79	102.791	100.511	91.316	102.704	100.33
15:40	MP30584A-PS1	92.686	97.604	94.177	101.18	99.445	95.062	102.754	96.076
15:46	ZZZZZZ	91.155	92.628	92.925	101.004	96.48	94.333	101.443	97.065
15:52	MA51693-CCVA3	92.78	97.904	95.043	101.875	99.474	96.357	101.673	100.247
15:58	MA51693-CCB3	93.99	97.715	95.702	102.548	98.866	96.648	103.069	99.627
16:04	ZZZZZZ	89.516	95.216	91.262	101.101	97.192	93.781	101.772	97.673
16:09	MP30441-MB1	96.703	98.258	97.331	104.248	99.958	98.525	105.319	100.766
16:15	MP30441-B1	86.902	93.387	89.616	90.086	95.719	91.709	88.452	96.102
16:21	MP30441-S1	71.545	78.206	81.417	86.123	74.293	76.678	80.783	74.277
16:27	MP30441-S2	78.836	83.26	82.755	85.499	78.62	76.889	80.106	79.255
16:32	ZZZZZZ	91.188	85.893	97.316	96.235	94.154	95.686	97.535	93.902
16:38	JD36533-1	75.887	79.127	79.004	81.964	74.99	74.345	77.301	75.741
16:44	MP30441-SD1	86.608	89.215	89.083	82.027	89.013	87.547	81.366	88.621
16:50	ZZZZZZ	85.868	86.985	87.032	94.714	91.401	90.594	96.023	91.347
16:55	MA51693-CCVA4	80.024	87.939	87.491	94.962	92.164	89.51	96.019	92.366
17:01	MA51693-CCB4	78.677	84.498	81.254	89.239	88.743	83.428	91.668	88.746
17:07	ZZZZZZ	74.451	80.885	79.263	90.436	82.795	80.036	89.08	82.52
17:12	ZZZZZZ	76.752	85.568	82.742	80.577	86.491	82.372	78.037	85.406
17:18	ZZZZZZ	77.09	83.495	81.561	89.587	85.426	81.213	87.024	84.879
17:24	ZZZZZZ	72.055	83.141	80.897	88.59	78.04	76.59	80.653	78.035
17:30	ZZZZZZ	76.706	85.427	81.505	96.813	89.903	82.945	96.282	89.898
17:35	ZZZZZZ	72.961	85.354	82.527	90.588	84.91	82.41	88.944	84.462
17:41	ZZZZZZ	80.678	88.912	87.009	94.753	91.967	88.283	93.403	91.788
17:47	ZZZZZZ	81.912	89.004	84.367	89.499	89.763	83.697	87.041	89.76
17:53	MA51693-CCVA5	86.903	92.052	90.038	83.123	95.789	91.997	88.928	95.624
17:58	MA51693-CCB5	90.975	94.596	94.182	99.024	98.185	96.77	100.995	98.725
18:04	ZZZZZZ	81.717	88.145	84.389	95.638	88.329	83.485	92.42	88.273
18:10	ZZZZZZ	74.255	83.774	80.265	86.61	81.926	76.823	82.524	82.207
18:16	ZZZZZZ	74.566	83.66	80.898	96.627	88.396	84.116	96.816	87.901
18:21	ZZZZZZ	81.23	90.405	78.177	101.126	95.117	82.061	99.798	93.653
18:27	JD36682-2	85.298	94.322	90.661	103.827	99.044	94.83	103.527	98.677
18:33	JD36682-3	86.094	95.998	91.566	104.068	101.458	95.129	103.674	99.838
18:38	JD36682-4	82.467	92.83	88.046	100.869	96.681	90.751	99.862	95.611

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:44	JD36682-5	83.326	92.787	86.073	96.949	98.324	90.783	97.677	98.128
18:50	JD36682-6	76.608	84.846	87.454	96.323	89.845	93.304	98.759	89.237
18:55	MA51693-CCVA6	91.549	96.581	93.919	99.089	99.631	95.623	99.158	99.701
19:01	MA51693-CCB6	93.544	95.733	94.23	99.279	98.44	97.034	100.469	99.126
19:07	MP30440-MB1	95.458	98.416	99.348	100.17	100.501	101.187	100.93	100.999
19:12	MP30440-B1	85.482	92.189	88.908	96.549	94.892	90.306	96.117	95.032
19:18	ZZZZZZ	83.703	91.067	88.917	92.445	92.895	90.475	92.395	92.74
19:23	MP30440-S1	85.073	93.01	90.245	98.104	96.336	91.848	97.039	96.791
19:29	MP30440-S2	84.479	92.604	91.359	97.378	96.559	93.498	97.534	96.465
19:35	JD36624-5	85.933	93.094	89.875	98.383	97.428	92.48	98.458	96.601
19:41	MP30440-SD1	83.62	89.615	99.144	100.021	88.638	101.25	101.385	88.839
19:46	ZZZZZZ	84.055	91.655	88.491	86.257	91.147	86.527	83.462	90.552
19:52	ZZZZZZ	84.016	91.058	83.55	96.631	94.028	85.912	97.081	94.538
19:58	ZZZZZZ	99.872	101.851	98.62	101.051	104.074	99.47	102.243	103.701
20:03	MA51693-CCVA7	91.017	94.115	95.337	90.655	97.704	95.347	88.276	97.736
20:09	MA51693-CCB7	94.436	96.212	95.331	99.112	99.506	96.651	100.317	99.392
20:15	ZZZZZZ	99.567	104.249	96.65	89.858	104.948	96.187	88.931	105.638

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
11:50	MA51693-STD1	100	100	100	100	100	100	100	100
11:56	MA51693-STD2	100	100	100	100	100	100	100	100
12:02	MA51693-STD3	100	100	100	100	100	100	100	100
12:08	MA51693-STD4	100.315	98.59	100.364	100.812	97.543	100.819	100.022	100.094
12:14	MA51693-STD5	95.022	100.218	101.024	95.187	100.388	101.188	95.186	100.993
12:19	MA51693-STD6	101.732	101.357	102.052	101.627	101.655	101.453	101.217	101.483
12:25	MA51693-STD7	101.629	100.888	90.259	102.037	100.587	90.782	101.77	91.606
12:31	MA51693-STD8	101.082	100.471	92.795	101.449	100.259	93.298	100.828	93.956
12:37	MA51693-STD9	99.75	99.782	98.681	100.379	99.898	99.738	100.393	100.544
12:43	MA51693-STD10	101.047	81.47	98.712	100.683	78.503	100.502	101.463	100.894
12:48	MA51693-STD11	92.375	90.571	87.395	91.209	89.431	88.413	91.338	88.651
12:54	MA51693-STD12	92.21	90.582	87.363	90.057	88.112	89.468	91.229	89.588
13:00	MA51693-STD13	93.162	91.966	87.273	90.928	88.935	90.574	92.293	91.112
13:15	MA51693-STD14	94.231	91.528	90.1	93.067	90.901	91.481	92.673	91.176
13:20	MA51693-STD15	93.773	92.51	89.447	92.624	91.458	91.376	93.634	90.838
13:27	MA51693-STD16	100	100	100	100	100	100	100	100
13:33	ZZZZZZ	99.582	100.699	99.186	99.343	99.878	99.239	99.686	99.302
13:39	MA51693-ICVA1	100.306	99.465	98.13	98.217	97.532	97.787	99.538	99.192
13:45	MA51693-ICV1	99.822	100.225	99.19	99.668	99.935	99.055	99.098	99.738
14:11	MA51693-ICB1	101.074	101.118	103.936	99.882	100.954	101.116	100.754	100.467
14:17	MA51693-CCVA1	102.639	101.401	100.37	101.142	98.888	100.121	102.194	101.036
14:23	MA51693-CCB1	101.619	103.12	103.064	101.514	102.819	100.7	102.088	101.259
14:28	MA51693-CRI1	101.883	103.057	104.232	101.283	102.825	101.58	102.202	100.919
14:34	MA51693-ICSA1	90.28	89.922	85.538	84.911	85.054	85.789	84.62	93.841
14:40	MA51693-ICSAB1	89.178	88.838	83.13	84.15	83.861	82.107	83.595	92.564
14:48	ZZZZZZ	92.727	94.926	92.56	93.579	96.174	91.515	94.16	96.641
14:54	MA51693-CCVA2	93.412	95.833	93.496	93.715	94.821	92.98	95.892	98.179
15:00	MA51693-CCB2	95.106	98.35	95.147	96.008	99.354	93.826	96.655	98.459
15:05	MP30584A-MB1	96.165	98.037	97.773	97.464	98.592	98.563	97.763	99.118
15:11	MP30584A-B2	97.484	100.318	96.872	98.666	99.84	98.132	98.319	99.54
15:17	MP30584A-S3	91.943	99.59	93.577	88.292	95.251	97.66	91.332	99.938
15:23	MP30584A-S4	95.014	99.247	94.588	93.067	95.121	97.435	95.27	101.004
15:28	JD37159-1	92.66	96.624	92.596	91.905	93.626	97.097	94.082	101.54

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:34	MP30584A-SD1	90.221	102.357	98.003	90.463	100.922	102.245	90.765	105.291
15:40	MP30584A-PS1	92.803	98.57	92.608	92.064	95.283	96.709	94.064	101.308
15:46	ZZZZZZ	94.914	101.823	94.789	97.421	102.793	96.118	97.171	102.358
15:52	MA51693-CCVA3	97.504	101.684	97.352	97.459	100.583	100.324	97.255	104.308
15:58	MA51693-CCB3	96.605	102.406	102.528	99.228	103.117	102.144	98.308	104.134
16:04	ZZZZZZ	93.313	100.694	99.541	95.87	102.463	99.212	94.417	102.028
16:09	MP30441-MB1	98.424	104.932	104.094	99.907	105.199	102.781	99.342	105.766
16:15	MP30441-B1	92.126	88.817	96.026	94.088	89.468	95.89	92.969	101.858
16:21	MP30441-S1	77.759	80.376	66.71 !	70.975	73.942	70.874	76.346	80.433
16:27	MP30441-S2	77.581	80.003	71.155	71.225	73.069	75.092	77.017	85.811
16:32	ZZZZZZ	97.465	97.316	91.809	98.725	99.12	93.854	100.175	97.421
16:38	JD36533-1	75.068	76.539	68.93 !	68.895 !	70.747	73.203	74.635	84.025
16:44	MP30441-SD1	88.071	80.913	83.778	83.81	76.845	88.241	89.21	97.928
16:50	ZZZZZZ	90.9	95.375	91.105	93.366	97.959	91.382	93.399	98.787
16:55	MA51693-CCVA4	89.869	96.204	91.65	91.564	96.639	92.204	92.641	100.7
17:01	MA51693-CCB4	84.338	91.65	91.013	87.186	94.455	90.494	87.207	98.548
17:07	ZZZZZZ	80.809	88.184	78.895	78.039	85.005	81.093	82.062	92.051
17:12	ZZZZZZ	82.508	77.308	79.979	79.06	73.319	83.475	83.049	93.591
17:18	ZZZZZZ	81.876	86.017	79.404	78.061	82.095	83.153	82.353	93.2
17:24	ZZZZZZ	75.962	80.001	71.554	70.626	74.003	76.518	76.926	86.789
17:30	ZZZZZZ	83.666	95.7	85.971	82.563	92.396	88.359	83.705	100.521
17:35	ZZZZZZ	82.49	87.038	81.198	81.489	84.901	83.311	83.745	95.964
17:41	ZZZZZZ	88.315	92.551	85.919	85.937	88.708	89.326	89.606	100.134
17:47	ZZZZZZ	83.438	86.976	83.704	80.858	83.022	87.205	85.426	97.377
17:53	MA51693-CCVA5	91.99	89.158	96.649	94.007	86.681	98.991	95.359	103.764
17:58	MA51693-CCB5	96.475	100.603	99.508	98.466	102.245	103.105	99.086	106.359
18:04	ZZZZZZ	83.41	91.934	81.977	80.433	86.542	85.554	84.747	96.032
18:10	ZZZZZZ	76.859	81.515	75.533	72.278	75.112	80.933	77.6	91.935
18:16	ZZZZZZ	84.251	96.083	82.874	82.753	92.295	86.859	85.112	98.805
18:21	ZZZZZZ	82.067	99.76	88.455	80.095	95.471	94.9	81.132	102.55
18:27	JD36682-2	94.59	102.829	95.344	94.251	99.835	98.937	94.027	106.285
18:33	JD36682-3	95.533	103.178	95.445	93.468	100.053	100.965	94.12	105.974
18:38	JD36682-4	91.643	99.745	92.305	90.895	97.491	97.342	90.704	105.842

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:44	JD36682-5	91.871	97.63	93.833	89.794	95.723	99.079	91.17	105.922
18:50	JD36682-6	92.268	98.314	84.596	89.782	94.531	87.822	90.529	94.434
18:55	MA51693-CCVA6	96.317	98.985	102.052	96.489	98.779	102.691	98.251	107.4
19:01	MA51693-CCB6	96.494	99.521	104.137	98.885	101.803	103.777	98.766	107.359
19:07	MP30440-MB1	101.886	100.803	106.034	103.641	102.315	104.915	102.767	107.883
19:12	MP30440-B1	90.801	96.372	94.536	93.369	97.687	97.345	92.991	103.296
19:18	ZZZZZZ	90.936	92.1	88.148	88.425	88.837	93.12	91.039	101.537
19:23	MP30440-S1	91.404	97.517	91.405	90.239	93.833	95.237	91.508	102.616
19:29	MP30440-S2	93.105	97.186	91.273	91.117	93.539	94	93.218	102.934
19:35	JD36624-5	92.975	98.36	91.736	90.641	94.63	96.014	93.077	103.838
19:41	MP30440-SD1	101.95	100.357	91.616	101.554	99.457	91.467	103.104	96.909
19:46	ZZZZZZ	86.652	82.898	83.838	82.883	78.19	86.435	86.376	98.499
19:52	ZZZZZZ	85.767	95.925	89.79	83.833	92.635	91.992	85.157	101.758
19:58	ZZZZZZ	100.751	101.871	108.784	101.499	103.017	107.533	102.179	110.551
20:03	MA51693-CCVA7	96.018	88.032	94.884	96.152	89.295	98.621	97.723	102.853
20:09	MA51693-CCB7	96.831	99.215	104.649	99.257	101.076	104.286	99.292	106.761
20:15	ZZZZZZ	97.256	88.929	108.331	96.538	89.258	109.434	98.661	113.521

! = Outside limits.

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Rhodium (103-3)	70-130 %	70-130 %
Istd#14	Indium (115-1)	70-130 %	70-130 %
Istd#15	Indium (115-2)	70-130 %	70-130 %
Istd#16	Terbium (159-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
11:50	MA51693-STD1	100	100	100	100	100	100
11:56	MA51693-STD2	100	100	100	100	100	100
12:02	MA51693-STD3	100	100	100	100	100	100
12:08	MA51693-STD4	100.755	97.825	100.169	100.688	100.267	100.468
12:14	MA51693-STD5	95.984	101.062	100.995	95.672	101.573	95.131
12:19	MA51693-STD6	101.721	102.152	101.017	101.634	101.435	102.011
12:25	MA51693-STD7	101.997	101.422	91.646	101.472	91.313	101.905
12:31	MA51693-STD8	102.375	101.703	93.154	102.086	94.132	102.228
12:37	MA51693-STD9	101.965	101.597	100.421	101.942	101.511	102.914
12:43	MA51693-STD10	102.096	78.945	100.999	101.787	100.904	101.904
12:48	MA51693-STD11	91.458	90.312	89.489	90.809	85.954	90.838
12:54	MA51693-STD12	91.576	90.239	89.207	91.498	85.342	89.865
13:00	MA51693-STD13	93.021	91.723	91.388	92.266	84.479	89.257
13:15	MA51693-STD14	92.938	90.939	90.487	92.001	85.551	92.195
13:20	MA51693-STD15	93	91.947	90.434	92.342	87.688	92.506
13:27	MA51693-STD16	100	100	100	100	100	100
13:33	ZZZZZZ	99.382	99.114	98.983	99.453	101.152	99.568
13:39	MA51693-ICVA1	100.332	100.315	98.496	101.139	99.29	99.216
13:45	MA51693-ICV1	98.441	100.035	99.5	99.221	100.11	98.84
14:11	MA51693-ICB1	99.567	99.98	100.148	100.057	95.8	99.285
14:17	MA51693-CCVA1	103.011	101.395	100.411	103.918	101.413	101.427
14:23	MA51693-CCB1	101.5	102.707	100.793	101.519	102.846	101.162
14:28	MA51693-CRI1	101.199	102.259	99.707	101.226	99.403	100.505
14:34	MA51693-ICSA1	92.698	93.892	94.025	93.145	89.152	86.651
14:40	MA51693-ICSAB1	91.906	93.201	92.909	92.402	88.55	86.66
14:48	ZZZZZZ	96.606	99.107	96.818	97.305	98.008	97.618
14:54	MA51693-CCVA2	98.081	100.046	98.214	98.934	100.232	97.791
15:00	MA51693-CCB2	98.038	101.247	98.01	98.269	100.666	99.204
15:05	MP30584A-MB1	98.298	100.499	100.091	98.887	100.941	99.288
15:11	MP30584A-B2	100.774	102.62	100.164	101.869	101.79	101.458
15:17	MP30584A-S3	93.716	101.112	99.666	94.804	98.113	88.879
15:23	MP30584A-S4	98.665	102.023	101.649	99.581	97.971	93.333
15:28	JD37159-1	98.414	100.152	101.43	99.087	99.089	93.548

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
15:34	MP30584A-SD1	94.028	105.147	105.692	94.206	102.459	93.396
15:40	MP30584A-PS1	98.437	102.205	101.074	99.387	99.848	94.262
15:46	ZZZZZZ	99.9	105.182	101.953	100.171	103.008	100.796
15:52	MA51693-CCVA3	101.354	105.314	104.844	102.256	104.629	100.932
15:58	MA51693-CCB3	100.849	105.397	105.392	101.561	105.697	101.504
16:04	ZZZZZZ	98.531	105.168	102.567	99.029	107.541	102.066
16:09	MP30441-MB1	102.236	107.393	105.443	103.236	107.861	102.856
16:15	MP30441-B1	98.348	93.904	101.829	99.121	104.084	99.899
16:21	MP30441-S1	83.166	87.201	81.556	84.176	72.525	74.118
16:27	MP30441-S2	83.489	85.909	86.322	84.85	76.513	73.51
16:32	ZZZZZZ	103.667	103.533	97.902	104.053	99.933	104.153
16:38	JD36533-1	80.933	83.206	84.657	81.745	75.426	71.599
16:44	MP30441-SD1	94.864	86.937	98.078	95.813	92.676	89.258
16:50	ZZZZZZ	97.661	103.806	99.544	98.936	101.93	100.693
16:55	MA51693-CCVA4	98.52	103.854	101.137	100.043	104.036	99.61
17:01	MA51693-CCB4	92.038	100.285	98.672	92.79	102.473	94.994
17:07	ZZZZZZ	90.334	97.609	93.087	90.861	90.179	86.124
17:12	ZZZZZZ	90.878	84.779	95.594	91.681	90.647	86.519
17:18	ZZZZZZ	89.541	95.781	93.897	90.912	90.572	85.523
17:24	ZZZZZZ	82.441	87.925	87.281	83.446	80.362	75.823
17:30	ZZZZZZ	92.879	104.6	100.493	94.602	97.117	89.878
17:35	ZZZZZZ	93.297	97.575	97.152	94.78	93.67	90.118
17:41	ZZZZZZ	96.35	100.908	100.323	97.308	96.314	92.026
17:47	ZZZZZZ	92.805	96.285	98.06	93.585	92.284	87.286
17:53	MA51693-CCVA5	101.458	93.622	105.087	102.332	105.036	101.621
17:58	MA51693-CCB5	102.547	106.42	105.636	104.005	107.469	104.526
18:04	ZZZZZZ	92.136	99.594	96.24	93.547	90.855	87.232
18:10	ZZZZZZ	83.939	88.914	92.746	85.138	83.586	76.103
18:16	ZZZZZZ	93.87	104.802	99.616	95.077	96.349	90.538
18:21	ZZZZZZ	88.005	106.851	104.162	89.158	98.981	85.028
18:27	JD36682-2	101.184	108.911	106.269	102.489	103.493	99.429
18:33	JD36682-3	100.491	109.468	107.321	101.882	104.787	98.963
18:38	JD36682-4	99.454	108.001	105.413	100.505	103.875	97.561

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
18:44	JD36682-5	97.901	105.294	106.155	99.343	104.233	97.22
18:50	JD36682-6	97.725	103.969	95.065	98.619	93.892	96.519
18:55	MA51693-CCVA6	103.414	106.783	107.346	104.414	111.073	102.355
19:01	MA51693-CCB6	101.819	105.618	107.461	102.784	109.689	103.14
19:07	MP30440-MB1	104.896	106.312	107.799	105.743	110.741	106.246
19:12	MP30440-B1	99.165	105.09	103.173	99.284	104.051	100.108
19:18	ZZZZZZ	98.547	99.467	102.804	99.081	97.72	94.02
19:23	MP30440-S1	98.298	104.175	102.762	99.823	100.75	95.469
19:29	MP30440-S2	100.638	103.771	103.677	102.217	101.058	97.823
19:35	JD36624-5	98.917	104.264	104.17	99.925	100.779	96.514
19:41	MP30440-SD1	107.67	105.524	96.765	108.644	99.234	107.064
19:46	ZZZZZZ	93.864	89.846	99.273	95.151	89.948	85.687
19:52	ZZZZZZ	91.715	103.253	101.146	92.138	98.759	88.683
19:58	ZZZZZZ	103.791	106.999	109.938	104.663	115.721	105.354
20:03	MA51693-CCVA7	102.563	95.678	103.464	102.988	103.809	101.818
20:09	MA51693-CCB7	101.903	105.336	107.707	102.62	110.158	103.011
20:15	ZZZZZZ	102.101	95.087	112.945	103.676	114.05	101.626

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	70-130 %	70-130 %
Istd#18	Terbium (159-3)	70-130 %	70-130 %
Istd#19	Holmium (165-1)	70-130 %	70-130 %
Istd#20	Holmium (165-2)	70-130 %	70-130 %
Istd#21	Bismuth (209-1)	70-130 %	70-130 %
Istd#22	Bismuth (209-2)	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51693 Units: ug/l

Time: / Sample ID:			14:11 ICB1		14:23 CCB1		15:00 CCB2		15:58 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	-6.55	<25	-6.50	<25	-5.91	<25	-6.76	<25
Antimony	2.0	.085	-0.305	<2.0	-0.289	<2.0	-0.299	<2.0	-0.300	<2.0
Arsenic	0.50	.025	-0.0177	<0.50	0.0364	<0.50	0.0245	<0.50	0.0297	<0.50
Barium	1.0	.009	0.00365	<1.0	0.00680	<1.0	0.00606	<1.0	-0.000288	<1.0
Beryllium	0.50	.005	-0.00618	<0.50	0.00620	<0.50	0.00332	<0.50	0.00519	<0.50
Boron	25	.85								
Cadmium	0.50	.01	0.0240	<0.50	0.0341	<0.50	0.0316	<0.50	0.0314	<0.50
Calcium	250	3.6	1.24	<250	1.51	<250	1.24	<250	1.19	<250
Chromium	1.0	.018	-0.00855	<1.0	0.0113	<1.0	0.00883	<1.0	0.00117	<1.0
Cobalt	0.50	.003	-0.000493	<0.50	0.00619	<0.50	0.00362	<0.50	0.00138	<0.50
Copper	2.0	.024	0.181	<2.0	0.143	<2.0	0.152	<2.0	0.106	<2.0
Iron	25	.24	-0.510	<25	0.361	<25	1.49	<25	2.28	<25
Lead	0.50	.008	-0.00212	<0.50	0.00543	<0.50	0.00925	<0.50	0.00581	<0.50
Magnesium	250	.19	0.0992	<250	0.170	<250	1.03	<250	0.0843	<250
Manganese	1.0	.012	0.00360	<1.0	0.0208	<1.0	0.0193	<1.0	0.0523	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	0.000975	<1.0	0.00177	<1.0	0.00585	<1.0	-0.000782	<1.0
Potassium	250	.78	0.246	<250	-0.0753	<250	-1.44	<250	-0.889	<250
Selenium	0.50	.044	-0.173	<0.50	0.220	<0.50	0.290	<0.50	0.309	<0.50
Silver	0.50	.004	-0.000989	<0.50	0.0139	<0.50	0.0108	<0.50	0.00704	<0.50
Sodium	250	1.5	0.470	<250	1.04	<250	2.55	<250	1.01	<250
Strontium	5.0	.014								
Thallium	0.50	.002	-0.00623	<0.50	0.0281	<0.50	0.0282	<0.50	0.0463	<0.50
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	0.00230	<1.0	-0.00612	<1.0	-0.00710	<1.0	-0.0148	<1.0
Zinc	5.0	.078	0.675	<5.0	0.674	<5.0	0.757	<5.0	0.737	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51693 Units: ug/l

Time:			17:01		17:58		19:01	
Sample ID:			CCB4		CCB5		CCB6	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	25	.42	-6.36	<25	-6.36	<25	-6.00	<25
Antimony	2.0	.085	-0.314	<2.0	-0.312	<2.0	-0.317	<2.0
Arsenic	0.50	.025	0.0174	<0.50	0.0310	<0.50	0.0142	<0.50
Barium	1.0	.009	0.000140	<1.0	0.000743	<1.0	0.00965	<1.0
Beryllium	0.50	.005	0.00820	<0.50	0.00807	<0.50	-0.00116	<0.50
Boron	25	.85						
Cadmium	0.50	.01	0.0284	<0.50	0.0281	<0.50	0.0305	<0.50
Calcium	250	3.6	0.255	<250	1.71	<250	0.477	<250
Chromium	1.0	.018	-0.00379	<1.0	-0.0207	<1.0	-0.0128	<1.0
Cobalt	0.50	.003	0.00528	<0.50	0.00423	<0.50	0.00408	<0.50
Copper	2.0	.024	0.292	<2.0	0.158	<2.0	0.120	<2.0
Iron	25	.24	1.13	<25	0.981	<25	0.997	<25
Lead	0.50	.008	0.00232	<0.50	0.00410	<0.50	0.00634	<0.50
Magnesium	250	.19	0.505	<250	2.65	<250	1.45	<250
Manganese	1.0	.012	0.0314	<1.0	0.0300	<1.0	0.0315	<1.0
Molybdenum	1.0	.017						
Nickel	1.0	.017	0.00558	<1.0	0.00705	<1.0	0.0138	<1.0
Potassium	250	.78	0.768	<250	-0.463	<250	0.141	<250
Selenium	0.50	.044	0.247	<0.50	0.201	<0.50	0.253	<0.50
Silver	0.50	.004	0.00921	<0.50	0.0112	<0.50	0.00927	<0.50
Sodium	250	1.5	54.3	<250	25.5	<250	14.3	<250
Strontium	5.0	.014						
Thallium	0.50	.002	0.0363	<0.50	0.0271	<0.50	0.0306	<0.50
Tin	5.0	.041						
Titanium	1.0	.11						
Vanadium	1.0	.013	-0.0154	<1.0	-0.000436	<1.0	0.00836	<1.0
Zinc	5.0	.078	0.786	<5.0	0.763	<5.0	0.802	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51693 Units: ug/l

Time:		13:39			13:45			14:17	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	5380	97.8	60	63.3	105.5	5000	4840	96.8
Antimony	60	64.5	107.5				50	53.7	107.4
Arsenic	60	59.1	98.5				50	48.9	97.8
Barium	60	60.2	100.3				50	49.1	98.2
Beryllium	60	59.7	99.5				50	49.7	99.4
Boron									
Cadmium	60	58.4	97.3				50	48.8	97.6
Calcium	5500	5360	97.5				5000	4800	96.0
Chromium	60	59.0	98.3				50	48.5	97.0
Cobalt	60	58.3	97.2				50	48.0	96.0
Copper	60	57.7	96.2				50	48.0	96.0
Iron	5500	5350	97.3				5000	4830	96.6
Lead	60	60.3	100.5				50	49.5	99.0
Magnesium	5500	5350	97.3				5000	4810	96.2
Manganese	60	58.8	98.0				50	48.6	97.2
Molybdenum									
Nickel	60	57.8	96.3				50	48.1	96.2
Potassium	5500	5310	96.5				5000	4840	96.8
Selenium	260	247	95.0				200	193	96.5
Silver	60	62.5	104.2				50	51.6	103.2
Sodium	5500	5410	98.4				5000	4850	97.0
Strontium									
Thallium	60	62.0	103.3				50	49.6	99.2
Tin									
Titanium									
Vanadium	60	59.4	99.0				50	49.3	98.6
Zinc	60	56.7	94.5				50	46.1	92.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51693 Units: ug/l

Time:		14:54			15:52			16:55	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4780	95.6	5000	4760	95.2	5000	4650	93.0
Antimony	50	52.7	105.4	50	51.9	103.8	50	51.3	102.6
Arsenic	50	49.8	99.6	50	49.5	99.0	50	49.2	98.4
Barium	50	48.6	97.2	50	47.7	95.4	50	47.5	95.0
Beryllium	50	50.4	100.8	50	48.2	96.4	50	49.0	98.0
Boron									
Cadmium	50	48.6	97.2	50	49.0	98.0	50	49.1	98.2
Calcium	5000	4840	96.8	5000	4790	95.8	5000	4750	95.0
Chromium	50	49.3	98.6	50	49.4	98.8	50	48.5	97.0
Cobalt	50	49.0	98.0	50	49.1	98.2	50	48.8	97.6
Copper	50	49.3	98.6	50	49.1	98.2	50	48.8	97.6
Iron	5000	4910	98.2	5000	4920	98.4	5000	4910	98.2
Lead	50	49.4	98.8	50	49.6	99.2	50	49.1	98.2
Magnesium	5000	4780	95.6	5000	4860	97.2	5000	4690	93.8
Manganese	50	49.7	99.4	50	49.7	99.4	50	48.8	97.6
Molybdenum									
Nickel	50	49.2	98.4	50	48.6	97.2	50	48.4	96.8
Potassium	5000	4830	96.6	5000	4800	96.0	5000	4700	94.0
Selenium	200	195	97.5	200	193	96.5	200	192	96.0
Silver	50	52.1	104.2	50	50.0	100.0	50	51.1	102.2
Sodium	5000	4800	96.0	5000	4900	98.0	5000	4790	95.8
Strontium									
Thallium	50	49.2	98.4	50	49.2	98.4	50	49.0	98.0
Tin									
Titanium									
Vanadium	50	49.5	99.0	50	49.8	99.6	50	48.9	97.8
Zinc	50	48.3	96.6	50	47.9	95.8	50	47.9	95.8

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51693 Units: ug/l

Time:		17:53			18:55	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4690	93.8	5000	4700	94.0
Antimony	50	50.6	101.2	50	50.3	100.6
Arsenic	50	48.7	97.4	50	48.5	97.0
Barium	50	46.9	93.8	50	46.8	93.6
Beryllium	50	48.3	96.6	50	48.7	97.4
Boron						
Cadmium	50	48.8	97.6	50	49.3	98.6
Calcium	5000	4740	94.8	5000	4780	95.6
Chromium	50	49.1	98.2	50	48.7	97.4
Cobalt	50	48.6	97.2	50	48.5	97.0
Copper	50	48.5	97.0	50	48.4	96.8
Iron	5000	4940	98.8	5000	4910	98.2
Lead	50	49.2	98.4	50	47.2	94.4
Magnesium	5000	4750	95.0	5000	4750	95.0
Manganese	50	49.5	99.0	50	49.1	98.2
Molybdenum						
Nickel	50	48.2	96.4	50	48.1	96.2
Potassium	5000	4720	94.4	5000	4730	94.6
Selenium	200	211	105.5	200	192	96.0
Silver	50	49.1	98.2	50	49.0	98.0
Sodium	5000	4820	96.4	5000	4780	95.6
Strontium						
Thallium	50	49.0	98.0	50	47.1	94.2
Tin						
Titanium						
Vanadium	50	49.1	98.2	50	49.2	98.4
Zinc	50	47.6	95.2	50	48.2	96.4

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51693 Units: ug/l

Time:			14:28	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	21.8	87.2
Antimony	2.0	0.25	1.83	91.5
Arsenic	0.50	0.50	0.495	99.0
Barium	1.0	0.50	0.949	94.9
Beryllium	0.50	0.25	0.498	99.6
Boron	25	2.5		
Cadmium	0.50	0.25	0.504	100.8
Calcium	250	125	249	99.6
Chromium	1.0	2.0	1.02	102.0
Cobalt	0.50	0.25	0.515	103.0
Copper	2.0	2.0	2.18	109.0
Iron	25	25	27.0	108.0
Lead	0.50	0.25	0.514	102.8
Magnesium	250	125	257	102.8
Manganese	1.0	0.25	1.02	102.0
Molybdenum	1.0	0.50		
Nickel	1.0	2.0	1.01	101.0
Potassium	250	125	253	101.2
Selenium	0.50	0.50	0.419	83.8
Silver	0.50	1.0	0.577	115.4
Sodium	250	125	254	101.6
Strontium	5.0	0.50		
Thallium	0.50	0.25	0.491	98.2
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0	1.02	102.0
Zinc	5.0	2.0	5.32	106.4

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51693 Units: ug/l

Time:			14:34		14:40	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	93800	93.8	94400	94.4
Antimony			-0.246		-0.224	
Arsenic		20	0.0573		18.5	92.5
Barium			0.0889		0.107	
Beryllium			-0.00217		-0.00147	
Boron		50	0.553		52.6	105.2
Cadmium		20	-0.353		19.7	98.5
Calcium	100000	100000	95000	95.0	97600	97.6
Chromium		20	0.892		20.7	103.5
Cobalt		20	0.115		19.3	96.5
Copper		20	0.308		18.7	93.5
Iron	100000	100000	92900	92.9	93900	93.9
Lead			0.0380		0.0495	
Magnesium	100000	100000	92400	92.4	93600	93.6
Manganese		20	0.329		20.2	101.0
Molybdenum	2000	2000	2200HH	110.0	2220HH	111.0
Nickel		20	0.541		19.1	95.5
Potassium	100000	100000	93800	93.8	94400	94.4
Selenium		20	-0.0212		19.2	96.0
Silver		20	0.0176		20.5	102.5
Sodium	100000	100000	93900	93.9	95000	95.0
Strontium	2000	2000	2170HH	108.5	2190HH	109.5
Thallium			0.00522		0.00181	
Tin	2000	2000	2010HH	100.5	2030HH	101.5
Titanium	2000	2000	1800HH	90.0	1830HH	91.5
Vanadium		20	0.0149		21.3	106.5
Zinc		20	0.780		19.5	97.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:41	MA51710-STD1	1		Sample introduction not stable, see rerun.
17:47	MA51710-STD2	1		Sample introduction not stable, see rerun.
17:53	MA51710-STD3	1		STDA
17:58	MA51710-STD4	1		STDB
18:04	MA51710-STD5	1		STDC
18:09	MA51710-STD6	1		STDD
18:15	MA51710-STD7	1		STDE
18:21	MA51710-STD8	1		STDF
18:26	MA51710-STD9	1		STDG
18:32	MA51710-STD10	1		STDH
18:37	MA51710-STD11	1		STDI
18:43	MA51710-STD12	1		STDJ
18:48	MA51710-STD13	1		STDE
18:54	MA51710-STD14	1		STDA
18:59	MA51710-ICVA1	1		
19:05	MA51710-ICV1	1		
19:11	MA51710-ICB1	1		
19:16	MA51710-CCVA1	1		
19:22	MA51710-CCB1	1		
19:28	ZZZZZZ	1		
19:34	MA51710-CRI1	1		
19:42	MA51710-CRI2	1		
19:48	MA51710-ICSA1	1		
19:54	MA51710-ICSAB1	1		
20:01	MA51710-ICSAB2	1		
20:07	ZZZZZZ	1		
20:13	MA51710-CCVA2	1		
20:18	MA51710-CCB2	1		
20:24	ZZZZZZ	2		
20:30	MP30441-B1	2		
20:35	MP30441-S1	2		Bi out
20:41	MP30441-S2	2		Bi out
20:46	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:52	MP30441-S1	500		
20:57	MP30441-S2	500		
21:03	JD36533-1	500		(sample used for QC only; not part of login JD36682)
21:09	MP30441-SD1	2500		
21:14	MA51710-CCVA3	1		
21:20	MA51710-CCB3	1		
21:25	ZZZZZZ	50		
21:31	ZZZZZZ	50		
21:36	ZZZZZZ	50		
21:42	ZZZZZZ	5		
21:47	ZZZZZZ	20		
21:53	ZZZZZZ	100		
21:59	ZZZZZZ	20		
22:04	ZZZZZZ	10		
22:10	ZZZZZZ	20		
22:15	ZZZZZZ	100		
22:21	MA51710-CCVA4	1		
22:26	MA51710-CCB4	1		
22:32	ZZZZZZ	50		
22:37	ZZZZZZ	50		
22:43	ZZZZZZ	50		
22:49	ZZZZZZ	10		
22:54	ZZZZZZ	100		
23:00	ZZZZZZ	20		
23:05	ZZZZZZ	20		
23:11	ZZZZZZ	100		
23:16	MA51710-CCVA5	1		
23:22	MA51710-CCB5	1		
23:27	JD36682-2	10		
23:33	JD36682-3	10		
23:38	JD36682-4	10		
23:44	JD36682-4	50		
23:50	JD36682-5	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:55	JD36682-5	20		
00:01	JD36682-6	2		
00:06	JD36682-6	20		
---------->	Last reportable sample/prep for job JD36682			
00:12	MA51710-CCVA6	1		
00:17	MA51710-CCB6	1		
---------->	Last reportable CCB for job JD36682			
00:23	ZZZZZZ	2		
00:28	ZZZZZZ	2		
00:34	MP30440-S1	2		
00:39	MP30440-S2	2		
00:45	JD36624-5	2		(sample used for QC only; not part of login JD36682)
00:51	MP30440-SD1	10		
00:56	MP30440-S1	20		rerun with the QC sample on dilution
01:02	MP30440-S2	20		rerun with the QC sample on dilution
01:07	MA51710-CCVA7	1		
01:13	MA51710-CCB7	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Element: Dilution	B a	C a	M g	M n	S e	N a	
18:59	MA51710-ICVA1	1	X	X	X	X	X	X	
19:05	MA51710-ICV1	1	X	X	X	X	X	X	
19:11	MA51710-ICB1	1	X	X	X	X	X	X	
19:16	MA51710-CCVA1	1	X	X	X	X	X	X	
19:22	MA51710-CCB1	1	X	X	X	X	X	X	
19:28	ZZZZZZ	1							
19:34	MA51710-CRI1	1							
19:42	MA51710-CRI2	1	X	X	X	X	X	X	
19:48	MA51710-ICSA1	1	X	X	X	X	X	X	
19:54	MA51710-ICSAB1	1							
20:01	MA51710-ICSAB2	1	X	X	X	X	X	X	
20:07	ZZZZZZ	1							
20:13	MA51710-CCVA2	1	X	X	X	X	X	X	
20:18	MA51710-CCB2	1	X	X	X	X	X	X	
20:24	ZZZZZZ	2							
20:30	MP30441-B1	2					X		
20:35	MP30441-S1	2	Bi	out					
20:41	MP30441-S2	2	Bi	out					
20:46	ZZZZZZ	1							
20:52	MP30441-S1	500						X	
20:57	MP30441-S2	500						X	
21:03	JD36533-1	500							(a)
21:09	MP30441-SD1	2500						X	
21:14	MA51710-CCVA3	1	X	X	X	X	X	X	
21:20	MA51710-CCB3	1	X	X	X	X	X	X	
21:25	ZZZZZZ	50							
21:31	ZZZZZZ	50							
21:36	ZZZZZZ	50							
21:42	ZZZZZZ	5							
21:47	ZZZZZZ	20							
21:53	ZZZZZZ	100							
21:59	ZZZZZZ	20							
22:04	ZZZZZZ	10							
		Element:	B a	C a	M g	M n	S e	N a	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Element: Dilution	B a	C a	M g	M n	S e	N a	
22:10	ZZZZZZ	20							
22:15	ZZZZZZ	100							
22:21	MA51710-CCVA4	1	X	X	X	X	X	X	
22:26	MA51710-CCB4	1	X	X	X	X	X	X	
22:32	ZZZZZZ	50							
22:37	ZZZZZZ	50							
22:43	ZZZZZZ	50							
22:49	ZZZZZZ	10							
22:54	ZZZZZZ	100							
23:00	ZZZZZZ	20							
23:05	ZZZZZZ	20							
23:11	ZZZZZZ	100							
23:16	MA51710-CCVA5	1	X	X	X	X	X	X	
23:22	MA51710-CCB5	1	X	X	X	X	X	X	
23:27	JD36682-2	10		X	X			X	
23:33	JD36682-3	10		X	X			X	
23:38	JD36682-4	10		X	X			X	
23:44	JD36682-4	50				X			
23:50	JD36682-5	2							
23:55	JD36682-5	20		X		X		X	
00:01	JD36682-6	2	X						
00:06	JD36682-6	20		X		X		X	
00:12	MA51710-CCVA6	1	X	X	X	X	X	X	
00:17	MA51710-CCB6	1	X	X	X	X	X	X	
00:23	ZZZZZZ	2							
00:28	ZZZZZZ	2							
00:34	MP30440-S1	2					X		
00:39	MP30440-S2	2					X		
00:45	JD36624-5	2					X		(a)
00:51	MP30440-SD1	10					X		
00:56	MP30440-S1	20	rerun with the QC sample on dilution						
01:02	MP30440-S2	20	rerun with the QC sample on dilution						
01:07	MA51710-CCVA7	1	X	X	X	X	X	X	
		Element:	B a	C a	M g	M n	S e	N a	

REPORTED ELEMENTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Element: Dilution	B a	C a	M g	M n	S e	N a
01:13	MA51710-CCB7	1	X	X	X	X	X	X

(a) Sample used for QC only; not part of login JD36682.

Element: B a, C a, M g, M n, S e, N a

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
17:41	MA51710-STD1	100	100	100	100	100	100	100	100
17:47	MA51710-STD2	100	100	100	100	100	100	100	100
17:53	MA51710-STD3	100	100	100	100	100	100	100	100
17:58	MA51710-STD4	95.129	91.702	100.207	100.868	94.092	99.523	100.965	95.032
18:04	MA51710-STD5	95.723	92.785	99.244	101.238	95.213	99.52	101.124	95.828
18:09	MA51710-STD6	95.429	91.861	100.135	100.603	95.386	99.739	100.603	96.476
18:15	MA51710-STD7	87.283	84.268	97.691	99.542	87.999	98.062	99.324	87.882
18:21	MA51710-STD8	92.638	91.554	96.798	98.014	94.431	96.76	97.631	96.466
18:26	MA51710-STD9	93.422	91.18	98.083	100.663	93.416	97.777	99.585	94.067
18:32	MA51710-STD10	95.038	92.452	100.009	101.862	95.283	100.784	101.921	96.141
18:37	MA51710-STD11	95.452	92.775	101.224	102.36	95.282	100.404	100.75	95.439
18:43	MA51710-STD12	95.398	93.704	102.923	99.006	95.79	100.388	96.387	95.687
18:48	MA51710-STD13	96.01	93.708	99.242	100.74	96.321	100.694	100.414	96.789
18:54	MA51710-STD14	100	100	100	100	100	100	100	100
18:59	MA51710-ICVA1	95.973	94.876	100.959	99.704	98.594	101.78	99.146	98.215
19:05	MA51710-ICV1	96.226	93.069	99.544	100.289	96.613	99.699	99.664	96.754
19:11	MA51710-ICB1	97.61	93.668	100.286	100.217	97.604	101.392	100.675	96.712
19:16	MA51710-CCVA1	96.414	95.37	101.056	99.903	99.192	101.286	98.59	99.013
19:22	MA51710-CCB1	95.868	100.401	100.081	99.821	96.667	100.852	99.838	96.045
19:28	ZZZZZZ	446.407 !	407.215 !	148.305 !	163.782 !	451.42 !	142.694 !	160.246 !	452.917 !
19:34	MA51710-CRI1	No results reported for the elements associated with this internal standard.							
19:42	MA51710-CRI2	98.894	95.191	98.357	101.646	98.739	99.762	101.694	98.326
19:48	MA51710-ICSA1	90.23	88.685	88.954	94.567	89.819	84.713	89.228	88.526
19:54	MA51710-ICSAB1	No results reported for the elements associated with this internal standard.							
20:01	MA51710-ICSAB2	81.433	81.438	87.961	90.715	84.69	86.582	86.818	83.858
20:07	ZZZZZZ	77.3	79.589	85.853	91.067	86.066	88.718	92.116	86.453
20:13	MA51710-CCVA2	80.053	83.235	88.989	93.62	89.127	91.264	93.803	89.781
20:18	MA51710-CCB2	82.628	84.152	84.688	94.658	89.992	85.964	95.916	90.433
20:24	ZZZZZZ	85.558	86.699	91.36	95.946	93.701	94.219	96.465	92.47
20:30	MP30441-B1	79.691	83.206	87.178	94.925	88.54	89.206	94.495	88.891
20:35	MP30441-S1	No results reported for the elements associated with this internal standard.							
20:41	MP30441-S2	No results reported for the elements associated with this internal standard.							
20:46	ZZZZZZ	90.034	85.354	93.337	86.201	91.559	95.53	89.699	91.339

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
20:52	MP30441-S1	83.269	78.619	89.081	88.409	88.793	92.644	91.132	88.312
20:57	MP30441-S2	76.889	74.789	87.492	87.197	82.155	91.339	89.447	82.674
21:03	JD36533-1	81.837	77.846	87.092	86.687	87.152	90.459	89.028	87.118
21:09	MP30441-SD1	72.761	69.396 !	86.535	86.954	78.351	90.087	89.453	78.545
21:14	MA51710-CCVA3	78.417	79.489	85.271	87.652	84.167	88.481	87.837	85.395
21:20	MA51710-CCB3	80.196	79.781	85.996	88.46	85.665	88.486	90.261	85.929
21:25	ZZZZZZ	85.006	82.052	88.971	89.268	90.288	93.297	91.546	89.997
21:31	ZZZZZZ	83.059	80.277	87.624	88.734	87.771	90.279	90.458	88.362
21:36	ZZZZZZ	83.557	81.01	88.798	89.812	88.419	92.341	91.523	88.74
21:42	ZZZZZZ	73.882	77.293	83.124	85.608	78.436	80.531	81.201	78.522
21:47	ZZZZZZ	82.084	82.164	86.877	89.235	87.357	88.144	88.467	87.718
21:53	ZZZZZZ	88.379	85.561	94.107	92.166	94.421	97.464	94.001	94.042
21:59	ZZZZZZ	83.911	82.156	89.372	89.572	89.799	92.985	90.801	90.037
22:04	ZZZZZZ	78.564	79.055	82.433	84.799	85.071	84.361	86.298	85.279
22:10	ZZZZZZ	82.466	81.422	88.237	88.239	88.413	90.469	88.771	88.15
22:15	ZZZZZZ	87.129	83.612	91.899	90.502	91.833	95.301	92.144	91.509
22:21	MA51710-CCVA4	87.613	91.083	90.155	90.248	93.628	92.098	90.746	94.051
22:26	MA51710-CCB4	85.089	83.692	89.532	87.752	89.342	91.887	89.437	89.504
22:32	ZZZZZZ	89.992	83.453	95.217	94.199	93.962	98.722	95.571	93.737
22:37	ZZZZZZ	91.331	87.643	87.867	94.13	95.686	90.801	95.004	95.401
22:43	ZZZZZZ	92.228	87.678	96.086	93.9	95.201	98.03	95.51	95.741
22:49	ZZZZZZ	86.483	84.881	91.408	89.092	89.048	90.709	86.948	88.644
22:54	ZZZZZZ	93.735	89.009	97.909	93.322	97.168	100.256	93.583	96.733
23:00	ZZZZZZ	88.986	86.256	91.411	89.333	92.849	94.006	90.85	93.094
23:05	ZZZZZZ	88.585	84.926	91.138	89.79	92.209	94.995	92.037	92.097
23:11	ZZZZZZ	91.991	83.025	94.757	91.283	94.503	97.762	92.824	94.869
23:16	MA51710-CCVA5	84.908	84.922	90.194	89.969	89.903	92.334	89.849	89.933
23:22	MA51710-CCB5	87.456	85.658	90.384	91.415	90.733	92.326	92.681	90.852
23:27	JD36682-2	89.191	87.656	92.446	91.512	93.786	95.372	92.306	92.557
23:33	JD36682-3	89.287	87.176	92.732	90.054	93.195	95.155	91.494	92.965
23:38	JD36682-4	88.29	85.858	91.854	90.38	91.552	93.622	90.802	91.836
23:44	JD36682-4	92.501	88.063	88.141	91.977	95.201	93.799	93.235	95.64
23:50	JD36682-5	79.251	79.116	86.702	88.905	86.046	89.397	91.461	85.901

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
23:55	JD36682-5	82.204	74.539	94.535	92.712	84.806	98.047	93.551	84.313
00:01	JD36682-6	81.071	81.346	86.263	90.141	87.973	89.903	91.25	87.553
00:06	JD36682-6	94.084	88.395	94.833	89.522	95.606	97.327	91.65	95.585
00:12	MA51710-CCVA6	87.937	85.369	92.598	91.808	90.77	91.478	90.329	91.044
00:17	MA51710-CCB6	78.972	74.912	92.517	92.025	80.871	93.813	92.802	80.422
00:23	ZZZZZZ	84.02	83.156	84.833	92.436	88.617	86.08	92.449	88.48
00:28	ZZZZZZ	83.322	83.172	87.502	91.265	88.611	89.043	91.514	88.279
00:34	MP30440-S1	81.082	81.333	86.692	91.714	87.402	88.218	91.112	87.265
00:39	MP30440-S2	83.233	83.358	88.144	91.789	89.232	90.12	91.691	89.396
00:45	JD36624-5	84.614	84.125	88.647	92.035	90.283	89.574	92.156	89.511
00:51	MP30440-SD1	93.315	89.139	94.027	89.659	94.637	95.209	89.534	95.067
00:56	MP30440-S1	No results reported for the elements associated with this internal standard.							
01:02	MP30440-S2	No results reported for the elements associated with this internal standard.							
01:07	MA51710-CCVA7	87.194	84.981	86.907	88.886	89.403	88.776	89.128	89.679
01:13	MA51710-CCB7	88.564	84.738	89.876	84.45	89.534	91.636	86.462	88.944

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
17:41	MA51710-STD1	100	100	100	100	100	100	100	100
17:47	MA51710-STD2	100	100	100	100	100	100	100	100
17:53	MA51710-STD3	100	100	100	100	100	100	100	100
17:58	MA51710-STD4	100.474	100.721	94.174	101.34	99.91	93.558	100.764	93.86
18:04	MA51710-STD5	100.355	100.409	95.065	100.814	100.122	93.844	99.777	94.856
18:09	MA51710-STD6	100.111	100.413	94.59	100.922	99.672	93.787	100.232	94.467
18:15	MA51710-STD7	99.268	99.114	84.094	99.918	98.721	84.488	99.221	86.153
18:21	MA51710-STD8	98.116	97.964	92.742	98.798	97.617	92.185	98.005	93.666
18:26	MA51710-STD9	98.234	99.343	92.514	99.198	98.575	92.97	99.252	94.036
18:32	MA51710-STD10	100.844	101.324	93.605	101.081	100.353	94.429	100.824	94.92
18:37	MA51710-STD11	100.788	100.49	92.46	99.979	98.686	93.821	100.418	94.251
18:43	MA51710-STD12	99.821	95.734	91.728	99.55	92.604	93.019	100.14	94.556
18:48	MA51710-STD13	100.683	99.758	94.745	101.182	99.344	94.663	100.223	94.446
18:54	MA51710-STD14	100	100	100	100	100	100	100	100
18:59	MA51710-ICVA1	101.155	98.357	92.815	98.331	96.438	93.534	99.701	95.375
19:05	MA51710-ICV1	100.324	99.69	95.502	100	99.201	95.069	100.442	96.348
19:11	MA51710-ICB1	101.029	100.073	96.006	99.891	100.348	96.045	101.18	96.05
19:16	MA51710-CCVA1	101.479	98.611	93.754	99.385	96.792	94.306	100.795	95.972
19:22	MA51710-CCB1	100.556	99.339	96.328	100.629	99.617	95.581	100.411	96.906
19:28	ZZZZZZ	142.659 !	158.924 !	411.83 !	146.872 !	160.499 !	416.104 !	141.333 !	423.267 !
19:34	MA51710-CRI1	No results reported for the elements associated with this internal standard.							
19:42	MA51710-CRI2	98.958	101.221	97.168	97.967	100.651	98.507	98.941	97.309
19:48	MA51710-ICSA1	83.799	88.513	81.741	79.273	82.473	83.064	78.988	90.115
19:54	MA51710-ICSAB1	No results reported for the elements associated with this internal standard.							
20:01	MA51710-ICSAB2	87.435	85.748	72.872	82.43	80.544	80.034	82.439	88.074
20:07	ZZZZZZ	88.83	92.153	87.383	90.861	93.163	88.136	91.429	92.174
20:13	MA51710-CCVA2	91.893	93.478	86.276	91.607	92.351	88.982	92.433	93.594
20:18	MA51710-CCB2	86.144	95.436	90.384	87.469	95.994	91.409	88.008	93.69
20:24	ZZZZZZ	93.848	96.215	92.974	94.972	96.347	94.254	94.916	96.841
20:30	MP30441-B1	89.488	94.212	87.953	91.233	94.774	88.719	90.679	93.257
20:35	MP30441-S1	No results reported for the elements associated with this internal standard.							
20:41	MP30441-S2	No results reported for the elements associated with this internal standard.							
20:46	ZZZZZZ	95.537	89.377	89.68	95.274	90.234	91.697	96.794	93.326

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
20:52	MP30441-S1	92.981	90.305	86.966	91.925	90.582	90.976	95.277	93.694
20:57	MP30441-S2	90.739	88.821	81.438	90.941	89.669	83.649	94.011	87.447
21:03	JD36533-1	91.726	88.656	85.445	90.41	89.117	88.448	94.047	92.511
21:09	MP30441-SD1	90.713	89.04	76.921	90.395	90.151	80.235	94.303	83.545
21:14	MA51710-CCVA3	88.041	87.512	82.746	88.158	87.806	85.335	90.849	89.976
21:20	MA51710-CCB3	89.033	89.304	86.652	90.107	91.62	87.552	90.969	91.773
21:25	ZZZZZZ	93.042	91.643	87.82	92.692	90.986	91.041	95.528	93.379
21:31	ZZZZZZ	90.937	90.759	85.938	89.425	90.245	89.075	92.72	92.276
21:36	ZZZZZZ	92.998	90.89	86.51	91.799	90.745	89.47	94.889	93.378
21:42	ZZZZZZ	81.125	80.887	68.808 !	77.157	77.472	76.794	82.87	84.844
21:47	ZZZZZZ	88.281	88.721	84.166	86.08	86.757	88.544	90.326	93.229
21:53	ZZZZZZ	97.928	94.639	91.411	96.071	93.573	94.412	99.412	96.913
21:59	ZZZZZZ	93.239	90.996	87.475	91.813	90.7	90.42	94.922	93.921
22:04	ZZZZZZ	84.16	85.981	82.952	83.887	85.526	86.767	86.587	91.62
22:10	ZZZZZZ	90.352	89.181	87.156	90.082	88.365	90.883	93.56	94.575
22:15	ZZZZZZ	94.926	92.885	90.512	95.278	92.801	93.198	97.531	96.619
22:21	MA51710-CCVA4	92.282	91.176	93.089	91.689	90.333	95.178	94.034	99.716
22:26	MA51710-CCB4	92.493	89.434	90.601	93.346	90.635	92.776	95.036	95.685
22:32	ZZZZZZ	99.171	95.723	91.647	98.116	95.217	93.467	101.126	95.47
22:37	ZZZZZZ	90.797	95.381	92.772	88.758	94.583	96.063	91.868	98.165
22:43	ZZZZZZ	97.912	94.78	93.395	96.937	94.081	96.051	100.299	99.085
22:49	ZZZZZZ	91.172	87.056	84.25	87.388	83.421	89.293	92.946	93.407
22:54	ZZZZZZ	100.381	94.257	94.971	98.883	93.697	97.488	101.867	100.509
23:00	ZZZZZZ	94.315	90.561	91.656	93.314	90.403	94.861	96.285	97.683
23:05	ZZZZZZ	94.901	91.314	91.014	93.465	91.179	94.543	96.036	97.716
23:11	ZZZZZZ	98.429	93.496	93.303	97.053	93.663	96.044	100.597	97.951
23:16	MA51710-CCVA5	92.822	90.328	88.32	92.715	90.252	90.637	95.055	95.783
23:22	MA51710-CCB5	93.012	91.829	92.636	94.272	94.128	93.658	95.445	96.96
23:27	JD36682-2	96.05	92.658	91.713	93.851	92.144	94.58	96.992	97.33
23:33	JD36682-3	95.261	92.383	91.853	94.426	91.593	95.105	97.635	98.153
23:38	JD36682-4	93.936	91.408	90.901	93.578	91.171	93.621	95.717	97.929
23:44	JD36682-4	94.344	93.145	94.378	93.076	93.473	96.081	95.975	99.561
23:50	JD36682-5	90.282	91.688	83.379	87.183	87.275	86.472	89.446	92.517

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
23:55	JD36682-5	97.738	93.899	80.042	97.891	94.129	84.084	99.915	86.836
00:01	JD36682-6	89.786	91.173	84.551	87.737	88.309	88.4	89.603	94.235
00:06	JD36682-6	97.624	92.194	95.462	97.121	91.988	98.034	99.262	100.847
00:12	MA51710-CCVA6	92.225	90.021	88.825	92.586	90.086	91.853	95.111	96.825
00:17	MA51710-CCB6	93.661	92.722	80.563	95.336	94.362	82.155	96.638	84.58
00:23	ZZZZZZ	86.695	92.366	90.094	87.593	93.448	91.842	88.445	95.821
00:28	ZZZZZZ	89.272	91.631	87.262	90.157	91.52	90.425	91.118	95.657
00:34	MP30440-S1	88.087	91.407	82.175	85.789	87.352	86.708	88.218	93.676
00:39	MP30440-S2	89.733	91.45	83.853	87.434	87.797	87.886	89.737	95.229
00:45	JD36624-5	90.186	92.339	85.75	88.003	87.874	90.121	89.553	96.13
00:51	MP30440-SD1	95.845	88.918	93.919	95.347	88.447	96.65	96.862	100.571
00:56	MP30440-S1	No results reported for the elements associated with this internal standard.							
01:02	MP30440-S2	No results reported for the elements associated with this internal standard.							
01:07	MA51710-CCVA7	88.715	88.642	88.188	87.653	88.871	90.737	90.256	94.757
01:13	MA51710-CCB7	92.1	86.975	90.24	92.823	87.788	92.452	94.519	96.276

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Rhodium (103-3)	70-130 %	70-130 %
Istd#14	Indium (115-1)	70-130 %	70-130 %
Istd#15	Indium (115-2)	70-130 %	70-130 %
Istd#16	Terbium (159-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
17:41	MA51710-STD1	100	100	100	100	100	100
17:47	MA51710-STD2	100	100	100	100	100	100
17:53	MA51710-STD3	100	100	100	100	100	100
17:58	MA51710-STD4	100.908	100.429	93.545	100.756	93.962	99.874
18:04	MA51710-STD5	100.18	100.231	94.078	100.441	93.993	99.989
18:09	MA51710-STD6	100.885	100.173	93.488	100.659	94.107	100.557
18:15	MA51710-STD7	99.874	100.07	85.815	100.239	85.733	100.248
18:21	MA51710-STD8	99.325	99.159	92.521	99.571	93.498	99.772
18:26	MA51710-STD9	99.97	99.525	93.369	99.764	94.167	99.577
18:32	MA51710-STD10	101.668	101.476	94.972	101.821	94.685	100.777
18:37	MA51710-STD11	102.165	100.543	94.359	101.501	92.672	99.585
18:43	MA51710-STD12	101.214	95.824	94.34	101.372	83.906	97.484
18:48	MA51710-STD13	101.383	100.501	93.835	101.001	94.161	100.757
18:54	MA51710-STD14	100	100	100	100	100	100
18:59	MA51710-ICVA1	100.894	99.687	95.591	101.221	93.414	98.727
19:05	MA51710-ICV1	99.849	99.534	96.072	99.146	96.408	98.971
19:11	MA51710-ICB1	100.062	99.852	96.995	99.537	95.988	99.582
19:16	MA51710-CCVA1	101.701	99.486	96.895	102.069	94.199	99.483
19:22	MA51710-CCB1	100.407	99.23	97.393	99.773	96.812	99.255
19:28	ZZZZZZ	148.655 !	165.829 !	427.266 !	148.677 !	408.866 !	147.092 !
19:34	MA51710-CRI1	No results reported for the elements associated with this internal standard.					
19:42	MA51710-CRI2	98.476	101	98.228	97.826	97.525	97.26
19:48	MA51710-ICSA1	86.426	91.338	90.085	86.501	76.806	80.041
19:54	MA51710-ICSAB1	No results reported for the elements associated with this internal standard.					
20:01	MA51710-ICSAB2	91.368	90.6	88.354	91.062	76.047	84.889
20:07	ZZZZZZ	94.114	95.495	92.939	94.385	90.501	95.16
20:13	MA51710-CCVA2	96.752	96.997	93.636	97.082	91.761	95.969
20:18	MA51710-CCB2	89.977	97.995	94.434	89.405	94.669	90.506
20:24	ZZZZZZ	97.047	98.142	96.305	97.41	97.213	97.793
20:30	MP30441-B1	95.951	99.296	93.531	95.717	97.679	99.158
20:35	MP30441-S1	No results reported for the elements associated with this internal standard.					
20:41	MP30441-S2	No results reported for the elements associated with this internal standard.					
20:46	ZZZZZZ	98.549	93.586	94.16	99.113	94.549	99.677

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
20:52	MP30441-S1	98.429	96.599	94.499	99.258	74.47	96.214
20:57	MP30441-S2	96.519	95.057	88.848	97.13	73.04	96.366
21:03	JD36533-1	96.239	94.283	93.152	96.588	75.795	96.369
21:09	MP30441-SD1	95.753	94.523	84.054	96.407	62.988 !	95.525
21:14	MA51710-CCVA3	94.55	94.354	90.657	95.202	86.132	94.402
21:20	MA51710-CCB3	94.085	95.427	92.559	94.29	93.396	95.471
21:25	ZZZZZZ	97.117	95.974	94.615	97.829	82.907	98.91
21:31	ZZZZZZ	95.226	95.966	93.061	95.551	82.067	95.756
21:36	ZZZZZZ	96.978	95.949	94.038	97.356	82.476	98.757
21:42	ZZZZZZ	88.582	88.075	86.232	89.302	76.004	83.535
21:47	ZZZZZZ	95.134	95.139	93.879	95.213	82.75	92.693
21:53	ZZZZZZ	102.106	98.841	97.938	102.656	83.527	101.845
21:59	ZZZZZZ	98.276	96.994	94.727	99.36	93.954	99.019
22:04	ZZZZZZ	91.759	94.127	92.773	92.316	85.603	91.698
22:10	ZZZZZZ	97.194	95.592	95.595	97.815	93.891	98.297
22:15	ZZZZZZ	99.154	97.941	97.176	99.94	81.32	99.095
22:21	MA51710-CCVA4	98.617	96.988	100.679	98.807	100.253	98.2
22:26	MA51710-CCB4	97.307	94.809	96.189	97.525	98.291	99.173
22:32	ZZZZZZ	102.065	100.055	96.318	102.539	88.525	103.179
22:37	ZZZZZZ	93.48	99.762	98.395	93.529	94.438	93.462
22:43	ZZZZZZ	101.619	99.289	99.252	102.198	91.325	102.895
22:49	ZZZZZZ	96.782	93.373	94.581	97.513	85.16	92.695
22:54	ZZZZZZ	103.574	98.862	101.059	103.55	88.95	102.203
23:00	ZZZZZZ	99.078	96.717	98.835	99.806	97.471	99.964
23:05	ZZZZZZ	99.799	97.253	98.631	100.466	97.873	100.899
23:11	ZZZZZZ	102.074	98.309	98.563	102.36	75.404	99.093
23:16	MA51710-CCVA5	99.227	97.193	96.686	99.838	96.677	99.011
23:22	MA51710-CCB5	97.649	97.795	97.566	97.804	99.935	99.079
23:27	JD36682-2	100.029	98.102	98.998	100.046	99.264	100.618
23:33	JD36682-3	99.803	96.812	99.01	100.725	98.87	100.962
23:38	JD36682-4	99.399	97.707	99.001	100.04	98.639	100.949
23:44	JD36682-4	97.152	98.252	100.109	97.098	94.117	93.915
23:50	JD36682-5	95.435	96.261	93.685	95.845	98.511	98.795

INTERNAL STANDARD SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Ca,Mg,Mn,Se,Na

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
23:55	JD36682-5	102.266	99.288	87.317	102.696	83.929	102.738
00:01	JD36682-6	96.557	97.477	95.594	97.169	96.357	96.652
00:06	JD36682-6	102.059	96.666	101.453	102.197	100.424	102.803
00:12	MA51710-CCVA6	99.431	97.574	97.66	99.569	98.004	98.935
00:17	MA51710-CCB6	99.253	98.385	85.947	99.542	82.09	100.395
00:23	ZZZZZZ	92.647	98.602	96.746	93.363	99.751	96.099
00:28	ZZZZZZ	97.748	97.804	96.956	97.874	97.638	98.239
00:34	MP30440-S1	95.877	96.989	95.234	96.817	89.311	93.473
00:39	MP30440-S2	96.87	97.055	96.462	97.273	89.842	93.558
00:45	JD36624-5	96.42	96.835	96.974	97.217	94.499	93.745
00:51	MP30440-SD1	100.414	94.068	101.396	100.844	100.926	100.338
00:56	MP30440-S1	No results reported for the elements associated with this internal standard.					
01:02	MP30440-S2	No results reported for the elements associated with this internal standard.					
01:07	MA51710-CCVA7	93.745	95.547	95.929	94.772	96.156	94.24
01:13	MA51710-CCB7	96.682	91.717	97.028	97.025	97.928	97.657

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	70-130 %	70-130 %
Istd#18	Terbium (159-3)	70-130 %	70-130 %
Istd#19	Holmium (165-1)	70-130 %	70-130 %
Istd#20	Holmium (165-2)	70-130 %	70-130 %
Istd#21	Bismuth (209-1)	70-130 %	70-130 %
Istd#22	Bismuth (209-2)	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51710 Units: ug/l

Time: / Sample ID:			19:11 ICB1		19:22 CCB1		20:18 CCB2		21:20 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	anr							
Antimony	2.0	.085								
Arsenic	0.50	.025	anr							
Barium	1.0	.009	0.00272	<1.0	0.00256	<1.0	0.00568	<1.0	0.00419	<1.0
Beryllium	0.50	.005								
Boron	25	.85								
Cadmium	0.50	.01	anr							
Calcium	250	3.6	-0.143	<250	-0.226	<250	1.70	<250	0.0233	<250
Chromium	1.0	.018								
Cobalt	0.50	.003								
Copper	2.0	.024	anr							
Iron	25	.24	anr							
Lead	0.50	.008	anr							
Magnesium	250	.19	-0.145	<250	0.0122	<250	1.81	<250	0.323	<250
Manganese	1.0	.012	-0.00260	<1.0	-0.00310	<1.0	-0.00130	<1.0	-0.000545	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017								
Potassium	250	.78	anr							
Selenium	0.50	.044	0.0799	<0.50	0.404	<0.50	0.352	<0.50	0.428	<0.50
Silver	0.50	.004								
Sodium	250	1.5	-0.464	<250	-0.686	<250	3.45	<250	21.2	<250
Strontium	5.0	.014								
Thallium	0.50	.002	anr							
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013								
Zinc	5.0	.078	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51710 Units: ug/l

Time:			22:26		23:22		00:17	
Sample ID:			CCB4		CCB5		CCB6	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	25	.42	anr					
Antimony	2.0	.085						
Arsenic	0.50	.025	anr					
Barium	1.0	.009	0.00560	<1.0	0.00194	<1.0	0.00990	<1.0
Beryllium	0.50	.005						
Boron	25	.85						
Cadmium	0.50	.01	anr					
Calcium	250	3.6	-0.0174	<250	-0.738	<250	1.16	<250
Chromium	1.0	.018						
Cobalt	0.50	.003						
Copper	2.0	.024	anr					
Iron	25	.24	anr					
Lead	0.50	.008	anr					
Magnesium	250	.19	0.355	<250	0.0324	<250	0.315	<250
Manganese	1.0	.012	0.00746	<1.0	-0.00737	<1.0	0.00119	<1.0
Molybdenum	1.0	.017						
Nickel	1.0	.017						
Potassium	250	.78	anr					
Selenium	0.50	.044	0.372	<0.50	0.361	<0.50	0.368	<0.50
Silver	0.50	.004						
Sodium	250	1.5	8.31	<250	5.27	<250	3.75	<250
Strontium	5.0	.014						
Thallium	0.50	.002	anr					
Tin	5.0	.041						
Titanium	1.0	.11						
Vanadium	1.0	.013						
Zinc	5.0	.078	anr					

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51710 Units: ug/l

Time:		18:59			19:05			19:16	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony									
Arsenic	anr								
Barium	60	61.7	102.8				50	51.7	103.4
Beryllium									
Boron									
Cadmium	anr								
Calcium	5500	5400	98.2				5000	4980	99.6
Chromium									
Cobalt									
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	5500	5490	99.8				5000	5040	100.8
Manganese	60	59.7	99.5				50	50.1	100.2
Molybdenum									
Nickel									
Potassium	anr								
Selenium	260	252	96.9				200	199	99.5
Silver									
Sodium	5500	5470	99.5				5000	5010	100.2
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51710 Units: ug/l

Time:		20:13			21:14			22:21	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony									
Arsenic	anr								
Barium	50	50.2	100.4	50	49.1	98.2	50	45.9	91.8
Beryllium									
Boron									
Cadmium	anr								
Calcium	5000	4990	99.8	5000	4870	97.4	5000	4470	89.4*(a)
Chromium									
Cobalt									
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	5000	4970	99.4	5000	4980	99.6	5000	4900	98.0
Manganese	50	50.6	101.2	50	50.5	101.0	50	49.8	99.6
Molybdenum									
Nickel									
Potassium	anr								
Selenium	200	199	99.5	200	202	101.0	200	198	99.0
Silver									
Sodium	5000	4930	98.6	5000	4960	99.2	5000	4870	97.4
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51710 Units: ug/l

Time:		23:16			00:12	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony						
Arsenic	anr					
Barium	50	48.6	97.2	50	48.1	96.2
Beryllium						
Boron						
Cadmium	anr					
Calcium	5000	4870	97.4	5000	4920	98.4
Chromium						
Cobalt						
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium	5000	4950	99.0	5000	4890	97.8
Manganese	50	50.1	100.2	50	49.0	98.0
Molybdenum						
Nickel						
Potassium	anr					
Selenium	200	200	100.0	200	199	99.5
Silver						
Sodium	5000	4930	98.6	5000	4890	97.8
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium						
Zinc	anr					

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51710 Units: ug/l

Time:			19:42	
Sample ID:	CRI	CRIA	CRI2	
Metal	True	True	Results	% Rec
Aluminum	25	25	anr	
Antimony	2.0	0.25		
Arsenic	0.50	0.50	anr	
Barium	1.0	0.50	1.01	101.0
Beryllium	0.50	0.25		
Boron	25	2.5		
Cadmium	0.50	0.25	anr	
Calcium	250	125	247	98.8
Chromium	1.0	2.0		
Cobalt	0.50	0.25		
Copper	2.0	2.0	anr	
Iron	25	25	anr	
Lead	0.50	0.25	anr	
Magnesium	250	125	264	105.6
Manganese	1.0	0.25	1.01	101.0
Molybdenum	1.0	0.50		
Nickel	1.0	2.0		
Potassium	250	125	anr	
Selenium	0.50	0.50	0.430	86.0
Silver	0.50	1.0		
Sodium	250	125	260	104.0
Strontium	5.0	0.50		
Thallium	0.50	0.25	anr	
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0		
Zinc	5.0	2.0	anr	

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51710 Units: ug/l

Time:			19:48		20:01	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	96700	96.7	92100	92.1
Antimony			-0.498		-0.481	
Arsenic		20	0.0164		18.7	93.5
Barium			0.101		0.117	
Beryllium			-0.00730		-0.0134	
Boron		50	1.80		52.0	104.0
Cadmium		20	-0.380		19.1	95.5
Calcium	100000	100000	97800	97.8	101000	101.0
Chromium		20	0.906		20.7	103.5
Cobalt		20	0.124		19.4	97.0
Copper		20	0.149		18.5	92.5
Iron	100000	100000	98900	98.9	95800	95.8
Lead			0.0331		0.0462	
Magnesium	100000	100000	101000	101.0	96600	96.6
Manganese		20	0.260		20.0	100.0
Molybdenum	2000	2000	2160HH	108.0	2360HH	118.0
Nickel		20	0.513		18.7	93.5
Potassium	100000	100000	104000	104.0	98700	98.7
Selenium		20	0.00491		19.4	97.0
Silver		20	0.00102		18.4	92.0
Sodium	100000	100000	102000	102.0	96600	96.6
Strontium	2000	2000	2160HH	108.0	2360HH	118.0
Thallium			-0.0118		-0.0108	
Tin	2000	2000	2130HH	106.5	2000HH	100.0
Titanium	2000	2000	1890HH	94.5	1800HH	90.0
Vanadium		20	0.0242		21.0	105.0
Zinc		20	0.236		19.3	96.5

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30399 Methods: SW846 7471B
Matrix Type: SOLID Units: mg/kg

Prep Date: 12/16/21

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.033	.0057	.015	0.0035	<0.033

Associated samples MP30399: JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30399
Matrix Type: SOLID

Methods: SW846 7471B
Units: mg/kg

Prep Date: 12/16/21

Metal	JD36639-25 Original	MS	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.016	0.35	0.351	95.2	80-120

Associated samples MP30399: JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30399 Methods: SW846 7471B
Matrix Type: SOLID Units: mg/kg

Prep Date: 12/16/21

Metal	JD36639-25 Original	MSD	Spikelot HGPWS1	% Rec	MSD RPD	QC Limit
Mercury	0.016	0.36	0.351	98.1	2.8	20

Associated samples MP30399: JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30399
Matrix Type: SOLID

Methods: SW846 7471B
Units: mg/kg

Prep Date: 12/16/21

Metal	BSP Result	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.33	0.333	99.0	80-120

Associated samples MP30399: JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30421 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/17/21

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.034	.095	-0.045	<0.20

Associated samples MP30421: JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30421
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/17/21

Metal	JD36639-5 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	1.9	2	95.0	75-125

Associated samples MP30421: JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30421 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/17/21

Metal	JD36639-5 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.2	2	110.0	14.6	20

Associated samples MP30421: JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30421
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/17/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	1.9	2	95.0	80-120

Associated samples MP30421: JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30441
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.83	32	-14	<50
Antimony	4.0	.17	1.7	-0.67	<4.0
Arsenic	1.0	.05	.39	-0.052	<1.0
Barium	2.0	.018	.73	0.013	<2.0
Beryllium	1.0	.01	.15	-0.0079	<1.0
Boron	50	1.7	14		
Cadmium	1.0	.02	.17	0.043	<1.0
Calcium	500	7.2	200	-3.1	<500
Chromium	2.0	.036	.62	-0.028	<2.0
Cobalt	1.0	.006	.17	0.0060	<1.0
Copper	4.0	.048	1.9	0.22	<4.0
Iron	50	.47	19	0.56	<50
Lead	1.0	.016	.52	-0.0098	<1.0
Magnesium	500	.38	46	-0.24	<500
Manganese	2.0	.024	.63	0.069	<2.0
Molybdenum	2.0	.034	.45		
Nickel	2.0	.034	.95	-0.0092	<2.0
Potassium	500	1.6	68	-2.9	<500
Selenium	1.0	.088	.55	-0.29	<1.0
Silver	1.0	.008	.16	0.0063	<1.0
Sodium	500	3	470	-0.89	<500
Strontium	10	.028	2.4		
Thallium	1.0	.004	.17	0.0092	<1.0
Tin	10	.082	2.6		
Titanium	2.0	.22	1.6		
Vanadium	2.0	.026	1.8	-0.036	<2.0
Zinc	10	.16	5.4	-0.079	<10

Associated samples MP30441: JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30441
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	JD36533-1 Original	MS	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	0.0	4030	4000	100.8	75-125
Antimony	0.0	96.5	80	120.6	75-125
Arsenic	0.17	75.5	80	94.2	75-125
Barium	7.3	103	80	119.6	75-125
Beryllium	0.017	92.7	80	115.9	75-125
Boron					
Cadmium	0.065	77.3	80	96.5	75-125
Calcium	5490	10400	4000	122.8	75-125
Chromium	9.7	94.8	80	106.4	75-125
Cobalt	0.097	80.5	80	100.5	75-125
Copper	3.1	79.1	80	95.0	75-125
Iron	47.5	4250	4000	105.1	75-125
Magnesium	8460	12400	4000	98.5	75-125
Manganese	0.85	85.2	80	105.4	75-125
Molybdenum					
Nickel	14.5	90.5	80	95.0	75-125
Potassium	5680	9600	4000	98.0	75-125
Selenium	0.49	396	400	98.9	75-125
Silver	0.019	94.2	80	117.7	75-125
Sodium	2950000	2920000	4000	-750.0(a	75-125
Strontium					
Tin					
Titanium					
Vanadium	0.39	89.8	80	111.8	75-125
Zinc	2.6	67.9	80	81.6	75-125

Associated samples MP30441: JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30441
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	JD36533-1 Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum	0.0	3950	4000	98.8	2.0	20
Antimony	0.0	87.0	80	108.8	10.4	20
Arsenic	0.17	73.7	80	91.9	2.4	20
Barium	7.3	94.3	80	108.8	8.8	20
Beryllium	0.017	83.2	80	104.0	10.8	20
Boron						
Cadmium	0.065	76.5	80	95.5	1.0	20
Calcium	5490	9680	4000	104.8	7.2	20
Chromium	9.7	92.6	80	103.6	2.3	20
Cobalt	0.097	78.9	80	98.5	2.0	20
Copper	3.1	76.5	80	91.8	3.3	20
Iron	47.5	4140	4000	102.3	2.6	20
Magnesium	8460	12300	4000	96.0	0.8	20
Manganese	0.85	83.4	80	103.2	2.1	20
Molybdenum						
Nickel	14.5	87.8	80	91.6	3.0	20
Potassium	5680	9620	4000	98.5	0.2	20
Selenium	0.49	386	400	96.4	2.6	20
Silver	0.019	86.3	80	107.9	8.8	20
Sodium	2950000	3010000	4000	1500.0(a	3.0	20
Strontium						
Tin						
Titanium						
Vanadium	0.39	88.4	80	110.0	1.6	20
Zinc	2.6	65.0	80	78.0	4.4	20

Associated samples MP30441: JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30441
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	4130	4000	103.3	80-120
Antimony	94.1	80	117.6	80-120
Arsenic	82.8	80	103.5	80-120
Barium	89.5	80	111.9	80-120
Beryllium	91.0	80	113.8	80-120
Boron				
Cadmium	87.6	80	109.5	80-120
Calcium	4380	4000	109.5	80-120
Chromium	91.4	80	114.3	80-120
Cobalt	91.2	80	114.0	80-120
Copper	92.4	80	115.5	80-120
Iron	4390	4000	109.8	80-120
Lead	91.8	80	114.8	80-120
Magnesium	4250	4000	106.3	80-120
Manganese	91.7	80	114.6	80-120
Molybdenum				
Nickel	91.5	80	114.4	80-120
Potassium	4180	4000	104.5	80-120
Selenium	359	400	89.8	80-120
Silver	97.7	80	122.1*(a	80-120
Sodium	4300	4000	107.5	80-120
Strontium				
Thallium	90.7	80	113.4	80-120
Tin				
Titanium				
Vanadium	90.6	80	113.3	80-120
Zinc	79.0	80	98.8	80-120

Associated samples MP30441: JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Spike blank indicates possible high bias, but all associated samples < RL.

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30441
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	JD36533-1 Original	SDL 2:10	%DIF	QC Limits
Aluminum	0.00	0.00	NC	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	0.167	0.00	100.0(a)	0-10
Barium	7.25	7.29	0.5	0-10
Beryllium	0.0175	0.00	100.0(a)	0-10
Boron				
Cadmium	0.0648	0.189	192.5(a)	0-10
Calcium	5490	5490	0.0	0-10
Chromium	9.70	10.2	4.9	0-10
Cobalt	0.0968	0.135	39.1 (a)	0-10
Copper	3.06	4.85	58.5*(b)	0-10
Iron	47.5	61.0	28.6*(b)	0-10
Lead	0.0739	0.00	100.0(a)	0-10
Magnesium	8460	8730	3.2	0-10
Manganese	0.850	1.12	31.8 (a)	0-10
Molybdenum				
Nickel	14.5	15.3	5.2	0-10
Potassium	5680	5780	1.7	0-10
Selenium	0.490	0.00	100.0(a)	0-10
Silver	0.0194	0.00	100.0(a)	0-10
Sodium	2950000	3050000	3.5	0-10
Strontium				
Thallium	0.0206	0.00	100.0(a)	0-10
Tin				
Titanium				
Vanadium	0.395	0.196	50.3 (a)	0-10
Zinc	2.58	2.46	4.6	0-10

Associated samples MP30441: JD36682-2, JD36682-3, JD36682-4, JD36682-5, JD36682-6

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30463
Matrix Type: SOLID

Methods: SW846 6020B
Units: mg/kg

Prep Date: 12/21/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	25	.21	7	0.40	<25
Antimony	1.0	.043	.44	0.13	<1.0
Arsenic	0.25	.013	.19	-0.0047	<0.25
Barium	0.50	.0045	.34	-0.00072	<0.50
Beryllium	0.25	.0025	.036	-0.00073	<0.25
Boron	13	.43	3.6		
Cadmium	0.25	.005	.049	-0.0034	<0.25
Calcium	130	1.8	54	7.2	<130
Chromium	1.0	.009	.72	0.0060	<1.0
Cobalt	0.25	.0015	.047	-0.0010	<0.25
Copper	1.0	.012	.69	-0.020	<1.0
Iron	25	.12	8.2	-0.43	<25
Lead	0.25	.004	.11	0.0020	<0.25
Magnesium	130	.096	33	-0.071	<130
Manganese	0.50	.006	.16	-0.024	<0.50
Molybdenum	0.50	.0085	.35		
Nickel	1.0	.0085	.64	-0.060	<1.0
Potassium	130	.39	32	-1.6	<130
Selenium	0.25	.022	.089	0.032	<0.25
Silver	0.25	.002	.062	0.00034	<0.25
Sodium	130	.76	38	0.31	<130
Strontium	2.5	.007	.49		
Thallium	0.25	.001	.049	-0.00024	<0.25
Tin	25	.021	8.6		
Titanium	1.0	.056	.41		
Vanadium	1.0	.0065	.45	0.0078	<1.0
Zinc	5.0	.039	2.8	0.48	<5.0

Associated samples MP30463: JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30463
Matrix Type: SOLID

Methods: SW846 6020B
Units: mg/kg

Prep Date: 12/21/21

Metal	JD36682-9 Original	MS	Spikelot MP6020SO3%	Rec	QC Limits
Aluminum	19800	26000	1290	481.1(a)	75-125
Antimony	0.0	7.9	25.8	29.9N(b)	75-125
Arsenic	10.0	30.9	25.8	81.1	75-125
Barium	66.2	91.3	25.8	97.4	75-125
Beryllium	1.8	26.5	25.8	95.8	75-125
Boron					
Cadmium	0.099	21.0	25.8	81.1	75-125
Calcium	13500	7710	1290	-449.3(a	75-125
Chromium	60.6	82.1	25.8	83.4	75-125
Cobalt	18.2	39.7	25.8	85.4	75-125
Copper	24.7	50.0	25.8	98.2	75-125
Iron	45800	37400	1290	-651.8(a	75-125
Lead	20.4	39.6	25.8	74.5N(b)	75-125
Magnesium	12400	10400	1290	-155.2(a	75-125
Manganese	818	541	25.8	-1074.8a	75-125
Molybdenum					
Nickel	25.9	50.7	25.8	96.2	75-125
Potassium	1000	2290	1290	102.2	75-125
Selenium	0.83	59.1	64.4	90.4	75-125
Silver	0.029	10.3	12.9	79.7	75-125
Sodium	117	1180	1290	82.5	75-125
Strontium					
Thallium	0.16	23.4	25.8	90.2	75-125
Tin					
Titanium					
Vanadium	101	112	25.8	42.7N(b)	75-125
Zinc	105	83.1	25.8	-85.0(a)	75-125

Associated samples MP30463: JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30463 Methods: SW846 6020B
Matrix Type: SOLID Units: mg/kg

Prep Date: 12/21/21

Metal	JD36682-9 Original	MSD	Spikelot MP6020SO3%	Rec	MSD RPD	QC Limit
Aluminum	19800	23900	1260	324.5(a)	8.4	20
Antimony	0.0	8.2	25.3	31.7N(b)	3.7	20
Arsenic	10.0	29.1	25.3	75.6	6.0	20
Barium	66.2	91.6	25.3	100.5	0.3	20
Beryllium	1.8	26.5	25.3	97.8	0.0	20
Boron						
Cadmium	0.099	20.8	25.3	81.9	1.0	20
Calcium	13500	4880	1260	-682.3(a	45.0 (c)	20
Chromium	60.6	75.3	25.3	58.2N(b)	8.6	20
Cobalt	18.2	37.4	25.3	78.0	6.0	20
Copper	24.7	45.8	25.3	83.5	8.8	20
Iron	45800	33000	1260	-1013.1a	12.5	20
Lead	20.4	41.7	25.3	84.3	5.2	20
Magnesium	12400	8610	1260	-300.0(a	18.8	20
Manganese	818	520	25.3	-1179.4a	4.0	20
Molybdenum						
Nickel	25.9	48.9	25.3	91.0	3.6	20
Potassium	1000	2360	1260	109.8	3.0	20
Selenium	0.83	59.6	63.2	93.0	0.8	20
Silver	0.029	10.3	12.6	81.3	0.0	20
Sodium	117	1200	1260	85.7	1.7	20
Strontium						
Thallium	0.16	24.0	25.3	94.3	2.5	20
Tin						
Titanium						
Vanadium	101	97.7	25.3	-13.1N(b	13.6	20
Zinc	105	82.0	25.3	-91.0(a)	1.3	20

Associated samples MP30463: JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
(c) High rpd due to possible sample nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30463
Matrix Type: SOLID

Methods: SW846 6020B
Units: mg/kg

Prep Date: 12/21/21

Metal	BSP Result	Spikelot MP6020SO3	% Rec	QC Limits
Aluminum	949	1000	94.9	80-120
Antimony	21.2	20	106.0	80-120
Arsenic	20.5	20	102.5	80-120
Barium	20.0	20	100.0	80-120
Beryllium	20.4	20	102.0	80-120
Boron				
Cadmium	18.7	20	93.5	80-120
Calcium	1150	1000	115.0	80-120
Chromium	21.4	20	107.0	80-120
Cobalt	20.7	20	103.5	80-120
Copper	20.4	20	102.0	80-120
Iron	953	1000	95.3	80-120
Lead	20.7	20	103.5	80-120
Magnesium	984	1000	98.4	80-120
Manganese	21.1	20	105.5	80-120
Molybdenum				
Nickel	20.6	20	103.0	80-120
Potassium	979	1000	97.9	80-120
Selenium	49.2	50	98.4	80-120
Silver	9.3	10	93.0	80-120
Sodium	977	1000	97.7	80-120
Strontium				
Thallium	19.6	20	98.0	80-120
Tin				
Titanium				
Vanadium	20.9	20	104.5	80-120
Zinc	20.0	20	100.0	80-120

Associated samples MP30463: JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30463 Methods: SW846 6020B
Matrix Type: SOLID Units: ug/l

Prep Date: 12/21/21

Metal	JD36682-9 Original	SDL 5:25	%DIF	QC Limits
Aluminum	161000	169000	4.6	0-10
Antimony	1.54	3.62	134.6(a)	0-10
Arsenic	88.5	89.2	9.3	0-10
Barium	540	582	8.0	0-10
Beryllium	14.5	15.1	4.1	0-10
Boron				
Cadmium	0.804	1.36	47.6 (a)	0-10
Calcium	110000	112000	2.4	0-10
Chromium	494	520	5.3	0-10
Cobalt	148	151	5.0	0-10
Copper	201	214	6.4	0-10
Iron	373000	393000	5.4	0-10
Lead	166	173	4.0	0-10
Magnesium	101000	106000	4.1	0-10
Manganese	6660	7230	8.6	0-10
Molybdenum				
Nickel	211	260	22.9*(b)	0-10
Potassium	7930	8200	3.4	0-10
Selenium	6.74	6.53	3.1	0-10
Silver	0.238	0.00	100.0(a)	0-10
Sodium	956	986	3.2	0-10
Strontium				
Thallium	1.30	1.22	5.9	0-10
Tin				
Titanium				
Vanadium	825	849	2.9	0-10
Zinc	856	947	10.7*(b)	0-10

Associated samples MP30463: JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

POST DIGESTATE SPIKE SUMMARY

Login Number: JD36682
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30463
Matrix Type: SOLID

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/21/21

Metal	Sample ml	Final ml	JD36682-9 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony	9.3	10			213.94	0.1	20	200	107.0	75-125
Arsenic										
Barium										
Beryllium										
Boron										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP30463: JD36682-7, JD36682-8, JD36682-9, JD36682-10, JD36682-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JD36682
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: JD36682-7 **Analyzed:** 14-DEC-21 by BG **Method:** SM2540 G 18TH ED MOD
ClientID: HOFF SED-4

Wet Weight (Total)	26.26	g
Tare Weight	20.31	g
Dry Weight (Total)	24.71	g
Solids, Percent	73.9	%

Sample: JD36682-8 **Analyzed:** 14-DEC-21 by BG **Method:** SM2540 G 18TH ED MOD
ClientID: HOFF SED-3

Wet Weight (Total)	33.32	g
Tare Weight	26.55	g
Dry Weight (Total)	32.1	g
Solids, Percent	82	%

Sample: JD36682-9 **Analyzed:** 14-DEC-21 by BG **Method:** SM2540 G 18TH ED MOD
ClientID: HOFF SED-2

Wet Weight (Total)	33.03	g
Tare Weight	24.14	g
Dry Weight (Total)	31.04	g
Solids, Percent	77.6	%

Sample: JD36682-10 **Analyzed:** 14-DEC-21 by BG **Method:** SM2540 G 18TH ED MOD
ClientID: HOFF SED-1

Wet Weight (Total)	32.11	g
Tare Weight	24.55	g
Dry Weight (Total)	30.5	g
Solids, Percent	78.7	%

Sample: JD36682-11 **Analyzed:** 14-DEC-21 by BG **Method:** SM2540 G 18TH ED MOD
ClientID: HOFF DUP-121321SED

Wet Weight (Total)	27.63	g
Tare Weight	21.04	g
Dry Weight (Total)	25.9	g
Solids, Percent	73.7	%

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Tetra Tech EC Inc.

Hoff VC- 336 Layfield Road, Perkiomenville, PA

SGS Job Number: JD35920

Sampling Dates: 11/29/21 - 11/30/21

Report to:

Tetra Tech EC Inc.
One Oxford Valley Suite 200
Langhorne, PA 19047
Jonathan.Dziekan@tetratech.com; Neb.Dedic@tetratech.com

ATTN: Jonathan Dziekan

Total number of pages in report: **716**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Mike Earp
General Manager

Client Service contact: Jadon Schiller 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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12.10: Prep QC MP30243: Cu 712

SGS North America Inc.

Sample Summary

Tetra Tech EC Inc.

Job No: JD35920

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD35920-1	11/30/21	12:00	MB	11/30/21	AQ	Trip Blank Water	TB-112921
JD35920-2	11/29/21	14:00	MB	11/30/21	AQ	Ground Water	HOFF MW-2DL
JD35920-2F	11/29/21	14:00	MB	11/30/21	AQ	Groundwater Filtered	HOFF MW-2DL
JD35920-3	11/29/21	15:35	MB	11/30/21	AQ	Ground Water	HOFF MW-2DU
JD35920-3F	11/29/21	15:35	MB	11/30/21	AQ	Groundwater Filtered	HOFF MW-2DU
JD35920-4	11/30/21	09:45	MB	11/30/21	AQ	Ground Water	HOFF MW-2S
JD35920-4F	11/30/21	09:45	MB	11/30/21	AQ	Groundwater Filtered	HOFF MW-2S
JD35920-5	11/30/21	11:55	MB	11/30/21	AQ	Ground Water	HOFF MW-7DL
JD35920-5F	11/30/21	11:55	MB	11/30/21	AQ	Groundwater Filtered	HOFF MW-7DL
JD35920-6	11/30/21	12:00	MB	11/30/21	AQ	Ground Water	HOFF DUP-113021
JD35920-6F	11/30/21	12:00	MB	11/30/21	AQ	Groundwater Filtered	HOFF DUP-113021

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Tetra Tech EC Inc.	**Job No:**	JD35920
Site:	Hoff VC- 336 Layfield Road, Perkiomenville, PA	**Report Date**	12/30/2021 3:27:16 P

On 11/30/2021, 5 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.5 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD35920 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V2V3430

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD35871-2MS, JD35871-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

MS Volatiles By Method SW846 8260D BY SIM

Matrix: AQ **Batch ID:** V3A7258

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35920-3DUP, JD35920-4MS were used as the QC samples indicated.
- Sample(s) JD35920-2 have surrogates outside control limits. Confirmation run for surrogate recoveries.
- JD35920-2 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ **Batch ID:** OP36899

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Butyl benzyl phthalate are outside control limits.
- OP36899-BSD: Recovery indicates possible low bias. Since balnk spike recoveries within control limits, data are qualified and reported.
- OP36899-BSD for 1,2,4,5-Tetrachlorobenzene: Analytical precision exceeds in-house control limits.
- JD35920-4 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD35920-2 for 4,6-Dinitro-o-cresol: Associated CCV outside of control limits high, sample was ND.
- OP36899-BS1 for Butyl benzyl phthalate: Outside of in house control limits.
- JD35920-5 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD35920-6 for Butyl benzyl phthalate: Associated CCV outside of control limits high.
- JD35920-6 for 4,6-Dinitro-o-cresol: Associated CCV outside of control limits high, sample was ND.
- JD35920-6 for 3,3'-Dichlorobenzidine: Associated CCV outside of control limits high, sample was ND.
- JD35920-6 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD35920-5 for Butyl benzyl phthalate: Associated CCV outside of control limits high.
- JD35920-5 for 3,3'-Dichlorobenzidine: Associated CCV outside of control limits high, sample was ND.
- JD35920-4 for Butyl benzyl phthalate: Associated CCV outside of control limits high.
- JD35920-2 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD35920-4 for 3,3'-Dichlorobenzidine: Associated CCV outside of control limits high, sample was ND.
- JD35920-2 for 3,3'-Dichlorobenzidine: Associated CCV outside of control limits high, sample was ND.
- JD35920-2 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD35920-5 for 4,6-Dinitro-o-cresol: Associated CCV outside of control limits high, sample was ND.
- JD35920-4 for 4,6-Dinitro-o-cresol: Associated CCV outside of control limits high, sample was ND.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: AQ **Batch ID:** OP36899A

- All samples were extracted within the recommended method holding time.
- Sample(s) JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- Blank Spike Recovery(s) for Benzo(b)fluoranthene are outside control limits.
- JD35920-3: Sample reextracted outside the holding time for confirmation.
- JD35920-4: Sample reextracted outside the holding time for confirmation.
- JD35920-6: Sample reextracted outside the holding time for confirmation.
- JD35920-2: Sample reextracted outside the holding time for confirmation.
- JD35920-5: Sample reextracted outside the holding time for confirmation.
- OP36899A-BS12 for Benzo(b)fluoranthene: Outside of in house control limits, but within reasonable method recovery limits.

Matrix: AQ **Batch ID:** OP37045A

- The data for SW846 8270E BY SIM meets quality control requirements.
- The following samples were extracted outside of holding time for method SW846 8270E BY SIM: JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6 Sample extracted outside the holding time. Confirmation run.
- JD35920-4: Sample extracted outside the holding time. Confirmation run.
- JD35920-3: Sample extracted outside the holding time. Confirmation run.
- JD35920-6: Sample extracted outside the holding time. Confirmation run.
- JD35920-5: Sample extracted outside the holding time. Confirmation run.
- JD35920-2: Sample extracted outside the holding time. Confirmation run.

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: AQ **Batch ID:** OP36897

- The data for SW846 8081B meets quality control requirements.
- Sample(s) JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6 have surrogates outside control limits. Probable cause due to matrix interference.
- JD35920-3: Confirmation run.
- JD35920-2: Confirmation run.
- JD35920-4: Confirmation run.
- JD35920-5: Confirmation run.
- JD35920-6: Confirmation run.
- JD35920-4 for Decachlorobiphenyl: Outside of in house control limits.
- JD35920-3 for Decachlorobiphenyl: Outside of in house control limits.
- JD35920-5 for Decachlorobiphenyl: Outside of in house control limits.
- JD35920-6 for Decachlorobiphenyl: Outside of in house control limits.
- JD35920-2 for Decachlorobiphenyl: Outside of in house control limits.

Matrix: AQ **Batch ID:** OP37193

- All method blanks for this batch meet method specific criteria.
- The following samples were extracted outside of holding time for method SW846 8081B: JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6 Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.
- Sample(s) JD35920-3 have surrogates outside control limits. Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.
- JD35920-5: Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.
- JD35920-6: Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.
- JD35920-2: Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.
- JD35920-4: Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.
- JD35920-3: Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.
- OP37193-BSD for Dieldrin: Analytical precision exceeds in-house control limits.
- OP37193-BSD for 4,4'-DDE: Analytical precision exceeds in-house control limits.
- OP37193-BS1 for Endosulfan-II: Reported from 2nd signal. 1st signal used for confirmation.
- OP37193-BSD for Endrin aldehyde: Analytical precision exceeds in-house control limits.
- OP37193-BSD for Heptachlor epoxide: Analytical precision exceeds in-house control limits.

Metals Analysis By Method SW846 6020B

Matrix:	AQ	Batch ID:	MP30105

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35834-3FMS, JD35834-3FMSD, JD35834-3FSDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Nickel, Vanadium, Zinc, Arsenic, Chromium, Manganese are outside control limits for sample MP30105-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix:	AQ	Batch ID:	MP30243

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35920-5MS, JD35920-5MSD, JD35920-5SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Copper are outside control limits for sample MP30243-SD1. RPD acceptable due to low duplicate and sample concentrations.

Metals Analysis By Method SW846 7470A

Matrix:	AQ	Batch ID:	MP30123

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD35914-1MS, JD35914-1MSD were used as the QC samples for metals.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JD35920
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/29/21 thru 11/30/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD35920-1	**TB-112921**					
1,4-Dioxane		0.21 J	0.40	0.095	ug/l	SW846 8260D BY SIM
JD35920-2	**HOFF MW-2DL**					
Benzo(a)pyrene [a]		0.0232 J	0.034	0.021	ug/l	SW846 8270E BY SIM
Fluoranthene [b]		0.0413 JB	0.069	0.034	ug/l	SW846 8270E BY SIM
Phenanthrene [b]		0.0496 JB	0.069	0.034	ug/l	SW846 8270E BY SIM
Aluminum		176	50		ug/l	SW846 6020B
Arsenic		5.7	1.0		ug/l	SW846 6020B
Barium		12.2	2.0		ug/l	SW846 6020B
Calcium		73400	2500		ug/l	SW846 6020B
Chromium		145	2.0		ug/l	SW846 6020B
Cobalt		7.6	1.0		ug/l	SW846 6020B
Copper		4.0	4.0		ug/l	SW846 6020B
Iron		1520	50		ug/l	SW846 6020B
Magnesium		23000	2500		ug/l	SW846 6020B
Manganese		30.8	2.0		ug/l	SW846 6020B
Nickel		208	10		ug/l	SW846 6020B
Potassium		1290	500		ug/l	SW846 6020B
Sodium		19500	500		ug/l	SW846 6020B
JD35920-2F	**HOFF MW-2DL**					
Arsenic		5.1	1.0		ug/l	SW846 6020B
Barium		8.7	2.0		ug/l	SW846 6020B
Calcium		70100	2500		ug/l	SW846 6020B
Cobalt		3.0	1.0		ug/l	SW846 6020B
Iron		58.3	50		ug/l	SW846 6020B
Magnesium		22200	2500		ug/l	SW846 6020B
Manganese		6.1	2.0		ug/l	SW846 6020B
Nickel		6.6	2.0		ug/l	SW846 6020B
Potassium		1250	500		ug/l	SW846 6020B
Sodium		19700	500		ug/l	SW846 6020B
JD35920-3	**HOFF MW-2DU**					
1,4-Dioxane		1.3	0.40	0.095	ug/l	SW846 8260D BY SIM
bis(2-Ethylhexyl)phthalate		1.6 J	1.7	1.1	ug/l	SW846 8270E
Acenaphthene [b]		0.0475 JB	0.069	0.034	ug/l	SW846 8270E BY SIM
Anthracene [b]		0.116 B	0.069	0.034	ug/l	SW846 8270E BY SIM
Benzo(a)anthracene [a]		0.547	0.034	0.021	ug/l	SW846 8270E BY SIM
Benzo(a)pyrene [a]		1.03	0.034	0.021	ug/l	SW846 8270E BY SIM
Benzo(b)fluoranthene [a]		1.42	0.034	0.021	ug/l	SW846 8270E BY SIM

Summary of Hits

Job Number: JD35920
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/29/21 thru 11/30/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(g,h,i)perylene [a]		1.46	0.069	0.034	ug/l	SW846 8270E BY SIM
Benzo(k)fluoranthene [a]		0.529	0.069	0.034	ug/l	SW846 8270E BY SIM
Chrysene [a]		0.631	0.069	0.034	ug/l	SW846 8270E BY SIM
Dibenzo(a,h)anthracene [a]		0.292	0.069	0.034	ug/l	SW846 8270E BY SIM
Fluoranthene [b]		1.23 B	0.069	0.034	ug/l	SW846 8270E BY SIM
Fluorene [b]		0.0347 JB	0.069	0.034	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene [a]		1.01	0.069	0.034	ug/l	SW846 8270E BY SIM
Naphthalene [b]		0.0345 JB	0.069	0.034	ug/l	SW846 8270E BY SIM
Phenanthrene [b]		0.511 B	0.069	0.034	ug/l	SW846 8270E BY SIM
Pyrene [b]		1.04 B	0.069	0.034	ug/l	SW846 8270E BY SIM
Aluminum		39000	630		ug/l	SW846 6020B
Arsenic		20.4	1.0		ug/l	SW846 6020B
Barium		309	25		ug/l	SW846 6020B
Beryllium		2.0	1.0		ug/l	SW846 6020B
Cadmium		2.1	1.0		ug/l	SW846 6020B
Calcium		221000	6300		ug/l	SW846 6020B
Chromium		408	25		ug/l	SW846 6020B
Cobalt		31.0	1.0		ug/l	SW846 6020B
Copper		121	4.0		ug/l	SW846 6020B
Iron		60500	630		ug/l	SW846 6020B
Lead		98.1	1.0		ug/l	SW846 6020B
Magnesium		79000	6300		ug/l	SW846 6020B
Manganese		1130	25		ug/l	SW846 6020B
Nickel		519	25		ug/l	SW846 6020B
Potassium		11200	500		ug/l	SW846 6020B
Selenium		8.1	1.0		ug/l	SW846 6020B
Sodium		32600	6300		ug/l	SW846 6020B
Vanadium		131	2.0		ug/l	SW846 6020B
Zinc		1500	130		ug/l	SW846 6020B
JD35920-3F	**HOFF MW-2DU**					
Arsenic		1.1	1.0		ug/l	SW846 6020B
Barium		29.1	2.0		ug/l	SW846 6020B
Calcium		202000	6300		ug/l	SW846 6020B
Cobalt		2.7	1.0		ug/l	SW846 6020B
Magnesium		54400	6300		ug/l	SW846 6020B
Manganese		113	2.0		ug/l	SW846 6020B
Nickel		2.8	2.0		ug/l	SW846 6020B
Potassium		4430	500		ug/l	SW846 6020B
Selenium		1.4	1.0		ug/l	SW846 6020B
Sodium		29700	6300		ug/l	SW846 6020B
Vanadium		6.1	2.0		ug/l	SW846 6020B
Zinc		17.0	10		ug/l	SW846 6020B

Summary of Hits

Job Number: JD35920
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/29/21 thru 11/30/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD35920-4	**HOFF MW-2S**					
Butyl benzyl phthalate [c]		1.8	1.7	0.74	ug/l	SW846 8270E
bis(2-Ethylhexyl)phthalate		1.1 J	1.7	1.1	ug/l	SW846 8270E
Benzo(a)anthracene [a]		0.0885	0.034	0.021	ug/l	SW846 8270E BY SIM
Benzo(a)pyrene [a]		0.159	0.034	0.021	ug/l	SW846 8270E BY SIM
Benzo(b)fluoranthene [a]		0.186	0.034	0.021	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene [a]		0.128	0.069	0.034	ug/l	SW846 8270E BY SIM
Benzo(k)fluoranthene [a]		0.0804	0.069	0.034	ug/l	SW846 8270E BY SIM
Chrysene [a]		0.103	0.069	0.034	ug/l	SW846 8270E BY SIM
Fluoranthene [b]		0.206 B	0.069	0.034	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene [a]		0.0948	0.069	0.034	ug/l	SW846 8270E BY SIM
Phenanthrene [b]		0.103 B	0.069	0.034	ug/l	SW846 8270E BY SIM
Pyrene [b]		0.166 B	0.069	0.034	ug/l	SW846 8270E BY SIM
Aluminum		1860	50		ug/l	SW846 6020B
Arsenic		2.3	1.0		ug/l	SW846 6020B
Barium		37.3	2.0		ug/l	SW846 6020B
Cadmium		1.7	1.0		ug/l	SW846 6020B
Calcium		66300	6300		ug/l	SW846 6020B
Chromium		284	5.0		ug/l	SW846 6020B
Cobalt		4.4	1.0		ug/l	SW846 6020B
Copper		19.8	4.0		ug/l	SW846 6020B
Iron		3980	50		ug/l	SW846 6020B
Lead		3.5	1.0		ug/l	SW846 6020B
Magnesium		62000	6300		ug/l	SW846 6020B
Manganese		36.3	2.0		ug/l	SW846 6020B
Nickel		260	5.0		ug/l	SW846 6020B
Potassium		3530	500		ug/l	SW846 6020B
Sodium		229000	6300		ug/l	SW846 6020B
Vanadium		11.1	2.0		ug/l	SW846 6020B
Zinc		67.7	10		ug/l	SW846 6020B
JD35920-4F	**HOFF MW-2S**					
Arsenic		1.4	1.0		ug/l	SW846 6020B
Barium		26.0	2.0		ug/l	SW846 6020B
Cadmium		1.3	1.0		ug/l	SW846 6020B
Calcium		63100	2500		ug/l	SW846 6020B
Cobalt		1.2	1.0		ug/l	SW846 6020B
Iron		80.5	50		ug/l	SW846 6020B
Magnesium		62200	2500		ug/l	SW846 6020B
Manganese		3.2	2.0		ug/l	SW846 6020B
Nickel		3.3	2.0		ug/l	SW846 6020B
Potassium		3060	500		ug/l	SW846 6020B
Sodium		228000	6300		ug/l	SW846 6020B

Summary of Hits

Job Number: JD35920
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/29/21 thru 11/30/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Vanadium		5.0	2.0		ug/l	SW846 6020B
Zinc		22.7	10		ug/l	SW846 6020B
JD35920-5	**HOFF MW-7DL**					
Chlorobenzene		1.0	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene		8.7	1.0	0.53	ug/l	SW846 8260D
1,4-Dichlorobenzene		1.3	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane		10.7	1.0	0.57	ug/l	SW846 8260D
1,2-Dichloroethane		0.83 J	1.0	0.60	ug/l	SW846 8260D
1,1-Dichloroethene		30.6	1.0	0.59	ug/l	SW846 8260D
cis-1,2-Dichloroethene		17.1	1.0	0.51	ug/l	SW846 8260D
Methyl Tert Butyl Ether		4.0	1.0	0.51	ug/l	SW846 8260D
1,1,1-Trichloroethane		5.7	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		14.9	1.0	0.53	ug/l	SW846 8260D
1,4-Dioxane		21.1	0.40	0.095	ug/l	SW846 8260D BY SIM
Butyl benzyl phthalate [c]		2.4	1.7	0.74	ug/l	SW846 8270E
Acenaphthene [b]		0.0593 JB	0.069	0.034	ug/l	SW846 8270E BY SIM
Anthracene [b]		0.0770 B	0.069	0.034	ug/l	SW846 8270E BY SIM
Fluoranthene [b]		0.0459 JB	0.069	0.034	ug/l	SW846 8270E BY SIM
Fluorene [b]		0.0989 B	0.069	0.034	ug/l	SW846 8270E BY SIM
Naphthalene [b]		0.0582 JB	0.069	0.034	ug/l	SW846 8270E BY SIM
Phenanthrene [b]		0.136 B	0.069	0.034	ug/l	SW846 8270E BY SIM
Aluminum		417	50		ug/l	SW846 6020B
Arsenic		3.6	1.0		ug/l	SW846 6020B
Barium		26.2	2.0		ug/l	SW846 6020B
Calcium		95500	6300		ug/l	SW846 6020B
Chromium		8.8	2.0		ug/l	SW846 6020B
Iron		368	50		ug/l	SW846 6020B
Lead		1.8	1.0		ug/l	SW846 6020B
Magnesium		32400	6300		ug/l	SW846 6020B
Manganese		12.8	2.0		ug/l	SW846 6020B
Nickel		7.9	2.0		ug/l	SW846 6020B
Potassium		2170	500		ug/l	SW846 6020B
Sodium		28400	6300		ug/l	SW846 6020B
Vanadium		2.3	2.0		ug/l	SW846 6020B
JD35920-5F	**HOFF MW-7DL**					
Arsenic		2.6	1.0		ug/l	SW846 6020B
Barium		17.1	2.0		ug/l	SW846 6020B
Calcium		95000	6300		ug/l	SW846 6020B
Iron		91.0	50		ug/l	SW846 6020B
Magnesium		32000	6300		ug/l	SW846 6020B
Manganese		6.5	2.0		ug/l	SW846 6020B

Summary of Hits

Job Number: JD35920
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/29/21 thru 11/30/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Potassium		2140	500		ug/l	SW846 6020B
Sodium		28200	6300		ug/l	SW846 6020B
Vanadium		2.0	2.0		ug/l	SW846 6020B
JD35920-6	**HOFF DUP-113021**					
Chlorobenzene		1.1	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene		8.5	1.0	0.53	ug/l	SW846 8260D
1,4-Dichlorobenzene		1.2	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane		10.9	1.0	0.57	ug/l	SW846 8260D
1,2-Dichloroethane		0.78 J	1.0	0.60	ug/l	SW846 8260D
1,1-Dichloroethene		30.8	1.0	0.59	ug/l	SW846 8260D
cis-1,2-Dichloroethene		17.4	1.0	0.51	ug/l	SW846 8260D
Methyl Tert Butyl Ether		4.0	1.0	0.51	ug/l	SW846 8260D
1,1,1-Trichloroethane		5.8	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		14.9	1.0	0.53	ug/l	SW846 8260D
1,4-Dioxane		21.1	0.40	0.095	ug/l	SW846 8260D BY SIM
Butyl benzyl phthalate [c]		1.6 J	1.7	0.74	ug/l	SW846 8270E
Phenanthrene [b]		0.0560 JB	0.069	0.034	ug/l	SW846 8270E BY SIM
Aluminum		457	50		ug/l	SW846 6020B
Arsenic		3.3	1.0		ug/l	SW846 6020B
Barium		26.6	2.0		ug/l	SW846 6020B
Calcium		94100	2500		ug/l	SW846 6020B
Chromium		11.7	2.0		ug/l	SW846 6020B
Iron		403	50		ug/l	SW846 6020B
Lead		1.7	1.0		ug/l	SW846 6020B
Magnesium		31400	2500		ug/l	SW846 6020B
Manganese		11.8	2.0		ug/l	SW846 6020B
Nickel		10.1	2.0		ug/l	SW846 6020B
Potassium		2100	500		ug/l	SW846 6020B
Sodium		27600	2500		ug/l	SW846 6020B
Vanadium		2.1	2.0		ug/l	SW846 6020B
JD35920-6F	**HOFF DUP-113021**					
Arsenic		2.6	1.0		ug/l	SW846 6020B
Barium		16.2	2.0		ug/l	SW846 6020B
Calcium		91900	2500		ug/l	SW846 6020B
Magnesium		31200	2500		ug/l	SW846 6020B
Manganese		5.8	2.0		ug/l	SW846 6020B
Mercury		0.22	0.20		ug/l	SW846 7470A
Potassium		2090	500		ug/l	SW846 6020B
Sodium		27700	2500		ug/l	SW846 6020B

(a) Sample reextracted outside the holding time for confirmation.

Summary of Hits

Job Number: JD35920
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/29/21 thru 11/30/21

Lab Sample ID	Client Sample ID	Result/				
Analyte		Qual	RL	MDL	Units	Method

(b) Sample reextracted outside the holding time for confirmation. Sample reextracted outside the holding time for confirmation.
(c) Associated CCV outside of control limits high.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	TB-112921		
Lab Sample ID:	JD35920-1	**Date Sampled:**	11/30/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/30/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167256.D	1	12/07/21 13:01	BK	n/a	n/a	V3A7258
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.21	0.40	0.095	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	124%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	TB-112921		
Lab Sample ID:	JD35920-1	**Date Sampled:**	11/30/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V83210.D	1	12/03/21 02:37	NW	n/a	n/a	V2V3430
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB-112921
Lab Sample ID: JD35920-1
Matrix: AQ - Trip Blank Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 11/30/21
Date Received: 11/30/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		85-118%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-112921		
Lab Sample ID:	JD35920-1	**Date Sampled:**	11/30/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	90%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	92%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2DL		
Lab Sample ID:	JD35920-2	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167257.D	1	12/07/21 13:29	BK	n/a	n/a	V3A7258
Run #2 [a]	3A167263.D	1	12/07/21 16:22	BK	n/a	n/a	V3A7258

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	188% [b]	192% [b]	39-174%

(a) Confirmation run for surrogate recoveries.
(b) Outside control limits due to matrix interference.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2DL		
Lab Sample ID:	JD35920-2	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V83213.D	1	12/03/21 03:53	NW	n/a	n/a	V2V3430
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-2DL		
Lab Sample ID:	JD35920-2	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		85-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-2DL		
Lab Sample ID:	JD35920-2	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	94%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2DL		
Lab Sample ID:	JD35920-2	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80159.D	1	12/08/21 10:41	CS	12/02/21 09:25	OP36899	E5P3793
Run #2							

	Initial Volume	Final Volume
Run #1	290 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.4	0.32	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.4	0.46	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.7	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.4	0.58	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.4	1.6	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.4	0.39	ug/l	
534-52-1	4,6-Dinitro-o-cresol [a]	ND	3.4	1.3	ug/l	
95-48-7	2-Methylphenol	ND	1.7	0.40	ug/l	
	3&4-Methylphenol	ND	1.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.4	0.34	ug/l	
100-02-7	4-Nitrophenol	ND	6.9	0.39	ug/l	
87-86-5	Pentachlorophenol	ND	3.4	1.0	ug/l	
108-95-2	Phenol	ND	1.7	0.23	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.4	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.4	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.4	0.51	ug/l	
98-86-2	Acetophenone	ND	1.7	0.44	ug/l	
62-53-3	Aniline	ND	1.7	0.66	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.7	0.47	ug/l	
85-68-7	Butyl benzyl phthalate [a]	ND	1.7	0.74	ug/l	
100-51-6	Benzyl Alcohol	ND	1.7	0.85	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.7	0.37	ug/l	
106-47-8	4-Chloroaniline	ND	3.4	0.46	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.7	0.39	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.7	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.7	0.51	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.86	0.47	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.86	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	1.7	0.94	ug/l	
132-64-9	Dibenzofuran	ND	3.4	0.63	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.7	0.46	ug/l	
117-84-0	Di-n-octyl phthalate	ND	1.7	1.4	ug/l	

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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-2DL
Lab Sample ID: JD35920-2
Matrix: AQ - Ground Water
Method: SW846 8270E SW846 3510C
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 11/29/21
Date Received: 11/30/21
Percent Solids: n/a

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.7	0.50	ug/l	
131-11-3	Dimethyl phthalate	ND	1.7	0.47	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.7	1.1	ug/l	
118-74-1	Hexachlorobenzene	ND	0.86	0.47	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.86	0.30	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	6.9	0.84	ug/l	
67-72-1	Hexachloroethane	ND	1.7	0.48	ug/l	
78-59-1	Isophorone	ND	1.7	0.34	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.86	0.56	ug/l	
88-74-4	2-Nitroaniline	ND	3.4	0.53	ug/l	
99-09-2	3-Nitroaniline	ND	3.4	0.55	ug/l	
100-01-6	4-Nitroaniline	ND	3.4	0.64	ug/l	
98-95-3	Nitrobenzene	ND	1.7	0.36	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.7	0.27	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.7	0.56	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.4	0.37	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.4		ug/l	
110-86-1	Pyridine	ND	1.7	0.27	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.7	0.42	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.86	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	25%		10-73%
4165-62-2	Phenol-d5	15%		10-64%
118-79-6	2,4,6-Tribromophenol	58%		31-130%
4165-60-0	Nitrobenzene-d5	63%		28-126%
321-60-8	2-Fluorobiphenyl	59%		26-114%
1718-51-0	Terphenyl-d14	66%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2DL		
Lab Sample ID:	JD35920-2	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4P49806.D	1	12/03/21 07:23	CS	12/02/21 09:25	OP36899A	E4P2607
Run #2 [b]	4P50036.D	1	12/12/21 16:18	KLS	12/10/21 16:34	OP37045A	E4P2620

	Initial Volume	Final Volume
Run #1	290 ml	1.0 ml
Run #2	260 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.069	0.034	ug/l	
208-96-8	Acenaphthylene	ND	0.069	0.034	ug/l	
120-12-7	Anthracene	ND	0.069	0.034	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.034	0.021	ug/l	
50-32-8	Benzo(a)pyrene	0.0232	0.034	0.021	ug/l	J
205-99-2	Benzo(b)fluoranthene	ND	0.034	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.069	0.034	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.069	0.034	ug/l	
218-01-9	Chrysene	ND	0.069	0.034	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.069	0.034	ug/l	
206-44-0	Fluoranthene [a]	0.0413	0.069	0.034	ug/l	JB
86-73-7	Fluorene	ND	0.069	0.034	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.069	0.034	ug/l	
91-20-3	Naphthalene	ND	0.069	0.034	ug/l	
85-01-8	Phenanthrene [a]	0.0496	0.069	0.034	ug/l	JB
129-00-0	Pyrene	ND	0.069	0.034	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	88%	85%	29-124%
321-60-8	2-Fluorobiphenyl	77%	67%	23-122%
1718-51-0	Terphenyl-d14	71%	89%	22-130%

(a) Sample reextracted outside the holding time for confirmation.
(b) Sample extracted outside the holding time. Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2DL		
Lab Sample ID:	JD35920-2	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	6G81304.D	1	12/20/21 04:09	CP	12/17/21 20:48	OP37193	G6G2876
Run #2 [b]	4G9723422.D	1	12/09/21 04:37	CP	12/03/21 10:00	OP36897	G4G3677

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2	270 ml	2.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%	9% [c]	10-190%
877-09-8	Tetrachloro-m-xylene	63%	6% [c]	10-190%
2051-24-3	Decachlorobiphenyl	38%	5% [c]	10-156%
2051-24-3	Decachlorobiphenyl	36%	6% [c]	10-156%

(a) Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.
(b) Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-2DL		
Lab Sample ID:	JD35920-2	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q

(c) Outside of in house control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-2DL		
Lab Sample ID:	JD35920-2	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	176	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	5.7	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	12.2	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	73400	2500	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	145	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	7.6	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	4.0	4.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Iron	1520	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	23000	2500	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	30.8	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/02/21	12/02/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	208	10	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Potassium	1290	500	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Sodium	19500	500	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	< 2.0	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51533
(2) Instrument QC Batch: MA51540
(3) Instrument QC Batch: MA51547
(4) Prep QC Batch: MP30105
(5) Prep QC Batch: MP30123

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-2DL		
Lab Sample ID:	JD35920-2F	**Date Sampled:**	11/29/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/30/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	5.1	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	8.7	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	70100	2500	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	< 2.0	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	3.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Iron	58.3	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	22200	2500	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	6.1	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/02/21	12/02/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	6.6	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Potassium	1250	500	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Sodium	19700	500	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	< 2.0	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51533
(2) Instrument QC Batch: MA51540
(3) Instrument QC Batch: MA51547
(4) Prep QC Batch: MP30105
(5) Prep QC Batch: MP30123

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2DU		
Lab Sample ID:	JD35920-3	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167258.D	1	12/07/21 13:58	BK	n/a	n/a	V3A7258
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	1.3	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	139%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2DU		
Lab Sample ID:	JD35920-3	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V83214.D	1	12/03/21 04:19	NW	n/a	n/a	V2V3430
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-2DU
Lab Sample ID: JD35920-3
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 11/29/21
Date Received: 11/30/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		85-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-2DU		
Lab Sample ID:	JD35920-3	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	95%		80-121%
2037-26-5	Toluene-D8	94%		80-120%
460-00-4	4-Bromofluorobenzene	91%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2DU		
Lab Sample ID:	JD35920-3	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80213.D	1	12/09/21 23:18	KLS	12/02/21 09:25	OP36899	E5P3796
Run #2							

	Initial Volume	Final Volume
Run #1	290 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.4	0.32	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.4	0.46	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.7	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.4	0.58	ug/l	
51-28-5	2,4-Dinitrophenol	ND	3.4	1.6	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.4	0.39	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.4	1.3	ug/l	
95-48-7	2-Methylphenol	ND	1.7	0.40	ug/l	
	3&4-Methylphenol	ND	1.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.4	0.34	ug/l	
100-02-7	4-Nitrophenol	ND	6.9	0.39	ug/l	
87-86-5	Pentachlorophenol	ND	3.4	1.0	ug/l	
108-95-2	Phenol	ND	1.7	0.23	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.4	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.4	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.4	0.51	ug/l	
98-86-2	Acetophenone	ND	1.7	0.44	ug/l	
62-53-3	Aniline	ND	1.7	0.66	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.7	0.47	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.7	0.74	ug/l	
100-51-6	Benzyl Alcohol	ND	1.7	0.85	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.7	0.37	ug/l	
106-47-8	4-Chloroaniline	ND	3.4	0.46	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.7	0.39	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.7	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.7	0.51	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.86	0.47	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.86	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.7	0.94	ug/l	
132-64-9	Dibenzofuran	ND	3.4	0.63	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.7	0.46	ug/l	
117-84-0	Di-n-octyl phthalate	ND	1.7	1.4	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-2DU		
Lab Sample ID:	JD35920-3	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.7	0.50	ug/l	
131-11-3	Dimethyl phthalate	ND	1.7	0.47	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	1.6	1.7	1.1	ug/l	J
118-74-1	Hexachlorobenzene	ND	0.86	0.47	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.86	0.30	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	6.9	0.84	ug/l	
67-72-1	Hexachloroethane	ND	1.7	0.48	ug/l	
78-59-1	Isophorone	ND	1.7	0.34	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.86	0.56	ug/l	
88-74-4	2-Nitroaniline	ND	3.4	0.53	ug/l	
99-09-2	3-Nitroaniline	ND	3.4	0.55	ug/l	
100-01-6	4-Nitroaniline	ND	3.4	0.64	ug/l	
98-95-3	Nitrobenzene	ND	1.7	0.36	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.7	0.27	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.7	0.56	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.4	0.37	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.4		ug/l	
110-86-1	Pyridine	ND	1.7	0.27	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.7	0.42	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.86	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	11%		10-73%
4165-62-2	Phenol-d5	10%		10-64%
118-79-6	2,4,6-Tribromophenol	39%		31-130%
4165-60-0	Nitrobenzene-d5	32%		28-126%
321-60-8	2-Fluorobiphenyl	39%		26-114%
1718-51-0	Terphenyl-d14	37%		16-122%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2DU		
Lab Sample ID:	JD35920-3	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4P49814.D	1	12/03/21 10:31	CS	12/02/21 09:25	OP36899A	E4P2607
Run #2 [b]	4P50047.D	1	12/12/21 20:37	KLS	12/10/21 16:34	OP37045A	E4P2620

	Initial Volume	Final Volume
Run #1	290 ml	1.0 ml
Run #2	250 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene [a]	0.0475	0.069	0.034	ug/l	JB
208-96-8	Acenaphthylene	ND	0.069	0.034	ug/l	
120-12-7	Anthracene [a]	0.116	0.069	0.034	ug/l	B
56-55-3	Benzo(a)anthracene	0.547	0.034	0.021	ug/l	
50-32-8	Benzo(a)pyrene	1.03	0.034	0.021	ug/l	
205-99-2	Benzo(b)fluoranthene	1.42	0.034	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene	1.46	0.069	0.034	ug/l	
207-08-9	Benzo(k)fluoranthene	0.529	0.069	0.034	ug/l	
218-01-9	Chrysene	0.631	0.069	0.034	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.292	0.069	0.034	ug/l	
206-44-0	Fluoranthene [a]	1.23	0.069	0.034	ug/l	B
86-73-7	Fluorene [a]	0.0347	0.069	0.034	ug/l	JB
193-39-5	Indeno(1,2,3-cd)pyrene	1.01	0.069	0.034	ug/l	
91-20-3	Naphthalene [a]	0.0345	0.069	0.034	ug/l	JB
85-01-8	Phenanthrene [a]	0.511	0.069	0.034	ug/l	B
129-00-0	Pyrene [a]	1.04	0.069	0.034	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	46%	84%	29-124%
321-60-8	2-Fluorobiphenyl	47%	68%	23-122%
1718-51-0	Terphenyl-d14	42%	45%	22-130%

(a) Sample reextracted outside the holding time for confirmation.
(b) Sample extracted outside the holding time. Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2DU		
Lab Sample ID:	JD35920-3	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	6G81305.D	1	12/20/21 04:26	CP	12/17/21 20:48	OP37193	G6G2876
Run #2 [b]	4G9723418.D	1	12/09/21 03:37	CP	12/03/21 10:00	OP36897	G4G3677

	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2	270 ml	2.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	12%	59%	10-190%
877-09-8	Tetrachloro-m-xylene	14%	51%	10-190%
2051-24-3	Decachlorobiphenyl	8% [c]	24% [d]	10-156%
2051-24-3	Decachlorobiphenyl	12%	19% [d]	10-156%

(a) Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.
(b) Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-2DU		
Lab Sample ID:	JD35920-3	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q

(c) Outside control limits due to matrix interference.
(d) Outside of in house control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-2DU		
Lab Sample ID:	JD35920-3	**Date Sampled:**	11/29/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	39000	630	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	20.4	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	309	25	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Beryllium	2.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	2.1	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	221000	6300	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	408	25	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Cobalt	31.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	121	4.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Iron	60500	630	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Lead	98.1	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	79000	6300	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	1130	25	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Mercury	< 0.60	0.60	ug/l	1	12/02/21	12/02/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	519	25	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Potassium	11200	500	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	8.1	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Sodium	32600	6300	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	131	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Zinc	1500	130	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51533
(2) Instrument QC Batch: MA51540
(3) Instrument QC Batch: MA51547
(4) Prep QC Batch: MP30105
(5) Prep QC Batch: MP30123

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-2DU		
Lab Sample ID:	JD35920-3F	**Date Sampled:**	11/29/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/30/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	1.1	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	29.1	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	202000	6300	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	< 2.0	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	2.7	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Iron	< 50	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	54400	6300	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	113	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/02/21	12/02/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	2.8	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Potassium	4430	500	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	1.4	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Sodium	29700	6300	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	6.1	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Zinc	17.0	10	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51533
(2) Instrument QC Batch: MA51540
(3) Instrument QC Batch: MA51547
(4) Prep QC Batch: MP30105
(5) Prep QC Batch: MP30123

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2S		
Lab Sample ID:	JD35920-4	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167259.D	1	12/07/21 14:27	BK	n/a	n/a	V3A7258
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	125%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2S		
Lab Sample ID:	JD35920-4	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V83215.D	1	12/03/21 04:44	NW	n/a	n/a	V2V3430
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-2S
Lab Sample ID: JD35920-4
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 11/30/21
Date Received: 11/30/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		85-118%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-2S		
Lab Sample ID:	JD35920-4	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	90%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	92%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2S		
Lab Sample ID:	JD35920-4	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80160.D	1	12/08/21 11:08	CS	12/02/21 09:25	OP36899	E5P3793
Run #2							

	Initial Volume	Final Volume
Run #1	290 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.4	0.32	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.4	0.46	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.7	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.4	0.58	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.4	1.6	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.4	0.39	ug/l	
534-52-1	4,6-Dinitro-o-cresol [a]	ND	3.4	1.3	ug/l	
95-48-7	2-Methylphenol	ND	1.7	0.40	ug/l	
	3&4-Methylphenol	ND	1.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.4	0.34	ug/l	
100-02-7	4-Nitrophenol	ND	6.9	0.39	ug/l	
87-86-5	Pentachlorophenol	ND	3.4	1.0	ug/l	
108-95-2	Phenol	ND	1.7	0.23	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.4	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.4	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.4	0.51	ug/l	
98-86-2	Acetophenone	ND	1.7	0.44	ug/l	
62-53-3	Aniline	ND	1.7	0.66	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.7	0.47	ug/l	
85-68-7	Butyl benzyl phthalate [b]	1.8	1.7	0.74	ug/l	
100-51-6	Benzyl Alcohol	ND	1.7	0.85	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.7	0.37	ug/l	
106-47-8	4-Chloroaniline	ND	3.4	0.46	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.7	0.39	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.7	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.7	0.51	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.86	0.47	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.86	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	1.7	0.94	ug/l	
132-64-9	Dibenzofuran	ND	3.4	0.63	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.7	0.46	ug/l	
117-84-0	Di-n-octyl phthalate	ND	1.7	1.4	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-2S		
Lab Sample ID:	JD35920-4	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.7	0.50	ug/l	
131-11-3	Dimethyl phthalate	ND	1.7	0.47	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	1.1	1.7	1.1	ug/l	J
118-74-1	Hexachlorobenzene	ND	0.86	0.47	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.86	0.30	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	6.9	0.84	ug/l	
67-72-1	Hexachloroethane	ND	1.7	0.48	ug/l	
78-59-1	Isophorone	ND	1.7	0.34	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.86	0.56	ug/l	
88-74-4	2-Nitroaniline	ND	3.4	0.53	ug/l	
99-09-2	3-Nitroaniline	ND	3.4	0.55	ug/l	
100-01-6	4-Nitroaniline	ND	3.4	0.64	ug/l	
98-95-3	Nitrobenzene	ND	1.7	0.36	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.7	0.27	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.7	0.56	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.4	0.37	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.4		ug/l	
110-86-1	Pyridine	ND	1.7	0.27	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.7	0.42	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.86	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	23%		10-73%
4165-62-2	Phenol-d5	15%		10-64%
118-79-6	2,4,6-Tribromophenol	72%		31-130%
4165-60-0	Nitrobenzene-d5	63%		28-126%
321-60-8	2-Fluorobiphenyl	65%		26-114%
1718-51-0	Terphenyl-d14	69%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2S		
Lab Sample ID:	JD35920-4	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4P49823.D	1	12/03/21 18:04	KLS	12/02/21 09:25	OP36899A	E4P2608
Run #2 [b]	4P50046.D	1	12/12/21 20:14	KLS	12/10/21 16:34	OP37045A	E4P2620

	Initial Volume	Final Volume
Run #1	290 ml	1.0 ml
Run #2	250 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.069	0.034	ug/l	
208-96-8	Acenaphthylene	ND	0.069	0.034	ug/l	
120-12-7	Anthracene	ND	0.069	0.034	ug/l	
56-55-3	Benzo(a)anthracene	0.0885	0.034	0.021	ug/l	
50-32-8	Benzo(a)pyrene	0.159	0.034	0.021	ug/l	
205-99-2	Benzo(b)fluoranthene	0.186	0.034	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.128	0.069	0.034	ug/l	
207-08-9	Benzo(k)fluoranthene	0.0804	0.069	0.034	ug/l	
218-01-9	Chrysene	0.103	0.069	0.034	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.069	0.034	ug/l	
206-44-0	Fluoranthene [a]	0.206	0.069	0.034	ug/l	B
86-73-7	Fluorene	ND	0.069	0.034	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.0948	0.069	0.034	ug/l	
91-20-3	Naphthalene	ND	0.069	0.034	ug/l	
85-01-8	Phenanthrene [a]	0.103	0.069	0.034	ug/l	B
129-00-0	Pyrene [a]	0.166	0.069	0.034	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	89%	84%	29-124%
321-60-8	2-Fluorobiphenyl	80%	75%	23-122%
1718-51-0	Terphenyl-d14	72%	85%	22-130%

(a) Sample reextracted outside the holding time for confirmation.
(b) Sample extracted outside the holding time. Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-2S		
Lab Sample ID:	JD35920-4	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	6G81306.D	1	12/20/21 04:44	CP	12/17/21 20:48	OP37193	G6G2876
Run #2 [b]	4G9723419.D	1	12/09/21 03:52	CP	12/03/21 10:00	OP36897	G4G3677

	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2	260 ml	2.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	48%	46%	10-190%
877-09-8	Tetrachloro-m-xylene	44%	44%	10-190%
2051-24-3	Decachlorobiphenyl	26%	26% [c]	10-156%
2051-24-3	Decachlorobiphenyl	30%	20% [c]	10-156%

(a) Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.
(b) Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-2S		
Lab Sample ID:	JD35920-4	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q

(c) Outside of in house control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-2S		
Lab Sample ID:	JD35920-4	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	1860	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	2.3	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	37.3	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	1.7	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	66300	6300	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	284	5.0	ug/l	5	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Cobalt	4.4	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	19.8	4.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Iron	3980	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	3.5	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	62000	6300	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	36.3	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/02/21	12/02/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	260	5.0	ug/l	5	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Potassium	3530	500	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Sodium	229000	6300	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	11.1	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Zinc	67.7	10	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51533
(2) Instrument QC Batch: MA51540
(3) Instrument QC Batch: MA51547
(4) Prep QC Batch: MP30105
(5) Prep QC Batch: MP30123

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-2S		
Lab Sample ID:	JD35920-4F	**Date Sampled:**	11/30/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/30/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	1.4	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	26.0	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	1.3	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	63100	2500	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	1.2	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [5]
Iron	80.5	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	62200	2500	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [5]
Manganese	3.2	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/02/21	12/02/21	SB	SW846 7470A [1]	SW846 7470A [6]
Nickel	3.3	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [5]
Potassium	3060	500	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [5]
Sodium	228000	6300	ug/l	25	12/02/21	12/07/21	NV	SW846 6020B [4]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	5.0	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [5]
Zinc	22.7	10	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [5]

(1) Instrument QC Batch: MA51533
(2) Instrument QC Batch: MA51540
(3) Instrument QC Batch: MA51547
(4) Instrument QC Batch: MA51563
(5) Prep QC Batch: MP30105
(6) Prep QC Batch: MP30123

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7DL		
Lab Sample ID:	JD35920-5	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167260.D	1	12/07/21 14:55	BK	n/a	n/a	V3A7258
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	21.1	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	145%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7DL		
Lab Sample ID:	JD35920-5	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V83216.D	1	12/03/21 05:10	NW	n/a	n/a	V2V3430
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	1.0	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	8.7	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	1.3	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	10.7	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.83	1.0	0.60	ug/l	J
75-35-4	1,1-Dichloroethene	30.6	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	17.1	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-7DL		
Lab Sample ID:	JD35920-5	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.0	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	5.7	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	14.9	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		85-118%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-7DL		
Lab Sample ID:	JD35920-5	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	90%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	93%		80-120%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7DL		
Lab Sample ID:	JD35920-5	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80161.D	1	12/08/21 11:35	CS	12/02/21 09:25	OP36899	E5P3793
Run #2							

	Initial Volume	Final Volume
Run #1	290 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.4	0.32	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.4	0.46	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.7	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.4	0.58	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.4	1.6	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.4	0.39	ug/l	
534-52-1	4,6-Dinitro-o-cresol [a]	ND	3.4	1.3	ug/l	
95-48-7	2-Methylphenol	ND	1.7	0.40	ug/l	
	3&4-Methylphenol	ND	1.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.4	0.34	ug/l	
100-02-7	4-Nitrophenol	ND	6.9	0.39	ug/l	
87-86-5	Pentachlorophenol	ND	3.4	1.0	ug/l	
108-95-2	Phenol	ND	1.7	0.23	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.4	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.4	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.4	0.51	ug/l	
98-86-2	Acetophenone	ND	1.7	0.44	ug/l	
62-53-3	Aniline	ND	1.7	0.66	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.7	0.47	ug/l	
85-68-7	Butyl benzyl phthalate [b]	2.4	1.7	0.74	ug/l	
100-51-6	Benzyl Alcohol	ND	1.7	0.85	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.7	0.37	ug/l	
106-47-8	4-Chloroaniline	ND	3.4	0.46	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.7	0.39	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.7	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.7	0.51	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.86	0.47	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.86	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	1.7	0.94	ug/l	
132-64-9	Dibenzofuran	ND	3.4	0.63	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.7	0.46	ug/l	
117-84-0	Di-n-octyl phthalate	ND	1.7	1.4	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-7DL		
Lab Sample ID:	JD35920-5	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.7	0.50	ug/l	
131-11-3	Dimethyl phthalate	ND	1.7	0.47	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.7	1.1	ug/l	
118-74-1	Hexachlorobenzene	ND	0.86	0.47	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.86	0.30	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	6.9	0.84	ug/l	
67-72-1	Hexachloroethane	ND	1.7	0.48	ug/l	
78-59-1	Isophorone	ND	1.7	0.34	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.86	0.56	ug/l	
88-74-4	2-Nitroaniline	ND	3.4	0.53	ug/l	
99-09-2	3-Nitroaniline	ND	3.4	0.55	ug/l	
100-01-6	4-Nitroaniline	ND	3.4	0.64	ug/l	
98-95-3	Nitrobenzene	ND	1.7	0.36	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.7	0.27	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.7	0.56	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.4	0.37	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.4		ug/l	
110-86-1	Pyridine	ND	1.7	0.27	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.7	0.42	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.86	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	28%		10-73%
4165-62-2	Phenol-d5	18%		10-64%
118-79-6	2,4,6-Tribromophenol	73%		31-130%
4165-60-0	Nitrobenzene-d5	74%		28-126%
321-60-8	2-Fluorobiphenyl	75%		26-114%
1718-51-0	Terphenyl-d14	96%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7DL		
Lab Sample ID:	JD35920-5	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4P49808.D	1	12/03/21 08:10	CS	12/02/21 09:25	OP36899A	E4P2607
Run #2 [b]	4P50037.D	1	12/12/21 16:42	KLS	12/10/21 16:34	OP37045A	E4P2620

	Initial Volume	Final Volume
Run #1	290 ml	1.0 ml
Run #2	250 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene [a]	0.0593	0.069	0.034	ug/l	JB
208-96-8	Acenaphthylene	ND	0.069	0.034	ug/l	
120-12-7	Anthracene [a]	0.0770	0.069	0.034	ug/l	B
56-55-3	Benzo(a)anthracene	ND	0.034	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.034	0.021	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.034	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.069	0.034	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.069	0.034	ug/l	
218-01-9	Chrysene	ND	0.069	0.034	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.069	0.034	ug/l	
206-44-0	Fluoranthene [a]	0.0459	0.069	0.034	ug/l	JB
86-73-7	Fluorene [a]	0.0989	0.069	0.034	ug/l	B
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.069	0.034	ug/l	
91-20-3	Naphthalene [a]	0.0582	0.069	0.034	ug/l	JB
85-01-8	Phenanthrene [a]	0.136	0.069	0.034	ug/l	B
129-00-0	Pyrene	ND	0.069	0.034	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	105%	91%	29-124%
321-60-8	2-Fluorobiphenyl	95%	73%	23-122%
1718-51-0	Terphenyl-d14	96%	94%	22-130%

(a) Sample reextracted outside the holding time for confirmation.
(b) Sample extracted outside the holding time. Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7DL		
Lab Sample ID:	JD35920-5	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	6G81307.D	1	12/20/21 05:02	CP	12/17/21 20:48	OP37193	G6G2876
Run #2 [b]	4G9723420.D	1	12/09/21 04:07	CP	12/03/21 10:00	OP36897	G4G3677

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2	270 ml	2.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%	87%	10-190%
877-09-8	Tetrachloro-m-xylene	58%	56%	10-190%
2051-24-3	Decachlorobiphenyl	38%	35%	10-156%
2051-24-3	Decachlorobiphenyl	37%	26% [c]	10-156%

(a) Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.
(b) Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-7DL		
Lab Sample ID:	JD35920-5	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q

(c) Outside of in house control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-7DL		
Lab Sample ID:	JD35920-5	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	417	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	3.6	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	26.2	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	95500	6300	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [6]
Chromium	8.8	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/07/21	12/08/21	NV	SW846 6020B [5]	SW846 3010A [8]
Iron	368	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	1.8	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	32400	6300	ug/l	25	12/02/21	12/07/21	NV	SW846 6020B [4]	SW846 3010A [6]
Manganese	12.8	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/02/21	12/02/21	SB	SW846 7470A [1]	SW846 7470A [7]
Nickel	7.9	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [6]
Potassium	2170	500	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [6]
Sodium	28400	6300	ug/l	25	12/02/21	12/07/21	NV	SW846 6020B [4]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	2.3	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [6]

(1) Instrument QC Batch: MA51533
(2) Instrument QC Batch: MA51540
(3) Instrument QC Batch: MA51547
(4) Instrument QC Batch: MA51563
(5) Instrument QC Batch: MA51567
(6) Prep QC Batch: MP30105
(7) Prep QC Batch: MP30123
(8) Prep QC Batch: MP30243

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-7DL		
Lab Sample ID:	JD35920-5F	**Date Sampled:**	11/30/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/30/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	2.6	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	17.1	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	95000	6300	ug/l	25	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [6]
Chromium	< 2.0	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/07/21	12/08/21	NV	SW846 6020B [5]	SW846 3010A [8]
Iron	91.0	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	32000	6300	ug/l	25	12/02/21	12/07/21	NV	SW846 6020B [4]	SW846 3010A [6]
Manganese	6.5	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/02/21	12/02/21	SB	SW846 7470A [1]	SW846 7470A [7]
Nickel	< 2.0	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [6]
Potassium	2140	500	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [6]
Sodium	28200	6300	ug/l	25	12/02/21	12/07/21	NV	SW846 6020B [4]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	2.0	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [6]

(1) Instrument QC Batch: MA51533
(2) Instrument QC Batch: MA51540
(3) Instrument QC Batch: MA51547
(4) Instrument QC Batch: MA51563
(5) Instrument QC Batch: MA51567
(6) Prep QC Batch: MP30105
(7) Prep QC Batch: MP30123
(8) Prep QC Batch: MP30243

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF DUP-113021		
Lab Sample ID:	JD35920-6	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167261.D	1	12/07/21 15:24	BK	n/a	n/a	V3A7258
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	21.1	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	145%		39-174%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF DUP-113021		
Lab Sample ID:	JD35920-6	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V83217.D	1	12/03/21 05:35	NW	n/a	n/a	V2V3430
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	1.1	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	8.5	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	1.2	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	10.9	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.78	1.0	0.60	ug/l	J
75-35-4	1,1-Dichloroethene	30.8	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	17.4	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF DUP-113021		
Lab Sample ID:	JD35920-6	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.0	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	5.8	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	14.9	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		85-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF DUP-113021		
Lab Sample ID:	JD35920-6	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	92%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF DUP-113021		
Lab Sample ID:	JD35920-6	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80162.D	1	12/08/21 12:02	CS	12/02/21 09:25	OP36899	E5P3793
Run #2							

	Initial Volume	Final Volume
Run #1	290 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.4	0.32	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.4	0.46	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.7	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.4	0.58	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.4	1.6	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.4	0.39	ug/l	
534-52-1	4,6-Dinitro-o-cresol [a]	ND	3.4	1.3	ug/l	
95-48-7	2-Methylphenol	ND	1.7	0.40	ug/l	
	3&4-Methylphenol	ND	1.7	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.4	0.34	ug/l	
100-02-7	4-Nitrophenol	ND	6.9	0.39	ug/l	
87-86-5	Pentachlorophenol	ND	3.4	1.0	ug/l	
108-95-2	Phenol	ND	1.7	0.23	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.4	0.55	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.4	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.4	0.51	ug/l	
98-86-2	Acetophenone	ND	1.7	0.44	ug/l	
62-53-3	Aniline	ND	1.7	0.66	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.7	0.47	ug/l	
85-68-7	Butyl benzyl phthalate [b]	1.6	1.7	0.74	ug/l	J
100-51-6	Benzyl Alcohol	ND	1.7	0.85	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.7	0.37	ug/l	
106-47-8	4-Chloroaniline	ND	3.4	0.46	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.7	0.39	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.7	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.7	0.51	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.86	0.47	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.86	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine [a]	ND	1.7	0.94	ug/l	
132-64-9	Dibenzofuran	ND	3.4	0.63	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.7	0.46	ug/l	
117-84-0	Di-n-octyl phthalate	ND	1.7	1.4	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF DUP-113021		
Lab Sample ID:	JD35920-6	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.7	0.50	ug/l	
131-11-3	Dimethyl phthalate	ND	1.7	0.47	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.7	1.1	ug/l	
118-74-1	Hexachlorobenzene	ND	0.86	0.47	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.86	0.30	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	6.9	0.84	ug/l	
67-72-1	Hexachloroethane	ND	1.7	0.48	ug/l	
78-59-1	Isophorone	ND	1.7	0.34	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.86	0.56	ug/l	
88-74-4	2-Nitroaniline	ND	3.4	0.53	ug/l	
99-09-2	3-Nitroaniline	ND	3.4	0.55	ug/l	
100-01-6	4-Nitroaniline	ND	3.4	0.64	ug/l	
98-95-3	Nitrobenzene	ND	1.7	0.36	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.7	0.27	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.7	0.56	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.4	0.37	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.4		ug/l	
110-86-1	Pyridine	ND	1.7	0.27	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.7	0.42	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.86	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	28%		10-73%
4165-62-2	Phenol-d5	21%		10-64%
118-79-6	2,4,6-Tribromophenol	79%		31-130%
4165-60-0	Nitrobenzene-d5	60%		28-126%
321-60-8	2-Fluorobiphenyl	65%		26-114%
1718-51-0	Terphenyl-d14	102%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF DUP-113021		
Lab Sample ID:	JD35920-6	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4P49809.D	1	12/03/21 08:33	CS	12/02/21 09:25	OP36899A	E4P2607
Run #2 [b]	4P50038.D	1	12/12/21 17:05	KLS	12/10/21 16:34	OP37045A	E4P2620

	Initial Volume	Final Volume
Run #1	290 ml	1.0 ml
Run #2	250 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.069	0.034	ug/l	
208-96-8	Acenaphthylene	ND	0.069	0.034	ug/l	
120-12-7	Anthracene	ND	0.069	0.034	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.034	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.034	0.021	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.034	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.069	0.034	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.069	0.034	ug/l	
218-01-9	Chrysene	ND	0.069	0.034	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.069	0.034	ug/l	
206-44-0	Fluoranthene	ND	0.069	0.034	ug/l	
86-73-7	Fluorene	ND	0.069	0.034	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.069	0.034	ug/l	
91-20-3	Naphthalene	ND	0.069	0.034	ug/l	
85-01-8	Phenanthrene [a]	0.0560	0.069	0.034	ug/l	JB
129-00-0	Pyrene	ND	0.069	0.034	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%	84%	29-124%
321-60-8	2-Fluorobiphenyl	84%	66%	23-122%
1718-51-0	Terphenyl-d14	108%	88%	22-130%

(a) Sample reextracted outside the holding time for confirmation.
(b) Sample extracted outside the holding time. Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF DUP-113021		
Lab Sample ID:	JD35920-6	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	6G81308.D	1	12/20/21 05:20	CP	12/17/21 20:48	OP37193	G6G2876
Run #2 [b]	4G9723421.D	1	12/09/21 04:22	CP	12/03/21 10:00	OP36897	G4G3677

	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2	270 ml	2.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%	115%	10-190%
877-09-8	Tetrachloro-m-xylene	64%	71%	10-190%
2051-24-3	Decachlorobiphenyl	45%	30%	10-156%
2051-24-3	Decachlorobiphenyl	51%	27% [c]	10-156%

(a) Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.
(b) Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF DUP-113021		
Lab Sample ID:	JD35920-6	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	11/30/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q

(c) Outside of in house control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF DUP-113021
Lab Sample ID: JD35920-6
Matrix: AQ - Ground Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 11/30/21
Date Received: 11/30/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	457	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	3.3	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	26.6	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	94100	2500	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	11.7	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Iron	403	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	1.7	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	31400	2500	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	11.8	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/02/21	12/02/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	10.1	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Potassium	2100	500	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Sodium	27600	2500	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	2.1	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51533
(2) Instrument QC Batch: MA51540
(3) Instrument QC Batch: MA51547
(4) Prep QC Batch: MP30105
(5) Prep QC Batch: MP30123

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF DUP-113021		
Lab Sample ID:	JD35920-6F	**Date Sampled:**	11/30/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/30/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	2.6	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	16.2	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	91900	2500	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	< 2.0	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Iron	< 50	50	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	31200	2500	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	5.8	2.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	0.22	0.20	ug/l	1	12/02/21	12/02/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 2.0	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Potassium	2090	500	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Sodium	27700	2500	ug/l	10	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/02/21	12/03/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	< 2.0	2.0	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/02/21	12/06/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51533
(2) Instrument QC Batch: MA51540
(3) Instrument QC Batch: MA51547
(4) Prep QC Batch: MP30105
(5) Prep QC Batch: MP30123

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

GW
TB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

SGS

EHSA-QAC-0023-04-FORM-Standard COC

Page 1 of 1

FED-EX Tracking #	Bottle Order Control # SS-112321-176
SGS Quote #	SGS Job # JD 35920

Client / Reporting Information

Company Name: TETRA TECH INC
Street Address:
City State Zip:
Project Contact E-mail: JONATHAN DZIEKAN
Phone #:
Sampler(s) Name(s) Phone #: N. DEDIC, M. BLOMER

Project Information

Project Name: HOFF VC
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)
Company Name: TETRA TECH INC
Street Address:
City State Zip:
Attention:

Requested Analysis

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	Volatiles V8260SC	1,4 Dioxane V8260 SIM DIOX	Semivolatiles BLV 8270 SIM PAH	Pesticides P8081 PEST TCL	Metals TAL	Metals TAL DIS					LAB USE ONLY
1	TB-112921		11-29-21	1230	MB	G		TB	4	4								X	X									E90
2F	HOFF MW-2DL		↓	1400		G		GW	12	6		2		4				X	X	X	X	X	X					A30
3F	HOFF MW-2DU		11-29-21	1535		G		GW	12	6		2		4				X	X	X	X	X	X					V939
4F	HOFF MW-2S		11-30-21	0945		G		GW	12	6		2		4				X	X	X	X	X	X					
5F	HOFF MW-7DL		↓	1155		G		GW	12	6		2		4				X	X	X	X	X	X					
6F	HOFF DUP113021		11-30-21	1200	↓	G		GW	12	6		2		4				X	X	X	X	X	X					

pH Check (Lab Use Only)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- ☐ 10 Business Days
- ☐ 5 Business Days
- ☐ 3 Business Days*
- ☐ 2 Business Days*
- ☐ 1 Business Day*
- ☐ Other

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ NJ Reduced (Level 3)
- ☐ Full Tier I (Level 4)
- ☐ Commercial "C"
- ☐ NJ DKQP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ MA MCP Criteria
- ☐ CT RCP Criteria
- ☐ State Forms
- ☐ EDD Format
- ☐ DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

• 4X 250ml NP EXT

3A EIN

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 [signature]	11/30/21 1215	1 Mike Gonnella	2 Mike Gonnella	11/30/21 1540	2 Jeemite Patel
3		3	4		4
5		5	Custody Seal # ☐ Intact ☐ Not intact ☐ Absent	Therm ID: See Sample Receipt Summary	On Ice ☐ Cooler Temp. °C 2.9 C/P

5.1

5

JD35920: Chain of Custody
Page 1 of 3

SGS Sample Receipt Summary

Job Number: JD35920 **Client:** TETRA TECH EC INC. **Project:** HOFF VC- 336 LAYFIELD ROAD, PERKIOMENV

Date / Time Received: 11/30/2021 3:40:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.9);

Cooler Temps (Corrected) °C: Cooler 1: (1.5);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

Job Change Order: JD35920

Requested Date:	12/30/2021	**Received Date:**	11/30/2021
Account Name:	Tetra Tech EC Inc.	**Due Date:**	12/30/2021
Project Description:	Hoff VC- 336 Layfield Road, Perkiomenville, PA	**Deliverable:**	REDT2
C/O Initiated By:	JADONS **PM:** JBS	**TAT (Days):**	7

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Sample #: JD35920-2 thru 6

Dept:

TAT: 7

Change:

Please cancel ABLV8270SL and add ABLV8270SL1 on the original jol the original due date.

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Above Changes Per: Jadon Schiller **Date/Time:** 12/30/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

JD35920: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD35920

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD35920-1 TB-112921	Collected: 30-NOV-21 12:00 By: MB		Received: 30-NOV-21 By: JP			
JD35920-1	SW846 8260D	03-DEC-21 02:37	NW			V8260SL
JD35920-1	SW846 8260D BY SIM	07-DEC-21 13:01	BK			V8260SIMDIOX
JD35920-2 HOFF MW-2DL	Collected: 29-NOV-21 14:00 By: MB		Received: 30-NOV-21 By: JP			
JD35920-2	SW846 7470A	02-DEC-21 15:57	SB	02-DEC-21	SB	HG
JD35920-2	SW846 8260D	03-DEC-21 03:53	NW			V8260SL
JD35920-2	SW846 8270E BY SIM	03-DEC-21 07:23	CS	02-DEC-21	JL	BLV8270SIMPAH
JD35920-2	SW846 6020B	03-DEC-21 18:02	NV	02-DEC-21	SF	ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, FEMS, KMS, MNMS, NAMS, PBMS, SBMS, SEMS, TLMS
JD35920-2	SW846 6020B	06-DEC-21 19:30	NV	02-DEC-21	SF	AGMS, CUMS, VMS, ZNMS
JD35920-2	SW846 6020B	06-DEC-21 19:36	NV	02-DEC-21	SF	CAMS, MGMS, NIMS
JD35920-2	SW846 8260D BY SIM	07-DEC-21 13:29	BK			V8260SIMDIOX
JD35920-2	SW846 8260D BY SIM	07-DEC-21 16:22	BK			
JD35920-2	SW846 8270E	08-DEC-21 10:41	CS	02-DEC-21	JL	ABLV8270SL
JD35920-2	SW846 8081B	09-DEC-21 04:37	CP	03-DEC-21	JL	P8081PESTTCL
JD35920-2	SW846 8270E BY SIM	12-DEC-21 16:18	KLS	10-DEC-21	JL	BLV8270SIMPAH
JD35920-2	SW846 8081B	20-DEC-21 04:09	CP	17-DEC-21	TG	P8081PESTTCL
JD35920-3 HOFF MW-2DU	Collected: 29-NOV-21 15:35 By: MB		Received: 30-NOV-21 By: JP			
JD35920-3	SW846 7470A	02-DEC-21 15:58	SB	02-DEC-21	SB	HG
JD35920-3	SW846 8260D	03-DEC-21 04:19	NW			V8260SL
JD35920-3	SW846 8270E BY SIM	03-DEC-21 10:31	CS	02-DEC-21	JL	BLV8270SIMPAH
JD35920-3	SW846 6020B	03-DEC-21 18:05	NV	02-DEC-21	SF	ASMS, BEMS, CDMS, COMS, KMS, PBMS, SBMS, SEMS, TLMS
JD35920-3	SW846 6020B	06-DEC-21 19:42	NV	02-DEC-21	SF	AGMS, CUMS, VMS
JD35920-3	SW846 6020B	06-DEC-21 19:48	NV	02-DEC-21	SF	ALMS, BAMS, CAMS, CRMS, FEMS, MGMS, MNMS, NAMS, NIMS, ZNMS
JD35920-3	SW846 8260D BY SIM	07-DEC-21 13:58	BK			V8260SIMDIOX
JD35920-3	SW846 8081B	09-DEC-21 03:37	CP	03-DEC-21	JL	P8081PESTTCL
JD35920-3	SW846 8270E	09-DEC-21 23:18	KLS	02-DEC-21	JL	ABLV8270SL
JD35920-3	SW846 8270E BY SIM	12-DEC-21 20:37	KLS	10-DEC-21	JL	BLV8270SIMPAH
JD35920-3	SW846 8081B	20-DEC-21 04:26	CP	17-DEC-21	TG	P8081PESTTCL

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD35920

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD35920-4	Collected: 30-NOV-21 09:45 By: MB			Received: 30-NOV-21 By: JP		
HOFF MW-2S						
JD35920-4	SW846 7470A	02-DEC-21 16:03	SB	02-DEC-21	SB	HG
JD35920-4	SW846 8260D	03-DEC-21 04:44	NW			V8260SL
JD35920-4	SW846 8270E BY SIM	03-DEC-21 18:04	KLS	02-DEC-21	JL	BLV8270SIMPAH
JD35920-4	SW846 6020B	03-DEC-21 18:08	NV	02-DEC-21	SF	ALMS, ASMS, BAMS, BEMS, CDMS, COMS, FEMS, KMS, MNMS, PBMS, SBMS, SEMS, TLMS
JD35920-4	SW846 6020B	06-DEC-21 19:54	NV	02-DEC-21	SF	CRMS, NIMS
JD35920-4	SW846 6020B	06-DEC-21 20:01	NV	02-DEC-21	SF	CAMS, MGMS, NAMS
JD35920-4	SW846 6020B	06-DEC-21 21:56	NV	02-DEC-21	SF	AGMS, CUMS, VMS, ZNMS
JD35920-4	SW846 8260D BY SIM	07-DEC-21 14:27	BK			V8260SIMDIOX
JD35920-4	SW846 8270E	08-DEC-21 11:08	CS	02-DEC-21	JL	ABLV8270SL
JD35920-4	SW846 8081B	09-DEC-21 03:52	CP	03-DEC-21	JL	P8081PESTTCL
JD35920-4	SW846 8270E BY SIM	12-DEC-21 20:14	KLS	10-DEC-21	JL	BLV8270SIMPAH
JD35920-4	SW846 8081B	20-DEC-21 04:44	CP	17-DEC-21	TG	P8081PESTTCL
JD35920-5	Collected: 30-NOV-21 11:55 By: MB			Received: 30-NOV-21 By: JP		
HOFF MW-7DL						
JD35920-5	SW846 7470A	02-DEC-21 16:04	SB	02-DEC-21	SB	HG
JD35920-5	SW846 8260D	03-DEC-21 05:10	NW			V8260SL
JD35920-5	SW846 8270E BY SIM	03-DEC-21 08:10	CS	02-DEC-21	JL	BLV8270SIMPAH
JD35920-5	SW846 6020B	03-DEC-21 18:11	NV	02-DEC-21	SF	ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, FEMS, KMS, MNMS, PBMS, SBMS, SEMS, TLMS
JD35920-5	SW846 6020B	06-DEC-21 20:07	NV	02-DEC-21	SF	AGMS, NIMS, VMS, ZNMS
JD35920-5	SW846 6020B	06-DEC-21 20:13	NV	02-DEC-21	SF	CAMS
JD35920-5	SW846 6020B	07-DEC-21 13:27	NV	02-DEC-21	SF	MGMS, NAMS
JD35920-5	SW846 8260D BY SIM	07-DEC-21 14:55	BK			V8260SIMDIOX
JD35920-5	SW846 8270E	08-DEC-21 11:35	CS	02-DEC-21	JL	ABLV8270SL
JD35920-5	SW846 6020B	08-DEC-21 17:02	NV	07-DEC-21	NV	CUMS
JD35920-5	SW846 8081B	09-DEC-21 04:07	CP	03-DEC-21	JL	P8081PESTTCL
JD35920-5	SW846 8270E BY SIM	12-DEC-21 16:42	KLS	10-DEC-21	JL	BLV8270SIMPAH
JD35920-5	SW846 8081B	20-DEC-21 05:02	CP	17-DEC-21	TG	P8081PESTTCL

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD35920

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD35920-6	Collected: 30-NOV-21 12:00 By: MB			Received: 30-NOV-21	By: JP	
HOFF DUP-113021						
JD35920-6	SW846 7470A	02-DEC-21 16:06	SB	02-DEC-21	SB	HG
JD35920-6	SW846 8260D	03-DEC-21 05:35	NW			V8260SL
JD35920-6	SW846 8270E BY SIM	03-DEC-21 08:33	CS	02-DEC-21	JL	BLV8270SIMPAH
JD35920-6	SW846 6020B	03-DEC-21 18:14	NV	02-DEC-21	SF	ALMS,ASMS,BAMS,BEMS,CDMS, COMS,CRMS,FEMS,KMS,MNMS, PBMS,SBMS,SEMS,TLMS
JD35920-6	SW846 6020B	06-DEC-21 20:19	NV	02-DEC-21	SF	AGMS,CUMS,NIMS,VMS,ZNMS
JD35920-6	SW846 6020B	06-DEC-21 20:25	NV	02-DEC-21	SF	CAMS,MGMS,NAMS
JD35920-6	SW846 8260D BY SIM	07-DEC-21 15:24	BK			V8260SIMDIOX
JD35920-6	SW846 8270E	08-DEC-21 12:02	CS	02-DEC-21	JL	ABLV8270SL
JD35920-6	SW846 8081B	09-DEC-21 04:22	CP	03-DEC-21	JL	P8081PESTTCL
JD35920-6	SW846 8270E BY SIM	12-DEC-21 17:05	KLS	10-DEC-21	JL	BLV8270SIMPAH
JD35920-6	SW846 8081B	20-DEC-21 05:20	CP	17-DEC-21	TG	P8081PESTTCL
JD35920-2F	Collected: 29-NOV-21 14:00 By: MB			Received: 30-NOV-21	By: JP	
HOFF MW-2DL						
JD35920-2F	SW846 7470A	02-DEC-21 16:07	SB	02-DEC-21	SB	HG
JD35920-2F	SW846 6020B	03-DEC-21 18:17	NV	02-DEC-21	SF	ALMS,ASMS,BAMS,BEMS,CDMS, COMS,CRMS,FEMS,KMS,MNMS, NAMS,PBMS,SBMS,SEMS,TLMS
JD35920-2F	SW846 6020B	06-DEC-21 20:44	NV	02-DEC-21	SF	AGMS,CUMS,NIMS,VMS,ZNMS
JD35920-2F	SW846 6020B	06-DEC-21 20:50	NV	02-DEC-21	SF	CAMS,MGMS
JD35920-3F	Collected: 29-NOV-21 15:35 By: MB			Received: 30-NOV-21	By: JP	
HOFF MW-2DU						
JD35920-3F	SW846 7470A	02-DEC-21 16:09	SB	02-DEC-21	SB	HG
JD35920-3F	SW846 6020B	03-DEC-21 18:20	NV	02-DEC-21	SF	ALMS,ASMS,BAMS,BEMS,CDMS, COMS,CRMS,FEMS,KMS,MNMS, PBMS,SBMS,SEMS,TLMS
JD35920-3F	SW846 6020B	06-DEC-21 20:56	NV	02-DEC-21	SF	AGMS,CUMS,NIMS,VMS,ZNMS
JD35920-3F	SW846 6020B	06-DEC-21 21:02	NV	02-DEC-21	SF	CAMS,MGMS,NAMS

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD35920

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD35920-4F	Collected: 30-NOV-21 09:45 By: MB			Received: 30-NOV-21 By: JP		
HOFF MW-2S						
JD35920-4F	SW846 7470A	02-DEC-21 16:10	SB	02-DEC-21	SB	HG
JD35920-4F	SW846 6020B	03-DEC-21 18:23	NV	02-DEC-21	SF	ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, FEMS, KMS, MNMS, PBMS, SBMS, SEMS, TLMS
JD35920-4F	SW846 6020B	06-DEC-21 21:08	NV	02-DEC-21	SF	AGMS, CUMS, NIMS, VMS, ZNMS
JD35920-4F	SW846 6020B	06-DEC-21 21:14	NV	02-DEC-21	SF	CAMS, MGMS
JD35920-4F	SW846 6020B	07-DEC-21 13:20	NV	02-DEC-21	SF	NAMS
JD35920-5F	Collected: 30-NOV-21 11:55 By: MB			Received: 30-NOV-21 By: JP		
HOFF MW-7DL						
JD35920-5F	SW846 7470A	02-DEC-21 16:11	SB	02-DEC-21	SB	HG
JD35920-5F	SW846 6020B	03-DEC-21 18:32	NV	02-DEC-21	SF	ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, FEMS, KMS, MNMS, PBMS, SBMS, SEMS, TLMS
JD35920-5F	SW846 6020B	06-DEC-21 21:20	NV	02-DEC-21	SF	AGMS, NIMS, VMS, ZNMS
JD35920-5F	SW846 6020B	06-DEC-21 21:26	NV	02-DEC-21	SF	CAMS
JD35920-5F	SW846 6020B	07-DEC-21 13:33	NV	02-DEC-21	SF	MGMS, NAMS
JD35920-5F	SW846 6020B	08-DEC-21 17:08	NV	07-DEC-21	NV	CUMS
JD35920-6F	Collected: 30-NOV-21 12:00 By: MB			Received: 30-NOV-21 By: JP		
HOFF DUP-113021						
JD35920-6F	SW846 7470A	02-DEC-21 16:13	SB	02-DEC-21	SB	HG
JD35920-6F	SW846 6020B	03-DEC-21 18:35	NV	02-DEC-21	SF	ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, FEMS, KMS, MNMS, PBMS, SBMS, SEMS, TLMS
JD35920-6F	SW846 6020B	06-DEC-21 21:32	NV	02-DEC-21	SF	AGMS, CUMS, NIMS, VMS, ZNMS
JD35920-6F	SW846 6020B	06-DEC-21 21:38	NV	02-DEC-21	SF	CAMS, MGMS, NAMS

SGS Internal Chain of Custody

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 11/30/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35920-1.2	Nicholas Weigand	GCMS2V	12/02/21 16:53	Load on Instrument
JD35920-1.2	GCMS2V	Taylor Sauter	12/06/21 10:24	Unload from Instrument
JD35920-1.2	Taylor Sauter	Secured Storage	12/06/21 10:24	Return to Storage
JD35920-1.4	Secured Storage	Taylor Sauter	12/07/21 15:35	Retrieve from Storage
JD35920-1.4	Taylor Sauter	GCMS3A	12/07/21 15:35	Load on Instrument
JD35920-1.4	GCMS3A	Bridget Kelly	12/08/21 15:12	Unload from Instrument
JD35920-1.4	Bridget Kelly	Secured Storage	12/08/21 15:12	Return to Storage
JD35920-2.1	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-2.1	Tyler Strong	Secured Staging Area	12/02/21 22:38	Return to Storage
stage				
JD35920-2.1	Secured Staging Area	Naisha Torres	12/03/21 07:59	Retrieve from Storage
JD35920-2.1	Naisha Torres		12/03/21 16:30	Depleted
JD35920-2.1.1	Naisha Torres	Organics Prep	12/03/21 08:02	Extract from JD35920-2.1
JD35920-2.1.1	Organics Prep	Jesse Li	12/04/21 00:33	Extract from JD35920-2.1
JD35920-2.1.1	Jesse Li	Extract Storage	12/04/21 00:33	Return to Storage
JD35920-2.1.1	Extract Storage	Christine Phillips	12/09/21 01:45	Retrieve from Storage
JD35920-2.1.1	Christine Phillips	GC4G	12/09/21 01:45	Load on Instrument
JD35920-2.2	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-2.2	Tyler Strong	Secured Staging Area	12/01/21 21:26	Return to Storage
stage				
JD35920-2.2	Secured Staging Area	Naisha Torres	12/02/21 08:02	Retrieve from Storage
JD35920-2.2	Naisha Torres		12/02/21 14:36	Depleted
JD35920-2.2.1	Naisha Torres	Organics Prep	12/02/21 08:08	Extract from JD35920-2.2
JD35920-2.2.1	Organics Prep	Jesse Li	12/03/21 00:26	Extract from JD35920-2.2
JD35920-2.2.1	Jesse Li	Extract Storage	12/03/21 00:26	Return to Storage
JD35920-2.2.1	Extract Storage	Christopher Sowa	12/03/21 06:07	Retrieve from Storage
JD35920-2.2.1	Christopher Sowa	GCMS4P	12/03/21 06:07	Load on Instrument
JD35920-2.2.1	GCMS4P	Christopher Sowa	12/08/21 06:34	Unload from Instrument
JD35920-2.2.1	Christopher Sowa	GCMS5P	12/08/21 06:35	Load on Instrument
JD35920-2.2.1	GCMS5P	Kristi Schollenberger	12/12/21 12:31	Unload from Instrument
JD35920-2.2.1	Kristi Schollenberger	Extract Freezer	12/12/21 12:31	Return to Storage
JD35920-2.3	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-2.3	Secured Storage	Joshua Reitan	12/16/21 20:09	Retrieve from Storage
JD35920-2.3	Joshua Reitan	Secured Staging Area	12/16/21 20:09	Return to Storage
JD35920-2.3	Secured Staging Area	Edward Rue	12/17/21 08:03	Retrieve from Storage
JD35920-2.3	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD35920-2.3	Rocquan Salters		12/17/21 23:08	Depleted

SGS Internal Chain of Custody

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 11/30/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35920-2.3.1	Edward Rue	Organics Prep	12/17/21 12:02	Extract from JD35920-2.3
JD35920-2.3.1	Organics Prep	Taylor Gorman	12/18/21 01:00	Extract from JD35920-2.3
JD35920-2.3.1	Taylor Gorman	Extract Storage	12/18/21 01:00	Return to Storage
JD35920-2.3.1	Extract Storage	Christine Phillips	12/20/21 03:17	Retrieve from Storage
JD35920-2.3.1	Christine Phillips	GC6G	12/20/21 03:17	Load on Instrument
JD35920-2.4	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-2.4	Secured Storage	Joshua Reitan	12/09/21 20:39	Retrieve from Storage
JD35920-2.4	Joshua Reitan	Secured Staging Area	12/09/21 20:40	Return to Storage
JD35920-2.4	Secured Staging Area	Dawnette Williams	12/10/21 08:10	Retrieve from Storage
JD35920-2.4	Dawnette Williams	Rocquan Salters	12/10/21 15:20	Custody Transfer
JD35920-2.4	Rocquan Salters		12/10/21 21:54	Depleted
JD35920-2.4.1	Dawnette Williams	Organics Prep	12/10/21 08:37	Extract from JD35920-2.4
JD35920-2.4.1	Organics Prep	Jesse Li	12/10/21 23:41	Extract from JD35920-2.4
JD35920-2.4.1	Jesse Li	Extract Storage	12/10/21 23:41	Return to Storage
JD35920-2.4.1	Extract Storage	Christopher Sowa	12/11/21 05:08	Retrieve from Storage
JD35920-2.4.1	Christopher Sowa	GCMS4P	12/11/21 05:08	Load on Instrument
JD35920-2.4.1	GCMS4P	Kristi Schollenberger	12/14/21 17:28	Unload from Instrument
JD35920-2.4.1	Kristi Schollenberger	Extract Freezer	12/14/21 17:28	Return to Storage
JD35920-2.5	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-2.5 stage	Christian King	Secured Staging Area	12/01/21 11:02	Return to Storage
JD35920-2.5 skip	Cosmos Giannakakis	Secured Staging Area	12/01/21 19:09	Return to Storage
JD35920-2.5	Secured Staging Area	Alyssa Koshy	12/02/21 08:29	Retrieve from Storage
JD35920-2.5	Alyssa Koshy	Secured Storage	12/02/21 12:26	Return to Storage
JD35920-2.5.1	Alyssa Koshy	Metals Digestion	12/02/21 11:29	Digestate from JD35920-2.5
JD35920-2.5.1	Metals Digestion	Alyssa Koshy	12/02/21 11:29	Digestate from JD35920-2.5
JD35920-2.5.1	Alyssa Koshy	Metals Digestate Storage	12/02/21 11:29	Return to Storage
JD35920-2.9	Secured Storage	Taylor Sauter	12/07/21 15:35	Retrieve from Storage
JD35920-2.9	Taylor Sauter	GCMS3A	12/07/21 15:35	Load on Instrument
JD35920-2.9	GCMS3A	Bridget Kelly	12/08/21 15:12	Unload from Instrument
JD35920-2.9	Bridget Kelly	Secured Storage	12/08/21 15:12	Return to Storage
JD35920-2.10	Secured Storage	Taylor Sauter	12/07/21 15:35	Retrieve from Storage
JD35920-2.10	Taylor Sauter	GCMS3A	12/07/21 15:35	Load on Instrument
JD35920-2.10	GCMS3A	Bridget Kelly	12/08/21 15:12	Unload from Instrument
JD35920-2.10	Bridget Kelly	Secured Storage	12/08/21 15:12	Return to Storage
JD35920-2.11	Nicholas Weigand	GCMS2V	12/02/21 16:53	Load on Instrument

SGS Internal Chain of Custody

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 11/30/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35920-2.11	GCMS2V	Taylor Sauter	12/06/21 10:24	Unload from Instrument
JD35920-2.11	Taylor Sauter	Secured Storage	12/06/21 10:24	Return to Storage
JD35920-2F.6	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-2F.6	Christian King	Secured Staging Area	12/01/21 11:02	Return to Storage
stage				
JD35920-2F.6	Cosmos Giannakakis	Secured Staging Area	12/01/21 19:09	Return to Storage
skip				
JD35920-2F.6	Secured Staging Area	Alyssa Koshy	12/02/21 08:29	Retrieve from Storage
JD35920-2F.6	Alyssa Koshy	Secured Storage	12/02/21 12:26	Return to Storage
JD35920-2F.6.1	Alyssa Koshy	Metals Digestion	12/02/21 11:29	Digestate from JD35920-2F.6
JD35920-2F.6.1	Metals Digestion	Alyssa Koshy	12/02/21 11:29	Digestate from JD35920-2F.6
JD35920-2F.6.1	Alyssa Koshy	Metals Digestate Storage	12/02/21 11:29	Return to Storage
JD35920-3.1	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-3.1	Secured Storage	Joshua Reitan	12/09/21 20:39	Retrieve from Storage
JD35920-3.1	Joshua Reitan	Secured Staging Area	12/09/21 20:40	Return to Storage
JD35920-3.1	Secured Staging Area	Dawnette Williams	12/10/21 08:10	Retrieve from Storage
JD35920-3.1	Dawnette Williams	Rocquan Salters	12/10/21 15:20	Custody Transfer
JD35920-3.1	Rocquan Salters		12/10/21 21:54	Depleted
JD35920-3.1.1	Dawnette Williams	Organics Prep	12/10/21 08:37	Extract from JD35920-3.1
JD35920-3.1.1	Organics Prep	Jesse Li	12/10/21 23:41	Extract from JD35920-3.1
JD35920-3.1.1	Jesse Li	Extract Storage	12/10/21 23:41	Return to Storage
JD35920-3.1.1	Extract Storage	Christopher Sowa	12/11/21 05:08	Retrieve from Storage
JD35920-3.1.1	Christopher Sowa	GCMS4P	12/11/21 05:08	Load on Instrument
JD35920-3.1.1	GCMS4P	Kristi Schollenberger	12/14/21 17:28	Unload from Instrument
JD35920-3.1.1	Kristi Schollenberger	Extract Freezer	12/14/21 17:28	Return to Storage
JD35920-3.2	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-3.2	Tyler Strong	Secured Staging Area	12/01/21 21:26	Return to Storage
stage				
JD35920-3.2	Secured Staging Area	Naisha Torres	12/02/21 08:02	Retrieve from Storage
JD35920-3.2	Naisha Torres		12/02/21 14:36	Depleted
JD35920-3.2.1	Naisha Torres	Organics Prep	12/02/21 08:08	Extract from JD35920-3.2
JD35920-3.2.1	Organics Prep	Jesse Li	12/03/21 00:26	Extract from JD35920-3.2
JD35920-3.2.1	Jesse Li	Extract Storage	12/03/21 00:26	Return to Storage
JD35920-3.2.1	Extract Storage	Christopher Sowa	12/03/21 06:07	Retrieve from Storage
JD35920-3.2.1	Christopher Sowa	GCMS4P	12/03/21 06:07	Load on Instrument
JD35920-3.2.1	GCMS4P	Christopher Sowa	12/08/21 06:34	Unload from Instrument
JD35920-3.2.1	Christopher Sowa	GCMS5P	12/08/21 06:35	Load on Instrument
JD35920-3.2.1	GCMS5P	Kristi Schollenberger	12/12/21 12:31	Unload from Instrument

SGS Internal Chain of Custody

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 11/30/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35920-3.2.1	Kristi Schollenberger	Extract Freezer	12/12/21 12:31	Return to Storage
JD35920-3.3	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-3.3	Tyler Strong	Secured Staging Area	12/02/21 22:38	Return to Storage
stage				
JD35920-3.3	Secured Staging Area	Naisha Torres	12/03/21 07:59	Retrieve from Storage
JD35920-3.3	Naisha Torres		12/03/21 16:30	Depleted
JD35920-3.3.1	Naisha Torres	Organics Prep	12/03/21 08:02	Extract from JD35920-3.3
JD35920-3.3.1	Organics Prep	Jesse Li	12/04/21 00:33	Extract from JD35920-3.3
JD35920-3.3.1	Jesse Li	Extract Storage	12/04/21 00:33	Return to Storage
JD35920-3.3.1	Extract Storage	Christine Phillips	12/09/21 01:45	Retrieve from Storage
JD35920-3.3.1	Christine Phillips	GC4G	12/09/21 01:45	Load on Instrument
JD35920-3.4	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-3.4	Secured Storage	Joshua Reitan	12/16/21 20:09	Retrieve from Storage
JD35920-3.4	Joshua Reitan	Secured Staging Area	12/16/21 20:09	Return to Storage
JD35920-3.4	Secured Staging Area	Edward Rue	12/17/21 08:03	Retrieve from Storage
JD35920-3.4	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD35920-3.4	Rocquan Salters		12/17/21 23:08	Depleted
JD35920-3.4.1	Edward Rue	Organics Prep	12/17/21 12:02	Extract from JD35920-3.4
JD35920-3.4.1	Organics Prep	Taylor Gorman	12/18/21 01:00	Extract from JD35920-3.4
JD35920-3.4.1	Taylor Gorman	Extract Storage	12/18/21 01:00	Return to Storage
JD35920-3.4.1	Extract Storage	Christine Phillips	12/20/21 03:17	Retrieve from Storage
JD35920-3.4.1	Christine Phillips	GC6G	12/20/21 03:17	Load on Instrument
JD35920-3.5	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-3.5	Christian King	Secured Staging Area	12/01/21 11:02	Return to Storage
stage				
JD35920-3.5	Cosmos Giannakakis	Secured Staging Area	12/01/21 19:09	Return to Storage
skip				
JD35920-3.5	Secured Staging Area	Alyssa Koshy	12/02/21 08:29	Retrieve from Storage
JD35920-3.5	Alyssa Koshy	Secured Storage	12/02/21 12:26	Return to Storage
JD35920-3.5.1	Alyssa Koshy	Metals Digestion	12/02/21 11:29	Digestate from JD35920-3.5
JD35920-3.5.1	Metals Digestion	Alyssa Koshy	12/02/21 11:29	Digestate from JD35920-3.5
JD35920-3.5.1	Alyssa Koshy	Metals Digestate Storage	12/02/21 11:29	Return to Storage
JD35920-3.7	Secured Storage	Bridget Kelly	12/07/21 17:09	Retrieve from Storage
JD35920-3.7	Bridget Kelly	GCMS3A	12/07/21 17:09	Load on Instrument
JD35920-3.7	GCMS3A	Bridget Kelly	12/08/21 15:12	Unload from Instrument
JD35920-3.7	Bridget Kelly	Secured Storage	12/08/21 15:12	Return to Storage

SGS Internal Chain of Custody

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 11/30/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35920-3.9	Nicholas Weigand	GCMS2V	12/02/21 16:53	Load on Instrument
JD35920-3.9	GCMS2V	Taylor Sauter	12/06/21 10:24	Unload from Instrument
JD35920-3.9	Taylor Sauter	Secured Storage	12/06/21 10:24	Return to Storage
JD35920-3.11	Secured Storage	Taylor Sauter	12/07/21 15:35	Retrieve from Storage
JD35920-3.11	Taylor Sauter	GCMS3A	12/07/21 15:35	Load on Instrument
JD35920-3.11	GCMS3A	Bridget Kelly	12/08/21 15:12	Unload from Instrument
JD35920-3.11	Bridget Kelly	Secured Storage	12/08/21 15:12	Return to Storage
JD35920-3F.6	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-3F.6 stage	Christian King	Secured Staging Area	12/01/21 11:02	Return to Storage
JD35920-3F.6 skip	Cosmos Giannakakis	Secured Staging Area	12/01/21 19:09	Return to Storage
JD35920-3F.6	Secured Staging Area	Alyssa Koshy	12/02/21 08:29	Retrieve from Storage
JD35920-3F.6	Alyssa Koshy	Secured Storage	12/02/21 12:26	Return to Storage
JD35920-3F.6.1	Alyssa Koshy	Metals Digestion	12/02/21 11:29	Digestate from JD35920-3F.6
JD35920-3F.6.1	Metals Digestion	Alyssa Koshy	12/02/21 11:29	Digestate from JD35920-3F.6
JD35920-3F.6.1	Alyssa Koshy	Metals Digestate Storage	12/02/21 11:29	Return to Storage
JD35920-4.1	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-4.1 stage	Tyler Strong	Secured Staging Area	12/01/21 21:26	Return to Storage
JD35920-4.1	Secured Staging Area	Naisha Torres	12/02/21 08:02	Retrieve from Storage
JD35920-4.1	Naisha Torres		12/02/21 14:36	Depleted
JD35920-4.1.1	Naisha Torres	Organics Prep	12/02/21 08:08	Extract from JD35920-4.1
JD35920-4.1.1	Organics Prep	Jesse Li	12/03/21 00:26	Extract from JD35920-4.1
JD35920-4.1.1	Jesse Li	Extract Storage	12/03/21 00:26	Return to Storage
JD35920-4.1.1	Extract Storage	Christopher Sowa	12/03/21 06:07	Retrieve from Storage
JD35920-4.1.1	Christopher Sowa	GCMS4P	12/03/21 06:07	Load on Instrument
JD35920-4.1.1	GCMS4P	Christopher Sowa	12/08/21 06:34	Unload from Instrument
JD35920-4.1.1	Christopher Sowa	GCMS5P	12/08/21 06:35	Load on Instrument
JD35920-4.1.1	GCMS5P	Kristi Schollenberger	12/12/21 12:31	Unload from Instrument
JD35920-4.1.1	Kristi Schollenberger	Extract Freezer	12/12/21 12:31	Return to Storage
JD35920-4.2	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-4.2 stage	Tyler Strong	Secured Staging Area	12/02/21 22:38	Return to Storage
JD35920-4.2	Secured Staging Area	Naisha Torres	12/03/21 07:59	Retrieve from Storage
JD35920-4.2	Naisha Torres		12/03/21 16:30	Depleted
JD35920-4.2.1	Naisha Torres	Organics Prep	12/03/21 08:02	Extract from JD35920-4.2

SGS Internal Chain of Custody

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 11/30/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35920-4.2.1	Organics Prep	Jesse Li	12/04/21 00:33	Extract from JD35920-4.2
JD35920-4.2.1	Jesse Li	Extract Storage	12/04/21 00:33	Return to Storage
JD35920-4.2.1	Extract Storage	Christine Phillips	12/09/21 01:45	Retrieve from Storage
JD35920-4.2.1	Christine Phillips	GC4G	12/09/21 01:45	Load on Instrument
JD35920-4.3	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-4.3	Secured Storage	Joshua Reitan	12/16/21 20:09	Retrieve from Storage
JD35920-4.3	Joshua Reitan	Secured Staging Area	12/16/21 20:09	Return to Storage
JD35920-4.3	Secured Staging Area	Edward Rue	12/17/21 08:03	Retrieve from Storage
JD35920-4.3	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD35920-4.3	Rocquan Salters		12/17/21 23:08	Depleted
JD35920-4.3.1	Edward Rue	Organics Prep	12/17/21 12:02	Extract from JD35920-4.3
JD35920-4.3.1	Organics Prep	Taylor Gorman	12/18/21 01:00	Extract from JD35920-4.3
JD35920-4.3.1	Taylor Gorman	Extract Storage	12/18/21 01:00	Return to Storage
JD35920-4.3.1	Extract Storage	Christine Phillips	12/20/21 03:17	Retrieve from Storage
JD35920-4.3.1	Christine Phillips	GC6G	12/20/21 03:17	Load on Instrument
JD35920-4.4	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-4.4	Secured Storage	Joshua Reitan	12/09/21 20:39	Retrieve from Storage
JD35920-4.4	Joshua Reitan	Secured Staging Area	12/09/21 20:40	Return to Storage
JD35920-4.4	Secured Staging Area	Dawnette Williams	12/10/21 08:10	Retrieve from Storage
JD35920-4.4	Dawnette Williams	Rocquan Salters	12/10/21 15:20	Custody Transfer
JD35920-4.4	Rocquan Salters		12/10/21 21:54	Depleted
JD35920-4.4.1	Dawnette Williams	Organics Prep	12/10/21 08:37	Extract from JD35920-4.4
JD35920-4.4.1	Organics Prep	Jesse Li	12/10/21 23:41	Extract from JD35920-4.4
JD35920-4.4.1	Jesse Li	Extract Storage	12/10/21 23:41	Return to Storage
JD35920-4.4.1	Extract Storage	Christopher Sowa	12/11/21 05:08	Retrieve from Storage
JD35920-4.4.1	Christopher Sowa	GCMS4P	12/11/21 05:08	Load on Instrument
JD35920-4.4.1	GCMS4P	Kristi Schollenberger	12/14/21 17:28	Unload from Instrument
JD35920-4.4.1	Kristi Schollenberger	Extract Freezer	12/14/21 17:28	Return to Storage
JD35920-4.5	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-4.5 stage	Christian King	Secured Staging Area	12/01/21 11:02	Return to Storage
JD35920-4.5 skip	Cosmos Giannakakis	Secured Staging Area	12/01/21 19:09	Return to Storage
JD35920-4.5	Secured Staging Area	Alyssa Koshy	12/02/21 08:29	Retrieve from Storage
JD35920-4.5	Alyssa Koshy	Secured Storage	12/02/21 12:26	Return to Storage
JD35920-4.5.1	Alyssa Koshy	Metals Digestion	12/02/21 11:29	Digestate from JD35920-4.5
JD35920-4.5.1	Metals Digestion	Alyssa Koshy	12/02/21 11:29	Digestate from JD35920-4.5
JD35920-4.5.1	Alyssa Koshy	Metals Digestate Storage	12/02/21 11:29	Return to Storage

SGS Internal Chain of Custody

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 11/30/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35920-4.7	Nicholas Weigand	GCMS2V	12/02/21 16:53	Load on Instrument
JD35920-4.7	GCMS2V	Taylor Sauter	12/06/21 10:24	Unload from Instrument
JD35920-4.7	Taylor Sauter	Secured Storage	12/06/21 10:24	Return to Storage
JD35920-4.9	Secured Storage	Taylor Sauter	12/07/21 15:35	Retrieve from Storage
JD35920-4.9	Taylor Sauter	GCMS3A	12/07/21 15:35	Load on Instrument
JD35920-4.9	GCMS3A	Bridget Kelly	12/08/21 15:12	Unload from Instrument
JD35920-4.9	Bridget Kelly	Secured Storage	12/08/21 15:12	Return to Storage
JD35920-4.11	Secured Storage	Taylor Sauter	12/07/21 15:35	Retrieve from Storage
JD35920-4.11	Taylor Sauter	GCMS3A	12/07/21 15:35	Load on Instrument
JD35920-4.11	GCMS3A	Bridget Kelly	12/08/21 15:12	Unload from Instrument
JD35920-4.11	Bridget Kelly	Secured Storage	12/08/21 15:12	Return to Storage
JD35920-4F.6	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-4F.6 stage	Christian King	Secured Staging Area	12/01/21 11:02	Return to Storage
JD35920-4F.6 skip	Cosmos Giannakakis	Secured Staging Area	12/01/21 19:09	Return to Storage
JD35920-4F.6	Secured Staging Area	Alyssa Koshy	12/02/21 08:29	Retrieve from Storage
JD35920-4F.6	Alyssa Koshy	Secured Storage	12/02/21 12:26	Return to Storage
JD35920-4F.6.1	Alyssa Koshy	Metals Digestion	12/02/21 11:29	Digestate from JD35920-4F.6
JD35920-4F.6.1	Metals Digestion	Alyssa Koshy	12/02/21 11:29	Digestate from JD35920-4F.6
JD35920-4F.6.1	Alyssa Koshy	Metals Digestate Storage	12/02/21 11:29	Return to Storage
JD35920-5.1	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-5.1	Secured Storage	Joshua Reitan	12/09/21 20:39	Retrieve from Storage
JD35920-5.1	Joshua Reitan	Secured Staging Area	12/09/21 20:40	Return to Storage
JD35920-5.1	Secured Staging Area	Dawnette Williams	12/10/21 08:10	Retrieve from Storage
JD35920-5.1	Dawnette Williams	Rocquan Salters	12/10/21 15:20	Custody Transfer
JD35920-5.1	Rocquan Salters		12/10/21 21:54	Depleted
JD35920-5.1.1	Dawnette Williams	Organics Prep	12/10/21 08:37	Extract from JD35920-5.1
JD35920-5.1.1	Organics Prep	Jesse Li	12/10/21 23:41	Extract from JD35920-5.1
JD35920-5.1.1	Jesse Li	Extract Storage	12/10/21 23:41	Return to Storage
JD35920-5.1.1	Extract Storage	Christopher Sowa	12/11/21 05:08	Retrieve from Storage
JD35920-5.1.1	Christopher Sowa	GCMS4P	12/11/21 05:08	Load on Instrument
JD35920-5.1.1	GCMS4P	Kristi Schollenberger	12/14/21 17:28	Unload from Instrument
JD35920-5.1.1	Kristi Schollenberger	Extract Freezer	12/14/21 17:28	Return to Storage
JD35920-5.2	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-5.2	Secured Storage	Joshua Reitan	12/16/21 20:09	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 11/30/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35920-5.2	Joshua Reitan	Secured Staging Area	12/16/21 20:09	Return to Storage
JD35920-5.2	Secured Staging Area	Edward Rue	12/17/21 08:03	Retrieve from Storage
JD35920-5.2	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD35920-5.2	Rocquan Salters		12/17/21 23:08	Depleted
JD35920-5.2.1	Edward Rue	Organics Prep	12/17/21 12:02	Extract from JD35920-5.2
JD35920-5.2.1	Organics Prep	Taylor Gorman	12/18/21 01:00	Extract from JD35920-5.2
JD35920-5.2.1	Taylor Gorman	Extract Storage	12/18/21 01:00	Return to Storage
JD35920-5.2.1	Extract Storage	Christine Phillips	12/20/21 03:17	Retrieve from Storage
JD35920-5.2.1	Christine Phillips	GC6G	12/20/21 03:17	Load on Instrument
JD35920-5.3	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-5.3 stage	Tyler Strong	Secured Staging Area	12/01/21 21:26	Return to Storage
JD35920-5.3	Secured Staging Area	Naisha Torres	12/02/21 08:02	Retrieve from Storage
JD35920-5.3	Naisha Torres		12/02/21 14:36	Depleted
JD35920-5.3.1	Naisha Torres	Organics Prep	12/02/21 08:08	Extract from JD35920-5.3
JD35920-5.3.1	Organics Prep	Jesse Li	12/03/21 00:26	Extract from JD35920-5.3
JD35920-5.3.1	Jesse Li	Extract Storage	12/03/21 00:26	Return to Storage
JD35920-5.3.1	Extract Storage	Christopher Sowa	12/03/21 06:07	Retrieve from Storage
JD35920-5.3.1	Christopher Sowa	GCMS4P	12/03/21 06:07	Load on Instrument
JD35920-5.3.1	GCMS4P	Christopher Sowa	12/08/21 06:34	Unload from Instrument
JD35920-5.3.1	Christopher Sowa	GCMS5P	12/08/21 06:35	Load on Instrument
JD35920-5.3.1	GCMS5P	Kristi Schollenberger	12/12/21 12:31	Unload from Instrument
JD35920-5.3.1	Kristi Schollenberger	Extract Freezer	12/12/21 12:31	Return to Storage
JD35920-5.4	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-5.4 stage	Tyler Strong	Secured Staging Area	12/02/21 22:38	Return to Storage
JD35920-5.4	Secured Staging Area	Naisha Torres	12/03/21 07:59	Retrieve from Storage
JD35920-5.4	Naisha Torres		12/03/21 16:30	Depleted
JD35920-5.4.1	Naisha Torres	Organics Prep	12/03/21 08:02	Extract from JD35920-5.4
JD35920-5.4.1	Organics Prep	Jesse Li	12/04/21 00:33	Extract from JD35920-5.4
JD35920-5.4.1	Jesse Li	Extract Storage	12/04/21 00:33	Return to Storage
JD35920-5.4.1	Extract Storage	Christine Phillips	12/09/21 01:45	Retrieve from Storage
JD35920-5.4.1	Christine Phillips	GC4G	12/09/21 01:45	Load on Instrument
JD35920-5.5	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-5.5 stage	Christian King	Secured Staging Area	12/01/21 11:02	Return to Storage
JD35920-5.5 skip	Cosmos Giannakakis	Secured Staging Area	12/01/21 19:09	Return to Storage

SGS Internal Chain of Custody

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 11/30/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35920-5.5	Secured Staging Area	Alyssa Koshy	12/02/21 08:29	Retrieve from Storage
JD35920-5.5	Alyssa Koshy	Secured Storage	12/02/21 12:26	Return to Storage
JD35920-5.5	Secured Storage	Natasha Verma	12/07/21 10:07	Retrieve from Storage
JD35920-5.5	Secured Storage	Alyssa Koshy	12/07/21 16:10	Retrieve from Storage
Analyst unavailable for custody transfer.				
JD35920-5.5	Alyssa Koshy	Secured Storage	12/07/21 16:12	Return to Storage
JD35920-5.5.1	Alyssa Koshy	Metals Digestion	12/02/21 11:29	Digestate from JD35920-5.5
JD35920-5.5.1	Metals Digestion	Alyssa Koshy	12/02/21 11:29	Digestate from JD35920-5.5
JD35920-5.5.1	Alyssa Koshy	Metals Digestate Storage	12/02/21 11:29	Return to Storage
JD35920-5.5.2	Alyssa Koshy	Metals Digestion	12/07/21 16:11	Digestate from JD35920-5.5
JD35920-5.5.2	Metals Digestion	Alyssa Koshy	12/07/21 16:11	Digestate from JD35920-5.5
JD35920-5.5.2	Alyssa Koshy	Metals Digestate Storage	12/07/21 16:11	Return to Storage
JD35920-5.10	Nicholas Weigand	GCMS2V	12/02/21 16:53	Load on Instrument
JD35920-5.10	GCMS2V	Taylor Sauter	12/06/21 10:24	Unload from Instrument
JD35920-5.10	Taylor Sauter	Secured Storage	12/06/21 10:24	Return to Storage
JD35920-5.11	Secured Storage	Taylor Sauter	12/07/21 15:35	Retrieve from Storage
JD35920-5.11	Taylor Sauter	GCMS3A	12/07/21 15:35	Load on Instrument
JD35920-5.11	GCMS3A	Bridget Kelly	12/08/21 15:12	Unload from Instrument
JD35920-5.11	Bridget Kelly	Secured Storage	12/08/21 15:12	Return to Storage
JD35920-5F.6	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-5F.6	Christian King	Secured Staging Area	12/01/21 11:02	Return to Storage
stage				
JD35920-5F.6	Cosmos Giannakakis	Secured Staging Area	12/01/21 19:09	Return to Storage
skip				
JD35920-5F.6	Secured Staging Area	Alyssa Koshy	12/02/21 08:29	Retrieve from Storage
JD35920-5F.6	Alyssa Koshy	Secured Storage	12/02/21 12:26	Return to Storage
JD35920-5F.6	Secured Storage	Natasha Verma	12/07/21 10:07	Retrieve from Storage
JD35920-5F.6	Secured Storage	Alyssa Koshy	12/07/21 16:10	Retrieve from Storage
Analyst unavailable for custody transfer.				
JD35920-5F.6	Alyssa Koshy	Secured Storage	12/07/21 16:12	Return to Storage
JD35920-5F.6.1	Alyssa Koshy	Metals Digestion	12/02/21 11:29	Digestate from JD35920-5F.6
JD35920-5F.6.1	Metals Digestion	Alyssa Koshy	12/02/21 11:29	Digestate from JD35920-5F.6
JD35920-5F.6.1	Alyssa Koshy	Metals Digestate Storage	12/02/21 11:29	Return to Storage
JD35920-5F.6.2	Alyssa Koshy	Metals Digestion	12/07/21 16:11	Digestate from JD35920-5F.6
JD35920-5F.6.2	Metals Digestion	Alyssa Koshy	12/07/21 16:11	Digestate from JD35920-5F.6
JD35920-5F.6.2	Alyssa Koshy	Metals Digestate Storage	12/07/21 16:11	Return to Storage

SGS Internal Chain of Custody

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 11/30/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35920-6.1	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-6.1	Tyler Strong	Secured Staging Area	12/01/21 21:26	Return to Storage
stage				
JD35920-6.1	Secured Staging Area	Naisha Torres	12/02/21 08:02	Retrieve from Storage
JD35920-6.1	Naisha Torres		12/02/21 14:36	Depleted
JD35920-6.1.1	Naisha Torres	Organics Prep	12/02/21 08:08	Extract from JD35920-6.1
JD35920-6.1.1	Organics Prep	Jesse Li	12/03/21 00:26	Extract from JD35920-6.1
JD35920-6.1.1	Jesse Li	Extract Storage	12/03/21 00:26	Return to Storage
JD35920-6.1.1	Extract Storage	Christopher Sowa	12/03/21 06:07	Retrieve from Storage
JD35920-6.1.1	Christopher Sowa	GCMS4P	12/03/21 06:07	Load on Instrument
JD35920-6.1.1	GCMS4P	Christopher Sowa	12/08/21 06:34	Unload from Instrument
JD35920-6.1.1	Christopher Sowa	GCMS5P	12/08/21 06:35	Load on Instrument
JD35920-6.1.1	GCMS5P	Kristi Schollenberger	12/12/21 12:31	Unload from Instrument
JD35920-6.1.1	Kristi Schollenberger	Extract Freezer	12/12/21 12:31	Return to Storage
JD35920-6.2	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-6.2	Tyler Strong	Secured Staging Area	12/02/21 22:38	Return to Storage
stage				
JD35920-6.2	Secured Staging Area	Naisha Torres	12/03/21 07:59	Retrieve from Storage
JD35920-6.2	Naisha Torres		12/03/21 16:30	Depleted
JD35920-6.2.1	Naisha Torres	Organics Prep	12/03/21 08:02	Extract from JD35920-6.2
JD35920-6.2.1	Organics Prep	Jesse Li	12/04/21 00:33	Extract from JD35920-6.2
JD35920-6.2.1	Jesse Li	Extract Storage	12/04/21 00:33	Return to Storage
JD35920-6.2.1	Extract Storage	Christine Phillips	12/09/21 01:45	Retrieve from Storage
JD35920-6.2.1	Christine Phillips	GC4G	12/09/21 01:45	Load on Instrument
JD35920-6.3	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-6.3	Secured Storage	Joshua Reitan	12/09/21 20:39	Retrieve from Storage
JD35920-6.3	Joshua Reitan	Secured Staging Area	12/09/21 20:40	Return to Storage
JD35920-6.3	Secured Staging Area	Dawnette Williams	12/10/21 08:10	Retrieve from Storage
JD35920-6.3	Dawnette Williams	Rocquan Salters	12/10/21 15:20	Custody Transfer
JD35920-6.3	Rocquan Salters		12/10/21 21:54	Depleted
JD35920-6.3.1	Dawnette Williams	Organics Prep	12/10/21 08:37	Extract from JD35920-6.3
JD35920-6.3.1	Organics Prep	Jesse Li	12/10/21 23:41	Extract from JD35920-6.3
JD35920-6.3.1	Jesse Li	Extract Storage	12/10/21 23:41	Return to Storage
JD35920-6.3.1	Extract Storage	Christopher Sowa	12/11/21 05:08	Retrieve from Storage
JD35920-6.3.1	Christopher Sowa	GCMS4P	12/11/21 05:08	Load on Instrument
JD35920-6.3.1	GCMS4P	Kristi Schollenberger	12/14/21 17:28	Unload from Instrument
JD35920-6.3.1	Kristi Schollenberger	Extract Freezer	12/14/21 17:28	Return to Storage
JD35920-6.4	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage

SGS Internal Chain of Custody

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 11/30/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35920-6.4	Secured Storage	Joshua Reitan	12/16/21 20:09	Retrieve from Storage
JD35920-6.4	Joshua Reitan	Secured Staging Area	12/16/21 20:09	Return to Storage
JD35920-6.4	Secured Staging Area	Edward Rue	12/17/21 08:03	Retrieve from Storage
JD35920-6.4	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD35920-6.4	Rocquan Salters		12/17/21 23:08	Depleted
JD35920-6.4.1	Edward Rue	Organics Prep	12/17/21 12:02	Extract from JD35920-6.4
JD35920-6.4.1	Organics Prep	Taylor Gorman	12/18/21 01:00	Extract from JD35920-6.4
JD35920-6.4.1	Taylor Gorman	Extract Storage	12/18/21 01:00	Return to Storage
JD35920-6.4.1	Extract Storage	Christine Phillips	12/20/21 03:17	Retrieve from Storage
JD35920-6.4.1	Christine Phillips	GC6G	12/20/21 03:17	Load on Instrument
JD35920-6.5	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-6.5 stage	Christian King	Secured Staging Area	12/01/21 11:02	Return to Storage
JD35920-6.5 skip	Cosmos Giannakakis	Secured Staging Area	12/01/21 19:09	Return to Storage
JD35920-6.5	Secured Staging Area	Alyssa Koshy	12/02/21 08:29	Retrieve from Storage
JD35920-6.5	Alyssa Koshy	Secured Storage	12/02/21 12:26	Return to Storage
JD35920-6.5.1	Alyssa Koshy	Metals Digestion	12/02/21 11:29	Digestate from JD35920-6.5
JD35920-6.5.1	Metals Digestion	Alyssa Koshy	12/02/21 11:29	Digestate from JD35920-6.5
JD35920-6.5.1	Alyssa Koshy	Metals Digestate Storage	12/02/21 11:29	Return to Storage
JD35920-6.8	Nicholas Weigand	GCMS2V	12/02/21 16:53	Load on Instrument
JD35920-6.8	GCMS2V	Taylor Sauter	12/06/21 10:24	Unload from Instrument
JD35920-6.8	Taylor Sauter	Secured Storage	12/06/21 10:24	Return to Storage
JD35920-6.11	Secured Storage	Taylor Sauter	12/07/21 15:35	Retrieve from Storage
JD35920-6.11	Taylor Sauter	GCMS3A	12/07/21 15:35	Load on Instrument
JD35920-6.11	GCMS3A	Bridget Kelly	12/08/21 15:12	Unload from Instrument
JD35920-6.11	Bridget Kelly	Secured Storage	12/08/21 15:12	Return to Storage
JD35920-6F.6	Epiphania Njoku	Secured Storage	11/30/21 19:24	Return to Storage
JD35920-6F.6 stage	Christian King	Secured Staging Area	12/01/21 11:02	Return to Storage
JD35920-6F.6 skip	Cosmos Giannakakis	Secured Staging Area	12/01/21 19:09	Return to Storage
JD35920-6F.6	Secured Staging Area	Alyssa Koshy	12/02/21 08:29	Retrieve from Storage
JD35920-6F.6	Alyssa Koshy	Secured Storage	12/02/21 12:26	Return to Storage
JD35920-6F.6.1	Alyssa Koshy	Metals Digestion	12/02/21 11:29	Digestate from JD35920-6F.6
JD35920-6F.6.1	Metals Digestion	Alyssa Koshy	12/02/21 11:29	Digestate from JD35920-6F.6
JD35920-6F.6.1	Alyssa Koshy	Metals Digestate Storage	12/02/21 11:29	Return to Storage

MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7258-MB	3A167255.D	1	12/07/21	BK	n/a	n/a	V3A7258

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries		Limits
17647-74-4	1,4-Dioxane-D8	95%	39-174%

Method Blank Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3430-MB	2V83203.D	1	12/02/21	NW	n/a	n/a	V2V3430

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	

Method Blank Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3430-MB	2V83203.D	1	12/02/21	NW	n/a	n/a	V2V3430

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3430-MB	2V83203.D	1	12/02/21	NW	n/a	n/a	V2V3430

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	97%	85-118%
17060-07-0	1,2-Dichloroethane-D4	88%	80-121%
2037-26-5	Toluene-D8	97%	80-120%
460-00-4	4-Bromofluorobenzene	93%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7258-BS	3A167254.D	1	12/07/21	BK	n/a	n/a	V3A7258

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
123-91-1	1,4-Dioxane	20	15.1	76	61-125

CAS No.	Surrogate Recoveries	BSP	Limits
17647-74-4	1,4-Dioxane-D8	82%	39-174%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3430-BS	2V83201.D	1	12/02/21	NW	n/a	n/a	V2V3430

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	239	120	63-137
71-43-2	Benzene	50	51.5	103	78-117
108-86-1	Bromobenzene	50	49.6	99	82-121
74-97-5	Bromochloromethane	50	52.5	105	83-124
75-27-4	Bromodichloromethane	50	50.9	102	83-123
75-25-2	Bromoform	50	55.0	110	80-140
74-83-9	Bromomethane	50	54.9	110	26-167
78-93-3	2-Butanone (MEK)	200	241	121	73-135
104-51-8	n-Butylbenzene	50	45.9	92	78-126
135-98-8	sec-Butylbenzene	50	47.0	94	78-122
98-06-6	tert-Butylbenzene	50	48.9	98	77-122
75-15-0	Carbon disulfide	50	47.8	96	60-131
56-23-5	Carbon tetrachloride	50	50.9	102	75-127
108-90-7	Chlorobenzene	50	52.1	104	83-115
75-00-3	Chloroethane	50	45.7	91	61-135
67-66-3	Chloroform	50	50.6	101	76-118
74-87-3	Chloromethane	50	47.2	94	46-144
95-49-8	o-Chlorotoluene	50	48.8	98	80-120
106-43-4	p-Chlorotoluene	50	49.4	99	80-117
96-12-8	1,2-Dibromo-3-chloropropane	50	52.7	105	75-135
124-48-1	Dibromochloromethane	50	53.6	107	84-128
106-93-4	1,2-Dibromoethane	50	52.5	105	82-129
95-50-1	1,2-Dichlorobenzene	50	49.1	98	85-117
541-73-1	1,3-Dichlorobenzene	50	50.6	101	83-116
106-46-7	1,4-Dichlorobenzene	50	50.0	100	82-115
75-71-8	Dichlorodifluoromethane	50	41.9	84	49-153
75-34-3	1,1-Dichloroethane	50	50.3	101	75-122
107-06-2	1,2-Dichloroethane	50	46.7	93	74-116
75-35-4	1,1-Dichloroethene	50	47.6	95	68-129
156-59-2	cis-1,2-Dichloroethene	50	52.5	105	78-120
156-60-5	trans-1,2-Dichloroethene	50	52.8	106	74-125
78-87-5	1,2-Dichloropropane	50	51.4	103	80-120
142-28-9	1,3-Dichloropropane	50	50.5	101	82-116
594-20-7	2,2-Dichloropropane	50	44.9	90	70-128
563-58-6	1,1-Dichloropropene	50	50.2	100	75-121
10061-01-5	cis-1,3-Dichloropropene	50	51.0	102	84-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3430-BS	2V83201.D	1	12/02/21	NW	n/a	n/a	V2V3430

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	49.0	98	84-124
100-41-4	Ethylbenzene	50	50.1	100	80-115
87-68-3	Hexachlorobutadiene	50	50.9	102	68-137
591-78-6	2-Hexanone	200	222	111	74-132
98-82-8	Isopropylbenzene	50	51.5	103	79-120
99-87-6	p-Isopropyltoluene	50	47.6	95	80-122
1634-04-4	Methyl Tert Butyl Ether	50	49.6	99	77-124
108-10-1	4-Methyl-2-pentanone(MIBK)	200	216	108	77-129
74-95-3	Methylene bromide	50	52.0	104	83-121
75-09-2	Methylene chloride	50	47.7	95	74-125
91-20-3	Naphthalene	50	49.2	98	73-138
103-65-1	n-Propylbenzene	50	46.9	94	78-117
100-42-5	Styrene	50	52.5	105	83-122
75-65-0	Tert Butyl Alcohol	250	245	98	77-125
630-20-6	1,1,1,2-Tetrachloroethane	50	53.3	107	82-125
79-34-5	1,1,2,2-Tetrachloroethane	50	46.4	93	78-122
127-18-4	Tetrachloroethene	50	53.9	108	75-125
109-99-9	Tetrahydrofuran	50	47.8	96	69-129
108-88-3	Toluene	50	49.8	100	80-115
87-61-6	1,2,3-Trichlorobenzene	50	52.5	105	73-140
120-82-1	1,2,4-Trichlorobenzene	50	53.5	107	77-137
71-55-6	1,1,1-Trichloroethane	50	50.9	102	77-124
79-00-5	1,1,2-Trichloroethane	50	50.5	101	83-118
79-01-6	Trichloroethene	50	54.6	109	80-123
75-69-4	Trichlorofluoromethane	50	51.2	102	71-134
96-18-4	1,2,3-Trichloropropane	50	49.2	98	80-121
95-63-6	1,2,4-Trimethylbenzene	50	46.6	93	81-119
108-67-8	1,3,5-Trimethylbenzene	50	47.7	95	79-120
108-05-4	Vinyl Acetate	50	42.5	85	77-131
75-01-4	Vinyl chloride	50	45.6	91	56-138
	m,p-Xylene	100	103	103	81-118
95-47-6	o-Xylene	50	49.5	99	81-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3430-BS	2V83201.D	1	12/02/21	NW	n/a	n/a	V2V3430

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	85-118%
17060-07-0	1,2-Dichloroethane-D4	92%	80-121%
2037-26-5	Toluene-D8	93%	80-120%
460-00-4	4-Bromofluorobenzene	91%	80-120%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35920-4MS	3A167262.D	1	12/07/21	BK	n/a	n/a	V3A7258
JD35920-4	3A167259.D	1	12/07/21	BK	n/a	n/a	V3A7258

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	JD35920-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
123-91-1	1,4-Dioxane	ND		20	17.8	89	36-157

CAS No.	Surrogate Recoveries	MS	JD35920-4	Limits
17647-74-4	1,4-Dioxane-D8	119%	125%	39-174%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35871-2MS	2V83205.D	1	12/03/21	NW	n/a	n/a	V2V3430
JD35871-2MSD	2V83206.D	1	12/03/21	NW	n/a	n/a	V2V3430
JD35871-2	2V83204.D	1	12/03/21	NW	n/a	n/a	V2V3430

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	JD35871-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		200	119	60	200	122	61	2	52-133/18
71-43-2	Benzene	ND		50	52.5	105	50	53.3	107	2	55-129/11
108-86-1	Bromobenzene	ND		50	49.5	99	50	50.9	102	3	73-120/11
74-97-5	Bromochloromethane	ND		50	52.2	104	50	53.0	106	2	75-122/10
75-27-4	Bromodichloromethane	ND		50	50.2	100	50	50.3	101	0	74-123/11
75-25-2	Bromoform	ND		50	53.3	107	50	54.1	108	1	69-135/12
74-83-9	Bromomethane	ND		50	50.5	101	50	54.4	109	7	11-167/43
78-93-3	2-Butanone (MEK)	ND		200	177	89	200	179	90	1	64-131/15
104-51-8	n-Butylbenzene	ND		50	46.9	94	50	48.7	97	4	69-130/11
135-98-8	sec-Butylbenzene	ND		50	48.1	96	50	50.0	100	4	70-125/12
98-06-6	tert-Butylbenzene	ND		50	50.5	101	50	51.8	104	3	68-125/12
75-15-0	Carbon disulfide	ND		50	50.5	101	50	51.1	102	1	54-137/15
56-23-5	Carbon tetrachloride	ND		50	53.8	108	50	53.9	108	0	68-132/11
108-90-7	Chlorobenzene	ND		50	52.6	105	50	52.9	106	1	71-119/10
75-00-3	Chloroethane	ND		50	49.6	99	50	49.1	98	1	50-146/18
67-66-3	Chloroform	ND		50	48.6	97	50	49.0	98	1	67-120/11
74-87-3	Chloromethane	ND		50	48.7	97	50	47.1	94	3	42-146/17
95-49-8	o-Chlorotoluene	ND		50	50.6	101	50	51.8	104	2	71-120/12
106-43-4	p-Chlorotoluene	ND		50	50.1	100	50	51.8	104	3	71-117/11
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	51.4	103	50	53.6	107	4	65-130/15
124-48-1	Dibromochloromethane	ND		50	52.4	105	50	53.0	106	1	74-125/10
106-93-4	1,2-Dibromoethane	ND		50	50.6	101	50	51.1	102	1	74-125/9
95-50-1	1,2-Dichlorobenzene	ND		50	49.3	99	50	50.6	101	3	73-117/10
541-73-1	1,3-Dichlorobenzene	ND		50	51.4	103	50	52.6	105	2	73-117/10
106-46-7	1,4-Dichlorobenzene	ND		50	50.4	101	50	51.6	103	2	70-117/10
75-71-8	Dichlorodifluoromethane	ND		50	41.1	82	50	42.2	84	3	46-169/17
75-34-3	1,1-Dichloroethane	ND		50	51.5	103	50	51.6	103	0	66-124/13
107-06-2	1,2-Dichloroethane	ND		50	46.1	92	50	45.8	92	1	66-115/10
75-35-4	1,1-Dichloroethene	ND		50	49.8	100	50	50.3	101	1	60-136/15
156-59-2	cis-1,2-Dichloroethene	ND		50	53.9	108	50	54.3	109	1	55-133/12
156-60-5	trans-1,2-Dichloroethene	ND		50	54.4	109	50	55.1	110	1	67-127/13
78-87-5	1,2-Dichloropropane	ND		50	51.7	103	50	51.8	104	0	72-120/11
142-28-9	1,3-Dichloropropane	ND		50	49.2	98	50	49.8	100	1	72-115/10
594-20-7	2,2-Dichloropropane	ND		50	45.4	91	50	45.6	91	0	61-133/12
563-58-6	1,1-Dichloropropene	ND		50	53.0	106	50	53.9	108	2	68-127/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	51.0	102	50	50.6	101	1	75-123/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35871-2MS	2V83205.D	1	12/03/21	NW	n/a	n/a	V2V3430
JD35871-2MSD	2V83206.D	1	12/03/21	NW	n/a	n/a	V2V3430
JD35871-2	2V83204.D	1	12/03/21	NW	n/a	n/a	V2V3430

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	JD35871-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		50	48.4	97	50	48.7	97	1	73-122/11
100-41-4	Ethylbenzene	ND		50	50.8	102	50	51.5	103	1	44-136/10
87-68-3	Hexachlorobutadiene	ND		50	53.3	107	50	54.2	108	2	55-143/15
591-78-6	2-Hexanone	ND		200	188	94	200	192	96	2	64-129/13
98-82-8	Isopropylbenzene	ND		50	52.6	105	50	53.4	107	2	71-122/11
99-87-6	p-Isopropyltoluene	ND		50	49.0	98	50	50.5	101	3	72-124/11
1634-04-4	Methyl Tert Butyl Ether	ND		50	48.6	97	50	49.0	98	1	64-122/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	210	105	200	211	106	0	68-128/13
74-95-3	Methylene bromide	ND		50	50.6	101	50	51.3	103	1	74-118/10
75-09-2	Methylene chloride	ND		50	47.7	95	50	48.0	96	1	65-126/13
91-20-3	Naphthalene	ND		50	47.7	95	50	50.5	101	6	58-140/16
103-65-1	n-Propylbenzene	ND		50	48.6	97	50	50.3	101	3	64-123/11
100-42-5	Styrene	ND		50	52.2	104	50	52.4	105	0	73-124/11
75-65-0	Tert Butyl Alcohol	ND		250	266	106	250	261	104	2	67-127/13
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	53.0	106	50	53.5	107	1	74-123/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	47.4	95	50	48.0	96	1	68-120/15
127-18-4	Tetrachloroethene	ND		50	55.8	112	50	57.1	114	2	61-134/11
109-99-9	Tetrahydrofuran	ND		50	43.4	87	50	46.1	92	6	58-127/17
108-88-3	Toluene	ND		50	50.8	102	50	51.4	103	1	54-130/11
87-61-6	1,2,3-Trichlorobenzene	ND		50	51.6	103	50	54.4	109	5	64-135/15
120-82-1	1,2,4-Trichlorobenzene	ND		50	53.6	107	50	55.0	110	3	67-134/14
71-55-6	1,1,1-Trichloroethane	ND		50	52.9	106	50	53.5	107	1	66-130/12
79-00-5	1,1,2-Trichloroethane	ND		50	49.4	99	50	49.5	99	0	73-117/11
79-01-6	Trichloroethene	ND		50	53.9	108	50	55.4	111	3	56-139/11
75-69-4	Trichlorofluoromethane	ND		50	53.7	107	50	54.6	109	2	63-150/16
96-18-4	1,2,3-Trichloropropane	ND		50	47.8	96	50	48.9	98	2	71-118/12
95-63-6	1,2,4-Trimethylbenzene	ND		50	47.9	96	50	49.1	98	2	45-139/11
108-67-8	1,3,5-Trimethylbenzene	ND		50	49.0	98	50	50.5	101	3	60-128/12
108-05-4	Vinyl Acetate	ND		50	48.2	96	50	48.5	97	1	66-128/15
75-01-4	Vinyl chloride	ND		50	48.4	97	50	48.6	97	0	48-148/17
	m,p-Xylene	ND		100	105	105	100	106	106	1	42-140/10
95-47-6	o-Xylene	ND		50	50.1	100	50	50.4	101	1	54-133/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35871-2MS	2V83205.D	1	12/03/21	NW	n/a	n/a	V2V3430
JD35871-2MSD	2V83206.D	1	12/03/21	NW	n/a	n/a	V2V3430
JD35871-2	2V83204.D	1	12/03/21	NW	n/a	n/a	V2V3430

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Surrogate Recoveries	MS	MSD	JD35871-2	Limits
1868-53-7	Dibromofluoromethane	98%	98%	97%	85-118%
17060-07-0	1,2-Dichloroethane-D4	91%	90%	89%	80-121%
2037-26-5	Toluene-D8	92%	93%	96%	80-120%
460-00-4	4-Bromofluorobenzene	91%	91%	93%	80-120%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35920-3DUP	3A167265.D	1	12/07/21	BK	n/a	n/a	V3A7258
JD35920-3	3A167258.D	1	12/07/21	BK	n/a	n/a	V3A7258

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD35920-1, JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	JD35920-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
123-91-1	1,4-Dioxane	1.3		1.5		14	36

CAS No.	Surrogate Recoveries	DUP	JD35920-3	Limits
17647-74-4	1,4-Dioxane-D8	126%	139%	39-174%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-BFB
Lab File ID: 2V82658.D
Instrument ID: GCMS2V
Injection Date: 11/17/21
Injection Time: 18:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16263	19.7		Pass
75	30.0 - 60.0% of mass 95	36856	44.6		Pass
95	Base peak, 100% relative abundance	82621	100.0		Pass
96	5.0 - 9.0% of mass 95	5234	6.33		Pass
173	Less than 2.0% of mass 174	452	0.55	(0.64) [a]	Pass
174	50.0 - 120.0% of mass 95	70272	85.1		Pass
175	5.0 - 9.0% of mass 174	5260	6.37	(7.49) [a]	Pass
176	95.0 - 101.0% of mass 174	70213	85.0	(99.9) [a]	Pass
177	5.0 - 9.0% of mass 176	4519	5.47	(6.44) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3410-IC3410	2V82659.D	11/17/21	19:09	00:25	Initial cal 0.2
V2V3410-IC3410	2V82660.D	11/17/21	19:35	00:51	Initial cal 0.5
V2V3410-IC3410	2V82661.D	11/17/21	20:00	01:16	Initial cal 1
V2V3410-IC3410	2V82662.D	11/17/21	20:26	01:42	Initial cal 2
V2V3410-IC3410	2V82663.D	11/17/21	20:51	02:07	Initial cal 4
V2V3410-IC3410	2V82664.D	11/17/21	21:17	02:33	Initial cal 8
V2V3410-IC3410	2V82665.D	11/17/21	21:43	02:59	Initial cal 20
V2V3410-ICC3410	2V82666.D	11/17/21	22:08	03:24	Initial cal 50
V2V3410-IC3410	2V82667.D	11/17/21	22:34	03:50	Initial cal 100
V2V3410-IC3410	2V82668.D	11/17/21	22:59	04:15	Initial cal 200
V2V3410-ICV3410	2V82671.D	11/18/21	00:15	05:31	Initial cal verification 50
V2V3410-ICV3410	2V82672.D	11/18/21	00:41	05:57	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V2V3410-BFB2	**Injection Date:**	11/18/21
Lab File ID:	2V82677.D	**Injection Time:**	11:00
Instrument ID:	GCMS2V		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16043	19.2		Pass
75	30.0 - 60.0% of mass 95	36659	43.9		Pass
95	Base peak, 100% relative abundance	83536	100.0		Pass
96	5.0 - 9.0% of mass 95	5523	6.61		Pass
173	Less than 2.0% of mass 174	710	0.85	(0.98) [a]	Pass
174	50.0 - 120.0% of mass 95	72229	86.5		Pass
175	5.0 - 9.0% of mass 174	5646	6.76	(7.82) [a]	Pass
176	95.0 - 101.0% of mass 174	72875	87.2	(100.9) [a]	Pass
177	5.0 - 9.0% of mass 176	4796	5.74	(6.58) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3410-ICV3410	2V82678.D	11/18/21	11:34	00:34	Initial cal verification 50
V2V3410-ICV3410	2V82679.D	11/18/21	11:59	00:59	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3430-BFB
Lab File ID: 2V83199.D
Instrument ID: GCMS2V
Injection Date: 12/02/21
Injection Time: 21:56

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	13434	17.0		Pass
75	30.0 - 60.0% of mass 95	33187	41.9		Pass
95	Base peak, 100% relative abundance	79216	100.0		Pass
96	5.0 - 9.0% of mass 95	5073	6.40		Pass
173	Less than 2.0% of mass 174	432	0.55	(0.59) [a]	Pass
174	50.0 - 120.0% of mass 95	73733	93.1		Pass
175	5.0 - 9.0% of mass 174	5464	6.90	(7.41) [a]	Pass
176	95.0 - 101.0% of mass 174	73808	93.2	(100.1) [a]	Pass
177	5.0 - 9.0% of mass 176	4814	6.08	(6.52) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3430-CC3410	2V83199.D	12/02/21	21:56	00:00	Continuing cal 50
V2V3430-BS	2V83201.D	12/02/21	22:47	00:51	Blank Spike
V2V3430-MB	2V83203.D	12/02/21	23:38	01:42	Method Blank
JD35871-2	2V83204.D	12/03/21	00:03	02:07	(used for QC only; not part of job JD35920)
JD35871-2MS	2V83205.D	12/03/21	00:29	02:33	Matrix Spike
JD35871-2MSD	2V83206.D	12/03/21	00:55	02:59	Matrix Spike Duplicate
ZZZZZZ	2V83208.D	12/03/21	01:45	03:49	(unrelated sample)
ZZZZZZ	2V83209.D	12/03/21	02:11	04:15	(unrelated sample)
JD35920-1	2V83210.D	12/03/21	02:37	04:41	TB-112921
ZZZZZZ	2V83211.D	12/03/21	03:02	05:06	(unrelated sample)
ZZZZZZ	2V83212.D	12/03/21	03:28	05:32	(unrelated sample)
JD35920-2	2V83213.D	12/03/21	03:53	05:57	HOFF MW-2DL
JD35920-3	2V83214.D	12/03/21	04:19	06:23	HOFF MW-2DU
JD35920-4	2V83215.D	12/03/21	04:44	06:48	HOFF MW-2S
JD35920-5	2V83216.D	12/03/21	05:10	07:14	HOFF MW-7DL
JD35920-6	2V83217.D	12/03/21	05:35	07:39	HOFF DUP-113021
ZZZZZZ	2V83218.D	12/03/21	06:01	08:05	(unrelated sample)
ZZZZZZ	2V83219.D	12/03/21	06:26	08:30	(unrelated sample)
ZZZZZZ	2V83220.D	12/03/21	06:52	08:56	(unrelated sample)
ZZZZZZ	2V83221.D	12/03/21	07:17	09:21	(unrelated sample)
ZZZZZZ	2V83222.D	12/03/21	07:43	09:47	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7257-BFB
Lab File ID: 3A167227.D
Instrument ID: GCMS3A
Injection Date: 12/06/21
Injection Time: 09:39

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	7175	21.9		Pass
75	30.0 - 60.0% of mass 95	17383	53.0		Pass
95	Base peak, 100% relative abundance	32826	100.0		Pass
96	5.0 - 9.0% of mass 95	1848	5.63		Pass
173	Less than 2.0% of mass 174	448	1.36	(1.39) [a]	Pass
174	50.0 - 120.0% of mass 95	32168	98.0		Pass
175	5.0 - 9.0% of mass 174	2750	8.38	(8.55) [a]	Pass
176	95.0 - 101.0% of mass 174	32485	99.0	(101.0) [a]	Pass
177	5.0 - 9.0% of mass 176	2405	7.33	(7.40) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7257-IC7257	3A167232.D	12/06/21	13:29	03:50	Initial cal 1
V3A7257-IC7257	3A167233.D	12/06/21	13:58	04:19	Initial cal 2
V3A7257-IC7257	3A167234.D	12/06/21	14:27	04:48	Initial cal 5
V3A7257-ICC7257	3A167235.D	12/06/21	14:56	05:17	Initial cal 20
V3A7257-IC7257	3A167236.D	12/06/21	15:25	05:46	Initial cal 50
V3A7257-IC7257	3A167237.D	12/06/21	15:54	06:15	Initial cal 100
V3A7257-IC7257	3A167242.D	12/06/21	18:20	08:41	Initial cal 0.25
V3A7257-IC7257	3A167243.D	12/06/21	18:49	09:10	Initial cal 0.40
V3A7257-IC7257	3A167245.D	12/06/21	19:47	10:08	Initial cal 200
V3A7257-ICV7257	3A167248.D	12/06/21	21:13	11:34	Initial cal verification 20

Instrument Performance Check (BFB)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V3A7258-BFB	**Injection Date:**	12/07/21
Lab File ID:	3A167251.D	**Injection Time:**	10:29
Instrument ID:	GCMS3A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	46381	20.2		Pass
75	30.0 - 60.0% of mass 95	118416	51.5		Pass
95	Base peak, 100% relative abundance	229988	100.0		Pass
96	5.0 - 9.0% of mass 95	14869	6.47		Pass
173	Less than 2.0% of mass 174	1910	0.83	(0.92) [a]	Pass
174	50.0 - 120.0% of mass 95	207616	90.3		Pass
175	5.0 - 9.0% of mass 174	16222	7.05	(7.81) [a]	Pass
176	95.0 - 101.0% of mass 174	201408	87.6	(97.0) [a]	Pass
177	5.0 - 9.0% of mass 176	12279	5.34	(6.10) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7258-CC7257	3A167253.D	12/07/21	11:34	01:05	Continuing cal 20
V3A7258-BS	3A167254.D	12/07/21	12:03	01:34	Blank Spike
V3A7258-MB	3A167255.D	12/07/21	12:31	02:02	Method Blank
JD35920-1	3A167256.D	12/07/21	13:01	02:32	TB-112921
JD35920-2	3A167257.D	12/07/21	13:29	03:00	HOFF MW-2DL
JD35920-3	3A167258.D	12/07/21	13:58	03:29	HOFF MW-2DU
JD35920-4	3A167259.D	12/07/21	14:27	03:58	HOFF MW-2S
JD35920-5	3A167260.D	12/07/21	14:55	04:26	HOFF MW-7DL
JD35920-6	3A167261.D	12/07/21	15:24	04:55	HOFF DUP-113021
JD35920-4MS	3A167262.D	12/07/21	15:53	05:24	Matrix Spike
JD35920-2	3A167263.D	12/07/21	16:22	05:53	HOFF MW-2DL
ZZZZZZ	3A167264.D	12/07/21	16:51	06:22	(unrelated sample)
JD35920-3DUP	3A167265.D	12/07/21	17:20	06:51	Duplicate
ZZZZZZ	3A167266.D	12/07/21	17:49	07:20	(unrelated sample)

Internal Standard Area Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V2V3430-CC3410	**Injection Date:**	12/02/21
Lab File ID:	2V83199.D	**Injection Time:**	21:56
Instrument ID:	GCMS2V	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	133550	2.59	243636	3.75	337813	4.29	324070	6.64	126811	8.82
Upper Limit [a]	267100	3.09	487272	4.25	675626	4.79	648140	7.14	253622	9.32
Lower Limit [b]	66775	2.09	121818	3.25	168907	3.79	162035	6.14	63406	8.32

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2V3430-BS	129490	2.59	241806	3.75	335091	4.29	316939	6.64	126420	8.82
V2V3430-MB	131414	2.59	257376	3.75	359458	4.29	324457	6.64	122183	8.82
JD35871-2	129873	2.59	257869	3.75	359817	4.29	325599	6.64	123852	8.82
JD35871-2MS	124826	2.59	242858	3.75	339243	4.29	320632	6.64	126159	8.82
JD35871-2MSD	128324	2.59	243153	3.75	338986	4.29	320727	6.64	124002	8.82
ZZZZZZ	131257	2.59	262980	3.75	367221	4.29	329096	6.64	125169	8.82
ZZZZZZ	132135	2.59	260611	3.75	362704	4.29	325844	6.64	122836	8.82
JD35920-1	135852	2.59	256892	3.75	358702	4.29	324133	6.64	123789	8.82
ZZZZZZ	124854	2.59	259720	3.75	361939	4.29	330079	6.64	127378	8.82
ZZZZZZ	135345	2.59	255413	3.75	358068	4.29	324513	6.64	124533	8.82
JD35920-2	126173	2.59	257721	3.75	363353	4.29	331487	6.64	125044	8.82
JD35920-3	133321	2.59	257220	3.75	363442	4.29	339749	6.64	132671	8.82
JD35920-4	122045	2.59	251150	3.75	352774	4.29	316955	6.64	120833	8.82
JD35920-5	119787	2.59	259186	3.75	363493	4.29	329172	6.64	124660	8.82
JD35920-6	120916	2.59	252358	3.75	355964	4.29	324060	6.64	123170	8.82
ZZZZZZ	122434	2.59	254738	3.75	352028	4.29	316952	6.64	118253	8.82
ZZZZZZ	124290	2.59	254767	3.75	356499	4.29	322572	6.64	120087	8.82
ZZZZZZ	126941	2.59	256084	3.75	359929	4.29	322530	6.64	121400	8.82
ZZZZZZ	126688	2.59	253627	3.75	353807	4.29	320043	6.64	119258	8.82
ZZZZZZ	129339	2.59	249106	3.75	351682	4.29	316659	6.64	119643	8.82

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V3A7258-CC7257	**Injection Date:**	12/07/21
Lab File ID:	3A167253.D	**Injection Time:**	11:34
Instrument ID:	GCMS3A	**Method:**	SW846 8260D BY SIM

	IS 1 AREA	RT
Check Std	14619	15.60
Upper Limit [a]	29238	16.10
Lower Limit [b]	7310	15.10

Lab Sample ID	IS 1 AREA	RT
V3A7258-BS	14437	15.60
V3A7258-MB	13687	15.60
JD35920-1	13341	15.60
JD35920-2	11865	15.60
JD35920-3	13344	15.60
JD35920-4	12983	15.60
JD35920-5	11165	15.60
JD35920-6	11547	15.60
JD35920-4MS	13145	15.60
JD35920-2 [c]	12092	15.60
ZZZZZZ	13727	15.60
JD35920-3DUP	13684	15.60
ZZZZZZ	13766	15.60

IS 1 = 4-Bromofluorobenzene

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run for surrogate recoveries.

Surrogate Recovery Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
JD35920-1	3A167256.D	124
JD35920-2	3A167263.D	192* [a]
JD35920-2	3A167257.D	188* [a]
JD35920-3	3A167258.D	139
JD35920-4	3A167259.D	125
JD35920-5	3A167260.D	145
JD35920-6	3A167261.D	145
JD35920-3DUP	3A167265.D	126
JD35920-4MS	3A167262.D	119
V3A7258-BS	3A167254.D	82
V3A7258-MB	3A167255.D	95

Surrogate Compounds	Recovery Limits
S1 = 1,4-Dioxane-D8	39-174%

(a) Outside control limits due to matrix interference.

Surrogate Recovery Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD35920-1	2V83210.D	97	90	96	92
JD35920-2	2V83213.D	99	91	96	94
JD35920-3	2V83214.D	100	95	94	91
JD35920-4	2V83215.D	98	90	96	92
JD35920-5	2V83216.D	98	90	96	93
JD35920-6	2V83217.D	99	91	96	92
JD35871-2MS	2V83205.D	98	91	92	91
JD35871-2MSD	2V83206.D	98	90	93	91
V2V3430-BS	2V83201.D	97	92	93	91
V2V3430-MB	2V83203.D	97	88	97	93

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	85-118%
S2 = 1,2-Dichloroethane-D4	80-121%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

Initial Calibration Summary

Job Number: JD35920 **Sample:** V2V3410-ICC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82666.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report MS2V

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 17:15:16 2021
Response via : Initial Calibration

Calibration Files
4 =2V82663.D 0.5 =2V82660.D 8 =2V82664.D 50 =2V82666.D
100 =2V82667.D 1 =2V82661.D 200 =2V82668.D 20 =2V82665.D
2 =2V82662.D 0.2 =2V82659.D = =

Compound	4	0.5	8	50	100	1	200	20	2	0.2	Avg	%RSD
1) I tert butyl alcohol-d9	----------ISTD----------											
2) ethanol	0.204	0.180	0.192	0.193	0.169	0.198	0.133	0.185	0.210		0.185	12.45
3) tertiary butyl alcohol	2.010	1.677	1.920	2.044	1.941	1.881	1.846	1.917	2.006		1.916	5.75
4) 1,4-dioxane	0.156		0.150	0.153	0.146	0.126	0.140	0.148	0.144		0.145	6.34
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	0.556		0.584	0.671	0.666	0.543	0.613	0.632	0.592		0.607	7.79
7) dichlorodifluoromethane	0.458		0.486	0.609	0.603	0.507	0.627	0.585	0.549		0.553	11.40
8) chloromethane	0.187	0.228	0.189	0.221	0.214	0.241	0.221	0.204	0.207		0.212	8.35
9) vinyl chloride	0.504	0.520	0.514	0.625	0.617	0.580	0.625	0.578	0.554	0.507	0.562	8.84
10) bromomethane	0.189		0.206	0.241	0.233		0.225	0.190			0.214	10.47
11) chloroethane	0.293		0.292	0.334	0.315	0.386	0.292	0.312	0.320		0.318	9.89
12) trichlorofluoromethane	0.629	0.594	0.668	0.815	0.802	0.700	0.775	0.770	0.720		0.719	10.85
13) 1,3-butadiene	0.498	0.449	0.496	0.583	0.578	0.489	0.524	0.550	0.546	0.613	0.532	9.51
14) ethyl ether	0.250		0.257	0.274	0.274	0.223	0.267	0.264	0.246		0.257	6.61
15) acrolein	0.115		0.112	0.118	0.119	0.097	0.114	0.116	0.111		0.113	6.28
16) freon 113	0.339		0.368	0.432	0.436		0.404	0.415	0.379		0.396	9.06
17) 1,1-dichloroethene	0.680		0.678	0.796	0.782	0.653	0.717	0.748	0.706		0.720	7.14
18) acetone	0.317		0.329	0.222	0.319	0.317	0.260	0.296	0.347		0.301	13.58
19) acetonitrile	0.099		0.091	0.088	0.089		0.082	0.089	0.111		0.093	10.05
20) iodomethane *This compound fails Initial Calibration criteria*	0.090		0.134	0.457	0.523	0.047	0.513	0.258	0.073		0.262	78.66
21) carbon disulfide	1.120	1.056	1.126	1.305	1.289	1.110	1.182	1.219	1.178	1.325	1.191	7.71
22) methylene chloride	0.472	0.486	0.468	0.499	0.495	0.503	0.470	0.490	0.488	0.640	0.501	10.01
23) methyl acetate												

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      0.595       0.599 0.565 0.566 0.673 0.540 0.549 0.622        0.589    7.42
24)  methyl tert butyl ether
      1.338 1.063 1.330 1.402 1.390 1.301 1.342 1.373 1.313 1.173  1.303    8.11
25)  trans-1,2-dichloroethene
      0.441 0.375 0.429 0.498 0.495 0.436 0.460 0.482 0.454 0.367  0.444   10.17
26)  hexane
      0.380       0.428 0.517 0.521       0.489 0.486              0.470   11.73
27)  di-isopropyl ether
      1.774 1.486 1.750 1.880 1.832 1.734 1.731 1.833 1.778 1.610  1.741    6.65
28)  ethyl tert-butyl ether
      1.673 1.399 1.670 1.801 1.776 1.678 1.724 1.750 1.692 1.450  1.661    8.01
29)  1,1-dichloroethane
      0.862 0.675 0.859 0.955 0.934 0.816 0.869 0.933 0.886 0.732  0.852   10.53
30)  chloroprene
      0.708       0.726 0.837 0.821 0.670 0.747 0.797 0.738        0.756    7.65
31)  acrylonitrile
      0.247       0.261 0.269 0.271 0.223 0.261 0.267 0.244        0.255    6.40
32)  vinyl acetate
      0.106       0.105 0.118 0.114 0.089 0.114 0.113 0.096        0.107    9.24
33)  ethyl acetate
      0.111       0.123 0.116 0.118 0.089 0.111 0.116 0.098        0.110   10.37
34)  2-butanone
      0.081       0.081 0.073 0.085 0.068 0.076 0.079 0.078        0.077    6.88
35)  2,2-dichloropropane
      0.661 0.546 0.670 0.738 0.725 0.626 0.666 0.718 0.691        0.671    8.78
36)  cis-1,2-dichloroethene
      0.499 0.389 0.504 0.551 0.545 0.479 0.512 0.534 0.519 0.423  0.495   10.62
37)  propionitrile
      0.103 0.088 0.104 0.105 0.105 0.101 0.096 0.106 0.102 0.090  0.100    6.47
38)  methyl acrylate
      0.089       0.091 0.099 0.098       0.095 0.096 0.087        0.093    4.97
39)  bromochloromethane
      0.278       0.275 0.296 0.287 0.264 0.267 0.285 0.282        0.279    3.78
40)  tetrahydrofuran
      0.086       0.082 0.080 0.082       0.078 0.078 0.087        0.082    4.51
41)  chloroform
      0.842 0.845 0.843 0.902 0.893 0.903 0.837 0.869 0.919        0.872    3.68
42)  dibromofluoromethane (s)
      0.459 0.462 0.461 0.465 0.471 0.468 0.472 0.464 0.458 0.455  0.464    1.23
43)  methacrylonitrile
      0.235       0.236 0.241 0.245 0.219 0.236 0.244 0.232        0.236    3.55
44)  1,1,1-trichloroethane
      0.713 0.619 0.714 0.803 0.797 0.662 0.744 0.770 0.761 0.646  0.723    8.82
45)  cyclohexane
      0.506       0.527 0.629 0.617 0.546 0.617 0.609 0.609        0.582    8.25
46)  1,1-dichloropropene
      0.571 0.446 0.583 0.664 0.649 0.557 0.605 0.626 0.596        0.589   10.88
47)  carbon tetrachloride
      0.597       0.623 0.717 0.706 0.533 0.652 0.684 0.625        0.642    9.53
48)  isobutyl alcohol
      0.024       0.024 0.024 0.024 0.022 0.022 0.024 0.023        0.023    4.70
49)  tert-amyl alcohol
      0.037       0.036 0.034 0.034       0.031 0.035 0.038        0.035    7.35

50) I   1,4-difluorobenzene   ----------------ISTD---------------------
51)  1,2-dichloroethane-d4 (s)
      0.315 0.324 0.320 0.317 0.322 0.324 0.325 0.325 0.316 0.318  0.321    1.15
52)  n-butyl alcohol
      0.018       0.018 0.018 0.018 0.017 0.017 0.019 0.018        0.018    3.65
53)  benzene
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      1.213 0.987 1.225 1.340 1.292 1.176 1.201 1.296 1.268 1.135  1.213    8.29
54)  tert-amyl methyl ether
      1.053 0.885 1.040 1.091 1.063 1.052 1.031 1.076 1.047 0.927  1.027    6.49
55)  iso-octane
      1.007       1.112 1.302 1.295       1.211 1.244 1.130        1.186    9.12
56)  heptane
      0.188       0.208 0.252 0.251       0.241 0.232 0.215        0.227   10.47
57)  isopropyl acetate
      0.092       0.092 0.093 0.094 0.076 0.090 0.093 0.083        0.089    7.10
58)  1,2-dichloroethane
      0.492 0.451 0.487 0.509 0.496 0.500 0.475 0.503 0.501 0.572  0.499    6.20
59)  trichloroethene
      0.329 0.266 0.336 0.379 0.375 0.310 0.351 0.361 0.352        0.340   10.39
60)  ethyl acrylate
      0.624 0.633 0.623 0.630 0.628 0.656 0.602 0.626 0.651        0.630    2.53
61)  2-nitropropane
      0.135       0.125 0.121 0.121       0.118 0.122 0.152        0.128    9.50
62)  2-chloroethyl vinyl ether
      0.177       0.192 0.226 0.229       0.220 0.214 0.156        0.202   13.70
63)  methyl methacrylate
      0.108       0.114 0.115 0.117 0.089 0.112 0.115 0.109        0.110    8.05
64)  1,2-dichloropropane
      0.355 0.261 0.361 0.387 0.378 0.332 0.362 0.373 0.355        0.351   10.61
65)  methylcyclohexane
      0.443       0.475 0.563 0.559       0.528 0.532 0.482        0.512    8.91
66)  dibromomethane
      0.228 0.184 0.231 0.242 0.238 0.212 0.231 0.235 0.233 0.238  0.227    7.64
67)  bromodichloromethane
      0.443 0.374 0.438 0.477 0.473 0.436 0.458 0.463 0.434 0.506  0.450    7.76
68)  epichlorohydrin
      0.047 0.051 0.048 0.050 0.053 0.050 0.050 0.048 0.049 0.046  0.049    4.04
69)  cis-1,3-dichloropropene
      0.526 0.409 0.534 0.583 0.573 0.505 0.556 0.560 0.519        0.530    9.83
70)  4-methyl-2-pentanone
      0.190 0.145 0.189 0.194 0.192 0.178 0.180 0.191 0.185 0.153  0.180    9.50
71)  3-methyl-1-butanol
      0.014       0.014 0.015 0.015 0.013 0.014 0.015 0.013        0.014    5.76

72) I   chlorobenzene-d5      ----------------ISTD---------------------
73)  toluene-d8 (s)
      1.294 1.282 1.271 1.238 1.218 1.291 1.195 1.255 1.296 1.299  1.264    2.87
74)  toluene
      0.900 0.728 0.885 0.950 0.919 0.857 0.852 0.928 0.945 0.856  0.882    7.41
75)  ethyl methacrylate
      0.544 0.479 0.537 0.549 0.541 0.514 0.514 0.549 0.553 0.547  0.533    4.39
76)  trans-1,3-dichloropropene
      0.531 0.433 0.539 0.574 0.563 0.520 0.539 0.556 0.535 0.405  0.519   10.72
77)  1,1,2-trichloroethane
      0.300 0.240 0.298 0.305 0.297 0.277 0.286 0.302 0.313 0.269  0.289    7.45
78)  2-hexanone
      0.237 0.182 0.232 0.215 0.225 0.205 0.200 0.226 0.229 0.189  0.214    8.89
79)  tetrachloroethene
      0.344 0.252 0.343 0.373 0.359 0.320 0.332 0.362 0.357        0.338   10.70
80)  1,3-dichloropropane
      0.568 0.426 0.556 0.573 0.559 0.549 0.532 0.569 0.578 0.426  0.534   10.88
81)  butyl acetate
      0.364 0.332 0.366 0.361 0.355 0.383 0.335 0.358 0.348 0.349  0.355    4.25
82)  dibromochloromethane
      0.438 0.333 0.436 0.458 0.455 0.413 0.434 0.447 0.445 0.390  0.425    8.93
83)  1,2-dibromoethane
```

```
      0.393 0.315 0.395 0.407 0.401 0.370 0.383 0.403 0.402        0.385    7.51
 84)  n-butyl ether
      1.707 1.400 1.699 1.828 1.755 1.602 1.606 1.778 1.740 1.715  1.683    7.21
 85)  chlorobenzene
      1.031 0.853 1.038 1.113 1.087 0.989 1.027 1.077 1.071 0.945  1.023    7.57
 86)  1,1,1,2-tetrachloroethane
      0.402 0.296 0.391 0.424 0.413 0.360 0.383 0.411 0.405        0.387   10.06
 87)  ethylbenzene
      1.660 1.393 1.636 1.770 1.702 1.598 1.546 1.722 1.722 1.500  1.625    7.21
 88)  m,p-xylene
      0.648 0.534 0.646 0.692 0.670 0.605 0.610 0.674 0.674 0.539  0.629    8.96
 89)  o-xylene
      1.335 1.110 1.327 1.416 1.367 1.314 1.263 1.394 1.386 1.241  1.315    6.94
 90)  styrene
      1.058 0.781 1.053 1.139 1.099 0.948 1.024 1.112 1.051        1.030   10.51
 91)  butyl acrylate
      0.423 0.371 0.423 0.451 0.443 0.394 0.427 0.438 0.428 0.429  0.423    5.59
 92)  n-amyl acetate
      0.295 0.210 0.288 0.301 0.295 0.245 0.282 0.297 0.285        0.278   10.89
 93)  bromoform
      0.306       0.307 0.330 0.330 0.273 0.318 0.317 0.291        0.309    6.27
 94)  isopropylbenzene
      1.546 1.258 1.562 1.723 1.664 1.484 1.527 1.659 1.598 1.401  1.542    8.88
 95)  cis-1,4-dichloro-2-butene
      0.151       0.160 0.183 0.182       0.176 0.172 0.142        0.167    9.49

 96) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 97)  4-bromofluorobenzene (s)
      1.143 1.144 1.140 1.124 1.132 1.152 1.134 1.137 1.145 1.156  1.141    0.82
 98)  bromobenzene
      1.196       1.173 1.267 1.235 1.043 1.176 1.228 1.225        1.193    5.73
 99)  1,1,2,2-tetrachloroethane
      1.334 1.107 1.361 1.341 1.317 1.307 1.291 1.351 1.345 1.196  1.295    6.28
100)  trans-1,4-dichloro-2-butene
      0.374       0.411 0.437 0.447 0.330 0.422 0.424 0.386        0.404    9.58
101)  1,2,3-trichloropropane
      0.394       0.401 0.388 0.384 0.310 0.362 0.387 0.366        0.374    7.73
102)  n-propylbenzene
      4.751 3.842 4.775 5.236 5.053 4.463 4.634 5.028 4.864 4.356  4.700    8.60
103)  2-chlorotoluene
      1.049 0.789 1.073 1.155 1.118 0.996 1.051 1.110 1.112        1.050   10.36
104)  4-chlorotoluene
      1.064 0.788 1.075 1.165 1.135 1.028 1.059 1.119 1.092        1.058   10.37
105)  1,3,5-trimethylbenzene
      3.277 2.577 3.332 3.660 3.541 2.983 3.275 3.524 3.492 3.026  3.269   10.03
106)  tert-butylbenzene
      2.883 2.289 2.894 3.214 3.142 2.678 2.892 3.062 2.931 2.506  2.849   10.04
107)  1,2,4-trimethylbenzene
      3.369 2.739 3.411 3.700 3.597 3.242 3.351 3.542 3.521 3.273  3.375    7.90
108)  sec-butylbenzene
      3.915       3.969 4.526 4.393 3.635 4.037 4.284 4.061        4.103    6.98
109)  1,3-dichlorobenzene
      1.943 1.614 1.960 2.158 2.137 1.775 2.025 2.056 1.970        1.960    8.81
110)  p-isopropyltoluene
      3.314       3.422 3.881 3.748 3.053 3.456 3.663 3.483        3.503    7.45
111)  1,2,3-trimethylbenzene
      3.401 2.667 3.422 3.609 3.502 3.157 3.278 3.494 3.398 2.760  3.269    9.74
112)  1,4-dichlorobenzene
      1.977 1.546 1.992 2.151 2.112 1.916 2.012 2.047 2.036        1.977    8.91
113)  1,2-dichlorobenzene
```

Initial Calibration Summary

Job Number: JD35920 **Sample:** V2V3410-ICC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82666.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
       1.858       1.863 2.000 1.977 1.743 1.875 1.926 1.866       1.889    4.25
114)  benzyl chloride
       2.195       2.304 2.566 2.589 1.980 2.516 2.413 2.157       2.340    9.35
115)  n-butylbenzene
       1.444       1.476 1.758 1.729       1.639 1.617 1.444       1.587    8.39
116)  hexachloroethane
       0.472       0.510 0.610 0.617       0.597 0.549 0.455       0.544   12.27
117)  1,2-dibromo-3-chloropropane
       0.290       0.302 0.337 0.357       0.355 0.326 0.277       0.320    9.86
118)  1,3,5-trichlorobenzene
       1.192       1.243 1.434 1.442 1.005 1.410 1.313 1.175       1.277   11.97
119)  1,2,4-trichlorobenzene
       0.954       1.008 1.191 1.221 0.728 1.209 1.089 0.925       1.040   16.47
120)  hexachlorobutadiene
       0.410       0.434 0.524 0.526       0.497 0.472 0.405       0.467   11.02
121)  naphthalene
       2.778       2.854 3.189 3.279       3.174 3.032 2.642       2.993    7.99
122)  1,2,3-trichlorobenzene
       0.792       0.863 0.980 1.005 0.665 0.975 0.906 0.796       0.873   13.43
123)  2-methylnaphthalene
       0.444       0.487 0.564 0.611       0.537 0.576             0.537   11.45
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M2V3410.M         Thu Nov 18 17:17:11 2021   RPT1
```

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82671.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V3410\2V82671.D Vial: 16
Acq On : 18 Nov 2021 12:15 am Operator: edwardd
Sample : icv3410-50 Inst : MS2V
Misc : MS54991,V2V3410,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 17:15:16 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	105	0.00	2.59
2		ethanol	0.185	0.188	-1.6	102	0.00	2.07
3		tertiary butyl alcohol	1.916	1.864	2.7	96	0.00	2.65
4		1,4-dioxane	0.145	0.148	-2.1	101	0.00	4.71
5	I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	3.75
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane	0.553	0.559	-1.1	95	0.00	1.34
8		chloromethane	0.212	0.230	-8.5	107	0.00	1.47
9		vinyl chloride	0.562	0.670	-19.2	111	0.00	1.54
10		bromomethane		----------NA----------				
11		chloroethane	0.318	0.330	-3.8	102	0.00	1.82
12		trichlorofluoromethane	0.719	0.801	-11.4	102	0.00	1.99
13		1,3-butadiene	0.532	0.598	-12.4	106	0.00	1.57
14		ethyl ether	0.257	0.268	-4.3	101	0.00	2.15
15		acrolein	0.113	0.114	-0.9	100	0.00	2.24
16		freon 113	0.396	0.397	-0.3	95	0.00	2.31
17		1,1-dichloroethene	0.720	0.730	-1.4	95	0.00	2.31
18		acetone	0.301	0.377	-25.2	175	0.00	2.32
19		acetonitrile		----------NA----------				
20		iodomethane	0.262	0.366	-39.7#	83	0.00	2.42
21		carbon disulfide	1.191	1.227	-3.0	97	0.00	2.46
22		methylene chloride	0.501	0.477	4.8	99	0.00	2.61
23		methyl acetate	0.589	0.490	16.8	90	0.00	2.51
24		methyl tert butyl ether	1.303	1.347	-3.4	99	0.00	2.77
25		trans-1,2-dichloroethene	0.444	0.478	-7.7	99	0.00	2.78
26		hexane	0.470	0.422	10.2	85	0.00	2.96
27		di-isopropyl ether	1.741	1.711	1.7	94	0.00	3.06
28		ethyl tert-butyl ether	1.661	1.614	2.8	93	0.00	3.30
29		1,1-dichloroethane	0.852	0.920	-8.0	100	0.00	3.06
30		chloroprene	0.756	0.843	-11.5	104	0.00	3.11
31		acrylonitrile		----------NA----------				
32		vinyl acetate	0.107	0.100	6.5	88	0.00	3.04
33		ethyl acetate	0.110	0.118	-7.3	105	0.00	3.42
34		2-butanone	0.077	0.094	-22.1	134	0.00	3.40
35		2,2-dichloropropane	0.671	0.709	-5.7	99	0.00	3.43
36		cis-1,2-dichloroethene	0.495	0.536	-8.3	101	0.00	3.43
37		propionitrile	0.100	0.091	9.0	89	0.00	3.44
38		methyl acrylate	0.093	0.096	-3.2	101	0.00	3.46
39		bromochloromethane	0.279	0.290	-3.9	101	0.00	3.58
40		tetrahydrofuran	0.082	0.078	4.9	101	0.00	3.60
41		chloroform	0.872	0.891	-2.2	102	0.00	3.64

Initial Calibration Verification

Job Number: JD35920 **Sample:** V2V3410-ICV3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82671.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	S	dibromofluoromethane (s)	0.464	0.468	-0.9	104	0.00	3.75
43		methacrylonitrile	0.236	0.241	-2.1	103	0.00	3.54
44		1,1,1-trichloroethane	0.723	0.781	-8.0	101	0.00	3.77
45		cyclohexane	0.582	0.715	-22.9	118	0.00	3.83
46		1,1-dichloropropene	0.589	0.658	-11.7	102	0.00	3.87
47		carbon tetrachloride	0.642	0.696	-8.4	100	0.00	3.88
48		isobutyl alcohol	0.023	0.024	-4.3	105	0.00	3.89
49		tert-amyl alcohol	0.035	0.034	2.9	105	0.00	3.98
50	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.317	1.2	104	0.00	3.98
52		n-butyl alcohol	0.018	0.018	0.0	101	0.00	4.36
53		benzene	1.213	1.286	-6.0	100	0.00	4.01
54		tert-amyl methyl ether	1.027	0.934	9.1	89	0.00	4.08
55		iso-octane	1.186	1.152	2.9	92	0.00	4.08
56		heptane	0.227	0.250	-10.1	103	0.00	4.20
57		isopropyl acetate	0.089	0.087	2.2	97	0.00	4.00
58		1,2-dichloroethane	0.499	0.486	2.6	99	0.00	4.04
59		trichloroethene	0.340	0.375	-10.3	103	0.00	4.47
60		ethyl acrylate	0.630	0.473	24.9	78	0.00	4.50
61		2-nitropropane	0.128	0.120	6.3	103	0.00	5.01
62		2-chloroethyl vinyl ether	0.202	0.240	-18.8	110	0.00	5.05
63		methyl methacrylate	0.110	0.114	-3.6	102	0.00	4.68
64		1,2-dichloropropane	0.351	0.373	-6.3	100	0.00	4.66
65		methylcyclohexane	0.512	0.560	-9.4	103	0.00	4.65
66		dibromomethane	0.227	0.232	-2.2	100	0.00	4.73
67		bromodichloromethane	0.450	0.462	-2.7	101	0.00	4.85
68		epichlorohydrin	0.049	0.050	-2.0	104	0.00	5.09
69		cis-1,3-dichloropropene	0.530	0.567	-7.0	101	0.00	5.18
70		4-methyl-2-pentanone	0.180	0.187	-3.9	100	0.00	5.29
71		3-methyl-1-butanol	0.014	0.014	0.0	99	0.00	5.33
72	I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.232	2.5	103	0.00	5.40
74		toluene	0.882	0.929	-5.3	101	0.00	5.46
75		ethyl methacrylate	0.533	0.525	1.5	99	0.00	5.67
76		trans-1,3-dichloropropene	0.519	0.554	-6.7	100	0.00	5.63
77		1,1,2-trichloroethane	0.289	0.299	-3.5	101	0.00	5.80
78		2-hexanone	0.214	0.237	-10.7	114	0.00	5.97
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane	0.534	0.558	-4.5	101	0.00	5.94
81		butyl acetate	0.355	0.341	3.9	98	0.00	6.06
82		dibromochloromethane	0.425	0.446	-4.9	101	0.00	6.13
83		1,2-dibromoethane	0.385	0.398	-3.4	101	0.00	6.23
84		n-butyl ether	1.683	1.437	14.6	81	0.00	6.74
85		chlorobenzene	1.023	1.094	-6.9	102	0.00	6.66
86		1,1,1,2-tetrachloroethane	0.387	0.419	-8.3	102	0.00	6.74
87		ethylbenzene	1.625	1.745	-7.4	102	0.00	6.75
88		m,p-xylene	0.629	0.688	-9.4	103	0.00	6.86
89		o-xylene	1.315	1.363	-3.7	100	0.00	7.21
90		styrene	1.030	1.115	-8.3	101	0.00	7.23
91		butyl acrylate	0.423	0.395	6.6	91	0.00	7.16
92		n-amyl acetate	0.278	0.271	2.5	93	0.00	7.36
93		bromoform	0.309	0.327	-5.8	103	0.00	7.40
94		isopropylbenzene	1.542	1.708	-10.8	103	0.00	7.55
95		cis-1,4-dichloro-2-butene	0.167	0.168	-0.6	95	0.00	7.60
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.135	0.5	105	0.00	7.71
98		bromobenzene	1.193	1.244	-4.3	102	0.00	7.85

Initial Calibration Verification

Job Number: JD35920 **Sample:** V2V3410-ICV3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82671.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	1,1,2,2-tetrachloroethane	1.295	1.303	-0.6	101	0.00	7.83
100	trans-1,4-dichloro-2-bute	0.404	0.432	-6.9	103	0.00	7.87
101	1,2,3-trichloropropane	0.374	0.379	-1.3	102	0.00	7.89
102	n-propylbenzene	4.700	5.121	-9.0	102	0.00	7.94
103	2-chlorotoluene	1.050	1.134	-8.0	102	0.00	8.03
104	4-chlorotoluene	1.058	1.135	-7.3	102	0.00	8.14
105	1,3,5-trimethylbenzene	3.269	3.604	-10.2	103	0.00	8.11
106	tert-butylbenzene	2.849	3.622	-27.1	117	0.00	8.41
107	1,2,4-trimethylbenzene	3.375	3.580	-6.1	101	0.00	8.48
108	sec-butylbenzene	4.103	4.461	-8.7	103	0.00	8.63
109	1,3-dichlorobenzene	1.960	2.121	-8.2	102	0.00	8.74
110	p-isopropyltoluene	3.503	3.785	-8.1	102	0.00	8.78
111	1,2,3-trimethylbenzene		----------NA----------				
112	1,4-dichlorobenzene	1.977	2.111	-6.8	102	0.00	8.84
113	1,2-dichlorobenzene	1.889	1.960	-3.8	102	0.00	9.19
114	benzyl chloride	2.340	2.244	4.1	91	0.00	8.95
115	n-butylbenzene	1.587	1.722	-8.5	102	0.00	9.18
116	hexachloroethane	0.544	0.618	-13.6	106	0.00	9.46
117	1,2-dibromo-3-chloropropa	0.320	0.335	-4.7	104	0.00	9.96
118	1,3,5-trichlorobenzene	1.277	1.430	-12.0	104	0.00	10.15
119	1,2,4-trichlorobenzene	1.040	1.172	-12.7	103	0.00	10.77
120	hexachlorobutadiene	0.467	0.513	-9.9	102	0.00	10.91
121	naphthalene	2.993	3.047	-1.8	100	0.00	11.01
122	1,2,3-trichlorobenzene	0.873	0.938	-7.4	100	0.00	11.22
123	2-methylnaphthalene	0.537	0.481	10.4	89	0.00	12.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82666.D M2V3410.M Thu Nov 18 17:16:58 2021 RPT1

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82672.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V3410\2V82672.D Vial: 17
Acq On : 18 Nov 2021 12:41 am Operator: edwardd
Sample : icv3410-50 Inst : MS2V
Misc : MS54991,V2V3410,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 11:29:02 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	99	0.00	2.59
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	104	0.00	3.75
6		chlorodifluoromethane	0.607	0.748	-23.2	116	0.00	1.35
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		freon 113		----------NA----------				
17		1,1-dichloroethene		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile	0.093	0.090	3.2	106	0.00	2.49
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		di-isopropyl ether		----------NA----------				
28		ethyl tert-butyl ether		----------NA----------				
29		1,1-dichloroethane		----------NA----------				
30		chloroprene		----------NA----------				
31		acrylonitrile	0.255	0.310	-21.6	120	0.00	2.75
32		vinyl acetate		----------NA----------				
33		ethyl acetate		----------NA----------				
34		2-butanone		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		propionitrile		----------NA----------				
38		methyl acrylate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				
41		chloroform		----------NA----------				

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82672.D

42	S	dibromofluoromethane (s)	0.464	0.463	0.2	103	0.00	3.75
43		methacrylonitrile		----------NA----------				
44		1,1,1-trichloroethane		----------NA----------				
45		cyclohexane		----------NA----------				
46		1,1-dichloropropene		----------NA----------				
47		carbon tetrachloride		----------NA----------				
48		isobutyl alcohol		----------NA----------				
49		tert-amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.318	0.9	105	0.00	3.98
52		n-butyl alcohol		----------NA----------				
53		benzene		----------NA----------				
54		tert-amyl methyl ether		----------NA----------				
55		iso-octane		----------NA----------				
56		heptane		----------NA----------				
57		isopropyl acetate		----------NA----------				
58		1,2-dichloroethane		----------NA----------				
59		trichloroethene		----------NA----------				
60		ethyl acrylate		----------NA----------				
61		2-nitropropane		----------NA----------				
62		2-chloroethyl vinyl ether		----------NA----------				
63		methyl methacrylate		----------NA----------				
64		1,2-dichloropropane		----------NA----------				
65		methylcyclohexane		----------NA----------				
66		dibromomethane		----------NA----------				
67		bromodichloromethane		----------NA----------				
68		epichlorohydrin		----------NA----------				
69		cis-1,3-dichloropropene		----------NA----------				
70		4-methyl-2-pentanone		----------NA----------				
71		3-methyl-1-butanol		----------NA----------				
72	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.291	-2.1	104	0.00	5.40
74		toluene		----------NA----------				
75		ethyl methacrylate		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		1,1,2-trichloroethane		----------NA----------				
78		2-hexanone		----------NA----------				
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane		----------NA----------				
81		butyl acetate		----------NA----------				
82		dibromochloromethane		----------NA----------				
83		1,2-dibromoethane		----------NA----------				
84		n-butyl ether		----------NA----------				
85		chlorobenzene		----------NA----------				
86		1,1,1,2-tetrachloroethane		----------NA----------				
87		ethylbenzene		----------NA----------				
88		m,p-xylene		----------NA----------				
89		o-xylene		----------NA----------				
90		styrene		----------NA----------				
91		butyl acrylate		----------NA----------				
92		n-amyl acetate		----------NA----------				
93		bromoform		----------NA----------				
94		isopropylbenzene		----------NA----------				
95		cis-1,4-dichloro-2-butene		----------NA----------				
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.122	1.7	101	0.00	7.71
98		bromobenzene		----------NA----------				

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82672.D

99	1,1,2,2-tetrachloroethane		----------NA----------				
100	trans-1,4-dichloro-2-bute		----------NA----------				
101	1,2,3-trichloropropane		----------NA----------				
102	n-propylbenzene		----------NA----------				
103	2-chlorotoluene		----------NA----------				
104	4-chlorotoluene		----------NA----------				
105	1,3,5-trimethylbenzene		----------NA----------				
106	tert-butylbenzene		----------NA----------				
107	1,2,4-trimethylbenzene		----------NA----------				
108	sec-butylbenzene		----------NA----------				
109	1,3-dichlorobenzene		----------NA----------				
110	p-isopropyltoluene		----------NA----------				
111	1,2,3-trimethylbenzene	3.269	4.119	-26.0	115	0.00	8.87
112	1,4-dichlorobenzene		----------NA----------				
113	1,2-dichlorobenzene		----------NA----------				
114	benzyl chloride		----------NA----------				
115	n-butylbenzene		----------NA----------				
116	hexachloroethane		----------NA----------				
117	1,2-dibromo-3-chloropropa		----------NA----------				
118	1,3,5-trichlorobenzene		----------NA----------				
119	1,2,4-trichlorobenzene		----------NA----------				
120	hexachlorobutadiene		----------NA----------				
121	naphthalene		----------NA----------				
122	1,2,3-trichlorobenzene		----------NA----------				
123	2-methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2V82666.D M2V3410.M Thu Nov 18 16:27:25 2021 RPT1

6.9.3

6

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82678.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V3410\2V82678.D Vial: 23
Acq On : 18 Nov 2021 11:34 am Operator: edwardd
Sample : icv3410-50 Inst : MS2V
Misc : MS54991,V2V3410,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 11:29:02 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	112	0.00	2.59
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	3.75
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane	0.214	0.180	15.9	82	0.00	1.76
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		freon 113		----------NA----------				
17		1,1-dichloroethene		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile		----------NA----------				
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		di-isopropyl ether		----------NA----------				
28		ethyl tert-butyl ether		----------NA----------				
29		1,1-dichloroethane		----------NA----------				
30		chloroprene		----------NA----------				
31		acrylonitrile		----------NA----------				
32		vinyl acetate		----------NA----------				
33		ethyl acetate		----------NA----------				
34		2-butanone		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		propionitrile		----------NA----------				
38		methyl acrylate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				
41		chloroform		----------NA----------				

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82678.D

42	S	dibromofluoromethane (s)	0.464	0.464	0.0	109	0.00	3.74
43		methacrylonitrile		----------NA----------				
44		1,1,1-trichloroethane		----------NA----------				
45		cyclohexane		----------NA----------				
46		1,1-dichloropropene		----------NA----------				
47		carbon tetrachloride		----------NA----------				
48		isobutyl alcohol		----------NA----------				
49		tert-amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	109	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.318	0.9	109	0.00	3.98
52		n-butyl alcohol		----------NA----------				
53		benzene		----------NA----------				
54		tert-amyl methyl ether		----------NA----------				
55		iso-octane		----------NA----------				
56		heptane		----------NA----------				
57		isopropyl acetate		----------NA----------				
58		1,2-dichloroethane		----------NA----------				
59		trichloroethene		----------NA----------				
60		ethyl acrylate		----------NA----------				
61		2-nitropropane		----------NA----------				
62		2-chloroethyl vinyl ether		----------NA----------				
63		methyl methacrylate		----------NA----------				
64		1,2-dichloropropane		----------NA----------				
65		methylcyclohexane		----------NA----------				
66		dibromomethane		----------NA----------				
67		bromodichloromethane		----------NA----------				
68		epichlorohydrin		----------NA----------				
69		cis-1,3-dichloropropene		----------NA----------				
70		4-methyl-2-pentanone		----------NA----------				
71		3-methyl-1-butanol		----------NA----------				
72	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.269	-0.4	108	0.00	5.40
74		toluene		----------NA----------				
75		ethyl methacrylate		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		1,1,2-trichloroethane		----------NA----------				
78		2-hexanone		----------NA----------				
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane		----------NA----------				
81		butyl acetate		----------NA----------				
82		dibromochloromethane		----------NA----------				
83		1,2-dibromoethane		----------NA----------				
84		n-butyl ether		----------NA----------				
85		chlorobenzene		----------NA----------				
86		1,1,1,2-tetrachloroethane		----------NA----------				
87		ethylbenzene		----------NA----------				
88		m,p-xylene		----------NA----------				
89		o-xylene		----------NA----------				
90		styrene		----------NA----------				
91		butyl acrylate		----------NA----------				
92		n-amyl acetate		----------NA----------				
93		bromoform		----------NA----------				
94		isopropylbenzene		----------NA----------				
95		cis-1,4-dichloro-2-butene		----------NA----------				
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.123	1.6	106	0.00	7.71
98		bromobenzene		----------NA----------				

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82678.D

99	1,1,2,2-tetrachloroethane	----------NA----------	
100	trans-1,4-dichloro-2-bute	----------NA----------	
101	1,2,3-trichloropropane	----------NA----------	
102	n-propylbenzene	----------NA----------	
103	2-chlorotoluene	----------NA----------	
104	4-chlorotoluene	----------NA----------	
105	1,3,5-trimethylbenzene	----------NA----------	
106	tert-butylbenzene	----------NA----------	
107	1,2,4-trimethylbenzene	----------NA----------	
108	sec-butylbenzene	----------NA----------	
109	1,3-dichlorobenzene	----------NA----------	
110	p-isopropyltoluene	----------NA----------	
111	1,2,3-trimethylbenzene	----------NA----------	
112	1,4-dichlorobenzene	----------NA----------	
113	1,2-dichlorobenzene	----------NA----------	
114	benzyl chloride	----------NA----------	
115	n-butylbenzene	----------NA----------	
116	hexachloroethane	----------NA----------	
117	1,2-dibromo-3-chloropropa	----------NA----------	
118	1,3,5-trichlorobenzene	----------NA----------	
119	1,2,4-trichlorobenzene	----------NA----------	
120	hexachlorobutadiene	----------NA----------	
121	naphthalene	----------NA----------	
122	1,2,3-trichlorobenzene	----------NA----------	
123	2-methylnaphthalene	----------NA----------	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82666.D M2V3410.M Thu Nov 18 16:27:26 2021 RPT1

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82679.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V3410\2V82679.D Vial: 24
Acq On : 18 Nov 2021 11:59 am Operator: edwardd
Sample : icv3410-50 Inst : MS2V
Misc : MS54991,V2V3410,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 11:29:02 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	114	0.00	2.59
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	3.75
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		freon 113		----------NA----------				
17		1,1-dichloroethene		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile		----------NA----------				
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		di-isopropyl ether		----------NA----------				
28		ethyl tert-butyl ether		----------NA----------				
29		1,1-dichloroethane		----------NA----------				
30		chloroprene		----------NA----------				
31		acrylonitrile		----------NA----------				
32		vinyl acetate		----------NA----------				
33		ethyl acetate		----------NA----------				
34		2-butanone		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		propionitrile		----------NA----------				
38		methyl acrylate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				
41		chloroform		----------NA----------				

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82679.D

42	S	dibromofluoromethane (s)	0.464	0.464	0.0	108	0.00	3.75
43		methacrylonitrile		----------NA----------				
44		1,1,1-trichloroethane		----------NA----------				
45		cyclohexane		----------NA----------				
46		1,1-dichloropropene		----------NA----------				
47		carbon tetrachloride		----------NA----------				
48		isobutyl alcohol		----------NA----------				
49		tert-amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	109	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.320	0.3	110	0.00	3.98
52		n-butyl alcohol		----------NA----------				
53		benzene		----------NA----------				
54		tert-amyl methyl ether		----------NA----------				
55		iso-octane		----------NA----------				
56		heptane		----------NA----------				
57		isopropyl acetate		----------NA----------				
58		1,2-dichloroethane		----------NA----------				
59		trichloroethene		----------NA----------				
60		ethyl acrylate		----------NA----------				
61		2-nitropropane		----------NA----------				
62		2-chloroethyl vinyl ether		----------NA----------				
63		methyl methacrylate		----------NA----------				
64		1,2-dichloropropane		----------NA----------				
65		methylcyclohexane		----------NA----------				
66		dibromomethane		----------NA----------				
67		bromodichloromethane		----------NA----------				
68		epichlorohydrin		----------NA----------				
69		cis-1,3-dichloropropene		----------NA----------				
70		4-methyl-2-pentanone		----------NA----------				
71		3-methyl-1-butanol		----------NA----------				
72	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.270	-0.5	108	0.00	5.40
74		toluene		----------NA----------				
75		ethyl methacrylate		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		1,1,2-trichloroethane		----------NA----------				
78		2-hexanone		----------NA----------				
79		tetrachloroethene	0.338	0.317	6.2	89	0.00	5.89
80		1,3-dichloropropane		----------NA----------				
81		butyl acetate		----------NA----------				
82		dibromochloromethane		----------NA----------				
83		1,2-dibromoethane		----------NA----------				
84		n-butyl ether		----------NA----------				
85		chlorobenzene		----------NA----------				
86		1,1,1,2-tetrachloroethane		----------NA----------				
87		ethylbenzene		----------NA----------				
88		m,p-xylene		----------NA----------				
89		o-xylene		----------NA----------				
90		styrene		----------NA----------				
91		butyl acrylate		----------NA----------				
92		n-amyl acetate		----------NA----------				
93		bromoform		----------NA----------				
94		isopropylbenzene		----------NA----------				
95		cis-1,4-dichloro-2-butene		----------NA----------				
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.138	0.3	107	0.00	7.71
98		bromobenzene		----------NA----------				

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82679.D

99	1,1,2,2-tetrachloroethane	----------NA----------	
100	trans-1,4-dichloro-2-bute	----------NA----------	
101	1,2,3-trichloropropane	----------NA----------	
102	n-propylbenzene	----------NA----------	
103	2-chlorotoluene	----------NA----------	
104	4-chlorotoluene	----------NA----------	
105	1,3,5-trimethylbenzene	----------NA----------	
106	tert-butylbenzene	----------NA----------	
107	1,2,4-trimethylbenzene	----------NA----------	
108	sec-butylbenzene	----------NA----------	
109	1,3-dichlorobenzene	----------NA----------	
110	p-isopropyltoluene	----------NA----------	
111	1,2,3-trimethylbenzene	----------NA----------	
112	1,4-dichlorobenzene	----------NA----------	
113	1,2-dichlorobenzene	----------NA----------	
114	benzyl chloride	----------NA----------	
115	n-butylbenzene	----------NA----------	
116	hexachloroethane	----------NA----------	
117	1,2-dibromo-3-chloropropa	----------NA----------	
118	1,3,5-trichlorobenzene	----------NA----------	
119	1,2,4-trichlorobenzene	----------NA----------	
120	hexachlorobutadiene	----------NA----------	
121	naphthalene	----------NA----------	
122	1,2,3-trichlorobenzene	----------NA----------	
123	2-methylnaphthalene	----------NA----------	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82666.D M2V3410.M Thu Nov 18 16:27:27 2021 RPT1

Continuing Calibration Summary

Job Number: JD35920 **Sample:** V2V3430-CC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V83199.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...021\v2v3430\2v83199.d Vial: 51
Acq On : 2 Dec 2021 9:56 pm Operator: nickw
Sample : cc3410-50 Inst : MS2V
Misc : MS55262,V2V3430,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 17:15:16 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	100	0.00	2.59
2		ethanol	0.185	0.176	4.9	91	0.00	2.07
3		tertiary butyl alcohol	1.916	1.872	2.3	91	0.00	2.65
4		1,4-dioxane	0.145	0.148	-2.1	96	0.00	4.71
5	I	pentafluorobenzene	1.000	1.000	0.0	94	0.00	3.75
6		chlorodifluoromethane	0.607	0.534	12.0	75	0.00	1.35
7		dichlorodifluoromethane	0.553	0.449	18.8	69	0.00	1.34
8		chloromethane	0.212	0.193	9.0	82	0.00	1.47
9		vinyl chloride	0.562	0.496	11.7	74	0.00	1.54
10		bromomethane	0.214	0.199	7.0	78	0.00	1.75
11		chloroethane	0.318	0.279	12.3	79	0.00	1.82
12		trichlorofluoromethane	0.719	0.715	0.6	82	0.00	1.99
13		1,3-butadiene	0.532	0.504	5.3	81	0.00	1.57
14		ethyl ether	0.257	0.250	2.7	86	0.00	2.15
15		acrolein	0.113	0.104	8.0	83	0.00	2.24
16		freon 113	0.396	0.410	-3.5	89	0.00	2.31
17		1,1-dichloroethene	0.720	0.660	8.3	78	0.00	2.31
18		acetone	0.301	0.295	2.0	124	0.00	2.32
19		acetonitrile	0.093	0.087	6.5	93	0.00	2.49
20		iodomethane	0.262	0.258	1.5	53	0.00	2.41
21		carbon disulfide	1.191	1.100	7.6	79	0.00	2.46
22		methylene chloride	0.501	0.472	5.8	89	0.00	2.61
23		methyl acetate	0.589	0.536	9.0	89	0.00	2.51
24		methyl tert butyl ether	1.303	1.280	1.8	86	0.00	2.77
25		trans-1,2-dichloroethene	0.444	0.448	-0.9	85	0.00	2.78
26		hexane	0.470	0.417	11.3	76	0.00	2.96
27		di-isopropyl ether	1.741	1.650	5.2	83	0.00	3.06
28		ethyl tert-butyl ether	1.661	1.611	3.0	84	0.00	3.30
29		1,1-dichloroethane	0.852	0.837	1.8	82	0.00	3.06
30		chloroprene	0.756	0.697	7.8	78	0.00	3.11
31		acrylonitrile	0.255	0.253	0.8	88	0.00	2.75
32		vinyl acetate	0.107	0.091	15.0	73	0.00	3.04
33		ethyl acetate	0.110	0.110	0.0	89	0.00	3.42
34		2-butanone	0.077	0.084	-9.1	108	0.00	3.40
35		2,2-dichloropropane	0.671	0.594	11.5	76	0.00	3.43
36		cis-1,2-dichloroethene	0.495	0.508	-2.6	87	0.00	3.43
37		propionitrile	0.100	0.107	-7.0	95	0.00	3.44
38		methyl acrylate	0.093	0.097	-4.3	92	0.00	3.45
39		bromochloromethane	0.279	0.288	-3.2	92	0.00	3.58
40		tetrahydrofuran	0.082	0.078	4.9	92	0.00	3.60
41		chloroform	0.872	0.866	0.7	90	0.00	3.64

Continuing Calibration Summary

Job Number: JD35920 **Sample:** V2V3430-CC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V83199.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	S	dibromofluoromethane (s)	0.464	0.459	1.1	93	0.00	3.75
43		methacrylonitrile	0.236	0.234	0.8	91	0.00	3.55
44		1,1,1-trichloroethane	0.723	0.715	1.1	84	0.00	3.77
45		cyclohexane	0.582	0.616	-5.8	92	0.00	3.83
46		1,1-dichloropropene	0.589	0.574	2.5	81	0.00	3.87
47		carbon tetrachloride	0.642	0.636	0.9	83	0.00	3.88
48		isobutyl alcohol	0.023	0.022	4.3	86	0.00	3.89
49		tert-amyl alcohol	0.035	0.034	2.9	97	0.00	3.98
50	I	1,4-difluorobenzene	1.000	1.000	0.0	92	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.297	7.5	86	0.00	3.98
52		n-butyl alcohol	0.018	0.019	-5.6	93	0.00	4.36
53		benzene	1.213	1.223	-0.8	84	0.00	4.01
54		tert-amyl methyl ether	1.027	1.011	1.6	85	0.00	4.08
55		iso-octane	1.186	1.068	9.9	75	0.00	4.08
56		heptane	0.227	0.205	9.7	75	0.00	4.20
57		isopropyl acetate	0.089	0.094	-5.6	92	0.00	4.00
58		1,2-dichloroethane	0.499	0.465	6.8	84	0.00	4.04
59		trichloroethene	0.340	0.358	-5.3	87	0.00	4.47
60		ethyl acrylate	0.630	0.614	2.5	90	0.00	4.50
61		2-nitropropane	0.128	0.097	24.2#	73	0.00	5.01
62		2-chloroethyl vinyl ether	0.202	0.228	-12.9	92	0.00	5.05
63		methyl methacrylate	0.110	0.117	-6.4	93	0.00	4.68
64		1,2-dichloropropane	0.351	0.356	-1.4	85	0.00	4.66
65		methylcyclohexane	0.512	0.501	2.1	82	0.00	4.65
66		dibromomethane	0.227	0.233	-2.6	88	0.00	4.73
67		bromodichloromethane	0.450	0.448	0.4	86	0.00	4.85
68		epichlorohydrin	0.049	0.051	-4.1	94	0.00	5.09
69		cis-1,3-dichloropropene	0.530	0.530	0.0	84	0.00	5.18
70		4-methyl-2-pentanone	0.180	0.194	-7.8	92	0.00	5.29
71		3-methyl-1-butanol	0.014	0.014	0.0	89	0.00	5.33
72	I	chlorobenzene-d5	1.000	1.000	0.0	96	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.161	8.1	90	0.00	5.40
74		toluene	0.882	0.842	4.5	86	0.00	5.46
75		ethyl methacrylate	0.533	0.493	7.5	87	0.00	5.67
76		trans-1,3-dichloropropene	0.519	0.494	4.8	83	0.00	5.63
77		1,1,2-trichloroethane	0.289	0.286	1.0	90	0.00	5.80
78		2-hexanone	0.214	0.222	-3.7	100	0.00	5.97
79		tetrachloroethene	0.338	0.352	-4.1	91	0.00	5.89
80		1,3-dichloropropane	0.534	0.525	1.7	88	0.00	5.94
81		butyl acetate	0.355	0.333	6.2	89	0.00	6.06
82		dibromochloromethane	0.425	0.440	-3.5	93	0.00	6.13
83		1,2-dibromoethane	0.385	0.394	-2.3	93	0.00	6.23
84		n-butyl ether	1.683	1.561	7.2	82	0.00	6.74
85		chlorobenzene	1.023	1.023	0.0	89	0.00	6.66
86		1,1,1,2-tetrachloroethane	0.387	0.398	-2.8	90	0.00	6.74
87		ethylbenzene	1.625	1.564	3.8	85	0.00	6.75
88		m,p-xylene	0.629	0.622	1.1	87	0.00	6.86
89		o-xylene	1.315	1.263	4.0	86	0.00	7.21
90		styrene	1.030	1.044	-1.4	88	0.00	7.23
91		butyl acrylate	0.423	0.401	5.2	86	0.00	7.16
92		n-amyl acetate	0.278	0.270	2.9	87	0.00	7.36
93		bromoform	0.309	0.331	-7.1	97	0.00	7.40
94		isopropylbenzene	1.542	1.515	1.8	85	0.00	7.55
95		cis-1,4-dichloro-2-butene	0.167	0.154	7.8	81	0.00	7.60
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.055	7.5	96	0.00	7.71
98		bromobenzene	1.193	1.169	2.0	94	0.00	7.85

Continuing Calibration Summary

Job Number: JD35920 **Sample:** V2V3430-CC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V83199.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	1,1,2,2-tetrachloroethane	1.295	1.193	7.9	91	0.00	7.84
100	trans-1,4-dichloro-2-bute	0.404	0.335	17.1	78	0.00	7.87
101	1,2,3-trichloropropane	0.374	0.365	2.4	96	0.00	7.89
102	n-propylbenzene	4.700	4.325	8.0	84	0.00	7.94
103	2-chlorotoluene	1.050	1.007	4.1	89	0.00	8.03
104	4-chlorotoluene	1.058	1.032	2.5	91	0.00	8.14
105	1,3,5-trimethylbenzene	3.269	3.057	6.5	85	0.00	8.11
106	tert-butylbenzene	2.849	2.718	4.6	86	0.00	8.42
107	1,2,4-trimethylbenzene	3.375	3.119	7.6	86	0.00	8.48
108	sec-butylbenzene	4.103	3.740	8.8	84	0.00	8.63
109	1,3-dichlorobenzene	1.960	1.950	0.5	92	0.00	8.75
110	p-isopropyltoluene	3.503	3.274	6.5	86	0.00	8.78
111	1,2,3-trimethylbenzene	3.269	3.108	4.9	88	0.00	8.87
112	1,4-dichlorobenzene	1.977	1.952	1.3	93	0.00	8.84
113	1,2-dichlorobenzene	1.889	1.832	3.0	94	0.00	9.19
114	benzyl chloride	2.340	1.986	15.1	79	0.00	8.95
115	n-butylbenzene	1.587	1.404	11.5	82	0.00	9.18
116	hexachloroethane	0.544	0.532	2.2	89	0.00	9.46
117	1,2-dibromo-3-chloropropa	0.320	0.343	-7.2	104	0.00	9.96
118	1,3,5-trichlorobenzene	1.277	1.323	-3.6	94	0.00	10.15
119	1,2,4-trichlorobenzene	1.040	1.104	-6.2	95	0.00	10.77
120	hexachlorobutadiene	0.467	0.465	0.4	91	0.00	10.91
121	naphthalene	2.993	2.935	1.9	94	0.00	11.01
122	1,2,3-trichlorobenzene	0.873	0.910	-4.2	95	0.00	11.22
123	2-methylnaphthalene	0.537	0.459	14.5	83	0.00	12.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82666.D M2V3410.M Mon Dec 06 00:44:34 2021

Initial Calibration Summary

Job Number: JD35920 **Sample:** V3A7257-ICC7257
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3A167235.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report MS3A

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

Calibration Files
0.4 =3A167243.D 1 =3A167232.D 2 =3A167233.D 5 =3A167234.D
0.25=3A167242.D 20 =3A167235.D 50 =3A167236.D 200 =3A167245.D
100 =3A167237.D = = =

Compound	0.4	1	2	5	0.25	20	50	200	100	Avg	%RSD
1) I 4-bromofluorobenzene	----------ISTD----------										
2) 1,4-dioxane-d8	0.034	0.030	0.028	0.029	0.023	0.025	0.034	0.021	0.026	0.028	16.15
3) 1,4-dioxane	0.038	0.037	0.034	0.030	0.038	0.025	0.032	0.020	0.026	0.031	19.97

(#) = Out of Range ### Number of calibration levels exceeded format ###

M3A7257.M Tue Dec 07 12:07:20 2021 ACCUNJ

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7257-ICV7257
Lab FileID: 3A167248.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7257\3A167248.D Vial: 24
Acq On : 6 Dec 2021 9:13 pm Operator: BridgetK
Sample : icv7257-20 Inst : MS3A
Misc : MS32930,V3A7257,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	116	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.024	14.3	116	0.00	11.85
3 M	1,4-dioxane	0.031	0.025	19.4	114	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167235.D M3A7257.M Tue Dec 07 12:07:06 2021 ACCUNJ

Continuing Calibration Summary

Job Number: JD35920 **Sample:** V3A7258-CC7257
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3A167253.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7258\3A167253.D Vial: 4
Acq On : 7 Dec 2021 11:34 am Operator: BridgetK
Sample : cc7257-20 Inst : MS3A
Misc : MS32930,V3A7258,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	128	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.026	7.1	136	0.00	11.85
3 M	1,4-dioxane	0.031	0.032	-3.2	165	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167235.D M3A7257.M Tue Dec 07 16:23:27 2021 ACCUNJ

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V2V3410	**Method:** SW846 8260D	**Instrument ID:** GCMS2V

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2V3410-BFB	2V82658.D	11/17/21 18:44	n/a	BFB Tune
V2V3410-IC3410	2V82659.D	11/17/21 19:09	n/a	Initial cal 0.2
V2V3410-IC3410	2V82660.D	11/17/21 19:35	n/a	Initial cal 0.5
V2V3410-IC3410	2V82661.D	11/17/21 20:00	n/a	Initial cal 1
V2V3410-IC3410	2V82662.D	11/17/21 20:26	n/a	Initial cal 2
V2V3410-IC3410	2V82663.D	11/17/21 20:51	n/a	Initial cal 4
V2V3410-IC3410	2V82664.D	11/17/21 21:17	n/a	Initial cal 8
V2V3410-IC3410	2V82665.D	11/17/21 21:43	n/a	Initial cal 20
V2V3410-ICC3410	2V82666.D	11/17/21 22:08	n/a	Initial cal 50
V2V3410-IC3410	2V82667.D	11/17/21 22:34	n/a	Initial cal 100
V2V3410-IC3410	2V82668.D	11/17/21 22:59	n/a	Initial cal 200
V2V3410-ICV3410	2V82671.D	11/18/21 00:15	n/a	Initial cal verification 50
V2V3410-ICV3410	2V82672.D	11/18/21 00:41	n/a	Initial cal verification 50
V2V3410-BFB2	2V82677.D	11/18/21 11:00	n/a	BFB Tune
V2V3410-ICV3410	2V82678.D	11/18/21 11:34	n/a	Initial cal verification 50
V2V3410-ICV3410	2V82679.D	11/18/21 11:59	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V2V3430	**Method:** SW846 8260D	**Instrument ID:** GCMS2V

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2V3430-BFB	2V83199.D	12/02/21 21:56	n/a	BFB Tune
V2V3430-CC3410	2V83199.D	12/02/21 21:56	n/a	Continuing cal 50
V2V3430-BS	2V83201.D	12/02/21 22:47	n/a	Blank Spike
V2V3430-MB	2V83203.D	12/02/21 23:38	n/a	Method Blank
JD35871-2	2V83204.D	12/03/21 00:03	n/a	(used for QC only; not part of job JD35920)
JD35871-2MS	2V83205.D	12/03/21 00:29	n/a	Matrix Spike
JD35871-2MSD	2V83206.D	12/03/21 00:55	n/a	Matrix Spike Duplicate
ZZZZZZ	2V83208.D	12/03/21 01:45	n/a	(unrelated sample)
ZZZZZZ	2V83209.D	12/03/21 02:11	n/a	(unrelated sample)
JD35920-1	2V83210.D	12/03/21 02:37	n/a	TB-112921
ZZZZZZ	2V83211.D	12/03/21 03:02	n/a	(unrelated sample)
ZZZZZZ	2V83212.D	12/03/21 03:28	n/a	(unrelated sample)
JD35920-2	2V83213.D	12/03/21 03:53	n/a	HOFF MW-2DL
JD35920-3	2V83214.D	12/03/21 04:19	n/a	HOFF MW-2DU
JD35920-4	2V83215.D	12/03/21 04:44	n/a	HOFF MW-2S
JD35920-5	2V83216.D	12/03/21 05:10	n/a	HOFF MW-7DL
JD35920-6	2V83217.D	12/03/21 05:35	n/a	HOFF DUP-113021
ZZZZZZ	2V83218.D	12/03/21 06:01	n/a	(unrelated sample)
ZZZZZZ	2V83219.D	12/03/21 06:26	n/a	(unrelated sample)
ZZZZZZ	2V83220.D	12/03/21 06:52	n/a	(unrelated sample)
ZZZZZZ	2V83221.D	12/03/21 07:17	n/a	(unrelated sample)
ZZZZZZ	2V83222.D	12/03/21 07:43	n/a	(unrelated sample)

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7257 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7257-BFB	3A167227.D	12/06/21 09:39	n/a	BFB Tune
V3A7257-IC7257	3A167232.D	12/06/21 13:29	n/a	Initial cal 1
V3A7257-IC7257	3A167233.D	12/06/21 13:58	n/a	Initial cal 2
V3A7257-IC7257	3A167234.D	12/06/21 14:27	n/a	Initial cal 5
V3A7257-ICC7257	3A167235.D	12/06/21 14:56	n/a	Initial cal 20
V3A7257-IC7257	3A167236.D	12/06/21 15:25	n/a	Initial cal 50
V3A7257-IC7257	3A167237.D	12/06/21 15:54	n/a	Initial cal 100
V3A7257-IC7257	3A167242.D	12/06/21 18:20	n/a	Initial cal 0.25
V3A7257-IC7257	3A167243.D	12/06/21 18:49	n/a	Initial cal 0.40
V3A7257-IC7257	3A167245.D	12/06/21 19:47	n/a	Initial cal 200
V3A7257-ICV7257	3A167248.D	12/06/21 21:13	n/a	Initial cal verification 20

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7258 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7258-BFB	3A167251.D	12/07/21 10:29	n/a	BFB Tune
V3A7258-CC7257	3A167253.D	12/07/21 11:34	n/a	Continuing cal 20
V3A7258-BS	3A167254.D	12/07/21 12:03	n/a	Blank Spike
V3A7258-MB	3A167255.D	12/07/21 12:31	n/a	Method Blank
JD35920-1	3A167256.D	12/07/21 13:01	n/a	TB-112921
JD35920-2	3A167257.D	12/07/21 13:29	n/a	HOFF MW-2DL
JD35920-3	3A167258.D	12/07/21 13:58	n/a	HOFF MW-2DU
JD35920-4	3A167259.D	12/07/21 14:27	n/a	HOFF MW-2S
JD35920-5	3A167260.D	12/07/21 14:55	n/a	HOFF MW-7DL
JD35920-6	3A167261.D	12/07/21 15:24	n/a	HOFF DUP-113021
JD35920-4MS	3A167262.D	12/07/21 15:53	n/a	Matrix Spike
JD35920-2	3A167263.D	12/07/21 16:22	n/a	HOFF MW-2DL
ZZZZZZ	3A167264.D	12/07/21 16:51	n/a	(unrelated sample)
JD35920-3DUP	3A167265.D	12/07/21 17:20	n/a	Duplicate
ZZZZZZ	3A167266.D	12/07/21 17:49	n/a	(unrelated sample)

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167256.D
Acq On : 7 Dec 2021 1:01 pm
Operator : BridgetK
Sample : jd35920-1
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 07 16:21:53 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

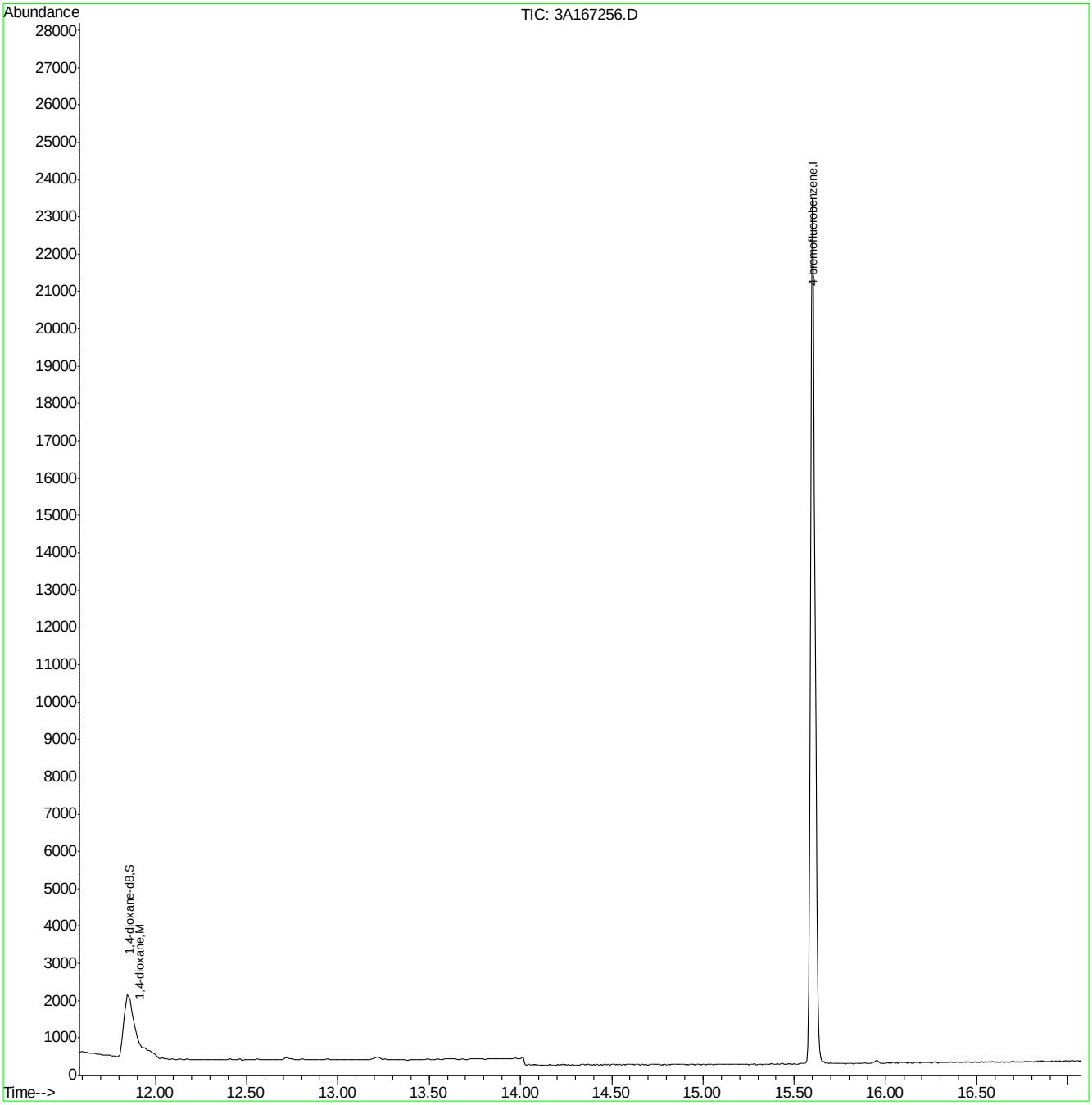
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	13341	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.86	96	4585	12.41	ug/L	0.01
Spiked Amount 10.000	Range 39 - 174		Recovery = 124.10%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	88	0.21	ug/L	# 1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

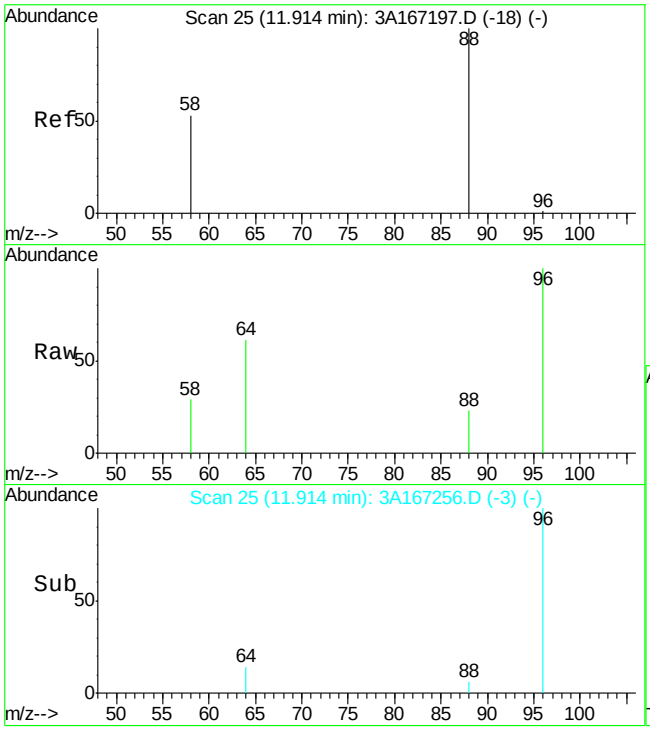
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167256.D
Acq On : 7 Dec 2021 1:01 pm
Operator : BridgetK
Sample : jd35920-1
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 07 16:21:53 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



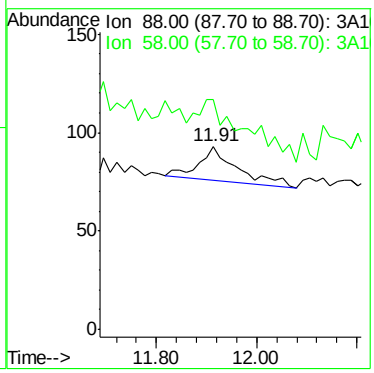
M3A7257.M Tue Dec 07 16:24:17 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 0.21 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167256.D
Acq: 7 Dec 2021 1:01 pm

Tgt Ion: 88 Resp: 88

Ion	Ratio	Lower	Upper
88	100		
58	152.4	30.0	90.0#



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167257.D
Acq On : 7 Dec 2021 1:29 pm
Operator : BridgetK
Sample : jd35920-2
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 07 16:21:54 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

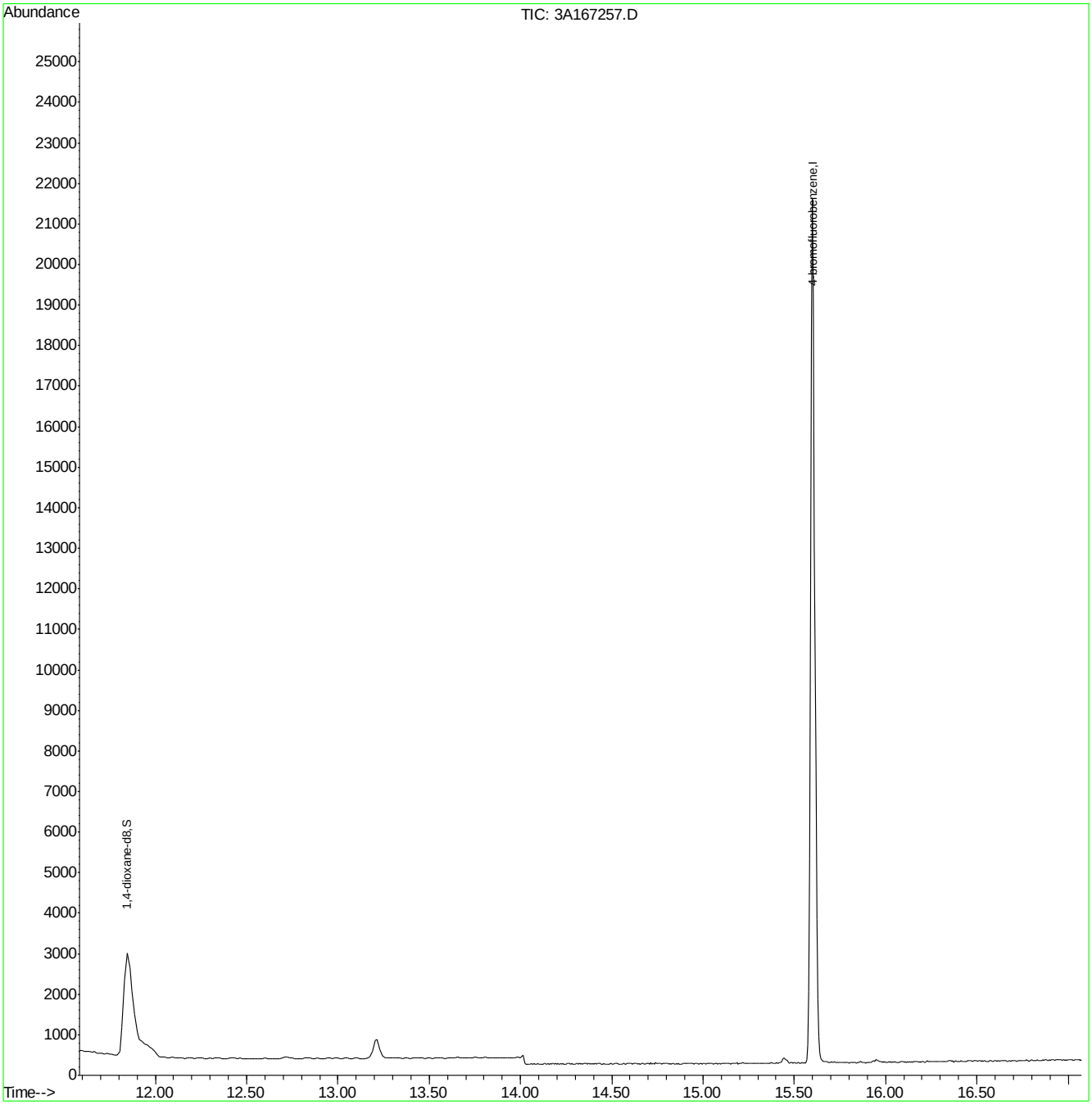
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	11865	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6192	18.85	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 188.50%#			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167257.D
Acq On : 7 Dec 2021 1:29 pm
Operator : BridgetK
Sample : jd35920-2
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 07 16:21:54 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7258\
Data File : 3A167263.D
Acq On : 7 Dec 2021 4:22 pm
Operator : BridgetK
Sample : jd35920-2cfs
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 17:05:13 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

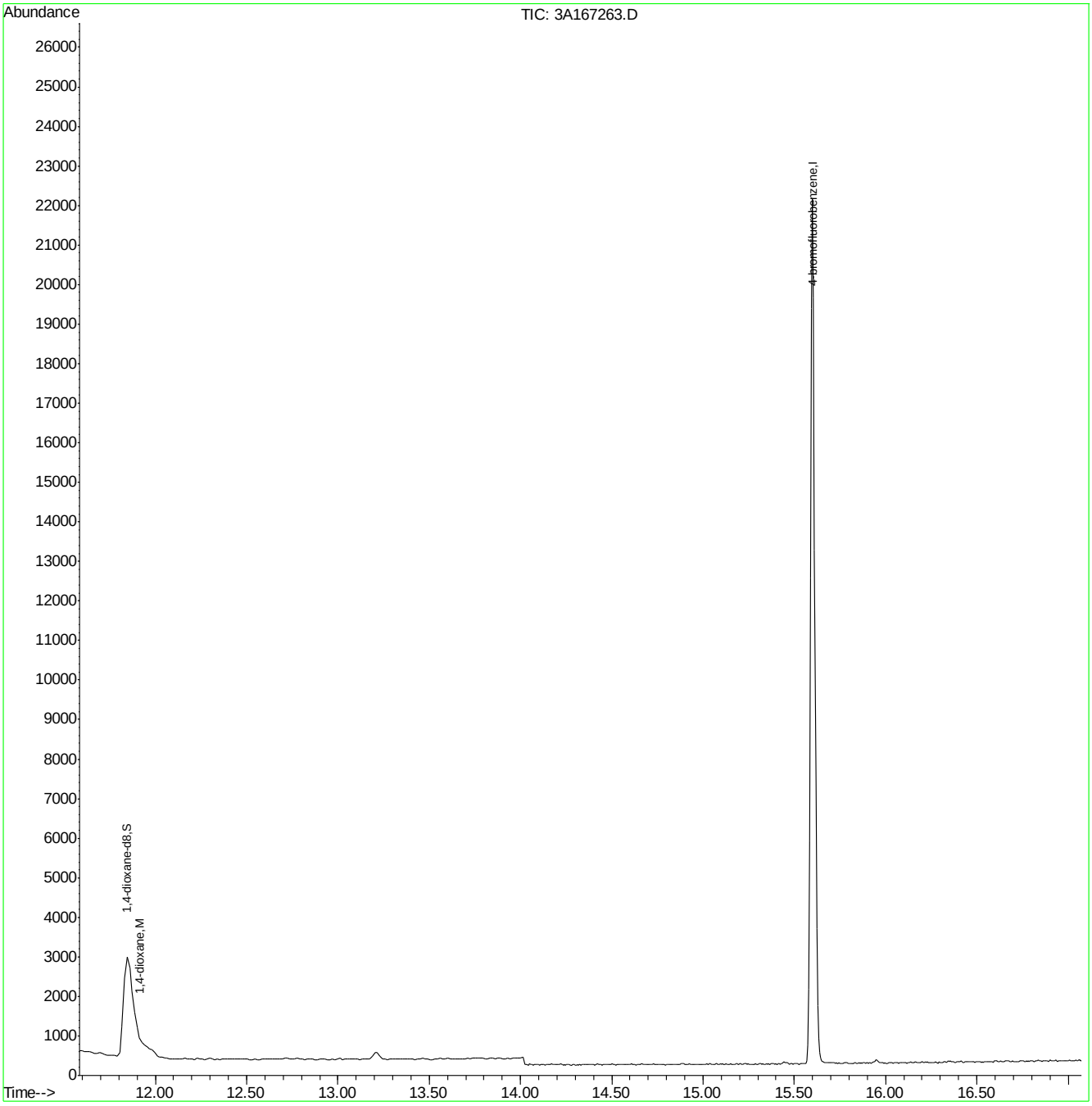
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	12092	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6433	19.21	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 192.10%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	181	0.48	ug/L	76

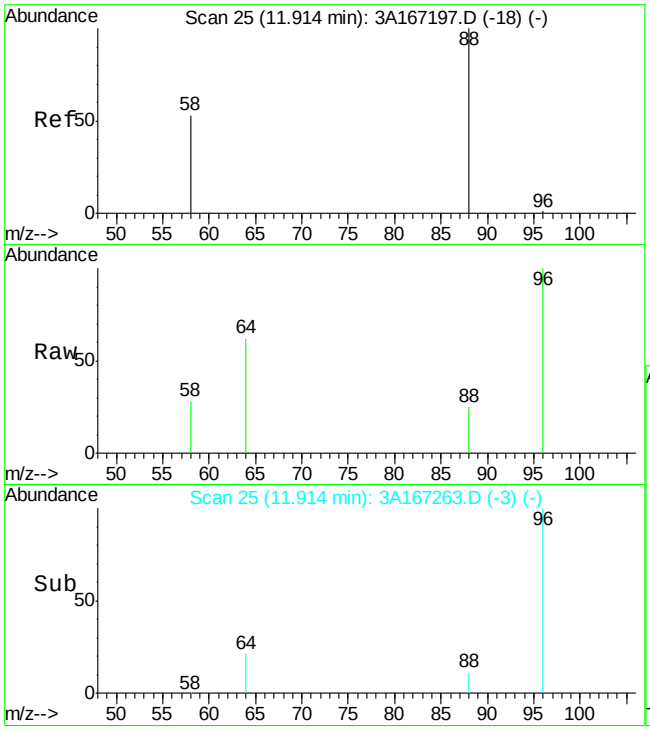
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7258\
Data File : 3A167263.D
Acq On : 7 Dec 2021 4:22 pm
Operator : BridgetK
Sample : jd35920-2cfs
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 07 17:05:13 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

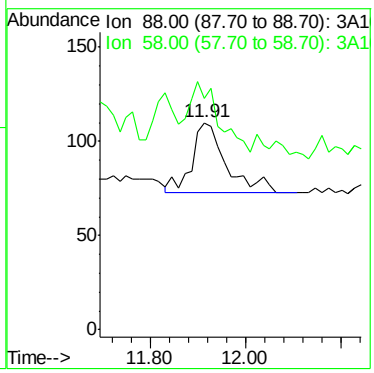




#3
1,4-dioxane
Concen: 0.48 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167263.D
Acq: 7 Dec 2021 4:22 pm

Tgt Ion: 88 Resp: 181

Ion	Ratio	Lower	Upper
88	100		
58	78.4	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167258.D
Acq On : 7 Dec 2021 1:58 pm
Operator : BridgetK
Sample : jd35920-3
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 07 16:21:55 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

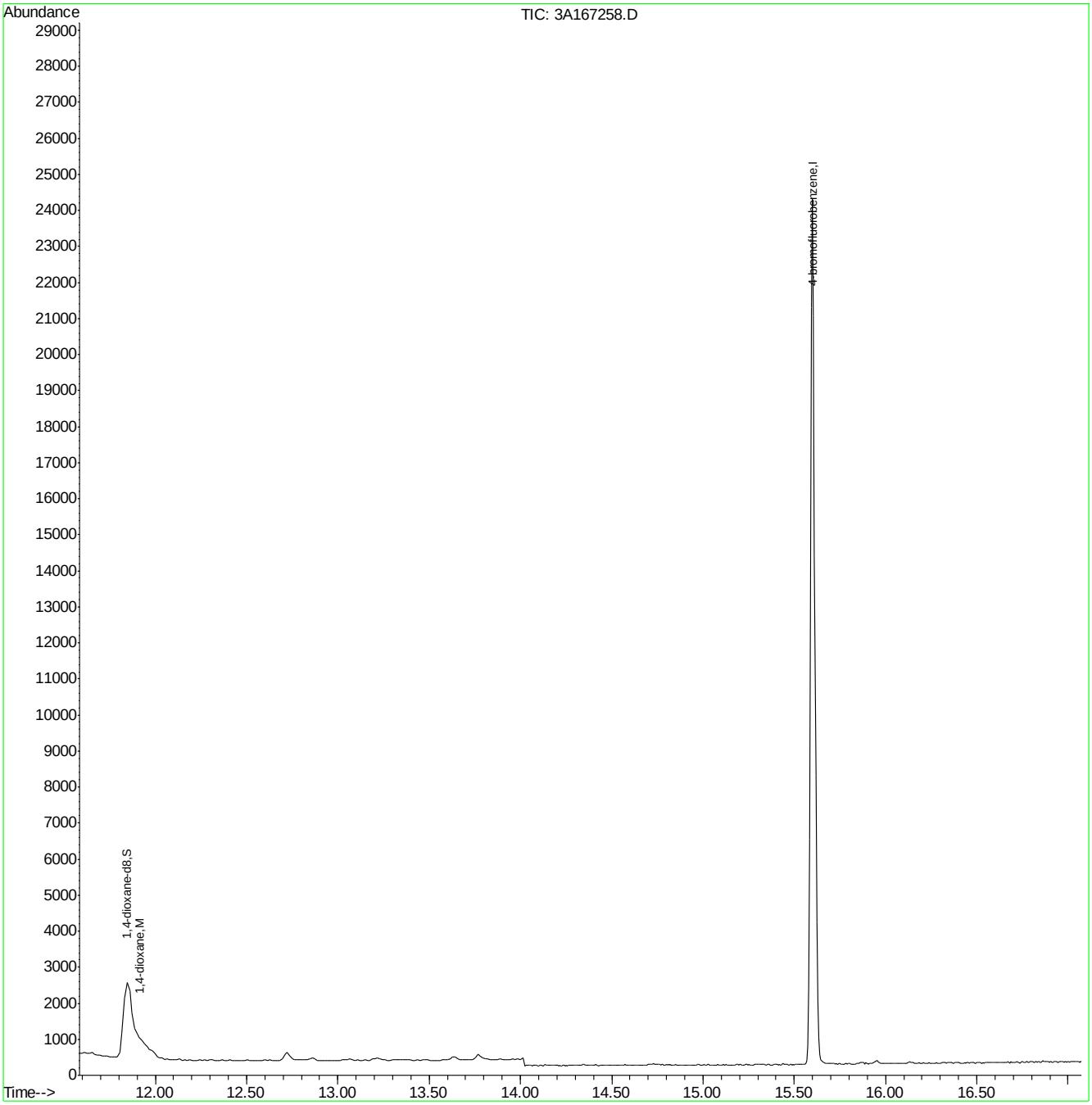
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	13344	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	5142	13.92	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 139.20%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	558	1.34	ug/L	99

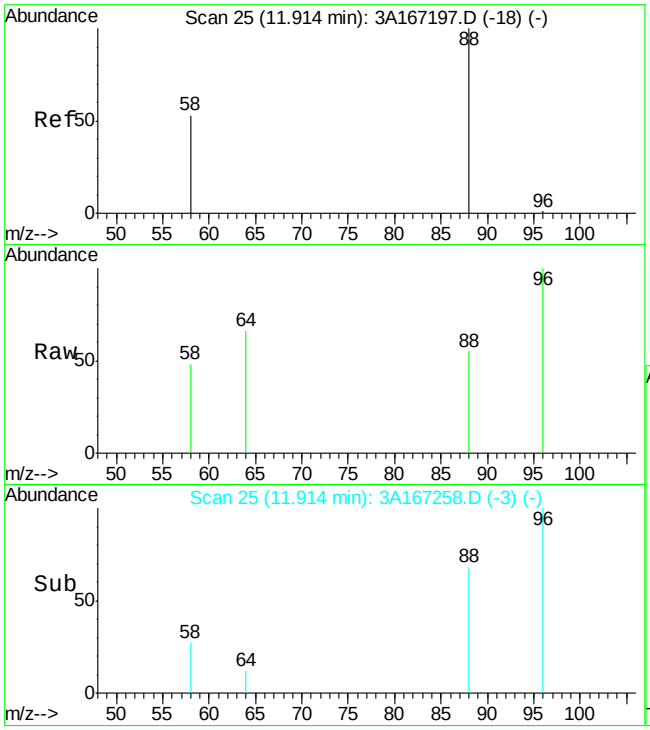
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167258.D
Acq On : 7 Dec 2021 1:58 pm
Operator : BridgetK
Sample : jd35920-3
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 07 16:21:55 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

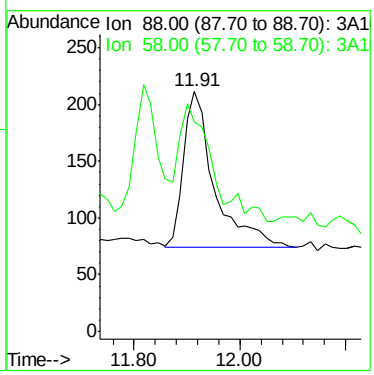




#3
1,4-dioxane
Concen: 1.34 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167258.D
Acq: 7 Dec 2021 1:58 pm

Tgt Ion: 88 Resp: 558

Ion	Ratio	Lower	Upper
88	100		
58	60.9	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167259.D
Acq On : 7 Dec 2021 2:27 pm
Operator : BridgetK
Sample : jd35920-4
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 07 16:21:56 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

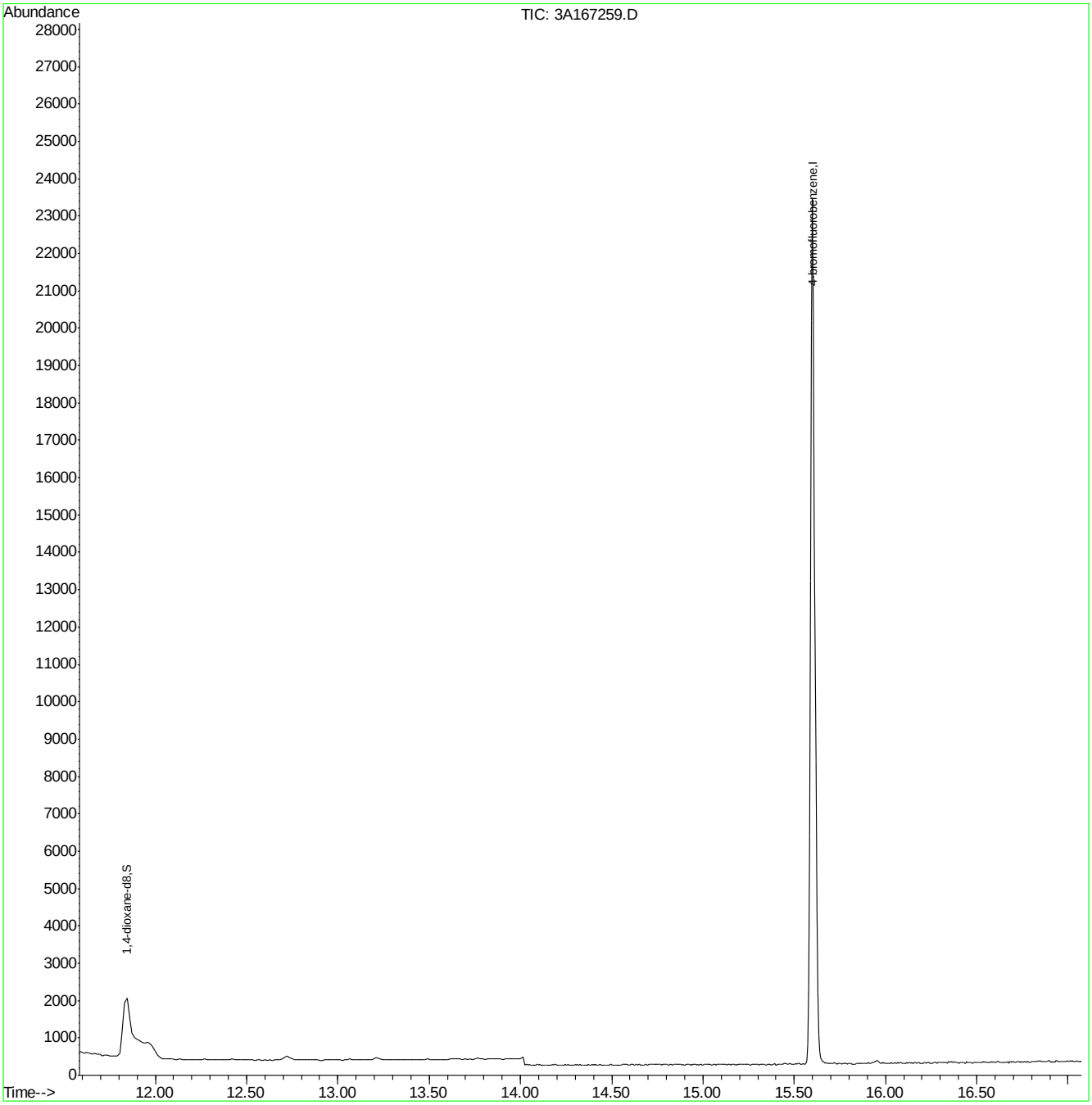
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	12983	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4487	12.48	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 124.80%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167259.D
Acq On : 7 Dec 2021 2:27 pm
Operator : BridgetK
Sample : jd35920-4
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 07 16:21:56 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167260.D
Acq On : 7 Dec 2021 2:55 pm
Operator : BridgetK
Sample : jd35920-5
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 07 16:21:57 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

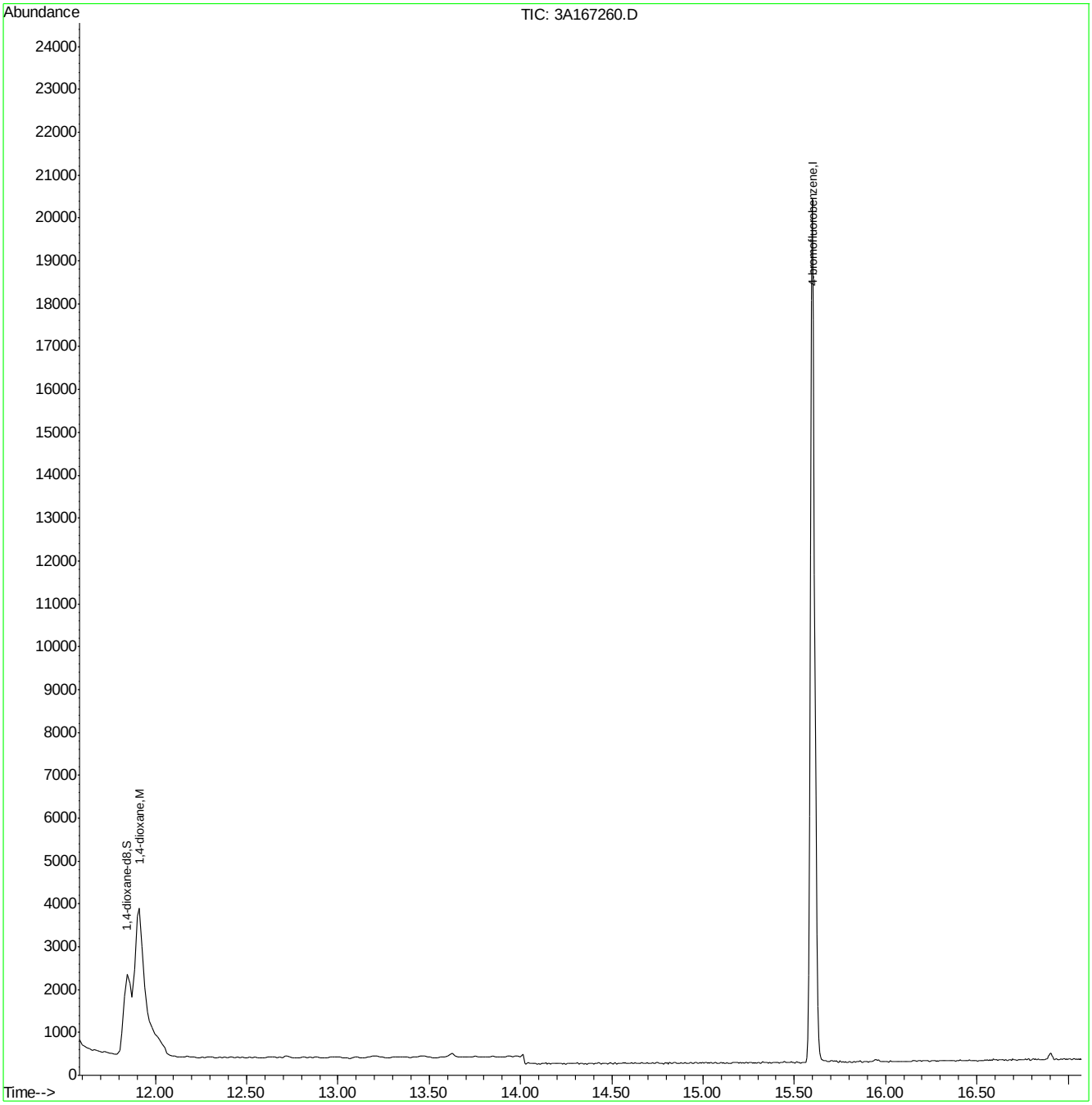
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	11165	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4490	14.52	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 145.20%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	7354	21.15	ug/L	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

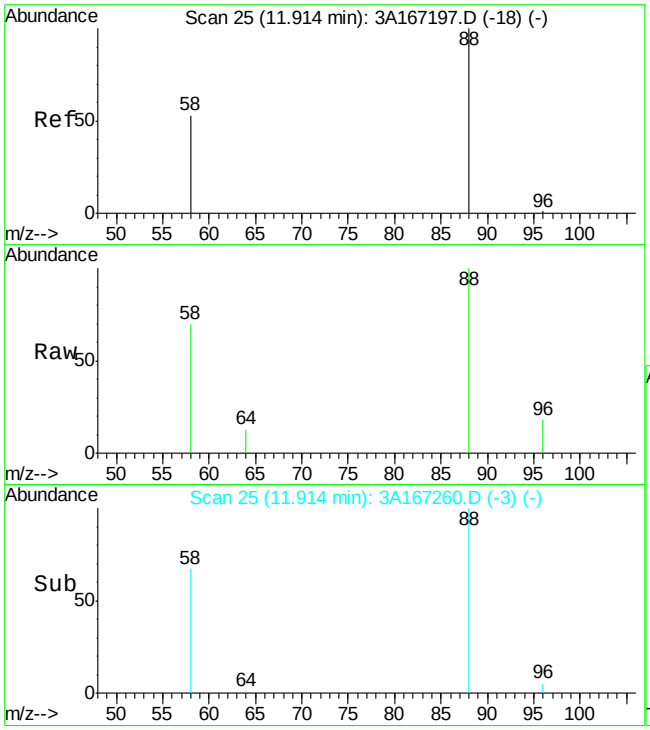
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167260.D
Acq On : 7 Dec 2021 2:55 pm
Operator : BridgetK
Sample : jd35920-5
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 07 16:21:57 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



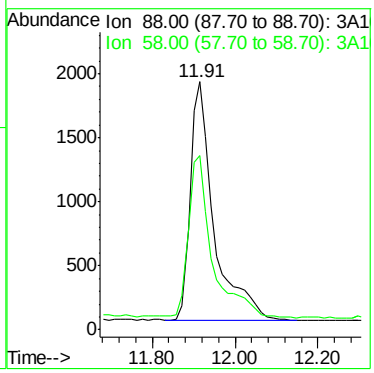
M3A7257.M Tue Dec 07 16:24:42 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 21.15 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167260.D
Acq: 7 Dec 2021 2:55 pm

Tgt Ion: 88 Resp: 7354

Ion	Ratio	Lower	Upper
88	100		
58	68.2	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167261.D
Acq On : 7 Dec 2021 3:24 pm
Operator : BridgetK
Sample : jd35920-6
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 07 16:21:58 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

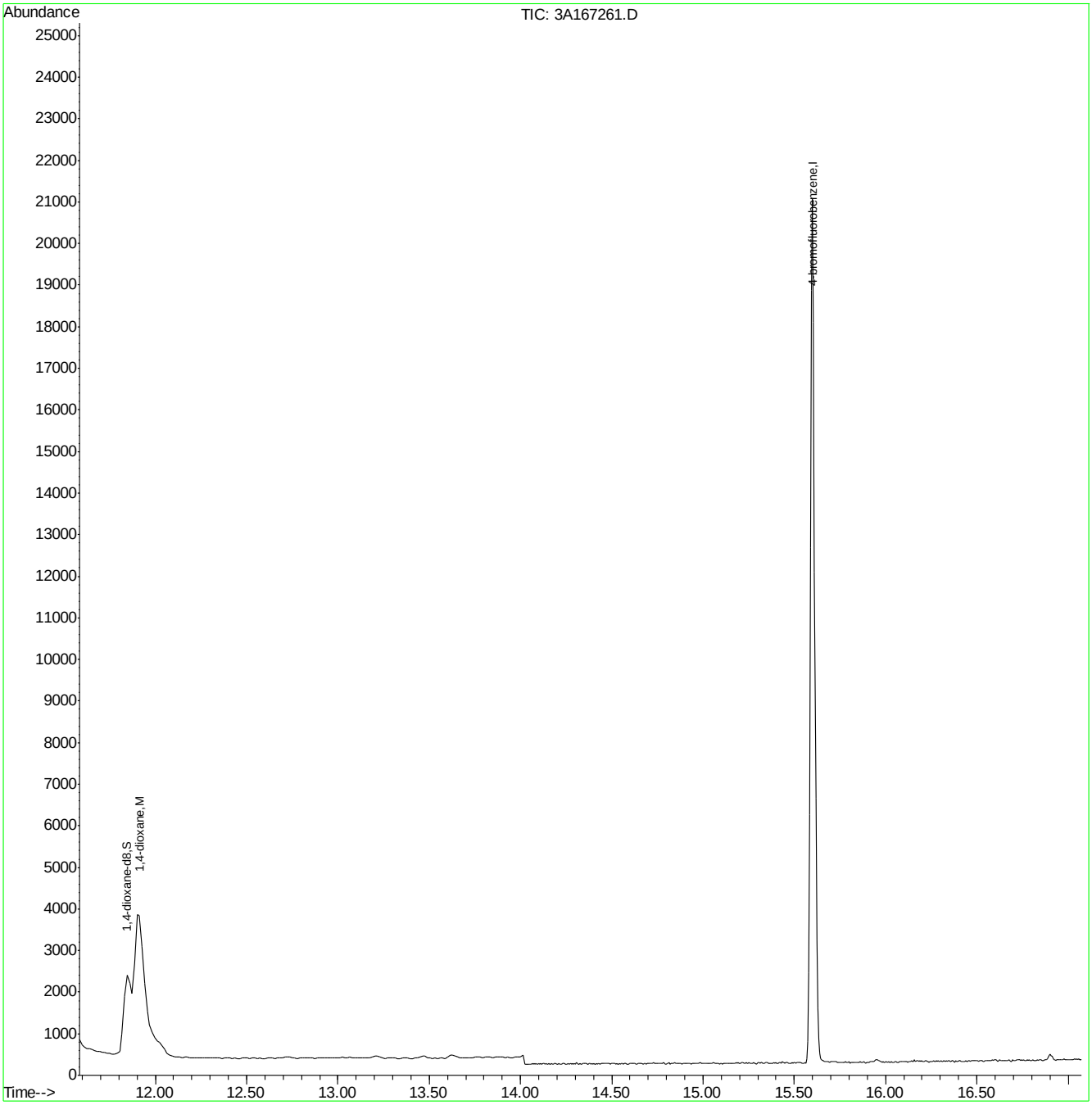
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	11547	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4632	14.49	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 144.90%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	7590	21.11	ug/L	97

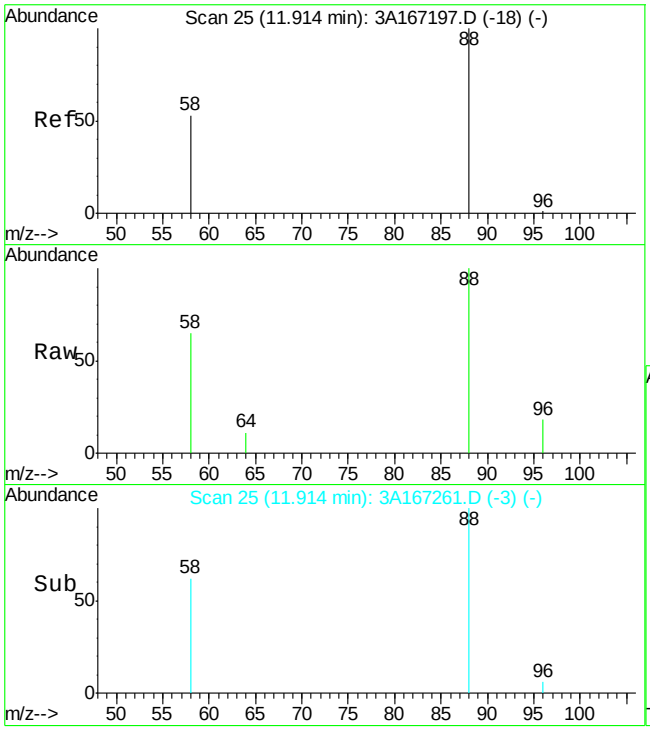
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167261.D
Acq On : 7 Dec 2021 3:24 pm
Operator : BridgetK
Sample : jd35920-6
Misc : MS55314,V3A7258,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 07 16:21:58 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

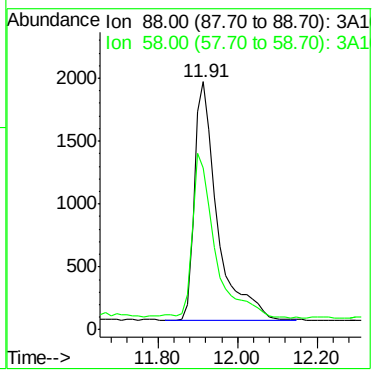




#3
1,4-dioxane
Concen: 21.11 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167261.D
Acq: 7 Dec 2021 3:24 pm

Tgt Ion: 88 Resp: 7590

Ion	Ratio	Lower	Upper
88	100		
58	62.6	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83210.d
Acq On : 3 Dec 2021 2:37 am
Operator : nickw
Sample : jd35920-1 Inst : MS2V
Misc : MS55316,V2V3430,5,,,,1
ALS Vial : 62 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:51:16 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

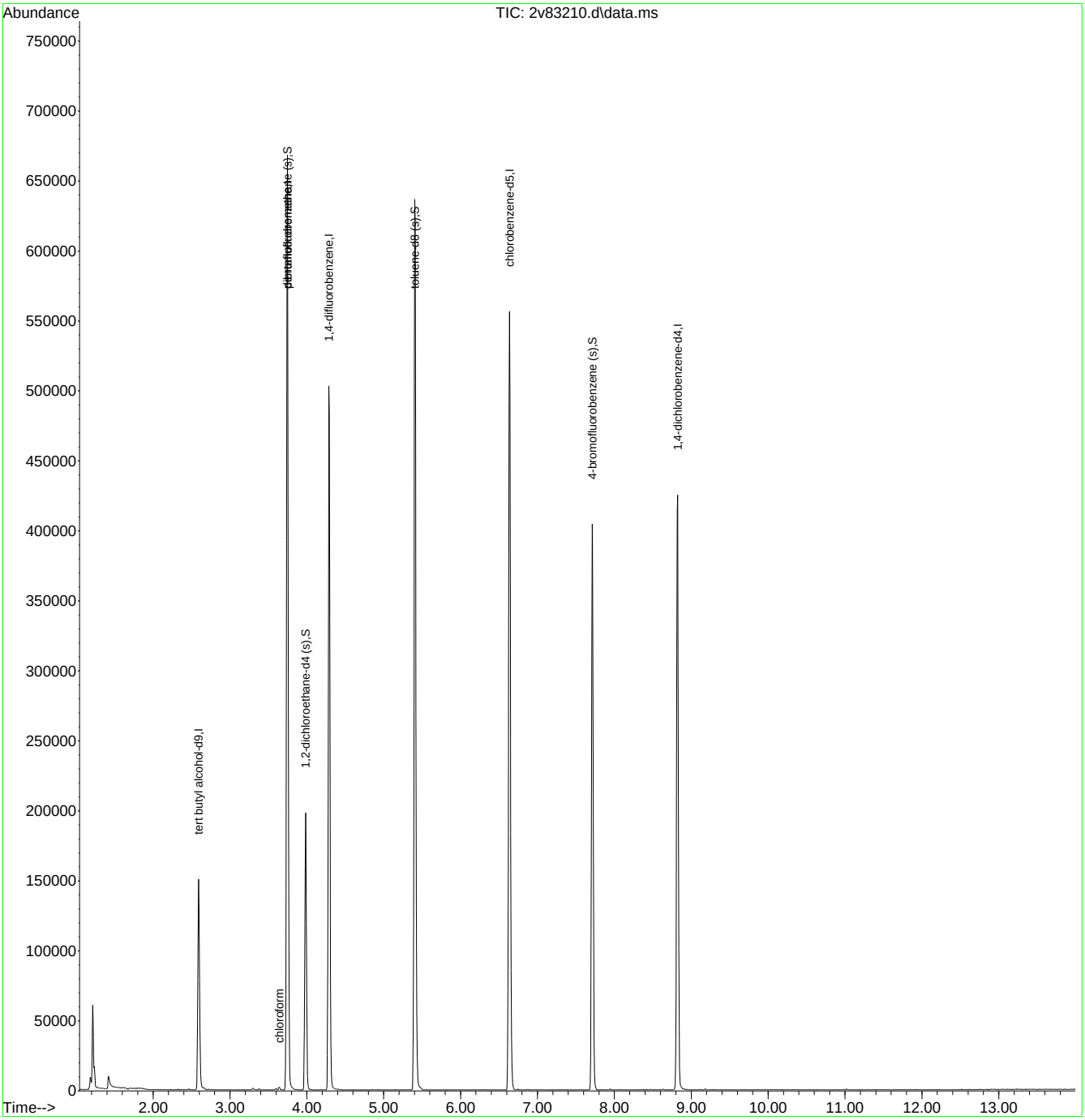
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	135852	500.00	ug/L	0.00
5) pentafluorobenzene	3.747	168	256892	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.287	114	358702	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	324133	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	123789	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.747	113	115662	48.56	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.12%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	103634	45.04	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 90.08%			
73) toluene-d8 (s)	5.404	98	392244	47.87	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.74%			
97) 4-bromofluorobenzene (s)	7.711	95	130238	46.11	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 92.22%			
Target Compounds						Qvalue
41) chloroform	3.643	83	1474	0.33	ug/L	79

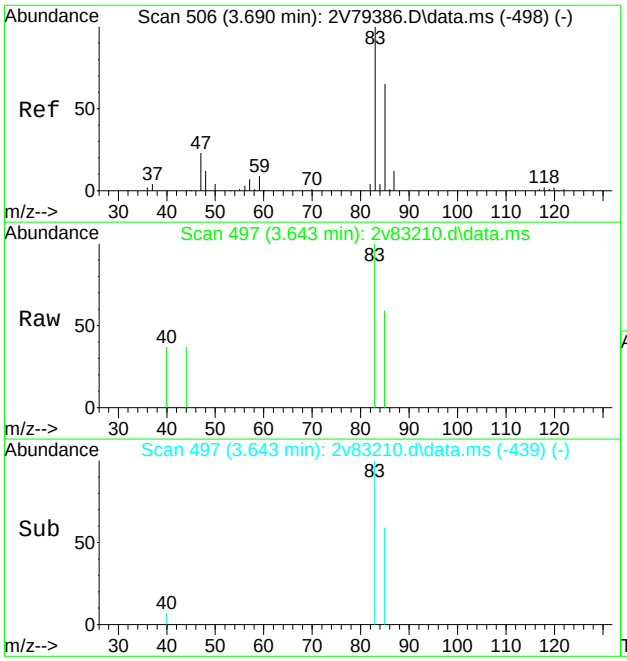
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83210.d
Acq On : 3 Dec 2021 2:37 am
Operator : nickw
Sample : jd35920-1 Inst : MS2V
Misc : MS55316,V2V3430,5,,,,1
ALS Vial : 62 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:51:16 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

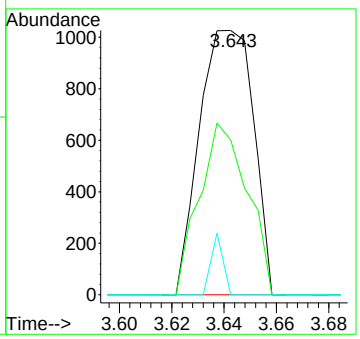




#41
chloroform
Concen: 0.33 ug/L
RT: 3.643 min Scan# 497
Delta R.T. 0.006 min
Lab File: 2v83210.d
Acq: 3 Dec 2021 2:37 am

Tgt Ion: 83 Resp: 1474

Ion	Ratio	Lower	Upper
83	100		
85	58.5	35.3	95.3
47	0.0	0.0	55.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83213.d
Acq On : 3 Dec 2021 3:53 am
Operator : nickw
Sample : jd35920-2 Inst : MS2V
Misc : MS55316,V2V3430,5,,,,1
ALS Vial : 65 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:52:49 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

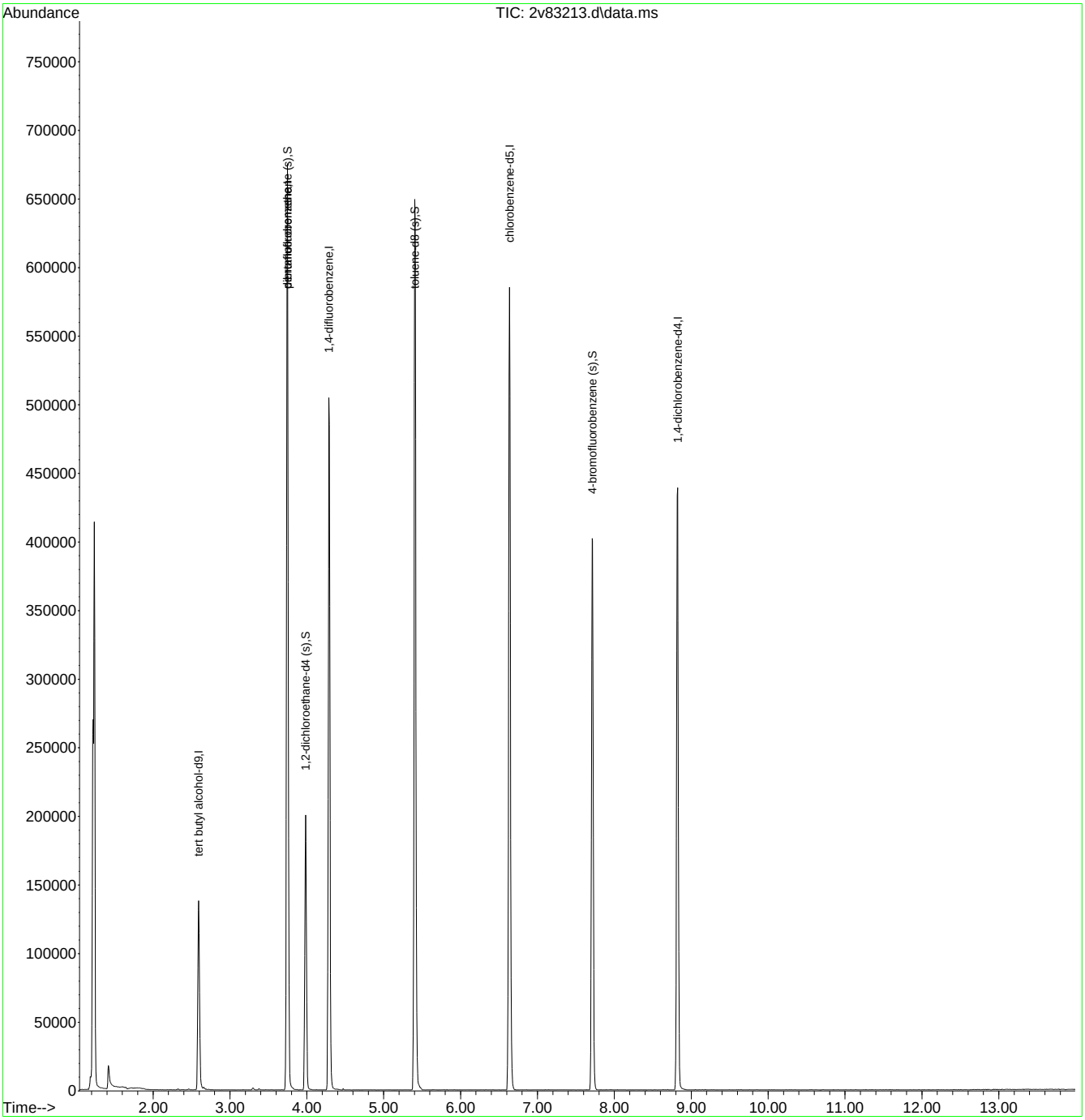
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	126173	500.00	ug/L	0.00
5) pentafluorobenzene	3.748	168	257721	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.288	114	363353	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	331487	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	125044	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.748	113	117864	49.33	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.66%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	106511	45.70	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 91.40%			
73) toluene-d8 (s)	5.404	98	400192	47.76	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.52%			
97) 4-bromofluorobenzene (s)	7.711	95	134207	47.04	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.08%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83213.d
Acq On : 3 Dec 2021 3:53 am
Operator : nickw
Sample : jd35920-2 Inst : MS2V
Misc : MS55316,V2V3430,5,,,,1
ALS Vial : 65 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:52:49 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83214.d
Acq On : 3 Dec 2021 4:19 am
Operator : nickw
Sample : jd35920-3 Inst : MS2V
Misc : MS55316,V2V3430,5,,,,1
ALS Vial : 66 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:53:16 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

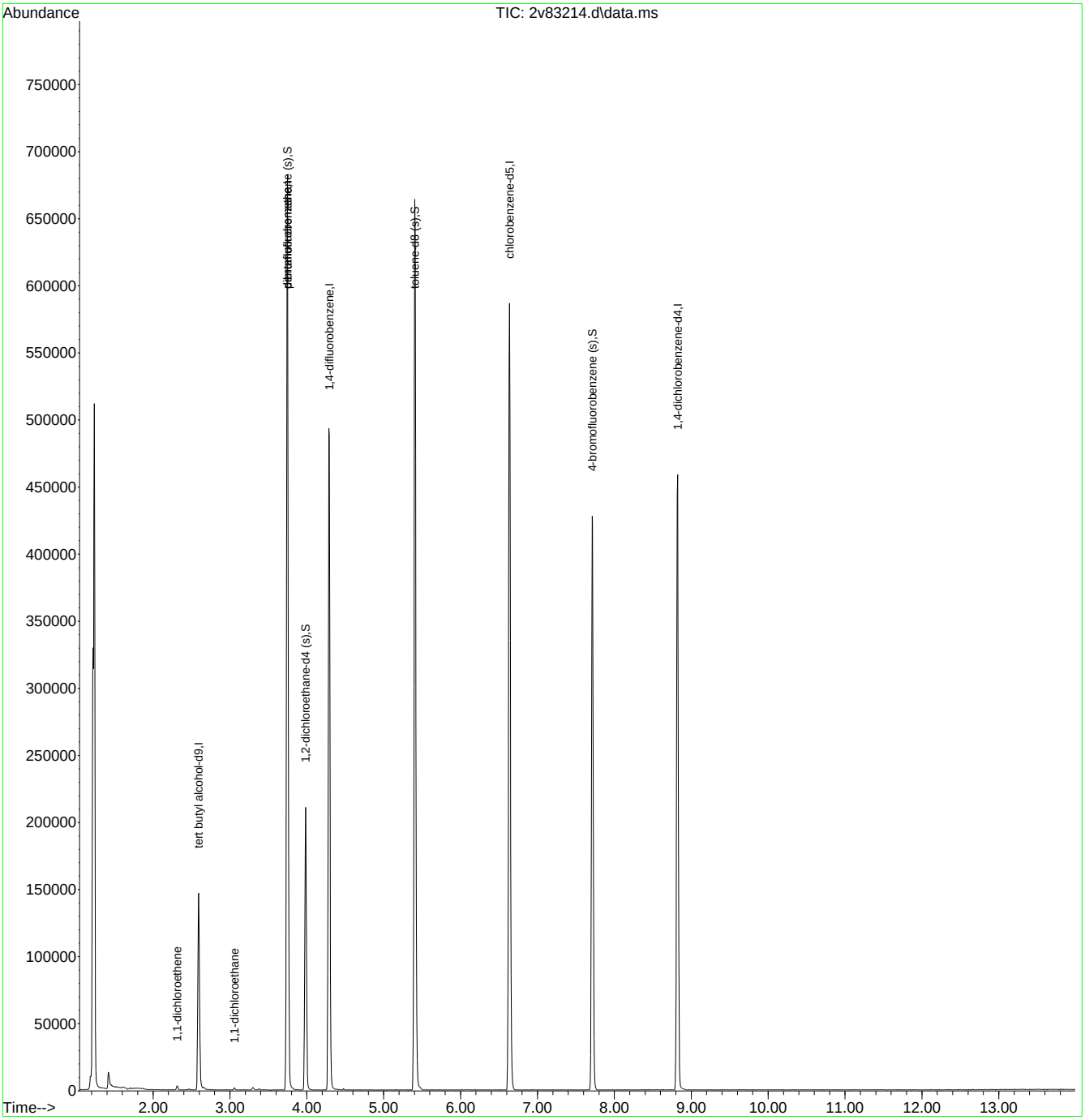
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	133321	500.00	ug/L	0.00
5) pentafluorobenzene	3.747	168	257220	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.293	114	363442	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	339749	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	132671	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.747	113	119349	50.05	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.10%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	111042	47.63	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 95.26%			
73) toluene-d8 (s)	5.404	98	402639	46.88	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.76%			
97) 4-bromofluorobenzene (s)	7.711	95	137611	45.46	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 90.92%			
Target Compounds						Qvalue
17) 1,1-dichloroethene	2.311	61	1605	0.43	ug/L	87
29) 1,1-dichloroethane	3.061	63	1444	0.33	ug/L	85

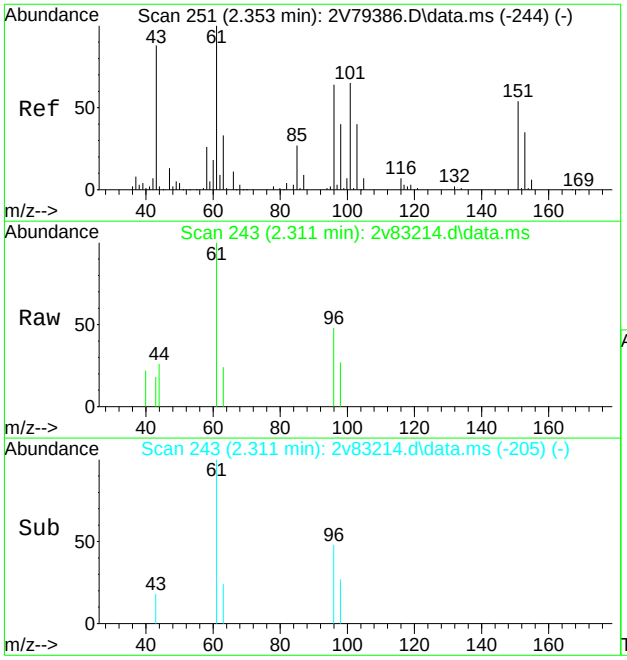
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83214.d
Acq On : 3 Dec 2021 4:19 am
Operator : nickw
Sample : jd35920-3 Inst : MS2V
Misc : MS55316,V2V3430,5,,,,1
ALS Vial : 66 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:53:16 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

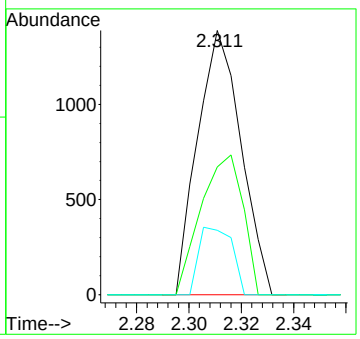


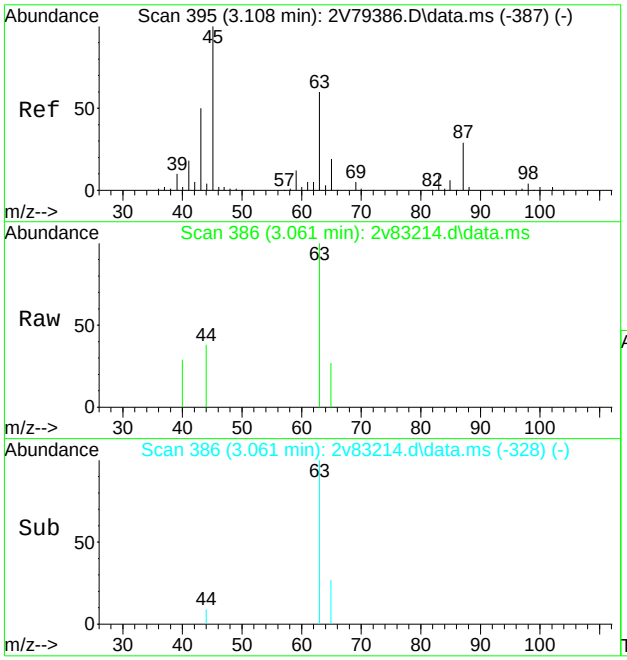


#17
1,1-dichloroethene
Concen: 0.43 ug/L
RT: 2.311 min Scan# 243
Delta R.T. -0.000 min
Lab File: 2v83214.d
Acq: 3 Dec 2021 4:19 am

Tgt Ion: 61 Resp: 1605

Ion	Ratio	Lower	Upper
61	100		
96	48.4	29.1	89.1
63	24.4	1.0	61.0

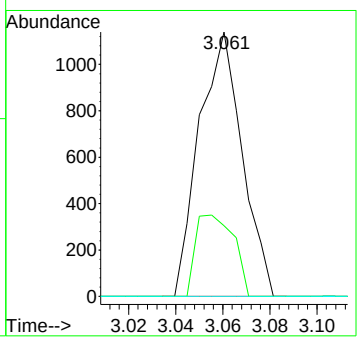




#29
1,1-dichloroethane
Concen: 0.33 ug/L
RT: 3.061 min Scan# 386
Delta R.T. 0.006 min
Lab File: 2v83214.d
Acq: 3 Dec 2021 4:19 am

Tgt Ion: 63 Resp: 1444

Ion	Ratio	Lower	Upper
63	100		
65	26.8	1.1	61.1
83	0.0	0.0	42.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83215.d
Acq On : 3 Dec 2021 4:44 am
Operator : nickw
Sample : jd35920-4 Inst : MS2V
Misc : MS55316,V2V3430,5,,,,1
ALS Vial : 67 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:53:41 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

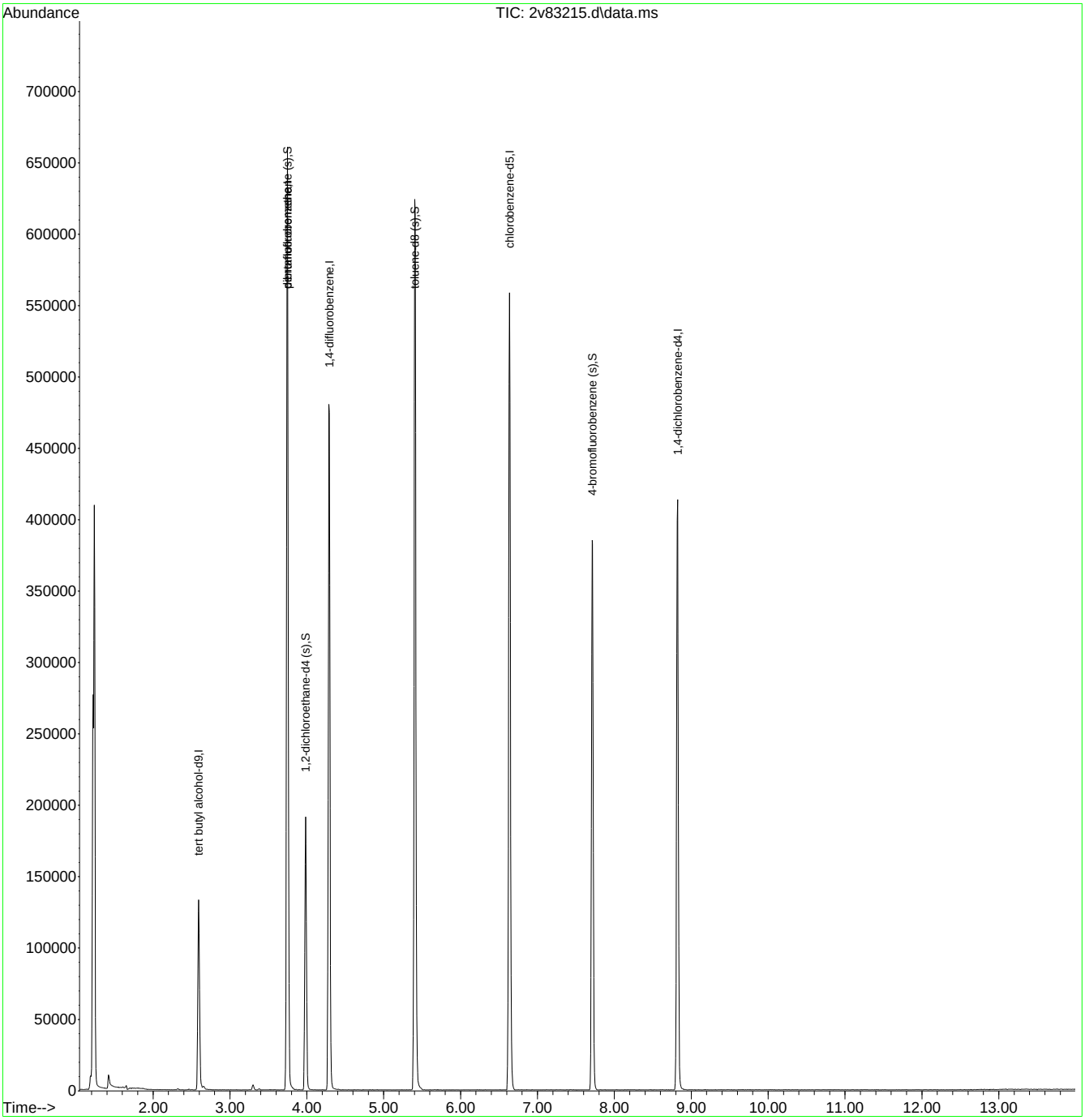
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	122045	500.00	ug/L	0.00
5) pentafluorobenzene	3.747	168	251150	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.293	114	352774	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	316955	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	120833	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.747	113	113905	48.92	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.84%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	102009	45.08	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 90.16%			
73) toluene-d8 (s)	5.404	98	385749	48.15	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.30%			
97) 4-bromofluorobenzene (s)	7.711	95	126873	46.02	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 92.04%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83215.d
Acq On : 3 Dec 2021 4:44 am
Operator : nickw
Sample : jd35920-4 Inst : MS2V
Misc : MS55316,V2V3430,5,,,,1
ALS Vial : 67 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:53:41 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration



M2V3410.M Mon Dec 06 01:00:52 2021 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83216.d
Acq On : 3 Dec 2021 5:10 am
Operator : nickw
Sample : jd35920-5 Inst : MS2V
Misc : MS55316,V2V3430,5,,,,1
ALS Vial : 68 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:54:29 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

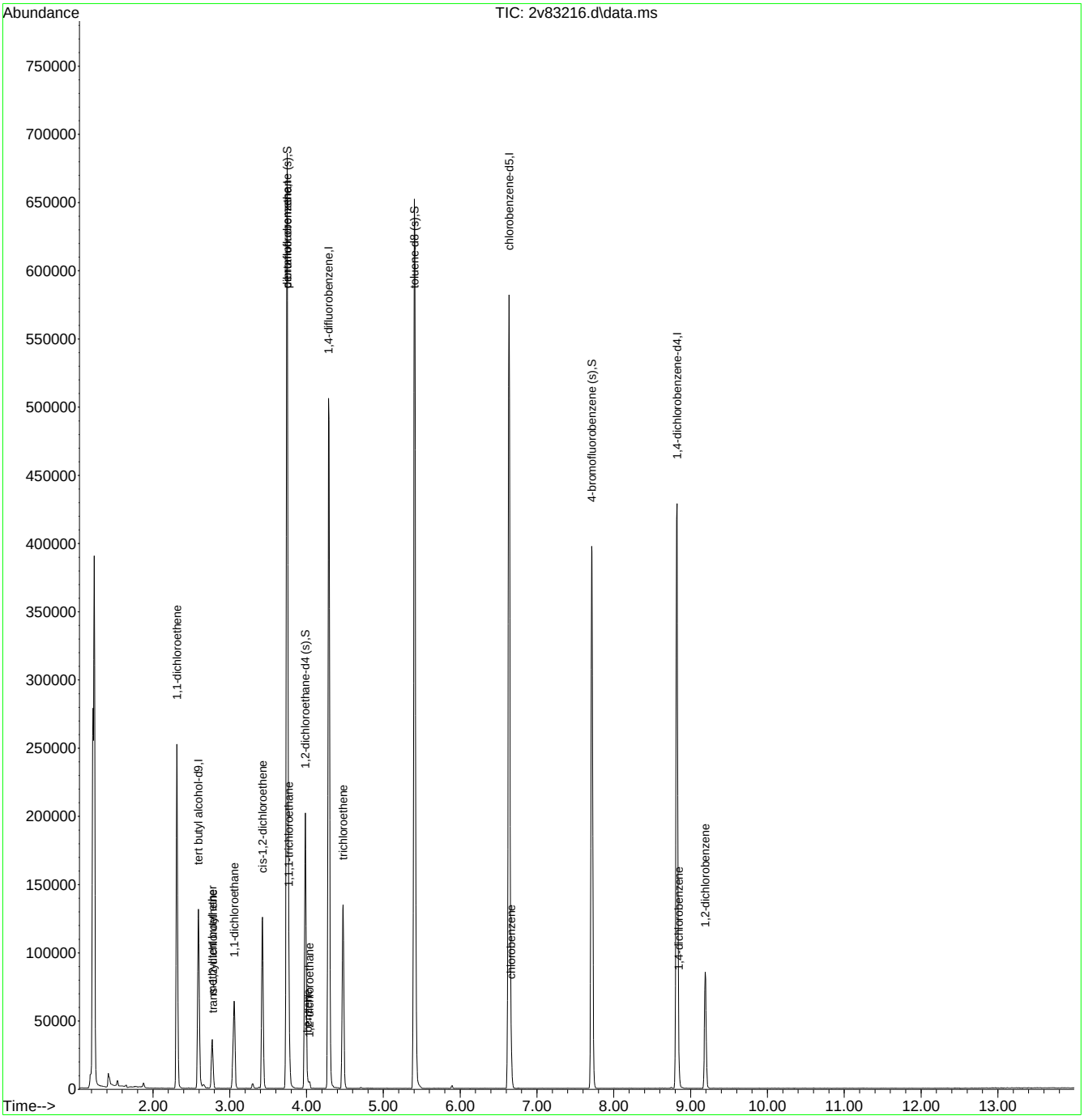
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	119787	500.00	ug/L	0.00
5) pentafluorobenzene	3.747	168	259186	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.287	114	363493	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	329172	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	124660	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.747	113	118094	49.14	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.28%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	105350	45.18	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 90.36%			
73) toluene-d8 (s)	5.404	98	399039	47.96	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.92%			
97) 4-bromofluorobenzene (s)	7.711	95	132250	46.50	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.00%			
Target Compounds						Qvalue
17) 1,1-dichloroethene	2.311	61	114197	30.60	ug/L	99
24) methyl tert butyl ether	2.772	73	26825	3.97	ug/L	96
25) trans-1,2-dichloroethene	2.783	96	622	0.27	ug/L #	87
29) 1,1-dichloroethane	3.061	63	47142	10.67	ug/L	99
36) cis-1,2-dichloroethene	3.428	96	44029	17.14	ug/L #	80
44) 1,1,1-trichloroethane	3.768	97	21493	5.73	ug/L #	56
53) benzene	4.015	78	2662	0.30	ug/L	93
58) 1,2-dichloroethane	4.036	62	2994	0.83	ug/L	94
59) trichloroethene	4.476	95	36734	14.87	ug/L	93
85) chlorobenzene	6.662	112	7009	1.04	ug/L	94
112) 1,4-dichlorobenzene	8.844	146	6223	1.26	ug/L	90
113) 1,2-dichlorobenzene	9.190	146	40995	8.71	ug/L	96

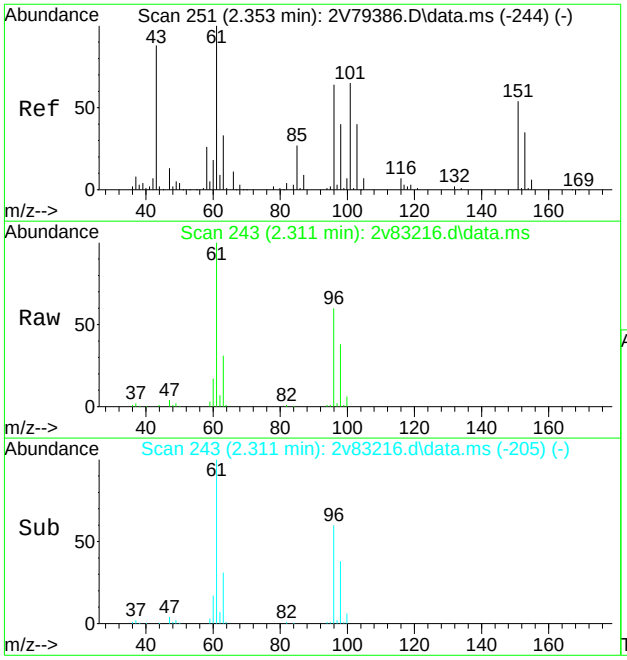
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83216.d
Acq On : 3 Dec 2021 5:10 am
Operator : nickw
Sample : jd35920-5 Inst : MS2V
Misc : MS55316,V2V3430,5,,,,1
ALS Vial : 68 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:54:29 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

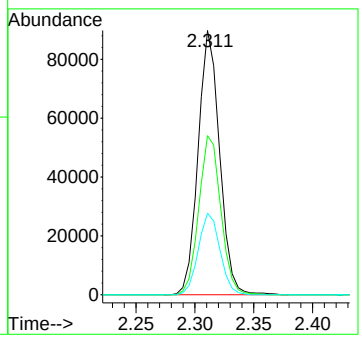


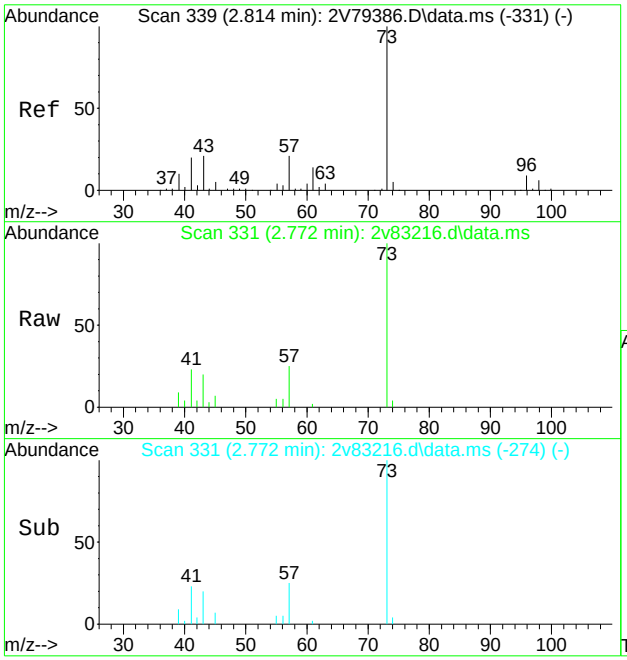


#17
1,1-dichloroethene
Concen: 30.60 ug/L
RT: 2.311 min Scan# 243
Delta R.T. -0.000 min
Lab File: 2v83216.d
Acq: 3 Dec 2021 5:10 am

Tgt Ion: 61 Resp: 114197

Ion	Ratio	Lower	Upper
61	100		
96	60.3	29.1	89.1
63	30.9	1.0	61.0

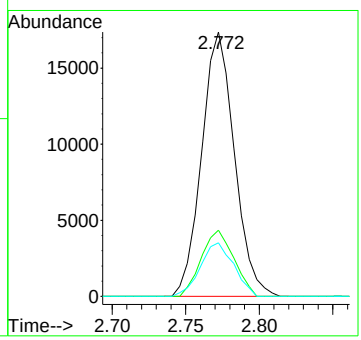


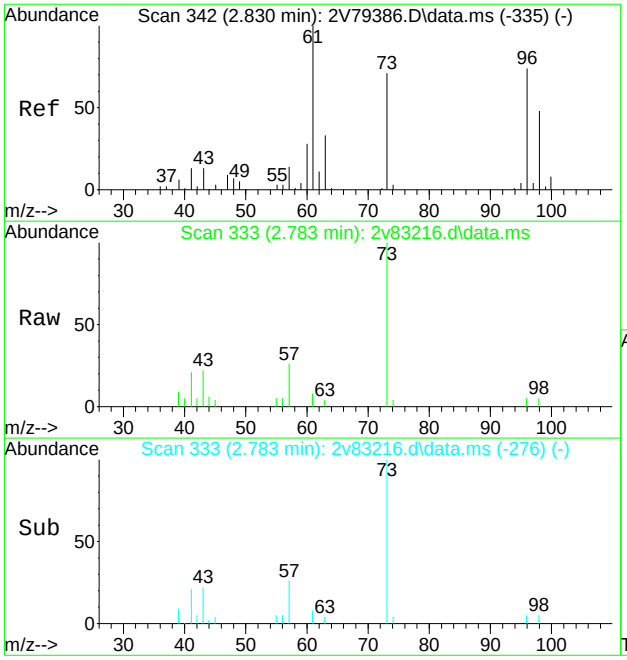


#24
methyl tert butyl ether
Concen: 3.97 ug/L
RT: 2.772 min Scan# 331
Delta R.T. 0.000 min
Lab File: 2v83216.d
Acq: 3 Dec 2021 5:10 am

Tgt Ion: 73 Resp: 26825

Ion	Ratio	Lower	Upper
73	100		
57	25.0	0.0	55.9
43	20.3	0.0	53.4

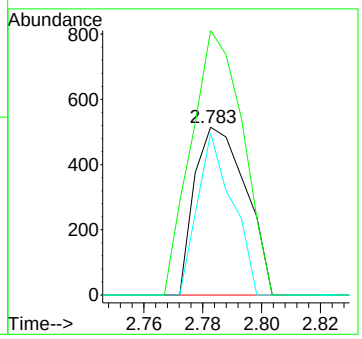


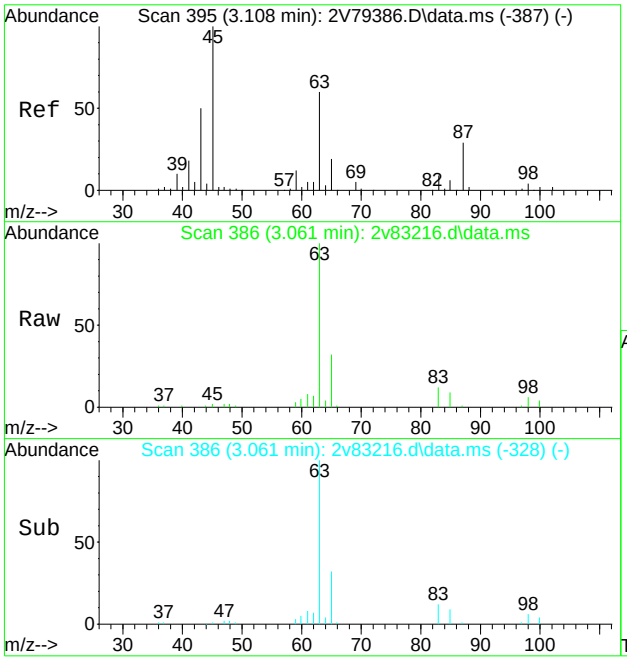


#25
trans-1,2-dichloroethene
Concen: 0.27 ug/L
RT: 2.783 min Scan# 333
Delta R.T. -0.000 min
Lab File: 2v83216.d
Acq: 3 Dec 2021 5:10 am

Tgt Ion: 96 Resp: 622

Ion	Ratio	Lower	Upper
96	100		
61	157.7	125.0	185.0
98	96.5	35.0	95.0#

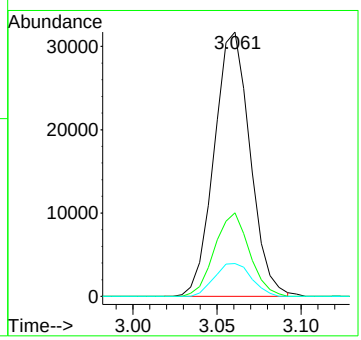


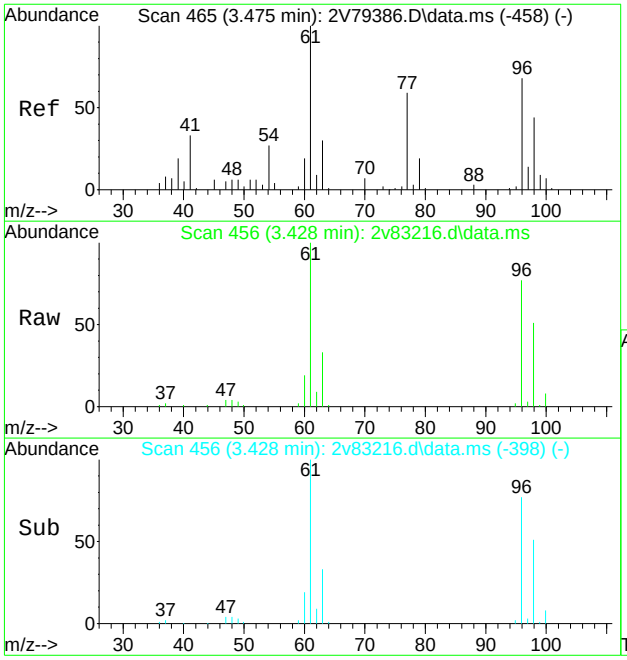


#29
1,1-dichloroethane
Concen: 10.67 ug/L
RT: 3.061 min Scan# 386
Delta R.T. 0.006 min
Lab File: 2v83216.d
Acq: 3 Dec 2021 5:10 am

Tgt Ion: 63 Resp: 47142

Ion	Ratio	Lower	Upper
63	100		
65	31.6	1.1	61.1
83	12.4	0.0	42.5

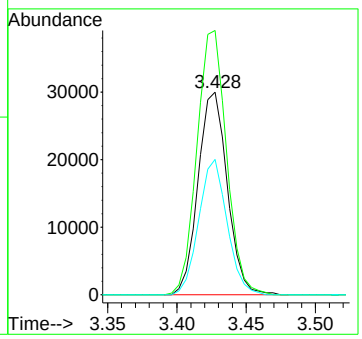


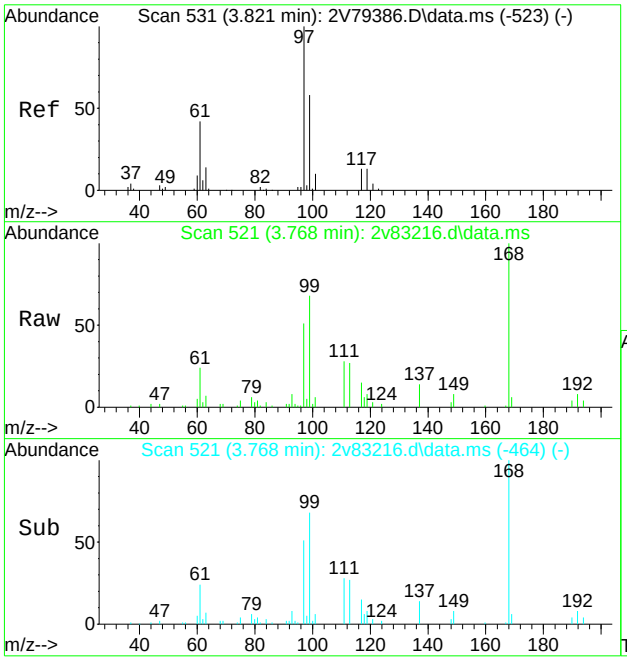


#36
cis-1,2-dichloroethene
Concen: 17.14 ug/L
RT: 3.428 min Scan# 456
Delta R.T. 0.006 min
Lab File: 2v83216.d
Acq: 3 Dec 2021 5:10 am

Tgt Ion: 96 Resp: 44029

Ion	Ratio	Lower	Upper
96	100		
61	130.4	137.0	197.0#
98	66.7	34.8	94.8

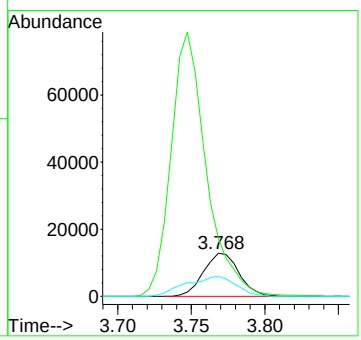


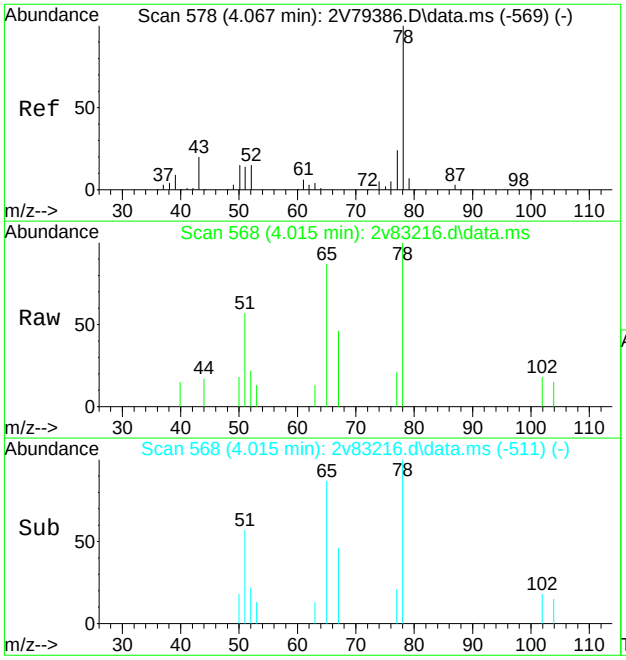


#44
1,1,1-trichloroethane
Concen: 5.73 ug/L
RT: 3.768 min Scan# 521
Delta R.T. 0.000 min
Lab File: 2v83216.d
Acq: 3 Dec 2021 5:10 am

Tgt Ion: 97 Resp: 21493

Ion	Ratio	Lower	Upper
97	100		
99	131.1	40.9	100.9#
61	46.4	16.4	76.4

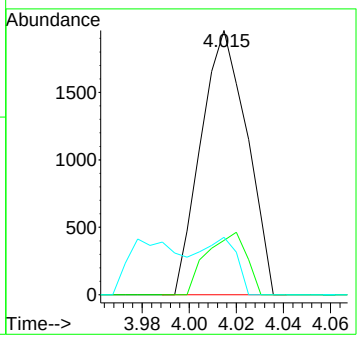


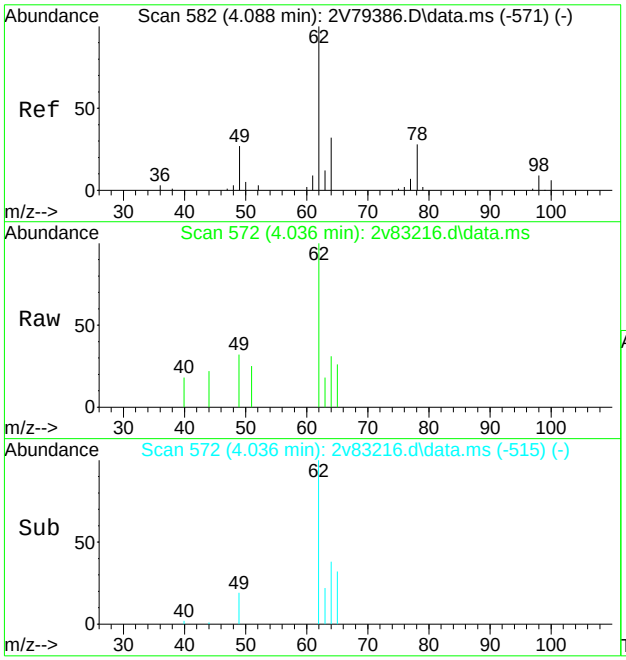


#53
benzene
Concen: 0.30 ug/L
RT: 4.015 min Scan# 568
Delta R.T. -0.000 min
Lab File: 2v83216.d
Acq: 3 Dec 2021 5:10 am

Tgt Ion: 78 Resp: 2662

Ion	Ratio	Lower	Upper
78	100		
77	20.6	0.0	53.4
52	21.8	0.0	48.4

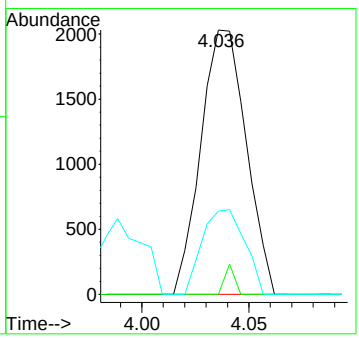


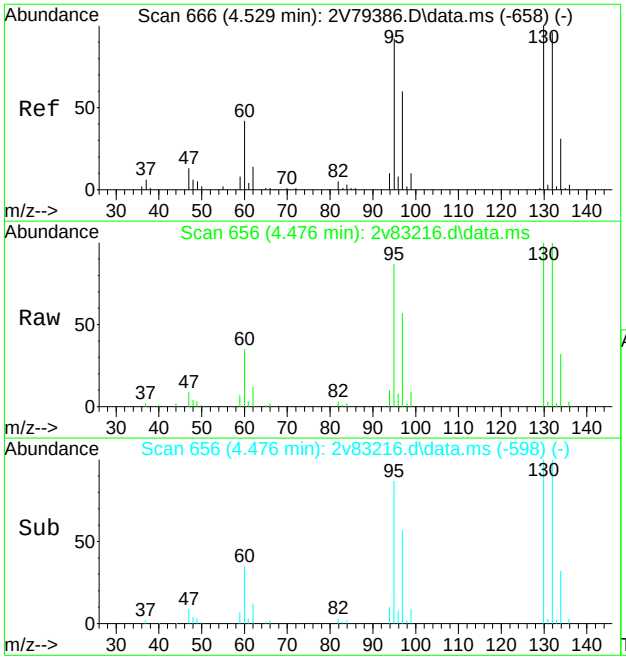


#58
1,2-dichloroethane
Concen: 0.83 ug/L
RT: 4.036 min Scan# 572
Delta R.T. -0.000 min
Lab File: 2v83216.d
Acq: 3 Dec 2021 5:10 am

Tgt Ion: 62 Resp: 2994

Ion	Ratio	Lower	Upper
62	100		
98	0.0	0.0	38.8
64	31.4	1.7	61.7

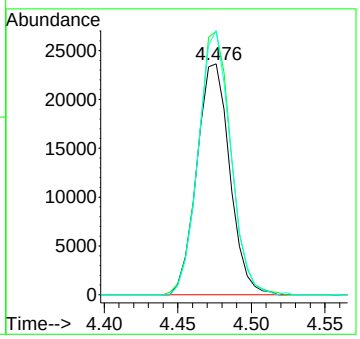


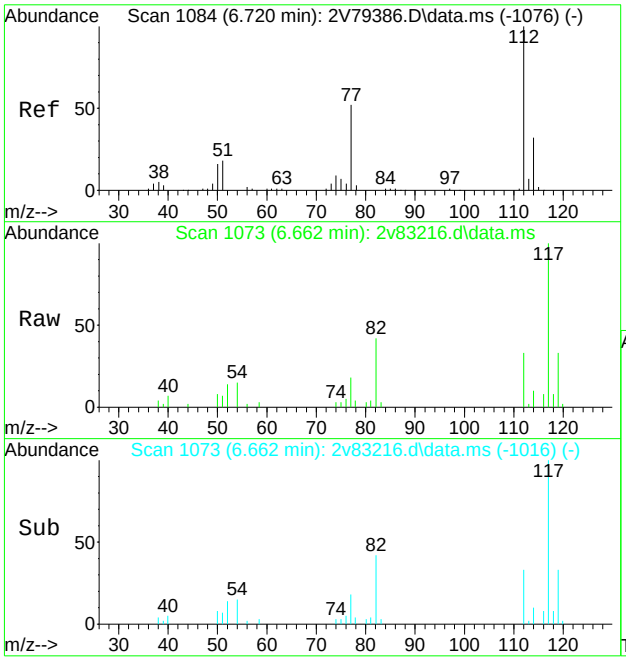


#59
trichloroethene
Concen: 14.87 ug/L
RT: 4.476 min Scan# 656
Delta R.T. 0.005 min
Lab File: 2v83216.d
Acq: 3 Dec 2021 5:10 am

Tgt Ion: 95 Resp: 36734

Ion	Ratio	Lower	Upper
95	100		
130	114.0	78.8	138.8
132	114.4	75.8	135.8

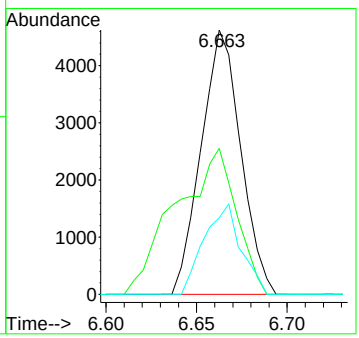


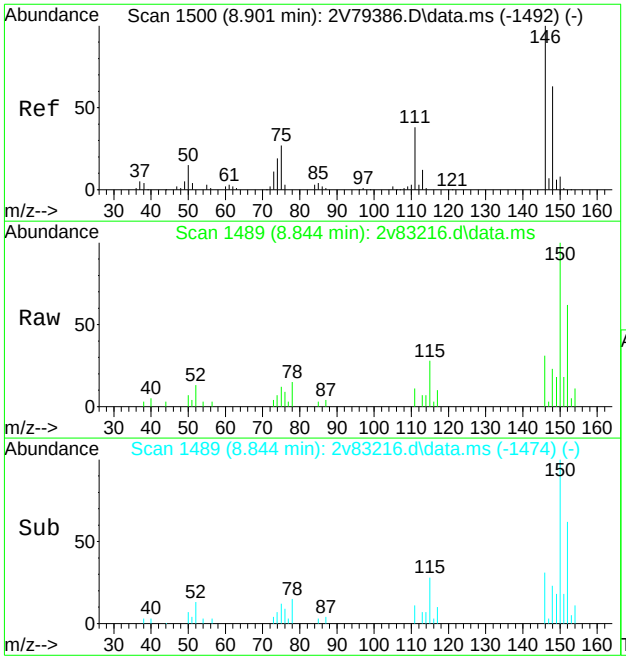


#85
chlorobenzene
Concen: 1.04 ug/L
RT: 6.662 min Scan# 1073
Delta R.T. -0.001 min
Lab File: 2v83216.d
Acq: 3 Dec 2021 5:10 am

Tgt Ion:112 Resp: 7009

Ion	Ratio	Lower	Upper
112	100		
77	55.3	20.6	80.6
114	28.9	2.1	62.1

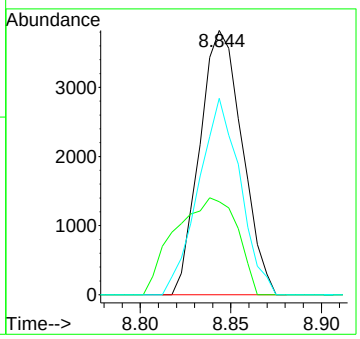


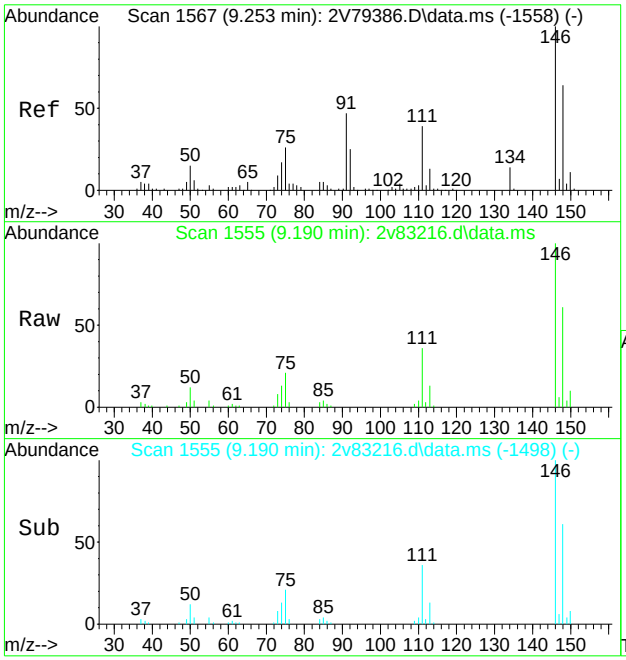


#112
1,4-dichlorobenzene
Concen: 1.26 ug/L
RT: 8.844 min Scan# 1489
Delta R.T. -0.000 min
Lab File: 2v83216.d
Acq: 3 Dec 2021 5:10 am

Tgt Ion:146 Resp: 6223

Ion	Ratio	Lower	Upper
146	100		
111	35.2	7.3	67.3
148	74.4	33.7	93.7

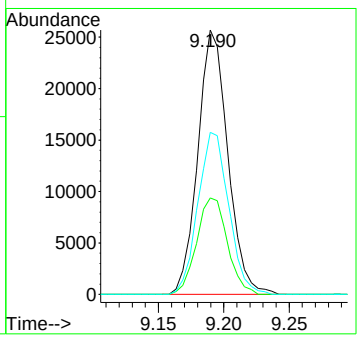




#113
1,2-dichlorobenzene
Concen: 8.71 ug/L
RT: 9.190 min Scan# 1555
Delta R.T. -0.000 min
Lab File: 2v83216.d
Acq: 3 Dec 2021 5:10 am

Tgt Ion:146 Resp: 40995

Ion	Ratio	Lower	Upper
146	100		
111	36.4	10.6	70.6
148	61.3	33.1	93.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83217.d
Acq On : 3 Dec 2021 5:35 am
Operator : nickw
Sample : jd35920-6 Inst : MS2V
Misc : MS55316,V2V3430,5,,,,1
ALS Vial : 69 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:55:18 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

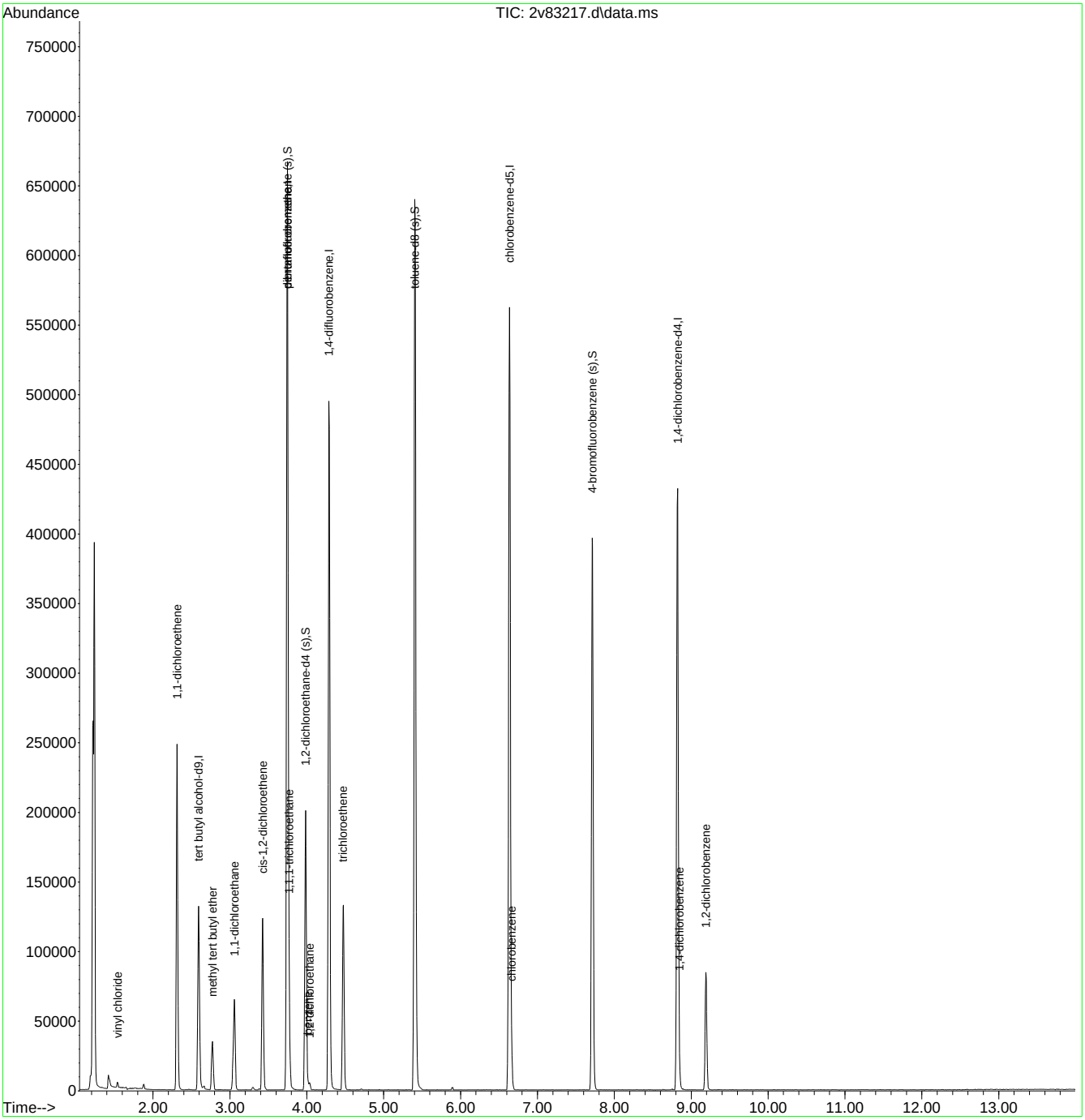
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	2.594	65	120916	500.00	ug/L		0.00
5) pentafluorobenzene	3.748	168	252358	50.00	ug/L		0.00
50) 1,4-difluorobenzene	4.288	114	355964	50.00	ug/L		0.00
72) chlorobenzene-d5	6.636	117	324060	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	8.823	152	123170	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	3.748	113	115773	49.48	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.96%				
51) 1,2-dichloroethane-d4 (s)	3.984	65	104049	45.57	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 91.14%				
73) toluene-d8 (s)	5.404	98	391403	47.78	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.56%				
97) 4-bromofluorobenzene (s)	7.711	95	129969	46.25	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 92.50%				
Target Compounds							Qvalue
9) vinyl chloride	1.540	62	1204	0.42	ug/L		90
17) 1,1-dichloroethene	2.311	61	111760	30.76	ug/L		98
24) methyl tert butyl ether	2.772	73	26558	4.04	ug/L		97
29) 1,1-dichloroethane	3.061	63	46702	10.86	ug/L		99
36) cis-1,2-dichloroethene	3.428	96	43574	17.42	ug/L	#	78
44) 1,1,1-trichloroethane	3.769	97	21108	5.78	ug/L	#	62
53) benzene	4.015	78	2735	0.32	ug/L		88
58) 1,2-dichloroethane	4.036	62	2780	0.78	ug/L		93
59) trichloroethene	4.471	95	36004	14.88	ug/L		98
85) chlorobenzene	6.663	112	7056	1.06	ug/L		96
112) 1,4-dichlorobenzene	8.844	146	5836	1.20	ug/L		97
113) 1,2-dichlorobenzene	9.190	146	39622	8.52	ug/L		95

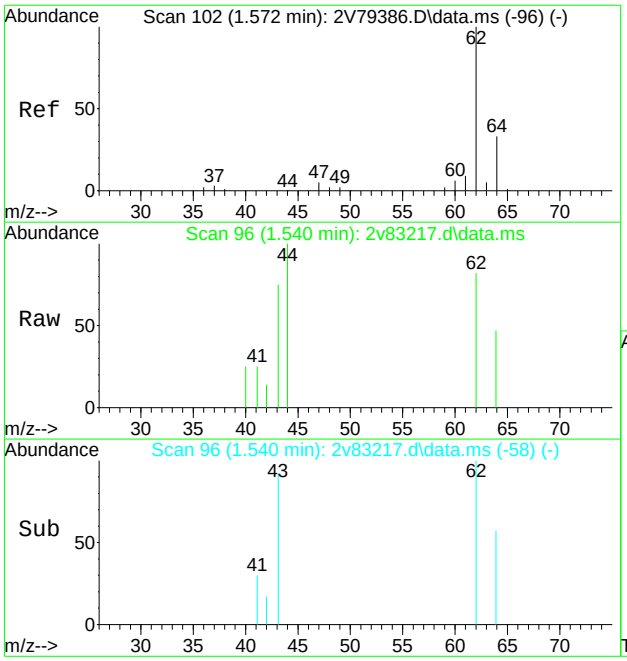
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83217.d
Acq On : 3 Dec 2021 5:35 am
Operator : nickw
Sample : jd35920-6 Inst : MS2V
Misc : MS55316,V2V3430,5,,,,1
ALS Vial : 69 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:55:18 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

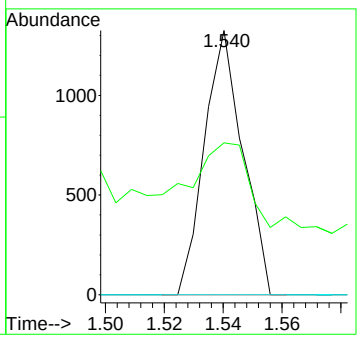


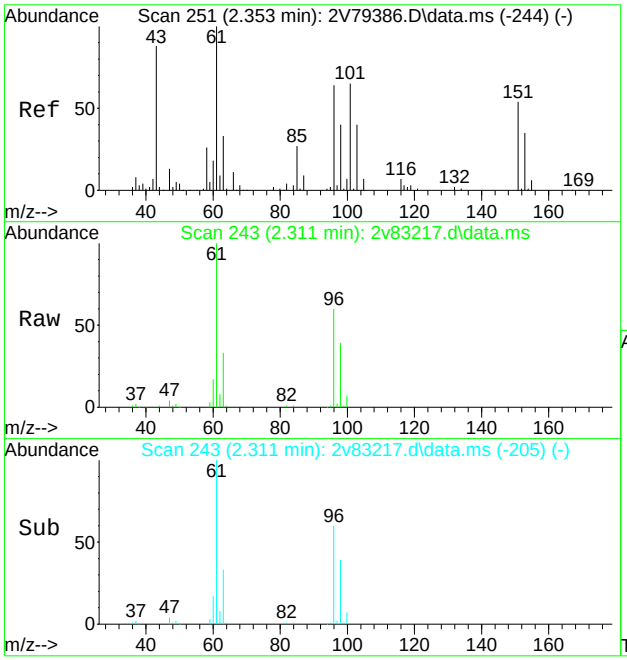


#9
vinyl chloride
Concen: 0.42 ug/L
RT: 1.540 min Scan# 96
Delta R.T. 0.000 min
Lab File: 2v83217.d
Acq: 3 Dec 2021 5:35 am

Tgt Ion: 62 Resp: 1204

Ion	Ratio	Lower	Upper
62	100		
64	28.0	1.3	61.3
61	0.0	0.0	38.8

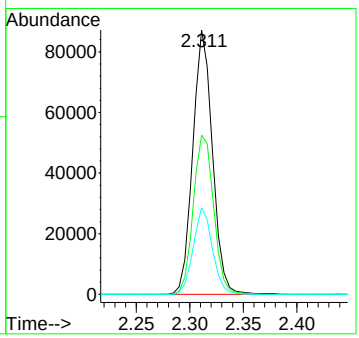


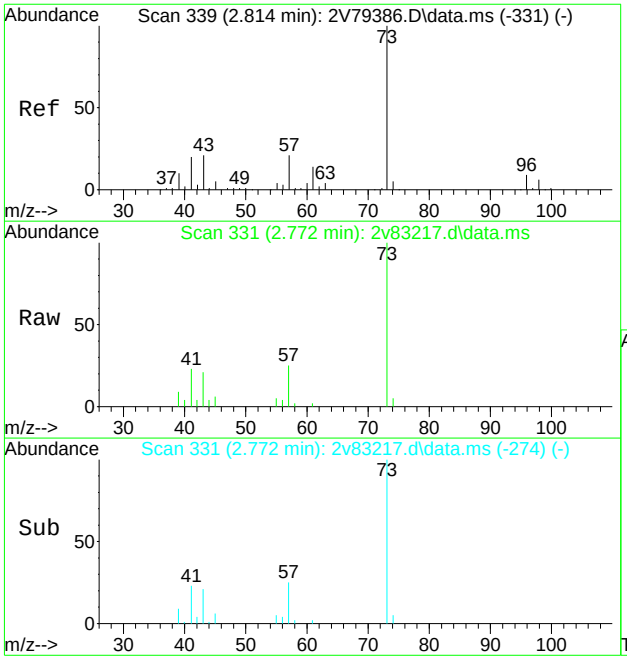


#17
1,1-dichloroethene
Concen: 30.76 ug/L
RT: 2.311 min Scan# 243
Delta R.T. 0.000 min
Lab File: 2v83217.d
Acq: 3 Dec 2021 5:35 am

Tgt Ion: 61 Resp: 111760

Ion	Ratio	Lower	Upper
61	100		
96	60.2	29.1	89.1
63	32.7	1.0	61.0

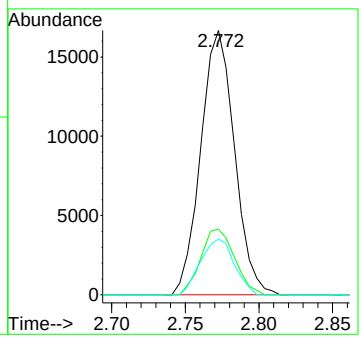


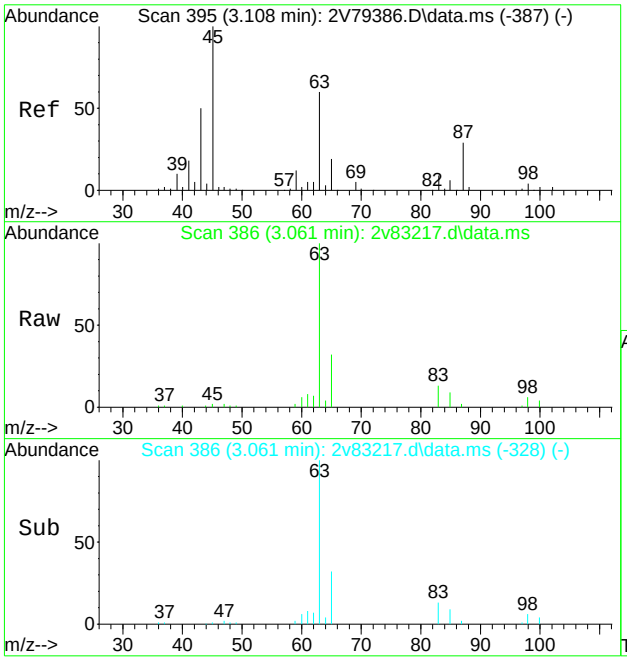


#24
methyl tert butyl ether
Concen: 4.04 ug/L
RT: 2.772 min Scan# 331
Delta R.T. 0.000 min
Lab File: 2v83217.d
Acq: 3 Dec 2021 5:35 am

Tgt Ion: 73 Resp: 26558

Ion	Ratio	Lower	Upper
73	100		
57	24.9	0.0	55.9
43	21.1	0.0	53.4

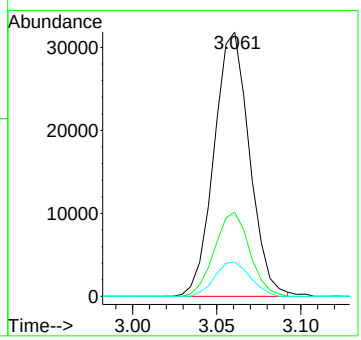


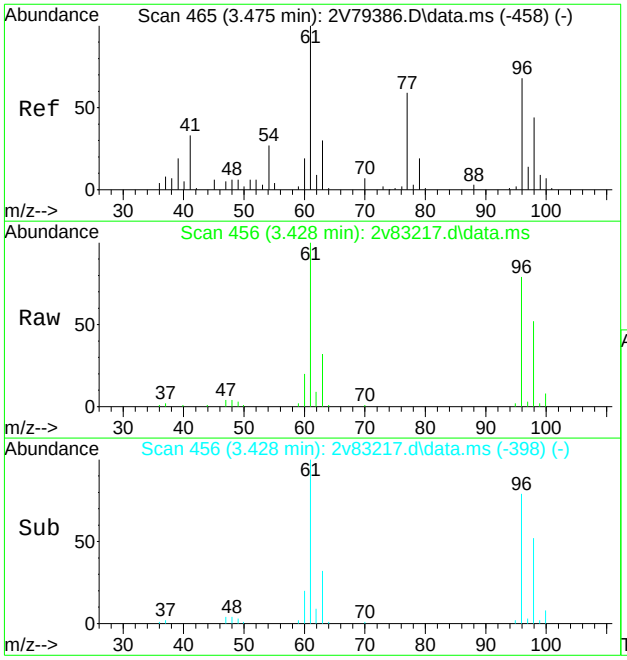


#29
1,1-dichloroethane
Concen: 10.86 ug/L
RT: 3.061 min Scan# 386
Delta R.T. 0.006 min
Lab File: 2v83217.d
Acq: 3 Dec 2021 5:35 am

Tgt Ion: 63 Resp: 46702

Ion	Ratio	Lower	Upper
63	100		
65	31.8	1.1	61.1
83	12.9	0.0	42.5

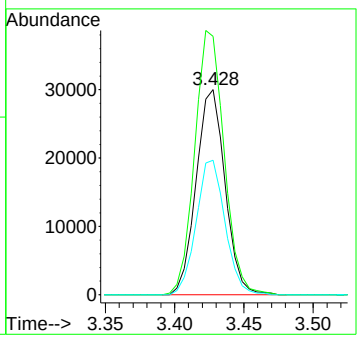


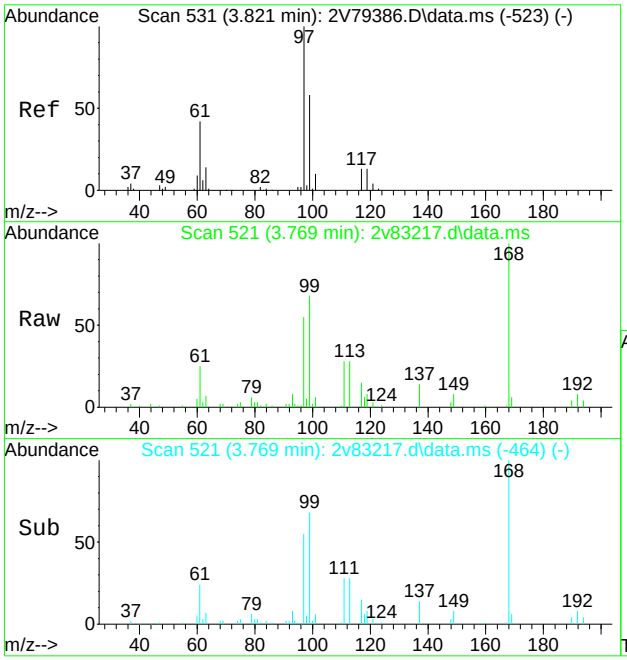


#36
cis-1,2-dichloroethene
Concen: 17.42 ug/L
RT: 3.428 min Scan# 456
Delta R.T. 0.006 min
Lab File: 2v83217.d
Acq: 3 Dec 2021 5:35 am

Tgt Ion: 96 Resp: 43574

Ion	Ratio	Lower	Upper
96	100		
61	125.9	137.0	197.0#
98	65.6	34.8	94.8

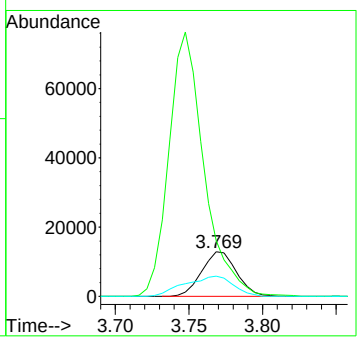


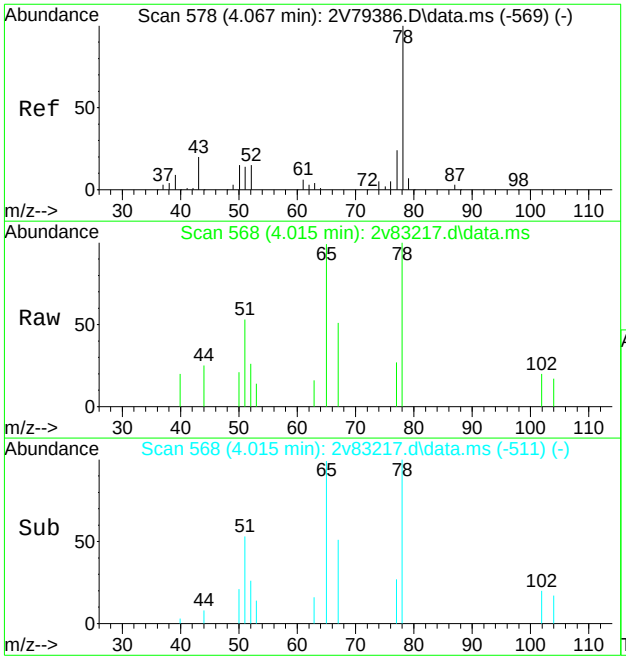


#44
1,1,1-trichloroethane
Concen: 5.78 ug/L
RT: 3.769 min Scan# 521
Delta R.T. 0.001 min
Lab File: 2v83217.d
Acq: 3 Dec 2021 5:35 am

Tgt Ion: 97 Resp: 21108

Ion	Ratio	Lower	Upper
97	100		
99	122.0	40.9	100.9#
61	45.0	16.4	76.4

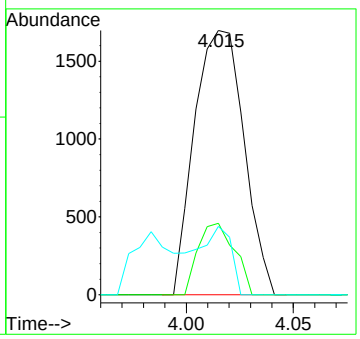


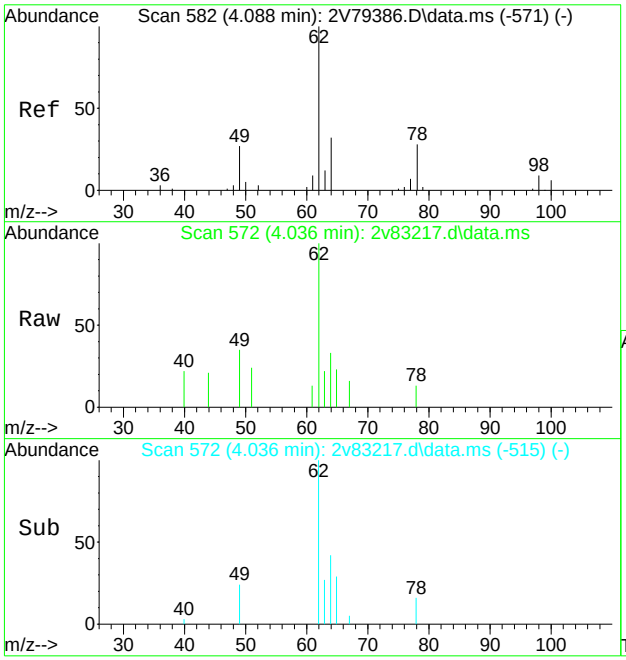


#53
benzene
Concen: 0.32 ug/L
RT: 4.015 min Scan# 568
Delta R.T. -0.000 min
Lab File: 2v83217.d
Acq: 3 Dec 2021 5:35 am

Tgt Ion: 78 Resp: 2735

Ion	Ratio	Lower	Upper
78	100		
77	27.1	0.0	53.4
52	25.9	0.0	48.4

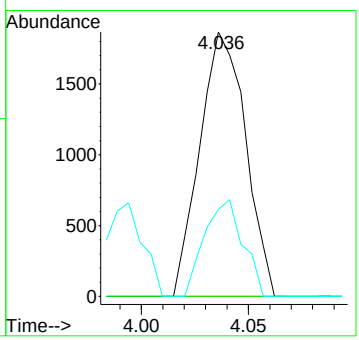


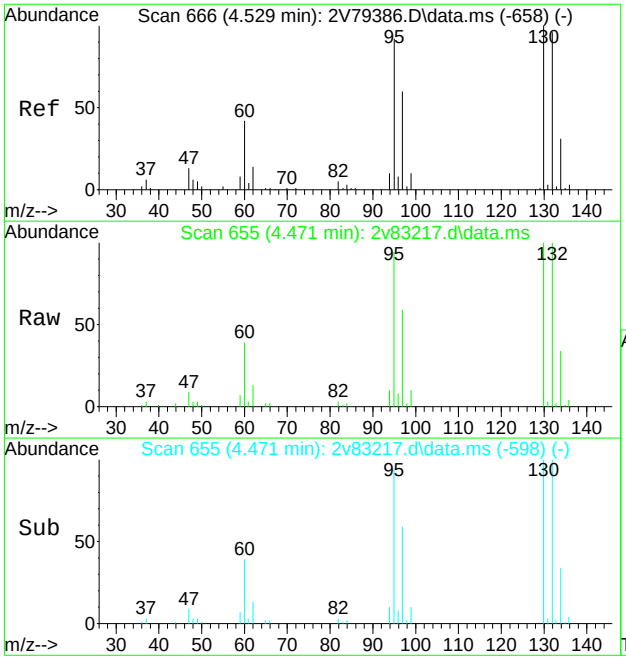


#58
1,2-dichloroethane
Concen: 0.78 ug/L
RT: 4.036 min Scan# 572
Delta R.T. -0.000 min
Lab File: 2v83217.d
Acq: 3 Dec 2021 5:35 am

Tgt Ion: 62 Resp: 2780

Ion	Ratio	Lower	Upper
62	100		
98	0.0	0.0	38.8
64	32.9	1.7	61.7

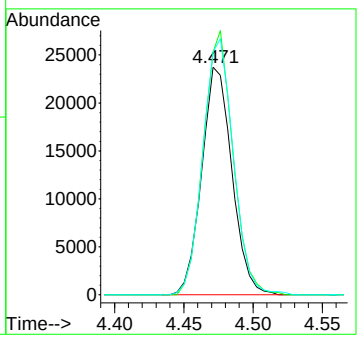


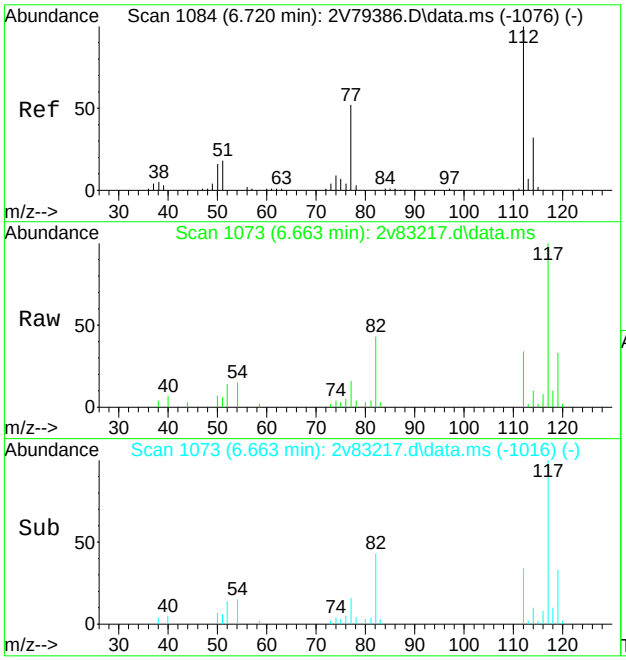


#59
trichloroethene
Concen: 14.88 ug/L
RT: 4.471 min Scan# 655
Delta R.T. 0.000 min
Lab File: 2v83217.d
Acq: 3 Dec 2021 5:35 am

Tgt Ion: 95 Resp: 36004

Ion	Ratio	Lower	Upper
95	100		
130	106.5	78.8	138.8
132	106.6	75.8	135.8

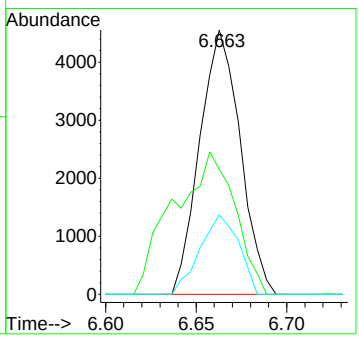


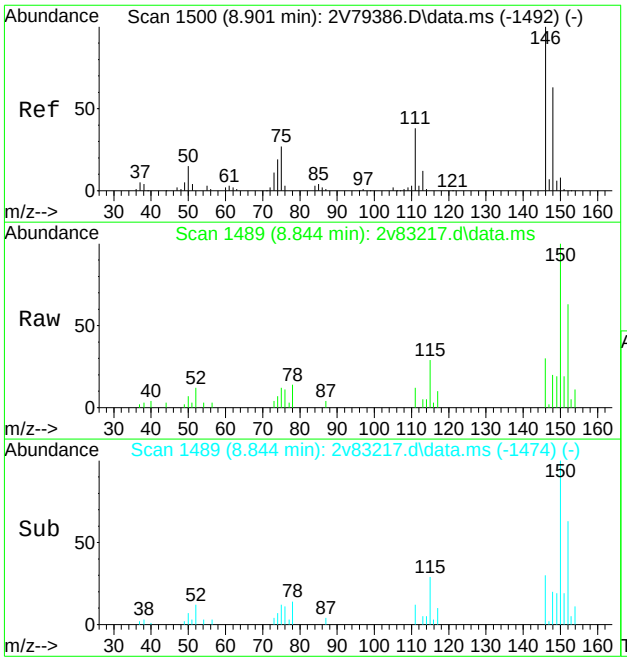


#85
chlorobenzene
Concen: 1.06 ug/L
RT: 6.663 min Scan# 1073
Delta R.T. -0.000 min
Lab File: 2v83217.d
Acq: 3 Dec 2021 5:35 am

Tgt Ion:112 Resp: 7056

Ion	Ratio	Lower	Upper
112	100		
77	47.4	20.6	80.6
114	30.1	2.1	62.1

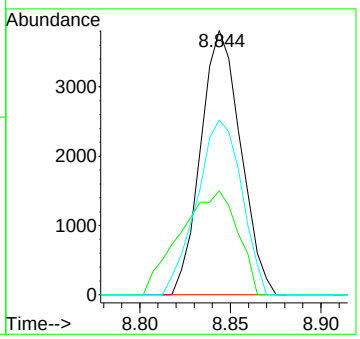


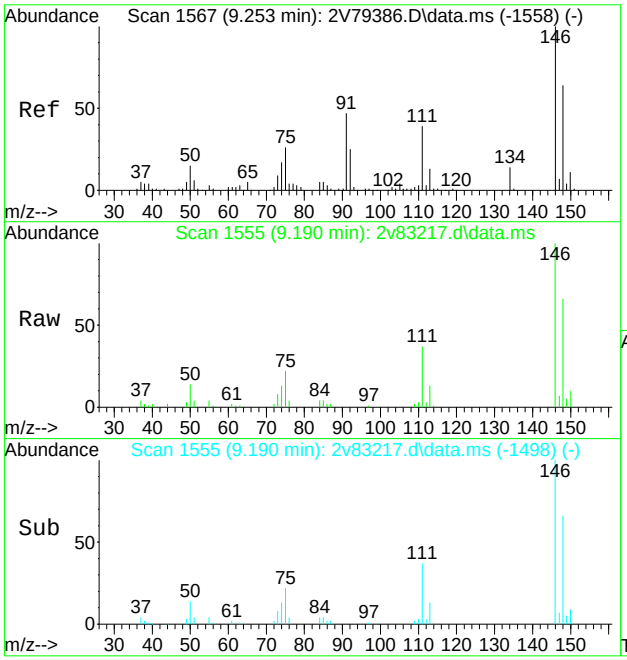


#112
1,4-dichlorobenzene
Concen: 1.20 ug/L
RT: 8.844 min Scan# 1489
Delta R.T. -0.000 min
Lab File: 2v83217.d
Acq: 3 Dec 2021 5:35 am

Tgt Ion:146 Resp: 5836

Ion	Ratio	Lower	Upper
146	100		
111	39.4	7.3	67.3
148	66.1	33.7	93.7

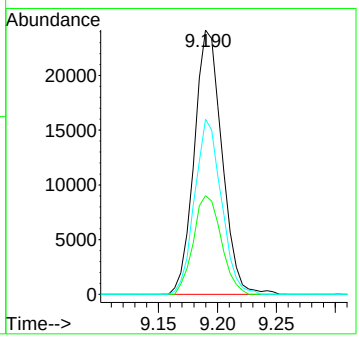




#113
1,2-dichlorobenzene
Concen: 8.52 ug/L
RT: 9.190 min Scan# 1555
Delta R.T. -0.000 min
Lab File: 2v83217.d
Acq: 3 Dec 2021 5:35 am

Tgt Ion:146 Resp: 39622

Ion	Ratio	Lower	Upper
146	100		
111	37.3	10.6	70.6
148	66.2	33.1	93.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83203.d
Acq On : 2 Dec 2021 11:38 pm
Operator : nickw
Sample : mb Inst : MS2V
Misc : MS48261,V2V3430,5,,,,1
ALS Vial : 55 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:47:23 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

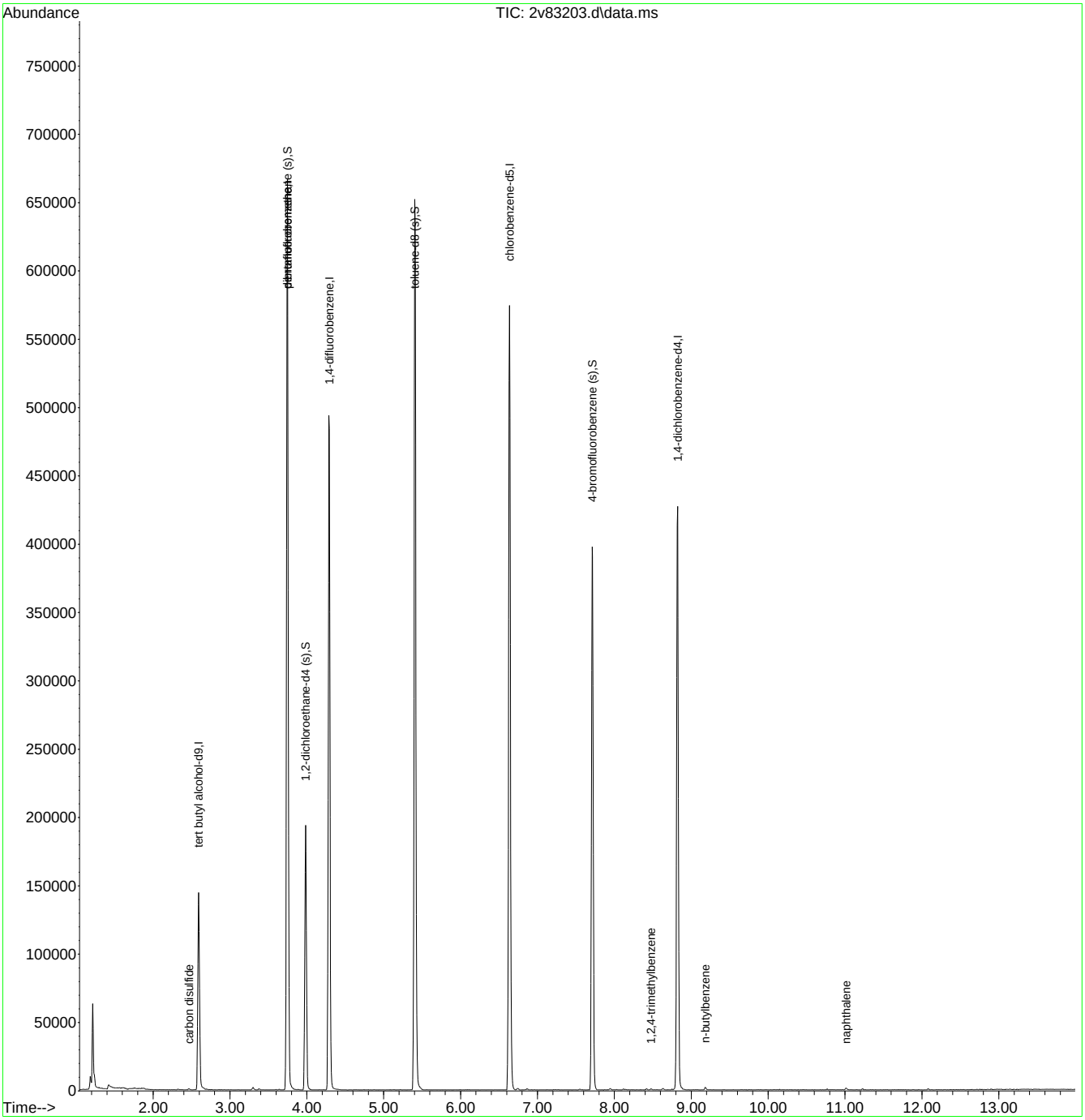
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	131414	500.00	ug/L	0.00
5) pentafluorobenzene	3.747	168	257376	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.293	114	359458	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	324457	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	122183	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.747	113	116285	48.73	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.46%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	101987	44.23	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 88.46%			
73) toluene-d8 (s)	5.404	98	397817	48.51	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.02%			
97) 4-bromofluorobenzene (s)	7.711	95	129899	46.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.18%			
Target Compounds						Qvalue
21) carbon disulfide	2.468	76	829	0.14	ug/L	82
107) 1,2,4-trimethylbenzene	8.477	105	850	0.10	ug/L	82
115) n-butylbenzene	9.184	92	585	0.15	ug/L	96
121) naphthalene	11.014	128	1871	0.26	ug/L	69

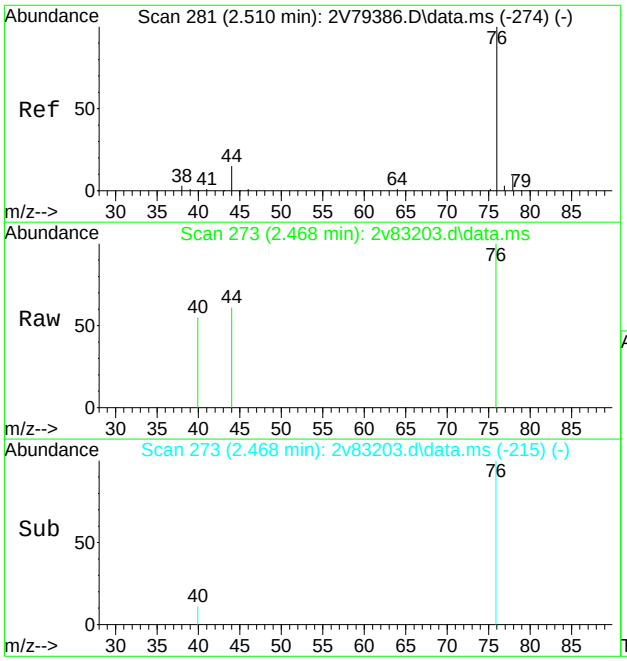
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-06-2021\v2v3430\
Data File : 2v83203.d
Acq On : 2 Dec 2021 11:38 pm
Operator : nickw
Sample : mb Inst : MS2V
Misc : MS48261,V2V3430,5,,,,1
ALS Vial : 55 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 06 00:47:23 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

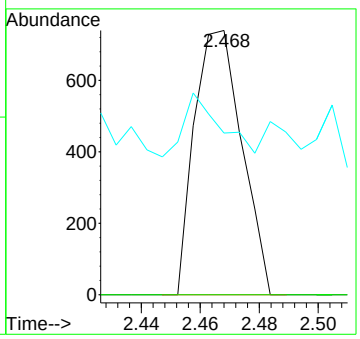


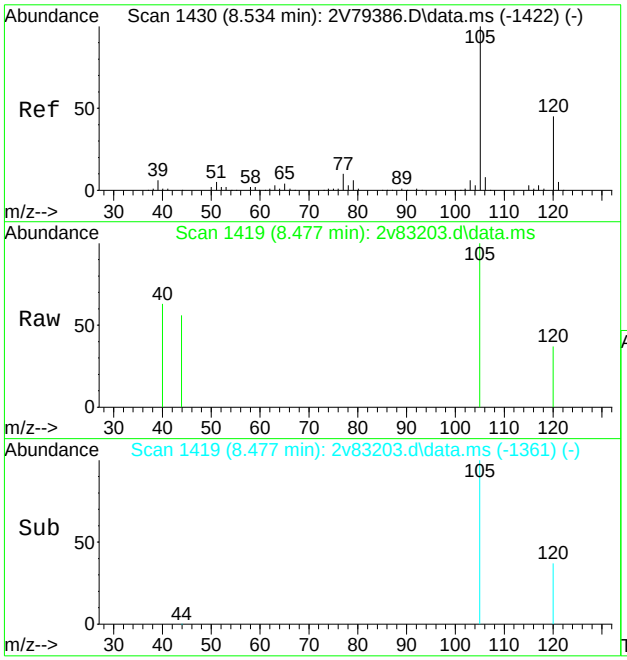


#21
carbon disulfide
Concen: 0.14 ug/L
RT: 2.468 min Scan# 273
Delta R.T. 0.005 min
Lab File: 2v83203.d
Acq: 2 Dec 2021 11:38 pm

Tgt Ion: 76 Resp: 829

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	38.9
44	9.1	0.0	45.2

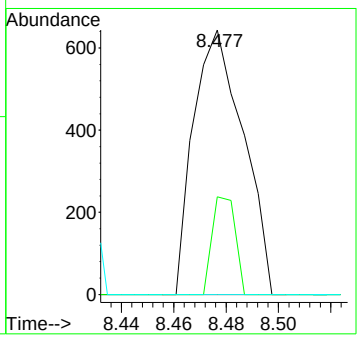


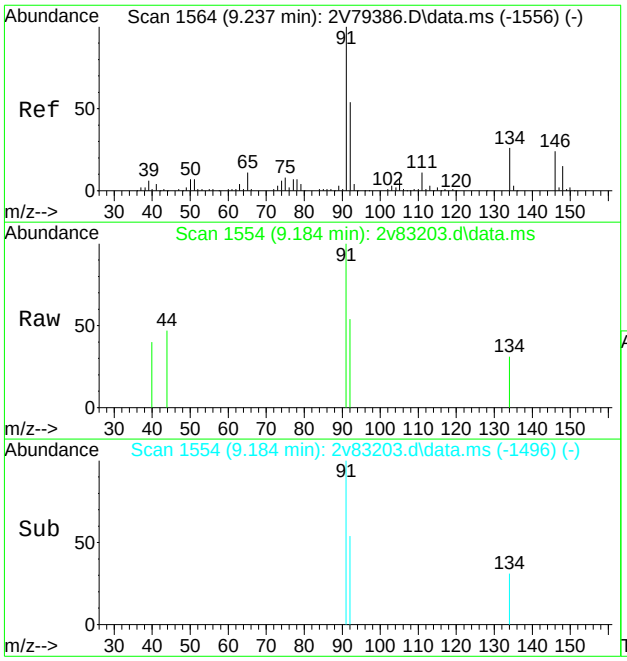


#107
1,2,4-trimethylbenzene
Concen: 0.10 ug/L
RT: 8.477 min Scan# 1419
Delta R.T. 0.006 min
Lab File: 2v83203.d
Acq: 2 Dec 2021 11:38 pm

Tgt Ion:105 Resp: 850

Ion	Ratio	Lower	Upper
105	100		
120	37.0	16.8	76.8
119	0.0	0.0	42.2

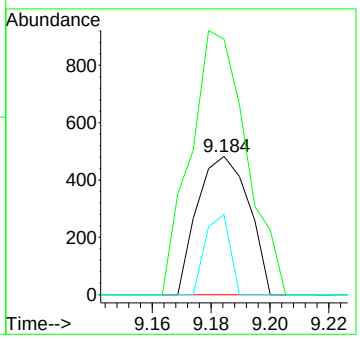


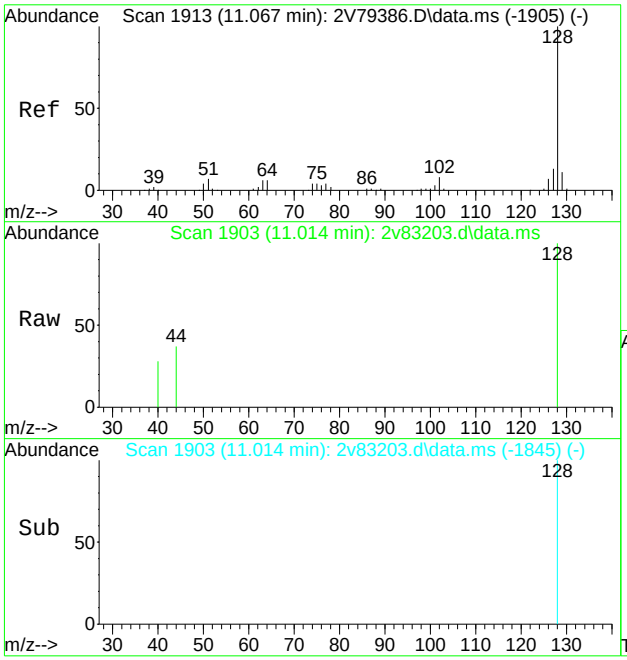


#115
n-butylbenzene
Concen: 0.15 ug/L
RT: 9.184 min Scan# 1554
Delta R.T. 0.005 min
Lab File: 2v83203.d
Acq: 2 Dec 2021 11:38 pm

Tgt Ion: 92 Resp: 585

Ion	Ratio	Lower	Upper
92	100		
91	184.5	150.5	210.5
134	57.8	22.4	82.4

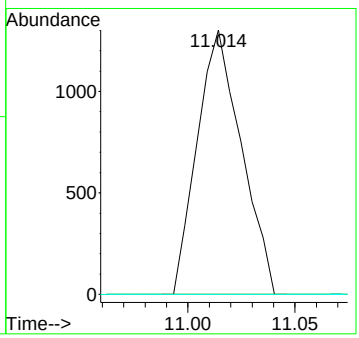




#121
naphthalene
Concen: 0.26 ug/L
RT: 11.014 min Scan# 1903
Delta R.T. 0.005 min
Lab File: 2v83203.d
Acq: 2 Dec 2021 11:38 pm

Tgt Ion:128 Resp: 1871

Ion	Ratio	Lower	Upper
128	100		
129	0.0	0.0	40.9
127	0.0	0.0	43.1



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167255.D
Acq On : 7 Dec 2021 12:31 pm
Operator : BridgetK
Sample : mb
Misc : MS32930,V3A7258,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 07 16:21:52 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

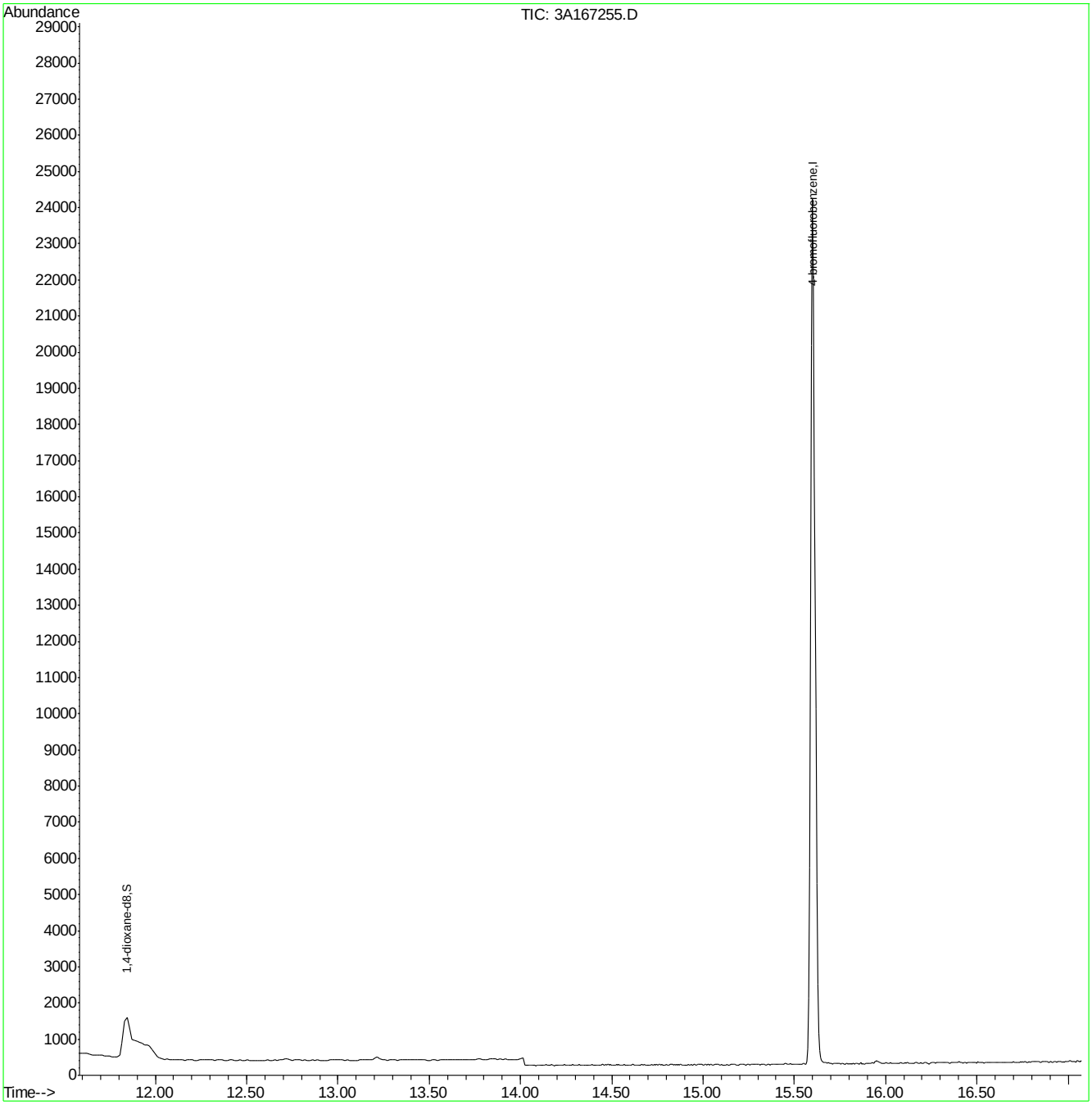
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	13687	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3591	9.48	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 94.80%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7258\
Data File : 3A167255.D
Acq On : 7 Dec 2021 12:31 pm
Operator : BridgetK
Sample : mb
Misc : MS32930,V3A7258,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 07 16:21:52 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36899-MB1	5P80150.D	1	12/08/21	CS	12/02/21	OP36899	E5P3793

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	1.1	2.0	0.86	ug/l	J
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.53	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	

Method Blank Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36899-MB1	5P80150.D	1	12/08/21	CS	12/02/21	OP36899	E5P3793

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	41%	10-73%
4165-62-2	Phenol-d5	27%	10-64%
118-79-6	2,4,6-Tribromophenol	70%	31-130%
4165-60-0	Nitrobenzene-d5	71%	28-126%
321-60-8	2-Fluorobiphenyl	71%	26-114%
1718-51-0	Terphenyl-d14	96%	16-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	4.77	3.3	ug/l	J
	Internal standard added for SIM test	6.58	3.4	ug/l	J
	Internal standard added for SIM test	8.57	3.4	ug/l	J
	Internal standard added for SIM test	11.89	3.6	ug/l	J
	unknown	15.48	7.5	ug/l	J
	Internal standard added for SIM test	16.21	3.6	ug/l	J

Method Blank Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36899-MB1	5P80150.D	1	12/08/21	CS	12/02/21	OP36899	E5P3793

The QC reported here applies to the following samples: **Method:**

JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		7.5	ug/l	J

Method Blank Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36899A-MB1	4P49793.D	1	12/03/21	CS	12/02/21	OP36899A	E4P2607

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.0534	0.080	0.040	ug/l	J
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	0.0975	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	0.0568	0.080	0.040	ug/l	J
86-73-7	Fluorene	0.0945	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	0.0564	0.080	0.040	ug/l	J
85-01-8	Phenanthrene	0.103	0.080	0.040	ug/l	
129-00-0	Pyrene	0.0446	0.080	0.040	ug/l	J

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	47%	15-110%
4165-62-2	Phenol-d5	34%	12-110%
118-79-6	2,4,6-Tribromophenol	124%	32-143%
4165-60-0	Nitrobenzene-d5	104%	29-124%
321-60-8	2-Fluorobiphenyl	86%	23-122%
1718-51-0	Terphenyl-d14	103%	22-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36899-BS1	5P80153.D	1	12/08/21	CS	12/02/21	OP36899	E5P3793
OP36899-BSD [a]	5P80154.D	1	12/08/21	CS	12/02/21	OP36899	E5P3793

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	40	28.2	71	8.7	22* [b]	106* [c]	33-102/34
59-50-7	4-Chloro-3-methyl phenol	40	36.7	92	19.8	50	60* [c]	46-113/28
120-83-2	2,4-Dichlorophenol	40	32.3	81	13.8	35* [b]	80* [c]	45-111/31
105-67-9	2,4-Dimethylphenol	40	25.7	64	12.6	32* [b]	68* [c]	39-124/30
51-28-5	2,4-Dinitrophenol	80	83.4	104	51.8	65	47* [c]	30-156/30
87-65-0	2,6-Dichlorophenol	40	32.1	80	13.6	34* [b]	81* [c]	45-114/28
534-52-1	4,6-Dinitro-o-cresol	40	45.4	114	28.5	71	46* [c]	41-138/29
95-48-7	2-Methylphenol	40	25.4	64	9.8	25* [b]	89* [c]	26-101/32
	3&4-Methylphenol	80	48.5	61	21.2	27	78* [c]	23-98/32
88-75-5	2-Nitrophenol	40	30.5	76	10.7	27* [b]	96* [c]	42-125/34
100-02-7	4-Nitrophenol	40	25.8	65	14.9	37	54* [c]	10-91/35
87-86-5	Pentachlorophenol	80	82.0	103	54.3	68	41* [c]	37-147/31
108-95-2	Phenol	40	17.3	43	5.8	15	100* [c]	10-77/35
58-90-2	2,3,4,6-Tetrachlorophenol	40	38.5	96	25.0	63	43* [c]	41-131/29
95-95-4	2,4,5-Trichlorophenol	40	34.4	86	20.0	50	53* [c]	39-125/28
88-06-2	2,4,6-Trichlorophenol	40	33.4	84	17.3	43	64* [c]	40-127/28
98-86-2	Acetophenone	40	26.7	67	11.2	28* [b]	82* [c]	44-110/30
62-53-3	Aniline	40	14.7	37	8.1	20	58* [c]	10-109/44
101-55-3	4-Bromophenyl phenyl ether	40	34.5	86	22.8	57	41* [c]	44-115/29
85-68-7	Butyl benzyl phthalate	40	61.2	153* [b]	46.9	117	26	49-121/29
100-51-6	Benzyl Alcohol	40	23.7	59	11.4	29* [b]	70* [c]	31-110/31
91-58-7	2-Chloronaphthalene	40	29.1	73	14.3	36	68* [c]	29-112/29
106-47-8	4-Chloroaniline	40	22.1	55	13.8	35	46	15-88/48
111-91-1	bis(2-Chloroethoxy)methane	40	27.7	69	12.3	31* [b]	77* [c]	44-115/29
111-44-4	bis(2-Chloroethyl)ether	40	26.6	67	7.7	19* [b]	110* [c]	38-116/32
7005-72-3	4-Chlorophenyl phenyl ether	40	33.1	83	21.6	54	42* [c]	35-119/28
121-14-2	2,4-Dinitrotoluene	40	43.9	110	29.5	74	39* [c]	47-128/27
606-20-2	2,6-Dinitrotoluene	40	40.3	101	26.4	66	42* [c]	48-127/28
91-94-1	3,3'-Dichlorobenzidine	40	33.9	84	21.4	54	45* [c]	18-103/38
132-64-9	Dibenzofuran	40	33.6	84	19.5	49	53* [c]	35-119/27
84-74-2	Di-n-butyl phthalate	40	41.8	105	28.1	70	39* [c]	50-122/29
117-84-0	Di-n-octyl phthalate	40	43.5	109	33.6	84	26	40-127/28
84-66-2	Diethyl phthalate	40	40.1	100	28.0	70	36* [c]	49-117/28
131-11-3	Dimethyl phthalate	40	38.5	96	27.4	69	34* [c]	49-114/28
117-81-7	bis(2-Ethylhexyl)phthalate	40	45.9	115	33.8	85	30* [c]	44-127/29
118-74-1	Hexachlorobenzene	40	33.7	84	22.3	56	41* [c]	46-113/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36899-BS1	5P80153.D	1	12/08/21	CS	12/02/21	OP36899	E5P3793
OP36899-BSD [a]	5P80154.D	1	12/08/21	CS	12/02/21	OP36899	E5P3793

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	40	24.2	61	8.2	21	99* [c]	17-111/37
77-47-4	Hexachlorocyclopentadiene	80	30.8	39	13.7	17	77* [c]	10-112/40
67-72-1	Hexachloroethane	40	21.3	53	5.0	13* [b]	124* [c]	18-101/38
78-59-1	Isophorone	40	30.0	75	17.5	44* [b]	53* [c]	47-119/28
91-57-6	2-Methylnaphthalene	40	29.0	73	12.6	32	79* [c]	30-116/32
88-74-4	2-Nitroaniline	40	36.0	90	25.9	65	33* [c]	35-133/28
99-09-2	3-Nitroaniline	40	32.0	80	25.2	63	24	31-102/39
100-01-6	4-Nitroaniline	40	36.0	90	28.0	70	25	51-118/30
98-95-3	Nitrobenzene	40	30.4	76	11.0	28* [b]	94* [c]	36-120/29
62-75-9	n-Nitrosodimethylamine	40	19.2	48	4.0	10	131* [c]	10-85/37
621-64-7	N-Nitroso-di-n-propylamine	40	26.6	67	14.4	36* [b]	60* [c]	41-118/30
86-30-6	N-Nitrosodiphenylamine	40	37.3	93	27.1	68	32* [c]	46-112/29
82-68-8	Pentachloronitrobenzene	40	34.2	86	23.5	59	37* [c]	43-126/28
110-86-1	Pyridine	40	8.4	21	2.9	7* [b]	97* [c]	10-78/57
95-94-3	1,2,4,5-Tetrachlorobenzene	40	26.7	67	12.5	31	72* [c]	20-114/31
120-82-1	1,2,4-Trichlorobenzene	40	24.7	62	8.9	22* [b]	94* [c]	24-104/33

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	55%	13%	10-73%
4165-62-2	Phenol-d5	38%	13%	10-64%
118-79-6	2,4,6-Tribromophenol	87%	64%	31-130%
4165-60-0	Nitrobenzene-d5	73%	30%	28-126%
321-60-8	2-Fluorobiphenyl	75%	40%	26-114%
1718-51-0	Terphenyl-d14	119%	89%	16-122%

(a) Recovery indicates possible low bias. Since balnk spike recoveries within control limits, data are qualified and reported.
(b) Outside of in house control limits.
(c) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36899A-BS12	4P49794.D	1	12/03/21	CS	12/02/21	OP36899A	E4P2607
OP36899A-BSD12	4P49795.D	1	12/03/21	CS	12/02/21	OP36899A	E4P2607

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	0.8	0.653	82	0.695	87	6	31-135/38
208-96-8	Acenaphthylene	0.8	0.442	55	0.467	58	6	28-130/42
120-12-7	Anthracene	0.8	0.748	94	0.734	92	2	40-125/32
56-55-3	Benzo(a)anthracene	0.8	0.632	79	0.629	79	0	38-132/31
50-32-8	Benzo(a)pyrene	0.8	0.863	108	0.884	111* [a]	2	31-110/37
205-99-2	Benzo(b)fluoranthene	0.8	0.937	117* [a]	1.00	125* [b]	7	31-113/37
191-24-2	Benzo(g,h,i)perylene	0.8	0.704	88	0.731	91	4	18-110/54
207-08-9	Benzo(k)fluoranthene	0.8	0.828	104	0.834	104	1	31-119/43
218-01-9	Chrysene	0.8	0.659	82	0.674	84	2	43-119/33
53-70-3	Dibenzo(a,h)anthracene	0.8	0.734	92	0.766	96	4	20-112/50
206-44-0	Fluoranthene	0.8	0.744	93	0.774	97	4	48-118/27
86-73-7	Fluorene	0.8	0.702	88	0.716	90	2	42-123/34
193-39-5	Indeno(1,2,3-cd)pyrene	0.8	0.676	85	0.697	87	3	18-113/49
91-20-3	Naphthalene	0.8	0.582	73	0.580	73	0	30-114/40
85-01-8	Phenanthrene	0.8	0.756	95	0.759	95	0	45-125/31
129-00-0	Pyrene	0.8	0.688	86	0.696	87	1	48-125/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	51%	49%	15-110%
4165-62-2	Phenol-d5	39%	37%	12-110%
118-79-6	2,4,6-Tribromophenol	135%	141%	32-143%
4165-60-0	Nitrobenzene-d5	111%	109%	29-124%
321-60-8	2-Fluorobiphenyl	95%	98%	23-122%
1718-51-0	Terphenyl-d14	110%	112%	22-130%

(a) Outside of in house control limits, but within reasonable method recovery limits.
(b) Outside of in house control limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-DFTPP
Lab File ID: 4P48502.D
Instrument ID: GCMS4P
Injection Date: 10/20/21
Injection Time: 22:19

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	23059	30.3		Pass
68	Less than 2.0% of mass 69	101	0.13	(0.34) [a]	Pass
69	Mass 69 relative abundance	29864	39.3		Pass
70	Less than 2.0% of mass 69	124	0.16	(0.42) [a]	Pass
127	40.0 - 60.0% of mass 198	30794	40.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	76018	100.0		Pass
199	5.0 - 9.0% of mass 198	5791	7.62		Pass
275	10.0 - 30.0% of mass 198	18191	23.9		Pass
365	1.0 - 100.0% of mass 198	1857	2.44		Pass
441	Present, but less than mass 443	4086	5.38	(39.2) [b]	Pass
442	40.0 - 100.0% of mass 198	51528	67.8		Pass
443	17.0 - 23.0% of mass 442	10411	13.7	(20.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2551-IC2551	4P48504.D	10/20/21	22:59	00:40	Initial cal 1
E4P2551-ICC2551	4P48505.D	10/20/21	23:23	01:04	Initial cal 0.2
E4P2551-IC2551	4P48506.D	10/20/21	23:46	01:27	Initial cal 0.02
E4P2551-IC2551	4P48507.D	10/21/21	00:10	01:51	Initial cal 0.5
E4P2551-IC2551	4P48508.D	10/21/21	00:33	02:14	Initial cal 0.1
E4P2551-IC2551	4P48509.D	10/21/21	00:57	02:38	Initial cal 0.004
E4P2551-IC2551	4P48511.D	10/21/21	01:44	03:25	Initial cal 0.04
E4P2551-IC2551	4P48513.D	10/21/21	02:16	03:57	Initial cal 0.002
E4P2551-IC2551	4P48514.D	10/21/21	02:39	04:20	Initial cal 0.01
E4P2551-ICV2551	4P48512.D	10/21/21	03:15	04:56	Initial cal verification 0.2
OP35848A-BSD12	4P48515.D	10/21/21	03:45	05:26	Blank Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2607-DFTPP
Lab File ID: 4P49790.D
Instrument ID: GCMS4P
Injection Date: 12/02/21
Injection Time: 23:54

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	55546	38.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	72305	50.0		Pass
70	Less than 2.0% of mass 69	530	0.37	(0.73) [a]	Pass
127	40.0 - 60.0% of mass 198	66608	46.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	144530	100.0		Pass
199	5.0 - 9.0% of mass 198	11090	7.67		Pass
275	10.0 - 30.0% of mass 198	37546	26.0		Pass
365	1.0 - 100.0% of mass 198	6044	4.18		Pass
441	Present, but less than mass 443	15897	11.0	(87.1) [b]	Pass
442	40.0 - 100.0% of mass 198	94498	65.4		Pass
443	17.0 - 23.0% of mass 442	18254	12.6	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2607-CC2551	4P49792.D	12/03/21	01:18	01:24	Continuing cal 0.1
OP36899A-MB1	4P49793.D	12/03/21	02:00	02:06	Method Blank
OP36899A-BS12	4P49794.D	12/03/21	02:24	02:30	Blank Spike
OP36899A-BSD12	4P49795.D	12/03/21	02:48	02:54	Blank Spike Duplicate
OP36670A-BSD12	4P49797.D	12/03/21	03:51	03:57	Blank Spike Duplicate
ZZZZZZ	4P49798.D	12/03/21	04:14	04:20	(unrelated sample)
ZZZZZZ	4P49799.D	12/03/21	04:38	04:44	(unrelated sample)
ZZZZZZ	4P49800.D	12/03/21	05:02	05:08	(unrelated sample)
ZZZZZZ	4P49801.D	12/03/21	05:25	05:31	(unrelated sample)
ZZZZZZ	4P49802.D	12/03/21	05:49	05:55	(unrelated sample)
ZZZZZZ	4P49803.D	12/03/21	06:12	06:18	(unrelated sample)
ZZZZZZ	4P49804.D	12/03/21	06:36	06:42	(unrelated sample)
ZZZZZZ	4P49805.D	12/03/21	07:00	07:06	(unrelated sample)
JD35920-2	4P49806.D	12/03/21	07:23	07:29	HOFF MW-2DL
JD35920-5	4P49808.D	12/03/21	08:10	08:16	HOFF MW-7DL
JD35920-6	4P49809.D	12/03/21	08:33	08:39	HOFF DUP-113021
JD35920-3	4P49814.D	12/03/21	10:31	10:37	HOFF MW-2DU

Instrument Performance Check (DFTPP)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2608-DFTPP	**Injection Date:**	12/03/21
Lab File ID:	4P49815.D	**Injection Time:**	11:58
Instrument ID:	GCMS4P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	58944	42.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	71367	51.8		Pass
70	Less than 2.0% of mass 69	561	0.41	(0.79) [a]	Pass
127	40.0 - 60.0% of mass 198	65415	47.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	137762	100.0		Pass
199	5.0 - 9.0% of mass 198	9803	7.12		Pass
275	10.0 - 30.0% of mass 198	30516	22.2		Pass
365	1.0 - 100.0% of mass 198	5222	3.79		Pass
441	Present, but less than mass 443	11219	8.14	(79.6) [b]	Pass
442	40.0 - 100.0% of mass 198	68512	49.7		Pass
443	17.0 - 23.0% of mass 442	14103	10.2	(20.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2608-CC2551	4P49816.D	12/03/21	12:11	00:13	Continuing cal 0.2
ZZZZZZ	4P49821.D	12/03/21	17:17	05:19	(unrelated sample)
ZZZZZZ	4P49822.D	12/03/21	17:40	05:42	(unrelated sample)
JD35920-4	4P49823.D	12/03/21	18:04	06:06	HOFF MW-2S

Instrument Performance Check (DFTPP)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2620-DFTPP	**Injection Date:**	12/12/21
Lab File ID:	4P50022.D	**Injection Time:**	10:16
Instrument ID:	GCMS4P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	35484	42.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	43828	52.7		Pass
70	Less than 2.0% of mass 69	296	0.36	(0.68) [a]	Pass
127	40.0 - 60.0% of mass 198	38142	45.8		Pass
197	Less than 1.0% of mass 198	522	0.63		Pass
198	Base peak, 100% relative abundance	83208	100.0		Pass
199	5.0 - 9.0% of mass 198	5685	6.83		Pass
275	10.0 - 30.0% of mass 198	18426	22.1		Pass
365	1.0 - 100.0% of mass 198	2907	3.49		Pass
441	Present, but less than mass 443	7011	8.43	(81.0) [b]	Pass
442	40.0 - 100.0% of mass 198	46029	55.3		Pass
443	17.0 - 23.0% of mass 442	8654	10.4	(18.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2620-CC2551	4P50023.D	12/12/21	10:42	00:26	Continuing cal 0.1
OP37001A-MB1	4P50024.D	12/12/21	11:20	01:04	Method Blank
OP37001A-BS12	4P50025.D	12/12/21	11:43	01:27	Blank Spike
ZZZZZZ	4P50026.D	12/12/21	12:15	01:59	(unrelated sample)
ZZZZZZ	4P50027A.D	12/12/21	12:47	02:31	(unrelated sample)
JD36109-3	4P50028.D	12/12/21	13:10	02:54	(used for QC only; not part of job JD35920)
ZZZZZZ	4P50029.D	12/12/21	13:33	03:17	(unrelated sample)
ZZZZZZ	4P50030.D	12/12/21	13:57	03:41	(unrelated sample)
ZZZZZZ	4P50031.D	12/12/21	14:20	04:04	(unrelated sample)
OP37001A-MS	4P50032.D	12/12/21	14:44	04:28	Matrix Spike
OP37001A-MSD	4P50033.D	12/12/21	15:07	04:51	Matrix Spike Duplicate
ZZZZZZ	4P50034.D	12/12/21	15:31	05:15	(unrelated sample)
ZZZZZZ	4P50035.D	12/12/21	15:54	05:38	(unrelated sample)
JD35920-2	4P50036.D	12/12/21	16:18	06:02	HOFF MW-2DL
JD35920-5	4P50037.D	12/12/21	16:42	06:26	HOFF MW-7DL
JD35920-6	4P50038.D	12/12/21	17:05	06:49	HOFF DUP-113021
ZZZZZZ	4P50039.D	12/12/21	17:29	07:13	(unrelated sample)
ZZZZZZ	4P50040.D	12/12/21	17:52	07:36	(unrelated sample)
ZZZZZZ	4P50041.D	12/12/21	18:16	08:00	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2620-DFTPP	**Injection Date:**	12/12/21
Lab File ID:	4P50022.D	**Injection Time:**	10:16
Instrument ID:	GCMS4P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4P50042.D	12/12/21	18:40	08:24	(unrelated sample)
ZZZZZZ	4P50043.D	12/12/21	19:03	08:47	(unrelated sample)
ZZZZZZ	4P50044.D	12/12/21	19:27	09:11	(unrelated sample)
ZZZZZZ	4P50045.D	12/12/21	19:50	09:34	(unrelated sample)
JD35920-4	4P50046.D	12/12/21	20:14	09:58	HOFF MW-2S
JD35920-3	4P50047.D	12/12/21	20:37	10:21	HOFF MW-2DU

Instrument Performance Check (DFTPP)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3784-DFTPP
Lab File ID: 5P79938.D
Instrument ID: GCMS5P
Injection Date: 12/01/21
Injection Time: 13:23

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	112410	32.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	123213	36.1		Pass
70	Less than 2.0% of mass 69	660	0.19	(0.54) [a]	Pass
127	40.0 - 60.0% of mass 198	158109	46.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	341760	100.0		Pass
199	5.0 - 9.0% of mass 198	23426	6.85		Pass
275	10.0 - 30.0% of mass 198	96773	28.3		Pass
365	1.0 - 100.0% of mass 198	13069	3.82		Pass
441	Present, but less than mass 443	36112	10.6	(81.2) [b]	Pass
442	40.0 - 100.0% of mass 198	230898	67.6		Pass
443	17.0 - 23.0% of mass 442	44486	13.0	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3784-IC3784	5P79940.D	12/01/21	14:12	00:49	Initial cal 20
E5P3784-IC3784	5P79941.D	12/01/21	14:41	01:18	Initial cal 0.4
E5P3784-IC3784	5P79942.D	12/01/21	15:26	02:03	Initial cal 16
E5P3784-IC3784	5P79943.D	12/01/21	15:52	02:29	Initial cal 0.2
E5P3784-IC3784	5P79944.D	12/01/21	16:18	02:55	Initial cal 10
E5P3784-IC3784	5P79945.D	12/01/21	16:45	03:22	Initial cal 1
E5P3784-ICC3784	5P79946.D	12/01/21	17:12	03:49	Initial cal 5
E5P3784-IC3784	5P79947.D	12/01/21	17:39	04:16	Initial cal 2
E5P3784-ICV3784	5P79948.D	12/01/21	18:20	04:57	Initial cal verification 10
E5P3784-ICV3784	5P79949.D	12/01/21	18:47	05:24	Initial cal verification 10
E5P3784-ICV3784	5P79950.D	12/01/21	19:14	05:51	Initial cal verification 10
E5P3784-ICV3784	5P79951.D	12/01/21	19:41	06:18	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-DFTPP
Lab File ID: 5P79956.D
Instrument ID: GCMS5P
Injection Date: 12/01/21
Injection Time: 21:49

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	91864	30.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	101906	33.7		Pass
70	Less than 2.0% of mass 69	672	0.22	(0.66) [a]	Pass
127	40.0 - 60.0% of mass 198	141221	46.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	302357	100.0		Pass
199	5.0 - 9.0% of mass 198	20705	6.85		Pass
275	10.0 - 30.0% of mass 198	84325	27.9		Pass
365	1.0 - 100.0% of mass 198	10108	3.34		Pass
441	Present, but less than mass 443	30682	10.1	(84.2) [b]	Pass
442	40.0 - 100.0% of mass 198	191162	63.2		Pass
443	17.0 - 23.0% of mass 442	36428	12.0	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3785-IC3785	5P79957.D	12/01/21	22:09	00:20	Initial cal 20
E5P3785-IC3785	5P79958.D	12/01/21	22:36	00:47	Initial cal 16
E5P3785-ICC3785	5P79959.D	12/01/21	23:02	01:13	Initial cal 10
E5P3785-IC3785	5P79960.D	12/01/21	23:30	01:41	Initial cal 5
E5P3785-IC3785	5P79961.D	12/01/21	23:57	02:08	Initial cal 2
E5P3785-IC3785	5P79962.D	12/02/21	00:24	02:35	Initial cal 1
E5P3785-IC3785	5P79963.D	12/02/21	00:51	03:02	Initial cal 0.4
E5P3785-IC3785	5P79964.D	12/02/21	01:17	03:28	Initial cal 0.2
E5P3785-ICV3785	5P79965.D	12/02/21	01:45	03:56	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3793-DFTPP
Lab File ID: 5P80146.D
Instrument ID: GCMS5P
Injection Date: 12/08/21
Injection Time: 05:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	15562	30.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	16997	33.8		Pass
70	Less than 2.0% of mass 69	77	0.15	(0.45) [a]	Pass
127	40.0 - 60.0% of mass 198	24996	49.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	50360	100.0		Pass
199	5.0 - 9.0% of mass 198	3420	6.79		Pass
275	10.0 - 30.0% of mass 198	12879	25.6		Pass
365	1.0 - 100.0% of mass 198	1444	2.87		Pass
441	Present, but less than mass 443	4849	9.63	(80.8) [b]	Pass
442	40.0 - 100.0% of mass 198	31304	62.2		Pass
443	17.0 - 23.0% of mass 442	6001	11.9	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3793-CC3784	5P80147.D	12/08/21	05:20	00:16	Continuing cal 10
E5P3793-CC3785	5P80148.D	12/08/21	05:47	00:43	Continuing cal 10
OP36899-MB1	5P80150.D	12/08/21	06:40	01:36	Method Blank
ZZZZZZ	5P80151.D	12/08/21	07:07	02:03	(unrelated sample)
ZZZZZZ	5P80151.D	12/08/21	07:07	02:03	(unrelated sample)
ZZZZZZ	5P80152.D	12/08/21	07:34	02:30	(unrelated sample)
OP36899-BS1	5P80153.D	12/08/21	08:00	02:56	Blank Spike
OP36899-BSD	5P80154.D	12/08/21	08:27	03:23	Blank Spike Duplicate
ZZZZZZ	5P80155.D	12/08/21	08:54	03:50	(unrelated sample)
ZZZZZZ	5P80156.D	12/08/21	09:21	04:17	(unrelated sample)
ZZZZZZ	5P80157.D	12/08/21	09:47	04:43	(unrelated sample)
ZZZZZZ	5P80158.D	12/08/21	10:14	05:10	(unrelated sample)
JD35920-2	5P80159.D	12/08/21	10:41	05:37	HOFF MW-2DL
JD35920-4	5P80160.D	12/08/21	11:08	06:04	HOFF MW-2S
JD35920-5	5P80161.D	12/08/21	11:35	06:31	HOFF MW-7DL
JD35920-6	5P80162.D	12/08/21	12:02	06:58	HOFF DUP-113021
ZZZZZZ	5P80163.D	12/08/21	12:29	07:25	(unrelated sample)
ZZZZZZ	5P80163.D	12/08/21	12:29	07:25	(unrelated sample)
ZZZZZZ	5P80164.D	12/08/21	12:55	07:51	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3793-DFTPP	**Injection Date:**	12/08/21
Lab File ID:	5P80146.D	**Injection Time:**	05:04
Instrument ID:	GCMS5P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	5P80164.D	12/08/21	12:55	07:51	(unrelated sample)
ZZZZZZ	5P80165.D	12/08/21	13:22	08:18	(unrelated sample)
ZZZZZZ	5P80165.D	12/08/21	13:22	08:18	(unrelated sample)
ZZZZZZ	5P80166.D	12/08/21	13:49	08:45	(unrelated sample)
ZZZZZZ	5P80167.D	12/08/21	14:16	09:12	(unrelated sample)
ZZZZZZ	5P80168.D	12/08/21	14:42	09:38	(unrelated sample)
ZZZZZZ	5P80169.D	12/08/21	15:09	10:05	(unrelated sample)
ZZZZZZ	5P80170.D	12/08/21	15:36	10:32	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-DFTPP
Lab File ID: 5P80176.D
Instrument ID: GCMS5P
Injection Date: 12/09/21
Injection Time: 00:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18190	31.0		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	21015	35.8		Pass
70	Less than 2.0% of mass 69	84	0.14	(0.40) [a]	Pass
127	40.0 - 60.0% of mass 198	29550	50.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	58650	100.0		Pass
199	5.0 - 9.0% of mass 198	3881	6.62		Pass
275	10.0 - 30.0% of mass 198	14712	25.1		Pass
365	1.0 - 100.0% of mass 198	1822	3.11		Pass
441	Present, but less than mass 443	5848	9.97	(82.8) [b]	Pass
442	40.0 - 100.0% of mass 198	36738	62.6		Pass
443	17.0 - 23.0% of mass 442	7065	12.0	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3794-IC3794	5P80177.D	12/09/21	01:11	00:18	Initial cal 0.2
E5P3794-IC3794	5P80178.D	12/09/21	01:38	00:45	Initial cal 0.4
E5P3794-IC3794	5P80179.D	12/09/21	02:05	01:12	Initial cal 1
E5P3794-IC3794	5P80180.D	12/09/21	02:32	01:39	Initial cal 2
E5P3794-IC3794	5P80181.D	12/09/21	02:59	02:06	Initial cal 5
E5P3794-ICC3794	5P80182.D	12/09/21	03:26	02:33	Initial cal 10
E5P3794-IC3794	5P80183.D	12/09/21	03:53	03:00	Initial cal 16
E5P3794-IC3794	5P80184.D	12/09/21	04:19	03:26	Initial cal 20
E5P3794-ICV3794	5P80185.D	12/09/21	04:47	03:54	Initial cal verification 10
E5P3794-ICV3794	5P80186.D	12/09/21	05:13	04:20	Initial cal verification 10
E5P3794-ICV3794	5P80187.D	12/09/21	05:40	04:47	Initial cal verification 10
E5P3794-ICV3794	5P80188.D	12/09/21	06:07	05:14	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3795-DFTPP	**Injection Date:**	12/09/21
Lab File ID:	5P80191.D	**Injection Time:**	12:44
Instrument ID:	GCMS5P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18799	32.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	21518	37.4		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	28913	50.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	57581	100.0		Pass
199	5.0 - 9.0% of mass 198	3946	6.85		Pass
275	10.0 - 30.0% of mass 198	14549	25.3		Pass
365	1.0 - 100.0% of mass 198	1899	3.30		Pass
441	Present, but less than mass 443	5422	9.42	(86.8) [b]	Pass
442	40.0 - 100.0% of mass 198	32893	57.1		Pass
443	17.0 - 23.0% of mass 442	6248	10.9	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3795-ICV3794	5P80192.D	12/09/21	12:58	00:14	Initial cal verification 10
E5P3795-CC3794	5P80193.D	12/09/21	13:25	00:41	Continuing cal 10
E5P3795-CC3785	5P80194.D	12/09/21	13:51	01:07	Continuing cal 10
OP36390-MB1	5P80195.D	12/09/21	14:46	02:02	Method Blank
OP36390-BS1	5P80196.D	12/09/21	15:13	02:29	Blank Spike
OP36390-BSD	5P80197.D	12/09/21	15:40	02:56	Blank Spike Duplicate
ZZZZZZ	5P80198.D	12/09/21	16:07	03:23	(unrelated sample)
E5P3795-ECC3794	5P80199.D	12/09/21	16:57	04:13	Ending cal 10
E5P3795-ECC3785	5P80200.D	12/09/21	17:36	04:52	Ending cal 10

Instrument Performance Check (DFTPP)

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3796-DFTPP	**Injection Date:**	12/09/21
Lab File ID:	5P80202.D	**Injection Time:**	18:18
Instrument ID:	GCMS5P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18409	32.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	21762	38.0		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	29284	51.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	57328	100.0		Pass
199	5.0 - 9.0% of mass 198	4029	7.03		Pass
275	10.0 - 30.0% of mass 198	14390	25.1		Pass
365	1.0 - 100.0% of mass 198	1688	2.94		Pass
441	Present, but less than mass 443	5376	9.38	(83.8) [b]	Pass
442	40.0 - 100.0% of mass 198	33326	58.1		Pass
443	17.0 - 23.0% of mass 442	6415	11.2	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3796-CC3794	5P80203.D	12/09/21	18:34	00:16	Continuing cal 5
E5P3796-CC3785	5P80204.D	12/09/21	19:16	00:58	Continuing cal 5
ZZZZZZ	5P80210.D	12/09/21	21:57	03:39	(unrelated sample)
ZZZZZZ	5P80211.D	12/09/21	22:24	04:06	(unrelated sample)
ZZZZZZ	5P80212.D	12/09/21	22:51	04:33	(unrelated sample)
JD35920-3	5P80213.D	12/09/21	23:18	05:00	HOFF MW-2DU
ZZZZZZ	5P80214.D	12/09/21	23:44	05:26	(unrelated sample)
ZZZZZZ	5P80214.D	12/09/21	23:44	05:26	(unrelated sample)
ZZZZZZ	5P80215.D	12/10/21	00:11	05:53	(unrelated sample)
ZZZZZZ	5P80216.D	12/10/21	00:38	06:20	(unrelated sample)
ZZZZZZ	5P80218.D	12/10/21	01:32	07:14	(unrelated sample)
ZZZZZZ	5P80219.D	12/10/21	01:58	07:40	(unrelated sample)
ZZZZZZ	5P80220.D	12/10/21	02:25	08:07	(unrelated sample)
ZZZZZZ	5P80221.D	12/10/21	02:51	08:33	(unrelated sample)
ZZZZZZ	5P80222.D	12/10/21	03:18	09:00	(unrelated sample)
ZZZZZZ	5P80223.D	12/10/21	03:45	09:27	(unrelated sample)
ZZZZZZ	5P80224.D	12/10/21	04:11	09:53	(unrelated sample)
ZZZZZZ	5P80225.D	12/10/21	04:38	10:20	(unrelated sample)

Internal Standard Area Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2607-CC2551	**Injection Date:**	12/03/21
Lab File ID:	4P49792.D	**Injection Time:**	01:18
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	21512	6.80	31627	8.28	55807	10.40	26708	13.05
Upper Limit [a]	43024	7.30	63254	8.78	111614	10.90	53416	13.55
Lower Limit [b]	10756	6.30	15814	7.78	27904	9.90	13354	12.55

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP36899A-MB1	18596	6.80	27764	8.28	46983	10.40	21099	13.05
OP36899A-BS12	17727	6.80	25884	8.28	42451	10.40	19163	13.05
OP36899A-BSD12	18693	6.80	27163	8.27	44465	10.39	19395	13.05
OP36670A-BSD12	17655	6.80	26090	8.28	42059	10.40	19328	13.05
ZZZZZZ	22552	6.80	31485	8.27	51000	10.39	23306	13.05
ZZZZZZ	20250	6.80	27889	8.27	41425	10.39	18966	13.05
ZZZZZZ	20344	6.80	28517	8.27	43401	10.39	19188	13.05
ZZZZZZ	19036	6.80	26627	8.27	40097	10.39	18385	13.05
ZZZZZZ	20264	6.80	28216	8.27	41294	10.39	18100	13.05
ZZZZZZ	19852	6.80	27183	8.27	40465	10.39	18710	13.05
ZZZZZZ	18732	6.80	25984	8.27	38087	10.39	17076	13.05
ZZZZZZ	19742	6.80	27956	8.27	41933	10.39	18513	13.05
JD35920-2 [c]	19283	6.80	26438	8.27	41210	10.39	18974	13.05
JD35920-5 [c]	18942	6.80	26016	8.27	39417	10.39	17641	13.05
JD35920-6 [c]	19670	6.80	26786	8.27	38966	10.39	17593	13.05
JD35920-3 [c]	18778	6.80	24559	8.27	35578	10.40	18103	13.05

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Sample reextracted outside the holding time for confirmation.

Internal Standard Area Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2608-CC2551	**Injection Date:**	12/03/21
Lab File ID:	4P49816.D	**Injection Time:**	12:11
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	23529	6.79	34876	8.27	62539	10.39	31107	13.04
Upper Limit [a]	47058	7.29	69752	8.77	125078	10.89	62214	13.54
Lower Limit [b]	11765	6.29	17438	7.77	31270	9.89	15554	12.54

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
ZZZZZZ	34942	6.79	52042	8.27	88412	10.39	44639	13.04
ZZZZZZ	22301	6.79	32735	8.26	53628	10.38	26089	13.04
JD35920-4 [c]	21578	6.79	30594	8.26	48723	10.38	22163	13.04

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Sample reextracted outside the holding time for confirmation.

Internal Standard Area Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2620-CC2551	**Injection Date:**	12/12/21
Lab File ID:	4P50023.D	**Injection Time:**	10:42
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	24063	6.84	38217	8.32	74397	10.45	35390	13.11
Upper Limit [a]	48126	7.34	76434	8.82	148794	10.95	70780	13.61
Lower Limit [b]	12032	6.34	19109	7.82	37199	9.95	17695	12.61

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37001A-MB1	19138	6.85	32471	8.33	57895	10.45	27371	13.11
OP37001A-BS12	18964	6.84	31780	8.32	56794	10.45	27531	13.11
ZZZZZZ	19491	6.85	32080	8.33	55632	10.45	25822	13.11
ZZZZZZ	21010	6.84	35178	8.33	60695	10.45	28009	13.11
JD36109-3	20610	6.84	34128	8.32	58756	10.45	26792	13.11
ZZZZZZ	21715	6.84	35695	8.32	60536	10.45	27144	13.11
ZZZZZZ	22291	6.84	33776	8.32	56078	10.45	25333	13.11
ZZZZZZ	23060	6.84	37077	8.32	62233	10.45	28354	13.11
OP37001A-MS	20572	6.85	31874	8.33	53000	10.45	24538	13.11
OP37001A-MSD	21015	6.84	33008	8.33	55052	10.45	25146	13.11
ZZZZZZ	20260	6.84	32219	8.32	53184	10.45	22288	13.11
ZZZZZZ	20109	6.84	31954	8.32	52302	10.45	22211	13.11
JD35920-2 [c]	17883	6.84	29069	8.32	51580	10.45	22152	13.11
JD35920-5 [c]	18196	6.84	29341	8.32	51537	10.45	21768	13.11
JD35920-6 [c]	18579	6.84	30029	8.32	52151	10.45	22325	13.11
ZZZZZZ	21057	6.84	30593	8.32	45200	10.45	17980	13.11
ZZZZZZ	20852	6.84	41545	8.33	45962	10.45	19231	13.11
ZZZZZZ	19346	6.84	30499	8.32	51834	10.45	21233	13.11
ZZZZZZ	17724	6.84	27537	8.32	44839	10.45	18238	13.11
ZZZZZZ	20541	6.84	32121	8.32	53646	10.45	22013	13.11
ZZZZZZ	18937	6.84	30017	8.32	50465	10.45	19799	13.11
ZZZZZZ	19472	6.84	30848	8.32	50475	10.45	19170	13.11
JD35920-4 [c]	18208	6.84	27328	8.32	40915	10.45	16475[d]	13.11
JD35920-3 [c]	19221	6.84	25538	8.32	35468[d]	10.45	18687	13.11

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Sample extracted outside the holding time. Confirmation run.
(d) Internal standard failing low.

Internal Standard Area Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std: E5P3793-CC3784 **Injection Date:** 12/08/21
Lab File ID: 5P80147.D **Injection Time:** 05:20
Instrument ID: GCMS5P **Method:** SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	70123	4.66	256746	5.75	143999	7.84	231772	10.02	160420	14.21	231345	16.32
Upper Limit [a]	140246	5.16	513492	6.25	287998	8.34	463544	10.52	320840	14.71	462690	16.82
Lower Limit [b]	35062	4.16	128373	5.25	72000	7.34	115886	9.52	80210	13.71	115673	15.82

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP36899-MB1	68107	4.65	254610	5.75	144493	7.83	258733	10.02	187248	14.21	177475	16.32
ZZZZZZ	68241	4.65	259012	5.75	142545	7.83	253580	10.02	182145	14.21	164983	16.32
ZZZZZZ	68241	4.65	259012	5.75	142545	7.83	253580	10.02	182145	14.21	164983	16.32
ZZZZZZ	76003	4.65	278123	5.75	155088	7.83	268515	10.02	196106	14.21	178120	16.32
OP36899-BS1	64431	4.65	240551	5.75	139659	7.84	230919	10.02	161764	14.21	217074	16.32
OP36899-BSD [c]	62337	4.65	235773	5.75	131961	7.84	219172	10.02	166245	14.21	204153	16.32
ZZZZZZ	90244	4.65	349715	5.75	202817	7.83	378604	10.02	316502	14.21	339486	16.32
ZZZZZZ	92223	4.65	356172	5.75	198475	7.83	366773	10.02	307659	14.21	294748	16.32
ZZZZZZ	88049	4.65	343087	5.75	194410	7.83	355565	10.02	291216	14.21	311580	16.32
ZZZZZZ	89394	4.65	344594	5.75	196178	7.83	356279	10.02	277335	14.21	297640	16.32
JD35920-2	75399	4.65	286874	5.75	166995	7.83	295452	10.02	225569	14.21	213371	16.32
JD35920-4	65794	4.65	258792	5.75	147049	7.83	250747	10.02	176280	14.21	218219	16.32
JD35920-5	66344	4.65	252713	5.75	140904	7.83	250414	10.02	168488	14.21	199253	16.32
JD35920-6	65396	4.65	252697	5.75	146675	7.83	250591	10.02	176764	14.21	214995	16.32
ZZZZZZ	68318	4.65	264207	5.75	144751	7.84	239802	10.02	162387	14.21	213678	16.32
ZZZZZZ	68318	4.65	264207	5.75	144751	7.84	239802	10.02	162387	14.21	213678	16.32
ZZZZZZ	67981	4.65	266162	5.75	146964	7.83	233011	10.02	181984	14.21	223436	16.33
ZZZZZZ	67981	4.65	266162	5.75	146964	7.83	233011	10.02	181984	14.21	223436	16.33
ZZZZZZ	69794	4.65	283086	5.75	141019	7.84	218403	10.02	199871	14.21	246256	16.33
ZZZZZZ	69794	4.65	283086	5.75	141019	7.84	218403	10.02	199871	14.21	246256	16.33
ZZZZZZ	68699	4.65	269508	5.75	156344	7.84	271128	10.02	189875	14.21	228733	16.32
ZZZZZZ	67555	4.65	263176	5.75	151290	7.84	265336	10.02	194249	14.21	232046	16.32
ZZZZZZ	70338	4.65	268228	5.75	151698	7.84	256255	10.02	187606	14.21	228750	16.32
ZZZZZZ	65398	4.65	249926	5.75	141800	7.84	241469	10.02	176522	14.21	212957	16.32
ZZZZZZ	68492	4.65	269558	5.75	151701	7.84	252214	10.02	176211	14.21	225790	16.32

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-d10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E5P3793-CC3784	**Injection Date:**	12/08/21
Lab File ID:	5P80147.D	**Injection Time:**	05:20
Instrument ID:	GCMS5P	**Method:**	SW846 8270E

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT	IS 6 AREA	IS 6 RT

(c) Recovery indicates possible low bias. Since balnk spike recoveries within control limits, data are qualified and reported.

Internal Standard Area Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E5P3796-CC3794	**Injection Date:**	12/09/21
Lab File ID:	5P80203.D	**Injection Time:**	18:34
Instrument ID:	GCMS5P	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	84739	4.64	317987	5.74	180677	7.81	299456	10.00	249035	14.19	277582	16.30
Upper Limit [a]	169478	5.14	635974	6.24	361354	8.31	598912	10.50	498070	14.69	555164	16.80
Lower Limit [b]	42370	4.14	158994	5.24	90339	7.31	149728	9.50	124518	13.69	138791	15.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	77271	4.64	298914	5.74	169756	7.81	295705	9.99	231491	14.18	259114	16.30
ZZZZZZ	85875	4.64	334294	5.74	188500	7.81	320718	9.99	250368	14.18	259673	16.30
ZZZZZZ	81056	4.64	312066	5.74	175408	7.81	305755	9.99	239477	14.18	250261	16.30
JD35920-3	96698	4.64	372099	5.74	196559	7.81	307527	9.99	246475	14.18	255703	16.30
ZZZZZZ	80768	4.64	278476	5.74	154377	7.82	252435	10.01	241004	14.21	272117	16.32
ZZZZZZ	80768	4.64	278476	5.74	154377	7.82	252435	10.01	241004	14.21	272117	16.32
ZZZZZZ	103800	4.65	383339	5.74	204827	7.82	318368	10.00	224596	14.19	236965	16.31
ZZZZZZ	110837	4.65	413139	5.74	223767	7.82	350600	10.00	244296	14.19	257219	16.31
ZZZZZZ	155724	4.65	592780	5.74	315221	7.82	500993	10.00	374190	14.19	380061	16.31
ZZZZZZ	149418	4.65	570835	5.74	301964	7.82	482883	10.00	359498	14.19	366278	16.31
ZZZZZZ	158223	4.65	576731	5.74	283662	7.82	438308	10.00	369802	14.20	411598	16.31
ZZZZZZ	143880	4.65	530862	5.74	253890	7.82	381542	10.01	329919	14.20	366637	16.32
ZZZZZZ	180139[c]	4.65	686610[c]	5.74	364689[c]	7.82	598213[c]	10.00	448199[c]	14.20	456891[c]	16.31
ZZZZZZ	162475	4.65	623193	5.74	331895	7.82	531191	10.00	413280	14.20	415453	16.31
ZZZZZZ	164731	4.65	623841	5.74	335929	7.82	530645	10.00	414631	14.19	421475	16.31
ZZZZZZ	149263	4.65	570407	5.74	304567	7.82	496534	10.00	397131	14.19	401918	16.31

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-d10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Internal standard double spiked; The recovery re-calculated based on the spike amount.

Surrogate Recovery Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8270E **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD35920-2	5P80159.D	25	15	58	63	59	66
JD35920-3	5P80213.D	11	10	39	32	39	37
JD35920-4	5P80160.D	23	15	72	63	65	69
JD35920-5	5P80161.D	28	18	73	74	75	96
JD35920-6	5P80162.D	28	21	79	60	65	102
OP36899-BS1	5P80153.D	55	38	87	73	75	119
OP36899-BSD	5P80154.D	13	13	64	30	40	89
OP36899-MB1	5P80150.D	41	27	70	71	71	96

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-73%
S2 = Phenol-d5	10-64%
S3 = 2,4,6-Tribromophenol	31-130%
S4 = Nitrobenzene-d5	28-126%
S5 = 2-Fluorobiphenyl	26-114%
S6 = Terphenyl-d14	16-122%

Surrogate Recovery Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8270E BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JD35920-2	4P50036.D	85	67	89
JD35920-2	4P49806.D	88	77	71
JD35920-3	4P50047.D	84	68	45
JD35920-3	4P49814.D	46	47	42
JD35920-4	4P50046.D	84	75	85
JD35920-4	4P49823.D	89	80	72
JD35920-5	4P50037.D	91	73	94
JD35920-5	4P49808.D	105	95	96
JD35920-6	4P50038.D	84	66	88
JD35920-6	4P49809.D	83	84	108
OP36899A-BS12	4P49794.D	111	95	110
OP36899A-BSD12	4P49795.D	109	98	112
OP36899A-MB1	4P49793.D	104	86	103

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	29-124%
S2 = 2-Fluorobiphenyl	23-122%
S3 = Terphenyl-d14	22-130%

Initial Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICC2551
Lab FileID: 4P48505.D

Response Factor Report MS4P

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Oct 21 09:41:06 2021
Response via : Initial Calibration

Calibration Files
1.0 =4p48504.D 0.5 =4p48507.D 0.2 =4p48505.D 0.1 =4p48508.D
0.04=4p48511.D 0.02=4p48506.D 0.01=4p48514.D .004=4p48509.D
.002=4p48513.D = = =

Compound	1.0	0.5	0.2	0.1	0.04	0.02	0.01	.004	.002	Avg	%RSD
1) I 1-Methylnaphthalene-d	----------ISTD----------										
2) 1,4-Dioxane	0.206	0.203	0.178	0.181	0.174	0.202	0.164			0.187	9.04
3) 2-Fluorophenol	0.582	0.514	0.506	0.461	0.513	0.470	0.501	0.454	0.465	0.496	8.04
4) Phenol-d5	1.054	0.987	0.918	0.896	0.920	0.922	0.940	0.923	0.913	0.941	5.21
5) Phenol	1.131	1.056	0.970	0.946	0.993	0.960	0.986	0.979	0.971	0.999	5.84
6) bis(2-Chloroethyl)ether										0.000#	-1.00
7) Nitrobenzene-d5	0.849	0.801	0.721	0.721	0.760	0.730	0.787	0.768	0.777	0.768	5.43
8) Naphthalene	2.530	2.312	2.144	2.041	2.083	2.189	2.226	2.349	2.732	2.290	9.73
9) Hexachlorobutadiene	0.572	0.534	0.492	0.481	0.506	0.580	0.602	0.705		0.559	13.17
10) 2-Methylnaphthalene	1.361	1.251	1.150	1.078	1.084	1.156	1.168	1.239	1.280	1.196	7.83
11) 1-Methylnaphthalene	1.306	1.184	1.089	0.986	1.066	1.129	1.180	1.328	1.095	1.152	9.68
12) Hexachlorocyclopentadiene	0.537	0.468	0.399	0.381	0.419	0.447	0.424	0.637		0.464	18.25
13) I Fluorene-d10	----------ISTD----------										
14) 2-Fluorobiphenyl	1.149	1.054	0.968	0.971	0.989	0.997	1.031	1.011	1.014	1.020	5.44
15) Acenaphthylene	1.752	1.539	1.377	1.378	1.378	1.346	1.456	1.556	1.630	1.490	9.33
16) Acenaphthene	1.065	0.980	0.889	0.882	0.884	0.874	0.892	0.974	1.120	0.951	9.49
17) Fluorene	1.302	1.154	1.064	1.043	1.101	1.078	1.121	1.145	1.320	1.148	8.67
18) 4,6-dinitro-2-methylphenol	0.192	0.150	0.113	0.103	0.094	0.074	0.065			0.113	39.49
---- Quadratic regression ---- Coefficient = 0.9997											
Response Ratio = -0.00290 + 0.10101 *A + 0.01473 *A^2											
19) 2,4,6-Tribromophenol	0.189	0.168	0.150	0.149	0.146	0.142	0.142	0.144	0.143	0.153	10.33
20) Fluoranthene-d10	----------ISTD----------										
21) Hexachlorobenzene	0.261	0.232	0.215	0.219	0.214	0.222	0.266	0.297	0.347	0.252	17.96

8.6.1

8

Initial Calibration Summary

Job Number: JD35920 **Sample:** E4P2551-ICC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P48505.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
22)  Pentachlorophenol
          0.171 0.155 0.133 0.126 0.130 0.127 0.113 0.151 0.172        0.142   14.84
23)  Phenanthrene
          1.135 1.022 0.940 0.910 0.908 0.975 1.076 1.203 1.528        1.078   18.32
24)  Anthracene
          1.127 1.034 0.934 0.935 0.964 0.927 1.010 1.240 1.129        1.033   10.65
25)  Fluoranthene
          1.239 1.113 1.027 0.988 1.079 1.160 1.248                    1.122    8.91
26)  Pyrene
          1.313 1.175 1.083 1.036 1.087 1.149 1.179 1.460 1.628        1.235   15.94
27)  Terphenyl-d14
          0.682 0.592 0.555 0.540 0.559 0.567 0.552 0.563 0.547        0.573    7.57
28)  Benzo[a]anthracene
          1.216 1.049 0.962 0.917 0.938 1.073 1.091 1.579              1.103   19.55
29)  Chrysene
          1.148 1.037 0.956 0.957 1.011 1.204 1.251                    1.081   11.10

30) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
31)  Benzo[b]fluoranthene
          1.819 1.630 1.574 1.645 2.088 2.859 3.428                    2.149   33.48
           ---- Quadratic regression ----  Coefficient =  0.9993
             Response Ratio = 0.02961 + 1.38761 *A + 0.32444 *A^2

32)  Benzo[k]fluoranthene
          1.573 1.493 1.446 1.446 1.587 1.734 2.278                    1.651   17.81
33)  Benzo[a]pyrene
          1.653 1.484 1.407 1.384 1.502 1.546 1.622                    1.514    6.69
34)  Indeno[1,2,3-cd]pyrene
          1.699 1.573 1.519 1.552 1.726 2.156 2.405                    1.804   18.94
35)  Dibenz[a,h]anthracene
          1.463 1.337 1.258 1.292 1.351 1.563 1.572                    1.405    9.11
36)  Benzo[g,h,i]perylene
          1.512 1.390 1.353 1.403 1.573 1.942                          1.529   14.31
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4P2551SIMLVI.M        Thu Oct 21 09:57:50 2021   YING
```

8.6.1

8

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICV2551
Lab FileID: 4P48512.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2551\4p48512.D Vial: 11
Acq On : 21 Oct 2021 3:15 am Operator: chriss2
Sample : icv2551-0.2 Inst : MS4P
Misc : op35776a,e4p2551,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Oct 21 09:41:06 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	100	0.00	7.10
2	t	1,4-Dioxane	0.187	0.187	0.0	105	0.02	2.16
5		Phenol	0.999	0.997	0.2	103	0.00	4.73
8	t	Naphthalene	2.290	1.983	13.4	92	0.00	6.35
9	t	Hexachlorobutadiene	0.559	0.471	15.7	96	0.00	6.47
10	t	2-Methylnaphthalene	1.196	1.097	8.3	95	0.00	7.04
11	t	1-Methylnaphthalene	1.152	1.045	9.3	96	0.00	7.13
12		Hexachlorocyclopentadiene	0.464	0.814	-75.4#	204#	0.00	7.19
13	I	Fluorene-d10	1.000	1.000	0.0	94	0.00	8.58
15	t	Acenaphthylene	1.490	1.201	19.4	82	0.00	7.92
16	t	Acenaphthene	0.951	0.830	12.7	88	0.00	8.09
17	t	Fluorene	1.148	1.009	12.1	89	0.00	8.60
		----------	True	Calc.	% Drift	----------		
18		4,6-dinitro-2-methylpheno	1000.000	1168.570	-16.9	117	0.00	8.66
		----------	AvgRF	CCRF	% Dev	----------		
20		Fluoranthene-d10	1.000	1.000	0.0	95	0.00	10.71
21	t	Hexachlorobenzene	0.252	0.210	16.7	93	0.01	9.15
22	t	Pentachlorophenol	0.142	0.152	-7.0	109	0.00	9.34
23	t	Phenanthrene	1.078	0.903	16.2	91	0.01	9.55
24	t	Anthracene	1.033	0.890	13.8	91	0.00	9.60
25	t	Fluoranthene	1.122	0.964	14.1	89	0.00	10.73
26	t	Pyrene	1.235	0.963	22.0	85	0.00	10.95
28	t	Benzo[a]anthracene	1.103	0.838	24.0	83	0.00	12.14
29	t	Chrysene	1.081	0.868	19.7	86	0.00	12.17
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	85	0.00	13.40
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[b]fluoranthene	200.000	215.764	-7.9	92	0.00	13.13
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Benzo[k]fluoranthene	1.651	1.458	11.7	86	0.00	13.15
33	t	Benzo[a]pyrene	1.514	1.429	5.6	86	0.00	13.42
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.458	19.2	82	0.00	14.60
35	t	Dibenz[a,h]anthracene	1.405	1.209	14.0	82	0.00	14.62
36	t	Benzo[g,h,i]perylene	1.529	1.345	12.0	85	0.00	14.93

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICV2551
Lab FileID: 4P48512.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p48505.D M4P2551SIMLVI.M Thu Oct 21 09:55:50 2021 YING

Continuing Calibration Summary

Job Number: JD35920 **Sample:** E4P2607-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P49792.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2607\4p49792.D Vial: 2
Acq On : 3 Dec 2021 1:18 am Operator: chriss2
Sample : cc2551-0.1 Inst : MS4P
Misc : op36606a,e4p2607,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Nov 23 15:50:49 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	81	-0.05	6.80
2	t	1,4-Dioxane	0.187	0.223	-19.3	100	-0.06	1.84
3	S	2-Fluorophenol	0.496	0.570	-14.9	100	-0.05	3.52
4	S	Phenol-d5	0.941	1.090	-15.8	98	-0.04	4.47
5		Phenol	0.999	1.145	-14.6	98	-0.03	4.48
7	S	Nitrobenzene-d5	0.768	1.107	-44.1#	124	-0.05	5.33
8	t	Naphthalene	2.290	2.388	-4.3	94	-0.05	6.05
9	t	Hexachlorobutadiene	0.559	0.742	-32.7#	124	-0.05	6.18
10	t	2-Methylnaphthalene	1.196	1.336	-11.7	100	-0.05	6.74
11	t	1-Methylnaphthalene	1.152	1.273	-10.5	104	-0.05	6.84
12		Hexachlorocyclopentadiene	0.464	0.623	-34.3#	132	-0.05	6.90
13	I	Fluorene-d10	1.000	1.000	0.0	79	-0.05	8.28
14	S	2-Fluorobiphenyl	1.020	1.182	-15.9	96	-0.05	7.12
15	t	Acenaphthylene	1.490	1.548	-3.9	89	-0.04	7.62
16	t	Acenaphthene	0.951	1.095	-15.1	98	-0.04	7.80
17	t	Fluorene	1.148	1.244	-8.4	94	-0.05	8.30
		----------	True	Calc.	% Drift	----------		
18		4,6-dinitro-2-methylpheno	500.000	655.974	-31.2#	111	-0.05	8.37
		----------	AvgRF	CCRF	% Dev	----------		
19	S	2,4,6-Tribromophenol	0.153	0.213	-39.2#	113	-0.05	8.54
20		Fluoranthene-d10	1.000	1.000	0.0	81	-0.05	10.40
21	t	Hexachlorobenzene	0.252	0.291	-15.5	108	-0.05	8.84
22	t	Pentachlorophenol	0.142	0.145	-2.1	93	-0.05	9.04
23	t	Phenanthrene	1.078	1.090	-1.1	97	-0.05	9.24
24	t	Anthracene	1.033	1.075	-4.1	93	-0.05	9.29
25	t	Fluoranthene	1.122	1.167	-4.0	96	-0.06	10.41
26	t	Pyrene	1.235	1.199	2.9	94	-0.06	10.63
27	S	Terphenyl-d14	0.573	0.643	-12.2	97	-0.05	10.81
28	t	Benzo[a]anthracene	1.103	0.937	15.0	83	-0.05	11.81
29	t	Chrysene	1.081	0.975	9.8	83	-0.05	11.85
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	62	-0.05	13.05
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[b]fluoranthene	100.000	106.236	-6.2	66	-0.05	12.80
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Benzo[k]fluoranthene	1.651	1.736	-5.1	75	-0.05	12.82

Continuing Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2607-CC2551
Lab FileID: 4P49792.D

33	t	Benzo[a]pyrene	1.514	1.672	-10.4	75	-0.05	13.07
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.578	12.5	63	-0.07	14.11
35	t	Dibenz[a,h]anthracene	1.405	1.328	5.5	64	-0.08	14.13
36	t	Benzo[g,h,i]perylene	1.529	1.412	7.7	63	-0.08	14.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0

4p49264.D M4P2551SIMLVI.M Fri Dec 03 15:30:36 2021 YING

Continuing Calibration Summary

Job Number: JD35920 **Sample:** E4P2608-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P49816.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2608\4p49816.D Vial: 2
Acq On : 3 Dec 2021 12:11 pm Operator: kristis
Sample : cc2551-0.2 Inst : MS4P
Misc : op36606a,e4p2608,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Dec 03 15:30:51 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	77	0.00	6.79
2	t	1,4-Dioxane	0.187	0.163	12.8	70	-0.01	1.83
3	S	2-Fluorophenol	0.496	0.591	-19.2	90	0.00	3.52
4	S	Phenol-d5	0.941	1.085	-15.3	91	0.00	4.47
5		Phenol	0.999	1.131	-13.2	90	0.00	4.48
7	S	Nitrobenzene-d5	0.768	1.096	-42.7#	117	0.00	5.33
8	t	Naphthalene	2.290	2.385	-4.1	85	0.00	6.05
9	t	Hexachlorobutadiene	0.559	0.731	-30.8#	114	0.00	6.18
10	t	2-Methylnaphthalene	1.196	1.329	-11.1	89	0.00	6.73
11	t	1-Methylnaphthalene	1.152	1.283	-11.4	90	0.00	6.83
12		Hexachlorocyclopentadiene	0.464	0.604	-30.2#	116	0.00	6.89
13	I	Fluorene-d10	1.000	1.000	0.0	72	0.00	8.27
14	S	2-Fluorobiphenyl	1.020	1.172	-14.9	87	0.00	7.11
15	t	Acenaphthylene	1.490	1.638	-9.9	86	0.00	7.62
16	t	Acenaphthene	0.951	1.090	-14.6	88	-0.02	7.78
17	t	Fluorene	1.148	1.233	-7.4	84	0.00	8.30
		----------	True	Calc.	% Drift	----------		
18		4,6-dinitro-2-methylpheno	1000.000	1411.885	-41.2#	113	0.00	8.36
		----------	AvgRF	CCRF	% Dev	----------		
19	S	2,4,6-Tribromophenol	0.153	0.224	-46.4#	108	0.00	8.53
20		Fluoranthene-d10	1.000	1.000	0.0	77	0.00	10.39
21	t	Hexachlorobenzene	0.252	0.294	-16.7	104	-0.01	8.83
22	t	Pentachlorophenol	0.142	0.128	9.9	74	0.00	9.04
23	t	Phenanthrene	1.078	1.063	1.4	87	0.00	9.24
24	t	Anthracene	1.033	1.074	-4.0	88	-0.01	9.28
25	t	Fluoranthene	1.122	1.161	-3.5	87	0.00	10.41
26	t	Pyrene	1.235	1.200	2.8	85	0.00	10.62
27	S	Terphenyl-d14	0.573	0.628	-9.6	87	0.00	10.80
28	t	Benzo[a]anthracene	1.103	1.056	4.3	84	0.00	11.81
29	t	Chrysene	1.081	1.020	5.6	82	0.00	11.84
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	62	-0.01	13.04
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[b]fluoranthene	200.000	235.303	-17.7	74	0.00	12.79
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Benzo[k]fluoranthene	1.651	1.765	-6.9	76	0.00	12.81

Continuing Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2608-CC2551
Lab FileID: 4P49816.D

33	t	Benzo[a]pyrene	1.514	1.721	-13.7	76	-0.01	13.06
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.696	6.0	70	0.00	14.10
35	t	Dibenz[a,h]anthracene	1.405	1.401	0.3	70	0.00	14.13
36	t	Benzo[g,h,i]perylene	1.529	1.447	5.4	67	-0.02	14.38

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p49564.D M4P2551SIMLVI.M Fri Dec 03 16:50:00 2021 YING

Continuing Calibration Summary

Job Number: JD35920 **Sample:** E4P2620-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50023.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2620\4p50023.D Vial: 2
Acq On : 12 Dec 2021 10:42 am Operator: kristis
Sample : cc2551-0.1 Inst : MS4P
Misc : op36606a,e4p2620,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Dec 03 16:51:52 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	90	0.05	6.84
2	t	1,4-Dioxane	0.187	0.231	-23.5#	115	0.07	1.89
3	S	2-Fluorophenol	0.496	0.586	-18.1	115	0.03	3.55
4	S	Phenol-d5	0.941	1.042	-10.7	105	0.03	4.50
5		Phenol	0.999	1.100	-10.1	105	0.03	4.51
7	S	Nitrobenzene-d5	0.768	1.136	-47.9#	142	0.04	5.37
8	t	Naphthalene	2.290	2.267	1.0	100	0.05	6.09
9	t	Hexachlorobutadiene	0.559	0.752	-34.5#	141	0.04	6.22
10	t	2-Methylnaphthalene	1.196	1.304	-9.0	109	0.05	6.78
11	t	1-Methylnaphthalene	1.152	1.232	-6.9	113	0.05	6.88
12		Hexachlorocyclopentadiene	0.464	0.491	-5.8	116	0.05	6.94
13	I	Fluorene-d10	1.000	1.000	0.0	96	0.05	8.32
14	S	2-Fluorobiphenyl	1.020	1.117	-9.5	110	0.05	7.16
15	t	Acenaphthylene	1.490	1.402	5.9	97	0.05	7.67
16	t	Acenaphthene	0.951	1.011	-6.3	110	0.06	7.84
17	t	Fluorene	1.148	1.244	-8.4	114	0.06	8.35
		----------	True	Calc.	% Drift	----------		
18		4,6-dinitro-2-methylpheno	500.000	731.898	-46.4#	152	0.06	8.42
		----------	AvgRF	CCRF	% Dev	----------		
19	S	2,4,6-Tribromophenol	0.153	0.228	-49.0#	146	0.06	8.59
20		Fluoranthene-d10	1.000	1.000	0.0	108	0.06	10.45
21	t	Hexachlorobenzene	0.252	0.284	-12.7	141	0.05	8.88
22	t	Pentachlorophenol	0.142	0.102	28.2#	87	0.05	9.09
23	t	Phenanthrene	1.078	1.057	1.9	126	0.05	9.29
24	t	Anthracene	1.033	0.952	7.8	110	0.06	9.34
25	t	Fluoranthene	1.122	1.184	-5.5	130	0.06	10.47
26	t	Pyrene	1.235	1.166	5.6	122	0.07	10.69
27	S	Terphenyl-d14	0.573	0.669	-16.8	134	0.06	10.86
28	t	Benzo[a]anthracene	1.103	0.903	18.1	107	0.06	11.87
29	t	Chrysene	1.081	1.039	3.9	118	0.06	11.90
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	82	0.07	13.11
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[b]fluoranthene	100.000	105.630	-5.6	88	0.06	12.85
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Benzo[k]fluoranthene	1.651	1.991	-20.6#	114	0.06	12.88

Continuing Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2620-CC2551
Lab FileID: 4P50023.D

33	t	Benzo[a]pyrene	1.514	1.707	-12.7	102	0.06	13.13
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.500	16.9	80	0.09	14.19
35	t	Dibenz[a,h]anthracene	1.405	1.272	9.5	81	0.09	14.22
36	t	Benzo[g,h,i]perylene	1.529	1.350	11.7	79	0.10	14.48

(#) = Out of Range SPCC's out = 0 CCC's out = 0

4p49792.D M4P2551SIMLVI.M Mon Dec 13 09:17:19 2021 YING

Initial Calibration Summary

Job Number: JD35920 **Sample:** E5P3784-ICC3784
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P79946.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report MS5P

Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Wed Dec 01 18:12:31 2021
Response via : Initial Calibration

Calibration Files
10 =5p79944.D 20 =5p79940.D 16 =5p79942.D 5 =5p79946.D
2 =5p79947.D 1 =5p79945.D 0.4 =5p79941.D 0.2 =5p79943.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.511	0.557	0.552	0.514	0.478	0.487	0.515	0.643	0.532	9.88
3) Pyridine	1.368	1.411	1.438	1.348	1.249	1.237	1.076	1.126	1.282	10.32
4) N-Nitrosodim	0.770	0.814	0.803	0.727	0.697	0.701	0.717	0.686	0.739	6.74
5) 2-Fluorophen	1.348	1.399	1.424	1.323	1.269	1.294	1.180	1.181	1.302	6.98
6) Indene	2.295	2.160	2.240	2.333	2.280	2.377	2.308	2.304	2.287	2.83
7) Cumene	3.121	3.079	3.183	3.075	2.944	3.044	2.994	2.996	3.055	2.52
8) Phenol-d5	1.761	1.784	1.790	1.679	1.645	1.647	1.560	1.568	1.679	5.46
9) Phenol	1.685	1.678	1.679	1.647	1.594	1.606	1.647	1.565	1.637	2.73
10) Aniline	2.087	2.014	2.070	2.085	1.979	2.029	1.935	1.959	2.020	2.89
11) bis(2-Chloro	1.327	1.283	1.339	1.332	1.281	1.250	1.255	1.233	1.287	3.18
12) 2-Chlorophen	1.396	1.353	1.391	1.387	1.358	1.462	1.433	1.385	1.396	2.61
13) Decane	1.295	1.219	1.268	1.294	1.251	1.330	1.446	1.441	1.318	6.39
14) 1,3-Dichloro	1.557	1.511	1.560	1.552	1.539	1.546	1.613	1.511	1.549	2.09
15) 1,4-Dichloro	1.508	1.475	1.506	1.490	1.483	1.515	1.503	1.436	1.489	1.73
16) Benzyl alcoh	0.949	0.938	0.958	0.909	0.890	0.891	0.919	0.826	0.910	4.63
17) 1,2-Dichloro	1.467	1.414	1.449	1.486	1.467	1.501	1.407	1.428	1.452	2.34
18) Acetophenone	1.757	1.663	1.737	1.781	1.816	1.849	1.787	1.856	1.781	3.54
19) 2-Methylphen	1.250	1.232	1.252	1.236	1.198	1.232	1.209	1.254	1.233	1.64
20) 2,2'-oxybis(	1.640	1.548	1.611	1.645	1.641	1.778	1.846	1.770	1.685	6.00
21) 3&4-Methylph	1.297	1.253	1.296	1.282	1.262	1.307	1.310	1.199	1.276	2.91
22) n-Nitroso-di	0.808	0.758	0.783	0.825	0.816	0.874	0.907	0.922	0.837	7.05
23) Hexachloroet	0.534	0.532	0.535	0.530	0.522	0.502	0.531	0.564	0.531	3.20
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.303	0.303	0.304	0.302	0.296	0.303	0.295	0.315	0.303	1.98
26) Nitrobenzene	0.295	0.295	0.296	0.302	0.293	0.309	0.288	0.299	0.297	2.07
27) Quinoline	0.717	0.724	0.728	0.715	0.686	0.679	0.670	0.689	0.701	3.18
28) Isophorone	0.649	0.650	0.649	0.629	0.604	0.628	0.625	0.628	0.633	2.55
29) 2-Nitropheno	0.187	0.180	0.187	0.184	0.181	0.177	0.169	0.177	0.180	3.39
30) 2,4-Dimethyl	0.326	0.321	0.326	0.335	0.325	0.334	0.352	0.336	0.332	2.93
31) Benzoic acid	0.153	0.155	0.157	0.150	0.143	0.099			0.143	15.52
32) bis(2-Chloro	0.401	0.402	0.407	0.397	0.401	0.400	0.384	0.394	0.398	1.72
33) 2,4-Dichloro	0.291	0.291	0.294	0.292	0.283	0.289	0.262	0.283	0.286	3.68
34) 2,6-Dichloro	0.275	0.271	0.272	0.279	0.273	0.268	0.268	0.260	0.271	2.12
35) 1,3,5-Trichl	0.326	0.320	0.330	0.334	0.320	0.319	0.308	0.315	0.322	2.57
36) 1,2,4-Trichl	0.323	0.318	0.324	0.324	0.311	0.320	0.322	0.325	0.321	1.46
37) 1,2,3-Trichl	0.290	0.284	0.290	0.295	0.296	0.298	0.294	0.320	0.296	3.57
38) Naphthalene	0.987	0.973	0.998	1.002	0.986	0.996	0.998	0.929	0.984	2.44
39) 4-Chloroanil	0.430	0.430	0.430	0.429	0.413	0.420	0.425	0.426	0.426	1.41
40) 2,3-Dichloro	0.356	0.348	0.344	0.348	0.347	0.345	0.359	0.344	0.349	1.62
41) Hydroquinone	0.343	0.345	0.343	0.337	0.315	0.309	0.285	0.274	0.319	8.75
42) Hexachlorobu	0.180	0.179	0.180	0.179	0.173	0.174	0.171	0.172	0.176	2.22
43) 4-Chloro-3-m	0.289	0.289	0.291	0.281	0.270	0.252	0.267	0.248	0.274	6.14
44) 2-Methylnaph	0.637	0.621	0.638	0.642	0.633	0.613	0.614	0.623	0.628	1.77
45) 1-Methylnaph	0.600	0.582	0.591	0.604	0.593	0.596	0.595	0.610	0.596	1.40

Initial Calibration Summary

Job Number: JD35920 **Sample:** E5P3784-ICC3784
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P79946.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

46)	I Acenaphthene-d10	ISTD									
47)	Hexachlorocy	0.362	0.373	0.373	0.362	0.350	0.359	0.338	0.343	0.358	3.64
48)	1,2,4,5-Tetr	0.535	0.527	0.542	0.555	0.556	0.585	0.544	0.563	0.551	3.27
49)	2,4,6-Trichl	0.363	0.375	0.373	0.367	0.358	0.360	0.354	0.319	0.359	4.87
50)	2,4,5-Trichl	0.376	0.369	0.373	0.365	0.359	0.380	0.402	0.353	0.372	4.02
51)	2-Fluorobiph	1.313	1.283	1.318	1.312	1.321	1.395	1.365	1.387	1.337	3.02
52)	2-Chloronaph	1.078	1.049	1.069	1.106	1.109	1.149	1.117	1.118	1.099	2.92
53)	Biphenyl	1.474	1.478	1.510	1.480	1.489	1.538	1.500	1.541	1.501	1.76
54)	2-Nitroanili	0.259	0.260	0.268	0.257	0.246	0.256	0.232	0.240	0.252	4.66
55)	Dimethylphth	1.314	1.302	1.332	1.273	1.239	1.282	1.237	1.310	1.286	2.73
56)	Acenaphthyle	1.665	1.649	1.678	1.653	1.612	1.690	1.713	1.664	1.665	1.81
57)	2,6-Dinitrot	0.272	0.267	0.274	0.272	0.270	0.257	0.246	0.239	0.262	5.09
58)	3-Nitroanili	0.324	0.335	0.339	0.322	0.309	0.312	0.292	0.304	0.317	5.03
59)	Acenaphthene	1.145	1.127	1.175	1.160	1.130	1.180	1.155	1.114	1.148	2.04
60)	2,4-Dinitrop	0.144	0.155	0.150	0.139	0.134	0.119	0.105		0.135	13.15
61)	4-Nitropheno	0.130	0.145	0.144	0.135	0.130	0.128	0.129		0.134	5.32
62)	Dibenzofuran	1.595	1.573	1.616	1.642	1.615	1.632	1.600	1.605	1.610	1.35
63)	2,4-Dinitrot	0.329	0.325	0.337	0.331	0.324	0.312	0.320	0.324	0.325	2.24
64)	2,3,4,6-Tetr	0.306	0.330	0.319	0.305	0.291	0.280	0.278	0.272	0.298	6.95
65)	Diethylphtha	1.264	1.277	1.287	1.253	1.223	1.256	1.263	1.208	1.254	2.11
66)	Fluorene	1.282	1.270	1.299	1.291	1.297	1.310	1.311	1.303	1.295	1.08
67)	4-Chlorophen	0.590	0.578	0.588	0.605	0.602	0.628	0.630	0.614	0.604	3.10
68)	4-Nitroanili	0.281	0.304	0.301	0.304	0.297	0.306	0.290	0.331	0.302	4.76
69)	I Phenanthrene-d10	ISTD									
70)	4,6-Dinitro-	0.101	0.104	0.103	0.100	0.090	0.086	0.074		0.094	11.98
71)	n-Nitrosodip	0.659	0.658	0.669	0.640	0.608	0.634	0.653	0.620	0.642	3.30
72)	Pentachloron	0.043	0.045	0.046	0.044	0.041	0.040			0.043#	5.18
73)	1,2-Diphenyl	0.693	0.672	0.696	0.671	0.647	0.669	0.673	0.674	0.674	2.23
74)	2,4,6-Tribro	0.124	0.133	0.130	0.122	0.109	0.114	0.112	0.116	0.120	7.39
75)	4-Bromopheny	0.254	0.257	0.257	0.233	0.221	0.232	0.222	0.228	0.238	6.52
76)	Hexachlorobe	0.269	0.273	0.271	0.262	0.257	0.263	0.248	0.264	0.264	3.15
77)	Pentachlorop	0.155	0.177	0.170	0.146	0.128	0.125	0.134	0.127	0.145	13.90
78)	Phenanthrene	1.044	1.045	1.049	1.058	1.014	1.050	1.038	1.174	1.059	4.55
79)	Anthracene	1.081	1.090	1.101	1.084	1.027	1.064	1.111	1.051	1.076	2.56
80)	Carbazole	1.029	1.105	1.095	1.034	0.963	0.961	1.081	1.082	1.044	5.49
81)	Di-n-butylph	1.332	1.462	1.433	1.308	1.195	1.205	1.211	1.290	1.305	7.82
82)	Fluoranthene	1.184	1.343	1.297	1.169	1.090	1.120	1.203	1.276	1.210	7.30
83)	Octadecane	0.490	0.482	0.495	0.443	0.397	0.416	0.421	0.435	0.447	8.29
84)	I Chrysene-d12	ISTD									
85)	Benzidine	0.511	0.663	0.401	0.286	0.265	0.297	0.268	0.384		39.60
	----- Quadratic regression ----- Coefficient = 0.9997										
	Response Ratio = 0.00006 + 0.25867 *A + 0.20262 *A^2										
86)	Pyrene	1.204	1.159	1.160	1.235	1.274	1.302	1.432	1.591	1.295	11.51
87)	Terphenyl-d1	0.943	0.993	0.961	0.968	0.967	0.983	1.045	1.127	0.998	6.01
88)	Butylbenzylp	0.401	0.561	0.498	0.311	0.238	0.211	0.237	0.199	0.332	41.95
	----- Quadratic regression ----- Coefficient = 0.9998										
	Response Ratio = -0.00103 + 0.22626 *A + 0.13525 *A^2										
89)	Benzo[a]anth	1.236	1.313	1.301	1.182	1.076	1.112	1.292	1.458	1.246	9.85
90)	3,3'-Dichlor	0.461	0.525	0.505	0.417	0.339	0.324	0.384	0.333	0.411	19.23
91)	Chrysene	1.133	1.137	1.138	1.152	1.111	1.124	1.152	1.211	1.145	2.62
92)	bis(2-Ethylh	0.819	0.923	0.910	0.705	0.510	0.481	0.514		0.695	27.98
	----- Quadratic regression ----- Coefficient = 0.9980										
	Response Ratio = -0.01525 + 0.65750 *A + 0.11729 *A^2										

Initial Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3784-ICC3784
Lab FileID: 5P79946.D

```
 93) I   Perylene-d12          ----------------ISTD--------------------
 94) Di-n-octylph 1.126       1.365 0.855 0.560 0.491 0.565       0.827  42.97
          ----- Quadratic regression -----                 Coefficient =  0.9986
               Response Ratio = -0.01078 + 0.61300 *A + 0.38595 *A^2

 95) Benzo[b]fluo 1.174 1.196 1.260 1.092 0.922 0.830 1.113 0.899 1.061  14.83
 96) Benzo[k]fluo 1.101 1.013 1.053 1.122 1.044 1.099 1.060 1.100 1.074   3.46
 97) Benzo[a]pyre 1.125 1.152 1.193 1.035 0.852 0.832 1.040 0.821 1.006  15.04
 98) Indeno[1,2,3 0.987 1.099 1.103 0.776 0.523 0.472 0.863 0.547 0.796  32.50
          ----- Quadratic regression -----                 Coefficient =  0.9948
               Response Ratio = -0.00566 + 0.69549 *A + 0.18040 *A^2

 99) Dibenz(a,h)a 0.974       1.063 0.815 0.529 0.498 0.785       0.777  29.43
          ----- Quadratic regression -----                 Coefficient =  0.9951
               Response Ratio = -0.00557 + 0.65467 *A + 0.21623 *A^2

100) Dibenz[a,h]a 1.070 1.132 1.157 1.025 0.755 0.666 0.944 0.545 0.912  25.10
          ----- Quadratic regression -----                 Coefficient =  0.9971
               Response Ratio = -0.01181 + 0.94794 *A + 0.08789 *A^2

101) 7,12-Dimethy 0.500 0.517 0.531 0.483 0.435 0.423 0.490 0.436 0.477   8.60
102) Benzo[g,h,i] 1.215 1.199 1.224 1.161 1.016 0.942 1.146 0.730 1.079  16.03


 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M5P3784LVI.M        Thu Dec 02 08:09:47 2021   RPT1
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8.6.9

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3784-ICV3784
Lab FileID: 5P79948.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3784\5p79948.D Vial: 10
Acq On : 1 Dec 2021 6:20 pm Operator: kristis
Sample : icv3784-10 Inst : MS5P
Misc : op35621,e5p3784,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Wed Dec 01 18:12:31 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	108	0.00	4.70
2	t	1,4-Dioxane	0.532	0.498	6.4	105	0.00	2.27
6	t	Indene	2.287	2.258	1.3	106	0.00	4.91
7	t	Cumene	3.055	3.082	-0.9	106	0.00	4.10
11	t	bis(2-Chloroethyl)ether	1.287	1.358	-5.5	110	0.00	4.50
13	t	Decane	1.318	1.280	2.9	107	0.00	4.57
14	t	1,3-Dichlorobenzene	1.549	1.546	0.2	107	0.00	4.66
15	t	1,4-Dichlorobenzene	1.489	1.520	-2.1	109	0.00	4.72
16	t	Benzyl alcohol	0.910	0.909	0.1	103	0.00	4.81
17	t	1,2-Dichlorobenzene	1.452	1.451	0.1	107	0.00	4.84
18	t	Acetophenone	1.781	1.789	-0.4	110	0.00	5.02
20	t	2,2'-oxybis(1-Chloropropa	1.685	1.551	8.0	102	0.00	4.92
23	t	Hexachloroethane	0.531	0.547	-3.0	111	0.00	5.11
24	I	Naphthalene-d8	1.000	1.000	0.0	105	0.00	5.81
26	t	Nitrobenzene	0.297	0.297	0.0	106	0.00	5.17
27	t	Quinoline	0.701	0.687	2.0	100	0.00	6.17
28	t	Isophorone	0.633	0.630	0.5	102	0.00	5.37
32	t	bis(2-Chloroethoxy)methan	0.398	0.409	-2.8	107	0.00	5.57
35		1,3,5-Trichlorobenzene	0.322	0.332	-3.1	107	0.00	5.46
36	t	1,2,4-Trichlorobenzene	0.321	0.326	-1.6	106	0.00	5.75
37		1,2,3-Trichlorobenzene	0.296	0.302	-2.0	109	0.00	5.97
38	t	Naphthalene	0.984	1.015	-3.2	108	0.00	5.83
40	t	2,3-Dichloroaniline	0.349	0.343	1.7	101	0.00	6.91
42	t	Hexachlorobutadiene	0.176	0.182	-3.4	106	0.00	5.95
44	t	2-Methylnaphthalene	0.628	0.631	-0.5	104	0.00	6.58
45	t	1-Methylnaphthalene	0.596	0.587	1.5	103	0.00	6.69
46	I	Acenaphthene-d10	1.000	1.000	0.0	106	0.00	7.90
47	t	Hexachlorocyclopentadiene	0.358	0.311	13.1	91	0.00	6.76
48	t	1,2,4,5-Tetrachlorobenzen	0.551	0.539	2.2	107	0.00	6.77
52	t	2-Chloronaphthalene	1.099	1.086	1.2	107	0.00	7.17
53	t	Biphenyl	1.501	1.486	1.0	107	0.00	7.15
55	t	Dimethylphthalate	1.286	1.287	-0.1	104	0.00	7.57
56	t	Acenaphthylene	1.665	1.436	13.8	91	0.00	7.71
57	t	2,6-Dinitrotoluene	0.262	0.266	-1.5	104	0.00	7.64
59	t	Acenaphthene	1.148	1.116	2.8	103	0.00	7.95
62	t	Dibenzofuran	1.610	1.601	0.6	106	0.00	8.19
63	t	2,4-Dinitrotoluene	0.325	0.322	0.9	104	0.00	8.19
65	t	Diethylphthalate	1.254	1.274	-1.6	107	0.00	8.58
66	t	Fluorene	1.295	1.276	1.5	105	0.00	8.69
67	t	4-Chlorophenyl-phenylethe	0.604	0.583	3.5	105	0.00	8.71

Initial Calibration Verification

Job Number: JD35920 **Sample:** E5P3784-ICV3784
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P79948.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

69	I	Phenanthrene-d10	1.000	1.000	0.0	109	0.00	10.09
72	t	Pentachloronitrobenzene	0.043	0.045#	-4.7	114	0.00	9.83
73	t	1,2-Diphenylhydrazine	0.674	0.689	-2.2	108	0.00	8.94
75	t	4-Bromophenyl-phenylether	0.238	0.242	-1.7	104	0.00	9.45
76	t	Hexachlorobenzene	0.264	0.264	0.0	107	0.00	9.49
78	t	Phenanthrene	1.059	1.022	3.5	107	0.00	10.13
79	t	Anthracene	1.076	1.050	2.4	106	0.00	10.21
80	t	Carbazole	1.044	1.015	2.8	107	0.00	10.48
81	t	Di-n-butylphthalate	1.305	1.314	-0.7	107	0.00	11.13
82	t	Fluoranthene	1.210	1.240	-2.5	114	0.00	12.00
83	t	Octadecane	0.447	0.442	1.1	98	0.00	10.06
84	I	Chrysene-d12	1.000	1.000	0.0	116	0.00	14.30
		----------	AvgRF	CCRF	% Dev	----------		
86	t	Pyrene	1.295	1.177	9.1	113	0.00	12.35
		----------	True	Calc.	% Drift	----------		
88	t	Butylbenzylphthalate	10.000	9.825	1.8	111	0.00	13.53
		----------	AvgRF	CCRF	% Dev	----------		
89	t	Benzo[a]anthracene	1.246	1.176	5.6	110	0.00	14.28
91	t	Chrysene	1.145	1.105	3.5	113	0.00	14.33
		----------	True	Calc.	% Drift	----------		
92	t	bis(2-Ethylhexyl)phthalat	10.000	9.456	5.4	104	0.00	14.50
		----------	AvgRF	CCRF	% Dev	----------		
93	I	Perylene-d12	1.000	1.000	0.0	106	0.00	16.41
		----------	True	Calc.	% Drift	----------		
94	t	Di-n-octylphthalate	10.000	9.940	0.6	102	0.00	15.50
		----------	AvgRF	CCRF	% Dev	----------		
95	t	Benzo[b]fluoranthene	1.061	1.205	-13.6	109	0.00	15.89
96	t	Benzo[k]fluoranthene	1.074	1.104	-2.8	107	0.00	15.93
97	t	Benzo[a]pyrene	1.006	1.109	-10.2	105	0.00	16.33
		----------	True	Calc.	% Drift	----------		
98	t	Indeno[1,2,3-cd]pyrene	10.000	9.741	2.6	96	0.01	18.00
99	t	Dibenz(a,h)acridine	10.000	9.884	1.2	99	0.00	17.64
100	t	Dibenz[a,h]anthracene	10.000	10.044	-0.4	105	0.00	18.05
		----------	AvgRF	CCRF	% Dev	----------		
101	t	7,12-Dimethylbenz(a)anthr	0.477	0.454	4.8	97	0.00	15.89
102	t	Benzo[g,h,i]perylene	1.079	1.202	-11.4	105	0.00	18.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79944.D M5P3784LVI.M Thu Dec 02 08:10:02 2021 RPT1

8.6.7

8

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3784-ICV3784
Lab FileID: 5P79949.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3784\5p79949.D Vial: 11
Acq On : 1 Dec 2021 6:47 pm Operator: kristis
Sample : icv3784-10 Inst : MS5P
Misc : op35621,e5p3784,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Wed Dec 01 18:12:31 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	123	0.00	4.70
9	t	Phenol	1.637	1.588	3.0	116	0.00	4.42
12	t	2-Chlorophenol	1.396	1.332	4.6	117	0.00	4.54
19	t	2-Methylphenol	1.233	1.184	4.0	116	0.00	4.89
21	t	3&4-Methylphenol	1.276	1.210	5.2	115	0.00	5.01
24	I	Naphthalene-d8	1.000	1.000	0.0	116	0.00	5.81
29	t	2-Nitrophenol	0.180	0.185	-2.8	115	0.00	5.45
30	t	2,4-Dimethylphenol	0.332	0.321	3.3	115	0.00	5.47
31	t	Benzoic acid	0.143	0.128	10.5	98	-0.01	5.54
33	t	2,4-Dichlorophenol	0.286	0.283	1.0	113	0.00	5.66
34	t	2,6-Dichlorophenol	0.271	0.281	-3.7	119	0.00	5.89
41	t	Hydroquinone	0.319	0.337	-5.6	114	0.00	6.20
43	t	4-Chloro-3-methylphenol	0.274	0.266	2.9	107	0.00	6.39
46	I	Acenaphthene-d10	1.000	1.000	0.0	118	0.00	7.90
49	t	2,4,6-Trichlorophenol	0.359	0.371	-3.3	121	0.00	6.90
50	t	2,4,5-Trichlorophenol	0.372	0.369	0.8	116	0.00	6.94
60	t	2,4-Dinitrophenol	0.135	0.155	-14.8	127	0.00	8.00
61	t	4-Nitrophenol	0.134	0.130	3.0	118	0.00	8.08
64		2,3,4,6-Tetrachlorophenol	0.298	0.305	-2.3	117	0.00	8.36
69	I	Phenanthrene-d10	1.000	1.000	0.0	124	0.00	10.09
70	t	4,6-Dinitro-2-methylpheno	0.094	0.105	-11.7	129	0.00	8.77
77	t	Pentachlorophenol	0.145	0.148	-2.1	118	0.00	9.80

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79944.D M5P3784LVI.M Thu Dec 02 08:10:04 2021 RPT1

Initial Calibration Verification

Job Number: JD35920 **Sample:** E5P3784-ICV3784
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P79950.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3784\5p79950.D Vial: 12
Acq On : 1 Dec 2021 7:14 pm Operator: kristis
Sample : icv3784-10 Inst : MS5P
Misc : op35621,e5p3784,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Wed Dec 01 18:12:31 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	128	0.00	4.70
3	t	Pyridine	1.282	1.210	5.6	113	0.00	2.58
4	t	N-Nitrosodimethylamine	0.739	0.679	8.1	113	0.00	2.55
10		Aniline	2.020	1.948	3.6	120	0.00	4.45
22	t	n-Nitroso-di-n-propylamin	0.837	0.823	1.7	131	0.00	5.02
24	I	Naphthalene-d8	1.000	1.000	0.0	126	0.00	5.81
39	t	4-Chloroaniline	0.426	0.419	1.6	123	0.00	5.88
46	I	Acenaphthene-d10	1.000	1.000	0.0	123	0.00	7.90
54	t	2-Nitroaniline	0.252	0.260	-3.2	124	0.00	7.30
58	t	3-Nitroaniline	0.317	0.327	-3.2	124	0.00	7.85
68	t	4-Nitroaniline	0.302	0.312	-3.3	136	0.00	8.72
69	I	Phenanthrene-d10	1.000	1.000	0.0	136	0.00	10.09
71	t	n-Nitrosodiphenylamine	0.642	0.587	8.6	121	0.00	8.89
84	I	Chrysene-d12	1.000	1.000	0.0	113	0.00	14.29
			True	Calc.	% Drift			
85	t	Benzidine	10.000	9.200	8.0	100	0.00	12.27
90	t	3,3'-Dichlorobenzidine	0.411	0.433	-5.4	107	0.00	14.29

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79944.D M5P3784LVI.M Thu Dec 02 08:10:06 2021 RPT1

8.6.9

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3784-ICV3784
Lab FileID: 5P79951.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3784\5p79951.D Vial: 13
Acq On : 1 Dec 2021 7:41 pm Operator: kristis
Sample : icv3784-10 Inst : MS5P
Misc : op35621,e5p3784,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Wed Dec 01 18:12:31 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	163	0.00	4.70
5	S	2-Fluorophenol	1.302	1.322	-1.5	160	0.00	3.71
8	S	Phenol-d5	1.679	1.594	5.1	147	0.00	4.41
24	I	Naphthalene-d8	1.000	1.000	0.0	162	0.00	5.81
25	S	Nitrobenzene-d5	0.303	0.301	0.7	160	0.00	5.15
46	I	Acenaphthene-d10	1.000	1.000	0.0	167	0.00	7.90
51	S	2-Fluorobiphenyl	1.337	1.316	1.6	168	0.00	7.02
69	I	Phenanthrene-d10	1.000	1.000	0.0	187	0.00	10.09
74	S	2,4,6-Tribromophenol	0.120	0.120	0.0	180	0.00	9.04
84	I	Chrysene-d12	1.000	1.000	0.0	137	0.00	14.29
87	S	Terphenyl-d14	0.998	1.146	-14.8	167	0.00	12.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79944.D M5P3784LVI.M Thu Dec 02 08:10:08 2021 RPT1

8.6.10

8

Initial Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-ICC3785
Lab FileID: 5P79959.D

Response Factor Report MS5P

Method : C:\MSDCHEM\1\METHODS\M5P3785LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 02 08:35:47 2021
Response via : Initial Calibration

Calibration Files
10 =5p79959.D 20 =5p79957.D 16 =5p79958.D 5 =5p79960.D
2 =5p79961.D 1 =5p79962.D 0.4 =5p79963.D 0.2 =5p79964.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
103) 1,4-Dichlorobenzene-d	ISTD									
104) Benzaldehyde	1.130	1.121	1.071	1.171	1.072	1.054	1.154	1.095	1.108	3.80
105) Phenanthrene-d10a	ISTD									
106) Atrazine	0.099	0.101	0.093	0.094	0.087	0.088	0.074	0.070	0.088	12.63
107) Naphthalene-d8a	ISTD									
108) Caprolactam	0.124	0.126	0.117	0.121	0.115	0.102	0.130	0.114	0.119	7.17
111) Phenanthrene-d10b	ISTD									
112) 1-chloroocta	0.269	0.270	0.249	0.264	0.229	0.224	0.230	0.244	0.247	7.49
113) o-terphenyl	0.564	0.558	0.522	0.567	0.547	0.536	0.546	0.552	0.549	2.72

(#) = Out of Range ### Number of calibration levels exceeded format ###

M5P3784LVI.M Thu Dec 02 08:37:46 2021 RPT1

8.6.11

8

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-ICV3785
Lab FileID: 5P79965.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3785\5p79965.D Vial: 10
Acq On : 2 Dec 2021 1:45 am Operator: chriss2
Sample : icv3785-10 Inst : MS5P
Misc : op35621,e5p3785,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 02 08:35:47 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	100	0.00	4.70
104	Benzaldehyde	1.108	1.224	-10.5	109	0.00	4.37
105	Phenanthrene-d10a	1.000	1.000	0.0	102	0.00	10.09
106	Atrazine	0.088	0.103	-17.0	107	0.00	9.74
107	Naphthalene-d8a	1.000	1.000	0.0	101	0.00	5.81
108 t	Caprolactam	0.119	0.138	-16.0	113	0.00	6.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3784LVI.M Thu Dec 02 08:37:36 2021 RPT1

8.6.12

8

Continuing Calibration Summary

Job Number: JD35920 **Sample:** E5P3793-CC3784
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80147.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3793\5p80147.D Vial: 2
Acq On : 8 Dec 2021 5:20 am Operator: chriss2
Sample : cc3784-10 Inst : MS5P
Misc : op35621,e5p3793,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Tue Dec 07 14:55:13 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	86	-0.01	4.66
2	t	1,4-Dioxane	0.532	0.605	-13.7	102	-0.02	2.24
3	t	Pyridine	1.282	1.499	-16.9	94	-0.01	2.55
4	t	N-Nitrosodimethylamine	0.739	0.870	-17.7	97	-0.01	2.51
5	S	2-Fluorophenol	1.302	1.388	-6.6	88	-0.01	3.66
6	t	Indene	2.287	2.101	8.1	78	-0.01	4.85
7	t	Cumene	3.055	3.087	-1.0	85	-0.01	4.06
8	S	Phenol-d5	1.679	1.712	-2.0	83	0.00	4.38
9	t	Phenol	1.637	1.793	-9.5	91	0.00	4.39
10		Aniline	2.020	1.942	3.9	80	-0.01	4.41
11	t	bis(2-Chloroethyl)ether	1.287	1.166	9.4	75	-0.01	4.46
12	t	2-Chlorophenol	1.396	1.406	-0.7	86	0.00	4.50
13	t	Decane	1.318	1.017	22.8#	67	-0.01	4.53
14	t	1,3-Dichlorobenzene	1.549	1.540	0.6	85	-0.01	4.61
15	t	1,4-Dichlorobenzene	1.489	1.501	-0.8	85	-0.01	4.67
16	t	Benzyl alcohol	0.910	0.863	5.2	78	0.00	4.76
17	t	1,2-Dichlorobenzene	1.452	1.423	2.0	83	-0.01	4.79
18	t	Acetophenone	1.781	1.535	13.8	75	-0.01	4.97
19	t	2-Methylphenol	1.233	1.125	8.8	77	0.00	4.85
20	t	2,2'-oxybis(1-Chloropropa	1.685	1.281	24.0#	67	-0.02	4.87
21	t	3&4-Methylphenol	1.276	1.123	12.0	74	0.00	4.97
22	t	n-Nitroso-di-n-propylamin	0.837	0.710	15.2	75	-0.01	4.97
23	t	Hexachloroethane	0.531	0.491	7.5	79	-0.02	5.06
24	I	Naphthalene-d8	1.000	1.000	0.0	78	-0.01	5.75
25	S	Nitrobenzene-d5	0.303	0.301	0.7	77	-0.01	5.10
26	t	Nitrobenzene	0.297	0.302	-1.7	80	-0.01	5.12
27	t	Quinoline	0.701	0.713	-1.7	78	-0.01	6.12
28	t	Isophorone	0.633	0.600	5.2	72	0.00	5.32
29	t	2-Nitrophenol	0.180	0.197	-9.4	82	-0.02	5.39
30	t	2,4-Dimethylphenol	0.332	0.321	3.3	77	0.00	5.43
31	t	Benzoic acid	0.143	0.225	-57.3#	114	0.01	5.52
32	t	bis(2-Chloroethoxy)methan	0.398	0.365	8.3	71	-0.01	5.52
33	t	2,4-Dichlorophenol	0.286	0.305	-6.6	82	0.00	5.61
34	t	2,6-Dichlorophenol	0.271	0.282	-4.1	80	-0.01	5.83
35		1,3,5-Trichlorobenzene	0.322	0.327	-1.6	78	-0.01	5.40
36	t	1,2,4-Trichlorobenzene	0.321	0.317	1.2	77	-0.01	5.69
37		1,2,3-Trichlorobenzene	0.296	0.290	2.0	78	-0.02	5.91
38	t	Naphthalene	0.984	1.007	-2.3	80	-0.01	5.77
39	t	4-Chloroaniline	0.426	0.424	0.5	77	-0.01	5.83
40	t	2,3-Dichloroaniline	0.349	0.356	-2.0	78	-0.02	6.85
41	t	Hydroquinone	0.319	0.333	-4.4	76	0.00	6.16

Continuing Calibration Summary

Job Number: JD35920 **Sample:** E5P3793-CC3784
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80147.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	t	Hexachlorobutadiene	0.176	0.173	1.7	75	-0.02	5.89
43	t	4-Chloro-3-methylphenol	0.274	0.283	-3.3	76	-0.01	6.33
44	t	2-Methylnaphthalene	0.628	0.642	-2.2	79	-0.02	6.51
45	t	1-Methylnaphthalene	0.596	0.599	-0.5	78	-0.02	6.63
46	I	Acenaphthene-d10	1.000	1.000	0.0	79	-0.02	7.84
47	t	Hexachlorocyclopentadiene	0.358	0.347	3.1	76	-0.02	6.69
48	t	1,2,4,5-Tetrachlorobenzen	0.551	0.525	4.7	78	-0.02	6.71
49	t	2,4,6-Trichlorophenol	0.359	0.368	-2.5	80	-0.02	6.85
50	t	2,4,5-Trichlorophenol	0.372	0.380	-2.2	80	-0.01	6.89
51	S	2-Fluorobiphenyl	1.337	1.321	1.2	80	-0.02	6.96
52	t	2-Chloronaphthalene	1.099	1.068	2.8	79	-0.02	7.10
53	t	Biphenyl	1.501	1.486	1.0	80	-0.02	7.08
54	t	2-Nitroaniline	0.252	0.261	-3.6	80	-0.02	7.24
55	t	Dimethylphthalate	1.286	1.316	-2.3	79	-0.01	7.50
56	t	Acenaphthylene	1.665	1.682	-1.0	80	-0.02	7.64
57	t	2,6-Dinitrotoluene	0.262	0.291	-11.1	85	-0.02	7.57
58	t	3-Nitroaniline	0.317	0.346	-9.1	85	-0.01	7.79
59	t	Acenaphthene	1.148	1.138	0.9	79	-0.02	7.88
60	t	2,4-Dinitrophenol	0.135	0.164	-21.5#	90	-0.01	7.94
61	t	4-Nitrophenol	0.134	0.133	0.7	81	0.00	8.04
62	t	Dibenzofuran	1.610	1.618	-0.5	80	-0.02	8.12
63	t	2,4-Dinitrotoluene	0.325	0.369	-13.5	89	-0.01	8.13
64		2,3,4,6-Tetrachlorophenol	0.298	0.311	-4.4	81	-0.02	8.30
65	t	Diethylphthalate	1.254	1.261	-0.6	79	-0.02	8.51
66	t	Fluorene	1.295	1.316	-1.6	81	-0.02	8.62
67	t	4-Chlorophenyl-phenylethe	0.604	0.583	3.5	78	-0.02	8.64
68	t	4-Nitroaniline	0.302	0.290	4.0	82	-0.01	8.66
69	I	Phenanthrene-d10	1.000	1.000	0.0	79	-0.02	10.02
70	t	4,6-Dinitro-2-methylpheno	0.094	0.117	-24.5#	92	-0.01	8.71
71	t	n-Nitrosodiphenylamine	0.642	0.682	-6.2	82	-0.02	8.82
72	t	Pentachloronitrobenzene	0.043	0.040#	7.0	73	-0.01	9.76
73	t	1,2-Diphenylhydrazine	0.674	0.646	4.2	74	-0.02	8.88
74	S	2,4,6-Tribromophenol	0.120	0.116	3.3	75	-0.02	8.97
75	t	4-Bromophenyl-phenylether	0.238	0.231	2.9	72	-0.02	9.37
76	t	Hexachlorobenzene	0.264	0.246	6.8	72	-0.02	9.42
77	t	Pentachlorophenol	0.145	0.161	-11.0	82	-0.02	9.74
78	t	Phenanthrene	1.059	1.050	0.8	80	-0.02	10.06
79	t	Anthracene	1.076	1.077	-0.1	79	-0.02	10.14
80	t	Carbazole	1.044	1.019	2.4	79	-0.01	10.42
81	t	Di-n-butylphthalate	1.305	1.319	-1.1	79	-0.02	11.06
82	t	Fluoranthene	1.210	1.154	4.6	77	-0.02	11.92
83	t	Octadecane	0.447	0.407	8.9	66	-0.02	9.99
84	I	Chrysene-d12	1.000	1.000	0.0	56	-0.02	14.21
		----------	True	Calc.	% Drift	----------		
85	t	Benzidine	10.000	14.231	-42.3#	96	-0.02	12.20
		----------	AvgRF	CCRF	% Dev	----------		
86	t	Pyrene	1.295	1.589	-22.7#	73	-0.02	12.27
87	S	Terphenyl-d14	0.998	1.171	-17.3	69	-0.02	12.60
		----------	True	Calc.	% Drift	----------		
88	t	Butylbenzylphthalate	10.000	14.654	-46.5#	96	-0.02	13.45
		----------	AvgRF	CCRF	% Dev	----------		
89	t	Benzo[a]anthracene	1.246	1.257	-0.9	56	-0.02	14.20
90	t	3,3'-Dichlorobenzidine	0.411	0.494	-20.2#	60	-0.02	14.21

8.6.13

8

Continuing Calibration Summary

Job Number: JD35920 **Sample:** E5P3793-CC3784
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80147.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

			True	Calc.	% Drift			
91	t	Chrysene	1.145	1.149	-0.3	56	-0.02	14.25
			True	Calc.	% Drift			
92	t	bis(2-Ethylhexyl)phthalat	10.000	11.280	-12.8	62	-0.02	14.42
			AvgRF	CCRF	% Dev			
93	I	Perylene-d12	1.000	1.000	0.0	64	-0.02	16.32
			True	Calc.	% Drift			
94	t	Di-n-octylphthalate	10.000	10.704	-7.0	68	-0.02	15.42
			AvgRF	CCRF	% Dev			
95	t	Benzo[b]fluoranthene	1.061	1.147	-8.1	62	-0.02	15.81
96	t	Benzo[k]fluoranthene	1.074	0.995	7.4	57	-0.02	15.85
97	t	Benzo[a]pyrene	1.006	1.146	-13.9	65	-0.01	16.25
			True	Calc.	% Drift			
98	t	Indeno[1,2,3-cd]pyrene	10.000	12.041	-20.4#	75	-0.01	17.88
99	t	Dibenz(a,h)acridine	10.000	11.577	-15.8	73	-0.02	17.53
100	t	Dibenz[a,h]anthracene	10.000	11.582	-15.8	73	-0.02	17.93
			AvgRF	CCRF	% Dev			
101	t	7,12-Dimethylbenz(a)anthr	0.477	0.446	6.5	57	-0.02	15.81
102	t	Benzo[g,h,i]perylene	1.079	1.309	-21.3#	68	-0.01	18.32

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3784LVI.M Wed Dec 08 15:09:57 2021 RPT1

8.6.13

8

Continuing Calibration Summary

Job Number: JD35920 **Sample:** E5P3793-CC3785
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80148.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3793\5p80148.D Vial: 3
Acq On : 8 Dec 2021 5:47 am Operator: chriss2
Sample : cc3785-10 Inst : MS5P
Misc : op35621,e5p3793,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Tue Dec 07 14:55:13 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103		1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	81	-0.02	4.65
104		Benzaldehyde	1.108	1.068	3.6	77	-0.02	4.33
105		Phenanthrene-d10a	1.000	1.000	0.0	78	-0.02	10.02
106		Atrazine	0.088	0.111	-26.1#	88	-0.01	9.68
107		Naphthalene-d8a	1.000	1.000	0.0	76	-0.02	5.75
108	t	Caprolactam	0.119	0.122	-2.5	75	0.00	6.17
111		Phenanthrene-d10b	1.000	1.000	0.0	78	-0.02	10.02
112	s	1-chlorooctadecane	0.247	0.265	-7.3	77	-0.02	11.90
113	s	o-terphenyl	0.549	0.561	-2.2	78	-0.02	10.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3784LVI.M Wed Dec 08 15:09:59 2021 RPT1

8.6.14

8

Initial Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICC3794
Lab FileID: 5P80182.D

Response Factor Report MS5P

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Initial Calibration

Calibration Files
10 =5p80182.D 20 =5p80184.D 16 =5p80183.D 5 =5p80181.D
2 =5p80180.D 1 =5p80179.D 0.4 =5p80178.D 0.2 =5p80177.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.589	0.611	0.601	0.550	0.503	0.549	0.500	0.594	0.562	7.76
3) Pyridine	1.480	1.544	1.539	1.496	1.341	1.276	1.283	1.042	1.375	12.64
4) N-Nitrosodim	0.892	0.937	0.929	0.865	0.749	0.721	0.731	0.729	0.819	11.67
5) 2-Fluorophen	1.383	1.453	1.458	1.390	1.244	1.188	1.095	1.147	1.295	11.08
6) Indene	2.149	2.056	2.102	2.202	2.229	2.197	2.273	2.093	2.162	3.47
7) Cumene	3.138	3.101	3.193	3.070	2.902	2.865	2.808	2.783	2.982	5.38
8) Phenol-d5	1.748	1.794	1.808	1.740	1.616	1.535	1.549	1.505	1.662	7.46
9) Phenol	1.816	1.781	1.822	1.836	1.730	1.701	1.720	1.647	1.756	3.84
10) Aniline	2.023	1.927	1.990	2.044	2.012	1.893	1.931	1.894	1.964	3.06
11) bis(2-Chloro	1.241	1.185	1.217	1.249	1.242	1.186	1.262	1.177	1.220	2.73
12) 2-Chlorophen	1.427	1.385	1.419	1.454	1.398	1.372	1.295	1.399	1.394	3.39
13) Decane	1.044	0.977	1.018	1.106	1.141	1.133	1.161	1.235	1.102	7.64
14) 1,3-Dichloro	1.553	1.521	1.545	1.591	1.525	1.489	1.539	1.524	1.536	1.93
15) 1,4-Dichloro	1.495	1.458	1.496	1.506	1.471	1.480	1.460	1.461	1.479	1.25
16) Benzyl alcoh	0.887	0.895	0.907	0.885	0.849	0.805	0.783	0.779	0.849	6.21
17) 1,2-Dichloro	1.421	1.385	1.417	1.466	1.438	1.401	1.410	1.305	1.405	3.36
18) Acetophenone	1.600	1.549	1.588	1.676	1.738	1.705	1.774	1.669	1.662	4.69
19) 2-Methylphen	1.153	1.109	1.126	1.192	1.161	1.160	1.076	1.056	1.129	4.11
20) 2,2'-oxybis(	1.364	1.262	1.302	1.454	1.471	1.526	1.577	1.613	1.446	8.80
21) 3&4-Methylph	1.146	1.091	1.117	1.216	1.221	1.183	1.160	1.164	1.162	3.87
22) n-Nitroso-di	0.753	0.700	0.726	0.790	0.839	0.792	0.876	0.833	0.789	7.61
23) Hexachloroet	0.487	0.500	0.491	0.486	0.490	0.493	0.499	0.525	0.496	2.55
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.298	0.294	0.304	0.302	0.301	0.304	0.297	0.307	0.301	1.46
26) Nitrobenzene	0.299	0.292	0.303	0.308	0.314	0.318	0.319	0.317	0.309	3.24
27) Quinoline	0.734	0.732	0.743	0.715	0.714	0.686	0.688	0.650	0.708	4.42
28) Isophorone	0.613	0.608	0.629	0.612	0.600	0.593	0.583	0.574	0.601	2.96
29) 2-Nitropheno	0.194	0.195	0.199	0.186	0.178	0.174	0.173	0.174	0.184	5.84
30) 2,4-Dimethyl	0.315	0.302	0.312	0.324	0.330	0.326	0.300	0.317	0.316	3.50
31) Benzoic acid	0.224	0.240	0.247	0.199	0.150				0.212	18.47
32) bis(2-Chloro	0.367	0.359	0.370	0.377	0.376	0.389	0.375	0.351	0.371	3.20
33) 2,4-Dichloro	0.298	0.301	0.306	0.298	0.296	0.269	0.273	0.270	0.289	5.36
34) 2,6-Dichloro	0.278	0.276	0.286	0.277	0.273	0.271	0.270	0.252	0.273	3.53
35) 1,3,5-Trichl	0.321	0.313	0.326	0.321	0.319	0.318	0.316	0.325	0.320	1.39
36) 1,2,4-Trichl	0.311	0.311	0.322	0.320	0.313	0.315	0.296	0.313	0.313	2.50
37) 1,2,3-Trichl	0.285	0.279	0.289	0.288	0.294	0.294	0.274	0.292	0.287	2.51
38) Naphthalene	0.986	0.970	1.007	0.998	0.998	0.986	0.990	1.004	0.992	1.22
39) 4-Chloroanil	0.419	0.409	0.424	0.424	0.420	0.415	0.401	0.400	0.414	2.33
40) 2,3-Dichloro	0.352	0.350	0.363	0.358	0.360	0.349	0.352	0.320	0.350	3.81
41) Hydroquinone	0.316	0.312	0.324	0.313	0.291	0.253	0.222		0.290	13.20
42) Hexachlorobu	0.167	0.169	0.174	0.171	0.169	0.172	0.158	0.176	0.169	3.24
43) 4-Chloro-3-m	0.283	0.287	0.295	0.286	0.270	0.256	0.255	0.242	0.272	7.01
44) 2-Methylnaph	0.648	0.640	0.661	0.646	0.639	0.633	0.626	0.618	0.639	2.11
45) 1-Methylnaph	0.606	0.588	0.613	0.610	0.611	0.617	0.602	0.602	0.606	1.46

Initial Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICC3794
Lab FileID: 5P80182.D

```
46) I   Acenaphthene-d10      ----------------ISTD---------------------
47) Hexachlorocy 0.336 0.337 0.343 0.330 0.308 0.308 0.287 0.284 0.317   7.36
48) 1,2,4,5-Tetr 0.525 0.507 0.518 0.533 0.527 0.529 0.536 0.542 0.527   2.05
49) 2,4,6-Trichl 0.359 0.362 0.363 0.355 0.334 0.339 0.327 0.303 0.343   6.17
50) 2,4,5-Trichl 0.381 0.376 0.382 0.378 0.368 0.361 0.354 0.314 0.364   6.24
51) 2-Fluorobiph 1.318 1.299 1.318 1.322 1.294 1.320 1.367 1.261 1.312   2.30
52) 2-Chloronaph 1.075 1.048 1.067 1.090 1.109 1.137 1.131 1.094 1.094   2.83
53) Biphenyl     1.495 1.461 1.504 1.505 1.470 1.519 1.464 1.465 1.485   1.54
54) 2-Nitroanili 0.268 0.270 0.275 0.265 0.252 0.236 0.248 0.234 0.256   6.20
55) Dimethylphth 1.362 1.345 1.354 1.337 1.300 1.286 1.319 1.290 1.324   2.24
56) Acenaphthyle 1.707 1.651 1.689 1.689 1.651 1.630 1.648 1.571 1.654   2.58
57) 2,6-Dinitrot 0.301 0.308 0.307 0.287 0.275 0.262 0.236 0.248 0.278   9.87
58) 3-Nitroanili 0.355 0.358 0.359 0.334 0.315 0.311 0.283 0.262 0.322  11.27
59) Acenaphthene 1.137 1.123 1.145 1.127 1.131 1.129 1.112 1.096 1.125   1.34
60) 2,4-Dinitrop 0.163 0.187 0.179 0.143 0.105 0.094 0.062       0.133  35.44
         ----- Quadratic regression -----               Coefficient =  0.9992
              Response Ratio = -0.00941 + 0.13575 *A + 0.01103 *A^2

61) 4-Nitropheno 0.139 0.143 0.145 0.134 0.120 0.118 0.109       0.130  10.78
62) Dibenzofuran 1.641 1.610 1.633 1.637 1.600 1.634 1.630 1.572 1.619   1.46
63) 2,4-Dinitrot 0.375 0.369 0.377 0.373 0.359 0.324 0.331 0.306 0.352   7.87
64) 2,3,4,6-Tetr 0.321 0.325 0.326 0.311 0.294 0.285 0.246 0.251 0.295  10.91
65) Diethylphtha 1.307 1.291 1.323 1.302 1.268 1.250 1.244 1.198 1.273   3.24
66) Fluorene     1.338 1.310 1.325 1.318 1.312 1.290 1.295 1.225 1.302   2.65
67) 4-Chlorophen 0.580 0.559 0.574 0.588 0.604 0.588 0.596 0.629 0.590   3.54
68) 4-Nitroanili 0.306 0.310 0.315 0.298 0.283 0.285 0.274 0.273 0.293   5.58

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro- 0.119 0.131 0.129 0.108 0.086 0.075 0.059       0.101  27.93
         ----- Quadratic regression -----               Coefficient =  0.9993
              Response Ratio = -0.00302 + 0.10458 *A + 0.01184 *A^2

71) n-Nitrosodip 0.667 0.666 0.670 0.659 0.630 0.631 0.602 0.596 0.640   4.66
72) Pentachloron 0.039 0.039 0.039 0.039 0.034 0.033 0.032 0.031 0.036# 10.11
73) 1,2-Diphenyl 0.647 0.627 0.646 0.662 0.647 0.662 0.639 0.677 0.651   2.37
74) 2,4,6-Tribro 0.111 0.115 0.115 0.109 0.097 0.096 0.087 0.082 0.102  12.55
75) 4-Bromopheny 0.228 0.237 0.235 0.221 0.204 0.196 0.189 0.199 0.214   8.79
76) Hexachlorobe 0.240 0.244 0.244 0.236 0.231 0.231 0.217 0.247 0.236   4.13
77) Pentachlorop 0.164 0.175 0.173 0.155 0.136 0.120 0.114       0.148  16.88
         ----- Quadratic regression -----               Coefficient =  0.9996
              Response Ratio = -0.00553 + 0.15251 *A + 0.00501 *A^2

78) Phenanthrene 1.043 1.042 1.053 1.039 1.004 1.027 1.038 1.046 1.037   1.46
79) Anthracene   1.074 1.071 1.086 1.066 1.037 1.049 1.004 1.024 1.051   2.69
80) Carbazole    1.066 1.081 1.095 1.049 0.994 0.975 0.958 0.948 1.021   5.75
81) Di-n-butylph 1.398 1.419 1.427 1.344 1.235 1.197 1.122 1.105 1.281  10.37
82) Fluoranthene 1.239 1.264 1.278 1.206 1.130 1.134 1.088 1.053 1.174   7.18
83) Octadecane   0.421 0.415 0.418 0.414 0.386 0.388 0.365 0.396 0.400   4.93

84) I   Chrysene-d12          ----------------ISTD---------------------
85) Benzidine    0.785 0.880 0.824 0.682 0.684 0.608             0.744  13.77
86) Pyrene       1.367 1.243 1.330 1.428 1.424 1.408 1.361 1.393 1.369   4.46
87) Terphenyl-d1 1.012 0.966 1.009 1.026 0.993 0.985 0.998 0.985 0.997   1.87
88) Butylbenzylp 0.676 0.682 0.698 0.652 0.598 0.571 0.543 0.519 0.617  11.12
89) Benzo[a]anth 1.294 1.340 1.355 1.254 1.190 1.171 1.198 1.261 1.258   5.48
90) 3,3'-Dichlor 0.479 0.499 0.503 0.451 0.419 0.390 0.370 0.343 0.432  14.10
91) Chrysene     1.136 1.147 1.151 1.125 1.098 1.108 1.137 1.096 1.125   1.91
92) bis(2-Ethylh 0.896 0.906 0.925 0.879 0.817 0.776 0.695 0.651 0.818  12.55
```

Initial Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICC3794
Lab FileID: 5P80182.D

```
 93) I   Perylene-d12          ----------------ISTD--------------------
 94) Di-n-octylph 1.515 1.668 1.636 1.349 1.267 1.237 1.143       1.402  14.65
 95) Benzo[b]fluo 1.301 1.296 1.294 1.245 1.159 1.159 1.122 1.120 1.212   6.61
 96) Benzo[k]fluo 1.070 1.003 1.064 1.077 1.063 1.061 1.087 1.052 1.060   2.38
 97) Benzo[a]pyre 1.180 1.200 1.208 1.153 1.077 1.050 1.015 0.990 1.109   7.81
 98) Indeno[1,2,3 1.069 1.115 1.114 0.982 0.997 0.945 0.919 0.834 0.997   9.93
 99) Dibenz(a,h)a 1.013 1.080 1.094 0.963 0.927 0.888 0.867 0.852 0.960   9.77
100) Dibenz[a,h]a 1.126 1.129 1.161 1.040 1.076 0.990 1.027 0.910 1.057   7.88
101) 7,12-Dimethy 0.522 0.526 0.529 0.488 0.464 0.464 0.484 0.461 0.492   5.92
102) Benzo[g,h,i] 1.193 1.220 1.241 1.130 1.161 1.101 1.085 1.067 1.150   5.60

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 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M5P3794LVI.M        Thu Dec 09 17:39:33 2021   RPT1
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8.6.15

8

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80185.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80185.D Vial: 10
Acq On : 9 Dec 2021 4:47 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	-0.03	4.64
2	t	1,4-Dioxane	0.562	0.457	18.7	79	-0.05	2.20
6	t	Indene	2.162	1.832	15.3	87	-0.03	4.84
7	t	Cumene	2.982	2.689	9.8	88	-0.03	4.04
11	t	bis(2-Chloroethyl)ether	1.220	1.162	4.8	96	-0.03	4.44
13	t	Decane	1.102	0.971	11.9	95	-0.02	4.52
14	t	1,3-Dichlorobenzene	1.536	1.393	9.3	92	-0.02	4.60
15	t	1,4-Dichlorobenzene	1.479	1.331	10.0	91	-0.02	4.66
16	t	Benzyl alcohol	0.849	0.762	10.2	88	-0.02	4.75
17	t	1,2-Dichlorobenzene	1.405	1.267	9.8	91	-0.03	4.77
18	t	Acetophenone	1.662	1.514	8.9	97	-0.03	4.96
20	t	2,2'-oxybis(1-Chloropropa	1.446	1.227	15.1	92	-0.03	4.85
23	t	Hexachloroethane	0.496	0.450	9.3	94	-0.03	5.05
24	I	Naphthalene-d8	1.000	1.000	0.0	102	-0.03	5.74
26	t	Nitrobenzene	0.309	0.280	9.4	95	-0.03	5.10
27	t	Quinoline	0.708	0.632	10.7	88	-0.04	6.09
28	t	Isophorone	0.601	0.542	9.8	90	-0.03	5.30
32	t	bis(2-Chloroethoxy)methan	0.371	0.343	7.5	95	-0.03	5.50
35		1,3,5-Trichlorobenzene	0.320	0.292	8.8	92	-0.03	5.38
36	t	1,2,4-Trichlorobenzene	0.313	0.284	9.3	93	-0.03	5.68
37		1,2,3-Trichlorobenzene	0.287	0.262	8.7	93	-0.03	5.90
38	t	Naphthalene	0.992	0.903	9.0	93	-0.03	5.76
40	t	2,3-Dichloroaniline	0.350	0.319	8.9	92	-0.04	6.83
42	t	Hexachlorobutadiene	0.169	0.154	8.9	94	-0.03	5.88
44	t	2-Methylnaphthalene	0.639	0.584	8.6	92	-0.03	6.49
45	t	1-Methylnaphthalene	0.606	0.540	10.9	91	-0.04	6.61
46	I	Acenaphthene-d10	1.000	1.000	0.0	105	-0.04	7.81
47	t	Hexachlorocyclopentadiene	0.317	0.367	-15.8	108	-0.04	6.68
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.463	12.1	92	-0.04	6.69
52	t	2-Chloronaphthalene	1.094	0.968	11.5	94	-0.04	7.08
53	t	Biphenyl	1.485	1.345	9.4	94	-0.03	7.07
55	t	Dimethylphthalate	1.324	1.195	9.7	92	-0.04	7.48
57	t	2,6-Dinitrotoluene	0.278	0.257	7.6	90	-0.04	7.55
59	t	Acenaphthene	1.125	1.000	11.1	92	-0.04	7.86
62	t	Dibenzofuran	1.619	1.451	10.4	93	-0.04	8.10
63	t	2,4-Dinitrotoluene	0.352	0.324	8.0	91	-0.04	8.10
65	t	Diethylphthalate	1.273	1.177	7.5	94	-0.04	8.49
66	t	Fluorene	1.302	1.172	10.0	92	-0.04	8.59
67	t	4-Chlorophenyl-phenylethe	0.590	0.504	14.6	91	-0.04	8.62

Initial Calibration Verification

Job Number: JD35920 **Sample:** E5P3794-ICV3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80185.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

69	I	Phenanthrene-d10	1.000	1.000	0.0	105	-0.04	10.00
72	t	Pentachloronitrobenzene	0.036	0.036#	0.0	98	-0.04	9.73
73	t	1,2-Diphenylhydrazine	0.651	0.607	6.8	99	-0.04	8.85
75	t	4-Bromophenyl-phenylether	0.214	0.198	7.5	91	-0.04	9.35
76	t	Hexachlorobenzene	0.236	0.214	9.3	94	-0.04	9.40
78	t	Phenanthrene	1.037	0.923	11.0	93	-0.04	10.04
79	t	Anthracene	1.051	0.941	10.5	92	-0.04	10.11
80	t	Carbazole	1.021	0.929	9.0	92	-0.04	10.39
81	t	Di-n-butylphthalate	1.281	1.214	5.2	91	-0.04	11.04
82	t	Fluoranthene	1.174	1.122	4.4	95	-0.04	11.90
83	t	Octadecane	0.400	0.372	7.0	93	-0.04	9.97
84	I	Chrysene-d12	1.000	1.000	0.0	107	-0.04	14.19
86	t	Pyrene	1.369	1.235	9.8	97	-0.04	12.25
88	t	Butylbenzylphthalate	0.617	0.592	4.1	94	-0.04	13.42
89	t	Benzo[a]anthracene	1.258	1.123	10.7	93	-0.04	14.18
91	t	Chrysene	1.125	1.004	10.8	95	-0.04	14.23
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.779	4.8	93	-0.04	14.40
93	I	Perylene-d12	1.000	1.000	0.0	108	-0.04	16.30
94	t	Di-n-octylphthalate	1.402	1.262	10.0	90	-0.04	15.39
95	t	Benzo[b]fluoranthene	1.212	1.173	3.2	98	-0.04	15.78
96	t	Benzo[k]fluoranthene	1.060	0.957	9.7	97	-0.04	15.83
97	t	Benzo[a]pyrene	1.109	1.052	5.1	97	-0.04	16.22
98	t	Indeno[1,2,3-cd]pyrene	0.997	0.902	9.5	91	-0.05	17.84
99	t	Dibenz(a,h)acridine	0.960	0.865	9.9	93	-0.05	17.50
100	t	Dibenz[a,h]anthracene	1.057	0.968	8.4	93	-0.05	17.90
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.441	10.4	92	-0.04	15.79
102	t	Benzo[g,h,i]perylene	1.150	1.017	11.6	92	-0.05	18.28

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:13 2021 RPT1

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80186.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80186.D Vial: 11
Acq On : 9 Dec 2021 5:13 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	-0.03	4.64
9	t	Phenol	1.756	1.433	18.4	86	-0.02	4.37
12	t	2-Chlorophenol	1.394	1.249	10.4	95	-0.02	4.48
19	t	2-Methylphenol	1.129	1.043	7.6	99	-0.02	4.83
21	t	3&4-Methylphenol	1.162	1.081	7.0	103	-0.02	4.96
24	I	Naphthalene-d8	1.000	1.000	0.0	106	-0.03	5.74
29	t	2-Nitrophenol	0.184	0.175	4.9	96	-0.03	5.38
30	t	2,4-Dimethylphenol	0.316	0.296	6.3	100	-0.02	5.41
31	t	Benzoic acid	0.212	0.183	13.7	86	-0.01	5.50
33	t	2,4-Dichlorophenol	0.289	0.259	10.4	92	-0.02	5.60
34	t	2,6-Dichlorophenol	0.273	0.257	5.9	98	-0.03	5.82
41	t	Hydroquinone	0.290	0.315	-8.6	106	-0.02	6.15
43	t	4-Chloro-3-methylphenol	0.272	0.258	5.1	97	-0.03	6.32
46	I	Acenaphthene-d10	1.000	1.000	0.0	114	-0.04	7.81
49	t	2,4,6-Trichlorophenol	0.343	0.319	7.0	101	-0.04	6.83
50	t	2,4,5-Trichlorophenol	0.364	0.331	9.1	99	-0.03	6.87
		----------	True	Calc.	% Drift		----------	
60	t	2,4-Dinitrophenol	20.000	18.164	9.2	99	-0.03	7.92
		----------	AvgRF	CCRF	% Dev		----------	
61	t	4-Nitrophenol	0.130	0.122	6.2	100	-0.03	8.02
64		2,3,4,6-Tetrachlorophenol	0.295	0.271	8.1	96	-0.04	8.28
69	I	Phenanthrene-d10	1.000	1.000	0.0	119	-0.04	10.00
		----------	True	Calc.	% Drift		----------	
70	t	4,6-Dinitro-2-methylpheno	10.000	8.933	10.7	103	-0.04	8.69
		----------	True	Calc.	% Drift		----------	
77	t	Pentachlorophenol	20.000	16.597	17.0	96	-0.04	9.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:15 2021 RPT1

8.6.17

8

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80187.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80187.D Vial: 12
Acq On : 9 Dec 2021 5:40 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	-0.03	4.64
3	t	Pyridine	1.375	1.229	10.6	85	-0.05	2.51
4	t	N-Nitrosodimethylamine	0.819	0.755	7.8	87	-0.04	2.48
10		Aniline	1.964	1.892	3.7	96	-0.02	4.40
22	t	n-Nitroso-di-n-propylamin	0.789	0.845	-7.1	115	-0.03	4.96
24	I	Naphthalene-d8	1.000	1.000	0.0	105	-0.03	5.74
39	t	4-Chloroaniline	0.414	0.409	1.2	103	-0.03	5.81
46	I	Acenaphthene-d10	1.000	1.000	0.0	100	-0.04	7.81
54	t	2-Nitroaniline	0.256	0.295	-15.2	110	-0.03	7.22
58	t	3-Nitroaniline	0.322	0.368	-14.3	103	-0.03	7.77
68	t	4-Nitroaniline	0.293	0.347	-18.4	113	-0.04	8.64
69	I	Phenanthrene-d10	1.000	1.000	0.0	112	-0.05	9.99
71	t	n-Nitrosodiphenylamine	0.640	0.618	3.4	104	-0.04	8.80
84	I	Chrysene-d12	1.000	1.000	0.0	105	-0.05	14.18
85	t	Benzidine	0.744	0.658	11.6	88	-0.04	12.17
90	t	3,3'-Dichlorobenzidine	0.432	0.432	0.0	95	-0.04	14.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:17 2021 RPT1

8.6.18

8

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80188.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80188.D Vial: 13
Acq On : 9 Dec 2021 6:07 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	131	-0.03	4.64
5	S	2-Fluorophenol	1.295	1.365	-5.4	129	-0.02	3.65
8	S	Phenol-d5	1.662	1.608	3.2	120	-0.02	4.36
24	I	Naphthalene-d8	1.000	1.000	0.0	134	-0.03	5.74
25	S	Nitrobenzene-d5	0.301	0.318	-5.6	143	-0.03	5.08
46	I	Acenaphthene-d10	1.000	1.000	0.0	139	-0.04	7.81
51	S	2-Fluorobiphenyl	1.312	1.309	0.2	138	-0.04	6.94
69	I	Phenanthrene-d10	1.000	1.000	0.0	154	-0.05	9.99
74	S	2,4,6-Tribromophenol	0.102	0.102	0.0	142	-0.04	8.95
84	I	Chrysene-d12	1.000	1.000	0.0	150	-0.04	14.19
87	S	Terphenyl-d14	0.997	1.017	-2.0	151	-0.04	12.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:19 2021 RPT1

8.6.19

8

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3795-ICV3794
Lab FileID: 5P80192.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3795\5p80192.D Vial: 2
Acq On : 9 Dec 2021 12:58 pm Operator: kristis
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3795,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
46 I	Acenaphthene-d10	1.000	1.000	0.0	110	-0.04	7.81
56 t	Acenaphthylene	1.654	1.509	8.8	97	-0.04	7.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:53:36 2021 RPT1

8.6.20

8

Continuing Calibration Summary

Job Number: JD35920 **Sample:** E5P3796-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80203.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...021\e5p3796\5p80203.d Vial: 2
Acq On : 9 Dec 2021 6:34 pm Operator: kristis
Sample : cc3794-5 Inst : MS5P
Misc : op35621,e5p3796,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	-0.03	4.64
2	t	1,4-Dioxane	0.562	0.566	-0.7	106	-0.04	2.21
3	t	Pyridine	1.375	1.454	-5.7	100	-0.04	2.53
4	t	N-Nitrosodimethylamine	0.819	0.848	-3.5	101	-0.03	2.49
5	S	2-Fluorophenol	1.295	1.345	-3.9	99	-0.03	3.65
6	t	Indene	2.162	2.211	-2.3	103	-0.03	4.84
7	t	Cumene	2.982	3.105	-4.1	104	-0.03	4.04
8	S	Phenol-d5	1.662	1.701	-2.3	100	-0.02	4.36
9	t	Phenol	1.756	1.787	-1.8	100	-0.02	4.37
10		Aniline	1.964	2.046	-4.2	103	-0.02	4.40
11	t	bis(2-Chloroethyl)ether	1.220	1.234	-1.1	101	-0.03	4.44
12	t	2-Chlorophenol	1.394	1.437	-3.1	101	-0.02	4.48
13	t	Decane	1.102	1.105	-0.3	103	-0.02	4.52
14	t	1,3-Dichlorobenzene	1.536	1.548	-0.8	100	-0.02	4.60
15	t	1,4-Dichlorobenzene	1.479	1.499	-1.4	102	-0.02	4.66
16	t	Benzyl alcohol	0.849	0.851	-0.2	99	-0.02	4.75
17	t	1,2-Dichlorobenzene	1.405	1.462	-4.1	102	-0.03	4.77
18	t	Acetophenone	1.662	1.646	1.0	101	-0.02	4.96
19	t	2-Methylphenol	1.129	1.154	-2.2	99	-0.02	4.83
20	t	2,2'-oxybis(1-Chloropropa	1.446	1.435	0.8	101	-0.03	4.85
21	t	3&4-Methylphenol	1.162	1.174	-1.0	99	-0.02	4.96
22	t	n-Nitroso-di-n-propylamin	0.789	0.770	2.4	100	-0.02	4.96
23	t	Hexachloroethane	0.496	0.479	3.4	101	-0.03	5.05
24	I	Naphthalene-d8	1.000	1.000	0.0	99	-0.03	5.74
25	S	Nitrobenzene-d5	0.301	0.302	-0.3	100	-0.03	5.08
26	t	Nitrobenzene	0.309	0.312	-1.0	101	-0.03	5.10
27	t	Quinoline	0.708	0.711	-0.4	99	-0.03	6.10
28	t	Isophorone	0.601	0.621	-3.3	101	-0.02	5.31
29	t	2-Nitrophenol	0.184	0.191	-3.8	102	-0.03	5.38
30	t	2,4-Dimethylphenol	0.316	0.332	-5.1	102	-0.02	5.41
31	t	Benzoic acid	0.212	0.186	12.3	93	-0.02	5.49
32	t	bis(2-Chloroethoxy)methan	0.371	0.382	-3.0	101	-0.03	5.50
33	t	2,4-Dichlorophenol	0.289	0.297	-2.8	99	-0.02	5.60
34	t	2,6-Dichlorophenol	0.273	0.283	-3.7	101	-0.03	5.82
35		1,3,5-Trichlorobenzene	0.320	0.326	-1.9	101	-0.03	5.38
36	t	1,2,4-Trichlorobenzene	0.313	0.318	-1.6	99	-0.03	5.68
37		1,2,3-Trichlorobenzene	0.287	0.291	-1.4	100	-0.03	5.90
38	t	Naphthalene	0.992	1.011	-1.9	101	-0.03	5.76
39	t	4-Chloroaniline	0.414	0.428	-3.4	100	-0.03	5.81
40	t	2,3-Dichloroaniline	0.350	0.357	-2.0	99	-0.04	6.83
41	t	Hydroquinone	0.290	0.300	-3.4	95	-0.02	6.15

Continuing Calibration Summary

Job Number: JD35920 **Sample:** E5P3796-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80203.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	t	Hexachlorobutadiene	0.169	0.170	-0.6	99	-0.03	5.88
43	t	4-Chloro-3-methylphenol	0.272	0.285	-4.8	99	-0.03	6.32
44	t	2-Methylnaphthalene	0.639	0.654	-2.3	101	-0.03	6.49
45	t	1-Methylnaphthalene	0.606	0.613	-1.2	100	-0.04	6.61
46	I	Acenaphthene-d10	1.000	1.000	0.0	100	-0.04	7.81
47	t	Hexachlorocyclopentadiene	0.317	0.328	-3.5	100	-0.04	6.68
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.518	1.7	97	-0.04	6.69
49	t	2,4,6-Trichlorophenol	0.343	0.349	-1.7	98	-0.04	6.83
50	t	2,4,5-Trichlorophenol	0.364	0.375	-3.0	99	-0.03	6.87
51	S	2-Fluorobiphenyl	1.312	1.312	0.0	99	-0.04	6.94
52	t	2-Chloronaphthalene	1.094	1.102	-0.7	101	-0.04	7.08
53	t	Biphenyl	1.485	1.502	-1.1	100	-0.04	7.06
54	t	2-Nitroaniline	0.256	0.258	-0.8	98	-0.04	7.22
55	t	Dimethylphthalate	1.324	1.324	0.0	99	-0.04	7.48
56	t	Acenaphthylene	1.654	1.686	-1.9	100	-0.04	7.62
57	t	2,6-Dinitrotoluene	0.278	0.285	-2.5	100	-0.04	7.55
58	t	3-Nitroaniline	0.322	0.335	-4.0	101	-0.03	7.77
59	t	Acenaphthene	1.125	1.133	-0.7	101	-0.04	7.86
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	10.000	9.732	2.7	96	-0.04	7.92
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.130	0.135	-3.8	101	-0.03	8.02
62	t	Dibenzofuran	1.619	1.637	-1.1	100	-0.04	8.10
63	t	2,4-Dinitrotoluene	0.352	0.362	-2.8	97	-0.04	8.10
64		2,3,4,6-Tetrachlorophenol	0.295	0.299	-1.4	96	-0.04	8.28
65	t	Diethylphthalate	1.273	1.286	-1.0	99	-0.04	8.49
66	t	Fluorene	1.302	1.326	-1.8	101	-0.04	8.59
67	t	4-Chlorophenyl-phenylethe	0.590	0.580	1.7	99	-0.04	8.62
68	t	4-Nitroaniline	0.293	0.299	-2.0	100	-0.04	8.64
69	I	Phenanthrene-d10	1.000	1.000	0.0	98	-0.04	10.00
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	5.000	4.952	1.0	97	-0.04	8.69
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.640	0.660	-3.1	99	-0.04	8.80
72	t	Pentachloronitrobenzene	0.036	0.040#	-11.1	101	-0.04	9.73
73	t	1,2-Diphenylhydrazine	0.651	0.675	-3.7	100	-0.04	8.85
74	S	2,4,6-Tribromophenol	0.102	0.104	-2.0	95	-0.04	8.95
75	t	4-Bromophenyl-phenylether	0.214	0.219	-2.3	97	-0.04	9.35
76	t	Hexachlorobenzene	0.236	0.236	0.0	99	-0.04	9.40
		----------	True	Calc.	% Drift	----------		
77	t	Pentachlorophenol	10.000	10.050	-0.5	98	-0.04	9.71
		----------	AvgRF	CCRF	% Dev	----------		
78	t	Phenanthrene	1.037	1.037	0.0	98	-0.04	10.03
79	t	Anthracene	1.051	1.064	-1.2	98	-0.04	10.11
80	t	Carbazole	1.021	1.047	-2.5	98	-0.04	10.39
81	t	Di-n-butylphthalate	1.281	1.353	-5.6	99	-0.04	11.04
82	t	Fluoranthene	1.174	1.198	-2.0	98	-0.04	11.90
83	t	Octadecane	0.400	0.418	-4.5	99	-0.04	9.97
84	I	Chrysene-d12	1.000	1.000	0.0	97	-0.04	14.19
85	t	Benzidine	0.744	0.798	-7.3	114	-0.04	12.17
86	t	Pyrene	1.369	1.434	-4.7	97	-0.04	12.24

Continuing Calibration Summary

Job Number: JD35920 **Sample:** E5P3796-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80203.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

87	S	Terphenyl-d14	0.997	1.030	-3.3	97	-0.05	12.57
88	t	Butylbenzylphthalate	0.617	0.661	-7.1	98	-0.04	13.42
89	t	Benzo[a]anthracene	1.258	1.253	0.4	97	-0.04	14.17
90	t	3,3'-Dichlorobenzidine	0.432	0.446	-3.2	96	-0.04	14.19
91	t	Chrysene	1.125	1.138	-1.2	98	-0.05	14.23
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.888	-8.6	98	-0.04	14.40
93	I	Perylene-d12	1.000	1.000	0.0	94	-0.04	16.30
94	t	Di-n-octylphthalate	1.402	1.402	0.0	97	-0.04	15.39
95	t	Benzo[b]fluoranthene	1.212	1.238	-2.1	93	-0.05	15.77
96	t	Benzo[k]fluoranthene	1.060	1.086	-2.5	94	-0.05	15.82
97	t	Benzo[a]pyrene	1.109	1.142	-3.0	93	-0.04	16.22
98	t	Indeno[1,2,3-cd]pyrene	0.997	0.988	0.9	94	-0.05	17.84
99	t	Dibenz(a,h)acridine	0.960	0.973	-1.4	95	-0.05	17.49
100	t	Dibenz[a,h]anthracene	1.057	1.083	-2.5	97	-0.06	17.88
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.492	0.0	94	-0.04	15.78
102	t	Benzo[g,h,i]perylene	1.150	1.182	-2.8	98	-0.06	18.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79960a.D M5P3794LVI.M Fri Dec 10 05:37:32 2021

8.6.21

8

Continuing Calibration Summary

Job Number: JD35920 **Sample:** E5P3796-CC3785
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80204.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...021\e5p3796\5p80204.d Vial: 3
Acq On : 9 Dec 2021 7:16 pm Operator: kristis
Sample : cc3785-5 Inst : MS5P
Misc : op35621,e5p3796,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	87	-0.03	4.64
104	Benzaldehyde	1.108	1.116	-0.7	83	-0.03	4.32
105	Phenanthrene-d10a	1.000	1.000	0.0	91	-0.04	10.00
106	Atrazine	0.088	0.104	-18.2	101	-0.04	9.65
107	Naphthalene-d8a	1.000	1.000	0.0	85	-0.03	5.74
108 t	Caprolactam	0.119	0.110	7.6	77	-0.03	6.14
\							
111	Phenanthrene-d10b	1.000	1.000	0.0	91	-0.04	10.00
112 s	1-chlorooctadecane	0.247	0.276	-11.7	95	-0.04	11.87
113 s	o-terphenyl	0.549	0.543	1.1	87	-0.04	10.65

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79960a.D M5P3794LVI.M Fri Dec 10 05:37:37 2021

8.6.22

8

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2551 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2551-DFTPP	4P48502.D	10/20/21 22:19	n/a	DFTPP Tune
E4P2551-IC2551	4P48504.D	10/20/21 22:59	n/a	Initial cal 1
E4P2551-ICC2551	4P48505.D	10/20/21 23:23	n/a	Initial cal 0.2
E4P2551-IC2551	4P48506.D	10/20/21 23:46	n/a	Initial cal 0.02
E4P2551-IC2551	4P48507.D	10/21/21 00:10	n/a	Initial cal 0.5
E4P2551-IC2551	4P48508.D	10/21/21 00:33	n/a	Initial cal 0.1
E4P2551-IC2551	4P48509.D	10/21/21 00:57	n/a	Initial cal 0.004
E4P2551-IC2551	4P48511.D	10/21/21 01:44	n/a	Initial cal 0.04
E4P2551-IC2551	4P48513.D	10/21/21 02:16	n/a	Initial cal 0.002
E4P2551-IC2551	4P48514.D	10/21/21 02:39	n/a	Initial cal 0.01
E4P2551-ICV2551	4P48512.D	10/21/21 03:15	n/a	Initial cal verification 0.2
OP35848A-BSD12	4P48515.D	10/21/21 03:45	OP35848A	Blank Spike Duplicate

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2607 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2607-DFTPP	4P49790.D	12/02/21 23:54	n/a	DFTPP Tune
E4P2607-CC2551	4P49792.D	12/03/21 01:18	n/a	Continuing cal 0.1
OP36899A-MB1	4P49793.D	12/03/21 02:00	OP36899A	Method Blank
OP36899A-BS12	4P49794.D	12/03/21 02:24	OP36899A	Blank Spike
OP36899A-BSD12	4P49795.D	12/03/21 02:48	OP36899A	Blank Spike Duplicate
OP36670A-BSD12	4P49797.D	12/03/21 03:51	OP36670A	Blank Spike Duplicate
ZZZZZZ	4P49798.D	12/03/21 04:14	OP36603A	(unrelated sample)
ZZZZZZ	4P49799.D	12/03/21 04:38	OP36777A	(unrelated sample)
ZZZZZZ	4P49800.D	12/03/21 05:02	OP36777A	(unrelated sample)
ZZZZZZ	4P49801.D	12/03/21 05:25	OP36777A	(unrelated sample)
ZZZZZZ	4P49802.D	12/03/21 05:49	OP36777A	(unrelated sample)
ZZZZZZ	4P49803.D	12/03/21 06:12	OP36777A	(unrelated sample)
ZZZZZZ	4P49804.D	12/03/21 06:36	OP36777A	(unrelated sample)
ZZZZZZ	4P49805.D	12/03/21 07:00	OP36777A	(unrelated sample)
JD35920-2	4P49806.D	12/03/21 07:23	OP36899A	HOFF MW-2DL
JD35920-5	4P49808.D	12/03/21 08:10	OP36899A	HOFF MW-7DL
JD35920-6	4P49809.D	12/03/21 08:33	OP36899A	HOFF DUP-113021
JD35920-3	4P49814.D	12/03/21 10:31	OP36899A	HOFF MW-2DU

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2608 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2608-DFTPP	4P49815.D	12/03/21 11:58	n/a	DFTPP Tune
E4P2608-CC2551	4P49816.D	12/03/21 12:11	n/a	Continuing cal 0.2
ZZZZZZ	4P49821.D	12/03/21 17:17	OP36572A	(unrelated sample)
ZZZZZZ	4P49822.D	12/03/21 17:40	OP36777A	(unrelated sample)
JD35920-4	4P49823.D	12/03/21 18:04	OP36899A	HOFF MW-2S

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2620 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2620-DFTPP	4P50022.D	12/12/21 10:16	n/a	DFTPP Tune
E4P2620-CC2551	4P50023.D	12/12/21 10:42	n/a	Continuing cal 0.1
OP37001A-MB1	4P50024.D	12/12/21 11:20	OP37001A	Method Blank
OP37001A-BS12	4P50025.D	12/12/21 11:43	OP37001A	Blank Spike
ZZZZZZ	4P50026.D	12/12/21 12:15	OP37001A	(unrelated sample)
ZZZZZZ	4P50027A.D	12/12/21 12:47	OP37001A	(unrelated sample)
JD36109-3	4P50028.D	12/12/21 13:10	OP37001A	(used for QC only; not part of job JD35920)
ZZZZZZ	4P50029.D	12/12/21 13:33	OP37001A	(unrelated sample)
ZZZZZZ	4P50030.D	12/12/21 13:57	OP37001A	(unrelated sample)
ZZZZZZ	4P50031.D	12/12/21 14:20	OP37001A	(unrelated sample)
OP37001A-MS	4P50032.D	12/12/21 14:44	OP37001A	Matrix Spike
OP37001A-MSD	4P50033.D	12/12/21 15:07	OP37001A	Matrix Spike Duplicate
ZZZZZZ	4P50034.D	12/12/21 15:31	OP36997A	(unrelated sample)
ZZZZZZ	4P50035.D	12/12/21 15:54	OP36997A	(unrelated sample)
JD35920-2	4P50036.D	12/12/21 16:18	OP37045A	HOFF MW-2DL
JD35920-5	4P50037.D	12/12/21 16:42	OP37045A	HOFF MW-7DL
JD35920-6	4P50038.D	12/12/21 17:05	OP37045A	HOFF DUP-113021
ZZZZZZ	4P50039.D	12/12/21 17:29	OP37045A	(unrelated sample)
ZZZZZZ	4P50040.D	12/12/21 17:52	OP37045A	(unrelated sample)
ZZZZZZ	4P50041.D	12/12/21 18:16	OP37045A	(unrelated sample)
ZZZZZZ	4P50042.D	12/12/21 18:40	OP37045A	(unrelated sample)
ZZZZZZ	4P50043.D	12/12/21 19:03	OP37045A	(unrelated sample)
ZZZZZZ	4P50044.D	12/12/21 19:27	OP37045A	(unrelated sample)
ZZZZZZ	4P50045.D	12/12/21 19:50	OP37045A	(unrelated sample)
JD35920-4	4P50046.D	12/12/21 20:14	OP37045A	HOFF MW-2S
JD35920-3	4P50047.D	12/12/21 20:37	OP37045A	HOFF MW-2DU

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3784	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3784-DFTPP	5P79938.D	12/01/21 13:23	n/a	DFTPP Tune
E5P3784-IC3784	5P79940.D	12/01/21 14:12	n/a	Initial cal 20
E5P3784-IC3784	5P79941.D	12/01/21 14:41	n/a	Initial cal 0.4
E5P3784-IC3784	5P79942.D	12/01/21 15:26	n/a	Initial cal 16
E5P3784-IC3784	5P79943.D	12/01/21 15:52	n/a	Initial cal 0.2
E5P3784-IC3784	5P79944.D	12/01/21 16:18	n/a	Initial cal 10
E5P3784-IC3784	5P79945.D	12/01/21 16:45	n/a	Initial cal 1
E5P3784-ICC3784	5P79946.D	12/01/21 17:12	n/a	Initial cal 5
E5P3784-IC3784	5P79947.D	12/01/21 17:39	n/a	Initial cal 2
E5P3784-ICV3784	5P79948.D	12/01/21 18:20	n/a	Initial cal verification 10
E5P3784-ICV3784	5P79949.D	12/01/21 18:47	n/a	Initial cal verification 10
E5P3784-ICV3784	5P79950.D	12/01/21 19:14	n/a	Initial cal verification 10
E5P3784-ICV3784	5P79951.D	12/01/21 19:41	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3785	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3785-DFTPP	5P79956.D	12/01/21 21:49	n/a	DFTPP Tune
E5P3785-IC3785	5P79957.D	12/01/21 22:09	n/a	Initial cal 20
E5P3785-IC3785	5P79958.D	12/01/21 22:36	n/a	Initial cal 16
E5P3785-ICC3785	5P79959.D	12/01/21 23:02	n/a	Initial cal 10
E5P3785-IC3785	5P79960.D	12/01/21 23:30	n/a	Initial cal 5
E5P3785-IC3785	5P79961.D	12/01/21 23:57	n/a	Initial cal 2
E5P3785-IC3785	5P79962.D	12/02/21 00:24	n/a	Initial cal 1
E5P3785-IC3785	5P79963.D	12/02/21 00:51	n/a	Initial cal 0.4
E5P3785-IC3785	5P79964.D	12/02/21 01:17	n/a	Initial cal 0.2
E5P3785-ICV3785	5P79965.D	12/02/21 01:45	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3793	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3793-DFTPP	5P80146.D	12/08/21 05:04	n/a	DFTPP Tune
E5P3793-CC3784	5P80147.D	12/08/21 05:20	n/a	Continuing cal 10
E5P3793-CC3785	5P80148.D	12/08/21 05:47	n/a	Continuing cal 10
OP36899-MB1	5P80150.D	12/08/21 06:40	OP36899	Method Blank
ZZZZZZ	5P80151.D	12/08/21 07:07	OP36899	(unrelated sample)
ZZZZZZ	5P80151.D	12/08/21 07:07	OP36899	(unrelated sample)
ZZZZZZ	5P80152.D	12/08/21 07:34	OP36899	(unrelated sample)
OP36899-BS1	5P80153.D	12/08/21 08:00	OP36899	Blank Spike
OP36899-BSD	5P80154.D	12/08/21 08:27	OP36899	Blank Spike Duplicate
ZZZZZZ	5P80155.D	12/08/21 08:54	OP36823	(unrelated sample)
ZZZZZZ	5P80156.D	12/08/21 09:21	OP36823	(unrelated sample)
ZZZZZZ	5P80157.D	12/08/21 09:47	OP36823	(unrelated sample)
ZZZZZZ	5P80158.D	12/08/21 10:14	OP36823	(unrelated sample)
JD35920-2	5P80159.D	12/08/21 10:41	OP36899	HOFF MW-2DL
JD35920-4	5P80160.D	12/08/21 11:08	OP36899	HOFF MW-2S
JD35920-5	5P80161.D	12/08/21 11:35	OP36899	HOFF MW-7DL
JD35920-6	5P80162.D	12/08/21 12:02	OP36899	HOFF DUP-113021
ZZZZZZ	5P80163.D	12/08/21 12:29	OP36899	(unrelated sample)
ZZZZZZ	5P80163.D	12/08/21 12:29	OP36899	(unrelated sample)
ZZZZZZ	5P80164.D	12/08/21 12:55	OP36899	(unrelated sample)
ZZZZZZ	5P80164.D	12/08/21 12:55	OP36899	(unrelated sample)
ZZZZZZ	5P80165.D	12/08/21 13:22	OP36899	(unrelated sample)
ZZZZZZ	5P80165.D	12/08/21 13:22	OP36899	(unrelated sample)
ZZZZZZ	5P80166.D	12/08/21 13:49	OP36899	(unrelated sample)
ZZZZZZ	5P80167.D	12/08/21 14:16	OP36899	(unrelated sample)
ZZZZZZ	5P80168.D	12/08/21 14:42	OP36899	(unrelated sample)
ZZZZZZ	5P80169.D	12/08/21 15:09	OP36899	(unrelated sample)
ZZZZZZ	5P80170.D	12/08/21 15:36	OP36899	(unrelated sample)

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3794	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3794-DFTPP	5P80176.D	12/09/21 00:53	n/a	DFTPP Tune
E5P3794-IC3794	5P80177.D	12/09/21 01:11	n/a	Initial cal 0.2
E5P3794-IC3794	5P80178.D	12/09/21 01:38	n/a	Initial cal 0.4
E5P3794-IC3794	5P80179.D	12/09/21 02:05	n/a	Initial cal 1
E5P3794-IC3794	5P80180.D	12/09/21 02:32	n/a	Initial cal 2
E5P3794-IC3794	5P80181.D	12/09/21 02:59	n/a	Initial cal 5
E5P3794-ICC3794	5P80182.D	12/09/21 03:26	n/a	Initial cal 10
E5P3794-IC3794	5P80183.D	12/09/21 03:53	n/a	Initial cal 16
E5P3794-IC3794	5P80184.D	12/09/21 04:19	n/a	Initial cal 20
E5P3794-ICV3794	5P80185.D	12/09/21 04:47	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80186.D	12/09/21 05:13	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80187.D	12/09/21 05:40	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80188.D	12/09/21 06:07	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3795	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3795-DFTPP	5P80191.D	12/09/21 12:44	n/a	DFTPP Tune
E5P3795-ICV3794	5P80192.D	12/09/21 12:58	n/a	Initial cal verification 10
E5P3795-CC3794	5P80193.D	12/09/21 13:25	n/a	Continuing cal 10
E5P3795-CC3785	5P80194.D	12/09/21 13:51	n/a	Continuing cal 10
OP36390-MB1	5P80195.D	12/09/21 14:46	OP36390	Method Blank
OP36390-BS1	5P80196.D	12/09/21 15:13	OP36390	Blank Spike
OP36390-BSD	5P80197.D	12/09/21 15:40	OP36390	Blank Spike Duplicate
ZZZZZZ	5P80198.D	12/09/21 16:07	OP36390	(unrelated sample)
E5P3795-ECC3794	5P80199.D	12/09/21 16:57	n/a	Ending cal 10
E5P3795-ECC3785	5P80200.D	12/09/21 17:36	n/a	Ending cal 10

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3796	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3796-DFTPP	5P80202.D	12/09/21 18:18	n/a	DFTPP Tune
E5P3796-CC3794	5P80203.D	12/09/21 18:34	n/a	Continuing cal 5
E5P3796-CC3785	5P80204.D	12/09/21 19:16	n/a	Continuing cal 5
ZZZZZZ	5P80210.D	12/09/21 21:57	OP36899	(unrelated sample)
ZZZZZZ	5P80211.D	12/09/21 22:24	OP36899	(unrelated sample)
ZZZZZZ	5P80212.D	12/09/21 22:51	OP36899	(unrelated sample)
JD35920-3	5P80213.D	12/09/21 23:18	OP36899	HOFF MW-2DU
ZZZZZZ	5P80214.D	12/09/21 23:44	OP36899	(unrelated sample)
ZZZZZZ	5P80214.D	12/09/21 23:44	OP36899	(unrelated sample)
ZZZZZZ	5P80215.D	12/10/21 00:11	OP36899	(unrelated sample)
ZZZZZZ	5P80216.D	12/10/21 00:38	OP36899	(unrelated sample)
ZZZZZZ	5P80218.D	12/10/21 01:32	OP36823	(unrelated sample)
ZZZZZZ	5P80219.D	12/10/21 01:58	OP36823	(unrelated sample)
ZZZZZZ	5P80220.D	12/10/21 02:25	OP36823A	(unrelated sample)
ZZZZZZ	5P80221.D	12/10/21 02:51	OP36823A	(unrelated sample)
ZZZZZZ	5P80222.D	12/10/21 03:18	OP36837	(unrelated sample)
ZZZZZZ	5P80223.D	12/10/21 03:45	OP36837	(unrelated sample)
ZZZZZZ	5P80224.D	12/10/21 04:11	OP36837	(unrelated sample)
ZZZZZZ	5P80225.D	12/10/21 04:38	OP36837	(unrelated sample)

MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3793\
Data File : 5p80159.D
Acq On : 8 Dec 2021 10:41 am
Operator : chriss2
Sample : jd35920-2
Misc : op36899,e5p3793,290,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 08 16:49:09 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Dec 07 14:55:13 2021
Response via : Initial Calibration

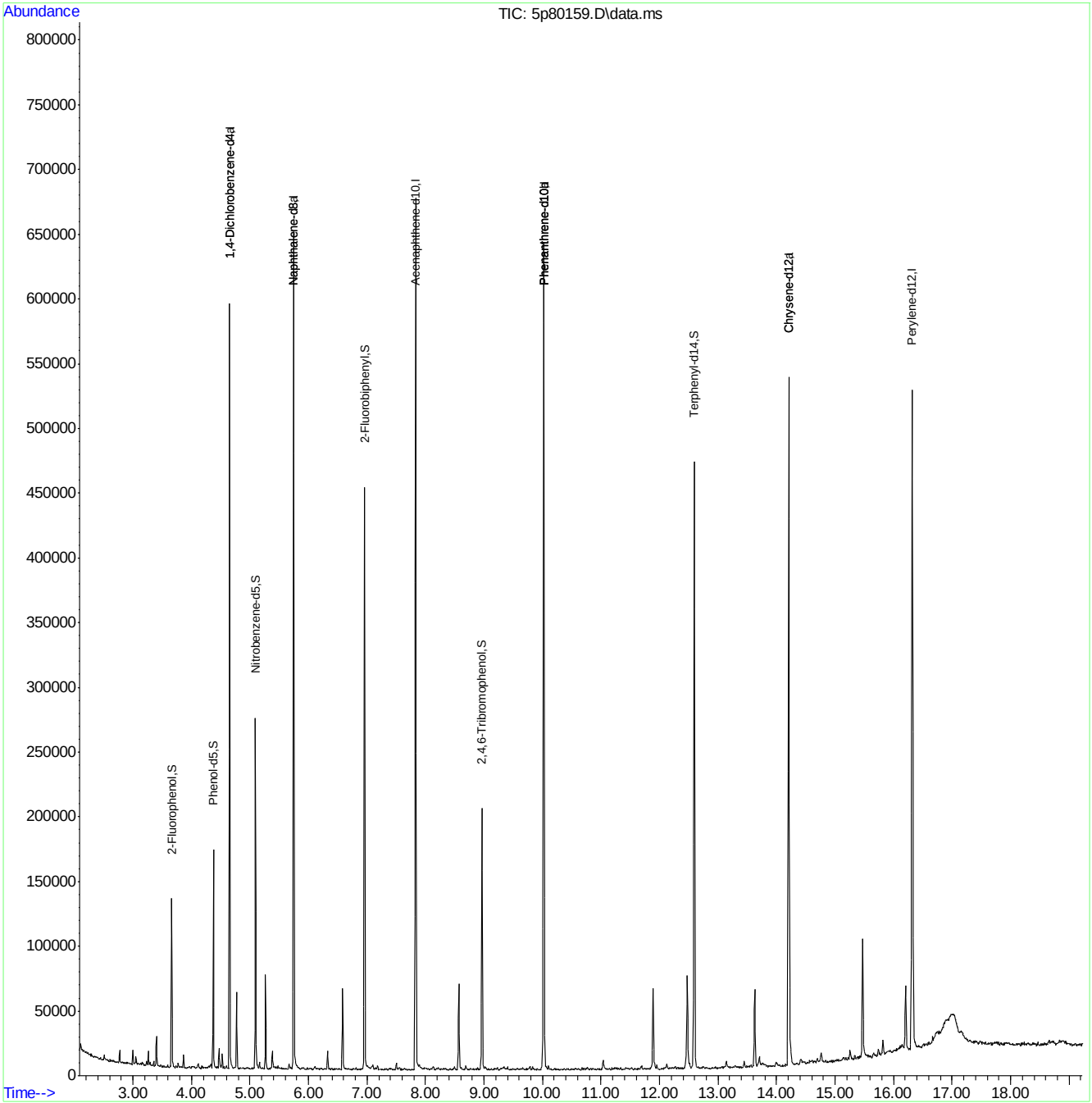
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.652	152	75399	8.00	ppm	-0.02
24) Naphthalene-d8	5.747	136	286874	8.00	ppm	-0.02
46) Acenaphthene-d10	7.830	164	166995	8.00	ppm	-0.02
69) Phenanthrene-d10	10.021	188	295452	8.00	ppm	-0.02
84) Chrysene-d12	14.209	240	225569	8.00	ppm	-0.02
93) Perylene-d12	16.319	264	213371	8.00	ppm	-0.02
103) 1,4-Dichlorobenzene-d4a	4.652	152	75399	8.00	ppm	-0.02
105) Phenanthrene-d10a	10.021	188	295452	8.00	ppm	-0.02
107) Naphthalene-d8a	5.747	136	286874	8.00	ppm	-0.02
109) Chrysene-d12a	14.209	240	225569	8.00	ppm	-0.02
111) Phenanthrene-d10b	10.021	188	295452	8.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.663	112	31201	2.54	ppm	-0.01
Spiked Amount 10.000			Recovery = 25.40%			
8) Phenol-d5	4.374	99	24071	1.52	ppm	-0.01
Spiked Amount 10.000			Recovery = 15.20%			
25) Nitrobenzene-d5	5.095	82	68152	6.28	ppm	-0.02
Spiked Amount 10.000			Recovery = 62.80%			
51) 2-Fluorobiphenyl	6.959	172	166019	5.95	ppm	-0.02
Spiked Amount 10.000			Recovery = 59.50%			
74) 2,4,6-Tribromophenol	8.963	330	25586	5.78	ppm	-0.02
Spiked Amount 10.000			Recovery = 57.80%			
87) Terphenyl-d14	12.596	244	187179	6.65	ppm	-0.02
Spiked Amount 10.000			Recovery = 66.50%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3793\
Data File : 5p80159.D
Acq On : 8 Dec 2021 10:41 am
Operator : chriss2
Sample : jd35920-2
Misc : op36899,e5p3793,290,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 08 16:49:09 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Dec 07 14:55:13 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\121021\e5p3796\
Data File : 5p80213.d
Acq On : 9 Dec 2021 11:18 pm
Operator : kristis
Sample : jd35920-3 Inst : MS5P
Misc : op36899,e5p3796,290,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 10 06:11:53 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Dec 10 05:39:04 2021
Response via : Initial Calibration

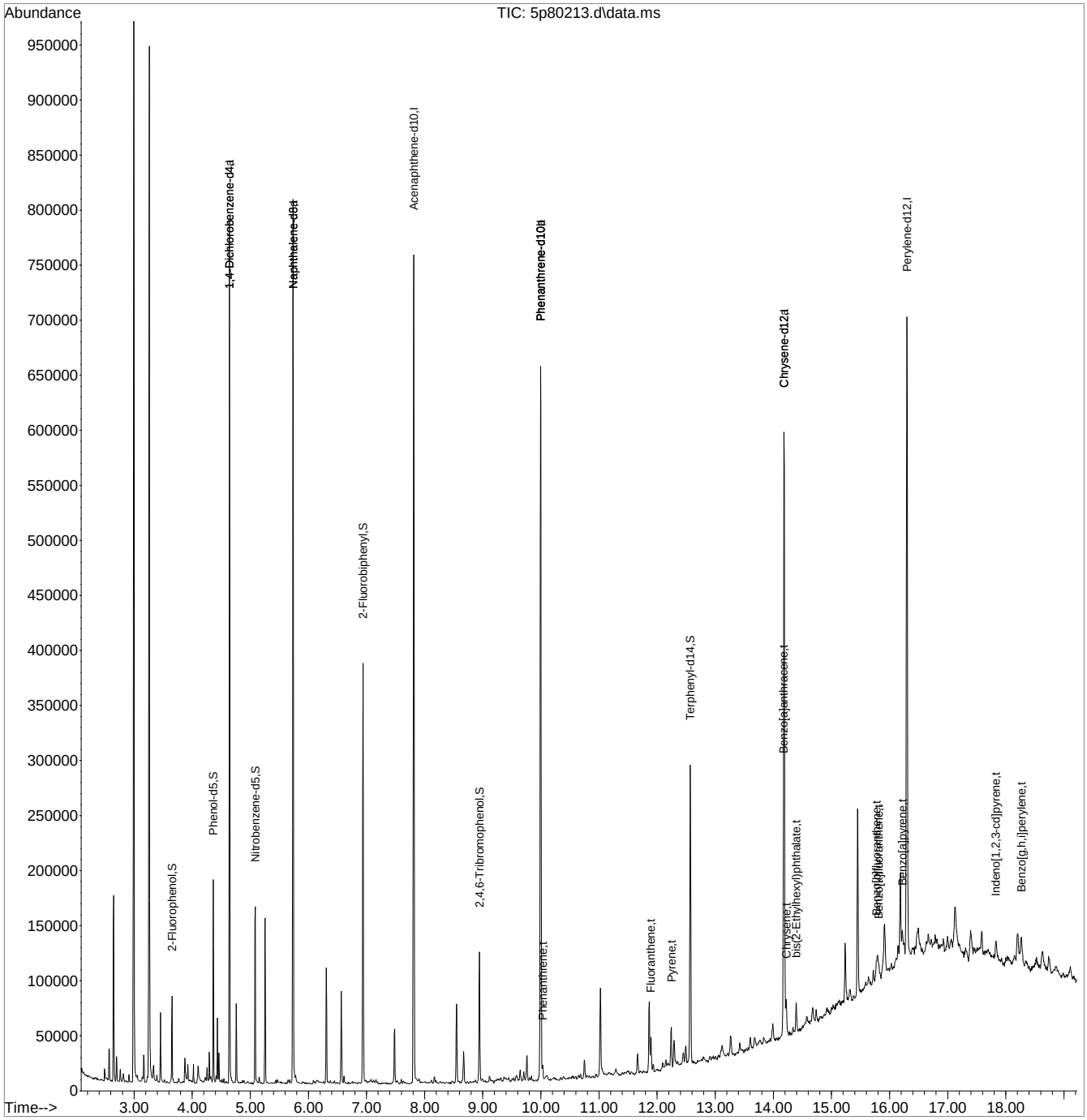
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.641	152	96698	8.00	ppm	0.00
24) Naphthalene-d8	5.736	136	372099	8.00	ppm	0.00
46) Acenaphthene-d10	7.814	164	196559	8.00	ppm	0.00
69) Phenanthrene-d10	9.994	188	307527	8.00	ppm	0.00
84) Chrysene-d12	14.182	240	246475	8.00	ppm	0.00
93) Perylene-d12	16.298	264	255703	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.641	152	96698	8.00	ppm	0.00
105) Phenanthrene-d10a	9.994	188	307527	8.00	ppm	0.00
107) Naphthalene-d8a	5.736	136	372099	8.00	ppm	0.00
109) Chrysene-d12a	14.182	240	246475	8.00	ppm	0.00
111) Phenanthrene-d10b	9.994	188	307527	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.653	112	17809	1.14	ppm	0.00
Spiked Amount 10.000			Recovery = 11.40%			
8) Phenol-d5	4.363	99	20316	1.01	ppm	0.00
Spiked Amount 10.000			Recovery = 10.10%			
25) Nitrobenzene-d5	5.085	82	45480	3.25	ppm	0.00
Spiked Amount 10.000			Recovery = 32.50%			
51) 2-Fluorobiphenyl	6.938	172	124173	3.85	ppm	0.00
Spiked Amount 10.000			Recovery = 38.50%			
74) 2,4,6-Tribromophenol	8.942	330	15068	3.86	ppm	0.00
Spiked Amount 10.000			Recovery = 38.60%			
87) Terphenyl-d14	12.569	244	113961	3.71	ppm	0.00
Spiked Amount 10.000			Recovery = 37.10%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
78) Phenanthrene	10.031	178	5673	0.14	ppm	99
82) Fluoranthene	11.891	202	14803	0.33	ppm	98
86) Pyrene	12.243	202	14221	0.34	ppm	95
89) Benzo[a]anthracene	14.172	228	7736	0.20	ppm	97
91) Chrysene	14.225	228	7774	0.22	ppm	99
92) bis(2-Ethylhexyl)phtha...	14.391	149	11522	0.46	ppm	93
95) Benzo[b]fluoranthene	15.774	252	13617	0.35	ppm	97
96) Benzo[k]fluoranthene	15.812	252	5075	0.15	ppm	91
97) Benzo[a]pyrene	16.218	252	9658	0.27	ppm	95
98) Indeno[1,2,3-cd]pyrene	17.826	276	10433	0.33	ppm	78
102) Benzo[g,h,i]perylene	18.264	276	13116	0.36	ppm	90

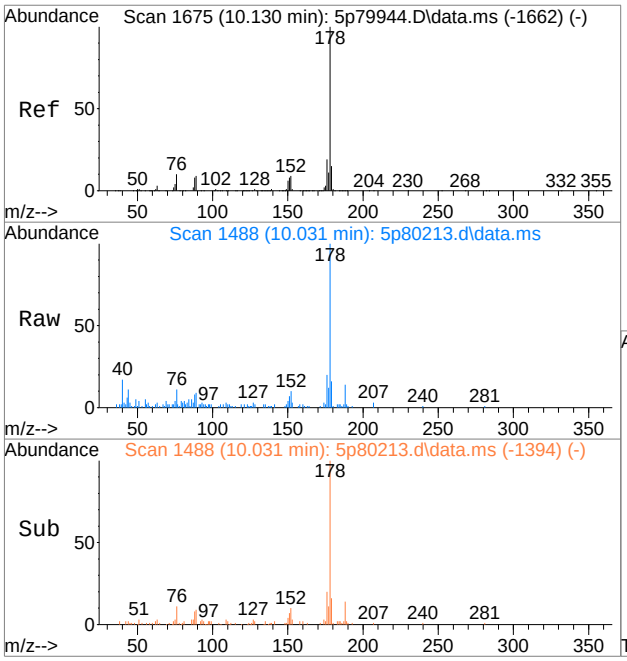
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\121021\e5p3796\
Data File : 5p80213.d
Acq On : 9 Dec 2021 11:18 pm
Operator : kristis
Sample : jd35920-3 Inst : MS5P
Misc : op36899,e5p3796,290,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 10 06:11:53 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Dec 10 05:39:04 2021
Response via : Initial Calibration

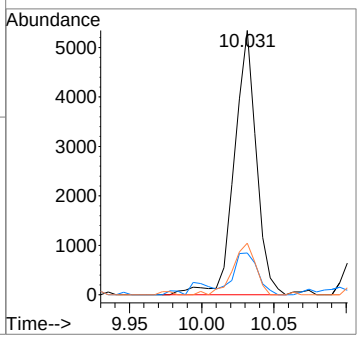


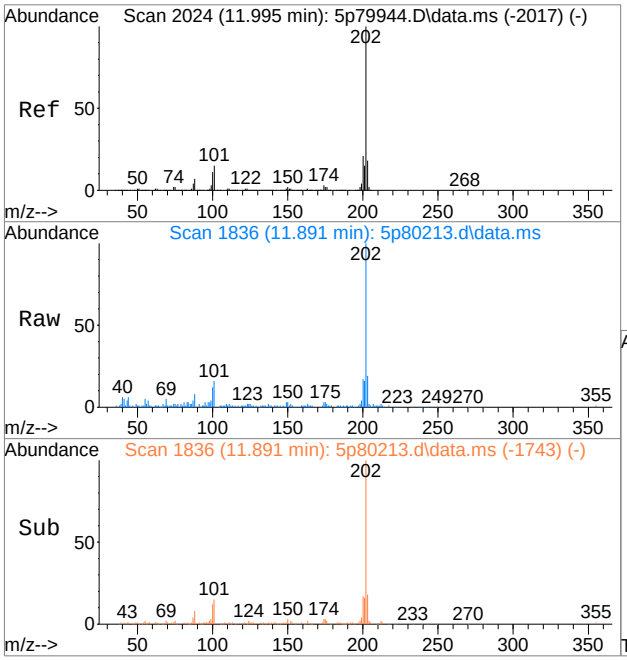


#78
Phenanthrene
Concen: 0.14 ppm
RT: 10.031 min Scan# 1488
Delta R.T. 0.000 min
Lab File: 5p80213.d
Acq: 9 Dec 2021 11:18 pm

Tgt Ion:178 Resp: 5673

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	45.0
176	18.9	0.0	49.1

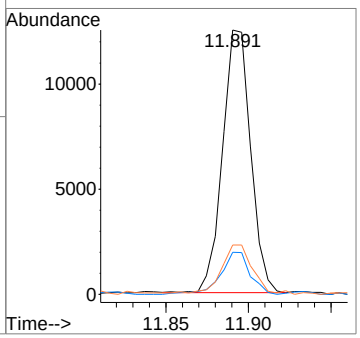


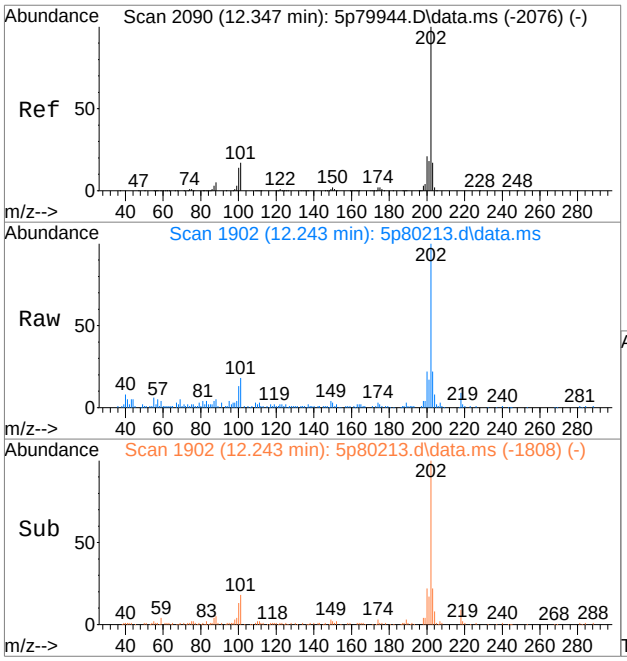


#82
Fluoranthene
Concen: 0.33 ppm
RT: 11.891 min Scan# 1836
Delta R.T. -0.005 min
Lab File: 5p80213.d
Acq: 9 Dec 2021 11:18 pm

Tgt Ion:202 Resp: 14803

Ion	Ratio	Lower	Upper
202	100		
101	15.8	0.0	44.5
203	17.8	0.0	48.2

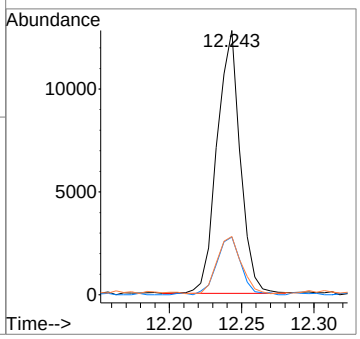


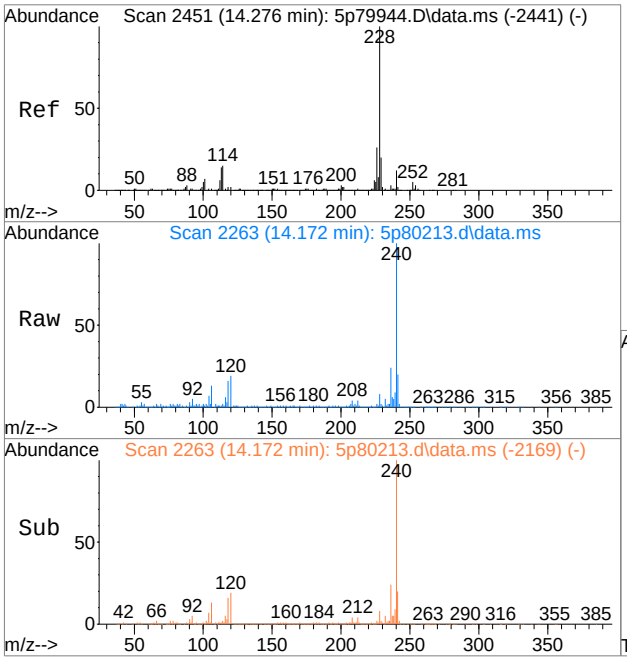


#86
Pyrene
Concen: 0.34 ppm
RT: 12.243 min Scan# 1902
Delta R.T. 0.000 min
Lab File: 5p80213.d
Acq: 9 Dec 2021 11:18 pm

Tgt Ion:202 Resp: 14221

Ion	Ratio	Lower	Upper
202	100		
200	22.0	0.0	50.3
203	21.5	0.0	48.5

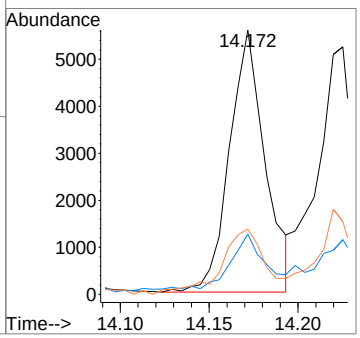


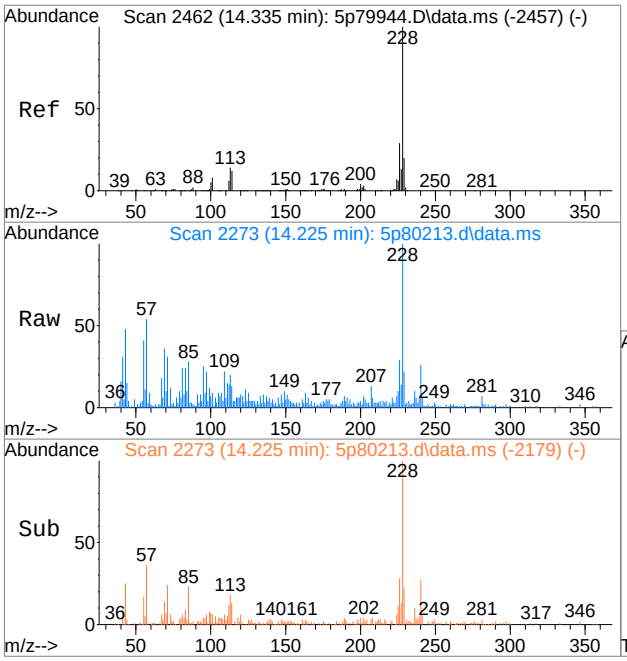


#89
Benzo[a]anthracene
Concen: 0.20 ppm
RT: 14.172 min Scan# 2263
Delta R.T. 0.000 min
Lab File: 5p80213.d
Acq: 9 Dec 2021 11:18 pm

Tgt Ion:228 Resp: 7736

Ion	Ratio	Lower	Upper
228	100		
229	20.5	0.0	49.4
226	23.6	0.0	55.7

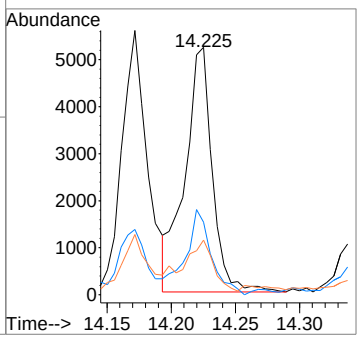


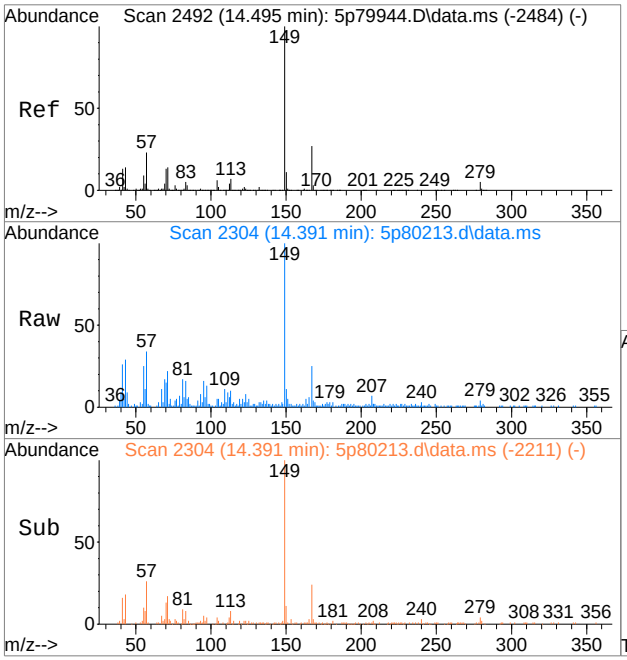


#91
Chrysene
Concen: 0.22 ppm
RT: 14.225 min Scan# 2273
Delta R.T. 0.000 min
Lab File: 5p80213.d
Acq: 9 Dec 2021 11:18 pm

Tgt Ion:228 Resp: 7774

Ion	Ratio	Lower	Upper
228	100		
226	28.7	0.0	59.2
229	19.5	0.0	49.9

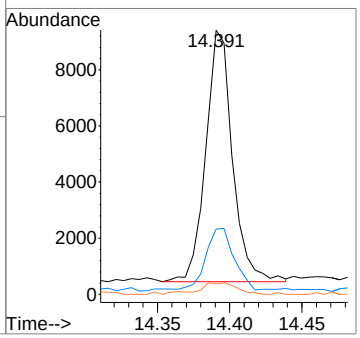


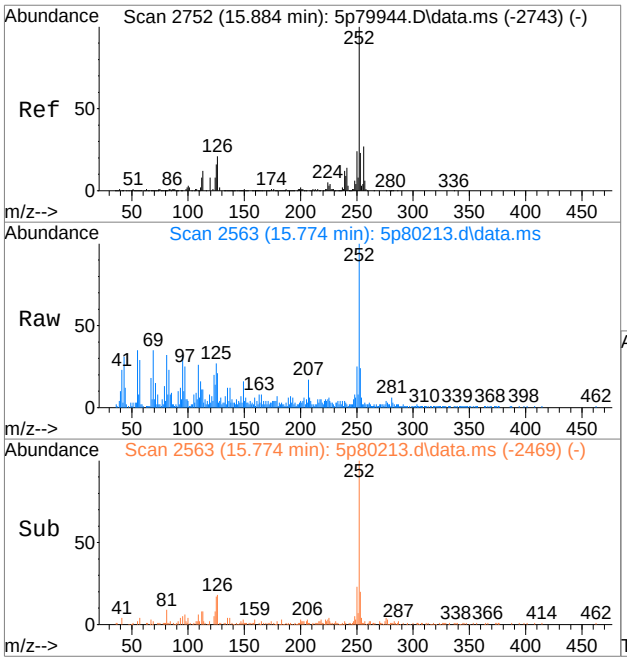


#92
bis(2-Ethylhexyl)phthalate
Concen: 0.46 ppm
RT: 14.391 min Scan# 2304
Delta R.T. -0.005 min
Lab File: 5p80213.d
Acq: 9 Dec 2021 11:18 pm

Tgt Ion:149 Resp: 11522

Ion	Ratio	Lower	Upper
149	100		
167	23.9	0.0	57.7
279	4.2	0.0	35.5

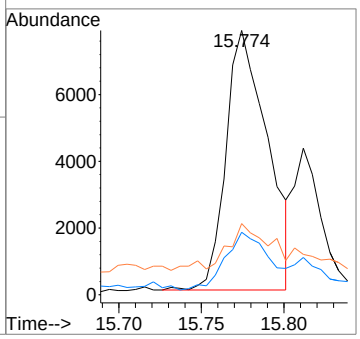


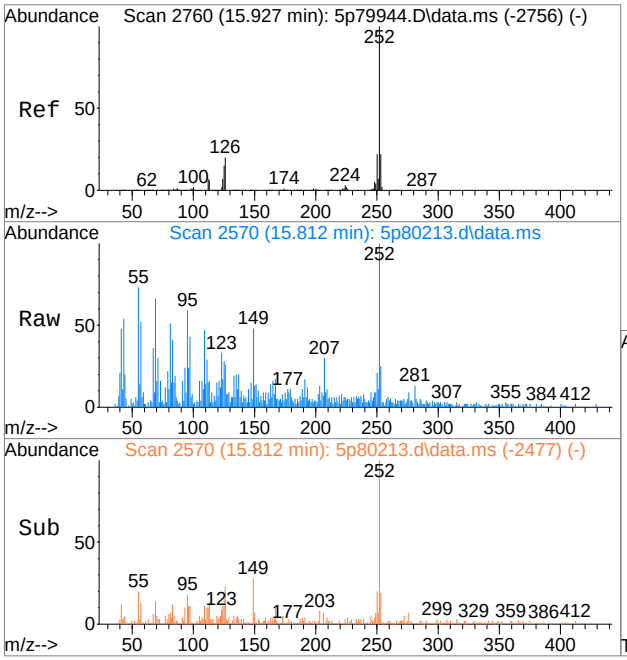


#95
Benzo[b]fluoranthene
Concen: 0.35 ppm
RT: 15.774 min Scan# 2563
Delta R.T. 0.000 min
Lab File: 5p80213.d
Acq: 9 Dec 2021 11:18 pm

Tgt Ion:252 Resp: 13617

Ion	Ratio	Lower	Upper
252	100		
253	21.4	0.0	52.8
125	18.6	0.0	47.0

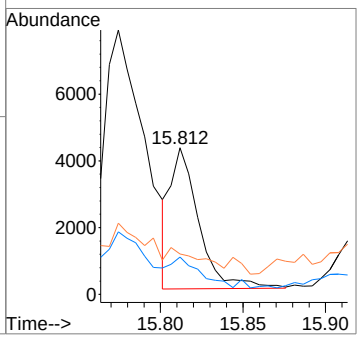


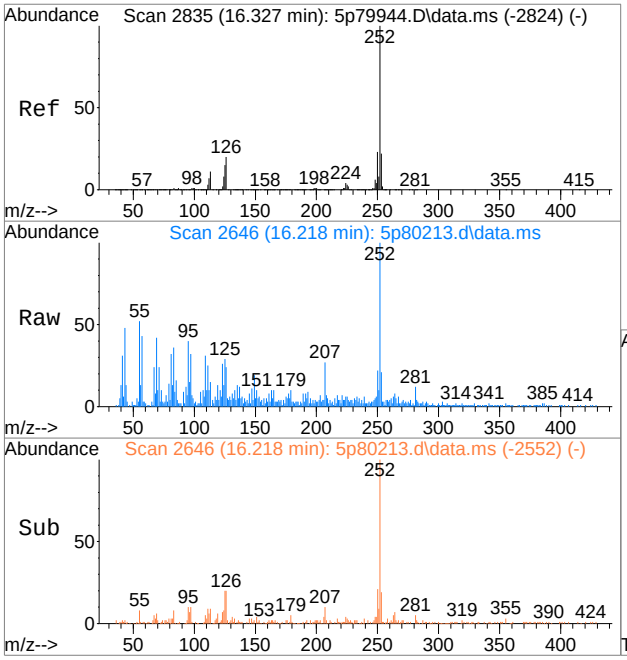


#96
Benzo[k]fluoranthene
Concen: 0.15 ppm
RT: 15.812 min Scan# 2570
Delta R.T. -0.005 min
Lab File: 5p80213.d
Acq: 9 Dec 2021 11:18 pm

Tgt Ion:252 Resp: 5075

Ion	Ratio	Lower	Upper
252	100		
253	20.6	0.0	51.5
125	7.1	0.0	45.3

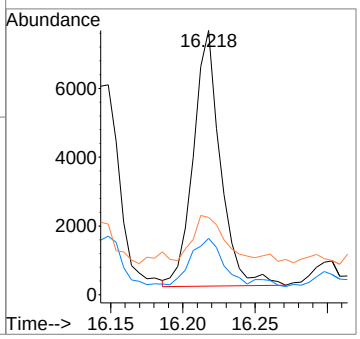


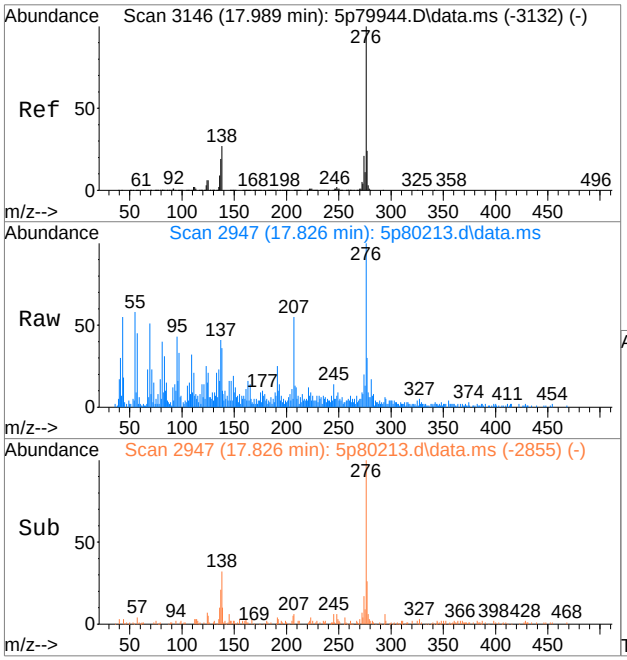


#97
Benzo[a]pyrene
Concen: 0.27 ppm
RT: 16.218 min Scan# 2646
Delta R.T. 0.000 min
Lab File: 5p80213.d
Acq: 9 Dec 2021 11:18 pm

Tgt Ion:252 Resp: 9658

Ion	Ratio	Lower	Upper
252	100		
253	18.6	0.0	51.8
125	15.1	0.0	46.4

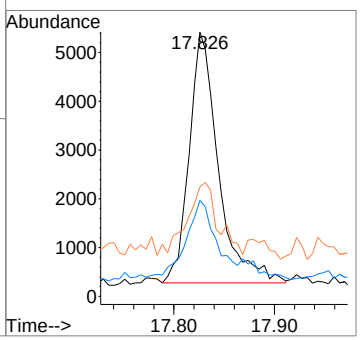


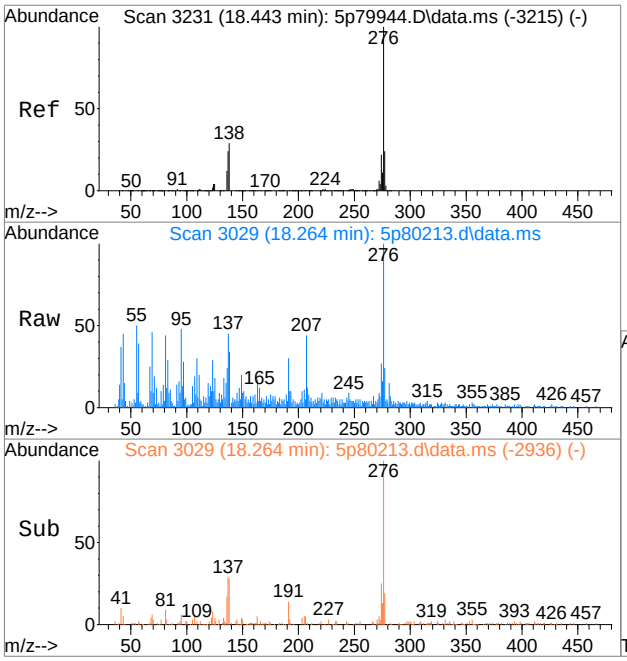


#98
Indeno[1,2,3-cd]pyrene
Concen: 0.33 ppm
RT: 17.826 min Scan# 2947
Delta R.T. -0.011 min
Lab File: 5p80213.d
Acq: 9 Dec 2021 11:18 pm

Tgt Ion:276 Resp: 10433

Ion	Ratio	Lower	Upper
276	100		
138	40.5	0.0	56.4
137	25.3	0.0	49.1

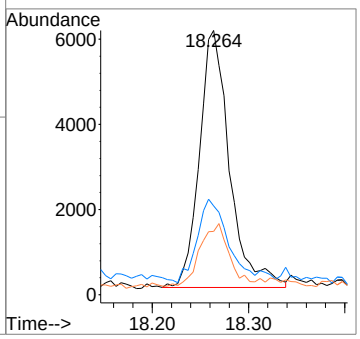




#102
Benzo[g,h,i]perylene
Concen: 0.36 ppm
RT: 18.264 min Scan# 3029
Delta R.T. -0.005 min
Lab File: 5p80213.d
Acq: 9 Dec 2021 11:18 pm

Tgt Ion:276 Resp: 13116

Ion	Ratio	Lower	Upper
276	100		
138	26.2	3.5	63.5
277	20.2	0.0	53.5



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/09/21 08:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3793\
Data File : 5p80160.D
Acq On : 8 Dec 2021 11:08 am
Operator : chriss2
Sample : jd35920-4
Misc : op36899,e5p3793,290,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 08 16:25:10 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Dec 07 14:55:13 2021
Response via : Initial Calibration

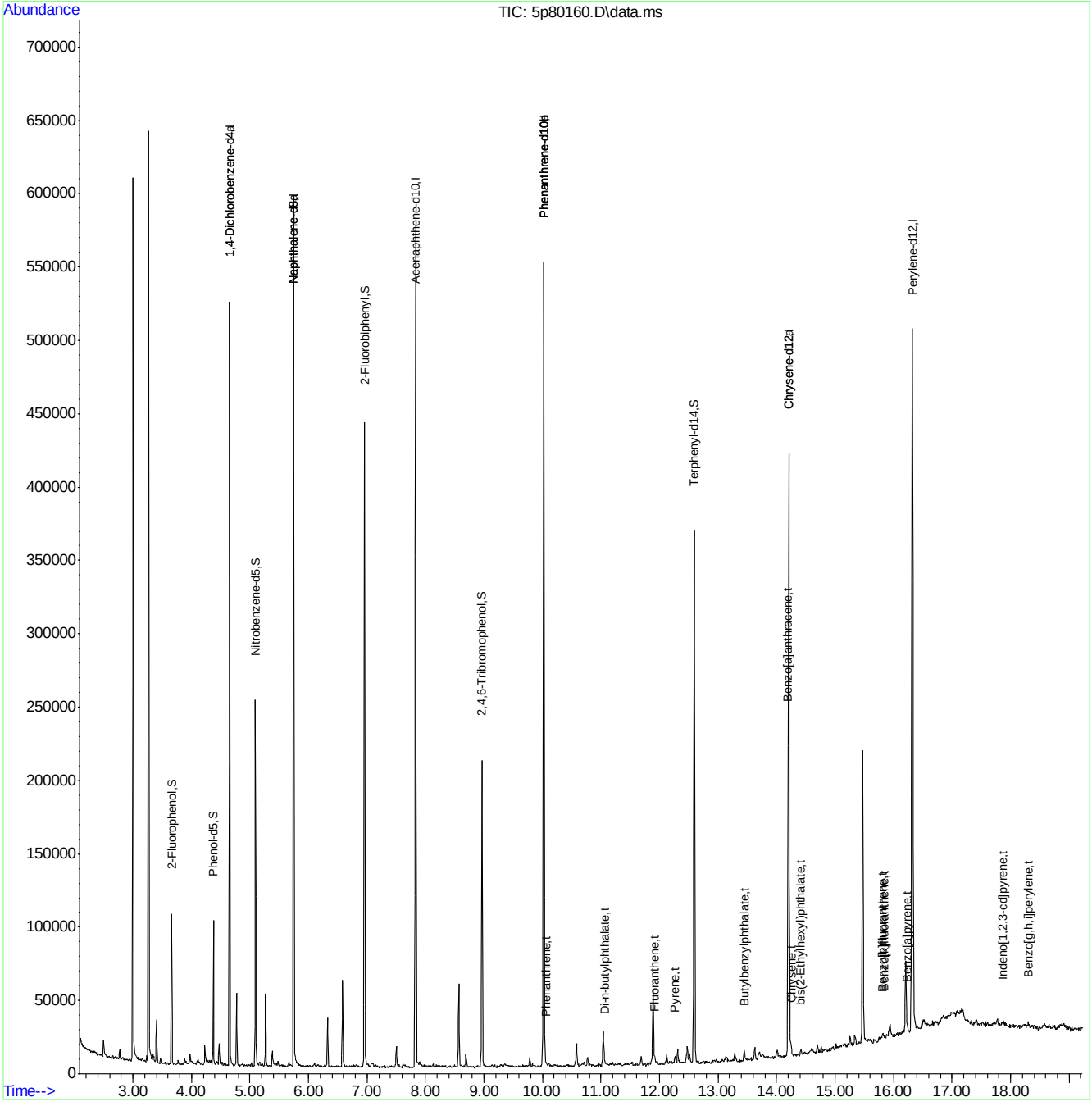
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.652	152	65794	8.00	ppm	-0.02
24) Naphthalene-d8	5.747	136	258792	8.00	ppm	-0.02
46) Acenaphthene-d10	7.830	164	147049	8.00	ppm	-0.02
69) Phenanthrene-d10	10.021	188	250747	8.00	ppm	-0.02
84) Chrysene-d12	14.209	240	176280	8.00	ppm	-0.02
93) Perylene-d12	16.324	264	218219	8.00	ppm	-0.02
103) 1,4-Dichlorobenzene-d4a	4.652	152	65794	8.00	ppm	-0.02
105) Phenanthrene-d10a	10.021	188	250747	8.00	ppm	-0.02
107) Naphthalene-d8a	5.747	136	258792	8.00	ppm	-0.02
109) Chrysene-d12a	14.209	240	176280	8.00	ppm	-0.02
111) Phenanthrene-d10b	10.021	188	250747	8.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.663	112	25043	2.34	ppm	-0.01
Spiked Amount 10.000			Recovery = 23.40%			
8) Phenol-d5	4.374	99	20658	1.50	ppm	-0.01
Spiked Amount 10.000			Recovery = 15.00%			
25) Nitrobenzene-d5	5.095	82	62029	6.34	ppm	-0.02
Spiked Amount 10.000			Recovery = 63.40%			
51) 2-Fluorobiphenyl	6.960	172	160253	6.52	ppm	-0.02
Spiked Amount 10.000			Recovery = 65.20%			
74) 2,4,6-Tribromophenol	8.963	330	26977	7.18	ppm	-0.02
Spiked Amount 10.000			Recovery = 71.80%			
87) Terphenyl-d14	12.596	244	152431	6.93	ppm	-0.02
Spiked Amount 10.000			Recovery = 69.30%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
78) Phenanthrene	10.053	178	1081	0.03	ppm	83
81) Di-n-butylphthalate	11.057	149	1121	0.03	ppm	95
82) Fluoranthene	11.917	202	1951	0.05	ppm	95
86) Pyrene	12.264	202	1900	0.07	ppm	96
88) Butylbenzylphthalate	13.445	149	2543	0.53	ppm	77
89) Benzo[a]anthracene	14.198	228	1306	0.05	ppm	78
91) Chrysene	14.252	228	871m	0.03	ppm	
92) bis(2-Ethylhexyl)phtha...	14.417	149	2157	0.33	ppm	95
95) Benzo[b]fluoranthene	15.806	252	1660	0.06	ppm	95
96) Benzo[k]fluoranthene	15.838	252	712m	0.02	ppm	
97) Benzo[a]pyrene	16.239	252	1288	0.05	ppm	79
98) Indeno[1,2,3-cd]pyrene	17.868	276	1269	0.13	ppm	88
102) Benzo[g,h,i]perylene	18.301	276	1321	0.04	ppm	83

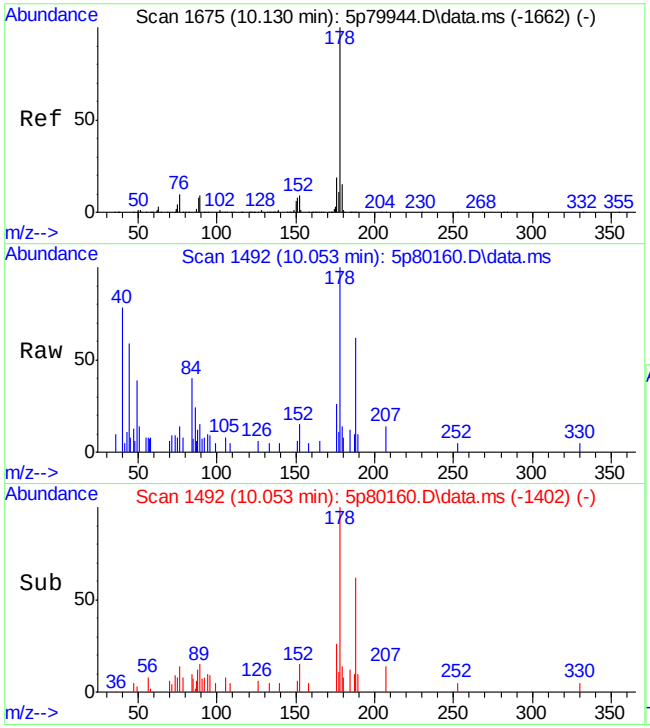
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3793\
Data File : 5p80160.D
Acq On : 8 Dec 2021 11:08 am
Operator : chriss2
Sample : jd35920-4
Misc : op36899,e5p3793,290,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 08 16:25:10 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Dec 07 14:55:13 2021
Response via : Initial Calibration

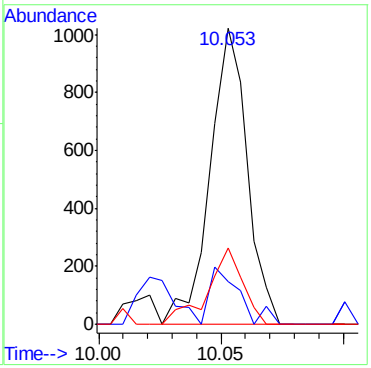


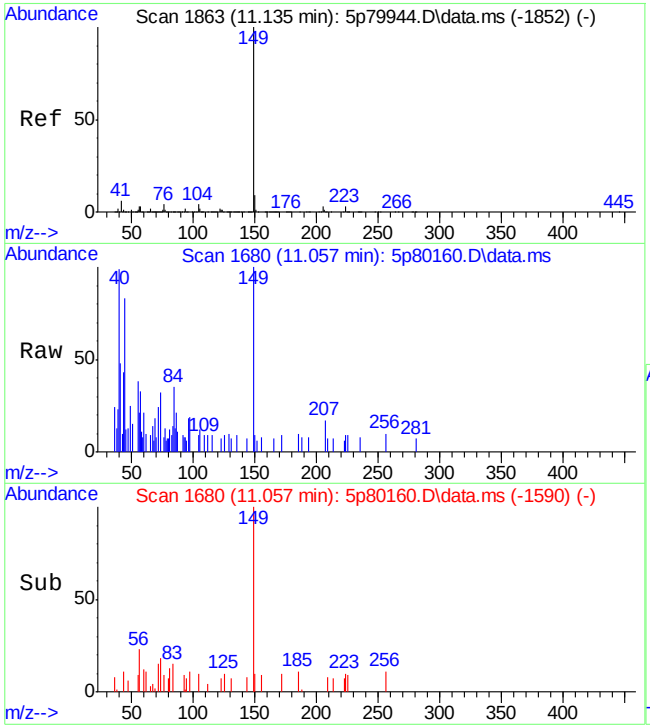


#78
Phenanthrene
Concen: 0.03 ppm
RT: 10.053 min Scan# 1492
Delta R.T. -0.021 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:178 Resp: 1081

Ion	Ratio	Lower	Upper
178	100		
179	6.9	0.0	45.4
176	25.7	0.0	49.0

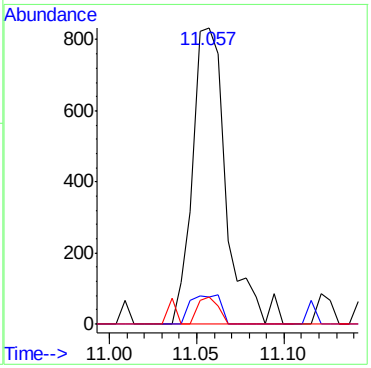


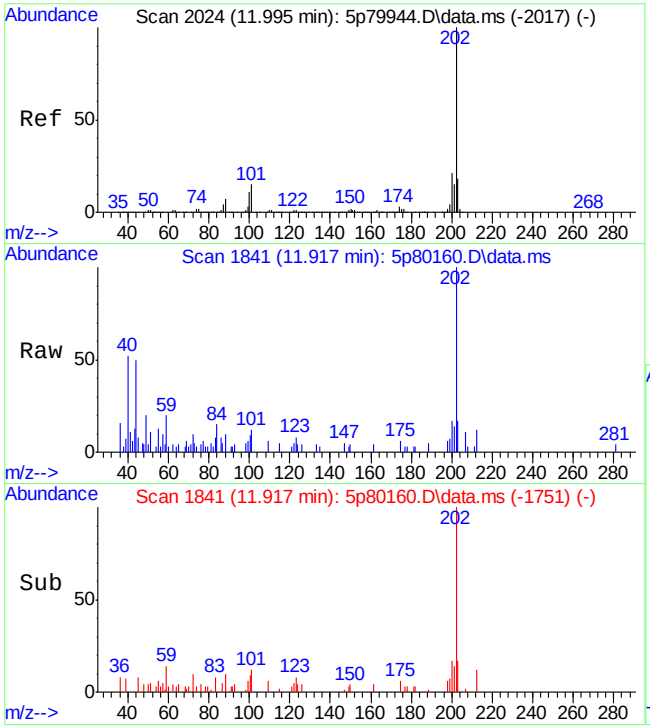


#81
Di-n-butylphthalate
Concen: 0.03 ppm
RT: 11.057 min Scan# 1680
Delta R.T. -0.021 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:149 Resp: 1121

Ion	Ratio	Lower	Upper
149	100		
150	9.0	0.0	38.9
104	9.2	0.0	34.2

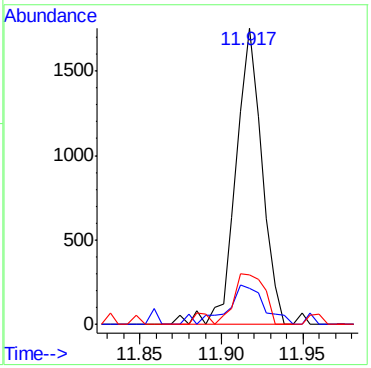


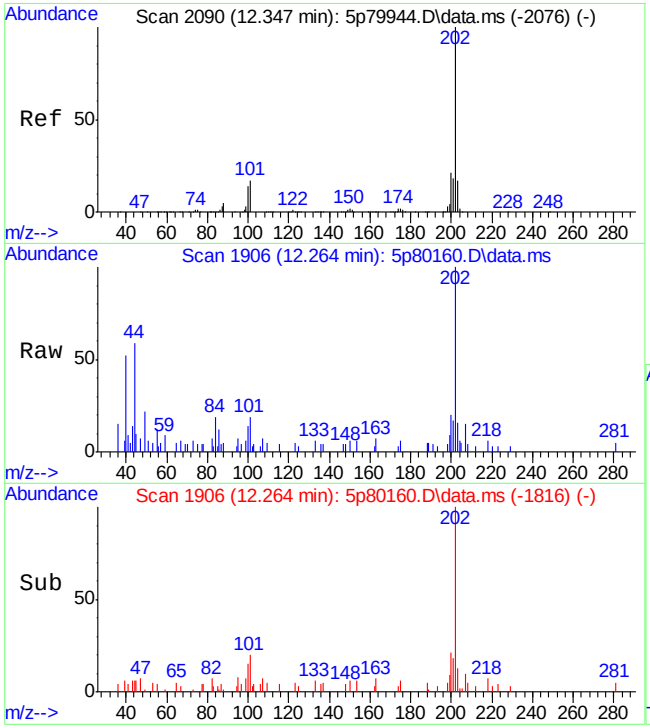


#82
Fluoranthene
Concen: 0.05 ppm
RT: 11.917 min Scan# 1841
Delta R.T. -0.021 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:202 Resp: 1951

Ion	Ratio	Lower	Upper
202	100		
101	12.3	0.0	45.2
203	16.6	0.0	47.9

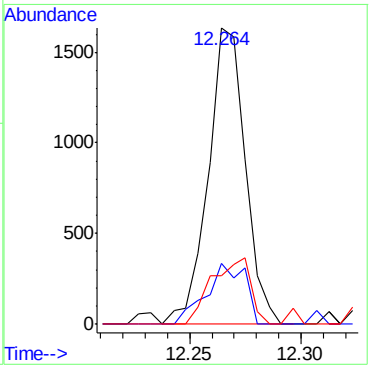


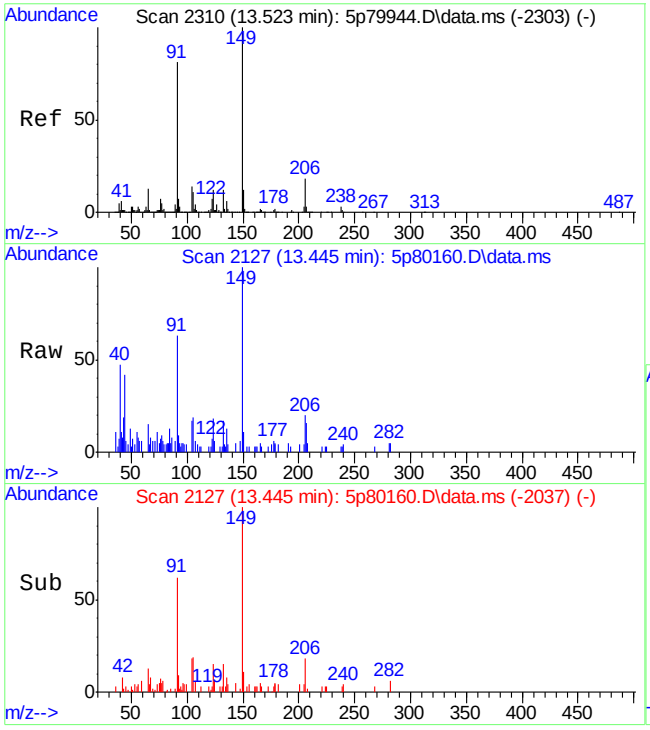


#86
Pyrene
Concen: 0.07 ppm
RT: 12.264 min Scan# 1906
Delta R.T. -0.021 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:202 Resp: 1900

Ion	Ratio	Lower	Upper
202	100		
200	20.3	0.0	50.6
203	13.6	0.0	47.3

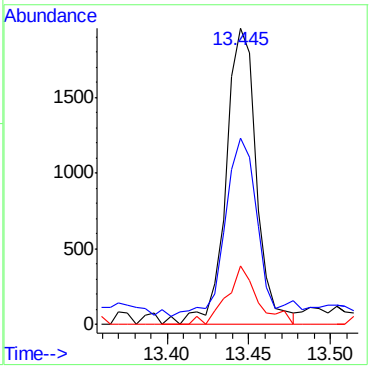


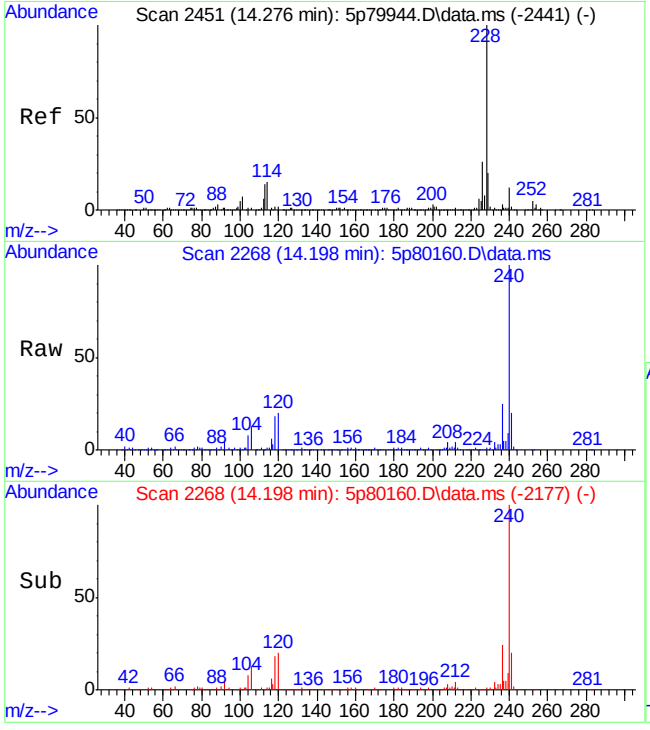


#88
Butylbenzylphthalate
Concen: 0.53 ppm
RT: 13.445 min Scan# 2127
Delta R.T. -0.021 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:149 Resp: 2543

Ion	Ratio	Lower	Upper
149	100		
91	57.7	51.5	111.5
206	20.2	0.0	48.1

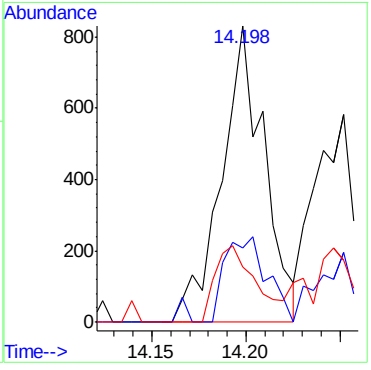


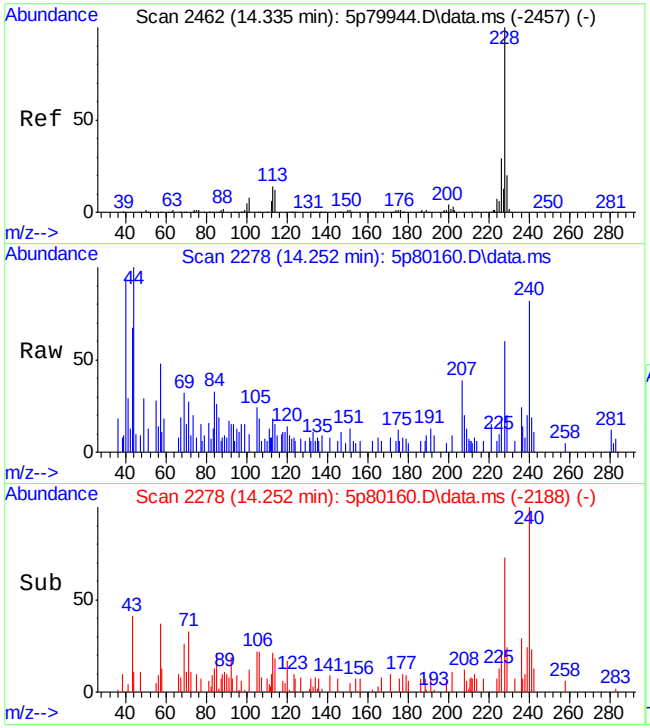


#89
Benzo[a]anthracene
Concen: 0.05 ppm
RT: 14.198 min Scan# 2268
Delta R.T. -0.016 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:228 Resp: 1306

Ion	Ratio	Lower	Upper
228	100		
229	27.0	0.0	49.7
226	12.7	0.0	56.0

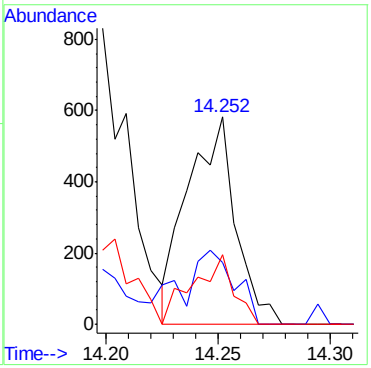


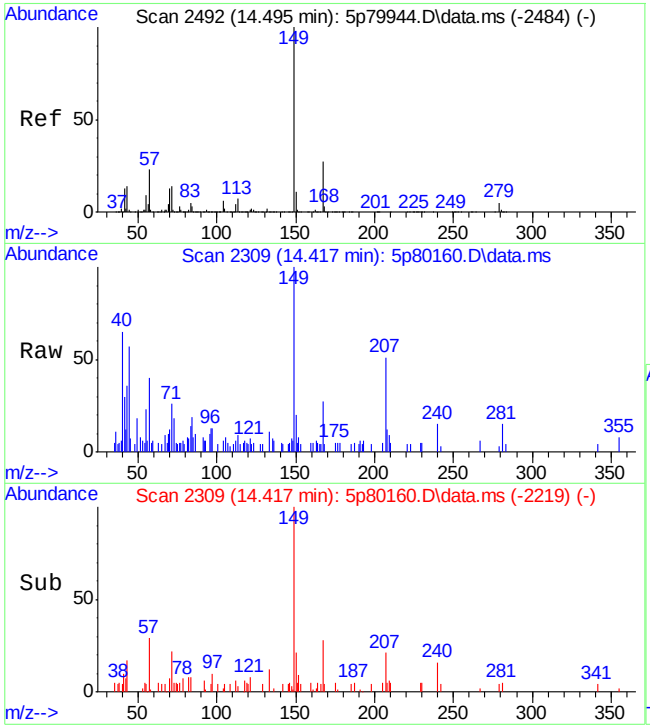


#91
Chrysene
Concen: 0.03 ppm m
RT: 14.252 min Scan# 2278
Delta R.T. -0.021 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:228 Resp: 871

Ion	Ratio	Lower	Upper
228	100		
226	29.6	0.0	59.3
229	33.5	0.0	50.0

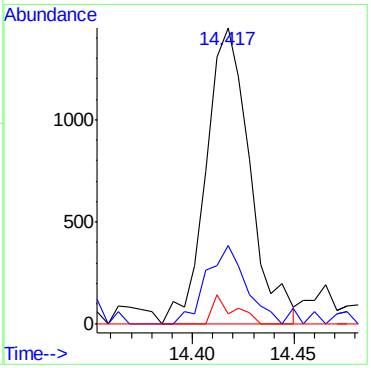


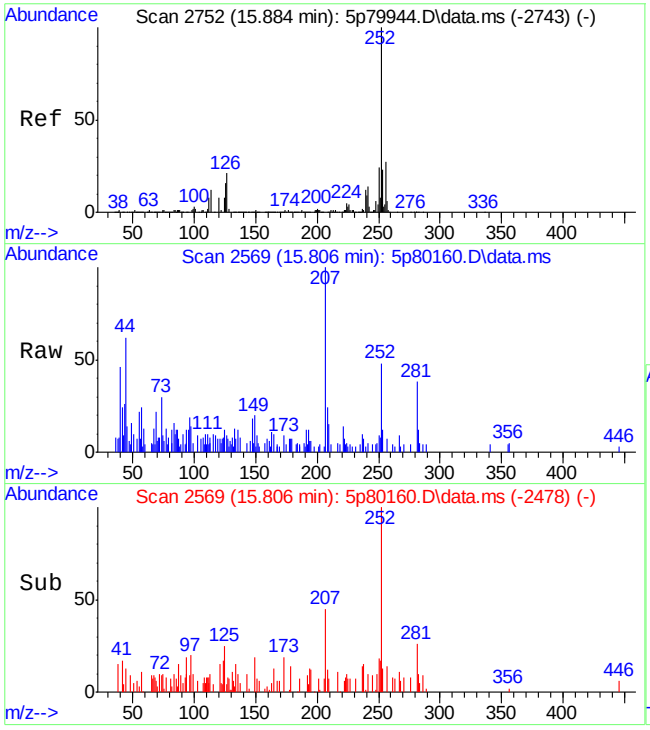


#92
bis(2-Ethylhexyl)phthalate
Concen: 0.33 ppm
RT: 14.417 min Scan# 2309
Delta R.T. -0.021 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:149 Resp: 2157

Ion	Ratio	Lower	Upper
149	100		
167	24.5	0.0	57.0
279	3.5	0.0	34.6

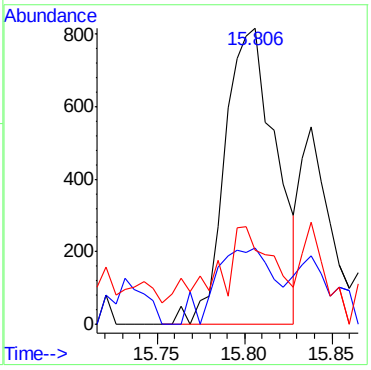


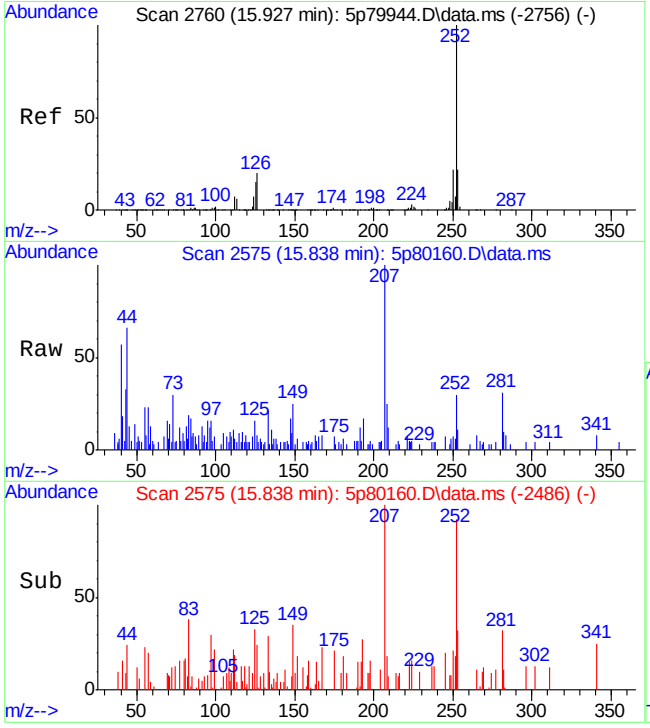


#95
Benzo[b]fluoranthene
Concen: 0.06 ppm
RT: 15.806 min Scan# 2569
Delta R.T. -0.016 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:252 Resp: 1660

Ion	Ratio	Lower	Upper
252	100		
253	21.4	0.0	52.9
125	18.4	0.0	45.6

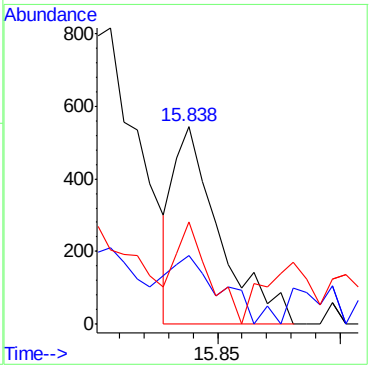


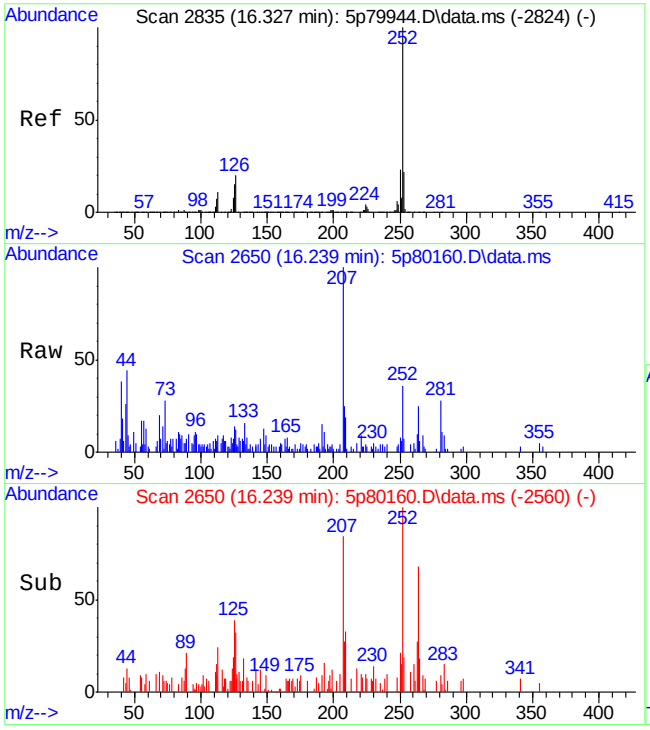


#96
Benzo[k]fluoranthene
Concen: 0.02 ppm m
RT: 15.838 min Scan# 2575
Delta R.T. -0.027 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:252 Resp: 712

Ion	Ratio	Lower	Upper
252	100		
253	34.7	0.0	52.3
125	51.9	0.0	44.8#

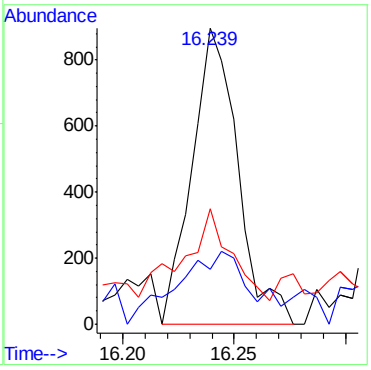


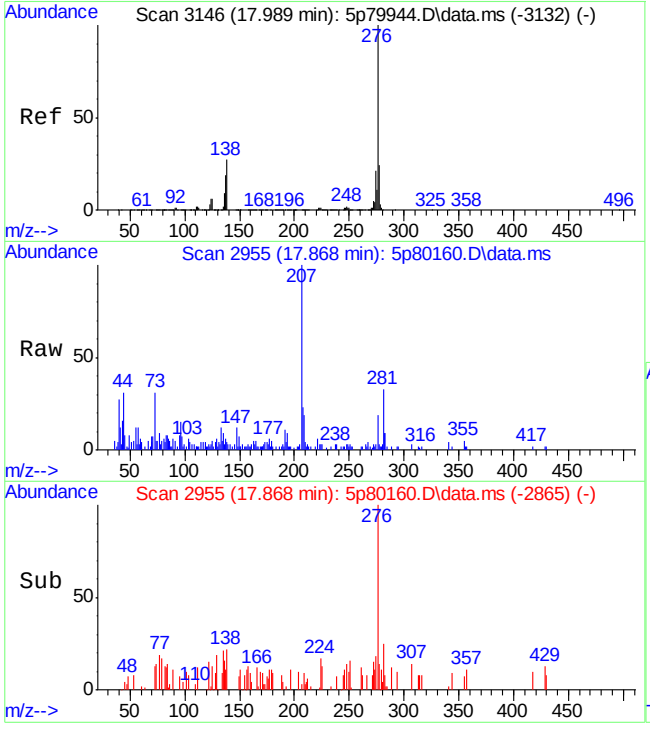


#97
Benzo[a]pyrene
Concen: 0.05 ppm
RT: 16.239 min Scan# 2650
Delta R.T. -0.021 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:252 Resp: 1288

Ion	Ratio	Lower	Upper
252	100		
253	9.3	0.0	52.0
125	20.3	0.0	45.4

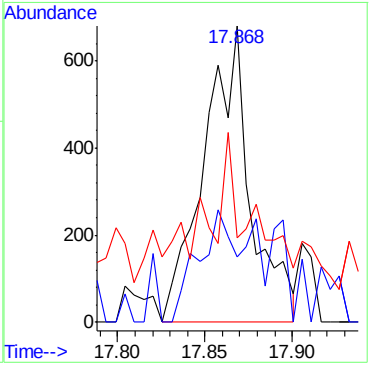


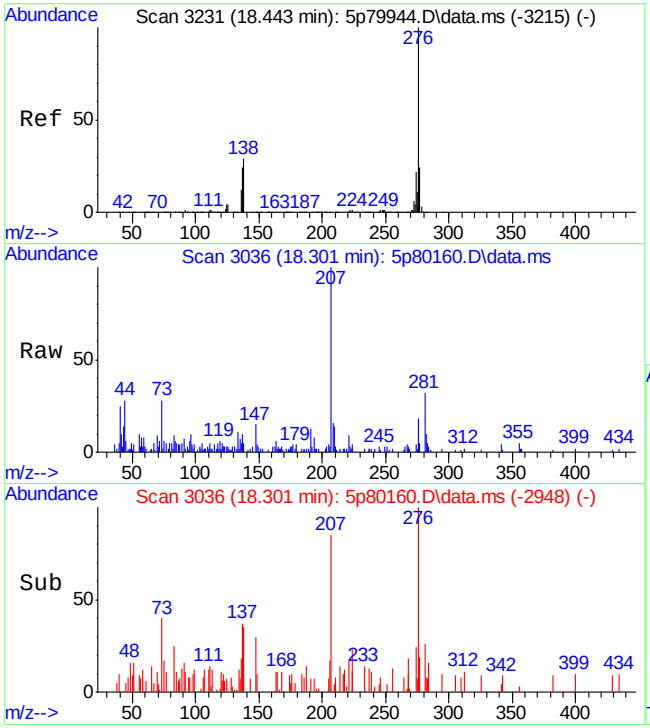


#98
Indeno[1,2,3-cd]pyrene
Concen: 0.13 ppm
RT: 17.868 min Scan# 2955
Delta R.T. -0.021 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:276 Resp: 1269

Ion	Ratio	Lower	Upper
276	100		
138	23.0	0.0	55.5
137	8.9	0.0	48.6

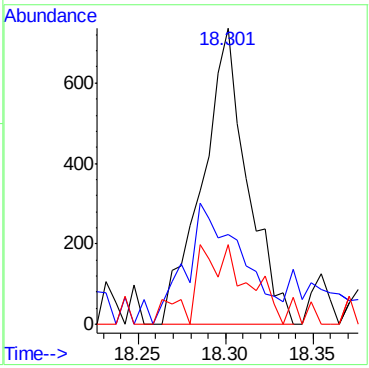




#102
Benzo[g,h,i]perylene
Concen: 0.04 ppm
RT: 18.301 min Scan# 3036
Delta R.T. -0.032 min
Lab File: 5p80160.D
Acq: 8 Dec 21 11:08 am

Tgt Ion:276 Resp: 1321

Ion	Ratio	Lower	Upper
276	100		
138	17.7	0.0	58.8
277	18.1	0.0	53.8



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/09/21 08:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3793\
Data File : 5p80161.D
Acq On : 8 Dec 2021 11:35 am
Operator : chriss2
Sample : jd35920-5
Misc : op36899,e5p3793,290,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 08 16:26:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Dec 07 14:55:13 2021
Response via : Initial Calibration

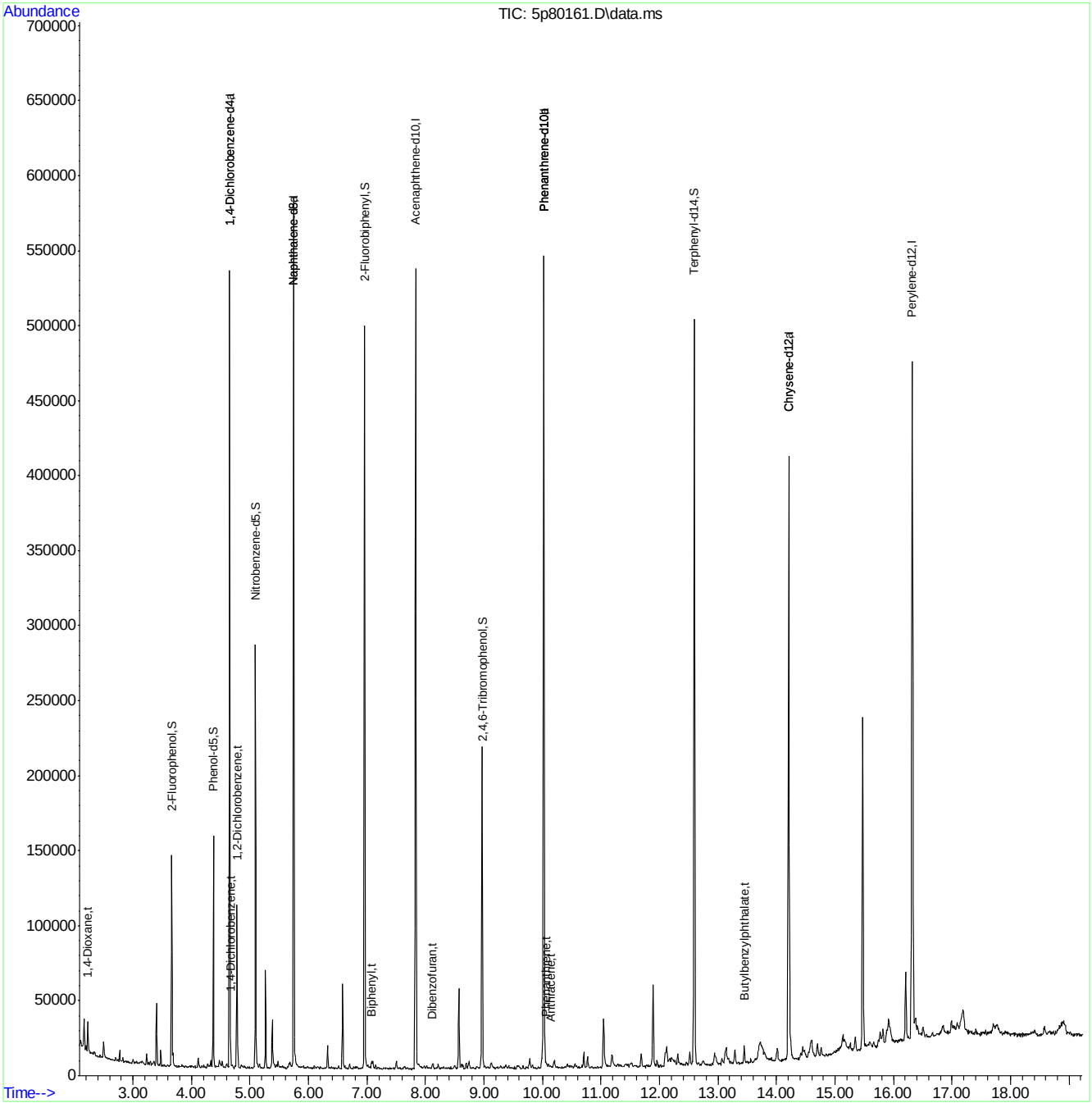
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.652	152	66344	8.00	ppm	-0.02
24) Naphthalene-d8	5.747	136	252713	8.00	ppm	-0.02
46) Acenaphthene-d10	7.830	164	140904	8.00	ppm	-0.02
69) Phenanthrene-d10	10.021	188	250414	8.00	ppm	-0.02
84) Chrysene-d12	14.209	240	168488	8.00	ppm	-0.02
93) Perylene-d12	16.319	264	199253	8.00	ppm	-0.02
103) 1,4-Dichlorobenzene-d4a	4.652	152	66344	8.00	ppm	-0.02
105) Phenanthrene-d10a	10.021	188	250414	8.00	ppm	-0.02
107) Naphthalene-d8a	5.747	136	252713	8.00	ppm	-0.02
109) Chrysene-d12a	14.209	240	168488	8.00	ppm	-0.02
111) Phenanthrene-d10b	10.021	188	250414	8.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.663	112	30209	2.80	ppm	-0.01
Spiked Amount 10.000			Recovery = 28.00%			
8) Phenol-d5	4.374	99	25140	1.81	ppm	-0.01
Spiked Amount 10.000			Recovery = 18.10%			
25) Nitrobenzene-d5	5.095	82	70894	7.42	ppm	-0.02
Spiked Amount 10.000			Recovery = 74.20%			
51) 2-Fluorobiphenyl	6.960	172	176122	7.48	ppm	-0.02
Spiked Amount 10.000			Recovery = 74.80%			
74) 2,4,6-Tribromophenol	8.968	330	27376	7.29	ppm	-0.02
Spiked Amount 10.000			Recovery = 72.90%			
87) Terphenyl-d14	12.596	244	202184	9.62	ppm	-0.02
Spiked Amount 10.000			Recovery = 96.20%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.226	88	6761	1.53	ppm	93
15) 1,4-Dichlorobenzene	4.668	146	2919	0.24	ppm	98
17) 1,2-Dichlorobenzene	4.780	146	20751	1.72	ppm	99
53) Biphenyl	7.082	154	1317	0.05	ppm	79
62) Dibenzofuran	8.119	168	1289	0.05	ppm	96
78) Phenanthrene	10.053	178	1478	0.04	ppm	82
79) Anthracene	10.133	178	701m	0.02	ppm	
88) Butylbenzylphthalate	13.445	149	3325	0.70	ppm	79

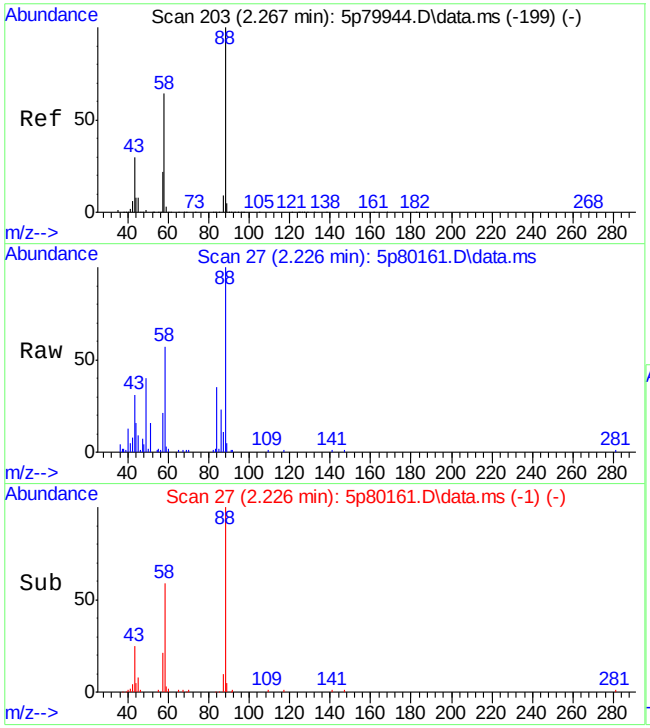
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3793\
Data File : 5p80161.D
Acq On : 8 Dec 2021 11:35 am
Operator : chriss2
Sample : jd35920-5
Misc : op36899,e5p3793,290,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 08 16:26:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Dec 07 14:55:13 2021
Response via : Initial Calibration

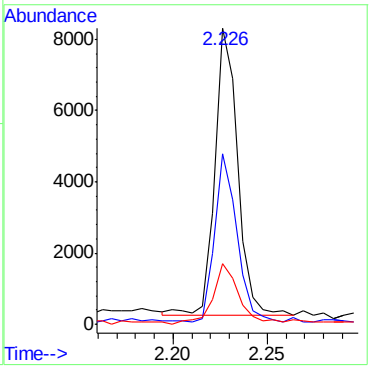


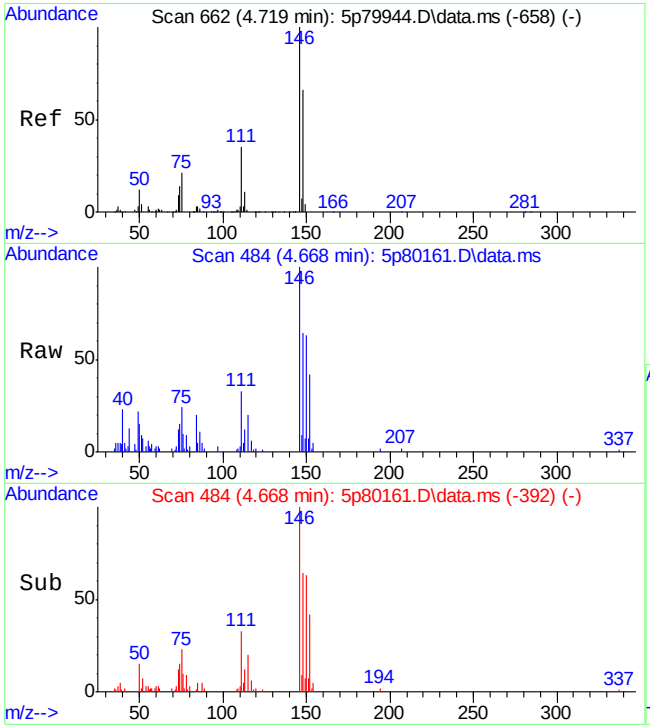


#2
1,4-Dioxane
Concen: 1.53 ppm
RT: 2.226 min Scan# 27
Delta R.T. -0.027 min
Lab File: 5p80161.D
Acq: 8 Dec 21 11:35 am

Tgt Ion: 88 Resp: 6761

Ion	Ratio	Lower	Upper
88	100		
58	57.8	33.6	93.6
57	20.2	0.0	52.3

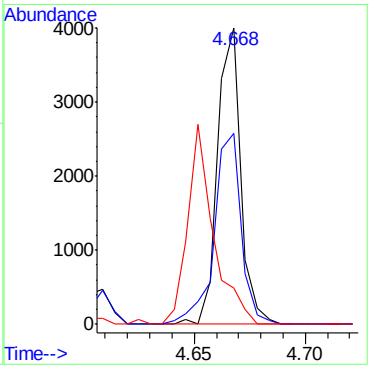


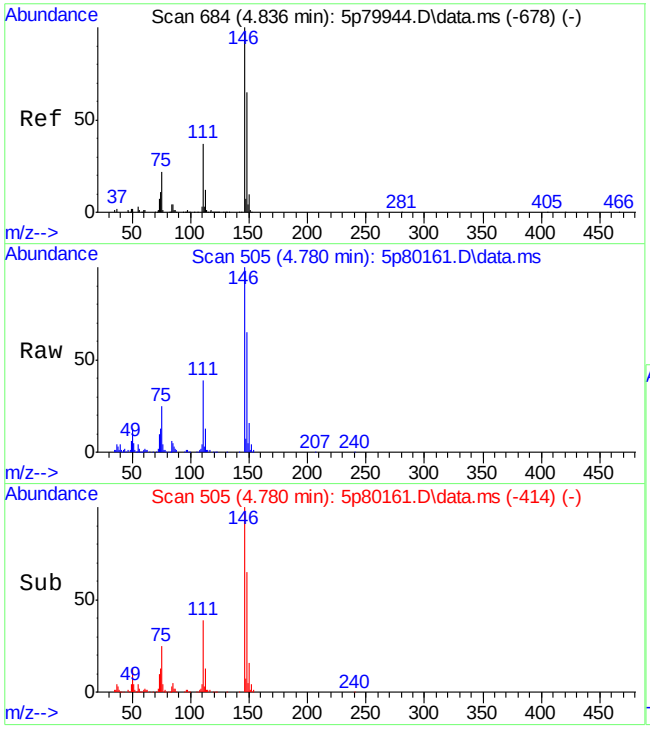


#15
1,4-Dichlorobenzene
Concen: 0.24 ppm
RT: 4.668 min Scan# 484
Delta R.T. -0.011 min
Lab File: 5p80161.D
Acq: 8 Dec 21 11:35 am

Tgt Ion:146 Resp: 2919

Ion	Ratio	Lower	Upper
146	100		
148	64.4	36.2	96.2
113	12.3	0.0	41.1

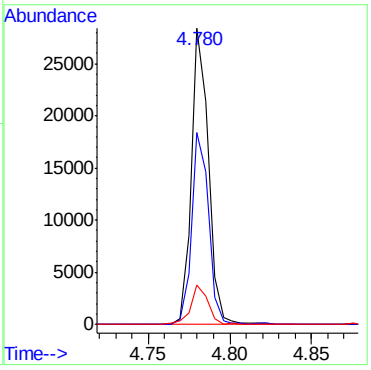


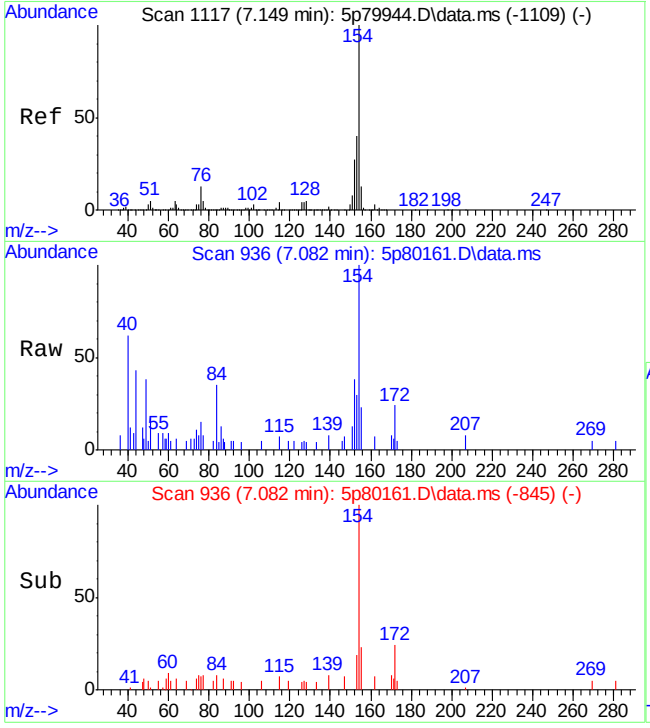


#17
1,2-Dichlorobenzene
Concen: 1.72 ppm
RT: 4.780 min Scan# 505
Delta R.T. -0.016 min
Lab File: 5p80161.D
Acq: 8 Dec 21 11:35 am

Tgt Ion:146 Resp: 20751

Ion	Ratio	Lower	Upper
146	100		
148	64.9	35.5	95.5
113	13.2	0.0	41.5

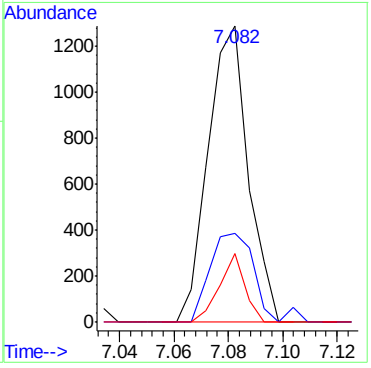


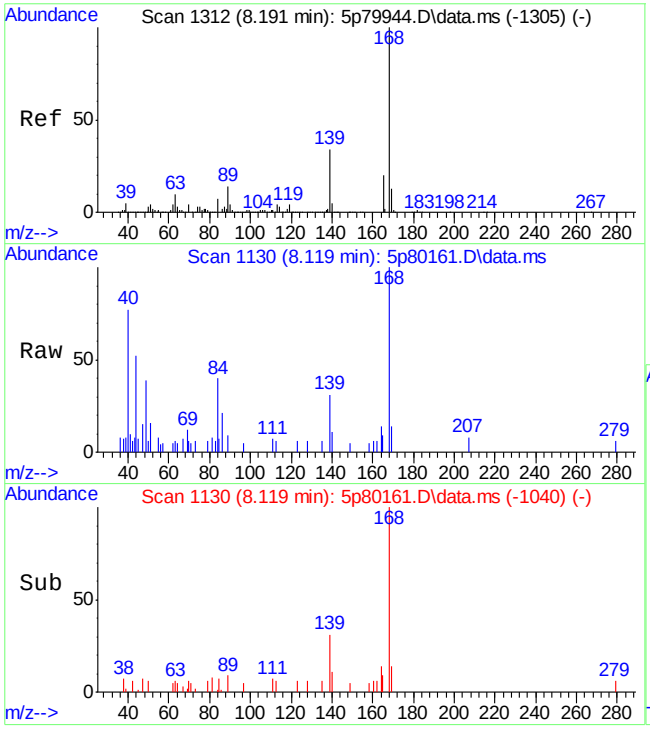


#53
Biphenyl
Concen: 0.05 ppm
RT: 7.082 min Scan# 936
Delta R.T. -0.016 min
Lab File: 5p80161.D
Acq: 8 Dec 21 11:35 am

Tgt Ion:154 Resp: 1317

Ion	Ratio	Lower	Upper
154	100		
153	27.5	9.9	69.9
155	23.0	0.0	42.8

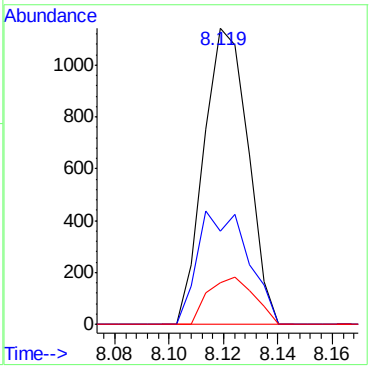


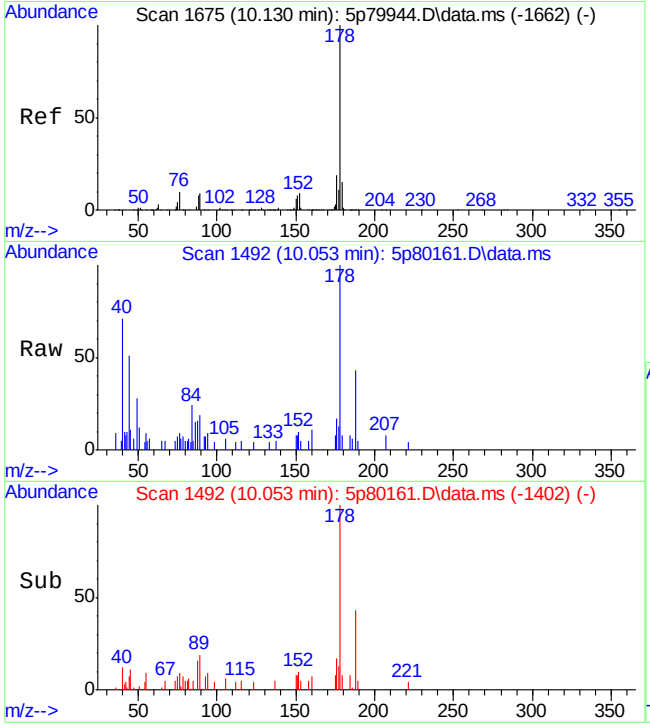


#62
Dibenzofuran
Concen: 0.05 ppm
RT: 8.119 min Scan# 1130
Delta R.T. -0.021 min
Lab File: 5p80161.D
Acq: 8 Dec 21 11:35 am

Tgt Ion:168 Resp: 1289

Ion	Ratio	Lower	Upper
168	100		
139	31.3	3.7	63.7
169	14.1	0.0	43.0

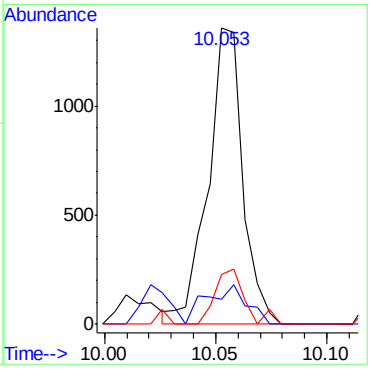


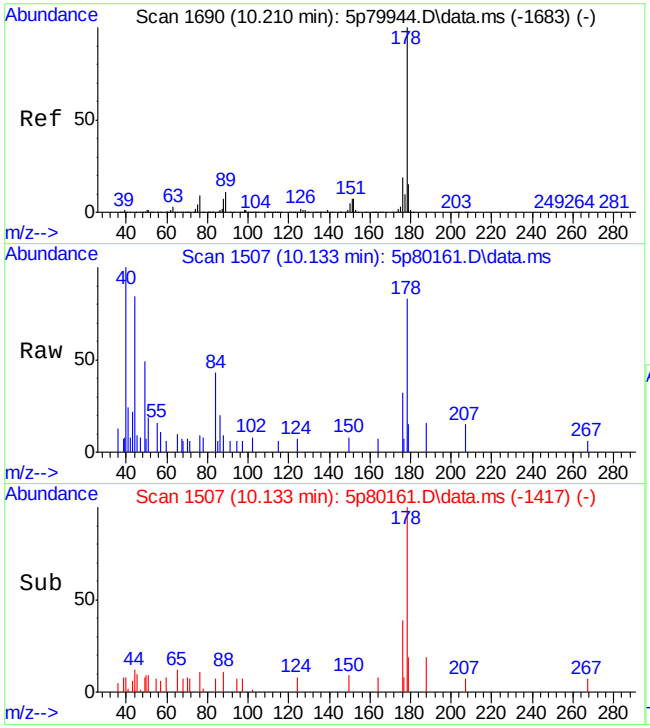


#78
Phenanthrene
Concen: 0.04 ppm
RT: 10.053 min Scan# 1492
Delta R.T. -0.021 min
Lab File: 5p80161.D
Acq: 8 Dec 21 11:35 am

Tgt Ion:178 Resp: 1478

Ion	Ratio	Lower	Upper
178	100		
179	3.2	0.0	45.4
176	14.7	0.0	49.0

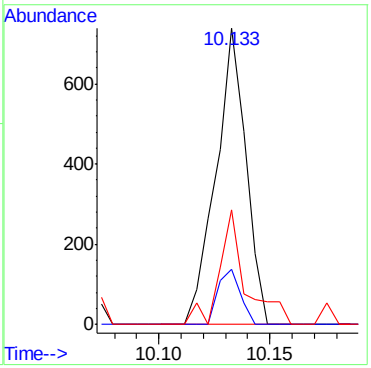


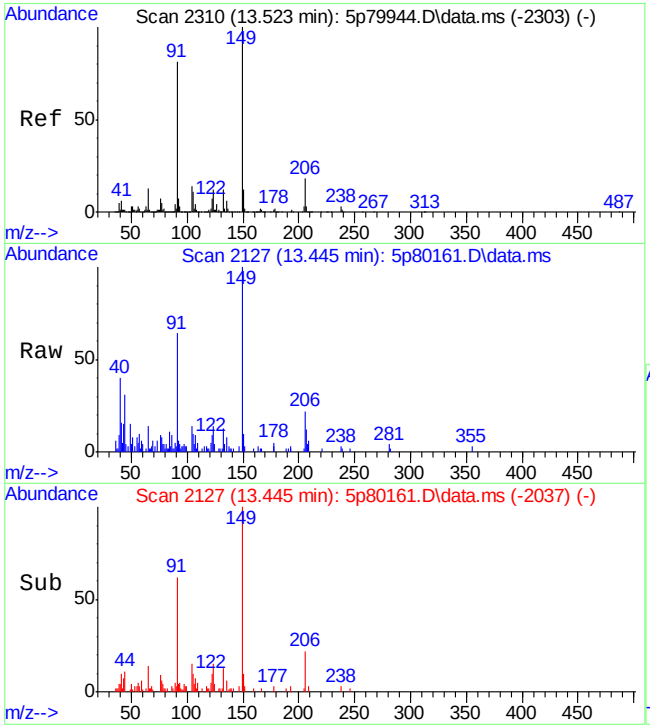


#79
Anthracene
Concen: 0.02 ppm m
RT: 10.133 min Scan# 1507
Delta R.T. -0.021 min
Lab File: 5p80161.D
Acq: 8 Dec 21 11:35 am

Tgt Ion:178 Resp: 701

Ion	Ratio	Lower	Upper
178	100		
179	18.5	0.0	45.3
176	38.7	0.0	49.0

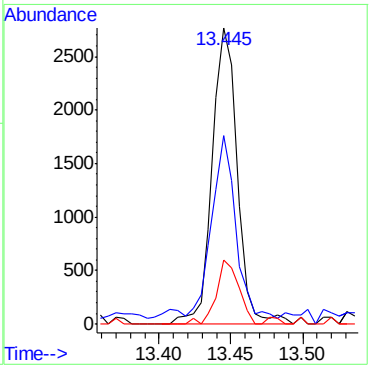




#88
Butylbenzylphthalate
Concen: 0.70 ppm
RT: 13.445 min Scan# 2127
Delta R.T. -0.021 min
Lab File: 5p80161.D
Acq: 8 Dec 21 11:35 am

Tgt Ion:149 Resp: 3325

Ion	Ratio	Lower	Upper
149	100		
91	60.4	51.5	111.5
206	21.6	0.0	48.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3793\
Data File : 5p80162.D
Acq On : 8 Dec 2021 12:02 pm
Operator : chriss2
Sample : jd35920-6
Misc : op36899,e5p3793,290,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 08 16:27:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Dec 07 14:55:13 2021
Response via : Initial Calibration

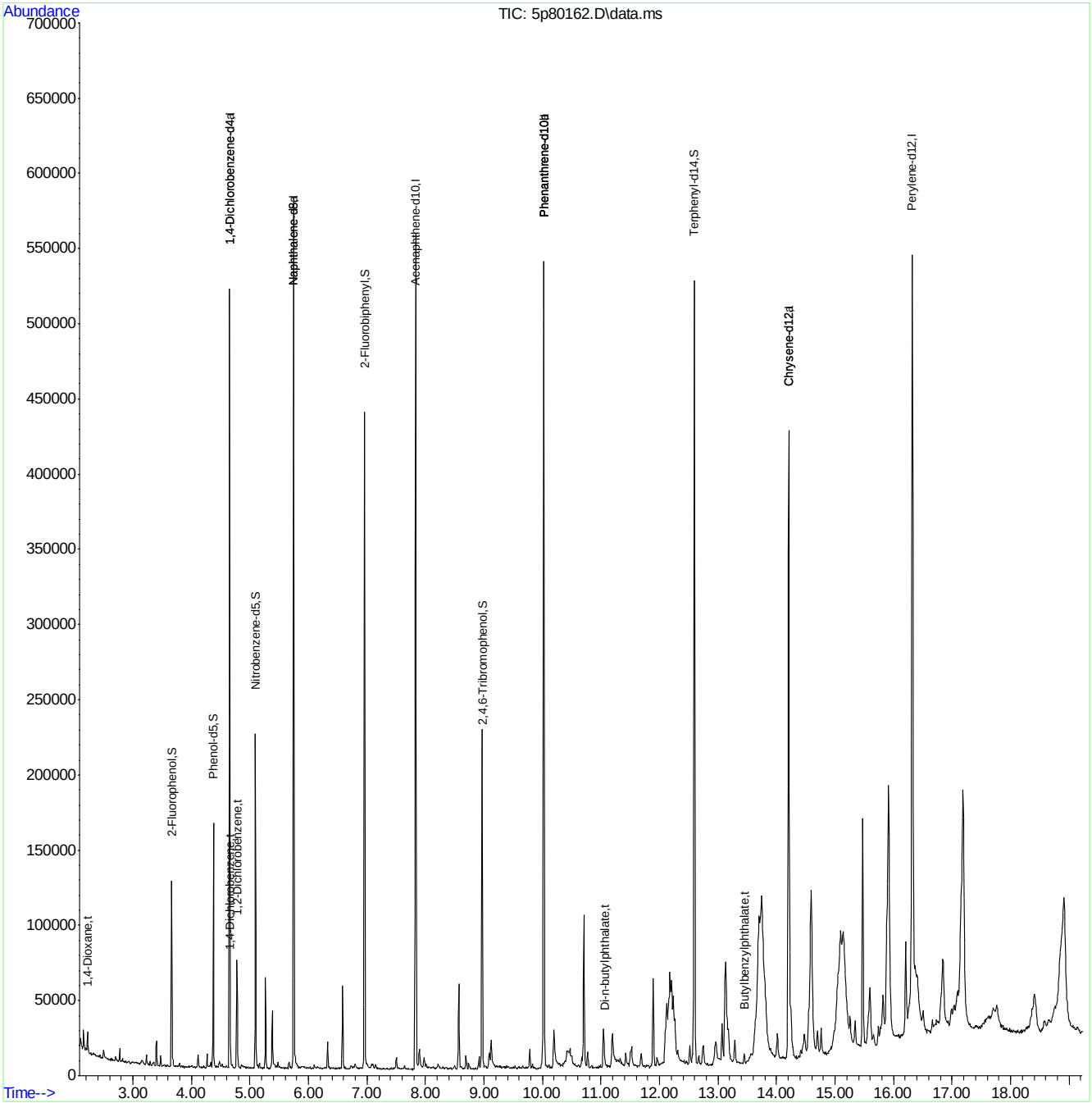
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.652	152	65396	8.00	ppm	-0.02
24) Naphthalene-d8	5.747	136	252697	8.00	ppm	-0.02
46) Acenaphthene-d10	7.830	164	146675	8.00	ppm	-0.02
69) Phenanthrene-d10	10.021	188	250591	8.00	ppm	-0.02
84) Chrysene-d12	14.209	240	176764	8.00	ppm	-0.02
93) Perylene-d12	16.319	264	214995	8.00	ppm	-0.02
103) 1,4-Dichlorobenzene-d4a	4.652	152	65396	8.00	ppm	-0.02
105) Phenanthrene-d10a	10.021	188	250591	8.00	ppm	-0.02
107) Naphthalene-d8a	5.747	136	252697	8.00	ppm	-0.02
109) Chrysene-d12a	14.209	240	176764	8.00	ppm	-0.02
111) Phenanthrene-d10b	10.021	188	250591	8.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.663	112	30086	2.83	ppm	-0.01
Spiked Amount 10.000			Recovery = 28.30%			
8) Phenol-d5	4.374	99	28859	2.10	ppm	-0.01
Spiked Amount 10.000			Recovery = 21.00%			
25) Nitrobenzene-d5	5.095	82	57505	6.02	ppm	-0.02
Spiked Amount 10.000			Recovery = 60.20%			
51) 2-Fluorobiphenyl	6.960	172	159021	6.49	ppm	-0.02
Spiked Amount 10.000			Recovery = 64.90%			
74) 2,4,6-Tribromophenol	8.968	330	29521	7.86	ppm	-0.02
Spiked Amount 10.000			Recovery = 78.60%			
87) Terphenyl-d14	12.596	244	224462	10.18	ppm	-0.02
Spiked Amount 10.000			Recovery = 101.80%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.221	88	4965	1.14	ppm	95
15) 1,4-Dichlorobenzene	4.662	146	2030	0.17	ppm	88
17) 1,2-Dichlorobenzene	4.780	146	13172	1.11	ppm	95
81) Di-n-butylphthalate	11.057	149	1936	0.05	ppm	90
88) Butylbenzylphthalate	13.445	149	2165	0.45	ppm	76

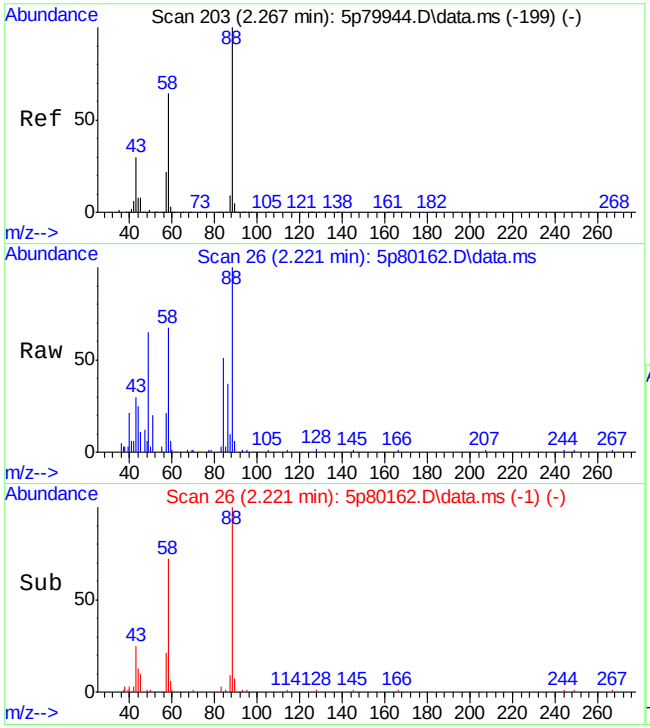
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3793\
Data File : 5p80162.D
Acq On : 8 Dec 2021 12:02 pm
Operator : chriss2
Sample : jd35920-6
Misc : op36899,e5p3793,290,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 08 16:27:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Dec 07 14:55:13 2021
Response via : Initial Calibration

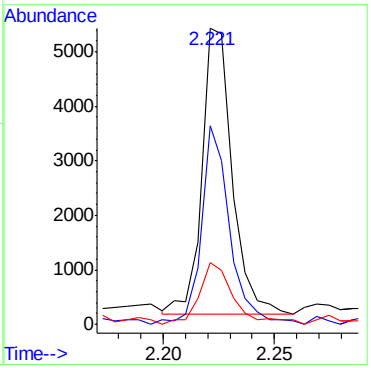


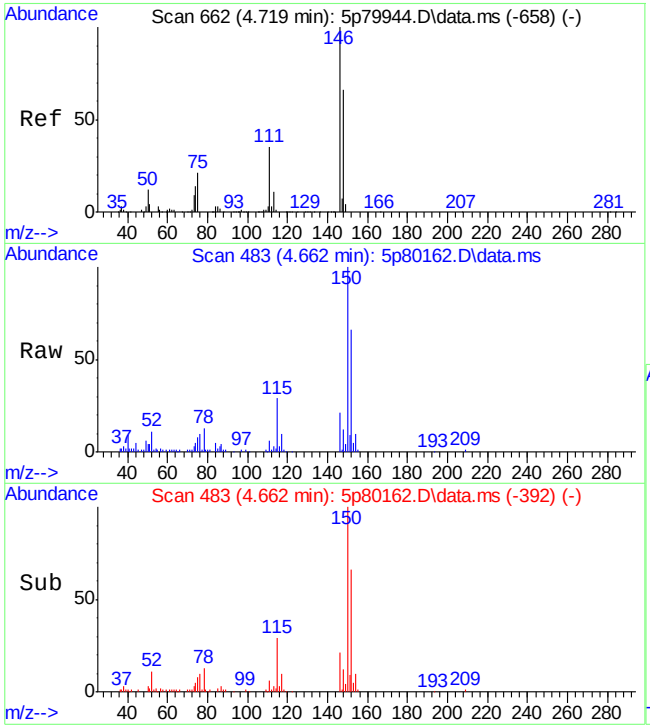


#2
1,4-Dioxane
Concen: 1.14 ppm
RT: 2.221 min Scan# 26
Delta R.T. -0.032 min
Lab File: 5p80162.D
Acq: 8 Dec 21 12:02 pm

Tgt Ion: 88 Resp: 4965

Ion	Ratio	Lower	Upper
88	100		
58	68.4	33.6	93.6
57	20.8	0.0	52.3

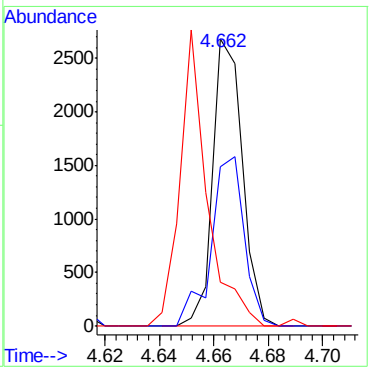


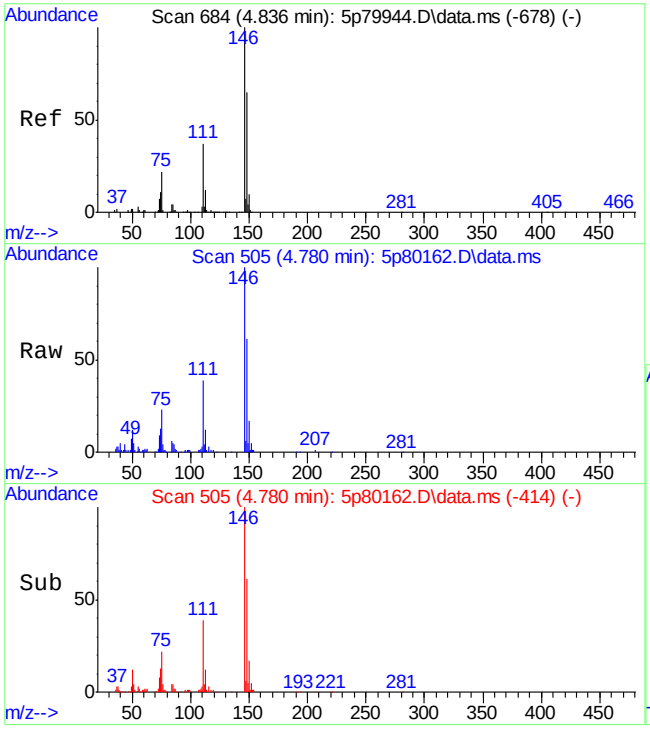


#15
1,4-Dichlorobenzene
Concen: 0.17 ppm
RT: 4.662 min Scan# 483
Delta R.T. -0.016 min
Lab File: 5p80162.D
Acq: 8 Dec 21 12:02 pm

Tgt Ion:146 Resp: 2030

Ion	Ratio	Lower	Upper
146	100		
148	55.7	36.2	96.2
113	12.0	0.0	41.1

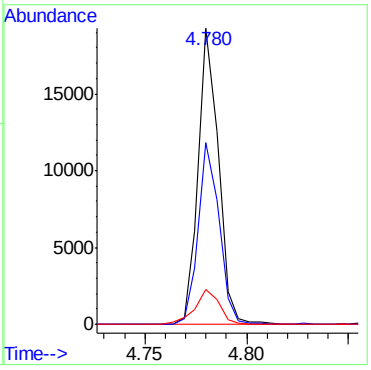


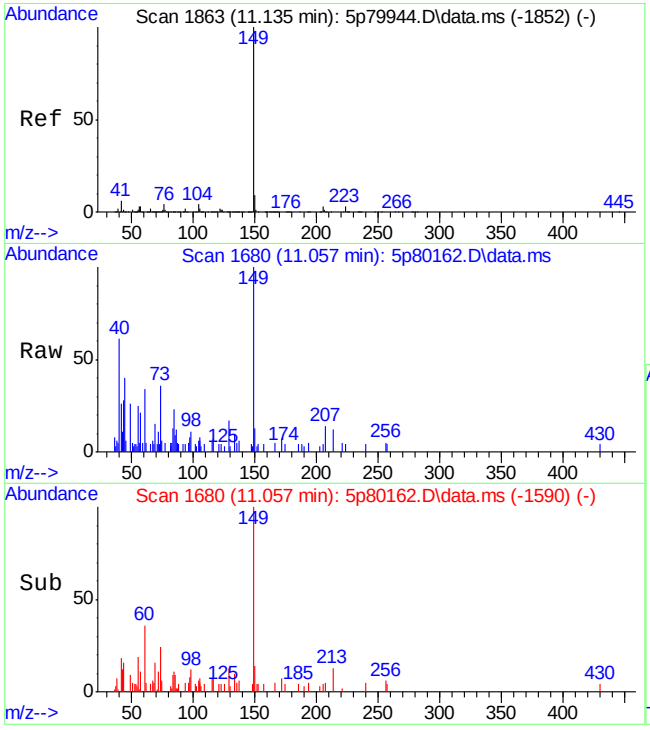


#17
1,2-Dichlorobenzene
Concen: 1.11 ppm
RT: 4.780 min Scan# 505
Delta R.T. -0.016 min
Lab File: 5p80162.D
Acq: 8 Dec 21 12:02 pm

Tgt Ion:146 Resp: 13172

Ion	Ratio	Lower	Upper
146	100		
148	61.2	35.5	95.5
113	11.8	0.0	41.5

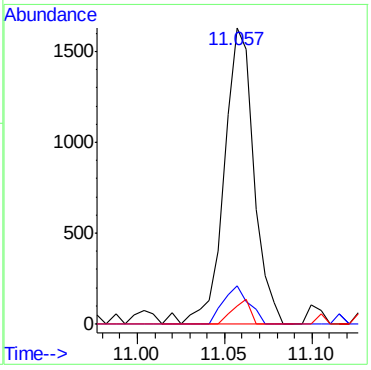


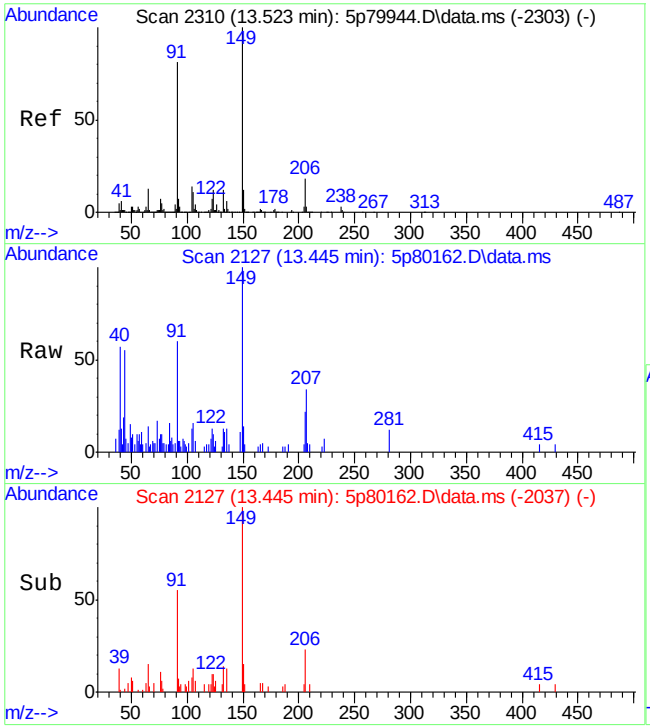


#81
Di-n-butylphthalate
Concen: 0.05 ppm
RT: 11.057 min Scan# 1680
Delta R.T. -0.021 min
Lab File: 5p80162.D
Acq: 8 Dec 21 12:02 pm

Tgt Ion:149 Resp: 1936

Ion	Ratio	Lower	Upper
149	100		
150	12.9	0.0	38.9
104	6.1	0.0	34.2

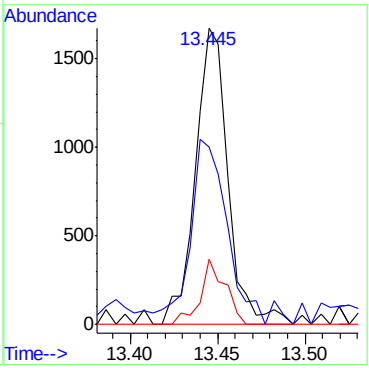




#88
Butylbenzylphthalate
Concen: 0.45 ppm
RT: 13.445 min Scan# 2127
Delta R.T. -0.021 min
Lab File: 5p80162.D
Acq: 8 Dec 21 12:02 pm

Tgt Ion:149 Resp: 2165

Ion	Ratio	Lower	Upper
149	100		
91	57.4	51.5	111.5
206	21.8	0.0	48.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2607\
Data File : 4p49806.D
Acq On : 3 Dec 2021 7:23 am
Operator : chriss2
Sample : jd35920-2
Misc : op36899a,e4p2607,290,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 03 15:58:29 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 03 15:30:51 2021
Response via : Initial Calibration

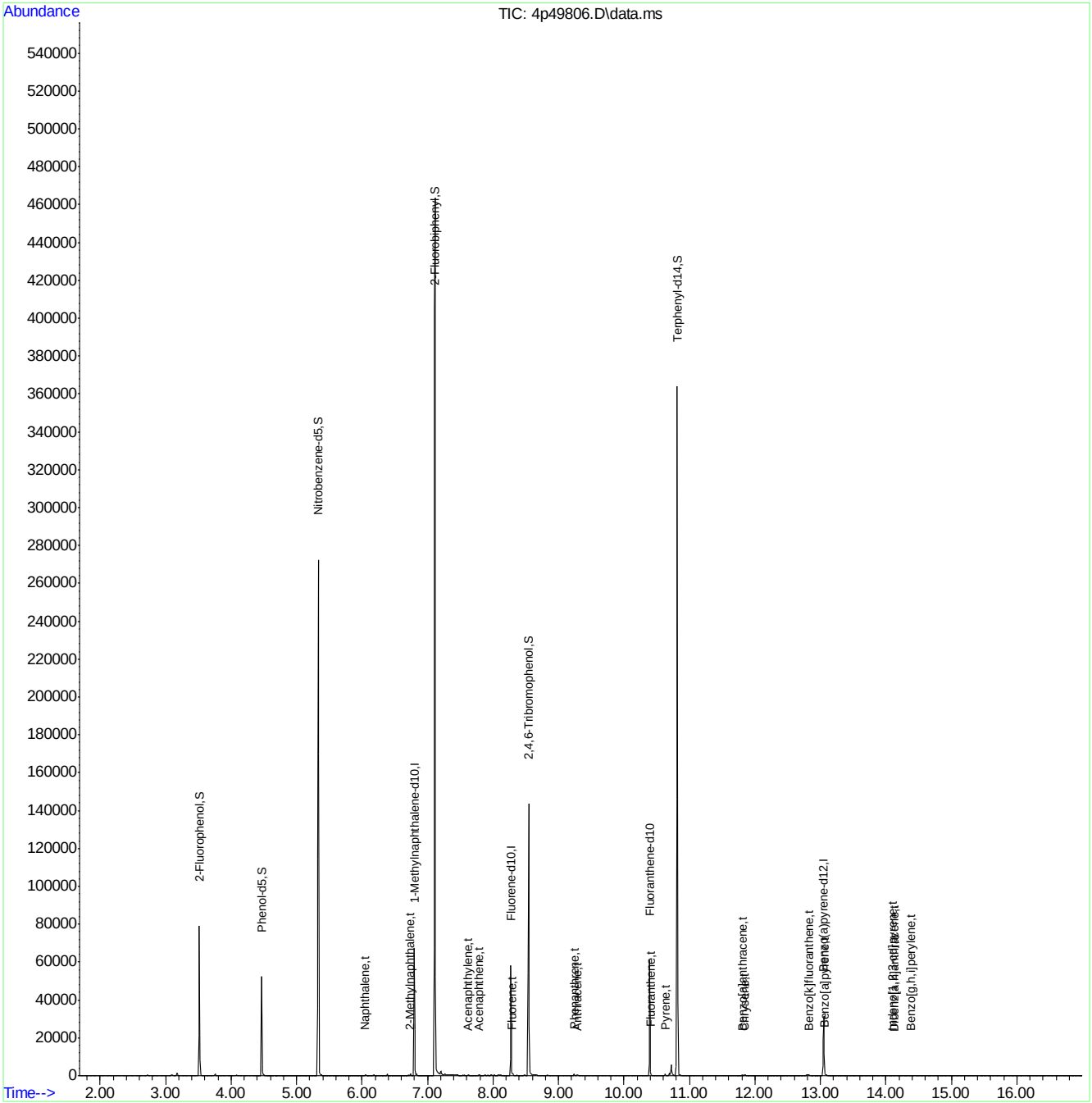
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.800	150	19283	800.00	ppm	0.00
13) Fluorene-d10	8.271	176	26438	800.00	ppm	0.00
20) Fluoranthene-d10	10.390	212	41210	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.048	264	18974	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.517	112	34514	2885.35	ppm	0.00
Spiked Amount 50.000			Recovery	= 5770.70%		
4) Phenol-d5	4.469	99	39141	1724.79	ppm	0.00
Spiked Amount 50.000			Recovery	= 3449.58%		
7) Nitrobenzene-d5	5.334	82	162241	8760.85	ppm	0.00
Spiked Amount 50.000			Recovery	= 17521.70%		
14) 2-Fluorobiphenyl	7.117	172	259368	7691.08	ppm	0.00
Spiked Amount 50.000			Recovery	= 15382.16%		
19) 2,4,6-Tribromophenol	8.543	330	48792	9670.12	ppm	0.00
Spiked Amount 50.000			Recovery	= 19340.24%		
27) Terphenyl-d14	10.814	244	210855	7143.40	ppm	0.00
Spiked Amount 50.000			Recovery	= 14286.80%		
Target Compounds						Qvalue
8) Naphthalene	6.051	128	419	7.59	ppm	95
10) 2-Methylnaphthalene	6.734	141	258	8.95	ppm	71
15) Acenaphthylene	7.617	152	111	2.25	ppm	88
16) Acenaphthene	7.791	153	153	4.87	ppm	96
17) Fluorene	8.296	166	251	6.62	ppm	85
23) Phenanthrene	9.238	178	799	14.39	ppm	95
24) Anthracene	9.293	178	230	4.32	ppm	85
25) Fluoranthene	10.409	202	692	11.97	ppm	94
26) Pyrene	10.630	202	577	9.07	ppm	95
28) Benzo[a]anthracene	11.809	228	289	5.09	ppm	88
29) Chrysene	11.845	228	363	6.52	ppm	99
32) Benzo[k]fluoranthene	12.819	252	262	6.69	ppm	88
33) Benzo[a]pyrene	13.068	252	242	6.74	ppm	84
34) Indeno[1,2,3-cd]pyrene	14.102	276	225	5.26	ppm	99
35) Dibenz[a,h]anthracene	14.133	278	94	2.82	ppm	82
36) Benzo[g,h,i]perylene	14.387	276	211	5.82	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

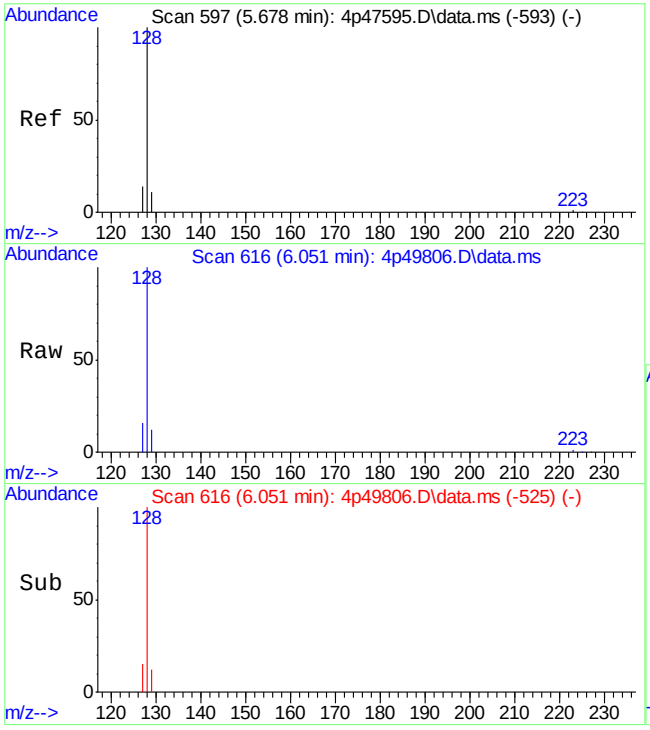
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2607\
Data File : 4p49806.D
Acq On : 3 Dec 2021 7:23 am
Operator : chriss2
Sample : jd35920-2
Misc : op36899a,e4p2607,290,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 03 15:58:29 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 03 15:30:51 2021
Response via : Initial Calibration



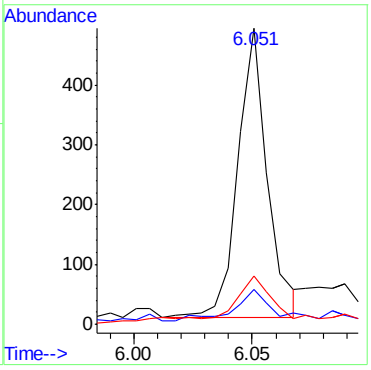
M4P2551SIMLVI.M Fri Dec 03 15:58:39 2021 YING Page: 2

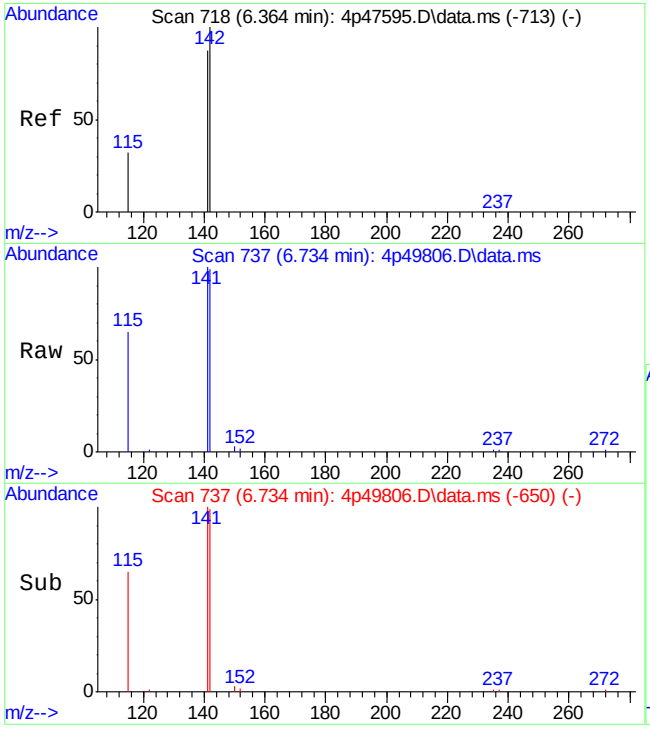


#8
Naphthalene
Concen: 7.59 ppm
RT: 6.051 min Scan# 616
Delta R.T. 0.000 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:128 Resp: 419

Ion	Ratio	Lower	Upper
128	100		
129	10.3	0.0	41.1
127	15.2	0.0	42.0

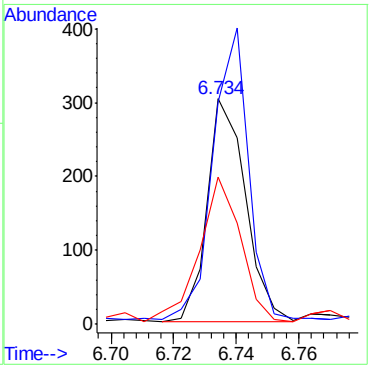


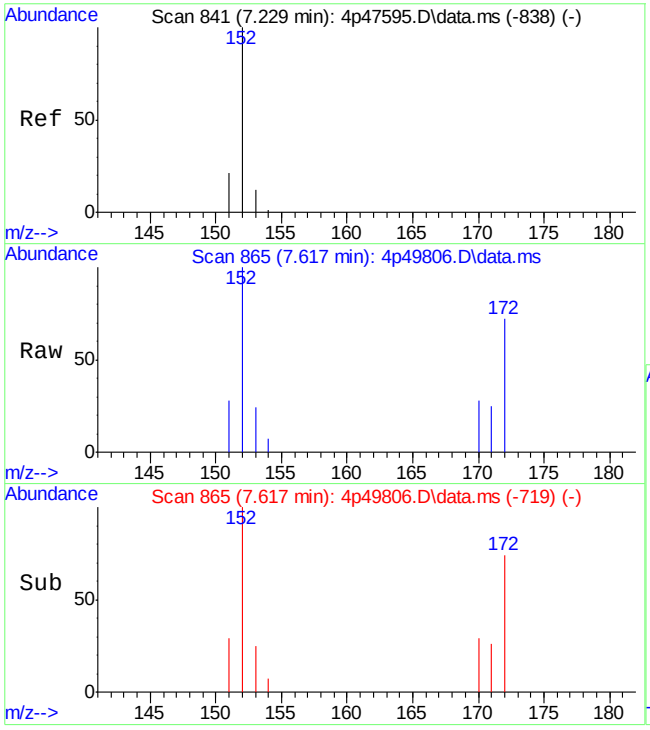


#10
2-Methylnaphthalene
Concen: 8.95 ppm
RT: 6.734 min Scan# 737
Delta R.T. -0.006 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:141 Resp: 258

Ion	Ratio	Lower	Upper
141	100		
142	97.5	96.1	156.1
115	62.7	7.9	67.9

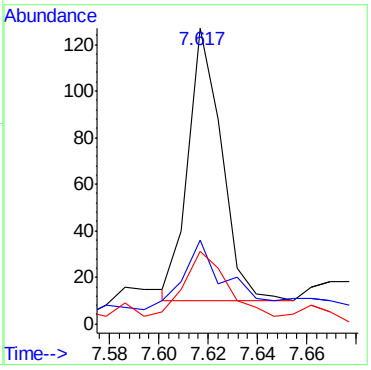


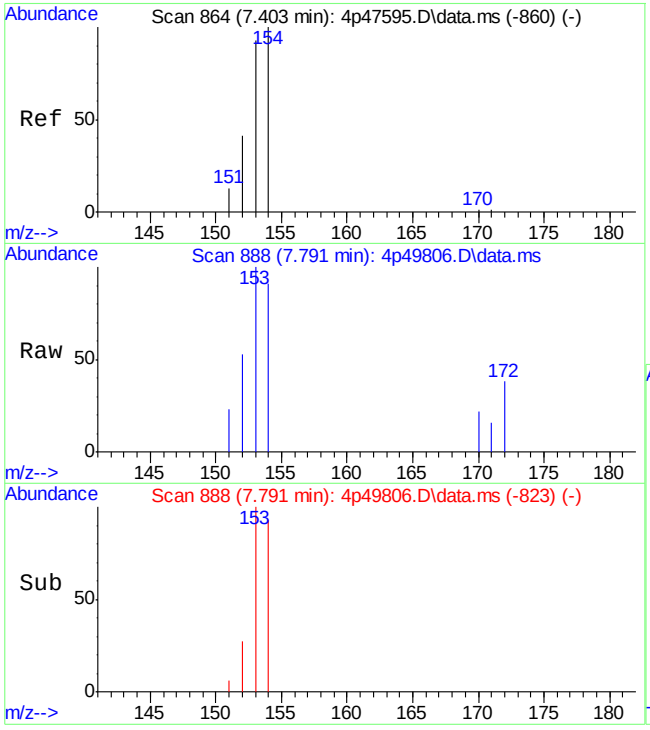


#15
Acenaphthylene
Concen: 2.25 ppm
RT: 7.617 min Scan# 865
Delta R.T. -0.008 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:152 Resp: 111

Ion	Ratio	Lower	Upper
152	100		
151	22.3	0.0	50.8
153	23.1	0.0	42.2

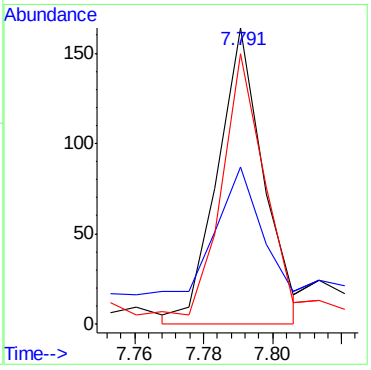


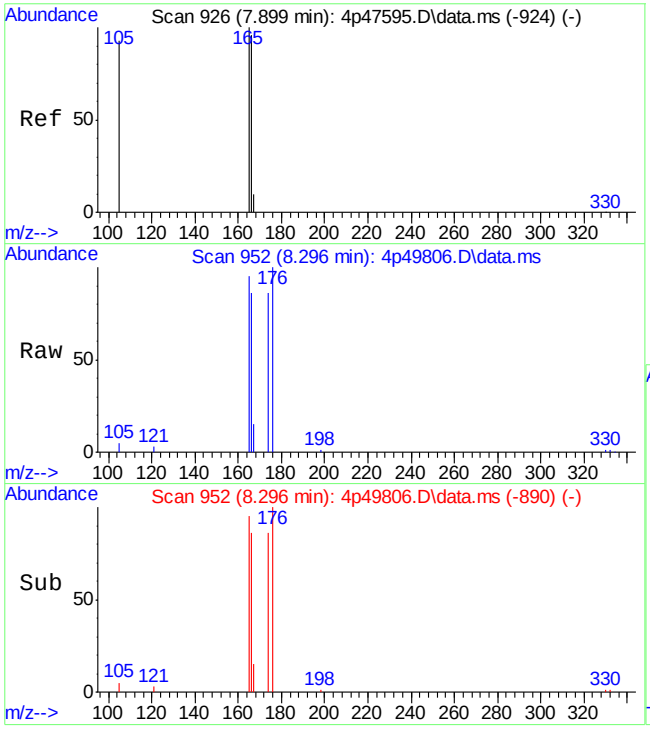


#16
Acenaphthene
Concen: 4.87 ppm
RT: 7.791 min Scan# 888
Delta R.T. -0.008 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:153 Resp: 153

Ion	Ratio	Lower	Upper
153	100		
152	45.0	18.5	78.5
154	91.5	59.1	119.1

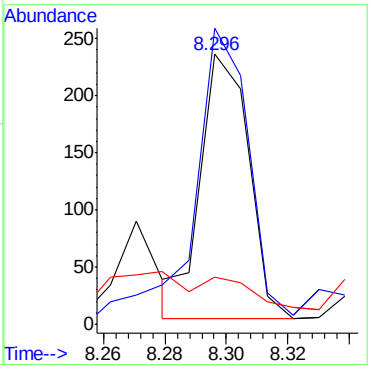


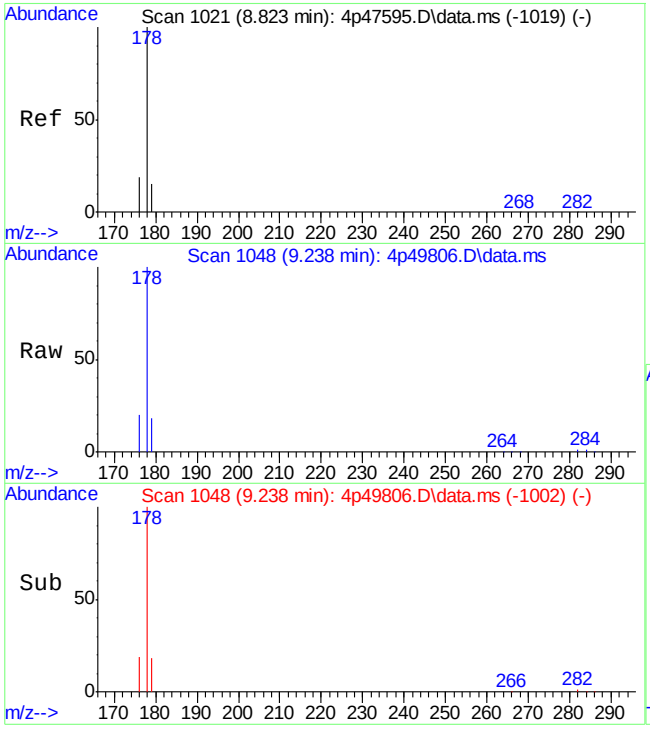


#17
Fluorene
Concen: 6.62 ppm
RT: 8.296 min Scan# 952
Delta R.T. -0.008 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:166 Resp: 251

Ion	Ratio	Lower	Upper
166	100		
165	111.2	66.9	126.9
167	4.9	0.0	41.7

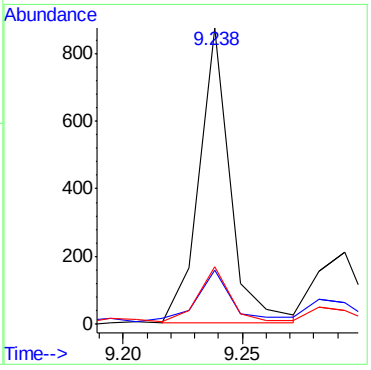


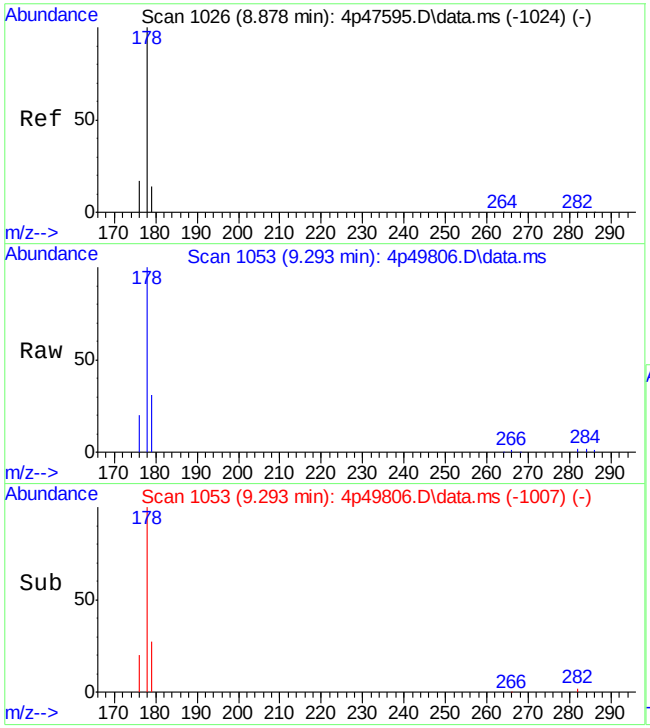


#23
Phenanthrene
Concen: 14.39 ppm
RT: 9.238 min Scan# 1048
Delta R.T. 0.000 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:178 Resp: 799

Ion	Ratio	Lower	Upper
178	100		
179	16.6	0.0	46.0
176	18.9	0.0	45.6

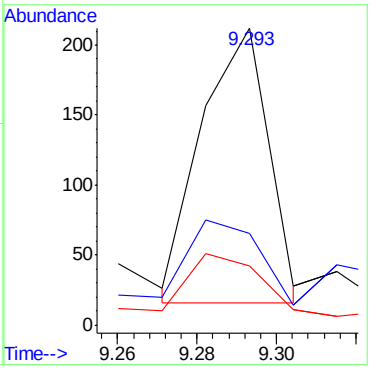


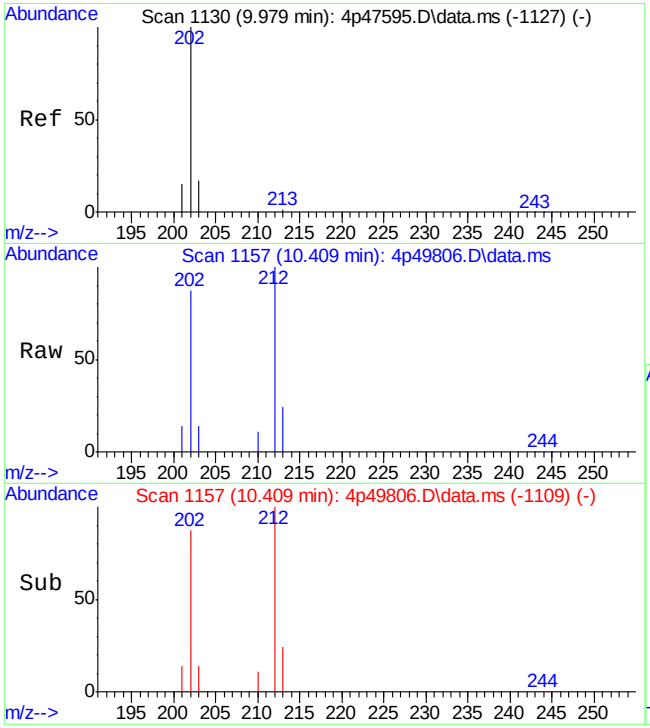


#24
Anthracene
Concen: 4.32 ppm
RT: 9.293 min Scan# 1053
Delta R.T. 0.000 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:178 Resp: 230

Ion	Ratio	Lower	Upper
178	100		
179	25.9	0.0	43.0
176	17.0	0.0	48.4

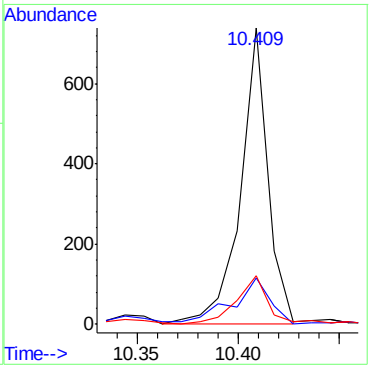


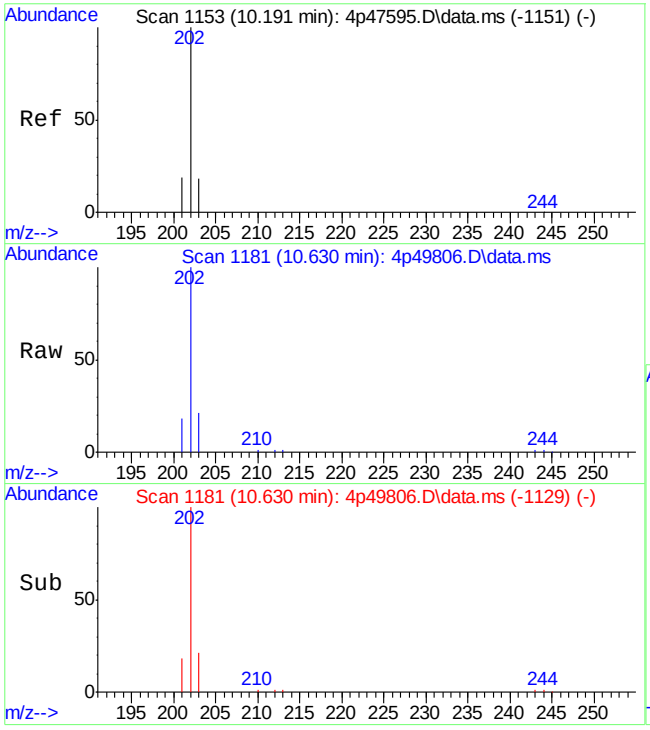


#25
Fluoranthene
Concen: 11.97 ppm
RT: 10.409 min Scan# 1157
Delta R.T. 0.000 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:202 Resp: 692

Ion	Ratio	Lower	Upper
202	100		
203	15.3	0.0	47.6
201	16.0	0.0	42.9

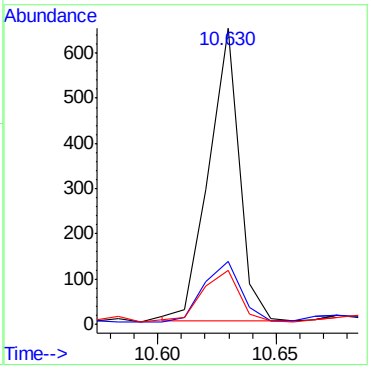


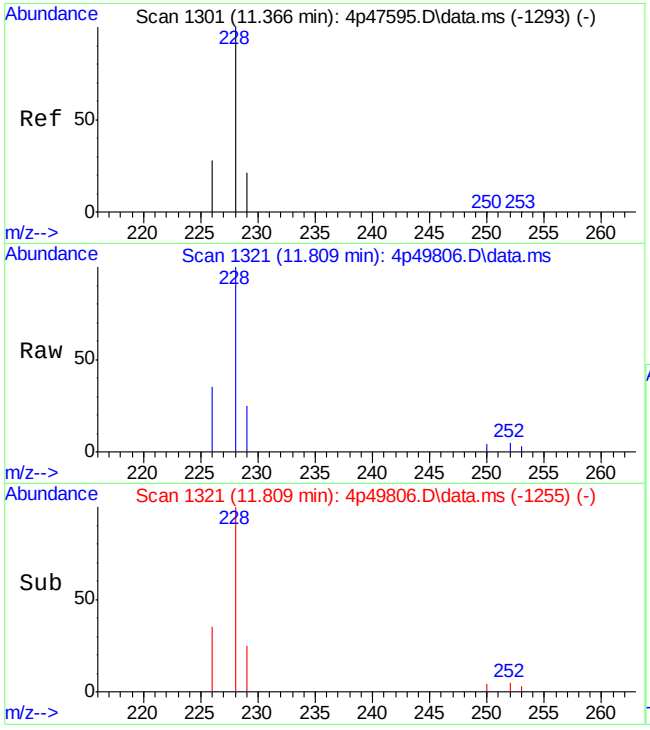


#26
Pyrene
Concen: 9.07 ppm
RT: 10.630 min Scan# 1181
Delta R.T. 0.000 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:202 Resp: 577

Ion	Ratio	Lower	Upper
202	100		
203	20.6	0.0	47.6
201	17.4	0.0	46.0

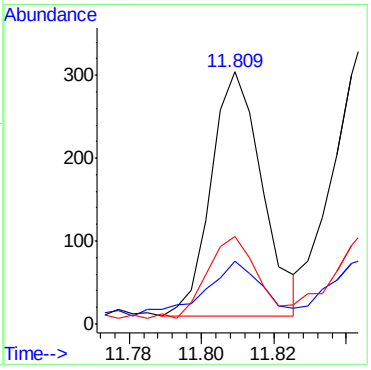


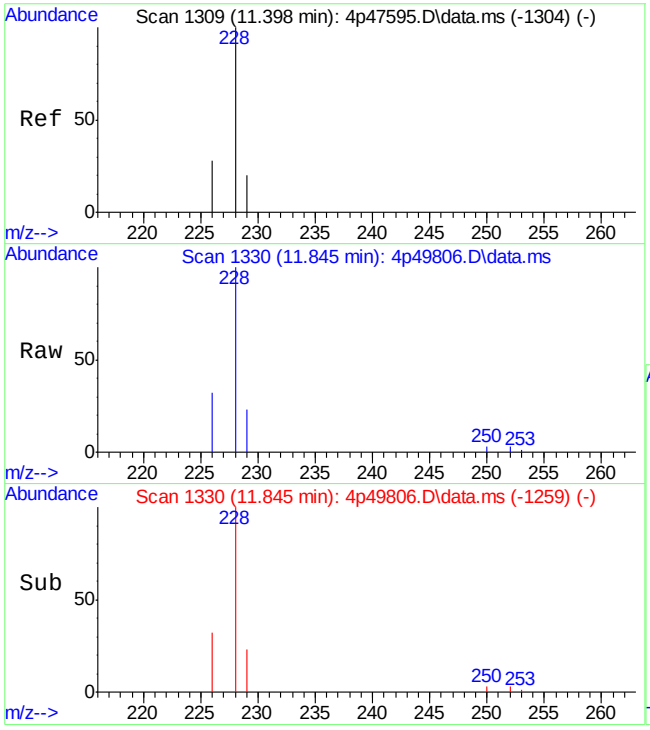


#28
Benzo[a]anthracene
Concen: 5.09 ppm
RT: 11.809 min Scan# 1321
Delta R.T. -0.004 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:228 Resp: 289

Ion	Ratio	Lower	Upper
228	100		
229	21.4	0.0	49.8
226	32.5	0.0	53.3

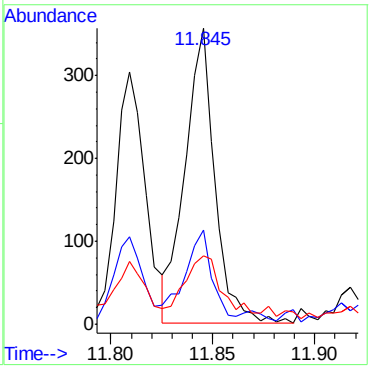


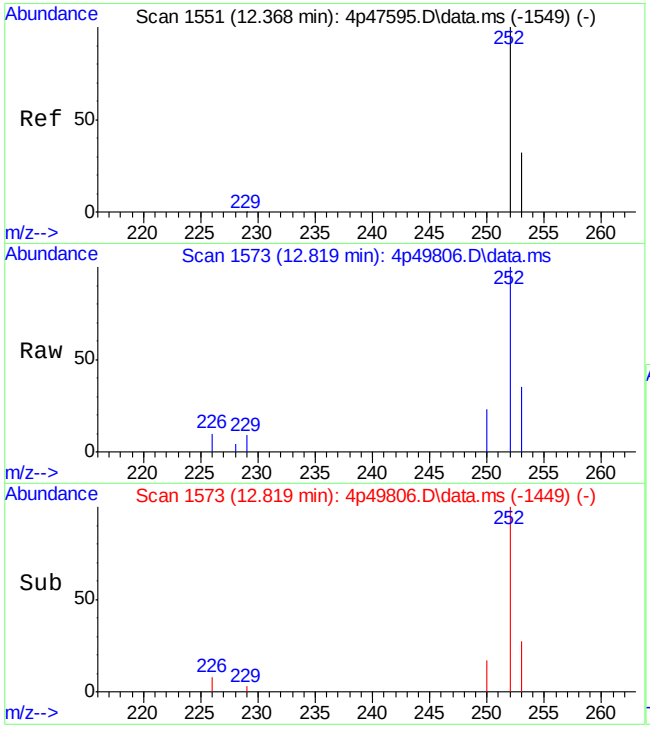


#29
Chrysene
Concen: 6.52 ppm
RT: 11.845 min Scan# 1330
Delta R.T. -0.004 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:228 Resp: 363

Ion	Ratio	Lower	Upper
228	100		
226	28.8	0.0	58.5
229	19.9	0.0	48.7

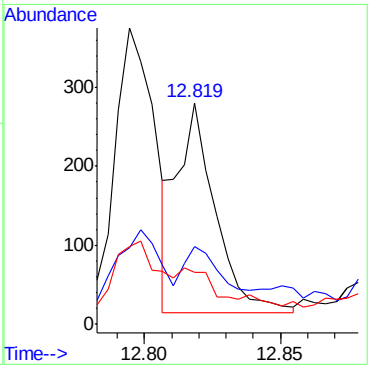


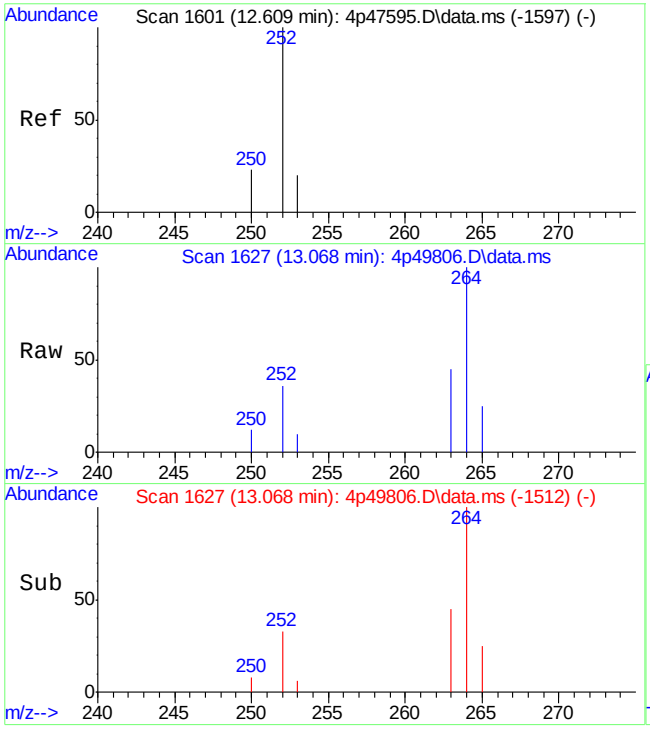


#32
Benzo[k]fluoranthene
Concen: 6.69 ppm
RT: 12.819 min Scan# 1573
Delta R.T. -0.004 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:252 Resp: 262

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	51.8
250	9.5	0.0	50.5

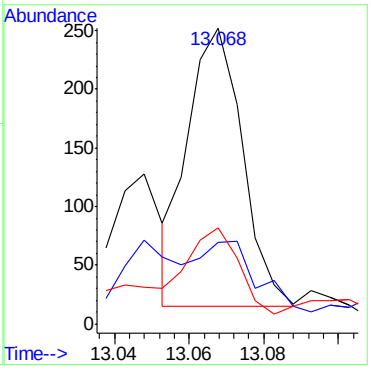


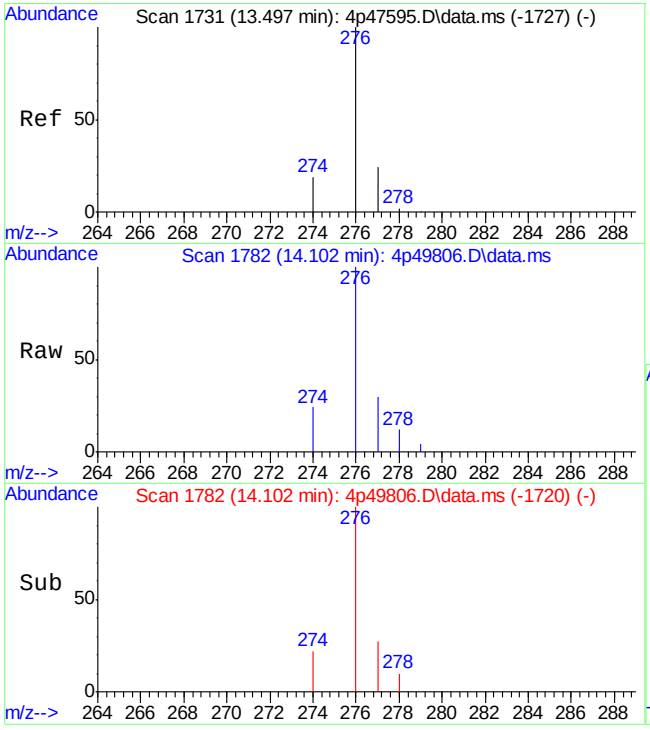


#33
Benzo[a]pyrene
Concen: 6.74 ppm
RT: 13.068 min Scan# 1627
Delta R.T. -0.005 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:252 Resp: 242

Ion	Ratio	Lower	Upper
252	100		
253	16.5	0.0	52.8
250	29.7	0.0	50.6

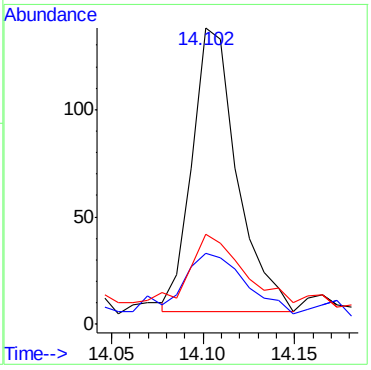


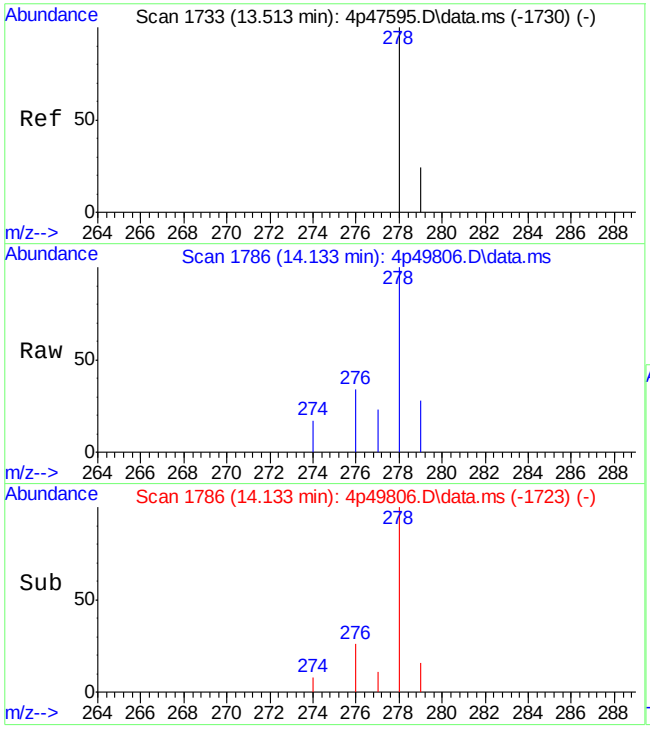


#34
Indeno[1,2,3-cd]pyrene
Concen: 5.26 ppm
RT: 14.102 min Scan# 1782
Delta R.T. -0.008 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:276 Resp: 225

Ion	Ratio	Lower	Upper
276	100		
274	20.0	0.0	49.3
277	22.7	0.0	53.2

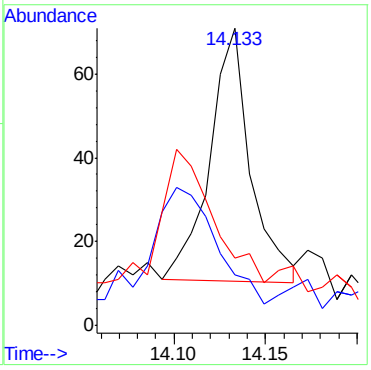


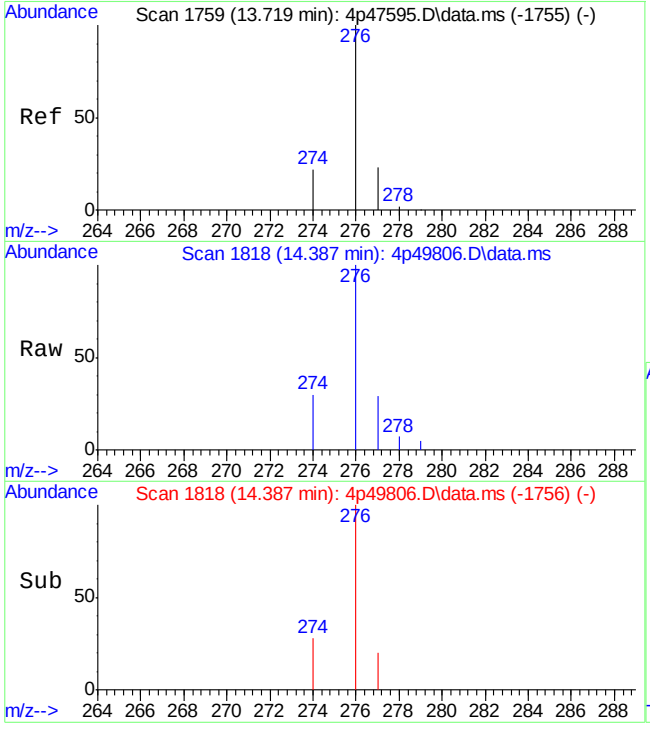


#35
Dibenz[a,h]anthracene
Concen: 2.82 ppm
RT: 14.133 min Scan# 1786
Delta R.T. 0.000 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:278 Resp: 94

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	0.0	0.0	36.7

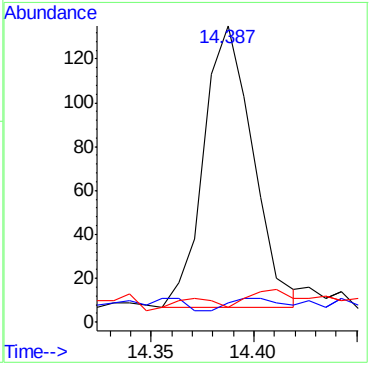




#36
Benzo[g,h,i]perylene
Concen: 5.82 ppm
RT: 14.387 min Scan# 1818
Delta R.T. -0.008 min
Lab File: 4p49806.D
Acq: 3 Dec 2021 7:23 am

Tgt Ion:276 Resp: 211

Ion	Ratio	Lower	Upper
276	100		
278	0.0	0.0	32.5
279	0.0	0.0	30.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50036.D
Acq On : 12 Dec 2021 4:18 pm
Operator : kristis
Sample : jd35920-2
Misc : op37045a,e4p2620,260,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 13 09:50:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

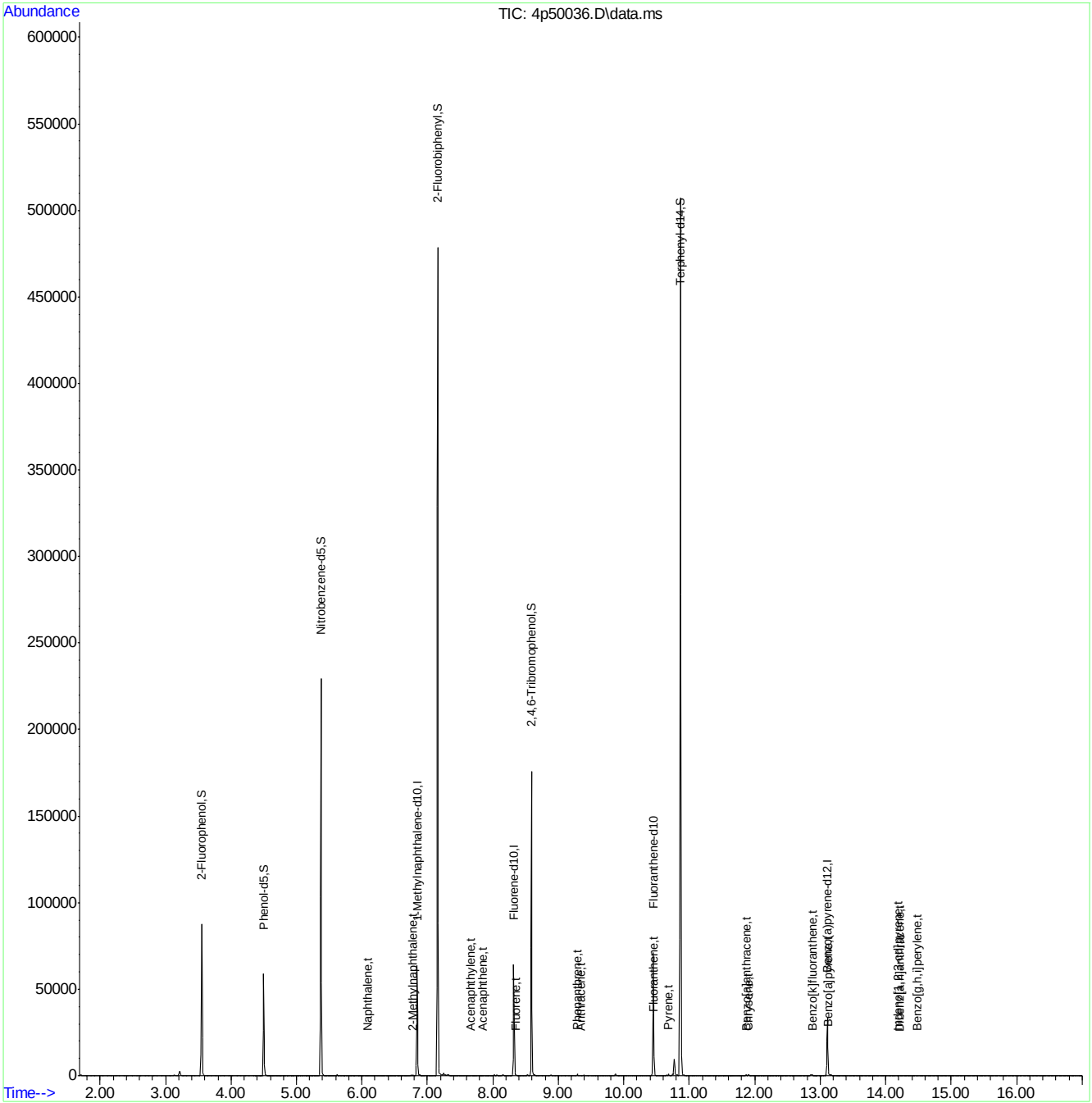
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.841	150	17883	800.00	ppm	0.00
13) Fluorene-d10	8.319	176	29069	800.00	ppm	0.00
20) Fluoranthene-d10	10.448	212	51580	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.106	264	22152	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.552	112	35499	3200.02	ppm	0.00
Spiked Amount 50.000			Recovery = 6400.04%			
4) Phenol-d5	4.497	99	43359	2060.24	ppm	0.00
Spiked Amount 50.000			Recovery = 4120.48%			
7) Nitrobenzene-d5	5.374	82	145382	8465.07	ppm	0.00
Spiked Amount 50.000			Recovery = 16930.14%			
14) 2-Fluorobiphenyl	7.159	172	246962	6660.39	ppm	0.00
Spiked Amount 50.000			Recovery = 13320.78%			
19) 2,4,6-Tribromophenol	8.591	330	61885	11154.94	ppm	0.00
Spiked Amount 50.000			Recovery = 22309.88%			
27) Terphenyl-d14	10.863	244	328849	8901.00	ppm	0.00
Spiked Amount 50.000			Recovery = 17802.00%			
Target Compounds						Qvalue
8) Naphthalene	6.094	128	180	3.52	ppm	93
10) 2-Methylnaphthalene	6.782	141	99	3.70	ppm	81
15) Acenaphthylene	7.666	152	50	0.92	ppm	87
16) Acenaphthene	7.841	153	80	2.31	ppm	80
17) Fluorene	8.344	166	146	3.50	ppm	82
23) Phenanthrene	9.290	178	656	9.44	ppm	89
24) Anthracene	9.345	178	213	3.20	ppm	82
25) Fluoranthene	10.458	202	885	12.23	ppm	93
26) Pyrene	10.679	202	811	10.19	ppm	92
28) Benzo[a]anthracene	11.868	228	301	4.23	ppm	97
29) Chrysene	11.900	228	331	4.75	ppm	95
32) Benzo[k]fluoranthene	12.877	252	184	4.03	ppm	97
33) Benzo[a]pyrene	13.126	252	278	6.63	ppm	77
34) Indeno[1,2,3-cd]pyrene	14.192	276	205	4.10	ppm	92
35) Dibenz[a,h]anthracene	14.215	278	68	1.75	ppm	89
36) Benzo[g,h,i]perylene	14.485	276	203	4.79	ppm	96

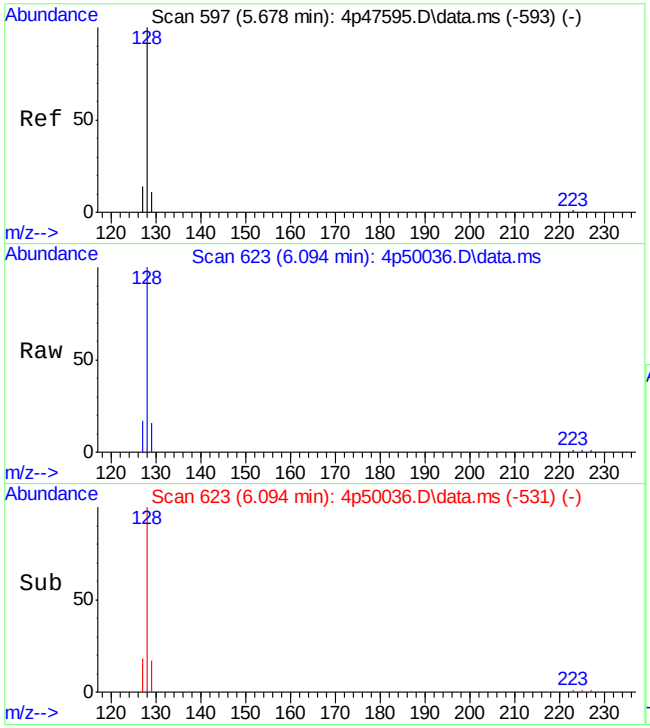
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50036.D
Acq On : 12 Dec 2021 4:18 pm
Operator : kristis
Sample : jd35920-2
Misc : op37045a,e4p2620,260,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 13 09:50:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

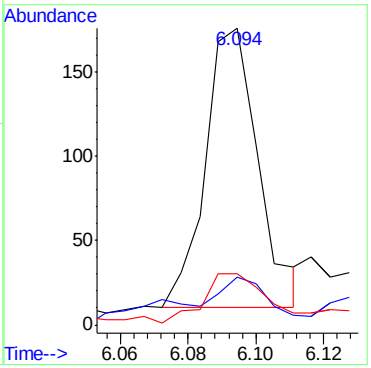


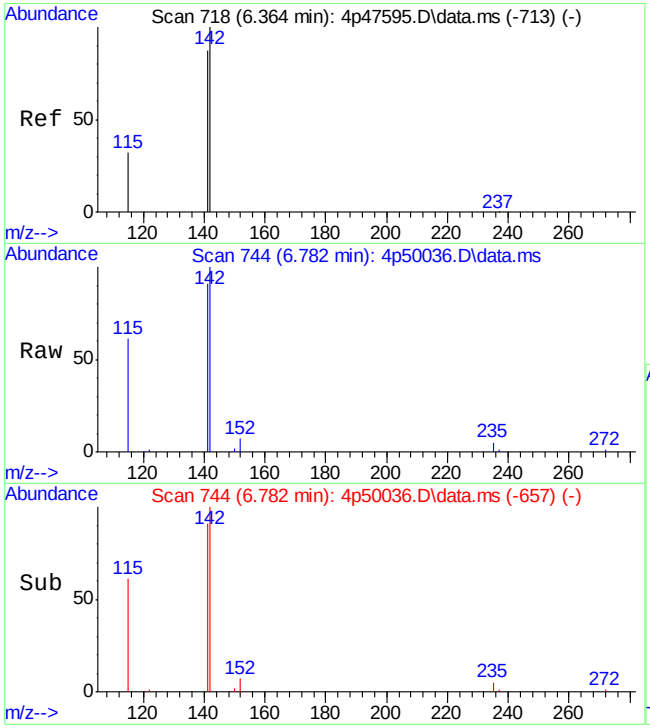


#8
Naphthalene
Concen: 3.52 ppm
RT: 6.094 min Scan# 623
Delta R.T. 0.000 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:128 Resp: 180

Ion	Ratio	Lower	Upper
128	100		
129	11.4	0.0	41.1
127	16.9	0.0	42.0

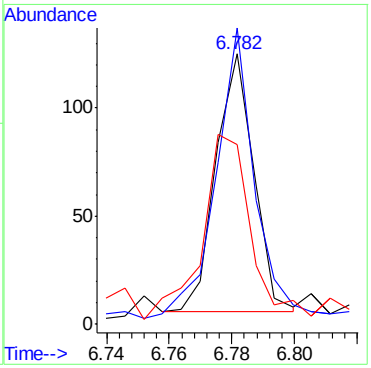


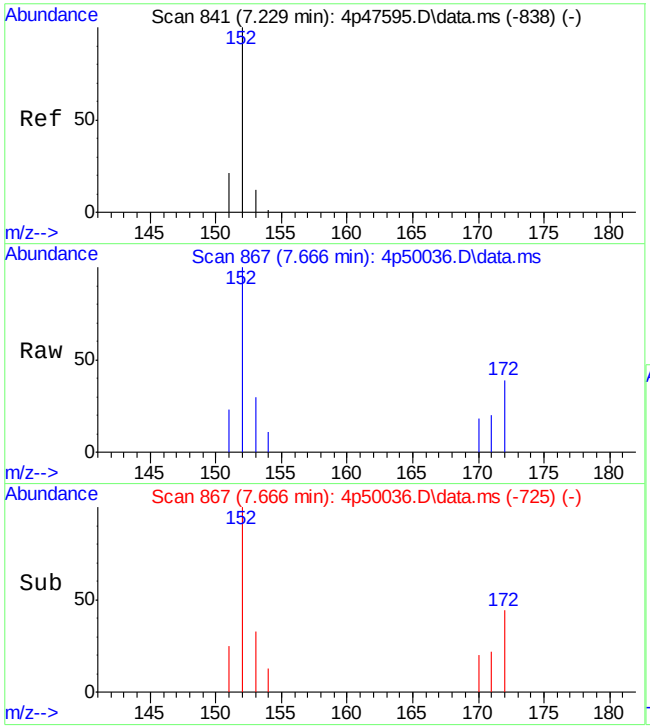


#10
2-Methylnaphthalene
Concen: 3.70 ppm
RT: 6.782 min Scan# 744
Delta R.T. 0.000 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:141 Resp: 99

Ion	Ratio	Lower	Upper
141	100		
142	110.2	96.1	156.1
115	60.6	7.9	67.9

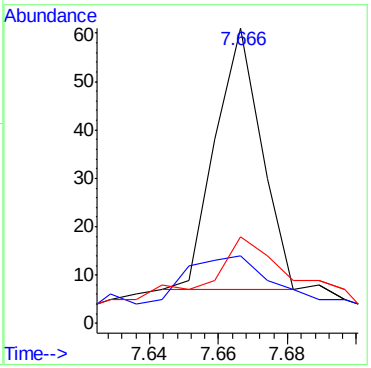


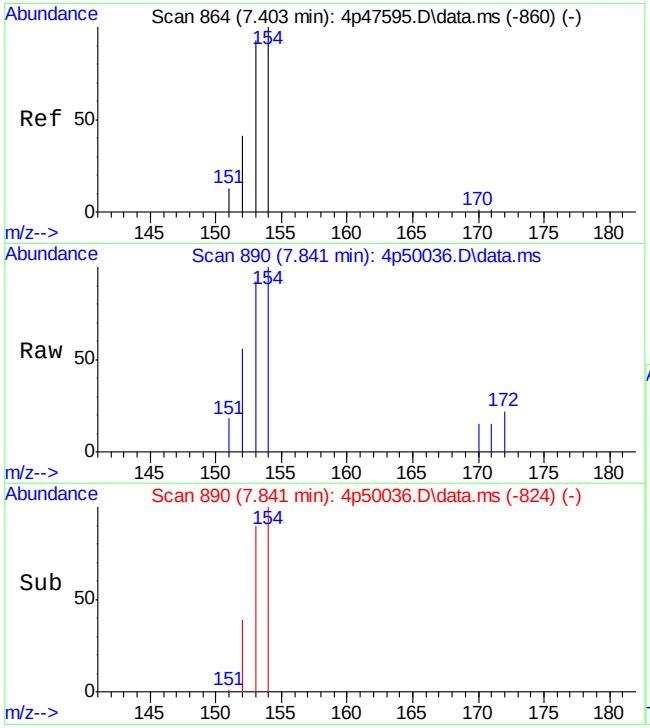


#15
Acenaphthylene
Concen: 0.92 ppm
RT: 7.666 min Scan# 867
Delta R.T. 0.000 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:152 Resp: 50

Ion	Ratio	Lower	Upper
152	100		
151	14.8	0.0	50.8
153	17.6	0.0	42.2

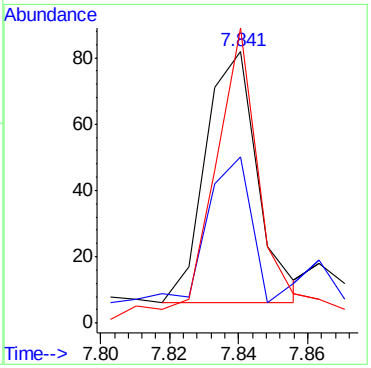


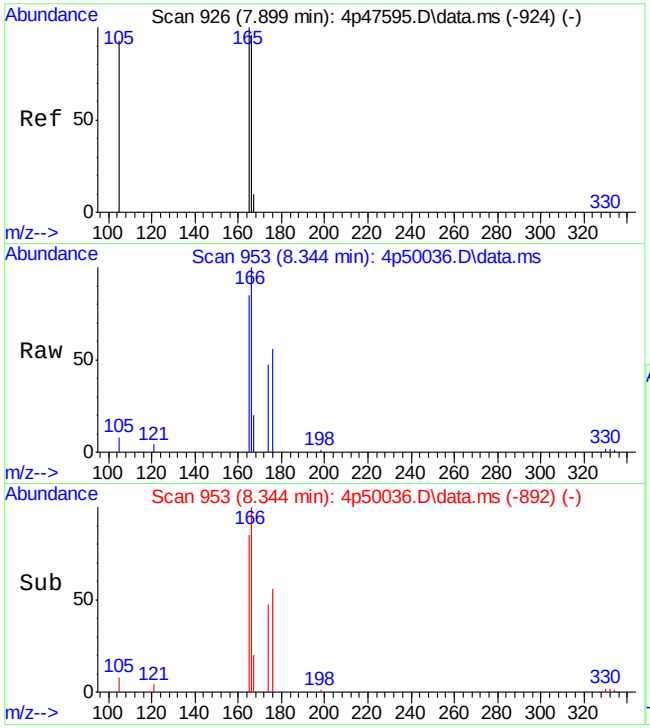


#16
Acenaphthene
Concen: 2.31 ppm
RT: 7.841 min Scan# 890
Delta R.T. 0.000 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:153 Resp: 80

Ion	Ratio	Lower	Upper
153	100		
152	54.5	18.5	78.5
154	113.8	59.1	119.1

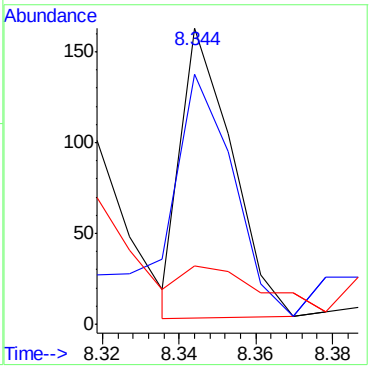


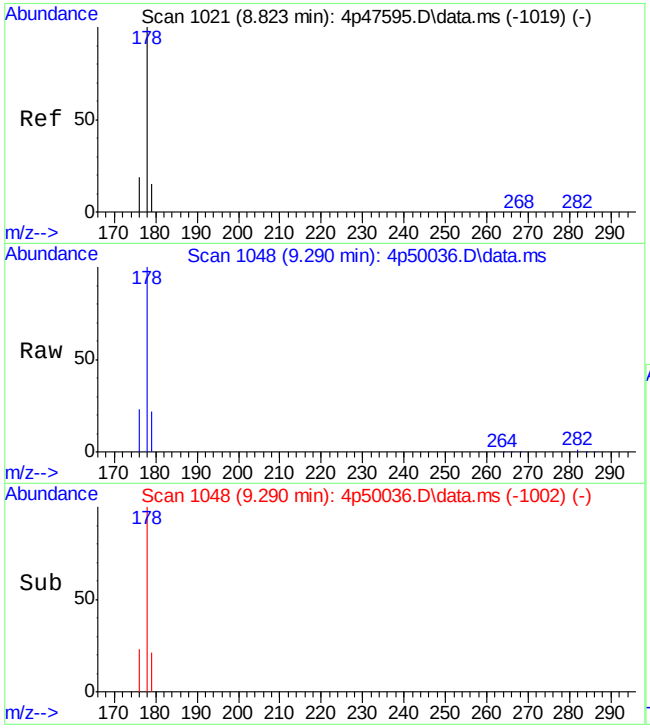


#17
Fluorene
Concen: 3.50 ppm
RT: 8.344 min Scan# 953
Delta R.T. -0.008 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:166 Resp: 146

Ion	Ratio	Lower	Upper
166	100		
165	77.9	66.9	126.9
167	9.2	0.0	41.7

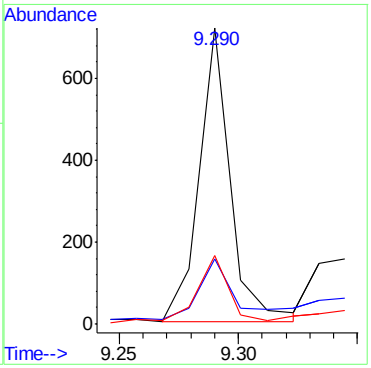


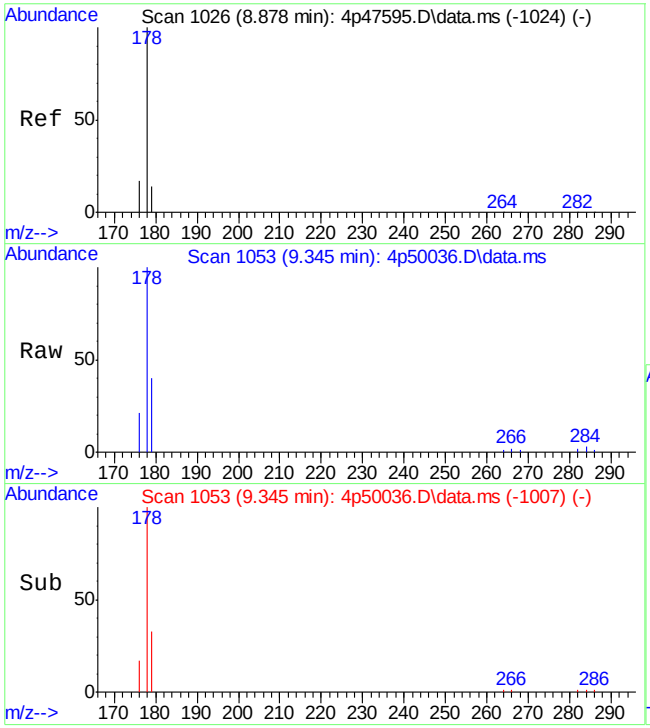


#23
Phenanthrene
Concen: 9.44 ppm
RT: 9.290 min Scan# 1048
Delta R.T. 0.000 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:178 Resp: 656

Ion	Ratio	Lower	Upper
178	100		
179	18.9	0.0	46.0
176	21.8	0.0	45.6

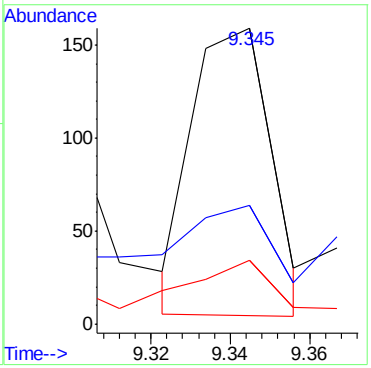


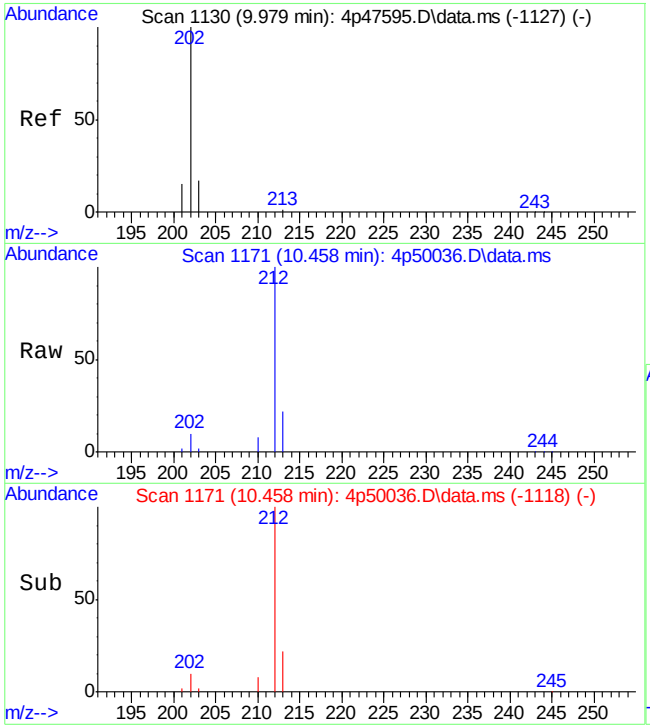


#24
Anthracene
Concen: 3.20 ppm
RT: 9.345 min Scan# 1053
Delta R.T. 0.000 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:178 Resp: 213

Ion	Ratio	Lower	Upper
178	100		
179	26.5	0.0	43.0
176	15.8	0.0	48.4

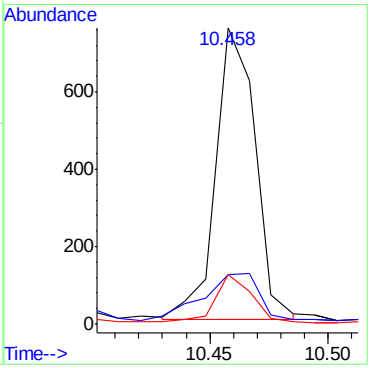


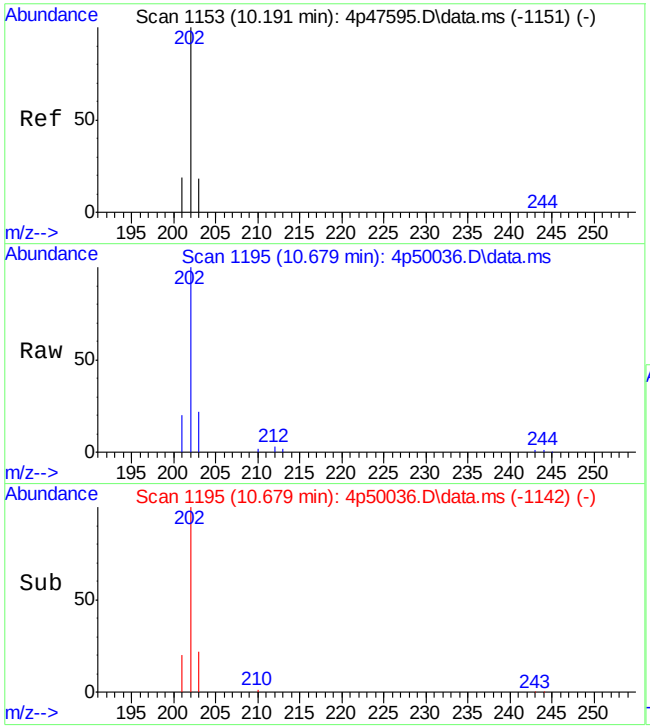


#25
Fluoranthene
Concen: 12.23 ppm
RT: 10.458 min Scan# 1171
Delta R.T. -0.009 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:202 Resp: 885

Ion	Ratio	Lower	Upper
202	100		
203	15.0	0.0	47.6
201	16.6	0.0	42.9

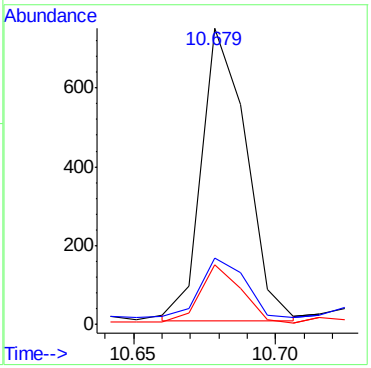


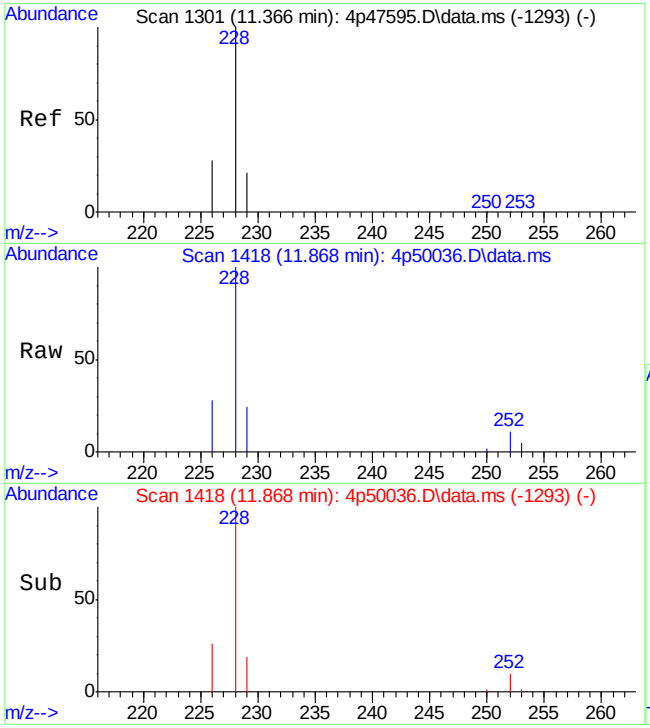


#26
Pyrene
Concen: 10.19 ppm
RT: 10.679 min Scan# 1195
Delta R.T. -0.009 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:202 Resp: 811

Ion	Ratio	Lower	Upper
202	100		
203	20.5	0.0	47.6
201	20.2	0.0	46.0

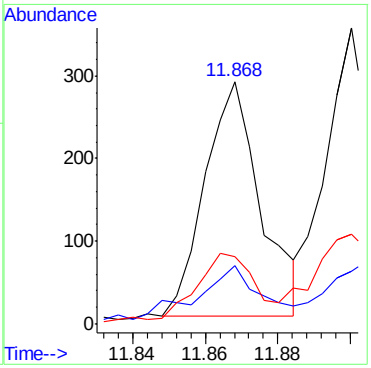


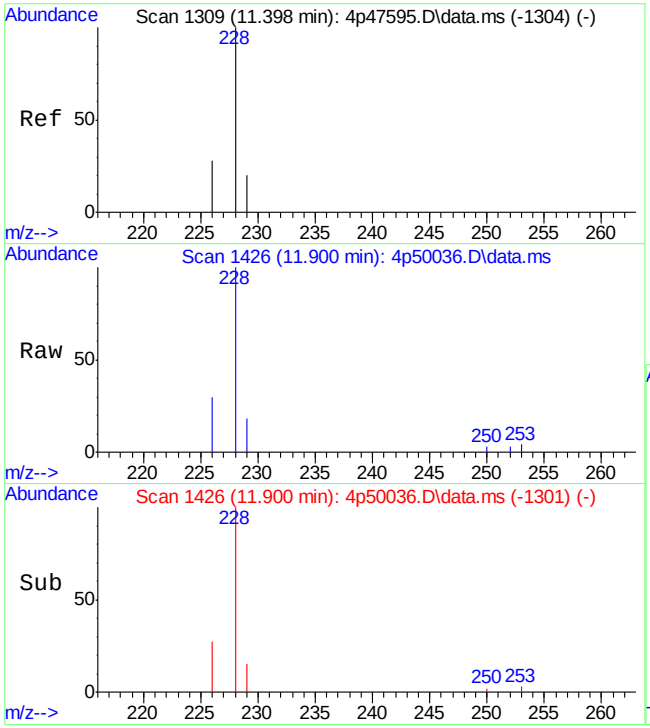


#28
Benzo[a]anthracene
Concen: 4.23 ppm
RT: 11.868 min Scan# 1418
Delta R.T. 0.000 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:228 Resp: 301

Ion	Ratio	Lower	Upper
228	100		
229	18.2	0.0	49.8
226	22.4	0.0	53.3

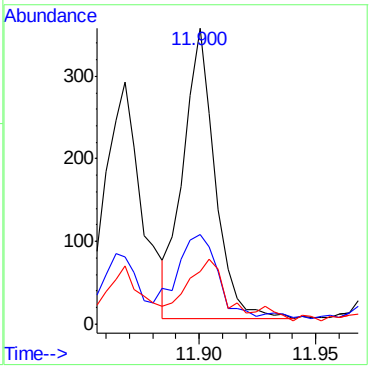


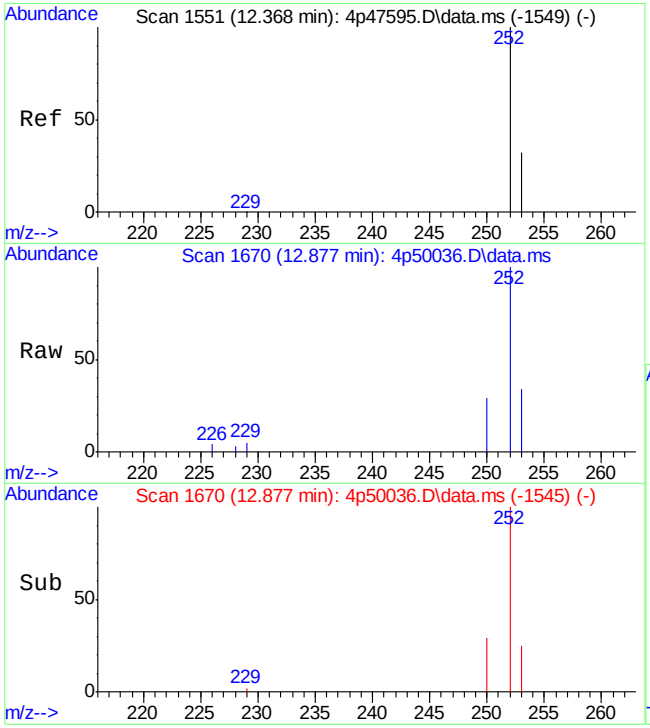


#29
Chrysene
Concen: 4.75 ppm
RT: 11.900 min Scan# 1426
Delta R.T. 0.000 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:228 Resp: 331

Ion	Ratio	Lower	Upper
228	100		
226	26.1	0.0	58.5
229	16.0	0.0	48.7

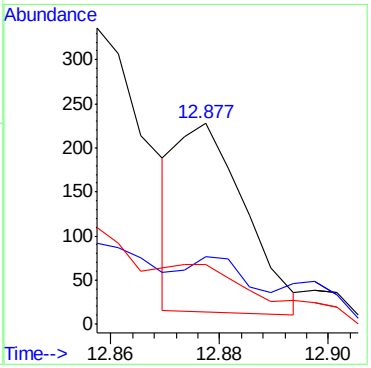


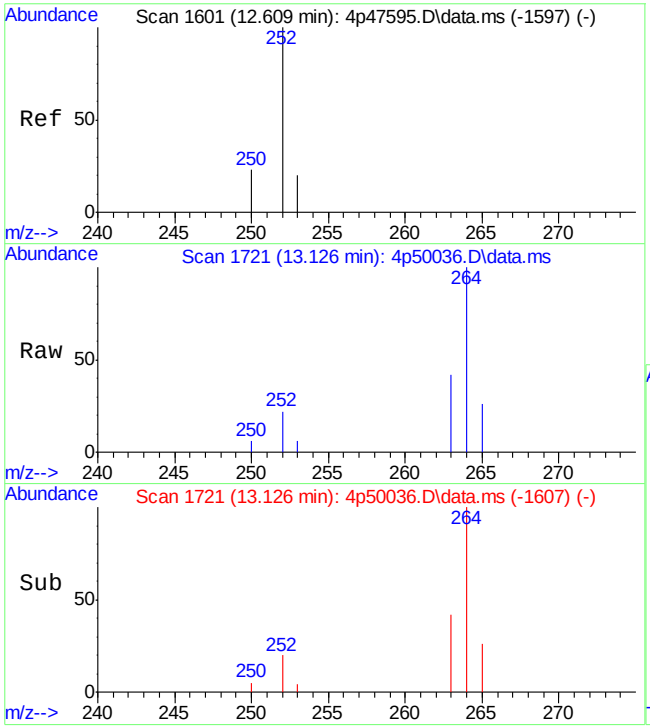


#32
Benzo[k]fluoranthene
Concen: 4.03 ppm
RT: 12.877 min Scan# 1670
Delta R.T. 0.000 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:252 Resp: 184

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	51.8
250	18.6	0.0	50.5

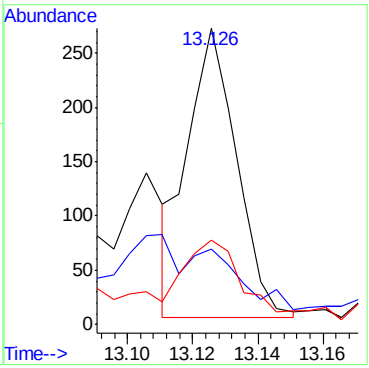


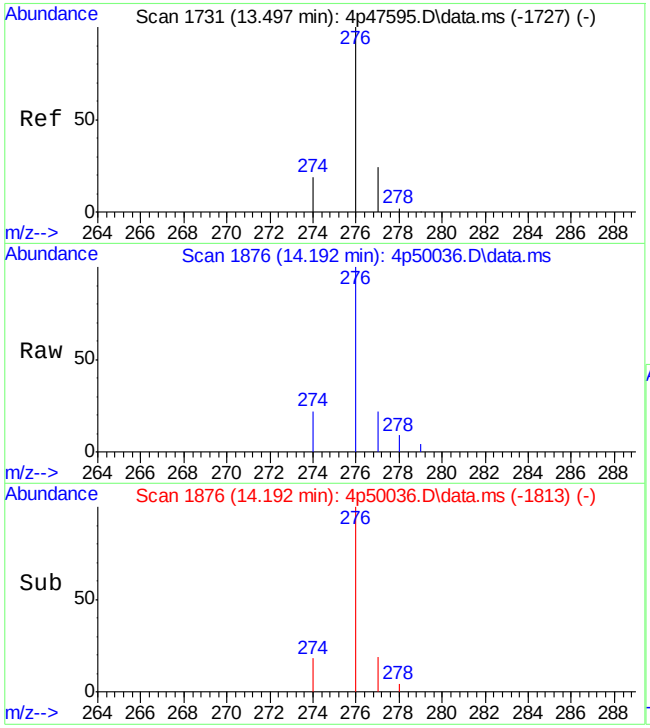


#33
Benzo[a]pyrene
Concen: 6.63 ppm
RT: 13.126 min Scan# 1721
Delta R.T. 0.000 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:252 Resp: 278

Ion	Ratio	Lower	Upper
252	100		
253	9.7	0.0	52.8
250	28.8	0.0	50.6

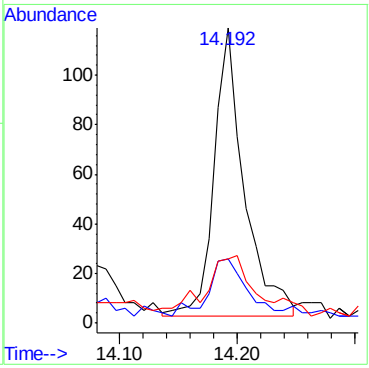


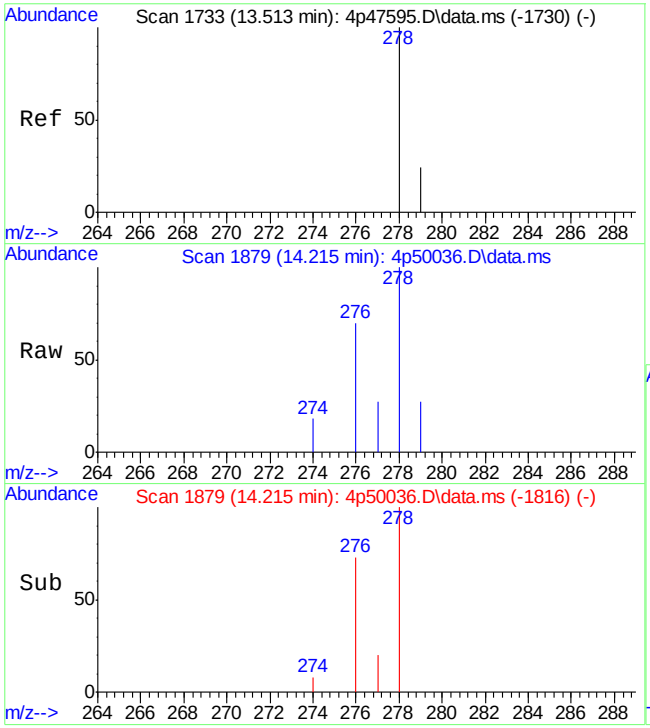


#34
Indeno[1,2,3-cd]pyrene
Concen: 4.10 ppm
RT: 14.192 min Scan# 1876
Delta R.T. 0.000 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:276 Resp: 205

Ion	Ratio	Lower	Upper
276	100		
274	18.1	0.0	49.3
277	16.7	0.0	53.2

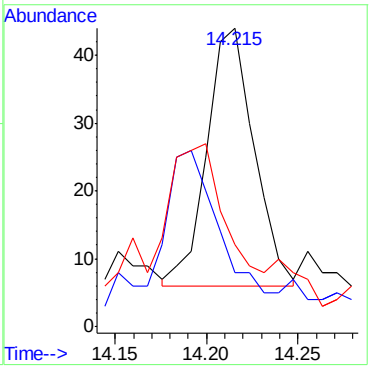


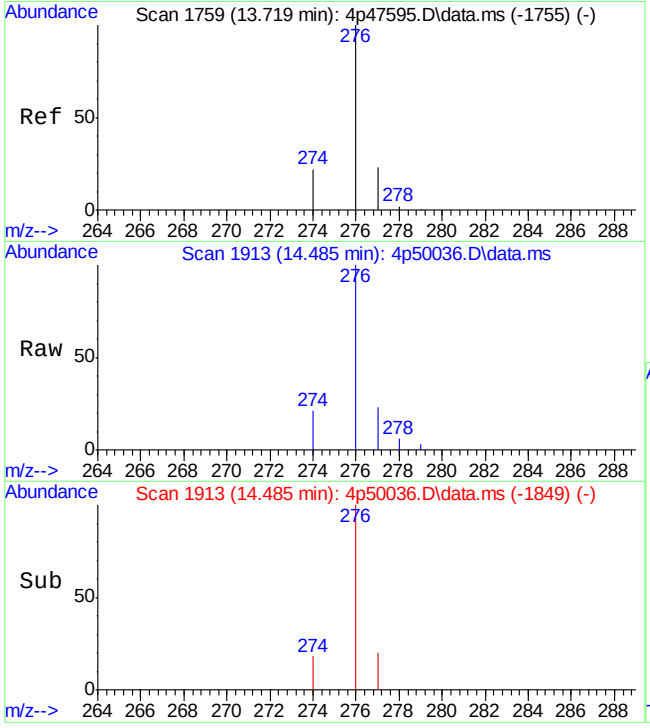


#35
Dibenz[a,h]anthracene
Concen: 1.75 ppm
RT: 14.215 min Scan# 1879
Delta R.T. 0.000 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:278 Resp: 68

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	4.1	0.0	36.7

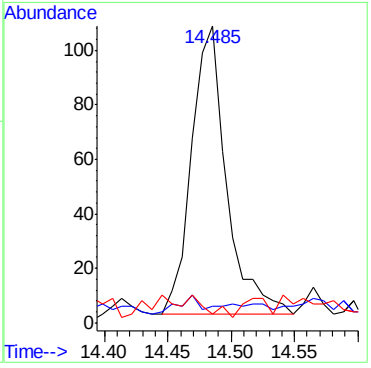




#36
Benzo[g,h,i]perylene
Concen: 4.79 ppm
RT: 14.485 min Scan# 1913
Delta R.T. 0.008 min
Lab File: 4p50036.D
Acq: 12 Dec 2021 4:18 pm

Tgt Ion:276 Resp: 203

Ion	Ratio	Lower	Upper
276	100		
278	0.9	0.0	32.5
279	0.0	0.0	30.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/14/21 08:52

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2607\
Data File : 4p49814.D
Acq On : 3 Dec 2021 10:31 am
Operator : chriss2
Sample : jd35920-3
Misc : op36899a,e4p2607,290,,,1,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 14 09:34:12 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 03 15:30:51 2021
Response via : Initial Calibration

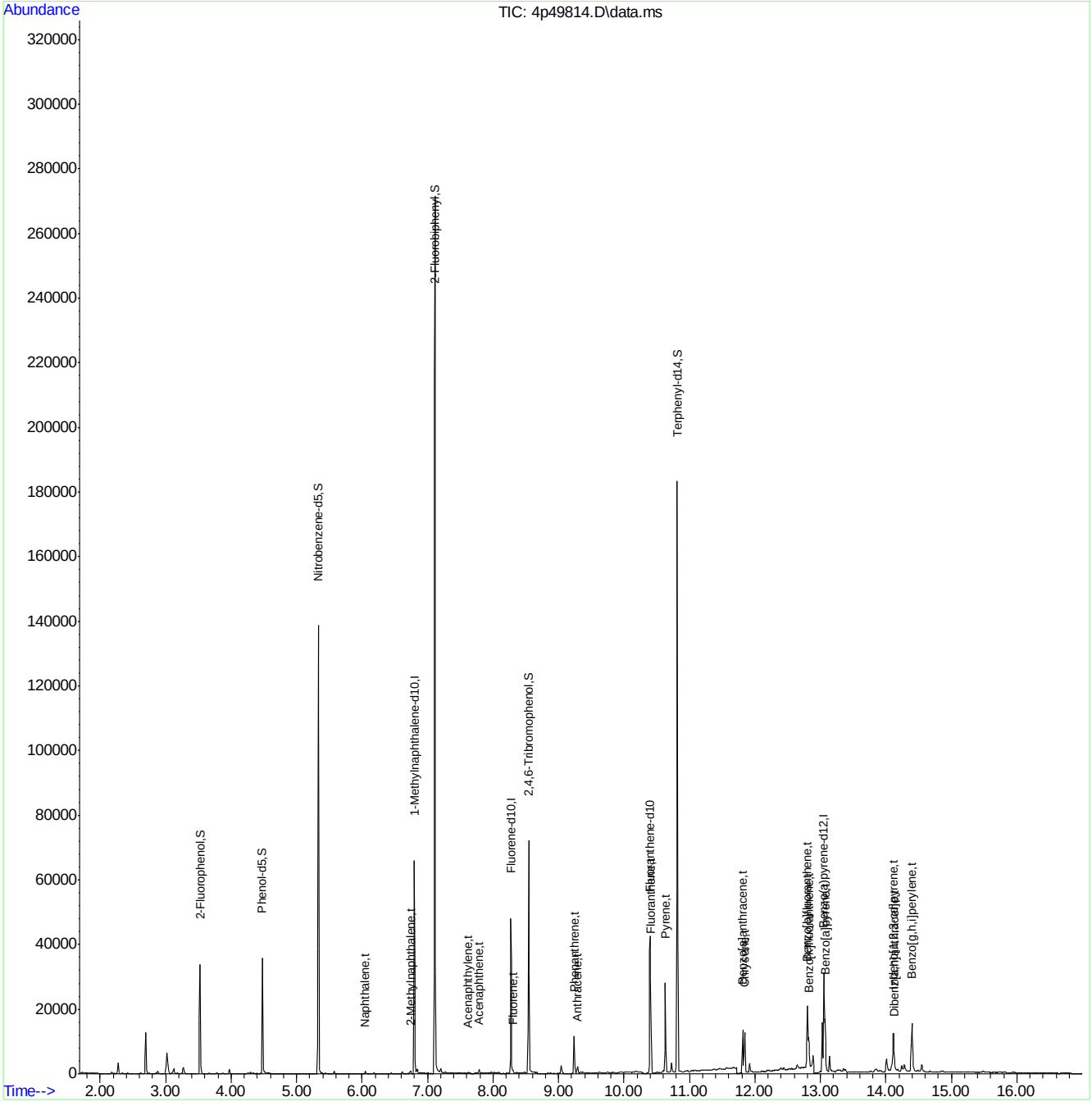
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.800	150	18778	800.00	ppm	0.00
13) Fluorene-d10	8.271	176	24559	800.00	ppm	0.00
20) Fluoranthene-d10	10.399	212	35578	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.053	264	18103	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.528	112	16906	1451.34	ppm	0.01
Spiked Amount 50.000			Recovery	= 2902.68%		
4) Phenol-d5	4.478	99	26242	1187.48	ppm	0.00
Spiked Amount 50.000			Recovery	= 2374.96%		
7) Nitrobenzene-d5	5.334	82	82356	4566.74	ppm	0.00
Spiked Amount 50.000			Recovery	= 9133.48%		
14) 2-Fluorobiphenyl	7.117	172	145781	4653.61	ppm	0.00
Spiked Amount 50.000			Recovery	= 9307.22%		
19) 2,4,6-Tribromophenol	8.543	330	24988	5331.29	ppm	0.00
Spiked Amount 50.000			Recovery	= 10662.58%		
27) Terphenyl-d14	10.814	244	106961	4197.28	ppm	0.00
Spiked Amount 50.000			Recovery	= 8394.56%		
Target Compounds						Qvalue
8) Naphthalene	6.051	128	538	10.01	ppm	96
10) 2-Methylnaphthalene	6.740	141	321	11.43	ppm	95
15) Acenaphthylene	7.617	152	269m	5.88	ppm	
16) Acenaphthene	7.791	153	402	13.77	ppm	97
17) Fluorene	8.305	166	355m	10.08	ppm	
23) Phenanthrene	9.238	178	7101	148.18	ppm	93
24) Anthracene	9.293	178	1547	33.66	ppm	95
25) Fluoranthene	10.408	202	17745	355.63	ppm	93
26) Pyrene	10.629	202	16519	300.86	ppm	94
28) Benzo[a]anthracene	11.813	228	7777	158.54	ppm	94
29) Chrysene	11.845	228	8798	183.08	ppm	99
31) Benzo[b]fluoranthene	12.798	252	15009	411.45	ppm	95
32) Benzo[k]fluoranthene	12.822	252	5730	153.39	ppm	91
33) Benzo[a]pyrene	13.073	252	10224	298.39	ppm	96
34) Indeno[1,2,3-cd]pyrene	14.109	276	12003	294.01	ppm	95
35) Dibenz[a,h]anthracene	14.133	278	2691	84.63	ppm	82
36) Benzo[g,h,i]perylene	14.395	276	14676	424.18	ppm	99

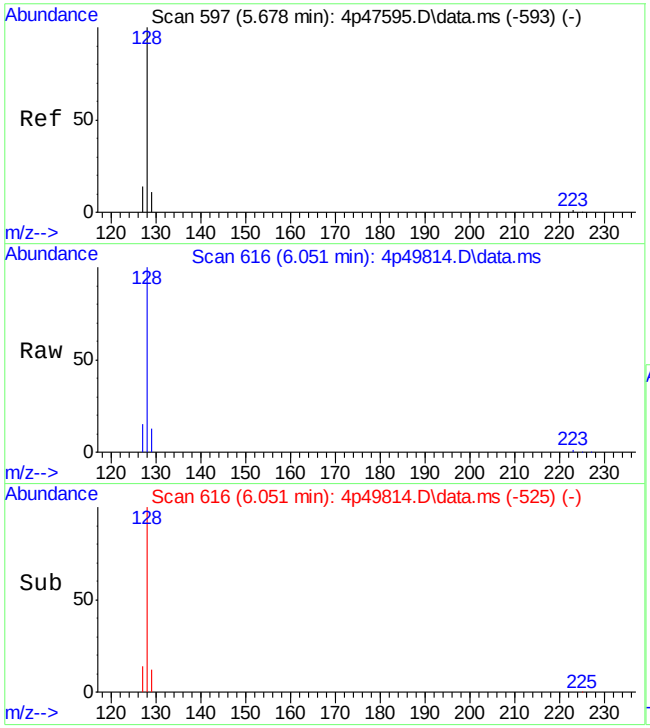
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2607\
Data File : 4p49814.D
Acq On : 3 Dec 2021 10:31 am
Operator : chriss2
Sample : jd35920-3
Misc : op36899a,e4p2607,290,,,1,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 14 09:34:12 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 03 15:30:51 2021
Response via : Initial Calibration

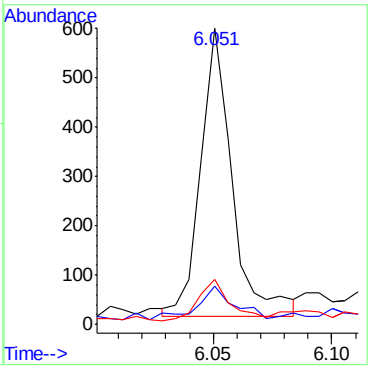


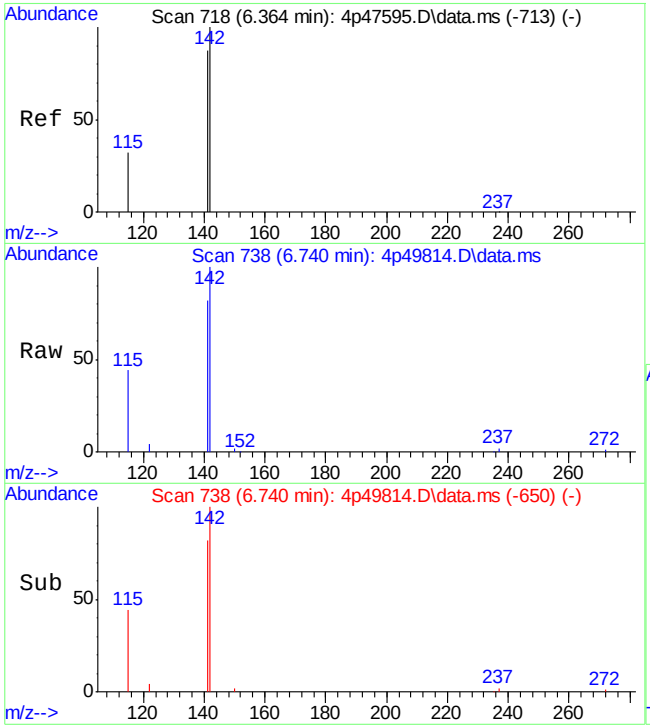


#8
Naphthalene
Concen: 10.01 ppm
RT: 6.051 min Scan# 616
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:128 Resp: 538

Ion	Ratio	Lower	Upper
128	100		
129	9.7	0.0	41.1
127	13.6	0.0	42.0

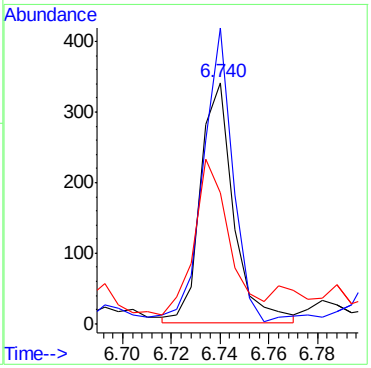


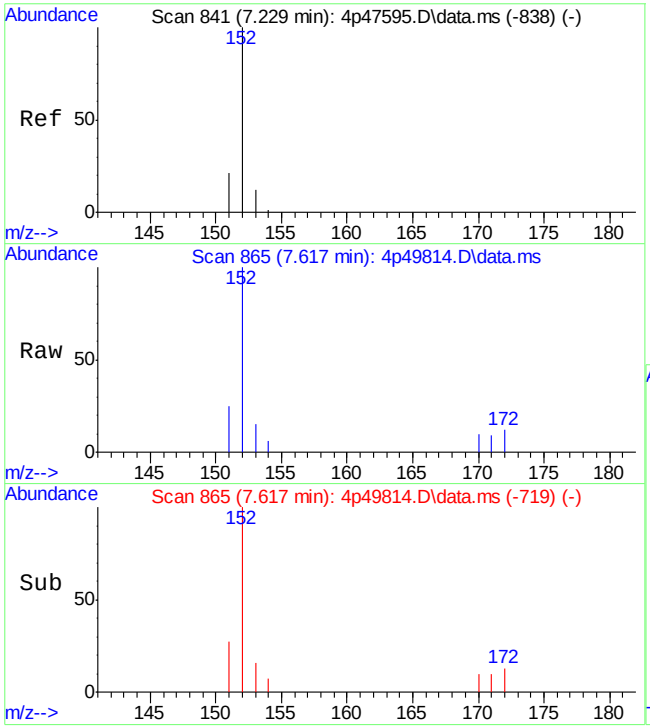


#10
2-Methylnaphthalene
Concen: 11.43 ppm
RT: 6.740 min Scan# 738
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:141 Resp: 321

Ion	Ratio	Lower	Upper
141	100		
142	123.1	96.1	156.1
115	46.8	7.9	67.9

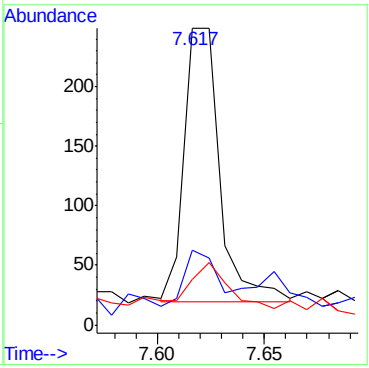


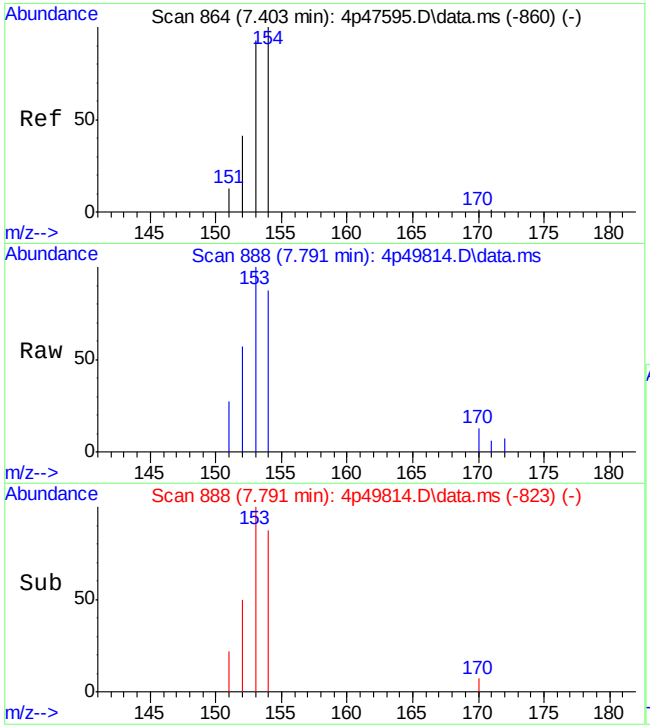


#15
Acenaphthylene
Concen: 5.88 ppm m
RT: 7.617 min Scan# 865
Delta R.T. -0.008 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:152 Resp: 269

Ion	Ratio	Lower	Upper
152	100		
151	25.3	0.0	50.8
153	15.3	0.0	42.2

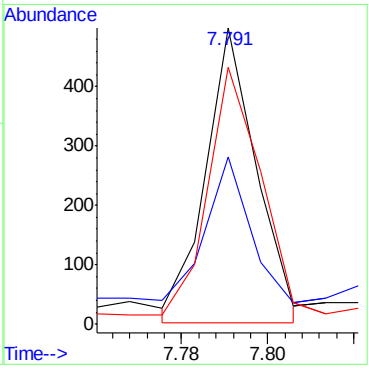


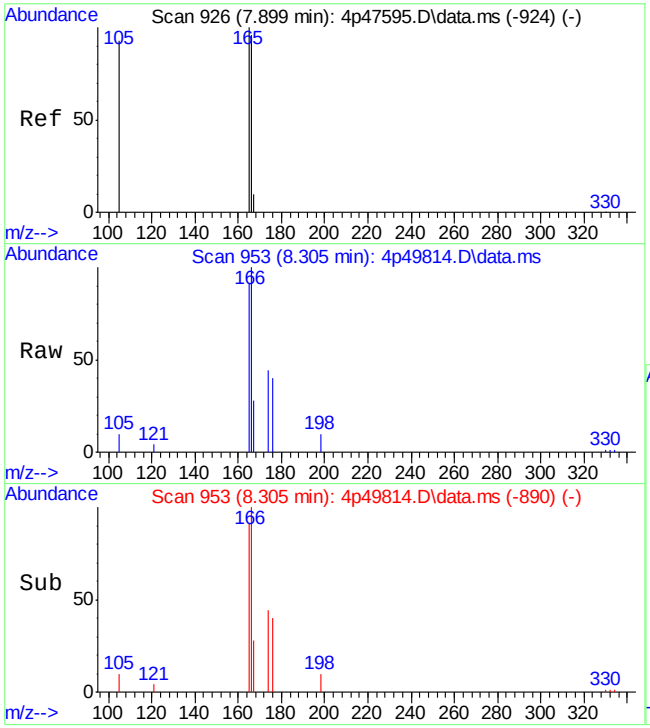


#16
Acenaphthene
Concen: 13.77 ppm
RT: 7.791 min Scan# 888
Delta R.T. -0.008 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:153 Resp: 402

Ion	Ratio	Lower	Upper
153	100		
152	51.9	18.5	78.5
154	86.6	59.1	119.1

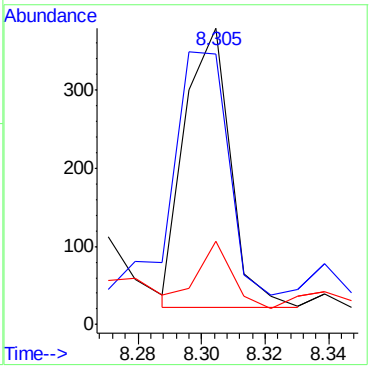


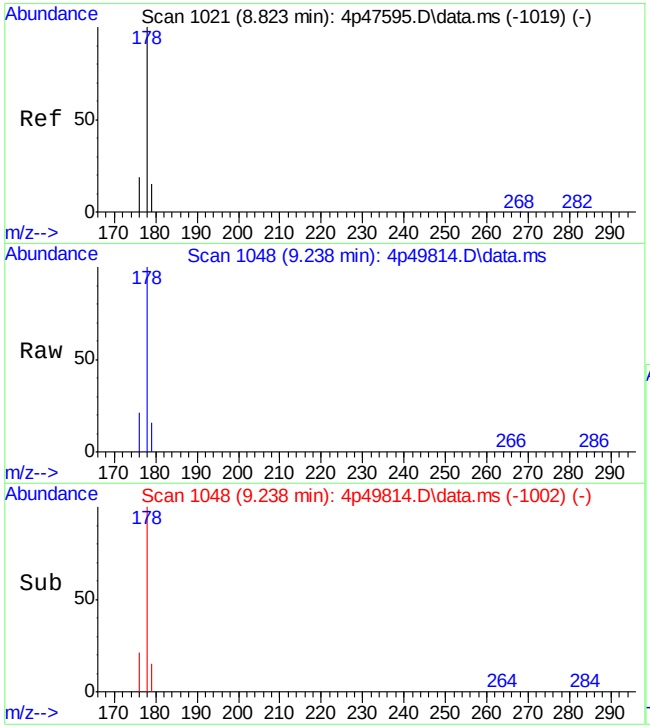


#17
Fluorene
Concen: 10.08 ppm m
RT: 8.305 min Scan# 953
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:166 Resp: 355

Ion	Ratio	Lower	Upper
166	100		
165	91.3	66.9	126.9
167	28.2	0.0	41.7

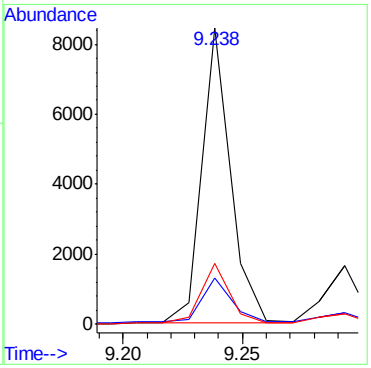


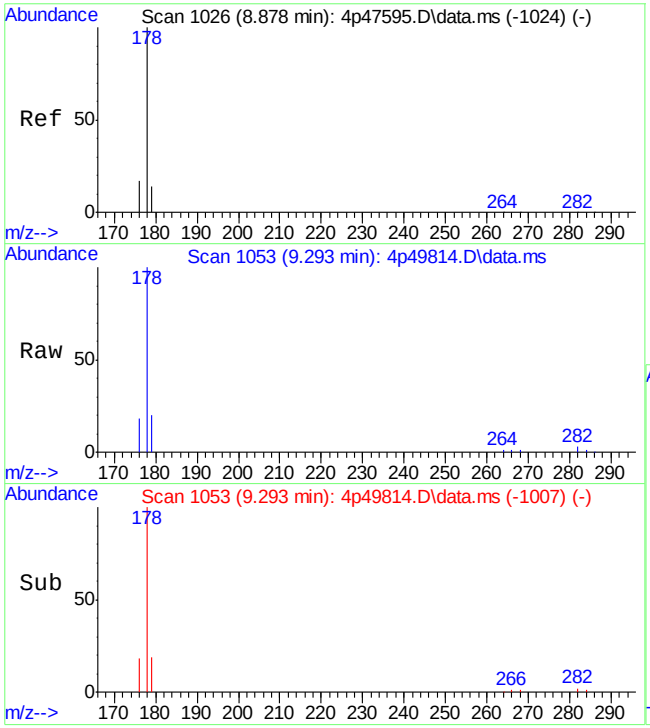


#23
Phenanthrene
Concen: 148.18 ppm
RT: 9.238 min Scan# 1048
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:178 Resp: 7101

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	46.0
176	20.3	0.0	45.6

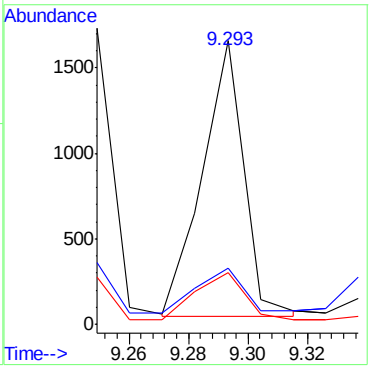


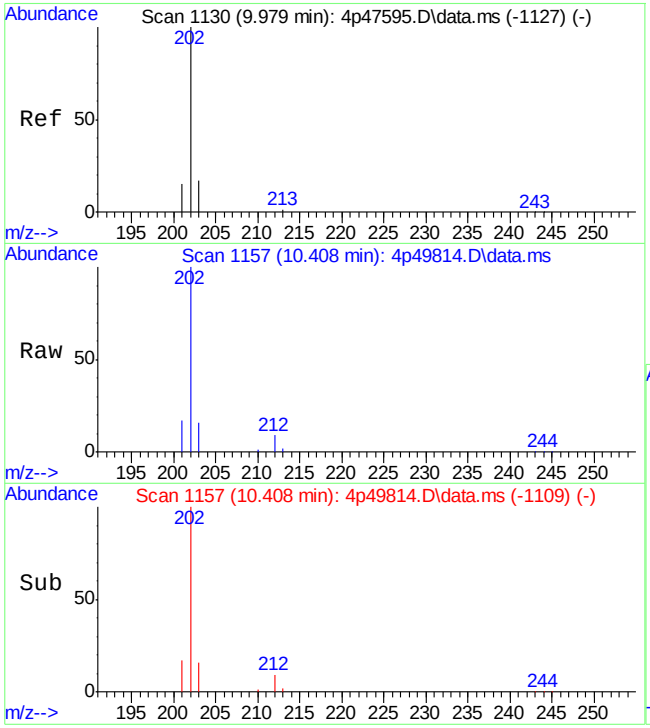


#24
Anthracene
Concen: 33.66 ppm
RT: 9.293 min Scan# 1053
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:178 Resp: 1547

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	43.0
176	17.5	0.0	48.4

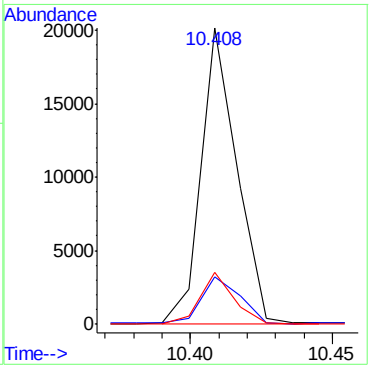


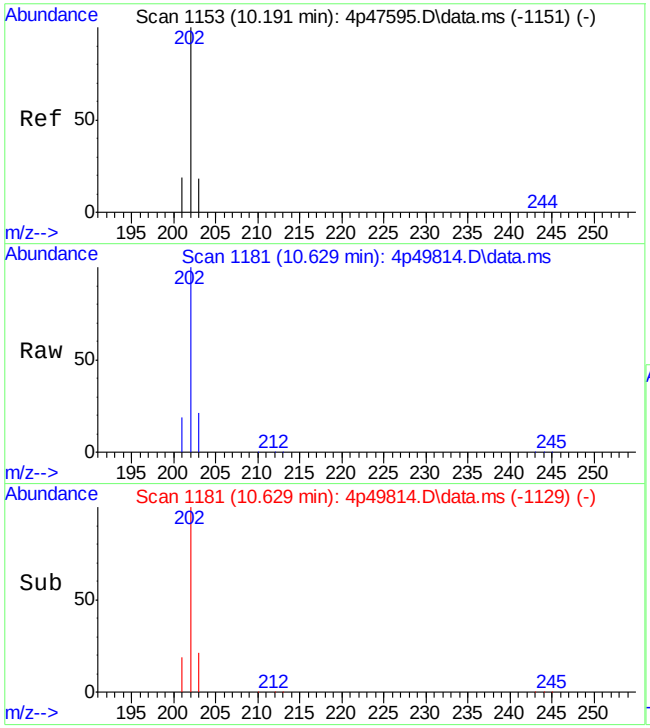


#25
Fluoranthene
Concen: 355.63 ppm
RT: 10.408 min Scan# 1157
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:202 Resp: 17745

Ion	Ratio	Lower	Upper
202	100		
203	15.9	0.0	47.6
201	17.2	0.0	42.9

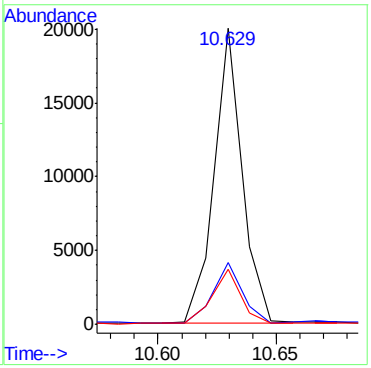


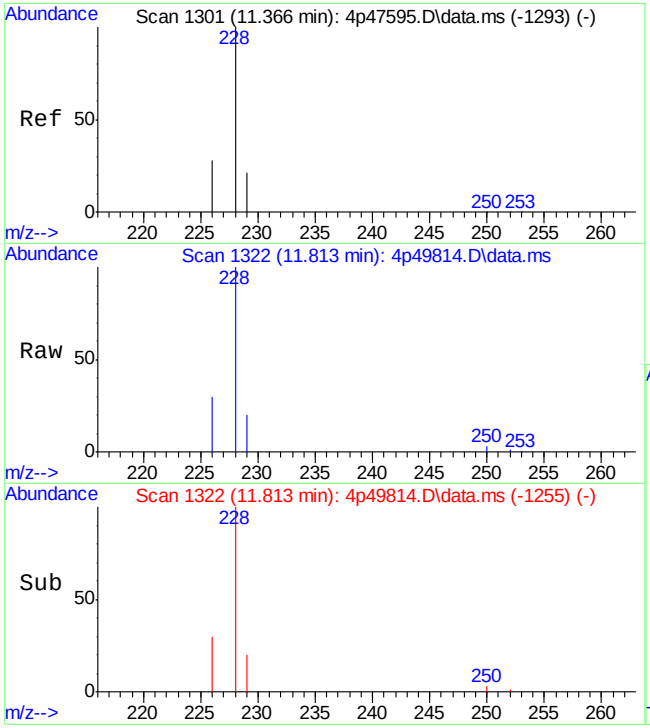


#26
Pyrene
Concen: 300.86 ppm
RT: 10.629 min Scan# 1181
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:202 Resp: 16519

Ion	Ratio	Lower	Upper
202	100		
203	20.3	0.0	47.6
201	18.3	0.0	46.0

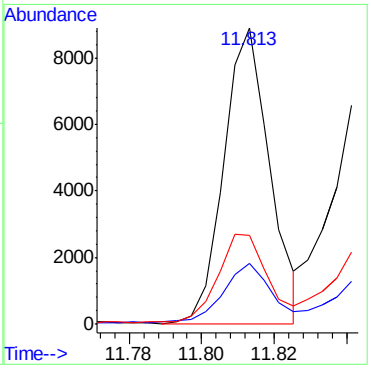


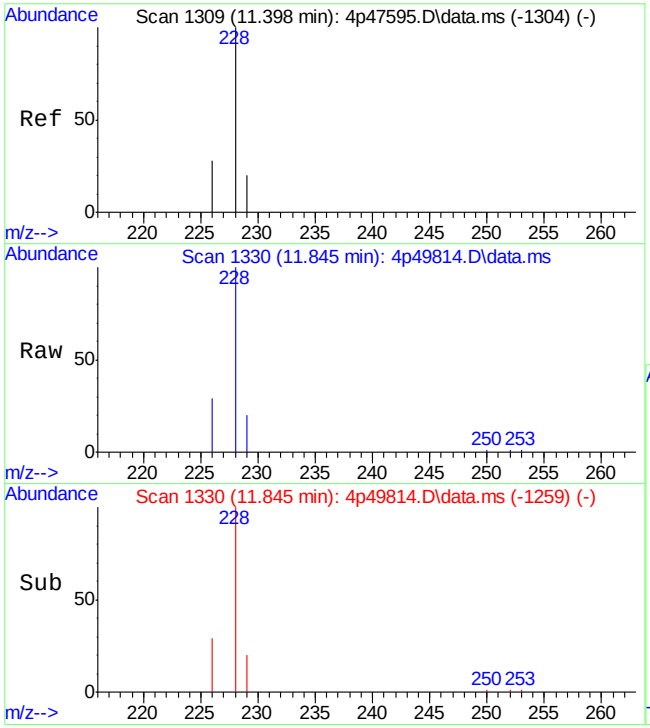


#28
Benzo[a]anthracene
Concen: 158.54 ppm
RT: 11.813 min Scan# 1322
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:228 Resp: 7777

Ion	Ratio	Lower	Upper
228	100		
229	19.8	0.0	49.8
226	29.1	0.0	53.3

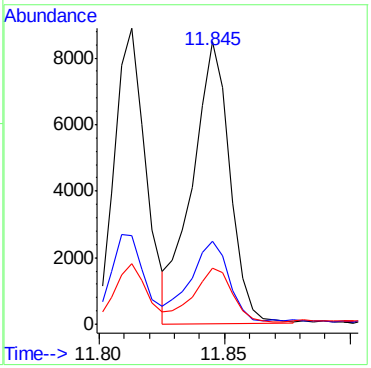


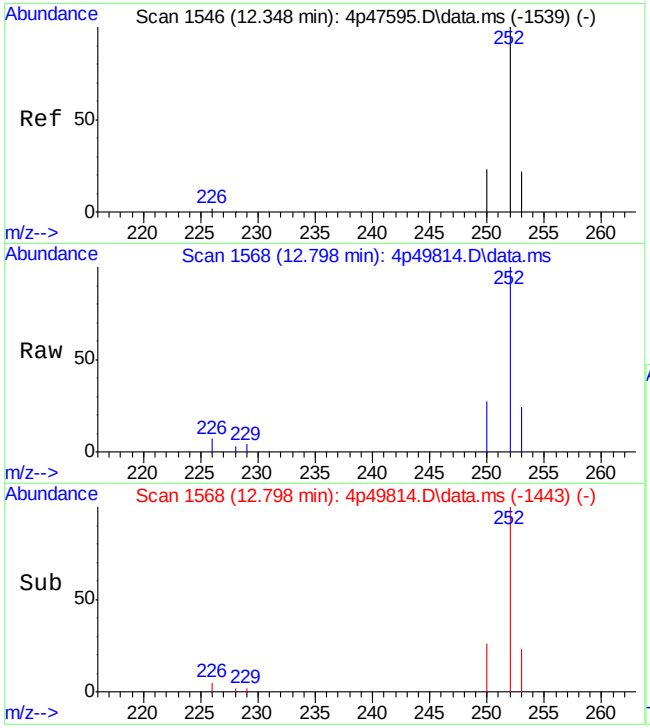


#29
Chrysene
Concen: 183.08 ppm
RT: 11.845 min Scan# 1330
Delta R.T. -0.004 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:228 Resp: 8798

Ion	Ratio	Lower	Upper
228	100		
226	28.2	0.0	58.5
229	18.9	0.0	48.7

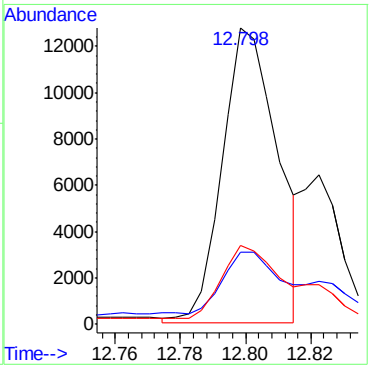


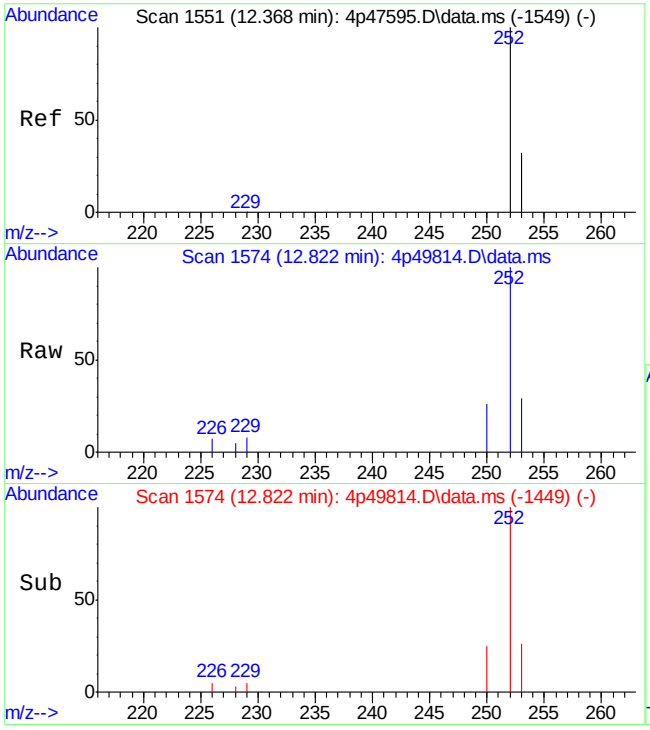


#31
Benzo[b]fluoranthene
Concen: 411.45 ppm
RT: 12.798 min Scan# 1568
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:252 Resp: 15009

Ion	Ratio	Lower	Upper
252	100		
253	20.2	0.0	51.8
250	25.1	0.0	52.4

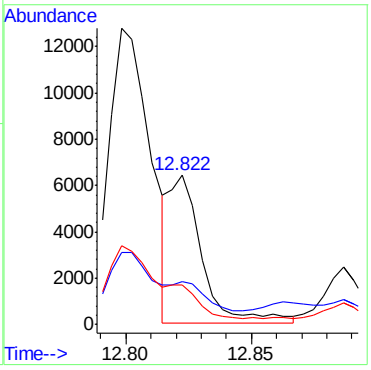


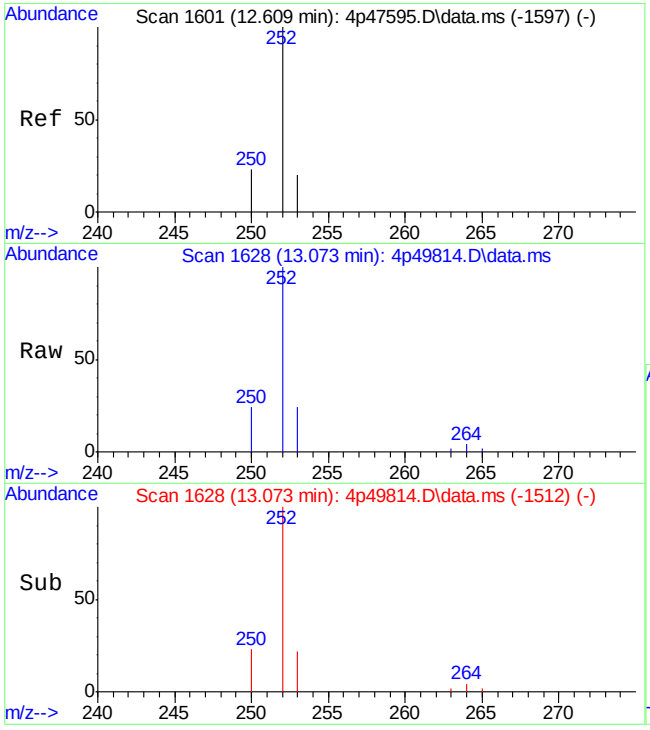


#32
Benzo[k]fluoranthene
Concen: 153.39 ppm
RT: 12.822 min Scan# 1574
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:252 Resp: 5730

Ion	Ratio	Lower	Upper
252	100		
253	15.4	0.0	51.8
250	22.3	0.0	50.5

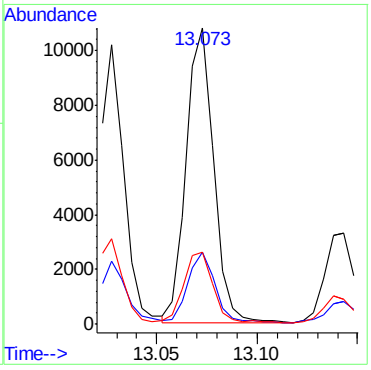


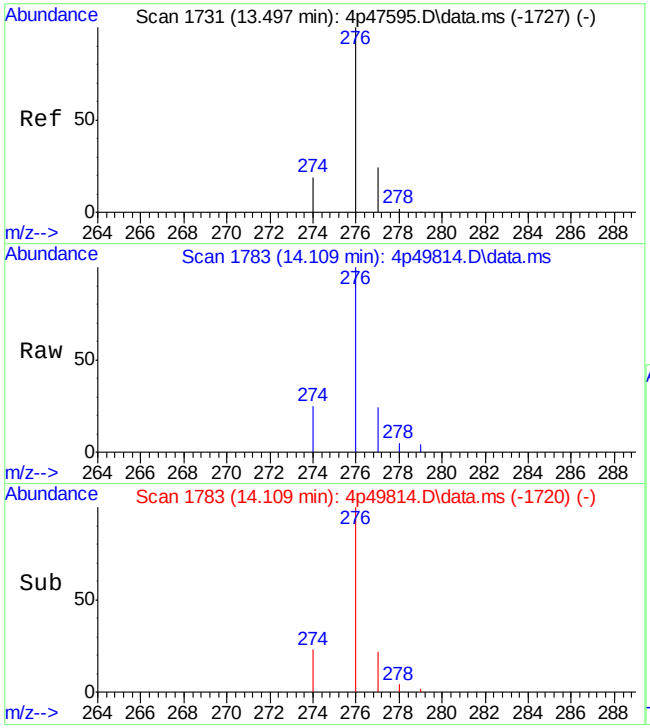


#33
Benzo[a]pyrene
Concen: 298.39 ppm
RT: 13.073 min Scan# 1628
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:252 Resp: 10224

Ion	Ratio	Lower	Upper
252	100		
253	23.7	0.0	52.8
250	23.8	0.0	50.6

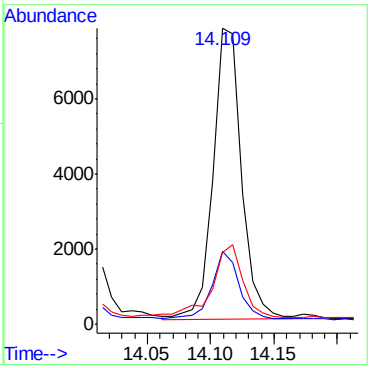


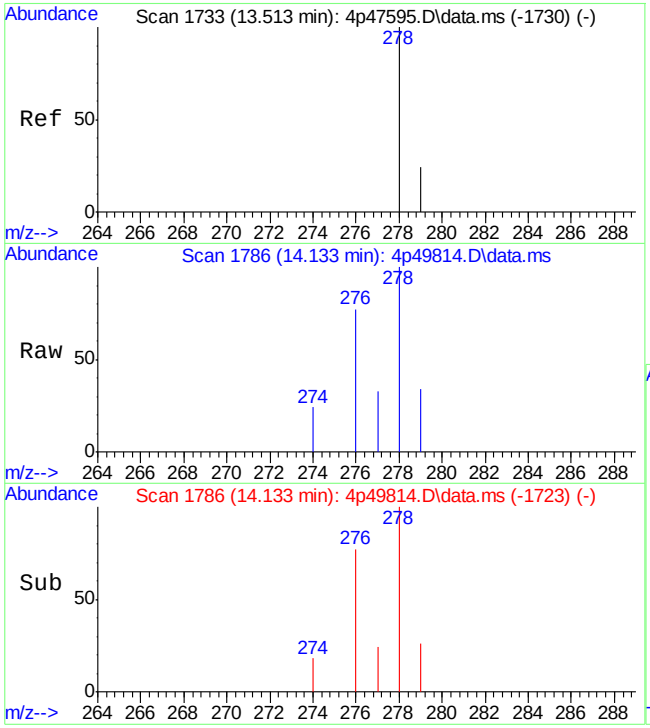


#34
Indeno[1,2,3-cd]pyrene
Concen: 294.01 ppm
RT: 14.109 min Scan# 1783
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:276 Resp: 12003

Ion	Ratio	Lower	Upper
276	100		
274	23.1	0.0	49.3
277	21.8	0.0	53.2

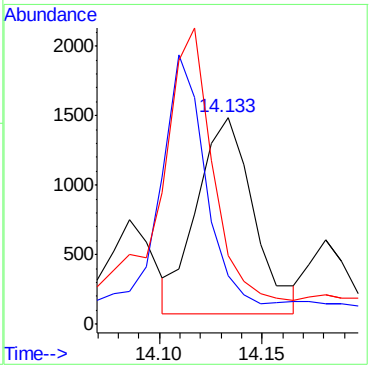


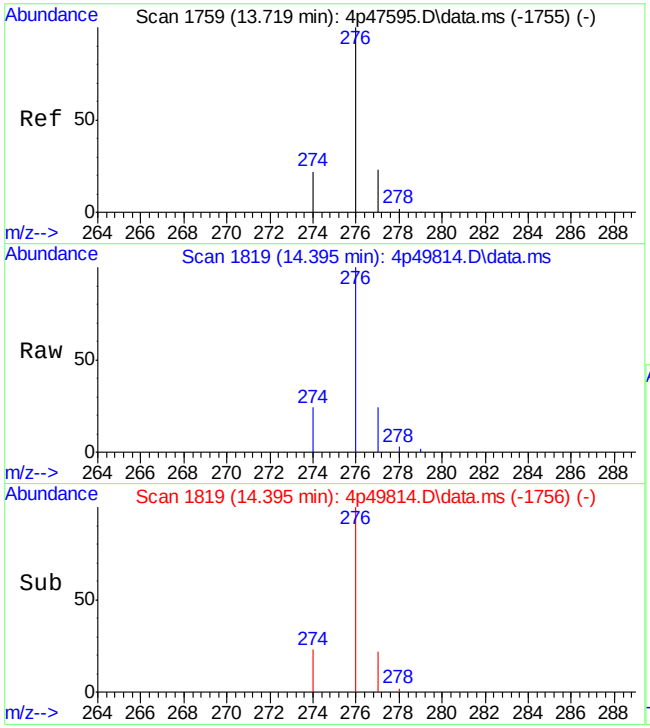


#35
Dibenz[a,h]anthracene
Concen: 84.63 ppm
RT: 14.133 min Scan# 1786
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:278 Resp: 2691

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	0.0	0.0	36.7

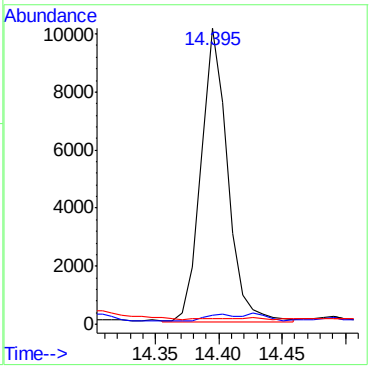




#36
Benzo[g,h,i]perylene
Concen: 424.18 ppm
RT: 14.395 min Scan# 1819
Delta R.T. -0.000 min
Lab File: 4p49814.D
Acq: 3 Dec 2021 10:31 am

Tgt Ion:276 Resp: 14676

Ion	Ratio	Lower	Upper
276	100		
278	1.9	0.0	32.5
279	0.0	0.0	30.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya 12/14/21 08:52

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50047.D
Acq On : 12 Dec 2021 8:37 pm
Operator : kristis
Sample : jd35920-3
Misc : op37045a,e4p2620,250,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 13 09:30:04 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

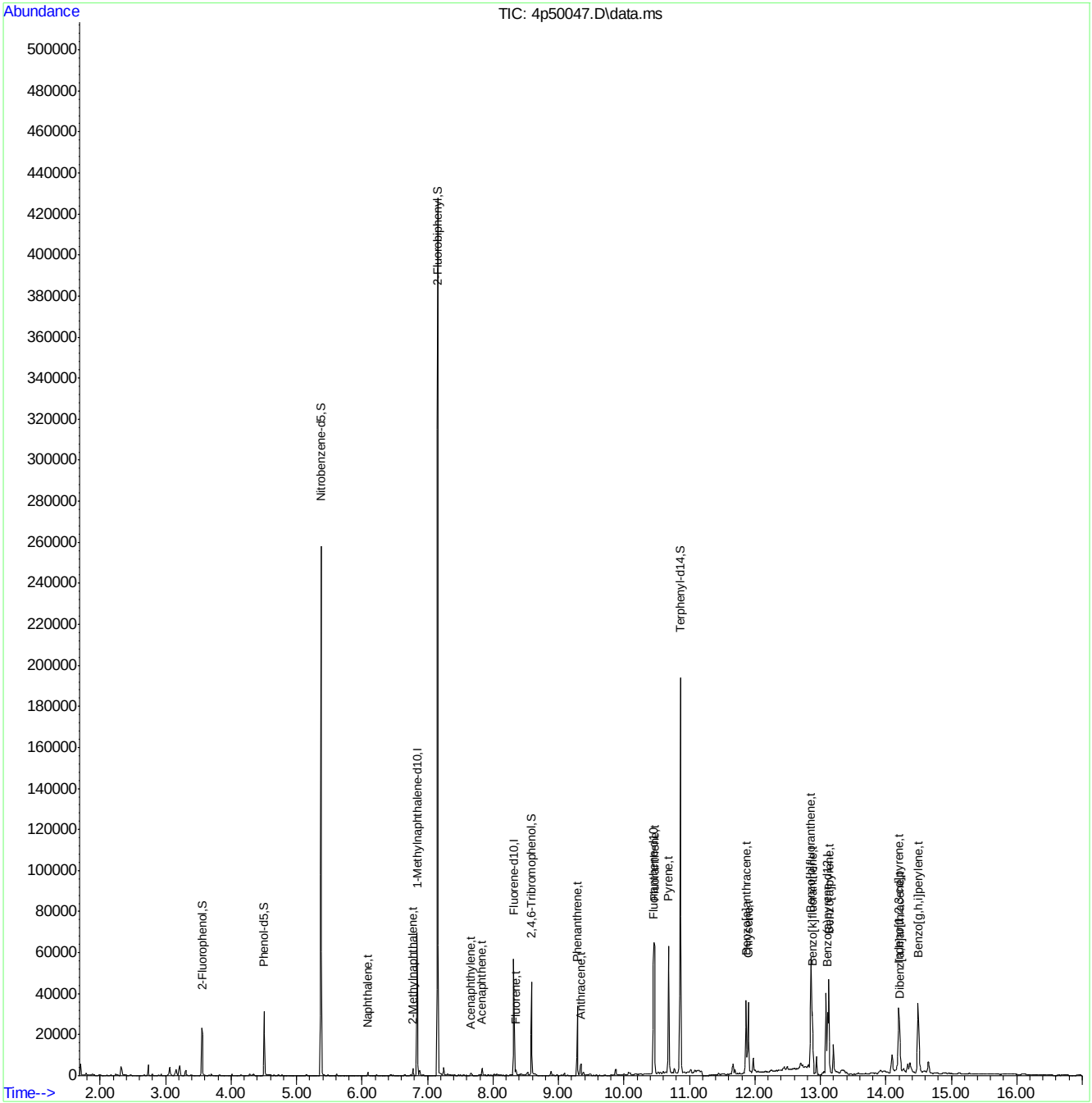
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.841	150	19221	800.00	ppm	0.00
13) Fluorene-d10	8.318	176	25538	800.00	ppm	0.00
20) Fluoranthene-d10	10.448	212	35468	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.111	264	18687	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.563	112	13006	1090.80	ppm	0.01
Spiked Amount 50.000			Recovery = 2181.60%			
4) Phenol-d5	4.506	99	22403	990.40	ppm	0.00
Spiked Amount 50.000			Recovery = 1980.80%			
7) Nitrobenzene-d5	5.374	82	155802	8440.29	ppm	0.00
Spiked Amount 50.000			Recovery = 16880.58%			
14) 2-Fluorobiphenyl	7.159	172	222574	6832.62	ppm	0.00
Spiked Amount 50.000			Recovery = 13665.24%			
19) 2,4,6-Tribromophenol	8.591	330	16144	3312.35	ppm	0.00
Spiked Amount 50.000			Recovery = 6624.70%			
27) Terphenyl-d14	10.863	244	115430	4543.66	ppm	0.00
Spiked Amount 50.000			Recovery = 9087.32%			
Target Compounds						Qvalue
8) Naphthalene	6.089	128	1220	22.18	ppm	94
10) 2-Methylnaphthalene	6.782	141	1010	35.14	ppm	90
15) Acenaphthylene	7.666	152	777m	16.33	ppm	
16) Acenaphthene	7.833	153	1388	45.71	ppm	89
17) Fluorene	8.344	166	1539	42.01	ppm	98
23) Phenanthrene	9.290	178	22153	463.72	ppm	95
24) Anthracene	9.345	178	5517	120.42	ppm	95
25) Fluoranthene	10.467	202	52124	1047.87	ppm	97
26) Pyrene	10.678	202	47920	875.48	ppm	90
28) Benzo[a]anthracene	11.864	228	22973	469.78	ppm	91
29) Chrysene	11.900	228	24515	511.73	ppm	98
31) Benzo[b]fluoranthene	12.857	252	43997m	1030.16	ppm	
32) Benzo[k]fluoranthene	12.877	252	13526m	350.76	ppm	
33) Benzo[a]pyrene	13.131	252	30382	858.98	ppm	96
34) Indeno[1,2,3-cd]pyrene	14.199	276	30880	732.76	ppm	97
35) Dibenz[a,h]anthracene	14.215	278	6994	213.08	ppm	67
36) Benzo[g,h,i]perylene	14.493	276	37690	1055.31	ppm	99

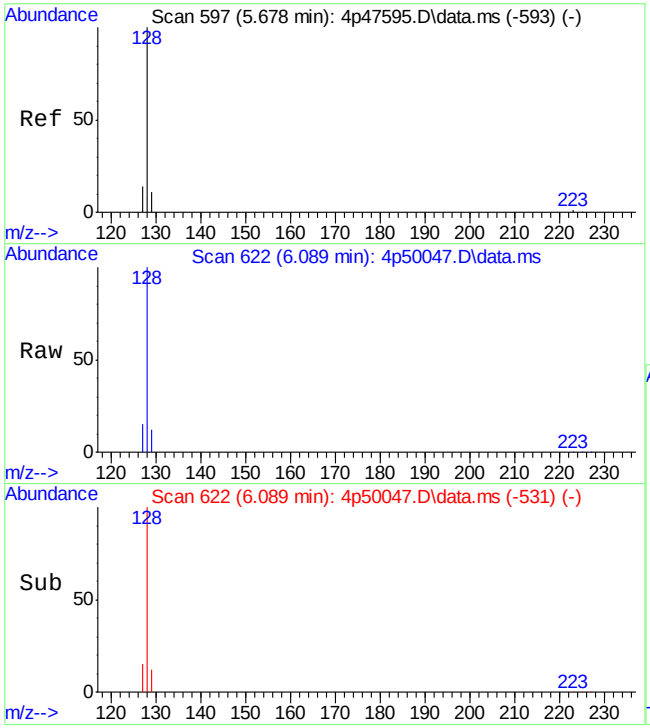
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50047.D
Acq On : 12 Dec 2021 8:37 pm
Operator : kristis
Sample : jd35920-3
Misc : op37045a,e4p2620,250,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 13 09:30:04 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

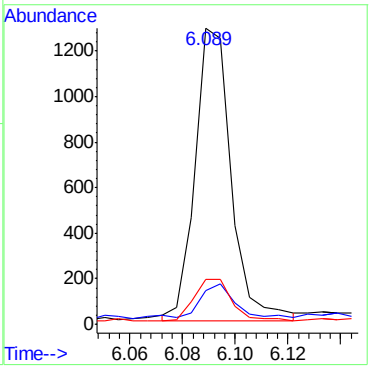


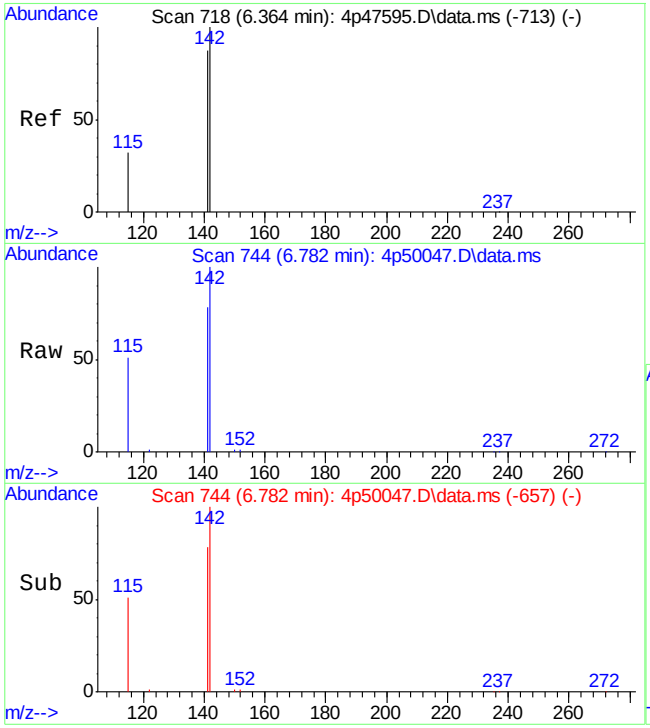


#8
Naphthalene
Concen: 22.18 ppm
RT: 6.089 min Scan# 622
Delta R.T. -0.006 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:128 Resp: 1220

Ion	Ratio	Lower	Upper
128	100		
129	9.1	0.0	41.1
127	14.4	0.0	42.0

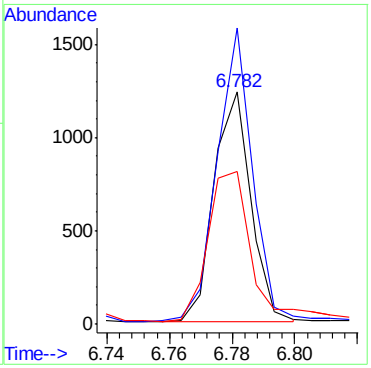


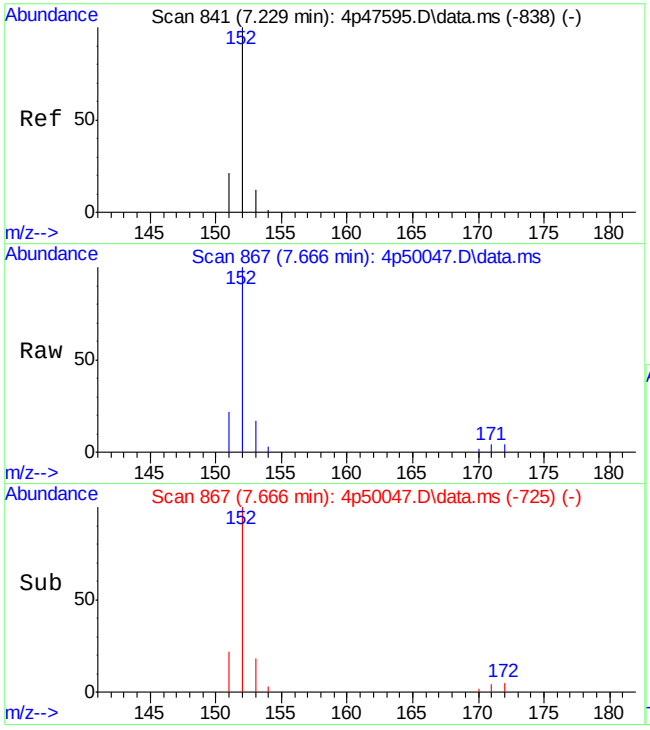


#10
2-Methylnaphthalene
Concen: 35.14 ppm
RT: 6.782 min Scan# 744
Delta R.T. -0.000 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:141 Resp: 1010

Ion	Ratio	Lower	Upper
141	100		
142	127.0	96.1	156.1
115	62.9	7.9	67.9

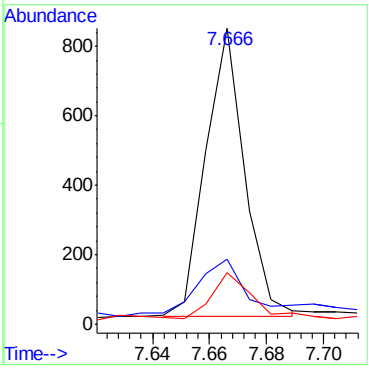


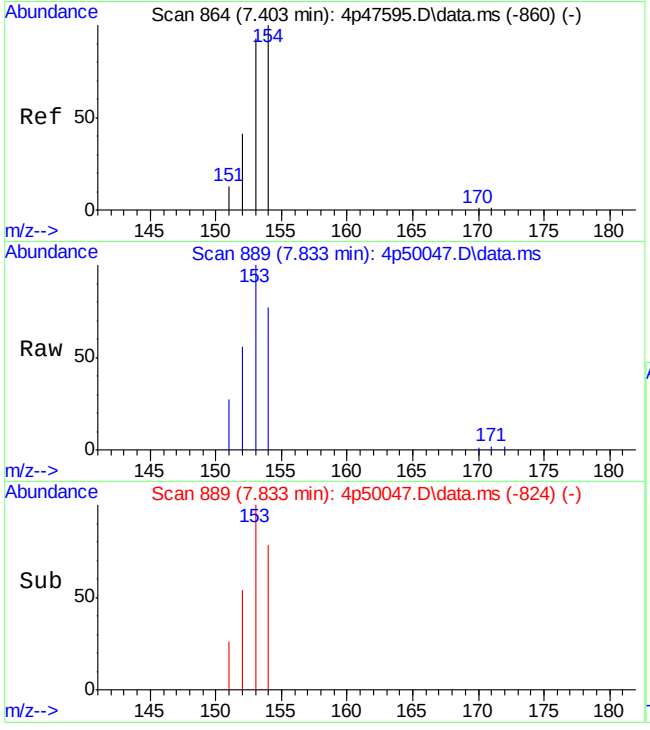


#15
Acenaphthylene
Concen: 16.33 ppm m
RT: 7.666 min Scan# 867
Delta R.T. -0.000 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:152 Resp: 777

Ion	Ratio	Lower	Upper
152	100		
151	21.8	0.0	50.8
153	17.5	0.0	42.2

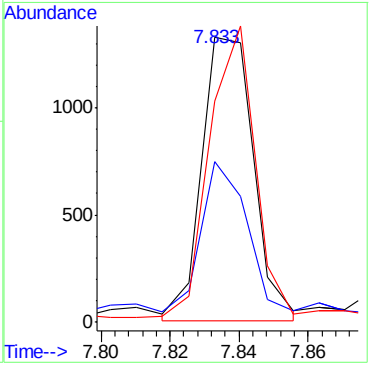


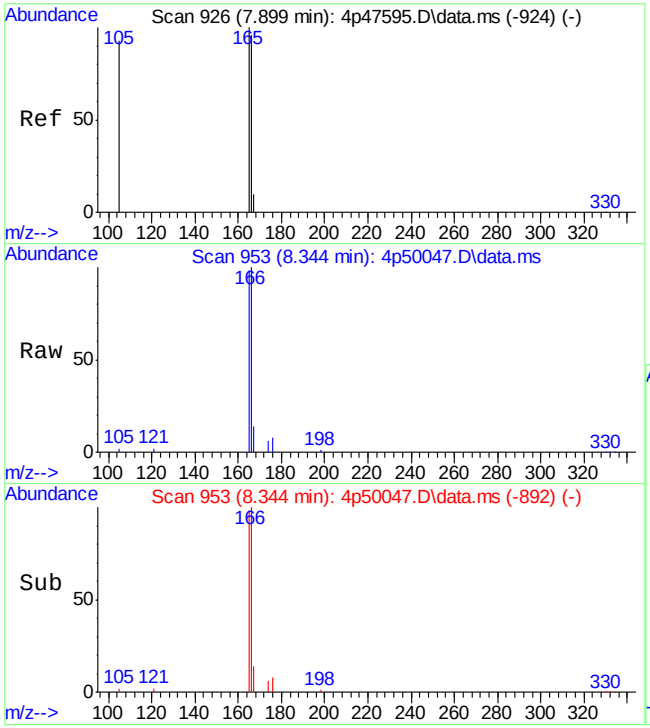


#16
Acenaphthene
Concen: 45.71 ppm
RT: 7.833 min Scan# 889
Delta R.T. -0.008 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:153 Resp: 1388

Ion	Ratio	Lower	Upper
153	100		
152	54.1	18.5	78.5
154	77.8	59.1	119.1

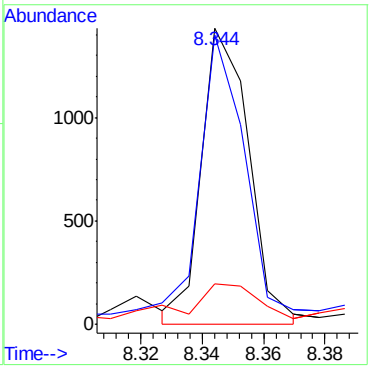


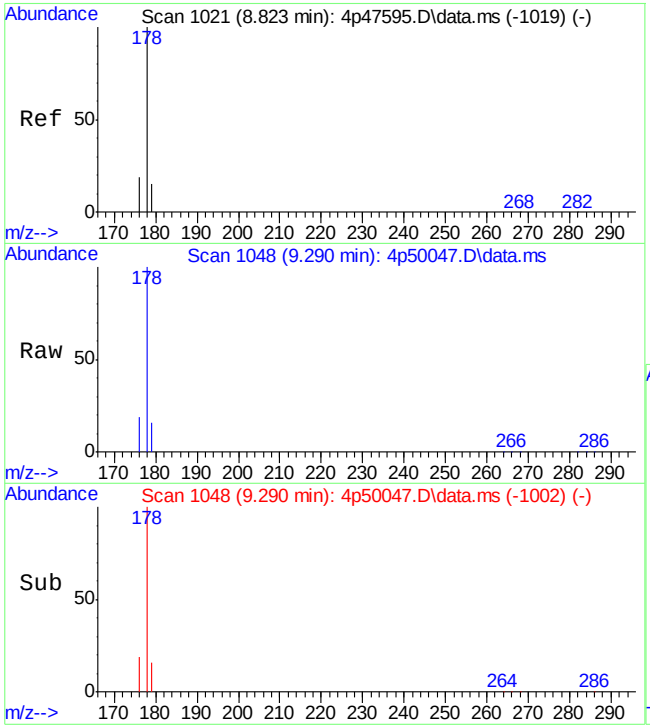


#17
Fluorene
Concen: 42.01 ppm
RT: 8.344 min Scan# 953
Delta R.T. -0.009 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:166 Resp: 1539

Ion	Ratio	Lower	Upper
166	100		
165	95.6	66.9	126.9
167	10.0	0.0	41.7

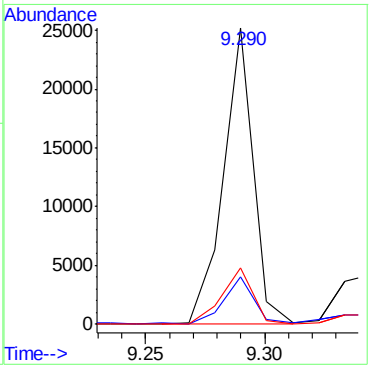


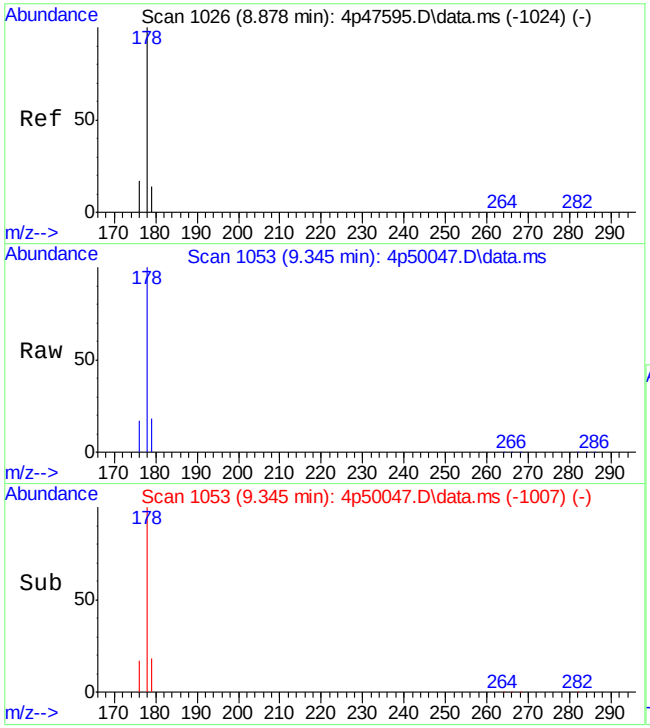


#23
Phenanthrene
Concen: 463.72 ppm
RT: 9.290 min Scan# 1048
Delta R.T. -0.000 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:178 Resp: 22153

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	46.0
176	19.0	0.0	45.6

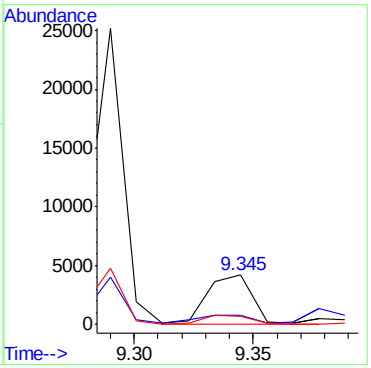


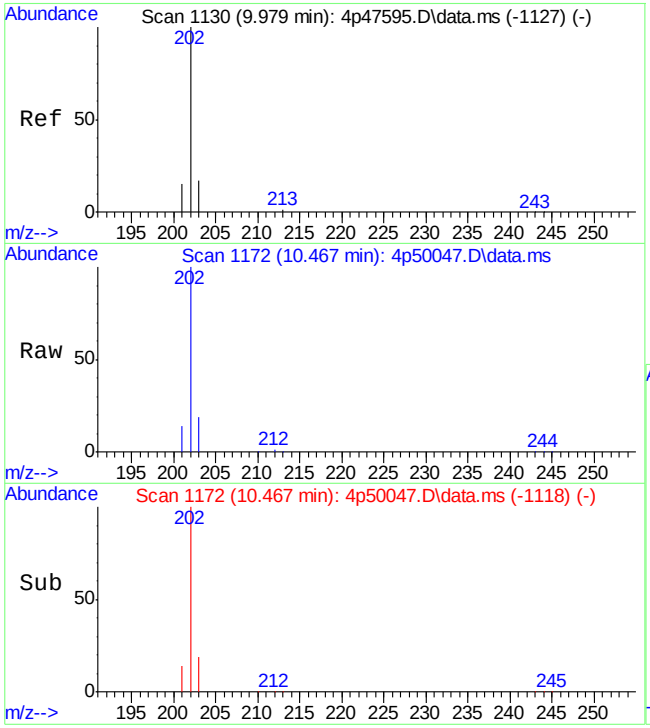


#24
Anthracene
Concen: 120.42 ppm
RT: 9.345 min Scan# 1053
Delta R.T. -0.000 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:178 Resp: 5517

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	43.0
176	16.4	0.0	48.4

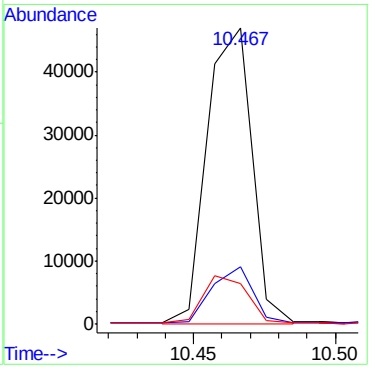


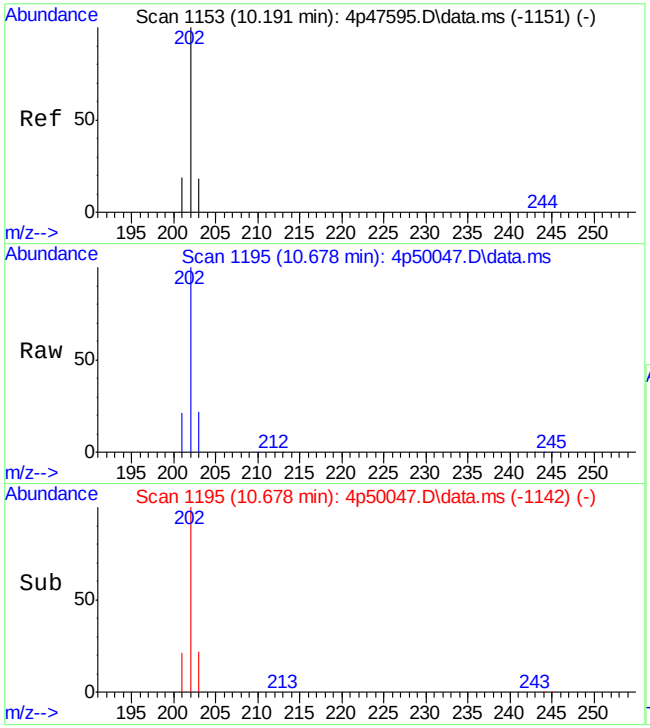


#25
Fluoranthene
Concen: 1047.87 ppm
RT: 10.467 min Scan# 1172
Delta R.T. -0.000 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:202 Resp: 52124

Ion	Ratio	Lower	Upper
202	100		
203	19.1	0.0	47.6
201	13.5	0.0	42.9

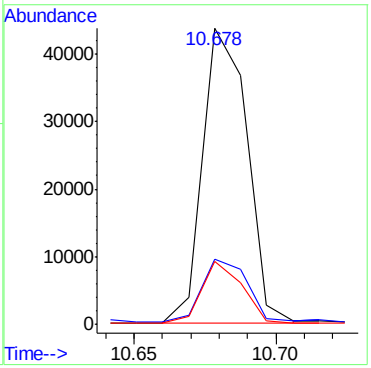


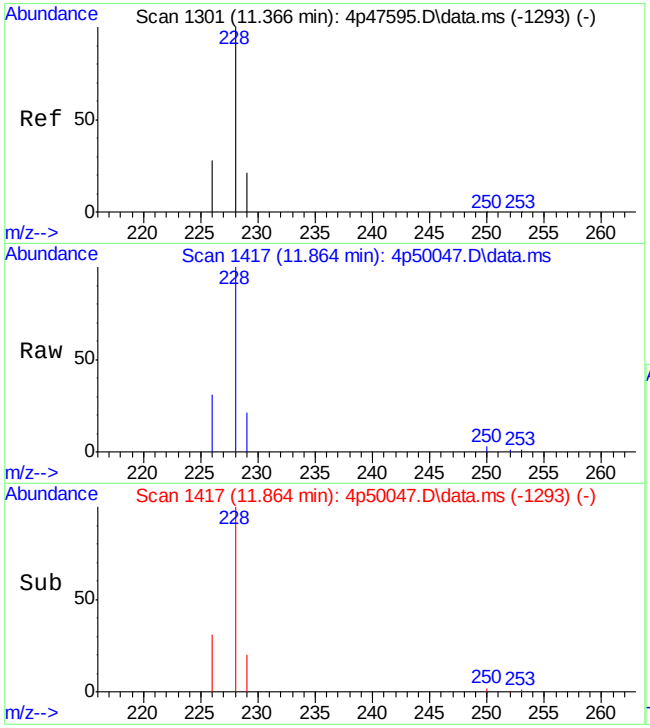


#26
Pyrene
Concen: 875.48 ppm
RT: 10.678 min Scan# 1195
Delta R.T. -0.009 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:202 Resp: 47920

Ion	Ratio	Lower	Upper
202	100		
203	21.2	0.0	47.6
201	21.0	0.0	46.0

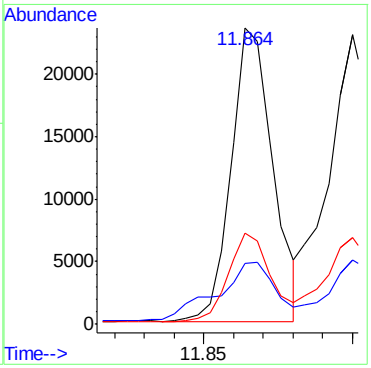


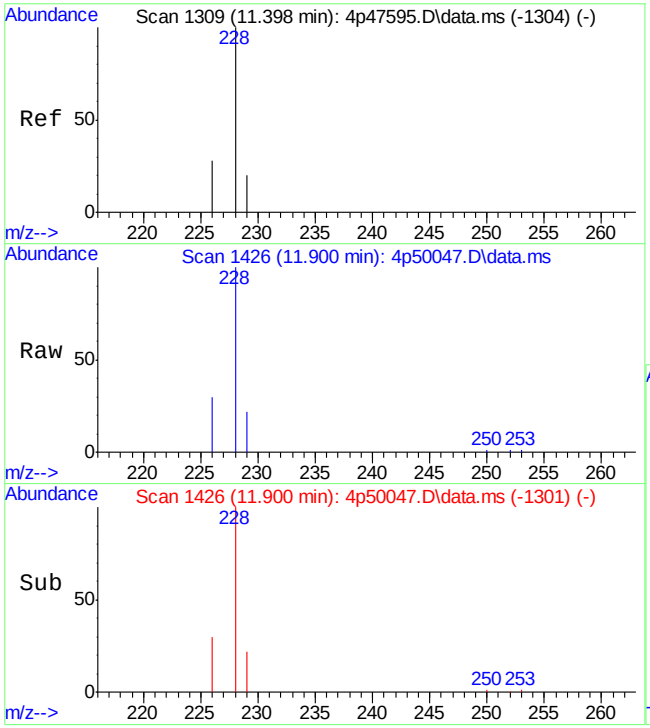


#28
Benzo[a]anthracene
Concen: 469.78 ppm
RT: 11.864 min Scan# 1417
Delta R.T. -0.004 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:228 Resp: 22973

Ion	Ratio	Lower	Upper
228	100		
229	18.9	0.0	49.8
226	30.3	0.0	53.3

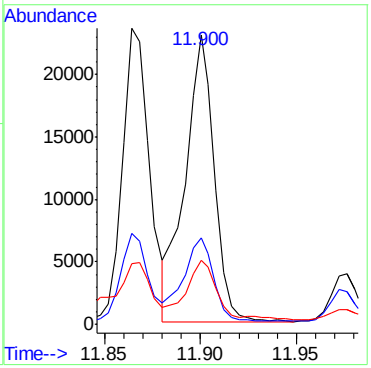


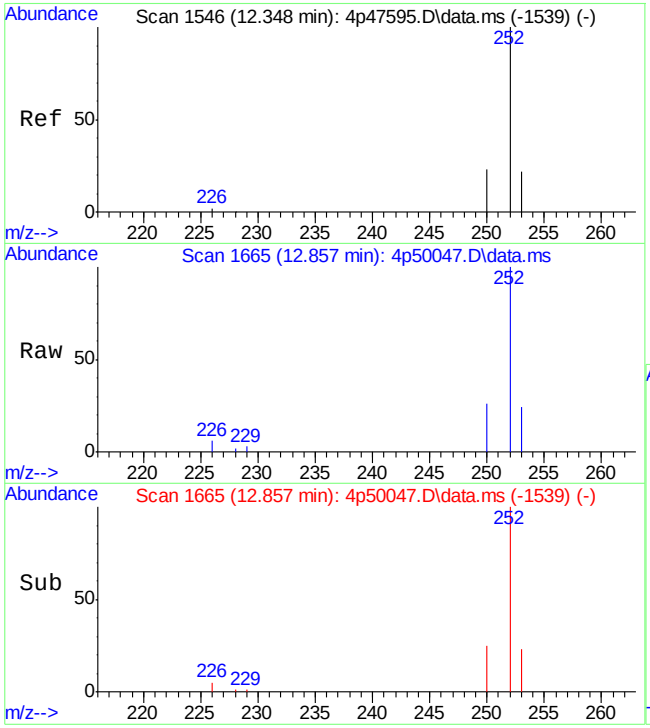


#29
Chrysene
Concen: 511.73 ppm
RT: 11.900 min Scan# 1426
Delta R.T. -0.000 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:228 Resp: 24515

Ion	Ratio	Lower	Upper
228	100		
226	29.1	0.0	58.5
229	20.7	0.0	48.7

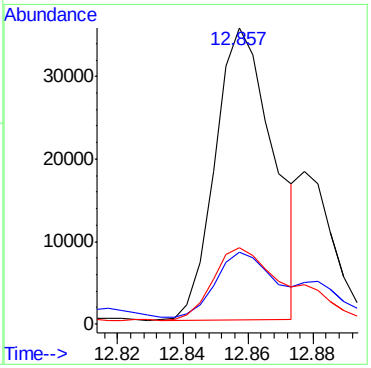


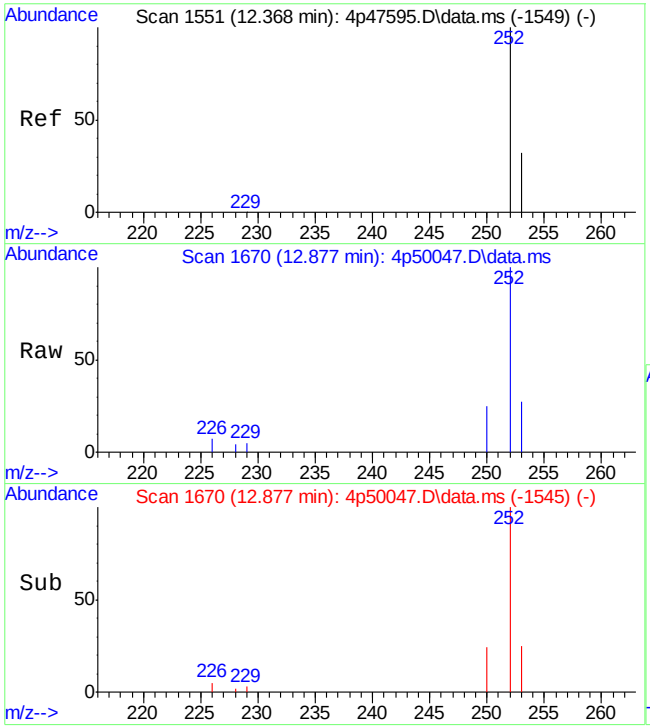


#31
Benzo[b]fluoranthene
Concen: 1030.16 ppm m
RT: 12.857 min Scan# 1665
Delta R.T. 0.004 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:252 Resp: 43997

Ion	Ratio	Lower	Upper
252	100		
253	24.2	0.0	51.8
250	25.8	0.0	52.4

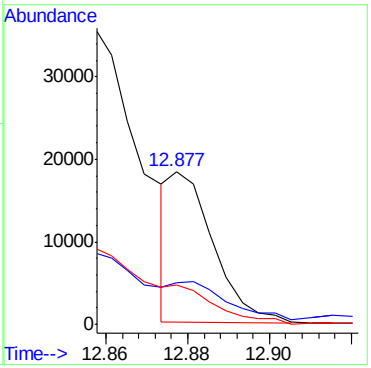


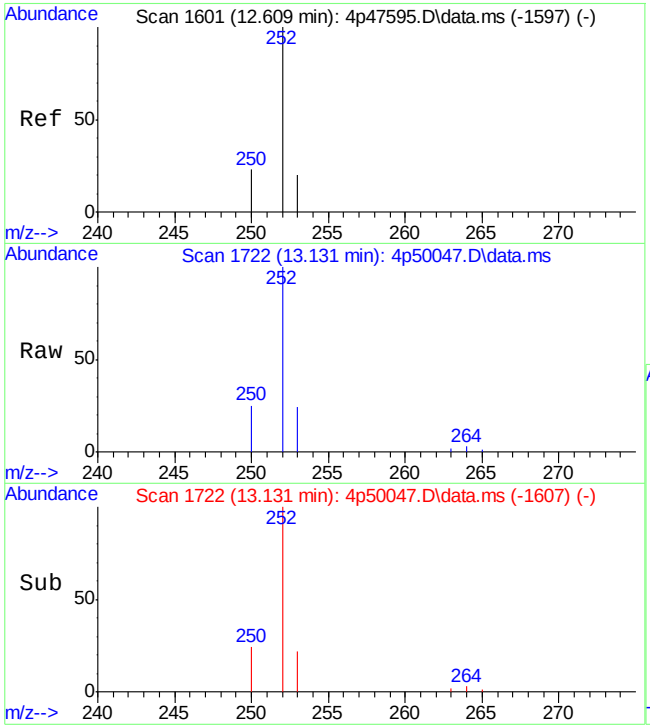


#32
Benzo[k]fluoranthene
Concen: 350.76 ppm m
RT: 12.877 min Scan# 1670
Delta R.T. -0.000 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:252 Resp: 13526

Ion	Ratio	Lower	Upper
252	100		
253	27.4	0.0	51.8
250	25.4	0.0	50.5

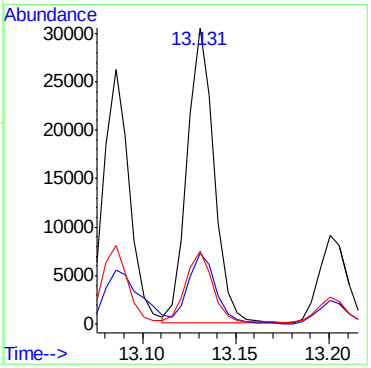


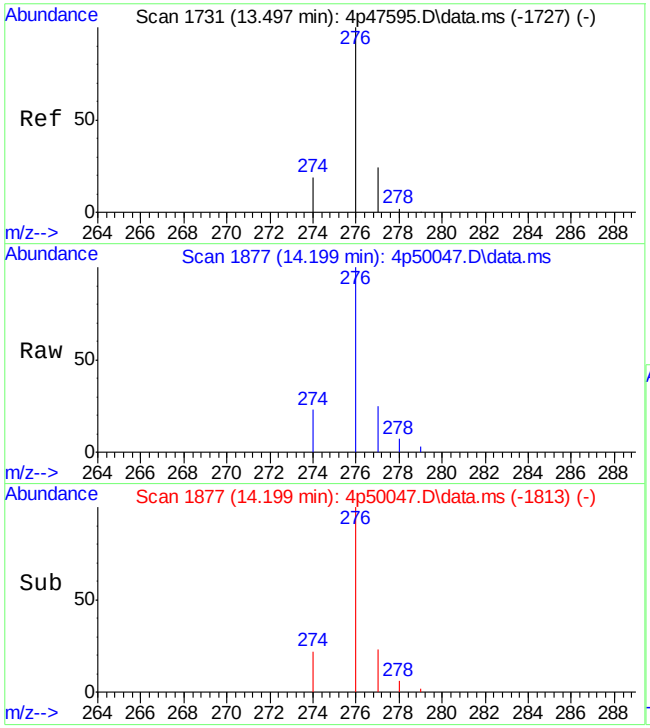


#33
Benzo[a]pyrene
Concen: 858.98 ppm
RT: 13.131 min Scan# 1722
Delta R.T. 0.005 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:252 Resp: 30382

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	52.8
250	24.2	0.0	50.6

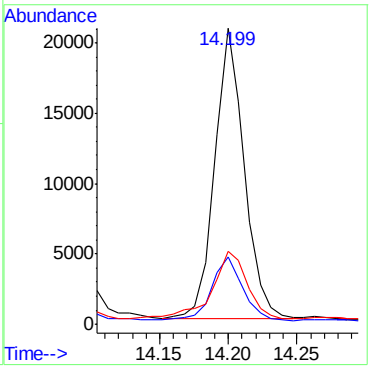


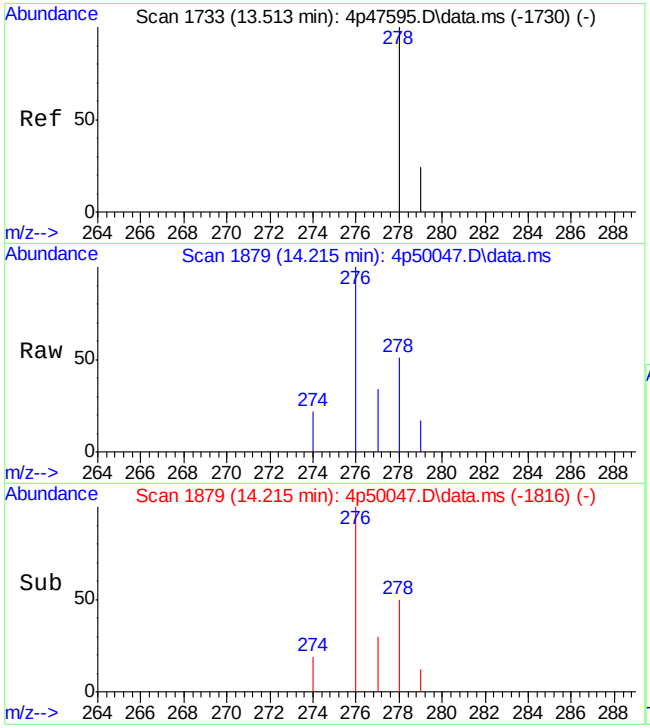


#34
Indeno[1,2,3-cd]pyrene
Concen: 732.76 ppm
RT: 14.199 min Scan# 1877
Delta R.T. 0.008 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:276 Resp: 30880

Ion	Ratio	Lower	Upper
276	100		
274	21.9	0.0	49.3
277	22.9	0.0	53.2

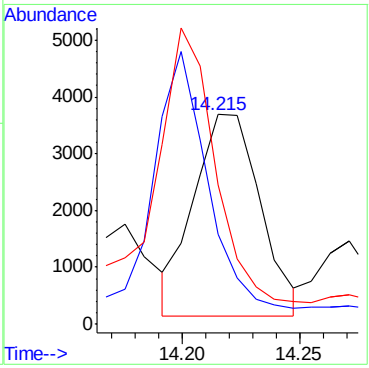


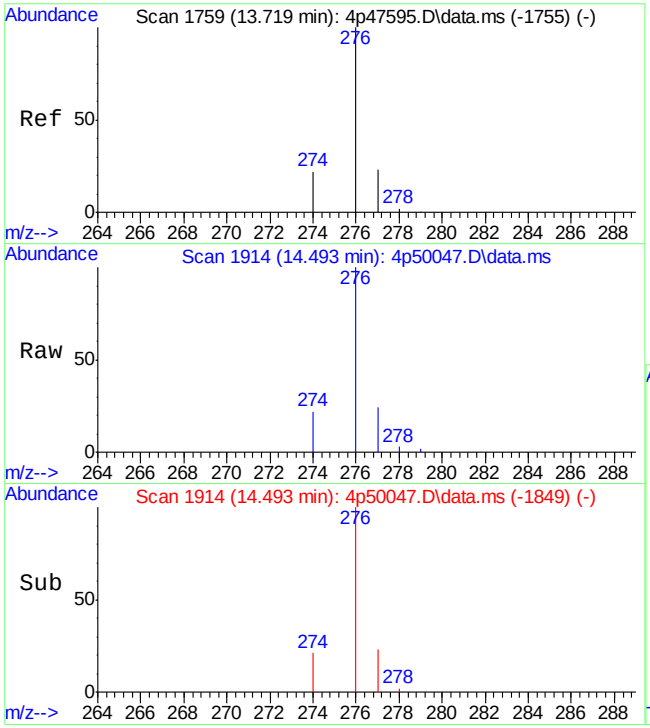


#35
Dibenz[a,h]anthracene
Concen: 213.08 ppm
RT: 14.215 min Scan# 1879
Delta R.T. -0.000 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:278 Resp: 6994

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	22.9	0.0	36.7

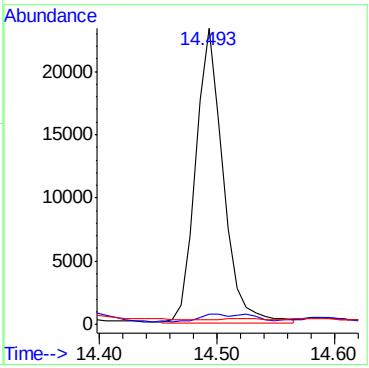




#36
Benzo[g,h,i]perylene
Concen: 1055.31 ppm
RT: 14.493 min Scan# 1914
Delta R.T. 0.016 min
Lab File: 4p50047.D
Acq: 12 Dec 2021 8:37 pm

Tgt Ion:276 Resp: 37690

Ion	Ratio	Lower	Upper
276	100		
278	2.1	0.0	32.5
279	0.0	0.0	30.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maritavb\e4p2608\
Data File : 4p49823.d
Acq On : 3 Dec 2021 6:04 pm
Operator : kristis
Sample : jd35920-4 Inst : MS4P
Misc : op36899a,e4p2608,290,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 05 23:05:31 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 05 22:07:58 2021
Response via : Initial Calibration

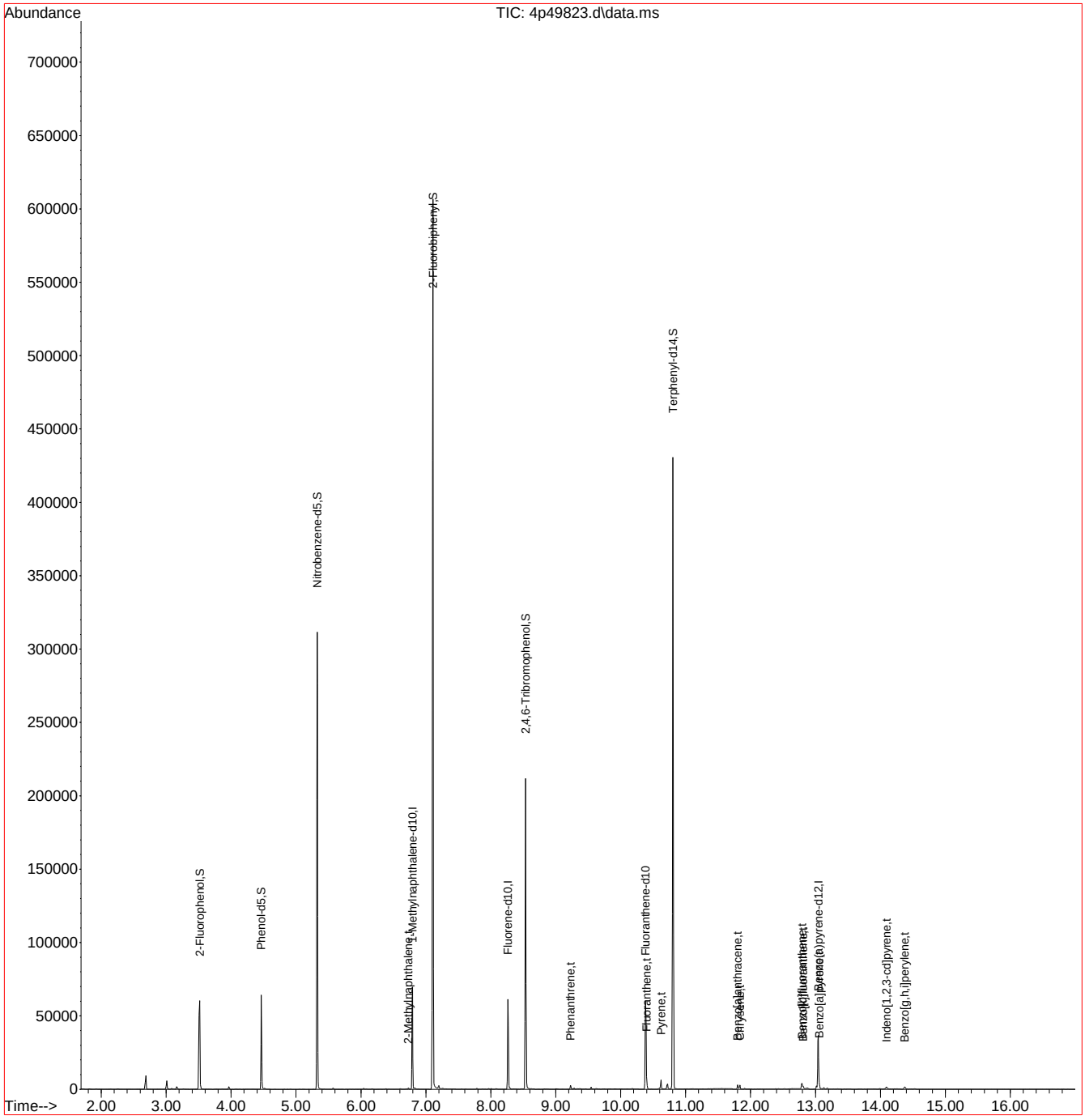
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.794	150	21578	800.00	ppm	0.00
13) Fluorene-d10	8.262	176	30594	800.00	ppm	0.00
20) Fluoranthene-d10	10.381	212	48723	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.043	264	22163	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.517	112	36224	2706.22	ppm	0.00
Spiked Amount 50.000			Recovery	= 5412.44%		
4) Phenol-d5	4.464	99	45701	1799.67	ppm	0.00
Spiked Amount 50.000			Recovery	= 3599.34%		
7) Nitrobenzene-d5	5.326	82	183965	8877.37	ppm	0.00
Spiked Amount 50.000			Recovery	= 17754.74%		
14) 2-Fluorobiphenyl	7.109	172	310343	7952.53	ppm	0.00
Spiked Amount 50.000			Recovery	= 15905.06%		
19) 2,4,6-Tribromophenol	8.535	330	70474	12069.92	ppm	0.00
Spiked Amount 50.000			Recovery	= 24139.84%		
27) Terphenyl-d14	10.804	244	251365	7202.68	ppm	0.00
Spiked Amount 50.000			Recovery	= 14405.36%		
Target Compounds						Qvalue
10) 2-Methylnaphthalene	6.728	141	299	9.27	ppm	96
23) Phenanthrene	9.227	178	1957	29.82	ppm	94
25) Fluoranthene	10.399	202	4082	59.74	ppm	95
26) Pyrene	10.620	202	3614	48.06	ppm	91
28) Benzo[a]anthracene	11.801	228	1725	25.68	ppm	96
29) Chrysene	11.833	228	1971	29.95	ppm	99
31) Benzo[b]fluoranthene	12.790	252	2762	53.93	ppm	97
32) Benzo[k]fluoranthene	12.810	252	1066	23.31	ppm	97
33) Benzo[a]pyrene	13.058	252	1940	46.25	ppm	98
34) Indeno[1,2,3-cd]pyrene	14.094	276	1374	27.49	ppm	95
36) Benzo[g,h,i]perylene	14.371	276	1574	37.16	ppm	99

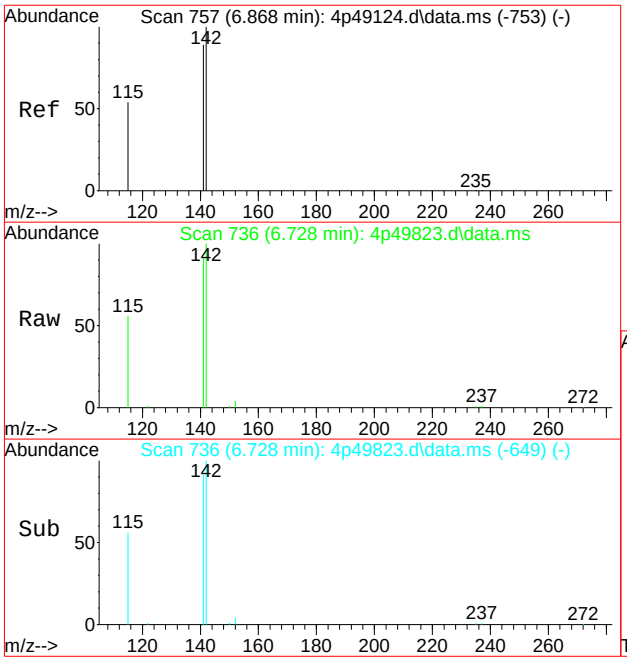
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maritavb\e4p2608\
Data File : 4p49823.d
Acq On : 3 Dec 2021 6:04 pm
Operator : kristis
Sample : jd35920-4 Inst : MS4P
Misc : op36899a,e4p2608,290,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 05 23:05:31 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 05 22:07:58 2021
Response via : Initial Calibration

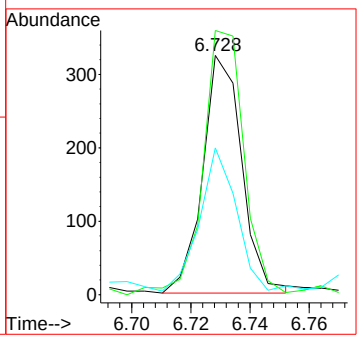


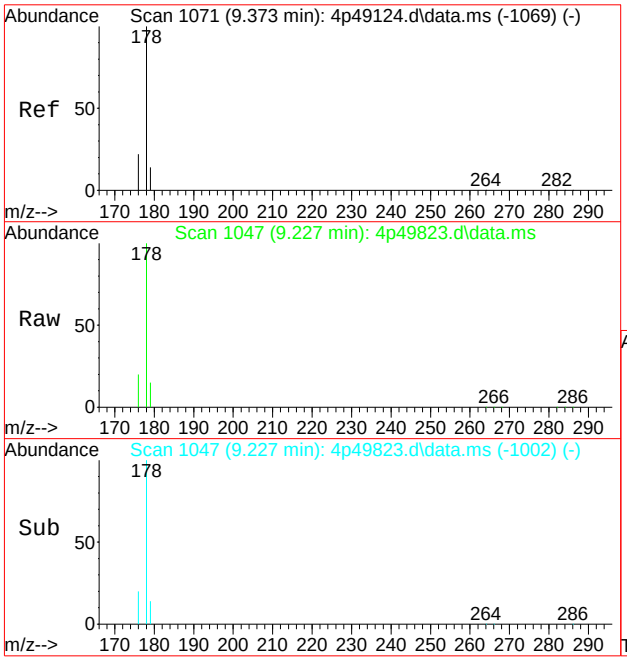


#10
2-Methylnaphthalene
Concen: 9.27 ppm
RT: 6.728 min Scan# 736
Delta R.T. -0.006 min
Lab File: 4p49823.d
Acq: 3 Dec 2021 6:04 pm

Tgt Ion:141 Resp: 299

Ion	Ratio	Lower	Upper
141	100		
142	111.0	86.0	146.0
115	60.0	27.7	87.7

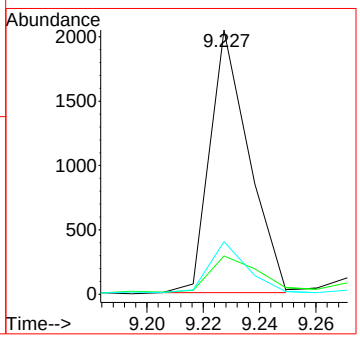


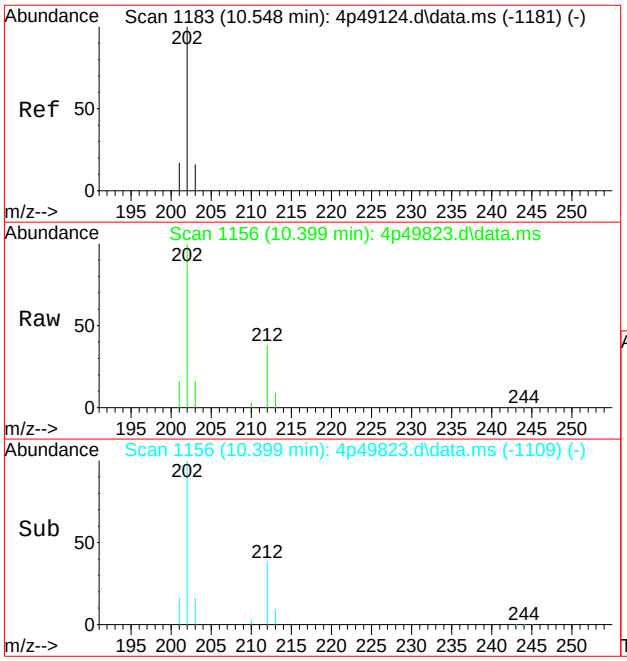


#23
Phenanthrene
Concen: 29.82 ppm
RT: 9.227 min Scan# 1047
Delta R.T. -0.011 min
Lab File: 4p49823.d
Acq: 3 Dec 2021 6:04 pm

Tgt Ion:178 Resp: 1957

Ion	Ratio	Lower	Upper
178	100		
179	13.0	0.0	46.0
176	19.3	0.0	47.2

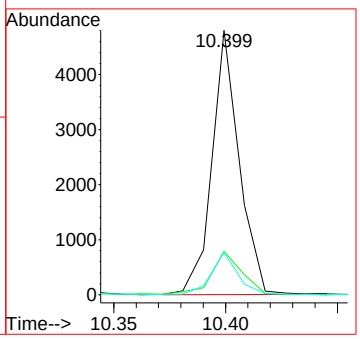


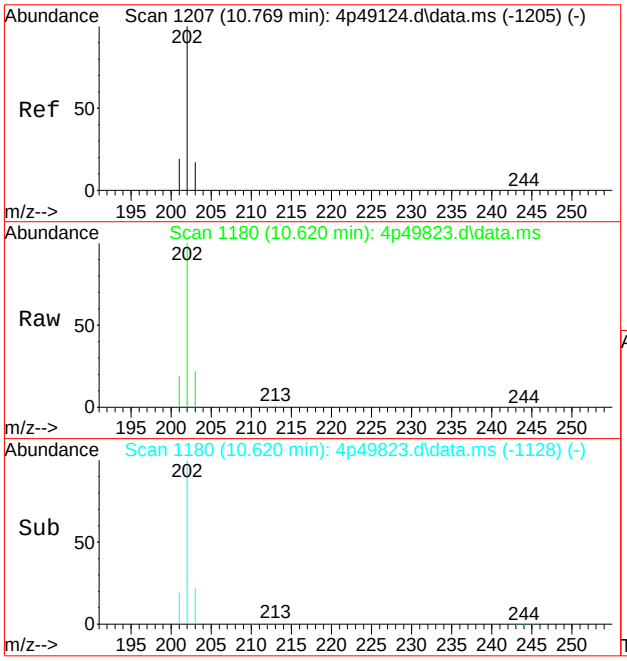


#25
Fluoranthene
Concen: 59.74 ppm
RT: 10.399 min Scan# 1156
Delta R.T. -0.009 min
Lab File: 4p49823.d
Acq: 3 Dec 2021 6:04 pm

Tgt Ion:202 Resp: 4082

Ion	Ratio	Lower	Upper
202	100		
203	16.4	0.0	48.7
201	15.9	0.0	43.6

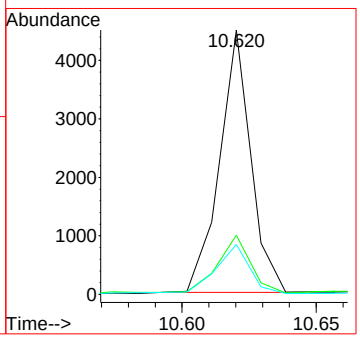


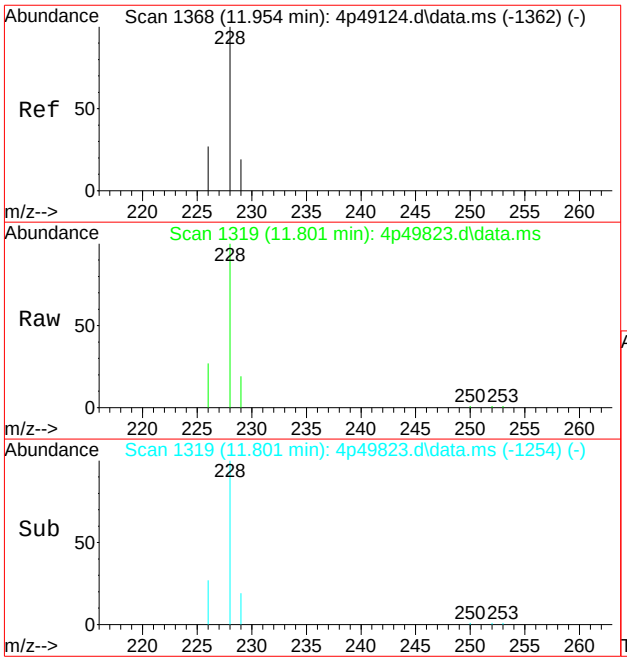


#26
Pyrene
Concen: 48.06 ppm
RT: 10.620 min Scan# 1180
Delta R.T. 0.000 min
Lab File: 4p49823.d
Acq: 3 Dec 2021 6:04 pm

Tgt Ion:202 Resp: 3614

Ion	Ratio	Lower	Upper
202	100		
203	21.9	0.0	46.0
201	18.6	0.0	50.7

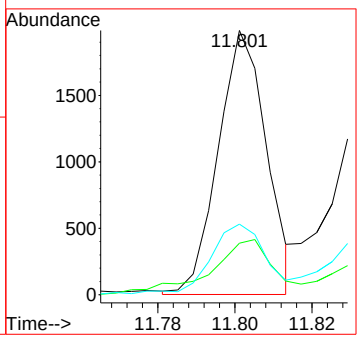


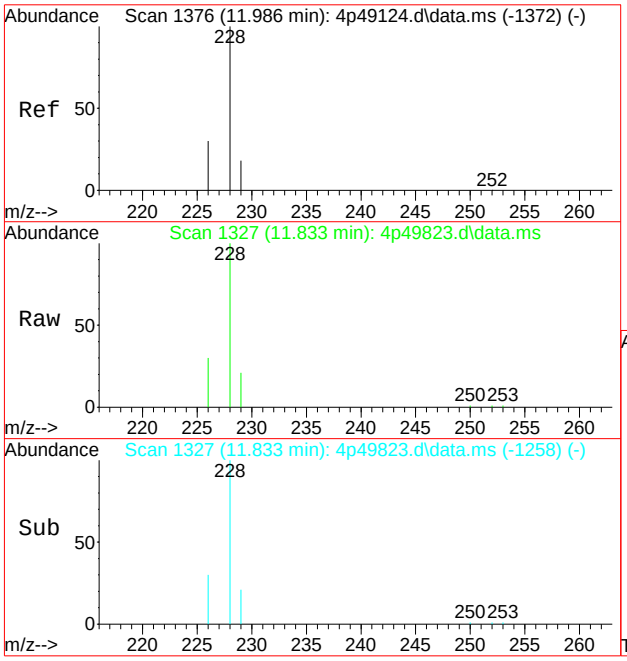


#28
Benzo[a]anthracene
Concen: 25.68 ppm
RT: 11.801 min Scan# 1319
Delta R.T. -0.004 min
Lab File: 4p49823.d
Acq: 3 Dec 2021 6:04 pm

Tgt Ion:228 Resp: 1725

Ion	Ratio	Lower	Upper
228	100		
229	16.4	0.0	48.2
226	25.9	0.0	58.0

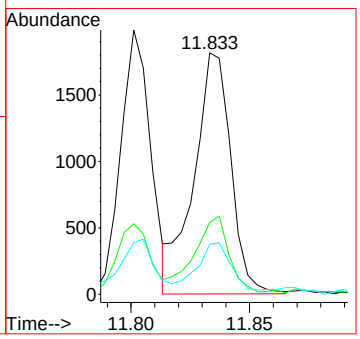


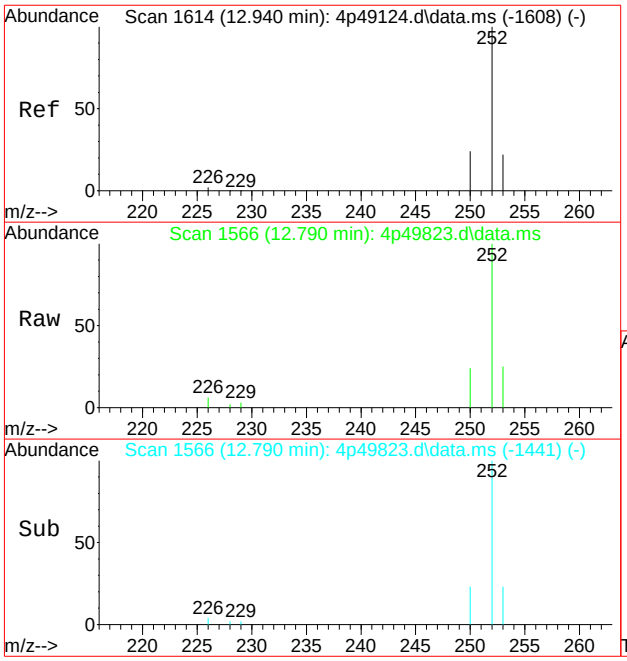


#29
Chrysene
Concen: 29.95 ppm
RT: 11.833 min Scan# 1327
Delta R.T. -0.008 min
Lab File: 4p49823.d
Acq: 3 Dec 2021 6:04 pm

Tgt Ion:228 Resp: 1971

Ion	Ratio	Lower	Upper
228	100		
226	29.7	0.0	59.3
229	18.6	0.0	49.6

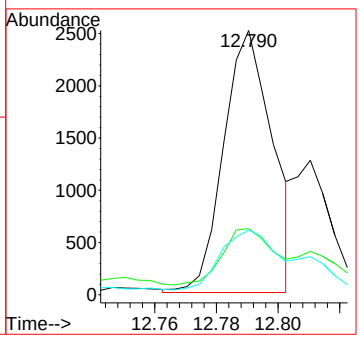


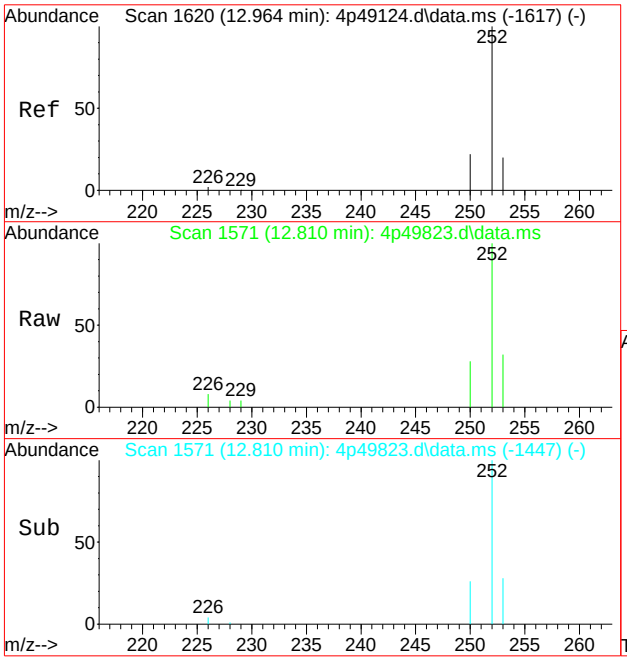


#31
Benzo[b]fluoranthene
Concen: 53.93 ppm
RT: 12.790 min Scan# 1566
Delta R.T. 0.000 min
Lab File: 4p49823.d
Acq: 3 Dec 2021 6:04 pm

Tgt Ion:252 Resp: 2762

Ion	Ratio	Lower	Upper
252	100		
253	20.9	0.0	51.2
250	22.0	0.0	54.6

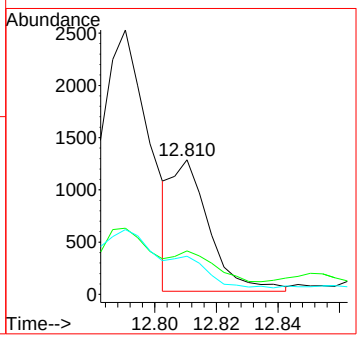


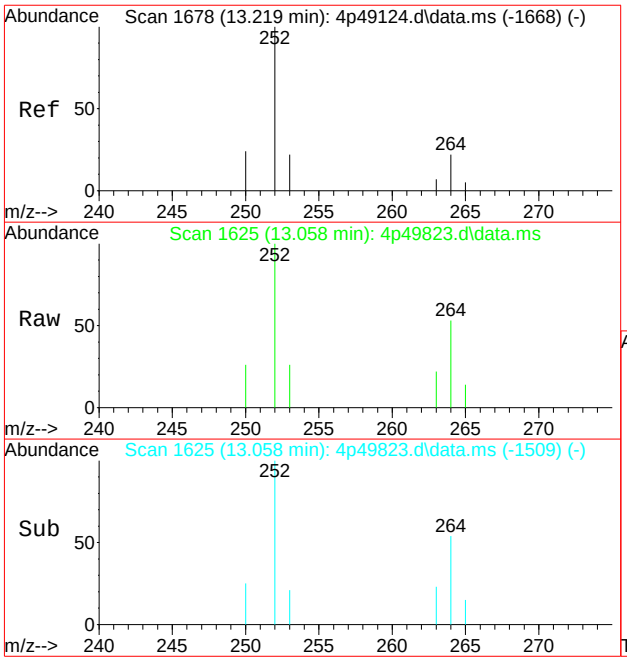


#32
Benzo[k]fluoranthene
Concen: 23.31 ppm
RT: 12.810 min Scan# 1571
Delta R.T. -0.004 min
Lab File: 4p49823.d
Acq: 3 Dec 2021 6:04 pm

Tgt Ion:252 Resp: 1066

Ion	Ratio	Lower	Upper
252	100		
253	23.4	0.0	50.1
250	23.1	0.0	53.1

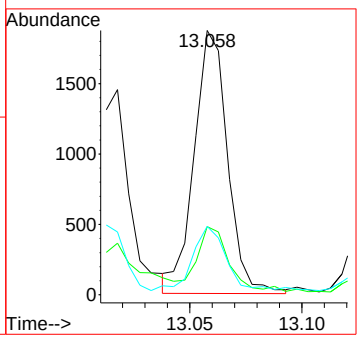


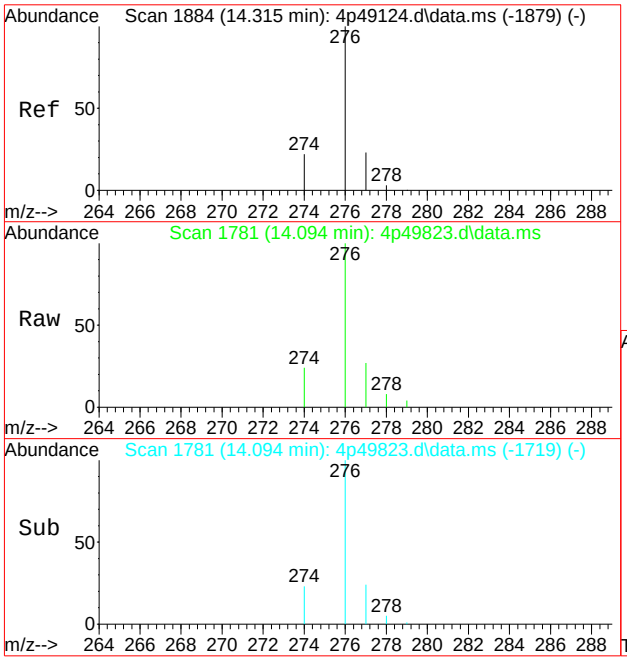


#33
Benzo[a]pyrene
Concen: 46.25 ppm
RT: 13.058 min Scan# 1625
Delta R.T. -0.005 min
Lab File: 4p49823.d
Acq: 3 Dec 2021 6:04 pm

Tgt Ion:252 Resp: 1940

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	51.3
250	23.9	0.0	53.8

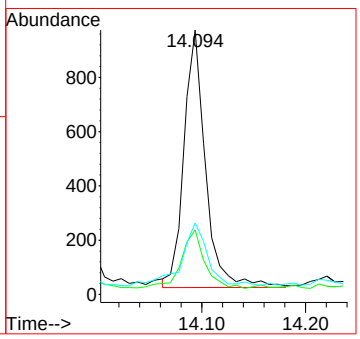


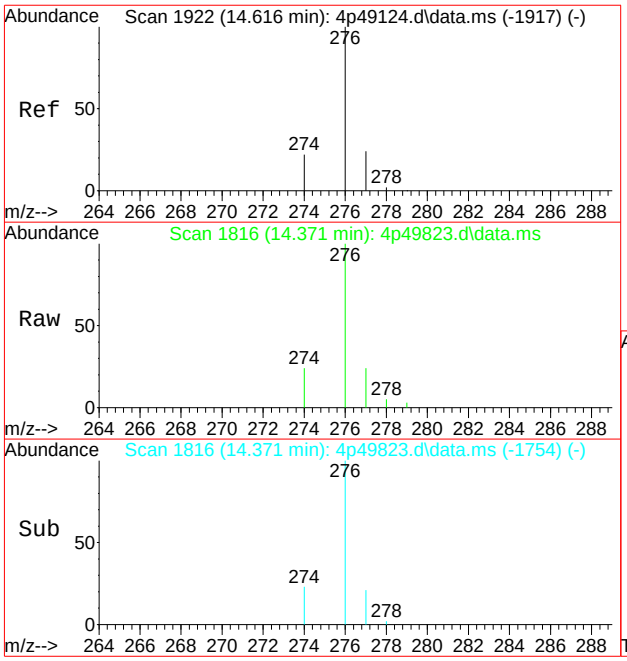


#34
Indeno[1,2,3-cd]pyrene
Concen: 27.49 ppm
RT: 14.094 min Scan# 1781
Delta R.T. -0.008 min
Lab File: 4p49823.d
Acq: 3 Dec 2021 6:04 pm

Tgt Ion:276 Resp: 1374

Ion	Ratio	Lower	Upper
276	100		
274	21.9	0.0	49.6
277	22.6	0.0	54.9

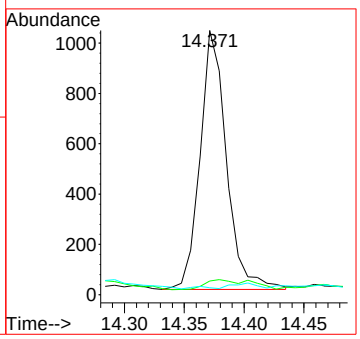




#36
Benzo[g,h,i]perylene
Concen: 37.16 ppm
RT: 14.371 min Scan# 1816
Delta R.T. -0.008 min
Lab File: 4p49823.d
Acq: 3 Dec 2021 6:04 pm

Tgt Ion:276 Resp: 1574

Ion	Ratio	Lower	Upper
276	100		
278	2.6	0.0	32.4
279	0.0	0.0	30.3



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/14/21 08:52

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50046.D
Acq On : 12 Dec 2021 8:14 pm
Operator : kristis
Sample : jd35920-4
Misc : op37045a,e4p2620,250,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 13 10:05:23 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

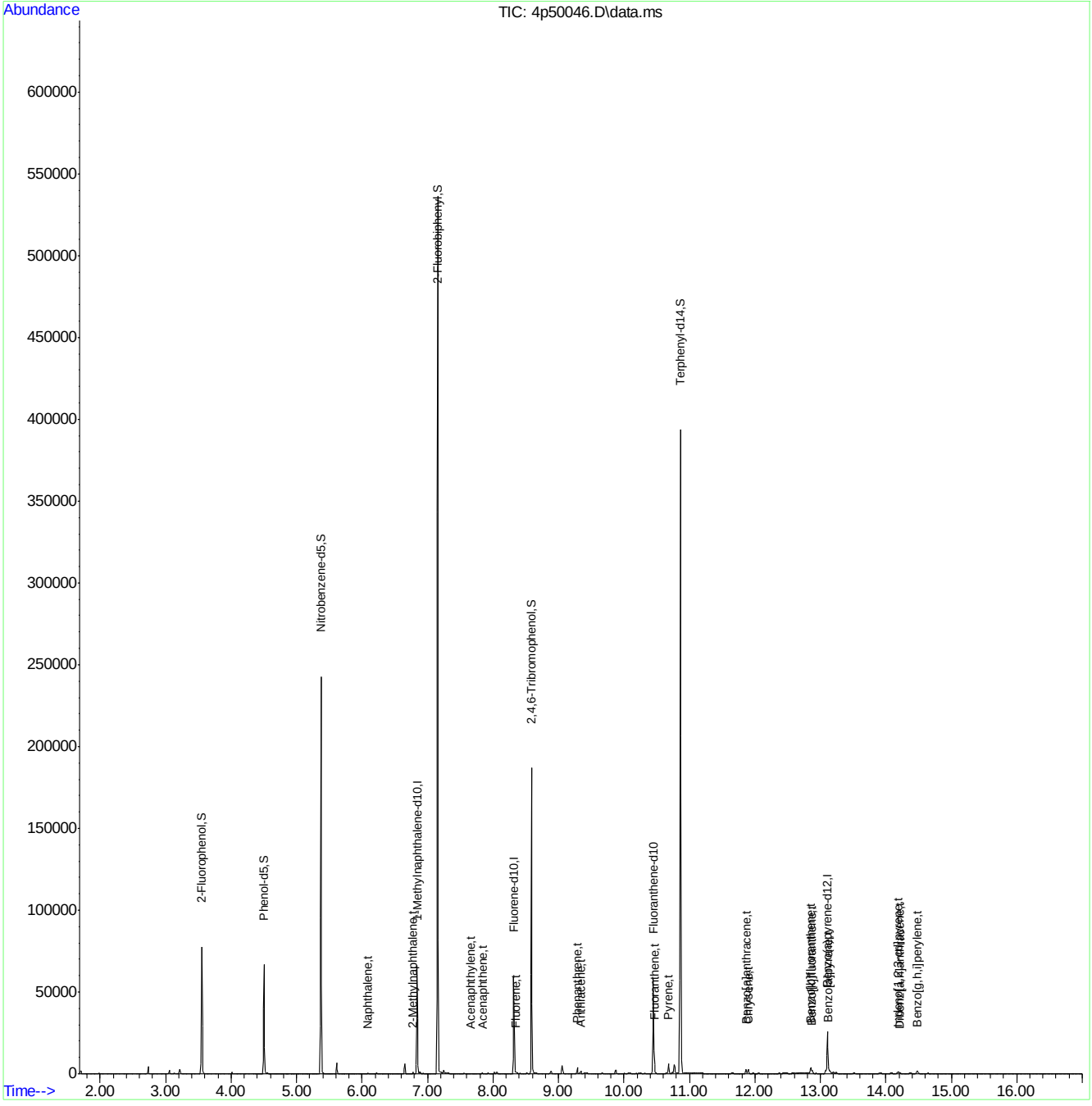
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.841	150	18208	800.00	ppm	0.00
13) Fluorene-d10	8.318	176	27328	800.00	ppm	0.00
20) Fluoranthene-d10	10.448	212	40915	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.110	264	16475	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.551	112	31675	2804.35	ppm	0.00
Spiked Amount 50.000			Recovery = 5608.70%			
4) Phenol-d5	4.501	99	46083	2150.59	ppm	0.00
Spiked Amount 50.000			Recovery = 4301.18%			
7) Nitrobenzene-d5	5.374	82	146458	8375.50	ppm	0.00
Spiked Amount 50.000			Recovery = 16751.00%			
14) 2-Fluorobiphenyl	7.159	172	262816	7539.52	ppm	0.00
Spiked Amount 50.000			Recovery = 15079.04%			
19) 2,4,6-Tribromophenol	8.591	330	63000	12079.38	ppm	0.00
Spiked Amount 50.000			Recovery = 24158.76%			
27) Terphenyl-d14	10.862	244	249913	8527.66	ppm	0.00
Spiked Amount 50.000			Recovery = 17055.32%			
Target Compounds						Qvalue
8) Naphthalene	6.094	128	305	5.85	ppm	99
10) 2-Methylnaphthalene	6.781	141	264	9.70	ppm	90
15) Acenaphthylene	7.666	152	126	2.48	ppm	90
16) Acenaphthene	7.840	153	229	7.05	ppm	90
17) Fluorene	8.344	166	429m	10.94	ppm	
23) Phenanthrene	9.290	178	2629	47.71	ppm	95
24) Anthracene	9.345	178	1292	24.45	ppm	90
25) Fluoranthene	10.467	202	4602	80.20	ppm	97
26) Pyrene	10.678	202	4143	65.61	ppm	93
28) Benzo[a]anthracene	11.864	228	1929	34.19	ppm	93
29) Chrysene	11.900	228	1990	36.01	ppm	95
31) Benzo[b]fluoranthene	12.853	252	2704	75.87	ppm	97
32) Benzo[k]fluoranthene	12.873	252	1157	34.03	ppm	95
33) Benzo[a]pyrene	13.126	252	1904	61.06	ppm	94
34) Indeno[1,2,3-cd]pyrene	14.191	276	1320	35.53	ppm	96
35) Dibenz[a,h]anthracene	14.207	278	366	12.65	ppm	82
36) Benzo[g,h,i]perylene	14.485	276	1662	52.78	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

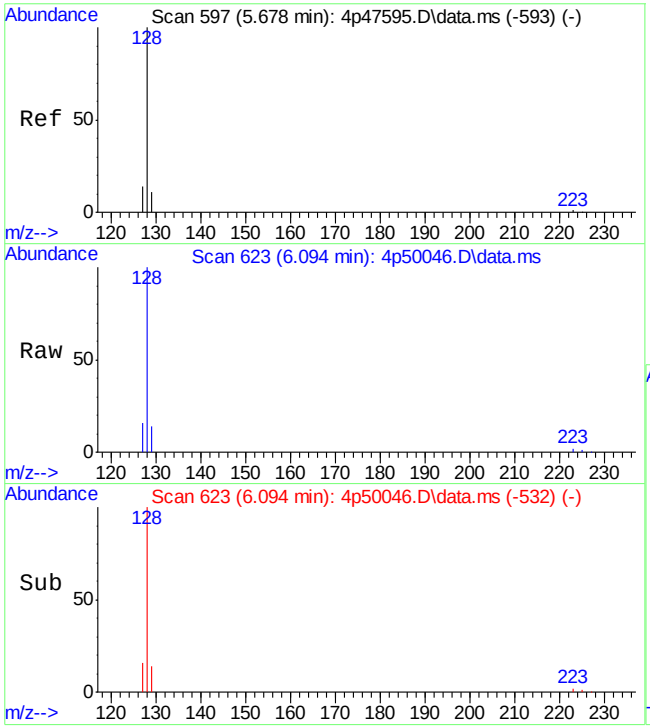
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50046.D
Acq On : 12 Dec 2021 8:14 pm
Operator : kristis
Sample : jd35920-4
Misc : op37045a,e4p2620,250,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 13 10:05:23 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration



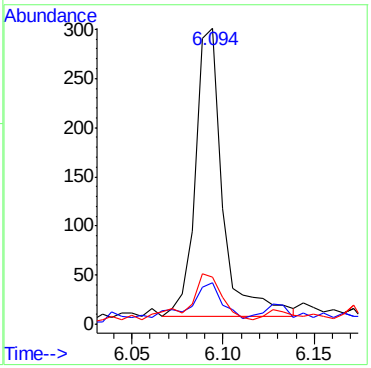
M4P2551SIMLVI.M Mon Dec 13 10:05:44 2021 YING Page: 2

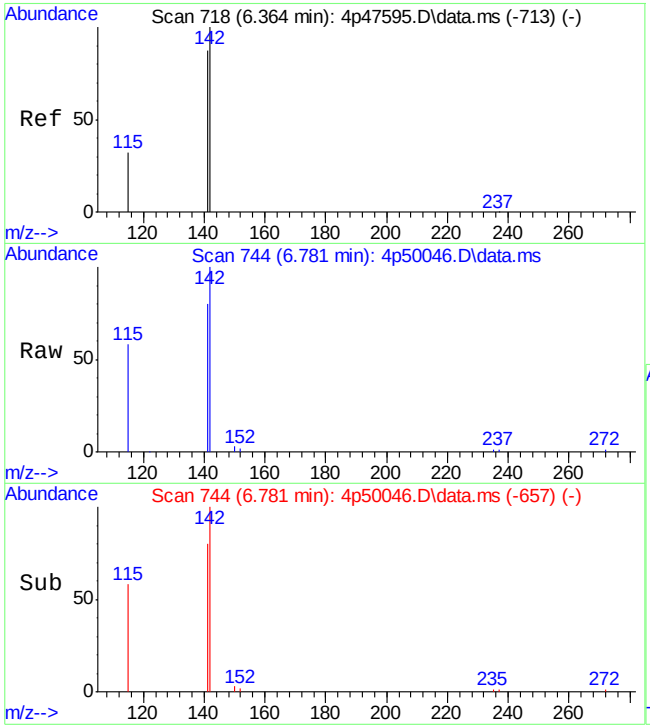


#8
Naphthalene
Concen: 5.85 ppm
RT: 6.094 min Scan# 623
Delta R.T. -0.000 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:128 Resp: 305

Ion	Ratio	Lower	Upper
128	100		
129	10.9	0.0	41.1
127	12.8	0.0	42.0

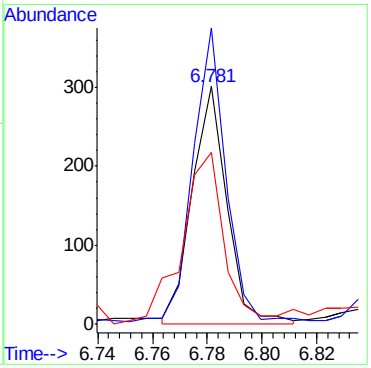


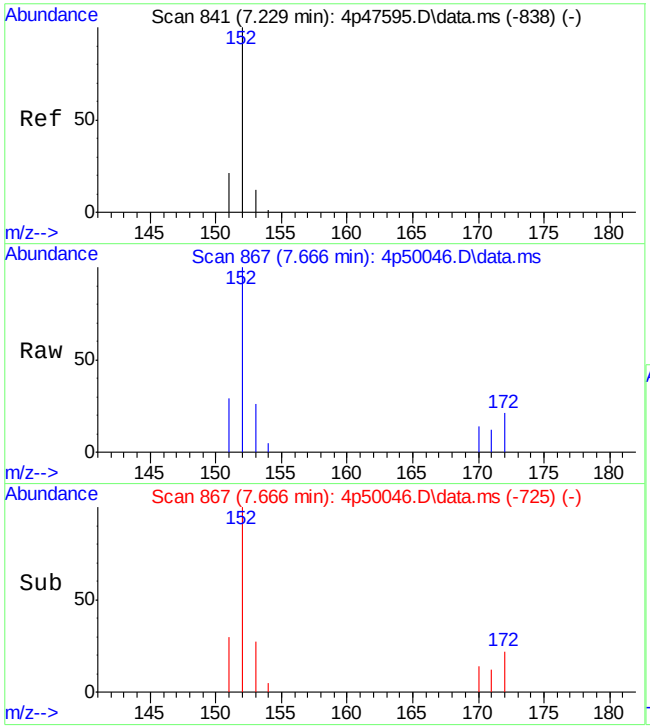


#10
2-Methylnaphthalene
Concen: 9.70 ppm
RT: 6.781 min Scan# 744
Delta R.T. -0.000 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:141 Resp: 264

Ion	Ratio	Lower	Upper
141	100		
142	124.8	96.1	156.1
115	61.0	7.9	67.9

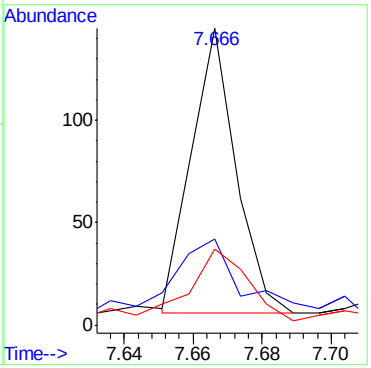


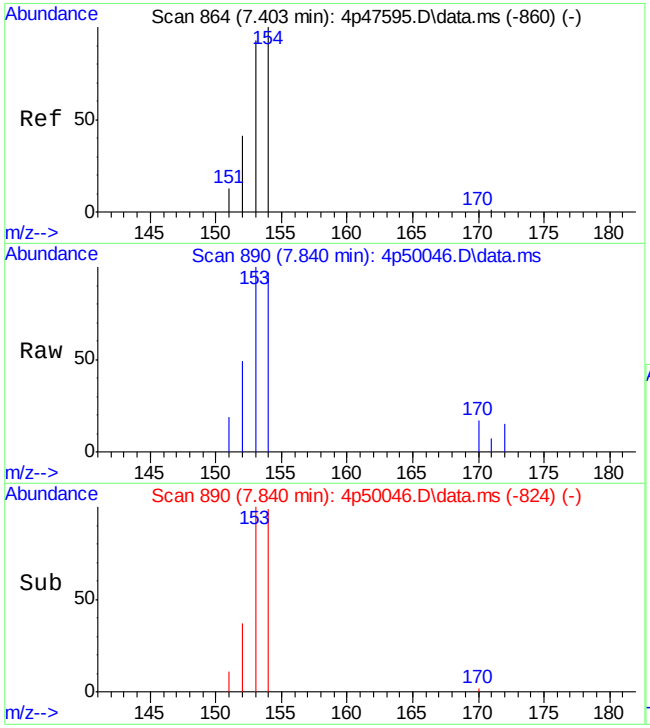


#15
Acenaphthylene
Concen: 2.48 ppm
RT: 7.666 min Scan# 867
Delta R.T. -0.000 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:152 Resp: 126

Ion	Ratio	Lower	Upper
152	100		
151	20.7	0.0	50.8
153	22.5	0.0	42.2

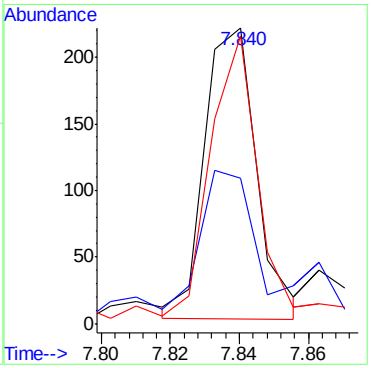


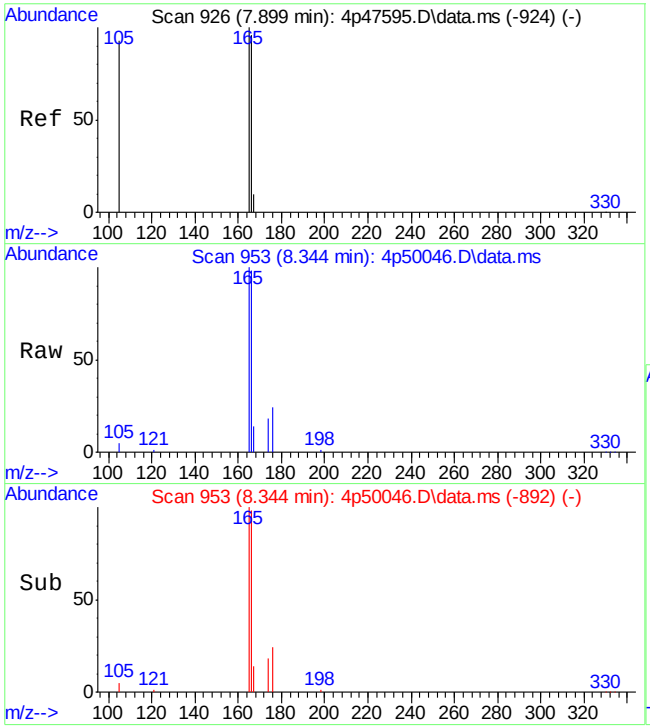


#16
Acenaphthene
Concen: 7.05 ppm
RT: 7.840 min Scan# 890
Delta R.T. -0.000 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:153 Resp: 229

Ion	Ratio	Lower	Upper
153	100		
152	43.4	18.5	78.5
154	100.5	59.1	119.1

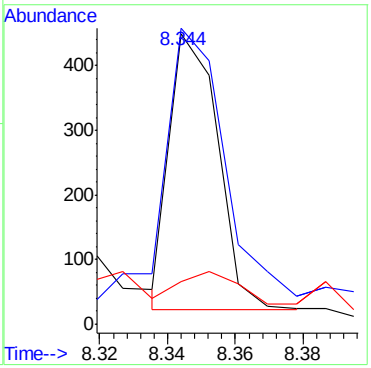


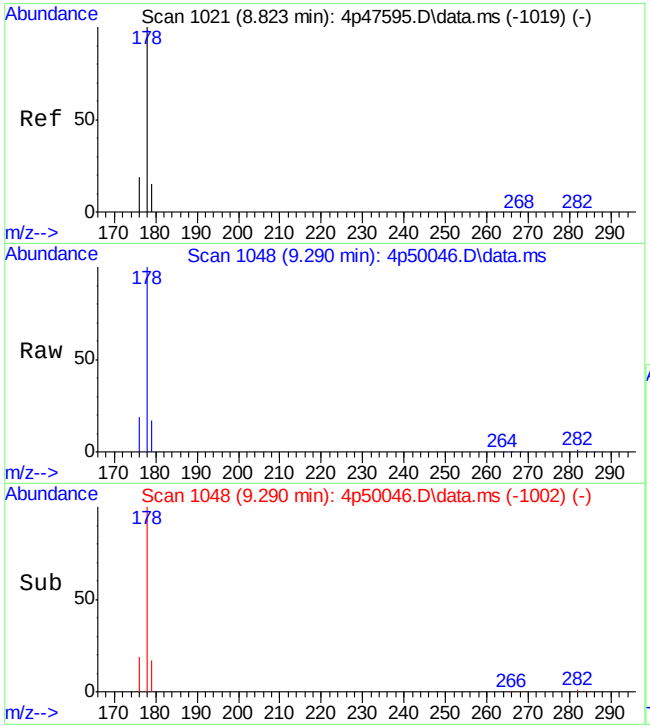


#17
Fluorene
Concen: 10.94 ppm m
RT: 8.344 min Scan# 953
Delta R.T. -0.009 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:166 Resp: 429

Ion	Ratio	Lower	Upper
166	100		
165	102.0	66.9	126.9
167	14.7	0.0	41.7

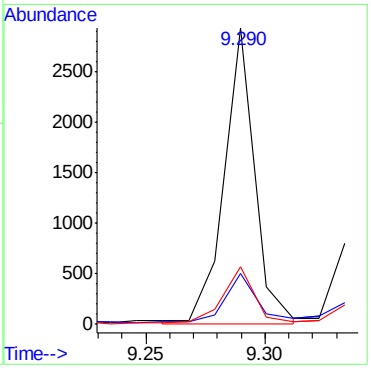


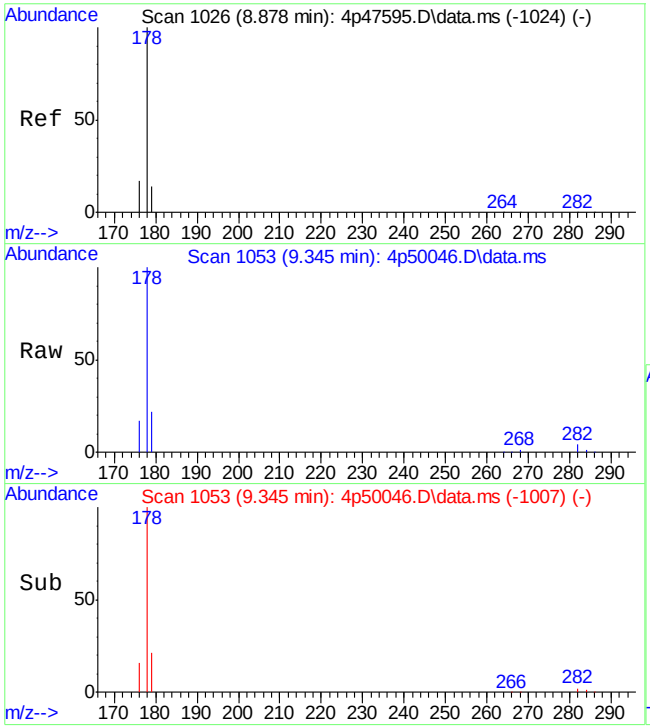


#23
Phenanthrene
Concen: 47.71 ppm
RT: 9.290 min Scan# 1048
Delta R.T. -0.000 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:178 Resp: 2629

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	46.0
176	19.3	0.0	45.6

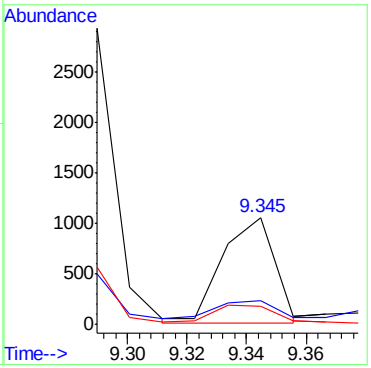


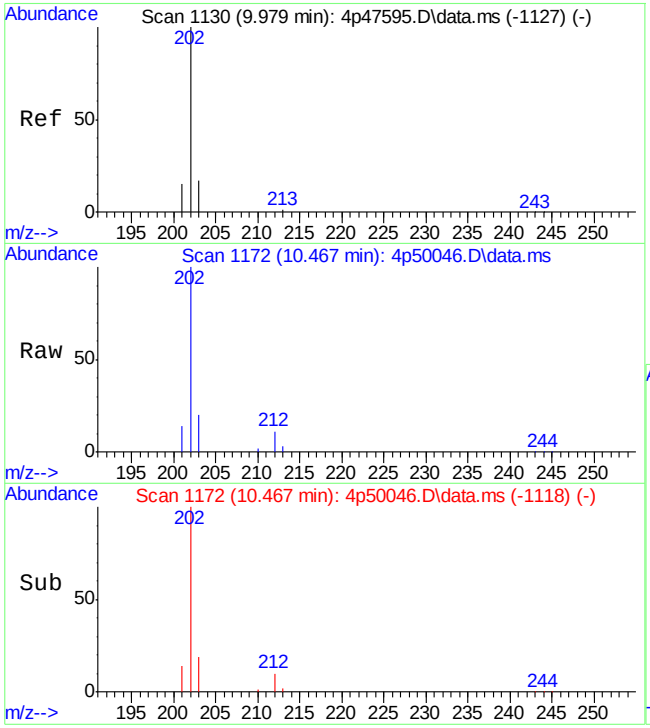


#24
Anthracene
Concen: 24.45 ppm
RT: 9.345 min Scan# 1053
Delta R.T. -0.000 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:178 Resp: 1292

Ion	Ratio	Lower	Upper
178	100		
179	17.7	0.0	43.0
176	14.9	0.0	48.4

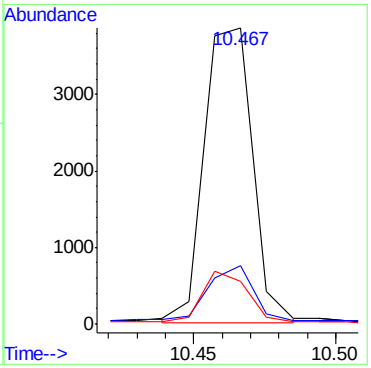


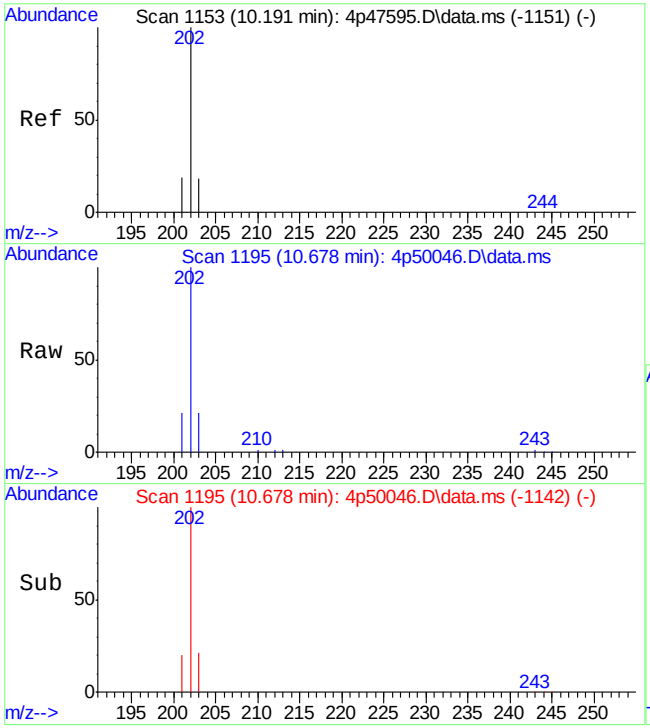


#25
Fluoranthene
Concen: 80.20 ppm
RT: 10.467 min Scan# 1172
Delta R.T. -0.000 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:202 Resp: 4602

Ion	Ratio	Lower	Upper
202	100		
203	18.8	0.0	47.6
201	13.9	0.0	42.9

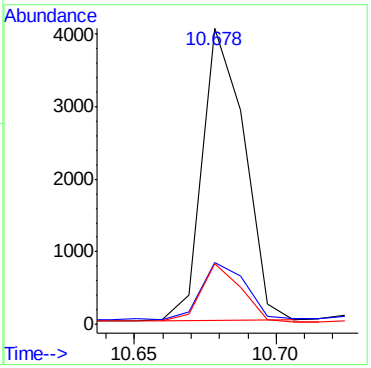


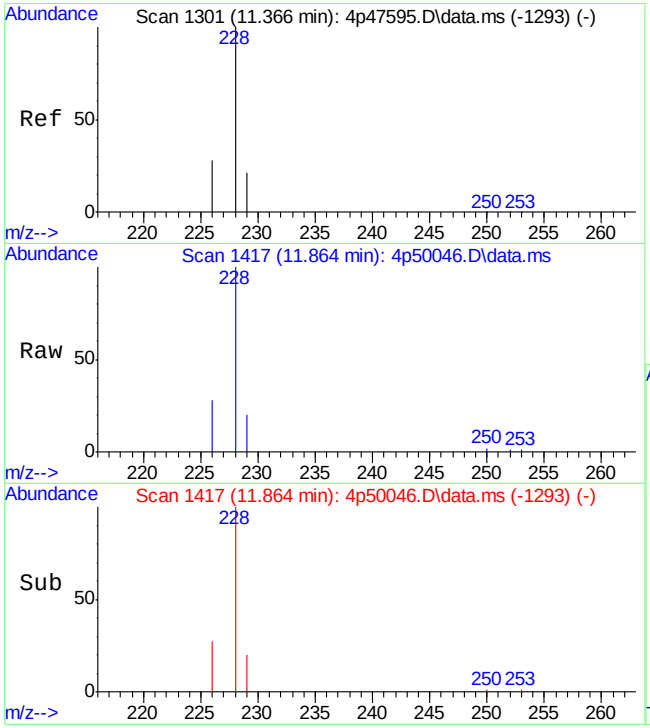


#26
Pyrene
Concen: 65.61 ppm
RT: 10.678 min Scan# 1195
Delta R.T. -0.009 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:202 Resp: 4143

Ion	Ratio	Lower	Upper
202	100		
203	19.6	0.0	47.6
201	20.0	0.0	46.0

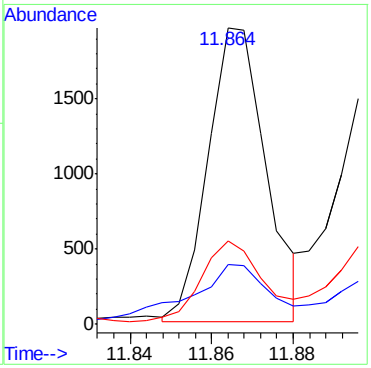


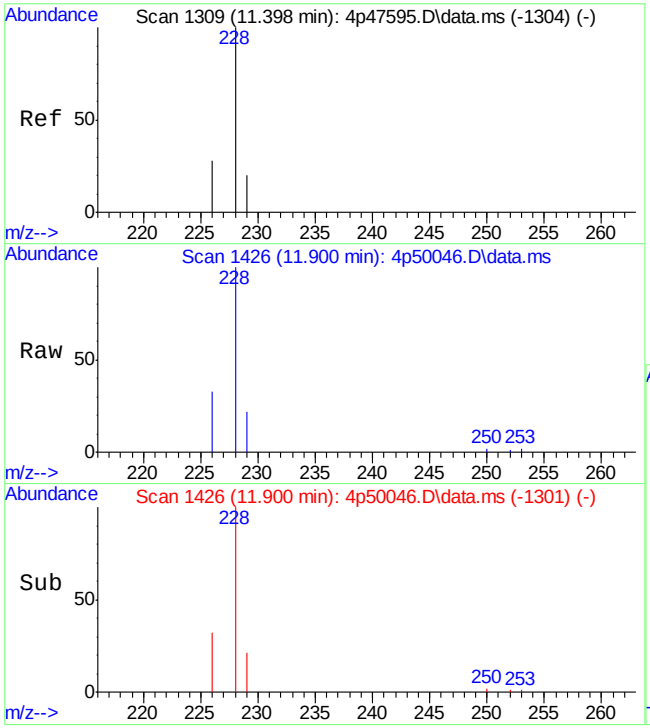


#28
Benzo[a]anthracene
Concen: 34.19 ppm
RT: 11.864 min Scan# 1417
Delta R.T. -0.004 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:228 Resp: 1929

Ion	Ratio	Lower	Upper
228	100		
229	15.5	0.0	49.8
226	26.1	0.0	53.3

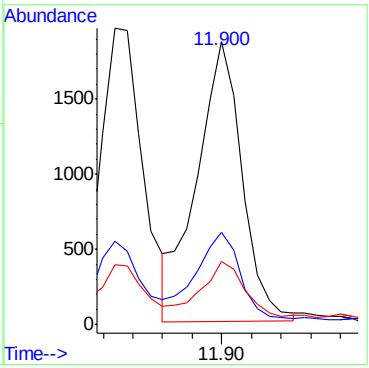


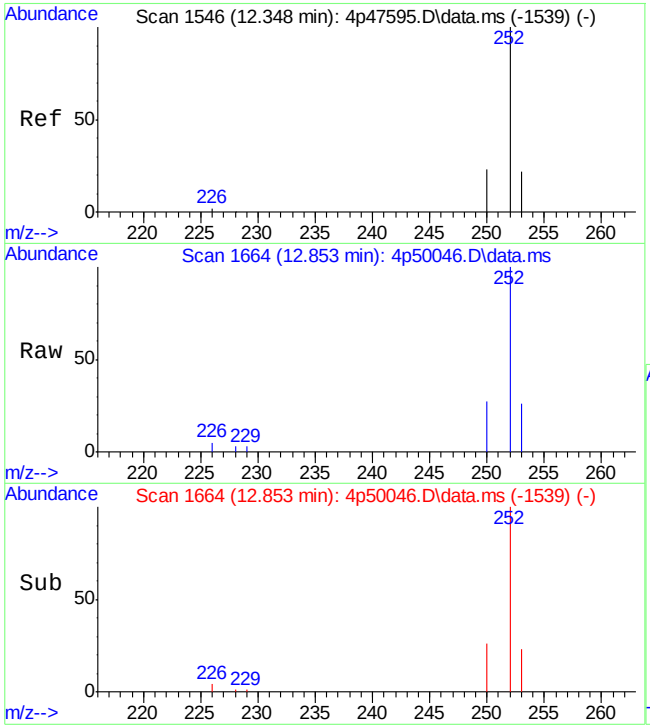


#29
Chrysene
Concen: 36.01 ppm
RT: 11.900 min Scan# 1426
Delta R.T. -0.000 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:228 Resp: 1990

Ion	Ratio	Lower	Upper
228	100		
226	31.7	0.0	58.5
229	20.5	0.0	48.7

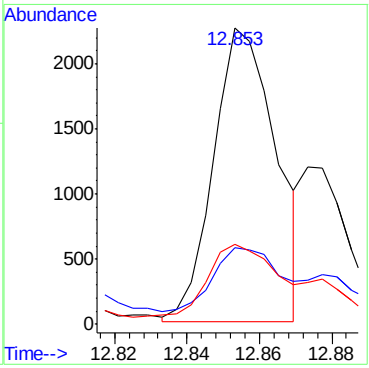


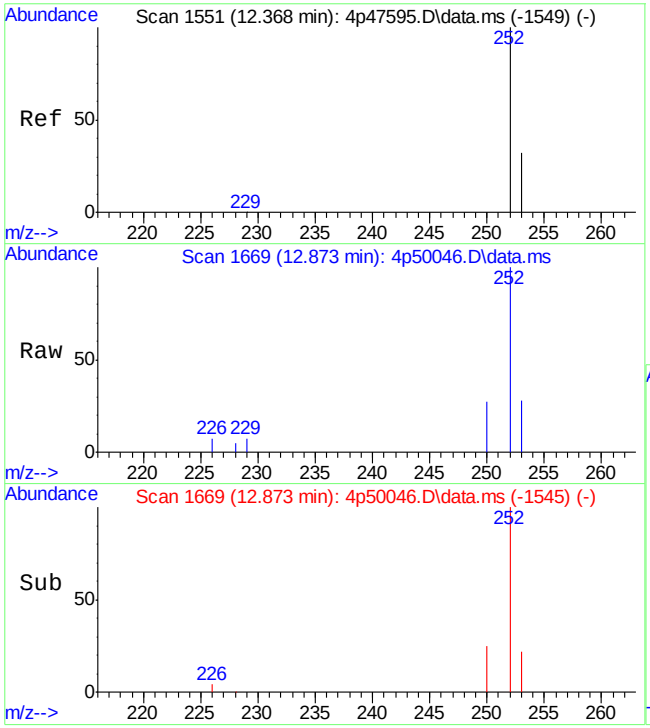


#31
Benzo[b]fluoranthene
Concen: 75.87 ppm
RT: 12.853 min Scan# 1664
Delta R.T. -0.000 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:252 Resp: 2704

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.8
250	24.7	0.0	52.4

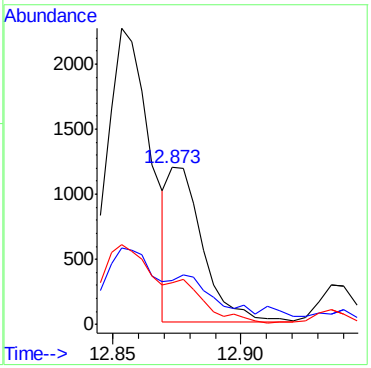


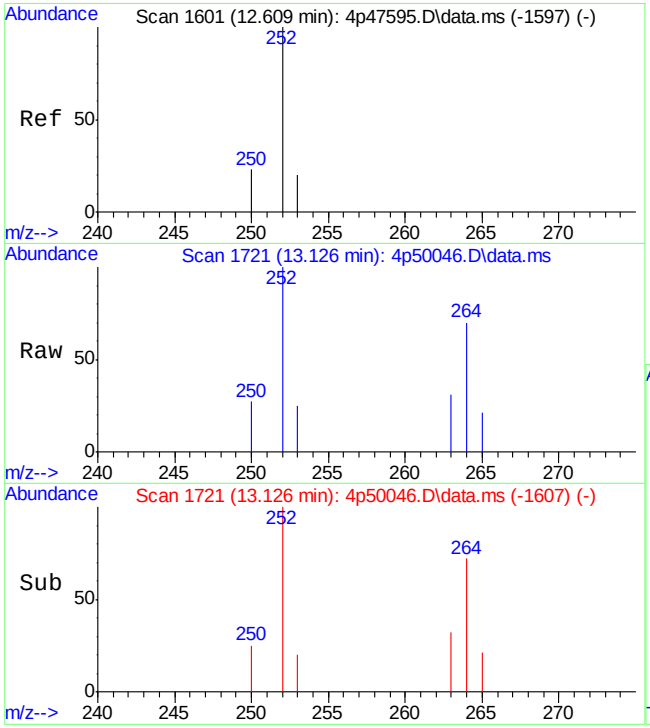


#32
Benzo[k]fluoranthene
Concen: 34.03 ppm
RT: 12.873 min Scan# 1669
Delta R.T. -0.004 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:252 Resp: 1157

Ion	Ratio	Lower	Upper
252	100		
253	20.5	0.0	51.8
250	23.9	0.0	50.5

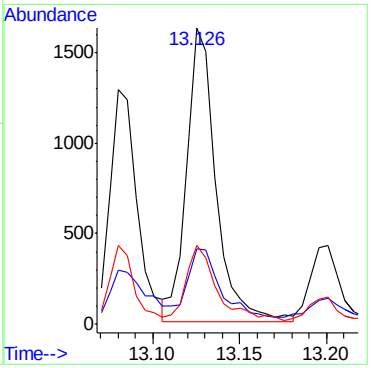


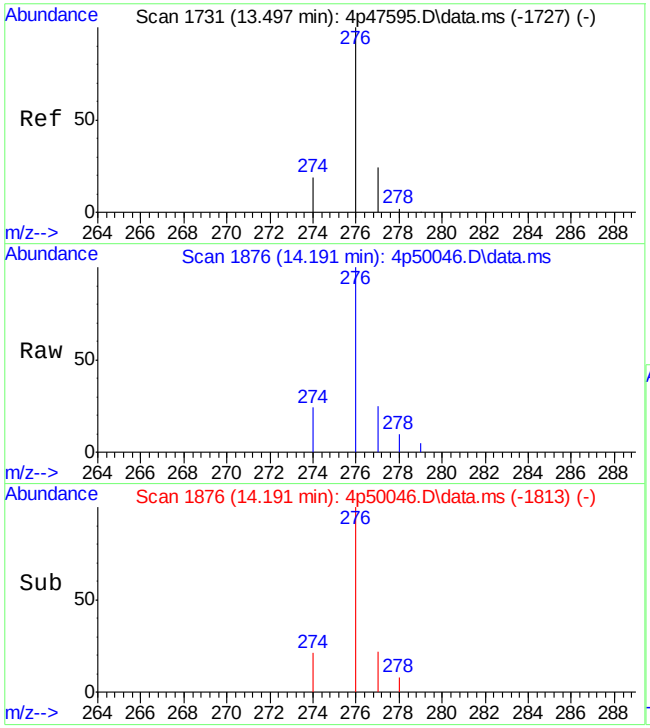


#33
Benzo[a]pyrene
Concen: 61.06 ppm
RT: 13.126 min Scan# 1721
Delta R.T. -0.000 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:252 Resp: 1904

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	52.8
250	25.8	0.0	50.6

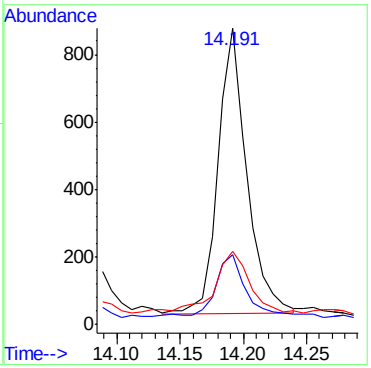


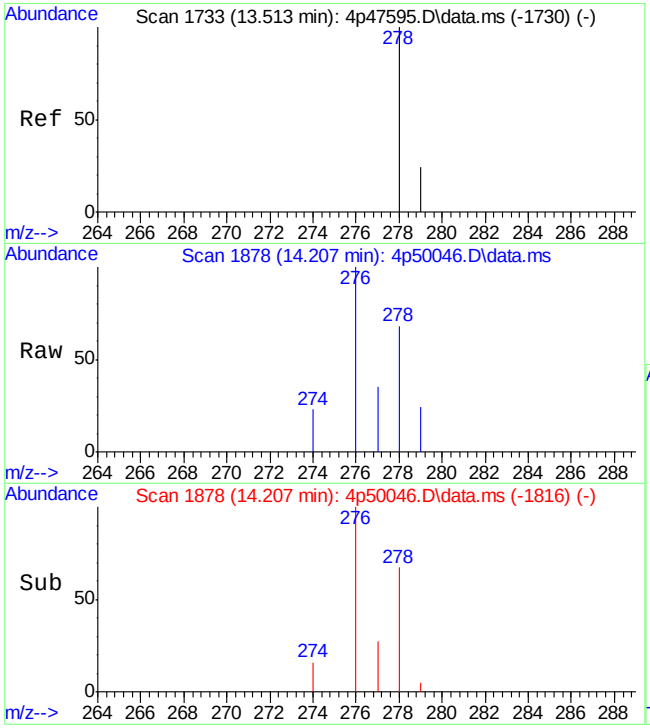


#34
Indeno[1,2,3-cd]pyrene
Concen: 35.53 ppm
RT: 14.191 min Scan# 1876
Delta R.T. -0.000 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:276 Resp: 1320

Ion	Ratio	Lower	Upper
276	100		
274	21.3	0.0	49.3
277	21.0	0.0	53.2

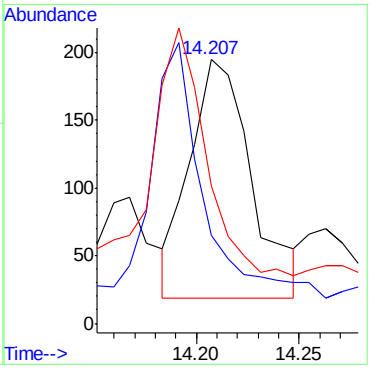


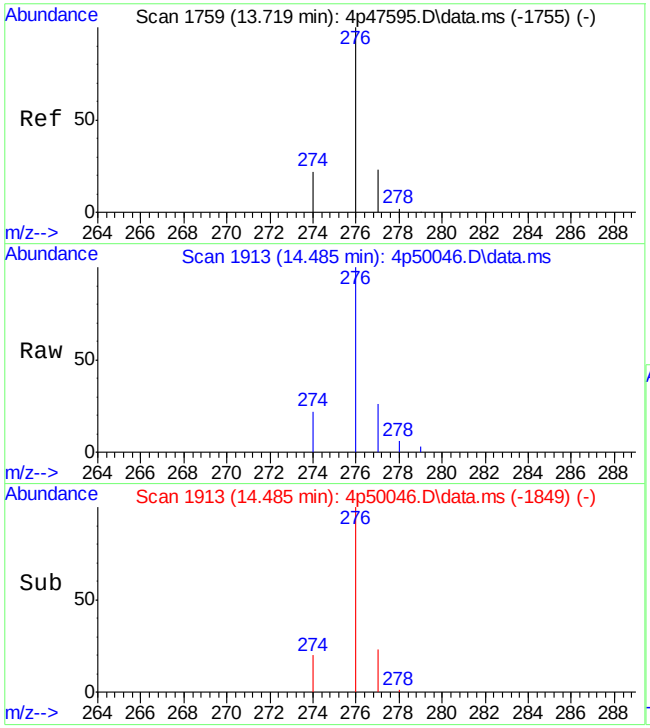


#35
Dibenz[a,h]anthracene
Concen: 12.65 ppm
RT: 14.207 min Scan# 1878
Delta R.T. -0.008 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:278 Resp: 366

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	0.0	0.0	36.7

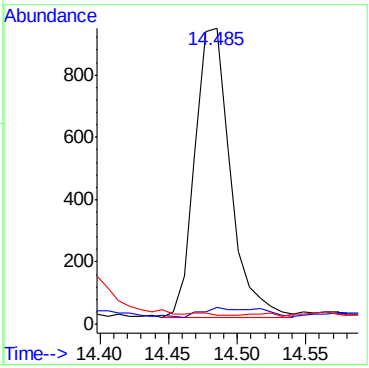




#36
Benzo[g,h,i]perylene
Concen: 52.78 ppm
RT: 14.485 min Scan# 1913
Delta R.T. 0.008 min
Lab File: 4p50046.D
Acq: 12 Dec 2021 8:14 pm

Tgt Ion:276 Resp: 1662

Ion	Ratio	Lower	Upper
276	100		
278	2.9	0.0	32.5
279	0.0	0.0	30.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2607\
Data File : 4p49808.D
Acq On : 3 Dec 2021 8:10 am
Operator : chriss2
Sample : jd35920-5
Misc : op36899a,e4p2607,290,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 03 16:00:05 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 03 15:30:51 2021
Response via : Initial Calibration

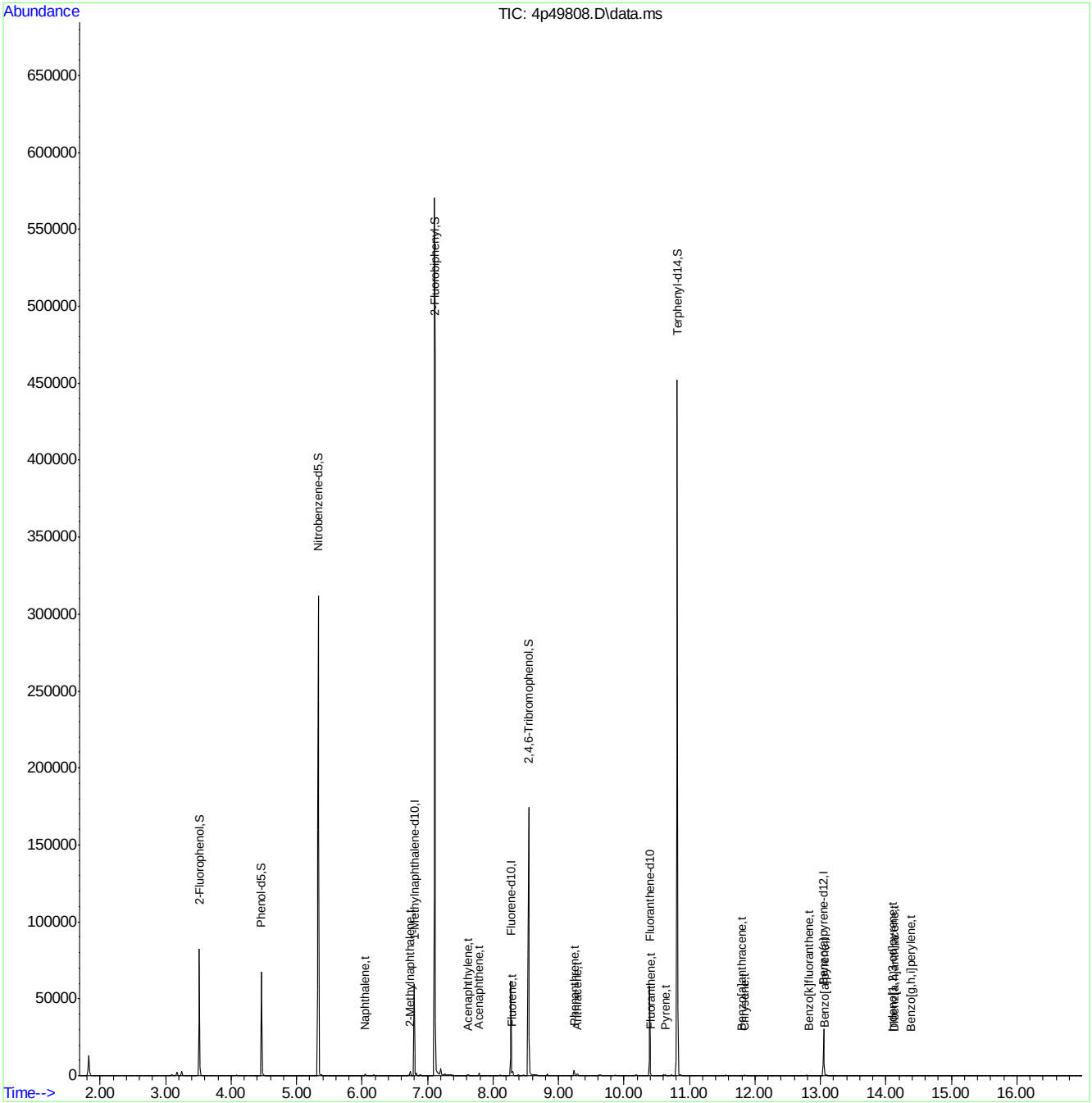
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.800	150	18942	800.00	ppm	0.00
13) Fluorene-d10	8.271	176	26016	800.00	ppm	0.00
20) Fluoranthene-d10	10.390	212	39417	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.048	264	17641	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.517	112	39165	3333.11	ppm	0.00
Spiked Amount 50.000			Recovery	= 6666.22%		
4) Phenol-d5	4.464	99	46770	2098.07	ppm	0.00
Spiked Amount 50.000			Recovery	= 4196.14%		
7) Nitrobenzene-d5	5.334	82	190351	10463.80	ppm	0.00
Spiked Amount 50.000			Recovery	= 20927.60%		
14) 2-Fluorobiphenyl	7.117	172	315184	9497.80	ppm	0.00
Spiked Amount 50.000			Recovery	= 18995.60%		
19) 2,4,6-Tribromophenol	8.543	330	62468	12581.40	ppm	0.00
Spiked Amount 50.000			Recovery	= 25162.80%		
27) Terphenyl-d14	10.814	244	270463	9579.61	ppm	0.00
Spiked Amount 50.000			Recovery	= 19159.22%		
Target Compounds						Qvalue
8) Naphthalene	6.051	128	915	16.88	ppm	96
10) 2-Methylnaphthalene	6.734	141	859	30.33	ppm	79
15) Acenaphthylene	7.617	152	375	7.74	ppm	96
16) Acenaphthene	7.791	153	532	17.20	ppm	97
17) Fluorene	8.296	166	1070	28.67	ppm	94
23) Phenanthrene	9.238	178	2098	39.52	ppm	93
24) Anthracene	9.282	178	1137	22.33	ppm	99
25) Fluoranthene	10.409	202	736	13.31	ppm	95
26) Pyrene	10.630	202	557	9.16	ppm	98
28) Benzo[a]anthracene	11.805	228	171	3.15	ppm	90
29) Chrysene	11.841	228	167	3.14	ppm	97
32) Benzo[k]fluoranthene	12.819	252	73	2.01	ppm	76
33) Benzo[a]pyrene	13.063	252	68	2.04	ppm	88
34) Indeno[1,2,3-cd]pyrene	14.102	276	61	1.53	ppm	90
35) Dibenz[a,h]anthracene	14.125	278	41	1.32	ppm	90
36) Benzo[g,h,i]perylene	14.387	276	57	1.69	ppm	82

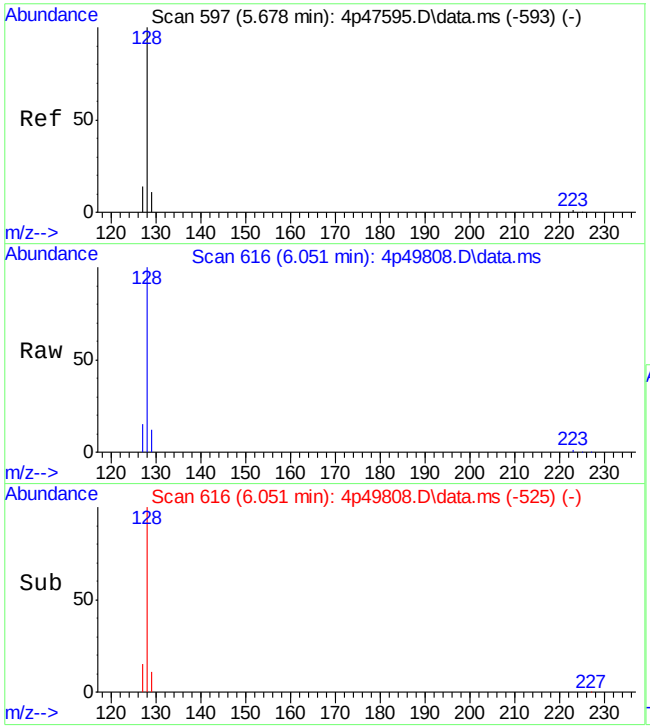
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2607\
Data File : 4p49808.D
Acq On : 3 Dec 2021 8:10 am
Operator : chriss2
Sample : jd35920-5
Misc : op36899a,e4p2607,290,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 03 16:00:05 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 03 15:30:51 2021
Response via : Initial Calibration

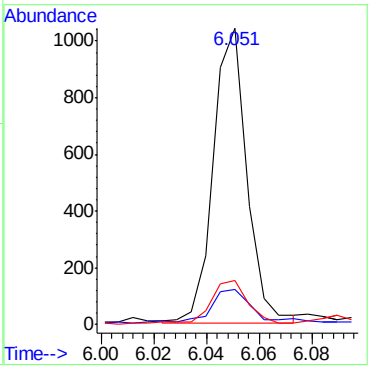


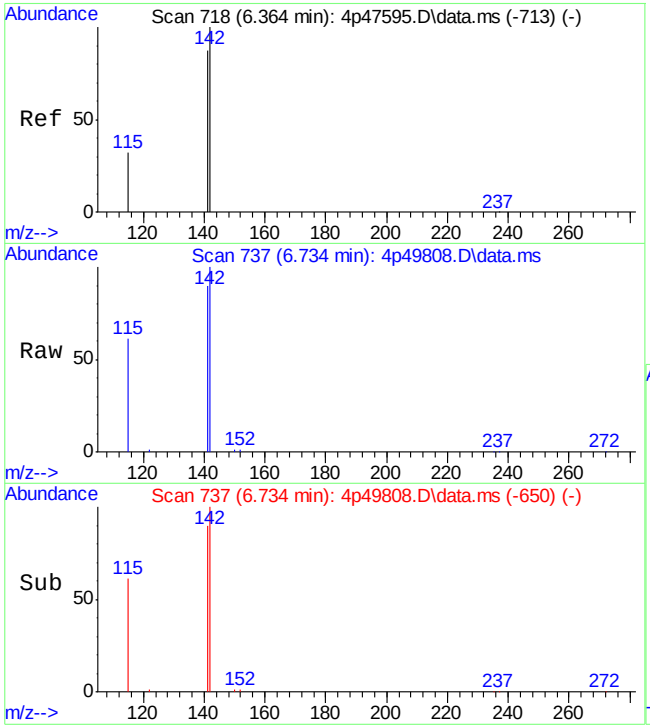


#8
Naphthalene
Concen: 16.88 ppm
RT: 6.051 min Scan# 616
Delta R.T. 0.000 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:128 Resp: 915

Ion	Ratio	Lower	Upper
128	100		
129	10.4	0.0	41.1
127	14.4	0.0	42.0

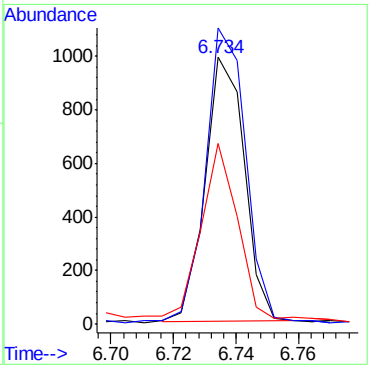


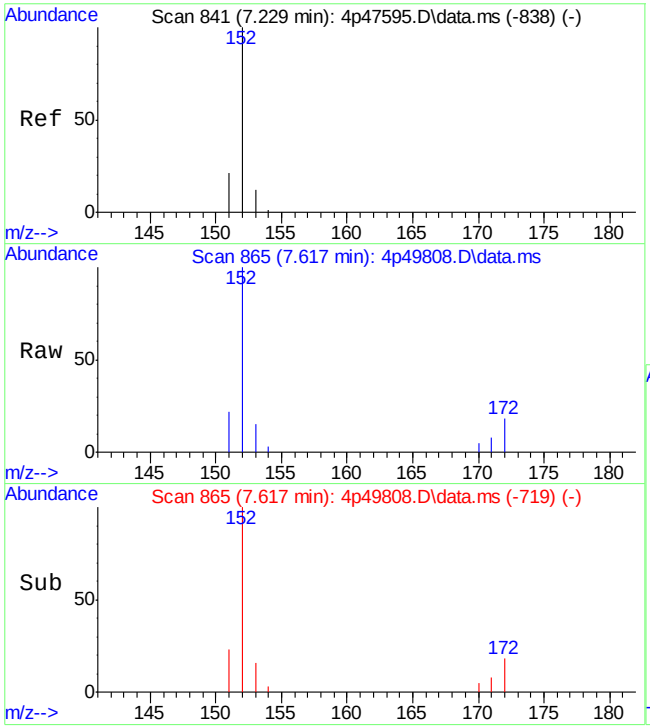


#10
2-Methylnaphthalene
Concen: 30.33 ppm
RT: 6.734 min Scan# 737
Delta R.T. -0.006 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:141 Resp: 859

Ion	Ratio	Lower	Upper
141	100		
142	111.1	96.1	156.1
115	65.5	7.9	67.9

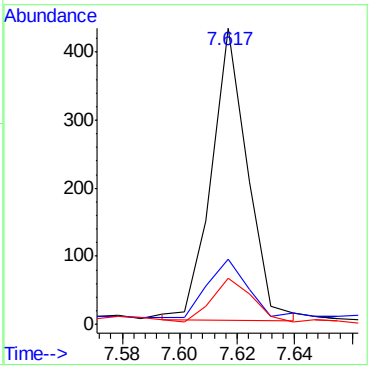


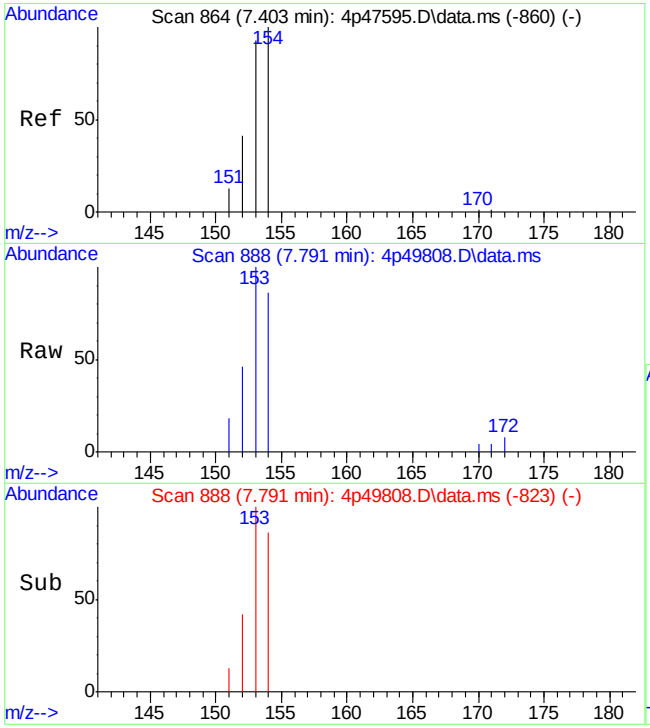


#15
Acenaphthylene
Concen: 7.74 ppm
RT: 7.617 min Scan# 865
Delta R.T. -0.007 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:152 Resp: 375

Ion	Ratio	Lower	Upper
152	100		
151	19.7	0.0	50.8
153	14.8	0.0	42.2

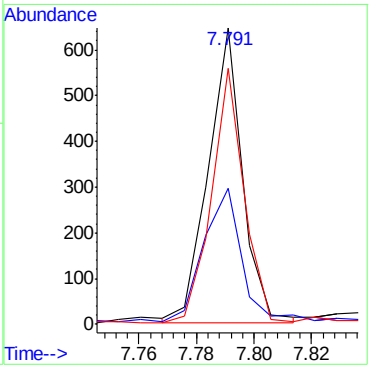


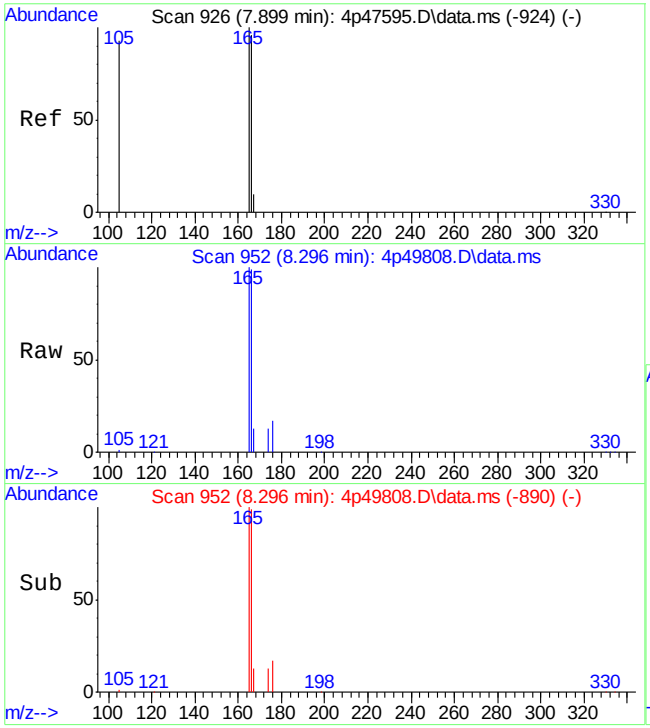


#16
Acenaphthene
Concen: 17.20 ppm
RT: 7.791 min Scan# 888
Delta R.T. -0.007 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:153 Resp: 532

Ion	Ratio	Lower	Upper
153	100		
152	44.9	18.5	78.5
154	87.6	59.1	119.1

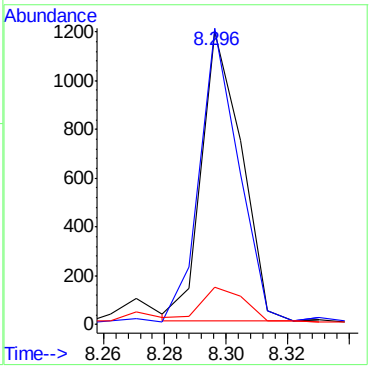


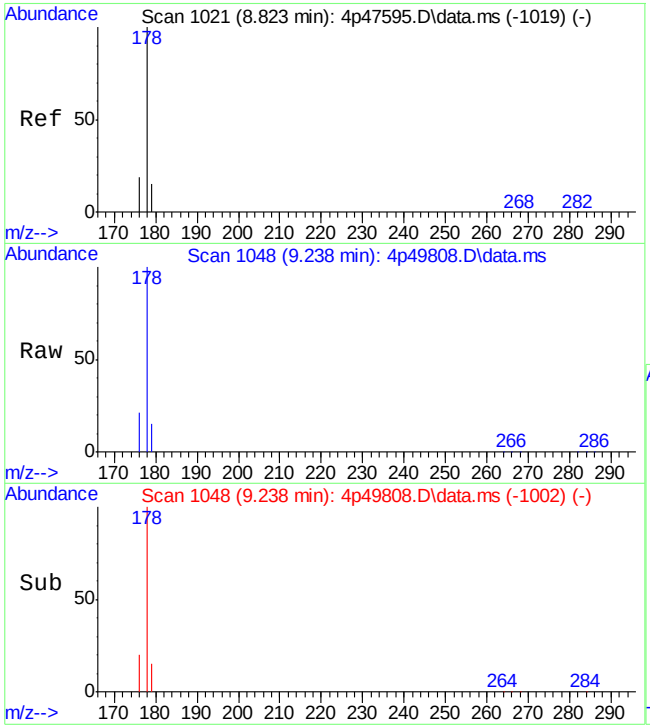


#17
Fluorene
Concen: 28.67 ppm
RT: 8.296 min Scan# 952
Delta R.T. -0.008 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:166 Resp: 1070

Ion	Ratio	Lower	Upper
166	100		
165	102.8	66.9	126.9
167	11.1	0.0	41.7

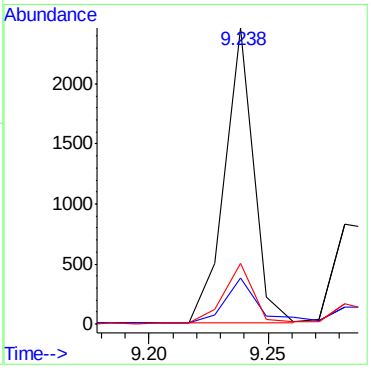


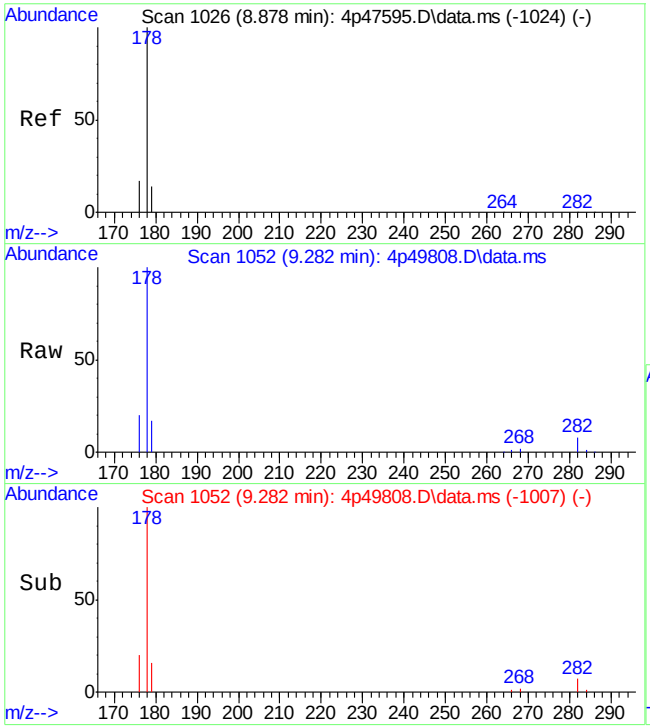


#23
Phenanthrene
Concen: 39.52 ppm
RT: 9.238 min Scan# 1048
Delta R.T. 0.000 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:178 Resp: 2098

Ion	Ratio	Lower	Upper
178	100		
179	14.2	0.0	46.0
176	19.9	0.0	45.6

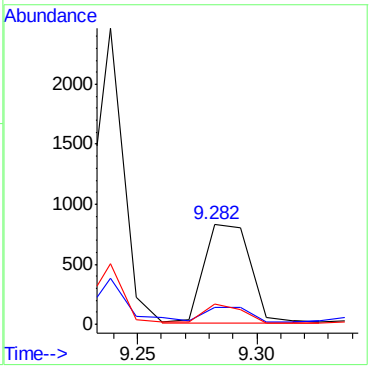


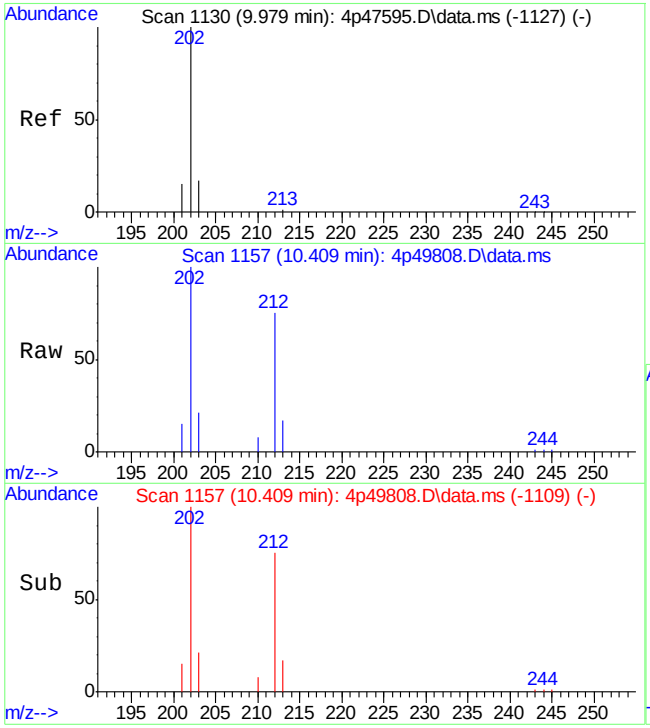


#24
Anthracene
Concen: 22.33 ppm
RT: 9.282 min Scan# 1052
Delta R.T. -0.011 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:178 Resp: 1137

Ion	Ratio	Lower	Upper
178	100		
179	13.1	0.0	43.0
176	19.0	0.0	48.4

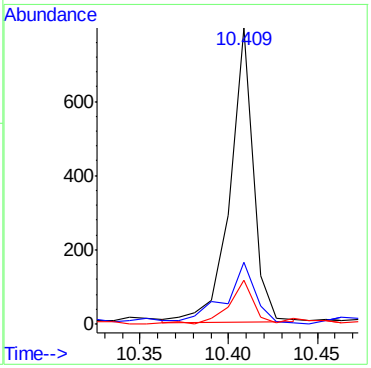


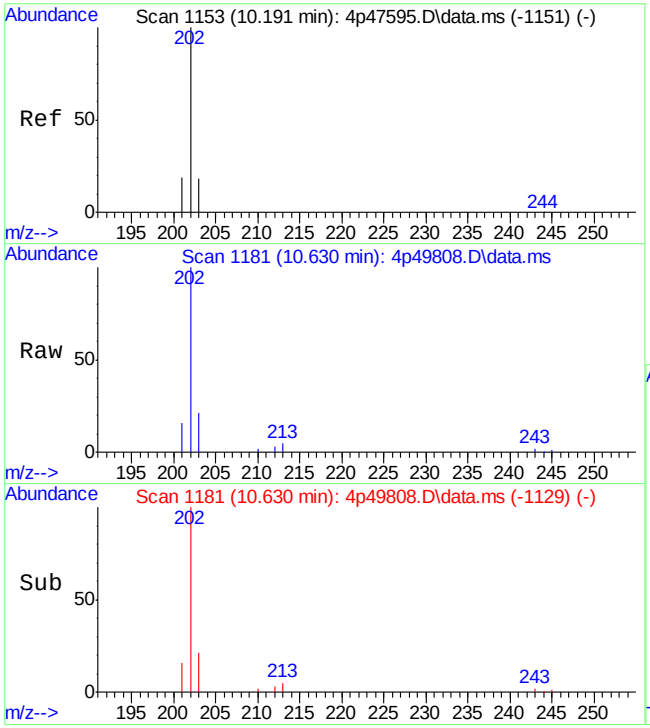


#25
Fluoranthene
Concen: 13.31 ppm
RT: 10.409 min Scan# 1157
Delta R.T. 0.000 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:202 Resp: 736

Ion	Ratio	Lower	Upper
202	100		
203	20.3	0.0	47.6
201	14.0	0.0	42.9

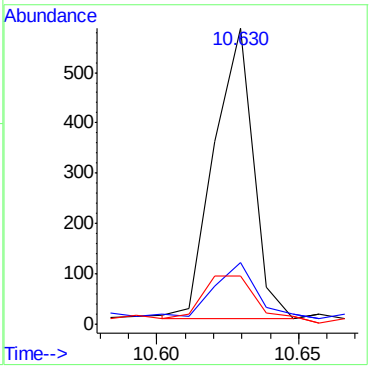


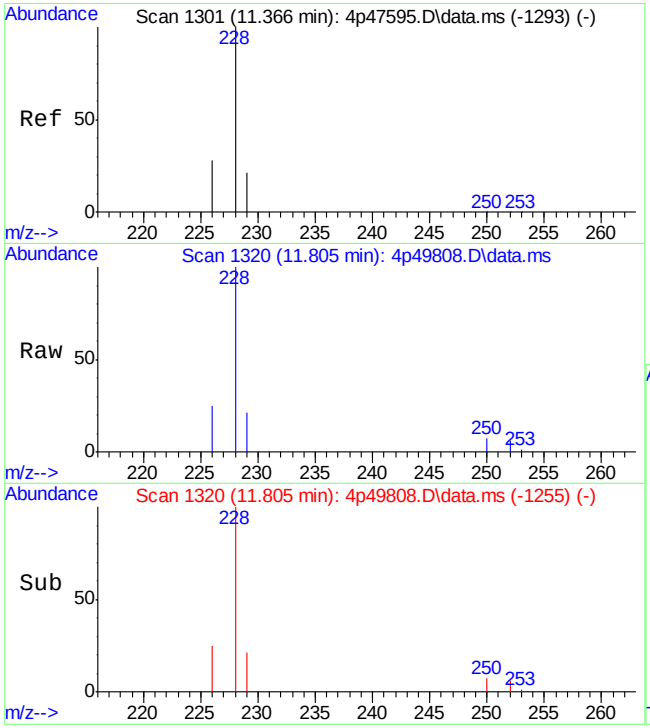


#26
Pyrene
Concen: 9.16 ppm
RT: 10.630 min Scan# 1181
Delta R.T. 0.000 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:202 Resp: 557

Ion	Ratio	Lower	Upper
202	100		
203	17.9	0.0	47.6
201	14.3	0.0	46.0

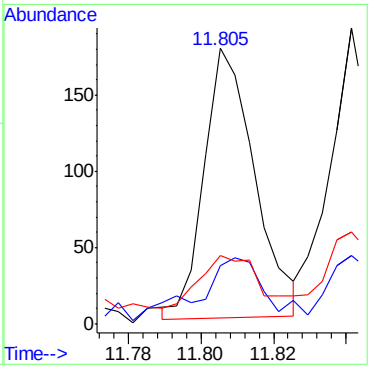


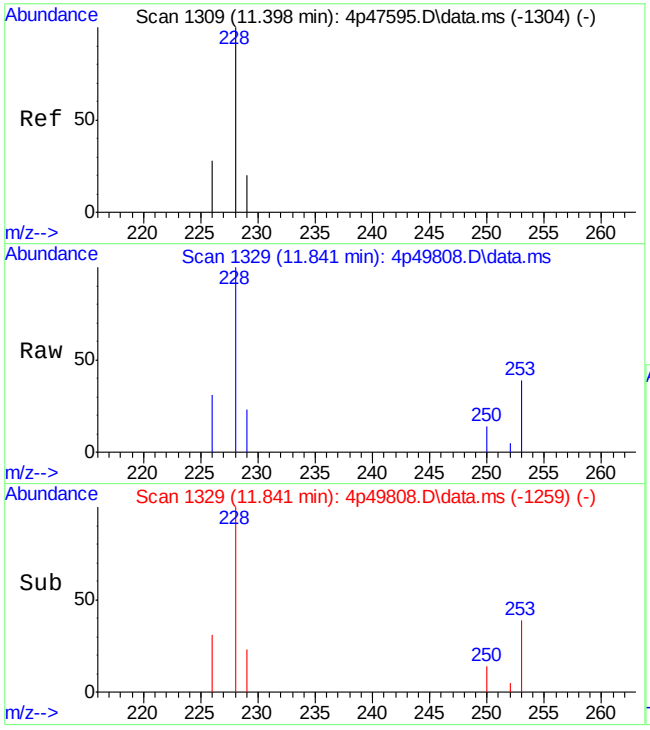


#28
Benzo[a]anthracene
Concen: 3.15 ppm
RT: 11.805 min Scan# 1320
Delta R.T. -0.008 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:228 Resp: 171

Ion	Ratio	Lower	Upper
228	100		
229	14.6	0.0	49.8
226	19.2	0.0	53.3

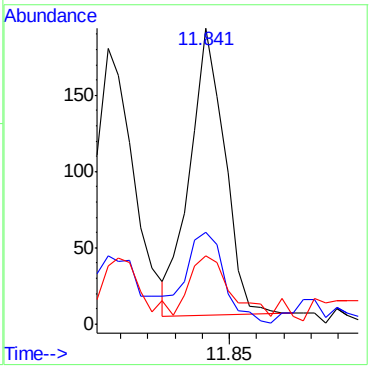


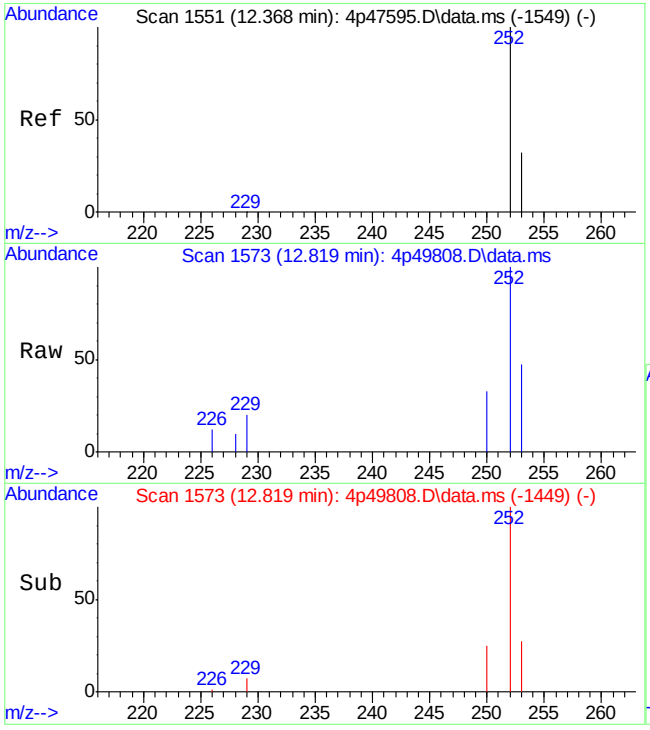


#29
Chrysene
Concen: 3.14 ppm
RT: 11.841 min Scan# 1329
Delta R.T. -0.008 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:228 Resp: 167

Ion	Ratio	Lower	Upper
228	100		
226	26.9	0.0	58.5
229	19.8	0.0	48.7

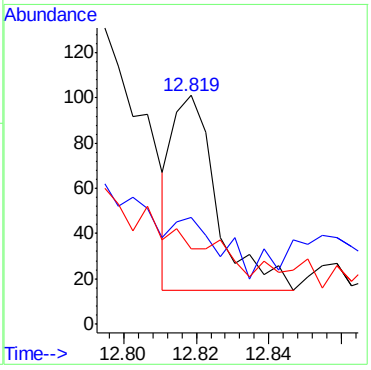


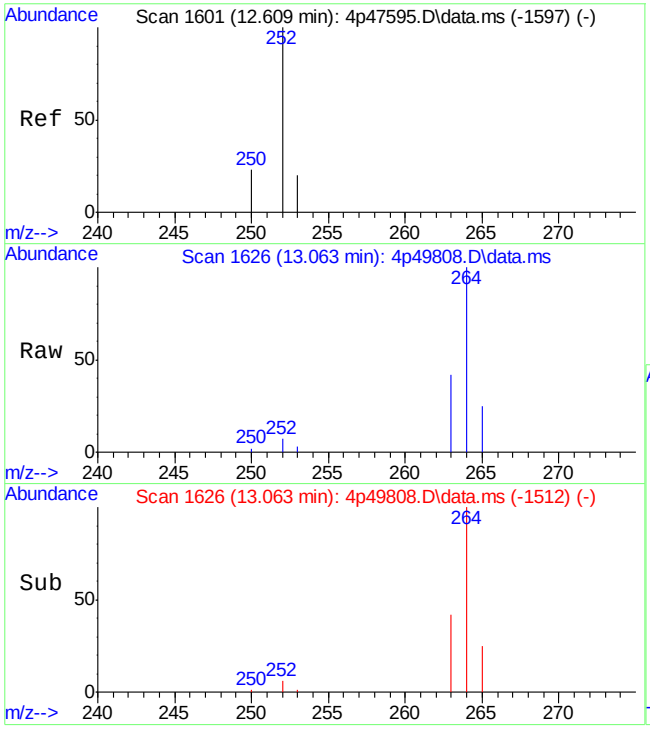


#32
Benzo[k]fluoranthene
Concen: 2.01 ppm
RT: 12.819 min Scan# 1573
Delta R.T. -0.004 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:252 Resp: 73

Ion	Ratio	Lower	Upper
252	100		
253	15.8	0.0	51.8
250	4.2	0.0	50.5

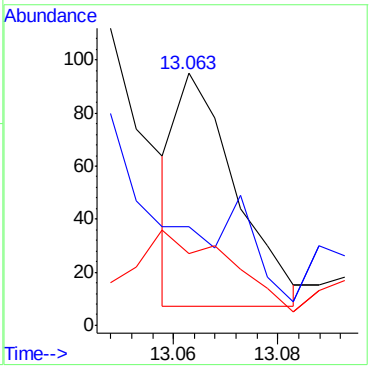


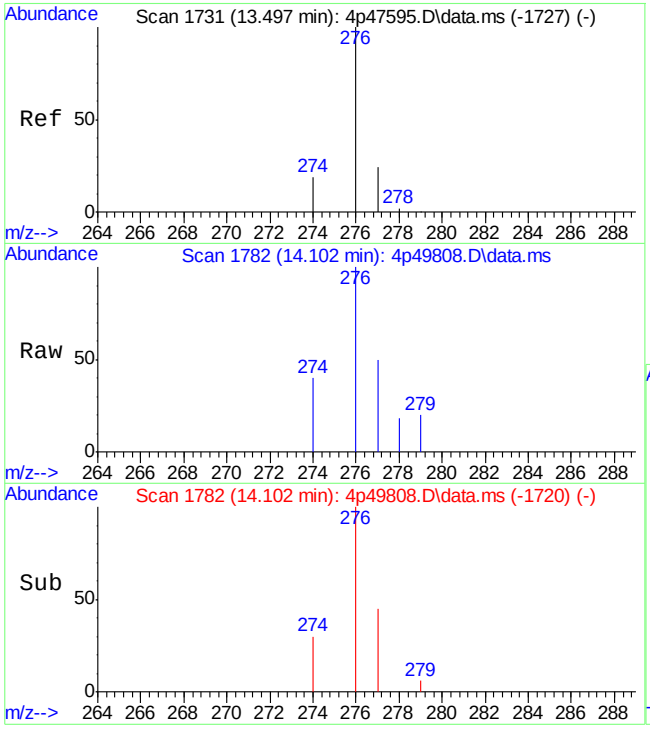


#33
Benzo[a]pyrene
Concen: 2.04 ppm
RT: 13.063 min Scan# 1626
Delta R.T. -0.010 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:252 Resp: 68

Ion	Ratio	Lower	Upper
252	100		
253	25.2	0.0	52.8
250	11.7	0.0	50.6

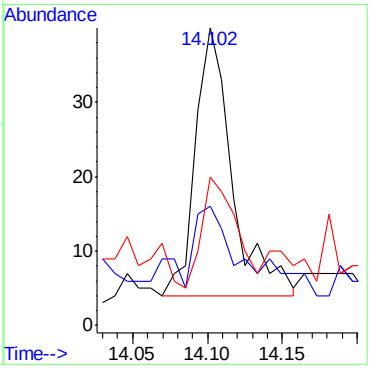


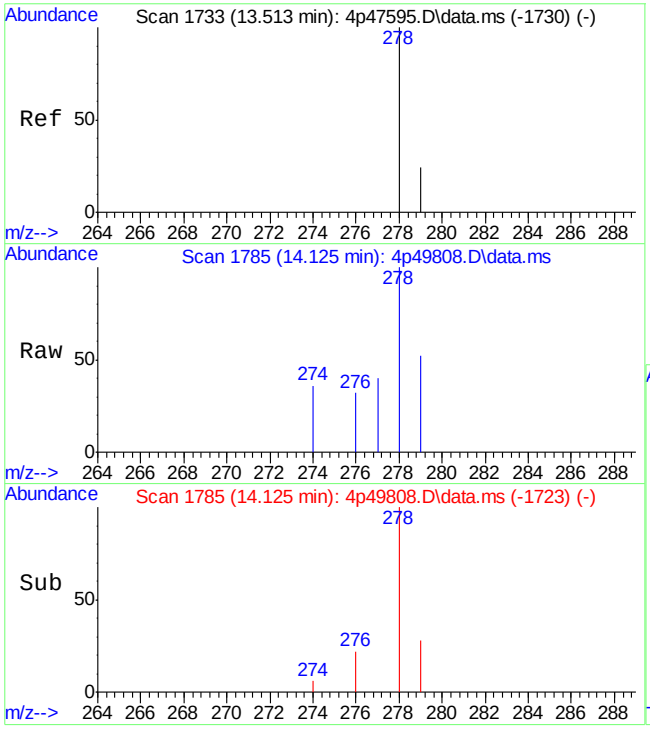


#34
Indeno[1,2,3-cd]pyrene
Concen: 1.53 ppm
RT: 14.102 min Scan# 1782
Delta R.T. -0.008 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:276 Resp: 61

Ion	Ratio	Lower	Upper
276	100		
274	22.5	0.0	49.3
277	29.6	0.0	53.2

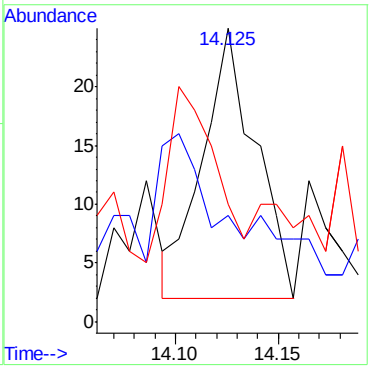


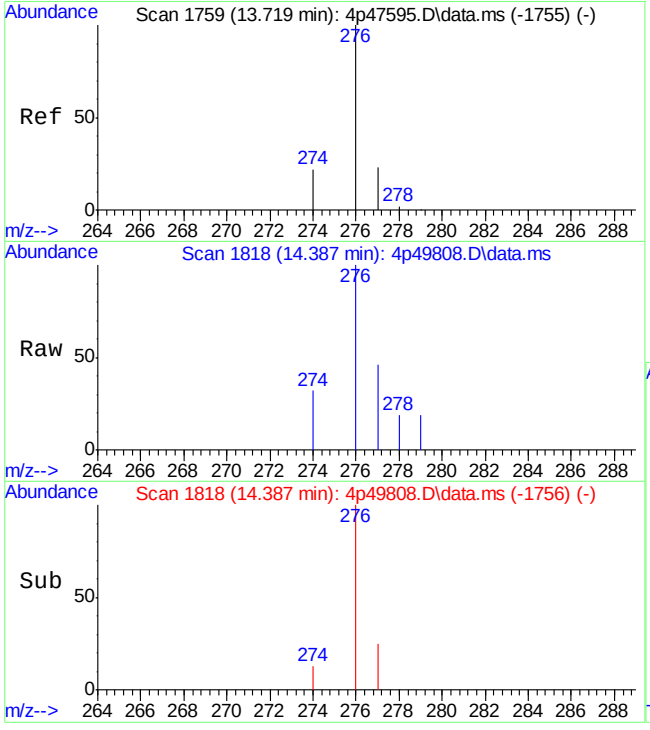


#35
Dibenz[a,h]anthracene
Concen: 1.32 ppm
RT: 14.125 min Scan# 1785
Delta R.T. -0.008 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:278 Resp: 41

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	4.8	0.0	36.7

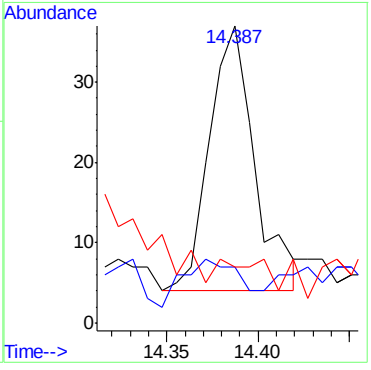




#36
Benzo[g,h,i]perylene
Concen: 1.69 ppm
RT: 14.387 min Scan# 1818
Delta R.T. -0.008 min
Lab File: 4p49808.D
Acq: 3 Dec 2021 8:10 am

Tgt Ion:276 Resp: 57

Ion	Ratio	Lower	Upper
276	100		
278	9.7	0.0	32.5
279	0.0	0.0	30.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50037.D
Acq On : 12 Dec 2021 4:42 pm
Operator : kristis
Sample : jd35920-5
Misc : op37045a,e4p2620,250,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 13 09:51:59 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

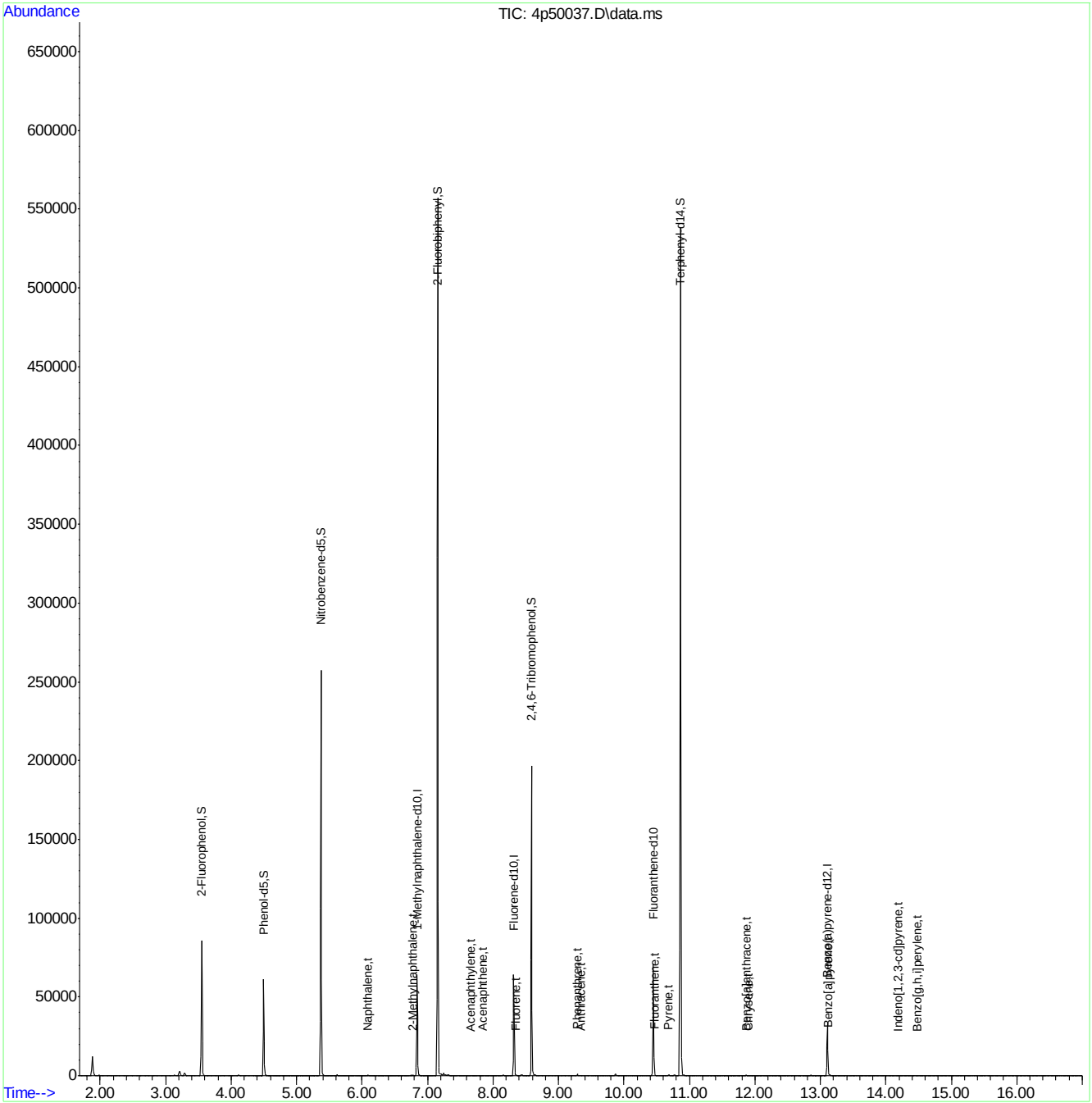
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.841	150	18196	800.00	ppm	0.00
13) Fluorene-d10	8.318	176	29341	800.00	ppm	0.00
20) Fluoranthene-d10	10.448	212	51537	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.106	264	21768	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.551	112	35246	3122.56	ppm	0.00
Spiked Amount 50.000			Recovery = 6245.12%			
4) Phenol-d5	4.497	99	45439	2121.93	ppm	0.00
Spiked Amount 50.000			Recovery = 4243.86%			
7) Nitrobenzene-d5	5.374	82	159194	9109.84	ppm	0.00
Spiked Amount 50.000			Recovery = 18219.68%			
14) 2-Fluorobiphenyl	7.159	172	273678	7312.48	ppm	0.00
Spiked Amount 50.000			Recovery = 14624.96%			
19) 2,4,6-Tribromophenol	8.591	330	68019	12146.95	ppm	0.00
Spiked Amount 50.000			Recovery = 24293.90%			
27) Terphenyl-d14	10.862	244	346607	9389.49	ppm	0.00
Spiked Amount 50.000			Recovery = 18778.98%			
Target Compounds						Qvalue
8) Naphthalene	6.094	128	223	4.28	ppm	80
10) 2-Methylnaphthalene	6.782	141	94	3.45	ppm	74
15) Acenaphthylene	7.666	152	57	1.04	ppm	79
16) Acenaphthene	7.840	153	69	1.98	ppm	89
17) Fluorene	8.344	166	114	2.71	ppm	93
23) Phenanthrene	9.290	178	964	13.89	ppm	94
24) Anthracene	9.345	178	226	3.39	ppm	92
25) Fluoranthene	10.467	202	622	8.61	ppm	96
26) Pyrene	10.678	202	580	7.29	ppm	91
28) Benzo[a]anthracene	11.868	228	186	2.62	ppm	93
29) Chrysene	11.900	228	216	3.10	ppm	90
33) Benzo[a]pyrene	13.126	252	121	2.94	ppm	73
34) Indeno[1,2,3-cd]pyrene	14.191	276	69	1.41	ppm	86
36) Benzo[g,h,i]perylene	14.485	276	74	1.78	ppm	93

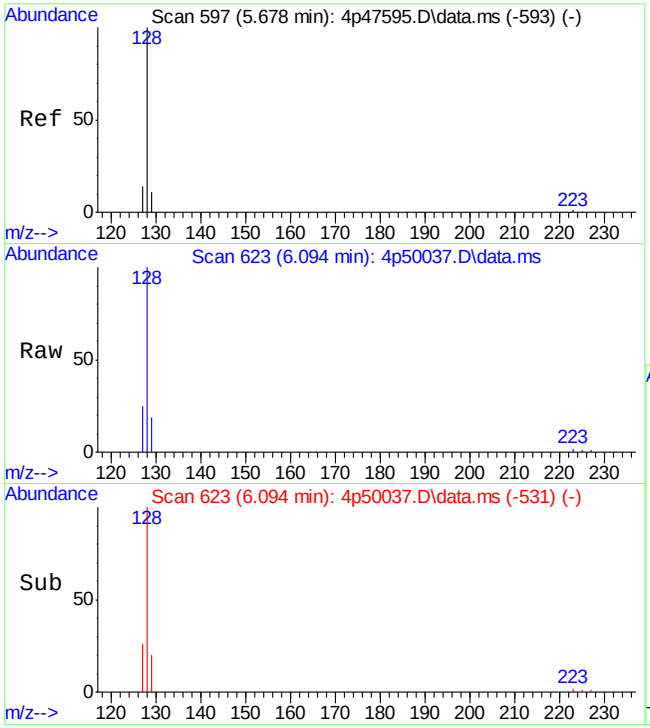
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50037.D
Acq On : 12 Dec 2021 4:42 pm
Operator : kristis
Sample : jd35920-5
Misc : op37045a,e4p2620,250,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 13 09:51:59 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

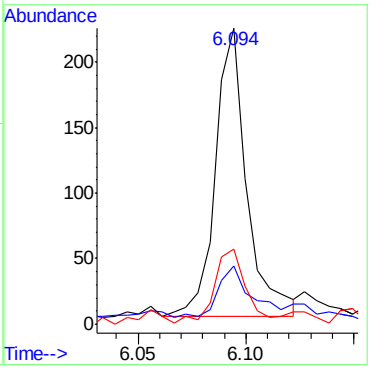


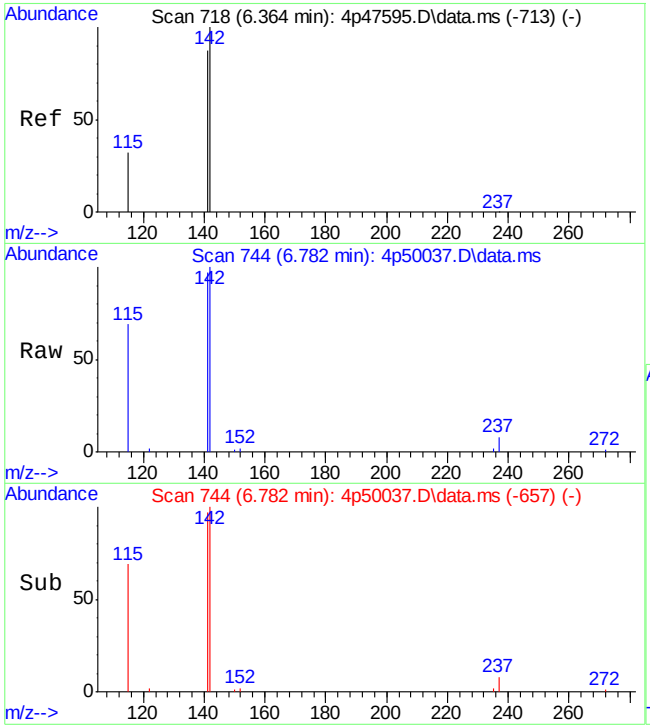


#8
Naphthalene
Concen: 4.28 ppm
RT: 6.094 min Scan# 623
Delta R.T. -0.000 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:128 Resp: 223

Ion	Ratio	Lower	Upper
128	100		
129	15.0	0.0	41.1
127	23.2	0.0	42.0

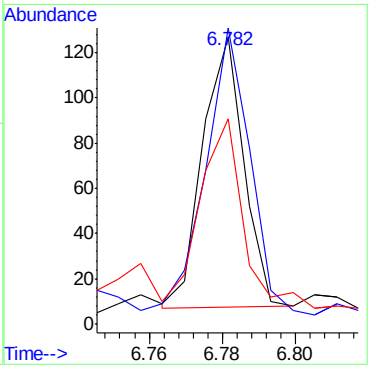


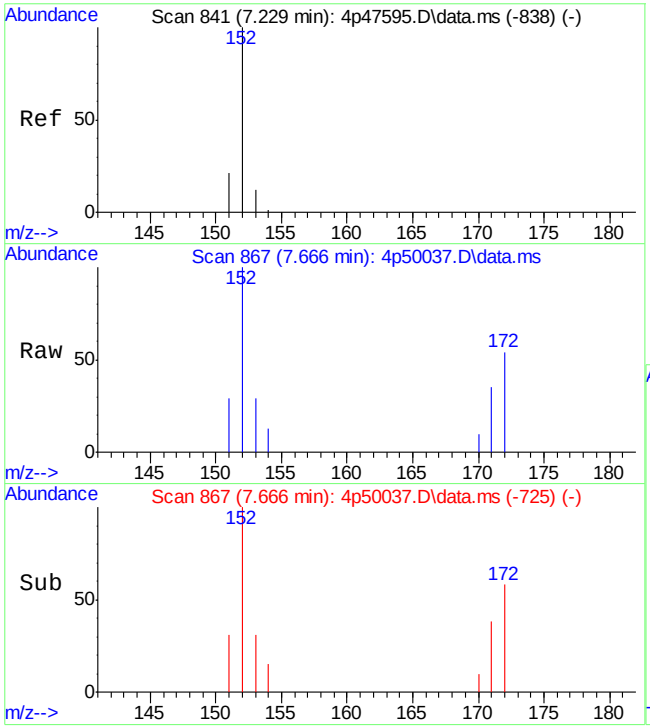


#10
2-Methylnaphthalene
Concen: 3.45 ppm
RT: 6.782 min Scan# 744
Delta R.T. -0.000 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:141 Resp: 94

Ion	Ratio	Lower	Upper
141	100		
142	104.2	96.1	156.1
115	66.7	7.9	67.9

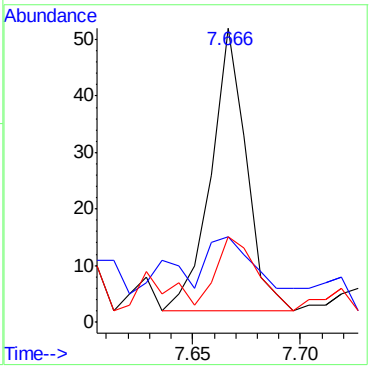


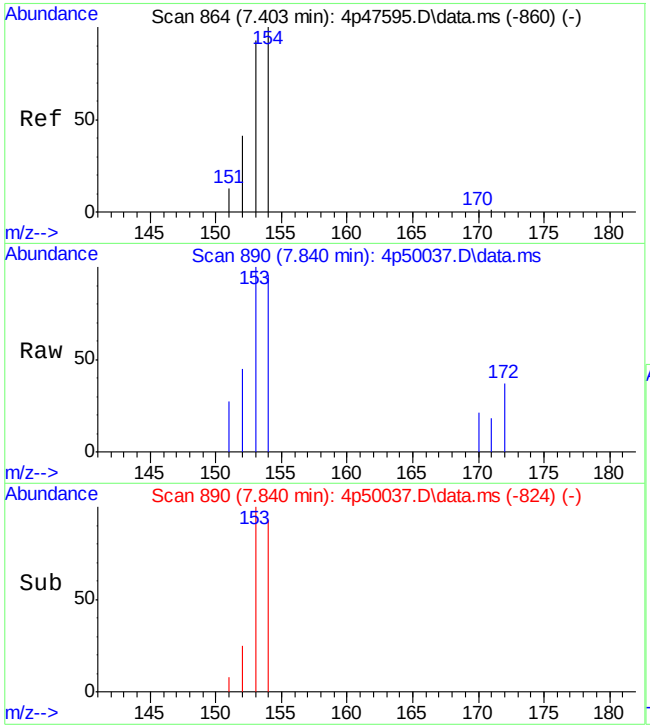


#15
Acenaphthylene
Concen: 1.04 ppm
RT: 7.666 min Scan# 867
Delta R.T. -0.000 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:152 Resp: 57

Ion	Ratio	Lower	Upper
152	100		
151	13.0	0.0	50.8
153	23.0	0.0	42.2

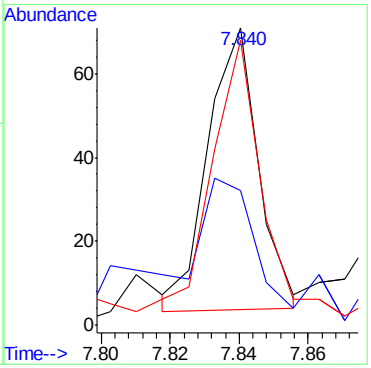


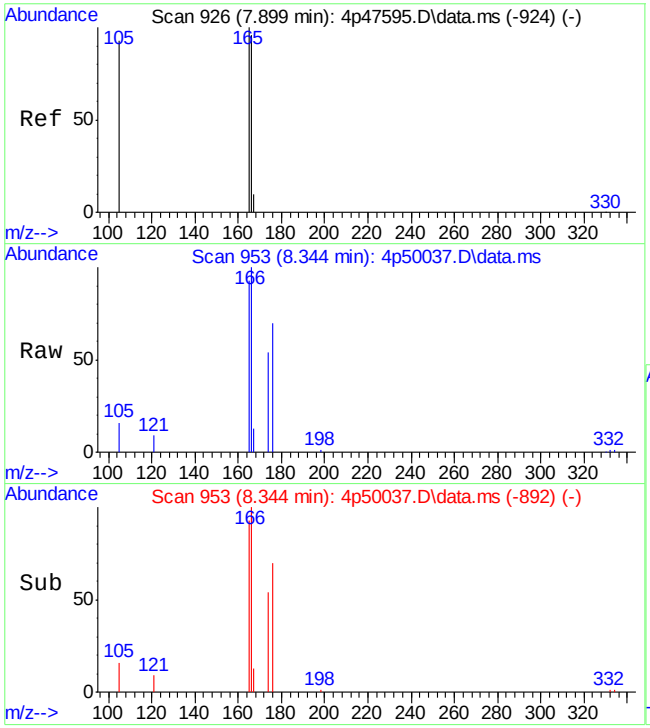


#16
Acenaphthene
Concen: 1.98 ppm
RT: 7.840 min Scan# 890
Delta R.T. -0.000 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:153 Resp: 69

Ion	Ratio	Lower	Upper
153	100		
152	37.5	18.5	78.5
154	96.9	59.1	119.1

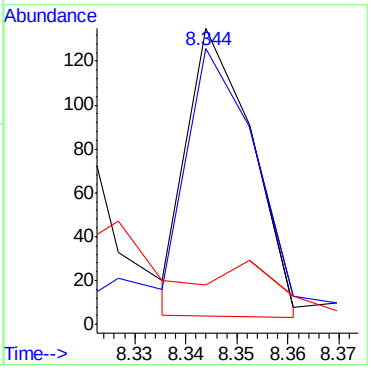


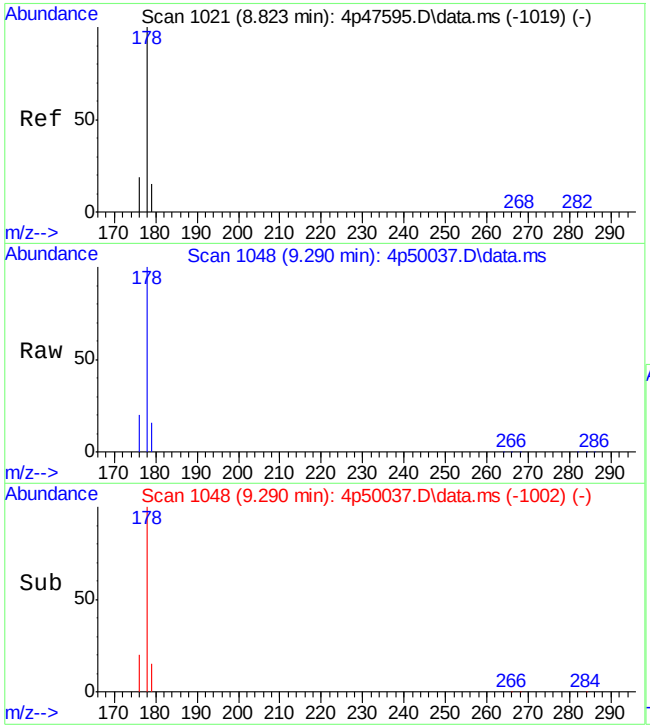


#17
Fluorene
Concen: 2.71 ppm
RT: 8.344 min Scan# 953
Delta R.T. -0.009 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:166 Resp: 114

Ion	Ratio	Lower	Upper
166	100		
165	92.1	66.9	126.9
167	1.2	0.0	41.7

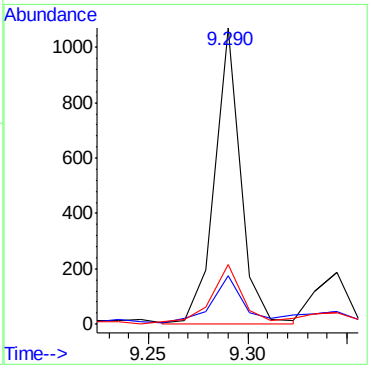


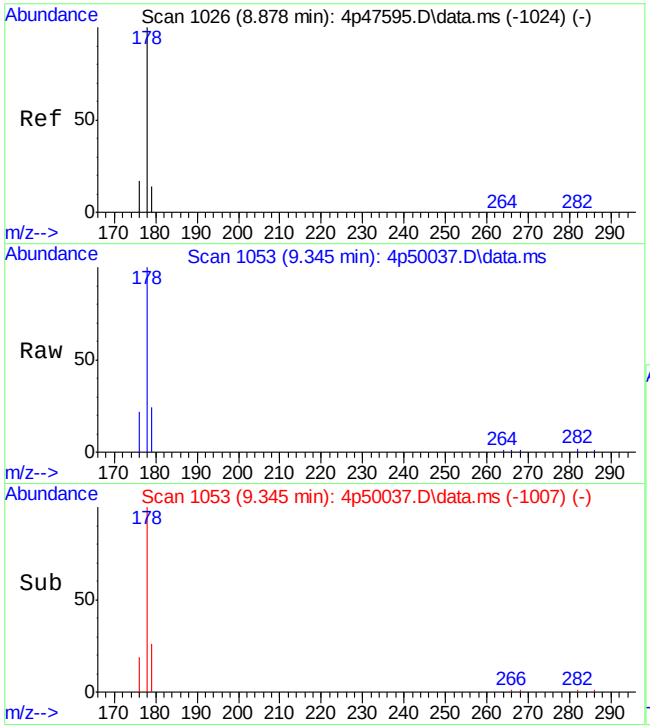


#23
Phenanthrene
Concen: 13.89 ppm
RT: 9.290 min Scan# 1048
Delta R.T. -0.000 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:178 Resp: 964

Ion	Ratio	Lower	Upper
178	100		
179	14.5	0.0	46.0
176	19.0	0.0	45.6

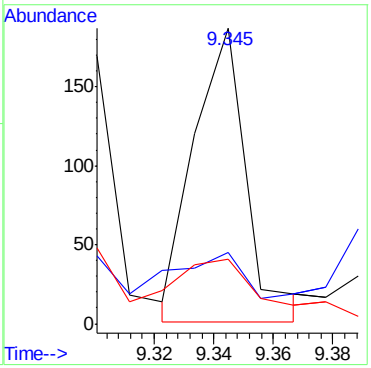


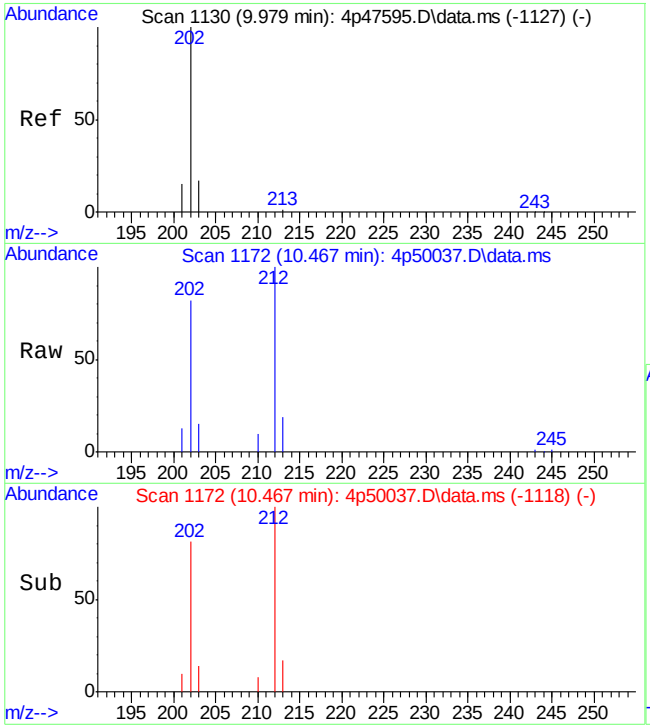


#24
Anthracene
Concen: 3.39 ppm
RT: 9.345 min Scan# 1053
Delta R.T. -0.000 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:178 Resp: 226

Ion	Ratio	Lower	Upper
178	100		
179	10.9	0.0	43.0
176	14.4	0.0	48.4

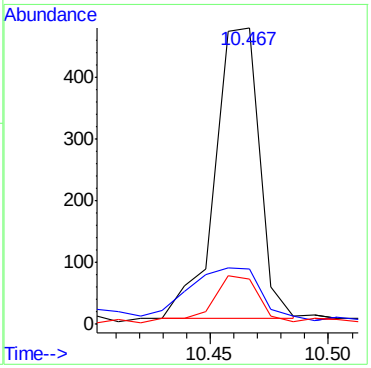


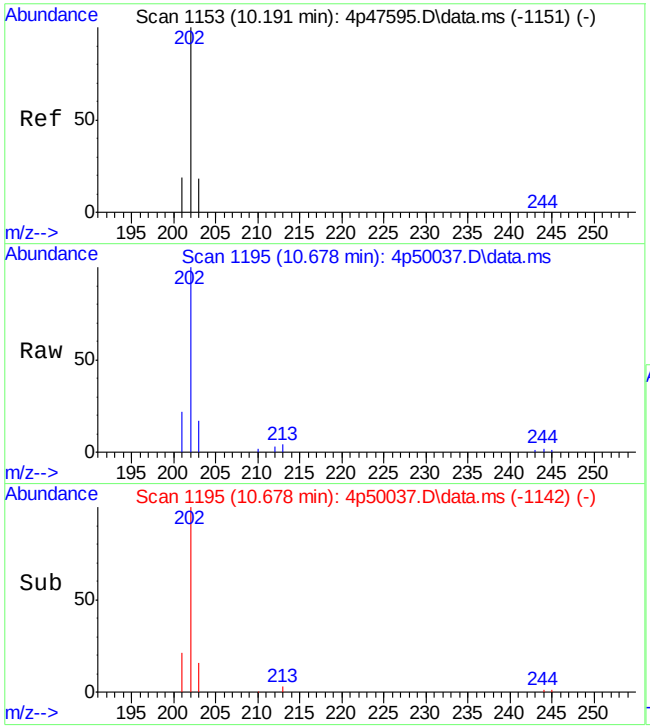


#25
Fluoranthene
Concen: 8.61 ppm
RT: 10.467 min Scan# 1172
Delta R.T. -0.000 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:202 Resp: 622

Ion	Ratio	Lower	Upper
202	100		
203	15.3	0.0	47.6
201	14.0	0.0	42.9

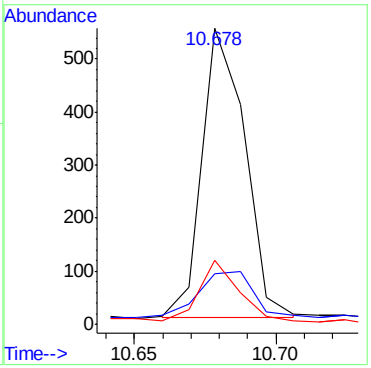


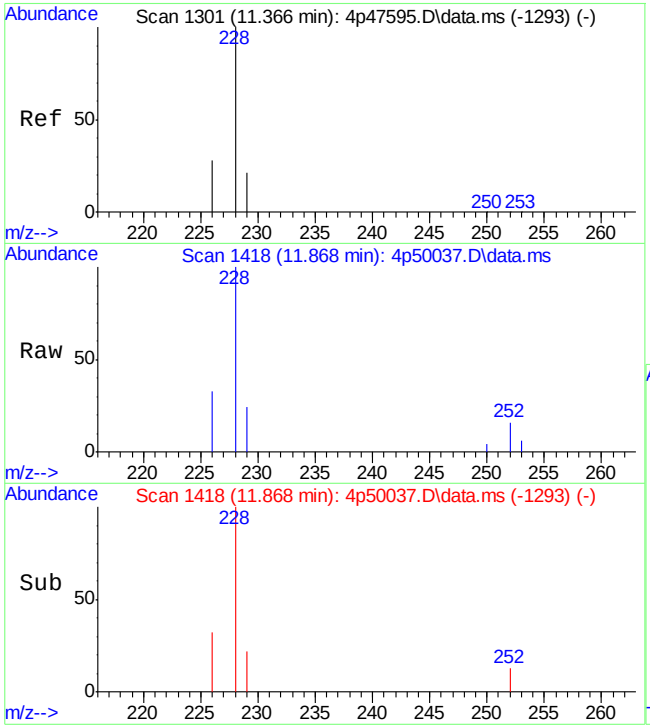


#26
Pyrene
Concen: 7.29 ppm
RT: 10.678 min Scan# 1195
Delta R.T. -0.009 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:202 Resp: 580

Ion	Ratio	Lower	Upper
202	100		
203	14.5	0.0	47.6
201	21.1	0.0	46.0

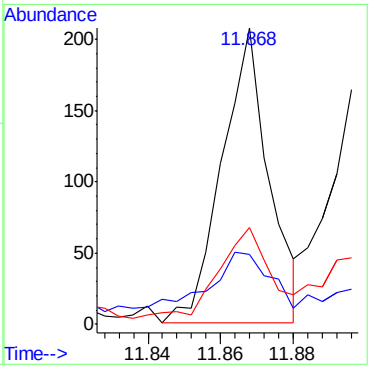


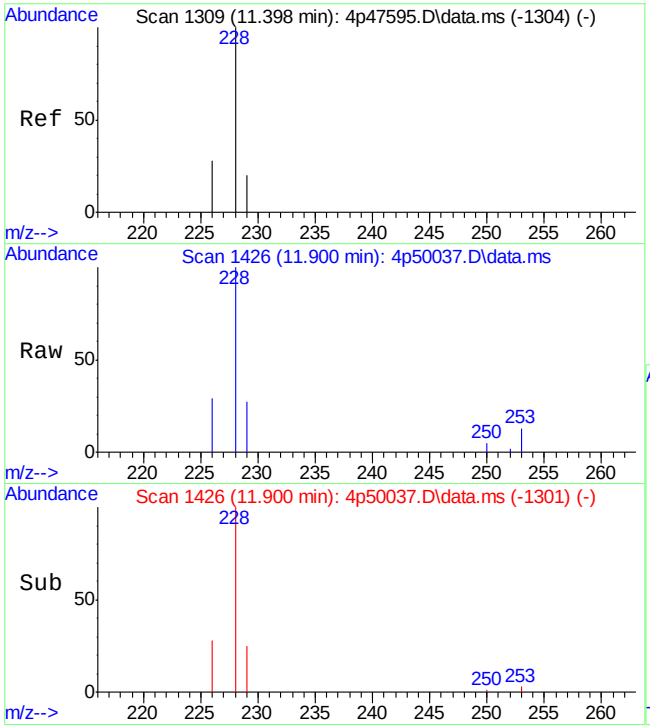


#28
Benzo[a]anthracene
Concen: 2.62 ppm
RT: 11.868 min Scan# 1418
Delta R.T. -0.000 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:228 Resp: 186

Ion	Ratio	Lower	Upper
228	100		
229	18.7	0.0	49.8
226	29.0	0.0	53.3

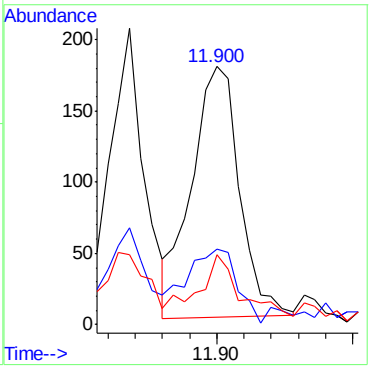


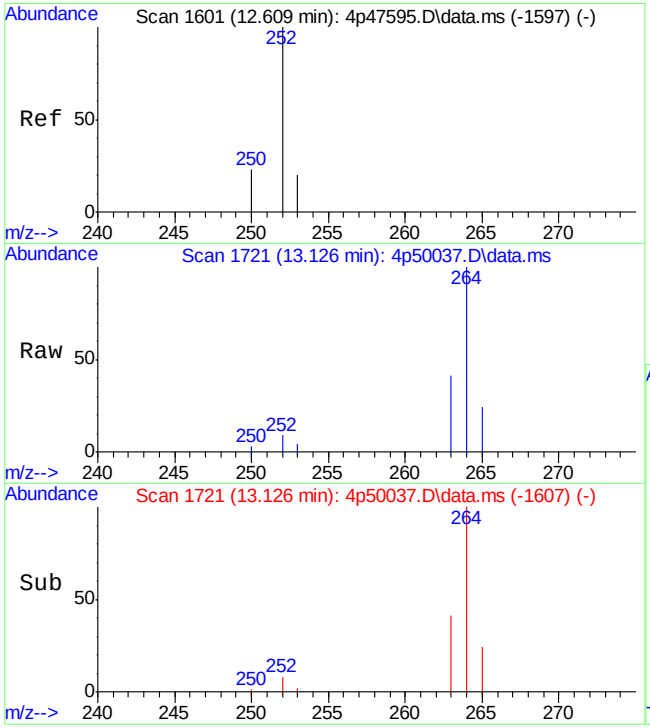


#29
Chrysene
Concen: 3.10 ppm
RT: 11.900 min Scan# 1426
Delta R.T. -0.000 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:228 Resp: 216

Ion	Ratio	Lower	Upper
228	100		
226	25.4	0.0	58.5
229	26.4	0.0	48.7

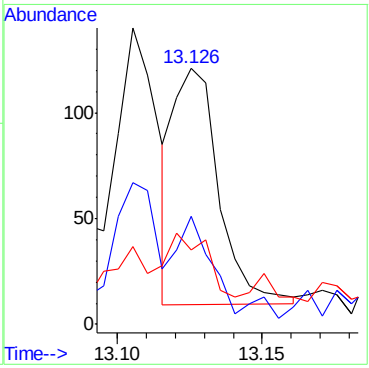


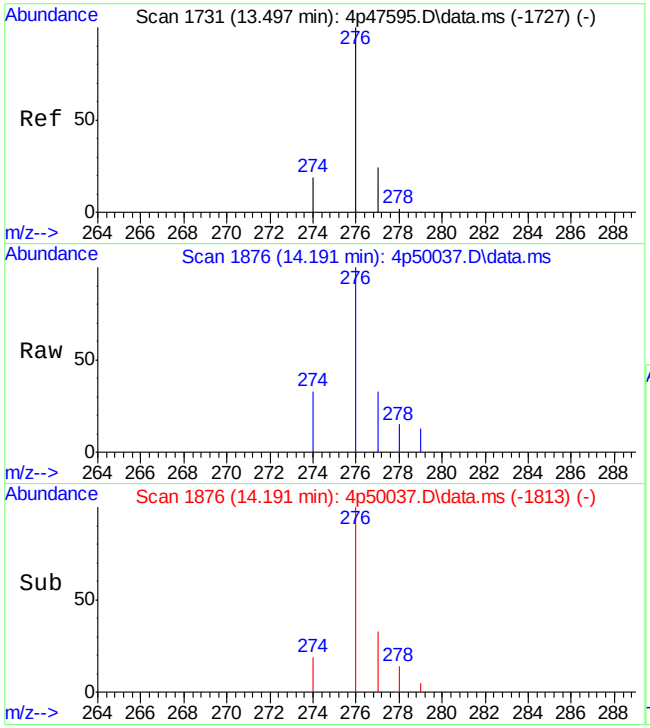


#33
Benzo[a]pyrene
Concen: 2.94 ppm
RT: 13.126 min Scan# 1721
Delta R.T. -0.000 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:252 Resp: 121

Ion	Ratio	Lower	Upper
252	100		
253	47.2	0.0	52.8
250	20.1	0.0	50.6

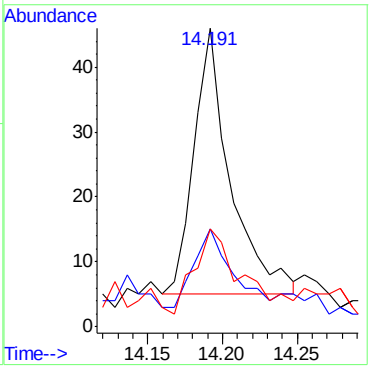


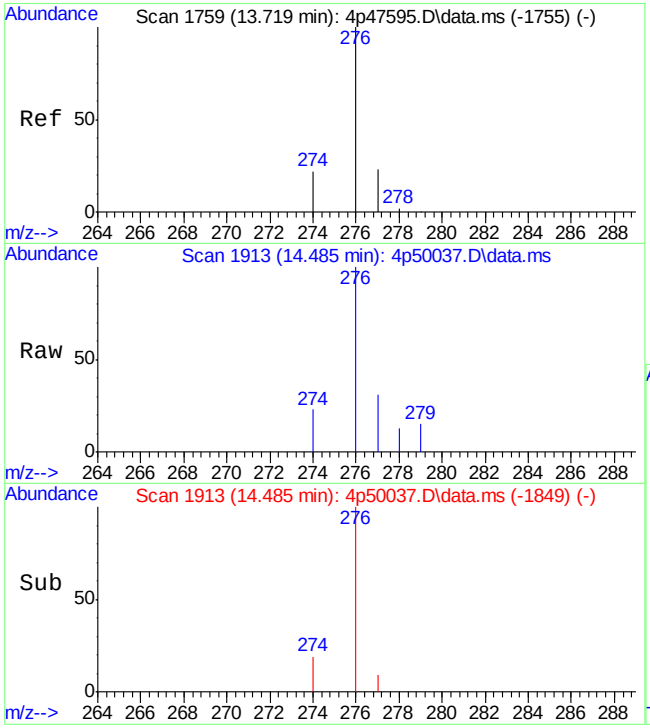


#34
Indeno[1,2,3-cd]pyrene
Concen: 1.41 ppm
RT: 14.191 min Scan# 1876
Delta R.T. -0.000 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:276 Resp: 69

Ion	Ratio	Lower	Upper
276	100		
274	27.5	0.0	49.3
277	28.8	0.0	53.2

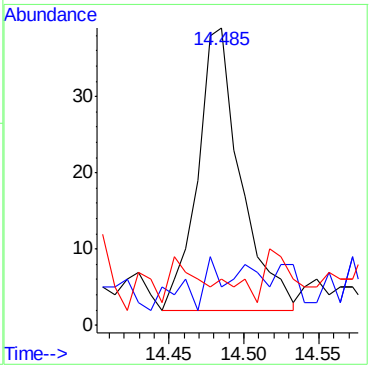




#36
Benzo[g,h,i]perylene
Concen: 1.78 ppm
RT: 14.485 min Scan# 1913
Delta R.T. 0.008 min
Lab File: 4p50037.D
Acq: 12 Dec 2021 4:42 pm

Tgt Ion:276 Resp: 74

Ion	Ratio	Lower	Upper
276	100		
278	0.0	0.0	32.5
279	4.1	0.0	30.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2607\
Data File : 4p49809.D
Acq On : 3 Dec 2021 8:33 am
Operator : chriss2
Sample : jd35920-6
Misc : op36899a,e4p2607,290,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 03 16:01:06 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 03 15:30:51 2021
Response via : Initial Calibration

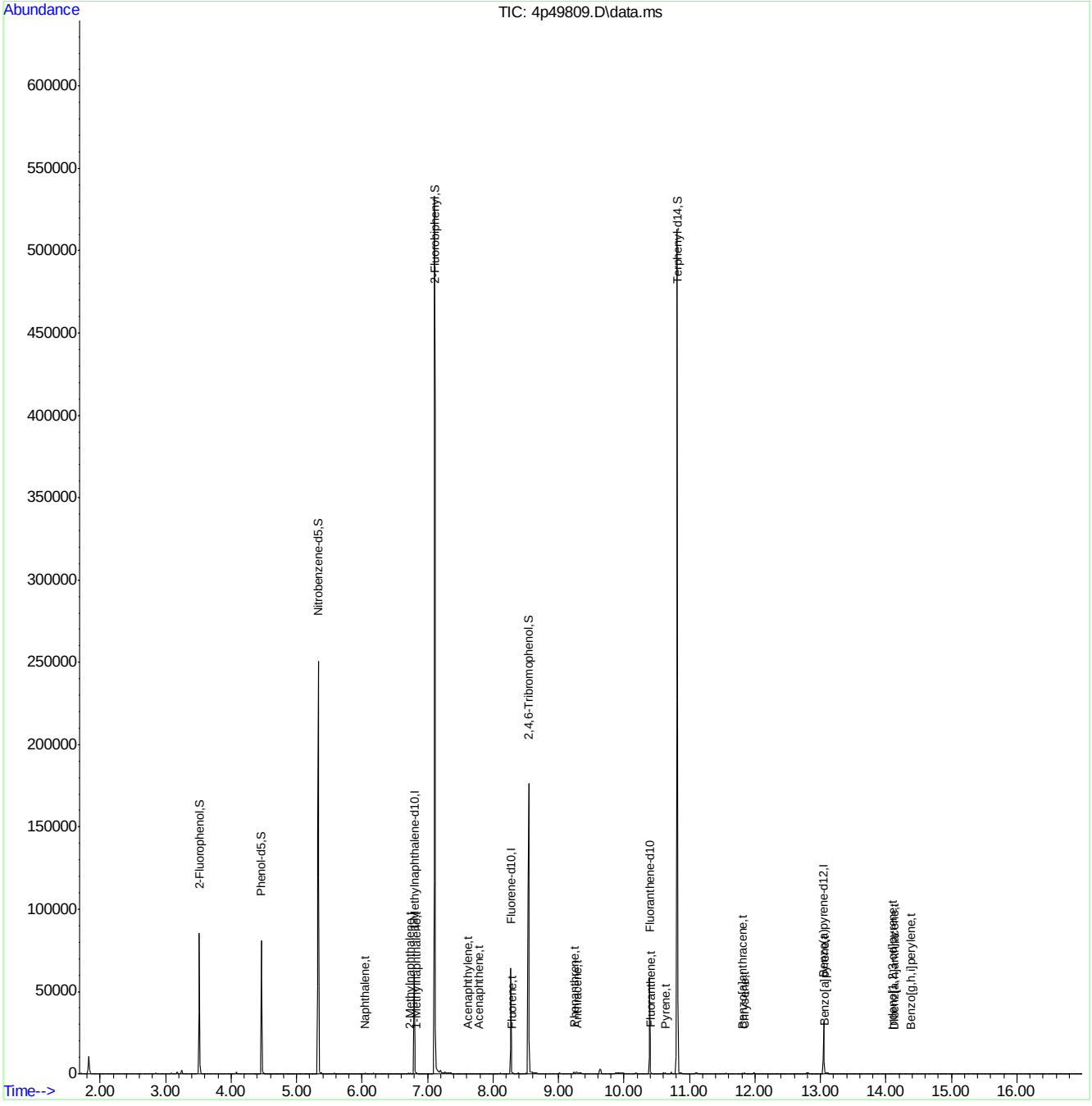
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.800	150	19670	800.00	ppm	0.00
13) Fluorene-d10	8.271	176	26786	800.00	ppm	0.00
20) Fluoranthene-d10	10.390	212	38966	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.048	264	17593	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.517	112	41090	3367.51	ppm	0.00
Spiked Amount 50.000			Recovery	= 6735.02%		
4) Phenol-d5	4.464	99	55305	2389.12	ppm	0.00
Spiked Amount 50.000			Recovery	= 4778.24%		
7) Nitrobenzene-d5	5.330	82	156611	8290.45	ppm	0.00
Spiked Amount 50.000			Recovery	= 16580.90%		
14) 2-Fluorobiphenyl	7.109	172	288491	8443.53	ppm	0.00
Spiked Amount 50.000			Recovery	= 16887.06%		
19) 2,4,6-Tribromophenol	8.543	330	66793	13065.77	ppm	0.00
Spiked Amount 50.000			Recovery	= 26131.54%		
27) Terphenyl-d14	10.814	244	301688	10809.26	ppm	0.00
Spiked Amount 50.000			Recovery	= 21618.52%		
Target Compounds						Qvalue
8) Naphthalene	6.051	128	256	4.55	ppm	92
10) 2-Methylnaphthalene	6.734	141	109	3.71	ppm	91
11) 1-Methylnaphthalene	6.830	141	63	2.23	ppm	88
15) Acenaphthylene	7.617	152	55	1.10	ppm	93
16) Acenaphthene	7.791	153	63	1.98	ppm	85
17) Fluorene	8.296	166	122	3.18	ppm	96
23) Phenanthrene	9.238	178	852	16.23	ppm	91
24) Anthracene	9.282	178	210	4.17	ppm	81
25) Fluoranthene	10.409	202	482	8.82	ppm	97
26) Pyrene	10.630	202	386	6.42	ppm	90
28) Benzo[a]anthracene	11.809	228	188	3.50	ppm	93
29) Chrysene	11.841	228	211	4.01	ppm	78
33) Benzo[a]pyrene	13.063	252	148	4.44	ppm	79
34) Indeno[1,2,3-cd]pyrene	14.102	276	125	3.15	ppm	91
35) Dibenz[a,h]anthracene	14.125	278	72	2.33	ppm	94
36) Benzo[g,h,i]perylene	14.387	276	111	3.30	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

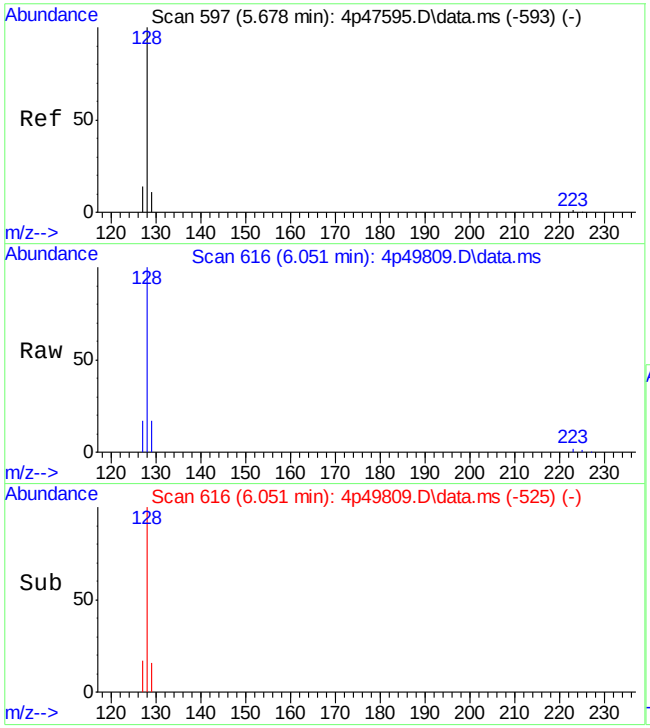
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2607\
Data File : 4p49809.D
Acq On : 3 Dec 2021 8:33 am
Operator : chriss2
Sample : jd35920-6
Misc : op36899a,e4p2607,290,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 03 16:01:06 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 03 15:30:51 2021
Response via : Initial Calibration



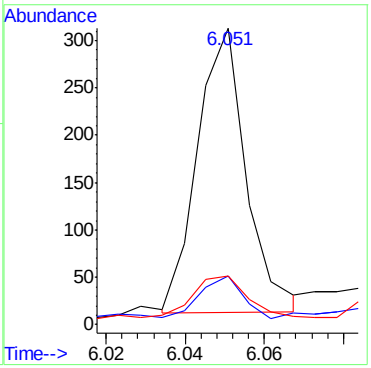
M4P2551SIMLVI.M Fri Dec 03 16:01:17 2021 YING Page: 2

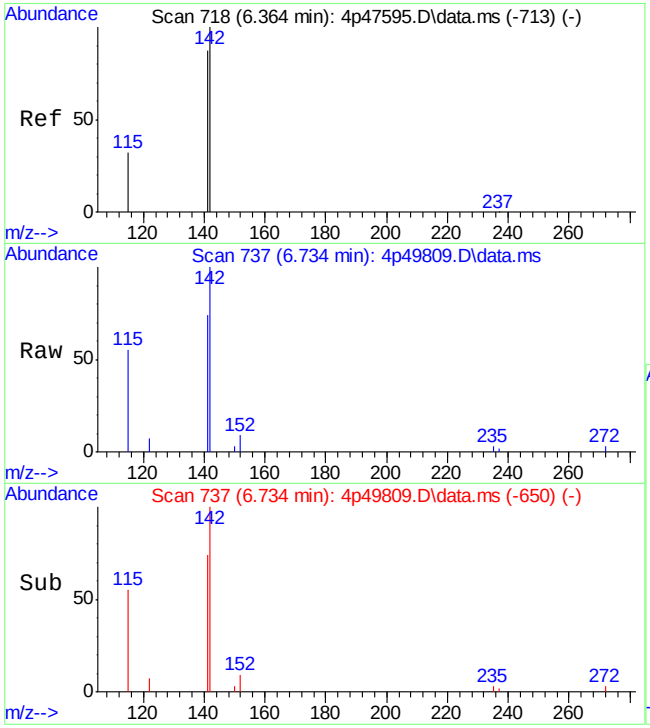


#8
Naphthalene
Concen: 4.55 ppm
RT: 6.051 min Scan# 616
Delta R.T. 0.000 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:128 Resp: 256

Ion	Ratio	Lower	Upper
128	100		
129	14.5	0.0	41.1
127	14.7	0.0	42.0

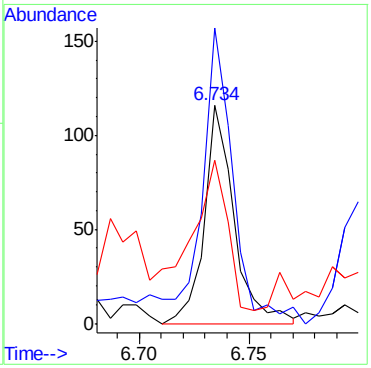


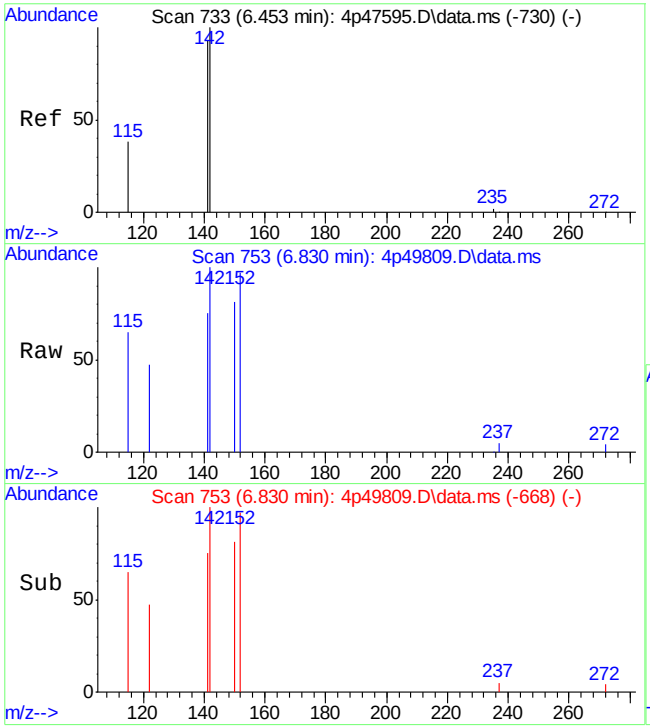


#10
2-Methylnaphthalene
Concen: 3.71 ppm
RT: 6.734 min Scan# 737
Delta R.T. -0.006 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:141 Resp: 109

Ion	Ratio	Lower	Upper
141	100		
142	127.5	96.1	156.1
115	57.6	7.9	67.9

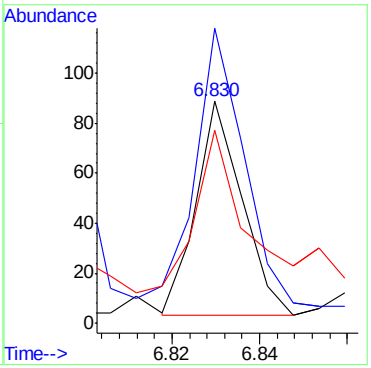


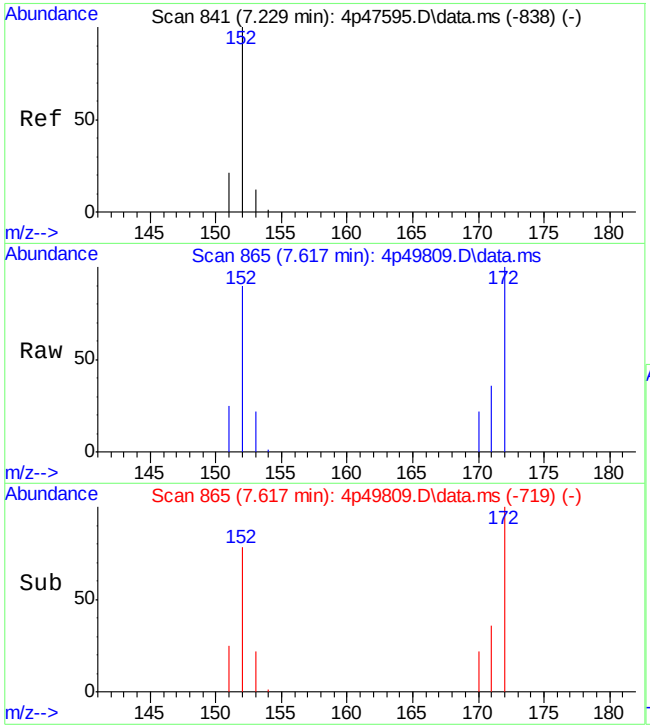


#11
1-Methylnaphthalene
Concen: 2.23 ppm
RT: 6.830 min Scan# 753
Delta R.T. -0.006 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:141 Resp: 63

Ion	Ratio	Lower	Upper
141	100		
142	124.6	93.8	153.8
115	67.8	9.4	69.4

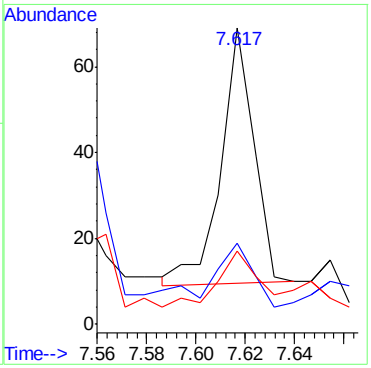


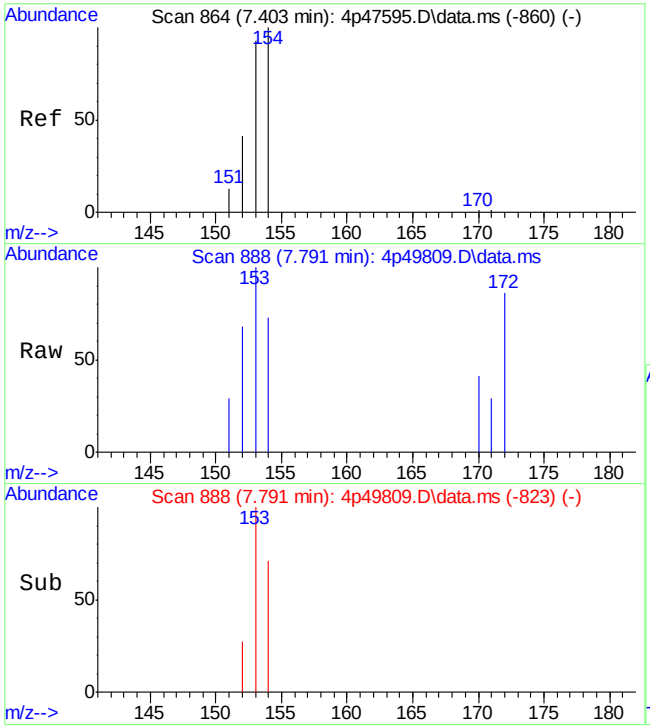


#15
Acenaphthylene
Concen: 1.10 ppm
RT: 7.617 min Scan# 865
Delta R.T. -0.007 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:152 Resp: 55

Ion	Ratio	Lower	Upper
152	100		
151	21.4	0.0	50.8
153	18.8	0.0	42.2

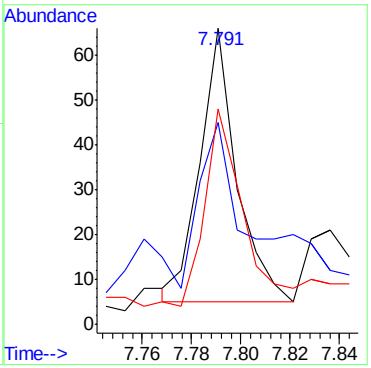


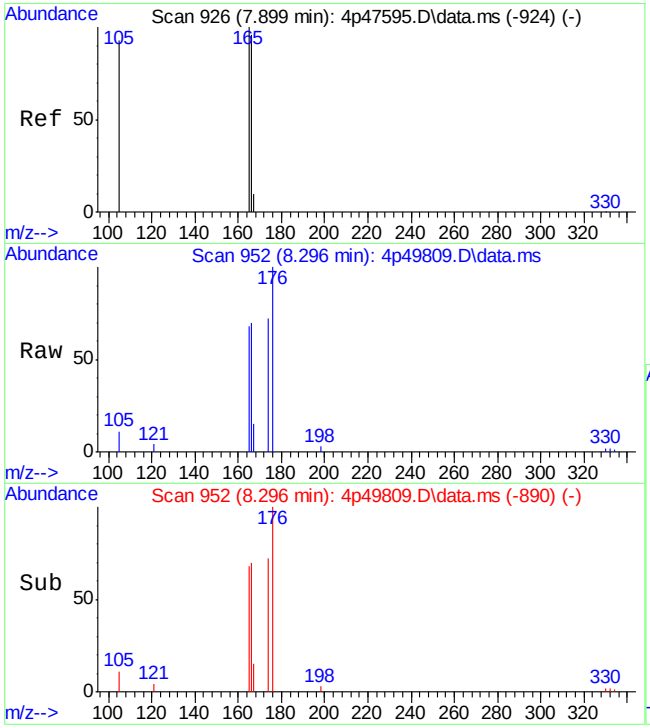


#16
Acenaphthene
Concen: 1.98 ppm
RT: 7.791 min Scan# 888
Delta R.T. -0.007 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:153 Resp: 63

Ion	Ratio	Lower	Upper
153	100		
152	46.2	18.5	78.5
154	69.7	59.1	119.1

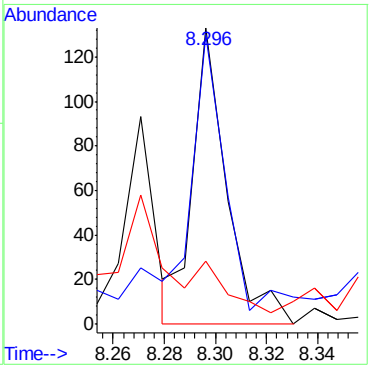


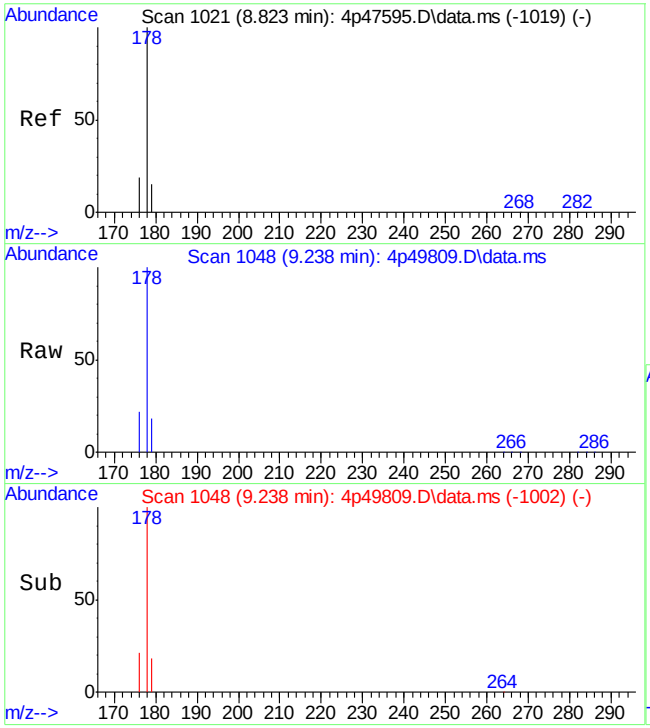


#17
Fluorene
Concen: 3.18 ppm
RT: 8.296 min Scan# 952
Delta R.T. -0.008 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:166 Resp: 122

Ion	Ratio	Lower	Upper
166	100		
165	93.1	66.9	126.9
167	8.5	0.0	41.7

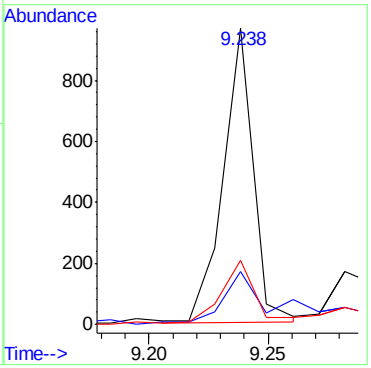


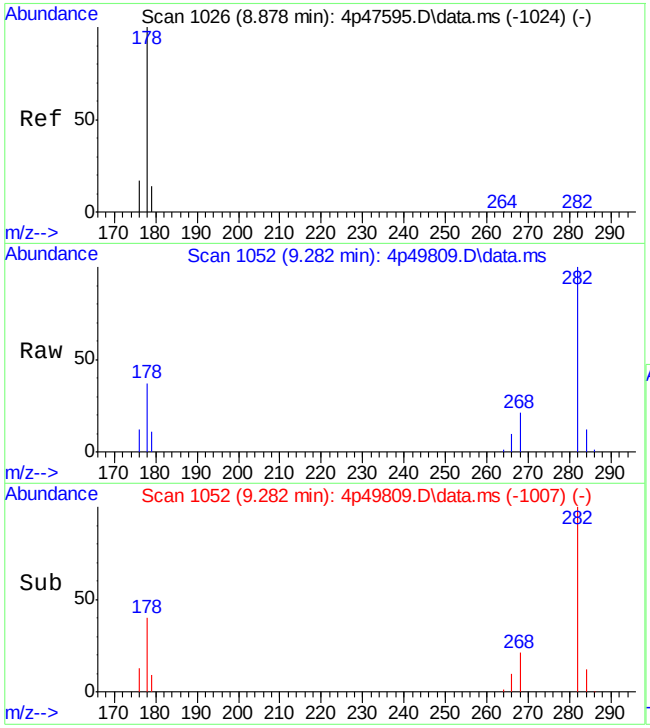


#23
Phenanthrene
Concen: 16.23 ppm
RT: 9.238 min Scan# 1048
Delta R.T. 0.000 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:178 Resp: 852

Ion	Ratio	Lower	Upper
178	100		
179	13.4	0.0	46.0
176	20.5	0.0	45.6

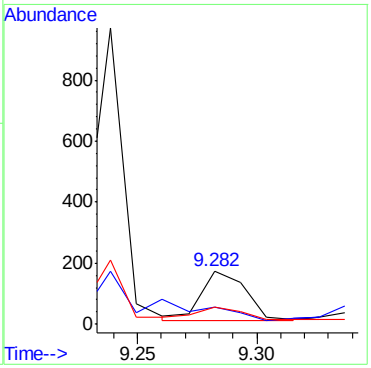


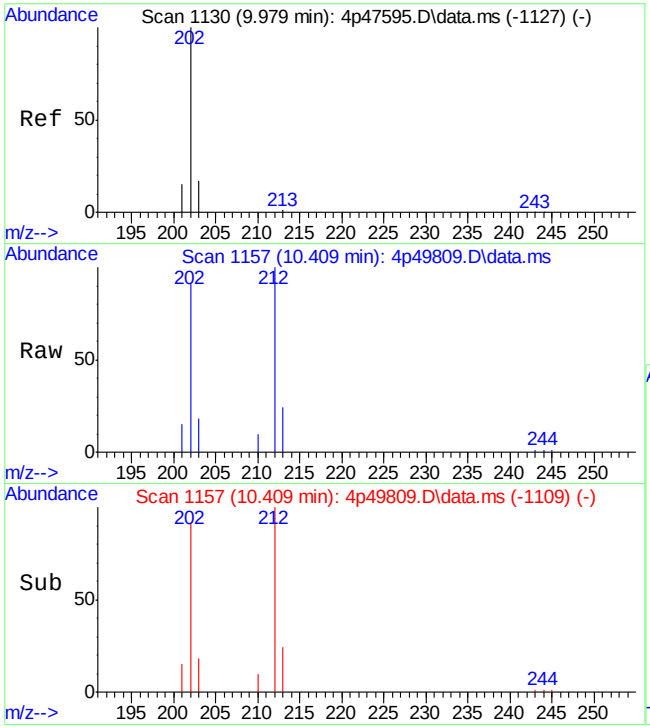


#24
Anthracene
Concen: 4.17 ppm
RT: 9.282 min Scan# 1052
Delta R.T. -0.011 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:178 Resp: 210

Ion	Ratio	Lower	Upper
178	100		
179	2.6	0.0	43.0
176	25.0	0.0	48.4

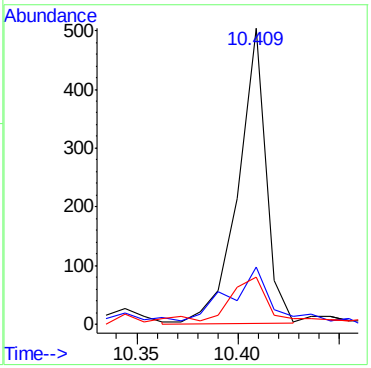


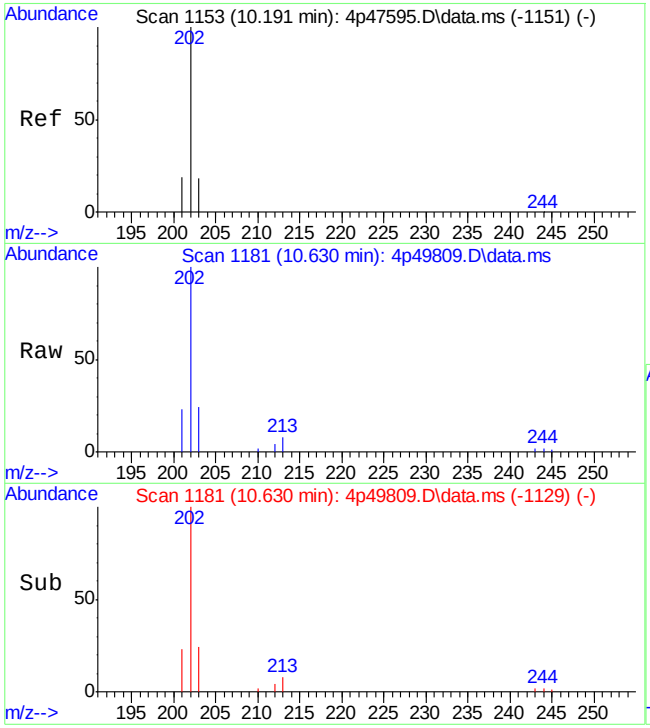


#25
Fluoranthene
Concen: 8.82 ppm
RT: 10.409 min Scan# 1157
Delta R.T. 0.000 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:202 Resp: 482

Ion	Ratio	Lower	Upper
202	100		
203	16.8	0.0	47.6
201	14.4	0.0	42.9

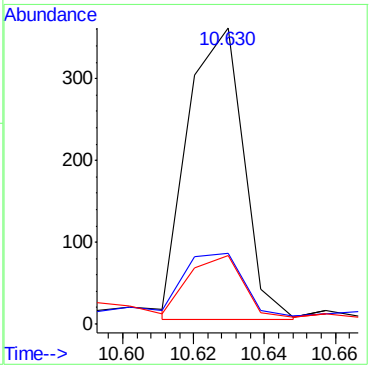


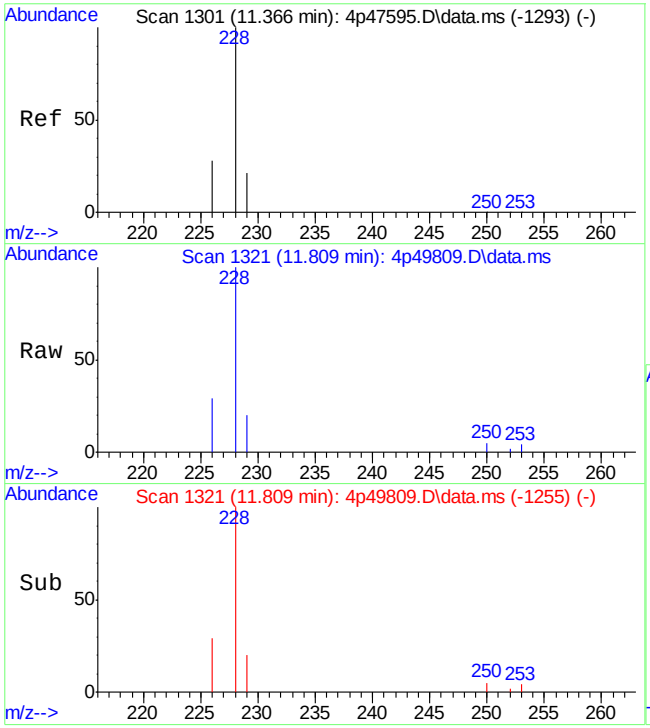


#26
Pyrene
Concen: 6.42 ppm
RT: 10.630 min Scan# 1181
Delta R.T. 0.000 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:202 Resp: 386

Ion	Ratio	Lower	Upper
202	100		
203	21.2	0.0	47.6
201	21.2	0.0	46.0

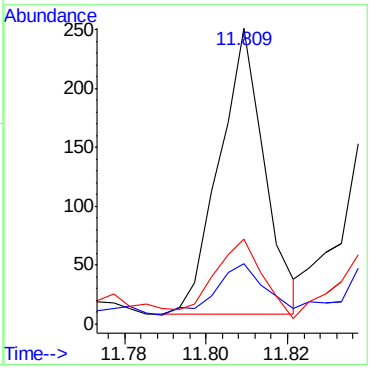


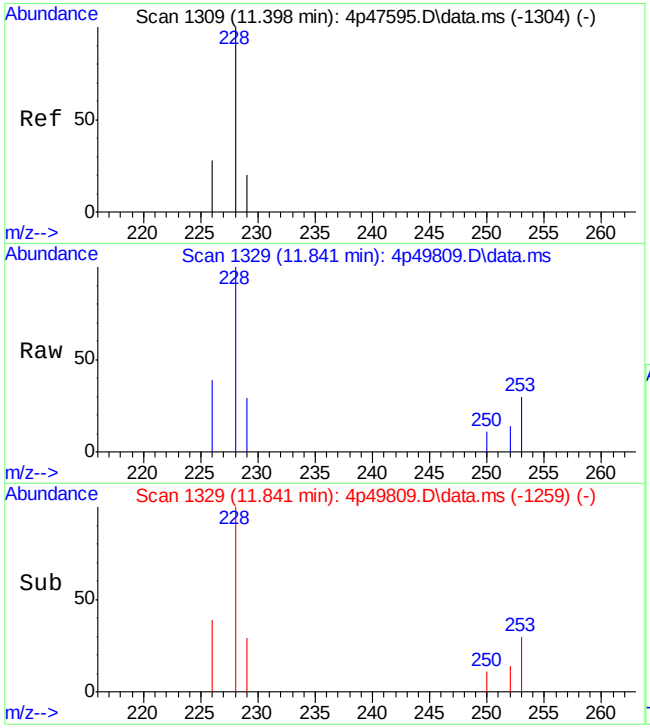


#28
Benzo[a]anthracene
Concen: 3.50 ppm
RT: 11.809 min Scan# 1321
Delta R.T. -0.004 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:228 Resp: 188

Ion	Ratio	Lower	Upper
228	100		
229	18.0	0.0	49.8
226	27.9	0.0	53.3

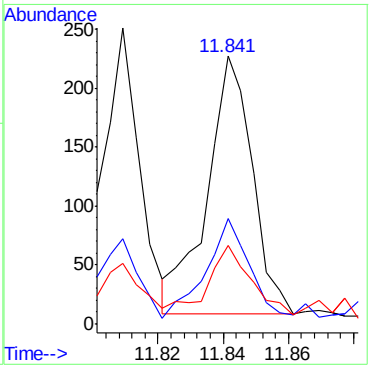


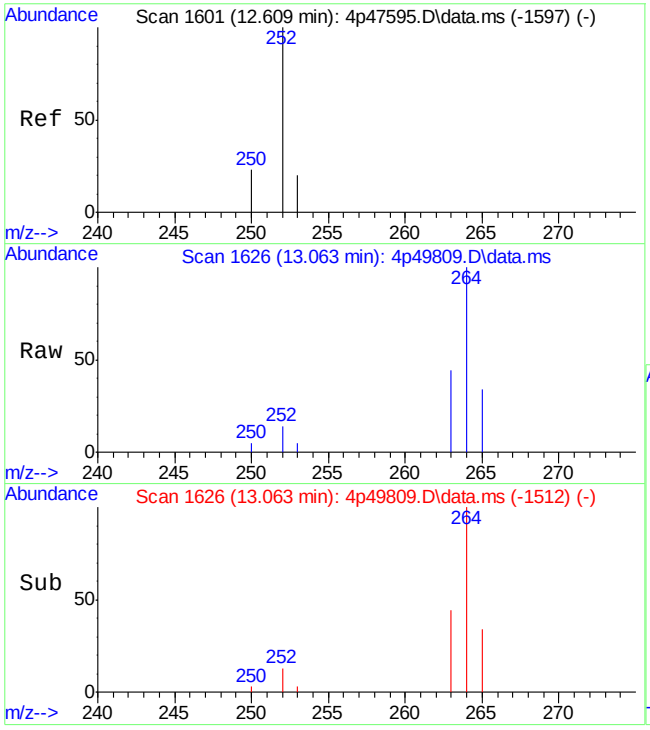


#29
Chrysene
Concen: 4.01 ppm
RT: 11.841 min Scan# 1329
Delta R.T. -0.008 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:228 Resp: 211

Ion	Ratio	Lower	Upper
228	100		
226	40.9	0.0	58.5
229	27.5	0.0	48.7

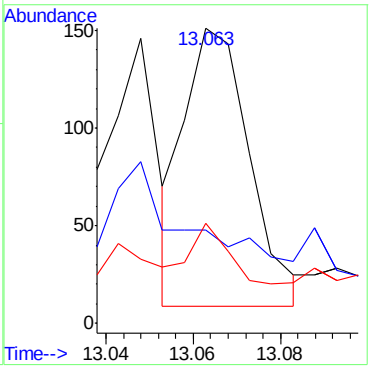


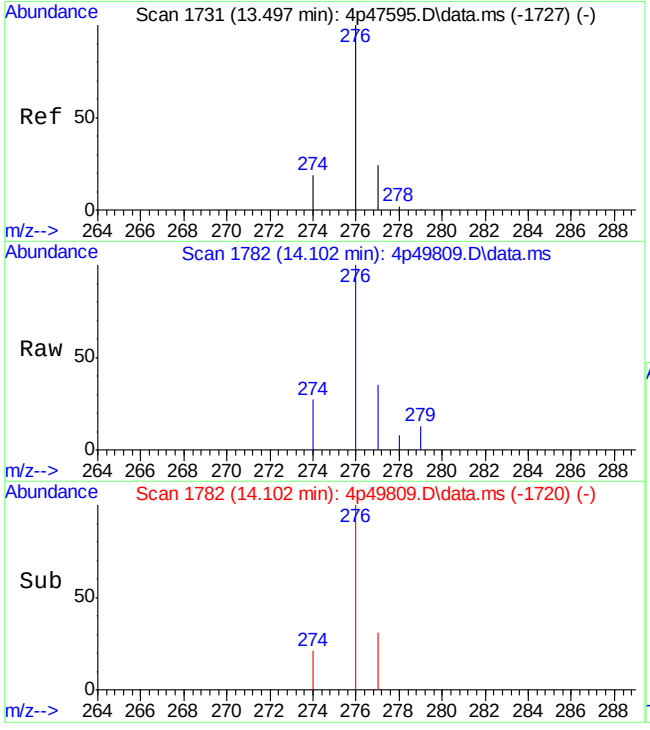


#33
Benzo[a]pyrene
Concen: 4.44 ppm
RT: 13.063 min Scan# 1626
Delta R.T. -0.010 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:252 Resp: 148

Ion	Ratio	Lower	Upper
252	100		
253	7.7	0.0	52.8
250	25.1	0.0	50.6

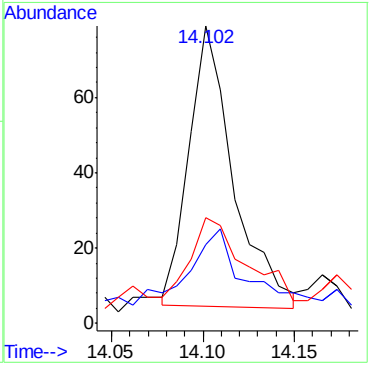


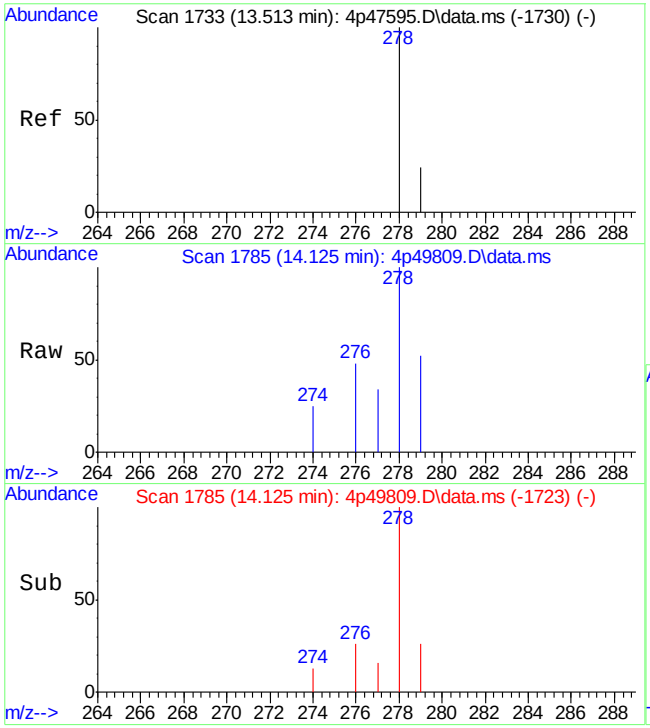


#34
Indeno[1,2,3-cd]pyrene
Concen: 3.15 ppm
RT: 14.102 min Scan# 1782
Delta R.T. -0.008 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:276 Resp: 125

Ion	Ratio	Lower	Upper
276	100		
274	18.2	0.0	49.3
277	30.1	0.0	53.2

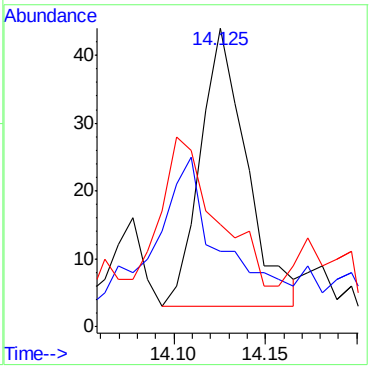


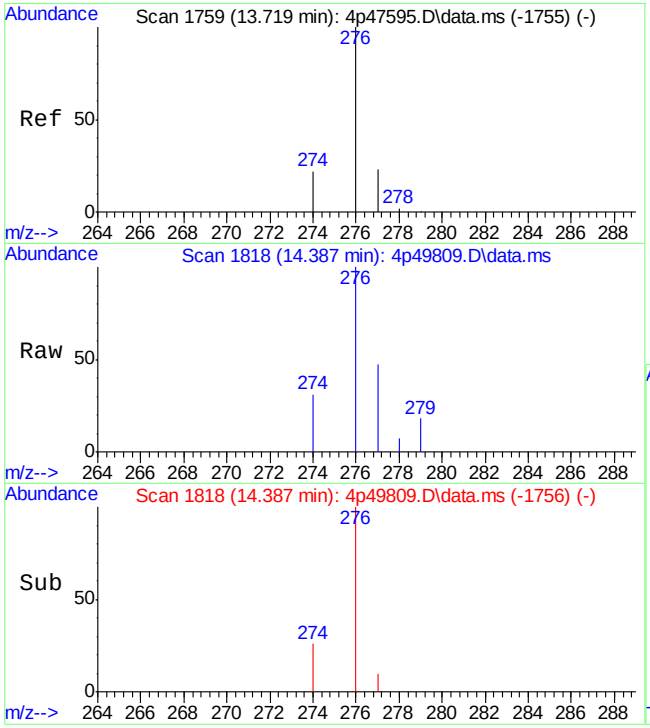


#35
Dibenz[a,h]anthracene
Concen: 2.33 ppm
RT: 14.125 min Scan# 1785
Delta R.T. -0.008 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:278 Resp: 72

Ion	Ratio	Lower	Upper
278	100		
274	2.6	0.0	35.2
277	5.1	0.0	36.7

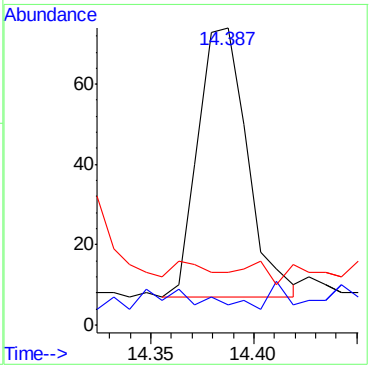




#36
Benzo[g,h,i]perylene
Concen: 3.30 ppm
RT: 14.387 min Scan# 1818
Delta R.T. -0.008 min
Lab File: 4p49809.D
Acq: 3 Dec 2021 8:33 am

Tgt Ion:276 Resp: 111

Ion	Ratio	Lower	Upper
276	100		
278	0.0	0.0	32.5
279	0.0	0.0	30.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50038.D
Acq On : 12 Dec 2021 5:05 pm
Operator : kristis
Sample : jd35920-6
Misc : op37045a,e4p2620,250,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 13 09:52:57 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

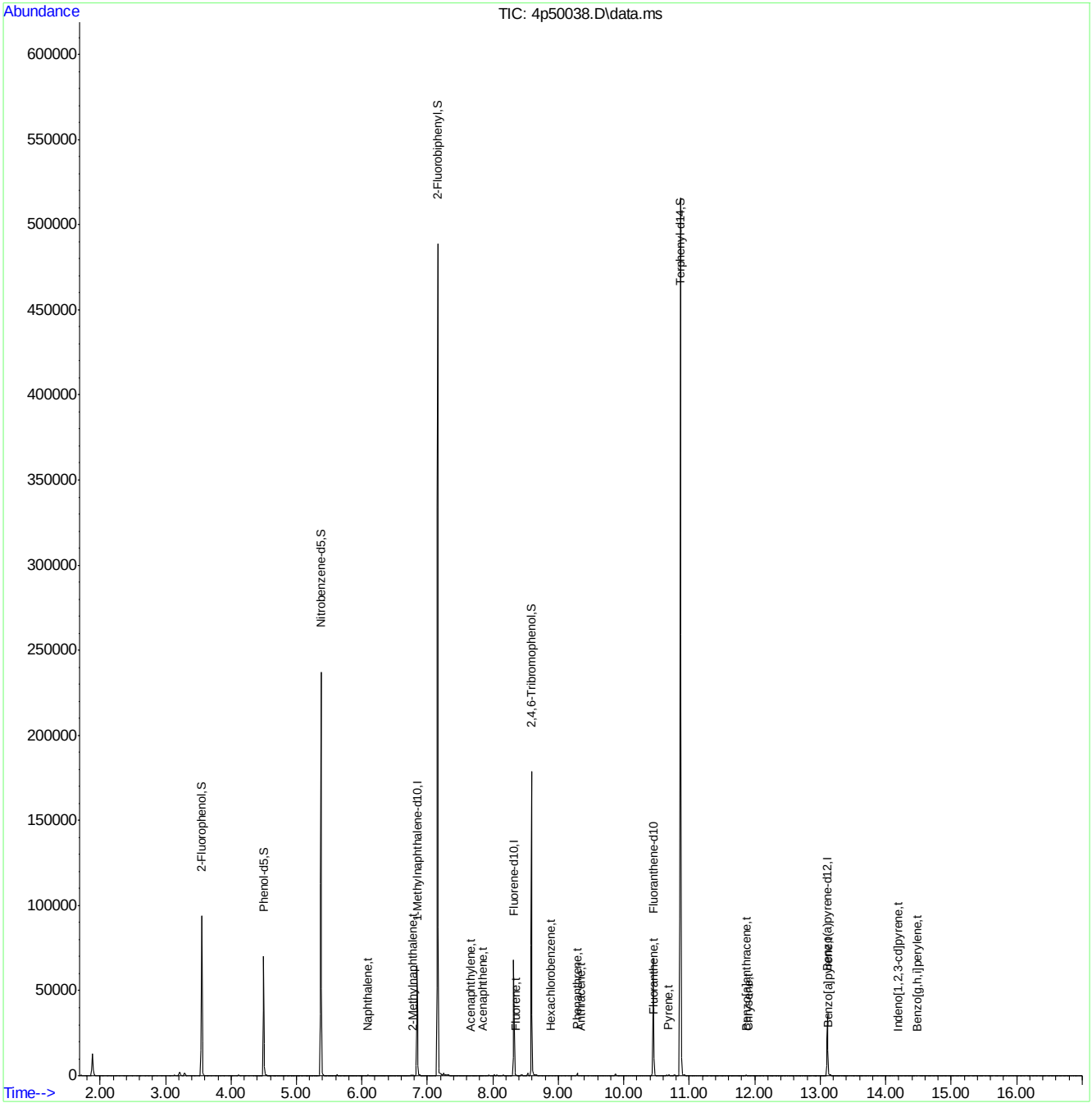
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.841	150	18579	800.00	ppm	0.00
13) Fluorene-d10	8.319	176	30029	800.00	ppm	0.00
20) Fluoranthene-d10	10.448	212	52151	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.106	264	22325	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.552	112	38289	3322.22	ppm	0.00
Spiked Amount 50.000			Recovery	= 6644.44%		
4) Phenol-d5	4.497	99	48942	2238.40	ppm	0.00
Spiked Amount 50.000			Recovery	= 4476.80%		
7) Nitrobenzene-d5	5.374	82	150485	8433.95	ppm	0.00
Spiked Amount 50.000			Recovery	= 16867.90%		
14) 2-Fluorobiphenyl	7.159	172	251318	6561.18	ppm	0.00
Spiked Amount 50.000			Recovery	= 13122.36%		
19) 2,4,6-Tribromophenol	8.591	330	63220	11031.27	ppm	0.00
Spiked Amount 50.000			Recovery	= 22062.54%		
27) Terphenyl-d14	10.863	244	330088	8836.71	ppm	0.00
Spiked Amount 50.000			Recovery	= 17673.42%		
Target Compounds						Qvalue
8) Naphthalene	6.094	128	192	3.61	ppm	86
10) 2-Methylnaphthalene	6.782	141	96	3.46	ppm	89
15) Acenaphthylene	7.666	152	53	0.95	ppm	93
16) Acenaphthene	7.841	153	54	1.51	ppm	92
17) Fluorene	8.344	166	139	3.23	ppm	91
21) Hexachlorobenzene	8.885	284	56	3.40	ppm	86
23) Phenanthrene	9.290	178	1040	14.81	ppm	94
24) Anthracene	9.345	178	167	2.48	ppm	93
25) Fluoranthene	10.458	202	492	6.73	ppm	94
26) Pyrene	10.679	202	449	5.58	ppm	86
28) Benzo[a]anthracene	11.864	228	171	2.38	ppm	92
29) Chrysene	11.900	228	131	1.86	ppm	89
33) Benzo[a]pyrene	13.126	252	97	2.30	ppm	79
34) Indeno[1,2,3-cd]pyrene	14.192	276	55	1.09	ppm	91
36) Benzo[g,h,i]perylene	14.477	276	59	1.38	ppm	98

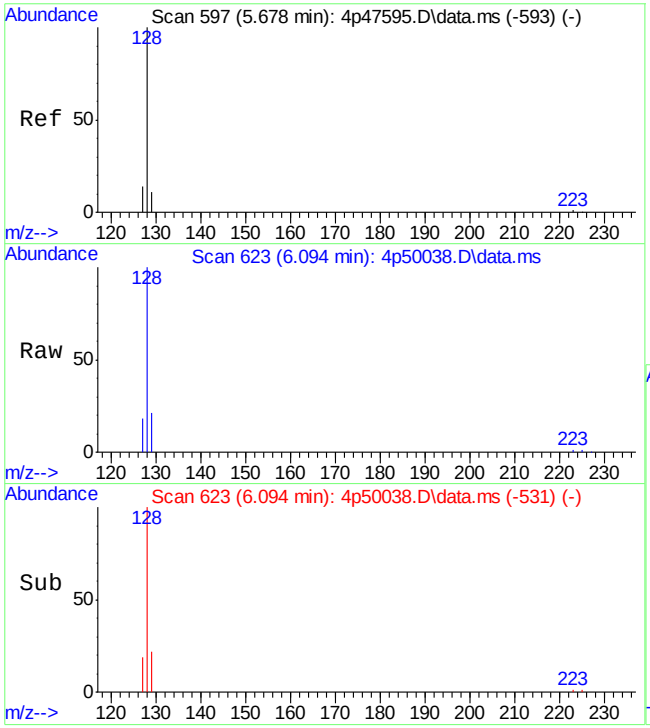
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50038.D
Acq On : 12 Dec 2021 5:05 pm
Operator : kristis
Sample : jd35920-6
Misc : op37045a,e4p2620,250,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 13 09:52:57 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

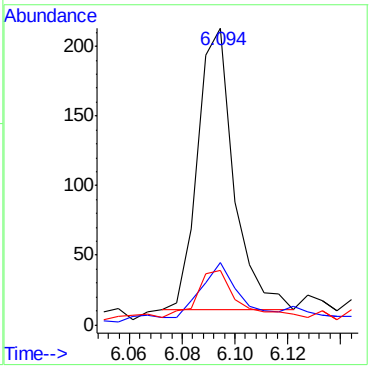


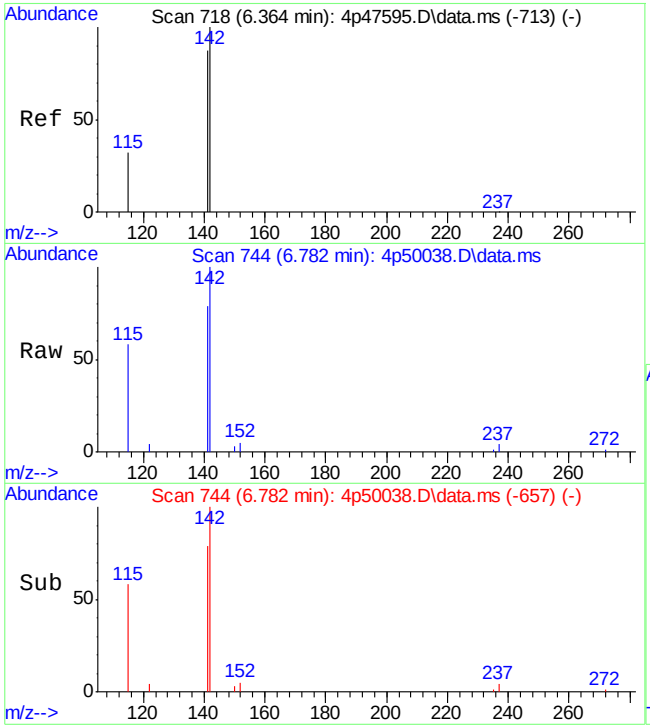


#8
Naphthalene
Concen: 3.61 ppm
RT: 6.094 min Scan# 623
Delta R.T. 0.000 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:128 Resp: 192

Ion	Ratio	Lower	Upper
128	100		
129	17.8	0.0	41.1
127	16.1	0.0	42.0

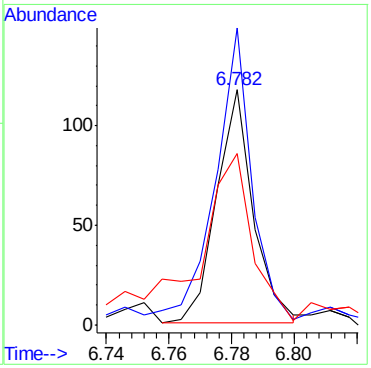


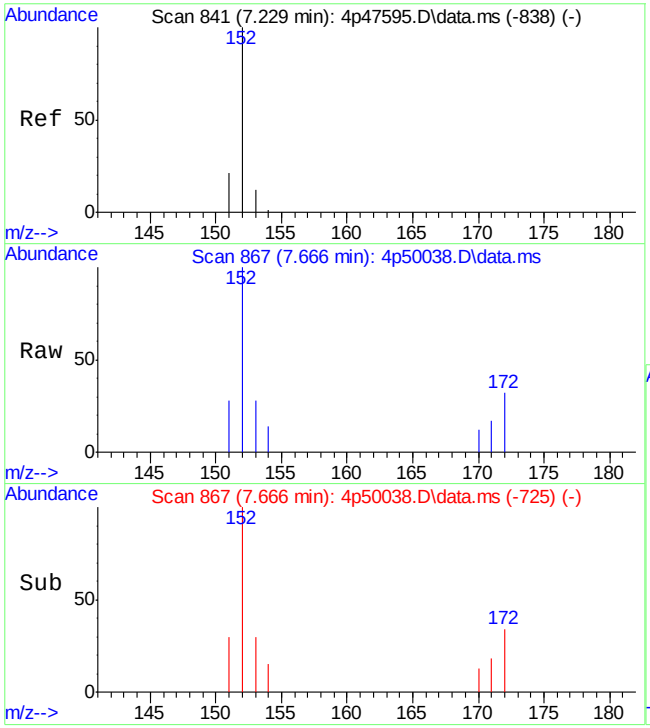


#10
2-Methylnaphthalene
Concen: 3.46 ppm
RT: 6.782 min Scan# 744
Delta R.T. 0.000 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:141 Resp: 96

Ion	Ratio	Lower	Upper
141	100		
142	125.2	96.1	156.1
115	63.9	7.9	67.9

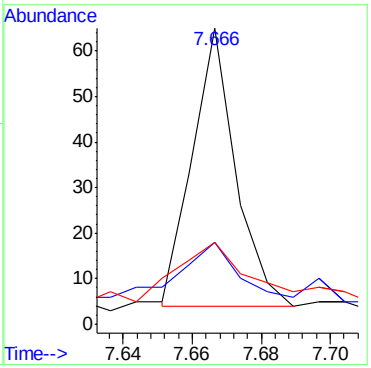


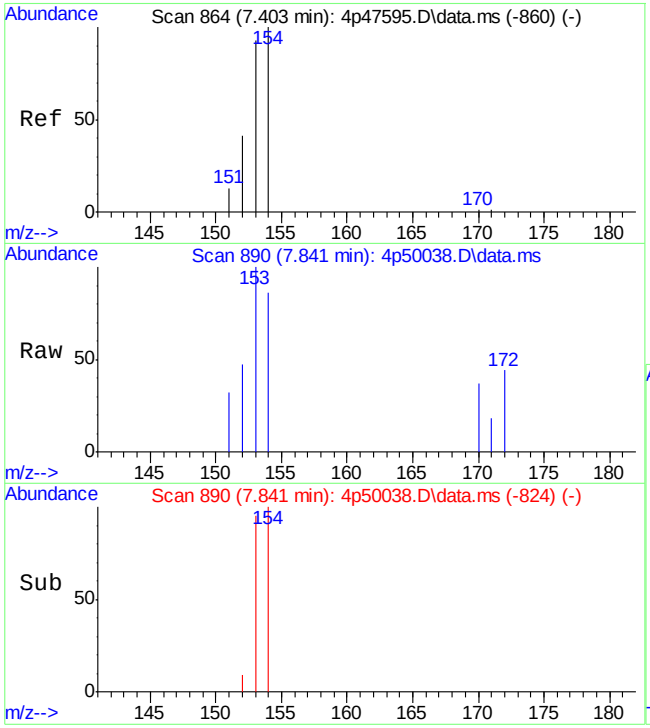


#15
Acenaphthylene
Concen: 0.95 ppm
RT: 7.666 min Scan# 867
Delta R.T. 0.000 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:152 Resp: 53

Ion	Ratio	Lower	Upper
152	100		
151	18.2	0.0	50.8
153	15.7	0.0	42.2

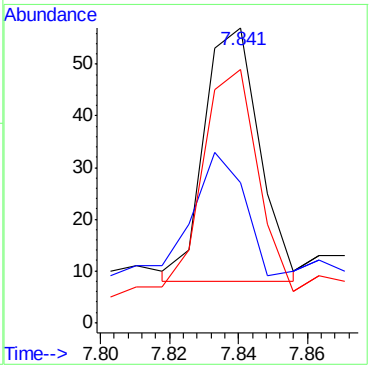


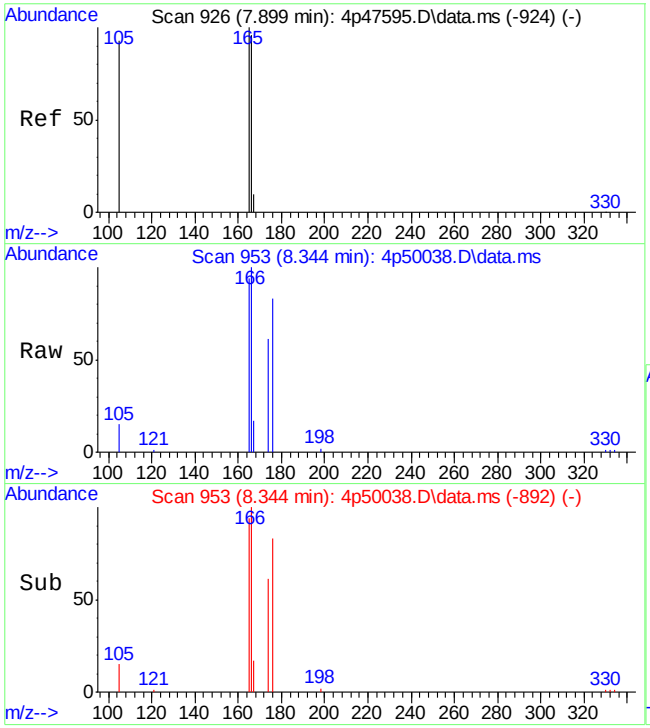


#16
Acenaphthene
Concen: 1.51 ppm
RT: 7.841 min Scan# 890
Delta R.T. 0.000 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:153 Resp: 54

Ion	Ratio	Lower	Upper
153	100		
152	35.1	18.5	78.5
154	90.4	59.1	119.1

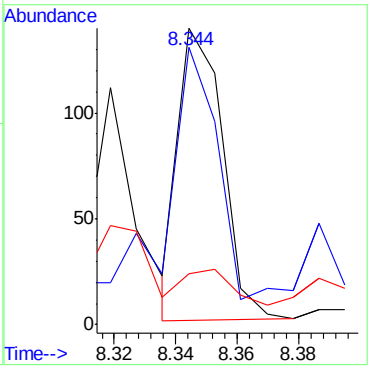


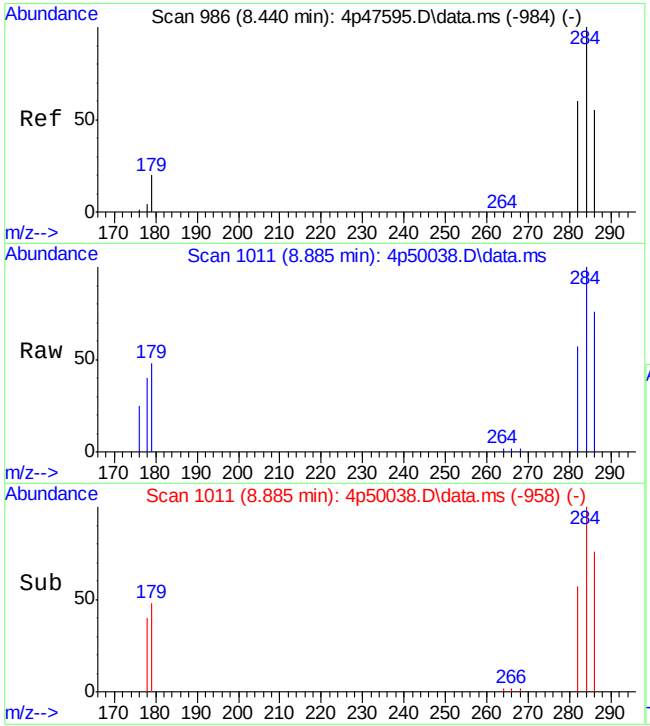


#17
Fluorene
Concen: 3.23 ppm
RT: 8.344 min Scan# 953
Delta R.T. -0.008 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:166 Resp: 139

Ion	Ratio	Lower	Upper
166	100		
165	87.4	66.9	126.9
167	8.7	0.0	41.7

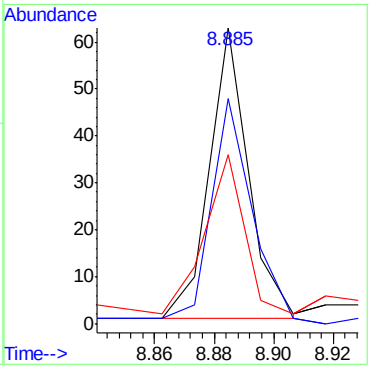


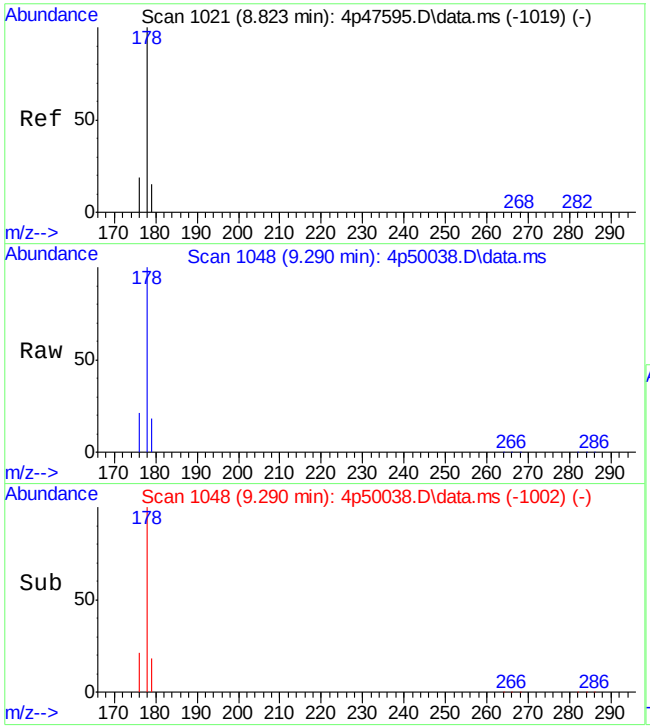


#21
Hexachlorobenzene
Concen: 3.40 ppm
RT: 8.885 min Scan# 1011
Delta R.T. 0.000 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:284 Resp: 56

Ion	Ratio	Lower	Upper
284	100		
286	76.4	57.8	117.8
282	55.3	13.6	73.6

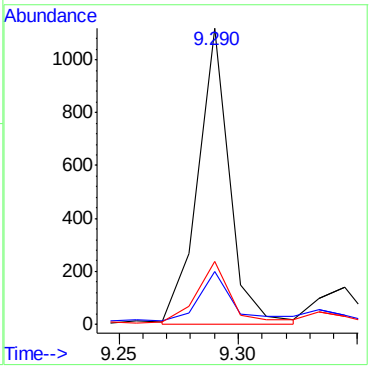


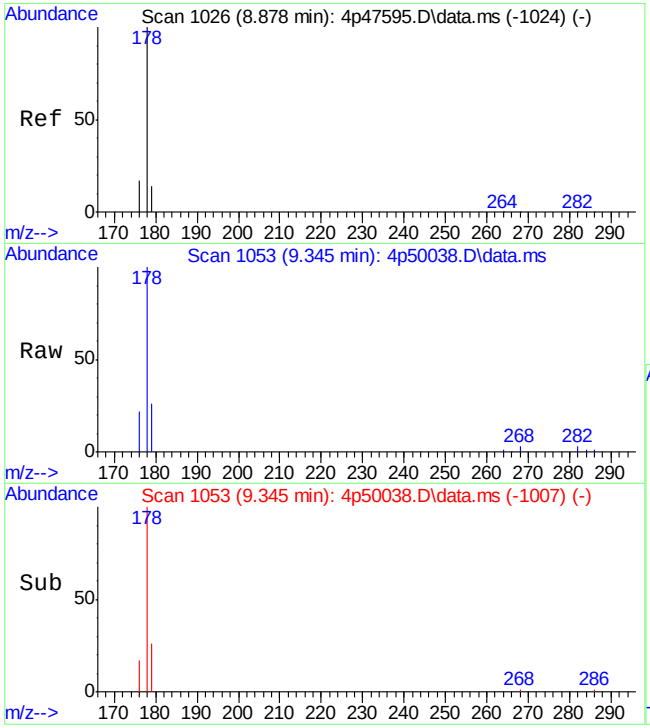


#23
Phenanthrene
Concen: 14.81 ppm
RT: 9.290 min Scan# 1048
Delta R.T. 0.000 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:178 Resp: 1040

Ion	Ratio	Lower	Upper
178	100		
179	16.2	0.0	46.0
176	20.2	0.0	45.6

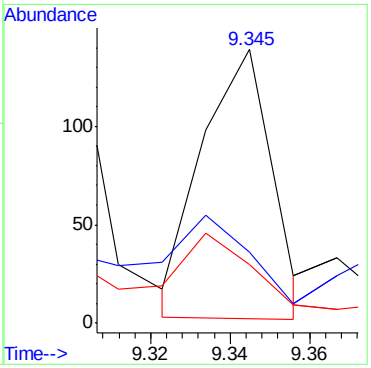


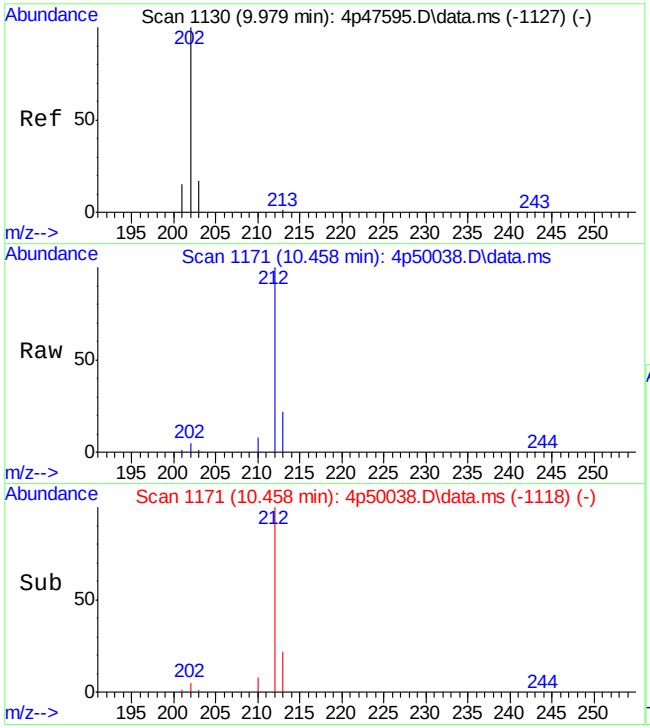


#24
Anthracene
Concen: 2.48 ppm
RT: 9.345 min Scan# 1053
Delta R.T. 0.000 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:178 Resp: 167

Ion	Ratio	Lower	Upper
178	100		
179	13.1	0.0	43.0
176	13.5	0.0	48.4

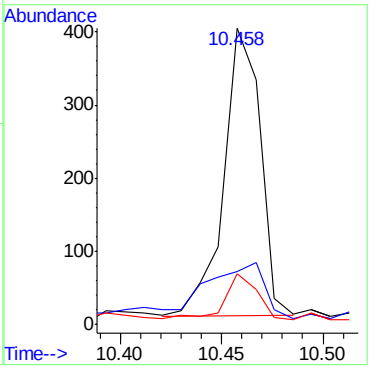


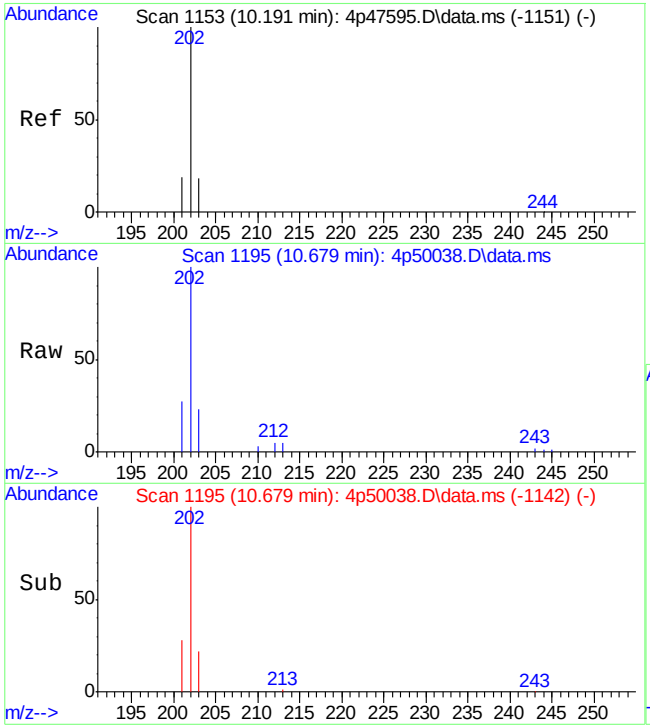


#25
Fluoranthene
Concen: 6.73 ppm
RT: 10.458 min Scan# 1171
Delta R.T. -0.009 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:202 Resp: 492

Ion	Ratio	Lower	Upper
202	100		
203	14.9	0.0	47.6
201	15.7	0.0	42.9

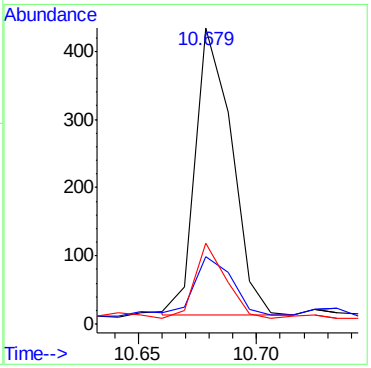


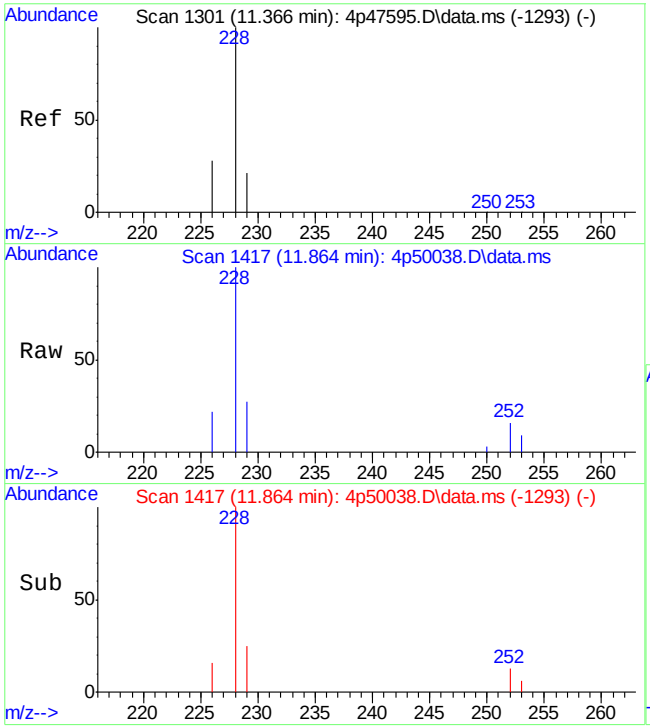


#26
Pyrene
Concen: 5.58 ppm
RT: 10.679 min Scan# 1195
Delta R.T. -0.009 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:202 Resp: 449

Ion	Ratio	Lower	Upper
202	100		
203	20.0	0.0	47.6
201	25.9	0.0	46.0

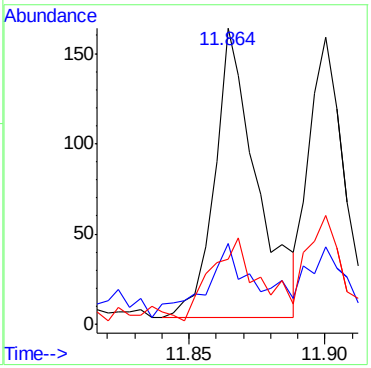


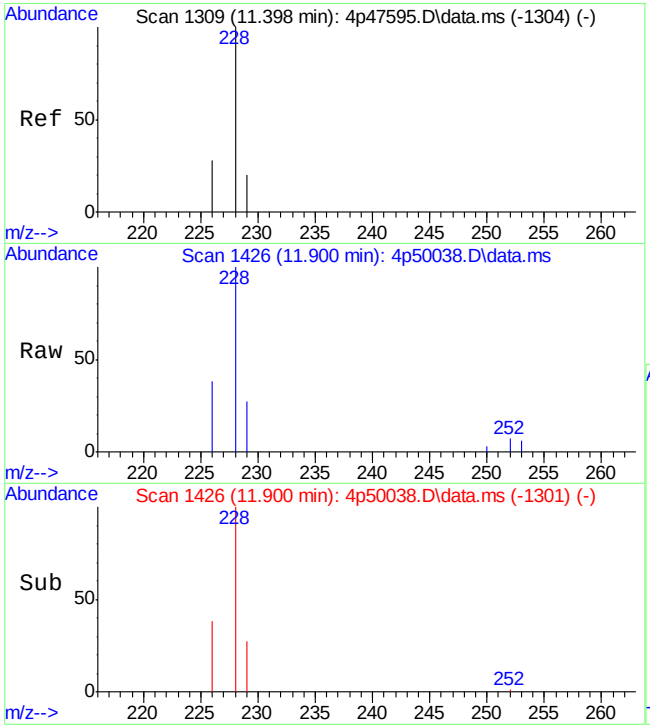


#28
Benzo[a]anthracene
Concen: 2.38 ppm
RT: 11.864 min Scan# 1417
Delta R.T. -0.004 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:228 Resp: 171

Ion	Ratio	Lower	Upper
228	100		
229	22.9	0.0	49.8
226	19.0	0.0	53.3

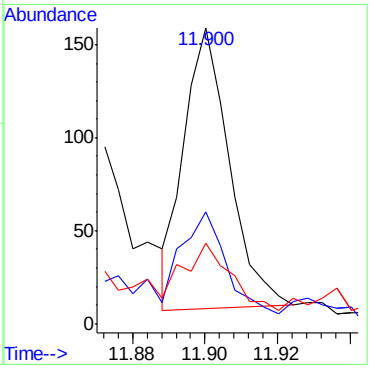


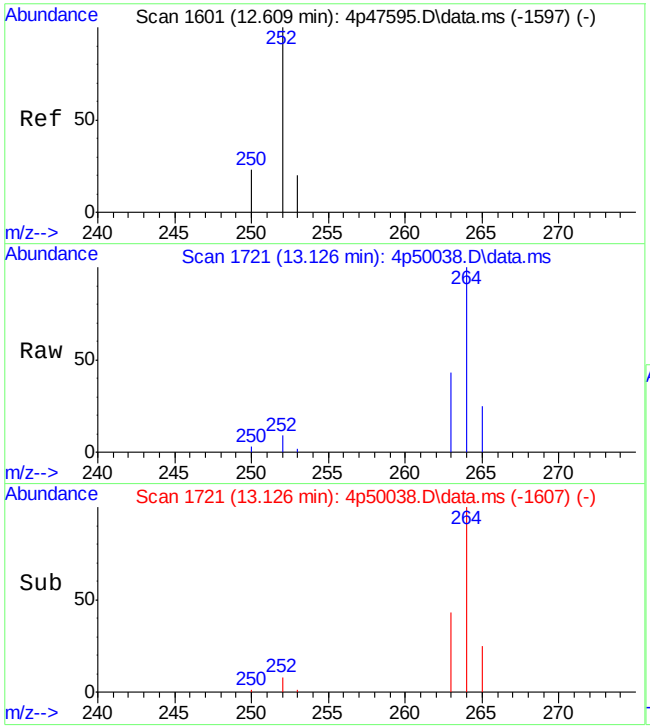


#29
Chrysene
Concen: 1.86 ppm
RT: 11.900 min Scan# 1426
Delta R.T. 0.000 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:228 Resp: 131

Ion	Ratio	Lower	Upper
228	100		
226	36.2	0.0	58.5
229	21.6	0.0	48.7

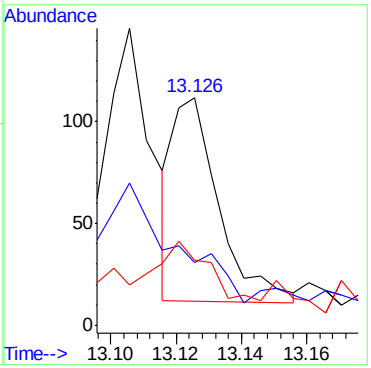


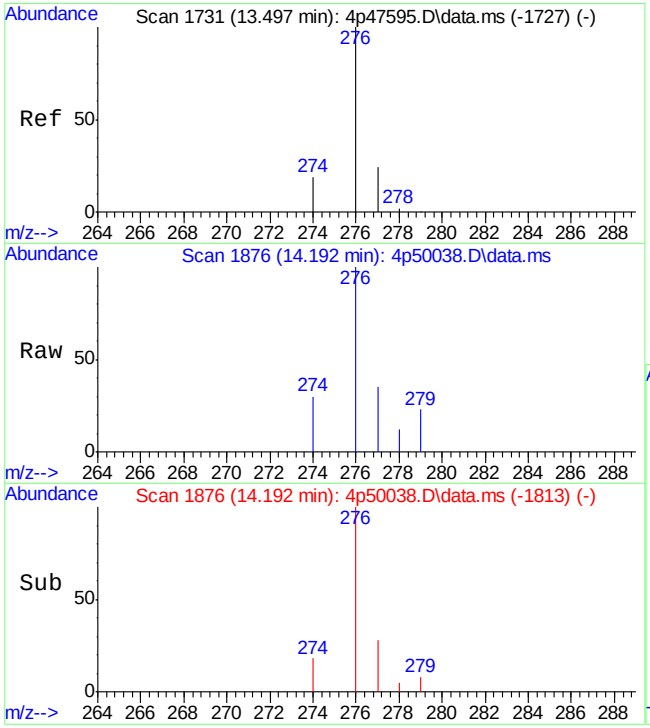


#33
Benzo[a]pyrene
Concen: 2.30 ppm
RT: 13.126 min Scan# 1721
Delta R.T. 0.000 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:252 Resp: 97

Ion	Ratio	Lower	Upper
252	100		
253	7.6	0.0	52.8
250	15.9	0.0	50.6

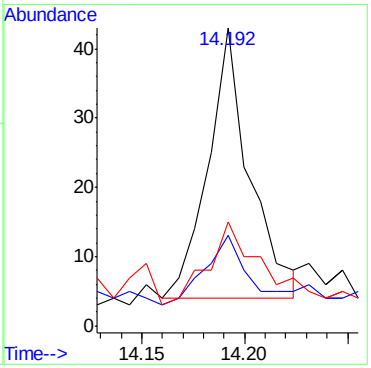


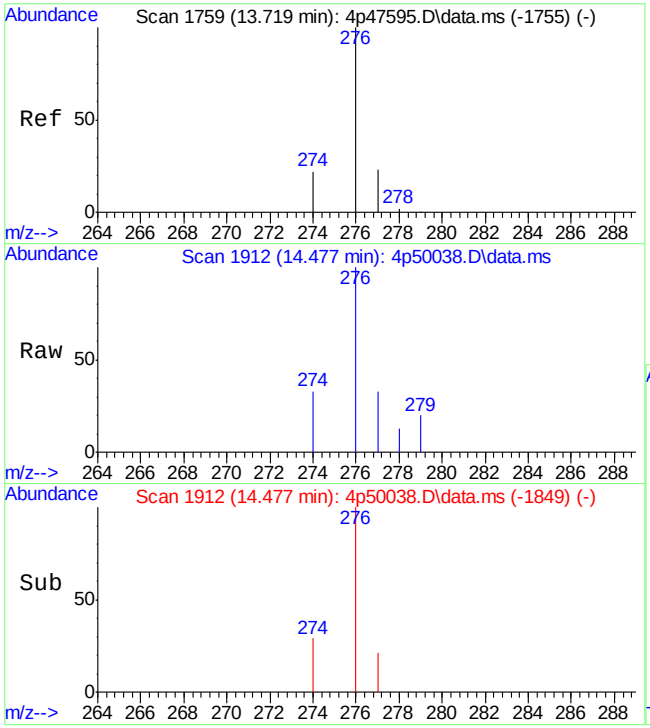


#34
Indeno[1,2,3-cd]pyrene
Concen: 1.09 ppm
RT: 14.192 min Scan# 1876
Delta R.T. 0.000 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:276 Resp: 55

Ion	Ratio	Lower	Upper
276	100		
274	24.3	0.0	49.3
277	27.0	0.0	53.2

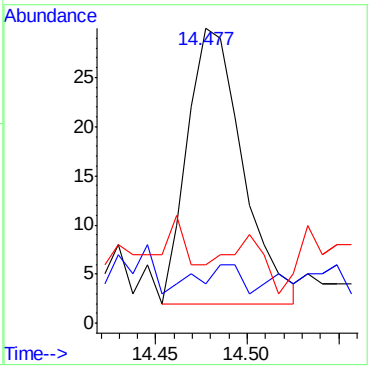




#36
Benzo[g,h,i]perylene
Concen: 1.38 ppm
RT: 14.477 min Scan# 1912
Delta R.T. 0.000 min
Lab File: 4p50038.D
Acq: 12 Dec 2021 5:05 pm

Tgt Ion:276 Resp: 59

Ion	Ratio	Lower	Upper
276	100		
278	1.9	0.0	32.5
279	0.0	0.0	30.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/05/21 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2607\
Data File : 4p49793.D
Acq On : 3 Dec 2021 2:00 am
Operator : chriss2
Sample : op36899a-mb1
Misc : op36899a,e4p2607,250,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 03 15:35:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 03 15:30:51 2021
Response via : Initial Calibration

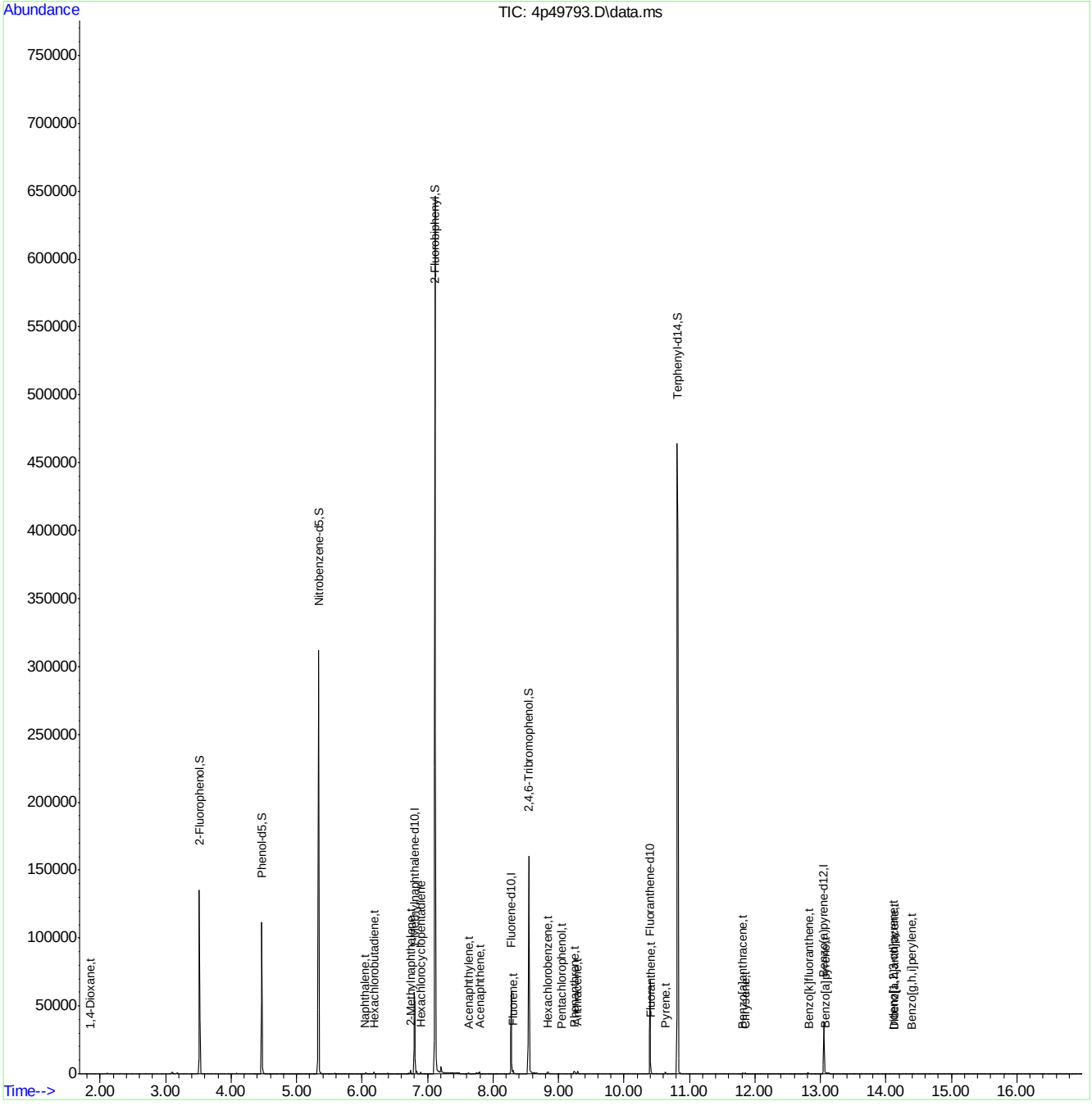
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.800	150	18596	800.00	ppm	0.00
13) Fluorene-d10	8.279	176	27764	800.00	ppm	0.00
20) Fluoranthene-d10	10.400	212	46983	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.053	264	21099	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.517	112	54098	4689.63	ppm	0.00
Spiked Amount 50.000			Recovery = 9379.26%			
4) Phenol-d5	4.469	99	75305	3440.99	ppm	0.00
Spiked Amount 50.000			Recovery = 6881.98%			
7) Nitrobenzene-d5	5.338	82	185661	10395.88	ppm	0.00
Spiked Amount 50.000			Recovery = 20791.76%			
14) 2-Fluorobiphenyl	7.117	172	305942	8638.86	ppm	0.00
Spiked Amount 50.000			Recovery = 17277.72%			
19) 2,4,6-Tribromophenol	8.543	330	65937	12443.97	ppm	0.00
Spiked Amount 50.000			Recovery = 24887.94%			
27) Terphenyl-d14	10.814	244	347412	10323.52	ppm	0.00
Spiked Amount 50.000			Recovery = 20647.04%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.849	88	39m	8.98	ppm	
8) Naphthalene	6.051	128	751	14.11	ppm	96
9) Hexachlorobutadiene	6.183	225	397	30.54	ppm	98
10) 2-Methylnaphthalene	6.740	141	786	28.26	ppm	80
12) Hexachlorocyclopentadiene	6.895	237	566	52.47	ppm	91
15) Acenaphthylene	7.624	152	399	7.71	ppm	94
16) Acenaphthene	7.798	153	441	13.36	ppm	90
17) Fluorene	8.305	166	941	23.63	ppm	88
21) Hexachlorobenzene	8.844	284	618	41.68	ppm	95
22) Pentachlorophenol	9.041	266	95	11.40	ppm	94
23) Phenanthrene	9.239	178	1624	25.66	ppm	91
24) Anthracene	9.293	178	1480	24.39	ppm	97
25) Fluoranthene	10.409	202	936	14.21	ppm	90
26) Pyrene	10.630	202	809	11.16	ppm	93
28) Benzo[a]anthracene	11.813	228	328	5.06	ppm	92
29) Chrysene	11.849	228	332	5.23	ppm	95
32) Benzo[k]fluoranthene	12.823	252	235	5.40	ppm	92
33) Benzo[a]pyrene	13.073	252	171	4.28	ppm	82
34) Indeno[1,2,3-cd]pyrene	14.110	276	151	3.17	ppm	91
35) Dibenz[a,h]anthracene	14.133	278	141	3.80	ppm	84
36) Benzo[g,h,i]perylene	14.395	276	160	3.97	ppm	97

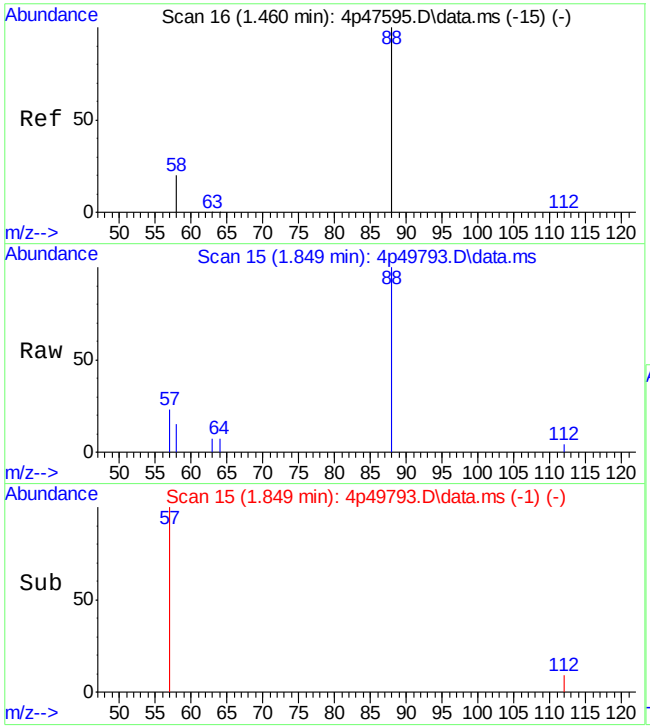
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2607\
Data File : 4p49793.D
Acq On : 3 Dec 2021 2:00 am
Operator : chriss2
Sample : op36899a-mb1
Misc : op36899a,e4p2607,250,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 03 15:35:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 03 15:30:51 2021
Response via : Initial Calibration

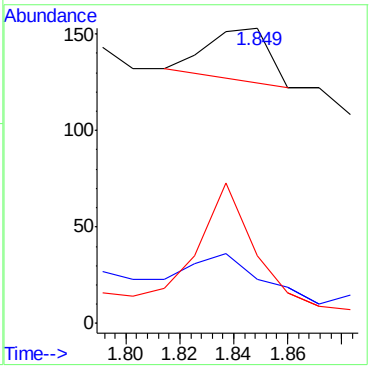


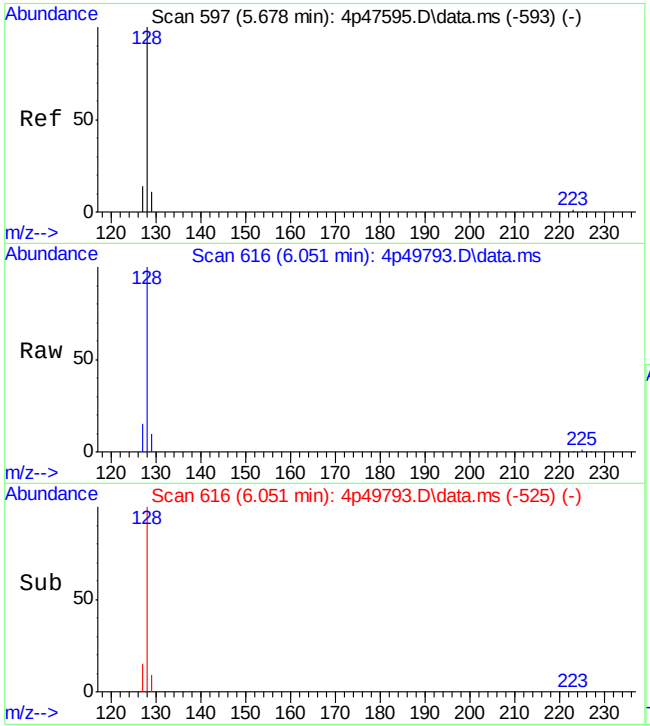


#2
1,4-Dioxane
Concen: 8.98 ppm m
RT: 1.849 min Scan# 15
Delta R.T. 0.012 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion: 88 Resp: 39

Ion	Ratio	Lower	Upper
88	100		
58	15.0	0.1	40.1
57	22.9	0.0	24.7

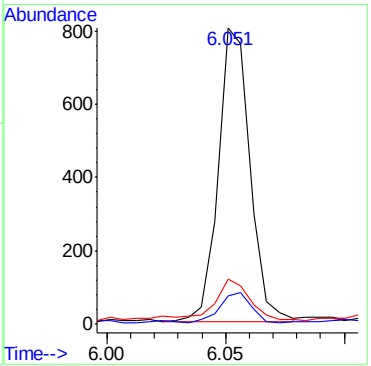


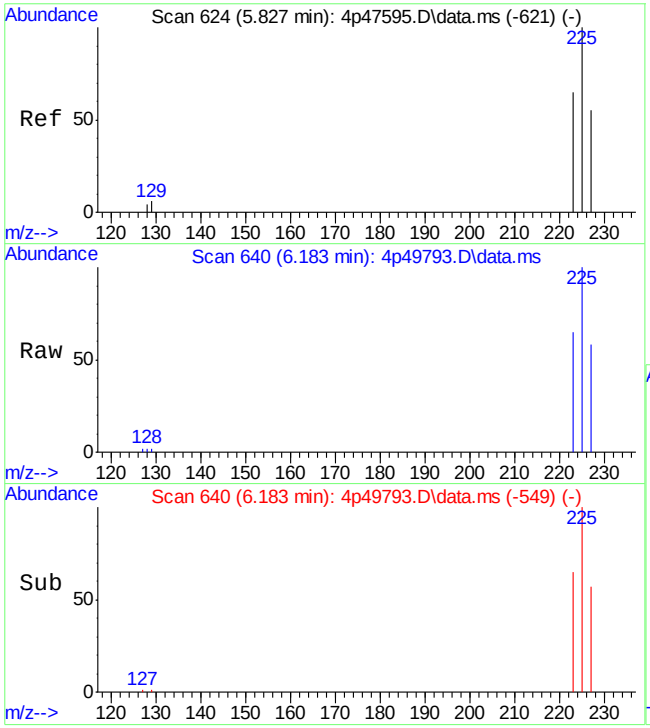


#8
Naphthalene
Concen: 14.11 ppm
RT: 6.051 min Scan# 616
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:128 Resp: 751

Ion	Ratio	Lower	Upper
128	100		
129	8.7	0.0	41.1
127	13.1	0.0	42.0

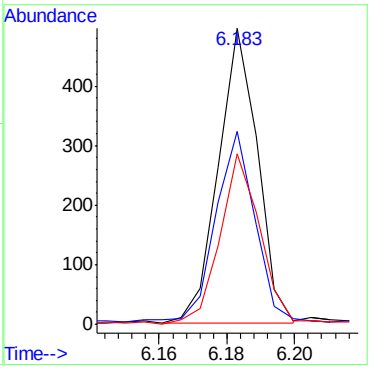


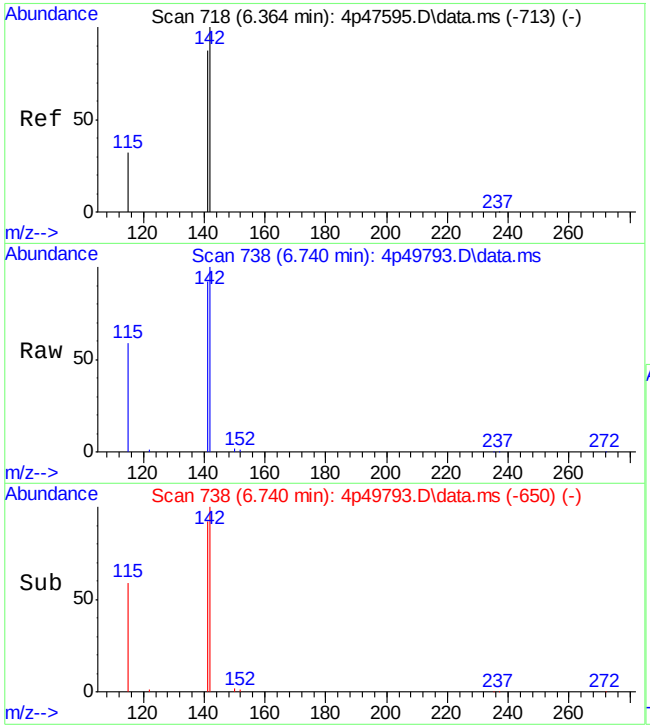


#9
Hexachlorobutadiene
Concen: 30.54 ppm
RT: 6.183 min Scan# 640
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:225 Resp: 397

Ion	Ratio	Lower	Upper
225	100		
223	63.8	35.2	95.2
227	57.4	29.1	89.1

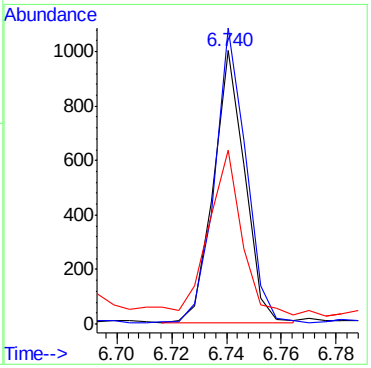


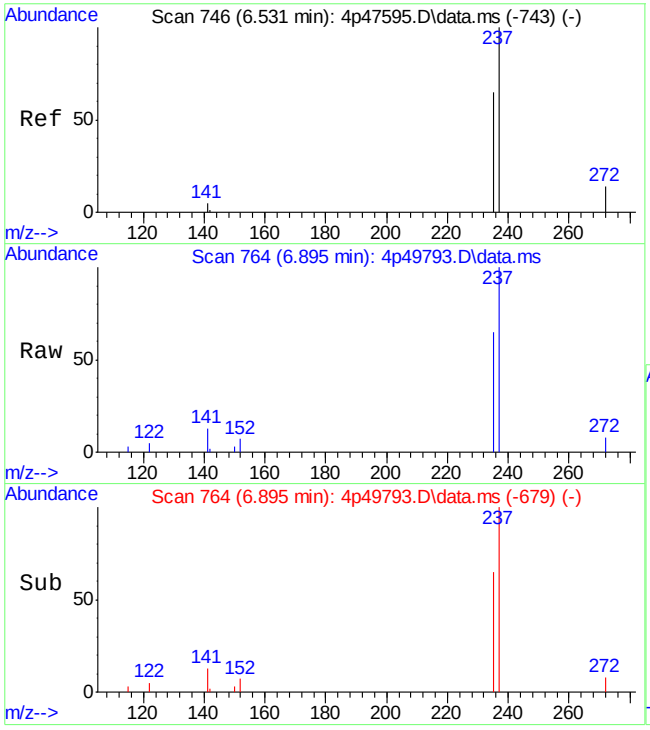


#10
2-Methylnaphthalene
Concen: 28.26 ppm
RT: 6.740 min Scan# 738
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:141 Resp: 786

Ion	Ratio	Lower	Upper
141	100		
142	108.5	96.1	156.1
115	59.6	7.9	67.9

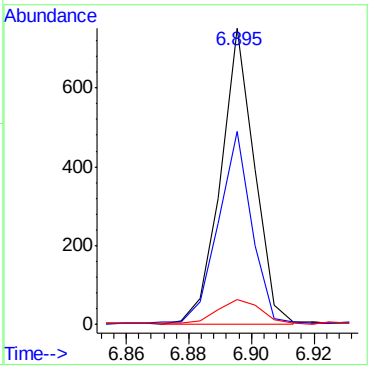


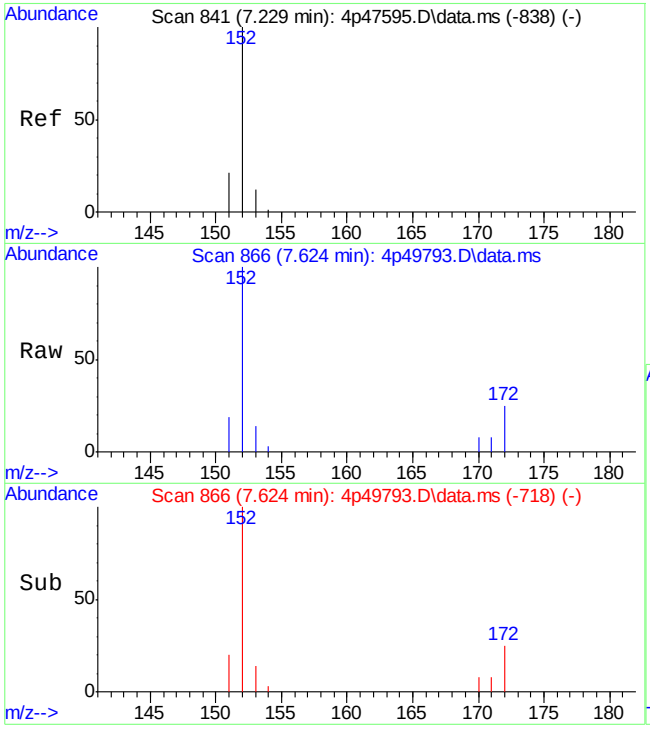


#12
Hexachlorocyclopentadiene
Concen: 52.47 ppm
RT: 6.895 min Scan# 764
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:237 Resp: 566

Ion	Ratio	Lower	Upper
237	100		
235	64.8	29.4	89.4
272	7.9	0.0	44.1

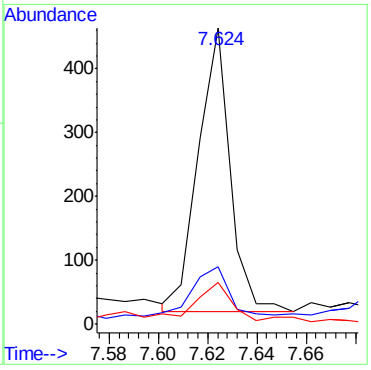


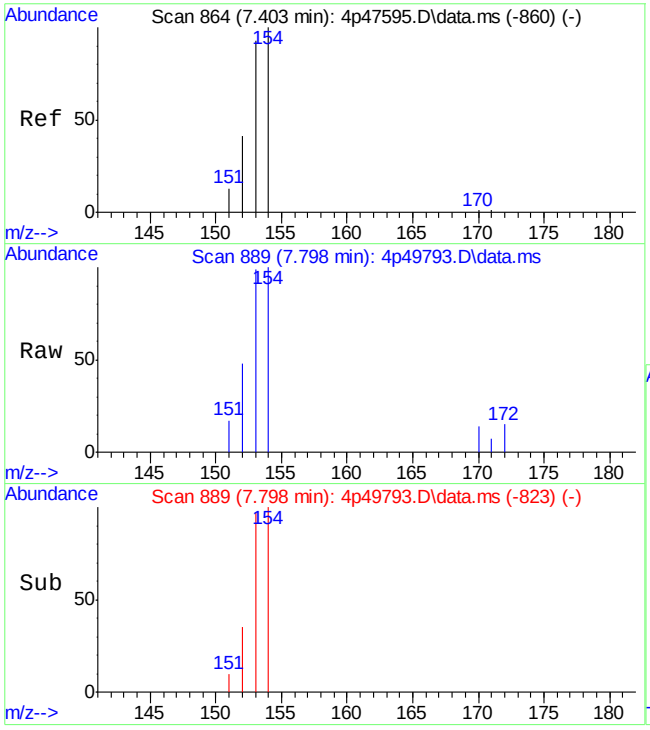


#15
Acenaphthylene
Concen: 7.71 ppm
RT: 7.624 min Scan# 866
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:152 Resp: 399

Ion	Ratio	Lower	Upper
152	100		
151	16.8	0.0	50.8
153	12.0	0.0	42.2

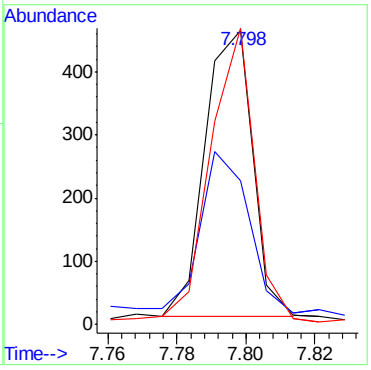


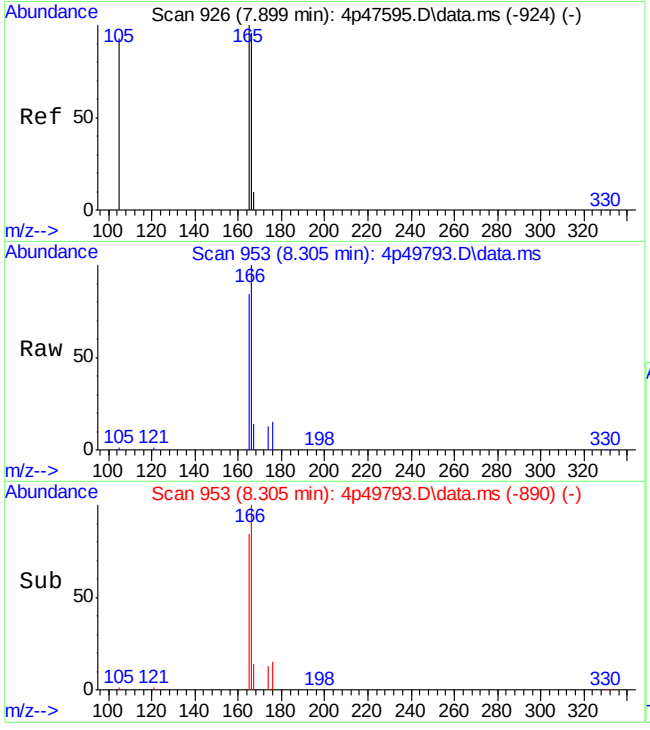


#16
Acenaphthene
Concen: 13.36 ppm
RT: 7.798 min Scan# 889
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:153 Resp: 441

Ion	Ratio	Lower	Upper
153	100		
152	45.3	18.5	78.5
154	101.2	59.1	119.1

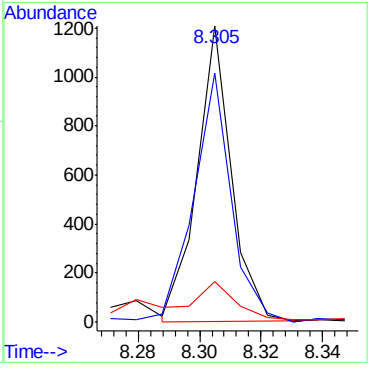


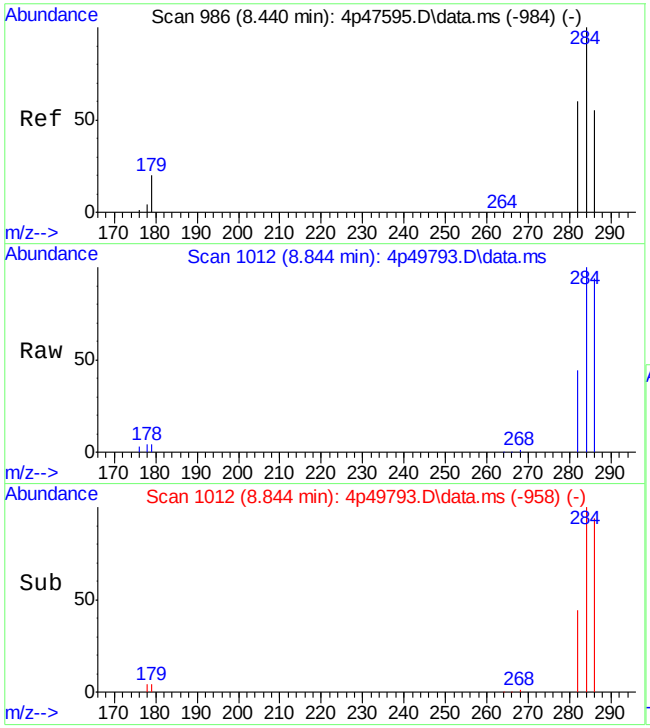


#17
Fluorene
Concen: 23.63 ppm
RT: 8.305 min Scan# 953
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:166 Resp: 941

Ion	Ratio	Lower	Upper
166	100		
165	83.4	66.9	126.9
167	11.1	0.0	41.7

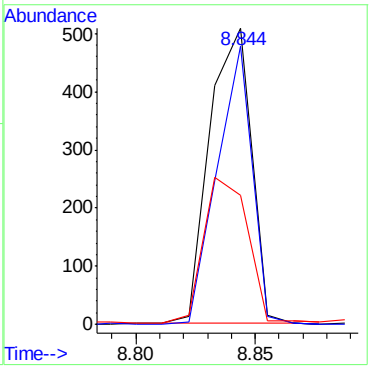


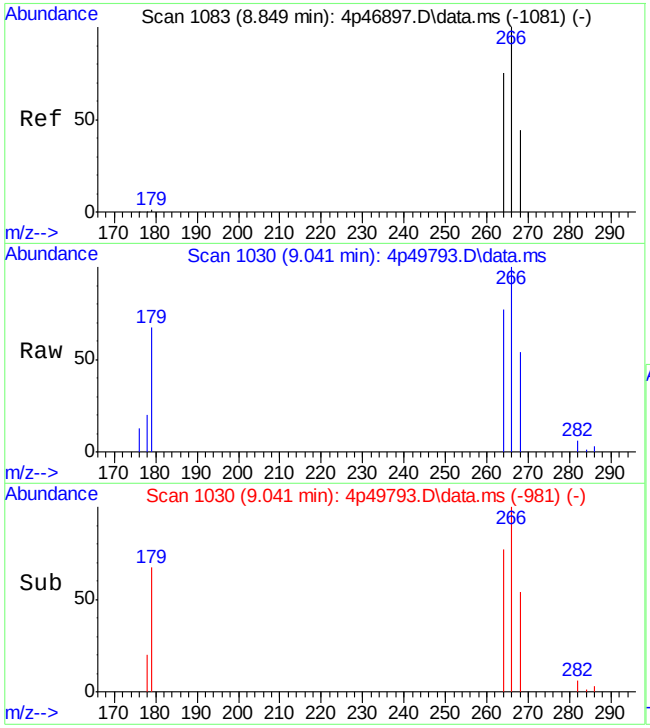


#21
Hexachlorobenzene
Concen: 41.68 ppm
RT: 8.844 min Scan# 1012
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:284 Resp: 618

Ion	Ratio	Lower	Upper
284	100		
286	94.3	57.8	117.8
282	43.0	13.6	73.6

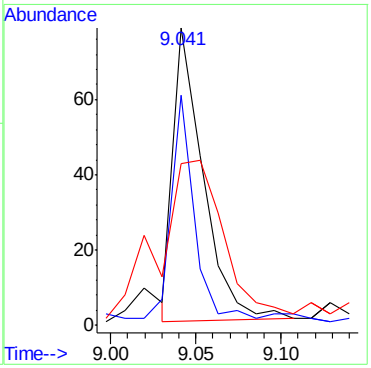


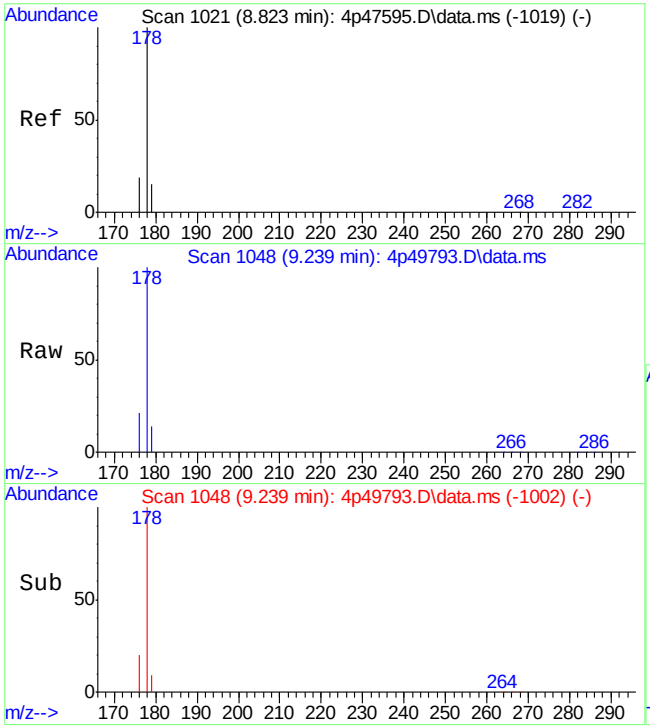


#22
Pentachlorophenol
Concen: 11.40 ppm
RT: 9.041 min Scan# 1030
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:266 Resp: 95

Ion	Ratio	Lower	Upper
266	100		
264	74.7	49.6	109.6
268	46.7	12.2	72.2

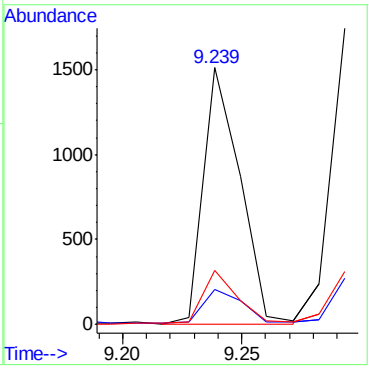


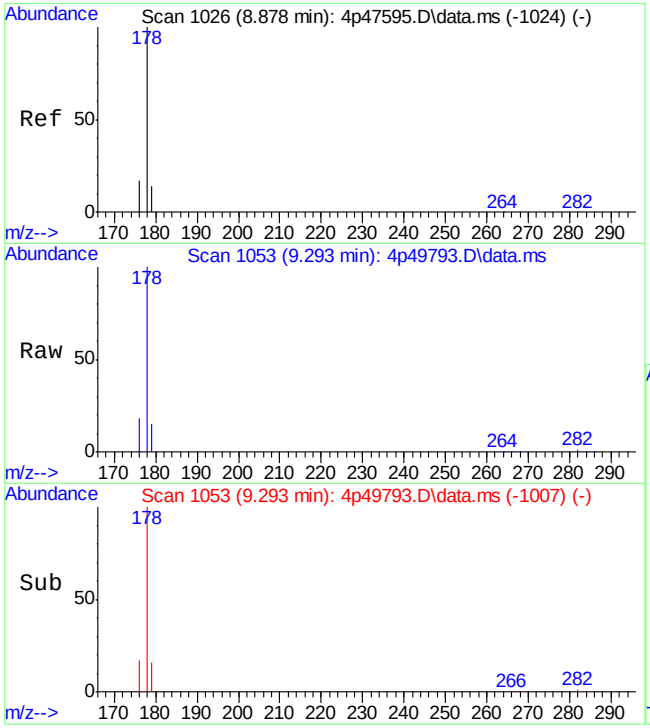


#23
Phenanthrene
Concen: 25.66 ppm
RT: 9.239 min Scan# 1048
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:178 Resp: 1624

Ion	Ratio	Lower	Upper
178	100		
179	13.1	0.0	46.0
176	20.6	0.0	45.6

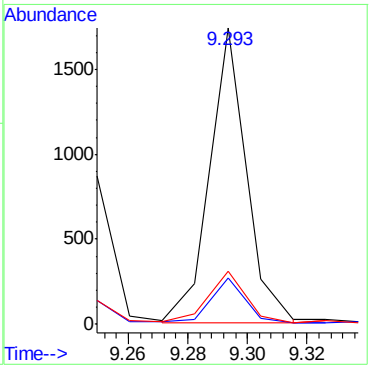


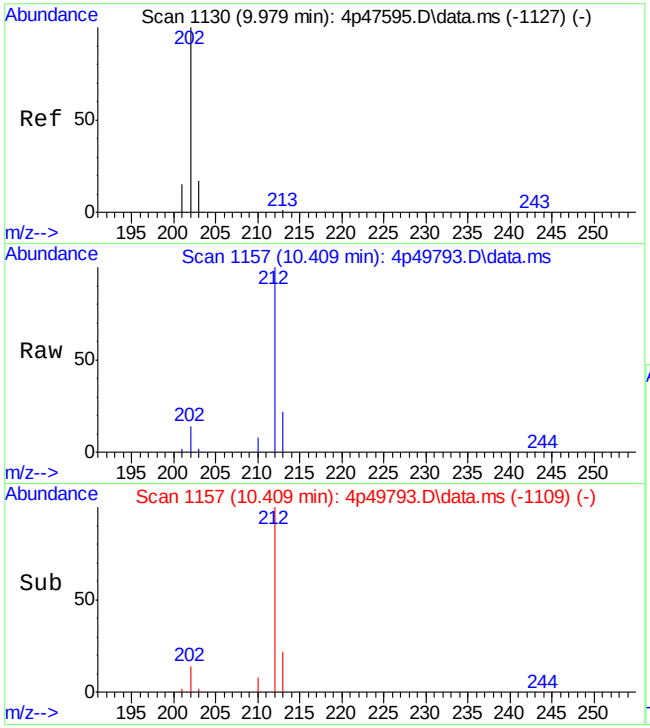


#24
Anthracene
Concen: 24.39 ppm
RT: 9.293 min Scan# 1053
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:178 Resp: 1480

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	43.0
176	17.5	0.0	48.4

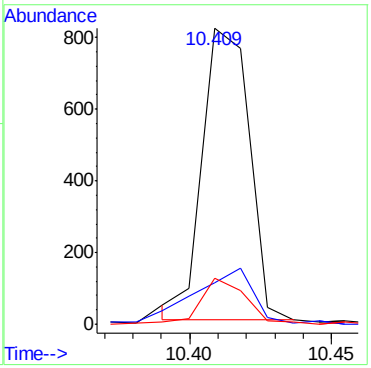


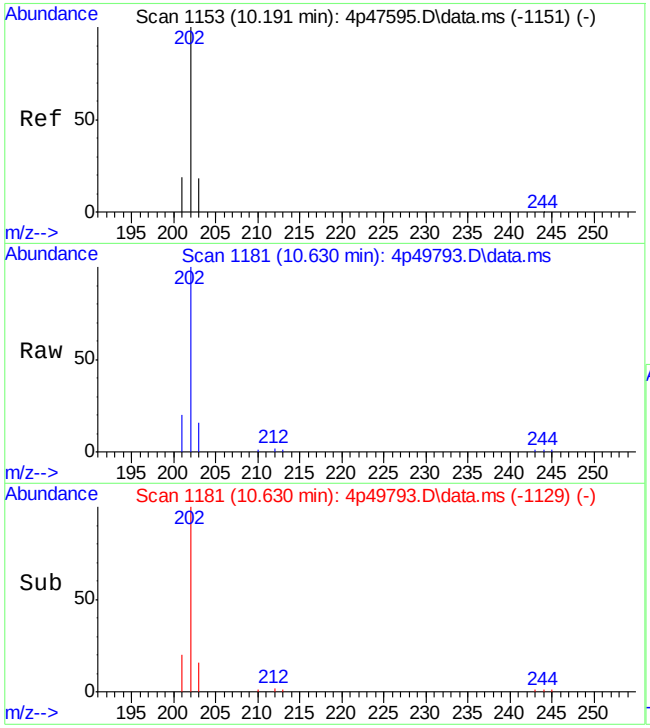


#25
Fluoranthene
Concen: 14.21 ppm
RT: 10.409 min Scan# 1157
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:202 Resp: 936

Ion	Ratio	Lower	Upper
202	100		
203	11.9	0.0	47.6
201	15.2	0.0	42.9

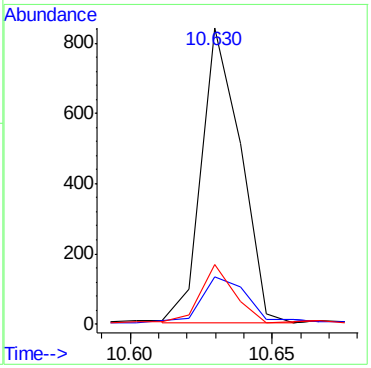


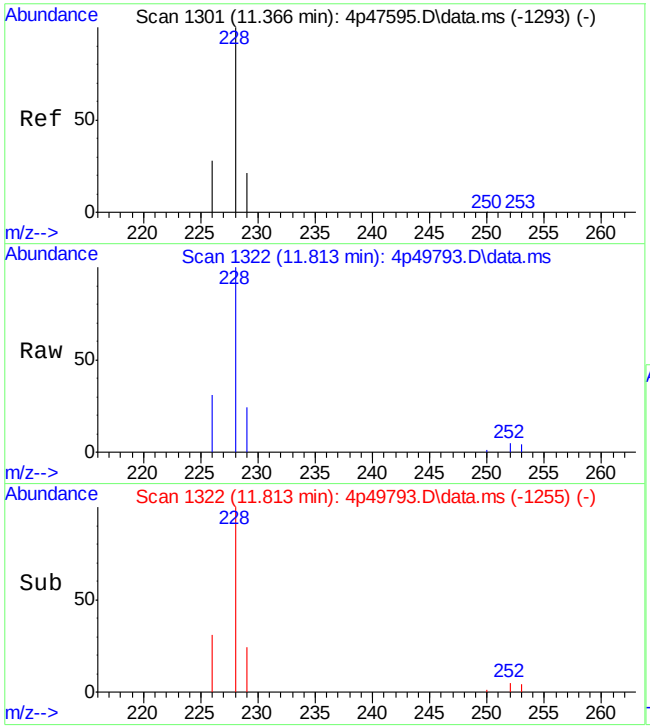


#26
Pyrene
Concen: 11.16 ppm
RT: 10.630 min Scan# 1181
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:202 Resp: 809

Ion	Ratio	Lower	Upper
202	100		
203	14.8	0.0	47.6
201	19.3	0.0	46.0

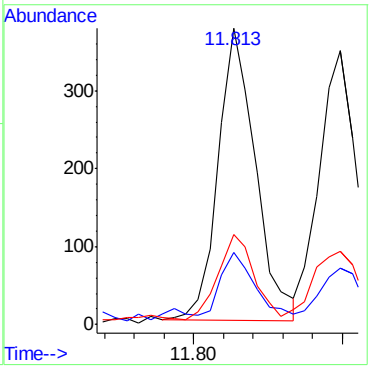


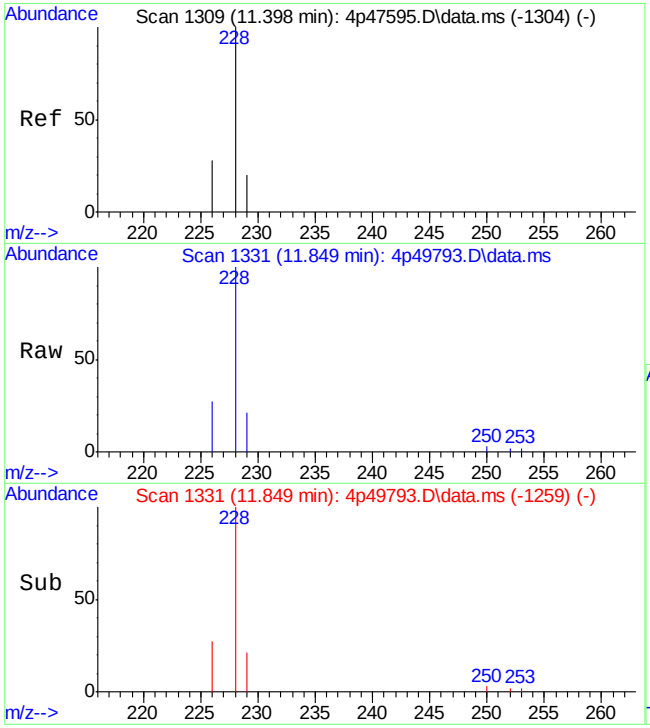


#28
Benzo[a]anthracene
Concen: 5.06 ppm
RT: 11.813 min Scan# 1322
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:228 Resp: 328

Ion	Ratio	Lower	Upper
228	100		
229	21.9	0.0	49.8
226	28.3	0.0	53.3

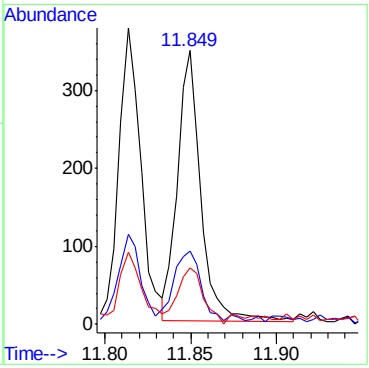


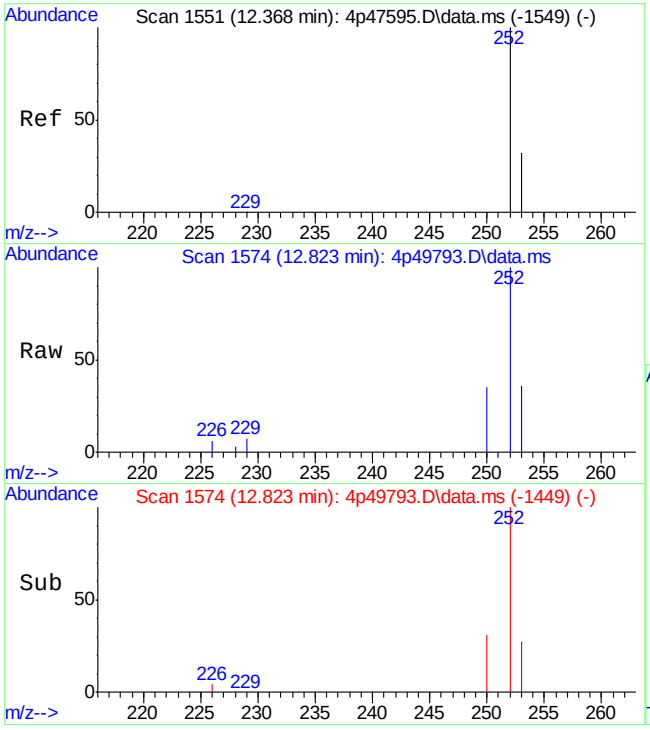


#29
Chrysene
Concen: 5.23 ppm
RT: 11.849 min Scan# 1331
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:228 Resp: 332

Ion	Ratio	Lower	Upper
228	100		
226	24.6	0.0	58.5
229	18.6	0.0	48.7

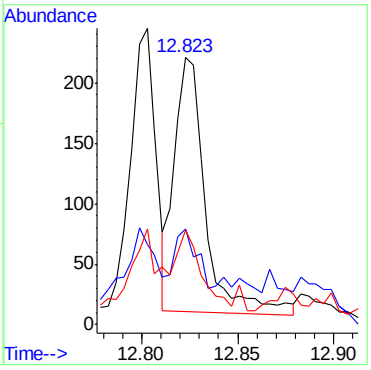


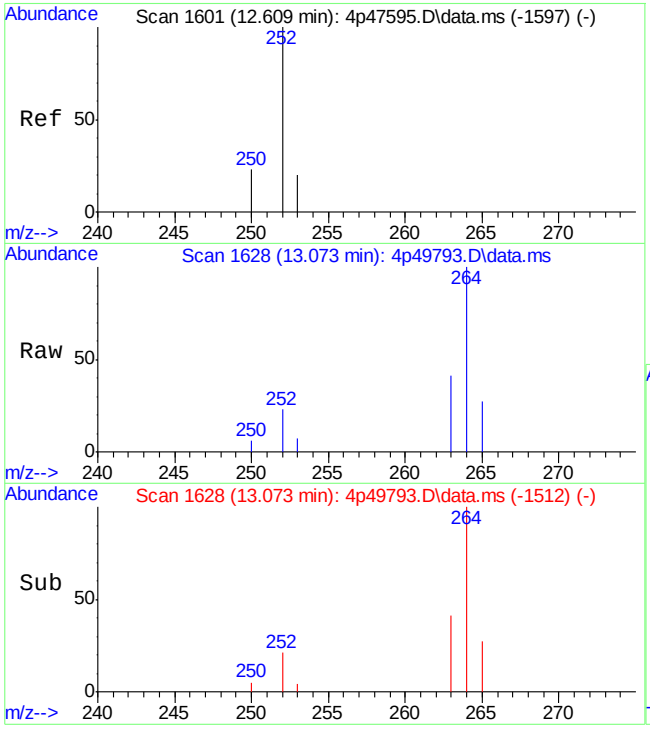


#32
Benzo[k]fluoranthene
Concen: 5.40 ppm
RT: 12.823 min Scan# 1574
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:252 Resp: 235

Ion	Ratio	Lower	Upper
252	100		
253	26.4	0.0	51.8
250	23.8	0.0	50.5

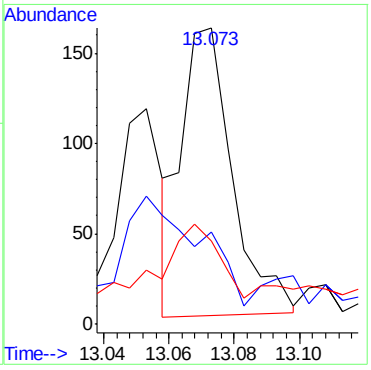


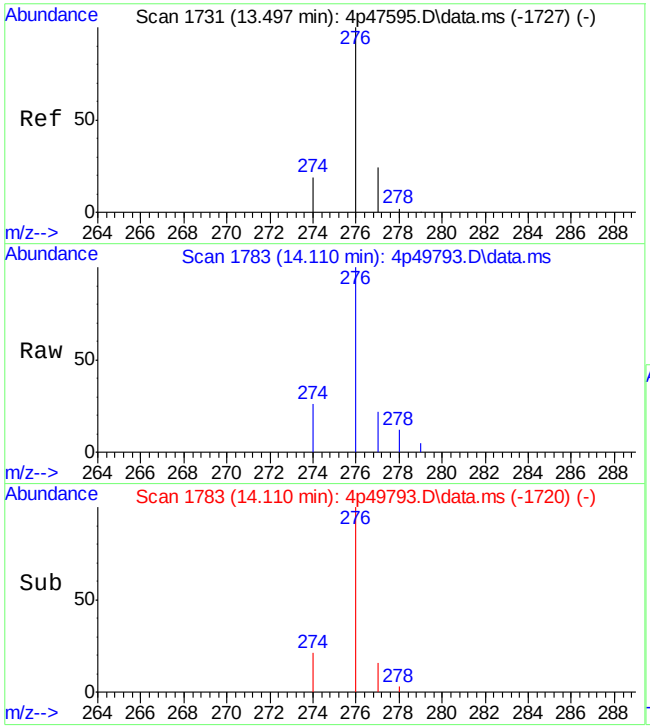


#33
Benzo[a]pyrene
Concen: 4.28 ppm
RT: 13.073 min Scan# 1628
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:252 Resp: 171

Ion	Ratio	Lower	Upper
252	100		
253	6.3	0.0	52.8
250	20.3	0.0	50.6

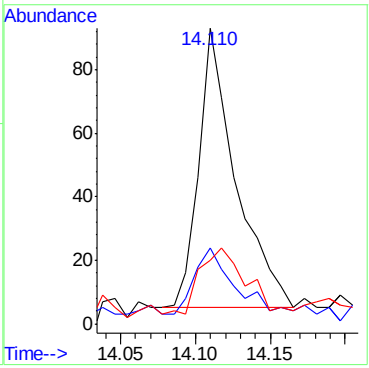


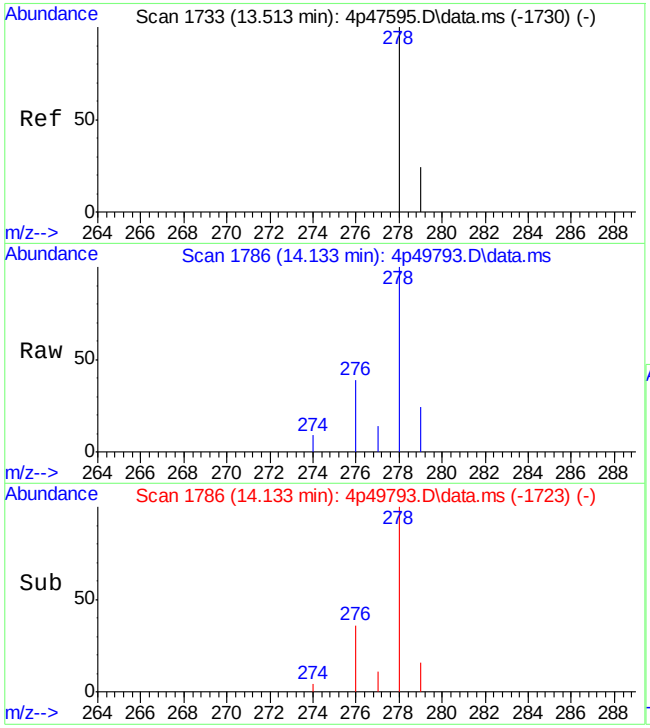


#34
Indeno[1,2,3-cd]pyrene
Concen: 3.17 ppm
RT: 14.110 min Scan# 1783
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:276 Resp: 151

Ion	Ratio	Lower	Upper
276	100		
274	23.3	0.0	49.3
277	18.8	0.0	53.2

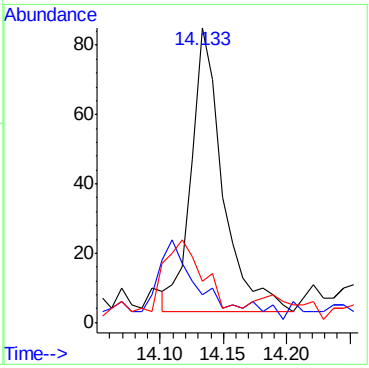


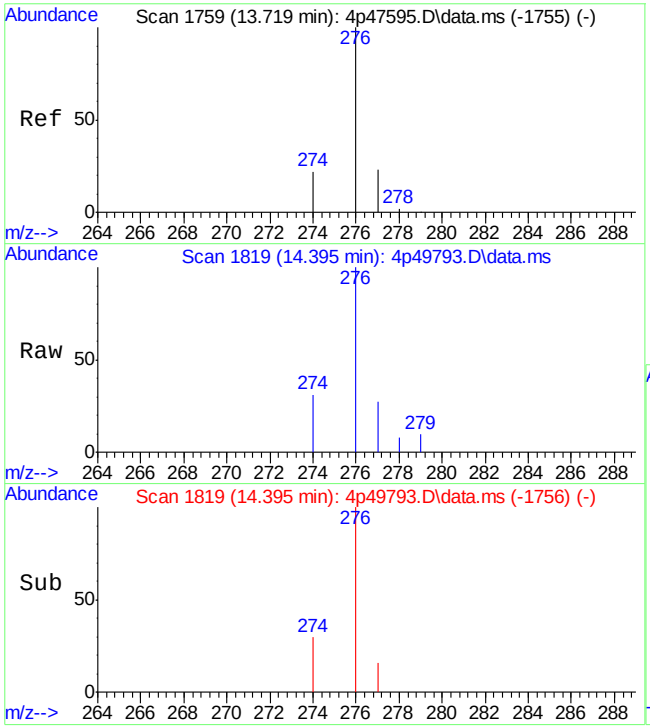


#35
Dibenz[a,h]anthracene
Concen: 3.80 ppm
RT: 14.133 min Scan# 1786
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:278 Resp: 141

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	1.3	0.0	36.7

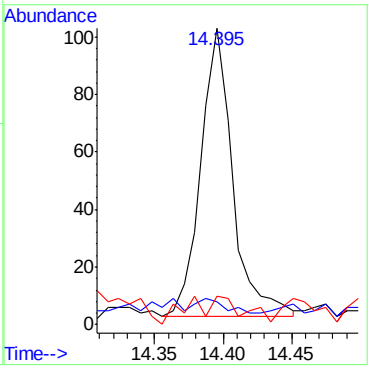




#36
Benzo[g,h,i]perylene
Concen: 3.97 ppm
RT: 14.395 min Scan# 1819
Delta R.T. 0.000 min
Lab File: 4p49793.D
Acq: 3 Dec 2021 2:00 am

Tgt Ion:276 Resp: 160

Ion	Ratio	Lower	Upper
276	100		
278	1.5	0.0	32.5
279	5.6	0.0	30.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3793\
Data File : 5p80150.D
Acq On : 8 Dec 2021 6:40 am
Operator : chriss2
Sample : op36899-mb1
Misc : op36899,e5p3793,250,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 16:09:17 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Dec 07 14:55:13 2021
Response via : Initial Calibration

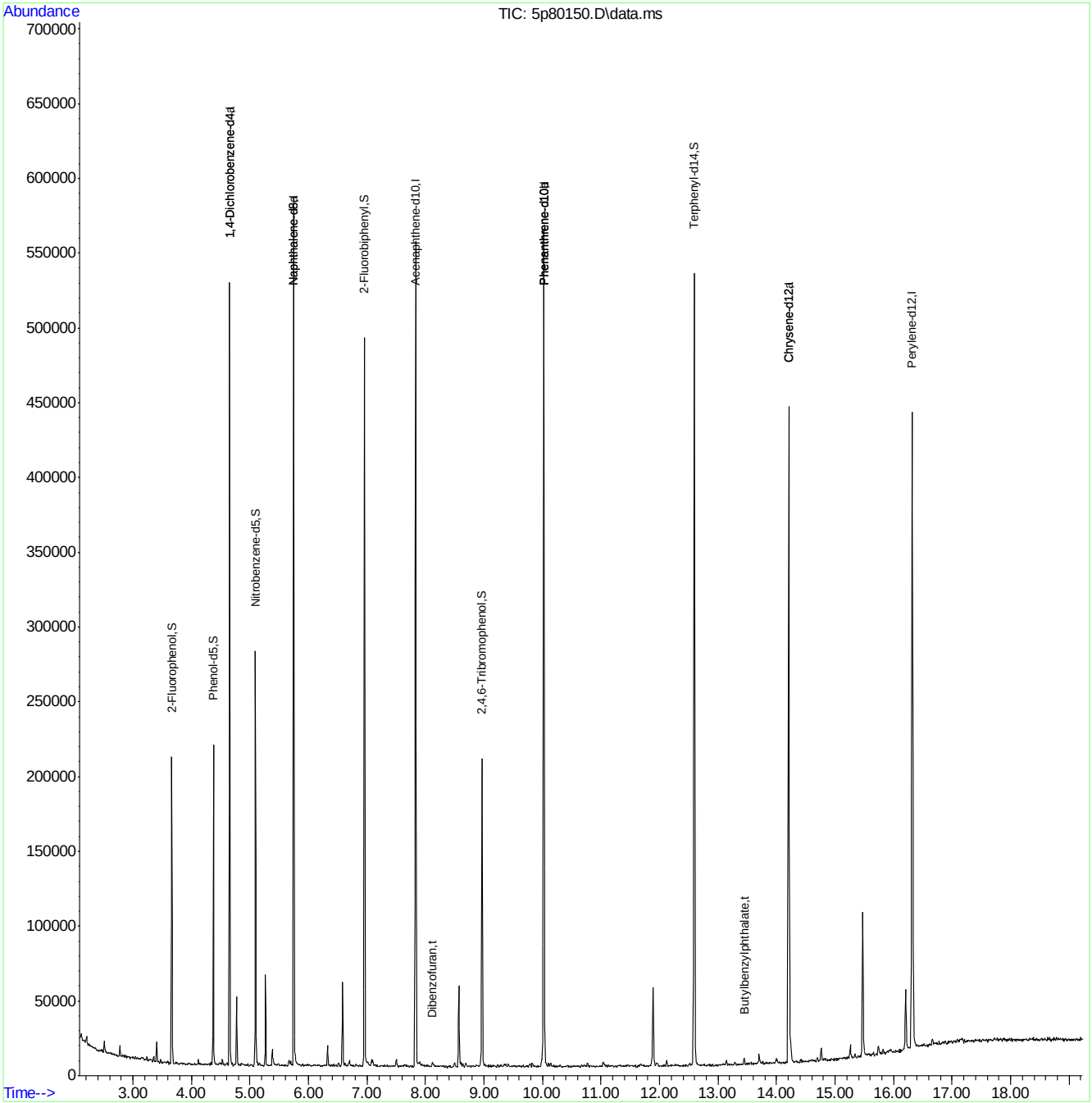
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.652	152	68107	8.00	ppm	-0.02
24) Naphthalene-d8	5.747	136	254610	8.00	ppm	-0.02
46) Acenaphthene-d10	7.830	164	144493	8.00	ppm	-0.02
69) Phenanthrene-d10	10.021	188	258733	8.00	ppm	-0.02
84) Chrysene-d12	14.209	240	187248	8.00	ppm	-0.02
93) Perylene-d12	16.319	264	177475	8.00	ppm	-0.02
103) 1,4-Dichlorobenzene-d4a	4.652	152	68107	8.00	ppm	-0.02
105) Phenanthrene-d10a	10.021	188	258733	8.00	ppm	-0.02
107) Naphthalene-d8a	5.747	136	254610	8.00	ppm	-0.02
109) Chrysene-d12a	14.209	240	187248	8.00	ppm	-0.02
111) Phenanthrene-d10b	10.021	188	258733	8.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.663	112	45420	4.10	ppm	-0.01
Spiked Amount 10.000			Recovery = 41.00%			
8) Phenol-d5	4.374	99	38799	2.71	ppm	-0.01
Spiked Amount 10.000			Recovery = 27.10%			
25) Nitrobenzene-d5	5.095	82	68493	7.11	ppm	-0.02
Spiked Amount 10.000			Recovery = 71.10%			
51) 2-Fluorobiphenyl	6.954	172	171574	7.11	ppm	-0.02
Spiked Amount 10.000			Recovery = 71.10%			
74) 2,4,6-Tribromophenol	8.963	330	27076	6.98	ppm	-0.02
Spiked Amount 10.000			Recovery = 69.80%			
87) Terphenyl-d14	12.595	244	225314	9.64	ppm	-0.02
Spiked Amount 10.000			Recovery = 96.40%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
62) Dibenzofuran	8.119	168	1088	0.04	ppm	95
88) Butylbenzylphthalate	13.445	149	1261	0.27	ppm	76

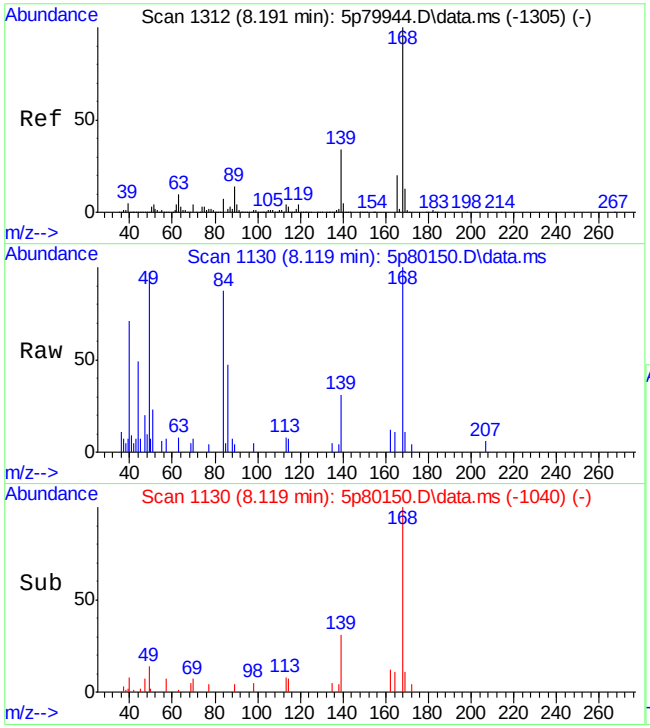
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3793\
Data File : 5p80150.D
Acq On : 8 Dec 2021 6:40 am
Operator : chriss2
Sample : op36899-mb1
Misc : op36899,e5p3793,250,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 16:09:17 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Dec 07 14:55:13 2021
Response via : Initial Calibration

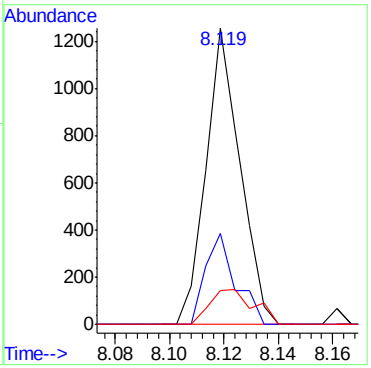


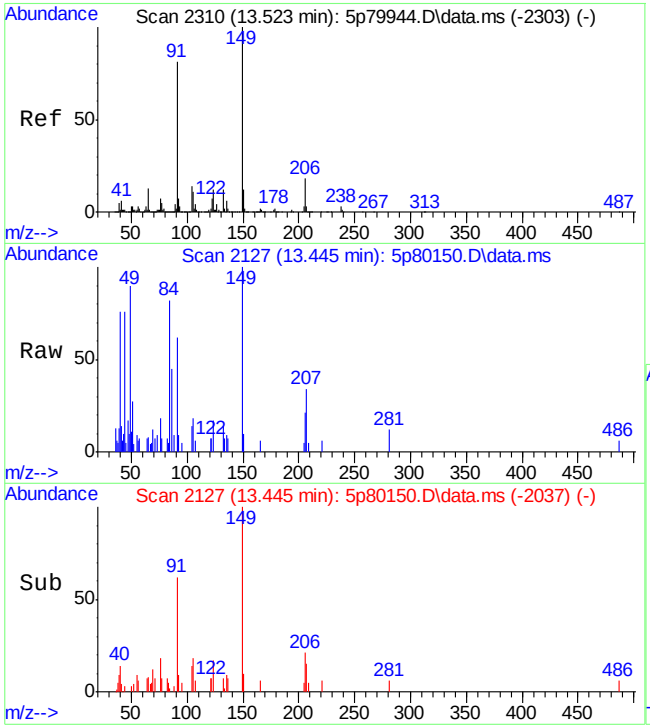


#62
Dibenzofuran
Concen: 0.04 ppm
RT: 8.119 min Scan# 1130
Delta R.T. -0.021 min
Lab File: 5p80150.D
Acq: 8 Dec 21 6:40 am

Tgt Ion:168 Resp: 1088

Ion	Ratio	Lower	Upper
168	100		
139	30.8	3.7	63.7
169	11.5	0.0	43.0

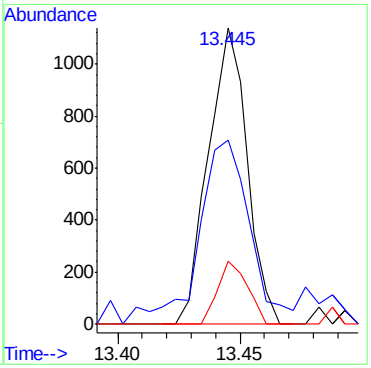




#88
Butylbenzylphthalate
Concen: 0.27 ppm
RT: 13.445 min Scan# 2127
Delta R.T. -0.021 min
Lab File: 5p80150.D
Acq: 8 Dec 21 6:40 am

Tgt Ion:149 Resp: 1261

Ion	Ratio	Lower	Upper
149	100		
91	57.0	51.5	111.5
206	21.2	0.0	48.1



GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- DDT/Endrin Breakdown Checks
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37193-MB1	6G81301.D	1	12/20/21	CP	12/17/21	OP37193	G6G2876

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	55%	10-190%
877-09-8	Tetrachloro-m-xylene	49%	10-190%
2051-24-3	Decachlorobiphenyl	38%	10-156%
2051-24-3	Decachlorobiphenyl	45%	10-156%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37193-BS1	6G81302.D	1	12/20/21	CP	12/17/21	OP37193	G6G2876
OP37193-BSD	6G81303.D	1	12/20/21	CP	12/17/21	OP37193	G6G2876

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.2	0.14	70	0.19	95	30	54-152/36
319-84-6	alpha-BHC	0.2	0.13	65	0.17	85	27	50-161/35
319-85-7	beta-BHC	0.2	0.16	80	0.19	95	17	56-150/36
319-86-8	delta-BHC	0.2	0.15	75	0.20	100	29	10-183/39
58-89-9	gamma-BHC (Lindane)	0.2	0.15	75	0.18	90	18	53-157/36
5103-71-9	alpha-Chlordane	0.2	0.15	75	0.19	95	24	57-152/37
5103-74-2	gamma-Chlordane	0.2	0.14	70	0.20	100	35	55-153/37
60-57-1	Dieldrin	0.2	0.12	60	0.20	100	50* [a]	56-163/36
72-54-8	4,4'-DDD	0.2	0.14	70	0.21	105	27	50-154/37
72-55-9	4,4'-DDE	0.2	0.098	49	0.16	80	48* [a]	47-157/43
50-29-3	4,4'-DDT	0.2	0.14	70	0.19	95	30	52-167/42
72-20-8	Endrin	0.2	0.15	75	0.20	100	29	55-165/36
1031-07-8	Endosulfan sulfate	0.2	0.13	65	0.17	85	19	43-150/36
7421-93-4	Endrin aldehyde	0.2	0.14	70	0.23	115	49* [a]	33-163/41
53494-70-5	Endrin ketone	0.2	0.17	85	0.21	105	15	42-178/38
959-98-8	Endosulfan-I	0.2	0.15	75	0.19	95	24	57-154/37
33213-65-9	Endosulfan-II	0.2	0.15	75 [b]	0.15	75	0	54-160/38
76-44-8	Heptachlor	0.2	0.15	75	0.18	90	18	55-151/37
1024-57-3	Heptachlor epoxide	0.2	0.12	60	0.19	95	45* [a]	58-157/36
72-43-5	Methoxychlor	0.2	0.12	60	0.18	90	32	55-155/39

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	54%	68%	10-190%
877-09-8	Tetrachloro-m-xylene	50%	62%	10-190%
2051-24-3	Decachlorobiphenyl	53%	51%	10-156%
2051-24-3	Decachlorobiphenyl	43%	66%	10-156%

(a) Analytical precision exceeds in-house control limits.
(b) Reported from 2nd signal. 1st signal used for confirmation.

* = Outside of Control Limits.

Internal Standard Area Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G4G3677-CC3578	**Injection Date:**	12/08/21
Lab File ID:	4G9723402.D	**Injection Time:**	23:17
Instrument ID:	GC4G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	302980167	1.87	1778186836	1.63
Upper Limit [a]	605960334	2.37	3556373672	2.13
Lower Limit [b]	151490084	1.37	889093418	1.13

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP36912-MB1 [c]	288639116	1.86	1657742602	1.63
OP36912-BS1 [c]	296876190	1.88	1920851733	1.64
JD35940-1	328160026	1.88	2727100621	1.64
OP36912-MS [c]	335271726	1.87	2203549384	1.64
OP36912-MSD [c]	307887303	1.87	2086194280	1.63
OP37005-MB1	305838599	1.87	2083290420	1.64
OP37005-BS1	308160552	1.87	2112176648	1.64
OP37005-BSD	306635524	1.87	2061153774	1.64
ZZZZZZ	369004587	1.87	1732882719	1.64
OP37005-LB25	291889907	1.87	1764581915	1.63
OP36897-MB1	311800076	1.87	2207802603	1.64
OP36897-BS1	342477701	1.87	2328376341	1.64
OP36897-BSD	335171343	1.87	2326881562	1.64
JD35920-3 [d]	344462863	1.86	2235067945	1.63
JD35920-4 [d]	335810089	1.87	2325426991	1.64
JD35920-5 [d]	322119002	1.87	2292156926	1.64
JD35920-6 [d]	315535503	1.87	2294042589	1.64
JD35920-2 [d]	323104298	1.87	2337507690	1.64

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Had TBA cleanup.
(d) Confirmation run.

Internal Standard Area Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2876-CC2867	**Injection Date:**	12/20/21
Lab File ID:	6G81299.D	**Injection Time:**	02:19
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	560769371	2.06	778610753	1.68
Upper Limit [a]	1121538742	2.56	1557221506	2.18
Lower Limit [b]	280384686	1.56	389305377	1.18

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP37193-MB1	621981065	2.06	860082544	1.69
OP37193-BS1	630639341	2.06	889109184	1.68
OP37193-BSD	643271139	2.06	915594386	1.68
JD35920-2 [c]	682025264	2.06	939771989	1.68
JD35920-3 [c]	688877304	2.06	943422164	1.69
JD35920-4 [c]	659992612	2.06	916247360	1.69
JD35920-5 [c]	671506729	2.06	930512524	1.69
JD35920-6 [c]	643072634	2.06	921375160	1.69
ZZZZZZ	626065291	2.06	906885398	1.68
ZZZZZZ	689209848	2.06	970985960	1.69
ZZZZZZ	675553933	2.06	946169357	1.68
ZZZZZZ	666835188	2.06	930262074	1.69
ZZZZZZ	711929080	2.06	1011185299	1.69
ZZZZZZ	651924010	2.06	932733403	1.69
ZZZZZZ	609228829	2.06	723559233	1.69
ZZZZZZ	6186209712*	2.10	-555527458	0.68*
ZZZZZZ	1935812952*	2.06	126030000	1.81
ZZZZZZ	597732038	2.06	813590560	1.69

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Re-extracted for low surrogate recovery and no surrogates added to QC. Originally prep date was within holding time.

DDT/Endrin Breakdown Check

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3578-DDT
Lab File ID: 4G9720947.D
Instrument ID: GC4G
Injection Date: 09/29/21
Injection Time: 21:56

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	87957040	10426750
4,4'-DDE	70467586	8617648
4,4'-DDT	3955980337	621436044
DDT Breakdown [a]	3.9 %	3 %
Endrin aldehyde	0	0
Endrin ketone	22525783	3817366
Endrin	2247813757	351667436
Endrin Breakdown [b]	1 %	1.1 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G4G3578-IC3578	4G9720949.D	09/29/21	23:55	01:59	Initial cal 1
G4G3578-IC3578	4G9720950.D	09/30/21	00:10	02:14	Initial cal 2
G4G3578-IC3578	4G9720951.D	09/30/21	00:25	02:29	Initial cal 5
G4G3578-IC3578	4G9720952.D	09/30/21	00:40	02:44	Initial cal 10
G4G3578-ICC3578	4G9720953.D	09/30/21	00:55	02:59	Initial cal 25
G4G3578-IC3578	4G9720954.D	09/30/21	01:10	03:14	Initial cal 50
G4G3578-IC3578	4G9720955.D	09/30/21	01:25	03:29	Initial cal 75
G4G3578-IC3578	4G9720956.D	09/30/21	01:40	03:44	Initial cal 100
G4G3578-IC3578	4G9720957.D	09/30/21	01:55	03:59	Initial cal 500
G4G3578-IC3578	4G9720958.D	09/30/21	02:10	04:14	Initial cal 500
G4G3578-ICV3578	4G9720959.D	09/30/21	02:25	04:29	Initial cal verification 25
G4G3578-ICV3578	4G9720960.D	09/30/21	02:40	04:44	Initial cal verification 500
G4G3578-ICV3578	4G9720961.D	09/30/21	02:55	04:59	Initial cal verification 500
G4G3578-ICV3578	4G9720962.D	09/30/21	03:18	05:22	Initial cal verification 25
G4G3578-ICV3578	4G9720963.D	09/30/21	03:33	05:37	Initial cal verification 25

DDT/Endrin Breakdown Check

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	G4G3677-DDT	**Injection Date:**	12/08/21
Lab File ID:	4G9723401.D	**Injection Time:**	23:02
Instrument ID:	GC4G		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	41928612	6061067
4,4'-DDE	57705727	9576166
4,4'-DDT	2389078532	434109610
DDT Breakdown [a]	4 %	3.5 %
Endrin aldehyde	0	0
Endrin ketone	15534806	3371067
Endrin	1546029142	289533620
Endrin Breakdown [b]	1 %	1.2 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G4G3677-CC3578	4G9723402.D	12/08/21	23:17	00:15	Continuing cal 25
OP36912-MB1	4G9723404.D	12/08/21	23:58	00:56	Method Blank
OP36912-BS1	4G9723405.D	12/09/21	00:13	01:11	Blank Spike
JD35940-1	4G9723406.D	12/09/21	00:28	01:26	(used for QC only; not part of job JD35920)
OP36912-MS	4G9723407.D	12/09/21	00:43	01:41	Matrix Spike
OP36912-MSD	4G9723408.D	12/09/21	00:58	01:56	Matrix Spike Duplicate
OP37005-MB1	4G9723410.D	12/09/21	01:37	02:35	Method Blank
OP37005-BS1	4G9723411.D	12/09/21	01:52	02:50	Blank Spike
OP37005-BSD	4G9723412.D	12/09/21	02:07	03:05	Blank Spike Duplicate
ZZZZZZ	4G9723413.D	12/09/21	02:22	03:20	(unrelated sample)
OP37005-LB25	4G9723414.D	12/09/21	02:37	03:35	Leachate Blank
OP36897-MB1	4G9723415.D	12/09/21	02:52	03:50	Method Blank
OP36897-BS1	4G9723416.D	12/09/21	03:07	04:05	Blank Spike
OP36897-BSD	4G9723417.D	12/09/21	03:22	04:20	Blank Spike Duplicate
JD35920-3	4G9723418.D	12/09/21	03:37	04:35	HOFF MW-2DU
JD35920-4	4G9723419.D	12/09/21	03:52	04:50	HOFF MW-2S
JD35920-5	4G9723420.D	12/09/21	04:07	05:05	HOFF MW-7DL
JD35920-6	4G9723421.D	12/09/21	04:22	05:20	HOFF DUP-113021
JD35920-2	4G9723422.D	12/09/21	04:37	05:35	HOFF MW-2DL

DDT/Endrin Breakdown Check

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	G6G2876-DDT	**Injection Date:**	12/20/21
Lab File ID:	6G81298.D	**Injection Time:**	02:01
Instrument ID:	GC6G		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	21554212	11874748
4,4'-DDE	13205104	7634208
4,4'-DDT	1383032291	920717800
DDT Breakdown [a]	2.5 %	2.1 %
Endrin aldehyde	4264741	1513293
Endrin ketone	4537110	8963963
Endrin	843926758	544226950
Endrin Breakdown [b]	1 %	1.9 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G2876-CC2867	6G81299.D	12/20/21	02:19	00:18	Continuing cal 50
OP37193-MB1	6G81301.D	12/20/21	03:16	01:15	Method Blank
OP37193-BS1	6G81302.D	12/20/21	03:34	01:33	Blank Spike
OP37193-BSD	6G81303.D	12/20/21	03:51	01:50	Blank Spike Duplicate
JD35920-2	6G81304.D	12/20/21	04:09	02:08	HOFF MW-2DL
JD35920-3	6G81305.D	12/20/21	04:26	02:26	HOFF MW-2DU
JD35920-4	6G81306.D	12/20/21	04:44	02:43	HOFF MW-2S
JD35920-5	6G81307.D	12/20/21	05:02	03:01	HOFF MW-7DL
JD35920-6	6G81308.D	12/20/21	05:20	03:19	HOFF DUP-113021
ZZZZZZ	6G81309.D	12/20/21	05:38	03:37	(unrelated sample)
ZZZZZZ	6G81310.D	12/20/21	05:56	03:55	(unrelated sample)
ZZZZZZ	6G81311.D	12/20/21	06:14	04:13	(unrelated sample)
ZZZZZZ	6G81312.D	12/20/21	06:32	04:31	(unrelated sample)
ZZZZZZ	6G81313.D	12/20/21	06:50	04:49	(unrelated sample)
ZZZZZZ	6G81314.D	12/20/21	07:08	05:07	(unrelated sample)
ZZZZZZ	6G81315.D	12/20/21	07:25	05:24	(unrelated sample)
ZZZZZZ	6G81316.D	12/20/21	07:43	05:42	(unrelated sample)
ZZZZZZ	6G81317.D	12/20/21	08:01	06:00	(unrelated sample)
ZZZZZZ	6G81318.D	12/20/21	08:19	06:18	(unrelated sample)

GC Identification Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2876-CC2867	**Injection Date:**	12/20/21
Lab File ID:	6G81299.D	**Injection Time:**	02:19
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37193-BS1	**Injection Date:**	12/20/21
Lab File ID:	6G81302.D	**Injection Time:**	03:34
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.77	3.77	0.16		ug/l	13.3
Aldrin	2 [a]	5.01	5.01	0.14		ug/l	
alpha-BHC	1	2.71	2.71	0.14		ug/l	7.4
alpha-BHC	2 [a]	3.55	3.55	0.13		ug/l	
beta-BHC	1	3.06	3.06	0.17		ug/l	6.1
beta-BHC	2 [a]	4.07	4.07	0.16		ug/l	
delta-BHC	1	3.23	3.23	0.17		ug/l	12.5
delta-BHC	2 [a]	4.46	4.46	0.15		ug/l	
gamma-BHC (Lindane)	1	2.99	2.98	0.17		ug/l	12.5
gamma-BHC (Lindane)	2 [a]	3.98	3.98	0.15		ug/l	
alpha-Chlordane	1	4.76	4.76	0.18		ug/l	18.2
alpha-Chlordane	2 [a]	6.35	6.35	0.15		ug/l	
gamma-Chlordane	1	4.60	4.60	0.17		ug/l	19.4
gamma-Chlordane	2 [a]	6.12	6.12	0.14		ug/l	
Dieldrin	1	5.24	5.24	0.16		ug/l	28.6
Dieldrin	2 [a]	6.88	6.88	0.12		ug/l	
4,4'-DDD	1	5.69	5.69	0.16		ug/l	13.3
4,4'-DDD	2 [a]	7.56	7.56	0.14		ug/l	
4,4'-DDE	1 [a]	4.89	4.88	0.098		ug/l	28.1
4,4'-DDE	2	6.61	6.61	0.13		ug/l	
4,4'-DDT	1	6.09	6.09	0.15		ug/l	6.9
4,4'-DDT	2 [a]	8.10	8.10	0.14		ug/l	
Endrin	1	5.55	5.54	0.16		ug/l	6.5
Endrin	2 [a]	7.38	7.38	0.15		ug/l	
Endosulfan sulfate	1 [a]	7.12	7.12	0.13		ug/l	7.4
Endosulfan sulfate	2	8.78	8.78	0.14		ug/l	
Endrin aldehyde	1 [a]	6.46	6.46	0.14		ug/l	6.9
Endrin aldehyde	2	8.31	8.31	0.15		ug/l	
Endrin ketone	1 [a]	7.54	7.54	0.17		ug/l	5.7
Endrin ketone	2	9.74	9.74	0.18		ug/l	
Endosulfan-I	1 [a]	4.93	4.93	0.15		ug/l	0.0
Endosulfan-I	2	6.44	6.44	0.15		ug/l	
Endosulfan-II	1	5.85	5.86	0.080		ug/l	60.9
Endosulfan-II [b]	2 [a]	7.73	7.74	0.15		ug/l	
Heptachlor	1	3.45	3.45	0.16		ug/l	6.5
Heptachlor	2 [a]	4.56	4.56	0.15		ug/l	
Heptachlor epoxide	1	4.44	4.44	0.17		ug/l	34.5
Heptachlor epoxide	2 [a]	5.83	5.84	0.12		ug/l	
Methoxychlor	1 [a]	6.87	6.87	0.12		ug/l	8.0
Methoxychlor	2	9.34	9.34	0.13		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2876-CC2867	**Injection Date:**	12/20/21
Lab File ID:	6G81299.D	**Injection Time:**	02:19
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37193-BS1	**Injection Date:**	12/20/21
Lab File ID:	6G81302.D	**Injection Time:**	03:34
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(b) Reported from 2nd signal. 1st signal used for confirmation.

GC Identification Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2876-CC2867	**Injection Date:**	12/20/21
Lab File ID:	6G81299.D	**Injection Time:**	02:19
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37193-BSD	**Injection Date:**	12/20/21
Lab File ID:	6G81303.D	**Injection Time:**	03:51
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.77	3.77	0.20		ug/l	5.1
Aldrin	2 [a]	5.01	5.01	0.19		ug/l	
alpha-BHC	1	2.71	2.71	0.19		ug/l	11.1
alpha-BHC	2 [a]	3.55	3.55	0.17		ug/l	
beta-BHC	1	3.06	3.06	0.25		ug/l	27.3
beta-BHC	2 [a]	4.07	4.07	0.19		ug/l	
delta-BHC	1	3.23	3.23	0.21		ug/l	4.9
delta-BHC	2 [a]	4.46	4.46	0.20		ug/l	
gamma-BHC (Lindane)	1	2.98	2.98	0.20		ug/l	10.5
gamma-BHC (Lindane)	2 [a]	3.98	3.98	0.18		ug/l	
alpha-Chlordane	1	4.76	4.76	0.23		ug/l	19.0
alpha-Chlordane	2 [a]	6.35	6.35	0.19		ug/l	
gamma-Chlordane	1	4.60	4.60	0.25		ug/l	22.2
gamma-Chlordane	2 [a]	6.12	6.12	0.20		ug/l	
Dieldrin	1	5.24	5.24	0.21		ug/l	4.9
Dieldrin	2 [a]	6.88	6.88	0.20		ug/l	
4,4'-DDD	1 [a]	5.69	5.69	0.21		ug/l	50.0
4,4'-DDD	2	7.59	7.56	0.35		ug/l	
4,4'-DDE	1 [a]	4.89	4.88	0.16		ug/l	11.8
4,4'-DDE	2	6.61	6.61	0.18		ug/l	
4,4'-DDT	1	6.09	6.09	0.20		ug/l	5.1
4,4'-DDT	2 [a]	8.10	8.10	0.19		ug/l	
Endrin	1	5.54	5.54	0.20		ug/l	0.0
Endrin	2 [a]	7.38	7.38	0.20		ug/l	
Endosulfan sulfate	1	7.12	7.12	0.19		ug/l	11.1
Endosulfan sulfate	2 [a]	8.78	8.78	0.17		ug/l	
Endrin aldehyde	1 [a]	6.46	6.46	0.23		ug/l	0.0
Endrin aldehyde	2	8.31	8.31	0.23		ug/l	
Endrin ketone	1	7.54	7.54	0.23		ug/l	9.1
Endrin ketone	2 [a]	9.74	9.74	0.21		ug/l	
Endosulfan-I	1	4.93	4.93	0.20		ug/l	5.1
Endosulfan-I	2 [a]	6.44	6.44	0.19		ug/l	
Endosulfan-II	1 [a]	5.85	5.86	0.15		ug/l	23.5
Endosulfan-II	2	7.73	7.74	0.19		ug/l	
Heptachlor	1	3.45	3.45	0.21		ug/l	15.4
Heptachlor	2 [a]	4.56	4.56	0.18		ug/l	
Heptachlor epoxide	1	4.44	4.44	0.22		ug/l	14.6
Heptachlor epoxide	2 [a]	5.83	5.84	0.19		ug/l	
Methoxychlor	1	6.88	6.87	0.18		ug/l	0.0
Methoxychlor	2 [a]	9.34	9.34	0.18		ug/l	

(a) QC results reported from this column.

Surrogate Recovery Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8081B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JD35920-2	6G81304.D	72	63	38	36
JD35920-2	4G9723422.D	9* [c]	6* [c]	5* [c]	6* [c]
JD35920-3	6G81305.D	12	14	8* [d]	12
JD35920-3	4G9723418.D	59	51	24* [c]	19* [c]
JD35920-4	6G81306.D	48	44	26	30
JD35920-4	4G9723419.D	46	44	26* [c]	20* [c]
JD35920-5	6G81307.D	70	58	38	37
JD35920-5	4G9723420.D	87	56	35	26* [c]
JD35920-6	6G81308.D	81	64	45	51
JD35920-6	4G9723421.D	115	71	30	27* [c]
OP37193-BS1	6G81302.D	54	50	53	43
OP37193-BSD	6G81303.D	68	62	51	66
OP37193-MB1	6G81301.D	55	49	38	45

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	10-165%
S2 = Decachlorobiphenyl	28-161%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside of in house control limits.
(d) Outside control limits due to matrix interference.

GC Surrogate Retention Time Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2876-CC2867	**Injection Date:**	12/20/21
Lab File ID:	6G81299.D	**Injection Time:**	02:19
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.26	2.89	9.35	11.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP37193-MB1	6G81301.D	12/20/21	03:16	2.27	2.88	9.36	11.84
OP37193-BS1	6G81302.D	12/20/21	03:34	2.26	2.89	9.35	11.85
OP37193-BSD	6G81303.D	12/20/21	03:51	2.26	2.89	9.35	11.85
JD35920-2	6G81304.D	12/20/21	04:09	2.26	2.89	9.35	11.85
JD35920-3	6G81305.D	12/20/21	04:26	2.26	2.89	9.35	11.84
JD35920-4	6G81306.D	12/20/21	04:44	2.26	2.89	9.35	11.85
JD35920-5	6G81307.D	12/20/21	05:02	2.26	2.89	9.35	11.85
JD35920-6	6G81308.D	12/20/21	05:20	2.26	2.89	9.35	11.84
ZZZZZZ	6G81309.D	12/20/21	05:38	2.26	2.89	9.35	11.85
ZZZZZZ	6G81310.D	12/20/21	05:56	2.26	2.89	9.35	11.84
ZZZZZZ	6G81311.D	12/20/21	06:14	2.26	2.89	9.35	11.84
ZZZZZZ	6G81312.D	12/20/21	06:32	2.27	2.89	9.35	11.84
ZZZZZZ	6G81313.D	12/20/21	06:50	2.26	2.89	9.35	11.84
ZZZZZZ	6G81314.D	12/20/21	07:08	2.26	2.89	9.35	11.85
ZZZZZZ	6G81315.D	12/20/21	07:25	2.27	2.89	9.35	11.85
ZZZZZZ	6G81316.D	12/20/21	07:43	0.00	0.00	9.35	11.85
ZZZZZZ	6G81317.D	12/20/21	08:01	0.00	0.00	9.35	11.84
ZZZZZZ	6G81318.D	12/20/21	08:19	2.27	2.89	9.35	11.84

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G4G3677-CC3578	**Injection Date:**	12/08/21
Lab File ID:	4G9723402.D	**Injection Time:**	23:17
Instrument ID:	GC4G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.31	2.75	10.05	11.86

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP36912-MB1	4G9723404.D	12/08/21	23:58	2.32	2.75	10.05	11.86
OP36912-BS1	4G9723405.D	12/09/21	00:13	2.32	2.76	10.04	11.86
JD35940-1	4G9723406.D	12/09/21	00:28	2.32	2.76	10.04	11.86
OP36912-MS	4G9723407.D	12/09/21	00:43	2.32	2.76	10.04	11.86
OP36912-MSD	4G9723408.D	12/09/21	00:58	2.31	2.76	10.05	11.86
OP37005-MB1	4G9723410.D	12/09/21	01:37	2.32	2.75	10.05	11.86
OP37005-BS1	4G9723411.D	12/09/21	01:52	2.32	2.76	10.05	11.86
OP37005-BSD	4G9723412.D	12/09/21	02:07	2.32	2.76	10.05	11.86
ZZZZZZ	4G9723413.D	12/09/21	02:22	2.32	2.76	10.04	11.86
OP37005-LB25	4G9723414.D	12/09/21	02:37	2.31	2.76	10.04	11.86
OP36897-MB1	4G9723415.D	12/09/21	02:52	0.00	0.00	0.00	0.00
OP36897-BS1	4G9723416.D	12/09/21	03:07	0.00	0.00	0.00	0.00
OP36897-BSD	4G9723417.D	12/09/21	03:22	0.00	0.00	0.00	0.00
JD35920-3	4G9723418.D	12/09/21	03:37	2.31	2.75	10.04	11.86
JD35920-4	4G9723419.D	12/09/21	03:52	2.32	2.76	10.05	11.86
JD35920-5	4G9723420.D	12/09/21	04:07	2.31	2.76	10.05	11.86
JD35920-6	4G9723421.D	12/09/21	04:22	2.31	2.76	10.05	11.86
JD35920-2	4G9723422.D	12/09/21	04:37	2.31	2.76	10.04	11.86

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3578-ICC3578
Lab FileID: 4G9720953.D

Response Factor Report GC4G

Method : C:\MSDCHEM\1\METHODS\4PST3578.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Thu Sep 30 20:21:24 2021
Response via : Initial Calibration

Calibration Files
2 =4g9720950.D 5 =4g9720951.D 10 =4g9720952.D 25 =4g9720953.D
50 =4g9720954.D 100 =4g9720956.D 1 =4g9720949.D 75 =4g9720955.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.891	0.792	0.871	0.822	0.824	0.813		0.795	0.830	4.51
3) hexachlorobe	1.325	1.271	1.210	1.193	1.167	1.195	1.652	1.146	1.270	12.98
4) alpha-BHC	1.255	1.192	1.169	1.212	1.223	1.294	1.406	1.221	1.246	5.98
5) gamma-BHC	1.172	1.088	1.064	1.100	1.101	1.166	1.178	1.100	1.121	3.91
6) Heptachlor	1.170	1.042	1.022	1.039	1.030	1.084	1.221	1.014	1.078	7.12
7) beta-BHC	0.531	0.492	0.470	0.471	0.461	0.482	0.576	0.457	0.492	8.31
8) delta-BHC	1.085	1.015	1.003	1.053	1.065	1.146	1.128	1.069	1.070	4.64
9) Aldrin	1.083	0.995	0.963	0.979	0.978	1.029	1.057	0.965	1.006	4.47
10) alachlor		0.126	0.111	0.111	0.106	0.098		0.096	0.108	9.96
11) Heptachlor E	1.048	0.945	0.893	0.900	0.882	0.903	1.017	0.862	0.931	7.23
12) gamma-Chlord	1.067	0.941	0.916	0.928	0.917	0.968	1.095	0.911	0.968	7.50
13) alpha-Chlord	1.079	0.931	0.899	0.898	0.883	0.926	0.928	0.872	0.927	7.01
14) Endosulfan I	0.986	0.911	0.860	0.865	0.844	0.866	0.986	0.821	0.892	7.07
15) 4,4'-DDE	1.073	0.958	0.925	0.938	0.931	0.976	1.085	0.917	0.975	6.84
16) Dieldrin	1.036	0.951	0.911	0.934	0.920	0.953	1.045	0.902	0.957	5.76
17) Endrin	1.023	0.895	0.866	0.878	0.865	0.884	1.013	0.839	0.908	7.73
18) 4,4'-DDD	0.818	0.766	0.740	0.758	0.756	0.787	0.841	0.741	0.776	4.76
19) Endosulfan I	0.891	0.831	0.796	0.797	0.782	0.799	0.882	0.760	0.817	5.74
20) 4,4'-DDT	0.866	0.754	0.748	0.759	0.754	0.793	0.785	0.744	0.775	5.23
21) Endrin Aldeh	0.770	0.694	0.662	0.650	0.633	0.651	0.770	0.614	0.681	8.76
22) Endosulfan S	0.776	0.729	0.721	0.723	0.719	0.742	0.883	0.705	0.750	7.70
23) Methoxychlor	0.417	0.371	0.366	0.369	0.353	0.354	0.398	0.340	0.371	6.78
24) Mirex	0.770	0.615	0.613	0.607	0.583	0.599	0.811	0.570	0.646	14.12
25) Endrin Keton	0.845	0.796	0.783	0.794	0.780	0.803	0.924	0.765	0.811	6.30
26) Decachlorobi	0.822	0.779	0.725	0.721	0.692	0.719	0.942	0.681	0.760	11.41
27) I 1-bromo-2-nitrobenzen	ISTD									
28) Toxaphene{A}				0.007					0.007	0.00
29) Toxaphene{B}				0.024					0.024	0.00
30) Toxaphene{C}				0.022					0.022	0.00
31) Toxaphene{D}				0.015					0.015	0.00
32) Toxaphene{E}				0.020					0.020	0.00
33) I 1-bromo-2-nitrobenzen	ISTD									
34) Chlordane {A				0.060					0.060	0.00
35) Chlordane {B				0.035					0.035	0.00
36) Chlordane {C				0.126					0.126	0.00
37) Chlordane {D				0.197					0.197	0.00
38) Chlordane {E				0.029					0.029	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.873	0.805	0.815	0.843	0.866	0.907		0.876	0.855	4.23

10.8.1 10

Initial Calibration Summary

Job Number: JD35920 **Sample:** G4G3578-ICC3578
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4G9720953.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

3)	hexachlorobe	1.099	1.023	1.018	1.030	1.035	1.078	1.125	1.038	1.056	3.77
4)	alpha-BHC	1.061	1.044	1.095	1.218	1.318	1.448	1.100	1.368	1.207	12.85
5)	gamma-BHC	1.006	1.001	1.031	1.127	1.198	1.303	1.004	1.238	1.114	10.83
6)	Heptachlor	1.050	1.002	1.018	1.108	1.150	1.235	1.044	1.179	1.098	7.60
7)	beta-BHC	0.554	0.513	0.511	0.518	0.521	0.542	0.519	0.522	0.525	2.85
8)	delta-BHC	0.879	0.896	0.944	1.054	1.140	1.257	0.865	1.191	1.028	14.95
9)	Aldrin	0.944	0.939	0.962	1.047	1.111	1.206	0.956	1.144	1.039	10.02
10)	alachlor		0.153	0.149	0.150	0.144	0.138		0.136	0.145	4.65
11)	Heptachlor E	0.896	0.928	0.942	0.998	1.034	1.098	0.921	1.052	0.984	7.37
12)	gamma-Chlord	0.924	0.938	0.955	1.020	1.068	1.150	0.992	1.092	1.017	7.89
13)	alpha-Chlord	0.907	0.925	0.950	0.996	1.034	1.106	1.018	1.059	0.999	6.88
14)	Endosulfan I	0.866	0.887	0.898	0.946	0.977	1.042	0.930	0.996	0.943	6.35
15)	4,4'-DDE	0.884	0.862	0.888	0.972	1.040	1.136	0.881	1.077	0.968	10.88
16)	Dieldrin	0.872	0.886	0.927	0.996	1.054	1.142	0.926	1.085	0.986	10.06
17)	Endrin	0.891	0.888	0.887	0.943	0.997	1.052	0.857	1.001	0.940	7.46
18)	4,4'-DDD	0.722	0.713	0.735	0.803	0.841	0.917	0.755	0.869	0.795	9.52
19)	Endosulfan I	0.853	0.838	0.843	0.888	0.915	0.969	0.897	0.926	0.891	5.12
20)	4,4'-DDT	0.709	0.722	0.744	0.801	0.842	0.920	0.761	0.870	0.796	9.49
21)	Endrin Aldeh	0.708	0.688	0.700	0.743	0.752	0.790	0.755	0.757	0.737	4.72
22)	Endosulfan S	0.800	0.798	0.802	0.831	0.852	0.905	0.812	0.867	0.833	4.63
23)	Methoxychlor	0.445	0.412	0.425	0.431	0.431	0.441	0.425	0.429	0.430	2.33
24)	Mirex	0.773	0.769	0.753	0.750	0.736	0.753	0.837	0.730	0.763	4.34
25)	Endrin Ketone	0.884	0.891	0.905	0.946	0.972	1.023	0.966	0.983	0.946	5.19
26)	Decachlorobi	0.770	0.752	0.779	0.780	0.759	0.802	0.866	0.784	0.787	4.53

27)	I 1-bromo-2-nitrobenzen	----------ISTD----------		
28)	Toxaphene{A}	0.011	0.011	0.00
29)	Toxaphene{B}	0.019	0.019	0.00
30)	Toxaphene{C}	0.036	0.036	0.00
31)	Toxaphene{D}	0.017	0.017	0.00
32)	Toxaphene{E}	0.021	0.021	0.00

33)	I 1-bromo-2-nitrobenzen	----------ISTD----------		
34)	Chlordane {A	0.062	0.062	0.00
35)	Chlordane {B	0.036	0.036	0.00
36)	Chlordane {C	0.134	0.134	0.00
37)	Chlordane {D	0.220	0.220	0.00
38)	Chlordane {E	0.031	0.031	0.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

4PST3578.M Thu Sep 30 20:30:25 2021 RPT1

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3578-ICV3578
Lab FileID: 4G9720959.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\4G...\4g9720959.D\ECD1A.ch Vial: 13
Signal #2 : C:\msdchem\1\DATA\4G3578\4g9720959.D\ECD2B.ch
Acq On : 30 Sep 2021 2:25 am Operator: christp
Sample : icv3578-25 Inst : GC4G
Misc : op35543,g4g3578,1000,,,5,10 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\4PST3578.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Thu Sep 30 20:21:24 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.16- 2.16
2	SAB	Tetrachloro-m-xylene	0.830	0.803	3.3	98	0.00	2.31- 2.37
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.246	1.209	3.0	100	0.00	2.85- 2.91
5	MA	gamma-BHC	1.121	1.112	0.8	101	0.00	3.18- 3.24
6	MA	Heptachlor	1.078	1.042	3.3	100	0.00	3.72- 3.78
7	B	beta-BHC	0.492	0.478	2.8	102	0.00	3.26- 3.32
8	B	delta-BHC	1.070	1.056	1.3	100	0.00	3.46- 3.52
9	MB	Aldrin	1.006	0.988	1.8	101	0.00	4.09- 4.15
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide	0.931	0.906	2.7	101	0.00	4.86- 4.92
12	B	gamma-Chlordane	0.968	0.925	4.4	100	0.00	5.03- 5.09
13	B	alpha-Chlordane	0.927	0.894	3.6	100	0.00	5.22- 5.28
14	A	Endosulfan I	0.892	0.844	5.4	98	0.00	5.41- 5.47
15	B	4,4'-DDE	0.975	0.928	4.8	99	0.00	5.33- 5.39
16	MA	Dieldrin	0.957	0.941	1.7	101	0.00	5.75- 5.81
17	MA	Endrin	0.908	0.854	5.9	97	0.00	6.10- 6.16
18	A	4,4'-DDD	0.776	0.751	3.2	99	0.00	6.21- 6.27
19	B	Endosulfan II	0.817	0.811	0.7	102	0.00	6.43- 6.49
20	MA	4,4'-DDT	0.775	0.764	1.4	101	0.00	6.64- 6.70
21	B	Endrin Aldehyde	0.681	0.662	2.8	102	0.00	7.09- 7.15
22	B	Endosulfan Sulfate	0.750	0.693	7.6	96	0.00	7.81- 7.87
23	A	Methoxychlor	0.371	0.372	-0.3	101	0.00	7.45- 7.51
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.811	0.818	-0.9	103	0.00	8.26- 8.32
26	SA	Decachlorobiphenyl	0.760	0.735	3.3	102	0.00	10.06-10.12
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.16- 2.16
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.16- 2.16
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3578-ICV3578
Lab FileID: 4G9720959.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.39- 2.39
2	SAB	Tetrachloro-m-xylene	0.855	0.843	1.4	102	0.00	2.75- 2.81
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.207	1.210	-0.2	101	0.00	3.46- 3.52
5	MA	gamma-BHC	1.114	1.121	-0.6	102	0.00	3.91- 3.97
6	MA	Heptachlor	1.098	1.087	1.0	100	0.00	4.51- 4.57
7	B	beta-BHC	0.525	0.512	2.5	101	0.00	4.00- 4.06
8	B	delta-BHC	1.028	1.037	-0.9	101	0.00	4.41- 4.47
9	MB	Aldrin	1.039	1.045	-0.6	102	0.00	4.98- 5.04
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide	0.984	0.991	-0.7	101	0.00	5.83- 5.89
12	B	gamma-Chlordane	1.017	1.005	1.2	101	0.00	6.12- 6.18
13	B	alpha-Chlordane	0.999	0.984	1.5	101	0.00	6.35- 6.41
14	A	Endosulfan I	0.943	0.920	2.4	99	0.00	6.45- 6.51
15	B	4,4'-DDE	0.968	0.959	0.9	101	0.00	6.62- 6.68
16	MA	Dieldrin	0.986	0.992	-0.6	102	0.00	6.90- 6.96
17	MA	Endrin	0.940	0.927	1.4	100	0.00	7.41- 7.47
18	A	4,4'-DDD	0.795	0.779	2.0	99	0.00	7.59- 7.65
19	B	Endosulfan II	0.891	0.880	1.2	101	0.00	7.77- 7.83
20	MA	4,4'-DDT	0.796	0.789	0.9	101	0.00	8.13- 8.19
21	B	Endrin Aldehyde	0.737	0.732	0.7	101	0.00	8.35- 8.41
22	B	Endosulfan Sulfate	0.833	0.777	6.7	95	0.00	8.82- 8.88
23	A	Methoxychlor	0.430	0.428	0.5	101	0.00	9.38- 9.44
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.946	0.941	0.5	102	0.00	9.79- 9.85
26	SA	Decachlorobiphenyl	0.787	0.773	1.8	101	0.00	11.88-11.94
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.39- 2.39
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.39- 2.39
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g9720953.D 4PST3578.M Thu Sep 30 20:28:16 2021 RPT1

10.8.2 10

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3578-ICV3578
Lab FileID: 4G9720960.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\4G...\4g9720960.D\ECD1A.ch Vial: 14
Signal #2 : C:\msdchem\1\DATA\4G3578\4g9720960.D\ECD2B.ch
Acq On : 30 Sep 2021 2:40 am Operator: christp
Sample : icv3578-500 Inst : GC4G
Misc : op35543,g4g3578,1000,,,5,10 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\4PST3578.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Thu Sep 30 20:21:24 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	90	0.00	1.16- 2.16
2	SAB	Tetrachloro-m-xylene	0.830	1.082	-30.4#	119	0.00	2.31- 2.37
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.760	0.877	-15.4	114	0.00	10.07-10.13
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.16- 2.16
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.16- 2.16
34		Chlordane {A}	0.060	0.068	-13.3	104	0.00	3.65- 3.85
35		Chlordane {B}	0.035	0.040	-14.3	104	0.00	4.18- 4.38
36		Chlordane {C}	0.126	0.148	-17.5	107	0.00	4.96- 5.16
37		Chlordane {D}	0.197	0.226	-14.7	105	0.00	5.14- 5.34
38		Chlordane {E}	0.029	0.034	-17.2	105	0.00	6.26- 6.46

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3578-ICV3578
Lab FileID: 4G9720960.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.40- 2.40
2	SAB	Tetrachloro-m-xylene	0.855	0.952	-11.3	112	0.00	2.75- 2.81
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.787	0.787	0.0	105	0.00	11.88-11.94
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.40- 2.40
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.40- 2.40
34		Chlordane {A}	0.062	0.065	-4.8	105	0.00	4.45- 4.65
35		Chlordane {B}	0.036	0.038	-5.6	107	0.00	5.11- 5.31
36		Chlordane {C}	0.134	0.139	-3.7	104	0.00	6.05- 6.25
37		Chlordane {D}	0.220	0.224	-1.8	103	0.00	6.29- 6.49
38		Chlordane {E}	0.031	0.035	-12.9	113	0.00	7.78- 7.98

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g9720954.D 4PST3578.M Thu Sep 30 20:27:47 2021 RPT1

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3578-ICV3578
Lab FileID: 4G9720961.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\4G...\4g9720961.D\ECD1A.ch Vial: 15
Signal #2 : C:\msdchem\1\DATA\4G3578\4g9720961.D\ECD2B.ch
Acq On : 30 Sep 2021 2:55 am Operator: christp
Sample : icv3578-500 Inst : GC4G
Misc : op35543,g4g3578,1000,,,5,10 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\4PST3578.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Thu Sep 30 20:21:24 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.16- 2.16
2	SAB	Tetrachloro-m-xylene	0.830	0.876	-5.5	103	0.00	2.31- 2.37
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.760	0.770	-1.3	108	0.00	10.07-10.13
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.16- 2.16
28	L8	Toxaphene{A}	0.007	0.008	-14.3	102	0.00	5.69- 5.89
29	L8	Toxaphene{B}	0.024	0.025	-4.2	101	0.00	6.35- 6.55
30	L8	Toxaphene{C}	0.022	0.024	-9.1	107	0.00	6.54- 6.74
31	L8	Toxaphene{D}	0.015	0.016	-6.7	105	0.00	6.89- 7.09
32	L8	Toxaphene{E}	0.020	0.021	-5.0	104	0.00	7.56- 7.76
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.16- 2.16
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3578-ICV3578
Lab FileID: 4G9720961.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.40- 2.40
2	SAB	Tetrachloro-m-xylene	0.855	0.953	-11.5	111	0.00	2.75- 2.81
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.787	0.859	-9.1	114	0.00	11.89-11.95
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.40- 2.40
28	L8	Toxaphene{A}	0.011	0.012	-9.1	109	0.00	6.79- 6.99
29	L8	Toxaphene{B}	0.019	0.020	-5.3	107	0.00	7.67- 7.87
30	L8	Toxaphene{C}	0.036	0.040	-11.1	109	0.00	7.83- 8.03
31	L8	Toxaphene{D}	0.017	0.019	-11.8	111	0.00	8.27- 8.47
32	L8	Toxaphene{E}	0.021	0.023	-9.5	104	0.00	9.19- 9.39
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.40- 2.40
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g9720954.D 4PST3578.M Thu Sep 30 20:27:49 2021 RPT1

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3578-ICV3578
Lab FileID: 4G9720962.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\4G...\4g9720962.D\ECD1A.ch Vial: 16
Signal #2 : C:\msdchem\1\DATA\4G3578\4g9720962.D\ECD2B.ch
Acq On : 30 Sep 2021 3:18 am Operator: christp
Sample : icv3578-25 Inst : GC4G
Misc : op35543,g4g3578,1000,,,5,10 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\4PST3578.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Thu Sep 30 20:21:24 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.17- 2.17
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex	0.646	0.611	5.4	100	0.00	7.64- 7.70
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.17- 2.17
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.17- 2.17
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3578-ICV3578
Lab FileID: 4G9720962.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.39- 2.39
2	SAB	Tetrachloro-m-xylene		----------	NA	----------		
3		hexachlorobenzene		----------	NA	----------		
4	A	alpha-BHC		----------	NA	----------		
5	MA	gamma-BHC		----------	NA	----------		
6	MA	Heptachlor		----------	NA	----------		
7	B	beta-BHC		----------	NA	----------		
8	B	delta-BHC		----------	NA	----------		
9	MB	Aldrin		----------	NA	----------		
10		alachlor		----------	NA	----------		
11	B	Heptachlor Epoxide		----------	NA	----------		
12	B	gamma-Chlordane		----------	NA	----------		
13	B	alpha-Chlordane		----------	NA	----------		
14	A	Endosulfan I		----------	NA	----------		
15	B	4,4'-DDE		----------	NA	----------		
16	MA	Dieldrin		----------	NA	----------		
17	MA	Endrin		----------	NA	----------		
18	A	4,4'-DDD		----------	NA	----------		
19	B	Endosulfan II		----------	NA	----------		
20	MA	4,4'-DDT		----------	NA	----------		
21	B	Endrin Aldehyde		----------	NA	----------		
22	B	Endosulfan Sulfate		----------	NA	----------		
23	A	Methoxychlor		----------	NA	----------		
24		Mirex	0.763	0.753	1.3	99	0.00	9.73- 9.79
25	B	Endrin Ketone		----------	NA	----------		
26	SA	Decachlorobiphenyl		----------	NA	----------		
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.39- 2.39
28	L8	Toxaphene{A}		----------	NA	----------		
29	L8	Toxaphene{B}		----------	NA	----------		
30	L8	Toxaphene{C}		----------	NA	----------		
31	L8	Toxaphene{D}		----------	NA	----------		
32	L8	Toxaphene{E}		----------	NA	----------		
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.39- 2.39
34		Chlordane {A}		----------	NA	----------		
35		Chlordane {B}		----------	NA	----------		
36		Chlordane {C}		----------	NA	----------		
37		Chlordane {D}		----------	NA	----------		
38		Chlordane {E}		----------	NA	----------		

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g9720953.D 4PST3578.M Thu Sep 30 20:28:18 2021 RPT1

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3578-ICV3578
Lab FileID: 4G9720963.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\4G...\4g9720963.D\ECD1A.ch Vial: 17
Signal #2 : C:\msdchem\1\DATA\4G3578\4g9720963.D\ECD2B.ch
Acq On : 30 Sep 2021 3:33 am Operator: christp
Sample : icv3578-25 Inst : GC4G
Misc : op35543,g4g3578,1000,,,5,10 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\4PST3578.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Thu Sep 30 20:21:24 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.17- 2.17
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene	1.270	1.222	3.8	102	0.00	2.69- 2.75
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor	0.108	0.097	10.2	87	0.00	4.25- 4.31
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.17- 2.17
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.17- 2.17
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3578-ICV3578
Lab FileID: 4G9720963.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.40- 2.40
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene	1.056	1.066	-0.9	101	0.00	3.30- 3.36
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor	0.145	0.128	11.7	84	0.00	4.78- 4.84
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.40- 2.40
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.40- 2.40
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g9720953.D 4PST3578.M Thu Sep 30 20:28:20 2021 RPT1

Continuing Calibration Summary

Job Number: JD35920 **Sample:** G4G3677-CC3578
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4G9723402.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\4G...\4g9723402.D\ECD1A.ch Vial: 2
Signal #2 : C:\msdchem\1\DATA\4G3677\4g9723402.D\ECD2B.ch
Acq On : 8 Dec 2021 11:17 pm Operator: christp
Sample : cc3578-25 Inst : GC4G
Misc : op36878,g4g3677,15.3,,,1,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4PST3578.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Wed Dec 08 17:28:28 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	67	-0.02	1.13- 2.13
2	SAB	Tetrachloro-m-xylene	0.830	0.882	-6.3	72	-0.01	2.28- 2.34
3		hexachlorobenzene	1.270	1.196	5.8	67	-0.01	2.65- 2.71
4	A	alpha-BHC	1.246	1.214	2.6	67	0.00	2.81- 2.87
5	MA	gamma-BHC	1.121	1.104	1.5	67	0.00	3.14- 3.20
6	MA	Heptachlor	1.078	1.067	1.0	69	0.00	3.69- 3.75
7	B	beta-BHC	0.492	0.480	2.4	68	0.00	3.23- 3.29
8	B	delta-BHC	1.070	0.928	13.3	59	0.00	3.43- 3.49
9	MB	Aldrin	1.006	1.002	0.4	69	0.00	4.05- 4.11
10		alachlor	0.108	0.105	2.8	64	0.00	4.21- 4.27
11	B	Heptachlor Epoxide	0.931	0.901	3.2	67	0.00	4.82- 4.88
12	B	gamma-Chlordane	0.968	1.042	-7.6	76	0.00	4.99- 5.05
13	B	alpha-Chlordane	0.927	0.866	6.6	65	0.00	5.18- 5.24
14	A	Endosulfan I	0.892	0.892	0.0	69	0.00	5.37- 5.43
15	B	4,4'-DDE	0.975	0.916	6.1	66	0.00	5.29- 5.35
16	MA	Dieldrin	0.957	0.927	3.1	67	0.00	5.71- 5.77
17	MA	Endrin	0.908	0.921	-1.4	71	0.00	6.05- 6.11
18	A	4,4'-DDD	0.776	0.769	0.9	68	-0.01	6.17- 6.23
19	B	Endosulfan II	0.817	0.748	8.4	63	0.00	6.39- 6.45
20	MA	4,4'-DDT	0.775	0.647	16.5	57	0.00	6.61- 6.67
21	B	Endrin Aldehyde	0.681	0.620	9.0	64	0.00	7.04- 7.10
22	B	Endosulfan Sulfate	0.750	0.623	16.9	58	0.00	7.75- 7.81
23	A	Methoxychlor	0.371	0.405	-9.2	74	-0.01	7.41- 7.47
24		Mirex	0.646	0.552	14.6	61	0.00	7.58- 7.64
25	B	Endrin Ketone	0.811	0.703	13.3	60	0.00	8.21- 8.27
26	SA	Decachlorobiphenyl	0.760	0.682	10.3	64	0.00	10.02-10.08
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	83	-0.01	1.37- 2.37
2	SAB	Tetrachloro-m-xylene	0.855	0.862	-0.8	85	0.00	2.72- 2.78
3		hexachlorobenzene	1.056	1.011	4.3	82	0.00	3.27- 3.33
4	A	alpha-BHC	1.207	1.211	-0.3	83	0.00	3.43- 3.49
5	MA	gamma-BHC	1.114	1.112	0.2	82	0.00	3.88- 3.94
6	MA	Heptachlor	1.098	1.076	2.0	81	0.00	4.47- 4.53
7	B	beta-BHC	0.525	0.493	6.1	79	0.00	3.97- 4.03
8	B	delta-BHC	1.028	0.960	6.6	76	0.00	4.38- 4.44
9	MB	Aldrin	1.039	1.036	0.3	82	0.00	4.94- 5.00
10		alachlor	0.145	0.144	0.7	80	0.00	4.74- 4.80
11	B	Heptachlor Epoxide	0.984	0.988	-0.4	83	0.00	5.78- 5.84
12	B	gamma-Chlordane	1.017	0.970	4.6	79	0.00	6.08- 6.14

Continuing Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3677-CC3578
Lab FileID: 4G9723402.D

13	B	alpha-Chlordane	0.999	0.946	5.3	79	0.00	6.31- 6.37
14	A	Endosulfan I	0.943	0.913	3.2	80	0.00	6.40- 6.46
15	B	4,4'-DDE	0.968	0.951	1.8	82	0.00	6.57- 6.63
16	MA	Dieldrin	0.986	0.964	2.2	81	0.00	6.85- 6.91
17	MA	Endrin	0.940	0.963	-2.4	85	0.00	7.36- 7.42
18	A	4,4'-DDD	0.795	0.738	7.2	77	0.00	7.54- 7.60
19	B	Endosulfan II	0.891	0.834	6.4	78	0.00	7.72- 7.78
20	MA	4,4'-DDT	0.796	0.589	26.0#	61	0.00	8.08- 8.14
21	B	Endrin Aldehyde	0.737	0.690	6.4	77	0.00	8.29- 8.35
22	B	Endosulfan Sulfate	0.833	0.714	14.3	72	0.00	8.77- 8.83
23	A	Methoxychlor	0.430	0.350	18.6	68	0.00	9.33- 9.39
24		Mirex	0.763	0.635	16.8	70	0.00	9.67- 9.73
25	B	Endrin Ketone	0.946	0.805	14.9	71	0.00	9.74- 9.80
26	SA	Decachlorobiphenyl	0.787	0.713	9.4	76	0.00	11.83-11.89

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g9720953.D 4PST3578.M Thu Dec 09 00:04:56 2021 RPT1

10.8.7 10

Continuing Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3678-CC3578
Lab FileID: 4G9723424.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ch...\4g9723424.d\ECD1A.ch Vial: 4
Signal #2 : C:\msdchem\1\data\chrisc...3678\4g9723424.d\ECD2B.ch
Acq On : 9 Dec 2021 4:50 pm Operator: thomasl
Sample : cc3578-50 Inst : GC4G
Misc : op36897,g4g3678,270,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4pst3578.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Fri Dec 10 05:00:24 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	80	0.00	1.14- 2.14
2	SAB	Tetrachloro-m-xylene	0.830	0.905	-9.0	88	0.00	2.29- 2.35
3		hexachlorobenzene	1.270	1.260	0.8	86	0.00	2.66- 2.72
4	A	alpha-BHC	1.246	1.340	-7.5	87	0.00	2.82- 2.88
5	MA	gamma-BHC	1.121	1.170	-4.4	85	0.00	3.15- 3.21
6	MA	Heptachlor	1.078	1.074	0.4	83	0.00	3.69- 3.75
7	B	beta-BHC	0.492	0.473	3.9	82	0.00	3.24- 3.30
8	B	delta-BHC	1.070	0.942	12.0	71	0.00	3.44- 3.50
9	MB	Aldrin	1.006	0.982	2.4	80	0.00	4.06- 4.12
10		alachlor	0.108	0.111	-2.8	83	0.00	4.21- 4.27
11	B	Heptachlor Epoxide	0.931	0.919	1.3	83	0.00	4.83- 4.89
12	B	gamma-Chlordane	0.968	0.819	15.4	71	0.00	5.00- 5.06
13	B	alpha-Chlordane	0.927	0.794	14.3	72	0.00	5.18- 5.24
14	A	Endosulfan I	0.892	0.936	-4.9	89	0.00	5.37- 5.43
15	B	4,4'-DDE	0.975	0.770	21.0#	66	0.00	5.30- 5.36
16	MA	Dieldrin	0.957	0.925	3.3	80	0.00	5.71- 5.77
17	MA	Endrin	0.908	0.911	-0.3	84	0.00	6.05- 6.11
18	A	4,4'-DDD	0.776	0.704	9.3	74	0.00	6.19- 6.25
19	B	Endosulfan II	0.817	0.779	4.7	80	0.00	6.39- 6.45
20	MA	4,4'-DDT	0.775	0.664	14.3	70	0.00	6.61- 6.67
21	B	Endrin Aldehyde	0.681	0.557	18.2	70	0.00	7.05- 7.11
22	B	Endosulfan Sulfate	0.750	0.701	6.5	78	0.00	7.76- 7.82
23	A	Methoxychlor	0.371	0.351	5.4	79	0.00	7.43- 7.49
24		Mirex	0.646	0.588	9.0	81	0.00	7.58- 7.64
25	B	Endrin Ketone	0.811	0.682	15.9	70	0.00	8.21- 8.27
26	SA	Decachlorobiphenyl	0.760	0.755	0.7	87	0.00	10.02-10.08
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	81	0.00	1.14- 2.14
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	81	0.00	1.14- 2.14
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G4G3678-CC3578
Lab FileID: 4G9723424.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	84	0.00	1.38- 2.38
2	SAB	Tetrachloro-m-xylene	0.855	0.948	-10.9	92	0.00	2.73- 2.79
3		hexachlorobenzene	1.056	1.112	-5.3	90	0.00	3.27- 3.33
4	A	alpha-BHC	1.207	1.416	-17.3	90	0.00	3.43- 3.49
5	MA	gamma-BHC	1.114	1.258	-12.9	88	0.00	3.88- 3.94
6	MA	Heptachlor	1.098	1.232	-12.2	90	0.00	4.48- 4.54
7	B	beta-BHC	0.525	0.523	0.4	84	0.00	3.97- 4.03
8	B	delta-BHC	1.028	1.037	-0.9	77	0.00	4.38- 4.44
9	MB	Aldrin	1.039	1.172	-12.8	89	0.00	4.94- 5.00
10		alachlor	0.145	0.152	-4.8	89	0.00	4.75- 4.81
11	B	Heptachlor Epoxide	0.984	1.074	-9.1	87	0.00	5.79- 5.85
12	B	gamma-Chlordane	1.017	1.089	-7.1	86	0.00	6.08- 6.14
13	B	alpha-Chlordane	0.999	1.056	-5.7	86	0.00	6.31- 6.37
14	A	Endosulfan I	0.943	1.004	-6.5	86	0.00	6.41- 6.47
15	B	4,4'-DDE	0.968	0.982	-1.4	79	0.00	6.58- 6.64
16	MA	Dieldrin	0.986	1.084	-9.9	86	0.00	6.85- 6.91
17	MA	Endrin	0.940	1.036	-10.2	87	0.00	7.36- 7.42
18	A	4,4'-DDD	0.795	0.755	5.0	75	0.00	7.55- 7.61
19	B	Endosulfan II	0.891	0.905	-1.6	83	0.00	7.72- 7.78
20	MA	4,4'-DDT	0.796	0.610	23.4#	61	0.00	8.09- 8.15
21	B	Endrin Aldehyde	0.737	0.628	14.8	70	0.00	8.30- 8.36
22	B	Endosulfan Sulfate	0.833	0.796	4.4	79	0.00	8.77- 8.83
23	A	Methoxychlor	0.430	0.367	14.7	72	0.00	9.34- 9.40
24		Mirex	0.763	0.712	6.7	81	0.00	9.67- 9.73
25	B	Endrin Ketone	0.946	0.759	19.8	66	0.00	9.74- 9.80
26	SA	Decachlorobiphenyl	0.787	0.760	3.4	84	0.00	11.83-11.89
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	83	0.00	1.38- 2.38
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	84	0.00	1.38- 2.38
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g9723058.d 4pst3578.m Fri Dec 10 06:04:15 2021

10.8.8 10

Initial Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICC2867
Lab FileID: 6G81077.D

Response Factor Report GC6G

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration

Calibration Files
5 =6g81079.d 10 =6g81078.d 25 =6g81077.d 50 =6g81076.d
100 =6g81074.d 1 =6g81081.d 75 =6g81075.d 2 =6g81080.d
= =

Compound	5	10	25	50	100	1	75	2	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-m-xylene	0.595	0.614	0.640	0.654	0.654	0.555	0.651	0.605	0.621	5.68
3) hexachlorobenzene	1.747	1.786	1.705	1.723	1.704	1.927	1.729	1.787	1.763	4.18
4) alpha-BHC	1.188	1.251	1.286	1.411	1.480	1.196	1.510	1.149	1.309	10.68
5) gamma-BHC	1.330	1.053	1.086	1.146	1.196	1.131	1.165	1.001	1.139	8.75
6) Heptachlor	0.991	1.016	1.043	1.083	1.169	0.862	1.118	1.111	1.049	9.08
7) beta-BHC	0.422	0.445	0.433	0.445	0.440	0.525	0.438	0.452	0.450	7.05
8) delta-BHC	0.893	0.947	1.017	1.122	1.183	1.167	1.135	0.910	1.047	11.41
9) Aldrin	1.064	0.990	1.101	1.091	1.168	1.025	1.125	1.313	1.110	8.96
10) alachlor	0.129	0.108	0.110	0.108	0.098		0.103		0.109	9.90
11) Heptachlor Epoxide	0.920	0.928	0.944	0.977	1.004	1.172	0.975	0.869	0.974	9.28
12) gamma-Chlordane	0.882	0.939	0.965	1.077	1.031	1.017	1.025	0.967	0.988	6.25
13) alpha-Chlordane	0.849	0.922	0.983	0.992	1.032	0.872	1.020	0.920	0.949	7.15
14) Endosulfan I	0.992	1.014	1.038	1.084	1.122	0.968	1.117	1.134	1.059	6.06
15) 4,4'-DDE	0.933	0.943	0.953	0.987	1.025	1.015	1.009	1.102	0.996	5.52
16) Dieldrin	1.039	1.097	1.046	1.091	1.132	1.061	1.113	0.983	1.070	4.48
17) Endrin	1.098	0.986	1.012	1.060	1.108	1.128	1.106	0.955	1.057	6.10
18) 4,4'-DDD	0.760	0.751	0.771	0.818	0.839	0.757	0.843	0.765	0.788	4.90
19) Endosulfan II	1.209	0.924	0.909	0.963	0.991	1.051	0.989	0.929	0.996	9.80
20) 4,4'-DDT	0.792	0.793	0.801	0.828	0.890	0.978	0.870	0.802	0.844	7.76
21) Endrin Aldehyde	0.708	0.688	0.698	0.731	0.727	0.878	0.730	0.929	0.761	11.84
22) Endosulfan Sulfate	1.073	0.950	0.911	0.989	0.995	0.864	0.988	1.019	0.973	6.63
23) Methoxychlor										

Initial Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICC2867
Lab FileID: 6G81077.D

```
          0.464 0.458 0.460 0.485 0.467 0.408 0.472 0.464          0.460    4.85
 24)  Mirex
          0.759 0.765 0.762 0.775 0.756 0.843 0.756 0.833          0.781    4.55
 25)  Endrin Ketone
          0.923 0.859 0.846 0.953 0.958 0.873 0.985 1.140          0.942   10.06
 26)  Decachlorobiphenyl
          1.228 1.217 1.097 1.158       1.303 1.083 1.283          1.195    7.19

 27) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
 28)  Toxaphene{A}
                            0.020                                  0.020    0.00
 29)  Toxaphene{B}
                            0.026                                  0.026    0.00
 30)  Toxaphene{C}
                            0.024                                  0.024    0.00
 31)  Toxaphene{D}
                            0.021                                  0.021    0.00
 32)  Toxaphene{E}
                            0.023                                  0.023    0.00

 33) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
 34)  Chlordane {A}
                            0.073                                  0.073    0.00
 35)  Chlordane {B}
                            0.044                                  0.044    0.00
 36)  Chlordane {C}
                            0.138                                  0.138    0.00
 37)  Chlordane {D}
                            0.226                                  0.226    0.00
 38)  Chlordane {E}
                            0.035                                  0.035    0.00

Signal #2


  1) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
  2)  Tetrachloro-m-xylene
          0.916 0.913 0.897 0.888 0.878 0.920 0.884 0.974          0.909    3.38
  3)  hexachlorobenzene
          1.093 1.079 1.034 1.003 0.980 1.262 0.986 1.153          1.074    8.96
  4)  alpha-BHC
          1.293 1.319 1.325 1.346 1.356 1.514 1.356 1.330          1.355    5.00
  5)  gamma-BHC
          1.115 1.114 1.112 1.109 1.098 1.222 1.103 1.140          1.127    3.60
  6)  Heptachlor
          1.148 1.137 1.142 1.116 1.124 1.240 1.131 1.163          1.150    3.40
  7)  beta-BHC
          0.522 0.508 0.489 0.468 0.448 0.612 0.456 0.550          0.507   10.84
  8)  delta-BHC
          0.996 1.021 1.024 1.069 1.081 0.979 1.080 0.998          1.031    3.92
  9)  Aldrin
          1.063 1.035 1.029 1.027 1.025 1.113 1.021 1.054          1.046    2.94
 10)  alachlor
          0.149 0.148 0.148 0.140 0.128       0.132                0.141    6.48
 11)  Heptachlor Epoxide
          0.976 0.987 0.989 0.972 0.970 1.101 0.967 1.007          0.996    4.44
 12)  gamma-Chlordane
          1.016 1.029 1.008 1.008 1.000 1.140 1.005 1.065          1.034    4.63
 13)  alpha-Chlordane
          0.999 0.992 0.971 0.961 0.952 1.003 0.957 0.997          0.979    2.16
```

Initial Calibration Summary

Job Number: JD35920 **Sample:** G6G2867-ICC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81077.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
14)  Endosulfan I
          0.955 0.962 0.941 0.929 0.922 1.057 0.926 0.979          0.959    4.63
15)  4,4'-DDE
          0.967 1.016 0.981 0.980 0.986 1.126 0.983 0.991          1.004    5.12
16)  Dieldrin
          1.007 1.020 1.017 1.012 1.013 1.126 1.014 1.040          1.031    3.84
17)  Endrin
          0.967 0.981 0.988 0.966 0.994 1.078 0.976 0.977          0.991    3.69
18)  4,4'-DDD
          0.829 0.837 0.829 0.828 0.831 0.954 0.831 0.847          0.848    5.11
19)  Endosulfan II
          0.906 0.905 0.884 0.872 0.869 1.015 0.872 0.927          0.906    5.37
20)  4,4'-DDT
          0.790 0.821 0.825 0.840 0.845 0.805 0.845 0.779          0.819    3.10
21)  Endrin Aldehyde
          0.649 0.645 0.629 0.656 0.646 0.650 0.645 0.634          0.644    1.32
22)  Endosulfan Sulfate
          0.871 0.890 0.863 0.876 0.866 0.916 0.871 0.896          0.881    2.06
23)  Methoxychlor
          0.446 0.460 0.456 0.444 0.433 0.492 0.439 0.460          0.454    4.03
24)  Mirex
          0.751 0.733 0.722 0.688 0.661 0.850 0.672 0.792          0.734    8.73
25)  Endrin Ketone
          0.816 0.817 0.789 0.838 0.836 0.804 0.838 0.826          0.820    2.15
26)  Decachlorobiphenyl
          0.788 0.763 0.733 0.699       0.911 0.686 0.876          0.779   11.01

27) I   1-bromo-2-nitrobenzen ----------------ISTD--------------------
28)  Toxaphene{A}
                              0.013                                0.013    0.00
29)  Toxaphene{B}
                              0.021                                0.021    0.00
30)  Toxaphene{C}
                              0.040                                0.040    0.00
31)  Toxaphene{D}
                              0.019                                0.019    0.00
32)  Toxaphene{E}
                              0.024                                0.024    0.00

33) I   1-bromo-2-nitrobenzen ----------------ISTD--------------------
34)  Chlordane {A}
                              0.066                                0.066    0.00
35)  Chlordane {B}
                              0.036                                0.036    0.00
36)  Chlordane {C}
                              0.133                                0.133    0.00
37)  Chlordane {D}
                              0.217                                0.217    0.00
38)  Chlordane {E}
                              0.033                                0.033    0.00
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          6pst2867.m        Sun Dec 12 10:40:46 2021
```

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81084.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81084.d\ECD1A.CH Vial: 13
Acq On : 10 Dec 2021 6:57 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81084.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 6:57 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene	0.621	0.698	-12.4	110	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.309	1.505	-15.0	118	0.00	2.69- 2.75
5	MA	gamma-BHC	1.139	1.342	-17.8	125	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.210	-15.3	117	0.00	3.43- 3.49
7	B	beta-BHC	0.450	0.521	-15.8	121	0.00	3.04- 3.10
8	B	delta-BHC	1.047	1.157	-10.5	115	0.00	3.21- 3.27
9	MB	Aldrin	1.110	1.219	-9.8	112	0.00	3.75- 3.81
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide	0.974	1.139	-16.9	122	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	1.145	-15.9	120	0.00	4.58- 4.64
13	B	alpha-Chlordane	0.949	1.111	-17.1	114	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.178	-11.2	114	0.00	4.91- 4.97
15	B	4,4'-DDE	0.996	1.098	-10.2	116	0.00	4.87- 4.93
16	MA	Dieldrin	1.070	1.195	-11.7	115	0.00	5.22- 5.28
17	MA	Endrin	1.057	1.040	1.6	104	0.00	5.53- 5.59
18	A	4,4'-DDD	0.788	0.877	-11.3	115	0.00	5.67- 5.73
19	B	Endosulfan II	0.996	1.056	-6.0	117	0.00	5.84- 5.90
20	MA	4,4'-DDT	0.844	0.928	-10.0	117	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.752	1.2	109	0.00	6.44- 6.50
22	B	Endosulfan Sulfate	0.973	0.984	-1.1	109	0.00	7.10- 7.16
23	A	Methoxychlor	0.460	0.529	-15.0	116	0.00	6.85- 6.91
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.942	0.938	0.4	112	0.00	7.53- 7.59
26	SA	Decachlorobiphenyl	1.195	1.211	-1.3	111	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

10.8.10 10

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81084.D

35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	0.990	-8.9	110	0.00	2.86- 2.92
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.355	1.524	-12.5	114	0.00	3.53- 3.59
5	MA	gamma-BHC	1.127	1.309	-16.1	117	0.00	3.96- 4.02
6	MA	Heptachlor	1.150	1.330	-15.7	116	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.570	-12.4	116	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.193	-15.7	116	0.00	4.44- 4.50
9	MB	Aldrin	1.046	1.214	-16.1	117	0.00	4.98- 5.04
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide	0.996	1.144	-14.9	115	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.172	-13.3	116	0.00	6.10- 6.16
13	B	alpha-Chlordane	0.979	1.127	-15.1	115	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	1.067	-11.3	113	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	1.115	-11.1	113	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	1.171	-13.6	114	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.044	-5.3	105	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.943	-11.2	113	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	1.017	-12.3	114	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.946	-15.5	114	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.690	-7.1	109	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.944	-7.2	109	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.530	-16.7	116	0.00	9.32- 9.38
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.820	0.882	-7.6	111	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.848	-8.9	115	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Sun Dec 12 10:39:03 2021

10.8.10 10

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81085.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81085.d\ECD1A.CH Vial: 14
Acq On : 10 Dec 2021 7:15 am Operator: christp
Sample : icv2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81085.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:15 am Operator: christp
Sample : icc2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene	0.621	0.760	-22.4#	115	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	1.195	1.187	0.7	101	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.19- 2.19
34		Chlordane {A}	0.073	0.067	8.2	89	0.00	3.36- 3.56

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81085.D

35		Chlordane {B}	0.044	0.040	9.1	88	0.00	3.81- 4.01
36		Chlordane {C}	0.138	0.151	-9.4	106	0.00	4.51- 4.71
37		Chlordane {D}	0.226	0.232	-2.7	99	0.00	4.67- 4.87
38		Chlordane {E}	0.035	0.038	-8.6	106	0.00	5.68- 5.88
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	1.024	-12.7	114	0.00	2.86- 2.92
3		hexachlorobenzene	----------NA----------					
4	A	alpha-BHC	----------NA----------					
5	MA	gamma-BHC	----------NA----------					
6	MA	Heptachlor	----------NA----------					
7	B	beta-BHC	----------NA----------					
8	B	delta-BHC	----------NA----------					
9	MB	Aldrin	----------NA----------					
10		alachlor	----------NA----------					
11	B	Heptachlor Epoxide	----------NA----------					
12	B	gamma-Chlordane	----------NA----------					
13	B	alpha-Chlordane	----------NA----------					
14	A	Endosulfan I	----------NA----------					
15	B	4,4'-DDE	----------NA----------					
16	MA	Dieldrin	----------NA----------					
17	MA	Endrin	----------NA----------					
18	A	4,4'-DDD	----------NA----------					
19	B	Endosulfan II	----------NA----------					
20	MA	4,4'-DDT	----------NA----------					
21	B	Endrin Aldehyde	----------NA----------					
22	B	Endosulfan Sulfate	----------NA----------					
23	A	Methoxychlor	----------NA----------					
24		Mirex	----------NA----------					
25	B	Endrin Ketone	----------NA----------					
26	SA	Decachlorobiphenyl	0.779	0.774	0.6	109	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.57- 2.57
28	L8	Toxaphene{A}	----------NA----------					
29	L8	Toxaphene{B}	----------NA----------					
30	L8	Toxaphene{C}	----------NA----------					
31	L8	Toxaphene{D}	----------NA----------					
32	L8	Toxaphene{E}	----------NA----------					
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
34		Chlordane {A}	0.066	0.070	-6.1	105	0.00	4.46- 4.66
35		Chlordane {B}	0.036	0.038	-5.6	103	0.00	5.11- 5.31
36		Chlordane {C}	0.133	0.136	-2.3	102	0.00	6.02- 6.22
37		Chlordane {D}	0.217	0.222	-2.3	101	0.00	6.25- 6.45
38		Chlordane {E}	0.033	0.036	-9.1	109	0.00	7.72- 7.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6pst2867.m Sun Dec 12 10:40:04 2021

10.8.11 10

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81086.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81086.d\ECD1A.CH Vial: 15
Acq On : 10 Dec 2021 7:33 am Operator: christp
Sample : icv2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81086.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:33 am Operator: christp
Sample : icc2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene	0.621	0.768	-23.7#	116	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	1.195	1.146	4.1	98	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.20- 2.20
28	L8	Toxaphene{A}	0.020	0.018	10.0	89	0.00	5.51- 5.71
29	L8	Toxaphene{B}	0.026	0.024	7.7	92	0.00	5.75- 5.95
30	L8	Toxaphene{C}	0.024	0.023	4.2	96	0.00	5.93- 6.13
31	L8	Toxaphene{D}	0.021	0.022	-4.8	102	0.00	6.26- 6.46
32	L8	Toxaphene{E}	0.023	0.021	8.7	91	0.00	6.88- 7.08
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

10.8.12 10

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81086.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	1.059	-16.5	116	0.00	2.86- 2.92
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC			----------NA----------			
5	MA	gamma-BHC			----------NA----------			
6	MA	Heptachlor			----------NA----------			
7	B	beta-BHC			----------NA----------			
8	B	delta-BHC			----------NA----------			
9	MB	Aldrin			----------NA----------			
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide			----------NA----------			
12	B	gamma-Chlordane			----------NA----------			
13	B	alpha-Chlordane			----------NA----------			
14	A	Endosulfan I			----------NA----------			
15	B	4,4'-DDE			----------NA----------			
16	MA	Dieldrin			----------NA----------			
17	MA	Endrin			----------NA----------			
18	A	4,4'-DDD			----------NA----------			
19	B	Endosulfan II			----------NA----------			
20	MA	4,4'-DDT			----------NA----------			
21	B	Endrin Aldehyde			----------NA----------			
22	B	Endosulfan Sulfate			----------NA----------			
23	A	Methoxychlor			----------NA----------			
24		Mirex			----------NA----------			
25	B	Endrin Ketone			----------NA----------			
26	SA	Decachlorobiphenyl	0.779	0.805	-3.3	112	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.57- 2.57
28	L8	Toxaphene{A}	0.013	0.014	-7.7	107	0.00	6.75- 6.95
29	L8	Toxaphene{B}	0.021	0.021	0.0	103	0.00	7.61- 7.81
30	L8	Toxaphene{C}	0.040	0.041	-2.5	104	0.00	7.77- 7.97
31	L8	Toxaphene{D}	0.019	0.019	0.0	104	0.00	8.21- 8.41
32	L8	Toxaphene{E}	0.024	0.024	0.0	100	0.00	9.11- 9.31
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6pst2867.m Sun Dec 12 10:40:25 2021

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81087.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81087.d\ECD1A.CH Vial: 16
Acq On : 10 Dec 2021 7:52 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81087.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:52 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex	0.781	0.804	-2.9	113	0.00	6.96- 7.02
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

10.8.13 10

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81087.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene			----------NA----------			
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC			----------NA----------			
5	MA	gamma-BHC			----------NA----------			
6	MA	Heptachlor			----------NA----------			
7	B	beta-BHC			----------NA----------			
8	B	delta-BHC			----------NA----------			
9	MB	Aldrin			----------NA----------			
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide			----------NA----------			
12	B	gamma-Chlordane			----------NA----------			
13	B	alpha-Chlordane			----------NA----------			
14	A	Endosulfan I			----------NA----------			
15	B	4,4'-DDE			----------NA----------			
16	MA	Dieldrin			----------NA----------			
17	MA	Endrin			----------NA----------			
18	A	4,4'-DDD			----------NA----------			
19	B	Endosulfan II			----------NA----------			
20	MA	4,4'-DDT			----------NA----------			
21	B	Endrin Aldehyde			----------NA----------			
22	B	Endosulfan Sulfate			----------NA----------			
23	A	Methoxychlor			----------NA----------			
24		Mirex	0.734	0.756	-3.0	112	0.00	9.64- 9.70
25	B	Endrin Ketone			----------NA----------			
26	SA	Decachlorobiphenyl			----------NA----------			
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
28	L8	Toxaphene{A}			----------NA----------			
29	L8	Toxaphene{B}			----------NA----------			
30	L8	Toxaphene{C}			----------NA----------			
31	L8	Toxaphene{D}			----------NA----------			
32	L8	Toxaphene{E}			----------NA----------			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Sun Dec 12 10:39:23 2021

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81088.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81088.d\ECD1A.CH Vial: 17
Acq On : 10 Dec 2021 8:10 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81088.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 8:10 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene	1.763	1.832	-3.9	112	0.00	2.55- 2.61
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor	0.109	0.105	3.7	100	0.00	3.89- 3.95
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
34		Chlordane {A}		----------NA----------				

Initial Calibration Verification

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81088.D

35		Chlordane {B}			----------NA----------				
36		Chlordane {C}			----------NA----------				
37		Chlordane {D}			----------NA----------				
38		Chlordane {E}			----------NA----------				
*****		Signal #2 *****							
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
2	SAB	Tetrachloro-m-xylene			----------NA----------				
3		hexachlorobenzene	1.074	1.092	-1.7	112	0.00	3.37-	3.43
4	A	alpha-BHC			----------NA----------				
5	MA	gamma-BHC			----------NA----------				
6	MA	Heptachlor			----------NA----------				
7	B	beta-BHC			----------NA----------				
8	B	delta-BHC			----------NA----------				
9	MB	Aldrin			----------NA----------				
10		alachlor	0.141	0.133	5.7	95	0.00	4.79-	4.85
11	B	Heptachlor Epoxide			----------NA----------				
12	B	gamma-Chlordane			----------NA----------				
13	B	alpha-Chlordane			----------NA----------				
14	A	Endosulfan I			----------NA----------				
15	B	4,4'-DDE			----------NA----------				
16	MA	Dieldrin			----------NA----------				
17	MA	Endrin			----------NA----------				
18	A	4,4'-DDD			----------NA----------				
19	B	Endosulfan II			----------NA----------				
20	MA	4,4'-DDT			----------NA----------				
21	B	Endrin Aldehyde			----------NA----------				
22	B	Endosulfan Sulfate			----------NA----------				
23	A	Methoxychlor			----------NA----------				
24		Mirex			----------NA----------				
25	B	Endrin Ketone			----------NA----------				
26	SA	Decachlorobiphenyl			----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
28	L8	Toxaphene{A}			----------NA----------				
29	L8	Toxaphene{B}			----------NA----------				
30	L8	Toxaphene{C}			----------NA----------				
31	L8	Toxaphene{D}			----------NA----------				
32	L8	Toxaphene{E}			----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
34		Chlordane {A}			----------NA----------				
35		Chlordane {B}			----------NA----------				
36		Chlordane {C}			----------NA----------				
37		Chlordane {D}			----------NA----------				
38		Chlordane {E}			----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Thu Dec 16 14:12:47 2021

10.8.14 10

Continuing Calibration Summary

Job Number: JD35920 **Sample:** G6G2876-CC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81299.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\sy...76\6g81299.d\ECD1A.CH Vial: 4
Signal #2 : C:\msdchem\1\data\syrap\g6g2876\6g81299.d\ECD2B.CH
Acq On : 20-Dec-21, 02:19:09 Operator: christp
Sample : cc2867-50 Inst : GC6G
Misc : op37120,g6g2876,250,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6PST2867.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Mon Dec 20 22:28:16 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.18- 2.18
2	SAB	Tetrachloro-m-xylene	0.621	0.621	0.0	92	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.617	8.3	91	0.00	2.54- 2.60
4	A	alpha-BHC	1.309	1.407	-7.5	96	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.285	-12.8	108	0.00	2.95- 3.01
6	MA	Heptachlor	1.049	1.224	-16.7	109	0.00	3.42- 3.48
7	B	beta-BHC	0.450	0.489	-8.7	106	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.300	-24.2#	112	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.189	-7.1	105	0.00	3.74- 3.80
10		alachlor	0.109	0.102	6.4	92	0.00	3.88- 3.94
11	B	Heptachlor Epoxide	0.974	1.097	-12.6	109	0.00	4.41- 4.47
12	B	gamma-Chlordane	0.988	1.103	-11.6	99	0.00	4.57- 4.63
13	B	alpha-Chlordane	0.949	1.052	-10.9	103	0.00	4.73- 4.79
14	A	Endosulfan I	1.059	1.120	-5.8	100	0.00	4.90- 4.96
15	B	4,4'-DDE	0.996	1.031	-3.5	101	0.00	4.85- 4.91
16	MA	Dieldrin	1.070	1.140	-6.5	101	0.00	5.21- 5.27
17	MA	Endrin	1.057	1.124	-6.3	103	0.00	5.51- 5.57
18	A	4,4'-DDD	0.788	0.844	-7.1	100	0.00	5.66- 5.72
19	B	Endosulfan II	0.996	0.977	1.9	98	0.00	5.83- 5.89
20	MA	4,4'-DDT	0.844	0.851	-0.8	99	0.00	6.06- 6.12
21	B	Endrin Aldehyde	0.761	0.802	-5.4	106	0.00	6.43- 6.49
22	B	Endosulfan Sulfate	0.973	0.939	3.5	92	0.00	7.09- 7.15
23	A	Methoxychlor	0.460	0.461	-0.2	92	0.00	6.84- 6.90
24		Mirex	0.781	0.729	6.7	91	0.00	6.95- 7.01
25	B	Endrin Ketone	0.942	1.037	-10.1	105	0.00	7.51- 7.57
26	SA	Decachlorobiphenyl	1.195	1.308	-9.5	109	0.00	9.32- 9.38
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.18- 2.18
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.18- 2.18
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2876-CC2867
Lab FileID: 6G81299.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.811	10.8	90	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.929	13.5	91	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.246	8.0	91	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.131	-0.4	100	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.122	2.4	99	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.479	5.5	101	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.127	-9.3	104	0.00	4.43- 4.49
9	MB	Aldrin	1.046	1.032	1.3	99	0.00	4.98- 5.04
10		alachlor	0.141	0.129	8.5	91	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	0.971	2.5	98	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.002	3.1	98	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	0.932	4.8	95	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.917	4.4	97	0.00	6.41- 6.47
15	B	4,4'-DDE	1.004	0.960	4.4	97	0.00	6.58- 6.64
16	MA	Dieldrin	1.031	0.997	3.3	97	0.00	6.85- 6.91
17	MA	Endrin	0.991	0.982	0.9	100	0.00	7.35- 7.41
18	A	4,4'-DDD	0.848	0.822	3.1	98	0.00	7.53- 7.59
19	B	Endosulfan II	0.906	0.855	5.6	97	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.808	1.3	95	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.718	-11.5	108	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.819	7.0	92	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.384	15.4	85	0.00	9.31- 9.37
24		Mirex	0.734	0.638	13.1	91	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.894	-9.0	105	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.662	15.0	93	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.56- 2.56
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.56- 2.56
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6PST2867.M Mon Dec 20 22:31:04 2021

10.8.15 10

Continuing Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2877-CC2867
Lab FileID: 6G81320.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\sy...77\6g81320.d\ECD1A.CH Vial: 2
Signal #2 : C:\msdchem\1\data\syrap\g6g2877\6g81320.d\ECD2B.CH
Acq On : 20-Dec-21, 16:39:43 Operator: thomasl
Sample : cc2867-25 Inst : GC6G
Misc : op37193,g6g2877,250,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue Dec 21 02:41:19 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.18- 2.18
2	SAB	Tetrachloro-m-xylene	0.621	0.562	9.5	101	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.593	9.6	107	0.00	2.55- 2.61
4	A	alpha-BHC	1.309	1.348	-3.0	120	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.266	-11.2	134	0.00	2.95- 3.01
6	MA	Heptachlor	1.049	1.207	-15.1	133	0.00	3.42- 3.48
7	B	beta-BHC	0.450	0.469	-4.2	124	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.212	-15.8	137	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.128	-1.6	117	0.00	3.74- 3.80
10		alachlor	0.109	0.086	21.1#	90	0.00	3.88- 3.94
11	B	Heptachlor Epoxide	0.974	1.111	-14.1	135	0.00	4.41- 4.47
12	B	gamma-Chlordane	0.988	1.097	-11.0	130	0.00	4.57- 4.63
13	B	alpha-Chlordane	0.949	1.005	-5.9	117	0.00	4.73- 4.79
14	A	Endosulfan I	1.059	1.121	-5.9	124	0.00	4.90- 4.96
15	B	4,4'-DDE	0.996	1.025	-2.9	123	0.00	4.85- 4.91
16	MA	Dieldrin	1.070	1.121	-4.8	123	0.00	5.21- 5.27
17	MA	Endrin	1.057	1.071	-1.3	121	0.00	5.51- 5.57
18	A	4,4'-DDD	0.788	0.828	-5.1	123	0.00	5.65- 5.71
19	B	Endosulfan II	0.996	0.972	2.4	123	0.00	5.83- 5.89
20	MA	4,4'-DDT	0.844	0.871	-3.2	125	0.00	6.06- 6.12
21	B	Endrin Aldehyde	0.761	0.799	-5.0	131	0.00	6.43- 6.49
22	B	Endosulfan Sulfate	0.973	0.989	-1.6	125	0.00	7.09- 7.15
23	A	Methoxychlor	0.460	0.444	3.5	111	0.00	6.84- 6.90
24		Mirex	0.781	0.792	-1.4	119	0.00	6.95- 7.01
25	B	Endrin Ketone	0.942	1.164	-23.6#	158#	0.00	7.51- 7.57
26	SA	Decachlorobiphenyl	1.195	1.202	-0.6	126	0.00	9.32- 9.38
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.18- 2.18
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.18- 2.18
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2877-CC2867
Lab FileID: 6G81320.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	114	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.831	8.6	106	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.976	9.1	108	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.310	3.3	113	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.176	-4.3	121	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.176	-2.3	117	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.505	0.4	118	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.181	-14.5	132	0.00	4.43- 4.49
9	MB	Aldrin	1.046	1.086	-3.8	120	0.00	4.98- 5.04
10		alachlor	0.141	0.137	2.8	106	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	1.025	-2.9	118	0.00	5.80- 5.86
12	B	gamma-Chlordane	1.034	1.046	-1.2	118	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	0.995	-1.6	117	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.972	-1.4	118	0.00	6.41- 6.47
15	B	4,4'-DDE	1.004	1.017	-1.3	118	0.00	6.58- 6.64
16	MA	Dieldrin	1.031	1.054	-2.2	118	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.036	-4.5	120	0.00	7.35- 7.41
18	A	4,4'-DDD	0.848	0.870	-2.6	120	0.00	7.53- 7.59
19	B	Endosulfan II	0.906	0.918	-1.3	118	0.00	7.70- 7.76
20	MA	4,4'-DDT	0.819	0.848	-3.5	117	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.744	-15.5	135	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.902	-2.4	119	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.453	0.2	113	0.00	9.31- 9.37
24		Mirex	0.734	0.705	4.0	111	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.976	-19.0	141	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.763	2.1	119	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	114	0.00	1.56- 2.56
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	114	0.00	1.56- 2.56
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81299.d 6pst2867.m Tue Dec 21 02:54:53 2021

10.8.16 10

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G4G3578	**Method:** SW846 8081B	**Instrument ID:** GC4G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G4G3578-DDT	4G9720947.D	09/29/21 21:56	n/a	DDT/Endrin Breakdown Check
G4G3578-IC3578	4G9720949.D	09/29/21 23:55	n/a	Initial cal 1
G4G3578-IC3578	4G9720950.D	09/30/21 00:10	n/a	Initial cal 2
G4G3578-IC3578	4G9720951.D	09/30/21 00:25	n/a	Initial cal 5
G4G3578-IC3578	4G9720952.D	09/30/21 00:40	n/a	Initial cal 10
G4G3578-ICC3578	4G9720953.D	09/30/21 00:55	n/a	Initial cal 25
G4G3578-IC3578	4G9720954.D	09/30/21 01:10	n/a	Initial cal 50
G4G3578-IC3578	4G9720955.D	09/30/21 01:25	n/a	Initial cal 75
G4G3578-IC3578	4G9720956.D	09/30/21 01:40	n/a	Initial cal 100
G4G3578-IC3578	4G9720957.D	09/30/21 01:55	n/a	Initial cal 500
G4G3578-IC3578	4G9720958.D	09/30/21 02:10	n/a	Initial cal 500
G4G3578-ICV3578	4G9720959.D	09/30/21 02:25	n/a	Initial cal verification 25
G4G3578-ICV3578	4G9720960.D	09/30/21 02:40	n/a	Initial cal verification 500
G4G3578-ICV3578	4G9720961.D	09/30/21 02:55	n/a	Initial cal verification 500
G4G3578-ICV3578	4G9720962.D	09/30/21 03:18	n/a	Initial cal verification 25
G4G3578-ICV3578	4G9720963.D	09/30/21 03:33	n/a	Initial cal verification 25

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G4G3677	**Method:** SW846 8081B	**Instrument ID:** GC4G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G4G3677-DDT	4G9723401.D	12/08/21 23:02	n/a	DDT/Endrin Breakdown Check
G4G3677-CC3578	4G9723402.D	12/08/21 23:17	n/a	Continuing cal 25
OP36912-MB1	4G9723404.D	12/08/21 23:58	OP36912	Method Blank
OP36912-BS1	4G9723405.D	12/09/21 00:13	OP36912	Blank Spike
JD35940-1	4G9723406.D	12/09/21 00:28	OP36912	(used for QC only; not part of job JD35920)
OP36912-MS	4G9723407.D	12/09/21 00:43	OP36912	Matrix Spike
OP36912-MSD	4G9723408.D	12/09/21 00:58	OP36912	Matrix Spike Duplicate
OP37005-MB1	4G9723410.D	12/09/21 01:37	OP37005	Method Blank
OP37005-BS1	4G9723411.D	12/09/21 01:52	OP37005	Blank Spike
OP37005-BSD	4G9723412.D	12/09/21 02:07	OP37005	Blank Spike Duplicate
ZZZZZZ	4G9723413.D	12/09/21 02:22	OP37005	(unrelated sample)
OP37005-LB25	4G9723414.D	12/09/21 02:37	OP37005	Leachate Blank
OP36897-MB1	4G9723415.D	12/09/21 02:52	OP36897	Method Blank
OP36897-BS1	4G9723416.D	12/09/21 03:07	OP36897	Blank Spike
OP36897-BSD	4G9723417.D	12/09/21 03:22	OP36897	Blank Spike Duplicate
JD35920-3	4G9723418.D	12/09/21 03:37	OP36897	HOFF MW-2DU
JD35920-4	4G9723419.D	12/09/21 03:52	OP36897	HOFF MW-2S
JD35920-5	4G9723420.D	12/09/21 04:07	OP36897	HOFF MW-7DL
JD35920-6	4G9723421.D	12/09/21 04:22	OP36897	HOFF DUP-113021
JD35920-2	4G9723422.D	12/09/21 04:37	OP36897	HOFF MW-2DL

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G4G3678	**Method:** SW846 8081B	**Instrument ID:** GC4G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G4G3678-DDT	4G9723423.D	12/09/21 16:35	n/a	DDT/Endrin Breakdown Check
G4G3678-CC3578	4G9723424.D	12/09/21 16:50	n/a	Continuing cal 50
OP36878-MB1	4G9723426.D	12/09/21 18:40	OP36878	Method Blank
OP36878-BS1	4G9723427.D	12/09/21 18:55	OP36878	Blank Spike
ZZZZZZ	4G9723428.D	12/09/21 19:09	OP36878	(unrelated sample)
ZZZZZZ	4G9723429.D	12/09/21 19:24	OP36878	(unrelated sample)
JD34436-3A	4G9723430.D	12/09/21 19:39	OP36878	(used for QC only; not part of job JD35920)
OP36878-MS	4G9723431.D	12/09/21 19:54	OP36878	Matrix Spike
OP36878-MSD	4G9723432.D	12/09/21 20:09	OP36878	Matrix Spike Duplicate
ZZZZZZ	4G9723433.D	12/09/21 20:24	OP36878	(unrelated sample)
ZZZZZZ	4G9723434.D	12/09/21 20:39	OP36878	(unrelated sample)
ZZZZZZ	4G9723435.D	12/09/21 20:54	OP36878	(unrelated sample)
ZZZZZZ	4G9723436.D	12/09/21 21:09	OP36878	(unrelated sample)
ZZZZZZ	4G9723437.D	12/09/21 21:24	OP36878	(unrelated sample)
ZZZZZZ	4G9723438.D	12/09/21 21:39	OP36878	(unrelated sample)
ZZZZZZ	4G9723439.D	12/09/21 21:54	OP36878	(unrelated sample)
ZZZZZZ	4G9723440.D	12/09/21 22:09	OP36878	(unrelated sample)
ZZZZZZ	4G9723441.D	12/09/21 22:24	OP36878	(unrelated sample)
ZZZZZZ	4G9723442.D	12/09/21 22:39	OP36878	(unrelated sample)

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2867	**Method:** EPA 608.3	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2867-IC2867	6G81074.D	12/10/21 03:54	n/a	Initial cal 100
G6G2867-IC2867	6G81075.D	12/10/21 04:13	n/a	Initial cal 75
G6G2867-IC2867	6G81076.D	12/10/21 04:31	n/a	Initial cal 50
G6G2867-ICC2867	6G81077.D	12/10/21 04:49	n/a	Initial cal 25
G6G2867-IC2867	6G81078.D	12/10/21 05:08	n/a	Initial cal 10
G6G2867-IC2867	6G81079.D	12/10/21 05:25	n/a	Initial cal 5
G6G2867-IC2867	6G81080.D	12/10/21 05:43	n/a	Initial cal 2
G6G2867-IC2867	6G81081.D	12/10/21 06:02	n/a	Initial cal 1
G6G2867-IC2867	6G81082.D	12/10/21 06:20	n/a	Initial cal 500
G6G2867-IC2867	6G81083.D	12/10/21 06:38	n/a	Initial cal 500
G6G2867-ICV2867	6G81084.D	12/10/21 06:57	n/a	Initial cal verification 25
G6G2867-ICV2867	6G81085.D	12/10/21 07:15	n/a	Initial cal verification 500
G6G2867-ICV2867	6G81086.D	12/10/21 07:33	n/a	Initial cal verification 500
G6G2867-ICV2867	6G81087.D	12/10/21 07:52	n/a	Initial cal verification 25
G6G2867-ICV2867	6G81088.D	12/10/21 08:10	n/a	Initial cal verification 25

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2876	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2876-DDT	6G81298.D	12/20/21 02:01	n/a	DDT/Endrin Breakdown Check
G6G2876-CC2867	6G81299.D	12/20/21 02:19	n/a	Continuing cal 50
OP37193-MB1	6G81301.D	12/20/21 03:16	OP37193	Method Blank
OP37193-BS1	6G81302.D	12/20/21 03:34	OP37193	Blank Spike
OP37193-BSD	6G81303.D	12/20/21 03:51	OP37193	Blank Spike Duplicate
JD35920-2	6G81304.D	12/20/21 04:09	OP37193	HOFF MW-2DL
JD35920-3	6G81305.D	12/20/21 04:26	OP37193	HOFF MW-2DU
JD35920-4	6G81306.D	12/20/21 04:44	OP37193	HOFF MW-2S
JD35920-5	6G81307.D	12/20/21 05:02	OP37193	HOFF MW-7DL
JD35920-6	6G81308.D	12/20/21 05:20	OP37193	HOFF DUP-113021
ZZZZZZ	6G81309.D	12/20/21 05:38	OP37193	(unrelated sample)
ZZZZZZ	6G81310.D	12/20/21 05:56	OP37193	(unrelated sample)
ZZZZZZ	6G81311.D	12/20/21 06:14	OP37193	(unrelated sample)
ZZZZZZ	6G81312.D	12/20/21 06:32	OP37193	(unrelated sample)
ZZZZZZ	6G81313.D	12/20/21 06:50	OP37193	(unrelated sample)
ZZZZZZ	6G81314.D	12/20/21 07:08	OP37193	(unrelated sample)
ZZZZZZ	6G81315.D	12/20/21 07:25	OP37120	(unrelated sample)
ZZZZZZ	6G81316.D	12/20/21 07:43	OP37120	(unrelated sample)
ZZZZZZ	6G81317.D	12/20/21 08:01	OP37120	(unrelated sample)
ZZZZZZ	6G81318.D	12/20/21 08:19	OP37120	(unrelated sample)

Run Sequence Report

Job Number: JD35920
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2877	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2877-DDT	6G81319.D	12/20/21 16:21	n/a	DDT/Endrin Breakdown Check
G6G2877-CC2867	6G81320.D	12/20/21 16:39	n/a	Continuing cal 25
OP37121-MB1	6G81322.D	12/20/21 18:11	OP37121	Method Blank
OP37121-BS1	6G81323.D	12/20/21 18:29	OP37121	Blank Spike
OP37121-BSD	6G81324.D	12/20/21 18:46	OP37121	Blank Spike Duplicate
ZZZZZZ	6G81325.D	12/20/21 19:04	OP37121	(unrelated sample)
ZZZZZZ	6G81327.D	12/20/21 19:40	OP37121	(unrelated sample)
ZZZZZZ	6G81329.D	12/20/21 20:16	OP37121	(unrelated sample)
ZZZZZZ	6G81331.D	12/20/21 20:52	OP37121	(unrelated sample)
ZZZZZZ	6G81337.D	12/20/21 22:39	OP37121	(unrelated sample)
ZZZZZZ	6G81338.D	12/20/21 22:57	OP37121	(unrelated sample)
ZZZZZZ	6G81339.D	12/20/21 23:15	OP37121	(unrelated sample)
ZZZZZZ	6G81340.D	12/20/21 23:32	OP37121	(unrelated sample)
G6G2877-CC2867	6G81343.D	12/21/21 00:25	n/a	Continuing cal 50

GC/LC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/21/21 08:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81304.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 04:09:03
Operator : christp
Sample : jd35920-2
Misc : op37193,g6g2876,260,,,2,1
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:37:07 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.685	2.063	939.8E6	682.0E6	50.000	50.000
27) I 1-bromo-2...	1.685	2.063	939.8E6	682.0E6	50.000	50.000
33) I 1-bromo-2...	1.685	2.063	939.8E6	682.0E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.261	2.888	338.3E6	311.1E6	28.986m	25.103
Spiked Amount	40.000 Range	30 - 150	Recovery	=	72.47%	62.76%
26) SA Decachlor...	9.350	11.845	343.7E6	154.0E6	15.297	14.491
Spiked Amount	40.000		Recovery	=	38.24%	36.23%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

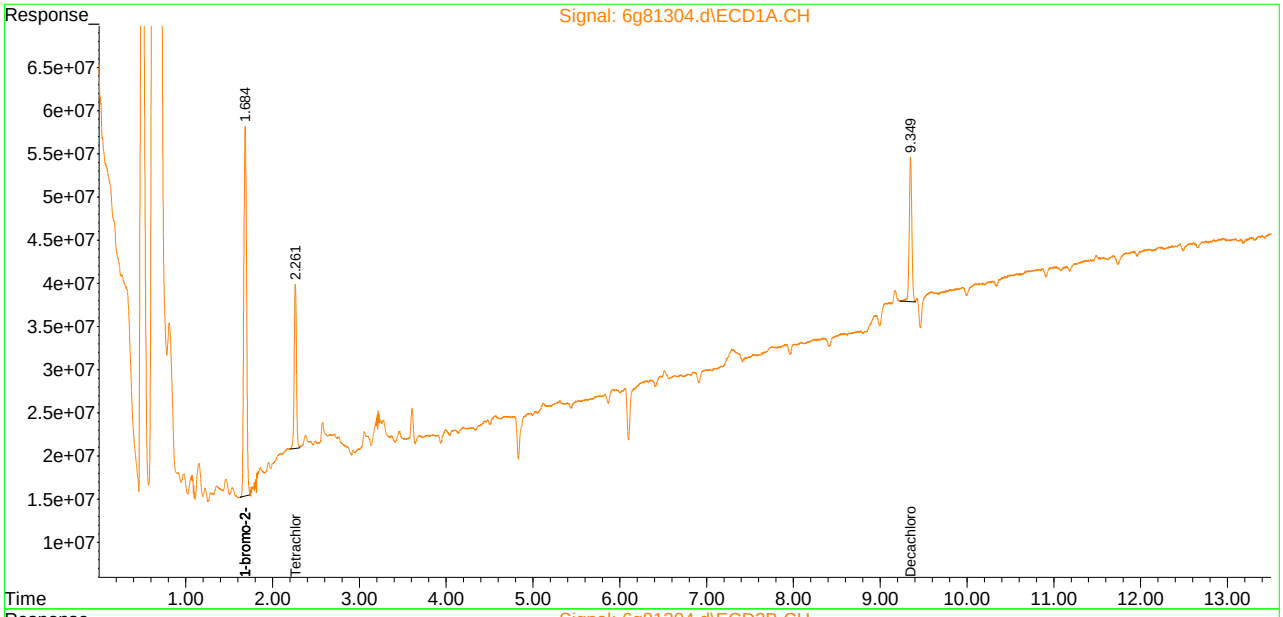
11.1.1 11

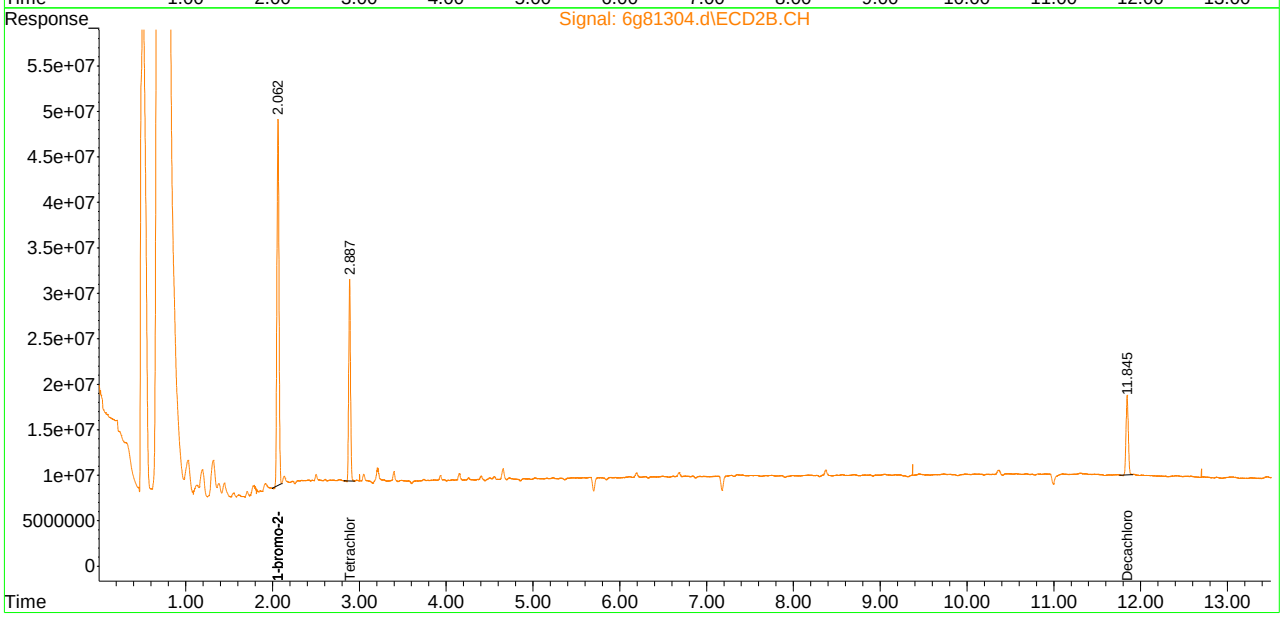
Quantitation Report (QT Reviewed)

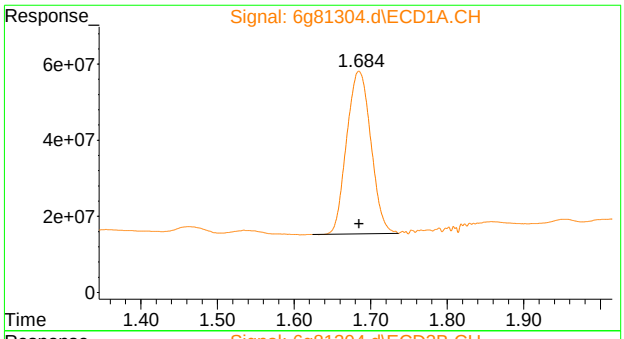
Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81304.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 04:09:03
Operator : christp
Sample : jd35920-2
Misc : op37193,g6g2876,260,,,2,1
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:37:07 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

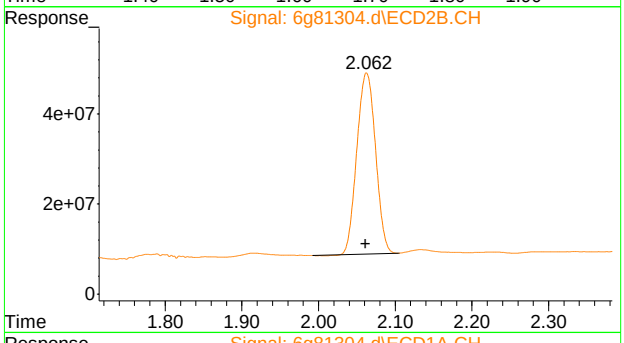






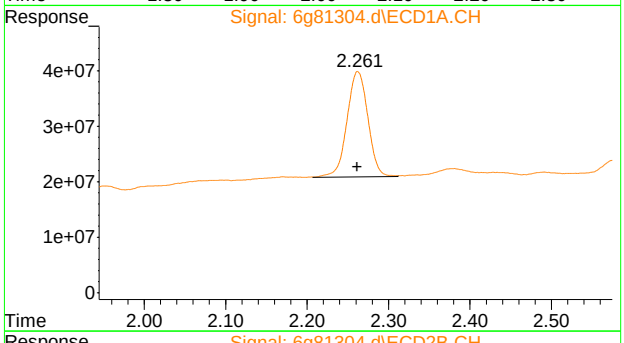
#1 1-bromo-2-nitrobenzene

R.T.: 1.685 min
Delta R.T.: 0.000 min
Response: 939771989
Conc: 50.00 PPB



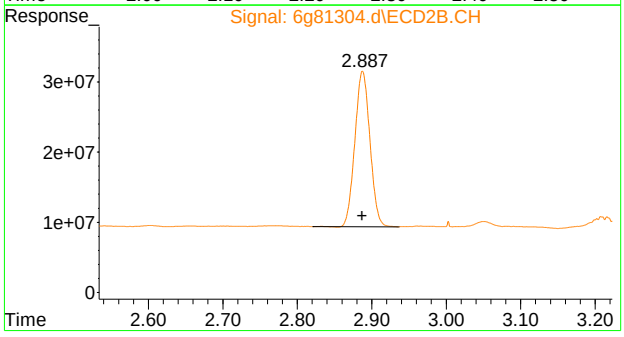
#1 1-bromo-2-nitrobenzene

R.T.: 2.063 min
Delta R.T.: 0.002 min
Response: 682025264
Conc: 50.00 PPB



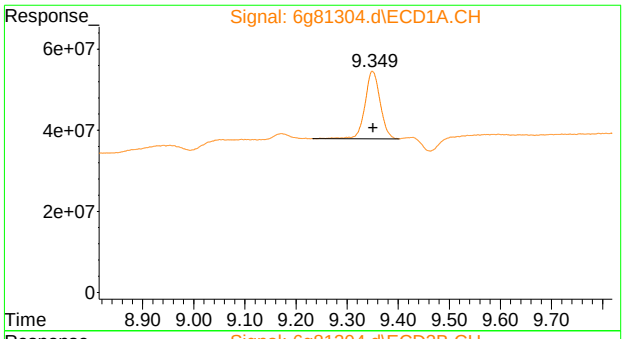
#2 Tetrachloro-m-xylene

R.T.: 2.261 min
Delta R.T.: 0.000 min
Response: 338291956
Conc: 28.99 PPB m



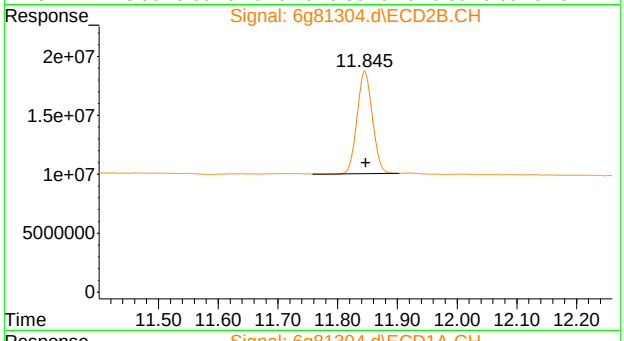
#2 Tetrachloro-m-xylene

R.T.: 2.888 min
Delta R.T.: 0.000 min
Response: 311119522
Conc: 25.10 PPB



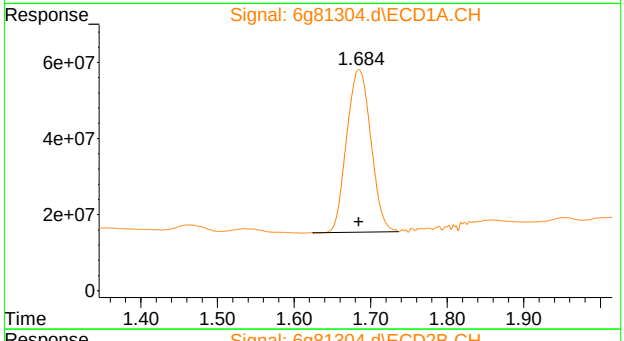
#26 Decachlorobiphenyl

R.T.: 9.350 min
Delta R.T.: -0.002 min
Response: 343726660
Conc: 15.30 PPB



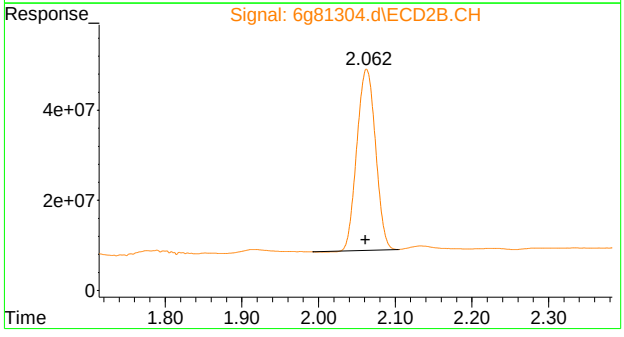
#26 Decachlorobiphenyl

R.T.: 11.845 min
Delta R.T.: -0.001 min
Response: 154046128
Conc: 14.49 PPB



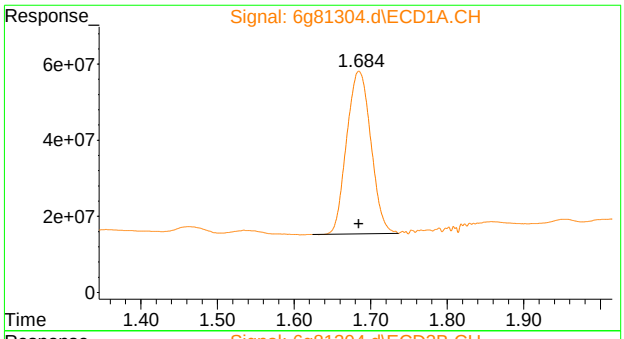
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.685 min
Delta R.T.: 0.000 min
Response: 939771989
Conc: 50.00 PPB



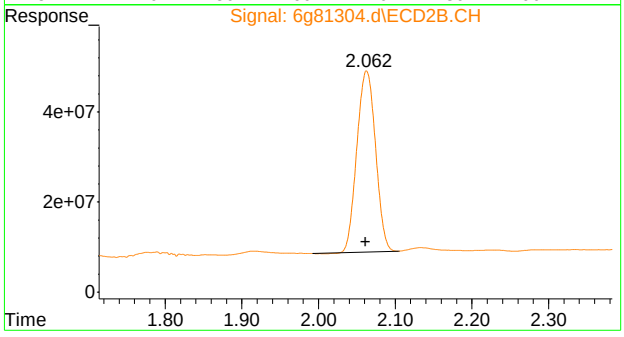
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.063 min
Delta R.T.: 0.002 min
Response: 682025264
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.685 min
Delta R.T.: 0.000 min
Response: 939771989
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.063 min
Delta R.T.: 0.002 min
Response: 682025264
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/21/21 09:00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\4g3677\
Data File : 4g9723422.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 9 Dec 2021 4:37 am
Operator : christp
Sample : jd35920-2
Misc : op36897,g4g3677,270,,,2,1
ALS Vial : 66 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 09 22:56:02 2021
Quant Method : C:\msdchem\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Dec 09 22:24:43 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.635	1.870	2337.5E6	323.1E6	50.000	50.000
27) I	1-bromo-2...	1.635	1.870	2337.5E6	323.1E6	50.000	50.000
33) I	1-bromo-2...	1.635	1.870	2337.5E6	323.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.314	2.760	144.4E6	13631235	3.723m	2.467m#
	Spiked Amount	40.000	Range 30 - 150		Recovery =	9.31%#	6.17%#
26) SA	Decachlor...	10.044	11.862	77089567	12505500	2.170m	2.461
	Spiked Amount	40.000			Recovery =	5.42%	6.15%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

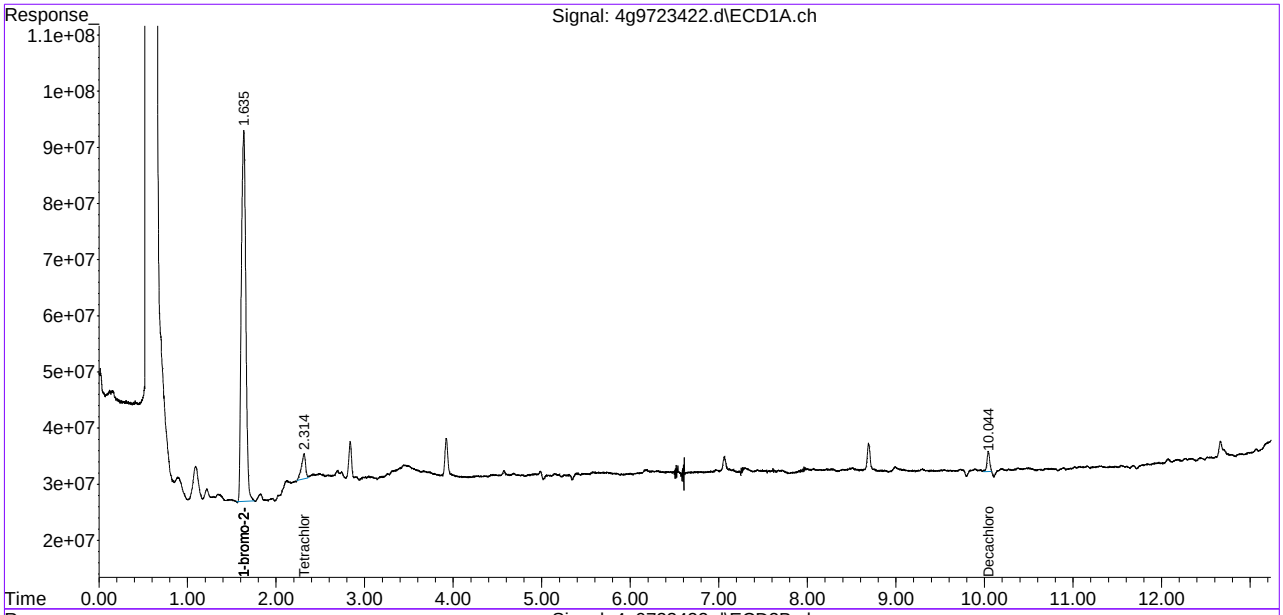
11.1.2 11

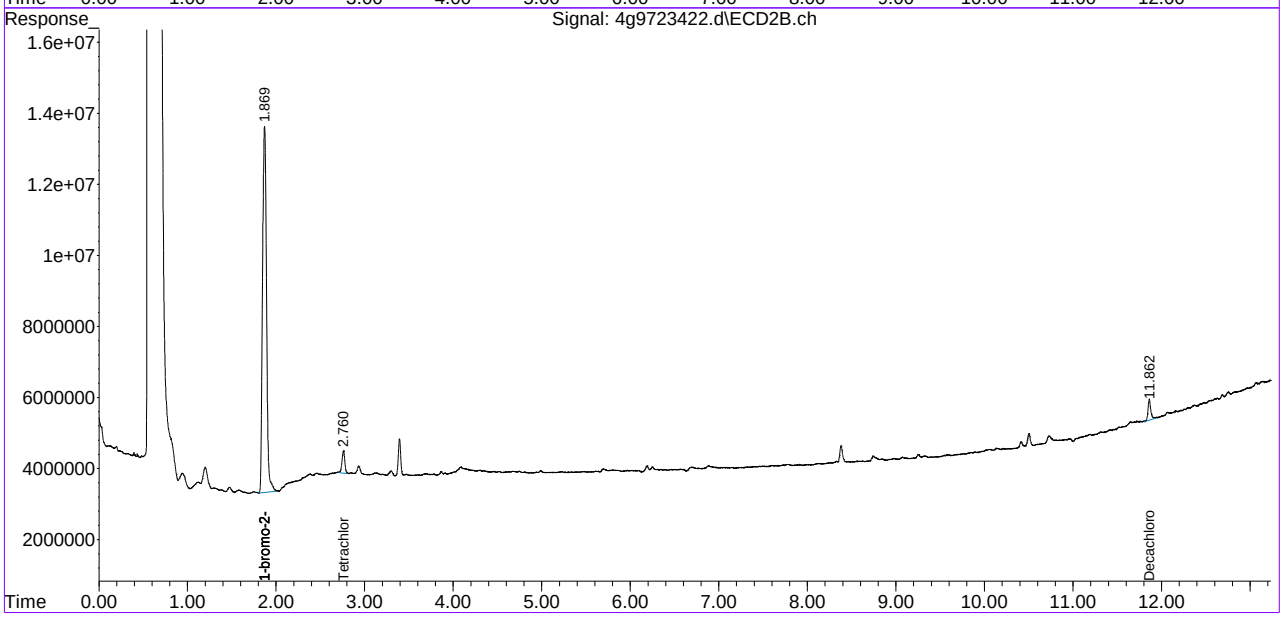
Quantitation Report (QT Reviewed)

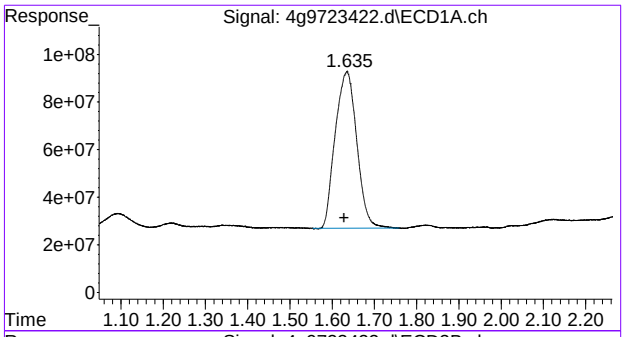
Data Path : C:\msdchem\1\data\sarah\4g3677\
Data File : 4g9723422.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 9 Dec 2021 4:37 am
Operator : christp
Sample : jd35920-2
Misc : op36897,g4g3677,270,,,2,1
ALS Vial : 66 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 09 22:56:02 2021
Quant Method : C:\msdchem\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Dec 09 22:24:43 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

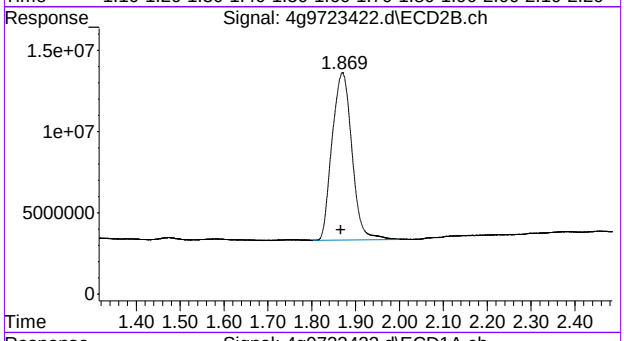






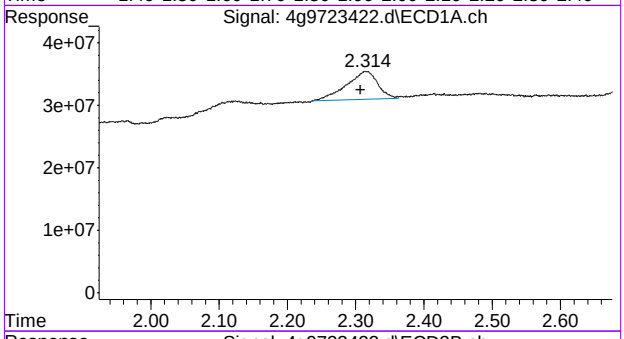
#1 1-bromo-2-nitrobenzene

R.T.: 1.635 min
Delta R.T.: 0.007 min
Response: 2337507690
Conc: 50.00 PPB



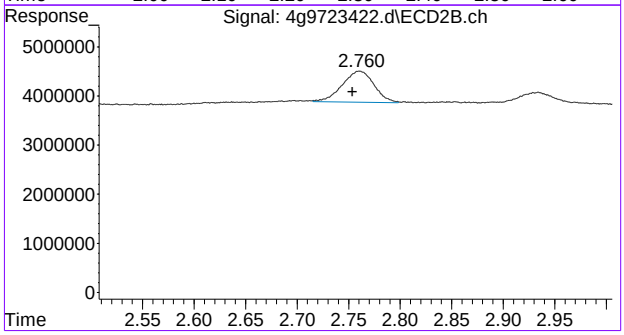
#1 1-bromo-2-nitrobenzene

R.T.: 1.870 min
Delta R.T.: 0.004 min
Response: 323104298
Conc: 50.00 PPB



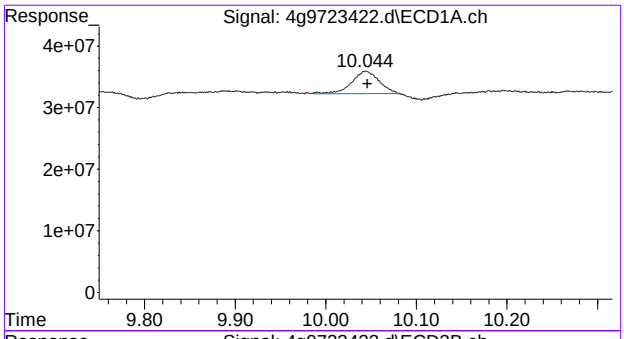
#2 Tetrachloro-m-xylene

R.T.: 2.314 min
Delta R.T.: 0.007 min
Response: 144379661
Conc: 3.72 PPB m



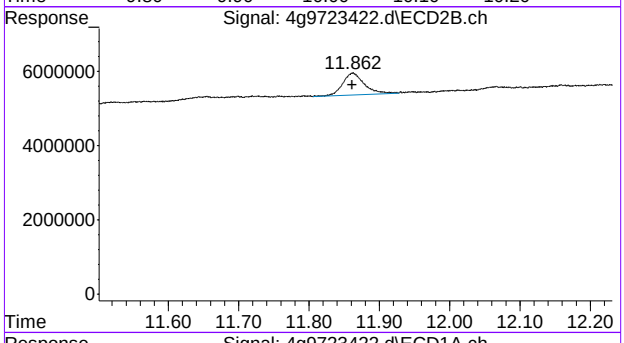
#2 Tetrachloro-m-xylene

R.T.: 2.760 min
Delta R.T.: 0.006 min
Response: 13631235
Conc: 2.47 PPB m



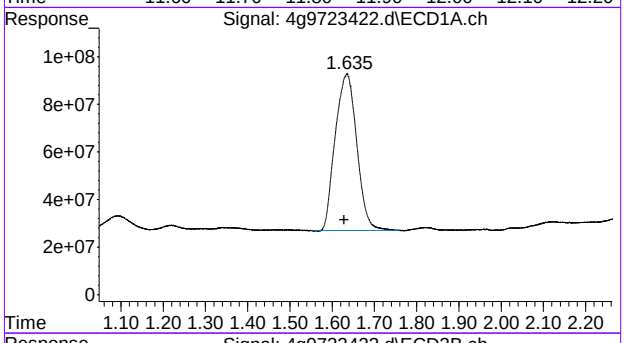
#26 Decachlorobiphenyl

R.T.: 10.044 min
Delta R.T.: -0.002 min
Response: 77089567
Conc: 2.17 PPB m



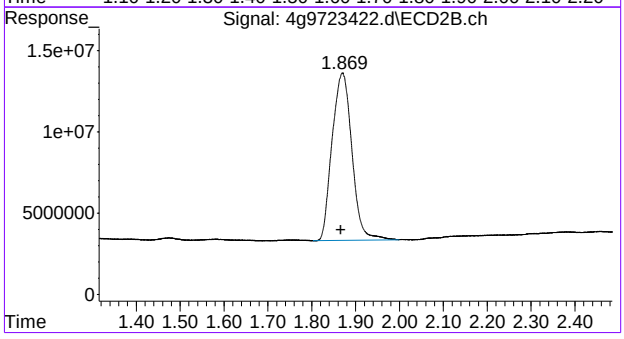
#26 Decachlorobiphenyl

R.T.: 11.862 min
Delta R.T.: 0.000 min
Response: 12505500
Conc: 2.46 PPB



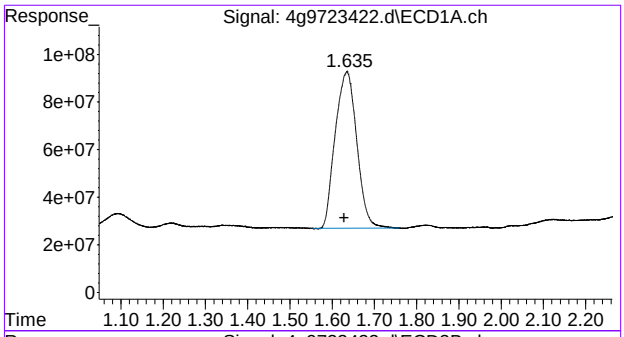
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.635 min
Delta R.T.: 0.007 min
Response: 2337507690
Conc: 50.00 PPB



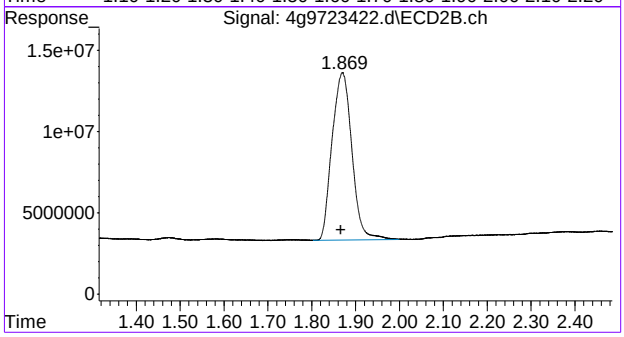
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.870 min
Delta R.T.: 0.004 min
Response: 323104298
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.635 min
Delta R.T.: 0.007 min
Response: 2337507690
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.870 min
Delta R.T.: 0.004 min
Response: 323104298
Conc: 50.00 PPB

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/21/21 08:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81305.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 04:26:57
Operator : christp
Sample : jd35920-3
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:39:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.687	2.062	943.4E6	688.9E6	50.000	50.000
27) I 1-bromo-2...	1.687	2.062	943.4E6	688.9E6	50.000	50.000
33) I 1-bromo-2...	1.687	2.062	943.4E6	688.9E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.260	2.890	55330158	72173067	4.723m	5.765m
Spiked Amount	40.000	Range 30 - 150	Recovery	=	11.81%#	14.41%#
26) SA Decachlor...	9.348	11.843	76510298	51889943	3.392m	4.833m#
Spiked Amount	40.000		Recovery	=	8.48%	12.08%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

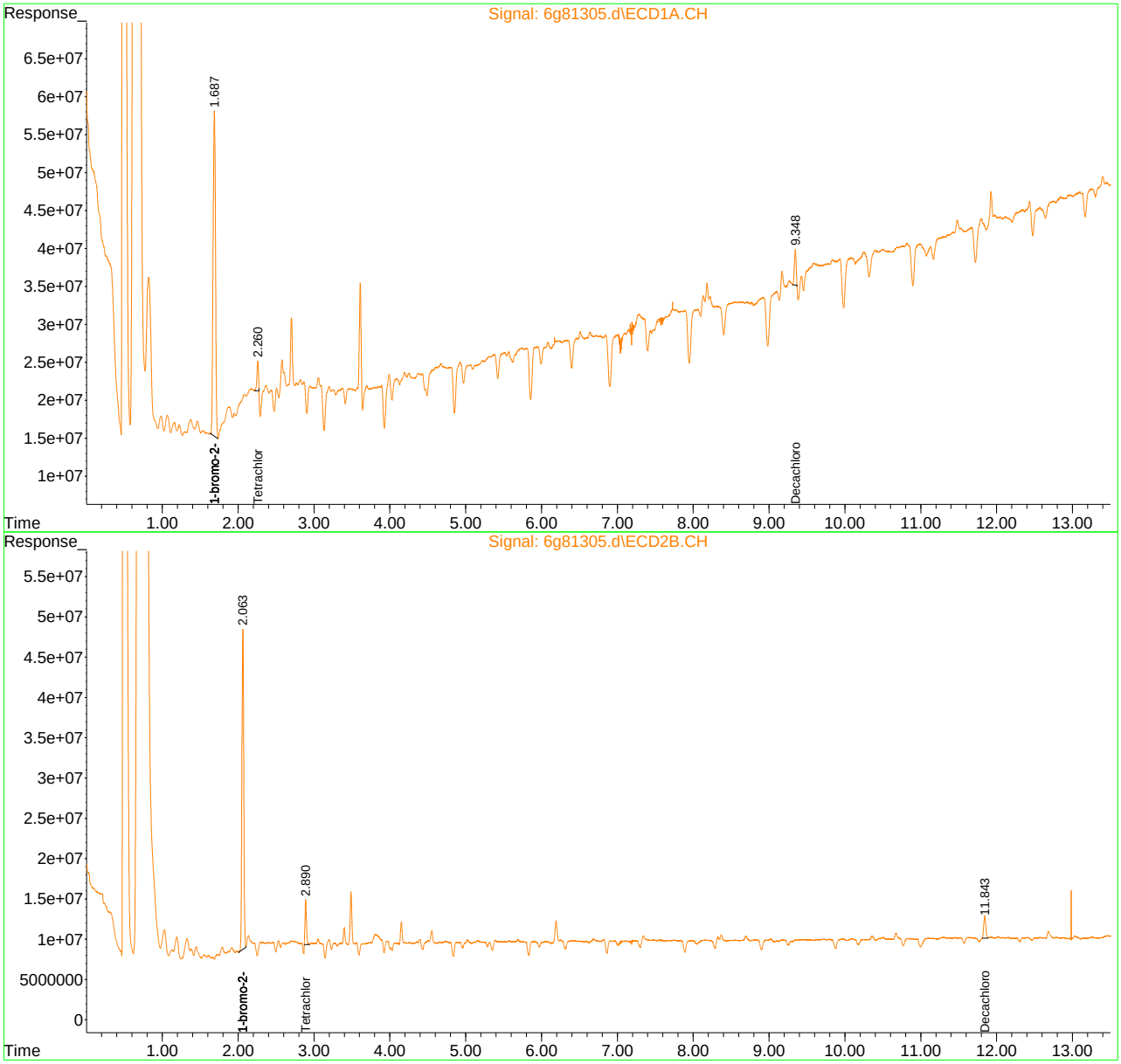
11.1.3
11

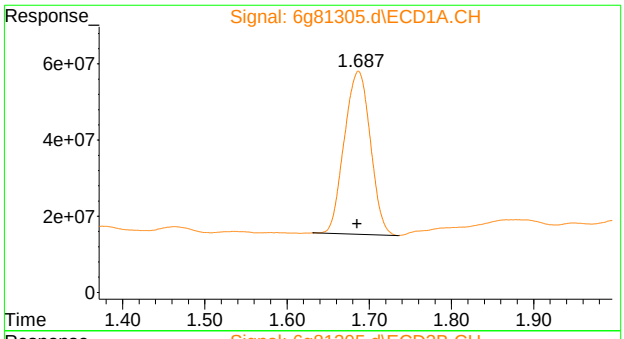
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81305.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 04:26:57
Operator : christp
Sample : jd35920-3
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:39:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

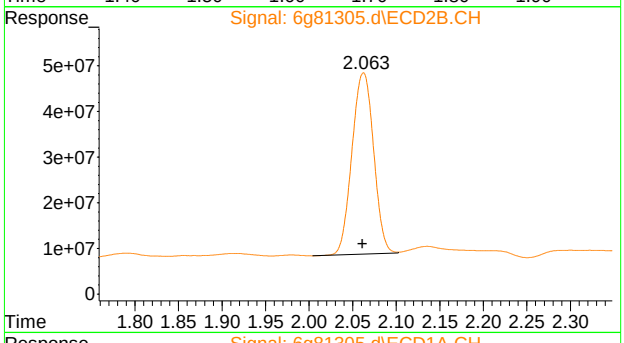
Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





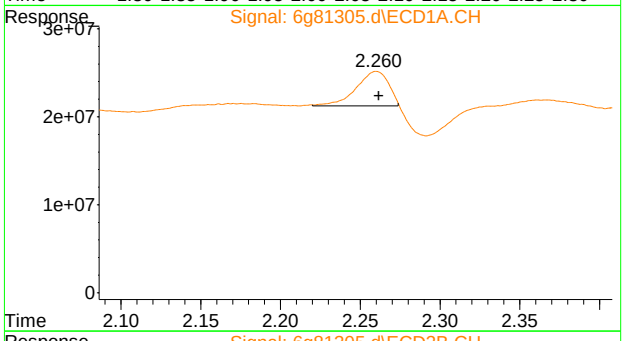
#1 1-bromo-2-nitrobenzene

R.T.: 1.687 min
Delta R.T.: 0.002 min
Response: 943422164
Conc: 50.00 PPB



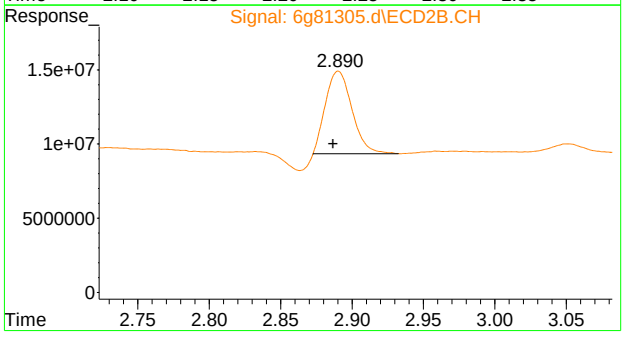
#1 1-bromo-2-nitrobenzene

R.T.: 2.062 min
Delta R.T.: 0.001 min
Response: 688877304
Conc: 50.00 PPB



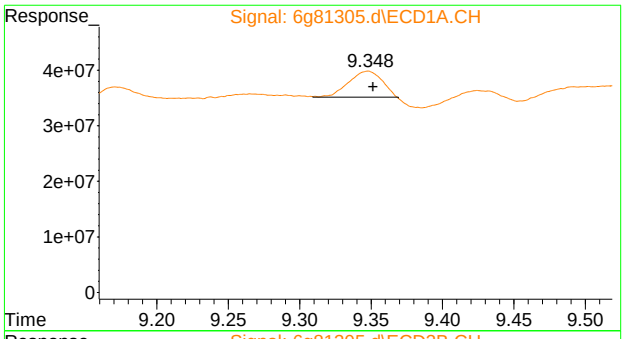
#2 Tetrachloro-m-xylene

R.T.: 2.260 min
Delta R.T.: -0.002 min
Response: 55330158
Conc: 4.72 PPB m



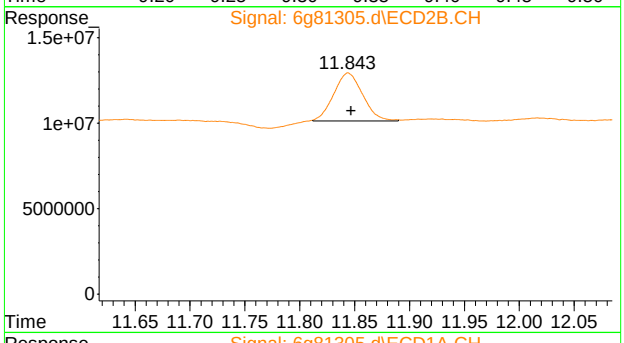
#2 Tetrachloro-m-xylene

R.T.: 2.890 min
Delta R.T.: 0.003 min
Response: 72173067
Conc: 5.77 PPB m



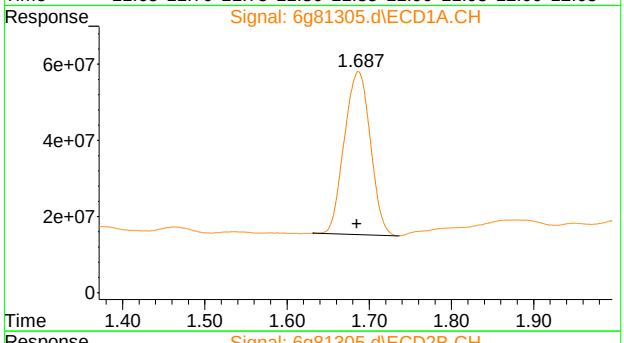
#26 Decachlorobiphenyl

R.T.: 9.348 min
Delta R.T.: -0.004 min
Response: 76510298
Conc: 3.39 PPB m



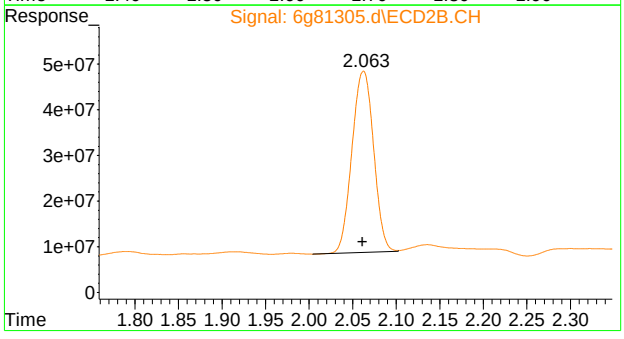
#26 Decachlorobiphenyl

R.T.: 11.843 min
Delta R.T.: -0.003 min
Response: 51889943
Conc: 4.83 PPB m



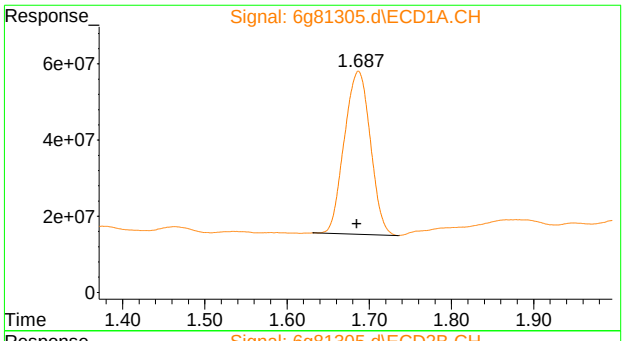
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.687 min
Delta R.T.: 0.002 min
Response: 943422164
Conc: 50.00 PPB



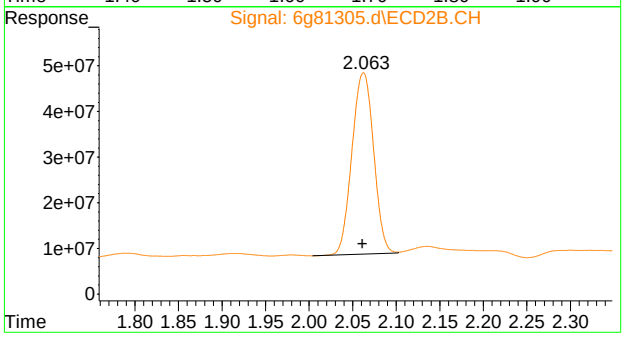
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.062 min
Delta R.T.: 0.001 min
Response: 688877304
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.687 min
Delta R.T.: 0.002 min
Response: 943422164
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.062 min
Delta R.T.: 0.001 min
Response: 688877304
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/21/21 09:00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\4g3677\
Data File : 4g9723418.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 9 Dec 2021 3:37 am
Operator : christp
Sample : jd35920-3
Misc : op36897,g4g3677,270,,,2,1
ALS Vial : 62 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 09 22:53:34 2021
Quant Method : C:\msdchem\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Dec 09 22:24:43 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.628	1.864	2235.1E6	344.5E6	50.000	50.000
27)	I 1-bromo-2...	1.628	1.864	2235.1E6	344.5E6	50.000	50.000
33)	I 1-bromo-2...	1.628	1.864	2235.1E6	344.5E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.309	2.755	870.4E6	119.4E6	23.470	20.274
	Spiked Amount 40.000	Range 30 - 150		Recovery =		58.67%	50.69%
26)	SA Decachlor...	10.044	11.861	320.8E6	40580994	9.441m	7.489
	Spiked Amount 40.000			Recovery =		23.60%	18.72%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

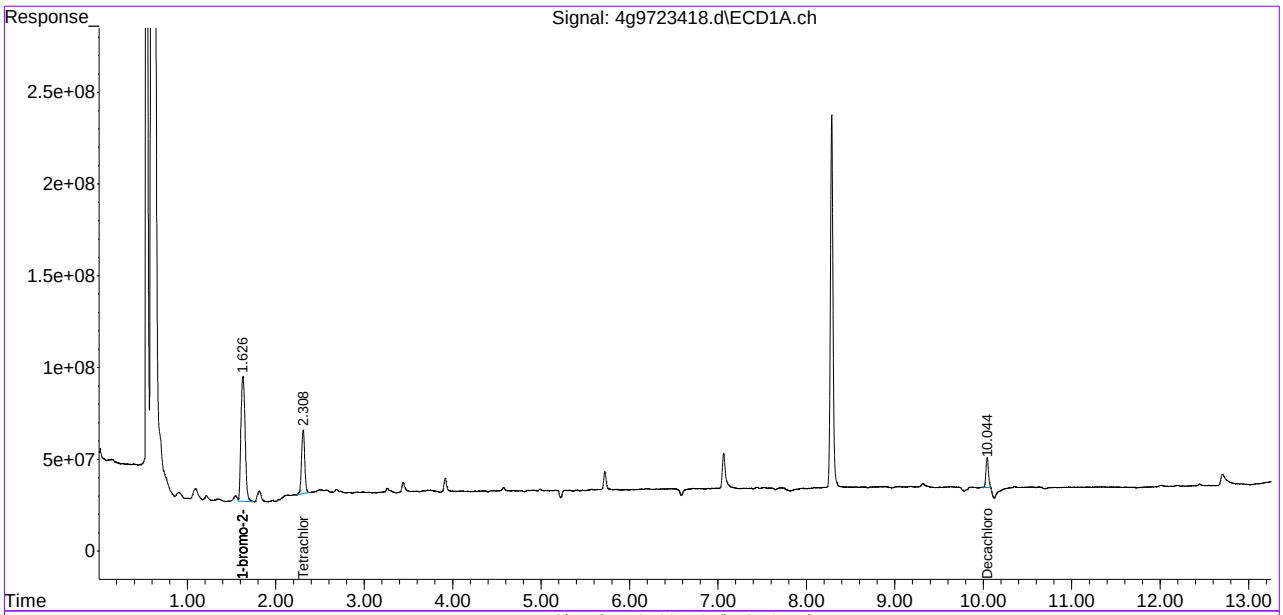
11.1.4 11

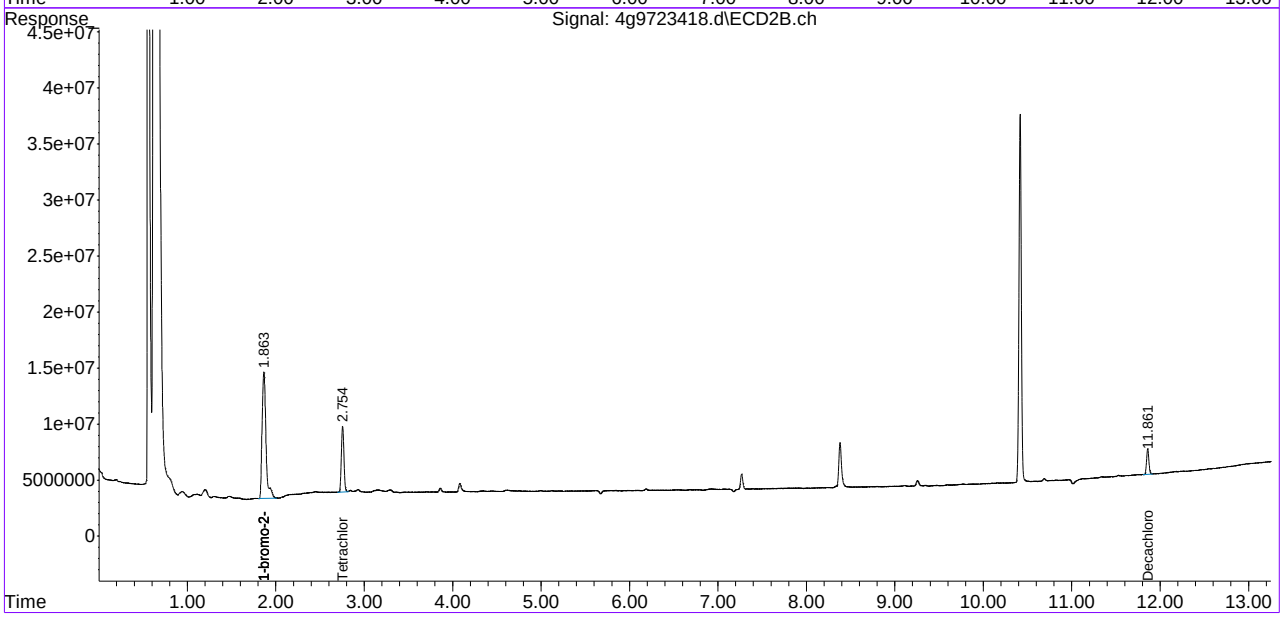
Quantitation Report (QT Reviewed)

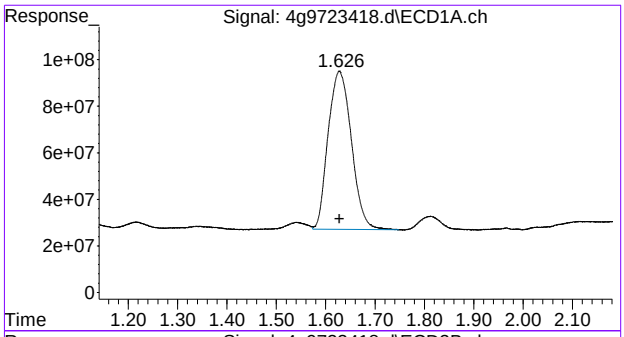
Data Path : C:\msdchem\1\data\sarah\4g3677\
Data File : 4g9723418.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 9 Dec 2021 3:37 am
Operator : christp
Sample : jd35920-3
Misc : op36897,g4g3677,270,,,2,1
ALS Vial : 62 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 09 22:53:34 2021
Quant Method : C:\msdchem\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Dec 09 22:24:43 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

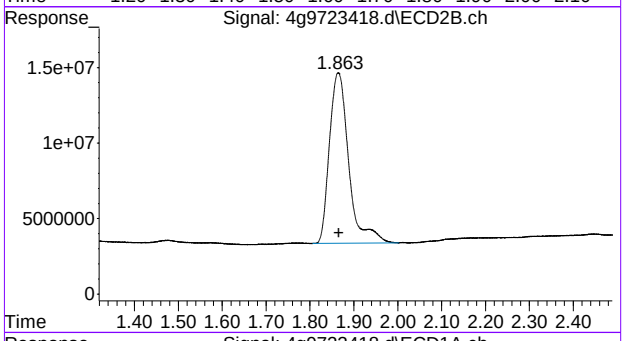






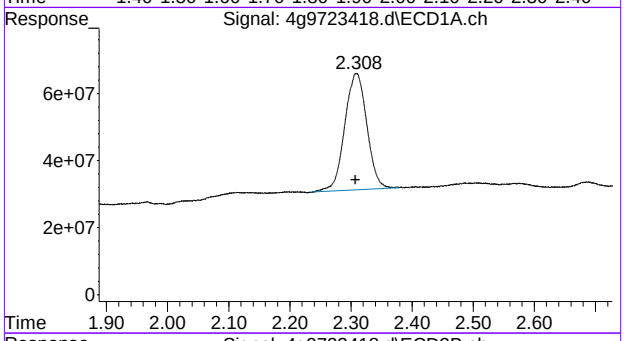
#1 1-bromo-2-nitrobenzene

R.T.: 1.628 min
Delta R.T.: 0.000 min
Response: 2235067945
Conc: 50.00 PPB



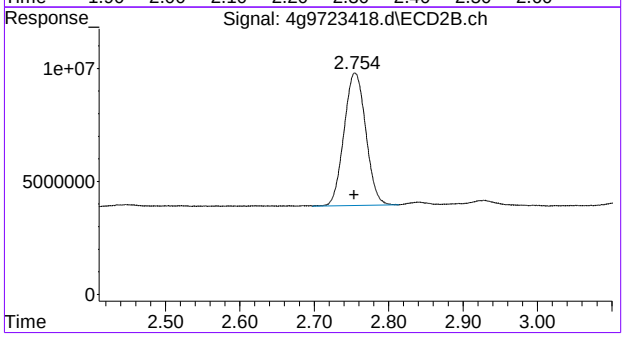
#1 1-bromo-2-nitrobenzene

R.T.: 1.864 min
Delta R.T.: -0.002 min
Response: 344462863
Conc: 50.00 PPB



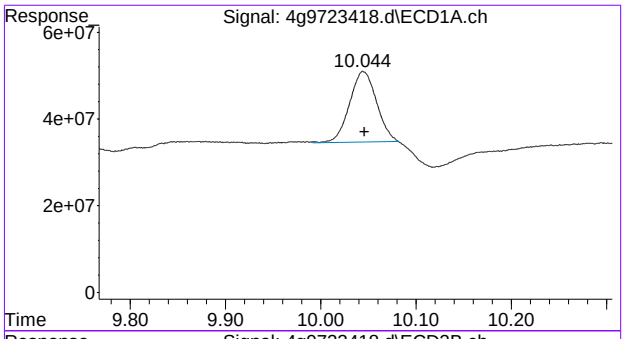
#2 Tetrachloro-m-xylene

R.T.: 2.309 min
Delta R.T.: 0.002 min
Response: 870376328
Conc: 23.47 PPB



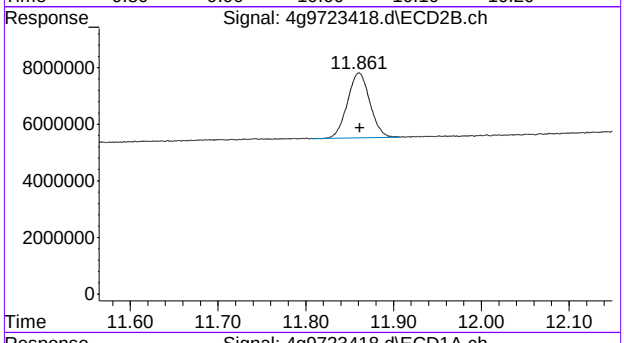
#2 Tetrachloro-m-xylene

R.T.: 2.755 min
Delta R.T.: 0.000 min
Response: 119426288
Conc: 20.27 PPB



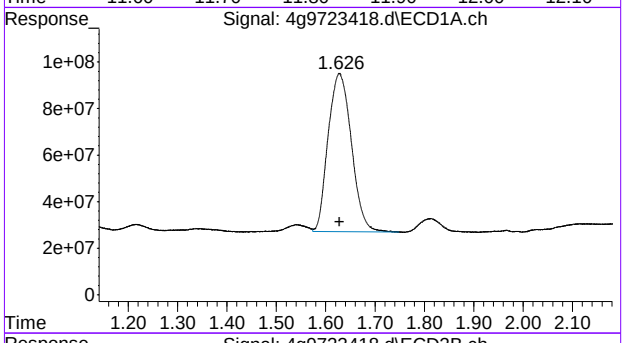
#26 Decachlorobiphenyl

R.T.: 10.044 min
Delta R.T.: -0.002 min
Response: 320751058
Conc: 9.44 PPB m



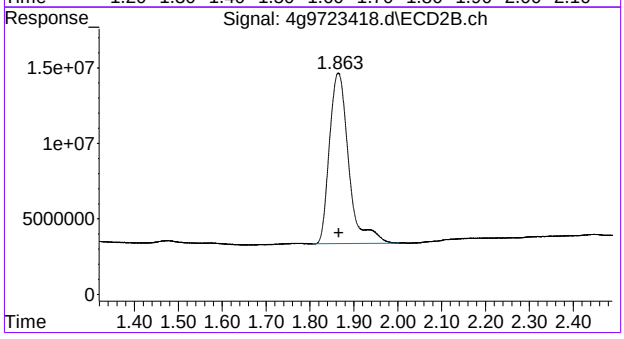
#26 Decachlorobiphenyl

R.T.: 11.861 min
Delta R.T.: 0.000 min
Response: 40580994
Conc: 7.49 PPB



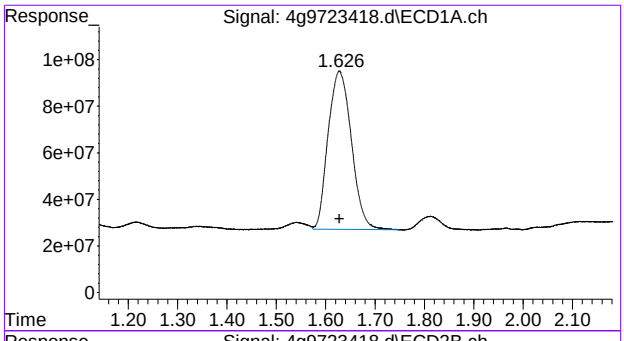
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.628 min
Delta R.T.: 0.000 min
Response: 2235067945
Conc: 50.00 PPB



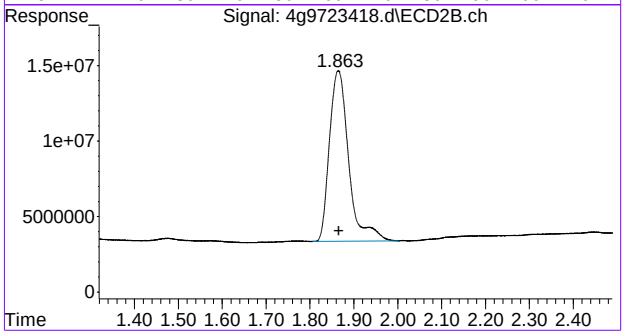
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.864 min
Delta R.T.: -0.002 min
Response: 344462863
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.628 min
Delta R.T.: 0.000 min
Response: 2235067945
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.864 min
Delta R.T.: -0.002 min
Response: 344462863
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/21/21 08:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81306.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 04:44:43
Operator : christp
Sample : jd35920-4
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:40:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.687	2.063	916.2E6	660.0E6	50.000	50.000
27) I 1-bromo-2...	1.687	2.063	916.2E6	660.0E6	50.000	50.000
33) I 1-bromo-2...	1.687	2.063	916.2E6	660.0E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.264	2.889	217.4E6	208.8E6	19.106m	17.412
Spiked Amount	40.000 Range	30 - 150	Recovery	=	47.77%	43.53%
26) SA Decachlor...	9.351	11.845	228.7E6	122.6E6	10.439m	11.917m
Spiked Amount	40.000		Recovery	=	26.10%	29.79%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

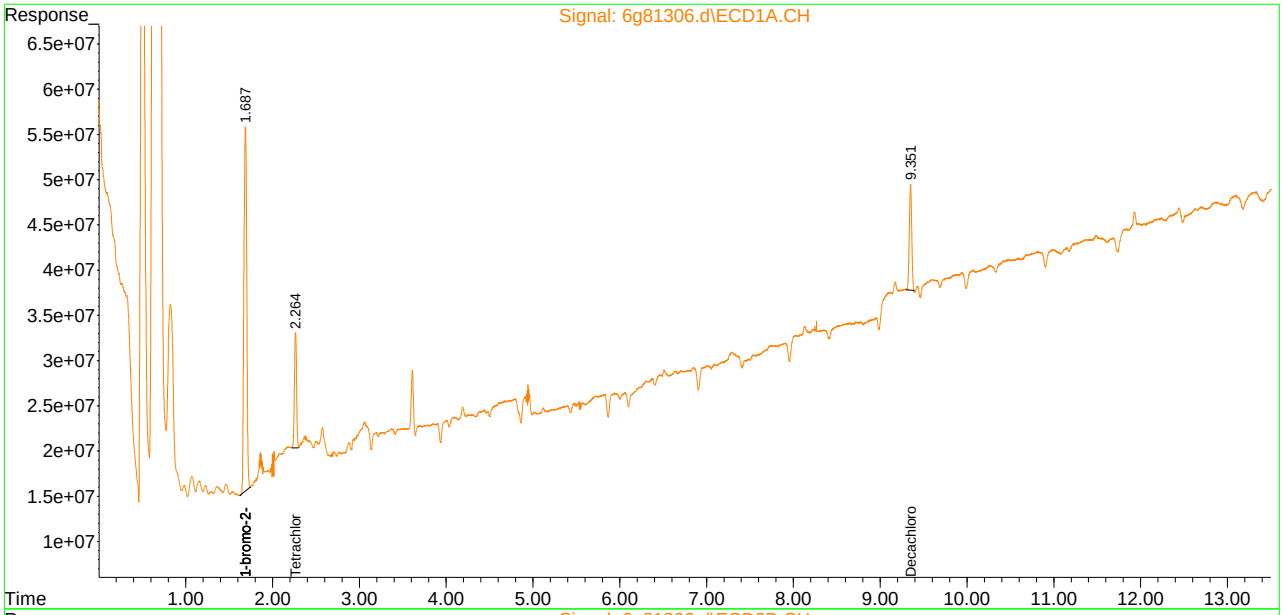
11.1.5 11

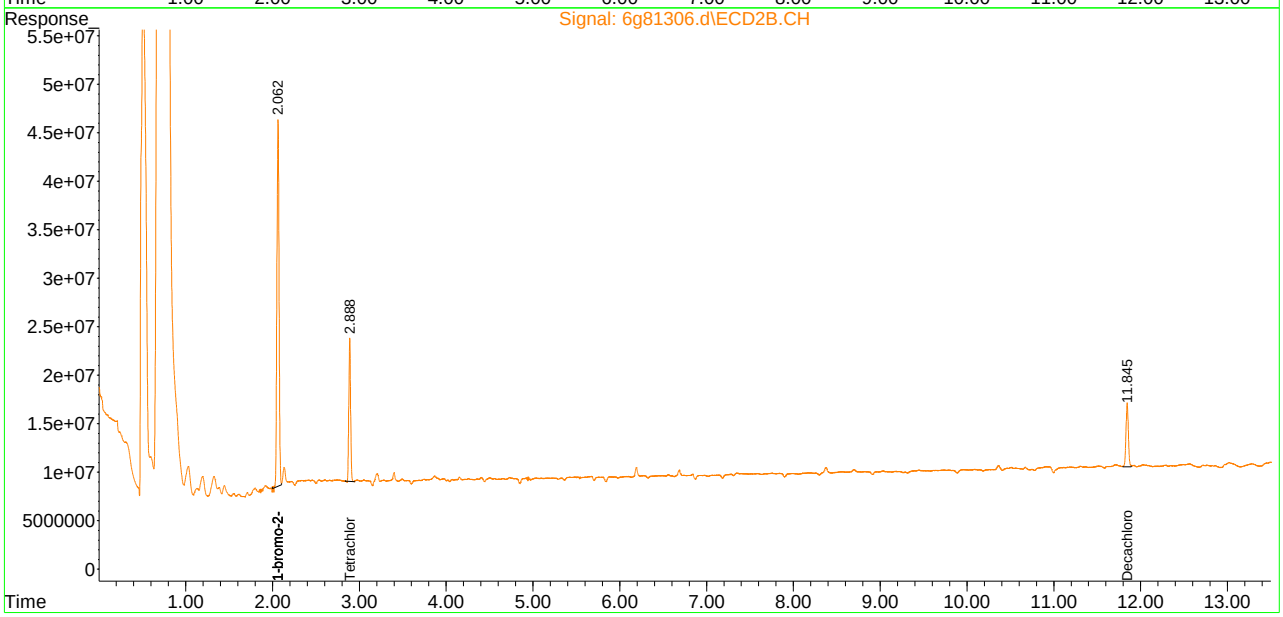
Quantitation Report (QT Reviewed)

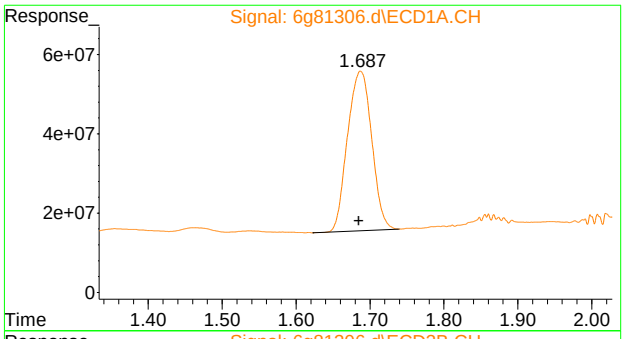
Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81306.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 04:44:43
Operator : christp
Sample : jd35920-4
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:40:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

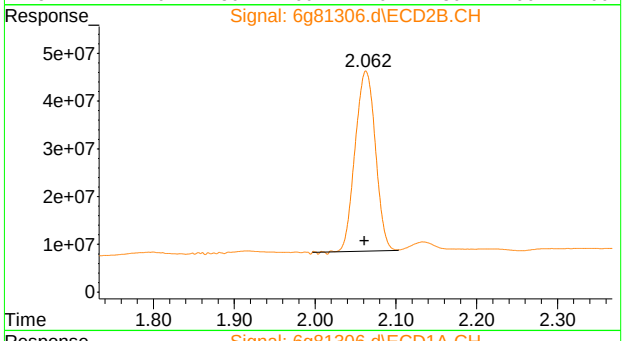






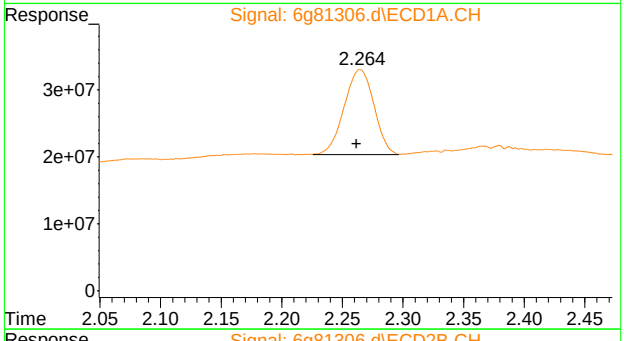
#1 1-bromo-2-nitrobenzene

R.T.: 1.687 min
Delta R.T.: 0.002 min
Response: 916247360
Conc: 50.00 PPB



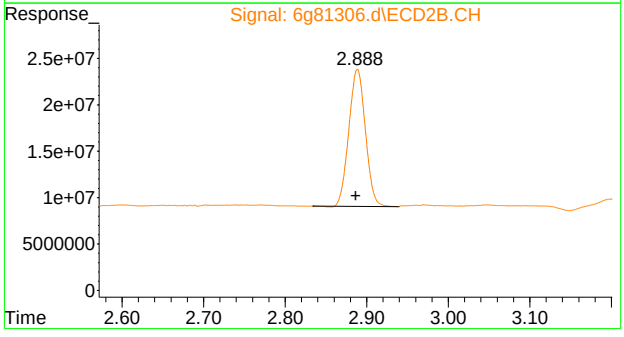
#1 1-bromo-2-nitrobenzene

R.T.: 2.063 min
Delta R.T.: 0.002 min
Response: 659992612
Conc: 50.00 PPB



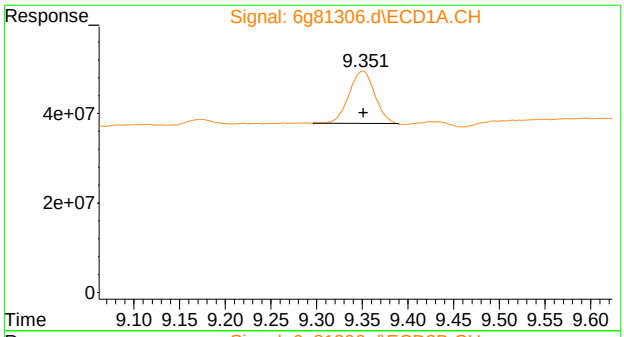
#2 Tetrachloro-m-xylene

R.T.: 2.264 min
Delta R.T.: 0.003 min
Response: 217398402
Conc: 19.11 PPB m



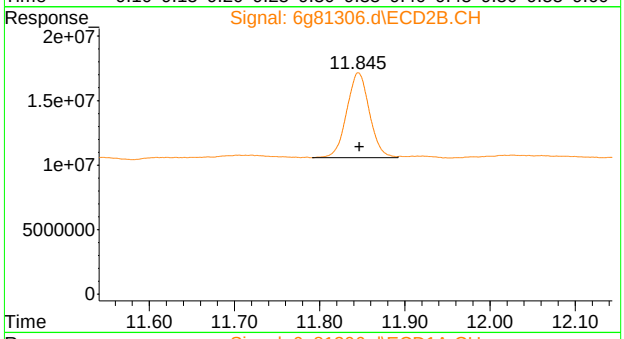
#2 Tetrachloro-m-xylene

R.T.: 2.889 min
Delta R.T.: 0.002 min
Response: 208830712
Conc: 17.41 PPB



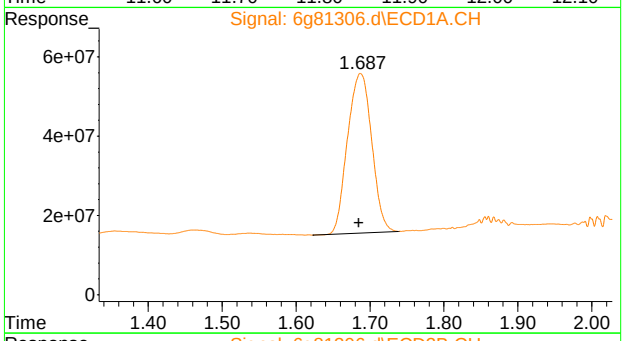
#26 Decachlorobiphenyl

R.T.: 9.351 min
Delta R.T.: 0.000 min
Response: 228697156
Conc: 10.44 PPB m



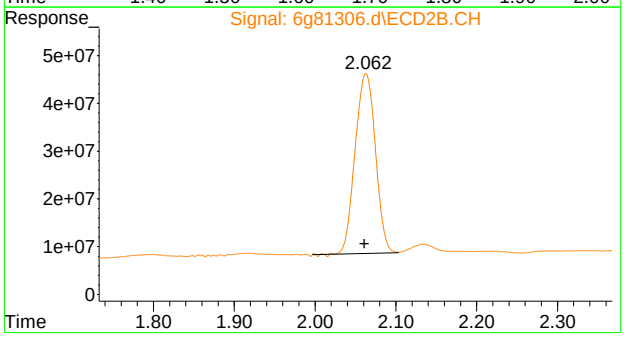
#26 Decachlorobiphenyl

R.T.: 11.845 min
Delta R.T.: -0.002 min
Response: 122595124
Conc: 11.92 PPB m



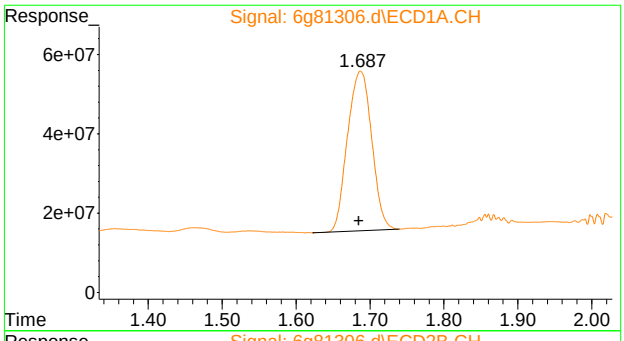
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.687 min
Delta R.T.: 0.002 min
Response: 916247360
Conc: 50.00 PPB



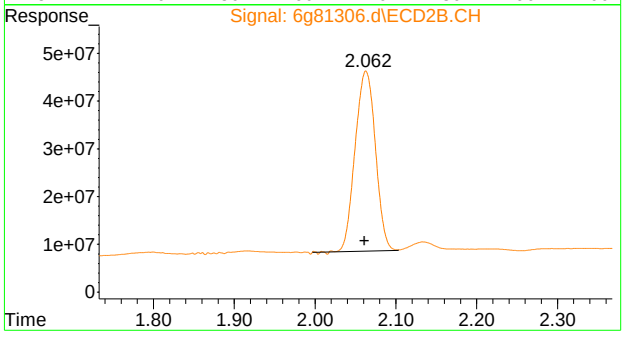
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.063 min
Delta R.T.: 0.002 min
Response: 659992612
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.687 min
Delta R.T.: 0.002 min
Response: 916247360
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.063 min
Delta R.T.: 0.002 min
Response: 659992612
Conc: 50.00 PPB

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\4g3677\
Data File : 4g9723419.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 9 Dec 2021 3:52 am
Operator : christp
Sample : jd35920-4
Misc : op36897,g4g3677,260,,,2,1
ALS Vial : 63 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 09 22:54:20 2021
Quant Method : C:\msdchem\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Dec 09 22:24:43 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.638	1.873	2325.4E6	335.8E6	50.000	50.000
27) I	1-bromo-2...	1.638	1.873	2325.4E6	335.8E6	50.000	50.000
33) I	1-bromo-2...	1.638	1.873	2325.4E6	335.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.316	2.760	712.7E6	101.7E6	18.471	17.709
	Spiked Amount	40.000	Range 30 - 150	Recovery	=	46.18%	44.27%
26) SA	Decachlor...	10.046	11.861	370.4E6	41704522	10.480	7.895
	Spiked Amount	40.000		Recovery	=	26.20%	19.74%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

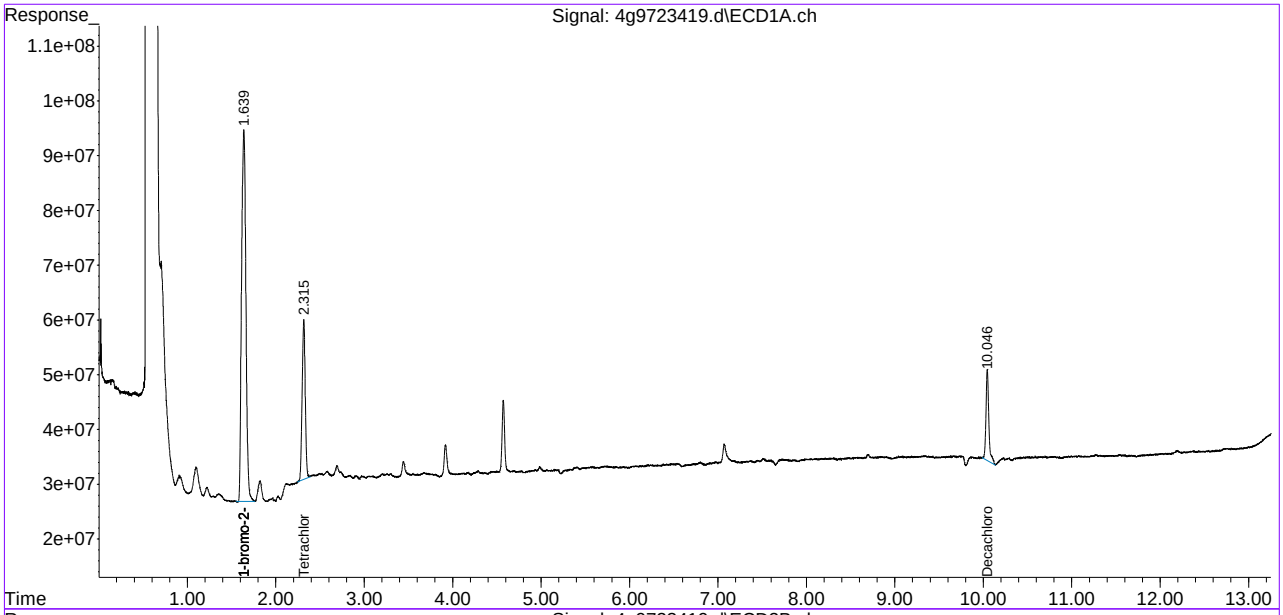
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

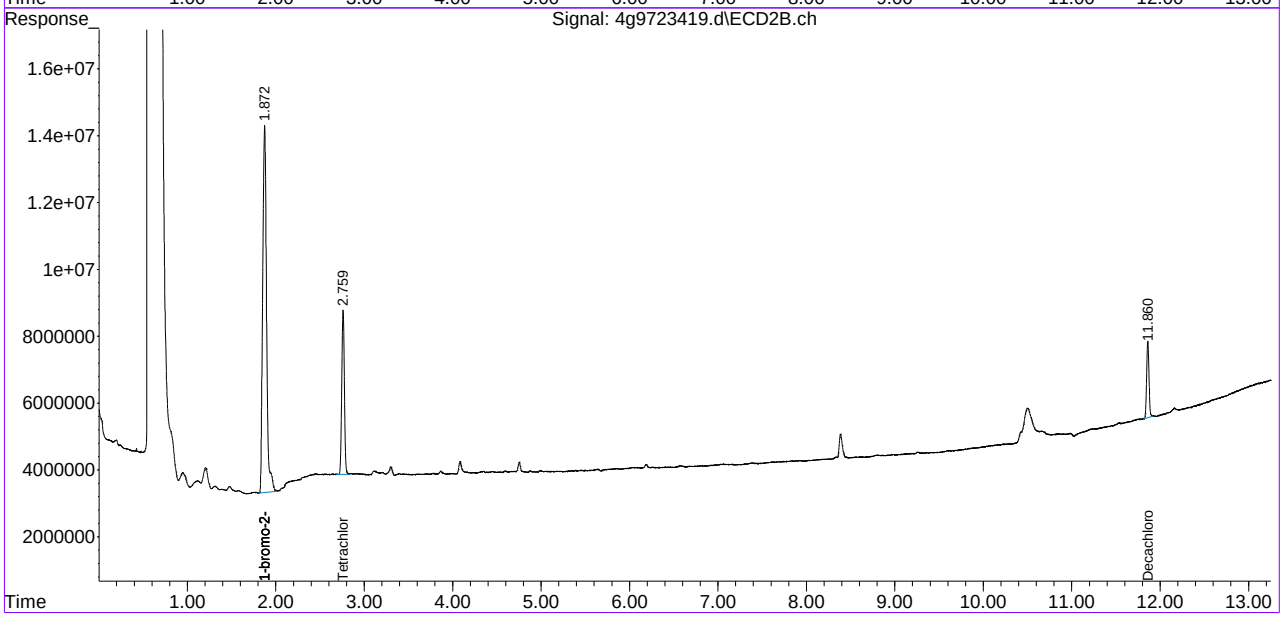
Quantitation Report (QT Reviewed)

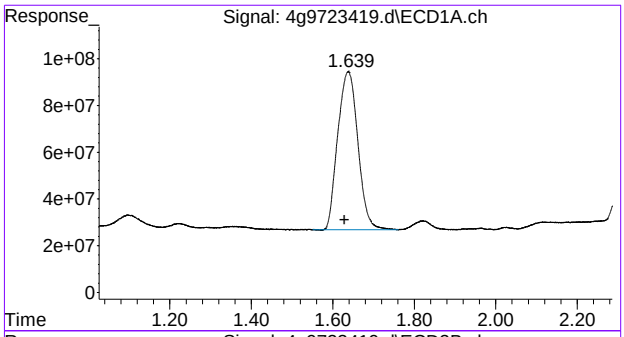
Data Path : C:\msdchem\1\data\sarah\4g3677\
Data File : 4g9723419.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 9 Dec 2021 3:52 am
Operator : christp
Sample : jd35920-4
Misc : op36897,g4g3677,260,,,2,1
ALS Vial : 63 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 09 22:54:20 2021
Quant Method : C:\msdchem\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Dec 09 22:24:43 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

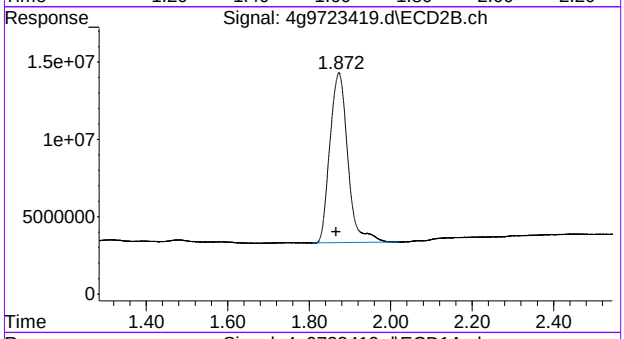






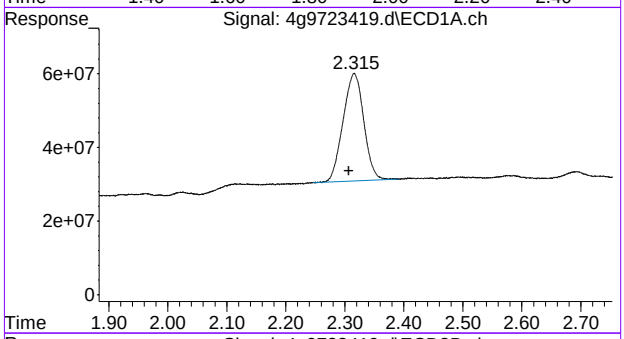
#1 1-bromo-2-nitrobenzene

R.T.: 1.638 min
Delta R.T.: 0.010 min
Response: 2325426991
Conc: 50.00 PPB



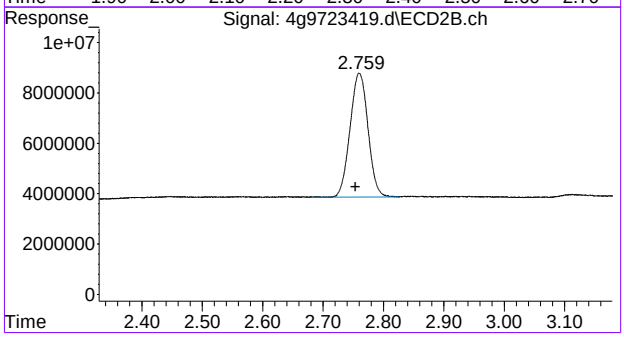
#1 1-bromo-2-nitrobenzene

R.T.: 1.873 min
Delta R.T.: 0.007 min
Response: 335810089
Conc: 50.00 PPB



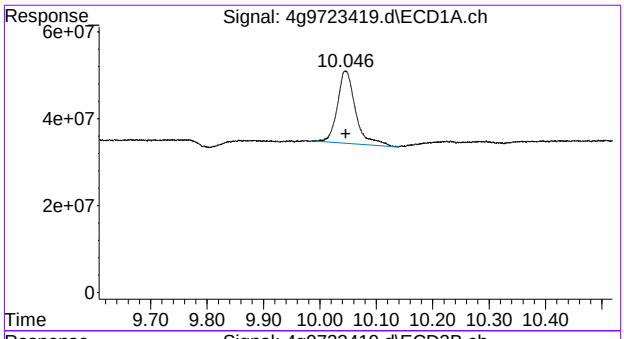
#2 Tetrachloro-m-xylene

R.T.: 2.316 min
Delta R.T.: 0.009 min
Response: 712687538
Conc: 18.47 PPB



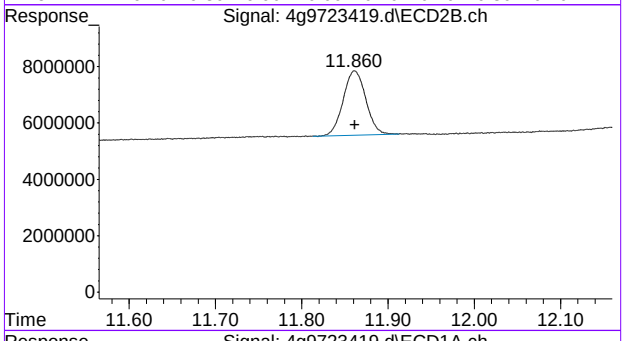
#2 Tetrachloro-m-xylene

R.T.: 2.760 min
Delta R.T.: 0.006 min
Response: 101698589
Conc: 17.71 PPB



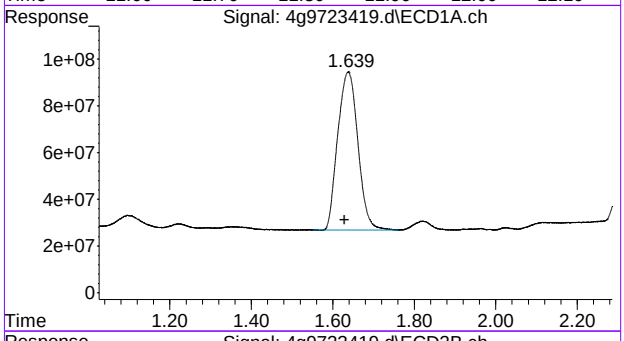
#26 Decachlorobiphenyl

R.T.: 10.046 min
Delta R.T.: 0.000 min
Response: 370424074
Conc: 10.48 PPB



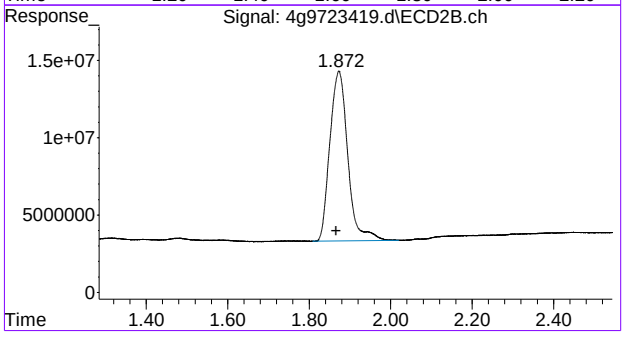
#26 Decachlorobiphenyl

R.T.: 11.861 min
Delta R.T.: 0.000 min
Response: 41704522
Conc: 7.90 PPB



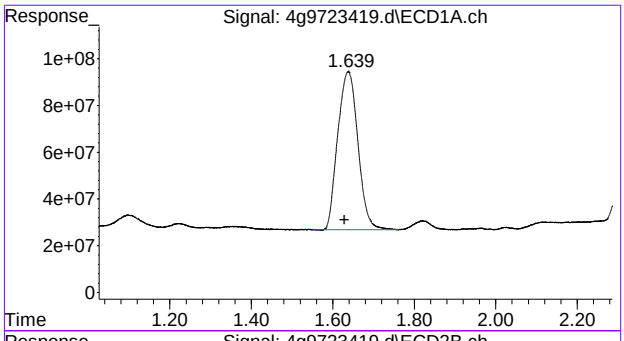
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.638 min
Delta R.T.: 0.010 min
Response: 2325426991
Conc: 50.00 PPB



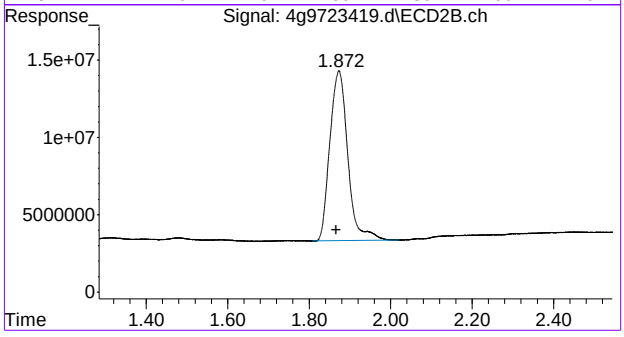
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.873 min
Delta R.T.: 0.007 min
Response: 335810089
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.638 min
Delta R.T.: 0.010 min
Response: 2325426991
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.873 min
Delta R.T.: 0.007 min
Response: 335810089
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/21/21 08:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81307.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 05:02:33
Operator : christp
Sample : jd35920-5
Misc : op37193,g6g2876,260,,,2,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:41:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.687	2.063	930.5E6	671.5E6	50.000	50.000
27) I 1-bromo-2...	1.687	2.063	930.5E6	671.5E6	50.000	50.000
33) I 1-bromo-2...	1.687	2.063	930.5E6	671.5E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.264	2.888	321.6E6	281.2E6	27.829m	23.042
Spiked Amount	40.000 Range	30 - 150	Recovery	=	69.57%	57.61%
26) SA Decachlor...	9.350	11.846	340.7E6	155.8E6	15.312m	14.889
Spiked Amount	40.000		Recovery	=	38.28%	37.22%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

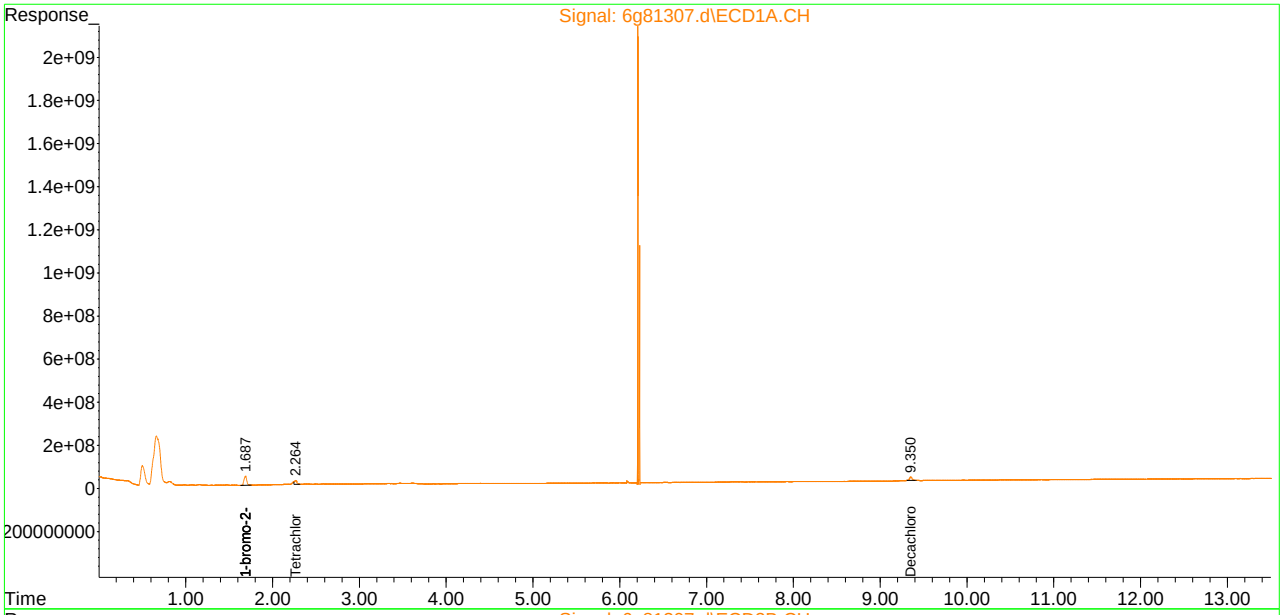
11.1.7 11

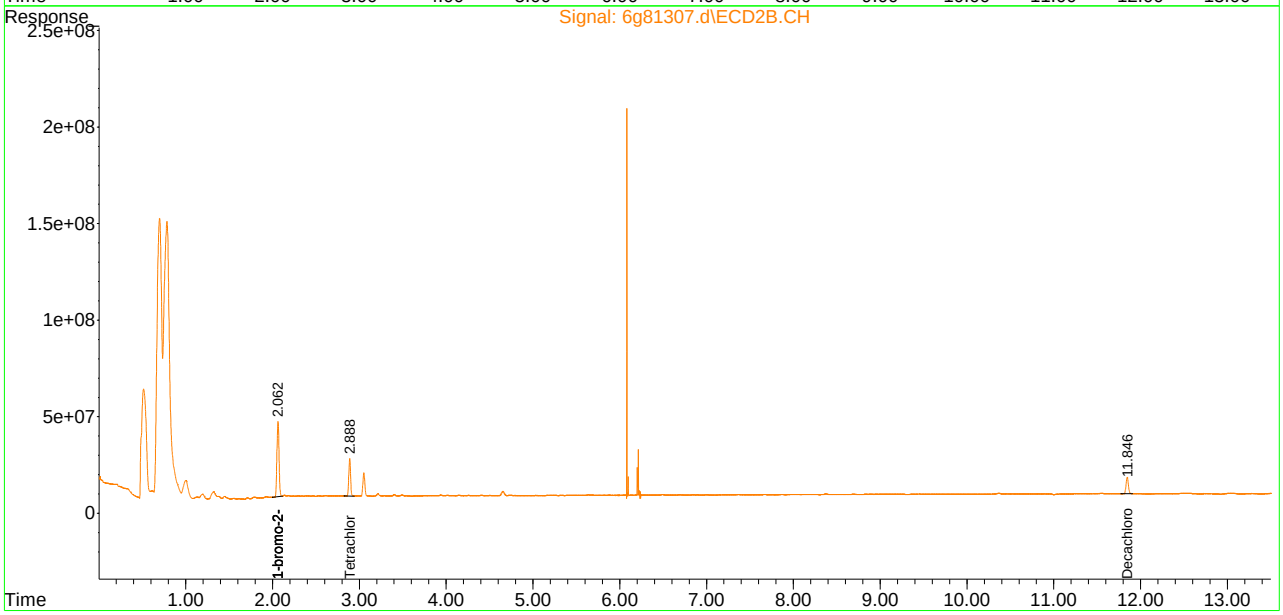
Quantitation Report (QT Reviewed)

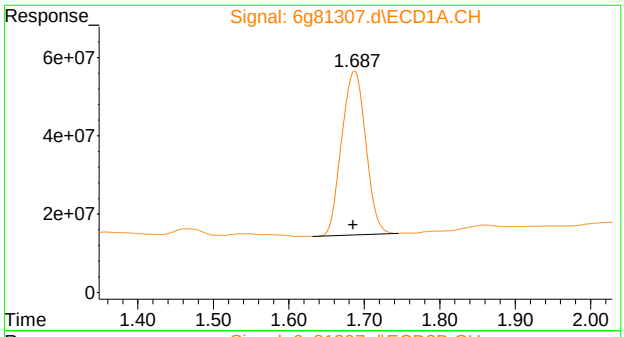
Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81307.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 05:02:33
Operator : christp
Sample : jd35920-5
Misc : op37193,g6g2876,260,,,2,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:41:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

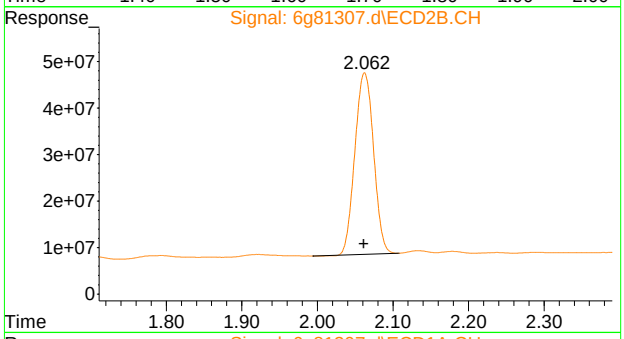






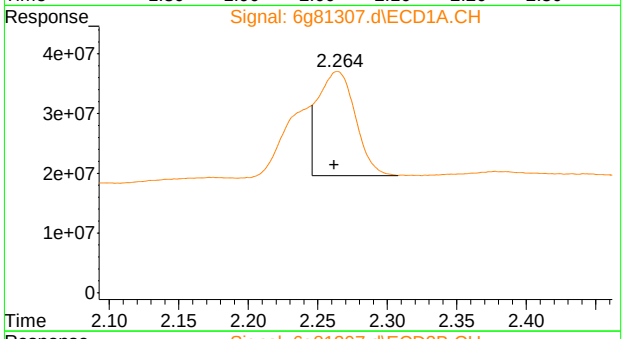
#1 1-bromo-2-nitrobenzene

R.T.: 1.687 min
Delta R.T.: 0.002 min
Response: 930512524
Conc: 50.00 PPB



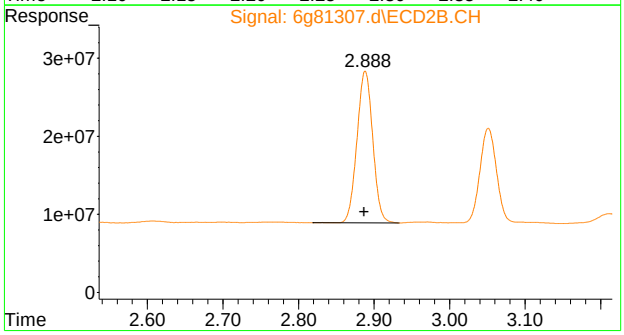
#1 1-bromo-2-nitrobenzene

R.T.: 2.063 min
Delta R.T.: 0.001 min
Response: 671506729
Conc: 50.00 PPB



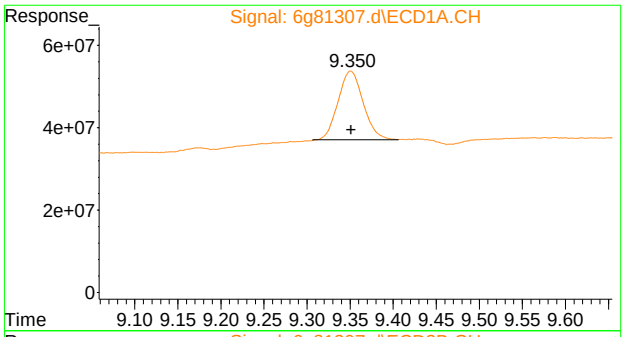
#2 Tetrachloro-m-xylene

R.T.: 2.264 min
Delta R.T.: 0.002 min
Response: 321589010
Conc: 27.83 PPB m



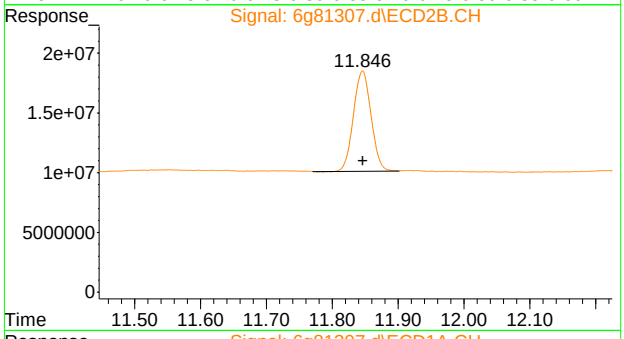
#2 Tetrachloro-m-xylene

R.T.: 2.888 min
Delta R.T.: 0.002 min
Response: 281179278
Conc: 23.04 PPB



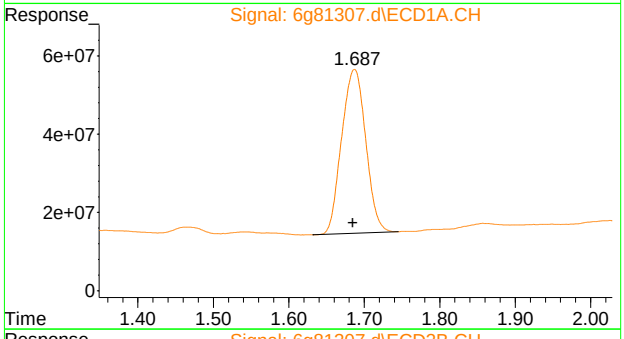
#26 Decachlorobiphenyl

R.T.: 9.350 min
Delta R.T.: -0.001 min
Response: 340663814
Conc: 15.31 PPB m



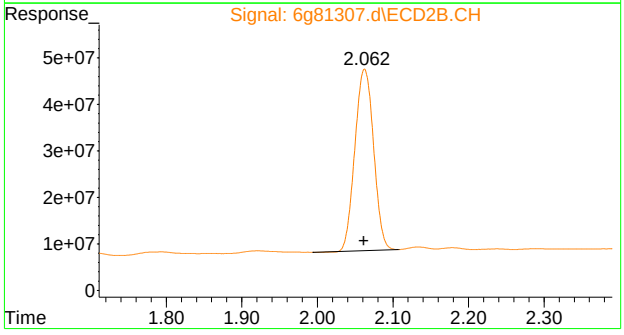
#26 Decachlorobiphenyl

R.T.: 11.846 min
Delta R.T.: 0.000 min
Response: 155836317
Conc: 14.89 PPB



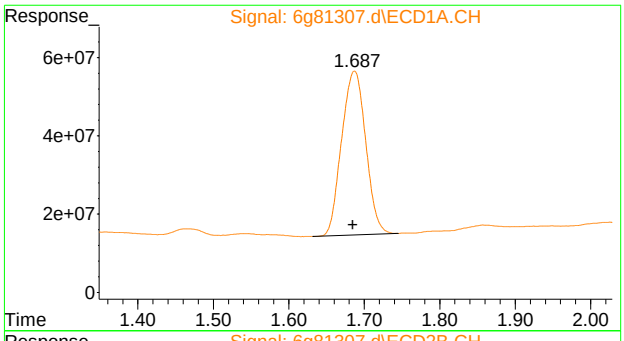
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.687 min
Delta R.T.: 0.003 min
Response: 930512524
Conc: 50.00 PPB



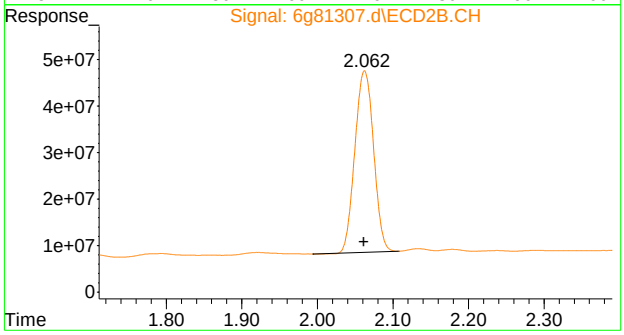
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.063 min
Delta R.T.: 0.001 min
Response: 671506729
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.687 min
Delta R.T.: 0.003 min
Response: 930512524
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.063 min
Delta R.T.: 0.001 min
Response: 671506729
Conc: 50.00 PPB

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 4g9723420.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 9 Dec 2021 4:07 am
Operator : christp
Sample : jd35920-5
Misc : op36897,g4g3677,270,,,2,1
ALS Vial : 64 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 21 08:59:30 2021
Quant Method : C:\msdchem\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Dec 09 22:24:43 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.635	1.871	2292.2E6	322.1E6	50.000	50.000
27) I	1-bromo-2...	1.635	1.871	2292.2E6	322.1E6	50.000	50.000
33) I	1-bromo-2...	1.635	1.871	2292.2E6	322.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.311	2.759	1328.6E6	123.4E6	34.934	22.407 #
Spiked Amount	40.000	Range	30 - 150	Recovery	=	87.33%	56.02%
26) SA	Decachlor...	10.047	11.860	485.3E6	51853144	13.930	10.234 #
Spiked Amount	40.000			Recovery	=	34.83%	25.59%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

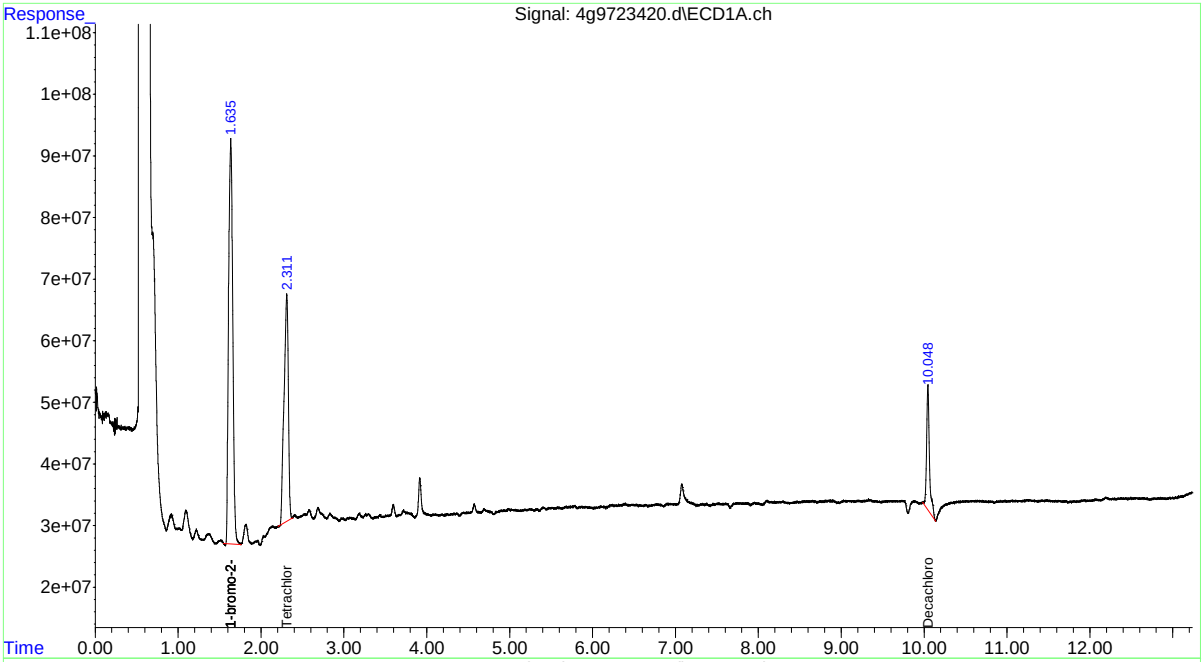
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

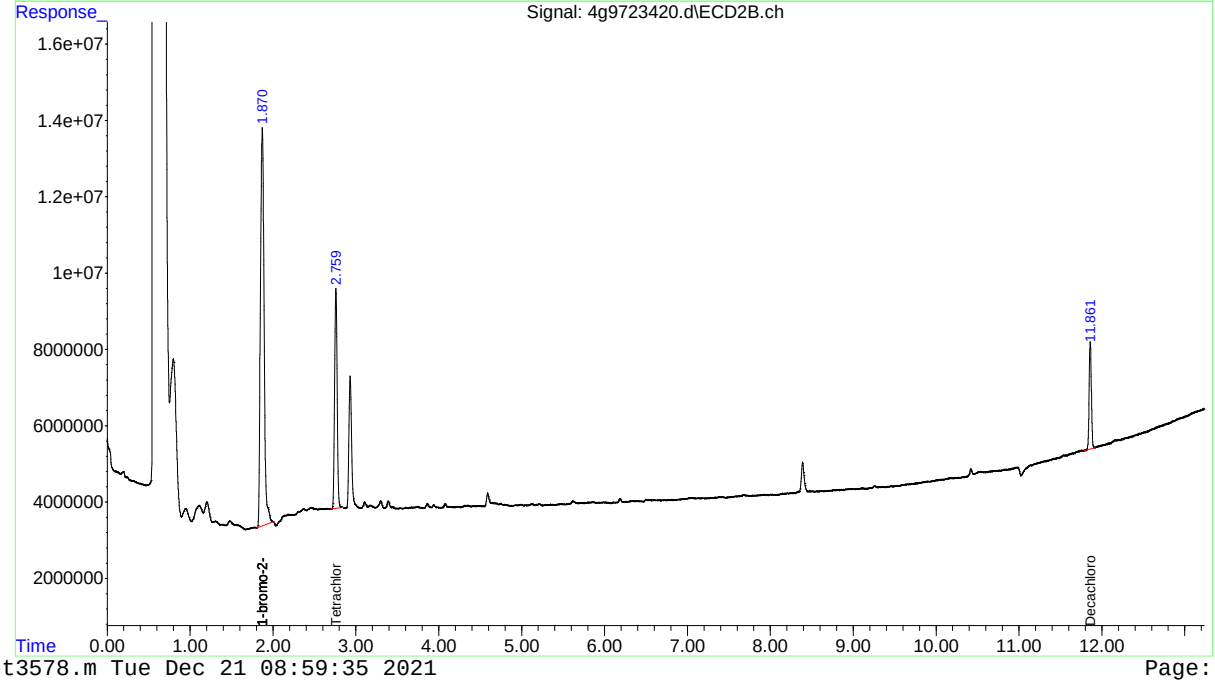
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 4g9723420.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 9 Dec 2021 4:07 am
Operator : christp
Sample : jd35920-5
Misc : op36897,g4g3677,270,,,2,1
ALS Vial : 64 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 21 08:59:30 2021
Quant Method : C:\msdchem\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Dec 09 22:24:43 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/21/21 08:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81308.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 05:20:18
Operator : christp
Sample : jd35920-6
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:47:00 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.688	2.063	921.4E6	643.1E6	50.000	50.000
27) I 1-bromo-2...	1.688	2.063	921.4E6	643.1E6	50.000	50.000
33) I 1-bromo-2...	1.688	2.063	921.4E6	643.1E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.261	2.889	369.5E6	297.9E6	32.291m	25.491
Spiked Amount	40.000 Range	30 - 150	Recovery	=	80.73%	63.73%
26) SA Decachlor...	9.349	11.845	394.5E6	202.6E6	17.907m	20.210m
Spiked Amount	40.000		Recovery	=	44.77%	50.52%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

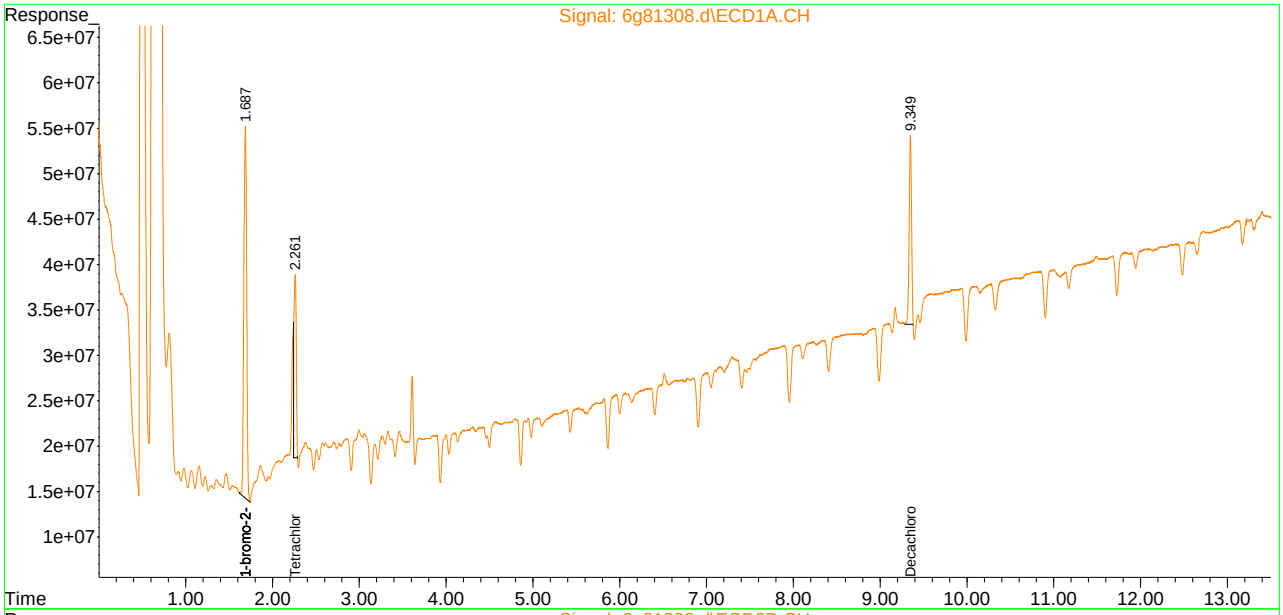
11.1.9 11

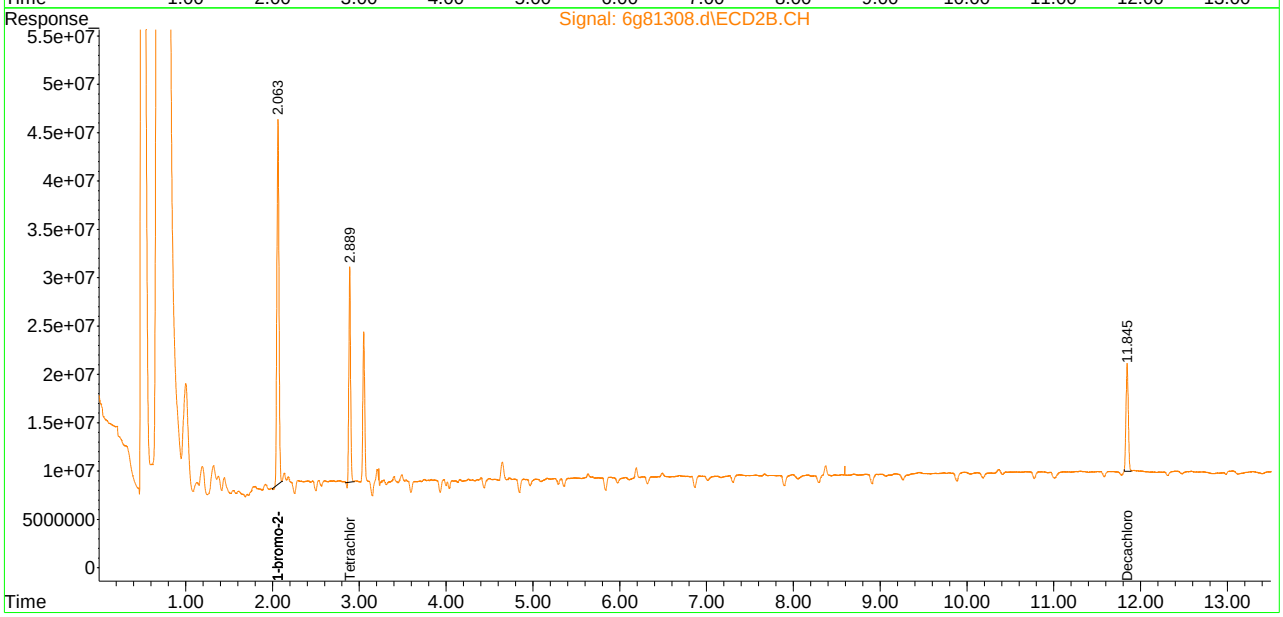
Quantitation Report (QT Reviewed)

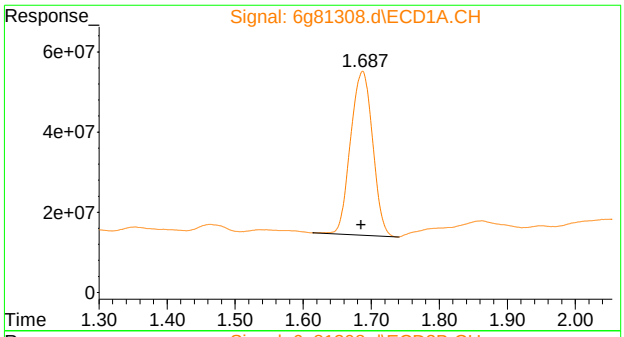
Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81308.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 05:20:18
Operator : christp
Sample : jd35920-6
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:47:00 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

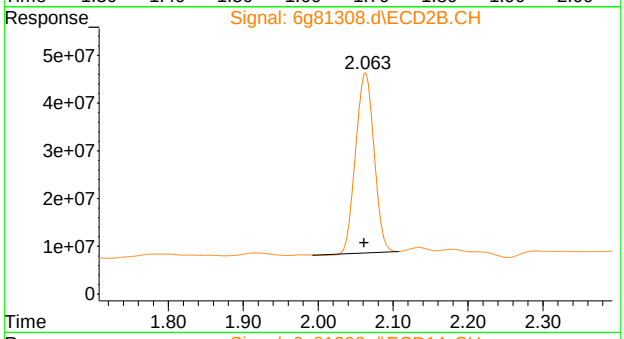






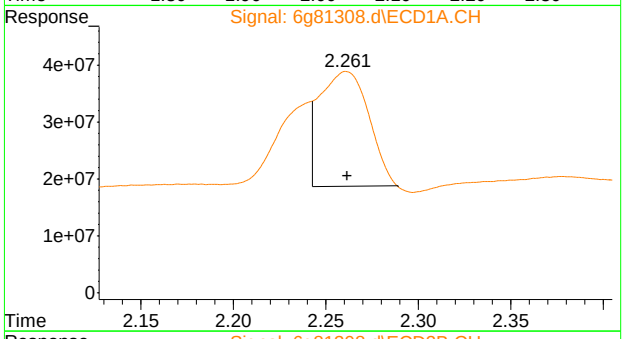
#1 1-bromo-2-nitrobenzene

R.T.: 1.688 min
Delta R.T.: 0.003 min
Response: 921375160
Conc: 50.00 PPB



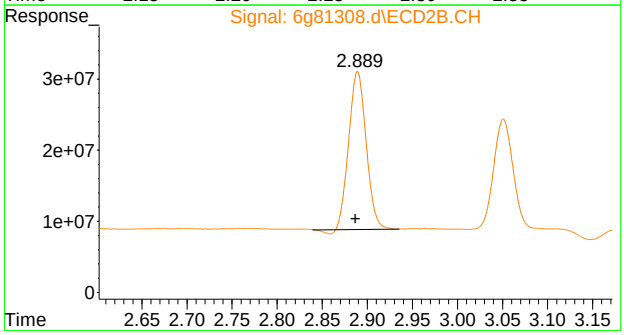
#1 1-bromo-2-nitrobenzene

R.T.: 2.063 min
Delta R.T.: 0.002 min
Response: 643072634
Conc: 50.00 PPB



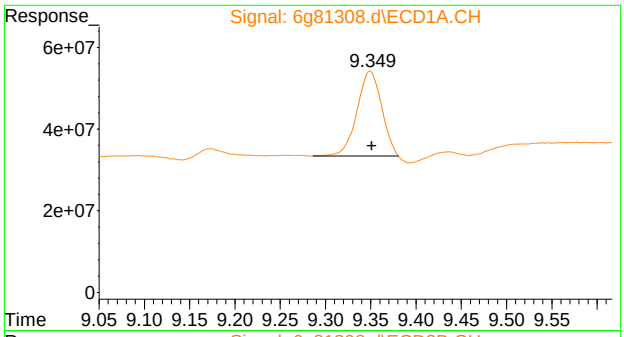
#2 Tetrachloro-m-xylene

R.T.: 2.261 min
Delta R.T.: -0.001 min
Response: 369492072
Conc: 32.29 PPB m



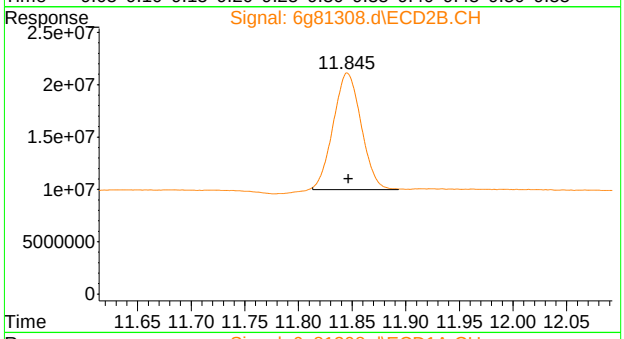
#2 Tetrachloro-m-xylene

R.T.: 2.889 min
Delta R.T.: 0.003 min
Response: 297890068
Conc: 25.49 PPB



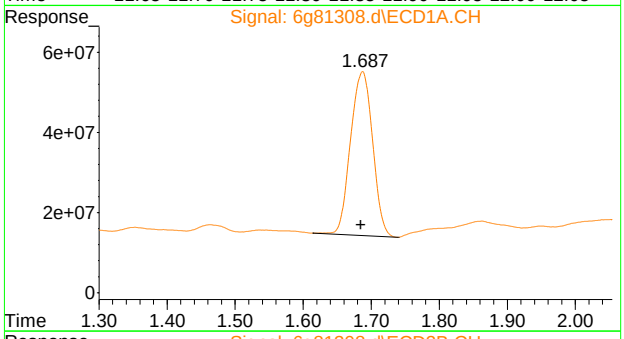
#26 Decachlorobiphenyl

R.T.: 9.349 min
Delta R.T.: -0.002 min
Response: 394484982
Conc: 17.91 PPB m



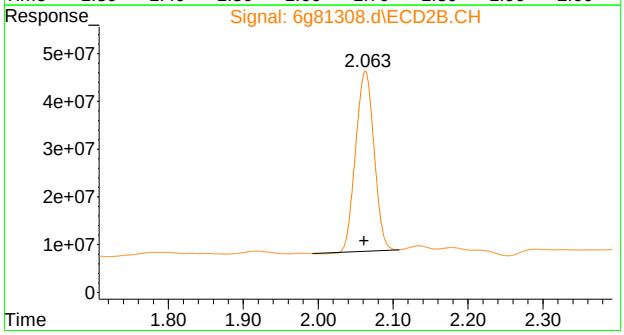
#26 Decachlorobiphenyl

R.T.: 11.845 min
Delta R.T.: -0.002 min
Response: 202575703
Conc: 20.21 PPB m



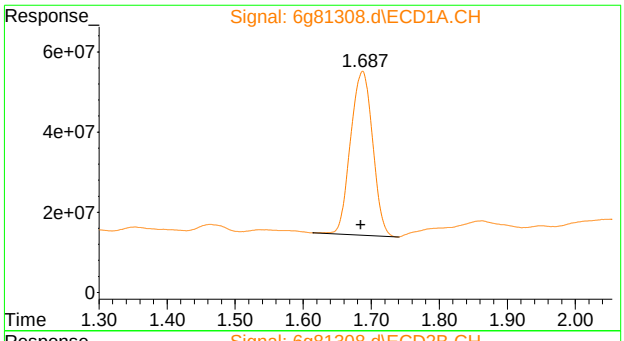
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.688 min
Delta R.T.: 0.003 min
Response: 921375160
Conc: 50.00 PPB



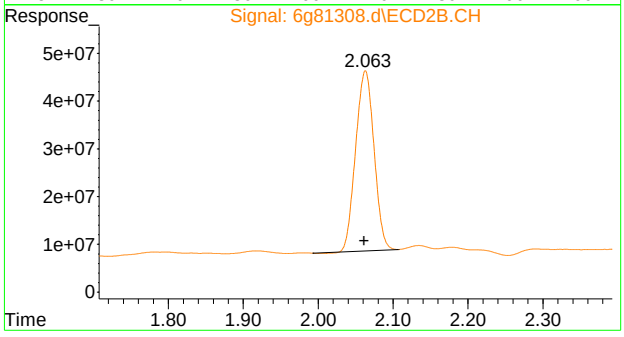
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.063 min
Delta R.T.: 0.002 min
Response: 643072634
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.688 min
Delta R.T.: 0.003 min
Response: 921375160
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.063 min
Delta R.T.: 0.002 min
Response: 643072634
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/21/21 09:00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\4g3677\
Data File : 4g9723421.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 9 Dec 2021 4:22 am
Operator : christp
Sample : jd35920-6
Misc : op36897,g4g3677,270,,,2,1
ALS Vial : 65 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 09 22:55:10 2021
Quant Method : C:\msdchem\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Dec 09 22:24:43 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.640	1.874	2294.0E6	315.5E6	50.000	50.000
27) I	1-bromo-2...	1.640	1.874	2294.0E6	315.5E6	50.000	50.000
33) I	1-bromo-2...	1.640	1.874	2294.0E6	315.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.313	2.760	1747.7E6	154.2E6	45.916	28.578 #
	Spiked Amount	40.000	Range 30 - 150		Recovery =	114.79%	71.45%
26) SA	Decachlor...	10.046	11.861	422.0E6	53777148	12.103m	10.835
	Spiked Amount	40.000			Recovery =	30.26%	27.09%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

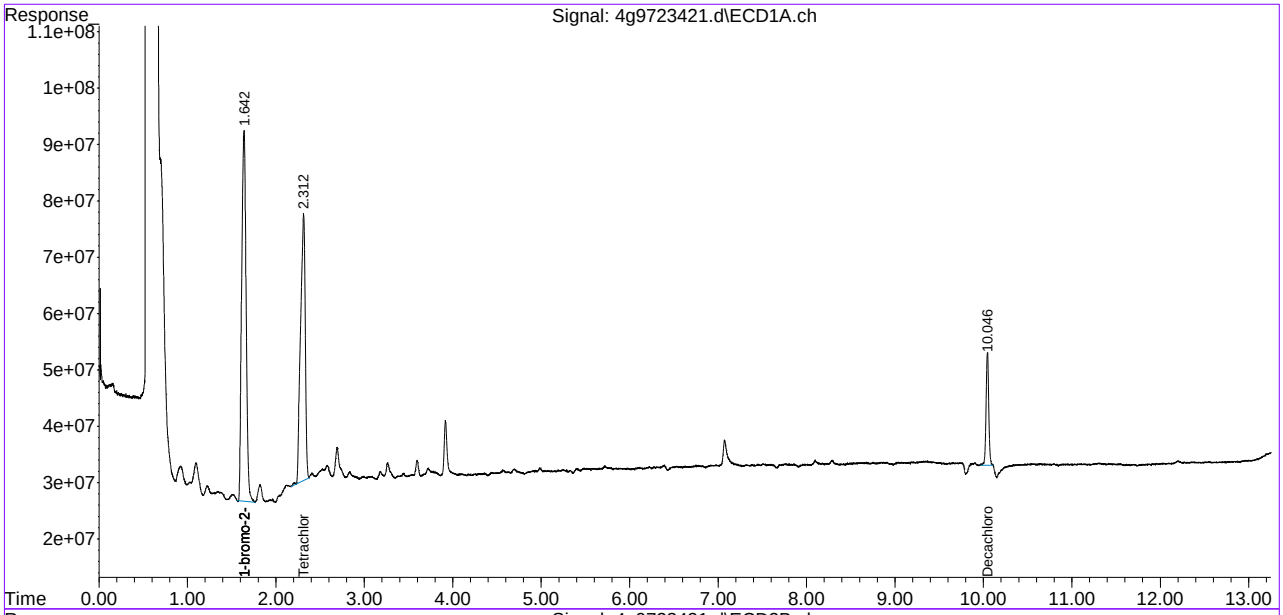
11.1.10 11

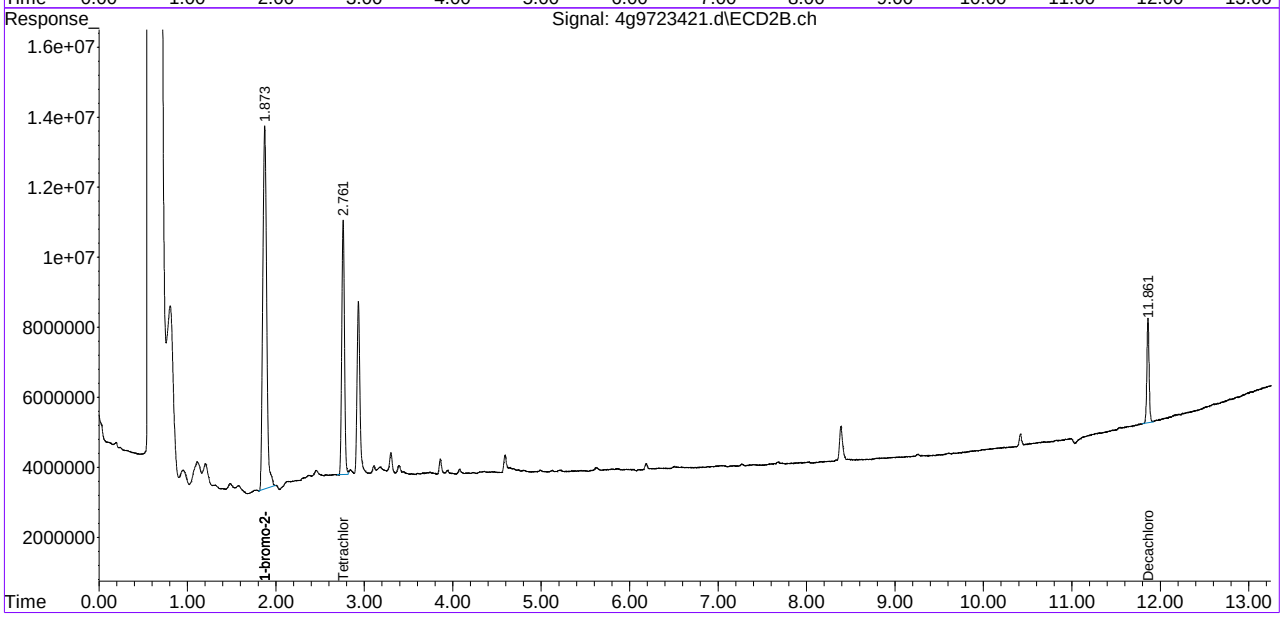
Quantitation Report (QT Reviewed)

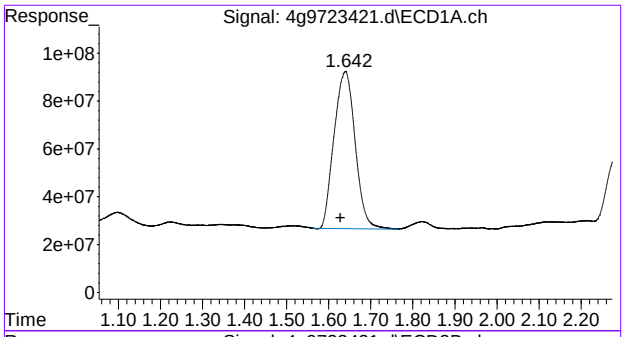
Data Path : C:\msdchem\1\data\sarah\4g3677\
Data File : 4g9723421.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 9 Dec 2021 4:22 am
Operator : christp
Sample : jd35920-6
Misc : op36897,g4g3677,270,,,2,1
ALS Vial : 65 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 09 22:55:10 2021
Quant Method : C:\msdchem\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Dec 09 22:24:43 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

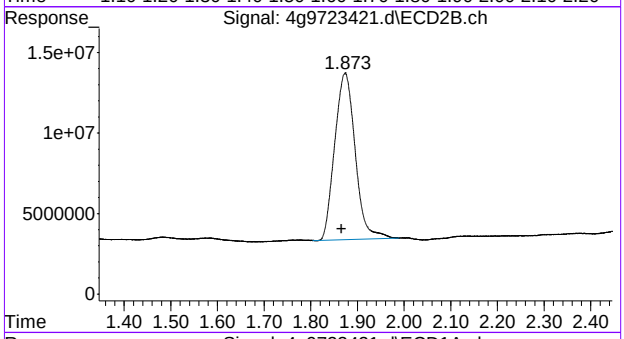






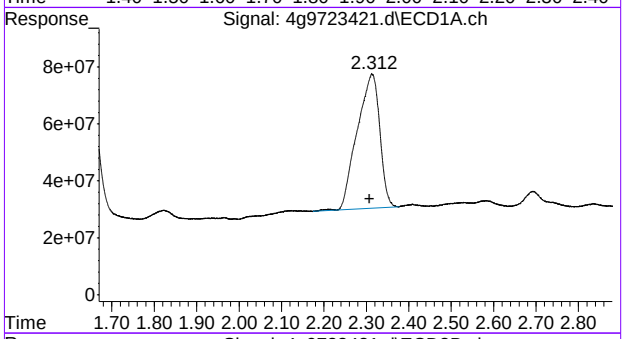
#1 1-bromo-2-nitrobenzene

R.T.: 1.640 min
Delta R.T.: 0.012 min
Response: 2294042589
Conc: 50.00 PPB



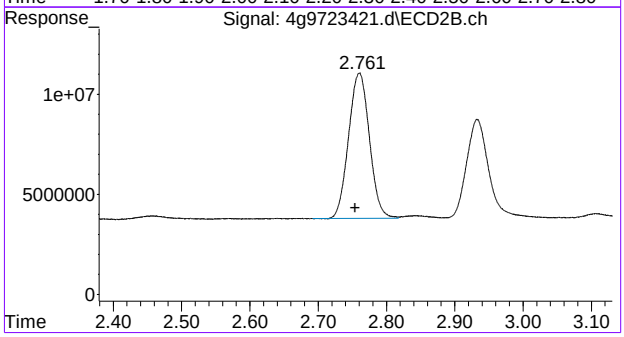
#1 1-bromo-2-nitrobenzene

R.T.: 1.874 min
Delta R.T.: 0.008 min
Response: 315535503
Conc: 50.00 PPB



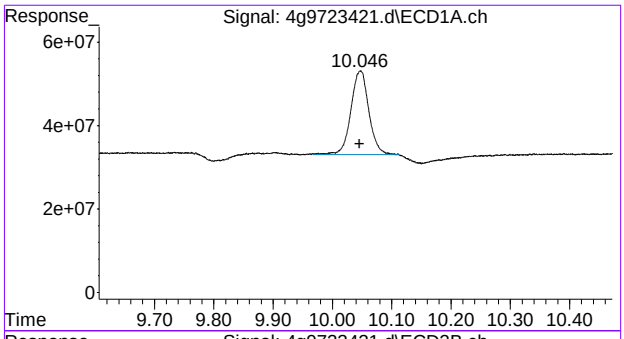
#2 Tetrachloro-m-xylene

R.T.: 2.313 min
Delta R.T.: 0.006 min
Response: 1747712317
Conc: 45.92 PPB



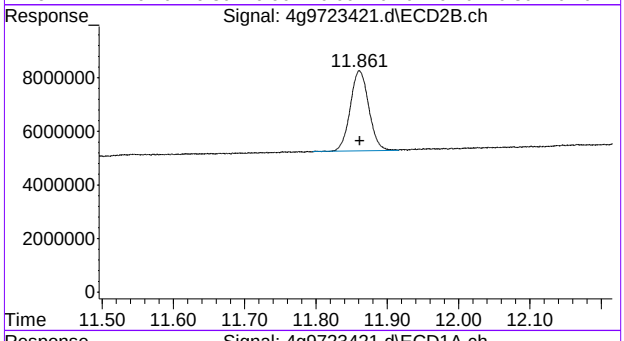
#2 Tetrachloro-m-xylene

R.T.: 2.760 min
Delta R.T.: 0.007 min
Response: 154209163
Conc: 28.58 PPB



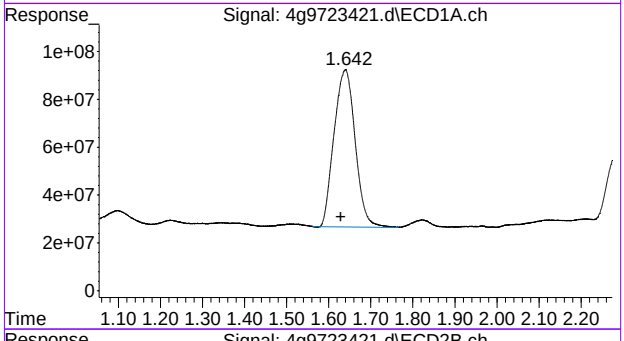
#26 Decachlorobiphenyl

R.T.: 10.046 min
Delta R.T.: 0.000 min
Response: 422031874
Conc: 12.10 PPB m



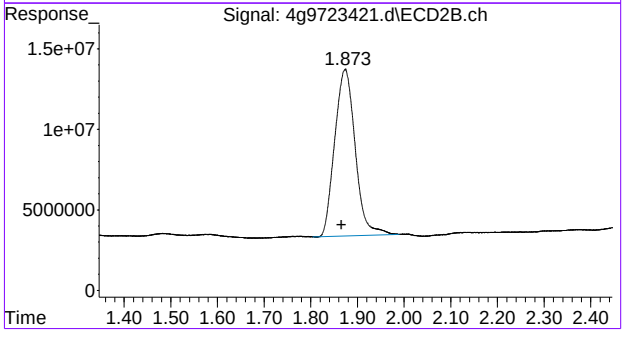
#26 Decachlorobiphenyl

R.T.: 11.861 min
Delta R.T.: 0.000 min
Response: 53777148
Conc: 10.83 PPB



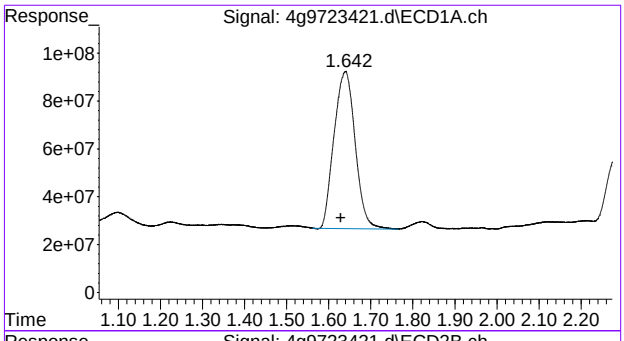
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.640 min
Delta R.T.: 0.012 min
Response: 2294042589
Conc: 50.00 PPB



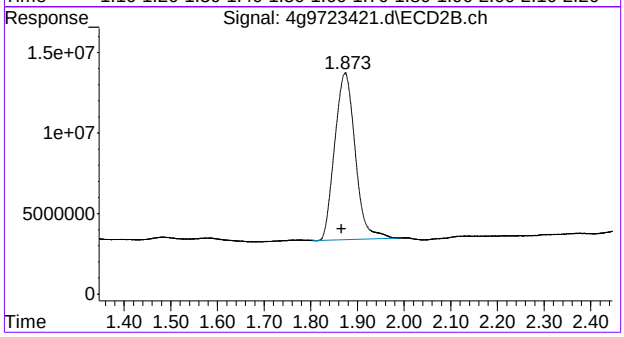
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.874 min
Delta R.T.: 0.008 min
Response: 315535503
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.640 min
Delta R.T.: 0.012 min
Response: 2294042589
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.874 min
Delta R.T.: 0.008 min
Response: 315535503
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/21/21 08:41

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81301.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 03:16:25
Operator : christp
Sample : op37193-mb1
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:31:38 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.689	2.058	860.1E6	622.0E6	50.000	50.000
27) I	1-bromo-2...	1.689	2.058	860.1E6	622.0E6	50.000	50.000
33) I	1-bromo-2...	1.689	2.058	860.1E6	622.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.265	2.883	235.4E6	220.9E6	22.040m	19.544
Spiked Amount	40.000	Range	30 - 150	Recovery	=	55.10%	48.86%
26) SA	Decachlor...	9.357	11.845	313.2E6	174.5E6	15.231m	17.998
Spiked Amount	40.000			Recovery	=	38.08%	45.00%
	Target Compounds						
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

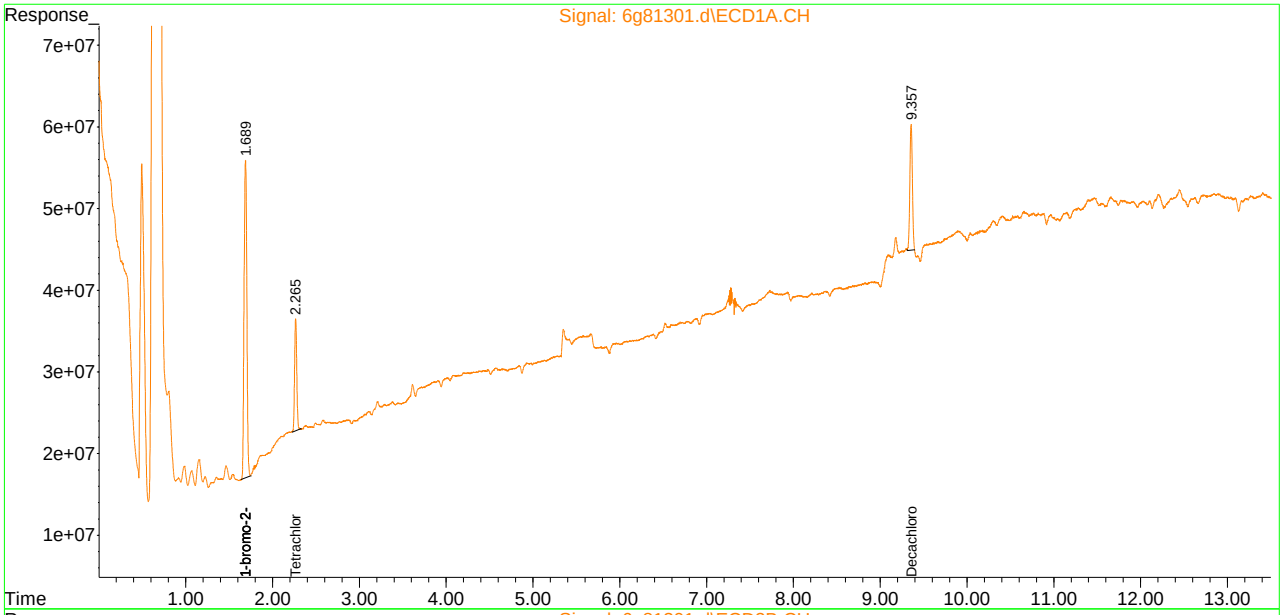
11.2.1 11

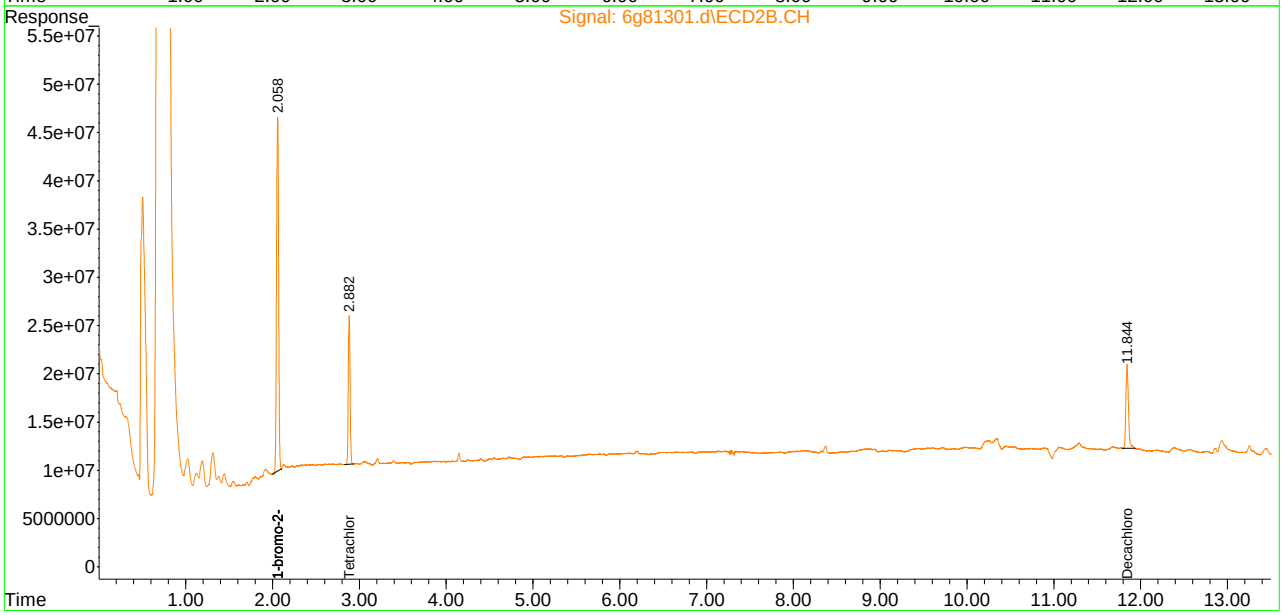
Quantitation Report (QT Reviewed)

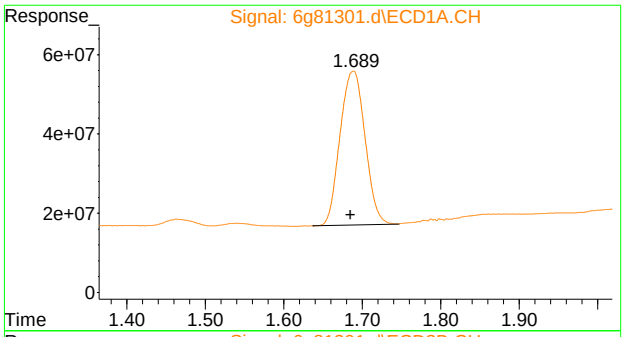
Data Path : C:\msdchem\1\data\syrap\g6g2876\
Data File : 6g81301.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Dec-21, 03:16:25
Operator : christp
Sample : op37193-mb1
Misc : op37193,g6g2876,250,,,2,1
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 23:31:38 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Mon Dec 20 22:28:16 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

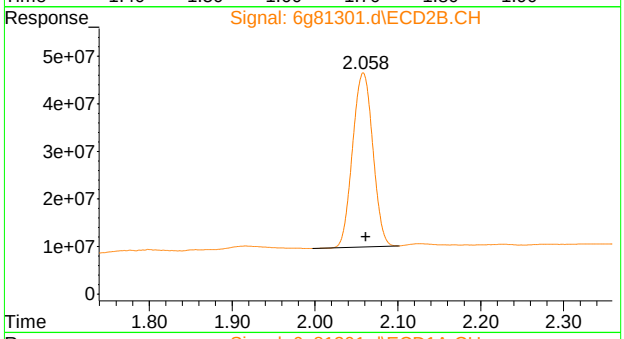






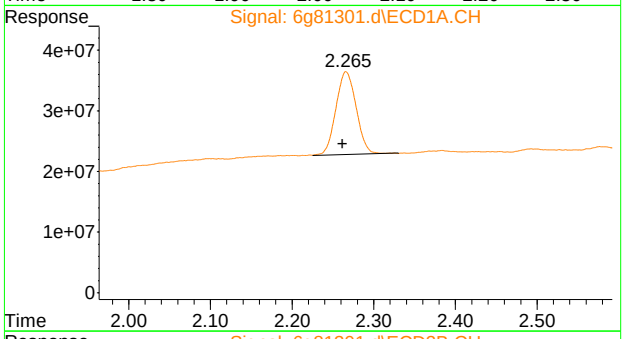
#1 1-bromo-2-nitrobenzene

R.T.: 1.689 min
Delta R.T.: 0.004 min
Response: 860082544
Conc: 50.00 PPB



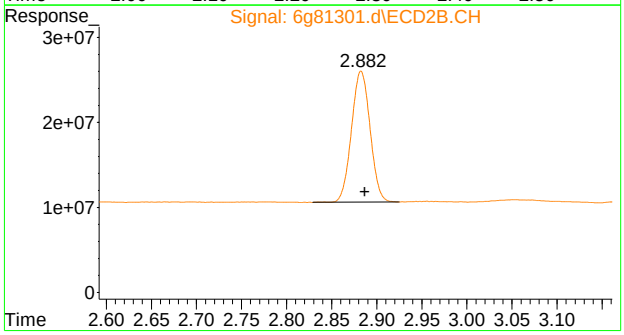
#1 1-bromo-2-nitrobenzene

R.T.: 2.058 min
Delta R.T.: -0.003 min
Response: 621981065
Conc: 50.00 PPB



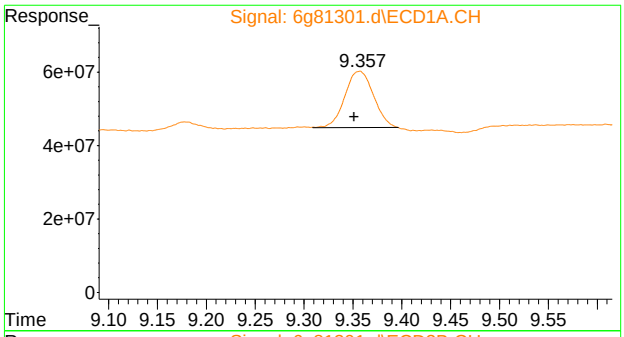
#2 Tetrachloro-m-xylene

R.T.: 2.265 min
Delta R.T.: 0.004 min
Response: 235409700
Conc: 22.04 PPB m



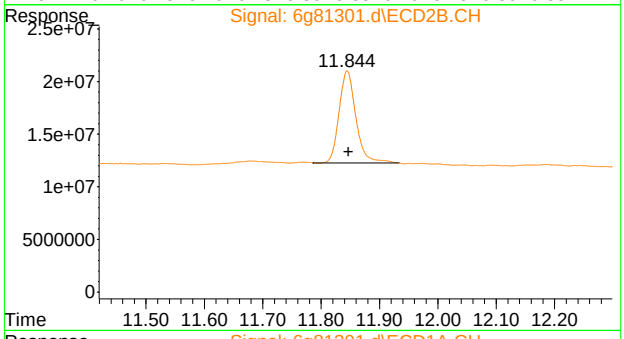
#2 Tetrachloro-m-xylene

R.T.: 2.883 min
Delta R.T.: -0.004 min
Response: 220898168
Conc: 19.54 PPB



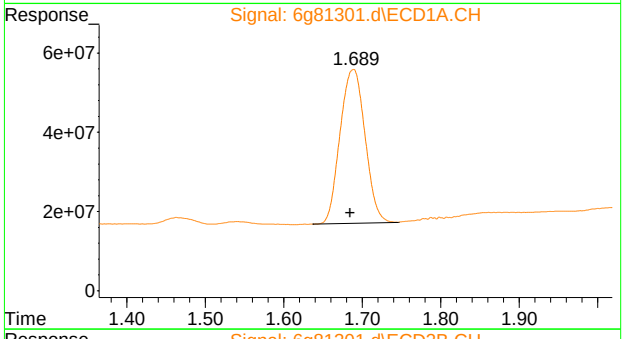
#26 Decachlorobiphenyl

R.T.: 9.357 min
Delta R.T.: 0.006 min
Response: 313215925
Conc: 15.23 PPB m



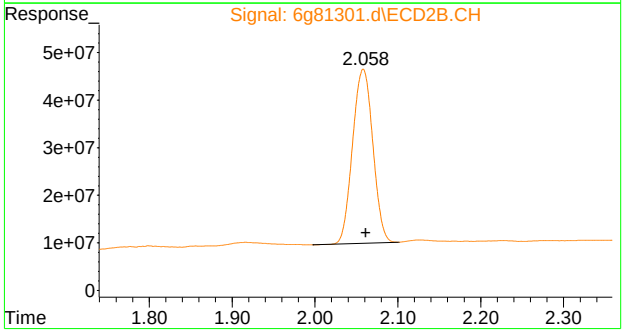
#26 Decachlorobiphenyl

R.T.: 11.845 min
Delta R.T.: -0.002 min
Response: 174485046
Conc: 18.00 PPB



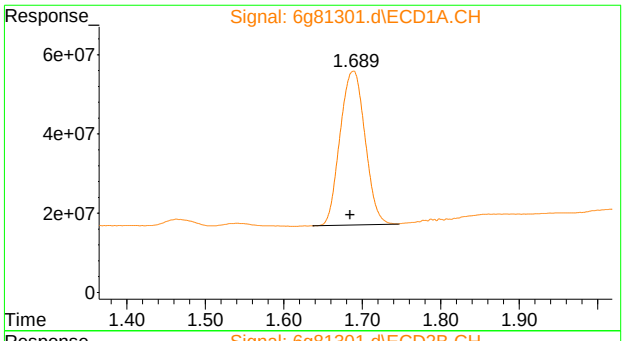
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.689 min
Delta R.T.: 0.005 min
Response: 860082544
Conc: 50.00 PPB



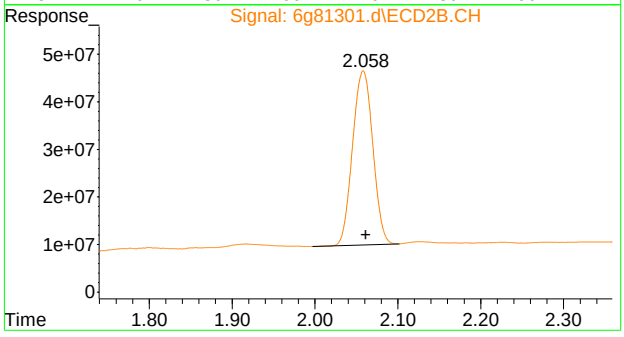
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.058 min
Delta R.T.: -0.003 min
Response: 621981065
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.689 min
Delta R.T.: 0.005 min
Response: 860082544
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.058 min
Delta R.T.: -0.003 min
Response: 621981065
Conc: 50.00 PPB

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81077.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 4:49 am
Operator : christp
Sample : icc2867-25
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 08:41:06 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 08:39:34 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
1)	I 1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
27)	I 1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
33)	I 1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
	System Monitoring Compounds							
2)	SAB Tetrachlo...	2.268	2.889	255.6E6	247.5E6	27.942	25.988	
	Spiked Amount 40.000	Range 30 - 150		Recovery =		69.86%	64.97%	
26)	SA Decachlor...	9.361	11.853	438.5E6	202.4E6	22.586m	28.026	
	Spiked Amount 40.000			Recovery =		56.46%	70.06%	
	Target Compounds							
3)	hexachlor...	2.581	3.400	681.4E6	285.6E6	26.546	25.055	
4)	A alpha-BHC	2.714	3.555	513.9E6	365.8E6	21.637	25.439	
5)	MA gamma-BHC	2.991	3.985	434.2E6	307.0E6	20.028	23.289	
6)	MA Heptachlor	3.461	4.562	416.9E6	315.4E6	20.067	24.752	
7)	B beta-BHC	3.064	4.070	173.0E6	135.0E6	20.133	21.978	
8)	B delta-BHC	3.236	4.467	406.6E6	282.6E6	19.098m	23.262	
9)	MB Aldrin	3.777	5.014	440.1E6	284.2E6	20.700	22.894	
10)	alachlor	3.922	4.825	43816318	40883081	31.937m	24.986	
11)	B Heptachlo...	4.453	5.841	377.4E6	273.0E6	18.389	23.653	#
12)	B gamma-Chl...	4.611	6.126	385.8E6	278.2E6	18.912	23.081	
13)	B alpha-Chl...	4.774	6.352	392.8E6	268.1E6	19.962	23.729	
14)	A Endosulfan I	4.938	6.447	414.9E6	259.8E6	21.462	23.483	
15)	B 4,4'-DDE	4.896	6.618	380.9E6	270.9E6	19.914	23.459	
16)	MA Dieldrin	5.250	6.885	418.2E6	280.9E6	20.702	24.659	
17)	MA Endrin	5.558	7.388	404.6E6	272.8E6	21.431	25.731	
18)	A 4,4'-DDD	5.697	7.570	308.3E6	228.8E6	20.877	24.816	
19)	B Endosulfa...	5.867	7.741	363.2E6	244.0E6	20.937	24.705	
20)	MA 4,4'-DDT	6.102	8.103	320.0E6	227.7E6	20.678	25.144	
21)	B Endrin Al...	6.473	8.315	279.1E6	173.8E6	19.630	21.385	
22)	B Endosulfa...	7.134	8.782	364.1E6	238.3E6	21.795	25.847	
23)	A Methoxychlor	6.883	9.348	184.0E6	125.9E6	26.356	27.933	
24)	Mirex	6.991	9.675	304.6E6	199.3E6	26.117	25.715	
25)	B Endrin Ke...	7.557	9.742	337.9E6	217.8E6	20.265	21.830	
	Sum Toxaphene			0	0	N.D.	N.D.	
Average	Toxaphene					0.000	0.000	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

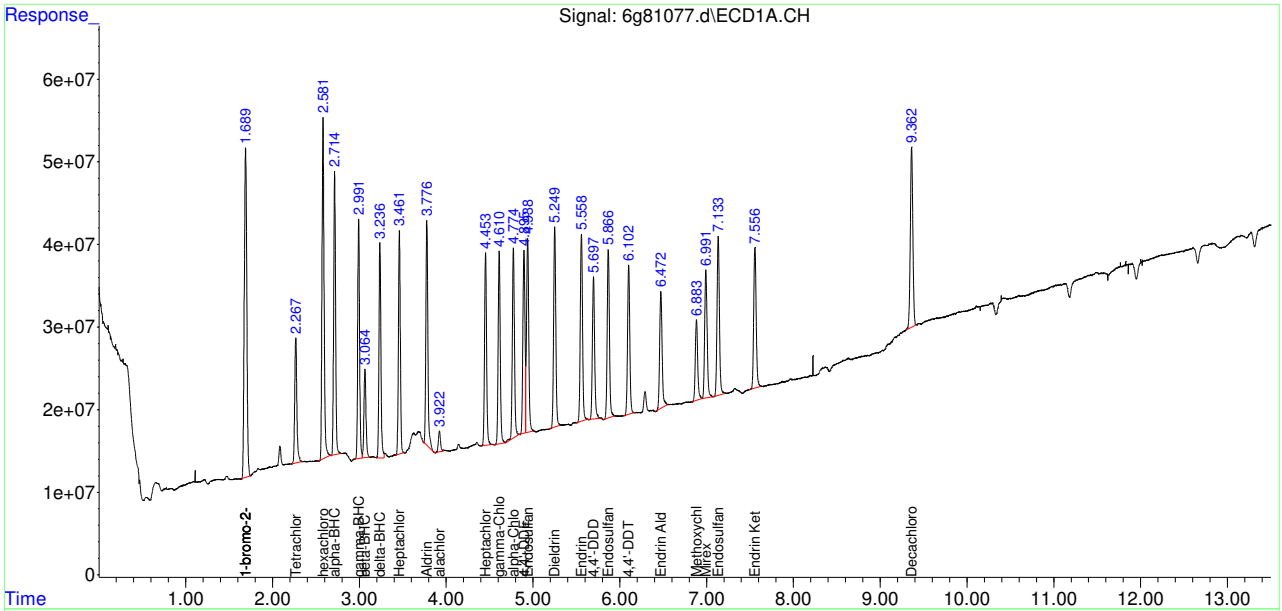
11.3.1 11

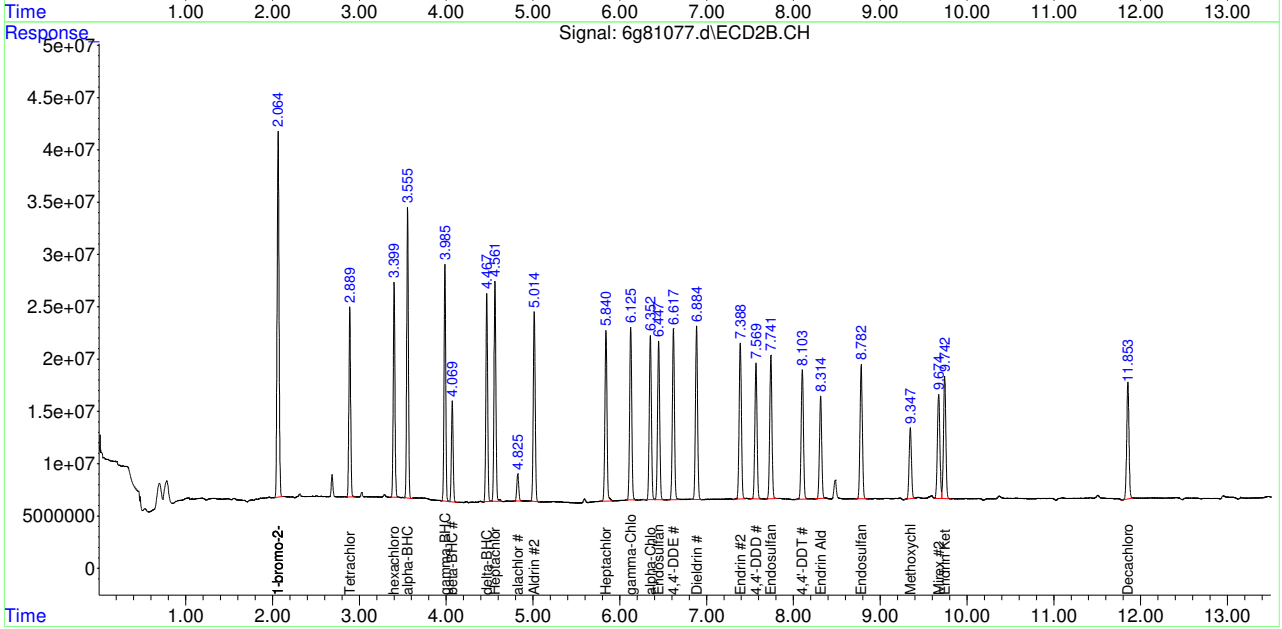
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81077.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 4:49 am
Operator : christp
Sample : icc2867-25
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 08:41:06 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 08:39:34 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81082.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:20 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:03:45 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:02:14 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000
27)	I 1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000
33)	I 1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.268	2.891	5806.8E6	5241.5E6	7.901	7.892
	Spiked Amount 40.000	Range 30 - 150		Recovery =		19.75%#	19.73%#
26)	SA Decachlor...	9.362	11.853	10772.8E6	4000.8E6	6.874m	6.911
	Spiked Amount 40.000			Recovery =		17.18%	17.28%
	Target Compounds						
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
34)	Chlordane...	3.461	4.562	597.5E6	374.1E6	1182.958	1382.044
35)	Chlordane...	3.914	5.209	365.7E6	205.2E6	702.530	688.043
36)	Chlordane...	4.610	6.126	1131.9E6	750.3E6	525.606	715.581 #
37)	Chlordane...	4.768	6.351	1859.4E6	1229.1E6	511.620	639.417m
38)	Chlordane...	5.779	7.818	284.4E6	185.6E6	468.892	682.840 #
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

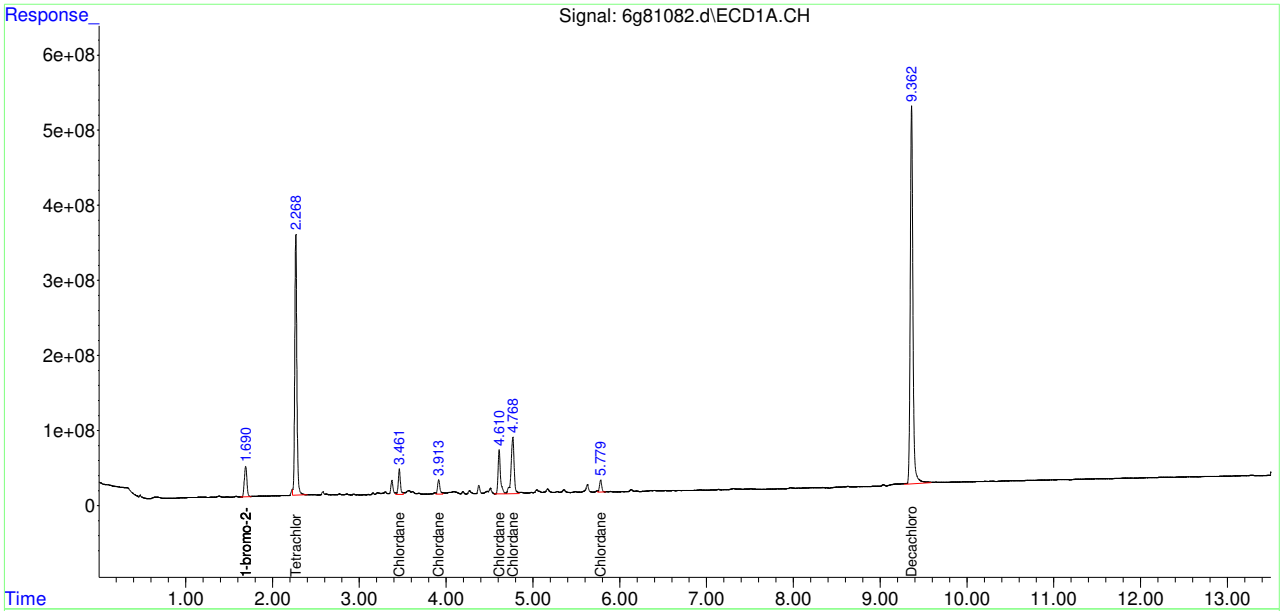
11.3.2 11

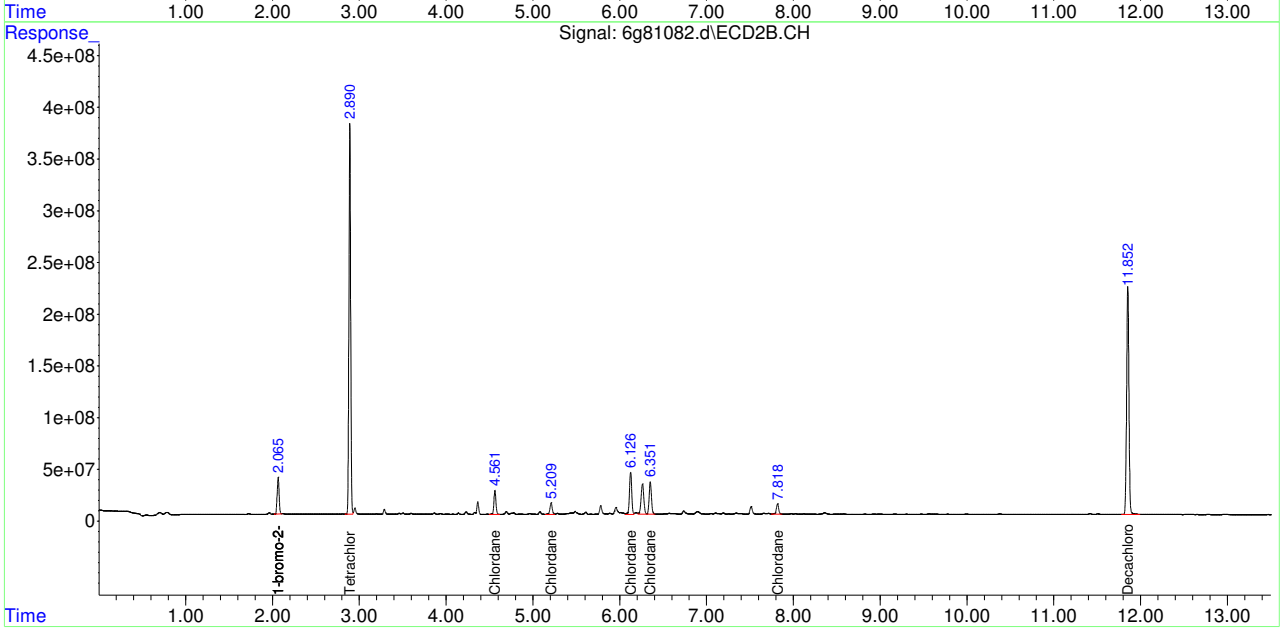
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81082.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:20 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:03:45 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:02:14 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81083.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:38 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:08:38 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:05:38 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
27)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
33)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.271	2.892	526.2E6	509.1E6	0.732	0.787
	Spiked Amount 40.000	Range 30 - 150		Recovery =		1.83%#	1.97%#
26)	SA Decachlor...	9.363	11.852	913.7E6	414.0E6	0.596	0.734
	Spiked Amount 40.000			Recovery =		1.49%	1.83%
	Target Compounds						
28)	L8 Toxaphene{A}	5.613	6.849	163.4E6	71929449	1242.670m	677.901m#
29)	L8 Toxaphene{B}	5.855	7.710	208.7E6	113.3E6	541.393m	632.663m
30)	L8 Toxaphene{C}	6.026	7.872	189.4E6	217.7E6	492.947m	636.971m#
31)	L8 Toxaphene{D}	6.361	8.310	167.8E6	102.1E6	571.511m	556.343m
32)	L8 Toxaphene{E}	6.982	9.214	183.5E6	131.3E6	543.649m	743.268 #
	Sum Toxaphene			912.9E6	636.3E6	3392.168	3247.146
Average Toxaphene						678.434	649.429

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

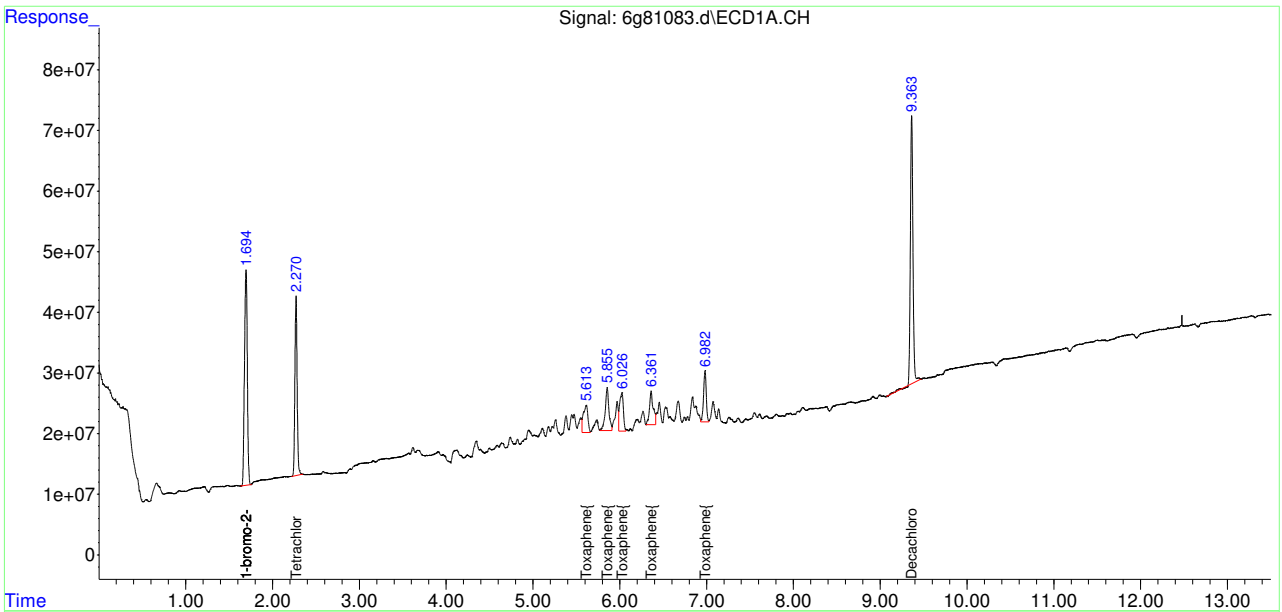
11.3.3 11

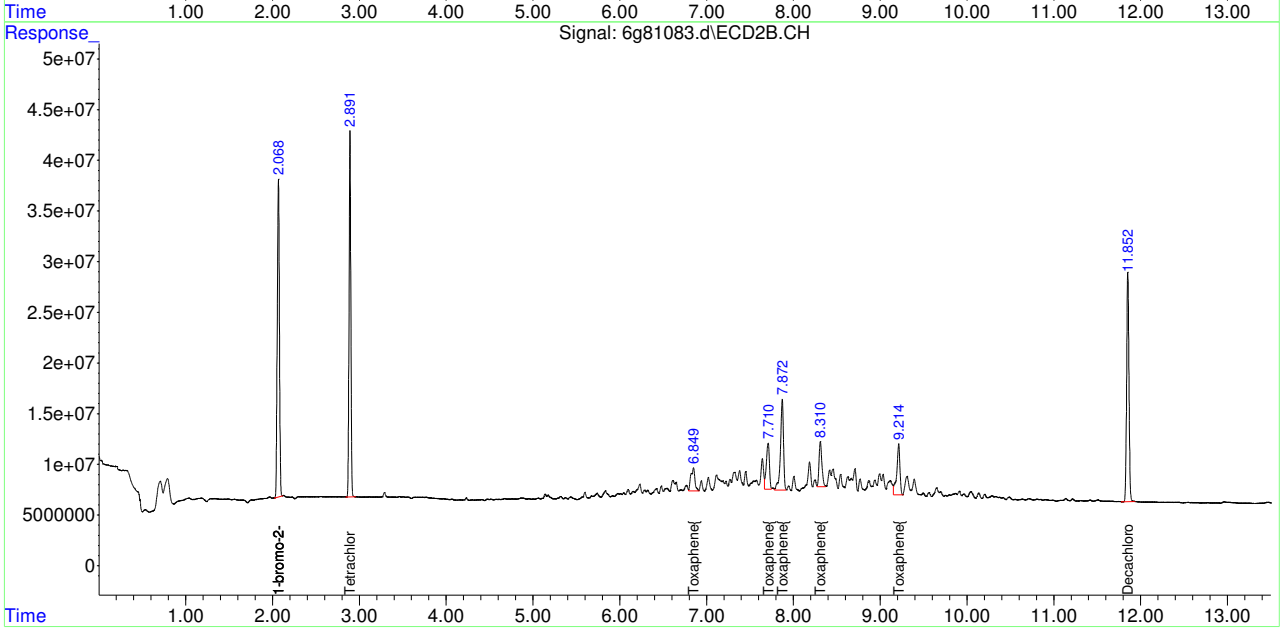
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81083.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:38 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:08:38 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:05:38 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
10/01/21 08:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G3578\
Data File : 4g9720953.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Sep 2021 12:55 am
Operator : christp
Sample : icc3578-25
Misc : op35543,g4g3578,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 30 19:44:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Sep 30 19:43:24 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.664	1.898	2645.7E6	363.7E6	50.000	50.000
27) I	1-bromo-2...	1.664	1.898	2645.7E6	363.7E6	50.000	50.000
33) I	1-bromo-2...	1.664	1.898	2645.7E6	363.7E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.341	2.785	1086.8E6	153.3E6	26.995	24.481
	Spiked Amount 40.000	Range 30 - 150		Recovery =		67.49%	61.20%
26) SA	Decachlor...	10.096	11.915	953.2E6	141.8E6	6.297	6.706
	Spiked Amount 40.000			Recovery =		15.74%	16.77%
	Target Compounds						
3)	hexachlor...	2.716	3.325	1577.6E6	187.3E6	6.253	6.210
4) A	alpha-BHC	2.878	3.491	1602.9E6	221.6E6	6.227	5.826
5) MA	gamma-BHC	3.208	3.941	1454.8E6	205.0E6	6.125	5.565
6) MA	Heptachlor	3.753	4.545	1374.3E6	201.5E6	6.297	6.187m
7) B	beta-BHC	3.289	4.027	622.6E6	94135505	7.892	6.188
8) B	delta-BHC	3.494	4.441	1392.5E6	191.6E6	6.233	5.952
9) MB	Aldrin	4.119	5.015	1295.5E6	190.5E6	6.371	6.890
10)	alachlor	4.277	4.813	146.8E6	27209315	24.135	27.530
11) B	Heptachlo...	4.894	5.862	1189.9E6	181.4E6	6.065	6.115
12) B	gamma-Chl...	5.064	6.153	1227.4E6	185.5E6	5.938	6.178
13) B	alpha-Chl...	5.248	6.384	1187.6E6	181.2E6	6.097	6.110
14) A	Endosulfan I	5.443	6.483	1143.9E6	172.0E6	5.870	6.093
15) B	4,4'-DDE	5.357	6.651	1241.3E6	176.7E6	6.347	6.080
16) MA	Dieldrin	5.784	6.929	1235.3E6	181.1E6	6.223	6.176
17) MA	Endrin	6.129	7.442	1161.3E6	171.5E6	6.033	6.158m
18) A	4,4'-DDD	6.238	7.616	1002.1E6	146.0E6	6.234	6.197
19) B	Endosulfa...	6.464	7.796	1054.2E6	161.4E6	6.075	5.777
20) MA	4,4'-DDT	6.675	8.159	1003.8E6	145.7E6	7.171	6.035
21) B	Endrin Al...	7.123	8.377	859.8E6	135.1E6	5.913	6.127
22) B	Endosulfa...	7.838	8.852	956.4E6	151.2E6	6.321	6.233
23) A	Methoxychlor	7.476	9.414	488.8E6	78301819	5.190	5.795
24)	Mirex	7.659	9.761	803.1E6	136.4E6	7.054	6.288
25) B	Endrin Ke...	8.289	9.824	1049.9E6	172.0E6	6.070	6.379
	SemiQuant Compounds - Not Calibrated on this Instrument						

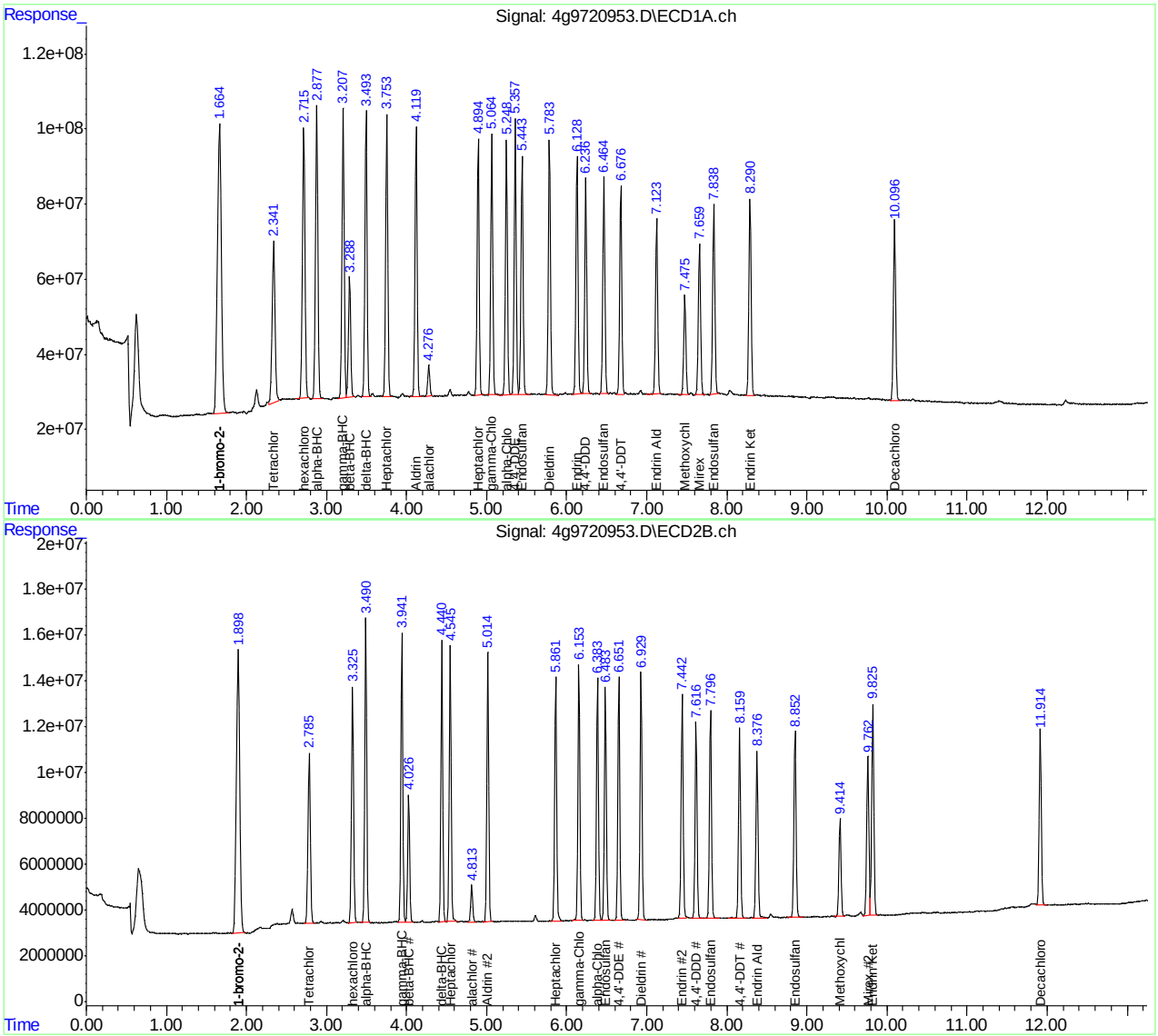
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G3578\
Data File : 4g9720953.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Sep 2021 12:55 am
Operator : christp
Sample : icc3578-25
Misc : op35543,g4g3578,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 30 19:44:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Sep 30 19:43:24 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
10/01/21 08:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G3578\
Data File : 4g9720957.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Sep 2021 1:55 am
Operator : christp
Sample : ic3578-500
Misc : op35543,g4g3578,1000,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 30 20:13:25 2021
Quant Method : C:\MSDCHEM\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Sep 30 20:12:52 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.666	1.899	2611.0E6	364.2E6	50.000	50.000
27) I	1-bromo-2...	1.666	1.899	2611.0E6	364.2E6	50.000	50.000
33) I	1-bromo-2...	1.666	1.899	2611.0E6	364.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.341	2.786	21749.7E6	3496.7E6	547.413	557.571
	Spiked Amount 40.000	Range 30 - 150		Recovery = 1368.53%#		1393.93%#	
26) SA	Decachlor...	10.095	11.916	19048.7E6	2976.3E6	127.520	140.597
	Spiked Amount 40.000			Recovery = 318.80%		351.49%	
	Target Compounds						
34)	Chlordane...	3.753	4.546	1570.4E6	227.4E6	1049.040	1095.802
35)	Chlordane...	4.277	5.214	920.8E6	130.4E6	553.114	591.946
36)	Chlordane...	5.064	6.152	3299.2E6	489.7E6	576.377	618.897
37)	Chlordane...	5.240	6.385	5135.0E6	801.2E6	524.920	552.434m
38)	Chlordane...	6.364	7.879	768.9E6	113.7E6	442.223	529.565
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

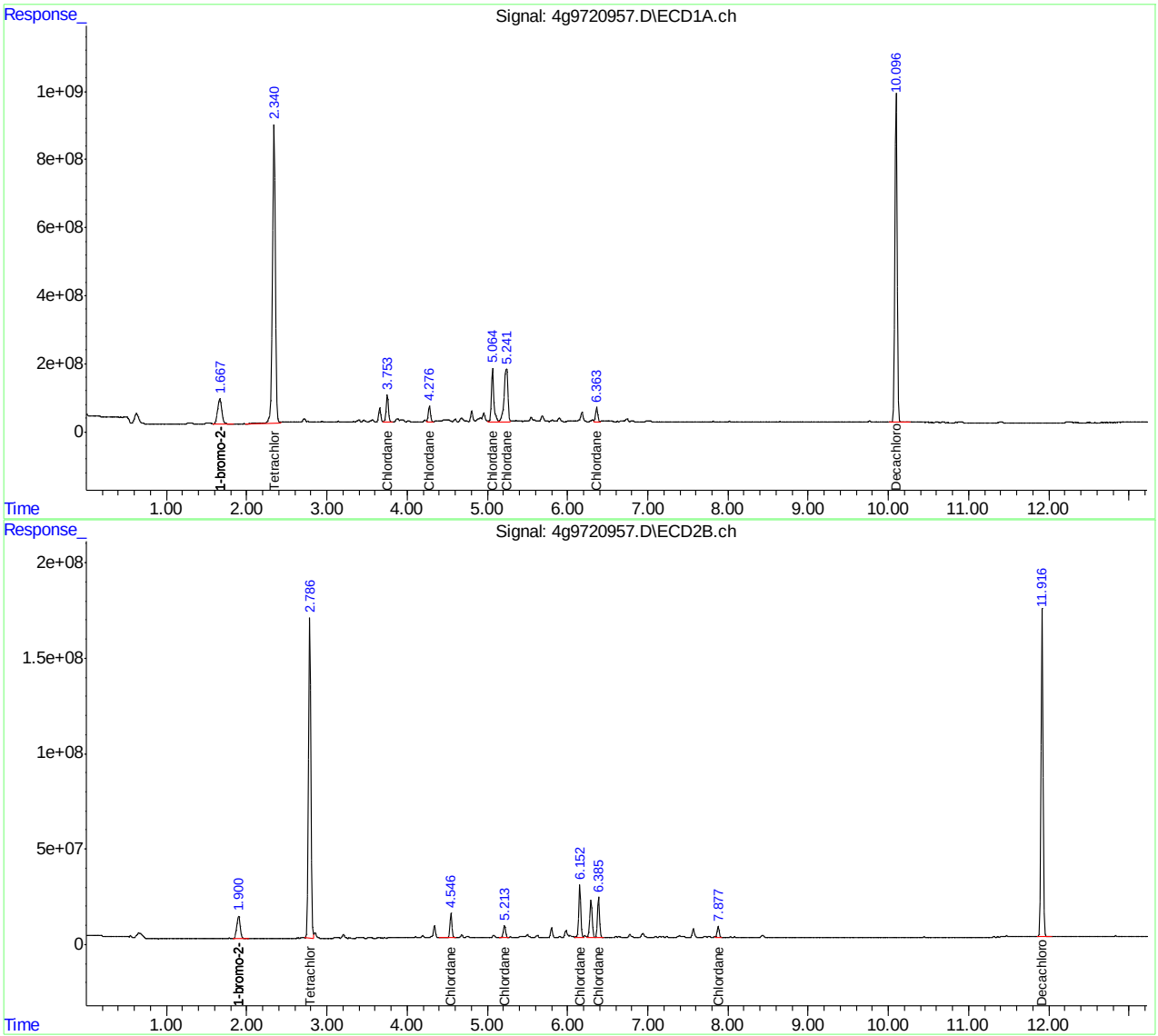
11.3.5 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G3578\
Data File : 4g9720957.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Sep 2021 1:55 am
Operator : christp
Sample : ic3578-500
Misc : op35543,g4g3578,1000,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 30 20:13:25 2021
Quant Method : C:\MSDCHEM\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Sep 30 20:12:52 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
10/01/21 08:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G3578\
Data File : 4g9720958.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Sep 2021 2:10 am
Operator : christp
Sample : ic3578-500
Misc : op35543,g4g3578,1000,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 30 20:16:49 2021
Quant Method : C:\MSDCHEM\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Sep 30 20:14:49 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.665	1.898	2605.8E6	367.9E6	50.000	50.000
27) I	1-bromo-2...	1.665	1.898	2605.8E6	367.9E6	50.000	50.000
33) I	1-bromo-2...	1.665	1.898	2605.8E6	367.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.340	2.786	2083.3E6	315.3E6	52.537m	49.769
	Spiked Amount 40.000	Range 30 - 150		Recovery =		131.34%	124.42%
26) SA	Decachlor...	10.095	11.915	1905.5E6	286.1E6	12.782	13.377
	Spiked Amount 40.000			Recovery =		31.95%	33.44%
	Target Compounds						
28) L8	Toxaphene{A}	5.793	6.895	195.1E6	41864752	222.945m	297.112m#
29) L8	Toxaphene{B}	6.450	7.766	634.1E6	68192374	272.831m	376.162m#
30) L8	Toxaphene{C}	6.639	7.930	576.4E6	132.5E6	323.734m	468.623m#
31) L8	Toxaphene{D}	6.986	8.374	389.9E6	63764745	246.935m	322.275m#
32) L8	Toxaphene{E}	7.667	9.291	512.4E6	79010020	324.353m	556.908m#
	SemiQuant Compounds - Not Calibrated on this Instrument						

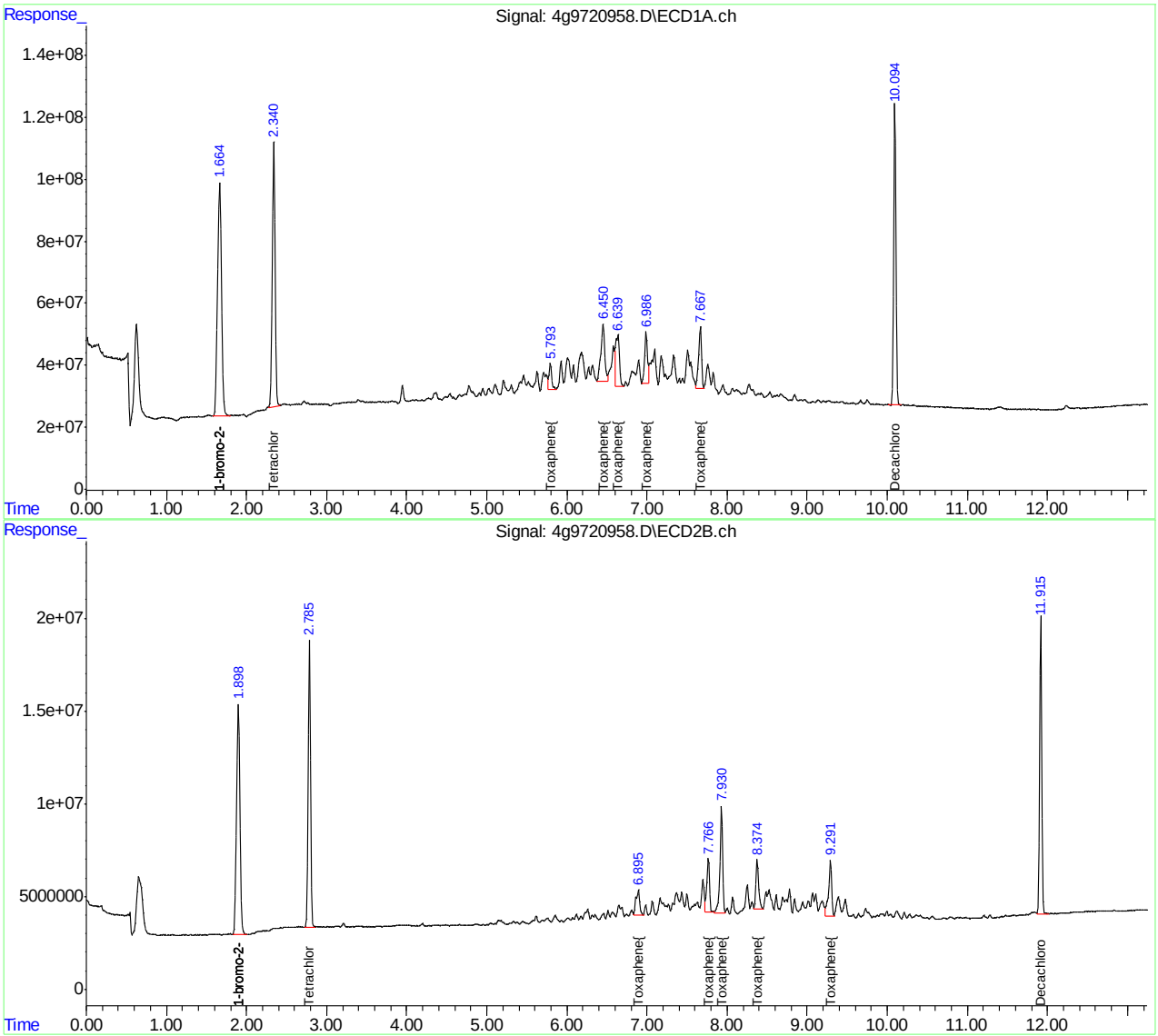
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G3578\
Data File : 4g9720958.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Sep 2021 2:10 am
Operator : christp
Sample : ic3578-500
Misc : op35543,g4g3578,1000,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 30 20:16:49 2021
Quant Method : C:\MSDCHEM\1\METHODS\4PST3578.M
Quant Title : PEST/PCB
QLast Update : Thu Sep 30 20:14:49 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120221W2.CSV Date Analyzed: 12/02/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51533
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:52	MA51533-STD1	1		STDA
14:54	MA51533-STD2	1		b=2.1119e-004,c=3.8468e-002,rho=0.9993948
14:55	MA51533-STD3	1		STDC
14:57	MA51533-STD4	1		STDD
14:58	MA51533-STD5	1		STDE
15:00	MA51533-STD6	1		STDF
15:03	MA51533-STD7	1		STDA
15:05	MA51533-STD8	1		STDB
15:06	MA51533-STD9	1		STDC
15:09	MA51533-STD10	1		STDA
15:11	MA51533-ICV1	1		
15:13	MA51533-ICB1	1		
15:15	MA51533-CCV1	1		
15:16	MA51533-CCB1	1		
15:18	ZZZZZZ	1		
15:20	ZZZZZZ	1		
15:22	ZZZZZZ	1		
15:24	MA51533-CRI1	1		
15:25	ZZZZZZ	1		
15:26	MP30122-B1	1		
15:27	MP30122-S1	1		
15:29	MP30122-S2	1		
15:31	MA51533-CCV2	1		
15:33	MA51533-CCB2	1		
15:35	MP30122-MB1	1		
15:37	JD35907-1A	1		(sample used for QC only; not part of login JD35920)
15:38	ZZZZZZ	1		
15:39	MP30123-B1	1		
15:41	MP30123-S1	1		
15:43	MP30123-S2	1		
15:45	MA51533-CCV3	1		
15:47	MA51533-CCB3	1		
15:48	MP30123-MB1	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120221W2.CSV Date Analyzed: 12/02/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51533
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:50	JD35914-1	1		(sample used for QC only; not part of login JD35920)
15:51	ZZZZZZ	1		
15:53	ZZZZZZ	1		
15:54	ZZZZZZ	1		
15:55	ZZZZZZ	1		
15:57	JD35920-2	1		
15:58	JD35920-3	1		
16:00	MA51533-CCV4	1		
16:01	MA51533-CCB4	1		
16:03	JD35920-4	1		
16:04	JD35920-5	1		
16:06	JD35920-6	1		
16:07	JD35920-2F	1		
16:09	JD35920-3F	1		
16:10	JD35920-4F	1		
16:11	JD35920-5F	1		
16:13	JD35920-6F	1		
---------->	Last reportable sample/prep for job JD35920			
16:14	MA51533-CCV5	1		
16:16	MA51533-CCB5	1		
---------->	Last reportable CCB for job JD35920			
16:18	ZZZZZZ	1		
16:19	ZZZZZZ	1		
16:21	ZZZZZZ	1		
16:22	ZZZZZZ	1		
16:23	ZZZZZZ	1		
16:27	MA51533-CCV6	1		
16:28	MA51533-CCB6	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120221W2.CSV Date Analyzed: 12/02/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51533
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
15:11	MA51533-ICV1	1	X	
15:13	MA51533-ICB1	1	X	
15:15	MA51533-CCV1	1	X	
15:16	MA51533-CCB1	1	X	
15:18	ZZZZZZ	1		
15:20	ZZZZZZ	1		
15:22	ZZZZZZ	1		
15:24	MA51533-CRI1	1	X	
15:25	ZZZZZZ	1		
15:26	MP30122-B1	1	X	
15:27	MP30122-S1	1	X	
15:29	MP30122-S2	1	X	
15:31	MA51533-CCV2	1	X	
15:33	MA51533-CCB2	1	X	
15:35	MP30122-MB1	1	X	
15:37	JD35907-1A	1	X	(a)
15:38	ZZZZZZ	1		
15:39	MP30123-B1	1	X	
15:41	MP30123-S1	1	X	
15:43	MP30123-S2	1	X	
15:45	MA51533-CCV3	1	X	
15:47	MA51533-CCB3	1	X	
15:48	MP30123-MB1	1	X	
15:50	JD35914-1	1	X	(a)
15:51	ZZZZZZ	1		
15:53	ZZZZZZ	1		
15:54	ZZZZZZ	1		
15:55	ZZZZZZ	1		
15:57	JD35920-2	1	X	
15:58	JD35920-3	1	X	
16:00	MA51533-CCV4	1	X	
16:01	MA51533-CCB4	1	X	
16:03	JD35920-4	1	X	
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120221W2.CSV Date Analyzed: 12/02/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51533
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg
16:04	JD35920-5	1	X
16:06	JD35920-6	1	X
16:07	JD35920-2F	1	X
16:09	JD35920-3F	1	X
16:10	JD35920-4F	1	X
16:11	JD35920-5F	1	X
16:13	JD35920-6F	1	X
16:14	MA51533-CCV5	1	X
16:16	MA51533-CCB5	1	X
16:18	ZZZZZZ	1	
16:19	ZZZZZZ	1	
16:21	ZZZZZZ	1	
16:22	ZZZZZZ	1	
16:23	ZZZZZZ	1	
16:27	MA51533-CCV6	1	X
16:28	MA51533-CCB6	1	X

(a) Sample used for QC only; not part of login JD35920.

Element: Hg

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120221W2.CSV Date Analyzed: 12/02/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51533 Units: ug/l

Time:			15:13		15:16		15:33		15:47	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0285	<0.20	0.00930	<0.20	-0.0479	<0.20	-0.0403	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120221W2.CSV Date Analyzed: 12/02/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51533 Units: ug/l

Time:			16:01		16:16	
Sample ID:			CCB4		CCB5	
Metal	RL	IDL	raw	final	raw	final
Mercury	0.20	.034	-0.0367	<0.20	-0.0378	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120221W2.CSV Date Analyzed: 12/02/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51533 Units: ug/l

Time:		15:11			15:15			15:31	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.07	102.3	2.5	2.62	104.8	2.5	2.62	104.8

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120221W2.CSV Date Analyzed: 12/02/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51533 Units: ug/l

Time:		15:45			16:00			16:14	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.57	102.8	2.5	2.60	104.0	2.5	2.65	106.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120221W2.CSV Date Analyzed: 12/02/21 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA51533 Units: ug/l

Time:			15:24	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Mercury	0.20		0.161	80.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:58	MA51540-STD1	1		Sample introduction not stable, see rerun.
12:02	MA51540-STD2	1		Sample introduction not stable, see rerun.
12:05	MA51540-STD3	1		STDA
12:08	MA51540-STD4	1		STDB
12:11	MA51540-STD5	1		STDC
12:15	MA51540-STD6	1		STDD
12:18	MA51540-STD7	1		STDE
12:21	MA51540-STD8	1		STDF
12:24	MA51540-STD9	1		STDG
12:27	MA51540-STD10	1		STDH
12:30	MA51540-STD11	1		STDI
12:33	MA51540-STD12	1		STDJ
12:37	ZZZZZZ	1		
12:40	ZZZZZZ	1		
12:43	MA51540-ICVA1	1		
12:46	MA51540-ICV1	1		
12:49	MA51540-ICB1	1		
12:52	MA51540-CCV1	1		
12:55	MA51540-CCB1	1		
12:58	ZZZZZZ	1		
13:05	MA51540-CRI1	1		
13:09	ZZZZZZ	1		
13:18	MA51540-CCV2	1		
13:21	MA51540-CCB2	1		
13:25	MP30037-MB1	1		
13:28	MP30037-B1	1		
13:31	ZZZZZZ	1		
13:34	MP30037-S1	1		Pb high
13:36	MP30037-S2	1		
13:39	JD35564-1	1		(sample used for QC only; not part of login JD35920)
13:42	ZZZZZZ	1		
13:45	ZZZZZZ	1		
13:48	MP30037-B2	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:51	MA51540-CCV3	1		
13:54	MA51540-CCB3	1		
13:57	ZZZZZZ	1		
14:00	ZZZZZZ	5		
14:03	MP30037-S1	2		
14:06	MP30037-S2	2		
14:09	MA51540-CCV4	1		
14:15	MA51540-CCB4	1		
14:19	MA51540-ICSA1	1		Ag out
14:23	MA51540-ICSAB1	1		Cu,Ni,Zn out
14:28	ZZZZZZ	1		
14:40	MA51540-CCV5	1		
14:44	MA51540-CCB5	1		
14:48	MP30086-MB1	2		Rerun for Ag, Ag out in ICSA
14:53	MP30086-B1	2		
14:56	MP30086-S1	2		
14:59	MP30086-S2	2		
15:03	JD35788-3	2		(sample used for QC only; not part of login JD35920)
15:06	MP30086-SD1	10		
15:09	ZZZZZZ	2		
15:12	ZZZZZZ	2		
15:15	ZZZZZZ	2		
15:19	MA51540-CCV6	1		
15:22	MA51540-CCB6	1		
15:25	ZZZZZZ	2		
15:28	ZZZZZZ	2		
15:31	ZZZZZZ	2		
15:34	ZZZZZZ	2		
15:38	ZZZZZZ	1		
15:41	MP30105-MB1	2		V out in MB. Rerun for Ag,Ni,Cu,Zn
15:44	MP30105-B1	2		
15:47	MP30105-S1	2		Na,Ca high
15:50	MP30105-S2	2		Na,Ca high

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:53	MA51540-CCV7	1		
15:57	MA51540-CCB7	1		
16:00	JD35834-3F	2		(sample used for QC only; not part of login JD35920)
16:03	MP30105-SD1	10		Ca high
16:06	ZZZZZZ	2		
16:09	ZZZZZZ	2		
16:13	ZZZZZZ	2		
16:16	ZZZZZZ	2		
16:19	MA51540-CCV8	1		
16:22	MA51540-CCB8	1		
16:25	MP30105-S1	10		
16:29	MP30105-S2	10		
16:32	ZZZZZZ	10		
16:35	ZZZZZZ	50		
16:38	MA51540-CRI2	1		
16:42	JD35834-3F	10		(sample used for QC only; not part of login JD35920)
16:45	MP30105-SD1	50		
16:48	MA51540-CRI3	1		
16:55	MA51540-CCV9	1		
16:58	MA51540-CCB9	1		
17:07	ZZZZZZ	2		
17:10	ZZZZZZ	2		
17:13	ZZZZZZ	2		
17:17	ZZZZZZ	10		
17:20	ZZZZZZ	5		
17:23	ZZZZZZ	25		
17:26	ZZZZZZ	10		
17:29	ZZZZZZ	5		
17:32	MA51540-CCV10	1		
17:35	MA51540-CCB10	1		
17:38	ZZZZZZ	50		
17:41	ZZZZZZ	20		
17:44	ZZZZZZ	10		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:47	ZZZZZZ	5		
17:51	ZZZZZZ	5		
17:53	ZZZZZZ	1		
17:56	MA51540-CCV11	1		
17:59	MA51540-CCB11	1		
18:02	JD35920-2	2		Ca high
18:05	JD35920-3	2		Ca,Na,Mg,Al,Cr,Mn,Fe,Ni,Zn,Ba high
18:08	JD35920-4	2		Ca,Na,Mg,Cr,Ni high
18:11	JD35920-5	2		Ca,Na,Mg high
18:14	JD35920-6	2		Ca,Na,Mg high
18:17	JD35920-2F	2		Ca high
18:20	JD35920-3F	2		Ca,Na,Mg high
18:23	JD35920-4F	2		Ca high
18:26	MA51540-CCV12	1		
18:29	MA51540-CCB12	1		
18:32	JD35920-5F	2		Ca,Na,Mg high
18:35	JD35920-6F	2		Ca,Na,Mg high
---------->	Last reportable sample/prep for job JD35920			
18:38	ZZZZZZ	2		
18:41	ZZZZZZ	2		
18:44	ZZZZZZ	2		
18:47	MA51540-CCV13	1		
18:50	MA51540-CCB13	1		
---------->	Last reportable CCB for job JD35920			
18:53	MP30166-MB1	1		
18:56	MP30166-B1	1		
18:59	MP30166-S1	1		
19:02	MP30166-S2	1		
19:05	JD35913-1	1		(sample used for QC only; not part of login JD35920)
19:08	ZZZZZZ	1		
19:11	ZZZZZZ	1		
19:14	ZZZZZZ	1		
19:18	ZZZZZZ	1		
19:21	MA51540-CCV14	1		
19:24	MA51540-CCB14	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:27	ZZZZZZ	1		
19:30	ZZZZZZ	1		
19:33	ZZZZZZ	1		
19:36	ZZZZZZ	1		
19:39	ZZZZZZ	1		
19:42	ZZZZZZ	2		
19:45	ZZZZZZ	2		
19:48	MP30015A-SD2	100		
19:51	MA51540-CCV15	1		
19:54	MA51540-CCB15	1		
19:57	ZZZZZZ	2		
20:00	ZZZZZZ	2		
20:03	JD35530-1	10		(sample used for QC only; not part of login JD35920)
20:06	MP30063A-SD1	50		internal std out
20:09	JD35530-1F	10		(sample used for QC only; not part of login JD35920)
20:12	MP30063A-SD2	50		
20:15	MA51540-CCV16	1		
20:18	MA51540-CCB16	1		
20:21	ZZZZZZ	2		
20:24	ZZZZZZ	2		
20:27	ZZZZZZ	2		
20:30	ZZZZZZ	2		
20:34	ZZZZZZ	2		
20:37	MA51540-CCV17	1		
20:40	MA51540-CCB17	1		
20:43	ZZZZZZ	1		
20:46	ZZZZZZ	1		
20:49	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	
12:37	ZZZZZZ	1																			
12:40	ZZZZZZ	1																			
12:43	MA51540-ICVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12:46	MA51540-ICV1	1	X																		
12:49	MA51540-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12:52	MA51540-CCV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12:55	MA51540-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12:58	ZZZZZZ	1																			
13:05	MA51540-CRI1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:09	ZZZZZZ	1																			
13:18	MA51540-CCV2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:21	MA51540-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:25	MP30037-MB1	1			X			X		X											
13:28	MP30037-B1	1						X										X			
13:31	ZZZZZZ	1																			
13:34	MP30037-S1	1						X										X			
13:36	MP30037-S2	1						X					X					X			
13:39	JD35564-1	1						X										X			(a)
13:42	ZZZZZZ	1																			
13:45	ZZZZZZ	1																			
13:48	MP30037-B2	1						X										X			
13:51	MA51540-CCV3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:54	MA51540-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:57	ZZZZZZ	1																			
14:00	ZZZZZZ	5																			
14:03	MP30037-S1	2											X								
14:06	MP30037-S2	2																			
14:09	MA51540-CCV4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:15	MA51540-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:19	MA51540-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:23	MA51540-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:28	ZZZZZZ	1																			
14:40	MA51540-CCV5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	
14:44	MA51540-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:48	MP30086-MB1	2			X	X		X		X			X				X				
14:53	MP30086-B1	2			X	X		X		X			X				X				
14:56	MP30086-S1	2			X	X		X		X			X				X				
14:59	MP30086-S2	2			X	X		X		X			X				X				
15:03	JD35788-3	2			X	X		X		X			X				X				(a)
15:06	MP30086-SD1	10			X	X		X		X			X				X				
15:09	ZZZZZZ	2																			
15:12	ZZZZZZ	2																			
15:15	ZZZZZZ	2																			
15:19	MA51540-CCV6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:22	MA51540-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:25	ZZZZZZ	2																			
15:28	ZZZZZZ	2																			
15:31	ZZZZZZ	2																			
15:34	ZZZZZZ	2																			
15:38	ZZZZZZ	1																			
15:41	MP30105-MB1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	
15:44	MP30105-B1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	
15:47	MP30105-S1	2	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X	
15:50	MP30105-S2	2	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X	
15:53	MA51540-CCV7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:57	MA51540-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:00	JD35834-3F	2			X	X		X		X			X				X				(a)
16:03	MP30105-SD1	10	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
16:06	ZZZZZZ	2																			
16:09	ZZZZZZ	2																			
16:13	ZZZZZZ	2																			
16:16	ZZZZZZ	2																			
16:19	MA51540-CCV8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:22	MA51540-CCB8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:25	MP30105-S1	10							X										X		
16:29	MP30105-S2	10							X										X		
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	
16:32	ZZZZZZ	10																			
16:35	ZZZZZZ	50																			
16:38	MA51540-CRI2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:42	JD35834-3F	10																			(a)
16:45	MP30105-SD1	50							X												
16:48	MA51540-CRI3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:55	MA51540-CCV9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:58	MA51540-CCB9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:07	ZZZZZZ	2																			
17:10	ZZZZZZ	2																			
17:13	ZZZZZZ	2																			
17:17	ZZZZZZ	10																			
17:20	ZZZZZZ	5																			
17:23	ZZZZZZ	25																			
17:26	ZZZZZZ	10																			
17:29	ZZZZZZ	5																			
17:32	MA51540-CCV10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:35	MA51540-CCB10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:38	ZZZZZZ	50																			
17:41	ZZZZZZ	20																			
17:44	ZZZZZZ	10																			
17:47	ZZZZZZ	5																			
17:51	ZZZZZZ	5																			
17:53	ZZZZZZ	1																			
17:56	MA51540-CCV11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:59	MA51540-CCB11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:02	JD35920-2	2	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	
18:05	JD35920-3	2		X	X		X	X			X		X			X	X			X	
18:08	JD35920-4	2	X	X	X	X	X	X			X	X	X		X	X	X			X	
18:11	JD35920-5	2	X	X	X	X	X	X		X	X	X	X		X	X	X			X	
18:14	JD35920-6	2	X	X	X	X	X	X		X	X	X	X		X	X	X			X	
18:17	JD35920-2F	2	X	X	X	X	X	X		X	X	X	X		X	X	X		X	X	
18:20	JD35920-3F	2	X	X	X	X	X	X		X	X	X	X		X	X	X			X	
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	
18:23	JD35920-4F	2	X	X	X	X	X	X		X	X	X	X		X	X	X			X	
18:26	MA51540-CCV12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:29	MA51540-CCB12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:32	JD35920-5F	2	X	X	X	X	X	X		X	X	X	X		X	X	X			X	
18:35	JD35920-6F	2	X	X	X	X	X	X		X	X	X	X		X	X	X			X	
18:38	ZZZZZZ	2																			
18:41	ZZZZZZ	2																			
18:44	ZZZZZZ	2																			
18:47	MA51540-CCV13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:50	MA51540-CCB13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:53	MP30166-MB1	1											X								
18:56	MP30166-B1	1											X								
18:59	MP30166-S1	1											X								
19:02	MP30166-S2	1											X								
19:05	JD35913-1	1											X								(a)
19:08	ZZZZZZ	1																			
19:11	ZZZZZZ	1																			
19:14	ZZZZZZ	1																			
19:18	ZZZZZZ	1																			
19:21	MA51540-CCV14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:24	MA51540-CCB14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:27	ZZZZZZ	1																			
19:30	ZZZZZZ	1																			
19:33	ZZZZZZ	1																			
19:36	ZZZZZZ	1																			
19:39	ZZZZZZ	1																			
19:42	ZZZZZZ	2																			
19:45	ZZZZZZ	2																			
19:48	MP30015A-SD2	100			X																
19:51	MA51540-CCV15	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:54	MA51540-CCB15	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:57	ZZZZZZ	2																			
20:00	ZZZZZZ	2																			
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl	
20:03	JD35530-1	10																			(a)
20:06	MP30063A-SD1	50																			
20:09	JD35530-1F	10			X															X	(a)
20:12	MP30063A-SD2	50			X								X							X	
20:15	MA51540-CCV16	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:18	MA51540-CCB16	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:21	ZZZZZZ	2																			
20:24	ZZZZZZ	2																			
20:27	ZZZZZZ	2																			
20:30	ZZZZZZ	2																			
20:34	ZZZZZZ	2																			
20:37	MA51540-CCV17	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:40	MA51540-CCB17	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:43	ZZZZZZ	1																			
20:46	ZZZZZZ	1																			
20:49	ZZZZZZ	1																			

(a) Sample used for QC only; not part of login JD35920.

Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	K	Se	Ag	Na	Tl

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
11:58	MA51540-STD1	100	100	100	100	100	100	100	100
12:02	MA51540-STD2	100	100	100	100	100	100	100	100
12:05	MA51540-STD3	100	100	100	100	100	100	100	100
12:08	MA51540-STD4	99.282	98.882	98.971	100.092	98.806	100.804	98.515	101.145
12:11	MA51540-STD5	101.059	99.996	101.175	100.48	100.417	101.64	100.334	101.728
12:15	MA51540-STD6	96.775	95.989	98.392	99.768	96.167	102.39	96.11	102.872
12:18	MA51540-STD7	99.612	98.665	98.513	98.663	98.801	104.157	98.271	104.968
12:21	MA51540-STD8	97.388	98.003	97.52	101.031	97.99	104.047	97.674	104.479
12:24	MA51540-STD9	97.861	97.806	100.097	100.612	98.167	103.342	97.953	103.305
12:27	MA51540-STD10	102.035	101.148	102.435	102.58	101.242	104.165	101.031	103.94
12:30	MA51540-STD11	101.769	101.777	103.107	103.04	100.246	104.718	99.399	102.537
12:33	MA51540-STD12	103.703	104.923	105.823	105.048	103.474	107.438	100.276	102.421
12:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:40	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:43	MA51540-ICVA1	104.029	103.309	104.214	101.351	101.611	108.893	100.259	106.367
12:46	MA51540-ICV1	104.811	103.518	105.233	104.169	102.536	105.722	102.571	105.822
12:49	MA51540-ICB1	104.794	103.704	102.374	101.354	103.989	102.565	103.34	102.414
12:52	MA51540-CCV1	103.696	102.933	103.54	102.758	101.771	109.067	100.191	106.668
12:55	MA51540-CCB1	104.382	104.271	104.065	102.896	103.793	105.077	103.567	105.293
12:58	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:05	MA51540-CRI1	103.148	103.468	103.997	102.676	102.774	103.046	102.318	103.411
13:09	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:18	MA51540-CCV2	103.006	102.699	103.468	102.087	101.846	105.251	99.79	103.176
13:21	MA51540-CCB2	103.432	103.391	105.156	104.757	103.112	105.053	101.684	105.035
13:25	MP30037-MB1	102.744	102.81	101.906	101.909	102.264	101.598	101.41	102.065
13:28	MP30037-B1	103.56	103.602	103.349	102.618	101.637	107.107	101.643	106.955
13:31	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:34	MP30037-S1	100.885	99.009	103.707	99.682	87.651	95.617	86.303	94.707
13:36	MP30037-S2	100.101	99.304	102.854	100.245	87.67	95.919	86.49	95.323
13:39	JD35564-1	102.22	100.238	104.12	102.388	88.851	94.154	87.559	93.926
13:42	ZZZZZZ	102.342	102.911	110.713	106.281	100.424	122.255	91.098	100.155
13:45	ZZZZZZ	108.547	110.685	118.604	110.846	97.541	105.248	96.069	102.889
13:48	MP30037-B2	107.232	113.109	110.967	108.372	111.975	116.838	110.837	115.705

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:51	MA51540-CCV3	102.201	107.111	108.329	108.217	107.545	115.348	105.956	113.279
13:54	MA51540-CCB3	105.139	111.152	111.77	109.286	110.402	113.51	109.969	113.64
13:57	ZZZZZZ	102.084	102.084	106.078	103.626	90.048	92.947	88.863	92.485
14:00	ZZZZZZ	101.916	105.833	108.016	103.57	104.786	110.868	101.865	107.132
14:03	MP30037-S1	99.96	103.572	104.592	101.601	95.06	101.718	94.313	101.455
14:06	MP30037-S2	100.928	102.604	106.616	101.628	94.902	103.12	95.249	103.105
14:09	MA51540-CCV4	103.224	106.156	107.821	104.966	105.334	113.649	104.419	111.433
14:15	MA51540-CCB4	109.739	111.281	113.632	109.357	110.259	111.841	109.824	111.411
14:19	MA51540-ICSA1	103.963	104.113	105.932	105.077	111.689	139.437 !	93.139	94.283
14:23	MA51540-ICSAB1	102.841	103.133	105.388	102.294	110.133	138.317 !	92.17	94.673
14:28	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:40	MA51540-CCV5	113.457	117.524	112.739	114.83	115.736	116.215	114.88	113.388
14:44	MA51540-CCB5	113.247	117.035	113.102	113.593	116.092	112.045	115.373	112.272
14:48	MP30086-MB1	112.926	114.756	109.939	112.011	111.301	104.807	111.222	104.941
14:53	MP30086-B1	114.727	116.669	110.702	113.809	113.152	111.677	111.425	110.312
14:56	MP30086-S1	110.47	112.756	107.922	111.076	108.155	109.175	107.626	108.832
14:59	MP30086-S2	109.384	111.342	107.373	111.731	106.954	108.947	106.504	108.375
15:03	JD35788-3	109.178	109.826	106.648	108.375	106.345	105.663	106.333	105.669
15:06	MP30086-SD1	112.564	112.837	111.657	108.432	112.479	112.809	112.439	112.919
15:09	ZZZZZZ	111.275	111.8	109.014	111.444	109.539	105.659	109.252	105.81
15:12	ZZZZZZ	106.893	108.613	105.117	108.157	105.233	102.42	104.965	101.933
15:15	ZZZZZZ	108.538	110.227	107.506	111.151	107.278	104.317	106.371	103.851
15:19	MA51540-CCV6	112.897	113.968	110.918	107.036	112.635	115.813	110.921	113.306
15:22	MA51540-CCB6	115.528	113.857	112.992	108.534	113.204	112.679	112.134	112.793
15:25	ZZZZZZ	109.542	110.971	109.326	109.098	107.036	106.519	105.905	105.258
15:28	ZZZZZZ	108.485	111.894	110.046	108.437	106.663	106.968	105.288	105.84
15:31	ZZZZZZ	112.08	114.848	111.523	111.384	111.132	107.063	109.868	107.348
15:34	ZZZZZZ	107.703	110.867	107.068	106.826	105.785	103.653	105.511	104.083
15:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:41	MP30105-MB1	108.448	108.397	107.114	107.177	106.802	104.037	106.577	104.5
15:44	MP30105-B1	113.112	113.17	111.101	107.415	110.175	113.432	109.347	112.727
15:47	MP30105-S1	110.567	110.682	109.355	107.205	106.784	111.709	105.814	111.091
15:50	MP30105-S2	112.521	112.513	110.021	106.041	108.685	112.57	108.216	111.966

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:53	MA51540-CCV7	113.64	112.855	112.093	108.372	110.8	117.988	108.931	114.932
15:57	MA51540-CCB7	113.536	113.368	112.422	107.003	111.494	111.145	111.11	111.385
16:00	JD35834-3F	112.987	111.676	109.224	107.15	108.454	108.19	107.707	108.196
16:03	MP30105-SD1	112.596	113.219	113.582	107.802	112.775	114.054	111.788	113.545
16:06	ZZZZZZ	109.344	109.578	104.522	104.797	105.313	102.605	105.177	102.255
16:09	ZZZZZZ	107.427	107.971	106.801	106.237	101.63	101.358	102.618	101.849
16:13	ZZZZZZ	108.987	110.964	106.815	106.97	106.861	104.964	106.445	105.153
16:16	ZZZZZZ	109.461	110.511	107.702	106.748	107.717	106.537	107.686	106.132
16:19	MA51540-CCV8	110.912	112.26	112.162	107.257	109.584	115.687	108.362	113.941
16:22	MA51540-CCB8	111.304	112.715	111.093	106.846	110.514	110.421	110.663	110.671
16:25	MP30105-S1	113.34	114.248	112.949	105.609	112.811	114.823	112.135	114.705
16:29	MP30105-S2	112.774	113.291	113.395	105.968	111.93	115.405	111.203	114.912
16:32	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:35	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:38	MA51540-CRI2	112.571	111.283	110.54	105.361	109.457	107.48	108.59	108.081
16:42	JD35834-3F	111.163	112.978	110.872	104.838	111.099	111.174	110.652	110.85
16:45	MP30105-SD1	111.897	111.296	112.909	103.242	111.637	113.015	111.088	113.104
16:48	MA51540-CRI3	110.751	108.893	109.221	105.914	108.747	109.033	107.662	109.225
16:55	MA51540-CCV9	112.151	111.236	110.696	105.973	109.354	113.126	107.894	110.902
16:58	MA51540-CCB9	113.171	111.569	111.587	106.365	110.394	110.552	109.183	110.328
17:07	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:10	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:13	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:17	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:20	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:23	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:26	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:29	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:32	MA51540-CCV10	114.661	114.23	112.52	107.375	112.202	115.764	110.558	113.014
17:35	MA51540-CCB10	116.02	115.996	113.737	106.667	112.909	112.907	113.687	113.723
17:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:41	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
17:47	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:51	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:53	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:56	MA51540-CCV11	116.562	116.857	115.17	111.42	114.551	119.409	112.839	117.036
17:59	MA51540-CCB11	116.284	116.775	114.103	108.985	114.441	113.4	114.206	113.647
18:02	JD35920-2	109.755	111.613	107.895	105.05	107.091	105.538	106.173	105.643
18:05	JD35920-3	105.847	110.494	105.976	103.42	105.785	114.764	99.705	101.442
18:08	JD35920-4	104.906	108.768	105.65	106.459	100.404	100.314	99.226	100.054
18:11	JD35920-5	106.806	110.443	104.78	104.041	104.69	100.77	104.317	100.998
18:14	JD35920-6	108.012	109.147	106.07	104.386	105.172	101.942	103.91	101.793
18:17	JD35920-2F	106.842	107.967	103.356	105.178	105.41	101.189	104.834	101.801
18:20	JD35920-3F	107.471	108.075	104.195	103.856	102.777	99.837	101.565	100.144
18:23	JD35920-4F	106.635	107.497	104.337	105.119	100.195	97.203	99.709	97.414
18:26	MA51540-CCV12	109.259	110.98	109.235	107.319	109.876	113.24	108.38	110.985
18:29	MA51540-CCB12	112.007	113.774	111.018	108.194	112.673	109.822	112.737	110.789
18:32	JD35920-5F	109.294	113.058	108.753	107.911	106.184	102.87	106.141	103.099
18:35	JD35920-6F	107.618	110.303	105.186	105.915	105.401	99.452	104.815	100.191
18:38	ZZZZZZ	102.219	101.25	99.931	94.595	86.917	85.287	86.215	85.314
18:41	ZZZZZZ	101.522	101.708	99.745	96.959	87.322	83.859	86.373	83.853
18:44	ZZZZZZ	120.897	112.435	122.265	115.037	90.83	94.217	89.455	94.226
18:47	MA51540-CCV13	112.775	114.986	108.292	112.924	114.036	112.749	111.955	110.601
18:50	MA51540-CCB13	110.697	113.699	109.339	111.944	114.424	108.316	113.86	108.887
18:53	MP30166-MB1	110.661	114.759	108.911	111.397	114.637	108.161	113.393	108.495
18:56	MP30166-B1	110.756	113.554	108.402	110.175	112.921	112.107	111.798	111.423
18:59	MP30166-S1	107.671	112.912	109.414	106.93	109.053	110.145	108.51	110.776
19:02	MP30166-S2	103.999	110.12	109.277	106.612	106.909	109.513	106.59	110.224
19:05	JD35913-1	102.378	108.782	108.404	107.678	106.024	106.442	105.96	106.6
19:08	ZZZZZZ	102.561	109.059	106.881	105.418	106.652	105.494	106.183	105.692
19:11	ZZZZZZ	103.317	109.33	108.46	106.215	106.562	106.57	105.408	106.78
19:14	ZZZZZZ	102.462	109.098	108.985	106.177	106.703	104.807	105.645	105.539
19:18	ZZZZZZ	104.249	110.028	108.123	105.721	107.65	105.615	106.432	105.868
19:21	MA51540-CCV14	102.507	108.359	104.862	104.829	107.804	108.969	107.384	107.23
19:24	MA51540-CCB14	104.976	109.281	107.888	105.374	109.866	105.674	108.891	106.368

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
19:27	ZZZZZZ	101.626	108.351	108.078	103.798	105.479	104.821	104.532	104.735
19:30	ZZZZZZ	100.569	108.369	108.889	103.242	104.886	105.532	103.963	105.592
19:33	ZZZZZZ	102.763	109.59	107.048	103.364	106.172	104.326	105.946	104.698
19:36	ZZZZZZ	101.335	108.067	106.236	104.707	104.162	105.052	104.166	105.327
19:39	ZZZZZZ	100.373	108.169	107.24	105.199	104.507	103.627	103.911	104.201
19:42	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:45	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:48	MP30015A-SD2	104.398	109.038	109.601	103.507	109.617	109.425	109.218	109.477
19:51	MA51540-CCV15	99.55	103.786	104.229	102.554	104.117	107.908	102.285	105.574
19:54	MA51540-CCB15	103.788	106.917	105.112	103.65	107.09	103.512	107.024	104.024
19:57	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:00	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:03	JD35530-1	102.026	105.116	105.043	103.276	99.55	100.236	98.752	100.468
20:06	MP30063A-SD1	0.237 !a	0.1 !a	0.019 !a	0.012 !a	0.145 !a	0.032 !a	0.125 !a	0.033 !a
20:09	JD35530-1F	103.265	107.973	106.114	102.217	100.791	98.297	100.458	98.669
20:12	MP30063A-SD2	104.503	109.758	108.938	104.178	108.672	108.976	108.923	108.954
20:15	MA51540-CCV16	102.739	107.774	105.993	103.381	107.697	109.409	105.279	107.524
20:18	MA51540-CCB16	105.939	109.743	107.073	104.41	110.044	106.04	109.808	106.269
20:21	ZZZZZZ	107.03	109.321	110.923	104.113	109.437	108.294	109	108.675
20:24	ZZZZZZ	106.833	109.466	109.902	104.663	109.956	110.259	109.7	110.53
20:27	ZZZZZZ	107.72	109.619	110.377	103.367	110.676	109.307	110.322	109.405
20:30	ZZZZZZ	105.871	110.1	109.344	104.15	108.954	108.184	108.873	108.388
20:34	ZZZZZZ	108.873	109.327	110.598	103.516	111.063	109.468	109.862	109.839
20:37	MA51540-CCV17	106.855	109.131	106.639	102.17	108.318	110.755	106.74	108.314
20:40	MA51540-CCB17	107.187	109.883	106.13	105.033	109.118	106.239	108.695	106.291
20:43	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:46	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:49	ZZZZZZ	No results reported for the elements associated with this internal standard.							

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Lithium	60-125 %
Istd#2	Scandium (45-1)	60-125 %
Istd#3	Scandium (45-2)	60-125 %
Istd#4	Scandium (45-3)	60-125 %
Istd#5	Germanium (72-1)	60-125 %
Istd#6	Germanium (72-2)	60-125 %
Istd#7	Germanium (74-1)	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8

Istd#8 Germanium (74-2) 60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
11:58	MA51540-STD1	100	100	100	100	100	100	100	100
12:02	MA51540-STD2	100	100	100	100	100	100	100	100
12:05	MA51540-STD3	100	100	100	100	100	100	100	100
12:08	MA51540-STD4	101.577	98.744	98.668	99.34	100.133	100.154	99.53	98.512
12:11	MA51540-STD5	101.422	100.784	99.652	98.974	100.545	101.138	100.851	99.942
12:15	MA51540-STD6	103.073	96.236	97.847	100.136	96.618	99.484	96.892	98.221
12:18	MA51540-STD7	103.403	98.406	98.388	98.857	100.041	98.971	99.112	98.523
12:21	MA51540-STD8	104.794	98.196	97.452	98.871	98.689	98.845	98.837	97.998
12:24	MA51540-STD9	103.223	98.861	99.177	100.263	99.016	100.289	99.284	98.743
12:27	MA51540-STD10	105.149	99.764	99.702	99.997	100.964	101.848	101.484	100.878
12:30	MA51540-STD11	103.321	97.812	97.788	98.916	99.233	100.411	100.45	100.288
12:33	MA51540-STD12	103.125	97.603	97.298	98.904	100.398	100.26	101.597	100.895
12:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:40	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:43	MA51540-ICVA1	105.109	98.81	97.918	97.996	100.091	100.239	101.365	100.933
12:46	MA51540-ICV1	104.803	103.242	103.827	103.261	102.025	104.119	102.231	102.647
12:49	MA51540-ICB1	101.192	102.766	100.899	99.994	103.334	102.912	103.749	100.936
12:52	MA51540-CCV1	105.834	98.336	98.53	98.305	100.14	101.754	101.851	101.529
12:55	MA51540-CCB1	103.034	103.043	102.627	100.888	103.582	104.712	102.726	102.604
12:58	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:05	MA51540-CRI1	102.769	103.174	102.297	102.02	103.312	104.364	102.938	102.537
13:09	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:18	MA51540-CCV2	103.409	98.726	98.127	98.482	100.053	100.445	101.86	100.374
13:21	MA51540-CCB2	104.265	101.441	103.404	102.659	102.359	104.294	101.361	102.514
13:25	MP30037-MB1	100.512	102.323	101.493	101.141	102.168	102.88	101.319	100.417
13:28	MP30037-B1	105.802	100.701	100.134	99.832	101.591	102.019	101.178	101.275
13:31	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:34	MP30037-S1	101.72	82.905	82.199	96.729	88.033	91.059	94.805	91.757
13:36	MP30037-S2	102.604	83.418	82.072	98.88	90.069	91.266	96.615	92.573
13:39	JD35564-1	102.029	84.86	83.977	100.38	91.246	92.854	97.883	93.916
13:42	ZZZZZZ	103.351	86.131	87.256	95.242	93.266	97.001	97.544	95.436
13:45	ZZZZZZ	104.851	91.413	90.291	96.749	96.83	99.449	100.269	96.476
13:48	MP30037-B2	112.948	111.925	108.45	106.17	112.39	110.572	111.105	109.27

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:51	MA51540-CCV3	110.914	104.709	105.407	104.278	106.469	107.772	106.668	107.005
13:54	MA51540-CCB3	110.472	111.451	110.711	109.25	111.805	113.549	110.305	110.463
13:57	ZZZZZZ	101.808	85.908	83.774	102.827	91.769	92.584	98.088	93.811
14:00	ZZZZZZ	103.941	96.928	97.696	96.591	101.287	103.415	103.044	103.008
14:03	MP30037-S1	102.588	90.88	89.537	95.247	95.983	97.36	99.996	98.072
14:06	MP30037-S2	102.982	91.807	90.142	94.972	96.313	97.309	101.621	99.199
14:09	MA51540-CCV4	109.148	103.257	103.392	102.733	105.395	106.39	106.599	105.68
14:15	MA51540-CCB4	107.41	110.762	110.118	106.615	111.175	112.696	108.692	108.936
14:19	MA51540-ICSA1	104.794	89.558	86.501	106.739	96.512	95.203	101.46	95.793
14:23	MA51540-ICSAB1	111.106	89.865	86.436	124.188	97.071	93.916	102.745	95.737
14:28	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:40	MA51540-CCV5	115.069	112.383	109.577	108.996	114.833	111.48	114.014	109.946
14:44	MA51540-CCB5	110.934	116.169	112.581	110.34	116.352	112.845	113.17	109.577
14:48	MP30086-MB1	108.66	115.838	109.001	108.87	116.718	108.817	114.589	108.649
14:53	MP30086-B1	113.485	113.17	108.196	108.069	114.787	108.728	114.493	109.187
14:56	MP30086-S1	111.724	106.437	101.8	104.255	109.776	104.612	110.556	105.961
14:59	MP30086-S2	111.318	106.988	103.243	104.518	108.835	104.407	110.625	106.939
15:03	JD35788-3	108.641	106.242	102.712	103.094	109.789	105.206	109.379	106.151
15:06	MP30086-SD1	108.256	110.655	109.578	104.168	112.018	111.89	110.837	108.951
15:09	ZZZZZZ	108.357	111.506	108.773	108.533	112.721	108.841	111.74	109.192
15:12	ZZZZZZ	105.529	105.33	101.854	102.788	109.274	104.592	109.176	105.082
15:15	ZZZZZZ	108.194	107.543	104.37	105.383	111.085	105.74	110.486	106.762
15:19	MA51540-CCV6	109.143	107.766	104.25	101.186	112.09	107.287	110.592	105.571
15:22	MA51540-CCB6	108.327	112.907	109.882	106.542	112.909	112.118	109.636	108.884
15:25	ZZZZZZ	106.319	104.403	102.871	102.718	108.841	105.915	108.912	105.48
15:28	ZZZZZZ	106.47	104.461	103.498	101.805	109.707	106.497	109.603	107.165
15:31	ZZZZZZ	107.634	111.811	109.902	106.818	112.557	110.568	111.787	108.787
15:34	ZZZZZZ	104.676	103.885	100.994	100.815	107.631	104.519	107.932	104.45
15:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:41	MP30105-MB1	103.669	108.513	106.37	103.661	108.93	106.31	108.114	105.144
15:44	MP30105-B1	108.741	109.213	106.857	103.59	110.165	107.771	110.208	107.931
15:47	MP30105-S1	108.992	103.667	102.518	101.56	107.793	105.674	107.635	105.226
15:50	MP30105-S2	107.423	104.7	103.009	99.717	108.712	106.554	107.931	105.335

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:53	MA51540-CCV7	109.456	106.073	105.865	102.868	108.552	109.048	107.364	106.91
15:57	MA51540-CCB7	105.744	111.546	109.213	102.769	112.5	111.009	108.976	108.107
16:00	JD35834-3F	105.925	106.469	103.787	101.882	109.114	107.624	108.831	106.029
16:03	MP30105-SD1	107.136	109.619	107.865	103.511	110.723	111.152	108.218	106.931
16:06	ZZZZZZ	102.901	105.374	100.05	100.404	108.09	102.948	107.156	102.889
16:09	ZZZZZZ	103.333	98.675	96.122	98.265	103.81	101.126	104.934	103.526
16:13	ZZZZZZ	105.805	104.81	101.033	101.404	108.442	104.874	108.577	104.644
16:16	ZZZZZZ	104.685	106.673	103.331	101.728	107.773	106.67	107.623	105.275
16:19	MA51540-CCV8	107.854	106.368	104.048	101.311	108.306	108.364	108.457	106.079
16:22	MA51540-CCB8	105.373	110.074	108.326	105.019	110.851	110.82	107.632	107.105
16:25	MP30105-S1	106.501	109.596	107.806	102.272	111.079	111.956	108.042	106.985
16:29	MP30105-S2	107.57	108.025	107.254	102.674	110.643	111.716	107.505	107.821
16:32	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:35	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:38	MA51540-CRI2	104.046	107.619	106.947	103.219	108.845	109.811	106.339	106.379
16:42	JD35834-3F	103.584	106.807	106.003	101.617	109.882	110.498	106.468	106.415
16:45	MP30105-SD1	104.214	108.697	107.618	101.478	109.91	112.312	106.583	106.259
16:48	MA51540-CRI3	104.573	106.373	107.113	103.206	108.531	108.655	104.064	105.723
16:55	MA51540-CCV9	106.405	104.657	104.199	101.474	108.012	107.133	106.835	105.652
16:58	MA51540-CCB9	104.509	109.282	108.132	103.924	110.387	109.964	106.676	106.686
17:07	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:10	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:13	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:17	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:20	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:23	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:26	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:29	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:32	MA51540-CCV10	107.675	107.719	105.531	102.824	110.329	109.046	108.153	106.634
17:35	MA51540-CCB10	106.563	112.186	111.399	105.689	114.171	112.939	110.227	108.023
17:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:41	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
17:47	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:51	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:53	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:56	MA51540-CCV11	110.475	109.78	108.461	104.639	112.648	111.263	110.302	108.478
17:59	MA51540-CCB11	107.693	113.125	111.121	105.751	114.01	113	110.197	108.042
18:02	JD35920-2	103.51	103.422	99.505	98.723	107.91	104.231	106.505	103.622
18:05	JD35920-3	103.472	96.205	92.965	98.615	101.545	97.791	104.176	99.46
18:08	JD35920-4	102.709	96.198	93.07	97.783	101.52	99.795	103.651	101.004
18:11	JD35920-5	102.601	102.528	97.183	98.092	106.876	101.975	107.439	103.542
18:14	JD35920-6	102.425	102.212	97.862	98.211	106.381	102.731	107.575	104.376
18:17	JD35920-2F	103.162	101.789	98.035	100.202	106.687	101.837	106.273	102.787
18:20	JD35920-3F	101.295	98.061	94.743	97.479	103.22	99.545	105.25	101.255
18:23	JD35920-4F	100.095	96.139	92.106	95.349	102.674	97.819	105.095	99.996
18:26	MA51540-CCV12	107.976	106.418	104.326	102.486	110.071	107.71	108.601	105.55
18:29	MA51540-CCB12	105.986	112.74	109.011	104.745	113.622	110.257	110.254	107.507
18:32	JD35920-5F	103.689	103.505	99.245	100.272	108.262	104.618	109.437	105.363
18:35	JD35920-6F	102.121	102.33	96.69	98.614	106.971	100.635	108.534	102.121
18:38	ZZZZZZ	100.12	82.842	77.279	113.881	91.53	86.988	95.4	87.261
18:41	ZZZZZZ	101.219	83.815	77.874	115.19	93.088	86.22	97.225	87.074
18:44	ZZZZZZ	102.006	83.739	80.479	95.748	92.778	90.378	92.293	84.428
18:47	MA51540-CCV13	112.324	110.204	103.94	105.103	113.951	106.359	111.036	105.072
18:50	MA51540-CCB13	108.31	115.046	108.601	107.168	116.952	109.421	112.468	107.227
18:53	MP30166-MB1	108.496	114.35	109.497	107.707	116.637	109.745	111.647	107.531
18:56	MP30166-B1	110.542	110.887	105.702	104.16	114.434	107.818	111.681	105.084
18:59	MP30166-S1	107.512	102.25	98.278	97.306	108.848	105.643	107.29	103.488
19:02	MP30166-S2	107.138	101.38	98.477	99.012	107.935	104.957	106.119	104.023
19:05	JD35913-1	105.707	99.659	97.848	99.438	105.623	104.504	105.011	103.508
19:08	ZZZZZZ	104.141	101.18	96.412	97.875	105.67	103.353	105.834	102.253
19:11	ZZZZZZ	103.352	101.407	98.578	97.468	107.176	105.573	105.537	103.568
19:14	ZZZZZZ	103.2	100.927	98.231	98.26	106.313	105.22	105.919	104.365
19:18	ZZZZZZ	103.462	101.38	98.398	97.897	107.618	104.995	108.135	103.703
19:21	MA51540-CCV14	104.599	106.397	100.937	99.96	108.856	104.925	107.152	103.804
19:24	MA51540-CCB14	103.259	109.153	106.045	103.668	111.5	107.804	107.654	105.319

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
19:27	ZZZZZZ	101.084	99.361	96.93	95.404	104.478	104.32	103.483	102.483
19:30	ZZZZZZ	101.757	99.2363	97.739	97.319	104.447	104.949	103.898	102.874
19:33	ZZZZZZ	100.9	100.844	97.449	95.832	105.925	103.861	106.009	102.167
19:36	ZZZZZZ	101.929	98.987	97.26	95.607	104.271	104.551	104.465	102.384
19:39	ZZZZZZ	101.935	98.142	97.195	97.37	104.583	103.568	103.347	101.612
19:42	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:45	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:48	MP30015A-SD2	102.106	106.038	104.391	99.973	109.272	110.55	105.817	105.527
19:51	MA51540-CCV15	102.715	100.668	98.812	98.645	103.325	102.561	102.499	102.403
19:54	MA51540-CCB15	100.666	107.175	102.693	101.179	108.58	105.139	105.986	102.482
19:57	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:00	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:03	JD35530-1	100.681	94.255	92.493	94.806	98.892	99.248	99.759	99.158
20:06	MP30063A-SD1	0.028 !a	0.09 !a	0.017 !a	0.015 !a	0.081 !a	0.008 !a	0.073 !a	0.007 !a
20:09	JD35530-1F	98.53	95.36	92.74	94.343	100.718	100.003	101.147	98.386
20:12	MP30063A-SD2	103.286	104.136	101.884	99.653	107.594	108.07	104.884	105.798
20:15	MA51540-CCV16	103.845	103.411	101.007	99.24	106.638	103.9	104.866	103.063
20:18	MA51540-CCB16	101.914	110.6	106.202	102.285	111.533	108.472	108.656	105.068
20:21	ZZZZZZ	102.548	107.379	105.599	101.79	110.286	109.961	105.421	104.247
20:24	ZZZZZZ	103.563	108.232	106.375	102.613	110.835	111.645	104.862	106.321
20:27	ZZZZZZ	101.437	108.048	106.355	100.937	110.162	110.44	106.509	105.589
20:30	ZZZZZZ	102.339	107.253	105.042	102.232	110.566	108.377	106.215	104.549
20:34	ZZZZZZ	102.304	107.484	105.638	101.391	109.814	109.625	105.304	104.881
20:37	MA51540-CCV17	102.246	104.464	101.916	97.562	107.886	105.835	105.621	103.083
20:40	MA51540-CCB17	101.68	107.929	104.906	103.153	110.457	108.11	106.744	103.162
20:43	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:46	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:49	ZZZZZZ	No results reported for the elements associated with this internal standard.							

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#9	Germanium (74-3)	60-125 %
Istd#10	Rhodium (103-1)	60-125 %
Istd#11	Rhodium (103-2)	60-125 %
Istd#12	Rhodium (103-3)	60-125 %
Istd#13	Indium (115-1)	60-125 %
Istd#14	Indium (115-2)	60-125 %
Istd#15	Terbium (159-1)	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16

Istd#16 Terbium (159-2) 60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
11:58	MA51540-STD1	100	100	100	100	100
12:02	MA51540-STD2	100	100	100	100	100
12:05	MA51540-STD3	100	100	100	100	100
12:08	MA51540-STD4	99.751	98.921	98.996	99.206	98.533
12:11	MA51540-STD5	100.555	101.303	100.311	100.497	99.797
12:15	MA51540-STD6	100.4	96.82	98.063	96.149	98.29
12:18	MA51540-STD7	98.426	100.602	98.302	99.642	99.608
12:21	MA51540-STD8	98.812	98.58	98.771	98.495	98.746
12:24	MA51540-STD9	99.797	99.245	99.505	98.304	98.917
12:27	MA51540-STD10	100.555	101.182	101.048	100.208	99.946
12:30	MA51540-STD11	100.635	101.27	99.397	96.257	96.27
12:33	MA51540-STD12	100.226	103.25	100.557	94.813	93.997
12:37	ZZZZZZ	No results reported for the elements associated with this internal standard.				
12:40	ZZZZZZ	No results reported for the elements associated with this internal standard.				
12:43	MA51540-ICVA1	99.78	101.059	100.673	96.698	95.881
12:46	MA51540-ICV1	100.708	102.997	102.325	101.955	102.236
12:49	MA51540-ICB1	98.418	103.421	101.05	101.749	100.28
12:52	MA51540-CCV1	100.706	101.419	101.345	96.87	97.353
12:55	MA51540-CCB1	100.08	103.57	101.858	102.443	102.032
12:58	ZZZZZZ	No results reported for the elements associated with this internal standard.				
13:05	MA51540-CRI1	100.419	102.597	102.208	101.997	102.174
13:09	ZZZZZZ	No results reported for the elements associated with this internal standard.				
13:18	MA51540-CCV2	100.144	102.009	100.325	96.184	96.856
13:21	MA51540-CCB2	100.888	102.307	102.526	100.093	103.237
13:25	MP30037-MB1	99.963	101.64	100.966	100.201	101.142
13:28	MP30037-B1	100.426	102.144	102.574	98.815	99.797
13:31	ZZZZZZ	No results reported for the elements associated with this internal standard.				
13:34	MP30037-S1	109.692	95.402	92.465	77.941	75.51
13:36	MP30037-S2	113.241	97.908	92.584	78.667	76.819
13:39	JD35564-1	115.147	98.954	93.987	79.999	77.752
13:42	ZZZZZZ	102.831	98.043	95.704	79.976	78.454
13:45	ZZZZZZ	102.494	100.205	95.799	79.765	77.891
13:48	MP30037-B2	104.951	110.263	109.491	105.568	105.682

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
13:51	MA51540-CCV3	104.707	106.459	106.647	101.067	102.346
13:54	MA51540-CCB3	105.191	110.047	109.341	108.311	109.01
13:57	ZZZZZZ	116.941	99.277	94.053	79.946	77.534
14:00	ZZZZZZ	100.705	103.677	103.508	93.663	95.385
14:03	MP30037-S1	104.417	100.963	98.531	86.127	84.863
14:06	MP30037-S2	103.856	101.895	99.445	86.754	86.358
14:09	MA51540-CCV4	103.801	105.954	106.232	99.79	101.671
14:15	MA51540-CCB4	103.669	109.046	108.416	106.409	107.614
14:19	MA51540-ICSA1	119.299	101.936	96.854	83.01	79.807
14:23	MA51540-ICSAB1	151.112 !	102.777	96.647	83.423	79.814
14:28	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:40	MA51540-CCV5	108.9	113.893	110.333	106.635	105.277
14:44	MA51540-CCB5	105.588	113.568	109.934	109.869	108.636
14:48	MP30086-MB1	107.773	114.945	109.129	108.046	104.446
14:53	MP30086-B1	108.236	115.863	109.57	105.363	102.173
14:56	MP30086-S1	105.595	110.129	105.496	99.047	95.915
14:59	MP30086-S2	106.784	111.923	107.385	98.761	97.845
15:03	JD35788-3	105.693	110.104	106.26	100.146	97.17
15:06	MP30086-SD1	104.081	110.359	108.549	106.641	107.186
15:09	ZZZZZZ	106.298	112.074	108.322	104.936	104.598
15:12	ZZZZZZ	104.03	109.378	105.506	100.923	99.427
15:15	ZZZZZZ	106.172	111.533	106.666	102.278	99.396
15:19	MA51540-CCV6	101.51	111.766	105.435	103.802	100.438
15:22	MA51540-CCB6	103.03	109.971	108.781	107.195	106.988
15:25	ZZZZZZ	106.2	109.597	106.431	99.019	97.724
15:28	ZZZZZZ	104.431	109.592	107.352	99.353	98.73
15:31	ZZZZZZ	106.104	111.063	108.799	105.509	104.615
15:34	ZZZZZZ	102.736	108.496	104.758	97.891	96.263
15:38	ZZZZZZ	No results reported for the elements associated with this internal standard.				
15:41	MP30105-MB1	102.722	108.198	105.712	103.795	103.103
15:44	MP30105-B1	102.66	109.948	107.999	104.146	102.633
15:47	MP30105-S1	103.851	107.72	106.02	98.115	98.182
15:50	MP30105-S2	100.231	108.435	105.45	99.945	98.98

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
15:53	MA51540-CCV7	102.633	108.219	106.362	101.562	100.693
15:57	MA51540-CCB7	100.921	108.843	106.507	106.526	106.016
16:00	JD35834-3F	102.73	108.864	105.741	101.572	100.285
16:03	MP30105-SD1	101.985	107.739	106.909	106.843	106.316
16:06	ZZZZZZ	101.478	107.236	102.506	99.861	97.486
16:09	ZZZZZZ	102.161	106.012	102.325	93.281	92.343
16:13	ZZZZZZ	103.797	108.924	105.074	99.834	98.171
16:16	ZZZZZZ	103.15	107.437	105.154	102.07	100.968
16:19	MA51540-CCV8	102.153	108.168	107.124	101.859	101.615
16:22	MA51540-CCB8	101.825	107.663	106.979	105.978	106.172
16:25	MP30105-S1	100.07	108.559	106.206	105.833	105.14
16:29	MP30105-S2	101.315	107.959	106.801	105.448	106.444
16:32	ZZZZZZ	No results reported for the elements associated with this internal standard.				
16:35	ZZZZZZ	No results reported for the elements associated with this internal standard.				
16:38	MA51540-CRI2	101.315	106.645	105.168	103.744	105.192
16:42	JD35834-3F	99.765	106.572	105.897	105.248	104.932
16:45	MP30105-SD1	99.858	106.202	106.654	106.484	107.243
16:48	MA51540-CRI3	101.32	105.317	105.701	104.054	104.091
16:55	MA51540-CCV9	100.932	106.746	105.739	101.256	100.354
16:58	MA51540-CCB9	100.94	107.108	106.515	104.958	105.012
17:07	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:10	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:13	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:17	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:20	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:23	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:26	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:29	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:32	MA51540-CCV10	101.459	108.295	106.335	102.2	100.816
17:35	MA51540-CCB10	101.338	110.048	108.37	107.955	107.208
17:38	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:41	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:44	ZZZZZZ	No results reported for the elements associated with this internal standard.				

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
17:47	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:51	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:53	ZZZZZZ	No results reported for the elements associated with this internal standard.				
17:56	MA51540-CCV11	103.542	110.041	108.657	103.674	103.132
17:59	MA51540-CCB11	101.433	110.228	108.119	108.688	107.2
18:02	JD35920-2	101.624	107.587	103.165	99	96.268
18:05	JD35920-3	106.004	105.128	100.282	91.216	87.965
18:08	JD35920-4	103.272	104.052	100.514	88.199	86.409
18:11	JD35920-5	102.608	107.862	102.847	96.747	93.273
18:14	JD35920-6	102.226	108.259	103.786	98.031	94.98
18:17	JD35920-2F	102.712	107.088	102.384	98.632	95.917
18:20	JD35920-3F	102.697	105.548	100.839	93.277	91.389
18:23	JD35920-4F	100.746	105.865	100.222	90.182	86.788
18:26	MA51540-CCV12	101.559	108.052	105.361	101.343	101.027
18:29	MA51540-CCB12	101.142	109.746	107.095	108.096	105.332
18:32	JD35920-5F	103.105	109.493	105.454	97.364	94.981
18:35	JD35920-6F	103.402	108.903	102.51	96.999	92.921
18:38	ZZZZZZ	138.886 !	96.058	87.737	74.299	68.636 !
18:41	ZZZZZZ	141.628 !	97.788	86.966	74.629	67.991 !
18:44	ZZZZZZ	101.548	92.981	84.272	66.764 !	61.578 !
18:47	MA51540-CCV13	106.056	111.545	106.072	103.316	100.795
18:50	MA51540-CCB13	103.56	112.887	107.073	108.624	105.968
18:53	MP30166-MB1	104.91	111.548	106.752	108.205	105.565
18:56	MP30166-B1	102.586	110.299	105.73	105.143	101.344
18:59	MP30166-S1	100.248	107.648	103.705	97.093	94.923
19:02	MP30166-S2	102.426	106.092	104.179	96.123	94.839
19:05	JD35913-1	101.595	105.301	103.462	94.899	94.604
19:08	ZZZZZZ	100.549	106.284	101.305	96.377	93.603
19:11	ZZZZZZ	99.816	106.317	104.651	96.148	95.128
19:14	ZZZZZZ	100.341	106.176	103.772	96.195	95.793
19:18	ZZZZZZ	100.794	107.544	104.296	96.604	95.749
19:21	MA51540-CCV14	99.889	107.488	103.762	100.875	98.961
19:24	MA51540-CCB14	100.738	107.971	105.232	105.25	104.124

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51540
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,K,Se,Ag,Na,Tl

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
19:27	ZZZZZZ	98.639	103.619	103.039	94.325	94.569
19:30	ZZZZZZ	100.978	104.155	102.235	93.88	94.45
19:33	ZZZZZZ	98.066	105.694	102.397	96.317	94.016
19:36	ZZZZZZ	98.941	105.688	103.171	94.732	94.74
19:39	ZZZZZZ	99.859	103.704	102.1	94.207	94.519
19:42	ZZZZZZ	No results reported for the elements associated with this internal standard.				
19:45	ZZZZZZ	No results reported for the elements associated with this internal standard.				
19:48	MP30015A-SD2	99.522	105.372	105.486	105.158	105.768
19:51	MA51540-CCV15	99.332	103.669	101.463	96.968	97.783
19:54	MA51540-CCB15	99.486	105.715	102.05	103.223	100.844
19:57	ZZZZZZ	No results reported for the elements associated with this internal standard.				
20:00	ZZZZZZ	No results reported for the elements associated with this internal standard.				
20:03	JD35530-1	99.418	101.01	99.015	87.004	87.294
20:06	MP30063A-SD1	0.006 !a	0.07 !a	0.007 !a	0.101 !a	0.033 !a
20:09	JD35530-1F	97.748	102.608	98.729	88.754	86.441
20:12	MP30063A-SD2	98.813	104.996	105.805	99.788	100.952
20:15	MA51540-CCV16	100.245	105.544	103.3	98.173	98.333
20:18	MA51540-CCB16	99.903	108.871	104.17	104.612	102.705
20:21	ZZZZZZ	99.887	106.116	103.852	104.294	103.58
20:24	ZZZZZZ	100.113	105.941	106.265	104.619	105.015
20:27	ZZZZZZ	98.9	105.902	104.349	104.646	104.635
20:30	ZZZZZZ	99.063	106.101	103.978	103.724	103.193
20:34	ZZZZZZ	99.189	105.407	104.469	105.183	104.857
20:37	MA51540-CCV17	97.85	105.009	103.262	99.326	98.096
20:40	MA51540-CCB17	100.338	107.208	104.859	104.076	101.849
20:43	ZZZZZZ	No results reported for the elements associated with this internal standard.				
20:46	ZZZZZZ	No results reported for the elements associated with this internal standard.				
20:49	ZZZZZZ	No results reported for the elements associated with this internal standard.				

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#17	Terbium (159-3)	60-125 %
Istd#18	Holmium (165-1)	60-125 %
Istd#19	Holmium (165-2)	60-125 %
Istd#20	Bismuth (209-1)	60-125 %
Istd#21	Bismuth (209-2)	60-125 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51540 Units: ug/l

Time: / Sample ID:			12:49 ICB1		12:55 CCB1		13:21 CCB2		13:54 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27	0.103	<25	0.458	<25	1.17	<25	1.02	<25
Antimony	2.0	.022	0.00410	<2.0	0.00348	<2.0	0.00713	<2.0	0.00628	<2.0
Arsenic	0.50	.009	0.00484	<0.50	-0.00133	<0.50	0.0100	<0.50	0.00835	<0.50
Barium	1.0	.009	0.0176	<1.0	0.0145	<1.0	0.0235	<1.0	0.0228	<1.0
Beryllium	0.50	.003	0.00914	<0.50	0.00571	<0.50	0.00797	<0.50	0.0106	<0.50
Boron	25	.87								
Cadmium	0.50	.007	0.000920	<0.50	0.00178	<0.50	0.00604	<0.50	0.00672	<0.50
Calcium	250	7.6	1.45	<250	0.474	<250	1.50	<250	1.30	<250
Chromium	1.0	.015	0.00309	<1.0	0.000459	<1.0	-0.0120	<1.0	-0.0260	<1.0
Cobalt	0.50	.002	0.00378	<0.50	0.00239	<0.50	0.0111	<0.50	0.00882	<0.50
Copper	2.0	.012	anr							
Iron	25	.56	0.358	<25	0.895	<25	1.37	<25	1.91	<25
Lead	0.50	.007	0.0117	<0.50	0.0187	<0.50	0.0231	<0.50	0.0199	<0.50
Magnesium	250	.37	0.132	<250	0.223	<250	0.875	<250	0.824	<250
Manganese	1.0	.009	0.00846	<1.0	0.00660	<1.0	0.0130	<1.0	0.0217	<1.0
Molybdenum	1.0	.027								
Nickel	1.0	.008	anr							
Potassium	250	1.2	0.372	<250	0.310	<250	0.909	<250	1.32	<250
Selenium	0.50	.35	-0.0187	<0.50	-0.0372	<0.50	-0.0249	<0.50	-0.0217	<0.50
Silver	0.50	.002	0.0104	<0.50	0.00500	<0.50	0.00733	<0.50	0.0151	<0.50
Sodium	250	.53	0.124	<250	0.199	<250	0.930	<250	14.0	<250
Strontium	5.0	.016								
Thallium	0.50	.009	0.00891	<0.50	0.0101	<0.50	0.0155	<0.50	0.0139	<0.50
Tin	5.0	.035								
Titanium	1.0	.045								
Vanadium	1.0	.017	anr							
Zinc	5.0	.048	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51540 Units: ug/l

Time: / Sample ID:			14:15 CCB4		14:44 CCB5		15:22 CCB6		15:57 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27	1.32	<25	1.26	<25	1.09	<25	1.52	<25
Antimony	2.0	.022	0.00719	<2.0	0.00434	<2.0	0.0101	<2.0	0.00817	<2.0
Arsenic	0.50	.009	0.00743	<0.50	0.000722	<0.50	0.00524	<0.50	0.0115	<0.50
Barium	1.0	.009	0.0247	<1.0	0.0108	<1.0	0.0195	<1.0	0.0241	<1.0
Beryllium	0.50	.003	0.00812	<0.50	0.00838	<0.50	0.00994	<0.50	0.0102	<0.50
Boron	25	.87								
Cadmium	0.50	.007	0.00589	<0.50	0.00720	<0.50	0.00506	<0.50	0.00779	<0.50
Calcium	250	7.6	3.33	<250	0.838	<250	1.67	<250	1.84	<250
Chromium	1.0	.015	-0.0129	<1.0	-0.0448	<1.0	-0.0644	<1.0	-0.0631	<1.0
Cobalt	0.50	.002	0.00903	<0.50	0.00759	<0.50	0.00841	<0.50	0.00964	<0.50
Copper	2.0	.012	anr							
Iron	25	.56	1.69	<25	1.45	<25	1.14	<25	1.18	<25
Lead	0.50	.007	0.0106	<0.50	0.0110	<0.50	0.0222	<0.50	0.0252	<0.50
Magnesium	250	.37	1.38	<250	0.915	<250	0.891	<250	0.853	<250
Manganese	1.0	.009	0.0157	<1.0	0.0122	<1.0	0.0254	<1.0	0.0263	<1.0
Molybdenum	1.0	.027								
Nickel	1.0	.008	anr							
Potassium	250	1.2	1.53	<250	1.51	<250	1.87	<250	1.63	<250
Selenium	0.50	.35	-0.0324	<0.50	-0.0238	<0.50	-0.0303	<0.50	0.000178	<0.50
Silver	0.50	.002	0.0108	<0.50	0.00478	<0.50	0.0109	<0.50	0.0126	<0.50
Sodium	250	.53	11.2	<250	4.90	<250	2.71	<250	2.69	<250
Strontium	5.0	.016								
Thallium	0.50	.009	0.0129	<0.50	0.0114	<0.50	0.0140	<0.50	0.0193	<0.50
Tin	5.0	.035								
Titanium	1.0	.045								
Vanadium	1.0	.017	anr							
Zinc	5.0	.048	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51540 Units: ug/l

Time: / Sample ID:			16:22 CCB8		16:58 CCB9		17:35 CCB10		17:59 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27	1.61	<25	1.10	<25	2.94	<25	2.96	<25
Antimony	2.0	.022	0.00470	<2.0	0.00323	<2.0	0.0245	<2.0	0.00778	<2.0
Arsenic	0.50	.009	0.0111	<0.50	0.0102	<0.50	0.00252	<0.50	0.00341	<0.50
Barium	1.0	.009	0.0229	<1.0	0.0174	<1.0	0.179	<1.0	0.0202	<1.0
Beryllium	0.50	.003	0.00928	<0.50	0.00760	<0.50	0.0289	<0.50	0.0123	<0.50
Boron	25	.87								
Cadmium	0.50	.007	0.00969	<0.50	0.00613	<0.50	0.00503	<0.50	0.00978	<0.50
Calcium	250	7.6	1.68	<250	1.43	<250	7.87	<250	0.774	<250
Chromium	1.0	.015	-0.00927	<1.0	-0.0505	<1.0	-0.0762	<1.0	-0.0652	<1.0
Cobalt	0.50	.002	0.0114	<0.50	0.00773	<0.50	0.00789	<0.50	0.00689	<0.50
Copper	2.0	.012	anr							
Iron	25	.56	1.58	<25	1.02	<25	2.50	<25	2.24	<25
Lead	0.50	.007	0.0185	<0.50	0.0206	<0.50	0.0428	<0.50	0.0260	<0.50
Magnesium	250	.37	1.50	<250	0.786	<250	0.597	<250	0.608	<250
Manganese	1.0	.009	0.343	<1.0	0.0225	<1.0	0.0187	<1.0	0.0226	<1.0
Molybdenum	1.0	.027								
Nickel	1.0	.008	anr							
Potassium	250	1.2	2.68	<250	1.68	<250	1.38	<250	1.12	<250
Selenium	0.50	.35	-0.0383	<0.50	-0.0304	<0.50	0.00229	<0.50	-0.00452	<0.50
Silver	0.50	.002	0.00793	<0.50	0.0102	<0.50	0.0315	<0.50	0.0107	<0.50
Sodium	250	.53	7.58	<250	2.03	<250	1.45	<250	1.18	<250
Strontium	5.0	.016								
Thallium	0.50	.009	0.0138	<0.50	0.0146	<0.50	0.0373	<0.50	0.0183	<0.50
Tin	5.0	.035								
Titanium	1.0	.045								
Vanadium	1.0	.017	anr							
Zinc	5.0	.048	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51540 Units: ug/l

Time: / Sample ID:			18:29 CCB12		18:50 CCB13	
Metal	RL	IDL	raw	final	raw	final
Aluminum	25	.27	3.01	<25	2.66	<25
Antimony	2.0	.022	0.00170	<2.0	0.00189	<2.0
Arsenic	0.50	.009	0.00976	<0.50	0.00751	<0.50
Barium	1.0	.009	0.0150	<1.0	0.0173	<1.0
Beryllium	0.50	.003	0.00944	<0.50	0.00818	<0.50
Boron	25	.87				
Cadmium	0.50	.007	0.00389	<0.50	0.00256	<0.50
Calcium	250	7.6	3.50	<250	1.06	<250
Chromium	1.0	.015	-0.0725	<1.0	-0.0830	<1.0
Cobalt	0.50	.002	0.00778	<0.50	0.00612	<0.50
Copper	2.0	.012	anr			
Iron	25	.56	1.76	<25	1.23	<25
Lead	0.50	.007	0.0186	<0.50	0.00974	<0.50
Magnesium	250	.37	2.00	<250	1.65	<250
Manganese	1.0	.009	0.0252	<1.0	0.0250	<1.0
Molybdenum	1.0	.027				
Nickel	1.0	.008	anr			
Potassium	250	1.2	1.28	<250	2.62	<250
Selenium	0.50	.35	-0.00865	<0.50	-0.0138	<0.50
Silver	0.50	.002	0.0104	<0.50	0.0121	<0.50
Sodium	250	.53	7.50	<250	33.7	<250
Strontium	5.0	.016				
Thallium	0.50	.009	0.0137	<0.50	0.0106	<0.50
Tin	5.0	.035				
Titanium	1.0	.045				
Vanadium	1.0	.017	anr			
Zinc	5.0	.048	anr			

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51540 Units: ug/l

Time:		12:43			12:46			12:52	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCV	CCV1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	5370	97.6	60	64.6	107.7	500	5180	103.6
Antimony	60	57.0	95.0				50	50.8	101.6
Arsenic	60	57.3	95.5				50	50.2	100.4
Barium	60	56.5	94.2				50	49.0	98.0
Beryllium	60	55.6	92.7				50	48.9	97.8
Boron									
Cadmium	60	55.3	92.2				50	47.6	95.2
Calcium	5500	5310	96.5				500	5190	103.8
Chromium	60	54.9	91.5				50	48.3	96.6
Cobalt	60	55.2	92.0				50	48.9	97.8
Copper	anr								
Iron	5500	5220	94.9				500	5180	103.6
Lead	60	56.7	94.5				50	49.6	99.2
Magnesium	5500	5290	96.2				500	5150	103.0
Manganese	60	54.3	90.5				50	48.0	96.0
Molybdenum									
Nickel	anr								
Potassium	5500	5270	95.8				500	5100	102.0
Selenium	260	248	95.4				200	201	100.5
Silver	60	60.6	101.0				50	52.3	104.6
Sodium	5500	5240	95.3				500	5150	103.0
Strontium									
Thallium	60	58.8	98.0				50	50.8	101.6
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51540 Units: ug/l

Time:		13:18			13:51			14:09	
Sample ID:	CCV	CCV2		CCV	CCV3		CCV	CCV4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	500	5080	101.6	500	5080	101.6	500	5180	103.6
Antimony	50	48.3	96.6	50	51.3	102.6	50	51.1	102.2
Arsenic	50	48.5	97.0	50	51.1	102.2	50	50.3	100.6
Barium	50	46.5	93.0	50	50.2	100.4	50	49.8	99.6
Beryllium	50	47.7	95.4	50	49.6	99.2	50	49.5	99.0
Boron									
Cadmium	50	46.0	92.0	50	47.8	95.6	50	48.1	96.2
Calcium	500	5100	102.0	500	5150	103.0	500	5190	103.8
Chromium	50	46.6	93.2	50	48.1	96.2	50	47.6	95.2
Cobalt	50	46.7	93.4	50	48.4	96.8	50	47.9	95.8
Copper	anr								
Iron	500	5120	102.4	500	5100	102.0	500	5100	102.0
Lead	50	48.1	96.2	50	49.4	98.8	50	49.8	99.6
Magnesium	500	5100	102.0	500	5030	100.6	500	5070	101.4
Manganese	50	46.2	92.4	50	48.0	96.0	50	47.7	95.4
Molybdenum									
Nickel	anr								
Potassium	500	4990	99.8	500	5150	103.0	500	5150	103.0
Selenium	200	201	100.5	200	203	101.5	200	201	100.5
Silver	50	51.4	102.8	50	51.4	102.8	50	52.1	104.2
Sodium	500	5040	100.8	500	5020	100.4	500	5060	101.2
Strontium									
Thallium	50	50.5	101.0	50	50.1	100.2	50	50.5	101.0
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51540 Units: ug/l

Time:		14:40			15:19			15:53	
Sample ID:	CCV	CCV5		CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	500	5050	101.0	500	5070	101.4	500	5140	102.8
Antimony	50	48.2	96.4	50	49.7	99.4	50	50.8	101.6
Arsenic	50	48.9	97.8	50	49.9	99.8	50	50.1	100.2
Barium	50	47.3	94.6	50	49.2	98.4	50	50.4	100.8
Beryllium	50	46.5	93.0	50	48.0	96.0	50	48.0	96.0
Boron									
Cadmium	50	46.1	92.2	50	47.9	95.8	50	47.6	95.2
Calcium	500	5170	103.4	500	5150	103.0	500	5210	104.2
Chromium	50	46.7	93.4	50	47.7	95.4	50	47.3	94.6
Cobalt	50	47.0	94.0	50	47.9	95.8	50	47.8	95.6
Copper	anr								
Iron	500	5120	102.4	500	5100	102.0	500	5060	101.2
Lead	50	47.5	95.0	50	48.7	97.4	50	49.5	99.0
Magnesium	500	5060	101.2	500	5060	101.2	500	5100	102.0
Manganese	50	46.0	92.0	50	47.4	94.8	50	47.4	94.8
Molybdenum									
Nickel	anr								
Potassium	500	5110	102.2	500	5150	103.0	500	5150	103.0
Selenium	200	200	100.0	200	201	100.5	200	201	100.5
Silver	50	51.2	102.4	50	52.1	104.2	50	51.5	103.0
Sodium	500	5070	101.4	500	5060	101.2	500	5110	102.2
Strontium									
Thallium	50	50.2	100.4	50	50.2	100.4	50	50.4	100.8
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51540 Units: ug/l

Time:		16:19			16:55			17:32	
Sample ID:	CCV	CCV8		CCV	CCV9		CCV	CCV10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	500	5110	102.2	500	5170	103.4	500	5100	102.0
Antimony	50	50.3	100.6	50	48.7	97.4	50	48.5	97.0
Arsenic	50	48.7	97.4	50	49.0	98.0	50	48.8	97.6
Barium	50	48.6	97.2	50	48.2	96.4	50	48.4	96.8
Beryllium	50	48.2	96.4	50	47.1	94.2	50	46.7	93.4
Boron									
Cadmium	50	46.8	93.6	50	46.9	93.8	50	46.0	92.0
Calcium	500	5200	104.0	500	5170	103.4	500	5210	104.2
Chromium	50	46.7	93.4	50	46.5	93.0	50	46.6	93.2
Cobalt	50	47.1	94.2	50	46.7	93.4	50	46.7	93.4
Copper	anr								
Iron	500	5040	100.8	500	5070	101.4	500	5070	101.4
Lead	50	48.6	97.2	50	47.8	95.6	50	47.9	95.8
Magnesium	500	5050	101.0	500	5130	102.6	500	5120	102.4
Manganese	50	46.7	93.4	50	46.4	92.8	50	46.2	92.4
Molybdenum									
Nickel	anr								
Potassium	500	5060	101.2	500	5180	103.6	500	5160	103.2
Selenium	200	199	99.5	200	202	101.0	200	200	100.0
Silver	50	52.1	104.2	50	52.4	104.8	50	51.5	103.0
Sodium	500	5060	101.2	500	5060	101.2	500	5090	101.8
Strontium									
Thallium	50	50.2	100.4	50	50.3	100.6	50	50.1	100.2
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51540 Units: ug/l

Time:		17:56			18:26			18:47	
Sample ID:	CCV	CCV11		CCV	CCV12		CCV	CCV13	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	500	5030	100.6	500	5080	101.6	500	4950	99.0
Antimony	50	49.5	99.0	50	49.6	99.2	50	49.8	99.6
Arsenic	50	49.4	98.8	50	48.9	97.8	50	49.1	98.2
Barium	50	49.7	99.4	50	48.7	97.4	50	49.6	99.2
Beryllium	50	47.5	95.0	50	47.4	94.8	50	45.6	91.2
Boron									
Cadmium	50	46.5	93.0	50	46.3	92.6	50	46.6	93.2
Calcium	500	5150	103.0	500	5210	104.2	500	5140	102.8
Chromium	50	46.8	93.6	50	46.6	93.2	50	46.6	93.2
Cobalt	50	47.0	94.0	50	46.7	93.4	50	46.7	93.4
Copper	anr								
Iron	500	5110	102.2	500	5070	101.4	500	5050	101.0
Lead	50	48.6	97.2	50	48.5	97.0	50	47.9	95.8
Magnesium	500	5040	100.8	500	5090	101.8	500	5050	101.0
Manganese	50	46.6	93.2	50	46.4	92.8	50	46.0	92.0
Molybdenum									
Nickel	anr								
Potassium	500	5090	101.8	500	5150	103.0	500	5120	102.4
Selenium	200	199	99.5	200	199	99.5	200	198	99.0
Silver	50	51.5	103.0	50	51.6	103.2	50	51.4	102.8
Sodium	500	5050	101.0	500	5050	101.0	500	5160	103.2
Strontium									
Thallium	50	50.4	100.8	50	50.2	100.4	50	49.3	98.6
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51540 Units: ug/l

Time:			13:05		16:38		16:48	
Sample ID:	CRI	CRIA	CRI1		CRI2		CRI3	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	25	25	25.5	102.0	25.2	100.8	25.7	102.8
Antimony	2.0	0.25	1.78	89.0	1.78	89.0	1.80	90.0
Arsenic	0.50	0.50	0.425	85.0	0.443	88.6	0.443	88.6
Barium	1.0	0.50	0.926	92.6	0.945	94.5	0.919	91.9
Beryllium	0.50	0.25	0.460	92.0	0.442	88.4	0.440	88.0
Boron	25	2.5						
Cadmium	0.50	0.25	0.439	87.8	0.453	90.6	0.429	85.8
Calcium	250	125	237	94.8	240	96.0	246	98.4
Chromium	1.0	2.0	0.892	89.2	0.804	80.4	0.884	88.4
Cobalt	0.50	0.25	0.460	92.0	0.447	89.4	0.456	91.2
Copper	2.0	2.0	anr					
Iron	25	25	23.9	95.6	23.6	94.4	24.0	96.0
Lead	0.50	0.25	0.447	89.4	0.450	90.0	0.457	91.4
Magnesium	250	125	244	97.6	244	97.6	246	98.4
Manganese	1.0	0.25	0.883	88.3	1.02	102.0	0.901	90.1
Molybdenum	1.0	0.50						
Nickel	1.0	2.0	anr					
Potassium	250	125	240	96.0	245	98.0	248	99.2
Selenium	0.50	0.50	0.558	111.6	0.497	99.4	0.405	81.0
Silver	0.50	1.0	0.576	115.2	0.598	119.6	0.591	118.2
Sodium	250	125	241	96.4	244	97.6	242	96.8
Strontium	5.0	0.50						
Thallium	0.50	0.25	0.441	88.2	0.440	88.0	0.440	88.0
Tin	5.0	0.50						
Titanium	1.0	0.50						
Vanadium	1.0	2.0	anr					
Zinc	5.0	2.0	anr					

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120321M2.CSV Date Analyzed: 12/03/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51540 Units: ug/l

Time:			14:19		14:23	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	92400	92.4	89600	89.6
Antimony			0.0515		0.0611	
Arsenic		20	0.109		16.4	82.0
Barium			0.145		0.147	
Beryllium			0.00450		0.00443	
Boron		50	1.62		42.7	85.4
Cadmium		20	0.276		16.2	81.0
Calcium	100000	100000	97200	97.2	96600	96.6
Chromium		20	0.739		17.6	88.0
Cobalt		20	0.0884		16.1	80.5
Copper		20	0.223		15.1	75.5*(a)
Iron	100000	100000	89500	89.5	88900	88.9
Lead			0.0352		0.0379	
Magnesium	100000	100000	89300	89.3	87700	87.7
Manganese		20	0.128		16.4	82.0
Molybdenum	2000	2000	2170	108.5	2160	108.0
Nickel		20	0.528		15.6	78.0*(a)
Potassium	100000	100000	95100	95.1	93700	93.7
Selenium		20	0.0737		19.9	99.5
Silver		20	0.930*(a		17.8	89.0
Sodium	100000	100000	92200	92.2	90000	90.0
Strontium	2000	2000	1720	86.0	1730	86.5
Thallium			0.00818		0.00490	
Tin	2000	2000	1890	94.5	1890	94.5
Titanium	2000	2000	1730	86.5	1700	85.0
Vanadium		20	0.266		21.1	105.5
Zinc		20	0.516		14.0	70.0*(a)

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:04	MA51544-STD1	1		Sample introduction not stable, see rerun.
12:08	MA51544-STD2	1		Sample introduction not stable, see rerun.
12:11	MA51544-STD3	1		Sample introduction not stable, see rerun.
12:15	MA51544-STD4	1		STDB
12:18	MA51544-STD5	1		STDC
12:21	MA51544-STD6	1		STDD
12:24	MA51544-STD7	1		STDE
12:27	MA51544-STD8	1		STDF
12:31	MA51544-STD9	1		STDG
12:34	MA51544-STD10	1		STDH
12:37	MA51544-STD11	1		STDI
12:40	MA51544-STD12	1		STDJ
13:06	MA51544-STD13	1		STDA
13:09	ZZZZZZ	1		
13:12	MA51544-ICVA1	1		
13:15	MA51544-ICV1	1		
13:21	MA51544-ICB1	1		
13:24	MA51544-CCV1	1		
13:27	MA51544-CCB1	1		
13:30	MA51544-CRI1	1		
13:37	MA51544-ICSA1	1		
13:43	MA51544-ICSAB1	1		Cu,Ni,Zn out
13:48	ZZZZZZ	1		
13:51	MA51544-CCV2	1		
13:54	MA51544-CCB2	1		
13:57	ZZZZZZ	2		
14:00	ZZZZZZ	2		
14:03	ZZZZZZ	2		
14:06	ZZZZZZ	10		
14:08	ZZZZZZ	5		
14:11	ZZZZZZ	50		
14:14	ZZZZZZ	10		
14:17	ZZZZZZ	20		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:20	ZZZZZZ	5		
14:23	MA51544-CCV3	1		
14:26	MA51544-CCB3	1		
14:29	ZZZZZZ	100		
14:32	MA51544-CCV4	1		
14:35	MA51544-CCB4	1		
14:38	ZZZZZZ	50		
14:41	ZZZZZZ	10		
14:44	ZZZZZZ	10		
14:49	MA51544-CCV5	1		
14:52	MA51544-CCB5	1		
15:00	MP30086-MB1	2		
15:03	MP30086-B1	2		
15:06	MP30086-S1	2		
15:09	MP30086-S2	2		
15:12	JD35788-3	2		(sample used for QC only; not part of login JD35920)
15:15	MP30086-SD1	10		
15:18	ZZZZZZ	2		
15:21	ZZZZZZ	2		
15:24	ZZZZZZ	2		
15:27	MA51544-CCV6	1		
15:30	MA51544-CCB6	1		
15:33	ZZZZZZ	2		
15:36	ZZZZZZ	2		
15:39	ZZZZZZ	2		
15:42	ZZZZZZ	2		
15:45	MP30105-MB1	2		
15:48	MP30105-B1	2		
15:51	MP30105-S1	2		
15:54	MP30105-S2	2		
15:57	MA51544-CCV7	1		
16:00	MA51544-CCB7	1		
16:03	JD35834-3F	2		(sample used for QC only; not part of login JD35920)

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:06	MP30105-SD1	10		
----------->	Last reportable sample/prep for job JD35920			
16:09	ZZZZZZ	2		
16:12	ZZZZZZ	2		
16:15	ZZZZZZ	2		
16:18	ZZZZZZ	2		
16:21	MA51544-CCV8	1		
16:24	MA51544-CCB8	1		
16:27	MA51544-CRI2	1		
16:30	MA51544-CCV9	1		
16:33	MA51544-CCB9	1		
----------->	Last reportable CCB for job JD35920			
16:36	ZZZZZZ	2		
16:39	ZZZZZZ	2		
16:42	JD35530-1	10		(sample used for QC only; not part of login JD35920)
16:45	MP30063A-SD1	50		
16:48	MA51544-CCV10	1		
16:57	MA51544-CCB10	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Element: Dilution	Ag
13:09	ZZZZZZ	1	
13:12	MA51544-ICVA1	1	X
13:15	MA51544-ICV1	1	
13:21	MA51544-ICB1	1	X
13:24	MA51544-CCV1	1	X
13:27	MA51544-CCB1	1	X
13:30	MA51544-CRI1	1	X
13:37	MA51544-ICSA1	1	X
13:43	MA51544-ICSAB1	1	X
13:48	ZZZZZZ	1	
13:51	MA51544-CCV2	1	X
13:54	MA51544-CCB2	1	X
13:57	ZZZZZZ	2	
14:00	ZZZZZZ	2	
14:03	ZZZZZZ	2	
14:06	ZZZZZZ	10	
14:08	ZZZZZZ	5	
14:11	ZZZZZZ	50	
14:14	ZZZZZZ	10	
14:17	ZZZZZZ	20	
14:20	ZZZZZZ	5	
14:23	MA51544-CCV3	1	X
14:26	MA51544-CCB3	1	X
14:29	ZZZZZZ	100	
14:32	MA51544-CCV4	1	X
14:35	MA51544-CCB4	1	X
14:38	ZZZZZZ	50	
14:41	ZZZZZZ	10	
14:44	ZZZZZZ	10	
14:49	MA51544-CCV5	1	X
14:52	MA51544-CCB5	1	X
15:00	MP30086-MB1	2	X
15:03	MP30086-B1	2	X
		Element:	Ag

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Element: Dilution	Ag	
15:06	MP30086-S1	2	X	
15:09	MP30086-S2	2	X	
15:12	JD35788-3	2	X	(a)
15:15	MP30086-SD1	10	X	
15:18	ZZZZZZ	2		
15:21	ZZZZZZ	2		
15:24	ZZZZZZ	2		
15:27	MA51544-CCV6	1	X	
15:30	MA51544-CCB6	1	X	
15:33	ZZZZZZ	2		
15:36	ZZZZZZ	2		
15:39	ZZZZZZ	2		
15:42	ZZZZZZ	2		
15:45	MP30105-MB1	2	X	
15:48	MP30105-B1	2	X	
15:51	MP30105-S1	2	X	
15:54	MP30105-S2	2	X	
15:57	MA51544-CCV7	1	X	
16:00	MA51544-CCB7	1	X	
16:03	JD35834-3F	2	X	(a)
16:06	MP30105-SD1	10	X	
16:09	ZZZZZZ	2		
16:12	ZZZZZZ	2		
16:15	ZZZZZZ	2		
16:18	ZZZZZZ	2		
16:21	MA51544-CCV8	1	X	
16:24	MA51544-CCB8	1	X	
16:27	MA51544-CRI2	1	X	
16:30	MA51544-CCV9	1	X	
16:33	MA51544-CCB9	1	X	
16:36	ZZZZZZ	2		
16:39	ZZZZZZ	2		
16:42	JD35530-1	10		(a)
		Element:	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Dilution	Element: Ag
16:45	MP30063A-SD1	50	
16:48	MA51544-CCV10	1	X
16:57	MA51544-CCB10	1	X

(a) Sample used for QC only; not part of login JD35920.

Element: Ag

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
12:04	MA51544-STD1	100	100	100	100	100	100	100	100
12:08	MA51544-STD2	100	100	100	100	100	100	100	100
12:11	MA51544-STD3	100	100	100	100	100	100	100	100
12:15	MA51544-STD4	99.674	100.962	102.778	100.002	100.991	103.791	100.593	103.761
12:18	MA51544-STD5	99.149	99.561	101.787	99.883	100.03	101.817	99.657	101.274
12:21	MA51544-STD6	99.776	101.361	102.46	99.009	101.305	104.835	101.402	104.267
12:24	MA51544-STD7	98.333	101.199	102.888	100.284	100.601	107.146	100.947	106.646
12:27	MA51544-STD8	97.545	100.211	100.751	99.31	100.186	105.543	99.85	105.849
12:31	MA51544-STD9	100.3	101.739	102.655	100.772	101.628	104.978	101.023	104.369
12:34	MA51544-STD10	101.123	102.346	105.067	104.573	102.359	104.91	101.733	105.272
12:37	MA51544-STD11	102.429	105.279	106.464	103.691	103.807	106.828	102.28	104.179
12:40	MA51544-STD12	104.726	107.331	110.889	106.548	105.999	110.928	103.255	105.851
13:06	MA51544-STD13	100	100	100	100	100	100	100	100
13:09	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:12	MA51544-ICVA1	98.058	100.594	99.609	99.497	98.869	110.849	98.46	107.994
13:15	MA51544-ICV1	99.461	101.689	102.742	100.797	101.138	109.58	101.607	109.598
13:21	MA51544-ICB1	96.697	99.508	100.594	100.204	99.188	104.081	99.069	104.066
13:24	MA51544-CCV1	98.595	100.393	100.25	100.761	99.489	112.229	98.59	109.918
13:27	MA51544-CCB1	99.192	100.805	100.491	99.291	100.19	108.29	100.186	107.882
13:30	MA51544-CRI1	98.548	100.674	100.046	98.345	100.435	108.849	100.057	108.865
13:37	MA51544-ICSA1	92.411	93.756	95.014	97.2	100.069	128.855	85.179	88.826
13:43	MA51544-ICSAB1	88.49	92.004	93.718	93.873	98.521	129.985	84.187	89.675
13:48	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:51	MA51544-CCV2	92.129	99.993	96.293	102.096	101.09	109.474	100.571	106.931
13:54	MA51544-CCB2	94.426	99.726	97.772	102.989	101.363	106.87	102.272	106.636
13:57	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:00	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:06	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:08	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:11	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:14	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:17	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
14:20	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:23	MA51544-CCV3	101.299	105.93	102.066	106.47	106.633	115.253	105.78	113.105
14:26	MA51544-CCB3	125.407	129.64	121.927	125.573	131.836 !a	131.851 !a	132.578 !a	145.323 !a
14:29	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:32	MA51544-CCV4	103.094	105.919	100.756	105.38	105.635	113.375	104.717	111.197
14:35	MA51544-CCB4	102.4	103.856	101.395	105.306	105.17	108.271	106.451	108.683
14:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:41	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:49	MA51544-CCV5	99.485	104.109	100.503	104.717	103.965	111.83	103.925	109.594
14:52	MA51544-CCB5	98.051	103.152	99.698	103.87	104.456	106.202	105.131	106.398
15:00	MP30086-MB1	100.912	103.85	100.077	103.6	105.143	105.584	105.432	105.549
15:03	MP30086-B1	96.145	100.817	96.354	105.086	99.31	102.863	98.937	102.425
15:06	MP30086-S1	92.808	97.654	94.315	104.561	96.034	102.316	96.133	102.241
15:09	MP30086-S2	94.452	99.799	95.183	103.742	97.704	103.028	97.415	102.744
15:12	JD35788-3	97.345	100.905	97.115	103.972	98.549	101.593	99.085	101.727
15:15	MP30086-SD1	101.018	104.083	102.531	105.437	105.699	109.809	105.514	109.55
15:18	ZZZZZZ	95.593	99.906	96.571	101.611	99.321	99.337	99.486	99.497
15:21	ZZZZZZ	92.596	97.135	94.166	101.666	95.913	97.41	96.311	97.408
15:24	ZZZZZZ	89.648	93.449	90.967	100.754	93.503	95.176	93.605	95.272
15:27	MA51544-CCV6	96.858	99.702	97.466	100.572	100.023	109.594	99.645	107.283
15:30	MA51544-CCB6	98.89	101.85	98.524	101.281	103.285	104.543	102.998	104.696
15:33	ZZZZZZ	93.593	97.612	95.664	102.041	95.886	99.468	96.446	98.634
15:36	ZZZZZZ	94.005	98.9	96.074	103.423	97.346	100.828	97.006	99.519
15:39	ZZZZZZ	98.195	102.757	100.505	104.745	101.86	101.564	101.469	101.894
15:42	ZZZZZZ	91.89	96.508	96.208	102.693	95.16	98.681	95.802	98.414
15:45	MP30105-MB1	99.707	101.485	101.914	102.209	103.482	108.942	103.619	108.909
15:48	MP30105-B1	95.4	98.346	95.44	100.226	98.015	105.142	98.127	104.392
15:51	MP30105-S1	93.447	97.136	96.869	102.929	96.706	105.789	96.155	104.782
15:54	MP30105-S2	94.566	97.913	95.655	99.611	97.381	105.491	97.739	104.293
15:57	MA51544-CCV7	97.393	100.379	97.966	100.261	100.229	109.845	99.913	107.676
16:00	MA51544-CCB7	97.411	100.253	99.601	102.807	101.132	105.677	101.462	105.983
16:03	JD35834-3F	93.707	95.319	94.599	100.168	95.185	98.517	95.792	98.304

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
16:06	MP30105-SD1	98.09	101.004	99.225	99.808	101.764	106.579	101.628	106.382
16:09	ZZZZZZ	91.089	94.847	92.85	99.766	94.298	96.796	94.622	96.795
16:12	ZZZZZZ	89.211	93.994	91.593	99.304	90.548	93.036	90.65	93.299
16:15	ZZZZZZ	90.942	95.319	92.677	98.391	94.378	96.989	94.887	97.513
16:18	ZZZZZZ	91.872	96.202	94.119	99.721	97.018	100.214	96.745	99.993
16:21	MA51544-CCV8	95.748	97.968	98.127	100.767	98.474	108.279	97.45	105.829
16:24	MA51544-CCB8	96.632	99.852	98.164	99.96	100.131	104.393	100.304	104.15
16:27	MA51544-CRI2	96.877	98.304	98.298	100.289	99.967	104.044	99.628	103.948
16:30	MA51544-CCV9	95.888	97.988	96.949	100.126	97.741	107.462	97.288	104.947
16:33	MA51544-CCB9	93.093	97.264	96.801	100.167	98.274	102.684	98.969	102.742
16:36	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:39	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:42	JD35530-1	92.793	95.502	96.508	98.114	92.03	97.622	91.979	97.333
16:45	MP30063A-SD1	93.25	96.56	96.52	99.26	97.77	105.076	97.904	104.722
16:48	MA51544-CCV10	91.534	95.187	95.867	97.954	96.863	105.865	95.921	103.707
16:57	MA51544-CCB10	94.439	98.037	97.805	99.733	98.997	100.114	99.248	100.075

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (74-1)	70-130 %	70-130 %
Istd#8	Germanium (74-2)	70-130 %	70-130 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
12:04	MA51544-STD1	100	100	100	100	100	100	100	100
12:08	MA51544-STD2	100	100	100	100	100	100	100	100
12:11	MA51544-STD3	100	100	100	100	100	100	100	100
12:15	MA51544-STD4	103.445	99.875	101.911	100.955	100.329	102.699	100.396	102.857
12:18	MA51544-STD5	101.117	99.243	101.494	101.008	99.257	101.168	100.306	101.207
12:21	MA51544-STD6	103.259	101.698	101.598	100.761	101.565	101.737	101.738	101.531
12:24	MA51544-STD7	105.209	101.383	102.51	102.695	101.57	102.229	100.992	102.237
12:27	MA51544-STD8	104.517	100.097	101.324	100.688	100.755	100.489	100.708	100.487
12:31	MA51544-STD9	103.662	101.083	102.33	100.988	101.687	102.3	101.451	102.826
12:34	MA51544-STD10	104.576	100.907	102.824	102.988	102.199	104.187	101.718	103.261
12:37	MA51544-STD11	103.757	100.395	101.651	101.054	101.204	103.084	102.146	103.919
12:40	MA51544-STD12	105.041	100.757	101.918	100.035	102.083	104.101	104.071	105.953
13:06	MA51544-STD13	100	100	100	100	100	100	100	100
13:09	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:12	MA51544-ICVA1	107.314	95.719	95.163	95.098	96.321	95.907	97.902	98.67
13:15	MA51544-ICV1	107.024	101.142	101.282	100.092	99.008	101.1	100.303	101.741
13:21	MA51544-ICB1	104.067	99.29	99.35	99.101	98.186	99.727	97.847	99.363
13:24	MA51544-CCV1	109.29	96.845	96.467	98.147	97.086	98.083	98.329	99.197
13:27	MA51544-CCB1	106.113	99.242	99.481	99.442	98.929	100.297	98.536	100.087
13:30	MA51544-CRI1	107.043	99.996	99.327	98.937	99.411	100.771	99.168	100.243
13:37	MA51544-ICSA1	103.677	81.842	78.67	101.139	86.947	84.608	93.529	88.878
13:43	MA51544-ICSAB1	110.457	81.31	78.582	117.016	87.559	85.016	93.842	89.15
13:48	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:51	MA51544-CCV2	111.142	99.792	96.064	99.616	101.142	96.517	103.045	99.718
13:54	MA51544-CCB2	110.691	103.313	100.538	103.008	103.293	99.206	102.951	101.886
13:57	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:00	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:06	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:08	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:11	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:14	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:17	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
14:20	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:23	MA51544-CCV3	115.384	103.948	99.673	101.817	104.84	99.343	106.934	102.55
14:26	MA51544-CCB3	131.439	!a129.716	122.426	122.216	131.283	!a122.714	129.354	121.13
14:29	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:32	MA51544-CCV4	114.138	103.718	98.607	102.082	104.647	98.231	106.601	101.425
14:35	MA51544-CCB4	111.508	106.19	102.438	105.035	106.135	102	105.514	102.383
14:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:41	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:49	MA51544-CCV5	113.482	102.66	98.938	101.708	105.222	98.479	105.933	101.325
14:52	MA51544-CCB5	109.377	104.878	101.29	103.196	104.967	99.96	104.426	101.53
15:00	MP30086-MB1	106.742	104.966	102.59	102.149	105.243	102.19	105.555	102.041
15:03	MP30086-B1	111.014	101.538	97.167	102.558	103.22	96.606	105.221	101.006
15:06	MP30086-S1	111.081	96.545	93.311	100.214	98.901	94.394	102.588	99.756
15:09	MP30086-S2	111.535	98.112	93.096	99.556	100.708	93.585	104.951	98.882
15:12	JD35788-3	109.945	99.208	95.504	99.92	102.615	96.857	104.617	100.63
15:15	MP30086-SD1	111.207	103.911	101.687	103.095	104.473	102.559	104.142	102.498
15:18	ZZZZZZ	105.46	102.408	97.597	101.754	102.593	97.564	103.875	99.743
15:21	ZZZZZZ	105.039	96.913	93.67	99.24	100.415	94.273	103.135	98.724
15:24	ZZZZZZ	105.687	95.206	91.826	99.838	99.401	92.057	100.942	97.56
15:27	MA51544-CCV6	109.236	98.099	96.174	97.71	100.869	96.93	102.104	99.834
15:30	MA51544-CCB6	106.039	102.418	99.189	100.274	103.703	100.174	103.798	99.948
15:33	ZZZZZZ	105.864	95.978	93.584	98.649	99.609	94.903	101.9	98.934
15:36	ZZZZZZ	106.938	97.647	94.201	100.326	99.89	96.355	103.844	100.244
15:39	ZZZZZZ	107.537	104.666	99.632	104.608	104.611	98.986	106.004	103.36
15:42	ZZZZZZ	106.797	94.831	92.124	99.419	97.121	94.638	100.351	98.332
15:45	MP30105-MB1	107.273	102.702	102.528	101.231	102.615	103.49	102.064	103.377
15:48	MP30105-B1	108.419	98.938	95.775	98.563	100.79	96.1	101.053	98.873
15:51	MP30105-S1	110.212	95.96	94.328	98.817	98.294	95.17	100.7	99.96
15:54	MP30105-S2	107.755	95.418	92.696	96.587	97.976	93.618	100.348	97.651
15:57	MA51544-CCV7	109.068	97.83	95.788	97.862	99.665	95.979	101.495	99.21
16:00	MA51544-CCB7	107.803	101.694	100.305	101.169	100.921	99.826	101.463	101.443
16:03	JD35834-3F	105.188	94.031	91.988	97.407	95.905	92.554	98.445	96.523

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
16:06	MP30105-SD1	104.811	100.085	97.977	97.844	100.597	98.746	100.139	99.355
16:09	ZZZZZZ	103.803	93.765	92.163	98.122	95.787	91.738	98.448	96.129
16:12	ZZZZZZ	101.9	88.99	86.327	92.978	92.208	89.186	96.57	93.969
16:15	ZZZZZZ	103.531	94.383	90.758	95.995	97.255	92.711	100.855	96.656
16:18	ZZZZZZ	105.148	96.352	94.311	97.965	98.193	96.034	100.512	99.412
16:21	MA51544-CCV8	107.565	95.555	95.184	98.733	97.768	97.039	99.503	99.368
16:24	MA51544-CCB8	105.856	100.538	99.011	100.572	101.531	99.18	101.869	100.963
16:27	MA51544-CRI2	105.053	99.901	98.146	99.645	100.711	97.978	102.105	99.214
16:30	MA51544-CCV9	107.007	96.282	93.997	98.168	97.63	96.327	100.403	98.048
16:33	MA51544-CCB9	104.587	98.256	96.908	99.791	99.569	97.92	99.46	98.291
16:36	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:39	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:42	JD35530-1	103.449	88.204	86.358	92.727	91.508	91.167	95.43	93.57
16:45	MP30063A-SD1	105.628	93.497	94.116	95.472	95.638	96.575	96.575	98.2
16:48	MA51544-CCV10	105.552	95.02	93.409	96.159	97.524	95.986	99.713	97.812
16:57	MA51544-CCB10	102.685	99.972	98.527	100.94	101.039	100.248	101.466	100.337

! = Outside limits.

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-3)	70-130 %	70-130 %
Istd#10	Rhodium (103-1)	70-130 %	70-130 %
Istd#11	Rhodium (103-2)	70-130 %	70-130 %
Istd#12	Rhodium (103-3)	70-130 %	70-130 %
Istd#13	Indium (115-1)	70-130 %	70-130 %
Istd#14	Indium (115-2)	70-130 %	70-130 %
Istd#15	Terbium (159-1)	70-130 %	70-130 %
Istd#16	Terbium (159-2)	70-130 %	70-130 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
12:04	MA51544-STD1	100	100	100	100	100
12:08	MA51544-STD2	100	100	100	100	100
12:11	MA51544-STD3	100	100	100	100	100
12:15	MA51544-STD4	101.217	99.458	101.623	100.661	101.869
12:18	MA51544-STD5	100.959	98.345	100.15	99.557	100.869
12:21	MA51544-STD6	100.989	100.762	100.716	101.764	101.176
12:24	MA51544-STD7	102.984	101.41	101.453	101.249	101.916
12:27	MA51544-STD8	100.87	99.806	99.897	101.26	100.665
12:31	MA51544-STD9	101.465	100.997	102.025	101.801	102.17
12:34	MA51544-STD10	103.054	101.431	103.47	101.091	102.191
12:37	MA51544-STD11	102.184	101.448	102.746	98.296	99.439
12:40	MA51544-STD12	102.289	103.237	103.987	97.369	97.964
13:06	MA51544-STD13	100	100	100	100	100
13:09	ZZZZZZ	No results reported for the elements associated with this internal standard.				
13:12	MA51544-ICVA1	99.995	97.068	98.035	94.359	94.181
13:15	MA51544-ICV1	101.26	98.91	101.971	100.747	101.313
13:21	MA51544-ICB1	99.716	95.625	98.922	97.854	99.863
13:24	MA51544-CCV1	101.057	97.376	98.51	95.031	95.19
13:27	MA51544-CCB1	100.109	96.42	99.988	99.043	99.585
13:30	MA51544-CRI1	100.457	97.616	99.767	99.116	99.927
13:37	MA51544-ICSA1	118.821	92.422	88.793	78.351	74.982
13:43	MA51544-ICSAB1	146.054	!a92.545	88.815	77.854	75.419
13:48	ZZZZZZ	No results reported for the elements associated with this internal standard.				
13:51	MA51544-CCV2	104.636	101.508	99.02	97.729	95.833
13:54	MA51544-CCB2	104.461	101.278	101.604	101.721	102.032
13:57	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:00	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:03	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:06	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:08	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:11	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:14	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:17	ZZZZZZ	No results reported for the elements associated with this internal standard.				

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
14:20	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:23	MA51544-CCV3	105.388	105.674	102.349	101.355	98.002
14:26	MA51544-CCB3	122.919	126.868	122.12	127.845	120.758
14:29	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:32	MA51544-CCV4	104.998	104.587	101.458	101.262	97.784
14:35	MA51544-CCB4	105.417	103.405	102.729	104.118	102.711
14:38	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:41	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:44	ZZZZZZ	No results reported for the elements associated with this internal standard.				
14:49	MA51544-CCV5	105.043	103.887	101.545	99.292	98.077
14:52	MA51544-CCB5	103.655	102.844	102.112	103.802	101.368
15:00	MP30086-MB1	101.694	103.148	102.179	103.923	102.688
15:03	MP30086-B1	105.564	104.567	101.073	98.18	95.585
15:06	MP30086-S1	106.605	100.663	98.995	93.451	91.647
15:09	MP30086-S2	106.299	103.453	99.033	94.528	90.669
15:12	JD35788-3	105.075	102.318	101.217	96.157	93.479
15:15	MP30086-SD1	103.843	102.071	102.011	102.172	101.845
15:18	ZZZZZZ	103.419	102.026	99.728	100.002	96.963
15:21	ZZZZZZ	103.763	101.413	99.115	96.368	94.274
15:24	ZZZZZZ	106.502	99.929	98.625	93.85	92.488
15:27	MA51544-CCV6	100.415	100.801	99.719	97.224	96.619
15:30	MA51544-CCB6	101.528	102.144	99.935	103.136	100.299
15:33	ZZZZZZ	104.231	100.995	98.902	93.577	91.868
15:36	ZZZZZZ	105.3	101.759	100.46	94.986	92.801
15:39	ZZZZZZ	106.937	105.416	102.579	102.16	100.066
15:42	ZZZZZZ	104.926	99.493	98.665	92.76	92.103
15:45	MP30105-MB1	102.409	100.462	102.738	102.1	103.141
15:48	MP30105-B1	102.466	99.643	99.168	97.617	96.684
15:51	MP30105-S1	104.429	99.951	100.069	94.414	94.39
15:54	MP30105-S2	103.01	98.785	98.237	95.05	93.29
15:57	MA51544-CCV7	101.586	100.582	99.776	97.794	95.705
16:00	MA51544-CCB7	102.547	100.461	100.65	101.88	101.228
16:03	JD35834-3F	101.989	97.141	96.925	94.36	93.029

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51544
Parameters: Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
16:06	MP30105-SD1	99.949	98.589	99.807	100.921	100.801
16:09	ZZZZZZ	101.604	97.745	96.822	94.516	93.594
16:12	ZZZZZZ	102.439	96.056	93.87	87.583	86.18
16:15	ZZZZZZ	101.584	99.287	97.142	94.705	92.394
16:18	ZZZZZZ	102.153	98.927	98.769	96.46	96.137
16:21	MA51544-CCV8	102.629	98.305	98.842	95.27	95.31
16:24	MA51544-CCB8	100.975	100.598	100.629	101.455	100.65
16:27	MA51544-CRI2	102.13	99.813	99.071	100.116	99.786
16:30	MA51544-CCV9	101.421	98.064	99.148	95.976	95.321
16:33	MA51544-CCB9	100.164	97.931	97.918	98.928	98.652
16:36	ZZZZZZ	No results reported for the elements associated with this internal standard.				
16:39	ZZZZZZ	No results reported for the elements associated with this internal standard.				
16:42	JD35530-1	99.439	95.094	94.134	84.861	83.995
16:45	MP30063A-SD1	99.216	95.861	98.33	94.664	95.191
16:48	MA51544-CCV10	100.337	98.858	98.144	94.841	94.848
16:57	MA51544-CCB10	101.444	99.205	100.985	100.468	100.816

! = Outside limits.

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-3)	70-130 %	70-130 %
Istd#18	Holmium (165-1)	70-130 %	70-130 %
Istd#19	Holmium (165-2)	70-130 %	70-130 %
Istd#20	Bismuth (209-1)	70-130 %	70-130 %
Istd#21	Bismuth (209-2)	70-130 %	70-130 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51544 Units: ug/l

Time: / Sample ID:			13:21 ICB1		13:27 CCB1		13:54 CCB2		14:26 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27								
Antimony	2.0	.022								
Arsenic	0.50	.009	anr							
Barium	1.0	.009								
Beryllium	0.50	.003								
Boron	25	.87								
Cadmium	0.50	.007								
Calcium	250	7.6								
Chromium	1.0	.015								
Cobalt	0.50	.002								
Copper	2.0	.012								
Iron	25	.56								
Lead	0.50	.007	anr							
Magnesium	250	.37								
Manganese	1.0	.009								
Molybdenum	1.0	.027								
Nickel	1.0	.008								
Potassium	250	1.2								
Selenium	0.50	.35								
Silver	0.50	.002	-0.0717	<0.50	-0.0675	<0.50	-0.0638	<0.50	-0.0609	<0.50
Sodium	250	.53								
Strontium	5.0	.016								
Thallium	0.50	.009	anr							
Tin	5.0	.035								
Titanium	1.0	.045								
Vanadium	1.0	.017								
Zinc	5.0	.048								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51544 Units: ug/l

Time: / Sample ID:			14:35 CCB4		14:52 CCB5		15:30 CCB6		16:00 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27								
Antimony	2.0	.022								
Arsenic	0.50	.009	anr							
Barium	1.0	.009								
Beryllium	0.50	.003								
Boron	25	.87								
Cadmium	0.50	.007								
Calcium	250	7.6								
Chromium	1.0	.015								
Cobalt	0.50	.002								
Copper	2.0	.012								
Iron	25	.56								
Lead	0.50	.007	anr							
Magnesium	250	.37								
Manganese	1.0	.009								
Molybdenum	1.0	.027								
Nickel	1.0	.008								
Potassium	250	1.2								
Selenium	0.50	.35								
Silver	0.50	.002	0.0702	<0.50	-0.0626	<0.50	-0.0652	<0.50	-0.0669	<0.50
Sodium	250	.53								
Strontium	5.0	.016								
Thallium	0.50	.009	anr							
Tin	5.0	.035								
Titanium	1.0	.045								
Vanadium	1.0	.017								
Zinc	5.0	.048								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51544 Units: ug/l

Time:			16:24		16:33	
Sample ID:			CCB8		CCB9	
Metal	RL	IDL	raw	final	raw	final
Aluminum	25	.27				
Antimony	2.0	.022				
Arsenic	0.50	.009	anr			
Barium	1.0	.009				
Beryllium	0.50	.003				
Boron	25	.87				
Cadmium	0.50	.007				
Calcium	250	7.6				
Chromium	1.0	.015				
Cobalt	0.50	.002				
Copper	2.0	.012				
Iron	25	.56				
Lead	0.50	.007	anr			
Magnesium	250	.37				
Manganese	1.0	.009				
Molybdenum	1.0	.027				
Nickel	1.0	.008				
Potassium	250	1.2				
Selenium	0.50	.35				
Silver	0.50	.002	-0.0565	<0.50	-0.0670	<0.50
Sodium	250	.53				
Strontium	5.0	.016				
Thallium	0.50	.009	anr			
Tin	5.0	.035				
Titanium	1.0	.045				
Vanadium	1.0	.017				
Zinc	5.0	.048				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51544 Units: ug/l

Time:		13:12			13:15			13:24	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCV	CCV1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver	60	62.3	103.8				50	51.5	103.0
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51544 Units: ug/l

Time:		13:51			14:23			14:32	
Sample ID:	CCV	CCV2		CCV	CCV3		CCV	CCV4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver	50	51.5	103.0	50	52.4	104.8	50	52.1	104.2
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51544 Units: ug/l

Time:		14:49			15:27			15:57	
Sample ID:	CCV	CCV5		CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver	50	52.4	104.8	50	53.0	106.0	50	53.2	106.4
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51544 Units: ug/l

Time:		16:21			16:30	
Sample ID:	CCV	CCV8		CCV	CCV9	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony						
Arsenic	anr					
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	anr					
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver	50	52.7	105.4	50	52.9	105.8
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium						
Zinc						

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51544 Units: ug/l

Time:			13:30		16:27	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	25	25				
Antimony	2.0	0.25				
Arsenic	0.50	0.50	anr			
Barium	1.0	0.50				
Beryllium	0.50	0.25				
Boron	25	2.5				
Cadmium	0.50	0.25				
Calcium	250	125				
Chromium	1.0	2.0				
Cobalt	0.50	0.25				
Copper	2.0	2.0				
Iron	25	25				
Lead	0.50	0.25	anr			
Magnesium	250	125				
Manganese	1.0	0.25				
Molybdenum	1.0	0.50				
Nickel	1.0	2.0				
Potassium	250	125				
Selenium	0.50	0.50				
Silver	0.50	1.0	0.550	110.0	0.532	106.4
Sodium	250	125				
Strontium	5.0	0.50				
Thallium	0.50	0.25	anr			
Tin	5.0	0.50				
Titanium	1.0	0.50				
Vanadium	1.0	2.0				
Zinc	5.0	2.0				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120421M1.CSV Date Analyzed: 12/04/21 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51544 Units: ug/l

Time:			13:37		13:43	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	86700	86.7	86700	86.7
Antimony			0.0432		0.0406	
Arsenic		20	0.182		16.3	81.5
Barium			0.144		0.164	
Beryllium			-0.00128		-0.00189	
Boron		50	1.14		42.3	84.6
Cadmium		20	0.440		16.1	80.5
Calcium	100000	100000	90300	90.3	91400	91.4
Chromium		20	0.917		17.6	88.0
Cobalt		20	0.0734		16.1	80.5
Copper		20	0.200		14.4	72.0*(a)
Iron	100000	100000	85500	85.5	85900	85.9
Lead			0.0412		0.0350	
Magnesium	100000	100000	85000	85.0	84900	84.9
Manganese		20	0.115		16.5	82.5
Molybdenum	2000	2000	2050	102.5	2070	103.5
Nickel		20	0.467		15.6	78.0*(a)
Potassium	100000	100000	90300	90.3	89500	89.5
Selenium		20	0.114		18.8	94.0
Silver		20	-0.0420		17.7	88.5
Sodium	100000	100000	88100	88.1	88300	88.3
Strontium	2000	2000	1620	81.0	1780	89.0
Thallium			0.00630		0.00446	
Tin	2000	2000	1670	83.5	1680	84.0
Titanium	2000	2000	1630	81.5	1660	83.0
Vanadium		20	0.0827		19.1	95.5
Zinc		20	0.852		14.0	70.0*(a)

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:44	MA51547-STD1	1		Sample introduction not stable, see rerun.
15:50	MA51547-STD2	1		Sample introduction not stable, see rerun.
15:56	MA51547-STD3	1		STDA
16:02	MA51547-STD4	1		STDB
16:08	MA51547-STD5	1		STDC
16:14	MA51547-STD6	1		STDD
16:20	MA51547-STD7	1		STDE
16:26	MA51547-STD8	1		STDF
16:32	MA51547-STD9	1		Sample introduction not stable, see rerun.
16:38	MA51547-STD10	1		STDH
16:44	MA51547-STD11	1		STDI
16:50	MA51547-STD12	1		STDJ
17:03	MA51547-STD13	1		STDG
17:12	ZZZZZZ	1		
17:18	ZZZZZZ	1		
17:24	MA51547-ICVA1	1		
17:30	MA51547-ICV1	1		
17:36	MA51547-ICB1	1		
17:42	MA51547-CCVA1	1		
17:48	MA51547-CCB1	1		
17:54	MA51547-CRI1	1		
18:00	MA51547-ICSA1	1		
18:06	MA51547-ICSAB1	1		
18:12	ZZZZZZ	1		
18:18	MA51547-CCVA2	1		
18:24	MA51547-CCB2	1		
18:30	MP30105-MB1	2		
18:36	MP30105-B1	2		
18:42	MP30105-S1	2		
18:48	MP30105-S2	2		
18:54	JD35834-3F	2		(sample used for QC only; not part of login JD35920)
19:00	MP30105-SD1	10		
19:06	MA51547-CRI2	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	19:12	ZZZZZZ	1		
	19:18	MA51547-CCVA3	1		
	19:24	MA51547-CCB3	1		
	19:30	JD35920-2	2		
	19:36	JD35920-2	10		
	19:42	JD35920-3	2		
	19:48	JD35920-3	25		
	19:54	JD35920-4	5		
	20:01	JD35920-4	25		
	20:07	JD35920-5	2		redigest for Cu. Undigested clean
	20:13	JD35920-5	25		rerun for NA,Mg
	20:19	JD35920-6	2		
	20:25	JD35920-6	10		
	20:32	MA51547-CCVA4	1		
	20:38	MA51547-CCB4	1		
	20:44	JD35920-2F	2		
	20:50	JD35920-2F	10		
	20:56	JD35920-3F	2		
	21:02	JD35920-3F	25		
	21:08	JD35920-4F	2		
	21:14	JD35920-4F	10		Na still high
	21:20	JD35920-5F	2		Cu higher in F, redigest sample. Undigetsed clean
	21:26	JD35920-5F	25		
	21:32	JD35920-6F	2		
	21:38	JD35920-6F	10		
	21:44	MA51547-CCVA5	1		
	21:50	MA51547-CCB5	1		
	21:56	JD35920-4	2		
---------->		Last reportable sample/prep for job JD35920			
	22:03	ZZZZZZ	1		
	22:09	MA51547-CCVA6	1		
	22:15	MA51547-CCB6	1		
---------->		Last reportable CCB for job JD35920			
	22:21	ZZZZZZ	1		
	22:27	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:33	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Element: Dilution	Al	Ba	Ca	Cr	Cu	Fe	Mg	Mn	Ni	Ag	Na	V	Zn	
17:12	ZZZZZZ	1														
17:18	ZZZZZZ	1														
17:24	MA51547-ICVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:30	MA51547-ICV1	1	X													
17:36	MA51547-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:42	MA51547-CCVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:48	MA51547-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:54	MA51547-CRI1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:00	MA51547-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:06	MA51547-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:12	ZZZZZZ	1														
18:18	MA51547-CCVA2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:24	MA51547-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:30	MP30105-MB1	2					X				X			X	X	
18:36	MP30105-B1	2					X				X			X	X	
18:42	MP30105-S1	2					X				X			X	X	
18:48	MP30105-S2	2					X				X			X	X	
18:54	JD35834-3F	2														(a)
19:00	MP30105-SD1	10					X				X			X	X	
19:06	MA51547-CRI2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:12	ZZZZZZ	1														
19:18	MA51547-CCVA3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:24	MA51547-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:30	JD35920-2	2					X					X		X	X	
19:36	JD35920-2	10			X				X		X					
19:42	JD35920-3	2					X					X		X		
19:48	JD35920-3	25	X	X	X	X		X	X	X	X		X		X	
19:54	JD35920-4	5				X					X					
20:01	JD35920-4	25			X				X				X			
20:07	JD35920-5	2									X	X		X	X	
20:13	JD35920-5	25			X											
20:19	JD35920-6	2					X				X	X		X	X	
20:25	JD35920-6	10			X				X				X			
		Element:	Al	Ba	Ca	Cr	Cu	Fe	Mg	Mn	Ni	Ag	Na	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Element: Dilution	Al	Ba	Ca	Cr	Cu	Fe	Mg	Mn	Ni	Ag	Na	V	Zn
20:32	MA51547-CCVA4	1	X	X	X	X	X	X	X	X	X	X	X	X	X
20:38	MA51547-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X
20:44	JD35920-2F	2				X			X	X		X	X		
20:50	JD35920-2F	10			X			X							
20:56	JD35920-3F	2				X			X	X		X	X		
21:02	JD35920-3F	25			X			X			X				
21:08	JD35920-4F	2				X			X	X		X	X		
21:14	JD35920-4F	10			X			X							
21:20	JD35920-5F	2							X	X		X	X		
21:26	JD35920-5F	25			X										
21:32	JD35920-6F	2				X			X	X		X	X		
21:38	JD35920-6F	10			X			X			X				
21:44	MA51547-CCVA5	1	X	X	X	X	X	X	X	X	X	X	X	X	X
21:50	MA51547-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X
21:56	JD35920-4	2				X				X		X	X		
22:03	ZZZZZZ	1													
22:09	MA51547-CCVA6	1	X	X	X	X	X	X	X	X	X	X	X	X	X
22:15	MA51547-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X
22:21	ZZZZZZ	1													
22:27	ZZZZZZ	1													
22:33	ZZZZZZ	1													

(a) Sample used for QC only; not part of login JD35920.

Element:	Al	Ba	Ca	Cr	Cu	Fe	Mg	Mn	Ni	Ag	Na	V	Zn

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:44	MA51547-STD1	100	100	100	100	100	100	100	100
15:50	MA51547-STD2	100	100	100	100	100	100	100	100
15:56	MA51547-STD3	100	100	100	100	100	100	100	100
16:02	MA51547-STD4	107.538	106.853	99.644	96.841	107.384	99.751	97.348	107.323
16:08	MA51547-STD5	109.553	108.001	99.681	97.154	108.562	99.075	98.077	107.919
16:14	MA51547-STD6	108.717	106.79	100.293	96.504	107.873	99.451	98.029	107.29
16:20	MA51547-STD7	109.132	106.434	100.179	97.169	107.51	99.356	97.564	107.154
16:26	MA51547-STD8	111	107.694	99.373	97.225	109.729	99.338	97.999	109.996
16:32	MA51547-STD9	109.361	106.215	99.451	83.267	106.391	98.629	87.399	106.693
16:38	MA51547-STD10	111.222	106.754	101.505	97.373	106.423	99.284	97.774	107.509
16:44	MA51547-STD11	111.621	108.228	102.883	98.679	107.209	100.419	98.657	106.425
16:50	MA51547-STD12	112.85	109.462	105.046	100.508	108.791	102.539	99.193	107.713
17:03	MA51547-STD13	113.793	108.787	105.408	102.762	108.83	103.706	103.333	108.378
17:12	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:18	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:24	MA51547-ICVA1	114.529	112.656	108.009	105.101	111.922	106.98	103.75	111.597
17:30	MA51547-ICV1	118.999	113.144	105.664	93.882	112.588	103.621	98.172	111.255
17:36	MA51547-ICB1	115.539	109.526	105.576	99.866	109.236	103.143	101.562	109.166
17:42	MA51547-CCVA1	115.401	114.777	107.417	102.499	113.242	104.371	101.228	111.462
17:48	MA51547-CCB1	118.557	111.254	100.939	100.743	112.159	100.444	101.804	111.439
17:54	MA51547-CRI1	118.21	111.698	105.234	95.025	112.985	103.912	96.003	111.306
18:00	MA51547-ICSA1	108.06	108.78	99.059	98.664	109.667	96.467	96.469	101.212
18:06	MA51547-ICSAB1	107.654	104.488	97.706	96.004	109.309	96.563	94.643	101.799
18:12	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:18	MA51547-CCVA2	114.756	110.545	101.363	100.299	111.563	101.049	101.485	110.528
18:24	MA51547-CCB2	115.696	107.887	100.066	99.322	108.655	99.496	100.464	108.168
18:30	MP30105-MB1	115.48	105.793	96.499	97.045	107.567	96.614	98.414	107.164
18:36	MP30105-B1	116.021	109.354	98.613	99.679	109.434	97.866	99.385	109.438
18:42	MP30105-S1	113.703	107.26	97.535	98.457	107.992	96.34	98.519	106.924
18:48	MP30105-S2	115.619	108.105	97.229	92.828	108.767	97.409	94.029	108.616
18:54	JD35834-3F	117.816	107.659	97.713	100.506	108.706	96.442	101.604	108.173
19:00	MP30105-SD1	121.144	108.112	100.108	99.282	111.774	100.717	101.236	110.695
19:06	MA51547-CRI2	116.398	106.069	98.422	98.395	107.102	97.229	99.435	106.757

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
19:12	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:18	MA51547-CCVA3	116.173	108.771	99.809	98.796	108.592	99.206	99.045	108.642
19:24	MA51547-CCB3	116.848	105.307	98.533	97.509	106.119	97.89	98.922	106.348
19:30	JD35920-2	113.078	104.721	90.982	96.981	104.859	90.696	97.425	104.633
19:36	JD35920-2	118.091	105.867	96.725	96.744	109.904	96.185	98.823	108.996
19:42	JD35920-3	110.229	111.534	97.568	100.79	105.906	94.487	97.11	102.652
19:48	JD35920-3	118.693	107.858	101.935	99.771	111.584	101.401	102.023	110.568
19:54	JD35920-4	115.573	108.492	100.24	99.634	108.594	98.337	99.958	107.118
20:01	JD35920-4	117.981	106.514	101.731	97.904	109.888	101.082	99.728	110.257
20:07	JD35920-5	112.604	104.931	93.749	96.893	104.628	93.581	97.549	104.029
20:13	JD35920-5	117.645	105.269	99.475	95.9	110.493	100.401	98.188	109.709
20:19	JD35920-6	112.542	104.171	94.742	95.889	103.641	93.109	95.962	102.841
20:25	JD35920-6	116.496	105.287	99.427	96.767	108.657	98.752	98.896	107.807
20:32	MA51547-CCVA4	113.989	106.157	99.038	98.731	106.507	96.735	98.285	105.852
20:38	MA51547-CCB4	114.345	104.2	97.273	97.41	105.716	96.991	98.674	104.744
20:44	JD35920-2F	113.217	104.48	90.153	97.298	103.962	89.488	97.424	103.985
20:50	JD35920-2F	116.042	104.895	97.775	96.605	108.458	98.584	98.68	108.145
20:56	JD35920-3F	112.212	104.338	94.293	95.231	103.282	93.272	95.195	103.019
21:02	JD35920-3F	116.627	102.157	98.692	95.25	107.899	99.587	97.691	107.162
21:08	JD35920-4F	109.212	103.11	93.158	83.478	100.894	90.339	84.945	100.208
21:14	JD35920-4F	113.843	102.833	94.673	95.665	105.996	94.469	97.151	105.902
21:20	JD35920-5F	111.329	102.88	92.849	96.272	102.005	91.645	96.188	101.563
21:26	JD35920-5F	117.297	103.805	94.805	93.467	109.294	96.181	98.344	108.179
21:32	JD35920-6F	111.217	102.948	92.645	95.895	102.54	91.586	96.899	102.017
21:38	JD35920-6F	117.878	105.649	98.46	96.81	108.814	98.71	98.385	107.668
21:44	MA51547-CCVA5	114.711	106.386	97.902	98.039	107.028	96.884	98.199	106.575
21:50	MA51547-CCB5	117.253	104.34	92.63	98.197	105.432	92.769	98.979	105.366
21:56	JD35920-4	111.656	104.571	93.123	96.195	102.856	91.145	94.104	101.326
22:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:09	MA51547-CCVA6	116.135	105.848	98.277	98.268	107.067	96.855	98.82	106.903
22:15	MA51547-CCB6	118.033	105.574	97.624	99.174	107.286	97.703	101.174	106.581
22:21	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:27	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
22:33	ZZZZZZ	No results reported for the elements associated with this internal standard.							

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:44	MA51547-STD1	100	100	100	100	100	100	100	100
15:50	MA51547-STD2	100	100	100	100	100	100	100	100
15:56	MA51547-STD3	100	100	100	100	100	100	100	100
16:02	MA51547-STD4	99.106	97.95	107.15	99.802	97.568	108.065	99.821	107.884
16:08	MA51547-STD5	98.183	98.08	108.927	97.49	98.537	108.235	97.28	108.795
16:14	MA51547-STD6	99.291	97.603	107.684	98.873	98.183	107.486	99.241	108.492
16:20	MA51547-STD7	98.775	97.216	106.786	99.105	97.675	107.063	98.89	107.938
16:26	MA51547-STD8	98.978	98.173	108.1	98.506	98.464	108.333	98.244	108.308
16:32	MA51547-STD9	98.337	87.102	107.32	97.767	86.511	107.929	98.006	108.27
16:38	MA51547-STD10	99.648	98.674	107.252	98.499	97.975	108.61	99.14	108.824
16:44	MA51547-STD11	99.708	97.845	107.018	98.444	96.57	107.26	99.203	108.66
16:50	MA51547-STD12	101.792	99.026	107.016	98.273	96.437	108.469	100.655	109.692
17:03	MA51547-STD13	102.746	102.612	111.238	101.652	101.563	111.092	102.356	110.834
17:12	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:18	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:24	MA51547-ICVA1	105.865	103.661	109.402	101.901	101.211	109.888	103.768	110.746
17:30	MA51547-ICV1	102.477	97.899	114.096	102.612	98.254	113.908	102.254	113.275
17:36	MA51547-ICB1	103.053	100.785	111.97	101.31	101.425	111.425	101.554	111.233
17:42	MA51547-CCVA1	103.477	101.033	109.786	100.569	99.596	110.684	102.064	111.127
17:48	MA51547-CCB1	99.622	101.5	114.232	98.341	101.723	113.504	98.672	113.099
17:54	MA51547-CRI1	102.962	95.961	113.802	102.392	96.59	113.899	102.008	112.3
18:00	MA51547-ICSA1	91.936	92.84	97.369	85.104	87.024	97.822	83.517	103.834
18:06	MA51547-ICSAB1	93.501	91.976	97.286	86.62	86.194	97.303	85.868	105.063
18:12	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:18	MA51547-CCVA2	99.793	100.795	109.988	98.605	99.477	111.956	99.141	113.536
18:24	MA51547-CCB2	99.015	100.447	112.694	99.759	102.062	112.089	98.998	112.894
18:30	MP30105-MB1	96.18	98.486	110.959	97.349	100.512	110.708	94.665	111.991
18:36	MP30105-B1	97.856	99.707	110.417	97.875	99.996	110.553	96.518	111.403
18:42	MP30105-S1	95.706	98.807	105.922	93.876	97.282	108.494	93.972	110.376
18:48	MP30105-S2	96.514	94.691	107.168	94.992	92.01	109.891	95.437	111.817
18:54	JD35834-3F	96.58	101.18	108.788	95.497	99.05	112.442	95.377	112.091
19:00	MP30105-SD1	99.921	101.323	111.846	98.819	101.268	113.795	99.405	113.636
19:06	MA51547-CRI2	97.538	99.572	110.898	97.924	101.098	111.868	96.599	112.113

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
19:12	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:18	MA51547-CCVA3	97.713	98.65	107.021	96.635	98.191	109.43	96.388	111.433
19:24	MA51547-CCB3	97.659	99.481	110.356	97.325	101.094	111.52	95.656	111.362
19:30	JD35920-2	90.249	97.268	104.115	88.475	95.284	107.099	88.49	109.767
19:36	JD35920-2	96.035	98.368	109.821	93.866	98.2	112.341	94.504	113.619
19:42	JD35920-3	92.113	95.795	99.704	88.849	92.023	103.033	89.494	107.902
19:48	JD35920-3	101.068	101.508	111.612	98.618	99.728	113.312	99.594	113.798
19:54	JD35920-4	98.167	99.276	106.359	94.051	95.602	109.683	96.137	112.236
20:01	JD35920-4	101.384	99.68	110.934	97.986	98.733	113.629	99.56	112.634
20:07	JD35920-5	92.711	97.06	102.835	90.285	93.843	106.329	90.929	109.376
20:13	JD35920-5	99.709	98.295	110.768	97.336	98.069	112.967	98.825	112.593
20:19	JD35920-6	92.857	95.845	102.574	90.001	93.101	106.398	90.367	109.171
20:25	JD35920-6	98.235	98.713	109.117	96.4	97.241	112.721	97.37	112.896
20:32	MA51547-CCVA4	96.375	98.365	106.309	94.915	97.423	109.003	95.138	109.949
20:38	MA51547-CCB4	97.004	98.609	108.522	96.808	100.001	109.953	95.68	110.216
20:44	JD35920-2F	89.146	97.547	103.047	87.144	94.704	107.422	87.337	109.645
20:50	JD35920-2F	97.732	98.449	109.156	95.909	97.431	111.074	96.869	111.297
20:56	JD35920-3F	91.83	95.17	100.945	88.819	91.936	105.132	89.602	108.931
21:02	JD35920-3F	99.12	97.718	109.267	96.67	97.228	111.138	97.58	110.828
21:08	JD35920-4F	90.063	84.594	97.551	84.911	79.644	101.486	87.064	106.355
21:14	JD35920-4F	93.812	97.314	105.134	90.427	94.378	109.036	92.432	109.884
21:20	JD35920-5F	91.132	96.082	100.444	88.489	93.042	104.294	89.31	107.428
21:26	JD35920-5F	95.408	98.517	108.794	93.339	97.442	111.508	93.276	110.89
21:32	JD35920-6F	91.458	96.225	101.003	88.241	93.09	104.412	88.795	107.816
21:38	JD35920-6F	97.333	98.04	108.34	96.076	97.364	111.501	96.072	111.415
21:44	MA51547-CCVA5	95.677	97.959	105.476	94.006	97.209	108.684	94.257	110.003
21:50	MA51547-CCB5	91.874	98.498	109.492	92.202	99.913	110.156	90.913	110.666
21:56	JD35920-4	90.532	94.553	99.345	86.205	90.281	103.099	87.102	107.898
22:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:09	MA51547-CCVA6	96.036	99.277	106.583	94.625	98.757	109.421	94.491	109.795
22:15	MA51547-CCB6	96.616	100.385	110.3	96.912	101.757	111.051	94.932	111.551
22:21	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:27	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
22:33	ZZZZZZ	No results reported for the elements associated with this internal standard.							

! = Outside limits.

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Rhodium (103-3)	70-130 %	70-130 %
Istd#14	Indium (115-1)	70-130 %	70-130 %
Istd#15	Indium (115-2)	70-130 %	70-130 %
Istd#16	Terbium (159-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
15:44	MA51547-STD1	100	100	100	100	100	100
15:50	MA51547-STD2	100	100	100	100	100	100
15:56	MA51547-STD3	100	100	100	100	100	100
16:02	MA51547-STD4	99.683	98.83	107.266	99.726	108.131	99.108
16:08	MA51547-STD5	97.639	98.913	108.439	97.971	109.626	97.135
16:14	MA51547-STD6	99.008	99.191	107.778	99.254	108.74	98.662
16:20	MA51547-STD7	99.667	99.171	107.046	99.91	108.109	99.87
16:26	MA51547-STD8	99.721	99.947	108.306	100.003	109.259	99.838
16:32	MA51547-STD9	97.923	88.155	107.851	98.393	109.011	97.723
16:38	MA51547-STD10	99.419	100.023	107.761	99.813	108.322	98.022
16:44	MA51547-STD11	100.014	99.649	108.479	100.59	106.747	98.008
16:50	MA51547-STD12	100.857	99.964	109.212	101.428	103.666	97.464
17:03	MA51547-STD13	100.892	101.688	109.624	100.846	110.126	100.143
17:12	ZZZZZZ	No results reported for the elements associated with this internal standard.					
17:18	ZZZZZZ	No results reported for the elements associated with this internal standard.					
17:24	MA51547-ICVA1	102.735	103.523	110.229	103.57	108.436	100.562
17:30	MA51547-ICV1	101.061	98.112	112.855	100.573	113.092	100.616
17:36	MA51547-ICB1	99.953	101.539	110.404	99.732	110.987	99.303
17:42	MA51547-CCVA1	101.619	101.953	110.837	101.891	109.237	98.85
17:48	MA51547-CCB1	95.98	102.009	111.981	96.608	112.167	95.899
17:54	MA51547-CRI1	100.296	96.685	111.876	99.883	112.766	99.322
18:00	MA51547-ICSA1	89.351	95.093	103.731	90.092	91.205	82.443
18:06	MA51547-ICSAB1	92.317	94.244	104.529	92.588	91.892	85.046
18:12	ZZZZZZ	No results reported for the elements associated with this internal standard.					
18:18	MA51547-CCVA2	99.984	102.355	112.324	100.038	110.05	98.362
18:24	MA51547-CCB2	97.997	102.194	112.989	98.427	112.864	98.868
18:30	MP30105-MB1	96.227	101.367	111.166	96.593	119.493	100.392
18:36	MP30105-B1	98.143	102.771	112.104	98.192	111.353	97.565
18:42	MP30105-S1	96.27	101.027	110.477	97.067	107.732	94.255
18:48	MP30105-S2	97.313	96.186	111.598	98.205	109.165	94.806
18:54	JD35834-3F	96.764	101.491	112.103	97.082	110.388	94.964
19:00	MP30105-SD1	98.057	102.669	113.835	98.234	109.706	97.844
19:06	MA51547-CRI2	96.306	101.735	111.32	97.068	111.87	96.856

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
19:12	ZZZZZZ	No results reported for the elements associated with this internal standard.					
19:18	MA51547-CCVA3	97.984	101.253	110.669	97.847	109.047	95.88
19:24	MA51547-CCB3	96.185	101.627	111.162	95.928	111.873	96.453
19:30	JD35920-2	91.171	100.613	110.373	91.455	107.632	89.665
19:36	JD35920-2	94.547	101.054	113.017	94.705	109.502	94.866
19:42	JD35920-3	94.67	99.629	108.409	94.595	100.76	90.273
19:48	JD35920-3	99.365	102.588	113.59	99.259	94.757	96.549
19:54	JD35920-4	97.521	100.889	111.657	97.654	103.604	92.699
20:01	JD35920-4	98.608	101.363	112.29	98.957	96.969	96.297
20:07	JD35920-5	93.536	99.606	108.828	94.125	105.108	92.422
20:13	JD35920-5	98.029	100.152	111.74	98.192	99.315	96.515
20:19	JD35920-6	93.629	99.077	108.646	93.604	105.549	91.108
20:25	JD35920-6	97.284	101.042	112.079	97.741	108.907	96.777
20:32	MA51547-CCVA4	95.756	101.3	109.438	96.481	108.377	94.775
20:38	MA51547-CCB4	94.908	100.235	109.725	95.28	110.282	95.901
20:44	JD35920-2F	89.533	99.859	109.265	90.064	107.58	88.627
20:50	JD35920-2F	96.363	100.368	110.689	96.85	108.376	96.547
20:56	JD35920-3F	92.492	97.376	108.677	93.384	99.443	89.683
21:02	JD35920-3F	97.074	100.005	111.165	97.32	88.91	93.546
21:08	JD35920-4F	89.994	86.202	106.445	91.196	93.184	84.886
21:14	JD35920-4F	92.39	99.348	109.014	93	99.994	90.402
21:20	JD35920-5F	92.015	98.629	107.349	92.462	105.834	90.012
21:26	JD35920-5F	92.554	99.726	110.681	93.143	99.25	91.984
21:32	JD35920-6F	91.64	99.392	107.54	92.097	106.035	90.099
21:38	JD35920-6F	96.675	101.023	111.734	96.908	109.632	96.283
21:44	MA51547-CCVA5	96.07	101.176	109.297	95.555	106.723	94.432
21:50	MA51547-CCB5	91.152	101.199	109.604	91.63	110.816	91.747
21:56	JD35920-4	90.933	98.055	107.715	91.777	94.336	85.513
22:03	ZZZZZZ	No results reported for the elements associated with this internal standard.					
22:09	MA51547-CCVA6	95.976	101.968	109.933	97.03	107.564	94.391
22:15	MA51547-CCB6	94.703	102.109	111.211	95.382	110.639	95.881
22:21	ZZZZZZ	No results reported for the elements associated with this internal standard.					
22:27	ZZZZZZ	No results reported for the elements associated with this internal standard.					

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51547
Parameters: Al,Ba,Ca,Cr,Cu,Fe,Mg,Mn,Ni,Ag,Na,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
22:33	ZZZZZZ	No results reported for the elements associated with this internal standard.					

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#17	Terbium (159-2)	70-130 %	70-130 %
Istd#18	Terbium (159-3)	70-130 %	70-130 %
Istd#19	Holmium (165-1)	70-130 %	70-130 %
Istd#20	Holmium (165-2)	70-130 %	70-130 %
Istd#21	Bismuth (209-1)	70-130 %	70-130 %
Istd#22	Bismuth (209-2)	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51547 Units: ug/l

Time: / Sample ID:			17:36 ICB1		17:48 CCB1		18:24 CCB2		19:24 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	-0.423	<25	-0.0145	<25	0.566	<25	-0.394	<25
Antimony	2.0	.085								
Arsenic	0.50	.025	anr							
Barium	1.0	.009	-0.0111	<1.0	0.00119	<1.0	-0.00132	<1.0	-0.0107	<1.0
Beryllium	0.50	.005								
Boron	25	.85								
Cadmium	0.50	.01								
Calcium	250	3.6	-3.81	<250	-2.38	<250	-5.31	<250	-3.83	<250
Chromium	1.0	.018	-0.0510	<1.0	-0.0452	<1.0	-0.0399	<1.0	-0.0430	<1.0
Cobalt	0.50	.003								
Copper	2.0	.024	-0.0226	<2.0	-0.0184	<2.0	0.000349	<2.0	-0.0135	<2.0
Iron	25	.24	-0.434	<25	0.430	<25	2.30	<25	0.134	<25
Lead	0.50	.008								
Magnesium	250	.19	4.31	<250	4.62	<250	5.61	<250	4.38	<250
Manganese	1.0	.012	0.102	<1.0	0.0560	<1.0	0.00686	<1.0	0.00990	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	-0.0262	<1.0	0.000826	<1.0	-0.0347	<1.0	-0.0326	<1.0
Potassium	250	.78								
Selenium	0.50	.044								
Silver	0.50	.004	0.00118	<0.50	0.00399	<0.50	0.00537	<0.50	0.00341	<0.50
Sodium	250	1.5	-6.69	<250	5.73	<250	-3.77	<250	-5.91	<250
Strontium	5.0	.014								
Thallium	0.50	.002								
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	-0.000353	<1.0	0.00838	<1.0	0.00525	<1.0	0.00114	<1.0
Zinc	5.0	.078	-0.603	<5.0	-0.553	<5.0	-0.621	<5.0	-0.595	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51547 Units: ug/l

Time:			20:38		21:50		22:15	
Sample ID:			CCB4		CCB5		CCB6	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	25	.42	-0.187	<25	0.0359	<25	-0.0781	<25
Antimony	2.0	.085						
Arsenic	0.50	.025	anr					
Barium	1.0	.009	-0.00860	<1.0	-0.0114	<1.0	-0.00000443	<1.0
Beryllium	0.50	.005						
Boron	25	.85						
Cadmium	0.50	.01						
Calcium	250	3.6	-2.08	<250	0.129	<250	-0.706	<250
Chromium	1.0	.018	-0.0384	<1.0	-0.0484	<1.0	-0.0393	<1.0
Cobalt	0.50	.003						
Copper	2.0	.024	-0.0184	<2.0	-0.00907	<2.0	-0.0161	<2.0
Iron	25	.24	0.298	<25	0.367	<25	-0.225	<25
Lead	0.50	.008						
Magnesium	250	.19	4.82	<250	5.04	<250	4.60	<250
Manganese	1.0	.012	0.0293	<1.0	0.0494	<1.0	0.0286	<1.0
Molybdenum	1.0	.017						
Nickel	1.0	.017	-0.0265	<1.0	-0.00475	<1.0	-0.0320	<1.0
Potassium	250	.78						
Selenium	0.50	.044						
Silver	0.50	.004	0.0102	<0.50	0.00495	<0.50	0.00536	<0.50
Sodium	250	1.5	-4.59	<250	-3.40	<250	-3.16	<250
Strontium	5.0	.014						
Thallium	0.50	.002						
Tin	5.0	.041						
Titanium	1.0	.11						
Vanadium	1.0	.013	0.0120	<1.0	0.0109	<1.0	0.00288	<1.0
Zinc	5.0	.078	-0.628	<5.0	-0.585	<5.0	-0.603	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51547 Units: ug/l

Time:		17:24			17:30			17:42	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	5570	101.3	60	60.6	101.0	5000	5260	105.2
Antimony									
Arsenic	anr								
Barium	60	57.6	96.0				50	50.9	101.8
Beryllium									
Boron									
Cadmium									
Calcium	5500	5430	98.7				5000	5170	103.4
Chromium	60	56.4	94.0				50	50.5	101.0
Cobalt									
Copper	60	55.3	92.2				50	49.9	99.8
Iron	5500	5450	99.1				5000	5230	104.6
Lead									
Magnesium	5500	5520	100.4				5000	5250	105.0
Manganese	60	56.0	93.3				50	50.0	100.0
Molybdenum									
Nickel	60	55.5	92.5				50	49.7	99.4
Potassium									
Selenium									
Silver	60	57.8	96.3				50	49.8	99.6
Sodium	5500	5550	100.9				5000	5270	105.4
Strontium									
Thallium									
Tin									
Titanium									
Vanadium	60	57.2	95.3				50	51.3	102.6
Zinc	60	54.1	90.2				50	48.7	97.4

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51547 Units: ug/l

Time:		18:18			19:18			20:32	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	5280	105.6	5000	5240	104.8	5000	5170	103.4
Antimony									
Arsenic	anr								
Barium	50	50.3	100.6	50	50.0	100.0	50	49.7	99.4
Beryllium									
Boron									
Cadmium									
Calcium	5000	5250	105.0	5000	5280	105.6	5000	5190	103.8
Chromium	50	51.6	103.2	50	51.1	102.2	50	50.6	101.2
Cobalt									
Copper	50	51.7	103.4	50	51.2	102.4	50	50.5	101.0
Iron	5000	5420	108.4	5000	5330	106.6	5000	5290	105.8
Lead									
Magnesium	5000	5300	106.0	5000	5300	106.0	5000	5220	104.4
Manganese	50	51.4	102.8	50	50.6	101.2	50	50.0	100.0
Molybdenum									
Nickel	50	50.8	101.6	50	50.3	100.6	50	49.8	99.6
Potassium									
Selenium									
Silver	50	49.3	98.6	50	49.3	98.6	50	48.8	97.6
Sodium	5000	5300	106.0	5000	5300	106.0	5000	5230	104.6
Strontium									
Thallium									
Tin									
Titanium									
Vanadium	50	52.1	104.2	50	51.4	102.8	50	51.0	102.0
Zinc	50	50.5	101.0	50	50.7	101.4	50	49.5	99.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51547 Units: ug/l

Time:		21:44			22:09	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	5200	104.0	5000	5200	104.0
Antimony						
Arsenic	anr					
Barium	50	49.6	99.2	50	51.2	102.4
Beryllium						
Boron						
Cadmium						
Calcium	5000	5210	104.2	5000	5450	109.0
Chromium	50	50.4	100.8	50	51.2	102.4
Cobalt						
Copper	50	50.2	100.4	50	50.9	101.8
Iron	5000	5320	106.4	5000	5330	106.6
Lead						
Magnesium	5000	5260	105.2	5000	5250	105.0
Manganese	50	50.3	100.6	50	51.1	102.2
Molybdenum						
Nickel	50	50.1	100.2	50	50.3	100.6
Potassium						
Selenium						
Silver	50	48.3	96.6	50	49.1	98.2
Sodium	5000	5260	105.2	5000	5250	105.0
Strontium						
Thallium						
Tin						
Titanium						
Vanadium	50	51.2	102.4	50	51.6	103.2
Zinc	50	49.9	99.8	50	49.7	99.4

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51547 Units: ug/l

Time:			17:54		19:06	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	25	25	25.5	102.0	25.1	100.4
Antimony	2.0	0.25				
Arsenic	0.50	0.50	anr			
Barium	1.0	0.50	0.954	95.4	0.883	88.3
Beryllium	0.50	0.25				
Boron	25	2.5				
Cadmium	0.50	0.25				
Calcium	250	125	242	96.8	243	97.2
Chromium	1.0	2.0	0.936	93.6	0.922	92.2
Cobalt	0.50	0.25				
Copper	2.0	2.0	1.89	94.5	1.91	95.5
Iron	25	25	25.8	103.2	26.4	105.6
Lead	0.50	0.25				
Magnesium	250	125	248	99.2	251	100.4
Manganese	1.0	0.25	0.993	99.3	0.982	98.2
Molybdenum	1.0	0.50				
Nickel	1.0	2.0	0.904	90.4	0.930	93.0
Potassium	250	125				
Selenium	0.50	0.50				
Silver	0.50	1.0	0.571	114.2	0.559	111.8
Sodium	250	125	240	96.0	241	96.4
Strontium	5.0	0.50				
Thallium	0.50	0.25				
Tin	5.0	0.50				
Titanium	1.0	0.50				
Vanadium	1.0	2.0	0.978	97.8	0.969	96.9
Zinc	5.0	2.0	4.94	98.8	4.96	99.2

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120621M2.CSV Date Analyzed: 12/06/21 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51547 Units: ug/l

Time:			18:00		18:06	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	98700	98.7	96500	96.5
Antimony			0.0792		0.0701	
Arsenic		20	0.0906		18.7	93.5
Barium			0.117		0.154	
Beryllium			-0.00224		-0.00783	
Boron		50	3.73		52.2	104.4
Cadmium		20	-0.0781		18.8	94.0
Calcium	100000	100000	95100	95.1	98900	98.9
Chromium		20	0.842		20.0	100.0
Cobalt		20	0.133		18.5	92.5
Copper		20	0.157		17.9	89.5
Iron	100000	100000	96700	96.7	95600	95.6
Lead			0.0427		0.0515	
Magnesium	100000	100000	96400	96.4	94800	94.8
Manganese		20	0.337		18.9	94.5
Molybdenum	2000	2000	2230	111.5	2250	112.5
Nickel		20	0.556		18.5	92.5
Potassium	100000	100000	100000	100.0	97900	97.9
Selenium		20	-0.285		18.9	94.5
Silver		20	0.403		18.4	92.0
Sodium	100000	100000	99500	99.5	97500	97.5
Strontium	2000	2000	2150	107.5	2200	110.0
Thallium			0.00867		0.00622	
Tin	2000	2000	2220	111.0	2140	107.0
Titanium	2000	2000	1950	97.5	1910	95.5
Vanadium		20	0.0415		22.9	114.5
Zinc		20	0.476		18.6	93.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51563
Parameters: Mg,Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:57	MA51563-STD1	1		Sample introduction not stable, see rerun.
10:03	MA51563-STD2	1		Sample introduction not stable, see rerun.
10:09	MA51563-STD3	1		STDA
10:15	MA51563-STD4	1		STDB
10:21	MA51563-STD5	1		STDC
10:27	MA51563-STD6	1		STDD
10:33	MA51563-STD7	1		STDE
10:39	MA51563-STD8	1		STDF
10:45	MA51563-STD9	1		STDG
10:51	MA51563-STD10	1		STDH
10:57	MA51563-STD11	1		STDI
11:03	MA51563-STD12	1		STDJ
11:20	ZZZZZZ	1		
11:26	ZZZZZZ	1		
11:32	MA51563-ICVA1	1		
11:38	MA51563-ICV1	1		
11:45	MA51563-ICB1	1		
11:51	MA51563-CCVA1	1		
11:57	MA51563-CCB1	1		
12:03	MA51563-CRI1	1		
12:09	ZZZZZZ	25		
12:15	ZZZZZZ	25		
12:21	ZZZZZZ	1		
12:27	MA51563-ICSA1	1		
12:33	MA51563-ICSAB1	1		
12:50	ZZZZZZ	1		
12:56	MA51563-CCVA2	1		
13:02	MA51563-CCB2	1		
13:08	ZZZZZZ	2		
13:14	ZZZZZZ	2		
13:20	JD35920-4F	25		
13:27	JD35920-5	25		
13:33	JD35920-5F	25		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51563
Parameters: Mg,Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:39	JD35920-5	2		
13:45	JD35920-5F	2		
---------->	Last reportable sample/prep for job JD35920			
13:51	ZZZZZZ	5		
13:57	ZZZZZZ	5		
14:03	MA51563-CCVA3	1		
14:09	MA51563-CCB3	1		
---------->	Last reportable CCB for job JD35920			
14:15	ZZZZZZ	2		
14:21	MA51563-CCVA4	1		
14:28	MA51563-CCB4	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51563
Parameters: Mg,Na

Time	Sample Description	Element: Dilution	M g	N a
11:20	ZZZZZZ	1		
11:26	ZZZZZZ	1		
11:32	MA51563-ICVA1	1	X	X
11:38	MA51563-ICV1	1		
11:45	MA51563-ICB1	1	X	X
11:51	MA51563-CCVA1	1	X	X
11:57	MA51563-CCB1	1	X	X
12:03	MA51563-CRI1	1	X	X
12:09	ZZZZZZ	25		
12:15	ZZZZZZ	25		
12:21	ZZZZZZ	1		
12:27	MA51563-ICSA1	1	X	X
12:33	MA51563-ICSAB1	1	X	X
12:50	ZZZZZZ	1		
12:56	MA51563-CCVA2	1	X	X
13:02	MA51563-CCB2	1	X	X
13:08	ZZZZZZ	2		
13:14	ZZZZZZ	2		
13:20	JD35920-4F	25		X
13:27	JD35920-5	25	X	X
13:33	JD35920-5F	25	X	X
13:39	JD35920-5	2		
13:45	JD35920-5F	2		
13:51	ZZZZZZ	5		
13:57	ZZZZZZ	5		
14:03	MA51563-CCVA3	1	X	X
14:09	MA51563-CCB3	1	X	X
14:15	ZZZZZZ	2		
14:21	MA51563-CCVA4	1	X	X
14:28	MA51563-CCB4	1	X	X
		Element:	M g	N a

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51563
Parameters: Mg,Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
09:57	MA51563-STD1	100	100	100	100	100	100	100	100
10:03	MA51563-STD2	100	100	100	100	100	100	100	100
10:09	MA51563-STD3	100	100	100	100	100	100	100	100
10:15	MA51563-STD4	99.435	99.612	100.563	101.833	100.192	100.41	100.674	99.978
10:21	MA51563-STD5	100.917	101.13	102.385	101.128	101.114	101.998	100.407	101.934
10:27	MA51563-STD6	100.513	100.511	99.071	101.62	100.8	98.87	100.406	100.828
10:33	MA51563-STD7	99.193	101.05	96.157	101.291	100.697	97.085	100.274	100.806
10:39	MA51563-STD8	100.836	101.189	101.301	101.189	102.004	100.87	100.533	102.044
10:45	MA51563-STD9	100.126	98.444	101.256	102.639	97.982	101.861	100.703	98.807
10:51	MA51563-STD10	101.418	100.875	101.895	102.218	99.911	102.023	100.821	100.183
10:57	MA51563-STD11	101.413	101.566	102.936	102.162	99.754	101.633	100.616	99.201
11:03	MA51563-STD12	101.23	101.878	104.777	103.722	100.261	103.156	100.868	99.86
11:20	ZZZZZZ	No results reported for the elements associated with this internal standard.							
11:26	ZZZZZZ	No results reported for the elements associated with this internal standard.							
11:32	MA51563-ICVA1	102.835	103.422	106.663	104.652	102.134	105.542	102.213	103.498
11:38	MA51563-ICV1	103.865	101.77	104.423	103.212	100.693	103.604	102.032	100.779
11:45	MA51563-ICB1	105.481	101.163	104.586	103.304	100.583	104.067	102.003	100.229
11:51	MA51563-CCVA1	103.181	103.583	106.188	103.395	102.323	105.228	100.838	102.557
11:57	MA51563-CCB1	103.544	100.985	104.207	102.863	100.484	104.143	101.81	100.951
12:03	MA51563-CRI1	105.453	101.149	100.013	104.541	100.881	99.966	103.027	101.762
12:09	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:15	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:21	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:27	MA51563-ICSA1	93.975	97.477	99.469	97.135	98.032	97.591	94.133	91.011
12:33	MA51563-ICSAB1	94.057	93.983	95.163	95.952	98.231	96.141	93.937	91.385
12:50	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:56	MA51563-CCVA2	104.777	104.785	104.827	106.022	103.617	103.546	102.893	103.362
13:02	MA51563-CCB2	106.099	102.476	98.492	104.794	101.646	99.926	103.494	101.386
13:08	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:14	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:20	JD35920-4F	108.553	101.678	104.646	103.037	104.518	106.312	103.127	105.409
13:27	JD35920-5	105.204	99.427	103.07	101.506	102.339	104.124	101.573	102.553
13:33	JD35920-5F	103.433	97.472	103.053	101.272	99.843	104.281	101.828	100.212

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51563
Parameters: Mg,Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:39	JD35920-5	100.781	100.407	98.287	101.642	97.839	98.513	99.299	98.519
13:45	JD35920-5F	102.889	101.822	98.543	102.361	98.458	97.259	99.289	98.397
13:51	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:57	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:03	MA51563-CCVA3	105.039	103.186	103.718	105.254	101.432	102.092	101.675	101.514
14:09	MA51563-CCB3	107.515	101.924	101.515	103.138	100.423	100.877	103.048	100.557
14:15	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:21	MA51563-CCVA4	108.377	104.877	113.105	107.096	103.598	109.929	105.019	104.593
14:28	MA51563-CCB4	96.941	91.318	103.521	105.564	90.571	104.281	102.973	91.158

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51563
Parameters: Mg,Na

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
09:57	MA51563-STD1	100	100	100	100	100	100	100	100
10:03	MA51563-STD2	100	100	100	100	100	100	100	100
10:09	MA51563-STD3	100	100	100	100	100	100	100	100
10:15	MA51563-STD4	99.2	100.886	100.315	100.582	100.678	99.877	101.24	99.795
10:21	MA51563-STD5	101.019	101.092	101.066	102.547	100.808	101.288	102.202	100.661
10:27	MA51563-STD6	97.954	100.86	99.926	98.779	100.836	99.76	98.961	100.152
10:33	MA51563-STD7	96.406	100.553	99.81	96.836	100.636	99.941	97.028	100.105
10:39	MA51563-STD8	99.998	100.416	100.028	101.444	100.112	99.948	101.305	100.107
10:45	MA51563-STD9	101.509	101.7	98.829	101.675	100.519	99.076	101.871	99.346
10:51	MA51563-STD10	101.543	101.619	99.716	101.476	100.111	100.516	102.119	100.309
10:57	MA51563-STD11	100.563	100.87	98.29	100.057	97.991	99.5	101.524	101.336
11:03	MA51563-STD12	101.907	101.072	98.281	100.283	97.736	99.429	102.267	100.976
11:20	ZZZZZZ	No results reported for the elements associated with this internal standard.							
11:26	ZZZZZZ	No results reported for the elements associated with this internal standard.							
11:32	MA51563-ICVA1	104.622	102.316	99.027	102.252	98.958	100.101	105.308	100.422
11:38	MA51563-ICV1	103.092	102.456	102.407	102.809	101.455	101.644	103.569	101.399
11:45	MA51563-ICB1	103.267	101.981	103.032	102.88	101.115	101.967	103.8	102.275
11:51	MA51563-CCVA1	103.734	101.828	98.732	101.733	98.134	99.918	104.417	100.312
11:57	MA51563-CCB1	103.749	102.096	102.043	103.16	100.98	100.822	103.868	100.706
12:03	MA51563-CRI1	99.389	102.723	102.253	99.254	101.706	102.225	99.761	101.335
12:09	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:15	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:21	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:27	MA51563-ICSA1	93.421	90.669	82.699	87.532	84.243	86.373	88.067	93.052
12:33	MA51563-ICSAB1	92.697	90.389	82.391	87.299	84.398	86.687	87.092	93.913
12:50	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:56	MA51563-CCVA2	103.589	103.359	101.685	102.589	100.663	102.47	103.938	104.15
13:02	MA51563-CCB2	98.599	104.019	102.724	99.135	103.156	102.969	99.881	104.562
13:08	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:14	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:20	JD35920-4F	105.482	103.043	104.128	103.218	99.969	105.834	106.483	106.371
13:27	JD35920-5	103.779	101.814	102.034	101.89	99.853	103.139	104.232	103.527
13:33	JD35920-5F	102.792	101.982	100.412	101.034	99.987	101.749	103.583	102.832

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51563
Parameters: Mg,Na

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:39	JD35920-5	97.311	99.656	95.257	94.322	95.169	97.124	96.828	99.842
13:45	JD35920-5F	96.441	99.74	95.266	94.408	94.865	98.583	96.205	101.926
13:51	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:57	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:03	MA51563-CCVA3	101.357	102.242	98.893	100.494	100.379	101.434	102.155	103.614
14:09	MA51563-CCB3	100.262	103.31	103.259	99.925	103.134	104.198	101.091	104.673
14:15	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:21	MA51563-CCVA4	107.973	105.109	101.929	107.79	101.986	103.475	109.619	105.518
14:28	MA51563-CCB4	103.426	104.074	92.367	103.012	103.248	90.802	103.454	94.016

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Rhodium (103-3)	70-130 %	70-130 %
Istd#14	Indium (115-1)	70-130 %	70-130 %
Istd#15	Indium (115-2)	70-130 %	70-130 %
Istd#16	Terbium (159-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51563
Parameters: Mg,Na

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
09:57	MA51563-STD1	100	100	100	100	100	100
10:03	MA51563-STD2	100	100	100	100	100	100
10:09	MA51563-STD3	100	100	100	100	100	100
10:15	MA51563-STD4	100.855	100.144	99.803	100.99	99.971	100.155
10:21	MA51563-STD5	101.799	100.783	100.245	101.923	101.296	101.98
10:27	MA51563-STD6	99.427	100.784	99.734	99.852	101.652	98.633
10:33	MA51563-STD7	97.326	101.063	100.173	97.687	102.244	97.386
10:39	MA51563-STD8	102.269	101.062	100.51	102.165	104.322	102.05
10:45	MA51563-STD9	102.394	101.726	99.257	102.03	100.613	101.464
10:51	MA51563-STD10	102.769	101.808	99.958	102.406	99.412	101.299
10:57	MA51563-STD11	102.88	101.384	101.122	101.958	98.932	99.727
11:03	MA51563-STD12	103.475	101.31	100.554	103.296	97.839	98.928
11:20	ZZZZZZ	No results reported for the elements associated with this internal standard.					
11:26	ZZZZZZ	No results reported for the elements associated with this internal standard.					
11:32	MA51563-ICVA1	105.343	102.355	100.65	104.932	100.114	101.856
11:38	MA51563-ICV1	103.403	102.022	101.298	102.425	100.658	101.644
11:45	MA51563-ICB1	102.775	101.917	101.459	101.78	99.194	101.517
11:51	MA51563-CCVA1	104.147	101.548	100.844	103.453	99.798	100.974
11:57	MA51563-CCB1	102.757	101.823	100.795	102.212	101.664	101.199
12:03	MA51563-CRI1	98.815	102.646	101.905	98.325	100.08	97.054
12:09	ZZZZZZ	No results reported for the elements associated with this internal standard.					
12:15	ZZZZZZ	No results reported for the elements associated with this internal standard.					
12:21	ZZZZZZ	No results reported for the elements associated with this internal standard.					
12:27	MA51563-ICSA1	94.954	93.711	93.175	94.757	87.391	87.08
12:33	MA51563-ICSAB1	95.261	94.211	94.281	95.477	87.346	87.617
12:50	ZZZZZZ	No results reported for the elements associated with this internal standard.					
12:56	MA51563-CCVA2	105.156	104.376	104.576	105.427	102.151	102.619
13:02	MA51563-CCB2	99.382	104.278	104.146	99.904	101.855	98.787
13:08	ZZZZZZ	No results reported for the elements associated with this internal standard.					
13:14	ZZZZZZ	No results reported for the elements associated with this internal standard.					
13:20	JD35920-4F	105.685	103.734	106.647	106.197	92.333	100.634
13:27	JD35920-5	103.61	102.555	104.157	103.405	94.21	100.769
13:33	JD35920-5F	103.554	103.14	103.327	103.453	93.035	100.91

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51563
Parameters: Mg,Na

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
13:39	JD35920-5	100.206	102.213	100.111	100.258	98.177	97.637
13:45	JD35920-5F	99.715	101.928	102.558	99.562	97.359	95.758
13:51	ZZZZZZ	No results reported for the elements associated with this internal standard.					
13:57	ZZZZZZ	No results reported for the elements associated with this internal standard.					
14:03	MA51563-CCVA3	105.099	104.957	104.187	104.877	101.12	101.465
14:09	MA51563-CCB3	100.56	104.797	104.93	100.844	103.263	100.084
14:15	ZZZZZZ	No results reported for the elements associated with this internal standard.					
14:21	MA51563-CCVA4	111.804	106.063	106.439	111.532	102.636	107.343
14:28	MA51563-CCB4	103.131	104.891	94.528	103.145	90.975	102.224

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	70-130 %	70-130 %
Istd#18	Terbium (159-3)	70-130 %	70-130 %
Istd#19	Holmium (165-1)	70-130 %	70-130 %
Istd#20	Holmium (165-2)	70-130 %	70-130 %
Istd#21	Bismuth (209-1)	70-130 %	70-130 %
Istd#22	Bismuth (209-2)	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51563 Units: ug/l

Time:			11:45		11:57		13:02		14:09	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42								
Antimony	2.0	.085								
Arsenic	0.50	.025								
Barium	1.0	.009								
Beryllium	0.50	.005								
Boron	25	.85								
Cadmium	0.50	.01								
Calcium	250	3.6								
Chromium	1.0	.018								
Cobalt	0.50	.003								
Copper	2.0	.024	anr							
Iron	25	.24								
Lead	0.50	.008								
Magnesium	250	.19	-7.41	<250	-7.22	<250	-6.83	<250	-6.75	<250
Manganese	1.0	.012								
Molybdenum	1.0	.017								
Nickel	1.0	.017								
Potassium	250	.78								
Selenium	0.50	.044								
Silver	0.50	.004								
Sodium	250	1.5	0.151	<250	0.689	<250	2.14	<250	1.93	<250
Strontium	5.0	.014								
Thallium	0.50	.002								
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013								
Zinc	5.0	.078								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51563 Units: ug/l

Time:		11:32			11:38			11:51	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper	anr								
Iron									
Lead									
Magnesium	5500	5540	100.7				5000	5390	107.8
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium	5500	5410	98.4				5000	5310	106.2
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51563 Units: ug/l

Time:		12:56			14:03	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper	anr					
Iron						
Lead						
Magnesium	5000	5330	106.6	5000	5360	107.2
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium	5000	5290	105.8	5000	5330	106.6
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51563 Units: ug/l

Time:			12:03	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25		
Antimony	2.0	0.25		
Arsenic	0.50	0.50		
Barium	1.0	0.50		
Beryllium	0.50	0.25		
Boron	25	2.5		
Cadmium	0.50	0.25		
Calcium	250	125		
Chromium	1.0	2.0		
Cobalt	0.50	0.25		
Copper	2.0	2.0	anr	
Iron	25	25		
Lead	0.50	0.25		
Magnesium	250	125	254	101.6
Manganese	1.0	0.25		
Molybdenum	1.0	0.50		
Nickel	1.0	2.0		
Potassium	250	125		
Selenium	0.50	0.50		
Silver	0.50	1.0		
Sodium	250	125	258	103.2
Strontium	5.0	0.50		
Thallium	0.50	0.25		
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0		
Zinc	5.0	2.0		

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120721M1.CSV Date Analyzed: 12/07/21 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51563 Units: ug/l

Time:			12:27		12:33	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	93800	93.8	95500	95.5
Antimony			0.0808		0.0616	
Arsenic		20	0.0644		18.7	93.5
Barium			0.147		0.125	
Beryllium			-0.00621		-0.00851	
Boron		50	0.786		48.4	96.8
Cadmium		20	-0.00830		18.8	94.0
Calcium	100000	100000	95400	95.4	97900	97.9
Chromium		20	0.414		19.5	97.5
Cobalt		20	0.118		18.3	91.5
Copper		20	0.140		17.5	87.5
Iron	100000	100000	91600	91.6	94500	94.5
Lead			0.0259		0.0272	
Magnesium	100000	100000	92600	92.6	94200	94.2
Manganese		20	0.221		18.9	94.5
Molybdenum	2000	2000	2320	116.0	2330	116.5
Nickel		20	0.525		18.4	92.0
Potassium	100000	100000	94000	94.0	96200	96.2
Selenium		20	0.173		19.4	97.0
Silver		20	0.187		19.7	98.5
Sodium	100000	100000	92700	92.7	94400	94.4
Strontium	2000	2000	2230	111.5	2370	118.5
Thallium			0.000284		-0.000314	
Tin	2000	2000	1950	97.5	1950	97.5
Titanium	2000	2000	1800	90.0	1850	92.5
Vanadium		20	0.0221		21.1	105.5
Zinc		20	-0.635		16.4	82.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:25	MA51567-STD1	1		Sample introduction not stable, see rerun.
10:29	MA51567-STD2	1		Sample introduction not stable, see rerun.
10:32	MA51567-STD3	1		STDA
10:36	MA51567-STD4	1		STDB
10:39	MA51567-STD5	1		STDC
10:42	MA51567-STD6	1		STDD
10:45	MA51567-STD7	1		STDE
10:48	MA51567-STD8	1		STDF
10:52	MA51567-STD9	1		STDG
10:55	MA51567-STD10	1		STDH
10:58	MA51567-STD11	1		STDI
11:01	MA51567-STD12	1		STDJ
11:12	ZZZZZZ	1		
11:15	ZZZZZZ	1		
11:19	ZZZZZZ	1		
11:22	MA51567-ICVA1	1		
11:25	MA51567-ICV1	1		
11:50	MA51567-ICB1	1		
11:53	MA51567-CCV1	1		
11:57	MA51567-CCB1	1		
12:00	MA51567-CRI1	1		
12:04	MA51567-CRI2	1		
12:08	MA51567-ICSA1	1		see rerun
12:11	MA51567-ICSAB1	1		see rerun
12:25	ZZZZZZ	1		
12:32	ZZZZZZ	1		
12:35	MA51567-CCV2	1		
12:39	MA51567-CCB2	1		
13:01	MA51567-ICSA2	1		
13:04	MA51567-ICSAB2	1		
13:07	ZZZZZZ	1		
13:10	MA51567-CCV3	1		
13:15	MA51567-CCB3	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:18	MP30202-MB1	5		
13:22	MP30202-B1	5		
13:25	MP30202-PS1	5		
13:28	MP30202-S1	5		
13:31	MP30202-S2	5		
13:35	JD36076-1	5		(sample used for QC only; not part of login JD35920)
13:38	MP30202-SD1	25		
13:41	ZZZZZZ	5		
13:45	ZZZZZZ	1		
13:48	MA51567-CCV4	1		
13:51	MA51567-CCB4	1		
13:55	ZZZZZZ	5		
13:58	MP30202-S1	20		
14:02	MP30202-S2	20		
14:05	JD36076-1	20		(sample used for QC only; not part of login JD35920)
14:08	MP30202-SD1	100		
14:12	ZZZZZZ	2		
14:15	ZZZZZZ	2		
14:19	ZZZZZZ	2		
14:22	ZZZZZZ	2		
14:25	MA51567-CCV5	1		
14:28	MA51567-CCB5	1		
14:32	MP30210-MB1	2		Batch to reanalyze for GEQS wit CRI AND ICSAB/ICSA at the beginig and the end
14:36	MP30210-B1	2		
14:39	MP30210-S1	2		
14:43	MP30210-S2	2		
14:46	JD36149-6F	2		(sample used for QC only; not part of login JD35920)
14:49	MP30210-SD1	10		
14:53	ZZZZZZ	2		
14:56	ZZZZZZ	2		
14:59	ZZZZZZ	1		
15:03	MA51567-CCV6	1		
15:06	MA51567-CCB6	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:09	ZZZZZZ	2		
15:13	ZZZZZZ	2		
15:16	ZZZZZZ	2		
15:19	ZZZZZZ	2		
15:22	ZZZZZZ	50		
15:26	ZZZZZZ	2		
15:29	ZZZZZZ	50		
15:33	ZZZZZZ	500		
15:37	ZZZZZZ	2		
15:40	MA51567-CCV7	1		
15:43	MA51567-CCB7	1		
15:46	ZZZZZZ	50		
15:50	ZZZZZZ	2		
15:53	ZZZZZZ	2		
15:56	ZZZZZZ	50		
16:00	ZZZZZZ	2		
16:03	ZZZZZZ	2		
16:06	ZZZZZZ	20		
16:09	ZZZZZZ	2		
16:13	MP30210-S1	10		
16:16	MP30210-S2	10		
16:19	MA51567-CCV8	1		
16:23	MA51567-CCB8	1		
16:26	JD36149-6F	10		(sample used for QC only; not part of login JD35920)
16:29	MP30210-SD1	50		
16:32	MA51567-CRI3	1		
16:36	ZZZZZZ	1		
16:39	ZZZZZZ	2		
16:42	MA51567-CCV9	1		
16:45	MA51567-CCB9	1		
16:49	ZZZZZZ	2		
16:52	MP30243-B1	2		
16:55	MP30243-S1	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	16:59	MP30243-S2	2		
	17:02	JD35920-5	2		
	17:05	MP30243-SD1	10		
	17:08	JD35920-5F	2		
	17:12	MP30243-SD1	10		
---------->		Last reportable sample/prep for job JD35920			
	17:15	ZZZZZZ	1		
	17:18	MA51567-CCV10	1		
	17:21	MA51567-CCB10	1		
---------->		Last reportable CCB for job JD35920			
	17:25	MP30277-MB1	1		
	17:28	MP30277-B1	1		
	17:31	ZZZZZZ	1		
	17:34	MP30278-MB1	2		
	17:38	MP30278-B1	2		
	17:41	ZZZZZZ	2		
	17:44	MP30279-MB1	5		
	17:48	MP30279-B1	5		
	17:51	ZZZZZZ	5		
	17:54	MA51567-CCV11	1		
	17:57	MA51567-CCB11	1		
	18:01	ZZZZZZ	2		
	18:04	MP30244-B1	2		
	18:07	MP30244-S1	2		Ca high
	18:10	MP30244-S2	2		Ca high
	18:14	JD36168-2	2		(sample used for QC only; not part of login JD35920)
	18:17	MP30244-SD1	10		Ca high
	18:20	ZZZZZZ	2		
	18:24	ZZZZZZ	2		
	18:27	ZZZZZZ	2		
	18:30	MP30244-MB1	2		Cu>1/2 RL. rerun low hits
	18:33	MA51567-CCV12	1		
	18:36	MA51567-CCB12	1		
	18:40	ZZZZZZ	2		
	18:43	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:46	ZZZZZZ	2		
18:50	ZZZZZZ	2		
18:53	ZZZZZZ	2		
18:56	ZZZZZZ	2		
18:59	ZZZZZZ	2		
19:03	ZZZZZZ	2		
19:06	ZZZZZZ	1		
19:09	MA51567-CCV13	1		
19:12	MA51567-CCB13	1		
19:16	ZZZZZZ	2		
19:19	ZZZZZZ	2		
19:22	ZZZZZZ	2		
19:25	ZZZZZZ	2		
19:29	ZZZZZZ	2		
19:32	ZZZZZZ	2		
19:35	ZZZZZZ	2		
19:39	ZZZZZZ	1		
19:42	MA51567-CCV14	1		
19:45	MA51567-CCB14	1		
19:48	ZZZZZZ	1		
19:51	ZZZZZZ	1		
19:55	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Element: Dilution	Cu	
11:12	ZZZZZZ	1		
11:15	ZZZZZZ	1		
11:19	ZZZZZZ	1		
11:22	MA51567-ICVA1	1	X	
11:25	MA51567-ICV1	1	X	
11:50	MA51567-ICB1	1	X	
11:53	MA51567-CCV1	1	X	
11:57	MA51567-CCB1	1	X	
12:00	MA51567-CRI1	1		
12:04	MA51567-CRI2	1	X	
12:08	MA51567-ICSA1	1	see rerun	
12:11	MA51567-ICSAB1	1	see rerun	
12:25	ZZZZZZ	1		
12:32	ZZZZZZ	1		
12:35	MA51567-CCV2	1	X	
12:39	MA51567-CCB2	1	X	
13:01	MA51567-ICSA2	1	X	
13:04	MA51567-ICSAB2	1	X	
13:07	ZZZZZZ	1		
13:10	MA51567-CCV3	1	X	
13:15	MA51567-CCB3	1	X	
13:18	MP30202-MB1	5		
13:22	MP30202-B1	5		
13:25	MP30202-PS1	5		
13:28	MP30202-S1	5		
13:31	MP30202-S2	5		
13:35	JD36076-1	5		(a)
13:38	MP30202-SD1	25		
13:41	ZZZZZZ	5		
13:45	ZZZZZZ	1		
13:48	MA51567-CCV4	1	X	
13:51	MA51567-CCB4	1	X	
13:55	ZZZZZZ	5		
		Element:	Cu	

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Element: Dilution	C u	
13:58	MP30202-S1	20		
14:02	MP30202-S2	20		
14:05	JD36076-1	20		(a)
14:08	MP30202-SD1	100		
14:12	ZZZZZZ	2		
14:15	ZZZZZZ	2		
14:19	ZZZZZZ	2		
14:22	ZZZZZZ	2		
14:25	MA51567-CCV5	1	X	
14:28	MA51567-CCB5	1	X	
14:32	MP30210-MB1	2		Batch to reanalyze for GEQS wit CRI AND ICSAB/ICSA at the beginig and the end
14:36	MP30210-B1	2		
14:39	MP30210-S1	2		
14:43	MP30210-S2	2		
14:46	JD36149-6F	2		
14:49	MP30210-SD1	10		
14:53	ZZZZZZ	2		
14:56	ZZZZZZ	2		
14:59	ZZZZZZ	1		
15:03	MA51567-CCV6	1	X	
15:06	MA51567-CCB6	1	X	
15:09	ZZZZZZ	2		
15:13	ZZZZZZ	2		
15:16	ZZZZZZ	2		
15:19	ZZZZZZ	2		
15:22	ZZZZZZ	50		
15:26	ZZZZZZ	2		
15:29	ZZZZZZ	50		
15:33	ZZZZZZ	500		
15:37	ZZZZZZ	2		
15:40	MA51567-CCV7	1	X	
15:43	MA51567-CCB7	1	X	
15:46	ZZZZZZ	50		
		Element:	C u	

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Element: Dilution	Cu
15:50	ZZZZZZ	2	
15:53	ZZZZZZ	2	
15:56	ZZZZZZ	50	
16:00	ZZZZZZ	2	
16:03	ZZZZZZ	2	
16:06	ZZZZZZ	20	
16:09	ZZZZZZ	2	
16:13	MP30210-S1	10	
16:16	MP30210-S2	10	
16:19	MA51567-CCV8	1	X
16:23	MA51567-CCB8	1	X
16:26	JD36149-6F	10	
16:29	MP30210-SD1	50	
16:32	MA51567-CRI3	1	X
16:36	ZZZZZZ	1	
16:39	ZZZZZZ	2	
16:42	MA51567-CCV9	1	X
16:45	MA51567-CCB9	1	X
16:49	ZZZZZZ	2	
16:52	MP30243-B1	2	X
16:55	MP30243-S1	2	X
16:59	MP30243-S2	2	X
17:02	JD35920-5	2	X
17:05	MP30243-SD1	10	
17:08	JD35920-5F	2	X
17:12	MP30243-SD1	10	X
17:15	ZZZZZZ	1	
17:18	MA51567-CCV10	1	X
17:21	MA51567-CCB10	1	X
17:25	MP30277-MB1	1	X
17:28	MP30277-B1	1	X
17:31	ZZZZZZ	1	
17:34	MP30278-MB1	2	X
		Element:	Cu

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Element: Dilution	Cu	
17:38	MP30278-B1	2	X	
17:41	ZZZZZZ	2		
17:44	MP30279-MB1	5	X	
17:48	MP30279-B1	5	X	
17:51	ZZZZZZ	5		
17:54	MA51567-CCV11	1	X	
17:57	MA51567-CCB11	1	X	
18:01	ZZZZZZ	2		
18:04	MP30244-B1	2	X	
18:07	MP30244-S1	2	X	
18:10	MP30244-S2	2	X	
18:14	JD36168-2	2		(a)
18:17	MP30244-SD1	10	X	
18:20	ZZZZZZ	2		
18:24	ZZZZZZ	2		
18:27	ZZZZZZ	2		
18:30	MP30244-MB1	2		
18:33	MA51567-CCV12	1	X	
18:36	MA51567-CCB12	1	X	
18:40	ZZZZZZ	2		
18:43	ZZZZZZ	2		
18:46	ZZZZZZ	2		
18:50	ZZZZZZ	2		
18:53	ZZZZZZ	2		
18:56	ZZZZZZ	2		
18:59	ZZZZZZ	2		
19:03	ZZZZZZ	2		
19:06	ZZZZZZ	1		
19:09	MA51567-CCV13	1	X	
19:12	MA51567-CCB13	1	X	
19:16	ZZZZZZ	2		
19:19	ZZZZZZ	2		
19:22	ZZZZZZ	2		
		Element:	Cu	

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Element: Dilution	C u	
19:25	ZZZZZZ	2		
19:29	ZZZZZZ	2		
19:32	ZZZZZZ	2		
19:35	ZZZZZZ	2		
19:39	ZZZZZZ	1		
19:42	MA51567-CCV14	1	X	
19:45	MA51567-CCB14	1	X	
19:48	ZZZZZZ	1		
19:51	ZZZZZZ	1		
19:55	ZZZZZZ	1		

(a) Sample used for QC only; not part of login JD35920.

	Element:	C u

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
10:25	MA51567-STD1	100	100	100	100	100	100	100	100
10:29	MA51567-STD2	100	100	100	100	100	100	100	100
10:32	MA51567-STD3	100	100	100	100	100	100	100	100
10:36	MA51567-STD4	101.227	101.107	98.807	100.149	101.731	102.496	101.589	102.487
10:39	MA51567-STD5	100.975	99.822	98.112	99.929	101.64	100.009	100.635	100.304
10:42	MA51567-STD6	101.61	101.638	100.139	100.286	102.732	104.565	102.436	104.207
10:45	MA51567-STD7	99.69	99.37	96.746	99.693	100.213	103.368	99.648	103.53
10:48	MA51567-STD8	97.67	97.275	94.482	97.995	97.741	100.404	98.186	100.412
10:52	MA51567-STD9	97.545	99.228	98.4	100.395	100.146	102.462	99.364	102.211
10:55	MA51567-STD10	101.44	102.173	100.856	103.358	103.068	103.257	102.286	102.633
10:58	MA51567-STD11	102.847	103.933	103.635	105.288	103.939	106.543	102.069	104.059
11:01	MA51567-STD12	104.695	106.882	106.251	106.951	105.046	109.495	102.737	104.178
11:12	ZZZZZZ	104.996	104.988	103.807	105.245	105.824	100.558	104.971	100.761
11:15	ZZZZZZ	107.626	107.646	105.039	102.713	107.864	103.68	107.182	103.44
11:19	ZZZZZZ	106.11	106.598	106.889	103.723	108.509	107.77	107.97	107.768
11:22	MA51567-ICVA1	103.036	103.262	101.469	103.159	102.486	107.197	101.365	103.963
11:25	MA51567-ICV1	104.245	105.058	103.903	105.275	105.647	105.057	105.336	104.883
11:50	MA51567-ICB1	102.751	99.461	99.025	99.727	103.66	96.984	81.524	96.776
11:53	MA51567-CCV1	103.198	102.266	100.447	101.65	105.834	105.287	81.908	103.153
11:57	MA51567-CCB1	107.225	104.277	101.751	101.964	108.427	104.395	85.394	104.72
12:00	MA51567-CRI1	No results reported for the elements associated with this internal standard.							
12:04	MA51567-CRI2	107.194	104.8	101.905	103.385	108.954	106.112	84.858	105.615
12:08	MA51567-ICSA1	No results reported for the elements associated with this internal standard.							
12:11	MA51567-ICSAB1	No results reported for the elements associated with this internal standard.							
12:25	ZZZZZZ	95.719	95.416	92.839	94.689	105.48	123.293	70.927	84.668
12:32	ZZZZZZ	93.662	100.332	96.163	106.137	108.007	99.525	84.799	99.127
12:35	MA51567-CCV2	93.476	98.961	95.542	103.248	105.216	103.59	82.781	101.225
12:39	MA51567-CCB2	96.005	100.658	96.624	104.347	107.687	101.84	84.629	101.555
13:01	MA51567-ICSA2	98.634	96.896	94.734	96.732	106.256	120.865	71.749	82.202
13:04	MA51567-ICSAB2	93.591	94.893	93.648	98.279	105.641	124.2	71.783	86.306
13:07	ZZZZZZ	91.789	99.312	94.207	108.173	109.522	100.747	86.066	100.726
13:10	MA51567-CCV3	95.325	101.702	95.934	108.778	109.908	105.847	86.076	103.562
13:15	MA51567-CCB3	98.778	104	98.383	108.936	112.142	102.03	89.158	102.387

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:18	MP30202-MB1	100.207	104.938	98.826	108.754	112.536	102.833	88.363	102.808
13:22	MP30202-B1	100.168	104.61	97.073	109.498	110.486	104.383	86.775	103.342
13:25	MP30202-PS1	103.255	107.159	99.78	110.798	114.143	113.509	86.744	104.627
13:28	MP30202-S1	100.683	105.747	98.509	112.484	110.293	110.049	84.396	102.258
13:31	MP30202-S2	103.255	109.096	101.849	115.623	113.051	113.206	86.791	105.144
13:35	JD36076-1	107.174	111.729	103.154	114.302	115.863	114.853	88.851	105.878
13:38	MP30202-SD1	109.562	112.354	105.978	114.784	118.364	112.281	92.149	110.607
13:41	ZZZZZZ	107.545	110.247	103.28	112.33	120.562	126.857	88.753	106.846
13:45	ZZZZZZ	95.386	98.53	92.176	104.109	105.869	96.136	83.411	95.992
13:48	MA51567-CCV4	103.557	103.594	97.894	107.003	109.406	105.763	85.46	103.629
13:51	MA51567-CCB4	105.861	105.624	100.631	108.735	111.593	103.813	88.06	103.848
13:55	ZZZZZZ	106.091	107.803	102.235	113.108	113.75	122.683	83.436	100.692
13:58	MP30202-S1	110.588	111.885	104.059	112.285	116.601	111.589	90.949	109.414
14:02	MP30202-S2	111.626	112.022	103.913	113.083	116.532	110.607	91.056	108.802
14:05	JD36076-1	113.839	114.315	105.327	113.549	118.469	111.108	92.374	108.546
14:08	MP30202-SD1	113.918	113.92	108.527	113.993	119.446	111.123	93.351	109.962
14:12	ZZZZZZ	103.505	106.204	99.408	113.478	109.428	101.189	85.984	101.099
14:15	ZZZZZZ	106.583	108.636	100.342	111.327	111.763	99.985	88.232	99.69
14:19	ZZZZZZ	105.684	107.966	99.963	110.751	111.53	100.158	87.645	100.575
14:22	ZZZZZZ	107.818	108.736	102.101	112.761	111.995	100.603	88.252	100.876
14:25	MA51567-CCV5	118.239	115.952	109.848	114.928	119.307	116.296	93.336	113.472
14:28	MA51567-CCB5	119.6	116.394	109.899	113.554	120.952	111.721	95.48	112.237
14:32	MP30210-MB1	No results reported for the elements associated with this internal standard.							
14:36	MP30210-B1	No results reported for the elements associated with this internal standard.							
14:39	MP30210-S1	No results reported for the elements associated with this internal standard.							
14:43	MP30210-S2	No results reported for the elements associated with this internal standard.							
14:46	JD36149-6F	No results reported for the elements associated with this internal standard.							
14:49	MP30210-SD1	No results reported for the elements associated with this internal standard.							
14:53	ZZZZZZ	100.94	102.893	95.79	111.513	105.927	97.07	83.612	97.115
14:56	ZZZZZZ	81.252	81.879	92.716	86.95	62.741 !	64.598 !	49.15 !	63.818 !
14:59	ZZZZZZ	152.8 !	138.834 !	128.429	121.358	136.201 !	124.161	106.807	122.097
15:03	MA51567-CCV6	102.415	102.637	96.919	107.388	108.448	104.313	84.854	102.183
15:06	MA51567-CCB6	97.316	100.797	96.677	106.575	106.812	99.685	84.33	99.933

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:09	ZZZZZZ	93.57	95.187	91.698	103.06	90.487	83.478	71.402	83.534
15:13	ZZZZZZ	87.758	92.807	87.944	101.875	93.437	84.237	73.168	84.376
15:16	ZZZZZZ	90.995	94.265	88.571	104.197	96.483	85.983	76.404	86.017
15:19	ZZZZZZ	94.389	96.281	91.8	103.189	93.167	85.01	73.189	85.032
15:22	ZZZZZZ	96.55	99.79	95.918	106.692	106.695	97.297	84.209	97.165
15:26	ZZZZZZ	97.081	94.229	92.871	96.407	85.439	79.704	67.084 !	79.554
15:29	ZZZZZZ	99.23	102.986	99.119	107.324	107.871	100.183	85.752	99.765
15:33	ZZZZZZ	100.698	102.606	98.422	104.162	110.585	103.211	86.687	102.83
15:37	ZZZZZZ	94.242	97.55	92.836	105.51	93.349	85.754	73.913	85.639
15:40	MA51567-CCV7	96.817	100.598	96.418	105.475	106.655	104.001	83.063	101.719
15:43	MA51567-CCB7	102.045	105.092	99.793	106.627	111.37	103.178	88.127	103.039
15:46	ZZZZZZ	102.412	105.614	99.82	106.383	110.446	102.496	86.722	102.228
15:50	ZZZZZZ	96.293	100.21	95.428	106.511	99.118	90.998	78.019	91.276
15:53	ZZZZZZ	98.237	98.78	95.789	107.886	94.2	87.581	74.375	87.186
15:56	ZZZZZZ	103.653	105.123	99.35	106.944	110.27	101.912	86.823	102.163
16:00	ZZZZZZ	99.321	101.083	95.578	105.402	96.42	88.72	76.028	89.106
16:03	ZZZZZZ	103.669	104.063	99.18	107.863	100.871	92.44	79.551	92.285
16:06	ZZZZZZ	106.127	107.221	100.622	108.195	111.6	102.437	87.947	102.393
16:09	ZZZZZZ	98.768	100.99	95.628	107.233	103.343	94.503	82.156	94.644
16:13	MP30210-S1	No results reported for the elements associated with this internal standard.							
16:16	MP30210-S2	No results reported for the elements associated with this internal standard.							
16:19	MA51567-CCV8	103.032	103.147	98.429	104.313	107.931	105.209	84.634	102.897
16:23	MA51567-CCB8	103.418	105.08	102.456	106.074	109.787	103.443	86.871	103.086
16:26	JD36149-6F	No results reported for the elements associated with this internal standard.							
16:29	MP30210-SD1	No results reported for the elements associated with this internal standard.							
16:32	MA51567-CRI3	103.417	104.388	99.872	103.566	109.808	102.435	85.598	102.461
16:36	ZZZZZZ	103.605	102.243	99.737	104.391	107.633	102.278	85.266	102.255
16:39	ZZZZZZ	107.157	106.039	104.221	102.773	112.213	106.67	87.969	106.172
16:42	MA51567-CCV9	101.644	102.683	99.239	103.356	106.117	105.572	83.205	103.043
16:45	MA51567-CCB9	103.507	103.269	100.451	105.333	108.307	102.365	85.624	102.451
16:49	ZZZZZZ	98.759	99.453	95.719	103.874	101.779	93.23	80.527	93.167
16:52	MP30243-B1	102.24	101.894	96.4	104.572	103.96	98.706	81.64	98.136
16:55	MP30243-S1	100.943	102.627	97.811	103.712	100.838	97.005	79.488	96.247

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
16:59	MP30243-S2	101.103	102.103	97.216	105.538	101.746	96.598	80.021	95.778
17:02	JD35920-5	97.367	100.453	96.151	104.735	100.255	92.243	79.148	92.396
17:05	MP30243-SD1	No results reported for the elements associated with this internal standard.							
17:08	JD35920-5F	95.074	97.36	92.726	101.937	97.526	88.637	76.656	88.733
17:12	MP30243-SD1	100.645	102.866	96.352	101.934	106.787	96.975	83.526	97.044
17:15	ZZZZZZ	103.937	105.197	100.105	103.456	109.931	100.148	86.903	100.258
17:18	MA51567-CCV10	104.244	103.156	97.801	102.14	107.531	103.012	83.853	100.887
17:21	MA51567-CCB10	104.525	101.737	98.857	103.312	107.343	100.055	84.505	100.04
17:25	MP30277-MB1	103.526	102.256	97.704	101.952	106.915	98.586	83.935	98.518
17:28	MP30277-B1	103.462	102.904	99.273	102.796	106.7	102.983	84.076	101.846
17:31	ZZZZZZ	103.71	104.38	98.544	102.157	108.588	102.955	85.565	102.694
17:34	MP30278-MB1	105.597	104.218	100.236	103.514	108.789	101.056	85.737	100.651
17:38	MP30278-B1	99.427	99.003	94.764	104.473	101.609	96.97	80.264	96.355
17:41	ZZZZZZ	107.225	105.813	98.96	104.182	110.216	103.723	87.485	103.047
17:44	MP30279-MB1	106.596	104.725	98.66	101.499	108.848	99.743	85.222	99.36
17:48	MP30279-B1	101.911	100.852	95.936	102.217	104.64	98.918	81.878	97.766
17:51	ZZZZZZ	109.969	107.204	102.346	104.445	111.914	105.901	87.7	105.037
17:54	MA51567-CCV11	107.39	105.561	100.913	103.583	109.207	107.538	84.871	104.932
17:57	MA51567-CCB11	106.386	104.991	102.834	103.945	109.272	102.598	85.849	102.492
18:01	ZZZZZZ	100.63	99.565	93.891	102.291	102.278	92.303	80.73	92.471
18:04	MP30244-B1	103.763	103.164	97.729	102.555	105.581	99.221	82.89	98.524
18:07	MP30244-S1	99.226	100.03	94.411	102.856	100.803	97.39	79.425	96.592
18:10	MP30244-S2	100.561	100.968	94.458	104.151	102.281	97.386	80.169	96.62
18:14	JD36168-2	98.947	99.679	93.417	101.961	101.731	92.705	79.523	92.903
18:17	MP30244-SD1	101.644	101.558	95.922	102.289	106.244	96.788	83.841	96.528
18:20	ZZZZZZ	95.248	96.722	90.349	100.653	98.013	89.376	76.97	89.468
18:24	ZZZZZZ	93.988	95.041	90.442	98.857	99.48	90.47	77.841	90.161
18:27	ZZZZZZ	95.071	96.044	90.734	99.172	95.351	86.597	74.981	86.773
18:30	MP30244-MB1	103.207	101.868	96.239	101.144	107.612	97.646	84.571	97.67
18:33	MA51567-CCV12	100.822	99.732	94.52	99.948	103.693	99.818	81.203	97.735
18:36	MA51567-CCB12	101.057	99.419	95.405	100.149	105.013	96.368	83.193	96.75
18:40	ZZZZZZ	94.588	96.138	90.007	99.06	98.741	90.958	78.387	90.785
18:43	ZZZZZZ	96.193	98.537	92.609	102.149	100.405	94.369	78.043	90.705

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:46	ZZZZZZ	95.888	96.757	90.794	100.66	98.726	90.147	78.004	90.032
18:50	ZZZZZZ	93.356	94.459	88.727	99.143	97.629	88.16	76.723	88.438
18:53	ZZZZZZ	94.648	95.716	90.066	97.317	96.668	87.675	76.256	87.792
18:56	ZZZZZZ	91.487	94.173	88.506	97.915	93.617	85.429	73.575	85.523
18:59	ZZZZZZ	94.102	94.956	89.385	100.669	97.137	89.696	76.849	89.395
19:03	ZZZZZZ	90.887	92.663	86.07	97.206	95.868	86.284	75.7	85.958
19:06	ZZZZZZ	100.732	99.718	95.142	99.836	104.875	95.668	82.522	95.967
19:09	MA51567-CCV13	98.091	97.992	93.194	99.203	102.338	97.608	80.194	95.652
19:12	MA51567-CCB13	97.917	98.205	93.542	99.278	103.85	95.286	81.656	95.14
19:16	ZZZZZZ	91.433	92.344	88.078	97.812	96.186	88.897	75.757	88.738
19:19	ZZZZZZ	91.604	93.126	88.596	96.97	92.363	84	72.529	83.771
19:22	ZZZZZZ	89.089	90.561	84.716	96.835	94.054	84.097	74.312	84.344
19:25	ZZZZZZ	90.628	91.614	86.121	96.597	95.481	86.712	74.966	86.523
19:29	ZZZZZZ	92.687	93.996	87.885	96.309	97.342	86.576	76.433	86.717
19:32	ZZZZZZ	92.185	94.049	87.513	96.113	97.105	86.238	76.532	86.313
19:35	ZZZZZZ	90.08	92.026	86.641	95.843	93.746	84.15	73.712	84.408
19:39	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:42	MA51567-CCV14	97.623	97.302	93.573	97.148	102.236	98.432	79.769	96.473
19:45	MA51567-CCB14	98.146	98.664	93.609	99.435	104.489	95.457	82.041	95.974
19:48	ZZZZZZ	98.674	98.112	93.861	98.395	103.472	94.679	81.737	94.631
19:51	ZZZZZZ	96.262	96.217	94.441	97.426	101.657	93.247	80.288	92.805
19:55	ZZZZZZ	97.35	96.59	93.466	97.189	102.678	93.119	80.268	93.235

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (74-1)	60-125 %	60-125 %
Istd#8	Germanium (74-2)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
10:25	MA51567-STD1	100	100	100	100	100	100	100	100
10:29	MA51567-STD2	100	100	100	100	100	100	100	100
10:32	MA51567-STD3	100	100	100	100	100	100	100	100
10:36	MA51567-STD4	101.654	101.528	100.976	101.609	101.964	101.521	101.377	101.029
10:39	MA51567-STD5	100.904	99.983	100.112	100.738	101.389	100.59	101.082	100.647
10:42	MA51567-STD6	103.807	102.079	101.375	102.275	102.736	102.014	102.363	101.874
10:45	MA51567-STD7	103.376	100.088	99.173	101.519	100.415	99.78	101.1	98.916
10:48	MA51567-STD8	102.072	98.522	97.047	98.876	97.38	96.633	98.904	97.377
10:52	MA51567-STD9	103.322	98.966	100.834	101.628	100.25	100.76	100.537	101.661
10:55	MA51567-STD10	104.537	102.507	101.844	103.334	102.818	102.077	103.824	103.348
10:58	MA51567-STD11	104.174	101.11	102.079	102.559	101.269	103.438	103.806	103.966
11:01	MA51567-STD12	105.216	98.914	100.987	102.189	101.234	102.88	103.714	104.167
11:12	ZZZZZZ	101.487	104.542	105.824	104.927	104.734	105.908	104.716	104.834
11:15	ZZZZZZ	101.495	107.139	106.056	104.428	106.559	107.32	106.84	105.273
11:19	ZZZZZZ	103.466	105.005	105.641	103.785	105.005	107.752	103.175	104.793
11:22	MA51567-ICVA1	105.018	98.828	98.512	100.719	101.162	101.289	102.352	101.816
11:25	MA51567-ICV1	103.499	104.779	104.829	105.041	104.273	105.653	104.179	104.22
11:50	MA51567-ICB1	97.047	101.194	103.719	103.789	102.344	104.278	101.305	102.692
11:53	MA51567-CCV1	104.16	99.887	100.138	101.14	101.719	101.932	102.312	102.389
11:57	MA51567-CCB1	103.088	106.85	106.2	104.999	106.215	107.427	106.124	104.75
12:00	MA51567-CRI1	No results reported for the elements associated with this internal standard.							
12:04	MA51567-CRI2	105.471	105.771	105.254	106.417	106.488	106.185	106.005	104.39
12:08	MA51567-ICSA1	No results reported for the elements associated with this internal standard.							
12:11	MA51567-ICSAB1	No results reported for the elements associated with this internal standard.							
12:25	ZZZZZZ	105.111	86.438	83.132	122.234	93.11	88.379	100.243	92.707
12:32	ZZZZZZ	104.87	108.129	106.188	109.466	109.692	105.295	108.399	105.827
12:35	MA51567-CCV2	107.694	102.859	100.216	105.619	105.317	100.857	106.074	104.064
12:39	MA51567-CCB2	106.518	108.063	106.048	107.996	109.298	104.012	109.031	104.651
13:01	MA51567-ICSA2	103.632	86.719	82.878	124.23	93.922	88.894	99.34	92.096
13:04	MA51567-ICSAB2	109.434	88.27	83.561	125.203	96.193	87.499	101.84	93.37
13:07	ZZZZZZ	110.043	110.891	107.406	112.491	113.236	103.902	112.679	106.225
13:10	MA51567-CCV3	112.709	107.829	103.193	109.358	110.484	102.092	111.74	105.203
13:15	MA51567-CCB3	109.959	112.479	107.695	111.824	114.391	105.094	112.307	106.046

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:18	MP30202-MB1	109.88	112.747	108.047	112.291	114.368	105.629	111.388	105.578
13:22	MP30202-B1	112.476	109.636	103.378	110.071	112.849	101.79	113.106	105.177
13:25	MP30202-PS1	112.727	107.298	101.712	106.541	110.04	99.193	110.58	102.522
13:28	MP30202-S1	112.542	106.107	100.604	107.923	109.59	99.484	109.651	102.928
13:31	MP30202-S2	114.296	108.16	102.952	109.445	110.796	100.538	111.131	104.325
13:35	JD36076-1	114.131	111.088	105.088	109.19	112.088	103.196	111.966	105.008
13:38	MP30202-SD1	116.074	115.74	111.876	113.326	116.416	108.412	113.291	108.926
13:41	ZZZZZZ	112.752	110.121	107.275	110.127	112.5	104.752	111.364	105.327
13:45	ZZZZZZ	104.98	104.775	101.116	107.427	108.03	98.299	106.711	99.83
13:48	MA51567-CCV4	110.349	106.46	101.691	106.397	109.062	100.277	109.462	103.233
13:51	MA51567-CCB4	108.86	111.289	106.979	110.05	112.887	105.038	111.041	105.647
13:55	ZZZZZZ	109.731	103.144	100.08	106.902	106.745	99.429	108.591	102.829
13:58	MP30202-S1	114.166	112.735	108.893	111.989	114.273	106.178	112.909	106.828
14:02	MP30202-S2	113.868	113.098	108.218	111.518	114.999	105.852	113.908	107.018
14:05	JD36076-1	113.11	114.43	110.464	111.33	115.362	106.863	113.246	107.36
14:08	MP30202-SD1	113.357	115.557	112.45	112.456	116.338	109.482	113.884	108.959
14:12	ZZZZZZ	112.716	110.378	105.65	112.233	111.976	102.436	111.773	105.356
14:15	ZZZZZZ	109.604	113.046	107.442	113.912	115.201	102.868	115.208	107.081
14:19	ZZZZZZ	109.41	111.434	106.393	111.179	113.097	102.445	112.625	105.062
14:22	ZZZZZZ	109.582	113.107	108.265	113.116	115.609	103.892	115.489	107.094
14:25	MA51567-CCV5	115.481	113.1	110.416	110.078	115.634	108.21	114.197	108.87
14:28	MA51567-CCB5	113.232	117.244	114.748	114.234	118.526	111.345	114.5	110.271
14:32	MP30210-MB1	No results reported for the elements associated with this internal standard.							
14:36	MP30210-B1	No results reported for the elements associated with this internal standard.							
14:39	MP30210-S1	No results reported for the elements associated with this internal standard.							
14:43	MP30210-S2	No results reported for the elements associated with this internal standard.							
14:46	JD36149-6F	No results reported for the elements associated with this internal standard.							
14:49	MP30210-SD1	No results reported for the elements associated with this internal standard.							
14:53	ZZZZZZ	109.078	106.79	102.727	110.881	109.666	99.769	109.681	104.214
14:56	ZZZZZZ	82.458	56.088 !	51.384 !	88.853	63.931 !	60.468 !	62.432 !	53.826 !
14:59	ZZZZZZ	119.127	128.985	123.267	115.717	130.011 !	120.222	121.251	113.402
15:03	MA51567-CCV6	109.255	105.523	101.702	106.437	109.767	100.722	109.389	103.741
15:06	MA51567-CCB6	106.64	108.108	105.701	109.216	110.308	103.353	107.995	104.836

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:09	ZZZZZZ	102.081	87.67	84.271	106.608	94.944	87.482	100.262	93.175
15:13	ZZZZZZ	100.542	93.446	88.628	104.461	99.746	90.845	104.012	96.391
15:16	ZZZZZZ	101.529	95.809	90.215	103.666	102.305	91.881	106.791	98.152
15:19	ZZZZZZ	101.026	91.97	86.509	103.378	99.604	89.666	103.977	94.85
15:22	ZZZZZZ	105.569	106.588	102.12	107.131	109.421	102.21	108.966	104.211
15:26	ZZZZZZ	102.76	83.857	79.304	120.148	92.888	85.251	97.94	88.426
15:29	ZZZZZZ	107.313	106.895	103.526	108.209	110.451	103.629	109.062	105.375
15:33	ZZZZZZ	105.666	107.746	105.214	106.722	110.406	105.18	106.981	104.753
15:37	ZZZZZZ	101.251	91.259	87.181	104.578	98.742	90.386	102.798	95.559
15:40	MA51567-CCV7	107.855	104.751	101.207	105.894	108.032	101.872	108.057	103.15
15:43	MA51567-CCB7	106.182	111.24	107.973	108.593	114.392	106.183	110.871	106.054
15:46	ZZZZZZ	106.43	108.214	105.981	106.65	111.901	105.135	108.964	105.858
15:50	ZZZZZZ	104.123	98.184	93.443	104.183	104.434	96.57	106.542	101.133
15:53	ZZZZZZ	102.56	91.328	87.643	104.232	97.993	91.179	102.445	95.99
15:56	ZZZZZZ	106.715	107.941	105.004	107.691	110.716	104.935	108.426	104.497
16:00	ZZZZZZ	101.837	94.205	88.85	101.76	100.849	92.889	104.269	96.969
16:03	ZZZZZZ	102.801	99.753	94.165	103.324	106.688	97.906	109.13	102.068
16:06	ZZZZZZ	106.212	109.346	106.48	107.914	112.775	105.76	109.943	105.877
16:09	ZZZZZZ	104.379	106.208	101.971	108.188	108.722	100.924	108.57	103.062
16:13	MP30210-S1	No results reported for the elements associated with this internal standard.							
16:16	MP30210-S2	No results reported for the elements associated with this internal standard.							
16:19	MA51567-CCV8	105.929	104.777	100.557	102.764	108.771	101.725	107.622	102.421
16:23	MA51567-CCB8	104.686	108.998	107.227	108.461	110.564	107.043	107.484	105.701
16:26	JD36149-6F	No results reported for the elements associated with this internal standard.							
16:29	MP30210-SD1	No results reported for the elements associated with this internal standard.							
16:32	MA51567-CRI3	103.989	107.143	105.005	105.977	109.248	104.248	106.24	103.596
16:36	ZZZZZZ	104.524	106.406	104.705	105.354	108.303	105.156	104.889	103.19
16:39	ZZZZZZ	102.848	108.956	107.941	105.203	110.812	109.628	108.609	106.416
16:42	MA51567-CCV9	104.228	102.615	101.098	102.567	106.505	102.984	106.091	103.142
16:45	MA51567-CCB9	103.766	107.109	105.005	106.289	109.202	104.759	106.693	104.06
16:49	ZZZZZZ	100.8	103.585	99.955	105.884	106.157	100.186	106.05	101.414
16:52	MP30243-B1	104.476	102.829	99.924	103.899	106.914	99.313	107.471	101.939
16:55	MP30243-S1	104.174	97.744	94.478	102.195	103.89	96.656	106.082	100.741

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
16:59	MP30243-S2	105.097	99.107	94.625	102.743	105.232	97.037	107.824	100.907
17:02	JD35920-5	102.121	97.606	93.839	102.681	103.626	96.349	106.454	100.39
17:05	MP30243-SD1	No results reported for the elements associated with this internal standard.							
17:08	JD35920-5F	99.082	95.17	91.594	99.521	101.266	93.847	104.115	97.12
17:12	MP30243-SD1	101.175	103.369	98.727	102.179	107.557	101.516	106.635	101.531
17:15	ZZZZZZ	101.185	108.847	104.727	104.635	111.27	104.894	107.986	103.327
17:18	MA51567-CCV10	103.157	103.431	99.292	101.94	107.84	100.536	106.193	100.873
17:21	MA51567-CCB10	102.222	105.004	103.676	106.222	107.161	103.095	104.882	101.812
17:25	MP30277-MB1	100.611	105.69	102.807	104.45	108.109	102.923	104.269	102.061
17:28	MP30277-B1	103.001	103.698	100.85	100.818	106.269	101.742	103.569	101.452
17:31	ZZZZZZ	102.941	107.146	103.802	104.181	108.756	103.287	106.451	102.436
17:34	MP30278-MB1	101.805	108.509	104.955	104.87	109.278	104.784	106.067	103.134
17:38	MP30278-B1	103.964	101.236	99.16	104.432	103.821	98.611	104.555	101.201
17:41	ZZZZZZ	103.816	107.81	104.282	104.837	109.206	105.024	106.192	103.096
17:44	MP30279-MB1	99.989	106.328	103.198	102.902	108.423	102.086	105.058	100.513
17:48	MP30279-B1	101.506	102.427	97.93	101.695	104.732	98.613	104.441	99.814
17:51	ZZZZZZ	104.638	108.763	105.706	103.991	110.604	105.218	107.031	104.592
17:54	MA51567-CCV11	105.074	104.014	102.594	103.059	108.647	103.752	106.008	103.156
17:57	MA51567-CCB11	102.701	106.908	105.418	106.047	108.969	106.153	104.725	103.823
18:01	ZZZZZZ	99.022	103.399	99.85	103.773	105.331	98.171	104.741	100.205
18:04	MP30244-B1	103.105	104.728	100.124	104.11	108.38	100.013	107	102.193
18:07	MP30244-S1	103.451	98.611	95.49	101.753	102.75	97.723	104.191	100.061
18:10	MP30244-S2	104.304	98.191	95.735	102.013	104.059	96.373	104.975	100.316
18:14	JD36168-2	100.719	98.674	95.469	101.467	104.693	96.743	105.054	99.209
18:17	MP30244-SD1	100.68	104.092	100.059	103.116	108.252	100.256	105.463	101.167
18:20	ZZZZZZ	99.05	96.084	91.393	99.48	101.507	93.346	103.41	96.288
18:24	ZZZZZZ	98.129	99.079	95.26	101.714	103.175	94.752	103.855	98.194
18:27	ZZZZZZ	96.231	92.386	88.356	98.334	99.496	91.963	101.165	95.212
18:30	MP30244-MB1	98.739	105.936	102.622	104.043	107.827	101.967	106.055	101.77
18:33	MA51567-CCV12	100.141	99.061	96.64	100.486	104.783	97.984	103.464	99.121
18:36	MA51567-CCB12	98.981	103.011	100.652	102.815	106.989	101.069	104.169	100.496
18:40	ZZZZZZ	98.295	98.135	94.763	101.638	103.078	96.277	103.171	98.118
18:43	ZZZZZZ	99.016	97.499	95.728	102.916	102.672	94.456	103.395	97.723

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:46	ZZZZZZ	98.477	96.581	92.376	100.18	101.905	94.605	103.731	97.328
18:50	ZZZZZZ	97.787	95.426	92.274	99.745	101.589	92.903	102.566	97.44
18:53	ZZZZZZ	95.247	95.645	91.341	97.118	101.176	93.626	104.082	97.176
18:56	ZZZZZZ	96.467	89.693	86.766	96.729	97.186	90.039	99.675	94.521
18:59	ZZZZZZ	98.379	96.53	93.534	100.235	102.579	95.455	103.69	98.369
19:03	ZZZZZZ	95.425	94.193	89.428	96.919	99.755	91.18	101.831	95.315
19:06	ZZZZZZ	97.926	104.553	100.436	103.807	106.974	100.818	105.337	100.82
19:09	MA51567-CCV13	99.124	98.993	94.904	100.051	102.974	96.574	103.862	97.978
19:12	MA51567-CCB13	97.989	102.758	99.636	101.389	105.181	99.015	102.854	99.135
19:16	ZZZZZZ	96.353	97.307	92.88	99.713	101.168	93.998	100.749	95.939
19:19	ZZZZZZ	93.697	89.37	86.102	97.855	96.817	89.764	99.899	94.68
19:22	ZZZZZZ	95.157	96.033	90.582	99.312	100.651	90.477	102.421	95.632
19:25	ZZZZZZ	95.161	96.367	92.391	98.772	100.928	92.604	102.445	96.553
19:29	ZZZZZZ	94.565	94.602	90.26	97.629	101.432	91.966	103.588	96.192
19:32	ZZZZZZ	94.859	95.314	90.688	97.497	102.23	91.852	102.886	96.182
19:35	ZZZZZZ	93.027	90.933	87.311	95.856	97.164	89.7	100.011	93.655
19:39	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:42	MA51567-CCV14	98.653	99.196	95.807	98.127	102.526	97.7	103.424	98.279
19:45	MA51567-CCB14	97.441	103.58	99.733	101.88	105.823	100.739	103.158	99.683
19:48	ZZZZZZ	96.16	102.206	99.481	100.651	106.008	100.456	103.161	99.296
19:51	ZZZZZZ	95.824	101.442	98.312	100.903	102.878	99.663	101.387	97.959
19:55	ZZZZZZ	95.124	101.307	98.297	100.295	103.394	99.168	102.31	98.226

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#9	Germanium (74-3)	60-125 %	60-125 %
Istd#10	Rhodium (103-1)	60-125 %	60-125 %
Istd#11	Rhodium (103-2)	60-125 %	60-125 %
Istd#12	Rhodium (103-3)	60-125 %	60-125 %
Istd#13	Indium (115-1)	60-125 %	60-125 %
Istd#14	Indium (115-2)	60-125 %	60-125 %
Istd#15	Terbium (159-1)	60-125 %	60-125 %
Istd#16	Terbium (159-2)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
10:25	MA51567-STD1	100	100	100	100	100
10:29	MA51567-STD2	100	100	100	100	100
10:32	MA51567-STD3	100	100	100	100	100
10:36	MA51567-STD4	100.634	106.455	107.979	101.353	100.799
10:39	MA51567-STD5	101.638	109.508	110.728	101.283	99.604
10:42	MA51567-STD6	102.027	114.665	114.89	102.635	101.436
10:45	MA51567-STD7	100.836	114.144	114.259	101.623	98.942
10:48	MA51567-STD8	100.184	114.112	113.567	101.005	97.707
10:52	MA51567-STD9	102.136	117.982	120.294	100.772	101.391
10:55	MA51567-STD10	102.574	123.303	123.911	102.894	101.418
10:58	MA51567-STD11	103.804	124.329	126.191	99.911	100.087
11:01	MA51567-STD12	103.019	125.195	126.137	96.482	96.347
11:12	ZZZZZZ	103.313	126.45	127.525	103.661	103.403
11:15	ZZZZZZ	102.822	130.084 !	129.49	105.673	104.946
11:19	ZZZZZZ	101.144	125.646	128.157	105.012	105.443
11:22	MA51567-ICVA1	101.772	125.123	126.036	97.467	97.087
11:25	MA51567-ICV1	102.433	128.837	129.547	104.505	103.592
11:50	MA51567-ICB1	100.53	124.757	126.96	101.593	101.883
11:53	MA51567-CCV1	101.819	125.335	127.258	98.355	98.124
11:57	MA51567-CCB1	101.632	130.448 !	130.153 !	105.92	104.435
12:00	MA51567-CRI1	No results reported for the elements associated with this internal standard.				
12:04	MA51567-CRI2	102.603	130.015 !	129.299	105.307	103.833
12:08	MA51567-ICSA1	No results reported for the elements associated with this internal standard.				
12:11	MA51567-ICSAB1	No results reported for the elements associated with this internal standard.				
12:25	ZZZZZZ	149.306 !	125.142	116.228	82.61	77.627
12:32	ZZZZZZ	106.238	134.648 !	133.331 !	107.278	105.655
12:35	MA51567-CCV2	105.19	131.248 !	129.57	100.944	98.884
12:39	MA51567-CCB2	105.579	133.673 !	131.405 !	106.797	104.449
13:01	MA51567-ICSA2	149.363 !	123.745	115.917	81.765	77.109
13:04	MA51567-ICSAB2	150.883 !	127.09	116.143	83.55	77.652
13:07	ZZZZZZ	109.427	138.672 !	132.843 !	109.865	106.333
13:10	MA51567-CCV3	110.669	137.4 !	132.277 !	104.778	100.752
13:15	MA51567-CCB3	108.398	139.893 !	133.105 !	109.792	104.915

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
13:18	MP30202-MB1	107.346	137.693 !	132.523 !	109.208	105.771
13:22	MP30202-B1	109.577	139.664 !	131.006 !	105.798	100.927
13:25	MP30202-PS1	108.243	137.109 !	128.589	104.306	97.59
13:28	MP30202-S1	108.167	136.642 !	128.158	102.057	96.015
13:31	MP30202-S2	109.561	136.777 !	130.072 !	102.906	97.752
13:35	JD36076-1	107.835	140.081 !	131.924 !	105.384	99.771
13:38	MP30202-SD1	108.401	141.272 !	135.972 !	109.869	105.9
13:41	ZZZZZZ	108.273	137.081 !	131.713 !	104.786	101.199
13:45	ZZZZZZ	105.696	131.971 !	125.472	104.893	99.941
13:48	MA51567-CCV4	105.897	136.77 !	128.683	104.307	98.766
13:51	MA51567-CCB4	107.158	136.461 !	131.688 !	108.249	105.101
13:55	ZZZZZZ	108.427	135.461 !	128.762	98.189	94.223
13:58	MP30202-S1	107.485	140.4 !	133.691 !	108.072	103.687
14:02	MP30202-S2	109.091	140.421 !	133.13 !	109.149	103.612
14:05	JD36076-1	107.504	141.095 !	134.361 !	109.632	104.726
14:08	MP30202-SD1	106.881	140.774 !	136.463 !	111.434	106.667
14:12	ZZZZZZ	109.862	139.476 !	132.031 !	106.415	101.67
14:15	ZZZZZZ	109.508	141.883 !	133.803 !	108.103	102.203
14:19	ZZZZZZ	107.648	140.231 !	132.139 !	107.504	101.991
14:22	ZZZZZZ	108.888	142.976 !	134.119 !	109.023	103.837
14:25	MA51567-CCV5	107.154	140.882 !	136.41 !	107.515	103.315
14:28	MA51567-CCB5	108.867	142.114 !	137.683 !	112.226	107.791
14:32	MP30210-MB1	No results reported for the elements associated with this internal standard.				
14:36	MP30210-B1	No results reported for the elements associated with this internal standard.				
14:39	MP30210-S1	No results reported for the elements associated with this internal standard.				
14:43	MP30210-S2	No results reported for the elements associated with this internal standard.				
14:46	JD36149-6F	No results reported for the elements associated with this internal standard.				
14:49	MP30210-SD1	No results reported for the elements associated with this internal standard.				
14:53	ZZZZZZ	109.729	137.092 !	130.453 !	104.639	100.182
14:56	ZZZZZZ	102.787	76.584	66.838 !	39.393 !	35.357 !
14:59	ZZZZZZ	105.991	148.535 !	141.429 !	112.156	109.745
15:03	MA51567-CCV6	106.869	136.168 !	129.672	102.857	99.336
15:06	MA51567-CCB6	106.401	134.932 !	131.305 !	106.541	104.332

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
15:09	ZZZZZZ	120.302	125.041	117.043	81.595	77.187
15:13	ZZZZZZ	112.156	129.281	122.194	90.747	86.583
15:16	ZZZZZZ	109.602	133.106 !	123.777	93.523	87.72
15:19	ZZZZZZ	114.618	129.94	119.884	86.09	80.55
15:22	ZZZZZZ	107.6	135.006 !	131.469 !	104.957	102.384
15:26	ZZZZZZ	147.535 !	122.33	110.919	76.007	70.212
15:29	ZZZZZZ	108.666	134.66 !	132.503 !	102.802	101.759
15:33	ZZZZZZ	105.6	132.18 !	130.782 !	106.088	105.527
15:37	ZZZZZZ	115.212	127.339	119.843	85.416	81.044
15:40	MA51567-CCV7	105.589	134.024 !	129.838	101.684	98.936
15:43	MA51567-CCB7	104.717	137.761 !	132.549 !	108.353	104.982
15:46	ZZZZZZ	104.742	135.858 !	132.823 !	105.752	103.899
15:50	ZZZZZZ	109.595	132.36 !	126.912	92.498	89.001
15:53	ZZZZZZ	113.267	126.905	121.289	83.41	80.174
15:56	ZZZZZZ	105.655	134.753 !	131.896 !	103.935	101.886
16:00	ZZZZZZ	108.072	129.89	121.894	85.502	81.49
16:03	ZZZZZZ	108.564	135.444 !	126.965	92.828	88.507
16:06	ZZZZZZ	105.913	134.202 !	131.717 !	104.635	102.291
16:09	ZZZZZZ	107.646	134.74 !	129.589	101.861	98.973
16:13	MP30210-S1	No results reported for the elements associated with this internal standard.				
16:16	MP30210-S2	No results reported for the elements associated with this internal standard.				
16:19	MA51567-CCV8	101.77	133.638 !	129.233	101.045	98.189
16:23	MA51567-CCB8	104.187	133.44 !	132.292 !	105.038	105.19
16:26	JD36149-6F	No results reported for the elements associated with this internal standard.				
16:29	MP30210-SD1	No results reported for the elements associated with this internal standard.				
16:32	MA51567-CRI3	102.829	132.716 !	130.466 !	104.001	102.243
16:36	ZZZZZZ	103.079	130.885 !	129.89	103.054	102.489
16:39	ZZZZZZ	101.526	133.169 !	133.232 !	108.045	106.783
16:42	MA51567-CCV9	102.587	130.676 !	127.817	99.938	98.027
16:45	MA51567-CCB9	104.121	132.152 !	130.588 !	104.508	103.629
16:49	ZZZZZZ	105.175	131.038 !	127.683	99.537	97.598
16:52	MP30243-B1	104.629	132.813 !	127.281	98.903	95.758
16:55	MP30243-S1	105.141	132.1 !	127.01	93.286	89.531

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
16:59	MP30243-S2	106.574	133.391 !	127.138	94.086	90.517
17:02	JD35920-5	107.822	131.657 !	126.547	93.747	91.046
17:05	MP30243-SD1	No results reported for the elements associated with this internal standard.				
17:08	JD35920-5F	103.653	129.414	123.013	91.421	88.271
17:12	MP30243-SD1	101.131	131.555 !	127.185	101.28	98.104
17:15	ZZZZZZ	101.159	134.069 !	129.718	105.89	102.918
17:18	MA51567-CCV10	100.933	131.333 !	126.515	100.271	96.949
17:21	MA51567-CCB10	101.533	129.065	128.257	102.764	101.767
17:25	MP30277-MB1	101.777	129.779 !	127.229 !	102.859	100.939
17:28	MP30277-B1	99.616	128.306 !	127.002 !	101.356	98.142
17:31	ZZZZZZ	99.757	131.663 !	128.562 !	104.318	100.987
17:34	MP30278-MB1	100.516	131.487 !	129.271	105.05	102.517
17:38	MP30278-B1	103.728	130.981 !	127.342	96.777	94.935
17:41	ZZZZZZ	100.844	131.063 !	128.514	104.421	101.46
17:44	MP30279-MB1	99.267	130.125 !	126.669	103.84	100.712
17:48	MP30279-B1	99.375	128.957	124.452	99.263	95.556
17:51	ZZZZZZ	100.74	132.69 !	129.663	105.067	102.726
17:54	MA51567-CCV11	100.549	132.212 !	129.633	101.015	99.403
17:57	MA51567-CCB11	100.766	130.128 !	130.4 !	103.61	103.178
18:01	ZZZZZZ	101.938	130.358 !	125.636	98.547	96.369
18:04	MP30244-B1	102.576	132.411 !	127.062	100.305	96.686
18:07	MP30244-S1	103.525	128.658	125.088	95.434	93.069
18:10	MP30244-S2	104.107	130.035 !	126.164	96.715	93.45
18:14	JD36168-2	102.721	130.997 !	125.073	97.541	94.331
18:17	MP30244-SD1	101.435	131.135 !	127.046	102.785	100.53
18:20	ZZZZZZ	103.232	128.495	121.084	94.33	90.074
18:24	ZZZZZZ	101.536	128.857	123.567	97.346	93.854
18:27	ZZZZZZ	103.78	126.391	119.398	89.141	85.267
18:30	MP30244-MB1	100.381	130.462 !	127.435	103.845	100.437
18:33	MA51567-CCV12	99.043	128.813	123.841	97.844	94.467
18:36	MA51567-CCB12	100.129	127.849	125.951	101.813	99.345
18:40	ZZZZZZ	101.039	127.949	122.736	96.742	94.281
18:43	ZZZZZZ	103.908	128.591	123.699	95.814	93.301

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Cu

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
18:46	ZZZZZZ	102.741	128.425	122.363	94.663	91.321
18:50	ZZZZZZ	102.651	128.29	122.347	94.33	91.498
18:53	ZZZZZZ	102.762	129.747	123.083	94.157	89.732
18:56	ZZZZZZ	103.674	124.077	119.336	86.018	83.281
18:59	ZZZZZZ	103.242	129.046	123.176	96.527	93.183
19:03	ZZZZZZ	101.449	125.695	119.316	94.112	89.641
19:06	ZZZZZZ	99.857	130.11 !	126.505	103.169	99.685
19:09	MA51567-CCV13	99.072	127.295	122.756	97.442	93.944
19:12	MA51567-CCB13	99.27	127.261	124.643	101.978	98.829
19:16	ZZZZZZ	100.379	125.363	120.626	95.229	93.329
19:19	ZZZZZZ	103.704	124.555	119.21	87.004	84.464
19:22	ZZZZZZ	102.041	128.171	120.334	94.889	91.171
19:25	ZZZZZZ	100.085	126.631	121.451	96.67	92.704
19:29	ZZZZZZ	100.532	128.98	121.044	94.847	90.228
19:32	ZZZZZZ	101.124	128.322	120.998	94.748	90.447
19:35	ZZZZZZ	100.343	123.77	118.452	90.215	86.91
19:39	ZZZZZZ	No results reported for the elements associated with this internal standard.				
19:42	MA51567-CCV14	98.608	127.898	123.497	97.702	94.402
19:45	MA51567-CCB14	99.649	128.029	125.227	101.042	98.823
19:48	ZZZZZZ	98.592	128.264	124.312	101.109	98.876
19:51	ZZZZZZ	98.638	125.577	123.301	99.143	98.304
19:55	ZZZZZZ	98.441	125.093	123.444	99.822	98.127

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-3)	60-125 %	60-125 %
Istd#18	Holmium (165-1)	60-125 %	60-125 %
Istd#19	Holmium (165-2)	60-125 %	60-125 %
Istd#20	Bismuth (209-1)	60-125 %	60-125 %
Istd#21	Bismuth (209-2)	60-125 %	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51567 Units: ug/l

Time:			11:50		11:57		12:39		13:15	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27	anr							
Antimony	2.0	.022	anr							
Arsenic	0.50	.009	anr							
Barium	1.0	.009	anr							
Beryllium	0.50	.003	anr							
Boron	25	.87	anr							
Cadmium	0.50	.007	anr							
Calcium	250	7.6	anr							
Chromium	1.0	.015	anr							
Cobalt	0.50	.002	anr							
Copper	2.0	.012	0.370	<2.0	0.397	<2.0	0.451	<2.0	0.446	<2.0
Iron	25	.56	anr							
Lead	0.50	.007	anr							
Magnesium	250	.37	anr							
Manganese	1.0	.009	anr							
Molybdenum	1.0	.027	anr							
Nickel	1.0	.008	anr							
Potassium	250	1.2	anr							
Selenium	0.50	.35	anr							
Silver	0.50	.002	anr							
Sodium	250	.53	anr							
Strontium	5.0	.016	anr							
Thallium	0.50	.009	anr							
Tin	5.0	.035	anr							
Titanium	1.0	.045	anr							
Vanadium	1.0	.017	anr							
Zinc	5.0	.048	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51567 Units: ug/l

Time: / Sample ID:			13:51 CCB4		14:28 CCB5		15:06 CCB6		15:43 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27	anr							
Antimony	2.0	.022	anr							
Arsenic	0.50	.009	anr							
Barium	1.0	.009	anr							
Beryllium	0.50	.003	anr							
Boron	25	.87	anr							
Cadmium	0.50	.007	anr							
Calcium	250	7.6	anr							
Chromium	1.0	.015	anr							
Cobalt	0.50	.002	anr							
Copper	2.0	.012	0.441	<2.0	0.455	<2.0	0.461	<2.0	0.467	<2.0
Iron	25	.56	anr							
Lead	0.50	.007	anr							
Magnesium	250	.37	anr							
Manganese	1.0	.009	anr							
Molybdenum	1.0	.027	anr							
Nickel	1.0	.008	anr							
Potassium	250	1.2	anr							
Selenium	0.50	.35	anr							
Silver	0.50	.002	anr							
Sodium	250	.53	anr							
Strontium	5.0	.016	anr							
Thallium	0.50	.009	anr							
Tin	5.0	.035	anr							
Titanium	1.0	.045	anr							
Vanadium	1.0	.017	anr							
Zinc	5.0	.048	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51567 Units: ug/l

Time:			16:23		16:45		17:21	
Sample ID:			CCB8		CCB9		CCB10	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	25	.27	anr					
Antimony	2.0	.022	anr					
Arsenic	0.50	.009	anr					
Barium	1.0	.009	anr					
Beryllium	0.50	.003	anr					
Boron	25	.87	anr					
Cadmium	0.50	.007	anr					
Calcium	250	7.6	anr					
Chromium	1.0	.015	anr					
Cobalt	0.50	.002	anr					
Copper	2.0	.012	0.810	<2.0	1.08	<2.0	1.01	<2.0
Iron	25	.56	anr					
Lead	0.50	.007	anr					
Magnesium	250	.37	anr					
Manganese	1.0	.009	anr					
Molybdenum	1.0	.027	anr					
Nickel	1.0	.008	anr					
Potassium	250	1.2	anr					
Selenium	0.50	.35	anr					
Silver	0.50	.002	anr					
Sodium	250	.53	anr					
Strontium	5.0	.016	anr					
Thallium	0.50	.009	anr					
Tin	5.0	.035	anr					
Titanium	1.0	.045	anr					
Vanadium	1.0	.017	anr					
Zinc	5.0	.048	anr					

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51567 Units: ug/l

Time:		11:22			11:25			11:53	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCV	CCV1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	60	54.4	90.7				50	45.9	91.8
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51567 Units: ug/l

Time:		12:35			13:10			13:48	
Sample ID:	CCV	CCV2		CCV	CCV3		CCV	CCV4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	50	47.4	94.8	50	48.2	96.4	50	47.6	95.2
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51567 Units: ug/l

Time:		14:25			15:03			15:40	
Sample ID:	CCV	CCV5		CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	50	46.9	93.8	50	47.5	95.0	50	47.3	94.6
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51567 Units: ug/l

Time:		16:19			16:42			17:18	
Sample ID:	CCV	CCV8		CCV	CCV9		CCV	CCV10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	50	46.7	93.4	50	46.4	92.8	50	46.1	92.2
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51567 Units: ug/l

Time:			12:04		16:32	
Sample ID:	CRI	CRIA	CRI2		CRI3	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	25	25	anr			
Antimony	2.0	0.25	anr			
Arsenic	0.50	0.50	anr			
Barium	1.0	0.50	anr			
Beryllium	0.50	0.25	anr			
Boron	25	2.5	anr			
Cadmium	0.50	0.25	anr			
Calcium	250	125	anr			
Chromium	1.0	2.0	anr			
Cobalt	0.50	0.25	anr			
Copper	2.0	2.0	2.37	118.5	2.26	113.0
Iron	25	25	anr			
Lead	0.50	0.25	anr			
Magnesium	250	125	anr			
Manganese	1.0	0.25	anr			
Molybdenum	1.0	0.50	anr			
Nickel	1.0	2.0	anr			
Potassium	250	125	anr			
Selenium	0.50	0.50	anr			
Silver	0.50	1.0	anr			
Sodium	250	125	anr			
Strontium	5.0	0.50	anr			
Thallium	0.50	0.25	anr			
Tin	5.0	0.50	anr			
Titanium	1.0	0.50	anr			
Vanadium	1.0	2.0	anr			
Zinc	5.0	2.0	anr			

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51567 Units: ug/l

Time:			13:01		13:04	
Sample ID:	ICSA	ICSAB	ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	92600	92.6	87400	87.4
Antimony			0.0442		0.0530	
Arsenic		20	0.0954		20.5	102.5
Barium			0.365		0.185	
Beryllium			-0.000259		0.00102	
Boron		50	1.04		42.4	84.8
Cadmium		20	-0.226		20.4	102.0
Calcium	100000	100000	96700	96.7	95900	95.9
Chromium		20	0.768		22.1	110.5
Cobalt		20	0.0766		21.8	109.0
Copper		20	0.490		18.8	94.0
Iron	100000	100000	92200	92.2	88900	88.9
Lead			0.0379		0.0422	
Magnesium	100000	100000	91600	91.6	87600	87.6
Manganese		20	0.129		20.7	103.5
Molybdenum	2000	2000	2140	107.0	2060	103.0
Nickel		20	0.489		19.8	99.0
Potassium	100000	100000	95100	95.1	91000	91.0
Selenium		20	0.0908		19.4	97.0
Silver		20	0.0256		21.8	109.0
Sodium	100000	100000	95100	95.1	90700	90.7
Strontium	2000	2000	1750	87.5	1820	91.0
Thallium			0.00676		0.00977	
Tin	2000	2000	1760	88.0	1740	87.0
Titanium	2000	2000	1690	84.5	1690	84.5
Vanadium		20	0.152		20.3	101.5
Zinc		20	1.06		17.9	89.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:16	MA51580-STD1	1		STDA
11:22	MA51580-STD2	1		STDA
11:27	MA51580-STD3	1		STDA
11:33	MA51580-STD4	1		STDB
11:39	MA51580-STD5	1		STDC
11:45	MA51580-STD6	1		STDD
11:51	MA51580-STD7	1		STDE
11:57	MA51580-STD8	1		STDF
12:03	MA51580-STD9	1		STDG
12:09	MA51580-STD10	1		STDH
12:15	MA51580-STD11	1		STDI
12:20	MA51580-STD12	1		STDJ
12:52	MA51580-STD13	1		STDA
12:58	ZZZZZZ	1		
13:04	MA51580-ICVA1	1		
13:09	MA51580-ICV1	1		
13:35	MA51580-ICB1	1		
13:41	MA51580-CCVA1	1		
13:47	MA51580-CCB1	1		
13:53	MA51580-CRI1	1		
13:59	ZZZZZZ	1		
14:05	ZZZZZZ	1		
14:12	ZZZZZZ	1		
14:18	MA51580-ICSA1	1		
14:24	MA51580-ICSAB1	1		
14:49	ZZZZZZ	1		
14:55	MA51580-CCVA2	1		
15:01	MA51580-CCB2	1		
15:07	MP30243-MB1	2		
---------->	Last reportable sample/prep for job JD35920			
15:13	ZZZZZZ	2		
15:29	MP30162-S1	2		
15:36	MP30162-S2	2		
15:42	MP30162-S3	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	15:48	MP30163-S1	2		
	15:54	MP30163-S2	2		
	16:00	ZZZZZZ	1		
	16:06	ZZZZZZ	2		
	16:12	ZZZZZZ	1		
	16:18	MA51580-CCVA3	1		
	16:24	MA51580-CCB3	1		
---------->		Last reportable CCB for job JD35920			
	16:30	MA51580-CCVA4	1		
	16:36	MA51580-CCB4	1		
	16:42	ZZZZZZ	1		
	16:49	MP30299-MB1	1		
	16:55	MP30299-B1	1		
	17:01	MP30299-S1	1		PB high
	17:08	MP30299-S2	1		PB high
	17:14	JD36320-1	1		(sample used for QC only; not part of login JD35920)
	17:20	MP30299-S3	1		PB high
	17:26	JD36320-3	1		(sample used for QC only; not part of login JD35920)
	17:32	MA51580-CCVA5	1		
	17:38	MA51580-CCB5	1		
	17:44	ZZZZZZ	1		
	17:50	ZZZZZZ	1		
	17:56	ZZZZZZ	1		
	18:02	ZZZZZZ	1		
	18:08	ZZZZZZ	1		
	18:14	ZZZZZZ	1		
	18:20	ZZZZZZ	1		
	18:26	ZZZZZZ	1		
	18:32	ZZZZZZ	1		
	18:38	ZZZZZZ	1		
	18:44	MA51580-CCVA6	1		
	18:51	MA51580-CCB6	1		
	18:57	ZZZZZZ	1		
	19:03	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:09	ZZZZZZ	1		
19:15	ZZZZZZ	1		
19:21	ZZZZZZ	1		
19:27	ZZZZZZ	1		
19:33	ZZZZZZ	1		
19:39	ZZZZZZ	1		
19:45	MA51580-CCVA7	1		
19:51	MA51580-CCB7	1		
19:57	MP30300-MB1	1		
20:03	MP30300-B1	1		
20:09	MP30300-S1	1		PB high
20:15	MP30300-S2	1		PB high
20:21	JD36320-11	1		(sample used for QC only; not part of login JD35920)
20:27	ZZZZZZ	1		
20:33	ZZZZZZ	1		
20:39	ZZZZZZ	1		
20:45	ZZZZZZ	1		
20:51	ZZZZZZ	1		
20:57	MA51580-CCVA8	1		
21:03	MA51580-CCB8	1		
21:09	ZZZZZZ	1		
21:15	ZZZZZZ	1		
21:21	ZZZZZZ	1		
21:27	ZZZZZZ	1		
21:33	MP30266-B1	1		Ag needs dilution. Al failes high
21:39	MP30266-S1	1		CCV out
21:45	MP30266-S2	1		CCV out
21:51	JD36224-3	1		(sample used for QC only; not part of login JD35920)
21:57	ZZZZZZ	1		
22:03	MP30266-MB1	1		Batch to reanalyze for Ni, all checks out
22:09	MA51580-CCVA9	1		
22:15	MA51580-CCB9	1		
22:21	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:27	ZZZZZZ	1		
22:33	ZZZZZZ	1		
22:39	ZZZZZZ	1		
22:45	ZZZZZZ	1		
22:51	ZZZZZZ	1		
22:57	MA51580-CCVA10	1		
23:03	MA51580-CCB10	1		
23:09	MP30244-MB1	2		
23:15	ZZZZZZ	2		
23:21	JD36168-2	2		(sample used for QC only; not part of login JD35920)
23:27	ZZZZZZ	2		
23:33	ZZZZZZ	2		
23:39	ZZZZZZ	2		
23:45	ZZZZZZ	2		
23:51	ZZZZZZ	2		
23:57	ZZZZZZ	2		
00:03	ZZZZZZ	2		
00:09	MA51580-CCVA11	1		
00:15	MA51580-CCB11	1		
00:21	ZZZZZZ	2		
00:27	ZZZZZZ	2		
00:33	MA51580-CCVA12	1		
00:39	MA51580-CCB12	1		
00:45	ZZZZZZ	1		
00:51	ZZZZZZ	1		
00:57	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Element: Dilution	Cu
12:58	ZZZZZZ	1	
13:04	MA51580-ICVA1	1	X
13:09	MA51580-ICV1	1	X
13:35	MA51580-ICB1	1	X
13:41	MA51580-CCVA1	1	X
13:47	MA51580-CCB1	1	X
13:53	MA51580-CRI1	1	X
13:59	ZZZZZZ	1	
14:05	ZZZZZZ	1	
14:12	ZZZZZZ	1	
14:18	MA51580-ICSA1	1	X
14:24	MA51580-ICSAB1	1	X
14:49	ZZZZZZ	1	
14:55	MA51580-CCVA2	1	X
15:01	MA51580-CCB2	1	X
15:07	MP30243-MB1	2	X
15:13	ZZZZZZ	2	
15:29	MP30162-S1	2	
15:36	MP30162-S2	2	
15:42	MP30162-S3	2	
15:48	MP30163-S1	2	
15:54	MP30163-S2	2	
16:00	ZZZZZZ	1	
16:06	ZZZZZZ	2	
16:12	ZZZZZZ	1	
16:18	MA51580-CCVA3	1	X
16:24	MA51580-CCB3	1	X
16:30	MA51580-CCVA4	1	X
16:36	MA51580-CCB4	1	X
16:42	ZZZZZZ	1	
16:49	MP30299-MB1	1	
16:55	MP30299-B1	1	
17:01	MP30299-S1	1	PB high
		Element:	Cu

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Element: Dilution	Cu
17:08	MP30299-S2	1	PB high
17:14	JD36320-1	1	(a)
17:20	MP30299-S3	1	PB high
17:26	JD36320-3	1	(a)
17:32	MA51580-CCVA5	1	X
17:38	MA51580-CCB5	1	X
17:44	ZZZZZZ	1	
17:50	ZZZZZZ	1	
17:56	ZZZZZZ	1	
18:02	ZZZZZZ	1	
18:08	ZZZZZZ	1	
18:14	ZZZZZZ	1	
18:20	ZZZZZZ	1	
18:26	ZZZZZZ	1	
18:32	ZZZZZZ	1	
18:38	ZZZZZZ	1	
18:44	MA51580-CCVA6	1	X
18:51	MA51580-CCB6	1	X
18:57	ZZZZZZ	1	
19:03	ZZZZZZ	1	
19:09	ZZZZZZ	1	
19:15	ZZZZZZ	1	
19:21	ZZZZZZ	1	
19:27	ZZZZZZ	1	
19:33	ZZZZZZ	1	
19:39	ZZZZZZ	1	
19:45	MA51580-CCVA7	1	X
19:51	MA51580-CCB7	1	X
19:57	MP30300-MB1	1	
20:03	MP30300-B1	1	
20:09	MP30300-S1	1	PB high
20:15	MP30300-S2	1	PB high
20:21	JD36320-11	1	(a)
		Element:	Cu

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Element: Dilution	Cu	
20:27	ZZZZZZ	1		
20:33	ZZZZZZ	1		
20:39	ZZZZZZ	1		
20:45	ZZZZZZ	1		
20:51	ZZZZZZ	1		
20:57	MA51580-CCVA8	1	X	
21:03	MA51580-CCB8	1	X	
21:09	ZZZZZZ	1		
21:15	ZZZZZZ	1		
21:21	ZZZZZZ	1		
21:27	ZZZZZZ	1		
21:33	MP30266-B1	1	X	
21:39	MP30266-S1	1	X	
21:45	MP30266-S2	1	X	
21:51	JD36224-3	1	X	(a)
21:57	ZZZZZZ	1		
22:03	MP30266-MB1	1	X	
22:09	MA51580-CCVA9	1	X	
22:15	MA51580-CCB9	1	X	
22:21	ZZZZZZ	1		
22:27	ZZZZZZ	1		
22:33	ZZZZZZ	1		
22:39	ZZZZZZ	1		
22:45	ZZZZZZ	1		
22:51	ZZZZZZ	1		
22:57	MA51580-CCVA10	1	X	
23:03	MA51580-CCB10	1	X	
23:09	MP30244-MB1	2	X	
23:15	ZZZZZZ	2		
23:21	JD36168-2	2	X	(a)
23:27	ZZZZZZ	2		
23:33	ZZZZZZ	2		
23:39	ZZZZZZ	2		
		Element:	Cu	

REPORTED ELEMENTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Element: Dilution	C u
23:45	ZZZZZZ	2	
23:51	ZZZZZZ	2	
23:57	ZZZZZZ	2	
00:03	ZZZZZZ	2	
00:09	MA51580-CCVA11	1	X
00:15	MA51580-CCB11	1	X
00:21	ZZZZZZ	2	
00:27	ZZZZZZ	2	
00:33	MA51580-CCVA12	1	X
00:39	MA51580-CCB12	1	X
00:45	ZZZZZZ	1	
00:51	ZZZZZZ	1	
00:57	ZZZZZZ	1	

(a) Sample used for QC only; not part of login JD35920.

Element:	C u

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
11:16	MA51580-STD1	100	100	100	100	100	100	100	100
11:22	MA51580-STD2	100	100	100	100	100	100	100	100
11:27	MA51580-STD3	100	100	100	100	100	100	100	100
11:33	MA51580-STD4	94.429	97.7	101.647	99.917	94.881	100.206	98.978	96.46
11:39	MA51580-STD5	100.439	98.63	95.665	98.461	99.491	96.395	99.435	99.442
11:45	MA51580-STD6	97.996	97.262	99.671	97.517	95.961	99.297	98.012	98.554
11:51	MA51580-STD7	99.074	98.214	97.911	97.304	97.918	98.806	97.965	98.464
11:57	MA51580-STD8	99.463	96.678	97.816	96.731	96.49	97.01	96.549	97.13
12:03	MA51580-STD9	97.075	94.046	98.882	98.095	95.11	98.637	99.531	95.702
12:09	MA51580-STD10	100.986	99.369	103.555	101.47	98.35	101.65	102.605	99.598
12:15	MA51580-STD11	104.581	102.648	107.581	104.77	102.376	107.224	104.788	102.563
12:20	MA51580-STD12	109.336	106.358	112.24	108.092	104.892	109.073	107.229	105.408
12:52	MA51580-STD13	100	100	100	100	100	100	100	100
12:58	ZZZZZZ	100.175	99.82	100.446	98.497	102.199	101.883	98.527	102.664
13:04	MA51580-ICVA1	101.323	108.846	105.637	88.428	105.864	104.819	91.53	104.392
13:09	MA51580-ICV1	106.44	109.74	103.979	100.939	108.869	104.081	101.46	109.375
13:35	MA51580-ICB1	98.559	97.429	100.28	99.376	98.699	100.188	99.296	97.609
13:41	MA51580-CCVA1	100.146	103.419	104.442	102.627	103.529	104.509	101.703	102.348
13:47	MA51580-CCB1	96.114	94.582	108.844	100.843	98.551	109.577	101.659	98.218
13:53	MA51580-CRI1	100.245	100.93	103.369	100.957	103.344	103.975	101.611	103.044
13:59	ZZZZZZ	100.589	105.027	109.75	100.576	111.594	110.293	99.119	111.243
14:05	ZZZZZZ	101.329	105.918	109.5	101.649	110.999	111.854	99.78	110.645
14:12	ZZZZZZ	103.751	103.824	98.178	100.224	105.142	99.233	98.67	104.953
14:18	MA51580-ICSA1	108.193	108.09	109.007	98.771	108.815	109.419	95.855	101.927
14:24	MA51580-ICSAB1	122.347	111.912	107.573	96.986	114.336	107.954	95.425	108.295
14:49	ZZZZZZ	123.009	108.627	104.3	102.035	107.453	106.286	100.48	107.829
14:55	MA51580-CCVA2	119.513	110.109	105.836	102.614	110.382	108.035	101.371	110.477
15:01	MA51580-CCB2	120.449	108.473	103.986	88.519	109.225	107.19	89.889	109.114
15:07	MP30243-MB1	119.312	108.151	104.804	102.476	109.213	106.391	100.926	108.648
15:13	ZZZZZZ	122.922	106.155	101.329	105.053	111.706	114.662	119.363	111.089
15:29	MP30162-S1	109.408	97.585	107.582	101.675	103.639	110.027	99.7	102.97
15:36	MP30162-S2	115.522	107.249	110.294	102.2	112.932	113.248	101.417	113.083
15:42	MP30162-S3	120.13	109.796	111.795	101.393	115.585	114.006	100.969	115.913

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:48	MP30163-S1	122.605	111.948	112.655	102.369	117.052	115.278	100.538	118.029
15:54	MP30163-S2	122.234	111.782	112.216	101.277	118.051	114.077	100.987	117.808
16:00	ZZZZZZ	118.392	112.506	105.782	99.374	115.764	108.811	98.047	115.275
16:06	ZZZZZZ	124.235	111.219	107.514	97.771	116.924	111.165	99.384	116.957
16:12	ZZZZZZ	121.648	111.364	109.408	99.408	113.67	112.233	97.747	113.518
16:18	MA51580-CCVA3	122.584	113.187	108.684	102.115	111.714	109.233	99.586	111.762
16:24	MA51580-CCB3	120.578	110.55	107.763	101.349	111.062	107.052	99.813	109.534
16:30	MA51580-CCVA4	118.081	109.283	106.351	102.412	108.499	106.939	99.516	108.377
16:36	MA51580-CCB4	116.647	106.881	104.372	100.926	106.329	106.575	99.376	105.917
16:42	ZZZZZZ	117.945	108.412	109.301	101.104	108.569	108.469	100.095	107.311
16:49	MP30299-MB1	116.676	106.901	105.247	100.975	107.444	106.252	100.206	107.383
16:55	MP30299-B1	116.341	110.042	107.4	102.415	110.662	108.308	100.11	109.557
17:01	MP30299-S1	No results reported for the elements associated with this internal standard.							
17:08	MP30299-S2	No results reported for the elements associated with this internal standard.							
17:14	JD36320-1	117.366	110.858	110.352	94.315	114.663	112.629	96.965	114.738
17:20	MP30299-S3	No results reported for the elements associated with this internal standard.							
17:26	JD36320-3	121.055	110.252	105.67	97.515	115.029	109.442	97.208	115.254
17:32	MA51580-CCVA5	122.158	113.423	105.247	99.58	112.384	105.265	97.785	111.462
17:38	MA51580-CCB5	123.719	112.403	104.994	98.252	110.663	108.746	97.773	111.574
17:44	ZZZZZZ	118.455	107.291	107.997	95.768	111.833	109.355	94.333	110.976
17:50	ZZZZZZ	119.176	108.387	101.888	96.192	111.338	103.773	95.302	111.946
17:56	ZZZZZZ	119.229	109.513	107.723	95.781	113.375	110.205	95.428	113.749
18:02	ZZZZZZ	120.494	110.361	108.91	95.693	113.195	110.099	95.091	113.439
18:08	ZZZZZZ	121.229	107.165	108.282	98.304	113.754	111.269	95.11	113.431
18:14	ZZZZZZ	120.828	111.104	103.472	96.78	114.232	106.114	94.993	113.84
18:20	ZZZZZZ	121.492	109.334	107.587	90.448	112.94	110.262	92.758	113.578
18:26	ZZZZZZ	119.924	109.804	108.153	94.624	113.646	109.422	94.328	112.728
18:32	ZZZZZZ	117.041	99.666	107.907	95.267	108.514	110.388	94.55	108.167
18:38	ZZZZZZ	123.347	112.886	114.144	95.524	115.201	113.59	94.239	114.275
18:44	MA51580-CCVA6	125.962	113.272	102.348	96.854	112.314	103.876	94.986	111.835
18:51	MA51580-CCB6	125.646	112.084	104.567	95.711	111.816	106.644	95.398	111.329
18:57	ZZZZZZ	120.836	109.711	106.883	94.429	113.415	108.767	93.811	112.227
19:03	ZZZZZZ	121.078	110.214	102.764	94.747	112.158	105.341	93.403	112.657

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
19:09	ZZZZZZ	122.11	110.989	99.09	93.73	113.472	102.795	93.473	112.438
19:15	ZZZZZZ	120.916	111.119	107.559	94.638	112.744	108.969	93.332	112.274
19:21	ZZZZZZ	122.6	110.658	108.55	94.436	112.857	109.877	93.101	113.276
19:27	ZZZZZZ	122.419	112.276	108.463	94.167	114.498	110.299	92.818	113.972
19:33	ZZZZZZ	123.627	113.052	102.187	93.744	114.334	103.534	93.262	112.516
19:39	ZZZZZZ	123.89	110.491	107.558	94.063	114.02	110.065	93.666	113.536
19:45	MA51580-CCVA7	127.882	115.703	107.632	96.203	112.362	108.424	95.383	113.193
19:51	MA51580-CCB7	128.616	111.775	104.771	89.31	110.232	106.889	90.03	111.737
19:57	MP30300-MB1	117.468	102.961	105.526	96.251	102.716	106.394	95.114	102.676
20:03	MP30300-B1	124.053	111.012	105.776	96.046	110.092	106.511	94.779	110.321
20:09	MP30300-S1	No results reported for the elements associated with this internal standard.							
20:15	MP30300-S2	No results reported for the elements associated with this internal standard.							
20:21	JD36320-11	123.292	108.118	101.514	92.311	113.895	104.564	92.116	113.474
20:27	ZZZZZZ	122.458	111.662	108.081	94.48	114.946	110.734	94.127	114.224
20:33	ZZZZZZ	123.195	110.565	107.583	93.092	113.676	109.909	92.836	113.162
20:39	ZZZZZZ	124.518	111.611	108.314	93.248	115.002	109.213	92.265	113.531
20:45	ZZZZZZ	124.209	111.041	106.672	92.667	114.022	110.53	92.417	113.322
20:51	ZZZZZZ	124.537	112.259	106.966	91.814	115.89	109.674	92.425	114.058
20:57	MA51580-CCVA8	127.612	115.459	98.544	94.723	112.501	100.207	93.568	112.964
21:03	MA51580-CCB8	128.838	112.444	104.825	96.457	111.856	107.732	96.321	111.015
21:09	ZZZZZZ	122.45	110.196	106.447	92.661	111.446	108.759	92.486	111.47
21:15	ZZZZZZ	122.324	111.282	107.46	93.706	112.406	109.243	93.23	112.494
21:21	ZZZZZZ	128.846 !	113.436	103.492	93.137	112.539	106.014	94.089	111.653
21:27	ZZZZZZ	125.526 !	114.904	106.28	96.954	109.505	108.067	96.57	109.977
21:33	MP30266-B1	126.066 !a	112.276	104.048	96.176	111.433	104.997	95.338	110.8
21:39	MP30266-S1	120.495	111.145	104.095	95.066	107.906	103.851	93.077	107.335
21:45	MP30266-S2	123.911	112.74	104.698	93.799	109.996	105.199	92.474	109.217
21:51	JD36224-3	124.842	111.05	99.93	93.572	108.918	102.045	93.011	108.289
21:57	ZZZZZZ	120.473	111.239	105.256	92.136	107.366	104.167	90.024	107.438
22:03	MP30266-MB1	130.657 !b	110.957	102.924	93.167	111.205	105.756	93.19	111.301
22:09	MA51580-CCVA9	127.186	111.575	103.088	93.028	109.385	105.485	92.79	108.449
22:15	MA51580-CCB9	127.606	109.818	103.096	93.153	108.682	105.24	93.06	109.065
22:21	ZZZZZZ	120.227	109.29	99.236	91.949	104.444	97.973	88.748	104.165

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
22:27	ZZZZZZ	128.857	!a112.214	101.643	92.014	110.48	104.075	92.905	109.851
22:33	ZZZZZZ	126.577	!a111.605	102.187	92.379	109.653	103.191	92.406	108.286
22:39	ZZZZZZ	124.17	112.396	102.455	84.782	106.778	102.142	82.663	106.337
22:45	ZZZZZZ	136.969	!a113.589	107.276	97.07	113.015	109.777	96.993	112.213
22:51	ZZZZZZ	134.483	! 113.49	107.144	95.681	112.216	106.945	95.64	112.574
22:57	MA51580-CCVA10	129.753	112.432	104.061	94.502	109.742	106.177	94.248	110.03
23:03	MA51580-CCB10	130.983	!a111.477	102.706	94.058	110.655	105.811	93.262	110.445
23:09	MP30244-MB1	125.336	104.264	97.545	94.79	101.283	101.712	112.263	100.937
23:15	ZZZZZZ	127.483	111.014	101.622	94.928	106.434	103.315	102.768	106.453
23:21	JD36168-2	116.274	97.089	98.497	92.817	96.4	101.351	97.958	96.901
23:27	ZZZZZZ	125.975	109.792	104.798	93.596	104.562	104.001	98.304	104.445
23:33	ZZZZZZ	124.638	106.081	97.461	93.468	103.034	100.533	99.999	102.939
23:39	ZZZZZZ	121.334	106.986	100.129	95.104	102.371	99.187	97.906	102.143
23:45	ZZZZZZ	123.941	107.379	94.051	93.529	103.771	96.492	96.688	104.031
23:51	ZZZZZZ	125.291	111.044	97.568	96.061	102.793	97.876	98.282	101.743
23:57	ZZZZZZ	127.238	108.363	101.748	87.479	105.034	103	91.634	105.625
00:03	ZZZZZZ	114.397	99.983	100.475	92.257	96.318	99.965	96.251	95.017
00:09	MA51580-CCVA11	129.308	112.352	102.029	94.949	109.023	102.079	93.669	109.425
00:15	MA51580-CCB11	128.701	110.577	102.954	94.457	110.496	105.975	94.176	109.758
00:21	ZZZZZZ	126.246	104.793	97.081	93.22	102.849	101.207	110.484	102.768
00:27	ZZZZZZ	121.798	107.074	97.629	91.733	102.799	98.328	97.204	102.302
00:33	MA51580-CCVA12	130.85	!b 113.768	102.416	95.724	113.151	104.396	94.228	111.723
00:39	MA51580-CCB12	130.669	!b112.657	103.855	93.881	110.662	106.656	94.354	111.406
00:45	ZZZZZZ	129.659	111.112	103.805	93.738	109.923	105.434	94.347	109.923
00:51	ZZZZZZ	127.885	111.694	103.906	94.216	109.805	104.995	94.208	109.95
00:57	ZZZZZZ	127.323	109.758	103.017	93.72	108.655	105.285	93.356	107.896

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Lithium	60-125 %
Istd#2	Scandium (45-1)	60-125 %
Istd#3	Scandium (45-2)	60-125 %
Istd#4	Scandium (45-3)	60-125 %
Istd#5	Germanium (72-1)	60-125 %
Istd#6	Germanium (72-2)	60-125 %
Istd#7	Germanium (72-3)	60-125 %
Istd#8	Germanium (74-1)	60-125 %

(a) No samples reported for the elements associated with this internal standard.
(b) No samples reported for this element in the area bracketed by this QC.

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
11:16	MA51580-STD1	100	100	100	100	100	100	100	100
11:22	MA51580-STD2	100	100	100	100	100	100	100	100
11:27	MA51580-STD3	100	100	100	100	100	100	100	100
11:33	MA51580-STD4	101.049	99.358	95.941	99.747	99.224	95.686	101.914	93.292
11:39	MA51580-STD5	96.518	100.293	99.363	94.965	98.517	98.845	96.141	98.447
11:45	MA51580-STD6	99.337	98.424	98.807	98.026	97.179	98.289	98.65	96.385
11:51	MA51580-STD7	97.715	98.513	98.772	97.55	97.031	97.933	97.868	96.66
11:57	MA51580-STD8	96.731	96.689	96.283	96.471	95.949	96.595	97.425	95.841
12:03	MA51580-STD9	96.946	99.623	95.077	97.283	97.289	95.031	98.872	94.103
12:09	MA51580-STD10	100.589	102.237	98.227	100.509	99.901	98.415	101.521	97.903
12:15	MA51580-STD11	105.289	104.26	99.563	102.043	100.003	99.056	105.405	100.82
12:20	MA51580-STD12	107.725	106.641	101.655	103.499	100.866	102.505	106.78	103.116
12:52	MA51580-STD13	100	100	100	100	100	100	100	100
12:58	ZZZZZZ	101.32	99.129	103.031	101.906	99.669	103.665	101.247	99.829
13:04	MA51580-ICVA1	104.721	91.59	105.573	102.021	87.056	107.353	102.911	103.349
13:09	MA51580-ICV1	103.57	101.041	112.043	104.665	102.329	113.012	104.241	106.238
13:35	MA51580-ICB1	99.031	99.607	98.837	99.673	99.709	100.386	100.576	99.02
13:41	MA51580-CCVA1	104.242	102.149	101.653	101.569	99.131	103.816	103.661	100.107
13:47	MA51580-CCB1	108.225	101.863	99.401	108.703	102.171	99.597	108.227	93.486
13:53	MA51580-CRI1	103.643	101.366	104.858	103.39	101.651	105.876	103.743	99.761
13:59	ZZZZZZ	109.263	99.126	111.106	106.994	99.73	110.999	109.326	103.82
14:05	ZZZZZZ	110.809	100.889	109.62	107.447	101.253	111.6	110.256	105.091
14:12	ZZZZZZ	98.104	99.129	107.347	97.915	100.862	108.389	97.876	101.635
14:18	MA51580-ICSA1	103.481	92.225	96.693	95.659	87.363	98.504	95.351	99.231
14:24	MA51580-ICSAB1	104.615	91.515	101.095	96.136	87.018	103.081	96.425	104.385
14:49	ZZZZZZ	106.233	100.343	107.104	105.538	103.139	108.092	104.673	108.982
14:55	MA51580-CCVA2	107.536	101.115	107.018	105.032	101.469	111.946	105.644	106.502
15:01	MA51580-CCB2	106.143	89.195	110.353	106.553	90.27	110.806	104.898	105.911
15:07	MP30243-MB1	105.245	100.784	108.025	105.062	103.198	110.411	105.363	105.576
15:13	ZZZZZZ	113.782	119.262	102.942	100.185	102.471	103.191	98.507	100.877
15:29	MP30162-S1	109.274	100.301	99.113	104.036	97.77	104.105	106.82	101.064
15:36	MP30162-S2	112.061	101.914	108.41	106.943	99.915	113.9	110.473	109.177
15:42	MP30162-S3	113.694	101.095	112.249	108.069	98.571	117.001	111.379	110.375

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:48	MP30163-S1	114.251	101.426	113.363	108.337	99.283	117.934	112.961	112.206
15:54	MP30163-S2	112.628	101.039	112.893	108.299	98.895	117.749	112.683	111.776
16:00	ZZZZZZ	108.347	98.032	109.447	101.519	95.481	116.077	106.325	109.924
16:06	ZZZZZZ	109.992	99.33	113.324	105.296	98.134	117.806	108.862	112.067
16:12	ZZZZZZ	111.187	98.081	109.193	104.203	95.578	114.617	108.907	111.007
16:18	MA51580-CCVA3	108.357	100.102	110.05	105.963	99.912	113.671	107.029	108.693
16:24	MA51580-CCB3	106.99	100.01	110.197	107.737	102.174	112.309	107.741	107.694
16:30	MA51580-CCVA4	105.824	99.798	106.315	103.281	99.216	110.611	104.258	106.207
16:36	MA51580-CCB4	106.026	99.858	105.999	105.813	101.785	108.538	105.648	103.266
16:42	ZZZZZZ	107.987	100.175	108.529	108.521	102.021	110.864	107.922	106.848
16:49	MP30299-MB1	105.151	99.999	106.735	105.835	102.176	109.629	104.773	105.218
16:55	MP30299-B1	107.766	100.543	108.437	105.274	101.138	111.381	105.948	106.609
17:01	MP30299-S1	No results reported for the elements associated with this internal standard.							
17:08	MP30299-S2	No results reported for the elements associated with this internal standard.							
17:14	JD36320-1	111.485	97.582	109.257	104.336	93.419	115.322	110.514	111.344
17:20	MP30299-S3	No results reported for the elements associated with this internal standard.							
17:26	JD36320-3	107.313	96.929	108.814	100.694	95.125	115.841	106.297	112.032
17:32	MA51580-CCVA5	103.825	97.107	109.405	101.228	98.213	112.694	103.226	107.872
17:38	MA51580-CCB5	107.213	98.019	110.663	106.606	100.49	113.236	106.142	108.409
17:44	ZZZZZZ	108.852	95.054	105.242	101.68	92.56	112.666	107.25	108.909
17:50	ZZZZZZ	104.244	95.076	107.058	96.108	92.541	113.394	101.315	109.155
17:56	ZZZZZZ	108.699	95.31	107.461	102.372	93.043	113.662	107.905	110.127
18:02	ZZZZZZ	108.834	95.427	108.407	102.199	92.445	114.685	108.245	111.136
18:08	ZZZZZZ	110.214	95.231	107.495	102.244	95.665	114.259	107.71	111.184
18:14	ZZZZZZ	106.316	94.683	108.227	99.659	93.179	114.682	104.823	110.657
18:20	ZZZZZZ	109.461	92.49	108.206	102.414	88.55	113.57	108.143	111.896
18:26	ZZZZZZ	109.132	94.384	106.919	102.252	92.131	112.639	107.898	110.409
18:32	ZZZZZZ	109.046	93.835	101.911	102.22	92.459	106.998	107.707	104.077
18:38	ZZZZZZ	112.84	94.635	109.761	107.307	92.572	115.714	112.533	113.655
18:44	MA51580-CCVA6	102.386	95.091	109.184	99.901	95.667	114.004	102.63	109.553
18:51	MA51580-CCB6	105.914	95.712	110.997	105.974	98.643	113.454	105.07	109.308
18:57	ZZZZZZ	107.63	93.566	107.289	101.245	91.43	113.331	107.489	110.351
19:03	ZZZZZZ	104.691	93.546	107.065	96.842	91.036	111.991	102.563	110.223

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
19:09	ZZZZZZ	102.887	92.481	107.873	94.882	90.759	113.707	100.633	111.415
19:15	ZZZZZZ	109.021	93.557	106.838	101.521	91.43	113.449	107.899	110.528
19:21	ZZZZZZ	109.206	93.01	107.468	102.064	91.4	114.172	108.093	110.856
19:27	ZZZZZZ	109.378	93.416	109.09	101.427	91.706	114.988	107.982	111.971
19:33	ZZZZZZ	102.18	93.614	108.038	95.304	91.453	114.34	101	110.74
19:39	ZZZZZZ	109.798	93.297	107.349	101.711	91.7	114.051	107.538	112.238
19:45	MA51580-CCVA7	106.233	95.154	110.888	103.49	95.327	115.374	105.955	110.451
19:51	MA51580-CCB7	106.874	89.206	110.508	105.156	92.548	114.042	106.127	109.925
19:57	MP30300-MB1	105.829	95.303	101.276	104.777	98.003	104.571	105.82	100.412
20:03	MP30300-B1	105.727	94.927	108.185	103.101	96.23	111.864	103.93	108.547
20:09	MP30300-S1	No results reported for the elements associated with this internal standard.							
20:15	MP30300-S2	No results reported for the elements associated with this internal standard.							
20:21	JD36320-11	104.344	92.945	108.063	97.665	91.564	114.075	102.974	110.934
20:27	ZZZZZZ	109.653	93.996	109.702	103.533	92.618	116.416	109.243	111.995
20:33	ZZZZZZ	108.729	92.344	107.855	101.335	90.551	114.183	108.046	111.897
20:39	ZZZZZZ	109.215	92.919	108.579	101.47	90.659	114.583	108.243	113.154
20:45	ZZZZZZ	109.528	92.624	108.835	102.041	91.49	115.156	107.754	112.043
20:51	ZZZZZZ	109.797	92.932	109.513	102.737	91.254	115.853	108.064	111.711
20:57	MA51580-CCVA8	99.725	93.6	110.639	96.556	94.581	113.747	98.85	110.932
21:03	MA51580-CCB8	106.048	96.35	110.588	105.728	99.981	113.572	106.135	109.898
21:09	ZZZZZZ	107.789	92.237	105.668	100.673	90.553	112.686	106.703	111.119
21:15	ZZZZZZ	107.646	92.836	106.889	100.803	91	112.997	107.358	110.669
21:21	ZZZZZZ	104.415	94.797	112.234	102.76	97.938	114.892	103.68	111.787
21:27	ZZZZZZ	107.494	96.156	110.986	105.846	99.189	114.614	105.684	110.129
21:33	MP30266-B1	103.986	95.574	109.561	101.071	96.805	112.644	102.864	108.551
21:39	MP30266-S1	103.802	93.133	101.852	96.892	90.258	108.428	101.635	106.913
21:45	MP30266-S2	105.138	93.198	103.096	98.79	90.448	110.33	103.209	108.222
21:51	JD36224-3	100.509	92.309	103.49	95.623	91.136	111.271	99.962	108.284
21:57	ZZZZZZ	103.438	90.225	100.834	96.05	86.571	107.813	101.269	108.146
22:03	MP30266-MB1	105.404	93.739	109.891	104.037	96.737	112.591	104.144	109.832
22:09	MA51580-CCVA9	104.507	92.474	106.742	101.204	93.257	110.449	102.282	108.581
22:15	MA51580-CCB9	104.292	93.307	108.516	103.004	95.691	111.874	103.494	108.895
22:21	ZZZZZZ	98.099	89.534	98.191	91.013	85.869	106.532	96.772	106.938

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
22:27	ZZZZZZ	103.194	92.278	104.277	98.718	91.032	111.524	102.822	109.434
22:33	ZZZZZZ	102.035	92.102	103.718	98.851	91.798	111.067	102.067	108.879
22:39	ZZZZZZ	101.754	83.418	99.491	94.52	79.865	108.019	100.835	108.061
22:45	ZZZZZZ	108.707	97.102	111.339	106.769	99.757	115.263	108.321	111.663
22:51	ZZZZZZ	106.845	95.515	110.837	106.224	97.921	114.026	105.763	111.973
22:57	MA51580-CCVA10	104.695	94.114	106.882	100.676	94.062	112.143	103.031	109.304
23:03	MA51580-CCB10	105.037	93.621	109.411	103.285	96.892	113.269	104.057	109.931
23:09	MP30244-MB1	101.564	111.837	99.898	99.273	95.867	102.732	98.203	100.845
23:15	ZZZZZZ	102.596	103.34	105.402	100.064	94.212	109.491	100.686	109.216
23:21	JD36168-2	100.429	98.401	91.561	97.014	92.161	97.823	99.089	97.028
23:27	ZZZZZZ	104.601	98.843	100.055	99.61	90.712	107.757	102.468	106.642
23:33	ZZZZZZ	98.787	100.396	99.741	97.661	93.241	105.44	98.338	105.062
23:39	ZZZZZZ	97.993	97.116	95.641	93.283	89.535	104.092	97.785	104.483
23:45	ZZZZZZ	95.276	96.575	101.009	92.642	92.812	107.371	95.244	106.497
23:51	ZZZZZZ	96.671	97.33	98.378	92.995	92.454	105.235	95.099	105.243
23:57	ZZZZZZ	101.771	91.136	100.762	97.069	85.436	106.803	99.473	107.052
00:03	ZZZZZZ	99.533	96.124	89.888	93.28	87.353	96.988	98.025	98.109
00:09	MA51580-CCVA11	101.621	93.579	106.32	98.003	93.606	111.128	99.342	110.042
00:15	MA51580-CCB11	105.176	94.038	107.942	103.549	96.443	111.912	104.215	110.311
00:21	ZZZZZZ	100.117	111.415	98.372	95.909	91.957	105.405	98.293	103.983
00:27	ZZZZZZ	97.991	97.876	95.796	91.303	86.618	104.598	95.317	105.384
00:33	MA51580-CCVA12	103.586	94.154	107.926	99.601	94.203	113.58	101.454	110.967
00:39	MA51580-CCB12	106.09	94.679	109.907	102.893	97.088	114.069	104.108	111.387
00:45	ZZZZZZ	103.856	93.91	109.415	102.426	96.657	112.056	103.634	110.694
00:51	ZZZZZZ	103.486	93.745	107.9	102.265	95.707	110.642	103.14	109.719
00:57	ZZZZZZ	103.908	93.333	107.454	102.153	95.722	111.301	103.389	109.381

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#9	Germanium (74-2)	60-125 %
Istd#10	Germanium (74-3)	60-125 %
Istd#11	Rhodium (103-1)	60-125 %
Istd#12	Rhodium (103-2)	60-125 %
Istd#13	Rhodium (103-3)	60-125 %
Istd#14	Indium (115-1)	60-125 %
Istd#15	Indium (115-2)	60-125 %
Istd#16	Terbium (159-1)	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
11:16	MA51580-STD1	100	100	100	100	100	100
11:22	MA51580-STD2	100	100	100	100	100	100
11:27	MA51580-STD3	100	100	100	100	100	100
11:33	MA51580-STD4	100.227	99.067	94.492	99.773	96.219	99.568
11:39	MA51580-STD5	95.404	98.976	99.202	94.554	99.519	95.33
11:45	MA51580-STD6	98.627	97.453	96.61	98.349	98.683	99.287
11:51	MA51580-STD7	97.642	96.972	95.812	97.557	99.686	98.563
11:57	MA51580-STD8	97.433	96.678	96.132	97.794	98.497	98.346
12:03	MA51580-STD9	97.874	97.81	94.12	96.68	96.796	97.924
12:09	MA51580-STD10	100.594	99.806	98.988	99.59	98.641	100.477
12:15	MA51580-STD11	103.746	100.819	101.656	103.412	99.264	101.218
12:20	MA51580-STD12	106.421	102.214	103.021	105.351	99.125	101.834
12:52	MA51580-STD13	100	100	100	100	100	100
12:58	ZZZZZZ	101.013	98.421	99.546	101.851	105.887	102.079
13:04	MA51580-ICVA1	104.718	87.372	103.626	104.844	107.361	102.232
13:09	MA51580-ICV1	104.292	100.37	106.832	103.953	111.904	104.672
13:35	MA51580-ICB1	99.753	99.67	98.937	99.748	99.767	99.749
13:41	MA51580-CCVA1	103.891	100.022	100.134	104.259	104.71	102.074
13:47	MA51580-CCB1	108.004	100.877	93.461	108.452	100.585	108.706
13:53	MA51580-CRI1	102.728	100.63	97.544	103.303	105.022	103.121
13:59	ZZZZZZ	108.374	99.667	104.541	107.967	96.142	102.943
14:05	ZZZZZZ	107.885	100.814	104.717	108.582	96.411	103.078
14:12	ZZZZZZ	97.671	99.803	101.733	97.937	108.331	98.463
14:18	MA51580-ICSA1	101.947	94.231	99.42	101.898	97.5	93.588
14:24	MA51580-ICSAB1	102.298	94.67	105.247	102.746	101.785	94.363
14:49	ZZZZZZ	105.169	102.993	107.604	105.171	107.703	105.135
14:55	MA51580-CCVA2	106.09	102.698	107.674	107.373	110.466	104.896
15:01	MA51580-CCB2	105.359	90.286	106.259	106.539	111.075	106.071
15:07	MP30243-MB1	105.248	103.401	104.733	105.682	109.775	105.626
15:13	ZZZZZZ	102.986	104.552	102.159	103.773	124.744	108.54
15:29	MP30162-S1	107.461	102.274	99.461	108.045	83.094	97.273
15:36	MP30162-S2	109.627	103.297	108.751	110.828	90.962	99.6
15:42	MP30162-S3	111.279	102.102	111.073	111.854	88.792	100.447

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
15:48	MP30163-S1	111.67	103.175	112.841	112.389	92.92	101.308
15:54	MP30163-S2	111.761	102.939	112.737	112.054	92.001	100.785
16:00	ZZZZZZ	106.71	101.097	111.684	107.138	99.326	98.27
16:06	ZZZZZZ	108.157	102.635	113.406	109.087	96.938	101.248
16:12	ZZZZZZ	109.736	101.784	110.983	110.247	101.775	104.298
16:18	MA51580-CCVA3	108.209	102.872	108.975	109.183	112.3	107.216
16:24	MA51580-CCB3	107.496	103.001	107.773	108.195	111.849	108.502
16:30	MA51580-CCVA4	106.106	101.981	105.909	106.643	109.709	104.638
16:36	MA51580-CCB4	105.654	102.348	104.044	105.94	108.82	106.347
16:42	ZZZZZZ	108.102	103.332	106.748	108.308	110.237	108.554
16:49	MP30299-MB1	104.908	103.249	106.726	105.774	109.418	105.891
16:55	MP30299-B1	106.736	103.397	107.299	107.448	111.18	107.469
17:01	MP30299-S1	No results reported for the elements associated with this internal standard.					
17:08	MP30299-S2	No results reported for the elements associated with this internal standard.					
17:14	JD36320-1	110.528	100.829	111.587	111.168	95.852	102.026
17:20	MP30299-S3	No results reported for the elements associated with this internal standard.					
17:26	JD36320-3	106.951	101.891	112.856	107.528	93.3	97.163
17:32	MA51580-CCVA5	103.368	102.211	108.013	104.493	111.472	102.777
17:38	MA51580-CCB5	106.326	102.39	108.616	106.128	112.635	106.503
17:44	ZZZZZZ	107.602	100.255	108.92	108.875	96.041	100.805
17:50	ZZZZZZ	101.768	100.478	109.58	102.359	95.879	94.444
17:56	ZZZZZZ	108.58	100.597	110.995	108.872	95.444	100.904
18:02	ZZZZZZ	108.296	100.373	110.907	109.779	98.213	102.361
18:08	ZZZZZZ	108.625	104.05	111.364	109.708	85.405	97.105
18:14	ZZZZZZ	105.074	101.114	111.964	106.531	97.335	97.055
18:20	ZZZZZZ	108.86	95.891	111.949	109.832	91.643	100.414
18:26	ZZZZZZ	108.358	99.941	110.743	109.69	96.251	101.133
18:32	ZZZZZZ	108.773	100.219	104.403	109.696	90.556	101.912
18:38	ZZZZZZ	113.275	100.263	113.712	114.18	100.392	107.243
18:44	MA51580-CCVA6	102.769	100.815	110.019	103.472	112.647	102.633
18:51	MA51580-CCB6	104.945	101.674	109.649	105.949	112.671	107.685
18:57	ZZZZZZ	107.838	99.718	111.131	108.646	99.8	102.214
19:03	ZZZZZZ	102.73	100.275	110.572	103.628	100.133	96.82

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
19:09	ZZZZZZ	101.183	99.172	111.145	101.937	100.452	93.234
19:15	ZZZZZZ	107.629	99.88	110.904	108.263	97.504	101.22
19:21	ZZZZZZ	107.952	100.009	111.097	109.026	99.083	101.72
19:27	ZZZZZZ	107.941	99.96	112.906	109.029	100.555	103.24
19:33	ZZZZZZ	101.372	100.642	111.99	101.761	105.773	97.439
19:39	ZZZZZZ	108.038	100.326	112.213	108.725	98.44	101.815
19:45	MA51580-CCVA7	106.782	100.987	111.609	107.817	113.218	106.576
19:51	MA51580-CCB7	105.743	96.024	109.76	106.633	112.995	107.271
19:57	MP30300-MB1	105.177	102.047	101.452	105.438	103.893	106.714
20:03	MP30300-B1	104.981	101.059	109.127	106.016	111.682	105.605
20:09	MP30300-S1	No results reported for the elements associated with this internal standard.					
20:15	MP30300-S2	No results reported for the elements associated with this internal standard.					
20:21	JD36320-11	102.535	99.427	112.143	103.63	93.893	96.258
20:27	ZZZZZZ	108.348	100.815	112.272	109.405	97.982	102.227
20:33	ZZZZZZ	107.853	99.692	112.716	108.947	95.649	101.01
20:39	ZZZZZZ	108.671	99.662	113.51	109.713	96.122	100.594
20:45	ZZZZZZ	107.988	99.634	112.359	108.55	103.71	103.757
20:51	ZZZZZZ	107.797	99.467	113.474	108.638	100.602	102.625
20:57	MA51580-CCVA8	99.372	100.339	111.743	99.757	112.971	99.026
21:03	MA51580-CCB8	105.639	104.048	109.67	106.636	113.178	106.998
21:09	ZZZZZZ	107.08	99.584	111.309	108.301	98.514	101.159
21:15	ZZZZZZ	106.679	100.293	111.676	108.375	98.798	101.671
21:21	ZZZZZZ	103.474	102.066	112.252	103.393	113.487	104.51
21:27	ZZZZZZ	105.251	103.058	111.301	105.831	115.89	107.565
21:33	MP30266-B1	103.766	102.387	109.358	104.583	112.856	104.043
21:39	MP30266-S1	103.603	99.834	107.778	105.022	105.869	100.889
21:45	MP30266-S2	105.024	99.763	108.974	106.065	108.991	102.82
21:51	JD36224-3	101.112	100.432	109.408	101.941	108.254	99.043
21:57	ZZZZZZ	103.959	97.548	109.027	105.46	102.609	97.173
22:03	MP30266-MB1	105.162	101.894	110.665	105.823	112.32	106.352
22:09	MA51580-CCVA9	103.92	100.444	108.6	105.527	108.975	104.027
22:15	MA51580-CCB9	103.626	100.631	109.75	104.627	111.675	105.624
22:21	ZZZZZZ	98.694	96.903	107.423	100.408	100.749	93.16

INTERNAL STANDARD SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cu

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
22:27	ZZZZZZ	103.655	99.701	110.269	104.747	110.573	103.698
22:33	ZZZZZZ	103.4	100.689	109.171	104.153	111.037	103.134
22:39	ZZZZZZ	103.098	90.156	109.395	103.425	103.505	96.697
22:45	ZZZZZZ	107.173	104.494	112.646	108.65	118.423	110.253
22:51	ZZZZZZ	106.481	102.751	111.758	107.74	114.174	107.686
22:57	MA51580-CCVA10	104.661	100.696	109.703	105.881	110.897	104.547
23:03	MA51580-CCB10	103.921	102.073	110.415	104.593	112.227	105.739
23:09	MP30244-MB1	100.948	101.93	101.895	101.543	114.578	105.737
23:15	ZZZZZZ	102.441	101.338	110.216	103.686	110.156	102.971
23:21	JD36168-2	101.404	100.885	95.446	102.401	98.103	101.248
23:27	ZZZZZZ	106.249	100.374	107.189	106.982	107.765	104.842
23:33	ZZZZZZ	101.059	100.225	106.041	101.675	107.584	101.777
23:39	ZZZZZZ	100.448	100.8	105.688	101.908	102.49	96.516
23:45	ZZZZZZ	96.939	100.803	106.3	97.51	107.246	97.309
23:51	ZZZZZZ	97.249	100.678	106.348	98.524	106.355	97.761
23:57	ZZZZZZ	102.342	93.925	108.22	103.824	107.073	101.697
00:03	ZZZZZZ	100.622	98.118	98.172	102.248	95.916	97.097
00:09	MA51580-CCVA11	100.87	100.218	111.081	102.434	110.499	100.145
00:15	MA51580-CCB11	104.082	101.383	111.264	104.911	111.488	105.436
00:21	ZZZZZZ	99.923	100.439	105.134	101.402	107.165	102.352
00:27	ZZZZZZ	99.114	98.906	106.113	99.792	99.878	93.714
00:33	MA51580-CCVA12	102.706	101.216	111.416	103.518	111.6	101.537
00:39	MA51580-CCB12	104.123	101.414	111.102	104.973	113.054	105.572
00:45	ZZZZZZ	102.968	101.85	111.193	104.264	111.555	104.646
00:51	ZZZZZZ	102.252	101.319	109.673	103.748	110.749	104.483
00:57	ZZZZZZ	103.685	100.458	109.616	103.92	110.802	104.623

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#17	Terbium (159-2)	60-125 %
Istd#18	Terbium (159-3)	60-125 %
Istd#19	Holmium (165-1)	60-125 %
Istd#20	Holmium (165-2)	60-125 %
Istd#21	Bismuth (209-1)	60-125 %
Istd#22	Bismuth (209-2)	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51580 Units: ug/l

Time:			13:35		13:47		15:01		16:24	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	anr							
Antimony	2.0	.085	anr							
Arsenic	0.50	.025	anr							
Barium	1.0	.009								
Beryllium	0.50	.005	anr							
Boron	25	.85								
Cadmium	0.50	.01	anr							
Calcium	250	3.6								
Chromium	1.0	.018	anr							
Cobalt	0.50	.003								
Copper	2.0	.024	0.0295	<2.0	0.0185	<2.0	0.0208	<2.0	0.0258	<2.0
Iron	25	.24								
Lead	0.50	.008	anr							
Magnesium	250	.19								
Manganese	1.0	.012								
Molybdenum	1.0	.017								
Nickel	1.0	.017	anr							
Potassium	250	.78								
Selenium	0.50	.044								
Silver	0.50	.004	anr							
Sodium	250	1.5								
Strontium	5.0	.014								
Thallium	0.50	.002								
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013								
Zinc	5.0	.078	anr							

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51580 Units: ug/l

Time:		13:04			13:09			13:41	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium									
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	60	54.9	91.5				50	48.0	96.0
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51580 Units: ug/l

Time:		14:55			16:18	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium						
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper	50	48.7	97.4	50	47.0	94.0
Iron						
Lead	anr					
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Potassium						
Selenium						
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	anr					

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51580 Units: ug/l

Time:			13:53	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	anr	
Antimony	2.0	0.25	anr	
Arsenic	0.50	0.50	anr	
Barium	1.0	0.50		
Beryllium	0.50	0.25	anr	
Boron	25	2.5		
Cadmium	0.50	0.25	anr	
Calcium	250	125		
Chromium	1.0	2.0	anr	
Cobalt	0.50	0.25		
Copper	2.0	2.0	1.95	97.5
Iron	25	25		
Lead	0.50	0.25	anr	
Magnesium	250	125		
Manganese	1.0	0.25		
Molybdenum	1.0	0.50		
Nickel	1.0	2.0	anr	
Potassium	250	125		
Selenium	0.50	0.50		
Silver	0.50	1.0	anr	
Sodium	250	125		
Strontium	5.0	0.50		
Thallium	0.50	0.25		
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0		
Zinc	5.0	2.0	anr	

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51580 Units: ug/l

Time:			14:18		14:24	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	94300	94.3	93000	93.0
Antimony			1.87		0.701	
Arsenic		20	0.108		19.8	99.0
Barium			0.188		0.213	
Beryllium			0.0000539		0.000541	
Boron		50	2.47		49.3	98.6
Cadmium		20	0.0702		19.8	99.0
Calcium	100000	100000	97200HH	97.2	98600HH	98.6
Chromium		20	0.893		20.5	102.5
Cobalt		20	0.103		18.5	92.5
Copper		20	1.30		17.4	87.0
Iron	100000	100000	93200HH	93.2	93000HH	93.0
Lead			0.0522		0.0506	
Magnesium	100000	100000	93000HH	93.0	92100HH	92.1
Manganese		20	0.419		19.2	96.0
Molybdenum	2000	2000	2340HH	117.0	2360HH	118.0
Nickel		20	-6.01*(a		10.4	52.0*(a)
Potassium	100000	100000	95000HH	95.0	94200HH	94.2
Selenium		20	0.357		20.9	104.5
Silver		20	0.0538		20.7	103.5
Sodium	100000	100000	94000HH	94.0	93500HH	93.5
Strontium	2000	2000	2260HH	113.0	2380HH	119.0
Thallium			0.0266		0.0118	
Tin	2000	2000	2070HH	103.5	2050HH	102.5
Titanium	2000	2000	1930HH	96.5	1910HH	95.5
Vanadium		20	0.0371		22.2	111.0
Zinc		20	0.766		17.0	85.0

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30105
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/02/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.54	32	2.2	<50
Antimony	4.0	.044	1.7	0.011	<4.0
Arsenic	1.0	.018	.39	0.069	<1.0
Barium	2.0	.018	.73	0.080	<2.0
Beryllium	1.0	.006	.15	0.0013	<1.0
Boron	50	1.7	14		
Cadmium	1.0	.014	.17	0.0026	<1.0
Calcium	500	7.2	200	15.5	<500
Chromium	2.0	.03	.62	-0.027	<2.0
Cobalt	1.0	.004	.17	0.0072	<1.0
Copper	4.0	.024	1.9	0.23	<4.0
Iron	50	.47	19	2.8	<50
Lead	1.0	.014	.52	0.053	<1.0
Magnesium	500	.38	46	1.2	<500
Manganese	2.0	.018	.63	0.075	<2.0
Molybdenum	2.0	.034	.45		
Nickel	2.0	.016	.95	0.077	<2.0
Potassium	500	1.6	68	2.5	<500
Selenium	1.0	.088	.55	-0.083	<1.0
Silver	1.0	.004	.16	-0.15	<1.0
Sodium	500	1.1	470	12.4	<500
Strontium	10	.028	2.4		
Thallium	1.0	.004	.17	-0.0017	<1.0
Tin	10	.07	2.6		
Titanium	2.0	.09	1.6		
Vanadium	2.0	.026	1.8	0.12	<2.0
Zinc	10	.096	5.4	-0.14	<10

Associated samples MP30105: JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6, JD35920-2F, JD35920-3F, JD35920-4F, JD35920-5F, JD35920-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30105
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/02/21

Metal	JD35834-3F Original	MS	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	78.0	4270	4000	104.5	75-125
Antimony	0.11	80.6	80	100.8	75-125
Arsenic	0.43	77.6	80	96.7	75-125
Barium	11.1	93.1	80	102.1	75-125
Beryllium	0.0	77.0	80	96.3	75-125
Boron					
Cadmium	0.0	75.9	80	94.9	75-125
Calcium	36300	40200	4000	92.5	75-125
Chromium	0.91	78.0	80	96.7	75-125
Cobalt	0.090	78.5	80	98.0	75-125
Copper	1.9	82.8	80	100.9	75-125
Iron	106	4090	4000	99.8	75-125
Lead	0.12	82.7	80	103.2	75-125
Magnesium	2040	6130	4000	102.3	75-125
Manganese	3.5	80.0	80	95.5	75-125
Molybdenum					
Nickel	0.73	81.6	80	101.1	75-125
Potassium	970	4970	4000	100.0	75-125
Selenium	0.61	378	400	94.5	75-125
Silver	0.0	85.6	80	107.0	75-125
Sodium	18300	23100	4000	112.5	75-125
Strontium					
Thallium	0.0	85.8	80	107.3	75-125
Tin					
Titanium					
Vanadium	0.29	83.7	80	104.3	75-125
Zinc	1.7	76.3	80	93.1	75-125

Associated samples MP30105: JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6, JD35920-2F, JD35920-3F, JD35920-4F, JD35920-5F, JD35920-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30105
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/02/21

Metal	JD35834-3F Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum	78.0	4380	4000	107.2	2.5	20
Antimony	0.11	80.9	80	101.1	0.4	20
Arsenic	0.43	79.3	80	98.8	2.2	20
Barium	11.1	93.8	80	103.0	0.7	20
Beryllium	0.0	78.5	80	98.1	1.9	20
Boron						
Cadmium	0.0	77.9	80	97.4	2.6	20
Calcium	36300	40900	4000	110.0	1.7	20
Chromium	0.91	77.6	80	96.2	0.5	20
Cobalt	0.090	77.5	80	96.8	1.3	20
Copper	1.9	84.5	80	103.0	2.0	20
Iron	106	4190	4000	102.3	2.4	20
Lead	0.12	81.6	80	101.9	1.3	20
Magnesium	2040	6090	4000	101.3	0.7	20
Manganese	3.5	79.9	80	95.4	0.1	20
Molybdenum						
Nickel	0.73	81.5	80	101.0	0.1	20
Potassium	970	5130	4000	104.0	3.2	20
Selenium	0.61	397	400	99.3	4.9	20
Silver	0.0	86.3	80	107.9	1.3	20
Sodium	18300	22600	4000	102.5	2.2	20
Strontium						
Thallium	0.0	83.2	80	104.0	3.1	20
Tin						
Titanium						
Vanadium	0.29	83.8	80	104.4	0.1	20
Zinc	1.7	80.0	80	97.8	4.7	20

Associated samples MP30105: JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6, JD35920-2F, JD35920-3F, JD35920-4F, JD35920-5F, JD35920-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30105
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/02/21

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	4140	4000	103.5	80-120
Antimony	79.4	80	99.3	80-120
Arsenic	75.9	80	94.9	80-120
Barium	79.4	80	99.3	80-120
Beryllium	75.9	80	94.9	80-120
Boron				
Cadmium	75.7	80	94.6	80-120
Calcium	4120	4000	103.0	80-120
Chromium	76.5	80	95.6	80-120
Cobalt	77.7	80	97.1	80-120
Copper	83.6	80	104.5	80-120
Iron	4070	4000	101.8	80-120
Lead	79.7	80	99.6	80-120
Magnesium	4040	4000	101.0	80-120
Manganese	76.8	80	96.0	80-120
Molybdenum				
Nickel	80.9	80	101.1	80-120
Potassium	4030	4000	100.8	80-120
Selenium	381	400	95.3	80-120
Silver	83.1	80	103.9	80-120
Sodium	4040	4000	101.0	80-120
Strontium				
Thallium	82.6	80	103.3	80-120
Tin				
Titanium				
Vanadium	82.0	80	102.5	80-120
Zinc	76.1	80	95.1	80-120

Associated samples MP30105: JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6, JD35920-2F, JD35920-3F, JD35920-4F, JD35920-5F, JD35920-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30105
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/02/21

Metal	JD35834-3F Original	SDL 2:10	%DIF	QC Limits
Aluminum	92.8	84.8	7.8	0-10
Antimony	0.0979	0.00	NC	0-10
Arsenic	0.285	0.189	12.4 (a)	0-10
Barium	11.1	11.8	1.8	0-10
Beryllium	0.00	0.0400	NC	0-10
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium	36500	38600	6.0	0-10
Chromium	0.684	0.456	24.1 (a)	0-10
Cobalt	0.0896	0.0841	3.5	0-10
Copper	1.88	2.13	0.6	0-10
Iron	99.9	103	3.0	0-10
Lead	0.121	0.0814	0.9	0-10
Magnesium	2040	2030	0.2	0-10
Manganese	3.28	3.09	14.3 (a)	0-10
Molybdenum				
Nickel	0.716	0.372	48.0 (a)	0-10
Potassium	932	976	0.7	0-10
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Sodium	19400	18500	0.1	0-10
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Vanadium	0.294	0.139	52.6 (a)	0-10
Zinc	1.73	0.00	100.0(a)	0-10

Associated samples MP30105: JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6, JD35920-2F, JD35920-3F, JD35920-4F, JD35920-5F, JD35920-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30123 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/02/21

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.034	.095	0.060	<0.20

Associated samples MP30123: JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6, JD35920-2F, JD35920-3F, JD35920-4F, JD35920-5F, JD35920-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30123
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/02/21

Metal	JD35914-1 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.098	2.0	2	95.1	75-125

Associated samples MP30123: JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6, JD35920-2F, JD35920-3F, JD35920-4F, JD35920-5F, JD35920-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30123 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/02/21

Metal	JD35914-1 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.098	2.1	2	100.1	4.9	20

Associated samples MP30123: JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6, JD35920-2F, JD35920-3F, JD35920-4F, JD35920-5F, JD35920-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30123
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/02/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	1.7	2	85.0	80-120

Associated samples MP30123: JD35920-2, JD35920-3, JD35920-4, JD35920-5, JD35920-6, JD35920-2F, JD35920-3F, JD35920-4F, JD35920-5F, JD35920-6F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30243
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/07/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.83	32		
Antimony	4.0	.17	1.7		
Arsenic	1.0	.05	.39		
Barium	2.0	.018	.73		
Beryllium	1.0	.01	.15		
Boron	50	1.7	14		
Cadmium	1.0	.02	.17		
Calcium	500	7.2	200		
Chromium	2.0	.036	.62		
Cobalt	1.0	.006	.17		
Copper	4.0	.048	1.9	-0.035	<4.0
Iron	50	.47	19		
Lead	1.0	.016	.52		
Magnesium	500	.38	46		
Manganese	2.0	.024	.63		
Molybdenum	2.0	.034	.45		
Nickel	2.0	.034	.95		
Potassium	500	1.6	68		
Selenium	1.0	.088	.55		
Silver	1.0	.008	.16		
Sodium	500	3	470		
Strontium	10	.028	2.4		
Thallium	1.0	.004	.17		
Tin	10	.082	2.6		
Titanium	2.0	.22	1.6		
Vanadium	2.0	.026	1.8		
Zinc	10	.16	5.4		

Associated samples MP30243: JD35920-5, JD35920-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30243
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/07/21

Metal	JD35920-5 Original	MS	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper	1.8	71.2	80	86.8	75-125
Iron					
Lead					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP30243: JD35920-5, JD35920-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30243
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/07/21

Metal	JD35920-5 Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper	1.8	72.4	80	88.3	1.7	20
Iron						
Lead						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP30243: JD35920-5, JD35920-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30243
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/07/21

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	76.9	80	96.1	80-120
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP30243: JD35920-5, JD35920-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD35920
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30243 Methods: SW846 6020B
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/07/21

Metal	JD35920-5 Original	SDL 2:10	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	1.75	4.93	181.5*(a	0-10
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP30243: JD35920-5, JD35920-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Tetra Tech EC Inc.

Hoff VC- 336 Layfield Road, Perkiomenville, PA

SGS Job Number: JD36168

Sampling Dates: 11/30/21 - 12/03/21

Report to:

Tetra Tech EC Inc.
One Oxford Valley Suite 200
Langhorne, PA 19047
Jonathan.Dziekan@tetratech.com; Neb.Dedic@tetratech.com

ATTN: Jonathan Dziekan

Total number of pages in report: **719**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Mike Earp
General Manager

Client Service contact: Jadon Schiller 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Please share your ideas about
how we can serve you better at:
EHS.US.CustomerCare@sgs.com

January 7, 2022

Mr. Jonathan Dziekan
Tetra Tech EC Inc.
One Oxford Valley Suite 200
Langhorne, PA 19047

RE: SGS – Dayton, Job # JD36168 - Reissues

Dear Mr. Dziekan,

The final report for SGS job number JD36168 has been edited to reflect corrections to the results. These edits have been incorporated into the revised report which is attached.

Specifically, samples ID of JD36168-2, JD36168-3, JD36168-8, and JD36168-9 have been revised per client's request. The revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

February 4, 2022

Mr. Jonathan Dziekan
Tetra Tech EC Inc.
One Oxford Valley Suite 200
Langhorne, PA 19047

RE: SGS – Dayton, Job # JD36168 - Reissues #2

Dear Mr. Dziekan,

The final report for SGS job number JD36168 has been edited to reflect corrections to the results. These edits have been incorporated into the revised report which is attached.

Specifically, samples ID of JD36168-2, -2F, -3, -3F, -8, -8F, -9, and -9F have been revised per Neb Dedie's request 2/2/2022. The attached revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

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SGS North America Inc.

Sample Summary

Tetra Tech EC Inc.

Job No: JD36168

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD36168-1	12/03/21	12:30	MEB	12/03/21	AQ	Trip Blank Water	TB-20211130
JD36168-1R	12/03/21	12:30	MEB	12/03/21	AQ	Trip Blank Water	TB-20211130
JD36168-2	12/01/21	14:25	MEB	12/03/21	AQ	Ground Water	HOFF OW-4DL
JD36168-2F	12/01/21	14:25	MEB	12/03/21	AQ	Groundwater Filtered	HOFF OW-4DL
JD36168-3	12/01/21	16:30	MEB	12/03/21	AQ	Ground Water	HOFF OW-4DU
JD36168-3F	12/01/21	16:30	MEB	12/03/21	AQ	Groundwater Filtered	HOFF OW-4DU
JD36168-4	12/02/21	10:20	MEB	12/03/21	AQ	Ground Water	HOFF MW-5DL
JD36168-4F	12/02/21	10:20	MEB	12/03/21	AQ	Groundwater Filtered	HOFF MW-5DL
JD36168-5	12/02/21	11:35	MEB	12/03/21	AQ	Ground Water	HOFF MW-5DV
JD36168-5F	12/02/21	11:35	MEB	12/03/21	AQ	Groundwater Filtered	HOFF MW-5DV
JD36168-6	12/02/21	13:20	MEB	12/03/21	AQ	Ground Water	HOFF MW-5S
JD36168-6F	12/02/21	13:20	MEB	12/03/21	AQ	Groundwater Filtered	HOFF MW-5S

Sample Summary
(continued)

Tetra Tech EC Inc.

Job No: JD36168

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD36168-7	12/02/21	15:10	MEB	12/03/21	AQ	Ground Water	HOFF MW-6S
JD36168-7F	12/02/21	15:10	MEB	12/03/21	AQ	Groundwater Filtered	HOFF MW-6S
JD36168-8	12/03/21	11:00	MEB	12/03/21	AQ	Ground Water	HOFF OW-6DU
JD36168-8F	12/03/21	11:00	MEB	12/03/21	AQ	Groundwater Filtered	HOFF OW-6DU
JD36168-9	12/03/21	12:30	MEB	12/03/21	AQ	Ground Water	HOFF OW-6DL
JD36168-9F	12/03/21	12:30	MEB	12/03/21	AQ	Groundwater Filtered	HOFF OW-6DL
JD36168-10	11/30/21	13:40	MEB	12/03/21	AQ	Ground Water	HOFF MW-7DU
JD36168-10F	11/30/21	13:40	MEB	12/03/21	AQ	Groundwater Filtered	HOFF MW-7DU
JD36168-11	11/30/21	15:45	MEB	12/03/21	AQ	Ground Water	HOFF MW-7S
JD36168-11F	11/30/21	15:45	MEB	12/03/21	AQ	Groundwater Filtered	HOFF MW-7S

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Tetra Tech EC Inc. **Job No:** JD36168

Site: Hoff VC- 336 Layfield Road, Perkiomenville, PA **Report Date** 1/4/2022 4:47:15 PM

On 12/03/2021, 10 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.3 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD36168 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V1X8350

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36168-7MS, JD36168-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD36168-7 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36168-7 for Acetone: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-7 for Tetrahydrofuran: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-3 for Carbon disulfide: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-8 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36168-8 for Acetone: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-8 for Carbon disulfide: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-8 for Tetrahydrofuran: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-3 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36168-3 for Acetone: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-2 for Tetrahydrofuran: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-4 for Acetone: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-7 for Carbon disulfide: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-9 for Acetone: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-9 for Carbon disulfide: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-9 for Tetrahydrofuran: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-1 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36168-1 for Acetone: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-10 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V1X8350

- JD36168-1 for Carbon disulfide: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-1 for Tetrahydrofuran: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-4 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36168-3 for Tetrahydrofuran: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-11 for Carbon disulfide: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-4 for Tetrahydrofuran: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-11 for Acetone: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-9 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36168-5 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36168-10 for Carbon disulfide: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-4 for Carbon disulfide: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-11 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36168-5 for Carbon disulfide: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-10 for Acetone: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-11 for Tetrahydrofuran: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-6 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36168-10 for Tetrahydrofuran: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-6 for Tetrahydrofuran: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-6 for Carbon disulfide: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-2 for Carbon disulfide: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-2 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36168-2 for Acetone: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-5 for Tetrahydrofuran: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-5 for Acetone: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
- JD36168-6 for Acetone: Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.

MS Volatiles By Method SW846 8260D BY SIM

Matrix: AQ **Batch ID:** V3A7262

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36168-7MS, JD36168-7MSD were used as the QC samples indicated.
- Sample(s) JD36168-8 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.

Matrix: AQ **Batch ID:** V3A7265

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36294-5MS, JD36294-5MSD were used as the QC samples indicated.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ **Batch ID:** OP36999

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Isophorone are outside control limits.
- OP36999-BS1 for Isophorone: Outside of in house control limits.
- JD36168-11 for Di-n-octyl phthalate: Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.
- JD36168-11 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-3 for Di-n-octyl phthalate: Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.
- JD36168-11 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-3 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-3 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-2 for Di-n-octyl phthalate: Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.
- JD36168-2 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-10 for Di-n-octyl phthalate: Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.
- JD36168-2 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-10 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-10 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.

Matrix: AQ **Batch ID:** OP37001

- All samples were extracted within the recommended method holding time.
- Sample(s) JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- Sample(s) JD36168-4 have surrogates outside control limits. Probable cause due to matrix interference.
- JD36168-4 for Phenol-d5: Outside of in house control limits.
- JD36168-9 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-9 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-9 for Di-n-octyl phthalate: Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.
- JD36168-4 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-7 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- OP37001-BSD for 4-Chloroaniline: Analytical precision exceeds in-house control limits.
- JD36168-8 for Di-n-octyl phthalate: Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.
- JD36168-7 for Di-n-octyl phthalate: Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.
- JD36168-5 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD36168-8 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-8 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-5 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-6 for Di-n-octyl phthalate: Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.
- JD36168-6 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-6 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ **Batch ID:** OP37001

- OP37001-BSD for Aniline: Analytical precision exceeds in-house control limits.
- OP37001-BSD for Pyridine: Analytical precision exceeds in-house control limits.
- JD36168-4 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-7 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-5 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36168-4 for Di-n-octyl phthalate: Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: AQ **Batch ID:** OP36999A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36168-10, JD36168-11, JD36168-3 have surrogates outside control limits. Probable cause due to matrix interference.
- JD36168-11 for Nitrobenzene-d5: High percent recoveries and no positive found in the sample.
- JD36168-3 for Nitrobenzene-d5: High percent recoveries and no associated positive found in the sample.
- OP36999A-BSD12 for Benzo(a)pyrene: Analytical precision exceeds in-house control limits.
- JD36168-2 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- OP36999A-MB1 for Nitrobenzene-d5: Outside of in house control limits.
- JD36168-10 for Nitrobenzene-d5: High percent recoveries and no positive found in the sample.
- JD36168-10 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36168-11 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36168-3 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

Matrix: AQ **Batch ID:** OP37001A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36109-3MS, JD36109-3MSD were used as the QC samples indicated.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene are outside control limits. Outside control limits due to incorrect spike standard added.
- RPD(s) for MSD for Naphthalene are outside control limits for sample OP37001A-MSD. Analytical precision exceeds in-house control limits
- JD36168-5 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36168-5 for Indeno(1,2,3-cd)pyrene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: AQ **Batch ID:** OP36994

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Metals Analysis By Method SW846 6020B

Matrix: AQ **Batch ID:** MP30244

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36168-2MS, JD36168-2MSD, JD36168-2SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Aluminum, Antimony, Beryllium, Cadmium, Silver, Thallium, Zinc, Cobalt, Copper, Vanadium are outside control limits for sample MP30244-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals Analysis By Method SW846 7470A

Matrix: AQ **Batch ID:** MP30215

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36168-2MS, JD36168-2MSD were used as the QC samples for metals.

Matrix: AQ **Batch ID:** MP30250

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36168-6MS, JD36168-6MSD were used as the QC samples for metals.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JD36168
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/30/21 thru 12/03/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD36168-1	**TB-20211130**					
No hits reported in this sample.						
JD36168-2	**HOFF OW-4DL**					
Arsenic		23.1	1.0		ug/l	SW846 6020B
Barium		2.7	2.0		ug/l	SW846 6020B
Calcium		43500	2500		ug/l	SW846 6020B
Chromium		2.4	2.0		ug/l	SW846 6020B
Iron		96.8	50		ug/l	SW846 6020B
Magnesium		15000	500		ug/l	SW846 6020B
Manganese		11.1	2.0		ug/l	SW846 6020B
Nickel		2.6	2.0		ug/l	SW846 6020B
Potassium		1090	500		ug/l	SW846 6020B
Sodium		7260	500		ug/l	SW846 6020B
Vanadium		4.4	2.0		ug/l	SW846 6020B
JD36168-2F	**HOFF OW-4DL**					
Arsenic		22.3	1.0		ug/l	SW846 6020B
Barium		2.5	2.0		ug/l	SW846 6020B
Calcium		44700	2500		ug/l	SW846 6020B
Iron		62.1	50		ug/l	SW846 6020B
Magnesium		14700	500		ug/l	SW846 6020B
Manganese		8.8	2.0		ug/l	SW846 6020B
Potassium		1040	500		ug/l	SW846 6020B
Sodium		7070	500		ug/l	SW846 6020B
Vanadium		4.1	2.0		ug/l	SW846 6020B
JD36168-3	**HOFF OW-4DU**					
1,4-Dioxane		0.18 J	0.40	0.095	ug/l	SW846 8260D BY SIM
Anthracene		0.0534 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Fluoranthene		0.0541 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Fluorene		0.0431 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Phenanthrene		0.0752 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Pyrene		0.0500 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Aluminum		2820	50		ug/l	SW846 6020B
Arsenic		15.7	1.0		ug/l	SW846 6020B
Barium		212	10		ug/l	SW846 6020B
Calcium		76200	2500		ug/l	SW846 6020B
Chromium		76.5	2.0		ug/l	SW846 6020B
Cobalt		1.7	1.0		ug/l	SW846 6020B
Copper		10.7	4.0		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36168
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/30/21 thru 12/03/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Iron		2400	50		ug/l	SW846 6020B
Lead		2.8	1.0		ug/l	SW846 6020B
Magnesium		21600	2500		ug/l	SW846 6020B
Manganese		85.2	2.0		ug/l	SW846 6020B
Nickel		46.1	2.0		ug/l	SW846 6020B
Potassium		3700	500		ug/l	SW846 6020B
Sodium		16200	500		ug/l	SW846 6020B
Vanadium		4.5	2.0		ug/l	SW846 6020B
JD36168-3F	**HOFF OW-4DU**					
Arsenic		11.4	1.0		ug/l	SW846 6020B
Barium		98.7	2.0		ug/l	SW846 6020B
Calcium		53900	2500		ug/l	SW846 6020B
Magnesium		15800	500		ug/l	SW846 6020B
Manganese		2.5	2.0		ug/l	SW846 6020B
Nickel		2.0	2.0		ug/l	SW846 6020B
Potassium		3770	500		ug/l	SW846 6020B
Sodium		16500	500		ug/l	SW846 6020B
Vanadium		2.3	2.0		ug/l	SW846 6020B
JD36168-4	**HOFF MW-5DL**					
Di-n-butyl phthalate		4.1 B	1.9	0.51	ug/l	SW846 8270E
Aluminum		2330	50		ug/l	SW846 6020B
Arsenic		1.2	1.0		ug/l	SW846 6020B
Barium		29.4	2.0		ug/l	SW846 6020B
Cadmium		6.3	1.0		ug/l	SW846 6020B
Calcium		11900	500		ug/l	SW846 6020B
Chromium		16.0	2.0		ug/l	SW846 6020B
Cobalt		1.0	1.0		ug/l	SW846 6020B
Copper		9.5	4.0		ug/l	SW846 6020B
Iron		1650	50		ug/l	SW846 6020B
Lead		3.0	1.0		ug/l	SW846 6020B
Magnesium		1890	500		ug/l	SW846 6020B
Manganese		51.5	2.0		ug/l	SW846 6020B
Nickel		11.4	2.0		ug/l	SW846 6020B
Potassium		10400	500		ug/l	SW846 6020B
Sodium		3990	500		ug/l	SW846 6020B
Vanadium		4.5	2.0		ug/l	SW846 6020B
Zinc		21.5	10		ug/l	SW846 6020B
JD36168-4F	**HOFF MW-5DL**					
Aluminum		55.5	50		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36168
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/30/21 thru 12/03/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Barium		16.1	2.0		ug/l	SW846 6020B
Calcium		11100	500		ug/l	SW846 6020B
Chromium		3.3	2.0		ug/l	SW846 6020B
Iron		251	50		ug/l	SW846 6020B
Magnesium		1510	500		ug/l	SW846 6020B
Manganese		33.1	2.0		ug/l	SW846 6020B
Nickel		2.8	2.0		ug/l	SW846 6020B
Potassium		9810	500		ug/l	SW846 6020B
Sodium		3950	500		ug/l	SW846 6020B
Zinc		16.2	10		ug/l	SW846 6020B
JD36168-5	**HOFF MW-5DV**					
1,1-Dichloroethene		1.3	1.0	0.59	ug/l	SW846 8260D
cis-1,2-Dichloroethene		0.63 J	1.0	0.51	ug/l	SW846 8260D
1,1,1-Trichloroethane		2.3	1.0	0.54	ug/l	SW846 8260D
1,4-Dioxane		3.5	0.40	0.095	ug/l	SW846 8260D BY SIM
Di-n-butyl phthalate		2.6 B	1.8	0.48	ug/l	SW846 8270E
Aluminum		1240	50		ug/l	SW846 6020B
Arsenic		2.9	1.0		ug/l	SW846 6020B
Barium		45.5	2.0		ug/l	SW846 6020B
Calcium		148000	5000		ug/l	SW846 6020B
Chromium		7.1	2.0		ug/l	SW846 6020B
Copper		4.6	4.0		ug/l	SW846 6020B
Iron		715	50		ug/l	SW846 6020B
Lead		1.0	1.0		ug/l	SW846 6020B
Magnesium		36000	5000		ug/l	SW846 6020B
Manganese		22.8	2.0		ug/l	SW846 6020B
Nickel		6.0	2.0		ug/l	SW846 6020B
Potassium		4490	500		ug/l	SW846 6020B
Sodium		60800	5000		ug/l	SW846 6020B
Vanadium		11.3	2.0		ug/l	SW846 6020B
JD36168-5F	**HOFF MW-5DV**					
Arsenic		2.5	1.0		ug/l	SW846 6020B
Barium		34.8	2.0		ug/l	SW846 6020B
Calcium		143000	5000		ug/l	SW846 6020B
Magnesium		34800	5000		ug/l	SW846 6020B
Nickel		2.8	2.0		ug/l	SW846 6020B
Potassium		4440	500		ug/l	SW846 6020B
Sodium		58600	5000		ug/l	SW846 6020B
Vanadium		10.1	2.0		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36168
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/30/21 thru 12/03/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD36168-6	**HOFF MW-5S**					
Di-n-butyl phthalate		2.6 B	1.8	0.48	ug/l	SW846 8270E
Acenaphthene		0.0640 J	0.071	0.036	ug/l	SW846 8270E BY SIM
Acenaphthylene		0.0501 J	0.071	0.036	ug/l	SW846 8270E BY SIM
Anthracene		0.0767	0.071	0.036	ug/l	SW846 8270E BY SIM
Fluoranthene		0.157	0.071	0.036	ug/l	SW846 8270E BY SIM
Fluorene		0.126	0.071	0.036	ug/l	SW846 8270E BY SIM
Naphthalene		0.0523 J	0.071	0.036	ug/l	SW846 8270E BY SIM
Phenanthrene		0.173	0.071	0.036	ug/l	SW846 8270E BY SIM
Pyrene		0.109	0.071	0.036	ug/l	SW846 8270E BY SIM
Aluminum		363	50		ug/l	SW846 6020B
Barium		10	2.0		ug/l	SW846 6020B
Calcium		11500	500		ug/l	SW846 6020B
Chromium		3.9	2.0		ug/l	SW846 6020B
Copper		9.2	4.0		ug/l	SW846 6020B
Iron		227	50		ug/l	SW846 6020B
Magnesium		3100	500		ug/l	SW846 6020B
Manganese		3.8	2.0		ug/l	SW846 6020B
Nickel		2.7	2.0		ug/l	SW846 6020B
Potassium		1660	500		ug/l	SW846 6020B
Sodium		11400	500		ug/l	SW846 6020B
Vanadium		2.4	2.0		ug/l	SW846 6020B
Zinc		11.7	10		ug/l	SW846 6020B
JD36168-6F	**HOFF MW-5S**					
Barium		9.1	2.0		ug/l	SW846 6020B
Calcium		11700	500		ug/l	SW846 6020B
Chromium		2.4	2.0		ug/l	SW846 6020B
Copper		6.4	4.0		ug/l	SW846 6020B
Magnesium		3160	500		ug/l	SW846 6020B
Manganese		2.2	2.0		ug/l	SW846 6020B
Nickel		2.7	2.0		ug/l	SW846 6020B
Potassium		1630	500		ug/l	SW846 6020B
Sodium		11900	500		ug/l	SW846 6020B
Vanadium		2.7	2.0		ug/l	SW846 6020B
Zinc		11.4	10		ug/l	SW846 6020B
JD36168-7	**HOFF MW-6S**					
Di-n-butyl phthalate		2.3 B	1.9	0.51	ug/l	SW846 8270E
Aluminum		21500	130		ug/l	SW846 6020B
Arsenic		2.6	1.0		ug/l	SW846 6020B
Barium		57.6	2.0		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36168
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/30/21 thru 12/03/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Cadmium		1.8	1.0		ug/l	SW846 6020B
Calcium		5720	500		ug/l	SW846 6020B
Chromium		32.4	2.0		ug/l	SW846 6020B
Cobalt		6.0	1.0		ug/l	SW846 6020B
Copper		14.5	4.0		ug/l	SW846 6020B
Iron		16700	50		ug/l	SW846 6020B
Lead		10.3	1.0		ug/l	SW846 6020B
Magnesium		6920	500		ug/l	SW846 6020B
Manganese		134	2.0		ug/l	SW846 6020B
Nickel		18.6	2.0		ug/l	SW846 6020B
Potassium		3990	500		ug/l	SW846 6020B
Sodium		12900	500		ug/l	SW846 6020B
Vanadium		32.0	2.0		ug/l	SW846 6020B
Zinc		27.7	10		ug/l	SW846 6020B
JD36168-7F	**HOFF MW-6S**					
Aluminum		388	50		ug/l	SW846 6020B
Barium		3.3	2.0		ug/l	SW846 6020B
Calcium		3450	500		ug/l	SW846 6020B
Iron		232	50		ug/l	SW846 6020B
Magnesium		1380	500		ug/l	SW846 6020B
Manganese		4.2	2.0		ug/l	SW846 6020B
Nickel		2.9	2.0		ug/l	SW846 6020B
Potassium		712	500		ug/l	SW846 6020B
Sodium		11700	500		ug/l	SW846 6020B
Vanadium		2.6	2.0		ug/l	SW846 6020B
JD36168-8	**HOFF OW-6DU**					
1,4-Dioxane		0.22 JB	0.40	0.095	ug/l	SW846 8260D BY SIM
Di-n-butyl phthalate		11.6 B	2.0	0.53	ug/l	SW846 8270E
bis(2-Ethylhexyl)phthalate		1.8 J	2.0	1.3	ug/l	SW846 8270E
Fluorene		0.0519 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Naphthalene		0.501	0.080	0.040	ug/l	SW846 8270E BY SIM
Phenanthrene		0.0783 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Aluminum		1520	50		ug/l	SW846 6020B
Arsenic		11.7	1.0		ug/l	SW846 6020B
Barium		34.3	2.0		ug/l	SW846 6020B
Calcium		57800	2500		ug/l	SW846 6020B
Chromium		7.7	2.0		ug/l	SW846 6020B
Iron		756	50		ug/l	SW846 6020B
Lead		1.6	1.0		ug/l	SW846 6020B
Magnesium		16000	500		ug/l	SW846 6020B
Manganese		145	2.0		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36168
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/30/21 thru 12/03/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Nickel		5.2	2.0		ug/l	SW846 6020B
Potassium		2340	500		ug/l	SW846 6020B
Selenium		1.2	1.0		ug/l	SW846 6020B
Sodium		15700	500		ug/l	SW846 6020B
Vanadium		7.8	2.0		ug/l	SW846 6020B
JD36168-8F	**HOFF OW-6DU**					
Arsenic		10.4	1.0		ug/l	SW846 6020B
Barium		13.8	2.0		ug/l	SW846 6020B
Calcium		57300	2500		ug/l	SW846 6020B
Magnesium		15100	500		ug/l	SW846 6020B
Manganese		2.5	2.0		ug/l	SW846 6020B
Potassium		2060	500		ug/l	SW846 6020B
Sodium		15000	500		ug/l	SW846 6020B
Vanadium		7.0	2.0		ug/l	SW846 6020B
JD36168-9	**HOFF OW-6DL**					
1,4-Dioxane		0.32 J	0.40	0.095	ug/l	SW846 8260D BY SIM
Di-n-butyl phthalate		10.9 B	2.0	0.53	ug/l	SW846 8270E
bis(2-Ethylhexyl)phthalate		1.6 J	2.0	1.3	ug/l	SW846 8270E
Benzo(a)pyrene		0.0240 J	0.040	0.024	ug/l	SW846 8270E BY SIM
Fluoranthene		0.0456 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Phenanthrene		0.0536 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Arsenic		6.9	1.0		ug/l	SW846 6020B
Barium		5.9	2.0		ug/l	SW846 6020B
Calcium		41800	2500		ug/l	SW846 6020B
Magnesium		15900	500		ug/l	SW846 6020B
Manganese		8.4	2.0		ug/l	SW846 6020B
Sodium		13600	500		ug/l	SW846 6020B
JD36168-9F	**HOFF OW-6DL**					
Arsenic		6.7	1.0		ug/l	SW846 6020B
Barium		5.6	2.0		ug/l	SW846 6020B
Calcium		40700	2500		ug/l	SW846 6020B
Magnesium		15300	500		ug/l	SW846 6020B
Manganese		8.0	2.0		ug/l	SW846 6020B
Sodium		13100	500		ug/l	SW846 6020B
JD36168-10	**HOFF MW-7DU**					
1,2-Dichlorobenzene		1.1	1.0	0.53	ug/l	SW846 8260D
1,1-Dichloroethane		2.8	1.0	0.57	ug/l	SW846 8260D

Summary of Hits

Job Number: JD36168
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/30/21 thru 12/03/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,1-Dichloroethene		3.2	1.0	0.59	ug/l	SW846 8260D
cis-1,2-Dichloroethene		8.4	1.0	0.51	ug/l	SW846 8260D
Methyl Tert Butyl Ether		1.5	1.0	0.51	ug/l	SW846 8260D
Trichloroethene		2.9	1.0	0.53	ug/l	SW846 8260D
1,4-Dioxane		5.2	0.40	0.095	ug/l	SW846 8260D BY SIM
Arsenic		17.1	1.0		ug/l	SW846 6020B
Barium		53.2	2.0		ug/l	SW846 6020B
Calcium		106000	5000		ug/l	SW846 6020B
Chromium		29.1	2.0		ug/l	SW846 6020B
Iron		246	50		ug/l	SW846 6020B
Magnesium		27300	5000		ug/l	SW846 6020B
Manganese		18.6	2.0		ug/l	SW846 6020B
Nickel		22.8	2.0		ug/l	SW846 6020B
Potassium		3380	500		ug/l	SW846 6020B
Sodium		20800	5000		ug/l	SW846 6020B
JD36168-10F	**HOFF MW-7DU**					
Arsenic		18.6	1.0		ug/l	SW846 6020B
Barium		56.1	2.0		ug/l	SW846 6020B
Calcium		104000	5000		ug/l	SW846 6020B
Iron		120	50		ug/l	SW846 6020B
Magnesium		26900	5000		ug/l	SW846 6020B
Manganese		19.6	2.0		ug/l	SW846 6020B
Nickel		2.0	2.0		ug/l	SW846 6020B
Potassium		3700	500		ug/l	SW846 6020B
Sodium		20800	5000		ug/l	SW846 6020B
JD36168-11	**HOFF MW-7S**					
1,4-Dioxane		0.55	0.40	0.095	ug/l	SW846 8260D BY SIM
Aluminum		584	50		ug/l	SW846 6020B
Arsenic		4.2	1.0		ug/l	SW846 6020B
Barium		28.4	2.0		ug/l	SW846 6020B
Cadmium		1.1	1.0		ug/l	SW846 6020B
Calcium		47400	5000		ug/l	SW846 6020B
Chromium		13.9	2.0		ug/l	SW846 6020B
Cobalt		2.5	1.0		ug/l	SW846 6020B
Iron		512	500		ug/l	SW846 6020B
Magnesium		49100	5000		ug/l	SW846 6020B
Manganese		142	2.0		ug/l	SW846 6020B
Nickel		13.3	2.0		ug/l	SW846 6020B
Potassium		1810	500		ug/l	SW846 6020B
Sodium		144000	5000		ug/l	SW846 6020B
Vanadium		5.7	2.0		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36168
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 11/30/21 thru 12/03/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD36168-11F	**HOFF MW-7S**					
Arsenic		3.1	1.0		ug/l	SW846 6020B
Barium		26.7	2.0		ug/l	SW846 6020B
Cadmium		1.0	1.0		ug/l	SW846 6020B
Calcium		46700	5000		ug/l	SW846 6020B
Magnesium		48100	5000		ug/l	SW846 6020B
Manganese		109	2.0		ug/l	SW846 6020B
Nickel		4.6	2.0		ug/l	SW846 6020B
Potassium		1760	500		ug/l	SW846 6020B
Sodium		141000	5000		ug/l	SW846 6020B
Vanadium		4.4	2.0		ug/l	SW846 6020B

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	TB-20211130		
Lab Sample ID:	JD36168-1	**Date Sampled:**	12/03/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/03/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167346.D	1	12/13/21 18:42	BK	n/a	n/a	V3A7262
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	160%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	TB-20211130		
Lab Sample ID:	JD36168-1	**Date Sampled:**	12/03/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192802.D	1	12/06/21 17:57	BK	n/a	n/a	V1X8350
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide [a]	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-20211130		
Lab Sample ID:	JD36168-1	**Date Sampled:**	12/03/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		85-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-20211130		
Lab Sample ID:	JD36168-1	**Date Sampled:**	12/03/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

(a) Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-4DL		
Lab Sample ID:	JD36168-2	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167349.D	1	12/13/21 20:09	BK	n/a	n/a	V3A7262
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	173%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-4DL		
Lab Sample ID:	JD36168-2	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192808.D	1	12/06/21 20:33	BK	n/a	n/a	V1X8350
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide [a]	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-4DL		
Lab Sample ID:	JD36168-2	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		85-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-4DL		
Lab Sample ID:	JD36168-2	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

(a) Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-4DL		
Lab Sample ID:	JD36168-2	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80390.D	1	12/15/21 21:13	KLS	12/07/21 09:35	OP36999	E5P3805
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.7	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.7	0.49	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.48	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.7	0.62	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.7	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.7	0.42	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.7	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.43	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.7	0.37	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.4	0.42	ug/l	
87-86-5	Pentachlorophenol	ND	3.7	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.7	0.59	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.7	0.45	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.7	0.55	ug/l	
98-86-2	Acetophenone	ND	1.9	0.48	ug/l	
62-53-3	Aniline	ND	1.9	0.70	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.51	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.80	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.91	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.40	ug/l	
106-47-8	4-Chloroaniline	ND	3.7	0.49	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.42	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.55	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.93	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.93	0.52	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.0	ug/l	
132-64-9	Dibenzofuran	ND	3.7	0.67	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.9	0.49	ug/l	
117-84-0	Di-n-octyl phthalate [b]	ND	1.9	1.5	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-4DL		
Lab Sample ID:	JD36168-2	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.9	0.54	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.51	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.93	0.50	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.93	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.4	0.91	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.51	ug/l	
78-59-1	Isophorone	ND	1.9	0.36	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.93	0.60	ug/l	
88-74-4	2-Nitroaniline	ND	3.7	0.57	ug/l	
99-09-2	3-Nitroaniline	ND	3.7	0.59	ug/l	
100-01-6	4-Nitroaniline	ND	3.7	0.69	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.29	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.60	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.7	0.39	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.7		ug/l	
110-86-1	Pyridine	ND	1.9	0.29	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.45	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.93	0.33	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		10-73%
4165-62-2	Phenol-d5	32%		10-64%
118-79-6	2,4,6-Tribromophenol	93%		31-130%
4165-60-0	Nitrobenzene-d5	82%		28-126%
321-60-8	2-Fluorobiphenyl	84%		26-114%
1718-51-0	Terphenyl-d14	100%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-4DL		
Lab Sample ID:	JD36168-2	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P49926.D	1	12/08/21 11:18	CS	12/07/21 09:35	OP36999A	E4P2614
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.074	0.037	ug/l	
208-96-8	Acenaphthylene	ND	0.074	0.037	ug/l	
120-12-7	Anthracene	ND	0.074	0.037	ug/l	
56-55-3	Benzo(a)anthracene [a]	ND	0.037	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.037	0.022	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.037	0.022	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.074	0.037	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.074	0.037	ug/l	
218-01-9	Chrysene	ND	0.074	0.037	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.074	0.037	ug/l	
206-44-0	Fluoranthene	ND	0.074	0.037	ug/l	
86-73-7	Fluorene	ND	0.074	0.037	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.074	0.037	ug/l	
91-20-3	Naphthalene	ND	0.074	0.037	ug/l	
85-01-8	Phenanthrene	ND	0.074	0.037	ug/l	
129-00-0	Pyrene	ND	0.074	0.037	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	122%		29-124%
321-60-8	2-Fluorobiphenyl	101%		23-122%
1718-51-0	Terphenyl-d14	120%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-4DL		
Lab Sample ID:	JD36168-2	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81097.D	1	12/12/21 16:47	TL	12/07/21 09:45	OP36994	G6G2868
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0074	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.0074	0.0039	ug/l	
319-85-7	beta-BHC	ND	0.0074	0.0059	ug/l	
319-86-8	delta-BHC	ND	0.0074	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0074	0.0044	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0074	0.0037	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0074	0.0032	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0074	0.0032	ug/l	
60-57-1	Dieldrin	ND	0.0074	0.0057	ug/l	
72-54-8	4,4'-DDD	ND	0.0074	0.0043	ug/l	
72-55-9	4,4'-DDE	ND	0.0074	0.0037	ug/l	
50-29-3	4,4'-DDT	ND	0.0074	0.0051	ug/l	
72-20-8	Endrin	ND	0.0074	0.0045	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0074	0.0040	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0074	0.0050	ug/l	
53494-70-5	Endrin ketone	ND	0.0074	0.0046	ug/l	
959-98-8	Endosulfan-I	ND	0.0074	0.0039	ug/l	
33213-65-9	Endosulfan-II	ND	0.0074	0.0036	ug/l	
76-44-8	Heptachlor	ND	0.0074	0.0033	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0074	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0050	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		10-190%
877-09-8	Tetrachloro-m-xylene	83%		10-190%
2051-24-3	Decachlorobiphenyl	54%		10-156%
2051-24-3	Decachlorobiphenyl	59%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF OW-4DL
Lab Sample ID: JD36168-2
Matrix: AQ - Ground Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/01/21
Date Received: 12/03/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	23.1	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	2.7	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	43500	2500	ug/l	10	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [6]
Chromium	2.4	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [4]	SW846 3010A [6]
Iron	96.8	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	15000	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Manganese	11.1	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/07/21	12/07/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	2.6	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	1090	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	7260	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	4.4	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51549
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Instrument QC Batch: MA51580
(5) Prep QC Batch: MP30215
(6) Prep QC Batch: MP30244

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF OW-4DL		
Lab Sample ID:	JD36168-2F	**Date Sampled:**	12/01/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	22.3	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	2.5	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	44700	2500	ug/l	10	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	62.1	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	14700	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Manganese	8.8	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/07/21	12/07/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	1040	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	7070	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	4.1	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51549
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Prep QC Batch: MP30215
(5) Prep QC Batch: MP30244

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-4DU		
Lab Sample ID:	JD36168-3	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167350.D	1	12/13/21 20:37	BK	n/a	n/a	V3A7262
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.18	0.40	0.095	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	156%		39-174%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-4DU		
Lab Sample ID:	JD36168-3	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192797.D	1	12/06/21 15:47	BK	n/a	n/a	V1X8350
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide [a]	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF OW-4DU
Lab Sample ID: JD36168-3
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/01/21
Date Received: 12/03/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		85-118%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-4DU		
Lab Sample ID:	JD36168-3	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	99%		80-121%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

(a) Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-4DU		
Lab Sample ID:	JD36168-3	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80391.D	1	12/15/21 21:41	KLS	12/07/21 09:35	OP36999	E5P3805
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.8	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.8	0.51	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.50	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.8	0.65	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.8	1.8	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.8	0.44	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.8	1.5	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.45	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.8	0.38	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.7	0.43	ug/l	
87-86-5	Pentachlorophenol	ND	3.8	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.25	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.8	0.61	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.8	0.47	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.8	0.57	ug/l	
98-86-2	Acetophenone	ND	1.9	0.50	ug/l	
62-53-3	Aniline	ND	1.9	0.73	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.83	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.95	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	3.8	0.51	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.44	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.57	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.96	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.96	0.54	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.1	ug/l	
132-64-9	Dibenzofuran	ND	3.8	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.9	0.51	ug/l	
117-84-0	Di-n-octyl phthalate [b]	ND	1.9	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-4DU		
Lab Sample ID:	JD36168-3	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.9	0.56	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.53	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	0.96	0.52	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.96	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.7	0.94	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.53	ug/l	
78-59-1	Isophorone	ND	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.96	0.62	ug/l	
88-74-4	2-Nitroaniline	ND	3.8	0.59	ug/l	
99-09-2	3-Nitroaniline	ND	3.8	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	3.8	0.72	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.40	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.30	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.62	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.8	0.41	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.8		ug/l	
110-86-1	Pyridine	ND	1.9	0.30	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.96	0.34	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%		10-73%
4165-62-2	Phenol-d5	38%		10-64%
118-79-6	2,4,6-Tribromophenol	96%		31-130%
4165-60-0	Nitrobenzene-d5	87%		28-126%
321-60-8	2-Fluorobiphenyl	91%		26-114%
1718-51-0	Terphenyl-d14	85%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high, sample was ND. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-4DU		
Lab Sample ID:	JD36168-3	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P49927.D	1	12/08/21 11:42	CS	12/07/21 09:35	OP36999A	E4P2614
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.077	0.038	ug/l	
208-96-8	Acenaphthylene	ND	0.077	0.038	ug/l	
120-12-7	Anthracene	0.0534	0.077	0.038	ug/l	J
56-55-3	Benzo(a)anthracene [a]	ND	0.038	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.038	0.023	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.038	0.023	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.077	0.038	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.077	0.038	ug/l	
218-01-9	Chrysene	ND	0.077	0.038	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.077	0.038	ug/l	
206-44-0	Fluoranthene	0.0541	0.077	0.038	ug/l	J
86-73-7	Fluorene	0.0431	0.077	0.038	ug/l	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.077	0.038	ug/l	
91-20-3	Naphthalene	ND	0.077	0.038	ug/l	
85-01-8	Phenanthrene	0.0752	0.077	0.038	ug/l	J
129-00-0	Pyrene	0.0500	0.077	0.038	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	125% [b]		29-124%
321-60-8	2-Fluorobiphenyl	103%		23-122%
1718-51-0	Terphenyl-d14	96%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
(b) High percent recoveries and no associated positive found in the sample.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-4DU		
Lab Sample ID:	JD36168-3	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81098.D	1	12/12/21 17:05	TL	12/07/21 09:45	OP36994	G6G2868
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0074	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.0074	0.0039	ug/l	
319-85-7	beta-BHC	ND	0.0074	0.0059	ug/l	
319-86-8	delta-BHC	ND	0.0074	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0074	0.0044	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0074	0.0037	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0074	0.0032	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0074	0.0032	ug/l	
60-57-1	Dieldrin	ND	0.0074	0.0057	ug/l	
72-54-8	4,4'-DDD	ND	0.0074	0.0043	ug/l	
72-55-9	4,4'-DDE	ND	0.0074	0.0037	ug/l	
50-29-3	4,4'-DDT	ND	0.0074	0.0051	ug/l	
72-20-8	Endrin	ND	0.0074	0.0045	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0074	0.0040	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0074	0.0050	ug/l	
53494-70-5	Endrin ketone	ND	0.0074	0.0046	ug/l	
959-98-8	Endosulfan-I	ND	0.0074	0.0039	ug/l	
33213-65-9	Endosulfan-II	ND	0.0074	0.0036	ug/l	
76-44-8	Heptachlor	ND	0.0074	0.0033	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0074	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0050	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		10-190%
877-09-8	Tetrachloro-m-xylene	77%		10-190%
2051-24-3	Decachlorobiphenyl	32%		10-156%
2051-24-3	Decachlorobiphenyl	32%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-4DU		
Lab Sample ID:	JD36168-3	**Date Sampled:**	12/01/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	2820	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	15.7	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	212	10	ug/l	10	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	76200	2500	ug/l	10	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [6]
Chromium	76.5	2.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [4]	SW846 3010A [6]
Cobalt	1.7	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	10.7	4.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [4]	SW846 3010A [6]
Iron	2400	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	2.8	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	21600	2500	ug/l	10	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	85.2	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/07/21	12/07/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	46.1	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	3700	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	16200	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	4.5	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51549
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Instrument QC Batch: MA51580
(5) Prep QC Batch: MP30215
(6) Prep QC Batch: MP30244

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF OW-4DU		
Lab Sample ID:	JD36168-3F	**Date Sampled:**	12/01/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	11.4	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	98.7	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	53900	2500	ug/l	10	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	15800	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Manganese	2.5	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/07/21	12/07/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	3770	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	16500	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	2.3	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51549
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Prep QC Batch: MP30215
(5) Prep QC Batch: MP30244

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5DL		
Lab Sample ID:	JD36168-4	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167397.D	1	12/16/21 13:39	BK	n/a	n/a	V3A7265
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	172%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5DL		
Lab Sample ID:	JD36168-4	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192803.D	1	12/06/21 18:23	BK	n/a	n/a	V1X8350
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide [a]	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-5DL		
Lab Sample ID:	JD36168-4	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		85-118%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-5DL		
Lab Sample ID:	JD36168-4	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

(a) Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
(b) Associated CCV outside of control limits high, sample was ND.

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5DL		
Lab Sample ID:	JD36168-4	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80382.D	1	12/15/21 17:38	KLS	12/08/21 09:52	OP37001	E5P3805
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.8	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.8	0.51	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.50	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.8	0.65	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.8	1.8	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.8	0.44	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.8	1.5	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.45	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.8	0.38	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.7	0.43	ug/l	
87-86-5	Pentachlorophenol	ND	3.8	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.25	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.8	0.61	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.8	0.47	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.8	0.57	ug/l	
98-86-2	Acetophenone	ND	1.9	0.50	ug/l	
62-53-3	Aniline	ND	1.9	0.73	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.83	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.95	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	3.8	0.51	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.44	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.57	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.96	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.96	0.54	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.1	ug/l	
132-64-9	Dibenzofuran	ND	3.8	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	4.1	1.9	0.51	ug/l	B
117-84-0	Di-n-octyl phthalate [b]	ND	1.9	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-5DL		
Lab Sample ID:	JD36168-4	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.9	0.56	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.53	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	0.96	0.52	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.96	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.7	0.94	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.53	ug/l	
78-59-1	Isophorone	ND	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.96	0.62	ug/l	
88-74-4	2-Nitroaniline	ND	3.8	0.59	ug/l	
99-09-2	3-Nitroaniline	ND	3.8	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	3.8	0.72	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.40	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.30	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.62	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.8	0.41	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.8		ug/l	
110-86-1	Pyridine	ND	1.9	0.30	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.96	0.34	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	13%		10-73%
4165-62-2	Phenol-d5	8% [c]		10-64%
118-79-6	2,4,6-Tribromophenol	45%		31-130%
4165-60-0	Nitrobenzene-d5	62%		28-126%
321-60-8	2-Fluorobiphenyl	64%		26-114%
1718-51-0	Terphenyl-d14	60%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.
(c) Outside of in house control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5DL		
Lab Sample ID:	JD36168-4	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50143.D	1	12/16/21 02:05	KLS	12/08/21 09:52	OP37001A	E4P2625
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.077	0.038	ug/l	
208-96-8	Acenaphthylene	ND	0.077	0.038	ug/l	
120-12-7	Anthracene	ND	0.077	0.038	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.038	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.038	0.023	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.038	0.023	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.077	0.038	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.077	0.038	ug/l	
218-01-9	Chrysene	ND	0.077	0.038	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.077	0.038	ug/l	
206-44-0	Fluoranthene	ND	0.077	0.038	ug/l	
86-73-7	Fluorene	ND	0.077	0.038	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.077	0.038	ug/l	
91-20-3	Naphthalene	ND	0.077	0.038	ug/l	
85-01-8	Phenanthrene	ND	0.077	0.038	ug/l	
129-00-0	Pyrene	ND	0.077	0.038	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		29-124%
321-60-8	2-Fluorobiphenyl	63%		23-122%
1718-51-0	Terphenyl-d14	56%		22-130%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5DL		
Lab Sample ID:	JD36168-4	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81099.D	1	12/12/21 17:24	TL	12/07/21 09:45	OP36994	G6G2868
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0074	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.0074	0.0039	ug/l	
319-85-7	beta-BHC	ND	0.0074	0.0059	ug/l	
319-86-8	delta-BHC	ND	0.0074	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0074	0.0044	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0074	0.0037	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0074	0.0032	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0074	0.0032	ug/l	
60-57-1	Dieldrin	ND	0.0074	0.0057	ug/l	
72-54-8	4,4'-DDD	ND	0.0074	0.0043	ug/l	
72-55-9	4,4'-DDE	ND	0.0074	0.0037	ug/l	
50-29-3	4,4'-DDT	ND	0.0074	0.0051	ug/l	
72-20-8	Endrin	ND	0.0074	0.0045	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0074	0.0040	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0074	0.0050	ug/l	
53494-70-5	Endrin ketone	ND	0.0074	0.0046	ug/l	
959-98-8	Endosulfan-I	ND	0.0074	0.0039	ug/l	
33213-65-9	Endosulfan-II	ND	0.0074	0.0036	ug/l	
76-44-8	Heptachlor	ND	0.0074	0.0033	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0074	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0050	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		10-190%
877-09-8	Tetrachloro-m-xylene	66%		10-190%
2051-24-3	Decachlorobiphenyl	25%		10-156%
2051-24-3	Decachlorobiphenyl	27%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-5DL		
Lab Sample ID:	JD36168-4	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	2330	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	1.2	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	29.4	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	6.3	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	11900	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Chromium	16.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	9.5	4.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [5]
Iron	1650	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	3.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	1890	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Manganese	51.5	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/07/21	12/07/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	11.4	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	10400	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	3990	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	4.5	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	21.5	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51549
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51580
(4) Prep QC Batch: MP30215
(5) Prep QC Batch: MP30244

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF MW-5DL
Lab Sample ID: JD36168-4F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/02/21
Date Received: 12/03/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	55.5	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	16.1	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	11100	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Chromium	3.3	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	251	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	1510	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Manganese	33.1	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/07/21	12/07/21	SB	SW846 7470A [1]	SW846 7470A [3]
Nickel	2.8	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	9810	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	3950	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	16.2	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA51549
(2) Instrument QC Batch: MA51567
(3) Prep QC Batch: MP30215
(4) Prep QC Batch: MP30244

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5DV		
Lab Sample ID:	JD36168-5	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167398.D	1	12/16/21 14:08	BK	n/a	n/a	V3A7265
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	3.5	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	170%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5DV		
Lab Sample ID:	JD36168-5	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192804.D	1	12/06/21 18:49	BK	n/a	n/a	V1X8350
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide [a]	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	1.3	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.63	1.0	0.51	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-5DV
Lab Sample ID: JD36168-5
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/02/21
Date Received: 12/03/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	2.3	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		85-118%

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-5DV		
Lab Sample ID:	JD36168-5	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

(a) Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
(b) Associated CCV outside of control limits high, sample was ND.

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5DV		
Lab Sample ID:	JD36168-5	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80383.D	1	12/15/21 18:05	KLS	12/08/21 09:52	OP37001	E5P3805
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.6	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.6	0.47	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.8	0.46	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.6	0.60	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.6	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.6	0.41	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.8	0.42	ug/l	
	3&4-Methylphenol	ND	1.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.6	0.35	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.1	0.40	ug/l	
87-86-5	Pentachlorophenol	ND	3.6	1.0	ug/l	
108-95-2	Phenol	ND	1.8	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.6	0.57	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.6	0.44	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.6	0.53	ug/l	
98-86-2	Acetophenone	ND	1.8	0.46	ug/l	
62-53-3	Aniline	ND	1.8	0.68	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.8	0.49	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.8	0.77	ug/l	
100-51-6	Benzyl Alcohol	ND	1.8	0.88	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.8	0.39	ug/l	
106-47-8	4-Chloroaniline	ND	3.6	0.48	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.8	0.41	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.8	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.8	0.53	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.89	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.89	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.8	0.98	ug/l	
132-64-9	Dibenzofuran	ND	3.6	0.65	ug/l	
84-74-2	Di-n-butyl phthalate	2.6	1.8	0.48	ug/l	B
117-84-0	Di-n-octyl phthalate [a]	ND	1.8	1.5	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-5DV		
Lab Sample ID:	JD36168-5	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.8	0.52	ug/l	
131-11-3	Dimethyl phthalate	ND	1.8	0.49	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.8	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.89	0.48	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.89	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.1	0.88	ug/l	
67-72-1	Hexachloroethane	ND	1.8	0.49	ug/l	
78-59-1	Isophorone	ND	1.8	0.35	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.89	0.58	ug/l	
88-74-4	2-Nitroaniline	ND	3.6	0.55	ug/l	
99-09-2	3-Nitroaniline	ND	3.6	0.57	ug/l	
100-01-6	4-Nitroaniline	ND	3.6	0.67	ug/l	
98-95-3	Nitrobenzene	ND	1.8	0.38	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.8	0.28	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.8	0.58	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.6	0.38	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.6		ug/l	
110-86-1	Pyridine	ND	1.8	0.28	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.8	0.43	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.89	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	21%		10-73%
4165-62-2	Phenol-d5	13%		10-64%
118-79-6	2,4,6-Tribromophenol	71%		31-130%
4165-60-0	Nitrobenzene-d5	75%		28-126%
321-60-8	2-Fluorobiphenyl	79%		26-114%
1718-51-0	Terphenyl-d14	66%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5DV		
Lab Sample ID:	JD36168-5	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50173.D	1	12/17/21 00:22	KLS	12/08/21 09:52	OP37001A	E4P2627
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.071	0.036	ug/l	
208-96-8	Acenaphthylene	ND	0.071	0.036	ug/l	
120-12-7	Anthracene	ND	0.071	0.036	ug/l	
56-55-3	Benzo(a)anthracene [a]	ND	0.036	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.036	0.021	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.036	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.071	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.071	0.036	ug/l	
218-01-9	Chrysene	ND	0.071	0.036	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.071	0.036	ug/l	
206-44-0	Fluoranthene	ND	0.071	0.036	ug/l	
86-73-7	Fluorene	ND	0.071	0.036	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene [a]	ND	0.071	0.036	ug/l	
91-20-3	Naphthalene	ND	0.071	0.036	ug/l	
85-01-8	Phenanthrene	ND	0.071	0.036	ug/l	
129-00-0	Pyrene	ND	0.071	0.036	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	110%		29-124%
321-60-8	2-Fluorobiphenyl	90%		23-122%
1718-51-0	Terphenyl-d14	73%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5DV		
Lab Sample ID:	JD36168-5	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81100.D	1	12/12/21 17:42	TL	12/07/21 09:45	OP36994	G6G2868
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		10-190%
877-09-8	Tetrachloro-m-xylene	89%		10-190%
2051-24-3	Decachlorobiphenyl	51%		10-156%
2051-24-3	Decachlorobiphenyl	55%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-5DV		
Lab Sample ID:	JD36168-5	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	1240	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	2.9	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	45.5	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	148000	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [6]
Chromium	7.1	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	4.6	4.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [4]	SW846 3010A [6]
Iron	715	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	36000	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	22.8	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/07/21	12/07/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	6.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	4490	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	60800	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	11.3	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51549
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Instrument QC Batch: MA51580
(5) Prep QC Batch: MP30215
(6) Prep QC Batch: MP30244

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-5DV		
Lab Sample ID:	JD36168-5F	**Date Sampled:**	12/02/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	2.5	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	34.8	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	143000	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [6]
Chromium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/10/21	NV	SW846 6020B [4]	SW846 3010A [6]
Iron	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	34800	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/07/21	12/07/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	2.8	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	4440	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	58600	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	10.1	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51549
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Instrument QC Batch: MA51580
(5) Prep QC Batch: MP30215
(6) Prep QC Batch: MP30244

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5S		
Lab Sample ID:	JD36168-6	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167342.D	1	12/13/21 16:48	BK	n/a	n/a	V3A7262
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	124%		39-174%

ND = Not detected MDL = Method Detection Limit
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N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5S		
Lab Sample ID:	JD36168-6	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192805.D	1	12/06/21 19:15	BK	n/a	n/a	V1X8350
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide [a]	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-5S		
Lab Sample ID:	JD36168-6	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		85-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-5S		
Lab Sample ID:	JD36168-6	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	99%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

(a) Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5S		
Lab Sample ID:	JD36168-6	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80384.D	1	12/15/21 18:31	KLS	12/08/21 09:52	OP37001	E5P3805
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.6	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.6	0.47	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.8	0.46	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.6	0.60	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.6	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.6	0.41	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.8	0.42	ug/l	
	3&4-Methylphenol	ND	1.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.6	0.35	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.1	0.40	ug/l	
87-86-5	Pentachlorophenol	ND	3.6	1.0	ug/l	
108-95-2	Phenol	ND	1.8	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.6	0.57	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.6	0.44	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.6	0.53	ug/l	
98-86-2	Acetophenone	ND	1.8	0.46	ug/l	
62-53-3	Aniline	ND	1.8	0.68	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.8	0.49	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.8	0.77	ug/l	
100-51-6	Benzyl Alcohol	ND	1.8	0.88	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.8	0.39	ug/l	
106-47-8	4-Chloroaniline	ND	3.6	0.48	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.8	0.41	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.8	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.8	0.53	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.89	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.89	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.8	0.98	ug/l	
132-64-9	Dibenzofuran	ND	3.6	0.65	ug/l	
84-74-2	Di-n-butyl phthalate	2.6	1.8	0.48	ug/l	B
117-84-0	Di-n-octyl phthalate [b]	ND	1.8	1.5	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-5S		
Lab Sample ID:	JD36168-6	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.8	0.52	ug/l	
131-11-3	Dimethyl phthalate	ND	1.8	0.49	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.8	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.89	0.48	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.89	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.1	0.88	ug/l	
67-72-1	Hexachloroethane	ND	1.8	0.49	ug/l	
78-59-1	Isophorone	ND	1.8	0.35	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.89	0.58	ug/l	
88-74-4	2-Nitroaniline	ND	3.6	0.55	ug/l	
99-09-2	3-Nitroaniline	ND	3.6	0.57	ug/l	
100-01-6	4-Nitroaniline	ND	3.6	0.67	ug/l	
98-95-3	Nitrobenzene	ND	1.8	0.38	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.8	0.28	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.8	0.58	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.6	0.38	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.6		ug/l	
110-86-1	Pyridine	ND	1.8	0.28	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.8	0.43	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.89	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	22%		10-73%
4165-62-2	Phenol-d5	14%		10-64%
118-79-6	2,4,6-Tribromophenol	90%		31-130%
4165-60-0	Nitrobenzene-d5	88%		28-126%
321-60-8	2-Fluorobiphenyl	89%		26-114%
1718-51-0	Terphenyl-d14	59%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5S		
Lab Sample ID:	JD36168-6	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50201.D	1	12/17/21 20:09	KLS	12/08/21 09:52	OP37001A	E4P2628
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.0640	0.071	0.036	ug/l	J
208-96-8	Acenaphthylene	0.0501	0.071	0.036	ug/l	J
120-12-7	Anthracene	0.0767	0.071	0.036	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.036	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.036	0.021	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.036	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.071	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.071	0.036	ug/l	
218-01-9	Chrysene	ND	0.071	0.036	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.071	0.036	ug/l	
206-44-0	Fluoranthene	0.157	0.071	0.036	ug/l	
86-73-7	Fluorene	0.126	0.071	0.036	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.071	0.036	ug/l	
91-20-3	Naphthalene	0.0523	0.071	0.036	ug/l	J
85-01-8	Phenanthrene	0.173	0.071	0.036	ug/l	
129-00-0	Pyrene	0.109	0.071	0.036	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	116%		29-124%
321-60-8	2-Fluorobiphenyl	99%		23-122%
1718-51-0	Terphenyl-d14	57%		22-130%

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-5S		
Lab Sample ID:	JD36168-6	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81101.D	1	12/12/21 18:00	TL	12/07/21 09:45	OP36994	G6G2868
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0074	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.0074	0.0039	ug/l	
319-85-7	beta-BHC	ND	0.0074	0.0059	ug/l	
319-86-8	delta-BHC	ND	0.0074	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0074	0.0044	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0074	0.0037	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0074	0.0032	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0074	0.0032	ug/l	
60-57-1	Dieldrin	ND	0.0074	0.0057	ug/l	
72-54-8	4,4'-DDD	ND	0.0074	0.0043	ug/l	
72-55-9	4,4'-DDE	ND	0.0074	0.0037	ug/l	
50-29-3	4,4'-DDT	ND	0.0074	0.0051	ug/l	
72-20-8	Endrin	ND	0.0074	0.0045	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0074	0.0040	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0074	0.0050	ug/l	
53494-70-5	Endrin ketone	ND	0.0074	0.0046	ug/l	
959-98-8	Endosulfan-I	ND	0.0074	0.0039	ug/l	
33213-65-9	Endosulfan-II	ND	0.0074	0.0036	ug/l	
76-44-8	Heptachlor	ND	0.0074	0.0033	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0074	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0050	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		10-190%
877-09-8	Tetrachloro-m-xylene	82%		10-190%
2051-24-3	Decachlorobiphenyl	42%		10-156%
2051-24-3	Decachlorobiphenyl	46%		10-156%

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RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-5S		
Lab Sample ID:	JD36168-6	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	363	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	10	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	11500	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Chromium	3.9	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	9.2	4.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Iron	227	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	3100	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Manganese	3.8	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/08/21	12/08/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	2.7	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	1660	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	11400	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	2.4	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	11.7	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA51556
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51580
(4) Prep QC Batch: MP30244
(5) Prep QC Batch: MP30250

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-5S		
Lab Sample ID:	JD36168-6F	**Date Sampled:**	12/02/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	9.1	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	11700	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Chromium	2.4	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	6.4	4.0	ug/l	2	12/08/21	12/10/21	NV	SW846 6020B [3]	SW846 3010A [4]
Iron	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	3160	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Manganese	2.2	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/08/21	12/08/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	2.7	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	1630	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	11900	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	2.7	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	11.4	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA51556
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51580
(4) Prep QC Batch: MP30244
(5) Prep QC Batch: MP30250

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-6S		
Lab Sample ID:	JD36168-7	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167340.D	1	12/13/21 15:50	BK	n/a	n/a	V3A7262
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	109%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-6S		
Lab Sample ID:	JD36168-7	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192793.D	1	12/06/21 13:58	BK	n/a	n/a	V1X8350
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide [a]	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-6S		
Lab Sample ID:	JD36168-7	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		85-118%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-6S		
Lab Sample ID:	JD36168-7	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

(a) Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-6S		
Lab Sample ID:	JD36168-7	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80385.D	1	12/15/21 18:58	KLS	12/08/21 09:52	OP37001	E5P3805
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.8	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.8	0.51	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.50	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.8	0.65	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.8	1.8	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.8	0.44	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.8	1.5	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.45	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.8	0.38	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.7	0.43	ug/l	
87-86-5	Pentachlorophenol	ND	3.8	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.25	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.8	0.61	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.8	0.47	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.8	0.57	ug/l	
98-86-2	Acetophenone	ND	1.9	0.50	ug/l	
62-53-3	Aniline	ND	1.9	0.73	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.83	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.95	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	3.8	0.51	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.44	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.57	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.96	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.96	0.54	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.1	ug/l	
132-64-9	Dibenzofuran	ND	3.8	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	2.3	1.9	0.51	ug/l	B
117-84-0	Di-n-octyl phthalate [b]	ND	1.9	1.6	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-6S		
Lab Sample ID:	JD36168-7	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.9	0.56	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.53	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	0.96	0.52	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.96	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.7	0.94	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.53	ug/l	
78-59-1	Isophorone	ND	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.96	0.62	ug/l	
88-74-4	2-Nitroaniline	ND	3.8	0.59	ug/l	
99-09-2	3-Nitroaniline	ND	3.8	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	3.8	0.72	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.40	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.30	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.62	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.8	0.41	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.8		ug/l	
110-86-1	Pyridine	ND	1.9	0.30	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.96	0.34	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	17%		10-73%
4165-62-2	Phenol-d5	12%		10-64%
118-79-6	2,4,6-Tribromophenol	54%		31-130%
4165-60-0	Nitrobenzene-d5	81%		28-126%
321-60-8	2-Fluorobiphenyl	82%		26-114%
1718-51-0	Terphenyl-d14	59%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-6S		
Lab Sample ID:	JD36168-7	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50202.D	1	12/17/21 20:33	KLS	12/08/21 09:52	OP37001A	E4P2628
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.077	0.038	ug/l	
208-96-8	Acenaphthylene	ND	0.077	0.038	ug/l	
120-12-7	Anthracene	ND	0.077	0.038	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.038	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.038	0.023	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.038	0.023	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.077	0.038	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.077	0.038	ug/l	
218-01-9	Chrysene	ND	0.077	0.038	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.077	0.038	ug/l	
206-44-0	Fluoranthene	ND	0.077	0.038	ug/l	
86-73-7	Fluorene	ND	0.077	0.038	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.077	0.038	ug/l	
91-20-3	Naphthalene	ND	0.077	0.038	ug/l	
85-01-8	Phenanthrene	ND	0.077	0.038	ug/l	
129-00-0	Pyrene	ND	0.077	0.038	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	109%		29-124%
321-60-8	2-Fluorobiphenyl	90%		23-122%
1718-51-0	Terphenyl-d14	57%		22-130%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-6S		
Lab Sample ID:	JD36168-7	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81102.D	1	12/12/21 18:19	TL	12/07/21 09:45	OP36994	G6G2868
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0074	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.0074	0.0039	ug/l	
319-85-7	beta-BHC	ND	0.0074	0.0059	ug/l	
319-86-8	delta-BHC	ND	0.0074	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0074	0.0044	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0074	0.0037	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0074	0.0032	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0074	0.0032	ug/l	
60-57-1	Dieldrin	ND	0.0074	0.0057	ug/l	
72-54-8	4,4'-DDD	ND	0.0074	0.0043	ug/l	
72-55-9	4,4'-DDE	ND	0.0074	0.0037	ug/l	
50-29-3	4,4'-DDT	ND	0.0074	0.0051	ug/l	
72-20-8	Endrin	ND	0.0074	0.0045	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0074	0.0040	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0074	0.0050	ug/l	
53494-70-5	Endrin ketone	ND	0.0074	0.0046	ug/l	
959-98-8	Endosulfan-I	ND	0.0074	0.0039	ug/l	
33213-65-9	Endosulfan-II	ND	0.0074	0.0036	ug/l	
76-44-8	Heptachlor	ND	0.0074	0.0033	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0074	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0050	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		10-190%
877-09-8	Tetrachloro-m-xylene	83%		10-190%
2051-24-3	Decachlorobiphenyl	29%		10-156%
2051-24-3	Decachlorobiphenyl	33%		10-156%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-6S		
Lab Sample ID:	JD36168-7	**Date Sampled:**	12/02/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	21500	130	ug/l	5	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	2.6	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	57.6	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	1.8	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	5720	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Chromium	32.4	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	6.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	14.5	4.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [4]	SW846 3010A [5]
Iron	16700	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	10.3	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	6920	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Manganese	134	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/08/21	12/08/21	SB	SW846 7470A [1]	SW846 7470A [6]
Nickel	18.6	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	3990	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	12900	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	32.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	27.7	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51556
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Instrument QC Batch: MA51580
(5) Prep QC Batch: MP30244
(6) Prep QC Batch: MP30250

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-6S		
Lab Sample ID:	JD36168-7F	**Date Sampled:**	12/02/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	388	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Arsenic	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Barium	3.3	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Calcium	3450	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Chromium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Iron	232	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Magnesium	1380	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Manganese	4.2	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	12/08/21	12/08/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	2.9	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Potassium	712	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Sodium	11700	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Vanadium	2.6	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA51556
(2) Instrument QC Batch: MA51567
(3) Prep QC Batch: MP30244
(4) Prep QC Batch: MP30250

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-6DU		
Lab Sample ID:	JD36168-8	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167341.D	1	12/13/21 16:19	BK	n/a	n/a	V3A7262
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.22	0.40	0.095	ug/l	JB

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	161%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-6DU		
Lab Sample ID:	JD36168-8	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192796.D	1	12/06/21 15:20	BK	n/a	n/a	V1X8350
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide [a]	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-6DU		
Lab Sample ID:	JD36168-8	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		85-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-6DU		
Lab Sample ID:	JD36168-8	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	99%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

(a) Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
(b) Associated CCV outside of control limits high, sample was ND.

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-6DU		
Lab Sample ID:	JD36168-8	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80386.D	1	12/15/21 19:25	KLS	12/08/21 09:52	OP37001	E5P3805
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol [a]	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	11.6	2.0	0.53	ug/l	B
117-84-0	Di-n-octyl phthalate [b]	ND	2.0	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-6DU		
Lab Sample ID:	JD36168-8	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	1.8	2.0	1.3	ug/l	J
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	29%		10-73%
4165-62-2	Phenol-d5	21%		10-64%
118-79-6	2,4,6-Tribromophenol	73%		31-130%
4165-60-0	Nitrobenzene-d5	74%		28-126%
321-60-8	2-Fluorobiphenyl	79%		26-114%
1718-51-0	Terphenyl-d14	79%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-6DU		
Lab Sample ID:	JD36168-8	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50203.D	1	12/17/21 20:56	KLS	12/08/21 09:52	OP37001A	E4P2628
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	ND	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	ND	0.080	0.040	ug/l	
86-73-7	Fluorene	0.0519	0.080	0.040	ug/l	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	0.501	0.080	0.040	ug/l	
85-01-8	Phenanthrene	0.0783	0.080	0.040	ug/l	J
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	106%		29-124%
321-60-8	2-Fluorobiphenyl	89%		23-122%
1718-51-0	Terphenyl-d14	79%		22-130%

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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-6DU		
Lab Sample ID:	JD36168-8	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81103.D	1	12/12/21 18:37	TL	12/07/21 09:45	OP36994	G6G2868
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0074	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.0074	0.0039	ug/l	
319-85-7	beta-BHC	ND	0.0074	0.0059	ug/l	
319-86-8	delta-BHC	ND	0.0074	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0074	0.0044	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0074	0.0037	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0074	0.0032	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0074	0.0032	ug/l	
60-57-1	Dieldrin	ND	0.0074	0.0057	ug/l	
72-54-8	4,4'-DDD	ND	0.0074	0.0043	ug/l	
72-55-9	4,4'-DDE	ND	0.0074	0.0037	ug/l	
50-29-3	4,4'-DDT	ND	0.0074	0.0051	ug/l	
72-20-8	Endrin	ND	0.0074	0.0045	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0074	0.0040	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0074	0.0050	ug/l	
53494-70-5	Endrin ketone	ND	0.0074	0.0046	ug/l	
959-98-8	Endosulfan-I	ND	0.0074	0.0039	ug/l	
33213-65-9	Endosulfan-II	ND	0.0074	0.0036	ug/l	
76-44-8	Heptachlor	ND	0.0074	0.0033	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0074	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0050	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		10-190%
877-09-8	Tetrachloro-m-xylene	81%		10-190%
2051-24-3	Decachlorobiphenyl	45%		10-156%
2051-24-3	Decachlorobiphenyl	50%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-6DU		
Lab Sample ID:	JD36168-8	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	1520	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	11.7	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	34.3	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	57800	2500	ug/l	10	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [5]
Chromium	7.7	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [4]	SW846 3010A [5]
Iron	756	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	1.6	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	16000	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Manganese	145	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/08/21	12/08/21	SB	SW846 7470A [1]	SW846 7470A [6]
Nickel	5.2	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	2340	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	1.2	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	15700	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	7.8	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51556
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Instrument QC Batch: MA51580
(5) Prep QC Batch: MP30244
(6) Prep QC Batch: MP30250

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF OW-6DU
Lab Sample ID: JD36168-8F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/03/21
Date Received: 12/03/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	10.4	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	13.8	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	57300	2500	ug/l	10	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	15100	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Manganese	2.5	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/08/21	12/08/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	2060	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	15000	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	7.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA51556
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Prep QC Batch: MP30244
(5) Prep QC Batch: MP30250

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-6DL		
Lab Sample ID:	JD36168-9	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167396.D	1	12/16/21 13:10	BK	n/a	n/a	V3A7265
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.32	0.40	0.095	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	151%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-6DL		
Lab Sample ID:	JD36168-9	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192798.D	1	12/06/21 16:13	BK	n/a	n/a	V1X8350
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide [a]	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-6DL		
Lab Sample ID:	JD36168-9	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		85-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-6DL		
Lab Sample ID:	JD36168-9	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	99%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

(a) Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
(b) Associated CCV outside of control limits high, sample was ND.

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-6DL		
Lab Sample ID:	JD36168-9	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80387.D	1	12/15/21 19:52	KLS	12/08/21 09:52	OP37001	E5P3805
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol [a]	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	10.9	2.0	0.53	ug/l	B
117-84-0	Di-n-octyl phthalate [b]	ND	2.0	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-6DL		
Lab Sample ID:	JD36168-9	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	1.6	2.0	1.3	ug/l	J
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	37%		10-73%
4165-62-2	Phenol-d5	28%		10-64%
118-79-6	2,4,6-Tribromophenol	96%		31-130%
4165-60-0	Nitrobenzene-d5	78%		28-126%
321-60-8	2-Fluorobiphenyl	84%		26-114%
1718-51-0	Terphenyl-d14	73%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-6DL		
Lab Sample ID:	JD36168-9	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50204.D	1	12/17/21 21:20	KLS	12/08/21 09:52	OP37001A	E4P2628
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	ND	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	0.0240	0.040	0.024	ug/l	J
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	0.0456	0.080	0.040	ug/l	J
86-73-7	Fluorene	ND	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	ND	0.080	0.040	ug/l	
85-01-8	Phenanthrene	0.0536	0.080	0.040	ug/l	J
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	113%		29-124%
321-60-8	2-Fluorobiphenyl	97%		23-122%
1718-51-0	Terphenyl-d14	75%		22-130%

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RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF OW-6DL		
Lab Sample ID:	JD36168-9	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81104.D	1	12/12/21 18:56	TL	12/07/21 09:45	OP36994	G6G2868
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0074	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.0074	0.0039	ug/l	
319-85-7	beta-BHC	ND	0.0074	0.0059	ug/l	
319-86-8	delta-BHC	ND	0.0074	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0074	0.0044	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0074	0.0037	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0074	0.0032	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0074	0.0032	ug/l	
60-57-1	Dieldrin	ND	0.0074	0.0057	ug/l	
72-54-8	4,4'-DDD	ND	0.0074	0.0043	ug/l	
72-55-9	4,4'-DDE	ND	0.0074	0.0037	ug/l	
50-29-3	4,4'-DDT	ND	0.0074	0.0051	ug/l	
72-20-8	Endrin	ND	0.0074	0.0045	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0074	0.0040	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0074	0.0050	ug/l	
53494-70-5	Endrin ketone	ND	0.0074	0.0046	ug/l	
959-98-8	Endosulfan-I	ND	0.0074	0.0039	ug/l	
33213-65-9	Endosulfan-II	ND	0.0074	0.0036	ug/l	
76-44-8	Heptachlor	ND	0.0074	0.0033	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0074	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0050	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		10-190%
877-09-8	Tetrachloro-m-xylene	75%		10-190%
2051-24-3	Decachlorobiphenyl	47%		10-156%
2051-24-3	Decachlorobiphenyl	58%		10-156%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF OW-6DL		
Lab Sample ID:	JD36168-9	**Date Sampled:**	12/03/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	6.9	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	5.9	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	41800	2500	ug/l	10	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	15900	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Manganese	8.4	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/08/21	12/08/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	< 500	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	13600	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA51556
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Prep QC Batch: MP30244
(5) Prep QC Batch: MP30250

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF OW-6DL
Lab Sample ID: JD36168-9F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/03/21
Date Received: 12/03/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	6.7	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	5.6	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	40700	2500	ug/l	10	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	15300	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Manganese	8.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/08/21	12/08/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	< 500	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	13100	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA51556
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Prep QC Batch: MP30244
(5) Prep QC Batch: MP30250

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7DU		
Lab Sample ID:	JD36168-10	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167347.D	1	12/13/21 19:11	BK	n/a	n/a	V3A7262
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	5.2	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	129%		39-174%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7DU		
Lab Sample ID:	JD36168-10	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192806.D	1	12/06/21 19:41	BK	n/a	n/a	V1X8350
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide [a]	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	1.1	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	2.8	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	3.2	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	8.4	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-7DU		
Lab Sample ID:	JD36168-10	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.5	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	2.9	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		85-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-7DU		
Lab Sample ID:	JD36168-10	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

(a) Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7DU		
Lab Sample ID:	JD36168-10	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80388.D	1	12/15/21 20:19	KLS	12/07/21 09:35	OP36999	E5P3805
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.6	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.6	0.47	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.8	0.46	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.6	0.60	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.6	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.6	0.41	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.8	0.42	ug/l	
	3&4-Methylphenol	ND	1.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.6	0.35	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.1	0.40	ug/l	
87-86-5	Pentachlorophenol	ND	3.6	1.0	ug/l	
108-95-2	Phenol	ND	1.8	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.6	0.57	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.6	0.44	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.6	0.53	ug/l	
98-86-2	Acetophenone	ND	1.8	0.46	ug/l	
62-53-3	Aniline	ND	1.8	0.68	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.8	0.49	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.8	0.77	ug/l	
100-51-6	Benzyl Alcohol	ND	1.8	0.88	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.8	0.39	ug/l	
106-47-8	4-Chloroaniline	ND	3.6	0.48	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.8	0.41	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.8	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.8	0.53	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.89	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.89	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.8	0.98	ug/l	
132-64-9	Dibenzofuran	ND	3.6	0.65	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.8	0.48	ug/l	
117-84-0	Di-n-octyl phthalate [b]	ND	1.8	1.5	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-7DU		
Lab Sample ID:	JD36168-10	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.8	0.52	ug/l	
131-11-3	Dimethyl phthalate	ND	1.8	0.49	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.8	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.89	0.48	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.89	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.1	0.88	ug/l	
67-72-1	Hexachloroethane	ND	1.8	0.49	ug/l	
78-59-1	Isophorone	ND	1.8	0.35	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.89	0.58	ug/l	
88-74-4	2-Nitroaniline	ND	3.6	0.55	ug/l	
99-09-2	3-Nitroaniline	ND	3.6	0.57	ug/l	
100-01-6	4-Nitroaniline	ND	3.6	0.67	ug/l	
98-95-3	Nitrobenzene	ND	1.8	0.38	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.8	0.28	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.8	0.58	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.6	0.38	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.6		ug/l	
110-86-1	Pyridine	ND	1.8	0.28	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.8	0.43	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.89	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		10-73%
4165-62-2	Phenol-d5	39%		10-64%
118-79-6	2,4,6-Tribromophenol	100%		31-130%
4165-60-0	Nitrobenzene-d5	101%		28-126%
321-60-8	2-Fluorobiphenyl	100%		26-114%
1718-51-0	Terphenyl-d14	90%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7DU		
Lab Sample ID:	JD36168-10	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P49924.D	1	12/08/21 10:31	CS	12/07/21 09:35	OP36999A	E4P2614
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.071	0.036	ug/l	
208-96-8	Acenaphthylene	ND	0.071	0.036	ug/l	
120-12-7	Anthracene	ND	0.071	0.036	ug/l	
56-55-3	Benzo(a)anthracene [a]	ND	0.036	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.036	0.021	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.036	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.071	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.071	0.036	ug/l	
218-01-9	Chrysene	ND	0.071	0.036	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.071	0.036	ug/l	
206-44-0	Fluoranthene	ND	0.071	0.036	ug/l	
86-73-7	Fluorene	ND	0.071	0.036	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.071	0.036	ug/l	
91-20-3	Naphthalene	ND	0.071	0.036	ug/l	
85-01-8	Phenanthrene	ND	0.071	0.036	ug/l	
129-00-0	Pyrene	ND	0.071	0.036	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	139% [b]		29-124%
321-60-8	2-Fluorobiphenyl	112%		23-122%
1718-51-0	Terphenyl-d14	101%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
(b) High percent recoveries and no positive found in the sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7DU		
Lab Sample ID:	JD36168-10	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81095.D	1	12/12/21 16:10	TL	12/07/21 09:45	OP36994	G6G2868
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0071	0.0037	ug/l	
319-84-6	alpha-BHC	ND	0.0071	0.0037	ug/l	
319-85-7	beta-BHC	ND	0.0071	0.0057	ug/l	
319-86-8	delta-BHC	ND	0.0071	0.0047	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0071	0.0043	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0071	0.0035	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0071	0.0030	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0071	0.0030	ug/l	
60-57-1	Dieldrin	ND	0.0071	0.0055	ug/l	
72-54-8	4,4'-DDD	ND	0.0071	0.0041	ug/l	
72-55-9	4,4'-DDE	ND	0.0071	0.0036	ug/l	
50-29-3	4,4'-DDT	ND	0.0071	0.0049	ug/l	
72-20-8	Endrin	ND	0.0071	0.0043	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0071	0.0039	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0071	0.0048	ug/l	
53494-70-5	Endrin ketone	ND	0.0071	0.0044	ug/l	
959-98-8	Endosulfan-I	ND	0.0071	0.0038	ug/l	
33213-65-9	Endosulfan-II	ND	0.0071	0.0035	ug/l	
76-44-8	Heptachlor	ND	0.0071	0.0032	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0071	0.0043	ug/l	
72-43-5	Methoxychlor	ND	0.014	0.0048	ug/l	
8001-35-2	Toxaphene	ND	0.18	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82%		10-190%
877-09-8	Tetrachloro-m-xylene	74%		10-190%
2051-24-3	Decachlorobiphenyl	55%		10-156%
2051-24-3	Decachlorobiphenyl	58%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-7DU		
Lab Sample ID:	JD36168-10	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	17.1	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	53.2	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	106000	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	29.1	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	246	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	27300	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	18.6	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/08/21	12/08/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	22.8	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	3380	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	20800	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA51556
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Prep QC Batch: MP30244
(5) Prep QC Batch: MP30250

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-7DU		
Lab Sample ID:	JD36168-10F	**Date Sampled:**	11/30/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/03/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	18.6	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	56.1	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	104000	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	120	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	26900	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	19.6	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/08/21	12/08/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	3700	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	20800	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	< 2.0	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA51556
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Prep QC Batch: MP30244
(5) Prep QC Batch: MP30250

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7S		
Lab Sample ID:	JD36168-11	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167348.D	1	12/13/21 19:40	BK	n/a	n/a	V3A7262
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.55	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	136%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7S		
Lab Sample ID:	JD36168-11	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192807.D	1	12/06/21 20:07	BK	n/a	n/a	V1X8350
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide [a]	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-7S
Lab Sample ID: JD36168-11
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 11/30/21
Date Received: 12/03/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		85-118%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-7S		
Lab Sample ID:	JD36168-11	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

(a) Associated CCV outside of control limits low. This compound in blank spike is outside in house QC limits bias high.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7S		
Lab Sample ID:	JD36168-11	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80389.D	1	12/15/21 20:46	KLS	12/07/21 09:35	OP36999	E5P3805
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.8	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.8	0.51	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.50	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.8	0.65	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.8	1.8	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.8	0.44	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.8	1.5	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.45	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.8	0.38	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.7	0.43	ug/l	
87-86-5	Pentachlorophenol	ND	3.8	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.25	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.8	0.61	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.8	0.47	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.8	0.57	ug/l	
98-86-2	Acetophenone	ND	1.9	0.50	ug/l	
62-53-3	Aniline	ND	1.9	0.73	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.83	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.95	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	3.8	0.51	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.44	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.57	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.96	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.96	0.54	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.1	ug/l	
132-64-9	Dibenzofuran	ND	3.8	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.9	0.51	ug/l	
117-84-0	Di-n-octyl phthalate [b]	ND	1.9	1.6	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-7S		
Lab Sample ID:	JD36168-11	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.9	0.56	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.53	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	0.96	0.52	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.96	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.7	0.94	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.53	ug/l	
78-59-1	Isophorone	ND	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.96	0.62	ug/l	
88-74-4	2-Nitroaniline	ND	3.8	0.59	ug/l	
99-09-2	3-Nitroaniline	ND	3.8	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	3.8	0.72	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.40	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.30	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.62	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.8	0.41	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.8		ug/l	
110-86-1	Pyridine	ND	1.9	0.30	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.96	0.34	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%		10-73%
4165-62-2	Phenol-d5	39%		10-64%
118-79-6	2,4,6-Tribromophenol	101%		31-130%
4165-60-0	Nitrobenzene-d5	88%		28-126%
321-60-8	2-Fluorobiphenyl	91%		26-114%
1718-51-0	Terphenyl-d14	90%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high,sample was ND. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7S		
Lab Sample ID:	JD36168-11	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P49925.D	1	12/08/21 10:54	CS	12/07/21 09:35	OP36999A	E4P2614
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.077	0.038	ug/l	
208-96-8	Acenaphthylene	ND	0.077	0.038	ug/l	
120-12-7	Anthracene	ND	0.077	0.038	ug/l	
56-55-3	Benzo(a)anthracene [a]	ND	0.038	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.038	0.023	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.038	0.023	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.077	0.038	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.077	0.038	ug/l	
218-01-9	Chrysene	ND	0.077	0.038	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.077	0.038	ug/l	
206-44-0	Fluoranthene	ND	0.077	0.038	ug/l	
86-73-7	Fluorene	ND	0.077	0.038	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.077	0.038	ug/l	
91-20-3	Naphthalene	ND	0.077	0.038	ug/l	
85-01-8	Phenanthrene	ND	0.077	0.038	ug/l	
129-00-0	Pyrene	ND	0.077	0.038	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	130% [b]		29-124%
321-60-8	2-Fluorobiphenyl	109%		23-122%
1718-51-0	Terphenyl-d14	106%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
(b) High percent recoveries and no positive found in the sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-7S		
Lab Sample ID:	JD36168-11	**Date Sampled:**	11/30/21
Matrix:	AQ - Ground Water	**Date Received:**	12/03/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81096.D	1	12/12/21 16:29	TL	12/07/21 09:45	OP36994	G6G2868
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0074	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.0074	0.0039	ug/l	
319-85-7	beta-BHC	ND	0.0074	0.0059	ug/l	
319-86-8	delta-BHC	ND	0.0074	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0074	0.0044	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0074	0.0037	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0074	0.0032	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0074	0.0032	ug/l	
60-57-1	Dieldrin	ND	0.0074	0.0057	ug/l	
72-54-8	4,4'-DDD	ND	0.0074	0.0043	ug/l	
72-55-9	4,4'-DDE	ND	0.0074	0.0037	ug/l	
50-29-3	4,4'-DDT	ND	0.0074	0.0051	ug/l	
72-20-8	Endrin	ND	0.0074	0.0045	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0074	0.0040	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0074	0.0050	ug/l	
53494-70-5	Endrin ketone	ND	0.0074	0.0046	ug/l	
959-98-8	Endosulfan-I	ND	0.0074	0.0039	ug/l	
33213-65-9	Endosulfan-II	ND	0.0074	0.0036	ug/l	
76-44-8	Heptachlor	ND	0.0074	0.0033	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0074	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0050	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	77%		10-190%
877-09-8	Tetrachloro-m-xylene	72%		10-190%
2051-24-3	Decachlorobiphenyl	46%		10-156%
2051-24-3	Decachlorobiphenyl	50%		10-156%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-7S
Lab Sample ID: JD36168-11
Matrix: AQ - Ground Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 11/30/21
Date Received: 12/03/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	584	50	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	4.2	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	28.4	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	1.1	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	47400	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	13.9	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	2.5	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	512	500	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	49100	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	142	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/08/21	12/08/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	13.3	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	1810	500	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	144000	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	5.7	2.0	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/08/21	12/08/21	NV	SW846 6020B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA51556
(2) Instrument QC Batch: MA51567
(3) Instrument QC Batch: MA51579
(4) Prep QC Batch: MP30244
(5) Prep QC Batch: MP30250

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF MW-7S
Lab Sample ID: JD36168-11F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 11/30/21
Date Received: 12/03/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	3.1	1.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	26.7	2.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	1.0	1.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	46700	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Chromium	< 2.0	2.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/08/21	12/10/21	NV	SW846 6020B [3]	SW846 3010A [4]
Iron	< 50	50	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	48100	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Manganese	109	2.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/08/21	12/08/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	4.6	2.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	1760	500	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	141000	5000	ug/l	20	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	4.4	2.0	ug/l	2	12/08/21	12/09/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/08/21	12/10/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51556
(2) Instrument QC Batch: MA51579
(3) Instrument QC Batch: MA51580
(4) Prep QC Batch: MP30244
(5) Prep QC Batch: MP30250

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

Parameter Certification Exceptions

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Chlordane (alpha and gamma)	57-74-9	**SW846 8081B**	AQ	SGS is not certified for this parameter.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

GW
TB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

Page __ of __

EHSA-QAC-0023-04-FORM-Standard COC

FED-EX Tracking #
SGS Quote #
Bottle Order Control # JS-112321-176
SGS Job # JD36168

Client / Reporting Information

Company Name: TETRA TECH INC
Street Address
City State Zip
Project Contact E-mail: JONATHAN DZIEKAN
Phone #
Sampler(s) Name(s) Phone #: M. BLOMER, N. DERIC

Project Information

Project Name: HOFF VC
Street
City State
Project #
Client Purchase Order #
Project Manager: JONATHAN DZIEKAN

Billing Information (if different from Report to)
Company Name
Street Address
City State Zip
Attention:

Requested Analysis

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	VOLATILES V8260SC	1,4 DIOXANE V8260 SIM DIOX	SEMIVOLATILES BLV 8270 SIM PAH	Pesticides P8081 PEST TCL	Metals TAL	Metals TAL DISS	LAB USE ONLY
1	TB-20211130		11/30/2021	1230	MEB	G		TB	4	4								X	X					M27
2F	Hoff OW-4DL	•	12/1/2021	1425	MEB	G		GW	12	6		2						X	X	X	X	X	X	A38
3F	Hoff OW-4DU	•	12/1/2021	1630	MEB	G		GW	12	6		2						X	X	X	X	X	X	V976
4F	Hoff MW-5DL	•	12/2/2021	1020	MEB	G		GW	12	6		2						X	X	X	X	X	X	V975
5F	Hoff MW-5DU	•	12/2/2021	1135	MEB	G		GW	12	6		2						X	X	X	X	X	X	
6F	Hoff MW-5S	•	12/2/2021	1320	MEB	G		GW	12	6		2						X	X	X	X	X	X	
7F	Hoff MW-6S	⊙	12/2/2021	1510	MEB	G		GW	13	7		2						X	X	X	X	X	X	
8F	Hoff OW-6DU	•	12/3/2021	1100	MEB	G		GW	12	6		2						X	X	X	X	X	X	
9F	Hoff OW-6DL	⊙	12/3/2021	1230	MEB	G		GW	13	7		2						X	X	X	X	X	X	
10F	HOFF MW-7DU	•	11-30/21	1340	MEB	G		GW	12	6		2						X	X	X	X	X	X	
11F	HOFF MW-7S	•	11-30/21	1545		G		GW	12	6		2						X	X	X	X	X	X	

pH Check (Lab Use Only)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- ☐ 10 Business Days
- ☐ 5 Business Days
- ☐ 3 Business Days*
- ☐ 2 Business Days*
- ☐ 1 Business Day*
- ☐ Other

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ NJ Reduced (Level 3)
- ☐ Full Tier I (Level 4)
- ☐ Commercial "C"
- ☐ NJ DKQP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ MA MCP Criteria____
- ☐ CT RCP Criteria____
- ☐ State Forms
- ☐ EDD Format ____
- ☐ DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

⊙ QC VOA + 4X25PM1 NP EXT
• 4 X 250ml NP EXT

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 Mallow Erin Blom	12/3/2021 1312	1 Mike Gonnella	2 Mike Gonnella	12/3/21 1715	2 [signature]
3		3	4		4
5		5			

Custody Seal # ☐ Intact ☐ Not intact ☐ Absent

Therm ID: See Sample Receipt Summary ☐ On Ice 2.5 C/P 2.7 C/P Cooler Temp. °C

5.2
5

JD36168: Chain of Custody
Page 1 of 5

SGS Sample Receipt Summary

Job Number: JD36168 **Client:** TETRA TECH EC INC. **Project:** HOFF VC- 336 LAYFIELD ROAD, PERKIOMENVI

Date / Time Received: 12/3/2021 5:15:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.5); Cooler 2: (2.7);

Cooler Temps (Corrected) °C: Cooler 1: (1.1); Cooler 2: (1.3);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	2		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

Job Change Order: JD36168

Requested Date: 12/30/2021 **Received Date:** 12/3/2021

Account Name: Tetra Tech EC Inc. **Due Date:** 12/30/2021

Project Description: Hoff VC- 336 Layfield Road, Perkiomenville, PA **Deliverable:** REDT2

C/O Initiated By: JADONS **PM:** JBS **TAT (Days):** 7

==========

Sample #: JD36168-2 thru 11

Dept:

TAT: 7

Change:
Please cancel ABLV8270SL and add ABLV8270SL1 on the original jol the original due date.

==========

Above Changes Per: Jadon Schiller **Date/Time:** 12/30/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

JD36168: Chain of Custody
Page 3 of 5

Job Change Order: JD36168

Requested Date: 1/6/2022 **Received Date:** 12/3/2021

Account Name: Tetra Tech EC Inc. **Due Date:** 1/6/2022

Project Description: Hoff VC- 336 Layfield Road, Perkiomenville, PA **Deliverable:** REDT2

C/O Initiated By: JADONS **PM:** JBS **TAT (Days):** 1

==========

Sample #: JD36168-2 **Change:**

Dept: Please revise client ID on all sample fractions to HOFF MW-4DL and reissue the report.

TAT: 1

HOFF DW-4DL

==========

==========

Sample #: JD36168-3 **Change:**

Dept: Please revise client ID on all sample fractions to HOFF MW-4DU and reissue the report.

TAT: 1

HOFF DW-4DV

==========

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Sample #: JD36168-8 **Change:**

Dept: Please revise client ID on all sample fractions to HOFF MW-6DU and reissue the report.

TAT: 1

HOFF DW-6DV

==========

==========

Sample #: JD36168-9 **Change:**

Dept: Please revise client ID on all sample fractions to HOFF MW-6DL and reissue the report.

TAT: 1

HOFF DW-6DL

==========

Above Changes Per: Neb Dedic **Date/Time:** 1/6/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD36168

Requested Date:	2/2/2022	**Received Date:**	12/3/2021
Account Name:	Tetra Tech EC Inc.	**Due Date:**	2/2/2022
Project Description:	Hoff VC- 336 Layfield Road, Perkiomenville, PA	**Deliverable:**	REDT2
C/O Initiated By:	JADONS **PM:** JBS	**TAT (Days):**	7

Sample #: JD36168-2
Dept:
TAT: 7

HOFF OW-4DL

Change:
Please revise client ID to HOFF OW-4DL on all sample fractions and reissue the report.

Sample #: JD36168-3
Dept:
TAT: 7

HOFF OW-4DU

Change:
Please revise client ID to HOFF OW-4DU on all sample fractions and reissue the report.

Sample #: JD36168-8
Dept:
TAT: 7

HOFF OW-6DU

Change:
Please revise client ID HOFF OW-6DU on all sample fractions and rei
the report.

Sample #: JD36168-9
Dept:
TAT: 7

HOFF OW-6DL

Change:
Please revise client ID to HOFF OW-6DL on all sample fractions and reissue the report.

Above Changes Per: Neb Dedic **Date/Time:** 2/4/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36168

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36168-1 Collected: 03-DEC-21 12:30 By: MEB Received: 03-DEC-21 By: TS TB-20211130						
JD36168-1	SW846 8260D	06-DEC-21 17:57	BK			V8260SL
JD36168-1	SW846 8260D BY SIM	13-DEC-21 18:42	BK			V8260SIMDIOX
JD36168-2 Collected: 01-DEC-21 14:25 By: MEB Received: 03-DEC-21 By: TS HOFF OW-4DL						
JD36168-2	SW846 8260D	06-DEC-21 20:33	BK			V8260SL
JD36168-2	SW846 7470A	07-DEC-21 14:22	SB	07-DEC-21	SB	HG
JD36168-2	SW846 8270E BY SIM	08-DEC-21 11:18	CS	07-DEC-21	JL	BLV8270SIMPAH
JD36168-2	SW846 6020B	08-DEC-21 18:14	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-2	SW846 6020B	09-DEC-21 15:51	NV	08-DEC-21	NV	CAMS
JD36168-2	SW846 6020B	09-DEC-21 23:21	NV	08-DEC-21	NV	CUMS
JD36168-2	SW846 8081B	12-DEC-21 16:47	TL	07-DEC-21	JL	P8081PESTTCL
JD36168-2	SW846 8260D BY SIM	13-DEC-21 20:09	BK			V8260SIMDIOX
JD36168-2	SW846 8270E	15-DEC-21 21:13	KLS	07-DEC-21	JL	ABLV8270SL
JD36168-3 Collected: 01-DEC-21 16:30 By: MEB Received: 03-DEC-21 By: TS HOFF OW-4DU						
JD36168-3	SW846 8260D	06-DEC-21 15:47	BK			V8260SL
JD36168-3	SW846 7470A	07-DEC-21 14:24	SB	07-DEC-21	SB	HG
JD36168-3	SW846 8270E BY SIM	08-DEC-21 11:42	CS	07-DEC-21	JL	BLV8270SIMPAH
JD36168-3	SW846 6020B	08-DEC-21 18:20	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BEMS, CDMS, COMS, FEMS, KMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-3	SW846 6020B	09-DEC-21 15:58	NV	08-DEC-21	NV	BAMS, CAMS, MGMS
JD36168-3	SW846 6020B	09-DEC-21 23:27	NV	08-DEC-21	NV	CRMS, CUMS
JD36168-3	SW846 8081B	12-DEC-21 17:05	TL	07-DEC-21	JL	P8081PESTTCL
JD36168-3	SW846 8260D BY SIM	13-DEC-21 20:37	BK			V8260SIMDIOX
JD36168-3	SW846 8270E	15-DEC-21 21:41	KLS	07-DEC-21	JL	ABLV8270SL

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36168

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36168-4 Collected: 02-DEC-21 10:20 By: MEB Received: 03-DEC-21 By: TS HOFF MW-5DL						
JD36168-4	SW846 8260D	06-DEC-21 18:23	BK			V8260SL
JD36168-4	SW846 7470A	07-DEC-21 14:25	SB	07-DEC-21	SB	HG
JD36168-4	SW846 6020B	08-DEC-21 18:24	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CAMS, CDMS, COMS, CRMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-4	SW846 6020B	09-DEC-21 23:33	NV	08-DEC-21	NV	CUMS
JD36168-4	SW846 8081B	12-DEC-21 17:24	TL	07-DEC-21	JL	P8081PESTTCL
JD36168-4	SW846 8270E	15-DEC-21 17:38	KLS	08-DEC-21	NP	ABLV8270SL
JD36168-4	SW846 8270E BY SIM	16-DEC-21 02:05	KLS	08-DEC-21	NP	BLV8270SIMPAH
JD36168-4	SW846 8260D BY SIM	16-DEC-21 13:39	BK			V8260SIMDIOX
JD36168-5 Collected: 02-DEC-21 11:35 By: MEB Received: 03-DEC-21 By: TS HOFF MW-5DV						
JD36168-5	SW846 8260D	06-DEC-21 18:49	BK			V8260SL
JD36168-5	SW846 7470A	07-DEC-21 14:27	SB	07-DEC-21	SB	HG
JD36168-5	SW846 6020B	08-DEC-21 18:27	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, FEMS, KMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-5	SW846 6020B	09-DEC-21 16:01	NV	08-DEC-21	NV	CAMS, MGMS, NAMS
JD36168-5	SW846 6020B	09-DEC-21 23:39	NV	08-DEC-21	NV	CUMS
JD36168-5	SW846 8081B	12-DEC-21 17:42	TL	07-DEC-21	JL	P8081PESTTCL
JD36168-5	SW846 8270E	15-DEC-21 18:05	KLS	08-DEC-21	NP	ABLV8270SL
JD36168-5	SW846 8260D BY SIM	16-DEC-21 14:08	BK			V8260SIMDIOX
JD36168-5	SW846 8270E BY SIM	17-DEC-21 00:22	KLS	08-DEC-21	NP	BLV8270SIMPAH
JD36168-6 Collected: 02-DEC-21 13:20 By: MEB Received: 03-DEC-21 By: TS HOFF MW-5S						
JD36168-6	SW846 8260D	06-DEC-21 19:15	BK			V8260SL
JD36168-6	SW846 7470A	08-DEC-21 13:46	SB	08-DEC-21	SB	HG

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36168

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36168-6	SW846 6020B	08-DEC-21 18:40	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CAMS, CDMS, COMS, CRMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-6	SW846 6020B	09-DEC-21 23:45	NV	08-DEC-21	NV	CUMS
JD36168-6	SW846 8081B	12-DEC-21 18:00	TL	07-DEC-21	JL	P8081PESTTCL
JD36168-6	SW846 8260D BY SIM	13-DEC-21 16:48	BK			V8260SIMDIOX
JD36168-6	SW846 8270E	15-DEC-21 18:31	KLS	08-DEC-21	NP	ABLV8270SL
JD36168-6	SW846 8270E BY SIM	17-DEC-21 20:09	KLS	08-DEC-21	NP	BLV8270SIMPAH
JD36168-7	Collected: 02-DEC-21 15:10 By: MEB		Received: 03-DEC-21 By: TS			
HOFF MW-6S						
JD36168-7	SW846 8260D	06-DEC-21 13:58	BK			V8260SL
JD36168-7	SW846 7470A	08-DEC-21 13:47	SB	08-DEC-21	SB	HG
JD36168-7	SW846 6020B	08-DEC-21 18:43	NV	08-DEC-21	NV	AGMS, ASMS, BAMS, BEMS, CAMS, CDMS, COMS, CRMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-7	SW846 6020B	09-DEC-21 16:12	NV	08-DEC-21	NV	ALMS
JD36168-7	SW846 6020B	09-DEC-21 23:51	NV	08-DEC-21	NV	CUMS
JD36168-7	SW846 8081B	12-DEC-21 18:19	TL	07-DEC-21	JL	P8081PESTTCL
JD36168-7	SW846 8260D BY SIM	13-DEC-21 15:50	BK			V8260SIMDIOX
JD36168-7	SW846 8270E	15-DEC-21 18:58	KLS	08-DEC-21	NP	ABLV8270SL
JD36168-7	SW846 8270E BY SIM	17-DEC-21 20:33	KLS	08-DEC-21	NP	BLV8270SIMPAH
JD36168-8	Collected: 03-DEC-21 11:00 By: MEB		Received: 03-DEC-21 By: TS			
HOFF OW-6DU						
JD36168-8	SW846 8260D	06-DEC-21 15:20	BK			V8260SL
JD36168-8	SW846 7470A	08-DEC-21 13:48	SB	08-DEC-21	SB	HG
JD36168-8	SW846 6020B	08-DEC-21 18:46	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-8	SW846 6020B	09-DEC-21 16:15	NV	08-DEC-21	NV	CAMS
JD36168-8	SW846 6020B	09-DEC-21 23:57	NV	08-DEC-21	NV	CUMS
JD36168-8	SW846 8081B	12-DEC-21 18:37	TL	07-DEC-21	JL	P8081PESTTCL
JD36168-8	SW846 8260D BY SIM	13-DEC-21 16:19	BK			V8260SIMDIOX

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36168

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36168-8	SW846 8270E	15-DEC-21 19:25	KLS	08-DEC-21	NP	ABLV8270SL
JD36168-8	SW846 8270E BY SIM	17-DEC-21 20:56	KLS	08-DEC-21	NP	BLV8270SIMPAH
JD36168-9	Collected: 03-DEC-21 12:30 By: MEB		Received: 03-DEC-21 By: TS			
HOFF OW-6DL						
JD36168-9	SW846 8260D	06-DEC-21 16:13	BK			V8260SL
JD36168-9	SW846 7470A	08-DEC-21 13:50	SB	08-DEC-21	SB	HG
JD36168-9	SW846 6020B	08-DEC-21 18:50	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-9	SW846 6020B	09-DEC-21 16:19	NV	08-DEC-21	NV	CAMS
JD36168-9	SW846 8081B	12-DEC-21 18:56	TL	07-DEC-21	JL	P8081PESTTCL
JD36168-9	SW846 8270E	15-DEC-21 19:52	KLS	08-DEC-21	NP	ABLV8270SL
JD36168-9	SW846 8260D BY SIM	16-DEC-21 13:10	BK			V8260SIMDIOX
JD36168-9	SW846 8270E BY SIM	17-DEC-21 21:20	KLS	08-DEC-21	NP	BLV8270SIMPAH
JD36168-10	Collected: 30-NOV-21 13:40 By: MEB		Received: 03-DEC-21 By: TS			
HOFF MW-7DU						
JD36168-10	SW846 8260D	06-DEC-21 19:41	BK			V8260SL
JD36168-10	SW846 8270E BY SIM	08-DEC-21 10:31	CS	07-DEC-21	JL	BLV8270SIMPAH
JD36168-10	SW846 7470A	08-DEC-21 13:51	SB	08-DEC-21	SB	HG
JD36168-10	SW846 6020B	08-DEC-21 18:53	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-10	SW846 6020B	09-DEC-21 16:22	NV	08-DEC-21	NV	CAMS, MGMS, NAMS
JD36168-10	SW846 8081B	12-DEC-21 16:10	TL	07-DEC-21	JL	P8081PESTTCL
JD36168-10	SW846 8260D BY SIM	13-DEC-21 19:11	BK			V8260SIMDIOX
JD36168-10	SW846 8270E	15-DEC-21 20:19	KLS	07-DEC-21	JL	ABLV8270SL
JD36168-11	Collected: 30-NOV-21 15:45 By: MEB		Received: 03-DEC-21 By: TS			
HOFF MW-7S						
JD36168-11	SW846 8260D	06-DEC-21 20:07	BK			V8260SL
JD36168-11	SW846 8270E BY SIM	08-DEC-21 10:54	CS	07-DEC-21	JL	BLV8270SIMPAH
JD36168-11	SW846 7470A	08-DEC-21 13:53	SB	08-DEC-21	SB	HG

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36168

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36168-11	SW846 6020B	08-DEC-21 18:56	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, KMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-11	SW846 6020B	09-DEC-21 16:25	NV	08-DEC-21	NV	CAMS, FEMS, MGMS, NAMS
JD36168-11	SW846 8081B	12-DEC-21 16:29	TL	07-DEC-21	JL	P8081PESTTCL
JD36168-11	SW846 8260D BY SIM	13-DEC-21 19:40	BK			V8260SIMDIOX
JD36168-11	SW846 8270E	15-DEC-21 20:46	KLS	07-DEC-21	JL	ABLV8270SL
JD36168-2F	Collected: 01-DEC-21 14:25 By: MEB		Received: 03-DEC-21 By: TS			
HOFF OW-4DL						
JD36168-2F	SW846 7470A	07-DEC-21 14:28	SB	07-DEC-21	SB	HG
JD36168-2F	SW846 6020B	08-DEC-21 18:59	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-2F	SW846 6020B	09-DEC-21 16:28	NV	08-DEC-21	NV	CAMS
JD36168-3F	Collected: 01-DEC-21 16:30 By: MEB		Received: 03-DEC-21 By: TS			
HOFF OW-4DU						
JD36168-3F	SW846 7470A	07-DEC-21 14:29	SB	07-DEC-21	SB	HG
JD36168-3F	SW846 6020B	08-DEC-21 19:03	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-3F	SW846 6020B	09-DEC-21 16:37	NV	08-DEC-21	NV	CAMS
JD36168-4F	Collected: 02-DEC-21 10:20 By: MEB		Received: 03-DEC-21 By: TS			
HOFF MW-5DL						
JD36168-4F	SW846 7470A	07-DEC-21 14:31	SB	07-DEC-21	SB	HG
JD36168-4F	SW846 6020B	08-DEC-21 19:16	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CAMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36168

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36168-5F	Collected: 02-DEC-21 11:35 By: MEB HOFF MW-5DV			Received: 03-DEC-21 By: TS		
JD36168-5F	SW846 7470A	07-DEC-21 14:36	SB	07-DEC-21	SB	HG
JD36168-5F	SW846 6020B	08-DEC-21 19:19	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, FEMS, KMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-5F	SW846 6020B	09-DEC-21 16:40	NV	08-DEC-21	NV	CAMS, MGMS, NAMS
JD36168-5F	SW846 6020B	10-DEC-21 00:03	NV	08-DEC-21	NV	CUMS
JD36168-6F	Collected: 02-DEC-21 13:20 By: MEB HOFF MW-5S			Received: 03-DEC-21 By: TS		
JD36168-6F	SW846 7470A	08-DEC-21 13:54	SB	08-DEC-21	SB	HG
JD36168-6F	SW846 6020B	08-DEC-21 19:22	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CAMS, CDMS, COMS, CRMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-6F	SW846 6020B	10-DEC-21 00:21	NV	08-DEC-21	NV	CUMS
JD36168-7F	Collected: 02-DEC-21 15:10 By: MEB HOFF MW-6S			Received: 03-DEC-21 By: TS		
JD36168-7F	SW846 7470A	08-DEC-21 13:59	SB	08-DEC-21	SB	HG
JD36168-7F	SW846 6020B	08-DEC-21 19:25	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CAMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-8F	Collected: 03-DEC-21 11:00 By: MEB HOFF OW-6DU			Received: 03-DEC-21 By: TS		
JD36168-8F	SW846 7470A	08-DEC-21 14:00	SB	08-DEC-21	SB	HG

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36168

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36168-8F	SW846 6020B	08-DEC-21 19:29	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-8F	SW846 6020B	09-DEC-21 16:43	NV	08-DEC-21	NV	CAMS
JD36168-9F	Collected: 03-DEC-21 12:30 By: MEB Received: 03-DEC-21 By: TS HOFF OW-6DL					
JD36168-9F	SW846 7470A	08-DEC-21 14:01	SB	08-DEC-21	SB	HG
JD36168-9F	SW846 6020B	08-DEC-21 19:32	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MGMS, MNMS, NAMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-9F	SW846 6020B	09-DEC-21 16:46	NV	08-DEC-21	NV	CAMS
JD36168-10F	Collected: 30-NOV-21 13:40 By: MEB Received: 03-DEC-21 By: TS HOFF MW-7DU					
JD36168-10F	SW846 7470A	08-DEC-21 14:03	SB	08-DEC-21	SB	HG
JD36168-10F	SW846 6020B	08-DEC-21 19:35	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36168-10F	SW846 6020B	09-DEC-21 16:49	NV	08-DEC-21	NV	CAMS, MGMS, NAMS
JD36168-11F	Collected: 30-NOV-21 15:45 By: MEB Received: 03-DEC-21 By: TS HOFF MW-7S					
JD36168-11F	SW846 7470A	08-DEC-21 14:04	SB	08-DEC-21	SB	HG
JD36168-11F	SW846 6020B	09-DEC-21 16:52	NV	08-DEC-21	NV	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, FEMS, KMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS
JD36168-11F	SW846 6020B	09-DEC-21 16:55	NV	08-DEC-21	NV	CAMS, MGMS, NAMS
JD36168-11F	SW846 6020B	10-DEC-21 00:27	NV	08-DEC-21	NV	CUMS, ZNMS

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-1.3	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-1.3	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument
JD36168-1.3	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-1.3	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-1.4	Secured Storage	Bridget Kelly	12/13/21 16:22	Retrieve from Storage
JD36168-1.4	Bridget Kelly	GCMS3A	12/13/21 16:22	Load on Instrument
JD36168-1.4	GCMS3A	Bridget Kelly	12/14/21 14:54	Unload from Instrument
JD36168-1.4	Bridget Kelly	Secured Storage	12/14/21 14:54	Return to Storage
JD36168-2.1	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-2.1	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
stage				
JD36168-2.1	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-2.1	Naisha Torres		12/08/21 08:48	Depleted
JD36168-2.1.1	Naisha Torres	Organics Prep	12/07/21 08:21	Extract from JD36168-2.1
JD36168-2.1.1	Organics Prep	Jesse Li	12/07/21 22:48	Extract from JD36168-2.1
JD36168-2.1.1	Jesse Li	Extract Storage	12/07/21 22:48	Return to Storage
JD36168-2.1.1	Extract Storage	Thomas Lally	12/12/21 15:15	Retrieve from Storage
JD36168-2.1.1	Thomas Lally	GC6G	12/12/21 15:15	Load on Instrument
JD36168-2.2	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-2.3	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-2.3	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
stage				
JD36168-2.3	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-2.3	Naisha Torres		12/08/21 08:48	Depleted
JD36168-2.3.1	Naisha Torres	Organics Prep	12/07/21 08:03	Extract from JD36168-2.3
JD36168-2.3.1	Organics Prep	Jesse Li	12/07/21 22:50	Extract from JD36168-2.3
JD36168-2.3.1	Jesse Li	Extract Storage	12/07/21 22:50	Return to Storage
JD36168-2.3.1	Extract Storage	Christopher Sowa	12/08/21 04:30	Retrieve from Storage
JD36168-2.3.1	Christopher Sowa	GCMS4P	12/08/21 04:30	Load on Instrument
JD36168-2.3.1	GCMS4P	Christopher Sowa	12/09/21 08:22	Unload from Instrument
JD36168-2.3.1	Christopher Sowa	Extract Freezer	12/09/21 08:22	Return to Storage
JD36168-2.3.1	Extract Freezer	Christopher Sowa	12/15/21 07:11	Retrieve from Storage
JD36168-2.3.1	Christopher Sowa	GCMS4P	12/15/21 07:11	Load on Instrument
JD36168-2.3.1	GCMS4P	Christopher Sowa	12/16/21 07:43	Unload from Instrument
JD36168-2.3.1	Christopher Sowa	Extract Freezer	12/16/21 07:43	Return to Storage
JD36168-2.3.1	Extract Freezer		01/17/22 09:00	Disposed
JD36168-2.4	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-2.5	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-2.5	Secured Storage	Todd Shoemaker	12/06/21 13:20	Retrieve from Storage
JD36168-2.5	Todd Shoemaker	Secured Staging Area	12/06/21 13:21	Return to Storage
JD36168-2.5	Secured Staging Area	Tayah Martin	12/06/21 13:31	Retrieve from Storage
JD36168-2.5	Tayah Martin	Secured Storage	12/06/21 15:32	Return to Storage
JD36168-2.5	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-2.5	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-2.5	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-2.5	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-2.5.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-2.5
JD36168-2.5.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-2.5
JD36168-2.5.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-2.7	Secured Storage	Bridget Kelly	12/13/21 16:22	Retrieve from Storage
JD36168-2.7	Bridget Kelly	GCMS3A	12/13/21 16:22	Load on Instrument
JD36168-2.7	GCMS3A	Bridget Kelly	12/14/21 14:54	Unload from Instrument
JD36168-2.7	Bridget Kelly	Secured Storage	12/14/21 14:54	Return to Storage
JD36168-2.10	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-2.10	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument
JD36168-2.10	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-2.10	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-2F.6	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-2F.6	Secured Storage	Todd Shoemaker	12/06/21 13:20	Retrieve from Storage
JD36168-2F.6	Todd Shoemaker	Secured Staging Area	12/06/21 13:21	Return to Storage
JD36168-2F.6	Secured Staging Area	Tayah Martin	12/06/21 13:31	Retrieve from Storage
JD36168-2F.6	Tayah Martin	Secured Storage	12/06/21 15:32	Return to Storage
JD36168-2F.6	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-2F.6	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-2F.6	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-2F.6	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-2F.6.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-2F.6
JD36168-2F.6.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-2F.6
JD36168-2F.6.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-3.1	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-3.1	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
stage				
JD36168-3.1	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-3.1	Naisha Torres		12/08/21 08:48	Depleted

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-3.1.1	Naisha Torres	Organics Prep	12/07/21 08:03	Extract from JD36168-3.1
JD36168-3.1.1	Organics Prep	Jesse Li	12/07/21 22:50	Extract from JD36168-3.1
JD36168-3.1.1	Jesse Li	Extract Storage	12/07/21 22:50	Return to Storage
JD36168-3.1.1	Extract Storage	Christopher Sowa	12/08/21 04:30	Retrieve from Storage
JD36168-3.1.1	Christopher Sowa	GCMS4P	12/08/21 04:30	Load on Instrument
JD36168-3.1.1	GCMS4P	Christopher Sowa	12/09/21 08:22	Unload from Instrument
JD36168-3.1.1	Christopher Sowa	Extract Freezer	12/09/21 08:22	Return to Storage
JD36168-3.1.1	Extract Freezer	Christopher Sowa	12/15/21 07:11	Retrieve from Storage
JD36168-3.1.1	Christopher Sowa	GCMS4P	12/15/21 07:11	Load on Instrument
JD36168-3.1.1	GCMS4P	Christopher Sowa	12/16/21 07:43	Unload from Instrument
JD36168-3.1.1	Christopher Sowa	Extract Freezer	12/16/21 07:43	Return to Storage
JD36168-3.1.1	Extract Freezer		01/17/22 09:00	Disposed
JD36168-3.1.2	Naisha Torres	Organics Prep	12/07/21 08:21	Extract from JD36168-3.1
JD36168-3.1.2	Organics Prep	Jesse Li	12/07/21 22:48	Extract from JD36168-3.1
JD36168-3.1.2	Jesse Li	Extract Storage	12/07/21 22:48	Return to Storage
JD36168-3.1.2	Extract Storage	Thomas Lally	12/12/21 15:15	Retrieve from Storage
JD36168-3.1.2	Thomas Lally	GC6G	12/12/21 15:15	Load on Instrument
JD36168-3.2	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-3.3	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-3.4	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-3.4	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
stage				
JD36168-3.4	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-3.4	Naisha Torres		12/08/21 08:48	Depleted
JD36168-3.5	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-3.5	Secured Storage	Todd Shoemaker	12/06/21 13:20	Retrieve from Storage
JD36168-3.5	Todd Shoemaker	Secured Staging Area	12/06/21 13:21	Return to Storage
JD36168-3.5	Secured Staging Area	Tayah Martin	12/06/21 13:31	Retrieve from Storage
JD36168-3.5	Tayah Martin	Secured Storage	12/06/21 15:32	Return to Storage
JD36168-3.5	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-3.5	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-3.5	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-3.5	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-3.5.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-3.5
JD36168-3.5.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-3.5
JD36168-3.5.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-3.8	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-3.8	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument
JD36168-3.8	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-3.8	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-3.11	Secured Storage	Bridget Kelly	12/13/21 16:22	Retrieve from Storage
JD36168-3.11	Bridget Kelly	GCMS3A	12/13/21 16:22	Load on Instrument
JD36168-3.11	GCMS3A	Bridget Kelly	12/14/21 14:54	Unload from Instrument
JD36168-3.11	Bridget Kelly	Secured Storage	12/14/21 14:54	Return to Storage
JD36168-3F.6	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-3F.6	Secured Storage	Todd Shoemaker	12/06/21 13:20	Retrieve from Storage
JD36168-3F.6	Todd Shoemaker	Secured Staging Area	12/06/21 13:21	Return to Storage
JD36168-3F.6	Secured Staging Area	Tayah Martin	12/06/21 13:31	Retrieve from Storage
JD36168-3F.6	Tayah Martin	Secured Storage	12/06/21 15:32	Return to Storage
JD36168-3F.6	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-3F.6	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-3F.6	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-3F.6	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-3F.6.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-3F.6
JD36168-3F.6.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-3F.6
JD36168-3F.6.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-4.1	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-4.2	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-4.3	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-4.3 stage	Tyler Strong	Secured Staging Area	12/07/21 22:07	Return to Storage
JD36168-4.3	Secured Staging Area	Edward Rue	12/08/21 08:24	Retrieve from Storage
JD36168-4.3 stage	Tyler Strong	Secured Staging Area	12/08/21 18:29	Return to Storage
JD36168-4.3	Secured Staging Area	Jesse Li	12/08/21 18:30	Retrieve from Storage
JD36168-4.3	Jesse Li		12/09/21 00:23	Depleted
JD36168-4.3.1	Edward Rue	Organics Prep	12/08/21 08:42	Extract from JD36168-4.3
JD36168-4.3.1	Organics Prep	Nisha Patel	12/08/21 23:44	Extract from JD36168-4.3
JD36168-4.3.1	Nisha Patel	Extract Storage	12/08/21 23:44	Return to Storage
JD36168-4.3.1	Extract Storage	Christopher Sowa	12/15/21 07:12	Retrieve from Storage
JD36168-4.3.1	Christopher Sowa	GCMS5P	12/15/21 07:12	Load on Instrument
JD36168-4.3.1	GCMS5P	Christopher Sowa	12/16/21 03:09	Unload from Instrument
JD36168-4.3.1	Christopher Sowa	Extract Freezer	12/16/21 03:09	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-4.3.1	Extract Freezer		01/18/22 09:00	Disposed
JD36168-4.4	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-4.4	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
stage				
JD36168-4.4	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-4.4	Naisha Torres		12/08/21 08:48	Depleted
JD36168-4.4.1	Naisha Torres	Organics Prep	12/07/21 08:21	Extract from JD36168-4.4
JD36168-4.4.1	Organics Prep	Jesse Li	12/07/21 22:48	Extract from JD36168-4.4
JD36168-4.4.1	Jesse Li	Extract Storage	12/07/21 22:48	Return to Storage
JD36168-4.4.1	Extract Storage	Thomas Lally	12/12/21 15:15	Retrieve from Storage
JD36168-4.4.1	Thomas Lally	GC6G	12/12/21 15:15	Load on Instrument
JD36168-4.5	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-4.5	Secured Storage	Todd Shoemaker	12/06/21 13:20	Retrieve from Storage
JD36168-4.5	Todd Shoemaker	Secured Staging Area	12/06/21 13:21	Return to Storage
JD36168-4.5	Secured Staging Area	Tayah Martin	12/06/21 13:31	Retrieve from Storage
JD36168-4.5	Tayah Martin	Secured Storage	12/06/21 15:32	Return to Storage
JD36168-4.5	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-4.5	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-4.5	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-4.5	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-4.5.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-4.5
JD36168-4.5.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-4.5
JD36168-4.5.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-4.7	Secured Storage	Taylor Sauter	12/16/21 14:22	Retrieve from Storage
JD36168-4.7	Taylor Sauter	GCMS3A	12/16/21 14:22	Load on Instrument
JD36168-4.7	GCMS3A	Bridget Kelly	12/17/21 08:45	Unload from Instrument
JD36168-4.7	Bridget Kelly	Secured Storage	12/17/21 08:45	Return to Storage
JD36168-4.9	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-4.9	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument
JD36168-4.9	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-4.9	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-4.11	Secured Storage	Bridget Kelly	12/14/21 15:57	Retrieve from Storage
JD36168-4.11	Bridget Kelly	GCMS3A	12/14/21 15:57	Load on Instrument
JD36168-4.11	GCMS3A	Bridget Kelly	12/16/21 13:57	Unload from Instrument
JD36168-4.11	Bridget Kelly	Secured Storage	12/16/21 13:57	Return to Storage
JD36168-4F.6	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-4F.6	Secured Storage	Todd Shoemaker	12/06/21 13:20	Retrieve from Storage
JD36168-4F.6	Todd Shoemaker	Secured Staging Area	12/06/21 13:21	Return to Storage
JD36168-4F.6	Secured Staging Area	Tayah Martin	12/06/21 13:31	Retrieve from Storage
JD36168-4F.6	Tayah Martin	Secured Storage	12/06/21 15:32	Return to Storage
JD36168-4F.6	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-4F.6	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-4F.6	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-4F.6	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-4F.6.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-4F.6
JD36168-4F.6.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-4F.6
JD36168-4F.6.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-5.1	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-5.1 stage	Tyler Strong	Secured Staging Area	12/07/21 22:07	Return to Storage
JD36168-5.1	Secured Staging Area	Edward Rue	12/08/21 08:24	Retrieve from Storage
JD36168-5.1 stage	Tyler Strong	Secured Staging Area	12/08/21 18:29	Return to Storage
JD36168-5.1	Secured Staging Area	Jesse Li	12/08/21 18:30	Retrieve from Storage
JD36168-5.1	Jesse Li	Secured Storage	12/08/21 19:25	Return to Storage
JD36168-5.1.1	Edward Rue	Organics Prep	12/08/21 08:42	Extract from JD36168-5.1
JD36168-5.1.1	Organics Prep	Nisha Patel	12/08/21 23:44	Extract from JD36168-5.1
JD36168-5.1.1	Nisha Patel	Extract Storage	12/08/21 23:44	Return to Storage
JD36168-5.1.1	Extract Storage	Christopher Sowa	12/15/21 07:12	Retrieve from Storage
JD36168-5.1.1	Christopher Sowa	GCMS5P	12/15/21 07:12	Load on Instrument
JD36168-5.1.1	GCMS5P	Christopher Sowa	12/16/21 03:09	Unload from Instrument
JD36168-5.1.1	Christopher Sowa	Extract Freezer	12/16/21 03:09	Return to Storage
JD36168-5.1.1	Extract Freezer		01/18/22 09:00	Disposed
JD36168-5.2	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-5.3	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-5.3 stage	Tyler Strong	Secured Staging Area	12/07/21 22:07	Return to Storage
JD36168-5.3	Secured Staging Area	Edward Rue	12/08/21 08:24	Retrieve from Storage
JD36168-5.3 stage	Tyler Strong	Secured Staging Area	12/08/21 18:29	Return to Storage
JD36168-5.3	Secured Staging Area	Jesse Li	12/08/21 18:30	Retrieve from Storage
JD36168-5.3	Jesse Li		12/09/21 00:23	Depleted
JD36168-5.4	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-5.4	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
stage				
JD36168-5.4	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-5.4	Naisha Torres		12/08/21 08:48	Depleted
JD36168-5.4.1	Naisha Torres	Organics Prep	12/07/21 08:21	Extract from JD36168-5.4
JD36168-5.4.1	Organics Prep	Jesse Li	12/07/21 22:48	Extract from JD36168-5.4
JD36168-5.4.1	Jesse Li	Extract Storage	12/07/21 22:48	Return to Storage
JD36168-5.4.1	Extract Storage	Thomas Lally	12/12/21 15:15	Retrieve from Storage
JD36168-5.4.1	Thomas Lally	GC6G	12/12/21 15:15	Load on Instrument
JD36168-5.5	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-5.5	Secured Storage	Todd Shoemaker	12/06/21 13:20	Retrieve from Storage
JD36168-5.5	Todd Shoemaker	Secured Staging Area	12/06/21 13:21	Return to Storage
JD36168-5.5	Secured Staging Area	Tayah Martin	12/06/21 13:31	Retrieve from Storage
JD36168-5.5	Tayah Martin	Secured Storage	12/06/21 15:32	Return to Storage
JD36168-5.5	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-5.5	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-5.5	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-5.5	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-5.5.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-5.5
JD36168-5.5.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-5.5
JD36168-5.5.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-5.7	Secured Storage	Bridget Kelly	12/14/21 15:57	Retrieve from Storage
JD36168-5.7	Bridget Kelly	GCMS3A	12/14/21 15:57	Load on Instrument
JD36168-5.7	GCMS3A	Bridget Kelly	12/16/21 13:57	Unload from Instrument
JD36168-5.7	Bridget Kelly	Secured Storage	12/16/21 13:57	Return to Storage
JD36168-5.10	Secured Storage	Taylor Sauter	12/16/21 14:22	Retrieve from Storage
JD36168-5.10	Taylor Sauter	GCMS3A	12/16/21 14:22	Load on Instrument
JD36168-5.10	GCMS3A	Bridget Kelly	12/17/21 08:45	Unload from Instrument
JD36168-5.10	Bridget Kelly	Secured Storage	12/17/21 08:45	Return to Storage
JD36168-5.11	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-5.11	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument
JD36168-5.11	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-5.11	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-5F.6	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-5F.6	Secured Storage	Todd Shoemaker	12/06/21 13:20	Retrieve from Storage
JD36168-5F.6	Todd Shoemaker	Secured Staging Area	12/06/21 13:21	Return to Storage
JD36168-5F.6	Secured Staging Area	Tayah Martin	12/06/21 13:31	Retrieve from Storage
JD36168-5F.6	Tayah Martin	Secured Storage	12/06/21 15:32	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-5F.6	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-5F.6	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-5F.6	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-5F.6	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-5F.6.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-5F.6
JD36168-5F.6.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-5F.6
JD36168-5F.6.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-6.1	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-6.2	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-6.3	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-6.3 stage	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
JD36168-6.3	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-6.3	Naisha Torres		12/08/21 08:48	Depleted
JD36168-6.3.1	Naisha Torres	Organics Prep	12/07/21 08:21	Extract from JD36168-6.3
JD36168-6.3.1	Organics Prep	Jesse Li	12/07/21 22:48	Extract from JD36168-6.3
JD36168-6.3.1	Jesse Li	Extract Storage	12/07/21 22:48	Return to Storage
JD36168-6.3.1	Extract Storage	Thomas Lally	12/12/21 15:15	Retrieve from Storage
JD36168-6.3.1	Thomas Lally	GC6G	12/12/21 15:15	Load on Instrument
JD36168-6.4	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-6.4 stage	Tyler Strong	Secured Staging Area	12/07/21 22:07	Return to Storage
JD36168-6.4	Secured Staging Area	Edward Rue	12/08/21 08:24	Retrieve from Storage
JD36168-6.4 stage	Tyler Strong	Secured Staging Area	12/08/21 18:29	Return to Storage
JD36168-6.4	Secured Staging Area	Jesse Li	12/08/21 18:30	Retrieve from Storage
JD36168-6.4	Jesse Li		12/09/21 00:23	Depleted
JD36168-6.4.1	Edward Rue	Organics Prep	12/08/21 08:42	Extract from JD36168-6.4
JD36168-6.4.1	Organics Prep	Nisha Patel	12/08/21 23:44	Extract from JD36168-6.4
JD36168-6.4.1	Nisha Patel	Extract Storage	12/08/21 23:44	Return to Storage
JD36168-6.4.1	Extract Storage	Christopher Sowa	12/15/21 07:12	Retrieve from Storage
JD36168-6.4.1	Christopher Sowa	GCMS5P	12/15/21 07:12	Load on Instrument
JD36168-6.4.1	GCMS5P	Christopher Sowa	12/16/21 03:09	Unload from Instrument
JD36168-6.4.1	Christopher Sowa	Extract Freezer	12/16/21 03:09	Return to Storage
JD36168-6.4.1	Extract Freezer	Kristi Schollenberger	12/17/21 13:01	Retrieve from Storage
JD36168-6.4.1	Kristi Schollenberger	GCMS4P	12/17/21 13:01	Load on Instrument
JD36168-6.4.1	GCMS4P	Christopher Sowa	12/18/21 04:25	Unload from Instrument

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-6.4.1	Christopher Sowa	Extract Freezer	12/18/21 04:25	Return to Storage
JD36168-6.4.1	Extract Freezer		01/18/22 09:00	Disposed
JD36168-6.5	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-6.5	Secured Storage	Benjamin Gaines	12/07/21 10:07	Retrieve from Storage
JD36168-6.5	Benjamin Gaines	Secured Staging Area	12/07/21 10:07	Return to Storage
JD36168-6.5	Secured Staging Area	Tayah Martin	12/07/21 10:12	Retrieve from Storage
JD36168-6.5	Tayah Martin	Secured Storage	12/07/21 12:12	Return to Storage
JD36168-6.5	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-6.5	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-6.5	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-6.5	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-6.5.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-6.5
JD36168-6.5.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-6.5
JD36168-6.5.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-6.8	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-6.8	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument
JD36168-6.8	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-6.8	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-6.9	Secured Storage	Bridget Kelly	12/13/21 16:22	Retrieve from Storage
JD36168-6.9	Bridget Kelly	GCMS3A	12/13/21 16:22	Load on Instrument
JD36168-6.9	GCMS3A	Bridget Kelly	12/14/21 14:54	Unload from Instrument
JD36168-6.9	Bridget Kelly	Secured Storage	12/14/21 14:54	Return to Storage
JD36168-6F.6	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-6F.6	Secured Storage	Benjamin Gaines	12/07/21 10:07	Retrieve from Storage
JD36168-6F.6	Benjamin Gaines	Secured Staging Area	12/07/21 10:07	Return to Storage
JD36168-6F.6	Secured Staging Area	Tayah Martin	12/07/21 10:12	Retrieve from Storage
JD36168-6F.6	Tayah Martin	Secured Storage	12/07/21 12:12	Return to Storage
JD36168-6F.6	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-6F.6	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-6F.6	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-6F.6	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-6F.6.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-6F.6
JD36168-6F.6.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-6F.6
JD36168-6F.6.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-7.1	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-7.1 stage	Tyler Strong	Secured Staging Area	12/07/21 22:07	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-7.1	Secured Staging Area	Edward Rue	12/08/21 08:24	Retrieve from Storage
JD36168-7.1	Tyler Strong	Secured Staging Area	12/08/21 18:29	Return to Storage
stage				
JD36168-7.1	Secured Staging Area	Jesse Li	12/08/21 18:30	Retrieve from Storage
JD36168-7.1	Jesse Li		12/09/21 00:23	Depleted
JD36168-7.1.1	Edward Rue	Organics Prep	12/08/21 08:42	Extract from JD36168-7.1
JD36168-7.1.1	Organics Prep	Nisha Patel	12/08/21 23:44	Extract from JD36168-7.1
JD36168-7.1.1	Nisha Patel	Extract Storage	12/08/21 23:44	Return to Storage
JD36168-7.1.1	Extract Storage	Christopher Sowa	12/15/21 07:12	Retrieve from Storage
JD36168-7.1.1	Christopher Sowa	GCMS5P	12/15/21 07:12	Load on Instrument
JD36168-7.1.1	GCMS5P	Christopher Sowa	12/16/21 03:09	Unload from Instrument
JD36168-7.1.1	Christopher Sowa	Extract Freezer	12/16/21 03:09	Return to Storage
JD36168-7.1.1	Extract Freezer	Kristi Schollenberger	12/17/21 13:01	Retrieve from Storage
JD36168-7.1.1	Kristi Schollenberger	GCMS4P	12/17/21 13:01	Load on Instrument
JD36168-7.1.1	GCMS4P	Christopher Sowa	12/18/21 04:25	Unload from Instrument
JD36168-7.1.1	Christopher Sowa	Extract Freezer	12/18/21 04:25	Return to Storage
JD36168-7.1.1	Extract Freezer		01/18/22 09:00	Disposed
JD36168-7.2	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-7.3	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-7.4	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-7.4	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
stage				
JD36168-7.4	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-7.4	Naisha Torres		12/08/21 08:48	Depleted
JD36168-7.4.1	Naisha Torres	Organics Prep	12/07/21 08:21	Extract from JD36168-7.4
JD36168-7.4.1	Organics Prep	Jesse Li	12/07/21 22:48	Extract from JD36168-7.4
JD36168-7.4.1	Jesse Li	Extract Storage	12/07/21 22:48	Return to Storage
JD36168-7.4.1	Extract Storage	Thomas Lally	12/12/21 15:15	Retrieve from Storage
JD36168-7.4.1	Thomas Lally	GC6G	12/12/21 15:15	Load on Instrument
JD36168-7.5	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-7.5	Secured Storage	Benjamin Gaines	12/07/21 10:07	Retrieve from Storage
JD36168-7.5	Benjamin Gaines	Secured Staging Area	12/07/21 10:07	Return to Storage
JD36168-7.5	Secured Staging Area	Tayah Martin	12/07/21 10:12	Retrieve from Storage
JD36168-7.5	Tayah Martin	Secured Storage	12/07/21 12:12	Return to Storage
JD36168-7.5	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-7.5	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-7.5	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-7.5	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-7.5.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-7.5
JD36168-7.5.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-7.5
JD36168-7.5.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-7.7	Secured Storage	Bridget Kelly	12/13/21 16:22	Retrieve from Storage
JD36168-7.7	Bridget Kelly	GCMS3A	12/13/21 16:22	Load on Instrument
JD36168-7.7	GCMS3A	Bridget Kelly	12/14/21 14:54	Unload from Instrument
JD36168-7.7	Bridget Kelly	Secured Storage	12/14/21 14:54	Return to Storage
JD36168-7.8	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-7.8	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument
JD36168-7.8	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-7.8	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-7.9	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-7.9	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument
JD36168-7.9	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-7.9	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-7.10	Secured Storage	Bridget Kelly	12/13/21 16:22	Retrieve from Storage
JD36168-7.10	Bridget Kelly	GCMS3A	12/13/21 16:22	Load on Instrument
JD36168-7.10	GCMS3A	Bridget Kelly	12/14/21 14:54	Unload from Instrument
JD36168-7.10	Bridget Kelly	Secured Storage	12/14/21 14:54	Return to Storage
JD36168-7.11	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-7.11	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument
JD36168-7.11	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-7.11	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-7.12	Secured Storage	Bridget Kelly	12/13/21 16:22	Retrieve from Storage
JD36168-7.12	Bridget Kelly	GCMS3A	12/13/21 16:22	Load on Instrument
JD36168-7.12	GCMS3A	Bridget Kelly	12/14/21 14:54	Unload from Instrument
JD36168-7.12	Bridget Kelly	Secured Storage	12/14/21 14:54	Return to Storage
JD36168-7F.6	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-7F.6	Secured Storage	Benjamin Gaines	12/07/21 10:07	Retrieve from Storage
JD36168-7F.6	Benjamin Gaines	Secured Staging Area	12/07/21 10:07	Return to Storage
JD36168-7F.6	Secured Staging Area	Tayah Martin	12/07/21 10:12	Retrieve from Storage
JD36168-7F.6	Tayah Martin	Secured Storage	12/07/21 12:12	Return to Storage
JD36168-7F.6	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-7F.6	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-7F.6	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-7F.6	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-7F.6.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-7F.6
JD36168-7F.6.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-7F.6
JD36168-7F.6.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-8.1	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-8.2	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-8.2	Tyler Strong	Secured Staging Area	12/07/21 22:07	Return to Storage
stage				
JD36168-8.2	Secured Staging Area	Edward Rue	12/08/21 08:24	Retrieve from Storage
JD36168-8.2	Tyler Strong	Secured Staging Area	12/08/21 18:29	Return to Storage
stage				
JD36168-8.2	Secured Staging Area	Jesse Li	12/08/21 18:30	Retrieve from Storage
JD36168-8.2	Jesse Li		12/09/21 00:23	Depleted
JD36168-8.2.1	Edward Rue	Organics Prep	12/08/21 08:42	Extract from JD36168-8.2
JD36168-8.2.1	Organics Prep	Nisha Patel	12/08/21 23:44	Extract from JD36168-8.2
JD36168-8.2.1	Nisha Patel	Extract Storage	12/08/21 23:44	Return to Storage
JD36168-8.2.1	Extract Storage	Christopher Sowa	12/15/21 07:12	Retrieve from Storage
JD36168-8.2.1	Christopher Sowa	GCMS5P	12/15/21 07:12	Load on Instrument
JD36168-8.2.1	GCMS5P	Christopher Sowa	12/16/21 03:09	Unload from Instrument
JD36168-8.2.1	Christopher Sowa	Extract Freezer	12/16/21 03:09	Return to Storage
JD36168-8.2.1	Extract Freezer	Kristi Schollenberger	12/17/21 13:01	Retrieve from Storage
JD36168-8.2.1	Kristi Schollenberger	GCMS4P	12/17/21 13:01	Load on Instrument
JD36168-8.2.1	GCMS4P	Christopher Sowa	12/18/21 04:25	Unload from Instrument
JD36168-8.2.1	Christopher Sowa	Extract Freezer	12/18/21 04:25	Return to Storage
JD36168-8.2.1	Extract Freezer		01/18/22 09:00	Disposed
JD36168-8.3	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-8.3	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
stage				
JD36168-8.3	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-8.3	Naisha Torres		12/08/21 08:48	Depleted
JD36168-8.3.1	Naisha Torres	Organics Prep	12/07/21 08:21	Extract from JD36168-8.3
JD36168-8.3.1	Organics Prep	Jesse Li	12/07/21 22:48	Extract from JD36168-8.3
JD36168-8.3.1	Jesse Li	Extract Storage	12/07/21 22:48	Return to Storage
JD36168-8.3.1	Extract Storage	Thomas Lally	12/12/21 15:15	Retrieve from Storage
JD36168-8.3.1	Thomas Lally	GC6G	12/12/21 15:15	Load on Instrument
JD36168-8.4	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-8.4	Secured Storage	Naisha Torres	12/07/21 09:25	Retrieve from Storage
JD36168-8.4	Naisha Torres		12/08/21 08:48	Depleted

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-8.5	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-8.5	Secured Storage	Benjamin Gaines	12/07/21 10:07	Retrieve from Storage
JD36168-8.5	Benjamin Gaines	Secured Staging Area	12/07/21 10:07	Return to Storage
JD36168-8.5	Secured Staging Area	Tayah Martin	12/07/21 10:12	Retrieve from Storage
JD36168-8.5	Tayah Martin	Secured Storage	12/07/21 12:12	Return to Storage
JD36168-8.5	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-8.5	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-8.5	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-8.5	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-8.5.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-8.5
JD36168-8.5.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-8.5
JD36168-8.5.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-8.8	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-8.8	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument
JD36168-8.8	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-8.8	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-8.11	Secured Storage	Bridget Kelly	12/13/21 16:22	Retrieve from Storage
JD36168-8.11	Bridget Kelly	GCMS3A	12/13/21 16:22	Load on Instrument
JD36168-8.11	GCMS3A	Bridget Kelly	12/14/21 14:54	Unload from Instrument
JD36168-8.11	Bridget Kelly	Secured Storage	12/14/21 14:54	Return to Storage
JD36168-8F.6	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-8F.6	Secured Storage	Benjamin Gaines	12/07/21 10:07	Retrieve from Storage
JD36168-8F.6	Benjamin Gaines	Secured Staging Area	12/07/21 10:07	Return to Storage
JD36168-8F.6	Secured Staging Area	Tayah Martin	12/07/21 10:12	Retrieve from Storage
JD36168-8F.6	Tayah Martin	Secured Storage	12/07/21 12:12	Return to Storage
JD36168-8F.6	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-8F.6	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-8F.6	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-8F.6	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-8F.6.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-8F.6
JD36168-8F.6.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-8F.6
JD36168-8F.6.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-9.1	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-9.2	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-9.2	Tyler Strong	Secured Staging Area	12/07/21 22:07	Return to Storage
stage				

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-9.2	Secured Staging Area	Edward Rue	12/08/21 08:24	Retrieve from Storage
JD36168-9.2	Tyler Strong	Secured Staging Area	12/08/21 18:29	Return to Storage
stage				
JD36168-9.2	Secured Staging Area	Jesse Li	12/08/21 18:30	Retrieve from Storage
JD36168-9.2	Jesse Li		12/09/21 00:23	Depleted
JD36168-9.2.1	Edward Rue	Organics Prep	12/08/21 08:42	Extract from JD36168-9.2
JD36168-9.2.1	Organics Prep	Nisha Patel	12/08/21 23:44	Extract from JD36168-9.2
JD36168-9.2.1	Nisha Patel	Extract Storage	12/08/21 23:44	Return to Storage
JD36168-9.2.1	Extract Storage	Christopher Sowa	12/15/21 07:12	Retrieve from Storage
JD36168-9.2.1	Christopher Sowa	GCMS5P	12/15/21 07:12	Load on Instrument
JD36168-9.2.1	GCMS5P	Christopher Sowa	12/16/21 03:09	Unload from Instrument
JD36168-9.2.1	Christopher Sowa	Extract Freezer	12/16/21 03:09	Return to Storage
JD36168-9.2.1	Extract Freezer	Kristi Schollenberger	12/17/21 13:01	Retrieve from Storage
JD36168-9.2.1	Kristi Schollenberger	GCMS4P	12/17/21 13:01	Load on Instrument
JD36168-9.2.1	GCMS4P	Christopher Sowa	12/18/21 04:25	Unload from Instrument
JD36168-9.2.1	Christopher Sowa	Extract Freezer	12/18/21 04:25	Return to Storage
JD36168-9.2.1	Extract Freezer		01/18/22 09:00	Disposed
JD36168-9.3	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-9.3	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
stage				
JD36168-9.3	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-9.3	Naisha Torres		12/08/21 08:48	Depleted
JD36168-9.3.1	Naisha Torres	Organics Prep	12/07/21 08:21	Extract from JD36168-9.3
JD36168-9.3.1	Organics Prep	Jesse Li	12/07/21 22:48	Extract from JD36168-9.3
JD36168-9.3.1	Jesse Li	Extract Storage	12/07/21 22:48	Return to Storage
JD36168-9.3.1	Extract Storage	Thomas Lally	12/12/21 15:15	Retrieve from Storage
JD36168-9.3.1	Thomas Lally	GC6G	12/12/21 15:15	Load on Instrument
JD36168-9.4	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-9.5	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-9.5	Secured Storage	Benjamin Gaines	12/07/21 10:07	Retrieve from Storage
JD36168-9.5	Benjamin Gaines	Secured Staging Area	12/07/21 10:07	Return to Storage
JD36168-9.5	Secured Staging Area	Tayah Martin	12/07/21 10:12	Retrieve from Storage
JD36168-9.5	Tayah Martin	Secured Storage	12/07/21 12:12	Return to Storage
JD36168-9.5	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-9.5	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-9.5	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-9.5	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-9.5.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-9.5

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-9.5.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-9.5
JD36168-9.5.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-9.8	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-9.8	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument
JD36168-9.8	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-9.8	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-9.11	Secured Storage	Taylor Sauter	12/16/21 14:22	Retrieve from Storage
JD36168-9.11	Taylor Sauter	GCMS3A	12/16/21 14:22	Load on Instrument
JD36168-9.11	GCMS3A	Bridget Kelly	12/17/21 08:45	Unload from Instrument
JD36168-9.11	Bridget Kelly	Secured Storage	12/17/21 08:45	Return to Storage
JD36168-9.12	Secured Storage	Bridget Kelly	12/14/21 15:57	Retrieve from Storage
JD36168-9.12	Bridget Kelly	GCMS3A	12/14/21 15:57	Load on Instrument
JD36168-9.12	GCMS3A	Bridget Kelly	12/16/21 13:57	Unload from Instrument
JD36168-9.12	Bridget Kelly	Secured Storage	12/16/21 13:57	Return to Storage
JD36168-9F.6	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-9F.6	Secured Storage	Benjamin Gaines	12/07/21 10:07	Retrieve from Storage
JD36168-9F.6	Benjamin Gaines	Secured Staging Area	12/07/21 10:07	Return to Storage
JD36168-9F.6	Secured Staging Area	Tayah Martin	12/07/21 10:12	Retrieve from Storage
JD36168-9F.6	Tayah Martin	Secured Storage	12/07/21 12:12	Return to Storage
JD36168-9F.6	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-9F.6	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-9F.6	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-9F.6	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-9F.6.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-9F.6
JD36168-9F.6.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-9F.6
JD36168-9F.6.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-10.1	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-10.2	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-10.2	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
stage				
JD36168-10.2	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-10.2	Naisha Torres		12/08/21 08:48	Depleted
JD36168-10.2.1	Naisha Torres	Organics Prep	12/07/21 08:03	Extract from JD36168-10.2
JD36168-10.2.1	Organics Prep	Jesse Li	12/07/21 22:50	Extract from JD36168-10.2
JD36168-10.2.1	Jesse Li	Extract Storage	12/07/21 22:50	Return to Storage
JD36168-10.2.1	Extract Storage	Christopher Sowa	12/08/21 04:30	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-10.2.1	Christopher Sowa	GCMS4P	12/08/21 04:30	Load on Instrument
JD36168-10.2.1	GCMS4P	Christopher Sowa	12/09/21 08:22	Unload from Instrument
JD36168-10.2.1	Christopher Sowa	Extract Freezer	12/09/21 08:22	Return to Storage
JD36168-10.2.1	Extract Freezer	Christopher Sowa	12/15/21 07:11	Retrieve from Storage
JD36168-10.2.1	Christopher Sowa	GCMS4P	12/15/21 07:11	Load on Instrument
JD36168-10.2.1	GCMS4P	Christopher Sowa	12/16/21 07:43	Unload from Instrument
JD36168-10.2.1	Christopher Sowa	Extract Freezer	12/16/21 07:43	Return to Storage
JD36168-10.2.1	Extract Freezer		01/17/22 09:00	Disposed
JD36168-10.2.2	Naisha Torres	Organics Prep	12/07/21 08:21	Extract from JD36168-10.2
JD36168-10.2.2	Organics Prep	Jesse Li	12/07/21 22:48	Extract from JD36168-10.2
JD36168-10.2.2	Jesse Li	Extract Storage	12/07/21 22:48	Return to Storage
JD36168-10.2.2	Extract Storage	Thomas Lally	12/12/21 15:15	Retrieve from Storage
JD36168-10.2.2	Thomas Lally	GC6G	12/12/21 15:15	Load on Instrument
JD36168-10.3	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-10.4	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-10.4 stage	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
JD36168-10.4	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-10.4	Naisha Torres		12/08/21 08:48	Depleted
JD36168-10.5	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-10.5	Secured Storage	Benjamin Gaines	12/07/21 10:07	Retrieve from Storage
JD36168-10.5	Benjamin Gaines	Secured Staging Area	12/07/21 10:07	Return to Storage
JD36168-10.5	Secured Staging Area	Tayah Martin	12/07/21 10:12	Retrieve from Storage
JD36168-10.5	Tayah Martin	Secured Storage	12/07/21 12:12	Return to Storage
JD36168-10.5	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-10.5	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-10.5	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-10.5	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-10.5.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-10.5
JD36168-10.5.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-10.5
JD36168-10.5.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-10.7	Secured Storage	Bridget Kelly	12/08/21 15:13	Retrieve from Storage
JD36168-10.7	Bridget Kelly	GCMS3A	12/08/21 15:13	Load on Instrument
JD36168-10.7	GCMS3A	Bridget Kelly	12/13/21 13:06	Unload from Instrument
JD36168-10.7	Bridget Kelly	Secured Storage	12/13/21 13:06	Return to Storage
JD36168-10.8	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-10.8	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-10.8	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-10.8	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-10.11	Secured Storage	Bridget Kelly	12/13/21 16:22	Retrieve from Storage
JD36168-10.11	Bridget Kelly	GCMS3A	12/13/21 16:22	Load on Instrument
JD36168-10.11	GCMS3A	Bridget Kelly	12/14/21 14:54	Unload from Instrument
JD36168-10.11	Bridget Kelly	Secured Storage	12/14/21 14:54	Return to Storage
JD36168-10F.6	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-10F.6	Secured Storage	Benjamin Gaines	12/07/21 10:07	Retrieve from Storage
JD36168-10F.6	Benjamin Gaines	Secured Staging Area	12/07/21 10:07	Return to Storage
JD36168-10F.6	Secured Staging Area	Tayah Martin	12/07/21 10:12	Retrieve from Storage
JD36168-10F.6	Tayah Martin	Secured Storage	12/07/21 12:12	Return to Storage
JD36168-10F.6	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-10F.6	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-10F.6	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-10F.6	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-10F.6.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-10F.6
JD36168-10F.6.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-10F.6
JD36168-10F.6.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-11.1	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-11.1	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
stage				
JD36168-11.1	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-11.1	Naisha Torres		12/08/21 08:48	Depleted
JD36168-11.1.1	Naisha Torres	Organics Prep	12/07/21 08:03	Extract from JD36168-11.1
JD36168-11.1.1	Organics Prep	Jesse Li	12/07/21 22:50	Extract from JD36168-11.1
JD36168-11.1.1	Jesse Li	Extract Storage	12/07/21 22:50	Return to Storage
JD36168-11.1.1	Extract Storage	Christopher Sowa	12/08/21 04:30	Retrieve from Storage
JD36168-11.1.1	Christopher Sowa	GCMS4P	12/08/21 04:30	Load on Instrument
JD36168-11.1.1	GCMS4P	Christopher Sowa	12/09/21 08:22	Unload from Instrument
JD36168-11.1.1	Christopher Sowa	Extract Freezer	12/09/21 08:22	Return to Storage
JD36168-11.1.1	Extract Freezer	Christopher Sowa	12/15/21 07:11	Retrieve from Storage
JD36168-11.1.1	Christopher Sowa	GCMS4P	12/15/21 07:11	Load on Instrument
JD36168-11.1.1	GCMS4P	Christopher Sowa	12/16/21 07:43	Unload from Instrument
JD36168-11.1.1	Christopher Sowa	Extract Freezer	12/16/21 07:43	Return to Storage
JD36168-11.1.1	Extract Freezer		01/17/22 09:00	Disposed
JD36168-11.1.2	Naisha Torres	Organics Prep	12/07/21 08:21	Extract from JD36168-11.1
JD36168-11.1.2	Organics Prep	Jesse Li	12/07/21 22:48	Extract from JD36168-11.1
JD36168-11.1.2	Jesse Li	Extract Storage	12/07/21 22:48	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-11.1.2	Extract Storage	Thomas Lally	12/12/21 15:15	Retrieve from Storage
JD36168-11.1.2	Thomas Lally	GC6G	12/12/21 15:15	Load on Instrument
JD36168-11.2	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-11.3	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-11.3	Epiphania Njoku	Secured Staging Area	12/06/21 22:43	Return to Storage
stage				
JD36168-11.3	Secured Staging Area	Naisha Torres	12/07/21 07:51	Retrieve from Storage
JD36168-11.3	Naisha Torres		12/08/21 08:48	Depleted
JD36168-11.4	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-11.5	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-11.5	Secured Storage	Benjamin Gaines	12/07/21 10:07	Retrieve from Storage
JD36168-11.5	Benjamin Gaines	Secured Staging Area	12/07/21 10:07	Return to Storage
JD36168-11.5	Secured Staging Area	Tayah Martin	12/07/21 10:12	Retrieve from Storage
JD36168-11.5	Tayah Martin	Secured Storage	12/07/21 12:12	Return to Storage
JD36168-11.5	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-11.5	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-11.5	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-11.5	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-11.5.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-11.5
JD36168-11.5.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-11.5
JD36168-11.5.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage
JD36168-11.7	Secured Storage	Bridget Kelly	12/08/21 15:13	Retrieve from Storage
JD36168-11.7	Bridget Kelly	GCMS3A	12/08/21 15:13	Load on Instrument
JD36168-11.7	GCMS3A	Bridget Kelly	12/13/21 13:06	Unload from Instrument
JD36168-11.7	Bridget Kelly	Secured Storage	12/13/21 13:06	Return to Storage
JD36168-11.10	Secured Storage	Bridget Kelly	12/13/21 16:22	Retrieve from Storage
JD36168-11.10	Bridget Kelly	GCMS3A	12/13/21 16:22	Load on Instrument
JD36168-11.10	GCMS3A	Bridget Kelly	12/14/21 14:54	Unload from Instrument
JD36168-11.10	Bridget Kelly	Secured Storage	12/14/21 14:54	Return to Storage
JD36168-11.11	Secured Storage	Brittany Klimek	12/06/21 16:16	Retrieve from Storage
JD36168-11.11	Brittany Klimek	GCMS1X	12/06/21 16:16	Load on Instrument
JD36168-11.11	GCMS1X	Brittany Klimek	12/07/21 10:06	Unload from Instrument
JD36168-11.11	Brittany Klimek	Secured Storage	12/07/21 10:06	Return to Storage
JD36168-11F.6	Tyler Strong	Secured Storage	12/03/21 22:33	Return to Storage
JD36168-11F.6	Secured Storage	Benjamin Gaines	12/07/21 10:07	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/03/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36168-11F.6	Benjamin Gaines	Secured Staging Area	12/07/21 10:07	Return to Storage
JD36168-11F.6	Secured Staging Area	Tayah Martin	12/07/21 10:12	Retrieve from Storage
JD36168-11F.6	Tayah Martin	Secured Storage	12/07/21 12:12	Return to Storage
JD36168-11F.6	Secured Storage	Benjamin Gaines	12/07/21 15:57	Retrieve from Storage
JD36168-11F.6	Benjamin Gaines	Secured Staging Area	12/07/21 15:57	Return to Storage
JD36168-11F.6	Secured Staging Area	Alyssa Koshy	12/08/21 08:30	Retrieve from Storage
JD36168-11F.6	Alyssa Koshy	Secured Storage	12/08/21 10:41	Return to Storage
JD36168-11F.6.1	Alyssa Koshy	Metals Digestion	12/08/21 10:32	Digestate from JD36168-11F.6
JD36168-11F.6.1	Metals Digestion	Alyssa Koshy	12/08/21 10:33	Digestate from JD36168-11F.6
JD36168-11F.6.1	Alyssa Koshy	Metals Digestate Storage	12/08/21 10:33	Return to Storage

MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7262-MB	3A167332.D	1	12/13/21	BK	n/a	n/a	V3A7262

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36168-1, JD36168-2, JD36168-3, JD36168-6, JD36168-7, JD36168-8, JD36168-10, JD36168-11

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.26	0.30	0.095	ug/l	J

CAS No.	Surrogate Recoveries		Limits
17647-74-4	1,4-Dioxane-D8	139%	39-174%

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7265-MB	3A167393.D	1	12/16/21	BK	n/a	n/a	V3A7265

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36168-4, JD36168-5, JD36168-9

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries		Limits
17647-74-4	1,4-Dioxane-D8	108%	39-174%

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8350-MB	1X192791.D	1	12/06/21	BK	n/a	n/a	V1X8350

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36168-1, JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8350-MB	1X192791.D	1	12/06/21	BK	n/a	n/a	V1X8350

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36168-1, JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8350-MB	1X192791.D	1	12/06/21	BK	n/a	n/a	V1X8350

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36168-1, JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	85-118%
17060-07-0	1,2-Dichloroethane-D4	98%	80-121%
2037-26-5	Toluene-D8	99%	80-120%
460-00-4	4-Bromofluorobenzene	98%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7265-BS	3A167391.D	1	12/16/21	BK	n/a	n/a	V3A7265

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36168-4, JD36168-5, JD36168-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
123-91-1	1,4-Dioxane	20	20.0	100	61-125

CAS No.	Surrogate Recoveries	BSP	Limits
17647-74-4	1,4-Dioxane-D8	121%	39-174%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8350-BS	1X192789.D	1	12/06/21	BK	n/a	n/a	V1X8350

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36168-1, JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	168	84	63-137
71-43-2	Benzene	50	53.1	106	78-117
108-86-1	Bromobenzene	50	56.6	113	82-121
74-97-5	Bromochloromethane	50	54.6	109	83-124
75-27-4	Bromodichloromethane	50	53.9	108	83-123
75-25-2	Bromoform	50	59.4	119	80-140
74-83-9	Bromomethane	50	53.6	107	26-167
78-93-3	2-Butanone (MEK)	200	194	97	73-135
104-51-8	n-Butylbenzene	50	53.4	107	78-126
135-98-8	sec-Butylbenzene	50	53.1	106	78-122
98-06-6	tert-Butylbenzene	50	52.2	104	77-122
75-15-0	Carbon disulfide	50	41.8	84	60-131
56-23-5	Carbon tetrachloride	50	56.2	112	75-127
108-90-7	Chlorobenzene	50	54.5	109	83-115
75-00-3	Chloroethane	50	53.3	107	61-135
67-66-3	Chloroform	50	52.5	105	76-118
74-87-3	Chloromethane	50	50.9	102	46-144
95-49-8	o-Chlorotoluene	50	52.6	105	80-120
106-43-4	p-Chlorotoluene	50	52.8	106	80-117
96-12-8	1,2-Dibromo-3-chloropropane	50	53.4	107	75-135
124-48-1	Dibromochloromethane	50	57.9	116	84-128
106-93-4	1,2-Dibromoethane	50	54.9	110	82-129
95-50-1	1,2-Dichlorobenzene	50	53.0	106	85-117
541-73-1	1,3-Dichlorobenzene	50	52.9	106	83-116
106-46-7	1,4-Dichlorobenzene	50	52.3	105	82-115
75-71-8	Dichlorodifluoromethane	50	64.9	130	49-153
75-34-3	1,1-Dichloroethane	50	49.6	99	75-122
107-06-2	1,2-Dichloroethane	50	50.4	101	74-116
75-35-4	1,1-Dichloroethene	50	49.6	99	68-129
156-59-2	cis-1,2-Dichloroethene	50	50.6	101	78-120
156-60-5	trans-1,2-Dichloroethene	50	50.5	101	74-125
78-87-5	1,2-Dichloropropane	50	55.6	111	80-120
142-28-9	1,3-Dichloropropane	50	53.1	106	82-116
594-20-7	2,2-Dichloropropane	50	55.3	111	70-128
563-58-6	1,1-Dichloropropene	50	52.2	104	75-121
10061-01-5	cis-1,3-Dichloropropene	50	55.3	111	84-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8350-BS	1X192789.D	1	12/06/21	BK	n/a	n/a	V1X8350

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36168-1, JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	56.4	113	84-124
100-41-4	Ethylbenzene	50	52.2	104	80-115
87-68-3	Hexachlorobutadiene	50	53.2	106	68-137
591-78-6	2-Hexanone	200	190	95	74-132
98-82-8	Isopropylbenzene	50	53.1	106	79-120
99-87-6	p-Isopropyltoluene	50	54.0	108	80-122
1634-04-4	Methyl Tert Butyl Ether	50	50.5	101	77-124
108-10-1	4-Methyl-2-pentanone(MIBK)	200	208	104	77-129
74-95-3	Methylene bromide	50	53.8	108	83-121
75-09-2	Methylene chloride	50	47.8	96	74-125
91-20-3	Naphthalene	50	49.7	99	73-138
103-65-1	n-Propylbenzene	50	53.2	106	78-117
100-42-5	Styrene	50	53.9	108	83-122
75-65-0	Tert Butyl Alcohol	250	260	104	77-125
630-20-6	1,1,1,2-Tetrachloroethane	50	56.6	113	82-125
79-34-5	1,1,2,2-Tetrachloroethane	50	53.8	108	78-122
127-18-4	Tetrachloroethene	50	57.1	114	75-125
109-99-9	Tetrahydrofuran	50	42.5	85	69-129
108-88-3	Toluene	50	54.6	109	80-115
87-61-6	1,2,3-Trichlorobenzene	50	52.4	105	73-140
120-82-1	1,2,4-Trichlorobenzene	50	53.2	106	77-137
71-55-6	1,1,1-Trichloroethane	50	54.4	109	77-124
79-00-5	1,1,2-Trichloroethane	50	53.7	107	83-118
79-01-6	Trichloroethene	50	54.3	109	80-123
75-69-4	Trichlorofluoromethane	50	59.5	119	71-134
96-18-4	1,2,3-Trichloropropane	50	53.9	108	80-121
95-63-6	1,2,4-Trimethylbenzene	50	53.2	106	81-119
108-67-8	1,3,5-Trimethylbenzene	50	52.9	106	79-120
108-05-4	Vinyl Acetate	50	54.1	108	77-131
75-01-4	Vinyl chloride	50	49.5	99	56-138
	m,p-Xylene	100	108	108	81-118
95-47-6	o-Xylene	50	52.0	104	81-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8350-BS	1X192789.D	1	12/06/21	BK	n/a	n/a	V1X8350

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36168-1, JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	85-118%
17060-07-0	1,2-Dichloroethane-D4	97%	80-121%
2037-26-5	Toluene-D8	98%	80-120%
460-00-4	4-Bromofluorobenzene	98%	80-120%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7262-BS	3A167329.D	1	12/13/21	BK	n/a	n/a	V3A7262
V3A7262-BSD	3A167330.D	1	12/13/21	BK	n/a	n/a	V3A7262

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36168-1, JD36168-2, JD36168-3, JD36168-6, JD36168-7, JD36168-8, JD36168-10, JD36168-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
123-91-1	1,4-Dioxane	20	16.6	83	16.7	84	1	61-125/26

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17647-74-4	1,4-Dioxane-D8	104%	110%	39-174%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36168-7MS	3A167343.D	1	12/13/21	BK	n/a	n/a	V3A7262
JD36168-7MSD	3A167344.D	1	12/13/21	BK	n/a	n/a	V3A7262
JD36168-7	3A167340.D	1	12/13/21	BK	n/a	n/a	V3A7262

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36168-1, JD36168-2, JD36168-3, JD36168-6, JD36168-7, JD36168-8, JD36168-10, JD36168-11

CAS No.	Compound	JD36168-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
123-91-1	1,4-Dioxane	ND		20	16.7	84	20	18.0	90	7	36-157/42

CAS No.	Surrogate Recoveries	MS	MSD	JD36168-7	Limits
17647-74-4	1,4-Dioxane-D8	95%	99%	109%	39-174%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36294-5MS	3A167402.D	1	12/16/21	BK	n/a	n/a	V3A7265
JD36294-5MSD	3A167403.D	1	12/16/21	BK	n/a	n/a	V3A7265
JD36294-5	3A167406.D	1	12/16/21	BK	n/a	n/a	V3A7265

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36168-4, JD36168-5, JD36168-9

CAS No.	Compound	JD36294-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
123-91-1	1,4-Dioxane	0.26		20	23.1	114	20	25.1	124	8	36-157/42

CAS No.	Surrogate Recoveries	MS	MSD	JD36294-5	Limits
17647-74-4	1,4-Dioxane-D8	135%	170%	135%	39-174%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36168-7MS	1X192799.D	1	12/06/21	BK	n/a	n/a	V1X8350
JD36168-7MSD	1X192800.D	1	12/06/21	BK	n/a	n/a	V1X8350
JD36168-7	1X192793.D	1	12/06/21	BK	n/a	n/a	V1X8350

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36168-1, JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11

CAS No.	Compound	JD36168-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		200	163	82	200	154	77	6	52-133/18
71-43-2	Benzene	ND		50	53.8	108	50	50.3	101	7	55-129/11
108-86-1	Bromobenzene	ND		50	57.3	115	50	54.1	108	6	73-120/11
74-97-5	Bromochloromethane	ND		50	55.3	111	50	50.0	100	10	75-122/10
75-27-4	Bromodichloromethane	ND		50	55.2	110	50	51.2	102	8	74-123/11
75-25-2	Bromoform	ND		50	59.5	119	50	54.8	110	8	69-135/12
74-83-9	Bromomethane	ND		50	54.7	109	50	54.5	109	0	11-167/43
78-93-3	2-Butanone (MEK)	ND		200	200	100	200	183	92	9	64-131/15
104-51-8	n-Butylbenzene	ND		50	55.4	111	50	52.2	104	6	69-130/11
135-98-8	sec-Butylbenzene	ND		50	54.9	110	50	52.5	105	4	70-125/12
98-06-6	tert-Butylbenzene	ND		50	54.7	109	50	51.4	103	6	68-125/12
75-15-0	Carbon disulfide	ND		50	42.7	85	50	39.2	78	9	54-137/15
56-23-5	Carbon tetrachloride	ND		50	60.4	121	50	55.4	111	9	68-132/11
108-90-7	Chlorobenzene	ND		50	55.9	112	50	52.2	104	7	71-119/10
75-00-3	Chloroethane	ND		50	55.8	112	50	55.4	111	1	50-146/18
67-66-3	Chloroform	ND		50	52.9	106	50	49.0	98	8	67-120/11
74-87-3	Chloromethane	ND		50	52.3	105	50	52.1	104	0	42-146/17
95-49-8	o-Chlorotoluene	ND		50	54.6	109	50	52.0	104	5	71-120/12
106-43-4	p-Chlorotoluene	ND		50	53.7	107	50	50.6	101	6	71-117/11
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	53.6	107	50	49.5	99	8	65-130/15
124-48-1	Dibromochloromethane	ND		50	58.9	118	50	54.8	110	7	74-125/10
106-93-4	1,2-Dibromoethane	ND		50	55.3	111	50	50.9	102	8	74-125/9
95-50-1	1,2-Dichlorobenzene	ND		50	53.9	108	50	49.8	100	8	73-117/10
541-73-1	1,3-Dichlorobenzene	ND		50	54.7	109	50	50.8	102	7	73-117/10
106-46-7	1,4-Dichlorobenzene	ND		50	53.9	108	50	50.1	100	7	70-117/10
75-71-8	Dichlorodifluoromethane	ND		50	65.6	131	50	66.3	133	1	46-169/17
75-34-3	1,1-Dichloroethane	ND		50	50.9	102	50	48.0	96	6	66-124/13
107-06-2	1,2-Dichloroethane	ND		50	50.5	101	50	46.3	93	9	66-115/10
75-35-4	1,1-Dichloroethene	ND		50	51.2	102	50	47.5	95	7	60-136/15
156-59-2	cis-1,2-Dichloroethene	ND		50	53.1	106	50	49.8	100	6	55-133/12
156-60-5	trans-1,2-Dichloroethene	ND		50	52.9	106	50	49.0	98	8	67-127/13
78-87-5	1,2-Dichloropropane	ND		50	57.1	114	50	53.2	106	7	72-120/11
142-28-9	1,3-Dichloropropane	ND		50	53.4	107	50	49.4	99	8	72-115/10
594-20-7	2,2-Dichloropropane	ND		50	59.2	118	50	55.0	110	7	61-133/12
563-58-6	1,1-Dichloropropene	ND		50	55.8	112	50	51.8	104	7	68-127/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	55.9	112	50	51.9	104	7	75-123/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36168-7MS	1X192799.D	1	12/06/21	BK	n/a	n/a	V1X8350
JD36168-7MSD	1X192800.D	1	12/06/21	BK	n/a	n/a	V1X8350
JD36168-7	1X192793.D	1	12/06/21	BK	n/a	n/a	V1X8350

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36168-1, JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11

CAS No.	Compound	JD36168-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		50	56.5	113	50	52.6	105	7	73-122/11
100-41-4	Ethylbenzene	ND		50	54.4	109	50	51.1	102	6	44-136/10
87-68-3	Hexachlorobutadiene	ND		50	54.4	109	50	53.4	107	2	55-143/15
591-78-6	2-Hexanone	ND		200	190	95	200	178	89	7	64-129/13
98-82-8	Isopropylbenzene	ND		50	55.4	111	50	51.9	104	7	71-122/11
99-87-6	p-Isopropyltoluene	ND		50	56.2	112	50	52.6	105	7	72-124/11
1634-04-4	Methyl Tert Butyl Ether	ND		50	49.8	100	50	46.1	92	8	64-122/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	205	103	200	192	96	7	68-128/13
74-95-3	Methylene bromide	ND		50	54.9	110	50	50.4	101	9	74-118/10
75-09-2	Methylene chloride	ND		50	47.5	95	50	43.8	88	8	65-126/13
91-20-3	Naphthalene	ND		50	50.2	100	50	47.3	95	6	58-140/16
103-65-1	n-Propylbenzene	ND		50	54.7	109	50	51.7	103	6	64-123/11
100-42-5	Styrene	ND		50	55.0	110	50	51.0	102	8	73-124/11
75-65-0	Tert Butyl Alcohol	ND		250	262	105	250	243	97	8	67-127/13
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	58.3	117	50	53.7	107	8	74-123/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	53.8	108	50	50.3	101	7	68-120/15
127-18-4	Tetrachloroethene	ND		50	59.2	118	50	56.6	113	4	61-134/11
109-99-9	Tetrahydrofuran	ND		50	41.8	84	50	40.9	82	2	58-127/17
108-88-3	Toluene	ND		50	55.8	112	50	53.2	106	5	54-130/11
87-61-6	1,2,3-Trichlorobenzene	ND		50	53.0	106	50	49.4	99	7	64-135/15
120-82-1	1,2,4-Trichlorobenzene	ND		50	54.3	109	50	51.4	103	5	67-134/14
71-55-6	1,1,1-Trichloroethane	ND		50	58.0	116	50	54.0	108	7	66-130/12
79-00-5	1,1,2-Trichloroethane	ND		50	53.7	107	50	49.7	99	8	73-117/11
79-01-6	Trichloroethene	ND		50	55.8	112	50	51.9	104	7	56-139/11
75-69-4	Trichlorofluoromethane	ND		50	61.3	123	50	61.7	123	1	63-150/16
96-18-4	1,2,3-Trichloropropane	ND		50	54.8	110	50	49.7	99	10	71-118/12
95-63-6	1,2,4-Trimethylbenzene	ND		50	54.1	108	50	51.4	103	5	45-139/11
108-67-8	1,3,5-Trimethylbenzene	ND		50	54.3	109	50	51.1	102	6	60-128/12
108-05-4	Vinyl Acetate	ND		50	55.0	110	50	50.4	101	9	66-128/15
75-01-4	Vinyl chloride	ND		50	51.1	102	50	51.3	103	0	48-148/17
	m,p-Xylene	ND		100	112	112	100	105	105	6	42-140/10
95-47-6	o-Xylene	ND		50	53.5	107	50	50.3	101	6	54-133/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36168-7MS	1X192799.D	1	12/06/21	BK	n/a	n/a	V1X8350
JD36168-7MSD	1X192800.D	1	12/06/21	BK	n/a	n/a	V1X8350
JD36168-7	1X192793.D	1	12/06/21	BK	n/a	n/a	V1X8350

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36168-1, JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11

CAS No.	Surrogate Recoveries	MS	MSD	JD36168-7	Limits
1868-53-7	Dibromofluoromethane	102%	100%	103%	85-118%
17060-07-0	1,2-Dichloroethane-D4	97%	96%	98%	80-121%
2037-26-5	Toluene-D8	99%	99%	99%	80-120%
460-00-4	4-Bromofluorobenzene	97%	98%	100%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-BFB
Lab File ID: 1X192528.D
Instrument ID: GCMS1X
Injection Date: 11/17/21
Injection Time: 19:07

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	20418	22.0		Pass
75	30.0 - 60.0% of mass 95	45120	48.7		Pass
95	Base peak, 100% relative abundance	92688	100.0		Pass
96	5.0 - 9.0% of mass 95	6083	6.56		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	86586	93.4		Pass
175	5.0 - 9.0% of mass 174	6662	7.19	(7.69) [a]	Pass
176	95.0 - 101.0% of mass 174	85501	92.2	(98.7) [a]	Pass
177	5.0 - 9.0% of mass 176	5877	6.34	(6.87) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1X8342-IC8342	1X192530.D	11/17/21	19:41	00:34	Initial cal 0.2
V1X8342-IC8342	1X192532.D	11/17/21	20:15	01:08	Initial cal 0.5
V1X8342-IC8342	1X192534.D	11/17/21	20:49	01:42	Initial cal 1
V1X8342-IC8342	1X192536.D	11/17/21	21:22	02:15	Initial cal 2
V1X8342-IC8342	1X192538.D	11/17/21	21:56	02:49	Initial cal 4
V1X8342-IC8342	1X192540.D	11/17/21	22:30	03:23	Initial cal 8
V1X8342-IC8342	1X192542.D	11/17/21	23:04	03:57	Initial cal 20
V1X8342-ICC8342	1X192544.D	11/17/21	23:38	04:31	Initial cal 50
V1X8342-IC8342	1X192546.D	11/18/21	00:12	05:05	Initial cal 100
V1X8342-IC8342	1X192548.D	11/18/21	00:45	05:38	Initial cal 200
V1X8342-ICV8342	1X192554.D	11/18/21	02:25	07:18	Initial cal verification 50
V1X8342-ICV8342	1X192556.D	11/18/21	02:59	07:52	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V1X8342-BFB2	**Injection Date:**	11/23/21
Lab File ID:	1X192566.D	**Injection Time:**	10:03
Instrument ID:	GCMS1X		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15983	22.4		Pass
75	30.0 - 60.0% of mass 95	35298	49.6		Pass
95	Base peak, 100% relative abundance	71226	100.0		Pass
96	5.0 - 9.0% of mass 95	4783	6.72		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	65664	92.2		Pass
175	5.0 - 9.0% of mass 174	4944	6.94	(7.53) [a]	Pass
176	95.0 - 101.0% of mass 174	64024	89.9	(97.5) [a]	Pass
177	5.0 - 9.0% of mass 176	4107	5.77	(6.41) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1X8342-ICV8342	1X192568.D	11/23/21	10:46	00:43	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8350-BFB
Lab File ID: 1X192786.D
Instrument ID: GCMS1X
Injection Date: 12/06/21
Injection Time: 11:13

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	13772	20.8		Pass
75	30.0 - 60.0% of mass 95	32704	49.4		Pass
95	Base peak, 100% relative abundance	66184	100.0		Pass
96	5.0 - 9.0% of mass 95	4221	6.38		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	67064	101.3		Pass
175	5.0 - 9.0% of mass 174	4994	7.55	(7.45) [a]	Pass
176	95.0 - 101.0% of mass 174	64904	98.1	(96.8) [a]	Pass
177	5.0 - 9.0% of mass 176	4355	6.58	(6.71) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1X8350-CC8342	1X192787.D	12/06/21	11:39	00:26	Continuing cal 20
V1X8350-BS	1X192789.D	12/06/21	12:39	01:26	Blank Spike
V1X8350-MB	1X192791.D	12/06/21	13:31	02:18	Method Blank
JD36168-7	1X192793.D	12/06/21	13:58	02:45	HOFF MW-6S
JD36168-8	1X192796.D	12/06/21	15:20	04:07	HOFF OW-6DU
JD36168-3	1X192797.D	12/06/21	15:47	04:34	HOFF OW-4DU
JD36168-9	1X192798.D	12/06/21	16:13	05:00	HOFF OW-6DL
JD36168-7MS	1X192799.D	12/06/21	16:39	05:26	Matrix Spike
JD36168-7MSD	1X192800.D	12/06/21	17:05	05:52	Matrix Spike Duplicate
JD36168-1	1X192802.D	12/06/21	17:57	06:44	TB-20211130
JD36168-4	1X192803.D	12/06/21	18:23	07:10	HOFF MW-5DL
JD36168-5	1X192804.D	12/06/21	18:49	07:36	HOFF MW-5DV
JD36168-6	1X192805.D	12/06/21	19:15	08:02	HOFF MW-5S
JD36168-10	1X192806.D	12/06/21	19:41	08:28	HOFF MW-7DU
JD36168-11	1X192807.D	12/06/21	20:07	08:54	HOFF MW-7S
JD36168-2	1X192808.D	12/06/21	20:33	09:20	HOFF OW-4DL
V1X8351-MB	1X192810.D	12/06/21	21:25	10:12	Method Blank
V1X8351-BS100	1X192811.D	12/06/21	21:51	10:38	Blank Spike
V1X8351-BS100	1X192812.D	12/06/21	22:17	11:04	Blank Spike
V1X8351-BS100	1X192813.D	12/06/21	22:43	11:30	Blank Spike
V1X8351-BS100	1X192814.D	12/06/21	23:09	11:56	Blank Spike

Instrument Performance Check (BFB)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V3A7257-BFB	**Injection Date:**	12/06/21
Lab File ID:	3A167227.D	**Injection Time:**	09:39
Instrument ID:	GCMS3A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	7175	21.9		Pass
75	30.0 - 60.0% of mass 95	17383	53.0		Pass
95	Base peak, 100% relative abundance	32826	100.0		Pass
96	5.0 - 9.0% of mass 95	1848	5.63		Pass
173	Less than 2.0% of mass 174	448	1.36	(1.39) [a]	Pass
174	50.0 - 120.0% of mass 95	32168	98.0		Pass
175	5.0 - 9.0% of mass 174	2750	8.38	(8.55) [a]	Pass
176	95.0 - 101.0% of mass 174	32485	99.0	(101.0) [a]	Pass
177	5.0 - 9.0% of mass 176	2405	7.33	(7.40) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7257-IC7257	3A167232.D	12/06/21	13:29	03:50	Initial cal 1
V3A7257-IC7257	3A167233.D	12/06/21	13:58	04:19	Initial cal 2
V3A7257-IC7257	3A167234.D	12/06/21	14:27	04:48	Initial cal 5
V3A7257-ICC7257	3A167235.D	12/06/21	14:56	05:17	Initial cal 20
V3A7257-IC7257	3A167236.D	12/06/21	15:25	05:46	Initial cal 50
V3A7257-IC7257	3A167237.D	12/06/21	15:54	06:15	Initial cal 100
V3A7257-IC7257	3A167242.D	12/06/21	18:20	08:41	Initial cal 0.25
V3A7257-IC7257	3A167243.D	12/06/21	18:49	09:10	Initial cal 0.40
V3A7257-IC7257	3A167245.D	12/06/21	19:47	10:08	Initial cal 200
V3A7257-ICV7257	3A167248.D	12/06/21	21:13	11:34	Initial cal verification 20

Instrument Performance Check (BFB)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7262-BFB
Lab File ID: 3A167327.D
Instrument ID: GCMS3A
Injection Date: 12/13/21
Injection Time: 09:05

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	40804	19.2		Pass
75	30.0 - 60.0% of mass 95	110802	52.1		Pass
95	Base peak, 100% relative abundance	212827	100.0		Pass
96	5.0 - 9.0% of mass 95	14186	6.67		Pass
173	Less than 2.0% of mass 174	2157	1.01	(1.10) [a]	Pass
174	50.0 - 120.0% of mass 95	196608	92.4		Pass
175	5.0 - 9.0% of mass 174	15121	7.10	(7.69) [a]	Pass
176	95.0 - 101.0% of mass 174	193834	91.1	(98.6) [a]	Pass
177	5.0 - 9.0% of mass 176	12803	6.02	(6.61) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7262-CC7257	3A167328.D	12/13/21	09:34	00:29	Continuing cal 20
V3A7262-BS	3A167329.D	12/13/21	10:16	01:11	Blank Spike
V3A7262-BSD	3A167330.D	12/13/21	10:45	01:40	Blank Spike Duplicate
V3A7262-MB	3A167332.D	12/13/21	11:44	02:39	Method Blank
ZZZZZZ	3A167334.D	12/13/21	12:56	03:51	(unrelated sample)
ZZZZZZ	3A167335.D	12/13/21	13:25	04:20	(unrelated sample)
ZZZZZZ	3A167336.D	12/13/21	13:54	04:49	(unrelated sample)
ZZZZZZ	3A167337.D	12/13/21	14:23	05:18	(unrelated sample)
ZZZZZZ	3A167338.D	12/13/21	14:52	05:47	(unrelated sample)
ZZZZZZ	3A167339.D	12/13/21	15:21	06:16	(unrelated sample)
JD36168-7	3A167340.D	12/13/21	15:50	06:45	HOFF MW-6S
JD36168-8	3A167341.D	12/13/21	16:19	07:14	HOFF OW-6DU
JD36168-6	3A167342.D	12/13/21	16:48	07:43	HOFF MW-5S
JD36168-7MS	3A167343.D	12/13/21	17:17	08:12	Matrix Spike
JD36168-7MSD	3A167344.D	12/13/21	17:45	08:40	Matrix Spike Duplicate
JD36168-1	3A167346.D	12/13/21	18:42	09:37	TB-20211130
JD36168-10	3A167347.D	12/13/21	19:11	10:06	HOFF MW-7DU
JD36168-11	3A167348.D	12/13/21	19:40	10:35	HOFF MW-7S
JD36168-2	3A167349.D	12/13/21	20:09	11:04	HOFF OW-4DL
JD36168-3	3A167350.D	12/13/21	20:37	11:32	HOFF OW-4DU

Instrument Performance Check (BFB)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7265-BFB
Lab File ID: 3A167389.D
Instrument ID: GCMS3A
Injection Date: 12/16/21
Injection Time: 09:52

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	29469	18.4		Pass
75	30.0 - 60.0% of mass 95	82552	51.6		Pass
95	Base peak, 100% relative abundance	159957	100.0		Pass
96	5.0 - 9.0% of mass 95	10136	6.34		Pass
173	Less than 2.0% of mass 174	2004	1.25	(1.28) [a]	Pass
174	50.0 - 120.0% of mass 95	156394	97.8		Pass
175	5.0 - 9.0% of mass 174	12010	7.51	(7.68) [a]	Pass
176	95.0 - 101.0% of mass 174	151850	94.9	(97.1) [a]	Pass
177	5.0 - 9.0% of mass 176	10012	6.26	(6.59) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7265-CC7257	3A167390.D	12/16/21	10:21	00:29	Continuing cal 20
V3A7265-BS	3A167391.D	12/16/21	11:00	01:08	Blank Spike
V3A7265-MB	3A167393.D	12/16/21	11:58	02:06	Method Blank
JD36168-9	3A167396.D	12/16/21	13:10	03:18	HOFF OW-6DL
JD36168-4	3A167397.D	12/16/21	13:39	03:47	HOFF MW-5DL
JD36168-5	3A167398.D	12/16/21	14:08	04:16	HOFF MW-5DV
ZZZZZZ	3A167399.D	12/16/21	14:37	04:45	(unrelated sample)
ZZZZZZ	3A167400.D	12/16/21	15:06	05:14	(unrelated sample)
ZZZZZZ	3A167401.D	12/16/21	15:35	05:43	(unrelated sample)
JD36294-5MS	3A167402.D	12/16/21	16:04	06:12	Matrix Spike
JD36294-5MSD	3A167403.D	12/16/21	16:33	06:41	Matrix Spike Duplicate
ZZZZZZ	3A167405.D	12/16/21	17:30	07:38	(unrelated sample)
JD36294-5	3A167406.D	12/16/21	17:59	08:07	(used for QC only; not part of job JD36168)
ZZZZZZ	3A167407.D	12/16/21	18:28	08:36	(unrelated sample)
ZZZZZZ	3A167408.D	12/16/21	18:56	09:04	(unrelated sample)
ZZZZZZ	3A167409.D	12/16/21	19:25	09:33	(unrelated sample)
ZZZZZZ	3A167411.D	12/16/21	20:23	10:31	(unrelated sample)
ZZZZZZ	3A167412.D	12/16/21	20:51	10:59	(unrelated sample)
ZZZZZZ	3A167413.D	12/16/21	21:20	11:28	(unrelated sample)

Internal Standard Area Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std: V1X8350-CC8342 **Injection Date:** 12/06/21
Lab File ID: 1X192787.D **Injection Time:** 11:39
Instrument ID: GCMS1X **Method:** SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	84671	2.54	165281	3.62	232500	4.13	219699	6.21	99471	8.00
Upper Limit [a]	169342	3.04	330562	4.12	465000	4.63	439398	6.71	198942	8.50
Lower Limit [b]	42336	2.04	82641	3.12	116250	3.63	109850	5.71	49736	7.50

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V1X8350-BS	88786	2.54	162959	3.62	230783	4.13	222019	6.21	100525	8.00
V1X8350-MB	81601	2.54	155720	3.63	226980	4.13	213826	6.21	95400	8.01
JD36168-7	78412	2.55	154105	3.63	223448	4.13	211055	6.21	93372	8.01
JD36168-8	80889	2.55	149254	3.63	218929	4.13	206848	6.21	91196	8.01
JD36168-3	73105	2.55	136168	3.63	202996	4.13	200507	6.22	87956	8.01
JD36168-9	81072	2.55	147190	3.63	213842	4.13	201191	6.21	89073	8.01
JD36168-7MS	88857	2.55	154999	3.63	223998	4.13	216309	6.22	98723	8.01
JD36168-7MSD	96275	2.55	164301	3.63	236130	4.13	227410	6.21	103357	8.01
JD36168-1	82112	2.55	153030	3.63	223024	4.13	210599	6.22	93475	8.01
JD36168-4	82954	2.55	151072	3.63	220169	4.13	206768	6.21	91261	8.01
JD36168-5	78419	2.55	148459	3.63	216076	4.13	203518	6.22	89096	8.01
JD36168-6	79739	2.55	148864	3.63	214407	4.13	201765	6.22	88588	8.01
JD36168-10	82078	2.55	155707	3.63	224215	4.13	210817	6.21	92617	8.01
JD36168-11	79256	2.55	150577	3.63	217358	4.13	204385	6.21	89202	8.01
JD36168-2	78428	2.55	154458	3.63	221589	4.13	206594	6.21	90617	8.01
V1X8351-MB	74385	2.55	150355	3.63	213934	4.13	199235	6.21	87132	8.00
V1X8351-BS100	83451	2.54	162853	3.62	225895	4.13	214399	6.21	97107	8.00
V1X8351-BS100	87396	2.55	169442	3.62	234567	4.13	222022	6.21	100484	8.00
V1X8351-BS100	87563	2.54	173546	3.62	239074	4.12	225442	6.21	103388	8.00
V1X8351-BS100	88263	2.54	176036	3.62	239771	4.12	225482	6.21	103145	8.00

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V3A7262-CC7257	**Injection Date:**	12/13/21
Lab File ID:	3A167328.D	**Injection Time:**	09:34
Instrument ID:	GCMS3A	**Method:**	SW846 8260D BY SIM

	IS 1 AREA	RT
Check Std	19747	15.60
Upper Limit [a]	39494	16.10
Lower Limit [b]	9874	15.10

Lab Sample ID	IS 1 AREA	RT
V3A7262-BS	19351	15.60
V3A7262-BSD	17944	15.60
V3A7262-MB	17256	15.60
ZZZZZZ	12656	15.60
ZZZZZZ	16579	15.60
ZZZZZZ	16403	15.60
ZZZZZZ	13356	15.60
ZZZZZZ	15653	15.60
ZZZZZZ	15950	15.60
JD36168-7	15465	15.60
JD36168-8	15349	15.60
JD36168-6	15481	15.60
JD36168-7MS	16400	15.60
JD36168-7MSD	16778	15.60
JD36168-1	15585	15.60
JD36168-10	14765	15.60
JD36168-11	15931	15.60
JD36168-2	13882	15.60
JD36168-3	15155	15.60

IS 1 = 4-Bromofluorobenzene

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V3A7265-CC7257	**Injection Date:**	12/16/21
Lab File ID:	3A167390.D	**Injection Time:**	10:21
Instrument ID:	GCMS3A	**Method:**	SW846 8260D BY SIM

	IS 1 AREA	RT
Check Std	17766	15.60
Upper Limit [a]	35532	16.10
Lower Limit [b]	8883	15.10

Lab Sample ID	IS 1 AREA	RT
V3A7265-BS	16818	15.60
V3A7265-MB	15950	15.60
JD36168-9	15069	15.60
JD36168-4	14114	15.60
JD36168-5	15403	15.60
ZZZZZZ	8870[c]	15.60
ZZZZZZ	6572[c]	15.60
ZZZZZZ	7438[c]	15.60
JD36294-5MS	14931	15.60
JD36294-5MSD	15210	15.60
ZZZZZZ	14114	15.60
JD36294-5	14504	15.60
ZZZZZZ	14422	15.60
ZZZZZZ	15079	15.60
ZZZZZZ	14855	15.60
ZZZZZZ	13222	15.60
ZZZZZZ	14353	15.60
ZZZZZZ	4959[c]	15.60

IS 1 = 4-Bromofluorobenzene

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to matrix interference.

Surrogate Recovery Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
JD36168-1	3A167346.D	160
JD36168-2	3A167349.D	173
JD36168-3	3A167350.D	156
JD36168-4	3A167397.D	172
JD36168-5	3A167398.D	170
JD36168-6	3A167342.D	124
JD36168-7	3A167340.D	109
JD36168-8	3A167341.D	161
JD36168-9	3A167396.D	151
JD36168-10	3A167347.D	129
JD36168-11	3A167348.D	136
JD36168-7MS	3A167343.D	95
JD36168-7MSD	3A167344.D	99
JD36294-5MS	3A167402.D	135
JD36294-5MSD	3A167403.D	170
V3A7262-BS	3A167329.D	104
V3A7262-BSD	3A167330.D	110
V3A7262-MB	3A167332.D	139
V3A7265-BS	3A167391.D	121
V3A7265-MB	3A167393.D	108

Surrogate Compounds	Recovery Limits
S1 = 1,4-Dioxane-D8	39-174%

Surrogate Recovery Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD36168-1	1X192802.D	103	98	99	99
JD36168-2	1X192808.D	101	98	99	99
JD36168-3	1X192797.D	108	99	96	101
JD36168-4	1X192803.D	103	98	99	100
JD36168-5	1X192804.D	104	98	99	100
JD36168-6	1X192805.D	102	99	99	100
JD36168-7	1X192793.D	103	98	99	100
JD36168-8	1X192796.D	104	99	99	99
JD36168-9	1X192798.D	104	99	99	100
JD36168-10	1X192806.D	101	98	99	100
JD36168-11	1X192807.D	102	98	99	100
JD36168-7MS	1X192799.D	102	97	99	97
JD36168-7MSD	1X192800.D	100	96	99	98
V1X8350-BS	1X192789.D	99	97	98	98
V1X8350-MB	1X192791.D	103	98	99	98

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	85-118%
S2 = 1,2-Dichloroethane-D4	80-121%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

Initial Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICC8342
Lab FileID: 1X192544.D

Response Factor Report ACC-VOA-M

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Calibration Files
1 =1X192534.D 2 =1X192536.D 100 =1X192546.D 50 =1X192544.D
20 =1X192542.D 200 =1X192548.D 4 =1X192538.D 8 =1X192540.D
0.5 =1X192532.D 0.2 =1X192530.D = =

Compound	1	2	100	50	20	200	4	8	0.5	0.2	Avg	%RSD
1) I tert butyl alcohol-d9	----------ISTD----------											
2) ethanol	0.065	0.068	0.051	0.054	0.054	0.045	0.060	0.060			0.057	13.30
3) tertiary butyl alcohol	0.679	0.790	0.723	0.704	0.722	0.704	0.701	0.711			0.717	4.54
4) 1,4-dioxane	0.046	0.063	0.063	0.062	0.064	0.057	0.064				0.060	10.87
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	0.359	0.438	0.395	0.396	0.390	0.389	0.377	0.419			0.395	6.18
7) dichlorodifluoromethane	0.338	0.416	0.362	0.375	0.373	0.407	0.320	0.372			0.370	8.60
8) chloromethane	0.470	0.482	0.388	0.409	0.424	0.419	0.412	0.432	0.424	0.398	0.426	6.97
9) vinyl chloride	0.363	0.422	0.355	0.370	0.372	0.384	0.363	0.396			0.378	5.82
10) bromomethane	0.211	0.233	0.149	0.171	0.192		0.212	0.213	0.173		0.194	14.34
11) chloroethane	0.173	0.203	0.157	0.173	0.182	0.137	0.176	0.189			0.174	11.39
12) trichlorofluoromethane	0.498	0.580	0.506	0.518	0.515	0.520	0.452	0.516			0.513	6.80
13) 1,3-butadiene	0.279	0.378	0.324	0.336	0.333	0.320	0.306	0.352			0.328	9.04
14) ethyl ether	0.106	0.131	0.139	0.135	0.135	0.138	0.124	0.136			0.131	8.54
15) acrolein	0.046	0.051	0.061	0.061	0.057	0.058	0.047	0.056			0.055	10.64
16) 1,1-dichloroethene	0.211	0.272	0.270	0.267	0.259	0.276	0.244	0.269			0.258	8.35
17) freon 113	0.321	0.319	0.311	0.298	0.319	0.269	0.309				0.307	5.95
18) acetone	0.029	0.035	0.031	0.031	0.035	0.039	0.033	0.035			0.034	9.46
19) acetonitrile	0.043	0.051	0.048	0.049	0.048	0.047	0.053	0.052	0.037		0.047	10.04
20) iodomethane	0.297	0.355	0.359	0.349	0.329	0.369	0.301	0.332	0.266		0.328	10.37
21) carbon disulfide	0.652	0.797	0.743	0.731	0.691	0.753	0.658	0.726			0.719	6.86
22) methylene chloride	0.266	0.273	0.256	0.252	0.251	0.255	0.241	0.258	0.231	0.284	0.257	5.92
23) methyl acetate												

```
      0.294 0.325 0.323 0.318 0.333 0.297 0.321 0.323 0.243        0.309    8.99
24)  methyl tert butyl ether
      0.732 0.824 0.789 0.754 0.775 0.779 0.724 0.767 0.615        0.751    7.89
25)  acrylonitrile
      0.121 0.142 0.143 0.143 0.144 0.142 0.129 0.139              0.138    6.06
26)  trans-1,2-dichloroethene
      0.223 0.298 0.284 0.280 0.275 0.290 0.259 0.282              0.274    8.59
27)  hexane
            0.558 0.615 0.588 0.553 0.617 0.472 0.562              0.566    8.68
28)  di-isopropyl ether
      0.901 0.998 1.025 0.980 0.980 1.018 0.952 0.976 0.708        0.949   10.26
29)  2-butanone
            0.037 0.037 0.036 0.036 0.037 0.034 0.036              0.036    3.22
30)  1,1-dichloroethane
      0.473 0.551 0.544 0.539 0.534 0.548 0.514 0.545              0.531    4.93
31)  chloroprene
            0.498 0.522 0.519 0.508 0.529 0.464 0.521              0.509    4.35
32)  vinyl acetate
                  0.064 0.061 0.057 0.056 0.043 0.054              0.056   12.97
33)  ethyl tert-butyl ether
      0.830 0.921 0.962 0.916 0.932 0.957 0.875 0.900 0.701        0.888    9.15
34)  ethyl acetate
            0.058 0.064 0.062 0.063 0.062 0.059 0.055              0.060    5.01
35)  2,2-dichloropropane
      0.392 0.443 0.458 0.450 0.436 0.463 0.411 0.456              0.439    5.70
36)  cis-1,2-dichloroethene
      0.288 0.304 0.302 0.293 0.295 0.306 0.269 0.297              0.294    4.09
37)  methyl acrylate
      0.357 0.396 0.416 0.412 0.404 0.409 0.388 0.403              0.398    4.76
38)  propionitrile
      0.054 0.058 0.056 0.056 0.056 0.054 0.055 0.056 0.041        0.054    9.37
39)  tert-butyl formate
            0.182 0.266 0.246 0.228 0.253 0.191 0.209              0.225   14.24
40)  bromochloromethane
      0.135 0.157 0.146 0.144 0.147 0.145 0.146 0.151              0.146    4.22
41)  tetrahydrofuran
      0.131 0.128 0.116 0.113 0.112 0.110 0.125 0.121 0.123 0.124  0.120    6.07
42)  chloroform
      0.485 0.562 0.506 0.497 0.504 0.509 0.490 0.506 0.463 0.604  0.513    7.96
43)  dibromofluoromethane (s)
      0.508 0.515 0.492 0.498 0.503 0.488 0.513 0.506 0.511 0.509  0.504    1.78
44)  methacrylonitrile
      0.094 0.119 0.133 0.128 0.129 0.133 0.113 0.129              0.122   10.95
45)  1,1,1-trichloroethane
      0.454 0.532 0.510 0.506 0.495 0.519 0.473 0.514 0.346        0.483   11.74
46)  cyclohexane
      0.349 0.398 0.389 0.388 0.378 0.438 0.335 0.373              0.381    8.22
47)  tert amyl alcohol
            0.011 0.013 0.012 0.013 0.012 0.013 0.012              0.012    5.82
48)  1,1-dichloropropene
      0.332 0.409 0.421 0.411 0.400 0.426 0.365 0.410              0.397    8.04
49)  isobutyl alcohol
            0.007 0.007 0.007 0.007 0.007 0.007 0.007              0.007    3.93
50)  carbon tetrachloride
      0.366 0.473 0.490 0.476 0.453 0.498 0.407 0.465              0.453    9.93
51)  isopropyl acetate
      0.056 0.054 0.069 0.065 0.066 0.070 0.061 0.065              0.063    8.91

52) I   1,4-difluorobenzene   ----------------ISTD---------------------
53)  1,2-dichloroethane-d4 (s)
```

```
      0.435 0.435 0.414 0.421 0.433 0.404 0.435 0.438 0.432 0.431  0.428    2.62
54)  iso-octane
            0.767 0.812 0.779 0.759 0.798 0.655 0.784              0.765    6.75
55)  epichlorohydrin
      0.024 0.026 0.029 0.028 0.028 0.028 0.026 0.027              0.027    5.77
56)  n-butyl alcohol
                  0.006 0.006 0.005 0.006 0.004 0.005              0.005   17.17
57)  benzene
      0.625 0.759 0.746 0.731 0.723 0.751 0.680 0.738 0.501        0.695   12.12
58)  tert-amyl methyl ether
      0.541 0.551 0.610 0.574 0.577 0.604 0.541 0.565 0.406        0.552   10.90
59)  heptane
            0.142 0.152 0.146 0.142 0.152 0.115 0.148              0.142    9.04
60)  1,2-dichloroethane
      0.333 0.348 0.311 0.303 0.315 0.300 0.306 0.315 0.330        0.318    4.94
61)  trichloroethene
      0.206 0.242 0.244 0.238 0.232 0.252 0.215 0.240              0.234    6.73
62)  ethyl acrylate
      0.264 0.297 0.315 0.301 0.306 0.314 0.280 0.306              0.298    5.94
63)  2-nitropropane
            0.079 0.086 0.085 0.084 0.079 0.080 0.078              0.082    4.28
64)  2-chloroethyl vinyl ether
      0.118 0.133 0.143 0.136 0.137 0.138 0.125 0.135              0.133    5.99
65)  methyl methacrylate
            0.056 0.060 0.056 0.057 0.061 0.050 0.052              0.056    7.00
66)  1,2-dichloropropane
      0.056 0.078 0.086 0.083 0.084 0.085 0.075 0.086              0.079   12.88
67)  dibromomethane
      0.130 0.138 0.134 0.127 0.129 0.130 0.126 0.129 0.095        0.127    9.75
68)  methylcyclohexane
            0.321 0.364 0.344 0.327 0.375 0.277 0.327              0.334    9.56
69)  bromodichloromethane
      0.234 0.259 0.269 0.258 0.262 0.269 0.247 0.254              0.256    4.60
70)  cis-1,3-dichloropropene
      0.248 0.276 0.318 0.302 0.302 0.319 0.269 0.291              0.291    8.56
71)  4-methyl-2-pentanone
      0.079 0.087 0.094 0.089 0.091 0.093 0.085 0.091 0.066        0.086   10.08
72)  3-methyl-1-butanol  *This compound fails Initial Calibration criteria*
                  0.005 0.004 0.003 0.005 0.001 0.002              0.003   39.62

73) I   chlorobenzene-d5      ----------------ISTD---------------------
74)  toluene-d8 (s)
      1.217 1.221 1.205 1.209 1.221 1.209 1.222 1.210 1.223 1.218  1.216    0.54
75)  toluene
      0.429 0.499 0.498 0.481 0.477 0.506 0.454 0.483 0.338 0.388  0.455   12.07
76)  trans-1,3-dichloropropene
      0.235 0.275 0.318 0.299 0.297 0.322 0.262 0.276              0.286   10.27
77)  ethyl methacrylate
      0.229 0.247 0.273 0.255 0.261 0.272 0.236 0.251 0.190        0.246   10.45
78)  1,1,2-trichloroethane
      0.140 0.139 0.158 0.150 0.152 0.157 0.151 0.150              0.150    4.53
79)  tetrachloroethene
      0.174 0.199 0.207 0.199 0.194 0.216 0.176 0.193              0.195    7.28
80)  1,3-dichloropropane
      0.254 0.301 0.305 0.290 0.291 0.302 0.279 0.283              0.288    5.74
81)  2-hexanone
      0.088 0.095 0.096 0.092 0.096 0.099 0.092 0.097 0.069        0.092    9.99
82)  butyl acetate
      0.137 0.154 0.168 0.160 0.160 0.172 0.152 0.159              0.158    6.70
83)  dibromochloromethane
```

```
      0.212 0.222 0.254 0.237 0.240 0.252 0.215 0.224 0.160        0.224   12.70
 84)  1,2-dibromoethane
      0.189 0.202 0.218 0.208 0.206 0.215 0.194 0.205              0.205    4.81
 85)  n-butyl ether
      0.745 0.852 0.927 0.899 0.877 0.923 0.790 0.862              0.859    7.43
 86)  chlorobenzene
      0.498 0.565 0.576 0.555 0.551 0.580 0.520 0.547 0.406        0.533   10.18
 87)  1,1,1,2-tetrachloroethane
      0.179 0.201 0.234 0.219 0.214 0.236 0.190 0.205              0.210    9.65
 88)  ethylbenzene
      0.840 0.940 0.972 0.948 0.926 0.970 0.852 0.924              0.921    5.44
 89)  m,p-xylene
      0.333 0.369 0.389 0.375 0.366 0.391 0.335 0.365 0.248        0.352   12.50
 90)  o-xylene
      0.628 0.707 0.767 0.743 0.719 0.771 0.670 0.716              0.715    6.77
 91)  styrene
      0.477 0.547 0.635 0.598 0.586 0.632 0.501 0.558              0.567   10.15
 92)  butyl acrylate
            0.393 0.490 0.458 0.454 0.489 0.387 0.424              0.442    9.49
 93)  n-amyl acetate
            0.133 0.165 0.152 0.153 0.167 0.136 0.145              0.150    8.82
 94)  bromoform
      0.143 0.153 0.189 0.175 0.168 0.189 0.141 0.154              0.164   11.67
 95)  isopropylbenzene
      0.767 0.925 0.984 0.950 0.919 0.986 0.827 0.918              0.910    8.38
 96)  cis-1,4-dichloro-2-butene
                  0.115 0.106 0.103 0.111 0.082 0.094              0.102   11.64

 97) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 98)  4-bromofluorobenzene (s)
      1.013 1.000 0.963 0.976 0.982 0.994 1.001 0.995 1.007 1.007  0.994    1.58
 99)  bromobenzene
      0.498 0.538 0.569 0.545 0.536 0.585 0.509 0.539 0.392        0.523   10.70
100)  1,1,2,2-tetrachloroethane
      0.503 0.558 0.549 0.536 0.538 0.539 0.530 0.538 0.407        0.522    8.74
101)  trans-1,4-dichloro-2-butene
      0.171 0.185 0.216 0.208 0.207 0.211 0.188 0.205              0.199    7.80
102)  1,2,3-trichloropropane
      0.141 0.171 0.168 0.165 0.164 0.170 0.163 0.174              0.165    6.16
103)  n-propylbenzene
      1.982 2.319 2.402 2.375 2.303 2.455 2.114 2.356              2.288    6.96
104)  2-chlorotoluene
      0.438 0.509 0.519 0.511 0.501 0.543 0.468 0.503              0.499    6.45
105)  4-chlorotoluene
      1.188 1.354 1.411 1.365 1.352 1.429 1.237 1.341              1.335    6.16
106)  1,3,5-trimethylbenzene
      1.345 1.569 1.653 1.601 1.564 1.687 1.422 1.581              1.553    7.38
107)  tert-butylbenzene
      1.280 1.504 1.545 1.501 1.447 1.597 1.330 1.504              1.463    7.34
108)  1,2,4-trimethylbenzene
      1.284 1.558 1.668 1.613 1.564 1.712 1.445 1.569              1.551    8.67
109)  sec-butylbenzene
      1.712 1.994 2.186 2.141 2.044 2.231 1.823 2.095              2.028    8.87
110)  1,3-dichlorobenzene
      0.847 0.986 1.036 0.996 0.976 1.059 0.923 0.967              0.974    6.79
111)  p-isopropyltoluene
      1.469 1.734 1.957 1.916 1.792 2.002 1.584 1.810              1.783   10.33
112)  1,4-dichlorobenzene
      0.968 1.027 1.051 1.018 1.003 1.070 0.924 0.999              1.007    4.58
113)  1,2-dichlorobenzene
```

Initial Calibration Summary

Job Number: JD36168 **Sample:** V1X8342-ICC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X192544.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
       0.856 0.922 0.987 0.944 0.933 1.000 0.853 0.911              0.926    5.77
114)  benzyl chloride
                  1.175 1.111 1.049 1.185 0.833 0.960              1.052   12.96
115)  n-butylbenzene
       0.647 0.769 0.875 0.852 0.814 0.904 0.708 0.815             0.798   10.84
116)  1,2-dibromo-3-chloropropane
             0.113 0.155 0.149 0.145 0.160 0.119 0.141             0.140   12.71
117)  1,3,5-trichlorobenzene
       0.502 0.617 0.688 0.661 0.630 0.745 0.581 0.621             0.630   11.45
118)  hexachlorobutadiene
             0.217 0.258 0.247 0.225 0.285 0.187 0.226             0.235   13.37
119)  naphthalene
       1.558 1.681 1.883 1.764 1.757 1.961 1.584 1.713             1.738    7.90
120)  1,2,4-trichlorobenzene
       0.474 0.518 0.631 0.582 0.548 0.677 0.485 0.525             0.555   12.74
121)  1,2,3-trichlorobenzene
       0.483 0.522 0.609 0.550 0.531 0.639 0.470 0.503             0.538   11.00
122)  hexachloroethane
             0.232 0.296 0.276 0.250 0.316 0.209 0.234             0.259   14.78
123)  2-methylnaphthalene
                  0.907 0.835 0.794 0.975 0.679 0.754             0.824   12.94
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M1X8342.M         Wed Dec 01 10:50:35 2021   GCMSX
```

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192554.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VX8342\1X192554.D Vial: 31
Acq On : 18 Nov 2021 2:25 am Operator: benk
Sample : icv8342-50 Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	97	0.00	2.55
2		ethanol	0.057	0.057	0.0	101	0.00	2.04
3		tertiary butyl alcohol	0.717	0.702	2.1	96	0.00	2.59
4		1,4-dioxane	0.060	0.066	-10.0	101	0.00	4.49
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	3.62
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane	0.370	0.319	13.8	89	0.00	1.32
8		chloromethane	0.426	0.385	9.6	98	0.00	1.45
9		vinyl chloride	0.378	0.352	6.9	99	0.00	1.52
10		bromomethane	0.194	0.182	6.2	111	0.00	1.74
11		chloroethane	0.174	0.162	6.9	98	0.00	1.80
12		trichlorofluoromethane	0.513	0.472	8.0	96	0.00	1.96
13		1,3-butadiene	0.328	0.308	6.1	96	0.00	1.55
14		ethyl ether	0.131	0.129	1.5	100	0.00	2.12
15		acrolein	0.055	0.055	0.0	95	0.00	2.21
16		1,1-dichloroethene	0.258	0.228	11.6	89	0.00	2.28
17		freon 113	0.307	0.268	12.7	90	0.00	2.27
18		acetone	0.034	0.037	-8.8	125	0.00	2.29
19		acetonitrile		----------NA----------				
20		iodomethane	0.328	0.338	-3.0	102	0.00	2.38
21		carbon disulfide	0.719	0.632	12.1	91	0.00	2.43
22		methylene chloride	0.257	0.237	7.8	98	0.00	2.57
23		methyl acetate	0.309	0.272	12.0	90	0.00	2.47
24		methyl tert butyl ether	0.751	0.720	4.1	100	0.00	2.72
25		acrylonitrile		----------NA----------				
26		trans-1,2-dichloroethene	0.274	0.255	6.9	95	0.00	2.73
27		hexane	0.566	0.446	21.2	80	0.00	2.89
28		di-isopropyl ether	0.949	0.870	8.3	93	0.00	2.98
29		2-butanone	0.036	0.037	-2.8	109	0.00	3.30
30		1,1-dichloroethane	0.531	0.496	6.6	96	0.00	2.99
31		chloroprene	0.509	0.492	3.3	99	0.00	3.04
32		vinyl acetate	0.056	0.047	16.1	80	0.00	2.97
33		ethyl tert-butyl ether	0.888	0.822	7.4	94	0.00	3.20
34		ethyl acetate	0.060	0.060	0.0	102	0.00	3.32
35		2,2-dichloropropane	0.439	0.406	7.5	95	0.00	3.34
36		cis-1,2-dichloroethene	0.294	0.279	5.1	100	0.00	3.33
37		methyl acrylate	0.398	0.378	5.0	96	0.00	3.35
38		propionitrile	0.054	0.047	13.0	89	0.00	3.35
39		tert-butyl formate	0.225	0.221	1.8	94	0.00	3.54
40		bromochloromethane	0.146	0.145	0.7	105	0.00	3.48
41		tetrahydrofuran	0.120	0.107	10.8	99	0.00	3.49

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192554.D

42		chloroform	0.513	0.474	7.6	100	0.00	3.53
43	S	dibromofluoromethane (s)	0.504	0.491	2.6	103	0.00	3.62
44		methacrylonitrile	0.122	0.127	-4.1	104	0.00	3.44
45		1,1,1-trichloroethane	0.483	0.467	3.3	97	0.00	3.65
46		cyclohexane	0.381	0.412	-8.1	111	0.00	3.70
47	m	tert amyl alcohol	0.012	0.012	0.0	99	0.00	3.83
48		1,1-dichloropropene	0.397	0.383	3.5	98	0.00	3.74
49		isobutyl alcohol	0.007	0.006	14.3	92	0.00	3.92
50		carbon tetrachloride	0.453	0.439	3.1	96	0.00	3.75
51		isopropyl acetate	0.063	0.060	4.8	96	0.00	3.85
52	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	4.12
53	S	1,2-dichloroethane-d4 (s)	0.428	0.422	1.4	103	0.00	3.84
54		iso-octane	0.765	0.651	14.9	86	0.00	3.93
55		epichlorohydrin	0.027	0.028	-3.7	102	0.00	4.84
56		n-butyl alcohol	0.005	0.006	-20.0	104	0.00	4.17
57		benzene	0.695	0.692	0.4	97	0.00	3.87
58		tert-amyl methyl ether	0.552	0.502	9.1	90	0.00	3.93
59		heptane	0.142	0.135	4.9	95	0.00	4.02
60		1,2-dichloroethane	0.318	0.295	7.2	100	0.00	3.90
61		trichloroethene	0.234	0.231	1.3	100	0.00	4.29
62	m	ethyl acrylate	0.298	0.224	24.8	77	0.00	4.30
63		2-nitropropane	0.082	0.083	-1.2	100	0.00	4.77
64		2-chloroethyl vinyl ether	0.133	0.148	-11.3	112	0.00	4.79
65		methyl methacrylate	0.056	0.056	0.0	104	0.00	4.46
66		1,2-dichloropropane	0.079	0.082	-3.8	101	0.00	4.46
67		dibromomethane	0.127	0.127	0.0	104	0.00	4.52
68		methylcyclohexane	0.334	0.335	-0.3	100	0.00	4.45
69		bromodichloromethane	0.256	0.257	-0.4	103	0.00	4.62
70		cis-1,3-dichloropropene	0.291	0.302	-3.8	103	0.00	4.92
71		4-methyl-2-pentanone	0.086	0.087	-1.2	100	0.00	5.01
72		3-methyl-1-butanol	0.003	0.004	-33.3#	111	0.00	5.03
73	I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	6.20
74	S	toluene-d8 (s)	1.216	1.200	1.3	103	0.00	5.11
75		toluene	0.455	0.457	-0.4	99	0.00	5.16
76		trans-1,3-dichloropropene	0.286	0.296	-3.5	103	0.00	5.31
77		ethyl methacrylate	0.246	0.247	-0.4	100	0.00	5.33
78		1,1,2-trichloroethane	0.150	0.149	0.7	103	0.00	5.46
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane	0.288	0.285	1.0	102	0.00	5.59
81		2-hexanone	0.092	0.093	-1.1	105	0.00	5.60
82		butyl acetate	0.158	0.151	4.4	98	0.00	5.68
83		dibromochloromethane	0.224	0.236	-5.4	104	0.00	5.75
84		1,2-dibromoethane	0.205	0.206	-0.5	103	0.00	5.85
85	m	n-butyl ether	0.859	0.672	21.8	78	0.00	6.26
86		chlorobenzene	0.533	0.538	-0.9	101	0.00	6.22
87		1,1,1,2-tetrachloroethane	0.210	0.216	-2.9	102	0.00	6.28
88		ethylbenzene	0.921	0.897	2.6	98	0.00	6.29
89		m,p-xylene	0.352	0.357	-1.4	99	0.00	6.38
90		o-xylene	0.715	0.693	3.1	97	0.00	6.69
91		styrene	0.567	0.584	-3.0	101	0.00	6.70
92		butyl acrylate	0.442	0.409	7.5	93	0.00	6.62
93		n-amyl acetate	0.150	0.139	7.3	95	0.00	6.80
94		bromoform	0.164	0.177	-7.9	105	0.00	6.86
95		isopropylbenzene	0.910	0.916	-0.7	100	0.00	6.98
96		cis-1,4-dichloro-2-butene	0.102	0.100	2.0	98	0.00	7.02
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	7.99
98	S	4-bromofluorobenzene (s)	0.994	0.973	2.1	105	0.00	7.12

Initial Calibration Verification

Job Number: JD36168 **Sample:** V1X8342-ICV8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X192554.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	bromobenzene	0.523	0.530	-1.3	103	0.00	7.24
100	1,1,2,2-tetrachloroethane	0.522	0.511	2.1	101	0.00	7.22
101	trans-1,4-dichloro-2-bute	0.199	0.200	-0.5	101	0.00	7.24
102	1,2,3-trichloropropane	0.165	0.162	1.8	103	0.00	7.26
103	n-propylbenzene	2.288	2.222	2.9	99	0.00	7.30
104	2-chlorotoluene	0.499	0.485	2.8	100	0.00	7.38
105	4-chlorotoluene	1.335	1.284	3.8	99	0.00	7.47
106	1,3,5-trimethylbenzene	1.553	1.524	1.9	100	0.00	7.44
107	tert-butylbenzene	1.463	1.739	-18.9	122	0.00	7.68
108	1,2,4-trimethylbenzene	1.551	1.540	0.7	101	0.00	7.72
109	sec-butylbenzene	2.028	2.000	1.4	99	0.00	7.84
110	1,3-dichlorobenzene	0.974	0.963	1.1	102	0.00	7.93
111	p-isopropyltoluene	1.783	1.788	-0.3	98	0.00	7.95
112	1,4-dichlorobenzene	1.007	0.978	2.9	101	0.00	8.01
113	1,2-dichlorobenzene	0.926	0.930	-0.4	104	0.00	8.26
114	benzyl chloride	1.052	0.950	9.7	90	0.00	8.08
115	n-butylbenzene	0.798	0.794	0.5	98	0.00	8.24
116	1,2-dibromo-3-chloropropa	0.140	0.148	-5.7	105	0.00	8.79
117	1,3,5-trichlorobenzene	0.630	0.656	-4.1	105	0.00	8.91
118	hexachlorobutadiene	0.235	0.242	-3.0	103	0.00	9.40
119	naphthalene	1.738	1.764	-1.5	105	0.00	9.48
120	1,2,4-trichlorobenzene	0.555	0.585	-5.4	106	0.00	9.31
121 m	1,2,3-trichlorobenzene	0.538	0.564	-4.8	108	0.00	9.62
122	hexachloroethane	0.259	0.274	-5.8	105	0.00	8.45
123	2-methylnaphthalene	0.824	0.817	0.8	103	0.00	10.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192544.D M1X8342.M Wed Dec 01 10:50:09 2021 GCMSX

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192556.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VX8342\1X192556.D Vial: 33
Acq On : 18 Nov 2021 2:59 am Operator: benk
Sample : icv8342-50 Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Tue Nov 23 09:12:27 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	90	0.00	2.54
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	3.62
6		chlorodifluoromethane	0.395	0.485	-22.8	129	0.00	1.33
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		1,1-dichloroethene		----------NA----------				
17		freon 113		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile	0.047	0.049	-4.3	107	0.00	2.46
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		acrylonitrile	0.138	0.163	-18.1	120	0.00	2.70
26		trans-1,2-dichloroethene		----------NA----------				
27		hexane		----------NA----------				
28		di-isopropyl ether		----------NA----------				
29		2-butanone		----------NA----------				
30		1,1-dichloroethane		----------NA----------				
31		chloroprene		----------NA----------				
32		vinyl acetate		----------NA----------				
33		ethyl tert-butyl ether		----------NA----------				
34		ethyl acetate		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		methyl acrylate		----------NA----------				
38		propionitrile		----------NA----------				
39		tert-butyl formate		----------NA----------				
40		bromochloromethate		----------NA----------				
41		tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192556.D

42		chloroform			----------NA----------				
43	S	dibromofluoromethane (s)	0.504	0.487	3.4	103	0.00		3.62
44		methacrylonitrile			----------NA----------				
45		1,1,1-trichloroethane			----------NA----------				
46		cyclohexane			----------NA----------				
47	m	tert amyl alcohol			----------NA----------				
48		1,1-dichloropropene			----------NA----------				
49		isobutyl alcohol			----------NA----------				
50		carbon tetrachloride			----------NA----------				
51		isopropyl acetate			----------NA----------				
52	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00		4.12
53	S	1,2-dichloroethane-d4 (s)	0.428	0.424	0.9	104	0.00		3.84
54		iso-octane			----------NA----------				
55		epichlorohydrin			----------NA----------				
56		n-butyl alcohol			----------NA----------				
57		benzene			----------NA----------				
58		tert-amyl methyl ether			----------NA----------				
59		heptane			----------NA----------				
60		1,2-dichloroethane			----------NA----------				
61		trichloroethene			----------NA----------				
62	m	ethyl acrylate			----------NA----------				
63		2-nitropropane			----------NA----------				
64		2-chloroethyl vinyl ether			----------NA----------				
65		methyl methacrylate			----------NA----------				
66		1,2-dichloropropane			----------NA----------				
67		dibromomethane			----------NA----------				
68		methylcyclohexane			----------NA----------				
69		bromodichloromethane			----------NA----------				
70		cis-1,3-dichloropropene			----------NA----------				
71		4-methyl-2-pentanone			----------NA----------				
72		3-methyl-1-butanol			----------NA----------				
73	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00		6.20
74	S	toluene-d8 (s)	1.216	1.211	0.4	104	0.00		5.11
75		toluene			----------NA----------				
76		trans-1,3-dichloropropene			----------NA----------				
77		ethyl methacrylate			----------NA----------				
78		1,1,2-trichloroethane			----------NA----------				
79		tetrachloroethene	0.195	0.292	-49.7#	152	0.00		5.54
80		1,3-dichloropropane			----------NA----------				
81		2-hexanone			----------NA----------				
82		butyl acetate			----------NA----------				
83		dibromochloromethane			----------NA----------				
84		1,2-dibromoethane			----------NA----------				
85	m	n-butyl ether			----------NA----------				
86		chlorobenzene			----------NA----------				
87		1,1,1,2-tetrachloroethane			----------NA----------				
88		ethylbenzene			----------NA----------				
89		m,p-xylene			----------NA----------				
90		o-xylene			----------NA----------				
91		styrene			----------NA----------				
92		butyl acrylate			----------NA----------				
93		n-amyl acetate			----------NA----------				
94		bromoform			----------NA----------				
95		isopropylbenzene			----------NA----------				
96		cis-1,4-dichloro-2-butene			----------NA----------				
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	0.00		7.99
98	S	4-bromofluorobenzene (s)	0.994	0.993	0.1	103	0.00		7.12

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192556.D

99		bromobenzene	----------NA----------
100		1,1,2,2-tetrachloroethane	----------NA----------
101		trans-1,4-dichloro-2-bute	----------NA----------
102		1,2,3-trichloropropane	----------NA----------
103		n-propylbenzene	----------NA----------
104		2-chlorotoluene	----------NA----------
105		4-chlorotoluene	----------NA----------
106		1,3,5-trimethylbenzene	----------NA----------
107		tert-butylbenzene	----------NA----------
108		1,2,4-trimethylbenzene	----------NA----------
109		sec-butylbenzene	----------NA----------
110		1,3-dichlorobenzene	----------NA----------
111		p-isopropyltoluene	----------NA----------
112		1,4-dichlorobenzene	----------NA----------
113		1,2-dichlorobenzene	----------NA----------
114		benzyl chloride	----------NA----------
115		n-butylbenzene	----------NA----------
116		1,2-dibromo-3-chloropropa	----------NA----------
117		1,3,5-trichlorobenzene	----------NA----------
118		hexachlorobutadiene	----------NA----------
119		naphthalene	----------NA----------
120		1,2,4-trichlorobenzene	----------NA----------
121	m	1,2,3-trichlorobenzene	----------NA----------
122		hexachloroethane	----------NA----------
123		2-methylnaphthalene	----------NA----------

(#) = Out of Range SPCC's out = 0 CCC's out = 0

1X192544.D M1X8342.M Sat Nov 27 09:41:15 2021 GCMSX

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192568.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VX8342\1X192568.D Vial: 45
Acq On : 23 Nov 2021 10:46 am Operator: benk
Sample : icv8342-50 Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Tue Nov 23 09:12:27 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	52	0.00	2.54
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	62	0.00	3.62
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		1,1-dichloroethene		----------NA----------				
17		freon 113		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile		----------NA----------				
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		acrylonitrile		----------NA----------				
26		trans-1,2-dichloroethene		----------NA----------				
27		hexane		----------NA----------				
28		di-isopropyl ether		----------NA----------				
29		2-butanone		----------NA----------				
30		1,1-dichloroethane		----------NA----------				
31		chloroprene		----------NA----------				
32		vinyl acetate		----------NA----------				
33		ethyl tert-butyl ether		----------NA----------				
34		ethyl acetate		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		methyl acrylate		----------NA----------				
38		propionitrile		----------NA----------				
39		tert-butyl formate		----------NA----------				
40		bromochloromethane		----------NA----------				
41		tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192568.D

42		chloroform		----------NA----------				
43	S	dibromofluoromethane (s)	0.504	0.538	-6.7	67	0.00	3.62
44		methacrylonitrile		----------NA----------				
45		1,1,1-trichloroethane		----------NA----------				
46		cyclohexane		----------NA----------				
47	m	tert amyl alcohol		----------NA----------				
48		1,1-dichloropropene		----------NA----------				
49		isobutyl alcohol		----------NA----------				
50		carbon tetrachloride		----------NA----------				
51		isopropyl acetate		----------NA----------				
52	I	1,4-difluorobenzene	1.000	1.000	0.0	67	0.00	4.12
53	S	1,2-dichloroethane-d4 (s)	0.428	0.423	1.2	67	0.00	3.85
54		iso-octane		----------NA----------				
55		epichlorohydrin		----------NA----------				
56		n-butyl alcohol		----------NA----------				
57		benzene		----------NA----------				
58		tert-amyl methyl ether		----------NA----------				
59		heptane		----------NA----------				
60		1,2-dichloroethane		----------NA----------				
61		trichloroethene		----------NA----------				
62	m	ethyl acrylate		----------NA----------				
63		2-nitropropane		----------NA----------				
64		2-chloroethyl vinyl ether		----------NA----------				
65		methyl methacrylate		----------NA----------				
66		1,2-dichloropropane		----------NA----------				
67		dibromomethane		----------NA----------				
68		methylcyclohexane		----------NA----------				
69		bromodichloromethane		----------NA----------				
70		cis-1,3-dichloropropene		----------NA----------				
71		4-methyl-2-pentanone		----------NA----------				
72		3-methyl-1-butanol		----------NA----------				
73	I	chlorobenzene-d5	1.000	1.000	0.0	64	0.00	6.20
74	S	toluene-d8 (s)	1.216	1.235	-1.6	65	0.00	5.12
75		toluene		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		ethyl methacrylate		----------NA----------				
78		1,1,2-trichloroethane		----------NA----------				
79		tetrachloroethene	0.195	0.187	4.1	60	0.00	5.55
80		1,3-dichloropropane		----------NA----------				
81		2-hexanone		----------NA----------				
82		butyl acetate		----------NA----------				
83		dibromochloromethane		----------NA----------				
84		1,2-dibromoethane		----------NA----------				
85	m	n-butyl ether		----------NA----------				
86		chlorobenzene		----------NA----------				
87		1,1,1,2-tetrachloroethane		----------NA----------				
88		ethylbenzene		----------NA----------				
89		m,p-xylene		----------NA----------				
90		o-xylene		----------NA----------				
91		styrene		----------NA----------				
92		butyl acrylate		----------NA----------				
93		n-amyl acetate		----------NA----------				
94		bromoform		----------NA----------				
95		isopropylbenzene		----------NA----------				
96		cis-1,4-dichloro-2-butene		----------NA----------				
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	62	0.00	7.99
98	S	4-bromofluorobenzene (s)	0.994	0.989	0.5	63	0.00	7.13

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192568.D

99		bromobenzene	----------NA----------
100		1,1,2,2-tetrachloroethane	----------NA----------
101		trans-1,4-dichloro-2-bute	----------NA----------
102		1,2,3-trichloropropane	----------NA----------
103		n-propylbenzene	----------NA----------
104		2-chlorotoluene	----------NA----------
105		4-chlorotoluene	----------NA----------
106		1,3,5-trimethylbenzene	----------NA----------
107		tert-butylbenzene	----------NA----------
108		1,2,4-trimethylbenzene	----------NA----------
109		sec-butylbenzene	----------NA----------
110		1,3-dichlorobenzene	----------NA----------
111		p-isopropyltoluene	----------NA----------
112		1,4-dichlorobenzene	----------NA----------
113		1,2-dichlorobenzene	----------NA----------
114		benzyl chloride	----------NA----------
115		n-butylbenzene	----------NA----------
116		1,2-dibromo-3-chloropropa	----------NA----------
117		1,3,5-trichlorobenzene	----------NA----------
118		hexachlorobutadiene	----------NA----------
119		naphthalene	----------NA----------
120		1,2,4-trichlorobenzene	----------NA----------
121	m	1,2,3-trichlorobenzene	----------NA----------
122		hexachloroethane	----------NA----------
123		2-methylnaphthalene	----------NA----------

(#) = Out of Range SPCC's out = 0 CCC's out = 0

1X192544.D M1X8342.M Sat Nov 27 09:41:16 2021 GCMSX

Continuing Calibration Summary

Job Number: JD36168 **Sample:** V1X8350-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X192787.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\da...50-partial\1x192787.d Vial: 5
Acq On : 6 Dec 2021 11:39 am Operator: brittank
Sample : cc8342-20 Inst : ACC-VOA-MSX
Misc : MS55346,V1X8350,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	63	0.00	2.54
2		ethanol	0.057	0.061	-7.0	70	0.00	2.03
3		tertiary butyl alcohol	0.717	0.726	-1.3	63	0.00	2.59
4		1,4-dioxane	0.060	0.066	-10.0	67	0.01	4.50
5	I	pentafluorobenzene	1.000	1.000	0.0	70	0.00	3.62
6		chlorodifluoromethane	0.395	0.237	40.0#	42#	0.00	1.32
7		dichlorodifluoromethane	0.370	0.456	-23.2#	85	-0.01	1.31
8		chloromethane	0.426	0.403	5.4	66	0.00	1.44
9		vinyl chloride	0.378	0.346	8.5	65	0.00	1.52
10		bromomethane	0.194	0.201	-3.6	73	0.00	1.73
11		chloroethane	0.174	0.174	0.0	66	0.00	1.80
12		trichlorofluoromethane	0.513	0.553	-7.8	75	0.00	1.96
13		1,3-butadiene	0.328	0.206	37.2#	43#	0.00	1.54
14		ethyl ether	0.131	0.117	10.7	60	0.00	2.12
15		acrolein	0.055	0.061	-10.9	76	0.00	2.20
16		1,1-dichloroethene	0.258	0.235	8.9	63	0.00	2.27
17		freon 113	0.307	0.304	1.0	71	0.00	2.27
18		acetone	0.034	0.025	26.5#	50#	0.00	2.28
19		acetonitrile	0.047	0.039	17.0	56	0.00	2.46
20		iodomethane	0.328	0.274	16.5	58	0.00	2.38
21		carbon disulfide	0.719	0.566	21.3#	57	0.00	2.43
22		methylene chloride	0.257	0.234	8.9	65	0.00	2.57
23		methyl acetate	0.309	0.256	17.2	53	0.00	2.47
24		methyl tert butyl ether	0.751	0.707	5.9	64	0.00	2.72
25		acrylonitrile	0.138	0.128	7.2	62	0.00	2.70
26		trans-1,2-dichloroethene	0.274	0.254	7.3	64	0.00	2.73
27		hexane	0.566	0.545	3.7	69	0.00	2.89
28		di-isopropyl ether	0.949	0.867	8.6	62	0.00	2.99
29		2-butanone	0.036	0.032	11.1	61	0.00	3.31
30		1,1-dichloroethane	0.531	0.487	8.3	64	0.01	2.99
31		chloroprene	0.509	0.459	9.8	63	0.00	3.04
32		vinyl acetate	0.056	0.055	1.8	67	0.00	2.97
33		ethyl tert-butyl ether	0.888	0.855	3.7	64	0.00	3.21
34		ethyl acetate	0.060	0.052	13.3	58	0.00	3.32
35		2,2-dichloropropane	0.439	0.448	-2.1	72	0.00	3.34
36		cis-1,2-dichloroethene	0.294	0.276	6.1	65	0.01	3.34
37		methyl acrylate	0.398	0.361	9.3	62	0.00	3.36
38		propionitrile	0.054	0.049	9.3	61	0.00	3.35
39		tert-butyl formate	0.225	0.197	12.4	60	0.00	3.54
40		bromochloromethane	0.146	0.150	-2.7	71	0.00	3.48
41		tetrahydrofuran	0.120	0.102	15.0	63	0.01	3.49

Continuing Calibration Summary

Job Number: JD36168 **Sample:** V1X8350-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X192787.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42		chloroform	0.513	0.522	-1.8	72	0.01	3.53
43	S	dibromofluoromethane (s)	0.504	0.495	1.8	69	0.00	3.63
44		methacrylonitrile	0.122	0.122	0.0	66	0.00	3.45
45		1,1,1-trichloroethane	0.483	0.485	-0.4	68	0.00	3.65
46		cyclohexane	0.381	0.417	-9.4	77	0.01	3.70
47	m	tert amyl alcohol	0.012	0.011	8.3	60	0.00	3.83
48		1,1-dichloropropene	0.397	0.382	3.8	66	0.01	3.75
49		isobutyl alcohol	0.007	0.006	14.3	60	0.00	3.93
50		carbon tetrachloride	0.453	0.459	-1.3	71	0.01	3.75
51		isopropyl acetate	0.063	0.064	-1.6	68	0.01	3.86
52	I	1,4-difluorobenzene	1.000	1.000	0.0	69	0.01	4.13
53	S	1,2-dichloroethane-d4 (s)	0.428	0.424	0.9	67	0.01	3.85
54		iso-octane	0.765	0.730	4.6	66	0.01	3.93
55		epichlorohydrin	0.027	0.026	3.7	64	0.01	4.85
56		n-butyl alcohol	0.005	0.006	-20.0	72	0.00	4.17
57		benzene	0.695	0.685	1.4	65	0.00	3.88
58		tert-amyl methyl ether	0.552	0.560	-1.4	67	0.01	3.93
59		heptane	0.142	0.137	3.5	67	0.01	4.04
60		1,2-dichloroethane	0.318	0.306	3.8	67	0.01	3.90
61		trichloroethene	0.234	0.231	1.3	68	0.01	4.29
62	m	ethyl acrylate	0.298	0.279	6.4	63	0.01	4.31
63		2-nitropropane	0.082	0.076	7.3	62	0.01	4.77
64		2-chloroethyl vinyl ether	0.133	0.130	2.3	65	0.01	4.80
65		methyl methacrylate	0.056	0.053	5.4	64	0.01	4.47
66		1,2-dichloropropane	0.079	0.085	-7.6	69	0.01	4.47
67		dibromomethane	0.127	0.129	-1.6	68	0.01	4.53
68		methylcyclohexane	0.334	0.331	0.9	70	0.01	4.46
69		bromodichloromethane	0.256	0.255	0.4	67	0.02	4.63
70		cis-1,3-dichloropropene	0.291	0.300	-3.1	68	0.01	4.93
71		4-methyl-2-pentanone	0.086	0.081	5.8	61	0.02	5.02
72		3-methyl-1-butanol	0.003	0.005	-66.7#	91	0.00	5.03
73	I	chlorobenzene-d5	1.000	1.000	0.0	68	0.01	6.21
74	S	toluene-d8 (s)	1.216	1.199	1.4	66	0.01	5.12
75		toluene	0.455	0.464	-2.0	66	0.01	5.17
76		trans-1,3-dichloropropene	0.286	0.305	-6.6	69	0.01	5.32
77		ethyl methacrylate	0.246	0.246	0.0	64	0.02	5.34
78		1,1,2-trichloroethane	0.150	0.156	-4.0	69	0.01	5.47
79		tetrachloroethene	0.195	0.203	-4.1	71	0.01	5.55
80		1,3-dichloropropane	0.288	0.292	-1.4	68	0.02	5.60
81		2-hexanone	0.092	0.083	9.8	58	0.02	5.61
82		butyl acetate	0.158	0.143	9.5	60	0.02	5.69
83		dibromochloromethane	0.224	0.241	-7.6	68	0.02	5.76
84		1,2-dibromoethane	0.205	0.213	-3.9	70	0.01	5.86
85	m	n-butyl ether	0.859	0.782	9.0	60	0.01	6.27
86		chlorobenzene	0.533	0.549	-3.0	68	0.02	6.23
87		1,1,1,2-tetrachloroethane	0.210	0.219	-4.3	69	0.02	6.29
88		ethylbenzene	0.921	0.897	2.6	66	0.02	6.30
89		m,p-xylene	0.352	0.354	-0.6	66	0.02	6.40
90		o-xylene	0.715	0.698	2.4	66	0.02	6.70
91		styrene	0.567	0.559	1.4	64	0.02	6.72
92		butyl acrylate	0.442	0.399	9.7	60	0.01	6.63
93		n-amyl acetate	0.150	0.139	7.3	61	0.01	6.81
94		bromoform	0.164	0.173	-5.5	70	0.02	6.87
95		isopropylbenzene	0.910	0.881	3.2	65	0.02	6.99
96		cis-1,4-dichloro-2-butene	0.102	0.102	0.0	67	0.02	7.03
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	66	0.02	8.00
98	S	4-bromofluorobenzene (s)	0.994	0.978	1.6	66	0.02	7.14

Continuing Calibration Summary

Job Number: JD36168 **Sample:** V1X8350-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X192787.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	bromobenzene	0.523	0.549	-5.0	68	0.02	7.25
100	1,1,2,2-tetrachloroethane	0.522	0.531	-1.7	65	0.02	7.23
101	trans-1,4-dichloro-2-bute	0.199	0.206	-3.5	66	0.02	7.26
102	1,2,3-trichloropropane	0.165	0.168	-1.8	68	0.02	7.28
103	n-propylbenzene	2.288	2.238	2.2	64	0.02	7.32
104	2-chlorotoluene	0.499	0.483	3.2	64	0.02	7.39
105	4-chlorotoluene	1.335	1.295	3.0	63	0.02	7.48
106	1,3,5-trimethylbenzene	1.553	1.516	2.4	64	0.02	7.45
107	tert-butylbenzene	1.463	1.418	3.1	65	0.02	7.69
108	1,2,4-trimethylbenzene	1.551	1.527	1.5	65	0.02	7.73
109	sec-butylbenzene	2.028	1.955	3.6	63	0.02	7.85
110	1,3-dichlorobenzene	0.974	0.957	1.7	65	0.02	7.95
111	p-isopropyltoluene	1.783	1.741	2.4	64	0.01	7.96
112	1,4-dichlorobenzene	1.007	0.996	1.1	66	0.01	8.02
113	1,2-dichlorobenzene	0.926	0.926	0.0	66	0.02	8.27
114	benzyl chloride	1.052	1.080	-2.7	68	0.02	8.10
115	n-butylbenzene	0.798	0.766	4.0	62	0.01	8.25
116	1,2-dibromo-3-chloropropa	0.140	0.138	1.4	63	0.02	8.80
117	1,3,5-trichlorobenzene	0.630	0.627	0.5	66	0.02	8.92
118	hexachlorobutadiene	0.235	0.231	1.7	68	0.01	9.41
119	naphthalene	1.738	1.663	4.3	63	0.01	9.49
120	1,2,4-trichlorobenzene	0.555	0.554	0.2	67	0.02	9.33
121 m	1,2,3-trichlorobenzene	0.538	0.529	1.7	66	0.02	9.63
122	hexachloroethane	0.259	0.245	5.4	65	0.02	8.46
123	2-methylnaphthalene	0.824	0.752	8.7	63	0.02	10.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192542.D M1X8342.M Tue Dec 07 05:43:53 2021

Continuing Calibration Summary

Job Number: JD36168 **Sample:** V1X8352-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X192816.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ke...021\vx8352\1x192816.d Vial: 2
Acq On : 7 Dec 2021 10:11 am Operator: brittank
Sample : cc8342-20 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8352,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	56	-0.02	2.52
2		ethanol	0.057	0.067	-17.5	70	-0.02	2.02
3		tertiary butyl alcohol	0.717	0.788	-9.9	61	-0.02	2.58
4		1,4-dioxane	0.060	0.070	-16.7	64	-0.01	4.48
5	I	pentafluorobenzene	1.000	1.000	0.0	73	-0.01	3.61
6		chlorodifluoromethane	0.395	0.359	9.1	67	-0.02	1.31
7		dichlorodifluoromethane	0.370	0.526	-42.2#	103	-0.02	1.30
8		chloromethane	0.426	0.449	-5.4	77	-0.02	1.43
9		vinyl chloride	0.378	0.379	-0.3	74	-0.02	1.50
10		bromomethane	0.194	0.235	-21.1#	89	-0.02	1.72
11		chloroethane	0.174	0.193	-10.9	77	-0.02	1.78
12		trichlorofluoromethane	0.513	0.613	-19.5	87	-0.02	1.94
13		1,3-butadiene	0.328	0.324	1.2	71	-0.02	1.53
14		ethyl ether	0.131	0.133	-1.5	72	-0.02	2.10
15		acrolein	0.055	0.065	-18.2	83	-0.02	2.19
16		1,1-dichloroethene	0.258	0.265	-2.7	75	-0.02	2.26
17		freon 113	0.307	0.336	-9.4	82	-0.01	2.26
18		acetone	0.034	0.031	8.8	65	-0.02	2.27
19		acetonitrile	0.047	0.039	17.0	59	-0.02	2.44
20		iodomethane	0.328	0.297	9.5	66	-0.02	2.36
21		carbon disulfide	0.719	0.718	0.1	76	-0.01	2.41
22		methylene chloride	0.257	0.246	4.3	72	-0.01	2.55
23		methyl acetate	0.309	0.263	14.9	57	-0.02	2.45
24		methyl tert butyl ether	0.751	0.753	-0.3	71	-0.01	2.70
25		acrylonitrile	0.138	0.127	8.0	64	-0.02	2.68
26		trans-1,2-dichloroethene	0.274	0.278	-1.5	74	-0.02	2.71
27		hexane	0.566	0.597	-5.5	79	-0.01	2.87
28		di-isopropyl ether	0.949	0.910	4.1	68	-0.01	2.97
29		2-butanone	0.036	0.033	8.3	67	-0.01	3.29
30		1,1-dichloroethane	0.531	0.521	1.9	71	-0.01	2.97
31		chloroprene	0.509	0.502	1.4	72	-0.01	3.02
32		vinyl acetate	0.056	0.057	-1.8	73	-0.02	2.95
33		ethyl tert-butyl ether	0.888	0.886	0.2	69	-0.01	3.19
34		ethyl acetate	0.060	0.049	18.3	57	-0.01	3.30
35		2,2-dichloropropane	0.439	0.477	-8.7	80	-0.01	3.33
36		cis-1,2-dichloroethene	0.294	0.291	1.0	72	-0.01	3.31
37		methyl acrylate	0.398	0.353	11.3	64	-0.01	3.34
38		propionitrile	0.054	0.047	13.0	61	-0.01	3.34
39		tert-butyl formate	0.225	0.195	13.3	62	0.00	3.53
40		bromochloromethane	0.146	0.158	-8.2	78	-0.01	3.46
41		tetrahydrofuran	0.120	0.095	20.8#	61	-0.01	3.47

Continuing Calibration Summary

Job Number: JD36168 **Sample:** V1X8352-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X192816.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42		chloroform	0.513	0.531	-3.5	77	-0.01	3.51
43	S	dibromofluoromethane (s)	0.504	0.481	4.6	70	-0.01	3.61
44		methacrylonitrile	0.122	0.117	4.1	67	-0.01	3.43
45		1,1,1-trichloroethane	0.483	0.523	-8.3	77	-0.01	3.63
46		cyclohexane	0.381	0.453	-18.9	87	0.00	3.69
47	m	tert amyl alcohol	0.012	0.011	8.3	61	-0.01	3.82
48		1,1-dichloropropene	0.397	0.411	-3.5	75	0.00	3.73
49		isobutyl alcohol	0.007	0.007	0.0	69	0.00	3.92
50		carbon tetrachloride	0.453	0.493	-8.8	79	0.00	3.74
51		isopropyl acetate	0.063	0.060	4.8	67	0.00	3.84
52	I	1,4-difluorobenzene	1.000	1.000	0.0	70	0.00	4.11
53	S	1,2-dichloroethane-d4 (s)	0.428	0.416	2.8	67	-0.01	3.83
54		iso-octane	0.765	0.812	-6.1	75	0.00	3.92
55		epichlorohydrin	0.027	0.025	7.4	61	0.00	4.83
56		n-butyl alcohol	0.005	0.005	0.0	66	-0.01	4.16
57		benzene	0.695	0.742	-6.8	72	-0.01	3.86
58		tert-amyl methyl ether	0.552	0.597	-8.2	72	0.00	3.92
59		heptane	0.142	0.154	-8.5	76	-0.01	4.01
60		1,2-dichloroethane	0.318	0.328	-3.1	73	0.00	3.89
61		trichloroethene	0.234	0.256	-9.4	77	0.00	4.28
62	m	ethyl acrylate	0.298	0.278	6.7	63	0.00	4.30
63		2-nitropropane	0.082	0.075	8.5	62	0.00	4.76
64		2-chloroethyl vinyl ether	0.133	0.132	0.8	67	0.00	4.79
65		methyl methacrylate	0.056	0.054	3.6	66	0.00	4.45
66		1,2-dichloropropane	0.079	0.087	-10.1	72	-0.01	4.45
67		dibromomethane	0.127	0.138	-8.7	75	0.00	4.51
68		methylcyclohexane	0.334	0.370	-10.8	79	0.00	4.44
69		bromodichloromethane	0.256	0.277	-8.2	74	0.00	4.62
70		cis-1,3-dichloropropene	0.291	0.322	-10.7	74	0.00	4.91
71		4-methyl-2-pentanone	0.086	0.081	5.8	63	0.00	5.00
72		3-methyl-1-butanol	0.003	0.004	-33.3#	78	-0.01	5.02
73	I	chlorobenzene-d5	1.000	1.000	0.0	68	0.00	6.19
74	S	toluene-d8 (s)	1.216	1.206	0.8	67	0.00	5.11
75		toluene	0.455	0.505	-11.0	72	0.00	5.16
76		trans-1,3-dichloropropene	0.286	0.323	-12.9	74	0.00	5.31
77		ethyl methacrylate	0.246	0.251	-2.0	65	0.00	5.33
78		1,1,2-trichloroethane	0.150	0.163	-8.7	72	0.00	5.45
79		tetrachloroethene	0.195	0.224	-14.9	78	0.00	5.53
80		1,3-dichloropropane	0.288	0.308	-6.9	72	0.00	5.58
81		2-hexanone	0.092	0.094	-2.2	66	0.00	5.60
82		butyl acetate	0.158	0.147	7.0	62	0.00	5.67
83		dibromochloromethane	0.224	0.266	-18.8	75	0.00	5.75
84		1,2-dibromoethane	0.205	0.224	-9.3	74	0.00	5.84
85	m	n-butyl ether	0.859	0.850	1.0	66	0.00	6.26
86		chlorobenzene	0.533	0.593	-11.3	73	0.00	6.22
87		1,1,1,2-tetrachloroethane	0.210	0.239	-13.8	76	0.00	6.28
88		ethylbenzene	0.921	0.972	-5.5	71	0.00	6.28
89		m,p-xylene	0.352	0.385	-9.4	71	0.00	6.38
90		o-xylene	0.715	0.756	-5.7	71	0.00	6.69
91		styrene	0.567	0.609	-7.4	70	0.00	6.70
92		butyl acrylate	0.442	0.422	4.5	63	0.00	6.62
93		n-amyl acetate	0.150	0.147	2.0	65	0.00	6.79
94		bromoform	0.164	0.188	-14.6	76	0.00	6.86
95		isopropylbenzene	0.910	0.970	-6.6	71	0.00	6.98
96		cis-1,4-dichloro-2-butene	0.102	0.105	-2.9	69	0.00	7.02
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	68	0.00	7.98
98	S	4-bromofluorobenzene (s)	0.994	0.968	2.6	67	0.00	7.12

Continuing Calibration Summary

Job Number: JD36168 **Sample:** V1X8352-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X192816.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	bromobenzene	0.523	0.589	-12.6	74	0.00	7.24
100	1,1,2,2-tetrachloroethane	0.522	0.544	-4.2	68	0.00	7.21
101	trans-1,4-dichloro-2-bute	0.199	0.198	0.5	65	0.00	7.24
102	1,2,3-trichloropropane	0.165	0.172	-4.2	71	0.00	7.26
103	n-propylbenzene	2.288	2.417	-5.6	71	0.00	7.30
104	2-chlorotoluene	0.499	0.537	-7.6	72	0.00	7.38
105	4-chlorotoluene	1.335	1.413	-5.8	71	0.00	7.47
106	1,3,5-trimethylbenzene	1.553	1.632	-5.1	71	0.00	7.43
107	tert-butylbenzene	1.463	1.537	-5.1	72	0.00	7.68
108	1,2,4-trimethylbenzene	1.551	1.641	-5.8	71	0.00	7.72
109	sec-butylbenzene	2.028	2.162	-6.6	72	0.00	7.84
110	1,3-dichlorobenzene	0.974	1.050	-7.8	73	0.00	7.93
111	p-isopropyltoluene	1.783	1.910	-7.1	72	0.00	7.95
112	1,4-dichlorobenzene	1.007	1.074	-6.7	72	0.00	8.01
113	1,2-dichlorobenzene	0.926	1.006	-8.6	73	0.00	8.26
114	benzyl chloride	1.052	1.116	-6.1	72	0.00	8.08
115	n-butylbenzene	0.798	0.841	-5.4	70	0.00	8.24
116	1,2-dibromo-3-chloropropa	0.140	0.142	-1.4	66	0.00	8.79
117	1,3,5-trichlorobenzene	0.630	0.694	-10.2	75	0.00	8.91
118	hexachlorobutadiene	0.235	0.270	-14.9	81	0.00	9.40
119	naphthalene	1.738	1.717	1.2	66	0.00	9.48
120	1,2,4-trichlorobenzene	0.555	0.603	-8.6	74	0.00	9.31
121 m	1,2,3-trichlorobenzene	0.538	0.580	-7.8	74	0.00	9.62
122	hexachloroethane	0.259	0.271	-4.6	73	0.00	8.45
123	2-methylnaphthalene	0.824	0.766	7.0	65	0.00	10.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192542.D M1X8342.M Wed Dec 08 06:29:22 2021

Initial Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7257-ICC7257
Lab FileID: 3A167235.D

Response Factor Report MS3A

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

Calibration Files
0.4 =3A167243.D 1 =3A167232.D 2 =3A167233.D 5 =3A167234.D
0.25=3A167242.D 20 =3A167235.D 50 =3A167236.D 200 =3A167245.D
100 =3A167237.D = = =

Compound	0.4	1	2	5	0.25	20	50	200	100	Avg	%RSD
1) I 4-bromofluorobenzene	----------ISTD----------										
2) 1,4-dioxane-d8	0.034	0.030	0.028	0.029	0.023	0.025	0.034	0.021	0.026	0.028	16.15
3) 1,4-dioxane	0.038	0.037	0.034	0.030	0.038	0.025	0.032	0.020	0.026	0.031	19.97

(#) = Out of Range ### Number of calibration levels exceeded format ###

M3A7257.M Tue Dec 07 12:07:20 2021 ACCUNJ

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7257-ICV7257
Lab FileID: 3A167248.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7257\3A167248.D Vial: 24
Acq On : 6 Dec 2021 9:13 pm Operator: BridgetK
Sample : icv7257-20 Inst : MS3A
Misc : MS32930,V3A7257,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	116	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.024	14.3	116	0.00	11.85
3 M	1,4-dioxane	0.031	0.025	19.4	114	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167235.D M3A7257.M Tue Dec 07 12:07:06 2021 ACCUNJ

Continuing Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7262-CC7257
Lab FileID: 3A167328.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7262\3A167328.D Vial: 3
Acq On : 13 Dec 2021 9:34 am Operator: BridgetK
Sample : cc7257-20 Inst : MS3A
Misc : MS55395,V3A7262,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	4-bromofluorobenzene	1.000	1.000	0.0	173	0.00	15.60
2	S	1,4-dioxane-d8	0.028	0.024	14.3	171	0.00	11.85
3	M	1,4-dioxane	0.031	0.026	16.1	177	-0.01	11.90

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167235.D M3A7257.M Mon Dec 13 13:10:11 2021 ACCUNJ

Continuing Calibration Summary

Job Number: JD36168 **Sample:** V3A7265-CC7257
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3A167390.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7265\3A167390.D Vial: 2
Acq On : 16 Dec 2021 10:21 am Operator: BridgetK
Sample : cc7257-20 Inst : MS3A
Misc : MS55474,V3A7265,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	156	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.030	-7.1	193	0.00	11.85
3 M	1,4-dioxane	0.031	0.028	9.7	174	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167235.D M3A7257.M Thu Dec 16 15:02:52 2021 ACCUNJ

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V1X8342	**Method:** SW846 8260D	**Instrument ID:** GCMS1X

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1X8342-BFB	1X192528.D	11/17/21 19:07	n/a	BFB Tune
V1X8342-IC8342	1X192530.D	11/17/21 19:41	n/a	Initial cal 0.2
V1X8342-IC8342	1X192532.D	11/17/21 20:15	n/a	Initial cal 0.5
V1X8342-IC8342	1X192534.D	11/17/21 20:49	n/a	Initial cal 1
V1X8342-IC8342	1X192536.D	11/17/21 21:22	n/a	Initial cal 2
V1X8342-IC8342	1X192538.D	11/17/21 21:56	n/a	Initial cal 4
V1X8342-IC8342	1X192540.D	11/17/21 22:30	n/a	Initial cal 8
V1X8342-IC8342	1X192542.D	11/17/21 23:04	n/a	Initial cal 20
V1X8342-ICC8342	1X192544.D	11/17/21 23:38	n/a	Initial cal 50
V1X8342-IC8342	1X192546.D	11/18/21 00:12	n/a	Initial cal 100
V1X8342-IC8342	1X192548.D	11/18/21 00:45	n/a	Initial cal 200
V1X8342-ICV8342	1X192554.D	11/18/21 02:25	n/a	Initial cal verification 50
V1X8342-ICV8342	1X192556.D	11/18/21 02:59	n/a	Initial cal verification 50
V1X8342-BFB2	1X192566.D	11/23/21 10:03	n/a	BFB Tune
V1X8342-ICV8342	1X192568.D	11/23/21 10:46	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V1X8350	**Method:** SW846 8260D	**Instrument ID:** GCMS1X

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1X8350-BFB	1X192786.D	12/06/21 11:13	n/a	BFB Tune
V1X8350-CC8342	1X192787.D	12/06/21 11:39	n/a	Continuing cal 20
V1X8350-BS	1X192789.D	12/06/21 12:39	n/a	Blank Spike
V1X8350-MB	1X192791.D	12/06/21 13:31	n/a	Method Blank
JD36168-7	1X192793.D	12/06/21 13:58	n/a	HOFF MW-6S
JD36168-8	1X192796.D	12/06/21 15:20	n/a	HOFF OW-6DU
JD36168-3	1X192797.D	12/06/21 15:47	n/a	HOFF OW-4DU
JD36168-9	1X192798.D	12/06/21 16:13	n/a	HOFF OW-6DL
JD36168-7MS	1X192799.D	12/06/21 16:39	n/a	Matrix Spike
JD36168-7MSD	1X192800.D	12/06/21 17:05	n/a	Matrix Spike Duplicate
JD36168-1	1X192802.D	12/06/21 17:57	n/a	TB-20211130
JD36168-4	1X192803.D	12/06/21 18:23	n/a	HOFF MW-5DL
JD36168-5	1X192804.D	12/06/21 18:49	n/a	HOFF MW-5DV
JD36168-6	1X192805.D	12/06/21 19:15	n/a	HOFF MW-5S
JD36168-10	1X192806.D	12/06/21 19:41	n/a	HOFF MW-7DU
JD36168-11	1X192807.D	12/06/21 20:07	n/a	HOFF MW-7S
JD36168-2	1X192808.D	12/06/21 20:33	n/a	HOFF OW-4DL

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V1X8352	**Method:** SW846 8260D	**Instrument ID:** GCMS1X

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1X8352-BFB	1X192816.D	12/07/21 10:11	n/a	BFB Tune
V1X8352-CC8342	1X192816.D	12/07/21 10:11	n/a	Continuing cal 20
V1X8352-BS	1X192818.D	12/07/21 11:09	n/a	Blank Spike
V1X8352-MB	1X192820.D	12/07/21 12:01	n/a	Method Blank
ZZZZZZ	1X192821.D	12/07/21 12:27	n/a	(unrelated sample)
ZZZZZZ	1X192822.D	12/07/21 12:53	n/a	(unrelated sample)
ZZZZZZ	1X192823.D	12/07/21 13:19	n/a	(unrelated sample)
ZZZZZZ	1X192824.D	12/07/21 13:45	n/a	(unrelated sample)
ZZZZZZ	1X192825.D	12/07/21 14:11	n/a	(unrelated sample)
JD36089-2	1X192826.D	12/07/21 14:37	n/a	(used for QC only; not part of job JD36168)
JD36089-2MS	1X192828.D	12/07/21 15:28	n/a	Matrix Spike
JD36089-2MSD	1X192829.D	12/07/21 15:54	n/a	Matrix Spike Duplicate
ZZZZZZ	1X192831.D	12/07/21 16:46	n/a	(unrelated sample)
ZZZZZZ	1X192832.D	12/07/21 17:12	n/a	(unrelated sample)
ZZZZZZ	1X192833.D	12/07/21 17:38	n/a	(unrelated sample)
ZZZZZZ	1X192834.D	12/07/21 18:04	n/a	(unrelated sample)
V1X8352-ECC8342	1X192835.D	12/07/21 18:30	n/a	Ending cal 50

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7257 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7257-BFB	3A167227.D	12/06/21 09:39	n/a	BFB Tune
V3A7257-IC7257	3A167232.D	12/06/21 13:29	n/a	Initial cal 1
V3A7257-IC7257	3A167233.D	12/06/21 13:58	n/a	Initial cal 2
V3A7257-IC7257	3A167234.D	12/06/21 14:27	n/a	Initial cal 5
V3A7257-ICC7257	3A167235.D	12/06/21 14:56	n/a	Initial cal 20
V3A7257-IC7257	3A167236.D	12/06/21 15:25	n/a	Initial cal 50
V3A7257-IC7257	3A167237.D	12/06/21 15:54	n/a	Initial cal 100
V3A7257-IC7257	3A167242.D	12/06/21 18:20	n/a	Initial cal 0.25
V3A7257-IC7257	3A167243.D	12/06/21 18:49	n/a	Initial cal 0.40
V3A7257-IC7257	3A167245.D	12/06/21 19:47	n/a	Initial cal 200
V3A7257-ICV7257	3A167248.D	12/06/21 21:13	n/a	Initial cal verification 20

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7262 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7262-BFB	3A167327.D	12/13/21 09:05	n/a	BFB Tune
V3A7262-CC7257	3A167328.D	12/13/21 09:34	n/a	Continuing cal 20
V3A7262-BS	3A167329.D	12/13/21 10:16	n/a	Blank Spike
V3A7262-BSD	3A167330.D	12/13/21 10:45	n/a	Blank Spike Duplicate
V3A7262-MB	3A167332.D	12/13/21 11:44	n/a	Method Blank
ZZZZZZ	3A167334.D	12/13/21 12:56	n/a	(unrelated sample)
ZZZZZZ	3A167335.D	12/13/21 13:25	n/a	(unrelated sample)
ZZZZZZ	3A167336.D	12/13/21 13:54	n/a	(unrelated sample)
ZZZZZZ	3A167337.D	12/13/21 14:23	n/a	(unrelated sample)
ZZZZZZ	3A167338.D	12/13/21 14:52	n/a	(unrelated sample)
ZZZZZZ	3A167339.D	12/13/21 15:21	n/a	(unrelated sample)
JD36168-7	3A167340.D	12/13/21 15:50	n/a	HOFF MW-6S
JD36168-8	3A167341.D	12/13/21 16:19	n/a	HOFF OW-6DU
JD36168-6	3A167342.D	12/13/21 16:48	n/a	HOFF MW-5S
JD36168-7MS	3A167343.D	12/13/21 17:17	n/a	Matrix Spike
JD36168-7MSD	3A167344.D	12/13/21 17:45	n/a	Matrix Spike Duplicate
JD36168-1	3A167346.D	12/13/21 18:42	n/a	TB-20211130
JD36168-10	3A167347.D	12/13/21 19:11	n/a	HOFF MW-7DU
JD36168-11	3A167348.D	12/13/21 19:40	n/a	HOFF MW-7S
JD36168-2	3A167349.D	12/13/21 20:09	n/a	HOFF OW-4DL
JD36168-3	3A167350.D	12/13/21 20:37	n/a	HOFF OW-4DU

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7265 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7265-BFB	3A167389.D	12/16/21 09:52	n/a	BFB Tune
V3A7265-CC7257	3A167390.D	12/16/21 10:21	n/a	Continuing cal 20
V3A7265-BS	3A167391.D	12/16/21 11:00	n/a	Blank Spike
V3A7265-MB	3A167393.D	12/16/21 11:58	n/a	Method Blank
JD36168-9	3A167396.D	12/16/21 13:10	n/a	HOFF OW-6DL
JD36168-4	3A167397.D	12/16/21 13:39	n/a	HOFF MW-5DL
JD36168-5	3A167398.D	12/16/21 14:08	n/a	HOFF MW-5DV
ZZZZZZ	3A167399.D	12/16/21 14:37	n/a	(unrelated sample)
ZZZZZZ	3A167400.D	12/16/21 15:06	n/a	(unrelated sample)
ZZZZZZ	3A167401.D	12/16/21 15:35	n/a	(unrelated sample)
JD36294-5MS	3A167402.D	12/16/21 16:04	n/a	Matrix Spike
JD36294-5MSD	3A167403.D	12/16/21 16:33	n/a	Matrix Spike Duplicate
ZZZZZZ	3A167405.D	12/16/21 17:30	n/a	(unrelated sample)
JD36294-5	3A167406.D	12/16/21 17:59	n/a	(used for QC only; not part of job JD36168)
ZZZZZZ	3A167407.D	12/16/21 18:28	n/a	(unrelated sample)
ZZZZZZ	3A167408.D	12/16/21 18:56	n/a	(unrelated sample)
ZZZZZZ	3A167409.D	12/16/21 19:25	n/a	(unrelated sample)
ZZZZZZ	3A167411.D	12/16/21 20:23	n/a	(unrelated sample)
ZZZZZZ	3A167412.D	12/16/21 20:51	n/a	(unrelated sample)
ZZZZZZ	3A167413.D	12/16/21 21:20	n/a	(unrelated sample)

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167346.D
Acq On : 13 Dec 2021 6:42 pm
Operator : BridgetK
Sample : jd36168-1
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 14 08:18:25 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

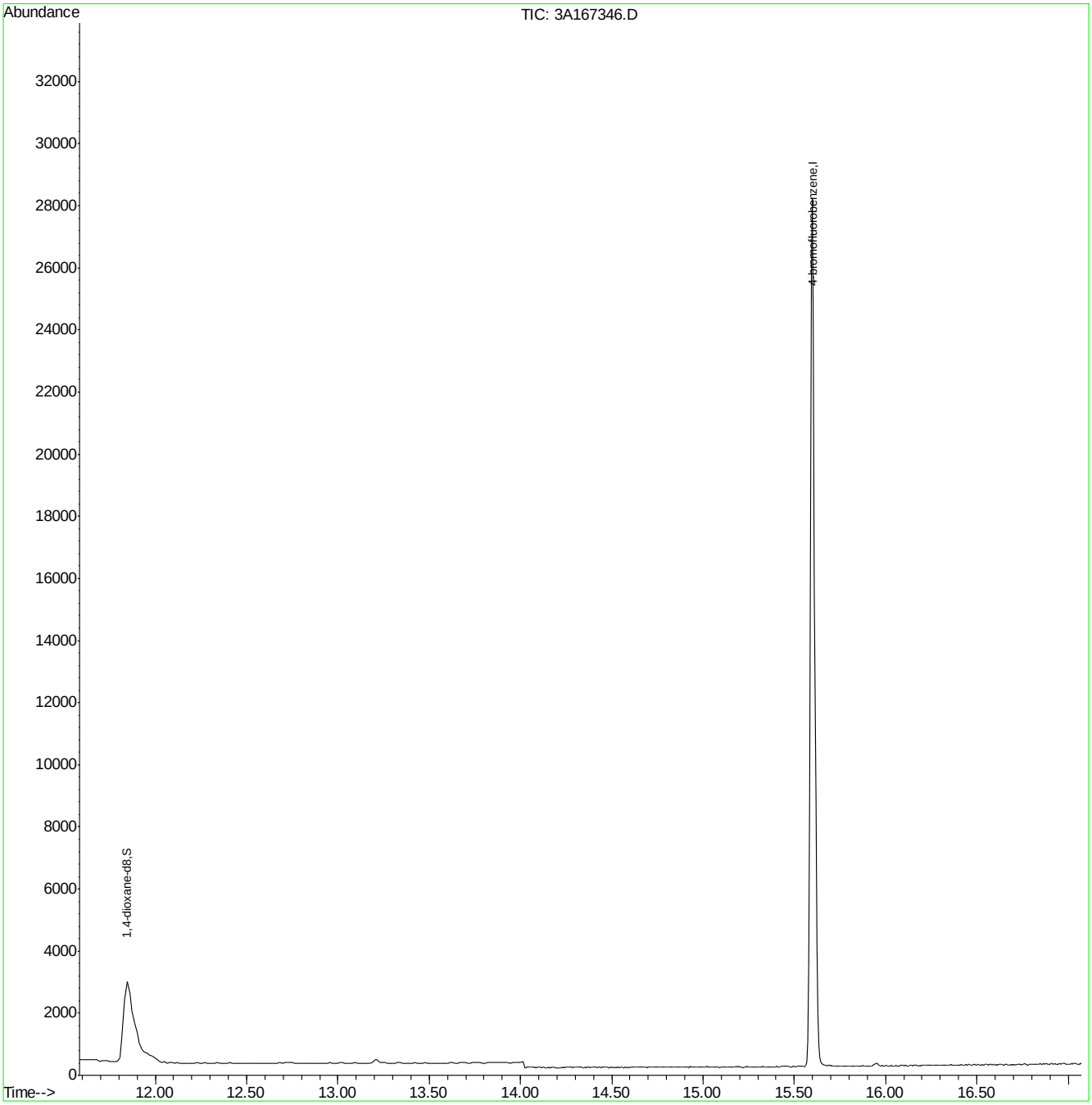
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15585	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6914	16.02	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 160.20%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167346.D
Acq On : 13 Dec 2021 6:42 pm
Operator : BridgetK
Sample : jd36168-1
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 14 08:18:25 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167349.D
Acq On : 13 Dec 2021 8:09 pm
Operator : BridgetK
Sample : jd36168-2
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 14 08:18:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

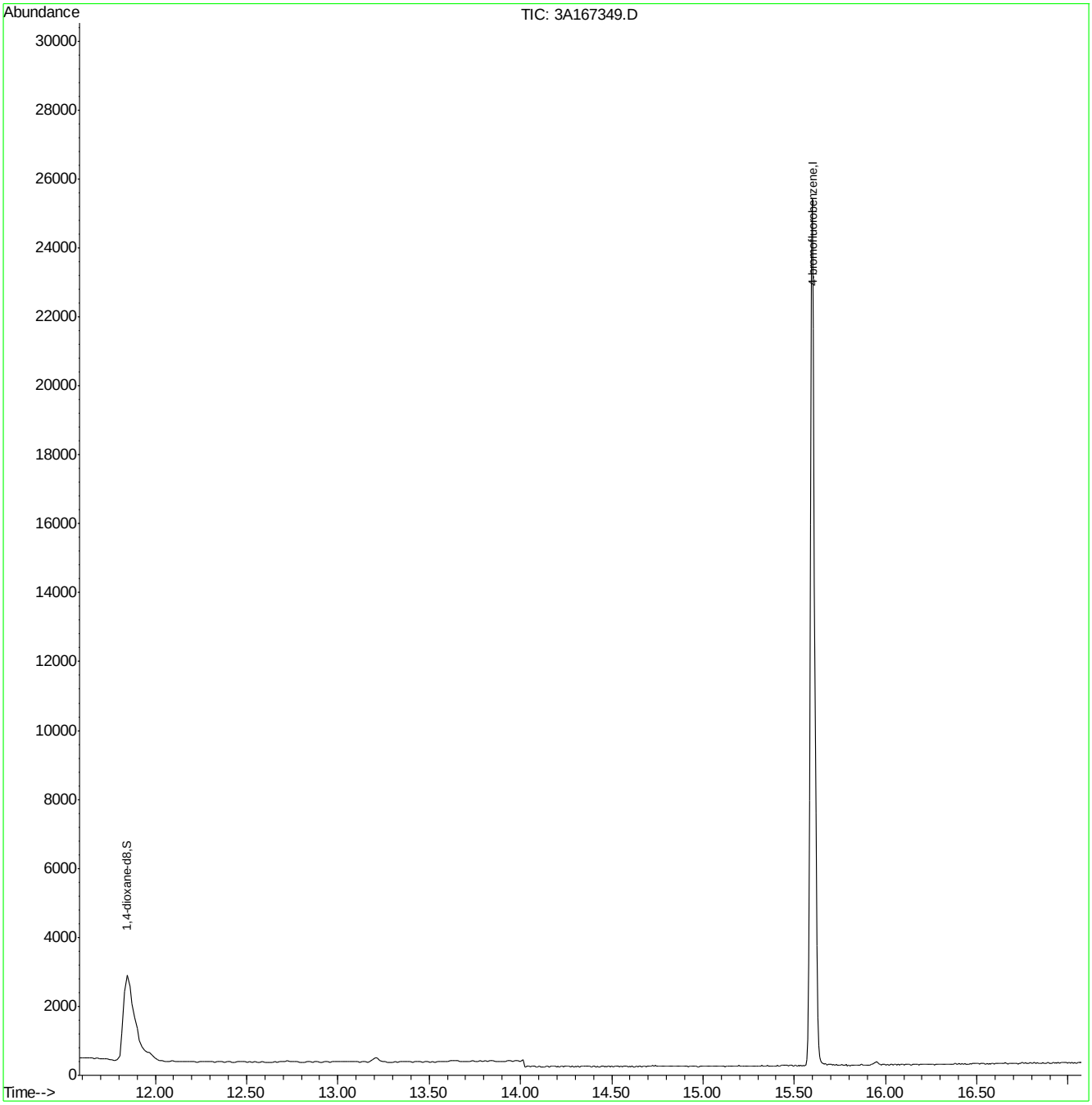
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	13882	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6653	17.31	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 173.10%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167349.D
Acq On : 13 Dec 2021 8:09 pm
Operator : BridgetK
Sample : jd36168-2
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 14 08:18:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



M3A7257.M Tue Dec 14 08:22:00 2021 ACCUNJ Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167350.D
Acq On : 13 Dec 2021 8:37 pm
Operator : BridgetK
Sample : jd36168-3
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 14 08:18:29 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

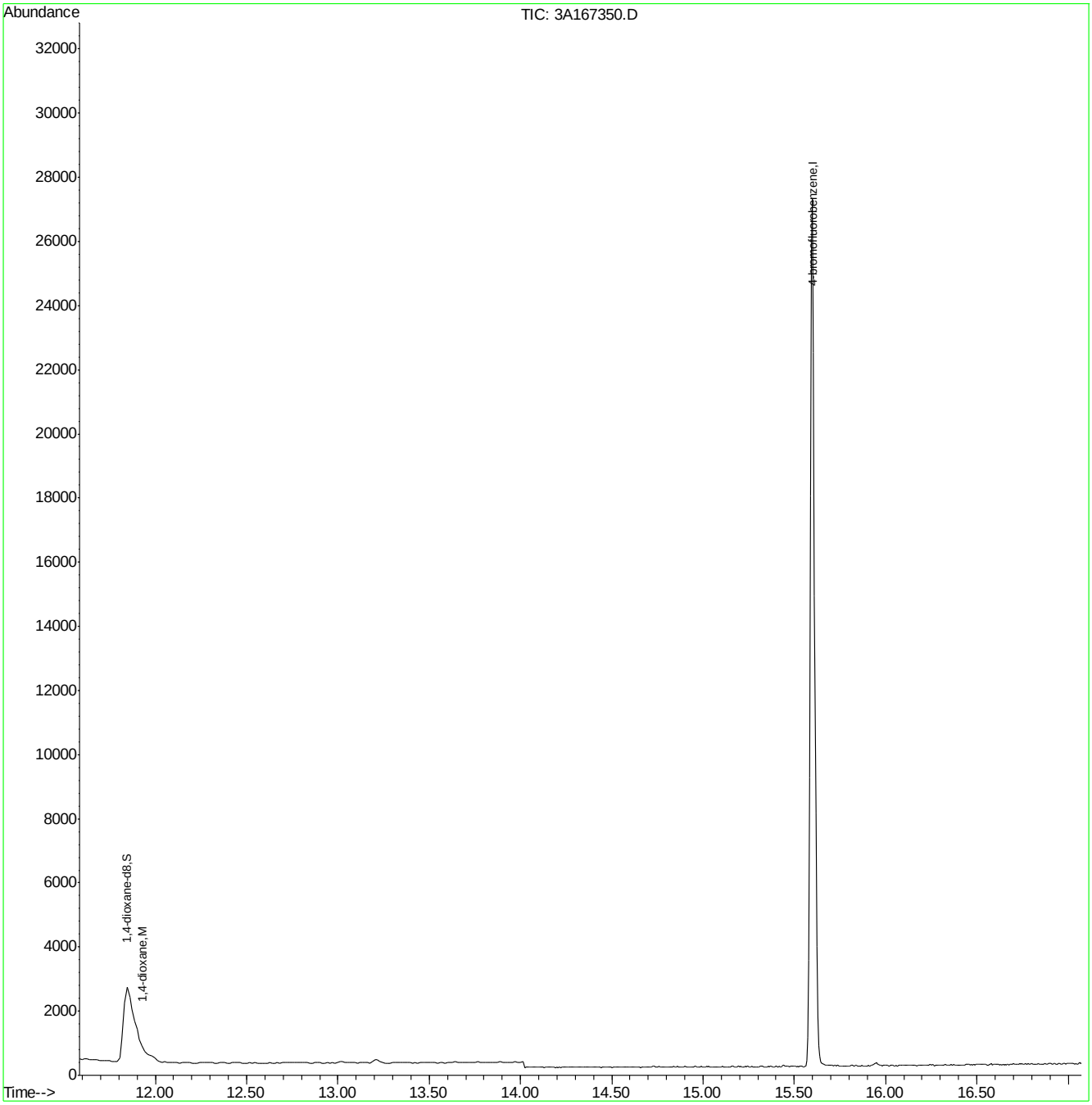
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15155	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6526	15.55	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 155.50%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.93	88	85	0.18	ug/L	# 36

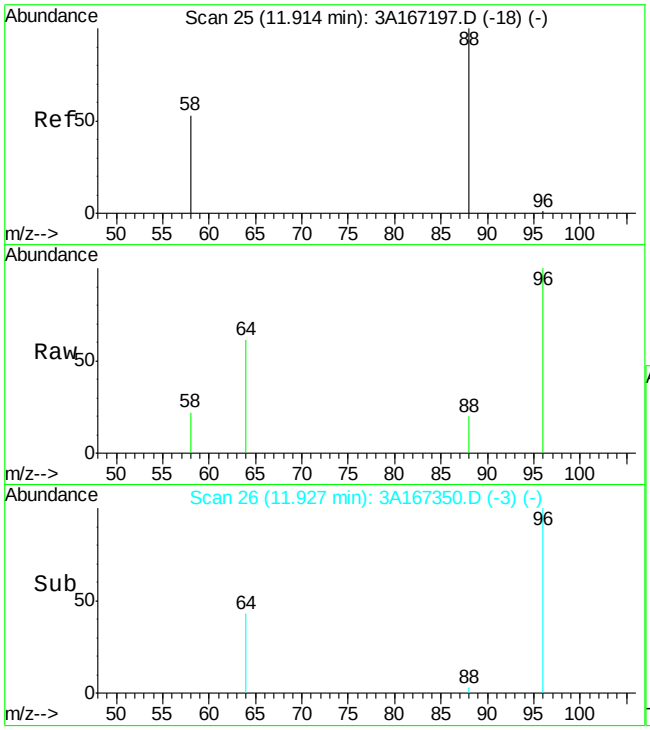
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167350.D
Acq On : 13 Dec 2021 8:37 pm
Operator : BridgetK
Sample : jd36168-3
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 14 08:18:29 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

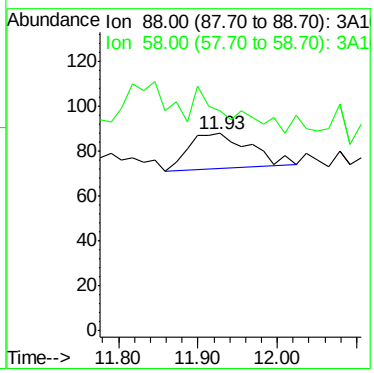




#3
1,4-dioxane
Concen: 0.18 ug/L
RT: 11.93 min Scan# 26
Delta R.T. 0.01 min
Lab File: 3A167350.D
Acq: 13 Dec 2021 8:37 pm

Tgt Ion: 88 Resp: 85

Ion	Ratio	Lower	Upper
88	100		
58	11.8	30.0	90.0#



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7265\
Data File : 3A167397.D
Acq On : 16 Dec 2021 1:39 pm
Operator : BridgetK
Sample : JD36168-4
Misc : MS55395,V3A7265,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 16 15:00:44 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

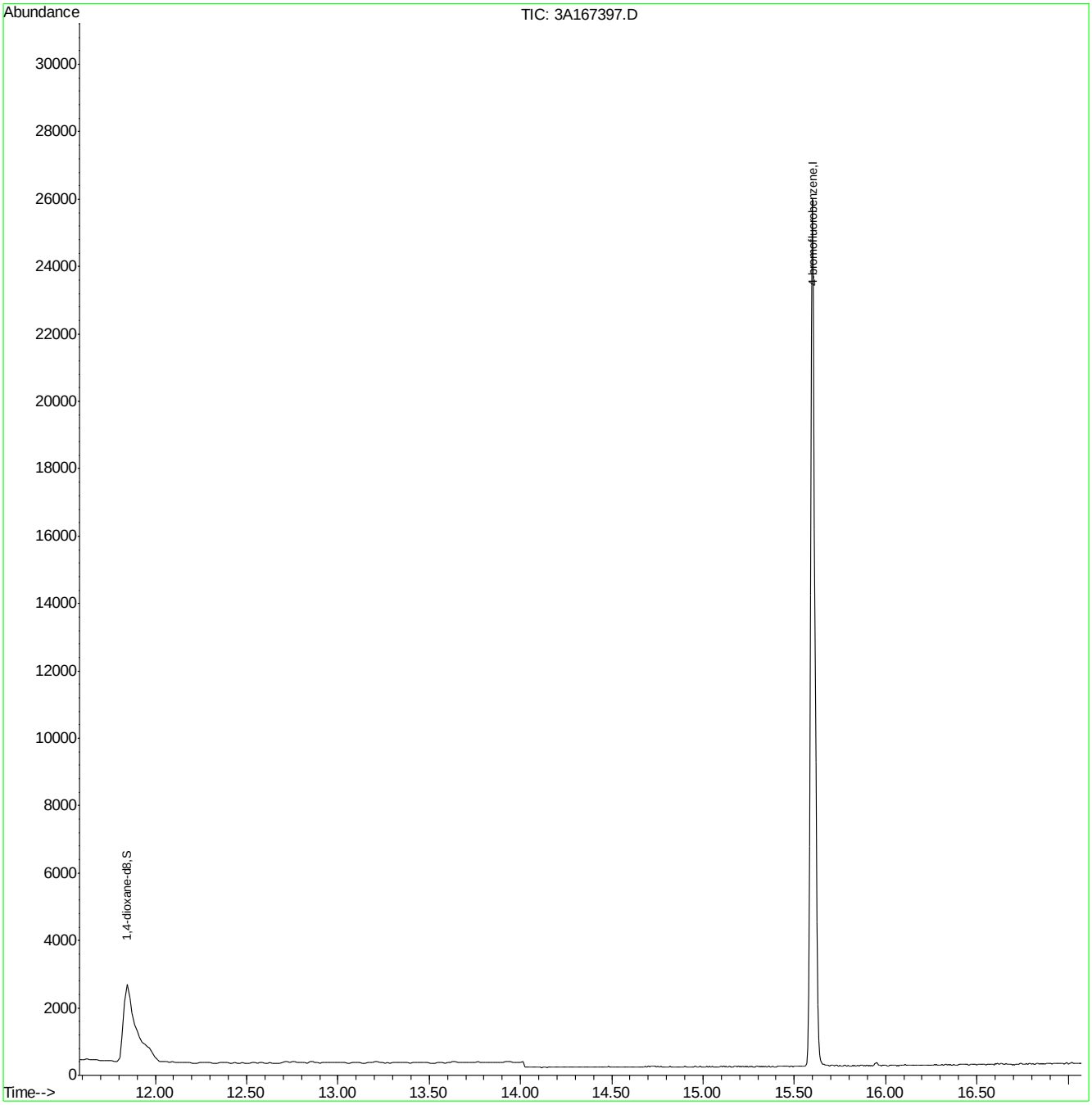
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	14114	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6725	17.21	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 172.10%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7265\
Data File : 3A167397.D
Acq On : 16 Dec 2021 1:39 pm
Operator : BridgetK
Sample : JD36168-4
Misc : MS55395,V3A7265,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 16 15:00:44 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7265\
Data File : 3A167398.D
Acq On : 16 Dec 2021 2:08 pm
Operator : BridgetK
Sample : JD36168-5
Misc : MS55395,V3A7265,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 16 15:00:45 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

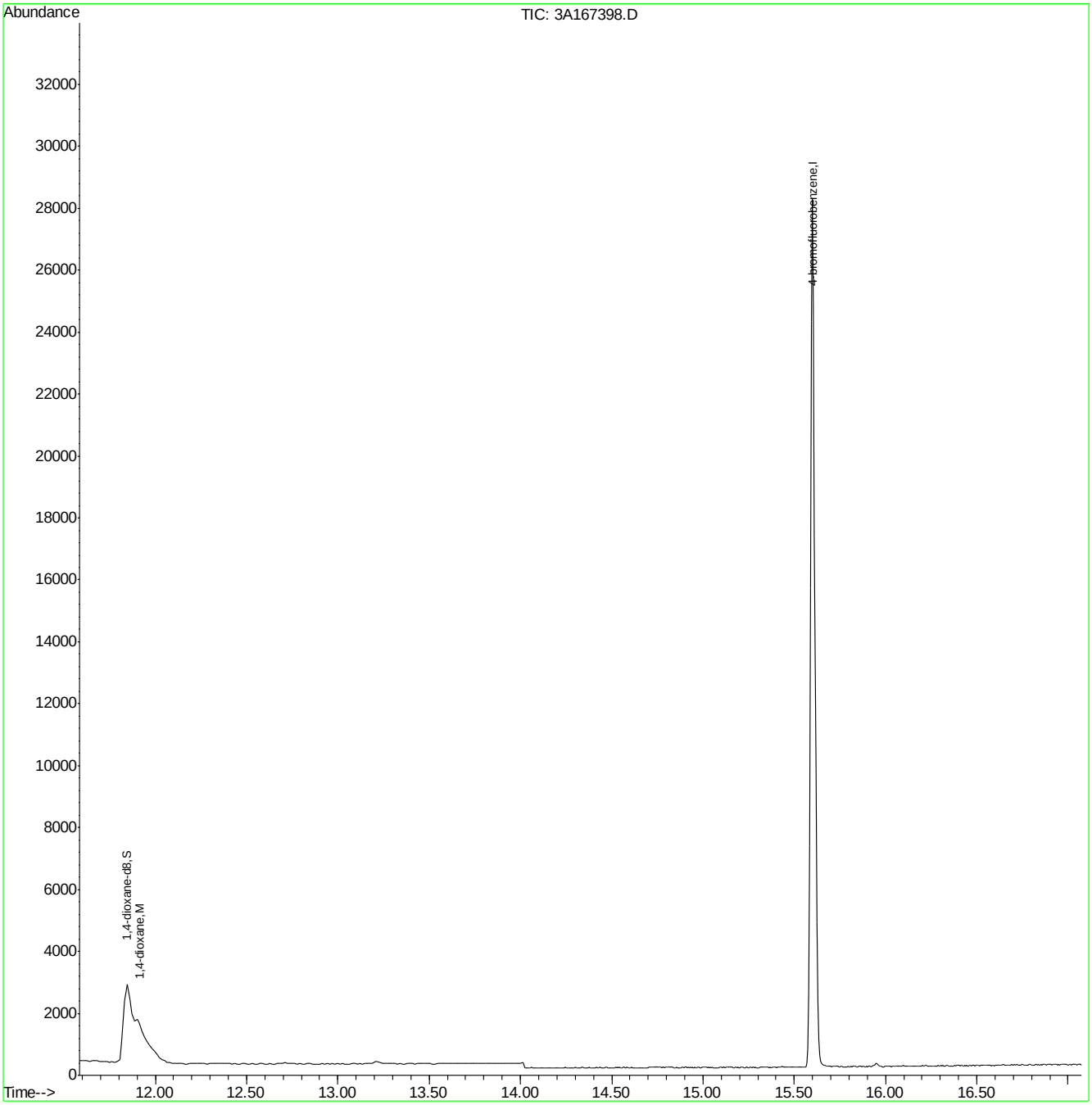
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15403	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	7239	16.97	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 169.70%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	1658	3.46	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

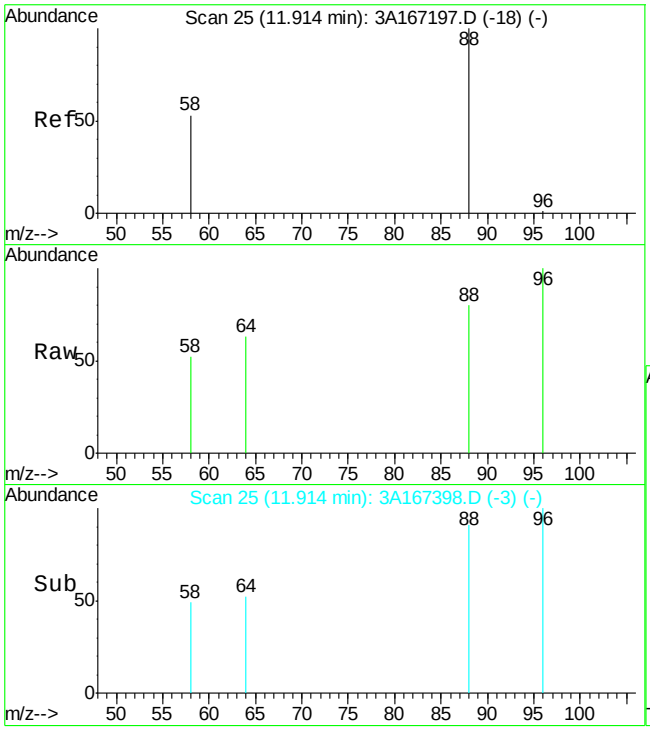
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7265\
Data File : 3A167398.D
Acq On : 16 Dec 2021 2:08 pm
Operator : BridgetK
Sample : JD36168-5
Misc : MS55395,V3A7265,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 16 15:00:45 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



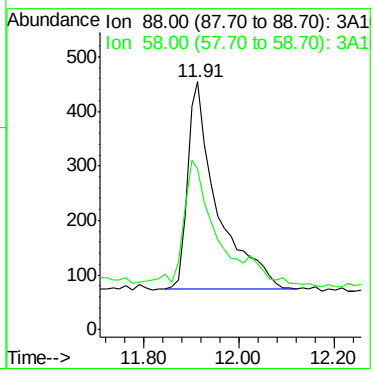
M3A7257.M Thu Dec 16 15:03:52 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 3.46 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167398.D
Acq: 16 Dec 2021 2:08 pm

Tgt Ion: 88 Resp: 1658

Ion	Ratio	Lower	Upper
88	100		
58	55.5	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167342.D
Acq On : 13 Dec 2021 4:48 pm
Operator : BridgetK
Sample : jd36168-6
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 14 08:18:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

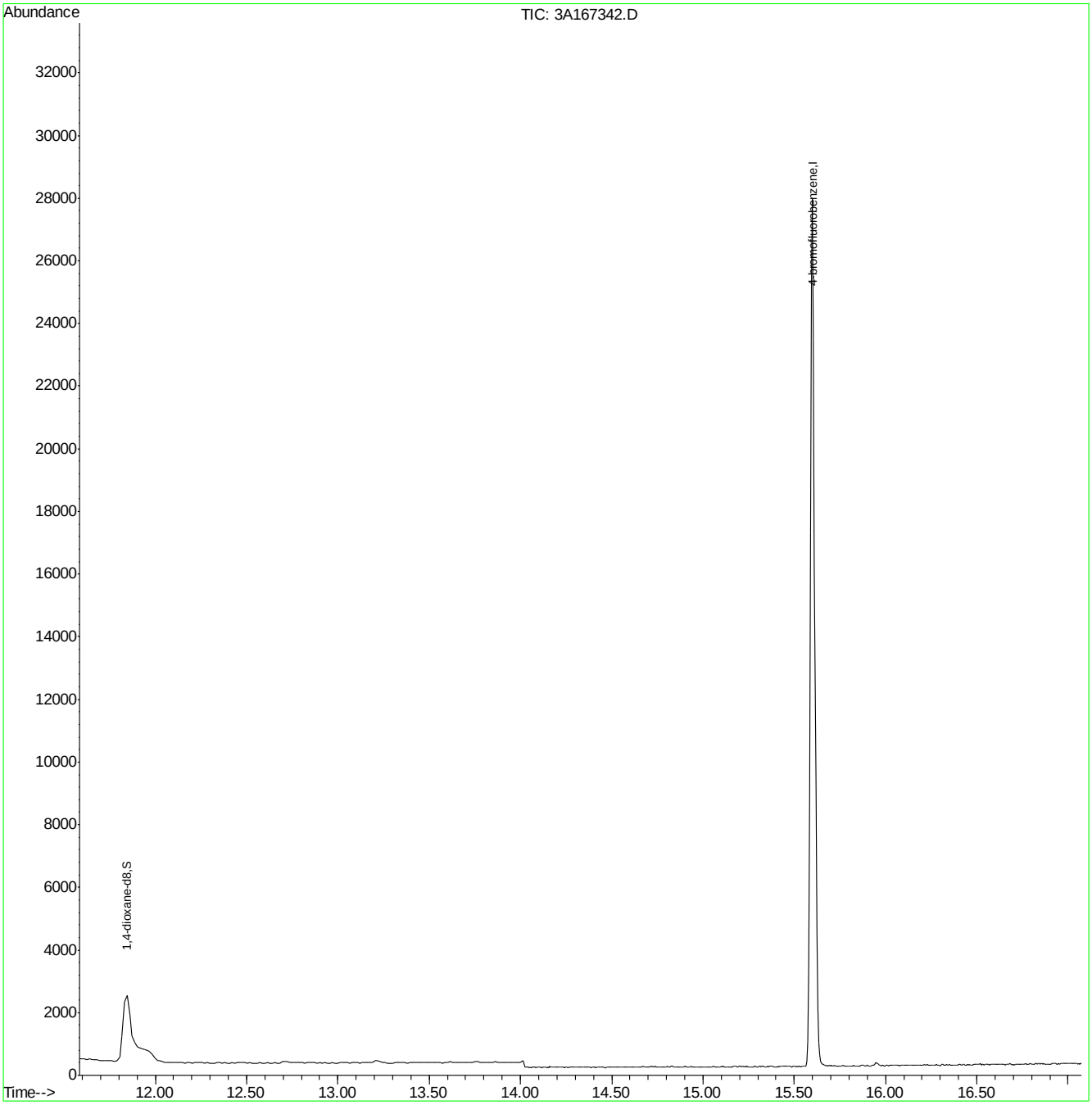
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15481	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	5320	12.41	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 124.10%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167342.D
Acq On : 13 Dec 2021 4:48 pm
Operator : BridgetK
Sample : jd36168-6
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 14 08:18:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167340.D
Acq On : 13 Dec 2021 3:50 pm
Operator : BridgetK
Sample : jd36168-7
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 14 08:18:19 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

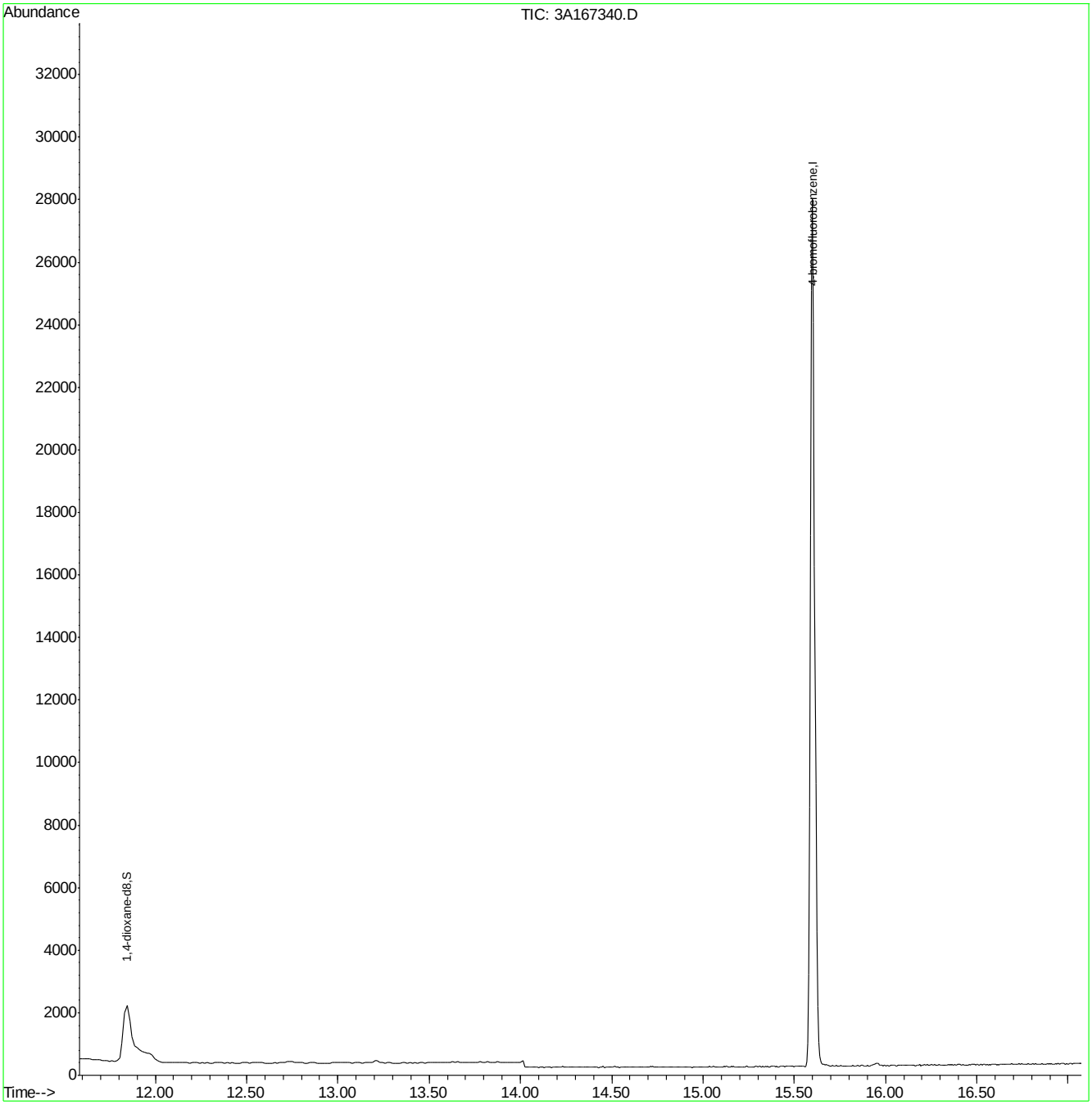
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15465	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4683	10.94	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 109.40%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167340.D
Acq On : 13 Dec 2021 3:50 pm
Operator : BridgetK
Sample : jd36168-7
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 14 08:18:19 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167341.D
Acq On : 13 Dec 2021 4:19 pm
Operator : BridgetK
Sample : jd36168-8
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 14 08:18:20 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

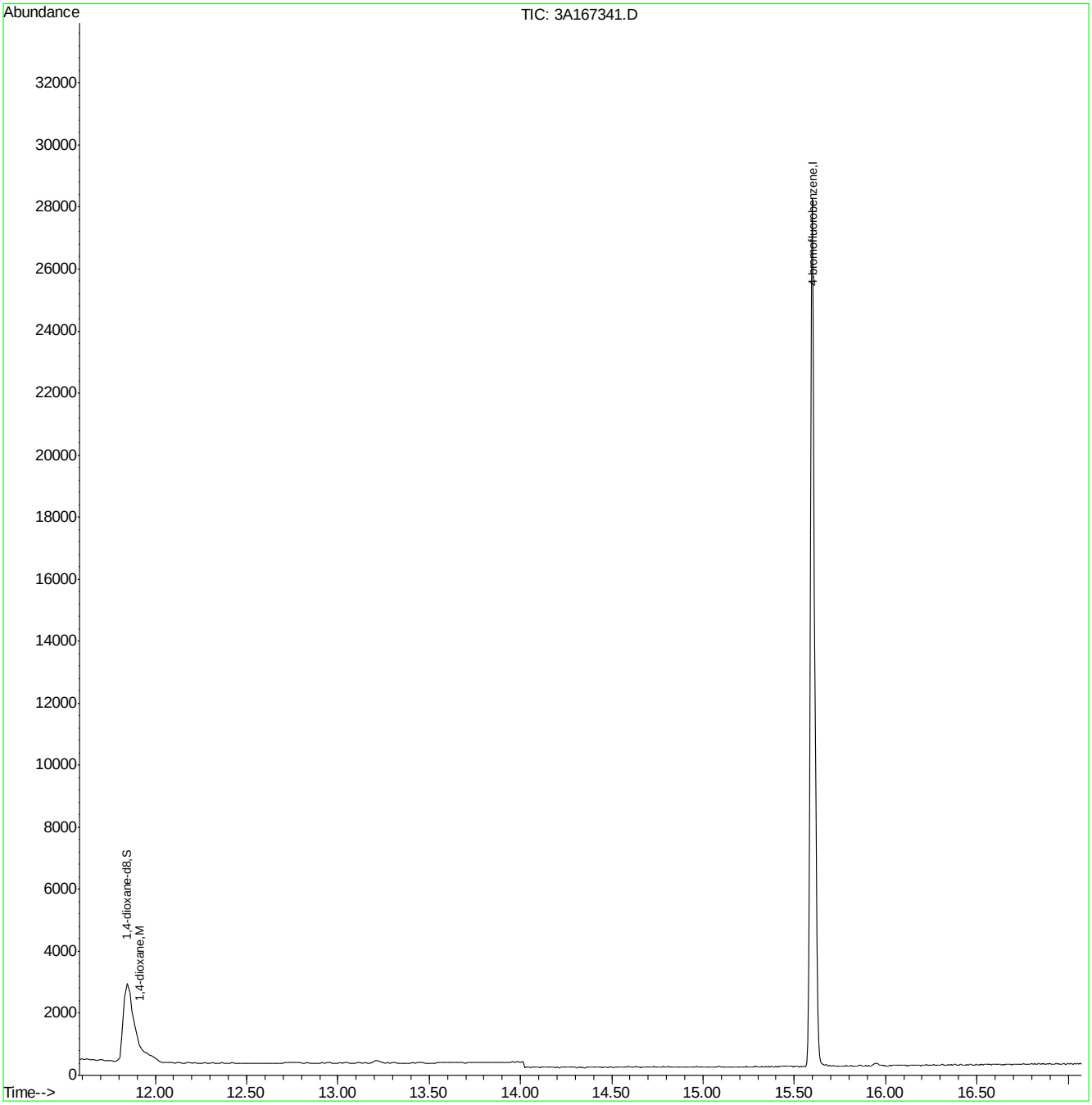
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15349	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6845	16.11	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 161.10%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	104	0.22	ug/L	93

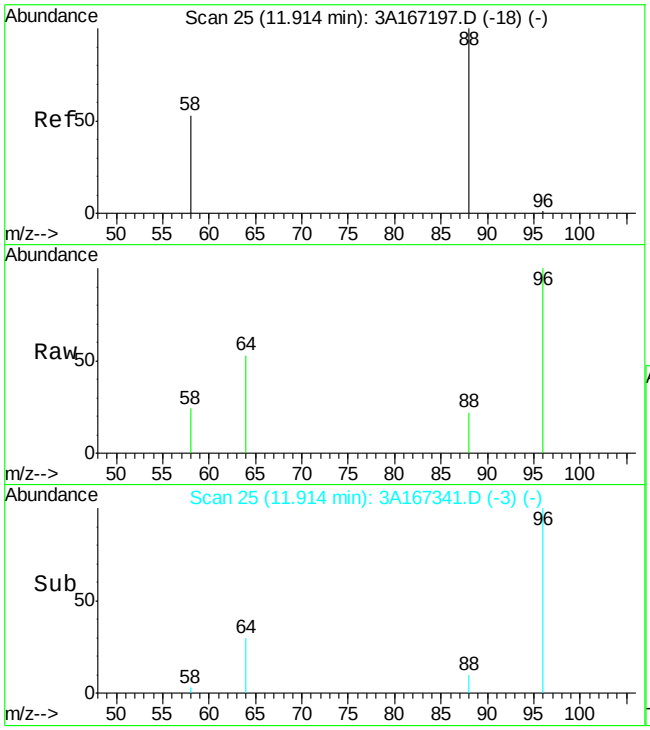
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167341.D
Acq On : 13 Dec 2021 4:19 pm
Operator : BridgetK
Sample : jd36168-8
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 14 08:18:20 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

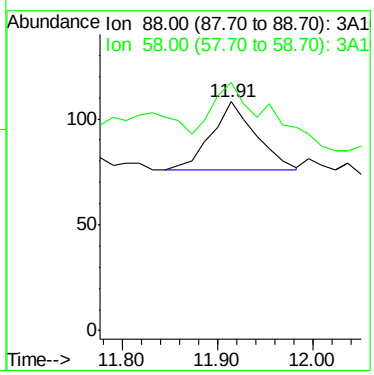




#3
1,4-dioxane
Concen: 0.22 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167341.D
Acq: 13 Dec 2021 4:19 pm

Tgt Ion: 88 Resp: 104

Ion	Ratio	Lower	Upper
88	100		
58	65.6	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7265\
Data File : 3A167396.D
Acq On : 16 Dec 2021 1:10 pm
Operator : BridgetK
Sample : JD36168-9
Misc : MS55395,V3A7265,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 16 15:00:43 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

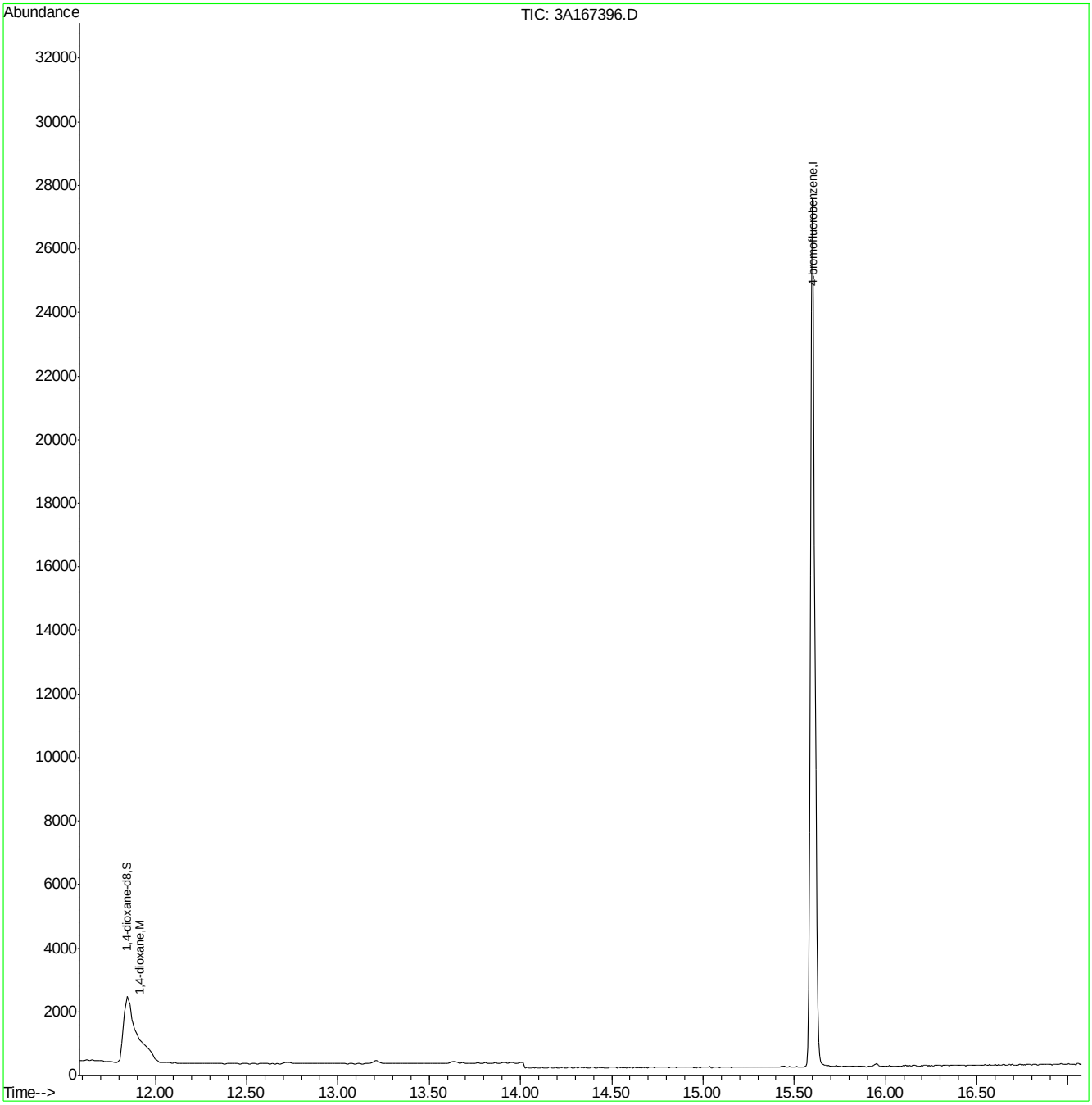
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15069	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6313	15.13	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 151.30%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	148	0.32	ug/L	78

(#) = qualifier out of range (m) = manual integration (+) = signals summed

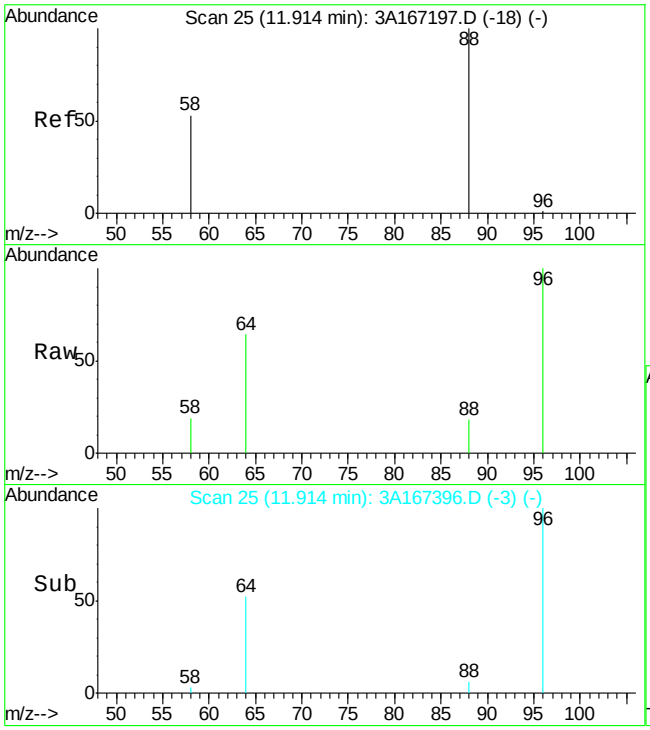
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7265\
Data File : 3A167396.D
Acq On : 16 Dec 2021 1:10 pm
Operator : BridgetK
Sample : JD36168-9
Misc : MS55395,V3A7265,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 16 15:00:43 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



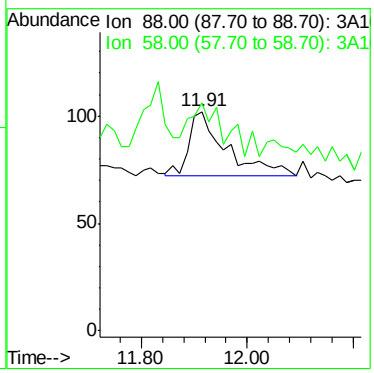
M3A7257.M Thu Dec 16 15:03:34 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 0.32 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167396.D
Acq: 16 Dec 2021 1:10 pm

Tgt Ion: 88 Resp: 148

Ion	Ratio	Lower	Upper
88	100		
58	76.7	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167347.D
Acq On : 13 Dec 2021 7:11 pm
Operator : BridgetK
Sample : jd36168-10
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 14 08:18:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

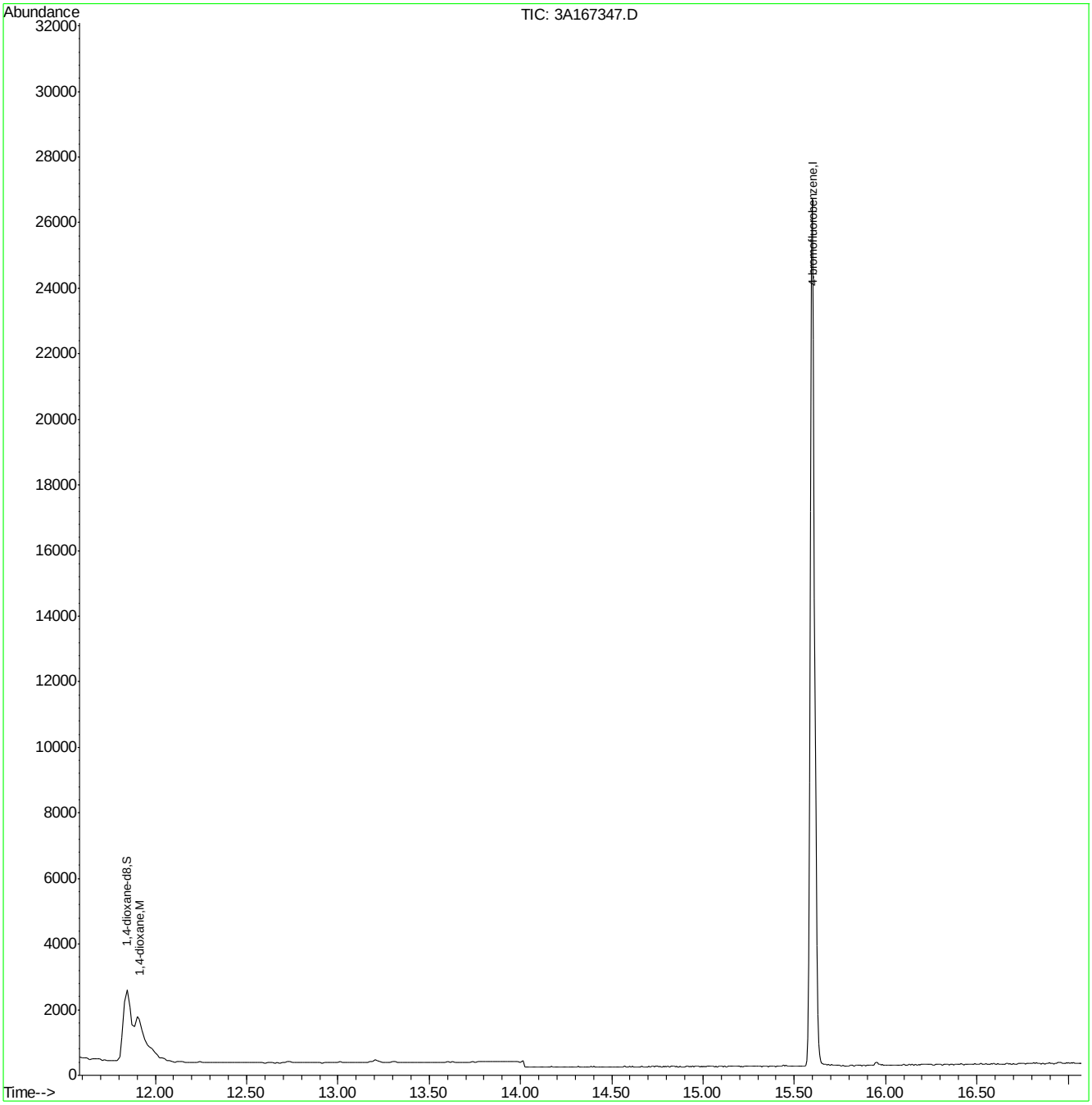
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	14765	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	5267	12.88	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 128.80%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	2382	5.18	ug/L	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

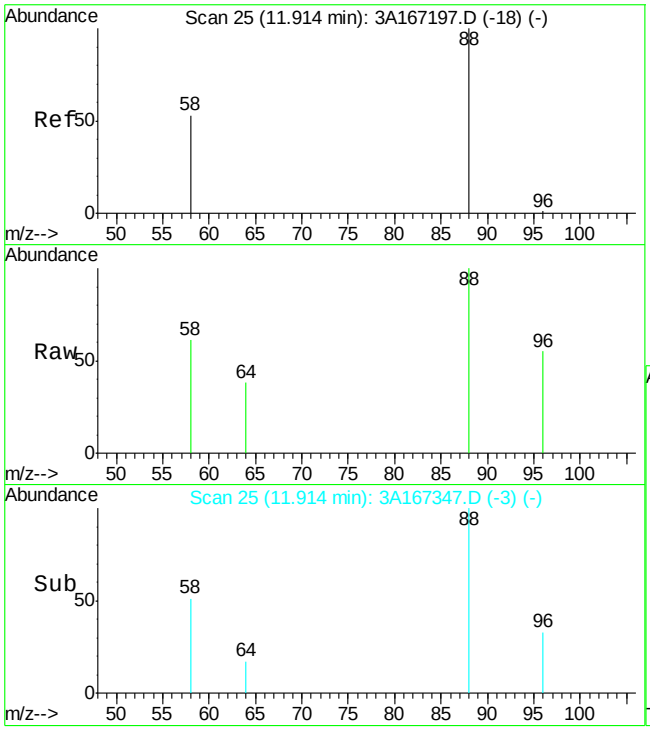
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167347.D
Acq On : 13 Dec 2021 7:11 pm
Operator : BridgetK
Sample : jd36168-10
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 14 08:18:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



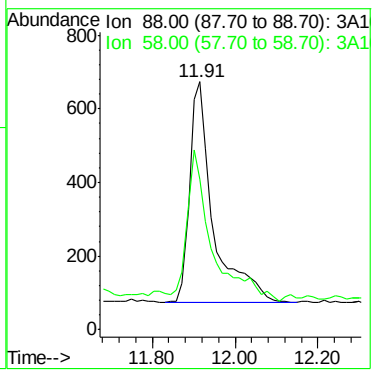
M3A7257.M Tue Dec 14 08:21:40 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 5.18 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167347.D
Acq: 13 Dec 2021 7:11 pm

Tgt Ion: 88 Resp: 2382

Ion	Ratio	Lower	Upper
88	100		
58	53.8	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167348.D
Acq On : 13 Dec 2021 7:40 pm
Operator : BridgetK
Sample : jd36168-11
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 14 08:18:27 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

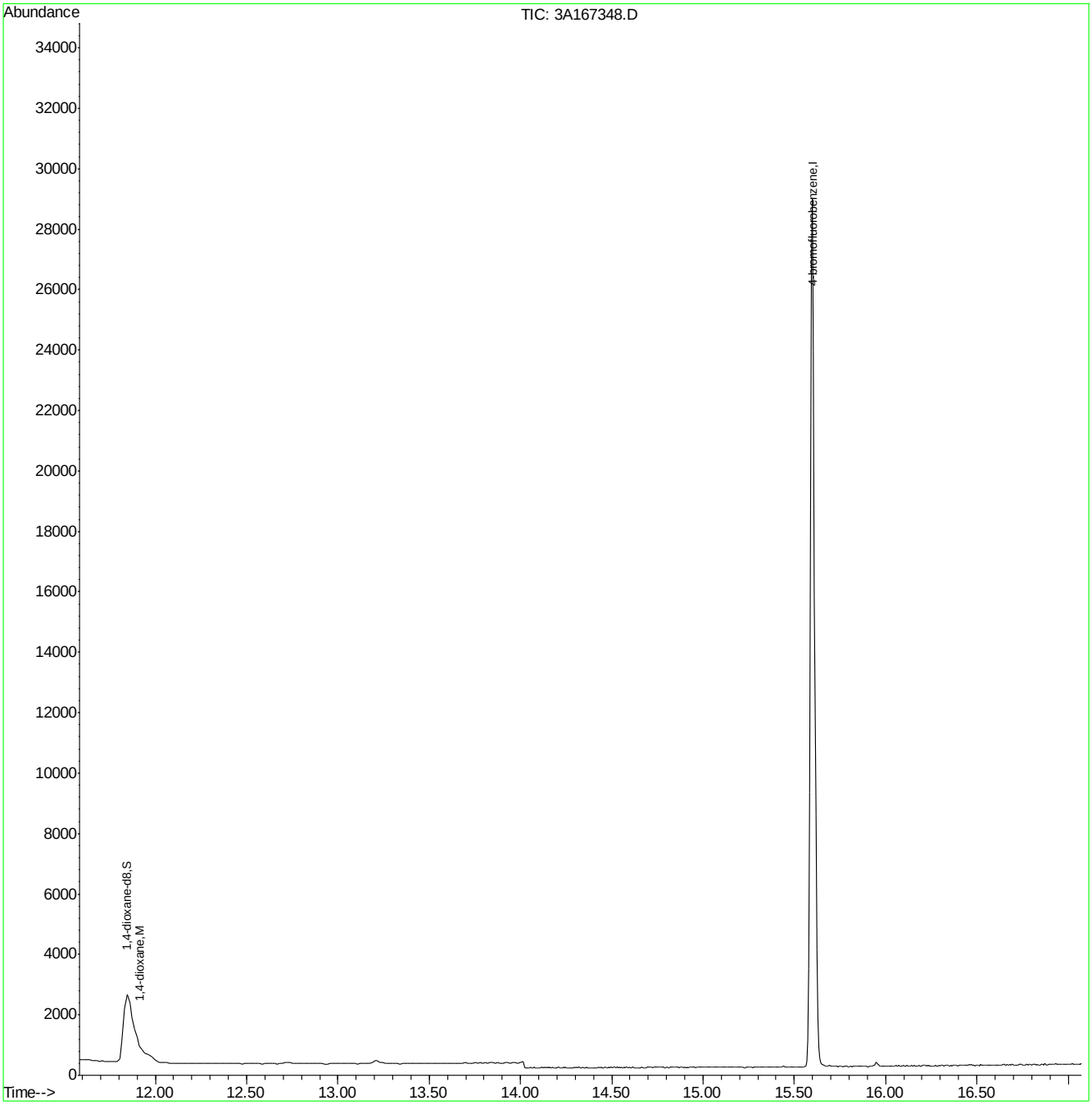
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15931	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6017	13.64	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 136.40%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	273	0.55	ug/L	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

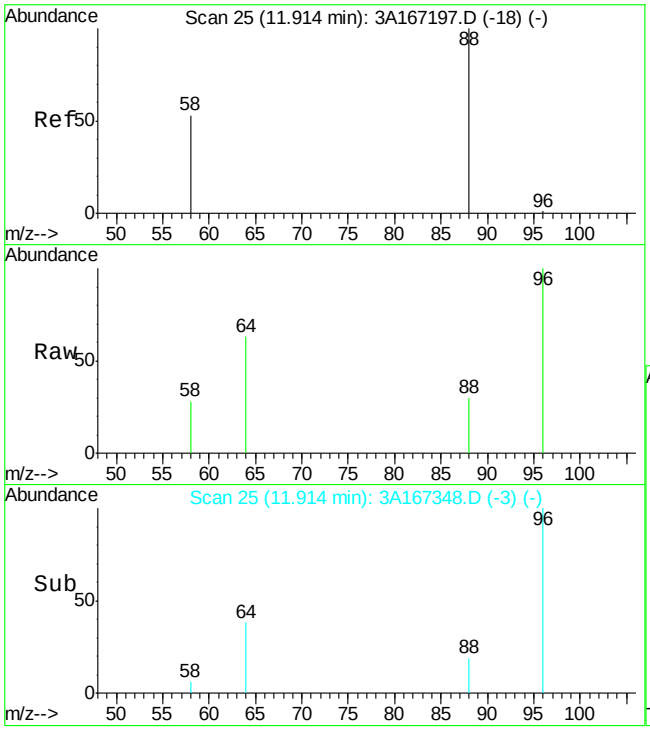
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7262\
Data File : 3A167348.D
Acq On : 13 Dec 2021 7:40 pm
Operator : BridgetK
Sample : jd36168-11
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 14 08:18:27 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



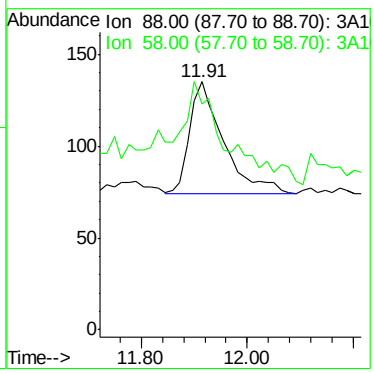
M3A7257.M Tue Dec 14 08:21:52 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 0.55 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167348.D
Acq: 13 Dec 2021 7:40 pm

Tgt Ion: 88 Resp: 273

Ion	Ratio	Lower	Upper
88	100		
58	68.9	30.0	90.0



7.1.11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192802.d
Acq On : 6 Dec 2021 5:57 pm
Operator : brittank
Sample : JD36168-1 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:49:40 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

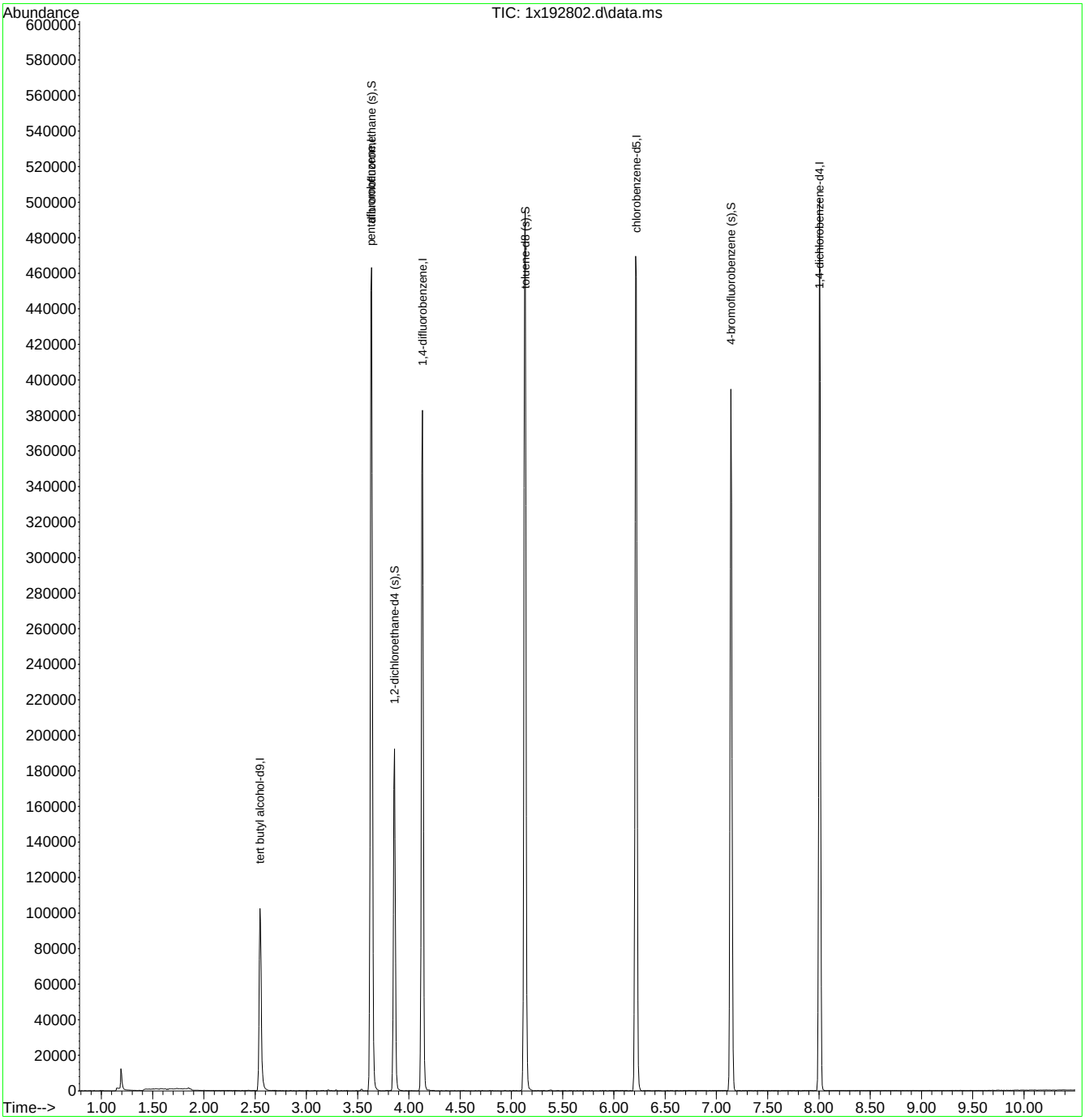
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.546	65	82112	500.00	ug/L	0.00
5) pentafluorobenzene	3.630	168	153030	50.00	ug/L	0.01
52) 1,4-difluorobenzene	4.131	114	223024	50.00	ug/L	0.02
73) chlorobenzene-d5	6.218	117	210599	50.00	ug/L	0.02
97) 1,4-dichlorobenzene-d4	8.006	152	93475	50.00	ug/L	0.02
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.635	113	79170	51.30	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.60%			
53) 1,2-dichloroethane-d4 (s)	3.859	65	93567	49.04	ug/L	0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.08%			
74) toluene-d8 (s)	5.135	98	253925	49.59	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.18%			
98) 4-bromofluorobenzene (s)	7.141	95	92074	49.56	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.12%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192802.d
Acq On : 6 Dec 2021 5:57 pm
Operator : brittank
Sample : JD36168-1 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:49:40 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-08-2021\vx8350-rest of batch\
Data File : 1x192808.d
Acq On : 6 Dec 2021 8:33 pm
Operator : brittank
Sample : JD36168-2 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 08 02:54:06 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

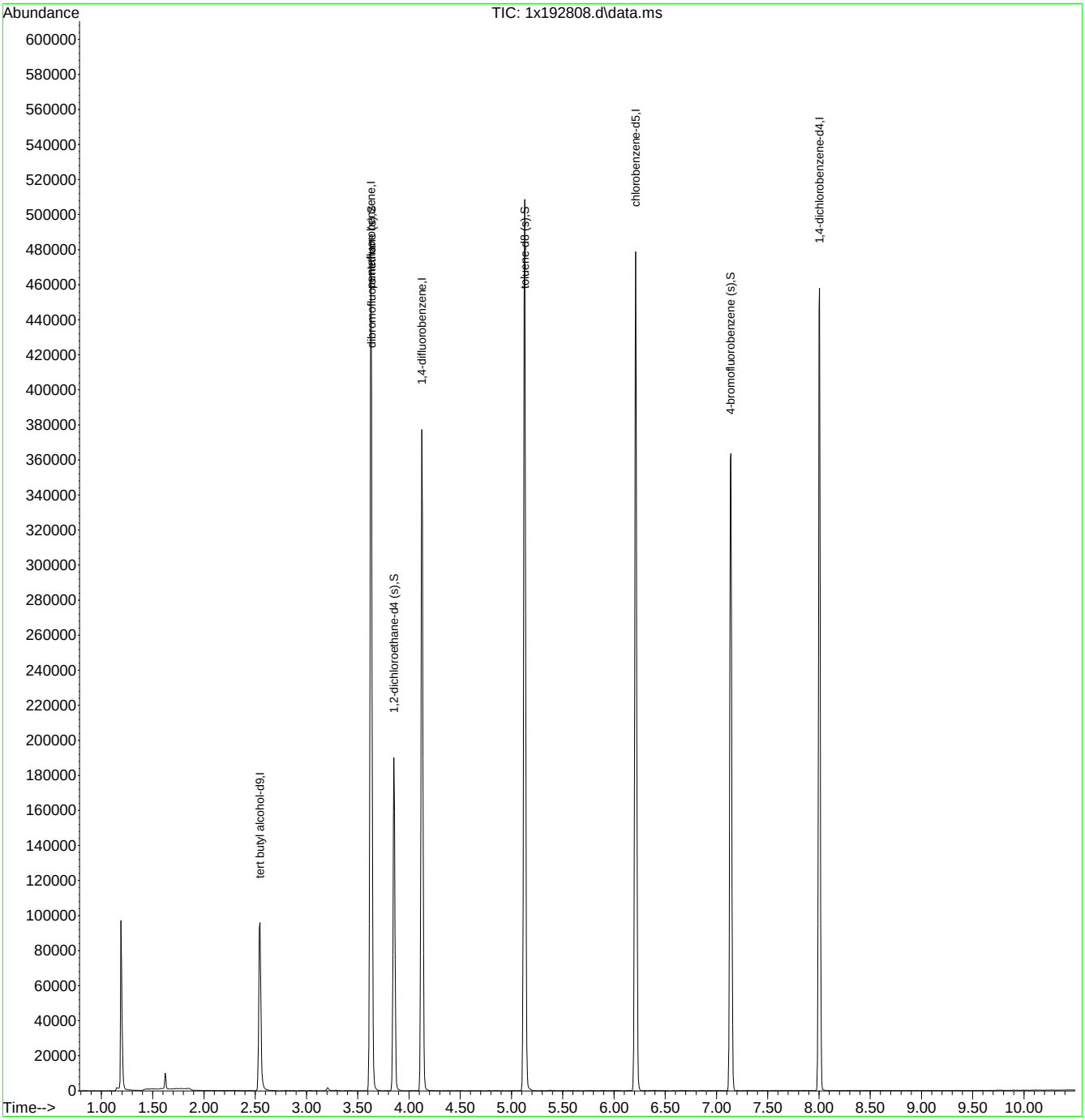
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.546	65	78428	500.00	ug/L	0.00
5) pentafluorobenzene	3.630	168	154458	50.00	ug/L	0.01
52) 1,4-difluorobenzene	4.126	114	221589	50.00	ug/L	0.01
73) chlorobenzene-d5	6.213	117	206594	50.00	ug/L	0.02
97) 1,4-dichlorobenzene-d4	8.006	152	90617	50.00	ug/L	0.02
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.635	113	78435	50.36	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.72%			
53) 1,2-dichloroethane-d4 (s)	3.854	65	92521	48.80	ug/L	0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.60%			
74) toluene-d8 (s)	5.129	98	249376	49.65	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.30%			
98) 4-bromofluorobenzene (s)	7.136	95	89017	49.42	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.84%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-08-2021\vx8350-rest of batch\
Data File : 1x192808.d
Acq On : 6 Dec 2021 8:33 pm
Operator : brittank
Sample : JD36168-2 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 08 02:54:06 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192797.d
Acq On : 6 Dec 2021 3:47 pm
Operator : brittank
Sample : JD36168-3 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:48:49 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.546	65	73105	500.00	ug/L	0.00
5) pentafluorobenzene	3.630	168	136168	50.00	ug/L	0.01
52) 1,4-difluorobenzene	4.131	114	202996	50.00	ug/L	0.02
73) chlorobenzene-d5	6.218	117	200507	50.00	ug/L	0.02
97) 1,4-dichlorobenzene-d4	8.006	152	87956	50.00	ug/L	0.02
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.635	113	74427	54.20	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 108.40%			
53) 1,2-dichloroethane-d4 (s)	3.859	65	85570	49.27	ug/L	0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.54%			
74) toluene-d8 (s)	5.129	98	232805	47.75	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.50%			
98) 4-bromofluorobenzene (s)	7.141	95	87876	50.26	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.52%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

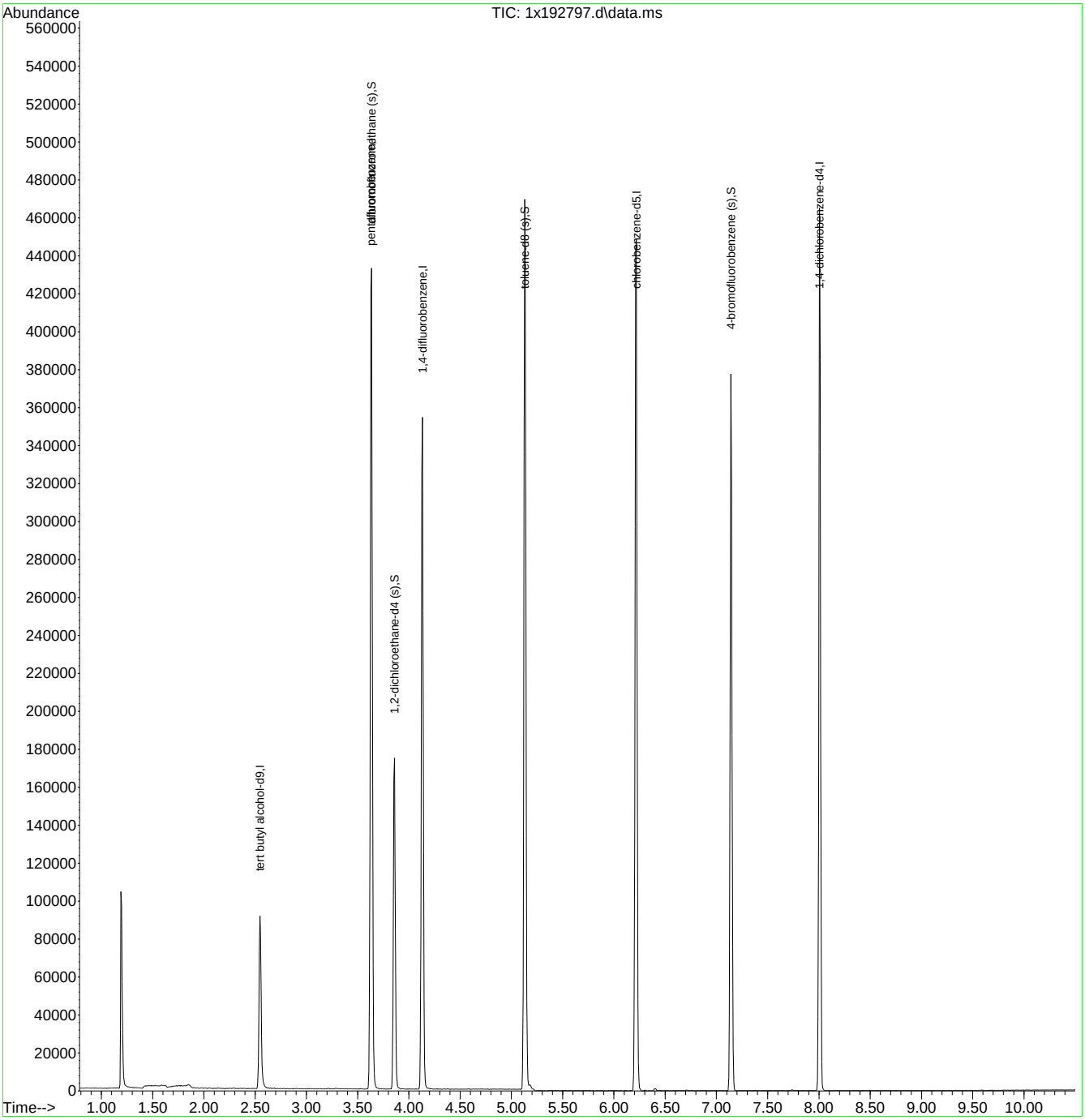
7.1.14

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192797.d
Acq On : 6 Dec 2021 3:47 pm
Operator : brittank
Sample : JD36168-3 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:48:49 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192803.d
Acq On : 6 Dec 2021 6:23 pm
Operator : brittank
Sample : JD36168-4 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:50:03 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

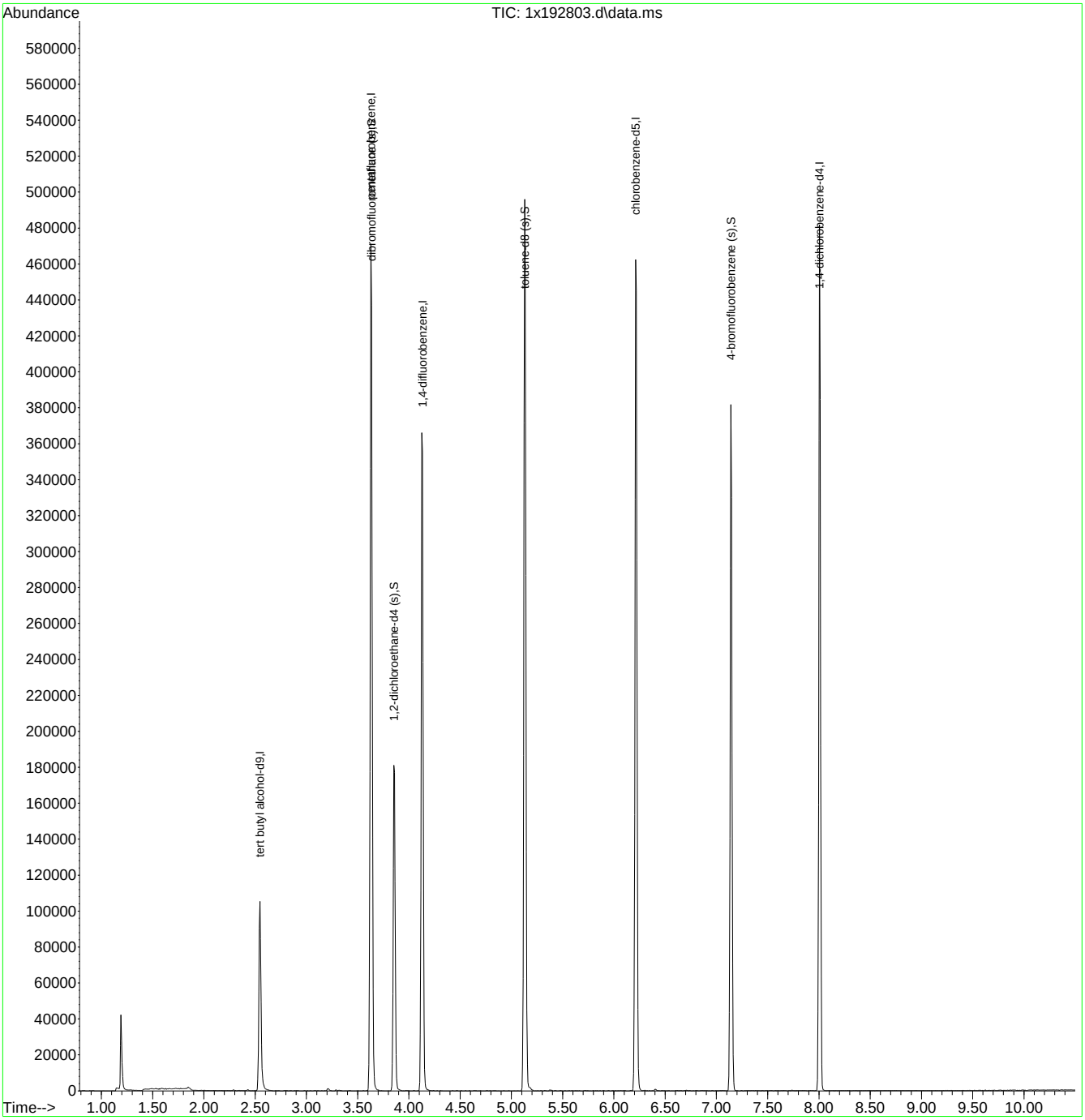
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.546	65	82954	500.00	ug/L	0.00
5) pentafluorobenzene	3.630	168	151072	50.00	ug/L	0.01
52) 1,4-difluorobenzene	4.131	114	220169	50.00	ug/L	0.02
73) chlorobenzene-d5	6.213	117	206768	50.00	ug/L	0.02
97) 1,4-dichlorobenzene-d4	8.006	152	91261	50.00	ug/L	0.02
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.635	113	78530	51.55	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.10%			
53) 1,2-dichloroethane-d4 (s)	3.854	65	92362	49.03	ug/L	0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.06%			
74) toluene-d8 (s)	5.129	98	249204	49.57	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.14%			
98) 4-bromofluorobenzene (s)	7.141	95	90582	49.94	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.88%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192803.d
Acq On : 6 Dec 2021 6:23 pm
Operator : brittank
Sample : JD36168-4 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:50:03 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192804.d
Acq On : 6 Dec 2021 6:49 pm
Operator : brittank
Sample : JD36168-5 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:50:30 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

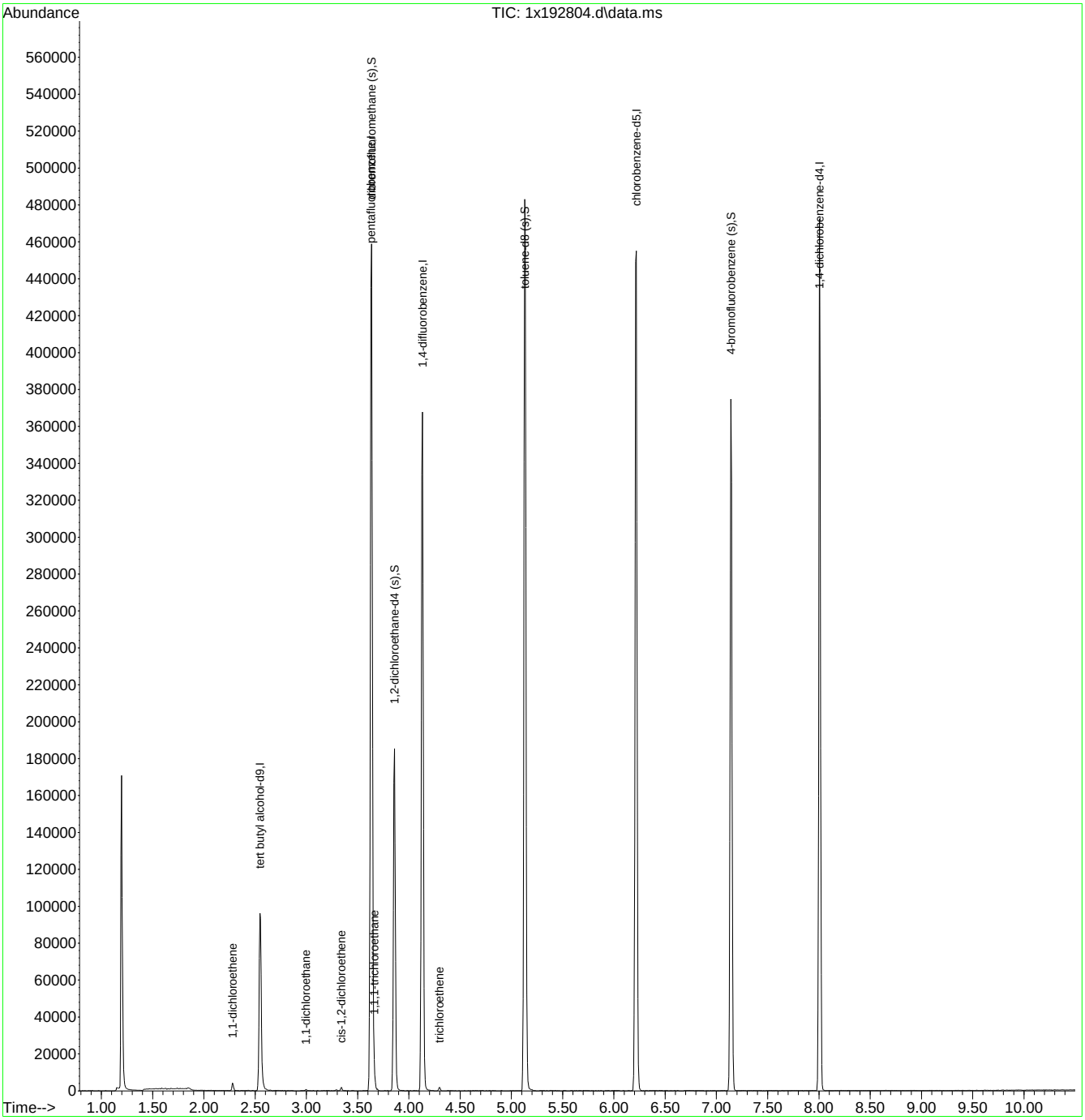
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.546	65	78419	500.00	ug/L	0.00
5) pentafluorobenzene	3.630	168	148459	50.00	ug/L	0.01
52) 1,4-difluorobenzene	4.131	114	216076	50.00	ug/L	0.02
73) chlorobenzene-d5	6.218	117	203518	50.00	ug/L	0.02
97) 1,4-dichlorobenzene-d4	8.006	152	89096	50.00	ug/L	0.02
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.635	113	77641	51.86	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.72%			
53) 1,2-dichloroethane-d4 (s)	3.859	65	90650	49.04	ug/L	0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.08%			
74) toluene-d8 (s)	5.129	98	244924	49.50	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.00%			
98) 4-bromofluorobenzene (s)	7.141	95	88716	50.10	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.20%			
Target Compounds						Qvalue
16) 1,1-dichloroethene	2.280	96	973	1.27	ug/L	98
30) 1,1-dichloroethane	2.995	63	660	0.42	ug/L	87
36) cis-1,2-dichloroethene	3.342	96	547	0.63	ug/L	82
45) 1,1,1-trichloroethane	3.662	97	3251	2.27	ug/L #	78
61) trichloroethene	4.297	130	509	0.50	ug/L	95

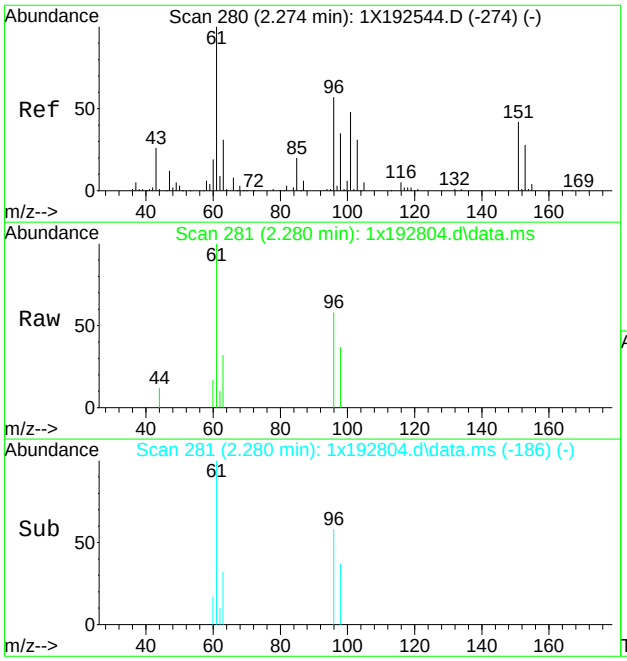
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192804.d
Acq On : 6 Dec 2021 6:49 pm
Operator : brittank
Sample : JD36168-5 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:50:30 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

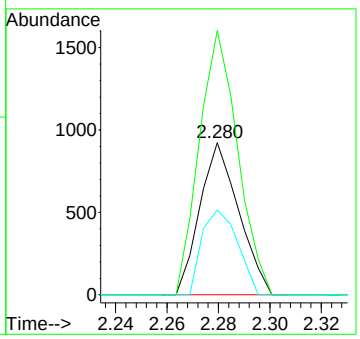


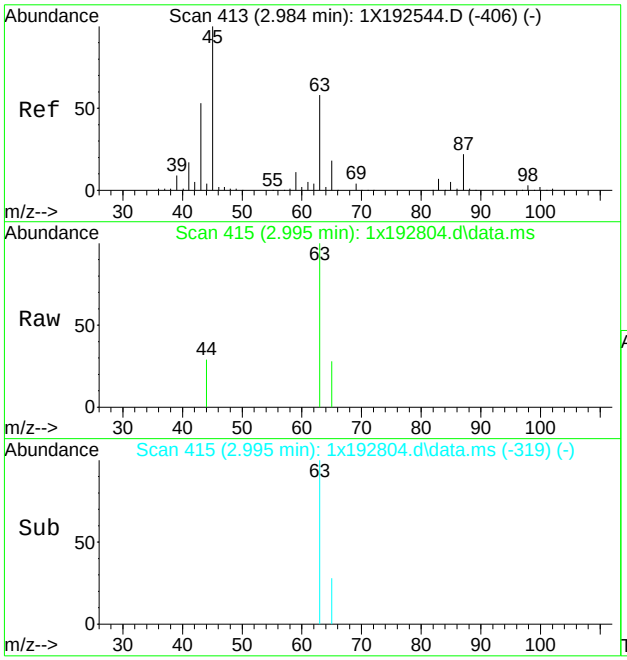


#16
1,1-dichloroethene
Concen: 1.27 ug/L
RT: 2.280 min Scan# 281
Delta R.T. 0.005 min
Lab File: 1x192804.d
Acq: 6 Dec 2021 6:49 pm

Tgt Ion: 96 Resp: 973

Ion	Ratio	Lower	Upper
96	100		
61	173.7	146.8	206.8
63	55.8	25.5	85.5

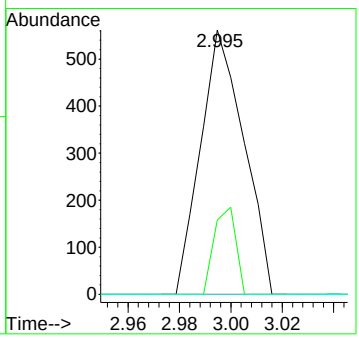


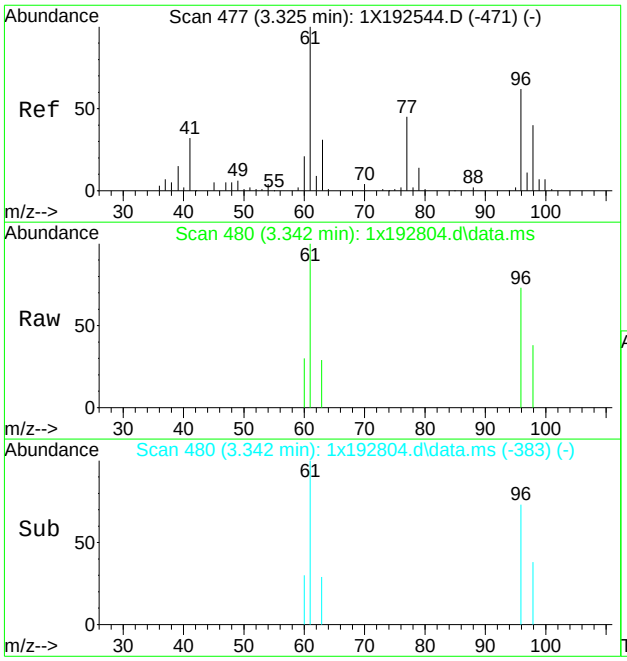


#30
1,1-dichloroethane
Concen: 0.42 ug/L
RT: 2.995 min Scan# 415
Delta R.T. 0.011 min
Lab File: 1x192804.d
Acq: 6 Dec 2021 6:49 pm

Tgt Ion: 63 Resp: 660

Ion	Ratio	Lower	Upper
63	100		
65	28.1	0.9	60.9
83	0.0	0.0	42.5

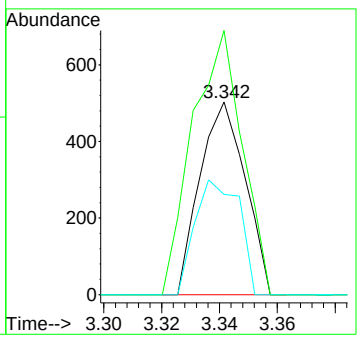


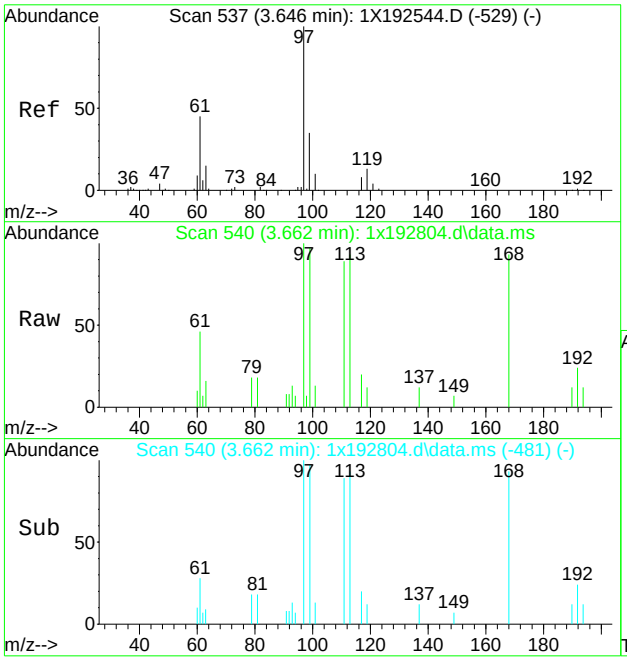


#36
cis-1,2-dichloroethene
Concen: 0.63 ug/L
RT: 3.342 min Scan# 480
Delta R.T. 0.016 min
Lab File: 1x192804.d
Acq: 6 Dec 2021 6:49 pm

Tgt Ion: 96 Resp: 547

Ion	Ratio	Lower	Upper
96	100		
61	137.2	131.2	191.2
98	52.1	34.7	94.7

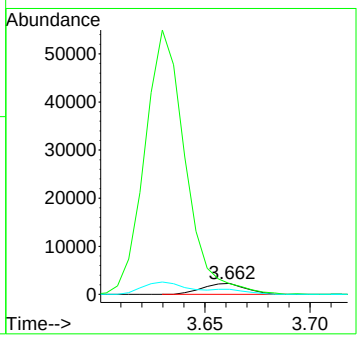


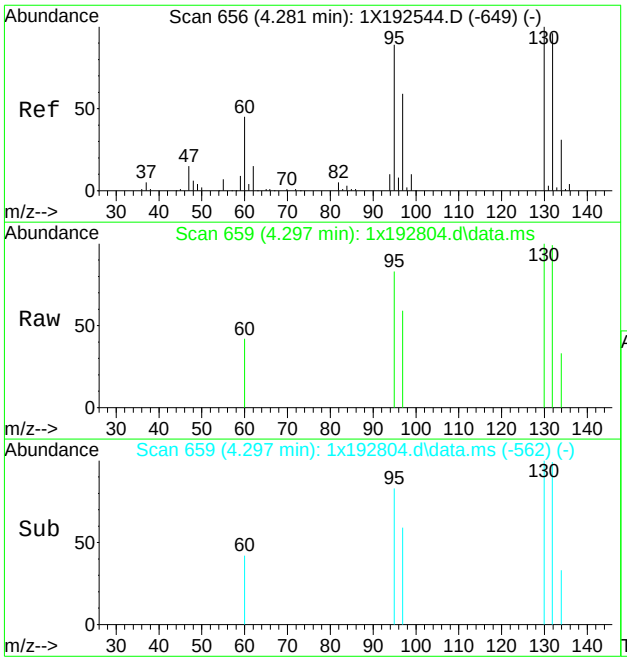


#45
1,1,1-trichloroethane
Concen: 2.27 ug/L
RT: 3.662 min Scan# 540
Delta R.T. 0.016 min
Lab File: 1x192804.d
Acq: 6 Dec 2021 6:49 pm

Tgt Ion: 97 Resp: 3251

Ion	Ratio	Lower	Upper
97	100		
99	97.4	37.2	97.2#
61	46.2	16.0	76.0

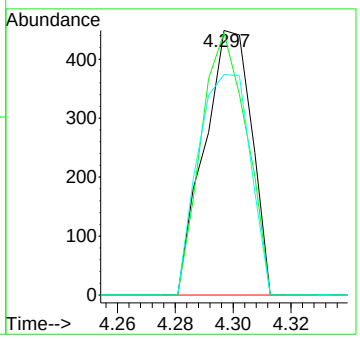




#61
trichloroethene
Concen: 0.50 ug/L
RT: 4.297 min Scan# 659
Delta R.T. 0.016 min
Lab File: 1x192804.d
Acq: 6 Dec 2021 6:49 pm

Tgt Ion:130 Resp: 509

Ion	Ratio	Lower	Upper
130	100		
132	99.1	65.5	125.5
95	83.3	58.7	118.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192805.d
Acq On : 6 Dec 2021 7:15 pm
Operator : brittank
Sample : JD36168-6 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:50:49 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

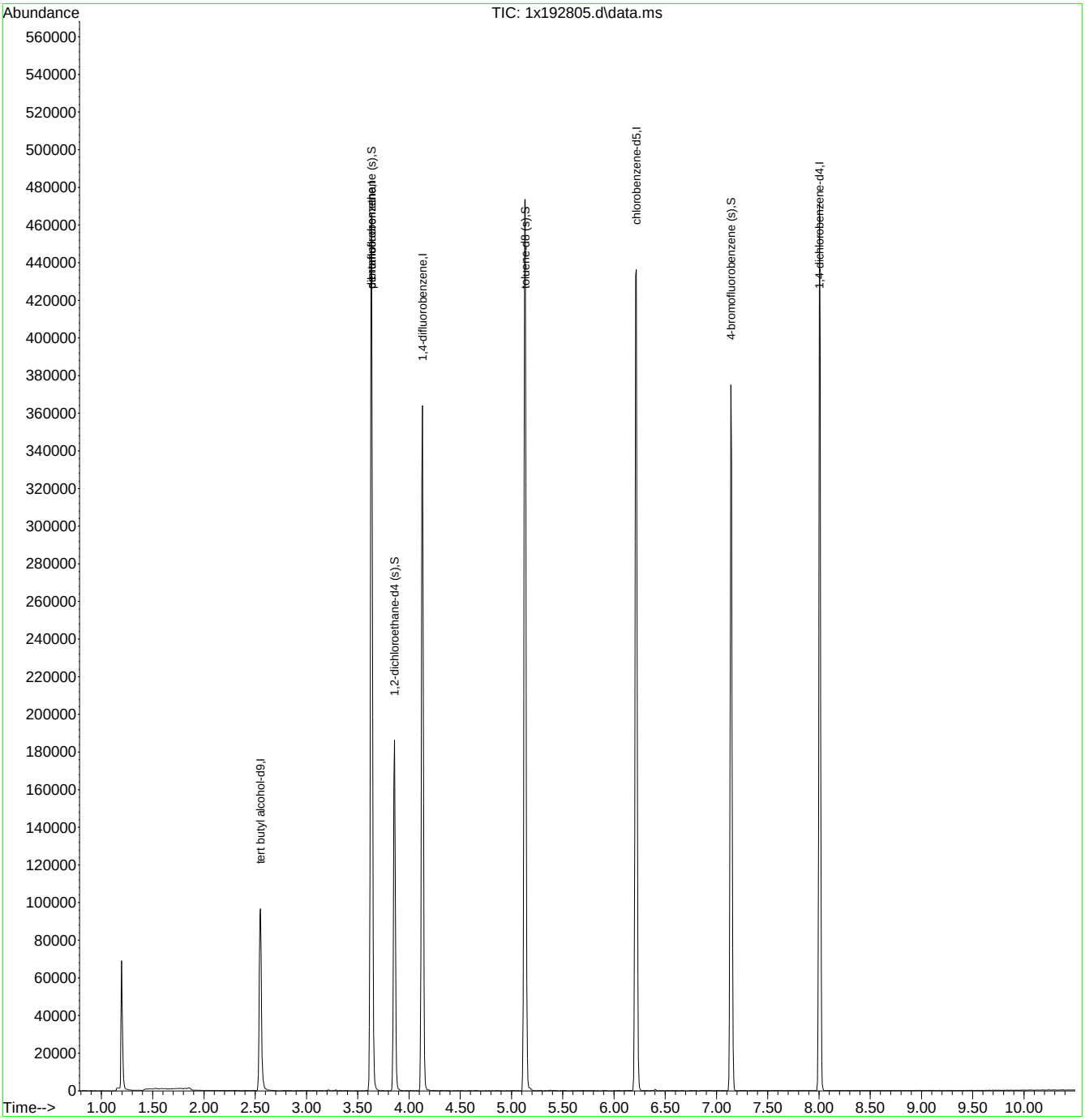
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.551	65	79739	500.00	ug/L	0.00
5) pentafluorobenzene	3.635	168	148864	50.00	ug/L	0.02
52) 1,4-difluorobenzene	4.131	114	214407	50.00	ug/L	0.02
73) chlorobenzene-d5	6.218	117	201765	50.00	ug/L	0.02
97) 1,4-dichlorobenzene-d4	8.006	152	88588	50.00	ug/L	0.02
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.635	113	76663	51.07	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.14%			
53) 1,2-dichloroethane-d4 (s)	3.859	65	90369	49.26	ug/L	0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.52%			
74) toluene-d8 (s)	5.135	98	242711	49.48	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.96%			
98) 4-bromofluorobenzene (s)	7.141	95	87717	49.82	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.64%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192805.d
Acq On : 6 Dec 2021 7:15 pm
Operator : brittank
Sample : JD36168-6 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:50:49 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\voa-gcms\complete\2021\dayton 202112\12-07-2021\davem1\v1x8350-partial\
Data File : 1x192793.d
Acq On : 6 Dec 2021 1:58 pm
Operator : brittank
Sample : JD36168-7 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:46:58 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

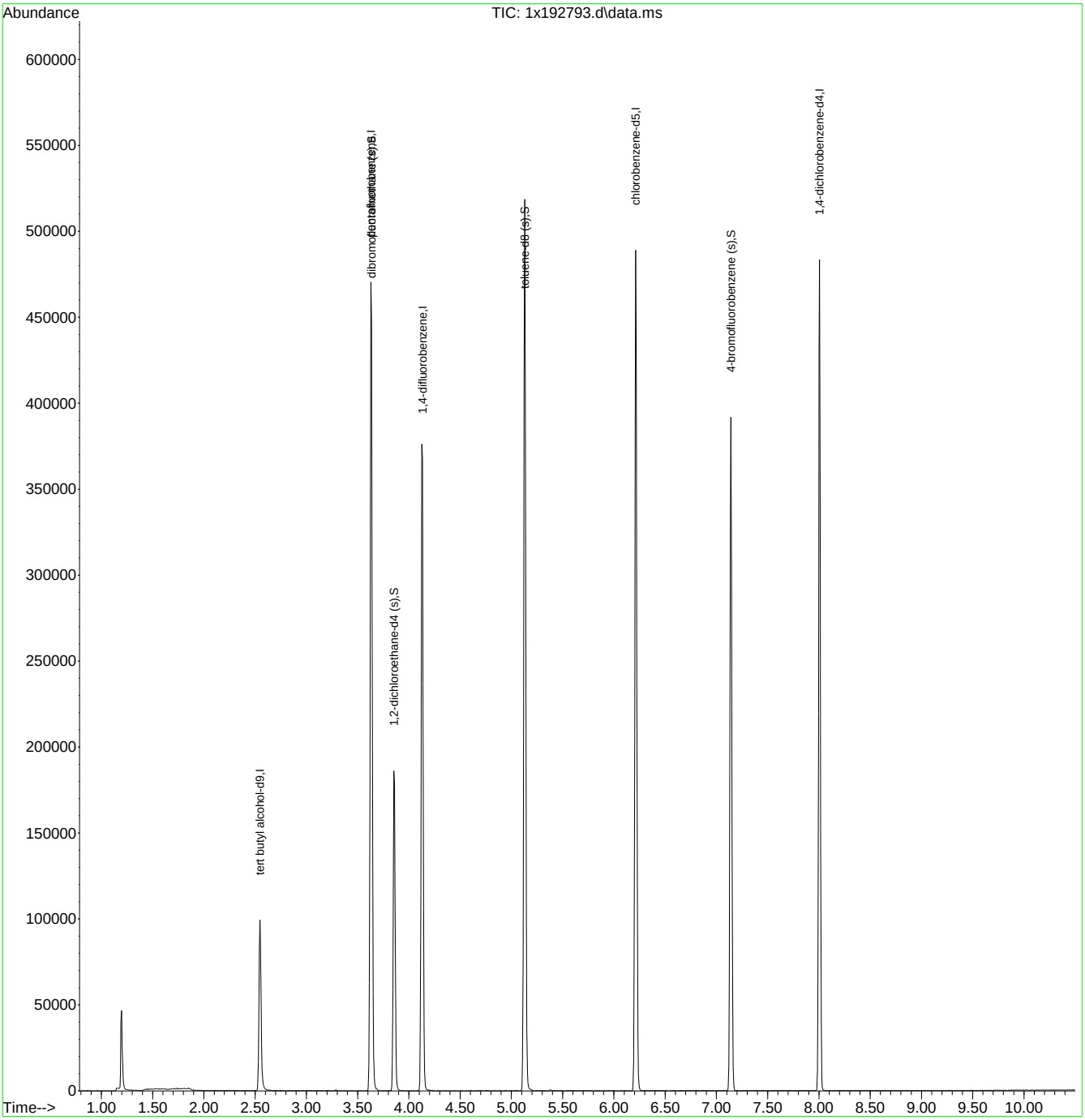
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.546	65	78412	500.00	ug/L	0.00
5) pentafluorobenzene	3.630	168	154105	50.00	ug/L	0.01
52) 1,4-difluorobenzene	4.131	114	223448	50.00	ug/L	0.02
73) chlorobenzene-d5	6.213	117	211055	50.00	ug/L	0.02
97) 1,4-dichlorobenzene-d4	8.006	152	93372	50.00	ug/L	0.02
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.635	113	79668	51.27	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.54%			
53) 1,2-dichloroethane-d4 (s)	3.854	65	93966	49.15	ug/L	0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.30%			
74) toluene-d8 (s)	5.129	98	253422	49.39	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.78%			
98) 4-bromofluorobenzene (s)	7.141	95	92701	49.95	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.90%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\voa-gcms\complete\2021\dayton 202112\12-07-2021\davem1\v1x8350-partial\
Data File : 1x192793.d
Acq On : 6 Dec 2021 1:58 pm
Operator : brittank
Sample : JD36168-7 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:46:58 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192796.d
Acq On : 6 Dec 2021 3:20 pm
Operator : brittank
Sample : JD36168-8 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:48:26 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

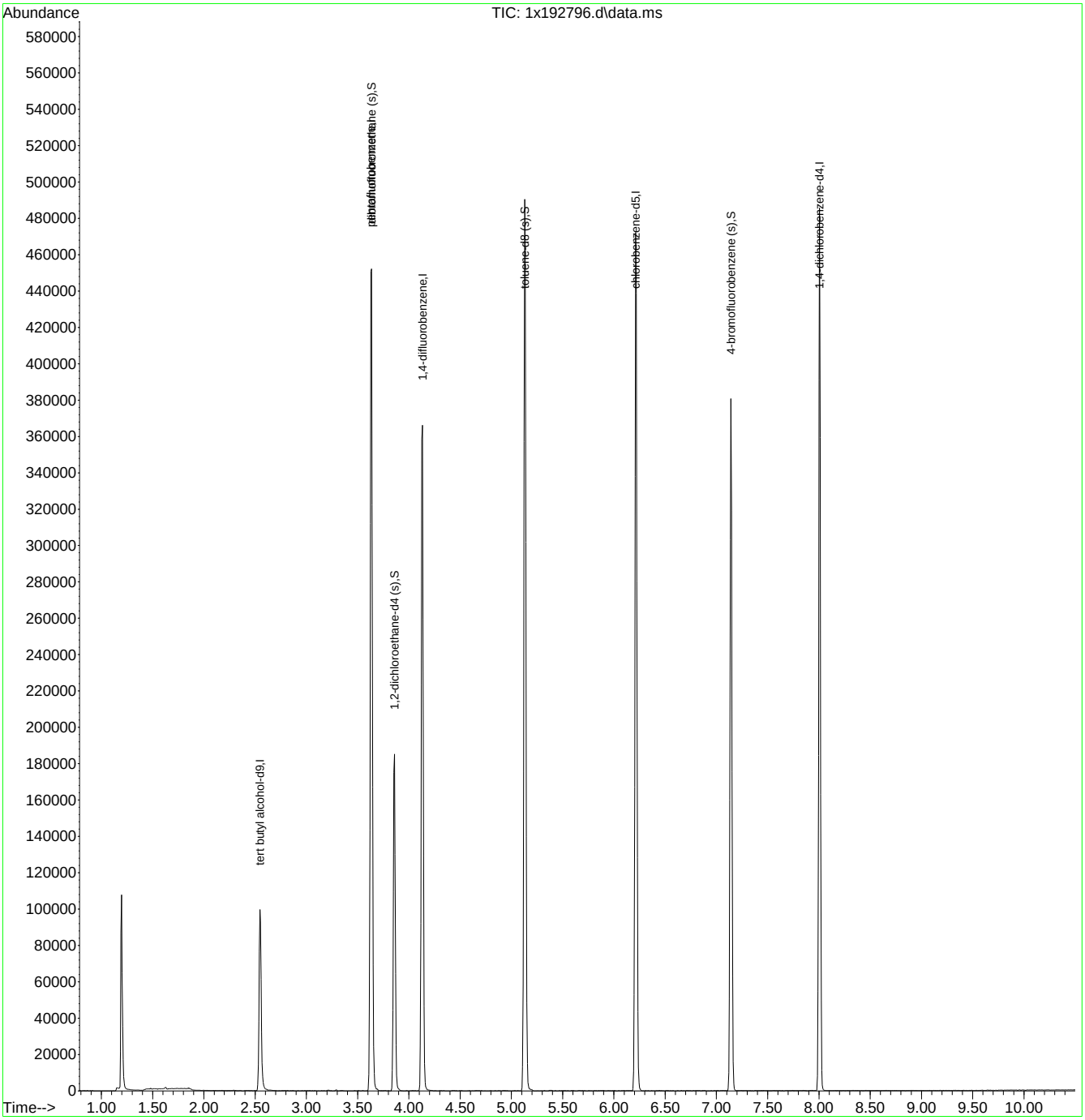
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.546	65	80889	500.00	ug/L	0.00
5) pentafluorobenzene	3.630	168	149254	50.00	ug/L	0.01
52) 1,4-difluorobenzene	4.131	114	218929	50.00	ug/L	0.02
73) chlorobenzene-d5	6.213	117	206848	50.00	ug/L	0.02
97) 1,4-dichlorobenzene-d4	8.006	152	91196	50.00	ug/L	0.02
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.635	113	78018	51.84	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.68%			
53) 1,2-dichloroethane-d4 (s)	3.859	65	92934	49.62	ug/L	0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.24%			
74) toluene-d8 (s)	5.129	98	249231	49.56	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.12%			
98) 4-bromofluorobenzene (s)	7.141	95	90074	49.69	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.38%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192796.d
Acq On : 6 Dec 2021 3:20 pm
Operator : brittank
Sample : JD36168-8 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:48:26 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192798.d
Acq On : 6 Dec 2021 4:13 pm
Operator : brittank
Sample : JD36168-9 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:49:11 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

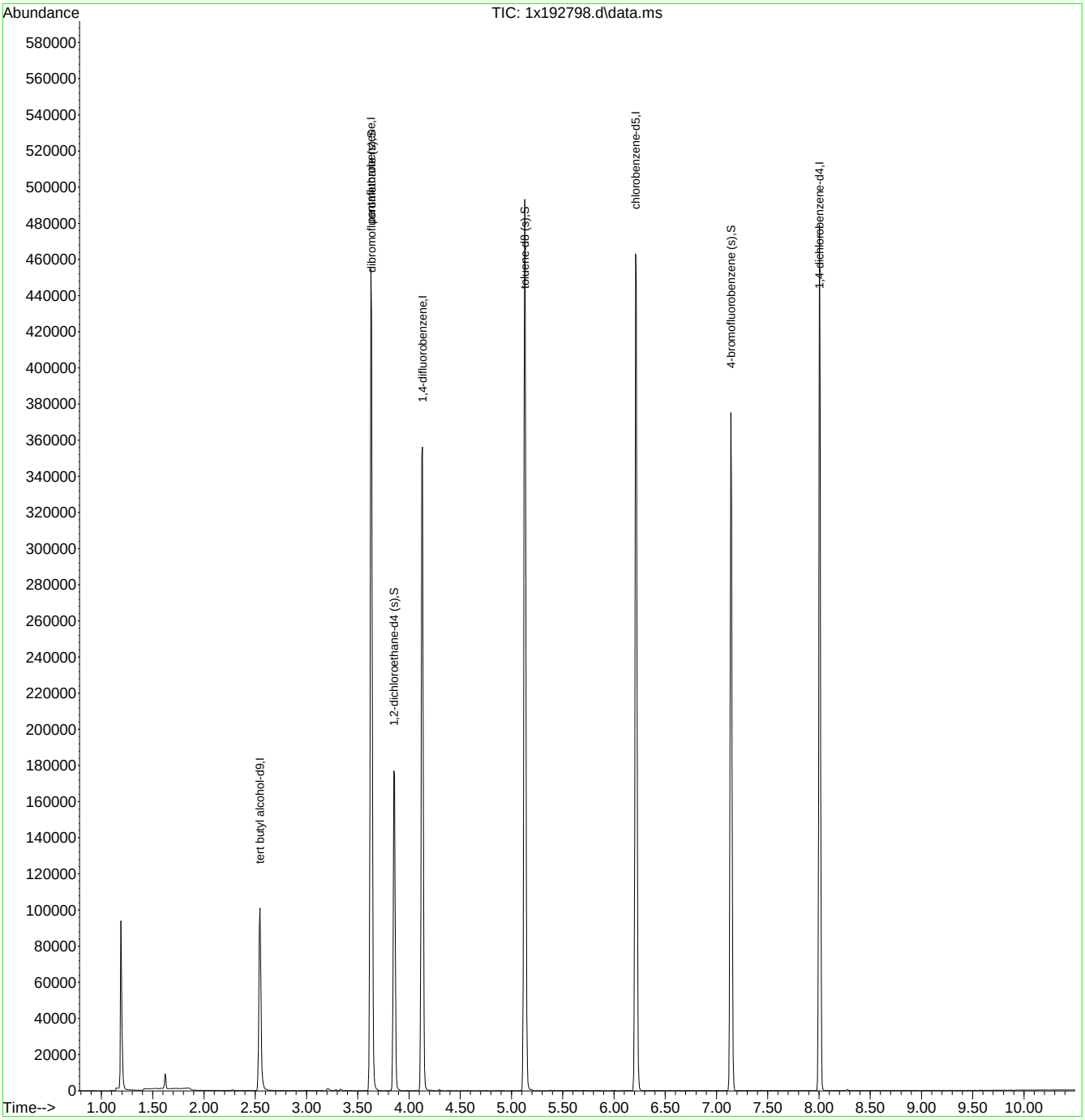
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.546	65	81072	500.00	ug/L	0.00
5) pentafluorobenzene	3.630	168	147190	50.00	ug/L	0.01
52) 1,4-difluorobenzene	4.131	114	213842	50.00	ug/L	0.02
73) chlorobenzene-d5	6.213	117	201191	50.00	ug/L	0.02
97) 1,4-dichlorobenzene-d4	8.006	152	89073	50.00	ug/L	0.02
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.635	113	77117	51.96	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.92%			
53) 1,2-dichloroethane-d4 (s)	3.854	65	90538	49.49	ug/L	0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.98%			
74) toluene-d8 (s)	5.129	98	243173	49.71	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.42%			
98) 4-bromofluorobenzene (s)	7.141	95	88598	50.04	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.08%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192798.d
Acq On : 6 Dec 2021 4:13 pm
Operator : brittank
Sample : JD36168-9 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:49:11 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192806.d
Acq On : 6 Dec 2021 7:41 pm
Operator : brittank
Sample : JD36168-10 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:51:18 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

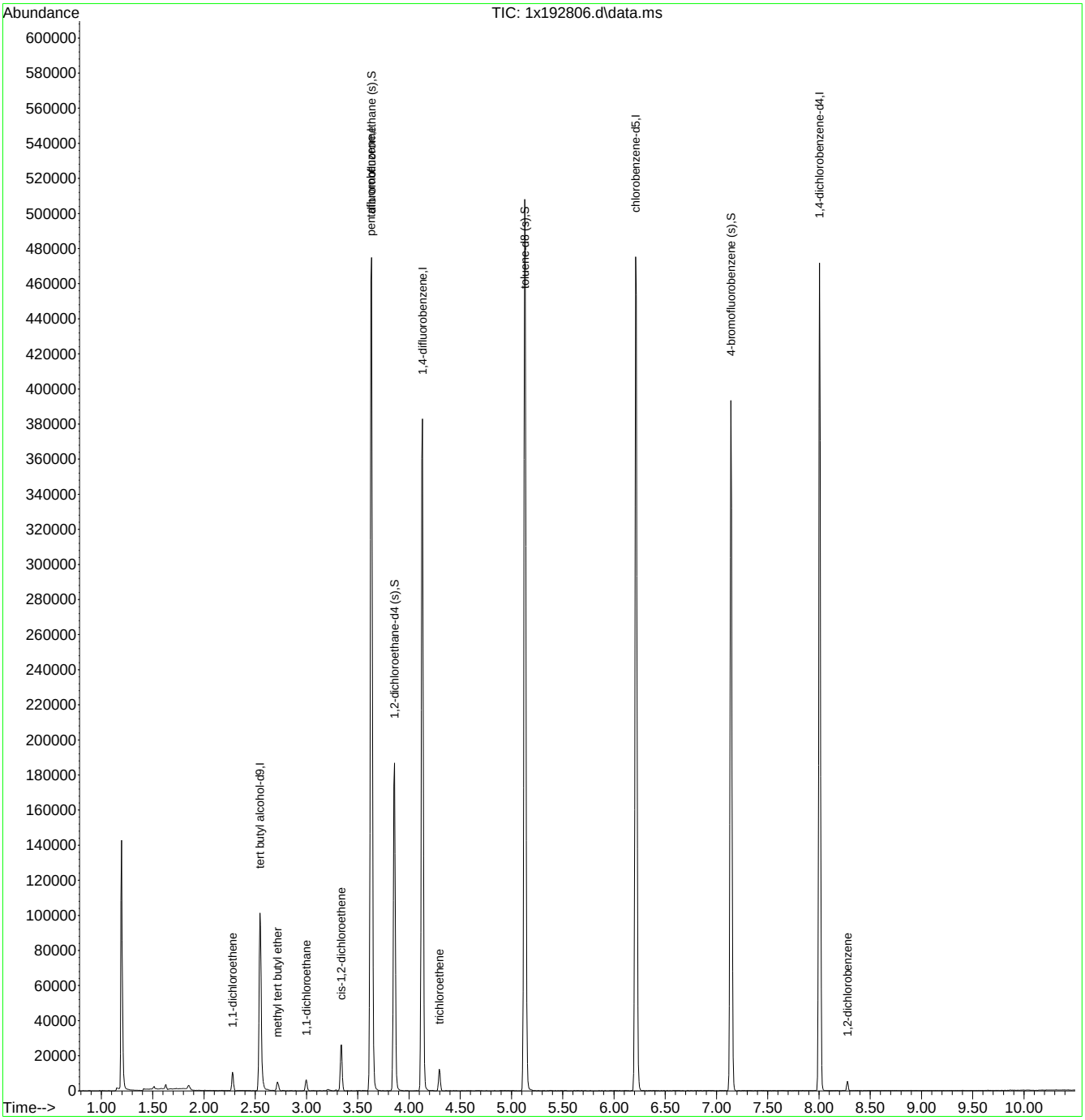
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.546	65	82078	500.00	ug/L	0.00
5) pentafluorobenzene	3.630	168	155707	50.00	ug/L	0.01
52) 1,4-difluorobenzene	4.131	114	224215	50.00	ug/L	0.02
73) chlorobenzene-d5	6.213	117	210817	50.00	ug/L	0.02
97) 1,4-dichlorobenzene-d4	8.006	152	92617	50.00	ug/L	0.02
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.635	113	79599	50.69	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.38%			
53) 1,2-dichloroethane-d4 (s)	3.859	65	93567	48.78	ug/L	0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.56%			
74) toluene-d8 (s)	5.129	98	254529	49.66	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.32%			
98) 4-bromofluorobenzene (s)	7.141	95	91887	49.91	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.82%			
Target Compounds						Qvalue
16) 1,1-dichloroethene	2.279	96	2591	3.22	ug/L	91
24) methyl tert butyl ether	2.717	73	3478	1.49	ug/L	97
30) 1,1-dichloroethane	3.000	63	4585	2.77	ug/L	93
36) cis-1,2-dichloroethene	3.341	96	7714	8.41	ug/L #	82
61) trichloroethene	4.297	130	3087	2.95	ug/L	90
113) 1,2-dichlorobenzene	8.278	146	1959	1.14	ug/L	95

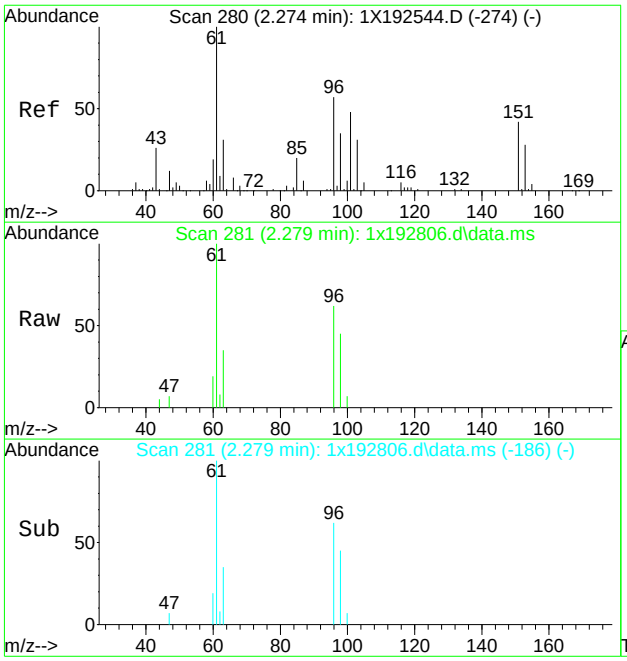
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192806.d
Acq On : 6 Dec 2021 7:41 pm
Operator : brittank
Sample : JD36168-10 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:51:18 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

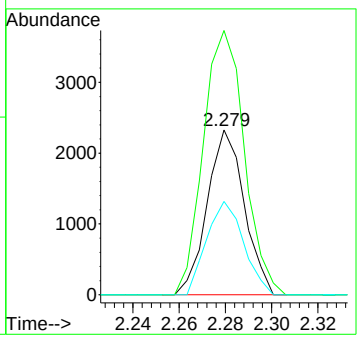


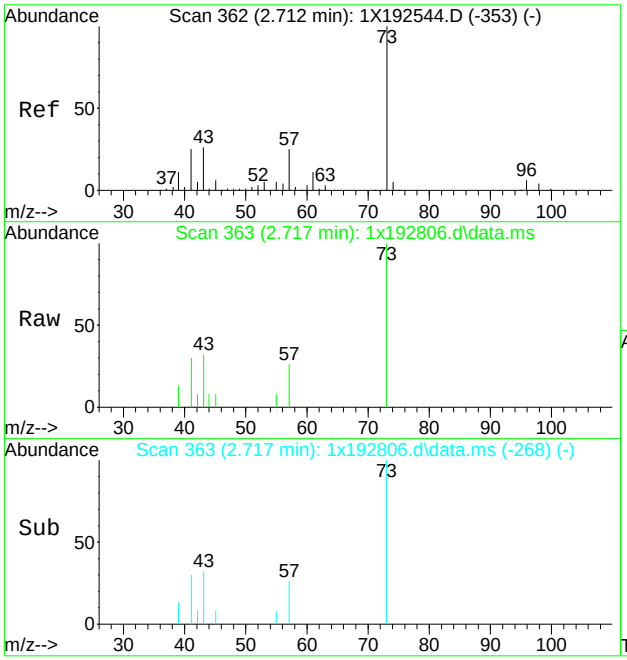


#16
1,1-dichloroethene
Concen: 3.22 ug/L
RT: 2.279 min Scan# 281
Delta R.T. 0.005 min
Lab File: 1x192806.d
Acq: 6 Dec 2021 7:41 pm

Tgt Ion: 96 Resp: 2591

Ion	Ratio	Lower	Upper
96	100		
61	160.5	146.8	206.8
63	56.7	25.5	85.5

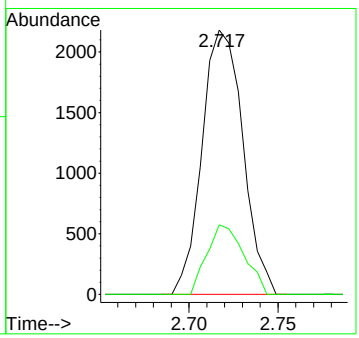


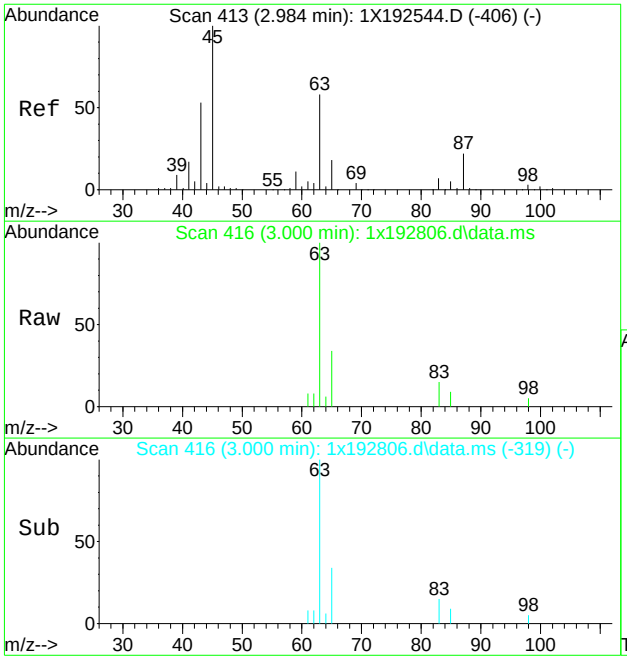


#24
methyl tert butyl ether
Concen: 1.49 ug/L
RT: 2.717 min Scan# 363
Delta R.T. 0.005 min
Lab File: 1x192806.d
Acq: 6 Dec 2021 7:41 pm

Tgt Ion: 73 Resp: 3478

Ion	Ratio	Lower	Upper
73	100		
57	26.3	0.0	54.6

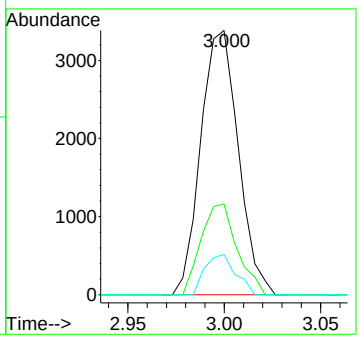


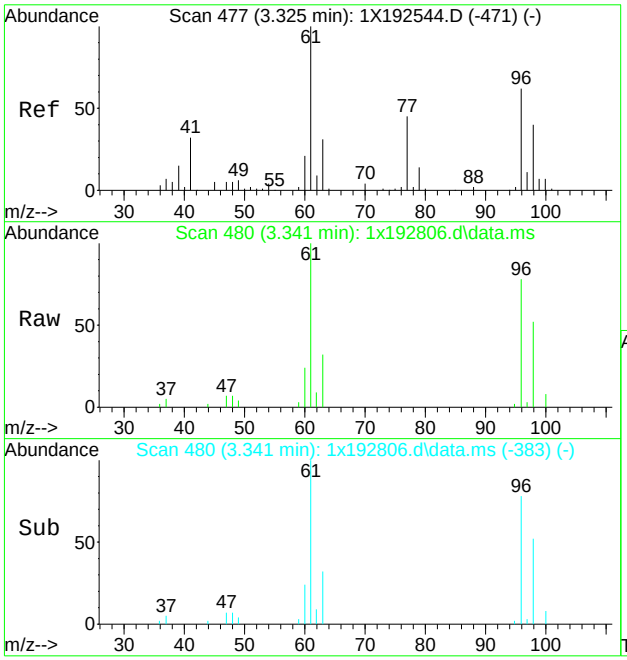


#30
1,1-dichloroethane
Concen: 2.77 ug/L
RT: 3.000 min Scan# 416
Delta R.T. 0.016 min
Lab File: 1x192806.d
Acq: 6 Dec 2021 7:41 pm

Tgt Ion: 63 Resp: 4585

Ion	Ratio	Lower	Upper
63	100		
65	34.4	0.9	60.9
83	15.3	0.0	42.5

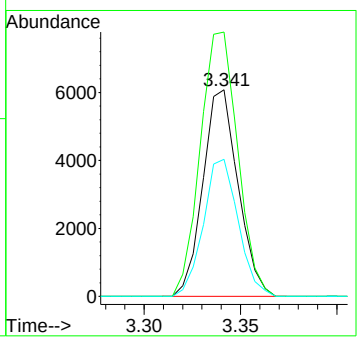


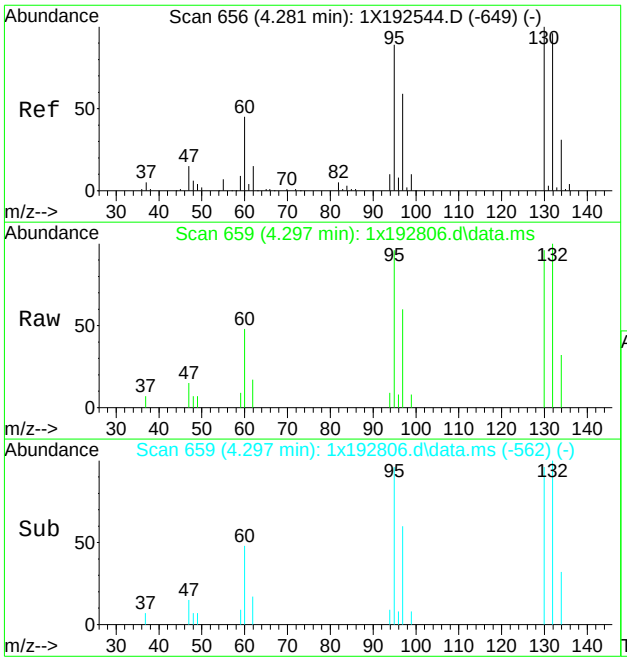


#36
cis-1,2-dichloroethene
Concen: 8.41 ug/L
RT: 3.341 min Scan# 480
Delta R.T. 0.016 min
Lab File: 1x192806.d
Acq: 6 Dec 2021 7:41 pm

Tgt Ion: 96 Resp: 7714

Ion	Ratio	Lower	Upper
96	100		
61	128.0	131.2	191.2#
98	66.3	34.7	94.7

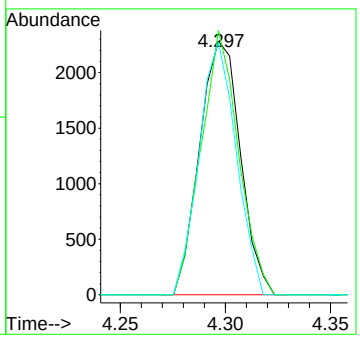


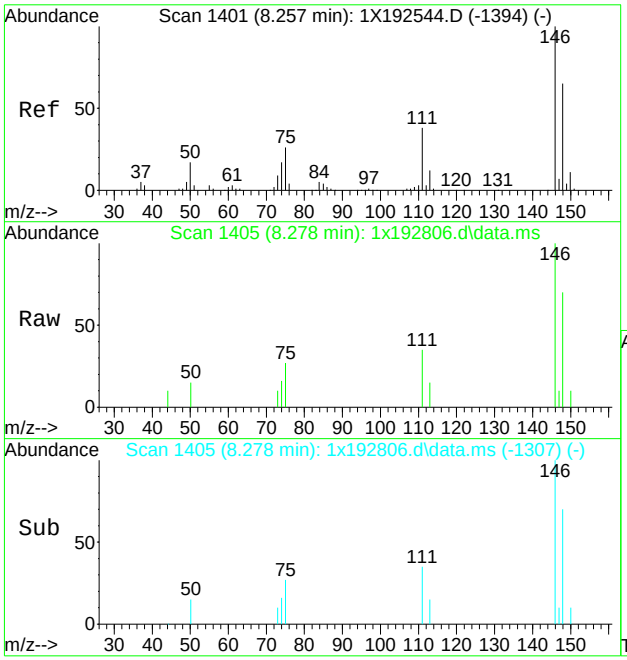


#61
trichloroethene
Concen: 2.95 ug/L
RT: 4.297 min Scan# 659
Delta R.T. 0.016 min
Lab File: 1x192806.d
Acq: 6 Dec 2021 7:41 pm

Tgt Ion:130 Resp: 3087

Ion	Ratio	Lower	Upper
130	100		
132	104.2	65.5	125.5
95	99.7	58.7	118.7

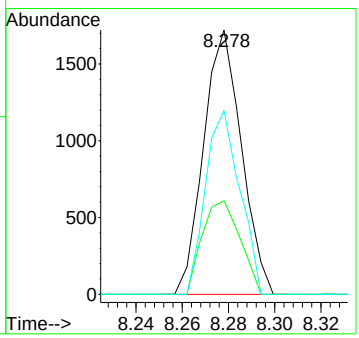




#113
1,2-dichlorobenzene
Concen: 1.14 ug/L
RT: 8.278 min Scan# 1405
Delta R.T. 0.021 min
Lab File: 1x192806.d
Acq: 6 Dec 2021 7:41 pm

Tgt Ion:146 Resp: 1959

Ion	Ratio	Lower	Upper
146	100		
111	35.4	8.0	68.0
148	69.5	34.7	94.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-08-2021\vx8350-rest of batch\
Data File : 1x192807.d
Acq On : 6 Dec 2021 8:07 pm
Operator : brittank
Sample : JD36168-11 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 08 02:52:30 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

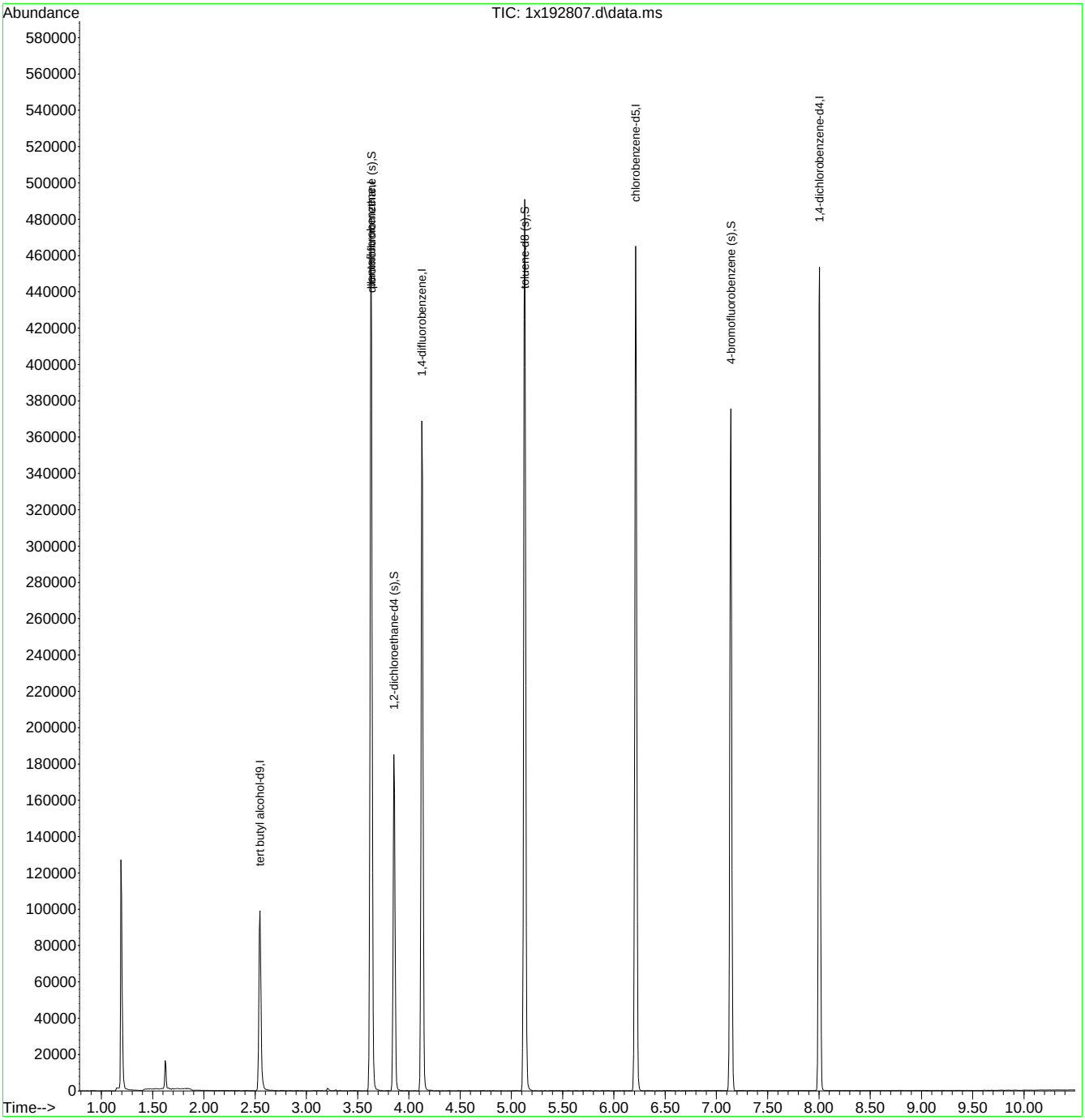
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.546	65	79256	500.00	ug/L	0.00
5) pentafluorobenzene	3.630	168	150577	50.00	ug/L	0.01
52) 1,4-difluorobenzene	4.126	114	217358	50.00	ug/L	0.01
73) chlorobenzene-d5	6.213	117	204385	50.00	ug/L	0.02
97) 1,4-dichlorobenzene-d4	8.006	152	89202	50.00	ug/L	0.02
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.635	113	77411	50.98	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.96%			
53) 1,2-dichloroethane-d4 (s)	3.854	65	91115	49.00	ug/L	0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.00%			
74) toluene-d8 (s)	5.129	98	245251	49.35	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.70%			
98) 4-bromofluorobenzene (s)	7.141	95	88789	50.08	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.16%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-08-2021\vx8350-rest of batch\
Data File : 1x192807.d
Acq On : 6 Dec 2021 8:07 pm
Operator : brittank
Sample : JD36168-11 Inst : ACC-VOA-MSX
Misc : MS55394,V1X8350,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 08 02:52:30 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192791.d
Acq On : 6 Dec 2021 1:31 pm
Operator : brittank
Sample : mb Inst : ACC-VOA-MSX
Misc : MS46075,V1X8350,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:31:25 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

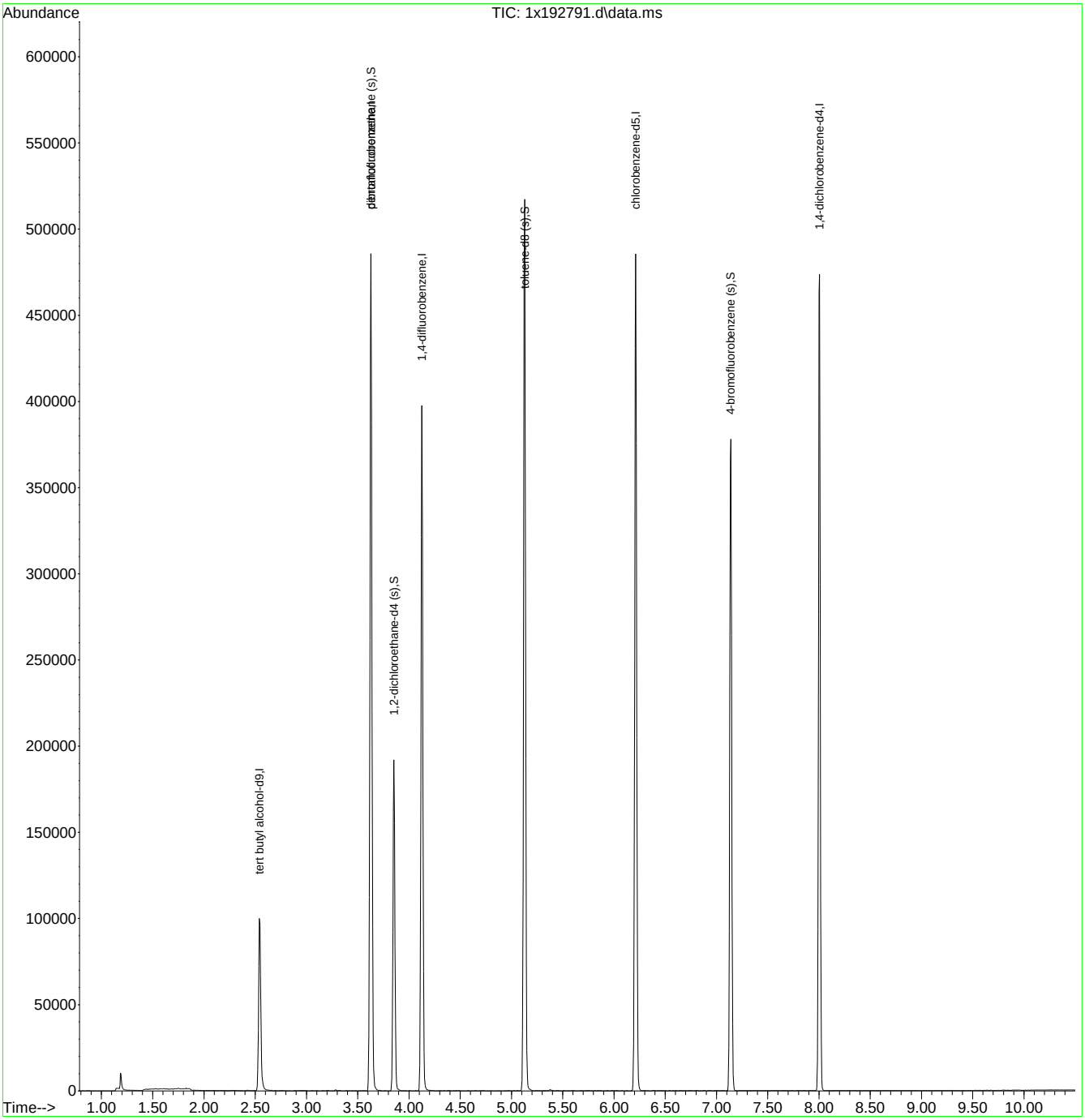
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.541	65	81601	500.00	ug/L	0.00
5) pentafluorobenzene	3.630	168	155720	50.00	ug/L	0.01
52) 1,4-difluorobenzene	4.126	114	226980	50.00	ug/L	0.01
73) chlorobenzene-d5	6.213	117	213826	50.00	ug/L	0.02
97) 1,4-dichlorobenzene-d4	8.006	152	95400	50.00	ug/L	0.02
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.630	113	80901	51.52	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.04%			
53) 1,2-dichloroethane-d4 (s)	3.854	65	94897	48.87	ug/L	0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.74%			
74) toluene-d8 (s)	5.129	98	256805	49.40	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.80%			
98) 4-bromofluorobenzene (s)	7.136	95	93019	49.06	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.12%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\12-07-21\v1x8350-partial\
Data File : 1x192791.d
Acq On : 6 Dec 2021 1:31 pm
Operator : brittank
Sample : mb Inst : ACC-VOA-MSX
Misc : MS46075,V1X8350,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 07 05:31:25 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7262\
Data File : 3A167332.D
Acq On : 13 Dec 2021 11:44 am
Operator : BridgetK
Sample : mb
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 13 13:07:07 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

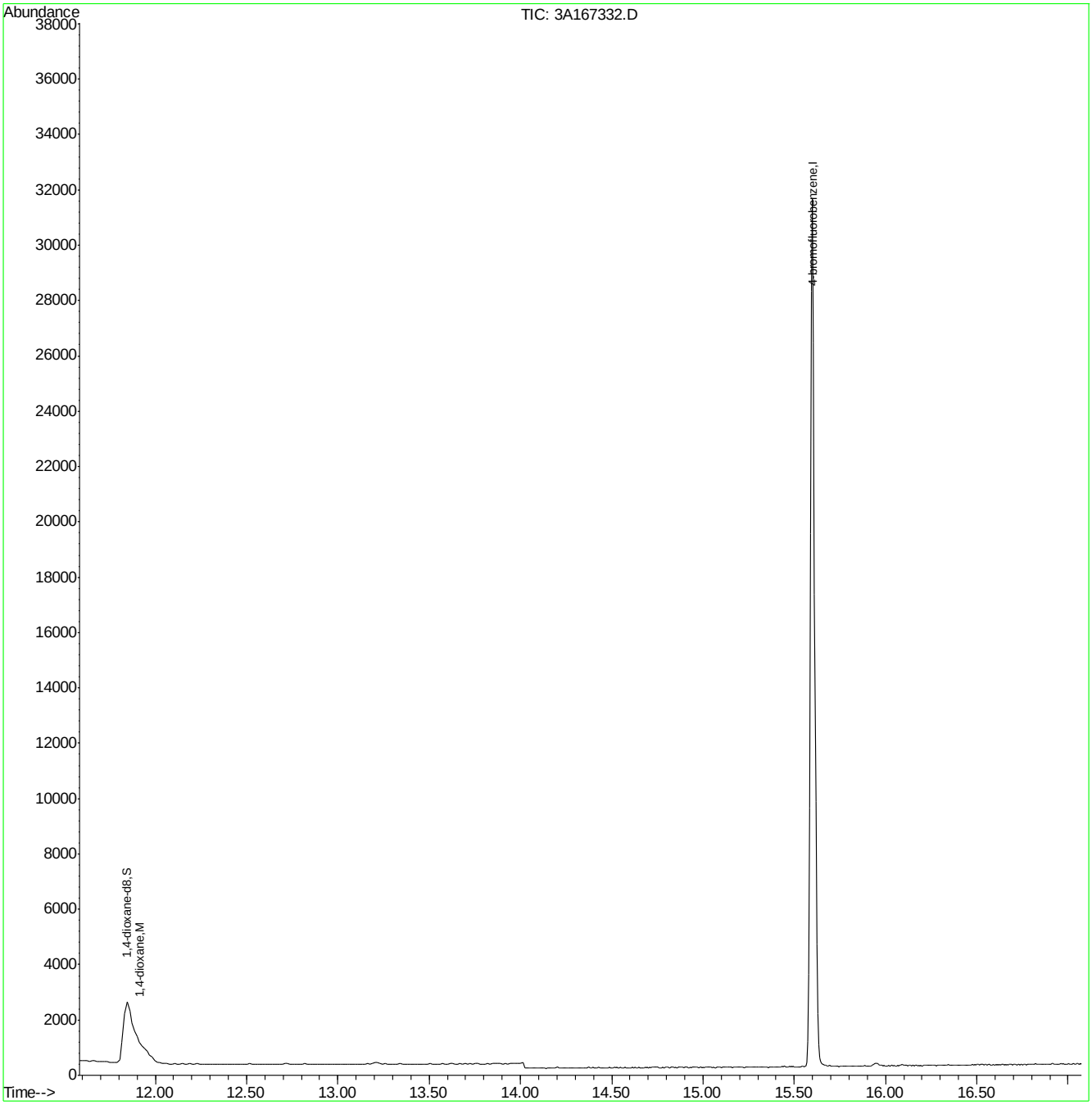
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	17256	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6653	13.92	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 139.20%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	142	0.26	ug/L	78

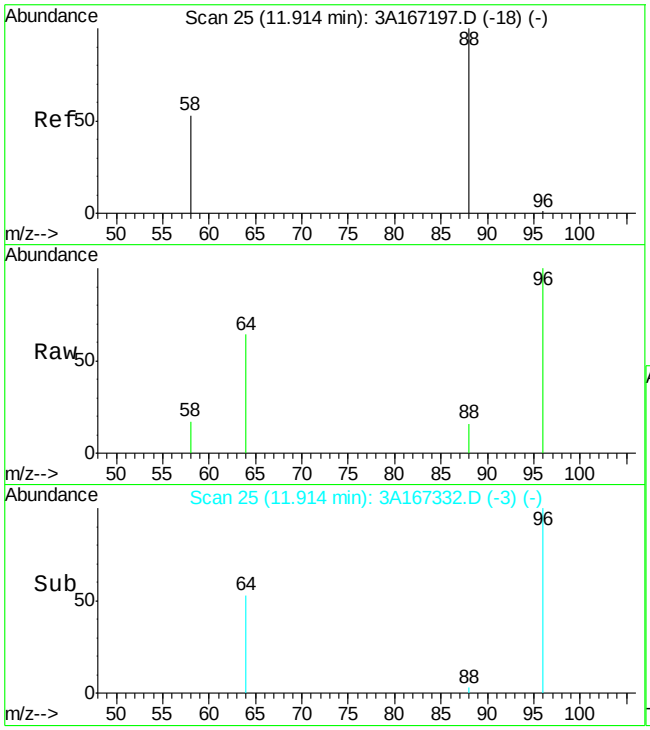
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7262\
Data File : 3A167332.D
Acq On : 13 Dec 2021 11:44 am
Operator : BridgetK
Sample : mb
Misc : MS55395,V3A7262,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 13 13:07:07 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

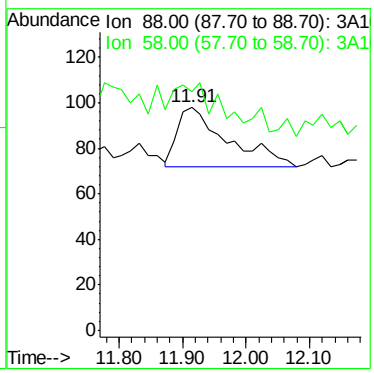




#3
1,4-dioxane
Concen: 0.26 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167332.D
Acq: 13 Dec 2021 11:44 am

Tgt Ion: 88 Resp: 142

Ion	Ratio	Lower	Upper
88	100		
58	76.9	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7265\
Data File : 3A167393.D
Acq On : 16 Dec 2021 11:58 am
Operator : BridgetK
Sample : mb
Misc : MS55474,V3A7265,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 16 15:00:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

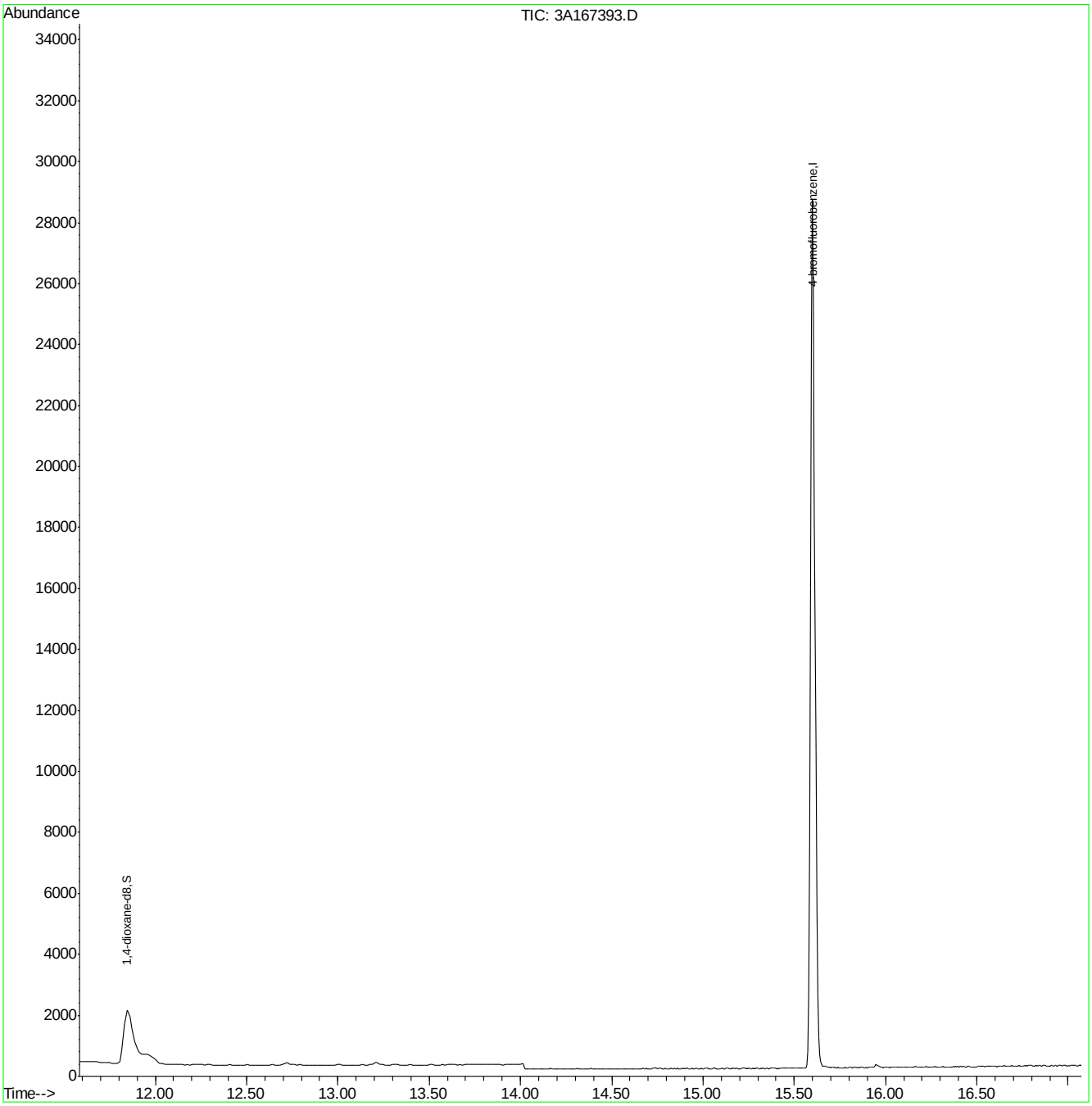
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15950	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4772	10.81	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 108.10%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7265\
Data File : 3A167393.D
Acq On : 16 Dec 2021 11:58 am
Operator : BridgetK
Sample : mb
Misc : MS55474,V3A7265,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 16 15:00:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36999-MB1	5P80345.D	1	12/15/21	CS	12/07/21	OP36999	E5P3803

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36168-2, JD36168-3, JD36168-10, JD36168-11

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.53	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36999-MB1	5P80345.D	1	12/15/21	CS	12/07/21	OP36999	E5P3803

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36168-2, JD36168-3, JD36168-10, JD36168-11

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.63	1.0	0.36	ug/l	J

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	46%	10-73%
4165-62-2	Phenol-d5	32%	10-64%
118-79-6	2,4,6-Tribromophenol	85%	31-130%
4165-60-0	Nitrobenzene-d5	84%	28-126%
321-60-8	2-Fluorobiphenyl	86%	26-114%
1718-51-0	Terphenyl-d14	93%	16-122%

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37001-MB1	5P80342.D	1	12/15/21	CS	12/08/21	OP37001	E5P3803

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	2.4	2.0	0.53	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37001-MB1	5P80342.D	1	12/15/21	CS	12/08/21	OP37001	E5P3803

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	36%	10-73%
4165-62-2	Phenol-d5	23%	10-64%
118-79-6	2,4,6-Tribromophenol	92%	31-130%
4165-60-0	Nitrobenzene-d5	86%	28-126%
321-60-8	2-Fluorobiphenyl	90%	26-114%
1718-51-0	Terphenyl-d14	77%	16-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	4.73	3.7	ug/l	J
	Internal standard added for SIM test	6.52	3.8	ug/l	J
	Internal standard added for SIM test	8.50	3.8	ug/l	J
	Internal standard added for SIM test	11.81	4.2	ug/l	J
	unknown	13.42	4.6	ug/l	J
	unknown	13.46	5.6	ug/l	J

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37001-MB1	5P80342.D	1	12/15/21	CS	12/08/21	OP37001	E5P3803

The QC reported here applies to the following samples: **Method:**

JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	15.39	3.8	ug/l	J
	unknown	15.58	5.2	ug/l	J
	Total TIC, Semi-Volatile		19.2	ug/l	J

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36999A-MB1	4P49909A.D	1	12/08/21	CS	12/07/21	OP36999A	E4P2614

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36168-2, JD36168-3, JD36168-10, JD36168-11

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	ND	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	ND	0.080	0.040	ug/l	
86-73-7	Fluorene	ND	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	ND	0.080	0.040	ug/l	
85-01-8	Phenanthrene	ND	0.080	0.040	ug/l	
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	54%	15-110%
4165-62-2	Phenol-d5	41%	12-110%
118-79-6	2,4,6-Tribromophenol	128%	32-143%
4165-60-0	Nitrobenzene-d5	125%* [a]	29-124%
321-60-8	2-Fluorobiphenyl	99%	23-122%
1718-51-0	Terphenyl-d14	120%	22-130%

(a) Outside of in house control limits.

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37001A-MB1	4P50024.D	1	12/12/21	KLS	12/08/21	OP37001A	E4P2620

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	ND	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	ND	0.080	0.040	ug/l	
86-73-7	Fluorene	ND	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	ND	0.080	0.040	ug/l	
85-01-8	Phenanthrene	ND	0.080	0.040	ug/l	
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	121%	29-124%
321-60-8	2-Fluorobiphenyl	92%	23-122%
1718-51-0	Terphenyl-d14	90%	22-130%

Blank Spike Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37001A-BS12	4P50025.D	1	12/12/21	KLS	12/08/21	OP37001A	E4P2620

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	0.8	0.594	74	31-135
208-96-8	Acenaphthylene	0.8	0.383	48	28-130
120-12-7	Anthracene	0.8	0.620	78	40-125
56-55-3	Benzo(a)anthracene	0.8	0.579	72	38-132
50-32-8	Benzo(a)pyrene	0.8	0.714	89	31-110
205-99-2	Benzo(b)fluoranthene	0.8	0.789	99	31-113
191-24-2	Benzo(g,h,i)perylene	0.8	0.538	67	18-110
207-08-9	Benzo(k)fluoranthene	0.8	0.809	101	31-119
218-01-9	Chrysene	0.8	0.621	78	43-119
53-70-3	Dibenzo(a,h)anthracene	0.8	0.507	63	20-112
206-44-0	Fluoranthene	0.8	0.695	87	48-118
86-73-7	Fluorene	0.8	0.657	82	42-123
193-39-5	Indeno(1,2,3-cd)pyrene	0.8	0.488	61	18-113
91-20-3	Naphthalene	0.8	0.575	72	30-114
85-01-8	Phenanthrene	0.8	0.694	87	45-125
129-00-0	Pyrene	0.8	0.621	78	48-125

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	117%	29-124%
321-60-8	2-Fluorobiphenyl	85%	23-122%
1718-51-0	Terphenyl-d14	96%	22-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36999-BS1	5P80346.D	1	12/15/21	CS	12/07/21	OP36999	E5P3803
OP36999-BSD	5P80347.D	1	12/15/21	CS	12/07/21	OP36999	E5P3803

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36168-2, JD36168-3, JD36168-10, JD36168-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	40	17.1	43	15.9	40	7	33-102/34
59-50-7	4-Chloro-3-methyl phenol	40	19.3	48	19.5	49	1	46-113/28
120-83-2	2,4-Dichlorophenol	40	19.1	48	17.6	44* [a]	8	45-111/31
105-67-9	2,4-Dimethylphenol	40	16.5	41	15.5	39	6	39-124/30
51-28-5	2,4-Dinitrophenol	80	46.9	59	47.1	59	0	30-156/30
87-65-0	2,6-Dichlorophenol	40	19.0	48	17.5	44* [a]	8	45-114/28
534-52-1	4,6-Dinitro-o-cresol	40	22.8	57	23.9	60	5	41-138/29
95-48-7	2-Methylphenol	40	15.1	38	14.2	36	6	26-101/32
	3&4-Methylphenol	80	29.0	37	27.4	35	6	23-98/32
88-75-5	2-Nitrophenol	40	19.3	48	18.1	45	6	42-125/34
100-02-7	4-Nitrophenol	40	12.7	32	15.8	40	22	10-91/35
87-86-5	Pentachlorophenol	80	38.9	49	41.5	52	6	37-147/31
108-95-2	Phenol	40	8.5	21	8.2	21	4	10-77/35
58-90-2	2,3,4,6-Tetrachlorophenol	40	20.8	52	21.8	55	5	41-131/29
95-95-4	2,4,5-Trichlorophenol	40	20.8	52	20.0	50	4	39-125/28
88-06-2	2,4,6-Trichlorophenol	40	20.6	52	19.4	49	6	40-127/28
98-86-2	Acetophenone	40	18.3	46	16.6	42* [a]	10	44-110/30
62-53-3	Aniline	40	16.7	42	11.6	29	36	10-109/44
101-55-3	4-Bromophenyl phenyl ether	40	20.4	51	21.3	53	4	44-115/29
85-68-7	Butyl benzyl phthalate	40	24.1	60	26.2	66	8	49-121/29
100-51-6	Benzyl Alcohol	40	16.5	41	13.8	35	18	31-110/31
91-58-7	2-Chloronaphthalene	40	18.7	47	17.3	43	8	29-112/29
106-47-8	4-Chloroaniline	40	24.7	62	21.4	54	14	15-88/48
111-91-1	bis(2-Chloroethoxy)methane	40	18.1	45	16.4	41* [a]	10	44-115/29
111-44-4	bis(2-Chloroethyl)ether	40	16.4	41	14.9	37* [a]	10	38-116/32
7005-72-3	4-Chlorophenyl phenyl ether	40	20.1	50	19.8	50	2	35-119/28
121-14-2	2,4-Dinitrotoluene	40	22.9	57	25.1	63	9	47-128/27
606-20-2	2,6-Dinitrotoluene	40	21.6	54	22.6	57	5	48-127/28
91-94-1	3,3'-Dichlorobenzidine	40	25.7	64	31.2	78	19	18-103/38
132-64-9	Dibenzofuran	40	20.0	50	19.2	48	4	35-119/27
84-74-2	Di-n-butyl phthalate	40	22.9	57	25.2	63	10	50-122/29
117-84-0	Di-n-octyl phthalate	40	25.1	63	27.1	68	8	40-127/28
84-66-2	Diethyl phthalate	40	22.4	56	24.0	60	7	49-117/28
131-11-3	Dimethyl phthalate	40	21.1	53	21.9	55	4	49-114/28
117-81-7	bis(2-Ethylhexyl)phthalate	40	24.2	61	26.3	66	8	44-127/29
118-74-1	Hexachlorobenzene	40	20.2	51	20.8	52	3	46-113/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36999-BS1	5P80346.D	1	12/15/21	CS	12/07/21	OP36999	E5P3803
OP36999-BSD	5P80347.D	1	12/15/21	CS	12/07/21	OP36999	E5P3803

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36168-2, JD36168-3, JD36168-10, JD36168-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	40	16.6	42	16.2	41	2	17-111/37
77-47-4	Hexachlorocyclopentadiene	80	23.7	30	21.7	27	9	10-112/40
67-72-1	Hexachloroethane	40	15.9	40	14.7	37	8	18-101/38
78-59-1	Isophorone	40	18.4	46* [a]	16.8	42* [a]	9	47-119/28
91-57-6	2-Methylnaphthalene	40	18.3	46	16.7	42	9	30-116/32
88-74-4	2-Nitroaniline	40	35.6	89	36.6	92	3	35-133/28
99-09-2	3-Nitroaniline	40	33.7	84	34.2	86	1	31-102/39
100-01-6	4-Nitroaniline	40	39.9	100	42.5	106	6	51-118/30
98-95-3	Nitrobenzene	40	17.9	45	16.6	42	8	36-120/29
62-75-9	n-Nitrosodimethylamine	40	19.6	49	16.2	41	19	10-85/37
621-64-7	N-Nitroso-di-n-propylamine	40	31.4	79	28.2	71	11	41-118/30
86-30-6	N-Nitrosodiphenylamine	40	31.7	79	34.0	85	7	46-112/29
82-68-8	Pentachloronitrobenzene	40	22.3	56	24.1	60	8	43-126/28
110-86-1	Pyridine	40	7.3	18	4.3	11	52	10-78/57
95-94-3	1,2,4,5-Tetrachlorobenzene	40	18.0	45	16.8	42	7	20-114/31
120-82-1	1,2,4-Trichlorobenzene	40	17.5	44	16.2	41	8	24-104/33

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	54%	50%	10-73%
4165-62-2	Phenol-d5	35%	34%	10-64%
118-79-6	2,4,6-Tribromophenol	102%	105%	31-130%
4165-60-0	Nitrobenzene-d5	85%	77%	28-126%
321-60-8	2-Fluorobiphenyl	89%	78%	26-114%
1718-51-0	Terphenyl-d14	104%	102%	16-122%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37001-BS1	5P80343.D	1	12/15/21	CS	12/08/21	OP37001	E5P3803
OP37001-BSD	5P80344.D	1	12/15/21	CS	12/08/21	OP37001	E5P3803

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	40	27.2	68	22.1	55	21	33-102/34
59-50-7	4-Chloro-3-methyl phenol	40	33.8	85	28.1	70	18	46-113/28
120-83-2	2,4-Dichlorophenol	40	33.9	85	27.6	69	20	45-111/31
105-67-9	2,4-Dimethylphenol	40	30.8	77	24.9	62	21	39-124/30
51-28-5	2,4-Dinitrophenol	80	78.6	98	67.4	84	15	30-156/30
87-65-0	2,6-Dichlorophenol	40	34.0	85	28.3	71	18	45-114/28
534-52-1	4,6-Dinitro-o-cresol	40	38.9	97	33.5	84	15	41-138/29
95-48-7	2-Methylphenol	40	24.2	61	19.0	48	24	26-101/32
	3&4-Methylphenol	80	44.3	56	35.6	45	22	23-98/32
88-75-5	2-Nitrophenol	40	35.5	89	29.5	74	18	42-125/34
100-02-7	4-Nitrophenol	40	20.5	51	16.8	42	20	10-91/35
87-86-5	Pentachlorophenol	80	69.8	88	62.0	78	12	37-147/31
108-95-2	Phenol	40	12.4	31	9.6	24	25	10-77/35
58-90-2	2,3,4,6-Tetrachlorophenol	40	39.0	98	33.6	84	15	41-131/29
95-95-4	2,4,5-Trichlorophenol	40	36.2	91	31.8	80	13	39-125/28
88-06-2	2,4,6-Trichlorophenol	40	35.8	90	30.4	76	16	40-127/28
98-86-2	Acetophenone	40	34.6	87	29.7	74	15	44-110/30
62-53-3	Aniline	40	21.4	54	7.9	20	92* [a]	10-109/44
101-55-3	4-Bromophenyl phenyl ether	40	39.1	98	35.3	88	10	44-115/29
85-68-7	Butyl benzyl phthalate	40	46.7	117	42.7	107	9	49-121/29
100-51-6	Benzyl Alcohol	40	28.8	72	22.7	57	24	31-110/31
91-58-7	2-Chloronaphthalene	40	34.7	87	31.7	79	9	29-112/29
106-47-8	4-Chloroaniline	40	32.3	81	15.8	40	69* [a]	15-88/48
111-91-1	bis(2-Chloroethoxy)methane	40	34.8	87	30.1	75	14	44-115/29
111-44-4	bis(2-Chloroethyl)ether	40	31.4	79	27.4	69	14	38-116/32
7005-72-3	4-Chlorophenyl phenyl ether	40	37.3	93	33.6	84	10	35-119/28
121-14-2	2,4-Dinitrotoluene	40	42.9	107	39.5	99	8	47-128/27
606-20-2	2,6-Dinitrotoluene	40	42.9	107	38.5	96	11	48-127/28
91-94-1	3,3'-Dichlorobenzidine	40	34.1	86	27.6	70	21	18-103/38
132-64-9	Dibenzofuran	40	37.8	95	34.4	86	9	35-119/27
84-74-2	Di-n-butyl phthalate	40	45.7	114	41.8	105	9	50-122/29
117-84-0	Di-n-octyl phthalate	40	46.7	117	39.8	100	16	40-127/28
84-66-2	Diethyl phthalate	40	40.8	102	37.6	94	8	49-117/28
131-11-3	Dimethyl phthalate	40	38.5	96	34.5	86	11	49-114/28
117-81-7	bis(2-Ethylhexyl)phthalate	40	46.8	117	43.0	108	8	44-127/29
118-74-1	Hexachlorobenzene	40	38.3	96	34.0	85	12	46-113/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37001-BS1	5P80343.D	1	12/15/21	CS	12/08/21	OP37001	E5P3803
OP37001-BSD	5P80344.D	1	12/15/21	CS	12/08/21	OP37001	E5P3803

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	40	31.2	78	27.2	68	14	17-111/37
77-47-4	Hexachlorocyclopentadiene	80	36.6	46	31.7	40	14	10-112/40
67-72-1	Hexachloroethane	40	27.9	70	23.9	60	15	18-101/38
78-59-1	Isophorone	40	36.2	91	31.6	79	14	47-119/28
91-57-6	2-Methylnaphthalene	40	35.8	90	31.6	79	12	30-116/32
88-74-4	2-Nitroaniline	40	39.4	99	35.2	88	11	35-133/28
99-09-2	3-Nitroaniline	40	38.0	95	28.1	70	30	31-102/39
100-01-6	4-Nitroaniline	40	40.9	102	35.1	88	15	51-118/30
98-95-3	Nitrobenzene	40	33.6	84	30.1	75	11	36-120/29
62-75-9	n-Nitrosodimethylamine	40	19.0	48	14.6	37	26	10-85/37
621-64-7	N-Nitroso-di-n-propylamine	40	34.0	85	30.1	75	12	41-118/30
86-30-6	N-Nitrosodiphenylamine	40	37.5	94	34.2	86	9	46-112/29
82-68-8	Pentachloronitrobenzene	40	42.0	105	39.7	99	6	43-126/28
110-86-1	Pyridine	40	8.0	20	3.6	9* [b]	76* [a]	10-78/57
95-94-3	1,2,4,5-Tetrachlorobenzene	40	33.3	83	29.6	74	12	20-114/31
120-82-1	1,2,4-Trichlorobenzene	40	31.7	79	28.0	70	12	24-104/33

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	41%	37%	10-73%
4165-62-2	Phenol-d5	27%	24%	10-64%
118-79-6	2,4,6-Tribromophenol	97%	91%	31-130%
4165-60-0	Nitrobenzene-d5	87%	83%	28-126%
321-60-8	2-Fluorobiphenyl	89%	86%	26-114%
1718-51-0	Terphenyl-d14	89%	81%	16-122%

(a) Analytical precision exceeds in-house control limits.
(b) Outside of in house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36999A-BS12	4P49912.D	1	12/08/21	CS	12/07/21	OP36999A	E4P2614
OP36999A-BSD12	4P49913.D	1	12/08/21	CS	12/07/21	OP36999A	E4P2614

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36168-2, JD36168-3, JD36168-10, JD36168-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	0.8	0.641	80	0.598	75	7	31-135/38
208-96-8	Acenaphthylene	0.8	0.436	55	0.409	51	6	28-130/42
120-12-7	Anthracene	0.8	0.703	88	0.542	68	26	40-125/32
56-55-3	Benzo(a)anthracene	0.8	0.619	77	0.549	69	12	38-132/31
50-32-8	Benzo(a)pyrene	0.8	0.703	88	0.368	46	63* [a]	31-110/37
205-99-2	Benzo(b)fluoranthene	0.8	0.851	106	0.690	86	21	31-113/37
191-24-2	Benzo(g,h,i)perylene	0.8	0.465	58	0.398	50	16	18-110/54
207-08-9	Benzo(k)fluoranthene	0.8	0.681	85	0.679	85	0	31-119/43
218-01-9	Chrysene	0.8	0.692	87	0.601	75	14	43-119/33
53-70-3	Dibenzo(a,h)anthracene	0.8	0.486	61	0.437	55	11	20-112/50
206-44-0	Fluoranthene	0.8	0.812	102	0.730	91	11	48-118/27
86-73-7	Fluorene	0.8	0.702	88	0.678	85	3	42-123/34
193-39-5	Indeno(1,2,3-cd)pyrene	0.8	0.441	55	0.396	50	11	18-113/49
91-20-3	Naphthalene	0.8	0.611	76	0.526	66	15	30-114/40
85-01-8	Phenanthrene	0.8	0.732	92	0.673	84	8	45-125/31
129-00-0	Pyrene	0.8	0.725	91	0.631	79	14	48-125/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	58%	47%	15-110%
4165-62-2	Phenol-d5	47%	37%	12-110%
118-79-6	2,4,6-Tribromophenol	141%	135%	32-143%
4165-60-0	Nitrobenzene-d5	116%	104%	29-124%
321-60-8	2-Fluorobiphenyl	93%	89%	23-122%
1718-51-0	Terphenyl-d14	121%	115%	22-130%

(a) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37001A-MS	4P50032.D	1	12/12/21	KLS	12/08/21	OP37001A	E4P2620
OP37001A-MSD	4P50033.D	1	12/12/21	KLS	12/08/21	OP37001A	E4P2620
JD36109-3	4P50028.D	1	12/12/21	KLS	12/08/21	OP37001A	E4P2620

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9

CAS No.	Compound	JD36109-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		0.741	30.7	4145* [a]	0.714	22.4	3136* [a]	31	22-149/33
208-96-8	Acenaphthylene	ND		0.741	21.8	2943* [a]	0.714	16.0	2240* [a]	31	20-146/36
120-12-7	Anthracene	ND		0.741	33.8	4563* [a]	0.714	28.7	4018* [a]	16	28-144/32
56-55-3	Benzo(a)anthracene	ND		0.741	28.3	3821* [a]	3.570	24.1	3374* [a]	16	27-144/36
50-32-8	Benzo(a)pyrene	ND		0.741	35.2	4752* [a]	0.714	30.6	4284* [a]	14	21-113/41
205-99-2	Benzo(b)fluoranthene	ND		0.741	18.6	2511* [a]	0.714	16.7	2338* [a]	11	21-123/41
191-24-2	Benzo(g,h,i)perylene	ND		0.741	28.8	3888* [a]	0.714	25.0	3500* [a]	14	10-113/48
207-08-9	Benzo(k)fluoranthene	ND		0.741	38.0	5130* [a]	0.714	33.5	4690* [a]	13	23-122/42
218-01-9	Chrysene	ND		0.741	27.3	3686* [a]	0.714	23.4	3276* [a]	15	31-128/34
53-70-3	Dibenzo(a,h)anthracene	ND		0.741	31.0	4185* [a]	0.714	26.8	3752* [a]	15	12-114/47
206-44-0	Fluoranthene	ND		0.741	33.0	4455* [a]	0.714	27.6	3864* [a]	18	34-134/32
86-73-7	Fluorene	ND		0.741	33.4	4509* [a]	0.714	25.7	3598* [a]	26	32-138/33
193-39-5	Indeno(1,2,3-cd)pyrene	ND		0.741	28.2	3807* [a]	0.714	24.6	3444* [a]	14	11-116/49
91-20-3	Naphthalene	ND		0.741	24.8	3348* [a]	0.714	16.5	2310* [a]	40* [b]	13-141/33
85-01-8	Phenanthrene	ND		0.741	30.5	4118* [a]	0.714	25.2	3528* [a]	19	33-139/31
129-00-0	Pyrene	ND		0.741	30.3	4091* [a]	0.714	25.2	3528* [a]	18	35-142/33

CAS No.	Surrogate Recoveries	MS	MSD	JD36109-3	Limits
4165-60-0	Nitrobenzene-d5	112%	97%	104%	29-124%
321-60-8	2-Fluorobiphenyl	92%	84%	82%	23-122%
1718-51-0	Terphenyl-d14	64%	77%	42%	22-130%

(a) Outside control limits due to incorrect spike standard added.
(b) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2551-DFTPP	**Injection Date:**	10/20/21
Lab File ID:	4P48502.D	**Injection Time:**	22:19
Instrument ID:	GCMS4P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	23059	30.3		Pass
68	Less than 2.0% of mass 69	101	0.13	(0.34) [a]	Pass
69	Mass 69 relative abundance	29864	39.3		Pass
70	Less than 2.0% of mass 69	124	0.16	(0.42) [a]	Pass
127	40.0 - 60.0% of mass 198	30794	40.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	76018	100.0		Pass
199	5.0 - 9.0% of mass 198	5791	7.62		Pass
275	10.0 - 30.0% of mass 198	18191	23.9		Pass
365	1.0 - 100.0% of mass 198	1857	2.44		Pass
441	Present, but less than mass 443	4086	5.38	(39.2) [b]	Pass
442	40.0 - 100.0% of mass 198	51528	67.8		Pass
443	17.0 - 23.0% of mass 442	10411	13.7	(20.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2551-IC2551	4P48504.D	10/20/21	22:59	00:40	Initial cal 1
E4P2551-ICC2551	4P48505.D	10/20/21	23:23	01:04	Initial cal 0.2
E4P2551-IC2551	4P48506.D	10/20/21	23:46	01:27	Initial cal 0.02
E4P2551-IC2551	4P48507.D	10/21/21	00:10	01:51	Initial cal 0.5
E4P2551-IC2551	4P48508.D	10/21/21	00:33	02:14	Initial cal 0.1
E4P2551-IC2551	4P48509.D	10/21/21	00:57	02:38	Initial cal 0.004
E4P2551-IC2551	4P48511.D	10/21/21	01:44	03:25	Initial cal 0.04
E4P2551-IC2551	4P48513.D	10/21/21	02:16	03:57	Initial cal 0.002
E4P2551-IC2551	4P48514.D	10/21/21	02:39	04:20	Initial cal 0.01
E4P2551-ICV2551	4P48512.D	10/21/21	03:15	04:56	Initial cal verification 0.2
OP35848A-BSD12	4P48515.D	10/21/21	03:45	05:26	Blank Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2614-DFTPP
Lab File ID: 4P49903.D
Instrument ID: GCMS4P
Injection Date: 12/08/21
Injection Time: 01:03

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	23501	44.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	27913	52.9		Pass
70	Less than 2.0% of mass 69	218	0.41	(0.78) [a]	Pass
127	40.0 - 60.0% of mass 198	24346	46.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	52808	100.0		Pass
199	5.0 - 9.0% of mass 198	3343	6.33		Pass
275	10.0 - 30.0% of mass 198	11642	22.0		Pass
365	1.0 - 100.0% of mass 198	966	1.83		Pass
441	Present, but less than mass 443	4108	7.78	(78.8) [b]	Pass
442	40.0 - 100.0% of mass 198	26190	49.6		Pass
443	17.0 - 23.0% of mass 442	5213	9.87	(19.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2614-CC2551	4P49907.D	12/08/21	03:45	02:42	Continuing cal 0.1
OP36999A-MB1	4P49909A.D	12/08/21	04:39	03:36	Method Blank
ZZZZZZ	4P49910.D	12/08/21	05:02	03:59	(unrelated sample)
ZZZZZZ	4P49911.D	12/08/21	05:26	04:23	(unrelated sample)
OP36999A-BS12	4P49912.D	12/08/21	05:49	04:46	Blank Spike
OP36999A-BSD12	4P49913.D	12/08/21	06:13	05:10	Blank Spike Duplicate
ZZZZZZ	4P49914.D	12/08/21	06:36	05:33	(unrelated sample)
ZZZZZZ	4P49915.D	12/08/21	07:00	05:57	(unrelated sample)
ZZZZZZ	4P49917.D	12/08/21	07:47	06:44	(unrelated sample)
ZZZZZZ	4P49918.D	12/08/21	08:10	07:07	(unrelated sample)
ZZZZZZ	4P49919.D	12/08/21	08:34	07:31	(unrelated sample)
ZZZZZZ	4P49920.D	12/08/21	08:57	07:54	(unrelated sample)
ZZZZZZ	4P49921.D	12/08/21	09:21	08:18	(unrelated sample)
ZZZZZZ	4P49922.D	12/08/21	09:43	08:40	(unrelated sample)
JD36168-10	4P49924.D	12/08/21	10:31	09:28	HOFF MW-7DU
JD36168-11	4P49925.D	12/08/21	10:54	09:51	HOFF MW-7S
JD36168-2	4P49926.D	12/08/21	11:18	10:15	HOFF OW-4DL
JD36168-3	4P49927.D	12/08/21	11:42	10:39	HOFF OW-4DU

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2620-DFTPP	**Injection Date:**	12/12/21
Lab File ID:	4P50022.D	**Injection Time:**	10:16
Instrument ID:	GCMS4P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	35484	42.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	43828	52.7		Pass
70	Less than 2.0% of mass 69	296	0.36	(0.68) [a]	Pass
127	40.0 - 60.0% of mass 198	38142	45.8		Pass
197	Less than 1.0% of mass 198	522	0.63		Pass
198	Base peak, 100% relative abundance	83208	100.0		Pass
199	5.0 - 9.0% of mass 198	5685	6.83		Pass
275	10.0 - 30.0% of mass 198	18426	22.1		Pass
365	1.0 - 100.0% of mass 198	2907	3.49		Pass
441	Present, but less than mass 443	7011	8.43	(81.0) [b]	Pass
442	40.0 - 100.0% of mass 198	46029	55.3		Pass
443	17.0 - 23.0% of mass 442	8654	10.4	(18.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2620-CC2551	4P50023.D	12/12/21	10:42	00:26	Continuing cal 0.1
OP37001A-MB1	4P50024.D	12/12/21	11:20	01:04	Method Blank
OP37001A-BS12	4P50025.D	12/12/21	11:43	01:27	Blank Spike
ZZZZZZ	4P50026.D	12/12/21	12:15	01:59	(unrelated sample)
ZZZZZZ	4P50027A.D	12/12/21	12:47	02:31	(unrelated sample)
JD36109-3	4P50028.D	12/12/21	13:10	02:54	(used for QC only; not part of job JD36168)
ZZZZZZ	4P50029.D	12/12/21	13:33	03:17	(unrelated sample)
ZZZZZZ	4P50030.D	12/12/21	13:57	03:41	(unrelated sample)
ZZZZZZ	4P50031.D	12/12/21	14:20	04:04	(unrelated sample)
OP37001A-MS	4P50032.D	12/12/21	14:44	04:28	Matrix Spike
OP37001A-MSD	4P50033.D	12/12/21	15:07	04:51	Matrix Spike Duplicate
ZZZZZZ	4P50034.D	12/12/21	15:31	05:15	(unrelated sample)
ZZZZZZ	4P50035.D	12/12/21	15:54	05:38	(unrelated sample)
ZZZZZZ	4P50036.D	12/12/21	16:18	06:02	(unrelated sample)
ZZZZZZ	4P50037.D	12/12/21	16:42	06:26	(unrelated sample)
ZZZZZZ	4P50038.D	12/12/21	17:05	06:49	(unrelated sample)
ZZZZZZ	4P50039.D	12/12/21	17:29	07:13	(unrelated sample)
ZZZZZZ	4P50040.D	12/12/21	17:52	07:36	(unrelated sample)
ZZZZZZ	4P50041.D	12/12/21	18:16	08:00	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2620-DFTPP	**Injection Date:**	12/12/21
Lab File ID:	4P50022.D	**Injection Time:**	10:16
Instrument ID:	GCMS4P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4P50042.D	12/12/21	18:40	08:24	(unrelated sample)
ZZZZZZ	4P50043.D	12/12/21	19:03	08:47	(unrelated sample)
ZZZZZZ	4P50044.D	12/12/21	19:27	09:11	(unrelated sample)
ZZZZZZ	4P50045.D	12/12/21	19:50	09:34	(unrelated sample)
ZZZZZZ	4P50046.D	12/12/21	20:14	09:58	(unrelated sample)
ZZZZZZ	4P50047.D	12/12/21	20:37	10:21	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2625-DFTPP
Lab File ID: 4P50117.D
Instrument ID: GCMS4P
Injection Date: 12/15/21
Injection Time: 15:07

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22529	42.7		Pass
68	Less than 2.0% of mass 69	319	0.60	(1.20) [a]	Pass
69	Mass 69 relative abundance	26667	50.5		Pass
70	Less than 2.0% of mass 69	168	0.32	(0.63) [a]	Pass
127	40.0 - 60.0% of mass 198	25389	48.1		Pass
197	Less than 1.0% of mass 198	156	0.30		Pass
198	Base peak, 100% relative abundance	52763	100.0		Pass
199	5.0 - 9.0% of mass 198	3609	6.84		Pass
275	10.0 - 30.0% of mass 198	14010	26.6		Pass
365	1.0 - 100.0% of mass 198	2200	4.17		Pass
441	Present, but less than mass 443	4830	9.15	(77.8) [b]	Pass
442	40.0 - 100.0% of mass 198	32240	61.1		Pass
443	17.0 - 23.0% of mass 442	6208	11.8	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2625-CC2551	4P50120.D	12/15/21	16:36	01:29	Continuing cal 0.2
OP37091A-MB1	4P50121.D	12/15/21	17:19	02:12	Method Blank
OP37091A-BS12	4P50122.D	12/15/21	17:47	02:40	Blank Spike
OP37091A-BSD12	4P50123.D	12/15/21	18:10	03:03	Blank Spike Duplicate
OP37046A-MB1	4P50124.D	12/15/21	18:34	03:27	Method Blank
OP37046A-BS12	4P50125.D	12/15/21	18:57	03:50	Blank Spike
OP37046A-BSD12	4P50126.D	12/15/21	19:21	04:14	Blank Spike Duplicate
OP37017A-MB1	4P50127.D	12/15/21	19:45	04:38	Method Blank
OP37017A-BS12	4P50128.D	12/15/21	20:08	05:01	Blank Spike
OP37017A-BSD12	4P50129.D	12/15/21	20:32	05:25	Blank Spike Duplicate
ZZZZZZ	4P50130.D	12/15/21	20:56	05:49	(unrelated sample)
ZZZZZZ	4P50131.D	12/15/21	21:20	06:13	(unrelated sample)
ZZZZZZ	4P50132.D	12/15/21	21:43	06:36	(unrelated sample)
ZZZZZZ	4P50133.D	12/15/21	22:07	07:00	(unrelated sample)
ZZZZZZ	4P50134.D	12/15/21	22:31	07:24	(unrelated sample)
ZZZZZZ	4P50135.D	12/15/21	22:54	07:47	(unrelated sample)
ZZZZZZ	4P50136.D	12/15/21	23:18	08:11	(unrelated sample)
ZZZZZZ	4P50137.D	12/15/21	23:42	08:35	(unrelated sample)
ZZZZZZ	4P50138.D	12/16/21	00:05	08:58	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2625-DFTPP	**Injection Date:**	12/15/21
Lab File ID:	4P50117.D	**Injection Time:**	15:07
Instrument ID:	GCMS4P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4P50139.D	12/16/21	00:29	09:22	(unrelated sample)
ZZZZZZ	4P50140.D	12/16/21	00:53	09:46	(unrelated sample)
ZZZZZZ	4P50141.D	12/16/21	01:17	10:10	(unrelated sample)
ZZZZZZ	4P50142.D	12/16/21	01:41	10:34	(unrelated sample)
JD36168-4	4P50143.D	12/16/21	02:05	10:58	HOFF MW-5DL

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2627-DFTPP	**Injection Date:**	12/16/21
Lab File ID:	4P50147.D	**Injection Time:**	12:35
Instrument ID:	GCMS4P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	29080	42.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	33524	49.5		Pass
70	Less than 2.0% of mass 69	130	0.19	(0.39) [a]	Pass
127	40.0 - 60.0% of mass 198	30373	44.8		Pass
197	Less than 1.0% of mass 198	660	0.97		Pass
198	Base peak, 100% relative abundance	67760	100.0		Pass
199	5.0 - 9.0% of mass 198	4773	7.04		Pass
275	10.0 - 30.0% of mass 198	17208	25.4		Pass
365	1.0 - 100.0% of mass 198	2730	4.03		Pass
441	Present, but less than mass 443	5905	8.71	(77.3) [b]	Pass
442	40.0 - 100.0% of mass 198	41795	61.7		Pass
443	17.0 - 23.0% of mass 442	7644	11.3	(18.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2627-CC2551	4P50150.D	12/16/21	13:53	01:18	Continuing cal 0.2
OP37092A-MB1	4P50152B.D	12/16/21	15:57	03:22	Method Blank
ZZZZZZ	4P50153.D	12/16/21	16:21	03:46	(unrelated sample)
ZZZZZZ	4P50154.D	12/16/21	16:45	04:10	(unrelated sample)
OP37092A-BS12	4P50155.D	12/16/21	17:09	04:34	Blank Spike
OP37092A-BSD12	4P50156.D	12/16/21	17:33	04:58	Blank Spike Duplicate
ZZZZZZ	4P50157.D	12/16/21	17:57	05:22	(unrelated sample)
ZZZZZZ	4P50158.D	12/16/21	18:21	05:46	(unrelated sample)
ZZZZZZ	4P50159.D	12/16/21	18:45	06:10	(unrelated sample)
ZZZZZZ	4P50160.D	12/16/21	19:09	06:34	(unrelated sample)
ZZZZZZ	4P50161.D	12/16/21	19:33	06:58	(unrelated sample)
ZZZZZZ	4P50162.D	12/16/21	19:58	07:23	(unrelated sample)
ZZZZZZ	4P50163.D	12/16/21	20:22	07:47	(unrelated sample)
ZZZZZZ	4P50164.D	12/16/21	20:46	08:11	(unrelated sample)
ZZZZZZ	4P50165.D	12/16/21	21:10	08:35	(unrelated sample)
ZZZZZZ	4P50166.D	12/16/21	21:34	08:59	(unrelated sample)
ZZZZZZ	4P50167.D	12/16/21	21:58	09:23	(unrelated sample)
ZZZZZZ	4P50168.D	12/16/21	22:22	09:47	(unrelated sample)
ZZZZZZ	4P50169.D	12/16/21	22:46	10:11	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2627-DFTPP	**Injection Date:**	12/16/21
Lab File ID:	4P50147.D	**Injection Time:**	12:35
Instrument ID:	GCMS4P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4P50170.D	12/16/21	23:10	10:35	(unrelated sample)
ZZZZZZ	4P50171.D	12/16/21	23:34	10:59	(unrelated sample)
JD36168-5	4P50173.D	12/17/21	00:22	11:47	HOFF MW-5DV

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2628-DFTPP	**Injection Date:**	12/17/21
Lab File ID:	4P50179.D	**Injection Time:**	10:49
Instrument ID:	GCMS4P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	32406	42.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	41883	54.8		Pass
70	Less than 2.0% of mass 69	138	0.18	(0.33) [a]	Pass
127	40.0 - 60.0% of mass 198	37899	49.6		Pass
197	Less than 1.0% of mass 198	665	0.87		Pass
198	Base peak, 100% relative abundance	76371	100.0		Pass
199	5.0 - 9.0% of mass 198	4996	6.54		Pass
275	10.0 - 30.0% of mass 198	17203	22.5		Pass
365	1.0 - 100.0% of mass 198	3147	4.12		Pass
441	Present, but less than mass 443	7053	9.24	(82.9) [b]	Pass
442	40.0 - 100.0% of mass 198	41611	54.5		Pass
443	17.0 - 23.0% of mass 442	8505	11.1	(20.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2628-CC2551	4P50182.D	12/17/21	12:13	01:24	Continuing cal 0.1
OP37151-MB1	4P50183.D	12/17/21	13:02	02:13	Method Blank
ZZZZZZ	4P50184.D	12/17/21	13:26	02:37	(unrelated sample)
OP37151-BS12	4P50185.D	12/17/21	13:49	03:00	Blank Spike
OP37151-BSD12	4P50186.D	12/17/21	14:13	03:24	Blank Spike Duplicate
ZZZZZZ	4P50187.D	12/17/21	14:36	03:47	(unrelated sample)
ZZZZZZ	4P50188.D	12/17/21	15:00	04:11	(unrelated sample)
ZZZZZZ	4P50189.D	12/17/21	15:24	04:35	(unrelated sample)
ZZZZZZ	4P50190.D	12/17/21	15:48	04:59	(unrelated sample)
ZZZZZZ	4P50191.D	12/17/21	16:12	05:23	(unrelated sample)
ZZZZZZ	4P50192.D	12/17/21	16:35	05:46	(unrelated sample)
ZZZZZZ	4P50193.D	12/17/21	16:59	06:10	(unrelated sample)
ZZZZZZ	4P50194.D	12/17/21	17:23	06:34	(unrelated sample)
ZZZZZZ	4P50195.D	12/17/21	17:46	06:57	(unrelated sample)
ZZZZZZ	4P50196.D	12/17/21	18:10	07:21	(unrelated sample)
ZZZZZZ	4P50197.D	12/17/21	18:33	07:44	(unrelated sample)
ZZZZZZ	4P50198.D	12/17/21	18:57	08:08	(unrelated sample)
ZZZZZZ	4P50199.D	12/17/21	19:21	08:32	(unrelated sample)
ZZZZZZ	4P50200.D	12/17/21	19:45	08:56	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2628-DFTPP	**Injection Date:**	12/17/21
Lab File ID:	4P50179.D	**Injection Time:**	10:49
Instrument ID:	GCMS4P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JD36168-6	4P50201.D	12/17/21	20:09	09:20	HOFF MW-5S
JD36168-7	4P50202.D	12/17/21	20:33	09:44	HOFF MW-6S
JD36168-8	4P50203.D	12/17/21	20:56	10:07	HOFF OW-6DU
JD36168-9	4P50204.D	12/17/21	21:20	10:31	HOFF OW-6DL

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-DFTPP
Lab File ID: 5P79956.D
Instrument ID: GCMS5P
Injection Date: 12/01/21
Injection Time: 21:49

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	91864	30.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	101906	33.7		Pass
70	Less than 2.0% of mass 69	672	0.22	(0.66) [a]	Pass
127	40.0 - 60.0% of mass 198	141221	46.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	302357	100.0		Pass
199	5.0 - 9.0% of mass 198	20705	6.85		Pass
275	10.0 - 30.0% of mass 198	84325	27.9		Pass
365	1.0 - 100.0% of mass 198	10108	3.34		Pass
441	Present, but less than mass 443	30682	10.1	(84.2) [b]	Pass
442	40.0 - 100.0% of mass 198	191162	63.2		Pass
443	17.0 - 23.0% of mass 442	36428	12.0	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3785-IC3785	5P79957.D	12/01/21	22:09	00:20	Initial cal 20
E5P3785-IC3785	5P79958.D	12/01/21	22:36	00:47	Initial cal 16
E5P3785-ICC3785	5P79959.D	12/01/21	23:02	01:13	Initial cal 10
E5P3785-IC3785	5P79960.D	12/01/21	23:30	01:41	Initial cal 5
E5P3785-IC3785	5P79961.D	12/01/21	23:57	02:08	Initial cal 2
E5P3785-IC3785	5P79962.D	12/02/21	00:24	02:35	Initial cal 1
E5P3785-IC3785	5P79963.D	12/02/21	00:51	03:02	Initial cal 0.4
E5P3785-IC3785	5P79964.D	12/02/21	01:17	03:28	Initial cal 0.2
E5P3785-ICV3785	5P79965.D	12/02/21	01:45	03:56	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-DFTPP
Lab File ID: 5P80176.D
Instrument ID: GCMS5P
Injection Date: 12/09/21
Injection Time: 00:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18190	31.0		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	21015	35.8		Pass
70	Less than 2.0% of mass 69	84	0.14	(0.40) [a]	Pass
127	40.0 - 60.0% of mass 198	29550	50.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	58650	100.0		Pass
199	5.0 - 9.0% of mass 198	3881	6.62		Pass
275	10.0 - 30.0% of mass 198	14712	25.1		Pass
365	1.0 - 100.0% of mass 198	1822	3.11		Pass
441	Present, but less than mass 443	5848	9.97	(82.8) [b]	Pass
442	40.0 - 100.0% of mass 198	36738	62.6		Pass
443	17.0 - 23.0% of mass 442	7065	12.0	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3794-IC3794	5P80177.D	12/09/21	01:11	00:18	Initial cal 0.2
E5P3794-IC3794	5P80178.D	12/09/21	01:38	00:45	Initial cal 0.4
E5P3794-IC3794	5P80179.D	12/09/21	02:05	01:12	Initial cal 1
E5P3794-IC3794	5P80180.D	12/09/21	02:32	01:39	Initial cal 2
E5P3794-IC3794	5P80181.D	12/09/21	02:59	02:06	Initial cal 5
E5P3794-ICC3794	5P80182.D	12/09/21	03:26	02:33	Initial cal 10
E5P3794-IC3794	5P80183.D	12/09/21	03:53	03:00	Initial cal 16
E5P3794-IC3794	5P80184.D	12/09/21	04:19	03:26	Initial cal 20
E5P3794-ICV3794	5P80185.D	12/09/21	04:47	03:54	Initial cal verification 10
E5P3794-ICV3794	5P80186.D	12/09/21	05:13	04:20	Initial cal verification 10
E5P3794-ICV3794	5P80187.D	12/09/21	05:40	04:47	Initial cal verification 10
E5P3794-ICV3794	5P80188.D	12/09/21	06:07	05:14	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3795-DFTPP	**Injection Date:**	12/09/21
Lab File ID:	5P80191.D	**Injection Time:**	12:44
Instrument ID:	GCMS5P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18799	32.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	21518	37.4		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	28913	50.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	57581	100.0		Pass
199	5.0 - 9.0% of mass 198	3946	6.85		Pass
275	10.0 - 30.0% of mass 198	14549	25.3		Pass
365	1.0 - 100.0% of mass 198	1899	3.30		Pass
441	Present, but less than mass 443	5422	9.42	(86.8) [b]	Pass
442	40.0 - 100.0% of mass 198	32893	57.1		Pass
443	17.0 - 23.0% of mass 442	6248	10.9	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3795-ICV3794	5P80192.D	12/09/21	12:58	00:14	Initial cal verification 10
E5P3795-CC3794	5P80193.D	12/09/21	13:25	00:41	Continuing cal 10
E5P3795-CC3785	5P80194.D	12/09/21	13:51	01:07	Continuing cal 10
OP36390-MB1	5P80195.D	12/09/21	14:46	02:02	Method Blank
OP36390-BS1	5P80196.D	12/09/21	15:13	02:29	Blank Spike
OP36390-BSD	5P80197.D	12/09/21	15:40	02:56	Blank Spike Duplicate
ZZZZZZ	5P80198.D	12/09/21	16:07	03:23	(unrelated sample)
E5P3795-ECC3794	5P80199.D	12/09/21	16:57	04:13	Ending cal 10
E5P3795-ECC3785	5P80200.D	12/09/21	17:36	04:52	Ending cal 10

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3803-DFTPP
Lab File ID: 5P80339.D
Instrument ID: GCMS5P
Injection Date: 12/15/21
Injection Time: 02:25

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	10919	34.0		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	13383	41.6		Pass
70	Less than 2.0% of mass 69	73	0.23	(0.55) [a]	Pass
127	40.0 - 60.0% of mass 198	17338	53.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	32162	100.0		Pass
199	5.0 - 9.0% of mass 198	2297	7.14		Pass
275	10.0 - 30.0% of mass 198	7341	22.8		Pass
365	1.0 - 100.0% of mass 198	972	3.02		Pass
441	Present, but less than mass 443	2630	8.18	(86.5) [b]	Pass
442	40.0 - 100.0% of mass 198	16711	52.0		Pass
443	17.0 - 23.0% of mass 442	3042	9.46	(18.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3803-CC3794	5P80340.D	12/15/21	02:51	00:26	Continuing cal 10
E5P3803-CC3785	5P80341.D	12/15/21	03:18	00:53	Continuing cal 10
OP37001-MB1	5P80342.D	12/15/21	03:51	01:26	Method Blank
OP37001-BS1	5P80343.D	12/15/21	04:17	01:52	Blank Spike
OP37001-BSD	5P80344.D	12/15/21	04:48	02:23	Blank Spike Duplicate
OP36999-MB1	5P80345.D	12/15/21	05:15	02:50	Method Blank
OP36999-BS1	5P80346.D	12/15/21	05:41	03:16	Blank Spike
OP36999-BSD	5P80347.D	12/15/21	06:08	03:43	Blank Spike Duplicate
ZZZZZZ	5P80348.D	12/15/21	06:35	04:10	(unrelated sample)
ZZZZZZ	5P80349.D	12/15/21	07:01	04:36	(unrelated sample)
ZZZZZZ	5P80350.D	12/15/21	07:28	05:03	(unrelated sample)
ZZZZZZ	5P80351.D	12/15/21	07:54	05:29	(unrelated sample)
ZZZZZZ	5P80352.D	12/15/21	08:21	05:56	(unrelated sample)
ZZZZZZ	5P80353.D	12/15/21	08:48	06:23	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3805-DFTPP	**Injection Date:**	12/15/21
Lab File ID:	5P80377.D	**Injection Time:**	14:31
Instrument ID:	GCMS5P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	11856	30.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	15933	41.0		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	21073	54.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	38837	100.0		Pass
199	5.0 - 9.0% of mass 198	2605	6.71		Pass
275	10.0 - 30.0% of mass 198	10066	25.9		Pass
365	1.0 - 100.0% of mass 198	1329	3.42		Pass
441	Present, but less than mass 443	3823	9.84	(83.6) [b]	Pass
442	40.0 - 100.0% of mass 198	23590	60.7		Pass
443	17.0 - 23.0% of mass 442	4572	11.8	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3805-CC3794	5P80378.D	12/15/21	14:51	00:20	Continuing cal 5
E5P3805-CC3785	5P80379.D	12/15/21	15:43	01:12	Continuing cal 5
ZZZZZZ	5P80380.D	12/15/21	16:10	01:39	(unrelated sample)
ZZZZZZ	5P80381.D	12/15/21	16:37	02:06	(unrelated sample)
JD36168-4	5P80382.D	12/15/21	17:38	03:07	HOFF MW-5DL
JD36168-5	5P80383.D	12/15/21	18:05	03:34	HOFF MW-5DV
JD36168-6	5P80384.D	12/15/21	18:31	04:00	HOFF MW-5S
JD36168-7	5P80385.D	12/15/21	18:58	04:27	HOFF MW-6S
JD36168-8	5P80386.D	12/15/21	19:25	04:54	HOFF OW-6DU
JD36168-9	5P80387.D	12/15/21	19:52	05:21	HOFF OW-6DL
JD36168-10	5P80388.D	12/15/21	20:19	05:48	HOFF MW-7DU
JD36168-11	5P80389.D	12/15/21	20:46	06:15	HOFF MW-7S
JD36168-2	5P80390.D	12/15/21	21:13	06:42	HOFF OW-4DL
JD36168-3	5P80391.D	12/15/21	21:41	07:10	HOFF OW-4DU
ZZZZZZ	5P80392.D	12/15/21	22:07	07:36	(unrelated sample)
ZZZZZZ	5P80393.D	12/15/21	22:34	08:03	(unrelated sample)
ZZZZZZ	5P80394.D	12/15/21	23:01	08:30	(unrelated sample)
ZZZZZZ	5P80395.D	12/15/21	23:28	08:57	(unrelated sample)

Internal Standard Area Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2614-CC2551	**Injection Date:**	12/08/21
Lab File ID:	4P49907.D	**Injection Time:**	03:45
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	16163	6.76	24365	8.23	46040	10.35	23789	13.00
Upper Limit [a]	32326	7.26	48730	8.73	92080	10.85	47578	13.50
Lower Limit [b]	8082	6.26	12183	7.73	23020	9.85	11895	12.50

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP36999A-MB1	13187	6.76	20053	8.23	34812	10.35	16256	13.00
ZZZZZZ	12410	6.76	18590	8.23	33666	10.35	15842	13.00
ZZZZZZ	13924	6.76	20868	8.23	36995	10.35	17770	13.00
OP36999A-BS12	13635	6.76	21192	8.23	37083	10.35	17540	13.00
OP36999A-BSD12	13751	6.76	21020	8.23	37274	10.35	17991	13.00
ZZZZZZ	14099	6.76	21300	8.23	37307	10.35	17067	13.00
ZZZZZZ	13434	6.76	20458	8.23	36389	10.35	16798	13.00
ZZZZZZ	13036	6.76	19845	8.23	34914	10.35	16209	13.00
ZZZZZZ	13895	6.76	21031	8.23	37463	10.35	16924	13.00
ZZZZZZ	13622	6.76	21054	8.23	37221	10.35	16377	13.00
ZZZZZZ	13948	6.76	21170	8.23	36679	10.35	16855	13.00
ZZZZZZ	13430	6.76	20746	8.23	36243	10.35	16197	13.00
ZZZZZZ	14061	6.76	21649	8.23	38289	10.35	17437	13.00
JD36168-10	13436	6.76	20865	8.23	35937	10.35	16453	13.00
JD36168-11	14086	6.76	21492	8.23	37791	10.35	16624	13.00
JD36168-2	14053	6.76	21173	8.23	36643	10.35	17360	13.00
JD36168-3	14856	6.76	22545	8.23	39565	10.35	17688	13.00

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2620-CC2551	**Injection Date:**	12/12/21
Lab File ID:	4P50023.D	**Injection Time:**	10:42
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	24063	6.84	38217	8.32	74397	10.45	35390	13.11
Upper Limit [a]	48126	7.34	76434	8.82	148794	10.95	70780	13.61
Lower Limit [b]	12032	6.34	19109	7.82	37199	9.95	17695	12.61

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37001A-MB1	19138	6.85	32471	8.33	57895	10.45	27371	13.11
OP37001A-BS12	18964	6.84	31780	8.32	56794	10.45	27531	13.11
ZZZZZZ	19491	6.85	32080	8.33	55632	10.45	25822	13.11
ZZZZZZ	21010	6.84	35178	8.33	60695	10.45	28009	13.11
JD36109-3	20610	6.84	34128	8.32	58756	10.45	26792	13.11
ZZZZZZ	21715	6.84	35695	8.32	60536	10.45	27144	13.11
ZZZZZZ	22291	6.84	33776	8.32	56078	10.45	25333	13.11
ZZZZZZ	23060	6.84	37077	8.32	62233	10.45	28354	13.11
OP37001A-MS	20572	6.85	31874	8.33	53000	10.45	24538	13.11
OP37001A-MSD	21015	6.84	33008	8.33	55052	10.45	25146	13.11
ZZZZZZ	20260	6.84	32219	8.32	53184	10.45	22288	13.11
ZZZZZZ	20109	6.84	31954	8.32	52302	10.45	22211	13.11
ZZZZZZ	17883	6.84	29069	8.32	51580	10.45	22152	13.11
ZZZZZZ	18196	6.84	29341	8.32	51537	10.45	21768	13.11
ZZZZZZ	18579	6.84	30029	8.32	52151	10.45	22325	13.11
ZZZZZZ	21057	6.84	30593	8.32	45200	10.45	17980	13.11
ZZZZZZ	20852	6.84	41545	8.33	45962	10.45	19231	13.11
ZZZZZZ	19346	6.84	30499	8.32	51834	10.45	21233	13.11
ZZZZZZ	17724	6.84	27537	8.32	44839	10.45	18238	13.11
ZZZZZZ	20541	6.84	32121	8.32	53646	10.45	22013	13.11
ZZZZZZ	18937	6.84	30017	8.32	50465	10.45	19799	13.11
ZZZZZZ	19472	6.84	30848	8.32	50475	10.45	19170	13.11
ZZZZZZ	18208	6.84	27328	8.32	40915	10.45	16475[c]	13.11
ZZZZZZ	19221	6.84	25538	8.32	35468[c]	10.45	18687	13.11

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Internal standard failing low.

Internal Standard Area Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2625-CC2551	**Injection Date:**	12/15/21
Lab File ID:	4P50120.D	**Injection Time:**	16:36
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	21955	6.81	32962	8.28	58398	10.41	30861	13.07
Upper Limit [a]	43910	7.31	65924	8.78	116796	10.91	61722	13.57
Lower Limit [b]	10978	6.31	16481	7.78	29199	9.91	15431	12.57

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37091A-MB1	15920	6.81	23228	8.29	41466	10.41	21459	13.07
OP37091A-BS12	16268	6.81	24585	8.28	42414	10.41	21994	13.07
OP37091A-BSD12	15687	6.81	23523	8.29	41328	10.41	21022	13.07
OP37046A-MB1	15641	6.81	23038	8.28	39977	10.41	18813	13.07
OP37046A-BS12	15709	6.81	23339	8.28	41376	10.41	20110	13.07
OP37046A-BSD12	15199	6.81	22471	8.28	39759	10.41	18682	13.07
OP37017A-MB1	17314	6.81	25849	8.29	45764	10.41	23256	13.07
OP37017A-BS12	16929	6.82	24220	8.29	37534	10.41	16903	13.07
OP37017A-BSD12	15818	6.81	23916	8.29	38654	10.41	17916	13.07
ZZZZZZ	15330	6.82	22905	8.29	41008	10.41	20375	13.07
ZZZZZZ	44226[c]	6.82	68112[c]	8.29	121443[c]	10.41	61000[c]	13.07
ZZZZZZ	14963	6.82	23753	8.29	39815	10.41	20053	13.07
ZZZZZZ	17169	6.82	32935	8.29	38044	10.41	19854	13.07
ZZZZZZ	18482	6.82	27810	8.29	47608	10.41	23169	13.07
ZZZZZZ	15834	6.82	23125	8.29	41906	10.44	18789	13.08
ZZZZZZ	16776	6.82	25386	8.29	52464	10.44	19477	13.08
ZZZZZZ	15505	6.82	23558	8.29	39536	10.41	18491	13.08
ZZZZZZ	19896	6.82	29500	8.29	48469	10.41	24438	13.08
ZZZZZZ	18406	6.82	27428	8.29	46631	10.41	23127	13.08
ZZZZZZ	17749	6.82	26215	8.29	44264	10.41	22650	13.08
ZZZZZZ	17747	6.82	25990	8.29	42968	10.41	21608	13.08
ZZZZZZ	17464	6.82	25903	8.29	43423	10.42	22017	13.08
JD36168-4	16062	6.82	23950	8.29	40822	10.41	20205	13.08

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Internal standard double spiked; The recovery re-calculated based on the spike amount.

Internal Standard Area Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2627-CC2551	**Injection Date:**	12/16/21
Lab File ID:	4P50150.D	**Injection Time:**	13:53
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	21212	6.81	31163	8.28	54490	10.40	28540	13.07
Upper Limit [a]	42424	7.31	62326	8.78	108980	10.90	57080	13.57
Lower Limit [b]	10606	6.31	15582	7.78	27245	9.90	14270	12.57

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37092A-MB1	15292	6.81	23153	8.28	40479	10.41	22133	13.07
ZZZZZZ	18458	6.81	26156	8.28	44493	10.40	23032	13.07
ZZZZZZ	15861	6.81	23284	8.28	41507	10.40	21345	13.07
OP37092A-BS12	16889	6.81	24612	8.28	42898	10.40	21851	13.07
OP37092A-BSD12	16100	6.81	23786	8.28	42124	10.41	21564	13.07
ZZZZZZ	19961	6.81	29443	8.28	48312	10.40	24132	13.07
ZZZZZZ	18654	6.81	27448	8.28	44525	10.40	21326	13.07
ZZZZZZ	17066	6.81	24965	8.28	43087	10.40	20885	13.07
ZZZZZZ	17643	6.81	25421	8.28	43478	10.40	21590	13.07
ZZZZZZ	19382	6.81	27540	8.28	44938	10.40	22678	13.07
ZZZZZZ	16986	6.81	25092	8.28	42482	10.40	21979	13.07
ZZZZZZ	17211	6.81	25080	8.28	42086	10.40	20776	13.07
ZZZZZZ	18792	6.81	26738	8.28	44646	10.40	22202	13.07
ZZZZZZ	19046	6.81	27768	8.28	43657	10.40	21309	13.07
ZZZZZZ	18259	6.81	25738	8.28	44478	10.40	22274	13.07
ZZZZZZ	18000	6.81	26327	8.28	44086	10.40	21580	13.07
ZZZZZZ	18847	6.81	26750	8.28	43147	10.40	21037	13.07
ZZZZZZ	17307	6.81	25464	8.28	42540	10.40	21440	13.07
ZZZZZZ	18243	6.81	26541	8.28	45968	10.40	23478	13.07
ZZZZZZ	17901	6.81	25619	8.28	42473	10.40	20965	13.07
JD36168-5	19560	6.81	28374	8.28	48824	10.40	23930	13.07

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2628-CC2551	**Injection Date:**	12/17/21
Lab File ID:	4P50182.D	**Injection Time:**	12:13
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	20275	6.80	28725	8.28	52935	10.39	27733	13.05
Upper Limit [a]	40550	7.30	57450	8.78	105870	10.89	55466	13.55
Lower Limit [b]	10138	6.30	14363	7.78	26468	9.89	13867	12.55

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37151-MB1	17888	6.80	24444	8.28	37390	10.39	16616	13.06
ZZZZZZ	15614	6.80	22265	8.28	35871	10.39	17996	13.05
OP37151-BS12	17572	6.80	23976	8.28	35447	10.39	16100	13.05
OP37151-BSD12	15636	6.80	22543	8.28	39287	10.39	19830	13.05
ZZZZZZ	17487	6.80	24878	8.28	41465	10.39	21409	13.05
ZZZZZZ	19266	6.80	26074	8.28	38906	10.39	17990	13.05
ZZZZZZ	15808	6.80	22451	8.28	37118	10.39	18902	13.05
ZZZZZZ	17889	6.80	25206	8.28	40981	10.39	21018	13.05
ZZZZZZ	17078	6.80	24299	8.28	40145	10.39	20039	13.05
ZZZZZZ	19097	6.80	26542	8.28	44031	10.39	22016	13.05
ZZZZZZ	17805	6.80	25462	8.27	41663	10.39	20600	13.05
ZZZZZZ	17966	6.79	25247	8.27	41268	10.39	20558	13.05
ZZZZZZ	20828	6.79	27616	8.27	40904	10.39	18391	13.05
ZZZZZZ	16153	6.79	23120	8.27	39275	10.39	20263	13.05
ZZZZZZ	18823	6.79	25858	8.27	39076	10.39	18275	13.05
ZZZZZZ	18907	6.79	43609	8.28	43103	10.39	21588	13.05
ZZZZZZ	19861	6.79	27636	8.27	42706	10.39	20524	13.05
ZZZZZZ	17679	6.79	25581	8.27	41762	10.39	20872	13.05
JD36168-6	16789	6.79	23105	8.27	39701	10.39	20187	13.05
JD36168-7	18907	6.79	27079	8.27	44843	10.39	22505	13.05
JD36168-8	17044	6.79	23932	8.27	39469	10.39	20548	13.05
JD36168-9	16134	6.79	22982	8.27	37808	10.39	19866	13.05

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E5P3803-CC3794	**Injection Date:**	12/15/21
Lab File ID:	5P80340.D	**Injection Time:**	02:51
Instrument ID:	GCMS5P	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	61227	4.61	231146	5.70	137244	7.77	239200	9.95	204724	14.13	216233	16.24
Upper Limit [a]	122454	5.11	462292	6.20	274488	8.27	478400	10.45	409448	14.63	432466	16.74
Lower Limit [b]	30614	4.11	115573	5.20	68622	7.27	119600	9.45	102362	13.63	108117	15.74

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP37001-MB1	65017	4.61	246449	5.69	139604	7.76	249977	9.94	221021	14.13	216560	16.24
OP37001-BS1	58616	4.61	217530	5.70	125600	7.77	216182	9.95	184372	14.13	180647	16.24
OP37001-BSD	62085	4.61	227801	5.70	129281	7.77	223963	9.95	193513	14.13	196245	16.24
OP36999-MB1	67452	4.61	258360	5.69	142491	7.76	259588	9.94	226533	14.12	217730	16.23
OP36999-BS1	58023	4.61	216608	5.69	122747	7.76	213350	9.95	186296	14.13	177668	16.24
OP36999-BSD	59728	4.61	221192	5.69	123920	7.76	215792	9.94	193336	14.13	187325	16.24
ZZZZZZ	88600	4.61	338891	5.69	187438	7.76	338970	9.94	300076	14.12	277682	16.24
ZZZZZZ	59311	4.61	206292	5.69	119579	7.76	207834	9.94	187644	14.12	176951	16.23
ZZZZZZ	63755	4.61	239526	5.69	133613	7.76	232972	9.94	205181	14.13	197568	16.23
ZZZZZZ	61952	4.61	235738	5.69	130004	7.76	229722	9.94	205200	14.12	204555	16.24
ZZZZZZ	63933	4.61	240145	5.69	134210	7.76	238109	9.94	205022	14.12	188962	16.23
ZZZZZZ	69077	4.61	263373	5.69	147503	7.76	261835	9.94	221566	14.12	201045	16.24

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-d10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E5P3805-CC3794	**Injection Date:**	12/15/21
Lab File ID:	5P80378.D	**Injection Time:**	14:51
Instrument ID:	GCMS5P	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	64914	4.61	248757	5.69	148590	7.76	259901	9.94	222222	14.12	209594	16.23
Upper Limit [a]	129828	5.11	497514	6.19	297180	8.26	519802	10.44	444444	14.62	419188	16.73
Lower Limit [b]	32457	4.11	124379	5.19	74295	7.26	129951	9.44	111111	13.62	104797	15.73

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	70719	4.61	273806	5.69	154662	7.76	265221	9.94	215856	14.12	198232	16.23
ZZZZZZ	66019	4.61	257462	5.69	146707	7.76	258224	9.94	209428	14.12	193887	16.23
JD36168-4	59878	4.61	227428	5.69	134174	7.76	240169	9.94	194415	14.12	180112	16.23
JD36168-5	71612	4.61	273727	5.69	159227	7.76	283600	9.94	235170	14.12	215048	16.23
JD36168-6	62355	4.61	245862	5.69	141633	7.76	240700	9.94	204507	14.12	193966	16.23
JD36168-7	68381	4.61	271593	5.69	161017	7.76	286275	9.94	233565	14.12	212760	16.23
JD36168-8	67493	4.61	260756	5.69	149955	7.76	263222	9.94	205035	14.12	193550	16.23
JD36168-9	64931	4.61	253000	5.69	145694	7.76	255056	9.94	201159	14.12	189992	16.23
JD36168-10	79185	4.61	307493	5.69	179292	7.76	319659	9.94	261884	14.12	242750	16.23
JD36168-11	72689	4.61	286542	5.69	164199	7.76	293336	9.94	242565	14.12	220098	16.23
JD36168-2	73746	4.61	285738	5.69	163428	7.76	282081	9.94	235973	14.12	221392	16.23
JD36168-3	72269	4.61	284056	5.69	163952	7.76	290733	9.94	239747	14.12	220905	16.23
ZZZZZZ	72128	4.61	282200	5.69	163300	7.76	288615	9.94	236778	14.12	222048	16.23
ZZZZZZ	69621	4.61	271237	5.69	158329	7.76	282932	9.94	230180	14.12	216343	16.23
ZZZZZZ	72117	4.61	268366	5.69	158734	7.76	287228	9.94	238632	14.12	227367	16.23
ZZZZZZ	67554	4.61	267573	5.69	154729	7.76	269238	9.94	220839	14.12	206552	16.23

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-d10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8270E **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD36168-2	5P80390.D	45	32	93	82	84	100
JD36168-3	5P80391.D	54	38	96	87	91	85
JD36168-4	5P80382.D	13	8* [a]	45	62	64	60
JD36168-5	5P80383.D	21	13	71	75	79	66
JD36168-6	5P80384.D	22	14	90	88	89	59
JD36168-7	5P80385.D	17	12	54	81	82	59
JD36168-8	5P80386.D	29	21	73	74	79	79
JD36168-9	5P80387.D	37	28	96	78	84	73
JD36168-10	5P80388.D	53	39	100	101	100	90
JD36168-11	5P80389.D	54	39	101	88	91	90
OP36999-BS1	5P80346.D	54	35	102	85	89	104
OP36999-BSD	5P80347.D	50	34	105	77	78	102
OP36999-MB1	5P80345.D	46	32	85	84	86	93
OP37001-BS1	5P80343.D	41	27	97	87	89	89
OP37001-BSD	5P80344.D	37	24	91	83	86	81
OP37001-MB1	5P80342.D	36	23	92	86	90	77

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-73%
S2 = Phenol-d5	10-64%
S3 = 2,4,6-Tribromophenol	31-130%
S4 = Nitrobenzene-d5	28-126%
S5 = 2-Fluorobiphenyl	26-114%
S6 = Terphenyl-d14	16-122%

(a) Outside of in house control limits.

Surrogate Recovery Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8270E BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JD36168-2	4P49926.D	122	101	120
JD36168-3	4P49927.D	125* [a]	103	96
JD36168-4	4P50143.D	77	63	56
JD36168-5	4P50173.D	110	90	73
JD36168-6	4P50201.D	116	99	57
JD36168-7	4P50202.D	109	90	57
JD36168-8	4P50203.D	106	89	79
JD36168-9	4P50204.D	113	97	75
JD36168-10	4P49924.D	139* [b]	112	101
JD36168-11	4P49925.D	130* [b]	109	106
OP36999A-BS12	4P49912.D	116	93	121
OP36999A-BSD12	4P49913.D	104	89	115
OP36999A-MB1	4P49909A.D	125* [c]	99	120
OP37001A-BS12	4P50025.D	117	85	96
OP37001A-MB1	4P50024.D	121	92	90
OP37001A-MS	4P50032.D	112	92	64
OP37001A-MSD	4P50033.D	97	84	77

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	29-124%
S2 = 2-Fluorobiphenyl	23-122%
S3 = Terphenyl-d14	22-130%

(a) High percent recoveries and no associated positive found in the sample.
(b) High percent recoveries and no positive found in the sample.
(c) Outside of in house control limits.

Initial Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICC2551
Lab FileID: 4P48505.D

Response Factor Report MS4P

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Oct 21 09:41:06 2021
Response via : Initial Calibration

Calibration Files
1.0 =4p48504.D 0.5 =4p48507.D 0.2 =4p48505.D 0.1 =4p48508.D
0.04=4p48511.D 0.02=4p48506.D 0.01=4p48514.D .004=4p48509.D
.002=4p48513.D = = =

Compound	1.0	0.5	0.2	0.1	0.04	0.02	0.01	.004	.002	Avg	%RSD
1) I 1-Methylnaphthalene-d	----------ISTD----------										
2) 1,4-Dioxane	0.206	0.203	0.178	0.181	0.174	0.202	0.164			0.187	9.04
3) 2-Fluorophenol	0.582	0.514	0.506	0.461	0.513	0.470	0.501	0.454	0.465	0.496	8.04
4) Phenol-d5	1.054	0.987	0.918	0.896	0.920	0.922	0.940	0.923	0.913	0.941	5.21
5) Phenol	1.131	1.056	0.970	0.946	0.993	0.960	0.986	0.979	0.971	0.999	5.84
6) bis(2-Chloroethyl)ether										0.000#	-1.00
7) Nitrobenzene-d5	0.849	0.801	0.721	0.721	0.760	0.730	0.787	0.768	0.777	0.768	5.43
8) Naphthalene	2.530	2.312	2.144	2.041	2.083	2.189	2.226	2.349	2.732	2.290	9.73
9) Hexachlorobutadiene	0.572	0.534	0.492	0.481	0.506	0.580	0.602	0.705		0.559	13.17
10) 2-Methylnaphthalene	1.361	1.251	1.150	1.078	1.084	1.156	1.168	1.239	1.280	1.196	7.83
11) 1-Methylnaphthalene	1.306	1.184	1.089	0.986	1.066	1.129	1.180	1.328	1.095	1.152	9.68
12) Hexachlorocyclopentadiene	0.537	0.468	0.399	0.381	0.419	0.447	0.424	0.637		0.464	18.25
13) I Fluorene-d10	----------ISTD----------										
14) 2-Fluorobiphenyl	1.149	1.054	0.968	0.971	0.989	0.997	1.031	1.011	1.014	1.020	5.44
15) Acenaphthylene	1.752	1.539	1.377	1.378	1.378	1.346	1.456	1.556	1.630	1.490	9.33
16) Acenaphthene	1.065	0.980	0.889	0.882	0.884	0.874	0.892	0.974	1.120	0.951	9.49
17) Fluorene	1.302	1.154	1.064	1.043	1.101	1.078	1.121	1.145	1.320	1.148	8.67
18) 4,6-dinitro-2-methylphenol	0.192	0.150	0.113	0.103	0.094	0.074	0.065			0.113	39.49
---- Quadratic regression ---- Coefficient = 0.9997											
Response Ratio = -0.00290 + 0.10101 *A + 0.01473 *A^2											
19) 2,4,6-Tribromophenol	0.189	0.168	0.150	0.149	0.146	0.142	0.142	0.144	0.143	0.153	10.33
20) Fluoranthene-d10	----------ISTD----------										
21) Hexachlorobenzene	0.261	0.232	0.215	0.219	0.214	0.222	0.266	0.297	0.347	0.252	17.96

8.8.1

8

Initial Calibration Summary

Job Number: JD36168 **Sample:** E4P2551-ICC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P48505.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
22)  Pentachlorophenol
          0.171 0.155 0.133 0.126 0.130 0.127 0.113 0.151 0.172        0.142   14.84
23)  Phenanthrene
          1.135 1.022 0.940 0.910 0.908 0.975 1.076 1.203 1.528        1.078   18.32
24)  Anthracene
          1.127 1.034 0.934 0.935 0.964 0.927 1.010 1.240 1.129        1.033   10.65
25)  Fluoranthene
          1.239 1.113 1.027 0.988 1.079 1.160 1.248                    1.122    8.91
26)  Pyrene
          1.313 1.175 1.083 1.036 1.087 1.149 1.179 1.460 1.628        1.235   15.94
27)  Terphenyl-d14
          0.682 0.592 0.555 0.540 0.559 0.567 0.552 0.563 0.547        0.573    7.57
28)  Benzo[a]anthracene
          1.216 1.049 0.962 0.917 0.938 1.073 1.091 1.579              1.103   19.55
29)  Chrysene
          1.148 1.037 0.956 0.957 1.011 1.204 1.251                    1.081   11.10

30) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
31)  Benzo[b]fluoranthene
          1.819 1.630 1.574 1.645 2.088 2.859 3.428                    2.149   33.48
           ---- Quadratic regression ----  Coefficient =  0.9993
             Response Ratio = 0.02961 + 1.38761 *A + 0.32444 *A^2

32)  Benzo[k]fluoranthene
          1.573 1.493 1.446 1.446 1.587 1.734 2.278                    1.651   17.81
33)  Benzo[a]pyrene
          1.653 1.484 1.407 1.384 1.502 1.546 1.622                    1.514    6.69
34)  Indeno[1,2,3-cd]pyrene
          1.699 1.573 1.519 1.552 1.726 2.156 2.405                    1.804   18.94
35)  Dibenz[a,h]anthracene
          1.463 1.337 1.258 1.292 1.351 1.563 1.572                    1.405    9.11
36)  Benzo[g,h,i]perylene
          1.512 1.390 1.353 1.403 1.573 1.942                          1.529   14.31
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4P2551SIMLVI.M        Thu Oct 21 09:57:50 2021   YING
```

8.8.1

8

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICV2551
Lab FileID: 4P48512.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2551\4p48512.D Vial: 11
Acq On : 21 Oct 2021 3:15 am Operator: chriss2
Sample : icv2551-0.2 Inst : MS4P
Misc : op35776a,e4p2551,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Oct 21 09:41:06 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	100	0.00	7.10
2	t	1,4-Dioxane	0.187	0.187	0.0	105	0.02	2.16
5		Phenol	0.999	0.997	0.2	103	0.00	4.73
8	t	Naphthalene	2.290	1.983	13.4	92	0.00	6.35
9	t	Hexachlorobutadiene	0.559	0.471	15.7	96	0.00	6.47
10	t	2-Methylnaphthalene	1.196	1.097	8.3	95	0.00	7.04
11	t	1-Methylnaphthalene	1.152	1.045	9.3	96	0.00	7.13
12		Hexachlorocyclopentadiene	0.464	0.814	-75.4#	204#	0.00	7.19
13	I	Fluorene-d10	1.000	1.000	0.0	94	0.00	8.58
15	t	Acenaphthylene	1.490	1.201	19.4	82	0.00	7.92
16	t	Acenaphthene	0.951	0.830	12.7	88	0.00	8.09
17	t	Fluorene	1.148	1.009	12.1	89	0.00	8.60
		----------	True	Calc.	% Drift	----------		
18		4,6-dinitro-2-methylpheno	1000.000	1168.570	-16.9	117	0.00	8.66
		----------	AvgRF	CCRF	% Dev	----------		
20		Fluoranthene-d10	1.000	1.000	0.0	95	0.00	10.71
21	t	Hexachlorobenzene	0.252	0.210	16.7	93	0.01	9.15
22	t	Pentachlorophenol	0.142	0.152	-7.0	109	0.00	9.34
23	t	Phenanthrene	1.078	0.903	16.2	91	0.01	9.55
24	t	Anthracene	1.033	0.890	13.8	91	0.00	9.60
25	t	Fluoranthene	1.122	0.964	14.1	89	0.00	10.73
26	t	Pyrene	1.235	0.963	22.0	85	0.00	10.95
28	t	Benzo[a]anthracene	1.103	0.838	24.0	83	0.00	12.14
29	t	Chrysene	1.081	0.868	19.7	86	0.00	12.17
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	85	0.00	13.40
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[b]fluoranthene	200.000	215.764	-7.9	92	0.00	13.13
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Benzo[k]fluoranthene	1.651	1.458	11.7	86	0.00	13.15
33	t	Benzo[a]pyrene	1.514	1.429	5.6	86	0.00	13.42
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.458	19.2	82	0.00	14.60
35	t	Dibenz[a,h]anthracene	1.405	1.209	14.0	82	0.00	14.62
36	t	Benzo[g,h,i]perylene	1.529	1.345	12.0	85	0.00	14.93

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICV2551
Lab FileID: 4P48512.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p48505.D M4P2551SIMLVI.M Thu Oct 21 09:55:50 2021 YING

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E4P2614-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P49907.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e4p2614\4p49907.d Vial: 3
Acq On : 8 Dec 2021 3:45 am Operator: chriss2
Sample : cc2551-0.1 Inst : MS4P
Misc : op36606a,e4p2614,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Dec 08 05:24:03 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	61	0.00	6.76
2	t	1,4-Dioxane	0.187	0.229	-22.5#	77	0.00	1.77
3	S	2-Fluorophenol	0.496	0.556	-12.1	73	0.00	3.46
4	S	Phenol-d5	0.941	1.109	-17.9	75	0.00	4.42
5		Phenol	0.999	1.173	-17.4	75	0.00	4.43
7	S	Nitrobenzene-d5	0.768	1.129	-47.0#	95	0.00	5.29
8	t	Naphthalene	2.290	2.329	-1.7	69	0.00	6.01
9	t	Hexachlorobutadiene	0.559	0.730	-30.6#	92	0.00	6.14
10	t	2-Methylnaphthalene	1.196	1.297	-8.4	73	0.00	6.70
11	t	1-Methylnaphthalene	1.152	1.249	-8.4	77	0.00	6.79
12		Hexachlorocyclopentadiene	0.464	0.444	4.3	71	0.00	6.85
13	I	Fluorene-d10	1.000	1.000	0.0	61	0.00	8.23
14	S	2-Fluorobiphenyl	1.020	1.175	-15.2	74	0.00	7.08
15	t	Acenaphthylene	1.490	1.449	2.8	64	0.00	7.58
16	t	Acenaphthene	0.951	1.042	-9.6	72	0.00	7.75
17	t	Fluorene	1.148	1.222	-6.4	71	0.00	8.26
		----------	True	Calc.	% Drift	----------		
18		4,6-dinitro-2-methylpheno	500.000	655.275	-31.1#	85	0.00	8.34
		----------	AvgRF	CCRF	% Dev	----------		
19	S	2,4,6-Tribromophenol	0.153	0.221	-44.4#	90	0.00	8.50
20		Fluoranthene-d10	1.000	1.000	0.0	67	0.00	10.35
21	t	Hexachlorobenzene	0.252	0.288	-14.3	88	0.00	8.80
22	t	Pentachlorophenol	0.142	0.113	20.4#	60	0.00	8.99
23	t	Phenanthrene	1.078	1.001	7.1	74	0.00	9.20
24	t	Anthracene	1.033	0.945	8.5	68	0.00	9.25
25	t	Fluoranthene	1.122	1.240	-10.5	84	0.00	10.37
26	t	Pyrene	1.235	1.187	3.9	77	0.00	10.59
27	S	Terphenyl-d14	0.573	0.665	-16.1	82	0.00	10.77
28	t	Benzo[a]anthracene	1.103	0.878	20.4#	64	0.00	11.77
29	t	Chrysene	1.081	1.051	2.8	74	0.00	11.80
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	55	0.00	13.00
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[b]fluoranthene	100.000	98.049	2.0	55	0.00	12.75
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Benzo[k]fluoranthene	1.651	1.731	-4.8	66	0.00	12.78

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E4P2614-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P49907.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

33	t	Benzo[a]pyrene	1.514	1.761	-16.3	71	0.00	13.02
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.589	11.9	57	0.00	14.04
35	t	Dibenz[a,h]anthracene	1.405	1.325	5.7	57	0.00	14.07
36	t	Benzo[g,h,i]perylene	1.529	1.449	5.2	57	0.00	14.32

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p49907.d M4P2551SIMLVI.M Wed Dec 08 05:24:15 2021

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E4P2620-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50023.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2620\4p50023.D Vial: 2
Acq On : 12 Dec 2021 10:42 am Operator: kristis
Sample : cc2551-0.1 Inst : MS4P
Misc : op36606a,e4p2620,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Dec 03 16:51:52 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	90	0.05	6.84
2	t	1,4-Dioxane	0.187	0.231	-23.5#	115	0.07	1.89
3	S	2-Fluorophenol	0.496	0.586	-18.1	115	0.03	3.55
4	S	Phenol-d5	0.941	1.042	-10.7	105	0.03	4.50
5		Phenol	0.999	1.100	-10.1	105	0.03	4.51
7	S	Nitrobenzene-d5	0.768	1.136	-47.9#	142	0.04	5.37
8	t	Naphthalene	2.290	2.267	1.0	100	0.05	6.09
9	t	Hexachlorobutadiene	0.559	0.752	-34.5#	141	0.04	6.22
10	t	2-Methylnaphthalene	1.196	1.304	-9.0	109	0.05	6.78
11	t	1-Methylnaphthalene	1.152	1.232	-6.9	113	0.05	6.88
12		Hexachlorocyclopentadiene	0.464	0.491	-5.8	116	0.05	6.94
13	I	Fluorene-d10	1.000	1.000	0.0	96	0.05	8.32
14	S	2-Fluorobiphenyl	1.020	1.117	-9.5	110	0.05	7.16
15	t	Acenaphthylene	1.490	1.402	5.9	97	0.05	7.67
16	t	Acenaphthene	0.951	1.011	-6.3	110	0.06	7.84
17	t	Fluorene	1.148	1.244	-8.4	114	0.06	8.35
		----------	True	Calc.	% Drift	----------		
18		4,6-dinitro-2-methylpheno	500.000	731.898	-46.4#	152	0.06	8.42
		----------	AvgRF	CCRF	% Dev	----------		
19	S	2,4,6-Tribromophenol	0.153	0.228	-49.0#	146	0.06	8.59
20		Fluoranthene-d10	1.000	1.000	0.0	108	0.06	10.45
21	t	Hexachlorobenzene	0.252	0.284	-12.7	141	0.05	8.88
22	t	Pentachlorophenol	0.142	0.102	28.2#	87	0.05	9.09
23	t	Phenanthrene	1.078	1.057	1.9	126	0.05	9.29
24	t	Anthracene	1.033	0.952	7.8	110	0.06	9.34
25	t	Fluoranthene	1.122	1.184	-5.5	130	0.06	10.47
26	t	Pyrene	1.235	1.166	5.6	122	0.07	10.69
27	S	Terphenyl-d14	0.573	0.669	-16.8	134	0.06	10.86
28	t	Benzo[a]anthracene	1.103	0.903	18.1	107	0.06	11.87
29	t	Chrysene	1.081	1.039	3.9	118	0.06	11.90
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	82	0.07	13.11
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[b]fluoranthene	100.000	105.630	-5.6	88	0.06	12.85
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Benzo[k]fluoranthene	1.651	1.991	-20.6#	114	0.06	12.88

Continuing Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2620-CC2551
Lab FileID: 4P50023.D

33	t	Benzo[a]pyrene	1.514	1.707	-12.7	102	0.06	13.13
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.500	16.9	80	0.09	14.19
35	t	Dibenz[a,h]anthracene	1.405	1.272	9.5	81	0.09	14.22
36	t	Benzo[g,h,i]perylene	1.529	1.350	11.7	79	0.10	14.48

(#) = Out of Range SPCC's out = 0 CCC's out = 0

4p49792.D M4P2551SIMLVI.M Mon Dec 13 09:17:19 2021 YING

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E4P2625-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50120.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2625\4p50120.D Vial: 4
Acq On : 15 Dec 2021 4:36 pm Operator: kristis
Sample : cc2551-0.2 Inst : MS4P
Misc : op36999a,e4p2625,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 13 09:21:17 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	72	-0.03	6.81
2	t	1,4-Dioxane	0.187	0.243	-29.9#	98	-0.07	1.83
3	S	2-Fluorophenol	0.496	0.490	1.2	69	-0.03	3.52
4	S	Phenol-d5	0.941	0.884	6.1	69	-0.02	4.47
5		Phenol	0.999	0.923	7.6	68	-0.03	4.48
7	S	Nitrobenzene-d5	0.768	0.970	-26.3#	96	-0.03	5.35
8	t	Naphthalene	2.290	1.924	16.0	64	-0.03	6.06
9	t	Hexachlorobutadiene	0.559	0.679	-21.5#	99	-0.03	6.19
10	t	2-Methylnaphthalene	1.196	1.092	8.7	68	-0.03	6.75
11	t	1-Methylnaphthalene	1.152	1.046	9.2	69	-0.03	6.85
12		Hexachlorocyclopentadiene	0.464	0.542	-16.8	97	-0.03	6.91
13	I	Fluorene-d10	1.000	1.000	0.0	68	-0.03	8.28
14	S	2-Fluorobiphenyl	1.020	1.005	1.5	71	-0.03	7.13
15	t	Acenaphthylene	1.490	1.343	9.9	66	-0.03	7.64
16	t	Acenaphthene	0.951	0.909	4.4	70	-0.04	7.80
17	t	Fluorene	1.148	1.059	7.8	68	-0.03	8.32
			True	Calc.	% Drift			
18		4,6-dinitro-2-methylpheno	1000.000	1353.807	-35.4#	102	-0.03	8.39
			AvgRF	CCRF	% Dev			
19	S	2,4,6-Tribromophenol	0.153	0.199	-30.1#	90	-0.03	8.56
20		Fluoranthene-d10	1.000	1.000	0.0	72	-0.04	10.41
21	t	Hexachlorobenzene	0.252	0.277	-9.9	92	-0.03	8.85
22	t	Pentachlorophenol	0.142	0.135	4.9	73	-0.03	9.06
23	t	Phenanthrene	1.078	0.901	16.4	69	-0.03	9.26
24	t	Anthracene	1.033	0.882	14.6	68	-0.04	9.30
25	t	Fluoranthene	1.122	1.019	9.2	71	-0.04	10.43
26	t	Pyrene	1.235	1.034	16.3	68	-0.04	10.65
27	S	Terphenyl-d14	0.573	0.568	0.9	73	-0.04	10.83
28	t	Benzo[a]anthracene	1.103	0.904	18.0	67	-0.04	11.83
29	t	Chrysene	1.081	0.909	15.9	68	-0.04	11.86
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	62	-0.04	13.07
			True	Calc.	% Drift			
31	t	Benzo[b]fluoranthene	200.000	189.765	5.1	59	-0.04	12.81
			AvgRF	CCRF	% Dev			
32	t	Benzo[k]fluoranthene	1.651	1.545	6.4	66	-0.04	12.84

Continuing Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2625-CC2551
Lab FileID: 4P50120.D

33	t	Benzo[a]pyrene	1.514	1.478	2.4	65	-0.04	13.09
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.447	19.8	59	-0.06	14.14
35	t	Dibenz[a,h]anthracene	1.405	1.185	15.7	58	-0.06	14.16
36	t	Benzo[g,h,i]perylene	1.529	1.229	19.6	56	-0.06	14.42

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p49816.D M4P2551SIMLVI.M Thu Dec 16 10:00:33 2021 YING

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E4P2627-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50150.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e4p2627\4p50150.d Vial: 3
Acq On : 16 Dec 2021 1:53 pm Operator: kristis
Sample : cc2551-0.2 Inst : MS4P
Misc : op36999a,e4p2627,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Dec 17 03:02:46 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	69	0.00	6.81
2	t	1,4-Dioxane	0.187	0.242	-29.4#	94	0.00	1.85
3	S	2-Fluorophenol	0.496	0.452	8.9	62	0.00	3.52
4	S	Phenol-d5	0.941	0.891	5.3	67	0.00	4.47
5		Phenol	0.999	0.923	7.6	66	0.00	4.48
7	S	Nitrobenzene-d5	0.768	0.998	-29.9#	96	0.00	5.34
8	t	Naphthalene	2.290	1.896	17.2	61	0.00	6.06
9	t	Hexachlorobutadiene	0.559	0.726	-29.9#	102	0.00	6.19
10	t	2-Methylnaphthalene	1.196	1.082	9.5	65	0.00	6.75
11	t	1-Methylnaphthalene	1.152	1.050	8.9	67	0.00	6.84
12		Hexachlorocyclopentadiene	0.464	0.501	-8.0	87	0.00	6.90
13	I	Fluorene-d10	1.000	1.000	0.0	64	0.00	8.28
14	S	2-Fluorobiphenyl	1.020	1.023	-0.3	68	0.00	7.12
15	t	Acenaphthylene	1.490	1.332	10.6	62	0.00	7.63
16	t	Acenaphthene	0.951	0.900	5.4	65	0.00	7.80
17	t	Fluorene	1.148	1.086	5.4	66	0.00	8.31
			True	Calc.	% Drift			
18		4,6-dinitro-2-methylpheno	1000.000	1164.839	-16.5	80	0.00	8.38
			AvgRF	CCRF	% Dev			
19	S	2,4,6-Tribromophenol	0.153	0.199	-30.1#	85	0.00	8.55
20		Fluoranthene-d10	1.000	1.000	0.0	67	0.00	10.40
21	t	Hexachlorobenzene	0.252	0.268	-6.3	83	0.00	8.85
22	t	Pentachlorophenol	0.142	0.146	-2.8	74	0.00	9.05
23	t	Phenanthrene	1.078	0.922	14.5	65	0.00	9.25
24	t	Anthracene	1.033	0.906	12.3	65	0.00	9.30
25	t	Fluoranthene	1.122	1.044	7.0	68	0.00	10.42
26	t	Pyrene	1.235	1.030	16.6	63	0.00	10.64
27	S	Terphenyl-d14	0.573	0.592	-3.3	71	0.00	10.83
28	t	Benzo[a]anthracene	1.103	0.841	23.8#	58	0.00	11.82
29	t	Chrysene	1.081	0.921	14.8	64	0.00	11.86
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	57	0.00	13.07
			True	Calc.	% Drift			
31	t	Benzo[b]fluoranthene	200.000	185.507	7.2	54	0.00	12.81
			AvgRF	CCRF	% Dev			
32	t	Benzo[k]fluoranthene	1.651	1.540	6.7	61	0.00	12.83

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E4P2627-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50150.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

33	t	Benzo[a]pyrene	1.514	1.490	1.6	61	0.00	13.08
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.416	21.5#	53	0.00	14.13
35	t	Dibenz[a,h]anthracene	1.405	1.159	17.5	53	0.00	14.15
36	t	Benzo[g,h,i]perylene	1.529	1.246	18.5	53	0.00	14.41

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p50150.d M4P2551SIMLVI.M Fri Dec 17 03:02:59 2021

Continuing Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2628-CC2551
Lab FileID: 4P50182.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e4p2628\4p50182.d Vial: 3
Acq On : 17 Dec 2021 12:13 pm Operator: kristis
Sample : cc2551-0.1 Inst : MS4P
Misc : op37092a,e4p2628,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Dec 19 21:34:37 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	76	0.00	6.80
2	t	1,4-Dioxane	0.187	0.309	-65.2#	130	0.00	1.84
3	S	2-Fluorophenol	0.496	0.588	-18.5	97	0.00	3.51
4	S	Phenol-d5	0.941	1.070	-13.7	91	0.00	4.45
5		Phenol	0.999	1.124	-12.5	90	0.00	4.47
7	S	Nitrobenzene-d5	0.768	1.218	-58.6#	128	0.00	5.33
8	t	Naphthalene	2.290	2.312	-1.0	86	0.00	6.05
9	t	Hexachlorobutadiene	0.559	0.870	-55.6#	137	0.00	6.18
10	t	2-Methylnaphthalene	1.196	1.317	-10.1	93	0.00	6.73
11	t	1-Methylnaphthalene	1.152	1.278	-10.9	98	0.00	6.83
12		Hexachlorocyclopentadiene	0.464	0.541	-16.6	108	0.00	6.89
13	I	Fluorene-d10	1.000	1.000	0.0	72	0.00	8.28
14	S	2-Fluorobiphenyl	1.020	1.227	-20.3#	91	0.00	7.11
15	t	Acenaphthylene	1.490	1.577	-5.8	82	0.00	7.62
16	t	Acenaphthene	0.951	1.087	-14.3	89	0.00	7.79
17	t	Fluorene	1.148	1.294	-12.7	89	0.00	8.30
		----------	True	Calc.	% Drift	----------		
18		4,6-dinitro-2-methylpheno	500.000	616.513	-23.3#	94	0.00	8.37
		----------	AvgRF	CCRF	% Dev	----------		
19	S	2,4,6-Tribromophenol	0.153	0.254	-66.0#	123	0.00	8.54
20		Fluoranthene-d10	1.000	1.000	0.0	77	0.00	10.39
21	t	Hexachlorobenzene	0.252	0.330	-31.0#	116	0.00	8.84
22	t	Pentachlorophenol	0.142	0.126	11.3	77	0.00	9.04
23	t	Phenanthrene	1.078	1.012	6.1	86	0.00	9.24
24	t	Anthracene	1.033	1.024	0.9	84	0.00	9.29
25	t	Fluoranthene	1.122	1.240	-10.5	97	0.00	10.41
26	t	Pyrene	1.235	1.195	3.2	89	0.00	10.63
27	S	Terphenyl-d14	0.573	0.667	-16.4	95	0.00	10.82
28	t	Benzo[a]anthracene	1.103	0.956	13.3	80	0.00	11.81
29	t	Chrysene	1.081	1.065	1.5	86	0.00	11.85
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	65	0.00	13.05
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[b]fluoranthene	100.000	97.602	2.4	64	0.00	12.80
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Benzo[k]fluoranthene	1.651	1.668	-1.0	75	0.00	12.82

8.8.7

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Continuing Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2628-CC2551
Lab FileID: 4P50182.D

33	t	Benzo[a]pyrene	1.514	1.774	-17.2	83	0.00	13.07
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.584	12.2	66	0.00	14.11
35	t	Dibenz[a,h]anthracene	1.405	1.324	5.8	66	0.00	14.14
36	t	Benzo[g,h,i]perylene	1.529	1.413	7.6	65	0.00	14.39

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p50182.d M4P2551SIMLVI.M Sun Dec 19 21:34:53 2021

Initial Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-ICC3785
Lab FileID: 5P79959.D

Response Factor Report MS5P

Method : C:\MSDCHEM\1\METHODS\M5P3785LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 02 08:35:47 2021
Response via : Initial Calibration

Calibration Files
10 =5p79959.D 20 =5p79957.D 16 =5p79958.D 5 =5p79960.D
2 =5p79961.D 1 =5p79962.D 0.4 =5p79963.D 0.2 =5p79964.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
103) 1,4-Dichlorobenzene-d	ISTD									
104) Benzaldehyde	1.130	1.121	1.071	1.171	1.072	1.054	1.154	1.095	1.108	3.80
105) Phenanthrene-d10a	ISTD									
106) Atrazine	0.099	0.101	0.093	0.094	0.087	0.088	0.074	0.070	0.088	12.63
107) Naphthalene-d8a	ISTD									
108) Caprolactam	0.124	0.126	0.117	0.121	0.115	0.102	0.130	0.114	0.119	7.17
111) Phenanthrene-d10b	ISTD									
112) 1-chloroocta	0.269	0.270	0.249	0.264	0.229	0.224	0.230	0.244	0.247	7.49
113) o-terphenyl	0.564	0.558	0.522	0.567	0.547	0.536	0.546	0.552	0.549	2.72

(#) = Out of Range ### Number of calibration levels exceeded format ###

M5P3784LVI.M Thu Dec 02 08:37:46 2021 RPT1

8.8.8

8

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-ICV3785
Lab FileID: 5P79965.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3785\5p79965.D Vial: 10
Acq On : 2 Dec 2021 1:45 am Operator: chriss2
Sample : icv3785-10 Inst : MS5P
Misc : op35621,e5p3785,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 02 08:35:47 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	100	0.00	4.70
104	Benzaldehyde	1.108	1.224	-10.5	109	0.00	4.37
105	Phenanthrene-d10a	1.000	1.000	0.0	102	0.00	10.09
106	Atrazine	0.088	0.103	-17.0	107	0.00	9.74
107	Naphthalene-d8a	1.000	1.000	0.0	101	0.00	5.81
108 t	Caprolactam	0.119	0.138	-16.0	113	0.00	6.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3784LVI.M Thu Dec 02 08:37:36 2021 RPT1

8.8.9

8

Initial Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICC3794
Lab FileID: 5P80182.D

Response Factor Report MS5P

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Initial Calibration

Calibration Files
10 =5p80182.D 20 =5p80184.D 16 =5p80183.D 5 =5p80181.D
2 =5p80180.D 1 =5p80179.D 0.4 =5p80178.D 0.2 =5p80177.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.589	0.611	0.601	0.550	0.503	0.549	0.500	0.594	0.562	7.76
3) Pyridine	1.480	1.544	1.539	1.496	1.341	1.276	1.283	1.042	1.375	12.64
4) N-Nitrosodim	0.892	0.937	0.929	0.865	0.749	0.721	0.731	0.729	0.819	11.67
5) 2-Fluorophen	1.383	1.453	1.458	1.390	1.244	1.188	1.095	1.147	1.295	11.08
6) Indene	2.149	2.056	2.102	2.202	2.229	2.197	2.273	2.093	2.162	3.47
7) Cumene	3.138	3.101	3.193	3.070	2.902	2.865	2.808	2.783	2.982	5.38
8) Phenol-d5	1.748	1.794	1.808	1.740	1.616	1.535	1.549	1.505	1.662	7.46
9) Phenol	1.816	1.781	1.822	1.836	1.730	1.701	1.720	1.647	1.756	3.84
10) Aniline	2.023	1.927	1.990	2.044	2.012	1.893	1.931	1.894	1.964	3.06
11) bis(2-Chloro	1.241	1.185	1.217	1.249	1.242	1.186	1.262	1.177	1.220	2.73
12) 2-Chlorophen	1.427	1.385	1.419	1.454	1.398	1.372	1.295	1.399	1.394	3.39
13) Decane	1.044	0.977	1.018	1.106	1.141	1.133	1.161	1.235	1.102	7.64
14) 1,3-Dichloro	1.553	1.521	1.545	1.591	1.525	1.489	1.539	1.524	1.536	1.93
15) 1,4-Dichloro	1.495	1.458	1.496	1.506	1.471	1.480	1.460	1.461	1.479	1.25
16) Benzyl alcoh	0.887	0.895	0.907	0.885	0.849	0.805	0.783	0.779	0.849	6.21
17) 1,2-Dichloro	1.421	1.385	1.417	1.466	1.438	1.401	1.410	1.305	1.405	3.36
18) Acetophenone	1.600	1.549	1.588	1.676	1.738	1.705	1.774	1.669	1.662	4.69
19) 2-Methylphen	1.153	1.109	1.126	1.192	1.161	1.160	1.076	1.056	1.129	4.11
20) 2,2'-oxybis(	1.364	1.262	1.302	1.454	1.471	1.526	1.577	1.613	1.446	8.80
21) 3&4-Methylph	1.146	1.091	1.117	1.216	1.221	1.183	1.160	1.164	1.162	3.87
22) n-Nitroso-di	0.753	0.700	0.726	0.790	0.839	0.792	0.876	0.833	0.789	7.61
23) Hexachloroet	0.487	0.500	0.491	0.486	0.490	0.493	0.499	0.525	0.496	2.55
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.298	0.294	0.304	0.302	0.301	0.304	0.297	0.307	0.301	1.46
26) Nitrobenzene	0.299	0.292	0.303	0.308	0.314	0.318	0.319	0.317	0.309	3.24
27) Quinoline	0.734	0.732	0.743	0.715	0.714	0.686	0.688	0.650	0.708	4.42
28) Isophorone	0.613	0.608	0.629	0.612	0.600	0.593	0.583	0.574	0.601	2.96
29) 2-Nitropheno	0.194	0.195	0.199	0.186	0.178	0.174	0.173	0.174	0.184	5.84
30) 2,4-Dimethyl	0.315	0.302	0.312	0.324	0.330	0.326	0.300	0.317	0.316	3.50
31) Benzoic acid	0.224	0.240	0.247	0.199	0.150				0.212	18.47
32) bis(2-Chloro	0.367	0.359	0.370	0.377	0.376	0.389	0.375	0.351	0.371	3.20
33) 2,4-Dichloro	0.298	0.301	0.306	0.298	0.296	0.269	0.273	0.270	0.289	5.36
34) 2,6-Dichloro	0.278	0.276	0.286	0.277	0.273	0.271	0.270	0.252	0.273	3.53
35) 1,3,5-Trichl	0.321	0.313	0.326	0.321	0.319	0.318	0.316	0.325	0.320	1.39
36) 1,2,4-Trichl	0.311	0.311	0.322	0.320	0.313	0.315	0.296	0.313	0.313	2.50
37) 1,2,3-Trichl	0.285	0.279	0.289	0.288	0.294	0.294	0.274	0.292	0.287	2.51
38) Naphthalene	0.986	0.970	1.007	0.998	0.998	0.986	0.990	1.004	0.992	1.22
39) 4-Chloroanil	0.419	0.409	0.424	0.424	0.420	0.415	0.401	0.400	0.414	2.33
40) 2,3-Dichloro	0.352	0.350	0.363	0.358	0.360	0.349	0.352	0.320	0.350	3.81
41) Hydroquinone	0.316	0.312	0.324	0.313	0.291	0.253	0.222		0.290	13.20
42) Hexachlorobu	0.167	0.169	0.174	0.171	0.169	0.172	0.158	0.176	0.169	3.24
43) 4-Chloro-3-m	0.283	0.287	0.295	0.286	0.270	0.256	0.255	0.242	0.272	7.01
44) 2-Methylnaph	0.648	0.640	0.661	0.646	0.639	0.633	0.626	0.618	0.639	2.11
45) 1-Methylnaph	0.606	0.588	0.613	0.610	0.611	0.617	0.602	0.602	0.606	1.46

8.8.10

8

Initial Calibration Summary

Job Number: JD36168 **Sample:** E5P3794-ICC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80182.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
46) I   Acenaphthene-d10      ----------------ISTD---------------------
47) Hexachlorocy 0.336 0.337 0.343 0.330 0.308 0.308 0.287 0.284 0.317   7.36
48) 1,2,4,5-Tetr 0.525 0.507 0.518 0.533 0.527 0.529 0.536 0.542 0.527   2.05
49) 2,4,6-Trichl 0.359 0.362 0.363 0.355 0.334 0.339 0.327 0.303 0.343   6.17
50) 2,4,5-Trichl 0.381 0.376 0.382 0.378 0.368 0.361 0.354 0.314 0.364   6.24
51) 2-Fluorobiph 1.318 1.299 1.318 1.322 1.294 1.320 1.367 1.261 1.312   2.30
52) 2-Chloronaph 1.075 1.048 1.067 1.090 1.109 1.137 1.131 1.094 1.094   2.83
53) Biphenyl     1.495 1.461 1.504 1.505 1.470 1.519 1.464 1.465 1.485   1.54
54) 2-Nitroanili 0.268 0.270 0.275 0.265 0.252 0.236 0.248 0.234 0.256   6.20
55) Dimethylphth 1.362 1.345 1.354 1.337 1.300 1.286 1.319 1.290 1.324   2.24
56) Acenaphthyle 1.707 1.651 1.689 1.689 1.651 1.630 1.648 1.571 1.654   2.58
57) 2,6-Dinitrot 0.301 0.308 0.307 0.287 0.275 0.262 0.236 0.248 0.278   9.87
58) 3-Nitroanili 0.355 0.358 0.359 0.334 0.315 0.311 0.283 0.262 0.322  11.27
59) Acenaphthene 1.137 1.123 1.145 1.127 1.131 1.129 1.112 1.096 1.125   1.34
60) 2,4-Dinitrop 0.163 0.187 0.179 0.143 0.105 0.094 0.062       0.133  35.44
         ----- Quadratic regression -----               Coefficient =  0.9992
              Response Ratio = -0.00941 + 0.13575 *A + 0.01103 *A^2

61) 4-Nitropheno 0.139 0.143 0.145 0.134 0.120 0.118 0.109       0.130  10.78
62) Dibenzofuran 1.641 1.610 1.633 1.637 1.600 1.634 1.630 1.572 1.619   1.46
63) 2,4-Dinitrot 0.375 0.369 0.377 0.373 0.359 0.324 0.331 0.306 0.352   7.87
64) 2,3,4,6-Tetr 0.321 0.325 0.326 0.311 0.294 0.285 0.246 0.251 0.295  10.91
65) Diethylphtha 1.307 1.291 1.323 1.302 1.268 1.250 1.244 1.198 1.273   3.24
66) Fluorene     1.338 1.310 1.325 1.318 1.312 1.290 1.295 1.225 1.302   2.65
67) 4-Chlorophen 0.580 0.559 0.574 0.588 0.604 0.588 0.596 0.629 0.590   3.54
68) 4-Nitroanili 0.306 0.310 0.315 0.298 0.283 0.285 0.274 0.273 0.293   5.58

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro- 0.119 0.131 0.129 0.108 0.086 0.075 0.059       0.101  27.93
         ----- Quadratic regression -----               Coefficient =  0.9993
              Response Ratio = -0.00302 + 0.10458 *A + 0.01184 *A^2

71) n-Nitrosodip 0.667 0.666 0.670 0.659 0.630 0.631 0.602 0.596 0.640   4.66
72) Pentachloron 0.039 0.039 0.039 0.039 0.034 0.033 0.032 0.031 0.036# 10.11
73) 1,2-Diphenyl 0.647 0.627 0.646 0.662 0.647 0.662 0.639 0.677 0.651   2.37
74) 2,4,6-Tribro 0.111 0.115 0.115 0.109 0.097 0.096 0.087 0.082 0.102  12.55
75) 4-Bromopheny 0.228 0.237 0.235 0.221 0.204 0.196 0.189 0.199 0.214   8.79
76) Hexachlorobe 0.240 0.244 0.244 0.236 0.231 0.231 0.217 0.247 0.236   4.13
77) Pentachlorop 0.164 0.175 0.173 0.155 0.136 0.120 0.114       0.148  16.88
         ----- Quadratic regression -----               Coefficient =  0.9996
              Response Ratio = -0.00553 + 0.15251 *A + 0.00501 *A^2

78) Phenanthrene 1.043 1.042 1.053 1.039 1.004 1.027 1.038 1.046 1.037   1.46
79) Anthracene   1.074 1.071 1.086 1.066 1.037 1.049 1.004 1.024 1.051   2.69
80) Carbazole    1.066 1.081 1.095 1.049 0.994 0.975 0.958 0.948 1.021   5.75
81) Di-n-butylph 1.398 1.419 1.427 1.344 1.235 1.197 1.122 1.105 1.281  10.37
82) Fluoranthene 1.239 1.264 1.278 1.206 1.130 1.134 1.088 1.053 1.174   7.18
83) Octadecane   0.421 0.415 0.418 0.414 0.386 0.388 0.365 0.396 0.400   4.93

84) I   Chrysene-d12          ----------------ISTD---------------------
85) Benzidine    0.785 0.880 0.824 0.682 0.684 0.608             0.744  13.77
86) Pyrene       1.367 1.243 1.330 1.428 1.424 1.408 1.361 1.393 1.369   4.46
87) Terphenyl-d1 1.012 0.966 1.009 1.026 0.993 0.985 0.998 0.985 0.997   1.87
88) Butylbenzylp 0.676 0.682 0.698 0.652 0.598 0.571 0.543 0.519 0.617  11.12
89) Benzo[a]anth 1.294 1.340 1.355 1.254 1.190 1.171 1.198 1.261 1.258   5.48
90) 3,3'-Dichlor 0.479 0.499 0.503 0.451 0.419 0.390 0.370 0.343 0.432  14.10
91) Chrysene     1.136 1.147 1.151 1.125 1.098 1.108 1.137 1.096 1.125   1.91
92) bis(2-Ethylh 0.896 0.906 0.925 0.879 0.817 0.776 0.695 0.651 0.818  12.55
```

Initial Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICC3794
Lab FileID: 5P80182.D

93)	I Perylene-d12				----------ISTD----------						
94)	Di-n-octylph	1.515	1.668	1.636	1.349	1.267	1.237	1.143		1.402	14.65
95)	Benzo[b]fluo	1.301	1.296	1.294	1.245	1.159	1.159	1.122	1.120	1.212	6.61
96)	Benzo[k]fluo	1.070	1.003	1.064	1.077	1.063	1.061	1.087	1.052	1.060	2.38
97)	Benzo[a]pyre	1.180	1.200	1.208	1.153	1.077	1.050	1.015	0.990	1.109	7.81
98)	Indeno[1,2,3	1.069	1.115	1.114	0.982	0.997	0.945	0.919	0.834	0.997	9.93
99)	Dibenz(a,h)a	1.013	1.080	1.094	0.963	0.927	0.888	0.867	0.852	0.960	9.77
100)	Dibenz[a,h]a	1.126	1.129	1.161	1.040	1.076	0.990	1.027	0.910	1.057	7.88
101)	7,12-Dimethy	0.522	0.526	0.529	0.488	0.464	0.464	0.484	0.461	0.492	5.92
102)	Benzo[g,h,i]	1.193	1.220	1.241	1.130	1.161	1.101	1.085	1.067	1.150	5.60

(#) = Out of Range ### Number of calibration levels exceeded format ###

M5P3794LVI.M Thu Dec 09 17:39:33 2021 RPT1

8.8.10

8

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80185.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80185.D Vial: 10
Acq On : 9 Dec 2021 4:47 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	-0.03	4.64
2	t	1,4-Dioxane	0.562	0.457	18.7	79	-0.05	2.20
6	t	Indene	2.162	1.832	15.3	87	-0.03	4.84
7	t	Cumene	2.982	2.689	9.8	88	-0.03	4.04
11	t	bis(2-Chloroethyl)ether	1.220	1.162	4.8	96	-0.03	4.44
13	t	Decane	1.102	0.971	11.9	95	-0.02	4.52
14	t	1,3-Dichlorobenzene	1.536	1.393	9.3	92	-0.02	4.60
15	t	1,4-Dichlorobenzene	1.479	1.331	10.0	91	-0.02	4.66
16	t	Benzyl alcohol	0.849	0.762	10.2	88	-0.02	4.75
17	t	1,2-Dichlorobenzene	1.405	1.267	9.8	91	-0.03	4.77
18	t	Acetophenone	1.662	1.514	8.9	97	-0.03	4.96
20	t	2,2'-oxybis(1-Chloropropa	1.446	1.227	15.1	92	-0.03	4.85
23	t	Hexachloroethane	0.496	0.450	9.3	94	-0.03	5.05
24	I	Naphthalene-d8	1.000	1.000	0.0	102	-0.03	5.74
26	t	Nitrobenzene	0.309	0.280	9.4	95	-0.03	5.10
27	t	Quinoline	0.708	0.632	10.7	88	-0.04	6.09
28	t	Isophorone	0.601	0.542	9.8	90	-0.03	5.30
32	t	bis(2-Chloroethoxy)methan	0.371	0.343	7.5	95	-0.03	5.50
35		1,3,5-Trichlorobenzene	0.320	0.292	8.8	92	-0.03	5.38
36	t	1,2,4-Trichlorobenzene	0.313	0.284	9.3	93	-0.03	5.68
37		1,2,3-Trichlorobenzene	0.287	0.262	8.7	93	-0.03	5.90
38	t	Naphthalene	0.992	0.903	9.0	93	-0.03	5.76
40	t	2,3-Dichloroaniline	0.350	0.319	8.9	92	-0.04	6.83
42	t	Hexachlorobutadiene	0.169	0.154	8.9	94	-0.03	5.88
44	t	2-Methylnaphthalene	0.639	0.584	8.6	92	-0.03	6.49
45	t	1-Methylnaphthalene	0.606	0.540	10.9	91	-0.04	6.61
46	I	Acenaphthene-d10	1.000	1.000	0.0	105	-0.04	7.81
47	t	Hexachlorocyclopentadiene	0.317	0.367	-15.8	108	-0.04	6.68
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.463	12.1	92	-0.04	6.69
52	t	2-Chloronaphthalene	1.094	0.968	11.5	94	-0.04	7.08
53	t	Biphenyl	1.485	1.345	9.4	94	-0.03	7.07
55	t	Dimethylphthalate	1.324	1.195	9.7	92	-0.04	7.48
57	t	2,6-Dinitrotoluene	0.278	0.257	7.6	90	-0.04	7.55
59	t	Acenaphthene	1.125	1.000	11.1	92	-0.04	7.86
62	t	Dibenzofuran	1.619	1.451	10.4	93	-0.04	8.10
63	t	2,4-Dinitrotoluene	0.352	0.324	8.0	91	-0.04	8.10
65	t	Diethylphthalate	1.273	1.177	7.5	94	-0.04	8.49
66	t	Fluorene	1.302	1.172	10.0	92	-0.04	8.59
67	t	4-Chlorophenyl-phenylethe	0.590	0.504	14.6	91	-0.04	8.62

Initial Calibration Verification

Job Number: JD36168 **Sample:** E5P3794-ICV3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80185.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

69	I	Phenanthrene-d10	1.000	1.000	0.0	105	-0.04	10.00
72	t	Pentachloronitrobenzene	0.036	0.036#	0.0	98	-0.04	9.73
73	t	1,2-Diphenylhydrazine	0.651	0.607	6.8	99	-0.04	8.85
75	t	4-Bromophenyl-phenylether	0.214	0.198	7.5	91	-0.04	9.35
76	t	Hexachlorobenzene	0.236	0.214	9.3	94	-0.04	9.40
78	t	Phenanthrene	1.037	0.923	11.0	93	-0.04	10.04
79	t	Anthracene	1.051	0.941	10.5	92	-0.04	10.11
80	t	Carbazole	1.021	0.929	9.0	92	-0.04	10.39
81	t	Di-n-butylphthalate	1.281	1.214	5.2	91	-0.04	11.04
82	t	Fluoranthene	1.174	1.122	4.4	95	-0.04	11.90
83	t	Octadecane	0.400	0.372	7.0	93	-0.04	9.97
84	I	Chrysene-d12	1.000	1.000	0.0	107	-0.04	14.19
86	t	Pyrene	1.369	1.235	9.8	97	-0.04	12.25
88	t	Butylbenzylphthalate	0.617	0.592	4.1	94	-0.04	13.42
89	t	Benzo[a]anthracene	1.258	1.123	10.7	93	-0.04	14.18
91	t	Chrysene	1.125	1.004	10.8	95	-0.04	14.23
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.779	4.8	93	-0.04	14.40
93	I	Perylene-d12	1.000	1.000	0.0	108	-0.04	16.30
94	t	Di-n-octylphthalate	1.402	1.262	10.0	90	-0.04	15.39
95	t	Benzo[b]fluoranthene	1.212	1.173	3.2	98	-0.04	15.78
96	t	Benzo[k]fluoranthene	1.060	0.957	9.7	97	-0.04	15.83
97	t	Benzo[a]pyrene	1.109	1.052	5.1	97	-0.04	16.22
98	t	Indeno[1,2,3-cd]pyrene	0.997	0.902	9.5	91	-0.05	17.84
99	t	Dibenz(a,h)acridine	0.960	0.865	9.9	93	-0.05	17.50
100	t	Dibenz[a,h]anthracene	1.057	0.968	8.4	93	-0.05	17.90
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.441	10.4	92	-0.04	15.79
102	t	Benzo[g,h,i]perylene	1.150	1.017	11.6	92	-0.05	18.28

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:13 2021 RPT1

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80186.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80186.D Vial: 11
Acq On : 9 Dec 2021 5:13 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	-0.03	4.64
9	t	Phenol	1.756	1.433	18.4	86	-0.02	4.37
12	t	2-Chlorophenol	1.394	1.249	10.4	95	-0.02	4.48
19	t	2-Methylphenol	1.129	1.043	7.6	99	-0.02	4.83
21	t	3&4-Methylphenol	1.162	1.081	7.0	103	-0.02	4.96
24	I	Naphthalene-d8	1.000	1.000	0.0	106	-0.03	5.74
29	t	2-Nitrophenol	0.184	0.175	4.9	96	-0.03	5.38
30	t	2,4-Dimethylphenol	0.316	0.296	6.3	100	-0.02	5.41
31	t	Benzoic acid	0.212	0.183	13.7	86	-0.01	5.50
33	t	2,4-Dichlorophenol	0.289	0.259	10.4	92	-0.02	5.60
34	t	2,6-Dichlorophenol	0.273	0.257	5.9	98	-0.03	5.82
41	t	Hydroquinone	0.290	0.315	-8.6	106	-0.02	6.15
43	t	4-Chloro-3-methylphenol	0.272	0.258	5.1	97	-0.03	6.32
46	I	Acenaphthene-d10	1.000	1.000	0.0	114	-0.04	7.81
49	t	2,4,6-Trichlorophenol	0.343	0.319	7.0	101	-0.04	6.83
50	t	2,4,5-Trichlorophenol	0.364	0.331	9.1	99	-0.03	6.87
		---------- True	Calc.	% Drift	----------			
60	t	2,4-Dinitrophenol	20.000	18.164	9.2	99	-0.03	7.92
		---------- AvgRF	CCRF	% Dev	----------			
61	t	4-Nitrophenol	0.130	0.122	6.2	100	-0.03	8.02
64		2,3,4,6-Tetrachlorophenol	0.295	0.271	8.1	96	-0.04	8.28
69	I	Phenanthrene-d10	1.000	1.000	0.0	119	-0.04	10.00
		---------- True	Calc.	% Drift	----------			
70	t	4,6-Dinitro-2-methylpheno	10.000	8.933	10.7	103	-0.04	8.69
		---------- True	Calc.	% Drift	----------			
77	t	Pentachlorophenol	20.000	16.597	17.0	96	-0.04	9.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:15 2021 RPT1

8.8.12

8

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80187.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80187.D Vial: 12
Acq On : 9 Dec 2021 5:40 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	-0.03	4.64
3	t	Pyridine	1.375	1.229	10.6	85	-0.05	2.51
4	t	N-Nitrosodimethylamine	0.819	0.755	7.8	87	-0.04	2.48
10		Aniline	1.964	1.892	3.7	96	-0.02	4.40
22	t	n-Nitroso-di-n-propylamin	0.789	0.845	-7.1	115	-0.03	4.96
24	I	Naphthalene-d8	1.000	1.000	0.0	105	-0.03	5.74
39	t	4-Chloroaniline	0.414	0.409	1.2	103	-0.03	5.81
46	I	Acenaphthene-d10	1.000	1.000	0.0	100	-0.04	7.81
54	t	2-Nitroaniline	0.256	0.295	-15.2	110	-0.03	7.22
58	t	3-Nitroaniline	0.322	0.368	-14.3	103	-0.03	7.77
68	t	4-Nitroaniline	0.293	0.347	-18.4	113	-0.04	8.64
69	I	Phenanthrene-d10	1.000	1.000	0.0	112	-0.05	9.99
71	t	n-Nitrosodiphenylamine	0.640	0.618	3.4	104	-0.04	8.80
84	I	Chrysene-d12	1.000	1.000	0.0	105	-0.05	14.18
85	t	Benzidine	0.744	0.658	11.6	88	-0.04	12.17
90	t	3,3'-Dichlorobenzidine	0.432	0.432	0.0	95	-0.04	14.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:17 2021 RPT1

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80188.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80188.D Vial: 13
Acq On : 9 Dec 2021 6:07 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	131	-0.03	4.64
5	S	2-Fluorophenol	1.295	1.365	-5.4	129	-0.02	3.65
8	S	Phenol-d5	1.662	1.608	3.2	120	-0.02	4.36
24	I	Naphthalene-d8	1.000	1.000	0.0	134	-0.03	5.74
25	S	Nitrobenzene-d5	0.301	0.318	-5.6	143	-0.03	5.08
46	I	Acenaphthene-d10	1.000	1.000	0.0	139	-0.04	7.81
51	S	2-Fluorobiphenyl	1.312	1.309	0.2	138	-0.04	6.94
69	I	Phenanthrene-d10	1.000	1.000	0.0	154	-0.05	9.99
74	S	2,4,6-Tribromophenol	0.102	0.102	0.0	142	-0.04	8.95
84	I	Chrysene-d12	1.000	1.000	0.0	150	-0.04	14.19
87	S	Terphenyl-d14	0.997	1.017	-2.0	151	-0.04	12.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:19 2021 RPT1

8.8.14

8

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3795-ICV3794
Lab FileID: 5P80192.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3795\5p80192.D Vial: 2
Acq On : 9 Dec 2021 12:58 pm Operator: kristis
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3795,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
46 I	Acenaphthene-d10	1.000	1.000	0.0	110	-0.04	7.81
56 t	Acenaphthylene	1.654	1.509	8.8	97	-0.04	7.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:53:36 2021 RPT1

8.8.15

8

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E5P3803-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80340.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3803\5p80340.D Vial: 2
Acq On : 15 Dec 2021 2:51 am Operator: chriss2
Sample : cc3794-10 Inst : MS5P
Misc : op35621,e5p3803,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Wed Dec 15 08:22:53 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	80	0.00	4.61
2	t	1,4-Dioxane	0.562	0.538	4.3	73	0.00	2.18
3	t	Pyridine	1.375	1.335	2.9	72	0.00	2.49
4	t	N-Nitrosodimethylamine	0.819	0.793	3.2	71	0.00	2.47
5	S	2-Fluorophenol	1.295	1.357	-4.8	78	0.00	3.62
6	t	Indene	2.162	2.076	4.0	77	0.00	4.81
7	t	Cumene	2.982	3.053	-2.4	78	0.00	4.02
8	S	Phenol-d5	1.662	1.637	1.5	75	0.00	4.34
9	t	Phenol	1.756	1.678	4.4	74	0.00	4.35
10		Aniline	1.964	1.867	4.9	74	0.00	4.37
11	t	bis(2-Chloroethyl)ether	1.220	1.146	6.1	74	0.00	4.42
12	t	2-Chlorophenol	1.394	1.388	0.4	78	0.00	4.45
13	t	Decane	1.102	1.004	8.9	77	0.00	4.49
14	t	1,3-Dichlorobenzene	1.536	1.548	-0.8	80	0.00	4.57
15	t	1,4-Dichlorobenzene	1.479	1.500	-1.4	80	0.00	4.62
16	t	Benzyl alcohol	0.849	0.840	1.1	76	0.00	4.72
17	t	1,2-Dichlorobenzene	1.405	1.428	-1.6	80	0.00	4.74
18	t	Acetophenone	1.662	1.604	3.5	80	0.00	4.93
19	t	2-Methylphenol	1.129	1.085	3.9	75	0.00	4.81
20	t	2,2'-oxybis(1-Chloropropa	1.446	1.245	13.9	73	0.00	4.82
21	t	3&4-Methylphenol	1.162	1.098	5.5	76	0.00	4.93
22	t	n-Nitroso-di-n-propylamin	0.789	0.736	6.7	78	0.00	4.93
23	t	Hexachloroethane	0.496	0.489	1.4	80	0.00	5.01
24	I	Naphthalene-d8	1.000	1.000	0.0	78	0.00	5.70
25	S	Nitrobenzene-d5	0.301	0.298	1.0	78	0.00	5.05
26	t	Nitrobenzene	0.309	0.296	4.2	77	0.00	5.07
27	t	Quinoline	0.708	0.747	-5.5	80	0.00	6.07
28	t	Isophorone	0.601	0.585	2.7	75	0.00	5.28
29	t	2-Nitrophenol	0.184	0.198	-7.6	80	0.00	5.34
30	t	2,4-Dimethylphenol	0.316	0.318	-0.6	79	0.00	5.38
31	t	Benzoic acid	0.212	0.234	-10.4	81	0.00	5.48
32	t	bis(2-Chloroethoxy)methan	0.371	0.350	5.7	75	0.00	5.47
33	t	2,4-Dichlorophenol	0.289	0.302	-4.5	79	0.00	5.56
34	t	2,6-Dichlorophenol	0.273	0.283	-3.7	80	0.00	5.78
35		1,3,5-Trichlorobenzene	0.320	0.317	0.9	77	0.00	5.35
36	t	1,2,4-Trichlorobenzene	0.313	0.316	-1.0	80	0.00	5.64
37		1,2,3-Trichlorobenzene	0.287	0.287	0.0	79	0.00	5.86
38	t	Naphthalene	0.992	1.012	-2.0	80	0.00	5.72
39	t	4-Chloroaniline	0.414	0.422	-1.9	79	0.00	5.77
40	t	2,3-Dichloroaniline	0.350	0.367	-4.9	82	0.00	6.78
41	t	Hydroquinone	0.290	0.319	-10.0	79	0.00	6.12

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E5P3803-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80340.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	t	Hexachlorobutadiene	0.169	0.170	-0.6	80	0.00	5.84
43	t	4-Chloro-3-methylphenol	0.272	0.292	-7.4	80	0.00	6.28
44	t	2-Methylnaphthalene	0.639	0.665	-4.1	80	0.00	6.45
45	t	1-Methylnaphthalene	0.606	0.617	-1.8	80	0.00	6.56
46	I	Acenaphthene-d10	1.000	1.000	0.0	82	0.00	7.77
47	t	Hexachlorocyclopentadiene	0.317	0.318	-0.3	78	0.00	6.63
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.501	4.9	79	0.00	6.64
49	t	2,4,6-Trichlorophenol	0.343	0.360	-5.0	83	0.00	6.79
50	t	2,4,5-Trichlorophenol	0.364	0.381	-4.7	82	0.00	6.83
51	S	2-Fluorobiphenyl	1.312	1.290	1.7	81	0.00	6.90
52	t	2-Chloronaphthalene	1.094	1.082	1.1	83	0.00	7.03
53	t	Biphenyl	1.485	1.470	1.0	81	0.00	7.02
54	t	2-Nitroaniline	0.256	0.264	-3.1	81	0.00	7.17
55	t	Dimethylphthalate	1.324	1.365	-3.1	83	0.00	7.43
56	t	Acenaphthylene	1.654	1.691	-2.2	82	0.00	7.57
57	t	2,6-Dinitrotoluene	0.278	0.314	-12.9	86	0.00	7.51
58	t	3-Nitroaniline	0.322	0.359	-11.5	83	0.00	7.73
59	t	Acenaphthene	1.125	1.133	-0.7	82	0.00	7.81
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	20.000	23.766	-18.8	99	0.00	7.88
			AvgRF	CCRF	% Dev			
61	t	4-Nitrophenol	0.130	0.164	-26.2#	97	0.00	7.99
62	t	Dibenzofuran	1.619	1.626	-0.4	82	0.00	8.05
63	t	2,4-Dinitrotoluene	0.352	0.387	-9.9	85	0.00	8.06
64		2,3,4,6-Tetrachlorophenol	0.295	0.321	-8.8	82	0.00	8.23
65	t	Diethylphthalate	1.273	1.380	-8.4	87	0.00	8.44
66	t	Fluorene	1.302	1.358	-4.3	84	0.00	8.55
67	t	4-Chlorophenyl-phenylethe	0.590	0.585	0.8	83	0.00	8.57
68	t	4-Nitroaniline	0.293	0.328	-11.9	88	0.00	8.60
69	I	Phenanthrene-d10	1.000	1.000	0.0	86	0.00	9.95
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylpheno	10.000	11.198	-12.0	96	0.00	8.64
			AvgRF	CCRF	% Dev			
71	t	n-Nitrosodiphenylamine	0.640	0.647	-1.1	83	0.00	8.75
72	t	Pentachloronitrobenzene	0.036	0.041#	-13.9	90	0.00	9.68
73	t	1,2-Diphenylhydrazine	0.651	0.616	5.4	82	0.00	8.80
74	S	2,4,6-Tribromophenol	0.102	0.111	-8.8	86	0.00	8.90
75	t	4-Bromophenyl-phenylether	0.214	0.221	-3.3	83	0.00	9.30
76	t	Hexachlorobenzene	0.236	0.235	0.4	84	0.00	9.35
			True	Calc.	% Drift			
77	t	Pentachlorophenol	20.000	20.232	-1.2	86	0.00	9.67
			AvgRF	CCRF	% Dev			
78	t	Phenanthrene	1.037	1.042	-0.5	86	0.00	9.98
79	t	Anthracene	1.051	1.074	-2.2	86	0.00	10.06
80	t	Carbazole	1.021	1.098	-7.5	88	0.00	10.34
81	t	Di-n-butylphthalate	1.281	1.445	-12.8	89	0.00	10.99
82	t	Fluoranthene	1.174	1.283	-9.3	89	0.00	11.84
83	t	Octadecane	0.400	0.372	7.0	76	0.00	9.91
84	I	Chrysene-d12	1.000	1.000	0.0	84	0.01	14.13
85	t	Benzidine	0.744	0.822	-10.5	88	0.00	12.12
86	t	Pyrene	1.369	1.445	-5.6	89	0.00	12.19

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E5P3803-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80340.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

87	S	Terphenyl-d14	0.997	1.069	-7.2	89	0.00	12.52
88	t	Butylbenzylphthalate	0.617	0.737	-19.4	92	0.00	13.37
89	t	Benzo[a]anthracene	1.258	1.297	-3.1	84	0.00	14.12
90	t	3,3'-Dichlorobenzidine	0.432	0.465	-7.6	81	0.00	14.14
91	t	Chrysene	1.125	1.143	-1.6	85	0.00	14.18
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.966	-18.1	91	0.00	14.34
93	I	Perylene-d12	1.000	1.000	0.0	79	0.00	16.24
94	t	Di-n-octylphthalate	1.402	1.593	-13.6	83	0.00	15.34
95	t	Benzo[b]fluoranthene	1.212	1.265	-4.4	77	0.00	15.73
96	t	Benzo[k]fluoranthene	1.060	1.041	1.8	77	0.00	15.77
97	t	Benzo[a]pyrene	1.109	1.192	-7.5	80	0.00	16.16
98	t	Indeno[1,2,3-cd]pyrene	0.997	1.120	-12.3	83	0.00	17.76
99	t	Dibenz(a,h)acridine	0.960	1.082	-12.7	84	0.00	17.42
100	t	Dibenz[a,h]anthracene	1.057	1.178	-11.4	82	0.00	17.81
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.501	-1.8	76	0.00	15.73
102	t	Benzo[g,h,i]perylene	1.150	1.251	-8.8	83	0.00	18.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p80341.D M5P3794LVI.M Wed Dec 15 08:23:23 2021 RPT1

8.8.16

8

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E5P3803-CC3785
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80341.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3803\5p80341.D Vial: 3
Acq On : 15 Dec 2021 3:18 am Operator: chriss2
Sample : cc3785-10 Inst : MS5P
Misc : op35621,e5p3803,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Wed Dec 15 08:22:53 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	74	0.00	4.61
104	Benzaldehyde	1.108	1.029	7.1	67	0.00	4.29
105	Phenanthrene-d10a	1.000	1.000	0.0	75	0.00	9.94
106	Atrazine	0.088	0.112	-27.3#	85	0.00	9.60
107	Naphthalene-d8a	1.000	1.000	0.0	70	0.00	5.69
108 t	Caprolactam	0.119	0.113	5.0	64	0.00	6.12
111	Phenanthrene-d10b	1.000	1.000	0.0	75	0.00	9.94
112 s	1-chlorooctadecane	0.247	0.262	-6.1	73	0.00	11.82
113 s	o-terphenyl	0.549	0.559	-1.8	74	0.00	10.60

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p80341.D M5P3794LVI.M Wed Dec 15 08:23:25 2021 RPT1

8.8.17

8

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E5P3805-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80378.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jeryllr\e5p3805\5p80378.d Vial: 2
Acq On : 15 Dec 2021 2:51 pm Operator: kristis
Sample : cc3794-5 Inst : MS5P
Misc : op35621,e5p3805,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Sun Dec 12 09:41:29 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	79	-0.06	4.61
2	t	1,4-Dioxane	0.562	0.500	11.0	71	-0.07	2.18
3	t	Pyridine	1.375	1.237	10.0	65	-0.06	2.50
4	t	N-Nitrosodimethylamine	0.819	0.717	12.5	65	-0.06	2.47
5	S	2-Fluorophenol	1.295	1.299	-0.3	73	-0.05	3.62
6	t	Indene	2.162	2.153	0.4	77	-0.06	4.80
7	t	Cumene	2.982	3.005	-0.8	77	-0.06	4.01
8	S	Phenol-d5	1.662	1.609	3.2	73	-0.05	4.34
9	t	Phenol	1.756	1.684	4.1	72	-0.04	4.35
10		Aniline	1.964	1.893	3.6	73	-0.05	4.36
11	t	bis(2-Chloroethyl)ether	1.220	1.155	5.3	73	-0.06	4.41
12	t	2-Chlorophenol	1.394	1.426	-2.3	77	-0.05	4.45
13	t	Decane	1.102	1.017	7.7	72	-0.06	4.48
14	t	1,3-Dichlorobenzene	1.536	1.571	-2.3	78	-0.06	4.56
15	t	1,4-Dichlorobenzene	1.479	1.491	-0.8	78	-0.06	4.62
16	t	Benzyl alcohol	0.849	0.833	1.9	74	-0.05	4.72
17	t	1,2-Dichlorobenzene	1.405	1.441	-2.6	77	-0.06	4.73
18	t	Acetophenone	1.662	1.661	0.1	78	-0.06	4.92
19	t	2-Methylphenol	1.129	1.099	2.7	73	-0.05	4.80
20	t	2,2'-oxybis(1-Chloropropa	1.446	1.281	11.4	69	-0.06	4.82
21	t	3&4-Methylphenol	1.162	1.162	0.0	75	-0.05	4.92
22	t	n-Nitroso-di-n-propylamin	0.789	0.779	1.3	78	-0.06	4.92
23	t	Hexachloroethane	0.496	0.496	0.0	80	-0.07	5.00
24	I	Naphthalene-d8	1.000	1.000	0.0	78	-0.07	5.69
25	S	Nitrobenzene-d5	0.301	0.299	0.7	77	-0.06	5.05
26	t	Nitrobenzene	0.309	0.307	0.6	78	-0.06	5.06
27	t	Quinoline	0.708	0.747	-5.5	81	-0.07	6.06
28	t	Isophorone	0.601	0.601	0.0	76	-0.06	5.27
29	t	2-Nitrophenol	0.184	0.199	-8.2	83	-0.07	5.34
30	t	2,4-Dimethylphenol	0.316	0.323	-2.2	77	-0.06	5.37
31	t	Benzoic acid	0.212	0.216	-1.9	84	-0.05	5.45
32	t	bis(2-Chloroethoxy)methan	0.371	0.359	3.2	74	-0.06	5.46
33	t	2,4-Dichlorophenol	0.289	0.301	-4.2	79	-0.06	5.55
34	t	2,6-Dichlorophenol	0.273	0.285	-4.4	80	-0.07	5.77
35		1,3,5-Trichlorobenzene	0.320	0.320	0.0	78	-0.07	5.34
36	t	1,2,4-Trichlorobenzene	0.313	0.314	-0.3	76	-0.07	5.63
37		1,2,3-Trichlorobenzene	0.287	0.291	-1.4	79	-0.07	5.85
38	t	Naphthalene	0.992	1.015	-2.3	79	-0.07	5.71
39	t	4-Chloroaniline	0.414	0.432	-4.3	79	-0.07	5.77
40	t	2,3-Dichloroaniline	0.350	0.375	-7.1	82	-0.09	6.78
41	t	Hydroquinone	0.290	0.332	-14.5	82	-0.06	6.10

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E5P3805-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80378.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	t	Hexachlorobutadiene	0.169	0.170	-0.6	77	-0.07	5.83
43	t	4-Chloro-3-methylphenol	0.272	0.291	-7.0	79	-0.07	6.28
44	t	2-Methylnaphthalene	0.639	0.670	-4.9	81	-0.08	6.45
45	t	1-Methylnaphthalene	0.606	0.629	-3.8	80	-0.09	6.56
46	I	Acenaphthene-d10	1.000	1.000	0.0	82	-0.09	7.76
47	t	Hexachlorocyclopentadiene	0.317	0.318	-0.3	79	-0.09	6.63
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.517	1.9	80	-0.09	6.64
49	t	2,4,6-Trichlorophenol	0.343	0.356	-3.8	82	-0.09	6.78
50	t	2,4,5-Trichlorophenol	0.364	0.377	-3.6	82	-0.08	6.82
51	S	2-Fluorobiphenyl	1.312	1.312	0.0	82	-0.09	6.89
52	t	2-Chloronaphthalene	1.094	1.097	-0.3	83	-0.09	7.03
53	t	Biphenyl	1.485	1.487	-0.1	81	-0.09	7.01
54	t	2-Nitroaniline	0.256	0.269	-5.1	84	-0.09	7.17
55	t	Dimethylphthalate	1.324	1.372	-3.6	84	-0.09	7.43
56	t	Acenaphthylene	1.654	1.705	-3.1	83	-0.10	7.56
57	t	2,6-Dinitrotoluene	0.278	0.299	-7.6	86	-0.09	7.50
58	t	3-Nitroaniline	0.322	0.348	-8.1	86	-0.09	7.72
59	t	Acenaphthene	1.125	1.159	-3.0	85	-0.09	7.80
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	10.000	12.381	-23.8#	104	-0.09	7.87
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.130	0.157	-20.8#	96	-0.07	7.98
62	t	Dibenzofuran	1.619	1.662	-2.7	84	-0.10	8.04
63	t	2,4-Dinitrotoluene	0.352	0.394	-11.9	87	-0.09	8.05
64		2,3,4,6-Tetrachlorophenol	0.295	0.317	-7.5	84	-0.09	8.23
65	t	Diethylphthalate	1.273	1.387	-9.0	88	-0.10	8.43
66	t	Fluorene	1.302	1.363	-4.7	85	-0.10	8.54
67	t	4-Chlorophenyl-phenylethe	0.590	0.605	-2.5	85	-0.10	8.57
68	t	4-Nitroaniline	0.293	0.333	-13.7	92	-0.09	8.58
69	I	Phenanthrene-d10	1.000	1.000	0.0	85	-0.10	9.94
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	5.000	5.732	-14.6	99	-0.09	8.63
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.640	0.655	-2.3	85	-0.10	8.74
72	t	Pentachloronitrobenzene	0.036	0.038#	-5.6	84	-0.10	9.67
73	t	1,2-Diphenylhydrazine	0.651	0.630	3.2	81	-0.10	8.80
74	S	2,4,6-Tribromophenol	0.102	0.108	-5.9	85	-0.10	8.89
75	t	4-Bromophenyl-phenylether	0.214	0.221	-3.3	85	-0.10	9.29
76	t	Hexachlorobenzene	0.236	0.230	2.5	83	-0.10	9.34
		----------	True	Calc.	% Drift	----------		
77	t	Pentachlorophenol	10.000	10.065	-0.6	85	-0.10	9.66
		----------	AvgRF	CCRF	% Dev	----------		
78	t	Phenanthrene	1.037	1.032	0.5	85	-0.10	9.97
79	t	Anthracene	1.051	1.086	-3.3	87	-0.10	10.05
80	t	Carbazole	1.021	1.084	-6.2	88	-0.10	10.33
81	t	Di-n-butylphthalate	1.281	1.423	-11.1	90	-0.10	10.98
82	t	Fluoranthene	1.174	1.268	-8.0	90	-0.11	11.83
83	t	Octadecane	0.400	0.370	7.5	76	-0.10	9.91
84	I	Chrysene-d12	1.000	1.000	0.0	87	-0.11	14.12
85	t	Benzidine	0.744	0.788	-5.9	100	-0.10	12.11
86	t	Pyrene	1.369	1.447	-5.7	88	-0.10	12.18

Continuing Calibration Summary

Job Number: JD36168 **Sample:** E5P3805-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80378.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

87	S	Terphenyl-d14	0.997	1.051	-5.4	89	-0.11	12.51
88	t	Butylbenzylphthalate	0.617	0.723	-17.2	96	-0.11	13.36
89	t	Benzo[a]anthracene	1.258	1.290	-2.5	89	-0.11	14.11
90	t	3,3'-Dichlorobenzidine	0.432	0.453	-4.9	87	-0.10	14.13
91	t	Chrysene	1.125	1.146	-1.9	88	-0.11	14.17
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.971	-18.7	96	-0.11	14.33
93	I	Perylene-d12	1.000	1.000	0.0	71	-0.11	16.23
94	t	Di-n-octylphthalate	1.402	1.793	-27.9#	94	-0.11	15.33
95	t	Benzo[b]fluoranthene	1.212	1.265	-4.4	72	-0.11	15.71
96	t	Benzo[k]fluoranthene	1.060	1.180	-11.3	77	-0.11	15.75
97	t	Benzo[a]pyrene	1.109	1.172	-5.7	72	-0.11	16.15
98	t	Indeno[1,2,3-cd]pyrene	0.997	0.938	5.9	68	-0.15	17.74
99	t	Dibenz(a,h)acridine	0.960	0.909	5.3	67	-0.14	17.41
100	t	Dibenz[a,h]anthracene	1.057	0.994	6.0	68	-0.15	17.79
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.576	-17.1	83	-0.11	15.72
102	t	Benzo[g,h,i]perylene	1.150	1.062	7.7	66	-0.17	18.17

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79960a.D M5P3794LVI.M Wed Dec 15 23:58:45 2021

8.8.18

8

Continuing Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3805-CC3785
Lab FileID: 5P80379.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jeryllr\e5p3805\5p80379.d Vial: 3
Acq On : 15 Dec 2021 3:43 pm Operator: kristis
Sample : cc3785-5 Inst : MS5P
Misc : op35621,e5p3805,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Sun Dec 12 09:41:29 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103		1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	83	-0.06	4.61
104		Benzaldehyde	1.108	1.057	4.6	75	-0.06	4.28
105		Phenanthrene-d10a	1.000	1.000	0.0	90	-0.10	9.94
106		Atrazine	0.088	0.112	-27.3#	107	-0.09	9.60
107		Naphthalene-d8a	1.000	1.000	0.0	80	-0.07	5.69
108	t	Caprolactam	0.119	0.112	5.9	74	-0.07	6.10
111		Phenanthrene-d10b	1.000	1.000	0.0	90	-0.10	9.94
112	s	1-chlorooctadecane	0.247	0.259	-4.9	88	-0.10	11.82
113	s	o-terphenyl	0.549	0.557	-1.5	88	-0.10	10.59

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79960a.D M5P3794LVI.M Wed Dec 15 23:58:52 2021

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2551 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2551-DFTPP	4P48502.D	10/20/21 22:19	n/a	DFTPP Tune
E4P2551-IC2551	4P48504.D	10/20/21 22:59	n/a	Initial cal 1
E4P2551-ICC2551	4P48505.D	10/20/21 23:23	n/a	Initial cal 0.2
E4P2551-IC2551	4P48506.D	10/20/21 23:46	n/a	Initial cal 0.02
E4P2551-IC2551	4P48507.D	10/21/21 00:10	n/a	Initial cal 0.5
E4P2551-IC2551	4P48508.D	10/21/21 00:33	n/a	Initial cal 0.1
E4P2551-IC2551	4P48509.D	10/21/21 00:57	n/a	Initial cal 0.004
E4P2551-IC2551	4P48511.D	10/21/21 01:44	n/a	Initial cal 0.04
E4P2551-IC2551	4P48513.D	10/21/21 02:16	n/a	Initial cal 0.002
E4P2551-IC2551	4P48514.D	10/21/21 02:39	n/a	Initial cal 0.01
E4P2551-ICV2551	4P48512.D	10/21/21 03:15	n/a	Initial cal verification 0.2
OP35848A-BSD12	4P48515.D	10/21/21 03:45	OP35848A	Blank Spike Duplicate

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2614 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2614-DFTPP	4P49903.D	12/08/21 01:03	n/a	DFTPP Tune
E4P2614-CC2551	4P49907.D	12/08/21 03:45	n/a	Continuing cal 0.1
OP36999A-MB1	4P49909A.D	12/08/21 04:39	OP36999A	Method Blank
ZZZZZZ	4P49910.D	12/08/21 05:02	OP36999A	(unrelated sample)
ZZZZZZ	4P49911.D	12/08/21 05:26	OP36999A	(unrelated sample)
OP36999A-BS12	4P49912.D	12/08/21 05:49	OP36999A	Blank Spike
OP36999A-BSD12	4P49913.D	12/08/21 06:13	OP36999A	Blank Spike Duplicate
ZZZZZZ	4P49914.D	12/08/21 06:36	OP36999A	(unrelated sample)
ZZZZZZ	4P49915.D	12/08/21 07:00	OP36999A	(unrelated sample)
ZZZZZZ	4P49917.D	12/08/21 07:47	OP36999A	(unrelated sample)
ZZZZZZ	4P49918.D	12/08/21 08:10	OP36999A	(unrelated sample)
ZZZZZZ	4P49919.D	12/08/21 08:34	OP36999A	(unrelated sample)
ZZZZZZ	4P49920.D	12/08/21 08:57	OP36999A	(unrelated sample)
ZZZZZZ	4P49921.D	12/08/21 09:21	OP36999A	(unrelated sample)
ZZZZZZ	4P49922.D	12/08/21 09:43	OP36999A	(unrelated sample)
JD36168-10	4P49924.D	12/08/21 10:31	OP36999A	HOFF MW-7DU
JD36168-11	4P49925.D	12/08/21 10:54	OP36999A	HOFF MW-7S
JD36168-2	4P49926.D	12/08/21 11:18	OP36999A	HOFF OW-4DL
JD36168-3	4P49927.D	12/08/21 11:42	OP36999A	HOFF OW-4DU

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2620 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2620-DFTPP	4P50022.D	12/12/21 10:16	n/a	DFTPP Tune
E4P2620-CC2551	4P50023.D	12/12/21 10:42	n/a	Continuing cal 0.1
OP37001A-MB1	4P50024.D	12/12/21 11:20	OP37001A	Method Blank
OP37001A-BS12	4P50025.D	12/12/21 11:43	OP37001A	Blank Spike
ZZZZZZ	4P50026.D	12/12/21 12:15	OP37001A	(unrelated sample)
ZZZZZZ	4P50027A.D	12/12/21 12:47	OP37001A	(unrelated sample)
JD36109-3	4P50028.D	12/12/21 13:10	OP37001A	(used for QC only; not part of job JD36168)
ZZZZZZ	4P50029.D	12/12/21 13:33	OP37001A	(unrelated sample)
ZZZZZZ	4P50030.D	12/12/21 13:57	OP37001A	(unrelated sample)
ZZZZZZ	4P50031.D	12/12/21 14:20	OP37001A	(unrelated sample)
OP37001A-MS	4P50032.D	12/12/21 14:44	OP37001A	Matrix Spike
OP37001A-MSD	4P50033.D	12/12/21 15:07	OP37001A	Matrix Spike Duplicate
ZZZZZZ	4P50034.D	12/12/21 15:31	OP36997A	(unrelated sample)
ZZZZZZ	4P50035.D	12/12/21 15:54	OP36997A	(unrelated sample)
ZZZZZZ	4P50036.D	12/12/21 16:18	OP37045A	(unrelated sample)
ZZZZZZ	4P50037.D	12/12/21 16:42	OP37045A	(unrelated sample)
ZZZZZZ	4P50038.D	12/12/21 17:05	OP37045A	(unrelated sample)
ZZZZZZ	4P50039.D	12/12/21 17:29	OP37045A	(unrelated sample)
ZZZZZZ	4P50040.D	12/12/21 17:52	OP37045A	(unrelated sample)
ZZZZZZ	4P50041.D	12/12/21 18:16	OP37045A	(unrelated sample)
ZZZZZZ	4P50042.D	12/12/21 18:40	OP37045A	(unrelated sample)
ZZZZZZ	4P50043.D	12/12/21 19:03	OP37045A	(unrelated sample)
ZZZZZZ	4P50044.D	12/12/21 19:27	OP37045A	(unrelated sample)
ZZZZZZ	4P50045.D	12/12/21 19:50	OP37045A	(unrelated sample)
ZZZZZZ	4P50046.D	12/12/21 20:14	OP37045A	(unrelated sample)
ZZZZZZ	4P50047.D	12/12/21 20:37	OP37045A	(unrelated sample)

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2625 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2625-DFTPP	4P50117.D	12/15/21 15:07	n/a	DFTPP Tune
E4P2625-CC2551	4P50120.D	12/15/21 16:36	n/a	Continuing cal 0.2
OP37091A-MB1	4P50121.D	12/15/21 17:19	OP37091A	Method Blank
OP37091A-BS12	4P50122.D	12/15/21 17:47	OP37091A	Blank Spike
OP37091A-BSD12	4P50123.D	12/15/21 18:10	OP37091A	Blank Spike Duplicate
OP37046A-MB1	4P50124.D	12/15/21 18:34	OP37046A	Method Blank
OP37046A-BS12	4P50125.D	12/15/21 18:57	OP37046A	Blank Spike
OP37046A-BSD12	4P50126.D	12/15/21 19:21	OP37046A	Blank Spike Duplicate
OP37017A-MB1	4P50127.D	12/15/21 19:45	OP37017A	Method Blank
OP37017A-BS12	4P50128.D	12/15/21 20:08	OP37017A	Blank Spike
OP37017A-BSD12	4P50129.D	12/15/21 20:32	OP37017A	Blank Spike Duplicate
ZZZZZZ	4P50130.D	12/15/21 20:56	OP37017A	(unrelated sample)
ZZZZZZ	4P50131.D	12/15/21 21:20	OP36997A	(unrelated sample)
ZZZZZZ	4P50132.D	12/15/21 21:43	OP37091A	(unrelated sample)
ZZZZZZ	4P50133.D	12/15/21 22:07	OP37091A	(unrelated sample)
ZZZZZZ	4P50134.D	12/15/21 22:31	OP37091A	(unrelated sample)
ZZZZZZ	4P50135.D	12/15/21 22:54	OP37046A	(unrelated sample)
ZZZZZZ	4P50136.D	12/15/21 23:18	OP37046A	(unrelated sample)
ZZZZZZ	4P50137.D	12/15/21 23:42	OP37001A	(unrelated sample)
ZZZZZZ	4P50138.D	12/16/21 00:05	OP37001A	(unrelated sample)
ZZZZZZ	4P50139.D	12/16/21 00:29	OP37001A	(unrelated sample)
ZZZZZZ	4P50140.D	12/16/21 00:53	OP37001A	(unrelated sample)
ZZZZZZ	4P50141.D	12/16/21 01:17	OP37001A	(unrelated sample)
ZZZZZZ	4P50142.D	12/16/21 01:41	OP37001A	(unrelated sample)
JD36168-4	4P50143.D	12/16/21 02:05	OP37001A	HOFF MW-5DL

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2627 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2627-DFTPP	4P50147.D	12/16/21 12:35	n/a	DFTPP Tune
E4P2627-CC2551	4P50150.D	12/16/21 13:53	n/a	Continuing cal 0.2
OP37092A-MB1	4P50152B.D	12/16/21 15:57	OP37092A	Method Blank
ZZZZZZ	4P50153.D	12/16/21 16:21	OP37092A	(unrelated sample)
ZZZZZZ	4P50154.D	12/16/21 16:45	OP37092A	(unrelated sample)
OP37092A-BS12	4P50155.D	12/16/21 17:09	OP37092A	Blank Spike
OP37092A-BSD12	4P50156.D	12/16/21 17:33	OP37092A	Blank Spike Duplicate
ZZZZZZ	4P50157.D	12/16/21 17:57	OP37092A	(unrelated sample)
ZZZZZZ	4P50158.D	12/16/21 18:21	OP37092A	(unrelated sample)
ZZZZZZ	4P50159.D	12/16/21 18:45	OP37092A	(unrelated sample)
ZZZZZZ	4P50160.D	12/16/21 19:09	OP37092A	(unrelated sample)
ZZZZZZ	4P50161.D	12/16/21 19:33	OP37092A	(unrelated sample)
ZZZZZZ	4P50162.D	12/16/21 19:58	OP37092A	(unrelated sample)
ZZZZZZ	4P50163.D	12/16/21 20:22	OP37092A	(unrelated sample)
ZZZZZZ	4P50164.D	12/16/21 20:46	OP37092A	(unrelated sample)
ZZZZZZ	4P50165.D	12/16/21 21:10	OP37092A	(unrelated sample)
ZZZZZZ	4P50166.D	12/16/21 21:34	OP37092A	(unrelated sample)
ZZZZZZ	4P50167.D	12/16/21 21:58	OP37092A	(unrelated sample)
ZZZZZZ	4P50168.D	12/16/21 22:22	OP37092A	(unrelated sample)
ZZZZZZ	4P50169.D	12/16/21 22:46	OP37092A	(unrelated sample)
ZZZZZZ	4P50170.D	12/16/21 23:10	OP37092A	(unrelated sample)
ZZZZZZ	4P50171.D	12/16/21 23:34	OP37092A	(unrelated sample)
JD36168-5	4P50173.D	12/17/21 00:22	OP37001A	HOFF MW-5DV

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2628 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2628-DFTPP	4P50179.D	12/17/21 10:49	n/a	DFTPP Tune
E4P2628-CC2551	4P50182.D	12/17/21 12:13	n/a	Continuing cal 0.1
OP37151-MB1	4P50183.D	12/17/21 13:02	OP37151	Method Blank
ZZZZZZ	4P50184.D	12/17/21 13:26	OP37151	(unrelated sample)
OP37151-BS12	4P50185.D	12/17/21 13:49	OP37151	Blank Spike
OP37151-BSD12	4P50186.D	12/17/21 14:13	OP37151	Blank Spike Duplicate
ZZZZZZ	4P50187.D	12/17/21 14:36	OP37151	(unrelated sample)
ZZZZZZ	4P50188.D	12/17/21 15:00	OP37151	(unrelated sample)
ZZZZZZ	4P50189.D	12/17/21 15:24	OP37151	(unrelated sample)
ZZZZZZ	4P50190.D	12/17/21 15:48	OP37151	(unrelated sample)
ZZZZZZ	4P50191.D	12/17/21 16:12	OP37151	(unrelated sample)
ZZZZZZ	4P50192.D	12/17/21 16:35	OP37151	(unrelated sample)
ZZZZZZ	4P50193.D	12/17/21 16:59	OP37151	(unrelated sample)
ZZZZZZ	4P50194.D	12/17/21 17:23	OP37151	(unrelated sample)
ZZZZZZ	4P50195.D	12/17/21 17:46	OP37151	(unrelated sample)
ZZZZZZ	4P50196.D	12/17/21 18:10	OP37151	(unrelated sample)
ZZZZZZ	4P50197.D	12/17/21 18:33	OP37151	(unrelated sample)
ZZZZZZ	4P50198.D	12/17/21 18:57	OP37151	(unrelated sample)
ZZZZZZ	4P50199.D	12/17/21 19:21	OP37151	(unrelated sample)
ZZZZZZ	4P50200.D	12/17/21 19:45	OP37151	(unrelated sample)
JD36168-6	4P50201.D	12/17/21 20:09	OP37001A	HOFF MW-5S
JD36168-7	4P50202.D	12/17/21 20:33	OP37001A	HOFF MW-6S
JD36168-8	4P50203.D	12/17/21 20:56	OP37001A	HOFF OW-6DU
JD36168-9	4P50204.D	12/17/21 21:20	OP37001A	HOFF OW-6DL

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3785	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3785-DFTPP	5P79956.D	12/01/21 21:49	n/a	DFTPP Tune
E5P3785-IC3785	5P79957.D	12/01/21 22:09	n/a	Initial cal 20
E5P3785-IC3785	5P79958.D	12/01/21 22:36	n/a	Initial cal 16
E5P3785-ICC3785	5P79959.D	12/01/21 23:02	n/a	Initial cal 10
E5P3785-IC3785	5P79960.D	12/01/21 23:30	n/a	Initial cal 5
E5P3785-IC3785	5P79961.D	12/01/21 23:57	n/a	Initial cal 2
E5P3785-IC3785	5P79962.D	12/02/21 00:24	n/a	Initial cal 1
E5P3785-IC3785	5P79963.D	12/02/21 00:51	n/a	Initial cal 0.4
E5P3785-IC3785	5P79964.D	12/02/21 01:17	n/a	Initial cal 0.2
E5P3785-ICV3785	5P79965.D	12/02/21 01:45	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3794	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3794-DFTPP	5P80176.D	12/09/21 00:53	n/a	DFTPP Tune
E5P3794-IC3794	5P80177.D	12/09/21 01:11	n/a	Initial cal 0.2
E5P3794-IC3794	5P80178.D	12/09/21 01:38	n/a	Initial cal 0.4
E5P3794-IC3794	5P80179.D	12/09/21 02:05	n/a	Initial cal 1
E5P3794-IC3794	5P80180.D	12/09/21 02:32	n/a	Initial cal 2
E5P3794-IC3794	5P80181.D	12/09/21 02:59	n/a	Initial cal 5
E5P3794-ICC3794	5P80182.D	12/09/21 03:26	n/a	Initial cal 10
E5P3794-IC3794	5P80183.D	12/09/21 03:53	n/a	Initial cal 16
E5P3794-IC3794	5P80184.D	12/09/21 04:19	n/a	Initial cal 20
E5P3794-ICV3794	5P80185.D	12/09/21 04:47	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80186.D	12/09/21 05:13	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80187.D	12/09/21 05:40	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80188.D	12/09/21 06:07	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3795	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3795-DFTPP	5P80191.D	12/09/21 12:44	n/a	DFTPP Tune
E5P3795-ICV3794	5P80192.D	12/09/21 12:58	n/a	Initial cal verification 10
E5P3795-CC3794	5P80193.D	12/09/21 13:25	n/a	Continuing cal 10
E5P3795-CC3785	5P80194.D	12/09/21 13:51	n/a	Continuing cal 10
OP36390-MB1	5P80195.D	12/09/21 14:46	OP36390	Method Blank
OP36390-BS1	5P80196.D	12/09/21 15:13	OP36390	Blank Spike
OP36390-BSD	5P80197.D	12/09/21 15:40	OP36390	Blank Spike Duplicate
ZZZZZZ	5P80198.D	12/09/21 16:07	OP36390	(unrelated sample)
E5P3795-ECC3794	5P80199.D	12/09/21 16:57	n/a	Ending cal 10
E5P3795-ECC3785	5P80200.D	12/09/21 17:36	n/a	Ending cal 10

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3803	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3803-DFTPP	5P80339.D	12/15/21 02:25	n/a	DFTPP Tune
E5P3803-CC3794	5P80340.D	12/15/21 02:51	n/a	Continuing cal 10
E5P3803-CC3785	5P80341.D	12/15/21 03:18	n/a	Continuing cal 10
OP37001-MB1	5P80342.D	12/15/21 03:51	OP37001	Method Blank
OP37001-BS1	5P80343.D	12/15/21 04:17	OP37001	Blank Spike
OP37001-BSD	5P80344.D	12/15/21 04:48	OP37001	Blank Spike Duplicate
OP36999-MB1	5P80345.D	12/15/21 05:15	OP36999	Method Blank
OP36999-BS1	5P80346.D	12/15/21 05:41	OP36999	Blank Spike
OP36999-BSD	5P80347.D	12/15/21 06:08	OP36999	Blank Spike Duplicate
ZZZZZZ	5P80348.D	12/15/21 06:35	OP36837	(unrelated sample)
ZZZZZZ	5P80349.D	12/15/21 07:01	OP36838	(unrelated sample)
ZZZZZZ	5P80350.D	12/15/21 07:28	OP37001	(unrelated sample)
ZZZZZZ	5P80351.D	12/15/21 07:54	OP37001	(unrelated sample)
ZZZZZZ	5P80352.D	12/15/21 08:21	OP37001	(unrelated sample)
ZZZZZZ	5P80353.D	12/15/21 08:48	OP37001	(unrelated sample)

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3805	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3805-DFTPP	5P80377.D	12/15/21 14:31	n/a	DFTPP Tune
E5P3805-CC3794	5P80378.D	12/15/21 14:51	n/a	Continuing cal 5
E5P3805-CC3785	5P80379.D	12/15/21 15:43	n/a	Continuing cal 5
ZZZZZZ	5P80380.D	12/15/21 16:10	OP37001	(unrelated sample)
ZZZZZZ	5P80381.D	12/15/21 16:37	OP37001	(unrelated sample)
JD36168-4	5P80382.D	12/15/21 17:38	OP37001	HOFF MW-5DL
JD36168-5	5P80383.D	12/15/21 18:05	OP37001	HOFF MW-5DV
JD36168-6	5P80384.D	12/15/21 18:31	OP37001	HOFF MW-5S
JD36168-7	5P80385.D	12/15/21 18:58	OP37001	HOFF MW-6S
JD36168-8	5P80386.D	12/15/21 19:25	OP37001	HOFF OW-6DU
JD36168-9	5P80387.D	12/15/21 19:52	OP37001	HOFF OW-6DL
JD36168-10	5P80388.D	12/15/21 20:19	OP36999	HOFF MW-7DU
JD36168-11	5P80389.D	12/15/21 20:46	OP36999	HOFF MW-7S
JD36168-2	5P80390.D	12/15/21 21:13	OP36999	HOFF OW-4DL
JD36168-3	5P80391.D	12/15/21 21:41	OP36999	HOFF OW-4DU
ZZZZZZ	5P80392.D	12/15/21 22:07	OP36999	(unrelated sample)
ZZZZZZ	5P80393.D	12/15/21 22:34	OP36999	(unrelated sample)
ZZZZZZ	5P80394.D	12/15/21 23:01	OP36999	(unrelated sample)
ZZZZZZ	5P80395.D	12/15/21 23:28	OP36999	(unrelated sample)

MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80390.d
Acq On : 15 Dec 2021 9:13 pm
Operator : kristis
Sample : jd36168-2 Inst : MS5P
Misc : op36999,e5p3805,270,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:28:49 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

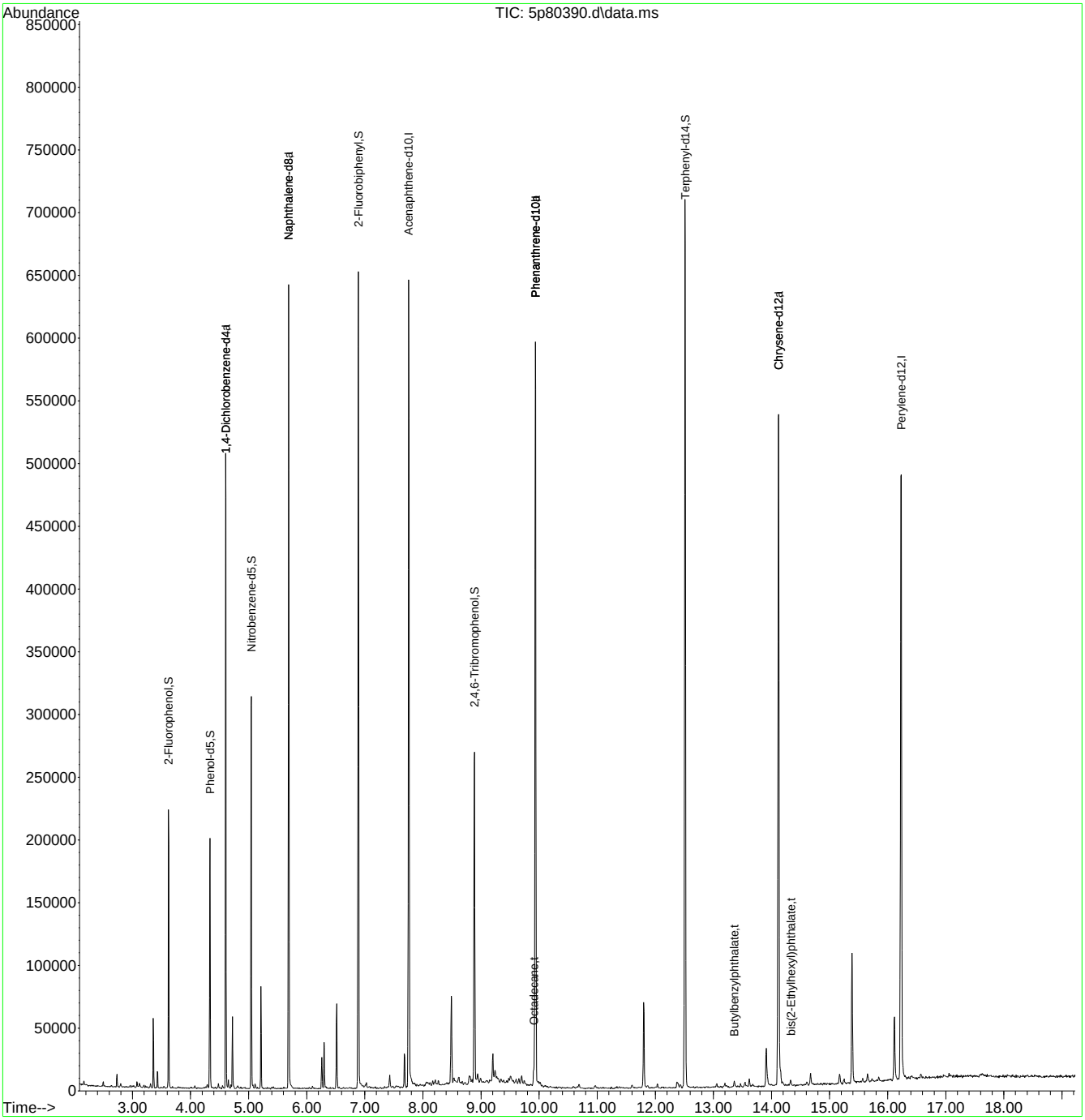
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	73746	8.00	ppm	0.00
24) Naphthalene-d8	5.688	136	285738	8.00	ppm	0.00
46) Acenaphthene-d10	7.756	164	163428	8.00	ppm	0.00
69) Phenanthrene-d10	9.935	188	282081	8.00	ppm	0.00
84) Chrysene-d12	14.124	240	235973	8.00	ppm	0.00
93) Perylene-d12	16.234	264	221392	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.609	152	73746	8.00	ppm	0.00
105) Phenanthrene-d10a	9.935	188	282081	8.00	ppm	0.00
107) Naphthalene-d8a	5.688	136	285738	8.00	ppm	0.00
109) Chrysene-d12a	14.124	240	235973	8.00	ppm	0.00
111) Phenanthrene-d10b	9.935	188	282081	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.621	112	54066	4.53	ppm	0.00
Spiked Amount 10.000			Recovery = 45.30%			
8) Phenol-d5	4.337	99	49737	3.25	ppm	0.00
Spiked Amount 10.000			Recovery = 32.50%			
25) Nitrobenzene-d5	5.047	82	88047	8.19	ppm	0.00
Spiked Amount 10.000			Recovery = 81.90%			
51) 2-Fluorobiphenyl	6.890	172	225021	8.39	ppm	0.00
Spiked Amount 10.000			Recovery = 83.90%			
74) 2,4,6-Tribromophenol	8.888	330	33176	9.26	ppm	0.00
Spiked Amount 10.000			Recovery = 92.60%			
87) Terphenyl-d14	12.516	244	295018	10.03	ppm	0.00
Spiked Amount 10.000			Recovery = 100.30%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
83) Octadecane	9.909	57	2700	0.19	ppm	84
88) Butylbenzylphthalate	13.360	149	1494	0.08	ppm	80
92) bis(2-Ethylhexyl)phtha...	14.332	149	1840	0.08	ppm	94

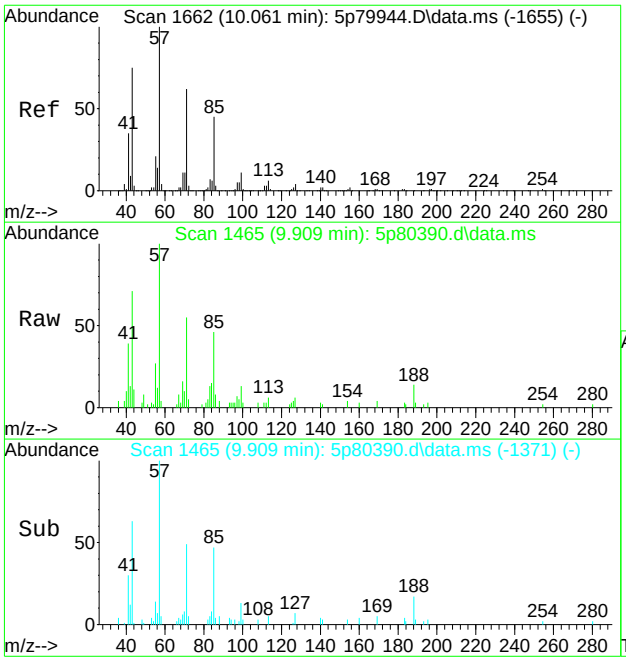
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80390.d
Acq On : 15 Dec 2021 9:13 pm
Operator : kristis
Sample : jd36168-2 Inst : MS5P
Misc : op36999,e5p3805,270,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:28:49 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

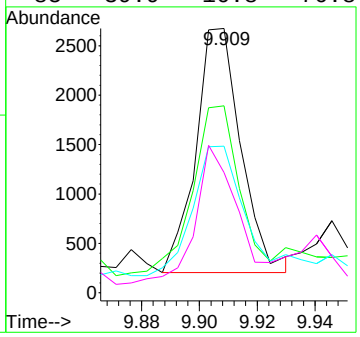


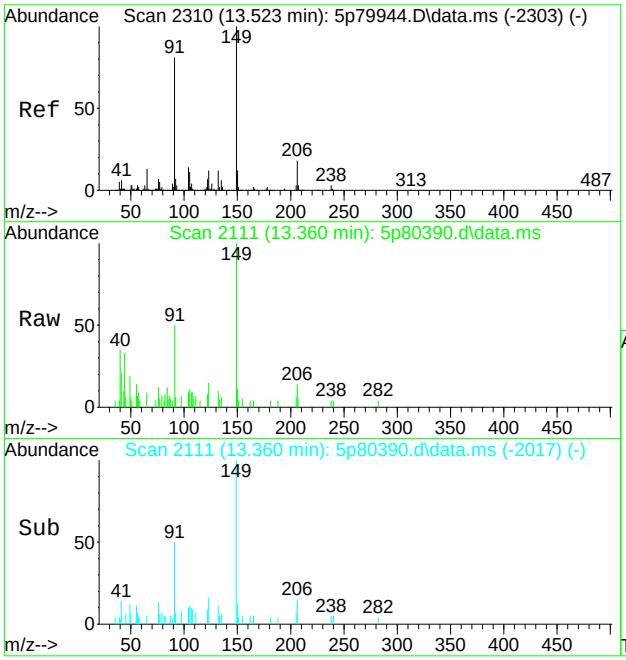


#83
Octadecane
Concen: 0.19 ppm
RT: 9.909 min Scan# 1465
Delta R.T. 0.000 min
Lab File: 5p80390.d
Acq: 15 Dec 2021 9:13 pm

Tgt Ion: 57 Resp: 2700

Ion	Ratio	Lower	Upper
57	100		
43	62.4	45.6	105.6
71	48.6	35.5	95.5
85	39.9	16.8	76.8

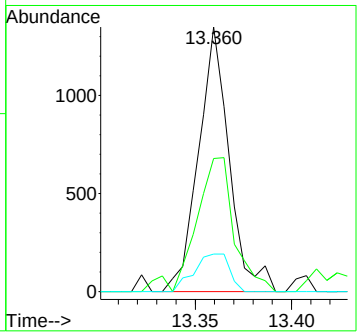


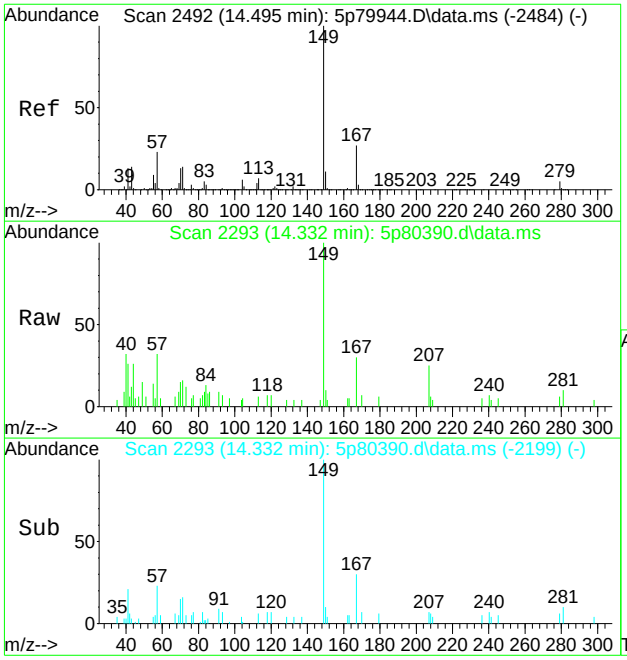


#88
Butylbenzylphthalate
Concen: 0.08 ppm
RT: 13.360 min Scan# 2111
Delta R.T. 0.000 min
Lab File: 5p80390.d
Acq: 15 Dec 2021 9:13 pm

Tgt Ion:149 Resp: 1494

Ion	Ratio	Lower	Upper
149	100		
91	47.3	31.1	91.1
206	5.6	0.0	47.2

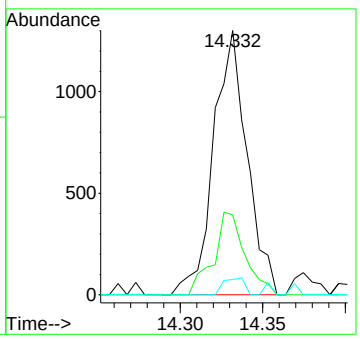




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.08 ppm
RT: 14.332 min Scan# 2293
Delta R.T. 0.000 min
Lab File: 5p80390.d
Acq: 15 Dec 2021 9:13 pm

Tgt Ion:149 Resp: 1840

Ion	Ratio	Lower	Upper
149	100		
167	30.2	0.0	56.9
279	5.8	0.0	34.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80391.d
Acq On : 15 Dec 2021 9:41 pm
Operator : kristis
Sample : jd36168-3 Inst : MS5P
Misc : op36999,e5p3805,260,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:29:52 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

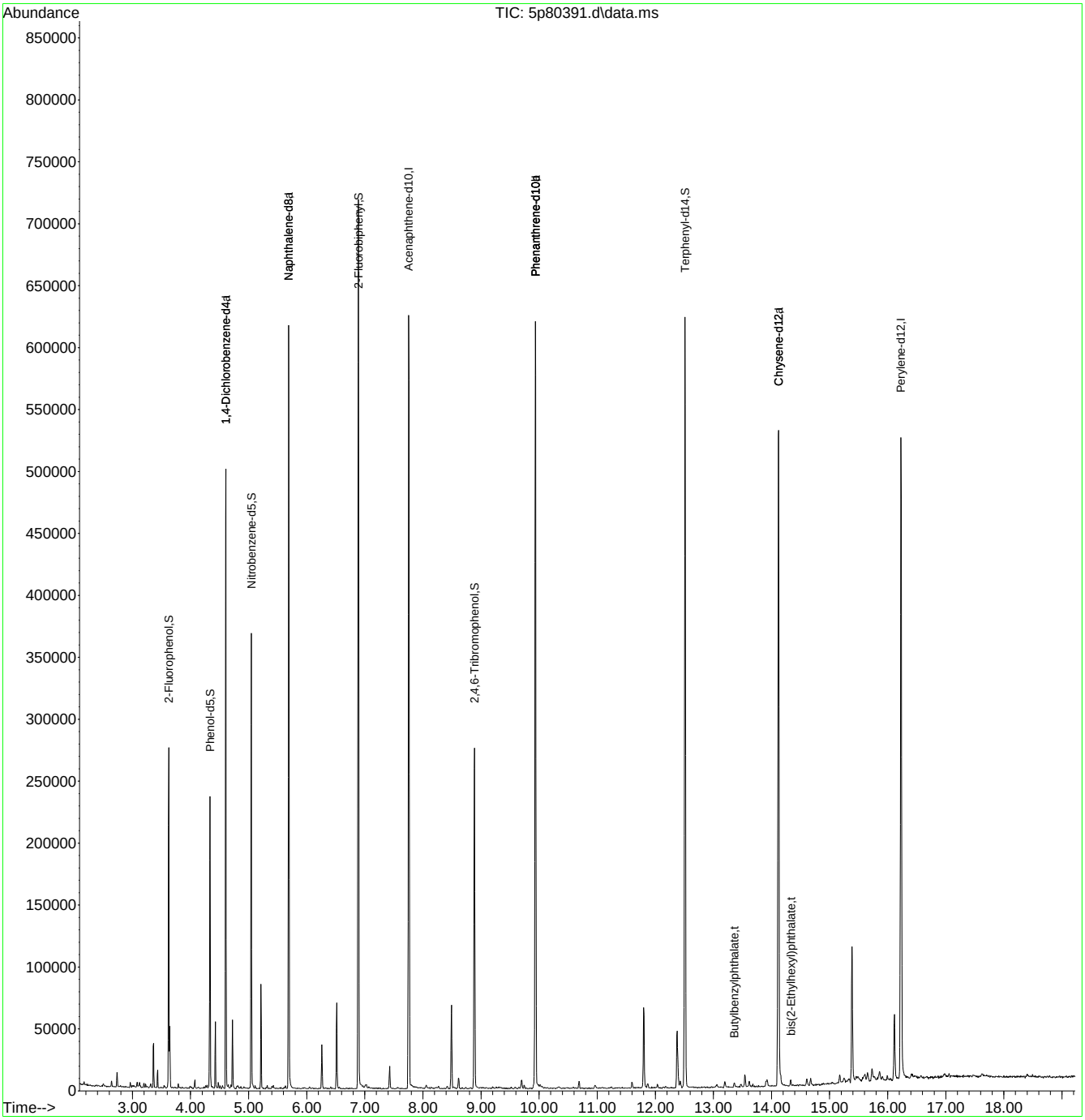
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	72269	8.00	ppm	0.00
24) Naphthalene-d8	5.688	136	284056	8.00	ppm	0.00
46) Acenaphthene-d10	7.755	164	163952	8.00	ppm	0.00
69) Phenanthrene-d10	9.935	188	290733	8.00	ppm	0.00
84) Chrysene-d12	14.123	240	239747	8.00	ppm	0.00
93) Perylene-d12	16.228	264	220905	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.609	152	72269	8.00	ppm	0.00
105) Phenanthrene-d10a	9.935	188	290733	8.00	ppm	0.00
107) Naphthalene-d8a	5.688	136	284056	8.00	ppm	0.00
109) Chrysene-d12a	14.123	240	239747	8.00	ppm	0.00
111) Phenanthrene-d10b	9.935	188	290733	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.626	112	63156	5.40	ppm	0.00
Spiked Amount 10.000			Recovery = 54.00%			
8) Phenol-d5	4.336	99	57611	3.84	ppm	0.00
Spiked Amount 10.000			Recovery = 38.40%			
25) Nitrobenzene-d5	5.047	82	93512	8.75	ppm	0.00
Spiked Amount 10.000			Recovery = 87.50%			
51) 2-Fluorobiphenyl	6.890	172	244205	9.08	ppm	0.00
Spiked Amount 10.000			Recovery = 90.80%			
74) 2,4,6-Tribromophenol	8.888	330	35323	9.56	ppm	0.00
Spiked Amount 10.000			Recovery = 95.60%			
87) Terphenyl-d14	12.510	244	253521	8.49	ppm	0.00
Spiked Amount 10.000			Recovery = 84.90%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
88) Butylbenzylphthalate	13.360	149	1264	0.07	ppm	79
92) bis(2-Ethylhexyl)phtha...	14.332	149	1875	0.08	ppm	82

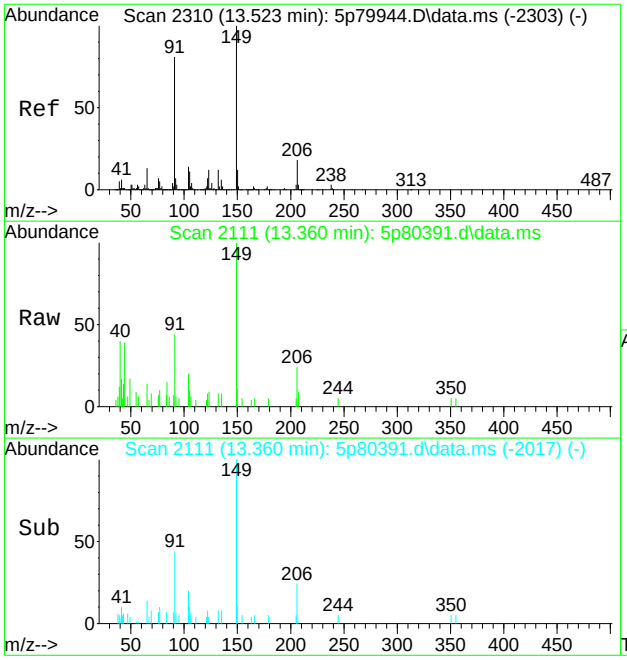
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80391.d
Acq On : 15 Dec 2021 9:41 pm
Operator : kristis
Sample : jd36168-3 Inst : MS5P
Misc : op36999,e5p3805,260,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:29:52 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

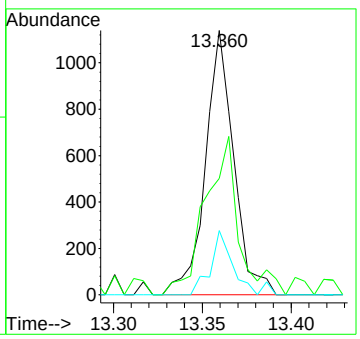


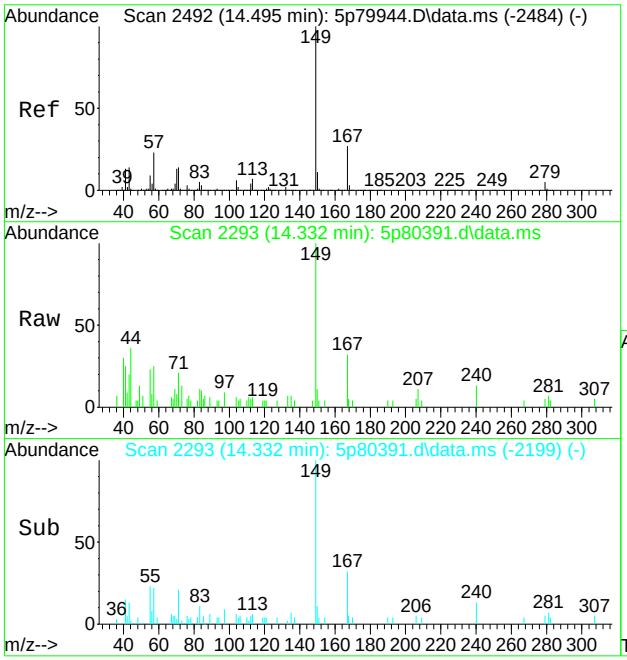


#88
Butylbenzylphthalate
Concen: 0.07 ppm
RT: 13.360 min Scan# 2111
Delta R.T. 0.000 min
Lab File: 5p80391.d
Acq: 15 Dec 2021 9:41 pm

Tgt Ion:149 Resp: 1264

Ion	Ratio	Lower	Upper
149	100		
91	44.0	31.1	91.1
206	24.3	0.0	47.2

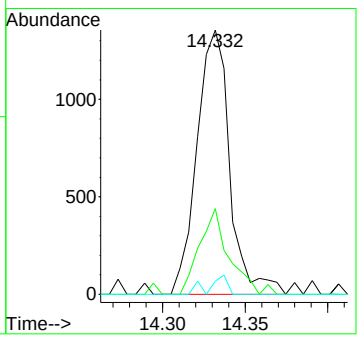




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.08 ppm
RT: 14.332 min Scan# 2293
Delta R.T. 0.000 min
Lab File: 5p80391.d
Acq: 15 Dec 2021 9:41 pm

Tgt Ion:149 Resp: 1875

Ion	Ratio	Lower	Upper
149	100		
167	37.6	0.0	56.9
279	4.9	0.0	34.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80382.d
Acq On : 15 Dec 2021 5:38 pm
Operator : kristis
Sample : jd36168-4 Inst : MS5P
Misc : op37001,e5p3805,260,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:19:52 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

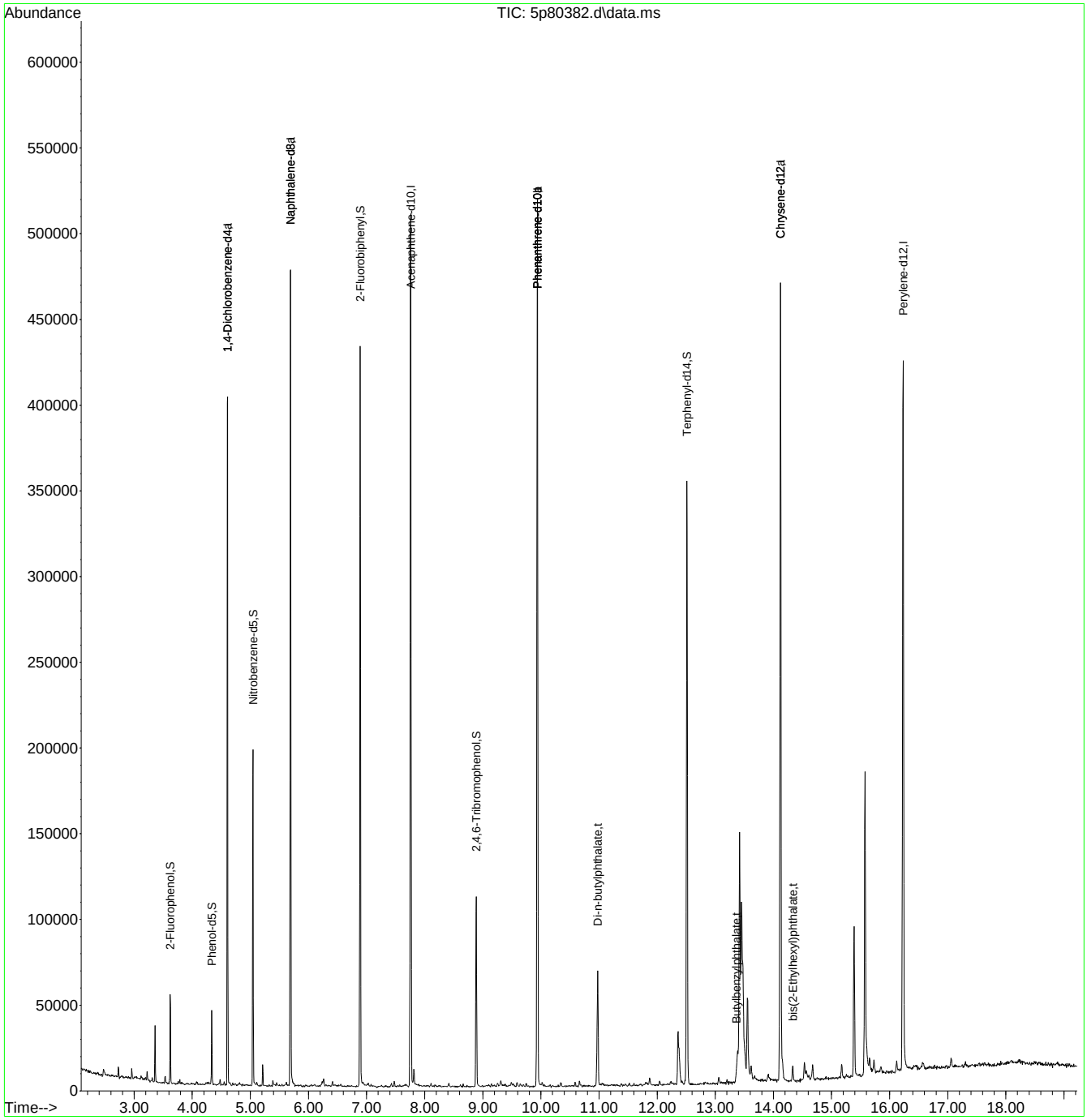
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	59878	8.00	ppm	0.00
24) Naphthalene-d8	5.693	136	227428	8.00	ppm	0.00
46) Acenaphthene-d10	7.761	164	134174	8.00	ppm	0.00
69) Phenanthrene-d10	9.940	188	240169	8.00	ppm	0.00
84) Chrysene-d12	14.123	240	194415	8.00	ppm	0.00
93) Perylene-d12	16.234	264	180112	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.609	152	59878	8.00	ppm	0.00
105) Phenanthrene-d10a	9.940	188	240169	8.00	ppm	0.00
107) Naphthalene-d8a	5.693	136	227428	8.00	ppm	0.00
109) Chrysene-d12a	14.123	240	194415	8.00	ppm	0.00
111) Phenanthrene-d10b	9.940	188	240169	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.620	112	12222	1.26	ppm	0.00
Spiked Amount 10.000			Recovery = 12.60%			
8) Phenol-d5	4.336	99	10410	0.84	ppm	0.00
Spiked Amount 10.000			Recovery = 8.40%			
25) Nitrobenzene-d5	5.047	82	53304	6.23	ppm	0.00
Spiked Amount 10.000			Recovery = 62.30%			
51) 2-Fluorobiphenyl	6.890	172	140969	6.40	ppm	0.00
Spiked Amount 10.000			Recovery = 64.00%			
74) 2,4,6-Tribromophenol	8.888	330	13819	4.53	ppm	0.00
Spiked Amount 10.000			Recovery = 45.30%			
87) Terphenyl-d14	12.510	244	144899	5.98	ppm	0.00
Spiked Amount 10.000			Recovery = 59.80%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
81) Di-n-butylphthalate	10.977	149	41060	1.07	ppm	100
88) Butylbenzylphthalate	13.365	149	1798	0.12	ppm	90
92) bis(2-Ethylhexyl)phtha...	14.332	149	4160	0.21	ppm	98

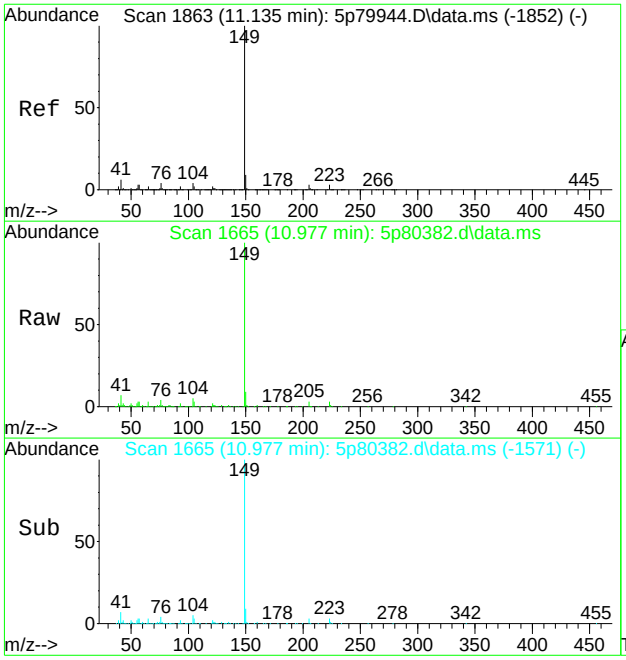
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80382.d
Acq On : 15 Dec 2021 5:38 pm
Operator : kristis
Sample : jd36168-4 Inst : MS5P
Misc : op37001,e5p3805,260,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:19:52 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

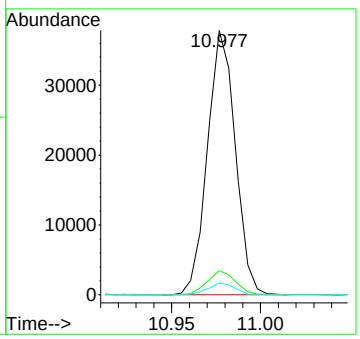


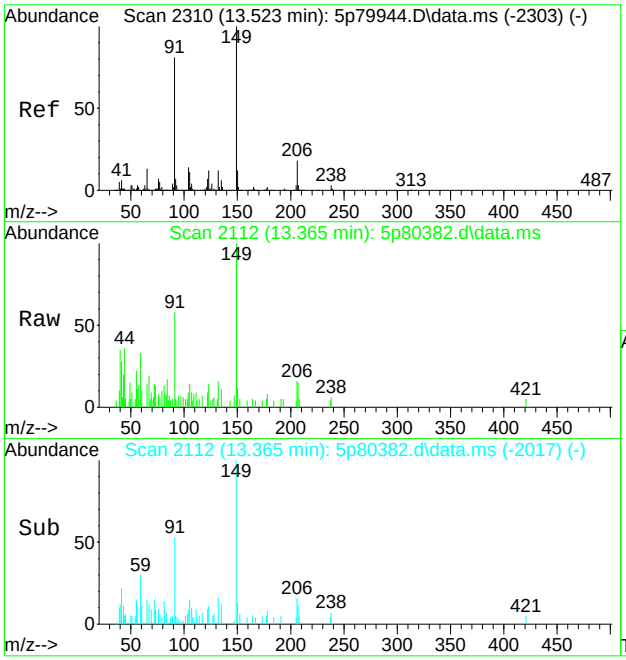


#81
Di-n-butylphthalate
Concen: 1.07 ppm
RT: 10.977 min Scan# 1665
Delta R.T. 0.000 min
Lab File: 5p80382.d
Acq: 15 Dec 2021 5:38 pm

Tgt Ion:149 Resp: 41060

Ion	Ratio	Lower	Upper
149	100		
150	9.2	0.0	39.2
104	4.5	0.0	34.2

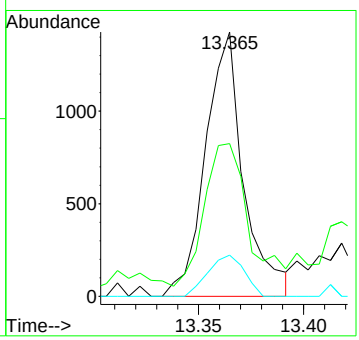


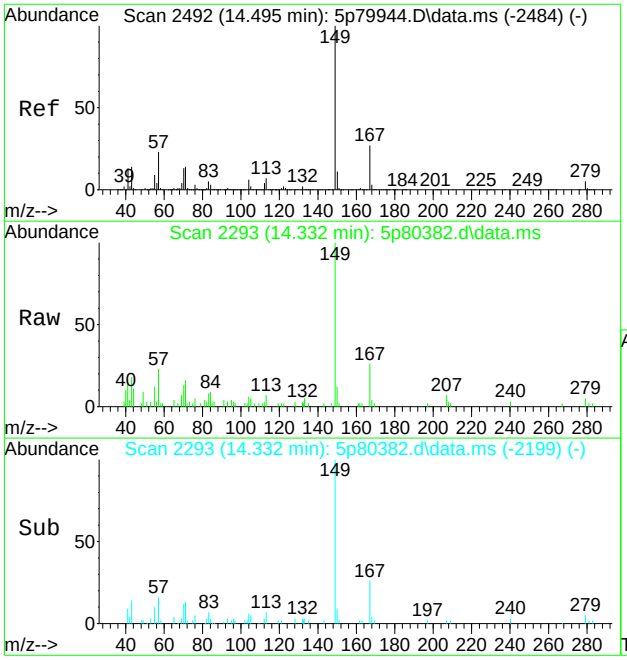


#88
Butylbenzylphthalate
Concen: 0.12 ppm
RT: 13.365 min Scan# 2112
Delta R.T. 0.005 min
Lab File: 5p80382.d
Acq: 15 Dec 2021 5:38 pm

Tgt Ion:149 Resp: 1798

Ion	Ratio	Lower	Upper
149	100		
91	52.1	31.1	91.1
206	16.3	0.0	47.2

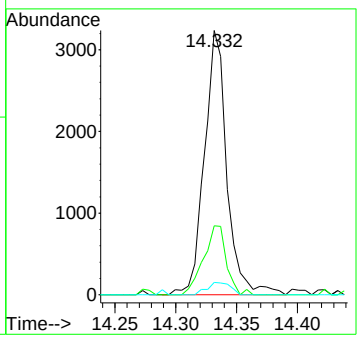




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.21 ppm
RT: 14.332 min Scan# 2293
Delta R.T. 0.000 min
Lab File: 5p80382.d
Acq: 15 Dec 2021 5:38 pm

Tgt Ion:149 Resp: 4160

Ion	Ratio	Lower	Upper
149	100		
167	26.1	0.0	56.9
279	3.8	0.0	34.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80383.d
Acq On : 15 Dec 2021 6:05 pm
Operator : kristis
Sample : jd36168-5 Inst : MS5P
Misc : op37001,e5p3805,280,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 02:28:28 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

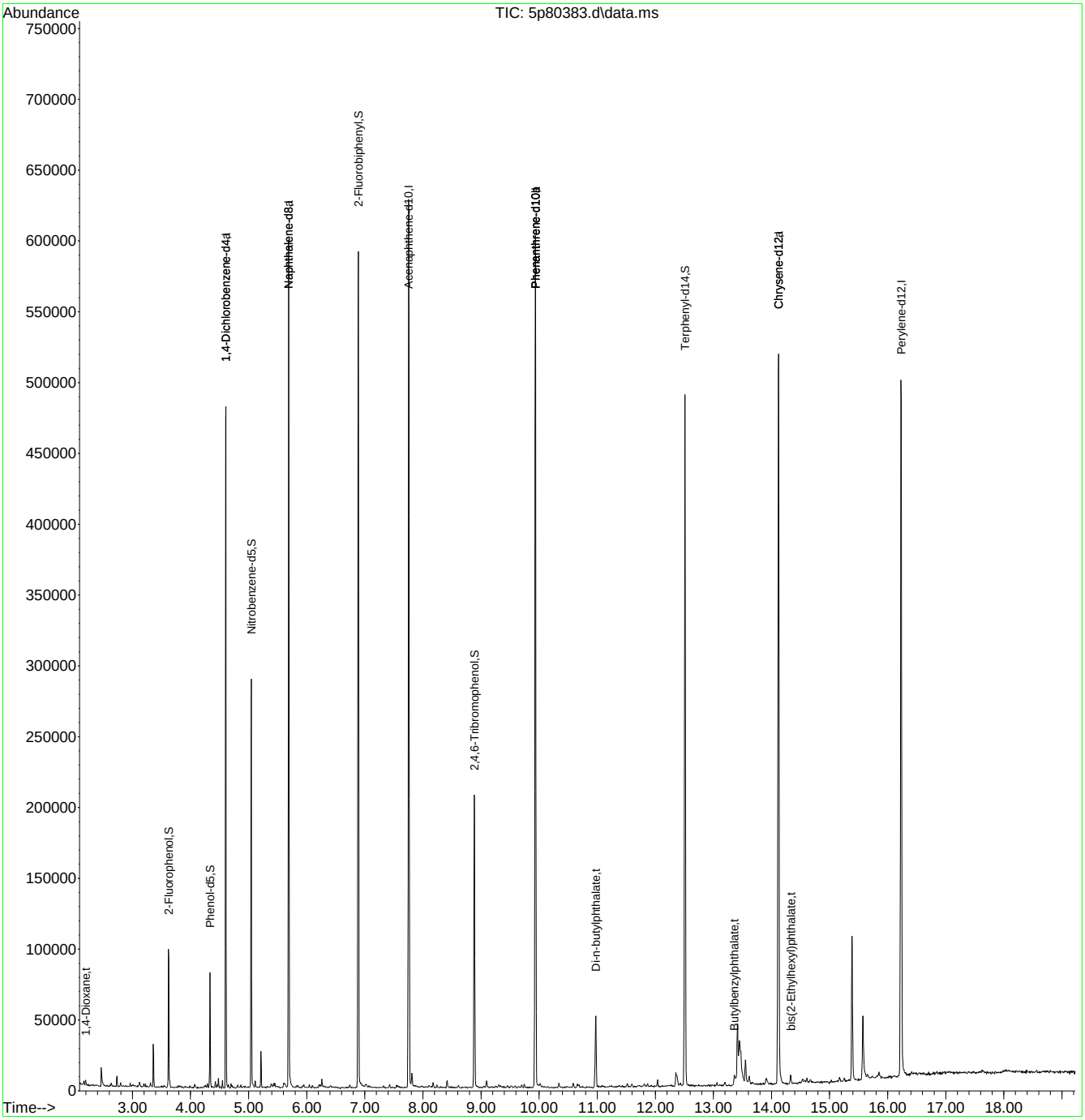
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	71612	8.00	ppm	0.00
24) Naphthalene-d8	5.688	136	273727	8.00	ppm	0.00
46) Acenaphthene-d10	7.756	164	159227	8.00	ppm	0.00
69) Phenanthrene-d10	9.935	188	283600	8.00	ppm	0.00
84) Chrysene-d12	14.124	240	235170	8.00	ppm	0.00
93) Perylene-d12	16.234	264	215048	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.609	152	71612	8.00	ppm	0.00
105) Phenanthrene-d10a	9.935	188	283600	8.00	ppm	0.00
107) Naphthalene-d8a	5.688	136	273727	8.00	ppm	0.00
109) Chrysene-d12a	14.124	240	235170	8.00	ppm	0.00
111) Phenanthrene-d10b	9.935	188	283600	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.626	112	24166	2.08	ppm	0.00
Spiked Amount 10.000			Recovery = 20.80%			
8) Phenol-d5	4.337	99	19896	1.34	ppm	0.00
Spiked Amount 10.000			Recovery = 13.40%			
25) Nitrobenzene-d5	5.047	82	76836	7.46	ppm	0.00
Spiked Amount 10.000			Recovery = 74.60%			
51) 2-Fluorobiphenyl	6.890	172	205476	7.87	ppm	0.00
Spiked Amount 10.000			Recovery = 78.70%			
74) 2,4,6-Tribromophenol	8.888	330	25546	7.09	ppm	0.00
Spiked Amount 10.000			Recovery = 70.90%			
87) Terphenyl-d14	12.510	244	194612	6.64	ppm	0.00
Spiked Amount 10.000			Recovery = 66.40%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.194	88	1317	0.26	ppm	89
81) Di-n-butylphthalate	10.977	149	33663	0.74	ppm	99
88) Butylbenzylphthalate	13.360	149	1930	0.11	ppm	93
92) bis(2-Ethylhexyl)phtha...	14.332	149	2655	0.11	ppm	98

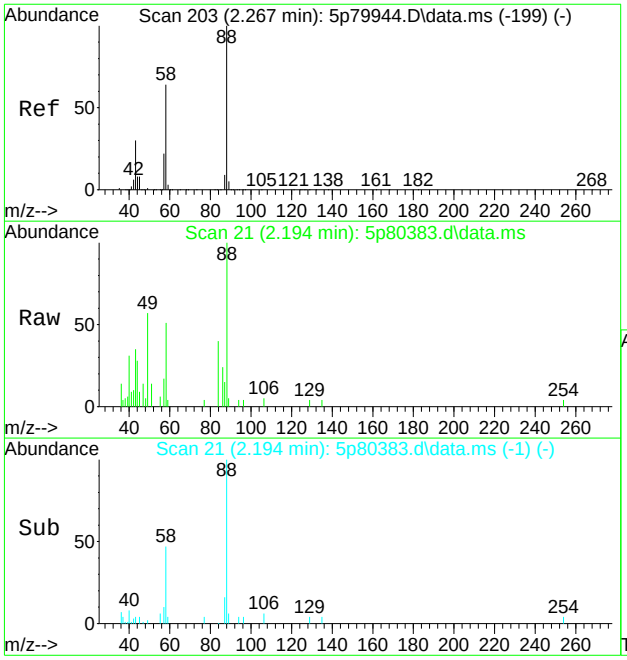
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80383.d
Acq On : 15 Dec 2021 6:05 pm
Operator : kristis
Sample : jd36168-5 Inst : MS5P
Misc : op37001,e5p3805,280,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 02:28:28 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

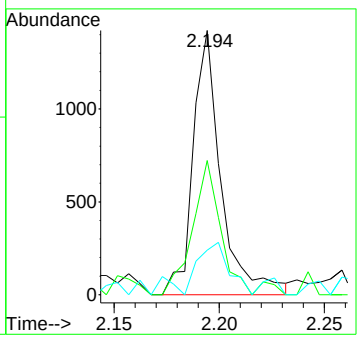


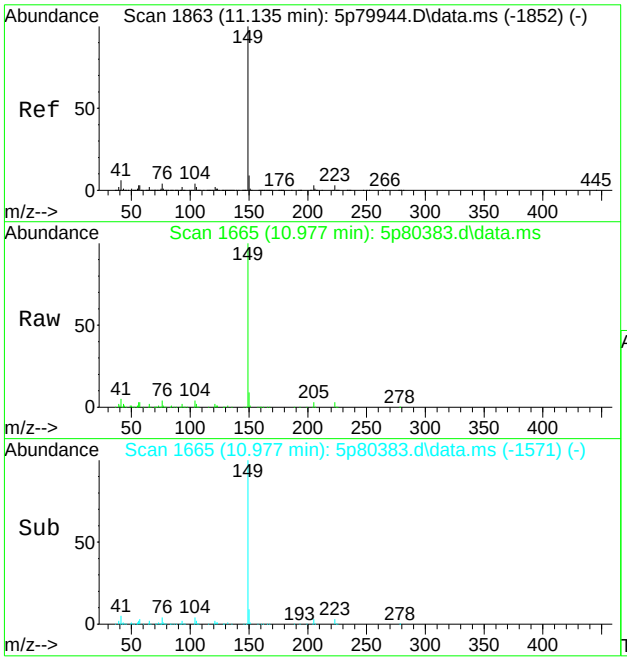


#2
1,4-Dioxane
Concen: 0.26 ppm
RT: 2.194 min Scan# 21
Delta R.T. 0.011 min
Lab File: 5p80383.d
Acq: 15 Dec 2021 6:05 pm

Tgt Ion: 88 Resp: 1317

Ion	Ratio	Lower	Upper
88	100		
58	51.9	28.2	88.2
57	13.7	0.0	52.2

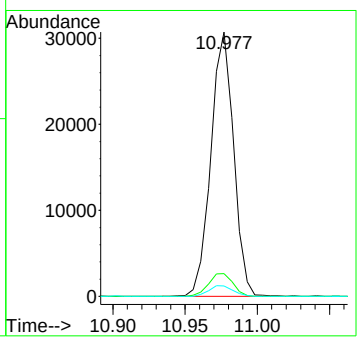


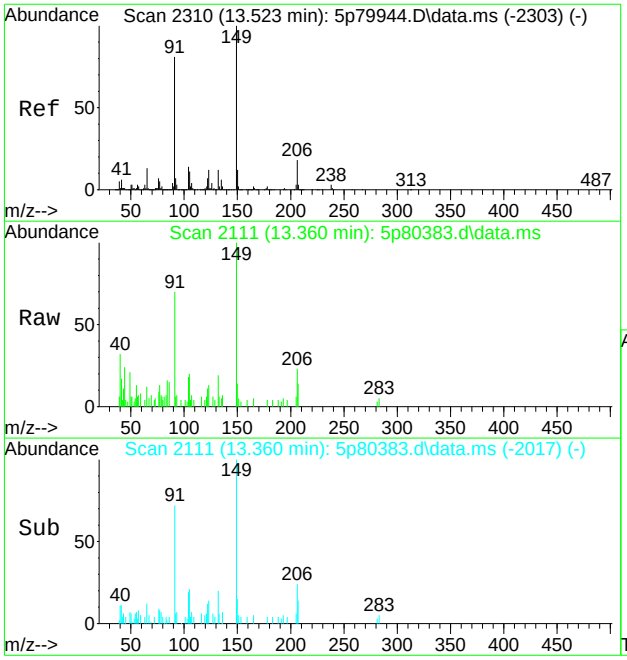


#81
Di-n-butylphthalate
Concen: 0.74 ppm
RT: 10.977 min Scan# 1665
Delta R.T. 0.000 min
Lab File: 5p80383.d
Acq: 15 Dec 2021 6:05 pm

Tgt Ion:149 Resp: 33663

Ion	Ratio	Lower	Upper
149	100		
150	8.6	0.0	39.2
104	3.9	0.0	34.2

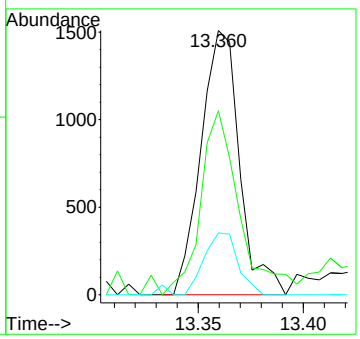


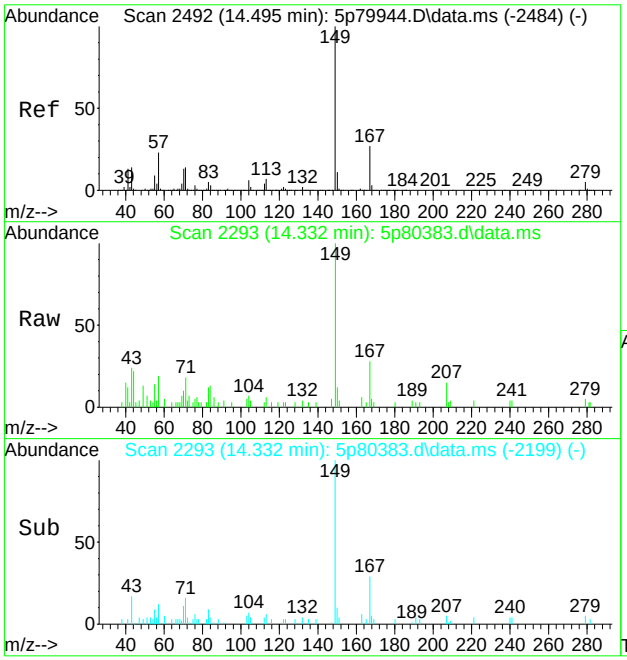


#88
Butylbenzylphthalate
Concen: 0.11 ppm
RT: 13.360 min Scan# 2111
Delta R.T. 0.000 min
Lab File: 5p80383.d
Acq: 15 Dec 2021 6:05 pm

Tgt Ion:149 Resp: 1930

Ion	Ratio	Lower	Upper
149	100		
91	65.7	31.1	91.1
206	21.6	0.0	47.2

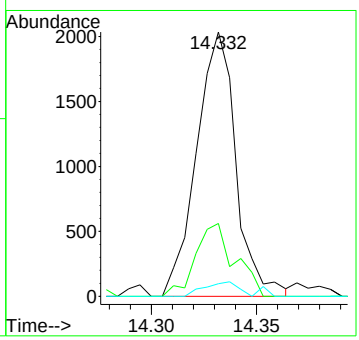




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.11 ppm
RT: 14.332 min Scan# 2293
Delta R.T. 0.000 min
Lab File: 5p80383.d
Acq: 15 Dec 2021 6:05 pm

Tgt Ion:149 Resp: 2655

Ion	Ratio	Lower	Upper
149	100		
167	28.0	0.0	56.9
279	4.8	0.0	34.6



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 15:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80384.d
Acq On : 15 Dec 2021 6:31 pm
Operator : kristis
Sample : jd36168-6 Inst : MS5P
Misc : op37001,e5p3805,280,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:23:04 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

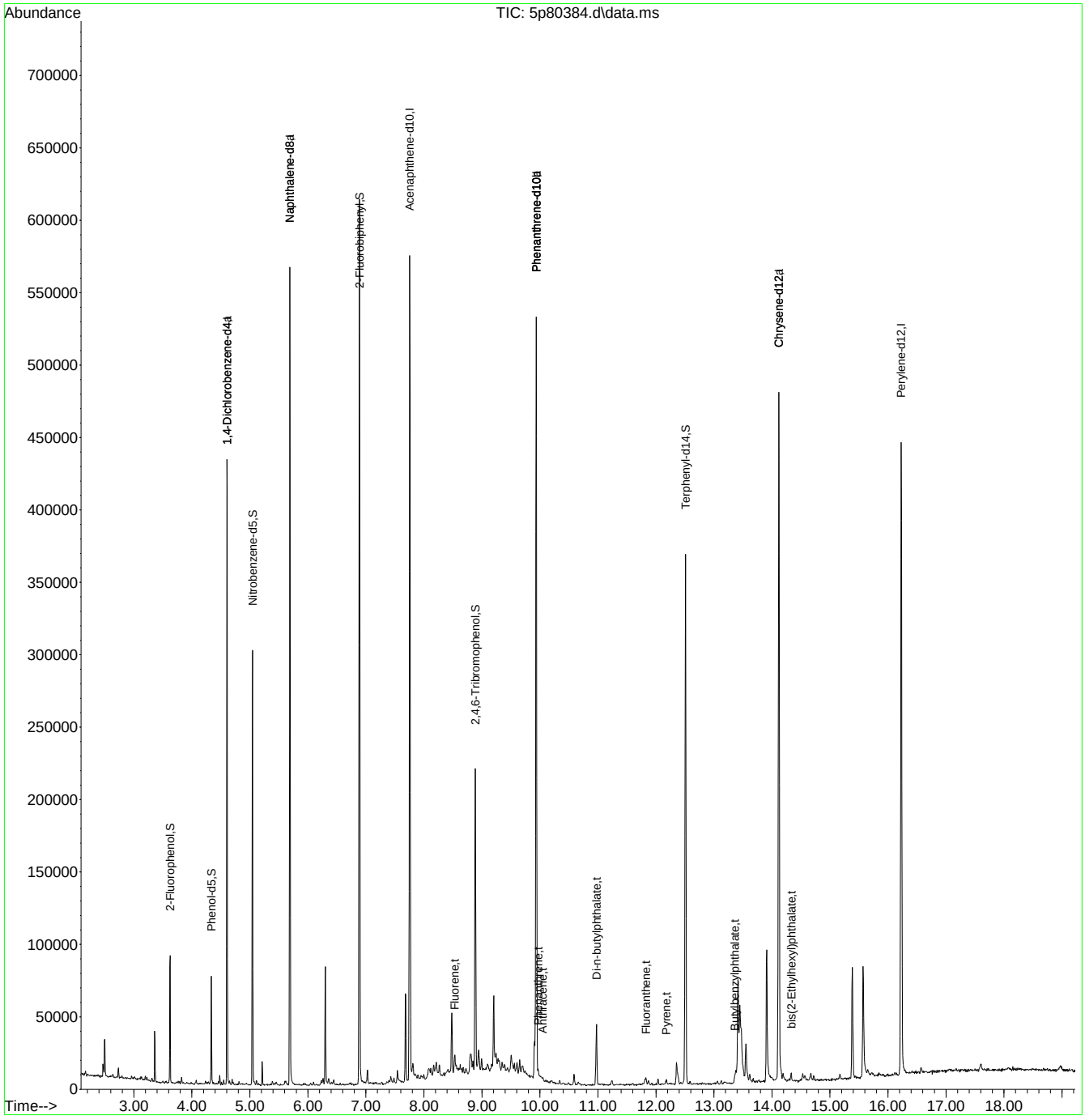
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	62355	8.00	ppm	0.00
24) Naphthalene-d8	5.688	136	245862	8.00	ppm	0.00
46) Acenaphthene-d10	7.756	164	141633	8.00	ppm	0.00
69) Phenanthrene-d10	9.935	188	240700	8.00	ppm	0.00
84) Chrysene-d12	14.118	240	204507	8.00	ppm	0.00
93) Perylene-d12	16.228	264	193966	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.609	152	62355	8.00	ppm	0.00
105) Phenanthrene-d10a	9.935	188	240700	8.00	ppm	0.00
107) Naphthalene-d8a	5.688	136	245862	8.00	ppm	0.00
109) Chrysene-d12a	14.118	240	204507	8.00	ppm	0.00
111) Phenanthrene-d10b	9.935	188	240700	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.626	112	22112	2.19	ppm	0.00
Spiked Amount 10.000			Recovery = 21.90%			
8) Phenol-d5	4.337	99	18504	1.43	ppm	0.00
Spiked Amount 10.000			Recovery = 14.30%			
25) Nitrobenzene-d5	5.047	82	81497	8.81	ppm	0.00
Spiked Amount 10.000			Recovery = 88.10%			
51) 2-Fluorobiphenyl	6.890	172	207763	8.94	ppm	0.00
Spiked Amount 10.000			Recovery = 89.40%			
74) 2,4,6-Tribromophenol	8.888	330	27479	8.98	ppm	0.00
Spiked Amount 10.000			Recovery = 89.80%			
87) Terphenyl-d14	12.510	244	150699	5.91	ppm	0.00
Spiked Amount 10.000			Recovery = 59.10%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
66) Fluorene	8.530	166	1152	0.05	ppm	73
78) Phenanthrene	9.973	178	1966	0.06	ppm	98
79) Anthracene	10.047	178	965m	0.03	ppm	
81) Di-n-butylphthalate	10.977	149	28041	0.73	ppm	100
82) Fluoranthene	11.832	202	1948	0.06	ppm	96
86) Pyrene	12.179	202	1709	0.05	ppm	89
88) Butylbenzylphthalate	13.360	149	1626	0.10	ppm	79
92) bis(2-Ethylhexyl)phtha...	14.332	149	2203	0.11	ppm	83

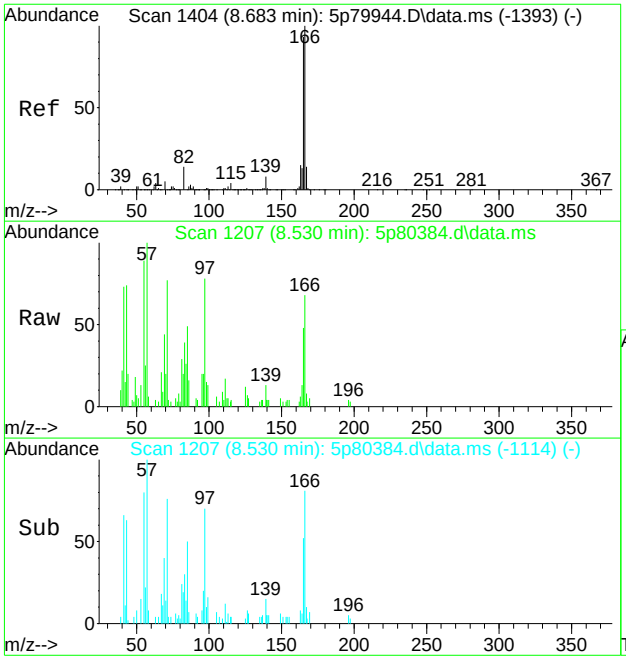
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80384.d
Acq On : 15 Dec 2021 6:31 pm
Operator : kristis
Sample : jd36168-6 Inst : MS5P
Misc : op37001,e5p3805,280,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:23:04 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

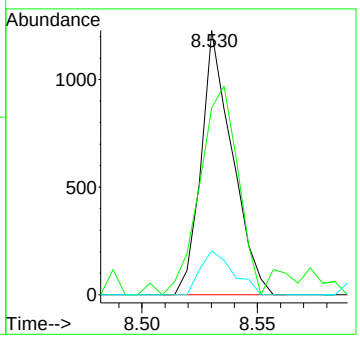


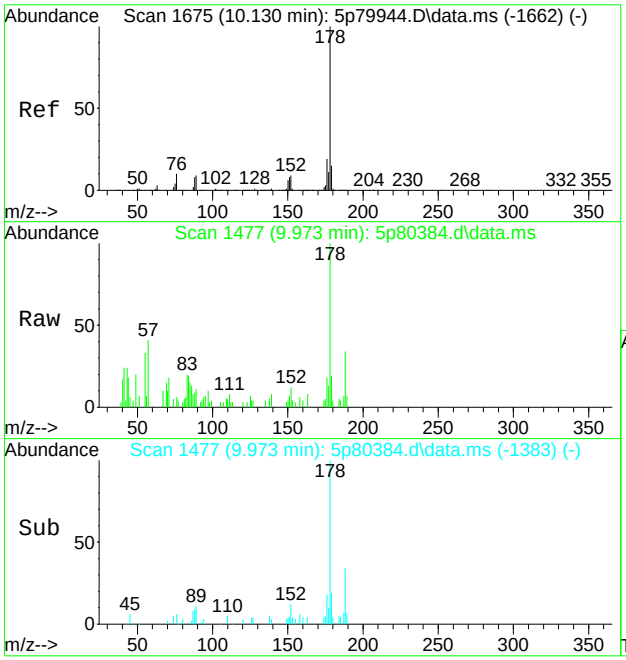


#66
Fluorene
Concen: 0.05 ppm
RT: 8.530 min Scan# 1207
Delta R.T. -0.005 min
Lab File: 5p80384.d
Acq: 15 Dec 2021 6:31 pm

Tgt Ion:166 Resp: 1152

Ion	Ratio	Lower	Upper
166	100		
165	66.6	65.1	125.1
167	16.7	0.0	43.2

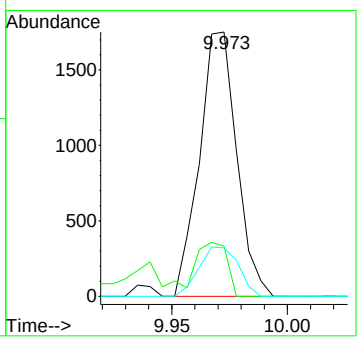


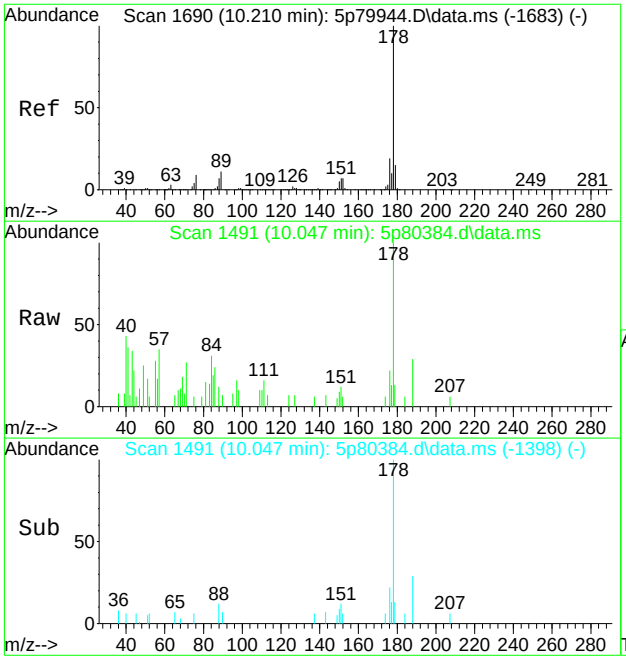


#78
Phenanthrene
Concen: 0.06 ppm
RT: 9.973 min Scan# 1477
Delta R.T. 0.000 min
Lab File: 5p80384.d
Acq: 15 Dec 2021 6:31 pm

Tgt Ion:178 Resp: 1966

Ion	Ratio	Lower	Upper
178	100		
179	17.2	0.0	46.0
176	18.3	0.0	49.3

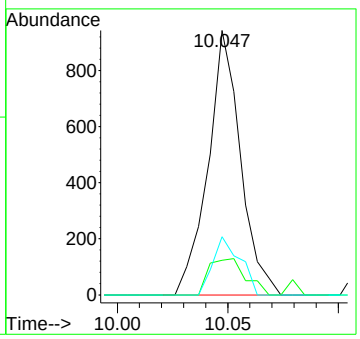


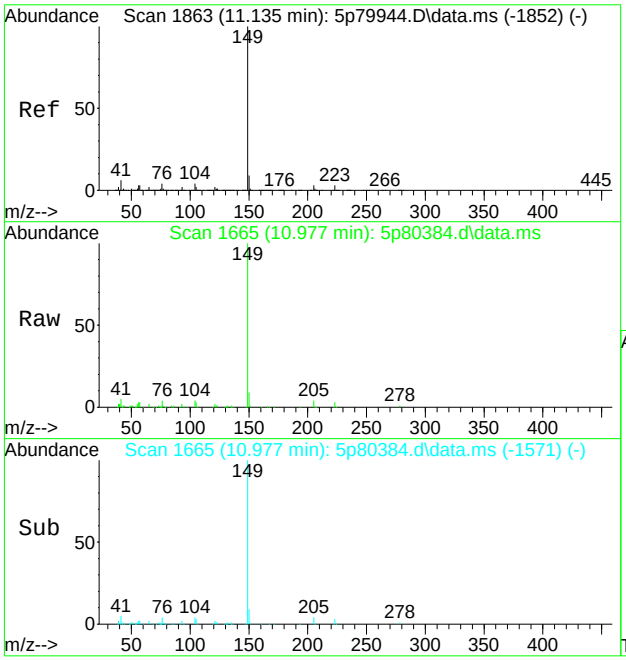


#79
Anthracene
Concen: 0.03 ppm m
RT: 10.047 min Scan# 1491
Delta R.T. -0.005 min
Lab File: 5p80384.d
Acq: 15 Dec 2021 6:31 pm

Tgt Ion:178 Resp: 965

Ion	Ratio	Lower	Upper
178	100		
179	13.0	0.0	45.3
176	22.0	0.0	48.2

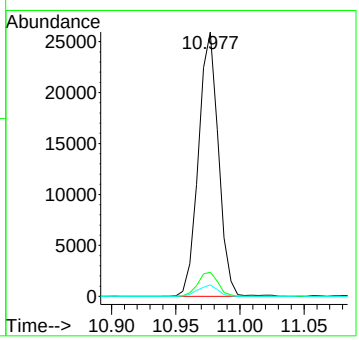


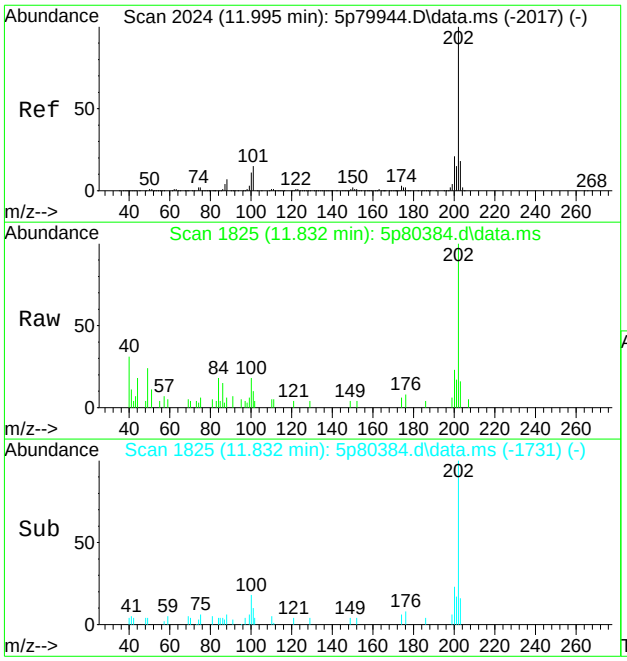


#81
Di-n-butylphthalate
Concen: 0.73 ppm
RT: 10.977 min Scan# 1665
Delta R.T. 0.000 min
Lab File: 5p80384.d
Acq: 15 Dec 2021 6:31 pm

Tgt Ion:149 Resp: 28041

Ion	Ratio	Lower	Upper
149	100		
150	9.1	0.0	39.2
104	4.4	0.0	34.2

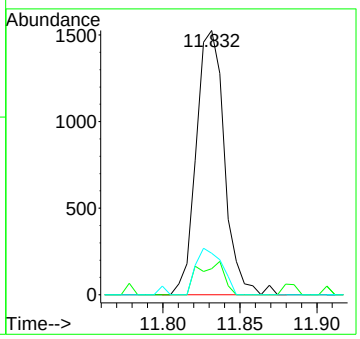


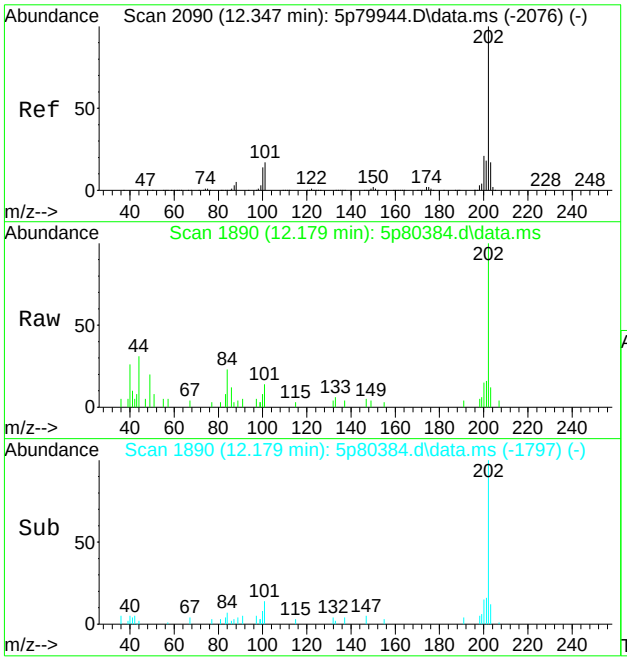


#82
Fluoranthene
Concen: 0.06 ppm
RT: 11.832 min Scan# 1825
Delta R.T. 0.000 min
Lab File: 5p80384.d
Acq: 15 Dec 2021 6:31 pm

Tgt Ion:202 Resp: 1948

Ion	Ratio	Lower	Upper
202	100		
101	12.3	0.0	43.3
203	14.0	0.0	46.4

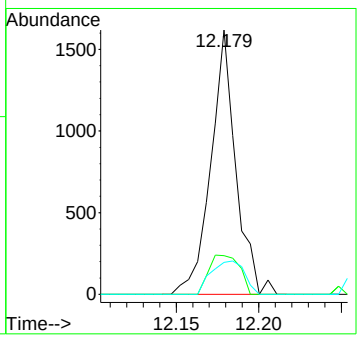


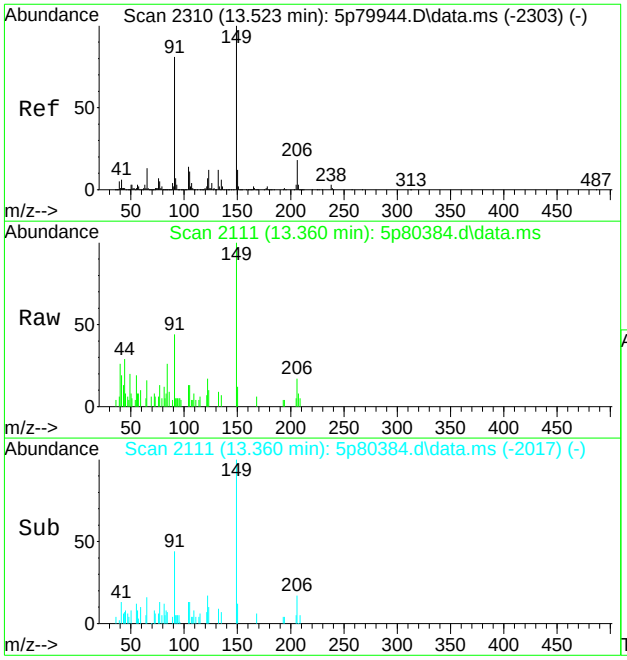


#86
Pyrene
Concen: 0.05 ppm
RT: 12.179 min Scan# 1890
Delta R.T. -0.005 min
Lab File: 5p80384.d
Acq: 15 Dec 2021 6:31 pm

Tgt Ion:202 Resp: 1709

Ion	Ratio	Lower	Upper
202	100		
200	14.6	0.0	49.4
203	12.0	0.0	47.4

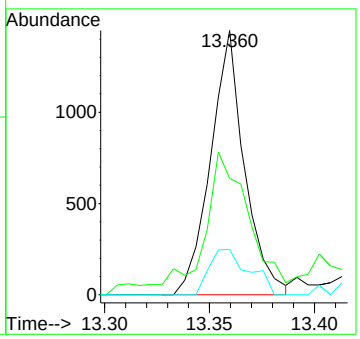


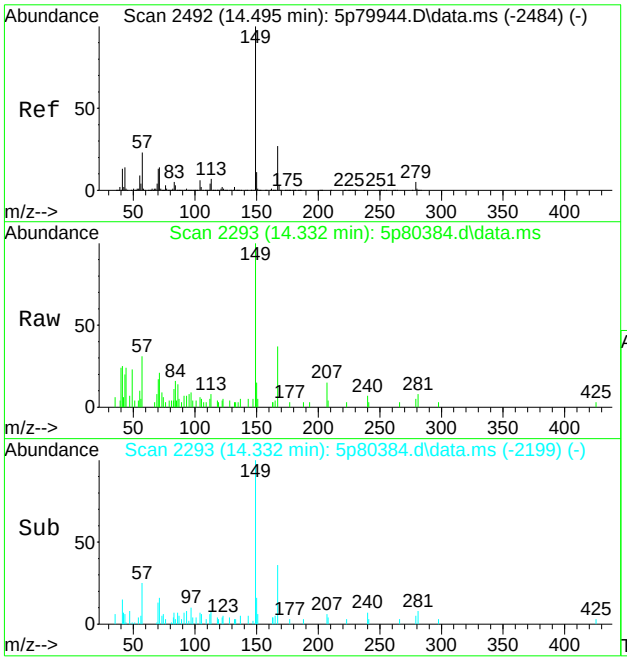


#88
Butylbenzylphthalate
Concen: 0.10 ppm
RT: 13.360 min Scan# 2111
Delta R.T. 0.000 min
Lab File: 5p80384.d
Acq: 15 Dec 2021 6:31 pm

Tgt Ion:149 Resp: 1626

Ion	Ratio	Lower	Upper
149	100		
91	40.5	31.1	91.1
206	17.6	0.0	47.2

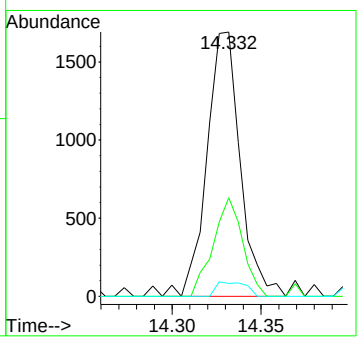




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.11 ppm
RT: 14.332 min Scan# 2293
Delta R.T. 0.000 min
Lab File: 5p80384.d
Acq: 15 Dec 2021 6:31 pm

Tgt Ion:149 Resp: 2203

Ion	Ratio	Lower	Upper
149	100		
167	37.3	0.0	56.9
279	4.8	0.0	34.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80385.d
Acq On : 15 Dec 2021 6:58 pm
Operator : kristis
Sample : jd36168-7 Inst : MS5P
Misc : op37001,e5p3805,260,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 02:01:49 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

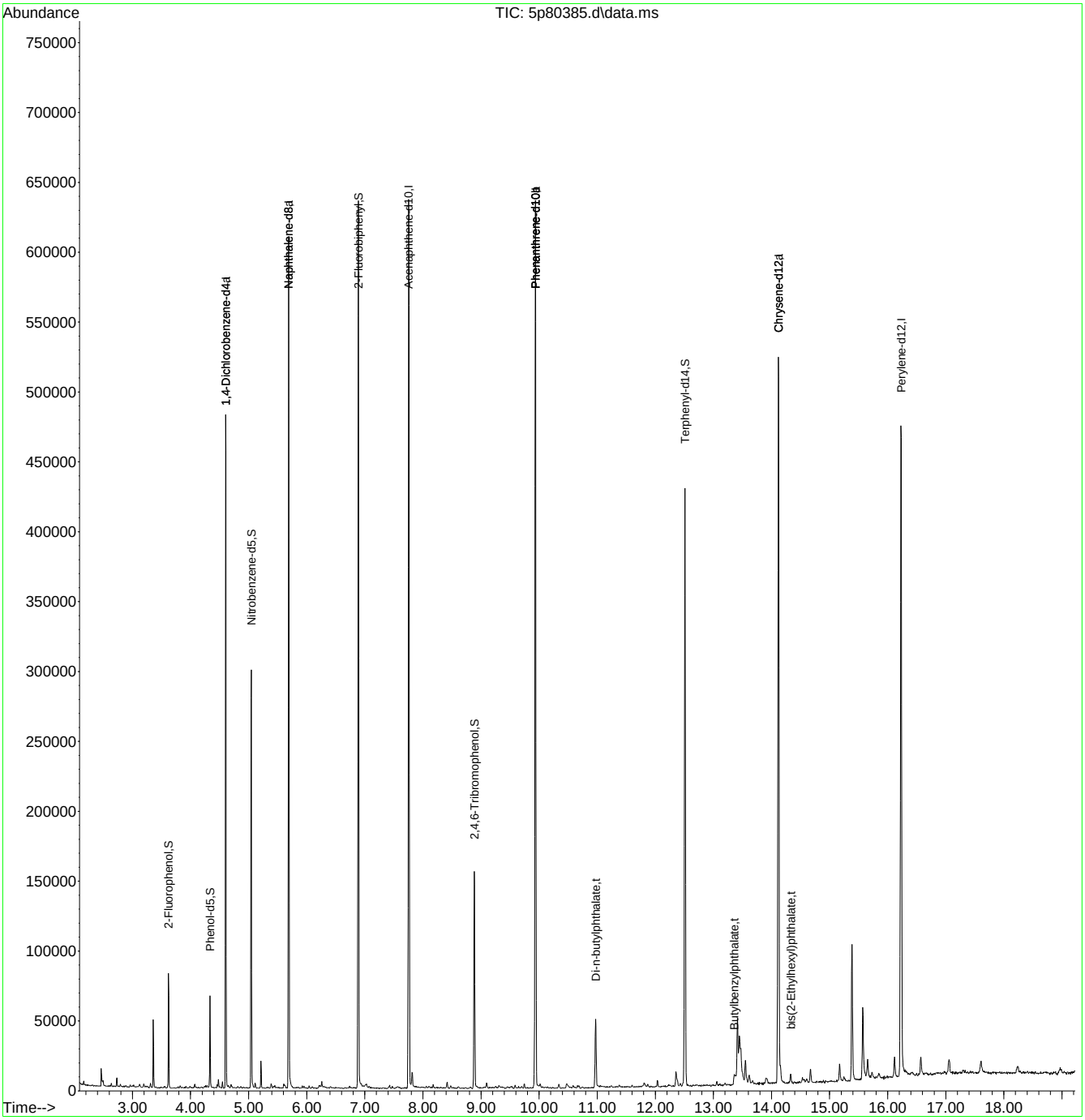
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	68381	8.00	ppm	0.00
24) Naphthalene-d8	5.688	136	271593	8.00	ppm	0.00
46) Acenaphthene-d10	7.756	164	161017	8.00	ppm	0.00
69) Phenanthrene-d10	9.935	188	286275	8.00	ppm	0.00
84) Chrysene-d12	14.124	240	233565	8.00	ppm	0.00
93) Perylene-d12	16.234	264	212760	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.609	152	68381	8.00	ppm	0.00
105) Phenanthrene-d10a	9.935	188	286275	8.00	ppm	0.00
107) Naphthalene-d8a	5.688	136	271593	8.00	ppm	0.00
109) Chrysene-d12a	14.124	240	233565	8.00	ppm	0.00
111) Phenanthrene-d10b	9.935	188	286275	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.621	112	19098	1.73	ppm	0.00
Spiked Amount 10.000			Recovery = 17.30%			
8) Phenol-d5	4.337	99	16624	1.17	ppm	0.00
Spiked Amount 10.000			Recovery = 11.70%			
25) Nitrobenzene-d5	5.047	82	82772	8.10	ppm	0.00
Spiked Amount 10.000			Recovery = 81.00%			
51) 2-Fluorobiphenyl	6.890	172	216707	8.20	ppm	0.00
Spiked Amount 10.000			Recovery = 82.00%			
74) 2,4,6-Tribromophenol	8.888	330	19766	5.43	ppm	0.00
Spiked Amount 10.000			Recovery = 54.30%			
87) Terphenyl-d14	12.510	244	171301	5.89	ppm	0.00
Spiked Amount 10.000			Recovery = 58.90%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
81) Di-n-butylphthalate	10.977	149	27068	0.59	ppm	99
88) Butylbenzylphthalate	13.360	149	2459	0.14	ppm	98
92) bis(2-Ethylhexyl)phtha...	14.332	149	3127	0.13	ppm	94

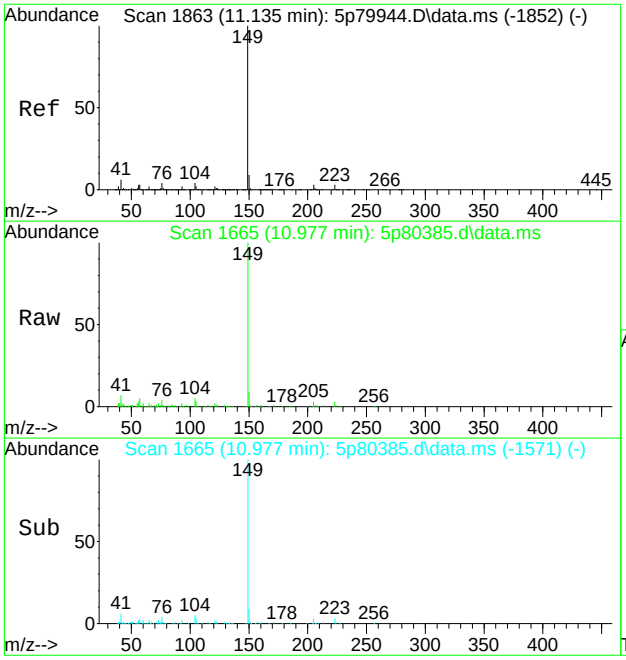
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80385.d
Acq On : 15 Dec 2021 6:58 pm
Operator : kristis
Sample : jd36168-7 Inst : MS5P
Misc : op37001,e5p3805,260,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 02:01:49 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

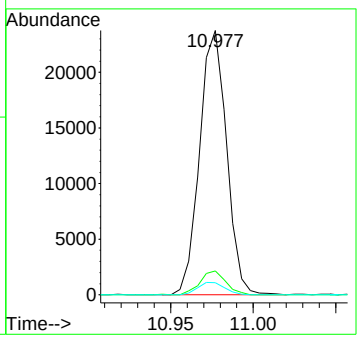


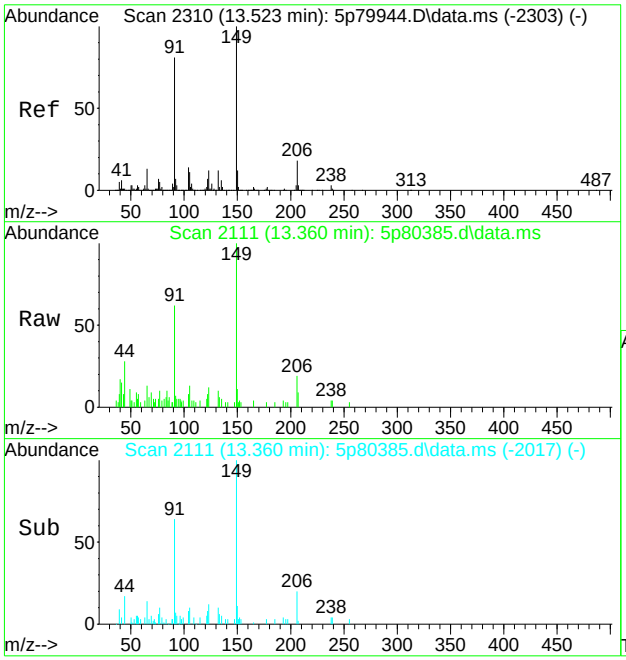


#81
Di-n-butylphthalate
Concen: 0.59 ppm
RT: 10.977 min Scan# 1665
Delta R.T. 0.000 min
Lab File: 5p80385.d
Acq: 15 Dec 2021 6:58 pm

Tgt Ion:149 Resp: 27068

Ion	Ratio	Lower	Upper
149	100		
150	9.0	0.0	39.2
104	4.5	0.0	34.2

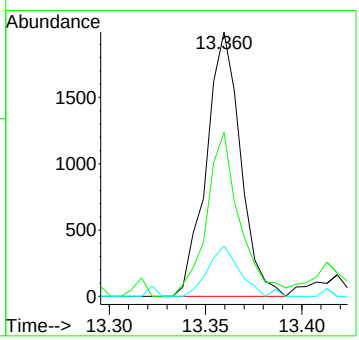


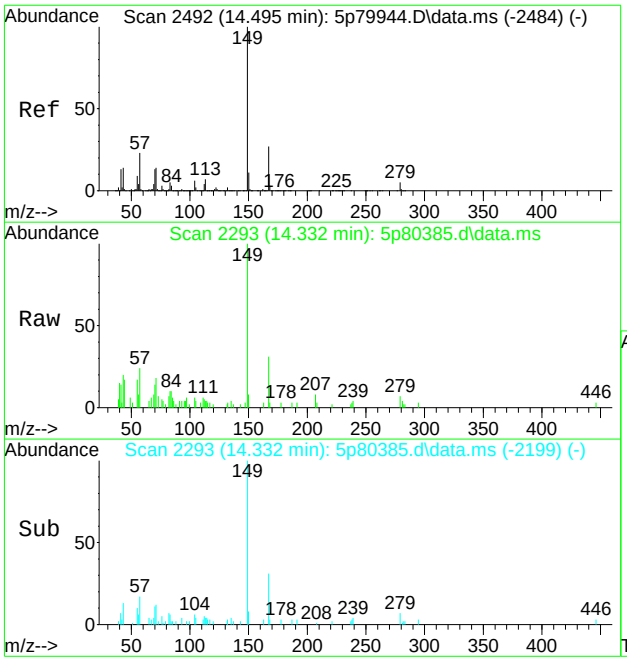


#88
Butylbenzylphthalate
Concen: 0.14 ppm
RT: 13.360 min Scan# 2111
Delta R.T. 0.000 min
Lab File: 5p80385.d
Acq: 15 Dec 2021 6:58 pm

Tgt Ion:149 Resp: 2459

Ion	Ratio	Lower	Upper
149	100		
91	60.5	31.1	91.1
206	19.1	0.0	47.2

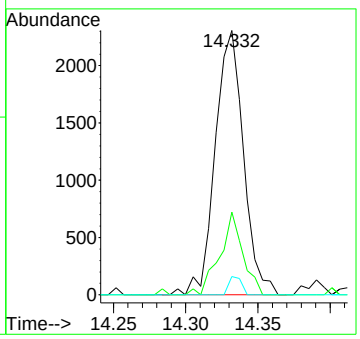




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.13 ppm
RT: 14.332 min Scan# 2293
Delta R.T. 0.000 min
Lab File: 5p80385.d
Acq: 15 Dec 2021 6:58 pm

Tgt Ion:149 Resp: 3127

Ion	Ratio	Lower	Upper
149	100		
167	30.2	0.0	56.9
279	6.9	0.0	34.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80386.d
Acq On : 15 Dec 2021 7:25 pm
Operator : kristis
Sample : jd36168-8 Inst : MS5P
Misc : op37001,e5p3805,250,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:24:36 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

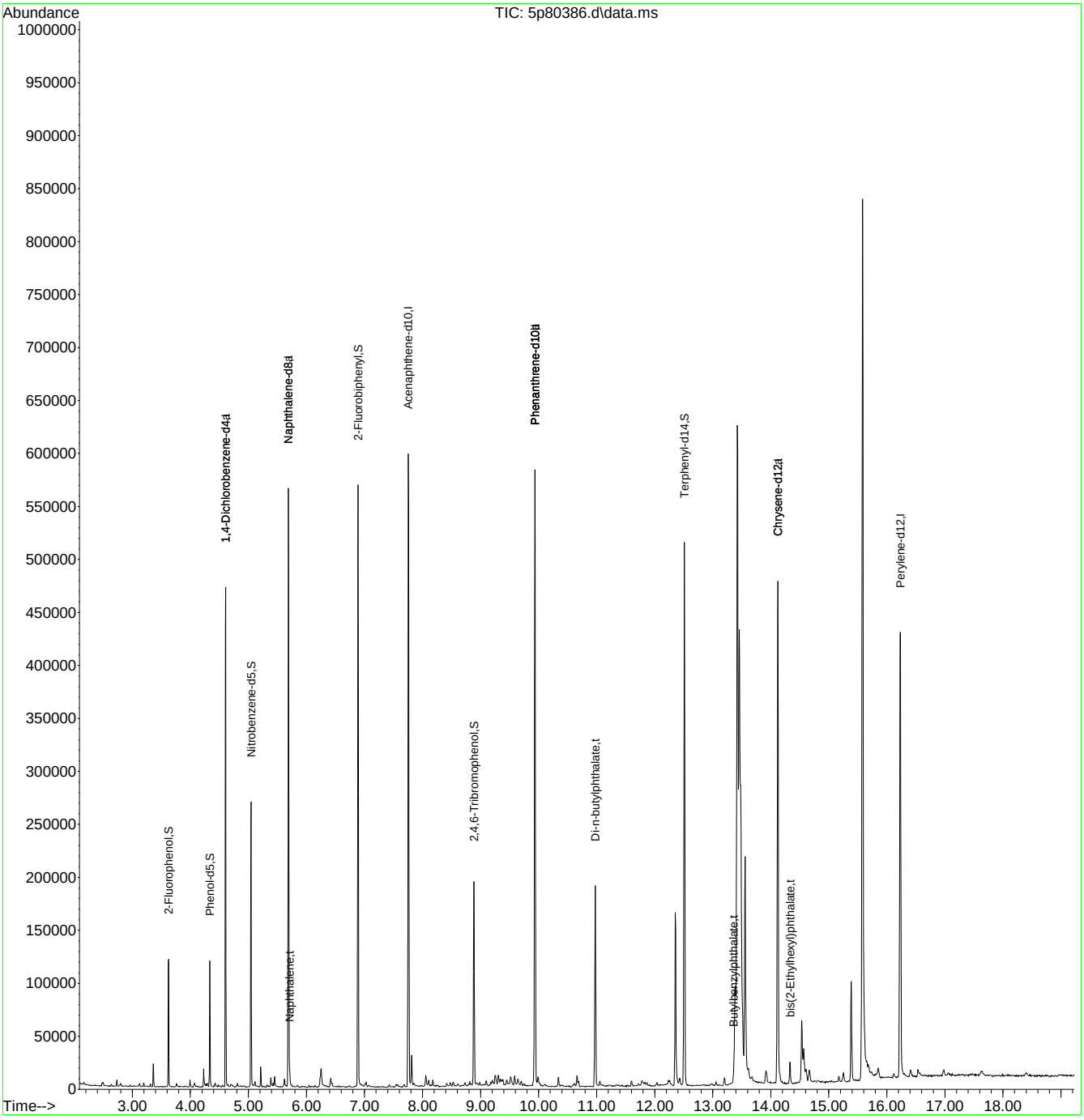
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	67493	8.00	ppm	0.00
24) Naphthalene-d8	5.688	136	260756	8.00	ppm	0.00
46) Acenaphthene-d10	7.755	164	149955	8.00	ppm	0.00
69) Phenanthrene-d10	9.935	188	263222	8.00	ppm	0.00
84) Chrysene-d12	14.123	240	205035	8.00	ppm	0.00
93) Perylene-d12	16.234	264	193550	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.609	152	67493	8.00	ppm	0.00
105) Phenanthrene-d10a	9.935	188	263222	8.00	ppm	0.00
107) Naphthalene-d8a	5.688	136	260756	8.00	ppm	0.00
109) Chrysene-d12a	14.123	240	205035	8.00	ppm	0.00
111) Phenanthrene-d10b	9.935	188	263222	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.626	112	31337	2.87	ppm	0.00
Spiked Amount 10.000			Recovery = 28.70%			
8) Phenol-d5	4.336	99	28889	2.06	ppm	0.00
Spiked Amount 10.000			Recovery = 20.60%			
25) Nitrobenzene-d5	5.047	82	72946	7.43	ppm	0.00
Spiked Amount 10.000			Recovery = 74.30%			
51) 2-Fluorobiphenyl	6.890	172	194643	7.91	ppm	0.00
Spiked Amount 10.000			Recovery = 79.10%			
74) 2,4,6-Tribromophenol	8.888	330	24377	7.29	ppm	0.00
Spiked Amount 10.000			Recovery = 72.90%			
87) Terphenyl-d14	12.510	244	201274	7.88	ppm	0.00
Spiked Amount 10.000			Recovery = 78.80%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
38) Naphthalene	5.709	128	4968	0.15	ppm	98
81) Di-n-butylphthalate	10.977	149	122020	2.90	ppm	99
88) Butylbenzylphthalate	13.359	149	2011	0.13	ppm	75
92) bis(2-Ethylhexyl)phtha...	14.332	149	9181	0.44	ppm	94

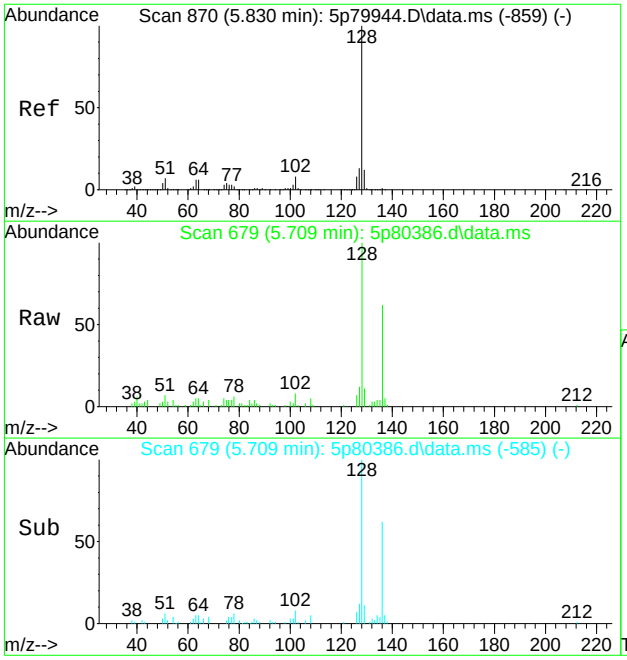
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80386.d
Acq On : 15 Dec 2021 7:25 pm
Operator : kristis
Sample : jd36168-8 Inst : MS5P
Misc : op37001,e5p3805,250,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:24:36 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

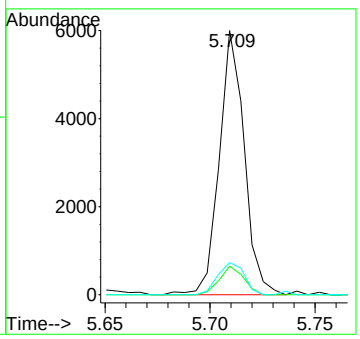


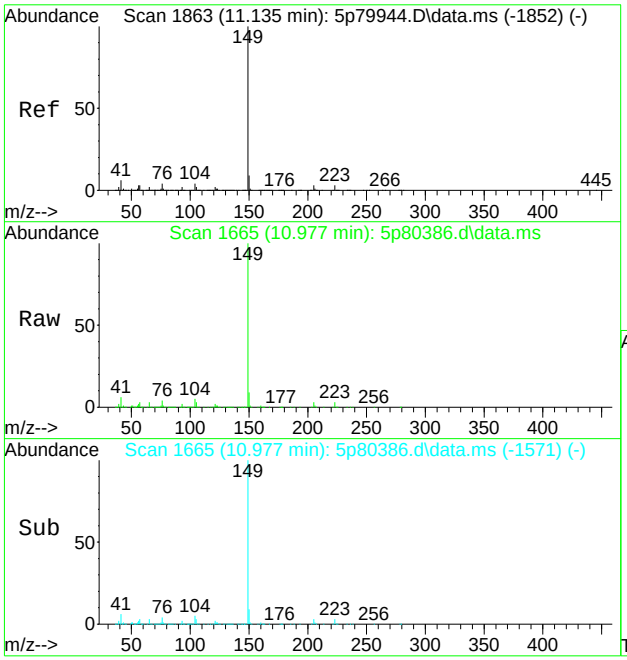


#38
Naphthalene
Concen: 0.15 ppm
RT: 5.709 min Scan# 679
Delta R.T. 0.000 min
Lab File: 5p80386.d
Acq: 15 Dec 2021 7:25 pm

Tgt Ion:128 Resp: 4968

Ion	Ratio	Lower	Upper
128	100		
129	10.9	0.0	41.2
127	11.5	0.0	42.7

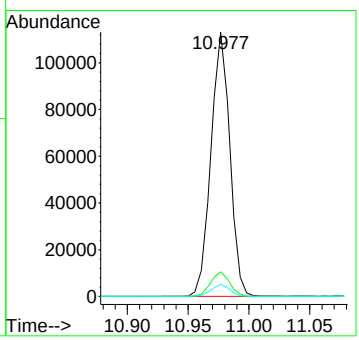


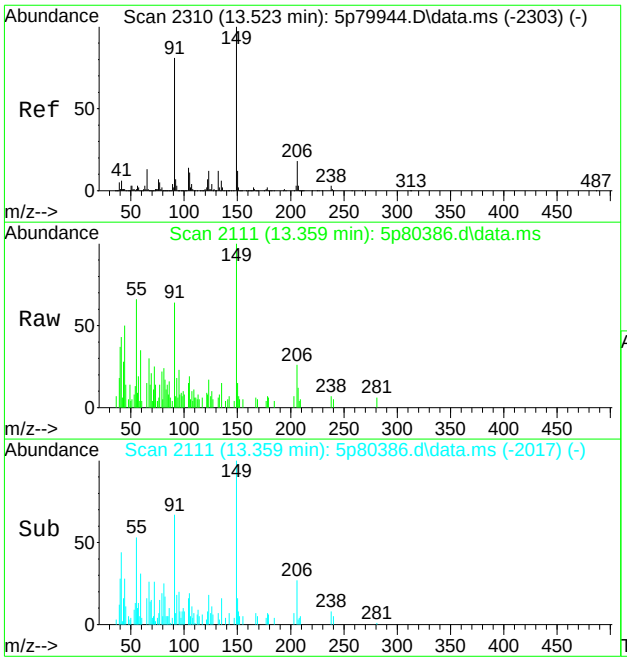


#81
Di-n-butylphthalate
Concen: 2.90 ppm
RT: 10.977 min Scan# 1665
Delta R.T. 0.000 min
Lab File: 5p80386.d
Acq: 15 Dec 2021 7:25 pm

Tgt Ion:149 Resp: 122020

Ion	Ratio	Lower	Upper
149	100		
150	9.4	0.0	39.2
104	4.5	0.0	34.2

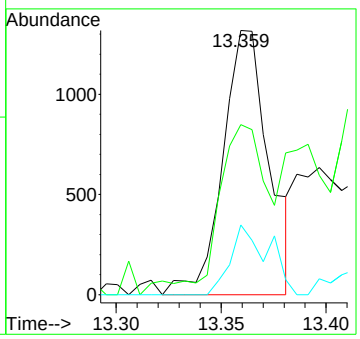


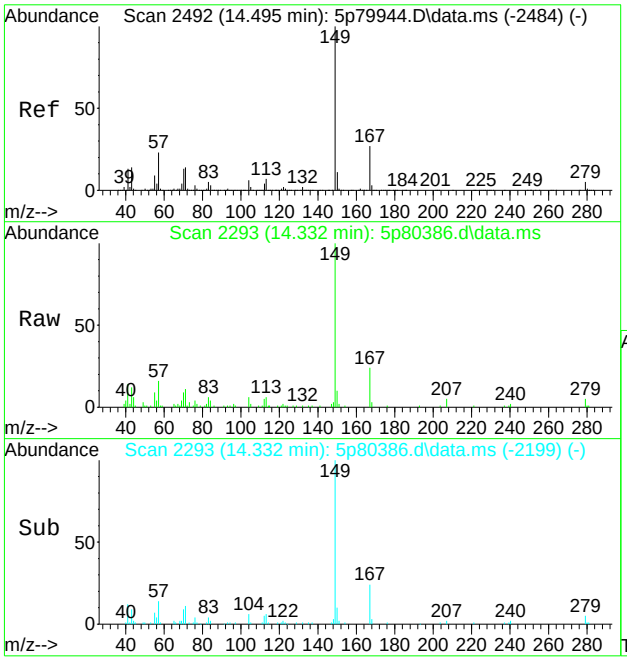


#88
Butylbenzylphthalate
Concen: 0.13 ppm
RT: 13.359 min Scan# 2111
Delta R.T. -0.000 min
Lab File: 5p80386.d
Acq: 15 Dec 2021 7:25 pm

Tgt Ion:149 Resp: 2011

Ion	Ratio	Lower	Upper
149	100		
91	42.9	31.1	91.1
206	28.9	0.0	47.2

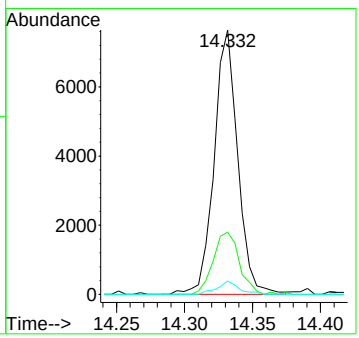




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.44 ppm
RT: 14.332 min Scan# 2293
Delta R.T. 0.000 min
Lab File: 5p80386.d
Acq: 15 Dec 2021 7:25 pm

Tgt Ion:149 Resp: 9181

Ion	Ratio	Lower	Upper
149	100		
167	23.3	0.0	56.9
279	5.1	0.0	34.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80387.d
Acq On : 15 Dec 2021 7:52 pm
Operator : kristis
Sample : jd36168-9 Inst : MS5P
Misc : op37001,e5p3805,250,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:25:26 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

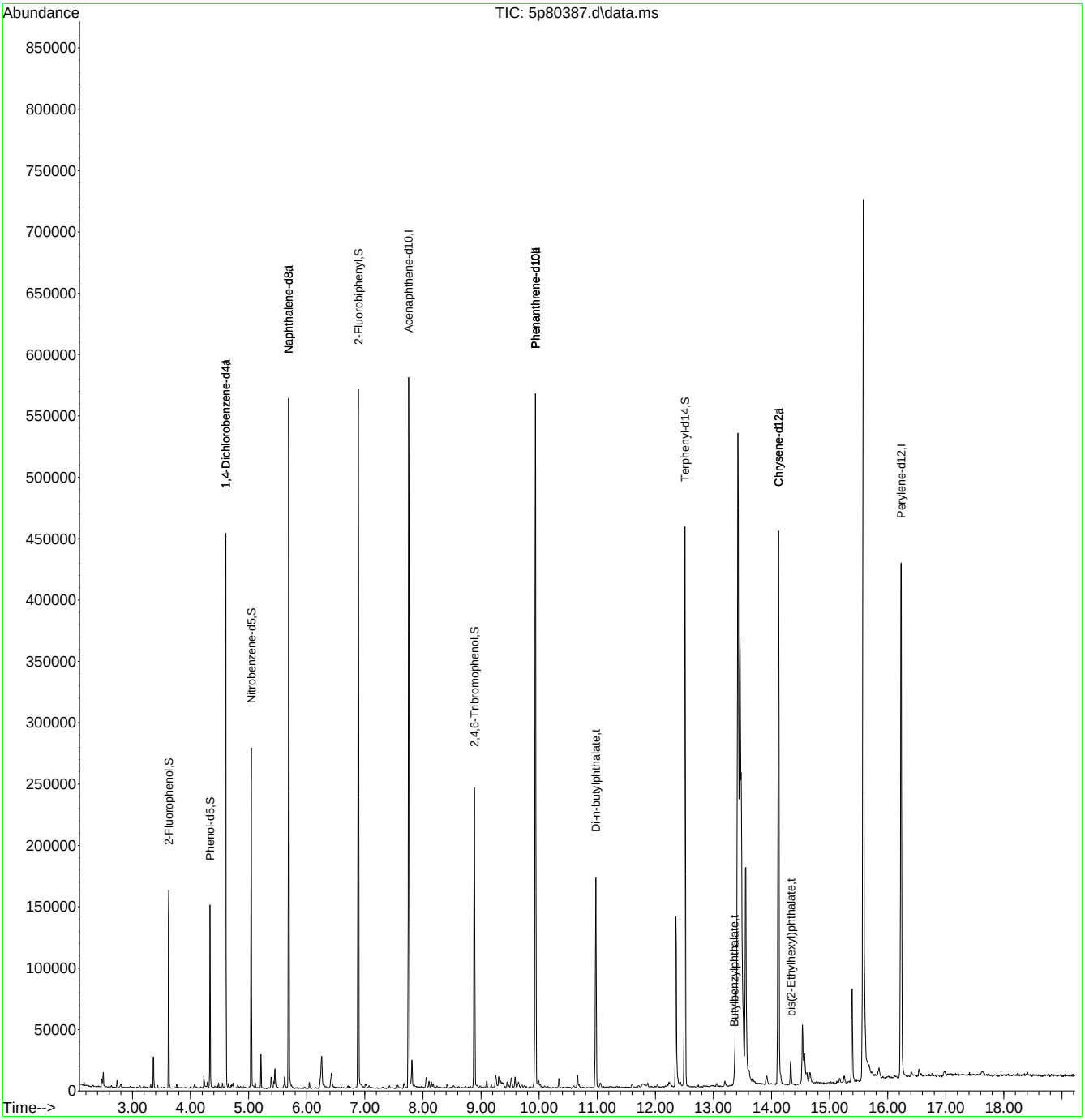
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	64931	8.00	ppm	0.00
24) Naphthalene-d8	5.688	136	253000	8.00	ppm	0.00
46) Acenaphthene-d10	7.756	164	145694	8.00	ppm	0.00
69) Phenanthrene-d10	9.935	188	255056	8.00	ppm	0.00
84) Chrysene-d12	14.123	240	201159	8.00	ppm	0.00
93) Perylene-d12	16.234	264	189992	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.609	152	64931	8.00	ppm	0.00
105) Phenanthrene-d10a	9.935	188	255056	8.00	ppm	0.00
107) Naphthalene-d8a	5.688	136	253000	8.00	ppm	0.00
109) Chrysene-d12a	14.123	240	201159	8.00	ppm	0.00
111) Phenanthrene-d10b	9.935	188	255056	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.626	112	39373	3.75	ppm	0.00
Spiked Amount 10.000			Recovery = 37.50%			
8) Phenol-d5	4.336	99	37096	2.75	ppm	0.00
Spiked Amount 10.000			Recovery = 27.50%			
25) Nitrobenzene-d5	5.047	82	74117	7.79	ppm	0.00
Spiked Amount 10.000			Recovery = 77.90%			
51) 2-Fluorobiphenyl	6.890	172	201470	8.43	ppm	0.00
Spiked Amount 10.000			Recovery = 84.30%			
74) 2,4,6-Tribromophenol	8.888	330	31150	9.61	ppm	0.00
Spiked Amount 10.000			Recovery = 96.10%			
87) Terphenyl-d14	12.510	244	183136	7.31	ppm	0.00
Spiked Amount 10.000			Recovery = 73.10%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
81) Di-n-butylphthalate	10.977	149	111536	2.73	ppm	99
88) Butylbenzylphthalate	13.360	149	1805	0.12	ppm	88
92) bis(2-Ethylhexyl)phtha...	14.332	149	8127	0.40	ppm	98

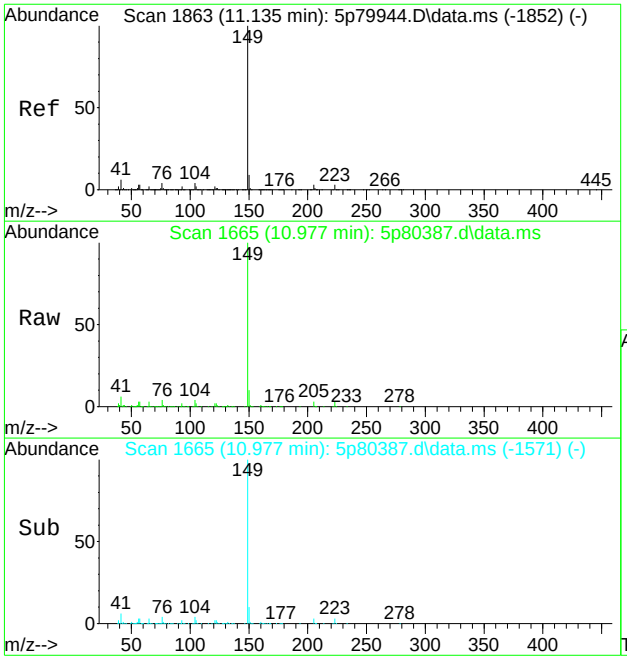
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80387.d
Acq On : 15 Dec 2021 7:52 pm
Operator : kristis
Sample : jd36168-9 Inst : MS5P
Misc : op37001,e5p3805,250,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:25:26 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

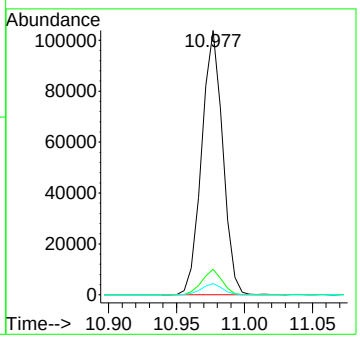


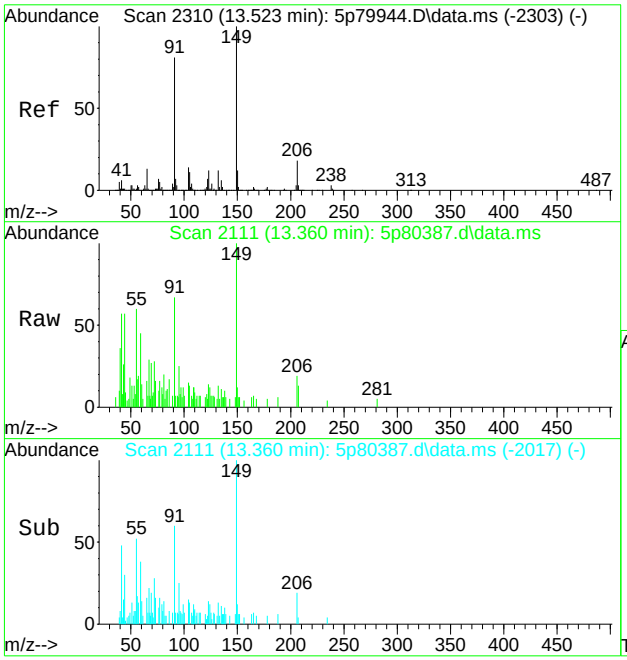


#81
Di-n-butylphthalate
Concen: 2.73 ppm
RT: 10.977 min Scan# 1665
Delta R.T. 0.000 min
Lab File: 5p80387.d
Acq: 15 Dec 2021 7:52 pm

Tgt Ion:149 Resp: 111536

Ion	Ratio	Lower	Upper
149	100		
150	9.6	0.0	39.2
104	4.3	0.0	34.2

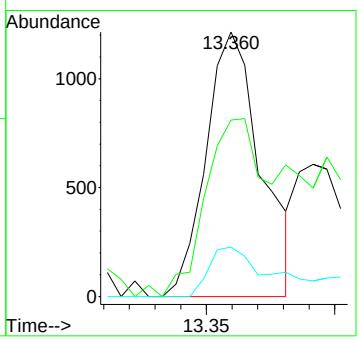


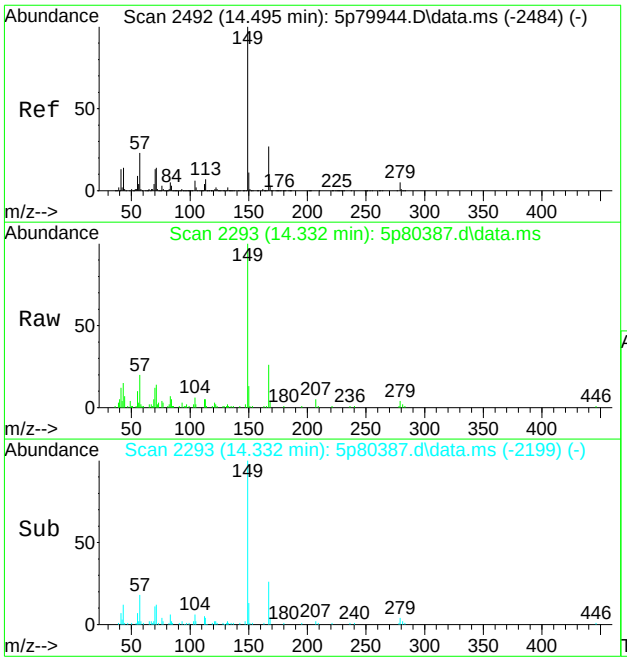


#88
Butylbenzylphthalate
Concen: 0.12 ppm
RT: 13.360 min Scan# 2111
Delta R.T. 0.000 min
Lab File: 5p80387.d
Acq: 15 Dec 2021 7:52 pm

Tgt Ion:149 Resp: 1805

Ion	Ratio	Lower	Upper
149	100		
91	49.8	31.1	91.1
206	16.8	0.0	47.2

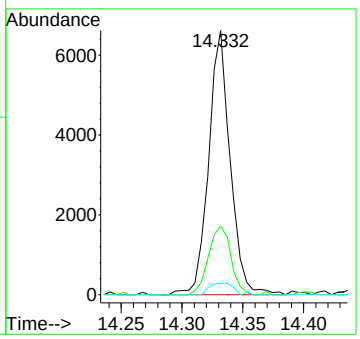




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.40 ppm
RT: 14.332 min Scan# 2293
Delta R.T. 0.000 min
Lab File: 5p80387.d
Acq: 15 Dec 2021 7:52 pm

Tgt Ion:149 Resp: 8127

Ion	Ratio	Lower	Upper
149	100		
167	26.0	0.0	56.9
279	4.2	0.0	34.6



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 15:06

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80388.d
Acq On : 15 Dec 2021 8:19 pm
Operator : kristis
Sample : jd36168-10 Inst : MS5P
Misc : op36999,e5p3805,280,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:26:46 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

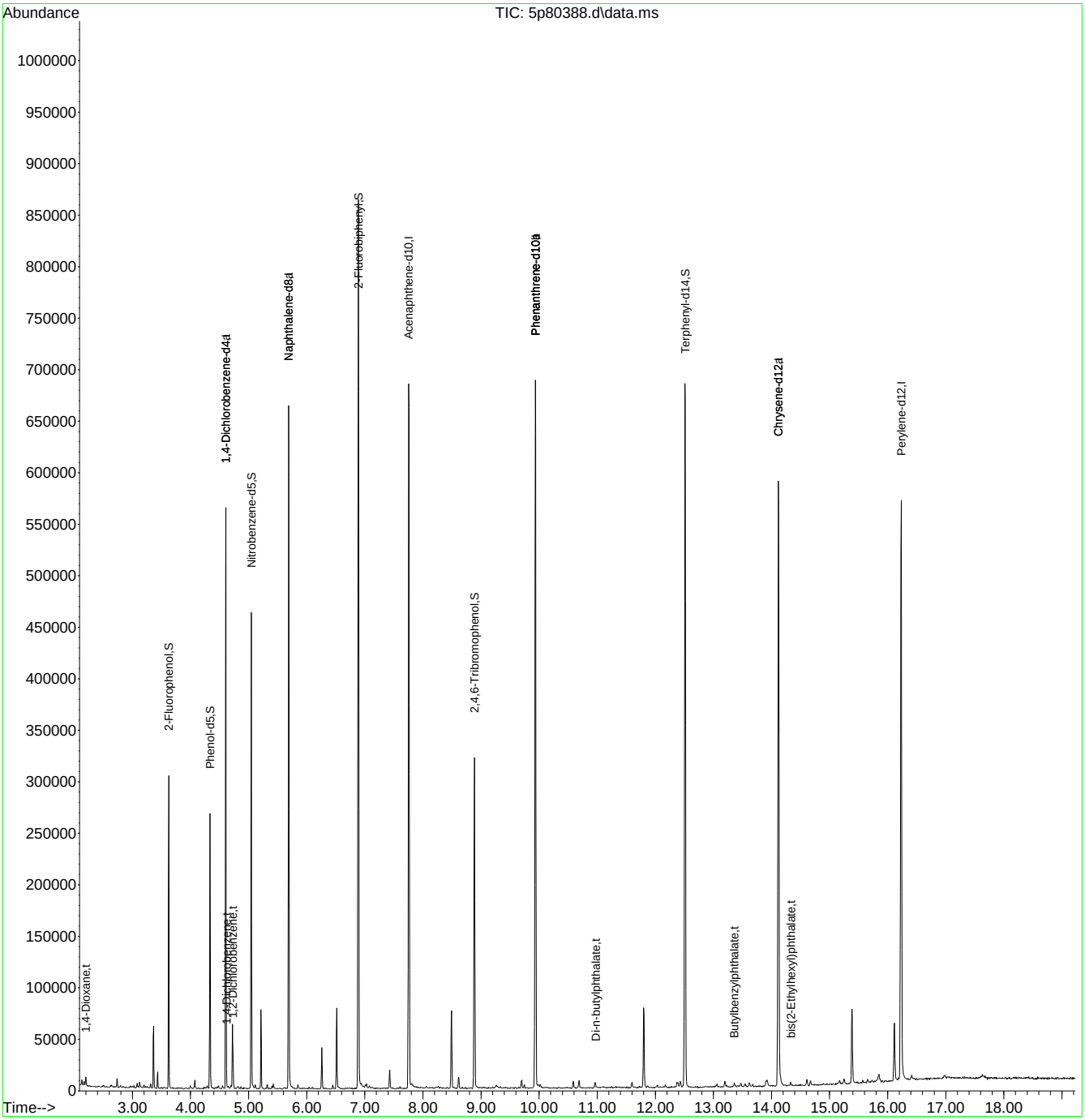
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	79185	8.00	ppm	0.00
24) Naphthalene-d8	5.688	136	307493	8.00	ppm	0.00
46) Acenaphthene-d10	7.755	164	179292	8.00	ppm	0.00
69) Phenanthrene-d10	9.935	188	319659	8.00	ppm	0.00
84) Chrysene-d12	14.118	240	261884	8.00	ppm	0.00
93) Perylene-d12	16.234	264	242750	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.609	152	79185	8.00	ppm	0.00
105) Phenanthrene-d10a	9.935	188	319659	8.00	ppm	0.00
107) Naphthalene-d8a	5.688	136	307493	8.00	ppm	0.00
109) Chrysene-d12a	14.118	240	261884	8.00	ppm	0.00
111) Phenanthrene-d10b	9.935	188	319659	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.626	112	68457	5.34	ppm	0.00
Spiked Amount 10.000			Recovery = 53.40%			
8) Phenol-d5	4.336	99	64615	3.93	ppm	0.00
Spiked Amount 10.000			Recovery = 39.30%			
25) Nitrobenzene-d5	5.047	82	116475	10.07	ppm	0.00
Spiked Amount 10.000			Recovery = 100.70%			
51) 2-Fluorobiphenyl	6.890	172	293879	9.99	ppm	0.00
Spiked Amount 10.000			Recovery = 99.90%			
74) 2,4,6-Tribromophenol	8.888	330	40549	9.98	ppm	0.00
Spiked Amount 10.000			Recovery = 99.80%			
87) Terphenyl-d14	12.515	244	292485	8.96	ppm	0.00
Spiked Amount 10.000			Recovery = 89.60%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.199	88	2895	0.52	ppm	93
15) 1,4-Dichlorobenzene	4.620	146	636m	0.04	ppm	
17) 1,2-Dichlorobenzene	4.732	146	3699	0.27	ppm	96
81) Di-n-butylphthalate	10.977	149	1170	0.02	ppm	91
88) Butylbenzylphthalate	13.359	149	1030	0.05	ppm	73
92) bis(2-Ethylhexyl)phtha...	14.332	149	1367	0.05	ppm	84

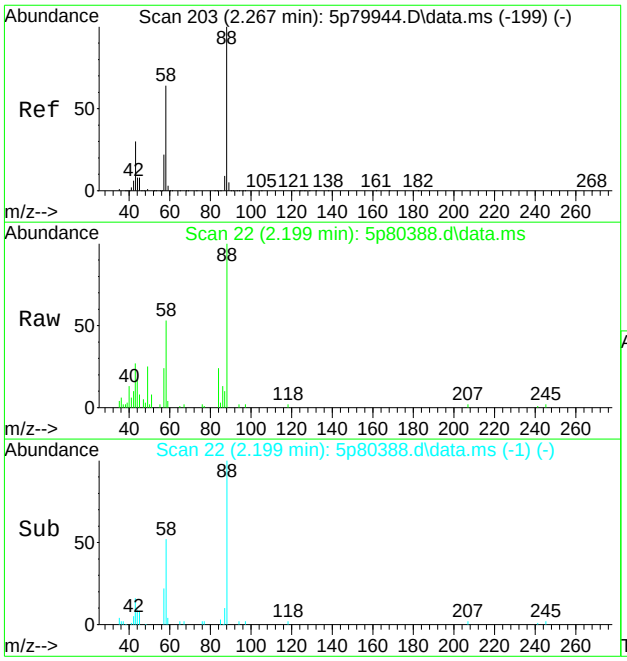
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80388.d
Acq On : 15 Dec 2021 8:19 pm
Operator : kristis
Sample : jd36168-10 Inst : MS5P
Misc : op36999,e5p3805,280,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:26:46 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

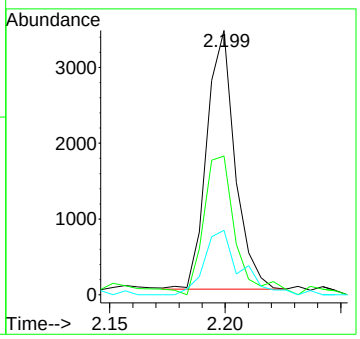


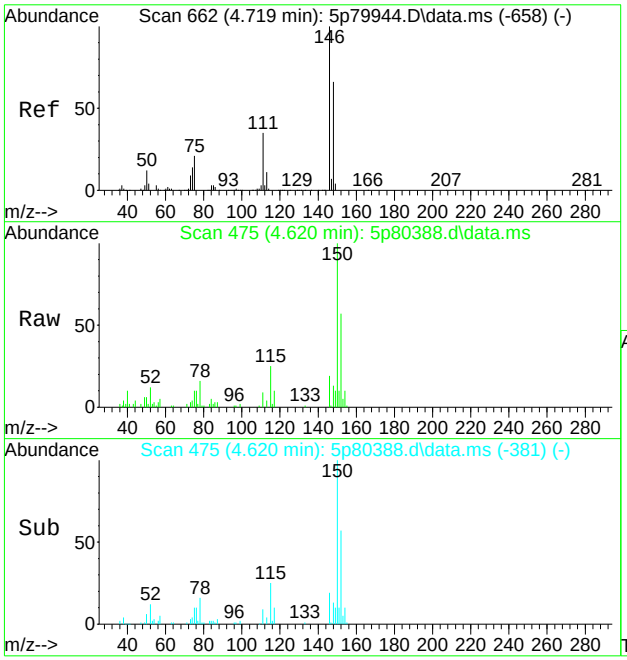


#2
1,4-Dioxane
Concen: 0.52 ppm
RT: 2.199 min Scan# 22
Delta R.T. 0.016 min
Lab File: 5p80388.d
Acq: 15 Dec 2021 8:19 pm

Tgt Ion: 88 Resp: 2895

Ion	Ratio	Lower	Upper
88	100		
58	51.7	28.2	88.2
57	22.9	0.0	52.2

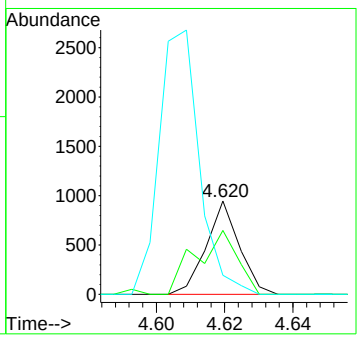


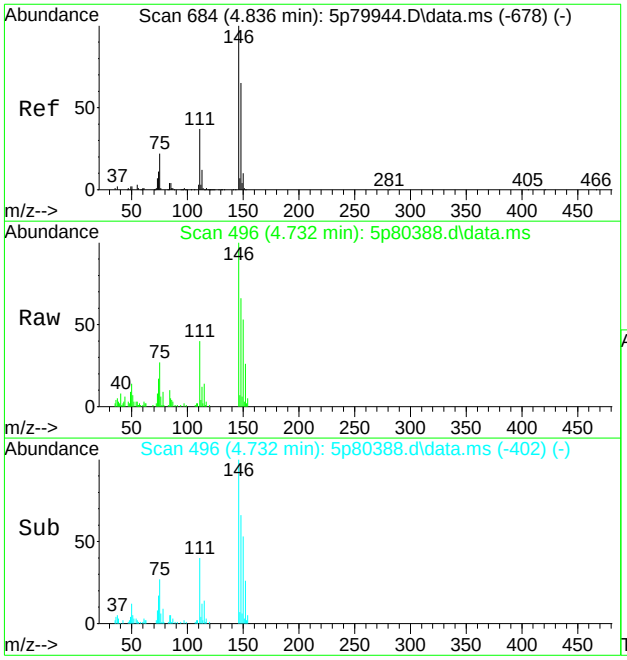


#15
1,4-Dichlorobenzene
Concen: 0.04 ppm m
RT: 4.620 min Scan# 475
Delta R.T. 0.000 min
Lab File: 5p80388.d
Acq: 15 Dec 2021 8:19 pm

Tgt Ion:146 Resp: 636

Ion	Ratio	Lower	Upper
146	100		
148	68.6	33.7	93.7
113	20.5	0.0	41.2

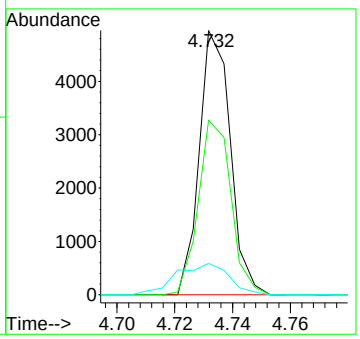


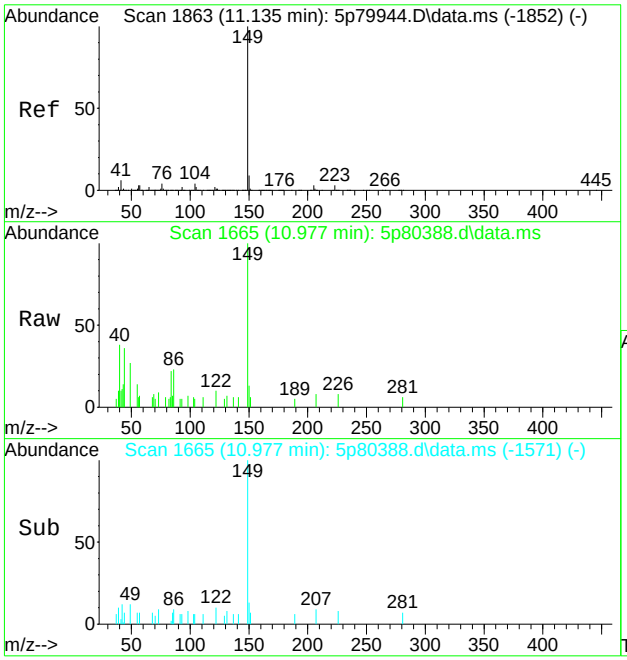


#17
1,2-Dichlorobenzene
Concen: 0.27 ppm
RT: 4.732 min Scan# 496
Delta R.T. 0.000 min
Lab File: 5p80388.d
Acq: 15 Dec 2021 8:19 pm

Tgt Ion:146 Resp: 3699

Ion	Ratio	Lower	Upper
146	100		
148	66.0	32.7	92.7
113	10.6	0.0	42.0

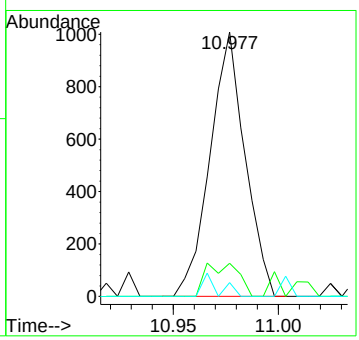


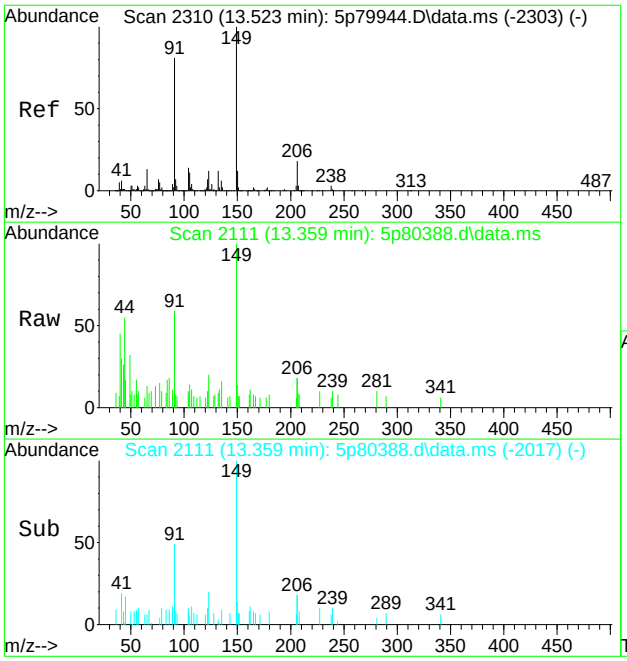


#81
Di-n-butylphthalate
Concen: 0.02 ppm
RT: 10.977 min Scan# 1665
Delta R.T. 0.000 min
Lab File: 5p80388.d
Acq: 15 Dec 2021 8:19 pm

Tgt Ion:149 Resp: 1170

Ion	Ratio	Lower	Upper
149	100		
150	12.6	0.0	39.2
104	1.4	0.0	34.2

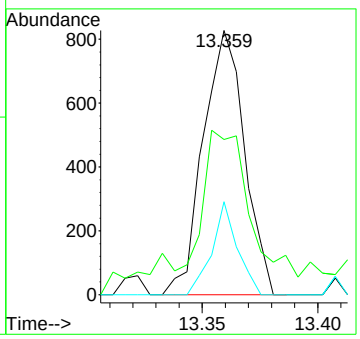


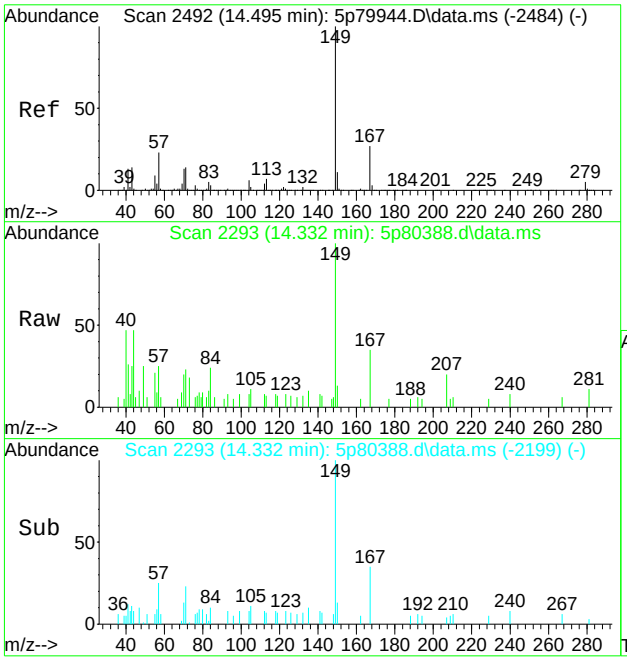


#88
Butylbenzylphthalate
Concen: 0.05 ppm
RT: 13.359 min Scan# 2111
Delta R.T. 0.000 min
Lab File: 5p80388.d
Acq: 15 Dec 2021 8:19 pm

Tgt Ion:149 Resp: 1030

Ion	Ratio	Lower	Upper
149	100		
91	43.4	31.1	91.1
206	35.1	0.0	47.2

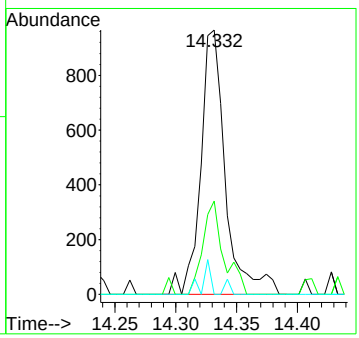




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.05 ppm
RT: 14.332 min Scan# 2293
Delta R.T. 0.000 min
Lab File: 5p80388.d
Acq: 15 Dec 2021 8:19 pm

Tgt Ion:149 Resp: 1367

Ion	Ratio	Lower	Upper
149	100		
167	35.3	0.0	56.9
279	0.0	0.0	34.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80389.d
Acq On : 15 Dec 2021 8:46 pm
Operator : kristis
Sample : jd36168-11 Inst : MS5P
Misc : op36999,e5p3805,260,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:27:39 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

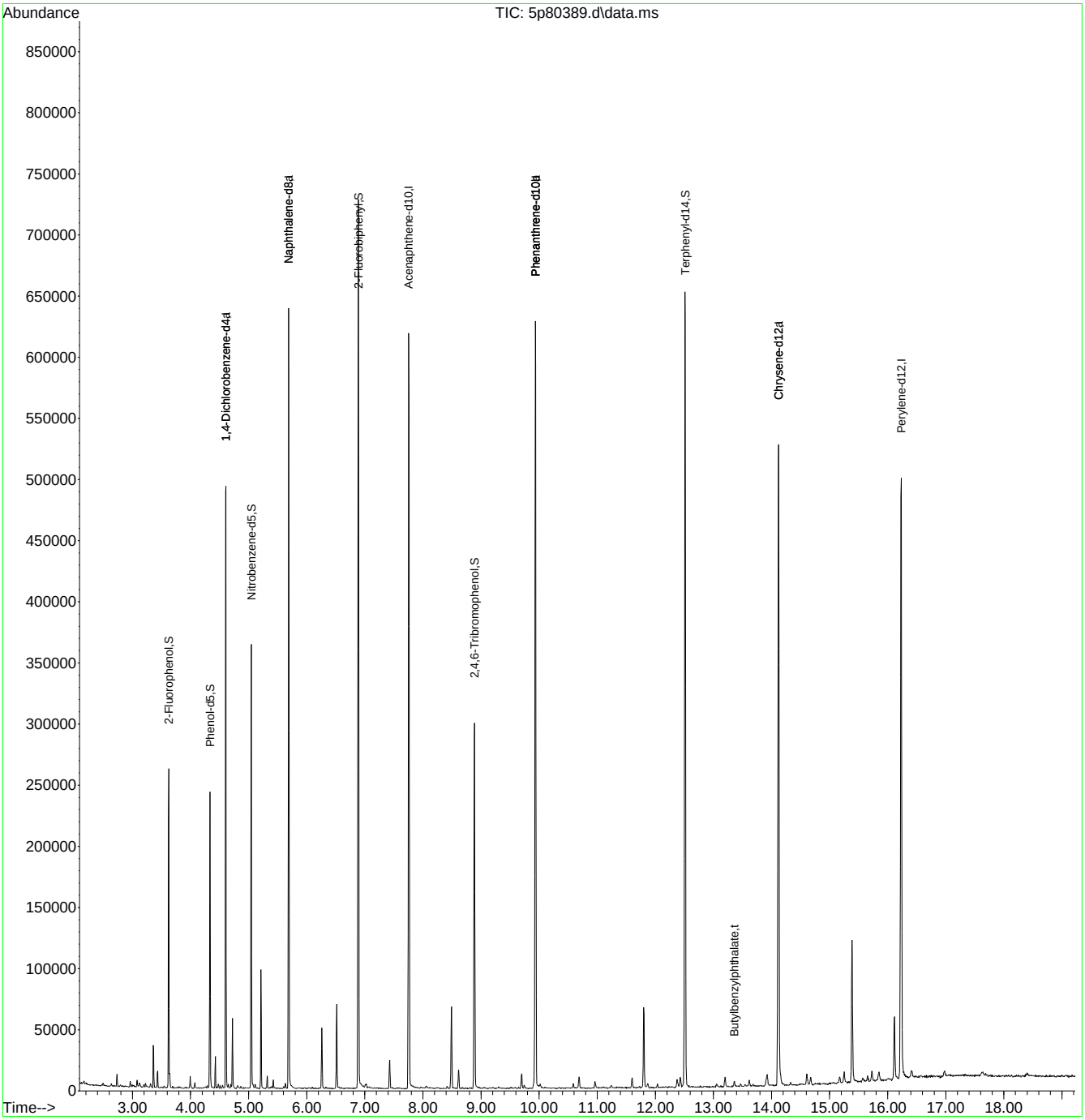
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	72689	8.00	ppm	0.00
24) Naphthalene-d8	5.688	136	286542	8.00	ppm	0.00
46) Acenaphthene-d10	7.755	164	164199	8.00	ppm	0.00
69) Phenanthrene-d10	9.935	188	293336	8.00	ppm	0.00
84) Chrysene-d12	14.123	240	242565	8.00	ppm	0.00
93) Perylene-d12	16.234	264	220098	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.609	152	72689	8.00	ppm	0.00
105) Phenanthrene-d10a	9.935	188	293336	8.00	ppm	0.00
107) Naphthalene-d8a	5.688	136	286542	8.00	ppm	0.00
109) Chrysene-d12a	14.123	240	242565	8.00	ppm	0.00
111) Phenanthrene-d10b	9.935	188	293336	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.626	112	63158	5.37	ppm	0.00
Spiked Amount 10.000			Recovery = 53.70%			
8) Phenol-d5	4.336	99	58744	3.89	ppm	0.00
Spiked Amount 10.000			Recovery = 38.90%			
25) Nitrobenzene-d5	5.047	82	95244	8.83	ppm	0.00
Spiked Amount 10.000			Recovery = 88.30%			
51) 2-Fluorobiphenyl	6.890	172	246315	9.14	ppm	0.00
Spiked Amount 10.000			Recovery = 91.40%			
74) 2,4,6-Tribromophenol	8.888	330	37771	10.13	ppm	0.00
Spiked Amount 10.000			Recovery = 101.30%			
87) Terphenyl-d14	12.515	244	271701	8.99	ppm	0.00
Spiked Amount 10.000			Recovery = 89.90%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
88) Butylbenzylphthalate	13.359	149	1484	0.08	ppm	96

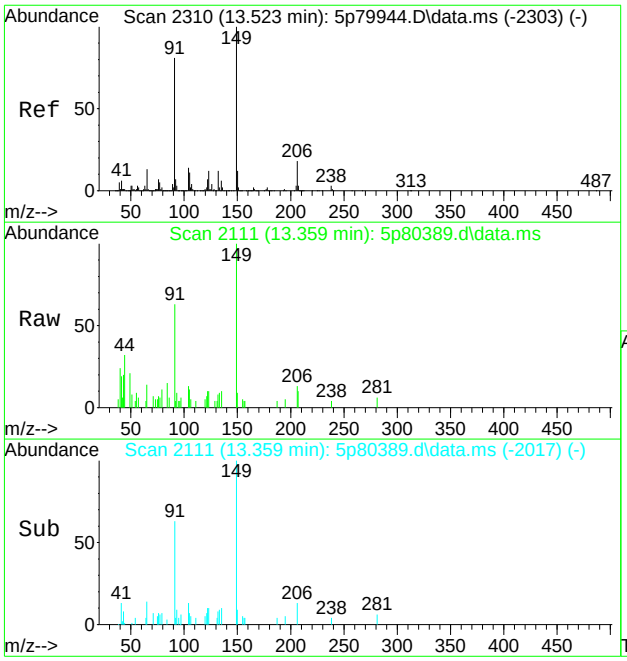
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3805\
Data File : 5p80389.d
Acq On : 15 Dec 2021 8:46 pm
Operator : kristis
Sample : jd36168-11 Inst : MS5P
Misc : op36999,e5p3805,260,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 16 00:27:39 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 16 00:12:40 2021
Response via : Initial Calibration

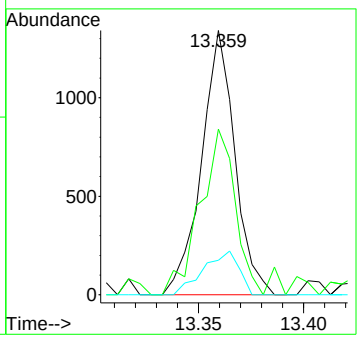




#88
Butylbenzylphthalate
Concen: 0.08 ppm
RT: 13.359 min Scan# 2111
Delta R.T. 0.000 min
Lab File: 5p80389.d
Acq: 15 Dec 2021 8:46 pm

Tgt Ion:149 Resp: 1484

Ion	Ratio	Lower	Upper
149	100		
91	62.7	31.1	91.1
206	13.0	0.0	47.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\121021\e4p2614\
Data File : 4p49926.d
Acq On : 8 Dec 2021 11:18 am
Operator : chriss2
Sample : jd36168-2 Inst : MS4P
Misc : op36999a,e4p2614,270,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 10 04:25:00 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 10 03:44:37 2021
Response via : Initial Calibration

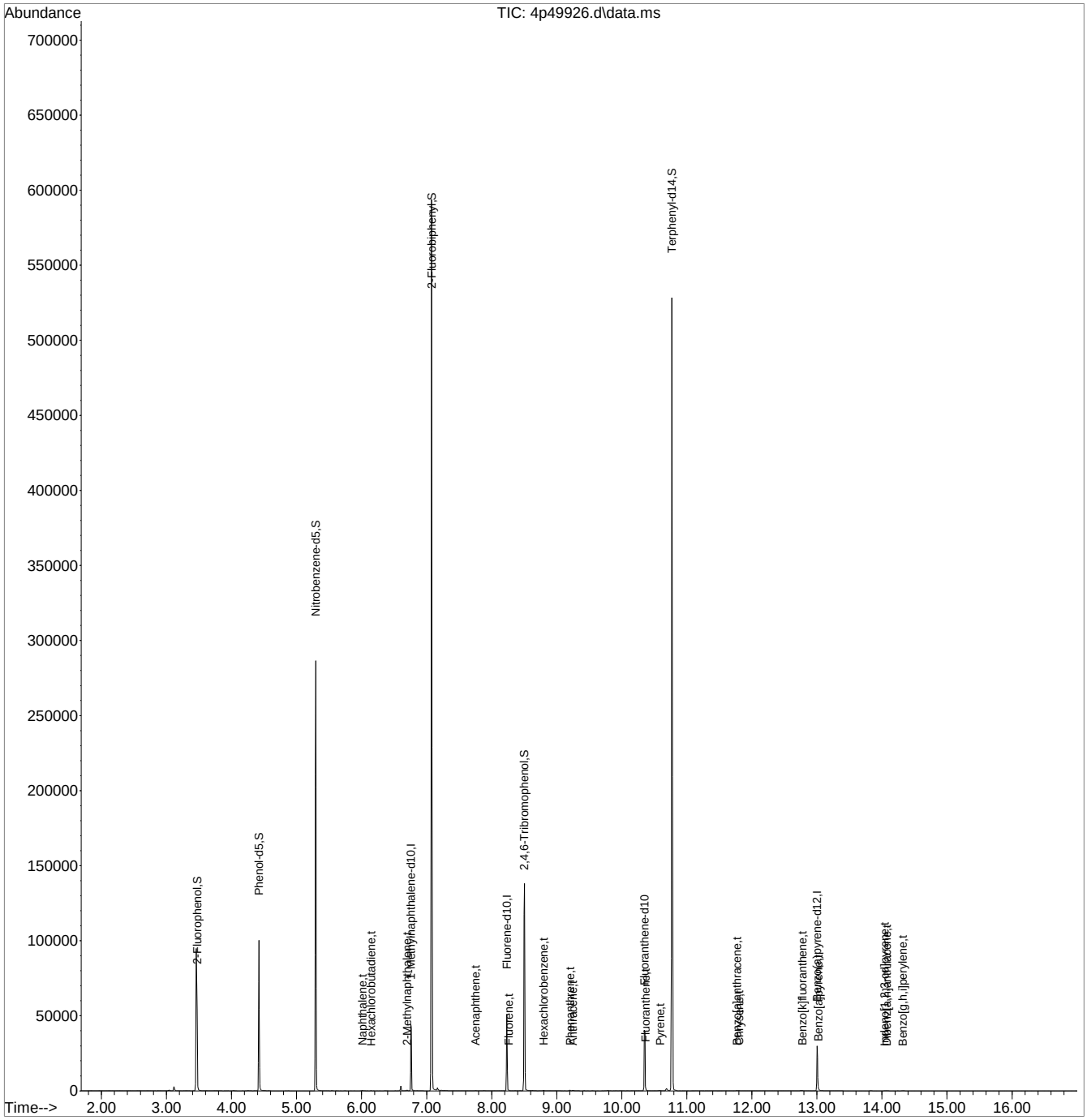
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.758	150	14053	800.00	ppm	0.00
13) Fluorene-d10	8.234	176	21173	800.00	ppm	0.00
20) Fluoranthene-d10	10.347	212	36643	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.004	264	17360	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.471	112	45276	5193.69	ppm	0.01
Spiked Amount 50.000			Recovery	= 10387.38%		
4) Phenol-d5	4.422	99	69136	4180.36	ppm	0.00
Spiked Amount 50.000			Recovery	= 8360.72%		
7) Nitrobenzene-d5	5.295	82	164068	12156.68	ppm	0.00
Spiked Amount 50.000			Recovery	= 24313.36%		
14) 2-Fluorobiphenyl	7.076	172	271520	10053.54	ppm	0.00
Spiked Amount 50.000			Recovery	= 20107.08%		
19) 2,4,6-Tribromophenol	8.498	330	58003	14354.23	ppm	0.00
Spiked Amount 50.000			Recovery	= 28708.46%		
27) Terphenyl-d14	10.771	244	315739	12029.87	ppm	0.00
Spiked Amount 50.000			Recovery	= 24059.74%		
Target Compounds						Qvalue
8) Naphthalene	6.012	128	181	4.50	ppm	94
9) Hexachlorobutadiene	6.144	225	67	6.82	ppm	93
10) 2-Methylnaphthalene	6.698	141	155	7.38	ppm	95
16) Acenaphthene	7.750	153	79	3.14	ppm	94
17) Fluorene	8.259	166	183	6.03	ppm	93
21) Hexachlorobenzene	8.797	284	120	10.38	ppm	95
23) Phenanthrene	9.203	178	387	7.84	ppm	98
24) Anthracene	9.246	178	301	6.36	ppm	94
25) Fluoranthene	10.366	202	298	5.80	ppm	94
26) Pyrene	10.587	202	205	3.63	ppm	96
28) Benzo[a]anthracene	11.771	228	150	2.97	ppm	93
29) Chrysene	11.803	228	185	3.74	ppm	94
32) Benzo[k]fluoranthene	12.776	252	158	4.41	ppm	86
33) Benzo[a]pyrene	13.019	252	127	3.87	ppm	87
34) Indeno[1,2,3-cd]pyrene	14.040	276	131	3.35	ppm	93
35) Dibenz[a,h]anthracene	14.071	278	105	3.44	ppm	91
36) Benzo[g,h,i]perylene	14.317	276	126	3.80	ppm	84

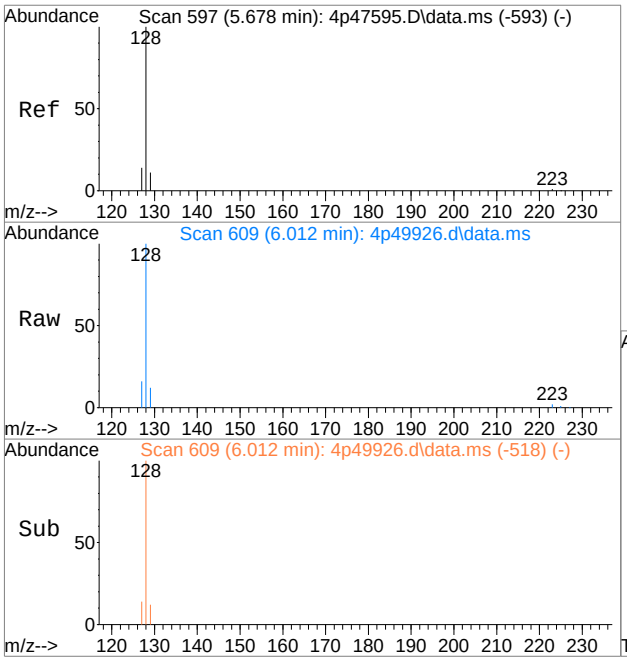
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\121021\e4p2614\
Data File : 4p49926.d
Acq On : 8 Dec 2021 11:18 am
Operator : chriss2
Sample : jd36168-2 Inst : MS4P
Misc : op36999a,e4p2614,270,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 10 04:25:00 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 10 03:44:37 2021
Response via : Initial Calibration

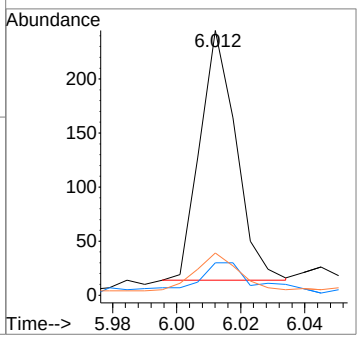


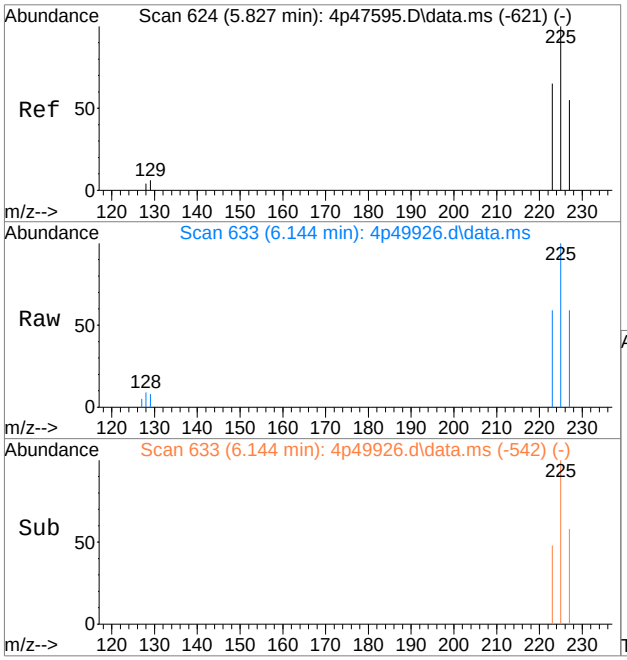


#8
Naphthalene
Concen: 4.50 ppm
RT: 6.012 min Scan# 609
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:128 Resp: 181

Ion	Ratio	Lower	Upper
128	100		
129	9.3	0.0	41.0
127	14.8	0.0	42.2

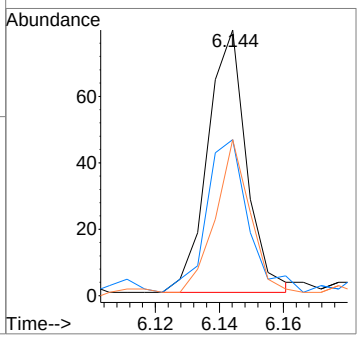


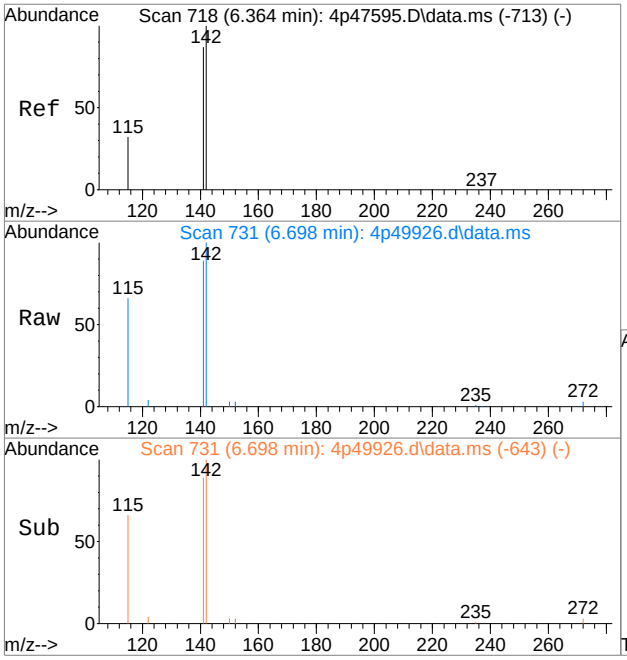


#9
Hexachlorobutadiene
Concen: 6.82 ppm
RT: 6.144 min Scan# 633
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:225 Resp: 67

Ion	Ratio	Lower	Upper
225	100		
223	56.1	27.2	87.2
227	58.7	38.7	98.7

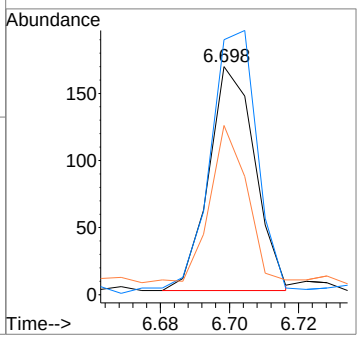


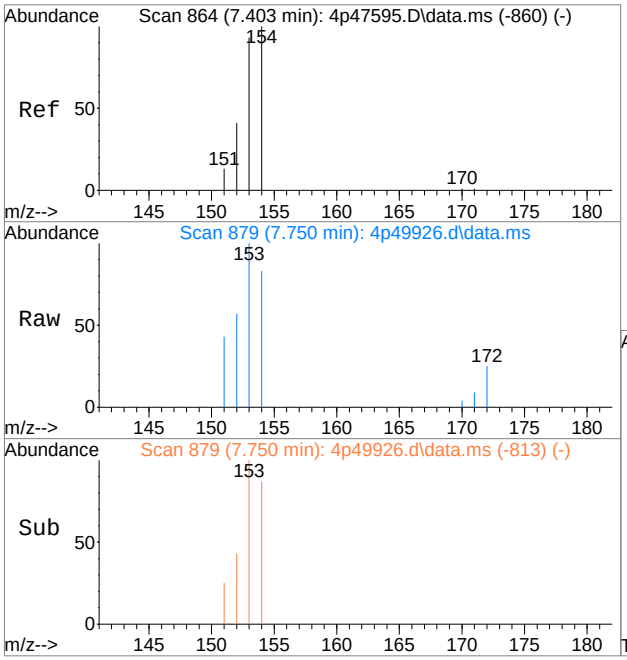


#10
2-Methylnaphthalene
Concen: 7.38 ppm
RT: 6.698 min Scan# 731
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:141 Resp: 155

Ion	Ratio	Lower	Upper
141	100		
142	112.1	83.9	143.9
115	69.7	31.1	91.1

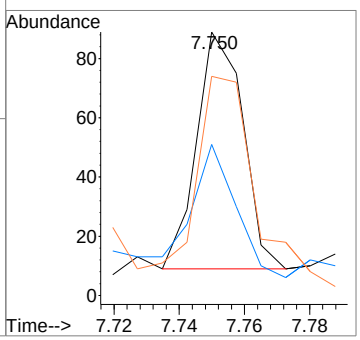


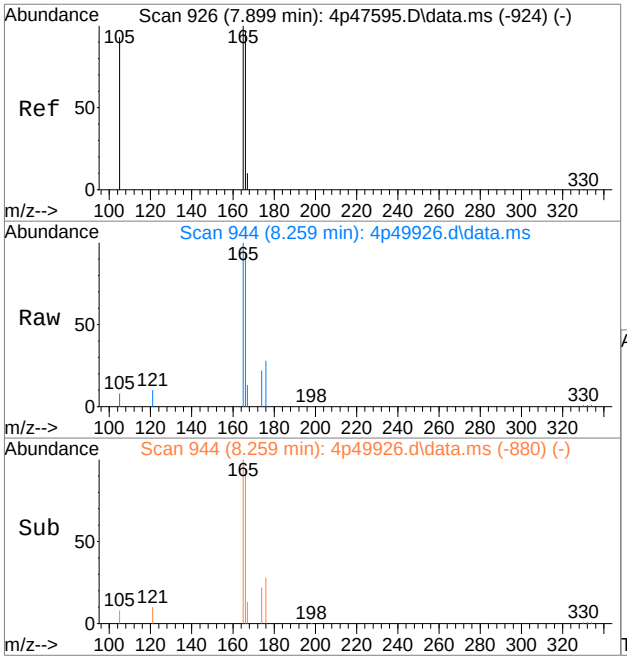


#16
Acenaphthene
Concen: 3.14 ppm
RT: 7.750 min Scan# 879
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:153 Resp: 79

Ion	Ratio	Lower	Upper
153	100		
152	51.9	21.7	81.7
154	74.4	52.6	112.6

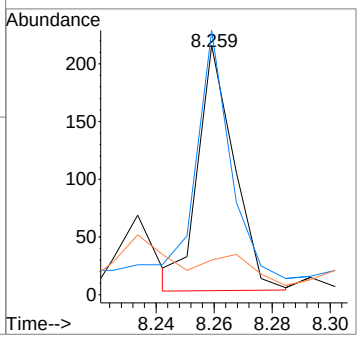


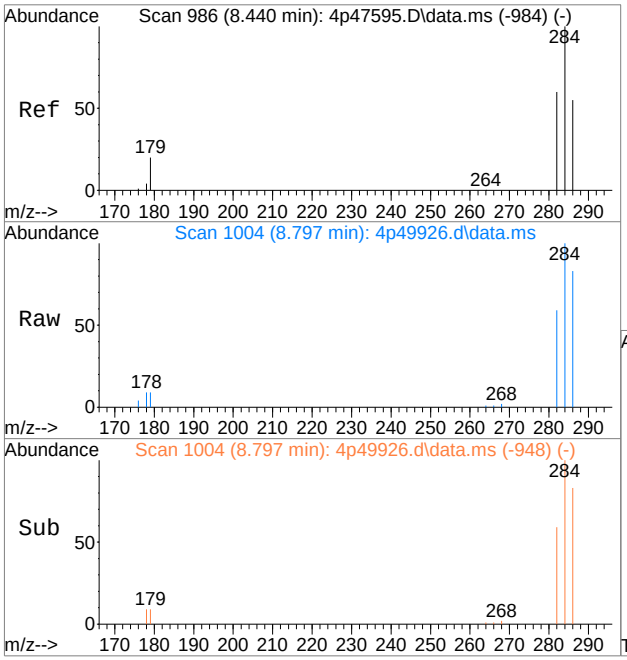


#17
Fluorene
Concen: 6.03 ppm
RT: 8.259 min Scan# 944
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:166 Resp: 183

Ion	Ratio	Lower	Upper
166	100		
165	103.7	68.2	128.2
167	4.2	0.0	42.1

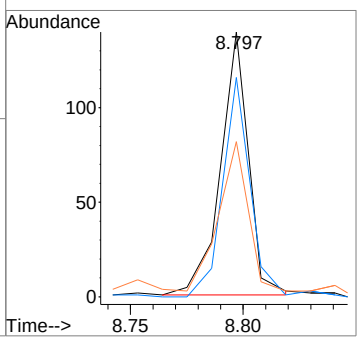


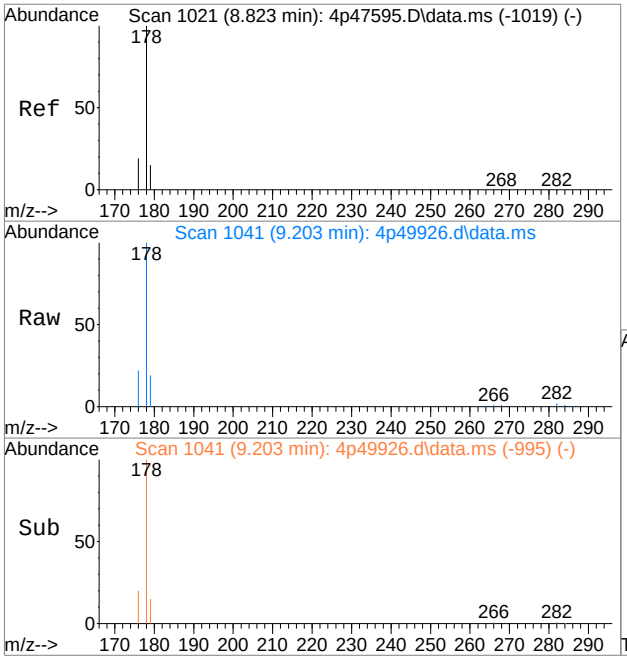


#21
Hexachlorobenzene
Concen: 10.38 ppm
RT: 8.797 min Scan# 1004
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:284 Resp: 120

Ion	Ratio	Lower	Upper
284	100		
286	83.7	55.2	115.2
282	56.9	19.0	79.0

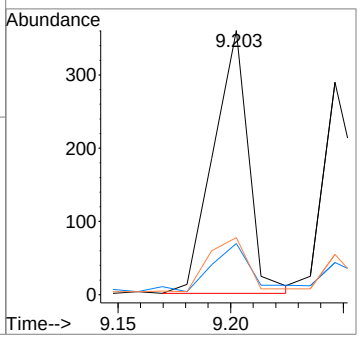


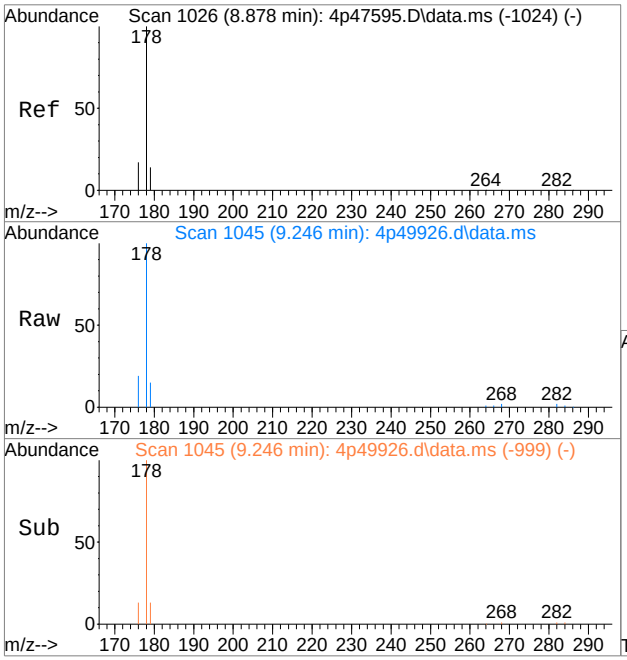


#23
Phenanthrene
Concen: 7.84 ppm
RT: 9.203 min Scan# 1041
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:178 Resp: 387

Ion	Ratio	Lower	Upper
178	100		
179	16.4	0.0	45.9
176	20.2	0.0	48.7

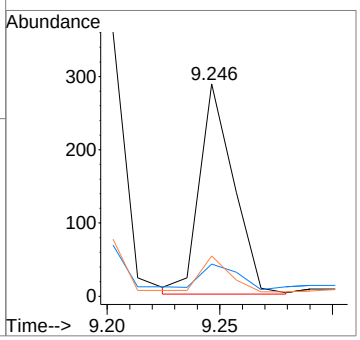


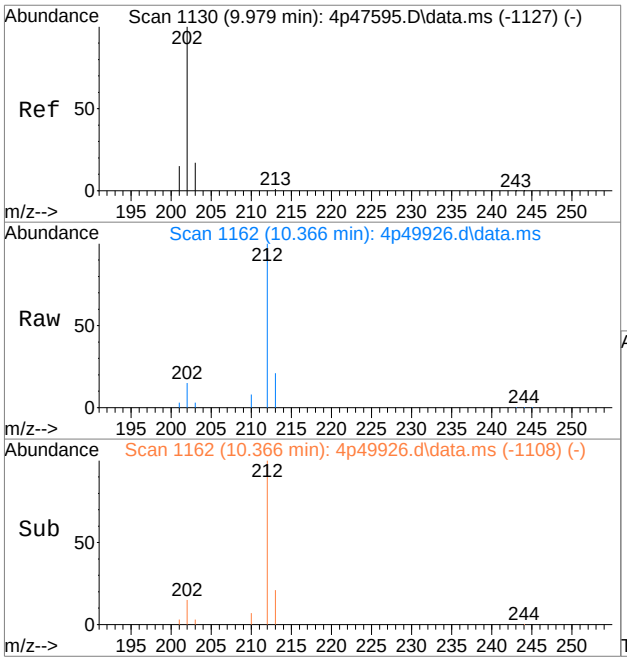


#24
Anthracene
Concen: 6.36 ppm
RT: 9.246 min Scan# 1045
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:178 Resp: 301

Ion	Ratio	Lower	Upper
178	100		
179	11.0	0.0	43.6
176	17.1	0.0	50.0

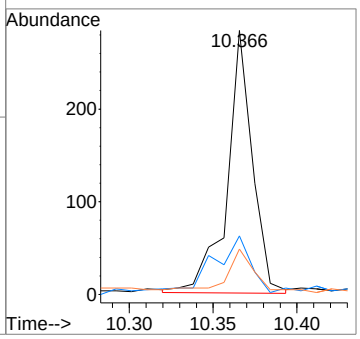


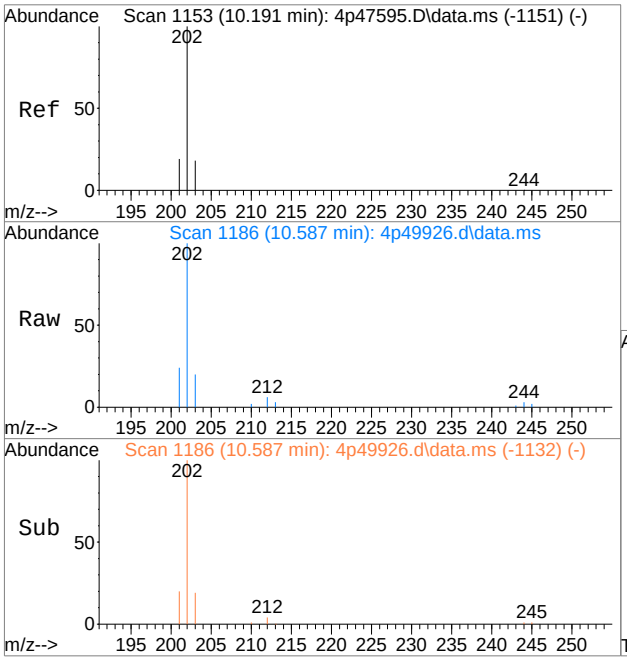


#25
Fluoranthene
Concen: 5.80 ppm
RT: 10.366 min Scan# 1162
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:202 Resp: 298

Ion	Ratio	Lower	Upper
202	100		
203	20.2	0.0	45.4
201	15.7	0.0	46.5

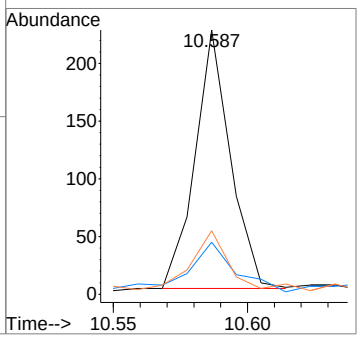


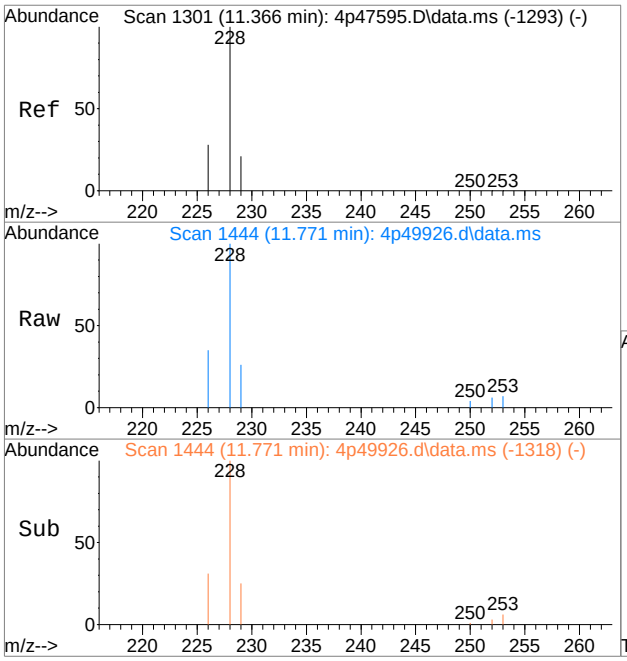


#26
Pyrene
Concen: 3.63 ppm
RT: 10.587 min Scan# 1186
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:202 Resp: 205

Ion	Ratio	Lower	Upper
202	100		
203	17.9	0.0	47.2
201	20.8	0.0	47.8

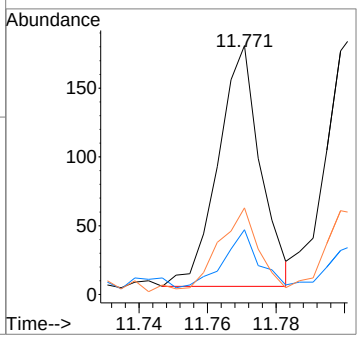


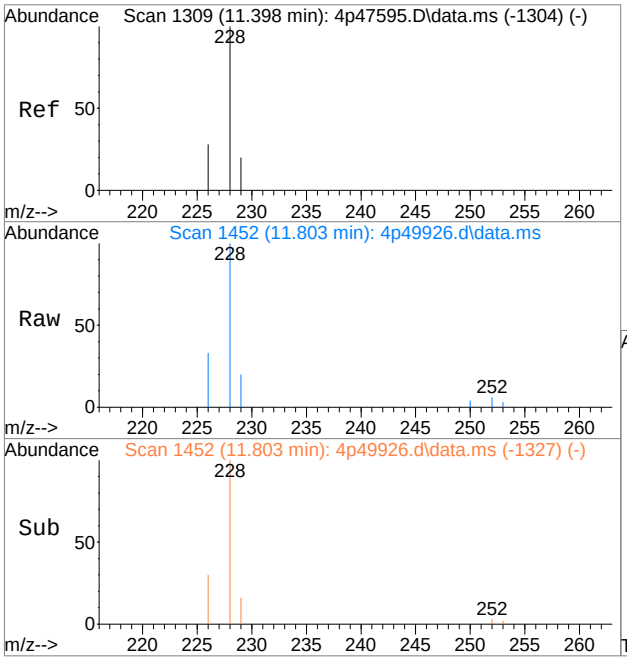


#28
Benzo[a]anthracene
Concen: 2.97 ppm
RT: 11.771 min Scan# 1444
Delta R.T. 0.004 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:228 Resp: 150

Ion	Ratio	Lower	Upper
228	100		
229	22.6	0.0	49.6
226	34.3	0.0	60.0

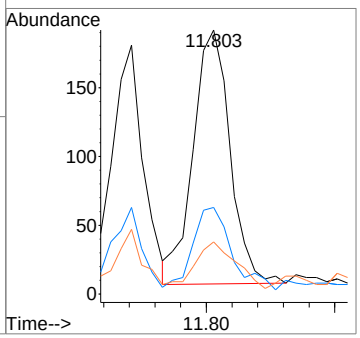


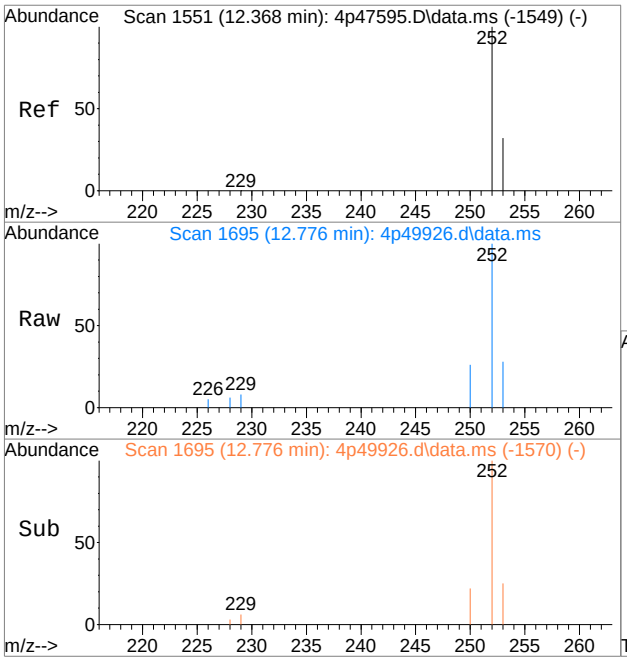


#29
Chrysene
Concen: 3.74 ppm
RT: 11.803 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:228 Resp: 185

Ion	Ratio	Lower	Upper
228	100		
226	31.5	0.0	59.3
229	15.9	0.0	49.5

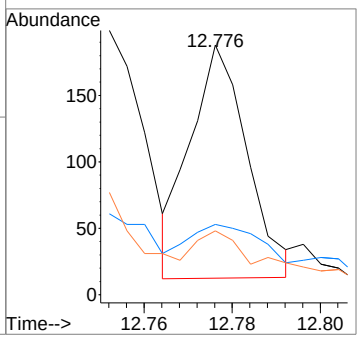


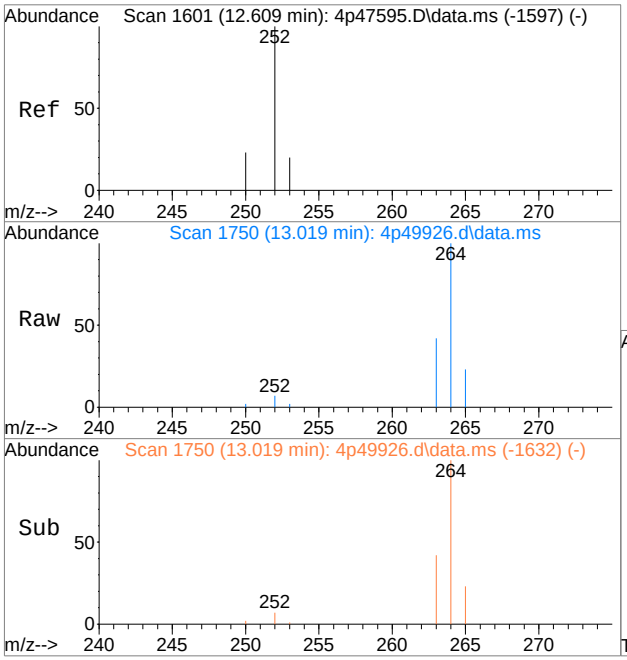


#32
Benzo[k]fluoranthene
Concen: 4.41 ppm
RT: 12.776 min Scan# 1695
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:252 Resp: 158

Ion	Ratio	Lower	Upper
252	100		
253	18.1	0.0	52.0
250	14.6	0.0	54.6

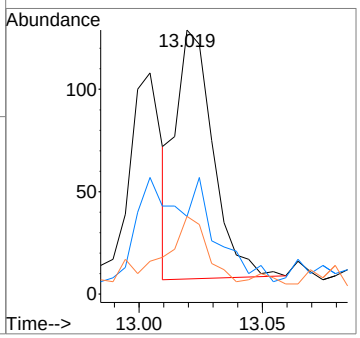


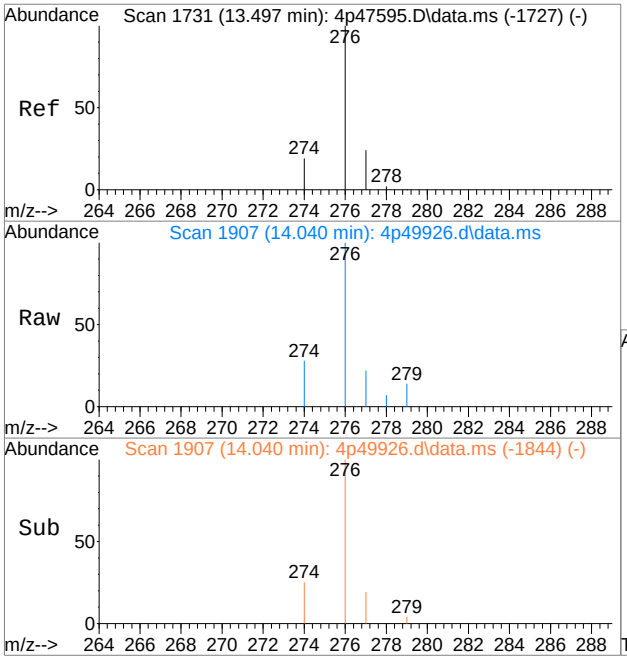


#33
Benzo[a]pyrene
Concen: 3.87 ppm
RT: 13.019 min Scan# 1750
Delta R.T. -0.005 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:252 Resp: 127

Ion	Ratio	Lower	Upper
252	100		
253	14.1	0.0	51.1
250	29.9	0.0	53.9

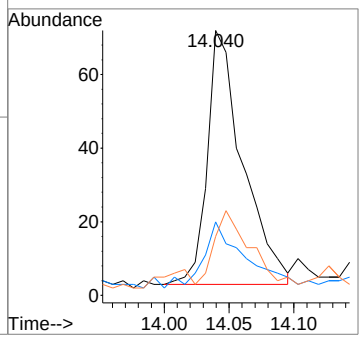


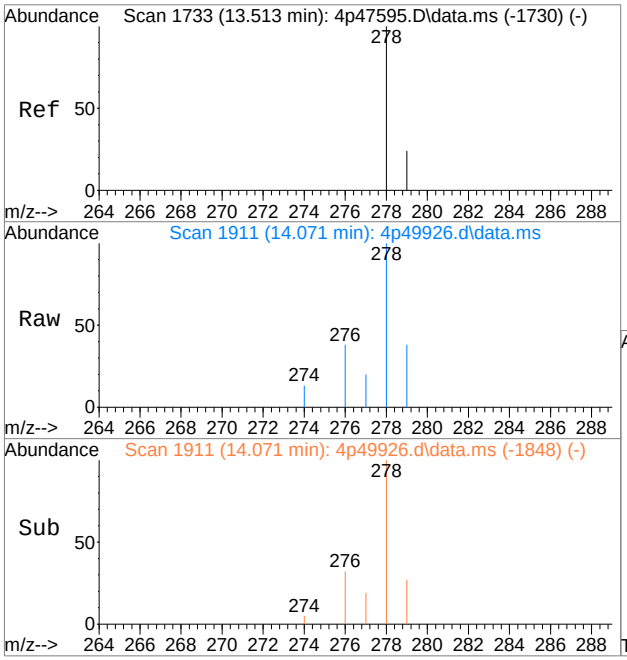


#34
Indeno[1,2,3-cd]pyrene
Concen: 3.35 ppm
RT: 14.040 min Scan# 1907
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:276 Resp: 131

Ion	Ratio	Lower	Upper
276	100		
274	24.4	0.0	52.4
277	16.3	0.0	50.5

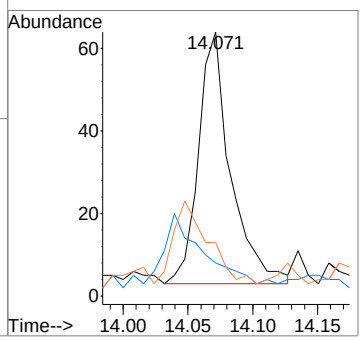


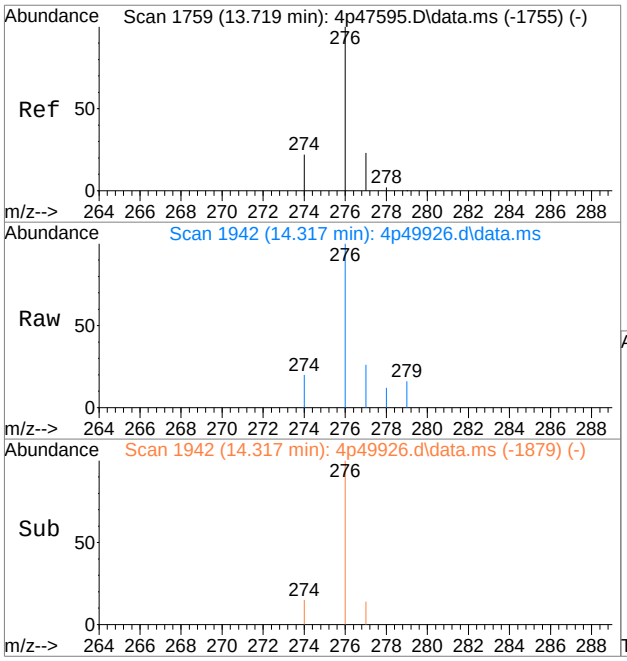


#35
Dibenz[a,h]anthracene
Concen: 3.44 ppm
RT: 14.071 min Scan# 1911
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:278 Resp: 105

Ion	Ratio	Lower	Upper
278	100		
274	0.8	0.0	38.0
277	10.0	0.0	39.8

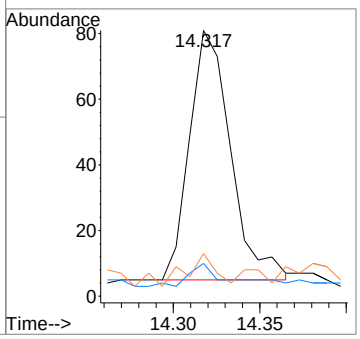




#36
Benzo[g,h,i]perylene
Concen: 3.80 ppm
RT: 14.317 min Scan# 1942
Delta R.T. 0.000 min
Lab File: 4p49926.d
Acq: 8 Dec 2021 11:18 am

Tgt Ion:276 Resp: 126

Ion	Ratio	Lower	Upper
276	100		
278	8.0	0.0	32.4
279	9.3	0.0	30.1



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/10/21 10:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\121021\e4p2614\
Data File : 4p49927.d
Acq On : 8 Dec 2021 11:42 am
Operator : chriss2
Sample : jd36168-3 Inst : MS4P
Misc : op36999a,e4p2614,260,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 10 04:17:48 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 10 03:44:37 2021
Response via : Initial Calibration

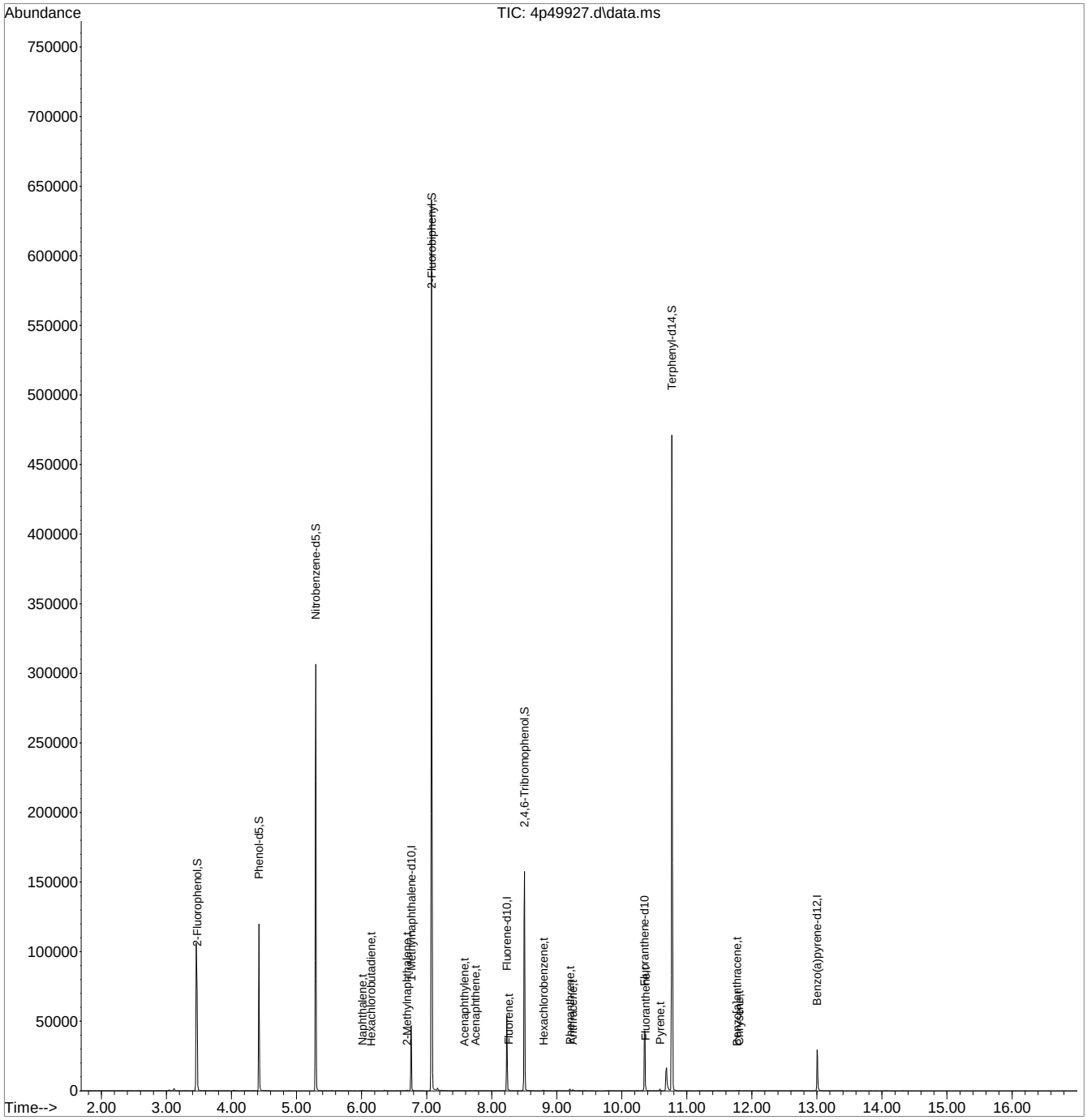
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.764	150	14856	800.00	ppm	# 0.00
13) Fluorene-d10	8.234	176	22545	800.00	ppm	0.00
20) Fluoranthene-d10	10.347	212	39565	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.005	264	17688	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.471	112	54264	5888.26	ppm	0.01
Spiked Amount 50.000			Recovery	= 11776.52%		
4) Phenol-d5	4.422	99	81385	4655.02	ppm	0.00
Spiked Amount 50.000			Recovery	= 9310.04%		
7) Nitrobenzene-d5	5.295	82	178118	12484.35	ppm	0.00
Spiked Amount 50.000			Recovery	= 24968.70%		
14) 2-Fluorobiphenyl	7.076	172	296508	10310.64	ppm	0.00
Spiked Amount 50.000			Recovery	= 20621.28%		
19) 2,4,6-Tribromophenol	8.506	330	64429m	14974.18	ppm	0.00
Spiked Amount 50.000			Recovery	= 29948.36%		
27) Terphenyl-d14	10.771	244	273289	9643.50	ppm	0.00
Spiked Amount 50.000			Recovery	= 19287.00%		
Target Compounds						Qvalue
8) Naphthalene	6.012	128	332	7.81	ppm	92
9) Hexachlorobutadiene	6.144	225	39	3.76	ppm	85
10) 2-Methylnaphthalene	6.699	141	169	7.61	ppm	82
15) Acenaphthylene	7.583	152	157	3.74	ppm	85
16) Acenaphthene	7.750	153	141	5.26	ppm	97
17) Fluorene	8.259	166	362	11.19	ppm	97
21) Hexachlorobenzene	8.797	284	172	13.78	ppm	95
23) Phenanthrene	9.203	178	1042	19.55	ppm	94
24) Anthracene	9.246	178	710	13.89	ppm	94
25) Fluoranthene	10.366	202	781	14.07	ppm	94
26) Pyrene	10.587	202	794	13.00	ppm	99
28) Benzo[a]anthracene	11.771	228	179	3.28	ppm	93
29) Chrysene	11.803	228	218	4.08	ppm	93

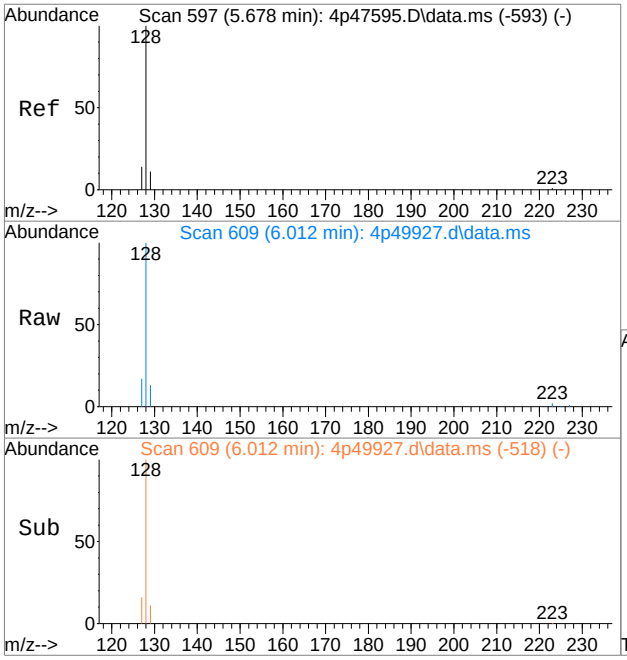
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\121021\e4p2614\
Data File : 4p49927.d
Acq On : 8 Dec 2021 11:42 am
Operator : chriss2
Sample : jd36168-3 Inst : MS4P
Misc : op36999a,e4p2614,260,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 10 04:17:48 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 10 03:44:37 2021
Response via : Initial Calibration

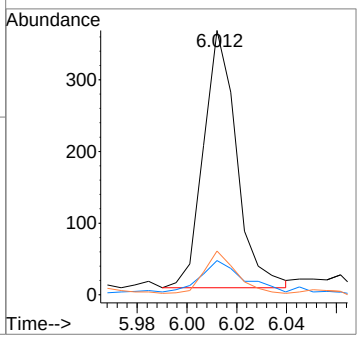


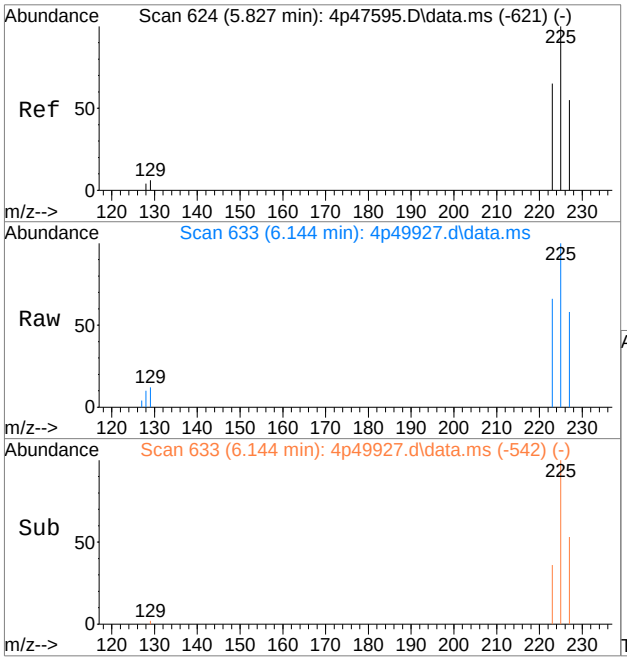


#8
Naphthalene
Concen: 7.81 ppm
RT: 6.012 min Scan# 609
Delta R.T. 0.000 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:128 Resp: 332

Ion	Ratio	Lower	Upper
128	100		
129	12.4	0.0	41.0
127	16.7	0.0	42.2

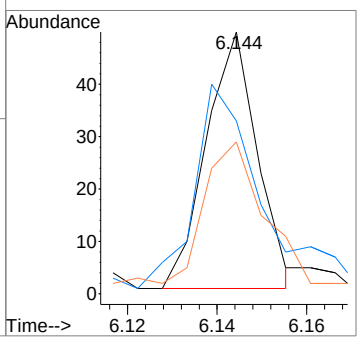


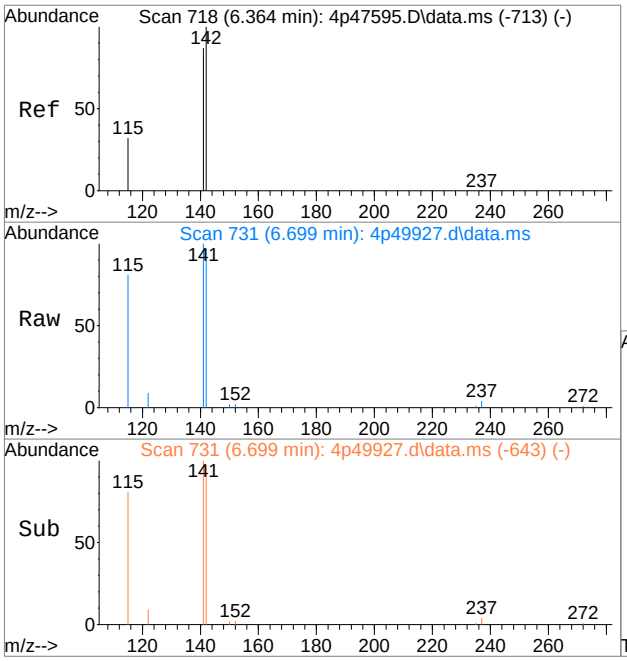


#9
Hexachlorobutadiene
Concen: 3.76 ppm
RT: 6.144 min Scan# 633
Delta R.T. 0.000 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:225 Resp: 39

Ion	Ratio	Lower	Upper
225	100		
223	55.3	27.2	87.2
227	47.9	38.7	98.7

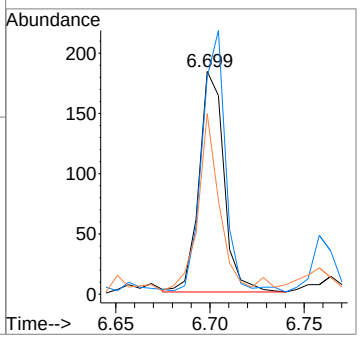


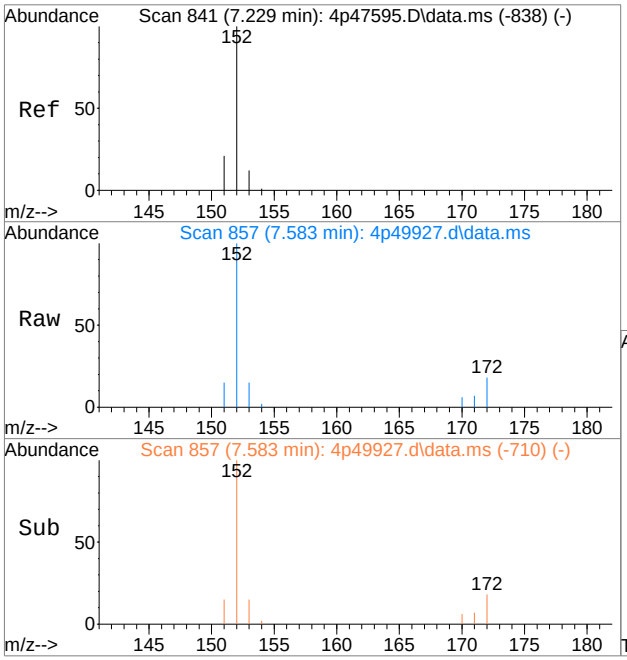


#10
2-Methylnaphthalene
Concen: 7.61 ppm
RT: 6.699 min Scan# 731
Delta R.T. 0.000 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:141 Resp: 169

Ion	Ratio	Lower	Upper
141	100		
142	97.3	83.9	143.9
115	79.4	31.1	91.1

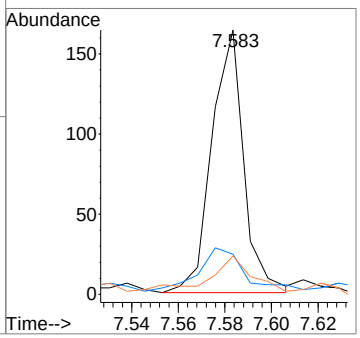


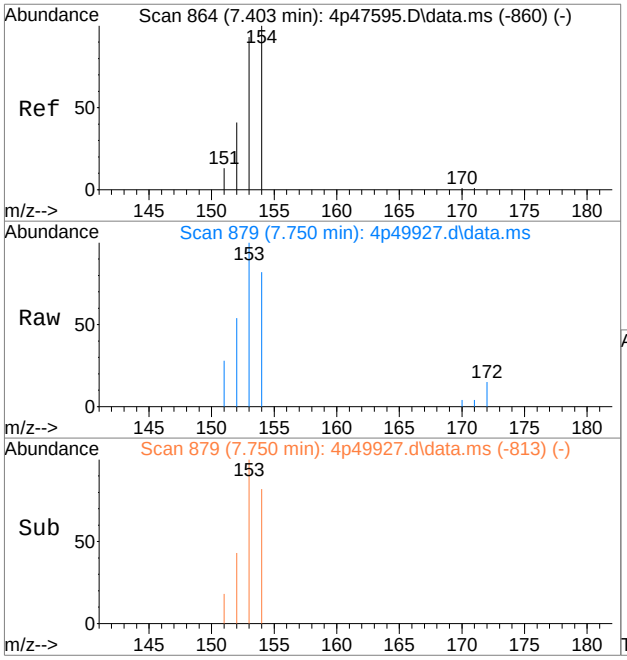


#15
Acenaphthylene
Concen: 3.74 ppm
RT: 7.583 min Scan# 857
Delta R.T. 0.008 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:152 Resp: 157

Ion	Ratio	Lower	Upper
152	100		
151	12.3	0.0	52.9
153	12.3	0.0	41.6

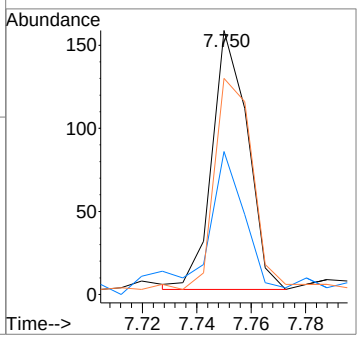


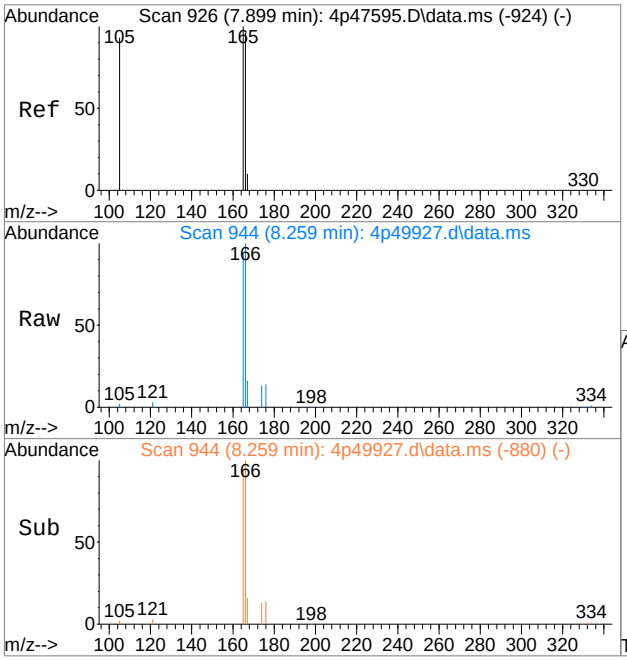


#16
Acenaphthene
Concen: 5.26 ppm
RT: 7.750 min Scan# 879
Delta R.T. 0.000 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:153 Resp: 141

Ion	Ratio	Lower	Upper
153	100		
152	49.8	21.7	81.7
154	80.3	52.6	112.6

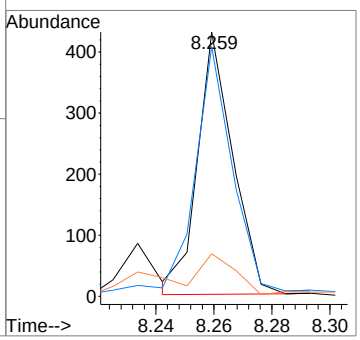


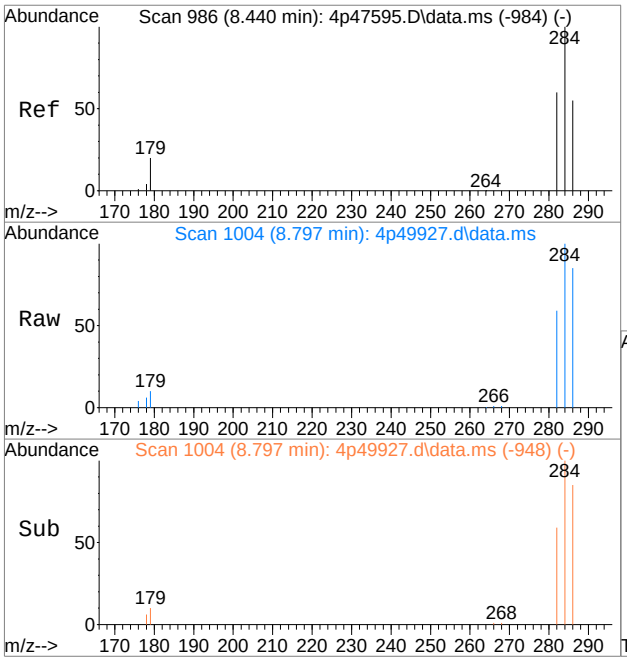


#17
Fluorene
Concen: 11.19 ppm
RT: 8.259 min Scan# 944
Delta R.T. 0.000 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:166 Resp: 362

Ion	Ratio	Lower	Upper
166	100		
165	94.9	68.2	128.2
167	12.1	0.0	42.1

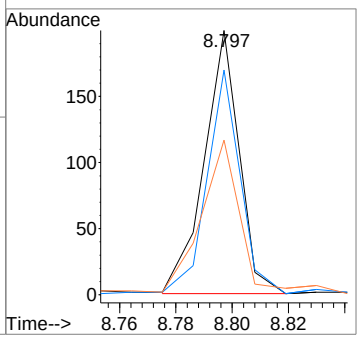


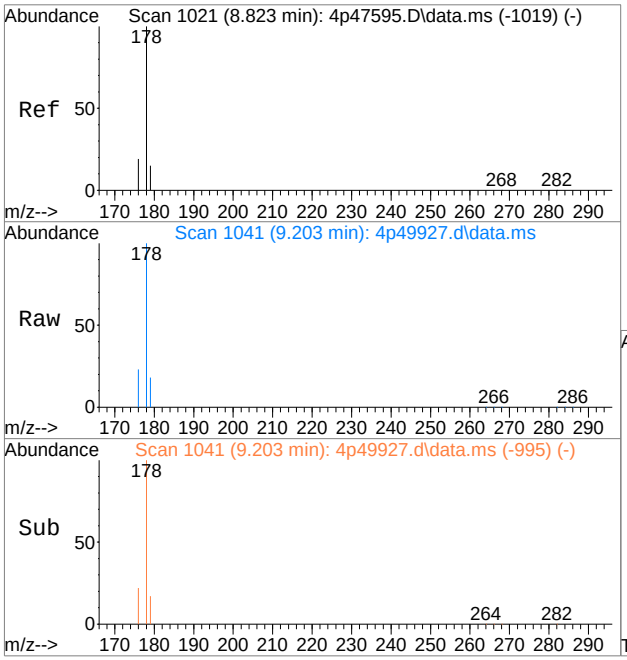


#21
Hexachlorobenzene
Concen: 13.78 ppm
RT: 8.797 min Scan# 1004
Delta R.T. 0.000 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:284 Resp: 172

Ion	Ratio	Lower	Upper
284	100		
286	84.9	55.2	115.2
282	57.2	19.0	79.0

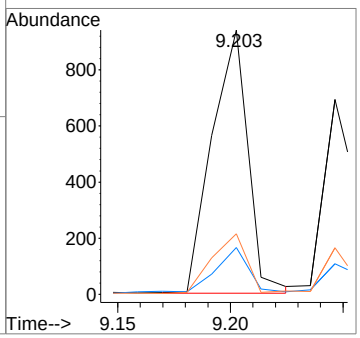


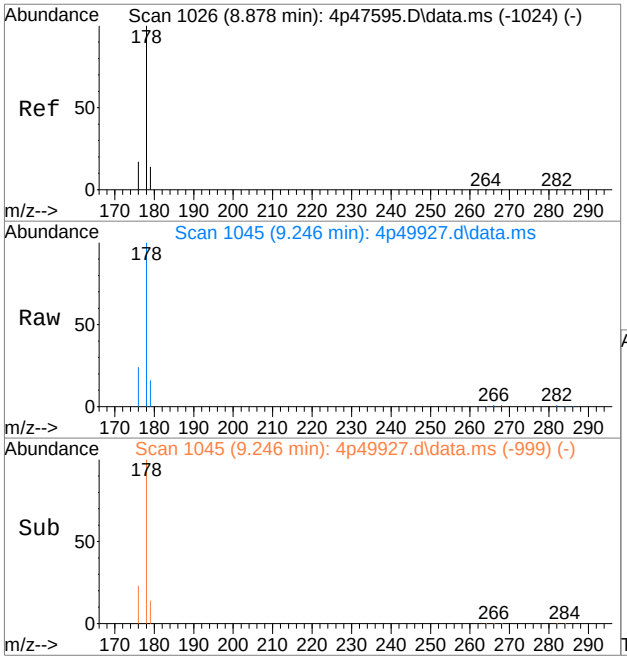


#23
Phenanthrene
Concen: 19.55 ppm
RT: 9.203 min Scan# 1041
Delta R.T. 0.000 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:178 Resp: 1042

Ion	Ratio	Lower	Upper
178	100		
179	17.0	0.0	45.9
176	22.5	0.0	48.7

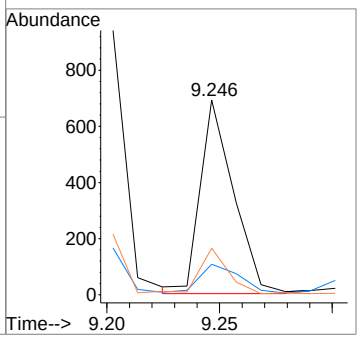


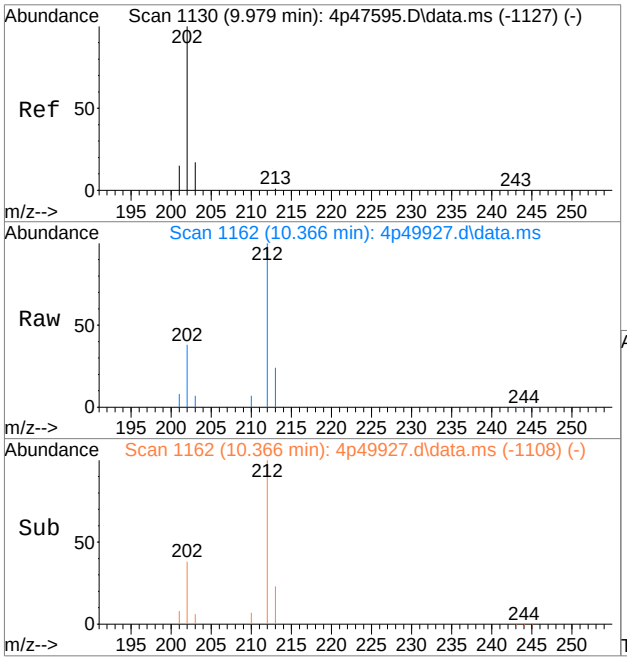


#24
Anthracene
Concen: 13.89 ppm
RT: 9.246 min Scan# 1045
Delta R.T. 0.000 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:178 Resp: 710

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	43.6
176	23.2	0.0	50.0

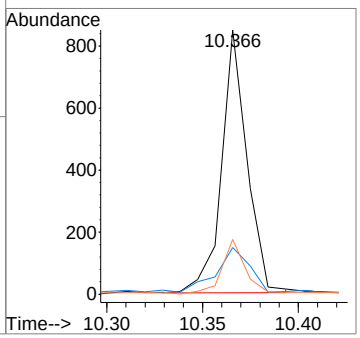


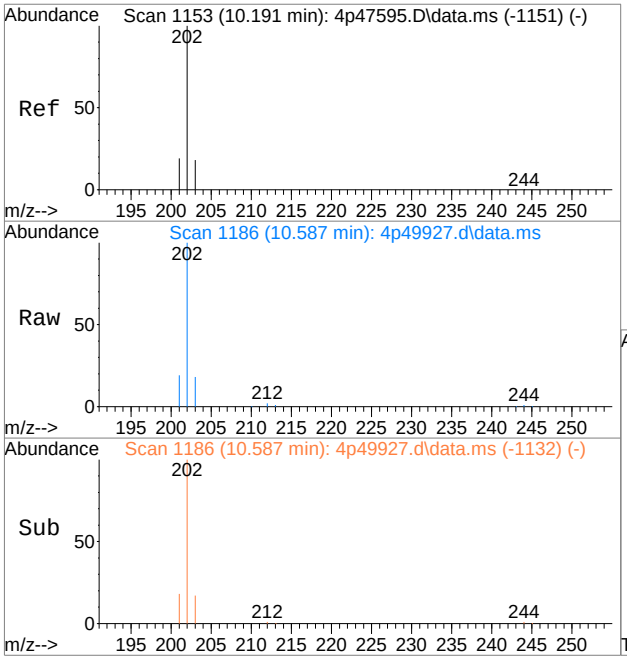


#25
Fluoranthene
Concen: 14.07 ppm
RT: 10.366 min Scan# 1162
Delta R.T. 0.000 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:202 Resp: 781

Ion	Ratio	Lower	Upper
202	100		
203	16.6	0.0	45.4
201	20.3	0.0	46.5

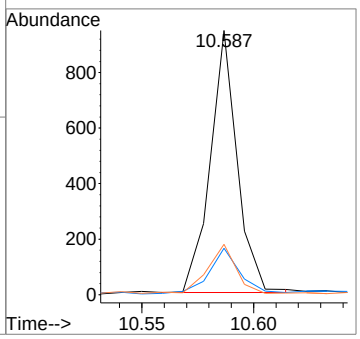


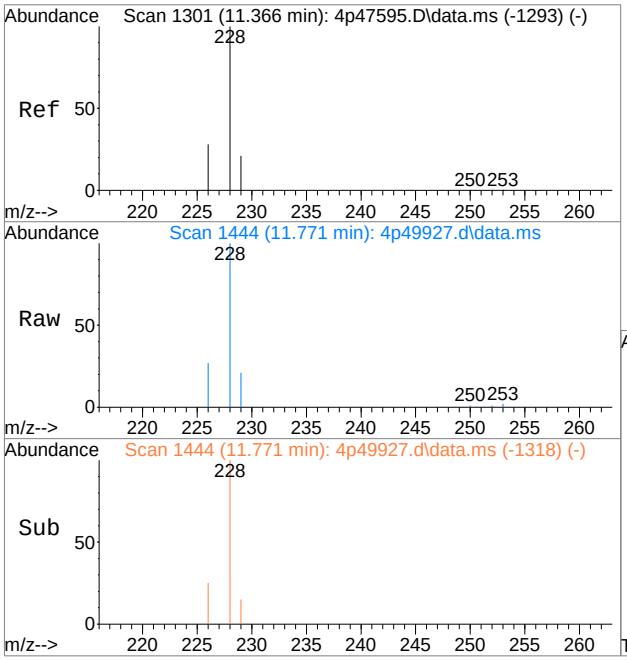


#26
Pyrene
Concen: 13.00 ppm
RT: 10.587 min Scan# 1186
Delta R.T. 0.000 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:202 Resp: 794

Ion	Ratio	Lower	Upper
202	100		
203	17.1	0.0	47.2
201	18.5	0.0	47.8

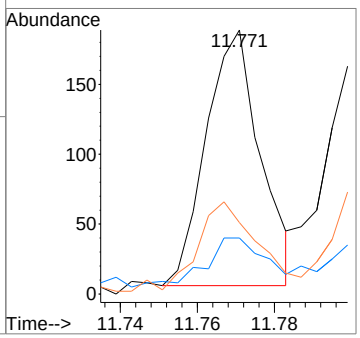


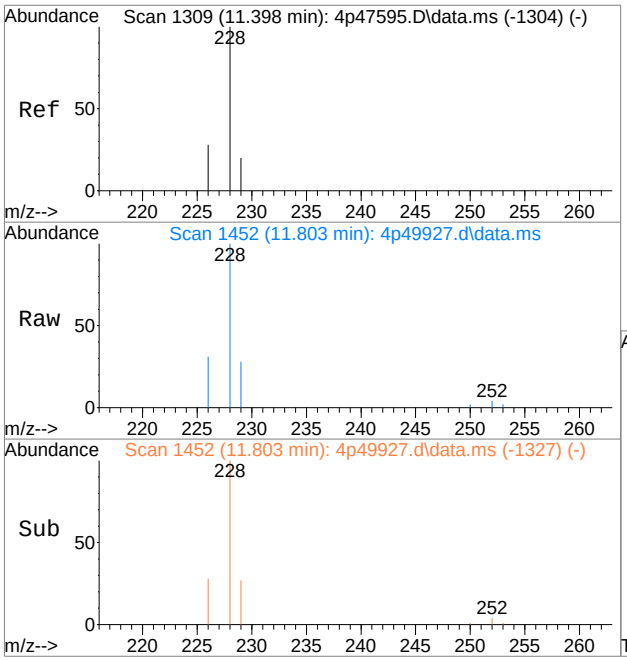


#28
Benzo[a]anthracene
Concen: 3.28 ppm
RT: 11.771 min Scan# 1444
Delta R.T. 0.004 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:228 Resp: 179

Ion	Ratio	Lower	Upper
228	100		
229	17.4	0.0	49.6
226	25.7	0.0	60.0

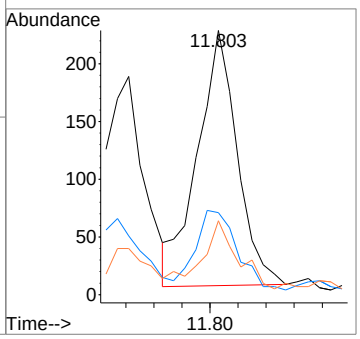




#29
Chrysene
Concen: 4.08 ppm
RT: 11.803 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 4p49927.d
Acq: 8 Dec 2021 11:42 am

Tgt Ion:228 Resp: 218

Ion	Ratio	Lower	Upper
228	100		
226	30.4	0.0	59.3
229	25.7	0.0	49.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maritavb\e4p2625\
Data File : 4p50143.d
Acq On : 16 Dec 2021 2:05 am
Operator : kristis
Sample : JD36168-4 Inst : MS4P
Misc : op37001a,e4p2625,260,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 16 04:20:57 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Dec 15 23:03:48 2021
Response via : Initial Calibration

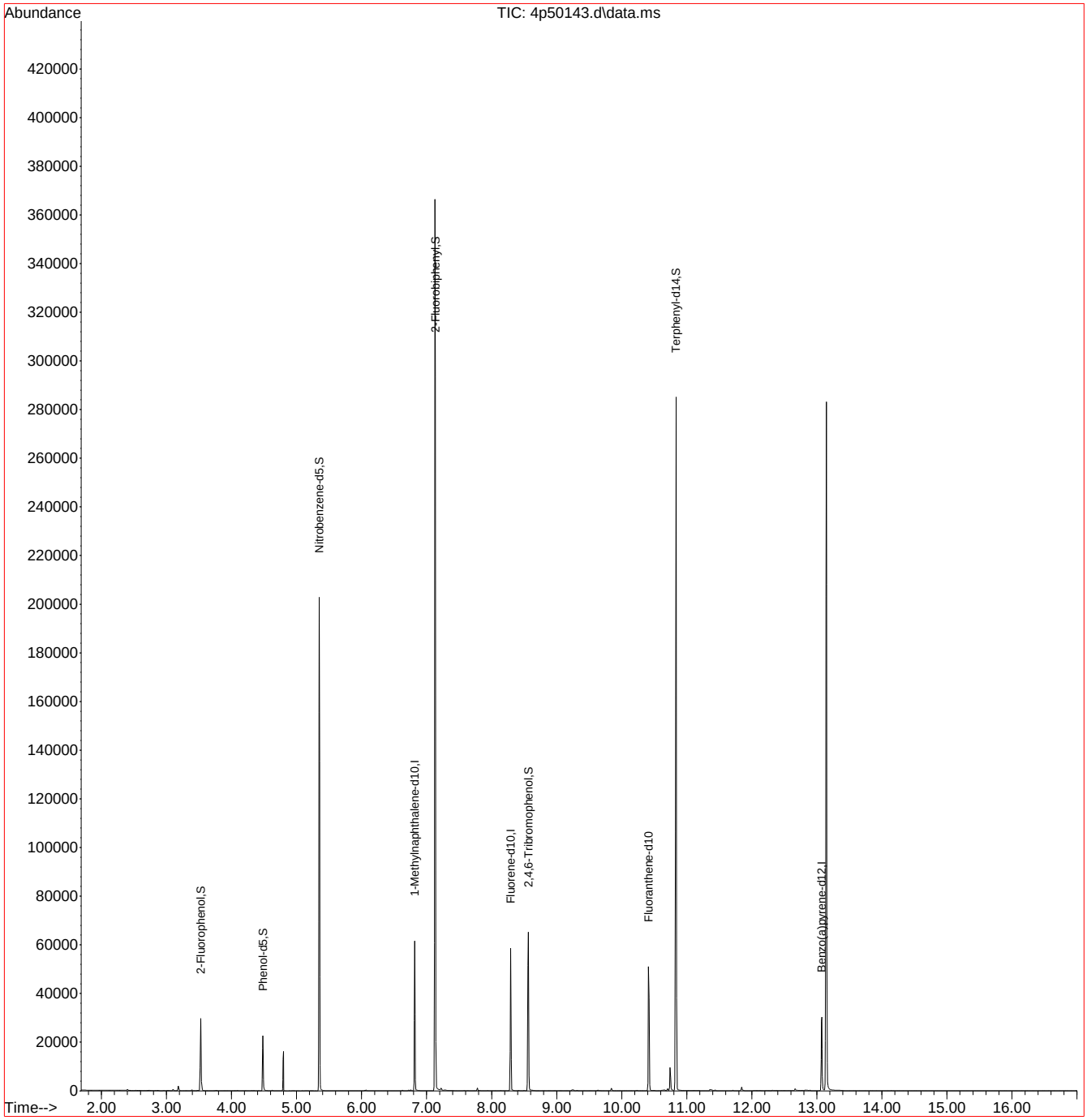
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.817	150	16062	800.00	ppm	0.00
13) Fluorene-d10	8.293	176	23950	800.00	ppm	0.00
20) Fluoranthene-d10	10.411	212	40822	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.075	264	20205	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.528	112	12904	1295.10	ppm	0.01
Spiked Amount 50.000			Recovery	= 2590.20%		
4) Phenol-d5	4.483	99	16283	861.42	ppm	0.00
Spiked Amount 50.000			Recovery	= 1722.84%		
7) Nitrobenzene-d5	5.350	82	118017	7650.77	ppm	0.00
Spiked Amount 50.000			Recovery	= 15301.54%		
14) 2-Fluorobiphenyl	7.136	172	193848	6345.35	ppm	0.00
Spiked Amount 50.000			Recovery	= 12690.70%		
19) 2,4,6-Tribromophenol	8.565	330	26709	5843.38	ppm	0.00
Spiked Amount 50.000			Recovery	= 11686.76%		
27) Terphenyl-d14	10.835	244	163857	5603.95	ppm	0.00
Spiked Amount 50.000			Recovery	= 11207.90%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maritavb\e4p2625\
Data File : 4p50143.d
Acq On : 16 Dec 2021 2:05 am
Operator : kristis
Sample : JD36168-4 Inst : MS4P
Misc : op37001a,e4p2625,260,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 16 04:20:57 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Dec 15 23:03:48 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2627\
Data File : 4p50173.d
Acq On : 17 Dec 2021 12:22 am
Operator : kristis
Sample : jd36168-5 Inst : MS4P
Misc : op37001a,e4p2627,280,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 17 04:44:45 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 17 03:02:46 2021
Response via : Initial Calibration

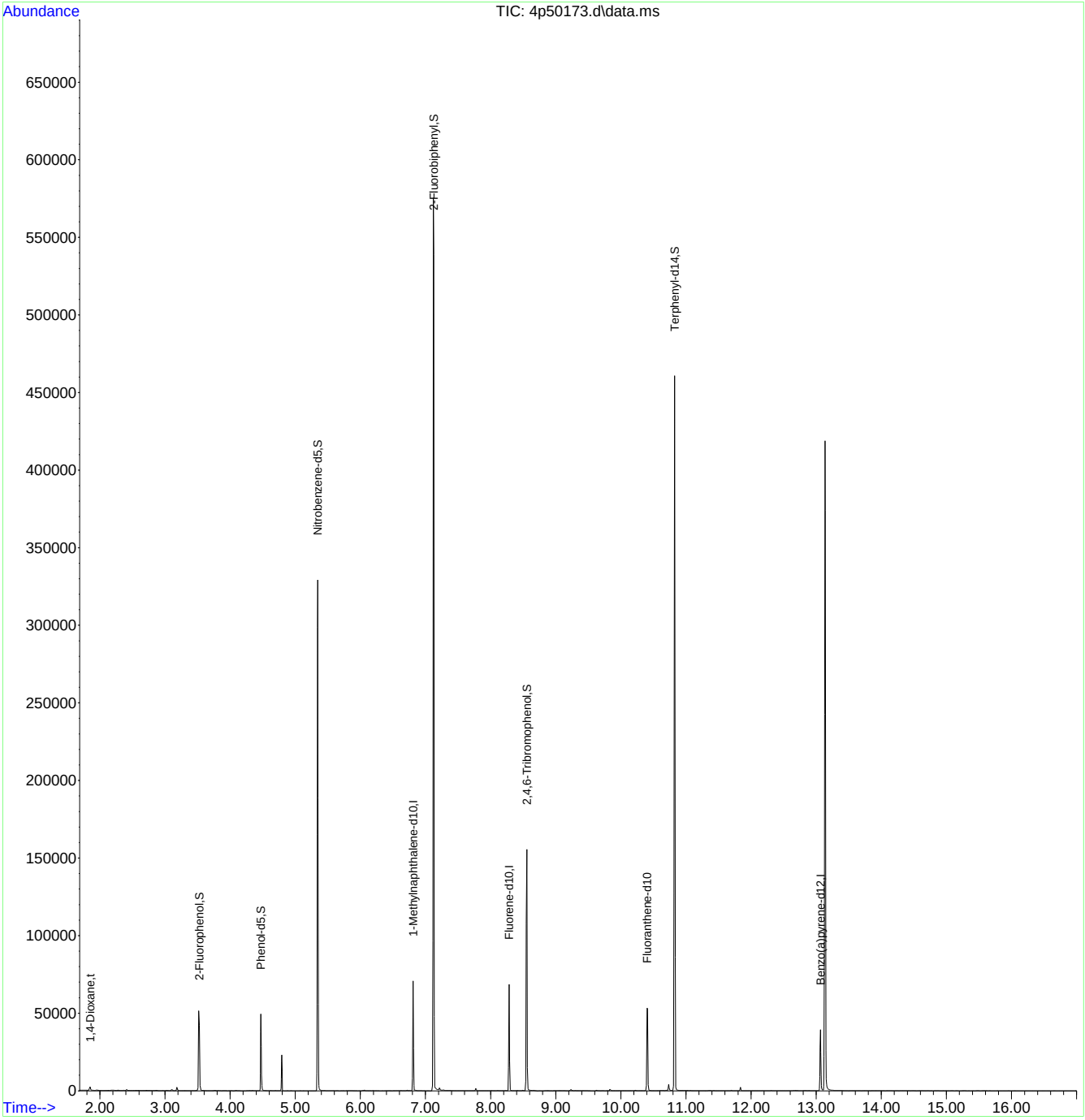
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.811	150	19560	800.00	ppm	0.00
13) Fluorene-d10	8.284	176	28374	800.00	ppm	0.00
20) Fluoranthene-d10	10.402	212	48824	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.065	264	23930	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.528	112	27598	2274.50	ppm	0.01
Spiked Amount 50.000			Recovery = 4549.00%			
4) Phenol-d5	4.473	99	36001	1563.96	ppm	0.00
Spiked Amount 50.000			Recovery = 3127.92%			
7) Nitrobenzene-d5	5.347	82	206017	10967.16	ppm	0.00
Spiked Amount 50.000			Recovery = 21934.32%			
14) 2-Fluorobiphenyl	7.129	172	326324	9016.29	ppm	0.00
Spiked Amount 50.000			Recovery = 18032.58%			
19) 2,4,6-Tribromophenol	8.557	330	60065	11092.07	ppm	0.00
Spiked Amount 50.000			Recovery = 22184.14%			
27) Terphenyl-d14	10.826	244	256775	7342.48	ppm	0.00
Spiked Amount 50.000			Recovery = 14684.96%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.848	88	1494	326.98	ppm	99

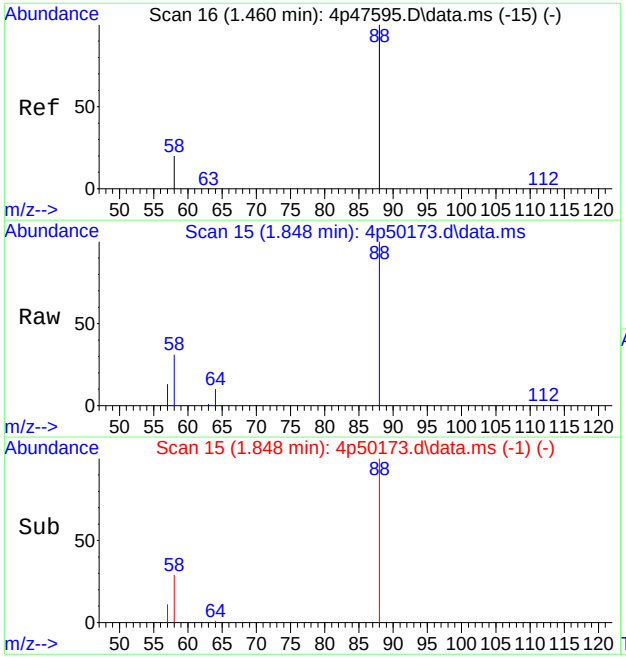
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2627\
Data File : 4p50173.d
Acq On : 17 Dec 2021 12:22 am
Operator : kristis
Sample : jd36168-5 Inst : MS4P
Misc : op37001a,e4p2627,280,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 17 04:44:45 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 17 03:02:46 2021
Response via : Initial Calibration

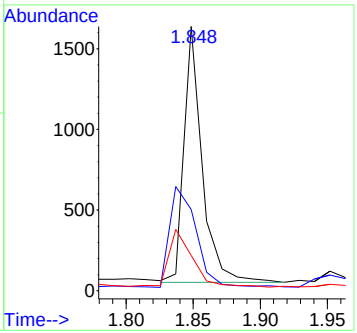




#2
1,4-Dioxane
Concen: 326.98 ppm
RT: 1.848 min Scan# 15
Delta R.T. 0.000 min
Lab File: 4p50173.d
Acq: 17 Dec 2021 12:22 am

Tgt Ion: 88 Resp: 1494

Ion	Ratio	Lower	Upper
88	100		
58	30.5	9.8	49.8
57	12.0	0.0	31.5



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/19/21 23:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2628\
Data File : 4p50201.d
Acq On : 17 Dec 2021 8:09 pm
Operator : kristis
Sample : jd36168-6 Inst : MS4P
Misc : op37001a,e4p2628,280,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 19 22:29:48 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 21:34:37 2021
Response via : Initial Calibration

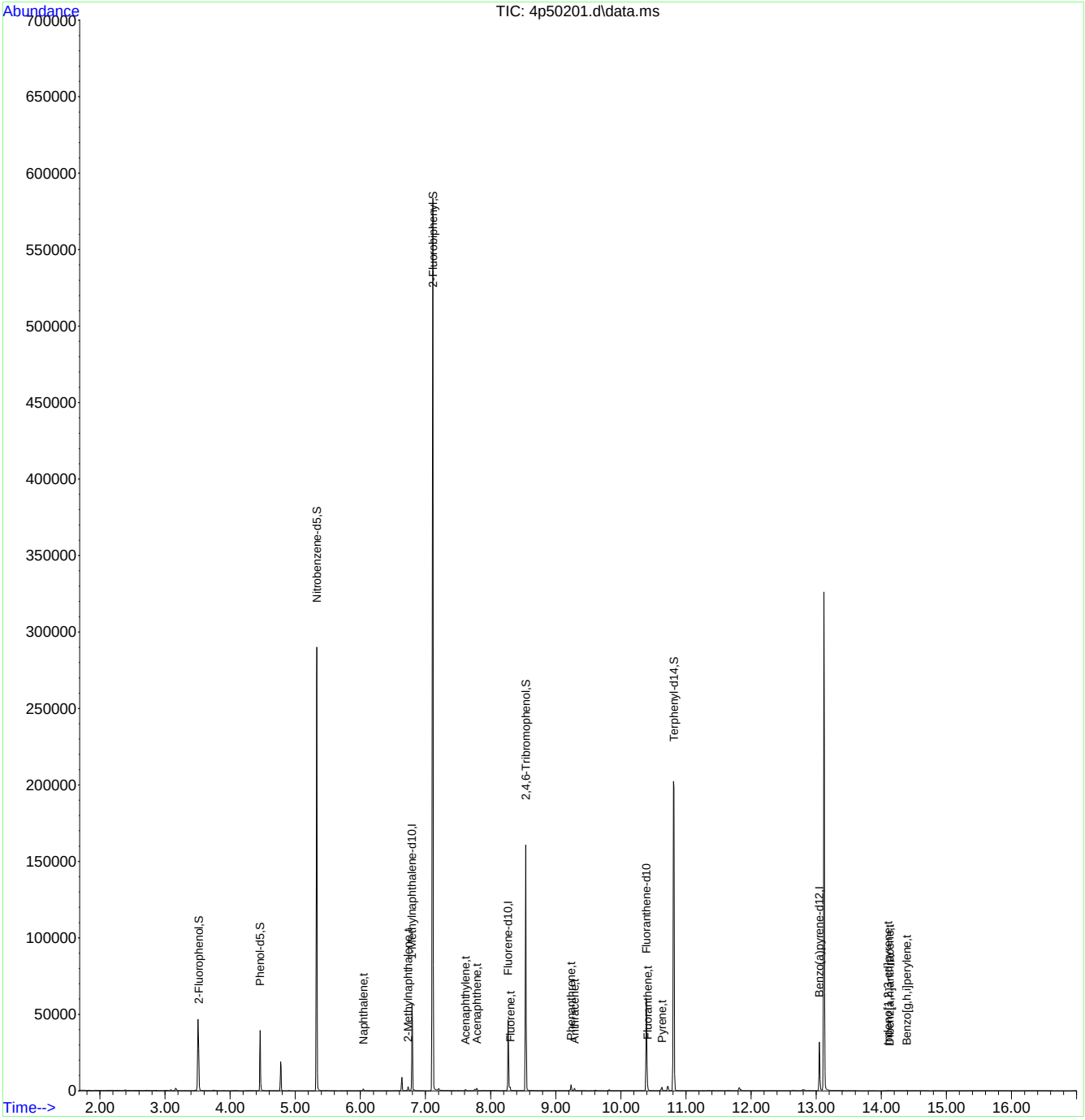
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.793	150	16789	800.00	ppm	0.00
13) Fluorene-d10	8.267	176	23105	800.00	ppm	0.00
20) Fluoranthene-d10	10.393	212	39701	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.050	264	20187	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.517	112	22542	2164.44	ppm	0.01
Spiked Amount 50.000			Recovery	= 4328.88%		
4) Phenol-d5	4.459	99	29027	1469.12	ppm	0.00
Spiked Amount 50.000			Recovery	= 2938.24%		
7) Nitrobenzene-d5	5.331	82	186423	11562.05	ppm	0.00
Spiked Amount 50.000			Recovery	= 23124.10%		
14) 2-Fluorobiphenyl	7.113	172	292597	9928.04	ppm	0.00
Spiked Amount 50.000			Recovery	= 19856.08%		
19) 2,4,6-Tribromophenol	8.540	330	52239	11846.79	ppm	0.00
Spiked Amount 50.000			Recovery	= 23693.58%		
27) Terphenyl-d14	10.816	244	161754	5688.23	ppm	0.00
Spiked Amount 50.000			Recovery	= 11376.46%		
Target Compounds						Qvalue
8) Naphthalene	6.045	128	704m	14.65	ppm	
10) 2-Methylnaphthalene	6.734	141	737	29.36	ppm	88
15) Acenaphthylene	7.613	152	604	14.03	ppm	93
16) Acenaphthene	7.787	153	492m	17.91	ppm	
17) Fluorene	8.301	166	1171m	35.33	ppm	
23) Phenanthrene	9.235	178	2585	48.34	ppm	96
24) Anthracene	9.290	178	1102m	21.49	ppm	
25) Fluoranthene	10.411	202	2450	44.00	ppm	98
26) Pyrene	10.632	202	1865	30.44	ppm	99
34) Indeno[1,2,3-cd]pyrene	14.104	276	316	6.94	ppm	98
35) Dibenz[a,h]anthracene	14.128	278	188	5.30	ppm	99
36) Benzo[g,h,i]perylene	14.390	276	240	6.22	ppm	92

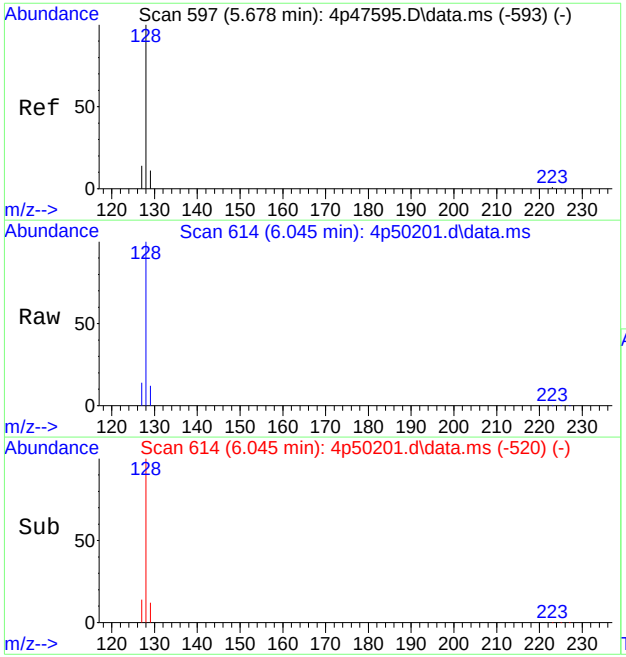
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2628\
Data File : 4p50201.d
Acq On : 17 Dec 2021 8:09 pm
Operator : kristis
Sample : jd36168-6 Inst : MS4P
Misc : op37001a,e4p2628,280,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 19 22:29:48 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 21:34:37 2021
Response via : Initial Calibration

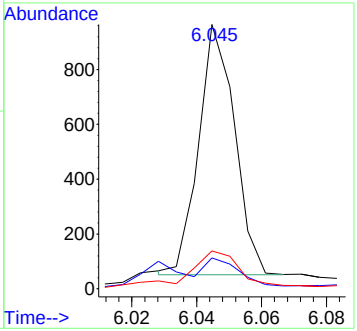


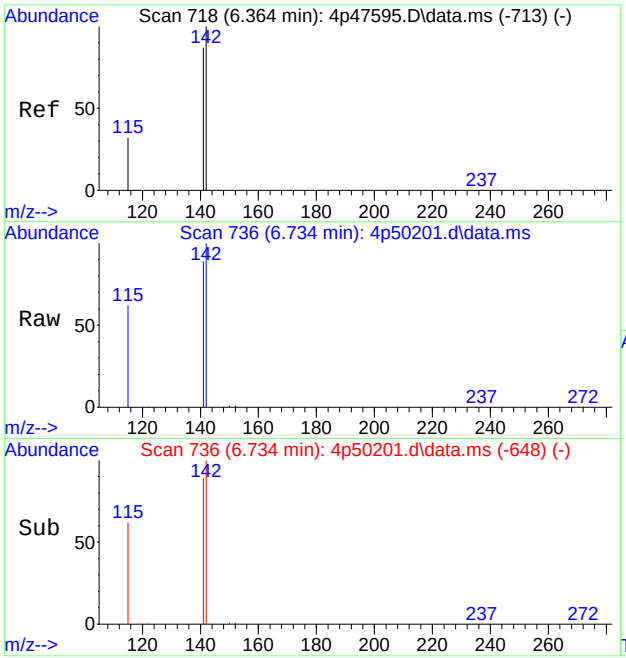


#8
Naphthalene
Concen: 14.65 ppm m
RT: 6.045 min Scan# 614
Delta R.T. -0.006 min
Lab File: 4p50201.d
Acq: 17 Dec 2021 8:09 pm

Tgt Ion:128 Resp: 704

Ion	Ratio	Lower	Upper
128	100		
129	11.7	0.0	41.7
127	14.3	0.0	42.8

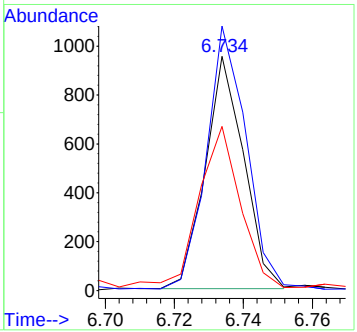


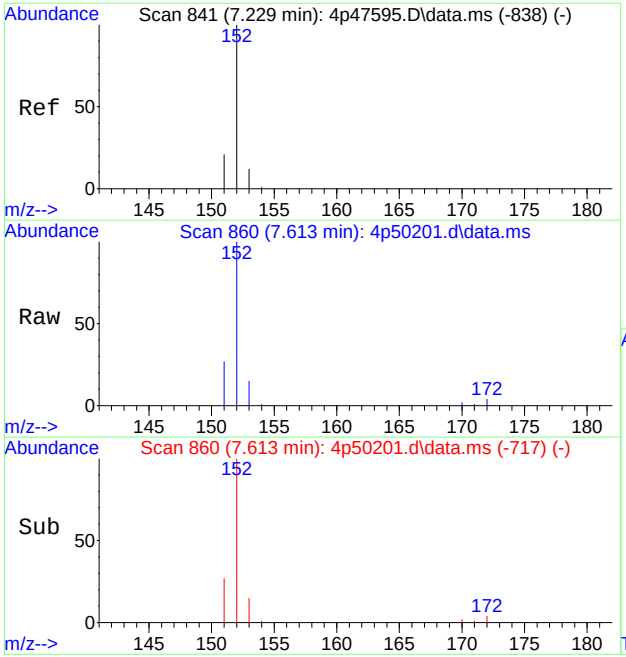


#10
2-Methylnaphthalene
Concen: 29.36 ppm
RT: 6.734 min Scan# 736
Delta R.T. -0.000 min
Lab File: 4p50201.d
Acq: 17 Dec 2021 8:09 pm

Tgt Ion:141 Resp: 737

Ion	Ratio	Lower	Upper
141	100		
142	112.7	70.6	130.6
115	68.6	49.8	109.8

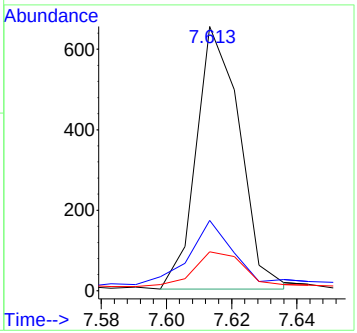


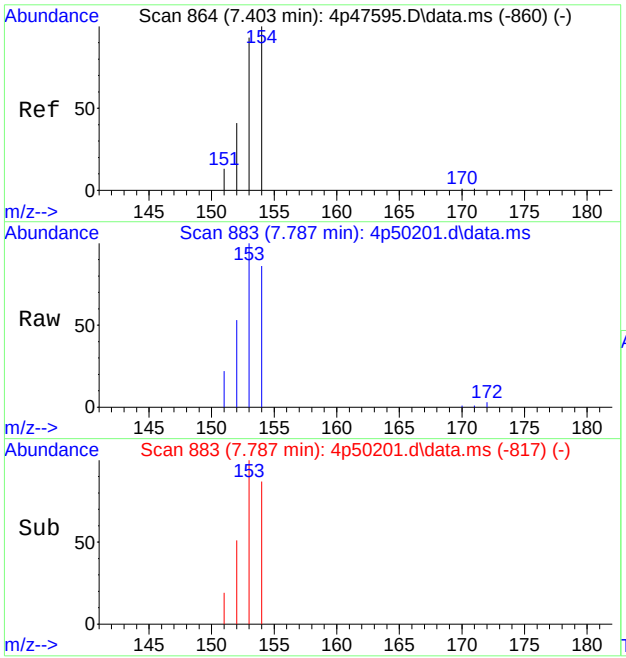


#15
Acenaphthylene
Concen: 14.03 ppm
RT: 7.613 min Scan# 860
Delta R.T. -0.008 min
Lab File: 4p50201.d
Acq: 17 Dec 2021 8:09 pm

Tgt Ion:152 Resp: 604

Ion	Ratio	Lower	Upper
152	100		
151	22.2	0.0	47.6
153	12.7	0.0	44.0

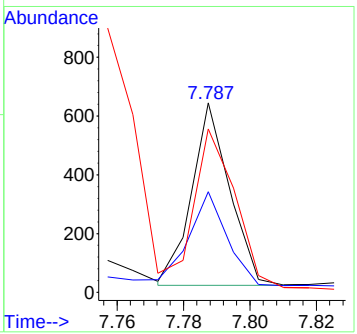


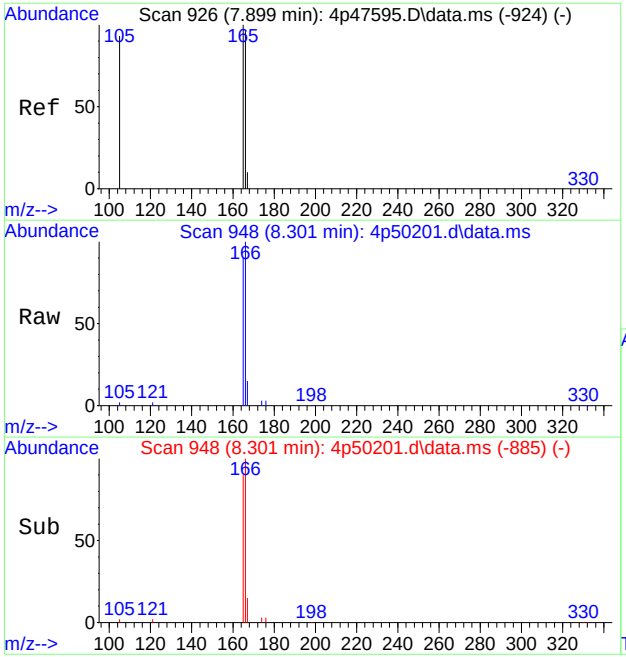


#16
Acenaphthene
Concen: 17.91 ppm m
RT: 7.787 min Scan# 883
Delta R.T. -0.000 min
Lab File: 4p50201.d
Acq: 17 Dec 2021 8:09 pm

Tgt Ion:153 Resp: 492

Ion	Ratio	Lower	Upper
153	100		
152	53.2	28.9	88.9
154	86.2	47.3	107.3

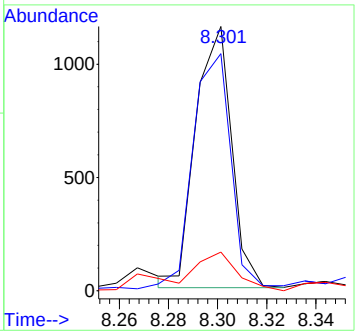


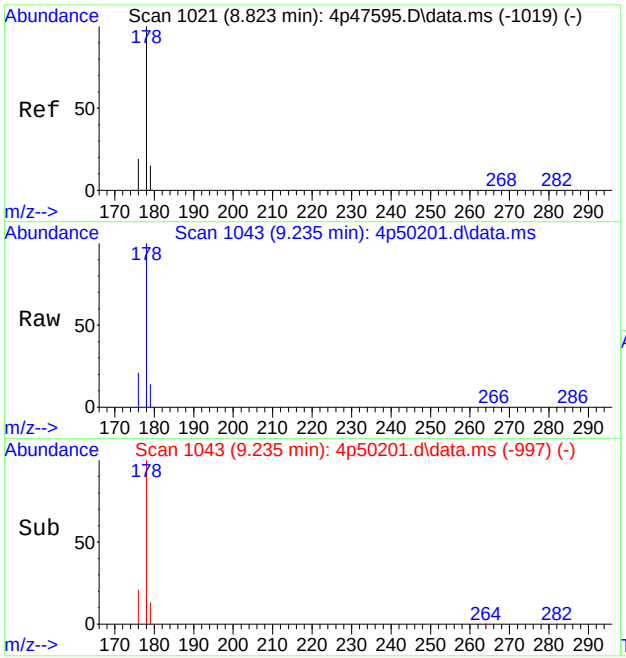


#17
Fluorene
Concen: 35.33 ppm m
RT: 8.301 min Scan# 948
Delta R.T. -0.000 min
Lab File: 4p50201.d
Acq: 17 Dec 2021 8:09 pm

Tgt Ion:166 Resp: 1171

Ion	Ratio	Lower	Upper
166	100		
165	89.7	60.7	120.7
167	14.7	0.0	43.1

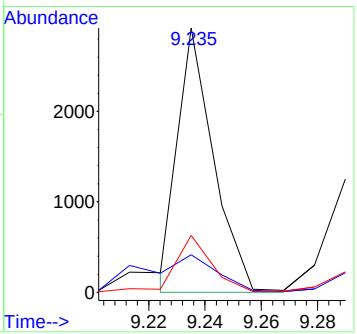


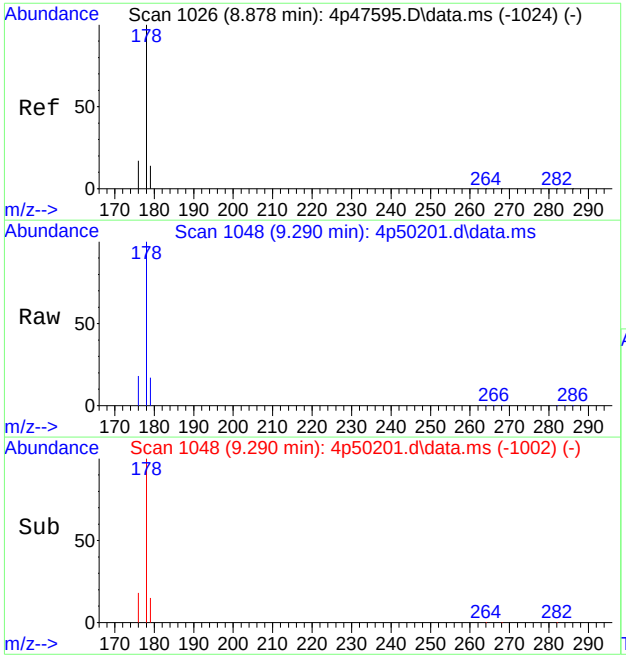


#23
Phenanthrene
Concen: 48.34 ppm
RT: 9.235 min Scan# 1043
Delta R.T. -0.000 min
Lab File: 4p50201.d
Acq: 17 Dec 2021 8:09 pm

Tgt Ion:178 Resp: 2585

Ion	Ratio	Lower	Upper
178	100		
179	10.8	0.0	43.9
176	21.6	0.0	52.4

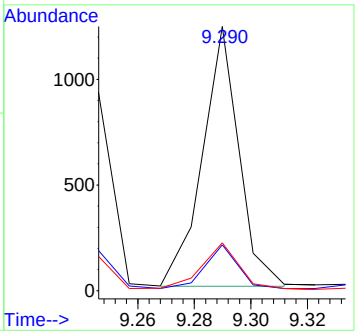


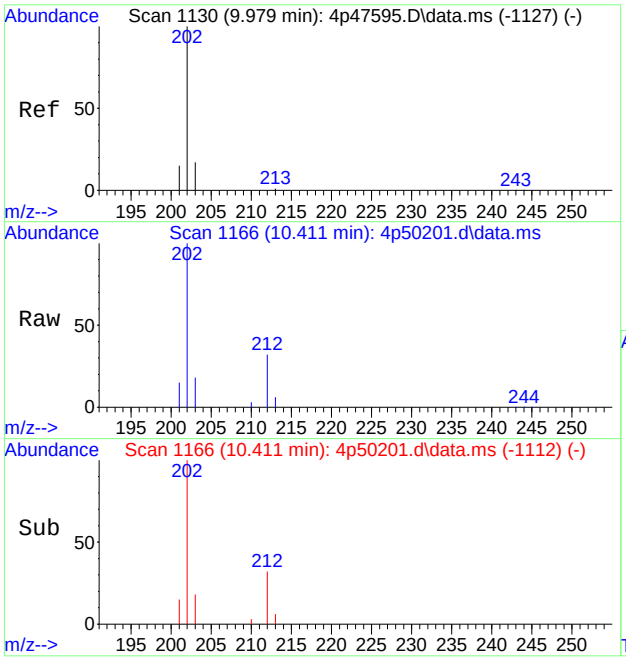


#24
Anthracene
Concen: 21.49 ppm m
RT: 9.290 min Scan# 1048
Delta R.T. -0.000 min
Lab File: 4p50201.d
Acq: 17 Dec 2021 8:09 pm

Tgt Ion:178 Resp: 1102

Ion	Ratio	Lower	Upper
178	100		
179	17.3	0.0	44.5
176	18.1	0.0	49.5

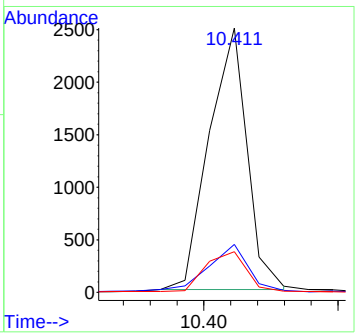


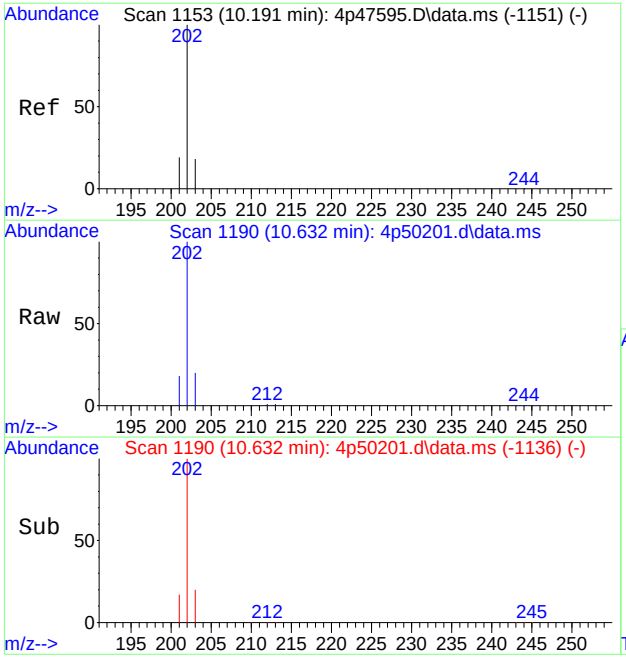


#25
Fluoranthene
Concen: 44.00 ppm
RT: 10.411 min Scan# 1166
Delta R.T. -0.000 min
Lab File: 4p50201.d
Acq: 17 Dec 2021 8:09 pm

Tgt Ion:202 Resp: 2450

Ion	Ratio	Lower	Upper
202	100		
203	17.5	0.0	46.1
201	15.3	0.0	45.2

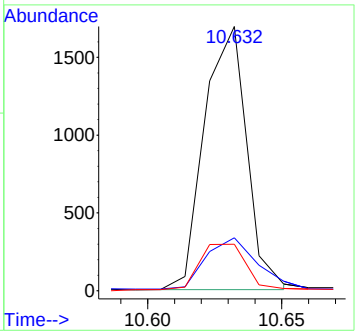


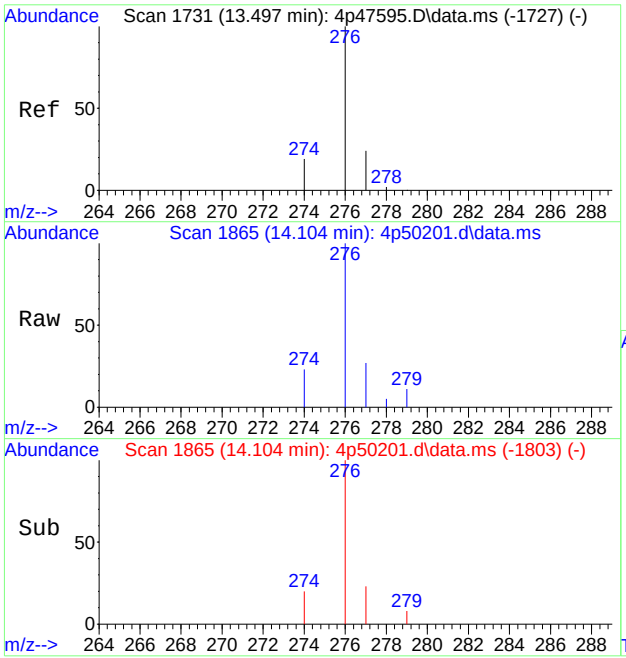


#26
Pyrene
Concen: 30.44 ppm
RT: 10.632 min Scan# 1190
Delta R.T. -0.000 min
Lab File: 4p50201.d
Acq: 17 Dec 2021 8:09 pm

Tgt Ion:202 Resp: 1865

Ion	Ratio	Lower	Upper
202	100		
203	18.1	0.0	47.7
201	17.2	0.0	47.3

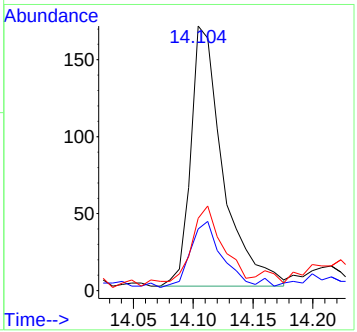


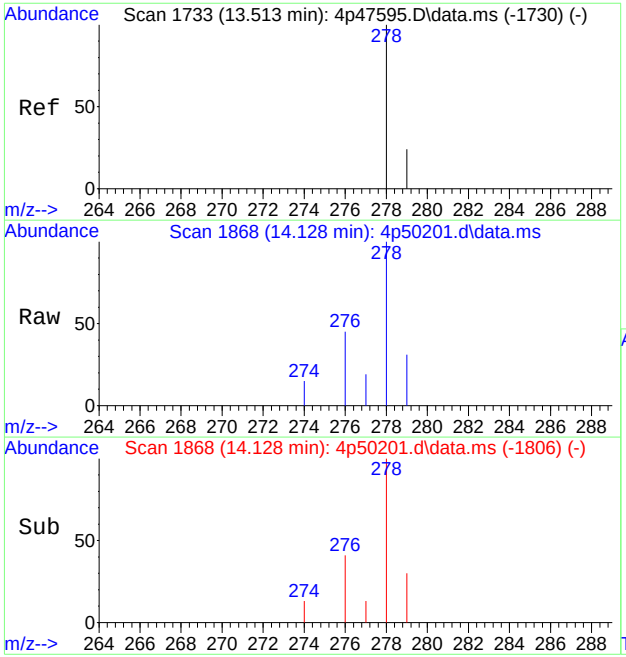


#34
Indeno[1,2,3-cd]pyrene
Concen: 6.94 ppm
RT: 14.104 min Scan# 1865
Delta R.T. -0.008 min
Lab File: 4p50201.d
Acq: 17 Dec 2021 8:09 pm

Tgt Ion:276 Resp: 316

Ion	Ratio	Lower	Upper
276	100		
274	21.9	0.0	52.0
277	24.9	0.0	53.2

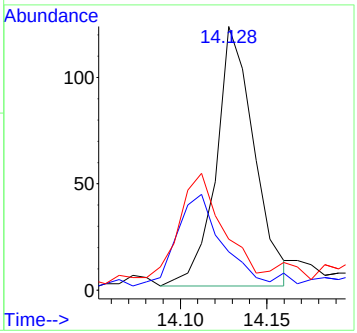


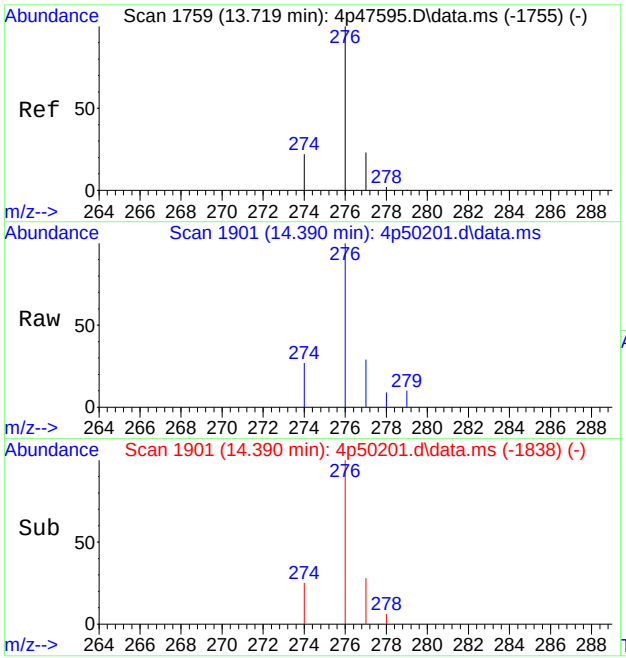


#35
Dibenz[a,h]anthracene
Concen: 5.30 ppm
RT: 14.128 min Scan# 1868
Delta R.T. -0.008 min
Lab File: 4p50201.d
Acq: 17 Dec 2021 8:09 pm

Tgt Ion:278 Resp: 188

Ion	Ratio	Lower	Upper
278	100		
274	9.5	0.0	39.5
277	10.3	0.0	41.1

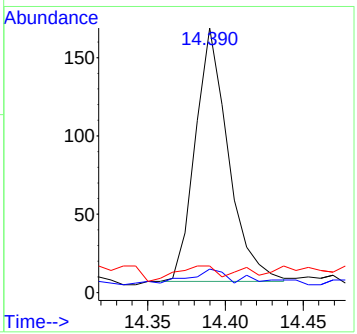




#36
Benzo[g,h,i]perylene
Concen: 6.22 ppm
RT: 14.390 min Scan# 1901
Delta R.T. -0.000 min
Lab File: 4p50201.d
Acq: 17 Dec 2021 8:09 pm

Tgt Ion:276 Resp: 240

Ion	Ratio	Lower	Upper
276	100		
278	5.0	0.0	32.2
279	2.5	0.0	30.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2628\
Data File : 4p50202.d
Acq On : 17 Dec 2021 8:33 pm
Operator : kristis
Sample : jd36168-7 Inst : MS4P
Misc : op37001a,e4p2628,260,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 19 22:35:07 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 21:34:37 2021
Response via : Initial Calibration

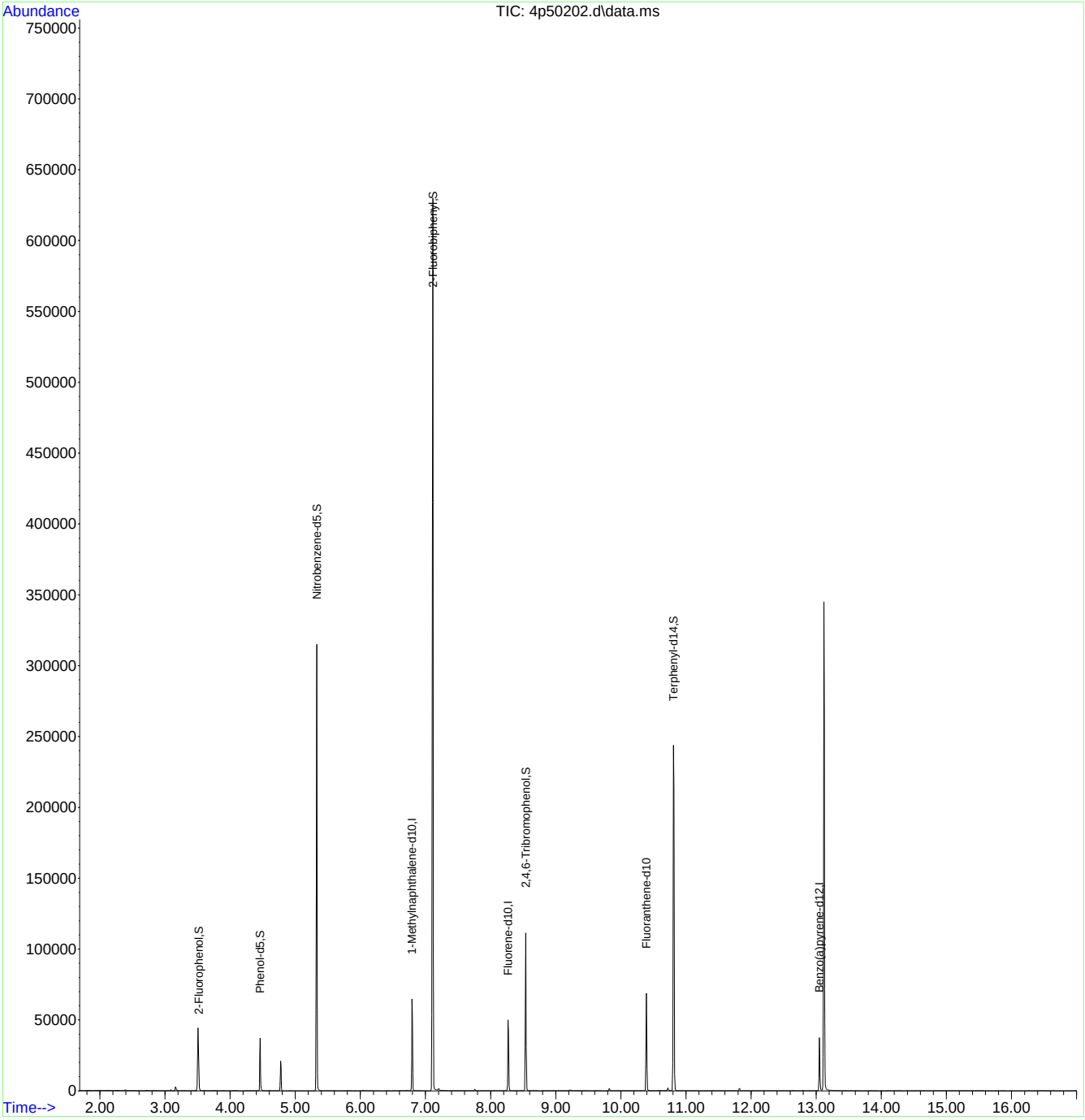
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.793	150	18907	800.00	ppm	# 0.00
13) Fluorene-d10	8.267	176	27079	800.00	ppm	0.00
20) Fluoranthene-d10	10.393	212	44843	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.050	264	22505	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.517	112	20350	1735.08	ppm	0.01
Spiked Amount 50.000			Recovery	= 3470.16%		
4) Phenol-d5	4.459	99	27002	1213.53	ppm	0.00
Spiked Amount 50.000			Recovery	= 2427.06%		
7) Nitrobenzene-d5	5.331	82	197562	10880.30	ppm	0.00
Spiked Amount 50.000			Recovery	= 21760.60%		
14) 2-Fluorobiphenyl	7.113	172	312212	9038.92	ppm	0.00
Spiked Amount 50.000			Recovery	= 18077.84%		
19) 2,4,6-Tribromophenol	8.540	330	37338	7224.87	ppm	0.00
Spiked Amount 50.000			Recovery	= 14449.74%		
27) Terphenyl-d14	10.807	244	183060	5699.31	ppm	0.00
Spiked Amount 50.000			Recovery	= 11398.62%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2628\
Data File : 4p50202.d
Acq On : 17 Dec 2021 8:33 pm
Operator : kristis
Sample : jd36168-7 Inst : MS4P
Misc : op37001a,e4p2628,260,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 19 22:35:07 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 21:34:37 2021
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/19/21 23:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2628\
Data File : 4p50203.d
Acq On : 17 Dec 2021 8:56 pm
Operator : kristis
Sample : jd36168-8 Inst : MS4P
Misc : op37001a,e4p2628,250,,,1,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 19 22:36:48 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 21:34:37 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.794	150	17044	800.00	ppm	# 0.00
13) Fluorene-d10	8.267	176	23932	800.00	ppm	0.00
20) Fluoranthene-d10	10.393	212	39469	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.051	264	20548	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.506	112	32736	3096.22	ppm	0.00
Spiked Amount 50.000			Recovery	= 6192.44%		
4) Phenol-d5	4.460	99	45140	2250.45	ppm	0.00
Spiked Amount 50.000			Recovery	= 4500.90%		
7) Nitrobenzene-d5	5.327	82	173933	10626.02	ppm	0.00
Spiked Amount 50.000			Recovery	= 21252.04%		
14) 2-Fluorobiphenyl	7.114	172	272067	8912.44	ppm	0.00
Spiked Amount 50.000			Recovery	= 17824.88%		
19) 2,4,6-Tribromophenol	8.540	330	47521	10404.43	ppm	0.00
Spiked Amount 50.000			Recovery	= 20808.86%		
27) Terphenyl-d14	10.807	244	224557	7943.17	ppm	0.00
Spiked Amount 50.000			Recovery	= 15886.34%		
Target Compounds						Qvalue
8) Naphthalene	6.045	128	6115	125.36	ppm	96
10) 2-Methylnaphthalene	6.734	141	532	20.87	ppm	89
15) Acenaphthylene	7.613	152	226	5.07	ppm	90
16) Acenaphthene	7.788	153	237m	8.33	ppm	
17) Fluorene	8.301	166	445	12.96	ppm	92
23) Phenanthrene	9.235	178	1041m	19.58	ppm	
24) Anthracene	9.290	178	397m	7.79	ppm	
25) Fluoranthene	10.411	202	488	8.82	ppm	99
26) Pyrene	10.623	202	388	6.37	ppm	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

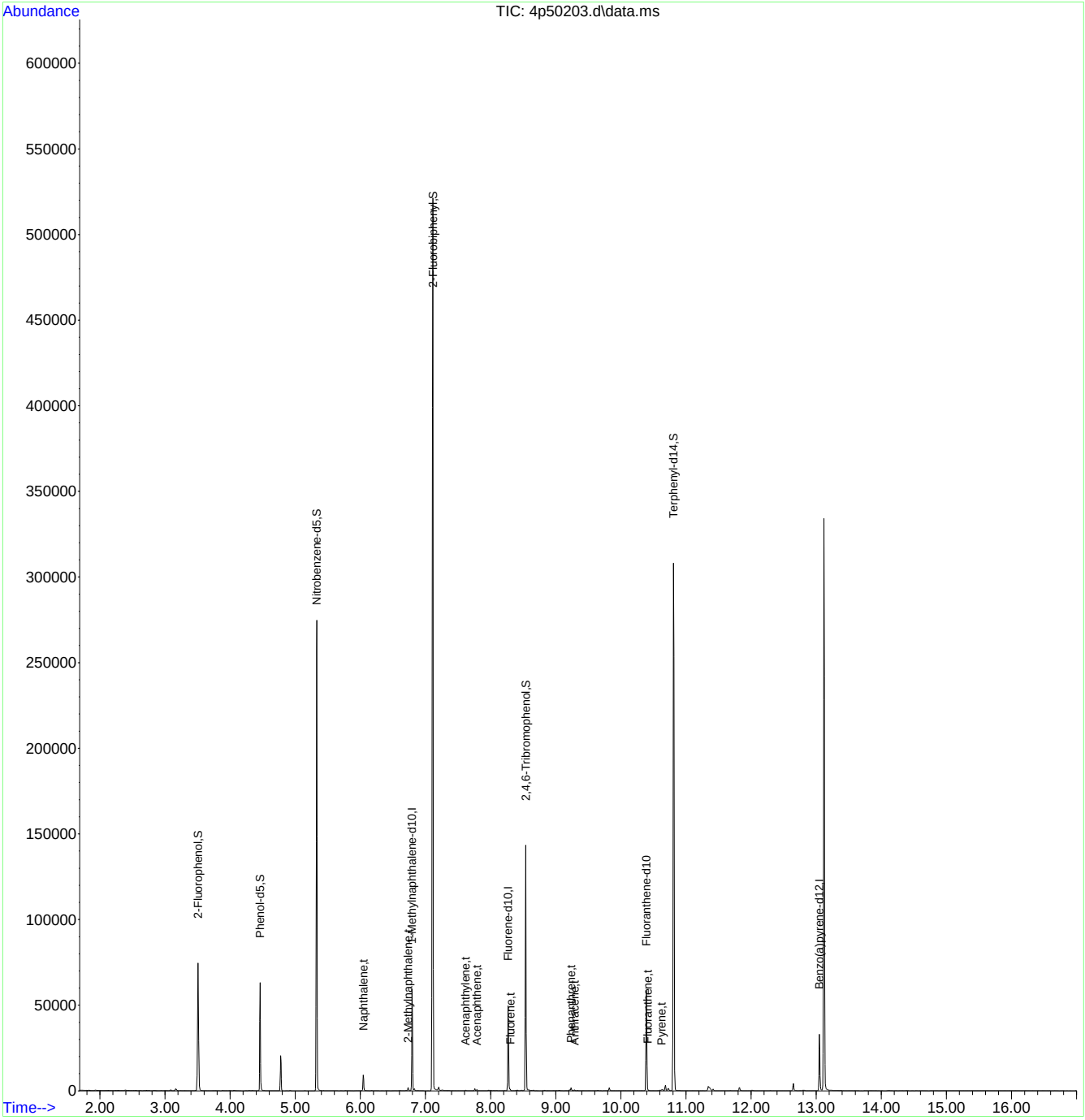
9.1.17

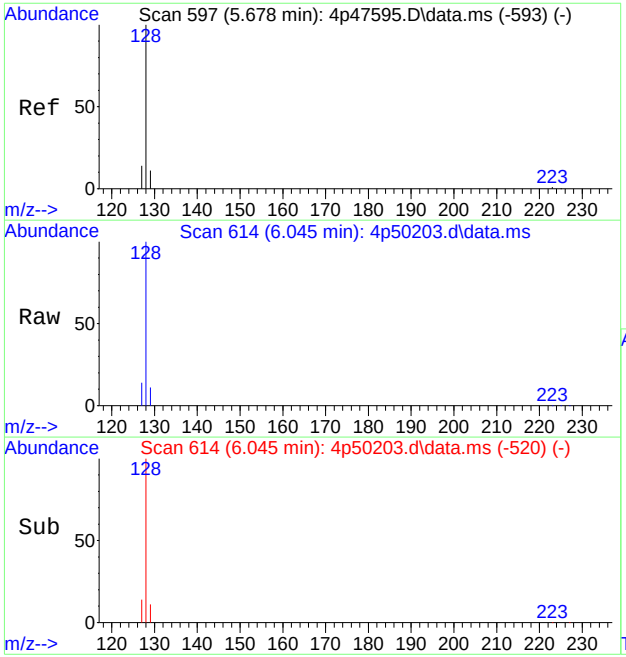
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2628\
Data File : 4p50203.d
Acq On : 17 Dec 2021 8:56 pm
Operator : kristis
Sample : jd36168-8 Inst : MS4P
Misc : op37001a,e4p2628,250,,,1,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 19 22:36:48 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 21:34:37 2021
Response via : Initial Calibration

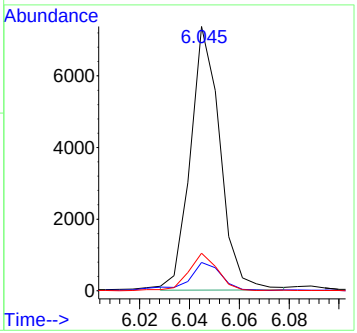


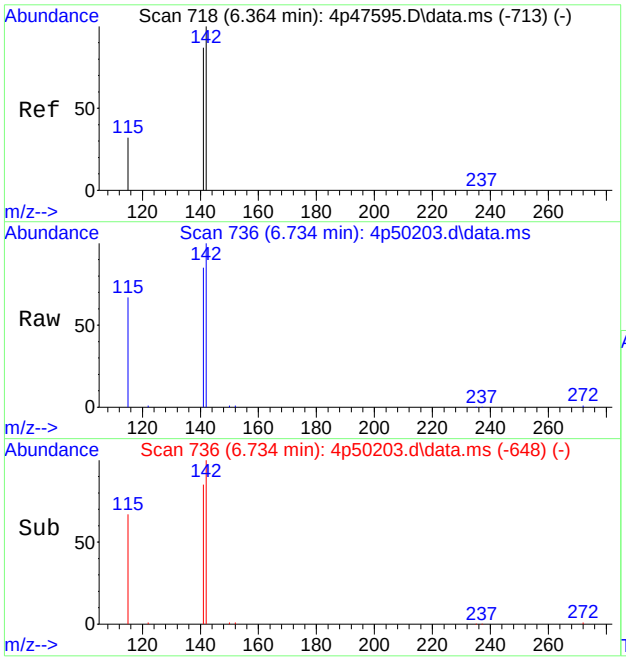


#8
Naphthalene
Concen: 125.36 ppm
RT: 6.045 min Scan# 614
Delta R.T. -0.005 min
Lab File: 4p50203.d
Acq: 17 Dec 2021 8:56 pm

Tgt Ion:128 Resp: 6115

Ion	Ratio	Lower	Upper
128	100		
129	10.0	0.0	41.7
127	14.1	0.0	42.8

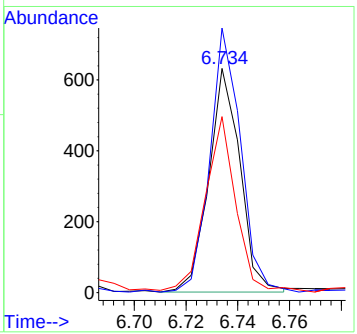


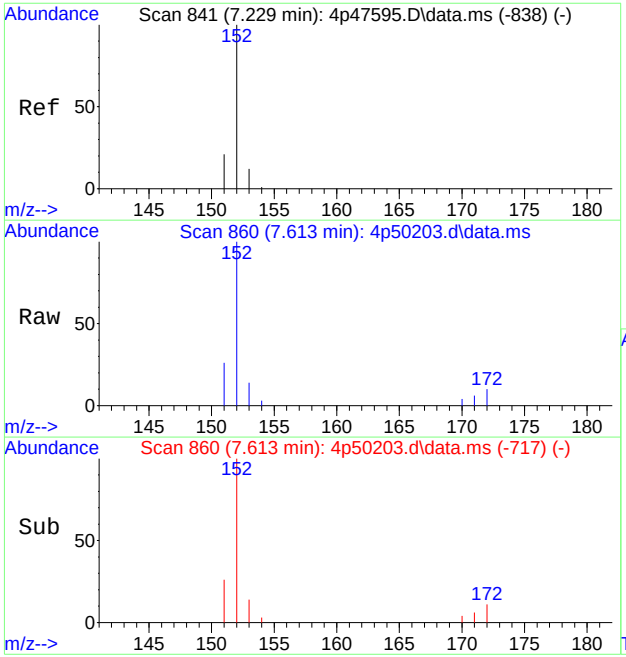


#10
2-Methylnaphthalene
Concen: 20.87 ppm
RT: 6.734 min Scan# 736
Delta R.T. 0.000 min
Lab File: 4p50203.d
Acq: 17 Dec 2021 8:56 pm

Tgt Ion:141 Resp: 532

Ion	Ratio	Lower	Upper
141	100		
142	118.3	70.6	130.6
115	77.7	49.8	109.8

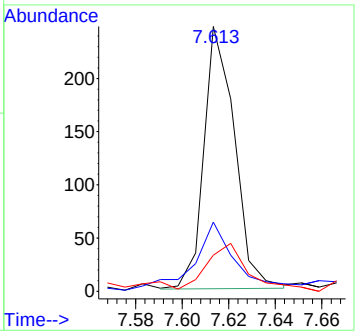


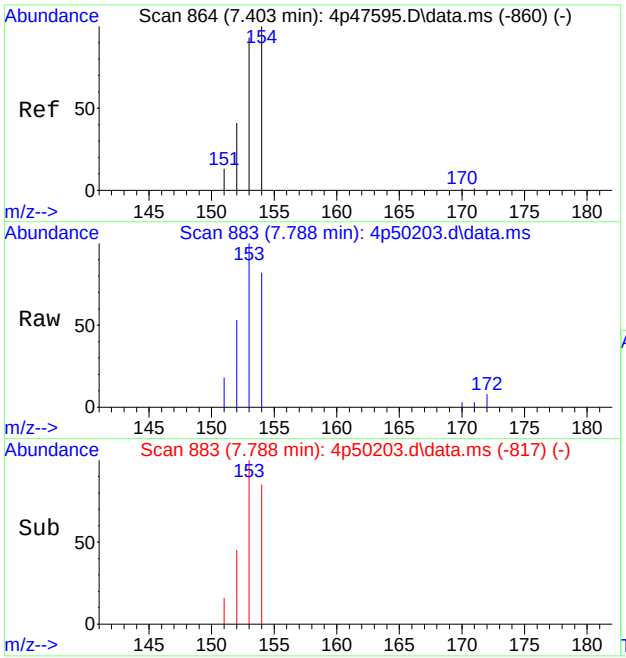


#15
Acenaphthylene
Concen: 5.07 ppm
RT: 7.613 min Scan# 860
Delta R.T. -0.008 min
Lab File: 4p50203.d
Acq: 17 Dec 2021 8:56 pm

Tgt Ion:152 Resp: 226

Ion	Ratio	Lower	Upper
152	100		
151	22.9	0.0	47.6
153	10.8	0.0	44.0

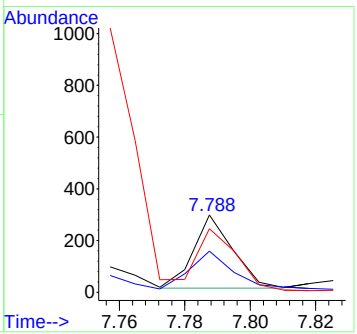


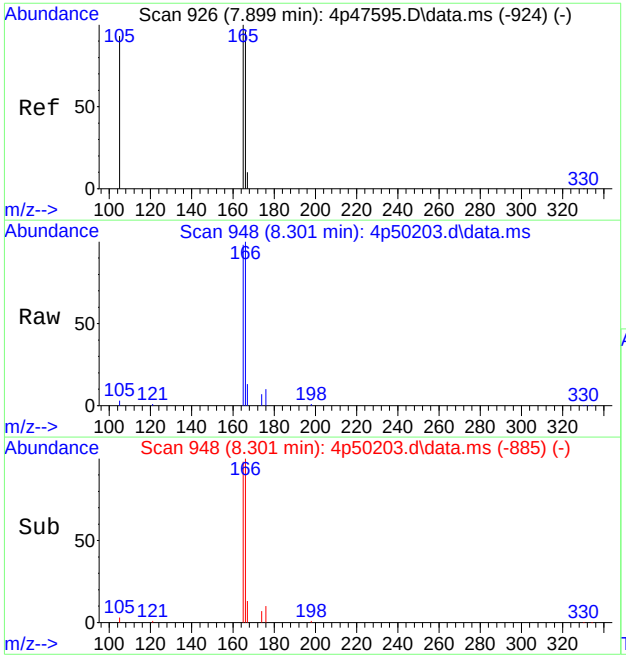


#16
Acenaphthene
Concen: 8.33 ppm m
RT: 7.788 min Scan# 883
Delta R.T. 0.000 min
Lab File: 4p50203.d
Acq: 17 Dec 2021 8:56 pm

Tgt Ion:153 Resp: 237

Ion	Ratio	Lower	Upper
153	100		
152	53.2	28.9	88.9
154	82.3	47.3	107.3

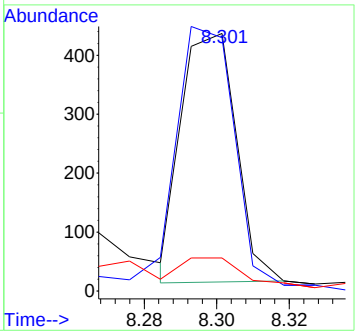


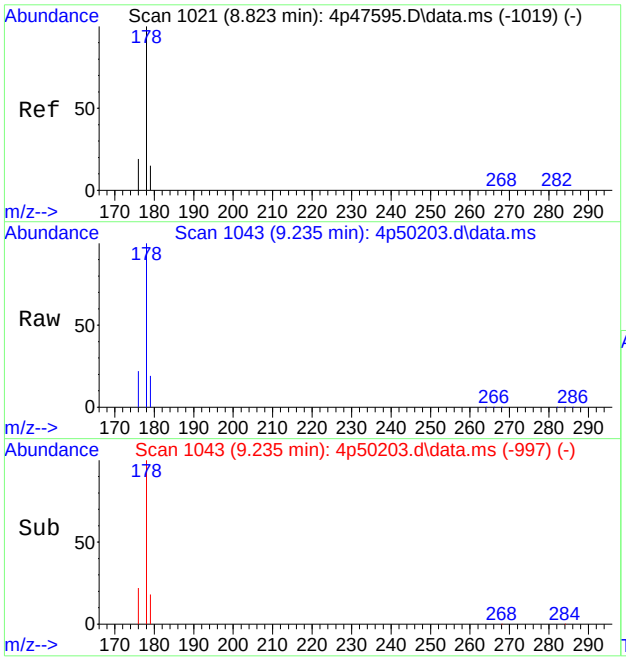


#17
Fluorene
Concen: 12.96 ppm
RT: 8.301 min Scan# 948
Delta R.T. 0.000 min
Lab File: 4p50203.d
Acq: 17 Dec 2021 8:56 pm

Tgt Ion:166 Resp: 445

Ion	Ratio	Lower	Upper
166	100		
165	98.0	60.7	120.7
167	9.6	0.0	43.1

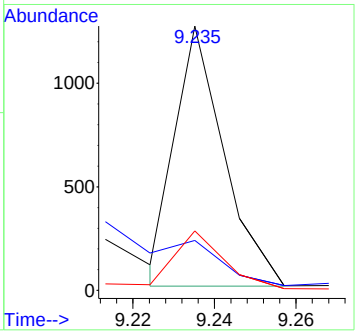


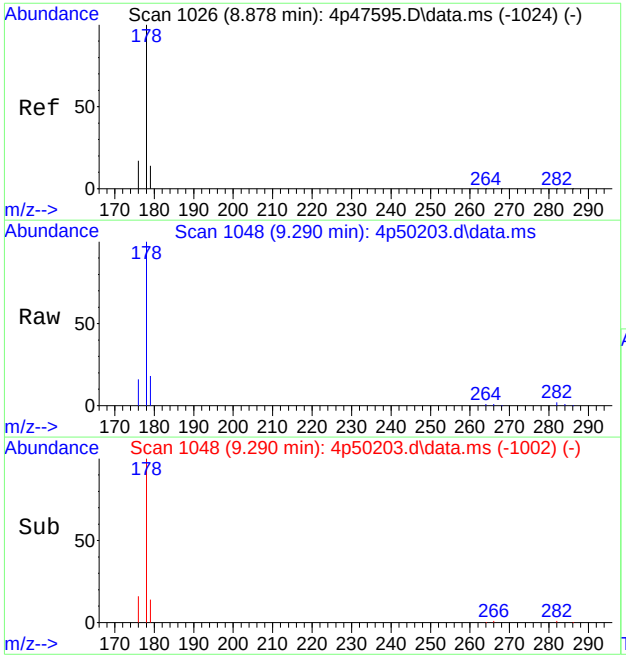


#23
Phenanthrene
Concen: 19.58 ppm m
RT: 9.235 min Scan# 1043
Delta R.T. 0.000 min
Lab File: 4p50203.d
Acq: 17 Dec 2021 8:56 pm

Tgt Ion:178 Resp: 1041

Ion	Ratio	Lower	Upper
178	100		
179	18.9	0.0	43.9
176	22.5	0.0	52.4

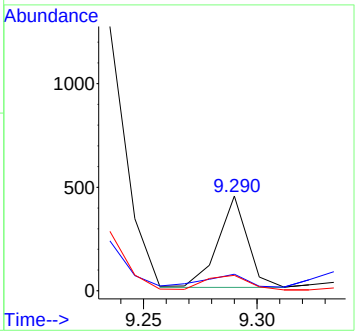


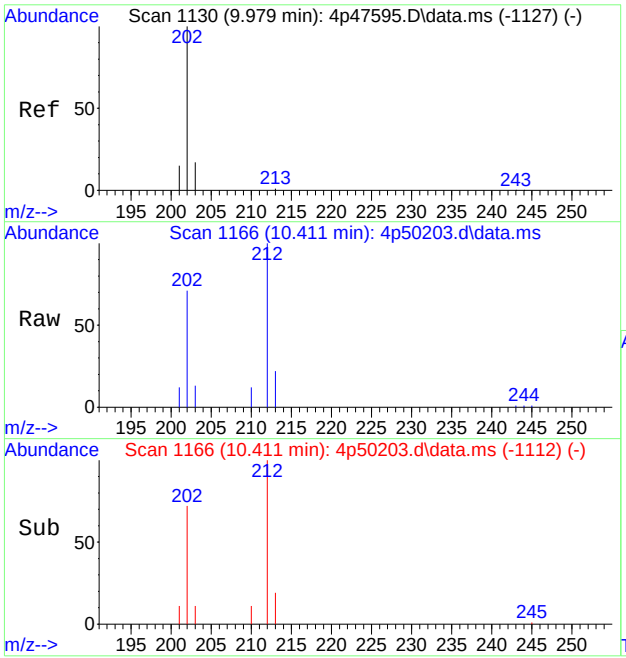


#24
Anthracene
Concen: 7.79 ppm m
RT: 9.290 min Scan# 1048
Delta R.T. 0.000 min
Lab File: 4p50203.d
Acq: 17 Dec 2021 8:56 pm

Tgt Ion:178 Resp: 397

Ion	Ratio	Lower	Upper
178	100		
179	17.5	0.0	44.5
176	16.4	0.0	49.5

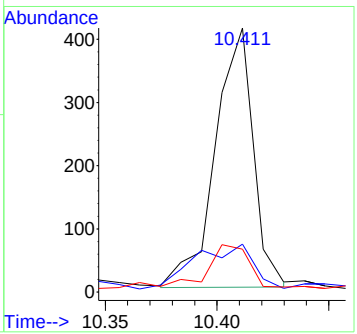


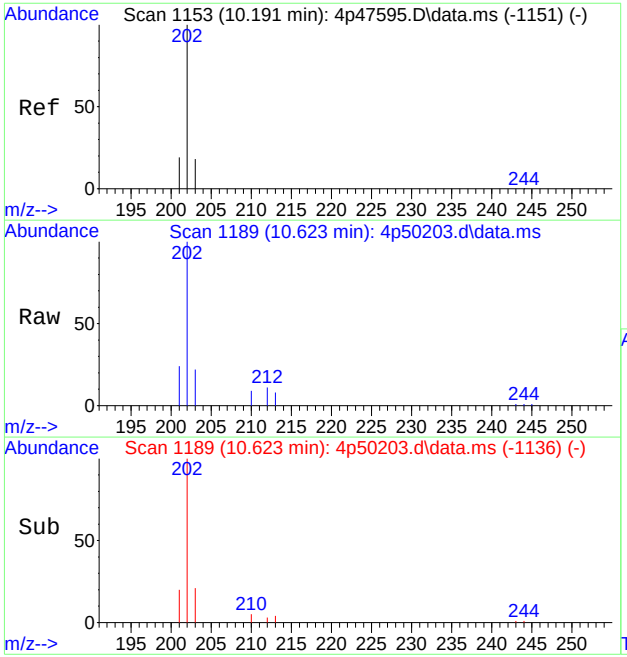


#25
Fluoranthene
Concen: 8.82 ppm
RT: 10.411 min Scan# 1166
Delta R.T. 0.000 min
Lab File: 4p50203.d
Acq: 17 Dec 2021 8:56 pm

Tgt Ion:202 Resp: 488

Ion	Ratio	Lower	Upper
202	100		
203	16.7	0.0	46.1
201	14.7	0.0	45.2

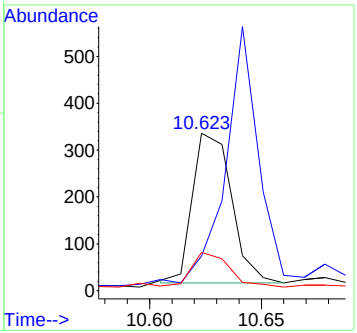




#26
Pyrene
Concen: 6.37 ppm
RT: 10.623 min Scan# 1189
Delta R.T. -0.009 min
Lab File: 4p50203.d
Acq: 17 Dec 2021 8:56 pm

Tgt Ion:202 Resp: 388

Ion	Ratio	Lower	Upper
202	100		
203	14.4	0.0	47.7
201	23.1	0.0	47.3



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/19/21 23:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2628\
Data File : 4p50204.d
Acq On : 17 Dec 2021 9:20 pm
Operator : kristis
Sample : jd36168-9 Inst : MS4P
Misc : op37001a,e4p2628,250,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 19 22:38:11 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 21:34:37 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.794	150	16134	800.00	ppm	# 0.00
13) Fluorene-d10	8.267	176	22982	800.00	ppm	0.00
20) Fluoranthene-d10	10.393	212	37808	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.051	264	19866	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.517	112	41105	4107.05	ppm	0.01
Spiked Amount 50.000			Recovery	= 8214.10%		
4) Phenol-d5	4.460	99	57045	3004.38	ppm	0.00
Spiked Amount 50.000			Recovery	= 6008.76%		
7) Nitrobenzene-d5	5.327	82	175394	11319.64	ppm	0.00
Spiked Amount 50.000			Recovery	= 22639.28%		
14) 2-Fluorobiphenyl	7.114	172	285210	9729.18	ppm	0.00
Spiked Amount 50.000			Recovery	= 19458.36%		
19) 2,4,6-Tribromophenol	8.540	330	63046	14374.13	ppm	0.00
Spiked Amount 50.000			Recovery	= 28748.26%		
27) Terphenyl-d14	10.807	244	204398	7547.73	ppm	0.00
Spiked Amount 50.000			Recovery	= 15095.46%		
Target Compounds						Qvalue
8) Naphthalene	6.045	128	244m	5.28	ppm	
10) 2-Methylnaphthalene	6.734	141	189	7.83	ppm	88
16) Acenaphthene	7.788	153	151	5.53	ppm	86
17) Fluorene	8.302	166	272	8.25	ppm	98
23) Phenanthrene	9.235	178	682	13.39	ppm	88
24) Anthracene	9.290	178	418m	8.56	ppm	
25) Fluoranthene	10.412	202	604	11.39	ppm	94
26) Pyrene	10.632	202	454	7.78	ppm	64
33) Benzo[a]pyrene	13.066	252	226	6.01	ppm	95
34) Indeno[1,2,3-cd]pyrene	14.104	276	240	5.36	ppm	94
35) Dibenz[a,h]anthracene	14.128	278	182	5.22	ppm	90
36) Benzo[g,h,i]perylene	14.390	276	193	5.08	ppm	96

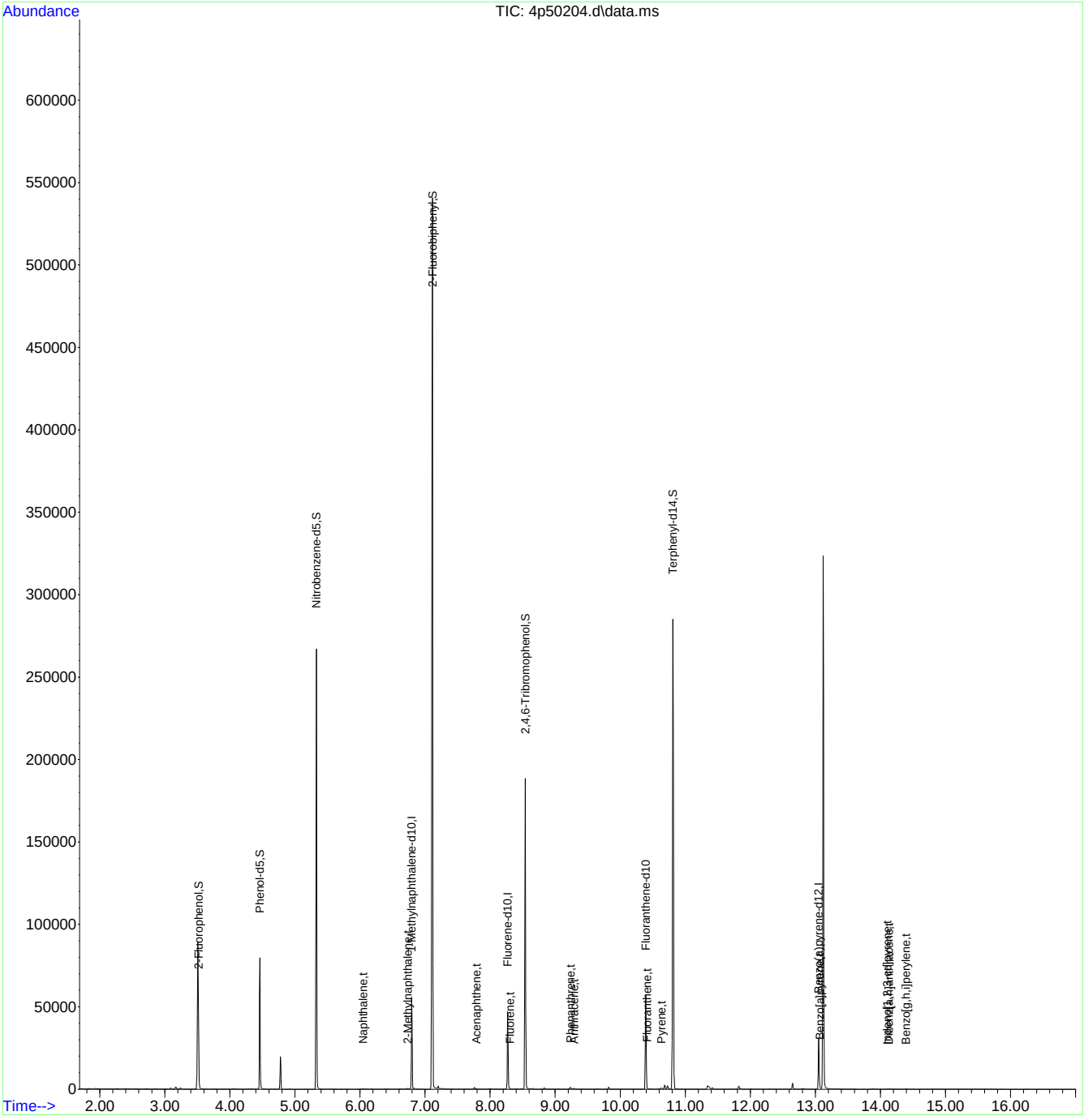
(#) = qualifier out of range (m) = manual integration (+) = signals summed

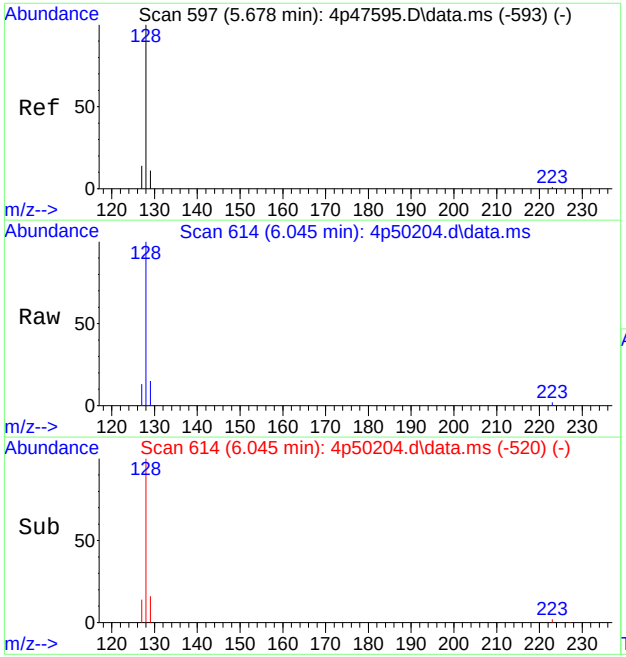
9.1.18
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2628\
Data File : 4p50204.d
Acq On : 17 Dec 2021 9:20 pm
Operator : kristis
Sample : jd36168-9 Inst : MS4P
Misc : op37001a,e4p2628,250,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 19 22:38:11 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 21:34:37 2021
Response via : Initial Calibration

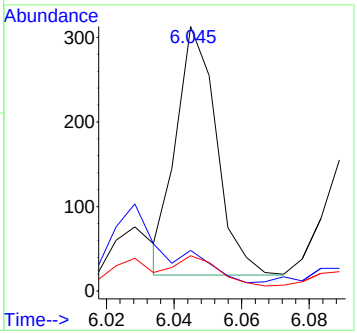


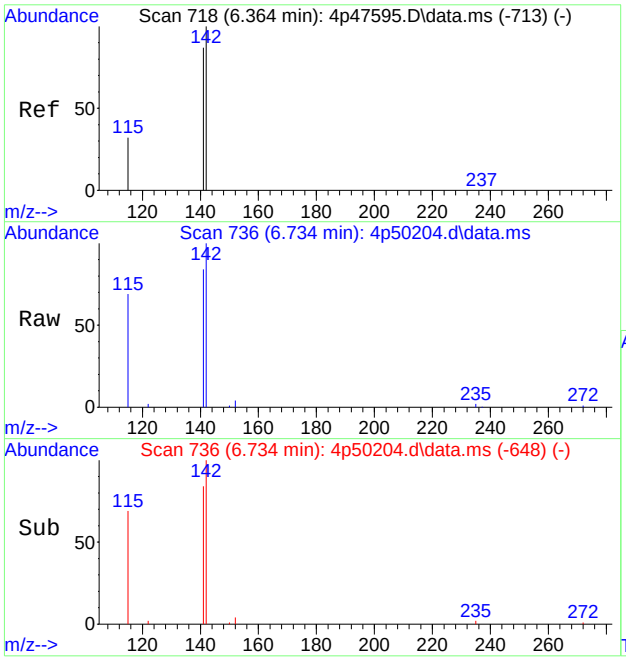


#8
Naphthalene
Concen: 5.28 ppm m
RT: 6.045 min Scan# 614
Delta R.T. -0.005 min
Lab File: 4p50204.d
Acq: 17 Dec 2021 9:20 pm

Tgt Ion:128 Resp: 244

Ion	Ratio	Lower	Upper
128	100		
129	15.3	0.0	41.7
127	13.4	0.0	42.8

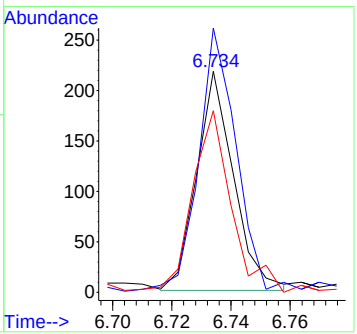


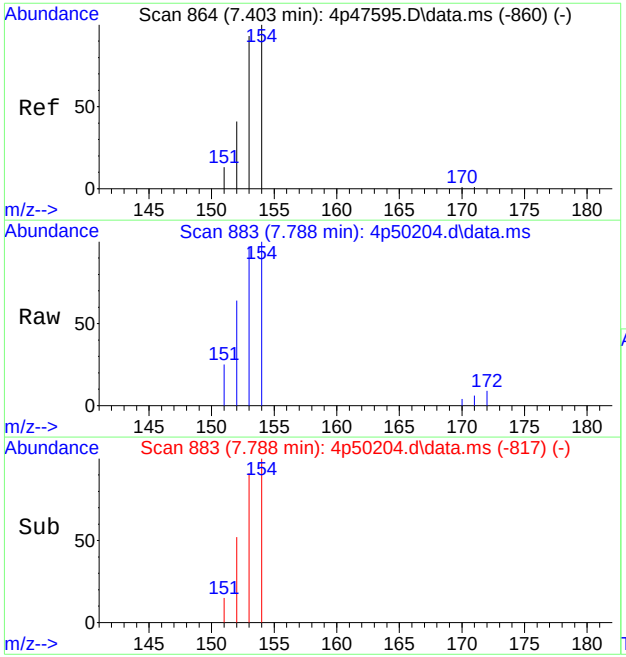


#10
2-Methylnaphthalene
Concen: 7.83 ppm
RT: 6.734 min Scan# 736
Delta R.T. 0.000 min
Lab File: 4p50204.d
Acq: 17 Dec 2021 9:20 pm

Tgt Ion:141 Resp: 189

Ion	Ratio	Lower	Upper
141	100		
142	118.7	70.6	130.6
115	83.1	49.8	109.8

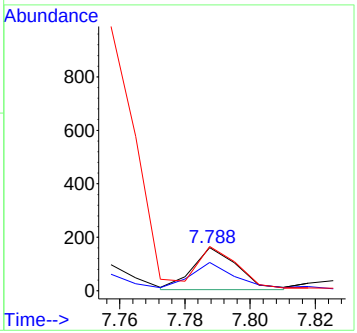


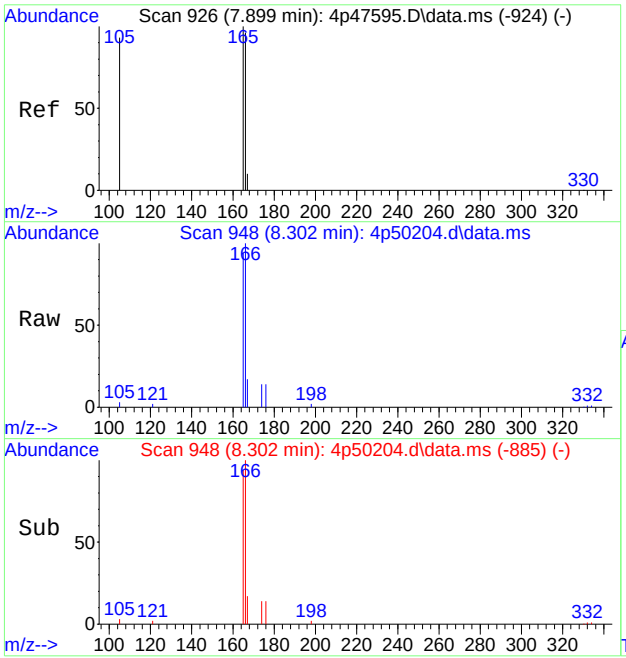


#16
Acenaphthene
Concen: 5.53 ppm
RT: 7.788 min Scan# 883
Delta R.T. 0.000 min
Lab File: 4p50204.d
Acq: 17 Dec 2021 9:20 pm

Tgt Ion:153 Resp: 151

Ion	Ratio	Lower	Upper
153	100		
152	64.2	28.9	88.9
154	94.3	47.3	107.3

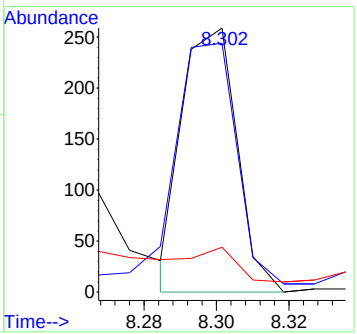


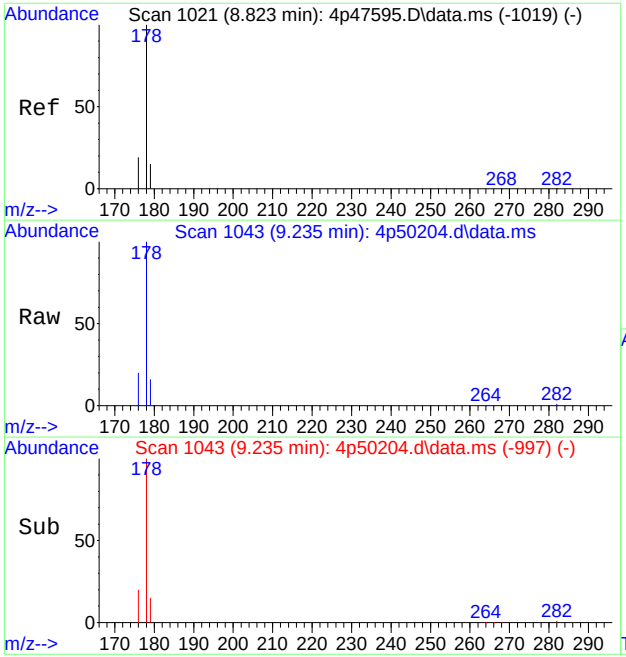


#17
Fluorene
Concen: 8.25 ppm
RT: 8.302 min Scan# 948
Delta R.T. 0.000 min
Lab File: 4p50204.d
Acq: 17 Dec 2021 9:20 pm

Tgt Ion:166 Resp: 272

Ion	Ratio	Lower	Upper
166	100		
165	89.3	60.7	120.7
167	9.4	0.0	43.1

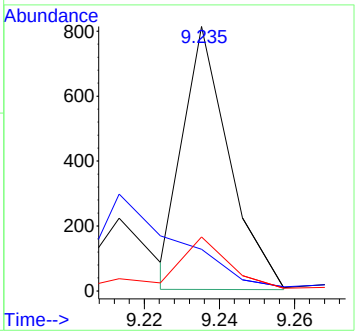


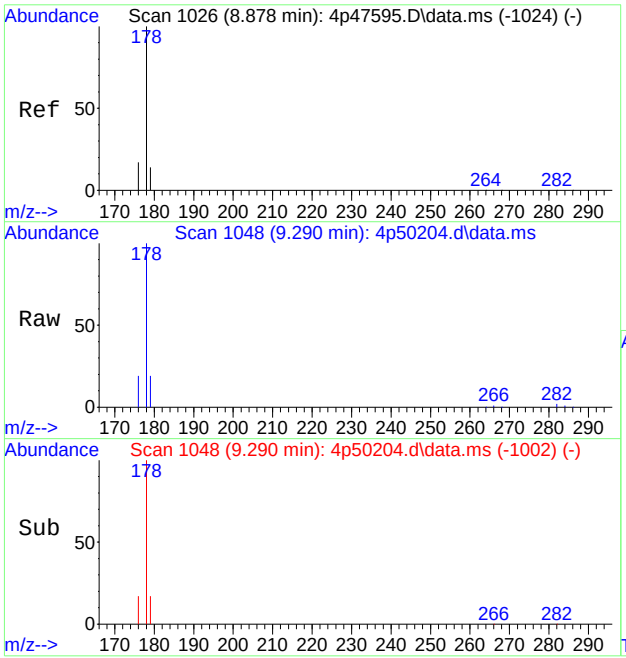


#23
Phenanthrene
Concen: 13.39 ppm
RT: 9.235 min Scan# 1043
Delta R.T. 0.000 min
Lab File: 4p50204.d
Acq: 17 Dec 2021 9:20 pm

Tgt Ion:178 Resp: 682

Ion	Ratio	Lower	Upper
178	100		
179	4.8	0.0	43.9
176	19.5	0.0	52.4

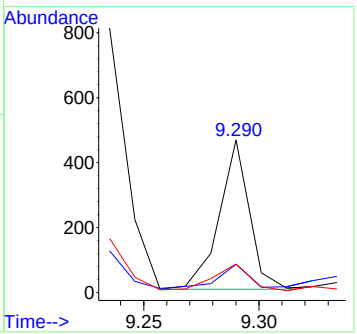


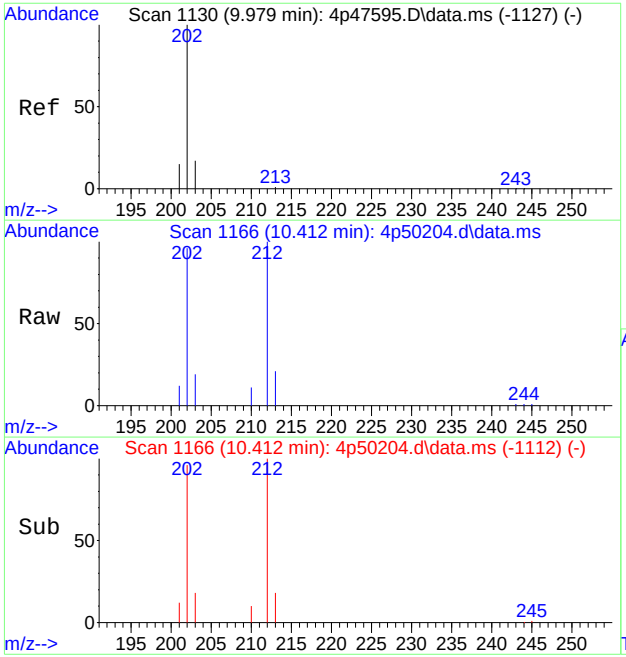


#24
Anthracene
Concen: 8.56 ppm m
RT: 9.290 min Scan# 1048
Delta R.T. 0.000 min
Lab File: 4p50204.d
Acq: 17 Dec 2021 9:20 pm

Tgt Ion:178 Resp: 418

Ion	Ratio	Lower	Upper
178	100		
179	18.5	0.0	44.5
176	18.7	0.0	49.5

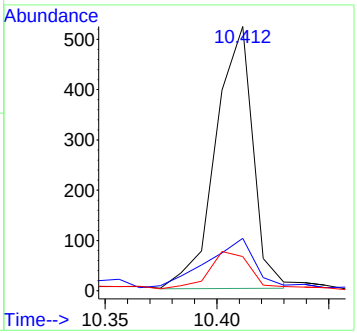


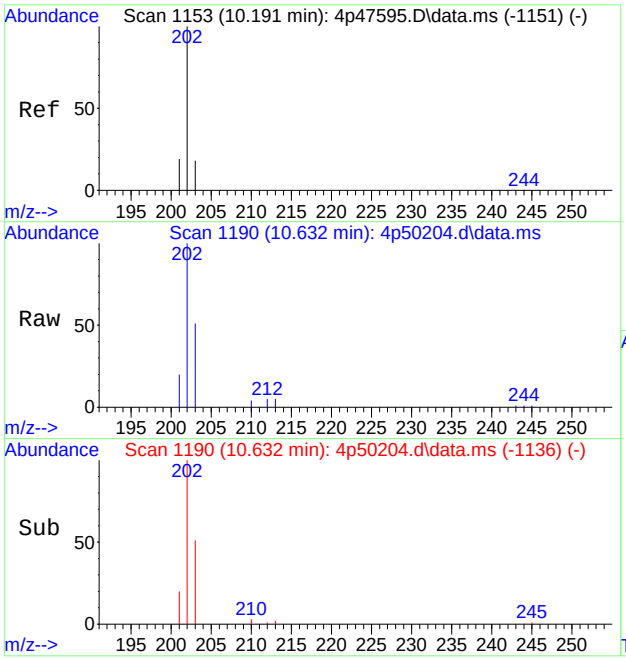


#25
Fluoranthene
Concen: 11.39 ppm
RT: 10.412 min Scan# 1166
Delta R.T. 0.000 min
Lab File: 4p50204.d
Acq: 17 Dec 2021 9:20 pm

Tgt Ion:202 Resp: 604

Ion	Ratio	Lower	Upper
202	100		
203	18.2	0.0	46.1
201	12.0	0.0	45.2

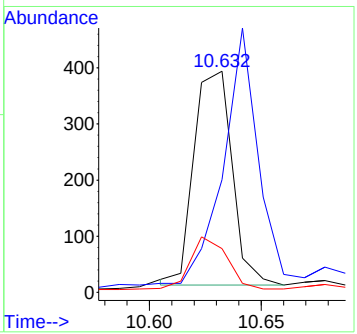


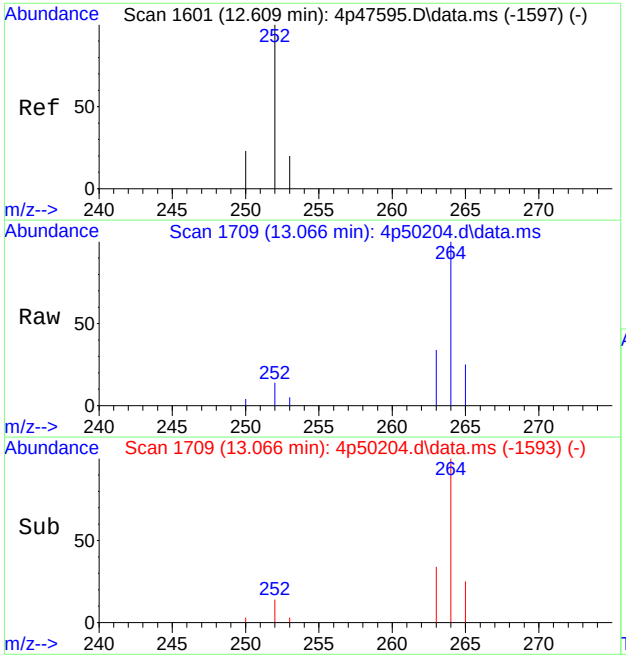


#26
Pyrene
Concen: 7.78 ppm
RT: 10.632 min Scan# 1190
Delta R.T. 0.000 min
Lab File: 4p50204.d
Acq: 17 Dec 2021 9:20 pm

Tgt Ion:202 Resp: 454

Ion	Ratio	Lower	Upper
202	100		
203	47.1	0.0	47.7
201	19.0	0.0	47.3

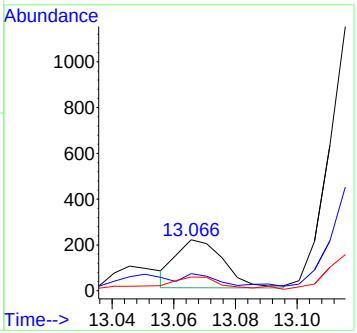


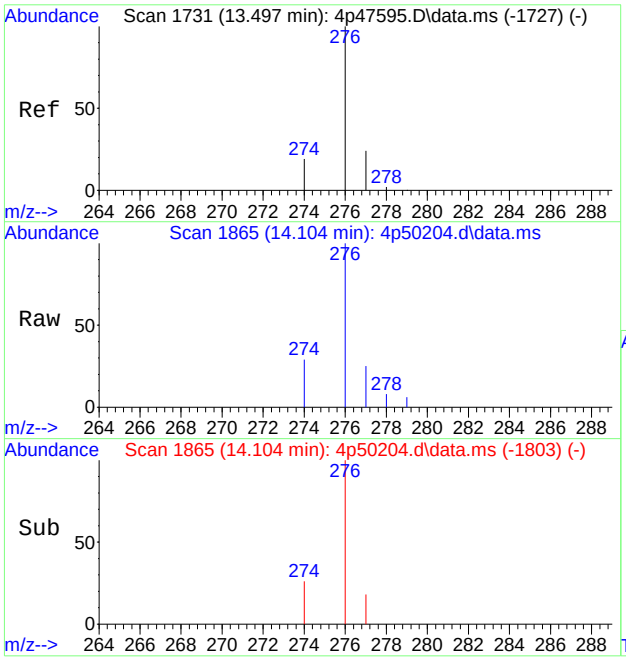


#33
Benzo[a]pyrene
Concen: 6.01 ppm
RT: 13.066 min Scan# 1709
Delta R.T. -0.005 min
Lab File: 4p50204.d
Acq: 17 Dec 2021 9:20 pm

Tgt Ion:252 Resp: 226

Ion	Ratio	Lower	Upper
252	100		
253	21.1	0.0	52.1
250	27.3	0.0	53.2

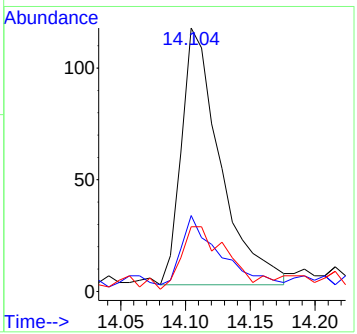


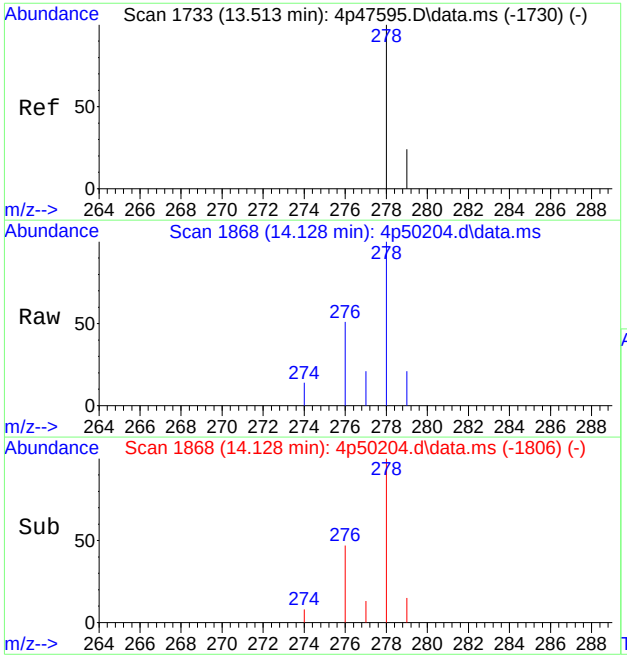


#34
Indeno[1,2,3-cd]pyrene
Concen: 5.36 ppm
RT: 14.104 min Scan# 1865
Delta R.T. -0.008 min
Lab File: 4p50204.d
Acq: 17 Dec 2021 9:20 pm

Tgt Ion:276 Resp: 240

Ion	Ratio	Lower	Upper
276	100		
274	27.1	0.0	52.0
277	22.2	0.0	53.2

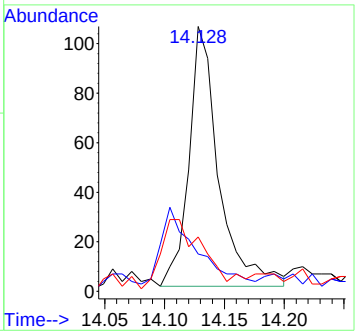


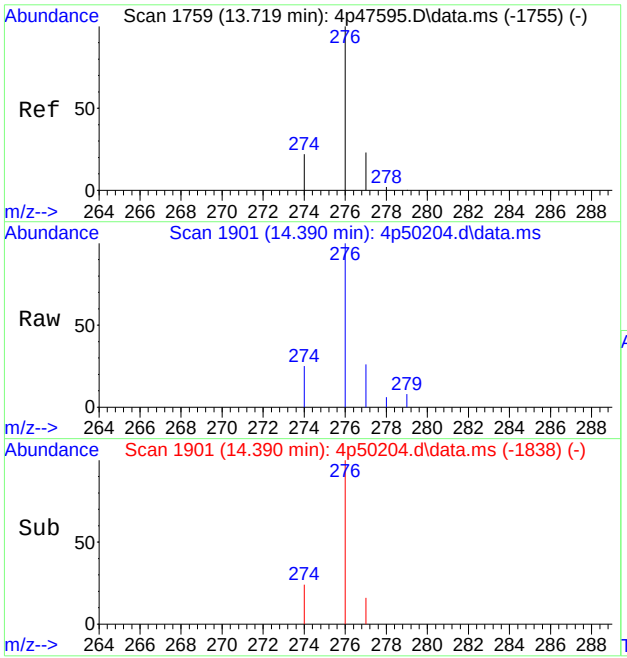


#35
Dibenz[a,h]anthracene
Concen: 5.22 ppm
RT: 14.128 min Scan# 1868
Delta R.T. -0.008 min
Lab File: 4p50204.d
Acq: 17 Dec 2021 9:20 pm

Tgt Ion:278 Resp: 182

Ion	Ratio	Lower	Upper
278	100		
274	2.9	0.0	39.5
277	12.1	0.0	41.1

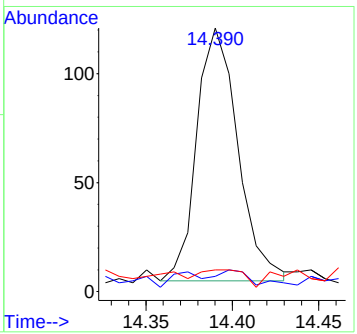




#36
Benzo[g,h,i]perylene
Concen: 5.08 ppm
RT: 14.390 min Scan# 1901
Delta R.T. 0.000 min
Lab File: 4p50204.d
Acq: 17 Dec 2021 9:20 pm

Tgt Ion:276 Resp: 193

Ion	Ratio	Lower	Upper
276	100		
278	3.5	0.0	32.2
279	2.2	0.0	30.0



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya 12/10/21 10:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\121021\e4p2614\
Data File : 4p49924.d
Acq On : 8 Dec 2021 10:31 am
Operator : chriss2
Sample : jd36168-10 Inst : MS4P
Misc : op36999a,e4p2614,258,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 10 04:23:41 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 10 03:44:37 2021
Response via : Initial Calibration

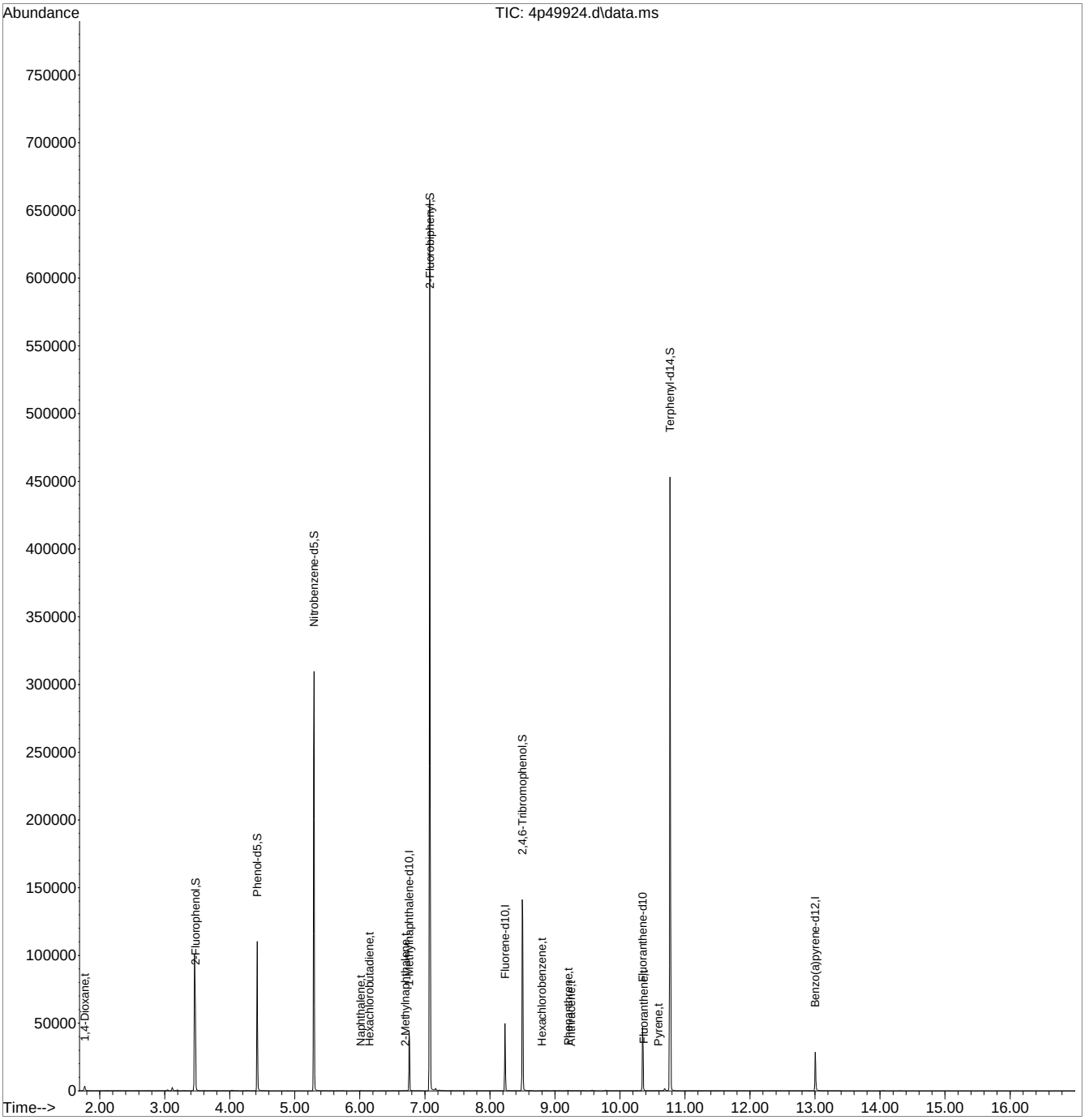
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.758	150	13436	800.00	ppm	0.00
13) Fluorene-d10	8.234	176	20865	800.00	ppm	0.00
20) Fluoranthene-d10	10.347	212	35937	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.004	264	16453	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.471	112	48487	5817.45	ppm	0.01
Spiked Amount 50.000			Recovery	= 11634.90%		
4) Phenol-d5	4.422	99	75594	4780.75	ppm	0.00
Spiked Amount 50.000			Recovery	= 9561.50%		
7) Nitrobenzene-d5	5.295	82	179828	13936.30	ppm	0.00
Spiked Amount 50.000			Recovery	= 27872.60%		
14) 2-Fluorobiphenyl	7.076	172	298050	11198.77	ppm	0.00
Spiked Amount 50.000			Recovery	= 22397.54%		
19) 2,4,6-Tribromophenol	8.498	330	60901	15293.89	ppm	0.00
Spiked Amount 50.000			Recovery	= 30587.78%		
27) Terphenyl-d14	10.771	244	260691	10127.63	ppm	0.00
Spiked Amount 50.000			Recovery	= 20255.26%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.768	88	2382m	758.96	ppm	
8) Naphthalene	6.012	128	145	3.77	ppm	83
9) Hexachlorobutadiene	6.144	225	42	4.47	ppm	94
10) 2-Methylnaphthalene	6.698	141	71	3.53	ppm	97
21) Hexachlorobenzene	8.797	284	47	4.14	ppm	88
23) Phenanthrene	9.203	178	302	6.24	ppm	98
24) Anthracene	9.246	178	126	2.71	ppm	85
25) Fluoranthene	10.366	202	239	4.74	ppm	98
26) Pyrene	10.587	202	145	2.61	ppm	93

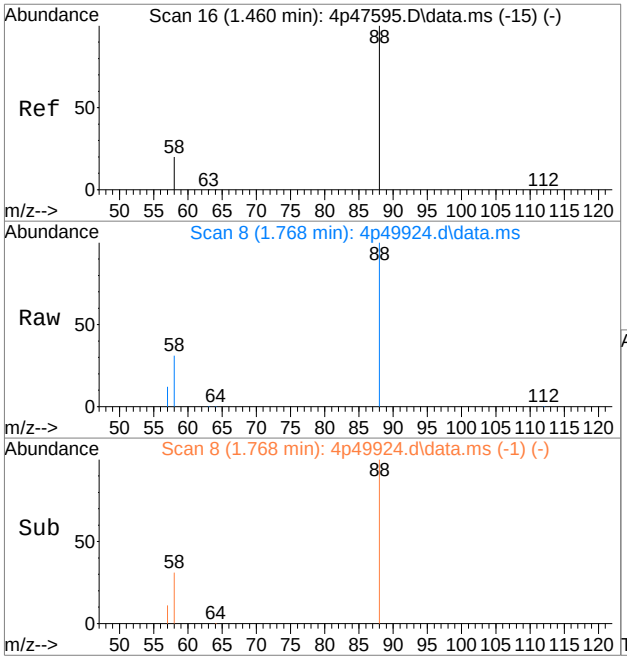
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\121021\e4p2614\
Data File : 4p49924.d
Acq On : 8 Dec 2021 10:31 am
Operator : chriss2
Sample : jd36168-10 Inst : MS4P
Misc : op36999a,e4p2614,258,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 10 04:23:41 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 10 03:44:37 2021
Response via : Initial Calibration

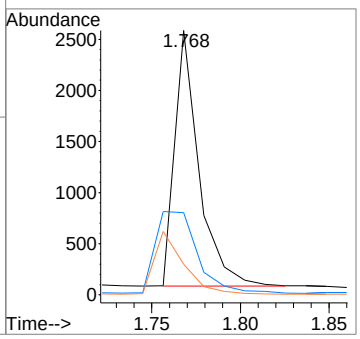


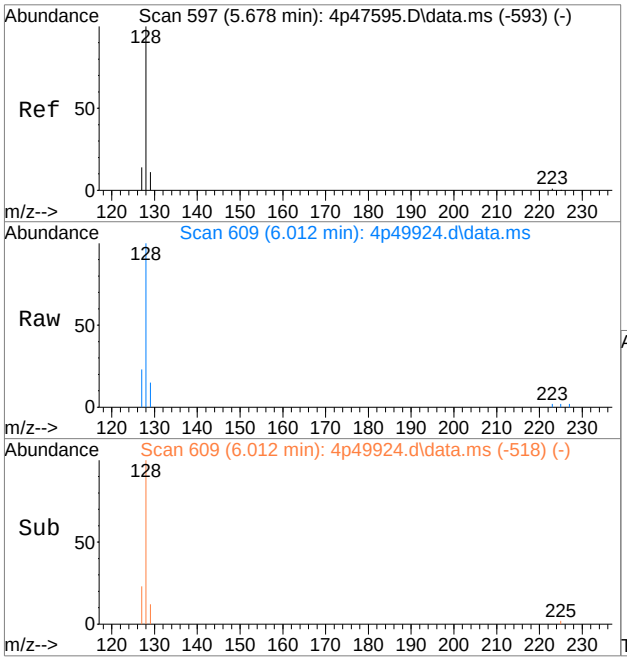


#2
1,4-Dioxane
Concen: 758.96 ppm m
RT: 1.768 min Scan# 8
Delta R.T. 0.000 min
Lab File: 4p49924.d
Acq: 8 Dec 2021 10:31 am

Tgt Ion: 88 Resp: 2382

Ion	Ratio	Lower	Upper
88	100		
58	31.0	9.0	49.0
57	11.6	0.0	34.2

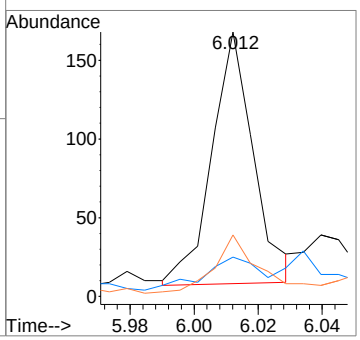


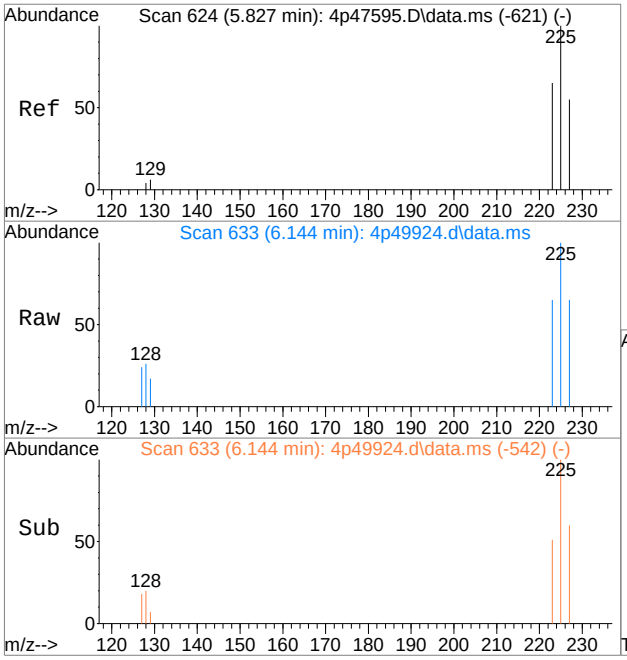


#8
Naphthalene
Concen: 3.77 ppm
RT: 6.012 min Scan# 609
Delta R.T. 0.000 min
Lab File: 4p49924.d
Acq: 8 Dec 2021 10:31 am

Tgt Ion:128 Resp: 145

Ion	Ratio	Lower	Upper
128	100		
129	8.4	0.0	41.0
127	22.4	0.0	42.2

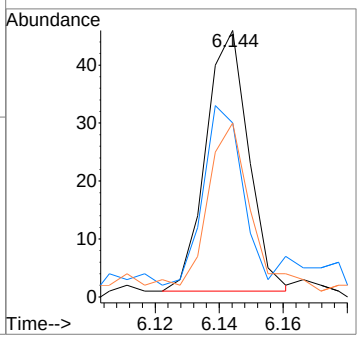


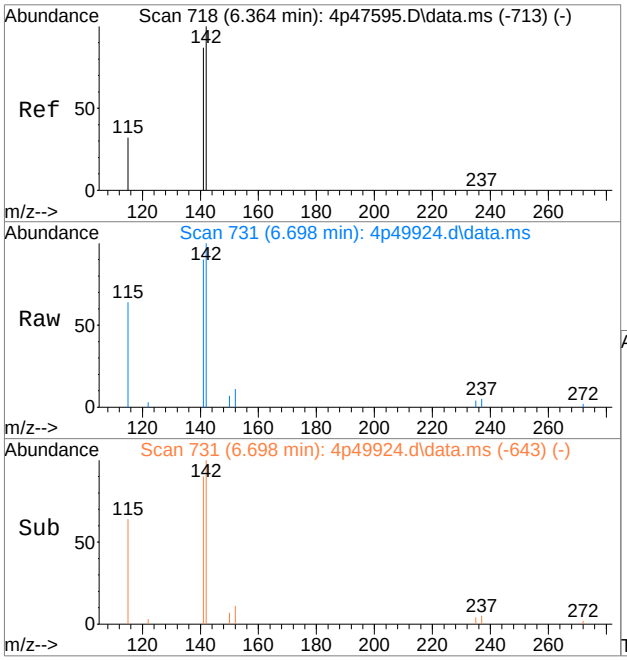


#9
Hexachlorobutadiene
Concen: 4.47 ppm
RT: 6.144 min Scan# 633
Delta R.T. 0.000 min
Lab File: 4p49924.d
Acq: 8 Dec 2021 10:31 am

Tgt Ion:225 Resp: 42

Ion	Ratio	Lower	Upper
225	100		
223	57.3	27.2	87.2
227	59.6	38.7	98.7

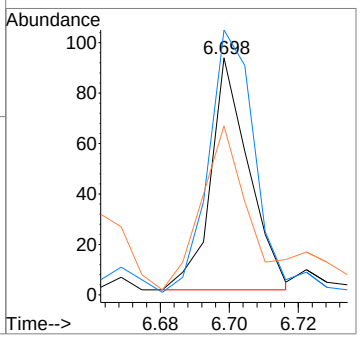


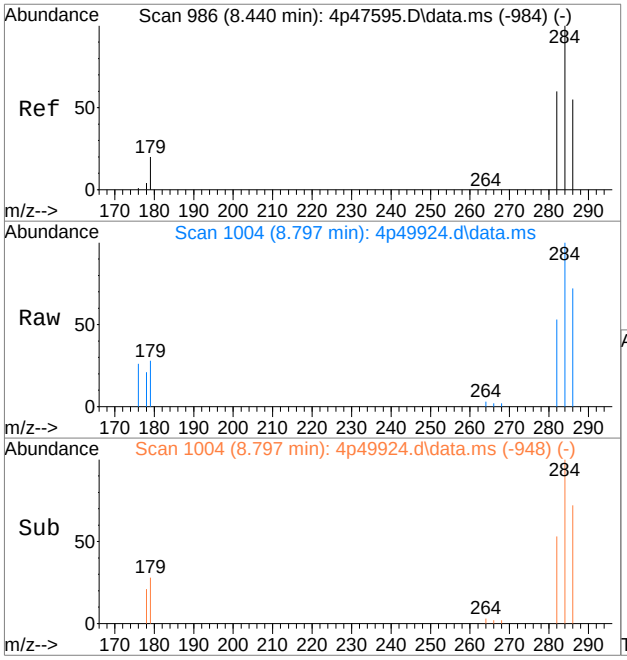


#10
2-Methylnaphthalene
Concen: 3.53 ppm
RT: 6.698 min Scan# 731
Delta R.T. 0.000 min
Lab File: 4p49924.d
Acq: 8 Dec 2021 10:31 am

Tgt Ion:141 Resp: 71

Ion	Ratio	Lower	Upper
141	100		
142	112.2	83.9	143.9
115	65.2	31.1	91.1

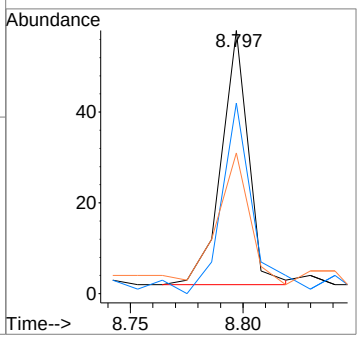


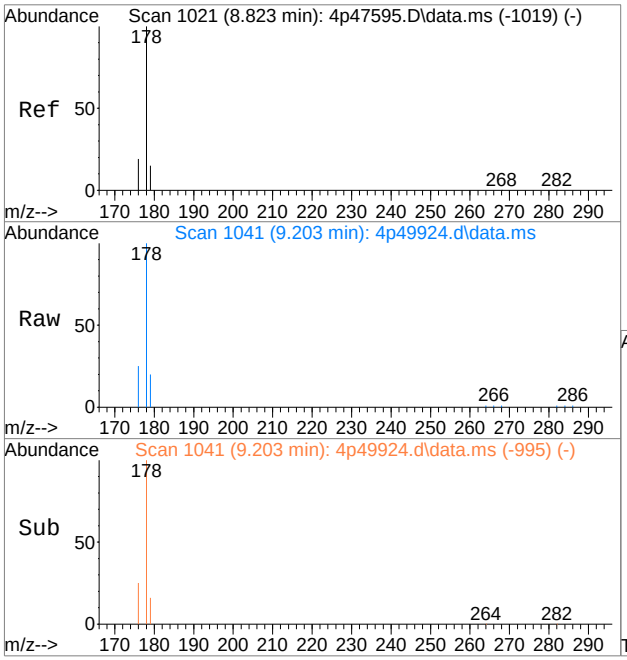


#21
Hexachlorobenzene
Concen: 4.14 ppm
RT: 8.797 min Scan# 1004
Delta R.T. 0.000 min
Lab File: 4p49924.d
Acq: 8 Dec 2021 10:31 am

Tgt Ion:284 Resp: 47

Ion	Ratio	Lower	Upper
284	100		
286	69.4	55.2	115.2
282	50.5	19.0	79.0

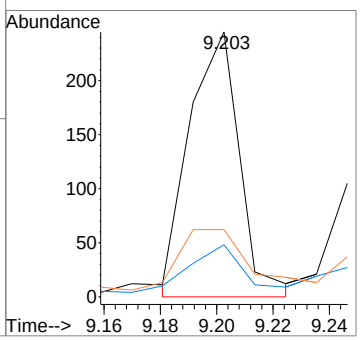


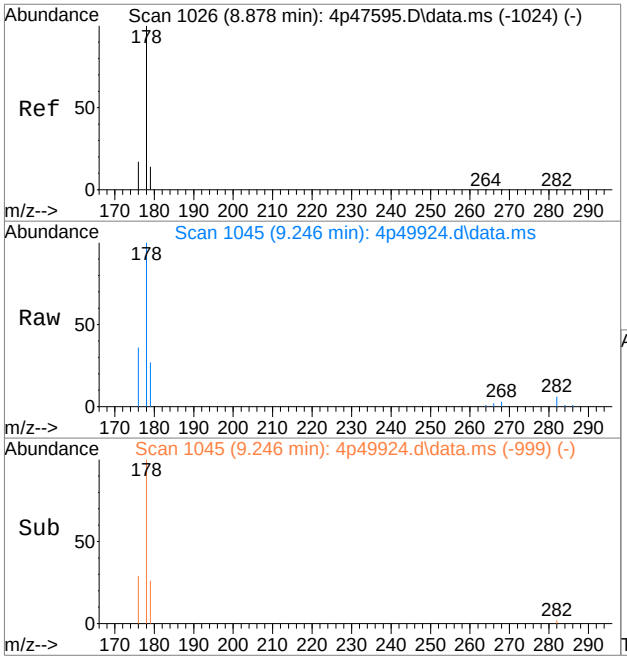


#23
Phenanthrene
Concen: 6.24 ppm
RT: 9.203 min Scan# 1041
Delta R.T. 0.000 min
Lab File: 4p49924.d
Acq: 8 Dec 2021 10:31 am

Tgt Ion:178 Resp: 302

Ion	Ratio	Lower	Upper
178	100		
179	16.5	0.0	45.9
176	19.9	0.0	48.7

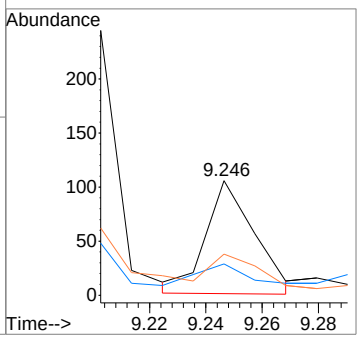


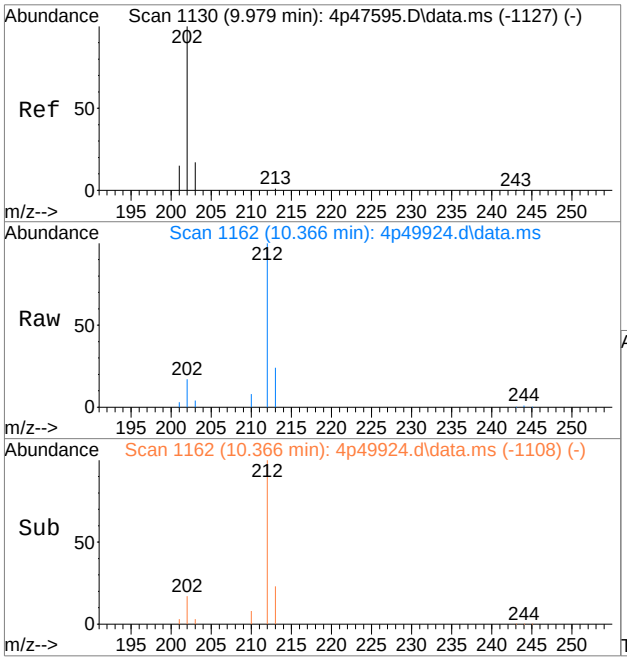


#24
Anthracene
Concen: 2.71 ppm
RT: 9.246 min Scan# 1045
Delta R.T. 0.000 min
Lab File: 4p49924.d
Acq: 8 Dec 2021 10:31 am

Tgt Ion:178 Resp: 126

Ion	Ratio	Lower	Upper
178	100		
179	20.3	0.0	43.6
176	26.2	0.0	50.0

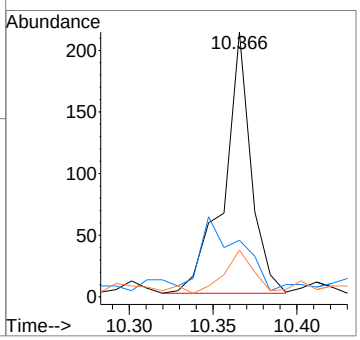


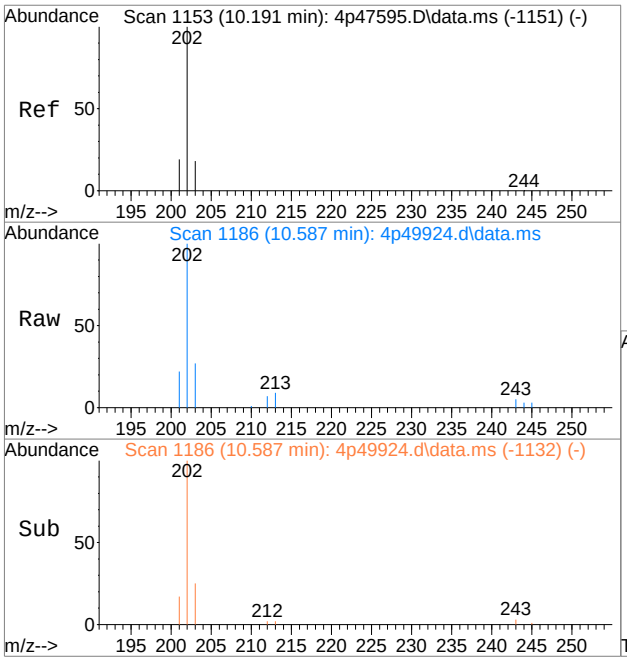


#25
Fluoranthene
Concen: 4.74 ppm
RT: 10.366 min Scan# 1162
Delta R.T. 0.000 min
Lab File: 4p49924.d
Acq: 8 Dec 2021 10:31 am

Tgt Ion:202 Resp: 239

Ion	Ratio	Lower	Upper
202	100		
203	16.1	0.0	45.4
201	15.4	0.0	46.5

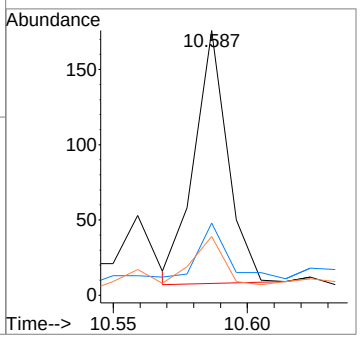




#26
Pyrene
Concen: 2.61 ppm
RT: 10.587 min Scan# 1186
Delta R.T. 0.000 min
Lab File: 4p49924.d
Acq: 8 Dec 2021 10:31 am

Tgt Ion:202 Resp: 145

Ion	Ratio	Lower	Upper
202	100		
203	22.3	0.0	47.2
201	18.7	0.0	47.8



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/10/21 10:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\121021\e4p2614\
Data File : 4p49925.d
Acq On : 8 Dec 2021 10:54 am
Operator : chriss2
Sample : jd36168-11 Inst : MS4P
Misc : op36999a,e4p2614,260,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 10 04:24:25 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 10 03:44:37 2021
Response via : Initial Calibration

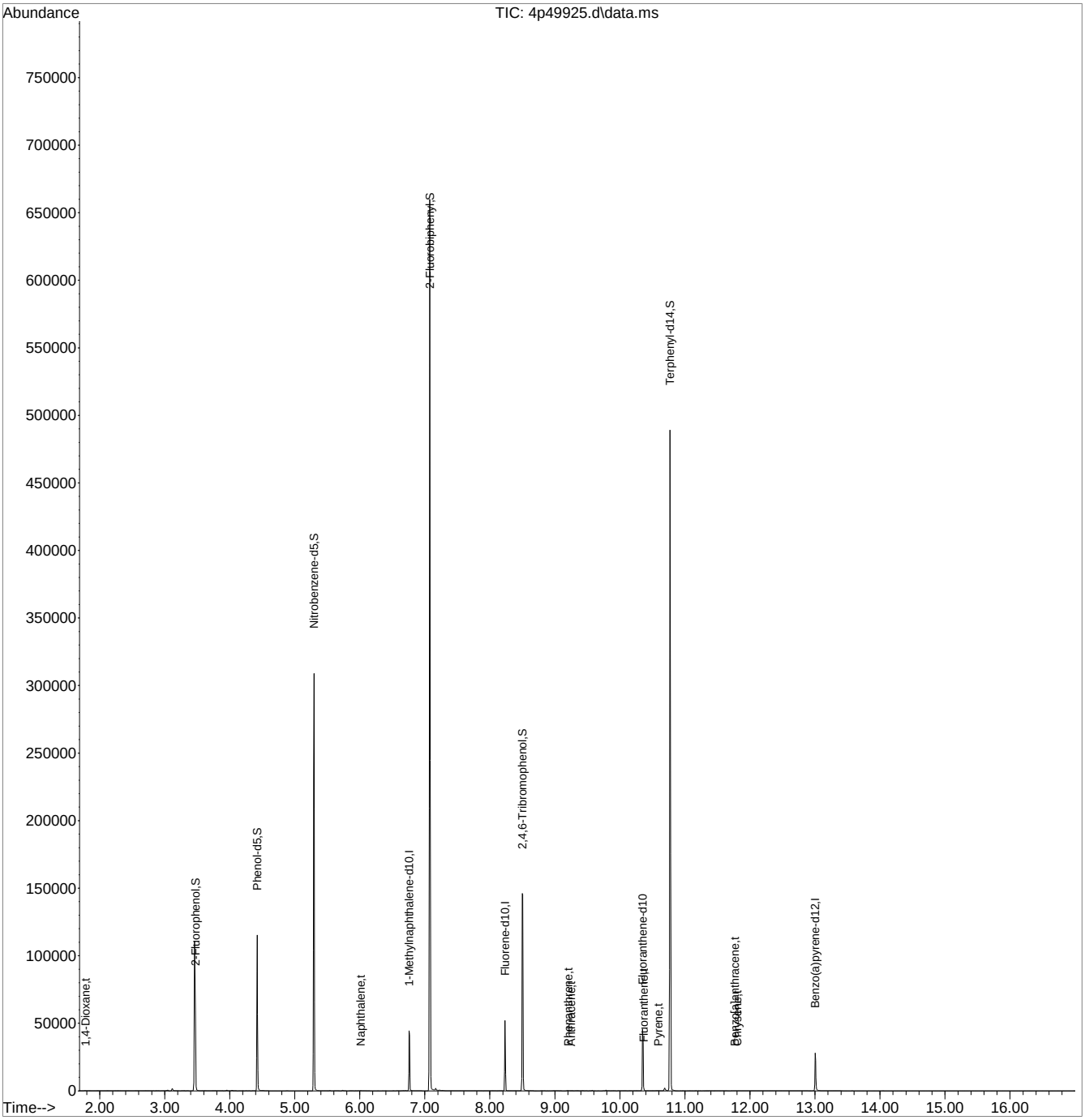
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.758	150	14086	800.00	ppm	0.00
13) Fluorene-d10	8.234	176	21492	800.00	ppm	0.00
20) Fluoranthene-d10	10.347	212	37791	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.005	264	16624	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.471	112	51439	5886.84	ppm	0.01
Spiked Amount 50.000			Recovery	= 11773.68%		
4) Phenol-d5	4.422	99	79297	4783.52	ppm	0.00
Spiked Amount 50.000			Recovery	= 9567.04%		
7) Nitrobenzene-d5	5.295	82	176473	13045.20	ppm	0.00
Spiked Amount 50.000			Recovery	= 26090.40%		
14) 2-Fluorobiphenyl	7.076	172	298495	10888.29	ppm	0.00
Spiked Amount 50.000			Recovery	= 21776.58%		
19) 2,4,6-Tribromophenol	8.498	330	64958	15836.81	ppm	0.00
Spiked Amount 50.000			Recovery	= 31673.62%		
27) Terphenyl-d14	10.771	244	286223	10574.01	ppm	0.00
Spiked Amount 50.000			Recovery	= 21148.02%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.780	88	93m	28.26	ppm	
8) Naphthalene	6.012	128	186	4.61	ppm	99
23) Phenanthrene	9.203	178	258	5.07	ppm	90
24) Anthracene	9.247	178	106	2.17	ppm	82
25) Fluoranthene	10.366	202	219	4.13	ppm	90
26) Pyrene	10.587	202	191	3.28	ppm	92
28) Benzo[a]anthracene	11.767	228	75	1.44	ppm	85
29) Chrysene	11.803	228	66	1.29	ppm	75

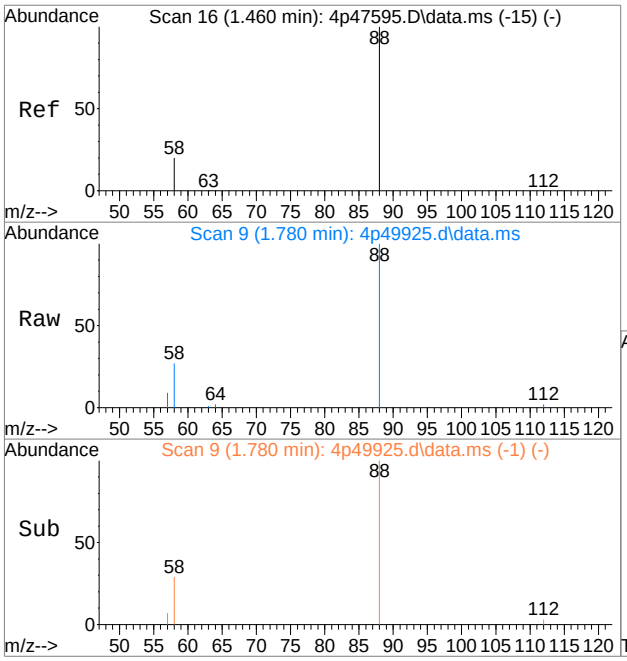
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\121021\e4p2614\
Data File : 4p49925.d
Acq On : 8 Dec 2021 10:54 am
Operator : chriss2
Sample : jd36168-11 Inst : MS4P
Misc : op36999a,e4p2614,260,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 10 04:24:25 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 10 03:44:37 2021
Response via : Initial Calibration

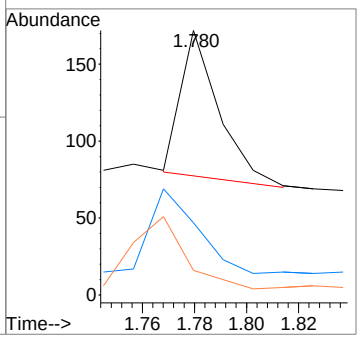


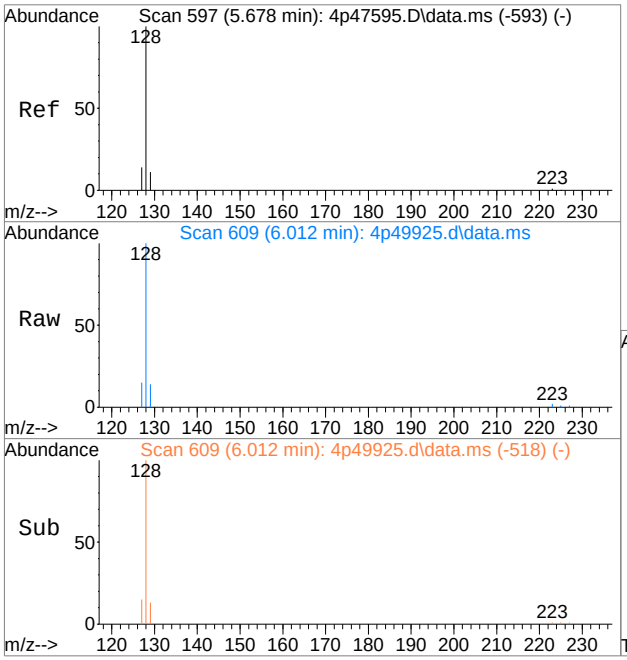


#2
1,4-Dioxane
Concen: 28.26 ppm m
RT: 1.780 min Scan# 9
Delta R.T. 0.012 min
Lab File: 4p49925.d
Acq: 8 Dec 2021 10:54 am

Tgt Ion: 88 Resp: 93

Ion	Ratio	Lower	Upper
88	100		
58	27.3	9.0	49.0
57	9.3	0.0	34.2

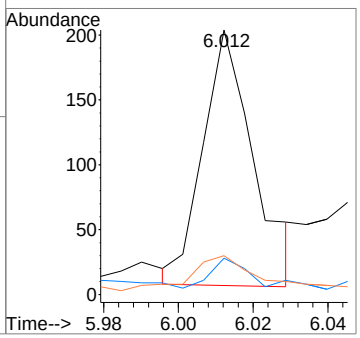


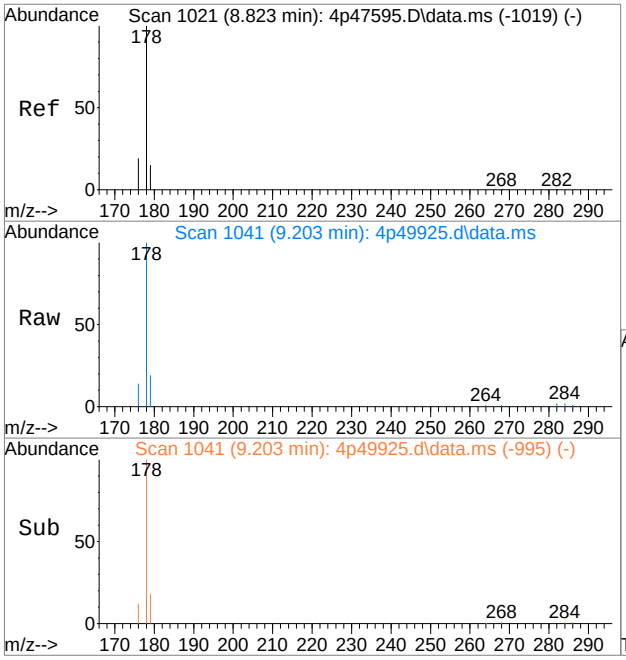


#8
Naphthalene
Concen: 4.61 ppm
RT: 6.012 min Scan# 609
Delta R.T. 0.000 min
Lab File: 4p49925.d
Acq: 8 Dec 2021 10:54 am

Tgt Ion:128 Resp: 186

Ion	Ratio	Lower	Upper
128	100		
129	10.8	0.0	41.0
127	12.7	0.0	42.2

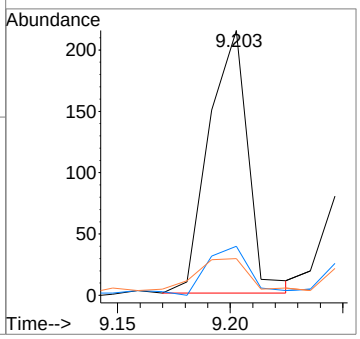


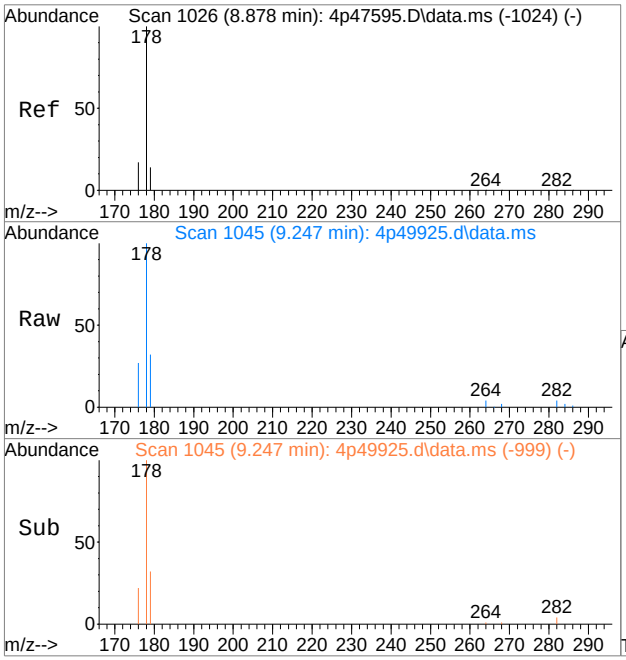


#23
Phenanthrene
Concen: 5.07 ppm
RT: 9.203 min Scan# 1041
Delta R.T. 0.000 min
Lab File: 4p49925.d
Acq: 8 Dec 2021 10:54 am

Tgt Ion:178 Resp: 258

Ion	Ratio	Lower	Upper
178	100		
179	17.5	0.0	45.9
176	11.7	0.0	48.7

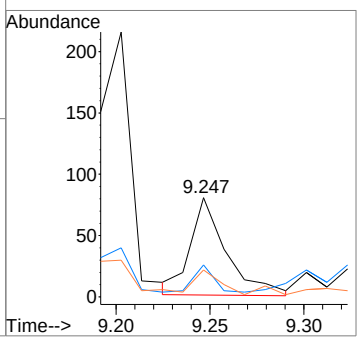


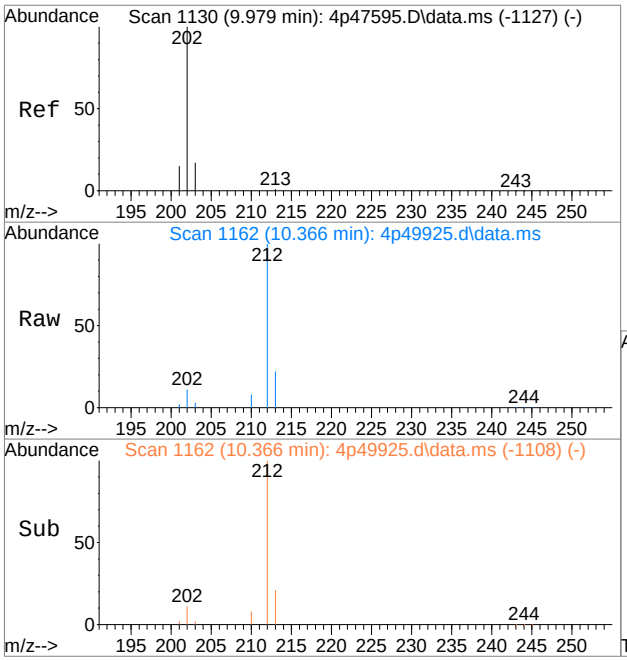


#24
Anthracene
Concen: 2.17 ppm
RT: 9.247 min Scan# 1045
Delta R.T. 0.000 min
Lab File: 4p49925.d
Acq: 8 Dec 2021 10:54 am

Tgt Ion:178 Resp: 106

Ion	Ratio	Lower	Upper
178	100		
179	25.5	0.0	43.6
176	24.8	0.0	50.0

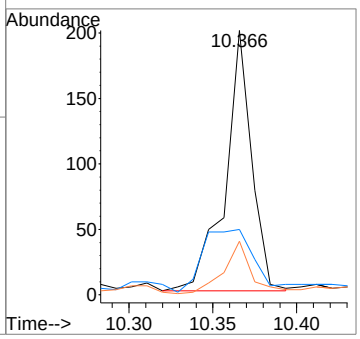


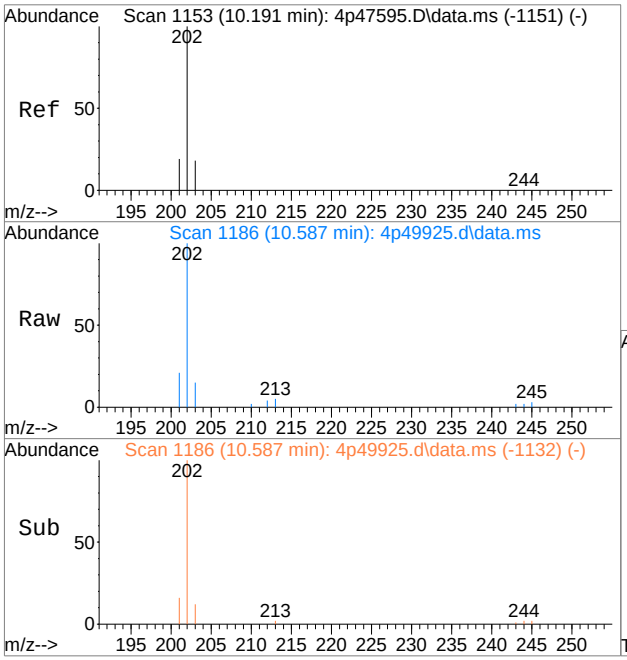


#25
Fluoranthene
Concen: 4.13 ppm
RT: 10.366 min Scan# 1162
Delta R.T. 0.000 min
Lab File: 4p49925.d
Acq: 8 Dec 2021 10:54 am

Tgt Ion:202 Resp: 219

Ion	Ratio	Lower	Upper
202	100		
203	21.2	0.0	45.4
201	19.2	0.0	46.5

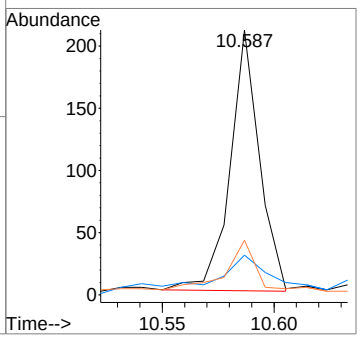


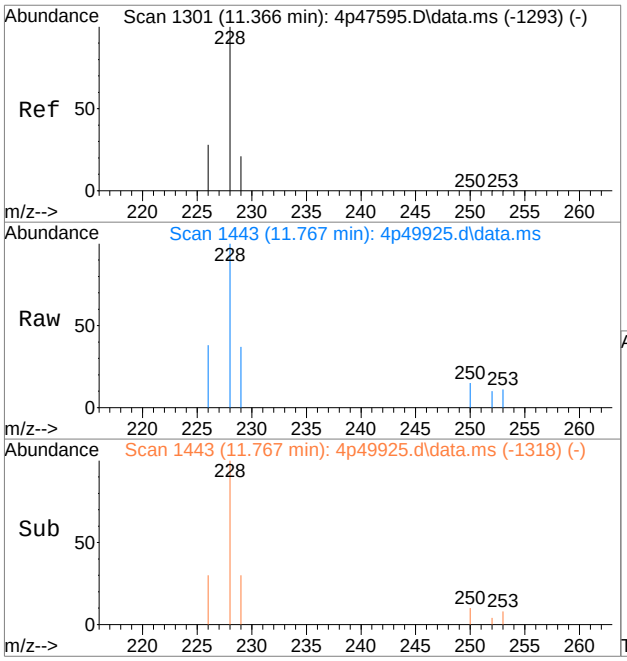


#26
Pyrene
Concen: 3.28 ppm
RT: 10.587 min Scan# 1186
Delta R.T. 0.000 min
Lab File: 4p49925.d
Acq: 8 Dec 2021 10:54 am

Tgt Ion:202 Resp: 191

Ion	Ratio	Lower	Upper
202	100		
203	11.3	0.0	47.2
201	18.9	0.0	47.8

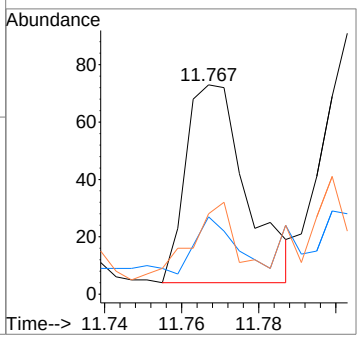


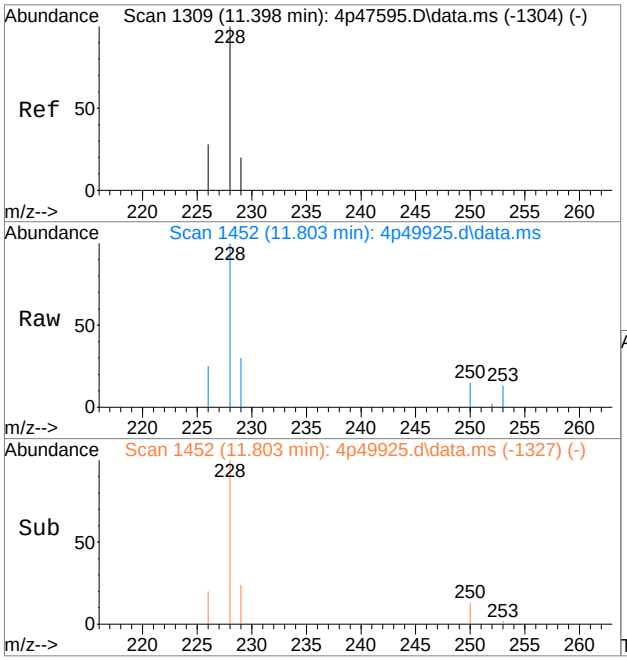


#28
Benzo[a]anthracene
Concen: 1.44 ppm
RT: 11.767 min Scan# 1443
Delta R.T. 0.000 min
Lab File: 4p49925.d
Acq: 8 Dec 2021 10:54 am

Tgt Ion:228 Resp: 75

Ion	Ratio	Lower	Upper
228	100		
229	17.1	0.0	49.6
226	18.7	0.0	60.0

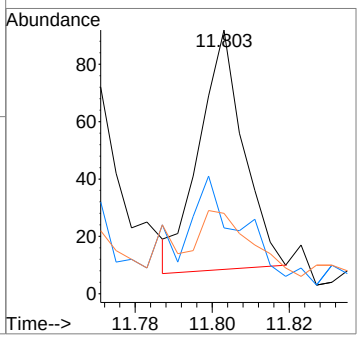




#29
Chrysene
Concen: 1.29 ppm
RT: 11.803 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 4p49925.d
Acq: 8 Dec 2021 10:54 am

Tgt Ion:228 Resp: 66

Ion	Ratio	Lower	Upper
228	100		
226	10.3	0.0	59.3
229	14.8	0.0	49.5



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/10/21 10:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2614\
Data File : 4p49909a.d
Acq On : 8 Dec 2021 4:39 am
Operator : chriss2
Sample : op36999a-mb1 Inst : MS4P
Misc : op36999a,e4p2614,250,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 08 05:29:03 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Dec 08 05:24:03 2021
Response via : Initial Calibration

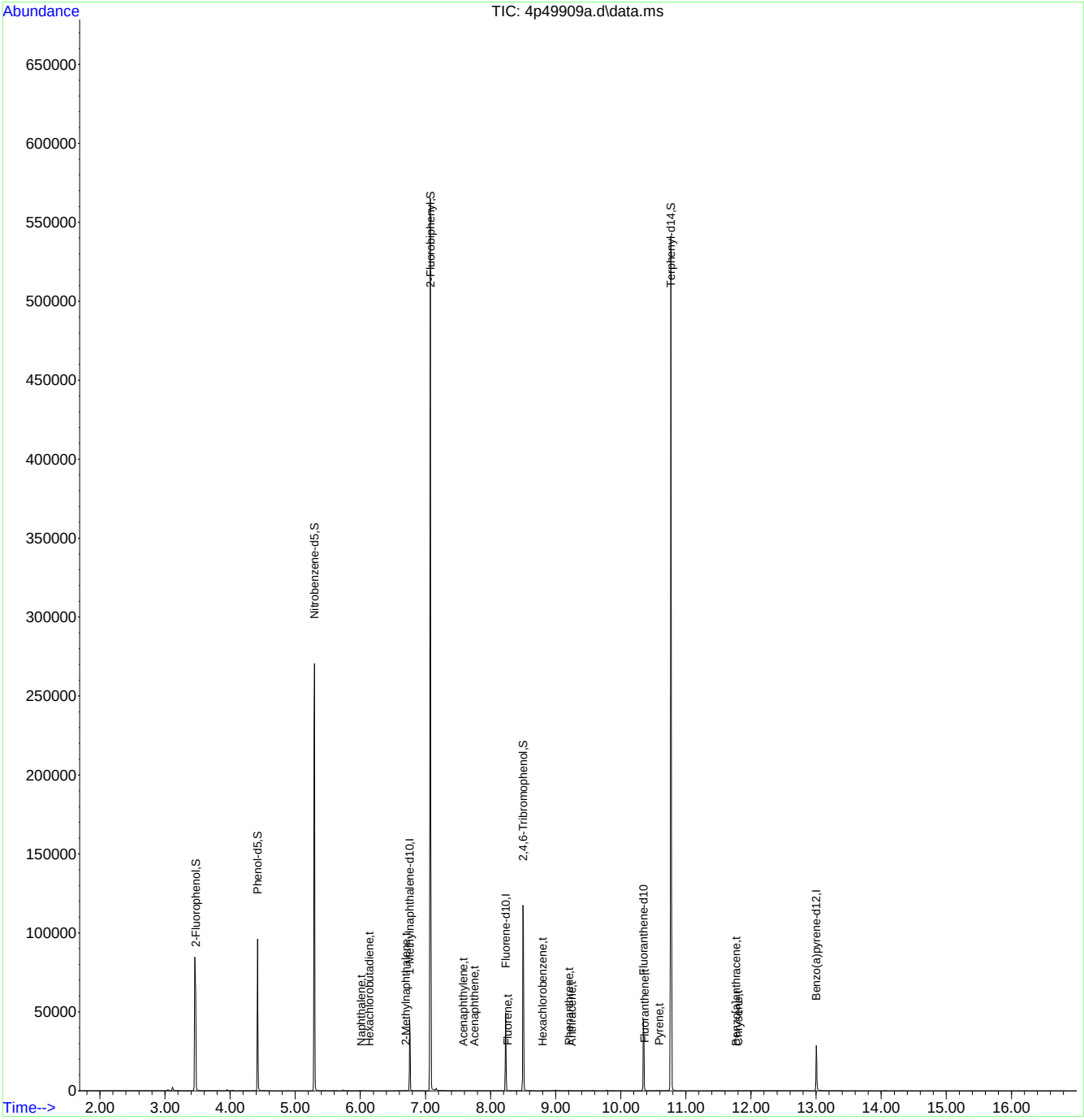
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.758	150	13187	800.00	ppm	0.00
13) Fluorene-d10	8.234	176	20053	800.00	ppm	0.00
20) Fluoranthene-d10	10.347	212	34812	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.004	264	16256	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.471	112	44447	5433.43	ppm	0.01
Spiked Amount 50.000			Recovery	= 10866.86%		
4) Phenol-d5	4.422	99	63765	4108.80	ppm	0.00
Spiked Amount 50.000			Recovery	= 8217.60%		
7) Nitrobenzene-d5	5.295	82	158890	12546.15	ppm	0.00
Spiked Amount 50.000			Recovery	= 25092.30%		
14) 2-Fluorobiphenyl	7.076	172	253901	9926.24	ppm	0.00
Spiked Amount 50.000			Recovery	= 19852.48%		
19) 2,4,6-Tribromophenol	8.498	330	48844	12762.73	ppm	0.00
Spiked Amount 50.000			Recovery	= 25525.46%		
27) Terphenyl-d14	10.771	244	299059	11993.65	ppm	0.00
Spiked Amount 50.000			Recovery	= 23987.30%		
Target Compounds						Qvalue
8) Naphthalene	6.012	128	178	4.72	ppm	95
9) Hexachlorobutadiene	6.139	225	34	3.69	ppm	86
10) 2-Methylnaphthalene	6.699	141	92	4.67	ppm	86
15) Acenaphthylene	7.583	152	35	0.94	ppm	86
16) Acenaphthene	7.750	153	35	1.47	ppm #	73
17) Fluorene	8.259	166	102	3.55	ppm	92
21) Hexachlorobenzene	8.797	284	37	3.37	ppm	97
23) Phenanthrene	9.203	178	371m	7.91	ppm	
24) Anthracene	9.246	178	68	1.51	ppm	75
25) Fluoranthene	10.366	202	258	5.28	ppm	99
26) Pyrene	10.587	202	164	3.05	ppm	92
28) Benzo[a]anthracene	11.771	228	75	1.56	ppm	72
29) Chrysene	11.803	228	91	1.94	ppm	80

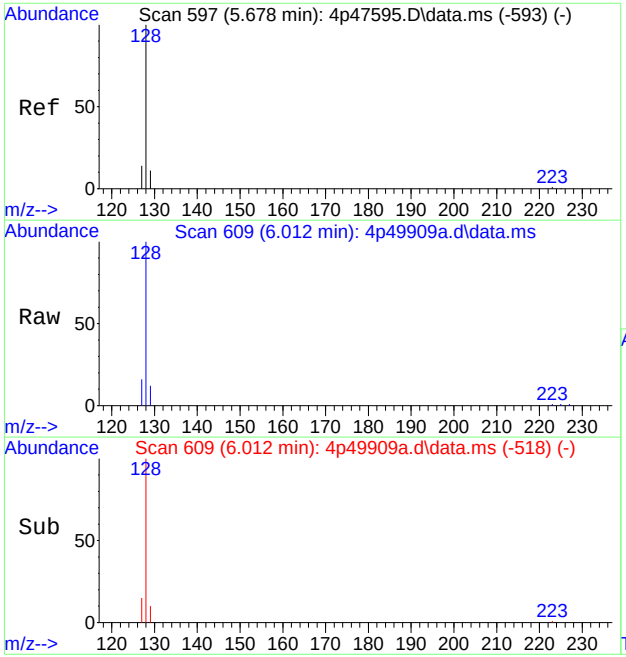
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2614\
Data File : 4p49909a.d
Acq On : 8 Dec 2021 4:39 am
Operator : chriss2
Sample : op36999a-mb1 Inst : MS4P
Misc : op36999a,e4p2614,250,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 08 05:29:03 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Dec 08 05:24:03 2021
Response via : Initial Calibration

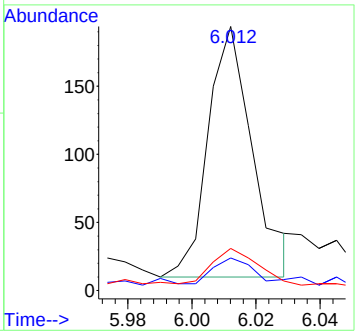


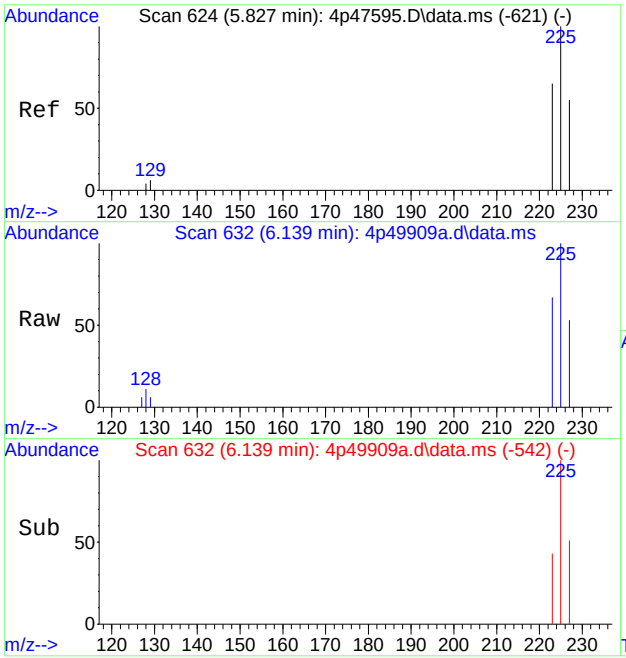


#8
Naphthalene
Concen: 4.72 ppm
RT: 6.012 min Scan# 609
Delta R.T. 0.000 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:128 Resp: 178

Ion	Ratio	Lower	Upper
128	100		
129	9.2	0.0	41.0
127	14.6	0.0	42.2

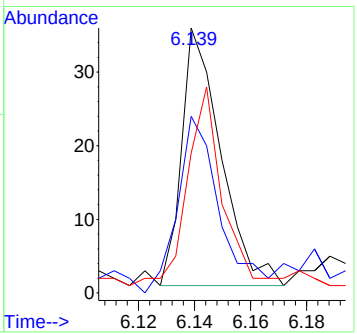


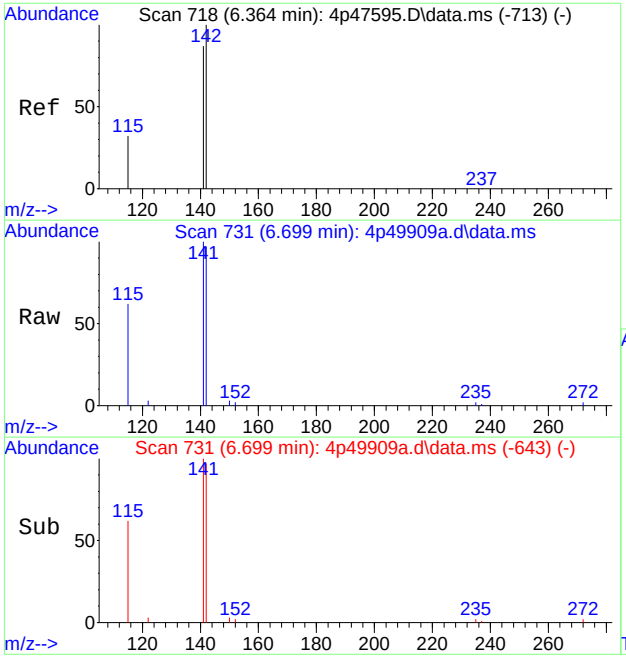


#9
Hexachlorobutadiene
Concen: 3.69 ppm
RT: 6.139 min Scan# 632
Delta R.T. -0.005 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:225 Resp: 34

Ion	Ratio	Lower	Upper
225	100		
223	58.6	27.2	87.2
227	48.6	38.7	98.7

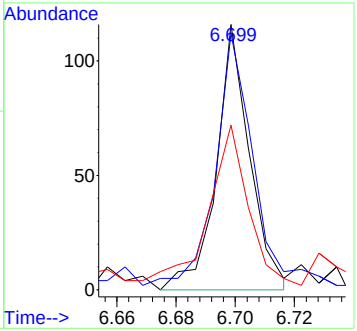


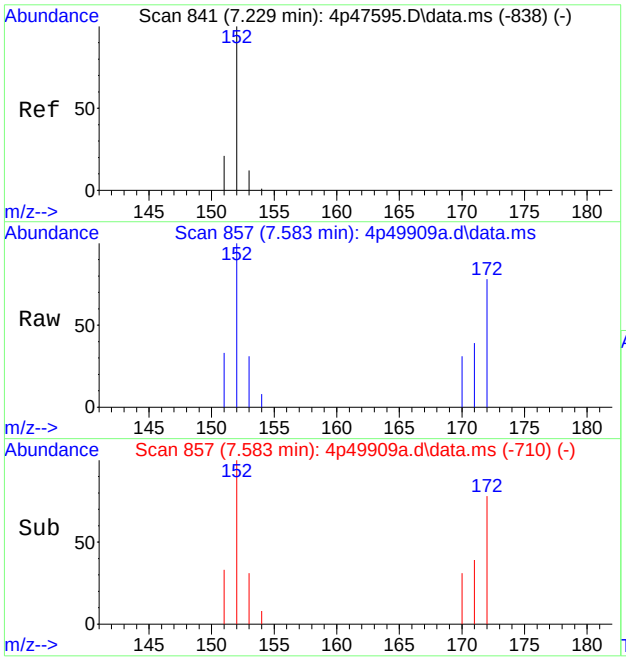


#10
2-Methylnaphthalene
Concen: 4.67 ppm
RT: 6.699 min Scan# 731
Delta R.T. 0.000 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:141 Resp: 92

Ion	Ratio	Lower	Upper
141	100		
142	93.0	83.9	143.9
115	57.7	31.1	91.1

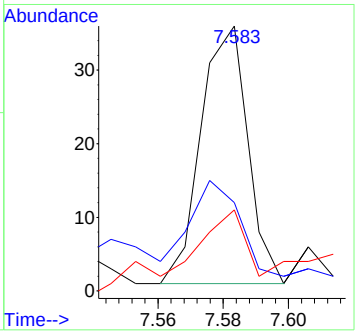


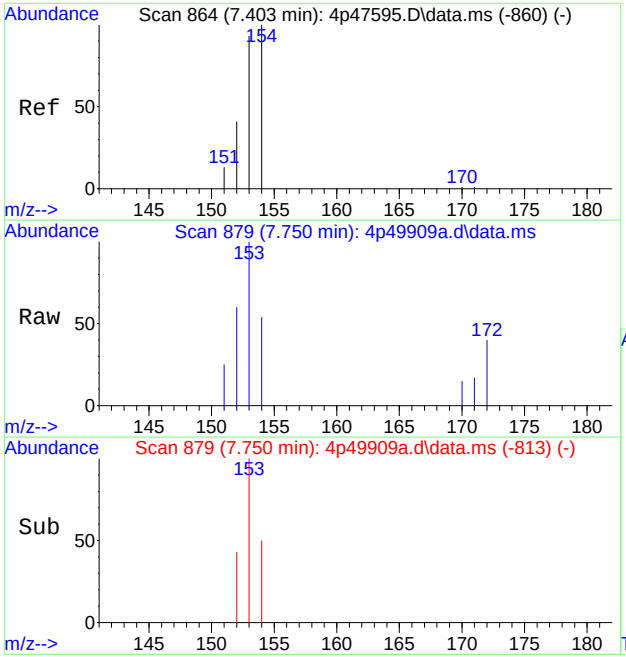


#15
Acenaphthylene
Concen: 0.94 ppm
RT: 7.583 min Scan# 857
Delta R.T. 0.008 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:152 Resp: 35

Ion	Ratio	Lower	Upper
152	100		
151	25.7	0.0	52.9
153	22.9	0.0	41.6

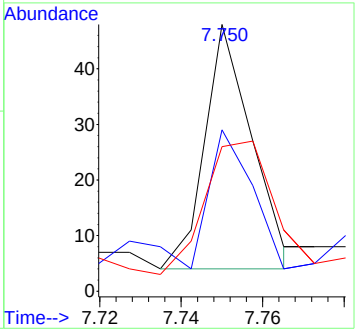


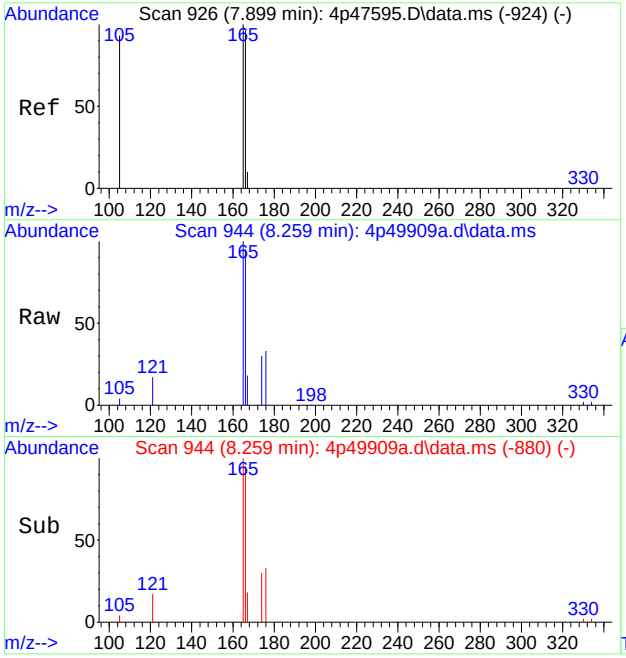


#16
Acenaphthene
Concen: 1.47 ppm
RT: 7.750 min Scan# 879
Delta R.T. 0.000 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:153 Resp: 35

Ion	Ratio	Lower	Upper
153	100		
152	54.8	21.7	81.7
154	45.2	52.6	112.6#

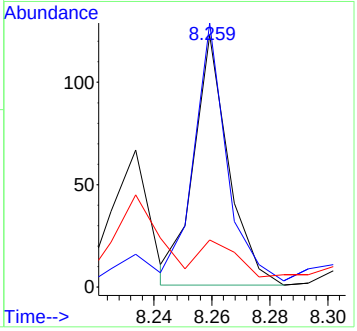


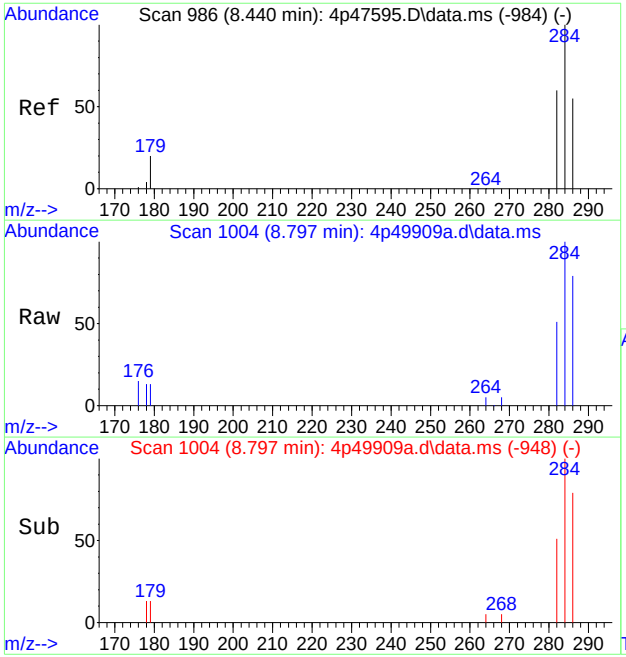


#17
Fluorene
Concen: 3.55 ppm
RT: 8.259 min Scan# 944
Delta R.T. 0.000 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:166 Resp: 102

Ion	Ratio	Lower	Upper
166	100		
165	106.0	68.2	128.2
167	6.8	0.0	42.1

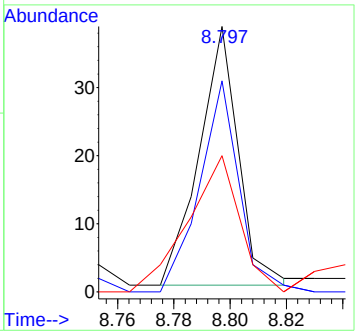


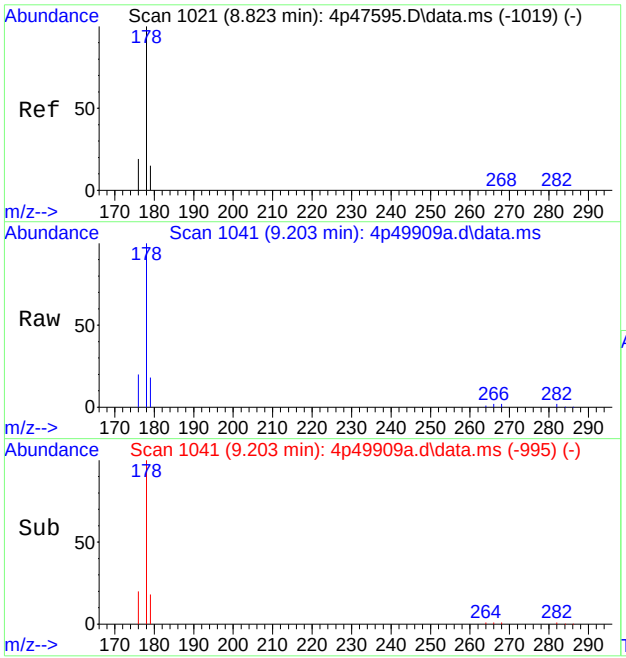


#21
Hexachlorobenzene
Concen: 3.37 ppm
RT: 8.797 min Scan# 1004
Delta R.T. 0.000 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:284 Resp: 37

Ion	Ratio	Lower	Upper
284	100		
286	81.3	55.2	115.2
282	48.0	19.0	79.0

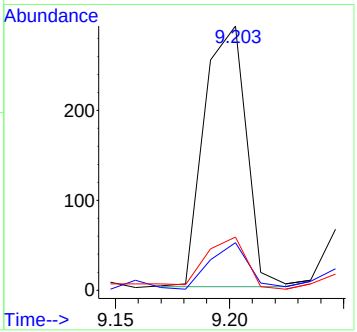


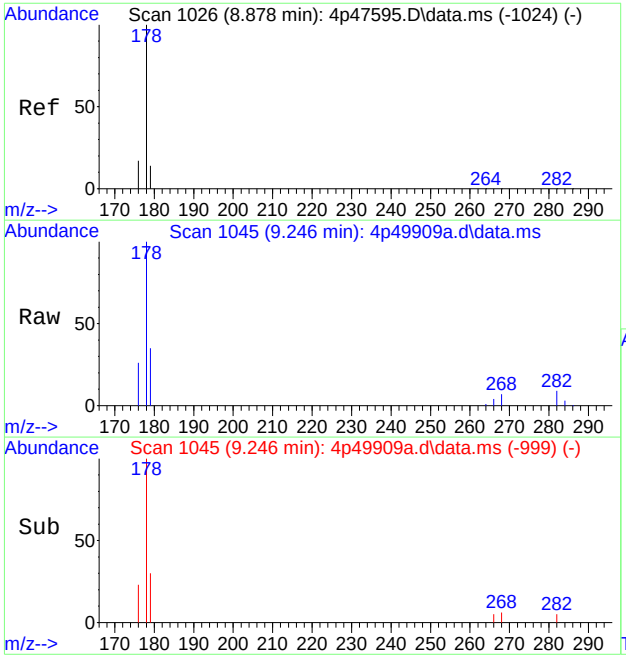


#23
Phenanthrene
Concen: 7.91 ppm m
RT: 9.203 min Scan# 1041
Delta R.T. 0.000 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:178 Resp: 371

Ion	Ratio	Lower	Upper
178	100		
179	18.0	0.0	45.9
176	20.1	0.0	48.7

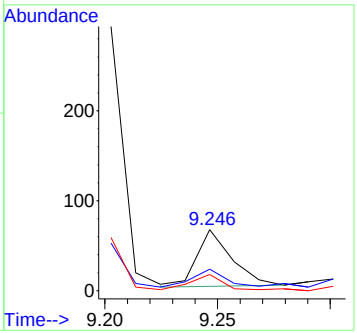


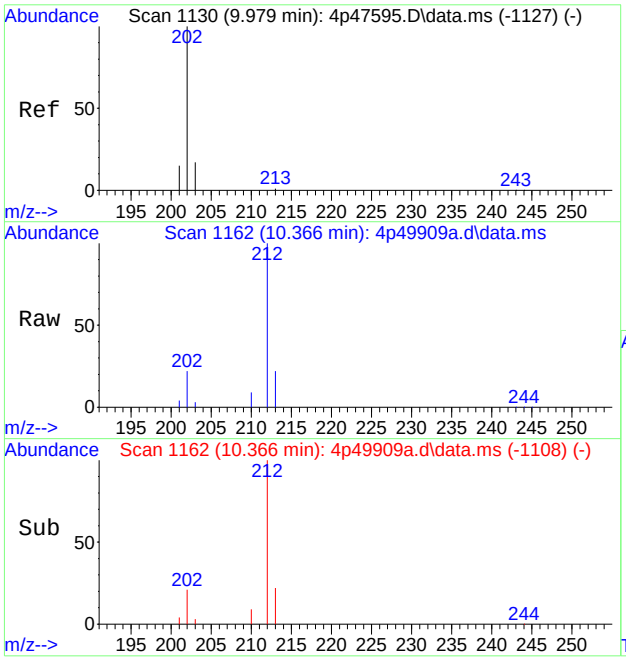


#24
Anthracene
Concen: 1.51 ppm
RT: 9.246 min Scan# 1045
Delta R.T. 0.000 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:178 Resp: 68

Ion	Ratio	Lower	Upper
178	100		
179	29.3	0.0	43.6
176	26.8	0.0	50.0

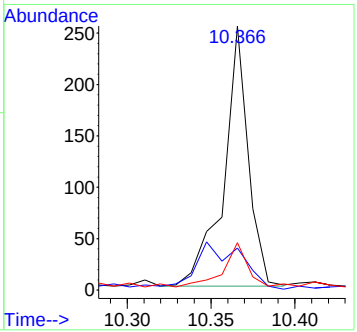


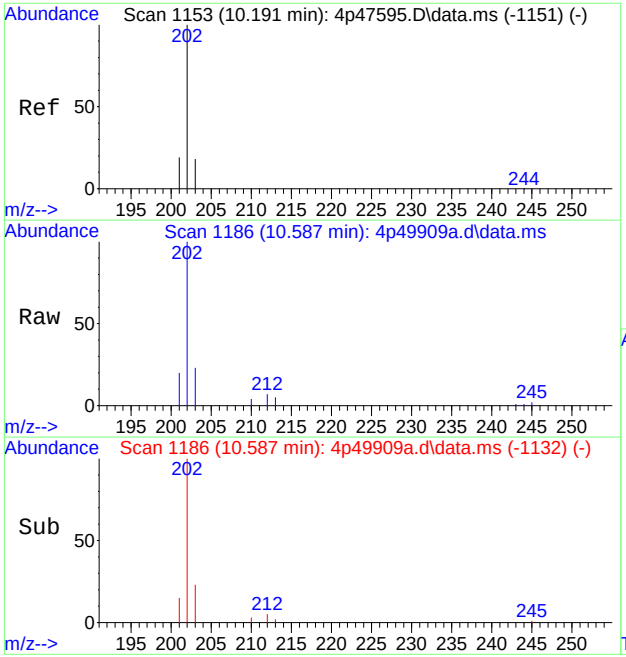


#25
Fluoranthene
Concen: 5.28 ppm
RT: 10.366 min Scan# 1162
Delta R.T. 0.000 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:202 Resp: 258

Ion	Ratio	Lower	Upper
202	100		
203	15.2	0.0	45.4
201	15.8	0.0	46.5

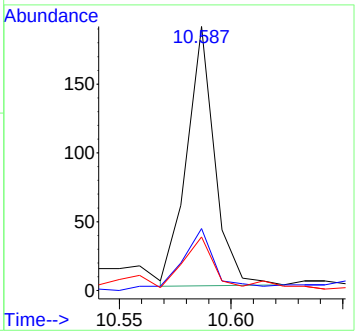


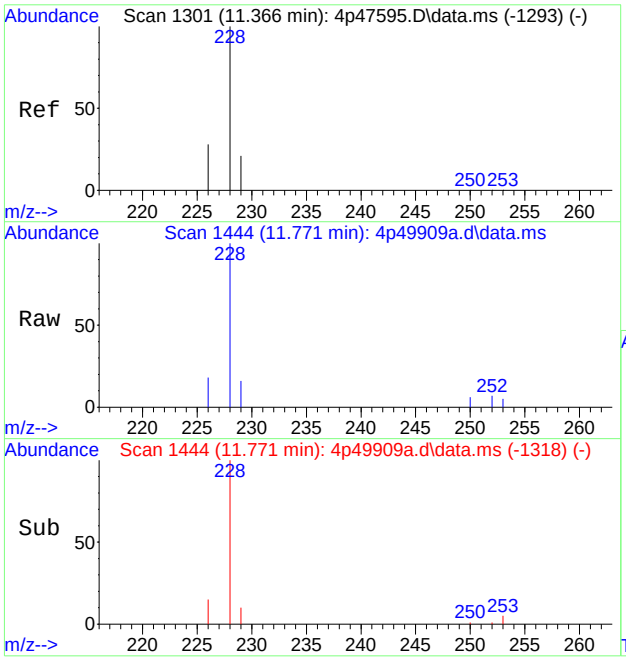


#26
Pyrene
Concen: 3.05 ppm
RT: 10.587 min Scan# 1186
Delta R.T. 0.000 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:202 Resp: 164

Ion	Ratio	Lower	Upper
202	100		
203	22.3	0.0	47.2
201	19.6	0.0	47.8

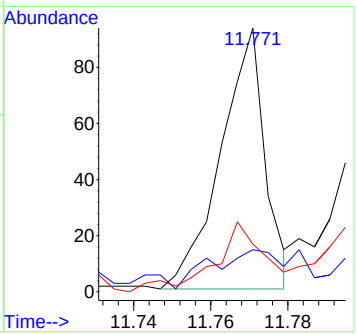


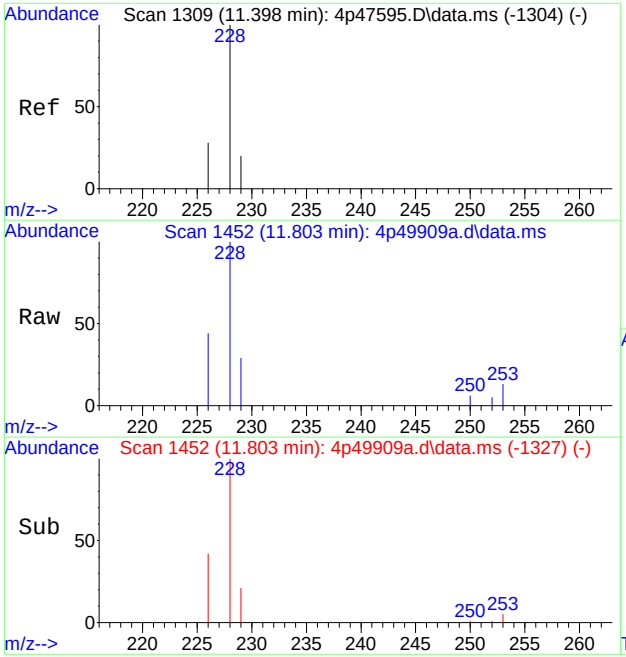


#28
Benzo[a]anthracene
Concen: 1.56 ppm
RT: 11.771 min Scan# 1444
Delta R.T. 0.004 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:228 Resp: 75

Ion	Ratio	Lower	Upper
228	100		
229	8.7	0.0	49.6
226	13.4	0.0	60.0

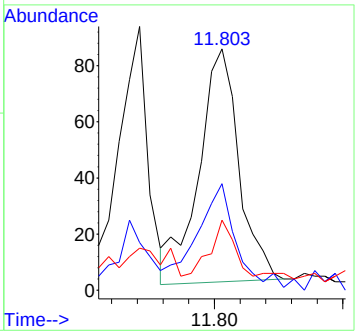




#29
Chrysene
Concen: 1.94 ppm
RT: 11.803 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 4p49909a.d
Acq: 8 Dec 2021 4:39 am

Tgt Ion:228 Resp: 91

Ion	Ratio	Lower	Upper
228	100		
226	44.4	0.0	59.3
229	22.9	0.0	49.5



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/15/21 10:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50024.D
Acq On : 12 Dec 2021 11:20 am
Operator : kristis
Sample : op37001a-mb1
Misc : op37001a,e4p2620,250,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 13 09:32:06 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

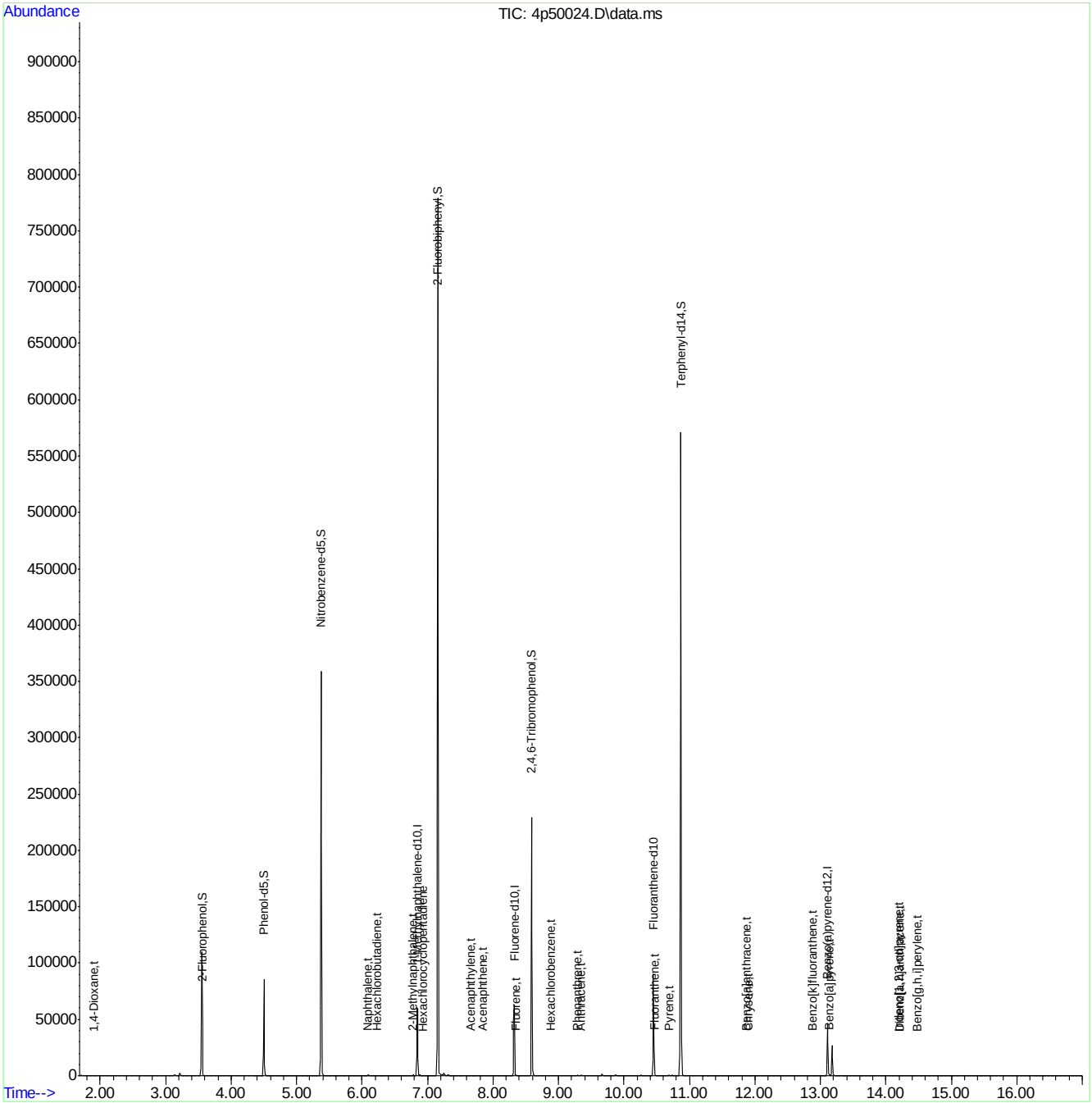
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	6.847	150	19138	800.00	ppm		0.00
13) Fluorene-d10	8.327	176	32471	800.00	ppm		0.00
20) Fluoranthene-d10	10.448	212	57895	800.00	ppm		0.00
30) Benzo(a)pyrene-d12	13.111	264	27371	800.00	ppm		0.00
System Monitoring Compounds							
3) 2-Fluorophenol	3.563	112	43171	3636.41	ppm		0.01
Spiked Amount 50.000			Recovery = 7272.82%				
4) Phenol-d5	4.501	99	57698	2561.79	ppm		0.00
Spiked Amount 50.000			Recovery = 5123.58%				
7) Nitrobenzene-d5	5.378	82	221773	12066.25	ppm		0.00
Spiked Amount 50.000			Recovery = 24132.50%				
14) 2-Fluorobiphenyl	7.159	172	382179	9227.22	ppm		0.00
Spiked Amount 50.000			Recovery = 18454.44%				
19) 2,4,6-Tribromophenol	8.591	330	82964	13387.70	ppm		0.00
Spiked Amount 50.000			Recovery = 26775.40%				
27) Terphenyl-d14	10.872	244	371910	8968.51	ppm		0.00
Spiked Amount 50.000			Recovery = 17937.02%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.906	88	38m	8.50	ppm		
8) Naphthalene	6.094	128	483	8.82	ppm		97
9) Hexachlorobutadiene	6.226	225	80	5.98	ppm		89
10) 2-Methylnaphthalene	6.782	141	193	6.74	ppm	#	73
12) Hexachlorocyclopentadiene	6.937	237	39	3.51	ppm		91
15) Acenaphthylene	7.666	152	91	1.50	ppm		90
16) Acenaphthene	7.840	153	94m	2.43	ppm		
17) Fluorene	8.352	166	208	4.47	ppm		87
21) Hexachlorobenzene	8.884	284	112	6.13	ppm		78
23) Phenanthrene	9.290	178	608	7.80	ppm		89
24) Anthracene	9.345	178	333	4.45	ppm		96
25) Fluoranthene	10.467	202	426	5.25	ppm		97
26) Pyrene	10.688	202	306	3.42	ppm		89
28) Benzo[a]anthracene	11.868	228	290	3.63	ppm		93
29) Chrysene	11.904	228	243	3.11	ppm		93
32) Benzo[k]fluoranthene	12.881	252	233	4.13	ppm		91
33) Benzo[a]pyrene	13.131	252	163	3.15	ppm		85
34) Indeno[1,2,3-cd]pyrene	14.199	276	206	3.34	ppm		99
35) Dibenz[a,h]anthracene	14.215	278	155	3.22	ppm		86
36) Benzo[g,h,i]perylene	14.485	276	200	3.82	ppm		97

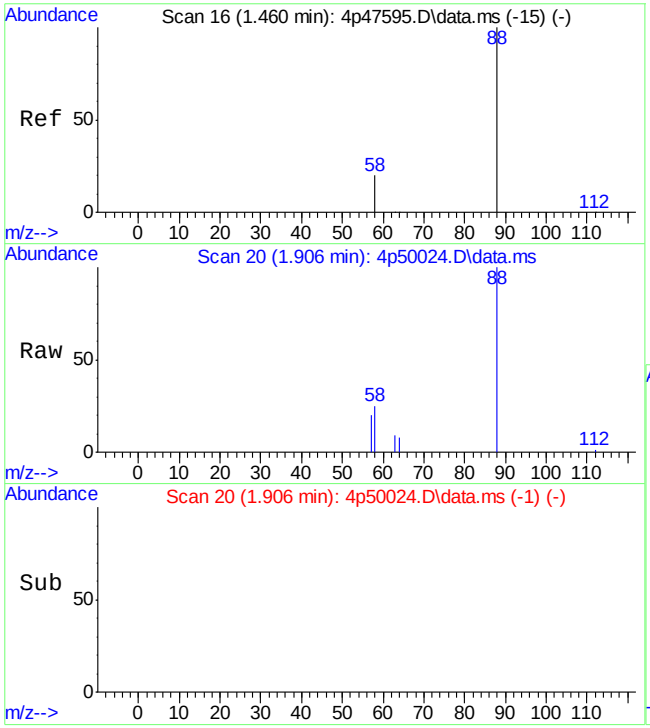
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50024.D
Acq On : 12 Dec 2021 11:20 am
Operator : kristis
Sample : op37001a-mb1
Misc : op37001a,e4p2620,250,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 13 09:32:06 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

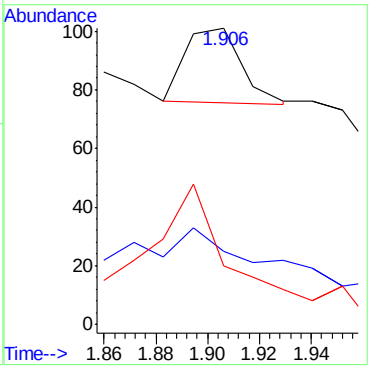


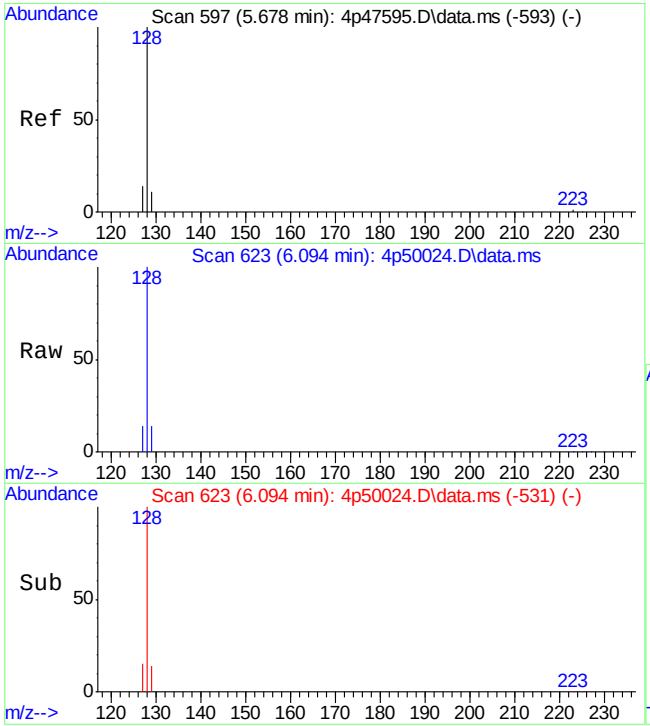


#2
1,4-Dioxane
Concen: 8.50 ppm m
RT: 1.906 min Scan# 20
Delta R.T. 0.011 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion: 88 Resp: 38

Ion	Ratio	Lower	Upper
88	100		
58	24.8	0.1	40.1
57	19.8	0.0	24.7

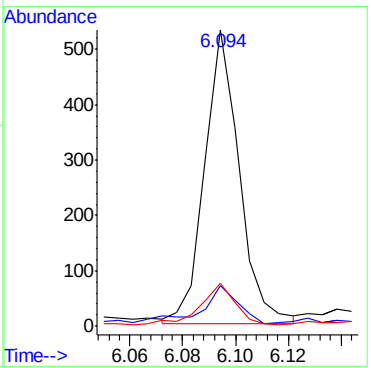


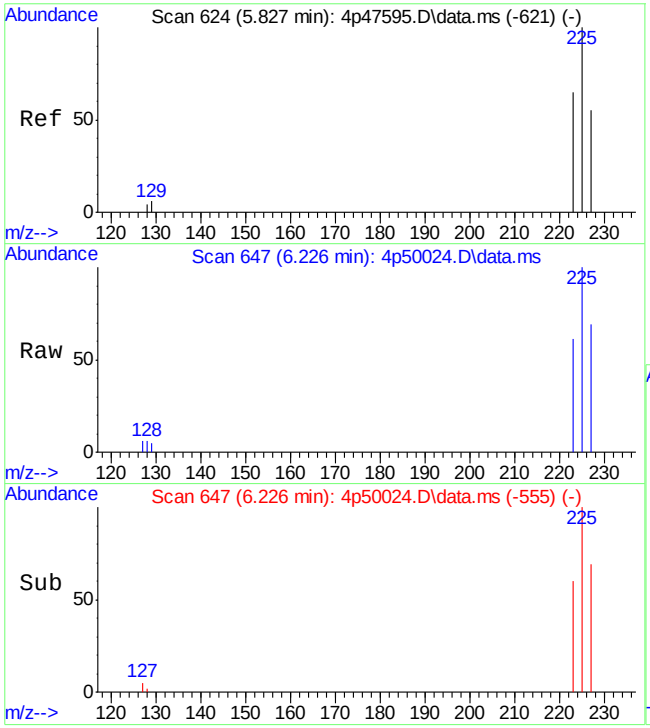


#8
Naphthalene
Concen: 8.82 ppm
RT: 6.094 min Scan# 623
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:128 Resp: 483

Ion	Ratio	Lower	Upper
128	100		
129	11.7	0.0	41.1
127	13.4	0.0	42.0

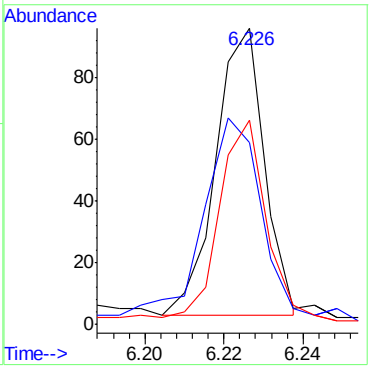


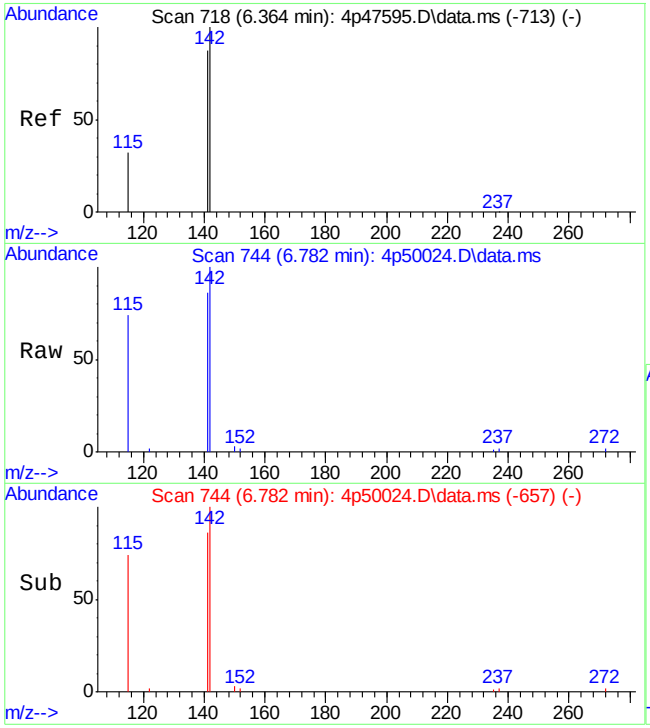


#9
Hexachlorobutadiene
Concen: 5.98 ppm
RT: 6.226 min Scan# 647
Delta R.T. 0.005 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:225 Resp: 80

Ion	Ratio	Lower	Upper
225	100		
223	57.1	35.2	95.2
227	67.4	29.1	89.1

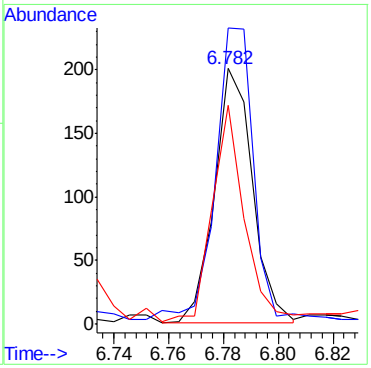


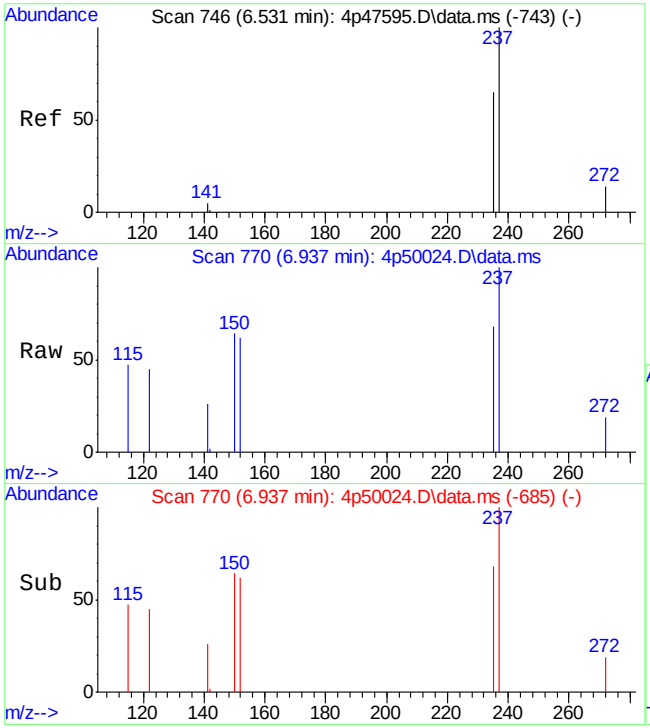


#10
2-Methylnaphthalene
Concen: 6.74 ppm
RT: 6.782 min Scan# 744
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:141 Resp: 193

Ion	Ratio	Lower	Upper
141	100		
142	112.6	96.1	156.1
115	84.4	7.9	67.9#

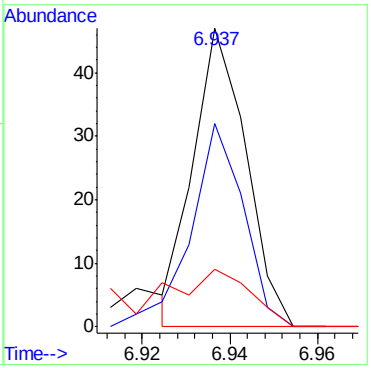


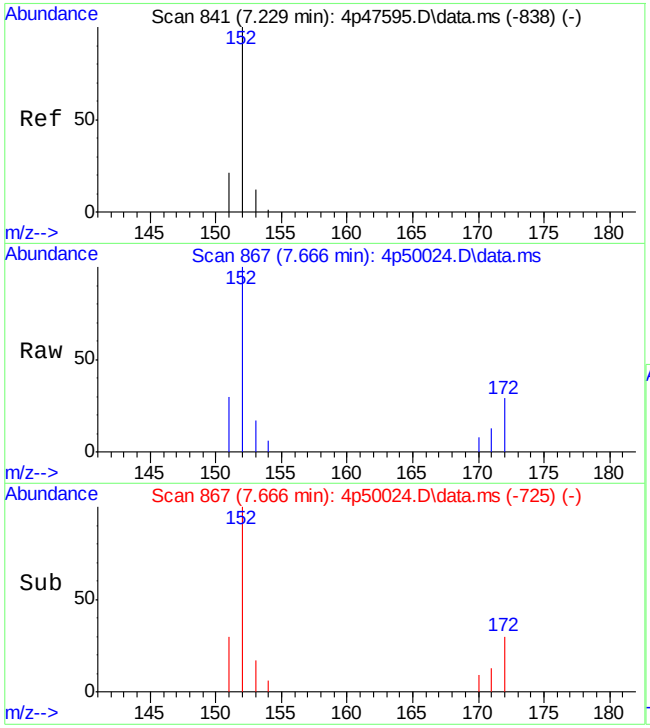


#12
Hexachlorocyclopentadiene
Concen: 3.51 ppm
RT: 6.937 min Scan# 770
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:237 Resp: 39

Ion	Ratio	Lower	Upper
237	100		
235	67.4	29.4	89.4
272	12.4	0.0	44.1

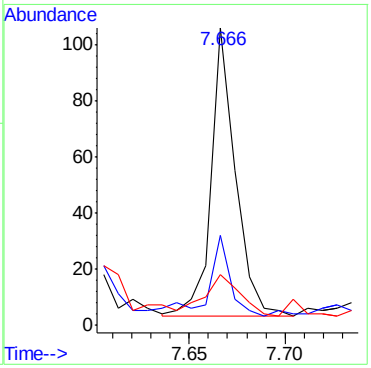


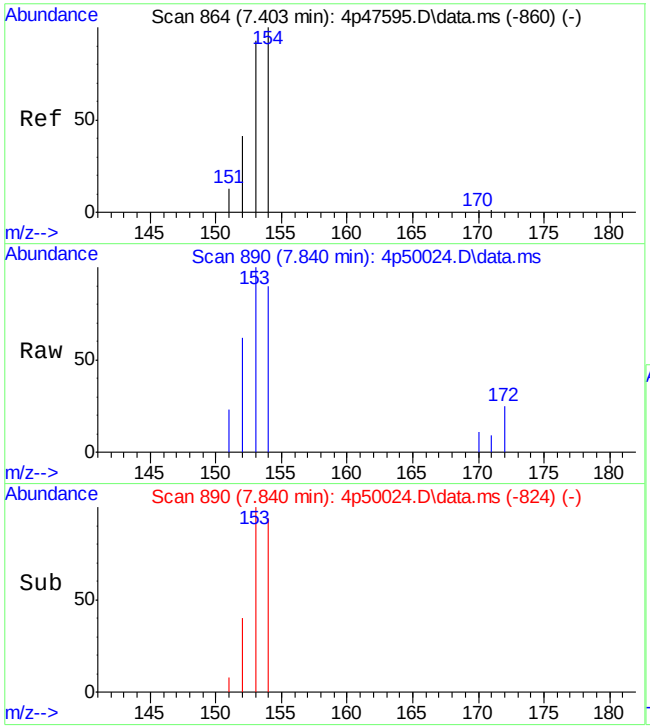


#15
Acenaphthylene
Concen: 1.50 ppm
RT: 7.666 min Scan# 867
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:152 Resp: 91

Ion	Ratio	Lower	Upper
152	100		
151	26.3	0.0	50.8
153	9.8	0.0	42.2

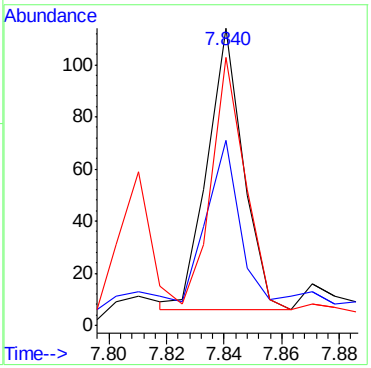


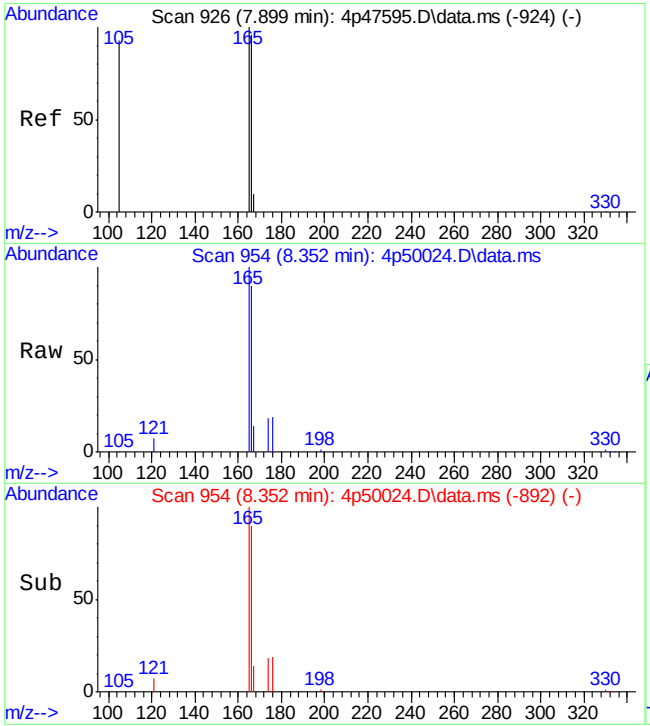


#16
Acenaphthene
Concen: 2.43 ppm m
RT: 7.840 min Scan# 890
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:153 Resp: 94

Ion	Ratio	Lower	Upper
153	100		
152	62.3	18.5	78.5
154	90.4	59.1	119.1

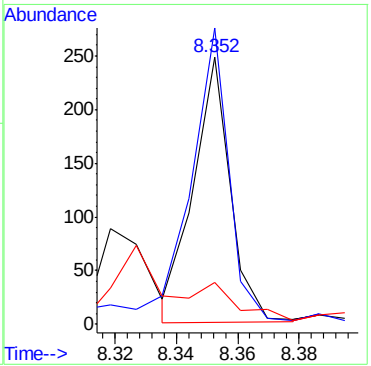


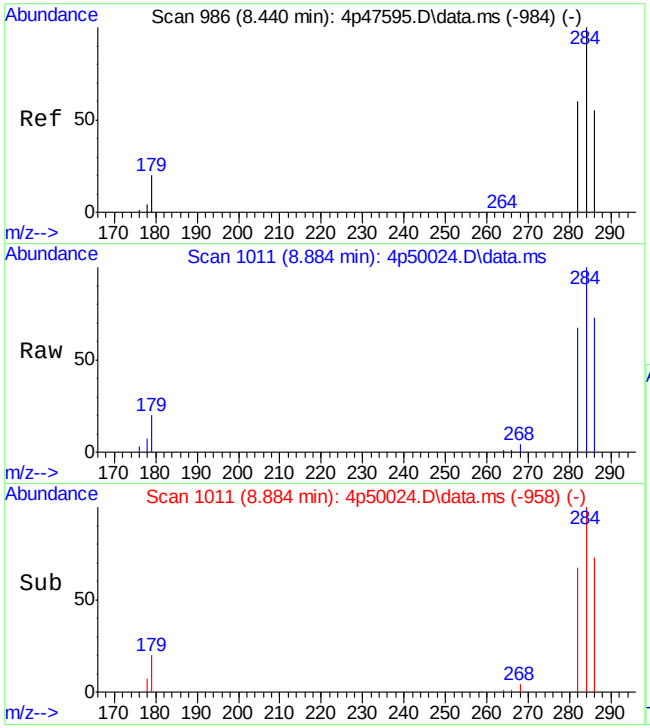


#17
Fluorene
Concen: 4.47 ppm
RT: 8.352 min Scan# 954
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:166 Resp: 208

Ion	Ratio	Lower	Upper
166	100		
165	111.3	66.9	126.9
167	10.4	0.0	41.7

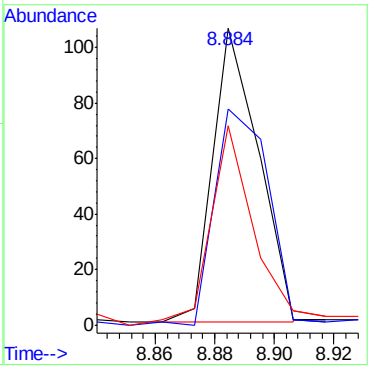


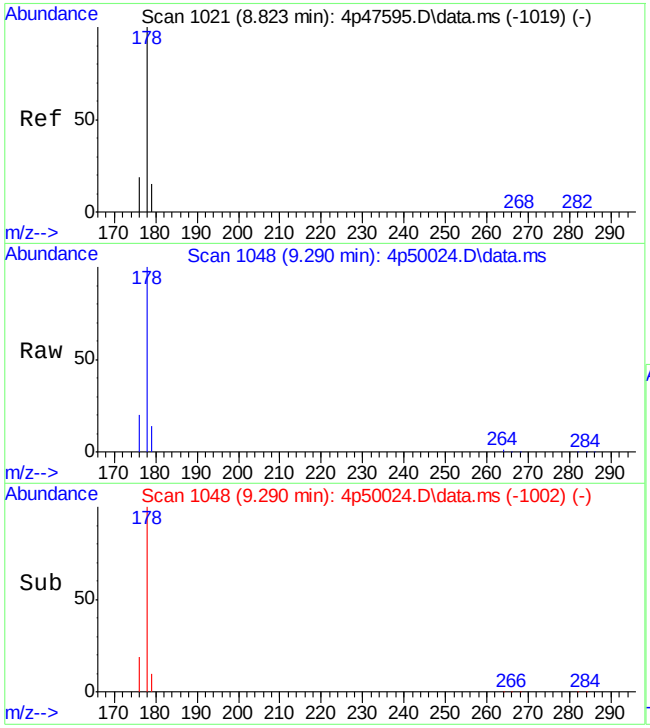


#21
Hexachlorobenzene
Concen: 6.13 ppm
RT: 8.884 min Scan# 1011
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:284 Resp: 112

Ion	Ratio	Lower	Upper
284	100		
286	72.5	57.8	117.8
282	64.9	13.6	73.6

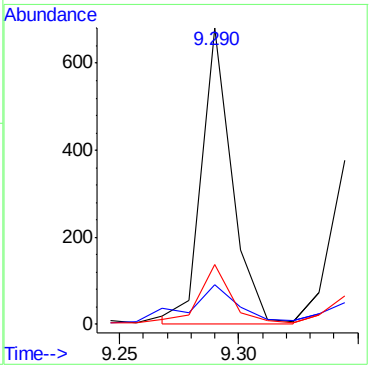


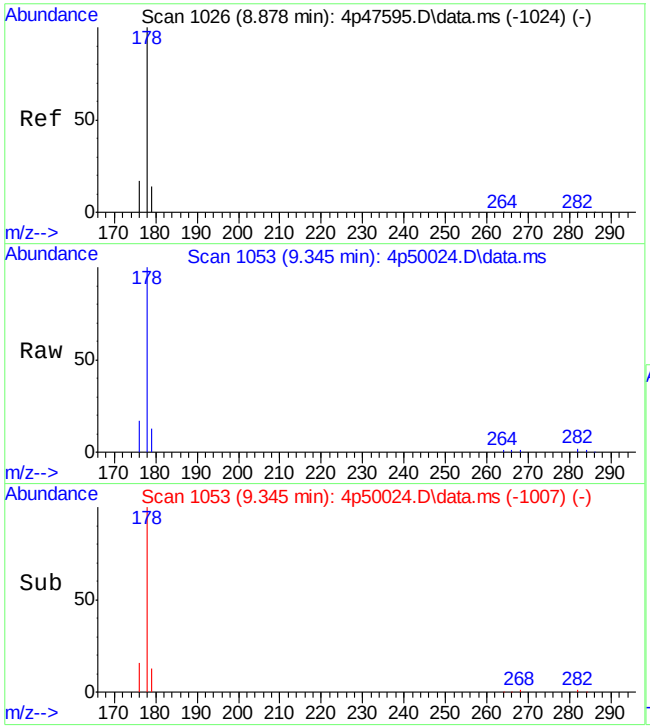


#23
Phenanthrene
Concen: 7.80 ppm
RT: 9.290 min Scan# 1048
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:178 Resp: 608

Ion	Ratio	Lower	Upper
178	100		
179	10.4	0.0	46.0
176	19.5	0.0	45.6

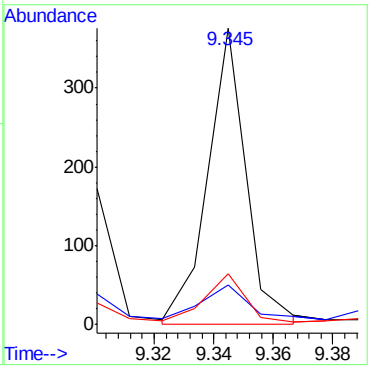


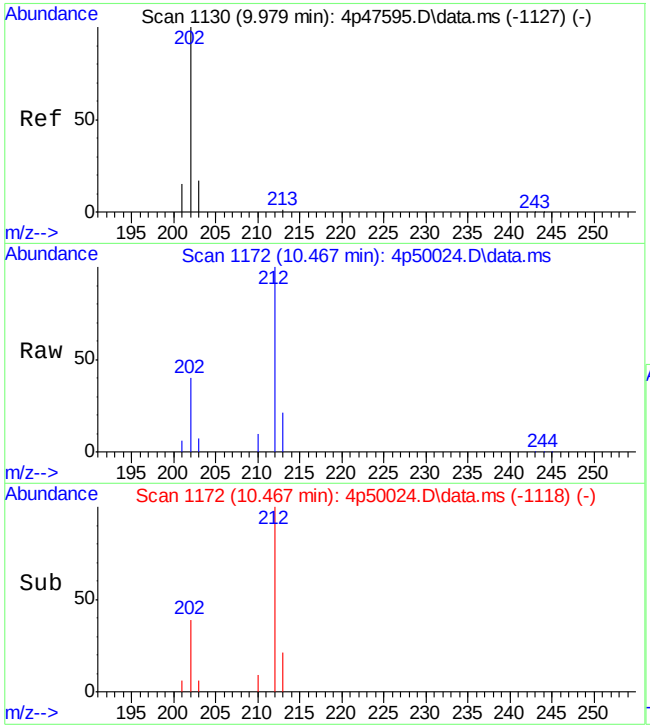


#24
Anthracene
Concen: 4.45 ppm
RT: 9.345 min Scan# 1053
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:178 Resp: 333

Ion	Ratio	Lower	Upper
178	100		
179	11.0	0.0	43.0
176	16.8	0.0	48.4

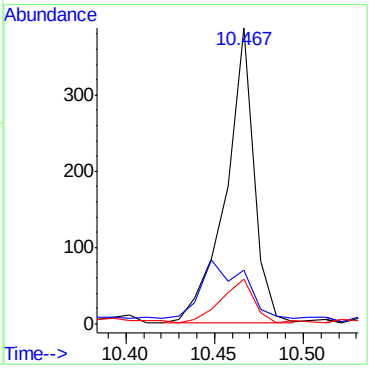


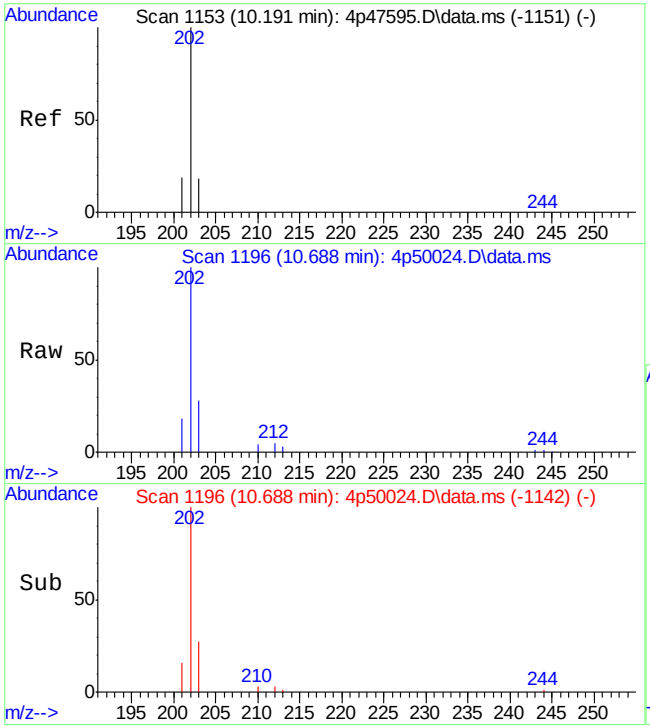


#25
Fluoranthene
Concen: 5.25 ppm
RT: 10.467 min Scan# 1172
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:202 Resp: 426

Ion	Ratio	Lower	Upper
202	100		
203	16.3	0.0	47.6
201	14.3	0.0	42.9

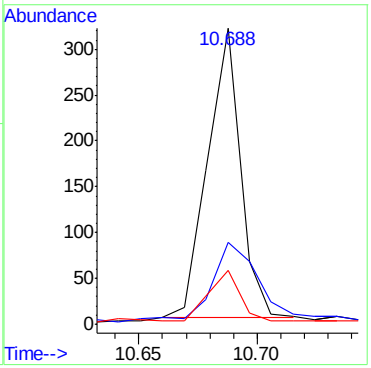


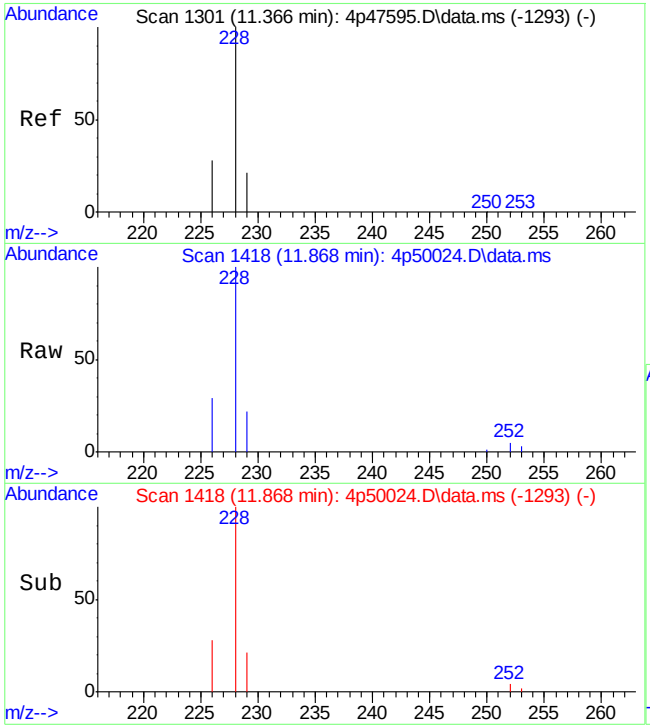


#26
Pyrene
Concen: 3.42 ppm
RT: 10.688 min Scan# 1196
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:202 Resp: 306

Ion	Ratio	Lower	Upper
202	100		
203	25.4	0.0	47.6
201	17.1	0.0	46.0

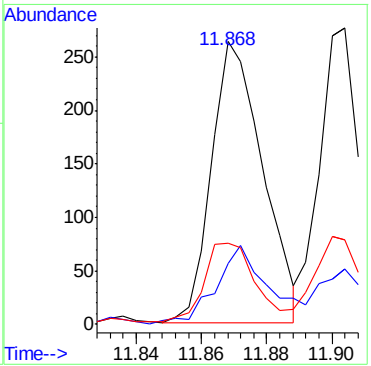


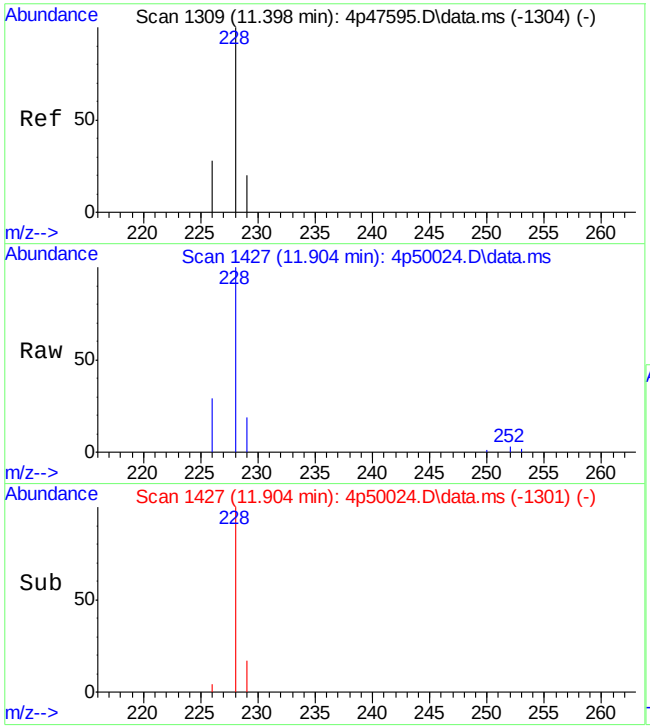


#28
Benzo[a]anthracene
Concen: 3.63 ppm
RT: 11.868 min Scan# 1418
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:228 Resp: 290

Ion	Ratio	Lower	Upper
228	100		
229	17.5	0.0	49.8
226	27.5	0.0	53.3

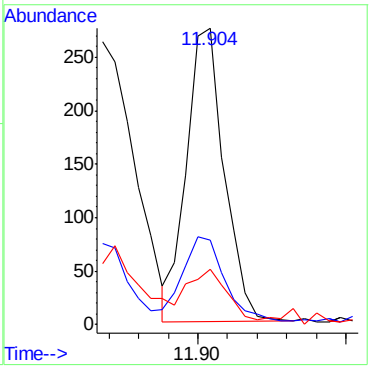


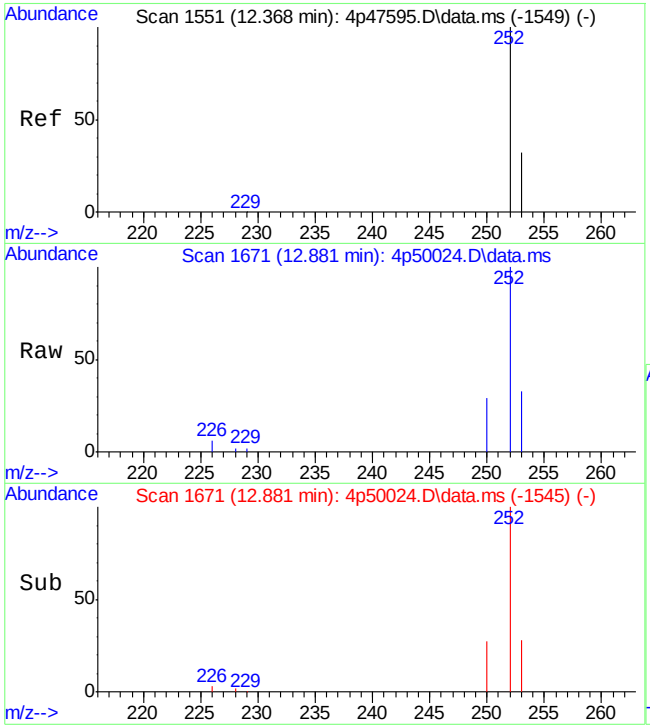


#29
Chrysene
Concen: 3.11 ppm
RT: 11.904 min Scan# 1427
Delta R.T. 0.004 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:228 Resp: 243

Ion	Ratio	Lower	Upper
228	100		
226	27.2	0.0	58.5
229	12.6	0.0	48.7

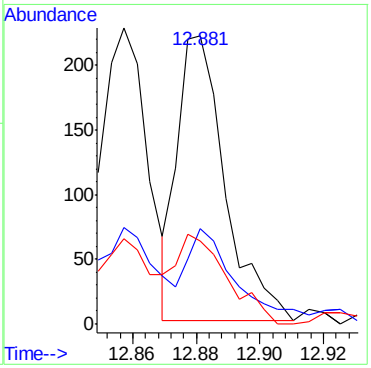


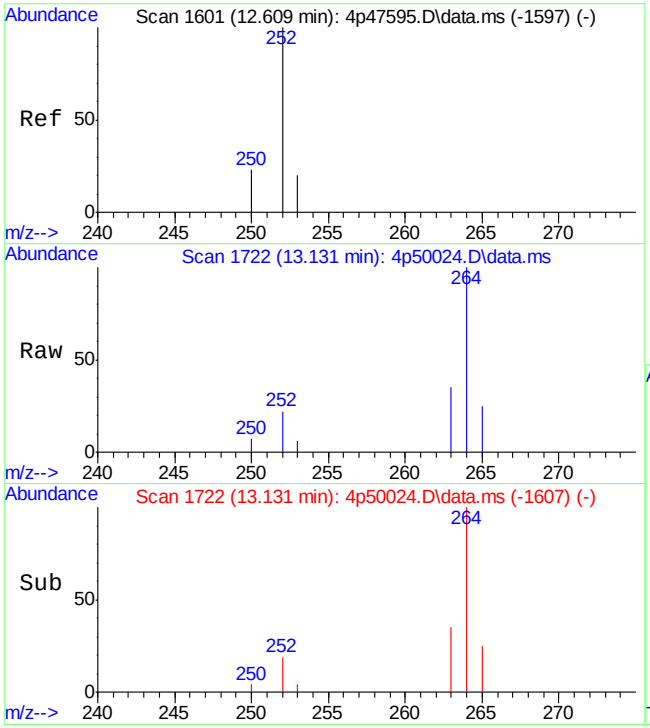


#32
Benzo[k]fluoranthene
Concen: 4.13 ppm
RT: 12.881 min Scan# 1671
Delta R.T. 0.004 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:252 Resp: 233

Ion	Ratio	Lower	Upper
252	100		
253	26.7	0.0	51.8
250	24.0	0.0	50.5

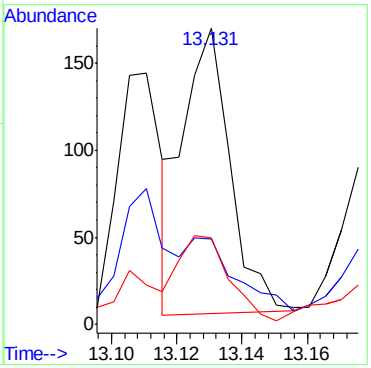


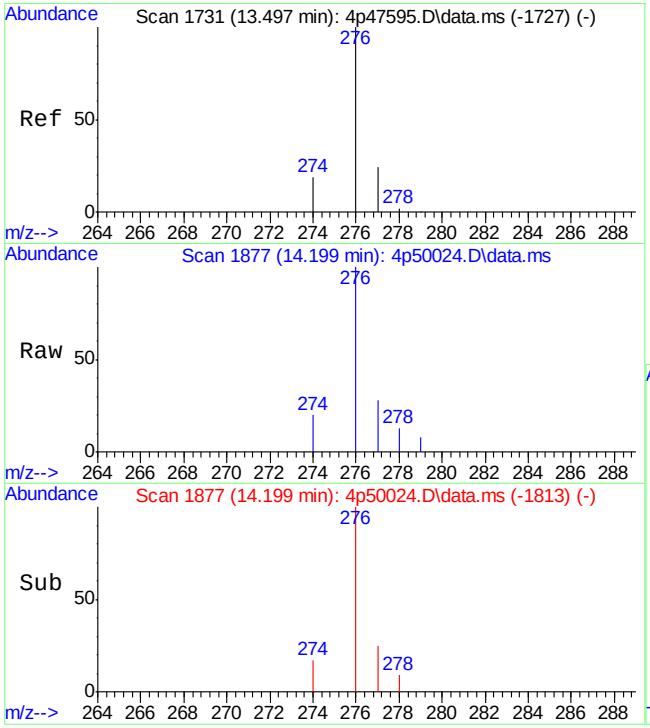


#33
Benzo[a]pyrene
Concen: 3.15 ppm
RT: 13.131 min Scan# 1722
Delta R.T. 0.005 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:252 Resp: 163

Ion	Ratio	Lower	Upper
252	100		
253	19.6	0.0	52.8
250	31.5	0.0	50.6

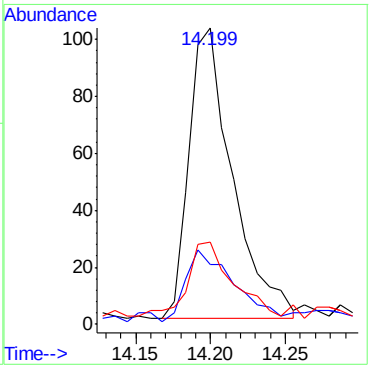


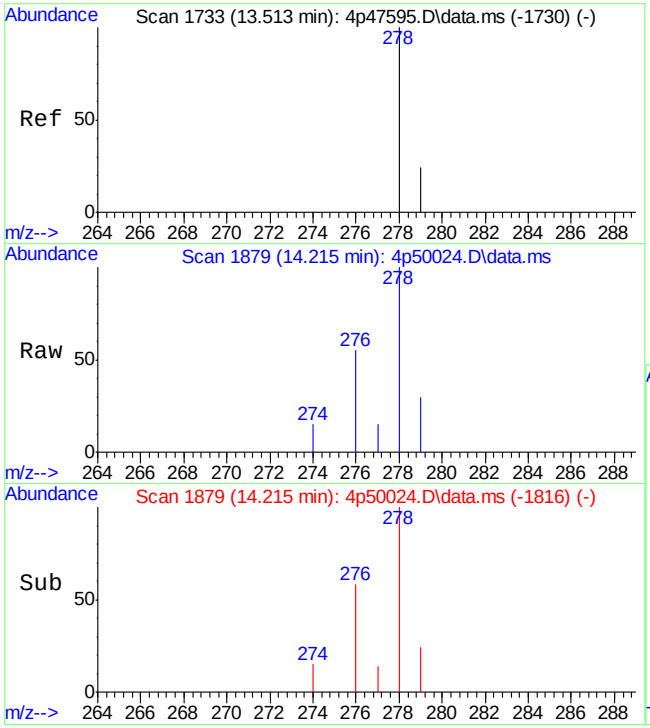


#34
Indeno[1,2,3-cd]pyrene
Concen: 3.34 ppm
RT: 14.199 min Scan# 1877
Delta R.T. 0.008 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:276 Resp: 206

Ion	Ratio	Lower	Upper
276	100		
274	18.4	0.0	49.3
277	22.9	0.0	53.2

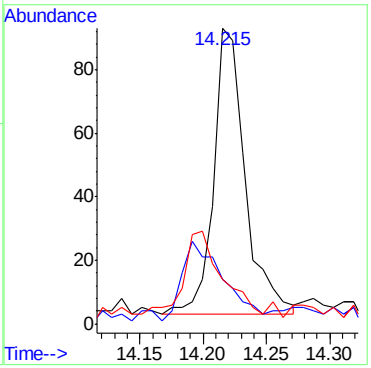


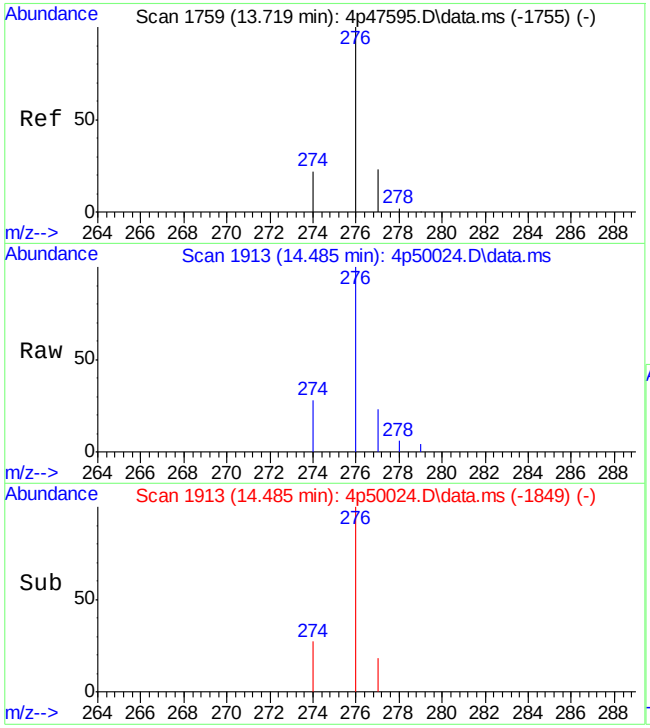


#35
Dibenz[a,h]anthracene
Concen: 3.22 ppm
RT: 14.215 min Scan# 1879
Delta R.T. -0.000 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:278 Resp: 155

Ion	Ratio	Lower	Upper
278	100		
274	12.4	0.0	35.2
277	9.6	0.0	36.7

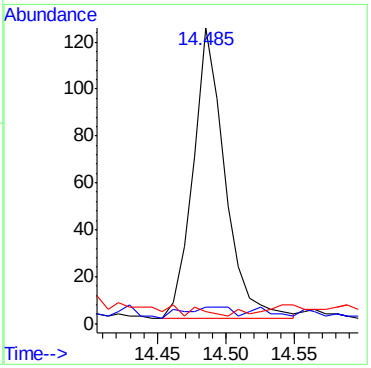




#36
Benzo[g,h,i]perylene
Concen: 3.82 ppm
RT: 14.485 min Scan# 1913
Delta R.T. 0.008 min
Lab File: 4p50024.D
Acq: 12 Dec 2021 11:20 am

Tgt Ion:276 Resp: 200

Ion	Ratio	Lower	Upper
276	100		
278	3.7	0.0	32.5
279	0.0	0.0	30.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3803\
Data File : 5p80342.D
Acq On : 15 Dec 2021 3:51 am
Operator : chriss2
Sample : op37001-mb1
Misc : op37001,e5p3803,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 15 08:30:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Wed Dec 15 08:22:53 2021
Response via : Initial Calibration

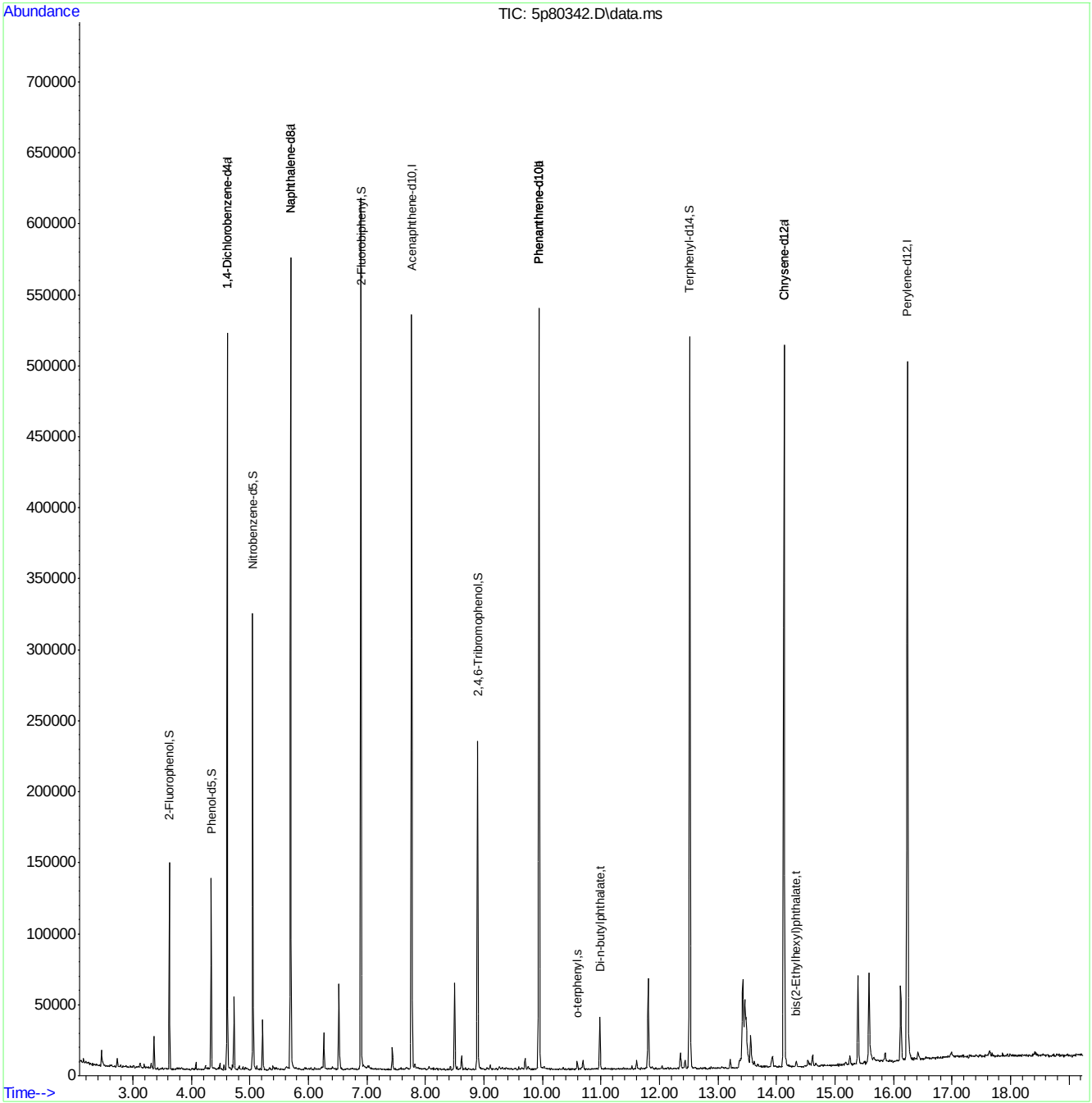
Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4		4.609	152	65017	8.00	ppm	0.00
24) Naphthalene-d8		5.693	136	246449	8.00	ppm	0.00
46) Acenaphthene-d10		7.761	164	139604	8.00	ppm	0.00
69) Phenanthrene-d10		9.941	188	249977	8.00	ppm	0.00
84) Chrysene-d12		14.129	240	221021	8.00	ppm	0.00
93) Perylene-d12		16.239	264	216560	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a		4.609	152	65017	8.00	ppm	0.00
105) Phenanthrene-d10a		9.941	188	249977	8.00	ppm	0.00
107) Naphthalene-d8a		5.693	136	246449	8.00	ppm	0.00
109) Chrysene-d12a		14.129	240	221021	8.00	ppm	0.00
111) Phenanthrene-d10b		9.941	188	249977	8.00	ppm	0.00
System Monitoring Compounds							
5) 2-Fluorophenol		3.626	112	38077	3.62	ppm	0.00
Spiked Amount	10.000			Recovery	=	36.20%	
8) Phenol-d5		4.337	99	31452	2.33	ppm	0.00
Spiked Amount	10.000			Recovery	=	23.30%	
25) Nitrobenzene-d5		5.047	82	80089	8.64	ppm	0.00
Spiked Amount	10.000			Recovery	=	86.40%	
51) 2-Fluorobiphenyl		6.895	172	206757	9.03	ppm	0.00
Spiked Amount	10.000			Recovery	=	90.30%	
74) 2,4,6-Tribromophenol		8.893	330	29328	9.23	ppm	0.00
Spiked Amount	10.000			Recovery	=	92.30%	
87) Terphenyl-d14		12.515	244	211028	7.66	ppm	0.00
Spiked Amount	10.000			Recovery	=	76.60%	
112) 1-chlorooctadecane		0.000	57	0	0.00	ppm	
Spiked Amount	10.000			Recovery	=	0.00%	
113) o-terphenyl		10.598	230	1300	0.08	ppm	0.00
Spiked Amount	10.000			Recovery	=	0.80%	
Target Compounds							Qvalue
81) Di-n-butylphthalate		10.982	149	24003	0.60	ppm	99
92) bis(2-Ethylhexyl)phtha...		14.337	149	1790	0.08	ppm	94

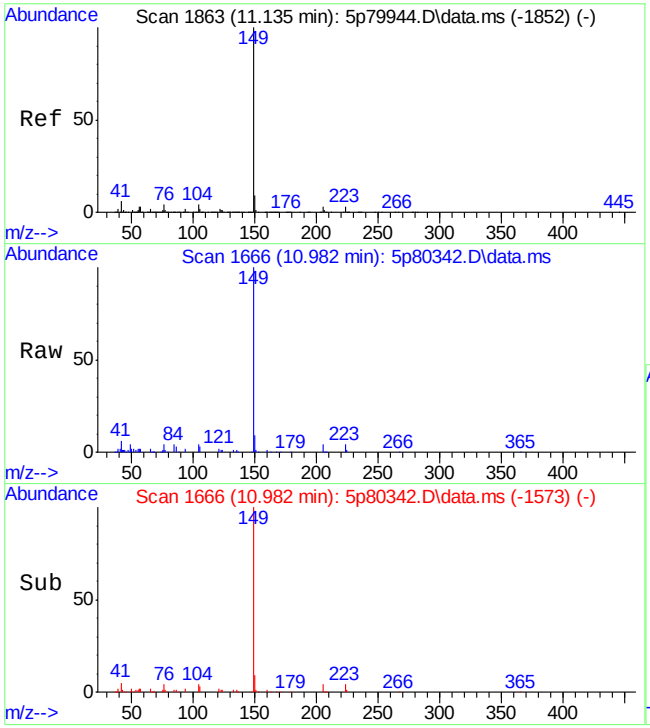
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3803\
Data File : 5p80342.D
Acq On : 15 Dec 2021 3:51 am
Operator : chriss2
Sample : op37001-mb1
Misc : op37001,e5p3803,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 15 08:30:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Wed Dec 15 08:22:53 2021
Response via : Initial Calibration

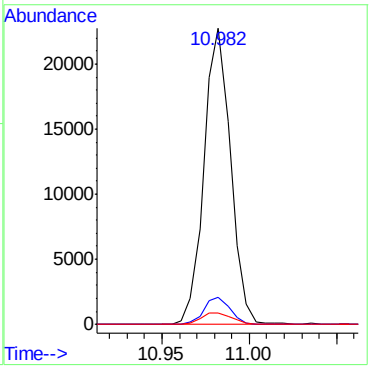


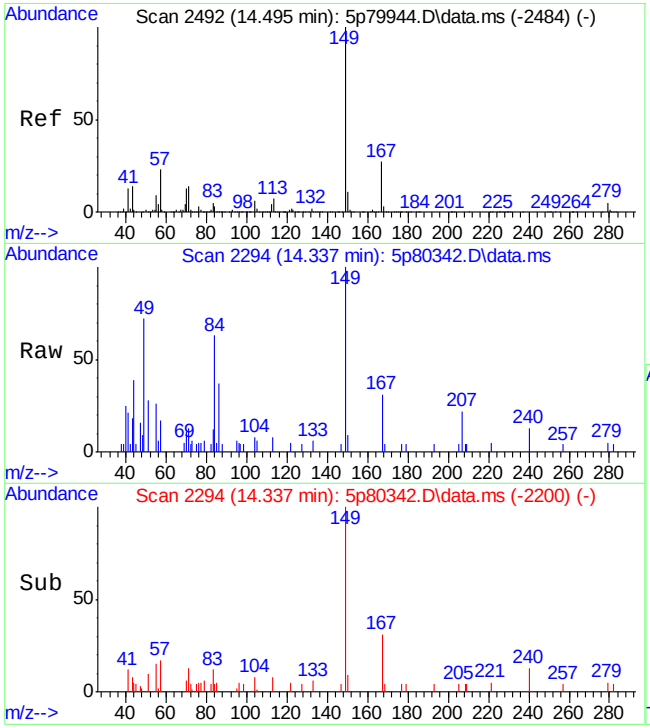


#81
Di-n-butylphthalate
Concen: 0.60 ppm
RT: 10.982 min Scan# 1666
Delta R.T. -0.005 min
Lab File: 5p80342.D
Acq: 15 Dec 21 3:51 am

Tgt Ion:149 Resp: 24003

Ion	Ratio	Lower	Upper
149	100		
150	9.3	0.0	38.9
104	4.0	0.0	34.2

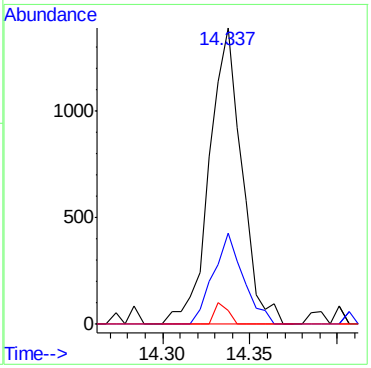




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.08 ppm
RT: 14.337 min Scan# 2294
Delta R.T. 0.000 min
Lab File: 5p80342.D
Acq: 15 Dec 21 3:51 am

Tgt Ion:149 Resp: 1790

Ion	Ratio	Lower	Upper
149	100		
167	30.9	0.0	57.0
279	4.6	0.0	34.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3803\
Data File : 5p80345.D
Acq On : 15 Dec 2021 5:15 am
Operator : chriss2
Sample : op36999-mb1
Misc : op36999,e5p3803,250,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 15 08:34:53 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Wed Dec 15 08:22:53 2021
Response via : Initial Calibration

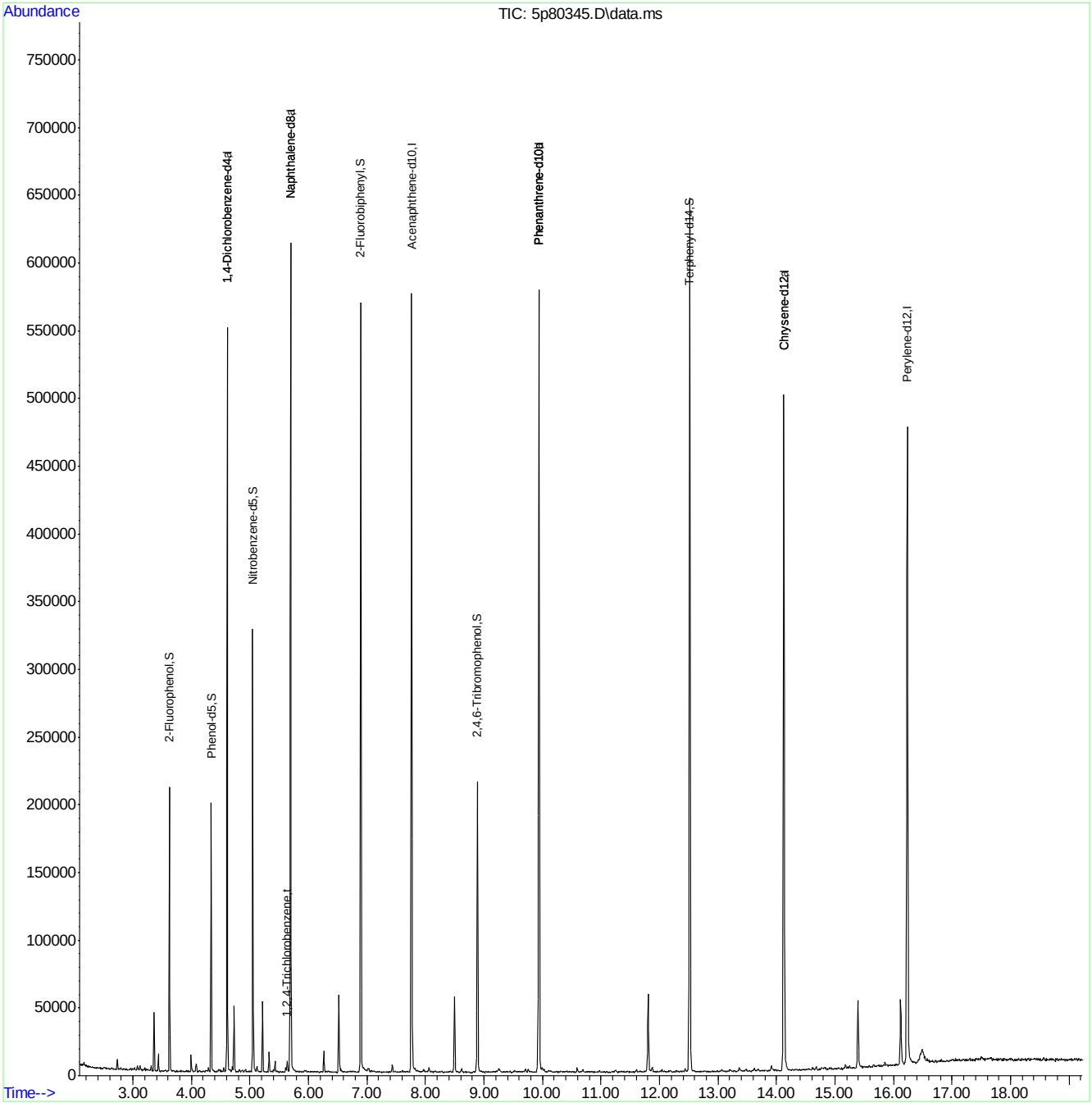
Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4		4.609	152	67452	8.00	ppm	0.00
24) Naphthalene-d8		5.694	136	258360	8.00	ppm	0.00
46) Acenaphthene-d10		7.761	164	142491	8.00	ppm	0.00
69) Phenanthrene-d10		9.941	188	259588	8.00	ppm	0.00
84) Chrysene-d12		14.124	240	226533	8.00	ppm	0.00
93) Perylene-d12		16.234	264	217730	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a		4.609	152	67452	8.00	ppm	0.00
105) Phenanthrene-d10a		9.941	188	259588	8.00	ppm	0.00
107) Naphthalene-d8a		5.694	136	258360	8.00	ppm	0.00
109) Chrysene-d12a		14.124	240	226533	8.00	ppm	0.00
111) Phenanthrene-d10b		9.941	188	259588	8.00	ppm	0.00
System Monitoring Compounds							
5) 2-Fluorophenol		3.626	112	50327	4.61	ppm	0.00
Spiked Amount	10.000			Recovery	=	46.10%	
8) Phenol-d5		4.337	99	44544	3.18	ppm	0.00
Spiked Amount	10.000			Recovery	=	31.80%	
25) Nitrobenzene-d5		5.047	82	81786	8.41	ppm	0.00
Spiked Amount	10.000			Recovery	=	84.10%	
51) 2-Fluorobiphenyl		6.890	172	199983	8.56	ppm	0.00
Spiked Amount	10.000			Recovery	=	85.60%	
74) 2,4,6-Tribromophenol		8.888	330	27993	8.49	ppm	-0.01
Spiked Amount	10.000			Recovery	=	84.90%	
87) Terphenyl-d14		12.516	244	263086	9.32	ppm	0.00
Spiked Amount	10.000			Recovery	=	93.20%	
112) 1-chlorooctadecane		0.000	57	0	0.00	ppm	
Spiked Amount	10.000			Recovery	=	0.00%	
113) o-terphenyl		0.000	230	0	0.00	ppm	
Spiked Amount	10.000			Recovery	=	0.00%	
Target Compounds							Qvalue
36) 1,2,4-Trichlorobenzene		5.635	180	1592	0.16	ppm	80

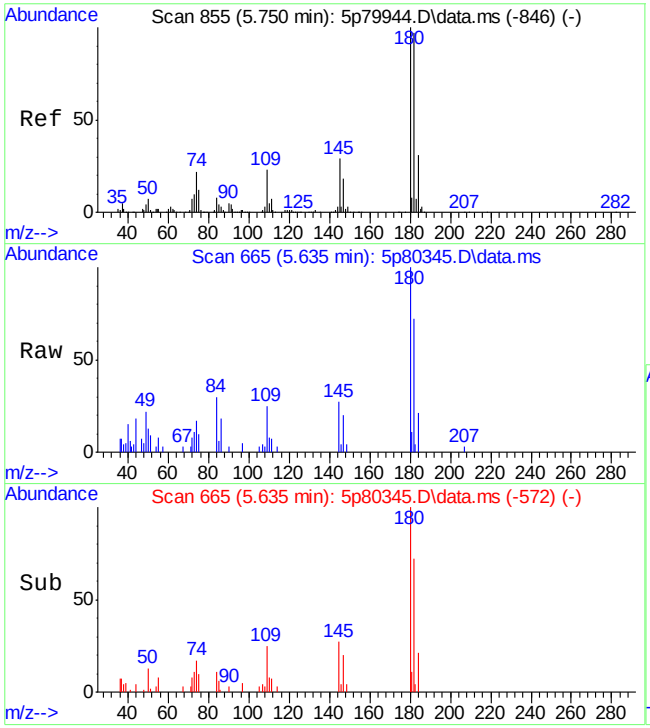
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P3803\
Data File : 5p80345.D
Acq On : 15 Dec 2021 5:15 am
Operator : chriss2
Sample : op36999-mb1
Misc : op36999,e5p3803,250,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 15 08:34:53 2021
Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Wed Dec 15 08:22:53 2021
Response via : Initial Calibration

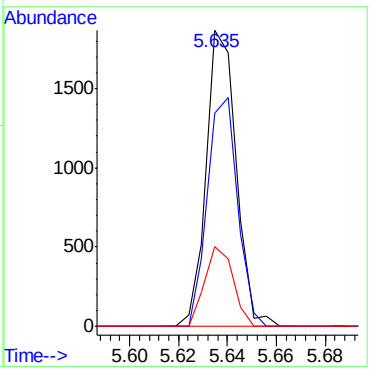




#36
1,2,4-Trichlorobenzene
Concen: 0.16 ppm
RT: 5.635 min Scan# 665
Delta R.T. -0.005 min
Lab File: 5p80345.D
Acq: 15 Dec 21 5:15 am

Tgt Ion:180 Resp: 1592

Ion	Ratio	Lower	Upper
180	100		
182	72.1	66.7	126.7
145	26.8	0.0	58.7



GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- DDT/Endrin Breakdown Checks
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36994-MB1	6G81092.D	1	12/12/21	TL	12/07/21	OP36994	G6G2868

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	105%	10-190%
877-09-8	Tetrachloro-m-xylene	95%	10-190%
2051-24-3	Decachlorobiphenyl	51%	10-156%
2051-24-3	Decachlorobiphenyl	51%	10-156%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP36994-BS1	6G81093.D	1	12/12/21	TL	12/07/21	OP36994	G6G2868
OP36994-BSD	6G81094.D	1	12/12/21	TL	12/07/21	OP36994	G6G2868

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.2	0.16	80	0.13	65	21	54-152/36
319-84-6	alpha-BHC	0.2	0.20	100	0.15	75	29	50-161/35
319-85-7	beta-BHC	0.2	0.22	110	0.18	90	20	56-150/36
319-86-8	delta-BHC	0.2	0.25	125	0.19	95	27	10-183/39
58-89-9	gamma-BHC (Lindane)	0.2	0.22	110	0.17	85	26	53-157/36
5103-71-9	alpha-Chlordane	0.2	0.23	115	0.18	90	24	57-152/37
5103-74-2	gamma-Chlordane	0.2	0.22	110	0.18	90	20	55-153/37
57-74-9	Chlordane (alpha and gamma)	0.4	0.45	113	0.36	90	22	55-152/37
60-57-1	Dieldrin	0.2	0.23	115	0.18	90	24	56-163/36
72-54-8	4,4'-DDD	0.2	0.22	110	0.17	85	26	50-154/37
72-55-9	4,4'-DDE	0.2	0.20	100	0.16	80	22	47-157/43
50-29-3	4,4'-DDT	0.2	0.25	125	0.19	95	27	52-167/42
72-20-8	Endrin	0.2	0.23	115	0.18	90	24	55-165/36
1031-07-8	Endosulfan sulfate	0.2	0.22	110	0.17	85	30	43-150/36
7421-93-4	Endrin aldehyde	0.2	0.23	115	0.19	95	19	33-163/41
53494-70-5	Endrin ketone	0.2	0.26	130	0.21	105	21	42-178/38
959-98-8	Endosulfan-I	0.2	0.23	115	0.18	90	24	57-154/37
33213-65-9	Endosulfan-II	0.2	0.23	115	0.18	90	29	54-160/38
76-44-8	Heptachlor	0.2	0.17	85	0.14	70	19	55-151/37
1024-57-3	Heptachlor epoxide	0.2	0.23	115	0.18	90	24	58-157/36
72-43-5	Methoxychlor	0.2	0.24	120	0.18	90	29	55-155/39

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	58%	47%	10-190%
877-09-8	Tetrachloro-m-xylene	55%	43%	10-190%
2051-24-3	Decachlorobiphenyl	80%	58%	10-156%
2051-24-3	Decachlorobiphenyl	75%	62%	10-156%

* = Outside of Control Limits.

Internal Standard Area Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2868-CC2867	**Injection Date:**	12/12/21
Lab File ID:	6G81090.D	**Injection Time:**	14:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	609118521	2.06	891379664	1.68
Upper Limit [a]	1218237042	2.56	1782759328	2.18
Lower Limit [b]	304559261	1.56	445689832	1.18

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP36994-MB1	538082383	2.06	763121310	1.69
OP36994-BS1	611219116	2.06	903805718	1.68
OP36994-BSD	557943896	2.06	792264214	1.68
JD36168-10	552803354	2.06	784641936	1.68
JD36168-11	587321435	2.06	850020985	1.68
JD36168-2	599803483	2.06	873534848	1.68
JD36168-3	739952269	2.06	1064662664	1.68
JD36168-4	601766449	2.06	864977416	1.69
JD36168-5	578156169	2.06	840856349	1.68
JD36168-6	600108040	2.06	806584216	1.68
JD36168-7	628343770	2.06	911702581	1.68
JD36168-8	571281422	2.06	826783282	1.68
JD36168-9	590501077	2.06	853596592	1.68

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

DDT/Endrin Breakdown Check

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	G6G2868-DDT	**Injection Date:**	12/12/21
Lab File ID:	6G81089.D	**Injection Time:**	13:48
Instrument ID:	GC6G		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	7620860	6527352
4,4'-DDE	13393391	11973754
4,4'-DDT	1872585757	1229943265
DDT Breakdown [a]	1.1 %	1.5 %
Endrin aldehyde	6727919	3189300
Endrin ketone	9171031	4283120
Endrin	1087443700	700681290
Endrin Breakdown [b]	1.4 %	1.1 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G2868-CC2867	6G81090.D	12/12/21	14:07	00:19	Continuing cal 25
OP36994-MB1	6G81092.D	12/12/21	15:16	01:27	Method Blank
OP36994-BS1	6G81093.D	12/12/21	15:34	01:45	Blank Spike
OP36994-BSD	6G81094.D	12/12/21	15:52	02:04	Blank Spike Duplicate
JD36168-10	6G81095.D	12/12/21	16:10	02:22	HOFF MW-7DU
JD36168-11	6G81096.D	12/12/21	16:29	02:40	HOFF MW-7S
JD36168-2	6G81097.D	12/12/21	16:47	02:58	HOFF OW-4DL
JD36168-3	6G81098.D	12/12/21	17:05	03:17	HOFF OW-4DU
JD36168-4	6G81099.D	12/12/21	17:24	03:35	HOFF MW-5DL
JD36168-5	6G81100.D	12/12/21	17:42	03:54	HOFF MW-5DV
JD36168-6	6G81101.D	12/12/21	18:00	04:12	HOFF MW-5S
JD36168-7	6G81102.D	12/12/21	18:19	04:31	HOFF MW-6S
JD36168-8	6G81103.D	12/12/21	18:37	04:49	HOFF OW-6DU
JD36168-9	6G81104.D	12/12/21	18:56	05:07	HOFF OW-6DL

GC Identification Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2868-CC2867	**Injection Date:**	12/12/21
Lab File ID:	6G81090.D	**Injection Time:**	14:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP36994-BS1	**Injection Date:**	12/12/21
Lab File ID:	6G81093.D	**Injection Time:**	15:34
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.77	3.77	0.16		ug/l	0.0
Aldrin	2 [a]	5.01	5.01	0.16		ug/l	
alpha-BHC	1	2.71	2.71	0.21		ug/l	4.9
alpha-BHC	2 [a]	3.55	3.55	0.20		ug/l	
beta-BHC	1	3.06	3.06	0.25		ug/l	12.8
beta-BHC	2 [a]	4.07	4.07	0.22		ug/l	
delta-BHC	1	3.23	3.23	0.26		ug/l	3.9
delta-BHC	2 [a]	4.47	4.47	0.25		ug/l	
gamma-BHC (Lindane)	1	2.99	2.99	0.23		ug/l	4.4
gamma-BHC (Lindane)	2 [a]	3.98	3.98	0.22		ug/l	
alpha-Chlordane	1	4.77	4.77	0.25		ug/l	8.3
alpha-Chlordane	2 [a]	6.35	6.35	0.23		ug/l	
gamma-Chlordane	1	4.61	4.61	0.25		ug/l	12.8
gamma-Chlordane	2 [a]	6.12	6.13	0.22		ug/l	
Chlordane (alpha and gamma)	n/a [b]			0.45		ug/l	
Dieldrin	1	5.25	5.25	0.24		ug/l	4.3
Dieldrin	2 [a]	6.88	6.88	0.23		ug/l	
4,4'-DDD	1	5.70	5.70	0.22		ug/l	0.0
4,4'-DDD	2 [a]	7.57	7.57	0.22		ug/l	
4,4'-DDE	1	4.90	4.89	0.21		ug/l	4.9
4,4'-DDE	2 [a]	6.62	6.62	0.20		ug/l	
4,4'-DDT	1 [a]	6.10	6.10	0.25		ug/l	0.0
4,4'-DDT	2	8.10	8.10	0.25		ug/l	
Endrin	1 [a]	5.56	5.56	0.23		ug/l	0.0
Endrin	2	7.39	7.39	0.23		ug/l	
Endosulfan sulfate	1 [a]	7.13	7.13	0.22		ug/l	4.4
Endosulfan sulfate	2	8.78	8.78	0.23		ug/l	
Endrin aldehyde	1 [a]	6.47	6.47	0.23		ug/l	12.2
Endrin aldehyde	2	8.31	8.31	0.26		ug/l	
Endrin ketone	1 [a]	7.56	7.56	0.26		ug/l	7.4
Endrin ketone	2	9.74	9.74	0.28		ug/l	
Endosulfan-I	1	4.94	4.94	0.24		ug/l	4.3
Endosulfan-I	2 [a]	6.45	6.45	0.23		ug/l	
Endosulfan-II	1 [a]	5.87	5.87	0.23		ug/l	4.3
Endosulfan-II	2	7.74	7.74	0.24		ug/l	
Heptachlor	1	3.46	3.46	0.19		ug/l	11.1
Heptachlor	2 [a]	4.56	4.56	0.17		ug/l	
Heptachlor epoxide	1	4.45	4.45	0.25		ug/l	8.3
Heptachlor epoxide	2 [a]	5.84	5.84	0.23		ug/l	
Methoxychlor	1	6.88	6.88	0.27		ug/l	11.8
Methoxychlor	2 [a]	9.35	9.35	0.24		ug/l	

GC Identification Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2868-CC2867	**Injection Date:**	12/12/21
Lab File ID:	6G81090.D	**Injection Time:**	14:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP36994-BS1	**Injection Date:**	12/12/21
Lab File ID:	6G81093.D	**Injection Time:**	15:34
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(a) QC results reported from this column.
(b) Final reported result.

GC Identification Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2868-CC2867	**Injection Date:**	12/12/21
Lab File ID:	6G81090.D	**Injection Time:**	14:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP36994-BSD	**Injection Date:**	12/12/21
Lab File ID:	6G81094.D	**Injection Time:**	15:52
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.77	3.77	0.14		ug/l	7.4
Aldrin	2 [a]	5.01	5.01	0.13		ug/l	
alpha-BHC	1	2.71	2.71	0.17		ug/l	12.5
alpha-BHC	2 [a]	3.55	3.55	0.15		ug/l	
beta-BHC	1	3.06	3.06	0.20		ug/l	10.5
beta-BHC	2 [a]	4.07	4.07	0.18		ug/l	
delta-BHC	1	3.23	3.23	0.20		ug/l	5.1
delta-BHC	2 [a]	4.47	4.47	0.19		ug/l	
gamma-BHC (Lindane)	1	2.99	2.99	0.19		ug/l	11.1
gamma-BHC (Lindane)	2 [a]	3.98	3.98	0.17		ug/l	
alpha-Chlordane	1	4.77	4.77	0.20		ug/l	10.5
alpha-Chlordane	2 [a]	6.35	6.35	0.18		ug/l	
gamma-Chlordane	1	4.61	4.61	0.20		ug/l	10.5
gamma-Chlordane	2 [a]	6.13	6.13	0.18		ug/l	
Chlordane (alpha and gamma)	n/a [b]			0.36		ug/l	
Dieldrin	1	5.25	5.25	0.19		ug/l	5.4
Dieldrin	2 [a]	6.88	6.88	0.18		ug/l	
4,4'-DDD	1	5.70	5.70	0.18		ug/l	5.7
4,4'-DDD	2 [a]	7.57	7.57	0.17		ug/l	
4,4'-DDE	1	4.89	4.89	0.18		ug/l	11.8
4,4'-DDE	2 [a]	6.62	6.62	0.16		ug/l	
4,4'-DDT	1	6.10	6.10	0.20		ug/l	5.1
4,4'-DDT	2 [a]	8.10	8.10	0.19		ug/l	
Endrin	1	5.56	5.56	0.19		ug/l	5.4
Endrin	2 [a]	7.39	7.39	0.18		ug/l	
Endosulfan sulfate	1	7.13	7.13	0.18		ug/l	5.7
Endosulfan sulfate	2 [a]	8.78	8.78	0.17		ug/l	
Endrin aldehyde	1 [a]	6.47	6.47	0.19		ug/l	5.1
Endrin aldehyde	2	8.31	8.31	0.20		ug/l	
Endrin ketone	1 [a]	7.56	7.56	0.21		ug/l	4.7
Endrin ketone	2	9.74	9.74	0.22		ug/l	
Endosulfan-I	1	4.94	4.94	0.20		ug/l	10.5
Endosulfan-I	2 [a]	6.45	6.45	0.18		ug/l	
Endosulfan-II	1	5.87	5.87	0.18		ug/l	0.0
Endosulfan-II	2 [a]	7.74	7.74	0.18		ug/l	
Heptachlor	1	3.46	3.46	0.16		ug/l	13.3
Heptachlor	2 [a]	4.56	4.56	0.14		ug/l	
Heptachlor epoxide	1	4.45	4.45	0.21		ug/l	15.4
Heptachlor epoxide	2 [a]	5.84	5.84	0.18		ug/l	
Methoxychlor	1	6.88	6.88	0.19		ug/l	5.4
Methoxychlor	2 [a]	9.35	9.35	0.18		ug/l	

GC Identification Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2868-CC2867	**Injection Date:**	12/12/21
Lab File ID:	6G81090.D	**Injection Time:**	14:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP36994-BSD	**Injection Date:**	12/12/21
Lab File ID:	6G81094.D	**Injection Time:**	15:52
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(a) QC results reported from this column.
(b) Final reported result.

Surrogate Recovery Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8081B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JD36168-2	6G81097.D	93	83	54	59
JD36168-3	6G81098.D	86	77	32	32
JD36168-4	6G81099.D	95	66	25	27
JD36168-5	6G81100.D	98	89	51	55
JD36168-6	6G81101.D	95	82	42	46
JD36168-7	6G81102.D	92	83	29	33
JD36168-8	6G81103.D	90	81	45	50
JD36168-9	6G81104.D	87	75	47	58
JD36168-10	6G81095.D	82	74	55	58
JD36168-11	6G81096.D	77	72	46	50
OP36994-BS1	6G81093.D	58	55	80	75
OP36994-BSD	6G81094.D	47	43	58	62
OP36994-MB1	6G81092.D	105	95	51	51

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	10-190%
S2 = Decachlorobiphenyl	10-156%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2868-CC2867	**Injection Date:**	12/12/21
Lab File ID:	6G81090.D	**Injection Time:**	14:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.26	2.89	9.36	11.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP36994-MB1	6G81092.D	12/12/21	15:16	2.27	2.88	9.37	11.85
OP36994-BS1	6G81093.D	12/12/21	15:34	2.26	2.89	9.36	11.85
OP36994-BSD	6G81094.D	12/12/21	15:52	2.26	2.89	9.36	11.85
JD36168-10	6G81095.D	12/12/21	16:10	2.26	2.89	9.36	11.85
JD36168-11	6G81096.D	12/12/21	16:29	2.26	2.89	9.36	11.85
JD36168-2	6G81097.D	12/12/21	16:47	2.26	2.89	9.36	11.85
JD36168-3	6G81098.D	12/12/21	17:05	2.26	2.89	9.36	11.85
JD36168-4	6G81099.D	12/12/21	17:24	2.26	2.89	9.36	11.85
JD36168-5	6G81100.D	12/12/21	17:42	2.26	2.89	9.36	11.85
JD36168-6	6G81101.D	12/12/21	18:00	2.26	2.89	9.36	11.85
JD36168-7	6G81102.D	12/12/21	18:19	2.26	2.89	9.36	11.85
JD36168-8	6G81103.D	12/12/21	18:37	2.26	2.89	9.36	11.85
JD36168-9	6G81104.D	12/12/21	18:56	2.26	2.89	9.36	11.85

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICC2867
Lab FileID: 6G81077.D

Response Factor Report GC6G

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration

Calibration Files
5 =6g81079.d 10 =6g81078.d 25 =6g81077.d 50 =6g81076.d
100 =6g81074.d 1 =6g81081.d 75 =6g81075.d 2 =6g81080.d
= =

Compound	5	10	25	50	100	1	75	2	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-m-xylene	0.595	0.614	0.640	0.654	0.654	0.555	0.651	0.605	0.621	5.68
3) hexachlorobenzene	1.747	1.786	1.705	1.723	1.704	1.927	1.729	1.787	1.763	4.18
4) alpha-BHC	1.188	1.251	1.286	1.411	1.480	1.196	1.510	1.149	1.309	10.68
5) gamma-BHC	1.330	1.053	1.086	1.146	1.196	1.131	1.165	1.001	1.139	8.75
6) Heptachlor	0.991	1.016	1.043	1.083	1.169	0.862	1.118	1.111	1.049	9.08
7) beta-BHC	0.422	0.445	0.433	0.445	0.440	0.525	0.438	0.452	0.450	7.05
8) delta-BHC	0.893	0.947	1.017	1.122	1.183	1.167	1.135	0.910	1.047	11.41
9) Aldrin	1.064	0.990	1.101	1.091	1.168	1.025	1.125	1.313	1.110	8.96
10) alachlor	0.129	0.108	0.110	0.108	0.098		0.103		0.109	9.90
11) Heptachlor Epoxide	0.920	0.928	0.944	0.977	1.004	1.172	0.975	0.869	0.974	9.28
12) gamma-Chlordane	0.882	0.939	0.965	1.077	1.031	1.017	1.025	0.967	0.988	6.25
13) alpha-Chlordane	0.849	0.922	0.983	0.992	1.032	0.872	1.020	0.920	0.949	7.15
14) Endosulfan I	0.992	1.014	1.038	1.084	1.122	0.968	1.117	1.134	1.059	6.06
15) 4,4'-DDE	0.933	0.943	0.953	0.987	1.025	1.015	1.009	1.102	0.996	5.52
16) Dieldrin	1.039	1.097	1.046	1.091	1.132	1.061	1.113	0.983	1.070	4.48
17) Endrin	1.098	0.986	1.012	1.060	1.108	1.128	1.106	0.955	1.057	6.10
18) 4,4'-DDD	0.760	0.751	0.771	0.818	0.839	0.757	0.843	0.765	0.788	4.90
19) Endosulfan II	1.209	0.924	0.909	0.963	0.991	1.051	0.989	0.929	0.996	9.80
20) 4,4'-DDT	0.792	0.793	0.801	0.828	0.890	0.978	0.870	0.802	0.844	7.76
21) Endrin Aldehyde	0.708	0.688	0.698	0.731	0.727	0.878	0.730	0.929	0.761	11.84
22) Endosulfan Sulfate	1.073	0.950	0.911	0.989	0.995	0.864	0.988	1.019	0.973	6.63
23) Methoxychlor										

Initial Calibration Summary

Job Number: JD36168 **Sample:** G6G2867-ICC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81077.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
          0.464 0.458 0.460 0.485 0.467 0.408 0.472 0.464          0.460    4.85
 24)  Mirex
          0.759 0.765 0.762 0.775 0.756 0.843 0.756 0.833          0.781    4.55
 25)  Endrin Ketone
          0.923 0.859 0.846 0.953 0.958 0.873 0.985 1.140          0.942   10.06
 26)  Decachlorobiphenyl
          1.228 1.217 1.097 1.158       1.303 1.083 1.283          1.195    7.19

 27) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
 28)  Toxaphene{A}
                            0.020                                  0.020    0.00
 29)  Toxaphene{B}
                            0.026                                  0.026    0.00
 30)  Toxaphene{C}
                            0.024                                  0.024    0.00
 31)  Toxaphene{D}
                            0.021                                  0.021    0.00
 32)  Toxaphene{E}
                            0.023                                  0.023    0.00

 33) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
 34)  Chlordane {A}
                            0.073                                  0.073    0.00
 35)  Chlordane {B}
                            0.044                                  0.044    0.00
 36)  Chlordane {C}
                            0.138                                  0.138    0.00
 37)  Chlordane {D}
                            0.226                                  0.226    0.00
 38)  Chlordane {E}
                            0.035                                  0.035    0.00

Signal #2


  1) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
  2)  Tetrachloro-m-xylene
          0.916 0.913 0.897 0.888 0.878 0.920 0.884 0.974          0.909    3.38
  3)  hexachlorobenzene
          1.093 1.079 1.034 1.003 0.980 1.262 0.986 1.153          1.074    8.96
  4)  alpha-BHC
          1.293 1.319 1.325 1.346 1.356 1.514 1.356 1.330          1.355    5.00
  5)  gamma-BHC
          1.115 1.114 1.112 1.109 1.098 1.222 1.103 1.140          1.127    3.60
  6)  Heptachlor
          1.148 1.137 1.142 1.116 1.124 1.240 1.131 1.163          1.150    3.40
  7)  beta-BHC
          0.522 0.508 0.489 0.468 0.448 0.612 0.456 0.550          0.507   10.84
  8)  delta-BHC
          0.996 1.021 1.024 1.069 1.081 0.979 1.080 0.998          1.031    3.92
  9)  Aldrin
          1.063 1.035 1.029 1.027 1.025 1.113 1.021 1.054          1.046    2.94
 10)  alachlor
          0.149 0.148 0.148 0.140 0.128       0.132                0.141    6.48
 11)  Heptachlor Epoxide
          0.976 0.987 0.989 0.972 0.970 1.101 0.967 1.007          0.996    4.44
 12)  gamma-Chlordane
          1.016 1.029 1.008 1.008 1.000 1.140 1.005 1.065          1.034    4.63
 13)  alpha-Chlordane
          0.999 0.992 0.971 0.961 0.952 1.003 0.957 0.997          0.979    2.16
```

Initial Calibration Summary

Job Number: JD36168 **Sample:** G6G2867-ICC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81077.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
14)  Endosulfan I
          0.955 0.962 0.941 0.929 0.922 1.057 0.926 0.979          0.959    4.63
15)  4,4'-DDE
          0.967 1.016 0.981 0.980 0.986 1.126 0.983 0.991          1.004    5.12
16)  Dieldrin
          1.007 1.020 1.017 1.012 1.013 1.126 1.014 1.040          1.031    3.84
17)  Endrin
          0.967 0.981 0.988 0.966 0.994 1.078 0.976 0.977          0.991    3.69
18)  4,4'-DDD
          0.829 0.837 0.829 0.828 0.831 0.954 0.831 0.847          0.848    5.11
19)  Endosulfan II
          0.906 0.905 0.884 0.872 0.869 1.015 0.872 0.927          0.906    5.37
20)  4,4'-DDT
          0.790 0.821 0.825 0.840 0.845 0.805 0.845 0.779          0.819    3.10
21)  Endrin Aldehyde
          0.649 0.645 0.629 0.656 0.646 0.650 0.645 0.634          0.644    1.32
22)  Endosulfan Sulfate
          0.871 0.890 0.863 0.876 0.866 0.916 0.871 0.896          0.881    2.06
23)  Methoxychlor
          0.446 0.460 0.456 0.444 0.433 0.492 0.439 0.460          0.454    4.03
24)  Mirex
          0.751 0.733 0.722 0.688 0.661 0.850 0.672 0.792          0.734    8.73
25)  Endrin Ketone
          0.816 0.817 0.789 0.838 0.836 0.804 0.838 0.826          0.820    2.15
26)  Decachlorobiphenyl
          0.788 0.763 0.733 0.699       0.911 0.686 0.876          0.779   11.01

27) I   1-bromo-2-nitrobenzen ----------------ISTD--------------------
28)  Toxaphene{A}
                              0.013                                0.013    0.00
29)  Toxaphene{B}
                              0.021                                0.021    0.00
30)  Toxaphene{C}
                              0.040                                0.040    0.00
31)  Toxaphene{D}
                              0.019                                0.019    0.00
32)  Toxaphene{E}
                              0.024                                0.024    0.00

33) I   1-bromo-2-nitrobenzen ----------------ISTD--------------------
34)  Chlordane {A}
                              0.066                                0.066    0.00
35)  Chlordane {B}
                              0.036                                0.036    0.00
36)  Chlordane {C}
                              0.133                                0.133    0.00
37)  Chlordane {D}
                              0.217                                0.217    0.00
38)  Chlordane {E}
                              0.033                                0.033    0.00
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          6pst2867.m        Sun Dec 12 10:40:46 2021
```

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81084.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81084.d\ECD1A.CH Vial: 13
Acq On : 10 Dec 2021 6:57 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81084.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 6:57 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene	0.621	0.698	-12.4	110	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.309	1.505	-15.0	118	0.00	2.69- 2.75
5	MA	gamma-BHC	1.139	1.342	-17.8	125	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.210	-15.3	117	0.00	3.43- 3.49
7	B	beta-BHC	0.450	0.521	-15.8	121	0.00	3.04- 3.10
8	B	delta-BHC	1.047	1.157	-10.5	115	0.00	3.21- 3.27
9	MB	Aldrin	1.110	1.219	-9.8	112	0.00	3.75- 3.81
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide	0.974	1.139	-16.9	122	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	1.145	-15.9	120	0.00	4.58- 4.64
13	B	alpha-Chlordane	0.949	1.111	-17.1	114	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.178	-11.2	114	0.00	4.91- 4.97
15	B	4,4'-DDE	0.996	1.098	-10.2	116	0.00	4.87- 4.93
16	MA	Dieldrin	1.070	1.195	-11.7	115	0.00	5.22- 5.28
17	MA	Endrin	1.057	1.040	1.6	104	0.00	5.53- 5.59
18	A	4,4'-DDD	0.788	0.877	-11.3	115	0.00	5.67- 5.73
19	B	Endosulfan II	0.996	1.056	-6.0	117	0.00	5.84- 5.90
20	MA	4,4'-DDT	0.844	0.928	-10.0	117	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.752	1.2	109	0.00	6.44- 6.50
22	B	Endosulfan Sulfate	0.973	0.984	-1.1	109	0.00	7.10- 7.16
23	A	Methoxychlor	0.460	0.529	-15.0	116	0.00	6.85- 6.91
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.942	0.938	0.4	112	0.00	7.53- 7.59
26	SA	Decachlorobiphenyl	1.195	1.211	-1.3	111	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

10.8.2 10

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81084.D

35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	0.990	-8.9	110	0.00	2.86- 2.92
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.355	1.524	-12.5	114	0.00	3.53- 3.59
5	MA	gamma-BHC	1.127	1.309	-16.1	117	0.00	3.96- 4.02
6	MA	Heptachlor	1.150	1.330	-15.7	116	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.570	-12.4	116	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.193	-15.7	116	0.00	4.44- 4.50
9	MB	Aldrin	1.046	1.214	-16.1	117	0.00	4.98- 5.04
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide	0.996	1.144	-14.9	115	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.172	-13.3	116	0.00	6.10- 6.16
13	B	alpha-Chlordane	0.979	1.127	-15.1	115	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	1.067	-11.3	113	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	1.115	-11.1	113	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	1.171	-13.6	114	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.044	-5.3	105	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.943	-11.2	113	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	1.017	-12.3	114	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.946	-15.5	114	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.690	-7.1	109	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.944	-7.2	109	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.530	-16.7	116	0.00	9.32- 9.38
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.820	0.882	-7.6	111	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.848	-8.9	115	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Sun Dec 12 10:39:03 2021

10.8.2 10

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81085.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81085.d\ECD1A.CH Vial: 14
Acq On : 10 Dec 2021 7:15 am Operator: christp
Sample : icv2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81085.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:15 am Operator: christp
Sample : icc2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene	0.621	0.760	-22.4#	115	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	1.195	1.187	0.7	101	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.19- 2.19
34		Chlordane {A}	0.073	0.067	8.2	89	0.00	3.36- 3.56

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81085.D

35		Chlordane {B}	0.044	0.040	9.1	88	0.00	3.81- 4.01
36		Chlordane {C}	0.138	0.151	-9.4	106	0.00	4.51- 4.71
37		Chlordane {D}	0.226	0.232	-2.7	99	0.00	4.67- 4.87
38		Chlordane {E}	0.035	0.038	-8.6	106	0.00	5.68- 5.88
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	1.024	-12.7	114	0.00	2.86- 2.92
3		hexachlorobenzene	----------NA----------					
4	A	alpha-BHC	----------NA----------					
5	MA	gamma-BHC	----------NA----------					
6	MA	Heptachlor	----------NA----------					
7	B	beta-BHC	----------NA----------					
8	B	delta-BHC	----------NA----------					
9	MB	Aldrin	----------NA----------					
10		alachlor	----------NA----------					
11	B	Heptachlor Epoxide	----------NA----------					
12	B	gamma-Chlordane	----------NA----------					
13	B	alpha-Chlordane	----------NA----------					
14	A	Endosulfan I	----------NA----------					
15	B	4,4'-DDE	----------NA----------					
16	MA	Dieldrin	----------NA----------					
17	MA	Endrin	----------NA----------					
18	A	4,4'-DDD	----------NA----------					
19	B	Endosulfan II	----------NA----------					
20	MA	4,4'-DDT	----------NA----------					
21	B	Endrin Aldehyde	----------NA----------					
22	B	Endosulfan Sulfate	----------NA----------					
23	A	Methoxychlor	----------NA----------					
24		Mirex	----------NA----------					
25	B	Endrin Ketone	----------NA----------					
26	SA	Decachlorobiphenyl	0.779	0.774	0.6	109	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.57- 2.57
28	L8	Toxaphene{A}	----------NA----------					
29	L8	Toxaphene{B}	----------NA----------					
30	L8	Toxaphene{C}	----------NA----------					
31	L8	Toxaphene{D}	----------NA----------					
32	L8	Toxaphene{E}	----------NA----------					
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
34		Chlordane {A}	0.066	0.070	-6.1	105	0.00	4.46- 4.66
35		Chlordane {B}	0.036	0.038	-5.6	103	0.00	5.11- 5.31
36		Chlordane {C}	0.133	0.136	-2.3	102	0.00	6.02- 6.22
37		Chlordane {D}	0.217	0.222	-2.3	101	0.00	6.25- 6.45
38		Chlordane {E}	0.033	0.036	-9.1	109	0.00	7.72- 7.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6pst2867.m Sun Dec 12 10:40:04 2021

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81086.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81086.d\ECD1A.CH Vial: 15
Acq On : 10 Dec 2021 7:33 am Operator: christp
Sample : icv2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81086.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:33 am Operator: christp
Sample : icc2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene	0.621	0.768	-23.7#	116	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	1.195	1.146	4.1	98	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.20- 2.20
28	L8	Toxaphene{A}	0.020	0.018	10.0	89	0.00	5.51- 5.71
29	L8	Toxaphene{B}	0.026	0.024	7.7	92	0.00	5.75- 5.95
30	L8	Toxaphene{C}	0.024	0.023	4.2	96	0.00	5.93- 6.13
31	L8	Toxaphene{D}	0.021	0.022	-4.8	102	0.00	6.26- 6.46
32	L8	Toxaphene{E}	0.023	0.021	8.7	91	0.00	6.88- 7.08
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81086.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	1.059	-16.5	116	0.00	2.86- 2.92
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC			----------NA----------			
5	MA	gamma-BHC			----------NA----------			
6	MA	Heptachlor			----------NA----------			
7	B	beta-BHC			----------NA----------			
8	B	delta-BHC			----------NA----------			
9	MB	Aldrin			----------NA----------			
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide			----------NA----------			
12	B	gamma-Chlordane			----------NA----------			
13	B	alpha-Chlordane			----------NA----------			
14	A	Endosulfan I			----------NA----------			
15	B	4,4'-DDE			----------NA----------			
16	MA	Dieldrin			----------NA----------			
17	MA	Endrin			----------NA----------			
18	A	4,4'-DDD			----------NA----------			
19	B	Endosulfan II			----------NA----------			
20	MA	4,4'-DDT			----------NA----------			
21	B	Endrin Aldehyde			----------NA----------			
22	B	Endosulfan Sulfate			----------NA----------			
23	A	Methoxychlor			----------NA----------			
24		Mirex			----------NA----------			
25	B	Endrin Ketone			----------NA----------			
26	SA	Decachlorobiphenyl	0.779	0.805	-3.3	112	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.57- 2.57
28	L8	Toxaphene{A}	0.013	0.014	-7.7	107	0.00	6.75- 6.95
29	L8	Toxaphene{B}	0.021	0.021	0.0	103	0.00	7.61- 7.81
30	L8	Toxaphene{C}	0.040	0.041	-2.5	104	0.00	7.77- 7.97
31	L8	Toxaphene{D}	0.019	0.019	0.0	104	0.00	8.21- 8.41
32	L8	Toxaphene{E}	0.024	0.024	0.0	100	0.00	9.11- 9.31
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6pst2867.m Sun Dec 12 10:40:25 2021

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81087.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81087.d\ECD1A.CH Vial: 16
Acq On : 10 Dec 2021 7:52 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81087.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:52 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex	0.781	0.804	-2.9	113	0.00	6.96- 7.02
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81087.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene			----------NA----------			
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC			----------NA----------			
5	MA	gamma-BHC			----------NA----------			
6	MA	Heptachlor			----------NA----------			
7	B	beta-BHC			----------NA----------			
8	B	delta-BHC			----------NA----------			
9	MB	Aldrin			----------NA----------			
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide			----------NA----------			
12	B	gamma-Chlordane			----------NA----------			
13	B	alpha-Chlordane			----------NA----------			
14	A	Endosulfan I			----------NA----------			
15	B	4,4'-DDE			----------NA----------			
16	MA	Dieldrin			----------NA----------			
17	MA	Endrin			----------NA----------			
18	A	4,4'-DDD			----------NA----------			
19	B	Endosulfan II			----------NA----------			
20	MA	4,4'-DDT			----------NA----------			
21	B	Endrin Aldehyde			----------NA----------			
22	B	Endosulfan Sulfate			----------NA----------			
23	A	Methoxychlor			----------NA----------			
24		Mirex	0.734	0.756	-3.0	112	0.00	9.64- 9.70
25	B	Endrin Ketone			----------NA----------			
26	SA	Decachlorobiphenyl			----------NA----------			
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
28	L8	Toxaphene{A}			----------NA----------			
29	L8	Toxaphene{B}			----------NA----------			
30	L8	Toxaphene{C}			----------NA----------			
31	L8	Toxaphene{D}			----------NA----------			
32	L8	Toxaphene{E}			----------NA----------			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Sun Dec 12 10:39:23 2021

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81088.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81088.d\ECD1A.CH Vial: 17
Acq On : 10 Dec 2021 8:10 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81088.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 8:10 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene	1.763	1.832	-3.9	112	0.00	2.55- 2.61
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor	0.109	0.105	3.7	100	0.00	3.89- 3.95
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
34		Chlordane {A}		----------NA----------				

Initial Calibration Verification

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81088.D

35		Chlordane {B}			----------NA----------				
36		Chlordane {C}			----------NA----------				
37		Chlordane {D}			----------NA----------				
38		Chlordane {E}			----------NA----------				
*****		Signal #2 *****							
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
2	SAB	Tetrachloro-m-xylene			----------NA----------				
3		hexachlorobenzene	1.074	1.092	-1.7	112	0.00	3.37-	3.43
4	A	alpha-BHC			----------NA----------				
5	MA	gamma-BHC			----------NA----------				
6	MA	Heptachlor			----------NA----------				
7	B	beta-BHC			----------NA----------				
8	B	delta-BHC			----------NA----------				
9	MB	Aldrin			----------NA----------				
10		alachlor	0.141	0.133	5.7	95	0.00	4.79-	4.85
11	B	Heptachlor Epoxide			----------NA----------				
12	B	gamma-Chlordane			----------NA----------				
13	B	alpha-Chlordane			----------NA----------				
14	A	Endosulfan I			----------NA----------				
15	B	4,4'-DDE			----------NA----------				
16	MA	Dieldrin			----------NA----------				
17	MA	Endrin			----------NA----------				
18	A	4,4'-DDD			----------NA----------				
19	B	Endosulfan II			----------NA----------				
20	MA	4,4'-DDT			----------NA----------				
21	B	Endrin Aldehyde			----------NA----------				
22	B	Endosulfan Sulfate			----------NA----------				
23	A	Methoxychlor			----------NA----------				
24		Mirex			----------NA----------				
25	B	Endrin Ketone			----------NA----------				
26	SA	Decachlorobiphenyl			----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
28	L8	Toxaphene{A}			----------NA----------				
29	L8	Toxaphene{B}			----------NA----------				
30	L8	Toxaphene{C}			----------NA----------				
31	L8	Toxaphene{D}			----------NA----------				
32	L8	Toxaphene{E}			----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
34		Chlordane {A}			----------NA----------				
35		Chlordane {B}			----------NA----------				
36		Chlordane {C}			----------NA----------				
37		Chlordane {D}			----------NA----------				
38		Chlordane {E}			----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Thu Dec 16 14:12:47 2021

10.8.6 10

Continuing Calibration Summary

Job Number: JD36168 **Sample:** G6G2868-CC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81090.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\sa...68\6g81090.d\ECD1A.CH Vial: 2
Signal #2 : C:\msdchem\1\data\sarah\g6g2868\6g81090.d\ECD2B.CH
Acq On : 12-Dec-21, 14:07:36 Operator: thomasl
Sample : cc2867-25 Inst : GC6G
Misc : op36673a,g6g2868,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6PST2867.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	1.18- 2.18
2	SAB	Tetrachloro-m-xylene	0.621	0.608	2.1	106	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.672	5.2	109	0.00	2.55- 2.61
4	A	alpha-BHC	1.309	1.343	-2.6	116	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.219	-7.0	125	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.175	-12.0	126	0.00	3.43- 3.49
7	B	beta-BHC	0.450	0.510	-13.3	131	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.181	-12.8	129	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.172	-5.6	119	0.00	3.74- 3.80
10		alachlor	0.109	0.095	12.8	96	0.00	3.89- 3.95
11	B	Heptachlor Epoxide	0.974	1.093	-12.2	129	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	1.153	-16.7	133	0.00	4.58- 4.64
13	B	alpha-Chlordane	0.949	1.015	-7.0	115	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.143	-7.9	123	0.00	4.91- 4.97
15	B	4,4'-DDE	0.996	1.034	-3.8	121	0.00	4.86- 4.92
16	MA	Dieldrin	1.070	1.113	-4.0	119	0.00	5.22- 5.28
17	MA	Endrin	1.057	1.115	-5.5	123	0.00	5.53- 5.59
18	A	4,4'-DDD	0.788	0.844	-7.1	122	0.00	5.67- 5.73
19	B	Endosulfan II	0.996	1.014	-1.8	124	0.00	5.84- 5.90
20	MA	4,4'-DDT	0.844	0.885	-4.9	123	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.831	-9.2	133	0.00	6.44- 6.50
22	B	Endosulfan Sulfate	0.973	0.972	0.1	119	0.00	7.10- 7.16
23	A	Methoxychlor	0.460	0.497	-8.0	120	0.00	6.85- 6.91
24		Mirex	0.781	0.818	-4.7	120	0.00	6.96- 7.02
25	B	Endrin Ketone	0.942	0.984	-4.5	130	0.00	7.53- 7.59
26	SA	Decachlorobiphenyl	1.195	1.113	6.9	113	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	1.18- 2.18
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	1.18- 2.18
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2868-CC2867
Lab FileID: 6G81090.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.845	7.0	104	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.989	7.9	105	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.307	3.5	109	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.178	-4.5	117	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.187	-3.2	115	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.513	-1.2	116	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.136	-10.2	122	0.00	4.44- 4.50
9	MB	Aldrin	1.046	1.093	-4.5	117	0.00	4.98- 5.04
10		alachlor	0.141	0.149	-5.7	111	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	1.038	-4.2	116	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.064	-2.9	116	0.00	6.10- 6.16
13	B	alpha-Chlordane	0.979	1.019	-4.1	116	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.981	-2.3	115	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	1.016	-1.2	114	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	1.051	-1.9	114	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.035	-4.4	116	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.858	-1.2	114	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	0.912	-0.7	114	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.886	-8.2	119	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.740	-14.9	130	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.903	-2.5	115	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.465	-2.4	113	0.00	9.32- 9.38
24		Mirex	0.734	0.748	-1.9	114	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.961	-17.2	134	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.787	-1.0	118	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.56- 2.56
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.56- 2.56
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6PST2867.M Sun Dec 12 20:57:27 2021

10.8.7 10

Continuing Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2868-CC2867
Lab FileID: 6G81106.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ch...68\6g81106.d\ECD1A.CH Vial: 4
Signal #2 : C:\msdchem\1\data\chrisc2\g6g2868\6g81106.d\ECD2B.CH
Acq On : 12-Dec-21, 23:01:19 Operator: christp
Sample : cc2867-50 Inst : GC6G
Misc : op36994,g6g2868,270,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Mon Dec 13 21:19:51 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.18- 2.18
2	SAB	Tetrachloro-m-xylene	0.621	0.630	-1.4	93	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.678	4.8	94	0.00	2.55- 2.61
4	A	alpha-BHC	1.309	1.362	-4.0	94	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.167	-2.5	99	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.111	-5.9	99	0.00	3.43- 3.49
7	B	beta-BHC	0.450	0.453	-0.7	99	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.040	0.7	90	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.089	1.9	97	0.00	3.74- 3.80
10		alachlor	0.109	0.098	10.1	88	0.00	3.89- 3.95
11	B	Heptachlor Epoxide	0.974	0.952	2.3	94	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	0.965	2.3	87	0.00	4.58- 4.64
13	B	alpha-Chlordane	0.949	0.960	-1.2	94	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.023	3.4	91	0.00	4.91- 4.97
15	B	4,4'-DDE	0.996	0.928	6.8	91	0.00	4.86- 4.92
16	MA	Dieldrin	1.070	1.084	-1.3	96	0.00	5.22- 5.28
17	MA	Endrin	1.057	1.097	-3.8	100	0.00	5.53- 5.59
18	A	4,4'-DDD	0.788	0.805	-2.2	95	0.00	5.66- 5.72
19	B	Endosulfan II	0.996	0.941	5.5	95	0.00	5.84- 5.90
20	MA	4,4'-DDT	0.844	0.843	0.1	99	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.725	4.7	96	0.00	6.44- 6.50
22	B	Endosulfan Sulfate	0.973	0.924	5.0	91	0.00	7.10- 7.16
23	A	Methoxychlor	0.460	0.486	-5.7	97	0.00	6.85- 6.91
24		Mirex	0.781	0.771	1.3	96	0.00	6.96- 7.02
25	B	Endrin Ketone	0.942	0.872	7.4	89	0.00	7.53- 7.59
26	SA	Decachlorobiphenyl	1.195	1.187	0.7	99	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.18- 2.18
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.18- 2.18
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

10.8.8 10

Continuing Calibration Summary

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2868-CC2867
Lab FileID: 6G81106.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.834	8.3	94	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.939	12.6	94	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.262	6.9	94	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.042	7.5	94	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.062	7.7	95	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.442	12.8	95	0.00	4.04- 4.10
8	B	delta-BHC	1.031	0.986	4.4	92	0.00	4.44- 4.50
9	MB	Aldrin	1.046	0.968	7.5	94	0.00	4.98- 5.04
10		alachlor	0.141	0.130	7.8	93	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	0.921	7.5	95	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	0.963	6.9	96	0.00	6.10- 6.16
13	B	alpha-Chlordane	0.979	0.902	7.9	94	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.886	7.6	96	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	0.939	6.5	96	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	0.967	6.2	96	0.00	6.85- 6.91
17	MA	Endrin	0.991	0.960	3.1	99	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.796	6.1	96	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	0.846	6.6	97	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.801	2.2	95	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.629	2.3	96	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.810	8.1	93	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.428	5.7	96	0.00	9.32- 9.38
24		Mirex	0.734	0.677	7.8	99	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.796	2.9	95	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.710	8.9	102	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.56- 2.56
28	L8	Toxaphene{A}	----------NA----------					
29	L8	Toxaphene{B}	----------NA----------					
30	L8	Toxaphene{C}	----------NA----------					
31	L8	Toxaphene{D}	----------NA----------					
32	L8	Toxaphene{E}	----------NA----------					
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.56- 2.56
34		Chlordane {A}	----------NA----------					
35		Chlordane {B}	----------NA----------					
36		Chlordane {C}	----------NA----------					
37		Chlordane {D}	----------NA----------					
38		Chlordane {E}	----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6pst2867.m Mon Dec 13 22:28:29 2021

10.8.8 10

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2867	**Method:** EPA 608.3	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2867-IC2867	6G81074.D	12/10/21 03:54	n/a	Initial cal 100
G6G2867-IC2867	6G81075.D	12/10/21 04:13	n/a	Initial cal 75
G6G2867-IC2867	6G81076.D	12/10/21 04:31	n/a	Initial cal 50
G6G2867-ICC2867	6G81077.D	12/10/21 04:49	n/a	Initial cal 25
G6G2867-IC2867	6G81078.D	12/10/21 05:08	n/a	Initial cal 10
G6G2867-IC2867	6G81079.D	12/10/21 05:25	n/a	Initial cal 5
G6G2867-IC2867	6G81080.D	12/10/21 05:43	n/a	Initial cal 2
G6G2867-IC2867	6G81081.D	12/10/21 06:02	n/a	Initial cal 1
G6G2867-IC2867	6G81082.D	12/10/21 06:20	n/a	Initial cal 500
G6G2867-IC2867	6G81083.D	12/10/21 06:38	n/a	Initial cal 500
G6G2867-ICV2867	6G81084.D	12/10/21 06:57	n/a	Initial cal verification 25
G6G2867-ICV2867	6G81085.D	12/10/21 07:15	n/a	Initial cal verification 500
G6G2867-ICV2867	6G81086.D	12/10/21 07:33	n/a	Initial cal verification 500
G6G2867-ICV2867	6G81087.D	12/10/21 07:52	n/a	Initial cal verification 25
G6G2867-ICV2867	6G81088.D	12/10/21 08:10	n/a	Initial cal verification 25

Run Sequence Report

Job Number: JD36168
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2868	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2868-DDT	6G81089.D	12/12/21 13:48	n/a	DDT/Endrin Breakdown Check
G6G2868-CC2867	6G81090.D	12/12/21 14:07	n/a	Continuing cal 25
OP36994-MB1	6G81092.D	12/12/21 15:16	OP36994	Method Blank
OP36994-BS1	6G81093.D	12/12/21 15:34	OP36994	Blank Spike
OP36994-BSD	6G81094.D	12/12/21 15:52	OP36994	Blank Spike Duplicate
JD36168-10	6G81095.D	12/12/21 16:10	OP36994	HOFF MW-7DU
JD36168-11	6G81096.D	12/12/21 16:29	OP36994	HOFF MW-7S
JD36168-2	6G81097.D	12/12/21 16:47	OP36994	HOFF OW-4DL
JD36168-3	6G81098.D	12/12/21 17:05	OP36994	HOFF OW-4DU
JD36168-4	6G81099.D	12/12/21 17:24	OP36994	HOFF MW-5DL
JD36168-5	6G81100.D	12/12/21 17:42	OP36994	HOFF MW-5DV
JD36168-6	6G81101.D	12/12/21 18:00	OP36994	HOFF MW-5S
JD36168-7	6G81102.D	12/12/21 18:19	OP36994	HOFF MW-6S
JD36168-8	6G81103.D	12/12/21 18:37	OP36994	HOFF OW-6DU
JD36168-9	6G81104.D	12/12/21 18:56	OP36994	HOFF OW-6DL
G6G2868-DDT	6G81105.D	12/12/21 22:42	n/a	DDT/Endrin Breakdown Check
G6G2868-CC2867	6G81106.D	12/12/21 23:01	n/a	Continuing cal 50
OP36976-MB1	6G81108.D	12/13/21 00:38	OP36976	Method Blank
OP36976-BS1	6G81109.D	12/13/21 00:56	OP36976	Blank Spike
OP36976-BSD	6G81110.D	12/13/21 01:15	OP36976	Blank Spike Duplicate
JD36176-13	6G81111.D	12/13/21 01:33	OP36976	(used for QC only; not part of job JD36168)
OP36976-MS	6G81112.D	12/13/21 01:51	OP36976	Matrix Spike
OP36976-MSD	6G81113.D	12/13/21 02:08	OP36976	Matrix Spike Duplicate
ZZZZZZ	6G81114.D	12/13/21 02:26	OP36976	(unrelated sample)
ZZZZZZ	6G81115.D	12/13/21 02:45	OP36976	(unrelated sample)
ZZZZZZ	6G81116.D	12/13/21 03:03	OP36976	(unrelated sample)
ZZZZZZ	6G81117.D	12/13/21 03:21	OP36976	(unrelated sample)
ZZZZZZ	6G81118.D	12/13/21 03:39	OP36976	(unrelated sample)
ZZZZZZ	6G81119.D	12/13/21 03:58	OP36976	(unrelated sample)
ZZZZZZ	6G81120.D	12/13/21 04:16	OP36976	(unrelated sample)
ZZZZZZ	6G81121.D	12/13/21 04:34	OP36976	(unrelated sample)
ZZZZZZ	6G81122.D	12/13/21 04:52	OP36976	(unrelated sample)
ZZZZZZ	6G81124.D	12/13/21 05:29	OP36976	(unrelated sample)
G6G2868-CC2867	6G81127.D	12/13/21 06:24	n/a	Continuing cal 25
ZZZZZZ	6G81129.D	12/13/21 07:01	OP36976	(unrelated sample)
ZZZZZZ	6G81130.D	12/13/21 07:19	OP36976	(unrelated sample)
ZZZZZZ	6G81131.D	12/13/21 07:37	OP36976	(unrelated sample)
ZZZZZZ	6G81132.D	12/13/21 07:56	OP36976	(unrelated sample)
ZZZZZZ	6G81133.D	12/13/21 08:14	OP36976	(unrelated sample)

GC/LC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 19:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81097.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 16:47:25
Operator : thomasl
Sample : jd36168-2
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:13:54 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.684	2.060	873.5E6	599.8E6	50.000	50.000m
27) I 1-bromo-2...	1.684	2.060	873.5E6	599.3E6	50.000	50.000m
33) I 1-bromo-2...	1.684	2.060	873.5E6	601.4E6	50.000	50.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	2.264	2.888	405.1E6	360.9E6	37.345	33.107
Spiked Amount	40.000 Range	30 - 150	Recovery	=	93.36%	82.77%
26) SA Decachlor...	9.362	11.853	450.3E6	219.1E6	21.562	23.436
Spiked Amount	40.000		Recovery	=	53.91%	58.59%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

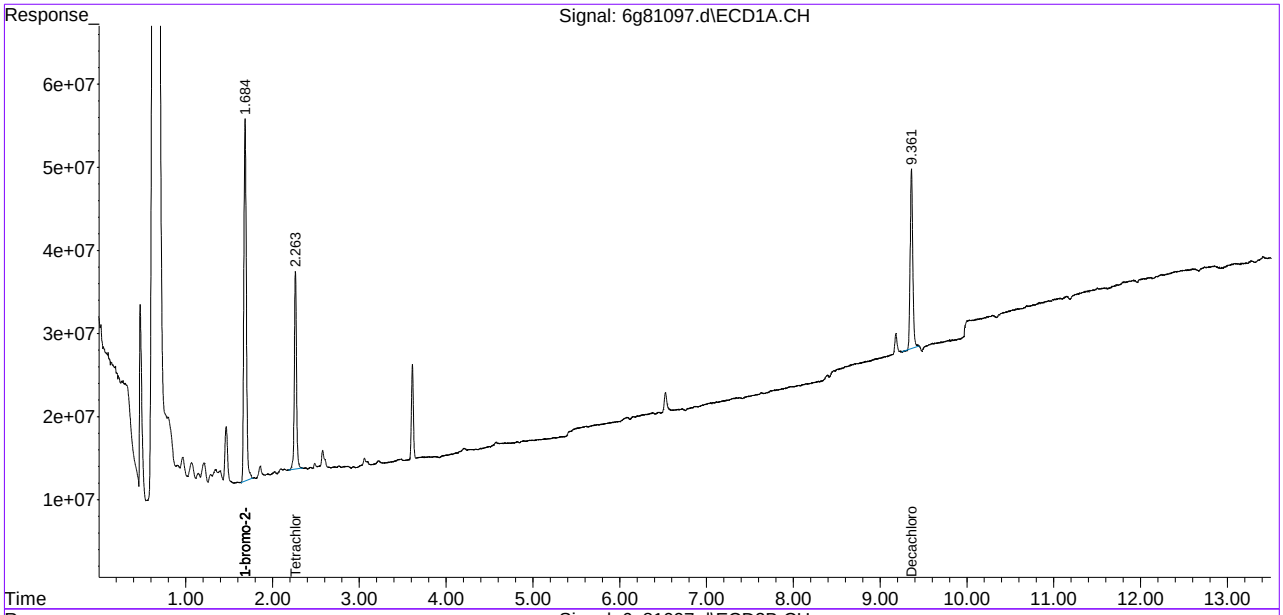
11.1.1 11

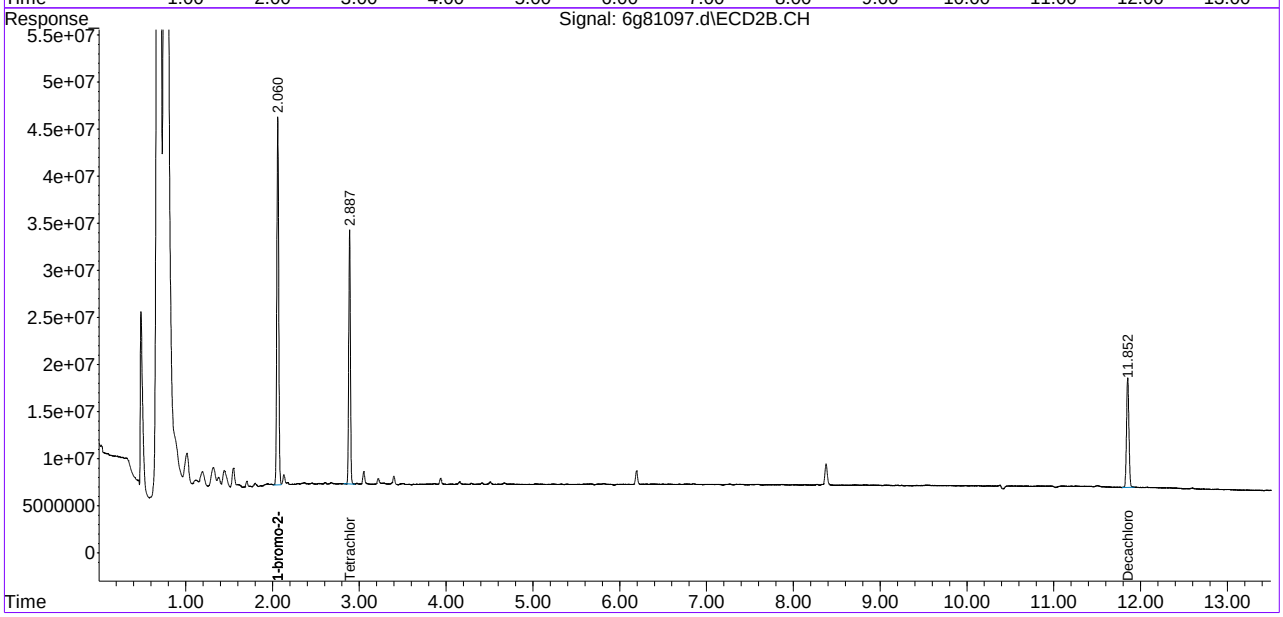
Quantitation Report (QT Reviewed)

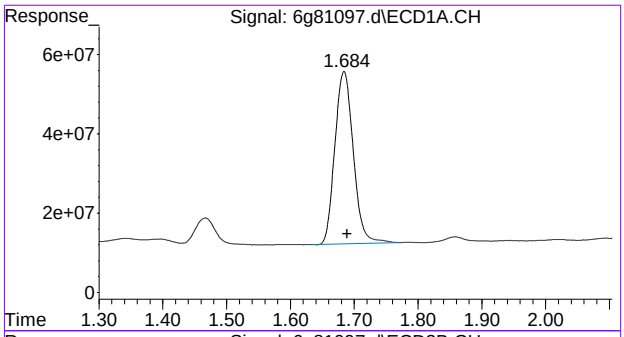
Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81097.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 16:47:25
Operator : thomasl
Sample : jd36168-2
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:13:54 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

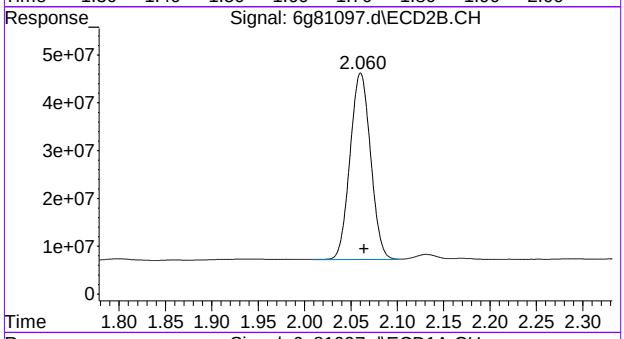






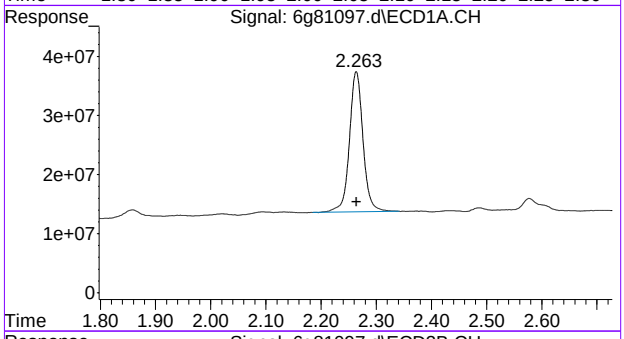
#1 1-bromo-2-nitrobenzene

R.T.: 1.684 min
Delta R.T.: -0.005 min
Response: 873534848
Conc: 50.00 PPB



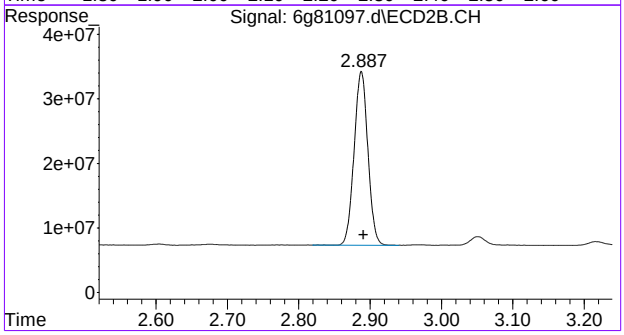
#1 1-bromo-2-nitrobenzene

R.T.: 2.060 min
Delta R.T.: -0.004 min
Response: 599803483
Conc: 50.00 PPB m



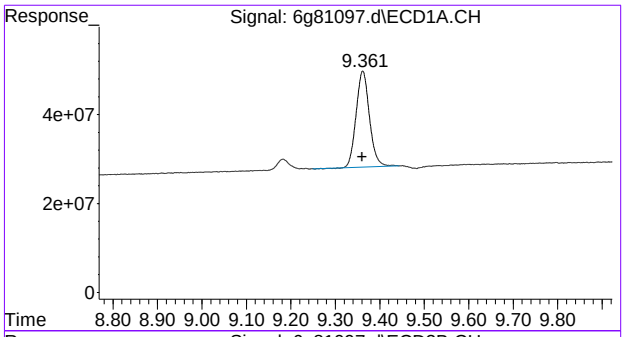
#2 Tetrachloro-m-xylene

R.T.: 2.264 min
Delta R.T.: 0.000 min
Response: 405130524
Conc: 37.35 PPB



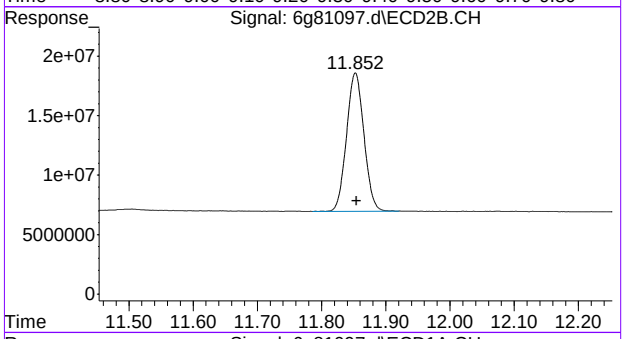
#2 Tetrachloro-m-xylene

R.T.: 2.888 min
Delta R.T.: -0.003 min
Response: 360860182
Conc: 33.11 PPB



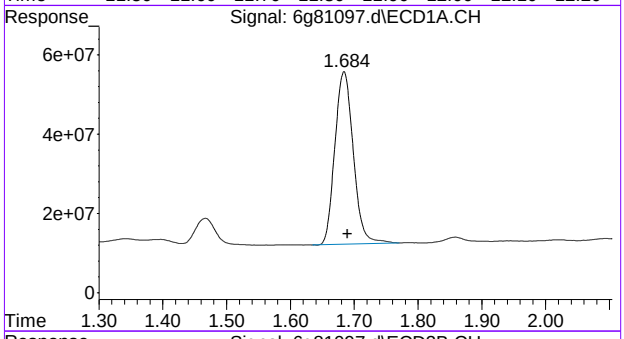
#26 Decachlorobiphenyl

R.T.: 9.362 min
Delta R.T.: 0.002 min
Response: 450337886
Conc: 21.56 PPB



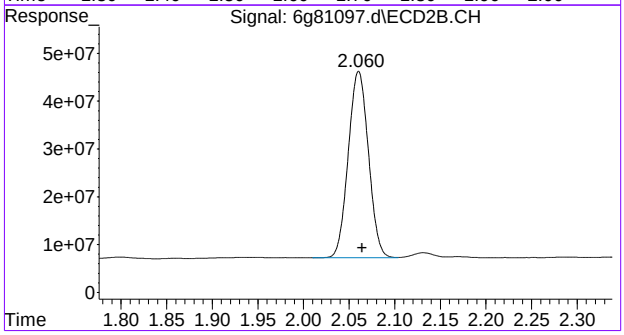
#26 Decachlorobiphenyl

R.T.: 11.853 min
Delta R.T.: -0.002 min
Response: 219105587
Conc: 23.44 PPB



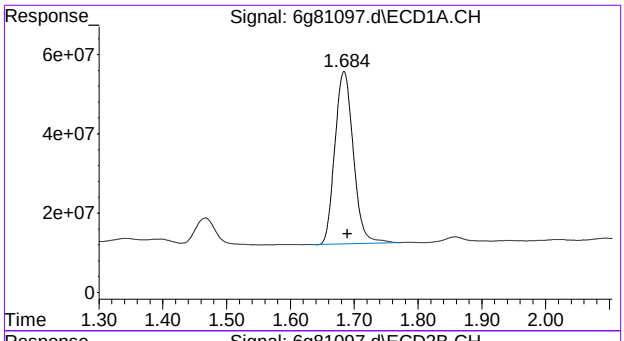
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.684 min
Delta R.T.: -0.005 min
Response: 873534848
Conc: 50.00 PPB



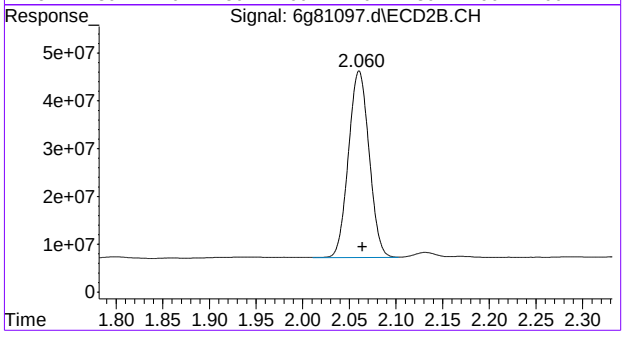
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.060 min
Delta R.T.: -0.004 min
Response: 599349413
Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.684 min
Delta R.T.: -0.005 min
Response: 873534848
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.060 min
Delta R.T.: -0.004 min
Response: 601420562
Conc: 50.00 PPB m

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/14/21 19:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81098.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 17:05:41
Operator : thomasl
Sample : jd36168-3
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:15:08 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.682	2.059	1064.7E6	740.0E6	50.000	50.000m
27) I 1-bromo-2...	1.682	2.059	1064.7E6	736.5E6	50.000	50.000m
33) I 1-bromo-2...	1.682	2.059	1064.7E6	737.2E6	50.000	50.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	2.263	2.887	452.5E6	411.9E6	34.224	30.634
Spiked Amount 40.000	Range 30 - 150		Recovery =		85.56%	76.59%
26) SA Decachlor...	9.362	11.855	330.0E6	147.8E6	12.966	12.819
Spiked Amount 40.000			Recovery =		32.41%	32.05%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

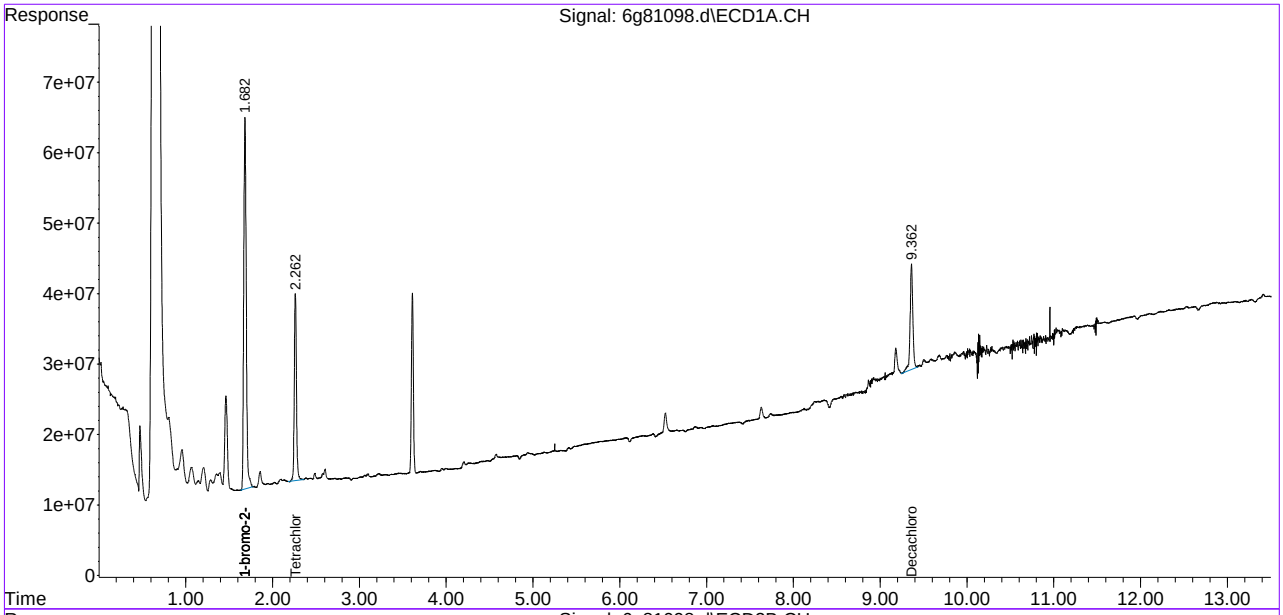
11.1.2 11

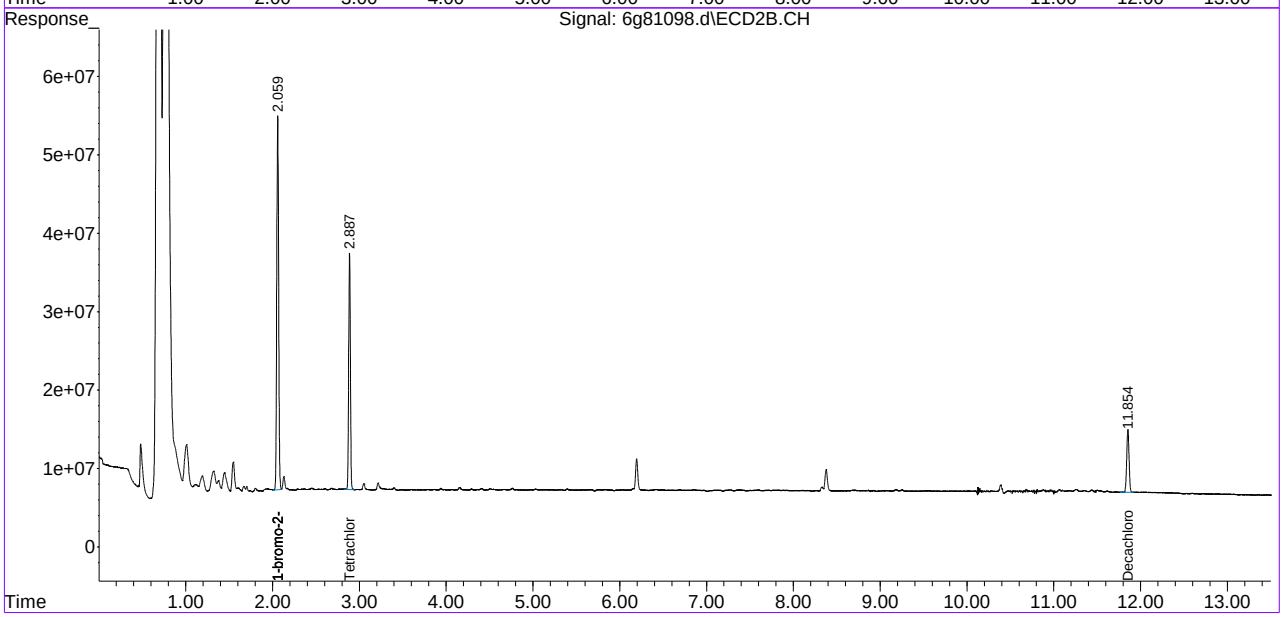
Quantitation Report (QT Reviewed)

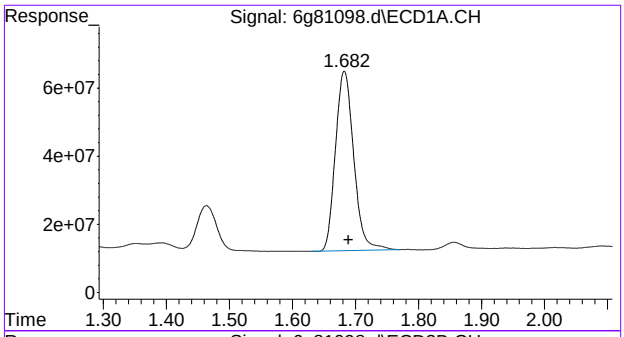
Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81098.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 17:05:41
Operator : thomasl
Sample : jd36168-3
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:15:08 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

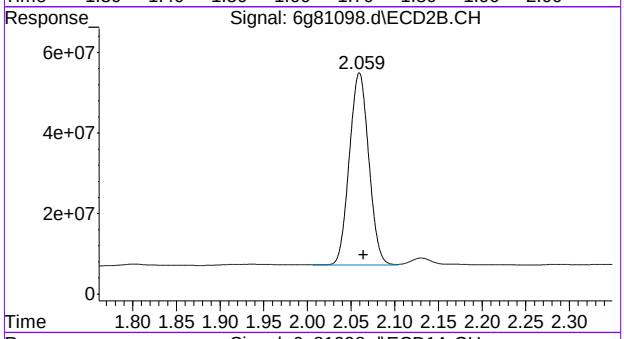






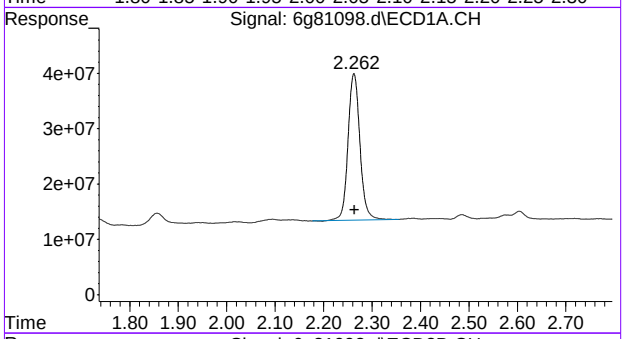
#1 1-bromo-2-nitrobenzene

R.T.: 1.682 min
Delta R.T.: -0.007 min
Response: 1064662664
Conc: 50.00 PPB



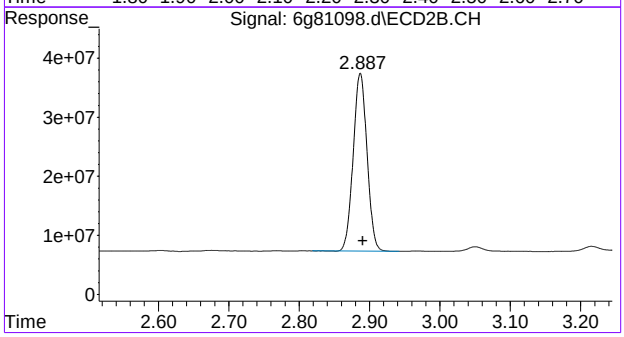
#1 1-bromo-2-nitrobenzene

R.T.: 2.059 min
Delta R.T.: -0.005 min
Response: 739952269
Conc: 50.00 PPB m



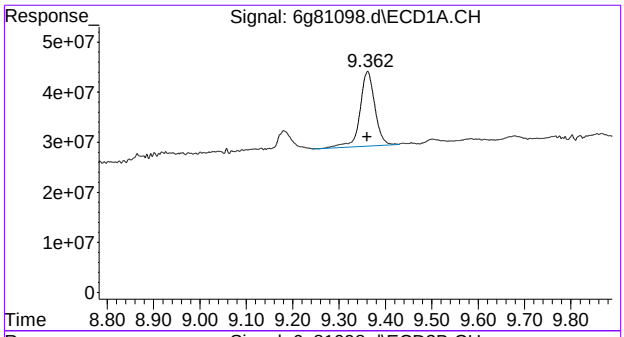
#2 Tetrachloro-m-xylene

R.T.: 2.263 min
Delta R.T.: 0.000 min
Response: 452509832
Conc: 34.22 PPB



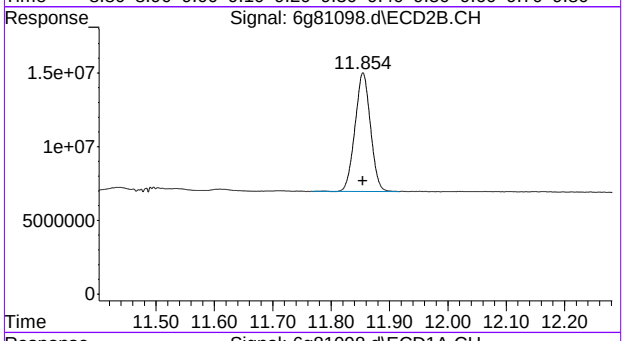
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: -0.004 min
Response: 411916994
Conc: 30.63 PPB



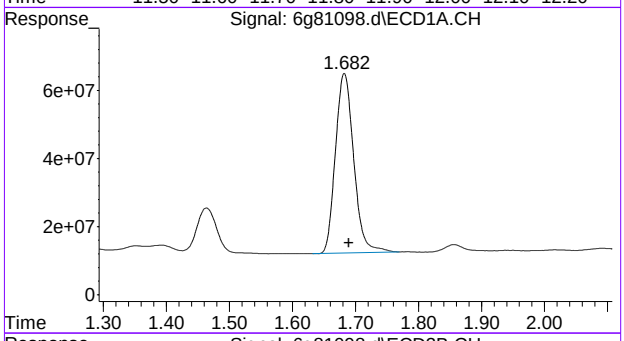
#26 Decachlorobiphenyl

R.T.: 9.362 min
Delta R.T.: 0.002 min
Response: 330049523
Conc: 12.97 PPB



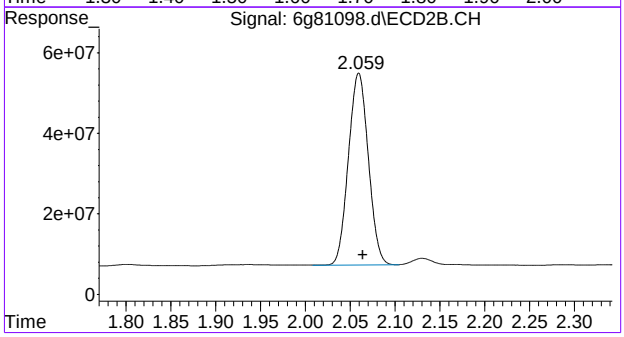
#26 Decachlorobiphenyl

R.T.: 11.855 min
Delta R.T.: 0.000 min
Response: 147849133
Conc: 12.82 PPB



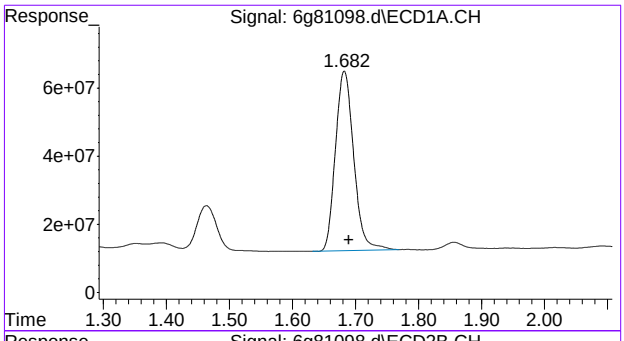
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.682 min
Delta R.T.: -0.007 min
Response: 1064662664
Conc: 50.00 PPB



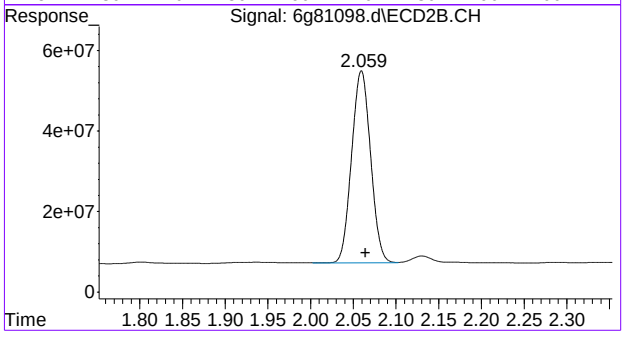
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.059 min
Delta R.T.: -0.005 min
Response: 736543973
Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.682 min
Delta R.T.: -0.007 min
Response: 1064662664
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.059 min
Delta R.T.: -0.005 min
Response: 737188609
Conc: 50.00 PPB m

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81099.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 17:24:17
Operator : thomasl
Sample : jd36168-4
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:15:35 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.685	2.061	865.0E6	601.8E6	50.000	50.000
27) I 1-bromo-2...	1.685	2.061	865.0E6	601.8E6	50.000	50.000
33) I 1-bromo-2...	1.685	2.061	865.0E6	601.8E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.265	2.888	406.9E6	290.3E6	37.880	26.551 #
Spiked Amount	40.000 Range	30 - 150	Recovery	=	94.70%	66.38%
26) SA Decachlor...	9.363	11.853	209.1E6	101.2E6	10.112	10.786
Spiked Amount	40.000		Recovery	=	25.28%	26.97%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

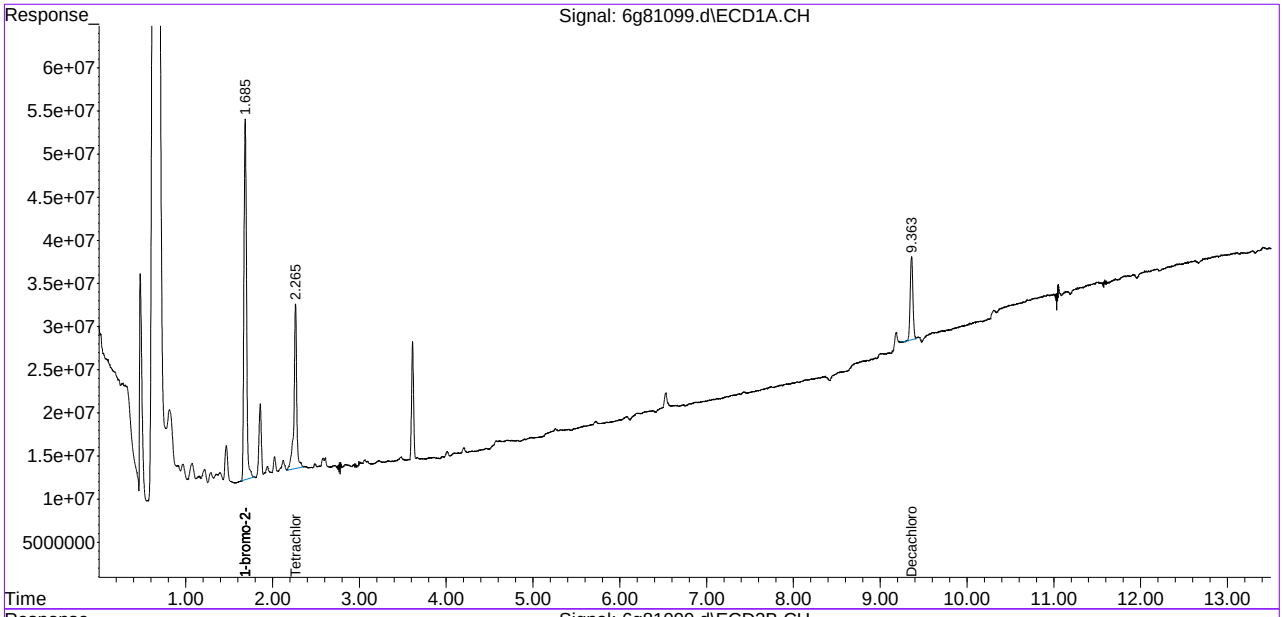
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

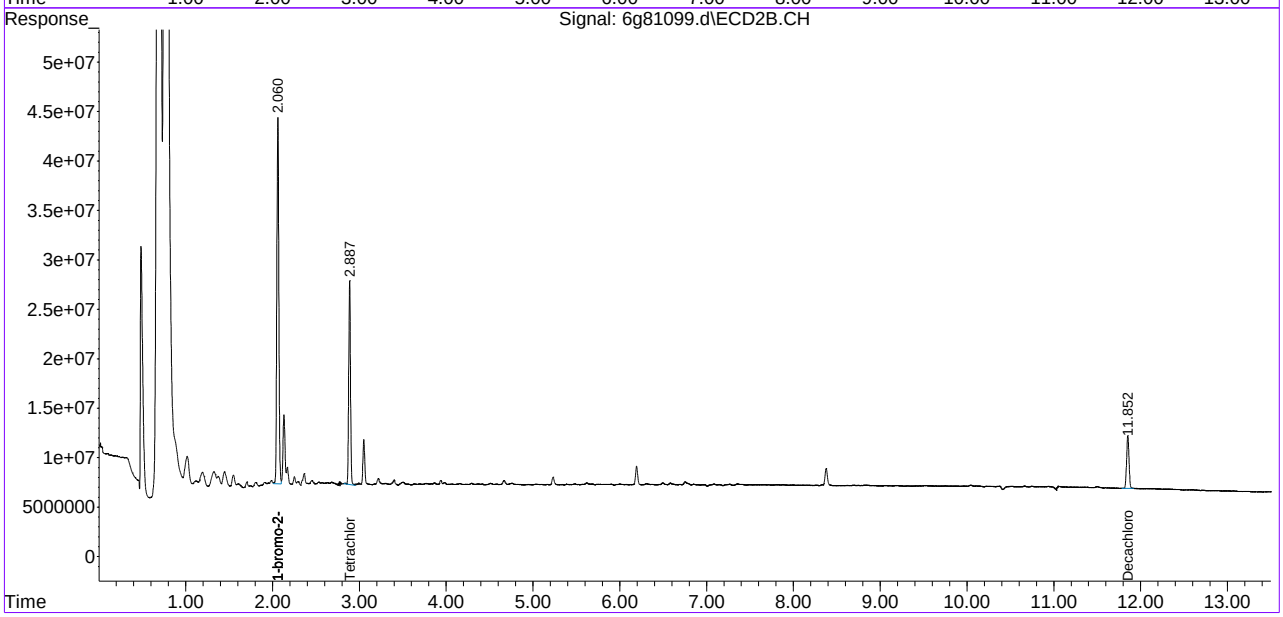
Quantitation Report (QT Reviewed)

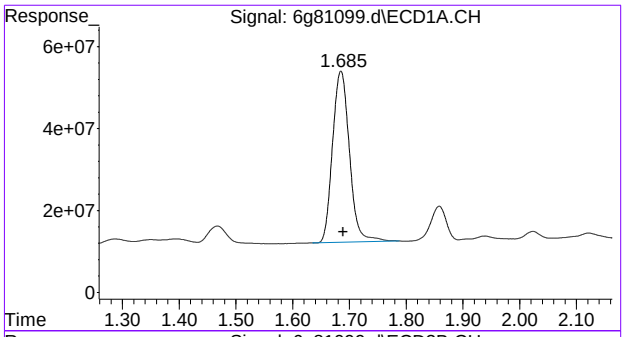
Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81099.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 17:24:17
Operator : thomasl
Sample : jd36168-4
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:15:35 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

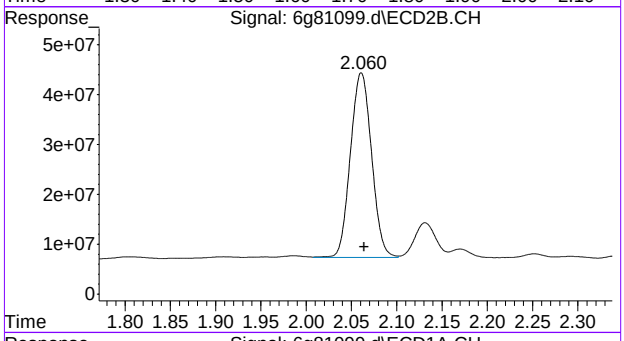






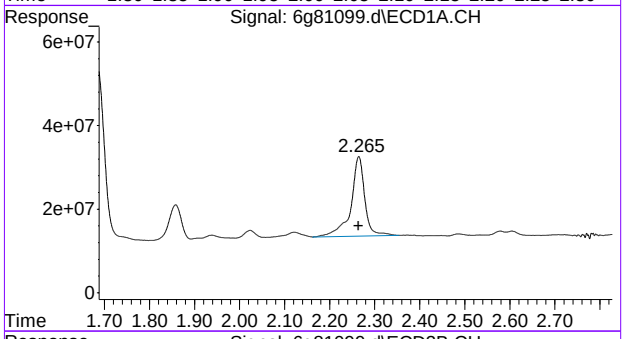
#1 1-bromo-2-nitrobenzene

R.T.: 1.685 min
Delta R.T.: -0.004 min
Response: 864977416
Conc: 50.00 PPB



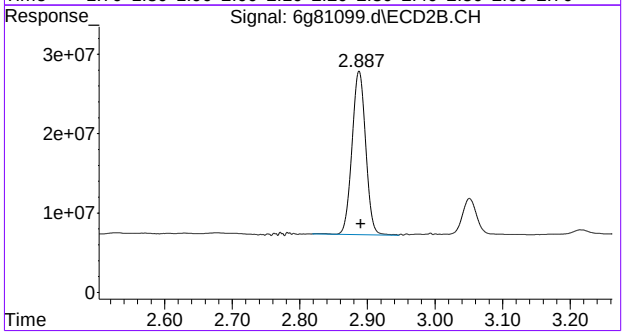
#1 1-bromo-2-nitrobenzene

R.T.: 2.061 min
Delta R.T.: -0.003 min
Response: 601766449
Conc: 50.00 PPB



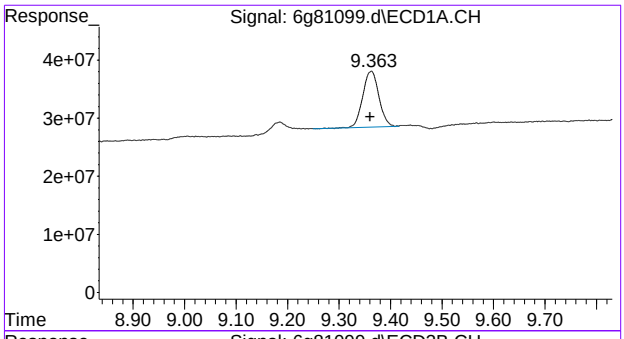
#2 Tetrachloro-m-xylene

R.T.: 2.265 min
Delta R.T.: 0.001 min
Response: 406904496
Conc: 37.88 PPB



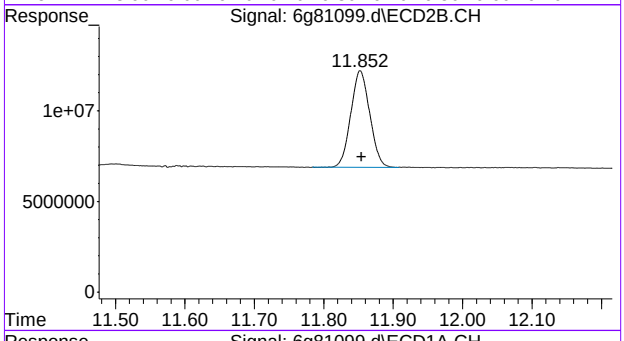
#2 Tetrachloro-m-xylene

R.T.: 2.888 min
Delta R.T.: -0.003 min
Response: 290348160
Conc: 26.55 PPB



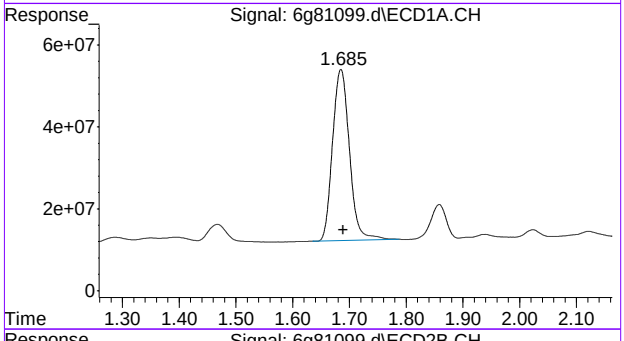
#26 Decachlorobiphenyl

R.T.: 9.363 min
Delta R.T.: 0.003 min
Response: 209139368
Conc: 10.11 PPB



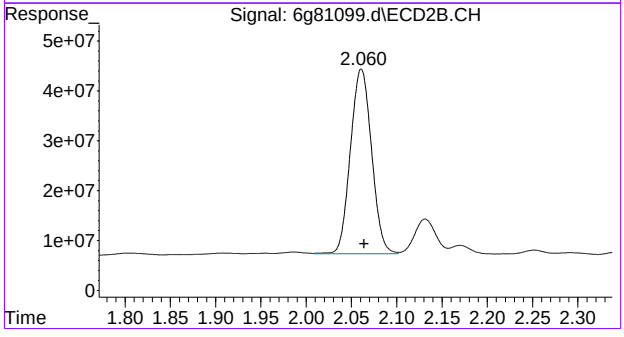
#26 Decachlorobiphenyl

R.T.: 11.853 min
Delta R.T.: -0.002 min
Response: 101171887
Conc: 10.79 PPB



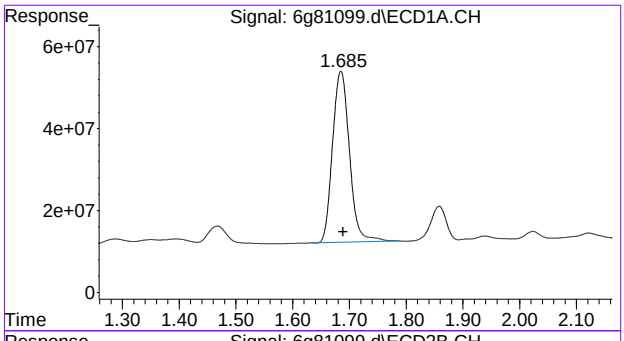
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.685 min
Delta R.T.: -0.004 min
Response: 864977416
Conc: 50.00 PPB



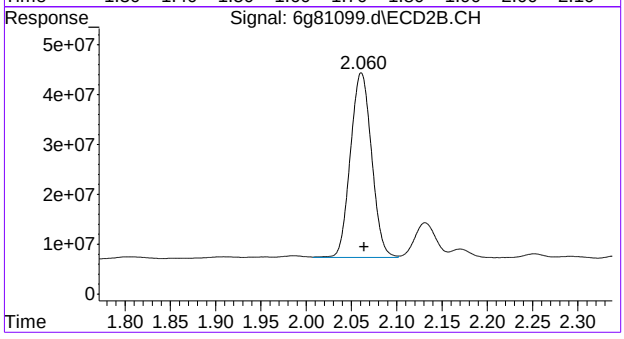
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.061 min
Delta R.T.: -0.003 min
Response: 601766449
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.685 min
Delta R.T.: -0.004 min
Response: 864977416
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.061 min
Delta R.T.: -0.003 min
Response: 601766449
Conc: 50.00 PPB

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81100.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 17:42:40
Operator : thomasl
Sample : jd36168-5
Misc : op36994,g6g2868,260,,,2,1
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:16:05 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.682	2.059	840.9E6	578.2E6	50.000	50.000
27) I 1-bromo-2...	1.682	2.059	840.9E6	578.2E6	50.000	50.000
33) I 1-bromo-2...	1.682	2.059	840.9E6	578.2E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.262	2.886	407.7E6	374.4E6	39.043	35.637
Spiked Amount 40.000	Range 30 - 150		Recovery =		97.61%	89.09%
26) SA Decachlor...	9.361	11.853	413.0E6	197.7E6	20.543	21.940
Spiked Amount 40.000			Recovery =		51.36%	54.85%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

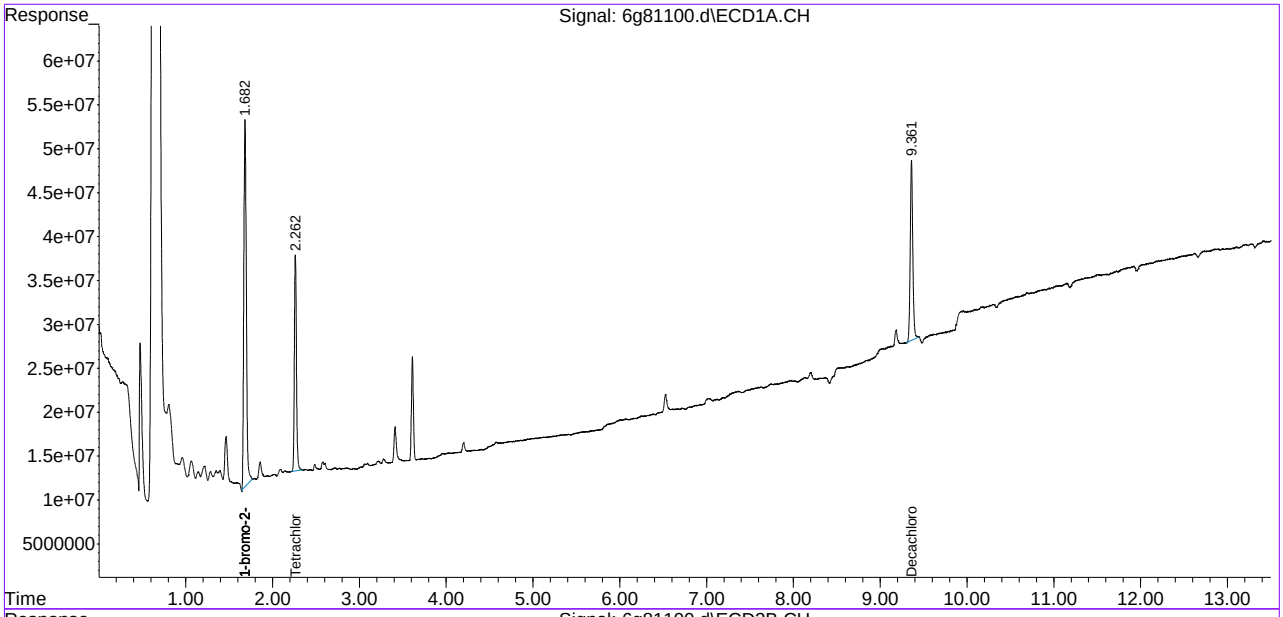
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

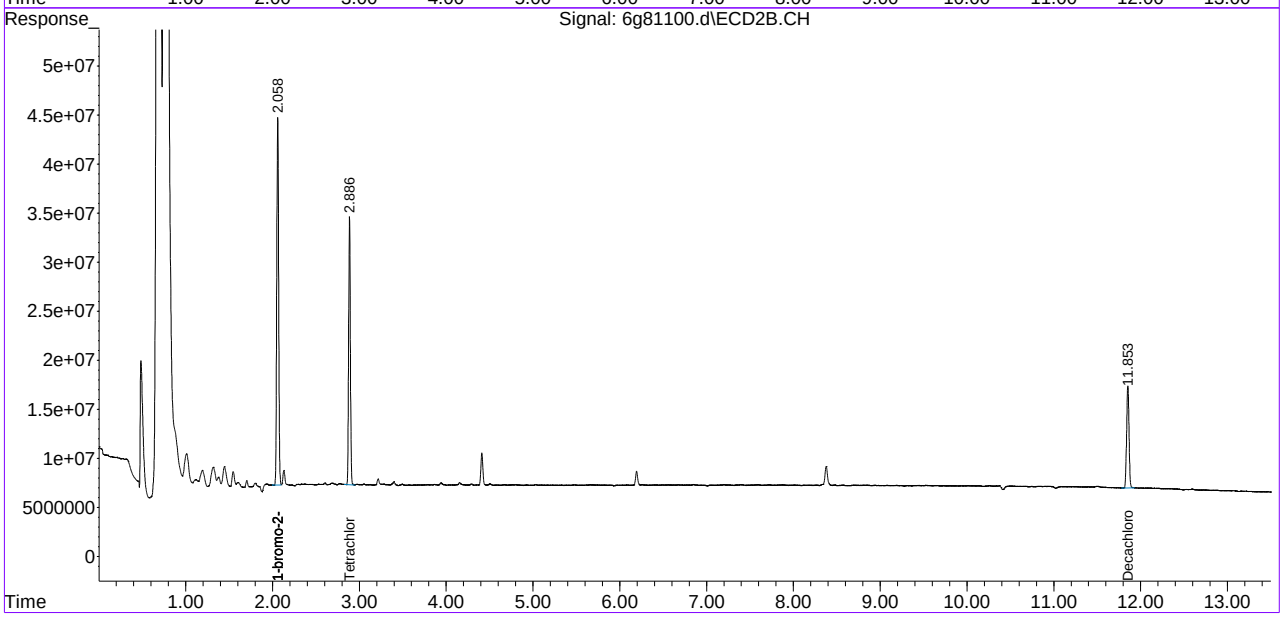
Quantitation Report (QT Reviewed)

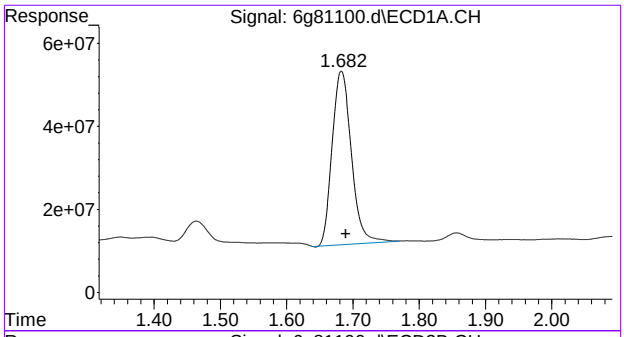
Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81100.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 17:42:40
Operator : thomasl
Sample : jd36168-5
Misc : op36994,g6g2868,260,,,2,1
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:16:05 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

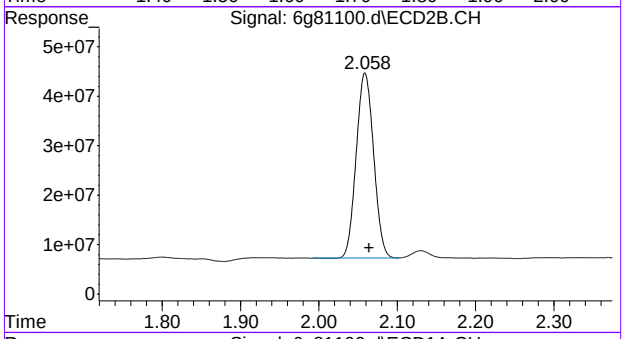






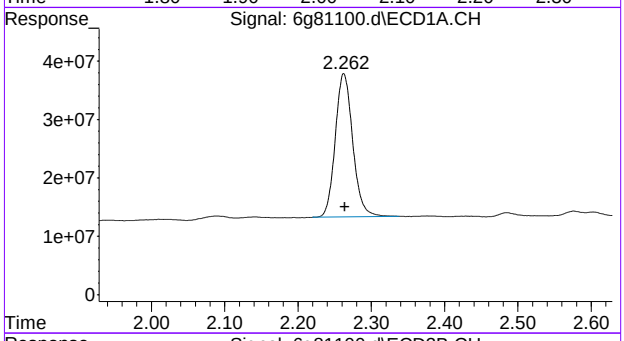
#1 1-bromo-2-nitrobenzene

R.T.: 1.682 min
Delta R.T.: -0.007 min
Response: 840856349
Conc: 50.00 PPB



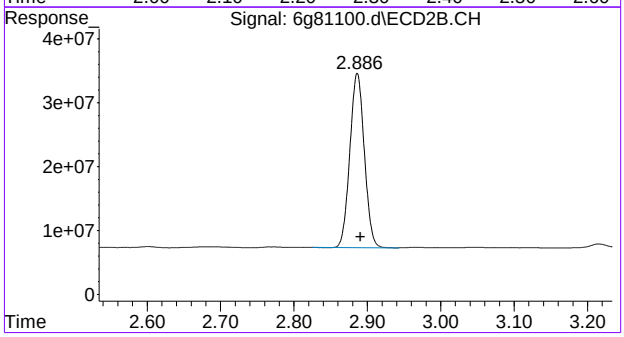
#1 1-bromo-2-nitrobenzene

R.T.: 2.059 min
Delta R.T.: -0.005 min
Response: 578156169
Conc: 50.00 PPB



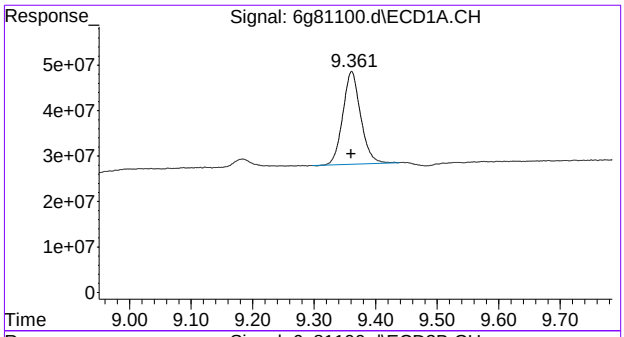
#2 Tetrachloro-m-xylene

R.T.: 2.262 min
Delta R.T.: -0.001 min
Response: 407703552
Conc: 39.04 PPB



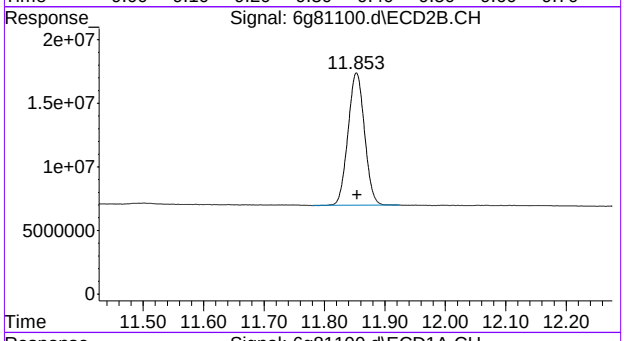
#2 Tetrachloro-m-xylene

R.T.: 2.886 min
Delta R.T.: -0.004 min
Response: 374415346
Conc: 35.64 PPB



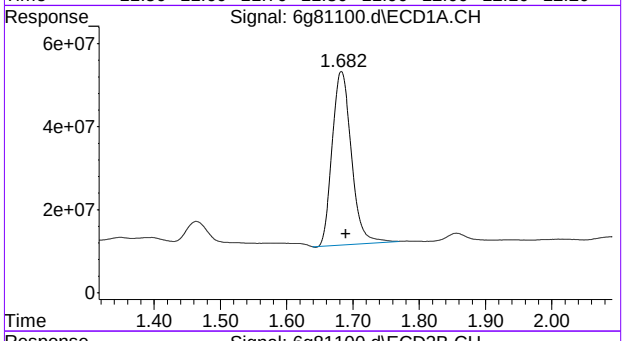
#26 Decachlorobiphenyl

R.T.: 9.361 min
Delta R.T.: 0.000 min
Response: 413020400
Conc: 20.54 PPB



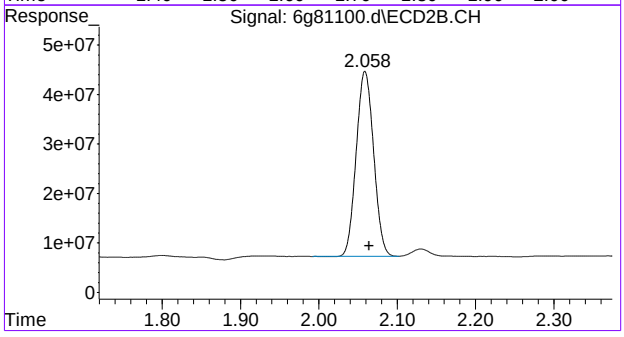
#26 Decachlorobiphenyl

R.T.: 11.853 min
Delta R.T.: -0.001 min
Response: 197719621
Conc: 21.94 PPB



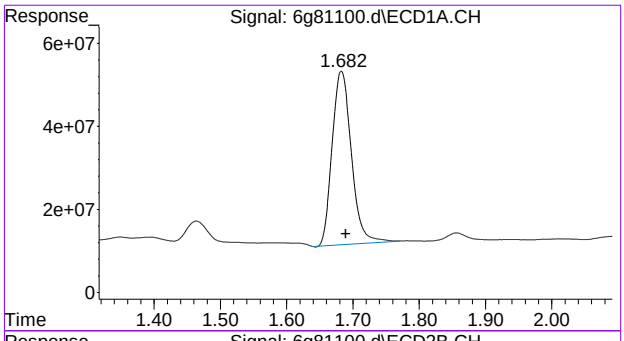
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.682 min
Delta R.T.: -0.007 min
Response: 840856349
Conc: 50.00 PPB



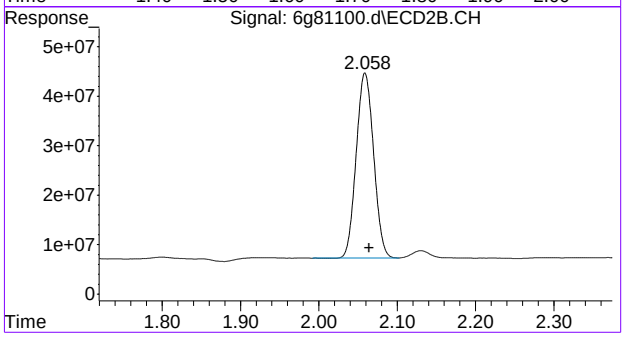
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.059 min
Delta R.T.: -0.005 min
Response: 578156169
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.682 min
Delta R.T.: -0.007 min
Response: 840856349
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.059 min
Delta R.T.: -0.005 min
Response: 578156169
Conc: 50.00 PPB

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81101.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 18:00:56
Operator : thomasl
Sample : jd36168-6
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:16:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.685	2.061	806.6E6	600.1E6	50.000	50.000
27) I 1-bromo-2...	1.685	2.061	806.6E6	600.1E6	50.000	50.000
33) I 1-bromo-2...	1.685	2.061	806.6E6	600.1E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.264	2.888	382.1E6	356.3E6	38.150	32.673
Spiked Amount 40.000	Range 30 - 150		Recovery =		95.38%	81.68%
26) SA Decachlor...	9.361	11.851	322.4E6	171.9E6	16.719	18.372
Spiked Amount 40.000			Recovery =		41.80%	45.93%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

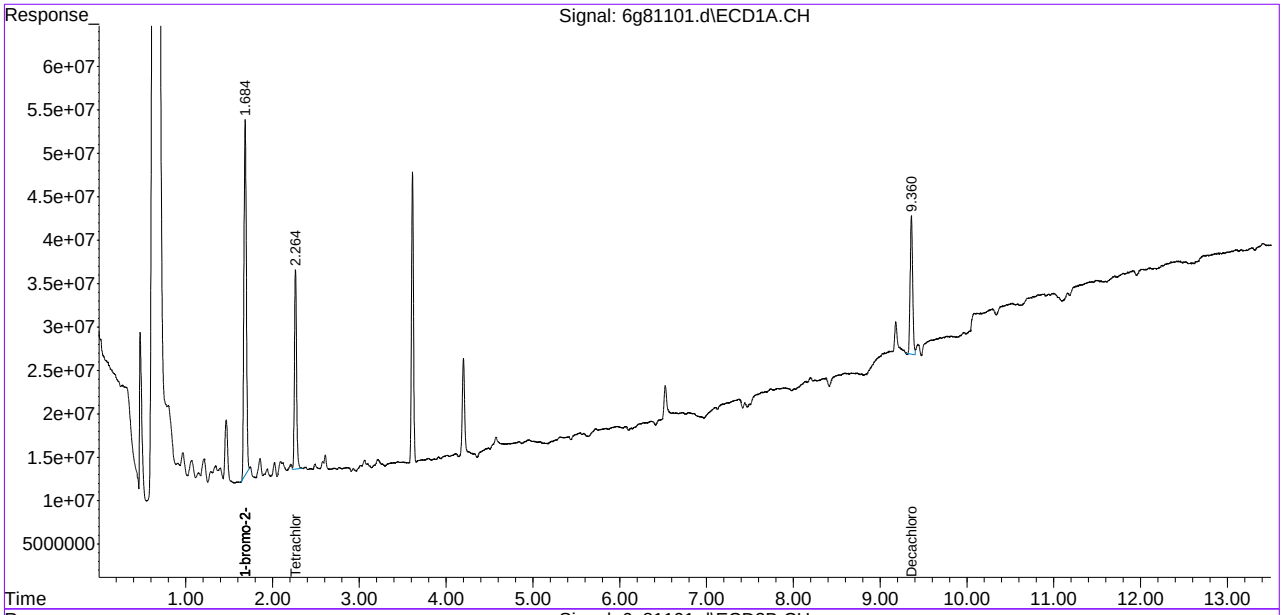
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

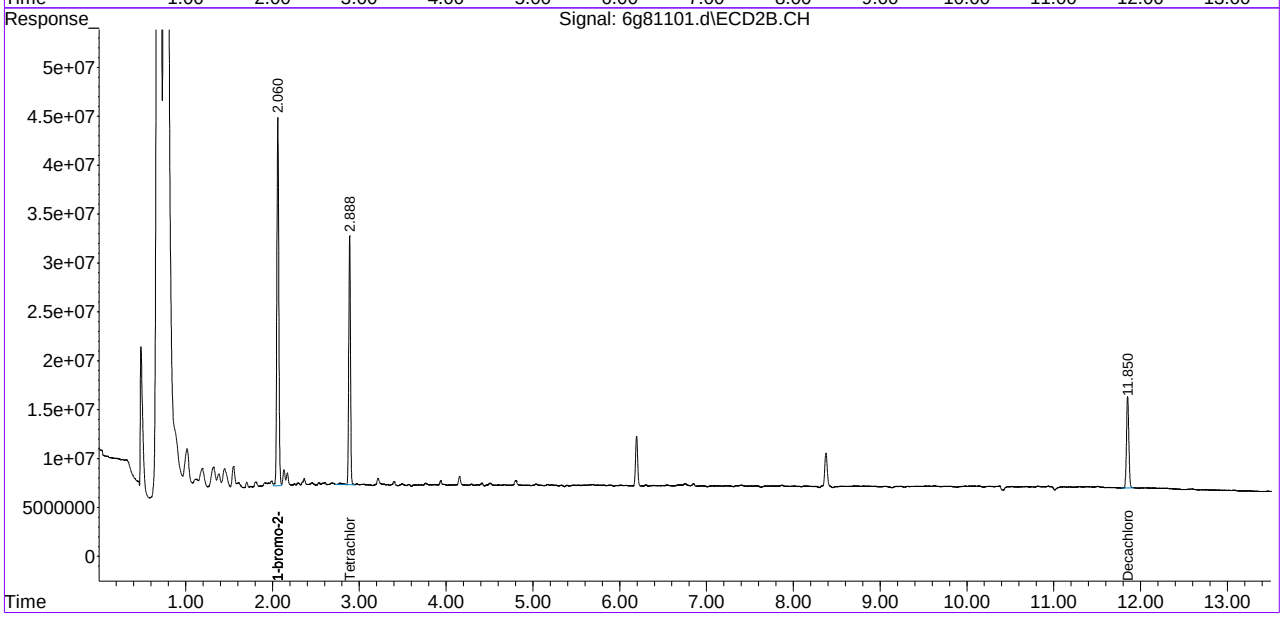
Quantitation Report (QT Reviewed)

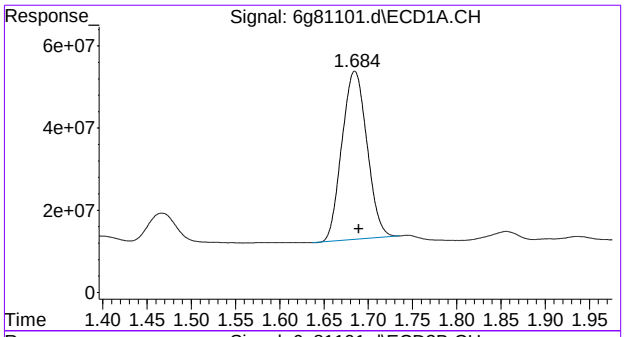
Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81101.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 18:00:56
Operator : thomasl
Sample : jd36168-6
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:16:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

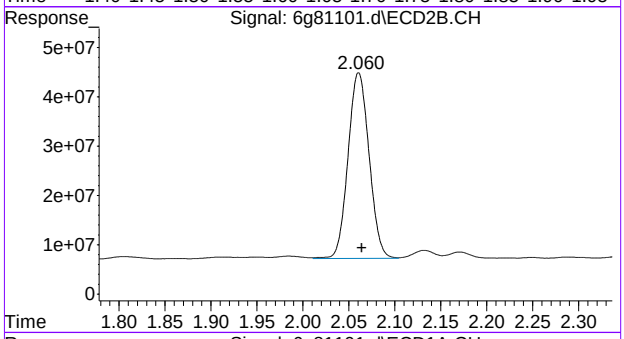






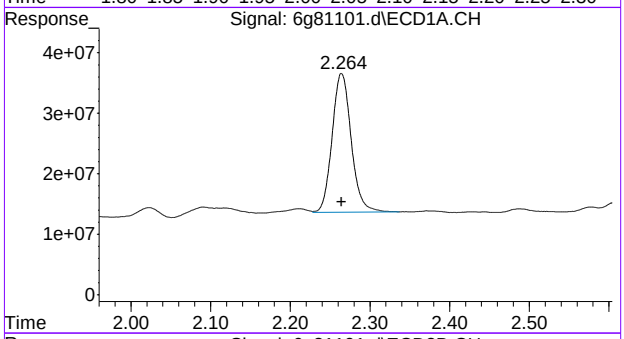
#1 1-bromo-2-nitrobenzene

R.T.: 1.685 min
Delta R.T.: -0.004 min
Response: 806584216
Conc: 50.00 PPB



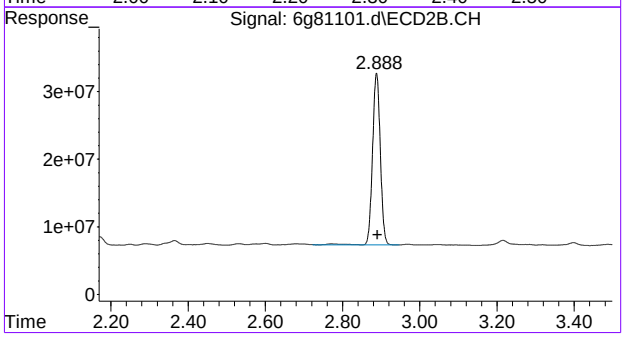
#1 1-bromo-2-nitrobenzene

R.T.: 2.061 min
Delta R.T.: -0.003 min
Response: 600108040
Conc: 50.00 PPB



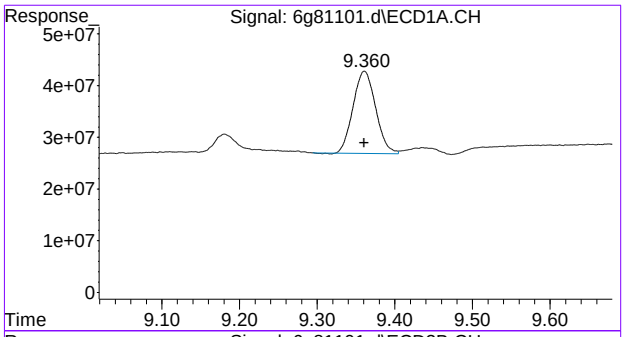
#2 Tetrachloro-m-xylene

R.T.: 2.264 min
Delta R.T.: 0.000 min
Response: 382140996
Conc: 38.15 PPB



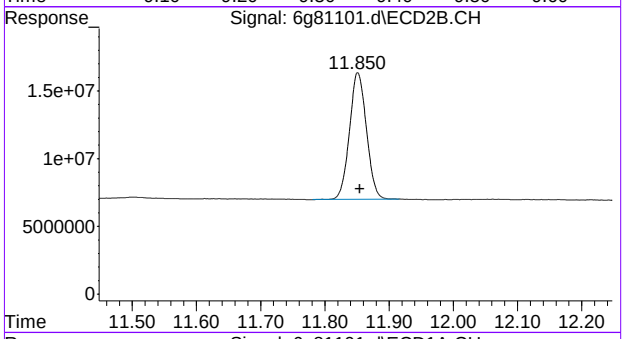
#2 Tetrachloro-m-xylene

R.T.: 2.888 min
Delta R.T.: -0.002 min
Response: 356307228
Conc: 32.67 PPB



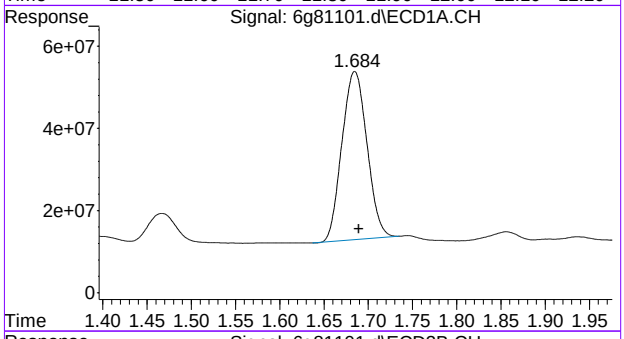
#26 Decachlorobiphenyl

R.T.: 9.361 min
Delta R.T.: 0.000 min
Response: 322432342
Conc: 16.72 PPB



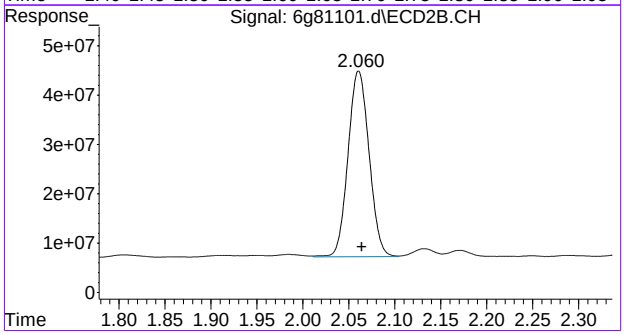
#26 Decachlorobiphenyl

R.T.: 11.851 min
Delta R.T.: -0.003 min
Response: 171850574
Conc: 18.37 PPB



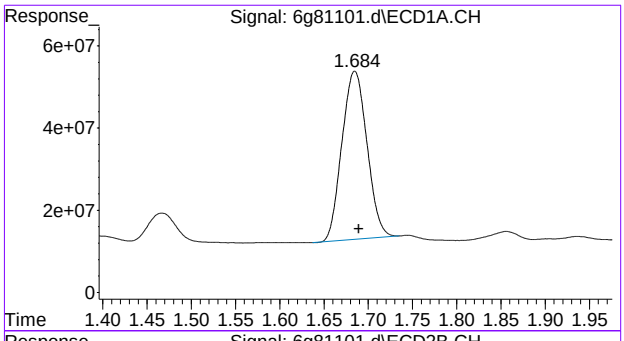
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.685 min
Delta R.T.: -0.004 min
Response: 806584216
Conc: 50.00 PPB



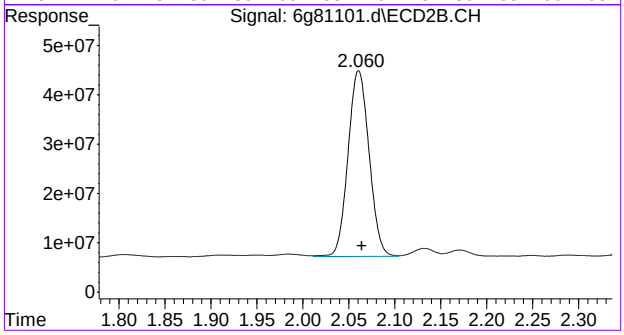
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.061 min
Delta R.T.: -0.003 min
Response: 600108040
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.685 min
Delta R.T.: -0.004 min
Response: 806584216
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.061 min
Delta R.T.: -0.003 min
Response: 600108040
Conc: 50.00 PPB

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81102.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 18:19:30
Operator : thomasl
Sample : jd36168-7
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:17:10 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.685	2.060	911.7E6	628.3E6	50.000	50.000
27) I 1-bromo-2...	1.685	2.060	911.7E6	628.3E6	50.000	50.000
33) I 1-bromo-2...	1.685	2.060	911.7E6	628.3E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.264	2.887	417.6E6	381.0E6	36.880	33.369
Spiked Amount 40.000	Range 30 - 150		Recovery =		92.20%	83.42%
26) SA Decachlor...	9.362	11.853	256.7E6	128.6E6	11.776	13.129
Spiked Amount 40.000			Recovery =		29.44%	32.82%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

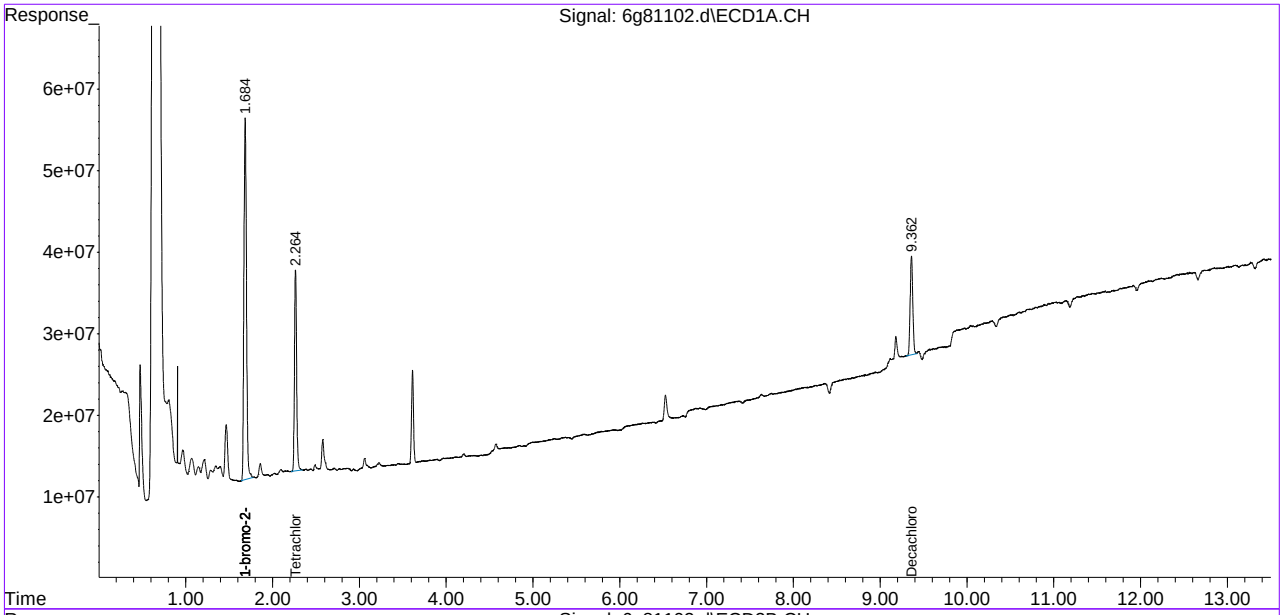
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

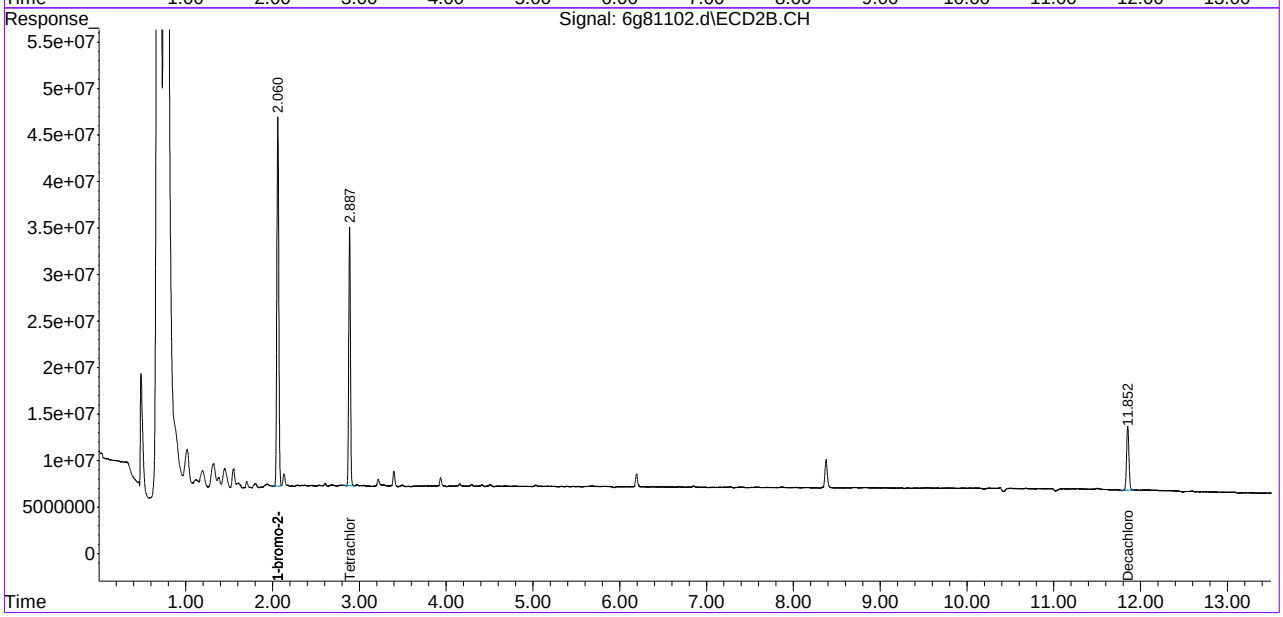
Quantitation Report (QT Reviewed)

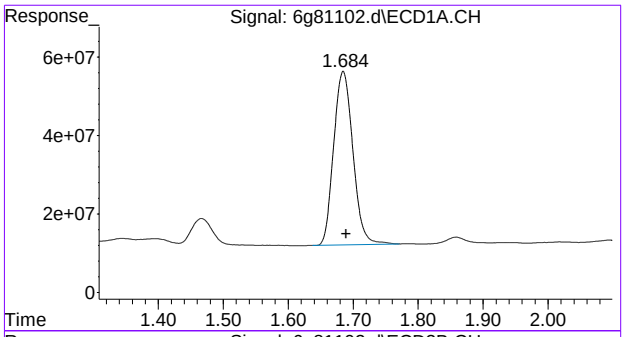
Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81102.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 18:19:30
Operator : thomasl
Sample : jd36168-7
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:17:10 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

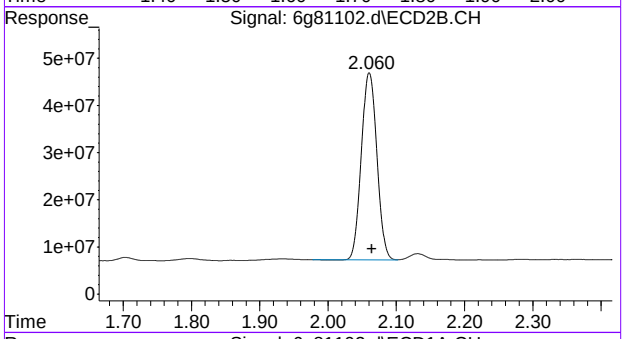






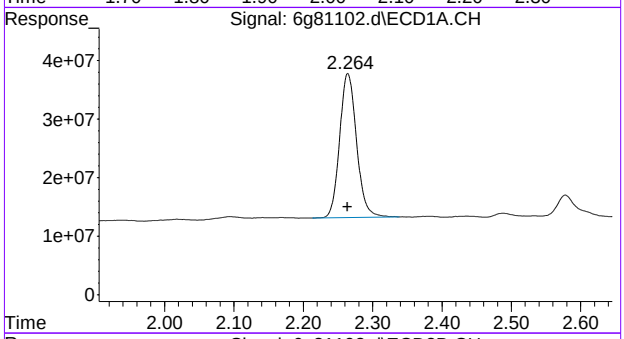
#1 1-bromo-2-nitrobenzene

R.T.: 1.685 min
Delta R.T.: -0.004 min
Response: 911702581
Conc: 50.00 PPB



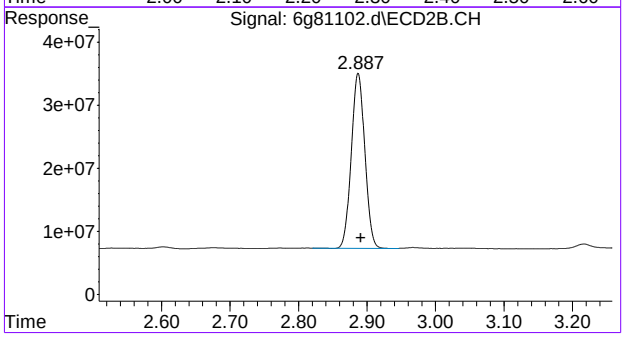
#1 1-bromo-2-nitrobenzene

R.T.: 2.060 min
Delta R.T.: -0.004 min
Response: 628343770
Conc: 50.00 PPB



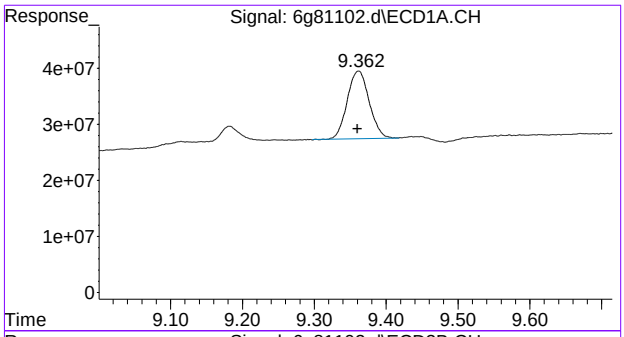
#2 Tetrachloro-m-xylene

R.T.: 2.264 min
Delta R.T.: 0.000 min
Response: 417561488
Conc: 36.88 PPB



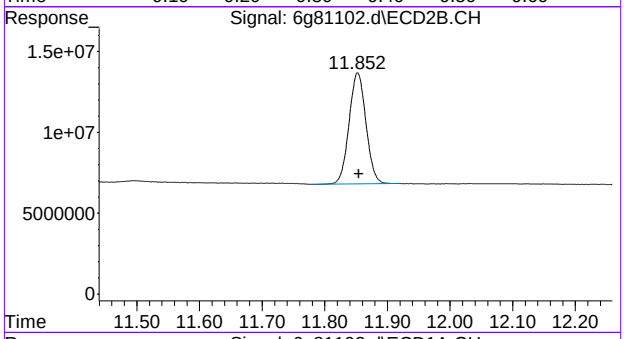
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: -0.003 min
Response: 381019576
Conc: 33.37 PPB



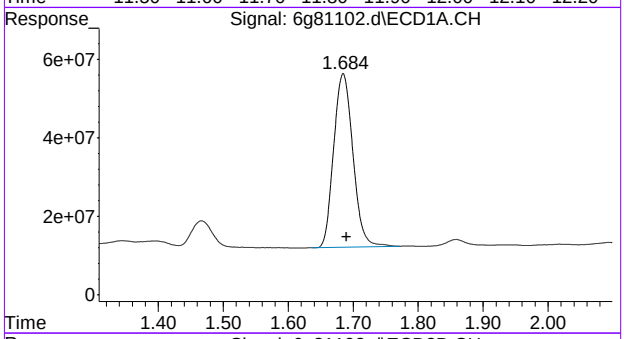
#26 Decachlorobiphenyl

R.T.: 9.362 min
Delta R.T.: 0.002 min
Response: 256708549
Conc: 11.78 PPB



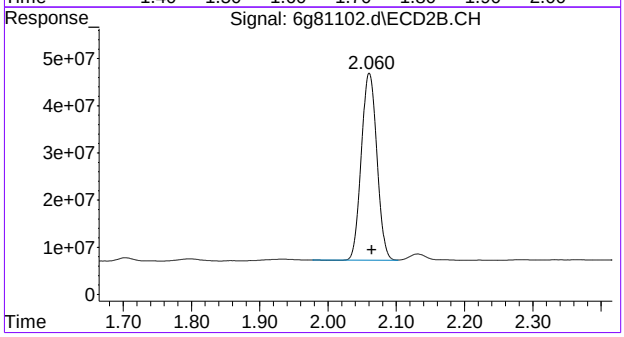
#26 Decachlorobiphenyl

R.T.: 11.853 min
Delta R.T.: -0.002 min
Response: 128588691
Conc: 13.13 PPB



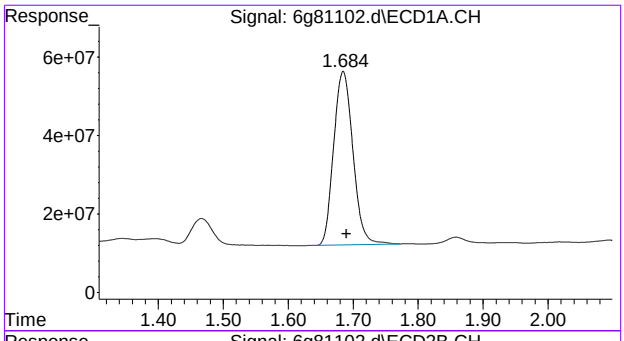
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.685 min
Delta R.T.: -0.005 min
Response: 911702581
Conc: 50.00 PPB



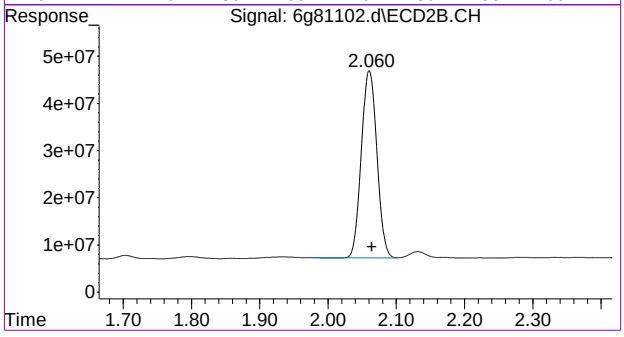
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.060 min
Delta R.T.: -0.004 min
Response: 628343770
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.685 min
Delta R.T.: -0.005 min
Response: 911702581
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.060 min
Delta R.T.: -0.004 min
Response: 628343770
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 19:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81103.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 18:37:54
Operator : thomasl
Sample : jd36168-8
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:17:58 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.684	2.060	826.8E6	571.3E6	50.000	50.000m
27) I 1-bromo-2...	1.684	2.060	826.8E6	582.4E6	50.000	50.000
33) I 1-bromo-2...	1.684	2.060	826.8E6	582.4E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.264	2.888	368.5E6	335.8E6	35.891	32.345
Spiked Amount	40.000	Range 30 - 150	Recovery	=	89.73%	80.86%
26) SA Decachlor...	9.362	11.853	352.2E6	177.2E6	17.819	19.899
Spiked Amount	40.000		Recovery	=	44.55%	49.75%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

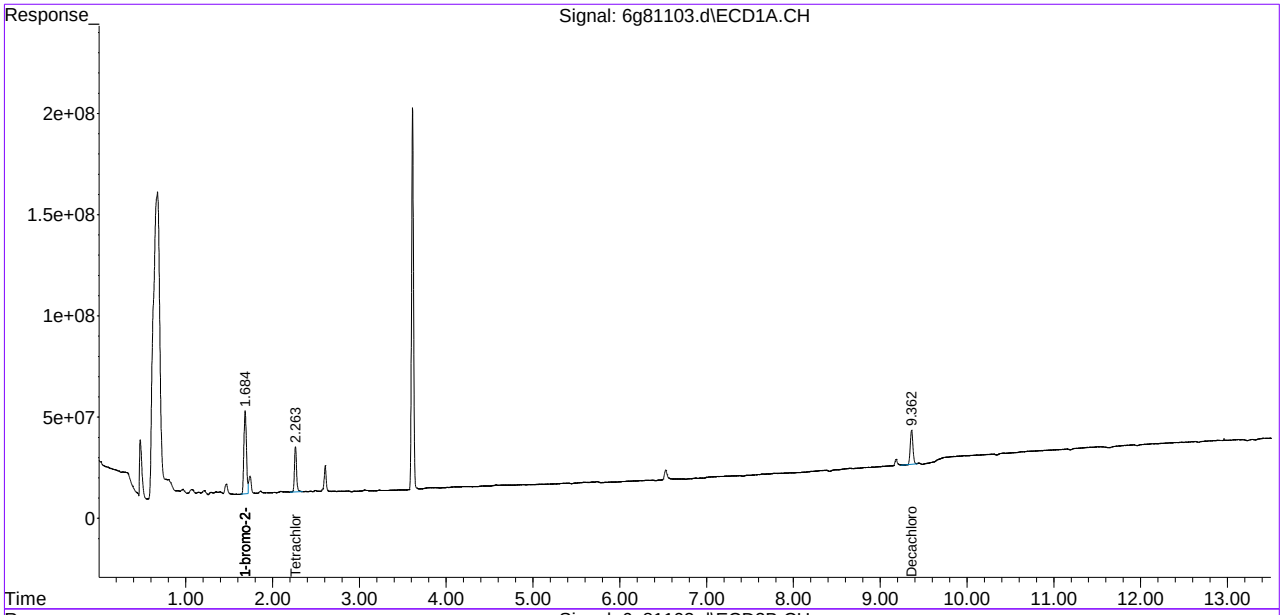
11.1.7 11

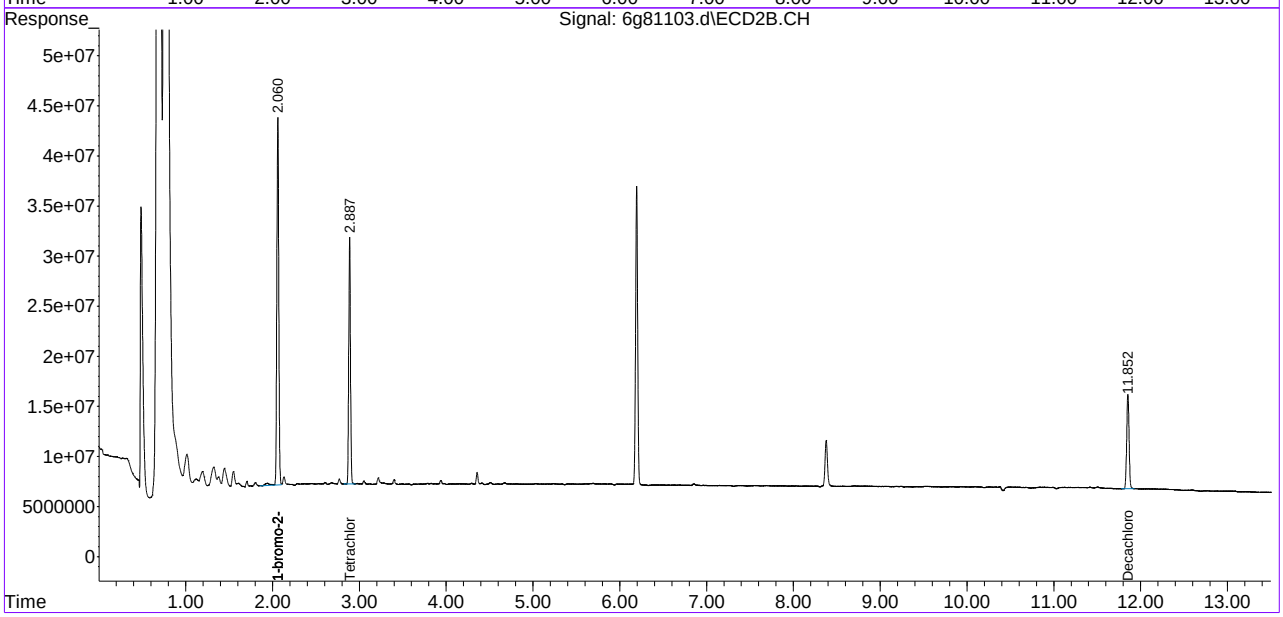
Quantitation Report (QT Reviewed)

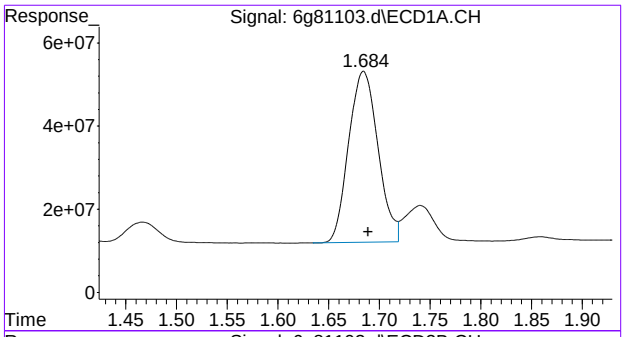
Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81103.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 18:37:54
Operator : thomasl
Sample : jd36168-8
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:17:58 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

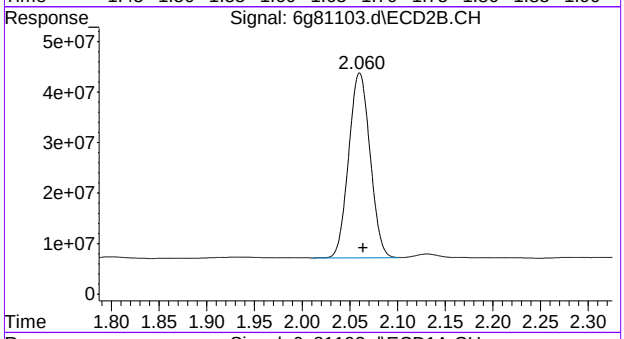






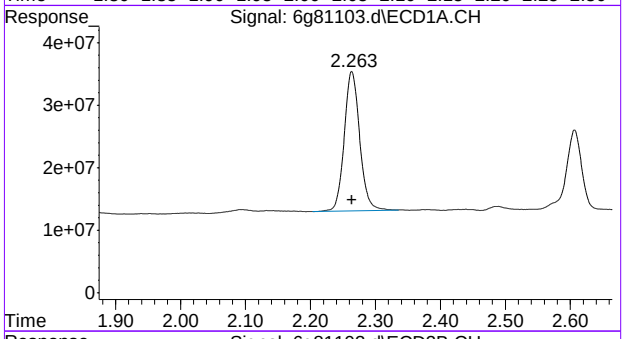
#1 1-bromo-2-nitrobenzene

R.T.: 1.684 min
Delta R.T.: -0.005 min
Response: 826783282
Conc: 50.00 PPB



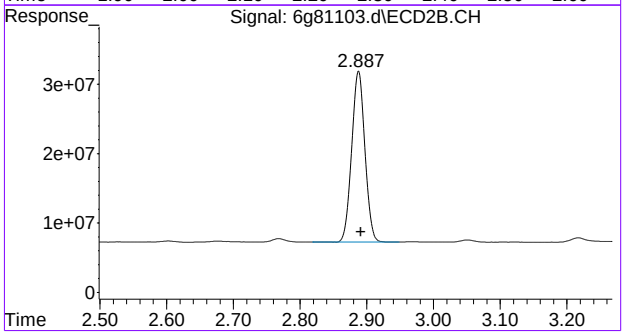
#1 1-bromo-2-nitrobenzene

R.T.: 2.060 min
Delta R.T.: -0.004 min
Response: 571281422
Conc: 50.00 PPB m



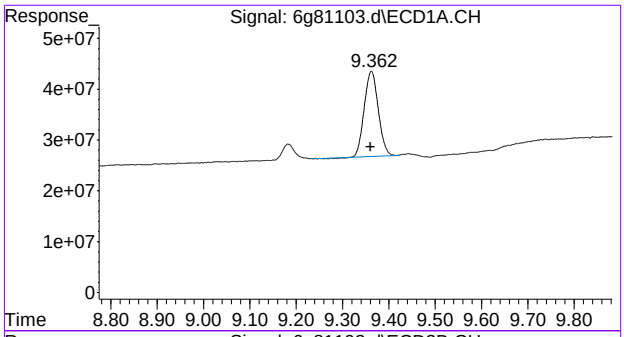
#2 Tetrachloro-m-xylene

R.T.: 2.264 min
Delta R.T.: 0.000 min
Response: 368520947
Conc: 35.89 PPB



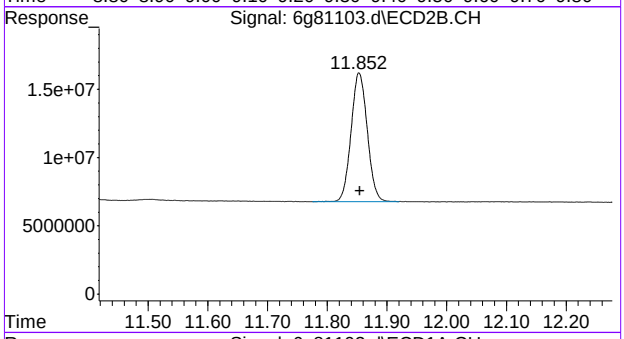
#2 Tetrachloro-m-xylene

R.T.: 2.888 min
Delta R.T.: -0.003 min
Response: 335790698
Conc: 32.35 PPB



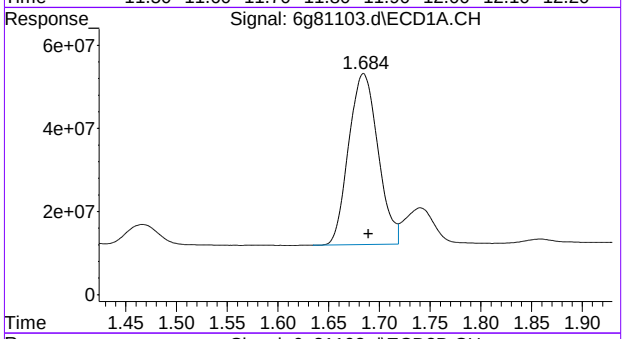
#26 Decachlorobiphenyl

R.T.: 9.362 min
Delta R.T.: 0.002 min
Response: 352247782
Conc: 17.82 PPB



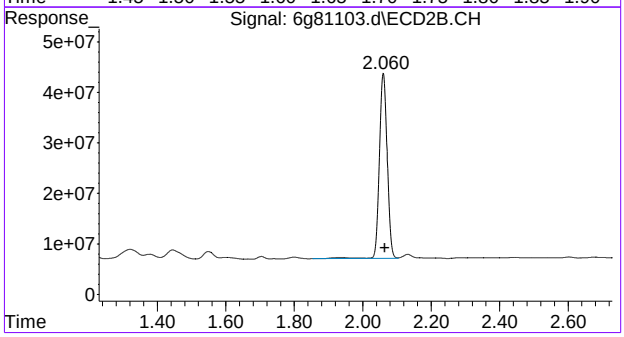
#26 Decachlorobiphenyl

R.T.: 11.853 min
Delta R.T.: 0.000 min
Response: 177190579
Conc: 19.90 PPB



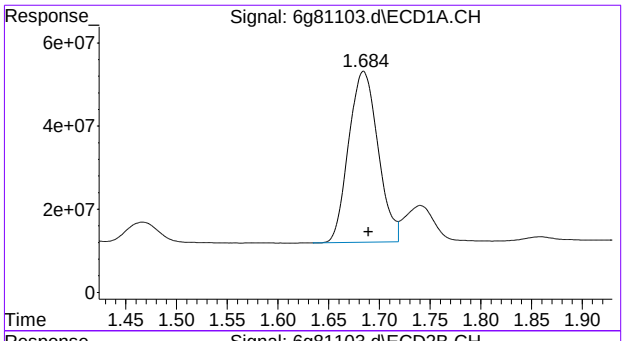
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.684 min
Delta R.T.: -0.005 min
Response: 826783282
Conc: 50.00 PPB



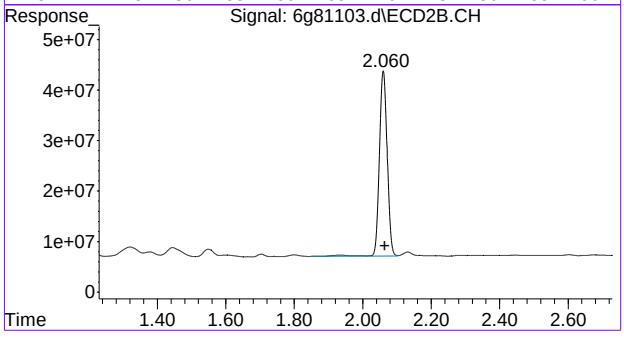
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.060 min
Delta R.T.: -0.004 min
Response: 582403115
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.684 min
Delta R.T.: -0.005 min
Response: 826783282
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.060 min
Delta R.T.: -0.004 min
Response: 582403115
Conc: 50.00 PPB

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/14/21 19:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81104.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 18:56:15
Operator : thomasl
Sample : jd36168-9
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:19:16 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.684	2.060	853.6E6	590.5E6	50.000	50.000
27) I 1-bromo-2...	1.684	2.060	853.6E6	590.5E6	50.000	50.000
33) I 1-bromo-2...	1.684	2.060	853.6E6	590.5E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.263	2.887	367.6E6	323.2E6	34.681	30.118
Spiked Amount 40.000	Range 30 - 150		Recovery =		86.70%	75.30%
26) SA Decachlor...	9.362	11.853	386.4E6	212.8E6	18.931m	23.121
Spiked Amount 40.000			Recovery =		47.33%	57.80%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

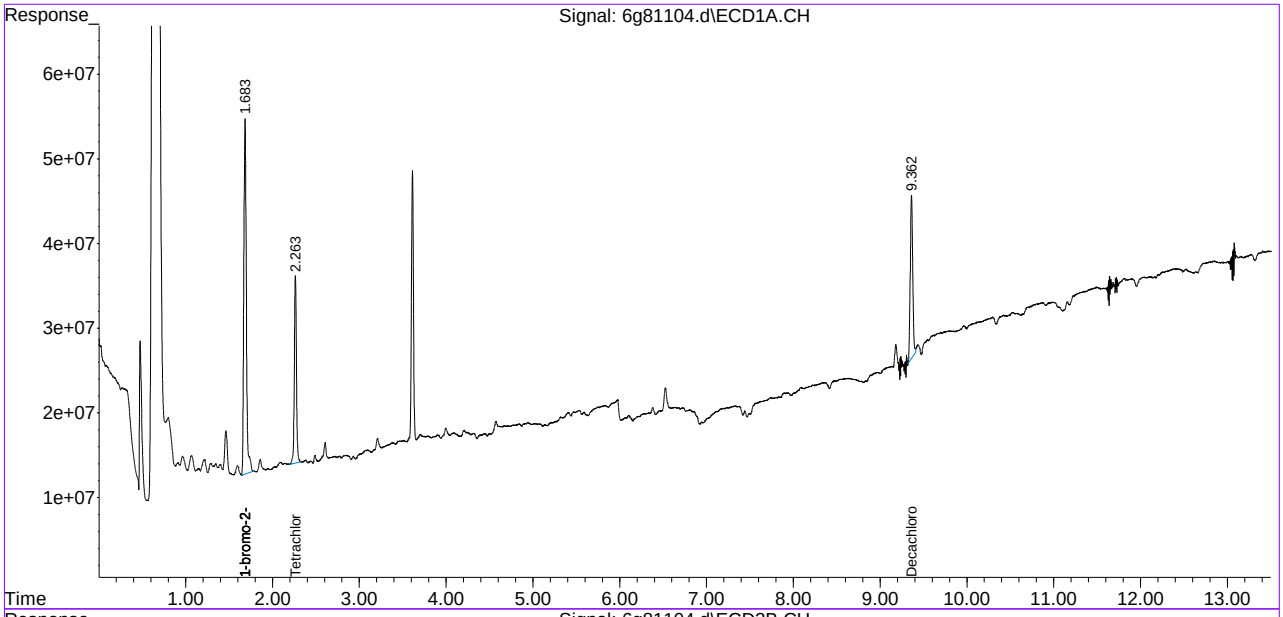
11.1.8
11

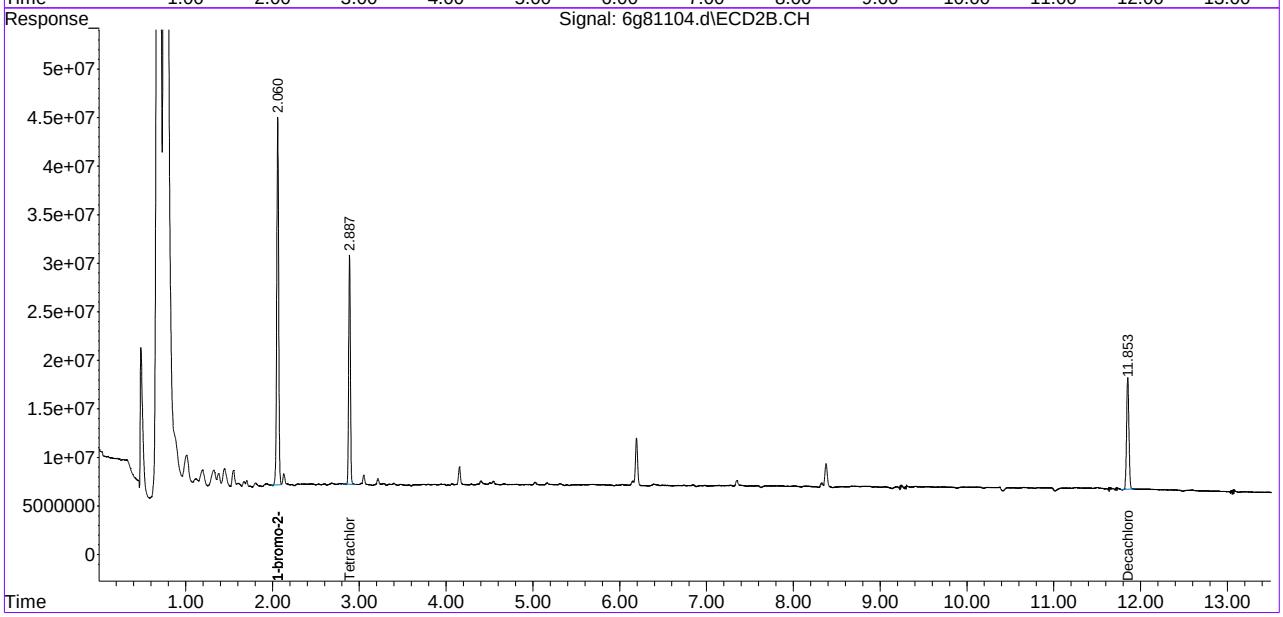
Quantitation Report (QT Reviewed)

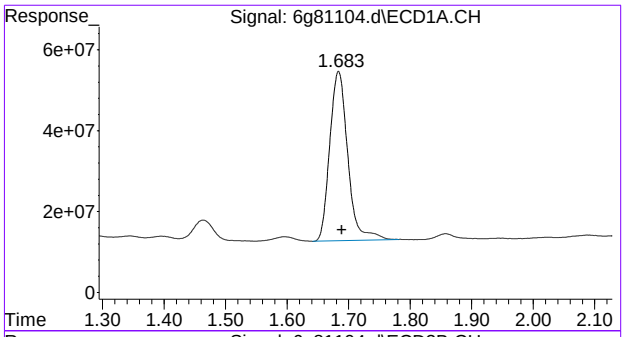
Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81104.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 18:56:15
Operator : thomasl
Sample : jd36168-9
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:19:16 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

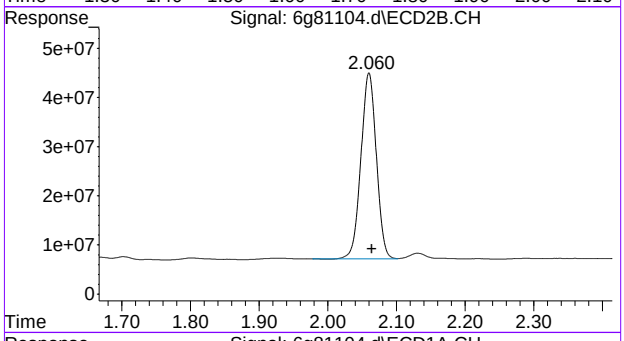






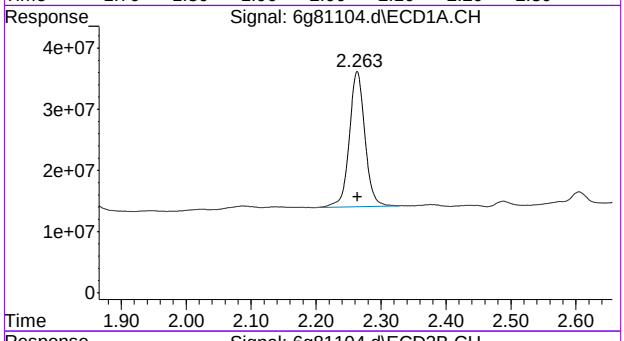
#1 1-bromo-2-nitrobenzene

R.T.: 1.684 min
Delta R.T.: -0.005 min
Response: 853596592
Conc: 50.00 PPB



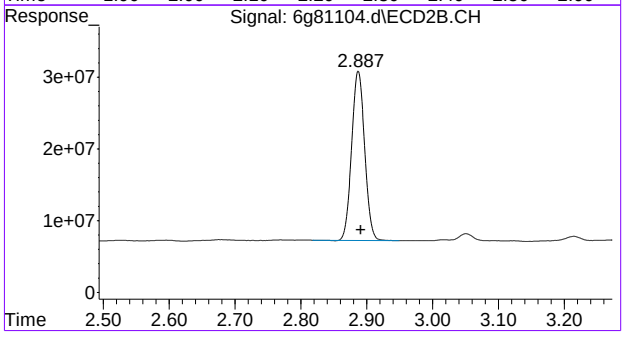
#1 1-bromo-2-nitrobenzene

R.T.: 2.060 min
Delta R.T.: -0.004 min
Response: 590501077
Conc: 50.00 PPB



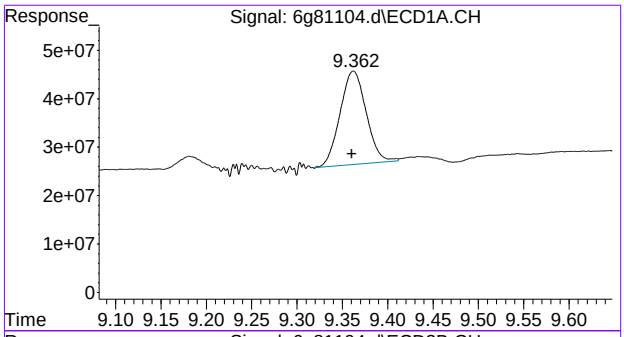
#2 Tetrachloro-m-xylene

R.T.: 2.263 min
Delta R.T.: 0.000 min
Response: 367643403
Conc: 34.68 PPB



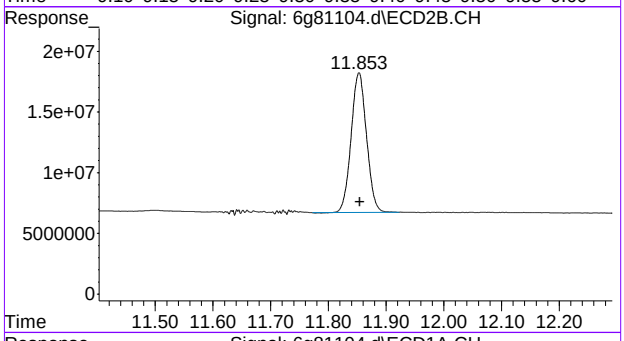
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: -0.003 min
Response: 323191870
Conc: 30.12 PPB



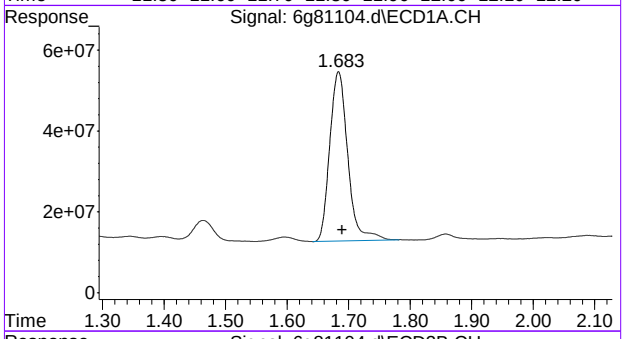
#26 Decachlorobiphenyl

R.T.: 9.362 min
Delta R.T.: 0.002 min
Response: 386368703
Conc: 18.93 PPB m



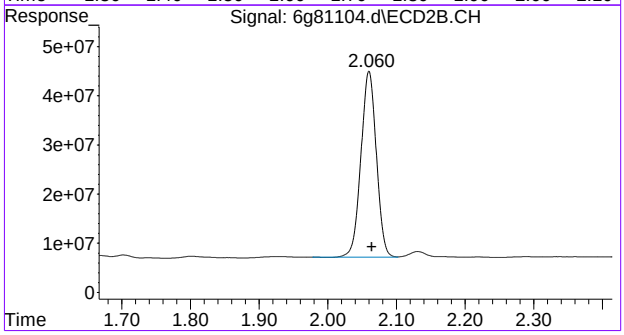
#26 Decachlorobiphenyl

R.T.: 11.853 min
Delta R.T.: -0.001 min
Response: 212809989
Conc: 23.12 PPB



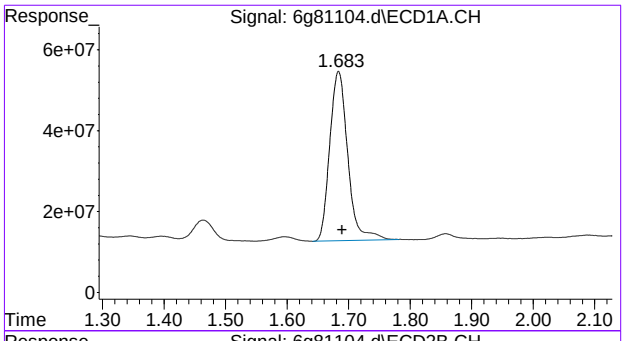
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.684 min
Delta R.T.: -0.006 min
Response: 853596592
Conc: 50.00 PPB



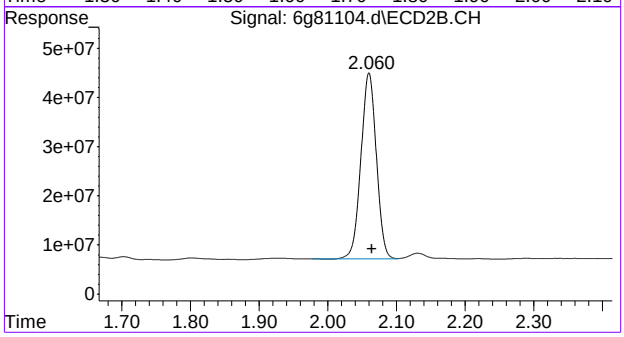
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.060 min
Delta R.T.: -0.004 min
Response: 590501077
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.684 min
Delta R.T.: -0.006 min
Response: 853596592
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.060 min
Delta R.T.: -0.004 min
Response: 590501077
Conc: 50.00 PPB

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81095.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 16:10:50
Operator : thomasl
Sample : jd36168-10
Misc : op36994,g6g2868,280,,,2,1
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:11:16 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.683	2.059	784.6E6	552.8E6	50.000	50.000
27) I 1-bromo-2...	1.683	2.059	784.6E6	552.8E6	50.000	50.000
33) I 1-bromo-2...	1.683	2.059	784.6E6	552.8E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.263	2.887	321.2E6	297.5E6	32.958	29.614
Spiked Amount 40.000	Range 30 - 150		Recovery =		82.39%	74.04%
26) SA Decachlor...	9.361	11.853	415.9E6	201.4E6	22.169	23.373
Spiked Amount 40.000			Recovery =		55.42%	58.43%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

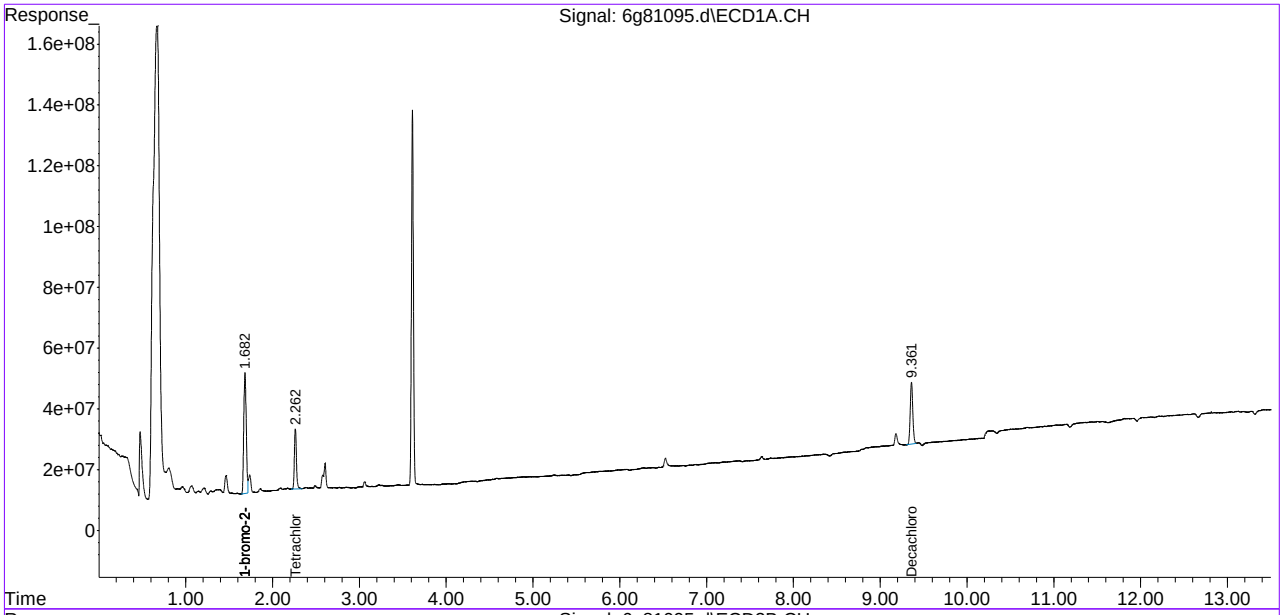
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

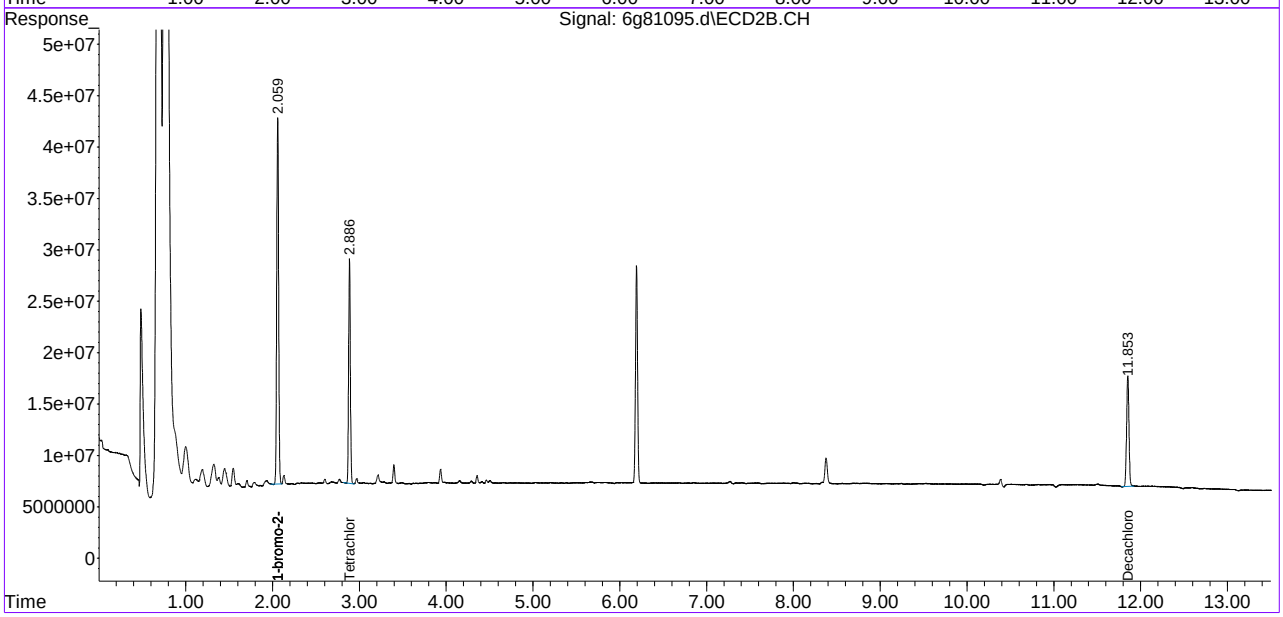
Quantitation Report (QT Reviewed)

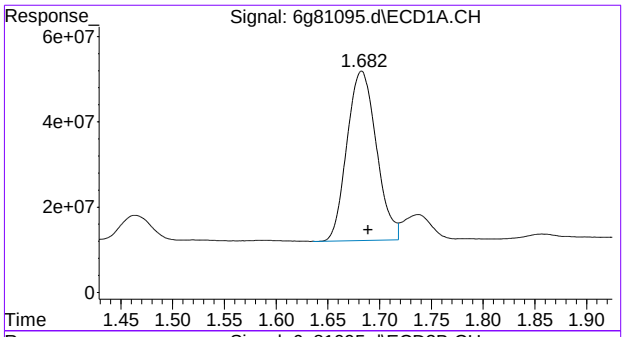
Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81095.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 16:10:50
Operator : thomasl
Sample : jd36168-10
Misc : op36994,g6g2868,280,,,2,1
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:11:16 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

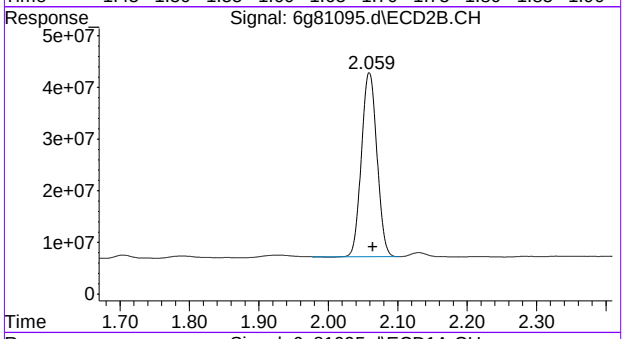






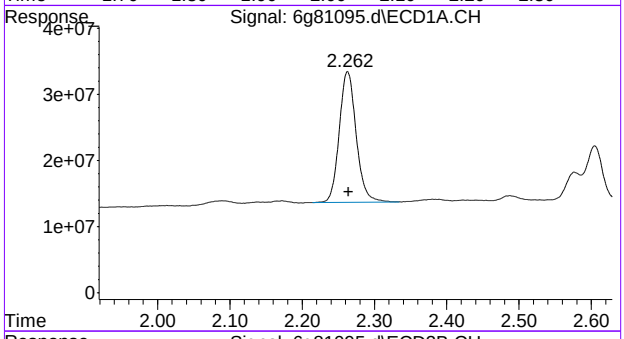
#1 1-bromo-2-nitrobenzene

R.T.: 1.683 min
Delta R.T.: -0.006 min
Response: 784641936
Conc: 50.00 PPB



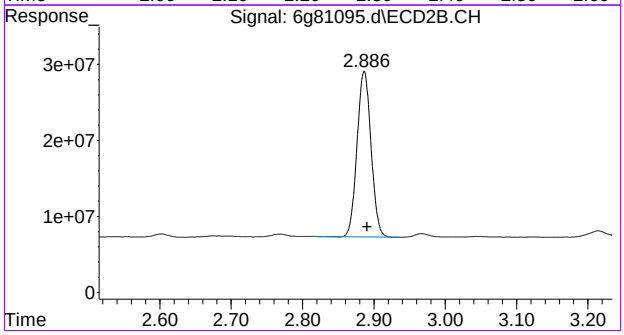
#1 1-bromo-2-nitrobenzene

R.T.: 2.059 min
Delta R.T.: -0.005 min
Response: 552803354
Conc: 50.00 PPB



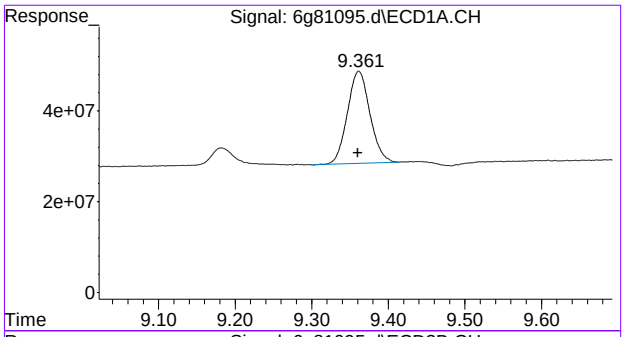
#2 Tetrachloro-m-xylene

R.T.: 2.263 min
Delta R.T.: 0.000 min
Response: 321151258
Conc: 32.96 PPB



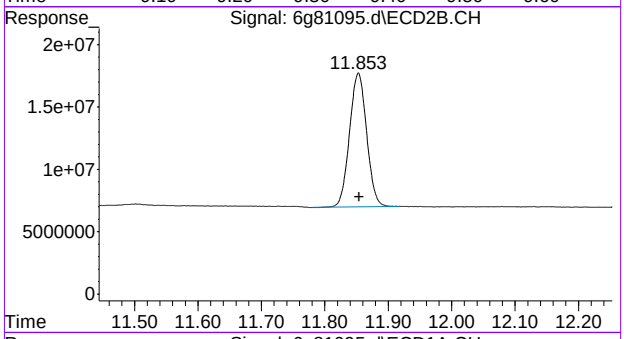
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: -0.004 min
Response: 297495567
Conc: 29.61 PPB



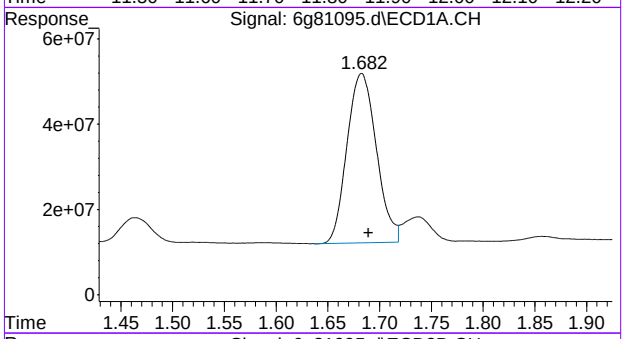
#26 Decachlorobiphenyl

R.T.: 9.361 min
Delta R.T.: 0.001 min
Response: 415911664
Conc: 22.17 PPB



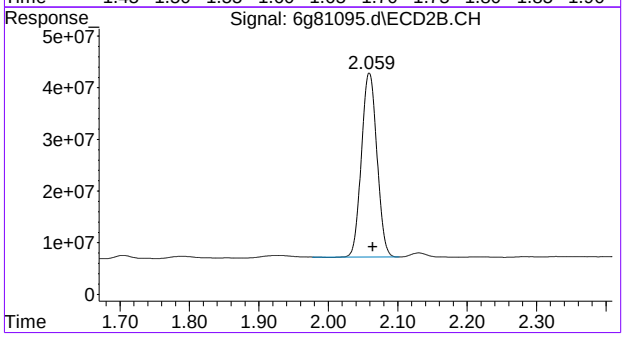
#26 Decachlorobiphenyl

R.T.: 11.853 min
Delta R.T.: -0.001 min
Response: 201393320
Conc: 23.37 PPB



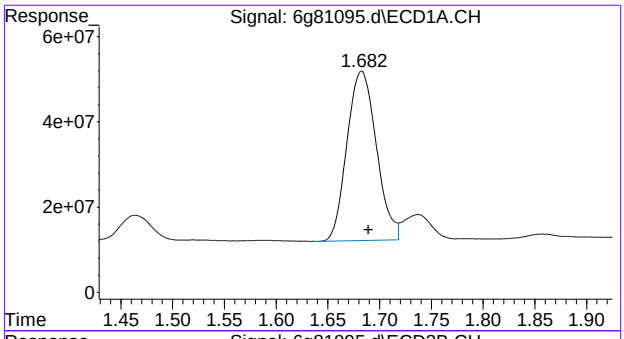
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.683 min
Delta R.T.: -0.006 min
Response: 784641936
Conc: 50.00 PPB



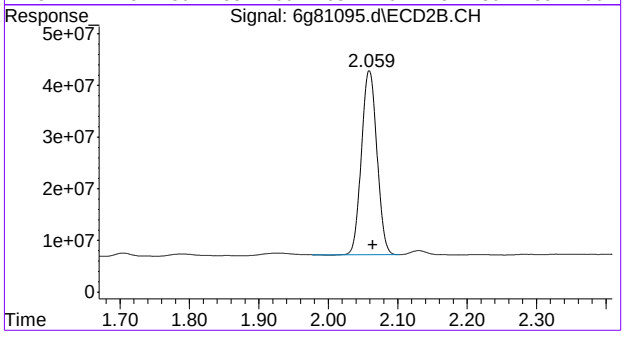
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.059 min
Delta R.T.: -0.005 min
Response: 552803354
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.683 min
Delta R.T.: -0.006 min
Response: 784641936
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.059 min
Delta R.T.: -0.005 min
Response: 552803354
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 19:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81096.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 16:29:12
Operator : thomasl
Sample : jd36168-11
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:12:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.682	2.059	850.0E6	587.3E6	50.000	50.000m
27) I 1-bromo-2...	1.682	2.059	850.0E6	586.8E6	50.000	50.000m
33) I 1-bromo-2...	1.682	2.059	850.0E6	585.9E6	50.000	50.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	2.263	2.887	325.2E6	307.2E6	30.806	28.788
Spiked Amount 40.000	Range 30 - 150		Recovery =		77.02%	71.97%
26) SA Decachlor...	9.361	11.853	375.0E6	183.5E6	18.454	20.043
Spiked Amount 40.000			Recovery =		46.14%	50.11%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

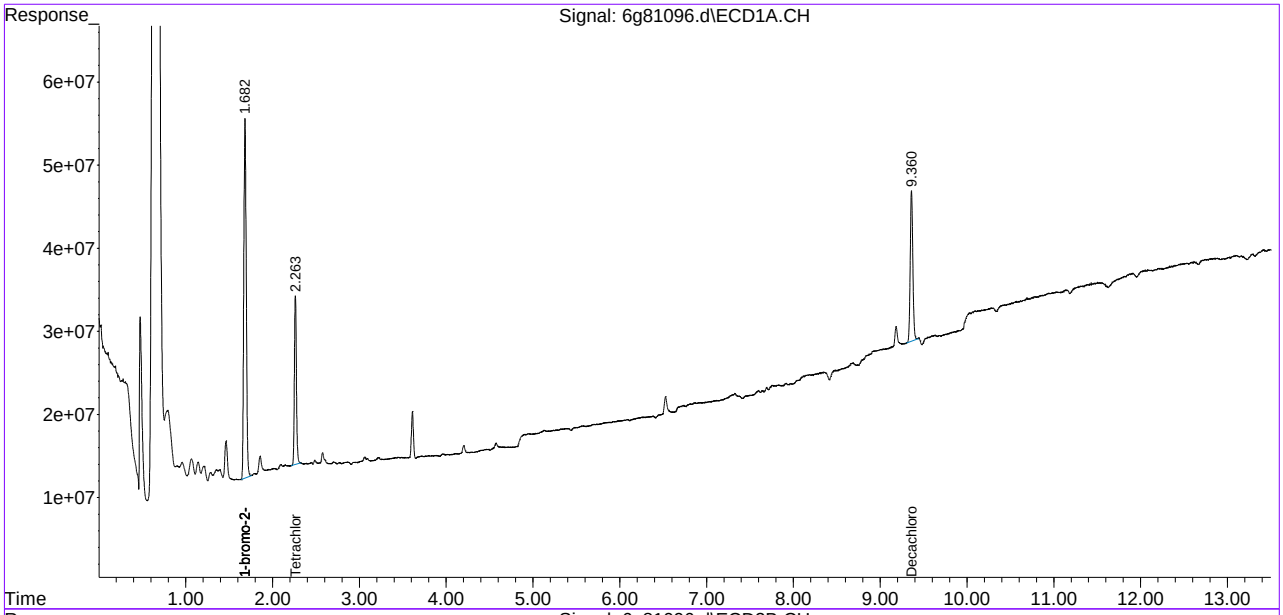
11.1.10 11

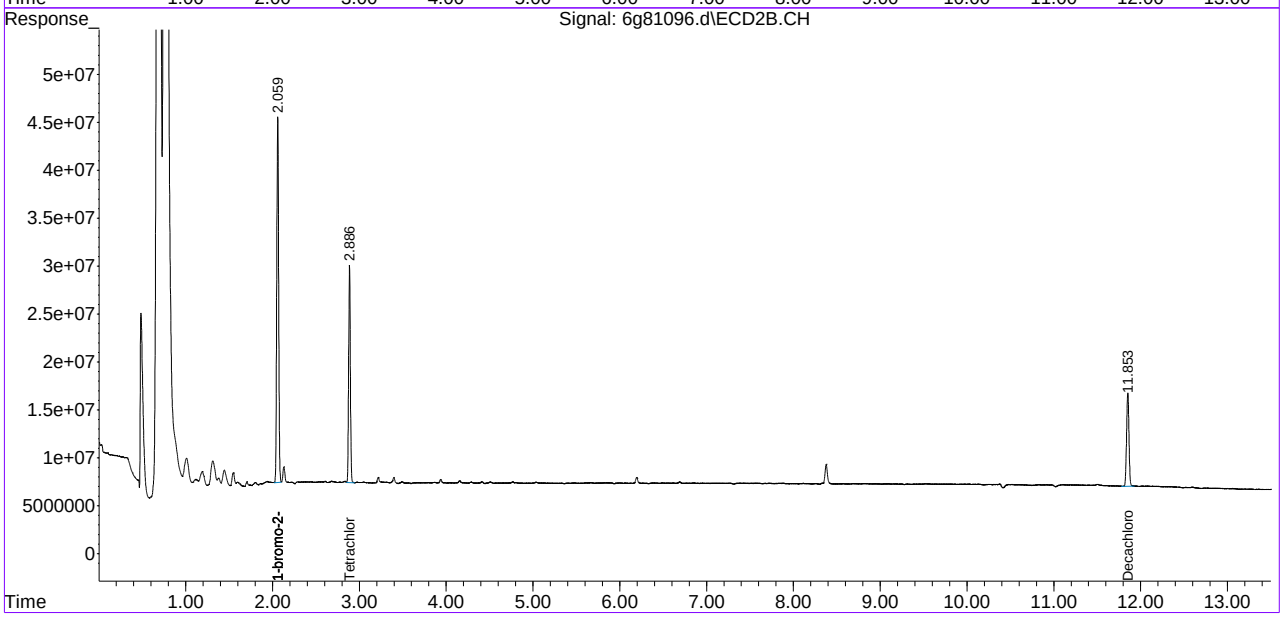
Quantitation Report (QT Reviewed)

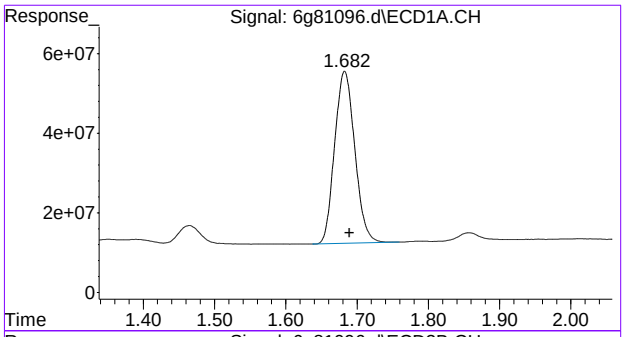
Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81096.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 16:29:12
Operator : thomasl
Sample : jd36168-11
Misc : op36994,g6g2868,270,,,2,1
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:12:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

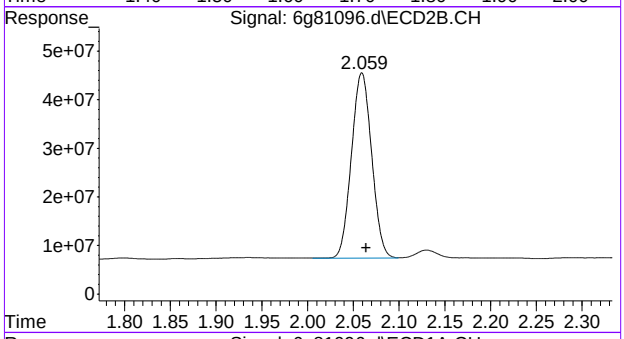






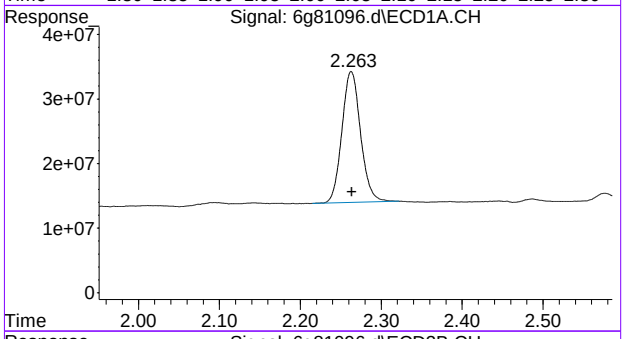
#1 1-bromo-2-nitrobenzene

R.T.: 1.682 min
Delta R.T.: -0.007 min
Response: 850020985
Conc: 50.00 PPB



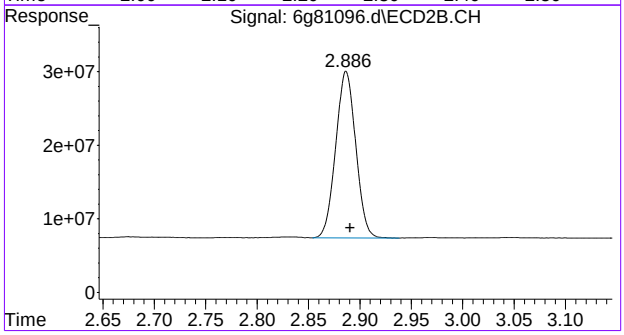
#1 1-bromo-2-nitrobenzene

R.T.: 2.059 min
Delta R.T.: -0.005 min
Response: 587321435
Conc: 50.00 PPB m



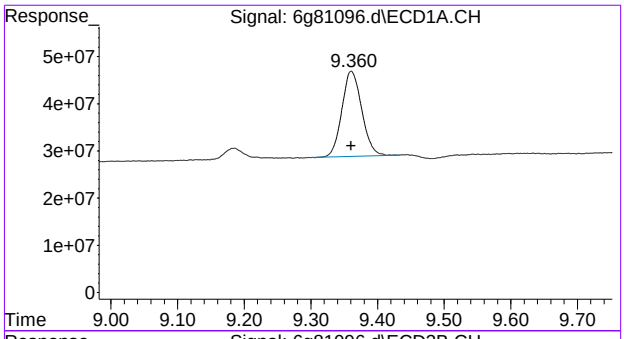
#2 Tetrachloro-m-xylene

R.T.: 2.263 min
Delta R.T.: 0.000 min
Response: 325192888
Conc: 30.81 PPB



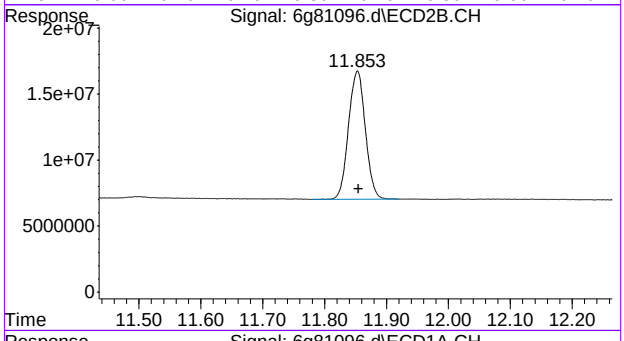
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: -0.004 min
Response: 307247567
Conc: 28.79 PPB



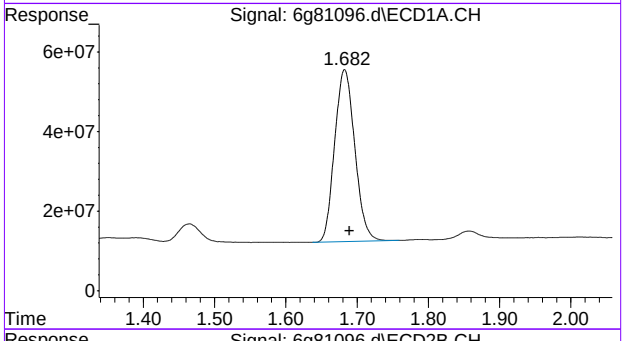
#26 Decachlorobiphenyl

R.T.: 9.361 min
Delta R.T.: 0.000 min
Response: 375047245
Conc: 18.45 PPB



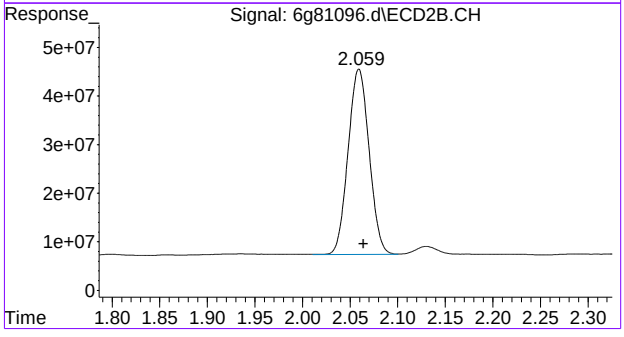
#26 Decachlorobiphenyl

R.T.: 11.853 min
Delta R.T.: -0.001 min
Response: 183487360
Conc: 20.04 PPB



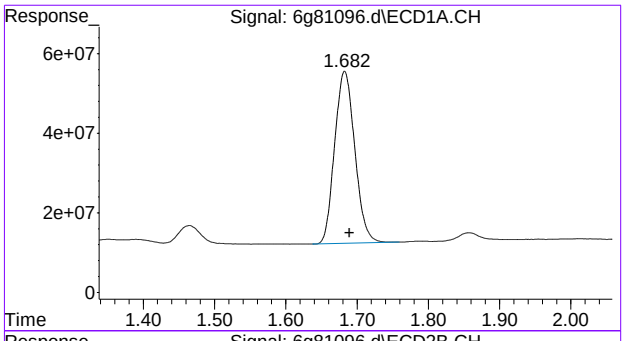
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.682 min
Delta R.T.: -0.007 min
Response: 850020985
Conc: 50.00 PPB



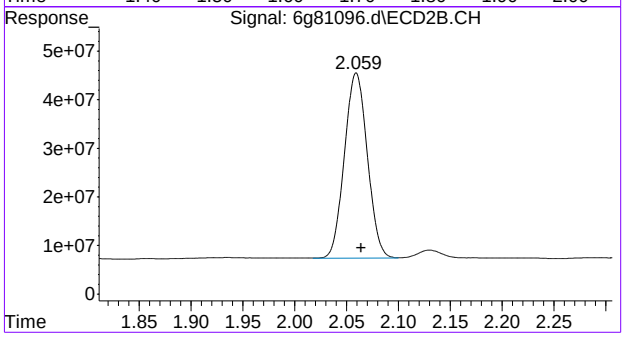
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.059 min
Delta R.T.: -0.005 min
Response: 586778019
Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.682 min
Delta R.T.: -0.007 min
Response: 850020985
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.059 min
Delta R.T.: -0.005 min
Response: 585936081
Conc: 50.00 PPB m

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/14/21 19:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81092.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 15:16:00
Operator : thomasl
Sample : op36994-mb1
Misc : op36994,g6g2868,250,,,2,1
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:05:47 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.687	2.058	763.1E6	538.1E6	50.000	50.000m
27) I 1-bromo-2...	1.687	2.058	763.1E6	540.4E6	50.000	50.000m
33) I 1-bromo-2...	1.687	2.059	763.1E6	559.0E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.268	2.885	399.4E6	372.9E6	42.142	38.137
Spiked Amount	40.000	Range 30 - 150	Recovery	= 105.36%		95.34%
26) SA Decachlor...	9.368	11.853	371.7E6	172.3E6	20.374m	20.548
Spiked Amount	40.000		Recovery	= 50.93%		51.37%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

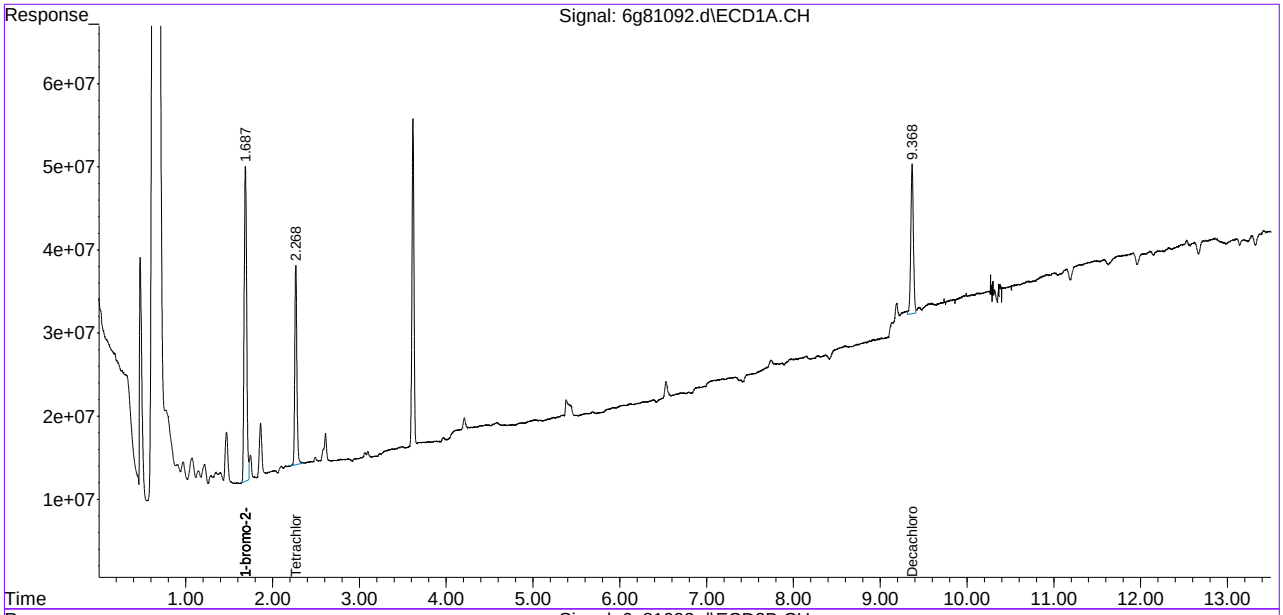
11.2.1 11

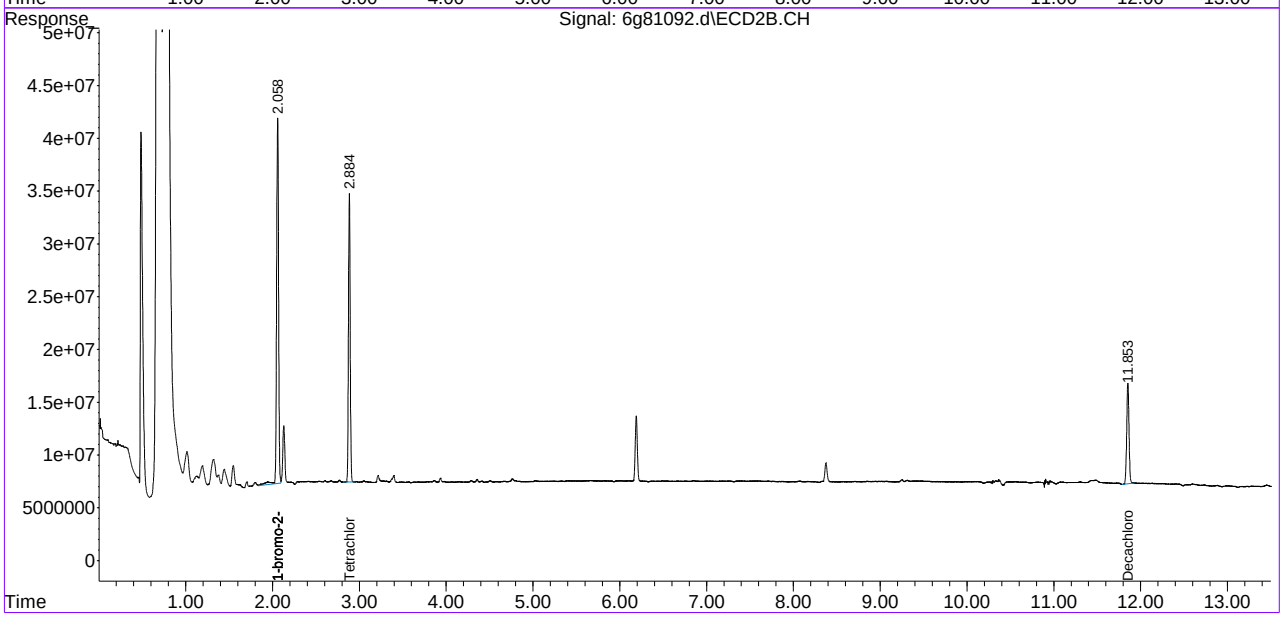
Quantitation Report (QT Reviewed)

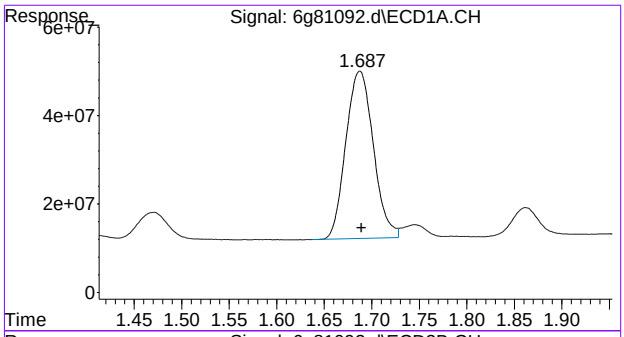
Data Path : C:\msdchem\1\data\sarah\g6g2868\
Data File : 6g81092.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12-Dec-21, 15:16:00
Operator : thomasl
Sample : op36994-mb1
Misc : op36994,g6g2868,250,,,2,1
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 21:05:47 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

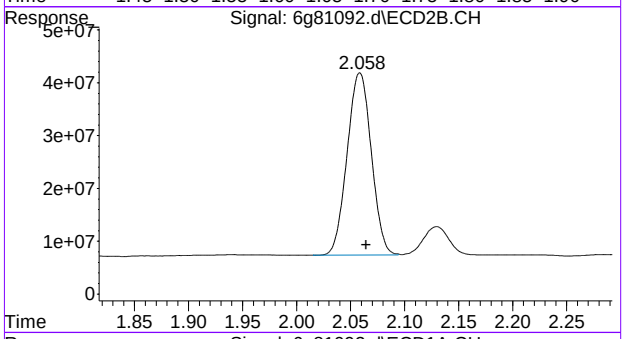






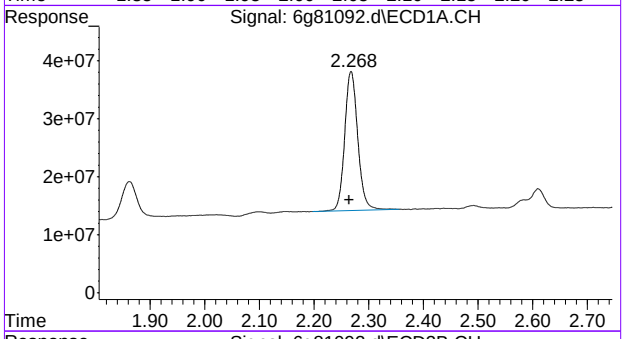
#1 1-bromo-2-nitrobenzene

R.T.: 1.687 min
Delta R.T.: -0.002 min
Response: 763121310
Conc: 50.00 PPB



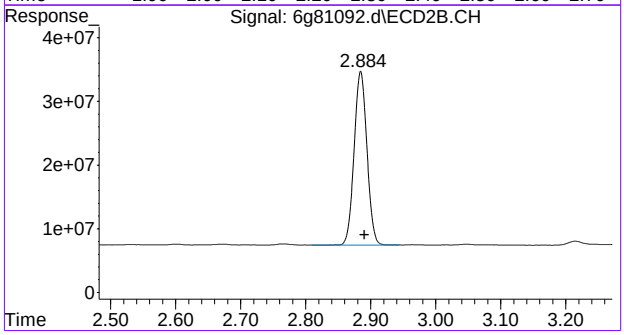
#1 1-bromo-2-nitrobenzene

R.T.: 2.058 min
Delta R.T.: -0.006 min
Response: 538082383
Conc: 50.00 PPB m



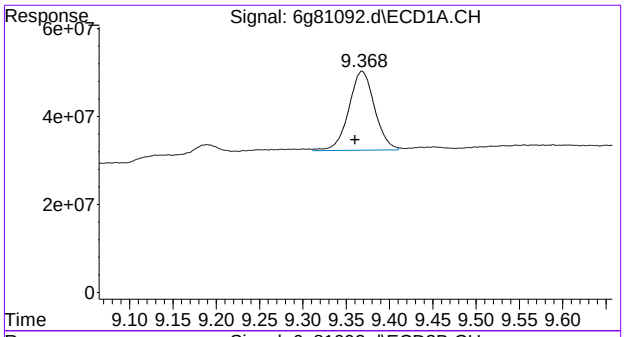
#2 Tetrachloro-m-xylene

R.T.: 2.268 min
Delta R.T.: 0.004 min
Response: 399385932
Conc: 42.14 PPB



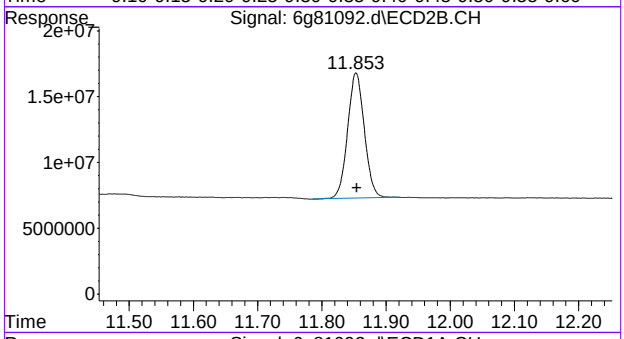
#2 Tetrachloro-m-xylene

R.T.: 2.885 min
Delta R.T.: -0.006 min
Response: 372908896
Conc: 38.14 PPB



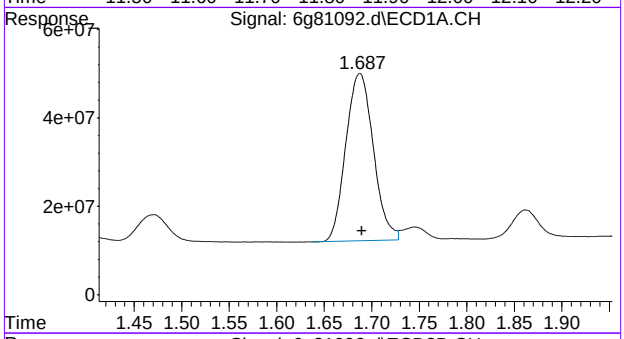
#26 Decachlorobiphenyl

R.T.: 9.368 min
Delta R.T.: 0.008 min
Response: 371739593
Conc: 20.37 PPB m



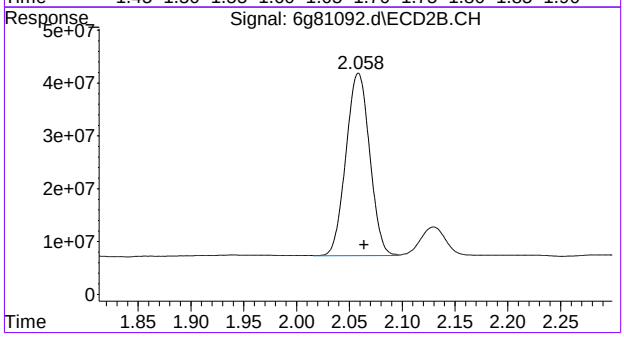
#26 Decachlorobiphenyl

R.T.: 11.853 min
Delta R.T.: 0.000 min
Response: 172335660
Conc: 20.55 PPB



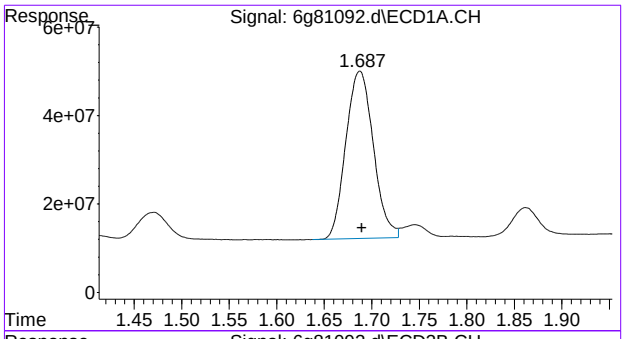
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.687 min
Delta R.T.: -0.002 min
Response: 763121310
Conc: 50.00 PPB



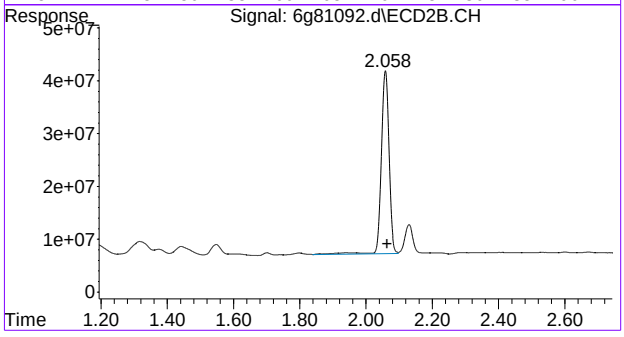
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.058 min
Delta R.T.: -0.006 min
Response: 540420601
Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.687 min
Delta R.T.: -0.002 min
Response: 763121310
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.059 min
Delta R.T.: -0.006 min
Response: 559020657
Conc: 50.00 PPB

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81077.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 4:49 am
Operator : christp
Sample : icc2867-25
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 08:41:06 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 08:39:34 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
1)	I 1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
27)	I 1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
33)	I 1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
	System Monitoring Compounds							
2)	SAB Tetrachlo...	2.268	2.889	255.6E6	247.5E6	27.942	25.988	
	Spiked Amount 40.000	Range 30 - 150		Recovery =		69.86%	64.97%	
26)	SA Decachlor...	9.361	11.853	438.5E6	202.4E6	22.586m	28.026	
	Spiked Amount 40.000			Recovery =		56.46%	70.06%	
	Target Compounds							
3)	hexachlor...	2.581	3.400	681.4E6	285.6E6	26.546	25.055	
4)	A alpha-BHC	2.714	3.555	513.9E6	365.8E6	21.637	25.439	
5)	MA gamma-BHC	2.991	3.985	434.2E6	307.0E6	20.028	23.289	
6)	MA Heptachlor	3.461	4.562	416.9E6	315.4E6	20.067	24.752	
7)	B beta-BHC	3.064	4.070	173.0E6	135.0E6	20.133	21.978	
8)	B delta-BHC	3.236	4.467	406.6E6	282.6E6	19.098m	23.262	
9)	MB Aldrin	3.777	5.014	440.1E6	284.2E6	20.700	22.894	
10)	alachlor	3.922	4.825	43816318	40883081	31.937m	24.986	
11)	B Heptachlo...	4.453	5.841	377.4E6	273.0E6	18.389	23.653	#
12)	B gamma-Chl...	4.611	6.126	385.8E6	278.2E6	18.912	23.081	
13)	B alpha-Chl...	4.774	6.352	392.8E6	268.1E6	19.962	23.729	
14)	A Endosulfan I	4.938	6.447	414.9E6	259.8E6	21.462	23.483	
15)	B 4,4'-DDE	4.896	6.618	380.9E6	270.9E6	19.914	23.459	
16)	MA Dieldrin	5.250	6.885	418.2E6	280.9E6	20.702	24.659	
17)	MA Endrin	5.558	7.388	404.6E6	272.8E6	21.431	25.731	
18)	A 4,4'-DDD	5.697	7.570	308.3E6	228.8E6	20.877	24.816	
19)	B Endosulfa...	5.867	7.741	363.2E6	244.0E6	20.937	24.705	
20)	MA 4,4'-DDT	6.102	8.103	320.0E6	227.7E6	20.678	25.144	
21)	B Endrin Al...	6.473	8.315	279.1E6	173.8E6	19.630	21.385	
22)	B Endosulfa...	7.134	8.782	364.1E6	238.3E6	21.795	25.847	
23)	A Methoxychlor	6.883	9.348	184.0E6	125.9E6	26.356	27.933	
24)	Mirex	6.991	9.675	304.6E6	199.3E6	26.117	25.715	
25)	B Endrin Ke...	7.557	9.742	337.9E6	217.8E6	20.265	21.830	
	Sum Toxaphene			0	0	N.D.	N.D.	
Average	Toxaphene					0.000	0.000	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

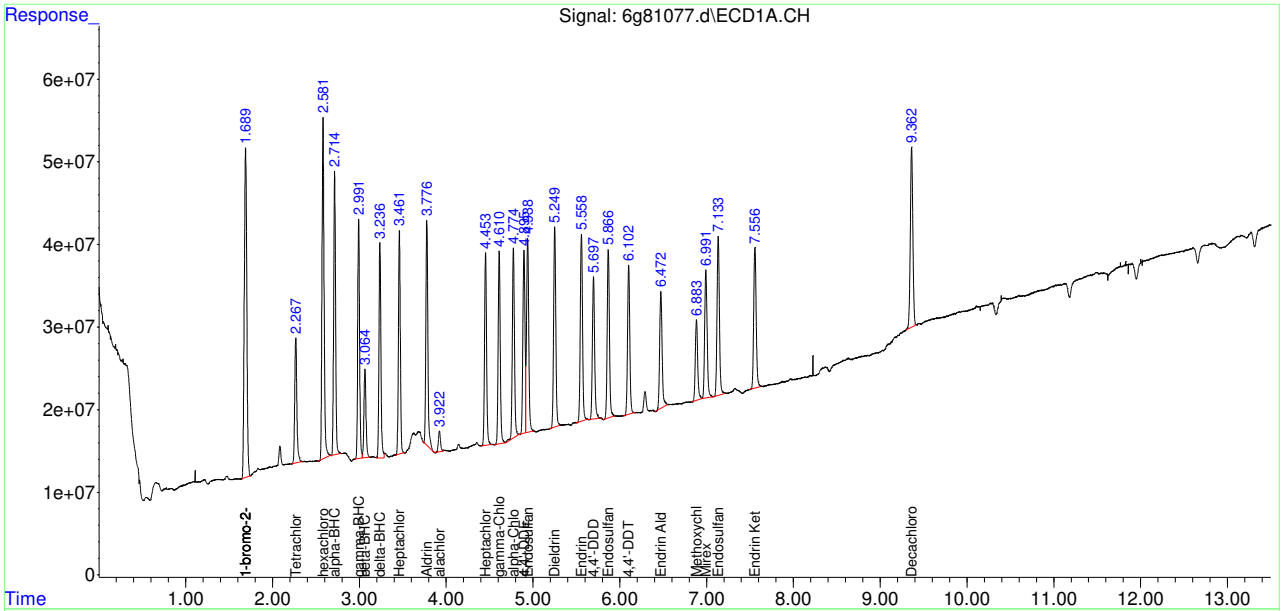
11.3.1 11

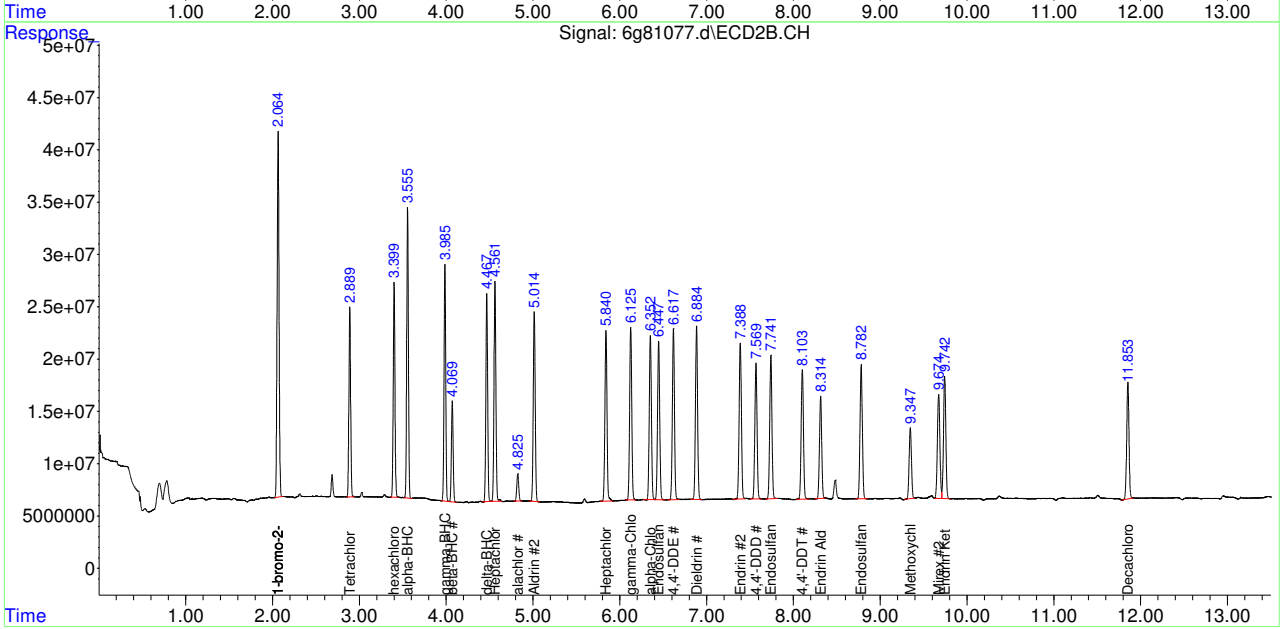
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81077.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 4:49 am
Operator : christp
Sample : icc2867-25
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 08:41:06 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 08:39:34 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81082.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:20 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:03:45 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:02:14 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
1) I	1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000	
27) I	1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000	
33) I	1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000	
	System Monitoring Compounds							
2)	SAB Tetrachlo...	2.268	2.891	5806.8E6	5241.5E6	7.901	7.892	
	Spiked Amount 40.000	Range 30 - 150		Recovery =		19.75%#	19.73%#	
26)	SA Decachlor...	9.362	11.853	10772.8E6	4000.8E6	6.874m	6.911	
	Spiked Amount 40.000			Recovery =		17.18%	17.28%	
	Target Compounds							
	Sum Toxaphene			0	0	N.D.	N.D.	
	Average Toxaphene					0.000	0.000	
34)	Chlordane...	3.461	4.562	597.5E6	374.1E6	1182.958	1382.044	
35)	Chlordane...	3.914	5.209	365.7E6	205.2E6	702.530	688.043	
36)	Chlordane...	4.610	6.126	1131.9E6	750.3E6	525.606	715.581	#
37)	Chlordane...	4.768	6.351	1859.4E6	1229.1E6	511.620	639.417m	
38)	Chlordane...	5.779	7.818	284.4E6	185.6E6	468.892	682.840	#
	SemiQuant Compounds - Not Calibrated on this Instrument							

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

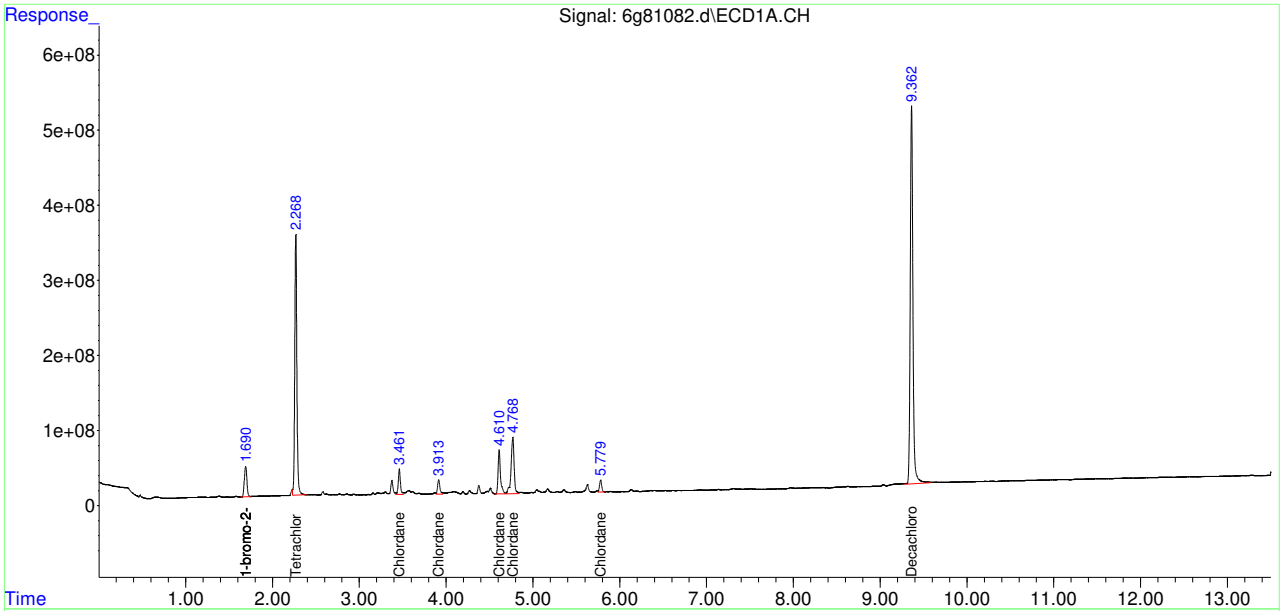
11.3.2 11

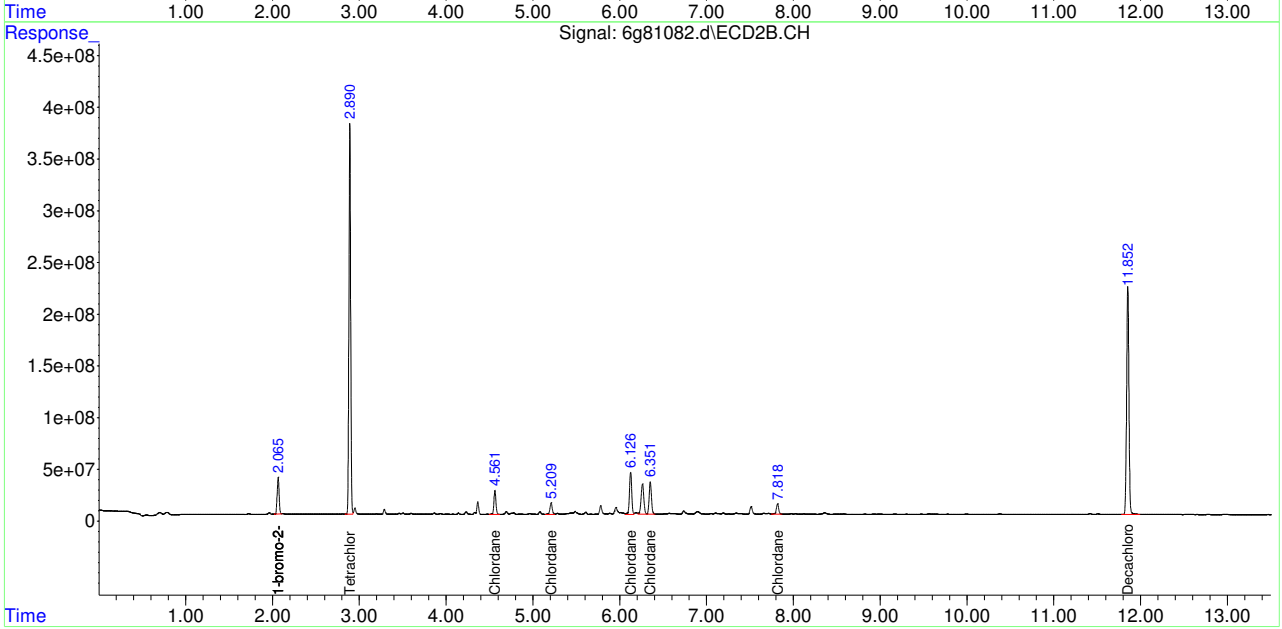
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81082.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:20 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:03:45 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:02:14 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81083.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:38 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:08:38 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:05:38 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
27)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
33)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.271	2.892	526.2E6	509.1E6	0.732	0.787
	Spiked Amount 40.000	Range 30 - 150		Recovery =		1.83%#	1.97%#
26)	SA Decachlor...	9.363	11.852	913.7E6	414.0E6	0.596	0.734
	Spiked Amount 40.000			Recovery =		1.49%	1.83%
	Target Compounds						
28)	L8 Toxaphene{A}	5.613	6.849	163.4E6	71929449	1242.670m	677.901m#
29)	L8 Toxaphene{B}	5.855	7.710	208.7E6	113.3E6	541.393m	632.663m
30)	L8 Toxaphene{C}	6.026	7.872	189.4E6	217.7E6	492.947m	636.971m#
31)	L8 Toxaphene{D}	6.361	8.310	167.8E6	102.1E6	571.511m	556.343m
32)	L8 Toxaphene{E}	6.982	9.214	183.5E6	131.3E6	543.649m	743.268 #
	Sum Toxaphene			912.9E6	636.3E6	3392.168	3247.146
Average Toxaphene						678.434	649.429

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

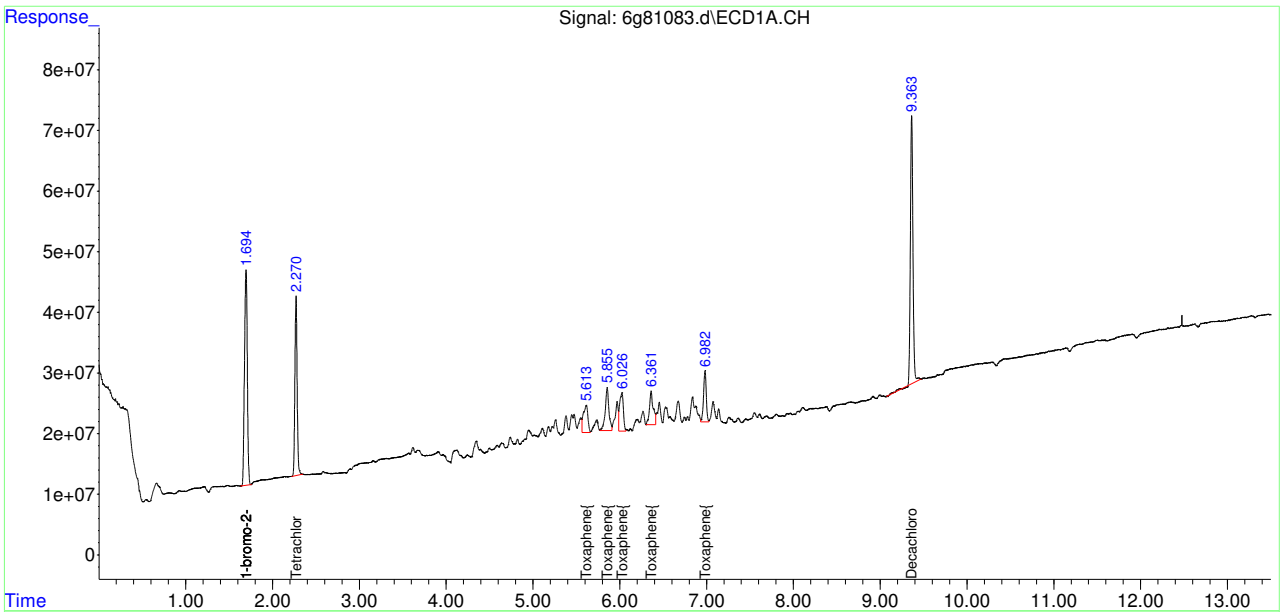
11.3.3 11

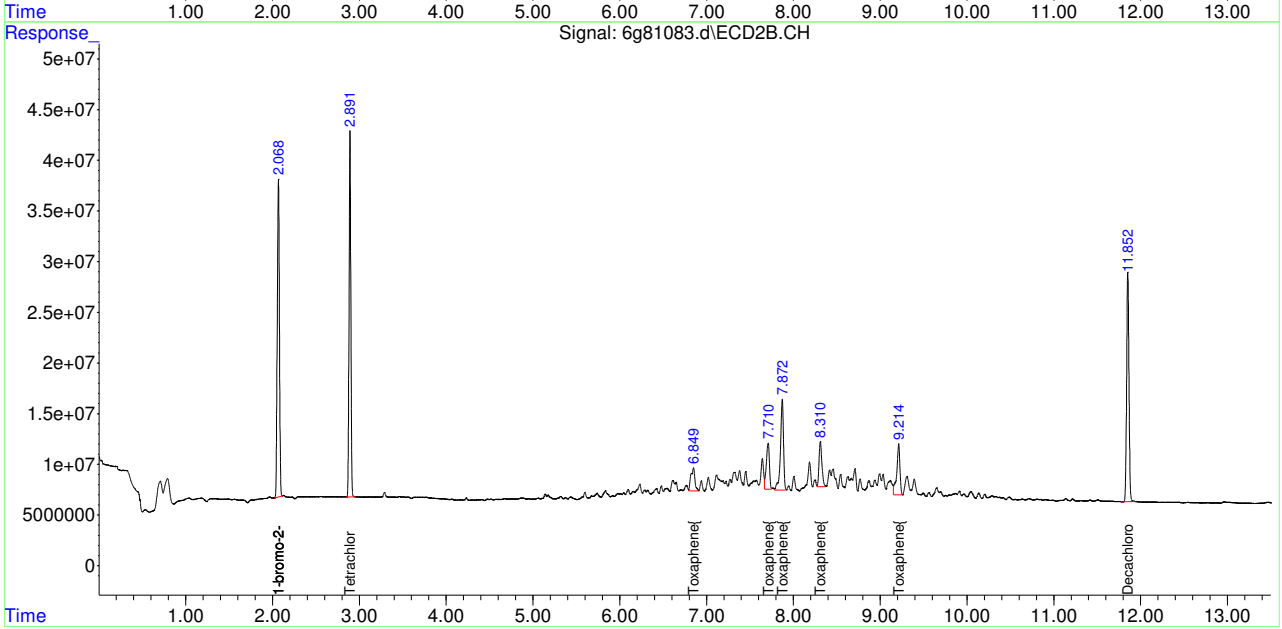
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81083.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:38 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:08:38 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:05:38 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51549
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:55	MA51549-STD1	1		b=2.0556e-004,c=4.7454e-003,rho=0.9993103
12:56	MA51549-STD2	1		STDB
12:57	MA51549-STD3	1		STDC
12:59	MA51549-STD4	1		STDD
13:01	MA51549-STD5	1		STDE
13:03	MA51549-STD6	1		STDF
13:08	MA51549-STD7	1		STDF
13:10	MA51549-ICV1	1		
13:12	MA51549-ICB1	1		
13:14	MA51549-CCV1	1		
13:15	MA51549-CCB1	1		
13:17	MA51549-CRI1	1		
13:20	MP30214-B1	1		
13:21	MP30214-S1	1		
13:23	MP30214-S2	1		
13:25	MA51549-CCV2	1		
13:27	MA51549-CCB2	1		
13:29	MP30214-MB1	1		
13:31	JD36100-1	1		(sample used for QC only; not part of login JD36168)
13:32	ZZZZZZ	1		
13:33	ZZZZZZ	1		
13:35	ZZZZZZ	1		
13:36	ZZZZZZ	1		
13:38	ZZZZZZ	1		
13:39	ZZZZZZ	1		
13:40	MA51549-CCV3	1		
13:42	MA51549-CCB3	1		
13:44	ZZZZZZ	1		
13:45	ZZZZZZ	1		
13:46	ZZZZZZ	1		
13:48	ZZZZZZ	1		
13:49	ZZZZZZ	1		
13:51	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51549
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:52	ZZZZZZ	1		
13:53	ZZZZZZ	1		
13:55	MA51549-CCV4	1		
13:56	MA51549-CCB4	1		
13:58	ZZZZZZ	1		
13:59	ZZZZZZ	1		
14:01	ZZZZZZ	1		
14:02	ZZZZZZ	1		
14:03	MA51549-CRI2	1		
14:04	ZZZZZZ	1		
14:06	ZZZZZZ	1		
14:07	MA51549-CCV5	1		
14:08	MA51549-CCB5	1		
14:10	ZZZZZZ	1		
14:12	MP30215-B1	1		
14:13	MP30215-S1	1		
14:15	MP30215-S2	1		
14:17	MA51549-CCV6	1		
14:19	MA51549-CCB6	1		
14:21	MP30215-MB1	1		
14:22	JD36168-2	1		
14:24	JD36168-3	1		
14:25	JD36168-4	1		
14:27	JD36168-5	1		
14:28	JD36168-2F	1		
14:29	JD36168-3F	1		
14:31	JD36168-4F	1		
14:32	MA51549-CCV7	1		
14:34	MA51549-CCB7	1		
14:36	JD36168-5F	1		
---------->	Last reportable sample/prep for job JD36168			
14:37	ZZZZZZ	1		
14:38	ZZZZZZ	1		
14:40	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51549
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:41	ZZZZZZ	1		
14:43	ZZZZZZ	1		
14:44	ZZZZZZ	1		
14:45	ZZZZZZ	1		
14:47	MA51549-CCV8	1		
14:48	MA51549-CCB8	1		
---------->	Last reportable CCB for job JD36168			
14:50	ZZZZZZ	1		
14:51	ZZZZZZ	1		
14:53	ZZZZZZ	1		
14:54	ZZZZZZ	1		
14:56	ZZZZZZ	1		
14:57	MP30216-B1	1		
14:58	MP30216-S1	1		
15:00	MP30216-S2	1		
15:02	MA51549-CCV9	1		
15:04	MA51549-CCB9	1		
15:06	MP30216-MB1	1		
15:08	JD35487-1	1		(sample used for QC only; not part of login JD36168)
15:09	ZZZZZZ	1		
15:11	ZZZZZZ	1		
15:12	ZZZZZZ	1		
15:16	MA51549-CCV10	1		
15:17	MA51549-CCB10	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51549
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
13:10	MA51549-ICV1	1	X	
13:12	MA51549-ICB1	1	X	
13:14	MA51549-CCV1	1	X	
13:15	MA51549-CCB1	1	X	
13:17	MA51549-CRI1	1	X	
13:20	MP30214-B1	1	X	
13:21	MP30214-S1	1	X	
13:23	MP30214-S2	1	X	
13:25	MA51549-CCV2	1	X	
13:27	MA51549-CCB2	1	X	
13:29	MP30214-MB1	1	X	
13:31	JD36100-1	1	X	(a)
13:32	ZZZZZZ	1		
13:33	ZZZZZZ	1		
13:35	ZZZZZZ	1		
13:36	ZZZZZZ	1		
13:38	ZZZZZZ	1		
13:39	ZZZZZZ	1		
13:40	MA51549-CCV3	1	X	
13:42	MA51549-CCB3	1	X	
13:44	ZZZZZZ	1		
13:45	ZZZZZZ	1		
13:46	ZZZZZZ	1		
13:48	ZZZZZZ	1		
13:49	ZZZZZZ	1		
13:51	ZZZZZZ	1		
13:52	ZZZZZZ	1		
13:53	ZZZZZZ	1		
13:55	MA51549-CCV4	1	X	
13:56	MA51549-CCB4	1	X	
13:58	ZZZZZZ	1		
13:59	ZZZZZZ	1		
14:01	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51549
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg
14:02	ZZZZZZ	1	
14:03	MA51549-CRI2	1	X
14:04	ZZZZZZ	1	
14:06	ZZZZZZ	1	
14:07	MA51549-CCV5	1	X
14:08	MA51549-CCB5	1	X
14:10	ZZZZZZ	1	
14:12	MP30215-B1	1	X
14:13	MP30215-S1	1	X
14:15	MP30215-S2	1	X
14:17	MA51549-CCV6	1	X
14:19	MA51549-CCB6	1	X
14:21	MP30215-MB1	1	X
14:22	JD36168-2	1	X
14:24	JD36168-3	1	X
14:25	JD36168-4	1	X
14:27	JD36168-5	1	X
14:28	JD36168-2F	1	X
14:29	JD36168-3F	1	X
14:31	JD36168-4F	1	X
14:32	MA51549-CCV7	1	X
14:34	MA51549-CCB7	1	X
14:36	JD36168-5F	1	X
14:37	ZZZZZZ	1	
14:38	ZZZZZZ	1	
14:40	ZZZZZZ	1	
14:41	ZZZZZZ	1	
14:43	ZZZZZZ	1	
14:44	ZZZZZZ	1	
14:45	ZZZZZZ	1	
14:47	MA51549-CCV8	1	X
14:48	MA51549-CCB8	1	X
14:50	ZZZZZZ	1	
		Element:	Hg

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51549
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg
14:51	ZZZZZZ	1	
14:53	ZZZZZZ	1	
14:54	ZZZZZZ	1	
14:56	ZZZZZZ	1	
14:57	MP30216-B1	1	X
14:58	MP30216-S1	1	X
15:00	MP30216-S2	1	X
15:02	MA51549-CCV9	1	X
15:04	MA51549-CCB9	1	X
15:06	MP30216-MB1	1	X
15:08	JD35487-1	1	X (a)
15:09	ZZZZZZ	1	
15:11	ZZZZZZ	1	
15:12	ZZZZZZ	1	
15:16	MA51549-CCV10	1	X
15:17	MA51549-CCB10	1	X

(a) Sample used for QC only; not part of login JD36168.

Element: Hg

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51549 Units: ug/l

Time:			13:12		13:15		13:27		13:42	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0296	<0.20	-0.0236	<0.20	-0.0129	<0.20	-0.0238	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51549 Units: ug/l

Time:			13:56		14:08		14:19		14:34	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0199	<0.20	-0.0343	<0.20	-0.0150	<0.20	-0.0193	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51549 Units: ug/l

Time:			14:48	
Sample ID:			CCB8	
Metal	RL	IDL	raw	final
Mercury	0.20	.034	-0.0177	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51549 Units: ug/l

Time:		13:10			13:14			13:25	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.07	102.3	2.5	2.50	100.0	2.5	2.50	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51549 Units: ug/l

Time:		13:40			13:55			14:07	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.48	99.2	2.5	2.48	99.2	2.5	2.50	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51549 Units: ug/l

Time:		14:17			14:32			14:47	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.37	94.8	2.5	2.45	98.0	2.5	2.40	96.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120721W2.CSV Date Analyzed: 12/07/21 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA51549 Units: ug/l

Time:			13:17		14:03	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Mercury	0.20		0.213	106.5	0.219	109.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120821W2.CSV Date Analyzed: 12/08/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51556
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:16	MA51556-STD1	1		b=2.3719e-004,c=2.7838e-002,rho=0.9993890
13:17	MA51556-STD2	1		STDB
13:18	MA51556-STD3	1		STDC
13:20	MA51556-STD4	1		STDD
13:22	MA51556-STD5	1		STDE
13:24	MA51556-STD6	1		STDF
13:26	MA51556-ICV1	1		
13:28	MA51556-ICB1	1		
13:30	MA51556-CCV1	1		
13:31	MA51556-CCB1	1		
13:33	MA51556-CRI1	1		
13:35	MP30250-B1	1		
13:36	MP30250-S1	1		
13:38	MP30250-S2	1		
13:40	MA51556-CCV2	1		
13:42	MA51556-CCB2	1		
13:44	MP30250-MB1	1		
13:46	JD36168-6	1		
13:47	JD36168-7	1		
13:48	JD36168-8	1		
13:50	JD36168-9	1		
13:51	JD36168-10	1		
13:53	JD36168-11	1		
13:54	JD36168-6F	1		
13:55	MA51556-CCV3	1		
13:57	MA51556-CCB3	1		
13:59	JD36168-7F	1		
14:00	JD36168-8F	1		
14:01	JD36168-9F	1		
14:03	JD36168-10F	1		
14:04	JD36168-11F	1		
---------->	Last reportable sample/prep for job JD36168			
14:06	ZZZZZZ	1		
14:07	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120821W2.CSV Date Analyzed: 12/08/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51556
Parameters: Hg

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	14:08	ZZZZZZ	1		
	14:10	MA51556-CCV4	1		
	14:11	MA51556-CCB4	1		
---------->	Last reportable CCB for job JD36168				
	14:13	ZZZZZZ	1		
	14:15	ZZZZZZ	1		
	14:16	ZZZZZZ	1		
	14:17	ZZZZZZ	1		
	14:19	ZZZZZZ	1		
	14:20	MP30251-B1	1		
	14:22	MP30251-S1	1		
	14:24	MP30251-S2	1		
	14:26	MA51556-CCV5	1		
	14:28	MA51556-CCB5	1		
	14:30	MP30251-MB1	1		
	14:31	JD34436-4B	1		(sample used for QC only; not part of login JD36168)
	14:32	ZZZZZZ	1		
	14:34	ZZZZZZ	1		
	14:35	ZZZZZZ	1		
	14:37	MA51556-CCV6	1		
	14:38	MA51556-CCB6	1		
	14:40	ZZZZZZ	1		
	14:41	ZZZZZZ	1		
	14:43	ZZZZZZ	1		
	14:44	MP30252-B1	1		
	14:46	MP30252-S1	1		
	14:48	MP30252-S2	1		
	14:50	MA51556-CCV7	1		
	14:52	MA51556-CCB7	1		
	14:54	MP30252-MB1	1		
	14:55	ZZZZZZ	1		
	14:56	ZZZZZZ	1		
	14:58	ZZZZZZ	1		
	14:59	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120821W2.CSV Date Analyzed: 12/08/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51556
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:01	ZZZZZZ	1		
15:02	MA51556-CCV8	1		
15:03	MA51556-CCB8	1		
15:05	ZZZZZZ	1		
15:07	ZZZZZZ	1		
15:08	ZZZZZZ	1		
15:10	ZZZZZZ	1		
15:11	ZZZZZZ	1		
15:12	JD36105-2A	1		(sample used for QC only; not part of login JD36168)
15:14	MP30253-B1	1		
15:15	MA51556-CCV9	1		
15:17	MA51556-CCB9	1		
15:19	MP30253-MB1	1		
15:20	ZZZZZZ	1		
15:22	MA51556-CCV10	1		
15:24	MA51556-CCB10	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120821W2.CSV Date Analyzed: 12/08/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51556
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg
13:26	MA51556-ICV1	1	X
13:28	MA51556-ICB1	1	X
13:30	MA51556-CCV1	1	X
13:31	MA51556-CCB1	1	X
13:33	MA51556-CRI1	1	X
13:35	MP30250-B1	1	X
13:36	MP30250-S1	1	X
13:38	MP30250-S2	1	X
13:40	MA51556-CCV2	1	X
13:42	MA51556-CCB2	1	X
13:44	MP30250-MB1	1	X
13:46	JD36168-6	1	X
13:47	JD36168-7	1	X
13:48	JD36168-8	1	X
13:50	JD36168-9	1	X
13:51	JD36168-10	1	X
13:53	JD36168-11	1	X
13:54	JD36168-6F	1	X
13:55	MA51556-CCV3	1	X
13:57	MA51556-CCB3	1	X
13:59	JD36168-7F	1	X
14:00	JD36168-8F	1	X
14:01	JD36168-9F	1	X
14:03	JD36168-10F	1	X
14:04	JD36168-11F	1	X
14:06	ZZZZZZ	1	
14:07	ZZZZZZ	1	
14:08	ZZZZZZ	1	
14:10	MA51556-CCV4	1	X
14:11	MA51556-CCB4	1	X
14:13	ZZZZZZ	1	
14:15	ZZZZZZ	1	
14:16	ZZZZZZ	1	
		Element:	Hg

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120821W2.CSV Date Analyzed: 12/08/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51556
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
14:17	ZZZZZZ	1		
14:19	ZZZZZZ	1		
14:20	MP30251-B1	1	X	
14:22	MP30251-S1	1	X	
14:24	MP30251-S2	1	X	
14:26	MA51556-CCV5	1	X	
14:28	MA51556-CCB5	1	X	
14:30	MP30251-MB1	1	X	
14:31	JD34436-4B	1	X	(a)
14:32	ZZZZZZ	1		
14:34	ZZZZZZ	1		
14:35	ZZZZZZ	1		
14:37	MA51556-CCV6	1	X	
14:38	MA51556-CCB6	1	X	
14:40	ZZZZZZ	1		
14:41	ZZZZZZ	1		
14:43	ZZZZZZ	1		
14:44	MP30252-B1	1	X	
14:46	MP30252-S1	1	X	
14:48	MP30252-S2	1	X	
14:50	MA51556-CCV7	1	X	
14:52	MA51556-CCB7	1	X	
14:54	MP30252-MB1	1	X	
14:55	ZZZZZZ	1		
14:56	ZZZZZZ	1		
14:58	ZZZZZZ	1		
14:59	ZZZZZZ	1		
15:01	ZZZZZZ	1		
15:02	MA51556-CCV8	1	X	
15:03	MA51556-CCB8	1	X	
15:05	ZZZZZZ	1		
15:07	ZZZZZZ	1		
15:08	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120821W2.CSV Date Analyzed: 12/08/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51556
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg
15:10	ZZZZZZ	1	
15:11	ZZZZZZ	1	
15:12	JD36105-2A	1	X (a)
15:14	MP30253-B1	1	X
15:15	MA51556-CCV9	1	X
15:17	MA51556-CCB9	1	X
15:19	MP30253-MB1	1	X
15:20	ZZZZZZ	1	
15:22	MA51556-CCV10	1	X
15:24	MA51556-CCB10	1	X

(a) Sample used for QC only; not part of login JD36168.

Element: Hg

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120821W2.CSV Date Analyzed: 12/08/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51556 Units: ug/l

Time:			13:28		13:31		13:42		13:57	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0234	<0.20	-0.0153	<0.20	-0.0291	<0.20	-0.0149	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120821W2.CSV Date Analyzed: 12/08/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51556 Units: ug/l

Time:			14:11	
Sample ID:			CCB4	
Metal	RL	IDL	raw	final
Mercury	0.20	.034	-0.0191	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120821W2.CSV Date Analyzed: 12/08/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51556 Units: ug/l

Time:		13:26			13:30			13:40	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	2.93	97.7	2.5	2.48	99.2	2.5	2.48	99.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120821W2.CSV Date Analyzed: 12/08/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51556 Units: ug/l

Time:		13:55			14:10	
Sample ID:	CCV	CCV3		CCV	CCV4	
Metal	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.60	104.0	2.5	2.51	100.4

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9120821W2.CSV Date Analyzed: 12/08/21 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA51556 Units: ug/l

Time:			13:33	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Mercury	0.20		0.232	116.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:25	MA51567-STD1	1		Sample introduction not stable, see rerun.
10:29	MA51567-STD2	1		Sample introduction not stable, see rerun.
10:32	MA51567-STD3	1		STDA
10:36	MA51567-STD4	1		STDB
10:39	MA51567-STD5	1		STDC
10:42	MA51567-STD6	1		STDD
10:45	MA51567-STD7	1		STDE
10:48	MA51567-STD8	1		STDF
10:52	MA51567-STD9	1		STDG
10:55	MA51567-STD10	1		STDH
10:58	MA51567-STD11	1		STDI
11:01	MA51567-STD12	1		STDJ
11:12	ZZZZZZ	1		
11:15	ZZZZZZ	1		
11:19	ZZZZZZ	1		
11:22	MA51567-ICVA1	1		
11:25	MA51567-ICV1	1		
11:50	MA51567-ICB1	1		
11:53	MA51567-CCV1	1		
11:57	MA51567-CCB1	1		
12:00	MA51567-CRI1	1		
12:04	MA51567-CRI2	1		
12:08	MA51567-ICSA1	1		see rerun
12:11	MA51567-ICSAB1	1		see rerun
12:25	ZZZZZZ	1		
12:32	ZZZZZZ	1		
12:35	MA51567-CCV2	1		
12:39	MA51567-CCB2	1		
13:01	MA51567-ICSA2	1		
13:04	MA51567-ICSAB2	1		
13:07	ZZZZZZ	1		
13:10	MA51567-CCV3	1		
13:15	MA51567-CCB3	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:18	MP30202-MB1	5		
13:22	MP30202-B1	5		
13:25	MP30202-PS1	5		
13:28	MP30202-S1	5		
13:31	MP30202-S2	5		
13:35	JD36076-1	5		(sample used for QC only; not part of login JD36168)
13:38	MP30202-SD1	25		
13:41	ZZZZZZ	5		
13:45	ZZZZZZ	1		
13:48	MA51567-CCV4	1		
13:51	MA51567-CCB4	1		
13:55	ZZZZZZ	5		
13:58	MP30202-S1	20		
14:02	MP30202-S2	20		
14:05	JD36076-1	20		(sample used for QC only; not part of login JD36168)
14:08	MP30202-SD1	100		
14:12	ZZZZZZ	2		
14:15	ZZZZZZ	2		
14:19	ZZZZZZ	2		
14:22	ZZZZZZ	2		
14:25	MA51567-CCV5	1		
14:28	MA51567-CCB5	1		
14:32	MP30210-MB1	2		Batch to reanalyze for GEQS wit CRI AND ICSAB/ICSA at the beginig and the end
14:36	MP30210-B1	2		
14:39	MP30210-S1	2		
14:43	MP30210-S2	2		
14:46	JD36149-6F	2		(sample used for QC only; not part of login JD36168)
14:49	MP30210-SD1	10		
14:53	ZZZZZZ	2		
14:56	ZZZZZZ	2		
14:59	ZZZZZZ	1		
15:03	MA51567-CCV6	1		
15:06	MA51567-CCB6	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:09	ZZZZZZ	2		
15:13	ZZZZZZ	2		
15:16	ZZZZZZ	2		
15:19	ZZZZZZ	2		
15:22	ZZZZZZ	50		
15:26	ZZZZZZ	2		
15:29	ZZZZZZ	50		
15:33	ZZZZZZ	500		
15:37	ZZZZZZ	2		
15:40	MA51567-CCV7	1		
15:43	MA51567-CCB7	1		
15:46	ZZZZZZ	50		
15:50	ZZZZZZ	2		
15:53	ZZZZZZ	2		
15:56	ZZZZZZ	50		
16:00	ZZZZZZ	2		
16:03	ZZZZZZ	2		
16:06	ZZZZZZ	20		
16:09	ZZZZZZ	2		
16:13	MP30210-S1	10		
16:16	MP30210-S2	10		
16:19	MA51567-CCV8	1		
16:23	MA51567-CCB8	1		
16:26	JD36149-6F	10		(sample used for QC only; not part of login JD36168)
16:29	MP30210-SD1	50		
16:32	MA51567-CRI3	1		
16:36	ZZZZZZ	1		
16:39	ZZZZZZ	2		
16:42	MA51567-CCV9	1		
16:45	MA51567-CCB9	1		
16:49	ZZZZZZ	2		
16:52	MP30243-B1	2		
16:55	MP30243-S1	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:59	MP30243-S2	2		
17:02	JD35920-5	2		(sample used for QC only; not part of login JD36168)
17:05	MP30243-SD1	10		
17:08	ZZZZZZ	2		
17:12	MP30243-SD1	10		
17:15	ZZZZZZ	1		
17:18	MA51567-CCV10	1		
17:21	MA51567-CCB10	1		
17:25	MP30277-MB1	1		
17:28	MP30277-B1	1		
17:31	ZZZZZZ	1		
17:34	MP30278-MB1	2		
17:38	MP30278-B1	2		
17:41	ZZZZZZ	2		
17:44	MP30279-MB1	5		
17:48	MP30279-B1	5		
17:51	ZZZZZZ	5		
17:54	MA51567-CCV11	1		
17:57	MA51567-CCB11	1		
18:01	ZZZZZZ	2		
18:04	MP30244-B1	2		
18:07	MP30244-S1	2		Ca high
18:10	MP30244-S2	2		Ca high
18:14	JD36168-2	2		Ca high
18:17	MP30244-SD1	10		Ca high
18:20	JD36168-3	2		Ca high. High rsd
18:24	JD36168-4	2		
18:27	JD36168-5	2		Ca, Mn, Na high
18:30	MP30244-MB1	2		Cu>1/2 RL. rerun low hits
18:33	MA51567-CCV12	1		
18:36	MA51567-CCB12	1		
18:40	JD36168-6	2		
18:43	JD36168-7	2		Al high

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:46	JD36168-8	2		Ca high
18:50	JD36168-9	2		Ca high
18:53	JD36168-10	2		Ca, Mn, Na high
18:56	JD36168-11	2		Ca, Mn, Na high. high rsd
18:59	JD36168-2F	2		Ca high
19:03	JD36168-3F	2		Ca high
19:06	ZZZZZZ	1		
19:09	MA51567-CCV13	1		
19:12	MA51567-CCB13	1		
19:16	JD36168-4F	2		
19:19	JD36168-5F	2		Ca, Mn, Na high
19:22	JD36168-6F	2		
19:25	JD36168-7F	2		
19:29	JD36168-8F	2		Ca high
19:32	JD36168-9F	2		Ca high
19:35	JD36168-10F	2		Ca, Mg, na high
---------->	Last reportable sample/prep for job JD36168			
19:39	JD36168-11F	1		Ca, Mg, na high. rerun also on 1;2 dilution
19:42	MA51567-CCV14	1		
19:45	MA51567-CCB14	1		
---------->	Last reportable CCB for job JD36168			
19:48	ZZZZZZ	1		
19:51	ZZZZZZ	1		
19:55	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
11:12	ZZZZZZ	1																							
11:15	ZZZZZZ	1																							
11:19	ZZZZZZ	1																							
11:22	MA51567-ICVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
11:25	MA51567-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
11:50	MA51567-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
11:53	MA51567-CCV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
11:57	MA51567-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12:00	MA51567-CRI1	1																							
12:04	MA51567-CRI2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12:08	MA51567-ICSA1	1	see	rerun																					
12:11	MA51567-ICSAB1	1	see	rerun																					
12:25	ZZZZZZ	1																							
12:32	ZZZZZZ	1																							
12:35	MA51567-CCV2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12:39	MA51567-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:01	MA51567-ICSA2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:04	MA51567-ICSAB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:07	ZZZZZZ	1																							
13:10	MA51567-CCV3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:15	MA51567-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:18	MP30202-MB1	5																		X				X	
13:22	MP30202-B1	5																		X				X	
13:25	MP30202-PS1	5																							
13:28	MP30202-S1	5																		X				X	
13:31	MP30202-S2	5																		X				X	
13:35	JD36076-1	5																		X					(a)
13:38	MP30202-SD1	25																		X				X	
13:41	ZZZZZZ	5																							
13:45	ZZZZZZ	1																							
13:48	MA51567-CCV4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:51	MA51567-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:55	ZZZZZZ	5																							
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
13:58	MP30202-S1	20	X						X				X		X										
14:02	MP30202-S2	20	X						X				X		X										
14:05	JD36076-1	20																							(a)
14:08	MP30202-SD1	100	X										X		X										
14:12	ZZZZZZ	2																							
14:15	ZZZZZZ	2																							
14:19	ZZZZZZ	2																							
14:22	ZZZZZZ	2																							
14:25	MA51567-CCV5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:28	MA51567-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:32	MP30210-MB1	2	Batch to reanalyze for GEQS wit CRI AND ICSAB/ICSA at the beginig and the end																						
14:36	MP30210-B1	2																							
14:39	MP30210-S1	2																							
14:43	MP30210-S2	2																							
14:46	JD36149-6F	2																							
14:49	MP30210-SD1	10																							
14:53	ZZZZZZ	2																							
14:56	ZZZZZZ	2																							
14:59	ZZZZZZ	1																							
15:03	MA51567-CCV6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:06	MA51567-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:09	ZZZZZZ	2																							
15:13	ZZZZZZ	2																							
15:16	ZZZZZZ	2																							
15:19	ZZZZZZ	2																							
15:22	ZZZZZZ	50																							
15:26	ZZZZZZ	2																							
15:29	ZZZZZZ	50																							
15:33	ZZZZZZ	500																							
15:37	ZZZZZZ	2																							
15:40	MA51567-CCV7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:43	MA51567-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:46	ZZZZZZ	50																							
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
15:50	ZZZZZZ	2																							
15:53	ZZZZZZ	2																							
15:56	ZZZZZZ	50																							
16:00	ZZZZZZ	2																							
16:03	ZZZZZZ	2																							
16:06	ZZZZZZ	20																							
16:09	ZZZZZZ	2																							
16:13	MP30210-S1	10																							
16:16	MP30210-S2	10																							
16:19	MA51567-CCV8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:23	MA51567-CCB8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:26	JD36149-6F	10																							
16:29	MP30210-SD1	50																							
16:32	MA51567-CRI3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:36	ZZZZZZ	1																							
16:39	ZZZZZZ	2																							
16:42	MA51567-CCV9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:45	MA51567-CCB9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:49	ZZZZZZ	2																							
16:52	MP30243-B1	2										X													
16:55	MP30243-S1	2										X													
16:59	MP30243-S2	2										X													
17:02	JD35920-5	2										X													(a)
17:05	MP30243-SD1	10																							
17:08	ZZZZZZ	2																							
17:12	MP30243-SD1	10										X													
17:15	ZZZZZZ	1																							
17:18	MA51567-CCV10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:21	MA51567-CCB10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:25	MP30277-MB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:28	MP30277-B1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:31	ZZZZZZ	1																							
17:34	MP30278-MB1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn
17:38	MP30278-B1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:41	ZZZZZZ	2																						
17:44	MP30279-MB1	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:48	MP30279-B1	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:51	ZZZZZZ	5																						
17:54	MA51567-CCV11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:57	MA51567-CCB11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:01	ZZZZZZ	2																						
18:04	MP30244-B1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:07	MP30244-S1	2	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:10	MP30244-S2	2	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:14	JD36168-2	2	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X
18:17	MP30244-SD1	10	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:20	JD36168-3	2	X	X	X		X	X			X		X	X		X	X	X	X	X	X	X	X	X
18:24	JD36168-4	2	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
18:27	JD36168-5	2	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X		X	X	X
18:30	MP30244-MB1	2	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
18:33	MA51567-CCV12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:36	MA51567-CCB12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:40	JD36168-6	2	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
18:43	JD36168-7	2		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
18:46	JD36168-8	2	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X
18:50	JD36168-9	2	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:53	JD36168-10	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
18:56	JD36168-11	2	X	X	X	X	X	X		X	X	X		X		X	X	X	X	X		X	X	X
18:59	JD36168-2F	2	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:03	JD36168-3F	2	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:06	ZZZZZZ	1																						
19:09	MA51567-CCV13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:12	MA51567-CCB13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:16	JD36168-4F	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:19	JD36168-5F	2	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X		X	X	X
19:22	JD36168-6F	2	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn
19:25	JD36168-7F	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:29	JD36168-8F	2	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:32	JD36168-9F	2	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:35	JD36168-10F	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
19:39	JD36168-11F	1	Ca, Mg, na high. rerun also on 1;2 dilution																					
19:42	MA51567-CCV14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:45	MA51567-CCB14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:48	ZZZZZZ	1																						
19:51	ZZZZZZ	1																						
19:55	ZZZZZZ	1																						

(a) Sample used for QC only; not part of login JD36168.

Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
10:25	MA51567-STD1	100	100	100	100	100	100	100	100
10:29	MA51567-STD2	100	100	100	100	100	100	100	100
10:32	MA51567-STD3	100	100	100	100	100	100	100	100
10:36	MA51567-STD4	101.227	101.107	98.807	100.149	101.731	102.496	101.589	102.487
10:39	MA51567-STD5	100.975	99.822	98.112	99.929	101.64	100.009	100.635	100.304
10:42	MA51567-STD6	101.61	101.638	100.139	100.286	102.732	104.565	102.436	104.207
10:45	MA51567-STD7	99.69	99.37	96.746	99.693	100.213	103.368	99.648	103.53
10:48	MA51567-STD8	97.67	97.275	94.482	97.995	97.741	100.404	98.186	100.412
10:52	MA51567-STD9	97.545	99.228	98.4	100.395	100.146	102.462	99.364	102.211
10:55	MA51567-STD10	101.44	102.173	100.856	103.358	103.068	103.257	102.286	102.633
10:58	MA51567-STD11	102.847	103.933	103.635	105.288	103.939	106.543	102.069	104.059
11:01	MA51567-STD12	104.695	106.882	106.251	106.951	105.046	109.495	102.737	104.178
11:12	ZZZZZZ	104.996	104.988	103.807	105.245	105.824	100.558	104.971	100.761
11:15	ZZZZZZ	107.626	107.646	105.039	102.713	107.864	103.68	107.182	103.44
11:19	ZZZZZZ	106.11	106.598	106.889	103.723	108.509	107.77	107.97	107.768
11:22	MA51567-ICVA1	103.036	103.262	101.469	103.159	102.486	107.197	101.365	103.963
11:25	MA51567-ICV1	104.245	105.058	103.903	105.275	105.647	105.057	105.336	104.883
11:50	MA51567-ICB1	102.751	99.461	99.025	99.727	103.66	96.984	81.524	96.776
11:53	MA51567-CCV1	103.198	102.266	100.447	101.65	105.834	105.287	81.908	103.153
11:57	MA51567-CCB1	107.225	104.277	101.751	101.964	108.427	104.395	85.394	104.72
12:00	MA51567-CRI1	No results reported for the elements associated with this internal standard.							
12:04	MA51567-CRI2	107.194	104.8	101.905	103.385	108.954	106.112	84.858	105.615
12:08	MA51567-ICSA1	No results reported for the elements associated with this internal standard.							
12:11	MA51567-ICSAB1	No results reported for the elements associated with this internal standard.							
12:25	ZZZZZZ	95.719	95.416	92.839	94.689	105.48	123.293	70.927	84.668
12:32	ZZZZZZ	93.662	100.332	96.163	106.137	108.007	99.525	84.799	99.127
12:35	MA51567-CCV2	93.476	98.961	95.542	103.248	105.216	103.59	82.781	101.225
12:39	MA51567-CCB2	96.005	100.658	96.624	104.347	107.687	101.84	84.629	101.555
13:01	MA51567-ICSA2	98.634	96.896	94.734	96.732	106.256	120.865	71.749	82.202
13:04	MA51567-ICSAB2	93.591	94.893	93.648	98.279	105.641	124.2	71.783	86.306
13:07	ZZZZZZ	91.789	99.312	94.207	108.173	109.522	100.747	86.066	100.726
13:10	MA51567-CCV3	95.325	101.702	95.934	108.778	109.908	105.847	86.076	103.562
13:15	MA51567-CCB3	98.778	104	98.383	108.936	112.142	102.03	89.158	102.387

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:18	MP30202-MB1	100.207	104.938	98.826	108.754	112.536	102.833	88.363	102.808
13:22	MP30202-B1	100.168	104.61	97.073	109.498	110.486	104.383	86.775	103.342
13:25	MP30202-PS1	103.255	107.159	99.78	110.798	114.143	113.509	86.744	104.627
13:28	MP30202-S1	100.683	105.747	98.509	112.484	110.293	110.049	84.396	102.258
13:31	MP30202-S2	103.255	109.096	101.849	115.623	113.051	113.206	86.791	105.144
13:35	JD36076-1	107.174	111.729	103.154	114.302	115.863	114.853	88.851	105.878
13:38	MP30202-SD1	109.562	112.354	105.978	114.784	118.364	112.281	92.149	110.607
13:41	ZZZZZZ	107.545	110.247	103.28	112.33	120.562	126.857	88.753	106.846
13:45	ZZZZZZ	95.386	98.53	92.176	104.109	105.869	96.136	83.411	95.992
13:48	MA51567-CCV4	103.557	103.594	97.894	107.003	109.406	105.763	85.46	103.629
13:51	MA51567-CCB4	105.861	105.624	100.631	108.735	111.593	103.813	88.06	103.848
13:55	ZZZZZZ	106.091	107.803	102.235	113.108	113.75	122.683	83.436	100.692
13:58	MP30202-S1	110.588	111.885	104.059	112.285	116.601	111.589	90.949	109.414
14:02	MP30202-S2	111.626	112.022	103.913	113.083	116.532	110.607	91.056	108.802
14:05	JD36076-1	113.839	114.315	105.327	113.549	118.469	111.108	92.374	108.546
14:08	MP30202-SD1	113.918	113.92	108.527	113.993	119.446	111.123	93.351	109.962
14:12	ZZZZZZ	103.505	106.204	99.408	113.478	109.428	101.189	85.984	101.099
14:15	ZZZZZZ	106.583	108.636	100.342	111.327	111.763	99.985	88.232	99.69
14:19	ZZZZZZ	105.684	107.966	99.963	110.751	111.53	100.158	87.645	100.575
14:22	ZZZZZZ	107.818	108.736	102.101	112.761	111.995	100.603	88.252	100.876
14:25	MA51567-CCV5	118.239	115.952	109.848	114.928	119.307	116.296	93.336	113.472
14:28	MA51567-CCB5	119.6	116.394	109.899	113.554	120.952	111.721	95.48	112.237
14:32	MP30210-MB1	No results reported for the elements associated with this internal standard.							
14:36	MP30210-B1	No results reported for the elements associated with this internal standard.							
14:39	MP30210-S1	No results reported for the elements associated with this internal standard.							
14:43	MP30210-S2	No results reported for the elements associated with this internal standard.							
14:46	JD36149-6F	No results reported for the elements associated with this internal standard.							
14:49	MP30210-SD1	No results reported for the elements associated with this internal standard.							
14:53	ZZZZZZ	100.94	102.893	95.79	111.513	105.927	97.07	83.612	97.115
14:56	ZZZZZZ	81.252	81.879	92.716	86.95	62.741 !	64.598 !	49.15 !	63.818 !
14:59	ZZZZZZ	152.8 !	138.834 !	128.429	121.358	136.201 !	124.161	106.807	122.097
15:03	MA51567-CCV6	102.415	102.637	96.919	107.388	108.448	104.313	84.854	102.183
15:06	MA51567-CCB6	97.316	100.797	96.677	106.575	106.812	99.685	84.33	99.933

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:09	ZZZZZZ	93.57	95.187	91.698	103.06	90.487	83.478	71.402	83.534
15:13	ZZZZZZ	87.758	92.807	87.944	101.875	93.437	84.237	73.168	84.376
15:16	ZZZZZZ	90.995	94.265	88.571	104.197	96.483	85.983	76.404	86.017
15:19	ZZZZZZ	94.389	96.281	91.8	103.189	93.167	85.01	73.189	85.032
15:22	ZZZZZZ	96.55	99.79	95.918	106.692	106.695	97.297	84.209	97.165
15:26	ZZZZZZ	97.081	94.229	92.871	96.407	85.439	79.704	67.084 !	79.554
15:29	ZZZZZZ	99.23	102.986	99.119	107.324	107.871	100.183	85.752	99.765
15:33	ZZZZZZ	100.698	102.606	98.422	104.162	110.585	103.211	86.687	102.83
15:37	ZZZZZZ	94.242	97.55	92.836	105.51	93.349	85.754	73.913	85.639
15:40	MA51567-CCV7	96.817	100.598	96.418	105.475	106.655	104.001	83.063	101.719
15:43	MA51567-CCB7	102.045	105.092	99.793	106.627	111.37	103.178	88.127	103.039
15:46	ZZZZZZ	102.412	105.614	99.82	106.383	110.446	102.496	86.722	102.228
15:50	ZZZZZZ	96.293	100.21	95.428	106.511	99.118	90.998	78.019	91.276
15:53	ZZZZZZ	98.237	98.78	95.789	107.886	94.2	87.581	74.375	87.186
15:56	ZZZZZZ	103.653	105.123	99.35	106.944	110.27	101.912	86.823	102.163
16:00	ZZZZZZ	99.321	101.083	95.578	105.402	96.42	88.72	76.028	89.106
16:03	ZZZZZZ	103.669	104.063	99.18	107.863	100.871	92.44	79.551	92.285
16:06	ZZZZZZ	106.127	107.221	100.622	108.195	111.6	102.437	87.947	102.393
16:09	ZZZZZZ	98.768	100.99	95.628	107.233	103.343	94.503	82.156	94.644
16:13	MP30210-S1	No results reported for the elements associated with this internal standard.							
16:16	MP30210-S2	No results reported for the elements associated with this internal standard.							
16:19	MA51567-CCV8	103.032	103.147	98.429	104.313	107.931	105.209	84.634	102.897
16:23	MA51567-CCB8	103.418	105.08	102.456	106.074	109.787	103.443	86.871	103.086
16:26	JD36149-6F	No results reported for the elements associated with this internal standard.							
16:29	MP30210-SD1	No results reported for the elements associated with this internal standard.							
16:32	MA51567-CRI3	103.417	104.388	99.872	103.566	109.808	102.435	85.598	102.461
16:36	ZZZZZZ	103.605	102.243	99.737	104.391	107.633	102.278	85.266	102.255
16:39	ZZZZZZ	107.157	106.039	104.221	102.773	112.213	106.67	87.969	106.172
16:42	MA51567-CCV9	101.644	102.683	99.239	103.356	106.117	105.572	83.205	103.043
16:45	MA51567-CCB9	103.507	103.269	100.451	105.333	108.307	102.365	85.624	102.451
16:49	ZZZZZZ	98.759	99.453	95.719	103.874	101.779	93.23	80.527	93.167
16:52	MP30243-B1	102.24	101.894	96.4	104.572	103.96	98.706	81.64	98.136
16:55	MP30243-S1	100.943	102.627	97.811	103.712	100.838	97.005	79.488	96.247

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
16:59	MP30243-S2	101.103	102.103	97.216	105.538	101.746	96.598	80.021	95.778
17:02	JD35920-5	97.367	100.453	96.151	104.735	100.255	92.243	79.148	92.396
17:05	MP30243-SD1	No results reported for the elements associated with this internal standard.							
17:08	ZZZZZZ	95.074	97.36	92.726	101.937	97.526	88.637	76.656	88.733
17:12	MP30243-SD1	100.645	102.866	96.352	101.934	106.787	96.975	83.526	97.044
17:15	ZZZZZZ	103.937	105.197	100.105	103.456	109.931	100.148	86.903	100.258
17:18	MA51567-CCV10	104.244	103.156	97.801	102.14	107.531	103.012	83.853	100.887
17:21	MA51567-CCB10	104.525	101.737	98.857	103.312	107.343	100.055	84.505	100.04
17:25	MP30277-MB1	103.526	102.256	97.704	101.952	106.915	98.586	83.935	98.518
17:28	MP30277-B1	103.462	102.904	99.273	102.796	106.7	102.983	84.076	101.846
17:31	ZZZZZZ	103.71	104.38	98.544	102.157	108.588	102.955	85.565	102.694
17:34	MP30278-MB1	105.597	104.218	100.236	103.514	108.789	101.056	85.737	100.651
17:38	MP30278-B1	99.427	99.003	94.764	104.473	101.609	96.97	80.264	96.355
17:41	ZZZZZZ	107.225	105.813	98.96	104.182	110.216	103.723	87.485	103.047
17:44	MP30279-MB1	106.596	104.725	98.66	101.499	108.848	99.743	85.222	99.36
17:48	MP30279-B1	101.911	100.852	95.936	102.217	104.64	98.918	81.878	97.766
17:51	ZZZZZZ	109.969	107.204	102.346	104.445	111.914	105.901	87.7	105.037
17:54	MA51567-CCV11	107.39	105.561	100.913	103.583	109.207	107.538	84.871	104.932
17:57	MA51567-CCB11	106.386	104.991	102.834	103.945	109.272	102.598	85.849	102.492
18:01	ZZZZZZ	100.63	99.565	93.891	102.291	102.278	92.303	80.73	92.471
18:04	MP30244-B1	103.763	103.164	97.729	102.555	105.581	99.221	82.89	98.524
18:07	MP30244-S1	99.226	100.03	94.411	102.856	100.803	97.39	79.425	96.592
18:10	MP30244-S2	100.561	100.968	94.458	104.151	102.281	97.386	80.169	96.62
18:14	JD36168-2	98.947	99.679	93.417	101.961	101.731	92.705	79.523	92.903
18:17	MP30244-SD1	101.644	101.558	95.922	102.289	106.244	96.788	83.841	96.528
18:20	JD36168-3	95.248	96.722	90.349	100.653	98.013	89.376	76.97	89.468
18:24	JD36168-4	93.988	95.041	90.442	98.857	99.48	90.47	77.841	90.161
18:27	JD36168-5	95.071	96.044	90.734	99.172	95.351	86.597	74.981	86.773
18:30	MP30244-MB1	103.207	101.868	96.239	101.144	107.612	97.646	84.571	97.67
18:33	MA51567-CCV12	100.822	99.732	94.52	99.948	103.693	99.818	81.203	97.735
18:36	MA51567-CCB12	101.057	99.419	95.405	100.149	105.013	96.368	83.193	96.75
18:40	JD36168-6	94.588	96.138	90.007	99.06	98.741	90.958	78.387	90.785
18:43	JD36168-7	96.193	98.537	92.609	102.149	100.405	94.369	78.043	90.705

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:46	JD36168-8	95.888	96.757	90.794	100.66	98.726	90.147	78.004	90.032
18:50	JD36168-9	93.356	94.459	88.727	99.143	97.629	88.16	76.723	88.438
18:53	JD36168-10	94.648	95.716	90.066	97.317	96.668	87.675	76.256	87.792
18:56	JD36168-11	91.487	94.173	88.506	97.915	93.617	85.429	73.575	85.523
18:59	JD36168-2F	94.102	94.956	89.385	100.669	97.137	89.696	76.849	89.395
19:03	JD36168-3F	90.887	92.663	86.07	97.206	95.868	86.284	75.7	85.958
19:06	ZZZZZZ	100.732	99.718	95.142	99.836	104.875	95.668	82.522	95.967
19:09	MA51567-CCV13	98.091	97.992	93.194	99.203	102.338	97.608	80.194	95.652
19:12	MA51567-CCB13	97.917	98.205	93.542	99.278	103.85	95.286	81.656	95.14
19:16	JD36168-4F	91.433	92.344	88.078	97.812	96.186	88.897	75.757	88.738
19:19	JD36168-5F	91.604	93.126	88.596	96.97	92.363	84	72.529	83.771
19:22	JD36168-6F	89.089	90.561	84.716	96.835	94.054	84.097	74.312	84.344
19:25	JD36168-7F	90.628	91.614	86.121	96.597	95.481	86.712	74.966	86.523
19:29	JD36168-8F	92.687	93.996	87.885	96.309	97.342	86.576	76.433	86.717
19:32	JD36168-9F	92.185	94.049	87.513	96.113	97.105	86.238	76.532	86.313
19:35	JD36168-10F	90.08	92.026	86.641	95.843	93.746	84.15	73.712	84.408
19:39	JD36168-11F	No results reported for the elements associated with this internal standard.							
19:42	MA51567-CCV14	97.623	97.302	93.573	97.148	102.236	98.432	79.769	96.473
19:45	MA51567-CCB14	98.146	98.664	93.609	99.435	104.489	95.457	82.041	95.974
19:48	ZZZZZZ	98.674	98.112	93.861	98.395	103.472	94.679	81.737	94.631
19:51	ZZZZZZ	96.262	96.217	94.441	97.426	101.657	93.247	80.288	92.805
19:55	ZZZZZZ	97.35	96.59	93.466	97.189	102.678	93.119	80.268	93.235

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (74-1)	60-125 %	60-125 %
Istd#8	Germanium (74-2)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
10:25	MA51567-STD1	100	100	100	100	100	100	100	100
10:29	MA51567-STD2	100	100	100	100	100	100	100	100
10:32	MA51567-STD3	100	100	100	100	100	100	100	100
10:36	MA51567-STD4	101.654	101.528	100.976	101.609	101.964	101.521	101.377	101.029
10:39	MA51567-STD5	100.904	99.983	100.112	100.738	101.389	100.59	101.082	100.647
10:42	MA51567-STD6	103.807	102.079	101.375	102.275	102.736	102.014	102.363	101.874
10:45	MA51567-STD7	103.376	100.088	99.173	101.519	100.415	99.78	101.1	98.916
10:48	MA51567-STD8	102.072	98.522	97.047	98.876	97.38	96.633	98.904	97.377
10:52	MA51567-STD9	103.322	98.966	100.834	101.628	100.25	100.76	100.537	101.661
10:55	MA51567-STD10	104.537	102.507	101.844	103.334	102.818	102.077	103.824	103.348
10:58	MA51567-STD11	104.174	101.11	102.079	102.559	101.269	103.438	103.806	103.966
11:01	MA51567-STD12	105.216	98.914	100.987	102.189	101.234	102.88	103.714	104.167
11:12	ZZZZZZ	101.487	104.542	105.824	104.927	104.734	105.908	104.716	104.834
11:15	ZZZZZZ	101.495	107.139	106.056	104.428	106.559	107.32	106.84	105.273
11:19	ZZZZZZ	103.466	105.005	105.641	103.785	105.005	107.752	103.175	104.793
11:22	MA51567-ICVA1	105.018	98.828	98.512	100.719	101.162	101.289	102.352	101.816
11:25	MA51567-ICV1	103.499	104.779	104.829	105.041	104.273	105.653	104.179	104.22
11:50	MA51567-ICB1	97.047	101.194	103.719	103.789	102.344	104.278	101.305	102.692
11:53	MA51567-CCV1	104.16	99.887	100.138	101.14	101.719	101.932	102.312	102.389
11:57	MA51567-CCB1	103.088	106.85	106.2	104.999	106.215	107.427	106.124	104.75
12:00	MA51567-CRI1	No results reported for the elements associated with this internal standard.							
12:04	MA51567-CRI2	105.471	105.771	105.254	106.417	106.488	106.185	106.005	104.39
12:08	MA51567-ICSA1	No results reported for the elements associated with this internal standard.							
12:11	MA51567-ICSAB1	No results reported for the elements associated with this internal standard.							
12:25	ZZZZZZ	105.111	86.438	83.132	122.234	93.11	88.379	100.243	92.707
12:32	ZZZZZZ	104.87	108.129	106.188	109.466	109.692	105.295	108.399	105.827
12:35	MA51567-CCV2	107.694	102.859	100.216	105.619	105.317	100.857	106.074	104.064
12:39	MA51567-CCB2	106.518	108.063	106.048	107.996	109.298	104.012	109.031	104.651
13:01	MA51567-ICSA2	103.632	86.719	82.878	124.23	93.922	88.894	99.34	92.096
13:04	MA51567-ICSAB2	109.434	88.27	83.561	125.203	96.193	87.499	101.84	93.37
13:07	ZZZZZZ	110.043	110.891	107.406	112.491	113.236	103.902	112.679	106.225
13:10	MA51567-CCV3	112.709	107.829	103.193	109.358	110.484	102.092	111.74	105.203
13:15	MA51567-CCB3	109.959	112.479	107.695	111.824	114.391	105.094	112.307	106.046

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:18	MP30202-MB1	109.88	112.747	108.047	112.291	114.368	105.629	111.388	105.578
13:22	MP30202-B1	112.476	109.636	103.378	110.071	112.849	101.79	113.106	105.177
13:25	MP30202-PS1	112.727	107.298	101.712	106.541	110.04	99.193	110.58	102.522
13:28	MP30202-S1	112.542	106.107	100.604	107.923	109.59	99.484	109.651	102.928
13:31	MP30202-S2	114.296	108.16	102.952	109.445	110.796	100.538	111.131	104.325
13:35	JD36076-1	114.131	111.088	105.088	109.19	112.088	103.196	111.966	105.008
13:38	MP30202-SD1	116.074	115.74	111.876	113.326	116.416	108.412	113.291	108.926
13:41	ZZZZZZ	112.752	110.121	107.275	110.127	112.5	104.752	111.364	105.327
13:45	ZZZZZZ	104.98	104.775	101.116	107.427	108.03	98.299	106.711	99.83
13:48	MA51567-CCV4	110.349	106.46	101.691	106.397	109.062	100.277	109.462	103.233
13:51	MA51567-CCB4	108.86	111.289	106.979	110.05	112.887	105.038	111.041	105.647
13:55	ZZZZZZ	109.731	103.144	100.08	106.902	106.745	99.429	108.591	102.829
13:58	MP30202-S1	114.166	112.735	108.893	111.989	114.273	106.178	112.909	106.828
14:02	MP30202-S2	113.868	113.098	108.218	111.518	114.999	105.852	113.908	107.018
14:05	JD36076-1	113.11	114.43	110.464	111.33	115.362	106.863	113.246	107.36
14:08	MP30202-SD1	113.357	115.557	112.45	112.456	116.338	109.482	113.884	108.959
14:12	ZZZZZZ	112.716	110.378	105.65	112.233	111.976	102.436	111.773	105.356
14:15	ZZZZZZ	109.604	113.046	107.442	113.912	115.201	102.868	115.208	107.081
14:19	ZZZZZZ	109.41	111.434	106.393	111.179	113.097	102.445	112.625	105.062
14:22	ZZZZZZ	109.582	113.107	108.265	113.116	115.609	103.892	115.489	107.094
14:25	MA51567-CCV5	115.481	113.1	110.416	110.078	115.634	108.21	114.197	108.87
14:28	MA51567-CCB5	113.232	117.244	114.748	114.234	118.526	111.345	114.5	110.271
14:32	MP30210-MB1	No results reported for the elements associated with this internal standard.							
14:36	MP30210-B1	No results reported for the elements associated with this internal standard.							
14:39	MP30210-S1	No results reported for the elements associated with this internal standard.							
14:43	MP30210-S2	No results reported for the elements associated with this internal standard.							
14:46	JD36149-6F	No results reported for the elements associated with this internal standard.							
14:49	MP30210-SD1	No results reported for the elements associated with this internal standard.							
14:53	ZZZZZZ	109.078	106.79	102.727	110.881	109.666	99.769	109.681	104.214
14:56	ZZZZZZ	82.458	56.088 !	51.384 !	88.853	63.931 !	60.468 !	62.432 !	53.826 !
14:59	ZZZZZZ	119.127	128.985	123.267	115.717	130.011 !	120.222	121.251	113.402
15:03	MA51567-CCV6	109.255	105.523	101.702	106.437	109.767	100.722	109.389	103.741
15:06	MA51567-CCB6	106.64	108.108	105.701	109.216	110.308	103.353	107.995	104.836

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:09	ZZZZZZ	102.081	87.67	84.271	106.608	94.944	87.482	100.262	93.175
15:13	ZZZZZZ	100.542	93.446	88.628	104.461	99.746	90.845	104.012	96.391
15:16	ZZZZZZ	101.529	95.809	90.215	103.666	102.305	91.881	106.791	98.152
15:19	ZZZZZZ	101.026	91.97	86.509	103.378	99.604	89.666	103.977	94.85
15:22	ZZZZZZ	105.569	106.588	102.12	107.131	109.421	102.21	108.966	104.211
15:26	ZZZZZZ	102.76	83.857	79.304	120.148	92.888	85.251	97.94	88.426
15:29	ZZZZZZ	107.313	106.895	103.526	108.209	110.451	103.629	109.062	105.375
15:33	ZZZZZZ	105.666	107.746	105.214	106.722	110.406	105.18	106.981	104.753
15:37	ZZZZZZ	101.251	91.259	87.181	104.578	98.742	90.386	102.798	95.559
15:40	MA51567-CCV7	107.855	104.751	101.207	105.894	108.032	101.872	108.057	103.15
15:43	MA51567-CCB7	106.182	111.24	107.973	108.593	114.392	106.183	110.871	106.054
15:46	ZZZZZZ	106.43	108.214	105.981	106.65	111.901	105.135	108.964	105.858
15:50	ZZZZZZ	104.123	98.184	93.443	104.183	104.434	96.57	106.542	101.133
15:53	ZZZZZZ	102.56	91.328	87.643	104.232	97.993	91.179	102.445	95.99
15:56	ZZZZZZ	106.715	107.941	105.004	107.691	110.716	104.935	108.426	104.497
16:00	ZZZZZZ	101.837	94.205	88.85	101.76	100.849	92.889	104.269	96.969
16:03	ZZZZZZ	102.801	99.753	94.165	103.324	106.688	97.906	109.13	102.068
16:06	ZZZZZZ	106.212	109.346	106.48	107.914	112.775	105.76	109.943	105.877
16:09	ZZZZZZ	104.379	106.208	101.971	108.188	108.722	100.924	108.57	103.062
16:13	MP30210-S1	No results reported for the elements associated with this internal standard.							
16:16	MP30210-S2	No results reported for the elements associated with this internal standard.							
16:19	MA51567-CCV8	105.929	104.777	100.557	102.764	108.771	101.725	107.622	102.421
16:23	MA51567-CCB8	104.686	108.998	107.227	108.461	110.564	107.043	107.484	105.701
16:26	JD36149-6F	No results reported for the elements associated with this internal standard.							
16:29	MP30210-SD1	No results reported for the elements associated with this internal standard.							
16:32	MA51567-CRI3	103.989	107.143	105.005	105.977	109.248	104.248	106.24	103.596
16:36	ZZZZZZ	104.524	106.406	104.705	105.354	108.303	105.156	104.889	103.19
16:39	ZZZZZZ	102.848	108.956	107.941	105.203	110.812	109.628	108.609	106.416
16:42	MA51567-CCV9	104.228	102.615	101.098	102.567	106.505	102.984	106.091	103.142
16:45	MA51567-CCB9	103.766	107.109	105.005	106.289	109.202	104.759	106.693	104.06
16:49	ZZZZZZ	100.8	103.585	99.955	105.884	106.157	100.186	106.05	101.414
16:52	MP30243-B1	104.476	102.829	99.924	103.899	106.914	99.313	107.471	101.939
16:55	MP30243-S1	104.174	97.744	94.478	102.195	103.89	96.656	106.082	100.741

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
16:59	MP30243-S2	105.097	99.107	94.625	102.743	105.232	97.037	107.824	100.907
17:02	JD35920-5	102.121	97.606	93.839	102.681	103.626	96.349	106.454	100.39
17:05	MP30243-SD1	No results reported for the elements associated with this internal standard.							
17:08	ZZZZZZ	99.082	95.17	91.594	99.521	101.266	93.847	104.115	97.12
17:12	MP30243-SD1	101.175	103.369	98.727	102.179	107.557	101.516	106.635	101.531
17:15	ZZZZZZ	101.185	108.847	104.727	104.635	111.27	104.894	107.986	103.327
17:18	MA51567-CCV10	103.157	103.431	99.292	101.94	107.84	100.536	106.193	100.873
17:21	MA51567-CCB10	102.222	105.004	103.676	106.222	107.161	103.095	104.882	101.812
17:25	MP30277-MB1	100.611	105.69	102.807	104.45	108.109	102.923	104.269	102.061
17:28	MP30277-B1	103.001	103.698	100.85	100.818	106.269	101.742	103.569	101.452
17:31	ZZZZZZ	102.941	107.146	103.802	104.181	108.756	103.287	106.451	102.436
17:34	MP30278-MB1	101.805	108.509	104.955	104.87	109.278	104.784	106.067	103.134
17:38	MP30278-B1	103.964	101.236	99.16	104.432	103.821	98.611	104.555	101.201
17:41	ZZZZZZ	103.816	107.81	104.282	104.837	109.206	105.024	106.192	103.096
17:44	MP30279-MB1	99.989	106.328	103.198	102.902	108.423	102.086	105.058	100.513
17:48	MP30279-B1	101.506	102.427	97.93	101.695	104.732	98.613	104.441	99.814
17:51	ZZZZZZ	104.638	108.763	105.706	103.991	110.604	105.218	107.031	104.592
17:54	MA51567-CCV11	105.074	104.014	102.594	103.059	108.647	103.752	106.008	103.156
17:57	MA51567-CCB11	102.701	106.908	105.418	106.047	108.969	106.153	104.725	103.823
18:01	ZZZZZZ	99.022	103.399	99.85	103.773	105.331	98.171	104.741	100.205
18:04	MP30244-B1	103.105	104.728	100.124	104.11	108.38	100.013	107	102.193
18:07	MP30244-S1	103.451	98.611	95.49	101.753	102.75	97.723	104.191	100.061
18:10	MP30244-S2	104.304	98.191	95.735	102.013	104.059	96.373	104.975	100.316
18:14	JD36168-2	100.719	98.674	95.469	101.467	104.693	96.743	105.054	99.209
18:17	MP30244-SD1	100.68	104.092	100.059	103.116	108.252	100.256	105.463	101.167
18:20	JD36168-3	99.05	96.084	91.393	99.48	101.507	93.346	103.41	96.288
18:24	JD36168-4	98.129	99.079	95.26	101.714	103.175	94.752	103.855	98.194
18:27	JD36168-5	96.231	92.386	88.356	98.334	99.496	91.963	101.165	95.212
18:30	MP30244-MB1	98.739	105.936	102.622	104.043	107.827	101.967	106.055	101.77
18:33	MA51567-CCV12	100.141	99.061	96.64	100.486	104.783	97.984	103.464	99.121
18:36	MA51567-CCB12	98.981	103.011	100.652	102.815	106.989	101.069	104.169	100.496
18:40	JD36168-6	98.295	98.135	94.763	101.638	103.078	96.277	103.171	98.118
18:43	JD36168-7	99.016	97.499	95.728	102.916	102.672	94.456	103.395	97.723

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:46	JD36168-8	98.477	96.581	92.376	100.18	101.905	94.605	103.731	97.328
18:50	JD36168-9	97.787	95.426	92.274	99.745	101.589	92.903	102.566	97.44
18:53	JD36168-10	95.247	95.645	91.341	97.118	101.176	93.626	104.082	97.176
18:56	JD36168-11	96.467	89.693	86.766	96.729	97.186	90.039	99.675	94.521
18:59	JD36168-2F	98.379	96.53	93.534	100.235	102.579	95.455	103.69	98.369
19:03	JD36168-3F	95.425	94.193	89.428	96.919	99.755	91.18	101.831	95.315
19:06	ZZZZZZ	97.926	104.553	100.436	103.807	106.974	100.818	105.337	100.82
19:09	MA51567-CCV13	99.124	98.993	94.904	100.051	102.974	96.574	103.862	97.978
19:12	MA51567-CCB13	97.989	102.758	99.636	101.389	105.181	99.015	102.854	99.135
19:16	JD36168-4F	96.353	97.307	92.88	99.713	101.168	93.998	100.749	95.939
19:19	JD36168-5F	93.697	89.37	86.102	97.855	96.817	89.764	99.899	94.68
19:22	JD36168-6F	95.157	96.033	90.582	99.312	100.651	90.477	102.421	95.632
19:25	JD36168-7F	95.161	96.367	92.391	98.772	100.928	92.604	102.445	96.553
19:29	JD36168-8F	94.565	94.602	90.26	97.629	101.432	91.966	103.588	96.192
19:32	JD36168-9F	94.859	95.314	90.688	97.497	102.23	91.852	102.886	96.182
19:35	JD36168-10F	93.027	90.933	87.311	95.856	97.164	89.7	100.011	93.655
19:39	JD36168-11F	No results reported for the elements associated with this internal standard.							
19:42	MA51567-CCV14	98.653	99.196	95.807	98.127	102.526	97.7	103.424	98.279
19:45	MA51567-CCB14	97.441	103.58	99.733	101.88	105.823	100.739	103.158	99.683
19:48	ZZZZZZ	96.16	102.206	99.481	100.651	106.008	100.456	103.161	99.296
19:51	ZZZZZZ	95.824	101.442	98.312	100.903	102.878	99.663	101.387	97.959
19:55	ZZZZZZ	95.124	101.307	98.297	100.295	103.394	99.168	102.31	98.226

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#9	Germanium (74-3)	60-125 %	60-125 %
Istd#10	Rhodium (103-1)	60-125 %	60-125 %
Istd#11	Rhodium (103-2)	60-125 %	60-125 %
Istd#12	Rhodium (103-3)	60-125 %	60-125 %
Istd#13	Indium (115-1)	60-125 %	60-125 %
Istd#14	Indium (115-2)	60-125 %	60-125 %
Istd#15	Terbium (159-1)	60-125 %	60-125 %
Istd#16	Terbium (159-2)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
10:25	MA51567-STD1	100	100	100	100	100
10:29	MA51567-STD2	100	100	100	100	100
10:32	MA51567-STD3	100	100	100	100	100
10:36	MA51567-STD4	100.634	106.455	107.979	101.353	100.799
10:39	MA51567-STD5	101.638	109.508	110.728	101.283	99.604
10:42	MA51567-STD6	102.027	114.665	114.89	102.635	101.436
10:45	MA51567-STD7	100.836	114.144	114.259	101.623	98.942
10:48	MA51567-STD8	100.184	114.112	113.567	101.005	97.707
10:52	MA51567-STD9	102.136	117.982	120.294	100.772	101.391
10:55	MA51567-STD10	102.574	123.303	123.911	102.894	101.418
10:58	MA51567-STD11	103.804	124.329	126.191	99.911	100.087
11:01	MA51567-STD12	103.019	125.195	126.137	96.482	96.347
11:12	ZZZZZZ	103.313	126.45	127.525	103.661	103.403
11:15	ZZZZZZ	102.822	130.084 !	129.49	105.673	104.946
11:19	ZZZZZZ	101.144	125.646	128.157	105.012	105.443
11:22	MA51567-ICVA1	101.772	125.123	126.036	97.467	97.087
11:25	MA51567-ICV1	102.433	128.837	129.547	104.505	103.592
11:50	MA51567-ICB1	100.53	124.757	126.96	101.593	101.883
11:53	MA51567-CCV1	101.819	125.335	127.258	98.355	98.124
11:57	MA51567-CCB1	101.632	130.448 !	130.153 !	105.92	104.435
12:00	MA51567-CRI1	No results reported for the elements associated with this internal standard.				
12:04	MA51567-CRI2	102.603	130.015 !	129.299	105.307	103.833
12:08	MA51567-ICSA1	No results reported for the elements associated with this internal standard.				
12:11	MA51567-ICSAB1	No results reported for the elements associated with this internal standard.				
12:25	ZZZZZZ	149.306 !	125.142	116.228	82.61	77.627
12:32	ZZZZZZ	106.238	134.648 !	133.331 !	107.278	105.655
12:35	MA51567-CCV2	105.19	131.248 !	129.57	100.944	98.884
12:39	MA51567-CCB2	105.579	133.673 !	131.405 !	106.797	104.449
13:01	MA51567-ICSA2	149.363 !	123.745	115.917	81.765	77.109
13:04	MA51567-ICSAB2	150.883 !	127.09	116.143	83.55	77.652
13:07	ZZZZZZ	109.427	138.672 !	132.843 !	109.865	106.333
13:10	MA51567-CCV3	110.669	137.4 !	132.277 !	104.778	100.752
13:15	MA51567-CCB3	108.398	139.893 !	133.105 !	109.792	104.915

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
13:18	MP30202-MB1	107.346	137.693 !	132.523 !	109.208	105.771
13:22	MP30202-B1	109.577	139.664 !	131.006 !	105.798	100.927
13:25	MP30202-PS1	108.243	137.109 !	128.589	104.306	97.59
13:28	MP30202-S1	108.167	136.642 !	128.158	102.057	96.015
13:31	MP30202-S2	109.561	136.777 !	130.072 !	102.906	97.752
13:35	JD36076-1	107.835	140.081 !	131.924 !	105.384	99.771
13:38	MP30202-SD1	108.401	141.272 !	135.972 !	109.869	105.9
13:41	ZZZZZZ	108.273	137.081 !	131.713 !	104.786	101.199
13:45	ZZZZZZ	105.696	131.971 !	125.472	104.893	99.941
13:48	MA51567-CCV4	105.897	136.77 !	128.683	104.307	98.766
13:51	MA51567-CCB4	107.158	136.461 !	131.688 !	108.249	105.101
13:55	ZZZZZZ	108.427	135.461 !	128.762	98.189	94.223
13:58	MP30202-S1	107.485	140.4 !	133.691 !	108.072	103.687
14:02	MP30202-S2	109.091	140.421 !	133.13 !	109.149	103.612
14:05	JD36076-1	107.504	141.095 !	134.361 !	109.632	104.726
14:08	MP30202-SD1	106.881	140.774 !	136.463 !	111.434	106.667
14:12	ZZZZZZ	109.862	139.476 !	132.031 !	106.415	101.67
14:15	ZZZZZZ	109.508	141.883 !	133.803 !	108.103	102.203
14:19	ZZZZZZ	107.648	140.231 !	132.139 !	107.504	101.991
14:22	ZZZZZZ	108.888	142.976 !	134.119 !	109.023	103.837
14:25	MA51567-CCV5	107.154	140.882 !	136.41 !	107.515	103.315
14:28	MA51567-CCB5	108.867	142.114 !	137.683 !	112.226	107.791
14:32	MP30210-MB1	No results reported for the elements associated with this internal standard.				
14:36	MP30210-B1	No results reported for the elements associated with this internal standard.				
14:39	MP30210-S1	No results reported for the elements associated with this internal standard.				
14:43	MP30210-S2	No results reported for the elements associated with this internal standard.				
14:46	JD36149-6F	No results reported for the elements associated with this internal standard.				
14:49	MP30210-SD1	No results reported for the elements associated with this internal standard.				
14:53	ZZZZZZ	109.729	137.092 !	130.453 !	104.639	100.182
14:56	ZZZZZZ	102.787	76.584	66.838 !	39.393 !	35.357 !
14:59	ZZZZZZ	105.991	148.535 !	141.429 !	112.156	109.745
15:03	MA51567-CCV6	106.869	136.168 !	129.672	102.857	99.336
15:06	MA51567-CCB6	106.401	134.932 !	131.305 !	106.541	104.332

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
15:09	ZZZZZZ	120.302	125.041	117.043	81.595	77.187
15:13	ZZZZZZ	112.156	129.281	122.194	90.747	86.583
15:16	ZZZZZZ	109.602	133.106 !	123.777	93.523	87.72
15:19	ZZZZZZ	114.618	129.94	119.884	86.09	80.55
15:22	ZZZZZZ	107.6	135.006 !	131.469 !	104.957	102.384
15:26	ZZZZZZ	147.535 !	122.33	110.919	76.007	70.212
15:29	ZZZZZZ	108.666	134.66 !	132.503 !	102.802	101.759
15:33	ZZZZZZ	105.6	132.18 !	130.782 !	106.088	105.527
15:37	ZZZZZZ	115.212	127.339	119.843	85.416	81.044
15:40	MA51567-CCV7	105.589	134.024 !	129.838	101.684	98.936
15:43	MA51567-CCB7	104.717	137.761 !	132.549 !	108.353	104.982
15:46	ZZZZZZ	104.742	135.858 !	132.823 !	105.752	103.899
15:50	ZZZZZZ	109.595	132.36 !	126.912	92.498	89.001
15:53	ZZZZZZ	113.267	126.905	121.289	83.41	80.174
15:56	ZZZZZZ	105.655	134.753 !	131.896 !	103.935	101.886
16:00	ZZZZZZ	108.072	129.89	121.894	85.502	81.49
16:03	ZZZZZZ	108.564	135.444 !	126.965	92.828	88.507
16:06	ZZZZZZ	105.913	134.202 !	131.717 !	104.635	102.291
16:09	ZZZZZZ	107.646	134.74 !	129.589	101.861	98.973
16:13	MP30210-S1	No results reported for the elements associated with this internal standard.				
16:16	MP30210-S2	No results reported for the elements associated with this internal standard.				
16:19	MA51567-CCV8	101.77	133.638 !	129.233	101.045	98.189
16:23	MA51567-CCB8	104.187	133.44 !	132.292 !	105.038	105.19
16:26	JD36149-6F	No results reported for the elements associated with this internal standard.				
16:29	MP30210-SD1	No results reported for the elements associated with this internal standard.				
16:32	MA51567-CRI3	102.829	132.716 !	130.466 !	104.001	102.243
16:36	ZZZZZZ	103.079	130.885 !	129.89	103.054	102.489
16:39	ZZZZZZ	101.526	133.169 !	133.232 !	108.045	106.783
16:42	MA51567-CCV9	102.587	130.676 !	127.817	99.938	98.027
16:45	MA51567-CCB9	104.121	132.152 !	130.588 !	104.508	103.629
16:49	ZZZZZZ	105.175	131.038 !	127.683	99.537	97.598
16:52	MP30243-B1	104.629	132.813 !	127.281	98.903	95.758
16:55	MP30243-S1	105.141	132.1 !	127.01	93.286	89.531

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
16:59	MP30243-S2	106.574	133.391 !	127.138	94.086	90.517
17:02	JD35920-5	107.822	131.657 !	126.547	93.747	91.046
17:05	MP30243-SD1	No results reported for the elements associated with this internal standard.				
17:08	ZZZZZZ	103.653	129.414	123.013	91.421	88.271
17:12	MP30243-SD1	101.131	131.555 !	127.185	101.28	98.104
17:15	ZZZZZZ	101.159	134.069 !	129.718	105.89	102.918
17:18	MA51567-CCV10	100.933	131.333 !	126.515	100.271	96.949
17:21	MA51567-CCB10	101.533	129.065	128.257	102.764	101.767
17:25	MP30277-MB1	101.777	129.779 !	127.229 !	102.859	100.939
17:28	MP30277-B1	99.616	128.306 !	127.002 !	101.356	98.142
17:31	ZZZZZZ	99.757	131.663 !	128.562 !	104.318	100.987
17:34	MP30278-MB1	100.516	131.487 !	129.271	105.05	102.517
17:38	MP30278-B1	103.728	130.981 !	127.342	96.777	94.935
17:41	ZZZZZZ	100.844	131.063 !	128.514	104.421	101.46
17:44	MP30279-MB1	99.267	130.125 !	126.669	103.84	100.712
17:48	MP30279-B1	99.375	128.957	124.452	99.263	95.556
17:51	ZZZZZZ	100.74	132.69 !	129.663	105.067	102.726
17:54	MA51567-CCV11	100.549	132.212 !	129.633	101.015	99.403
17:57	MA51567-CCB11	100.766	130.128 !	130.4 !	103.61	103.178
18:01	ZZZZZZ	101.938	130.358 !	125.636	98.547	96.369
18:04	MP30244-B1	102.576	132.411 !	127.062	100.305	96.686
18:07	MP30244-S1	103.525	128.658	125.088	95.434	93.069
18:10	MP30244-S2	104.107	130.035 !	126.164	96.715	93.45
18:14	JD36168-2	102.721	130.997 !	125.073	97.541	94.331
18:17	MP30244-SD1	101.435	131.135 !	127.046	102.785	100.53
18:20	JD36168-3	103.232	128.495	121.084	94.33	90.074
18:24	JD36168-4	101.536	128.857	123.567	97.346	93.854
18:27	JD36168-5	103.78	126.391	119.398	89.141	85.267
18:30	MP30244-MB1	100.381	130.462 !	127.435	103.845	100.437
18:33	MA51567-CCV12	99.043	128.813	123.841	97.844	94.467
18:36	MA51567-CCB12	100.129	127.849	125.951	101.813	99.345
18:40	JD36168-6	101.039	127.949	122.736	96.742	94.281
18:43	JD36168-7	103.908	128.591	123.699	95.814	93.301

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51567
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
18:46	JD36168-8	102.741	128.425	122.363	94.663	91.321
18:50	JD36168-9	102.651	128.29	122.347	94.33	91.498
18:53	JD36168-10	102.762	129.747	123.083	94.157	89.732
18:56	JD36168-11	103.674	124.077	119.336	86.018	83.281
18:59	JD36168-2F	103.242	129.046	123.176	96.527	93.183
19:03	JD36168-3F	101.449	125.695	119.316	94.112	89.641
19:06	ZZZZZZ	99.857	130.11 !	126.505	103.169	99.685
19:09	MA51567-CCV13	99.072	127.295	122.756	97.442	93.944
19:12	MA51567-CCB13	99.27	127.261	124.643	101.978	98.829
19:16	JD36168-4F	100.379	125.363	120.626	95.229	93.329
19:19	JD36168-5F	103.704	124.555	119.21	87.004	84.464
19:22	JD36168-6F	102.041	128.171	120.334	94.889	91.171
19:25	JD36168-7F	100.085	126.631	121.451	96.67	92.704
19:29	JD36168-8F	100.532	128.98	121.044	94.847	90.228
19:32	JD36168-9F	101.124	128.322	120.998	94.748	90.447
19:35	JD36168-10F	100.343	123.77	118.452	90.215	86.91
19:39	JD36168-11F	No results reported for the elements associated with this internal standard.				
19:42	MA51567-CCV14	98.608	127.898	123.497	97.702	94.402
19:45	MA51567-CCB14	99.649	128.029	125.227	101.042	98.823
19:48	ZZZZZZ	98.592	128.264	124.312	101.109	98.876
19:51	ZZZZZZ	98.638	125.577	123.301	99.143	98.304
19:55	ZZZZZZ	98.441	125.093	123.444	99.822	98.127

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-3)	60-125 %	60-125 %
Istd#18	Holmium (165-1)	60-125 %	60-125 %
Istd#19	Holmium (165-2)	60-125 %	60-125 %
Istd#20	Bismuth (209-1)	60-125 %	60-125 %
Istd#21	Bismuth (209-2)	60-125 %	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51567 Units: ug/l

Time:			11:50		11:57		12:39		13:15	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27	-0.408	<25	-0.00839	<25	0.694	<25	4.82	<25
Antimony	2.0	.022	-0.000315	<2.0	0.00421	<2.0	0.00423	<2.0	0.000652	<2.0
Arsenic	0.50	.009	-0.00146	<0.50	0.00747	<0.50	0.00552	<0.50	0.00402	<0.50
Barium	1.0	.009	-0.00603	<1.0	-0.000269	<1.0	0.00507	<1.0	-0.00249	<1.0
Beryllium	0.50	.003	-0.00000427	<0.50	0.00139	<0.50	0.00380	<0.50	0.00135	<0.50
Boron	25	.87	anr							
Cadmium	0.50	.007	-0.000994	<0.50	0.000329	<0.50	0.00312	<0.50	0.00290	<0.50
Calcium	250	7.6	-0.870	<250	-0.977	<250	-0.656	<250	-2.01	<250
Chromium	1.0	.015	-0.000471	<1.0	-0.00452	<1.0	-0.00797	<1.0	-0.00430	<1.0
Cobalt	0.50	.002	-0.000197	<0.50	0.00278	<0.50	0.00224	<0.50	0.00210	<0.50
Copper	2.0	.012	0.370	<2.0	0.397	<2.0	0.451	<2.0	0.446	<2.0
Iron	25	.56	-0.477	<25	0.176	<25	1.57	<25	6.08	<25
Lead	0.50	.007	-0.00365	<0.50	0.00756	<0.50	0.00574	<0.50	0.00138	<0.50
Magnesium	250	.37	-0.0738	<250	0.126	<250	0.999	<250	5.02	<250
Manganese	1.0	.009	-0.000997	<1.0	0.00216	<1.0	0.00190	<1.0	-0.000589	<1.0
Molybdenum	1.0	.027	anr							
Nickel	1.0	.008	0.00455	<1.0	0.00470	<1.0	0.00654	<1.0	0.00781	<1.0
Potassium	250	1.2	-0.264	<250	0.165	<250	1.19	<250	5.00	<250
Selenium	0.50	.35	0.00505	<0.50	-0.00876	<0.50	0.0237	<0.50	0.00933	<0.50
Silver	0.50	.002	-0.00338	<0.50	0.000898	<0.50	0.00455	<0.50	0.00239	<0.50
Sodium	250	.53	-0.550	<250	-0.192	<250	1.92	<250	6.64	<250
Strontium	5.0	.016	anr							
Thallium	0.50	.009	-0.0000442	<0.50	0.00549	<0.50	0.00921	<0.50	0.00444	<0.50
Tin	5.0	.035	anr							
Titanium	1.0	.045	anr							
Vanadium	1.0	.017	0.0694	<1.0	0.0711	<1.0	0.0703	<1.0	0.0634	<1.0
Zinc	5.0	.048	-0.0471	<5.0	0.0174	<5.0	0.0118	<5.0	0.00262	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51567 Units: ug/l

Time:			13:51		14:28		15:06		15:43	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27	0.0677	<25	0.0909	<25	0.0441	<25	0.133	<25
Antimony	2.0	.022	0.00463	<2.0	0.00733	<2.0	0.00712	<2.0	0.0159	<2.0
Arsenic	0.50	.009	0.00223	<0.50	0.0120	<0.50	0.0149	<0.50	0.00748	<0.50
Barium	1.0	.009	0.00587	<1.0	0.0158	<1.0	0.00699	<1.0	0.0256	<1.0
Beryllium	0.50	.003	0.00425	<0.50	0.00309	<0.50	0.00403	<0.50	0.0102	<0.50
Boron	25	.87	anr							
Cadmium	0.50	.007	0.00224	<0.50	0.00326	<0.50	0.00179	<0.50	0.00174	<0.50
Calcium	250	7.6	-1.54	<250	-1.19	<250	-0.250	<250	27.2	<250
Chromium	1.0	.015	-0.00928	<1.0	-0.0105	<1.0	-0.0145	<1.0	-0.0145	<1.0
Cobalt	0.50	.002	0.000693	<0.50	0.00143	<0.50	0.00243	<0.50	0.00396	<0.50
Copper	2.0	.012	0.441	<2.0	0.455	<2.0	0.461	<2.0	0.467	<2.0
Iron	25	.56	1.31	<25	0.491	<25	0.417	<25	0.389	<25
Lead	0.50	.007	0.0115	<0.50	0.00826	<0.50	0.0121	<0.50	0.0151	<0.50
Magnesium	250	.37	0.177	<250	0.290	<250	3.28	<250	1.75	<250
Manganese	1.0	.009	0.00664	<1.0	0.00271	<1.0	0.00394	<1.0	0.237	<1.0
Molybdenum	1.0	.027	anr							
Nickel	1.0	.008	0.0113	<1.0	0.00662	<1.0	0.00684	<1.0	0.00650	<1.0
Potassium	250	1.2	0.400	<250	0.812	<250	2.01	<250	1.82	<250
Selenium	0.50	.35	0.00754	<0.50	0.0511	<0.50	0.00474	<0.50	0.0104	<0.50
Silver	0.50	.002	0.00231	<0.50	0.00215	<0.50	0.00588	<0.50	0.0145	<0.50
Sodium	250	.53	0.310	<250	0.128	<250	59.7	<250	23.4	<250
Strontium	5.0	.016	anr							
Thallium	0.50	.009	0.00709	<0.50	0.00821	<0.50	0.0104	<0.50	0.0156	<0.50
Tin	5.0	.035	anr							
Titanium	1.0	.045	anr							
Vanadium	1.0	.017	0.0701	<1.0	0.0896	<1.0	0.0663	<1.0	0.0824	<1.0
Zinc	5.0	.048	-0.0157	<5.0	-0.0238	<5.0	-0.0107	<5.0	-0.0268	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51567 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	16:23 CCB8 raw	final	16:45 CCB9 raw	final	17:21 CCB10 raw	final	17:57 CCB11 raw	final
Aluminum	25	.27	-0.0717	<25	0.149	<25	0.260	<25	0.261	<25
Antimony	2.0	.022	0.00657	<2.0	0.00726	<2.0	0.00932	<2.0	0.0134	<2.0
Arsenic	0.50	.009	-0.00145	<0.50	0.00613	<0.50	0.00176	<0.50	0.00635	<0.50
Barium	1.0	.009	0.00541	<1.0	0.0111	<1.0	0.0121	<1.0	0.0113	<1.0
Beryllium	0.50	.003	0.00228	<0.50	0.00459	<0.50	0.00260	<0.50	0.00868	<0.50
Boron	25	.87	anr							
Cadmium	0.50	.007	0.00219	<0.50	0.00504	<0.50	0.00604	<0.50	0.00761	<0.50
Calcium	250	7.6	-0.950	<250	-1.36	<250	-0.329	<250	-0.750	<250
Chromium	1.0	.015	-0.0167	<1.0	-0.00126	<1.0	-0.0138	<1.0	-0.0124	<1.0
Cobalt	0.50	.002	0.00187	<0.50	0.00410	<0.50	0.00492	<0.50	0.00655	<0.50
Copper	2.0	.012	0.810	<2.0	1.08	<2.0	1.01	<2.0	0.987	<2.0
Iron	25	.56	0.177	<25	0.290	<25	0.418	<25	0.463	<25
Lead	0.50	.007	0.00714	<0.50	0.00989	<0.50	0.00734	<0.50	0.0128	<0.50
Magnesium	250	.37	0.161	<250	0.327	<250	0.802	<250	0.459	<250
Manganese	1.0	.009	0.0112	<1.0	0.0135	<1.0	0.0123	<1.0	0.00759	<1.0
Molybdenum	1.0	.027	anr							
Nickel	1.0	.008	0.00923	<1.0	0.00241	<1.0	0.00976	<1.0	0.0121	<1.0
Potassium	250	1.2	0.647	<250	0.832	<250	1.31	<250	0.947	<250
Selenium	0.50	.35	0.0227	<0.50	0.0203	<0.50	0.0348	<0.50	0.0449	<0.50
Silver	0.50	.002	0.00405	<0.50	0.00314	<0.50	0.00441	<0.50	0.00666	<0.50
Sodium	250	.53	7.15	<250	5.38	<250	4.65	<250	3.10	<250
Strontium	5.0	.016	anr							
Thallium	0.50	.009	0.0107	<0.50	0.0109	<0.50	0.00911	<0.50	0.0136	<0.50
Tin	5.0	.035	anr							
Titanium	1.0	.045	anr							
Vanadium	1.0	.017	0.0826	<1.0	0.0758	<1.0	0.0804	<1.0	0.0725	<1.0
Zinc	5.0	.048	-0.00278	<5.0	-0.00208	<5.0	0.0120	<5.0	0.0281	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51567 Units: ug/l

Time:			18:36		19:12		19:45	
Sample ID:			CCB12		CCB13		CCB14	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	25	.27	0.0252	<25	0.573	<25	0.222	<25
Antimony	2.0	.022	0.00493	<2.0	0.00760	<2.0	0.00539	<2.0
Arsenic	0.50	.009	0.00556	<0.50	-0.00127	<0.50	0.00939	<0.50
Barium	1.0	.009	0.00186	<1.0	0.0180	<1.0	0.00253	<1.0
Beryllium	0.50	.003	0.00502	<0.50	0.00512	<0.50	0.00122	<0.50
Boron	25	.87	anr					
Cadmium	0.50	.007	0.00429	<0.50	0.00393	<0.50	0.00635	<0.50
Calcium	250	7.6	0.361	<250	3.83	<250	-0.431	<250
Chromium	1.0	.015	-0.0200	<1.0	-0.0162	<1.0	-0.0180	<1.0
Cobalt	0.50	.002	0.00298	<0.50	0.00481	<0.50	0.00374	<0.50
Copper	2.0	.012	1.02	<2.0	1.00	<2.0	1.02	<2.0
Iron	25	.56	0.258	<25	0.873	<25	0.523	<25
Lead	0.50	.007	0.00909	<0.50	0.00935	<0.50	0.00610	<0.50
Magnesium	250	.37	0.454	<250	2.34	<250	3.16	<250
Manganese	1.0	.009	0.00499	<1.0	0.0376	<1.0	0.0161	<1.0
Molybdenum	1.0	.027	anr					
Nickel	1.0	.008	0.00467	<1.0	0.00804	<1.0	0.0131	<1.0
Potassium	250	1.2	0.888	<250	1.24	<250	1.13	<250
Selenium	0.50	.35	0.0139	<0.50	0.0113	<0.50	0.0403	<0.50
Silver	0.50	.002	0.00402	<0.50	0.00479	<0.50	0.00214	<0.50
Sodium	250	.53	3.30	<250	9.32	<250	12.7	<250
Strontium	5.0	.016	anr					
Thallium	0.50	.009	0.0122	<0.50	0.00979	<0.50	0.00902	<0.50
Tin	5.0	.035	anr					
Titanium	1.0	.045	anr					
Vanadium	1.0	.017	0.0737	<1.0	0.0782	<1.0	0.0825	<1.0
Zinc	5.0	.048	-0.00805	<5.0	0.0288	<5.0	0.0272	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51567 Units: ug/l

Time:		11:22			11:25			11:53	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCV	CCV1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	5620	102.2	60	63.2	105.3	5000	5070	101.4
Antimony	60	57.1	95.2				50	47.6	95.2
Arsenic	60	57.6	96.0				50	48.5	97.0
Barium	60	56.6	94.3				50	46.5	93.0
Beryllium	60	57.0	95.0				50	47.8	95.6
Boron	anr								
Cadmium	60	56.5	94.2				50	46.8	93.6
Calcium	5500	5610	102.0				5000	5040	100.8
Chromium	60	55.0	91.7				50	46.5	93.0
Cobalt	60	58.7	97.8				50	49.2	98.4
Copper	60	54.4	90.7				50	45.9	91.8
Iron	5500	5540	100.7				5000	5090	101.8
Lead	60	59.1	98.5				50	48.2	96.4
Magnesium	5500	5610	102.0				5000	5020	100.4
Manganese	60	54.8	91.3				50	46.2	92.4
Molybdenum	anr								
Nickel	60	55.5	92.5				50	46.6	93.2
Potassium	5500	5550	100.9				5000	5000	100.0
Selenium	260	254	97.7				200	196	98.0
Silver	60	62.7	104.5				50	50.9	101.8
Sodium	5500	5550	100.9				5000	4990	99.8
Strontium	anr								
Thallium	60	61.0	101.7				50	49.9	99.8
Tin	anr								
Titanium	anr								
Vanadium	60	57.3	95.5				50	48.5	97.0
Zinc	60	54.2	90.3				50	45.0	90.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51567 Units: ug/l

Time:		12:35			13:10			13:48	
Sample ID:	CCV	CCV2		CCV	CCV3		CCV	CCV4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4840	96.8	5000	4790	95.8	5000	4870	97.4
Antimony	50	48.3	96.6	50	48.8	97.6	50	47.9	95.8
Arsenic	50	49.9	99.8	50	50.3	100.6	50	49.3	98.6
Barium	50	47.4	94.8	50	47.1	94.2	50	46.2	92.4
Beryllium	50	48.4	96.8	50	47.1	94.2	50	45.7	91.4
Boron	anr								
Cadmium	50	47.2	94.4	50	48.2	96.4	50	48.1	96.2
Calcium	5000	5110	102.2	5000	5050	101.0	5000	4970	99.4
Chromium	50	47.0	94.0	50	47.7	95.4	50	47.4	94.8
Cobalt	50	50.2	100.4	50	51.1	102.2	50	50.5	101.0
Copper	50	47.4	94.8	50	48.2	96.4	50	47.6	95.2
Iron	5000	5090	101.8	5000	5110	102.2	5000	5090	101.8
Lead	50	48.2	96.4	50	48.4	96.8	50	47.5	95.0
Magnesium	5000	4890	97.8	5000	4900	98.0	5000	5000	100.0
Manganese	50	46.6	93.2	50	47.0	94.0	50	46.6	93.2
Molybdenum	anr								
Nickel	50	47.5	95.0	50	48.5	97.0	50	48.0	96.0
Potassium	5000	4860	97.2	5000	4850	97.0	5000	4890	97.8
Selenium	200	196	98.0	200	196	98.0	200	198	99.0
Silver	50	49.9	99.8	50	49.5	99.0	50	49.0	98.0
Sodium	5000	4870	97.4	5000	4870	97.4	5000	5030	100.6
Strontium	anr								
Thallium	50	49.1	98.2	50	49.3	98.6	50	48.4	96.8
Tin	anr								
Titanium	anr								
Vanadium	50	48.8	97.6	50	49.6	99.2	50	49.1	98.2
Zinc	50	46.5	93.0	50	47.4	94.8	50	46.5	93.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51567 Units: ug/l

Time:		14:25			15:03			15:40	
Sample ID:	CCV	CCV5		CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4930	98.6	5000	4960	99.2	5000	4990	99.8
Antimony	50	49.0	98.0	50	48.6	97.2	50	48.3	96.6
Arsenic	50	48.7	97.4	50	49.4	98.8	50	49.6	99.2
Barium	50	47.6	95.2	50	48.1	96.2	50	47.6	95.2
Beryllium	50	46.1	92.2	50	47.2	94.4	50	48.1	96.2
Boron	anr								
Cadmium	50	47.9	95.8	50	48.5	97.0	50	47.7	95.4
Calcium	5000	5100	102.0	5000	5220	104.4	5000	5150	103.0
Chromium	50	47.2	94.4	50	47.4	94.8	50	47.4	94.8
Cobalt	50	50.0	100.0	50	50.5	101.0	50	50.4	100.8
Copper	50	46.9	93.8	50	47.5	95.0	50	47.3	94.6
Iron	5000	5050	101.0	5000	5140	102.8	5000	5160	103.2
Lead	50	48.6	97.2	50	48.9	97.8	50	48.8	97.6
Magnesium	5000	5040	100.8	5000	5080	101.6	5000	5020	100.4
Manganese	50	46.1	92.2	50	47.2	94.4	50	47.4	94.8
Molybdenum	anr								
Nickel	50	47.5	95.0	50	47.8	95.6	50	47.8	95.6
Potassium	5000	5000	100.0	5000	5020	100.4	5000	5040	100.8
Selenium	200	196	98.0	200	201	100.5	200	200	100.0
Silver	50	50.0	100.0	50	50.7	101.4	50	50.7	101.4
Sodium	5000	5050	101.0	5000	5190	103.8	5000	5100	102.0
Strontium	anr								
Thallium	50	49.1	98.2	50	50.3	100.6	50	49.8	99.6
Tin	anr								
Titanium	anr								
Vanadium	50	49.1	98.2	50	49.2	98.4	50	49.3	98.6
Zinc	50	45.2	90.4	50	47.0	94.0	50	46.7	93.4

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51567 Units: ug/l

Time:		16:19			16:42			17:18	
Sample ID:	CCV	CCV8		CCV	CCV9		CCV	CCV10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	5010	100.2	5000	5120	102.4	5000	5080	101.6
Antimony	50	48.3	96.6	50	47.9	95.8	50	47.5	95.0
Arsenic	50	49.4	98.8	50	49.2	98.4	50	48.6	97.2
Barium	50	48.8	97.6	50	47.8	95.6	50	48.1	96.2
Beryllium	50	47.7	95.4	50	47.9	95.8	50	46.9	93.8
Boron	anr								
Cadmium	50	47.7	95.4	50	47.3	94.6	50	47.9	95.8
Calcium	5000	5250	105.0	5000	5150	103.0	5000	5190	103.8
Chromium	50	47.3	94.6	50	47.0	94.0	50	46.6	93.2
Cobalt	50	50.0	100.0	50	49.7	99.4	50	49.8	99.6
Copper	50	46.7	93.4	50	46.4	92.8	50	46.1	92.2
Iron	5000	5090	101.8	5000	5110	102.2	5000	5130	102.6
Lead	50	49.3	98.6	50	48.5	97.0	50	48.6	97.2
Magnesium	5000	5060	101.2	5000	5080	101.6	5000	5180	103.6
Manganese	50	47.1	94.2	50	46.8	93.6	50	46.7	93.4
Molybdenum	anr								
Nickel	50	47.5	95.0	50	46.9	93.8	50	47.0	94.0
Potassium	5000	5060	101.2	5000	5080	101.6	5000	5100	102.0
Selenium	200	200	100.0	200	201	100.5	200	201	100.5
Silver	50	50.8	101.6	50	50.7	101.4	50	50.4	100.8
Sodium	5000	5110	102.2	5000	5090	101.8	5000	5160	103.2
Strontium	anr								
Thallium	50	49.9	99.8	50	49.7	99.4	50	50.1	100.2
Tin	anr								
Titanium	anr								
Vanadium	50	49.2	98.4	50	48.8	97.6	50	48.8	97.6
Zinc	50	46.1	92.2	50	46.0	92.0	50	45.5	91.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51567 Units: ug/l

Time:		17:54			18:33			19:09	
Sample ID:	CCV	CCV11		CCV	CCV12		CCV	CCV13	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	5140	102.8	5000	5060	101.2	5000	5020	100.4
Antimony	50	47.5	95.0	50	47.0	94.0	50	47.9	95.8
Arsenic	50	48.8	97.6	50	48.7	97.4	50	48.2	96.4
Barium	50	48.2	96.4	50	47.2	94.4	50	46.7	93.4
Beryllium	50	47.2	94.4	50	46.7	93.4	50	46.8	93.6
Boron	anr								
Cadmium	50	47.1	94.2	50	46.9	93.8	50	46.7	93.4
Calcium	5000	5110	102.2	5000	5210	104.2	5000	5150	103.0
Chromium	50	46.9	93.8	50	46.6	93.2	50	46.2	92.4
Cobalt	50	49.3	98.6	50	49.0	98.0	50	48.9	97.8
Copper	50	46.2	92.4	50	45.9	91.8	50	45.6	91.2
Iron	5000	5070	101.4	5000	5090	101.8	5000	5050	101.0
Lead	50	48.2	96.4	50	48.3	96.6	50	48.3	96.6
Magnesium	5000	5090	101.8	5000	5090	101.8	5000	5100	102.0
Manganese	50	46.5	93.0	50	46.0	92.0	50	45.9	91.8
Molybdenum	anr								
Nickel	50	46.7	93.4	50	46.1	92.2	50	46.0	92.0
Potassium	5000	5100	102.0	5000	5030	100.6	5000	4970	99.4
Selenium	200	200	100.0	200	199	99.5	200	199	99.5
Silver	50	50.4	100.8	50	50.9	101.8	50	51.1	102.2
Sodium	5000	5120	102.4	5000	5110	102.2	5000	5070	101.4
Strontium	anr								
Thallium	50	49.7	99.4	50	49.9	99.8	50	50.1	100.2
Tin	anr								
Titanium	anr								
Vanadium	50	49.1	98.2	50	48.5	97.0	50	48.2	96.4
Zinc	50	45.7	91.4	50	45.4	90.8	50	45.3	90.6

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51567 Units: ug/l

Time:		19:42	
Sample ID:	CCV	CCV14	
Metal	True	Results	% Rec
Aluminum	5000	5050	101.0
Antimony	50	48.1	96.2
Arsenic	50	48.4	96.8
Barium	50	47.2	94.4
Beryllium	50	46.7	93.4
Boron	anr		
Cadmium	50	46.8	93.6
Calcium	5000	5160	103.2
Chromium	50	46.0	92.0
Cobalt	50	48.7	97.4
Copper	50	45.6	91.2
Iron	5000	5050	101.0
Lead	50	47.9	95.8
Magnesium	5000	5040	100.8
Manganese	50	45.9	91.8
Molybdenum	anr		
Nickel	50	46.0	92.0
Potassium	5000	4980	99.6
Selenium	200	198	99.0
Silver	50	50.8	101.6
Sodium	5000	5060	101.2
Strontium	anr		
Thallium	50	49.4	98.8
Tin	anr		
Titanium	anr		
Vanadium	50	48.1	96.2
Zinc	50	45.2	90.4

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51567 Units: ug/l

Time:			12:04		16:32	
Sample ID:	CRI	CRIA	CRI2		CRI3	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	25	25	25.9	103.6	25.6	102.4
Antimony	2.0	0.25	1.79	89.5	1.79	89.5
Arsenic	0.50	0.50	0.494	98.8	0.437	87.4
Barium	1.0	0.50	0.912	91.2	0.929	92.9
Beryllium	0.50	0.25	0.463	92.6	0.445	89.0
Boron	25	2.5	anr			
Cadmium	0.50	0.25	0.463	92.6	0.460	92.0
Calcium	250	125	244	97.6	245	98.0
Chromium	1.0	2.0	0.895	89.5	0.876	87.6
Cobalt	0.50	0.25	0.488	97.6	0.488	97.6
Copper	2.0	2.0	2.37	118.5	2.26	113.0
Iron	25	25	25.0	100.0	24.6	98.4
Lead	0.50	0.25	0.452	90.4	0.459	91.8
Magnesium	250	125	255	102.0	248	99.2
Manganese	1.0	0.25	0.911	91.1	0.934	93.4
Molybdenum	1.0	0.50	anr			
Nickel	1.0	2.0	0.947	94.7	0.902	90.2
Potassium	250	125	251	100.4	248	99.2
Selenium	0.50	0.50	0.439	87.8	0.452	90.4
Silver	0.50	1.0	0.600	120.0	0.527	105.4
Sodium	250	125	250	100.0	254	101.6
Strontium	5.0	0.50	anr			
Thallium	0.50	0.25	0.460	92.0	0.456	91.2
Tin	5.0	0.50	anr			
Titanium	1.0	0.50	anr			
Vanadium	1.0	2.0	1.01	101.0	0.994	99.4
Zinc	5.0	2.0	4.59	91.8	4.73	94.6

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120821M3.CSV Date Analyzed: 12/08/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51567 Units: ug/l

Time:			13:01		13:04	
Sample ID:	ICSA	ICSAB	ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	92600	92.6	87400	87.4
Antimony			0.0442		0.0530	
Arsenic		20	0.0954		20.5	102.5
Barium			0.365		0.185	
Beryllium			-0.000259		0.00102	
Boron		50	1.04		42.4	84.8
Cadmium		20	-0.226		20.4	102.0
Calcium	100000	100000	96700	96.7	95900	95.9
Chromium		20	0.768		22.1	110.5
Cobalt		20	0.0766		21.8	109.0
Copper		20	0.490		18.8	94.0
Iron	100000	100000	92200	92.2	88900	88.9
Lead			0.0379		0.0422	
Magnesium	100000	100000	91600	91.6	87600	87.6
Manganese		20	0.129		20.7	103.5
Molybdenum	2000	2000	2140	107.0	2060	103.0
Nickel		20	0.489		19.8	99.0
Potassium	100000	100000	95100	95.1	91000	91.0
Selenium		20	0.0908		19.4	97.0
Silver		20	0.0256		21.8	109.0
Sodium	100000	100000	95100	95.1	90700	90.7
Strontium	2000	2000	1750	87.5	1820	91.0
Thallium			0.00676		0.00977	
Tin	2000	2000	1760	88.0	1740	87.0
Titanium	2000	2000	1690	84.5	1690	84.5
Vanadium		20	0.152		20.3	101.5
Zinc		20	1.06		17.9	89.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:56	MA51579-STD1	1		Sample introduction not stable, see rerun.
14:00	MA51579-STD2	1		Sample introduction not stable, see rerun.
14:03	MA51579-STD3	1		STDA
14:07	MA51579-STD4	1		STDB
14:10	MA51579-STD5	1		STDC
14:13	MA51579-STD6	1		STDD
14:16	MA51579-STD7	1		STDE
14:20	MA51579-STD8	1		STDF
14:25	MA51579-STD9	1		STDG
14:28	MA51579-STD10	1		STDH
14:31	MA51579-STD11	1		STDI
14:34	MA51579-STD12	1		STDJ
14:38	ZZZZZZ	1		
14:41	ZZZZZZ	1		
14:44	MA51579-ICVA1	1		
14:47	MA51579-ICV1	1		
14:50	MA51579-ICVA2	1		
14:55	MA51579-ICB1	1		
14:58	MA51579-CCVA1	1		
15:00	MA51579-CCB1	1		
15:03	MA51579-CRI1	1		
15:06	MA51579-ICSA1	1		
15:09	MA51579-ICSAB1	1		
15:19	ZZZZZZ	1		
15:22	MA51579-CRI2	1		
15:29	MA51579-CCVA2	1		
15:36	MA51579-CCB2	1		
15:39	ZZZZZZ	2		
15:42	ZZZZZZ	2		
15:45	MP30244-S1	10		
15:48	MP30244-S2	10		
15:51	JD36168-2	10		
15:54	ZZZZZZ	50		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:58	JD36168-3	10		
16:01	JD36168-5	20		
16:04	MP30244-SD1	50		
16:07	MA51579-CCVA3	1		
16:10	MA51579-CCB3	1		
16:12	JD36168-7	5		
16:15	JD36168-8	10		
16:19	JD36168-9	10		
16:22	JD36168-10	20		
16:25	JD36168-11	20		
16:28	JD36168-2F	10		
16:31	MA51579-CCVA4	1		
16:34	MA51579-CCB4	1		
16:37	JD36168-3F	10		
16:40	JD36168-5F	20		
16:43	JD36168-8F	10		
16:46	JD36168-9F	10		
16:49	JD36168-10F	20		
16:52	JD36168-11F	2		
16:55	JD36168-11F	20		
---------->	Last reportable sample/prep for job JD36168			
16:58	MA51579-CCVA5	1		
17:01	MA51579-CCB5	1		
---------->	Last reportable CCB for job JD36168			
17:04	MP30260-MB1	5		
17:07	MP30260-B1	5		
17:10	MP30260-S1	5		
17:13	MP30260-S2	5		
17:16	JD35813-1	5		(sample used for QC only; not part of login JD36168)
17:19	MP30260-SD1	25		
17:22	ZZZZZZ	1		
17:25	MA51579-CCVA6	1		
17:28	MA51579-CCB6	1		
17:31	ZZZZZZ	5		
17:34	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:37	ZZZZZZ	5		
17:40	ZZZZZZ	5		
17:43	ZZZZZZ	1		
17:46	MA51579-CCVA7	1		
17:49	MA51579-CCB7	1		
17:52	MP30263A-MB1	2		
17:55	MP30263A-B2	2		
17:58	MP30263A-S5	2		
18:01	MP30263A-S6	2		
18:04	JD36261-2	2		(sample used for QC only; not part of login JD36168)
18:07	MP30263A-SD1	10		
18:10	MP30263A-S7	2		
18:13	MP30263A-S8	2		
18:16	JD36261-2F	2		(sample used for QC only; not part of login JD36168)
18:19	MP30263A-SD2	10		
18:22	ZZZZZZ	1		
18:25	MA51579-CCVA8	1		
18:28	MA51579-CCB8	1		
18:31	ZZZZZZ	2		
18:34	ZZZZZZ	2		
18:37	ZZZZZZ	2		
18:40	ZZZZZZ	2		
18:42	ZZZZZZ	2		
18:45	MA51579-CCVA9	1		
18:48	MA51579-CCB9	1		
18:51	ZZZZZZ	2		
18:54	ZZZZZZ	2		
18:57	ZZZZZZ	2		
19:00	ZZZZZZ	2		
19:03	ZZZZZZ	2		
19:06	ZZZZZZ	2		
19:09	ZZZZZZ	1		
19:12	MA51579-CCVA10	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:15	MA51579-CCB10	1		
19:18	ZZZZZZ	1		
19:21	ZZZZZZ	1		
19:24	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V
14:38	ZZZZZZ	1																				
14:41	ZZZZZZ	1																				
14:44	MA51579-ICVA1	1																				
14:47	MA51579-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:50	MA51579-ICVA2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:55	MA51579-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:58	MA51579-CCVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:00	MA51579-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:03	MA51579-CRI1	1																				
15:06	MA51579-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:09	MA51579-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:19	ZZZZZZ	1																				
15:22	MA51579-CRI2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:29	MA51579-CCVA2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:36	MA51579-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:39	ZZZZZZ	2																				
15:42	ZZZZZZ	2																				
15:45	MP30244-S1	10							X													
15:48	MP30244-S2	10							X													
15:51	JD36168-2	10							X													
15:54	ZZZZZZ	50																				
15:58	JD36168-3	10				X			X					X								
16:01	JD36168-5	20							X					X							X	
16:04	MP30244-SD1	50							X													
16:07	MA51579-CCVA3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:10	MA51579-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:12	JD36168-7	5	X																			
16:15	JD36168-8	10							X													
16:19	JD36168-9	10							X													
16:22	JD36168-10	20							X					X							X	
16:25	JD36168-11	20							X			X		X							X	
16:28	JD36168-2F	10							X													
16:31	MA51579-CCVA4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	
16:34	MA51579-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:37	JD36168-3F	10							X														
16:40	JD36168-5F	20							X					X						X			
16:43	JD36168-8F	10							X														
16:46	JD36168-9F	10							X														
16:49	JD36168-10F	20							X					X						X			
16:52	JD36168-11F	2	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X		X	X	
16:55	JD36168-11F	20							X					X						X			
16:58	MA51579-CCVA5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:01	MA51579-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:04	MP30260-MB1	5			X	X		X		X			X					X	X				
17:07	MP30260-B1	5			X	X		X		X			X					X	X				
17:10	MP30260-S1	5			X	X		X		X			X					X	X				
17:13	MP30260-S2	5			X	X		X		X			X					X	X				
17:16	JD35813-1	5			X	X		X		X			X					X	X			(a)	
17:19	MP30260-SD1	25			X	X		X		X			X					X	X				
17:22	ZZZZZZ	1																					
17:25	MA51579-CCVA6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:28	MA51579-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:31	ZZZZZZ	5																					
17:34	ZZZZZZ	5																					
17:37	ZZZZZZ	5																					
17:40	ZZZZZZ	5																					
17:43	ZZZZZZ	1																					
17:46	MA51579-CCVA7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:49	MA51579-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:52	MP30263A-MB1	2			X																X		
17:55	MP30263A-B2	2			X																X		
17:58	MP30263A-S5	2			X																X		
18:01	MP30263A-S6	2			X																X		
18:04	JD36261-2	2			X																X		(a)
18:07	MP30263A-SD1	10			X																X		
18:10	MP30263A-S7	2			X																X		
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	
18:13	MP30263A-S8	2			X																X		
18:16	JD36261-2F	2			X																X		(a)
18:19	MP30263A-SD2	10			X																X		
18:22	ZZZZZZ	1																					
18:25	MA51579-CCVA8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:28	MA51579-CCB8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:31	ZZZZZZ	2																					
18:34	ZZZZZZ	2																					
18:37	ZZZZZZ	2																					
18:40	ZZZZZZ	2																					
18:42	ZZZZZZ	2																					
18:45	MA51579-CCVA9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:48	MA51579-CCB9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:51	ZZZZZZ	2																					
18:54	ZZZZZZ	2																					
18:57	ZZZZZZ	2																					
19:00	ZZZZZZ	2																					
19:03	ZZZZZZ	2																					
19:06	ZZZZZZ	2																					
19:09	ZZZZZZ	1																					
19:12	MA51579-CCVA10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:15	MA51579-CCB10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:18	ZZZZZZ	1																					
19:21	ZZZZZZ	1																					
19:24	ZZZZZZ	1																					

(a) Sample used for QC only; not part of login JD36168.

Element: Al Sb As Ba Be Cd Ca Cr Co Fe Pb Mg Mn Ni K Se Ag Na Tl V

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:56	MA51579-STD1	100	100	100	100	100	100	100	100
14:00	MA51579-STD2	100	100	100	100	100	100	100	100
14:03	MA51579-STD3	100	100	100	100	100	100	100	100
14:07	MA51579-STD4	100.413	100.182	96.66	99.973	100.801	100.252	99.663	99.748
14:10	MA51579-STD5	100.29	100.05	97.333	99.4	100.636	98.773	99.419	98.827
14:13	MA51579-STD6	99.165	100.13	97.088	100.261	99.693	101.166	99.407	100.836
14:16	MA51579-STD7	99.709	99.836	93.608	97.72	100.734	101.204	99.523	100.739
14:20	MA51579-STD8	93.762	95.856	92.396	97.624	96.78	99.535	96.584	99.464
14:25	MA51579-STD9	96.729	97.364	96.244	100.028	98.308	98.713	97.59	98.391
14:28	MA51579-STD10	99.248	100.296	97.011	101.25	99.886	100.95	99.632	100.775
14:31	MA51579-STD11	99.263	101.755	99.084	101.066	101.212	101.869	99.433	99.348
14:34	MA51579-STD12	99.112	101.227	98.21	102.009	100.389	101.785	97.262	97.249
14:38	ZZZZZZ	107.12	107.463	103.058	105.248	106.935	104.354	106.238	104.063
14:41	ZZZZZZ	105.867	106.93	101.457	103.482	105.914	102.987	105.327	103.255
14:44	MA51579-ICVA1	No results reported for the elements associated with this internal standard.							
14:47	MA51579-ICV1	109.082	108.775	105.856	107.023	107.943	106.521	106.502	106.766
14:50	MA51579-ICVA2	109.433	109.593	105.376	104.583	107.326	110.65	105.615	107.837
14:55	MA51579-ICB1	108.03	106.968	105.246	105.469	106.293	104.523	105.49	104.272
14:58	MA51579-CCVA1	106.805	107.158	103.863	105.34	104.869	108.72	104.058	106.028
15:00	MA51579-CCB1	109.446	108.07	105.339	106.032	107.024	105.67	106.052	105.307
15:03	MA51579-CRI1	No results reported for the elements associated with this internal standard.							
15:06	MA51579-ICSA1	102.273	101.707	100.097	98.207	107.717	132.633 !	90.04	90.074
15:09	MA51579-ICSAB1	95.667	97.378	96.394	97.131	105.085	129.767	88.136	88.879
15:19	ZZZZZZ	91.842	99.244	95.629	103.518	100.91	95.19	100.843	95.026
15:22	MA51579-CRI2	97.363	103.511	97.885	104.386	105.594	100.981	104.745	101.057
15:29	MA51579-CCVA2	99.37	104.401	99.931	105.543	104.862	104.594	103.823	102.172
15:36	MA51579-CCB2	101.456	104.333	100.24	106.267	105.701	99.66	104.283	99.429
15:39	ZZZZZZ	97.472	102.097	97.25	104.506	100.906	94.458	100.119	94.202
15:42	ZZZZZZ	102.975	106.08	100.541	108.376	104.368	103.194	104.17	102.384
15:45	MP30244-S1	106.601	109.27	104.062	107.77	107.955	105.767	107.75	105.891
15:48	MP30244-S2	104.412	106.823	101.873	106.824	106.165	104.275	105.839	104.013
15:51	JD36168-2	102.157	106.079	100.259	106.445	105.952	101.708	105.485	101.656
15:54	ZZZZZZ	0.136 !	0.055 !	0.045 !	0.055 !	0.09 !	0.084 !	0.071 !	0.079 !

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:58	JD36168-3	100.766	105.451	100.73	105.16	104.214	98.715	104.104	99.006
16:01	JD36168-5	103.112	106.078	101.869	107.156	105.579	101.782	105.33	102.146
16:04	MP30244-SD1	103.928	105.525	101.686	106.203	105.923	102.085	105.48	102.119
16:07	MA51579-CCVA3	106.729	107.738	103.583	108.14	107.128	108.178	105.619	105.835
16:10	MA51579-CCB3	108.294	108.932	104.415	111.12	108.599	106.044	108.05	106.309
16:12	JD36168-7	106.511	111.676	105.317	112.347	108.768	106.691	107.098	105.334
16:15	JD36168-8	108.425	113.018	107.25	111.003	111.841	107.217	110.947	107.049
16:19	JD36168-9	108.867	111.449	106.025	111.679	109.31	103.728	109.404	104.346
16:22	JD36168-10	108.79	112.018	106.092	112.053	110.56	105.884	110.297	105.863
16:25	JD36168-11	108.564	110.313	105.193	110.244	109.023	104.65	108.426	105.034
16:28	JD36168-2F	105.435	108.23	102.311	108.431	107.691	102.515	106.621	102.749
16:31	MA51579-CCVA4	113.915	115.361	109.133	112.839	113.112	113.405	111.272	111.065
16:34	MA51579-CCB4	114.288	114.853	109.592	112.663	113.322	109.755	112.532	109.848
16:37	JD36168-3F	109.112	109.851	103.254	108.811	109.113	102.842	108.256	102.963
16:40	JD36168-5F	105.501	109.166	104.281	108.475	107.055	103.245	107.597	103.04
16:43	JD36168-8F	105.514	106.982	102.008	107.961	106.636	101.841	106.533	101.893
16:46	JD36168-9F	106.373	108.37	102.656	108.601	107.174	102.248	107.457	102.294
16:49	JD36168-10F	108.493	110.665	105.9	109.075	109.477	104.557	109.081	104.847
16:52	JD36168-11F	103.913	107.334	103.445	111.251	100.82	98.48	99.95	97.953
16:55	JD36168-11F	114.41	116.874	111.326	114.988	115.217	110.021	114.051	110.113
16:58	MA51579-CCVA5	116.693	118.88	112.338	115.3	115.308	117.292	114.07	114.737
17:01	MA51579-CCB5	118.789	118.914	113.709	117.172	117.58	113.192	116.188	113.471
17:04	MP30260-MB1	113.985	114.635	108.574	114.621	113.023	107.316	112.135	107.303
17:07	MP30260-B1	117.178	117.848	110.188	115.38	114.43	113.011	113.105	111.834
17:10	MP30260-S1	116.694	118.783	112.808	117.262	116.716	122.423	111.57	112.189
17:13	MP30260-S2	117.04	118.751	112.1	116.973	116.083	121.83	110.779	111.406
17:16	JD35813-1	118.08	119.759	113.531	117.209	116.575	119.356	111.847	111.205
17:19	MP30260-SD1	119.251	120.012	115.024	118.455	118.072	116.773	116.414	114.969
17:22	ZZZZZZ	121.735	120.818	116.769	117.652	118.454	115.577	118.587	115.501
17:25	MA51579-CCVA6	120.499	120.296	115.99	117.044	118.163	119.912	116.014	116.909
17:28	MA51579-CCB6	123.108	123.522	117.088	118.223	120.955	117.67	120.875	117.138
17:31	ZZZZZZ	119.826	120.797	114.872	117.079	116.36	114.426	114.07	110.357
17:34	ZZZZZZ	118.467	119.435	114.698	116.613	117.457	121.668	112.613	111.952

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
17:37	ZZZZZZ	116.606	116.924	111.082	115.424	117.927	124.21	110.26	107.622
17:40	ZZZZZZ	117.081	119.512	113.577	117.953	118.118	123.393	112.438	111.915
17:43	ZZZZZZ	120.713	120.588	114.724	115.702	119	113.941	118.156	113.878
17:46	MA51579-CCVA7	120.802	121.281	116.687	118.597	117.661	120.238	115.496	117.582
17:49	MA51579-CCB7	123.018	123.558	118.498	118.784	121.6	118.436	120.41	118.099
17:52	MP30263A-MB1	121.621	120.911	114.615	118.213	116.102	110.135	116.319	109.89
17:55	MP30263A-B2	121.267	120.047	115.368	118.596	115.813	115.016	115.35	113.941
17:58	MP30263A-S5	106.277	107.762	102.806	110.746	102.22	102.218	101.709	101.266
18:01	MP30263A-S6	111.34	113.232	106.39	112.013	107.126	106.122	105.959	105.202
18:04	JD36261-2	109.092	111.284	104.986	111.653	104.945	99.939	104.26	100.087
18:07	MP30263A-SD1	112.777	113.547	106.311	109.231	111.42	104.695	111.314	104.807
18:10	MP30263A-S7	103.115	104.787	99.404	107.755	99.968	97.84	99.235	97.264
18:13	MP30263A-S8	101.548	103.333	97.708	106.308	98.681	95.571	98.368	94.985
18:16	JD36261-2F	103.198	105.569	98.754	107.932	101.244	95.111	100.367	95.007
18:19	MP30263A-SD2	107.948	107.727	101.521	107.953	107.333	100.046	106.377	100.368
18:22	ZZZZZZ	108.158	106.801	100.602	107.638	107.754	99.996	106.556	100.304
18:25	MA51579-CCVA8	108.884	108.063	102.409	107.996	106.91	105.918	105.068	103.757
18:28	MA51579-CCB8	108.287	107.486	103.178	108.317	107.31	102.559	107.053	102.424
18:31	ZZZZZZ	101.788	101.765	96.703	105.166	96.756	91.354	96.007	91.774
18:34	ZZZZZZ	99.472	100.971	95.568	105.179	99.216	92.312	98.315	92.403
18:37	ZZZZZZ	101.116	102.925	100.38	109.324	100.88	97.422	99.189	94.663
18:40	ZZZZZZ	102.558	105.932	99.892	107.691	98.197	91.821	97.535	92.12
18:42	ZZZZZZ	99.445	103.024	96.449	106.332	98.038	90.333	97.426	90.156
18:45	MA51579-CCVA9	102.202	104.985	100.303	106.887	106.062	103.998	105.383	101.978
18:48	MA51579-CCB9	104.684	106.793	102.832	108.325	107.681	103.003	107.388	103.238
18:51	ZZZZZZ	98.319	102.004	95.468	103.96	96.703	89.608	95.787	90.123
18:54	ZZZZZZ	95.868	98.403	92.327	105.138	94.89	89.68	94.183	89.539
18:57	ZZZZZZ	95.997	99.413	95.308	106.73	91.362	88.689	91.406	88.094
19:00	ZZZZZZ	106.735	109.435	101.572	110.447	109.253	99.591	109.285	99.752
19:03	ZZZZZZ	100.49	102.348	97.935	108.114	100.722	95.305	100.944	95.04
19:06	ZZZZZZ	102.148	105.385	99.827	109.07	103.522	97.883	103.231	97.554
19:09	ZZZZZZ	107.68	108.601	102.611	107.903	109.826	101.453	109.586	102.005
19:12	MA51579-CCVA10	106.512	107.423	101.214	107.988	107.173	105.604	106.453	103.399

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
19:15	MA51579-CCB10	105.803	106.652	103.477	107.18	108.221	102.71	107.8	102.808
19:18	ZZZZZZ	107.839	108.531	102.525	107.728	109.617	102.227	108.451	102.262
19:21	ZZZZZZ	107.168	106.374	103.227	106.167	106.422	100.915	106.847	101.251
19:24	ZZZZZZ	107.953	107.436	102.454	107.338	108.019	100.866	107.017	100.959

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (74-1)	70-130 %	70-130 %
Istd#8	Germanium (74-2)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:56	MA51579-STD1	100	100	100	100	100	100	100	100
14:00	MA51579-STD2	100	100	100	100	100	100	100	100
14:03	MA51579-STD3	100	100	100	100	100	100	100	100
14:07	MA51579-STD4	100.553	100.949	98.779	98.431	101.231	98.06	100.225	98.883
14:10	MA51579-STD5	100.306	100.814	97.995	99.399	100.432	97.513	99.491	98.704
14:13	MA51579-STD6	101.368	100.37	97.924	97.837	100.689	97.02	99.534	97.985
14:16	MA51579-STD7	100.635	101.579	96.326	97.898	100.402	96.514	102.147	97.539
14:20	MA51579-STD8	100.717	97.424	94.565	95.979	97.747	93.923	98.202	96.778
14:25	MA51579-STD9	100.82	98.034	97.485	97.883	98.14	97.442	99.202	99.019
14:28	MA51579-STD10	102.449	100.335	97.501	98.622	99.601	97.94	99.989	99.405
14:31	MA51579-STD11	99.763	98.573	95.886	97.131	99.034	97.231	99.754	100.067
14:34	MA51579-STD12	99.815	96.302	93.235	95.154	97.425	96.244	99.301	98.225
14:38	ZZZZZZ	103.669	106.675	102.807	103.066	105.876	103.746	103.985	103.24
14:41	ZZZZZZ	101.535	105.674	103.05	100.348	104.858	103.272	103.245	102.723
14:44	MA51579-ICVA1	No results reported for the elements associated with this internal standard.							
14:47	MA51579-ICV1	104.591	106.068	104.648	101.416	106.065	105.028	102.975	104.273
14:50	MA51579-ICVA2	105.708	103.082	99.706	98.479	104.102	101.688	103.634	102.495
14:55	MA51579-ICB1	103.379	106.187	104.622	102.626	105.169	105.071	103.527	104.218
14:58	MA51579-CCVA1	106.102	101.504	99.286	98.994	101.707	101.145	102.338	101.81
15:00	MA51579-CCB1	104.191	107.481	103.865	101.852	105.696	104.414	103.338	103.382
15:03	MA51579-CRI1	No results reported for the elements associated with this internal standard.							
15:06	MA51579-ICSA1	104.553	87.19	82.602	117.979	92.522	89.074	97.703	92.83
15:09	MA51579-ICSAB1	105.507	86.008	81.743	118.533	91.635	87.705	97.927	92.485
15:19	ZZZZZZ	100.061	101.972	100.301	102.837	104.353	99.84	102.2	101.476
15:22	MA51579-CRI2	103.585	106.146	101.291	102.566	106.601	102.11	104.791	102.726
15:29	MA51579-CCVA2	105.041	102.512	98.653	100.852	103.448	99.772	103.529	101.412
15:36	MA51579-CCB2	101.784	105.439	102.71	103.362	105.874	102.086	103.578	102.925
15:39	ZZZZZZ	101.566	103.742	99.417	102.955	102.874	97.69	104.271	101.52
15:42	ZZZZZZ	107.707	104.293	100.628	102.936	105.911	99.785	106.159	103.093
15:45	MP30244-S1	107.434	106.732	101.93	102.585	107.446	102.889	105.54	103.602
15:48	MP30244-S2	106.092	104.752	102.095	100.908	105.923	101.575	104.719	102.523
15:51	JD36168-2	105.276	104.843	100.909	100.061	105.765	101.108	103.827	101.296
15:54	ZZZZZZ	0.08 !	0.045 !	0.046 !	0.052 !	0.062 !	0.062 !	0.034 !	0.037 !

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:58	JD36168-3	102.961	103.483	99.405	100.48	105.094	100.123	102.995	101.045
16:01	JD36168-5	105.133	104.002	100.885	102.652	105.701	101.08	104	102.343
16:04	MP30244-SD1	104.653	105.509	102.075	102.01	105.56	102.144	103.136	101.662
16:07	MA51579-CCVA3	106.88	104.078	99.834	100.264	105.355	101.431	103.425	101.336
16:10	MA51579-CCB3	108.119	107.908	106.051	104.376	107.94	105.459	105.774	104.471
16:12	JD36168-7	108.986	107.032	103.968	104.017	106.768	103.151	105.047	103.65
16:15	JD36168-8	109.699	108.775	106.121	104.446	109.848	105.477	106.844	104.938
16:19	JD36168-9	107.428	108.791	104.148	104.766	109.554	104.181	106.569	103.83
16:22	JD36168-10	107.495	109.344	105.053	104.073	110.636	104.81	107.47	104.973
16:25	JD36168-11	106.352	107.072	102.671	102.72	107.829	103.924	106.282	103.711
16:28	JD36168-2F	105.63	105.628	102.88	102.699	107.551	101.979	105.147	102.299
16:31	MA51579-CCVA4	111.227	109.41	104.152	103.78	109.421	104.428	108.084	104.584
16:34	MA51579-CCB4	109.493	112.389	109.896	107.006	112.131	107.942	106.793	106.266
16:37	JD36168-3F	105.465	107.581	101.967	102.389	107.643	102.027	106.148	102.652
16:40	JD36168-5F	105.135	106.49	103.187	102.648	107.582	103.124	104.449	103.747
16:43	JD36168-8F	105.352	105.577	102.541	102.571	107.746	101.849	104.953	103.151
16:46	JD36168-9F	105.824	106.417	102.409	103.637	107.652	101.957	106.26	103.263
16:49	JD36168-10F	106.406	108.318	104.917	103.019	109.446	104.434	107.069	104.542
16:52	JD36168-11F	106.863	97.517	95.196	100.581	102.327	97.1	103.937	101.292
16:55	JD36168-11F	111.143	112.761	108.412	107.057	112.955	108.133	110.395	107.428
16:58	MA51579-CCVA5	113.961	111.615	108.078	106.605	112.227	108.254	110.041	108.744
17:01	MA51579-CCB5	112.427	116.069	111.585	109.984	116.007	111.886	111.348	109.047
17:04	MP30260-MB1	110.296	112.818	108.608	109.165	112.66	107.002	109.222	106.978
17:07	MP30260-B1	112.969	113.419	108.32	105.822	111.865	106.394	109.888	106.932
17:10	MP30260-S1	112.682	109.705	105.413	104.774	110.395	105.808	108.172	105.042
17:13	MP30260-S2	112.691	109.038	104.492	104.499	109.505	104.609	107.147	104.888
17:16	JD35813-1	111.399	111.146	107.013	105.234	110.705	107.093	108.114	106.037
17:19	MP30260-SD1	114.572	115.396	111.311	108.599	113.457	109.721	109.598	108.446
17:22	ZZZZZZ	113.506	117.988	114.479	108.985	116.345	113.782	110.454	109.945
17:25	MA51579-CCVA6	114.808	113.463	109.459	105.685	112.45	109.704	109.619	108.499
17:28	MA51579-CCB6	113.386	119.151	115.997	110.39	117.163	113.88	112.106	110.752
17:31	ZZZZZZ	110.221	112.409	107.983	105.376	111.468	107.443	108.013	104.621
17:34	ZZZZZZ	111.705	110.745	107.285	105.709	110.368	107.151	107.49	106.528

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
17:37	ZZZZZZ	108.904	108.123	102.88	102.645	108.445	103.317	105.397	102.329
17:40	ZZZZZZ	112.386	110.259	107.355	106.337	110.099	107.023	106.608	105.48
17:43	ZZZZZZ	111.579	116.462	113.425	108.688	115.438	111.47	111.234	108.483
17:46	MA51579-CCVA7	115.5	113.586	110.593	106.039	113.398	110.154	110.437	108.395
17:49	MA51579-CCB7	114.143	118.933	116.524	110.775	117.896	116.058	111.72	111.218
17:52	MP30263A-MB1	112.049	117.409	113.53	110.779	116.038	109.983	113.279	110.14
17:55	MP30263A-B2	115.979	115.21	111.199	109.584	114.855	109.813	112.915	109.798
17:58	MP30263A-S5	108.603	99.93	96.404	101.352	102.314	97.316	104.096	100.727
18:01	MP30263A-S6	110.199	104.582	100.049	102.856	107.32	101.02	107.814	104.933
18:04	JD36261-2	106.328	102.953	98.124	101.903	105.988	99.886	106.428	102.67
18:07	MP30263A-SD1	106.68	108.755	104.174	103.546	110.511	103.935	108.82	105.172
18:10	MP30263A-S7	104.573	97.969	93.651	98.379	101.262	95.024	103.938	99.426
18:13	MP30263A-S8	103.48	97.416	91.192	97.965	101.038	92.706	103.259	98.168
18:16	JD36261-2F	103.94	99.285	93.911	99.569	103.155	95.885	104.766	100.232
18:19	MP30263A-SD2	103.901	106.469	100.786	102.711	108.453	100.932	107.531	101.587
18:22	ZZZZZZ	102.741	107.945	103.44	102.969	107.987	101.614	106.222	102.764
18:25	MA51579-CCVA8	105.901	103.939	100.046	100.712	105.294	100.439	105.321	102.046
18:28	MA51579-CCB8	103.877	107.124	103.939	103.094	108.723	102.991	105.845	104.067
18:31	ZZZZZZ	101.117	95.636	91.845	100.332	101.324	94.504	102.929	97.817
18:34	ZZZZZZ	100.703	97.957	93.224	98.685	102.923	94.212	103.512	99.466
18:37	ZZZZZZ	103.338	97.625	94.87	101.139	102.237	96.89	104.231	100.525
18:40	ZZZZZZ	101.813	95.437	90.583	100.783	100.797	95.247	104.118	99.025
18:42	ZZZZZZ	100.355	96.457	89.974	99.637	100.537	93.256	104.337	98.475
18:45	MA51579-CCVA9	106.226	103.961	99.945	102.125	107.108	99.235	106.24	103.215
18:48	MA51579-CCB9	104.613	108.636	104.709	104.572	109.282	105.227	108.331	105.624
18:51	ZZZZZZ	99.884	95.945	90.328	99.37	101.187	93.069	103.408	99.461
18:54	ZZZZZZ	100.103	93.203	88.633	97.929	97.791	89.675	100.845	96.425
18:57	ZZZZZZ	100.876	89.436	86.608	101.067	95.929	90.87	100.944	95.7
19:00	ZZZZZZ	105.304	111.093	105.574	106.495	112.885	103.743	111.627	106.106
19:03	ZZZZZZ	102.602	100.383	95.824	100.794	104.518	97.709	107.024	102.765
19:06	ZZZZZZ	104.362	102.285	99.279	101.543	106.667	100.038	106.539	103.483
19:09	ZZZZZZ	103.32	111.027	104.912	104.259	111.808	104.849	108.459	105.266
19:12	MA51579-CCVA10	105.633	104.755	100.787	100.977	108.067	101.799	107.204	103.707

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
19:15	MA51579-CCB10	103.955	109.143	105.213	104.64	109.733	104.252	108.596	106.283
19:18	ZZZZZZ	104.029	109.41	105.273	104.63	110.344	104.933	108.862	105.606
19:21	ZZZZZZ	103.25	107.471	104.489	103.881	108.768	103.567	105.693	105.007
19:24	ZZZZZZ	102.454	109.015	103.686	102.546	109.168	103.861	106.57	105.048

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-3)	70-130 %	70-130 %
Istd#10	Rhodium (103-1)	70-130 %	70-130 %
Istd#11	Rhodium (103-2)	70-130 %	70-130 %
Istd#12	Rhodium (103-3)	70-130 %	70-130 %
Istd#13	Indium (115-1)	70-130 %	70-130 %
Istd#14	Indium (115-2)	70-130 %	70-130 %
Istd#15	Terbium (159-1)	70-130 %	70-130 %
Istd#16	Terbium (159-2)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
13:56	MA51579-STD1	100	100	100	100	100
14:00	MA51579-STD2	100	100	100	100	100
14:03	MA51579-STD3	100	100	100	100	100
14:07	MA51579-STD4	99.637	100.004	98.413	100.185	97.959
14:10	MA51579-STD5	99.008	100.728	97.17	100.664	97.394
14:13	MA51579-STD6	98.725	100.363	97.675	100.255	97.428
14:16	MA51579-STD7	98.308	101.999	97.863	102.523	97.178
14:20	MA51579-STD8	98	98.338	96.254	99.167	96.271
14:25	MA51579-STD9	99.258	98.745	97.933	98.54	97.646
14:28	MA51579-STD10	99.633	101.372	99.314	100.035	96.945
14:31	MA51579-STD11	99.632	100.405	99.196	96.465	94.501
14:34	MA51579-STD12	99.852	99.95	98.485	93.972	91.31
14:38	ZZZZZZ	101.083	103.319	102.412	103.218	101.292
14:41	ZZZZZZ	99.255	103.618	101.929	103.473	100.77
14:44	MA51579-ICVA1	No results reported for the elements associated with this internal standard.				
14:47	MA51579-ICV1	100.596	103.915	102.904	103.327	102.186
14:50	MA51579-ICVA2	99.939	103.791	101.31	99.346	96.364
14:55	MA51579-ICB1	100.633	103.144	103.196	103.217	102.002
14:58	MA51579-CCVA1	100.181	102.782	101.402	98.334	96.364
15:00	MA51579-CCB1	100.18	103.949	102.785	104.046	102.179
15:03	MA51579-CRI1	No results reported for the elements associated with this internal standard.				
15:06	MA51579-ICSA1	145.01 !	98.281	92.571	82.25	77.339
15:09	MA51579-ICSAB1	145.573 !	98.511	92.407	81.9	77.277
15:19	ZZZZZZ	102.104	101.493	100.052	101.674	99.436
15:22	MA51579-CRI2	101.096	105.377	102.031	104.074	100.309
15:29	MA51579-CCVA2	101.224	103.918	100.917	98.445	95.416
15:36	MA51579-CCB2	101.024	104.049	102.013	102.736	100.668
15:39	ZZZZZZ	102.655	104.258	101.728	100.123	96.042
15:42	ZZZZZZ	103.233	107.035	102.716	99.825	96.528
15:45	MP30244-S1	101.472	105.456	102.818	102.808	98.788
15:48	MP30244-S2	99.811	104.699	102.149	101.663	98.926
15:51	JD36168-2	101.685	104.039	101.058	102.282	98.461
15:54	ZZZZZZ	0.042 !	0.034 !	0.036 !	0.066 !	0.059 !

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
15:58	JD36168-3	101.007	103.344	100.795	100.777	97.035
16:01	JD36168-5	100.782	104.043	102.098	100.607	97.936
16:04	MP30244-SD1	100.693	103.455	101.405	102.809	99.603
16:07	MA51579-CCVA3	101.041	105.124	101.41	99.31	95.841
16:10	MA51579-CCB3	102.414	105.385	103.231	105.244	102.132
16:12	JD36168-7	101.806	105.698	101.798	102.435	98.573
16:15	JD36168-8	102.13	106.615	104.385	103.852	100.197
16:19	JD36168-9	102.67	107.125	103.243	104.083	99.459
16:22	JD36168-10	102.745	107.567	104.081	104.49	101.232
16:25	JD36168-11	101.198	106.606	103.085	102.156	98.84
16:28	JD36168-2F	101.809	105.323	102.072	103.279	99.735
16:31	MA51579-CCVA4	103.098	108.315	104.43	102.571	98.241
16:34	MA51579-CCB4	102.715	108.506	105.877	107.005	103.714
16:37	JD36168-3F	101.561	106.315	102.386	104.263	99.142
16:40	JD36168-5F	101.442	105.151	102.037	102.511	98.919
16:43	JD36168-8F	102.263	104.597	102.407	102.834	99.334
16:46	JD36168-9F	102.456	106.318	102.722	103.035	99.543
16:49	JD36168-10F	102.601	107.146	103.971	104.335	100.731
16:52	JD36168-11F	105.177	104.567	100.532	90.529	87.518
16:55	JD36168-11F	104.102	111.26	106.644	106.258	102.458
16:58	MA51579-CCVA5	104.532	110.541	106.973	104.47	101.388
17:01	MA51579-CCB5	104.532	110.977	107.78	109.623	105.425
17:04	MP30260-MB1	105.782	110.067	106.544	107.05	102.874
17:07	MP30260-B1	104.902	110.459	106.842	105.576	100.441
17:10	MP30260-S1	103.233	107.957	104.969	102.094	97.357
17:13	MP30260-S2	102.643	107.766	103.995	101.014	96.466
17:16	JD35813-1	101.938	108.394	105.885	103.092	99.729
17:19	MP30260-SD1	104.255	109.868	107.21	106.867	103.584
17:22	ZZZZZZ	104.777	111.252	109.848	109.533	106.01
17:25	MA51579-CCVA6	104.646	109.898	107.391	104.269	101.627
17:28	MA51579-CCB6	103.857	112.212	110.294	111.482	106.857
17:31	ZZZZZZ	101.503	108.611	105.52	103.481	99.484
17:34	ZZZZZZ	103.389	108.448	105.026	102.957	99.643

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
17:37	ZZZZZZ	102.039	105.21	101.762	100.163	94.817
17:40	ZZZZZZ	102.456	108.109	105.112	102.381	98.905
17:43	ZZZZZZ	103.132	111.139	107.734	108.715	105.031
17:46	MA51579-CCVA7	104.238	110.37	108.31	104.957	101.865
17:49	MA51579-CCB7	104.576	111.201	109.821	110.252	107.076
17:52	MP30263A-MB1	107.396	114.02	108.882	108.411	103.433
17:55	MP30263A-B2	107.229	113.856	109.736	106.365	102.07
17:58	MP30263A-S5	104.508	105.453	100.908	92.735	89.191
18:01	MP30263A-S6	106.245	109.503	104.05	97.076	92.029
18:04	JD36261-2	104.826	107.272	102.629	95.48	91.785
18:07	MP30263A-SD1	103.445	109.329	103.921	104.193	99.926
18:10	MP30263A-S7	103.794	105.336	99.397	93.291	88.178
18:13	MP30263A-S8	103.126	104.273	98.269	92.552	86.68
18:16	JD36261-2F	105.524	105.819	100.665	95.12	90.204
18:19	MP30263A-SD2	102.745	107.697	101.989	102.717	98.705
18:22	ZZZZZZ	101.714	106.09	101.693	104.529	100.813
18:25	MA51579-CCVA8	102.04	105.53	101.557	101.052	96.457
18:28	MA51579-CCB8	102.174	105.786	103.452	104.909	101.043
18:31	ZZZZZZ	106.775	104.047	98.41	93.537	88.239
18:34	ZZZZZZ	104.339	104.762	99.403	96.975	91.739
18:37	ZZZZZZ	106.794	104.767	100.799	95.099	90.09
18:40	ZZZZZZ	109.903	105.353	99.202	89.709	84.845
18:42	ZZZZZZ	108.092	106.268	99.185	91.206	85.978
18:45	MA51579-CCVA9	104.018	107.14	102.734	102.764	97.888
18:48	MA51579-CCB9	103.337	107.927	105.905	107.405	103.488
18:51	ZZZZZZ	106.788	104.673	99.127	92.468	87.636
18:54	ZZZZZZ	104.735	102.31	96.437	90.638	85.799
18:57	ZZZZZZ	111.412	100.917	96.053	85.248	81.195
19:00	ZZZZZZ	106.478	112.653	106.909	107.021	102.628
19:03	ZZZZZZ	105.196	106.579	102.237	98.039	94.651
19:06	ZZZZZZ	105.645	108.025	103.465	99.485	95.435
19:09	ZZZZZZ	103.751	108.777	104.818	107.284	103.246
19:12	MA51579-CCVA10	103.108	107.763	103.323	103.073	98.88

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
Analyst: NV Run ID: MA51579
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
19:15	MA51579-CCB10	104.257	108.08	105.529	106.928	103.98
19:18	ZZZZZZ	103.898	109.558	104.943	107.977	103.5
19:21	ZZZZZZ	103.666	106.212	102.851	105.551	102.783
19:24	ZZZZZZ	103.866	107.91	104.214	106.987	102.576

! = Outside limits.

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-3)	70-130 %	70-130 %
Istd#18	Holmium (165-1)	70-130 %	70-130 %
Istd#19	Holmium (165-2)	70-130 %	70-130 %
Istd#20	Bismuth (209-1)	70-130 %	70-130 %
Istd#21	Bismuth (209-2)	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51579 Units: ug/l

Time: / Sample ID:			14:55 ICB1		15:00 CCB1		15:36 CCB2		16:10 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27	1.77	<25	-0.0456	<25	-0.140	<25	-0.0481	<25
Antimony	2.0	.022	0.00873	<2.0	0.00378	<2.0	-0.00162	<2.0	0.00562	<2.0
Arsenic	0.50	.009	0.0152	<0.50	-0.00521	<0.50	0.00139	<0.50	-0.00270	<0.50
Barium	1.0	.009	0.00767	<1.0	-0.000354	<1.0	-0.00844	<1.0	-0.00783	<1.0
Beryllium	0.50	.003	0.0111	<0.50	0.00160	<0.50	-0.00107	<0.50	0.00477	<0.50
Boron	25	.87								
Cadmium	0.50	.007	0.0131	<0.50	-0.000144	<0.50	-0.000541	<0.50	-0.000169	<0.50
Calcium	250	7.6	0.957	<250	0.0972	<250	-0.776	<250	0.397	<250
Chromium	1.0	.015	0.0144	<1.0	-0.00432	<1.0	-0.00541	<1.0	-0.00463	<1.0
Cobalt	0.50	.002	0.0182	<0.50	0.00165	<0.50	0.000507	<0.50	0.00269	<0.50
Copper	2.0	.012								
Iron	25	.56	1.74	<25	0.116	<25	-0.166	<25	-0.00257	<25
Lead	0.50	.007	0.0136	<0.50	0.00923	<0.50	-0.00443	<0.50	0.00394	<0.50
Magnesium	250	.37	1.90	<250	0.0290	<250	0.0381	<250	0.125	<250
Manganese	1.0	.009	0.0162	<1.0	0.00161	<1.0	0.000534	<1.0	0.00520	<1.0
Molybdenum	1.0	.027								
Nickel	1.0	.008	0.0209	<1.0	0.00331	<1.0	-0.00150	<1.0	0.00400	<1.0
Potassium	250	1.2	1.89	<250	0.274	<250	0.285	<250	0.596	<250
Selenium	0.50	.35	0.0795	<0.50	0.0144	<0.50	-0.0123	<0.50	0.0167	<0.50
Silver	0.50	.002	0.0149	<0.50	0.00628	<0.50	0.00424	<0.50	0.0101	<0.50
Sodium	250	.53	1.70	<250	0.0656	<250	0.580	<250	0.511	<250
Strontium	5.0	.016								
Thallium	0.50	.009	0.0120	<0.50	0.00859	<0.50	0.00127	<0.50	0.00990	<0.50
Tin	5.0	.035								
Titanium	1.0	.045								
Vanadium	1.0	.017	0.0569	<1.0	0.0260	<1.0	0.0199	<1.0	0.0338	<1.0
Zinc	5.0	.048								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51579 Units: ug/l

Time:			16:34		17:01	
Sample ID:			CCB4		CCB5	
Metal	RL	IDL	raw	final	raw	final
Aluminum	25	.27	-0.101	<25	0.00552	<25
Antimony	2.0	.022	0.00165	<2.0	0.00241	<2.0
Arsenic	0.50	.009	-0.00213	<0.50	0.00353	<0.50
Barium	1.0	.009	-0.00203	<1.0	-0.00385	<1.0
Beryllium	0.50	.003	0.00188	<0.50	0.00245	<0.50
Boron	25	.87				
Cadmium	0.50	.007	-0.000723	<0.50	0.000588	<0.50
Calcium	250	7.6	0.441	<250	0.598	<250
Chromium	1.0	.015	-0.00479	<1.0	-0.00621	<1.0
Cobalt	0.50	.002	0.00138	<0.50	0.00222	<0.50
Copper	2.0	.012				
Iron	25	.56	0.0275	<25	0.0338	<25
Lead	0.50	.007	0.00386	<0.50	0.00597	<0.50
Magnesium	250	.37	0.272	<250	0.370	<250
Manganese	1.0	.009	0.00435	<1.0	0.00742	<1.0
Molybdenum	1.0	.027				
Nickel	1.0	.008	0.00175	<1.0	0.00579	<1.0
Potassium	250	1.2	0.526	<250	0.588	<250
Selenium	0.50	.35	0.0253	<0.50	0.0657	<0.50
Silver	0.50	.002	0.00816	<0.50	0.00971	<0.50
Sodium	250	.53	0.642	<250	1.49	<250
Strontium	5.0	.016				
Thallium	0.50	.009	0.0102	<0.50	0.00843	<0.50
Tin	5.0	.035				
Titanium	1.0	.045				
Vanadium	1.0	.017	0.0279	<1.0	0.0233	<1.0
Zinc	5.0	.048				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51579 Units: ug/l

Time:		14:47			14:50			14:58	
Sample ID:	ICV	ICV1		ICVA	ICVA2		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	60	59.8	99.7	5500	5110	92.9	5000	4840	96.8
Antimony				60	56.6	94.3	50	51.7	103.4
Arsenic				60	56.7	94.5	50	50.4	100.8
Barium				60	57.3	95.5	50	50.0	100.0
Beryllium				60	54.2	90.3	50	48.9	97.8
Boron									
Cadmium				60	55.0	91.7	50	48.1	96.2
Calcium				5500	5360	97.5	5000	5110	102.2
Chromium				60	54.5	90.8	50	48.3	96.6
Cobalt				60	54.7	91.2	50	48.3	96.6
Copper									
Iron				5500	5300	96.4	5000	5080	101.6
Lead				60	57.3	95.5	50	50.8	101.6
Magnesium				5500	5500	100.0	5000	5190	103.8
Manganese				60	54.6	91.0	50	47.9	95.8
Molybdenum									
Nickel				60	54.1	90.2	50	47.3	94.6
Potassium				5500	5460	99.3	5000	5200	104.0
Selenium				260	251	96.5	200	200	100.0
Silver				60	61.3	102.2	50	53.0	106.0
Sodium				5500	5410	98.4	5000	5160	103.2
Strontium									
Thallium				60	58.5	97.5	50	51.3	102.6
Tin									
Titanium									
Vanadium				60	55.5	92.5	50	49.6	99.2
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51579 Units: ug/l

Time:		15:29			16:07			16:31	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4700	94.0	5000	4710	94.2	5000	4700	94.0
Antimony	50	50.0	100.0	50	51.3	102.6	50	50.9	101.8
Arsenic	50	50.3	100.6	50	50.1	100.2	50	49.6	99.2
Barium	50	48.2	96.4	50	50.2	100.4	50	49.9	99.8
Beryllium	50	47.8	95.6	50	47.7	95.4	50	47.1	94.2
Boron									
Cadmium	50	47.6	95.2	50	47.8	95.6	50	48.2	96.4
Calcium	5000	5180	103.6	5000	5130	102.6	5000	5100	102.0
Chromium	50	47.9	95.8	50	48.1	96.2	50	47.7	95.4
Cobalt	50	48.0	96.0	50	48.1	96.2	50	47.6	95.2
Copper									
Iron	5000	5110	102.2	5000	5060	101.2	5000	5020	100.4
Lead	50	49.9	99.8	50	50.8	101.6	50	50.2	100.4
Magnesium	5000	5080	101.6	5000	5110	102.2	5000	5060	101.2
Manganese	50	47.3	94.6	50	47.6	95.2	50	46.9	93.8
Molybdenum									
Nickel	50	47.3	94.6	50	47.2	94.4	50	47.1	94.2
Potassium	5000	5130	102.6	5000	5150	103.0	5000	5120	102.4
Selenium	200	201	100.5	200	200	100.0	200	198	99.0
Silver	50	52.5	105.0	50	52.9	105.8	50	52.2	104.4
Sodium	5000	5070	101.4	5000	5100	102.0	5000	5040	100.8
Strontium									
Thallium	50	51.8	103.6	50	51.6	103.2	50	50.9	101.8
Tin									
Titanium									
Vanadium	50	48.9	97.8	50	49.1	98.2	50	48.8	97.6
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51579 Units: ug/l

Time:		16:58	
Sample ID:	CCVA	CCVA5	
Metal	True	Results	% Rec
Aluminum	5000	4730	94.6
Antimony	50	50.5	101.0
Arsenic	50	49.8	99.6
Barium	50	49.5	99.0
Beryllium	50	47.1	94.2
Boron			
Cadmium	50	47.9	95.8
Calcium	5000	5040	100.8
Chromium	50	48.0	96.0
Cobalt	50	47.8	95.6
Copper			
Iron	5000	5010	100.2
Lead	50	50.2	100.4
Magnesium	5000	5060	101.2
Manganese	50	46.8	93.6
Molybdenum			
Nickel	50	47.1	94.2
Potassium	5000	5120	102.4
Selenium	200	197	98.5
Silver	50	52.4	104.8
Sodium	5000	5090	101.8
Strontium			
Thallium	50	50.7	101.4
Tin			
Titanium			
Vanadium	50	49.1	98.2
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51579 Units: ug/l

Time:			15:22	
Sample ID:	CRI	CRIA	CRI2	
Metal	True	True	Results	% Rec
Aluminum	25	25	23.9	95.6
Antimony	2.0	0.25	1.83	91.5
Arsenic	0.50	0.50	0.459	91.8
Barium	1.0	0.50	0.926	92.6
Beryllium	0.50	0.25	0.445	89.0
Boron	25	2.5		
Cadmium	0.50	0.25	0.429	85.8
Calcium	250	125	243	97.2
Chromium	1.0	2.0	0.913	91.3
Cobalt	0.50	0.25	0.470	94.0
Copper	2.0	2.0		
Iron	25	25	25.3	101.2
Lead	0.50	0.25	0.444	88.8
Magnesium	250	125	249	99.6
Manganese	1.0	0.25	0.914	91.4
Molybdenum	1.0	0.50		
Nickel	1.0	2.0	0.968	96.8
Potassium	250	125	246	98.4
Selenium	0.50	0.50	0.520	104.0
Silver	0.50	1.0	0.496	99.2
Sodium	250	125	243	97.2
Strontium	5.0	0.50		
Thallium	0.50	0.25	0.450	90.0
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0	0.923	92.3
Zinc	5.0	2.0		

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB120921M2.CSV Date Analyzed: 12/09/21 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51579 Units: ug/l

Time:			15:06		15:09	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	84900	84.9	83200	83.2
Antimony			0.0504		0.0506	
Arsenic		20	0.0808		19.6	98.0
Barium			0.351		0.196	
Beryllium			-0.000175		0.00253	
Boron		50	1.76		44.3	88.6
Cadmium		20	0.0276		18.8	94.0
Calcium	100000	100000	94500	94.5	94000	94.0
Chromium		20	0.783		20.8	104.0
Cobalt		20	0.0770		19.4	97.0
Copper		20	-0.479		17.3	86.5
Iron	100000	100000	87300	87.3	87700	87.7
Lead			0.0421		0.0457	
Magnesium	100000	100000	89600	89.6	87900	87.9
Manganese		20	0.135		19.7	98.5
Molybdenum	2000	2000	2190HH	109.5	2190HH	109.5
Nickel		20	0.506		18.5	92.5
Potassium	100000	100000	93500	93.5	92200	92.2
Selenium		20	0.108		19.9	99.5
Silver		20	0.0368		21.3	106.5
Sodium	100000	100000	93000	93.0	90900	90.9
Strontium	2000	2000	1730HH	86.5	1830HH	91.5
Thallium			0.00854		0.00947	
Tin	2000	2000	1780HH	89.0	1770HH	88.5
Titanium	2000	2000	1760HH	88.0	1750HH	87.5
Vanadium		20	0.109		20.3	101.5
Zinc		20	0.937		16.2	81.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:16	MA51580-STD1	1		STDA
11:22	MA51580-STD2	1		STDA
11:27	MA51580-STD3	1		STDA
11:33	MA51580-STD4	1		STDB
11:39	MA51580-STD5	1		STDC
11:45	MA51580-STD6	1		STDD
11:51	MA51580-STD7	1		STDE
11:57	MA51580-STD8	1		STDF
12:03	MA51580-STD9	1		STDG
12:09	MA51580-STD10	1		STDH
12:15	MA51580-STD11	1		STDI
12:20	MA51580-STD12	1		STDJ
12:52	MA51580-STD13	1		STDA
12:58	ZZZZZZ	1		
13:04	MA51580-ICVA1	1		
13:09	MA51580-ICV1	1		
13:35	MA51580-ICB1	1		
13:41	MA51580-CCVA1	1		
13:47	MA51580-CCB1	1		
13:53	MA51580-CRI1	1		
13:59	ZZZZZZ	1		
14:05	ZZZZZZ	1		
14:12	ZZZZZZ	1		
14:18	MA51580-ICSA1	1		
14:24	MA51580-ICSAB1	1		
14:49	ZZZZZZ	1		
14:55	MA51580-CCVA2	1		
15:01	MA51580-CCB2	1		
15:07	MP30243-MB1	2		
15:13	ZZZZZZ	2		
15:29	MP30162-S1	2		
15:36	MP30162-S2	2		
15:42	MP30162-S3	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:48	MP30163-S1	2		
15:54	MP30163-S2	2		
16:00	ZZZZZZ	1		
16:06	ZZZZZZ	2		
16:12	ZZZZZZ	1		
16:18	MA51580-CCVA3	1		
16:24	MA51580-CCB3	1		
16:30	MA51580-CCVA4	1		
16:36	MA51580-CCB4	1		
16:42	ZZZZZZ	1		
16:49	MP30299-MB1	1		
16:55	MP30299-B1	1		
17:01	MP30299-S1	1		PB high
17:08	MP30299-S2	1		PB high
17:14	JD36320-1	1		(sample used for QC only; not part of login JD36168)
17:20	MP30299-S3	1		PB high
17:26	JD36320-3	1		(sample used for QC only; not part of login JD36168)
17:32	MA51580-CCVA5	1		
17:38	MA51580-CCB5	1		
17:44	ZZZZZZ	1		
17:50	ZZZZZZ	1		
17:56	ZZZZZZ	1		
18:02	ZZZZZZ	1		
18:08	ZZZZZZ	1		
18:14	ZZZZZZ	1		
18:20	ZZZZZZ	1		
18:26	ZZZZZZ	1		
18:32	ZZZZZZ	1		
18:38	ZZZZZZ	1		
18:44	MA51580-CCVA6	1		
18:51	MA51580-CCB6	1		
18:57	ZZZZZZ	1		
19:03	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:09	ZZZZZZ	1		
19:15	ZZZZZZ	1		
19:21	ZZZZZZ	1		
19:27	ZZZZZZ	1		
19:33	ZZZZZZ	1		
19:39	ZZZZZZ	1		
19:45	MA51580-CCVA7	1		
19:51	MA51580-CCB7	1		
19:57	MP30300-MB1	1		
20:03	MP30300-B1	1		
20:09	MP30300-S1	1		PB high
20:15	MP30300-S2	1		PB high
20:21	JD36320-11	1		(sample used for QC only; not part of login JD36168)
20:27	ZZZZZZ	1		
20:33	ZZZZZZ	1		
20:39	ZZZZZZ	1		
20:45	ZZZZZZ	1		
20:51	ZZZZZZ	1		
20:57	MA51580-CCVA8	1		
21:03	MA51580-CCB8	1		
21:09	ZZZZZZ	1		
21:15	ZZZZZZ	1		
21:21	ZZZZZZ	1		
21:27	ZZZZZZ	1		
21:33	MP30266-B1	1		Ag needs dilution. Al failes high
21:39	MP30266-S1	1		CCV out
21:45	MP30266-S2	1		CCV out
21:51	JD36224-3	1		(sample used for QC only; not part of login JD36168)
21:57	ZZZZZZ	1		
22:03	MP30266-MB1	1		Batch to reanalyze for Ni, all checks out
22:09	MA51580-CCVA9	1		
22:15	MA51580-CCB9	1		
22:21	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:27	ZZZZZZ	1		
22:33	ZZZZZZ	1		
22:39	ZZZZZZ	1		
22:45	ZZZZZZ	1		
22:51	ZZZZZZ	1		
22:57	MA51580-CCVA10	1		
23:03	MA51580-CCB10	1		
23:09	MP30244-MB1	2		
23:15	ZZZZZZ	2		
23:21	JD36168-2	2		
23:27	JD36168-3	2		
23:33	JD36168-4	2		
23:39	JD36168-5	2		
23:45	JD36168-6	2		
23:51	JD36168-7	2		
23:57	JD36168-8	2		
00:03	JD36168-5F	2		
00:09	MA51580-CCVA11	1		
00:15	MA51580-CCB11	1		
00:21	JD36168-6F	2		
00:27	JD36168-11F	2		
---------->	Last reportable sample/prep for job JD36168			
00:33	MA51580-CCVA12	1		
00:39	MA51580-CCB12	1		
---------->	Last reportable CCB for job JD36168			
00:45	ZZZZZZ	1		
00:51	ZZZZZZ	1		
00:57	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Element: Dilution	Cr	Cu	Zn
12:58	ZZZZZZ	1			
13:04	MA51580-ICVA1	1	X	X	X
13:09	MA51580-ICV1	1	X	X	X
13:35	MA51580-ICB1	1	X	X	X
13:41	MA51580-CCVA1	1	X	X	X
13:47	MA51580-CCB1	1	X	X	X
13:53	MA51580-CRI1	1	X	X	X
13:59	ZZZZZZ	1			
14:05	ZZZZZZ	1			
14:12	ZZZZZZ	1			
14:18	MA51580-ICSA1	1	X	X	X
14:24	MA51580-ICSAB1	1	X	X	X
14:49	ZZZZZZ	1			
14:55	MA51580-CCVA2	1	X	X	X
15:01	MA51580-CCB2	1	X	X	X
15:07	MP30243-MB1	2		X	
15:13	ZZZZZZ	2			
15:29	MP30162-S1	2			
15:36	MP30162-S2	2			
15:42	MP30162-S3	2			
15:48	MP30163-S1	2			
15:54	MP30163-S2	2			
16:00	ZZZZZZ	1			
16:06	ZZZZZZ	2			
16:12	ZZZZZZ	1			
16:18	MA51580-CCVA3	1	X	X	X
16:24	MA51580-CCB3	1	X	X	X
16:30	MA51580-CCVA4	1	X	X	X
16:36	MA51580-CCB4	1	X	X	X
16:42	ZZZZZZ	1			
16:49	MP30299-MB1	1			
16:55	MP30299-B1	1			
17:01	MP30299-S1	1	PB high		
		Element:	Cr	Cu	Zn

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Element: Dilution	C r	C u	Z n	
17:08	MP30299-S2	1	PB		high	
17:14	JD36320-1	1				(a)
17:20	MP30299-S3	1	PB		high	
17:26	JD36320-3	1				(a)
17:32	MA51580-CCVA5	1	X	X	X	
17:38	MA51580-CCB5	1	X	X	X	
17:44	ZZZZZZ	1				
17:50	ZZZZZZ	1				
17:56	ZZZZZZ	1				
18:02	ZZZZZZ	1				
18:08	ZZZZZZ	1				
18:14	ZZZZZZ	1				
18:20	ZZZZZZ	1				
18:26	ZZZZZZ	1				
18:32	ZZZZZZ	1				
18:38	ZZZZZZ	1				
18:44	MA51580-CCVA6	1	X	X	X	
18:51	MA51580-CCB6	1	X	X	X	
18:57	ZZZZZZ	1				
19:03	ZZZZZZ	1				
19:09	ZZZZZZ	1				
19:15	ZZZZZZ	1				
19:21	ZZZZZZ	1				
19:27	ZZZZZZ	1				
19:33	ZZZZZZ	1				
19:39	ZZZZZZ	1				
19:45	MA51580-CCVA7	1	X	X	X	
19:51	MA51580-CCB7	1	X	X	X	
19:57	MP30300-MB1	1				
20:03	MP30300-B1	1				
20:09	MP30300-S1	1	PB		high	
20:15	MP30300-S2	1	PB		high	
20:21	JD36320-11	1				(a)
		Element:	C r	C u	Z n	

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Dilution	Cr	Cu	Zn	
20:27	ZZZZZZ	1				
20:33	ZZZZZZ	1				
20:39	ZZZZZZ	1				
20:45	ZZZZZZ	1				
20:51	ZZZZZZ	1				
20:57	MA51580-CCVA8	1	X	X	X	
21:03	MA51580-CCB8	1	X	X	X	
21:09	ZZZZZZ	1				
21:15	ZZZZZZ	1				
21:21	ZZZZZZ	1				
21:27	ZZZZZZ	1				
21:33	MP30266-B1	1	X	X	X	
21:39	MP30266-S1	1	X	X	X	
21:45	MP30266-S2	1	X	X	X	
21:51	JD36224-3	1	X	X	X	(a)
21:57	ZZZZZZ	1				
22:03	MP30266-MB1	1	X	X	X	
22:09	MA51580-CCVA9	1	X	X	X	
22:15	MA51580-CCB9	1	X	X	X	
22:21	ZZZZZZ	1				
22:27	ZZZZZZ	1				
22:33	ZZZZZZ	1				
22:39	ZZZZZZ	1				
22:45	ZZZZZZ	1				
22:51	ZZZZZZ	1				
22:57	MA51580-CCVA10	1	X	X	X	
23:03	MA51580-CCB10	1	X	X	X	
23:09	MP30244-MB1	2		X		
23:15	ZZZZZZ	2				
23:21	JD36168-2	2		X		
23:27	JD36168-3	2	X	X		
23:33	JD36168-4	2		X		
23:39	JD36168-5	2		X		
		Element:	Cr	Cu	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Element: Dilution	Cr	Cu	Zn
23:45	JD36168-6	2		X	
23:51	JD36168-7	2		X	
23:57	JD36168-8	2		X	
00:03	JD36168-5F	2		X	
00:09	MA51580-CCVA11	1	X	X	X
00:15	MA51580-CCB11	1	X	X	X
00:21	JD36168-6F	2		X	
00:27	JD36168-11F	2		X	X
00:33	MA51580-CCVA12	1	X	X	X
00:39	MA51580-CCB12	1	X	X	X
00:45	ZZZZZZ	1			
00:51	ZZZZZZ	1			
00:57	ZZZZZZ	1			

(a) Sample used for QC only; not part of login JD36168.

Element:	Cr	Cu	Zn

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
11:16	MA51580-STD1	100	100	100	100	100	100	100	100
11:22	MA51580-STD2	100	100	100	100	100	100	100	100
11:27	MA51580-STD3	100	100	100	100	100	100	100	100
11:33	MA51580-STD4	94.429	97.7	101.647	99.917	94.881	100.206	98.978	96.46
11:39	MA51580-STD5	100.439	98.63	95.665	98.461	99.491	96.395	99.435	99.442
11:45	MA51580-STD6	97.996	97.262	99.671	97.517	95.961	99.297	98.012	98.554
11:51	MA51580-STD7	99.074	98.214	97.911	97.304	97.918	98.806	97.965	98.464
11:57	MA51580-STD8	99.463	96.678	97.816	96.731	96.49	97.01	96.549	97.13
12:03	MA51580-STD9	97.075	94.046	98.882	98.095	95.11	98.637	99.531	95.702
12:09	MA51580-STD10	100.986	99.369	103.555	101.47	98.35	101.65	102.605	99.598
12:15	MA51580-STD11	104.581	102.648	107.581	104.77	102.376	107.224	104.788	102.563
12:20	MA51580-STD12	109.336	106.358	112.24	108.092	104.892	109.073	107.229	105.408
12:52	MA51580-STD13	100	100	100	100	100	100	100	100
12:58	ZZZZZZ	100.175	99.82	100.446	98.497	102.199	101.883	98.527	102.664
13:04	MA51580-ICVA1	101.323	108.846	105.637	88.428	105.864	104.819	91.53	104.392
13:09	MA51580-ICV1	106.44	109.74	103.979	100.939	108.869	104.081	101.46	109.375
13:35	MA51580-ICB1	98.559	97.429	100.28	99.376	98.699	100.188	99.296	97.609
13:41	MA51580-CCVA1	100.146	103.419	104.442	102.627	103.529	104.509	101.703	102.348
13:47	MA51580-CCB1	96.114	94.582	108.844	100.843	98.551	109.577	101.659	98.218
13:53	MA51580-CRI1	100.245	100.93	103.369	100.957	103.344	103.975	101.611	103.044
13:59	ZZZZZZ	100.589	105.027	109.75	100.576	111.594	110.293	99.119	111.243
14:05	ZZZZZZ	101.329	105.918	109.5	101.649	110.999	111.854	99.78	110.645
14:12	ZZZZZZ	103.751	103.824	98.178	100.224	105.142	99.233	98.67	104.953
14:18	MA51580-ICSA1	108.193	108.09	109.007	98.771	108.815	109.419	95.855	101.927
14:24	MA51580-ICSAB1	122.347	111.912	107.573	96.986	114.336	107.954	95.425	108.295
14:49	ZZZZZZ	123.009	108.627	104.3	102.035	107.453	106.286	100.48	107.829
14:55	MA51580-CCVA2	119.513	110.109	105.836	102.614	110.382	108.035	101.371	110.477
15:01	MA51580-CCB2	120.449	108.473	103.986	88.519	109.225	107.19	89.889	109.114
15:07	MP30243-MB1	119.312	108.151	104.804	102.476	109.213	106.391	100.926	108.648
15:13	ZZZZZZ	122.922	106.155	101.329	105.053	111.706	114.662	119.363	111.089
15:29	MP30162-S1	109.408	97.585	107.582	101.675	103.639	110.027	99.7	102.97
15:36	MP30162-S2	115.522	107.249	110.294	102.2	112.932	113.248	101.417	113.083
15:42	MP30162-S3	120.13	109.796	111.795	101.393	115.585	114.006	100.969	115.913

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:48	MP30163-S1	122.605	111.948	112.655	102.369	117.052	115.278	100.538	118.029
15:54	MP30163-S2	122.234	111.782	112.216	101.277	118.051	114.077	100.987	117.808
16:00	ZZZZZZ	118.392	112.506	105.782	99.374	115.764	108.811	98.047	115.275
16:06	ZZZZZZ	124.235	111.219	107.514	97.771	116.924	111.165	99.384	116.957
16:12	ZZZZZZ	121.648	111.364	109.408	99.408	113.67	112.233	97.747	113.518
16:18	MA51580-CCVA3	122.584	113.187	108.684	102.115	111.714	109.233	99.586	111.762
16:24	MA51580-CCB3	120.578	110.55	107.763	101.349	111.062	107.052	99.813	109.534
16:30	MA51580-CCVA4	118.081	109.283	106.351	102.412	108.499	106.939	99.516	108.377
16:36	MA51580-CCB4	116.647	106.881	104.372	100.926	106.329	106.575	99.376	105.917
16:42	ZZZZZZ	117.945	108.412	109.301	101.104	108.569	108.469	100.095	107.311
16:49	MP30299-MB1	116.676	106.901	105.247	100.975	107.444	106.252	100.206	107.383
16:55	MP30299-B1	116.341	110.042	107.4	102.415	110.662	108.308	100.11	109.557
17:01	MP30299-S1	No results reported for the elements associated with this internal standard.							
17:08	MP30299-S2	No results reported for the elements associated with this internal standard.							
17:14	JD36320-1	117.366	110.858	110.352	94.315	114.663	112.629	96.965	114.738
17:20	MP30299-S3	No results reported for the elements associated with this internal standard.							
17:26	JD36320-3	121.055	110.252	105.67	97.515	115.029	109.442	97.208	115.254
17:32	MA51580-CCVA5	122.158	113.423	105.247	99.58	112.384	105.265	97.785	111.462
17:38	MA51580-CCB5	123.719	112.403	104.994	98.252	110.663	108.746	97.773	111.574
17:44	ZZZZZZ	118.455	107.291	107.997	95.768	111.833	109.355	94.333	110.976
17:50	ZZZZZZ	119.176	108.387	101.888	96.192	111.338	103.773	95.302	111.946
17:56	ZZZZZZ	119.229	109.513	107.723	95.781	113.375	110.205	95.428	113.749
18:02	ZZZZZZ	120.494	110.361	108.91	95.693	113.195	110.099	95.091	113.439
18:08	ZZZZZZ	121.229	107.165	108.282	98.304	113.754	111.269	95.11	113.431
18:14	ZZZZZZ	120.828	111.104	103.472	96.78	114.232	106.114	94.993	113.84
18:20	ZZZZZZ	121.492	109.334	107.587	90.448	112.94	110.262	92.758	113.578
18:26	ZZZZZZ	119.924	109.804	108.153	94.624	113.646	109.422	94.328	112.728
18:32	ZZZZZZ	117.041	99.666	107.907	95.267	108.514	110.388	94.55	108.167
18:38	ZZZZZZ	123.347	112.886	114.144	95.524	115.201	113.59	94.239	114.275
18:44	MA51580-CCVA6	125.962	113.272	102.348	96.854	112.314	103.876	94.986	111.835
18:51	MA51580-CCB6	125.646	112.084	104.567	95.711	111.816	106.644	95.398	111.329
18:57	ZZZZZZ	120.836	109.711	106.883	94.429	113.415	108.767	93.811	112.227
19:03	ZZZZZZ	121.078	110.214	102.764	94.747	112.158	105.341	93.403	112.657

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
19:09	ZZZZZZ	122.11	110.989	99.09	93.73	113.472	102.795	93.473	112.438
19:15	ZZZZZZ	120.916	111.119	107.559	94.638	112.744	108.969	93.332	112.274
19:21	ZZZZZZ	122.6	110.658	108.55	94.436	112.857	109.877	93.101	113.276
19:27	ZZZZZZ	122.419	112.276	108.463	94.167	114.498	110.299	92.818	113.972
19:33	ZZZZZZ	123.627	113.052	102.187	93.744	114.334	103.534	93.262	112.516
19:39	ZZZZZZ	123.89	110.491	107.558	94.063	114.02	110.065	93.666	113.536
19:45	MA51580-CCVA7	127.882	115.703	107.632	96.203	112.362	108.424	95.383	113.193
19:51	MA51580-CCB7	128.616	111.775	104.771	89.31	110.232	106.889	90.03	111.737
19:57	MP30300-MB1	117.468	102.961	105.526	96.251	102.716	106.394	95.114	102.676
20:03	MP30300-B1	124.053	111.012	105.776	96.046	110.092	106.511	94.779	110.321
20:09	MP30300-S1	No results reported for the elements associated with this internal standard.							
20:15	MP30300-S2	No results reported for the elements associated with this internal standard.							
20:21	JD36320-11	123.292	108.118	101.514	92.311	113.895	104.564	92.116	113.474
20:27	ZZZZZZ	122.458	111.662	108.081	94.48	114.946	110.734	94.127	114.224
20:33	ZZZZZZ	123.195	110.565	107.583	93.092	113.676	109.909	92.836	113.162
20:39	ZZZZZZ	124.518	111.611	108.314	93.248	115.002	109.213	92.265	113.531
20:45	ZZZZZZ	124.209	111.041	106.672	92.667	114.022	110.53	92.417	113.322
20:51	ZZZZZZ	124.537	112.259	106.966	91.814	115.89	109.674	92.425	114.058
20:57	MA51580-CCVA8	127.612	115.459	98.544	94.723	112.501	100.207	93.568	112.964
21:03	MA51580-CCB8	128.838	112.444	104.825	96.457	111.856	107.732	96.321	111.015
21:09	ZZZZZZ	122.45	110.196	106.447	92.661	111.446	108.759	92.486	111.47
21:15	ZZZZZZ	122.324	111.282	107.46	93.706	112.406	109.243	93.23	112.494
21:21	ZZZZZZ	128.846 !	113.436	103.492	93.137	112.539	106.014	94.089	111.653
21:27	ZZZZZZ	125.526 !	114.904	106.28	96.954	109.505	108.067	96.57	109.977
21:33	MP30266-B1	126.066 !a	112.276	104.048	96.176	111.433	104.997	95.338	110.8
21:39	MP30266-S1	120.495	111.145	104.095	95.066	107.906	103.851	93.077	107.335
21:45	MP30266-S2	123.911	112.74	104.698	93.799	109.996	105.199	92.474	109.217
21:51	JD36224-3	124.842	111.05	99.93	93.572	108.918	102.045	93.011	108.289
21:57	ZZZZZZ	120.473	111.239	105.256	92.136	107.366	104.167	90.024	107.438
22:03	MP30266-MB1	130.657 !b	110.957	102.924	93.167	111.205	105.756	93.19	111.301
22:09	MA51580-CCVA9	127.186	111.575	103.088	93.028	109.385	105.485	92.79	108.449
22:15	MA51580-CCB9	127.606	109.818	103.096	93.153	108.682	105.24	93.06	109.065
22:21	ZZZZZZ	120.227	109.29	99.236	91.949	104.444	97.973	88.748	104.165

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
22:27	ZZZZZZ	128.857	!a112.214	101.643	92.014	110.48	104.075	92.905	109.851
22:33	ZZZZZZ	126.577	!a111.605	102.187	92.379	109.653	103.191	92.406	108.286
22:39	ZZZZZZ	124.17	112.396	102.455	84.782	106.778	102.142	82.663	106.337
22:45	ZZZZZZ	136.969	!a113.589	107.276	97.07	113.015	109.777	96.993	112.213
22:51	ZZZZZZ	134.483	! 113.49	107.144	95.681	112.216	106.945	95.64	112.574
22:57	MA51580-CCVA10	129.753	112.432	104.061	94.502	109.742	106.177	94.248	110.03
23:03	MA51580-CCB10	130.983	!a111.477	102.706	94.058	110.655	105.811	93.262	110.445
23:09	MP30244-MB1	125.336	104.264	97.545	94.79	101.283	101.712	112.263	100.937
23:15	ZZZZZZ	127.483	111.014	101.622	94.928	106.434	103.315	102.768	106.453
23:21	JD36168-2	116.274	97.089	98.497	92.817	96.4	101.351	97.958	96.901
23:27	JD36168-3	125.975	109.792	104.798	93.596	104.562	104.001	98.304	104.445
23:33	JD36168-4	124.638	106.081	97.461	93.468	103.034	100.533	99.999	102.939
23:39	JD36168-5	121.334	106.986	100.129	95.104	102.371	99.187	97.906	102.143
23:45	JD36168-6	123.941	107.379	94.051	93.529	103.771	96.492	96.688	104.031
23:51	JD36168-7	125.291	111.044	97.568	96.061	102.793	97.876	98.282	101.743
23:57	JD36168-8	127.238	108.363	101.748	87.479	105.034	103	91.634	105.625
00:03	JD36168-5F	114.397	99.983	100.475	92.257	96.318	99.965	96.251	95.017
00:09	MA51580-CCVA11	129.308	112.352	102.029	94.949	109.023	102.079	93.669	109.425
00:15	MA51580-CCB11	128.701	110.577	102.954	94.457	110.496	105.975	94.176	109.758
00:21	JD36168-6F	126.246	104.793	97.081	93.22	102.849	101.207	110.484	102.768
00:27	JD36168-11F	121.798	107.074	97.629	91.733	102.799	98.328	97.204	102.302
00:33	MA51580-CCVA12	130.85	!b 113.768	102.416	95.724	113.151	104.396	94.228	111.723
00:39	MA51580-CCB12	130.669	!b112.657	103.855	93.881	110.662	106.656	94.354	111.406
00:45	ZZZZZZ	129.659	111.112	103.805	93.738	109.923	105.434	94.347	109.923
00:51	ZZZZZZ	127.885	111.694	103.906	94.216	109.805	104.995	94.208	109.95
00:57	ZZZZZZ	127.323	109.758	103.017	93.72	108.655	105.285	93.356	107.896

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Lithium	60-125 %
Istd#2	Scandium (45-1)	60-125 %
Istd#3	Scandium (45-2)	60-125 %
Istd#4	Scandium (45-3)	60-125 %
Istd#5	Germanium (72-1)	60-125 %
Istd#6	Germanium (72-2)	60-125 %
Istd#7	Germanium (72-3)	60-125 %
Istd#8	Germanium (74-1)	60-125 %

(a) No samples reported for the elements associated with this internal standard.
(b) No samples reported for this element in the area bracketed by this QC.

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
11:16	MA51580-STD1	100	100	100	100	100	100	100	100
11:22	MA51580-STD2	100	100	100	100	100	100	100	100
11:27	MA51580-STD3	100	100	100	100	100	100	100	100
11:33	MA51580-STD4	101.049	99.358	95.941	99.747	99.224	95.686	101.914	93.292
11:39	MA51580-STD5	96.518	100.293	99.363	94.965	98.517	98.845	96.141	98.447
11:45	MA51580-STD6	99.337	98.424	98.807	98.026	97.179	98.289	98.65	96.385
11:51	MA51580-STD7	97.715	98.513	98.772	97.55	97.031	97.933	97.868	96.66
11:57	MA51580-STD8	96.731	96.689	96.283	96.471	95.949	96.595	97.425	95.841
12:03	MA51580-STD9	96.946	99.623	95.077	97.283	97.289	95.031	98.872	94.103
12:09	MA51580-STD10	100.589	102.237	98.227	100.509	99.901	98.415	101.521	97.903
12:15	MA51580-STD11	105.289	104.26	99.563	102.043	100.003	99.056	105.405	100.82
12:20	MA51580-STD12	107.725	106.641	101.655	103.499	100.866	102.505	106.78	103.116
12:52	MA51580-STD13	100	100	100	100	100	100	100	100
12:58	ZZZZZZ	101.32	99.129	103.031	101.906	99.669	103.665	101.247	99.829
13:04	MA51580-ICVA1	104.721	91.59	105.573	102.021	87.056	107.353	102.911	103.349
13:09	MA51580-ICV1	103.57	101.041	112.043	104.665	102.329	113.012	104.241	106.238
13:35	MA51580-ICB1	99.031	99.607	98.837	99.673	99.709	100.386	100.576	99.02
13:41	MA51580-CCVA1	104.242	102.149	101.653	101.569	99.131	103.816	103.661	100.107
13:47	MA51580-CCB1	108.225	101.863	99.401	108.703	102.171	99.597	108.227	93.486
13:53	MA51580-CRI1	103.643	101.366	104.858	103.39	101.651	105.876	103.743	99.761
13:59	ZZZZZZ	109.263	99.126	111.106	106.994	99.73	110.999	109.326	103.82
14:05	ZZZZZZ	110.809	100.889	109.62	107.447	101.253	111.6	110.256	105.091
14:12	ZZZZZZ	98.104	99.129	107.347	97.915	100.862	108.389	97.876	101.635
14:18	MA51580-ICSA1	103.481	92.225	96.693	95.659	87.363	98.504	95.351	99.231
14:24	MA51580-ICSAB1	104.615	91.515	101.095	96.136	87.018	103.081	96.425	104.385
14:49	ZZZZZZ	106.233	100.343	107.104	105.538	103.139	108.092	104.673	108.982
14:55	MA51580-CCVA2	107.536	101.115	107.018	105.032	101.469	111.946	105.644	106.502
15:01	MA51580-CCB2	106.143	89.195	110.353	106.553	90.27	110.806	104.898	105.911
15:07	MP30243-MB1	105.245	100.784	108.025	105.062	103.198	110.411	105.363	105.576
15:13	ZZZZZZ	113.782	119.262	102.942	100.185	102.471	103.191	98.507	100.877
15:29	MP30162-S1	109.274	100.301	99.113	104.036	97.77	104.105	106.82	101.064
15:36	MP30162-S2	112.061	101.914	108.41	106.943	99.915	113.9	110.473	109.177
15:42	MP30162-S3	113.694	101.095	112.249	108.069	98.571	117.001	111.379	110.375

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:48	MP30163-S1	114.251	101.426	113.363	108.337	99.283	117.934	112.961	112.206
15:54	MP30163-S2	112.628	101.039	112.893	108.299	98.895	117.749	112.683	111.776
16:00	ZZZZZZ	108.347	98.032	109.447	101.519	95.481	116.077	106.325	109.924
16:06	ZZZZZZ	109.992	99.33	113.324	105.296	98.134	117.806	108.862	112.067
16:12	ZZZZZZ	111.187	98.081	109.193	104.203	95.578	114.617	108.907	111.007
16:18	MA51580-CCVA3	108.357	100.102	110.05	105.963	99.912	113.671	107.029	108.693
16:24	MA51580-CCB3	106.99	100.01	110.197	107.737	102.174	112.309	107.741	107.694
16:30	MA51580-CCVA4	105.824	99.798	106.315	103.281	99.216	110.611	104.258	106.207
16:36	MA51580-CCB4	106.026	99.858	105.999	105.813	101.785	108.538	105.648	103.266
16:42	ZZZZZZ	107.987	100.175	108.529	108.521	102.021	110.864	107.922	106.848
16:49	MP30299-MB1	105.151	99.999	106.735	105.835	102.176	109.629	104.773	105.218
16:55	MP30299-B1	107.766	100.543	108.437	105.274	101.138	111.381	105.948	106.609
17:01	MP30299-S1	No results reported for the elements associated with this internal standard.							
17:08	MP30299-S2	No results reported for the elements associated with this internal standard.							
17:14	JD36320-1	111.485	97.582	109.257	104.336	93.419	115.322	110.514	111.344
17:20	MP30299-S3	No results reported for the elements associated with this internal standard.							
17:26	JD36320-3	107.313	96.929	108.814	100.694	95.125	115.841	106.297	112.032
17:32	MA51580-CCVA5	103.825	97.107	109.405	101.228	98.213	112.694	103.226	107.872
17:38	MA51580-CCB5	107.213	98.019	110.663	106.606	100.49	113.236	106.142	108.409
17:44	ZZZZZZ	108.852	95.054	105.242	101.68	92.56	112.666	107.25	108.909
17:50	ZZZZZZ	104.244	95.076	107.058	96.108	92.541	113.394	101.315	109.155
17:56	ZZZZZZ	108.699	95.31	107.461	102.372	93.043	113.662	107.905	110.127
18:02	ZZZZZZ	108.834	95.427	108.407	102.199	92.445	114.685	108.245	111.136
18:08	ZZZZZZ	110.214	95.231	107.495	102.244	95.665	114.259	107.71	111.184
18:14	ZZZZZZ	106.316	94.683	108.227	99.659	93.179	114.682	104.823	110.657
18:20	ZZZZZZ	109.461	92.49	108.206	102.414	88.55	113.57	108.143	111.896
18:26	ZZZZZZ	109.132	94.384	106.919	102.252	92.131	112.639	107.898	110.409
18:32	ZZZZZZ	109.046	93.835	101.911	102.22	92.459	106.998	107.707	104.077
18:38	ZZZZZZ	112.84	94.635	109.761	107.307	92.572	115.714	112.533	113.655
18:44	MA51580-CCVA6	102.386	95.091	109.184	99.901	95.667	114.004	102.63	109.553
18:51	MA51580-CCB6	105.914	95.712	110.997	105.974	98.643	113.454	105.07	109.308
18:57	ZZZZZZ	107.63	93.566	107.289	101.245	91.43	113.331	107.489	110.351
19:03	ZZZZZZ	104.691	93.546	107.065	96.842	91.036	111.991	102.563	110.223

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
19:09	ZZZZZZ	102.887	92.481	107.873	94.882	90.759	113.707	100.633	111.415
19:15	ZZZZZZ	109.021	93.557	106.838	101.521	91.43	113.449	107.899	110.528
19:21	ZZZZZZ	109.206	93.01	107.468	102.064	91.4	114.172	108.093	110.856
19:27	ZZZZZZ	109.378	93.416	109.09	101.427	91.706	114.988	107.982	111.971
19:33	ZZZZZZ	102.18	93.614	108.038	95.304	91.453	114.34	101	110.74
19:39	ZZZZZZ	109.798	93.297	107.349	101.711	91.7	114.051	107.538	112.238
19:45	MA51580-CCVA7	106.233	95.154	110.888	103.49	95.327	115.374	105.955	110.451
19:51	MA51580-CCB7	106.874	89.206	110.508	105.156	92.548	114.042	106.127	109.925
19:57	MP30300-MB1	105.829	95.303	101.276	104.777	98.003	104.571	105.82	100.412
20:03	MP30300-B1	105.727	94.927	108.185	103.101	96.23	111.864	103.93	108.547
20:09	MP30300-S1	No results reported for the elements associated with this internal standard.							
20:15	MP30300-S2	No results reported for the elements associated with this internal standard.							
20:21	JD36320-11	104.344	92.945	108.063	97.665	91.564	114.075	102.974	110.934
20:27	ZZZZZZ	109.653	93.996	109.702	103.533	92.618	116.416	109.243	111.995
20:33	ZZZZZZ	108.729	92.344	107.855	101.335	90.551	114.183	108.046	111.897
20:39	ZZZZZZ	109.215	92.919	108.579	101.47	90.659	114.583	108.243	113.154
20:45	ZZZZZZ	109.528	92.624	108.835	102.041	91.49	115.156	107.754	112.043
20:51	ZZZZZZ	109.797	92.932	109.513	102.737	91.254	115.853	108.064	111.711
20:57	MA51580-CCVA8	99.725	93.6	110.639	96.556	94.581	113.747	98.85	110.932
21:03	MA51580-CCB8	106.048	96.35	110.588	105.728	99.981	113.572	106.135	109.898
21:09	ZZZZZZ	107.789	92.237	105.668	100.673	90.553	112.686	106.703	111.119
21:15	ZZZZZZ	107.646	92.836	106.889	100.803	91	112.997	107.358	110.669
21:21	ZZZZZZ	104.415	94.797	112.234	102.76	97.938	114.892	103.68	111.787
21:27	ZZZZZZ	107.494	96.156	110.986	105.846	99.189	114.614	105.684	110.129
21:33	MP30266-B1	103.986	95.574	109.561	101.071	96.805	112.644	102.864	108.551
21:39	MP30266-S1	103.802	93.133	101.852	96.892	90.258	108.428	101.635	106.913
21:45	MP30266-S2	105.138	93.198	103.096	98.79	90.448	110.33	103.209	108.222
21:51	JD36224-3	100.509	92.309	103.49	95.623	91.136	111.271	99.962	108.284
21:57	ZZZZZZ	103.438	90.225	100.834	96.05	86.571	107.813	101.269	108.146
22:03	MP30266-MB1	105.404	93.739	109.891	104.037	96.737	112.591	104.144	109.832
22:09	MA51580-CCVA9	104.507	92.474	106.742	101.204	93.257	110.449	102.282	108.581
22:15	MA51580-CCB9	104.292	93.307	108.516	103.004	95.691	111.874	103.494	108.895
22:21	ZZZZZZ	98.099	89.534	98.191	91.013	85.869	106.532	96.772	106.938

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
22:27	ZZZZZZ	103.194	92.278	104.277	98.718	91.032	111.524	102.822	109.434
22:33	ZZZZZZ	102.035	92.102	103.718	98.851	91.798	111.067	102.067	108.879
22:39	ZZZZZZ	101.754	83.418	99.491	94.52	79.865	108.019	100.835	108.061
22:45	ZZZZZZ	108.707	97.102	111.339	106.769	99.757	115.263	108.321	111.663
22:51	ZZZZZZ	106.845	95.515	110.837	106.224	97.921	114.026	105.763	111.973
22:57	MA51580-CCVA10	104.695	94.114	106.882	100.676	94.062	112.143	103.031	109.304
23:03	MA51580-CCB10	105.037	93.621	109.411	103.285	96.892	113.269	104.057	109.931
23:09	MP30244-MB1	101.564	111.837	99.898	99.273	95.867	102.732	98.203	100.845
23:15	ZZZZZZ	102.596	103.34	105.402	100.064	94.212	109.491	100.686	109.216
23:21	JD36168-2	100.429	98.401	91.561	97.014	92.161	97.823	99.089	97.028
23:27	JD36168-3	104.601	98.843	100.055	99.61	90.712	107.757	102.468	106.642
23:33	JD36168-4	98.787	100.396	99.741	97.661	93.241	105.44	98.338	105.062
23:39	JD36168-5	97.993	97.116	95.641	93.283	89.535	104.092	97.785	104.483
23:45	JD36168-6	95.276	96.575	101.009	92.642	92.812	107.371	95.244	106.497
23:51	JD36168-7	96.671	97.33	98.378	92.995	92.454	105.235	95.099	105.243
23:57	JD36168-8	101.771	91.136	100.762	97.069	85.436	106.803	99.473	107.052
00:03	JD36168-5F	99.533	96.124	89.888	93.28	87.353	96.988	98.025	98.109
00:09	MA51580-CCVA11	101.621	93.579	106.32	98.003	93.606	111.128	99.342	110.042
00:15	MA51580-CCB11	105.176	94.038	107.942	103.549	96.443	111.912	104.215	110.311
00:21	JD36168-6F	100.117	111.415	98.372	95.909	91.957	105.405	98.293	103.983
00:27	JD36168-11F	97.991	97.876	95.796	91.303	86.618	104.598	95.317	105.384
00:33	MA51580-CCVA12	103.586	94.154	107.926	99.601	94.203	113.58	101.454	110.967
00:39	MA51580-CCB12	106.09	94.679	109.907	102.893	97.088	114.069	104.108	111.387
00:45	ZZZZZZ	103.856	93.91	109.415	102.426	96.657	112.056	103.634	110.694
00:51	ZZZZZZ	103.486	93.745	107.9	102.265	95.707	110.642	103.14	109.719
00:57	ZZZZZZ	103.908	93.333	107.454	102.153	95.722	111.301	103.389	109.381

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#9	Germanium (74-2)	60-125 %
Istd#10	Germanium (74-3)	60-125 %
Istd#11	Rhodium (103-1)	60-125 %
Istd#12	Rhodium (103-2)	60-125 %
Istd#13	Rhodium (103-3)	60-125 %
Istd#14	Indium (115-1)	60-125 %
Istd#15	Indium (115-2)	60-125 %
Istd#16	Terbium (159-1)	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
11:16	MA51580-STD1	100	100	100	100	100	100
11:22	MA51580-STD2	100	100	100	100	100	100
11:27	MA51580-STD3	100	100	100	100	100	100
11:33	MA51580-STD4	100.227	99.067	94.492	99.773	96.219	99.568
11:39	MA51580-STD5	95.404	98.976	99.202	94.554	99.519	95.33
11:45	MA51580-STD6	98.627	97.453	96.61	98.349	98.683	99.287
11:51	MA51580-STD7	97.642	96.972	95.812	97.557	99.686	98.563
11:57	MA51580-STD8	97.433	96.678	96.132	97.794	98.497	98.346
12:03	MA51580-STD9	97.874	97.81	94.12	96.68	96.796	97.924
12:09	MA51580-STD10	100.594	99.806	98.988	99.59	98.641	100.477
12:15	MA51580-STD11	103.746	100.819	101.656	103.412	99.264	101.218
12:20	MA51580-STD12	106.421	102.214	103.021	105.351	99.125	101.834
12:52	MA51580-STD13	100	100	100	100	100	100
12:58	ZZZZZZ	101.013	98.421	99.546	101.851	105.887	102.079
13:04	MA51580-ICVA1	104.718	87.372	103.626	104.844	107.361	102.232
13:09	MA51580-ICV1	104.292	100.37	106.832	103.953	111.904	104.672
13:35	MA51580-ICB1	99.753	99.67	98.937	99.748	99.767	99.749
13:41	MA51580-CCVA1	103.891	100.022	100.134	104.259	104.71	102.074
13:47	MA51580-CCB1	108.004	100.877	93.461	108.452	100.585	108.706
13:53	MA51580-CRI1	102.728	100.63	97.544	103.303	105.022	103.121
13:59	ZZZZZZ	108.374	99.667	104.541	107.967	96.142	102.943
14:05	ZZZZZZ	107.885	100.814	104.717	108.582	96.411	103.078
14:12	ZZZZZZ	97.671	99.803	101.733	97.937	108.331	98.463
14:18	MA51580-ICSA1	101.947	94.231	99.42	101.898	97.5	93.588
14:24	MA51580-ICSAB1	102.298	94.67	105.247	102.746	101.785	94.363
14:49	ZZZZZZ	105.169	102.993	107.604	105.171	107.703	105.135
14:55	MA51580-CCVA2	106.09	102.698	107.674	107.373	110.466	104.896
15:01	MA51580-CCB2	105.359	90.286	106.259	106.539	111.075	106.071
15:07	MP30243-MB1	105.248	103.401	104.733	105.682	109.775	105.626
15:13	ZZZZZZ	102.986	104.552	102.159	103.773	124.744	108.54
15:29	MP30162-S1	107.461	102.274	99.461	108.045	83.094	97.273
15:36	MP30162-S2	109.627	103.297	108.751	110.828	90.962	99.6
15:42	MP30162-S3	111.279	102.102	111.073	111.854	88.792	100.447

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
15:48	MP30163-S1	111.67	103.175	112.841	112.389	92.92	101.308
15:54	MP30163-S2	111.761	102.939	112.737	112.054	92.001	100.785
16:00	ZZZZZZ	106.71	101.097	111.684	107.138	99.326	98.27
16:06	ZZZZZZ	108.157	102.635	113.406	109.087	96.938	101.248
16:12	ZZZZZZ	109.736	101.784	110.983	110.247	101.775	104.298
16:18	MA51580-CCVA3	108.209	102.872	108.975	109.183	112.3	107.216
16:24	MA51580-CCB3	107.496	103.001	107.773	108.195	111.849	108.502
16:30	MA51580-CCVA4	106.106	101.981	105.909	106.643	109.709	104.638
16:36	MA51580-CCB4	105.654	102.348	104.044	105.94	108.82	106.347
16:42	ZZZZZZ	108.102	103.332	106.748	108.308	110.237	108.554
16:49	MP30299-MB1	104.908	103.249	106.726	105.774	109.418	105.891
16:55	MP30299-B1	106.736	103.397	107.299	107.448	111.18	107.469
17:01	MP30299-S1	No results reported for the elements associated with this internal standard.					
17:08	MP30299-S2	No results reported for the elements associated with this internal standard.					
17:14	JD36320-1	110.528	100.829	111.587	111.168	95.852	102.026
17:20	MP30299-S3	No results reported for the elements associated with this internal standard.					
17:26	JD36320-3	106.951	101.891	112.856	107.528	93.3	97.163
17:32	MA51580-CCVA5	103.368	102.211	108.013	104.493	111.472	102.777
17:38	MA51580-CCB5	106.326	102.39	108.616	106.128	112.635	106.503
17:44	ZZZZZZ	107.602	100.255	108.92	108.875	96.041	100.805
17:50	ZZZZZZ	101.768	100.478	109.58	102.359	95.879	94.444
17:56	ZZZZZZ	108.58	100.597	110.995	108.872	95.444	100.904
18:02	ZZZZZZ	108.296	100.373	110.907	109.779	98.213	102.361
18:08	ZZZZZZ	108.625	104.05	111.364	109.708	85.405	97.105
18:14	ZZZZZZ	105.074	101.114	111.964	106.531	97.335	97.055
18:20	ZZZZZZ	108.86	95.891	111.949	109.832	91.643	100.414
18:26	ZZZZZZ	108.358	99.941	110.743	109.69	96.251	101.133
18:32	ZZZZZZ	108.773	100.219	104.403	109.696	90.556	101.912
18:38	ZZZZZZ	113.275	100.263	113.712	114.18	100.392	107.243
18:44	MA51580-CCVA6	102.769	100.815	110.019	103.472	112.647	102.633
18:51	MA51580-CCB6	104.945	101.674	109.649	105.949	112.671	107.685
18:57	ZZZZZZ	107.838	99.718	111.131	108.646	99.8	102.214
19:03	ZZZZZZ	102.73	100.275	110.572	103.628	100.133	96.82

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
19:09	ZZZZZZ	101.183	99.172	111.145	101.937	100.452	93.234
19:15	ZZZZZZ	107.629	99.88	110.904	108.263	97.504	101.22
19:21	ZZZZZZ	107.952	100.009	111.097	109.026	99.083	101.72
19:27	ZZZZZZ	107.941	99.96	112.906	109.029	100.555	103.24
19:33	ZZZZZZ	101.372	100.642	111.99	101.761	105.773	97.439
19:39	ZZZZZZ	108.038	100.326	112.213	108.725	98.44	101.815
19:45	MA51580-CCVA7	106.782	100.987	111.609	107.817	113.218	106.576
19:51	MA51580-CCB7	105.743	96.024	109.76	106.633	112.995	107.271
19:57	MP30300-MB1	105.177	102.047	101.452	105.438	103.893	106.714
20:03	MP30300-B1	104.981	101.059	109.127	106.016	111.682	105.605
20:09	MP30300-S1	No results reported for the elements associated with this internal standard.					
20:15	MP30300-S2	No results reported for the elements associated with this internal standard.					
20:21	JD36320-11	102.535	99.427	112.143	103.63	93.893	96.258
20:27	ZZZZZZ	108.348	100.815	112.272	109.405	97.982	102.227
20:33	ZZZZZZ	107.853	99.692	112.716	108.947	95.649	101.01
20:39	ZZZZZZ	108.671	99.662	113.51	109.713	96.122	100.594
20:45	ZZZZZZ	107.988	99.634	112.359	108.55	103.71	103.757
20:51	ZZZZZZ	107.797	99.467	113.474	108.638	100.602	102.625
20:57	MA51580-CCVA8	99.372	100.339	111.743	99.757	112.971	99.026
21:03	MA51580-CCB8	105.639	104.048	109.67	106.636	113.178	106.998
21:09	ZZZZZZ	107.08	99.584	111.309	108.301	98.514	101.159
21:15	ZZZZZZ	106.679	100.293	111.676	108.375	98.798	101.671
21:21	ZZZZZZ	103.474	102.066	112.252	103.393	113.487	104.51
21:27	ZZZZZZ	105.251	103.058	111.301	105.831	115.89	107.565
21:33	MP30266-B1	103.766	102.387	109.358	104.583	112.856	104.043
21:39	MP30266-S1	103.603	99.834	107.778	105.022	105.869	100.889
21:45	MP30266-S2	105.024	99.763	108.974	106.065	108.991	102.82
21:51	JD36224-3	101.112	100.432	109.408	101.941	108.254	99.043
21:57	ZZZZZZ	103.959	97.548	109.027	105.46	102.609	97.173
22:03	MP30266-MB1	105.162	101.894	110.665	105.823	112.32	106.352
22:09	MA51580-CCVA9	103.92	100.444	108.6	105.527	108.975	104.027
22:15	MA51580-CCB9	103.626	100.631	109.75	104.627	111.675	105.624
22:21	ZZZZZZ	98.694	96.903	107.423	100.408	100.749	93.16

INTERNAL STANDARD SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51580
Parameters: Cr,Cu,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
22:27	ZZZZZZ	103.655	99.701	110.269	104.747	110.573	103.698
22:33	ZZZZZZ	103.4	100.689	109.171	104.153	111.037	103.134
22:39	ZZZZZZ	103.098	90.156	109.395	103.425	103.505	96.697
22:45	ZZZZZZ	107.173	104.494	112.646	108.65	118.423	110.253
22:51	ZZZZZZ	106.481	102.751	111.758	107.74	114.174	107.686
22:57	MA51580-CCVA10	104.661	100.696	109.703	105.881	110.897	104.547
23:03	MA51580-CCB10	103.921	102.073	110.415	104.593	112.227	105.739
23:09	MP30244-MB1	100.948	101.93	101.895	101.543	114.578	105.737
23:15	ZZZZZZ	102.441	101.338	110.216	103.686	110.156	102.971
23:21	JD36168-2	101.404	100.885	95.446	102.401	98.103	101.248
23:27	JD36168-3	106.249	100.374	107.189	106.982	107.765	104.842
23:33	JD36168-4	101.059	100.225	106.041	101.675	107.584	101.777
23:39	JD36168-5	100.448	100.8	105.688	101.908	102.49	96.516
23:45	JD36168-6	96.939	100.803	106.3	97.51	107.246	97.309
23:51	JD36168-7	97.249	100.678	106.348	98.524	106.355	97.761
23:57	JD36168-8	102.342	93.925	108.22	103.824	107.073	101.697
00:03	JD36168-5F	100.622	98.118	98.172	102.248	95.916	97.097
00:09	MA51580-CCVA11	100.87	100.218	111.081	102.434	110.499	100.145
00:15	MA51580-CCB11	104.082	101.383	111.264	104.911	111.488	105.436
00:21	JD36168-6F	99.923	100.439	105.134	101.402	107.165	102.352
00:27	JD36168-11F	99.114	98.906	106.113	99.792	99.878	93.714
00:33	MA51580-CCVA12	102.706	101.216	111.416	103.518	111.6	101.537
00:39	MA51580-CCB12	104.123	101.414	111.102	104.973	113.054	105.572
00:45	ZZZZZZ	102.968	101.85	111.193	104.264	111.555	104.646
00:51	ZZZZZZ	102.252	101.319	109.673	103.748	110.749	104.483
00:57	ZZZZZZ	103.685	100.458	109.616	103.92	110.802	104.623

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#17	Terbium (159-2)	60-125 %
Istd#18	Terbium (159-3)	60-125 %
Istd#19	Holmium (165-1)	60-125 %
Istd#20	Holmium (165-2)	60-125 %
Istd#21	Bismuth (209-1)	60-125 %
Istd#22	Bismuth (209-2)	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51580 Units: ug/l

Time: / Sample ID:			13:35 ICB1		13:47 CCB1		15:01 CCB2		16:24 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	anr							
Antimony	2.0	.085	anr							
Arsenic	0.50	.025	anr							
Barium	1.0	.009								
Beryllium	0.50	.005	anr							
Boron	25	.85								
Cadmium	0.50	.01	anr							
Calcium	250	3.6								
Chromium	1.0	.018	-0.0348	<1.0	-0.0276	<1.0	-0.0317	<1.0	0.00180	<1.0
Cobalt	0.50	.003								
Copper	2.0	.024	0.0295	<2.0	0.0185	<2.0	0.0208	<2.0	0.0258	<2.0
Iron	25	.24								
Lead	0.50	.008	anr							
Magnesium	250	.19								
Manganese	1.0	.012								
Molybdenum	1.0	.017								
Nickel	1.0	.017	anr							
Potassium	250	.78								
Selenium	0.50	.044								
Silver	0.50	.004	anr							
Sodium	250	1.5								
Strontium	5.0	.014								
Thallium	0.50	.002								
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013								
Zinc	5.0	.078	0.192	<5.0	0.119	<5.0	0.245	<5.0	0.236	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51580 Units: ug/l

Time: / Sample ID:			16:36 CCB4		17:38 CCB5		18:51 CCB6		19:51 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	anr							
Antimony	2.0	.085	anr							
Arsenic	0.50	.025	anr							
Barium	1.0	.009								
Beryllium	0.50	.005	anr							
Boron	25	.85								
Cadmium	0.50	.01	anr							
Calcium	250	3.6								
Chromium	1.0	.018	-0.0435	<1.0	-0.0188	<1.0	-0.0257	<1.0	-0.00880	<1.0
Cobalt	0.50	.003								
Copper	2.0	.024	0.00672	<2.0	0.0304	<2.0	0.00739	<2.0	0.0257	<2.0
Iron	25	.24								
Lead	0.50	.008	anr							
Magnesium	250	.19								
Manganese	1.0	.012								
Molybdenum	1.0	.017								
Nickel	1.0	.017	anr							
Potassium	250	.78								
Selenium	0.50	.044								
Silver	0.50	.004	anr							
Sodium	250	1.5								
Strontium	5.0	.014								
Thallium	0.50	.002								
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013								
Zinc	5.0	.078	0.129	<5.0	0.306	<5.0	0.271	<5.0	0.271	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51580 Units: ug/l

Time: / Sample ID:			21:03 CCB8		22:15 CCB9		23:03 CCB10		00:15 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	anr							
Antimony	2.0	.085	anr							
Arsenic	0.50	.025	anr							
Barium	1.0	.009								
Beryllium	0.50	.005	anr							
Boron	25	.85								
Cadmium	0.50	.01	anr							
Calcium	250	3.6								
Chromium	1.0	.018	-0.00698	<1.0	-0.0380	<1.0	-0.0428	<1.0	-0.0459	<1.0
Cobalt	0.50	.003								
Copper	2.0	.024	0.0116	<2.0	0.00240	<2.0	0.0169	<2.0	0.0199	<2.0
Iron	25	.24								
Lead	0.50	.008	anr							
Magnesium	250	.19								
Manganese	1.0	.012								
Molybdenum	1.0	.017								
Nickel	1.0	.017	anr							
Potassium	250	.78								
Selenium	0.50	.044								
Silver	0.50	.004	anr							
Sodium	250	1.5								
Strontium	5.0	.014								
Thallium	0.50	.002								
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013								
Zinc	5.0	.078	0.248	<5.0	0.153	<5.0	0.201	<5.0	0.130	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51580 Units: ug/l

Time:			00:39	
Sample ID:			CCB12	
Metal	RL	IDL	raw	final
Aluminum	25	.42	anr	
Antimony	2.0	.085	anr	
Arsenic	0.50	.025	anr	
Barium	1.0	.009		
Beryllium	0.50	.005	anr	
Boron	25	.85		
Cadmium	0.50	.01	anr	
Calcium	250	3.6		
Chromium	1.0	.018	-0.0425	<1.0
Cobalt	0.50	.003		
Copper	2.0	.024	0.0196	<2.0
Iron	25	.24		
Lead	0.50	.008	anr	
Magnesium	250	.19		
Manganese	1.0	.012		
Molybdenum	1.0	.017		
Nickel	1.0	.017	anr	
Potassium	250	.78		
Selenium	0.50	.044		
Silver	0.50	.004	anr	
Sodium	250	1.5		
Strontium	5.0	.014		
Thallium	0.50	.002		
Tin	5.0	.041		
Titanium	1.0	.11		
Vanadium	1.0	.013		
Zinc	5.0	.078	0.243	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51580 Units: ug/l

Time:		13:04			13:09			13:41	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium									
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium	60	56.3	93.8				50	48.8	97.6
Cobalt									
Copper	60	54.9	91.5				50	48.0	96.0
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	60	54.6	91.0				50	47.4	94.8

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51580 Units: ug/l

Time:		14:55			16:18			16:30	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium									
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium	50	50.6	101.2	50	49.1	98.2	50	48.6	97.2
Cobalt									
Copper	50	48.7	97.4	50	47.0	94.0	50	47.5	95.0
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	50	47.6	95.2	50	47.3	94.6	50	46.8	93.6

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51580 Units: ug/l

Time:		17:32			18:44			19:45	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium									
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium	50	50.0	100.0	50	51.2	102.4	50	48.1	96.2
Cobalt									
Copper	50	48.0	96.0	50	48.8	97.6	50	46.2	92.4
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	50	47.8	95.6	50	49.8	99.6	50	46.6	93.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51580 Units: ug/l

Time:		20:57			22:09			22:57	
Sample ID:	CCVA	CCVA8		CCVA	CCVA9		CCVA	CCVA10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium									
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium	50	53.3	106.6	50	48.4	96.8	50	48.2	96.4
Cobalt									
Copper	50	51.0	102.0	50	46.7	93.4	50	45.9	91.8
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Potassium									
Selenium									
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	50	51.6	103.2	50	47.3	94.6	50	47.0	94.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51580 Units: ug/l

Time:		00:09			00:33	
Sample ID:	CCVA	CCVA11		CCVA	CCVA12	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium						
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium						
Chromium	50	49.5	99.0	50	49.2	98.4
Cobalt						
Copper	50	47.6	95.2	50	46.9	93.8
Iron						
Lead	anr					
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Potassium						
Selenium						
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	50	48.3	96.6	50	47.9	95.8

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51580 Units: ug/l

Time:			13:53	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	anr	
Antimony	2.0	0.25	anr	
Arsenic	0.50	0.50	anr	
Barium	1.0	0.50		
Beryllium	0.50	0.25	anr	
Boron	25	2.5		
Cadmium	0.50	0.25	anr	
Calcium	250	125		
Chromium	1.0	2.0	0.927	92.7
Cobalt	0.50	0.25		
Copper	2.0	2.0	1.95	97.5
Iron	25	25		
Lead	0.50	0.25	anr	
Magnesium	250	125		
Manganese	1.0	0.25		
Molybdenum	1.0	0.50		
Nickel	1.0	2.0	anr	
Potassium	250	125		
Selenium	0.50	0.50		
Silver	0.50	1.0	anr	
Sodium	250	125		
Strontium	5.0	0.50		
Thallium	0.50	0.25		
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0		
Zinc	5.0	2.0	4.83	96.6

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA120921M1.CSV Date Analyzed: 12/09/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51580 Units: ug/l

Time:			14:18		14:24	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	94300	94.3	93000	93.0
Antimony			1.87		0.701	
Arsenic		20	0.108		19.8	99.0
Barium			0.188		0.213	
Beryllium			0.0000539		0.000541	
Boron		50	2.47		49.3	98.6
Cadmium		20	0.0702		19.8	99.0
Calcium	100000	100000	97200HH	97.2	98600HH	98.6
Chromium		20	0.893		20.5	102.5
Cobalt		20	0.103		18.5	92.5
Copper		20	1.30		17.4	87.0
Iron	100000	100000	93200HH	93.2	93000HH	93.0
Lead			0.0522		0.0506	
Magnesium	100000	100000	93000HH	93.0	92100HH	92.1
Manganese		20	0.419		19.2	96.0
Molybdenum	2000	2000	2340HH	117.0	2360HH	118.0
Nickel		20	-6.01*(a		10.4	52.0*(a)
Potassium	100000	100000	95000HH	95.0	94200HH	94.2
Selenium		20	0.357		20.9	104.5
Silver		20	0.0538		20.7	103.5
Sodium	100000	100000	94000HH	94.0	93500HH	93.5
Strontium	2000	2000	2260HH	113.0	2380HH	119.0
Thallium			0.0266		0.0118	
Tin	2000	2000	2070HH	103.5	2050HH	102.5
Titanium	2000	2000	1930HH	96.5	1910HH	95.5
Vanadium		20	0.0371		22.2	111.0
Zinc		20	0.766		17.0	85.0

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30215
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/07/21

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.034	.095	-0.019	<0.20

Associated samples MP30215: JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-2F, JD36168-3F, JD36168-4F, JD36168-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30215
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/07/21

Metal	JD36168-2 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	2.0	2	100.0	75-125

Associated samples MP30215: JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-2F, JD36168-3F, JD36168-4F, JD36168-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30215
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/07/21

Metal	JD36168-2 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	1.9	2	95.0	5.1	20

Associated samples MP30215: JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-2F, JD36168-3F, JD36168-4F, JD36168-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30215
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/07/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	2.0	2	100.0	80-120

Associated samples MP30215: JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-2F, JD36168-3F, JD36168-4F, JD36168-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30244
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/08/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.54	32	-0.34	<50
Antimony	4.0	.044	1.7	-0.000020	<4.0
Arsenic	1.0	.018	.39	-0.00053	<1.0
Barium	2.0	.018	.73	0.017	<2.0
Beryllium	1.0	.006	.15	-0.0013	<1.0
Boron	50	1.7	14		
Cadmium	1.0	.014	.17	0.00086	<1.0
Calcium	500	7.2	200	9.4	<500
Chromium	2.0	.03	.62	-0.054	<2.0
Cobalt	1.0	.004	.17	0.0014	<1.0
Copper	4.0	.048	1.9	0.57	<4.0
Iron	50	.47	19	-0.43	<50
Lead	1.0	.014	.52	-0.0066	<1.0
Magnesium	500	.38	46	1.8	<500
Manganese	2.0	.018	.63	0.014	<2.0
Molybdenum	2.0	.034	.45		
Nickel	2.0	.016	.95	0.014	<2.0
Potassium	500	1.6	68	1.1	<500
Selenium	1.0	.088	.55	0.017	<1.0
Silver	1.0	.004	.16	-0.00034	<1.0
Sodium	500	1.1	470	9.4	<500
Strontium	10	.028	2.4		
Thallium	1.0	.004	.17	0.0045	<1.0
Tin	10	.07	2.6		
Titanium	2.0	.09	1.6		
Vanadium	2.0	.026	1.8	0.17	<2.0
Zinc	10	.096	5.4	-0.076	<10

Associated samples MP30244: JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11, JD36168-2F, JD36168-3F, JD36168-4F, JD36168-5F, JD36168-6F, JD36168-7F, JD36168-8F, JD36168-9F, JD36168-10F, JD36168-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30244
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/08/21

Metal	JD36168-2 Original	MS	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	10.8	4180	4000	104.2	75-125
Antimony	0.28	76.1	80	94.8	75-125
Arsenic	26.4	96.1	80	91.3	75-125
Barium	3.2	81.1	80	98.0	75-125
Beryllium	0.027	75.0	80	93.7	75-125
Boron					
Cadmium	0.0	73.4	80	91.7	75-125
Calcium	50300	48500	4000	125.0	75-125
Chromium	2.6	79.9	80	96.9	75-125
Cobalt	0.24	81.5	80	101.6	75-125
Copper	1.5	77.2	80	84.0	75-125
Iron	96.8	4180	4000	102.1	75-125
Lead	0.94	82.9	80	102.5	75-125
Magnesium	15000	19600	4000	115.0	75-125
Manganese	11.1	88.4	80	96.6	75-125
Molybdenum					
Nickel	2.6	78.5	80	94.9	75-125
Potassium	1120	5170	4000	102.0	75-125
Selenium	0.0	357	400	89.3	75-125
Silver	0.055	86.7	80	108.3	75-125
Sodium	7260	11600	4000	108.5	75-125
Strontium					
Thallium	0.042	85.4	80	106.7	75-125
Tin					
Titanium					
Vanadium	3.9	85.4	80	101.3	75-125
Zinc	2.4	67.6	80	81.5	75-125

Associated samples MP30244: JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11, JD36168-2F, JD36168-3F, JD36168-4F, JD36168-5F, JD36168-6F, JD36168-7F, JD36168-8F, JD36168-9F, JD36168-10F, JD36168-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30244
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/08/21

Metal	JD36168-2 Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum	10.8	4130	4000	103.0	1.2	20
Antimony	0.28	75.0	80	93.4	1.5	20
Arsenic	26.4	94.8	80	89.6	1.4	20
Barium	3.2	79.7	80	96.3	1.7	20
Beryllium	0.027	72.6	80	90.7	3.3	20
Boron						
Cadmium	0.0	73.7	80	92.0	0.4	20
Calcium	50300	47200	4000	92.5	2.7	20
Chromium	2.6	78.9	80	95.6	1.3	20
Cobalt	0.24	80.5	80	100.3	1.2	20
Copper	1.5	74.9	80	81.1	3.0	20
Iron	96.8	4170	4000	101.8	0.2	20
Lead	0.94	82.1	80	101.5	1.0	20
Magnesium	15000	19100	4000	102.5	2.6	20
Manganese	11.1	87.2	80	95.1	1.4	20
Molybdenum						
Nickel	2.6	77.3	80	93.4	1.5	20
Potassium	1120	5090	4000	100.0	1.6	20
Selenium	0.0	353	400	88.3	1.1	20
Silver	0.055	86.3	80	107.8	0.5	20
Sodium	7260	11300	4000	101.0	2.6	20
Strontium						
Thallium	0.042	83.6	80	104.4	2.1	20
Tin						
Titanium						
Vanadium	3.9	84.6	80	100.3	0.9	20
Zinc	2.4	67.4	80	81.3	0.3	20

Associated samples MP30244: JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11, JD36168-2F, JD36168-3F, JD36168-4F, JD36168-5F, JD36168-6F, JD36168-7F, JD36168-8F, JD36168-9F, JD36168-10F, JD36168-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30244
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/08/21

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	4140	4000	103.5	80-120
Antimony	76.6	80	95.8	80-120
Arsenic	73.9	80	92.4	80-120
Barium	80.2	80	100.3	80-120
Beryllium	75.3	80	94.1	80-120
Boron				
Cadmium	75.0	80	93.8	80-120
Calcium	4190	4000	104.8	80-120
Chromium	77.7	80	97.1	80-120
Cobalt	83.5	80	104.4	80-120
Copper	77.8	80	97.3	80-120
Iron	4140	4000	103.5	80-120
Lead	82.1	80	102.6	80-120
Magnesium	4070	4000	101.8	80-120
Manganese	77.7	80	97.1	80-120
Molybdenum				
Nickel	79.3	80	99.1	80-120
Potassium	4050	4000	101.3	80-120
Selenium	367	400	91.8	80-120
Silver	88.6	80	110.8	80-120
Sodium	4110	4000	102.8	80-120
Strontium				
Thallium	84.3	80	105.4	80-120
Tin				
Titanium				
Vanadium	81.7	80	102.1	80-120
Zinc	76.8	80	96.0	80-120

Associated samples MP30244: JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11, JD36168-2F, JD36168-3F, JD36168-4F, JD36168-5F, JD36168-6F, JD36168-7F, JD36168-8F, JD36168-9F, JD36168-10F, JD36168-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30244
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/08/21

Metal	JD36168-2 Original	SDL 2:10	%DIF	QC Limits
Aluminum	10.8	15.3	41.3 (a)	0-10
Antimony	0.276	0.282	12.0 (a)	0-10
Arsenic	23.1	24.2	4.7	0-10
Barium	2.67	2.93	9.7	0-10
Beryllium	0.0332	0.0785	136.6(a)	0-10
Boron				
Cadmium	0.00	0.105	49.2 (a)	0-10
Calcium	50300	44300	1.7	0-10
Chromium	2.61	2.52	5.1	0-10
Cobalt	0.240	0.275	17.9*(b)	0-10
Copper	1.47	13.9	38.1*(b)	0-10
Iron	96.8	98.1	1.3	0-10
Lead	1.13	0.927	1.0	0-10
Magnesium	15000	15700	4.1	0-10
Manganese	12.1	11.0	0.5	0-10
Molybdenum				
Nickel	0.00	2.72	4.5	0-10
Potassium	1090	1100	1.1	0-10
Selenium	0.00	0.00	NC	0-10
Silver	0.0546	0.0971	170.6(a)	0-10
Sodium	7260	7470	2.9	0-10
Strontium				
Thallium	0.0416	0.0956	129.8(a)	0-10
Tin				
Titanium				
Vanadium	3.94	5.45	23.2*(b)	0-10
Zinc	2.36	1.98	16.4 (a)	0-10

Associated samples MP30244: JD36168-2, JD36168-3, JD36168-4, JD36168-5, JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11, JD36168-2F, JD36168-3F, JD36168-4F, JD36168-5F, JD36168-6F, JD36168-7F, JD36168-8F, JD36168-9F, JD36168-10F, JD36168-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30250
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/08/21

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.034	.095	0.061	<0.20

Associated samples MP30250: JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11, JD36168-6F, JD36168-7F, JD36168-8F, JD36168-9F, JD36168-10F, JD36168-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30250
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/08/21

Metal	JD36168-6 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.050	1.9	2	92.5	75-125

Associated samples MP30250: JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11, JD36168-6F, JD36168-7F, JD36168-8F, JD36168-9F, JD36168-10F, JD36168-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30250
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/08/21

Metal	JD36168-6 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.050	1.9	2	92.5	0.0	20

Associated samples MP30250: JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11, JD36168-6F, JD36168-7F, JD36168-8F, JD36168-9F, JD36168-10F, JD36168-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36168
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30250
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/08/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	1.9	2	95.0	80-120

Associated samples MP30250: JD36168-6, JD36168-7, JD36168-8, JD36168-9, JD36168-10, JD36168-11, JD36168-6F, JD36168-7F, JD36168-8F, JD36168-9F, JD36168-10F, JD36168-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Tetra Tech EC Inc.

Hoff VC- 336 Layfield Road, Perkiomenville, PA

SGS Job Number: JD36319

Sampling Dates: 12/06/21 - 12/07/21

Report to:

Tetra Tech EC Inc.
One Oxford Valley Suite 200
Langhorne, PA 19047
Jonathan.Dziekan@tetratech.com; Neb.Dedic@tetratech.com

ATTN: Jonathan Dziekan

Total number of pages in report: **671**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Mike Earp
General Manager

Client Service contact: Jadon Schiller 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Sample Summary

Tetra Tech EC Inc.

Job No: JD36319

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD36319-1	12/07/21	11:45	MEB	12/07/21	AQ	Trip Blank Water	TB-20211206
JD36319-2	12/06/21	12:30	MEB	12/07/21	AQ	Ground Water	HOFF MW-A
JD36319-2F	12/06/21	12:30	MEB	12/07/21	AQ	Groundwater Filtered	HOFF MW-A
JD36319-3	12/06/21	14:15	MEB	12/07/21	AQ	Ground Water	HOFF MW-10
JD36319-3F	12/06/21	14:15	MEB	12/07/21	AQ	Groundwater Filtered	HOFF MW-10
JD36319-4	12/07/21	10:25	MEB	12/07/21	AQ	Ground Water	HOFF MW-8DL
JD36319-4F	12/07/21	10:25	MEB	12/07/21	AQ	Groundwater Filtered	HOFF MW-8DL
JD36319-5	12/07/21	11:45	MEB	12/07/21	AQ	Ground Water	HOFF MW-8DU
JD36319-5F	12/07/21	11:45	MEB	12/07/21	AQ	Groundwater Filtered	HOFF MW-8DU

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Tetra Tech EC Inc.	**Job No**	JD36319
Site:	Hoff VC- 336 Layfield Road, Perkiomenville, PA	**Report Date**	1/5/2022 11:00:36 AM

On 12/07/2021, 4 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.7 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD36319 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V2V3444

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36437-1MS, JD36437-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 2-Hexanone are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 2-Hexanone are outside control limits. Outside control limits due to matrix interference.
- V2V3444-BS for trans-1,3-Dichloropropene: High percent recovery and no associated positive reported in the QC batch.
- JD36319-2 for trans-1,3-Dichloropropene: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD36319-1 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD36319-2 for Chloromethane: Associated CCV outside of control limits high, sample was ND.
- JD36319-2 for Acetone: Associated CCV outside of control limits high, sample was ND.
- JD36319-2 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD36319-1 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36319-1 for trans-1,3-Dichloropropene: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD36319-1 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD36319-1 for Chloromethane: Associated CCV outside of control limits high, sample was ND.
- JD36319-2 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- V2V3444-BS for 1,3-Dichloropropane: Outside in-house control limits, but within EPA 8260D CCV limits.
- JD36319-1 for Acetone, Chloromethane: Associated CCV outside of control limits high, sample was ND.
- JD36319-2 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- V2V3444-BS for 2-Hexanone: High percent recovery and no associated positive reported in the QC batch.

Matrix: AQ **Batch ID:** V2V3446

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36538-15MS, JD36538-15MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 4-Methyl-2-pentanone(MIBK) are outside control limits. Outside control limits due to matrix interference.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V2V3446

- Matrix Spike / Matrix Spike Duplicate Recovery(s) for 1,3-Dichloropropane, 2-Hexanone, trans-1,3-Dichloropropene are outside control limits. Outside control limits.
- JD36319-5: Dilution required due to high concentration of target compound.
- JD36319-4: Dilution required due to high concentration of target compound.
- JD36319-5 for Chloromethane, 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD36319-5 for 1,2,3-Trichlorobenzene: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36319-5 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND.This compound in blank spike is outside in house QC limits bias high.
- JD36319-4 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND.This compound in blank spike is outside in house QC limits bias high.
- JD36319-4 for 1,2,3-Trichlorobenzene: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36319-4 for Chloromethane, 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD36319-3 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- V2V3446-BS for 1,3-Dichloropropane: High percent recovery and no associated positive reported in the QC batch.
- JD36319-3 for Chloromethane: Associated CCV outside of control limits high, sample was ND.
- JD36319-3 for 1,2,3-Trichlorobenzene: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36319-3 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND.This compound in blank spike is outside in house QC limits bias high.
- JD36319-3 for 1,3-Dichloropropane: This compound in blank spike is outside in house QC limits bias high.
- JD36319-3 for trans-1,3-Dichloropropene: This compound in blank spike is outside in house QC limits bias high.
- V2V3446-BS for trans-1,3-Dichloropropene: High percent recovery and no associated positive reported in the QC batch.
- V2V3446-BS for 2-Hexanone: High percent recovery and no associated positive reported in the QC batch.
- JD36319-4, -5 for 1,3-Dichloropropane, trans-1,3-Dichloropropene:This compound in blank spike is outside in house QC limits bias high.

MS Volatiles By Method SW846 8260D BY SIM

Matrix: AQ **Batch ID:** V3A7263

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36187-2MS, JD36319-2DUP were used as the QC samples indicated.
- Sample(s) JD36319-2 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- JD36319-4 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36319-5 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36319-3 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36319-2 for 1,4-Dioxane-d8: Outside control limits due to matrix interference. Confirmed by sample duplicate.

Matrix: AQ **Batch ID:** V3A7265

- The data for SW846 8260D BY SIM meets quality control requirements.
- JD36319-4: Confirmation run.
- JD36319-5: Confirmation run.
- JD36319-3: Confirmation run.
- JD36319-3 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36319-5 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36319-4 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ **Batch ID:** OP37045

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP37045-MB1: Surrogate recovery indicates possible low bias. Since balnk spike and samples recoveries are within control limits, data are qualified and reported.
- OP37045-MB1 for 2,4,6-Tribromophenol: Outside of in house control limits.
- JD36319-3 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36319-2 for Pyridine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36319-3 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36319-3 for 4,6-Dinitro-o-cresol: Associated CCV outside of control limits high, sample was ND.
- JD36319-3 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36319-2 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36319-2 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36319-3 for Pyridine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36319-2 for 4,6-Dinitro-o-cresol: Associated CCV outside of control limits high, sample was ND.
- JD36319-2 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.

Matrix: AQ **Batch ID:** OP37046

- All samples were extracted within the recommended method holding time.
- Sample(s) JD36319-4, JD36319-5 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- JD36319-4 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36319-4 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.
- OP37046-BSD for Pyridine: Analytical precision exceeds in-house control limits.
- OP37046-BSD for Aniline: Analytical precision exceeds in-house control limits.
- OP37046-BS1 for Pyridine: Outside of in house control limits.
- OP37046-BS1 for Aniline: Outside of in house control limits.
- JD36319-5 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: AQ **Batch ID:** OP37045A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP37045A-MB1: Surrogate recovery indicates possible low bias. Since balnk spike and samples recoveries are within control limits, data are qualified and reported.
- JD36319-3 for Benzo(k)fluoranthene: Associated CCV outside of control limits high. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36319-2 for Benzo(k)fluoranthene: Associated CCV outside of control limits high, sample was ND.

Matrix: AQ **Batch ID:** OP37046A

- All samples were extracted within the recommended method holding time.
- Sample(s) JD36319-4 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.

GC Volatiles By Method RSK-175

Matrix: AQ **Batch ID:** GAA2460

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36243-11DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD36319-3: Diluted due to high concentration of target compound.

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: AQ **Batch ID:** OP37055

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36387-1MS, JD36387-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 4,4'-DDD are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- RPD(s) for MSD for Endrin aldehyde are outside control limits for sample OP37055-MSD. Analytical precision exceeds in-house control limits.
- JD36319-5: Had TBA cleanup.
- OP37055-BS1: Had TBA cleanup.
- OP37055-MB1: Had TBA cleanup.
- OP37055-BSD: Had TBA cleanup.
- JD36319-3: Confirmation run.
- JD36319-5 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- JD36319-3 for 4,4'-DDE: More than 40 % RPD for detected concentrations between the two GC columns.
- JD36319-4 for alpha-Chlordane: Associated CCV outside of control limits high, sample was ND.

Metals Analysis By Method SW846 6020B

Matrix: AQ **Batch ID:** MP30317

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36281-1MS, JD36281-1MSD, JD36281-1SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Zinc are outside control limits. Spike recovery indicates possible matrix interference.
- Matrix Spike Duplicate Recovery(s) for Zinc are outside control limits. Spike recovery indicates possible matrix interference.
- Matrix Spike Recovery(s) for Calcium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Beryllium, Cadmium, Chromium, Lead, Selenium, Silver, Thallium, Vanadium are outside control limits for sample MP30317-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP30317-SD1 for Calcium, Zinc: Serial dilution indicates possible matrix interference.

Metals Analysis By Method SW846 7470A

Matrix: AQ **Batch ID:** MP30337

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36387-1MS, JD36387-1MSD were used as the QC samples for metals.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** F:GP37253

- The data for EPA 300/SW846 9056A meets quality control requirements.
- JD36319-3 for Sulfate: Analysis performed at SGS Orlando, FL.
- JD36319-2 for Sulfate: Analysis performed at SGS Orlando, FL.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ **Job No:** JD36319

Site: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA **Report Date:** 12/29/2021 1:30:28

On 12/22/2021, 2 Sample(s), 0 Trip Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD36319 was Assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP37253

Sample(s) JD36624-6MSD, JD36624-6MS were used as the QC samples for Sulfate.

Matrix Spike Recovery(s) for Sulfate are outside control limits. Spike recovery indicates possible matrix interference.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

_____

Kim Benham, Client Services *(Signature on File)*

Summary of Hits

Job Number: JD36319
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/06/21 thru 12/07/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD36319-1	**TB-20211206**					
Bromodichloromethane		1.1	1.0	0.45	ug/l	SW846 8260D
Chloroform		4.6	1.0	0.50	ug/l	SW846 8260D
JD36319-2	**HOFF MW-A**					
1,1-Dichloroethane		2.6	1.0	0.57	ug/l	SW846 8260D
1,4-Dioxane		2.0 B	0.40	0.095	ug/l	SW846 8260D BY SIM
Naphthalene		0.135	0.074	0.037	ug/l	SW846 8270E BY SIM
Methane		30.2	0.11	0.080	ug/l	RSK-175
Aluminum		3710	50		ug/l	SW846 6020B
Arsenic		6.7	1.0		ug/l	SW846 6020B
Barium		42.1	2.0		ug/l	SW846 6020B
Calcium		66200	2500		ug/l	SW846 6020B
Chromium		24.2	2.0		ug/l	SW846 6020B
Cobalt		6.6	1.0		ug/l	SW846 6020B
Copper		19.5	4.0		ug/l	SW846 6020B
Iron		5500	50		ug/l	SW846 6020B
Lead		3.7	1.0		ug/l	SW846 6020B
Magnesium		24400	2500		ug/l	SW846 6020B
Manganese		3080	50		ug/l	SW846 6020B
Nickel		15.7	2.0		ug/l	SW846 6020B
Potassium		3680	500		ug/l	SW846 6020B
Sodium		23800	2500		ug/l	SW846 6020B
Vanadium		14.6	2.0		ug/l	SW846 6020B
Zinc		15.0	10		ug/l	SW846 6020B
Sulfate [a]		78.2	2.0		mg/l	EPA 300/SW846 9056A
JD36319-2F	**HOFF MW-A**					
Arsenic		5.3	1.0		ug/l	SW846 6020B
Barium		27.6	2.0		ug/l	SW846 6020B
Calcium		70300	2500		ug/l	SW846 6020B
Chromium		2.4	2.0		ug/l	SW846 6020B
Cobalt		3.5	1.0		ug/l	SW846 6020B
Iron		844	50		ug/l	SW846 6020B
Magnesium		24000	2500		ug/l	SW846 6020B
Manganese		3220	50		ug/l	SW846 6020B
Nickel		4.1	2.0		ug/l	SW846 6020B
Potassium		3170	500		ug/l	SW846 6020B
Sodium		25300	2500		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36319
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/06/21 thru 12/07/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD36319-3	**HOFF MW-10**					
Benzene		7.3	0.50	0.43	ug/l	SW846 8260D
Chlorobenzene		572	10	5.6	ug/l	SW846 8260D
1,2-Dichlorobenzene		3.1	1.0	0.53	ug/l	SW846 8260D
1,3-Dichlorobenzene		1.1	1.0	0.54	ug/l	SW846 8260D
1,4-Dichlorobenzene		15.0	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane		10.7	1.0	0.57	ug/l	SW846 8260D
cis-1,2-Dichloroethene		21.9	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene		0.78 J	1.0	0.54	ug/l	SW846 8260D
Tert Butyl Alcohol		9.7 J	10	5.8	ug/l	SW846 8260D
Vinyl chloride		5.3	1.0	0.79	ug/l	SW846 8260D
1,4-Dioxane		9.3	0.40	0.095	ug/l	SW846 8260D BY SIM
2-Chlorophenol		0.40 J	4.0	0.37	ug/l	SW846 8270E
2-Chloronaphthalene		0.49 J	2.0	0.43	ug/l	SW846 8270E
1,2,4,5-Tetrachlorobenzene		0.93 J	2.0	0.48	ug/l	SW846 8270E
1,2,4-Trichlorobenzene		0.53 J	1.0	0.36	ug/l	SW846 8270E
Acenaphthene		0.172	0.080	0.040	ug/l	SW846 8270E BY SIM
Acenaphthylene		0.0698 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Anthracene		0.335	0.080	0.040	ug/l	SW846 8270E BY SIM
Benzo(a)anthracene		0.0543	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(a)pyrene		0.0475	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene		0.0467 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Benzo(k)fluoranthene [b]		0.0646 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Chrysene		0.0521 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Fluoranthene		0.143	0.080	0.040	ug/l	SW846 8270E BY SIM
Fluorene		0.248	0.080	0.040	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene		0.0403 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Naphthalene		0.194	0.080	0.040	ug/l	SW846 8270E BY SIM
Phenanthrene		0.299	0.080	0.040	ug/l	SW846 8270E BY SIM
Pyrene		0.121	0.080	0.040	ug/l	SW846 8270E BY SIM
Methane [c]		1080	2.2	1.6	ug/l	RSK-175
4,4'-DDE [d]		0.016	0.0078	0.0040	ug/l	SW846 8081B
Aluminum		182	50		ug/l	SW846 6020B
Arsenic		1.1	1.0		ug/l	SW846 6020B
Barium		90.9	2.0		ug/l	SW846 6020B
Calcium		219000	13000		ug/l	SW846 6020B
Chromium		8.8	2.0		ug/l	SW846 6020B
Copper		7.9	4.0		ug/l	SW846 6020B
Iron		2300	50		ug/l	SW846 6020B
Magnesium		49800	2500		ug/l	SW846 6020B
Manganese		3640	50		ug/l	SW846 6020B
Nickel		7.3	2.0		ug/l	SW846 6020B
Potassium		6050	500		ug/l	SW846 6020B
Sodium		33900	2500		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36319
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/06/21 thru 12/07/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Vanadium		3.2	2.0		ug/l	SW846 6020B
Zinc		131	10		ug/l	SW846 6020B
Sulfate [a]		305	20		mg/l	EPA 300/SW846 9056A
JD36319-3F	**HOFF MW-10**					
Arsenic		1.2	1.0		ug/l	SW846 6020B
Barium		91.6	2.0		ug/l	SW846 6020B
Calcium		238000	13000		ug/l	SW846 6020B
Chromium		2.4	2.0		ug/l	SW846 6020B
Iron		2210	50		ug/l	SW846 6020B
Magnesium		52200	2500		ug/l	SW846 6020B
Manganese		3950	50		ug/l	SW846 6020B
Nickel		5.8	2.0		ug/l	SW846 6020B
Potassium		6040	500		ug/l	SW846 6020B
Sodium		36400	2500		ug/l	SW846 6020B
Vanadium		3.1	2.0		ug/l	SW846 6020B
JD36319-4	**HOFF MW-8DL**					
Benzene [e]		13.7	5.0	4.3	ug/l	SW846 8260D
Chlorobenzene		2660	50	28	ug/l	SW846 8260D
Chloroethane [e]		51.8	10	7.3	ug/l	SW846 8260D
Chloroform [e]		13.4	10	5.0	ug/l	SW846 8260D
1,2-Dichlorobenzene [e]		679	10	5.3	ug/l	SW846 8260D
1,3-Dichlorobenzene [e]		8.5 J	10	5.4	ug/l	SW846 8260D
1,4-Dichlorobenzene [e]		158	10	5.1	ug/l	SW846 8260D
1,1-Dichloroethane [e]		46.0	10	5.7	ug/l	SW846 8260D
trans-1,2-Dichloroethene [e]		6.3 J	10	5.4	ug/l	SW846 8260D
Methyl Tert Butyl Ether [e]		7.1 J	10	5.1	ug/l	SW846 8260D
Tert Butyl Alcohol [e]		126	100	58	ug/l	SW846 8260D
1,4-Dioxane		42.6	0.40	0.095	ug/l	SW846 8260D BY SIM
2-Chlorophenol		6.0	4.0	0.37	ug/l	SW846 8270E
2,4-Dichlorophenol		0.87 J	2.0	0.52	ug/l	SW846 8270E
Di-n-butyl phthalate		16.9 B	2.0	0.53	ug/l	SW846 8270E
bis(2-Ethylhexyl)phthalate		2.3	2.0	1.3	ug/l	SW846 8270E
1,2,4-Trichlorobenzene		1.2	1.0	0.36	ug/l	SW846 8270E
Anthracene		0.0423 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Benzo(a)anthracene		0.0737	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(a)pyrene		0.110	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(b)fluoranthene		0.0927	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene		0.0597 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Benzo(k)fluoranthene		0.0512 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Chrysene		0.0685 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Fluoranthene		0.191	0.080	0.040	ug/l	SW846 8270E BY SIM

Summary of Hits

Job Number: JD36319
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/06/21 thru 12/07/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Indeno(1,2,3-cd)pyrene		0.0535 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Naphthalene		3.61 B	0.080	0.040	ug/l	SW846 8270E BY SIM
Phenanthrene		0.0969 B	0.080	0.040	ug/l	SW846 8270E BY SIM
Aluminum		743	50		ug/l	SW846 6020B
Arsenic		3.6	1.0		ug/l	SW846 6020B
Barium		34.7	2.0		ug/l	SW846 6020B
Calcium		129000	6300		ug/l	SW846 6020B
Chromium		70.2	2.0		ug/l	SW846 6020B
Cobalt		4.3	1.0		ug/l	SW846 6020B
Copper		17.4	4.0		ug/l	SW846 6020B
Iron		13200	50		ug/l	SW846 6020B
Lead		5.4	1.0		ug/l	SW846 6020B
Magnesium		28400	2500		ug/l	SW846 6020B
Manganese		565	10		ug/l	SW846 6020B
Nickel		61.4	2.0		ug/l	SW846 6020B
Potassium		3780	500		ug/l	SW846 6020B
Sodium		54300	2500		ug/l	SW846 6020B
Vanadium		5.9	2.0		ug/l	SW846 6020B
Zinc		61.2	10		ug/l	SW846 6020B
JD36319-4F	**HOFF MW-8DL**					
Arsenic		2.6	1.0		ug/l	SW846 6020B
Barium		30.0	2.0		ug/l	SW846 6020B
Calcium		133000	5000		ug/l	SW846 6020B
Chromium		8.2	2.0		ug/l	SW846 6020B
Iron		4230	50		ug/l	SW846 6020B
Magnesium		33000	5000		ug/l	SW846 6020B
Manganese		641	20		ug/l	SW846 6020B
Nickel		17.5	2.0		ug/l	SW846 6020B
Potassium		3730	500		ug/l	SW846 6020B
Sodium		63600	5000		ug/l	SW846 6020B
Vanadium		2.8	2.0		ug/l	SW846 6020B
JD36319-5	**HOFF MW-8DU**					
Benzene [e]		21.0	5.0	4.3	ug/l	SW846 8260D
Chlorobenzene		3280	50	28	ug/l	SW846 8260D
Chloroform [e]		14.0	10	5.0	ug/l	SW846 8260D
1,2-Dichlorobenzene [e]		1010	10	5.3	ug/l	SW846 8260D
1,3-Dichlorobenzene [e]		15.3	10	5.4	ug/l	SW846 8260D
1,4-Dichlorobenzene [e]		222	10	5.1	ug/l	SW846 8260D
1,1-Dichloroethane [e]		98.3	10	5.7	ug/l	SW846 8260D
cis-1,2-Dichloroethene [e]		338	10	5.1	ug/l	SW846 8260D
trans-1,2-Dichloroethene [e]		11.9	10	5.4	ug/l	SW846 8260D

Summary of Hits

Job Number: JD36319
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/06/21 thru 12/07/21

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Methyl Tert Butyl Ether [e]	9.3 J	10	5.1	ug/l	SW846 8260D
Tert Butyl Alcohol [e]	148	100	58	ug/l	SW846 8260D
1,2,4-Trichlorobenzene [e]	7.2 J	10	5.0	ug/l	SW846 8260D
1,1,1-Trichloroethane [e]	24.7	10	5.4	ug/l	SW846 8260D
Trichloroethene [e]	61.1	10	5.3	ug/l	SW846 8260D
Vinyl chloride [e]	62.0	10	7.9	ug/l	SW846 8260D
1,4-Dioxane	88.7	0.40	0.095	ug/l	SW846 8260D BY SIM
2-Chlorophenol	19.8	4.0	0.37	ug/l	SW846 8270E
2,4-Dichlorophenol	3.8	2.0	0.52	ug/l	SW846 8270E
Di-n-butyl phthalate	6.8 B	2.0	0.53	ug/l	SW846 8270E
bis(2-Ethylhexyl)phthalate	7.0	2.0	1.3	ug/l	SW846 8270E
Naphthalene	18.3	1.0	0.44	ug/l	SW846 8270E
1,2,4-Trichlorobenzene	7.0	1.0	0.36	ug/l	SW846 8270E
Acenaphthene	0.0559 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Anthracene	0.0809	0.080	0.040	ug/l	SW846 8270E BY SIM
Benzo(a)anthracene	0.264	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(a)pyrene	0.618	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(b)fluoranthene	0.976	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene	0.489	0.080	0.040	ug/l	SW846 8270E BY SIM
Benzo(k)fluoranthene	0.284	0.080	0.040	ug/l	SW846 8270E BY SIM
Chrysene	0.284	0.080	0.040	ug/l	SW846 8270E BY SIM
Dibenzo(a,h)anthracene	0.127	0.080	0.040	ug/l	SW846 8270E BY SIM
Fluoranthene	0.652	0.080	0.040	ug/l	SW846 8270E BY SIM
Fluorene	0.0416 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene	0.440	0.080	0.040	ug/l	SW846 8270E BY SIM
Phenanthrene	0.863	0.080	0.040	ug/l	SW846 8270E BY SIM
Pyrene	0.482	0.080	0.040	ug/l	SW846 8270E BY SIM
Aluminum	3520	50		ug/l	SW846 6020B
Antimony	8.1	4.0		ug/l	SW846 6020B
Arsenic	15.9	1.0		ug/l	SW846 6020B
Barium	46.7	2.0		ug/l	SW846 6020B
Cadmium	6.7	1.0		ug/l	SW846 6020B
Calcium	146000	5000		ug/l	SW846 6020B
Chromium	155	2.0		ug/l	SW846 6020B
Cobalt	17.0	1.0		ug/l	SW846 6020B
Copper	129	4.0		ug/l	SW846 6020B
Iron	36100	500		ug/l	SW846 6020B
Lead	48.3	1.0		ug/l	SW846 6020B
Magnesium	49900	5000		ug/l	SW846 6020B
Manganese	281	20		ug/l	SW846 6020B
Nickel	100	2.0		ug/l	SW846 6020B
Potassium	3380	500		ug/l	SW846 6020B
Sodium	25900	5000		ug/l	SW846 6020B
Vanadium	24.0	2.0		ug/l	SW846 6020B
Zinc	490	100		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36319
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/06/21 thru 12/07/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD36319-5F	**HOFF MW-8DU**					
Arsenic		1.2	1.0		ug/l	SW846 6020B
Barium		5.5	2.0		ug/l	SW846 6020B
Calcium		155000	5000		ug/l	SW846 6020B
Chromium		8.3	2.0		ug/l	SW846 6020B
Iron		1980	50		ug/l	SW846 6020B
Magnesium		53700	5000		ug/l	SW846 6020B
Manganese		261	5.0		ug/l	SW846 6020B
Nickel		4.1	2.0		ug/l	SW846 6020B
Potassium		3020	500		ug/l	SW846 6020B
Sodium		28400	1300		ug/l	SW846 6020B
Vanadium		2.5	2.0		ug/l	SW846 6020B

(a) Analysis performed at SGS Orlando, FL.
(b) Associated CCV outside of control limits high. Estimated value, due to corresponding failure in the batch associated CCV.
(c) Diluted due to high concentration of target compound.
(d) More than 40 % RPD for detected concentrations between the two GC columns.
(e) Dilution required due to high concentration of target compound.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	TB-20211206		
Lab Sample ID:	JD36319-1	**Date Sampled:**	12/07/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/07/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167361.D	1	12/14/21 12:23	BK	n/a	n/a	V3A7263
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	103%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	TB-20211206		
Lab Sample ID:	JD36319-1	**Date Sampled:**	12/07/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V83568.D	1	12/13/21 19:04	NW	n/a	n/a	V2V3444
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	1.1	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	4.6	1.0	0.50	ug/l	
74-87-3	Chloromethane [a]	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB-20211206
Lab Sample ID: JD36319-1
Matrix: AQ - Trip Blank Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/07/21
Date Received: 12/07/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene [c]	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone [c]	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK [a]	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-20211206		
Lab Sample ID:	JD36319-1	**Date Sampled:**	12/07/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	112%		80-120%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	95%		82-114%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-A		
Lab Sample ID:	JD36319-2	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167363.D	1	12/14/21 13:20	BK	n/a	n/a	V3A7263
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	2.0	0.40	0.095	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	179% [a]		39-174%

(a) Outside control limits due to matrix interference. Confirmed by sample duplicate.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-A		
Lab Sample ID:	JD36319-2	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V83569.D	1	12/13/21 19:30	NW	n/a	n/a	V2V3444
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [a]	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	2.6	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-A		
Lab Sample ID:	JD36319-2	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene [c]	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone [c]	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK [a]	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-A		
Lab Sample ID:	JD36319-2	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%		80-120%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	93%		82-114%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-A		
Lab Sample ID:	JD36319-2	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80656.D	1	12/28/21 18:23	KLS	12/10/21 16:34	OP37045	E5P3819
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.7	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.7	0.49	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.48	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.7	0.62	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.7	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.7	0.42	ug/l	
534-52-1	4,6-Dinitro-o-cresol [a]	ND	3.7	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.43	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.7	0.37	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.4	0.42	ug/l	
87-86-5	Pentachlorophenol	ND	3.7	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.7	0.59	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.7	0.45	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.7	0.55	ug/l	
98-86-2	Acetophenone	ND	1.9	0.48	ug/l	
62-53-3	Aniline	ND	1.9	0.70	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.51	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.80	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.91	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.40	ug/l	
106-47-8	4-Chloroaniline	ND	3.7	0.49	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.42	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.55	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.93	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.93	0.52	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.0	ug/l	
132-64-9	Dibenzofuran	ND	3.7	0.67	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.9	0.49	ug/l	
117-84-0	Di-n-octyl phthalate	ND	1.9	1.5	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-A		
Lab Sample ID:	JD36319-2	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.9	0.54	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.51	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.93	0.50	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.93	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.4	0.91	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.51	ug/l	
78-59-1	Isophorone	ND	1.9	0.36	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.93	0.60	ug/l	
88-74-4	2-Nitroaniline	ND	3.7	0.57	ug/l	
99-09-2	3-Nitroaniline	ND	3.7	0.59	ug/l	
100-01-6	4-Nitroaniline	ND	3.7	0.69	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine [b]	ND	1.9	0.29	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.60	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.7	0.39	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.7		ug/l	
110-86-1	Pyridine [b]	ND	1.9	0.29	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.45	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.93	0.33	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	32%		10-73%
4165-62-2	Phenol-d5	20%		10-64%
118-79-6	2,4,6-Tribromophenol	86%		31-130%
4165-60-0	Nitrobenzene-d5	67%		28-126%
321-60-8	2-Fluorobiphenyl	76%		26-114%
1718-51-0	Terphenyl-d14	75%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-A		
Lab Sample ID:	JD36319-2	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50039.D	1	12/12/21 17:29	KLS	12/10/21 16:34	OP37045A	E4P2620
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.074	0.037	ug/l	
208-96-8	Acenaphthylene	ND	0.074	0.037	ug/l	
120-12-7	Anthracene	ND	0.074	0.037	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.037	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.037	0.022	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.037	0.022	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.074	0.037	ug/l	
207-08-9	Benzo(k)fluoranthene [a]	ND	0.074	0.037	ug/l	
218-01-9	Chrysene	ND	0.074	0.037	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.074	0.037	ug/l	
206-44-0	Fluoranthene	ND	0.074	0.037	ug/l	
86-73-7	Fluorene	ND	0.074	0.037	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.074	0.037	ug/l	
91-20-3	Naphthalene	0.135	0.074	0.037	ug/l	
85-01-8	Phenanthrene	ND	0.074	0.037	ug/l	
129-00-0	Pyrene	ND	0.074	0.037	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	109%		29-124%
321-60-8	2-Fluorobiphenyl	93%		23-122%
1718-51-0	Terphenyl-d14	87%		22-130%

(a) Associated CCV outside of control limits high, sample was ND.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-A		
Lab Sample ID:	JD36319-2	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA92400.D	1	12/10/21 12:26	WC	n/a	n/a	GAA2460
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	30.2	0.11	0.080	ug/l	
74-84-0	Ethane	ND	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-A		
Lab Sample ID:	JD36319-2	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81168.D	1	12/14/21 07:27	CP	12/10/21 16:40	OP37055	G6G2870
Run #2							

	Initial Volume	Final Volume
Run #1	255 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0078	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0078	0.0041	ug/l	
319-85-7	beta-BHC	ND	0.0078	0.0063	ug/l	
319-86-8	delta-BHC	ND	0.0078	0.0052	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0078	0.0047	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0078	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0078	0.0033	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0078	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0078	0.0060	ug/l	
72-54-8	4,4'-DDD	ND	0.0078	0.0045	ug/l	
72-55-9	4,4'-DDE	ND	0.0078	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0078	0.0054	ug/l	
72-20-8	Endrin	ND	0.0078	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0078	0.0043	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0078	0.0053	ug/l	
53494-70-5	Endrin ketone	ND	0.0078	0.0049	ug/l	
959-98-8	Endosulfan-I	ND	0.0078	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0078	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0078	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0078	0.0047	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0053	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	119%		10-190%
877-09-8	Tetrachloro-m-xylene	108%		10-190%
2051-24-3	Decachlorobiphenyl	62%		10-156%
2051-24-3	Decachlorobiphenyl	58%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-A		
Lab Sample ID:	JD36319-2	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3710	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	6.7	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	42.1	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	66200	2500	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	24.2	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	6.6	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	19.5	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	5500	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	3.7	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	24400	2500	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	3080	50	ug/l	50	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/13/21	12/13/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	15.7	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	3680	500	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	23800	2500	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	14.6	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	15.0	10	ug/l	2	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51583
(2) Instrument QC Batch: MA51592
(3) Instrument QC Batch: MA51609
(4) Prep QC Batch: MP30317
(5) Prep QC Batch: MP30337

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-A		
Lab Sample ID:	JD36319-2	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	78.2	2.0	mg/l	1	12/27/21 16:15	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF MW-A
Lab Sample ID: JD36319-2F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/06/21
Date Received: 12/07/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	5.3	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	27.6	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	70300	2500	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	2.4	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	3.5	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	844	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	24000	2500	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	3220	50	ug/l	50	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/13/21	12/13/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	4.1	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	3170	500	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	25300	2500	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	< 2.0	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51583
(2) Instrument QC Batch: MA51592
(3) Instrument QC Batch: MA51609
(4) Prep QC Batch: MP30317
(5) Prep QC Batch: MP30337

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-10		
Lab Sample ID:	JD36319-3	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167364.D	1	12/14/21 13:49	BK	n/a	n/a	V3A7263
Run #2 [a]	3A167399.D	2.5	12/16/21 14:37	BK	n/a	n/a	V3A7265

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	9.3	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	265% [b]	199% [b]	39-174%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-10		
Lab Sample ID:	JD36319-3	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V83608.D	1	12/14/21 13:44	NW	n/a	n/a	V2V3446
Run #2	2V83570.D	10	12/13/21 19:55	NW	n/a	n/a	V2V3444

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	7.3	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	572 [a]	10	5.6	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [b]	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	3.1	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	1.1	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	15.0	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	10.7	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	21.9	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.78	1.0	0.54	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-10
Lab Sample ID: JD36319-3
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/06/21
Date Received: 12/07/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane [c]	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene [c]	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone [d]	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK [b]	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	9.7	10	5.8	ug/l	J
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene [e]	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	5.3	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%	96%	80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-10		
Lab Sample ID:	JD36319-3	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	108%	108%	80-120%
2037-26-5	Toluene-D8	104%	103%	80-120%
460-00-4	4-Bromofluorobenzene	94%	96%	82-114%

(a) Result is from Run# 2
(b) Associated CCV outside of control limits high, sample was ND.
(c) This compound in blank spike is outside in house QC limits bias high.
(d) Associated CCV outside of control limits high, sample was ND.This compound in blank spike is outside in house QC limits bias high.
(e) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-10		
Lab Sample ID:	JD36319-3	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80657.D	1	12/28/21 18:50	KLS	12/10/21 16:34	OP37045	E5P3819
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	0.40	4.0	0.37	ug/l	J
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol [a]	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol [a]	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	0.49	2.0	0.43	ug/l	J
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.53	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-10		
Lab Sample ID:	JD36319-3	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine [b]	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine [b]	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	0.93	2.0	0.48	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	0.53	1.0	0.36	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	35%		10-73%
4165-62-2	Phenol-d5	22%		10-64%
118-79-6	2,4,6-Tribromophenol	90%		31-130%
4165-60-0	Nitrobenzene-d5	69%		28-126%
321-60-8	2-Fluorobiphenyl	73%		26-114%
1718-51-0	Terphenyl-d14	62%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-10		
Lab Sample ID:	JD36319-3	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50040.D	1	12/12/21 17:52	KLS	12/10/21 16:34	OP37045A	E4P2620
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.172	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	0.0698	0.080	0.040	ug/l	J
120-12-7	Anthracene	0.335	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	0.0543	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	0.0475	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.0467	0.080	0.040	ug/l	J
207-08-9	Benzo(k)fluoranthene [a]	0.0646	0.080	0.040	ug/l	J
218-01-9	Chrysene	0.0521	0.080	0.040	ug/l	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	0.143	0.080	0.040	ug/l	
86-73-7	Fluorene	0.248	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.0403	0.080	0.040	ug/l	J
91-20-3	Naphthalene	0.194	0.080	0.040	ug/l	
85-01-8	Phenanthrene	0.299	0.080	0.040	ug/l	
129-00-0	Pyrene	0.121	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	110%		29-124%
321-60-8	2-Fluorobiphenyl	69%		23-122%
1718-51-0	Terphenyl-d14	85%		22-130%

(a) Associated CCV outside of control limits high. Estimated value, due to corresponding failure in the batch associated CCV.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-10		
Lab Sample ID:	JD36319-3	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92401.D	1	12/10/21 12:42	WC	n/a	n/a	GAA2460
Run #2 [a]	AA92402.D	20	12/10/21 12:58	WC	n/a	n/a	GAA2460

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1080 [b]	2.2	1.6	ug/l	
74-84-0	Ethane	ND	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-10		
Lab Sample ID:	JD36319-3	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81169.D	1	12/14/21 07:45	CP	12/10/21 16:40	OP37055	G6G2870
Run #2 [a]	6G81236.D	5	12/16/21 04:01	CP	12/10/21 16:40	OP37055	G6G2872

	Initial Volume	Final Volume
Run #1	255 ml	2.0 ml
Run #2	255 ml	2.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0078	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0078	0.0041	ug/l	
319-85-7	beta-BHC	ND	0.0078	0.0063	ug/l	
319-86-8	delta-BHC	ND	0.0078	0.0052	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0078	0.0047	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0078	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0078	0.0033	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0078	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0078	0.0060	ug/l	
72-54-8	4,4'-DDD	ND	0.0078	0.0045	ug/l	
72-55-9	4,4'-DDE [b]	0.016	0.0078	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0078	0.0054	ug/l	
72-20-8	Endrin	ND	0.0078	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0078	0.0043	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0078	0.0053	ug/l	
53494-70-5	Endrin ketone	ND	0.0078	0.0049	ug/l	
959-98-8	Endosulfan-I	ND	0.0078	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0078	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0078	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0078	0.0047	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0053	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	55%	53%	10-190%
877-09-8	Tetrachloro-m-xylene	44%	46%	10-190%
2051-24-3	Decachlorobiphenyl	31%	39%	10-156%
2051-24-3	Decachlorobiphenyl	41%	46%	10-156%

(a) Confirmation run.
(b) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-10
Lab Sample ID: JD36319-3
Matrix: AQ - Ground Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/06/21
Date Received: 12/07/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	182	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	1.1	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	90.9	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	219000	13000	ug/l	50	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	8.8	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	7.9	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	2300	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	49800	2500	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	3640	50	ug/l	50	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/13/21	12/13/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	7.3	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	6050	500	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	33900	2500	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	3.2	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	131	10	ug/l	2	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51583
(2) Instrument QC Batch: MA51592
(3) Instrument QC Batch: MA51609
(4) Prep QC Batch: MP30317
(5) Prep QC Batch: MP30337

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-10		
Lab Sample ID:	JD36319-3	**Date Sampled:**	12/06/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	305	20	mg/l	10	12/27/21 16:35	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-10		
Lab Sample ID:	JD36319-3F	**Date Sampled:**	12/06/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/07/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	1.2	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	91.6	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	238000	13000	ug/l	50	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	2.4	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	2210	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	52200	2500	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	3950	50	ug/l	50	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/13/21	12/13/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	5.8	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	6040	500	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	36400	2500	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	3.1	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51583
(2) Instrument QC Batch: MA51592
(3) Instrument QC Batch: MA51609
(4) Prep QC Batch: MP30317
(5) Prep QC Batch: MP30337

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8DL		
Lab Sample ID:	JD36319-4	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167365.D	1	12/14/21 14:18	BK	n/a	n/a	V3A7263
Run #2 [a]	3A167400.D	5	12/16/21 15:06	BK	n/a	n/a	V3A7265

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	42.6	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	237% [b]	265% [b]	39-174%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8DL		
Lab Sample ID:	JD36319-4	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2V83606.D	10	12/14/21 12:53	NW	n/a	n/a	V2V3446
Run #2	2V83571.D	50	12/13/21 20:21	NW	n/a	n/a	V2V3444

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	31	ug/l	
71-43-2	Benzene	13.7	5.0	4.3	ug/l	
108-86-1	Bromobenzene	ND	10	5.5	ug/l	
74-97-5	Bromochloromethane	ND	10	4.8	ug/l	
75-27-4	Bromodichloromethane	ND	10	4.5	ug/l	
75-25-2	Bromoform	ND	10	6.3	ug/l	
74-83-9	Bromomethane	ND	20	16	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	69	ug/l	
104-51-8	n-Butylbenzene	ND	20	5.2	ug/l	
135-98-8	sec-Butylbenzene	ND	20	6.2	ug/l	
98-06-6	tert-Butylbenzene	ND	20	6.9	ug/l	
75-15-0	Carbon disulfide	ND	20	4.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.5	ug/l	
108-90-7	Chlorobenzene	2660 [b]	50	28	ug/l	
75-00-3	Chloroethane	51.8	10	7.3	ug/l	
67-66-3	Chloroform	13.4	10	5.0	ug/l	
74-87-3	Chloromethane [c]	ND	10	7.6	ug/l	
95-49-8	o-Chlorotoluene	ND	20	6.3	ug/l	
106-43-4	p-Chlorotoluene	ND	20	6.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	5.3	ug/l	
124-48-1	Dibromochloromethane	ND	10	5.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	4.8	ug/l	
95-50-1	1,2-Dichlorobenzene	679	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	8.5	10	5.4	ug/l	J
106-46-7	1,4-Dichlorobenzene	158	10	5.1	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	5.6	ug/l	
75-34-3	1,1-Dichloroethane	46.0	10	5.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	6.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	5.1	ug/l	
156-60-5	trans-1,2-Dichloroethene	6.3	10	5.4	ug/l	J
78-87-5	1,2-Dichloropropane	ND	10	5.1	ug/l	

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-8DL		
Lab Sample ID:	JD36319-4	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane [d]	ND	10	4.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	5.2	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	4.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	4.7	ug/l	
10061-02-6	trans-1,3-Dichloropropene [d]	ND	10	4.3	ug/l	
100-41-4	Ethylbenzene	ND	10	6.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	5.4	ug/l	
591-78-6	2-Hexanone [e]	ND	50	20	ug/l	
98-82-8	Isopropylbenzene	ND	10	6.5	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	6.6	ug/l	
1634-04-4	Methyl Tert Butyl Ether	7.1	10	5.1	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK [c]	ND	50	19	ug/l	
74-95-3	Methylene bromide	ND	10	4.8	ug/l	
75-09-2	Methylene chloride	ND	20	10	ug/l	
91-20-3	Naphthalene	ND	50	25	ug/l	
103-65-1	n-Propylbenzene	ND	20	6.0	ug/l	
100-42-5	Styrene	ND	10	4.9	ug/l	
75-65-0	Tert Butyl Alcohol	126	100	58	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	6.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	6.5	ug/l	
127-18-4	Tetrachloroethene	ND	10	9.0	ug/l	
109-99-9	Tetrahydrofuran	ND	100	32	ug/l	
108-88-3	Toluene	ND	10	5.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene [f]	ND	10	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.3	ug/l	
79-01-6	Trichloroethene	ND	10	5.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	4.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	7.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	10	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	10	ug/l	
108-05-4	Vinyl Acetate	ND	100	21	ug/l	
75-01-4	Vinyl chloride	ND	10	7.9	ug/l	
	m,p-Xylene	ND	10	7.8	ug/l	
95-47-6	o-Xylene	ND	10	5.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%	96%	80-120%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-8DL		
Lab Sample ID:	JD36319-4	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	105%	109%	80-120%
2037-26-5	Toluene-D8	106%	104%	80-120%
460-00-4	4-Bromofluorobenzene	95%	93%	82-114%

(a) Dilution required due to high concentration of target compound.
(b) Result is from Run# 2
(c) Associated CCV outside of control limits high, sample was ND.
(d) This compound in blank spike is outside in house QC limits bias high.
(e) Associated CCV outside of control limits high, sample was ND.This compound in blank spike is outside in house QC limits bias high.
(f) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8DL		
Lab Sample ID:	JD36319-4	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80457.D	1	12/17/21 07:38	CS	12/13/21 17:33	OP37046	E5P3808
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	6.0	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	0.87	2.0	0.52	ug/l	J
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol [a]	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	16.9	2.0	0.53	ug/l	B
117-84-0	Di-n-octyl phthalate [a]	ND	2.0	1.6	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-8DL		
Lab Sample ID:	JD36319-4	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	2.3	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.2	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	22%		10-73%
4165-62-2	Phenol-d5	18%		10-64%
118-79-6	2,4,6-Tribromophenol	91%		31-130%
4165-60-0	Nitrobenzene-d5	60%		28-126%
321-60-8	2-Fluorobiphenyl	56%		26-114%
1718-51-0	Terphenyl-d14	52%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8DL		
Lab Sample ID:	JD36319-4	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50135.D	1	12/15/21 22:54	KLS	12/13/21 17:33	OP37046A	E4P2625
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	0.0423	0.080	0.040	ug/l	J
56-55-3	Benzo(a)anthracene	0.0737	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	0.110	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	0.0927	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.0597	0.080	0.040	ug/l	J
207-08-9	Benzo(k)fluoranthene	0.0512	0.080	0.040	ug/l	J
218-01-9	Chrysene	0.0685	0.080	0.040	ug/l	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	0.191	0.080	0.040	ug/l	
86-73-7	Fluorene	ND	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.0535	0.080	0.040	ug/l	J
91-20-3	Naphthalene	3.61	0.080	0.040	ug/l	B
85-01-8	Phenanthrene	0.0969	0.080	0.040	ug/l	B
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		29-124%
321-60-8	2-Fluorobiphenyl	71%		23-122%
1718-51-0	Terphenyl-d14	55%		22-130%

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SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8DL		
Lab Sample ID:	JD36319-4	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81203.D	1	12/15/21 05:34	CP	12/10/21 16:40	OP37055	G6G2871
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane [a]	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	79%		10-190%
877-09-8	Tetrachloro-m-xylene	42%		10-190%
2051-24-3	Decachlorobiphenyl	42%		10-156%
2051-24-3	Decachlorobiphenyl	33%		10-156%

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Client Sample ID: HOFF MW-8DL
Lab Sample ID: JD36319-4
Matrix: AQ - Ground Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/07/21
Date Received: 12/07/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	743	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	3.6	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	34.7	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	129000	6300	ug/l	25	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	70.2	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	4.3	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	17.4	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	13200	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	5.4	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	28400	2500	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	565	10	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/13/21	12/13/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	61.4	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	3780	500	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	54300	2500	ug/l	10	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	5.9	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	61.2	10	ug/l	2	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51583
(2) Instrument QC Batch: MA51592
(3) Instrument QC Batch: MA51609
(4) Prep QC Batch: MP30317
(5) Prep QC Batch: MP30337

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-8DL		
Lab Sample ID:	JD36319-4F	**Date Sampled:**	12/07/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/07/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	2.6	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	30.0	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	133000	5000	ug/l	20	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	8.2	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	4230	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	33000	5000	ug/l	20	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	641	20	ug/l	20	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/13/21	12/13/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	17.5	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	3730	500	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	63600	5000	ug/l	20	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	2.8	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51583
(2) Instrument QC Batch: MA51592
(3) Instrument QC Batch: MA51609
(4) Prep QC Batch: MP30317
(5) Prep QC Batch: MP30337

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8DU		
Lab Sample ID:	JD36319-5	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167366.D	1	12/14/21 14:47	BK	n/a	n/a	V3A7263
Run #2 [a]	3A167401.D	10	12/16/21 15:35	BK	n/a	n/a	V3A7265

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	88.7	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	346% [b]	232% [b]	39-174%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8DU		
Lab Sample ID:	JD36319-5	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2V83607.D	10	12/14/21 13:19	NW	n/a	n/a	V2V3446
Run #2	2V83572.D	50	12/13/21 20:46	NW	n/a	n/a	V2V3444

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	31	ug/l	
71-43-2	Benzene	21.0	5.0	4.3	ug/l	
108-86-1	Bromobenzene	ND	10	5.5	ug/l	
74-97-5	Bromochloromethane	ND	10	4.8	ug/l	
75-27-4	Bromodichloromethane	ND	10	4.5	ug/l	
75-25-2	Bromoform	ND	10	6.3	ug/l	
74-83-9	Bromomethane	ND	20	16	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	69	ug/l	
104-51-8	n-Butylbenzene	ND	20	5.2	ug/l	
135-98-8	sec-Butylbenzene	ND	20	6.2	ug/l	
98-06-6	tert-Butylbenzene	ND	20	6.9	ug/l	
75-15-0	Carbon disulfide	ND	20	4.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.5	ug/l	
108-90-7	Chlorobenzene	3280 [b]	50	28	ug/l	
75-00-3	Chloroethane	ND	10	7.3	ug/l	
67-66-3	Chloroform	14.0	10	5.0	ug/l	
74-87-3	Chloromethane [c]	ND	10	7.6	ug/l	
95-49-8	o-Chlorotoluene	ND	20	6.3	ug/l	
106-43-4	p-Chlorotoluene	ND	20	6.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	5.3	ug/l	
124-48-1	Dibromochloromethane	ND	10	5.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	4.8	ug/l	
95-50-1	1,2-Dichlorobenzene	1010	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	15.3	10	5.4	ug/l	
106-46-7	1,4-Dichlorobenzene	222	10	5.1	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	5.6	ug/l	
75-34-3	1,1-Dichloroethane	98.3	10	5.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	6.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	338	10	5.1	ug/l	
156-60-5	trans-1,2-Dichloroethene	11.9	10	5.4	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.1	ug/l	

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Report of Analysis

Client Sample ID:	HOFF MW-8DU		
Lab Sample ID:	JD36319-5	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane [d]	ND	10	4.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	5.2	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	4.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	4.7	ug/l	
10061-02-6	trans-1,3-Dichloropropene [d]	ND	10	4.3	ug/l	
100-41-4	Ethylbenzene	ND	10	6.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	5.4	ug/l	
591-78-6	2-Hexanone [e]	ND	50	20	ug/l	
98-82-8	Isopropylbenzene	ND	10	6.5	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	6.6	ug/l	
1634-04-4	Methyl Tert Butyl Ether	9.3	10	5.1	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK [c]	ND	50	19	ug/l	
74-95-3	Methylene bromide	ND	10	4.8	ug/l	
75-09-2	Methylene chloride	ND	20	10	ug/l	
91-20-3	Naphthalene	ND	50	25	ug/l	
103-65-1	n-Propylbenzene	ND	20	6.0	ug/l	
100-42-5	Styrene	ND	10	4.9	ug/l	
75-65-0	Tert Butyl Alcohol	148	100	58	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	6.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	6.5	ug/l	
127-18-4	Tetrachloroethene	ND	10	9.0	ug/l	
109-99-9	Tetrahydrofuran	ND	100	32	ug/l	
108-88-3	Toluene	ND	10	5.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene [f]	ND	10	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	7.2	10	5.0	ug/l	J
71-55-6	1,1,1-Trichloroethane	24.7	10	5.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.3	ug/l	
79-01-6	Trichloroethene	61.1	10	5.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	4.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	7.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	10	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	10	ug/l	
108-05-4	Vinyl Acetate	ND	100	21	ug/l	
75-01-4	Vinyl chloride	62.0	10	7.9	ug/l	
	m,p-Xylene	ND	10	7.8	ug/l	
95-47-6	o-Xylene	ND	10	5.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%	95%	80-120%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-8DU		
Lab Sample ID:	JD36319-5	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%	107%	80-120%
2037-26-5	Toluene-D8	104%	105%	80-120%
460-00-4	4-Bromofluorobenzene	94%	95%	82-114%

(a) Dilution required due to high concentration of target compound.
(b) Result is from Run# 2
(c) Associated CCV outside of control limits high, sample was ND.
(d) This compound in blank spike is outside in house QC limits bias high.
(e) Associated CCV outside of control limits high, sample was ND.This compound in blank spike is outside in house QC limits bias high.
(f) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8DU		
Lab Sample ID:	JD36319-5	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80525.D	1	12/20/21 20:21	JY	12/13/21 17:33	OP37046	E5P3811
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	19.8	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	3.8	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol [a]	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	6.8	2.0	0.53	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-8DU		
Lab Sample ID:	JD36319-5	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	7.0	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
91-20-3	Naphthalene	18.3	1.0	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	7.0	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	20%		10-73%
4165-62-2	Phenol-d5	15%		10-64%
118-79-6	2,4,6-Tribromophenol	63%		31-130%
4165-60-0	Nitrobenzene-d5	60%		28-126%
321-60-8	2-Fluorobiphenyl	60%		26-114%
1718-51-0	Terphenyl-d14	48%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8DU		
Lab Sample ID:	JD36319-5	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50136.D	1	12/15/21 23:18	KLS	12/13/21 17:33	OP37046A	E4P2625
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.0559	0.080	0.040	ug/l	J
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	0.0809	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	0.264	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	0.618	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	0.976	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.489	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	0.284	0.080	0.040	ug/l	
218-01-9	Chrysene	0.284	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.127	0.080	0.040	ug/l	
206-44-0	Fluoranthene	0.652	0.080	0.040	ug/l	
86-73-7	Fluorene	0.0416	0.080	0.040	ug/l	J
193-39-5	Indeno(1,2,3-cd)pyrene	0.440	0.080	0.040	ug/l	
85-01-8	Phenanthrene	0.863	0.080	0.040	ug/l	
129-00-0	Pyrene	0.482	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	89%		29-124%
321-60-8	2-Fluorobiphenyl	69%		23-122%
1718-51-0	Terphenyl-d14	53%		22-130%

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N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8DU		
Lab Sample ID:	JD36319-5	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/07/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	6G81269.D	1	12/17/21 10:59	CP	12/10/21 16:40	OP37055	G6G2873
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone [b]	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		10-190%
877-09-8	Tetrachloro-m-xylene	59%		10-190%
2051-24-3	Decachlorobiphenyl	53%		10-156%
2051-24-3	Decachlorobiphenyl	25%		10-156%

(a) Had TBA cleanup.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-8DU
Lab Sample ID: JD36319-5
Matrix: AQ - Ground Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/07/21
Date Received: 12/07/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3520	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	8.1	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	15.9	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	46.7	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	6.7	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	146000	5000	ug/l	20	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	155	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	17.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	129	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	36100	500	ug/l	20	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Lead	48.3	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	49900	5000	ug/l	20	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	281	20	ug/l	20	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/13/21	12/13/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	100	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	3380	500	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	25900	5000	ug/l	20	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	24.0	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	490	100	ug/l	20	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51583
(2) Instrument QC Batch: MA51592
(3) Instrument QC Batch: MA51609
(4) Prep QC Batch: MP30317
(5) Prep QC Batch: MP30337

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF MW-8DU
Lab Sample ID: JD36319-5F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/07/21
Date Received: 12/07/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Antimony	< 4.0	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Arsenic	1.2	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Barium	5.5	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Beryllium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cadmium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Calcium	155000	5000	ug/l	20	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Chromium	8.3	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Cobalt	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Copper	< 4.0	4.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Iron	1980	50	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Lead	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Magnesium	53700	5000	ug/l	20	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Manganese	261	5.0	ug/l	5	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	12/13/21	12/13/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	4.1	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Potassium	3020	500	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Selenium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Silver	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Sodium	28400	1300	ug/l	5	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]
Thallium	< 1.0	1.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Vanadium	2.5	2.0	ug/l	2	12/11/21	12/12/21	NV	SW846 6020B [2]	SW846 3010A [4]
Zinc	< 10	10	ug/l	2	12/11/21	12/15/21	NV	SW846 6020B [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA51583
(2) Instrument QC Batch: MA51592
(3) Instrument QC Batch: MA51609
(4) Prep QC Batch: MP30317
(5) Prep QC Batch: MP30337

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

Parameter Certification Exceptions

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Chlordane (alpha and gamma)	57-74-9	**SW846 8081B**	AQ	SGS is not certified for this parameter.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

SGS

EHSA-QAC-0023-04-FORM-Standard COC

GW
TB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

Page __ of __

FED-EX Tracking #	Bottle Order Control # 35-112321-176
SGS Quote #	SGS Job # JD36319

Client / Reporting Information

Company Name: Tetra Tech Inc
Street Address:
City State Zip:
Project Contact E-mail: JONATHAN DZIEKAN
Phone #: 610 842 9756
Sampler(s) Name(s) Phone #: M. BLOMER N DEDIC

Project Information

Project Name: Hoff
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager: JONATHAN DZIEKAN

Billing Information (if different from Report to)
Company Name: TETRA TECH INC
Street Address:
City State Zip:
Attention:

Requested Analysis

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	Volatiles VOC 6052	1,4 Dioxane VOC 6052 Sim Prox	Semivolatile BLV8720 Sim Pak	Pesticides Pr 8081 Pest TCL	Metals Tal	Metals Tal Diss	Methane VG, KITS DG-MEE	Sulfate SO4				LAB USE ONLY
1	TB 20211206		12/6/2021	1050	MEB	G		TB	4	4								X	X										E68
2F	Hoff MWA	•	12/6/2021	1230	MEB	G		GW	17	10		2		5				X	X	X	X	X	X	X	X				A34
3F	Hoff MW-10	•	12/6/2021	1415	MEB	G		GW	16	7		2		5				X	X	X	X	X	X	X	X				C53
4F	Hoff MW-8DL	•	12/7/2021	1005	MEB	G		GW	12	6		2		4				X	X	X	X	X	X						V991
5F	Hoff MW-8DU	•	12/7/2021	1145	MEB	G		GW	12	6		2		4				X	X	X	X	X	X						

pH Check (Lab Use Only)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- ☐ 10 Business Days
- ☐ 5 Business Days
- ☐ 3 Business Days
- ☐ 2 Business Days*
- ☐ 1 Business Day*
- ☐ Other

Initial Assessment 3A-CK
Label Verification

All data available via Lablink
* Approval needed for 1-3 Business Day TAT

Deliverable

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ NJ Reduced (Level 3)
- ☐ Full Tier I (Level 4)
- ☐ Commercial "C"
- ☐ NJ DKQP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ MA MCP Criteria____
- ☐ CT RCP Criteria____
- ☐ State Forms
- ☐ EDD Format ____
- ☐ DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

• 2x250 mL WI, 2x250mL PEST

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 Markus Blomer	12/7/21 1134	1 Mike Gonnella	2 Mike Gonnella	12/7/21 1730	2 [signature]
3		3	4		4
5		5	Custody Seal # ☐ Intact ☐ Not intact ☐ Absent	Therm ID: See Sample Receipt Summary ☐ On Ice ☐	Cooler Temp. °C 3.1 C.P

5.2
5

JD36319: Chain of Custody
Page 1 of 3

SGS Sample Receipt Summary

Job Number: JD36319 **Client:** TETRA TECH EC INC. **Project:** HOFF VC- 336 LAYFIELD ROAD, PERKIOMENVI

Date / Time Received: 12/7/2021 5:30:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (1.7);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

Job Change Order: JD36319

Requested Date: 12/30/2021 **Received Date:** 12/7/2021

Account Name: Tetra Tech EC Inc. **Due Date:** 12/30/2021

Project Description: Hoff VC- 336 Layfield Road, Perkiomenville, PA **Deliverable:** REDT2

C/O Initiated By: JADONS **PM:** JBS **TAT (Days):** 7

==========

Sample #: JD36319-2 thru 5

Dept:

TAT: 7

Change:
Please cancel ABLV8270SL and add ABLV8270SL1 on the original jol the original due date.

==========

Above Changes Per: Jadon Schiller **Date/Time:** 12/30/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

JD36319: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36319

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36319-1 Collected: 07-DEC-21 11:45 By: MEB Received: 07-DEC-21 By: JK TB-20211206						
JD36319-1	SW846 8260D	13-DEC-21 19:04	NW			V8260SL
JD36319-1	SW846 8260D BY SIM	14-DEC-21 12:23	BK			V8260SIMDIOX
JD36319-2 Collected: 06-DEC-21 12:30 By: MEB Received: 07-DEC-21 By: JK HOFF MW-A						
JD36319-2	RSK-175	10-DEC-21 12:26	WC			VRSK175DGMEE
JD36319-2	SW846 8270E BY SIM	12-DEC-21 17:29	KLS	10-DEC-21	JL	BLV8270SIMPAH
JD36319-2	SW846 6020B	12-DEC-21 22:36	NV	11-DEC-21	BR	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS
JD36319-2	SW846 7470A	13-DEC-21 14:12	SB	13-DEC-21	SB	HG
JD36319-2	SW846 8260D	13-DEC-21 19:30	NW			V8260SL
JD36319-2	SW846 8081B	14-DEC-21 07:27	CP	10-DEC-21	JL	P8081PESTTCL
JD36319-2	SW846 8260D BY SIM	14-DEC-21 13:20	BK			V8260SIMDIOX
JD36319-2	SW846 6020B	15-DEC-21 19:01	NV	11-DEC-21	BR	ZNMS
JD36319-2	SW846 6020B	15-DEC-21 19:07	NV	11-DEC-21	BR	CAMS, MGMS, NAMS
JD36319-2	SW846 6020B	15-DEC-21 19:14	NV	11-DEC-21	BR	MNMS
JD36319-2	EPA 300/SW846 9056A	27-DEC-21 16:15	AFL	27-DEC-21	AFL	SO4
JD36319-2	SW846 8270E	28-DEC-21 18:23	KLS	10-DEC-21	JL	ABLV8270SL
JD36319-3 Collected: 06-DEC-21 14:15 By: MEB Received: 07-DEC-21 By: JK HOFF MW-10						
JD36319-3	RSK-175	10-DEC-21 12:42	WC			VRSK175DGMEE
JD36319-3	RSK-175	10-DEC-21 12:58	WC			VRSK175DGMEE
JD36319-3	SW846 8270E BY SIM	12-DEC-21 17:52	KLS	10-DEC-21	JL	BLV8270SIMPAH
JD36319-3	SW846 6020B	12-DEC-21 22:39	NV	11-DEC-21	BR	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS
JD36319-3	SW846 7470A	13-DEC-21 14:14	SB	13-DEC-21	SB	HG
JD36319-3	SW846 8260D	13-DEC-21 19:55	NW			V8260SL
JD36319-3	SW846 8081B	14-DEC-21 07:45	CP	10-DEC-21	JL	P8081PESTTCL
JD36319-3	SW846 8260D	14-DEC-21 13:44	NW			V8260SL
JD36319-3	SW846 8260D BY SIM	14-DEC-21 13:49	BK			V8260SIMDIOX

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36319

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36319-3	SW846 6020B	15-DEC-21 19:20	NV	11-DEC-21	BR	ZNMS
JD36319-3	SW846 6020B	15-DEC-21 19:26	NV	11-DEC-21	BR	MGMS,NAMS
JD36319-3	SW846 6020B	15-DEC-21 19:32	NV	11-DEC-21	BR	CAMS,MNMS
JD36319-3	SW846 8081B	16-DEC-21 04:01	CP	10-DEC-21	JL	P8081PESTTCL
JD36319-3	SW846 8260D BY SIM	16-DEC-21 14:37	BK			
JD36319-3	EPA 300/SW846 9056A	27-DEC-21 16:35	AFL	27-DEC-21	AFL	SO4
JD36319-3	SW846 8270E	28-DEC-21 18:50	KLS	10-DEC-21	JL	ABLV8270SL
JD36319-4	Collected: 07-DEC-21 10:25 By: MEB		Received: 07-DEC-21 By: JK			
HOFF MW-8DL						
JD36319-4	SW846 6020B	12-DEC-21 22:42	NV	11-DEC-21	BR	AGMS,ALMS,ASMS,BAMS,BEMS,CDMS,COMS,CRMS,CUMS,FEMS,KMS,NIMS,PBMS,SBMS,SEMS,TLMS,VMS
JD36319-4	SW846 7470A	13-DEC-21 14:15	SB	13-DEC-21	SB	HG
JD36319-4	SW846 8260D	13-DEC-21 20:21	NW			V8260SL
JD36319-4	SW846 8260D	14-DEC-21 12:53	NW			V8260SL
JD36319-4	SW846 8260D BY SIM	14-DEC-21 14:18	BK			V8260SIMDIOX
JD36319-4	SW846 8081B	15-DEC-21 05:34	CP	10-DEC-21	JL	P8081PESTTCL
JD36319-4	SW846 6020B	15-DEC-21 19:50	NV	11-DEC-21	BR	ZNMS
JD36319-4	SW846 6020B	15-DEC-21 19:57	NV	11-DEC-21	BR	MGMS,MNMS,NAMS
JD36319-4	SW846 6020B	15-DEC-21 20:03	NV	11-DEC-21	BR	CAMS
JD36319-4	SW846 8270E BY SIM	15-DEC-21 22:54	KLS	13-DEC-21	JL	BLV8270SIMPAH
JD36319-4	SW846 8260D BY SIM	16-DEC-21 15:06	BK			
JD36319-4	SW846 8270E	17-DEC-21 07:38	CS	13-DEC-21	JL	ABLV8270SL
JD36319-5	Collected: 07-DEC-21 11:45 By: MEB		Received: 07-DEC-21 By: JK			
HOFF MW-8DU						
JD36319-5	SW846 6020B	12-DEC-21 22:45	NV	11-DEC-21	BR	AGMS,ALMS,ASMS,BAMS,BEMS,CDMS,COMS,CRMS,CUMS,KMS,NIMS,PBMS,SBMS,SEMS,TLMS,VMS
JD36319-5	SW846 7470A	13-DEC-21 14:17	SB	13-DEC-21	SB	HG
JD36319-5	SW846 8260D	13-DEC-21 20:46	NW			V8260SL
JD36319-5	SW846 8260D	14-DEC-21 13:19	NW			V8260SL
JD36319-5	SW846 8260D BY SIM	14-DEC-21 14:47	BK			V8260SIMDIOX
JD36319-5	SW846 6020B	15-DEC-21 20:15	NV	11-DEC-21	BR	CAMS,FEMS,MGMS,MNMS,NAMS,ZNMS

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36319

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36319-5	SW846 8270E BY SIM	15-DEC-21 23:18	KLS	13-DEC-21	JL	BLV8270SIMPAH
JD36319-5	SW846 8260D BY SIM	16-DEC-21 15:35	BK			
JD36319-5	SW846 8081B	17-DEC-21 10:59	CP	10-DEC-21	JL	P8081PESTTCL
JD36319-5	SW846 8270E	20-DEC-21 20:21	JY	13-DEC-21	JL	ABLV8270SL
JD36319-2F	Collected: 06-DEC-21 12:30 By: MEB			Received: 07-DEC-21	By:	JK
HOFF MW-A						
JD36319-2F	SW846 6020B	12-DEC-21 22:48	NV	11-DEC-21	BR	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS
JD36319-2F	SW846 7470A	13-DEC-21 14:18	SB	13-DEC-21	SB	HG
JD36319-2F	SW846 6020B	15-DEC-21 20:21	NV	11-DEC-21	BR	ZNMS
JD36319-2F	SW846 6020B	15-DEC-21 20:28	NV	11-DEC-21	BR	CAMS, MGMS, NAMS
JD36319-2F	SW846 6020B	15-DEC-21 20:34	NV	11-DEC-21	BR	MNMS
JD36319-3F	Collected: 06-DEC-21 14:15 By: MEB			Received: 07-DEC-21	By:	JK
HOFF MW-10						
JD36319-3F	SW846 6020B	12-DEC-21 22:51	NV	11-DEC-21	BR	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS
JD36319-3F	SW846 7470A	13-DEC-21 14:19	SB	13-DEC-21	SB	HG
JD36319-3F	SW846 6020B	15-DEC-21 20:40	NV	11-DEC-21	BR	ZNMS
JD36319-3F	SW846 6020B	15-DEC-21 20:46	NV	11-DEC-21	BR	MGMS, NAMS
JD36319-3F	SW846 6020B	15-DEC-21 21:04	NV	11-DEC-21	BR	CAMS, MNMS
JD36319-4F	Collected: 07-DEC-21 10:25 By: MEB			Received: 07-DEC-21	By:	JK
HOFF MW-8DL						
JD36319-4F	SW846 6020B	12-DEC-21 22:54	NV	11-DEC-21	BR	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS
JD36319-4F	SW846 7470A	13-DEC-21 14:21	SB	13-DEC-21	SB	HG
JD36319-4F	SW846 6020B	15-DEC-21 21:10	NV	11-DEC-21	BR	ZNMS
JD36319-4F	SW846 6020B	15-DEC-21 21:17	NV	11-DEC-21	BR	CAMS, MGMS, MNMS, NAMS

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36319

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36319-5F	Collected: 07-DEC-21 11:45 By: MEB		Received: 07-DEC-21 By: JK			
HOFF MW-8DU						
JD36319-5F	SW846 6020B	12-DEC-21 22:58	NV	11-DEC-21	BR	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS
JD36319-5F	SW846 7470A	13-DEC-21 14:26	SB	13-DEC-21	SB	HG
JD36319-5F	SW846 6020B	15-DEC-21 21:23	NV	11-DEC-21	BR	ZNMS
JD36319-5F	SW846 6020B	15-DEC-21 21:29	NV	11-DEC-21	BR	MNMS, NAMS
JD36319-5F	SW846 6020B	15-DEC-21 21:35	NV	11-DEC-21	BR	CAMS, MGMS

SGS Internal Chain of Custody

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/07/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36319-1.3	Secured Storage	Nicole Hornlien	12/13/21 17:47	Retrieve from Storage
JD36319-1.3	Nicole Hornlien	GCMS2V	12/13/21 17:47	Load on Instrument
JD36319-1.3	GCMS2V	Nicholas Weigand	12/16/21 11:38	Unload from Instrument
JD36319-1.3	Nicholas Weigand	Secured Storage	12/16/21 11:38	Return to Storage
JD36319-1.4	Secured Storage	Bridget Kelly	12/14/21 15:57	Retrieve from Storage
JD36319-1.4	Bridget Kelly	GCMS3A	12/14/21 15:57	Load on Instrument
JD36319-1.4	GCMS3A	Bridget Kelly	12/16/21 13:57	Unload from Instrument
JD36319-1.4	Bridget Kelly	Secured Storage	12/16/21 13:57	Return to Storage
JD36319-2.1	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-2.2	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-2.2	Aleandi Rodriguez	Secured Staging Area	12/08/21 23:56	Return to Storage
stage				
JD36319-2.2	Secured Staging Area	Edward Rue	12/09/21 07:52	Retrieve from Storage
JD36319-2.2	Edward Rue		12/13/21 08:04	Depleted
JD36319-2.3	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-2.3	Secured Storage	Joshua Reitan	12/09/21 20:39	Retrieve from Storage
JD36319-2.3	Joshua Reitan	Secured Staging Area	12/09/21 20:40	Return to Storage
JD36319-2.3	Secured Staging Area	Dawnette Williams	12/10/21 08:10	Retrieve from Storage
JD36319-2.3	Dawnette Williams	Rocquan Salters	12/10/21 15:20	Custody Transfer
JD36319-2.3	Rocquan Salters		12/10/21 21:54	Depleted
JD36319-2.3.1	Dawnette Williams	Organics Prep	12/10/21 08:37	Extract from JD36319-2.3
JD36319-2.3.1	Organics Prep	Jesse Li	12/10/21 23:41	Extract from JD36319-2.3
JD36319-2.3.1	Jesse Li	Extract Storage	12/10/21 23:41	Return to Storage
JD36319-2.3.1	Extract Storage	Christopher Sowa	12/11/21 05:08	Retrieve from Storage
JD36319-2.3.1	Christopher Sowa	GCMS4P	12/11/21 05:08	Load on Instrument
JD36319-2.3.1	GCMS4P	Kristi Schollenberger	12/14/21 17:28	Unload from Instrument
JD36319-2.3.1	Kristi Schollenberger	Extract Freezer	12/14/21 17:28	Return to Storage
JD36319-2.3.1	Extract Freezer	Kristi Schollenberger	12/28/21 16:57	Retrieve from Storage
JD36319-2.3.1	Kristi Schollenberger	GCMS5P	12/28/21 16:57	Load on Instrument
JD36319-2.3.1	GCMS5P	Kristi Schollenberger	12/29/21 17:21	Unload from Instrument
JD36319-2.3.1	Kristi Schollenberger	Extract Freezer	12/29/21 17:21	Return to Storage
JD36319-2.3.2	Dawnette Williams	Organics Prep	12/10/21 08:57	Extract from JD36319-2.3
JD36319-2.3.2	Organics Prep	Jesse Li	12/10/21 23:38	Extract from JD36319-2.3
JD36319-2.3.2	Jesse Li	Extract Storage	12/10/21 23:38	Return to Storage
JD36319-2.3.2	Extract Storage	Christine Phillips	12/14/21 05:10	Retrieve from Storage
JD36319-2.3.2	Christine Phillips	GC6G	12/14/21 05:10	Load on Instrument
JD36319-2.4	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/07/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36319-2.4	Secured Storage	Dawnette Williams	12/10/21 09:42	Retrieve from Storage
JD36319-2.4	Dawnette Williams	Rocquan Salters	12/10/21 15:20	Custody Transfer
JD36319-2.4	Rocquan Salters		12/10/21 21:54	Depleted
JD36319-2.5	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-2.5	Secured Storage	Dave Hunkele	12/10/21 11:02	Retrieve from Storage
JD36319-2.5	Dave Hunkele	Secured Staging Area	12/10/21 11:02	Return to Storage
JD36319-2.5	Secured Staging Area	Tayah Martin	12/10/21 11:17	Retrieve from Storage
JD36319-2.5	Secured Storage	Todd Shoemaker	12/10/21 15:33	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD36319-2.5	Todd Shoemaker	Secured Staging Area	12/10/21 15:33	Return to Storage
JD36319-2.5	Secured Storage	Alyssa Koshy	12/11/21 15:38	Retrieve from Storage
Analyst unavailable for custody transfer.				
JD36319-2.5	Alyssa Koshy	Secured Storage	12/11/21 16:35	Return to Storage
JD36319-2.5.1	Alyssa Koshy	Metals Digestion	12/11/21 15:40	Digestate from JD36319-2.5
JD36319-2.5.1	Metals Digestion	Alyssa Koshy	12/11/21 15:40	Digestate from JD36319-2.5
JD36319-2.5.1	Alyssa Koshy	Metals Digestate Storage	12/11/21 15:40	Return to Storage
JD36319-2.7	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-2.7	Tyler Strong		12/21/21 14:34	Subcontract
sub				
JD36319-2.9	Secured Storage	Bridget Kelly	12/14/21 15:57	Retrieve from Storage
JD36319-2.9	Bridget Kelly	GCMS3A	12/14/21 15:57	Load on Instrument
JD36319-2.9	GCMS3A	Bridget Kelly	12/16/21 13:57	Unload from Instrument
JD36319-2.9	Bridget Kelly	Secured Storage	12/16/21 13:57	Return to Storage
JD36319-2.13	VOA Prep Storage	William Cruser	12/20/21 09:42	Retrieve from Storage
JD36319-2.13	William Cruser		12/20/21 09:42	Depleted
JD36319-2.14	Secured Storage	Nicole Hornlien	12/13/21 17:47	Retrieve from Storage
JD36319-2.14	Nicole Hornlien	GCMS2V	12/13/21 17:47	Load on Instrument
JD36319-2.14	GCMS2V	Nicholas Weigand	12/16/21 11:38	Unload from Instrument
JD36319-2.14	Nicholas Weigand	Secured Storage	12/16/21 11:38	Return to Storage
JD36319-2.16	Secured Storage	Bridget Kelly	12/14/21 15:57	Retrieve from Storage
JD36319-2.16	Bridget Kelly	GCMS3A	12/14/21 15:57	Load on Instrument
JD36319-2.16	GCMS3A	Bridget Kelly	12/16/21 13:57	Unload from Instrument
JD36319-2.16	Bridget Kelly	Secured Storage	12/16/21 13:57	Return to Storage
JD36319-2F.6	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-2F.6	Secured Storage	Dave Hunkele	12/10/21 11:02	Retrieve from Storage
JD36319-2F.6	Dave Hunkele	Secured Staging Area	12/10/21 11:02	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/07/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36319-2F.6	Secured Staging Area	Tayah Martin	12/10/21 11:17	Retrieve from Storage
JD36319-2F.6	Secured Storage	Todd Shoemaker	12/10/21 15:33	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD36319-2F.6	Todd Shoemaker	Secured Staging Area	12/10/21 15:33	Return to Storage
JD36319-2F.6	Secured Storage	Alyssa Koshy	12/11/21 15:38	Retrieve from Storage
Analyst unavailable for custody transfer.				
JD36319-2F.6	Alyssa Koshy	Secured Storage	12/11/21 16:35	Return to Storage
JD36319-2F.6.1	Alyssa Koshy	Metals Digestion	12/11/21 15:40	Digestate from JD36319-2F.6
JD36319-2F.6.1	Metals Digestion	Alyssa Koshy	12/11/21 15:40	Digestate from JD36319-2F.6
JD36319-2F.6.1	Alyssa Koshy	Metals Digestate Storage	12/11/21 15:40	Return to Storage
JD36319-3.1	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-3.1	Secured Storage	Dawnette Williams	12/10/21 09:42	Retrieve from Storage
JD36319-3.1	Dawnette Williams	Rocquan Salters	12/10/21 15:20	Custody Transfer
JD36319-3.1	Rocquan Salters		12/10/21 21:54	Depleted
JD36319-3.2	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-3.3	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-3.3	Secured Storage	Joshua Reitan	12/09/21 20:39	Retrieve from Storage
JD36319-3.3	Joshua Reitan	Secured Staging Area	12/09/21 20:40	Return to Storage
JD36319-3.3	Secured Staging Area	Dawnette Williams	12/10/21 08:10	Retrieve from Storage
JD36319-3.3	Dawnette Williams	Rocquan Salters	12/10/21 15:20	Custody Transfer
JD36319-3.3	Rocquan Salters		12/10/21 21:54	Depleted
JD36319-3.3.1	Dawnette Williams	Organics Prep	12/10/21 08:37	Extract from JD36319-3.3
JD36319-3.3.1	Organics Prep	Jesse Li	12/10/21 23:41	Extract from JD36319-3.3
JD36319-3.3.1	Jesse Li	Extract Storage	12/10/21 23:41	Return to Storage
JD36319-3.3.1	Extract Storage	Christopher Sowa	12/11/21 05:08	Retrieve from Storage
JD36319-3.3.1	Christopher Sowa	GCMS4P	12/11/21 05:08	Load on Instrument
JD36319-3.3.1	GCMS4P	Kristi Schollenberger	12/14/21 17:28	Unload from Instrument
JD36319-3.3.1	Kristi Schollenberger	Extract Freezer	12/14/21 17:28	Return to Storage
JD36319-3.3.1	Extract Freezer	Kristi Schollenberger	12/28/21 16:57	Retrieve from Storage
JD36319-3.3.1	Kristi Schollenberger	GCMS5P	12/28/21 16:57	Load on Instrument
JD36319-3.3.1	GCMS5P	Kristi Schollenberger	12/29/21 17:21	Unload from Instrument
JD36319-3.3.1	Kristi Schollenberger	Extract Freezer	12/29/21 17:21	Return to Storage
JD36319-3.3.2	Dawnette Williams	Organics Prep	12/10/21 08:57	Extract from JD36319-3.3
JD36319-3.3.2	Organics Prep	Jesse Li	12/10/21 23:38	Extract from JD36319-3.3
JD36319-3.3.2	Jesse Li	Extract Storage	12/10/21 23:38	Return to Storage
JD36319-3.3.2	Extract Storage	Christine Phillips	12/14/21 05:10	Retrieve from Storage
JD36319-3.3.2	Christine Phillips	GC6G	12/14/21 05:10	Load on Instrument

SGS Internal Chain of Custody

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/07/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36319-3.4	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-3.5	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-3.5	Secured Storage	Dave Hunkele	12/10/21 11:02	Retrieve from Storage
JD36319-3.5	Dave Hunkele	Secured Staging Area	12/10/21 11:02	Return to Storage
JD36319-3.5	Secured Staging Area	Tayah Martin	12/10/21 11:17	Retrieve from Storage
JD36319-3.5	Secured Storage	Todd Shoemaker	12/10/21 15:33	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD36319-3.5	Todd Shoemaker	Secured Staging Area	12/10/21 15:33	Return to Storage
JD36319-3.5	Secured Storage	Alyssa Koshy	12/11/21 15:38	Retrieve from Storage
Analyst unavailable for custody transfer.				
JD36319-3.5	Alyssa Koshy	Secured Storage	12/11/21 16:35	Return to Storage
JD36319-3.5.1	Alyssa Koshy	Metals Digestion	12/11/21 15:40	Digestate from JD36319-3.5
JD36319-3.5.1	Metals Digestion	Alyssa Koshy	12/11/21 15:40	Digestate from JD36319-3.5
JD36319-3.5.1	Alyssa Koshy	Metals Digestate Storage	12/11/21 15:40	Return to Storage
JD36319-3.7	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-3.7	Tyler Strong		12/21/21 14:34	Subcontract
sub				
JD36319-3.8	Secured Storage	Taylor Sauter	12/14/21 15:57	Retrieve from Storage
JD36319-3.8	Taylor Sauter	GCMS2V	12/14/21 15:57	Load on Instrument
JD36319-3.8	GCMS2V	Nicholas Weigand	12/16/21 11:38	Unload from Instrument
JD36319-3.8	Nicholas Weigand	Secured Storage	12/16/21 11:38	Return to Storage
JD36319-3.12	Secured Storage	Taylor Sauter	12/16/21 14:21	Retrieve from Storage
JD36319-3.12	Taylor Sauter	GCMS3A	12/16/21 14:21	Load on Instrument
JD36319-3.12	GCMS3A	Bridget Kelly	12/17/21 08:45	Unload from Instrument
JD36319-3.12	Bridget Kelly	Secured Storage	12/17/21 08:45	Return to Storage
JD36319-3.13	Secured Storage	Nicole Hornlien	12/13/21 17:47	Retrieve from Storage
JD36319-3.13	Nicole Hornlien	GCMS2V	12/13/21 17:47	Load on Instrument
JD36319-3.13	GCMS2V	Nicholas Weigand	12/16/21 11:38	Unload from Instrument
JD36319-3.13	Nicholas Weigand	Secured Storage	12/16/21 11:38	Return to Storage
JD36319-3.14	Secured Storage	Bridget Kelly	12/14/21 15:57	Retrieve from Storage
JD36319-3.14	Bridget Kelly	GCMS3A	12/14/21 15:57	Load on Instrument
JD36319-3.14	GCMS3A	Bridget Kelly	12/16/21 13:57	Unload from Instrument
JD36319-3.14	Bridget Kelly	Secured Storage	12/16/21 13:57	Return to Storage
JD36319-3.15	VOA Prep Storage	William Cruser	12/20/21 09:42	Retrieve from Storage
JD36319-3.15	William Cruser		12/20/21 09:42	Depleted

SGS Internal Chain of Custody

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/07/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36319-3F.6	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-3F.6	Secured Storage	Dave Hunkele	12/10/21 11:02	Retrieve from Storage
JD36319-3F.6	Dave Hunkele	Secured Staging Area	12/10/21 11:02	Return to Storage
JD36319-3F.6	Secured Staging Area	Tayah Martin	12/10/21 11:17	Retrieve from Storage
JD36319-3F.6	Secured Storage	Todd Shoemaker	12/10/21 15:33	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD36319-3F.6	Todd Shoemaker	Secured Staging Area	12/10/21 15:33	Return to Storage
JD36319-3F.6	Secured Storage	Alyssa Koshy	12/11/21 15:38	Retrieve from Storage
Analyst unavailable for custody transfer.				
JD36319-3F.6	Alyssa Koshy	Secured Storage	12/11/21 16:35	Return to Storage
JD36319-3F.6.1	Alyssa Koshy	Metals Digestion	12/11/21 15:40	Digestate from JD36319-3F.6
JD36319-3F.6.1	Metals Digestion	Alyssa Koshy	12/11/21 15:40	Digestate from JD36319-3F.6
JD36319-3F.6.1	Alyssa Koshy	Metals Digestate Storage	12/11/21 15:40	Return to Storage
JD36319-4.1	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-4.1	Secured Storage	Joshua Reitan	12/09/21 20:39	Retrieve from Storage
JD36319-4.1	Joshua Reitan	Secured Staging Area	12/09/21 20:40	Return to Storage
JD36319-4.1	Secured Staging Area	Dawnette Williams	12/10/21 08:10	Retrieve from Storage
JD36319-4.1	Dawnette Williams	Rocquan Salters	12/10/21 15:20	Custody Transfer
JD36319-4.1	Rocquan Salters		12/10/21 21:54	Depleted
JD36319-4.1.1	Dawnette Williams	Organics Prep	12/10/21 08:57	Extract from JD36319-4.1
JD36319-4.1.1	Organics Prep	Jesse Li	12/10/21 23:38	Extract from JD36319-4.1
JD36319-4.1.1	Jesse Li	Extract Storage	12/10/21 23:38	Return to Storage
JD36319-4.1.1	Extract Storage	Christine Phillips	12/14/21 05:10	Retrieve from Storage
JD36319-4.1.1	Christine Phillips	GC6G	12/14/21 05:10	Load on Instrument
JD36319-4.2	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-4.2	Secured Storage	Benjamin Gaines	12/12/21 13:42	Retrieve from Storage
JD36319-4.2	Benjamin Gaines	Secured Staging Area	12/12/21 13:42	Return to Storage
JD36319-4.2	Secured Staging Area	Dawnette Williams	12/13/21 08:38	Retrieve from Storage
JD36319-4.2	Dawnette Williams		12/14/21 07:51	Depleted
JD36319-4.2.1	Dawnette Williams	Organics Prep	12/13/21 09:30	Extract from JD36319-4.2
JD36319-4.2.1	Organics Prep	Jesse Li	12/13/21 22:57	Extract from JD36319-4.2
JD36319-4.2.1	Jesse Li	Extract Storage	12/13/21 22:57	Return to Storage
JD36319-4.2.1	Extract Storage	Christopher Sowa	12/17/21 03:15	Retrieve from Storage
JD36319-4.2.1	Christopher Sowa	GCMS5P	12/17/21 03:15	Load on Instrument
JD36319-4.2.1	GCMS5P	Christopher Sowa	12/17/21 23:16	Unload from Instrument
JD36319-4.2.1	Christopher Sowa	Extract Freezer	12/17/21 23:17	Return to Storage
JD36319-4.3	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/07/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36319-4.4	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-4.5	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-4.5	Secured Storage	Dave Hunkele	12/10/21 11:02	Retrieve from Storage
JD36319-4.5	Dave Hunkele	Secured Staging Area	12/10/21 11:02	Return to Storage
JD36319-4.5	Secured Staging Area	Tayah Martin	12/10/21 11:17	Retrieve from Storage
JD36319-4.5	Secured Storage	Todd Shoemaker	12/10/21 15:33	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD36319-4.5	Todd Shoemaker	Secured Staging Area	12/10/21 15:33	Return to Storage
JD36319-4.5	Secured Storage	Alyssa Koshy	12/11/21 15:38	Retrieve from Storage
Analyst unavailable for custody transfer.				
JD36319-4.5	Alyssa Koshy	Secured Storage	12/11/21 16:35	Return to Storage
JD36319-4.5.1	Alyssa Koshy	Metals Digestion	12/11/21 15:40	Digestate from JD36319-4.5
JD36319-4.5.1	Metals Digestion	Alyssa Koshy	12/11/21 15:40	Digestate from JD36319-4.5
JD36319-4.5.1	Alyssa Koshy	Metals Digestate Storage	12/11/21 15:40	Return to Storage
JD36319-4.7	Secured Storage	Taylor Sauter	12/16/21 14:21	Retrieve from Storage
JD36319-4.7	Taylor Sauter	GCMS3A	12/16/21 14:21	Load on Instrument
JD36319-4.7	GCMS3A	Bridget Kelly	12/17/21 08:45	Unload from Instrument
JD36319-4.7	Bridget Kelly	Secured Storage	12/17/21 08:45	Return to Storage
JD36319-4.9	Secured Storage	Bridget Kelly	12/14/21 15:57	Retrieve from Storage
JD36319-4.9	Bridget Kelly	GCMS3A	12/14/21 15:57	Load on Instrument
JD36319-4.9	GCMS3A	Bridget Kelly	12/16/21 13:57	Unload from Instrument
JD36319-4.9	Bridget Kelly	Secured Storage	12/16/21 13:57	Return to Storage
JD36319-4.10	Secured Storage	Taylor Sauter	12/14/21 15:57	Retrieve from Storage
JD36319-4.10	Taylor Sauter	GCMS2V	12/14/21 15:57	Load on Instrument
JD36319-4.10	GCMS2V	Nicholas Weigand	12/16/21 11:38	Unload from Instrument
JD36319-4.10	Nicholas Weigand	Secured Storage	12/16/21 11:38	Return to Storage
JD36319-4.11	Secured Storage	Nicole Hornlien	12/13/21 17:47	Retrieve from Storage
JD36319-4.11	Nicole Hornlien	GCMS2V	12/13/21 17:47	Load on Instrument
JD36319-4.11	GCMS2V	Nicholas Weigand	12/16/21 11:38	Unload from Instrument
JD36319-4.11	Nicholas Weigand	Secured Storage	12/16/21 11:38	Return to Storage
JD36319-4F.6	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-4F.6	Secured Storage	Dave Hunkele	12/10/21 11:02	Retrieve from Storage
JD36319-4F.6	Dave Hunkele	Secured Staging Area	12/10/21 11:02	Return to Storage
JD36319-4F.6	Secured Staging Area	Tayah Martin	12/10/21 11:17	Retrieve from Storage
JD36319-4F.6	Secured Storage	Todd Shoemaker	12/10/21 15:33	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD36319-4F.6	Todd Shoemaker	Secured Staging Area	12/10/21 15:33	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/07/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36319-4F.6	Secured Storage	Alyssa Koshy	12/11/21 15:38	Retrieve from Storage
Analyst unavailable for custody transfer.				
JD36319-4F.6	Alyssa Koshy	Secured Storage	12/11/21 16:35	Return to Storage
JD36319-4F.6.1	Alyssa Koshy	Metals Digestion	12/11/21 15:40	Digestate from JD36319-4F.6
JD36319-4F.6.1	Metals Digestion	Alyssa Koshy	12/11/21 15:40	Digestate from JD36319-4F.6
JD36319-4F.6.1	Alyssa Koshy	Metals Digestate Storage	12/11/21 15:40	Return to Storage
JD36319-5.1	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-5.1	Secured Storage	Benjamin Gaines	12/12/21 13:42	Retrieve from Storage
JD36319-5.1	Benjamin Gaines	Secured Staging Area	12/12/21 13:42	Return to Storage
JD36319-5.1	Secured Staging Area	Dawnette Williams	12/13/21 08:38	Retrieve from Storage
JD36319-5.1	Dawnette Williams		12/14/21 07:51	Depleted
JD36319-5.1.1	Dawnette Williams	Organics Prep	12/13/21 09:30	Extract from JD36319-5.1
JD36319-5.1.1	Organics Prep	Jesse Li	12/13/21 22:57	Extract from JD36319-5.1
JD36319-5.1.1	Jesse Li	Extract Storage	12/13/21 22:57	Return to Storage
JD36319-5.1.1	Extract Storage	Christopher Sowa	12/17/21 03:15	Retrieve from Storage
JD36319-5.1.1	Christopher Sowa	GCMS5P	12/17/21 03:15	Load on Instrument
JD36319-5.1.1	GCMS5P	Jackleen Youssef	12/20/21 11:58	Unload from Instrument
JD36319-5.1.1	Jackleen Youssef	Extract Freezer	12/20/21 11:58	Return to Storage
JD36319-5.2	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-5.3	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-5.3	Secured Storage	Dawnette Williams	12/10/21 09:19	Retrieve from Storage
JD36319-5.3	Dawnette Williams	Rocquan Salters	12/10/21 15:20	Custody Transfer
JD36319-5.3	Rocquan Salters		12/10/21 21:54	Depleted
JD36319-5.3.1	Dawnette Williams	Organics Prep	12/10/21 09:19	Extract from JD36319-5.3
JD36319-5.3.1	Organics Prep	Jesse Li	12/10/21 23:38	Extract from JD36319-5.3
JD36319-5.3.1	Jesse Li	Extract Storage	12/10/21 23:38	Return to Storage
JD36319-5.3.1	Extract Storage	Christine Phillips	12/14/21 05:10	Retrieve from Storage
JD36319-5.3.1	Christine Phillips	GC6G	12/14/21 05:10	Load on Instrument
JD36319-5.4	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-5.5	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-5.5	Secured Storage	Dave Hunkele	12/10/21 11:02	Retrieve from Storage
JD36319-5.5	Dave Hunkele	Secured Staging Area	12/10/21 11:02	Return to Storage
JD36319-5.5	Secured Staging Area	Tayah Martin	12/10/21 11:17	Retrieve from Storage
JD36319-5.5	Secured Storage	Todd Shoemaker	12/10/21 15:33	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD36319-5.5	Todd Shoemaker	Secured Staging Area	12/10/21 15:33	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/07/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36319-5.5	Secured Storage	Alyssa Koshy	12/11/21 15:38	Retrieve from Storage
Analyst unavailable for custody transfer.				
JD36319-5.5	Alyssa Koshy	Secured Storage	12/11/21 16:35	Return to Storage
JD36319-5.5.1	Alyssa Koshy	Metals Digestion	12/11/21 15:40	Digestate from JD36319-5.5
JD36319-5.5.1	Metals Digestion	Alyssa Koshy	12/11/21 15:40	Digestate from JD36319-5.5
JD36319-5.5.1	Alyssa Koshy	Metals Digestate Storage	12/11/21 15:40	Return to Storage
JD36319-5.7	Secured Storage	Taylor Sauter	12/16/21 14:21	Retrieve from Storage
JD36319-5.7	Taylor Sauter	GCMS3A	12/16/21 14:21	Load on Instrument
JD36319-5.7	GCMS3A	Bridget Kelly	12/17/21 08:45	Unload from Instrument
JD36319-5.7	Bridget Kelly	Secured Storage	12/17/21 08:45	Return to Storage
JD36319-5.9	Secured Storage	Bridget Kelly	12/14/21 15:57	Retrieve from Storage
JD36319-5.9	Bridget Kelly	GCMS3A	12/14/21 15:57	Load on Instrument
JD36319-5.9	GCMS3A	Bridget Kelly	12/16/21 13:57	Unload from Instrument
JD36319-5.9	Bridget Kelly	Secured Storage	12/16/21 13:57	Return to Storage
JD36319-5.10	Secured Storage	Taylor Sauter	12/14/21 15:57	Retrieve from Storage
JD36319-5.10	Taylor Sauter	GCMS2V	12/14/21 15:57	Load on Instrument
JD36319-5.10	GCMS2V	Nicholas Weigand	12/16/21 11:38	Unload from Instrument
JD36319-5.10	Nicholas Weigand	Secured Storage	12/16/21 11:38	Return to Storage
JD36319-5.11	Secured Storage	Nicole Hornlien	12/13/21 17:47	Retrieve from Storage
JD36319-5.11	Nicole Hornlien	GCMS2V	12/13/21 17:47	Load on Instrument
JD36319-5.11	GCMS2V	Nicholas Weigand	12/16/21 11:38	Unload from Instrument
JD36319-5.11	Nicholas Weigand	Secured Storage	12/16/21 11:38	Return to Storage
JD36319-5F.6	Epiphania Njoku	Secured Storage	12/08/21 16:39	Return to Storage
JD36319-5F.6	Secured Storage	Dave Hunkele	12/10/21 11:02	Retrieve from Storage
JD36319-5F.6	Dave Hunkele	Secured Staging Area	12/10/21 11:02	Return to Storage
JD36319-5F.6	Secured Staging Area	Tayah Martin	12/10/21 11:17	Retrieve from Storage
JD36319-5F.6	Secured Storage	Todd Shoemaker	12/10/21 15:33	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JD36319-5F.6	Todd Shoemaker	Secured Staging Area	12/10/21 15:33	Return to Storage
JD36319-5F.6	Secured Storage	Alyssa Koshy	12/11/21 15:38	Retrieve from Storage
Analyst unavailable for custody transfer.				
JD36319-5F.6	Alyssa Koshy	Secured Storage	12/11/21 16:35	Return to Storage
JD36319-5F.6.1	Alyssa Koshy	Metals Digestion	12/11/21 15:40	Digestate from JD36319-5F.6
JD36319-5F.6.1	Metals Digestion	Alyssa Koshy	12/11/21 15:40	Digestate from JD36319-5F.6
JD36319-5F.6.1	Alyssa Koshy	Metals Digestate Storage	12/11/21 15:40	Return to Storage

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7263-MB	3A167360.D	1	12/14/21	BK	n/a	n/a	V3A7263

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.26	0.40	0.095	ug/l	J

CAS No.	Surrogate Recoveries		Limits
17647-74-4	1,4-Dioxane-D8	167%	39-174%

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3444-MB	2V83552.D	1	12/13/21	NW	n/a	n/a	V2V3444

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3444-MB	2V83552.D	1	12/13/21	NW	n/a	n/a	V2V3444

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3444-MB	2V83552.D	1	12/13/21	NW	n/a	n/a	V2V3444

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	92%	80-120%
17060-07-0	1,2-Dichloroethane-D4	110%	80-120%
2037-26-5	Toluene-D8	105%	80-120%
460-00-4	4-Bromofluorobenzene	92%	82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3446-MB	2V83605.D	1	12/14/21	NW	n/a	n/a	V2V3446

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3446-MB	2V83605.D	1	12/14/21	NW	n/a	n/a	V2V3446

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	93%	80-120%

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3446-MB	2V83605.D	1	12/14/21	NW	n/a	n/a	V2V3446

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-3, JD36319-4, JD36319-5

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4	108%	80-120%
2037-26-5	Toluene-D8	105%	80-120%
460-00-4	4-Bromofluorobenzene	96%	82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3444-BS	2V83550.D	1	12/13/21	NW	n/a	n/a	V2V3444

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	259	130	27-175
71-43-2	Benzene	50	50.2	100	80-115
108-86-1	Bromobenzene	50	46.9	94	79-119
74-97-5	Bromochloromethane	50	44.6	89	83-122
75-27-4	Bromodichloromethane	50	51.5	103	82-119
75-25-2	Bromoform	50	56.3	113	77-135
74-83-9	Bromomethane	50	46.9	94	40-162
78-93-3	2-Butanone (MEK)	200	208	104	61-150
104-51-8	n-Butylbenzene	50	49.5	99	77-124
135-98-8	sec-Butylbenzene	50	49.9	100	75-121
98-06-6	tert-Butylbenzene	50	50.2	100	74-120
75-15-0	Carbon disulfide	50	49.8	100	64-130
56-23-5	Carbon tetrachloride	50	50.1	100	75-127
108-90-7	Chlorobenzene	50	54.7	109	80-115
75-00-3	Chloroethane	50	49.8	100	56-144
67-66-3	Chloroform	50	47.8	96	75-116
74-87-3	Chloromethane	50	66.8	134	41-153
95-49-8	o-Chlorotoluene	50	47.5	95	79-119
106-43-4	p-Chlorotoluene	50	48.0	96	77-117
96-12-8	1,2-Dibromo-3-chloropropane	50	50.0	100	69-134
124-48-1	Dibromochloromethane	50	57.2	114	81-123
106-93-4	1,2-Dibromoethane	50	57.5	115	67-138
95-50-1	1,2-Dichlorobenzene	50	46.8	94	81-117
541-73-1	1,3-Dichlorobenzene	50	48.5	97	81-115
106-46-7	1,4-Dichlorobenzene	50	47.6	95	80-114
75-71-8	Dichlorodifluoromethane	50	61.5	123	43-152
75-34-3	1,1-Dichloroethane	50	56.0	112	75-125
107-06-2	1,2-Dichloroethane	50	55.7	111	73-117
75-35-4	1,1-Dichloroethene	50	56.8	114	70-124
156-59-2	cis-1,2-Dichloroethene	50	47.0	94	80-120
156-60-5	trans-1,2-Dichloroethene	50	48.1	96	77-121
78-87-5	1,2-Dichloropropane	50	57.1	114	79-121
142-28-9	1,3-Dichloropropane	50	59.9	120* [a]	81-117
594-20-7	2,2-Dichloropropane	50	51.8	104	70-131
563-58-6	1,1-Dichloropropene	50	50.6	101	77-122
10061-01-5	cis-1,3-Dichloropropene	50	52.2	104	83-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3444-BS	2V83550.D	1	12/13/21	NW	n/a	n/a	V2V3444

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	62.2	124* [b]	83-122
100-41-4	Ethylbenzene	50	54.2	108	78-116
87-68-3	Hexachlorobutadiene	50	46.5	93	55-136
591-78-6	2-Hexanone	200	290	145* [b]	66-136
98-82-8	Isopropylbenzene	50	56.5	113	78-121
99-87-6	p-Isopropyltoluene	50	48.7	97	78-121
1634-04-4	Methyl Tert Butyl Ether	50	50.9	102	76-123
108-10-1	4-Methyl-2-pentanone(MIBK)	200	253	127	73-134
74-95-3	Methylene bromide	50	50.0	100	82-117
75-09-2	Methylene chloride	50	44.4	89	73-123
91-20-3	Naphthalene	50	46.3	93	64-136
103-65-1	n-Propylbenzene	50	50.0	100	75-121
100-42-5	Styrene	50	56.5	113	81-125
75-65-0	Tert Butyl Alcohol	250	284	114	75-123
630-20-6	1,1,1,2-Tetrachloroethane	50	54.5	109	81-124
79-34-5	1,1,2,2-Tetrachloroethane	50	51.8	104	73-126
127-18-4	Tetrachloroethene	50	55.1	110	73-119
109-99-9	Tetrahydrofuran	50	45.0	90	63-133
108-88-3	Toluene	50	53.8	108	79-116
87-61-6	1,2,3-Trichlorobenzene	50	45.2	90	63-137
120-82-1	1,2,4-Trichlorobenzene	50	48.3	97	68-135
71-55-6	1,1,1-Trichloroethane	50	50.9	102	76-124
79-00-5	1,1,2-Trichloroethane	50	57.4	115	83-117
79-01-6	Trichloroethene	50	50.0	100	80-118
75-69-4	Trichlorofluoromethane	50	55.3	111	67-134
96-18-4	1,2,3-Trichloropropane	50	52.9	106	75-123
95-63-6	1,2,4-Trimethylbenzene	50	50.7	101	78-120
108-67-8	1,3,5-Trimethylbenzene	50	51.6	103	77-120
108-05-4	Vinyl Acetate	50	50.9	102	54-177
75-01-4	Vinyl chloride	50	54.1	108	52-146
	m,p-Xylene	100	112	112	79-119
95-47-6	o-Xylene	50	54.7	109	81-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3444-BS	2V83550.D	1	12/13/21	NW	n/a	n/a	V2V3444

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	91%	80-120%
17060-07-0	1,2-Dichloroethane-D4	107%	80-120%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	94%	82-114%

(a) Outside in-house control limits, but within EPA 8260D CCV limits.
(b) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3446-BS	2V83603.D	1	12/14/21	NW	n/a	n/a	V2V3446

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	319	160	27-175
71-43-2	Benzene	50	48.3	97	80-115
108-86-1	Bromobenzene	50	46.6	93	79-119
74-97-5	Bromochloromethane	50	44.5	89	83-122
75-27-4	Bromodichloromethane	50	51.4	103	82-119
75-25-2	Bromoform	50	55.8	112	77-135
74-83-9	Bromomethane	50	48.4	97	40-162
78-93-3	2-Butanone (MEK)	200	235	118	61-150
104-51-8	n-Butylbenzene	50	50.3	101	77-124
135-98-8	sec-Butylbenzene	50	50.6	101	75-121
98-06-6	tert-Butylbenzene	50	50.5	101	74-120
75-15-0	Carbon disulfide	50	46.1	92	64-130
56-23-5	Carbon tetrachloride	50	48.8	98	75-127
75-00-3	Chloroethane	50	48.1	96	56-144
67-66-3	Chloroform	50	47.9	96	75-116
74-87-3	Chloromethane	50	62.8	126	41-153
95-49-8	o-Chlorotoluene	50	47.8	96	79-119
106-43-4	p-Chlorotoluene	50	48.6	97	77-117
96-12-8	1,2-Dibromo-3-chloropropane	50	49.2	98	69-134
124-48-1	Dibromochloromethane	50	57.9	116	81-123
106-93-4	1,2-Dibromoethane	50	58.2	116	67-138
95-50-1	1,2-Dichlorobenzene	50	47.2	94	81-117
541-73-1	1,3-Dichlorobenzene	50	49.0	98	81-115
106-46-7	1,4-Dichlorobenzene	50	48.5	97	80-114
75-71-8	Dichlorodifluoromethane	50	54.9	110	43-152
75-34-3	1,1-Dichloroethane	50	55.1	110	75-125
107-06-2	1,2-Dichloroethane	50	54.6	109	73-117
75-35-4	1,1-Dichloroethene	50	53.7	107	70-124
156-59-2	cis-1,2-Dichloroethene	50	47.0	94	80-120
156-60-5	trans-1,2-Dichloroethene	50	47.0	94	77-121
78-87-5	1,2-Dichloropropane	50	56.1	112	79-121
142-28-9	1,3-Dichloropropane	50	60.7	121* [a]	81-117
594-20-7	2,2-Dichloropropane	50	50.7	101	70-131
563-58-6	1,1-Dichloropropene	50	49.5	99	77-122
10061-01-5	cis-1,3-Dichloropropene	50	52.0	104	83-123
10061-02-6	trans-1,3-Dichloropropene	50	62.3	125* [a]	83-122

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3446-BS	2V83603.D	1	12/14/21	NW	n/a	n/a	V2V3446

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	54.0	108	78-116
87-68-3	Hexachlorobutadiene	50	47.0	94	55-136
591-78-6	2-Hexanone	200	319	160* [a]	66-136
98-82-8	Isopropylbenzene	50	57.0	114	78-121
99-87-6	p-Isopropyltoluene	50	48.6	97	78-121
1634-04-4	Methyl Tert Butyl Ether	50	49.7	99	76-123
108-10-1	4-Methyl-2-pentanone(MIBK)	200	258	129	73-134
74-95-3	Methylene bromide	50	49.3	99	82-117
75-09-2	Methylene chloride	50	43.3	87	73-123
91-20-3	Naphthalene	50	46.4	93	64-136
103-65-1	n-Propylbenzene	50	50.4	101	75-121
100-42-5	Styrene	50	57.1	114	81-125
75-65-0	Tert Butyl Alcohol	250	283	113	75-123
630-20-6	1,1,1,2-Tetrachloroethane	50	54.6	109	81-124
79-34-5	1,1,2,2-Tetrachloroethane	50	52.3	105	73-126
127-18-4	Tetrachloroethene	50	54.1	108	73-119
109-99-9	Tetrahydrofuran	50	46.7	93	63-133
108-88-3	Toluene	50	53.0	106	79-116
87-61-6	1,2,3-Trichlorobenzene	50	45.9	92	63-137
120-82-1	1,2,4-Trichlorobenzene	50	48.2	96	68-135
71-55-6	1,1,1-Trichloroethane	50	49.4	99	76-124
79-00-5	1,1,2-Trichloroethane	50	57.5	115	83-117
79-01-6	Trichloroethene	50	48.4	97	80-118
75-69-4	Trichlorofluoromethane	50	54.4	109	67-134
96-18-4	1,2,3-Trichloropropane	50	55.3	111	75-123
95-63-6	1,2,4-Trimethylbenzene	50	51.0	102	78-120
108-67-8	1,3,5-Trimethylbenzene	50	51.1	102	77-120
108-05-4	Vinyl Acetate	50	49.4	99	54-177
75-01-4	Vinyl chloride	50	51.0	102	52-146
	m,p-Xylene	100	112	112	79-119
95-47-6	o-Xylene	50	54.8	110	81-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	80-120%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3446-BS	2V83603.D	1	12/14/21	NW	n/a	n/a	V2V3446

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-3, JD36319-4, JD36319-5

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	110%	80-120%
2037-26-5	Toluene-D8	101%	80-120%
460-00-4	4-Bromofluorobenzene	95%	82-114%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7263-BS	3A167357.D	1	12/14/21	BK	n/a	n/a	V3A7263
V3A7263-BSD	3A167358.D	1	12/14/21	BK	n/a	n/a	V3A7263

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
123-91-1	1,4-Dioxane	20	22.6	113	21.5	108	5	61-125/26

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17647-74-4	1,4-Dioxane-D8	122%	121%	39-174%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36187-2MS	3A167372.D	1	12/14/21	BK	n/a	n/a	V3A7263
JD36187-2	3A167370.D	1	12/14/21	BK	n/a	n/a	V3A7263

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	JD36187-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
123-91-1	1,4-Dioxane	0.20	B	20	21.4	106	36-157

CAS No.	Surrogate Recoveries	MS	JD36187-2	Limits
17647-74-4	1,4-Dioxane-D8	128%	107%	39-174%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36437-1MS	2V83562.D	10	12/13/21	NW	n/a	n/a	V2V3444
JD36437-1MSD	2V83563.D	10	12/13/21	NW	n/a	n/a	V2V3444
JD36437-1	2V83555.D	10	12/13/21	NW	n/a	n/a	V2V3444

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	JD36437-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		2000	1720	86	2000	1670	84	3	22-134/19
71-43-2	Benzene	495		500	934	88	500	927	86	1	49-137/12
108-86-1	Bromobenzene	ND		500	447	89	500	453	91	1	72-122/13
74-97-5	Bromochloromethane	ND		500	471	94	500	463	93	2	78-122/12
75-27-4	Bromodichloromethane	ND		500	514	103	500	514	103	0	76-121/12
75-25-2	Bromoform	ND		500	547	109	500	548	110	0	70-133/13
74-83-9	Bromomethane	ND		500	483	97	500	538	108	11	27-164/38
78-93-3	2-Butanone (MEK)	ND		2000	1900	95	2000	1830	92	4	52-137/17
104-51-8	n-Butylbenzene	ND		500	461	92	500	477	95	3	70-130/14
135-98-8	sec-Butylbenzene	ND		500	468	94	500	483	97	3	69-127/14
98-06-6	tert-Butylbenzene	ND		500	475	95	500	483	97	2	69-124/14
75-15-0	Carbon disulfide	ND		500	497	99	500	501	100	1	54-136/16
56-23-5	Carbon tetrachloride	7.0	J	500	512	101	500	517	102	1	70-132/13
108-90-7	Chlorobenzene	1580		500	1950	74	500	1970	78	1	68-123/12
75-00-3	Chloroethane	ND		500	516	103	500	527	105	2	48-152/17
67-66-3	Chloroform	18.5		500	516	100	500	511	99	1	68-120/13
74-87-3	Chloromethane	ND		500	686	137	500	699	140	2	35-156/18
95-49-8	o-Chlorotoluene	ND		500	457	91	500	466	93	2	73-123/13
106-43-4	p-Chlorotoluene	ND		500	455	91	500	468	94	3	71-120/13
96-12-8	1,2-Dibromo-3-chloropropane	ND		500	504	101	500	487	97	3	63-134/16
124-48-1	Dibromochloromethane	ND		500	561	112	500	559	112	0	75-122/12
106-93-4	1,2-Dibromoethane	ND		500	571	114	500	573	115	0	63-134/12
95-50-1	1,2-Dichlorobenzene	432		500	862	86	500	865	87	0	74-119/12
541-73-1	1,3-Dichlorobenzene	52.6		500	515	92	500	523	94	2	75-117/12
106-46-7	1,4-Dichlorobenzene	641		500	1050	82	500	1050	82	0	72-117/12
75-71-8	Dichlorodifluoromethane	ND		500	625	125	500	629	126	1	34-163/16
75-34-3	1,1-Dichloroethane	ND		500	588	118	500	584	117	1	68-129/13
107-06-2	1,2-Dichloroethane	ND		500	557	111	500	555	111	0	66-120/13
75-35-4	1,1-Dichloroethene	ND		500	574	115	500	577	115	1	59-133/15
156-59-2	cis-1,2-Dichloroethene	ND		500	498	100	500	498	100	0	52-140/12
156-60-5	trans-1,2-Dichloroethene	ND		500	496	99	500	497	99	0	70-125/13
78-87-5	1,2-Dichloropropane	ND		500	559	112	500	563	113	1	73-124/12
142-28-9	1,3-Dichloropropane	ND		500	586	117	500	587	117	0	74-117/11
594-20-7	2,2-Dichloropropane	ND		500	518	104	500	517	103	0	62-138/13
563-58-6	1,1-Dichloropropene	ND		500	521	104	500	524	105	1	71-129/13
10061-01-5	cis-1,3-Dichloropropene	ND		500	528	106	500	527	105	0	75-125/13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36437-1MS	2V83562.D	10	12/13/21	NW	n/a	n/a	V2V3444
JD36437-1MSD	2V83563.D	10	12/13/21	NW	n/a	n/a	V2V3444
JD36437-1	2V83555.D	10	12/13/21	NW	n/a	n/a	V2V3444

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	JD36437-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		500	596	119	500	599	120	1	75-122/12
100-41-4	Ethylbenzene	ND		500	521	104	500	528	106	1	37-144/12
87-68-3	Hexachlorobutadiene	ND		500	408	82	500	424	85	4	49-141/19
591-78-6	2-Hexanone	ND		2000	2730	137* [a]	2000	2670	134* [a]	2	56-132/16
98-82-8	Isopropylbenzene	ND		500	546	109	500	555	111	2	71-126/13
99-87-6	p-Isopropyltoluene	ND		500	460	92	500	472	94	3	71-126/13
1634-04-4	Methyl Tert Butyl Ether	ND		500	538	108	500	529	106	2	66-124/12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		2000	2640	132	2000	2550	128	3	65-135/14
74-95-3	Methylene bromide	ND		500	496	99	500	494	99	0	76-116/12
75-09-2	Methylene chloride	ND		500	472	94	500	468	94	1	66-125/14
91-20-3	Naphthalene	ND		500	460	92	500	471	94	2	49-146/18
103-65-1	n-Propylbenzene	ND		500	473	95	500	486	97	3	60-131/14
100-42-5	Styrene	ND		500	549	110	500	558	112	2	71-133/12
75-65-0	Tert Butyl Alcohol	ND		2500	2760	110	2500	2660	106	4	63-133/15
630-20-6	1,1,1,2-Tetrachloroethane	ND		500	531	106	500	533	107	0	75-125/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		500	512	102	500	506	101	1	68-127/14
127-18-4	Tetrachloroethene	98.9		500	614	103	500	631	106	3	58-132/13
109-99-9	Tetrahydrofuran	ND		500	500	100	500	481	96	4	54-134/18
108-88-3	Toluene	ND		500	525	105	500	528	106	1	46-139/12
87-61-6	1,2,3-Trichlorobenzene	6.9	J	500	455	90	500	469	92	3	57-136/17
120-82-1	1,2,4-Trichlorobenzene	22.1		500	489	93	500	498	95	2	61-137/16
71-55-6	1,1,1-Trichloroethane	ND		500	516	103	500	523	105	1	67-132/13
79-00-5	1,1,2-Trichloroethane	ND		500	557	111	500	566	113	2	75-120/12
79-01-6	Trichloroethene	ND		500	488	98	500	499	100	2	56-136/12
75-69-4	Trichlorofluoromethane	ND		500	570	114	500	578	116	1	61-145/16
96-18-4	1,2,3-Trichloropropane	ND		500	520	104	500	516	103	1	68-124/14
95-63-6	1,2,4-Trimethylbenzene	ND		500	482	96	500	491	98	2	39-147/13
108-67-8	1,3,5-Trimethylbenzene	ND		500	486	97	500	497	99	2	56-136/14
108-05-4	Vinyl Acetate	ND		500	545	109	500	523	105	4	68-167/16
75-01-4	Vinyl chloride	23.0		500	586	113	500	591	114	1	41-156/16
	m,p-Xylene	ND		1000	1070	107	1000	1100	110	3	32-151/12
95-47-6	o-Xylene	ND		500	533	107	500	541	108	1	50-139/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36437-1MS	2V83562.D	10	12/13/21	NW	n/a	n/a	V2V3444
JD36437-1MSD	2V83563.D	10	12/13/21	NW	n/a	n/a	V2V3444
JD36437-1	2V83555.D	10	12/13/21	NW	n/a	n/a	V2V3444

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Surrogate Recoveries	MS	MSD	JD36437-1	Limits
1868-53-7	Dibromofluoromethane	99%	97%	94%	80-120%
17060-07-0	1,2-Dichloroethane-D4	110%	111%	111%	80-120%
2037-26-5	Toluene-D8	99%	100%	104%	80-120%
460-00-4	4-Bromofluorobenzene	93%	92%	94%	82-114%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36538-15MS	2V83614.D	1	12/14/21	NW	n/a	n/a	V2V3446
JD36538-15MSD	2V83615.D	1	12/14/21	NW	n/a	n/a	V2V3446
JD36538-15	2V83613.D	1	12/14/21	NW	n/a	n/a	V2V3446

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	JD36538-15 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		200	177	89	200	167	84	6	22-134/19
71-43-2	Benzene	ND		50	49.5	99	50	49.0	98	1	49-137/12
108-86-1	Bromobenzene	ND		50	46.9	94	50	47.0	94	0	72-122/13
74-97-5	Bromochloromethane	ND		50	43.8	88	50	43.1	86	2	78-122/12
75-27-4	Bromodichloromethane	ND		50	51.7	103	50	51.5	103	0	76-121/12
75-25-2	Bromoform	ND		50	57.2	114	50	56.4	113	1	70-133/13
74-83-9	Bromomethane	ND		50	38.5	77	50	47.1	94	20	27-164/38
78-93-3	2-Butanone (MEK)	ND		200	186	93	200	182	91	2	52-137/17
104-51-8	n-Butylbenzene	ND		50	50.7	101	50	50.8	102	0	70-130/14
135-98-8	sec-Butylbenzene	ND		50	51.0	102	50	51.2	102	0	69-127/14
98-06-6	tert-Butylbenzene	ND		50	51.2	102	50	51.5	103	1	69-124/14
75-15-0	Carbon disulfide	ND		50	45.4	91	50	45.7	91	1	54-136/16
56-23-5	Carbon tetrachloride	ND		50	50.0	100	50	50.1	100	0	70-132/13
75-00-3	Chloroethane	ND		50	50.9	102	50	51.7	103	2	48-152/17
67-66-3	Chloroform	ND		50	48.6	97	50	48.2	96	1	68-120/13
74-87-3	Chloromethane	ND		50	65.0	130	50	66.1	132	2	35-156/18
95-49-8	o-Chlorotoluene	ND		50	48.8	98	50	48.9	98	0	73-123/13
106-43-4	p-Chlorotoluene	ND		50	49.3	99	50	48.9	98	1	71-120/13
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	53.6	107	50	52.2	104	3	63-134/16
124-48-1	Dibromochloromethane	ND		50	58.5	117	50	57.6	115	2	75-122/12
106-93-4	1,2-Dibromoethane	ND		50	59.9	120	50	58.7	117	2	63-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	48.1	96	50	47.8	96	1	74-119/12
541-73-1	1,3-Dichlorobenzene	ND		50	49.3	99	50	49.3	99	0	75-117/12
106-46-7	1,4-Dichlorobenzene	ND		50	48.6	97	50	48.9	98	1	72-117/12
75-71-8	Dichlorodifluoromethane	ND		50	55.8	112	50	58.4	117	5	34-163/16
75-34-3	1,1-Dichloroethane	ND		50	56.0	112	50	55.5	111	1	68-129/13
107-06-2	1,2-Dichloroethane	ND		50	54.6	109	50	54.1	108	1	66-120/13
75-35-4	1,1-Dichloroethene	ND		50	54.7	109	50	54.1	108	1	59-133/15
156-59-2	cis-1,2-Dichloroethene	ND		50	47.9	96	50	47.6	95	1	52-140/12
156-60-5	trans-1,2-Dichloroethene	ND		50	47.3	95	50	47.2	94	0	70-125/13
78-87-5	1,2-Dichloropropane	ND		50	56.1	112	50	56.1	112	0	73-124/12
142-28-9	1,3-Dichloropropane	ND		50	60.8	122* [a]	50	60.1	120* [a]	1	74-117/11
594-20-7	2,2-Dichloropropane	ND		50	51.3	103	50	50.8	102	1	62-138/13
563-58-6	1,1-Dichloropropene	ND		50	51.9	104	50	50.8	102	2	71-129/13
10061-01-5	cis-1,3-Dichloropropene	ND		50	52.8	106	50	52.4	105	1	75-125/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	62.7	125* [a]	50	62.1	124* [a]	1	75-122/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36538-15MS	2V83614.D	1	12/14/21	NW	n/a	n/a	V2V3446
JD36538-15MSD	2V83615.D	1	12/14/21	NW	n/a	n/a	V2V3446
JD36538-15	2V83613.D	1	12/14/21	NW	n/a	n/a	V2V3446

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	JD36538-15 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	ND		50	56.6	113	50	55.7	111	2	37-144/12
87-68-3	Hexachlorobutadiene	ND		50	44.5	89	50	45.1	90	1	49-141/19
591-78-6	2-Hexanone	ND		200	298	149* [a]	200	289	145* [a]	3	56-132/16
98-82-8	Isopropylbenzene	ND		50	59.5	119	50	58.6	117	2	71-126/13
99-87-6	p-Isopropyltoluene	ND		50	49.9	100	50	49.9	100	0	71-126/13
1634-04-4	Methyl Tert Butyl Ether	ND		50	48.9	98	50	48.9	98	0	66-124/12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	274	137* [b]	200	268	134	2	65-135/14
74-95-3	Methylene bromide	ND		50	49.4	99	50	49.4	99	0	76-116/12
75-09-2	Methylene chloride	ND		50	43.3	87	50	42.4	85	2	66-125/14
91-20-3	Naphthalene	ND		50	49.1	98	50	50.2	100	2	49-146/18
103-65-1	n-Propylbenzene	ND		50	51.6	103	50	51.6	103	0	60-131/14
100-42-5	Styrene	ND		50	58.2	116	50	57.9	116	1	71-133/12
75-65-0	Tert Butyl Alcohol	ND		250	302	121	250	294	118	3	63-133/15
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	56.5	113	50	56.2	112	1	75-125/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	55.1	110	50	54.5	109	1	68-127/14
127-18-4	Tetrachloroethene	ND		50	56.2	112	50	54.7	109	3	58-132/13
109-99-9	Tetrahydrofuran	ND		50	46.9	94	50	45.5	91	3	54-134/18
108-88-3	Toluene	ND		50	54.9	110	50	54.3	109	1	46-139/12
87-61-6	1,2,3-Trichlorobenzene	ND		50	47.8	96	50	47.7	95	0	57-136/17
120-82-1	1,2,4-Trichlorobenzene	ND		50	48.9	98	50	49.0	98	0	61-137/16
71-55-6	1,1,1-Trichloroethane	ND		50	51.5	103	50	51.5	103	0	67-132/13
79-00-5	1,1,2-Trichloroethane	ND		50	59.6	119	50	57.9	116	3	75-120/12
79-01-6	Trichloroethene	ND		50	50.2	100	50	50.0	100	0	56-136/12
75-69-4	Trichlorofluoromethane	ND		50	58.0	116	50	58.9	118	2	61-145/16
96-18-4	1,2,3-Trichloropropane	ND		50	55.3	111	50	55.2	110	0	68-124/14
95-63-6	1,2,4-Trimethylbenzene	ND		50	51.6	103	50	51.7	103	0	39-147/13
108-67-8	1,3,5-Trimethylbenzene	ND		50	52.3	105	50	52.1	104	0	56-136/14
108-05-4	Vinyl Acetate	ND		50	49.2	98	50	48.1	96	2	68-167/16
75-01-4	Vinyl chloride	ND		50	54.7	109	50	56.0	112	2	41-156/16
	m,p-Xylene	ND		100	116	116	100	115	115	1	32-151/12
95-47-6	o-Xylene	ND		50	56.8	114	50	56.5	113	1	50-139/12

CAS No.	Surrogate Recoveries	MS	MSD	JD36538-15	Limits
1868-53-7	Dibromofluoromethane	93%	94%	94%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36538-15MS	2V83614.D	1	12/14/21	NW	n/a	n/a	V2V3446
JD36538-15MSD	2V83615.D	1	12/14/21	NW	n/a	n/a	V2V3446
JD36538-15	2V83613.D	1	12/14/21	NW	n/a	n/a	V2V3446

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36319-3, JD36319-4, JD36319-5

CAS No.	Surrogate Recoveries	MS	MSD	JD36538-15	Limits
17060-07-0	1,2-Dichloroethane-D4	108%	109%	112%	80-120%
2037-26-5	Toluene-D8	102%	100%	103%	80-120%
460-00-4	4-Bromofluorobenzene	93%	94%	95%	82-114%

(a) Outside control limits.
(b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36319-2DUP	3A167374.D	1	12/14/21	BK	n/a	n/a	V3A7263
JD36319-2	3A167363.D	1	12/14/21	BK	n/a	n/a	V3A7263

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36319-1, JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	JD36319-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
123-91-1	1,4-Dioxane	2.0	B	2.0	B	0	36

CAS No.	Surrogate Recoveries	DUP	JD36319-2	Limits
17647-74-4	1,4-Dioxane-D8	199%* b	179%* a	39-174%

(a) Outside control limits due to matrix interference. Confirmed by sample duplicate.
(b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V2V3410-BFB	**Injection Date:**	11/17/21
Lab File ID:	2V82658.D	**Injection Time:**	18:44
Instrument ID:	GCMS2V		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16263	19.7		Pass
75	30.0 - 60.0% of mass 95	36856	44.6		Pass
95	Base peak, 100% relative abundance	82621	100.0		Pass
96	5.0 - 9.0% of mass 95	5234	6.33		Pass
173	Less than 2.0% of mass 174	452	0.55	(0.64) [a]	Pass
174	50.0 - 120.0% of mass 95	70272	85.1		Pass
175	5.0 - 9.0% of mass 174	5260	6.37	(7.49) [a]	Pass
176	95.0 - 101.0% of mass 174	70213	85.0	(99.9) [a]	Pass
177	5.0 - 9.0% of mass 176	4519	5.47	(6.44) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3410-IC3410	2V82659.D	11/17/21	19:09	00:25	Initial cal 0.2
V2V3410-IC3410	2V82660.D	11/17/21	19:35	00:51	Initial cal 0.5
V2V3410-IC3410	2V82661.D	11/17/21	20:00	01:16	Initial cal 1
V2V3410-IC3410	2V82662.D	11/17/21	20:26	01:42	Initial cal 2
V2V3410-IC3410	2V82663.D	11/17/21	20:51	02:07	Initial cal 4
V2V3410-IC3410	2V82664.D	11/17/21	21:17	02:33	Initial cal 8
V2V3410-IC3410	2V82665.D	11/17/21	21:43	02:59	Initial cal 20
V2V3410-ICC3410	2V82666.D	11/17/21	22:08	03:24	Initial cal 50
V2V3410-IC3410	2V82667.D	11/17/21	22:34	03:50	Initial cal 100
V2V3410-IC3410	2V82668.D	11/17/21	22:59	04:15	Initial cal 200
V2V3410-ICV3410	2V82671.D	11/18/21	00:15	05:31	Initial cal verification 50
V2V3410-ICV3410	2V82672.D	11/18/21	00:41	05:57	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V2V3410-BFB2	**Injection Date:**	11/18/21
Lab File ID:	2V82677.D	**Injection Time:**	11:00
Instrument ID:	GCMS2V		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16043	19.2		Pass
75	30.0 - 60.0% of mass 95	36659	43.9		Pass
95	Base peak, 100% relative abundance	83536	100.0		Pass
96	5.0 - 9.0% of mass 95	5523	6.61		Pass
173	Less than 2.0% of mass 174	710	0.85	(0.98) [a]	Pass
174	50.0 - 120.0% of mass 95	72229	86.5		Pass
175	5.0 - 9.0% of mass 174	5646	6.76	(7.82) [a]	Pass
176	95.0 - 101.0% of mass 174	72875	87.2	(100.9) [a]	Pass
177	5.0 - 9.0% of mass 176	4796	5.74	(6.58) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3410-ICV3410	2V82678.D	11/18/21	11:34	00:34	Initial cal verification 50
V2V3410-ICV3410	2V82679.D	11/18/21	11:59	00:59	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3444-BFB
Lab File ID: 2V83548.D
Instrument ID: GCMS2V
Injection Date: 12/13/21
Injection Time: 09:36

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	26683	24.9		Pass
75	30.0 - 60.0% of mass 95	51976	48.5		Pass
95	Base peak, 100% relative abundance	107259	100.0		Pass
96	5.0 - 9.0% of mass 95	7008	6.53		Pass
173	Less than 2.0% of mass 174	227	0.21	(0.26) [a]	Pass
174	50.0 - 120.0% of mass 95	87877	81.9		Pass
175	5.0 - 9.0% of mass 174	6585	6.14	(7.49) [a]	Pass
176	95.0 - 101.0% of mass 174	86205	80.4	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	5574	5.20	(6.47) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3444-CC3410	2V83548.D	12/13/21	09:36	00:00	Continuing cal 20
V2V3444-BS	2V83550.D	12/13/21	11:07	01:31	Blank Spike
V2V3444-MB	2V83552.D	12/13/21	12:16	02:40	Method Blank
ZZZZZZ	2V83553.D	12/13/21	12:42	03:06	(unrelated sample)
ZZZZZZ	2V83554.D	12/13/21	13:07	03:31	(unrelated sample)
JD36437-1	2V83555.D	12/13/21	13:33	03:57	(used for QC only; not part of job JD36319)
ZZZZZZ	2V83556.D	12/13/21	13:58	04:22	(unrelated sample)
ZZZZZZ	2V83557.D	12/13/21	14:24	04:48	(unrelated sample)
ZZZZZZ	2V83558.D	12/13/21	14:49	05:13	(unrelated sample)
ZZZZZZ	2V83559.D	12/13/21	15:15	05:39	(unrelated sample)
ZZZZZZ	2V83560.D	12/13/21	15:40	06:04	(unrelated sample)
ZZZZZZ	2V83561.D	12/13/21	16:06	06:30	(unrelated sample)
JD36437-1MS	2V83562.D	12/13/21	16:31	06:55	Matrix Spike
JD36437-1MSD	2V83563.D	12/13/21	16:57	07:21	Matrix Spike Duplicate
ZZZZZZ	2V83564.D	12/13/21	17:23	07:47	(unrelated sample)
ZZZZZZ	2V83565.D	12/13/21	17:48	08:12	(unrelated sample)
ZZZZZZ	2V83566.D	12/13/21	18:14	08:38	(unrelated sample)
ZZZZZZ	2V83567.D	12/13/21	18:39	09:03	(unrelated sample)
JD36319-1	2V83568.D	12/13/21	19:04	09:28	TB-20211206
JD36319-2	2V83569.D	12/13/21	19:30	09:54	HOFF MW-A
JD36319-3	2V83570.D	12/13/21	19:55	10:19	HOFF MW-10
JD36319-4	2V83571.D	12/13/21	20:21	10:45	HOFF MW-8DL
JD36319-5	2V83572.D	12/13/21	20:46	11:10	HOFF MW-8DU
ZZZZZZ	2V83573.D	12/13/21	21:12	11:36	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V2V3446-BFB	**Injection Date:**	12/14/21
Lab File ID:	2V83601.D	**Injection Time:**	09:49
Instrument ID:	GCMS2V		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	28136	24.5		Pass
75	30.0 - 60.0% of mass 95	54443	47.4		Pass
95	Base peak, 100% relative abundance	114795	100.0		Pass
96	5.0 - 9.0% of mass 95	7519	6.55		Pass
173	Less than 2.0% of mass 174	748	0.65	(0.78) [a]	Pass
174	50.0 - 120.0% of mass 95	96373	84.0		Pass
175	5.0 - 9.0% of mass 174	7386	6.43	(7.66) [a]	Pass
176	95.0 - 101.0% of mass 174	94083	82.0	(97.6) [a]	Pass
177	5.0 - 9.0% of mass 176	6199	5.40	(6.59) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3446-CC3410	2V83601.D	12/14/21	09:49	00:00	Continuing cal 20
V2V3446-BS	2V83603.D	12/14/21	11:07	01:18	Blank Spike
V2V3446-MB	2V83605.D	12/14/21	12:22	02:33	Method Blank
JD36319-4	2V83606.D	12/14/21	12:53	03:04	HOFF MW-8DL
JD36319-5	2V83607.D	12/14/21	13:19	03:30	HOFF MW-8DU
JD36319-3	2V83608.D	12/14/21	13:44	03:55	HOFF MW-10
ZZZZZZ	2V83609.D	12/14/21	14:10	04:21	(unrelated sample)
ZZZZZZ	2V83611.D	12/14/21	15:01	05:12	(unrelated sample)
ZZZZZZ	2V83612.D	12/14/21	15:27	05:38	(unrelated sample)
JD36538-15	2V83613.D	12/14/21	15:52	06:03	(used for QC only; not part of job JD36319)
JD36538-15MS	2V83614.D	12/14/21	16:18	06:29	Matrix Spike
JD36538-15MSD	2V83615.D	12/14/21	16:43	06:54	Matrix Spike Duplicate
ZZZZZZ	2V83618.D	12/14/21	18:00	08:11	(unrelated sample)
ZZZZZZ	2V83619.D	12/14/21	18:25	08:36	(unrelated sample)
ZZZZZZ	2V83620.D	12/14/21	18:51	09:02	(unrelated sample)
ZZZZZZ	2V83621.D	12/14/21	19:16	09:27	(unrelated sample)
ZZZZZZ	2V83622.D	12/14/21	19:41	09:52	(unrelated sample)
ZZZZZZ	2V83623.D	12/14/21	20:07	10:18	(unrelated sample)
ZZZZZZ	2V83624.D	12/14/21	20:32	10:43	(unrelated sample)
ZZZZZZ	2V83625.D	12/14/21	20:58	11:09	(unrelated sample)
ZZZZZZ	2V83626.D	12/14/21	21:23	11:34	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V3A7257-BFB	**Injection Date:**	12/06/21
Lab File ID:	3A167227.D	**Injection Time:**	09:39
Instrument ID:	GCMS3A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	7175	21.9		Pass
75	30.0 - 60.0% of mass 95	17383	53.0		Pass
95	Base peak, 100% relative abundance	32826	100.0		Pass
96	5.0 - 9.0% of mass 95	1848	5.63		Pass
173	Less than 2.0% of mass 174	448	1.36	(1.39) [a]	Pass
174	50.0 - 120.0% of mass 95	32168	98.0		Pass
175	5.0 - 9.0% of mass 174	2750	8.38	(8.55) [a]	Pass
176	95.0 - 101.0% of mass 174	32485	99.0	(101.0) [a]	Pass
177	5.0 - 9.0% of mass 176	2405	7.33	(7.40) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7257-IC7257	3A167232.D	12/06/21	13:29	03:50	Initial cal 1
V3A7257-IC7257	3A167233.D	12/06/21	13:58	04:19	Initial cal 2
V3A7257-IC7257	3A167234.D	12/06/21	14:27	04:48	Initial cal 5
V3A7257-ICC7257	3A167235.D	12/06/21	14:56	05:17	Initial cal 20
V3A7257-IC7257	3A167236.D	12/06/21	15:25	05:46	Initial cal 50
V3A7257-IC7257	3A167237.D	12/06/21	15:54	06:15	Initial cal 100
V3A7257-IC7257	3A167242.D	12/06/21	18:20	08:41	Initial cal 0.25
V3A7257-IC7257	3A167243.D	12/06/21	18:49	09:10	Initial cal 0.40
V3A7257-IC7257	3A167245.D	12/06/21	19:47	10:08	Initial cal 200
V3A7257-ICV7257	3A167248.D	12/06/21	21:13	11:34	Initial cal verification 20

Instrument Performance Check (BFB)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V3A7263-BFB	**Injection Date:**	12/14/21
Lab File ID:	3A167355.D	**Injection Time:**	08:56
Instrument ID:	GCMS3A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	55922	19.3		Pass
75	30.0 - 60.0% of mass 95	150545	51.8		Pass
95	Base peak, 100% relative abundance	290474	100.0		Pass
96	5.0 - 9.0% of mass 95	18618	6.41		Pass
173	Less than 2.0% of mass 174	3230	1.11	(1.19) [a]	Pass
174	50.0 - 120.0% of mass 95	271061	93.3		Pass
175	5.0 - 9.0% of mass 174	21586	7.43	(7.96) [a]	Pass
176	95.0 - 101.0% of mass 174	268864	92.6	(99.2) [a]	Pass
177	5.0 - 9.0% of mass 176	18603	6.40	(6.92) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7263-CC7257	3A167356.D	12/14/21	09:25	00:29	Continuing cal 5
V3A7263-BS	3A167357.D	12/14/21	10:26	01:30	Blank Spike
V3A7263-BSD	3A167358.D	12/14/21	10:56	02:00	Blank Spike Duplicate
V3A7263-MB	3A167360.D	12/14/21	11:54	02:58	Method Blank
JD36319-1	3A167361.D	12/14/21	12:23	03:27	TB-20211206
JD36319-2	3A167363.D	12/14/21	13:20	04:24	HOFF MW-A
JD36319-3	3A167364.D	12/14/21	13:49	04:53	HOFF MW-10
JD36319-4	3A167365.D	12/14/21	14:18	05:22	HOFF MW-8DL
JD36319-5	3A167366.D	12/14/21	14:47	05:51	HOFF MW-8DU
JD36187-2	3A167370.D	12/14/21	16:42	07:46	(used for QC only; not part of job JD36319)
ZZZZZZ	3A167371.D	12/14/21	17:11	08:15	(unrelated sample)
JD36187-2MS	3A167372.D	12/14/21	17:40	08:44	Matrix Spike
JD36319-2DUP	3A167374.D	12/14/21	18:37	09:41	Duplicate
JD36187-1	3A167375.D	12/14/21	19:06	10:10	(used for QC only; not part of job JD36319)
ZZZZZZ	3A167376.D	12/14/21	19:35	10:39	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7265-BFB
Lab File ID: 3A167389.D
Instrument ID: GCMS3A
Injection Date: 12/16/21
Injection Time: 09:52

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	29469	18.4		Pass
75	30.0 - 60.0% of mass 95	82552	51.6		Pass
95	Base peak, 100% relative abundance	159957	100.0		Pass
96	5.0 - 9.0% of mass 95	10136	6.34		Pass
173	Less than 2.0% of mass 174	2004	1.25	(1.28) [a]	Pass
174	50.0 - 120.0% of mass 95	156394	97.8		Pass
175	5.0 - 9.0% of mass 174	12010	7.51	(7.68) [a]	Pass
176	95.0 - 101.0% of mass 174	151850	94.9	(97.1) [a]	Pass
177	5.0 - 9.0% of mass 176	10012	6.26	(6.59) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7265-CC7257	3A167390.D	12/16/21	10:21	00:29	Continuing cal 20
V3A7265-BS	3A167391.D	12/16/21	11:00	01:08	Blank Spike
V3A7265-MB	3A167393.D	12/16/21	11:58	02:06	Method Blank
ZZZZZZ	3A167396.D	12/16/21	13:10	03:18	(unrelated sample)
ZZZZZZ	3A167397.D	12/16/21	13:39	03:47	(unrelated sample)
ZZZZZZ	3A167398.D	12/16/21	14:08	04:16	(unrelated sample)
JD36319-3	3A167399.D	12/16/21	14:37	04:45	HOFF MW-10
JD36319-4	3A167400.D	12/16/21	15:06	05:14	HOFF MW-8DL
JD36319-5	3A167401.D	12/16/21	15:35	05:43	HOFF MW-8DU
JD36294-5MS	3A167402.D	12/16/21	16:04	06:12	Matrix Spike
JD36294-5MSD	3A167403.D	12/16/21	16:33	06:41	Matrix Spike Duplicate
ZZZZZZ	3A167405.D	12/16/21	17:30	07:38	(unrelated sample)
JD36294-5	3A167406.D	12/16/21	17:59	08:07	(used for QC only; not part of job JD36319)
ZZZZZZ	3A167407.D	12/16/21	18:28	08:36	(unrelated sample)
ZZZZZZ	3A167408.D	12/16/21	18:56	09:04	(unrelated sample)
ZZZZZZ	3A167409.D	12/16/21	19:25	09:33	(unrelated sample)
ZZZZZZ	3A167411.D	12/16/21	20:23	10:31	(unrelated sample)
ZZZZZZ	3A167412.D	12/16/21	20:51	10:59	(unrelated sample)
ZZZZZZ	3A167413.D	12/16/21	21:20	11:28	(unrelated sample)

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V2V3444-CC3410	**Injection Date:**	12/13/21
Lab File ID:	2V83548.D	**Injection Time:**	09:36
Instrument ID:	GCMS2V	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	194076	2.59	396027	3.75	545705	4.29	426609	6.64	176303	8.82
Upper Limit [a]	388152	3.09	792054	4.25	1091410	4.79	853218	7.14	352606	9.32
Lower Limit [b]	97038	2.09	198014	3.25	272853	3.79	213305	6.14	88152	8.32

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2V3444-BS	194114	2.59	390758	3.75	537420	4.29	429302	6.64	176116	8.82
V2V3444-MB	240937	2.59	413311	3.75	576083	4.29	435630	6.64	181912	8.82
ZZZZZZ	228482	2.59	410476	3.75	573117	4.29	442453	6.64	179422	8.82
ZZZZZZ	245945	2.59	412955	3.75	587226	4.29	449664	6.64	184659	8.82
JD36437-1	244773	2.59	411535	3.75	578157	4.29	447186	6.64	184212	8.82
ZZZZZZ	225580	2.59	389429	3.75	548182	4.29	430957	6.64	179150	8.82
ZZZZZZ	243332	2.59	395765	3.75	566007	4.29	443437	6.64	184769	8.82
ZZZZZZ	231929	2.59	400584	3.75	559760	4.29	440877	6.64	184796	8.82
ZZZZZZ	241238	2.59	399863	3.75	564372	4.29	438200	6.64	181905	8.82
ZZZZZZ	241280	2.59	391598	3.75	548797	4.29	430203	6.64	182215	8.82
ZZZZZZ	254859	2.59	400255	3.75	557780	4.29	438576	6.64	187161	8.82
JD36437-1MS	220327	2.59	374883	3.75	544622	4.29	447542	6.64	186254	8.82
JD36437-1MSD	218658	2.59	379915	3.75	549588	4.29	445886	6.64	186030	8.82
ZZZZZZ	238462	2.59	411066	3.75	583974	4.29	454687	6.64	188449	8.82
ZZZZZZ	247506	2.59	413638	3.75	597129	4.29	459073	6.64	187763	8.82
ZZZZZZ	219521	2.59	402266	3.75	571896	4.29	442508	6.64	180025	8.82
ZZZZZZ	238241	2.59	401500	3.75	575375	4.29	445899	6.64	181772	8.82
JD36319-1	249462	2.59	399805	3.75	578706	4.29	447055	6.64	184172	8.82
JD36319-2	236377	2.59	389130	3.75	564611	4.29	435511	6.64	179602	8.82
JD36319-3	223293	2.59	408753	3.75	586454	4.29	455116	6.64	182135	8.82
JD36319-4	218908	2.59	401640	3.75	574472	4.29	443608	6.64	182905	8.82
JD36319-5	207989	2.59	401587	3.75	577296	4.29	438134	6.64	175777	8.82
ZZZZZZ	241664	2.59	401039	3.75	588933	4.29	454400	6.64	190685	8.82

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V2V3446-CC3410	**Injection Date:**	12/14/21
Lab File ID:	2V83601.D	**Injection Time:**	09:49
Instrument ID:	GCMS2V	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	220311	2.59	397971	3.75	567825	4.29	438928	6.64	180630	8.82
Upper Limit [a]	440622	3.09	795942	4.25	1135650	4.79	877856	7.14	361260	9.32
Lower Limit [b]	110156	2.09	198986	3.25	283913	3.79	219464	6.14	90315	8.32

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2V3446-BS	217521	2.59	393428	3.75	553513	4.29	439243	6.64	181393	8.82
V2V3446-MB	240698	2.59	427973	3.75	603164	4.29	454984	6.64	183319	8.82
JD36319-4 [c]	217012	2.59	424356	3.75	596675	4.29	443060	6.64	177310	8.82
JD36319-5 [c]	233369	2.59	427969	3.75	607515	4.29	462979	6.64	186893	8.82
JD36319-3	235802	2.59	425195	3.75	594184	4.29	454106	6.64	182128	8.82
ZZZZZZ	242675	2.59	430042	3.75	604580	4.29	465144	6.64	190817	8.82
ZZZZZZ	234142	2.59	433251	3.75	603768	4.29	462117	6.64	186573	8.82
ZZZZZZ	230748	2.59	430320	3.75	600922	4.29	455159	6.64	185381	8.82
JD36538-15	241334	2.59	432811	3.75	602647	4.29	469397	6.64	190679	8.82
JD36538-15MS	232392	2.59	396754	3.75	558743	4.29	440856	6.64	184149	8.82
JD36538-15MSD	238308	2.59	399859	3.75	563625	4.29	449362	6.64	186729	8.82
ZZZZZZ	236386	2.59	431223	3.75	599361	4.29	451109	6.64	186617	8.82
ZZZZZZ	239358	2.59	436223	3.75	606338	4.29	463356	6.64	185980	8.82
ZZZZZZ	224711	2.59	426939	3.75	594423	4.29	452734	6.64	182855	8.82
ZZZZZZ	249916	2.59	437499	3.75	608895	4.29	463462	6.64	189354	8.82
ZZZZZZ	235520	2.59	425700	3.75	600583	4.29	454366	6.64	181080	8.82
ZZZZZZ	232614	2.59	430128	3.75	601308	4.29	452427	6.64	184566	8.82
ZZZZZZ	254148	2.59	430200	3.75	604922	4.29	463103	6.64	189348	8.82
ZZZZZZ	235796	2.59	433311	3.75	606886	4.29	456060	6.64	183893	8.82
ZZZZZZ	239684	2.59	427661	3.75	596092	4.29	458618	6.64	189621	8.82

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Dilution required due to high concentration of target compound.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V3A7263-CC7257	**Injection Date:**	12/14/21
Lab File ID:	3A167356.D	**Injection Time:**	09:25
Instrument ID:	GCMS3A	**Method:**	SW846 8260D BY SIM

	IS 1 AREA	RT
Check Std	19388	15.60
Upper Limit [a]	38776	16.10
Lower Limit [b]	9694	15.10

Lab Sample ID	IS 1 AREA	RT
V3A7263-BS	19391	15.60
V3A7263-BSD	17938	15.60
V3A7263-MB	16075	15.60
JD36319-1	16571	15.60
JD36319-2	11975	15.60
JD36319-3	7721[c]	15.60
JD36319-4	6559[c]	15.60
JD36319-5	6345[c]	15.60
JD36187-2	15423	15.60
ZZZZZZ	14124	15.60
JD36187-2MS	16767	15.60
JD36319-2DUP	11671	15.60
JD36187-1	14021	15.60
ZZZZZZ	13987	15.60

IS 1 = 4-Bromofluorobenzene

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to matrix interference.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V3A7265-CC7257	**Injection Date:**	12/16/21
Lab File ID:	3A167390.D	**Injection Time:**	10:21
Instrument ID:	GCMS3A	**Method:**	SW846 8260D BY SIM

	IS 1 AREA	RT
Check Std	17766	15.60
Upper Limit [a]	35532	16.10
Lower Limit [b]	8883	15.10

Lab Sample ID	IS 1 AREA	RT
V3A7265-BS	16818	15.60
V3A7265-MB	15950	15.60
ZZZZZZ	15069	15.60
ZZZZZZ	14114	15.60
ZZZZZZ	15403	15.60
JD36319-3 [c]	8870[d]	15.60
JD36319-4 [c]	6572[d]	15.60
JD36319-5 [c]	7438[d]	15.60
JD36294-5MS	14931	15.60
JD36294-5MSD	15210	15.60
ZZZZZZ	14114	15.60
JD36294-5	14504	15.60
ZZZZZZ	14422	15.60
ZZZZZZ	15079	15.60
ZZZZZZ	14855	15.60
ZZZZZZ	13222	15.60
ZZZZZZ	14353	15.60
ZZZZZZ	4959[d]	15.60

IS 1 = 4-Bromofluorobenzene

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run.
(d) Outside control limits due to matrix interference.

Surrogate Recovery Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
JD36319-1	3A167361.D	103
JD36319-2	3A167363.D	179* a
JD36319-3	3A167364.D	265* b
JD36319-3	3A167399.D	199* b
JD36319-4	3A167365.D	237* b
JD36319-4	3A167400.D	265* b
JD36319-5	3A167366.D	346* b
JD36319-5	3A167401.D	232* b
JD36187-2MS	3A167372.D	128
JD36319-2DUP	3A167374.D	199* b
V3A7263-BS	3A167357.D	122
V3A7263-BSD	3A167358.D	121
V3A7263-MB	3A167360.D	167

Surrogate Compounds	Recovery Limits
S1 = 1,4-Dioxane-D8	39-174%

(a) Outside control limits due to matrix interference. Confirmed by sample duplicate.
(b) Outside control limits due to matrix interference.

Surrogate Recovery Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD36319-1	2V83568.D	97	112	103	95
JD36319-2	2V83569.D	97	110	103	93
JD36319-3	2V83608.D	92	108	104	94
JD36319-3	2V83570.D	96	108	103	96
JD36319-4	2V83606.D	91	105	106	95
JD36319-4	2V83571.D	96	109	104	93
JD36319-5	2V83607.D	93	106	104	94
JD36319-5	2V83572.D	95	107	105	95
JD36437-1MS	2V83562.D	99	110	99	93
JD36437-1MSD	2V83563.D	97	111	100	92
JD36538-15MS	2V83614.D	93	108	102	93
JD36538-15MSD	2V83615.D	94	109	100	94
V2V3444-BS	2V83550.D	91	107	100	94
V2V3444-MB	2V83552.D	92	110	105	92
V2V3446-BS	2V83603.D	94	110	101	95
V2V3446-MB	2V83605.D	93	108	105	96

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	80-120%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	82-114%

Initial Calibration Summary

Job Number: JD36319 **Sample:** V2V3410-ICC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82666.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report MS2V

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 17:15:16 2021
Response via : Initial Calibration

Calibration Files
4 =2V82663.D 0.5 =2V82660.D 8 =2V82664.D 50 =2V82666.D
100 =2V82667.D 1 =2V82661.D 200 =2V82668.D 20 =2V82665.D
2 =2V82662.D 0.2 =2V82659.D = =

Compound	4	0.5	8	50	100	1	200	20	2	0.2	Avg	%RSD
1) I tert butyl alcohol-d9	ISTD											
2) ethanol	0.204	0.180	0.192	0.193	0.169	0.198	0.133	0.185	0.210		0.185	12.45
3) tertiary butyl alcohol	2.010	1.677	1.920	2.044	1.941	1.881	1.846	1.917	2.006		1.916	5.75
4) 1,4-dioxane	0.156		0.150	0.153	0.146	0.126	0.140	0.148	0.144		0.145	6.34
5) I pentafluorobenzene	ISTD											
6) chlorodifluoromethane	0.556		0.584	0.671	0.666	0.543	0.613	0.632	0.592		0.607	7.79
7) dichlorodifluoromethane	0.458		0.486	0.609	0.603	0.507	0.627	0.585	0.549		0.553	11.40
8) chloromethane	0.187	0.228	0.189	0.221	0.214	0.241	0.221	0.204	0.207		0.212	8.35
9) vinyl chloride	0.504	0.520	0.514	0.625	0.617	0.580	0.625	0.578	0.554	0.507	0.562	8.84
10) bromomethane	0.189		0.206	0.241	0.233		0.225	0.190			0.214	10.47
11) chloroethane	0.293		0.292	0.334	0.315	0.386	0.292	0.312	0.320		0.318	9.89
12) trichlorofluoromethane	0.629	0.594	0.668	0.815	0.802	0.700	0.775	0.770	0.720		0.719	10.85
13) 1,3-butadiene	0.498	0.449	0.496	0.583	0.578	0.489	0.524	0.550	0.546	0.613	0.532	9.51
14) ethyl ether	0.250		0.257	0.274	0.274	0.223	0.267	0.264	0.246		0.257	6.61
15) acrolein	0.115		0.112	0.118	0.119	0.097	0.114	0.116	0.111		0.113	6.28
16) freon 113	0.339		0.368	0.432	0.436		0.404	0.415	0.379		0.396	9.06
17) 1,1-dichloroethene	0.680		0.678	0.796	0.782	0.653	0.717	0.748	0.706		0.720	7.14
18) acetone	0.317		0.329	0.222	0.319	0.317	0.260	0.296	0.347		0.301	13.58
19) acetonitrile	0.099		0.091	0.088	0.089		0.082	0.089	0.111		0.093	10.05
20) iodomethane *This compound fails Initial Calibration criteria*	0.090		0.134	0.457	0.523	0.047	0.513	0.258	0.073		0.262	78.66
21) carbon disulfide	1.120	1.056	1.126	1.305	1.289	1.110	1.182	1.219	1.178	1.325	1.191	7.71
22) methylene chloride	0.472	0.486	0.468	0.499	0.495	0.503	0.470	0.490	0.488	0.640	0.501	10.01
23) methyl acetate												

Initial Calibration Summary

Job Number: JD36319 **Sample:** V2V3410-ICC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82666.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

0.595 0.599 0.565 0.566 0.673 0.540 0.549 0.622 0.589 7.42

24) methyl tert butyl ether
1.338 1.063 1.330 1.402 1.390 1.301 1.342 1.373 1.313 1.173 1.303 8.11

25) trans-1,2-dichloroethene
0.441 0.375 0.429 0.498 0.495 0.436 0.460 0.482 0.454 0.367 0.444 10.17

26) hexane
0.380 0.428 0.517 0.521 0.489 0.486 0.470 11.73

27) di-isopropyl ether
1.774 1.486 1.750 1.880 1.832 1.734 1.731 1.833 1.778 1.610 1.741 6.65

28) ethyl tert-butyl ether
1.673 1.399 1.670 1.801 1.776 1.678 1.724 1.750 1.692 1.450 1.661 8.01

29) 1,1-dichloroethane
0.862 0.675 0.859 0.955 0.934 0.816 0.869 0.933 0.886 0.732 0.852 10.53

30) chloroprene
0.708 0.726 0.837 0.821 0.670 0.747 0.797 0.738 0.756 7.65

31) acrylonitrile
0.247 0.261 0.269 0.271 0.223 0.261 0.267 0.244 0.255 6.40

32) vinyl acetate
0.106 0.105 0.118 0.114 0.089 0.114 0.113 0.096 0.107 9.24

33) ethyl acetate
0.111 0.123 0.116 0.118 0.089 0.111 0.116 0.098 0.110 10.37

34) 2-butanone
0.081 0.081 0.073 0.085 0.068 0.076 0.079 0.078 0.077 6.88

35) 2,2-dichloropropane
0.661 0.546 0.670 0.738 0.725 0.626 0.666 0.718 0.691 0.671 8.78

36) cis-1,2-dichloroethene
0.499 0.389 0.504 0.551 0.545 0.479 0.512 0.534 0.519 0.423 0.495 10.62

37) propionitrile
0.103 0.088 0.104 0.105 0.105 0.101 0.096 0.106 0.102 0.090 0.100 6.47

38) methyl acrylate
0.089 0.091 0.099 0.098 0.095 0.096 0.087 0.093 4.97

39) bromochloromethane
0.278 0.275 0.296 0.287 0.264 0.267 0.285 0.282 0.279 3.78

40) tetrahydrofuran
0.086 0.082 0.080 0.082 0.078 0.078 0.087 0.082 4.51

41) chloroform
0.842 0.845 0.843 0.902 0.893 0.903 0.837 0.869 0.919 0.872 3.68

42) dibromofluoromethane (s)
0.459 0.462 0.461 0.465 0.471 0.468 0.472 0.464 0.458 0.455 0.464 1.23

43) methacrylonitrile
0.235 0.236 0.241 0.245 0.219 0.236 0.244 0.232 0.236 3.55

44) 1,1,1-trichloroethane
0.713 0.619 0.714 0.803 0.797 0.662 0.744 0.770 0.761 0.646 0.723 8.82

45) cyclohexane
0.506 0.527 0.629 0.617 0.546 0.617 0.609 0.609 0.582 8.25

46) 1,1-dichloropropene
0.571 0.446 0.583 0.664 0.649 0.557 0.605 0.626 0.596 0.589 10.88

47) carbon tetrachloride
0.597 0.623 0.717 0.706 0.533 0.652 0.684 0.625 0.642 9.53

48) isobutyl alcohol
0.024 0.024 0.024 0.024 0.022 0.022 0.024 0.023 0.023 4.70

49) tert-amyl alcohol
0.037 0.036 0.034 0.034 0.031 0.035 0.038 0.035 7.35

50) I 1,4-difluorobenzene ----------ISTD----------

51) 1,2-dichloroethane-d4 (s)
0.315 0.324 0.320 0.317 0.322 0.324 0.325 0.325 0.316 0.318 0.321 1.15

52) n-butyl alcohol
0.018 0.018 0.018 0.018 0.017 0.017 0.019 0.018 0.018 3.65

53) benzene

1.213 0.987 1.225 1.340 1.292 1.176 1.201 1.296 1.268 1.135 1.213 8.29

54) tert-amyl methyl ether
1.053 0.885 1.040 1.091 1.063 1.052 1.031 1.076 1.047 0.927 1.027 6.49

55) iso-octane
1.007 1.112 1.302 1.295 1.211 1.244 1.130 1.186 9.12

56) heptane
0.188 0.208 0.252 0.251 0.241 0.232 0.215 0.227 10.47

57) isopropyl acetate
0.092 0.092 0.093 0.094 0.076 0.090 0.093 0.083 0.089 7.10

58) 1,2-dichloroethane
0.492 0.451 0.487 0.509 0.496 0.500 0.475 0.503 0.501 0.572 0.499 6.20

59) trichloroethene
0.329 0.266 0.336 0.379 0.375 0.310 0.351 0.361 0.352 0.340 10.39

60) ethyl acrylate
0.624 0.633 0.623 0.630 0.628 0.656 0.602 0.626 0.651 0.630 2.53

61) 2-nitropropane
0.135 0.125 0.121 0.121 0.118 0.122 0.152 0.128 9.50

62) 2-chloroethyl vinyl ether
0.177 0.192 0.226 0.229 0.220 0.214 0.156 0.202 13.70

63) methyl methacrylate
0.108 0.114 0.115 0.117 0.089 0.112 0.115 0.109 0.110 8.05

64) 1,2-dichloropropane
0.355 0.261 0.361 0.387 0.378 0.332 0.362 0.373 0.355 0.351 10.61

65) methylcyclohexane
0.443 0.475 0.563 0.559 0.528 0.532 0.482 0.512 8.91

66) dibromomethane
0.228 0.184 0.231 0.242 0.238 0.212 0.231 0.235 0.233 0.238 0.227 7.64

67) bromodichloromethane
0.443 0.374 0.438 0.477 0.473 0.436 0.458 0.463 0.434 0.506 0.450 7.76

68) epichlorohydrin
0.047 0.051 0.048 0.050 0.053 0.050 0.050 0.048 0.049 0.046 0.049 4.04

69) cis-1,3-dichloropropene
0.526 0.409 0.534 0.583 0.573 0.505 0.556 0.560 0.519 0.530 9.83

70) 4-methyl-2-pentanone
0.190 0.145 0.189 0.194 0.192 0.178 0.180 0.191 0.185 0.153 0.180 9.50

71) 3-methyl-1-butanol
0.014 0.014 0.015 0.015 0.013 0.014 0.015 0.013 0.014 5.76

72) I chlorobenzene-d5 ----------ISTD----------

73) toluene-d8 (s)
1.294 1.282 1.271 1.238 1.218 1.291 1.195 1.255 1.296 1.299 1.264 2.87

74) toluene
0.900 0.728 0.885 0.950 0.919 0.857 0.852 0.928 0.945 0.856 0.882 7.41

75) ethyl methacrylate
0.544 0.479 0.537 0.549 0.541 0.514 0.514 0.549 0.553 0.547 0.533 4.39

76) trans-1,3-dichloropropene
0.531 0.433 0.539 0.574 0.563 0.520 0.539 0.556 0.535 0.405 0.519 10.72

77) 1,1,2-trichloroethane
0.300 0.240 0.298 0.305 0.297 0.277 0.286 0.302 0.313 0.269 0.289 7.45

78) 2-hexanone
0.237 0.182 0.232 0.215 0.225 0.205 0.200 0.226 0.229 0.189 0.214 8.89

79) tetrachloroethene
0.344 0.252 0.343 0.373 0.359 0.320 0.332 0.362 0.357 0.338 10.70

80) 1,3-dichloropropane
0.568 0.426 0.556 0.573 0.559 0.549 0.532 0.569 0.578 0.426 0.534 10.88

81) butyl acetate
0.364 0.332 0.366 0.361 0.355 0.383 0.335 0.358 0.348 0.349 0.355 4.25

82) dibromochloromethane
0.438 0.333 0.436 0.458 0.455 0.413 0.434 0.447 0.445 0.390 0.425 8.93

83) 1,2-dibromoethane

0.393 0.315 0.395 0.407 0.401 0.370 0.383 0.403 0.402 0.385 7.51

84) n-butyl ether
1.707 1.400 1.699 1.828 1.755 1.602 1.606 1.778 1.740 1.715 1.683 7.21

85) chlorobenzene
1.031 0.853 1.038 1.113 1.087 0.989 1.027 1.077 1.071 0.945 1.023 7.57

86) 1,1,1,2-tetrachloroethane
0.402 0.296 0.391 0.424 0.413 0.360 0.383 0.411 0.405 0.387 10.06

87) ethylbenzene
1.660 1.393 1.636 1.770 1.702 1.598 1.546 1.722 1.722 1.500 1.625 7.21

88) m,p-xylene
0.648 0.534 0.646 0.692 0.670 0.605 0.610 0.674 0.674 0.539 0.629 8.96

89) o-xylene
1.335 1.110 1.327 1.416 1.367 1.314 1.263 1.394 1.386 1.241 1.315 6.94

90) styrene
1.058 0.781 1.053 1.139 1.099 0.948 1.024 1.112 1.051 1.030 10.51

91) butyl acrylate
0.423 0.371 0.423 0.451 0.443 0.394 0.427 0.438 0.428 0.429 0.423 5.59

92) n-amyl acetate
0.295 0.210 0.288 0.301 0.295 0.245 0.282 0.297 0.285 0.278 10.89

93) bromoform
0.306 0.307 0.330 0.330 0.273 0.318 0.317 0.291 0.309 6.27

94) isopropylbenzene
1.546 1.258 1.562 1.723 1.664 1.484 1.527 1.659 1.598 1.401 1.542 8.88

95) cis-1,4-dichloro-2-butene
0.151 0.160 0.183 0.182 0.176 0.172 0.142 0.167 9.49

96) I 1,4-dichlorobenzene-d ----------ISTD----------

97) 4-bromofluorobenzene (s)
1.143 1.144 1.140 1.124 1.132 1.152 1.134 1.137 1.145 1.156 1.141 0.82

98) bromobenzene
1.196 1.173 1.267 1.235 1.043 1.176 1.228 1.225 1.193 5.73

99) 1,1,2,2-tetrachloroethane
1.334 1.107 1.361 1.341 1.317 1.307 1.291 1.351 1.345 1.196 1.295 6.28

100) trans-1,4-dichloro-2-butene
0.374 0.411 0.437 0.447 0.330 0.422 0.424 0.386 0.404 9.58

101) 1,2,3-trichloropropane
0.394 0.401 0.388 0.384 0.310 0.362 0.387 0.366 0.374 7.73

102) n-propylbenzene
4.751 3.842 4.775 5.236 5.053 4.463 4.634 5.028 4.864 4.356 4.700 8.60

103) 2-chlorotoluene
1.049 0.789 1.073 1.155 1.118 0.996 1.051 1.110 1.112 1.050 10.36

104) 4-chlorotoluene
1.064 0.788 1.075 1.165 1.135 1.028 1.059 1.119 1.092 1.058 10.37

105) 1,3,5-trimethylbenzene
3.277 2.577 3.332 3.660 3.541 2.983 3.275 3.524 3.492 3.026 3.269 10.03

106) tert-butylbenzene
2.883 2.289 2.894 3.214 3.142 2.678 2.892 3.062 2.931 2.506 2.849 10.04

107) 1,2,4-trimethylbenzene
3.369 2.739 3.411 3.700 3.597 3.242 3.351 3.542 3.521 3.273 3.375 7.90

108) sec-butylbenzene
3.915 3.969 4.526 4.393 3.635 4.037 4.284 4.061 4.103 6.98

109) 1,3-dichlorobenzene
1.943 1.614 1.960 2.158 2.137 1.775 2.025 2.056 1.970 1.960 8.81

110) p-isopropyltoluene
3.314 3.422 3.881 3.748 3.053 3.456 3.663 3.483 3.503 7.45

111) 1,2,3-trimethylbenzene
3.401 2.667 3.422 3.609 3.502 3.157 3.278 3.494 3.398 2.760 3.269 9.74

112) 1,4-dichlorobenzene
1.977 1.546 1.992 2.151 2.112 1.916 2.012 2.047 2.036 1.977 8.91

113) 1,2-dichlorobenzene

Initial Calibration Summary

Job Number: JD36319 **Sample:** V2V3410-ICC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82666.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
       1.858       1.863 2.000 1.977 1.743 1.875 1.926 1.866       1.889    4.25
114)  benzyl chloride
       2.195       2.304 2.566 2.589 1.980 2.516 2.413 2.157       2.340    9.35
115)  n-butylbenzene
       1.444       1.476 1.758 1.729       1.639 1.617 1.444       1.587    8.39
116)  hexachloroethane
       0.472       0.510 0.610 0.617       0.597 0.549 0.455       0.544   12.27
117)  1,2-dibromo-3-chloropropane
       0.290       0.302 0.337 0.357       0.355 0.326 0.277       0.320    9.86
118)  1,3,5-trichlorobenzene
       1.192       1.243 1.434 1.442 1.005 1.410 1.313 1.175       1.277   11.97
119)  1,2,4-trichlorobenzene
       0.954       1.008 1.191 1.221 0.728 1.209 1.089 0.925       1.040   16.47
120)  hexachlorobutadiene
       0.410       0.434 0.524 0.526       0.497 0.472 0.405       0.467   11.02
121)  naphthalene
       2.778       2.854 3.189 3.279       3.174 3.032 2.642       2.993    7.99
122)  1,2,3-trichlorobenzene
       0.792       0.863 0.980 1.005 0.665 0.975 0.906 0.796       0.873   13.43
123)  2-methylnaphthalene
       0.444       0.487 0.564 0.611       0.537 0.576             0.537   11.45
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M2V3410.M         Thu Nov 18 17:17:11 2021   RPT1
```

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82671.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V3410\2V82671.D Vial: 16
Acq On : 18 Nov 2021 12:15 am Operator: edwardd
Sample : icv3410-50 Inst : MS2V
Misc : MS54991,V2V3410,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 17:15:16 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	105	0.00	2.59
2		ethanol	0.185	0.188	-1.6	102	0.00	2.07
3		tertiary butyl alcohol	1.916	1.864	2.7	96	0.00	2.65
4		1,4-dioxane	0.145	0.148	-2.1	101	0.00	4.71
5	I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	3.75
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane	0.553	0.559	-1.1	95	0.00	1.34
8		chloromethane	0.212	0.230	-8.5	107	0.00	1.47
9		vinyl chloride	0.562	0.670	-19.2	111	0.00	1.54
10		bromomethane		----------NA----------				
11		chloroethane	0.318	0.330	-3.8	102	0.00	1.82
12		trichlorofluoromethane	0.719	0.801	-11.4	102	0.00	1.99
13		1,3-butadiene	0.532	0.598	-12.4	106	0.00	1.57
14		ethyl ether	0.257	0.268	-4.3	101	0.00	2.15
15		acrolein	0.113	0.114	-0.9	100	0.00	2.24
16		freon 113	0.396	0.397	-0.3	95	0.00	2.31
17		1,1-dichloroethene	0.720	0.730	-1.4	95	0.00	2.31
18		acetone	0.301	0.377	-25.2	175	0.00	2.32
19		acetonitrile		----------NA----------				
20		iodomethane	0.262	0.366	-39.7#	83	0.00	2.42
21		carbon disulfide	1.191	1.227	-3.0	97	0.00	2.46
22		methylene chloride	0.501	0.477	4.8	99	0.00	2.61
23		methyl acetate	0.589	0.490	16.8	90	0.00	2.51
24		methyl tert butyl ether	1.303	1.347	-3.4	99	0.00	2.77
25		trans-1,2-dichloroethene	0.444	0.478	-7.7	99	0.00	2.78
26		hexane	0.470	0.422	10.2	85	0.00	2.96
27		di-isopropyl ether	1.741	1.711	1.7	94	0.00	3.06
28		ethyl tert-butyl ether	1.661	1.614	2.8	93	0.00	3.30
29		1,1-dichloroethane	0.852	0.920	-8.0	100	0.00	3.06
30		chloroprene	0.756	0.843	-11.5	104	0.00	3.11
31		acrylonitrile		----------NA----------				
32		vinyl acetate	0.107	0.100	6.5	88	0.00	3.04
33		ethyl acetate	0.110	0.118	-7.3	105	0.00	3.42
34		2-butanone	0.077	0.094	-22.1	134	0.00	3.40
35		2,2-dichloropropane	0.671	0.709	-5.7	99	0.00	3.43
36		cis-1,2-dichloroethene	0.495	0.536	-8.3	101	0.00	3.43
37		propionitrile	0.100	0.091	9.0	89	0.00	3.44
38		methyl acrylate	0.093	0.096	-3.2	101	0.00	3.46
39		bromochloromethane	0.279	0.290	-3.9	101	0.00	3.58
40		tetrahydrofuran	0.082	0.078	4.9	101	0.00	3.60
41		chloroform	0.872	0.891	-2.2	102	0.00	3.64

Initial Calibration Verification

Job Number: JD36319 **Sample:** V2V3410-ICV3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82671.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	S	dibromofluoromethane (s)	0.464	0.468	-0.9	104	0.00	3.75
43		methacrylonitrile	0.236	0.241	-2.1	103	0.00	3.54
44		1,1,1-trichloroethane	0.723	0.781	-8.0	101	0.00	3.77
45		cyclohexane	0.582	0.715	-22.9	118	0.00	3.83
46		1,1-dichloropropene	0.589	0.658	-11.7	102	0.00	3.87
47		carbon tetrachloride	0.642	0.696	-8.4	100	0.00	3.88
48		isobutyl alcohol	0.023	0.024	-4.3	105	0.00	3.89
49		tert-amyl alcohol	0.035	0.034	2.9	105	0.00	3.98
50	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.317	1.2	104	0.00	3.98
52		n-butyl alcohol	0.018	0.018	0.0	101	0.00	4.36
53		benzene	1.213	1.286	-6.0	100	0.00	4.01
54		tert-amyl methyl ether	1.027	0.934	9.1	89	0.00	4.08
55		iso-octane	1.186	1.152	2.9	92	0.00	4.08
56		heptane	0.227	0.250	-10.1	103	0.00	4.20
57		isopropyl acetate	0.089	0.087	2.2	97	0.00	4.00
58		1,2-dichloroethane	0.499	0.486	2.6	99	0.00	4.04
59		trichloroethene	0.340	0.375	-10.3	103	0.00	4.47
60		ethyl acrylate	0.630	0.473	24.9	78	0.00	4.50
61		2-nitropropane	0.128	0.120	6.3	103	0.00	5.01
62		2-chloroethyl vinyl ether	0.202	0.240	-18.8	110	0.00	5.05
63		methyl methacrylate	0.110	0.114	-3.6	102	0.00	4.68
64		1,2-dichloropropane	0.351	0.373	-6.3	100	0.00	4.66
65		methylcyclohexane	0.512	0.560	-9.4	103	0.00	4.65
66		dibromomethane	0.227	0.232	-2.2	100	0.00	4.73
67		bromodichloromethane	0.450	0.462	-2.7	101	0.00	4.85
68		epichlorohydrin	0.049	0.050	-2.0	104	0.00	5.09
69		cis-1,3-dichloropropene	0.530	0.567	-7.0	101	0.00	5.18
70		4-methyl-2-pentanone	0.180	0.187	-3.9	100	0.00	5.29
71		3-methyl-1-butanol	0.014	0.014	0.0	99	0.00	5.33
72	I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.232	2.5	103	0.00	5.40
74		toluene	0.882	0.929	-5.3	101	0.00	5.46
75		ethyl methacrylate	0.533	0.525	1.5	99	0.00	5.67
76		trans-1,3-dichloropropene	0.519	0.554	-6.7	100	0.00	5.63
77		1,1,2-trichloroethane	0.289	0.299	-3.5	101	0.00	5.80
78		2-hexanone	0.214	0.237	-10.7	114	0.00	5.97
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane	0.534	0.558	-4.5	101	0.00	5.94
81		butyl acetate	0.355	0.341	3.9	98	0.00	6.06
82		dibromochloromethane	0.425	0.446	-4.9	101	0.00	6.13
83		1,2-dibromoethane	0.385	0.398	-3.4	101	0.00	6.23
84		n-butyl ether	1.683	1.437	14.6	81	0.00	6.74
85		chlorobenzene	1.023	1.094	-6.9	102	0.00	6.66
86		1,1,1,2-tetrachloroethane	0.387	0.419	-8.3	102	0.00	6.74
87		ethylbenzene	1.625	1.745	-7.4	102	0.00	6.75
88		m,p-xylene	0.629	0.688	-9.4	103	0.00	6.86
89		o-xylene	1.315	1.363	-3.7	100	0.00	7.21
90		styrene	1.030	1.115	-8.3	101	0.00	7.23
91		butyl acrylate	0.423	0.395	6.6	91	0.00	7.16
92		n-amyl acetate	0.278	0.271	2.5	93	0.00	7.36
93		bromoform	0.309	0.327	-5.8	103	0.00	7.40
94		isopropylbenzene	1.542	1.708	-10.8	103	0.00	7.55
95		cis-1,4-dichloro-2-butene	0.167	0.168	-0.6	95	0.00	7.60
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.135	0.5	105	0.00	7.71
98		bromobenzene	1.193	1.244	-4.3	102	0.00	7.85

Initial Calibration Verification

Job Number: JD36319 **Sample:** V2V3410-ICV3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82671.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	1,1,2,2-tetrachloroethane	1.295	1.303	-0.6	101	0.00	7.83
100	trans-1,4-dichloro-2-bute	0.404	0.432	-6.9	103	0.00	7.87
101	1,2,3-trichloropropane	0.374	0.379	-1.3	102	0.00	7.89
102	n-propylbenzene	4.700	5.121	-9.0	102	0.00	7.94
103	2-chlorotoluene	1.050	1.134	-8.0	102	0.00	8.03
104	4-chlorotoluene	1.058	1.135	-7.3	102	0.00	8.14
105	1,3,5-trimethylbenzene	3.269	3.604	-10.2	103	0.00	8.11
106	tert-butylbenzene	2.849	3.622	-27.1	117	0.00	8.41
107	1,2,4-trimethylbenzene	3.375	3.580	-6.1	101	0.00	8.48
108	sec-butylbenzene	4.103	4.461	-8.7	103	0.00	8.63
109	1,3-dichlorobenzene	1.960	2.121	-8.2	102	0.00	8.74
110	p-isopropyltoluene	3.503	3.785	-8.1	102	0.00	8.78
111	1,2,3-trimethylbenzene		----------NA----------				
112	1,4-dichlorobenzene	1.977	2.111	-6.8	102	0.00	8.84
113	1,2-dichlorobenzene	1.889	1.960	-3.8	102	0.00	9.19
114	benzyl chloride	2.340	2.244	4.1	91	0.00	8.95
115	n-butylbenzene	1.587	1.722	-8.5	102	0.00	9.18
116	hexachloroethane	0.544	0.618	-13.6	106	0.00	9.46
117	1,2-dibromo-3-chloropropa	0.320	0.335	-4.7	104	0.00	9.96
118	1,3,5-trichlorobenzene	1.277	1.430	-12.0	104	0.00	10.15
119	1,2,4-trichlorobenzene	1.040	1.172	-12.7	103	0.00	10.77
120	hexachlorobutadiene	0.467	0.513	-9.9	102	0.00	10.91
121	naphthalene	2.993	3.047	-1.8	100	0.00	11.01
122	1,2,3-trichlorobenzene	0.873	0.938	-7.4	100	0.00	11.22
123	2-methylnaphthalene	0.537	0.481	10.4	89	0.00	12.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82666.D M2V3410.M Thu Nov 18 17:16:58 2021 RPT1

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82672.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V3410\2V82672.D Vial: 17
Acq On : 18 Nov 2021 12:41 am Operator: edwardd
Sample : icv3410-50 Inst : MS2V
Misc : MS54991,V2V3410,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 11:29:02 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	99	0.00	2.59
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	104	0.00	3.75
6		chlorodifluoromethane	0.607	0.748	-23.2	116	0.00	1.35
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		freon 113		----------NA----------				
17		1,1-dichloroethene		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile	0.093	0.090	3.2	106	0.00	2.49
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		di-isopropyl ether		----------NA----------				
28		ethyl tert-butyl ether		----------NA----------				
29		1,1-dichloroethane		----------NA----------				
30		chloroprene		----------NA----------				
31		acrylonitrile	0.255	0.310	-21.6	120	0.00	2.75
32		vinyl acetate		----------NA----------				
33		ethyl acetate		----------NA----------				
34		2-butanone		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		propionitrile		----------NA----------				
38		methyl acrylate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				
41		chloroform		----------NA----------				

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82672.D

42	S	dibromofluoromethane (s)	0.464	0.463	0.2	103	0.00	3.75
43		methacrylonitrile		----------NA----------				
44		1,1,1-trichloroethane		----------NA----------				
45		cyclohexane		----------NA----------				
46		1,1-dichloropropene		----------NA----------				
47		carbon tetrachloride		----------NA----------				
48		isobutyl alcohol		----------NA----------				
49		tert-amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.318	0.9	105	0.00	3.98
52		n-butyl alcohol		----------NA----------				
53		benzene		----------NA----------				
54		tert-amyl methyl ether		----------NA----------				
55		iso-octane		----------NA----------				
56		heptane		----------NA----------				
57		isopropyl acetate		----------NA----------				
58		1,2-dichloroethane		----------NA----------				
59		trichloroethene		----------NA----------				
60		ethyl acrylate		----------NA----------				
61		2-nitropropane		----------NA----------				
62		2-chloroethyl vinyl ether		----------NA----------				
63		methyl methacrylate		----------NA----------				
64		1,2-dichloropropane		----------NA----------				
65		methylcyclohexane		----------NA----------				
66		dibromomethane		----------NA----------				
67		bromodichloromethane		----------NA----------				
68		epichlorohydrin		----------NA----------				
69		cis-1,3-dichloropropene		----------NA----------				
70		4-methyl-2-pentanone		----------NA----------				
71		3-methyl-1-butanol		----------NA----------				
72	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.291	-2.1	104	0.00	5.40
74		toluene		----------NA----------				
75		ethyl methacrylate		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		1,1,2-trichloroethane		----------NA----------				
78		2-hexanone		----------NA----------				
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane		----------NA----------				
81		butyl acetate		----------NA----------				
82		dibromochloromethane		----------NA----------				
83		1,2-dibromoethane		----------NA----------				
84		n-butyl ether		----------NA----------				
85		chlorobenzene		----------NA----------				
86		1,1,1,2-tetrachloroethane		----------NA----------				
87		ethylbenzene		----------NA----------				
88		m,p-xylene		----------NA----------				
89		o-xylene		----------NA----------				
90		styrene		----------NA----------				
91		butyl acrylate		----------NA----------				
92		n-amyl acetate		----------NA----------				
93		bromoform		----------NA----------				
94		isopropylbenzene		----------NA----------				
95		cis-1,4-dichloro-2-butene		----------NA----------				
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.122	1.7	101	0.00	7.71
98		bromobenzene		----------NA----------				

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82672.D

99	1,1,2,2-tetrachloroethane		----------NA----------				
100	trans-1,4-dichloro-2-bute		----------NA----------				
101	1,2,3-trichloropropane		----------NA----------				
102	n-propylbenzene		----------NA----------				
103	2-chlorotoluene		----------NA----------				
104	4-chlorotoluene		----------NA----------				
105	1,3,5-trimethylbenzene		----------NA----------				
106	tert-butylbenzene		----------NA----------				
107	1,2,4-trimethylbenzene		----------NA----------				
108	sec-butylbenzene		----------NA----------				
109	1,3-dichlorobenzene		----------NA----------				
110	p-isopropyltoluene		----------NA----------				
111	1,2,3-trimethylbenzene	3.269	4.119	-26.0	115	0.00	8.87
112	1,4-dichlorobenzene		----------NA----------				
113	1,2-dichlorobenzene		----------NA----------				
114	benzyl chloride		----------NA----------				
115	n-butylbenzene		----------NA----------				
116	hexachloroethane		----------NA----------				
117	1,2-dibromo-3-chloropropa		----------NA----------				
118	1,3,5-trichlorobenzene		----------NA----------				
119	1,2,4-trichlorobenzene		----------NA----------				
120	hexachlorobutadiene		----------NA----------				
121	naphthalene		----------NA----------				
122	1,2,3-trichlorobenzene		----------NA----------				
123	2-methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2V82666.D M2V3410.M Thu Nov 18 16:27:25 2021 RPT1

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82678.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V3410\2V82678.D Vial: 23
Acq On : 18 Nov 2021 11:34 am Operator: edwardd
Sample : icv3410-50 Inst : MS2V
Misc : MS54991,V2V3410,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 11:29:02 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	112	0.00	2.59
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	3.75
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane	0.214	0.180	15.9	82	0.00	1.76
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		freon 113		----------NA----------				
17		1,1-dichloroethene		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile		----------NA----------				
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		di-isopropyl ether		----------NA----------				
28		ethyl tert-butyl ether		----------NA----------				
29		1,1-dichloroethane		----------NA----------				
30		chloroprene		----------NA----------				
31		acrylonitrile		----------NA----------				
32		vinyl acetate		----------NA----------				
33		ethyl acetate		----------NA----------				
34		2-butanone		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		propionitrile		----------NA----------				
38		methyl acrylate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				
41		chloroform		----------NA----------				

Initial Calibration Verification

Job Number: JD36319 **Sample:** V2V3410-ICV3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82678.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	S	dibromofluoromethane (s)	0.464	0.464	0.0	109	0.00	3.74
43		methacrylonitrile		----------NA----------				
44		1,1,1-trichloroethane		----------NA----------				
45		cyclohexane		----------NA----------				
46		1,1-dichloropropene		----------NA----------				
47		carbon tetrachloride		----------NA----------				
48		isobutyl alcohol		----------NA----------				
49		tert-amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	109	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.318	0.9	109	0.00	3.98
52		n-butyl alcohol		----------NA----------				
53		benzene		----------NA----------				
54		tert-amyl methyl ether		----------NA----------				
55		iso-octane		----------NA----------				
56		heptane		----------NA----------				
57		isopropyl acetate		----------NA----------				
58		1,2-dichloroethane		----------NA----------				
59		trichloroethene		----------NA----------				
60		ethyl acrylate		----------NA----------				
61		2-nitropropane		----------NA----------				
62		2-chloroethyl vinyl ether		----------NA----------				
63		methyl methacrylate		----------NA----------				
64		1,2-dichloropropane		----------NA----------				
65		methylcyclohexane		----------NA----------				
66		dibromomethane		----------NA----------				
67		bromodichloromethane		----------NA----------				
68		epichlorohydrin		----------NA----------				
69		cis-1,3-dichloropropene		----------NA----------				
70		4-methyl-2-pentanone		----------NA----------				
71		3-methyl-1-butanol		----------NA----------				
72	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.269	-0.4	108	0.00	5.40
74		toluene		----------NA----------				
75		ethyl methacrylate		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		1,1,2-trichloroethane		----------NA----------				
78		2-hexanone		----------NA----------				
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane		----------NA----------				
81		butyl acetate		----------NA----------				
82		dibromochloromethane		----------NA----------				
83		1,2-dibromoethane		----------NA----------				
84		n-butyl ether		----------NA----------				
85		chlorobenzene		----------NA----------				
86		1,1,1,2-tetrachloroethane		----------NA----------				
87		ethylbenzene		----------NA----------				
88		m,p-xylene		----------NA----------				
89		o-xylene		----------NA----------				
90		styrene		----------NA----------				
91		butyl acrylate		----------NA----------				
92		n-amyl acetate		----------NA----------				
93		bromoform		----------NA----------				
94		isopropylbenzene		----------NA----------				
95		cis-1,4-dichloro-2-butene		----------NA----------				
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.123	1.6	106	0.00	7.71
98		bromobenzene		----------NA----------				

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82678.D

99	1,1,2,2-tetrachloroethane	----------NA----------	
100	trans-1,4-dichloro-2-bute	----------NA----------	
101	1,2,3-trichloropropane	----------NA----------	
102	n-propylbenzene	----------NA----------	
103	2-chlorotoluene	----------NA----------	
104	4-chlorotoluene	----------NA----------	
105	1,3,5-trimethylbenzene	----------NA----------	
106	tert-butylbenzene	----------NA----------	
107	1,2,4-trimethylbenzene	----------NA----------	
108	sec-butylbenzene	----------NA----------	
109	1,3-dichlorobenzene	----------NA----------	
110	p-isopropyltoluene	----------NA----------	
111	1,2,3-trimethylbenzene	----------NA----------	
112	1,4-dichlorobenzene	----------NA----------	
113	1,2-dichlorobenzene	----------NA----------	
114	benzyl chloride	----------NA----------	
115	n-butylbenzene	----------NA----------	
116	hexachloroethane	----------NA----------	
117	1,2-dibromo-3-chloropropa	----------NA----------	
118	1,3,5-trichlorobenzene	----------NA----------	
119	1,2,4-trichlorobenzene	----------NA----------	
120	hexachlorobutadiene	----------NA----------	
121	naphthalene	----------NA----------	
122	1,2,3-trichlorobenzene	----------NA----------	
123	2-methylnaphthalene	----------NA----------	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82666.D M2V3410.M Thu Nov 18 16:27:26 2021 RPT1

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82679.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V3410\2V82679.D Vial: 24
Acq On : 18 Nov 2021 11:59 am Operator: edwardd
Sample : icv3410-50 Inst : MS2V
Misc : MS54991,V2V3410,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 11:29:02 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	114	0.00	2.59
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	3.75
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		freon 113		----------NA----------				
17		1,1-dichloroethene		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile		----------NA----------				
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		di-isopropyl ether		----------NA----------				
28		ethyl tert-butyl ether		----------NA----------				
29		1,1-dichloroethane		----------NA----------				
30		chloroprene		----------NA----------				
31		acrylonitrile		----------NA----------				
32		vinyl acetate		----------NA----------				
33		ethyl acetate		----------NA----------				
34		2-butanone		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		propionitrile		----------NA----------				
38		methyl acrylate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				
41		chloroform		----------NA----------				

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82679.D

42	S	dibromofluoromethane (s)	0.464	0.464	0.0	108	0.00	3.75
43		methacrylonitrile		----------NA----------				
44		1,1,1-trichloroethane		----------NA----------				
45		cyclohexane		----------NA----------				
46		1,1-dichloropropene		----------NA----------				
47		carbon tetrachloride		----------NA----------				
48		isobutyl alcohol		----------NA----------				
49		tert-amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	109	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.320	0.3	110	0.00	3.98
52		n-butyl alcohol		----------NA----------				
53		benzene		----------NA----------				
54		tert-amyl methyl ether		----------NA----------				
55		iso-octane		----------NA----------				
56		heptane		----------NA----------				
57		isopropyl acetate		----------NA----------				
58		1,2-dichloroethane		----------NA----------				
59		trichloroethene		----------NA----------				
60		ethyl acrylate		----------NA----------				
61		2-nitropropane		----------NA----------				
62		2-chloroethyl vinyl ether		----------NA----------				
63		methyl methacrylate		----------NA----------				
64		1,2-dichloropropane		----------NA----------				
65		methylcyclohexane		----------NA----------				
66		dibromomethane		----------NA----------				
67		bromodichloromethane		----------NA----------				
68		epichlorohydrin		----------NA----------				
69		cis-1,3-dichloropropene		----------NA----------				
70		4-methyl-2-pentanone		----------NA----------				
71		3-methyl-1-butanol		----------NA----------				
72	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.270	-0.5	108	0.00	5.40
74		toluene		----------NA----------				
75		ethyl methacrylate		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		1,1,2-trichloroethane		----------NA----------				
78		2-hexanone		----------NA----------				
79		tetrachloroethene	0.338	0.317	6.2	89	0.00	5.89
80		1,3-dichloropropane		----------NA----------				
81		butyl acetate		----------NA----------				
82		dibromochloromethane		----------NA----------				
83		1,2-dibromoethane		----------NA----------				
84		n-butyl ether		----------NA----------				
85		chlorobenzene		----------NA----------				
86		1,1,1,2-tetrachloroethane		----------NA----------				
87		ethylbenzene		----------NA----------				
88		m,p-xylene		----------NA----------				
89		o-xylene		----------NA----------				
90		styrene		----------NA----------				
91		butyl acrylate		----------NA----------				
92		n-amyl acetate		----------NA----------				
93		bromoform		----------NA----------				
94		isopropylbenzene		----------NA----------				
95		cis-1,4-dichloro-2-butene		----------NA----------				
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.138	0.3	107	0.00	7.71
98		bromobenzene		----------NA----------				

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82679.D

99	1,1,2,2-tetrachloroethane	----------NA----------	
100	trans-1,4-dichloro-2-bute	----------NA----------	
101	1,2,3-trichloropropane	----------NA----------	
102	n-propylbenzene	----------NA----------	
103	2-chlorotoluene	----------NA----------	
104	4-chlorotoluene	----------NA----------	
105	1,3,5-trimethylbenzene	----------NA----------	
106	tert-butylbenzene	----------NA----------	
107	1,2,4-trimethylbenzene	----------NA----------	
108	sec-butylbenzene	----------NA----------	
109	1,3-dichlorobenzene	----------NA----------	
110	p-isopropyltoluene	----------NA----------	
111	1,2,3-trimethylbenzene	----------NA----------	
112	1,4-dichlorobenzene	----------NA----------	
113	1,2-dichlorobenzene	----------NA----------	
114	benzyl chloride	----------NA----------	
115	n-butylbenzene	----------NA----------	
116	hexachloroethane	----------NA----------	
117	1,2-dibromo-3-chloropropa	----------NA----------	
118	1,3,5-trichlorobenzene	----------NA----------	
119	1,2,4-trichlorobenzene	----------NA----------	
120	hexachlorobutadiene	----------NA----------	
121	naphthalene	----------NA----------	
122	1,2,3-trichlorobenzene	----------NA----------	
123	2-methylnaphthalene	----------NA----------	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82666.D M2V3410.M Thu Nov 18 16:27:27 2021 RPT1

Continuing Calibration Summary

Job Number: JD36319 **Sample:** V2V3444-CC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V83548.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...444-partial\2v83548.d Vial: 3
Acq On : 13 Dec 2021 9:36 am Operator: nickw
Sample : cc3410-20 Inst : MS2V
Misc : MS55509,V2V3444,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 17:15:16 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	131	0.00	2.59
2		ethanol	0.185	0.237	-28.1#	167	0.00	2.07
3		tertiary butyl alcohol	1.916	2.121	-10.7	145	0.00	2.65
4		1,4-dioxane	0.145	0.139	4.1	123	0.00	4.71
5	I	pentafluorobenzene	1.000	1.000	0.0	144	0.00	3.75
6		chlorodifluoromethane	0.607	0.792	-30.5#	181	0.00	1.35
7		dichlorodifluoromethane	0.553	0.629	-13.7	155	0.00	1.34
8		chloromethane	0.212	0.266	-25.5#	189	0.00	1.47
9		vinyl chloride	0.562	0.562	0.0	140	0.00	1.54
10		bromomethane	0.214	0.163	23.8#	105	0.00	1.75
11		chloroethane	0.318	0.307	3.5	142	0.00	1.83
12		trichlorofluoromethane	0.719	0.752	-4.6	141	0.00	1.99
13		1,3-butadiene	0.532	0.508	4.5	134	0.00	1.57
14		ethyl ether	0.257	0.244	5.1	134	0.00	2.15
15		acrolein	0.113	0.126	-11.5	157	0.00	2.24
16		freon 113	0.396	0.335	15.4	117	0.00	2.31
17		1,1-dichloroethene	0.720	0.801	-11.3	155	0.00	2.31
18		acetone	0.301	0.451	-49.8#	220#	0.00	2.32
19		acetonitrile	0.093	0.110	-18.3	178	0.00	2.49
20		iodomethane	0.262	0.145	44.7#	81	0.00	2.41
21		carbon disulfide	1.191	1.152	3.3	136	0.00	2.47
22		methylene chloride	0.501	0.446	11.0	131	0.00	2.61
23		methyl acetate	0.589	0.698	-18.5	184	0.00	2.51
24		methyl tert butyl ether	1.303	1.295	0.6	136	0.00	2.77
25		trans-1,2-dichloroethene	0.444	0.417	6.1	125	0.00	2.78
26		hexane	0.470	0.453	3.6	135	0.00	2.96
27		di-isopropyl ether	1.741	2.216	-27.3#	175	0.00	3.07
28		ethyl tert-butyl ether	1.661	1.859	-11.9	153	0.00	3.30
29		1,1-dichloroethane	0.852	0.952	-11.7	147	0.00	3.06
30		chloroprene	0.756	0.906	-19.8	164	0.00	3.11
31		acrylonitrile	0.255	0.268	-5.1	145	0.00	2.75
32		vinyl acetate	0.107	0.102	4.7	130	0.00	3.04
33		ethyl acetate	0.110	0.146	-32.7#	181	0.00	3.42
34		2-butanone	0.077	0.085	-10.4	156	0.00	3.40
35		2,2-dichloropropane	0.671	0.694	-3.4	140	0.00	3.43
36		cis-1,2-dichloroethene	0.495	0.461	6.9	125	0.00	3.43
37		propionitrile	0.100	0.127	-27.0#	173	0.00	3.44
38		methyl acrylate	0.093	0.090	3.2	134	0.00	3.46
39		bromochloromethane	0.279	0.248	11.1	126	0.00	3.58
40		tetrahydrofuran	0.082	0.074	9.8	137	0.00	3.60
41		chloroform	0.872	0.817	6.3	136	0.00	3.64

Continuing Calibration Summary

Job Number: JD36319 **Sample:** V2V3444-CC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V83548.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	S	dibromofluoromethane (s)	0.464	0.425	8.4	132	0.00	3.75
43		methacrylonitrile	0.236	0.233	1.3	137	0.00	3.55
44		1,1,1-trichloroethane	0.723	0.721	0.3	135	0.00	3.77
45		cyclohexane	0.582	0.554	4.8	132	0.00	3.83
46		1,1-dichloropropene	0.589	0.580	1.5	134	0.00	3.87
47		carbon tetrachloride	0.642	0.610	5.0	129	0.00	3.88
48		isobutyl alcohol	0.023	0.026	-13.0	153	0.00	3.89
49		tert-amyl alcohol	0.035	0.037	-5.7	149	0.00	3.98
50	I	1,4-difluorobenzene	1.000	1.000	0.0	140	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.347	-8.1	150	0.00	3.98
52		n-butyl alcohol	0.018	0.019	-5.6	146	0.00	4.36
53		benzene	1.213	1.195	1.5	129	0.00	4.01
54		tert-amyl methyl ether	1.027	0.956	6.9	124	0.00	4.08
55		iso-octane	1.186	1.340	-13.0	151	0.00	4.09
56		heptane	0.227	0.265	-16.7	160	0.00	4.20
57		isopropyl acetate	0.089	0.089	0.0	135	0.00	4.00
58		1,2-dichloroethane	0.499	0.548	-9.8	153	0.00	4.04
59		trichloroethene	0.340	0.327	3.8	127	0.00	4.48
60		ethyl acrylate	0.630	0.756	-20.0	169	0.00	4.50
61		2-nitropropane	0.128	0.131	-2.3	150	0.00	5.01
62		2-chloroethyl vinyl ether	0.202	0.249	-23.3#	163	0.00	5.05
63		methyl methacrylate	0.110	0.104	5.5	127	0.00	4.68
64		1,2-dichloropropane	0.351	0.388	-10.5	146	0.00	4.66
65		methylcyclohexane	0.512	0.482	5.9	127	0.00	4.66
66		dibromomethane	0.227	0.218	4.0	130	0.00	4.73
67		bromodichloromethane	0.450	0.444	1.3	134	0.00	4.85
68		epichlorohydrin	0.049	0.057	-16.3	168	0.00	5.09
69		cis-1,3-dichloropropene	0.530	0.527	0.6	132	0.00	5.19
70		4-methyl-2-pentanone	0.180	0.227	-26.1#	167	0.00	5.29
71		3-methyl-1-butanol	0.014	0.011	21.4#	107	0.00	5.33
72	I	chlorobenzene-d5	1.000	1.000	0.0	122	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.278	-1.1	125	0.00	5.41
74		toluene	0.882	0.940	-6.6	124	0.00	5.46
75		ethyl methacrylate	0.533	0.580	-8.8	129	0.00	5.67
76		trans-1,3-dichloropropene	0.519	0.626	-20.6#	138	0.00	5.63
77		1,1,2-trichloroethane	0.289	0.325	-12.5	132	0.00	5.80
78		2-hexanone	0.214	0.327	-52.8#	177	0.00	5.97
79		tetrachloroethene	0.338	0.365	-8.0	123	0.00	5.89
80		1,3-dichloropropane	0.534	0.631	-18.2	136	0.00	5.94
81		butyl acetate	0.355	0.494	-39.2#	169	0.00	6.06
82		dibromochloromethane	0.425	0.480	-12.9	131	0.00	6.13
83		1,2-dibromoethane	0.385	0.438	-13.8	133	0.00	6.23
84		n-butyl ether	1.683	2.242	-33.2#	154	0.00	6.74
85		chlorobenzene	1.023	1.092	-6.7	124	0.00	6.66
86		1,1,1,2-tetrachloroethane	0.387	0.410	-5.9	122	0.00	6.74
87		ethylbenzene	1.625	1.741	-7.1	124	0.00	6.75
88		m,p-xylene	0.629	0.683	-8.6	124	0.00	6.86
89		o-xylene	1.315	1.403	-6.7	123	0.00	7.21
90		styrene	1.030	1.139	-10.6	125	0.00	7.23
91		butyl acrylate	0.423	0.580	-37.1#	162	0.00	7.16
92		n-amyl acetate	0.278	0.314	-12.9	129	0.00	7.36
93		bromoform	0.309	0.330	-6.8	127	0.00	7.40
94		isopropylbenzene	1.542	1.675	-8.6	124	0.00	7.55
95		cis-1,4-dichloro-2-butene	0.167	0.200	-19.8	143	0.00	7.60
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	136	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.068	6.4	128	0.00	7.71
98		bromobenzene	1.193	1.064	10.8	118	0.00	7.85

Continuing Calibration Summary

Job Number: JD36319 **Sample:** V2V3444-CC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V83548.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	1,1,2,2-tetrachloroethane	1.295	1.324	-2.2	134	0.00	7.84
100	trans-1,4-dichloro-2-bute	0.404	0.526	-30.2#	170	0.00	7.87
101	1,2,3-trichloropropane	0.374	0.393	-5.1	139	0.00	7.89
102	n-propylbenzene	4.700	4.554	3.1	124	0.00	7.94
103	2-chlorotoluene	1.050	0.961	8.5	118	0.00	8.03
104	4-chlorotoluene	1.058	0.980	7.4	120	0.00	8.15
105	1,3,5-trimethylbenzene	3.269	3.232	1.1	125	0.00	8.12
106	tert-butylbenzene	2.849	2.716	4.7	121	0.00	8.42
107	1,2,4-trimethylbenzene	3.375	3.293	2.4	127	0.00	8.48
108	sec-butylbenzene	4.103	3.871	5.7	123	0.00	8.63
109	1,3-dichlorobenzene	1.960	1.803	8.0	120	0.00	8.75
110	p-isopropyltoluene	3.503	3.248	7.3	121	0.00	8.79
111	1,2,3-trimethylbenzene	3.269	3.213	1.7	125	0.00	8.88
112	1,4-dichlorobenzene	1.977	1.844	6.7	123	0.00	8.84
113	1,2-dichlorobenzene	1.889	1.685	10.8	119	0.00	9.19
114	benzyl chloride	2.340	2.274	2.8	129	0.00	8.95
115	n-butylbenzene	1.587	1.460	8.0	123	0.00	9.18
116	hexachloroethane	0.544	0.447	17.8	111	0.00	9.46
117	1,2-dibromo-3-chloropropa	0.320	0.293	8.4	123	0.00	9.96
118	1,3,5-trichlorobenzene	1.277	1.141	10.6	119	0.00	10.15
119	1,2,4-trichlorobenzene	1.040	0.901	13.4	113	0.00	10.77
120	hexachlorobutadiene	0.467	0.392	16.1	113	0.00	10.91
121	naphthalene	2.993	2.547	14.9	115	0.00	11.01
122	1,2,3-trichlorobenzene	0.873	0.717	17.9	108	0.00	11.23
123	2-methylnaphthalene	0.537	0.339	36.9#	80	0.01	12.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82665.D M2V3410.M Mon Dec 13 21:58:13 2021

Continuing Calibration Summary

Job Number: JD36319 **Sample:** V2V3446-CC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V83601.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kr...021\v2v3446\2v83601.d Vial: 2
Acq On : 14 Dec 2021 9:49 am Operator: nickw
Sample : cc3410-20 Inst : MS2V
Misc : MS55452,V2V3446,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 17:15:16 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	148	0.00	2.59
2		ethanol	0.185	0.231	-24.9#	185	0.00	2.07
3		tertiary butyl alcohol	1.916	2.075	-8.3	161	0.00	2.65
4		1,4-dioxane	0.145	0.132	9.0	132	0.00	4.71
5	I	pentafluorobenzene	1.000	1.000	0.0	145	0.00	3.75
6		chlorodifluoromethane	0.607	0.702	-15.7	161	0.00	1.35
7		dichlorodifluoromethane	0.553	0.618	-11.8	153	0.00	1.34
8		chloromethane	0.212	0.267	-25.9#	190	0.00	1.47
9		vinyl chloride	0.562	0.576	-2.5	145	0.00	1.54
10		bromomethane	0.214	0.194	9.3	125	0.00	1.76
11		chloroethane	0.318	0.316	0.6	147	0.00	1.82
12		trichlorofluoromethane	0.719	0.772	-7.4	146	0.00	1.99
13		1,3-butadiene	0.532	0.456	14.3	120	0.00	1.57
14		ethyl ether	0.257	0.237	7.8	130	0.00	2.15
15		acrolein	0.113	0.163	-44.2#	204#	0.00	2.24
16		freon 113	0.396	0.321	18.9	112	0.00	2.31
17		1,1-dichloroethene	0.720	0.772	-7.2	150	0.00	2.31
18		acetone	0.301	0.284	5.6	139	0.00	2.32
19		acetonitrile	0.093	0.113	-21.5#	185	0.00	2.49
20		iodomethane	0.262	0.156	40.5#	88	0.00	2.41
21		carbon disulfide	1.191	1.116	6.3	133	0.00	2.46
22		methylene chloride	0.501	0.441	12.0	131	0.00	2.61
23		methyl acetate	0.589	0.684	-16.1	181	0.00	2.51
24		methyl tert butyl ether	1.303	1.278	1.9	135	0.00	2.77
25		trans-1,2-dichloroethene	0.444	0.421	5.2	127	0.00	2.78
26		hexane	0.470	0.435	7.4	130	0.00	2.96
27		di-isopropyl ether	1.741	2.211	-27.0#	175	0.00	3.06
28		ethyl tert-butyl ether	1.661	1.854	-11.6	154	0.00	3.30
29		1,1-dichloroethane	0.852	0.953	-11.9	148	0.00	3.06
30		chloroprene	0.756	0.902	-19.3	164	0.00	3.11
31		acrylonitrile	0.255	0.336	-31.8#	183	0.00	2.75
32		vinyl acetate	0.107	0.106	0.9	137	0.00	3.04
33		ethyl acetate	0.110	0.147	-33.6#	184	0.00	3.42
34		2-butanone	0.077	0.071	7.8	131	0.00	3.40
35		2,2-dichloropropane	0.671	0.694	-3.4	140	0.00	3.43
36		cis-1,2-dichloroethene	0.495	0.475	4.0	129	0.00	3.42
37		propionitrile	0.100	0.131	-31.0#	180	0.00	3.44
38		methyl acrylate	0.093	0.087	6.5	132	0.00	3.45
39		bromochloromethane	0.279	0.242	13.3	123	0.00	3.58
40		tetrahydrofuran	0.082	0.076	7.3	141	0.00	3.60
41		chloroform	0.872	0.910	-4.4	152	0.00	3.64

Continuing Calibration Summary

Job Number: JD36319 **Sample:** V2V3446-CC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V83601.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	S	dibromofluoromethane (s)	0.464	0.442	4.7	138	0.00	3.75
43		methacrylonitrile	0.236	0.231	2.1	137	0.00	3.55
44		1,1,1-trichloroethane	0.723	0.710	1.8	134	0.00	3.77
45		cyclohexane	0.582	0.581	0.2	139	0.00	3.83
46		1,1-dichloropropene	0.589	0.588	0.2	136	0.00	3.87
47		carbon tetrachloride	0.642	0.614	4.4	130	0.00	3.88
48		isobutyl alcohol	0.023	0.028	-21.7#	167	0.00	3.89
49		tert-amyl alcohol	0.035	0.041	-17.1	166	0.00	3.98
50	I	1,4-difluorobenzene	1.000	1.000	0.0	146	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.352	-9.7	158	0.00	3.98
52		n-butyl alcohol	0.018	0.021	-16.7	163	0.00	4.36
53		benzene	1.213	1.154	4.9	130	0.00	4.01
54		tert-amyl methyl ether	1.027	0.933	9.2	126	0.00	4.08
55		iso-octane	1.186	1.256	-5.9	147	0.00	4.09
56		heptane	0.227	0.252	-11.0	158	0.00	4.20
57		isopropyl acetate	0.089	0.087	2.2	136	0.00	4.00
58		1,2-dichloroethane	0.499	0.529	-6.0	153	0.00	4.04
59		trichloroethene	0.340	0.318	6.5	129	0.00	4.48
60		ethyl acrylate	0.630	0.724	-14.9	169	0.00	4.50
61		2-nitropropane	0.128	0.128	0.0	152	0.00	5.01
62		2-chloroethyl vinyl ether	0.202	0.247	-22.3#	169	0.00	5.05
63		methyl methacrylate	0.110	0.102	7.3	130	0.00	4.68
64		1,2-dichloropropane	0.351	0.374	-6.6	146	0.00	4.67
65		methylcyclohexane	0.512	0.467	8.8	128	0.00	4.65
66		dibromomethane	0.227	0.219	3.5	136	0.00	4.73
67		bromodichloromethane	0.450	0.433	3.8	136	0.00	4.85
68		epichlorohydrin	0.049	0.058	-18.4	177	0.00	5.09
69		cis-1,3-dichloropropene	0.530	0.521	1.7	135	0.00	5.19
70		4-methyl-2-pentanone	0.180	0.221	-22.8#	169	0.00	5.29
71		3-methyl-1-butanol	0.014	0.012	14.3	120	0.00	5.33
72	I	chlorobenzene-d5	1.000	1.000	0.0	126	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.299	-2.8	130	0.00	5.41
74		toluene	0.882	0.934	-5.9	127	0.00	5.46
75		ethyl methacrylate	0.533	0.591	-10.9	135	0.00	5.67
76		trans-1,3-dichloropropene	0.519	0.613	-18.1	139	0.00	5.64
77		1,1,2-trichloroethane	0.289	0.326	-12.8	136	0.00	5.80
78		2-hexanone	0.214	0.292	-36.4#	163	0.00	5.98
79		tetrachloroethene	0.338	0.360	-6.5	125	0.00	5.89
80		1,3-dichloropropane	0.534	0.635	-18.9	140	0.00	5.94
81		butyl acetate	0.355	0.485	-36.6#	171	0.00	6.07
82		dibromochloromethane	0.425	0.469	-10.4	132	0.00	6.13
83		1,2-dibromoethane	0.385	0.436	-13.2	136	0.00	6.24
84		n-butyl ether	1.683	2.219	-31.8#	157	0.00	6.74
85		chlorobenzene	1.023	1.075	-5.1	126	0.00	6.66
86		1,1,1,2-tetrachloroethane	0.387	0.411	-6.2	126	0.00	6.74
87		ethylbenzene	1.625	1.725	-6.2	126	0.00	6.75
88		m,p-xylene	0.629	0.685	-8.9	128	0.00	6.86
89		o-xylene	1.315	1.407	-7.0	127	0.00	7.21
90		styrene	1.030	1.147	-11.4	130	0.00	7.23
91		butyl acrylate	0.423	0.576	-36.2#	165	0.00	7.16
92		n-amyl acetate	0.278	0.319	-14.7	135	0.00	7.37
93		bromoform	0.309	0.327	-5.8	130	0.00	7.40
94		isopropylbenzene	1.542	1.677	-8.8	127	0.00	7.55
95		cis-1,4-dichloro-2-butene	0.167	0.189	-13.2	138	0.00	7.60
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	140	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.084	5.0	133	0.00	7.72
98		bromobenzene	1.193	1.053	11.7	120	0.00	7.85

Continuing Calibration Summary

Job Number: JD36319 **Sample:** V2V3446-CC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V83601.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	1,1,2,2-tetrachloroethane	1.295	1.313	-1.4	136	0.00	7.84
100	trans-1,4-dichloro-2-bute	0.404	0.523	-29.5#	173	0.00	7.87
101	1,2,3-trichloropropane	0.374	0.385	-2.9	139	0.00	7.89
102	n-propylbenzene	4.700	4.548	3.2	126	0.00	7.94
103	2-chlorotoluene	1.050	0.973	7.3	123	0.00	8.03
104	4-chlorotoluene	1.058	0.987	6.7	123	0.00	8.15
105	1,3,5-trimethylbenzene	3.269	3.222	1.4	128	0.00	8.12
106	tert-butylbenzene	2.849	2.731	4.1	125	0.00	8.42
107	1,2,4-trimethylbenzene	3.375	3.284	2.7	130	0.00	8.48
108	sec-butylbenzene	4.103	3.889	5.2	127	0.00	8.63
109	1,3-dichlorobenzene	1.960	1.804	8.0	123	0.00	8.75
110	p-isopropyltoluene	3.503	3.296	5.9	126	0.00	8.79
111	1,2,3-trimethylbenzene	3.269	3.244	0.8	130	0.00	8.88
112	1,4-dichlorobenzene	1.977	1.827	7.6	125	0.00	8.85
113	1,2-dichlorobenzene	1.889	1.703	9.8	124	0.00	9.20
114	benzyl chloride	2.340	2.195	6.2	127	0.00	8.95
115	n-butylbenzene	1.587	1.480	6.7	128	0.00	9.18
116	hexachloroethane	0.544	0.446	18.0	113	0.00	9.46
117	1,2-dibromo-3-chloropropa	0.320	0.289	9.7	124	0.00	9.96
118	1,3,5-trichlorobenzene	1.277	1.138	10.9	121	0.00	10.15
119	1,2,4-trichlorobenzene	1.040	0.886	14.8	114	0.00	10.77
120	hexachlorobutadiene	0.467	0.402	13.9	119	0.00	10.91
121	naphthalene	2.993	2.435	18.6	112	0.00	11.01
122	1,2,3-trichlorobenzene	0.873	0.693	20.6#	107	0.00	11.23
123	2-methylnaphthalene	0.537	0.254	52.7#	62	0.00	12.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82665.D M2V3410.M Tue Dec 14 20:53:59 2021

Initial Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7257-ICC7257
Lab FileID: 3A167235.D

Response Factor Report MS3A

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

Calibration Files
0.4 =3A167243.D 1 =3A167232.D 2 =3A167233.D 5 =3A167234.D
0.25=3A167242.D 20 =3A167235.D 50 =3A167236.D 200 =3A167245.D
100 =3A167237.D = = =

Compound	0.4	1	2	5	0.25	20	50	200	100	Avg	%RSD
1) I 4-bromofluorobenzene	----------ISTD----------										
2) 1,4-dioxane-d8	0.034	0.030	0.028	0.029	0.023	0.025	0.034	0.021	0.026	0.028	16.15
3) 1,4-dioxane	0.038	0.037	0.034	0.030	0.038	0.025	0.032	0.020	0.026	0.031	19.97

(#) = Out of Range ### Number of calibration levels exceeded format ###

M3A7257.M Tue Dec 07 12:07:20 2021 ACCUNJ

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7257-ICV7257
Lab FileID: 3A167248.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7257\3A167248.D Vial: 24
Acq On : 6 Dec 2021 9:13 pm Operator: BridgetK
Sample : icv7257-20 Inst : MS3A
Misc : MS32930,V3A7257,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	4-bromofluorobenzene	1.000	1.000	0.0	116	0.00	15.60
2	S	1,4-dioxane-d8	0.028	0.024	14.3	116	0.00	11.85
3	M	1,4-dioxane	0.031	0.025	19.4	114	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167235.D M3A7257.M Tue Dec 07 12:07:06 2021 ACCUNJ

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7263-CC7257
Lab FileID: 3A167356.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7263\3A167356.D Vial: 2
Acq On : 14 Dec 2021 9:25 am Operator: BridgetK
Sample : cc7257-5 Inst : MS3A
Misc : MS55395,V3A7263,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	174	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.031	-10.7	185	0.00	11.85
3 M	1,4-dioxane	0.031	0.035	-12.9	205#	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167234.D M3A7257.M Tue Dec 14 14:13:44 2021 ACCUNJ

Continuing Calibration Summary

Job Number: JD36319 **Sample:** V3A7265-CC7257
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3A167390.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7265\3A167390.D Vial: 2
Acq On : 16 Dec 2021 10:21 am Operator: BridgetK
Sample : cc7257-20 Inst : MS3A
Misc : MS55474,V3A7265,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	156	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.030	-7.1	193	0.00	11.85
3 M	1,4-dioxane	0.031	0.028	9.7	174	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167235.D M3A7257.M Thu Dec 16 15:02:52 2021 ACCUNJ

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V2V3410	**Method:** SW846 8260D	**Instrument ID:** GCMS2V

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2V3410-BFB	2V82658.D	11/17/21 18:44	n/a	BFB Tune
V2V3410-IC3410	2V82659.D	11/17/21 19:09	n/a	Initial cal 0.2
V2V3410-IC3410	2V82660.D	11/17/21 19:35	n/a	Initial cal 0.5
V2V3410-IC3410	2V82661.D	11/17/21 20:00	n/a	Initial cal 1
V2V3410-IC3410	2V82662.D	11/17/21 20:26	n/a	Initial cal 2
V2V3410-IC3410	2V82663.D	11/17/21 20:51	n/a	Initial cal 4
V2V3410-IC3410	2V82664.D	11/17/21 21:17	n/a	Initial cal 8
V2V3410-IC3410	2V82665.D	11/17/21 21:43	n/a	Initial cal 20
V2V3410-ICC3410	2V82666.D	11/17/21 22:08	n/a	Initial cal 50
V2V3410-IC3410	2V82667.D	11/17/21 22:34	n/a	Initial cal 100
V2V3410-IC3410	2V82668.D	11/17/21 22:59	n/a	Initial cal 200
V2V3410-ICV3410	2V82671.D	11/18/21 00:15	n/a	Initial cal verification 50
V2V3410-ICV3410	2V82672.D	11/18/21 00:41	n/a	Initial cal verification 50
V2V3410-BFB2	2V82677.D	11/18/21 11:00	n/a	BFB Tune
V2V3410-ICV3410	2V82678.D	11/18/21 11:34	n/a	Initial cal verification 50
V2V3410-ICV3410	2V82679.D	11/18/21 11:59	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V2V3444	**Method:** SW846 8260D	**Instrument ID:** GCMS2V

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2V3444-BFB	2V83548.D	12/13/21 09:36	n/a	BFB Tune
V2V3444-CC3410	2V83548.D	12/13/21 09:36	n/a	Continuing cal 20
V2V3444-BS	2V83550.D	12/13/21 11:07	n/a	Blank Spike
V2V3444-MB	2V83552.D	12/13/21 12:16	n/a	Method Blank
ZZZZZZ	2V83553.D	12/13/21 12:42	n/a	(unrelated sample)
ZZZZZZ	2V83554.D	12/13/21 13:07	n/a	(unrelated sample)
JD36437-1	2V83555.D	12/13/21 13:33	n/a	(used for QC only; not part of job JD36319)
ZZZZZZ	2V83556.D	12/13/21 13:58	n/a	(unrelated sample)
ZZZZZZ	2V83557.D	12/13/21 14:24	n/a	(unrelated sample)
ZZZZZZ	2V83558.D	12/13/21 14:49	n/a	(unrelated sample)
ZZZZZZ	2V83559.D	12/13/21 15:15	n/a	(unrelated sample)
ZZZZZZ	2V83560.D	12/13/21 15:40	n/a	(unrelated sample)
ZZZZZZ	2V83561.D	12/13/21 16:06	n/a	(unrelated sample)
JD36437-1MS	2V83562.D	12/13/21 16:31	n/a	Matrix Spike
JD36437-1MSD	2V83563.D	12/13/21 16:57	n/a	Matrix Spike Duplicate
ZZZZZZ	2V83564.D	12/13/21 17:23	n/a	(unrelated sample)
ZZZZZZ	2V83565.D	12/13/21 17:48	n/a	(unrelated sample)
ZZZZZZ	2V83566.D	12/13/21 18:14	n/a	(unrelated sample)
ZZZZZZ	2V83567.D	12/13/21 18:39	n/a	(unrelated sample)
JD36319-1	2V83568.D	12/13/21 19:04	n/a	TB-20211206
JD36319-2	2V83569.D	12/13/21 19:30	n/a	HOFF MW-A
JD36319-3	2V83570.D	12/13/21 19:55	n/a	HOFF MW-10
JD36319-4	2V83571.D	12/13/21 20:21	n/a	HOFF MW-8DL
JD36319-5	2V83572.D	12/13/21 20:46	n/a	HOFF MW-8DU
ZZZZZZ	2V83573.D	12/13/21 21:12	n/a	(unrelated sample)

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V2V3446	**Method:** SW846 8260D	**Instrument ID:** GCMS2V

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2V3446-BFB	2V83601.D	12/14/21 09:49	n/a	BFB Tune
V2V3446-CC3410	2V83601.D	12/14/21 09:49	n/a	Continuing cal 20
V2V3446-BS	2V83603.D	12/14/21 11:07	n/a	Blank Spike
V2V3446-MB	2V83605.D	12/14/21 12:22	n/a	Method Blank
JD36319-4	2V83606.D	12/14/21 12:53	n/a	HOFF MW-8DL
JD36319-5	2V83607.D	12/14/21 13:19	n/a	HOFF MW-8DU
JD36319-3	2V83608.D	12/14/21 13:44	n/a	HOFF MW-10
ZZZZZZ	2V83609.D	12/14/21 14:10	n/a	(unrelated sample)
ZZZZZZ	2V83611.D	12/14/21 15:01	n/a	(unrelated sample)
ZZZZZZ	2V83612.D	12/14/21 15:27	n/a	(unrelated sample)
JD36538-15	2V83613.D	12/14/21 15:52	n/a	(used for QC only; not part of job JD36319)
JD36538-15MS	2V83614.D	12/14/21 16:18	n/a	Matrix Spike
JD36538-15MSD	2V83615.D	12/14/21 16:43	n/a	Matrix Spike Duplicate
ZZZZZZ	2V83618.D	12/14/21 18:00	n/a	(unrelated sample)
ZZZZZZ	2V83619.D	12/14/21 18:25	n/a	(unrelated sample)
ZZZZZZ	2V83620.D	12/14/21 18:51	n/a	(unrelated sample)
ZZZZZZ	2V83621.D	12/14/21 19:16	n/a	(unrelated sample)
ZZZZZZ	2V83622.D	12/14/21 19:41	n/a	(unrelated sample)
ZZZZZZ	2V83623.D	12/14/21 20:07	n/a	(unrelated sample)
ZZZZZZ	2V83624.D	12/14/21 20:32	n/a	(unrelated sample)
ZZZZZZ	2V83625.D	12/14/21 20:58	n/a	(unrelated sample)
ZZZZZZ	2V83626.D	12/14/21 21:23	n/a	(unrelated sample)

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7257 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7257-BFB	3A167227.D	12/06/21 09:39	n/a	BFB Tune
V3A7257-IC7257	3A167232.D	12/06/21 13:29	n/a	Initial cal 1
V3A7257-IC7257	3A167233.D	12/06/21 13:58	n/a	Initial cal 2
V3A7257-IC7257	3A167234.D	12/06/21 14:27	n/a	Initial cal 5
V3A7257-ICC7257	3A167235.D	12/06/21 14:56	n/a	Initial cal 20
V3A7257-IC7257	3A167236.D	12/06/21 15:25	n/a	Initial cal 50
V3A7257-IC7257	3A167237.D	12/06/21 15:54	n/a	Initial cal 100
V3A7257-IC7257	3A167242.D	12/06/21 18:20	n/a	Initial cal 0.25
V3A7257-IC7257	3A167243.D	12/06/21 18:49	n/a	Initial cal 0.40
V3A7257-IC7257	3A167245.D	12/06/21 19:47	n/a	Initial cal 200
V3A7257-ICV7257	3A167248.D	12/06/21 21:13	n/a	Initial cal verification 20

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7263 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7263-BFB	3A167355.D	12/14/21 08:56	n/a	BFB Tune
V3A7263-CC7257	3A167356.D	12/14/21 09:25	n/a	Continuing cal 5
V3A7263-BS	3A167357.D	12/14/21 10:26	n/a	Blank Spike
V3A7263-BSD	3A167358.D	12/14/21 10:56	n/a	Blank Spike Duplicate
V3A7263-MB	3A167360.D	12/14/21 11:54	n/a	Method Blank
JD36319-1	3A167361.D	12/14/21 12:23	n/a	TB-20211206
JD36319-2	3A167363.D	12/14/21 13:20	n/a	HOFF MW-A
JD36319-3	3A167364.D	12/14/21 13:49	n/a	HOFF MW-10
JD36319-4	3A167365.D	12/14/21 14:18	n/a	HOFF MW-8DL
JD36319-5	3A167366.D	12/14/21 14:47	n/a	HOFF MW-8DU
JD36187-2	3A167370.D	12/14/21 16:42	n/a	(used for QC only; not part of job JD36319)
ZZZZZZ	3A167371.D	12/14/21 17:11	n/a	(unrelated sample)
JD36187-2MS	3A167372.D	12/14/21 17:40	n/a	Matrix Spike
JD36319-2DUP	3A167374.D	12/14/21 18:37	n/a	Duplicate
JD36187-1	3A167375.D	12/14/21 19:06	n/a	(used for QC only; not part of job JD36319)
ZZZZZZ	3A167376.D	12/14/21 19:35	n/a	(unrelated sample)

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7265 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7265-BFB	3A167389.D	12/16/21 09:52	n/a	BFB Tune
V3A7265-CC7257	3A167390.D	12/16/21 10:21	n/a	Continuing cal 20
V3A7265-BS	3A167391.D	12/16/21 11:00	n/a	Blank Spike
V3A7265-MB	3A167393.D	12/16/21 11:58	n/a	Method Blank
ZZZZZZ	3A167396.D	12/16/21 13:10	n/a	(unrelated sample)
ZZZZZZ	3A167397.D	12/16/21 13:39	n/a	(unrelated sample)
ZZZZZZ	3A167398.D	12/16/21 14:08	n/a	(unrelated sample)
JD36319-3	3A167399.D	12/16/21 14:37	n/a	HOFF MW-10
JD36319-4	3A167400.D	12/16/21 15:06	n/a	HOFF MW-8DL
JD36319-5	3A167401.D	12/16/21 15:35	n/a	HOFF MW-8DU
JD36294-5MS	3A167402.D	12/16/21 16:04	n/a	Matrix Spike
JD36294-5MSD	3A167403.D	12/16/21 16:33	n/a	Matrix Spike Duplicate
ZZZZZZ	3A167405.D	12/16/21 17:30	n/a	(unrelated sample)
JD36294-5	3A167406.D	12/16/21 17:59	n/a	(used for QC only; not part of job JD36319)
ZZZZZZ	3A167407.D	12/16/21 18:28	n/a	(unrelated sample)
ZZZZZZ	3A167408.D	12/16/21 18:56	n/a	(unrelated sample)
ZZZZZZ	3A167409.D	12/16/21 19:25	n/a	(unrelated sample)
ZZZZZZ	3A167411.D	12/16/21 20:23	n/a	(unrelated sample)
ZZZZZZ	3A167412.D	12/16/21 20:51	n/a	(unrelated sample)
ZZZZZZ	3A167413.D	12/16/21 21:20	n/a	(unrelated sample)

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7263\
Data File : 3A167361.D
Acq On : 14 Dec 2021 12:23 pm
Operator : BridgetK
Sample : jd36319-1
Misc : MS55472,V3A7263,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 14 14:13:06 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

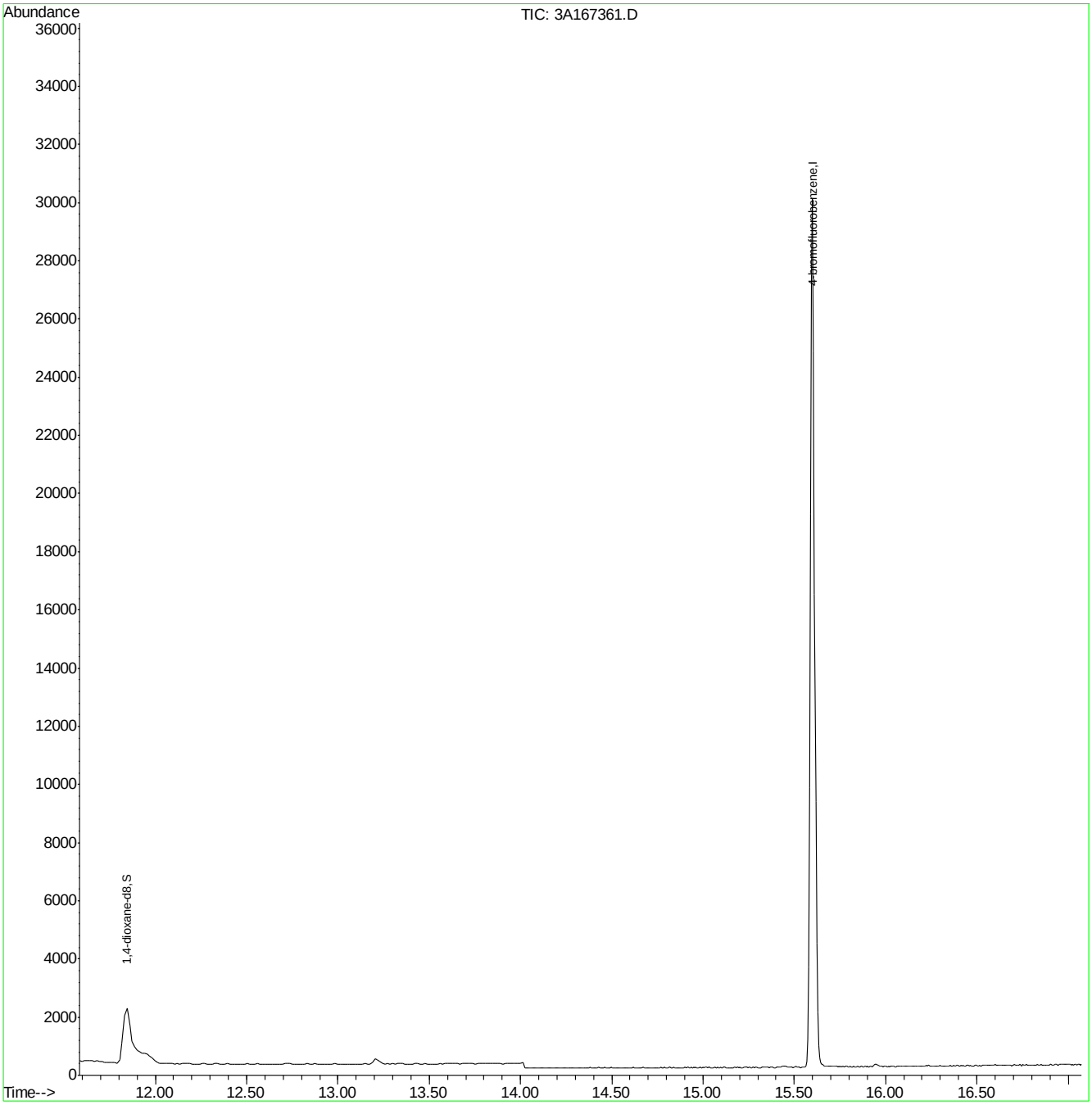
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	16571	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4712	10.27	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 102.70%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7263\
Data File : 3A167361.D
Acq On : 14 Dec 2021 12:23 pm
Operator : BridgetK
Sample : jd36319-1
Misc : MS55472,V3A7263,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 14 14:13:06 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7263\
Data File : 3A167363.D
Acq On : 14 Dec 2021 1:20 pm
Operator : BridgetK
Sample : jd36319-2
Misc : MS55472,V3A7263,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 14 14:13:08 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

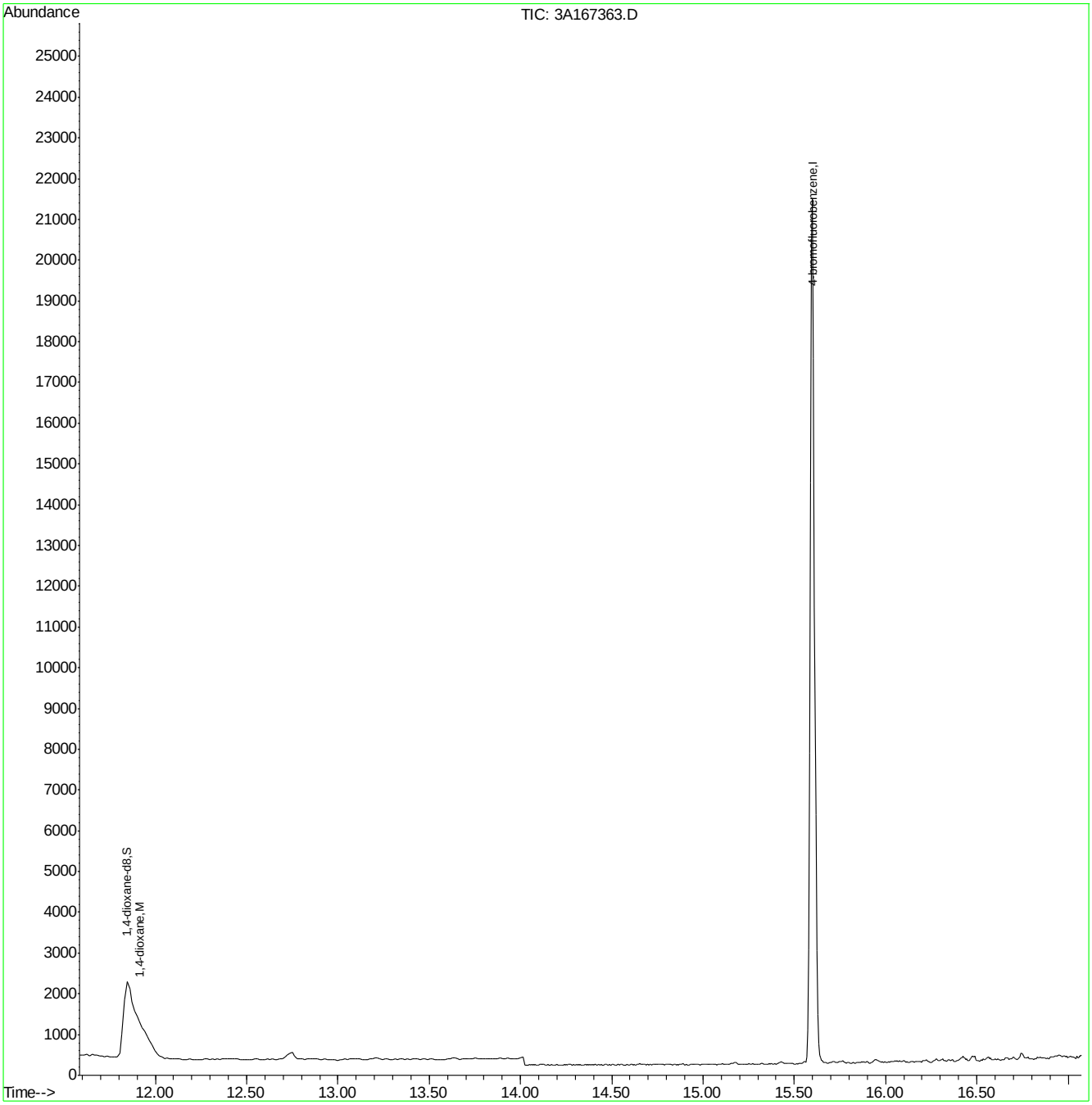
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	11975	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	5921	17.86	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 178.60%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	756	2.03	ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

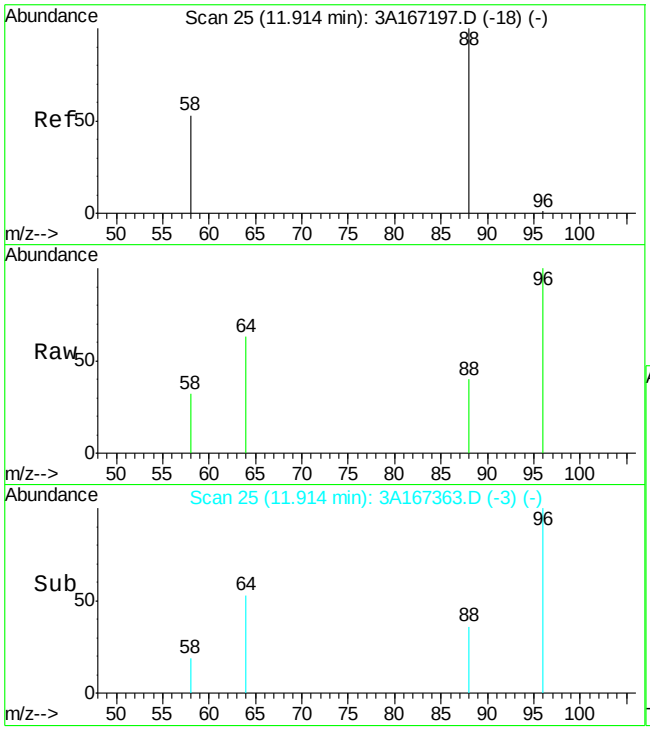
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7263\
Data File : 3A167363.D
Acq On : 14 Dec 2021 1:20 pm
Operator : BridgetK
Sample : jd36319-2
Misc : MS55472,V3A7263,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 14 14:13:08 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



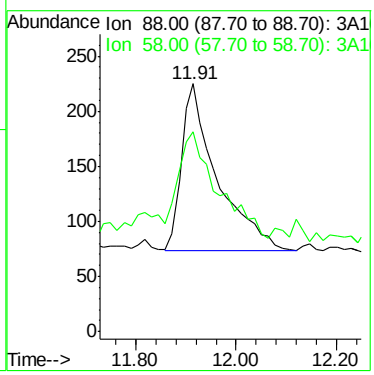
M3A7257.M Tue Dec 14 14:14:26 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 2.03 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167363.D
Acq: 14 Dec 2021 1:20 pm

Tgt Ion: 88 Resp: 756

Ion	Ratio	Lower	Upper
88	100		
58	54.6	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7263\
Data File : 3A167364.D
Acq On : 14 Dec 2021 1:49 pm
Operator : BridgetK
Sample : jd36319-3
Misc : MS55472,V3A7263,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 14 14:13:09 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

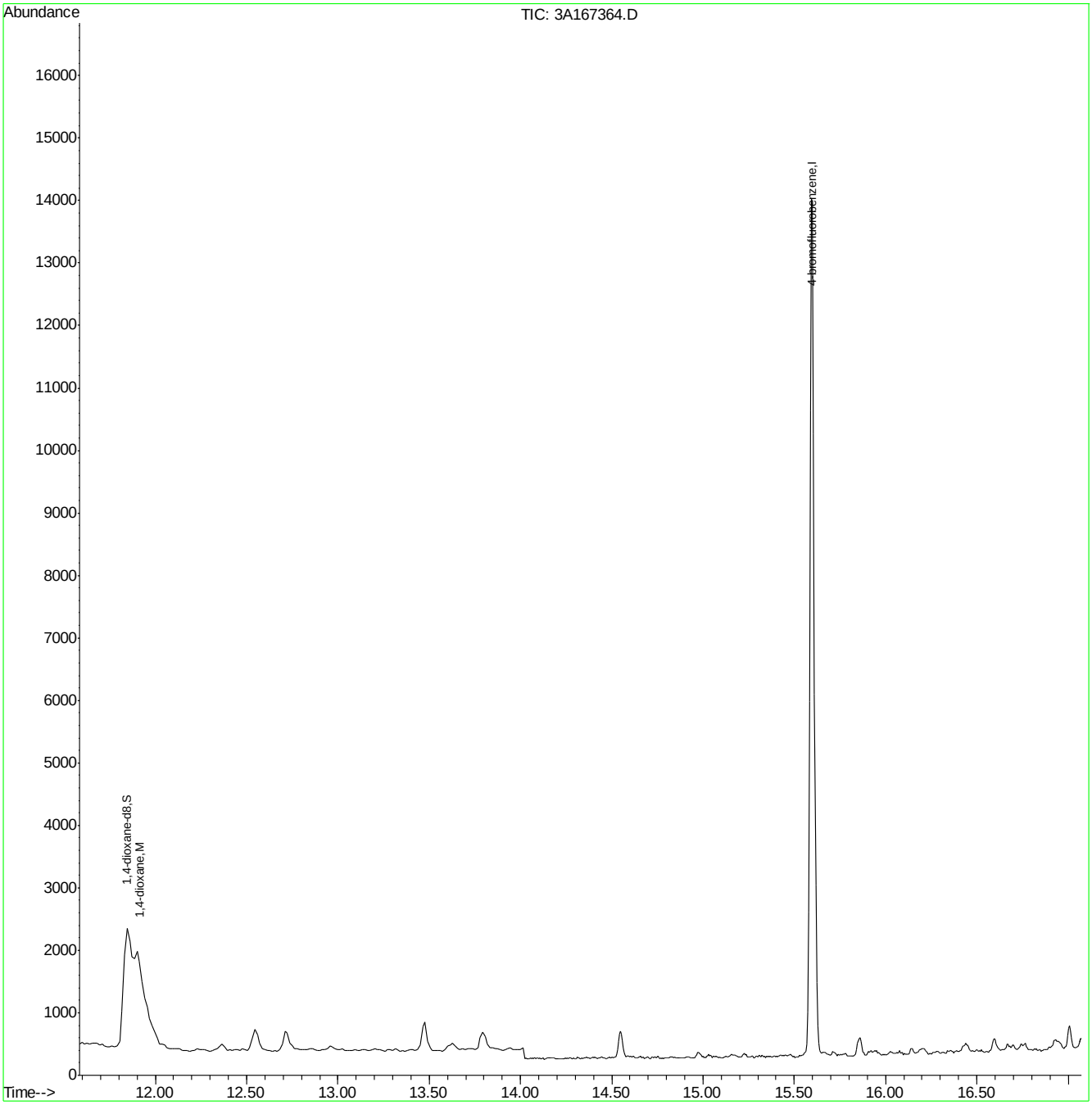
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	7721	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	5670	26.52	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 265.20%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	2232	9.28	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

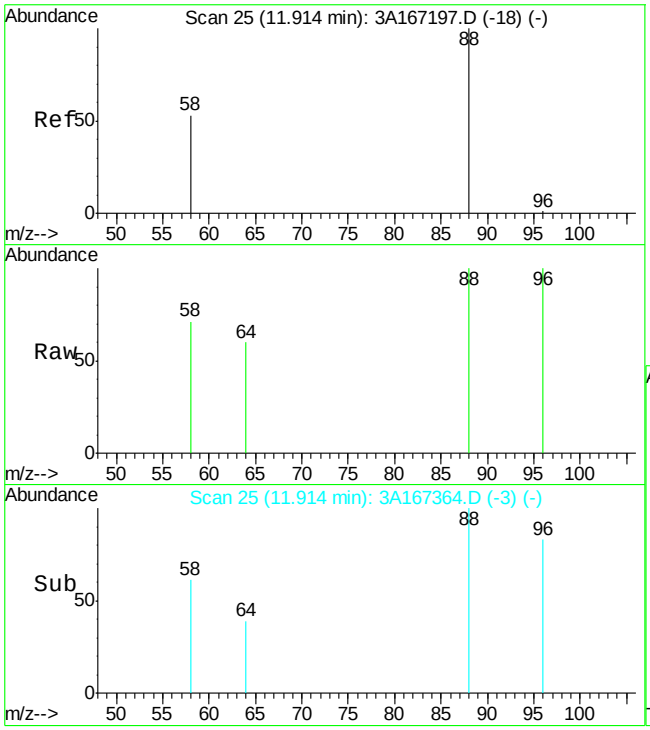
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7263\
Data File : 3A167364.D
Acq On : 14 Dec 2021 1:49 pm
Operator : BridgetK
Sample : jd36319-3
Misc : MS55472,V3A7263,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 14 14:13:09 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



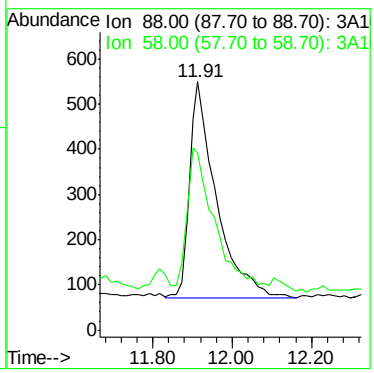
M3A7257.M Tue Dec 14 14:14:35 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 9.28 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167364.D
Acq: 14 Dec 2021 1:49 pm

Tgt Ion: 88 Resp: 2232

Ion	Ratio	Lower	Upper
88	100		
58	63.7	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7265\
Data File : 3A167399.D
Acq On : 16 Dec 2021 2:37 pm
Operator : BridgetK
Sample : JD36319-3
Misc : MS55472,V3A7265,5.0,,,,2.5
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 16 15:03:58 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

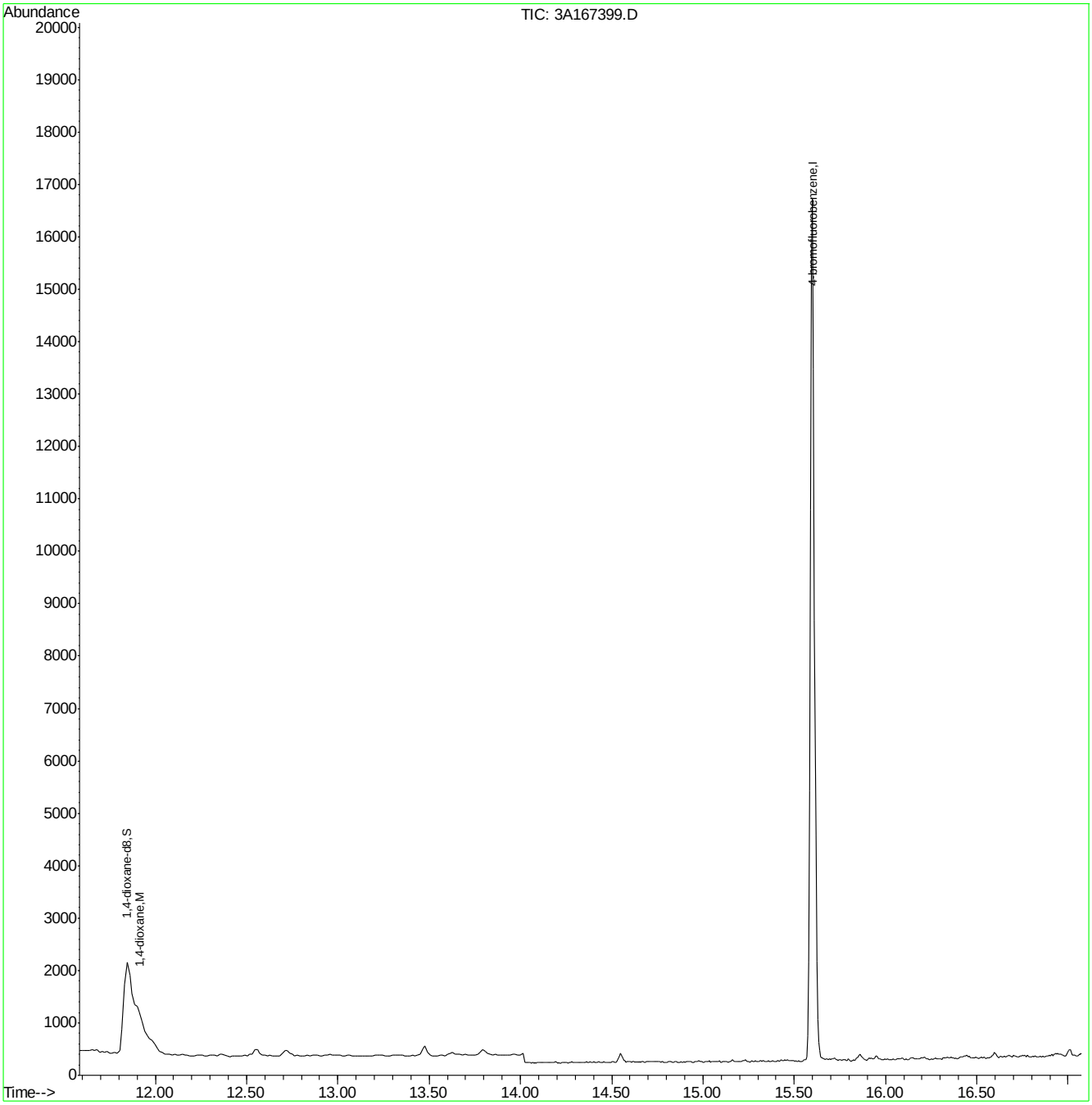
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	8870	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4893	19.92	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 199.20%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	796	2.88	ug/L	98

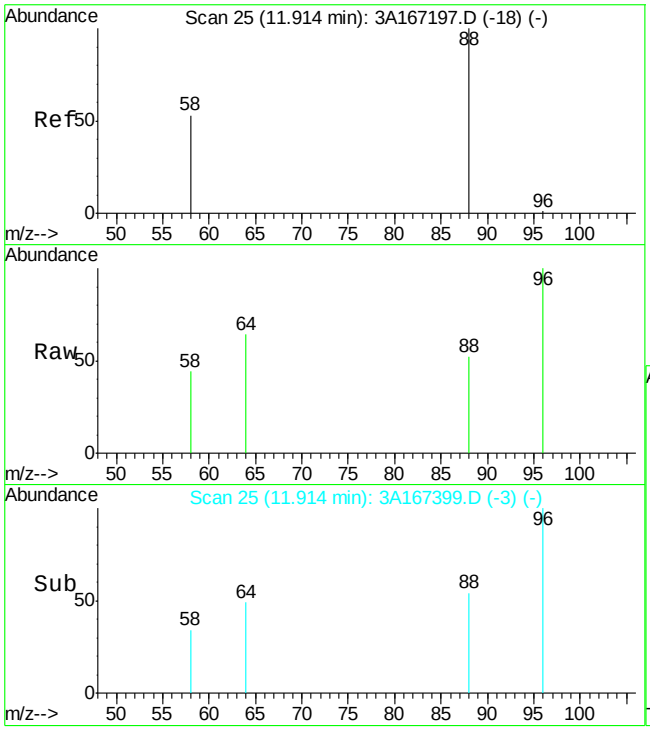
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7265\
Data File : 3A167399.D
Acq On : 16 Dec 2021 2:37 pm
Operator : BridgetK
Sample : JD36319-3
Misc : MS55472,V3A7265,5.0,,,,2.5
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 16 15:03:58 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

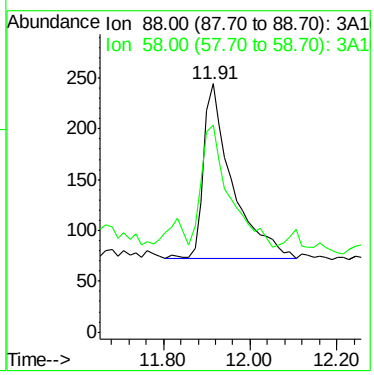




#3
1,4-dioxane
Concen: 2.88 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167399.D
Acq: 16 Dec 2021 2:37 pm

Tgt Ion: 88 Resp: 796

Ion	Ratio	Lower	Upper
88	100		
58	61.6	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7263\
Data File : 3A167365.D
Acq On : 14 Dec 2021 2:18 pm
Operator : BridgetK
Sample : jd36319-4
Misc : MS55472,V3A7263,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 14 16:00:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

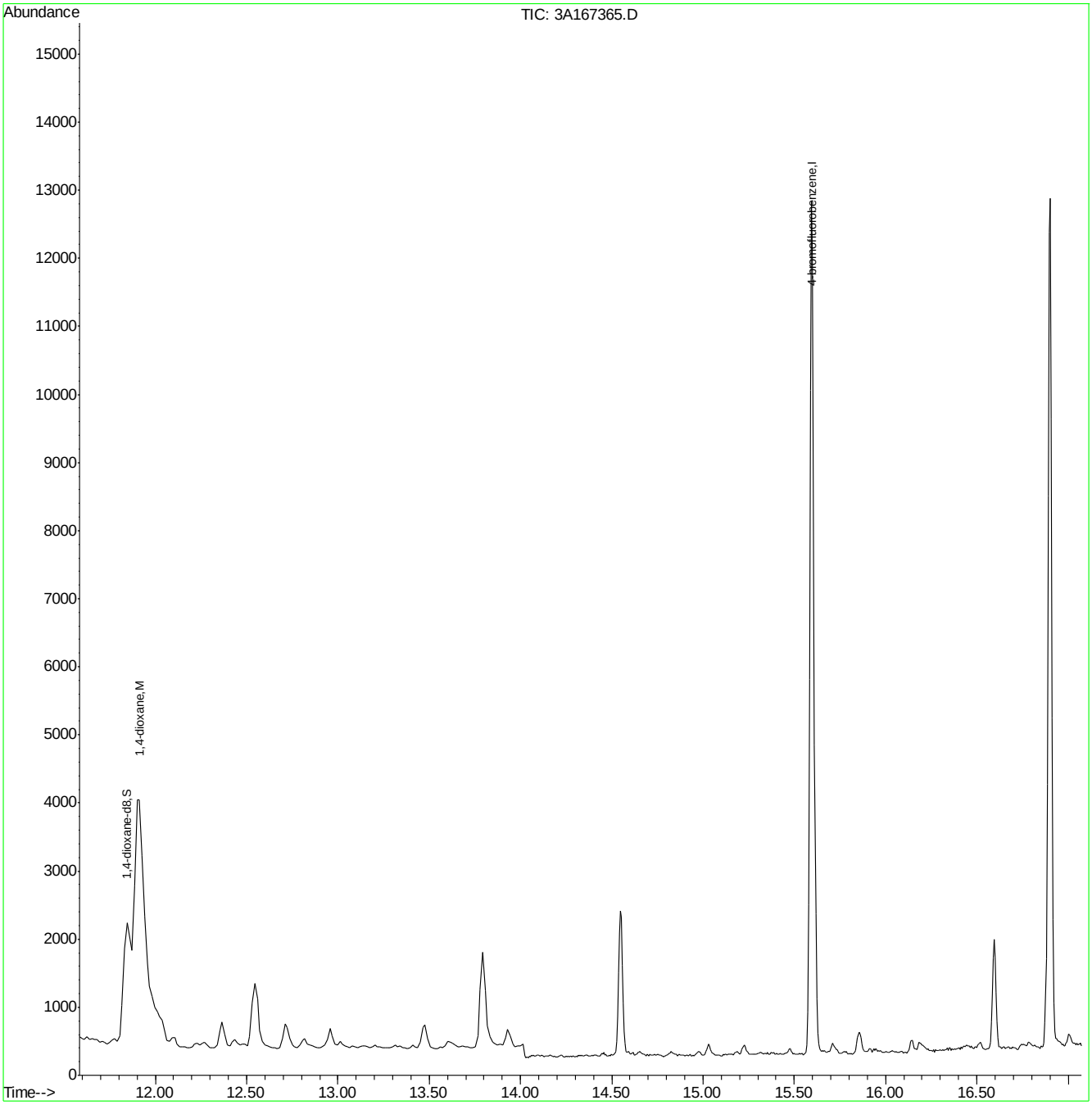
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	6559	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4295	23.65	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 236.50%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	8708	42.63	ug/L	97

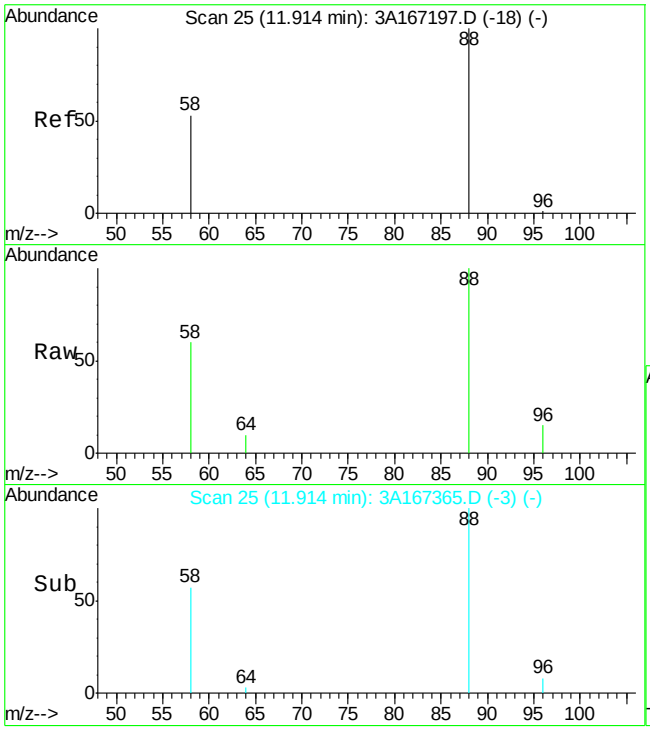
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7263\
Data File : 3A167365.D
Acq On : 14 Dec 2021 2:18 pm
Operator : BridgetK
Sample : jd36319-4
Misc : MS55472,V3A7263,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 14 16:00:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

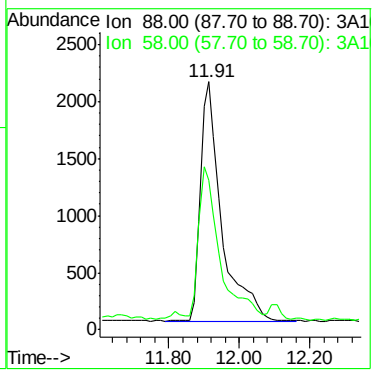




#3
1,4-dioxane
Concen: 42.63 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167365.D
Acq: 14 Dec 2021 2:18 pm

Tgt Ion: 88 Resp: 8708

Ion	Ratio	Lower	Upper
88	100		
58	57.8	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7265\
Data File : 3A167400.D
Acq On : 16 Dec 2021 3:06 pm
Operator : BridgetK
Sample : JD36319-4
Misc : MS55472,V3A7265,5.0,,,,5
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 16 16:17:11 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

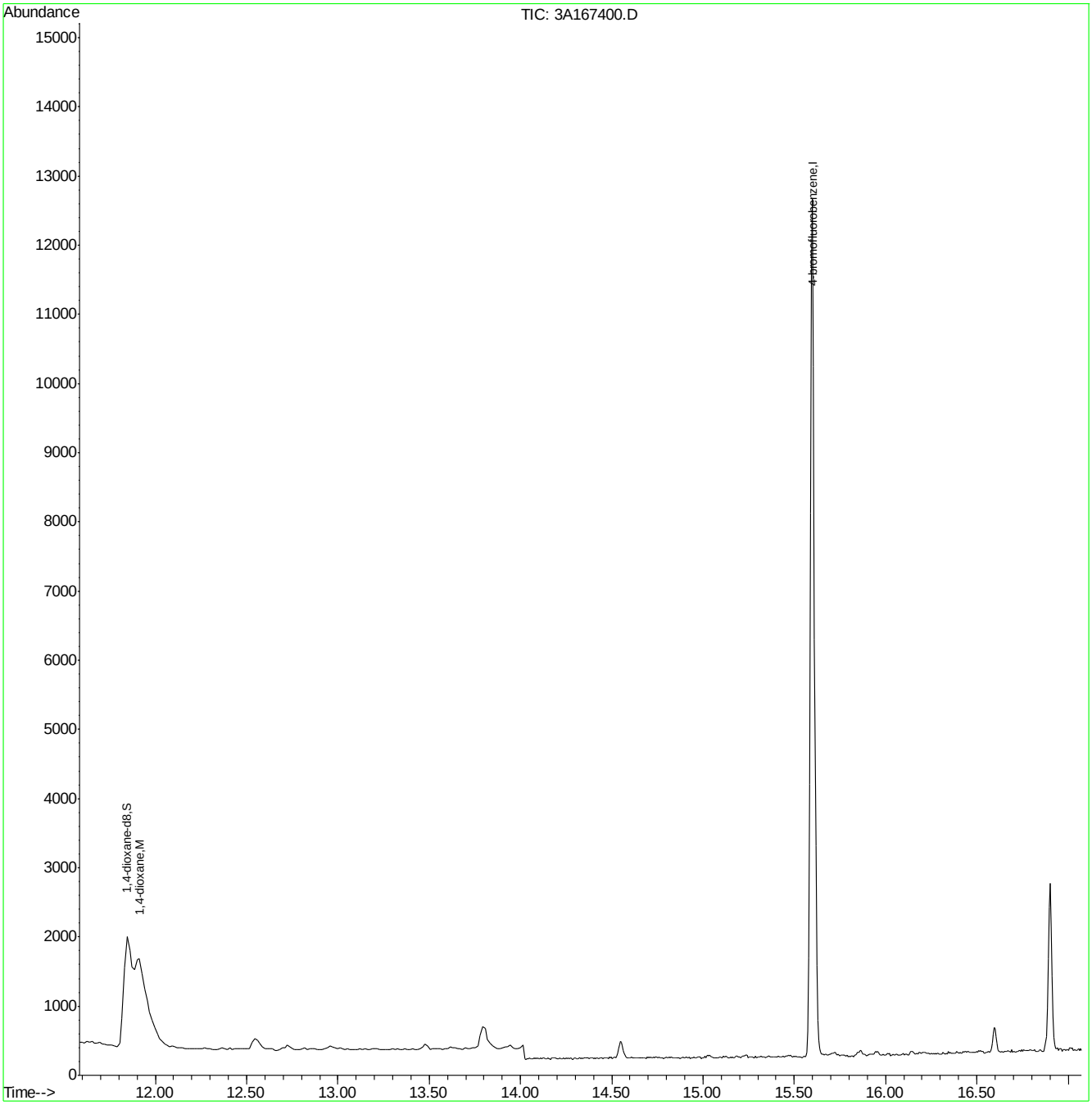
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	6572	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4814	26.46	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 264.60%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	2086	10.19	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

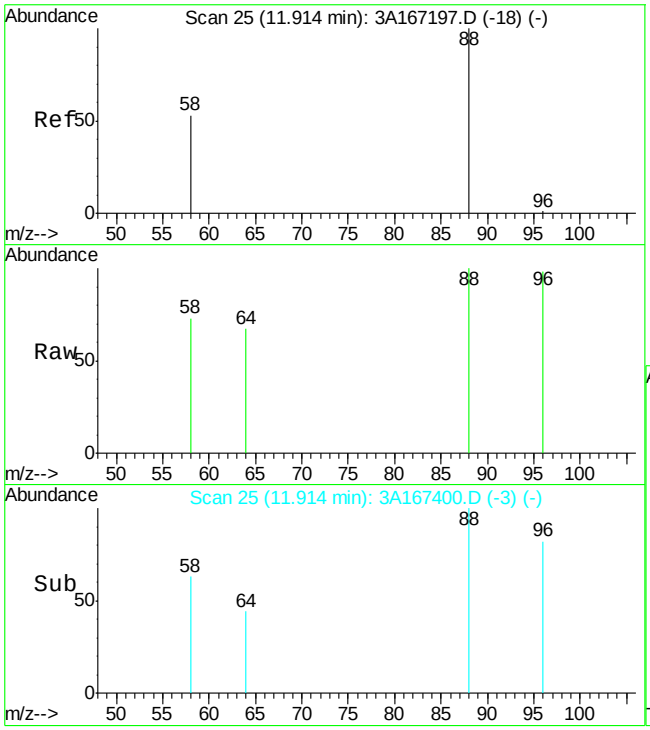
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7265\
Data File : 3A167400.D
Acq On : 16 Dec 2021 3:06 pm
Operator : BridgetK
Sample : JD36319-4
Misc : MS55472,V3A7265,5.0,,,,5
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 16 16:17:11 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



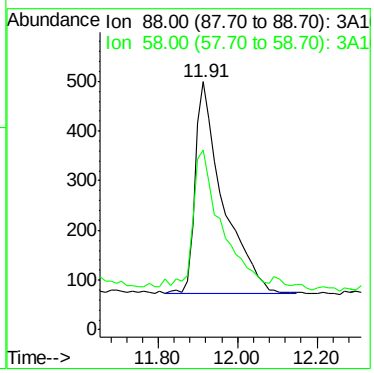
M3A7257.M Thu Dec 16 16:18:10 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 10.19 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167400.D
Acq: 16 Dec 2021 3:06 pm

Tgt Ion: 88 Resp: 2086

Ion	Ratio	Lower	Upper
88	100		
58	63.7	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7263\
Data File : 3A167366.D
Acq On : 14 Dec 2021 2:47 pm
Operator : BridgetK
Sample : jd36319-5
Misc : MS55472,V3A7263,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 14 16:00:43 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

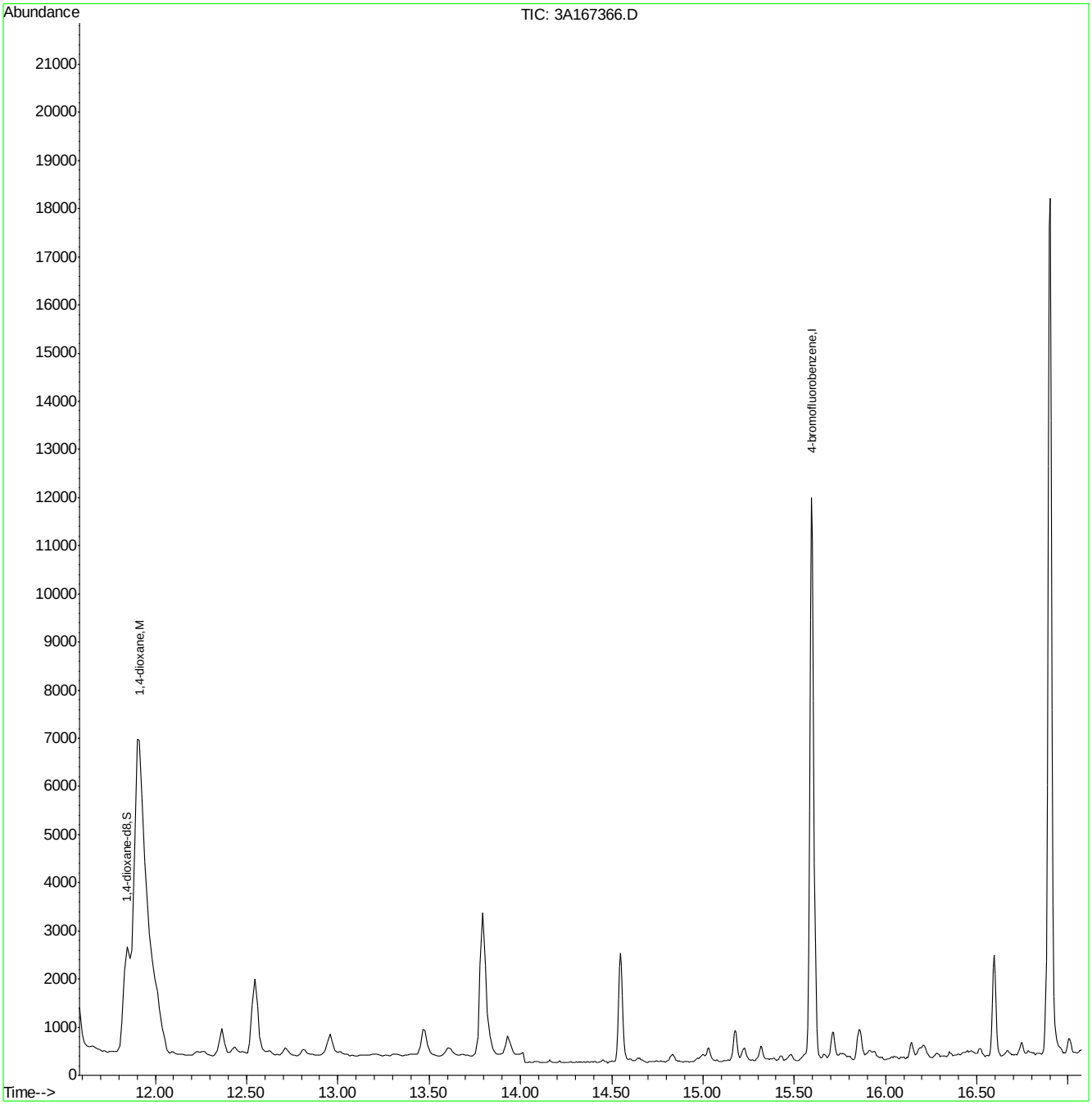
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	6345	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6076	34.59	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 345.90%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	17522	88.67	ug/L	97

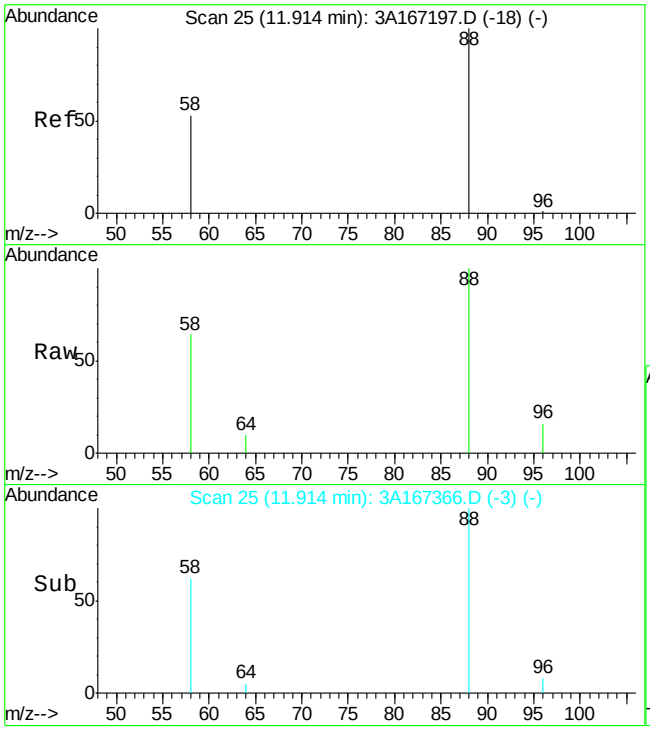
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7263\
Data File : 3A167366.D
Acq On : 14 Dec 2021 2:47 pm
Operator : BridgetK
Sample : jd36319-5
Misc : MS55472,V3A7263,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 14 16:00:43 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

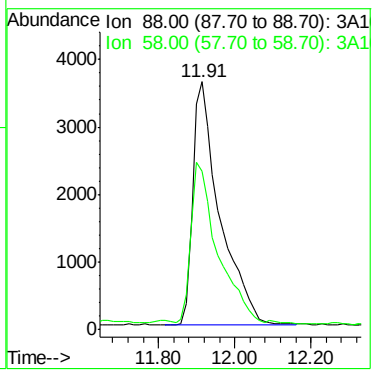




#3
1,4-dioxane
Concen: 88.67 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167366.D
Acq: 14 Dec 2021 2:47 pm

Tgt Ion: 88 Resp: 17522

Ion	Ratio	Lower	Upper
88	100		
58	62.4	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7265\
Data File : 3A167401.D
Acq On : 16 Dec 2021 3:35 pm
Operator : BridgetK
Sample : JD36319-5
Misc : MS55472,V3A7265,5.0,,,,10
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 16 16:17:12 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

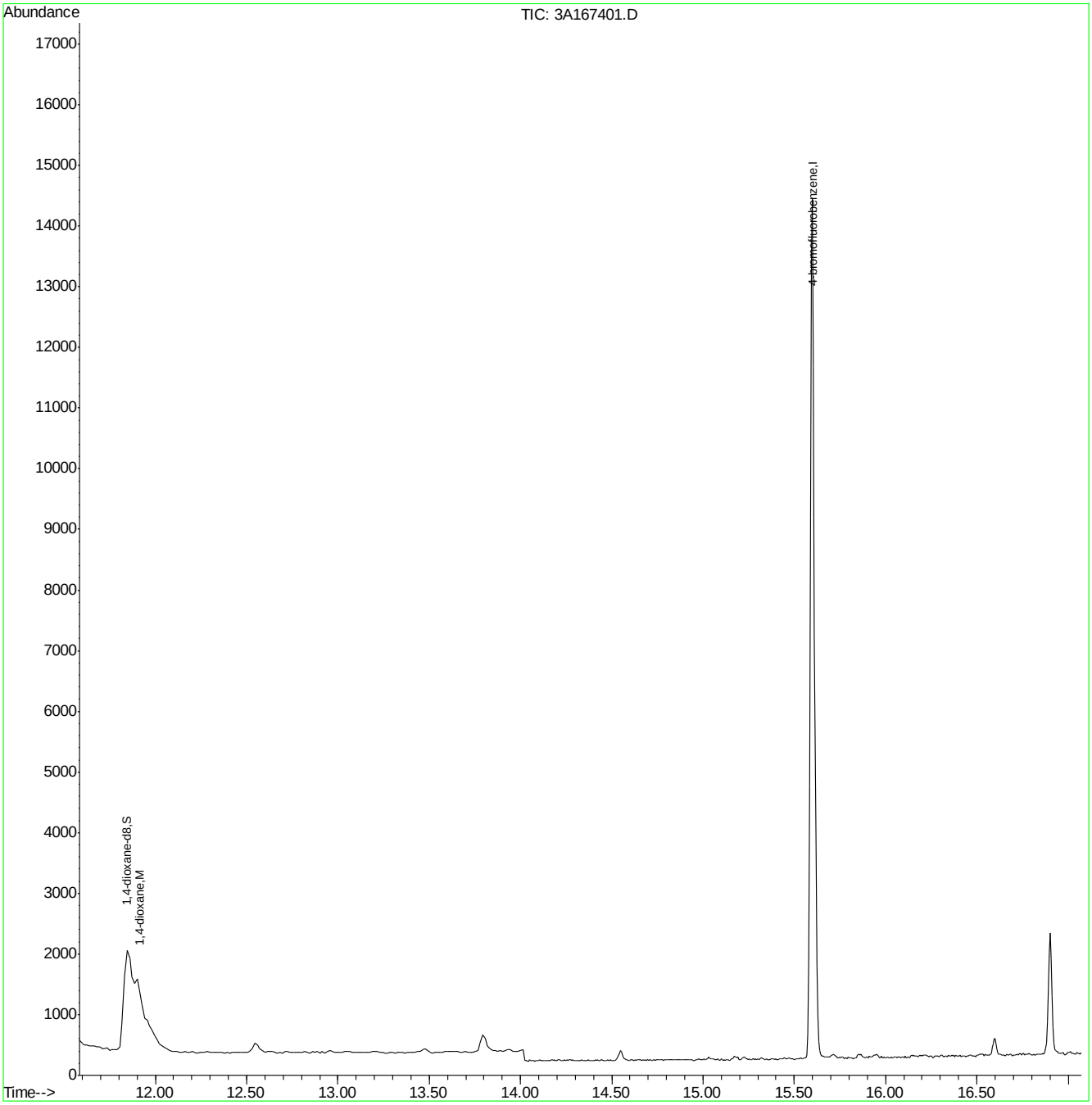
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	7438	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4772	23.17	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery =	231.70%#		
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	1536	6.63	ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

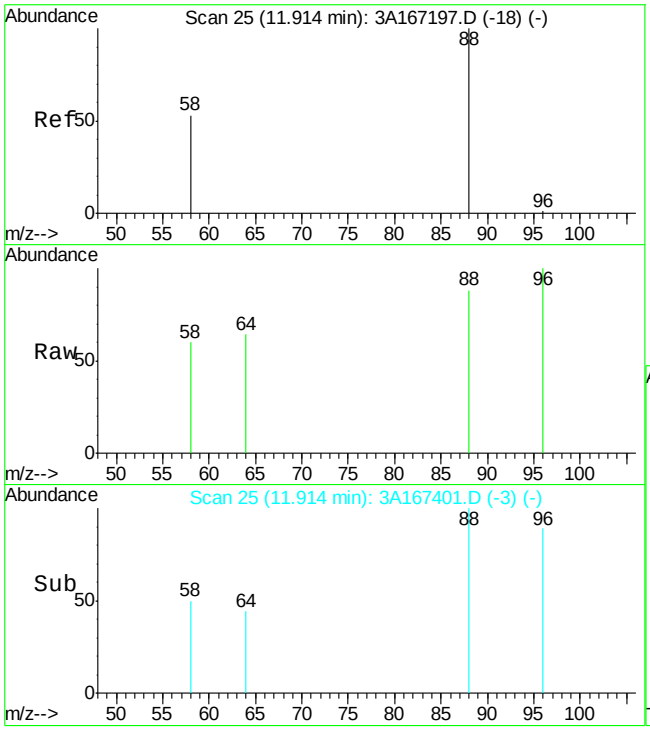
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7265\
Data File : 3A167401.D
Acq On : 16 Dec 2021 3:35 pm
Operator : BridgetK
Sample : JD36319-5
Misc : MS55472,V3A7265,5.0,,,,10
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 16 16:17:12 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



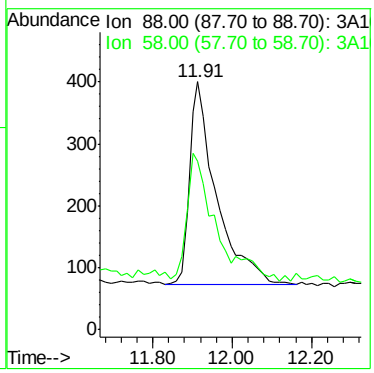
M3A7257.M Thu Dec 16 16:18:17 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 6.63 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167401.D
Acq: 16 Dec 2021 3:35 pm

Tgt Ion: 88 Resp: 1536

Ion	Ratio	Lower	Upper
88	100		
58	55.0	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-14-2021\v2v3444-partial\
Data File : 2v83568.d
Acq On : 13 Dec 2021 7:04 pm
Operator : nickw
Sample : jd36319-1 Inst : MS2V
Misc : MS55483,V2V3444,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 13 22:35:53 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

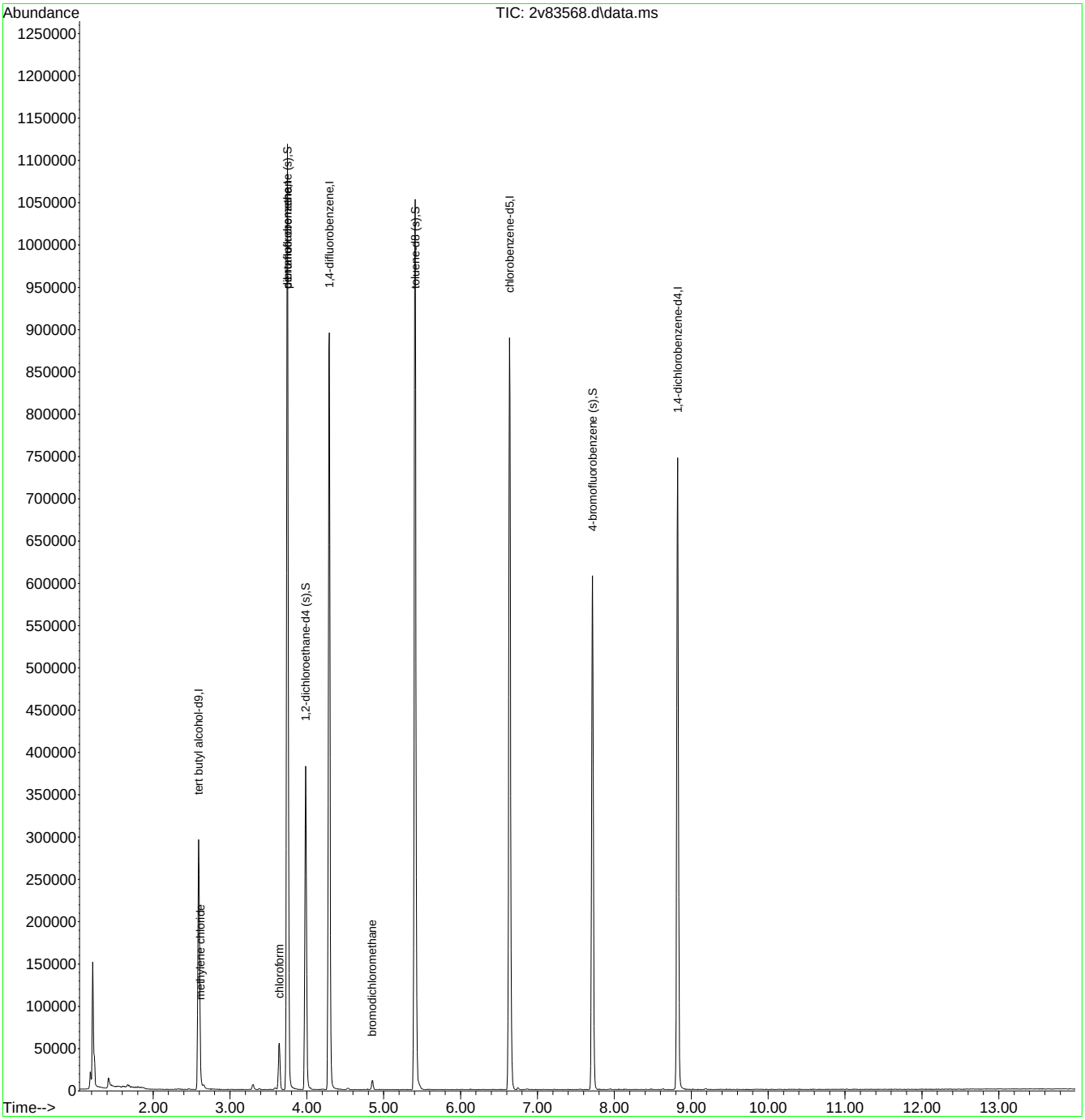
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	249462	500.00	ug/L	0.00
5) pentafluorobenzene	3.747	168	399805	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.293	114	578706	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	447055	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	184172	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.747	113	179824	48.51	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.02%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	207625	55.93	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 111.86%			
73) toluene-d8 (s)	5.409	98	583763	51.66	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.32%			
97) 4-bromofluorobenzene (s)	7.716	95	199866	47.56	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.12%			
Target Compounds						Qvalue
22) methylene chloride	2.615	84	2349	0.59	ug/L	93
41) chloroform	3.643	83	32088	4.60	ug/L	98
67) bromodichloromethane	4.848	83	5945	1.14	ug/L	91

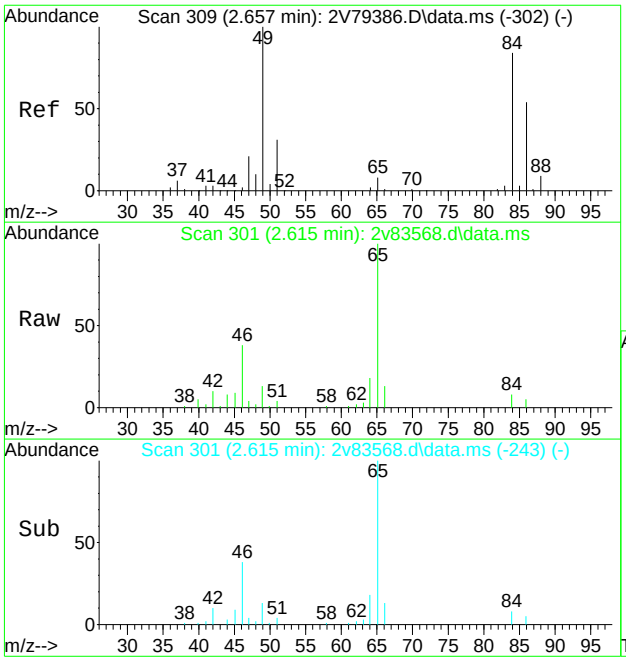
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-14-2021\v2v3444-partial\
Data File : 2v83568.d
Acq On : 13 Dec 2021 7:04 pm
Operator : nickw
Sample : jd36319-1 Inst : MS2V
Misc : MS55483,V2V3444,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 13 22:35:53 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

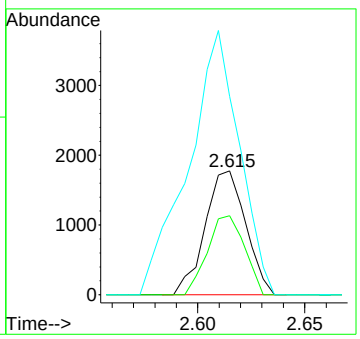


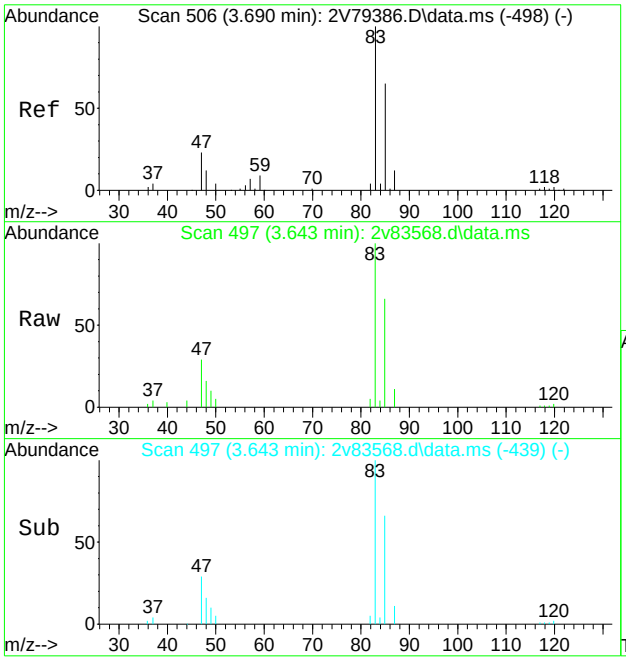


#22
methylene chloride
Concen: 0.59 ug/L
RT: 2.615 min Scan# 301
Delta R.T. 0.005 min
Lab File: 2v83568.d
Acq: 13 Dec 2021 7:04 pm

Tgt Ion: 84 Resp: 2349

Ion	Ratio	Lower	Upper
84	100		
86	63.9	36.3	96.3
49	160.3	119.8	179.8

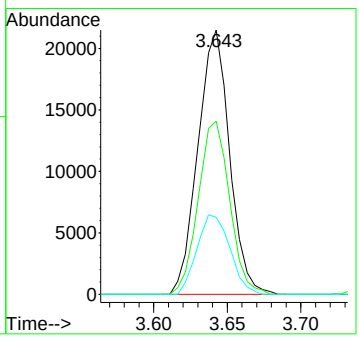


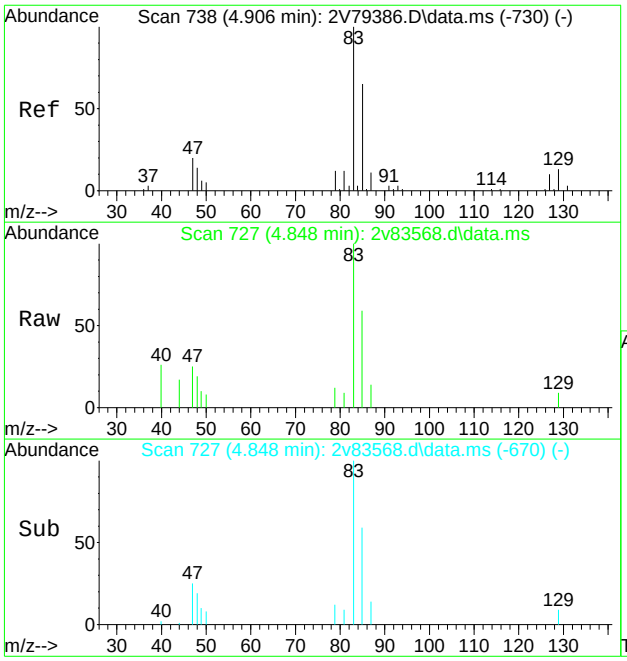


#41
chloroform
Concen: 4.60 ug/L
RT: 3.643 min Scan# 497
Delta R.T. 0.006 min
Lab File: 2v83568.d
Acq: 13 Dec 2021 7:04 pm

Tgt Ion: 83 Resp: 32088

Ion	Ratio	Lower	Upper
83	100		
85	65.5	35.3	95.3
47	29.1	0.0	55.9

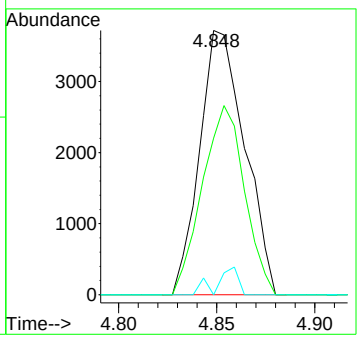




#67
bromodichloromethane
Concen: 1.14 ug/L
RT: 4.848 min Scan# 727
Delta R.T. -0.001 min
Lab File: 2v83568.d
Acq: 13 Dec 2021 7:04 pm

Tgt Ion: 83 Resp: 5945

Ion	Ratio	Lower	Upper
83	100		
85	59.2	34.7	94.7
127	0.0	0.0	39.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-14-2021\v2v3444-partial\
Data File : 2v83569.d
Acq On : 13 Dec 2021 7:30 pm
Operator : nickw
Sample : jd36319-2 Inst : MS2V
Misc : MS55483,V2V3444,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 13 22:36:29 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

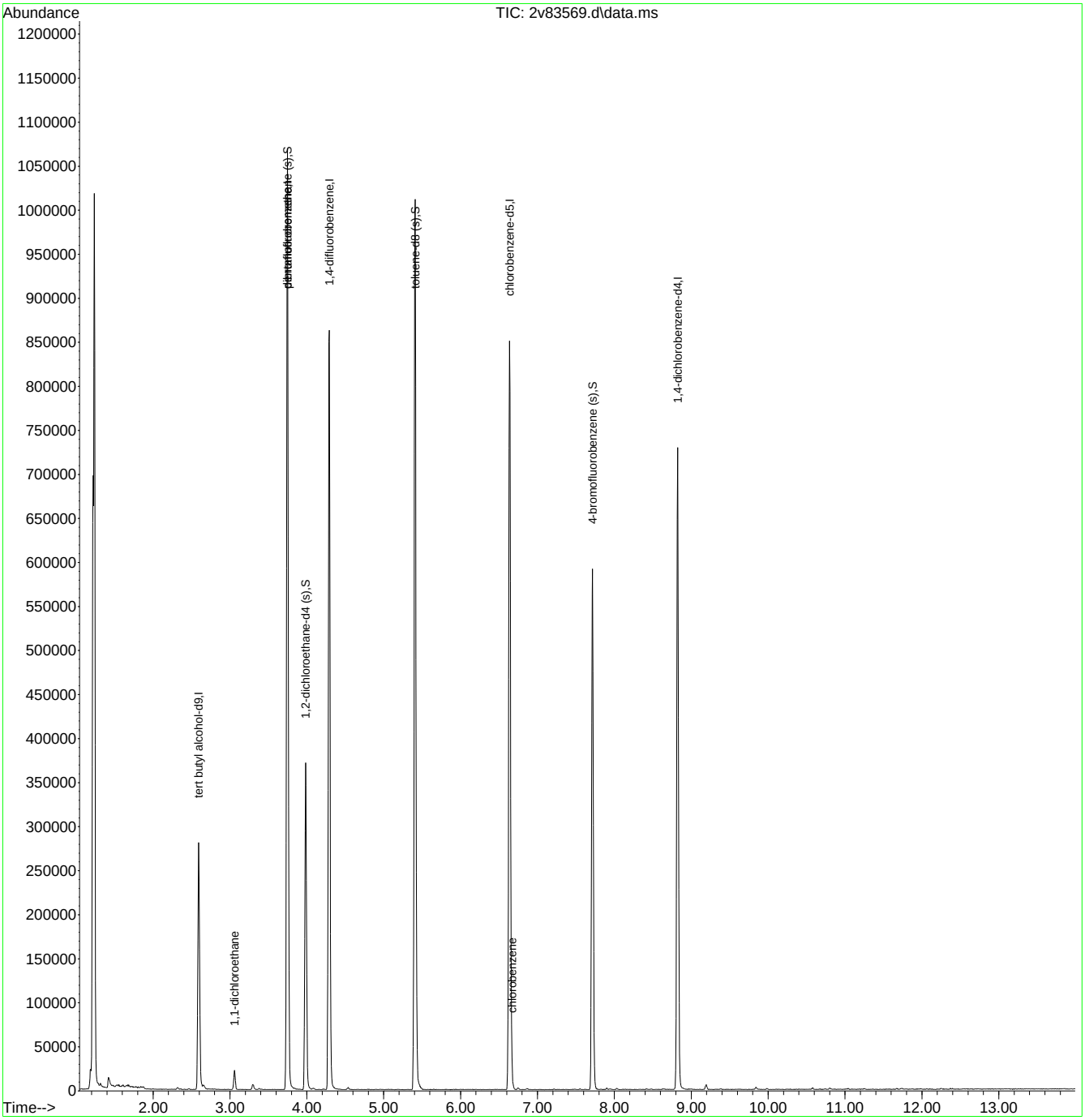
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	236377	500.00	ug/L	0.00
5) pentafluorobenzene	3.747	168	389130	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.293	114	564611	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	435511	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	179602	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.747	113	174438	48.35	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.70%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	198829	54.90	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 109.80%			
73) toluene-d8 (s)	5.409	98	566819	51.49	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.98%			
97) 4-bromofluorobenzene (s)	7.716	95	190902	46.58	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.16%			
Target Compounds						Qvalue
29) 1,1-dichloroethane	3.060	63	17064	2.57	ug/L	96
85) chlorobenzene	6.668	112	3524	0.40	ug/L	93

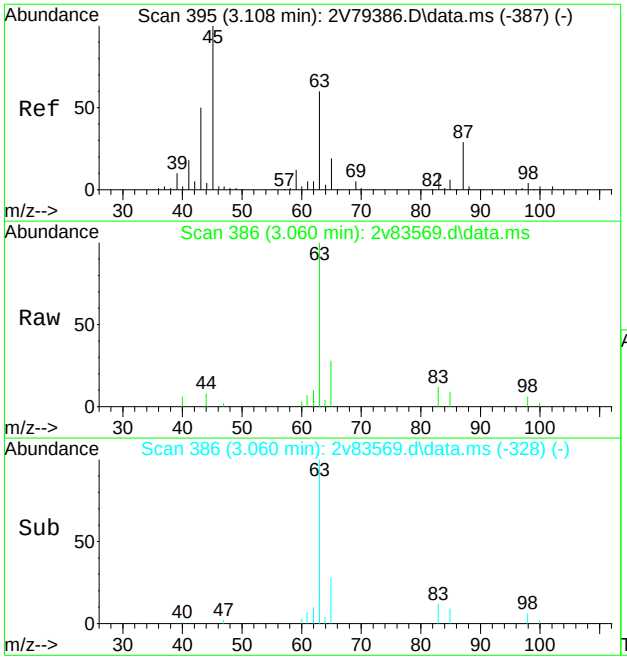
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-14-2021\v2v3444-partial\
Data File : 2v83569.d
Acq On : 13 Dec 2021 7:30 pm
Operator : nickw
Sample : jd36319-2 Inst : MS2V
Misc : MS55483,V2V3444,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 13 22:36:29 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

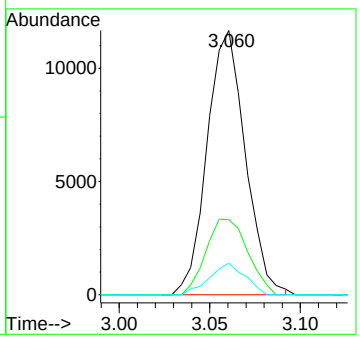


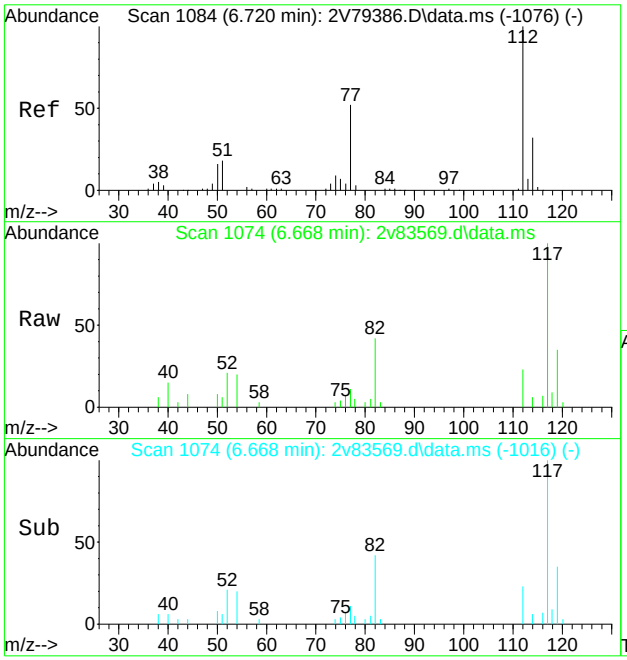


#29
1,1-dichloroethane
Concen: 2.57 ug/L
RT: 3.060 min Scan# 386
Delta R.T. 0.005 min
Lab File: 2v83569.d
Acq: 13 Dec 2021 7:30 pm

Tgt Ion: 63 Resp: 17064

Ion	Ratio	Lower	Upper
63	100		
65	28.5	1.1	61.1
83	12.0	0.0	42.5

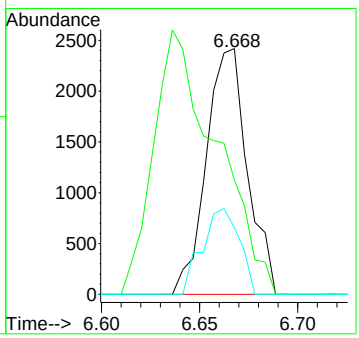




#85
chlorobenzene
Concen: 0.40 ug/L
RT: 6.668 min Scan# 1074
Delta R.T. 0.005 min
Lab File: 2v83569.d
Acq: 13 Dec 2021 7:30 pm

Tgt Ion:112 Resp: 3524

Ion	Ratio	Lower	Upper
112	100		
77	46.4	20.6	80.6
114	27.1	2.1	62.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-14-2021\v2v3444-partial\
Data File : 2v83570.d
Acq On : 13 Dec 2021 7:55 pm
Operator : nickw
Sample : jd36319-3 Inst : MS2V
Misc : MS55483,V2V3444,5,,,,10
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 13 22:37:09 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

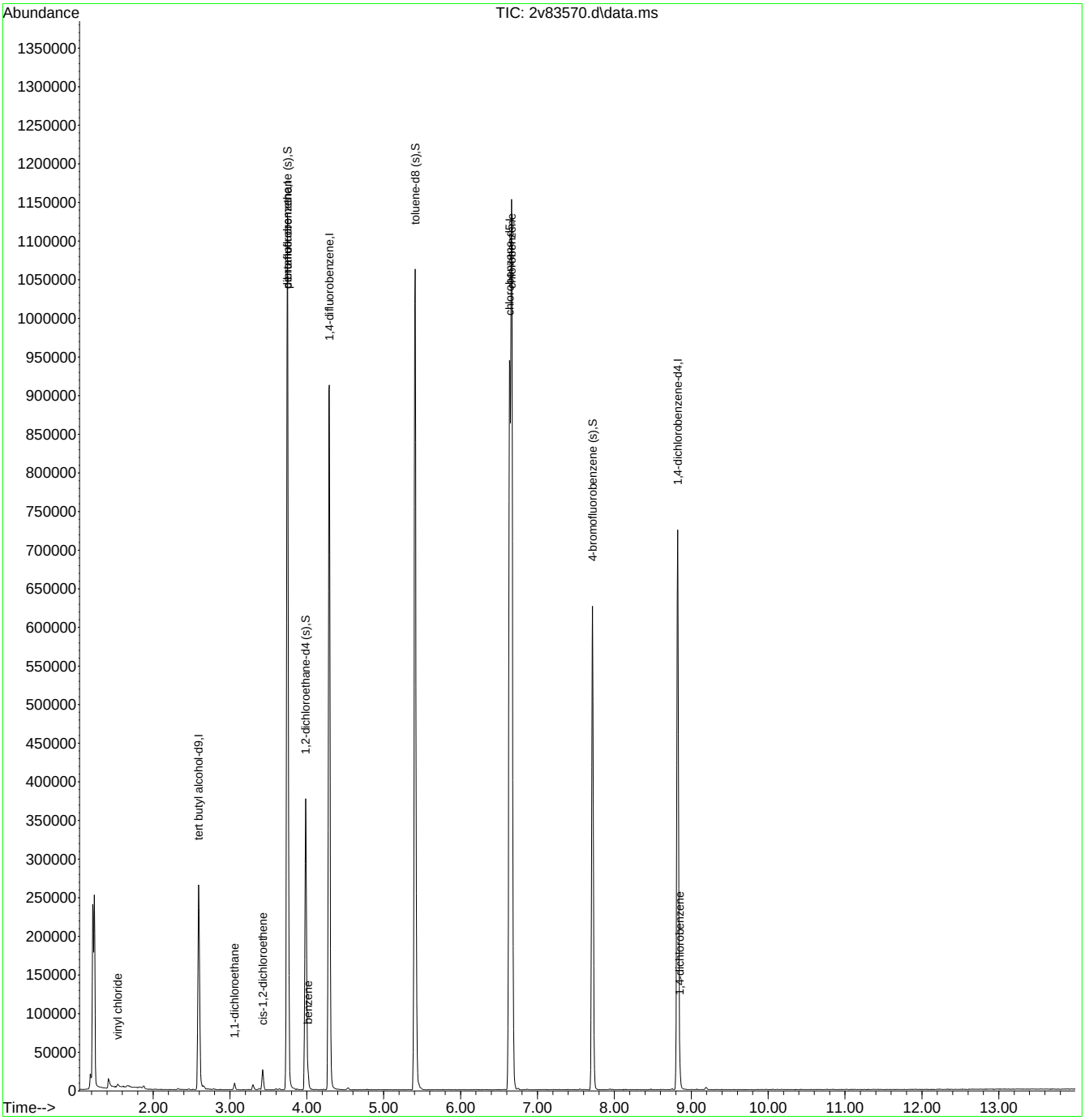
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	223293	500.00	ug/L	0.00
5) pentafluorobenzene	3.748	168	408753	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.293	114	586454	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	455116	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	182135	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.748	113	182219	48.08	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.16%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	202937	53.95	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 107.90%			
73) toluene-d8 (s)	5.410	98	593490	51.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.18%			
97) 4-bromofluorobenzene (s)	7.717	95	199672	48.05	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.10%			
Target Compounds						Qvalue
9) vinyl chloride	1.540	62	2008	0.44	ug/L	94
29) 1,1-dichloroethane	3.061	63	6994	1.00	ug/L	99
36) cis-1,2-dichloroethene	3.428	96	8069	1.99	ug/L	96
53) benzene	4.015	78	10714	0.75	ug/L	90
85) chlorobenzene	6.663	112	532750	57.21	ug/L	95
112) 1,4-dichlorobenzene	8.849	146	9963	1.38	ug/L	92

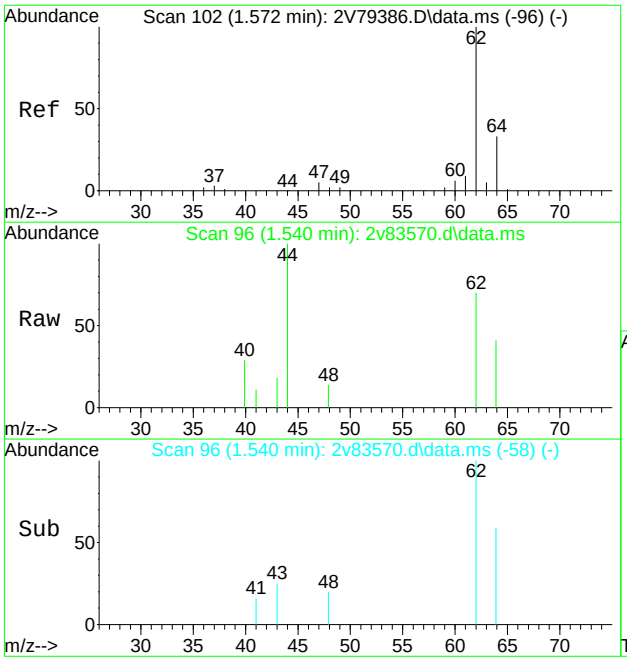
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-14-2021\v2v3444-partial\
Data File : 2v83570.d
Acq On : 13 Dec 2021 7:55 pm
Operator : nickw
Sample : jd36319-3 Inst : MS2V
Misc : MS55483,V2V3444,5,,,,10
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 13 22:37:09 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

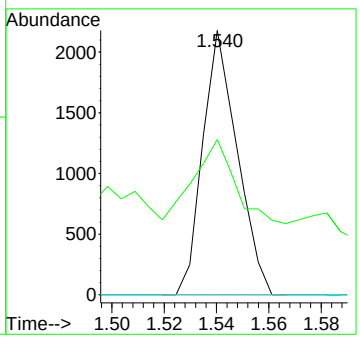


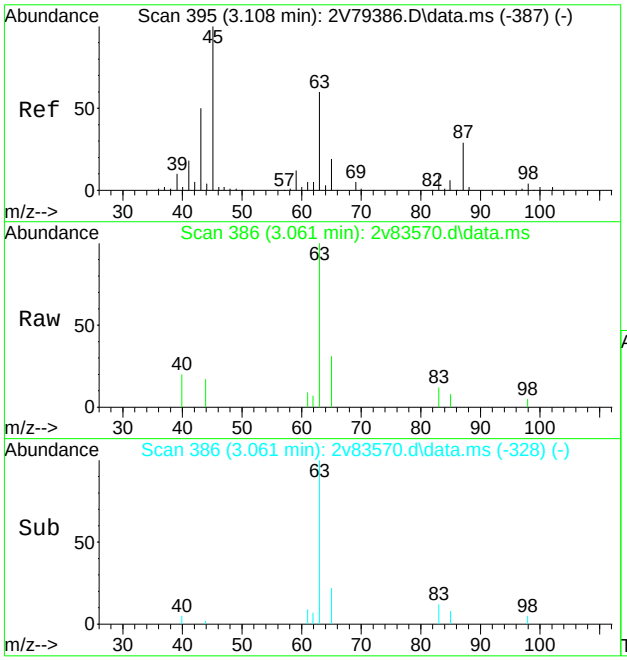


#9
vinyl chloride
Concen: 0.44 ug/L
RT: 1.540 min Scan# 96
Delta R.T. 0.000 min
Lab File: 2v83570.d
Acq: 13 Dec 2021 7:55 pm

Tgt Ion: 62 Resp: 2008

Ion	Ratio	Lower	Upper
62	100		
64	31.8	1.3	61.3
61	0.0	0.0	38.8

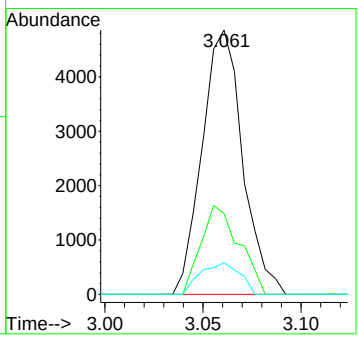


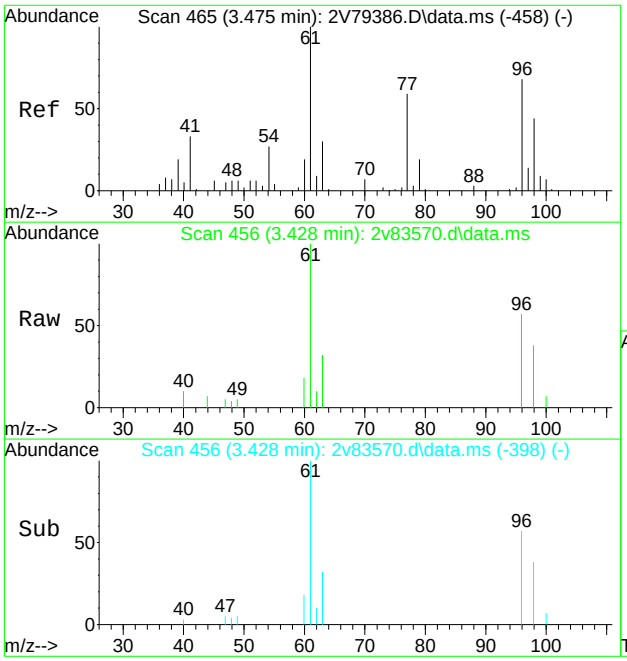


#29
1,1-dichloroethane
Concen: 1.00 ug/L
RT: 3.061 min Scan# 386
Delta R.T. 0.006 min
Lab File: 2v83570.d
Acq: 13 Dec 2021 7:55 pm

Tgt Ion: 63 Resp: 6994

Ion	Ratio	Lower	Upper
63	100		
65	30.6	1.1	61.1
83	12.0	0.0	42.5

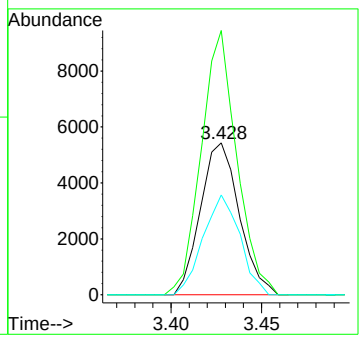


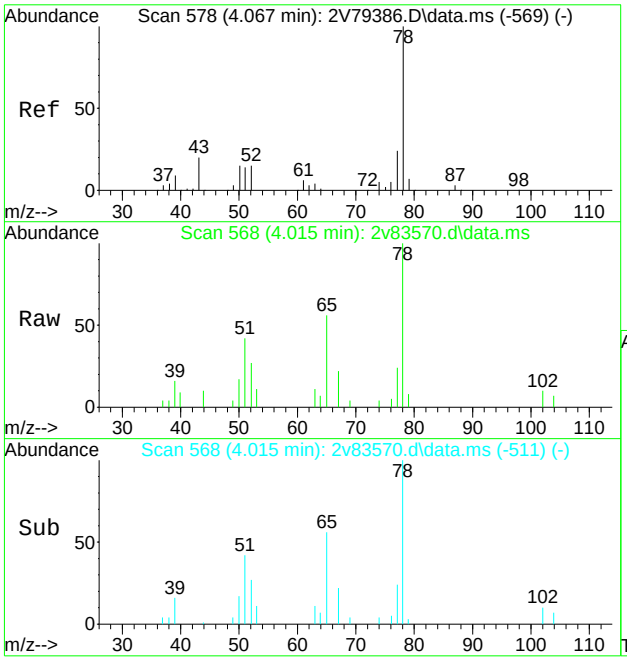


#36
cis-1,2-dichloroethene
Concen: 1.99 ug/L
RT: 3.428 min Scan# 456
Delta R.T. 0.006 min
Lab File: 2v83570.d
Acq: 13 Dec 2021 7:55 pm

Tgt Ion: 96 Resp: 8069

Ion	Ratio	Lower	Upper
96	100		
61	174.0	137.0	197.0
98	65.7	34.8	94.8

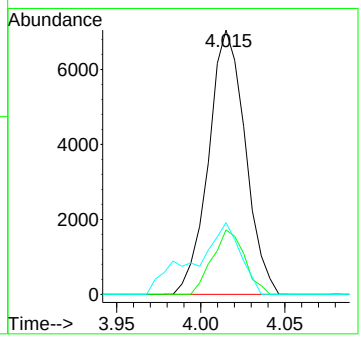


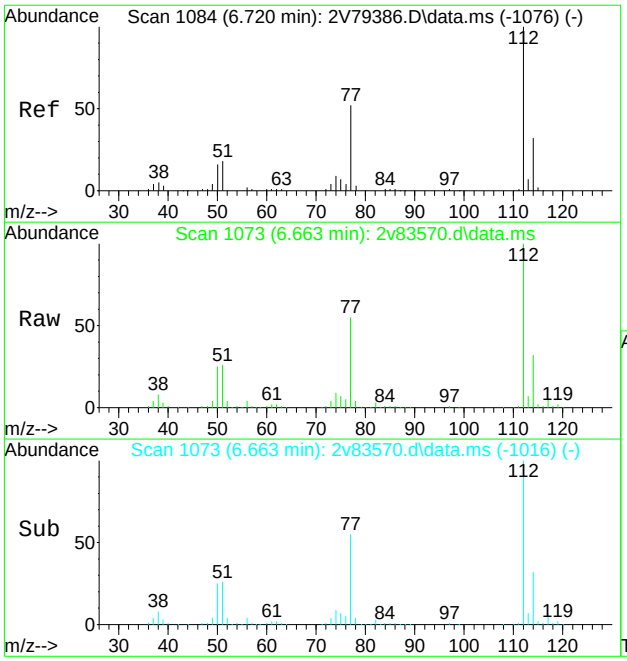


#53
benzene
Concen: 0.75 ug/L
RT: 4.015 min Scan# 568
Delta R.T. -0.000 min
Lab File: 2v83570.d
Acq: 13 Dec 2021 7:55 pm

Tgt Ion: 78 Resp: 10714

Ion	Ratio	Lower	Upper
78	100		
77	24.3	0.0	53.4
52	27.2	0.0	48.4

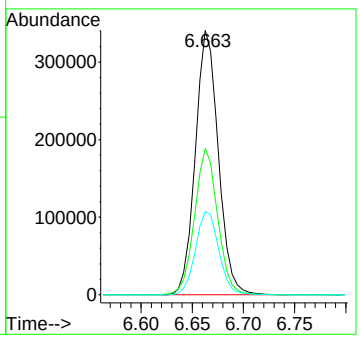


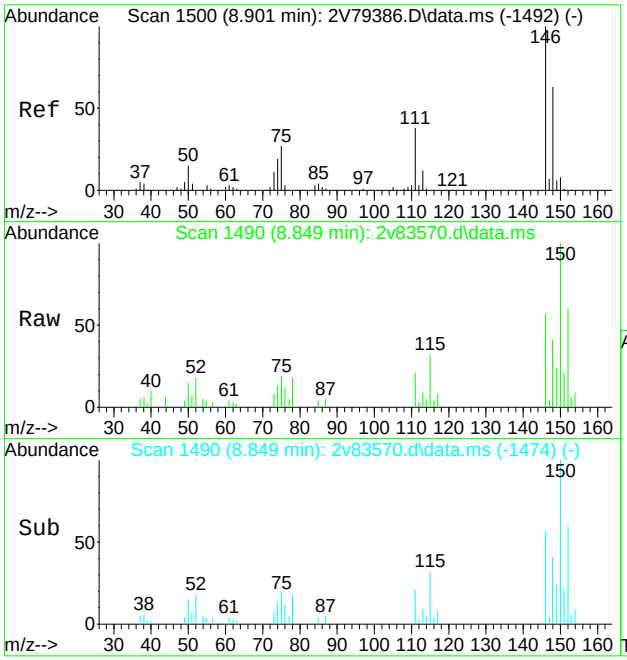


#85
chlorobenzene
Concen: 57.21 ug/L
RT: 6.663 min Scan# 1073
Delta R.T. -0.000 min
Lab File: 2v83570.d
Acq: 13 Dec 2021 7:55 pm

Tgt Ion:112 Resp: 532750

Ion	Ratio	Lower	Upper
112	100		
77	55.3	20.6	80.6
114	31.5	2.1	62.1

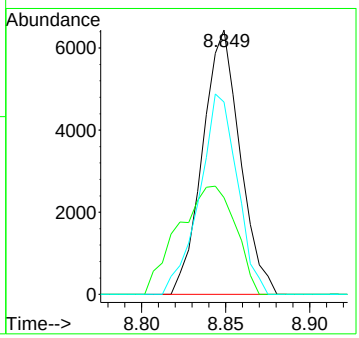




#112
1,4-dichlorobenzene
Concen: 1.38 ug/L
RT: 8.849 min Scan# 1490
Delta R.T. 0.005 min
Lab File: 2v83570.d
Acq: 13 Dec 2021 7:55 pm

Tgt Ion:146 Resp: 9963

Ion	Ratio	Lower	Upper
146	100		
111	36.6	7.3	67.3
148	72.7	33.7	93.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12152021\v2v3446\
Data File : 2v83608.d
Acq On : 14 Dec 2021 1:44 pm
Operator : nickw
Sample : jd36319-3 Inst : MS2V
Misc : MS55483,V2V3446,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 14 20:40:52 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

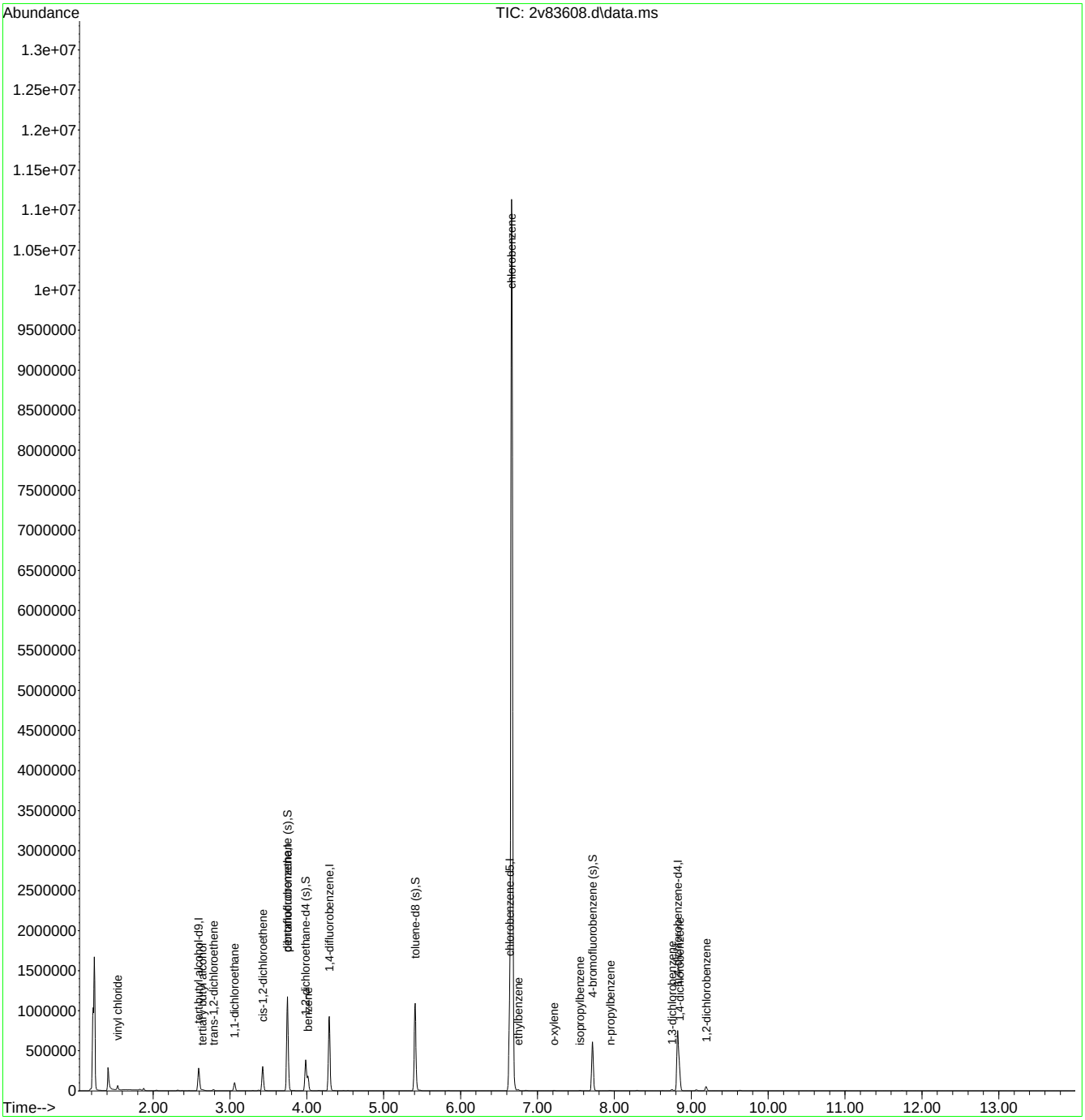
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	235802	500.00	ug/L	0.00
5) pentafluorobenzene	3.747	168	425195	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.293	114	594184	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	454106	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	182128	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.747	113	181253	45.98	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 91.96%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	206058	54.07	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 108.14%			
73) toluene-d8 (s)	5.409	98	594664	51.81	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.62%			
97) 4-bromofluorobenzene (s)	7.716	95	195253	46.99	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.98%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	2.641	59	8750	9.69	ug/L	88
9) vinyl chloride	1.540	62	25236	5.28	ug/L	99
25) trans-1,2-dichloroethene	2.788	96	2926	0.78	ug/L	95
29) 1,1-dichloroethane	3.061	63	77819	10.74	ug/L	99
36) cis-1,2-dichloroethene	3.428	96	92421	21.93	ug/L	93
53) benzene	4.015	78	105333	7.30	ug/L	94
85) chlorobenzene	6.662	112	5425815	583.93	ug/L	93
87) ethylbenzene	6.752	91	6949	0.47	ug/L	87
89) o-xylene	7.213	91	3310	0.28	ug/L	91
94) isopropylbenzene	7.554	105	4015	0.29	ug/L	91
102) n-propylbenzene	7.947	91	4336	0.25	ug/L	91
109) 1,3-dichlorobenzene	8.749	146	7612	1.07	ug/L	94
112) 1,4-dichlorobenzene	8.849	146	108200	15.03	ug/L	96
113) 1,2-dichlorobenzene	9.195	146	21515	3.13	ug/L	96

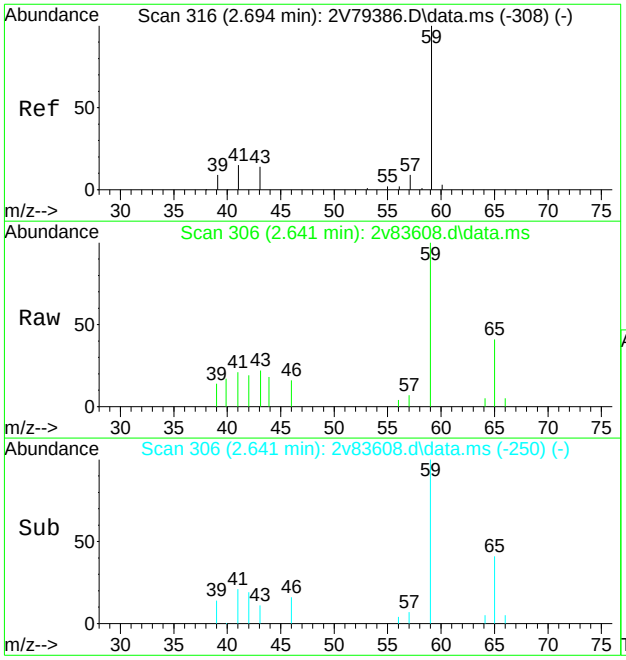
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12152021\v2v3446\
Data File : 2v83608.d
Acq On : 14 Dec 2021 1:44 pm
Operator : nickw
Sample : jd36319-3 Inst : MS2V
Misc : MS55483,V2V3446,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 14 20:40:52 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

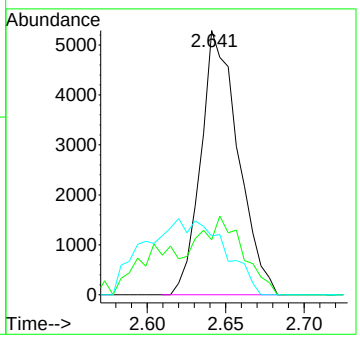


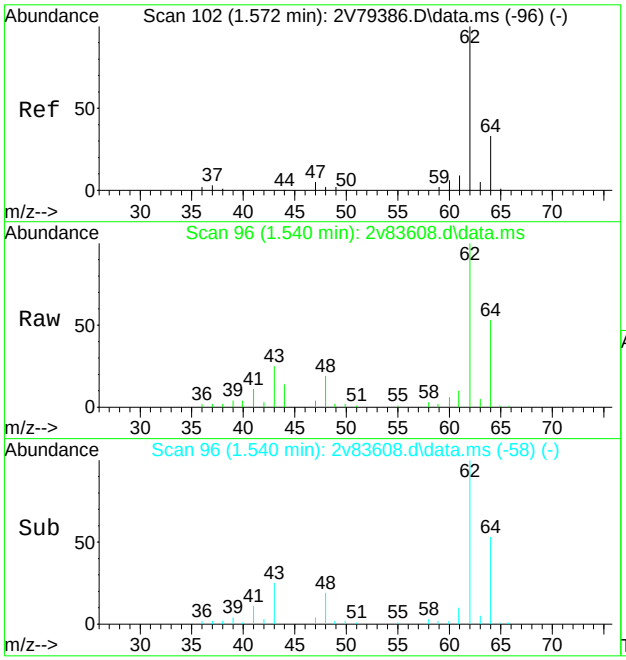


#3
tertiary butyl alcohol
Concen: 9.69 ug/L
RT: 2.641 min Scan# 306
Delta R.T. -0.005 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion: 59 Resp: 8750

Ion	Ratio	Lower	Upper
59	100		
41	20.8	0.0	48.5
43	22.3	0.0	43.9

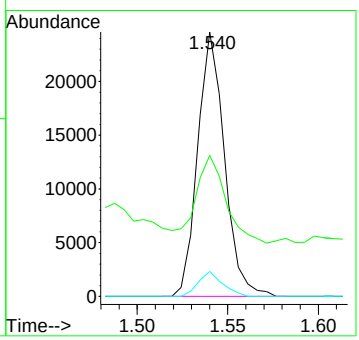


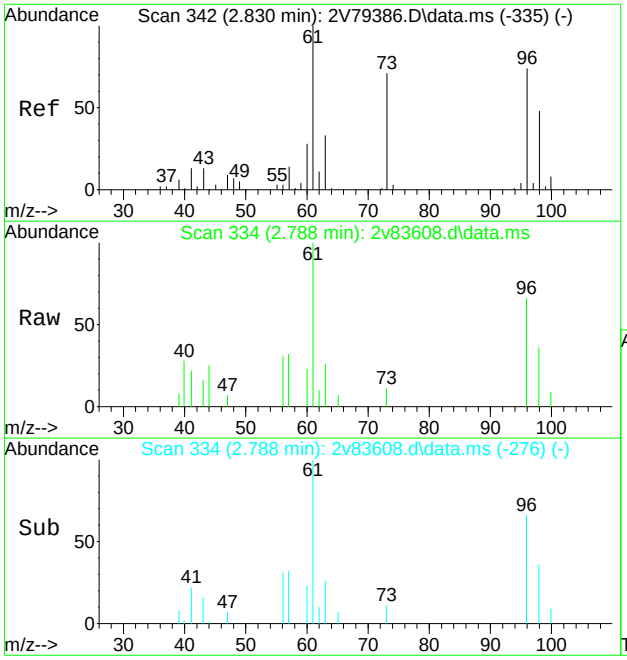


#9
vinyl chloride
Concen: 5.28 ug/L
RT: 1.540 min Scan# 96
Delta R.T. 0.000 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion: 62 Resp: 25236

Ion	Ratio	Lower	Upper
62	100		
64	31.4	1.3	61.3
61	9.5	0.0	38.8

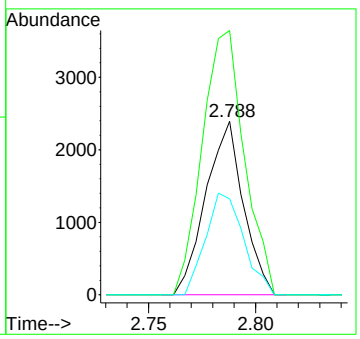


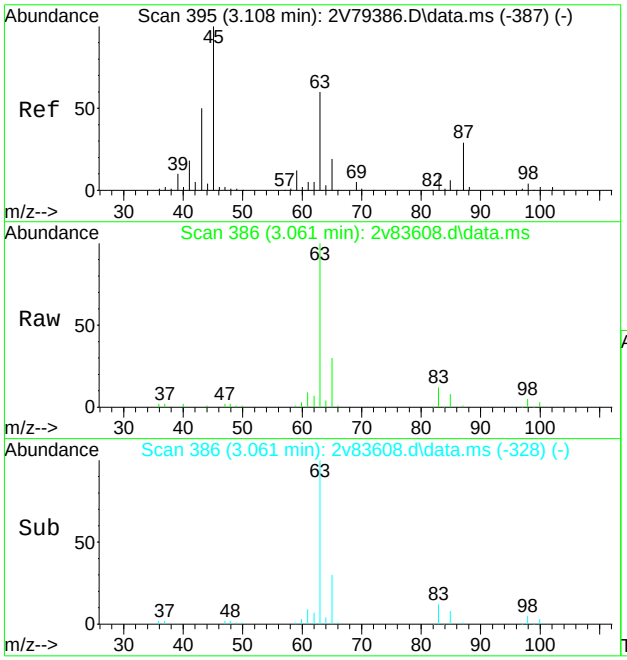


#25
trans-1,2-dichloroethene
Concen: 0.78 ug/L
RT: 2.788 min Scan# 334
Delta R.T. 0.005 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion: 96 Resp: 2926

Ion	Ratio	Lower	Upper
96	100		
61	152.5	125.0	185.0
98	55.4	35.0	95.0

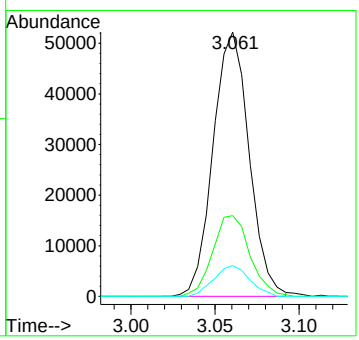


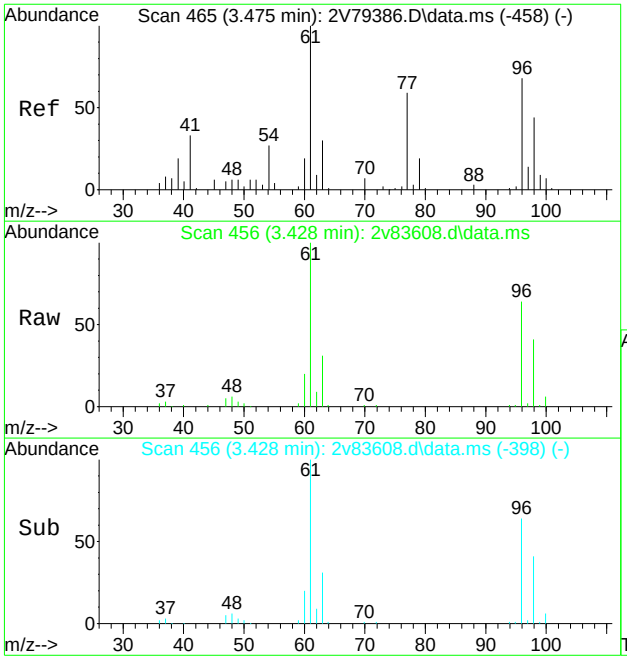


#29
1,1-dichloroethane
Concen: 10.74 ug/L
RT: 3.061 min Scan# 386
Delta R.T. 0.006 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion: 63 Resp: 77819

Ion	Ratio	Lower	Upper
63	100		
65	30.5	1.1	61.1
83	11.6	0.0	42.5

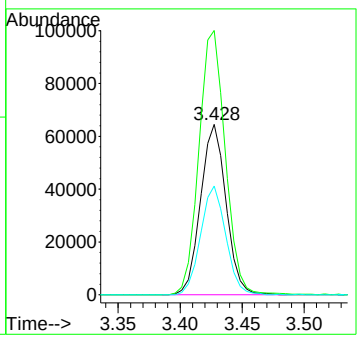


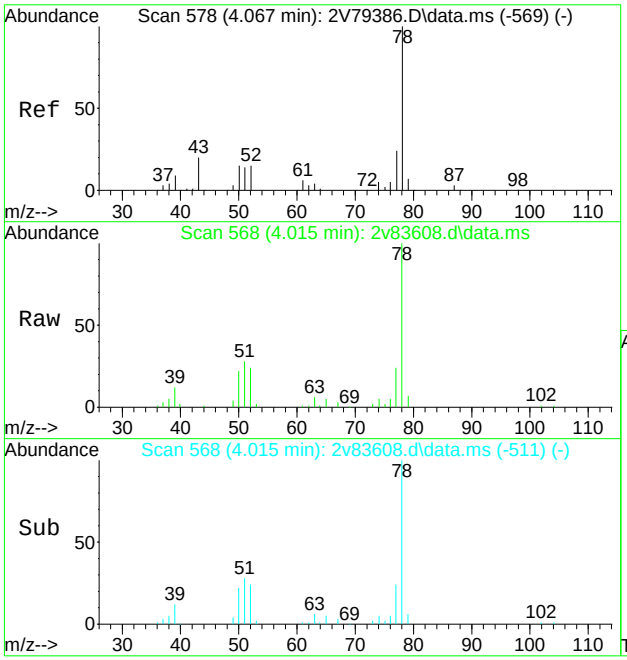


#36
cis-1,2-dichloroethene
Concen: 21.93 ug/L
RT: 3.428 min Scan# 456
Delta R.T. 0.006 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion: 96 Resp: 92421

Ion	Ratio	Lower	Upper
96	100		
61	155.2	137.0	197.0
98	63.8	34.8	94.8

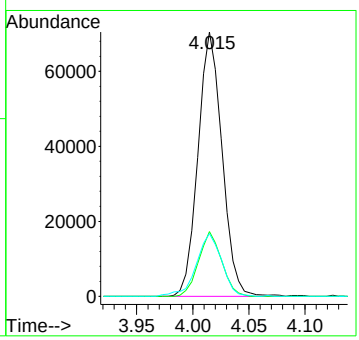


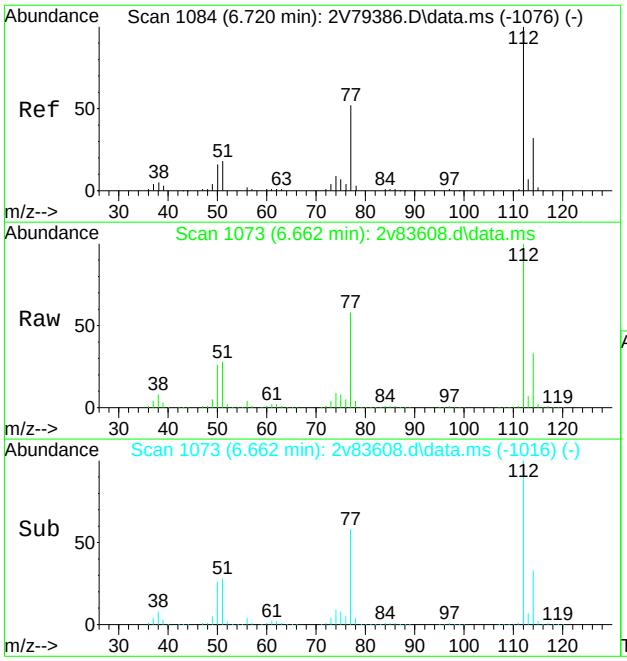


#53
benzene
Concen: 7.30 ug/L
RT: 4.015 min Scan# 568
Delta R.T. -0.000 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion: 78 Resp: 105333

Ion	Ratio	Lower	Upper
78	100		
77	24.5	0.0	53.4
52	23.7	0.0	48.4

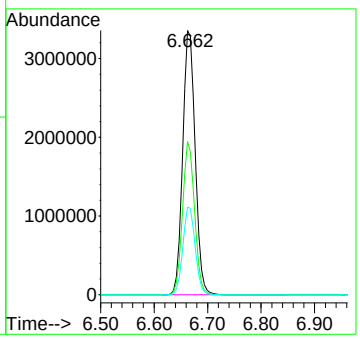


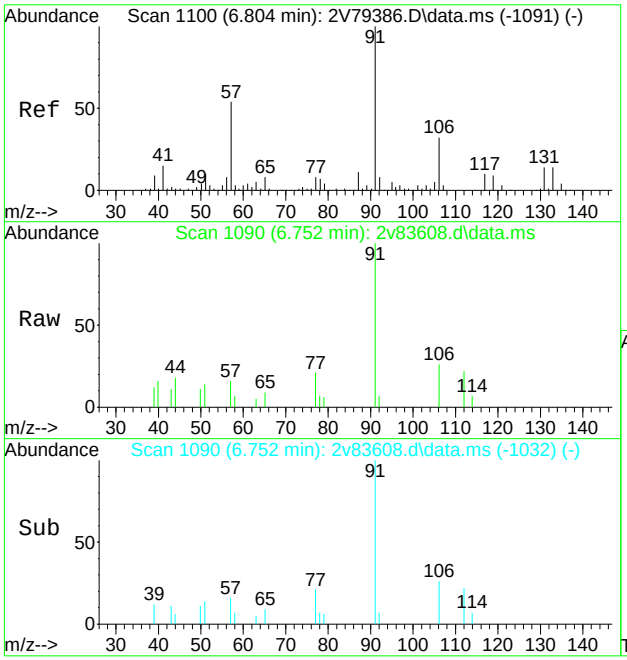


#85
chlorobenzene
Concen: 583.93 ug/L
RT: 6.662 min Scan# 1073
Delta R.T. -0.001 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion:112 Resp: 5425815

Ion	Ratio	Lower	Upper
112	100		
77	58.0	20.6	80.6
114	33.2	2.1	62.1

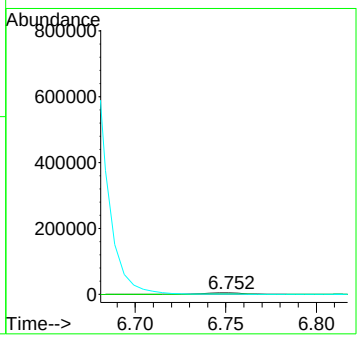


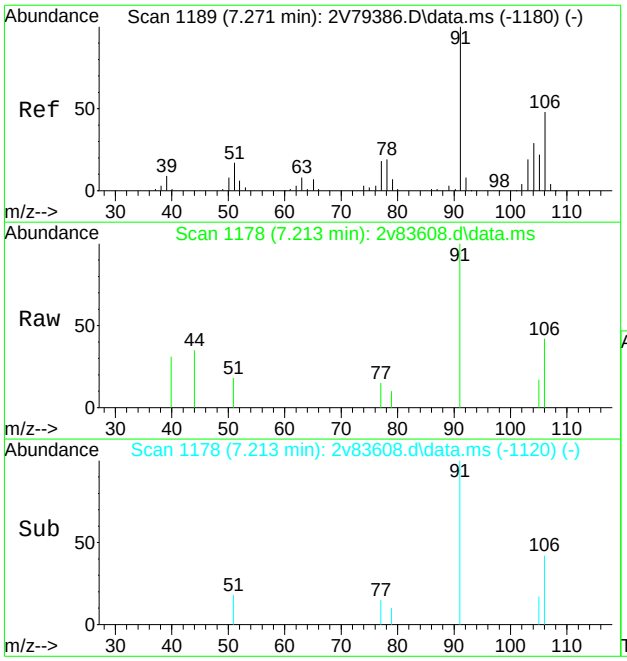


#87
ethylbenzene
Concen: 0.47 ug/L
RT: 6.752 min Scan# 1090
Delta R.T. 0.005 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion: 91 Resp: 6949

Ion	Ratio	Lower	Upper
91	100		
106	25.8	2.3	62.3
77	15.2	0.0	38.2

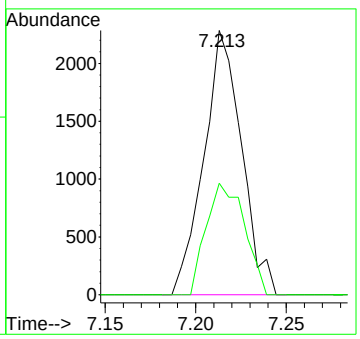


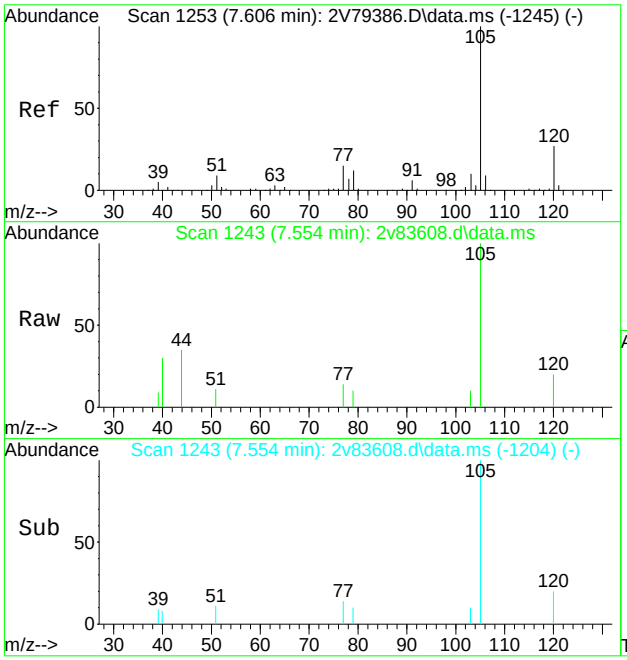


#89
o-xylene
Concen: 0.28 ug/L
RT: 7.213 min Scan# 1178
Delta R.T. 0.005 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion: 91 Resp: 3310

Ion	Ratio	Lower	Upper
91	100		
106	42.2	18.3	78.3

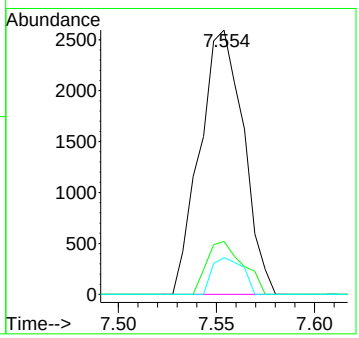


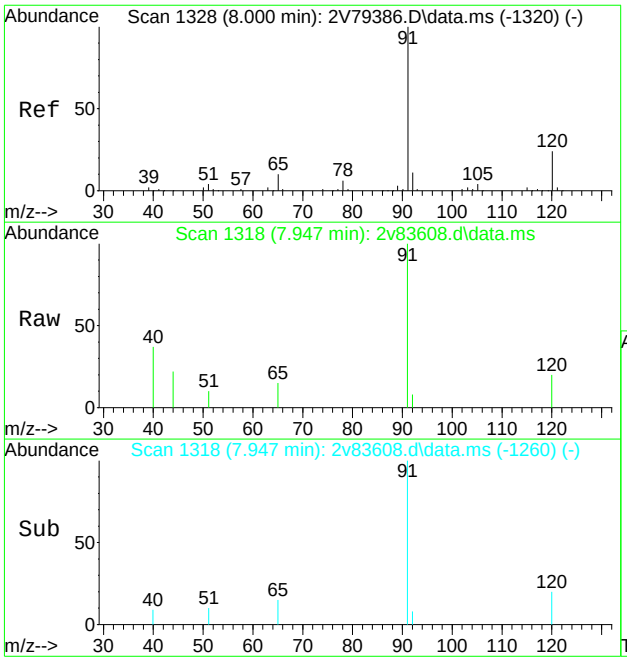


#94
isopropylbenzene
Concen: 0.29 ug/L
RT: 7.554 min Scan# 1243
Delta R.T. 0.005 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion:105 Resp: 4015

Ion	Ratio	Lower	Upper
105	100		
120	20.1	7.2	47.2
77	13.9	0.0	34.1

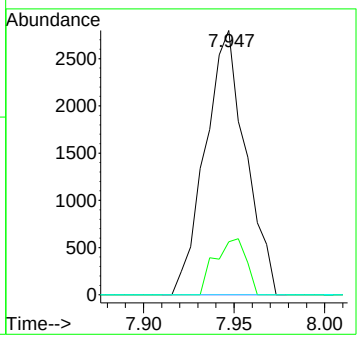


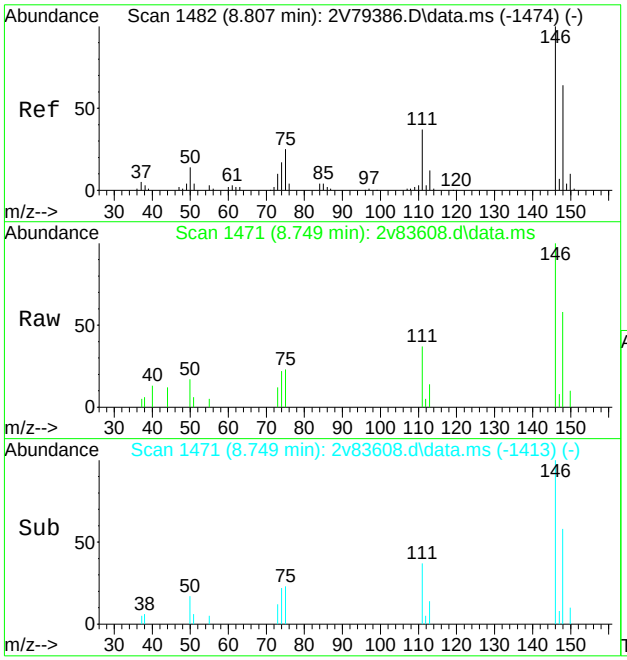


#102
n-propylbenzene
Concen: 0.25 ug/L
RT: 7.947 min Scan# 1318
Delta R.T. 0.005 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion: 91 Resp: 4336

Ion	Ratio	Lower	Upper
91	100		
120	20.1	0.0	54.3
105	0.0	0.0	33.9

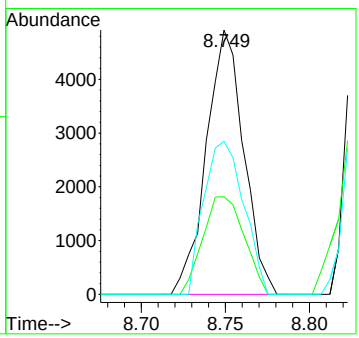


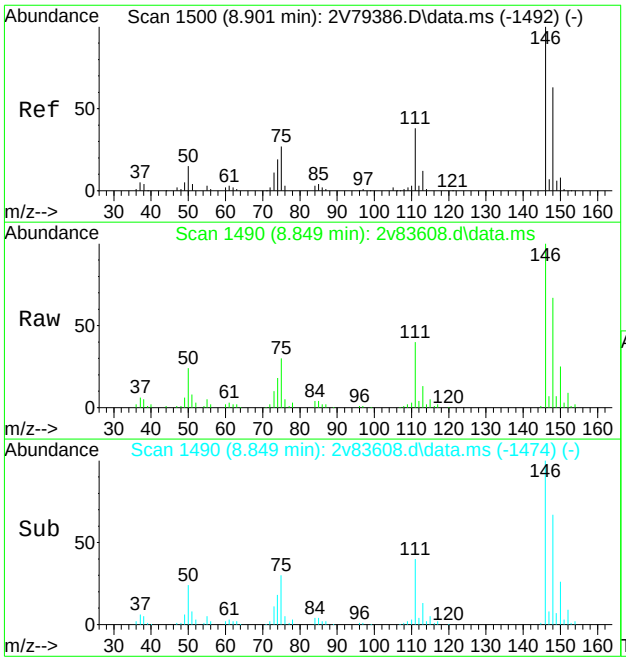


#109
1,3-dichlorobenzene
Concen: 1.07 ug/L
RT: 8.749 min Scan# 1471
Delta R.T. 0.005 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion:146 Resp: 7612

Ion	Ratio	Lower	Upper
146	100		
111	36.9	8.1	68.1
148	57.9	34.1	94.1

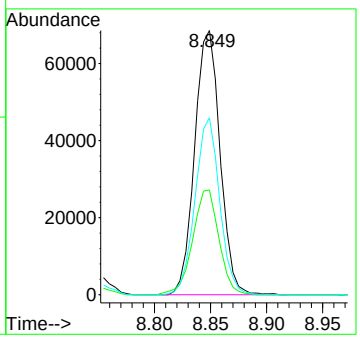


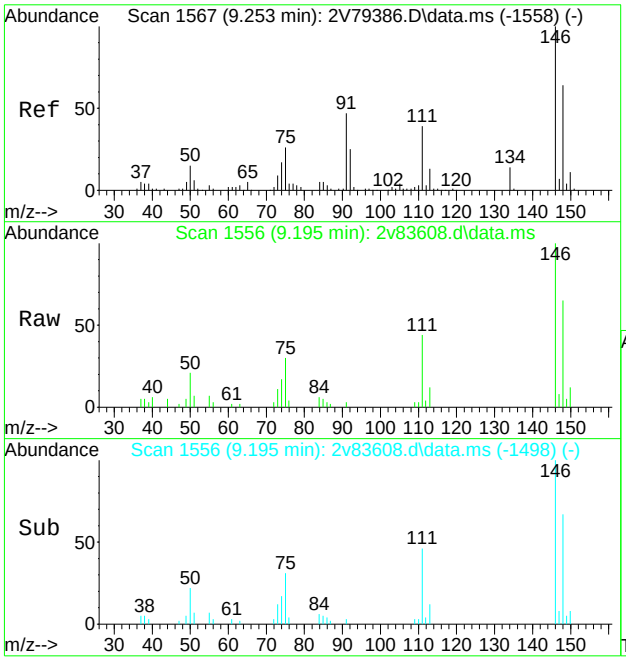


#112
1,4-dichlorobenzene
Concen: 15.03 ug/L
RT: 8.849 min Scan# 1490
Delta R.T. 0.005 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion:146 Resp: 108200

Ion	Ratio	Lower	Upper
146	100		
111	39.7	7.3	67.3
148	67.0	33.7	93.7

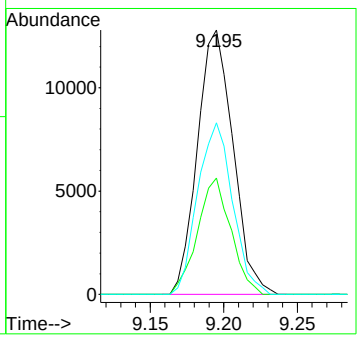




#113
1,2-dichlorobenzene
Concen: 3.13 ug/L
RT: 9.195 min Scan# 1556
Delta R.T. 0.005 min
Lab File: 2v83608.d
Acq: 14 Dec 2021 1:44 pm

Tgt Ion:146 Resp: 21515

Ion	Ratio	Lower	Upper
146	100		
111	44.0	10.6	70.6
148	64.9	33.1	93.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-14-2021\v2v3444-partial\
Data File : 2v83571.d
Acq On : 13 Dec 2021 8:21 pm
Operator : nickw
Sample : jd36319-4 Inst : MS2V
Misc : MS55483,V2V3444,5,,,,50
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 13 22:37:52 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

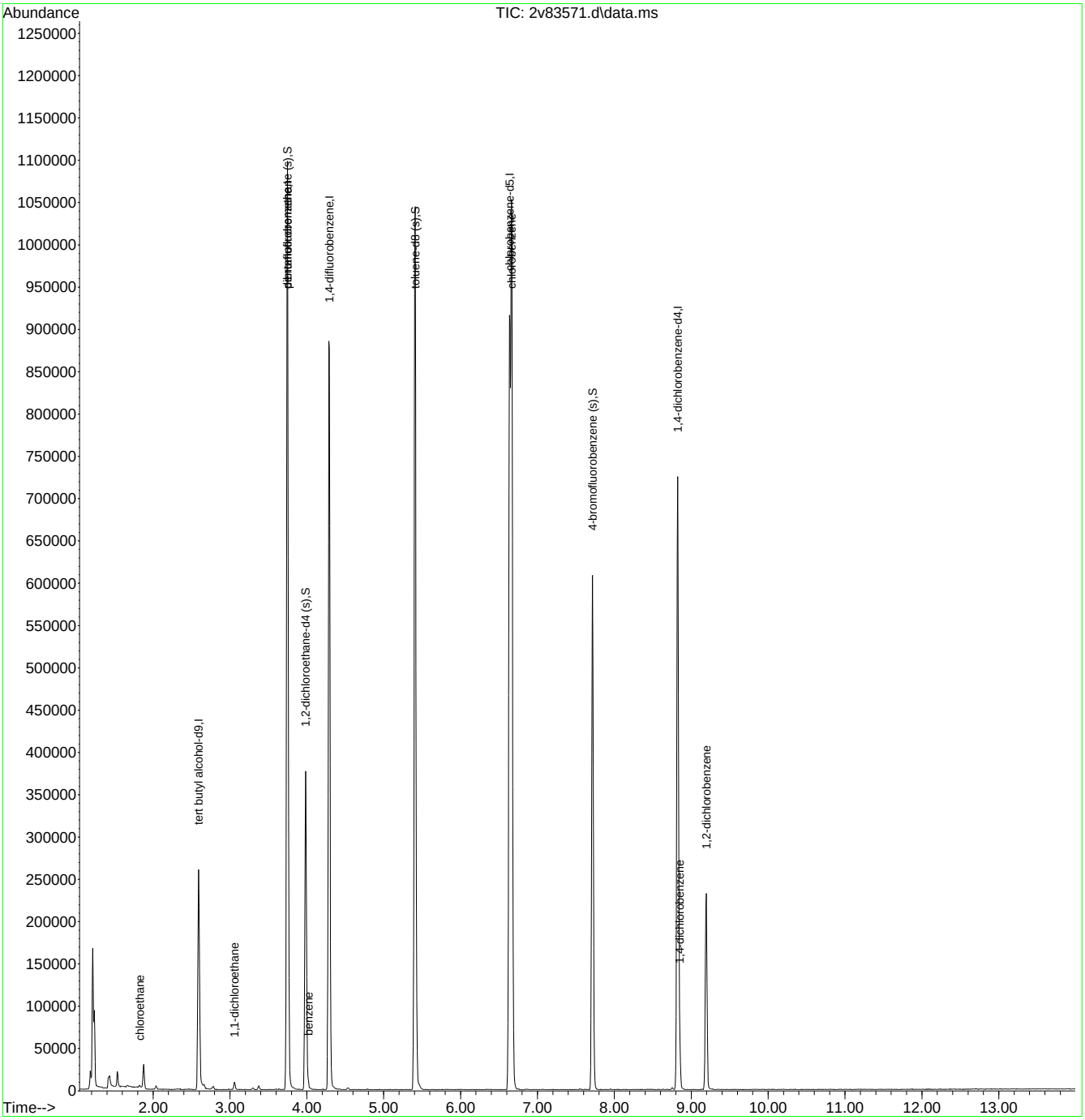
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	218908	500.00	ug/L	0.00
5) pentafluorobenzene	3.747	168	401640	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.293	114	574472	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	443608	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	182905	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.747	113	178646	47.97	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.94%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	200227	54.34	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 108.68%			
73) toluene-d8 (s)	5.409	98	584515	52.13	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.26%			
97) 4-bromofluorobenzene (s)	7.716	95	194022	46.49	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 92.98%			
Target Compounds						Qvalue
11) chloroethane	1.828	64	2455	0.96	ug/L	89
29) 1,1-dichloroethane	3.061	63	7189	1.05	ug/L	97
53) benzene	4.020	78	4571	0.33	ug/L	93
85) chlorobenzene	6.663	112	482425	53.15	ug/L	96
112) 1,4-dichlorobenzene	8.849	146	23215	3.21	ug/L	98
113) 1,2-dichlorobenzene	9.195	146	95782	13.86	ug/L	98

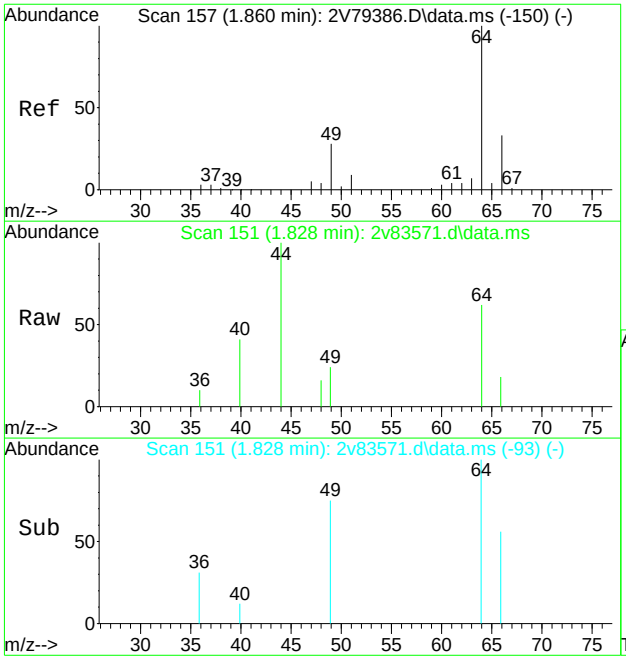
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-14-2021\v2v3444-partial\
Data File : 2v83571.d
Acq On : 13 Dec 2021 8:21 pm
Operator : nickw
Sample : jd36319-4 Inst : MS2V
Misc : MS55483,V2V3444,5,,,,50
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 13 22:37:52 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

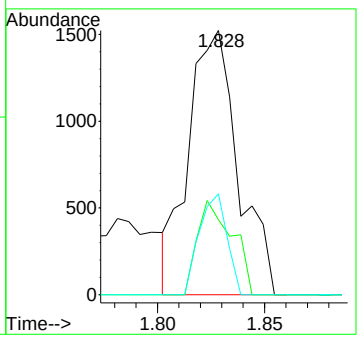


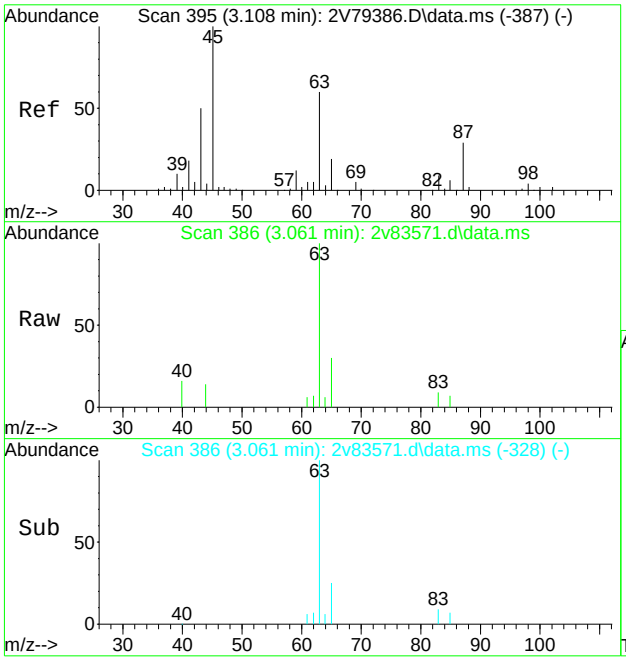


#11
chloroethane
Concen: 0.96 ug/L
RT: 1.828 min Scan# 151
Delta R.T. 0.005 min
Lab File: 2v83571.d
Acq: 13 Dec 2021 8:21 pm

Tgt Ion: 64 Resp: 2455

Ion	Ratio	Lower	Upper
64	100		
66	28.4	1.2	61.2
49	38.1	0.0	59.1

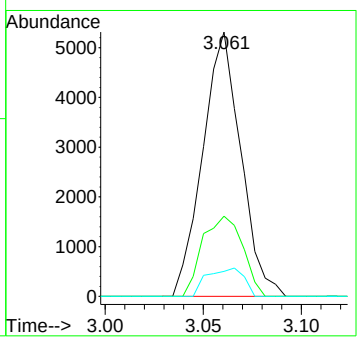


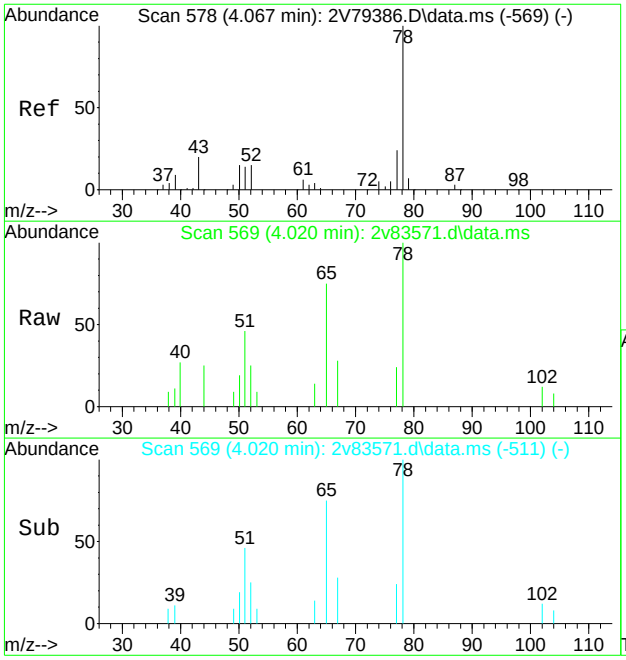


#29
1,1-dichloroethane
Concen: 1.05 ug/L
RT: 3.061 min Scan# 386
Delta R.T. 0.006 min
Lab File: 2v83571.d
Acq: 13 Dec 2021 8:21 pm

Tgt Ion: 63 Resp: 7189

Ion	Ratio	Lower	Upper
63	100		
65	30.4	1.1	61.1
83	9.4	0.0	42.5

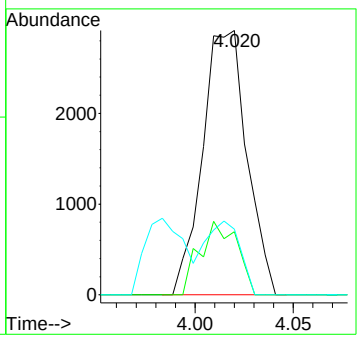


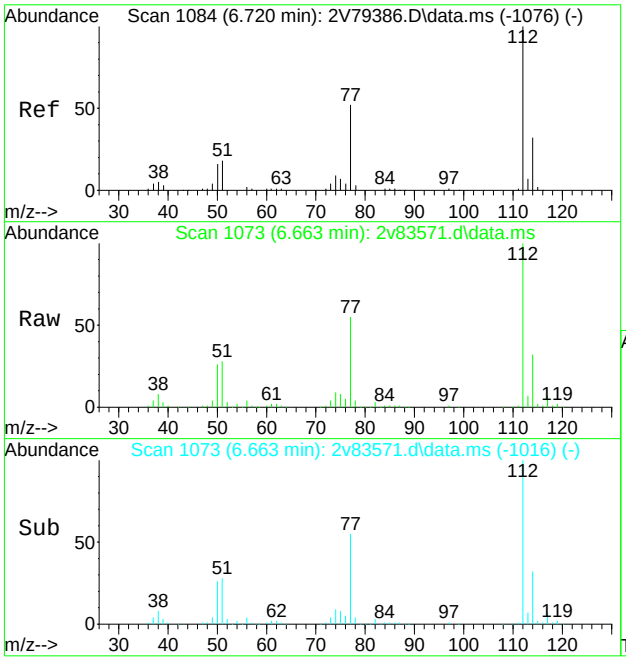


#53
benzene
Concen: 0.33 ug/L
RT: 4.020 min Scan# 569
Delta R.T. 0.005 min
Lab File: 2v83571.d
Acq: 13 Dec 2021 8:21 pm

Tgt Ion: 78 Resp: 4571

Ion	Ratio	Lower	Upper
78	100		
77	23.9	0.0	53.4
52	24.9	0.0	48.4

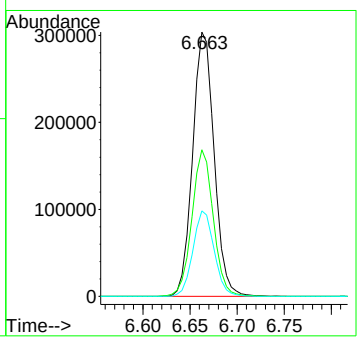


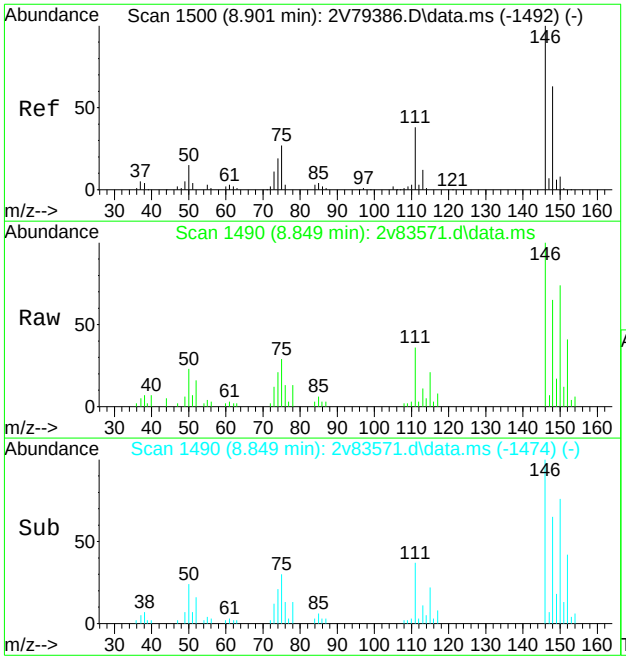


#85
chlorobenzene
Concen: 53.15 ug/L
RT: 6.663 min Scan# 1073
Delta R.T. -0.000 min
Lab File: 2v83571.d
Acq: 13 Dec 2021 8:21 pm

Tgt Ion:112 Resp: 482425

Ion	Ratio	Lower	Upper
112	100		
77	55.4	20.6	80.6
114	32.3	2.1	62.1

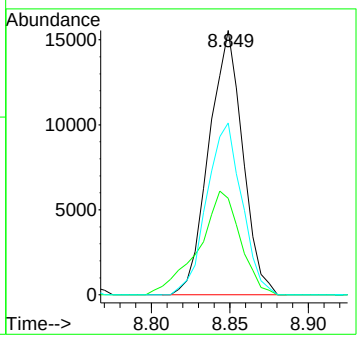


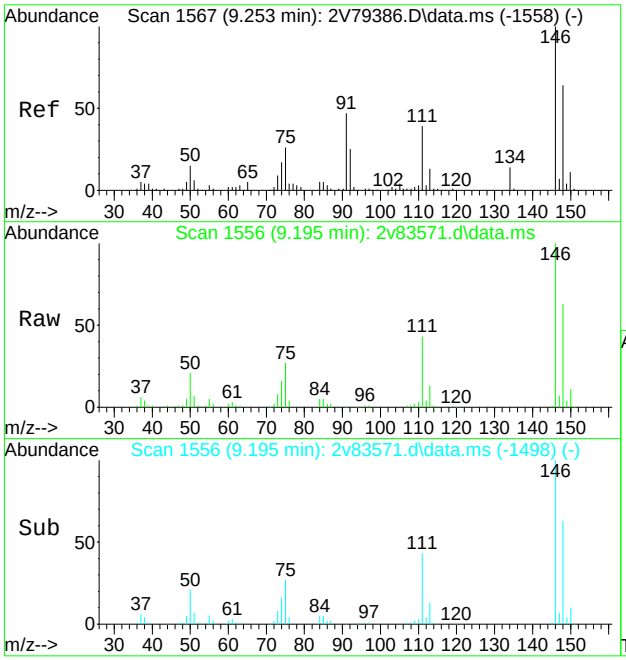


#112
1,4-dichlorobenzene
Concen: 3.21 ug/L
RT: 8.849 min Scan# 1490
Delta R.T. 0.005 min
Lab File: 2v83571.d
Acq: 13 Dec 2021 8:21 pm

Tgt Ion:146 Resp: 23215

Ion	Ratio	Lower	Upper
146	100		
111	36.4	7.3	67.3
148	65.0	33.7	93.7

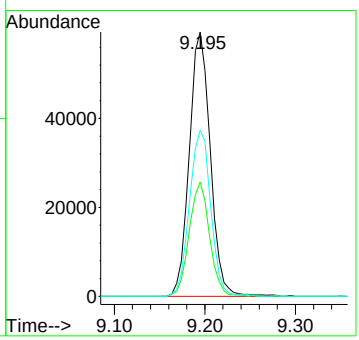




#113
1,2-dichlorobenzene
Concen: 13.86 ug/L
RT: 9.195 min Scan# 1556
Delta R.T. 0.005 min
Lab File: 2v83571.d
Acq: 13 Dec 2021 8:21 pm

Tgt Ion:146 Resp: 95782

Ion	Ratio	Lower	Upper
146	100		
111	43.2	10.6	70.6
148	62.9	33.1	93.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12152021\v2v3446\
Data File : 2v83606.d
Acq On : 14 Dec 2021 12:53 pm
Operator : nickw
Sample : jd36319-4 Inst : MS2V
Misc : MS55483,V2V3446,5,,,,10
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 14 20:35:04 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

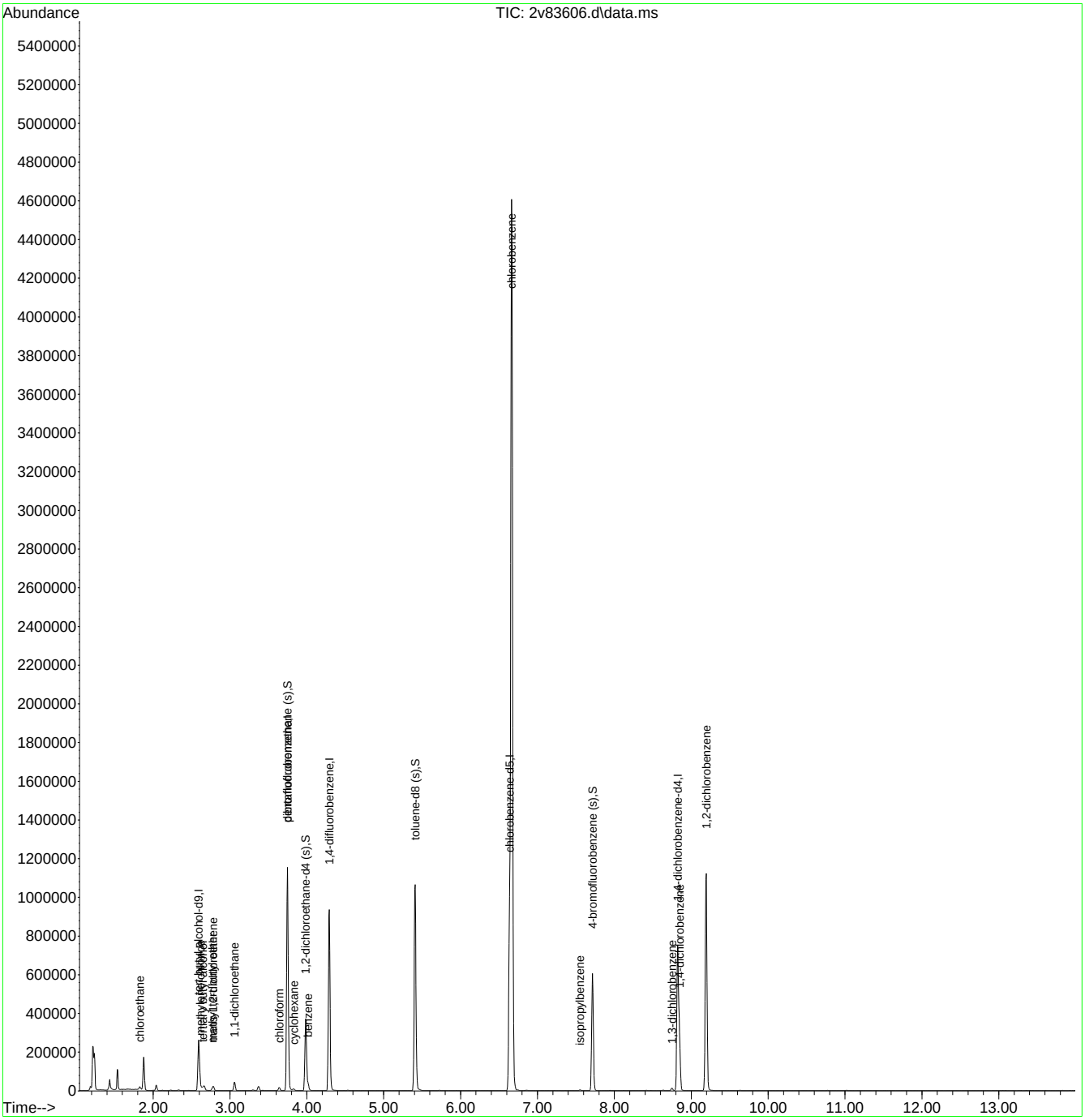
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	2.594	65	217012	500.00	ug/L		0.00
5) pentafluorobenzene	3.747	168	424356	50.00	ug/L		0.00
50) 1,4-difluorobenzene	4.293	114	596675	50.00	ug/L		0.00
72) chlorobenzene-d5	6.636	117	443060	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	8.823	152	177310	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	3.747	113	178722	45.43	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 90.86%				
51) 1,2-dichloroethane-d4 (s)	3.983	65	200610	52.42	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 104.84%				
73) toluene-d8 (s)	5.410	98	593692	53.01	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.02%				
97) 4-bromofluorobenzene (s)	7.716	95	192261	47.52	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.04%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	2.646	59	10445	12.56	ug/L		67
11) chloroethane	1.829	64	13989	5.18	ug/L		92
22) methylene chloride	2.615	84	1589	0.37	ug/L	#	73
24) methyl tert butyl ether	2.772	73	7814	0.71	ug/L		84
25) trans-1,2-dichloroethene	2.783	96	2363	0.63	ug/L	#	79
29) 1,1-dichloroethane	3.061	63	33241	4.60	ug/L		98
41) chloroform	3.643	83	9897	1.34	ug/L		90
45) cyclohexane	3.831	84	1672	0.34	ug/L	#	75
53) benzene	4.015	78	19887	1.37	ug/L		89
85) chlorobenzene	6.663	112	2266101	249.96	ug/L		95
94) isopropylbenzene	7.554	105	3307	0.24	ug/L		90
109) 1,3-dichlorobenzene	8.749	146	5938	0.85	ug/L		92
112) 1,4-dichlorobenzene	8.849	146	110603	15.78	ug/L		98
113) 1,2-dichlorobenzene	9.195	146	454644	67.89	ug/L		100

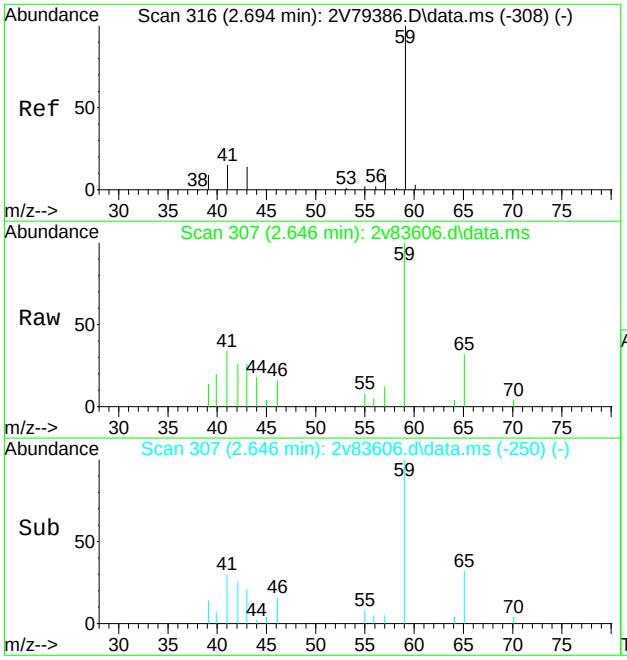
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12152021\v2v3446\
Data File : 2v83606.d
Acq On : 14 Dec 2021 12:53 pm
Operator : nickw
Sample : jd36319-4 Inst : MS2V
Misc : MS55483,V2V3446,5,,,,10
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 14 20:35:04 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

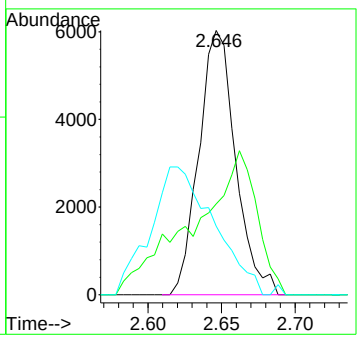


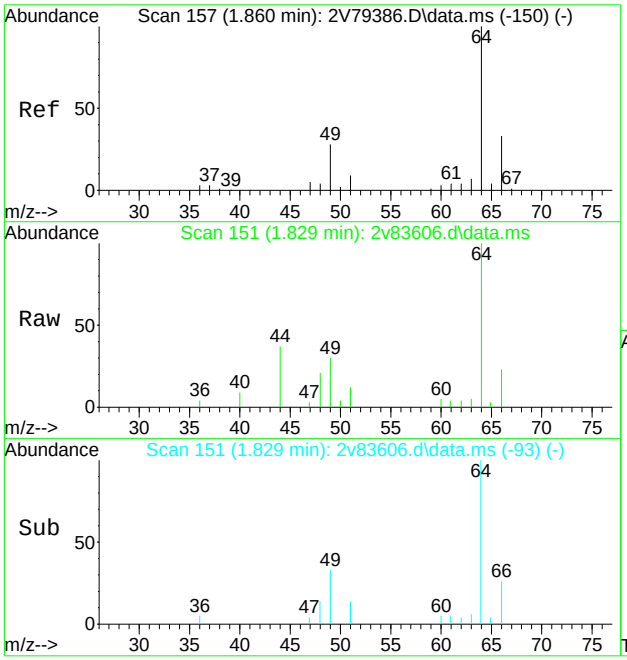


#3
tertiary butyl alcohol
Concen: 12.56 ug/L
RT: 2.646 min Scan# 307
Delta R.T. 0.000 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion: 59 Resp: 10445

Ion	Ratio	Lower	Upper
59	100		
41	34.3	0.0	48.5
43	26.0	0.0	43.9

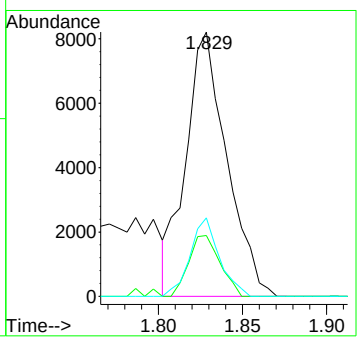


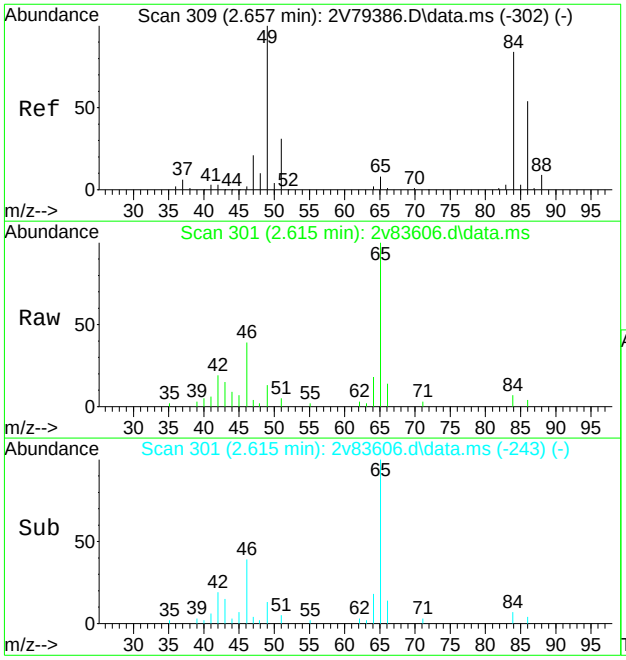


#11
chloroethane
Concen: 5.18 ug/L
RT: 1.829 min Scan# 151
Delta R.T. 0.006 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion: 64 Resp: 13989

Ion	Ratio	Lower	Upper
64	100		
66	23.1	1.2	61.2
49	29.7	0.0	59.1

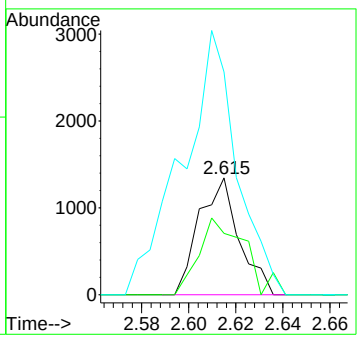


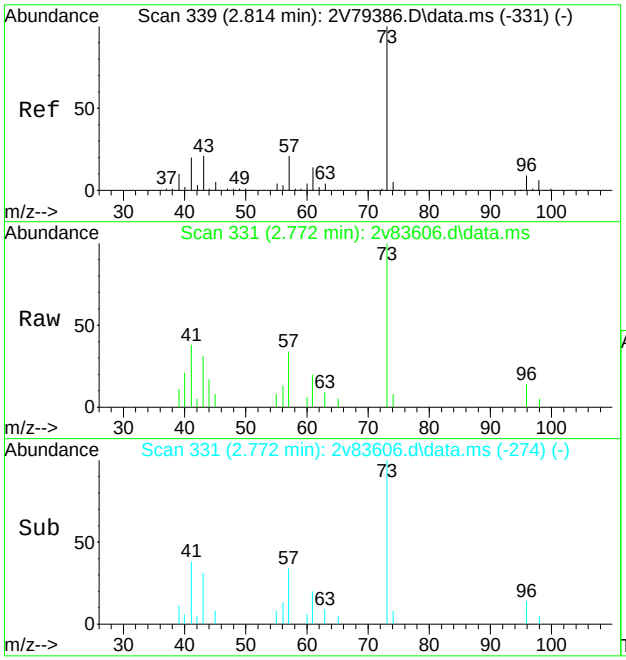


#22
methylene chloride
Concen: 0.37 ug/L
RT: 2.615 min Scan# 301
Delta R.T. 0.005 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion: 84 Resp: 1589

Ion	Ratio	Lower	Upper
84	100		
86	52.6	36.3	96.3
49	190.5	119.8	179.8#

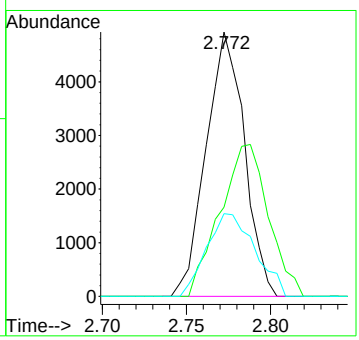


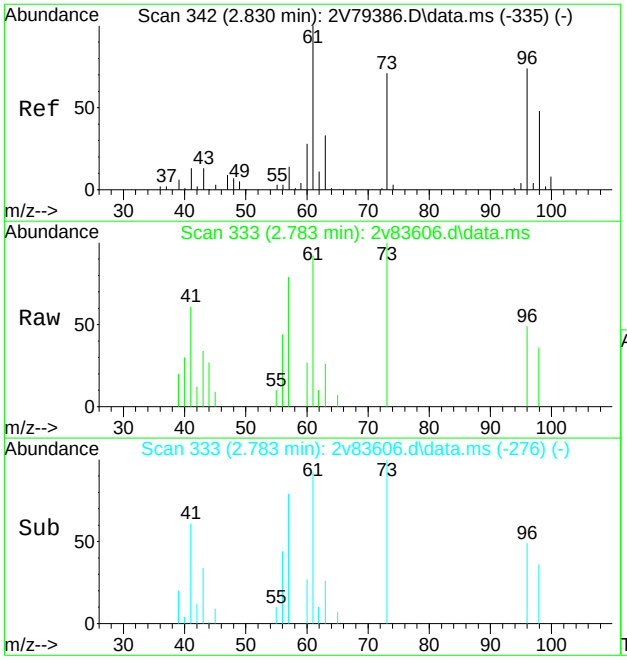


#24
methyl tert butyl ether
Concen: 0.71 ug/L
RT: 2.772 min Scan# 331
Delta R.T. 0.000 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion: 73 Resp: 7814

Ion	Ratio	Lower	Upper
73	100		
57	33.7	0.0	55.9
43	31.2	0.0	53.4

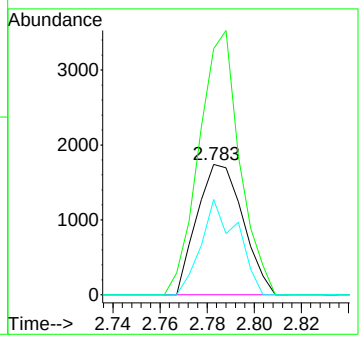


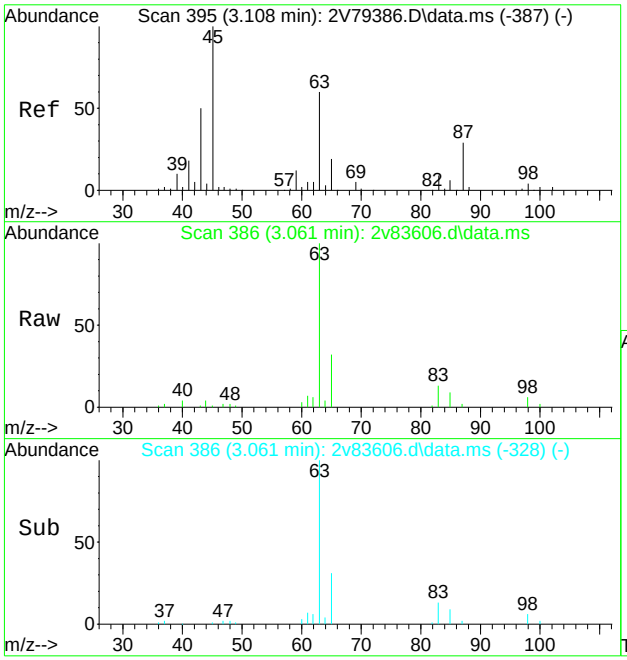


#25
trans-1,2-dichloroethene
Concen: 0.63 ug/L
RT: 2.783 min Scan# 333
Delta R.T. -0.000 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion: 96 Resp: 2363

Ion	Ratio	Lower	Upper
96	100		
61	188.8	125.0	185.0#
98	73.2	35.0	95.0

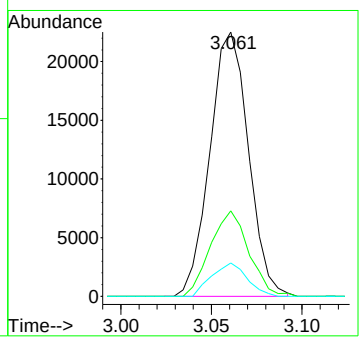


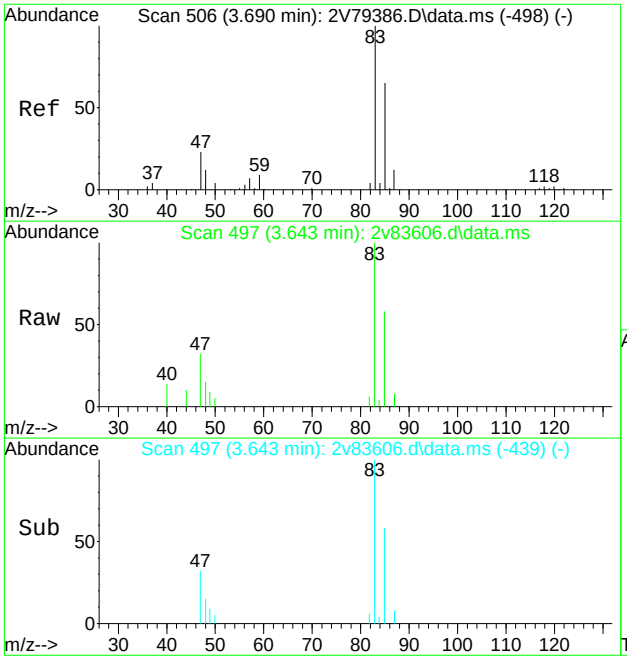


#29
1,1-dichloroethane
Concen: 4.60 ug/L
RT: 3.061 min Scan# 386
Delta R.T. 0.006 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion: 63 Resp: 33241

Ion	Ratio	Lower	Upper
63	100		
65	32.3	1.1	61.1
83	12.6	0.0	42.5

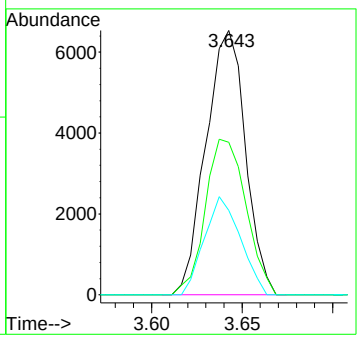


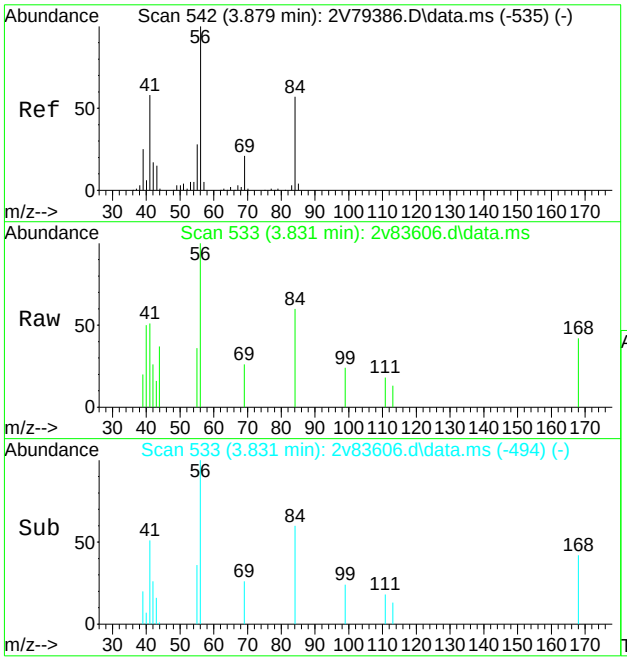


#41
chloroform
Concen: 1.34 ug/L
RT: 3.643 min Scan# 497
Delta R.T. 0.006 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion: 83 Resp: 9897

Ion	Ratio	Lower	Upper
83	100		
85	57.7	35.3	95.3
47	31.9	0.0	55.9

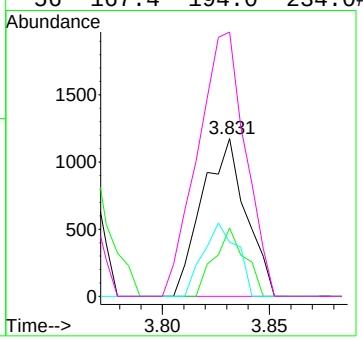


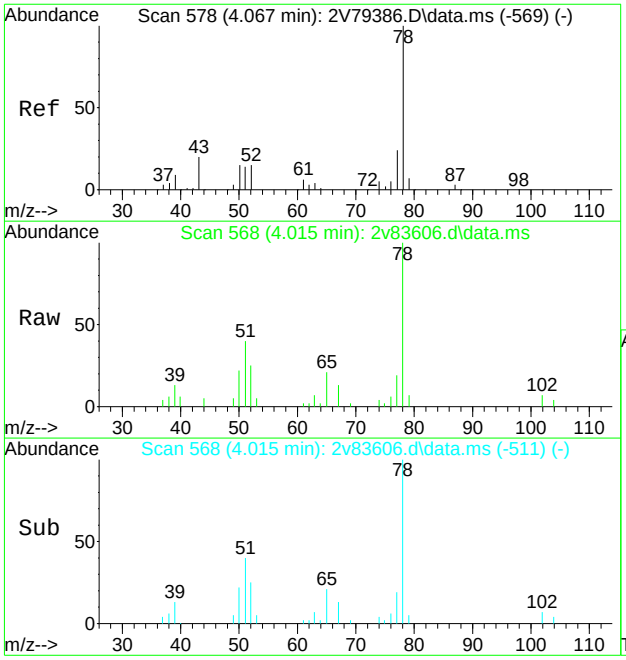


#45
cyclohexane
Concen: 0.34 ug/L
RT: 3.831 min Scan# 533
Delta R.T. 0.005 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion: 84 Resp: 1672

Ion	Ratio	Lower	Upper
84	100		
69	43.4	16.5	56.5
39	34.3	23.3	63.3
56	167.4	194.0	234.0#

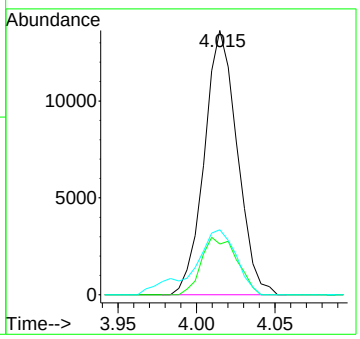


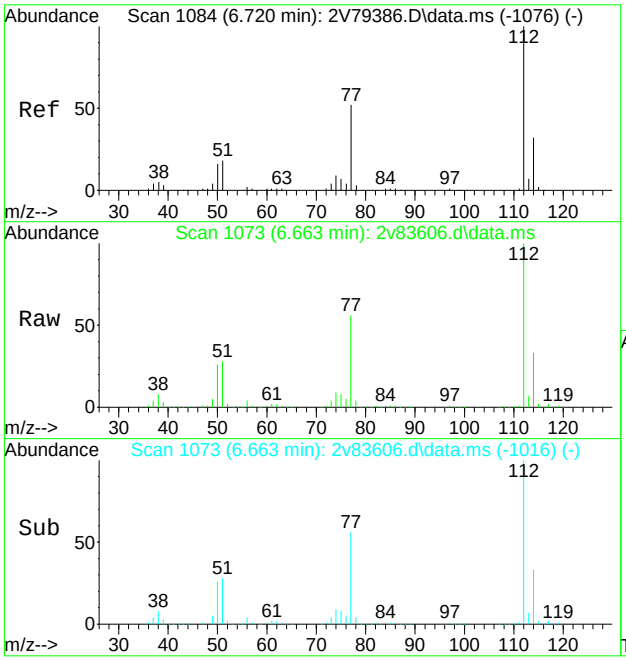


#53
benzene
Concen: 1.37 ug/L
RT: 4.015 min Scan# 568
Delta R.T. -0.000 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion: 78 Resp: 19887

Ion	Ratio	Lower	Upper
78	100		
77	19.2	0.0	53.4
52	24.6	0.0	48.4

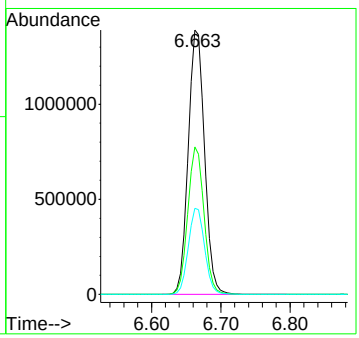


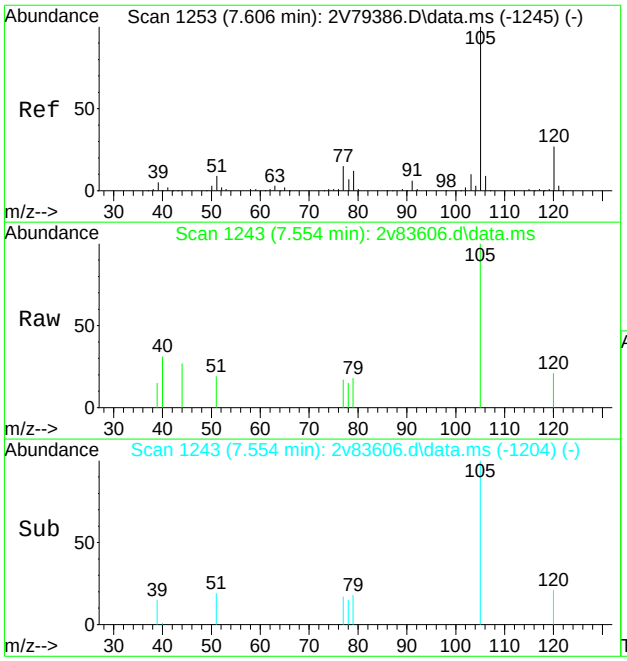


#85
chlorobenzene
Concen: 249.96 ug/L
RT: 6.663 min Scan# 1073
Delta R.T. -0.000 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion:112 Resp: 2266101

Ion	Ratio	Lower	Upper
112	100		
77	55.7	20.6	80.6
114	32.6	2.1	62.1

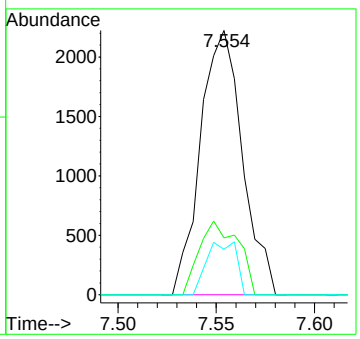


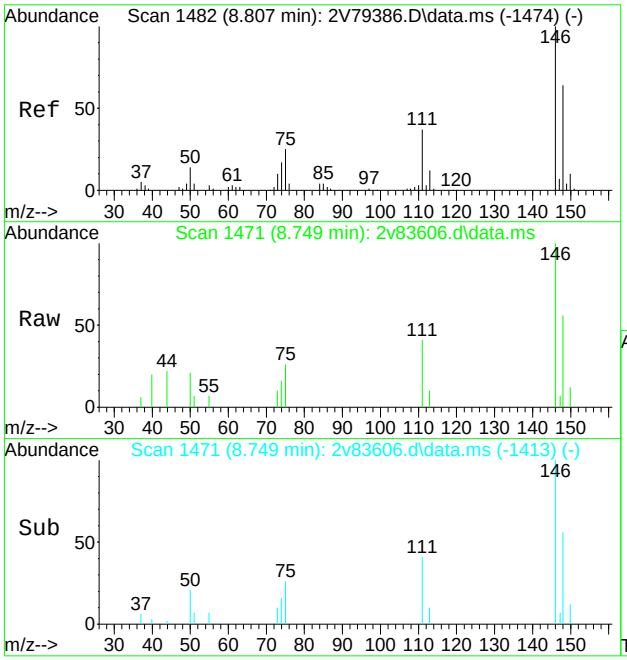


#94
isopropylbenzene
Concen: 0.24 ug/L
RT: 7.554 min Scan# 1243
Delta R.T. 0.005 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion:105 Resp: 3307

Ion	Ratio	Lower	Upper
105	100		
120	21.5	7.2	47.2
77	17.2	0.0	34.1

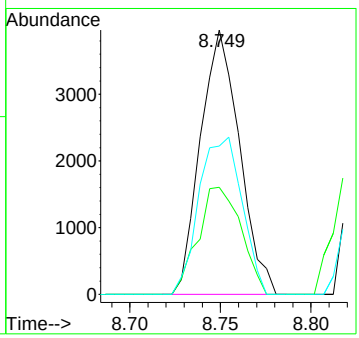


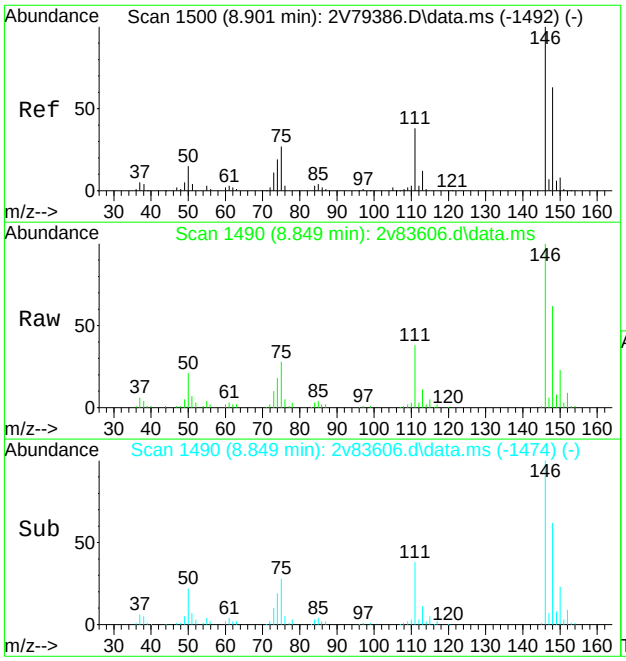


#109
1,3-dichlorobenzene
Concen: 0.85 ug/L
RT: 8.749 min Scan# 1471
Delta R.T. 0.005 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion:146 Resp: 5938

Ion	Ratio	Lower	Upper
146	100		
111	40.5	8.1	68.1
148	56.1	34.1	94.1

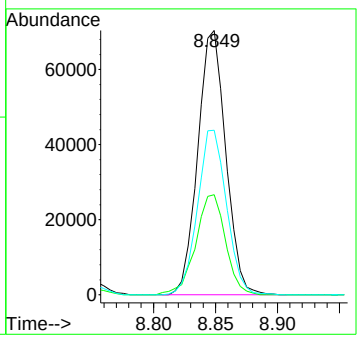


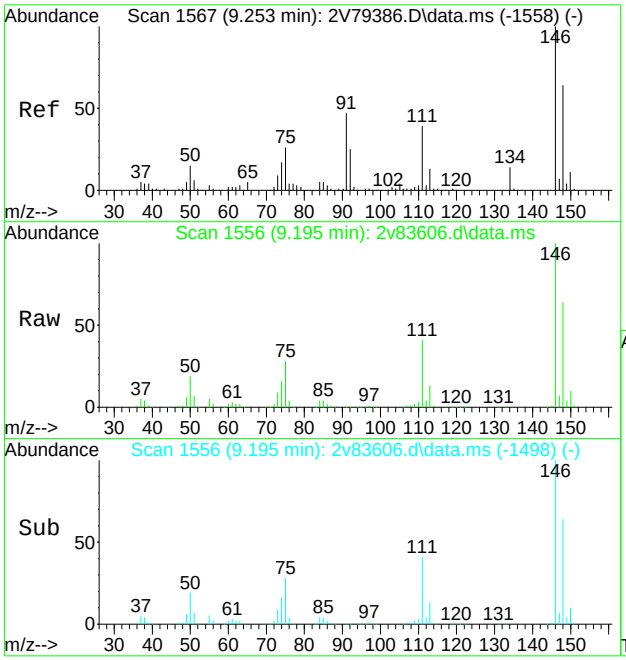


#112
1,4-dichlorobenzene
Concen: 15.78 ug/L
RT: 8.849 min Scan# 1490
Delta R.T. 0.005 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion:146 Resp: 110603

Ion	Ratio	Lower	Upper
146	100		
111	37.9	7.3	67.3
148	62.2	33.7	93.7

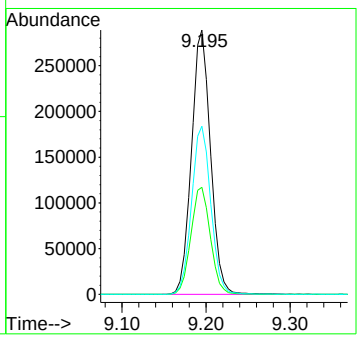




#113
1,2-dichlorobenzene
Concen: 67.89 ug/L
RT: 9.195 min Scan# 1556
Delta R.T. 0.005 min
Lab File: 2v83606.d
Acq: 14 Dec 2021 12:53 pm

Tgt Ion:146 Resp: 454644

Ion	Ratio	Lower	Upper
146	100		
111	40.5	10.6	70.6
148	63.6	33.1	93.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-14-2021\v2v3444-partial\
Data File : 2v83572.d
Acq On : 13 Dec 2021 8:46 pm
Operator : nickw
Sample : jd36319-5 Inst : MS2V
Misc : MS55483,V2V3444,5,,,,50
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 13 22:38:58 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

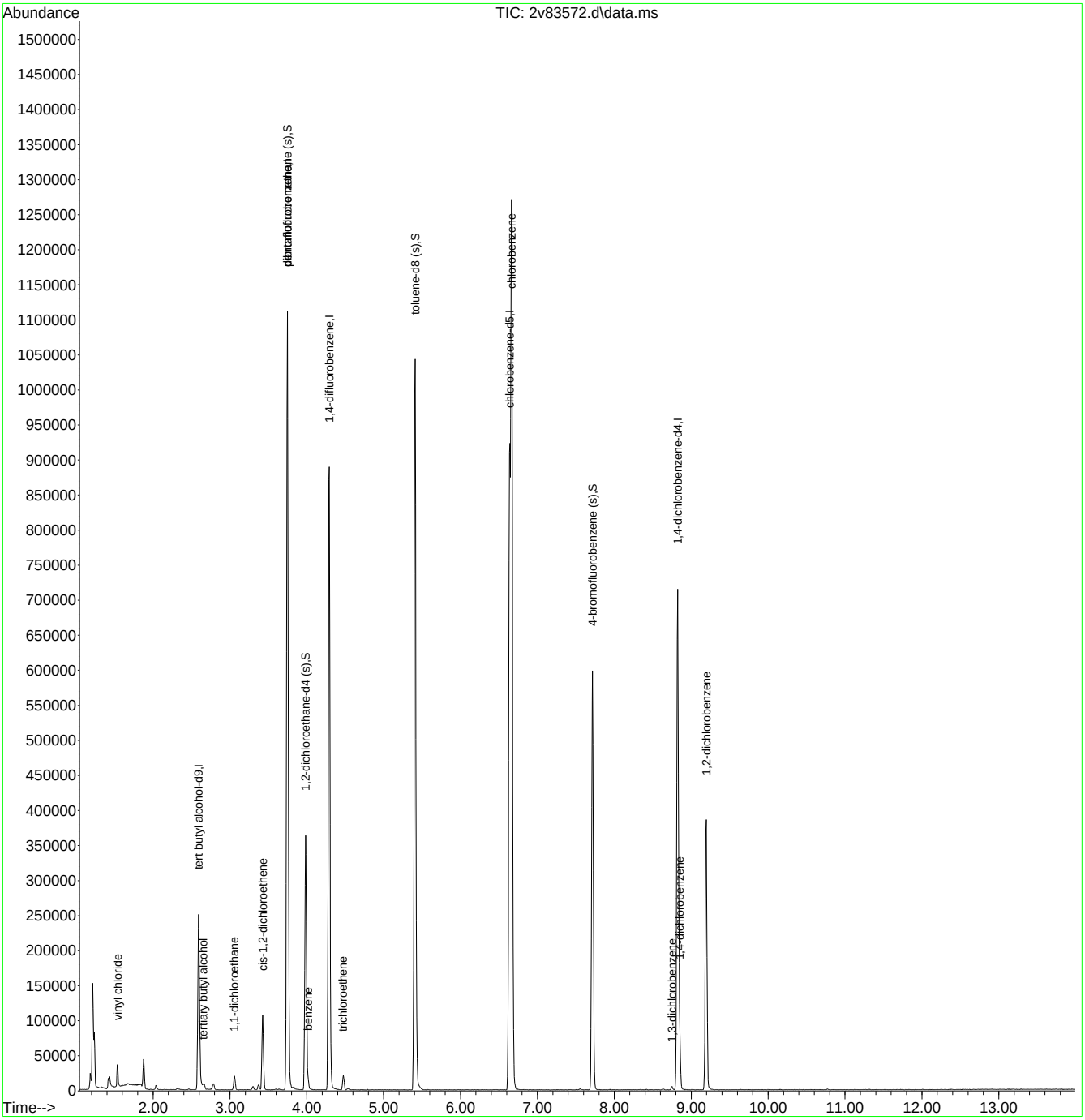
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	207989	500.00	ug/L	0.00
5) pentafluorobenzene	3.748	168	401587	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.293	114	577296	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	438134	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	175777	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.748	113	176786	47.48	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.96%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	197737	53.40	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 106.80%			
73) toluene-d8 (s)	5.410	98	581168	52.48	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.96%			
97) 4-bromofluorobenzene (s)	7.717	95	190216	47.43	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.86%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	2.652	59	3611	4.53	ug/L	70
9) vinyl chloride	1.540	62	6559	1.45	ug/L	87
29) 1,1-dichloroethane	3.055	63	16126	2.36	ug/L	93
36) cis-1,2-dichloroethene	3.428	96	31627	7.95	ug/L	96
53) benzene	4.015	78	7049	0.50	ug/L	95
59) trichloroethene	4.471	95	5590	1.42	ug/L	98
85) chlorobenzene	6.663	112	588668	65.66	ug/L	96
109) 1,3-dichlorobenzene	8.749	146	2322	0.34	ug/L	95
112) 1,4-dichlorobenzene	8.849	146	36011	5.18	ug/L	98
113) 1,2-dichlorobenzene	9.195	146	155879	23.48	ug/L	99

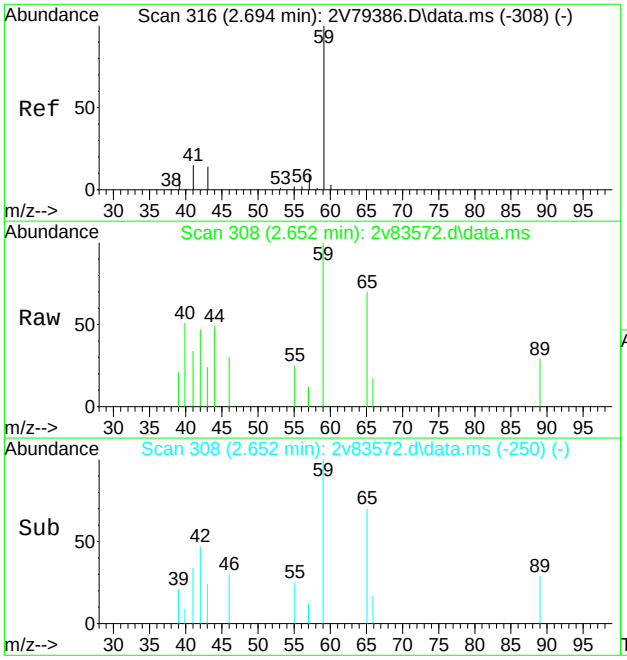
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-14-2021\v2v3444-partial\
Data File : 2v83572.d
Acq On : 13 Dec 2021 8:46 pm
Operator : nickw
Sample : jd36319-5 Inst : MS2V
Misc : MS55483,V2V3444,5,,,,50
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 13 22:38:58 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

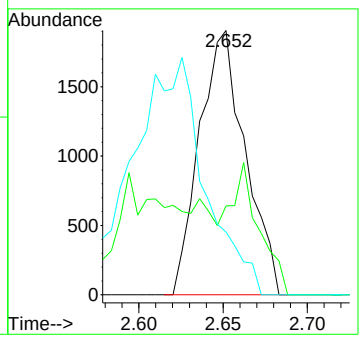


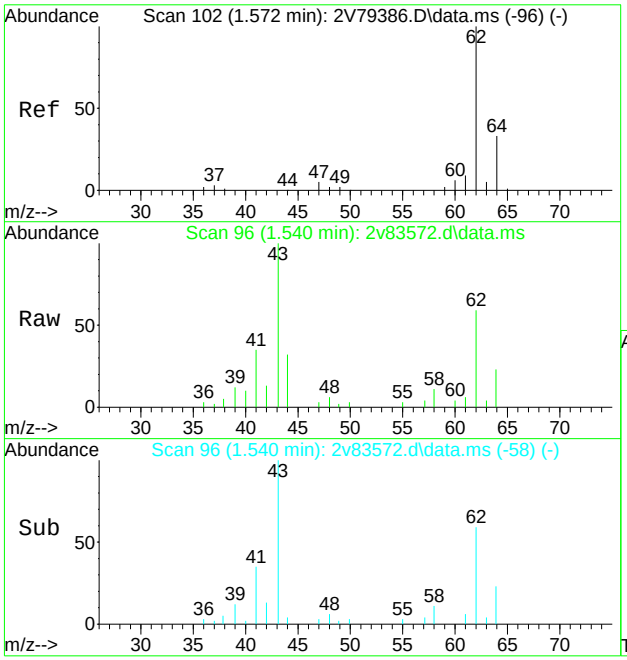


#3
tertiary butyl alcohol
Concen: 4.53 ug/L
RT: 2.652 min Scan# 308
Delta R.T. 0.006 min
Lab File: 2v83572.d
Acq: 13 Dec 2021 8:46 pm

Tgt Ion: 59 Resp: 3611

Ion	Ratio	Lower	Upper
59	100		
41	33.6	0.0	48.5
43	23.8	0.0	43.9

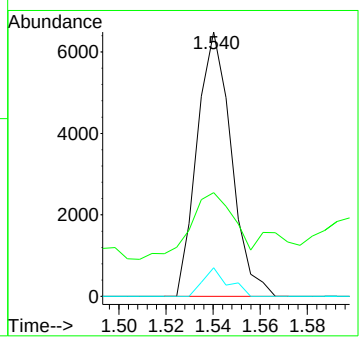


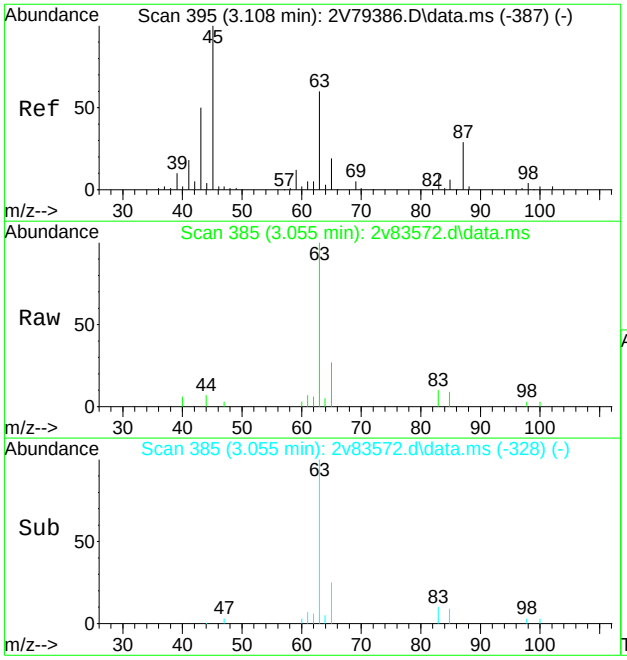


#9
vinyl chloride
Concen: 1.45 ug/L
RT: 1.540 min Scan# 96
Delta R.T. 0.000 min
Lab File: 2v83572.d
Acq: 13 Dec 2021 8:46 pm

Tgt Ion: 62 Resp: 6559

Ion	Ratio	Lower	Upper
62	100		
64	23.1	1.3	61.3
61	10.8	0.0	38.8

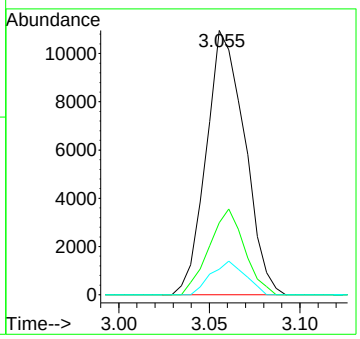


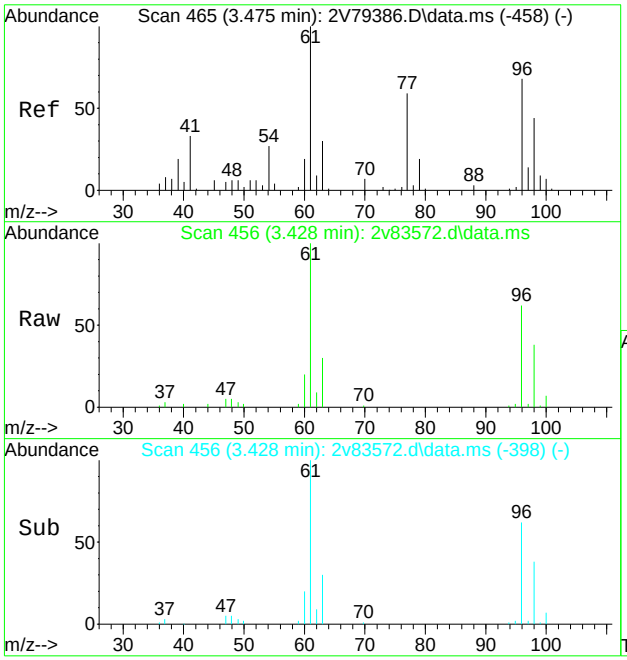


#29
1,1-dichloroethane
Concen: 2.36 ug/L
RT: 3.055 min Scan# 385
Delta R.T. 0.000 min
Lab File: 2v83572.d
Acq: 13 Dec 2021 8:46 pm

Tgt Ion: 63 Resp: 16126

Ion	Ratio	Lower	Upper
63	100		
65	27.3	1.1	61.1
83	9.7	0.0	42.5

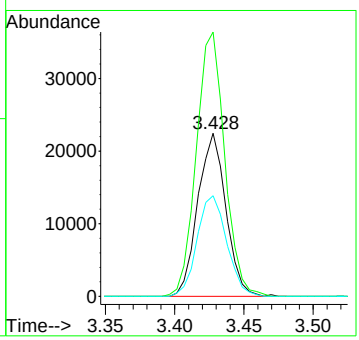


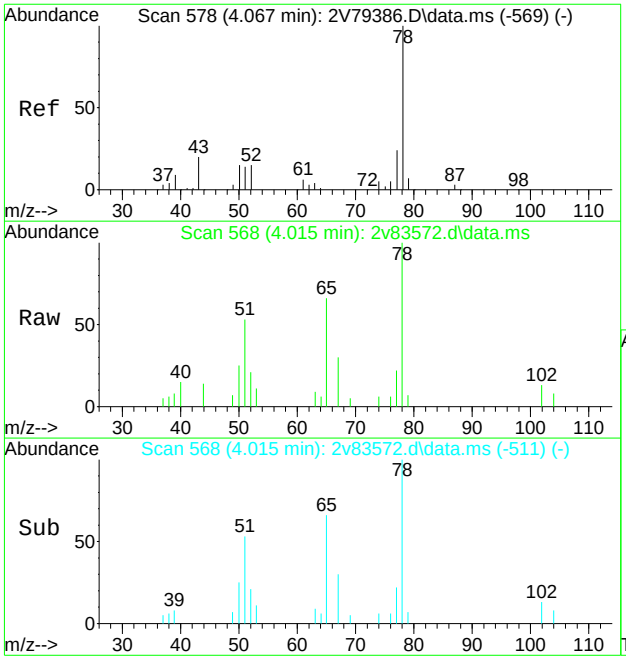


#36
cis-1,2-dichloroethene
Concen: 7.95 ug/L
RT: 3.428 min Scan# 456
Delta R.T. 0.006 min
Lab File: 2v83572.d
Acq: 13 Dec 2021 8:46 pm

Tgt Ion: 96 Resp: 31627

Ion	Ratio	Lower	Upper
96	100		
61	162.2	137.0	197.0
98	61.8	34.8	94.8

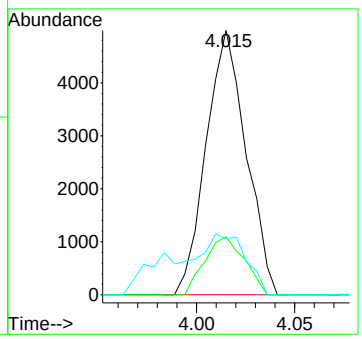


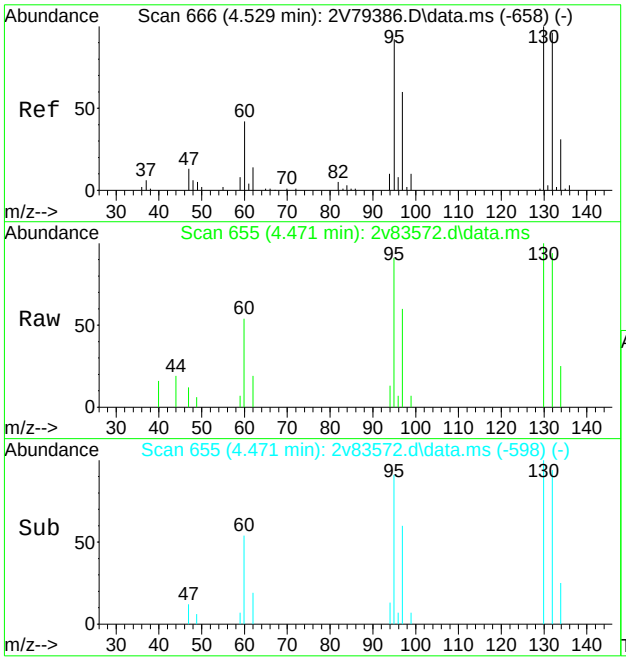


#53
benzene
Concen: 0.50 ug/L
RT: 4.015 min Scan# 568
Delta R.T. -0.000 min
Lab File: 2v83572.d
Acq: 13 Dec 2021 8:46 pm

Tgt Ion: 78 Resp: 7049

Ion	Ratio	Lower	Upper
78	100		
77	21.9	0.0	53.4
52	21.2	0.0	48.4

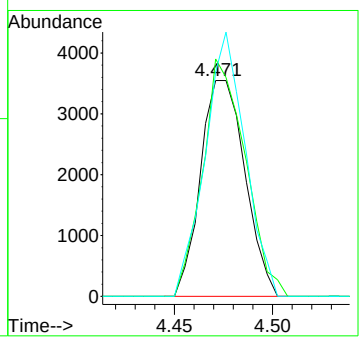


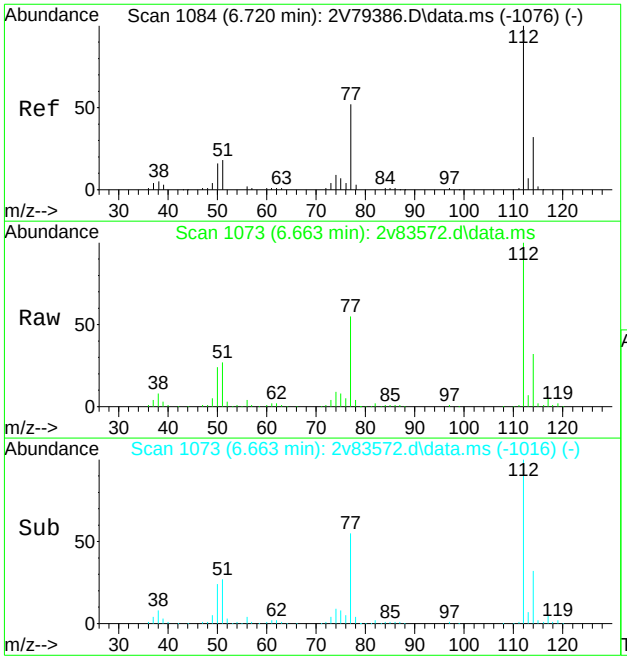


#59
trichloroethene
Concen: 1.42 ug/L
RT: 4.471 min Scan# 655
Delta R.T. 0.000 min
Lab File: 2v83572.d
Acq: 13 Dec 2021 8:46 pm

Tgt Ion: 95 Resp: 5590

Ion	Ratio	Lower	Upper
95	100		
130	110.0	78.8	138.8
132	103.9	75.8	135.8

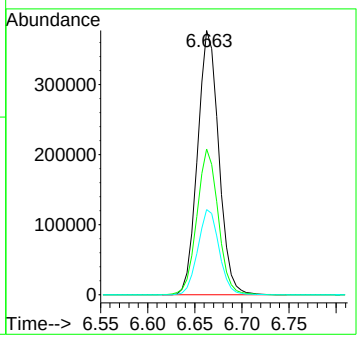


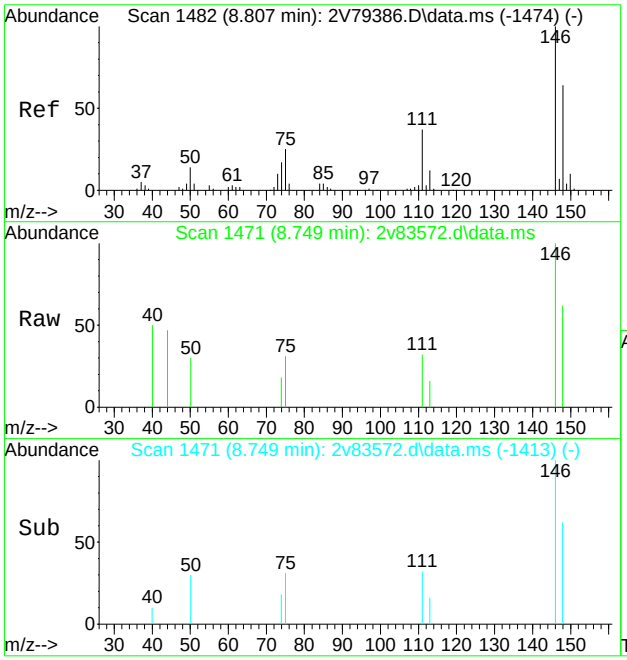


#85
chlorobenzene
Concen: 65.66 ug/L
RT: 6.663 min Scan# 1073
Delta R.T. -0.000 min
Lab File: 2v83572.d
Acq: 13 Dec 2021 8:46 pm

Tgt Ion:112 Resp: 588668

Ion	Ratio	Lower	Upper
112	100		
77	55.1	20.6	80.6
114	32.2	2.1	62.1

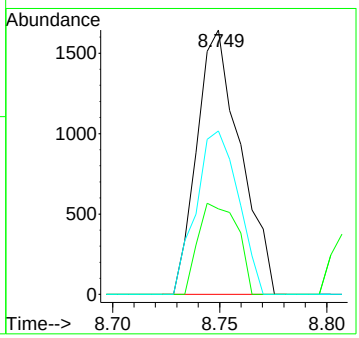


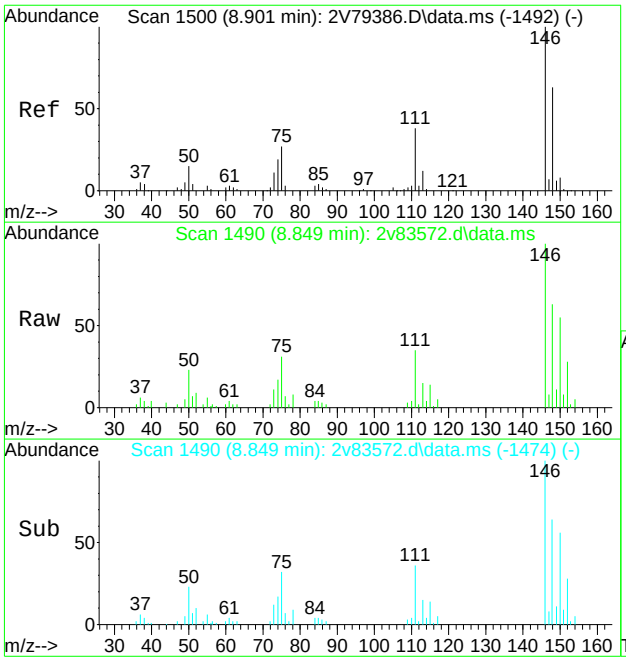


#109
1,3-dichlorobenzene
Concen: 0.34 ug/L
RT: 8.749 min Scan# 1471
Delta R.T. 0.005 min
Lab File: 2v83572.d
Acq: 13 Dec 2021 8:46 pm

Tgt Ion:146 Resp: 2322

Ion	Ratio	Lower	Upper
146	100		
111	32.3	8.1	68.1
148	61.8	34.1	94.1

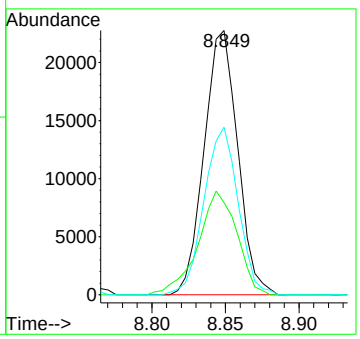


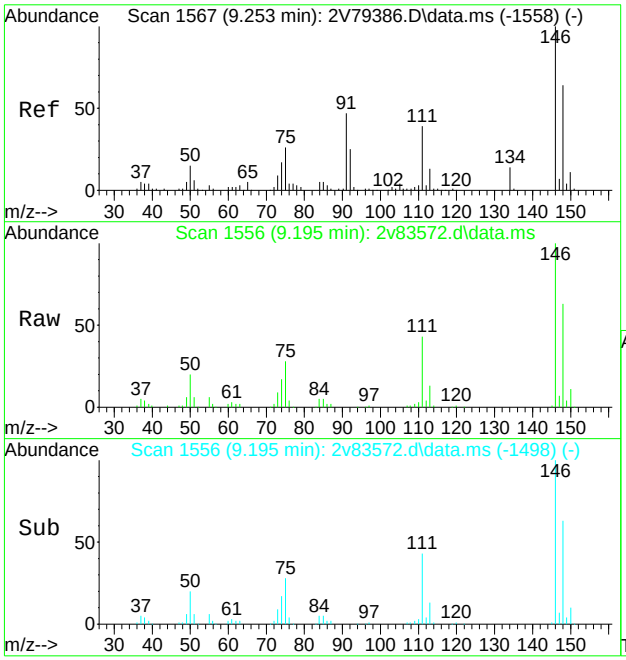


#112
1,4-dichlorobenzene
Concen: 5.18 ug/L
RT: 8.849 min Scan# 1490
Delta R.T. 0.005 min
Lab File: 2v83572.d
Acq: 13 Dec 2021 8:46 pm

Tgt Ion:146 Resp: 36011

Ion	Ratio	Lower	Upper
146	100		
111	34.8	7.3	67.3
148	63.4	33.7	93.7

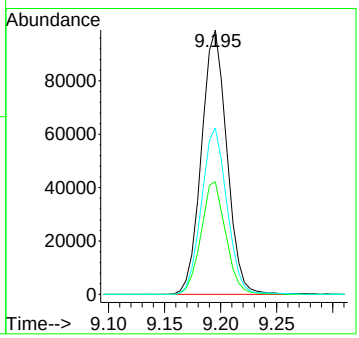




#113
1,2-dichlorobenzene
Concen: 23.48 ug/L
RT: 9.195 min Scan# 1556
Delta R.T. 0.005 min
Lab File: 2v83572.d
Acq: 13 Dec 2021 8:46 pm

Tgt Ion:146 Resp: 155879

Ion	Ratio	Lower	Upper
146	100		
111	42.6	10.6	70.6
148	63.0	33.1	93.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12152021\v2v3446\
Data File : 2v83607.d
Acq On : 14 Dec 2021 1:19 pm
Operator : nickw
Sample : jd36319-5 Inst : MS2V
Misc : MS55483,V2V3446,5,,,,10
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 14 20:37:06 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 17:15:16 2021
Response via : Initial Calibration

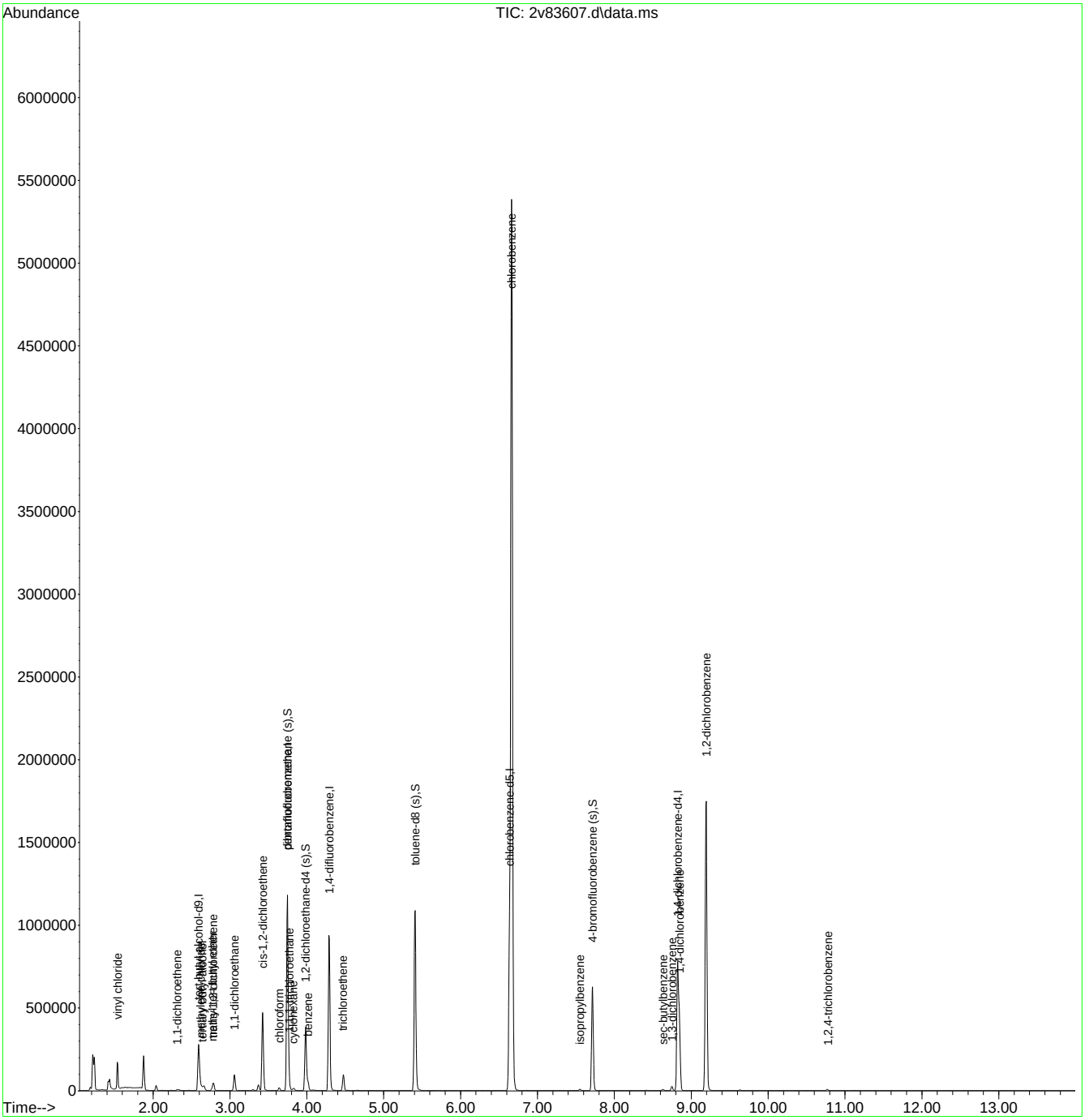
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	233369	500.00	ug/L	0.00
5) pentafluorobenzene	3.748	168	427969	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.293	114	607515	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	462979	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	186893	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.748	113	184353	46.46	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 92.92%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	207345	53.21	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 106.42%			
73) toluene-d8 (s)	5.410	98	611033	52.21	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.42%			
97) 4-bromofluorobenzene (s)	7.716	95	199931	46.88	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.76%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	2.641	59	13231	14.80	ug/L	59
9) vinyl chloride	1.540	62	29836	6.20	ug/L	96
17) 1,1-dichloroethene	2.311	61	3233	0.52	ug/L	94
22) methylene chloride	2.620	84	1576	0.37	ug/L #	70
24) methyl tert butyl ether	2.772	73	10319	0.93	ug/L	65
25) trans-1,2-dichloroethene	2.783	96	4510	1.19	ug/L	94
29) 1,1-dichloroethane	3.061	63	71682	9.83	ug/L	98
36) cis-1,2-dichloroethene	3.428	96	143355	33.80	ug/L	96
41) chloroform	3.643	83	10487	1.40	ug/L	91
44) 1,1,1-trichloroethane	3.774	97	15302	2.47	ug/L #	55
45) cyclohexane	3.821	84	2710	0.54	ug/L #	77
53) benzene	4.015	78	30889	2.10	ug/L	92
59) trichloroethene	4.471	95	25229	6.11	ug/L	87
85) chlorobenzene	6.663	112	2611303	275.65	ug/L	95
94) isopropylbenzene	7.554	105	6443	0.45	ug/L	90
108) sec-butylbenzene	8.634	105	6586	0.43	ug/L	95
109) 1,3-dichlorobenzene	8.749	146	11216	1.53	ug/L	98
112) 1,4-dichlorobenzene	8.849	146	164136	22.22	ug/L	98
113) 1,2-dichlorobenzene	9.195	146	710813	100.70	ug/L	100
119) 1,2,4-trichlorobenzene	10.778	180	2788	0.72	ug/L	85

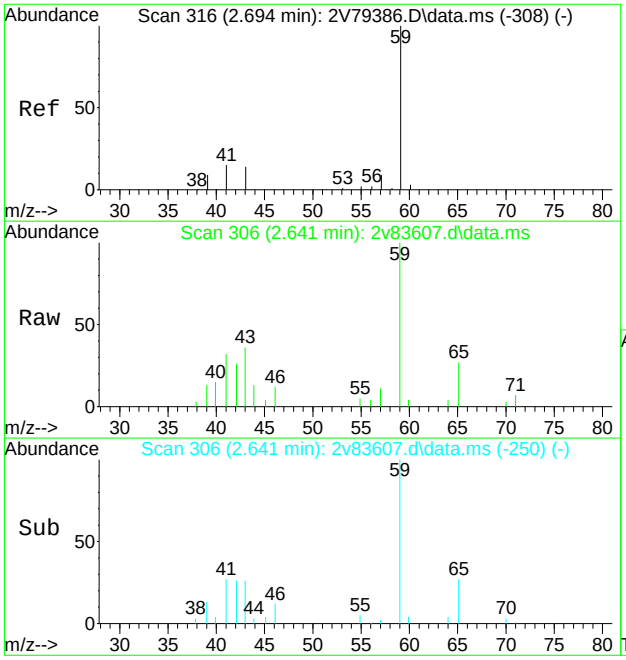
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12152021\v2v3446\
Data File : 2v83607.d
Acq On : 14 Dec 2021 1:19 pm
Operator : nickw
Sample : jd36319-5 Inst : MS2V
Misc : MS55483,V2V3446,5,,,,10
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 14 20:37:06 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 17:15:16 2021
Response via : Initial Calibration

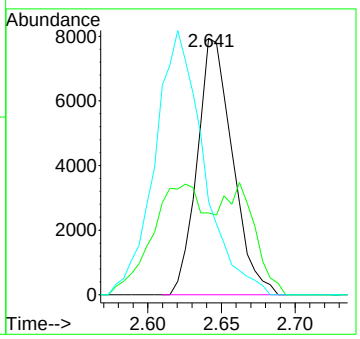


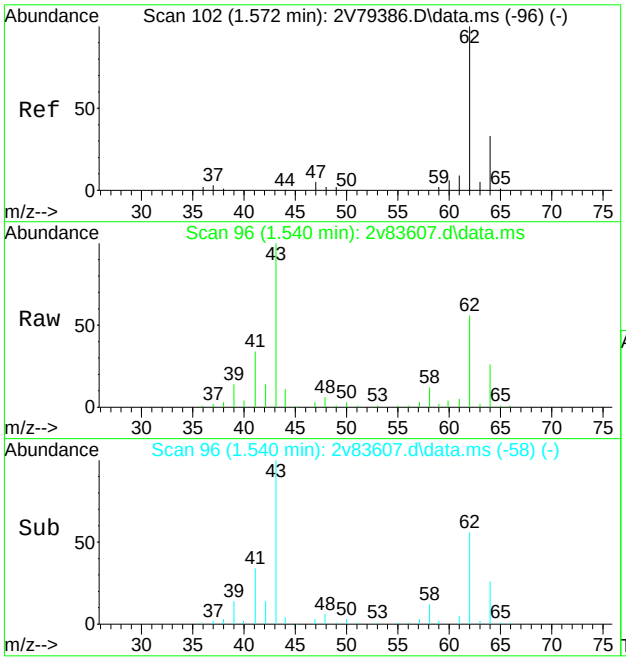


#3
tertiary butyl alcohol
Concen: 14.80 ug/L
RT: 2.641 min Scan# 306
Delta R.T. -0.005 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 59 Resp: 13231

Ion	Ratio	Lower	Upper
59	100		
41	31.9	0.0	48.5
43	36.3	0.0	43.9

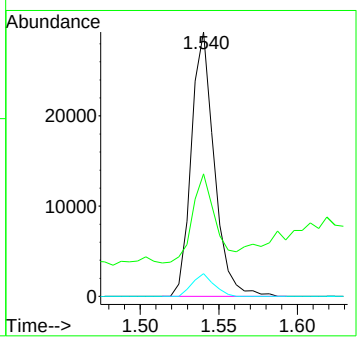


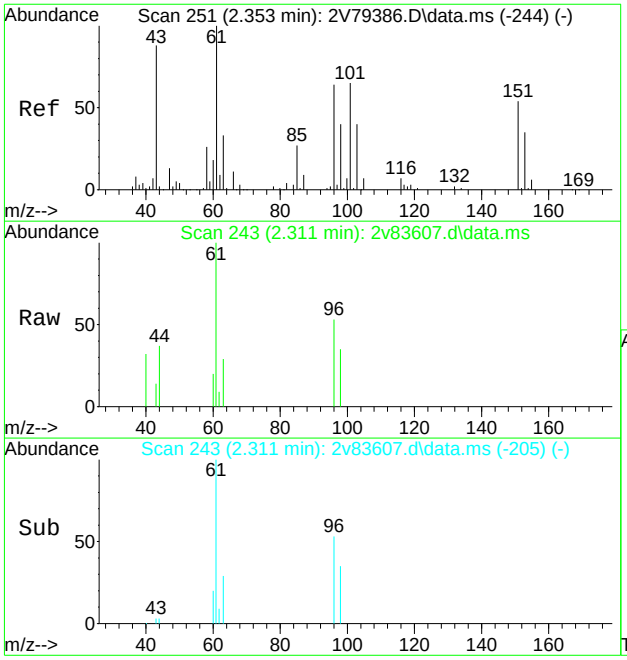


#9
vinyl chloride
Concen: 6.20 ug/L
RT: 1.540 min Scan# 96
Delta R.T. 0.000 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 62 Resp: 29836

Ion	Ratio	Lower	Upper
62	100		
64	33.7	1.3	61.3
61	8.6	0.0	38.8

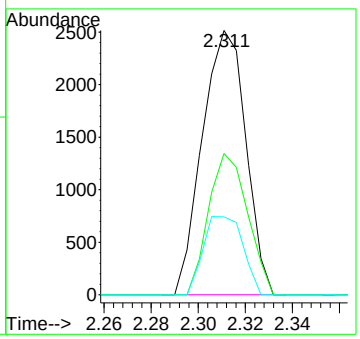


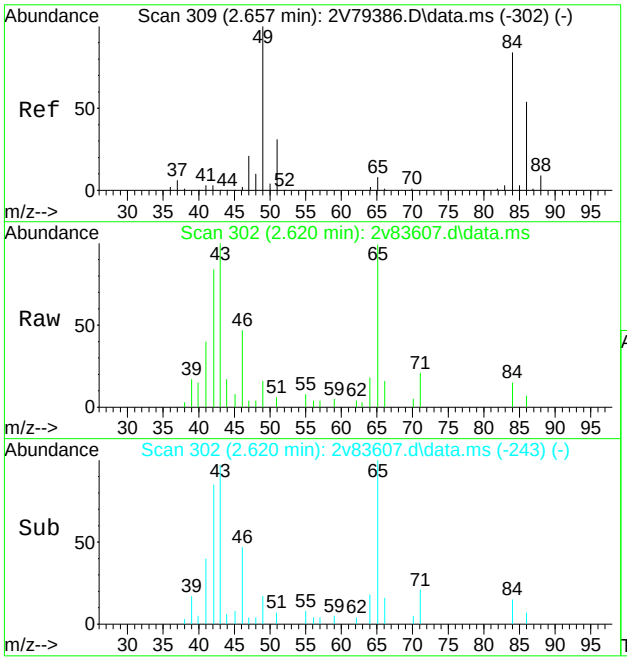


#17
1,1-dichloroethene
Concen: 0.52 ug/L
RT: 2.311 min Scan# 243
Delta R.T. -0.000 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 61 Resp: 3233

Ion	Ratio	Lower	Upper
61	100		
96	53.5	29.1	89.1
63	29.5	1.0	61.0

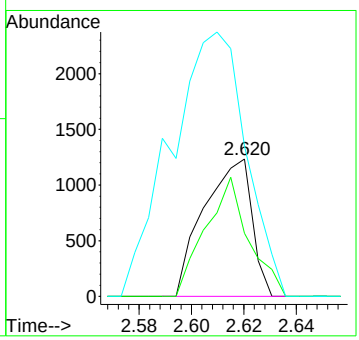


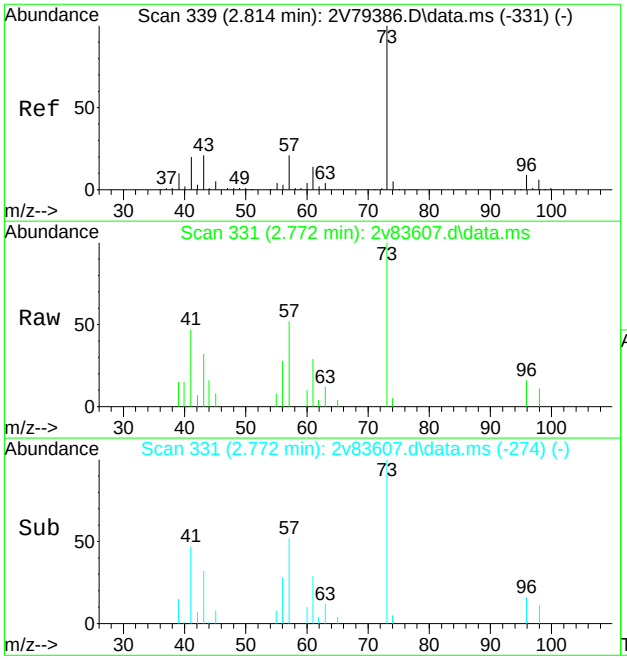


#22
methylene chloride
Concen: 0.37 ug/L
RT: 2.620 min Scan# 302
Delta R.T. 0.010 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 84 Resp: 1576

Ion	Ratio	Lower	Upper
84	100		
86	45.9	36.3	96.3
49	109.3	119.8	179.8#

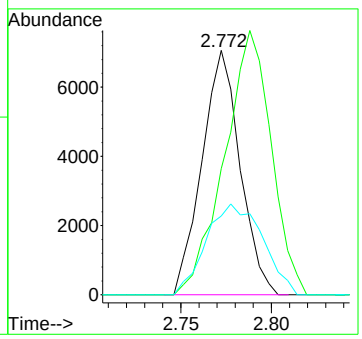


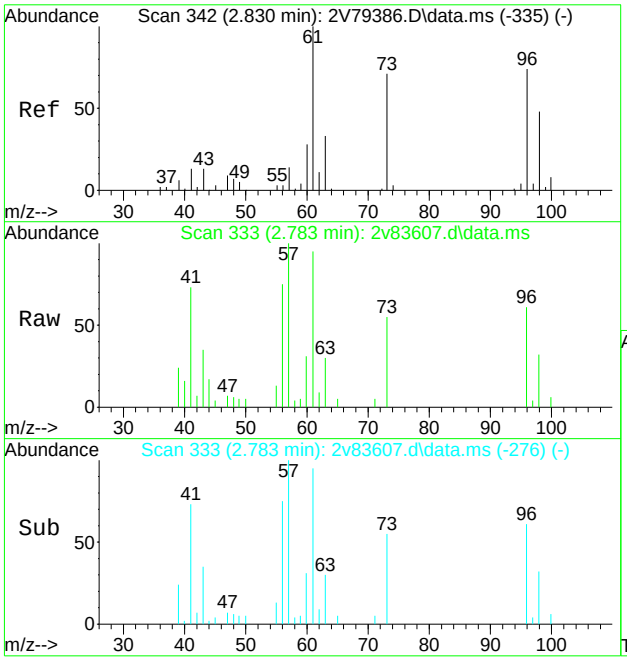


#24
methyl tert butyl ether
Concen: 0.93 ug/L
RT: 2.772 min Scan# 331
Delta R.T. 0.000 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 73 Resp: 10319

Ion	Ratio	Lower	Upper
73	100		
57	51.6	0.0	55.9
43	32.2	0.0	53.4

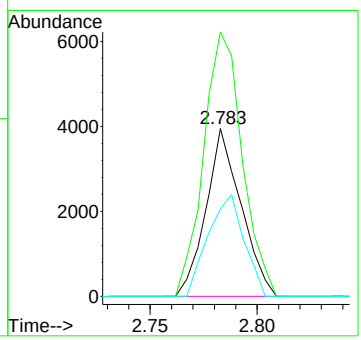


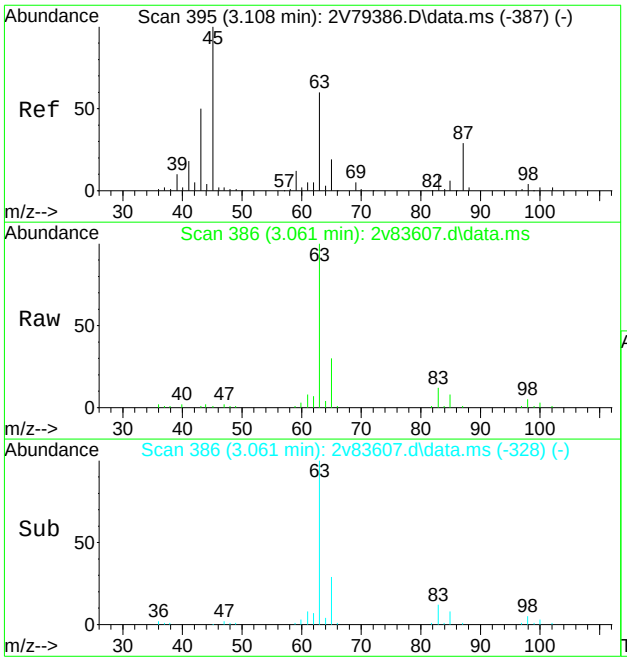


#25
trans-1,2-dichloroethene
Concen: 1.19 ug/L
RT: 2.783 min Scan# 333
Delta R.T. -0.000 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 96 Resp: 4510

Ion	Ratio	Lower	Upper
96	100		
61	157.6	125.0	185.0
98	52.1	35.0	95.0

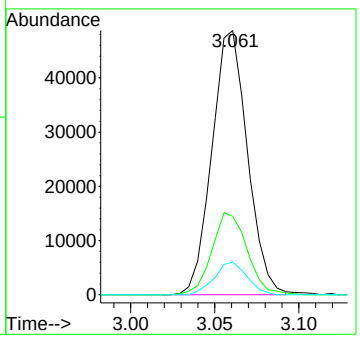


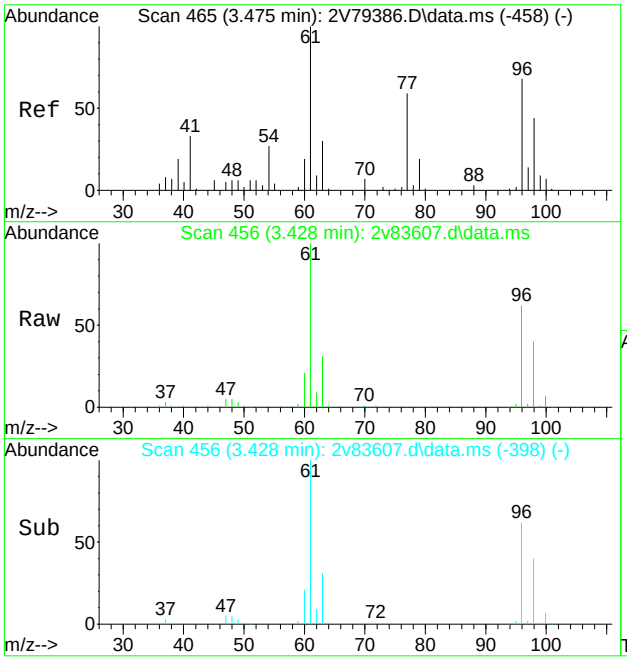


#29
1,1-dichloroethane
Concen: 9.83 ug/L
RT: 3.061 min Scan# 386
Delta R.T. 0.006 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 63 Resp: 71682

Ion	Ratio	Lower	Upper
63	100		
65	29.7	1.1	61.1
83	12.4	0.0	42.5

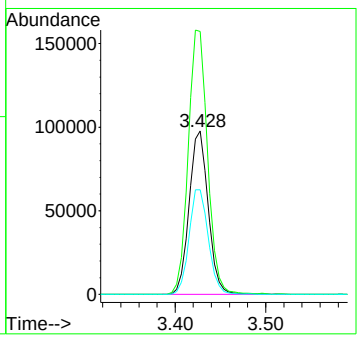


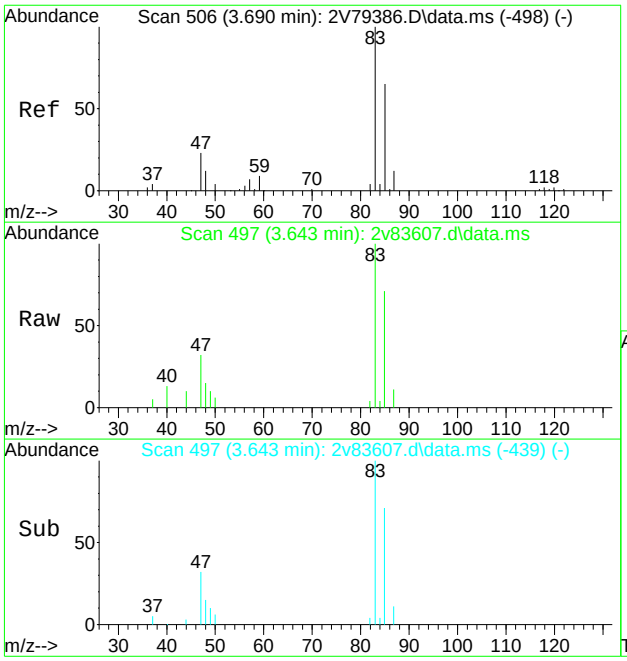


#36
cis-1,2-dichloroethene
Concen: 33.80 ug/L
RT: 3.428 min Scan# 456
Delta R.T. 0.006 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 96 Resp: 143355

Ion	Ratio	Lower	Upper
96	100		
61	160.7	137.0	197.0
98	64.0	34.8	94.8

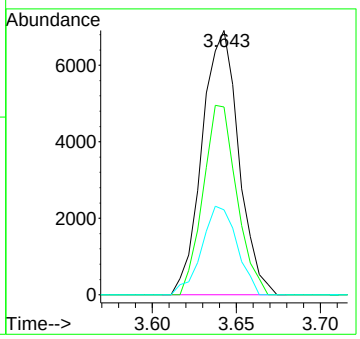


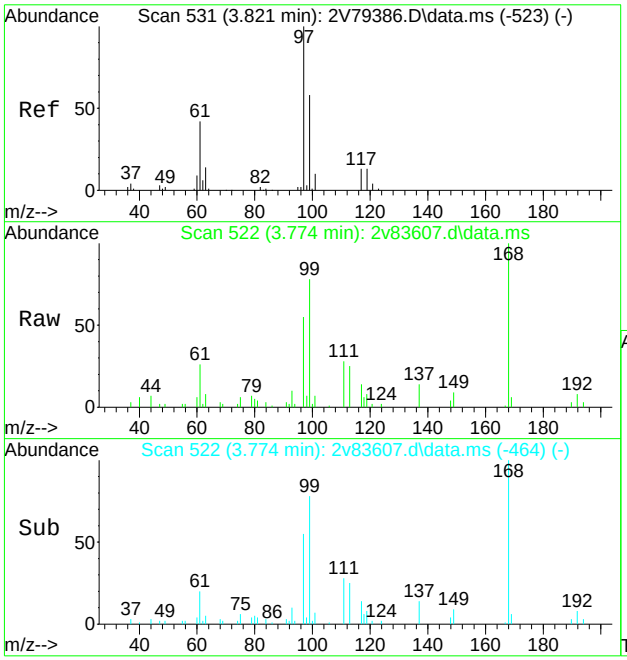


#41
chloroform
Concen: 1.40 ug/L
RT: 3.643 min Scan# 497
Delta R.T. 0.006 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 83 Resp: 10487

Ion	Ratio	Lower	Upper
83	100		
85	71.0	35.3	95.3
47	32.1	0.0	55.9

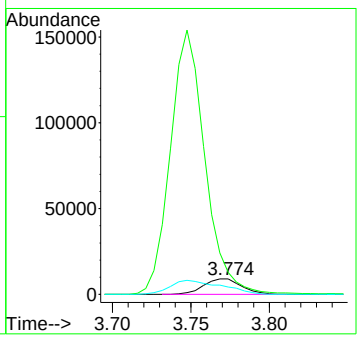


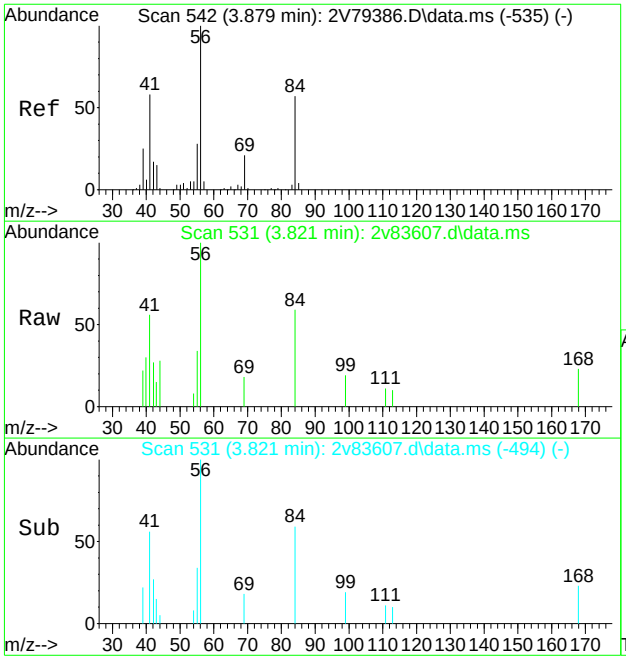


#44
1,1,1-trichloroethane
Concen: 2.47 ug/L
RT: 3.774 min Scan# 522
Delta R.T. 0.006 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 97 Resp: 15302

Ion	Ratio	Lower	Upper
97	100		
99	131.4	40.9	100.9#
61	47.2	16.4	76.4

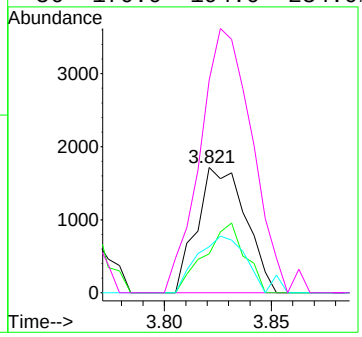


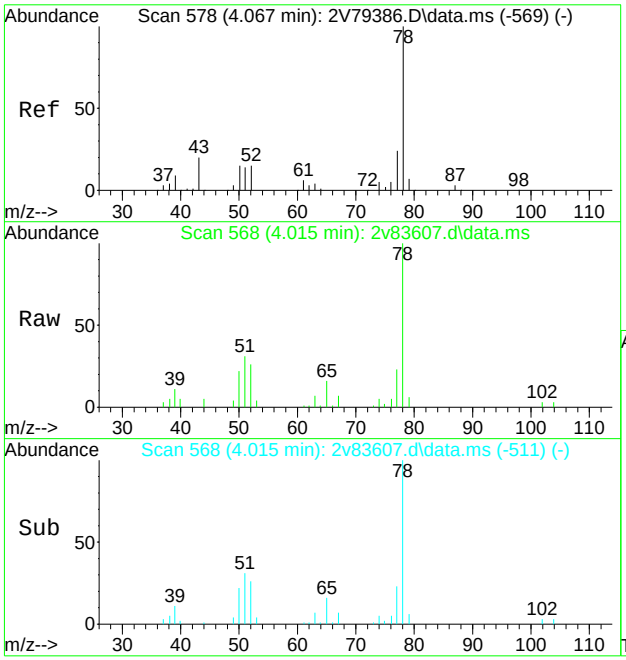


#45
cyclohexane
Concen: 0.54 ug/L
RT: 3.821 min Scan# 531
Delta R.T. -0.005 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 84 Resp: 2710

Ion	Ratio	Lower	Upper
84	100		
69	31.0	16.5	56.5
39	36.8	23.3	63.3
56	170.0	194.0	234.0#

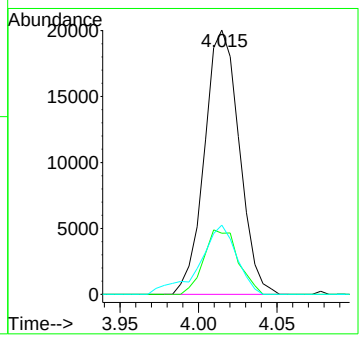


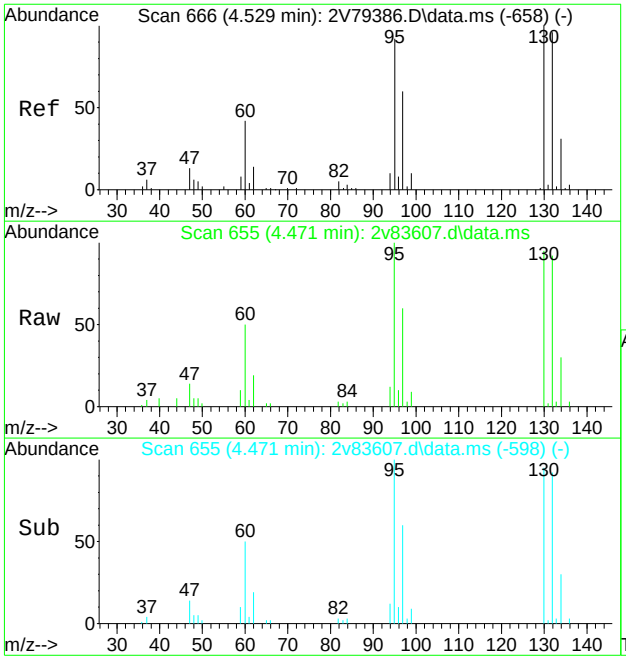


#53
benzene
Concen: 2.10 ug/L
RT: 4.015 min Scan# 568
Delta R.T. -0.000 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 78 Resp: 30889

Ion	Ratio	Lower	Upper
78	100		
77	23.1	0.0	53.4
52	26.2	0.0	48.4

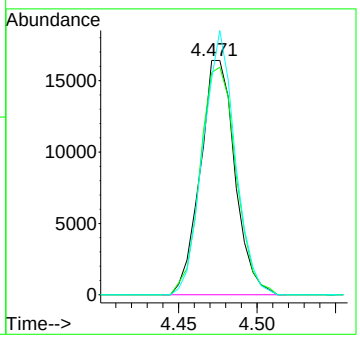


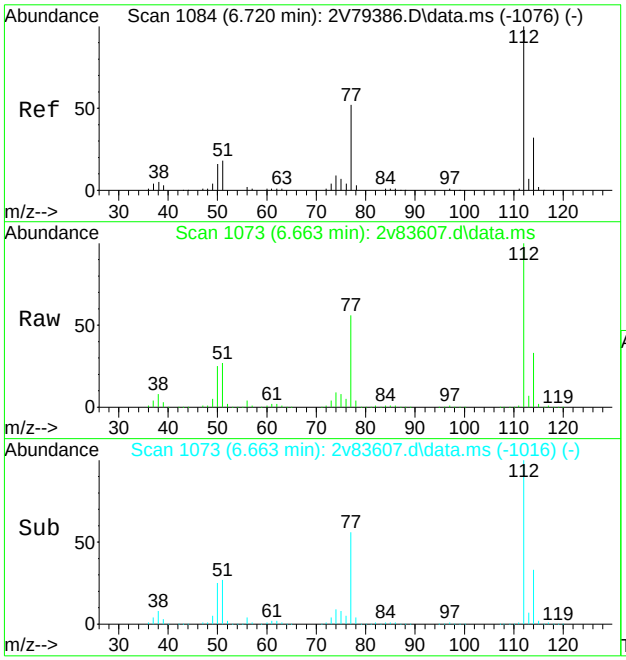


#59
trichloroethene
Concen: 6.11 ug/L
RT: 4.471 min Scan# 655
Delta R.T. 0.000 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion: 95 Resp: 25229

Ion	Ratio	Lower	Upper
95	100		
130	94.8	78.8	138.8
132	92.2	75.8	135.8

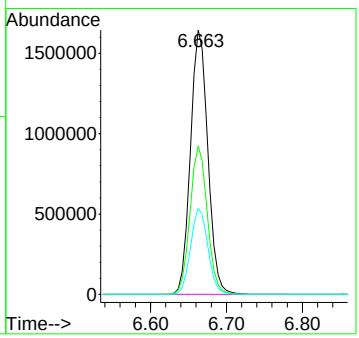


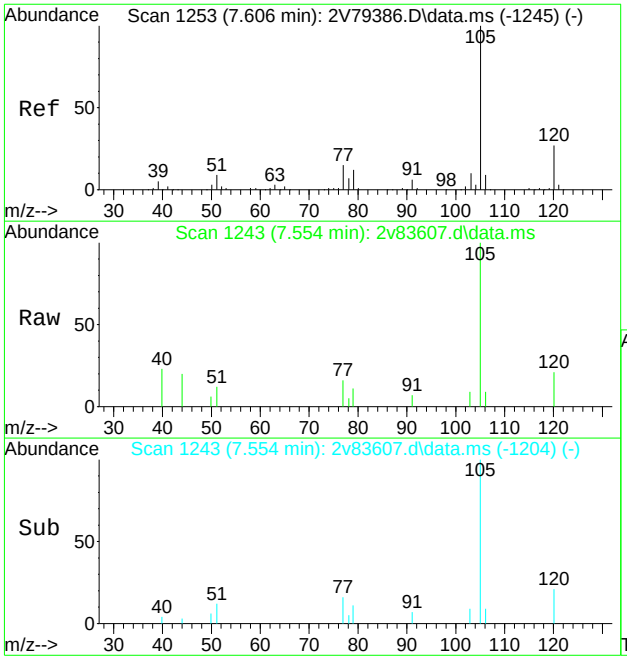


#85
chlorobenzene
Concen: 275.65 ug/L
RT: 6.663 min Scan# 1073
Delta R.T. -0.000 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion:112 Resp: 2611303

Ion	Ratio	Lower	Upper
112	100		
77	56.1	20.6	80.6
114	32.5	2.1	62.1

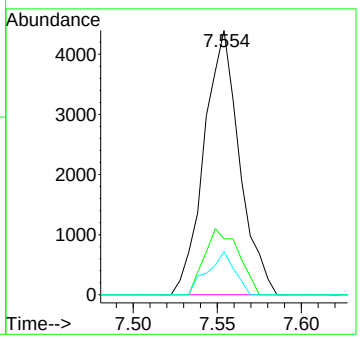


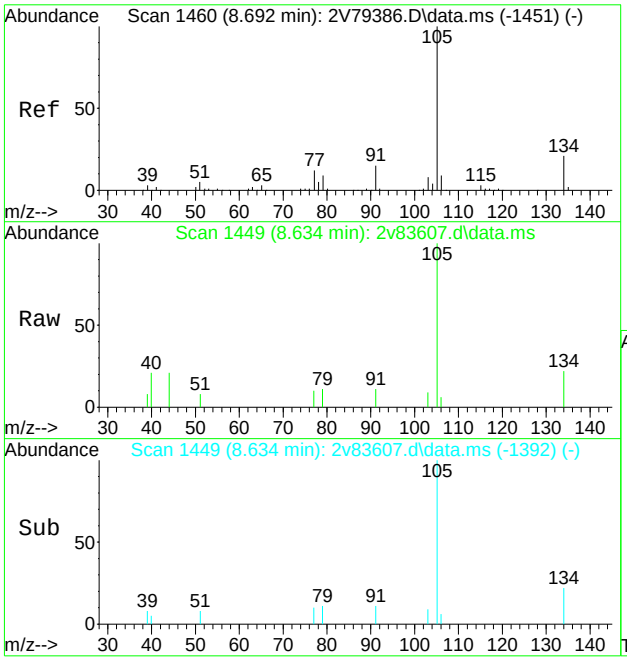


#94
isopropylbenzene
Concen: 0.45 ug/L
RT: 7.554 min Scan# 1243
Delta R.T. 0.005 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion:105 Resp: 6443

Ion	Ratio	Lower	Upper
105	100		
120	21.1	7.2	47.2
77	16.4	0.0	34.1

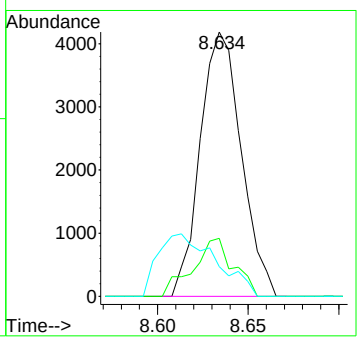


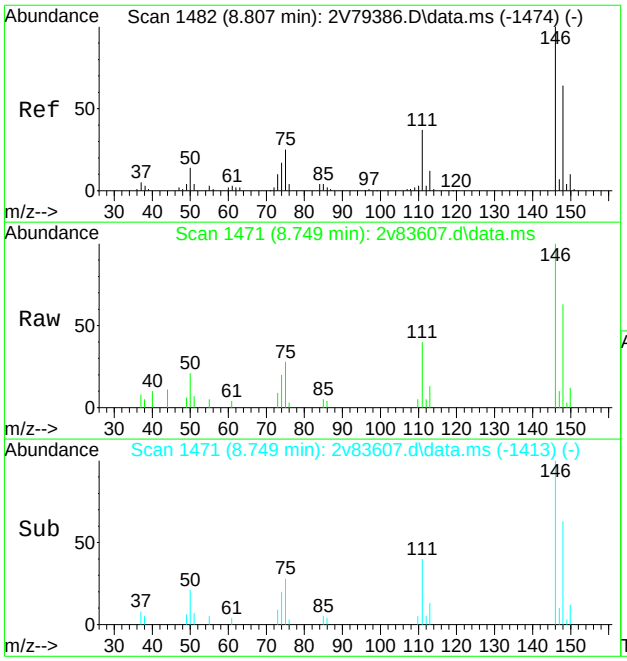


#108
sec-butylbenzene
Concen: 0.43 ug/L
RT: 8.634 min Scan# 1449
Delta R.T. 0.000 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion:105 Resp: 6586

Ion	Ratio	Lower	Upper
105	100		
134	21.9	0.0	51.1
91	11.3	0.0	44.9

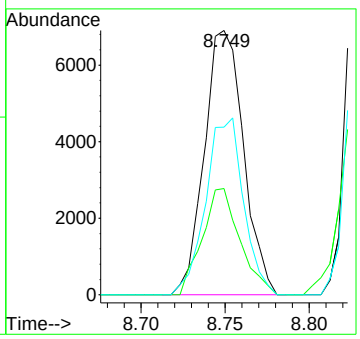


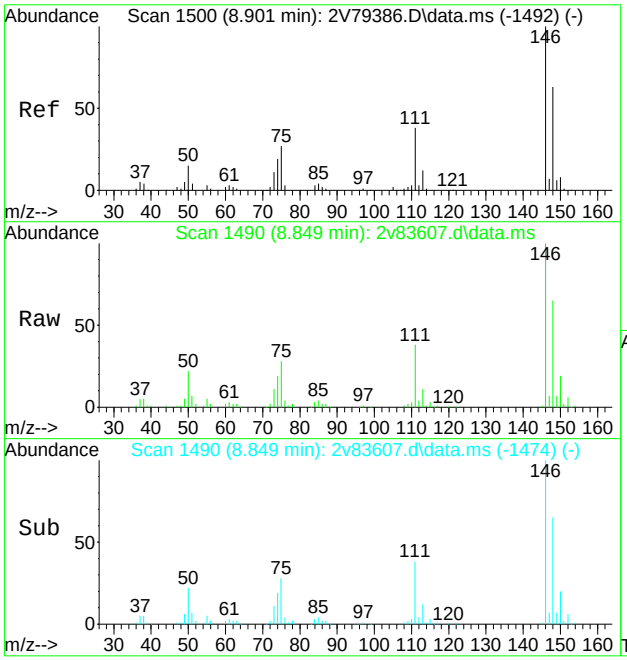


#109
1,3-dichlorobenzene
Concen: 1.53 ug/L
RT: 8.749 min Scan# 1471
Delta R.T. 0.005 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion:146 Resp: 11216

Ion	Ratio	Lower	Upper
146	100		
111	40.2	8.1	68.1
148	63.4	34.1	94.1

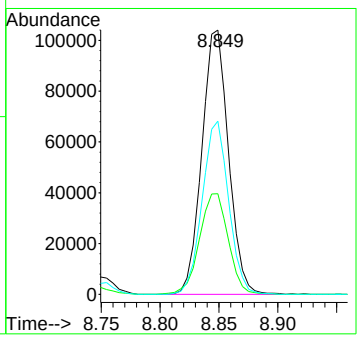


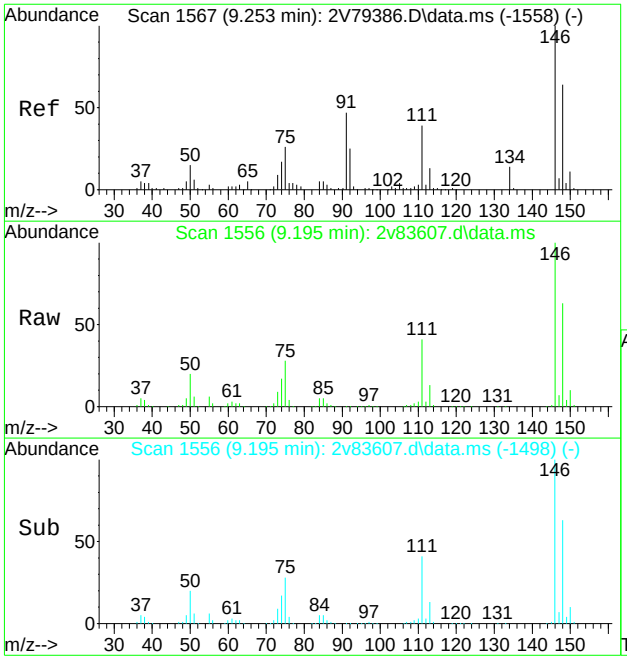


#112
1,4-dichlorobenzene
Concen: 22.22 ug/L
RT: 8.849 min Scan# 1490
Delta R.T. 0.005 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion:146 Resp: 164136

Ion	Ratio	Lower	Upper
146	100		
111	38.1	7.3	67.3
148	65.5	33.7	93.7

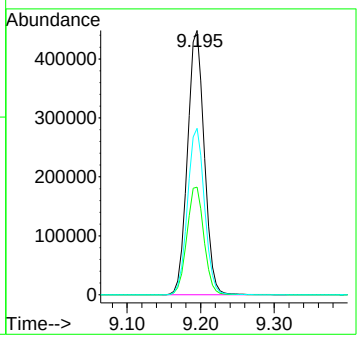


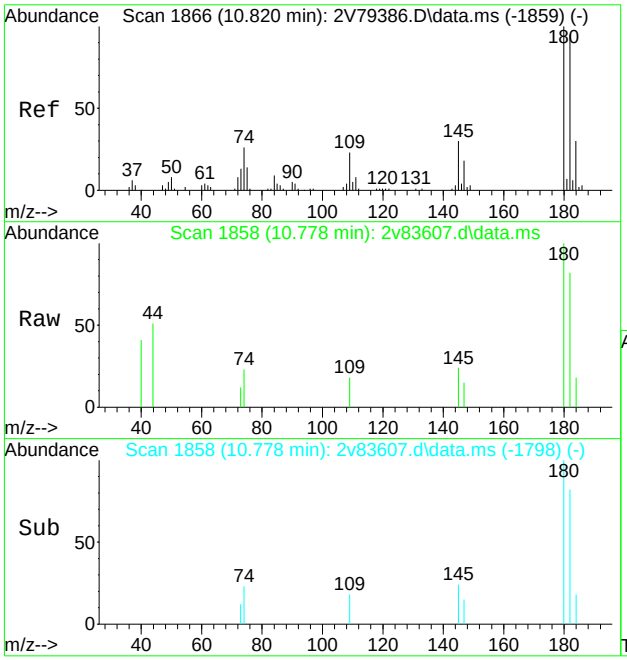


#113
1,2-dichlorobenzene
Concen: 100.70 ug/L
RT: 9.195 min Scan# 1556
Delta R.T. 0.005 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion:146 Resp: 710813

Ion	Ratio	Lower	Upper
146	100		
111	40.7	10.6	70.6
148	63.0	33.1	93.1

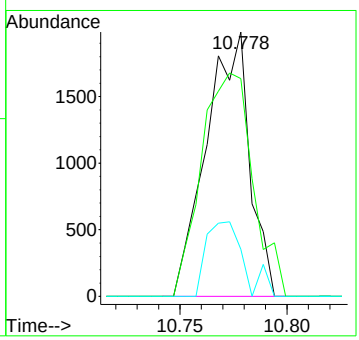




#119
1,2,4-trichlorobenzene
Concen: 0.72 ug/L
RT: 10.778 min Scan# 1858
Delta R.T. 0.015 min
Lab File: 2v83607.d
Acq: 14 Dec 2021 1:19 pm

Tgt Ion:180 Resp: 2788

Ion	Ratio	Lower	Upper
180	100		
182	82.3	64.3	124.3
184	17.8	0.9	60.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-14-2021\v2v3444-partial\
Data File : 2v83552.d
Acq On : 13 Dec 2021 12:16 pm
Operator : nickw
Sample : mb Inst : MS2V
Misc : MS48261,V2V3444,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 13 22:05:13 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

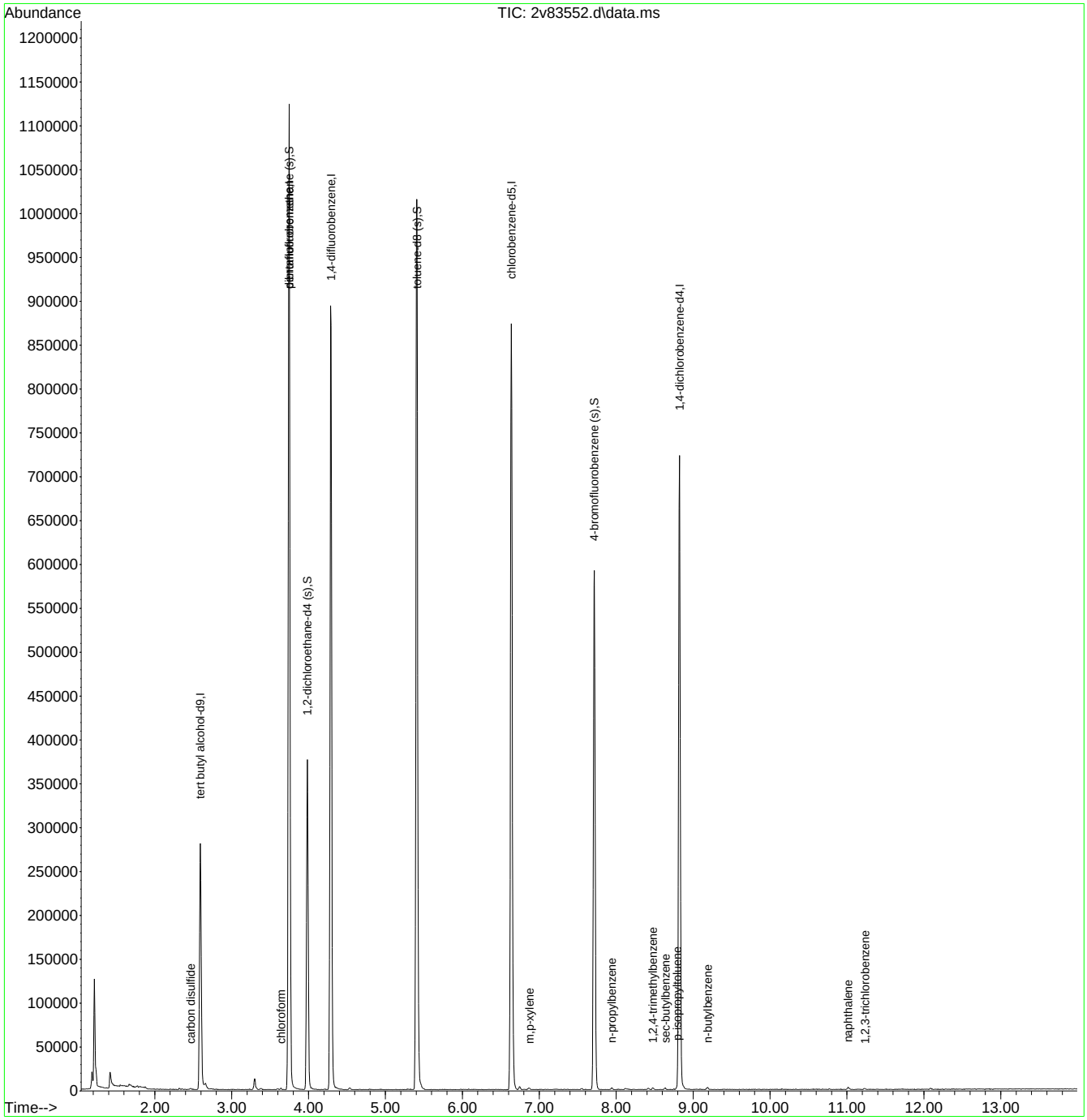
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	240937	500.00	ug/L	0.00
5) pentafluorobenzene	3.748	168	413311	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.293	114	576083	50.00	ug/L	0.00
72) chlorobenzene-d5	6.636	117	435630	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.823	152	181912	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.748	113	176775	46.13	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 92.26%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	202666	54.85	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 109.70%			
73) toluene-d8 (s)	5.410	98	575712	52.28	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.56%			
97) 4-bromofluorobenzene (s)	7.711	95	191249	46.08	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 92.16%			
Target Compounds						Qvalue
21) carbon disulfide	2.468	76	1294	0.13	ug/L	68
41) chloroform	3.643	83	750	0.10	ug/L	71
88) m,p-xylene	6.872	106	793	0.14	ug/L #	92
102) n-propylbenzene	7.942	91	1932	0.11	ug/L	96
107) 1,2,4-trimethylbenzene	8.477	105	1557	0.13	ug/L	78
108) sec-butylbenzene	8.639	105	1939	0.13	ug/L	96
110) p-isopropyltoluene	8.791	119	1789	0.14	ug/L	50
115) n-butylbenzene	9.190	92	834	0.14	ug/L #	79
121) naphthalene	11.014	128	2878	0.26	ug/L	80
122) 1,2,3-trichlorobenzene	11.235	180	762	0.24	ug/L #	72

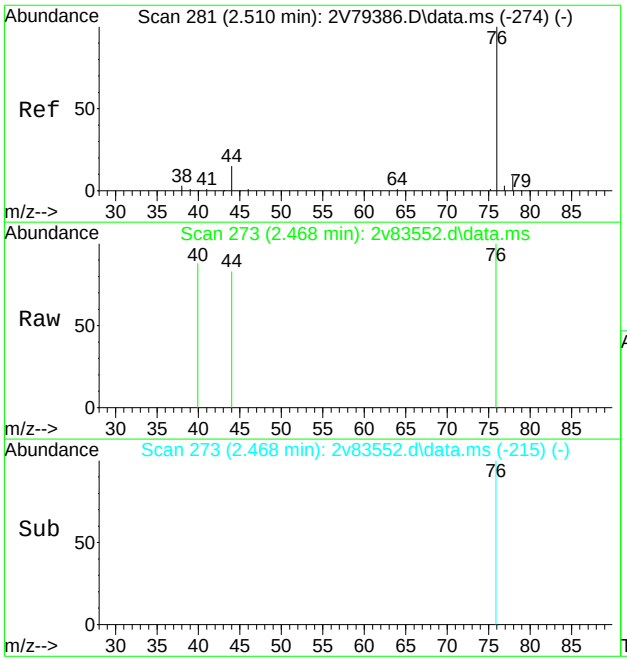
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-14-2021\v2v3444-partial\
Data File : 2v83552.d
Acq On : 13 Dec 2021 12:16 pm
Operator : nickw
Sample : mb Inst : MS2V
Misc : MS48261,V2V3444,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 13 22:05:13 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

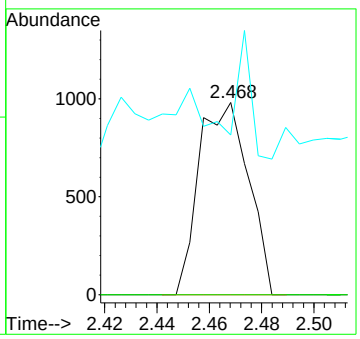


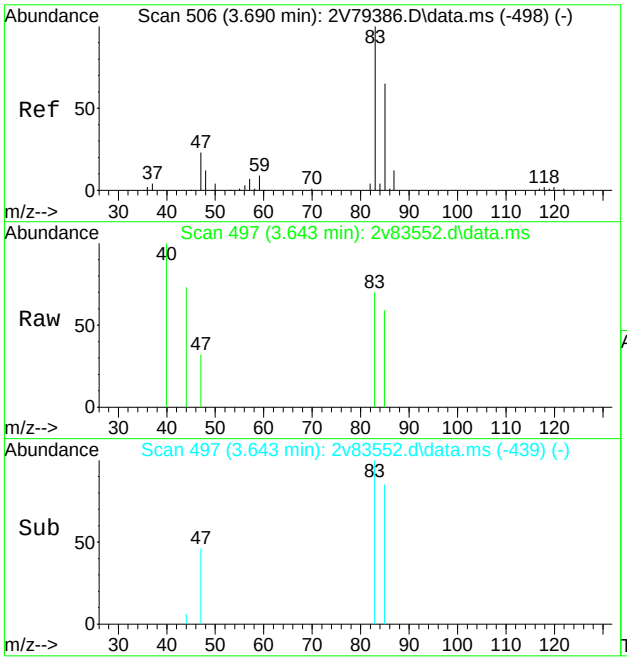


#21
carbon disulfide
Concen: 0.13 ug/L
RT: 2.468 min Scan# 273
Delta R.T. 0.005 min
Lab File: 2v83552.d
Acq: 13 Dec 2021 12:16 pm

Tgt Ion: 76 Resp: 1294

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	38.9
44	0.0	0.0	45.2

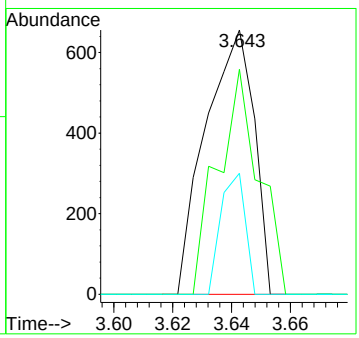


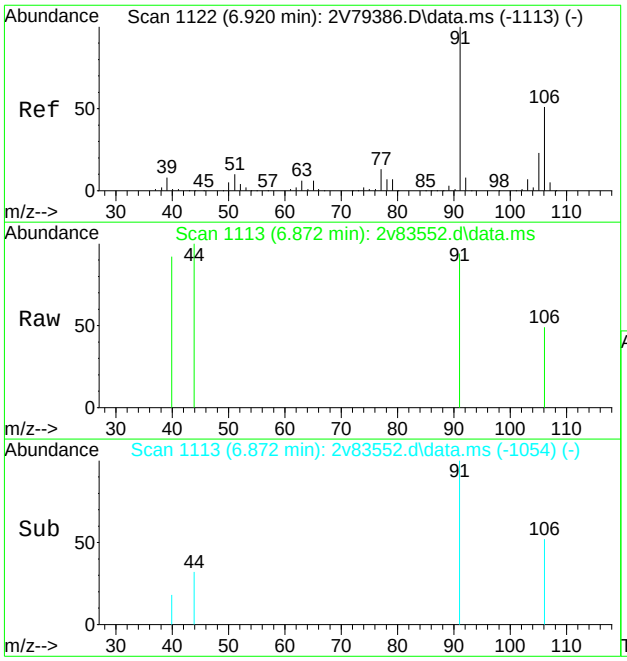


#41
chloroform
Concen: 0.10 ug/L
RT: 3.643 min Scan# 497
Delta R.T. 0.006 min
Lab File: 2v83552.d
Acq: 13 Dec 2021 12:16 pm

Tgt Ion: 83 Resp: 750

Ion	Ratio	Lower	Upper
83	100		
85	85.1	35.3	95.3
47	45.7	0.0	55.9

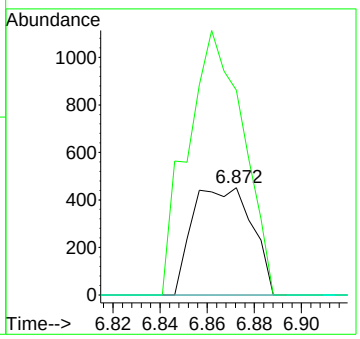


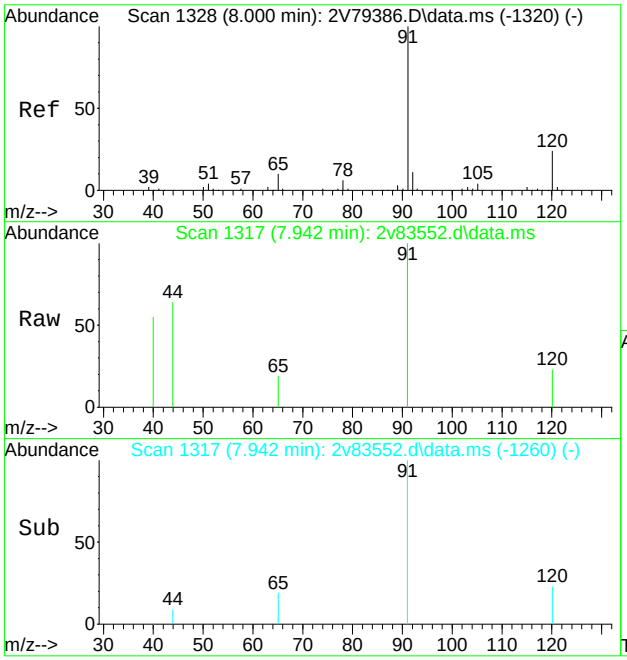


#88
m,p-xylene
Concen: 0.14 ug/L
RT: 6.872 min Scan# 1113
Delta R.T. 0.010 min
Lab File: 2v83552.d
Acq: 13 Dec 2021 12:16 pm

Tgt Ion:106 Resp: 793

Ion	Ratio	Lower	Upper
106	100		
91	191.1	165.7	225.7
77	0.0	4.5	44.5#

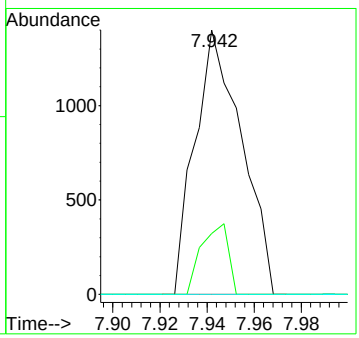


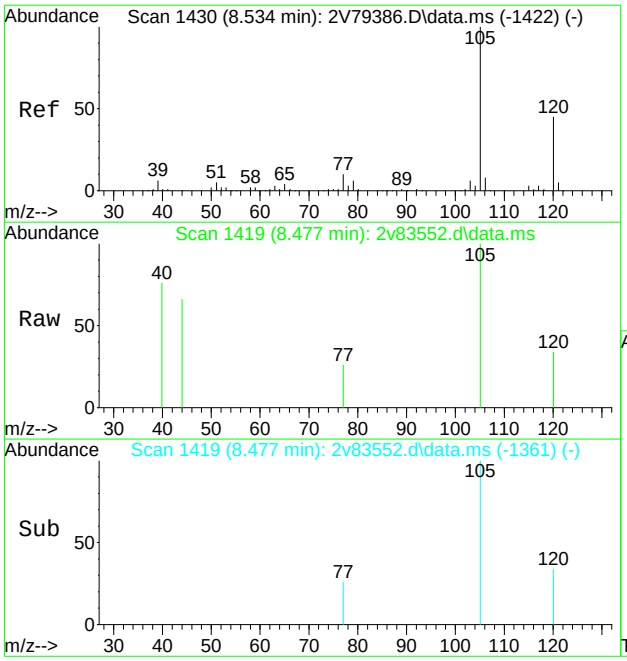


#102
n-propylbenzene
Concen: 0.11 ug/L
RT: 7.942 min Scan# 1317
Delta R.T. -0.000 min
Lab File: 2v83552.d
Acq: 13 Dec 2021 12:16 pm

Tgt Ion: 91 Resp: 1932

Ion	Ratio	Lower	Upper
91	100		
120	23.1	0.0	54.3
105	0.0	0.0	33.9

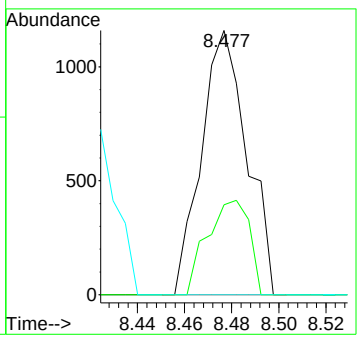


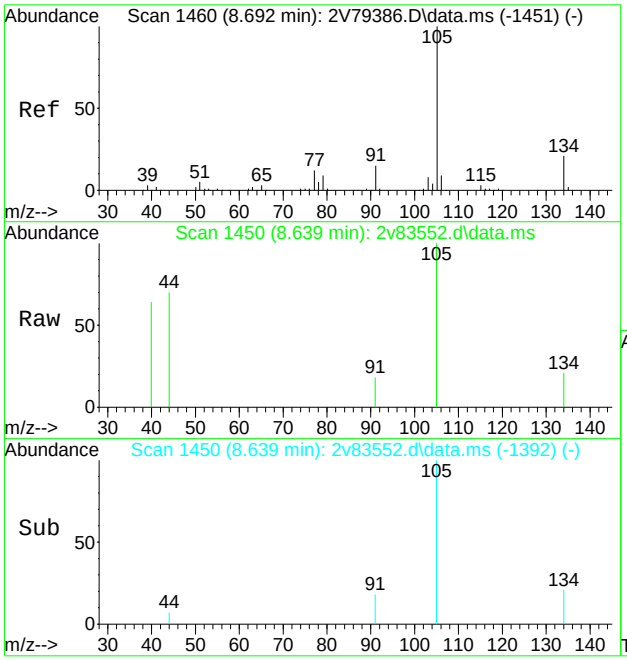


#107
1,2,4-trimethylbenzene
Concen: 0.13 ug/L
RT: 8.477 min Scan# 1419
Delta R.T. 0.006 min
Lab File: 2v83552.d
Acq: 13 Dec 2021 12:16 pm

Tgt Ion:105 Resp: 1557

Ion	Ratio	Lower	Upper
105	100		
120	34.1	16.8	76.8
119	0.0	0.0	42.2

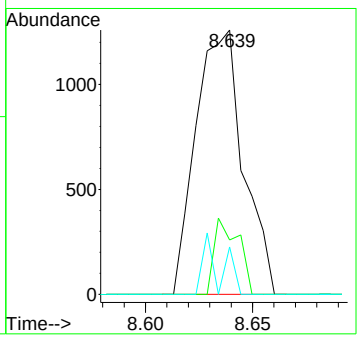


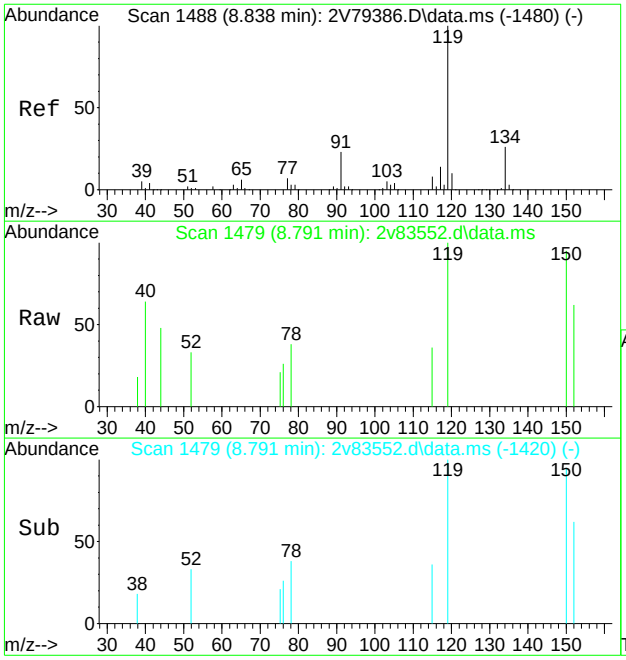


#108
sec-butylbenzene
Concen: 0.13 ug/L
RT: 8.639 min Scan# 1450
Delta R.T. 0.005 min
Lab File: 2v83552.d
Acq: 13 Dec 2021 12:16 pm

Tgt Ion:105 Resp: 1939

Ion	Ratio	Lower	Upper
105	100		
134	20.6	0.0	51.1
91	17.9	0.0	44.9

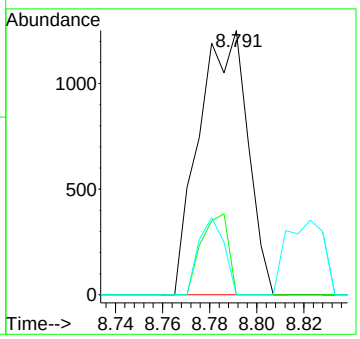


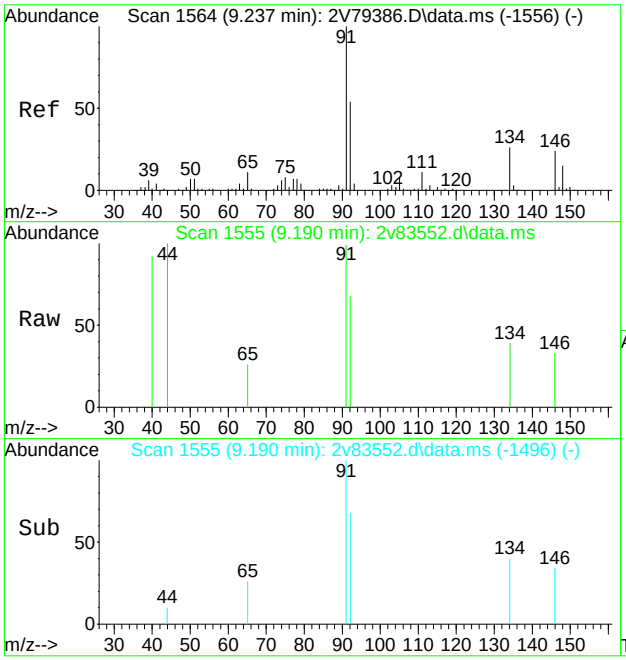


#110
p-isopropyltoluene
Concen: 0.14 ug/L
RT: 8.791 min Scan# 1479
Delta R.T. 0.010 min
Lab File: 2v83552.d
Acq: 13 Dec 2021 12:16 pm

Tgt Ion:119 Resp: 1789

Ion	Ratio	Lower	Upper
119	100		
134	0.0	0.0	57.5
91	0.0	0.0	52.3

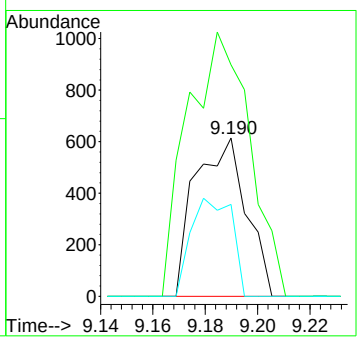


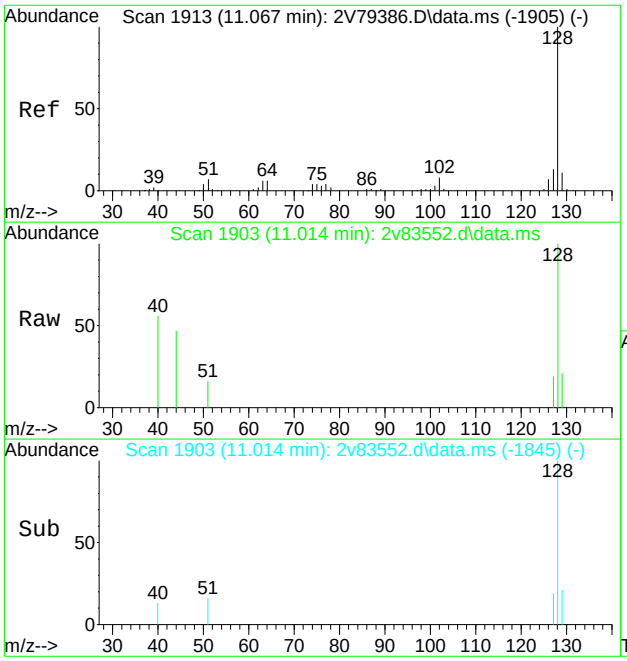


#115
n-butylbenzene
Concen: 0.14 ug/L
RT: 9.190 min Scan# 1555
Delta R.T. 0.011 min
Lab File: 2v83552.d
Acq: 13 Dec 2021 12:16 pm

Tgt Ion: 92 Resp: 834

Ion	Ratio	Lower	Upper
92	100		
91	146.3	150.5	210.5#
134	58.1	22.4	82.4

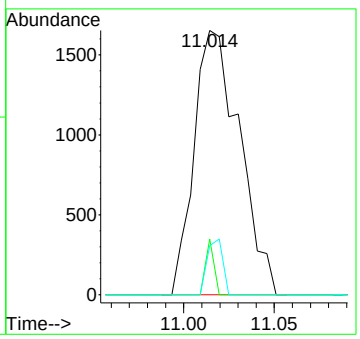


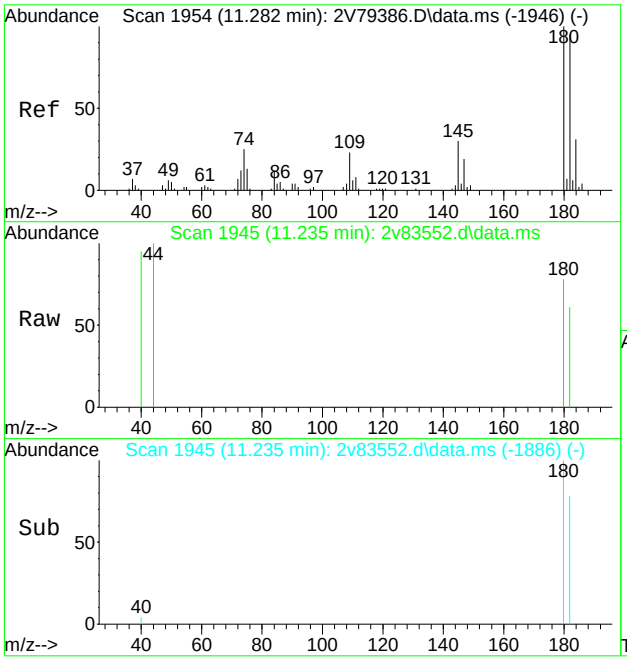


#121
naphthalene
Concen: 0.26 ug/L
RT: 11.014 min Scan# 1903
Delta R.T. 0.005 min
Lab File: 2v83552.d
Acq: 13 Dec 2021 12:16 pm

Tgt Ion:128 Resp: 2878

Ion	Ratio	Lower	Upper
128	100		
129	21.1	0.0	40.9
127	18.5	0.0	43.1

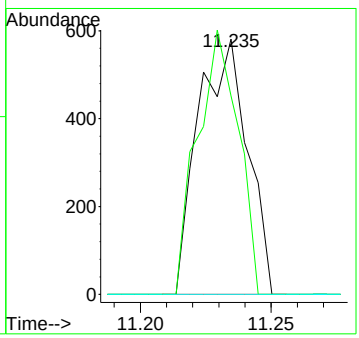




#122
1,2,3-trichlorobenzene
Concen: 0.24 ug/L
RT: 11.235 min Scan# 1945
Delta R.T. 0.011 min
Lab File: 2v83552.d
Acq: 13 Dec 2021 12:16 pm

Tgt Ion:180 Resp: 762

Ion	Ratio	Lower	Upper
180	100		
182	77.8	65.9	125.9
184	0.0	1.1	61.1#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12152021\v2v3446\
Data File : 2v83605.d
Acq On : 14 Dec 2021 12:22 pm
Operator : nickw
Sample : mb Inst : MS2V
Misc : MS37677,V2V3446,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 14 20:31:47 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

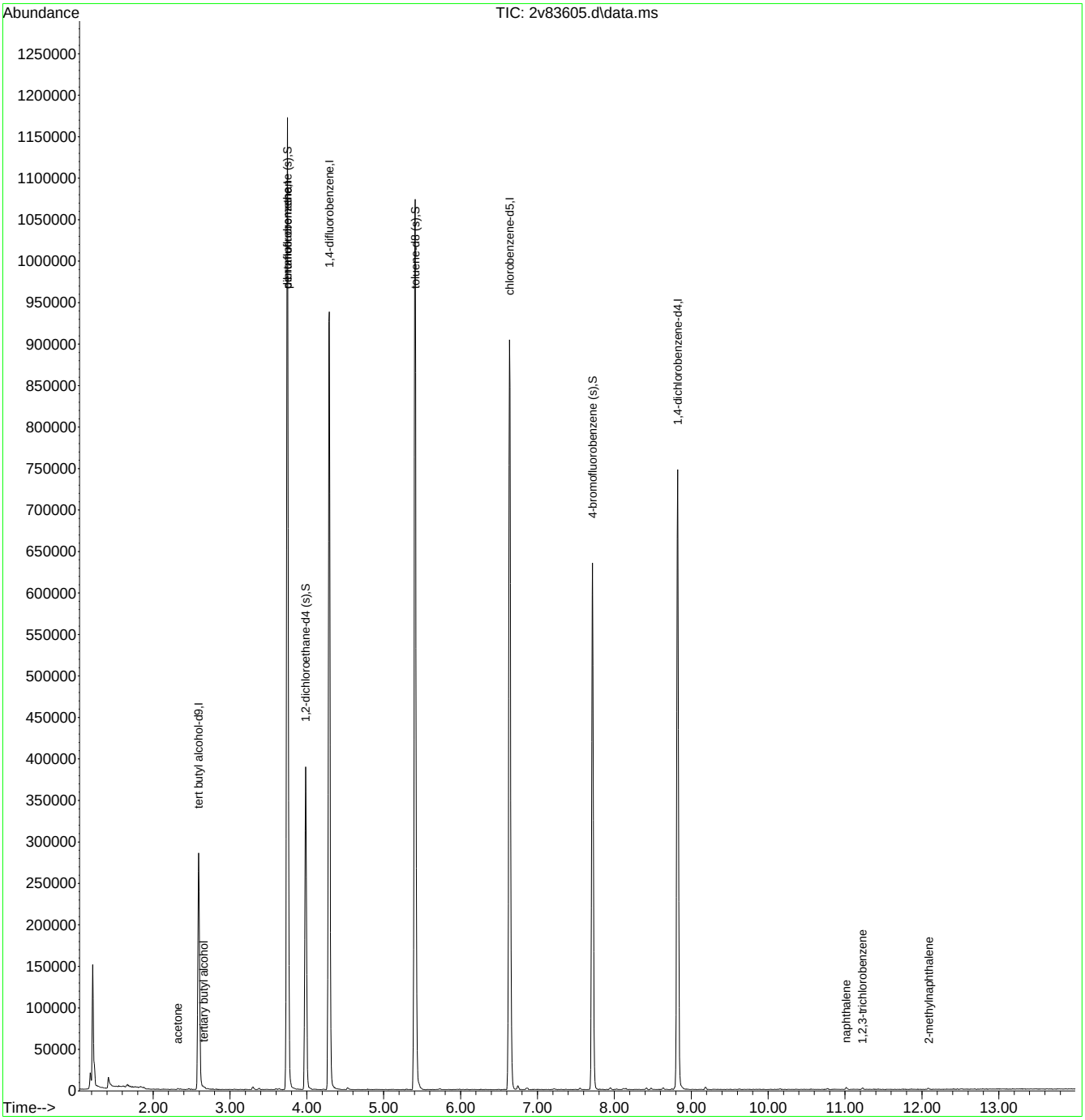
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	2.594	65	240698	500.00	ug/L		0.00
5) pentafluorobenzene	3.747	168	427973	50.00	ug/L		0.00
50) 1,4-difluorobenzene	4.293	114	603164	50.00	ug/L		0.00
72) chlorobenzene-d5	6.636	117	454984	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	8.823	152	183319	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	3.747	113	184173	46.42	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 92.84%				
51) 1,2-dichloroethane-d4 (s)	3.983	65	209277	54.09	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 108.18%				
73) toluene-d8 (s)	5.409	98	602559	52.39	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.78%				
97) 4-bromofluorobenzene (s)	7.716	95	200252	47.88	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.76%				
Target Compounds							Qvalue
3) tertiary butyl alcohol	2.657	59	998	1.08	ug/L		62
18) acetone	2.321	43	1240	0.48	ug/L		74
121) naphthalene	11.014	128	2693	0.25	ug/L		85
122) 1,2,3-trichlorobenzene	11.224	180	832	0.26	ug/L	#	84
123) 2-methylnaphthalene	12.089	142	715	0.36	ug/L	#	60

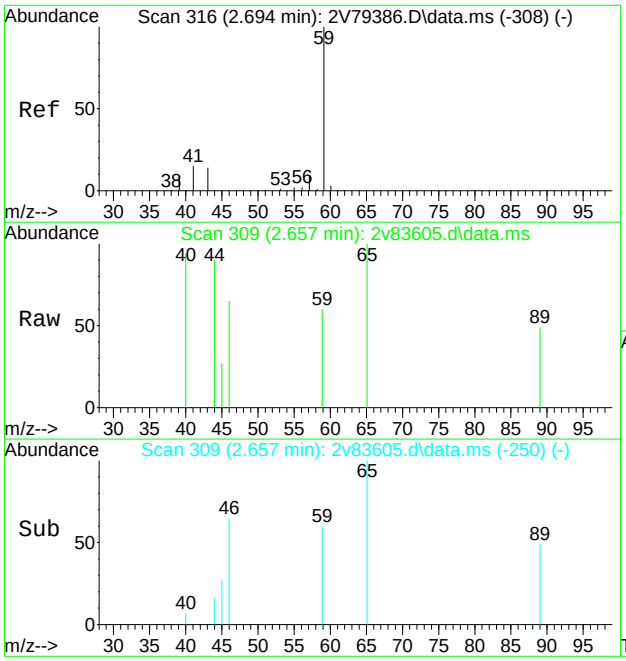
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12152021\v2v3446\
Data File : 2v83605.d
Acq On : 14 Dec 2021 12:22 pm
Operator : nickw
Sample : mb Inst : MS2V
Misc : MS37677,V2V3446,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 14 20:31:47 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

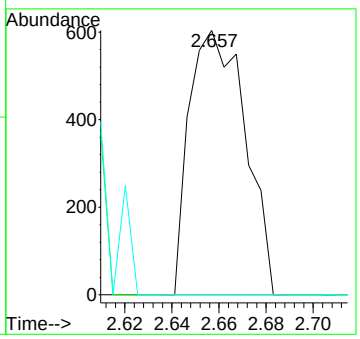


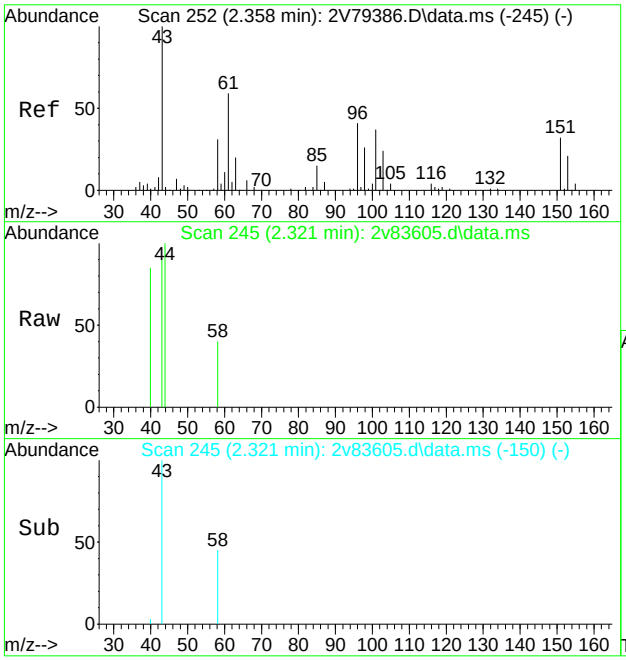


#3
tertiary butyl alcohol
Concen: 1.08 ug/L
RT: 2.657 min Scan# 309
Delta R.T. 0.011 min
Lab File: 2v83605.d
Acq: 14 Dec 2021 12:22 pm

Tgt Ion: 59 Resp: 998

Ion	Ratio	Lower	Upper
59	100		
41	0.0	0.0	48.5
43	0.0	0.0	43.9

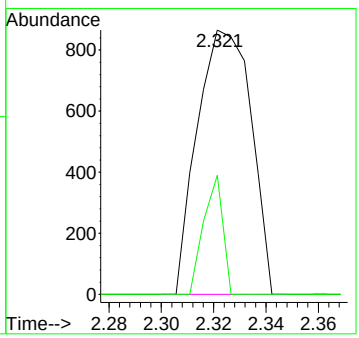


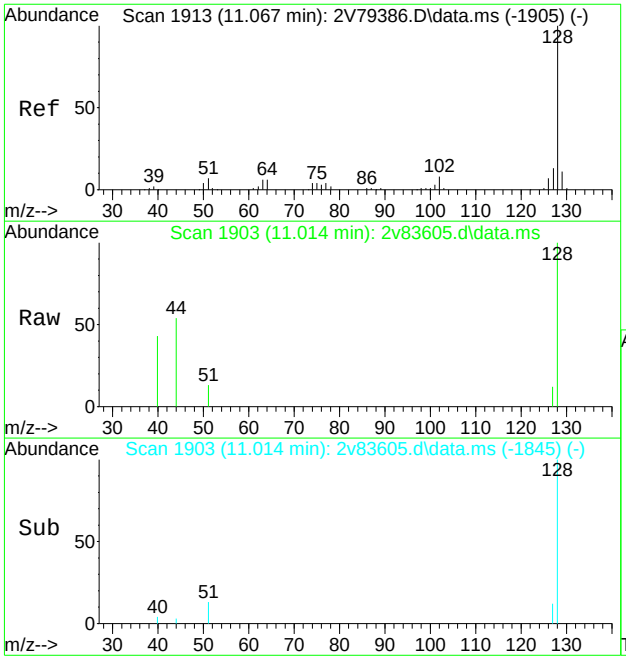


#18
acetone
Concen: 0.48 ug/L
RT: 2.321 min Scan# 245
Delta R.T. 0.000 min
Lab File: 2v83605.d
Acq: 14 Dec 2021 12:22 pm

Tgt Ion: 43 Resp: 1240

Ion	Ratio	Lower	Upper
43	100		
58	45.0	0.9	60.9

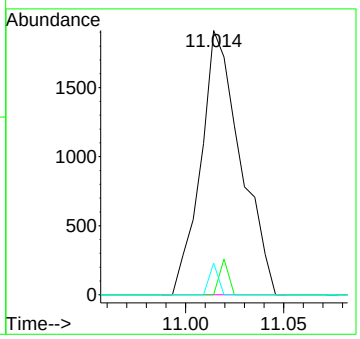


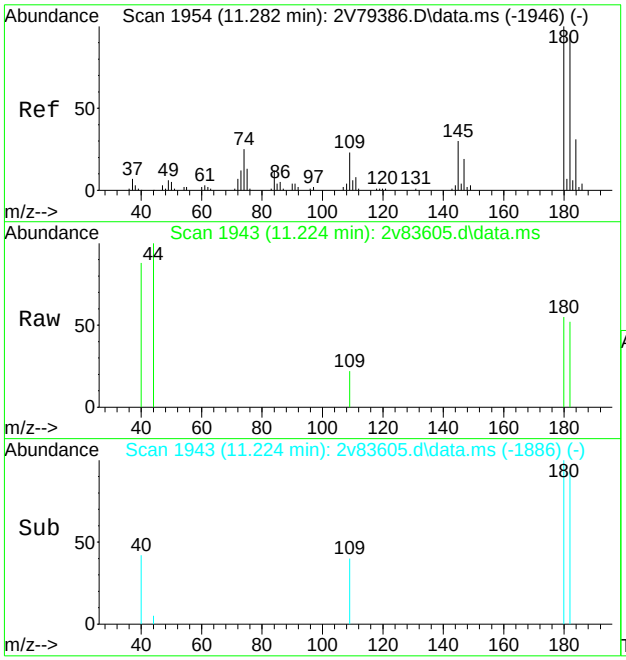


#121
naphthalene
Concen: 0.25 ug/L
RT: 11.014 min Scan# 1903
Delta R.T. 0.005 min
Lab File: 2v83605.d
Acq: 14 Dec 2021 12:22 pm

Tgt Ion:128 Resp: 2693

Ion	Ratio	Lower	Upper
128	100		
129	0.0	0.0	40.9
127	12.0	0.0	43.1

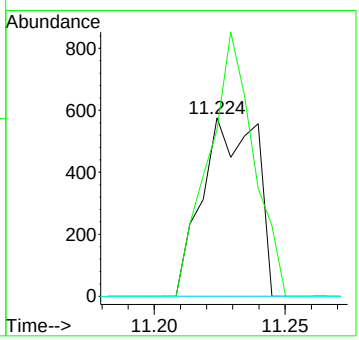


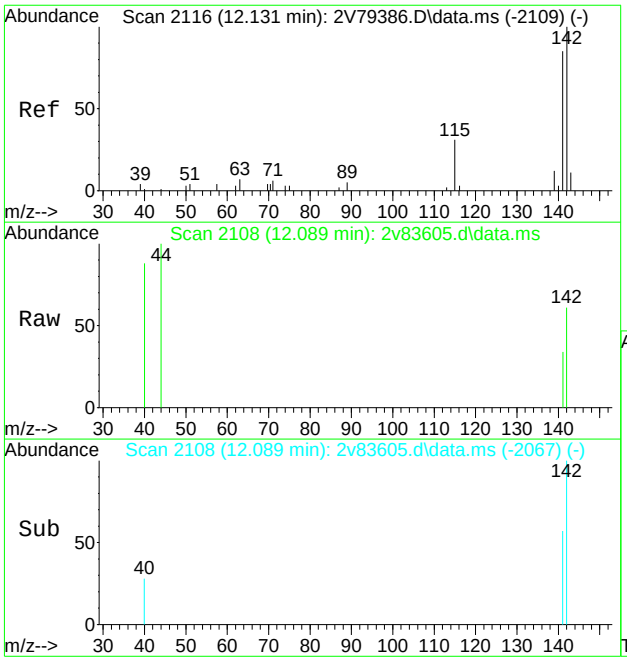


#122
1,2,3-trichlorobenzene
Concen: 0.26 ug/L
RT: 11.224 min Scan# 1943
Delta R.T. 0.000 min
Lab File: 2v83605.d
Acq: 14 Dec 2021 12:22 pm

Tgt Ion:180 Resp: 832

Ion	Ratio	Lower	Upper
180	100		
182	93.2	65.9	125.9
184	0.0	1.1	61.1#

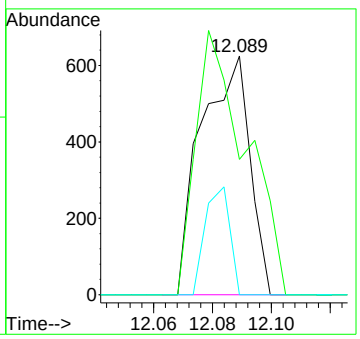




#123
2-methylnaphthalene
Concen: 0.36 ug/L
RT: 12.089 min Scan# 2108
Delta R.T. 0.016 min
Lab File: 2v83605.d
Acq: 14 Dec 2021 12:22 pm

Tgt Ion:142 Resp: 715

Ion	Ratio	Lower	Upper
142	100		
141	56.6	69.0	109.0#
115	0.0	11.6	51.6#



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7263\
Data File : 3A167360.D
Acq On : 14 Dec 2021 11:54 am
Operator : BridgetK
Sample : mb
Misc : MS55395,V3A7263,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 14 14:13:05 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

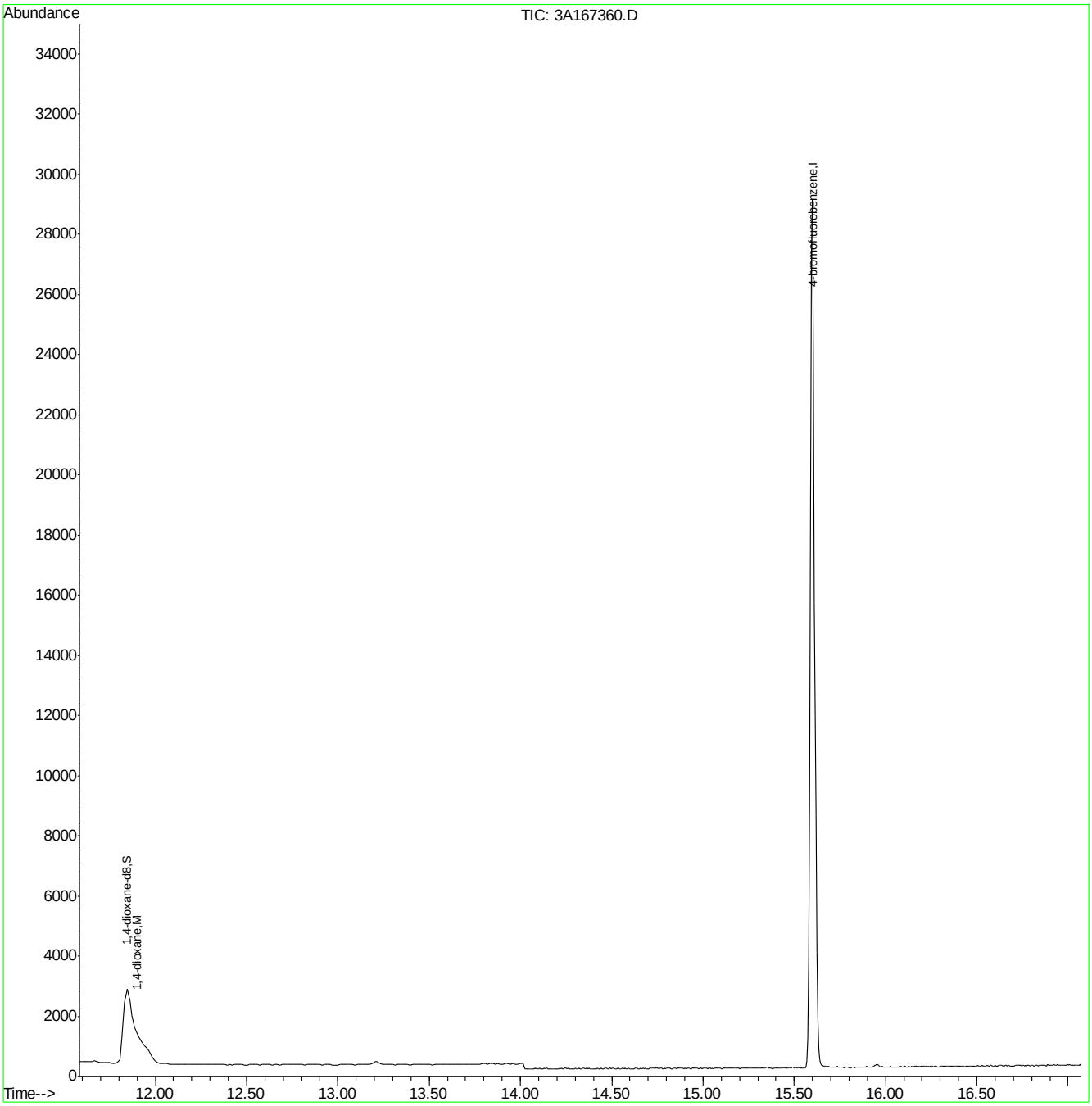
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	16075	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	7431	16.70	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 167.00%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	130	0.26	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

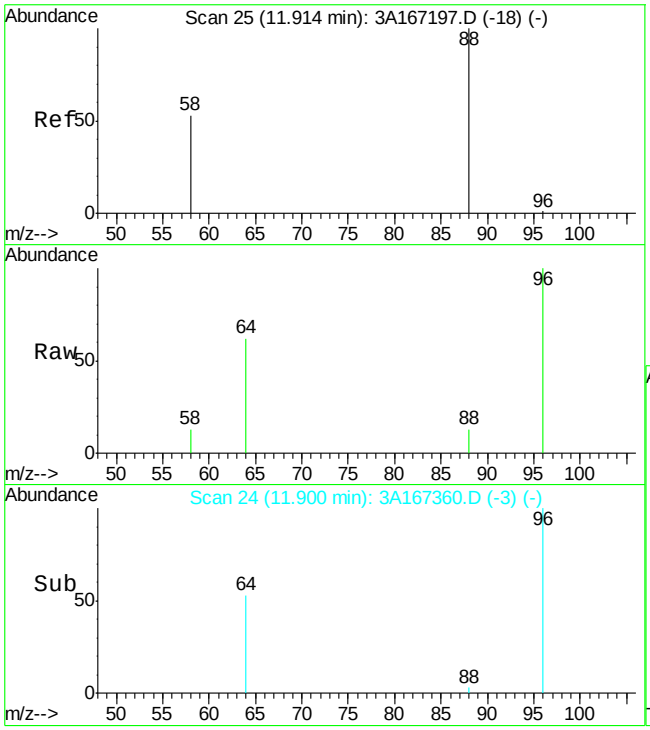
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7263\
Data File : 3A167360.D
Acq On : 14 Dec 2021 11:54 am
Operator : BridgetK
Sample : mb
Misc : MS55395,V3A7263,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 14 14:13:05 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



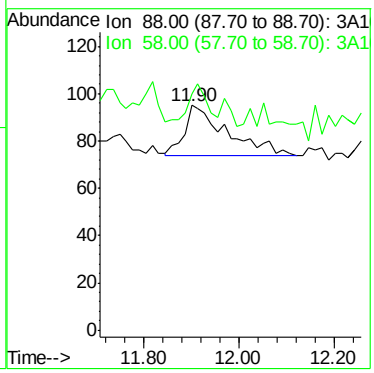
M3A7257.M Tue Dec 14 14:14:09 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 0.26 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167360.D
Acq: 14 Dec 2021 11:54 am

Tgt Ion: 88 Resp: 130

Ion	Ratio	Lower	Upper
88	100		
58	61.9	30.0	90.0



MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37045-MB1 [a]	5P80264.D	1	12/12/21	KLS	12/10/21	OP37045	E5P3799

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36319-2, JD36319-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.53	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37045-MB1 [a]	5P80264.D	1	12/12/21	KLS	12/10/21	OP37045	E5P3799

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36319-2, JD36319-3

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	1%* [b]	10-73%
4165-62-2	Phenol-d5	4%* [b]	10-64%
118-79-6	2,4,6-Tribromophenol	22%* [b]	31-130%
4165-60-0	Nitrobenzene-d5	38%	28-126%
321-60-8	2-Fluorobiphenyl	47%	26-114%
1718-51-0	Terphenyl-d14	58%	16-122%

(a) Surrogate recovery indicates possible low bias. Since balnk spike and samples recoveries are within control limits, data are qualified and reported.
(b) Outside of in house control limits.

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37046-MB1	5P80446.D	1	12/17/21	CS	12/13/21	OP37046	E5P3808

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36319-4, JD36319-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	2.4	2.0	0.53	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37046-MB1	5P80446.D	1	12/17/21	CS	12/13/21	OP37046	E5P3808

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36319-4, JD36319-5

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
91-20-3	Naphthalene	ND	1.0	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	38%	10-73%
4165-62-2	Phenol-d5	27%	10-64%
118-79-6	2,4,6-Tribromophenol	85%	31-130%
4165-60-0	Nitrobenzene-d5	65%	28-126%
321-60-8	2-Fluorobiphenyl	70%	26-114%
1718-51-0	Terphenyl-d14	94%	16-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	4.71	3.3	ug/l	J
	Internal standard added for SIM test	8.47	3.4	ug/l	J
	Internal standard added for SIM test	11.77	4.2	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37045A-MB1 [a]	4P49988.D	1	12/11/21	CS	12/10/21	OP37045A	E4P2619

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36319-2, JD36319-3

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	ND	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	ND	0.080	0.040	ug/l	
86-73-7	Fluorene	ND	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	ND	0.080	0.040	ug/l	
85-01-8	Phenanthrene	ND	0.080	0.040	ug/l	
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	1%* [b]	15-110%
4165-62-2	Phenol-d5	5%* [b]	12-110%
118-79-6	2,4,6-Tribromophenol	48%	32-143%
4165-60-0	Nitrobenzene-d5	69%	29-124%
321-60-8	2-Fluorobiphenyl	65%	23-122%
1718-51-0	Terphenyl-d14	89%	22-130%

(a) Surrogate recovery indicates possible low bias. Since balnk spike and samples recoveries are within control limits, data are qualified and reported.
(b) Outside of in house control limits.

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37046A-MB1	4P50103.D	1	12/15/21	CS	12/13/21	OP37046A	E4P2624

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36319-4, JD36319-5

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	ND	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	ND	0.080	0.040	ug/l	
86-73-7	Fluorene	0.0757	0.080	0.040	ug/l	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	0.0919	0.080	0.040	ug/l	
85-01-8	Phenanthrene	0.0719	0.080	0.040	ug/l	J
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	103%	29-124%
321-60-8	2-Fluorobiphenyl	89%	23-122%
1718-51-0	Terphenyl-d14	117%	22-130%

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37046A-MB1	4P50124.D	1	12/15/21	KLS	12/13/21	OP37046A	E4P2625

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36319-4, JD36319-5

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	ND	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	ND	0.080	0.040	ug/l	
86-73-7	Fluorene	0.0767	0.080	0.040	ug/l	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	0.0876	0.080	0.040	ug/l	
85-01-8	Phenanthrene	0.0739	0.080	0.040	ug/l	J
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	104%	29-124%
321-60-8	2-Fluorobiphenyl	86%	23-122%
1718-51-0	Terphenyl-d14	116%	22-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37045-BS1	5P80265.D	1	12/12/21	KLS	12/10/21	OP37045	E5P3799
OP37045-BSD	5P80266.D	1	12/12/21	KLS	12/10/21	OP37045	E5P3799

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36319-2, JD36319-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	40	21.8	55	17.1	43	24	33-102/34
59-50-7	4-Chloro-3-methyl phenol	40	25.2	63	21.5	54	16	46-113/28
120-83-2	2,4-Dichlorophenol	40	25.3	63	19.4	49	26	45-111/31
105-67-9	2,4-Dimethylphenol	40	23.0	58	18.4	46	22	39-124/30
51-28-5	2,4-Dinitrophenol	80	55.4	69	53.5	67	3	30-156/30
87-65-0	2,6-Dichlorophenol	40	25.1	63	20.1	50	22	45-114/28
534-52-1	4,6-Dinitro-o-cresol	40	28.3	71	28.8	72	2	41-138/29
95-48-7	2-Methylphenol	40	19.9	50	16.5	41	19	26-101/32
	3&4-Methylphenol	80	35.8	45	31.5	40	13	23-98/32
88-75-5	2-Nitrophenol	40	25.5	64	20.5	51	22	42-125/34
100-02-7	4-Nitrophenol	40	13.7	34	16.3	41	17	10-91/35
87-86-5	Pentachlorophenol	80	49.9	63	50.6	64	1	37-147/31
108-95-2	Phenol	40	10.6	27	9.6	24	10	10-77/35
58-90-2	2,3,4,6-Tetrachlorophenol	40	27.1	68	26.9	67	1	41-131/29
95-95-4	2,4,5-Trichlorophenol	40	26.4	66	23.5	59	12	39-125/28
88-06-2	2,4,6-Trichlorophenol	40	26.6	67	22.2	56	18	40-127/28
98-86-2	Acetophenone	40	24.0	60	19.2	48	22	44-110/30
62-53-3	Aniline	40	22.6	57	17.6	44	25	10-109/44
101-55-3	4-Bromophenyl phenyl ether	40	26.0	65	25.6	64	2	44-115/29
85-68-7	Butyl benzyl phthalate	40	28.5	71	28.8	72	1	49-121/29
100-51-6	Benzyl Alcohol	40	20.7	52	17.3	43	18	31-110/31
91-58-7	2-Chloronaphthalene	40	23.9	60	20.3	51	16	29-112/29
106-47-8	4-Chloroaniline	40	25.4	64	21.2	53	18	15-88/48
111-91-1	bis(2-Chloroethoxy)methane	40	24.1	60	19.2	48	23	44-115/29
111-44-4	bis(2-Chloroethyl)ether	40	22.9	57	17.6	44	26	38-116/32
7005-72-3	4-Chlorophenyl phenyl ether	40	24.7	62	23.3	58	6	35-119/28
121-14-2	2,4-Dinitrotoluene	40	28.2	71	29.4	74	4	47-128/27
606-20-2	2,6-Dinitrotoluene	40	27.2	68	27.3	68	0	48-127/28
91-94-1	3,3'-Dichlorobenzidine	40	23.3	58	25.0	62	7	18-103/38
132-64-9	Dibenzofuran	40	25.0	63	22.7	57	10	35-119/27
84-74-2	Di-n-butyl phthalate	40	28.0	70	28.7	72	2	50-122/29
117-84-0	Di-n-octyl phthalate	40	29.8	75	29.6	74	1	40-127/28
84-66-2	Diethyl phthalate	40	26.8	67	27.5	69	3	49-117/28
131-11-3	Dimethyl phthalate	40	26.1	65	25.7	64	2	49-114/28
117-81-7	bis(2-Ethylhexyl)phthalate	40	28.1	70	28.5	71	1	44-127/29
118-74-1	Hexachlorobenzene	40	25.2	63	24.8	62	2	46-113/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37045-BS1	5P80265.D	1	12/12/21	KLS	12/10/21	OP37045	E5P3799
OP37045-BSD	5P80266.D	1	12/12/21	KLS	12/10/21	OP37045	E5P3799

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36319-2, JD36319-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	40	22.5	56	17.8	45	23	17-111/37
77-47-4	Hexachlorocyclopentadiene	80	34.4	43	27.6	35	22	10-112/40
67-72-1	Hexachloroethane	40	21.7	54	16.3	41	28	18-101/38
78-59-1	Isophorone	40	24.4	61	19.5	49	22	47-119/28
91-57-6	2-Methylnaphthalene	40	24.4	61	19.8	50	21	30-116/32
88-74-4	2-Nitroaniline	40	24.7	62	23.9	60	3	35-133/28
99-09-2	3-Nitroaniline	40	26.2	66	27.8	70	6	31-102/39
100-01-6	4-Nitroaniline	40	26.1	65	28.6	72	9	51-118/30
98-95-3	Nitrobenzene	40	23.5	59	18.7	47	23	36-120/29
62-75-9	n-Nitrosodimethylamine	40	14.9	37	12.1	30	21	10-85/37
621-64-7	N-Nitroso-di-n-propylamine	40	22.6	57	18.6	47	19	41-118/30
86-30-6	N-Nitrosodiphenylamine	40	24.3	61	25.8	65	6	46-112/29
82-68-8	Pentachloronitrobenzene	40	28.6	72	29.3	73	2	43-126/28
110-86-1	Pyridine	40	15.0	38	10.9	27	32	10-78/57
95-94-3	1,2,4,5-Tetrachlorobenzene	40	23.5	59	19.9	50	17	20-114/31
120-82-1	1,2,4-Trichlorobenzene	40	22.7	57	17.8	45	24	24-104/33

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	37%	32%	10-73%
4165-62-2	Phenol-d5	24%	22%	10-64%
118-79-6	2,4,6-Tribromophenol	73%	74%	31-130%
4165-60-0	Nitrobenzene-d5	62%	50%	28-126%
321-60-8	2-Fluorobiphenyl	65%	56%	26-114%
1718-51-0	Terphenyl-d14	68%	73%	16-122%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37046-BS1	5P80447.D	1	12/17/21	CS	12/13/21	OP37046	E5P3808
OP37046-BSD	5P80448.D	1	12/17/21	CS	12/13/21	OP37046	E5P3808

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36319-4, JD36319-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	40	23.1	58	28.1	70	20	33-102/34
59-50-7	4-Chloro-3-methyl phenol	40	30.1	75	32.7	82	8	46-113/28
120-83-2	2,4-Dichlorophenol	40	25.9	65	31.7	79	20	45-111/31
105-67-9	2,4-Dimethylphenol	40	24.9	62	29.1	73	16	39-124/30
51-28-5	2,4-Dinitrophenol	80	71.4	89	74.2	93	4	30-156/30
87-65-0	2,6-Dichlorophenol	40	26.3	66	31.7	79	19	45-114/28
534-52-1	4,6-Dinitro-o-cresol	40	34.6	87	38.3	96	10	41-138/29
95-48-7	2-Methylphenol	40	23.7	59	25.5	64	7	26-101/32
	3&4-Methylphenol	80	47.9	60	49.6	62	3	23-98/32
88-75-5	2-Nitrophenol	40	26.2	66	32.4	81	21	42-125/34
100-02-7	4-Nitrophenol	40	31.4	79	22.9	57	31	10-91/35
87-86-5	Pentachlorophenol	80	59.9	75	65.9	83	10	37-147/31
108-95-2	Phenol	40	16.1	40	14.2	36	13	10-77/35
58-90-2	2,3,4,6-Tetrachlorophenol	40	32.6	82	35.7	89	9	41-131/29
95-95-4	2,4,5-Trichlorophenol	40	29.9	75	33.4	84	11	39-125/28
88-06-2	2,4,6-Trichlorophenol	40	28.3	71	32.7	82	14	40-127/28
98-86-2	Acetophenone	40	24.3	61	29.8	75	20	44-110/30
62-53-3	Aniline	40	ND	0* [a]	24.3	61	200* [b]	10-109/44
101-55-3	4-Bromophenyl phenyl ether	40	29.8	75	34.1	85	13	44-115/29
85-68-7	Butyl benzyl phthalate	40	36.9	92	38.8	97	5	49-121/29
100-51-6	Benzyl Alcohol	40	22.1	55	26.6	67	18	31-110/31
91-58-7	2-Chloronaphthalene	40	25.0	63	29.4	74	16	29-112/29
106-47-8	4-Chloroaniline	40	17.7	44	28.5	71	47	15-88/48
111-91-1	bis(2-Chloroethoxy)methane	40	23.5	59	28.6	72	20	44-115/29
111-44-4	bis(2-Chloroethyl)ether	40	21.6	54	27.0	68	22	38-116/32
7005-72-3	4-Chlorophenyl phenyl ether	40	27.7	69	31.7	79	13	35-119/28
121-14-2	2,4-Dinitrotoluene	40	33.9	85	37.1	93	9	47-128/27
606-20-2	2,6-Dinitrotoluene	40	32.6	82	36.3	91	11	48-127/28
91-94-1	3,3'-Dichlorobenzidine	40	29.3	74	31.0	78	6	18-103/38
132-64-9	Dibenzofuran	40	27.3	68	31.4	79	14	35-119/27
84-74-2	Di-n-butyl phthalate	40	40.4	101	39.2	98	3	50-122/29
117-84-0	Di-n-octyl phthalate	40	36.5	91	39.1	98	7	40-127/28
84-66-2	Diethyl phthalate	40	32.9	82	36.1	90	9	49-117/28
131-11-3	Dimethyl phthalate	40	30.4	76	33.8	85	11	49-114/28
117-81-7	bis(2-Ethylhexyl)phthalate	40	36.3	91	39.1	98	7	44-127/29
118-74-1	Hexachlorobenzene	40	29.5	74	33.1	83	12	46-113/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37046-BS1	5P80447.D	1	12/17/21	CS	12/13/21	OP37046	E5P3808
OP37046-BSD	5P80448.D	1	12/17/21	CS	12/13/21	OP37046	E5P3808

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36319-4, JD36319-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	40	20.8	52	26.6	67	24	17-111/37
77-47-4	Hexachlorocyclopentadiene	80	33.3	42	39.1	49	16	10-112/40
67-72-1	Hexachloroethane	40	19.4	49	25.3	63	26	18-101/38
78-59-1	Isophorone	40	24.2	61	29.5	74	20	47-119/28
91-57-6	2-Methylnaphthalene	40	26.0	65	30.4	76	16	30-116/32
88-74-4	2-Nitroaniline	40	29.9	75	32.8	82	9	35-133/28
99-09-2	3-Nitroaniline	40	31.9	80	33.1	83	4	31-102/39
100-01-6	4-Nitroaniline	40	34.3	86	35.5	89	3	51-118/30
91-20-3	Naphthalene	40	23.6	59	29.1	73	21	36-110/31
98-95-3	Nitrobenzene	40	23.4	59	27.9	70	18	36-120/29
62-75-9	n-Nitrosodimethylamine	40	14.9	37	18.4	46	21	10-85/37
621-64-7	N-Nitroso-di-n-propylamine	40	24.2	61	28.7	72	17	41-118/30
86-30-6	N-Nitrosodiphenylamine	40	31.1	78	33.3	83	7	46-112/29
82-68-8	Pentachloronitrobenzene	40	34.3	86	36.9	92	7	43-126/28
110-86-1	Pyridine	40	ND	0* [a]	16.3	41	200* [b]	10-78/57
95-94-3	1,2,4,5-Tetrachlorobenzene	40	23.4	59	28.4	71	19	20-114/31
120-82-1	1,2,4-Trichlorobenzene	40	21.7	54	27.6	69	24	24-104/33

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	59%	49%	10-73%
4165-62-2	Phenol-d5	48%	33%	10-64%
118-79-6	2,4,6-Tribromophenol	93%	94%	31-130%
4165-60-0	Nitrobenzene-d5	66%	73%	28-126%
321-60-8	2-Fluorobiphenyl	71%	74%	26-114%
1718-51-0	Terphenyl-d14	93%	88%	16-122%

(a) Outside of in house control limits.
(b) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37045A-BS12	4P49989.D	1	12/11/21	CS	12/10/21	OP37045A	E4P2619
OP37045A-BSD12	4P49990.D	1	12/11/21	CS	12/10/21	OP37045A	E4P2619

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36319-2, JD36319-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	0.8	0.667	83	0.538	67	21	31-135/38
208-96-8	Acenaphthylene	0.8	0.424	53	0.363	45	16	28-130/42
120-12-7	Anthracene	0.8	0.605	76	0.560	70	8	40-125/32
56-55-3	Benzo(a)anthracene	0.8	0.570	71	0.513	64	11	38-132/31
50-32-8	Benzo(a)pyrene	0.8	0.661	83	0.606	76	9	31-110/37
205-99-2	Benzo(b)fluoranthene	0.8	0.773	97	0.722	90	7	31-113/37
191-24-2	Benzo(g,h,i)perylene	0.8	0.477	60	0.413	52	14	18-110/54
207-08-9	Benzo(k)fluoranthene	0.8	0.716	90	0.704	88	2	31-119/43
218-01-9	Chrysene	0.8	0.612	77	0.576	72	6	43-119/33
53-70-3	Dibenzo(a,h)anthracene	0.8	0.517	65	0.452	57	13	20-112/50
206-44-0	Fluoranthene	0.8	0.690	86	0.678	85	2	48-118/27
86-73-7	Fluorene	0.8	0.665	83	0.571	71	15	42-123/34
193-39-5	Indeno(1,2,3-cd)pyrene	0.8	0.461	58	0.399	50	14	18-113/49
91-20-3	Naphthalene	0.8	0.584	73	0.492	62	17	30-114/40
85-01-8	Phenanthrene	0.8	0.649	81	0.598	75	8	45-125/31
129-00-0	Pyrene	0.8	0.613	77	0.586	73	5	48-125/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	56%	43%	15-110%
4165-62-2	Phenol-d5	39%	28%	12-110%
118-79-6	2,4,6-Tribromophenol	141%	119%	32-143%
4165-60-0	Nitrobenzene-d5	117%	95%	29-124%
321-60-8	2-Fluorobiphenyl	97%	78%	23-122%
1718-51-0	Terphenyl-d14	112%	102%	22-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37046A-BS12	4P50125.D	1	12/15/21	KLS	12/13/21	OP37046A	E4P2625
OP37046A-BSD12	4P50126.D	1	12/15/21	KLS	12/13/21	OP37046A	E4P2625

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36319-4, JD36319-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	0.8	0.550	69	0.675	84	20	31-135/38
208-96-8	Acenaphthylene	0.8	0.371	46	0.448	56	19	28-130/42
120-12-7	Anthracene	0.8	0.594	74	0.713	89	18	40-125/32
56-55-3	Benzo(a)anthracene	0.8	0.669	84	0.620	78	8	38-132/31
50-32-8	Benzo(a)pyrene	0.8	0.821	103	0.774	97	6	31-110/37
205-99-2	Benzo(b)fluoranthene	0.8	0.901	113	0.842	105	7	31-113/37
191-24-2	Benzo(g,h,i)perylene	0.8	0.635	79	0.617	77	3	18-110/54
207-08-9	Benzo(k)fluoranthene	0.8	0.819	102	0.804	101	2	31-119/43
218-01-9	Chrysene	0.8	0.665	83	0.636	80	4	43-119/33
53-70-3	Dibenzo(a,h)anthracene	0.8	0.659	82	0.644	81	2	20-112/50
206-44-0	Fluoranthene	0.8	0.723	90	0.728	91	1	48-118/27
86-73-7	Fluorene	0.8	0.595	74	0.735	92	21	42-123/34
193-39-5	Indeno(1,2,3-cd)pyrene	0.8	0.615	77	0.605	76	2	18-113/49
91-20-3	Naphthalene	0.8	0.472	59	0.578	72	20	30-114/40
85-01-8	Phenanthrene	0.8	0.614	77	0.736	92	18	45-125/31
129-00-0	Pyrene	0.8	0.642	80	0.667	83	4	48-125/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
4165-60-0	Nitrobenzene-d5	90%	111%	29-124%
321-60-8	2-Fluorobiphenyl	73%	88%	23-122%
1718-51-0	Terphenyl-d14	106%	101%	22-130%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-DFTPP
Lab File ID: 4P48502.D
Instrument ID: GCMS4P
Injection Date: 10/20/21
Injection Time: 22:19

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	23059	30.3		Pass
68	Less than 2.0% of mass 69	101	0.13	(0.34) [a]	Pass
69	Mass 69 relative abundance	29864	39.3		Pass
70	Less than 2.0% of mass 69	124	0.16	(0.42) [a]	Pass
127	40.0 - 60.0% of mass 198	30794	40.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	76018	100.0		Pass
199	5.0 - 9.0% of mass 198	5791	7.62		Pass
275	10.0 - 30.0% of mass 198	18191	23.9		Pass
365	1.0 - 100.0% of mass 198	1857	2.44		Pass
441	Present, but less than mass 443	4086	5.38	(39.2) [b]	Pass
442	40.0 - 100.0% of mass 198	51528	67.8		Pass
443	17.0 - 23.0% of mass 442	10411	13.7	(20.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2551-IC2551	4P48504.D	10/20/21	22:59	00:40	Initial cal 1
E4P2551-ICC2551	4P48505.D	10/20/21	23:23	01:04	Initial cal 0.2
E4P2551-IC2551	4P48506.D	10/20/21	23:46	01:27	Initial cal 0.02
E4P2551-IC2551	4P48507.D	10/21/21	00:10	01:51	Initial cal 0.5
E4P2551-IC2551	4P48508.D	10/21/21	00:33	02:14	Initial cal 0.1
E4P2551-IC2551	4P48509.D	10/21/21	00:57	02:38	Initial cal 0.004
E4P2551-IC2551	4P48511.D	10/21/21	01:44	03:25	Initial cal 0.04
E4P2551-IC2551	4P48513.D	10/21/21	02:16	03:57	Initial cal 0.002
E4P2551-IC2551	4P48514.D	10/21/21	02:39	04:20	Initial cal 0.01
E4P2551-ICV2551	4P48512.D	10/21/21	03:15	04:56	Initial cal verification 0.2
OP35848A-BSD12	4P48515.D	10/21/21	03:45	05:26	Blank Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2619-DFTPP
Lab File ID: 4P49980.D
Instrument ID: GCMS4P
Injection Date: 12/11/21
Injection Time: 02:36

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22849	43.3		Pass
68	Less than 2.0% of mass 69	100	0.19	(0.35) [a]	Pass
69	Mass 69 relative abundance	28564	54.1		Pass
70	Less than 2.0% of mass 69	213	0.40	(0.75) [a]	Pass
127	40.0 - 60.0% of mass 198	26187	49.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	52816	100.0		Pass
199	5.0 - 9.0% of mass 198	4130	7.82		Pass
275	10.0 - 30.0% of mass 198	12916	24.5		Pass
365	1.0 - 100.0% of mass 198	1639	3.10		Pass
441	Present, but less than mass 443	4884	9.25	(82.0) [b]	Pass
442	40.0 - 100.0% of mass 198	31472	59.6		Pass
443	17.0 - 23.0% of mass 442	5953	11.3	(18.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2619-CC2551	4P49983.D	12/11/21	03:42	01:06	Continuing cal 0.2
OP36997A-MB1	4P49985A.D	12/11/21	04:41	02:05	Method Blank
OP36997A-BS12	4P49986.D	12/11/21	05:05	02:29	Blank Spike
OP36997A-BSD12	4P49987.D	12/11/21	05:29	02:53	Blank Spike Duplicate
OP37045A-MB1	4P49988.D	12/11/21	05:52	03:16	Method Blank
OP37045A-BS12	4P49989.D	12/11/21	06:15	03:39	Blank Spike
OP37045A-BSD12	4P49990.D	12/11/21	06:39	04:03	Blank Spike Duplicate
ZZZZZZ	4P49991.D	12/11/21	07:03	04:27	(unrelated sample)
ZZZZZZ	4P49992.D	12/11/21	07:26	04:50	(unrelated sample)
ZZZZZZ	4P49993.D	12/11/21	07:50	05:14	(unrelated sample)
ZZZZZZ	4P49994.D	12/11/21	08:14	05:38	(unrelated sample)
ZZZZZZ	4P49995.D	12/11/21	08:38	06:02	(unrelated sample)
ZZZZZZ	4P49996.D	12/11/21	09:01	06:25	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2620-DFTPP
Lab File ID: 4P50022.D
Instrument ID: GCMS4P
Injection Date: 12/12/21
Injection Time: 10:16

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	35484	42.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	43828	52.7		Pass
70	Less than 2.0% of mass 69	296	0.36	(0.68) [a]	Pass
127	40.0 - 60.0% of mass 198	38142	45.8		Pass
197	Less than 1.0% of mass 198	522	0.63		Pass
198	Base peak, 100% relative abundance	83208	100.0		Pass
199	5.0 - 9.0% of mass 198	5685	6.83		Pass
275	10.0 - 30.0% of mass 198	18426	22.1		Pass
365	1.0 - 100.0% of mass 198	2907	3.49		Pass
441	Present, but less than mass 443	7011	8.43	(81.0) [b]	Pass
442	40.0 - 100.0% of mass 198	46029	55.3		Pass
443	17.0 - 23.0% of mass 442	8654	10.4	(18.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2620-CC2551	4P50023.D	12/12/21	10:42	00:26	Continuing cal 0.1
OP37001A-MB1	4P50024.D	12/12/21	11:20	01:04	Method Blank
OP37001A-BS12	4P50025.D	12/12/21	11:43	01:27	Blank Spike
ZZZZZZ	4P50026.D	12/12/21	12:15	01:59	(unrelated sample)
ZZZZZZ	4P50027A.D	12/12/21	12:47	02:31	(unrelated sample)
JD36109-3	4P50028.D	12/12/21	13:10	02:54	(used for QC only; not part of job JD36319)
ZZZZZZ	4P50029.D	12/12/21	13:33	03:17	(unrelated sample)
ZZZZZZ	4P50030.D	12/12/21	13:57	03:41	(unrelated sample)
ZZZZZZ	4P50031.D	12/12/21	14:20	04:04	(unrelated sample)
OP37001A-MS	4P50032.D	12/12/21	14:44	04:28	Matrix Spike
OP37001A-MSD	4P50033.D	12/12/21	15:07	04:51	Matrix Spike Duplicate
ZZZZZZ	4P50034.D	12/12/21	15:31	05:15	(unrelated sample)
ZZZZZZ	4P50035.D	12/12/21	15:54	05:38	(unrelated sample)
ZZZZZZ	4P50036.D	12/12/21	16:18	06:02	(unrelated sample)
ZZZZZZ	4P50037.D	12/12/21	16:42	06:26	(unrelated sample)
ZZZZZZ	4P50038.D	12/12/21	17:05	06:49	(unrelated sample)
JD36319-2	4P50039.D	12/12/21	17:29	07:13	HOFF MW-A
JD36319-3	4P50040.D	12/12/21	17:52	07:36	HOFF MW-10
ZZZZZZ	4P50041.D	12/12/21	18:16	08:00	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2620-DFTPP	**Injection Date:**	12/12/21
Lab File ID:	4P50022.D	**Injection Time:**	10:16
Instrument ID:	GCMS4P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4P50042.D	12/12/21	18:40	08:24	(unrelated sample)
ZZZZZZ	4P50043.D	12/12/21	19:03	08:47	(unrelated sample)
ZZZZZZ	4P50044.D	12/12/21	19:27	09:11	(unrelated sample)
ZZZZZZ	4P50045.D	12/12/21	19:50	09:34	(unrelated sample)
ZZZZZZ	4P50046.D	12/12/21	20:14	09:58	(unrelated sample)
ZZZZZZ	4P50047.D	12/12/21	20:37	10:21	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2624-DFTPP
Lab File ID: 4P50100.D
Instrument ID: GCMS4P
Injection Date: 12/15/21
Injection Time: 02:15

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	26883	40.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	35677	53.6		Pass
70	Less than 2.0% of mass 69	220	0.33	(0.62) [a]	Pass
127	40.0 - 60.0% of mass 198	29341	44.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	66603	100.0		Pass
199	5.0 - 9.0% of mass 198	4684	7.03		Pass
275	10.0 - 30.0% of mass 198	16127	24.2		Pass
365	1.0 - 100.0% of mass 198	2359	3.54		Pass
441	Present, but less than mass 443	5815	8.73	(81.8) [b]	Pass
442	40.0 - 100.0% of mass 198	36688	55.1		Pass
443	17.0 - 23.0% of mass 442	7108	10.7	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2624-CC2551	4P50101.D	12/15/21	02:28	00:13	Continuing cal 0.1
OP37046A-MB1	4P50103.D	12/15/21	03:39	01:24	Method Blank
ZZZZZZ	4P50106.D	12/15/21	04:50	02:35	(unrelated sample)
ZZZZZZ	4P50107.D	12/15/21	05:13	02:58	(unrelated sample)
ZZZZZZ	4P50108.D	12/15/21	05:37	03:22	(unrelated sample)
ZZZZZZ	4P50109.D	12/15/21	06:00	03:45	(unrelated sample)
ZZZZZZ	4P50110.D	12/15/21	06:24	04:09	(unrelated sample)
ZZZZZZ	4P50111.D	12/15/21	06:48	04:33	(unrelated sample)
ZZZZZZ	4P50112.D	12/15/21	07:11	04:56	(unrelated sample)
ZZZZZZ	4P50113.D	12/15/21	07:34	05:19	(unrelated sample)
ZZZZZZ	4P50115.D	12/15/21	08:21	06:06	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2625-DFTPP	**Injection Date:**	12/15/21
Lab File ID:	4P50117.D	**Injection Time:**	15:07
Instrument ID:	GCMS4P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22529	42.7		Pass
68	Less than 2.0% of mass 69	319	0.60	(1.20) [a]	Pass
69	Mass 69 relative abundance	26667	50.5		Pass
70	Less than 2.0% of mass 69	168	0.32	(0.63) [a]	Pass
127	40.0 - 60.0% of mass 198	25389	48.1		Pass
197	Less than 1.0% of mass 198	156	0.30		Pass
198	Base peak, 100% relative abundance	52763	100.0		Pass
199	5.0 - 9.0% of mass 198	3609	6.84		Pass
275	10.0 - 30.0% of mass 198	14010	26.6		Pass
365	1.0 - 100.0% of mass 198	2200	4.17		Pass
441	Present, but less than mass 443	4830	9.15	(77.8) [b]	Pass
442	40.0 - 100.0% of mass 198	32240	61.1		Pass
443	17.0 - 23.0% of mass 442	6208	11.8	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2625-CC2551	4P50120.D	12/15/21	16:36	01:29	Continuing cal 0.2
OP37091A-MB1	4P50121.D	12/15/21	17:19	02:12	Method Blank
OP37091A-BS12	4P50122.D	12/15/21	17:47	02:40	Blank Spike
OP37091A-BSD12	4P50123.D	12/15/21	18:10	03:03	Blank Spike Duplicate
OP37046A-MB1	4P50124.D	12/15/21	18:34	03:27	Method Blank
OP37046A-BS12	4P50125.D	12/15/21	18:57	03:50	Blank Spike
OP37046A-BSD12	4P50126.D	12/15/21	19:21	04:14	Blank Spike Duplicate
OP37017A-MB1	4P50127.D	12/15/21	19:45	04:38	Method Blank
OP37017A-BS12	4P50128.D	12/15/21	20:08	05:01	Blank Spike
OP37017A-BSD12	4P50129.D	12/15/21	20:32	05:25	Blank Spike Duplicate
ZZZZZZ	4P50130.D	12/15/21	20:56	05:49	(unrelated sample)
ZZZZZZ	4P50131.D	12/15/21	21:20	06:13	(unrelated sample)
ZZZZZZ	4P50132.D	12/15/21	21:43	06:36	(unrelated sample)
ZZZZZZ	4P50133.D	12/15/21	22:07	07:00	(unrelated sample)
ZZZZZZ	4P50134.D	12/15/21	22:31	07:24	(unrelated sample)
JD36319-4	4P50135.D	12/15/21	22:54	07:47	HOFF MW-8DL
JD36319-5	4P50136.D	12/15/21	23:18	08:11	HOFF MW-8DU
ZZZZZZ	4P50137.D	12/15/21	23:42	08:35	(unrelated sample)
ZZZZZZ	4P50138.D	12/16/21	00:05	08:58	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2625-DFTPP	**Injection Date:**	12/15/21
Lab File ID:	4P50117.D	**Injection Time:**	15:07
Instrument ID:	GCMS4P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4P50139.D	12/16/21	00:29	09:22	(unrelated sample)
ZZZZZZ	4P50140.D	12/16/21	00:53	09:46	(unrelated sample)
ZZZZZZ	4P50141.D	12/16/21	01:17	10:10	(unrelated sample)
ZZZZZZ	4P50142.D	12/16/21	01:41	10:34	(unrelated sample)
ZZZZZZ	4P50143.D	12/16/21	02:05	10:58	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-DFTPP
Lab File ID: 5P79956.D
Instrument ID: GCMS5P
Injection Date: 12/01/21
Injection Time: 21:49

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	91864	30.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	101906	33.7		Pass
70	Less than 2.0% of mass 69	672	0.22	(0.66) [a]	Pass
127	40.0 - 60.0% of mass 198	141221	46.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	302357	100.0		Pass
199	5.0 - 9.0% of mass 198	20705	6.85		Pass
275	10.0 - 30.0% of mass 198	84325	27.9		Pass
365	1.0 - 100.0% of mass 198	10108	3.34		Pass
441	Present, but less than mass 443	30682	10.1	(84.2) [b]	Pass
442	40.0 - 100.0% of mass 198	191162	63.2		Pass
443	17.0 - 23.0% of mass 442	36428	12.0	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3785-IC3785	5P79957.D	12/01/21	22:09	00:20	Initial cal 20
E5P3785-IC3785	5P79958.D	12/01/21	22:36	00:47	Initial cal 16
E5P3785-ICC3785	5P79959.D	12/01/21	23:02	01:13	Initial cal 10
E5P3785-IC3785	5P79960.D	12/01/21	23:30	01:41	Initial cal 5
E5P3785-IC3785	5P79961.D	12/01/21	23:57	02:08	Initial cal 2
E5P3785-IC3785	5P79962.D	12/02/21	00:24	02:35	Initial cal 1
E5P3785-IC3785	5P79963.D	12/02/21	00:51	03:02	Initial cal 0.4
E5P3785-IC3785	5P79964.D	12/02/21	01:17	03:28	Initial cal 0.2
E5P3785-ICV3785	5P79965.D	12/02/21	01:45	03:56	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-DFTPP
Lab File ID: 5P80176.D
Instrument ID: GCMS5P
Injection Date: 12/09/21
Injection Time: 00:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18190	31.0		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	21015	35.8		Pass
70	Less than 2.0% of mass 69	84	0.14	(0.40) [a]	Pass
127	40.0 - 60.0% of mass 198	29550	50.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	58650	100.0		Pass
199	5.0 - 9.0% of mass 198	3881	6.62		Pass
275	10.0 - 30.0% of mass 198	14712	25.1		Pass
365	1.0 - 100.0% of mass 198	1822	3.11		Pass
441	Present, but less than mass 443	5848	9.97	(82.8) [b]	Pass
442	40.0 - 100.0% of mass 198	36738	62.6		Pass
443	17.0 - 23.0% of mass 442	7065	12.0	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3794-IC3794	5P80177.D	12/09/21	01:11	00:18	Initial cal 0.2
E5P3794-IC3794	5P80178.D	12/09/21	01:38	00:45	Initial cal 0.4
E5P3794-IC3794	5P80179.D	12/09/21	02:05	01:12	Initial cal 1
E5P3794-IC3794	5P80180.D	12/09/21	02:32	01:39	Initial cal 2
E5P3794-IC3794	5P80181.D	12/09/21	02:59	02:06	Initial cal 5
E5P3794-ICC3794	5P80182.D	12/09/21	03:26	02:33	Initial cal 10
E5P3794-IC3794	5P80183.D	12/09/21	03:53	03:00	Initial cal 16
E5P3794-IC3794	5P80184.D	12/09/21	04:19	03:26	Initial cal 20
E5P3794-ICV3794	5P80185.D	12/09/21	04:47	03:54	Initial cal verification 10
E5P3794-ICV3794	5P80186.D	12/09/21	05:13	04:20	Initial cal verification 10
E5P3794-ICV3794	5P80187.D	12/09/21	05:40	04:47	Initial cal verification 10
E5P3794-ICV3794	5P80188.D	12/09/21	06:07	05:14	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3795-DFTPP
Lab File ID: 5P80191.D
Instrument ID: GCMS5P
Injection Date: 12/09/21
Injection Time: 12:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18799	32.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	21518	37.4		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	28913	50.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	57581	100.0		Pass
199	5.0 - 9.0% of mass 198	3946	6.85		Pass
275	10.0 - 30.0% of mass 198	14549	25.3		Pass
365	1.0 - 100.0% of mass 198	1899	3.30		Pass
441	Present, but less than mass 443	5422	9.42	(86.8) [b]	Pass
442	40.0 - 100.0% of mass 198	32893	57.1		Pass
443	17.0 - 23.0% of mass 442	6248	10.9	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3795-ICV3794	5P80192.D	12/09/21	12:58	00:14	Initial cal verification 10
E5P3795-CC3794	5P80193.D	12/09/21	13:25	00:41	Continuing cal 10
E5P3795-CC3785	5P80194.D	12/09/21	13:51	01:07	Continuing cal 10
OP36390-MB1	5P80195.D	12/09/21	14:46	02:02	Method Blank
OP36390-BS1	5P80196.D	12/09/21	15:13	02:29	Blank Spike
OP36390-BSD	5P80197.D	12/09/21	15:40	02:56	Blank Spike Duplicate
ZZZZZZ	5P80198.D	12/09/21	16:07	03:23	(unrelated sample)
E5P3795-ECC3794	5P80199.D	12/09/21	16:57	04:13	Ending cal 10
E5P3795-ECC3785	5P80200.D	12/09/21	17:36	04:52	Ending cal 10

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3799-DFTPP
Lab File ID: 5P80258.D
Instrument ID: GCMS5P
Injection Date: 12/12/21
Injection Time: 10:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	20084	30.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	23418	35.2		Pass
70	Less than 2.0% of mass 69	86	0.13	(0.37) [a]	Pass
127	40.0 - 60.0% of mass 198	33448	50.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	66453	100.0		Pass
199	5.0 - 9.0% of mass 198	4542	6.83		Pass
275	10.0 - 30.0% of mass 198	15521	23.4		Pass
365	1.0 - 100.0% of mass 198	1914	2.88		Pass
441	Present, but less than mass 443	5380	8.10	(82.1) [b]	Pass
442	40.0 - 100.0% of mass 198	35023	52.7		Pass
443	17.0 - 23.0% of mass 442	6549	9.86	(18.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3799-CC3794	5P80259.D	12/12/21	11:09	00:21	Continuing cal 5
E5P3799-CC3785	5P80260.D	12/12/21	11:44	00:56	Continuing cal 5
OP36953-MB1	5P80261.D	12/12/21	12:31	01:43	Method Blank
ZZZZZZ	5P80262.D	12/12/21	12:58	02:10	(unrelated sample)
OP36953-BS1	5P80263.D	12/12/21	13:25	02:37	Blank Spike
OP37045-MB1	5P80264.D	12/12/21	13:52	03:04	Method Blank
OP37045-BS1	5P80265.D	12/12/21	14:19	03:31	Blank Spike
OP37045-BSD	5P80266.D	12/12/21	14:46	03:58	Blank Spike Duplicate
ZZZZZZ	5P80267.D	12/12/21	15:13	04:25	(unrelated sample)
ZZZZZZ	5P80268.D	12/12/21	15:40	04:52	(unrelated sample)
JD36087-3	5P80269.D	12/12/21	16:07	05:19	(used for QC only; not part of job JD36319)
ZZZZZZ	5P80270.D	12/12/21	16:34	05:46	(unrelated sample)
ZZZZZZ	5P80271.D	12/12/21	17:01	06:13	(unrelated sample)
ZZZZZZ	5P80272.D	12/12/21	17:28	06:40	(unrelated sample)
ZZZZZZ	5P80273.D	12/12/21	17:54	07:06	(unrelated sample)
ZZZZZZ	5P80274.D	12/12/21	18:21	07:33	(unrelated sample)
ZZZZZZ	5P80275.D	12/12/21	18:48	08:00	(unrelated sample)
ZZZZZZ	5P80276.D	12/12/21	19:15	08:27	(unrelated sample)
ZZZZZZ	5P80277.D	12/12/21	19:42	08:54	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3799-DFTPP	**Injection Date:**	12/12/21
Lab File ID:	5P80258.D	**Injection Time:**	10:48
Instrument ID:	GCMS5P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP36953-MS	5P80278.D	12/12/21	20:08	09:20	Matrix Spike
OP36953-MSD	5P80279.D	12/12/21	20:35	09:47	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3808-DFTPP
Lab File ID: 5P80437.D
Instrument ID: GCMS5P
Injection Date: 12/16/21
Injection Time: 22:29

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	13519	31.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	17326	40.0		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	23610	54.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	43349	100.0		Pass
199	5.0 - 9.0% of mass 198	3015	6.96		Pass
275	10.0 - 30.0% of mass 198	10857	25.0		Pass
365	1.0 - 100.0% of mass 198	1462	3.37		Pass
441	Present, but less than mass 443	4157	9.59	(79.4) [b]	Pass
442	40.0 - 100.0% of mass 198	26084	60.2		Pass
443	17.0 - 23.0% of mass 442	5235	12.1	(20.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3808-CC3794	5P80438.D	12/16/21	22:47	00:18	Continuing cal 10
E5P3808-CC3785	5P80439.D	12/16/21	23:14	00:45	Continuing cal 10
OP36997-MB1	5P80440.D	12/16/21	23:57	01:28	Method Blank
OP36997-BS1	5P80441.D	12/17/21	00:24	01:55	Blank Spike
OP36997-BSD	5P80442.D	12/17/21	00:51	02:22	Blank Spike Duplicate
OP37091-BS1	5P80444.D	12/17/21	01:45	03:16	Blank Spike
OP37091-BSD	5P80445.D	12/17/21	02:13	03:44	Blank Spike Duplicate
OP37046B-MB1	5P80446.D	12/17/21	02:40	04:11	Method Blank
OP37046-MB1	5P80446.D	12/17/21	02:40	04:11	Method Blank
OP37046-BS1	5P80447.D	12/17/21	03:08	04:39	Blank Spike
OP37046B-BS1	5P80447.D	12/17/21	03:08	04:39	Blank Spike
OP37046-BSD	5P80448.D	12/17/21	03:35	05:06	Blank Spike Duplicate
OP37046B-BSD	5P80448.D	12/17/21	03:35	05:06	Blank Spike Duplicate
ZZZZZZ	5P80449.D	12/17/21	04:02	05:33	(unrelated sample)
ZZZZZZ	5P80450.D	12/17/21	04:29	06:00	(unrelated sample)
ZZZZZZ	5P80451.D	12/17/21	04:56	06:27	(unrelated sample)
ZZZZZZ	5P80452.D	12/17/21	05:23	06:54	(unrelated sample)
ZZZZZZ	5P80453.D	12/17/21	05:50	07:21	(unrelated sample)
ZZZZZZ	5P80454.D	12/17/21	06:17	07:48	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3808-DFTPP	**Injection Date:**	12/16/21
Lab File ID:	5P80437.D	**Injection Time:**	22:29
Instrument ID:	GCMS5P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	5P80455.D	12/17/21	06:44	08:15	(unrelated sample)
ZZZZZZ	5P80456.D	12/17/21	07:11	08:42	(unrelated sample)
JD36319-4	5P80457.D	12/17/21	07:38	09:09	HOFF MW-8DL
ZZZZZZ	5P80458.D	12/17/21	08:05	09:36	(unrelated sample)
ZZZZZZ	5P80459A.D	12/17/21	09:26	10:57	(unrelated sample)
ZZZZZZ	5P80461.D	12/17/21	10:19	11:50	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3811-DFTPP
Lab File ID: 5P80502.D
Instrument ID: GCMS5P
Injection Date: 12/20/21
Injection Time: 09:29

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	13624	33.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	16563	41.1		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	21819	54.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	40336	100.0		Pass
199	5.0 - 9.0% of mass 198	2677	6.64		Pass
275	10.0 - 30.0% of mass 198	10189	25.3		Pass
365	1.0 - 100.0% of mass 198	1336	3.31		Pass
441	Present, but less than mass 443	3885	9.63	(84.7) [b]	Pass
442	40.0 - 100.0% of mass 198	23124	57.3		Pass
443	17.0 - 23.0% of mass 442	4589	11.4	(19.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3811-CC3794	5P80503.D	12/20/21	10:03	00:34	Continuing cal 10
E5P3811-CC3785	5P80504.D	12/20/21	10:31	01:02	Continuing cal 10
OP37151A-MB1	5P80506.D	12/20/21	11:48	02:19	Method Blank
OP37151A-BS1	5P80507.D	12/20/21	12:14	02:45	Blank Spike
OP37151A-BSD	5P80508.D	12/20/21	12:41	03:12	Blank Spike Duplicate
ZZZZZZ	5P80509.D	12/20/21	13:07	03:38	(unrelated sample)
ZZZZZZ	5P80510.D	12/20/21	13:34	04:05	(unrelated sample)
ZZZZZZ	5P80513.D	12/20/21	15:02	05:33	(unrelated sample)
ZZZZZZ	5P80514.D	12/20/21	15:28	05:59	(unrelated sample)
ZZZZZZ	5P80515.D	12/20/21	15:55	06:26	(unrelated sample)
ZZZZZZ	5P80516.D	12/20/21	16:22	06:53	(unrelated sample)
ZZZZZZ	5P80517.D	12/20/21	16:48	07:19	(unrelated sample)
ZZZZZZ	5P80518.D	12/20/21	17:15	07:46	(unrelated sample)
ZZZZZZ	5P80519.D	12/20/21	17:42	08:13	(unrelated sample)
ZZZZZZ	5P80520.D	12/20/21	18:08	08:39	(unrelated sample)
ZZZZZZ	5P80521.D	12/20/21	18:35	09:06	(unrelated sample)
ZZZZZZ	5P80523.D	12/20/21	19:28	09:59	(unrelated sample)
ZZZZZZ	5P80524.D	12/20/21	19:55	10:26	(unrelated sample)
JD36319-5	5P80525.D	12/20/21	20:21	10:52	HOFF MW-8DU

Instrument Performance Check (DFTPP)

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3819-DFTPP	**Injection Date:**	12/28/21
Lab File ID:	5P80648.D	**Injection Time:**	14:52
Instrument ID:	GCMS5P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	27569	34.0		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	33509	41.3		Pass
70	Less than 2.0% of mass 69	67	0.08	(0.20) [a]	Pass
127	40.0 - 60.0% of mass 198	46533	57.4		Pass
197	Less than 1.0% of mass 198	787	0.97		Pass
198	Base peak, 100% relative abundance	81064	100.0		Pass
199	5.0 - 9.0% of mass 198	5470	6.75		Pass
275	10.0 - 30.0% of mass 198	21809	26.9		Pass
365	1.0 - 100.0% of mass 198	3516	4.34		Pass
441	Present, but less than mass 443	6512	8.03	(85.2) [b]	Pass
442	40.0 - 100.0% of mass 198	38450	47.4		Pass
443	17.0 - 23.0% of mass 442	7645	9.43	(19.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3819-CC3794	5P80649.D	12/28/21	15:06	00:14	Continuing cal 5
E5P3819-CC3785	5P80650.D	12/28/21	15:34	00:42	Continuing cal 5
OP37111-MB1	5P80652.D	12/28/21	16:35	01:43	Method Blank
ZZZZZZ	5P80655.D	12/28/21	17:56	03:04	(unrelated sample)
JD36319-2	5P80656.D	12/28/21	18:23	03:31	HOFF MW-A
JD36319-3	5P80657.D	12/28/21	18:50	03:58	HOFF MW-10
ZZZZZZ	5P80658.D	12/28/21	19:17	04:25	(unrelated sample)
ZZZZZZ	5P80659.D	12/28/21	19:44	04:52	(unrelated sample)
ZZZZZZ	5P80663.D	12/28/21	21:31	06:39	(unrelated sample)
ZZZZZZ	5P80670.D	12/29/21	00:39	09:47	(unrelated sample)
ZZZZZZ	5P80671.D	12/29/21	01:06	10:14	(unrelated sample)

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2619-CC2551	**Injection Date:**	12/11/21
Lab File ID:	4P49983.D	**Injection Time:**	03:42
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	20395	6.85	31685	8.33	60084	10.46	30684	13.12
Upper Limit [a]	40790	7.35	63370	8.83	120168	10.96	61368	13.62
Lower Limit [b]	10198	6.35	15843	7.83	30042	9.96	15342	12.62

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP36997A-MB1	14468	6.85	21790	8.34	40502	10.46	20101	13.12
OP36997A-BS12	15842	6.85	23161	8.34	41583	10.46	18442	13.12
OP36997A-BSD12	16198	6.85	23762	8.34	41566	10.46	18348	13.12
OP37045A-MB1 [c]	14983	6.85	22144	8.34	39773	10.46	18503	13.12
OP37045A-BS12	15286	6.85	22760	8.34	41165	10.46	19835	13.12
OP37045A-BSD12	14794	6.85	22003	8.34	40189	10.46	18676	13.12
ZZZZZZ	15814	6.85	23499	8.34	43706	10.46	20517	13.12
ZZZZZZ	14508	6.85	22061	8.34	40021	10.46	18120	13.12
ZZZZZZ	16701	6.85	25065	8.34	45094	10.46	20595	13.12
ZZZZZZ	16565	6.85	24733	8.34	44927	10.46	20364	13.12
ZZZZZZ	16864	6.85	24723	8.34	41169	10.46	17603	13.12
ZZZZZZ	16535	6.85	24220	8.34	42189	10.46	18877	13.12

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Surrogate recovery indicates possible low bias. Since balnk spike and samples recoveries are within control limits, data are qualified and reported.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2620-CC2551	**Injection Date:**	12/12/21
Lab File ID:	4P50023.D	**Injection Time:**	10:42
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	24063	6.84	38217	8.32	74397	10.45	35390	13.11
Upper Limit [a]	48126	7.34	76434	8.82	148794	10.95	70780	13.61
Lower Limit [b]	12032	6.34	19109	7.82	37199	9.95	17695	12.61

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37001A-MB1	19138	6.85	32471	8.33	57895	10.45	27371	13.11
OP37001A-BS12	18964	6.84	31780	8.32	56794	10.45	27531	13.11
ZZZZZZ	19491	6.85	32080	8.33	55632	10.45	25822	13.11
ZZZZZZ	21010	6.84	35178	8.33	60695	10.45	28009	13.11
JD36109-3	20610	6.84	34128	8.32	58756	10.45	26792	13.11
ZZZZZZ	21715	6.84	35695	8.32	60536	10.45	27144	13.11
ZZZZZZ	22291	6.84	33776	8.32	56078	10.45	25333	13.11
ZZZZZZ	23060	6.84	37077	8.32	62233	10.45	28354	13.11
OP37001A-MS	20572	6.85	31874	8.33	53000	10.45	24538	13.11
OP37001A-MSD	21015	6.84	33008	8.33	55052	10.45	25146	13.11
ZZZZZZ	20260	6.84	32219	8.32	53184	10.45	22288	13.11
ZZZZZZ	20109	6.84	31954	8.32	52302	10.45	22211	13.11
ZZZZZZ	17883	6.84	29069	8.32	51580	10.45	22152	13.11
ZZZZZZ	18196	6.84	29341	8.32	51537	10.45	21768	13.11
ZZZZZZ	18579	6.84	30029	8.32	52151	10.45	22325	13.11
JD36319-2	21057	6.84	30593	8.32	45200	10.45	17980	13.11
JD36319-3	20852	6.84	41545	8.33	45962	10.45	19231	13.11
ZZZZZZ	19346	6.84	30499	8.32	51834	10.45	21233	13.11
ZZZZZZ	17724	6.84	27537	8.32	44839	10.45	18238	13.11
ZZZZZZ	20541	6.84	32121	8.32	53646	10.45	22013	13.11
ZZZZZZ	18937	6.84	30017	8.32	50465	10.45	19799	13.11
ZZZZZZ	19472	6.84	30848	8.32	50475	10.45	19170	13.11
ZZZZZZ	18208	6.84	27328	8.32	40915	10.45	16475[c]	13.11
ZZZZZZ	19221	6.84	25538	8.32	35468[c]	10.45	18687	13.11

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Internal standard failing low.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2624-CC2551	**Injection Date:**	12/15/21
Lab File ID:	4P50101.D	**Injection Time:**	02:28
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	21810	6.81	32250	8.28	56626	10.41	28345	13.07
Upper Limit [a]	43620	7.31	64500	8.78	113252	10.91	56690	13.57
Lower Limit [b]	10905	6.31	16125	7.78	28313	9.91	14173	12.57

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37046A-MB1	14075	6.81	20237	8.28	35219	10.41	16013	13.07
ZZZZZZ	15880	6.81	22687	8.28	37475	10.41	16215	13.07
ZZZZZZ	16387	6.81	23584	8.28	40350	10.41	17928	13.07
ZZZZZZ	14503	6.81	21418	8.28	36992	10.41	17132	13.07
ZZZZZZ	14820	6.81	22383	8.28	39072	10.41	17315	13.07
ZZZZZZ	14137	6.81	20480	8.28	34957	10.41	16019	13.07
ZZZZZZ	17664	6.81	25913	8.28	43280	10.41	19281	13.07
ZZZZZZ	16349	6.81	23490	8.28	40855	10.41	18902	13.07
ZZZZZZ	15235	6.81	21970	8.28	36781	10.41	16808	13.07
ZZZZZZ	16875	6.81	27710	8.29	42080	10.42	20118	13.08

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2625-CC2551	**Injection Date:**	12/15/21
Lab File ID:	4P50120.D	**Injection Time:**	16:36
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	21955	6.81	32962	8.28	58398	10.41	30861	13.07
Upper Limit [a]	43910	7.31	65924	8.78	116796	10.91	61722	13.57
Lower Limit [b]	10978	6.31	16481	7.78	29199	9.91	15431	12.57

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37091A-MB1	15920	6.81	23228	8.29	41466	10.41	21459	13.07
OP37091A-BS12	16268	6.81	24585	8.28	42414	10.41	21994	13.07
OP37091A-BSD12	15687	6.81	23523	8.29	41328	10.41	21022	13.07
OP37046A-MB1	15641	6.81	23038	8.28	39977	10.41	18813	13.07
OP37046A-BS12	15709	6.81	23339	8.28	41376	10.41	20110	13.07
OP37046A-BSD12	15199	6.81	22471	8.28	39759	10.41	18682	13.07
OP37017A-MB1	17314	6.81	25849	8.29	45764	10.41	23256	13.07
OP37017A-BS12	16929	6.82	24220	8.29	37534	10.41	16903	13.07
OP37017A-BSD12	15818	6.81	23916	8.29	38654	10.41	17916	13.07
ZZZZZZ	15330	6.82	22905	8.29	41008	10.41	20375	13.07
ZZZZZZ	44226[c]	6.82	68112[c]	8.29	121443[c]	10.41	61000[c]	13.07
ZZZZZZ	14963	6.82	23753	8.29	39815	10.41	20053	13.07
ZZZZZZ	17169	6.82	32935	8.29	38044	10.41	19854	13.07
ZZZZZZ	18482	6.82	27810	8.29	47608	10.41	23169	13.07
JD36319-4	15834	6.82	23125	8.29	41906	10.44	18789	13.08
JD36319-5	16776	6.82	25386	8.29	52464	10.44	19477	13.08
ZZZZZZ	15505	6.82	23558	8.29	39536	10.41	18491	13.08
ZZZZZZ	19896	6.82	29500	8.29	48469	10.41	24438	13.08
ZZZZZZ	18406	6.82	27428	8.29	46631	10.41	23127	13.08
ZZZZZZ	17749	6.82	26215	8.29	44264	10.41	22650	13.08
ZZZZZZ	17747	6.82	25990	8.29	42968	10.41	21608	13.08
ZZZZZZ	17464	6.82	25903	8.29	43423	10.42	22017	13.08
ZZZZZZ	16062	6.82	23950	8.29	40822	10.41	20205	13.08

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Internal standard double spiked; The recovery re-calculated based on the spike amount.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E5P3799-CC3794	**Injection Date:**	12/12/21
Lab File ID:	5P80259.D	**Injection Time:**	11:09
Instrument ID:	GCMS5P	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	79959	4.63	302891	5.71	178485	7.79	306240	9.97	270750	14.16	270303	16.27
Upper Limit [a]	159918	5.13	605782	6.21	356970	8.29	612480	10.47	541500	14.66	540606	16.77
Lower Limit [b]	39980	4.13	151446	5.21	89243	7.29	153120	9.47	135375	13.66	135152	15.77
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP36953-MB1	87846	4.62	326204	5.71	179437	7.79	322516	9.97	269697	14.16	253538	16.27
ZZZZZZ	91890	4.62	347173	5.71	194484	7.79	352788	9.97	301524	14.16	288800	16.27
OP36953-BS1	87303	4.62	327828	5.71	181633	7.79	311806	9.97	276904	14.16	280401	16.27
OP37045-MB1 [c]	98373	4.62	372613	5.71	202219	7.79	368745	9.97	317308	14.16	304839	16.27
OP37045-BS1	82660	4.62	314552	5.71	179867	7.79	309587	9.97	275952	14.16	268918	16.27
OP37045-BSD	73853	4.62	275175	5.71	153310	7.79	263290	9.97	237174	14.16	229838	16.27
ZZZZZZ	72795	4.63	272859	5.71	150422	7.79	267052	9.97	235236	14.16	223670	16.27
ZZZZZZ	78523	4.63	258981	5.73	189915	7.79	338808	9.97	293052	14.16	275609	16.27
JD36087-3	57418	4.62	208956	5.71	125557	7.79	218737	9.97	162568	14.17	168727	16.27
ZZZZZZ	51933	4.62	178360	5.71	116526	7.79	201501	9.97	153344	14.16	150126	16.27
ZZZZZZ	69595	4.63	271747	5.73	173238	7.79	298403	9.97	243808	14.16	251299	16.27
ZZZZZZ	64437	4.63	238260	5.72	153305	7.79	270736	9.97	222400	14.16	223931	16.27
ZZZZZZ	70342	4.63	232808	5.72	153357	7.79	260860	9.97	213704	14.17	221416	16.27
ZZZZZZ	98635	4.62	379466	5.71	205175	7.79	351519	9.97	294161	14.16	289490	16.27
ZZZZZZ	100573	4.62	402657	5.71	223098	7.79	376844	9.97	319390	14.16	320526	16.27
ZZZZZZ	96995	4.63	316059	5.72	212474	7.79	365201	9.97	312821	14.16	309808	16.27
ZZZZZZ	89105	4.63	289480	5.73	204365	7.79	348888	9.97	306674	14.16	303983	16.27
OP36953-MS	55541	4.62	200419	5.71	120718	7.79	200185	9.97	148266	14.17	168867	16.28
OP36953-MSD	81722	4.62	296091	5.71	166292	7.79	271746	9.97	216417	14.18	257481	16.28

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-d10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Surrogate recovery indicates possible low bias. Since balnk spike and samples recoveries are within control limits, data are qualified and reported.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E5P3808-CC3794	**Injection Date:**	12/16/21
Lab File ID:	5P80438.D	**Injection Time:**	22:47
Instrument ID:	GCMS5P	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	65627	4.59	255548	5.67	153860	7.74	267800	9.91	233477	14.10	238603	16.21
Upper Limit [a]	131254	5.09	511096	6.17	307720	8.24	535600	10.41	466954	14.60	477206	16.71
Lower Limit [b]	32814	4.09	127774	5.17	76930	7.24	133900	9.41	116739	13.60	119302	15.71

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP36997-MB1	67926	4.59	259058	5.67	148809	7.73	259769	9.91	220445	14.10	214193	16.20
OP36997-BS1	60709	4.59	229090	5.67	135261	7.73	231283	9.91	194948	14.10	199723	16.20
OP36997-BSD	62026	4.59	236199	5.67	139170	7.73	239199	9.91	203900	14.10	209313	16.21
OP37091-BS1	57579	4.59	219391	5.67	127779	7.73	221412	9.91	192478	14.10	195346	16.20
OP37091-BSD	60520	4.59	228022	5.67	135207	7.73	226318	9.91	197821	14.10	203556	16.20
OP37046B-MB1	73994	4.59	288846	5.67	163911	7.73	291845	9.91	249056	14.09	241333	16.20
OP37046-MB1	73994	4.59	288846	5.67	163911	7.73	291845	9.91	249056	14.09	241333	16.20
OP37046-BS1	59085	4.59	224122	5.67	132246	7.73	225971	9.91	197095	14.10	196620	16.20
OP37046B-BS1	59085	4.59	224122	5.67	132246	7.73	225971	9.91	197095	14.10	196620	16.20
OP37046-BSD	67254	4.59	261021	5.67	154284	7.73	262263	9.91	232743	14.10	231760	16.21
OP37046B-BSD	67254	4.59	261021	5.67	154284	7.73	262263	9.91	232743	14.10	231760	16.21
ZZZZZZ	63765	4.59	247552	5.67	141683	7.73	250347	9.91	210738	14.09	202412	16.20
ZZZZZZ	65874	4.59	260095	5.67	147573	7.73	257182	9.91	220657	14.09	212827	16.20
ZZZZZZ	66956	4.59	262022	5.67	152690	7.73	271154	9.91	233892	14.09	227254	16.20
ZZZZZZ	64686	4.59	257261	5.67	151790	7.73	266248	9.91	225521	14.09	227500	16.20
ZZZZZZ	70438	4.59	260936	5.67	144331	7.73	254001	9.91	223794	14.09	222601	16.20
ZZZZZZ	74565	4.59	253340	5.67	138596	7.73	243487	9.91	220373	14.10	225533	16.20
ZZZZZZ	71193	4.59	276625	5.67	158365	7.73	279478	9.91	238120	14.09	222609	16.20
ZZZZZZ	65928	4.59	255112	5.67	148834	7.73	265426	9.91	225599	14.09	212920	16.20
JD36319-4	50271	4.59	195457	5.67	138639	7.73	197009	9.91	191721	14.10	224050	16.21
ZZZZZZ	70332	4.59	289105	5.67	175639	7.74	325146	9.91	275818	14.10	294282	16.21
ZZZZZZ	55025	4.59	217400	5.67	144536	7.73	259375	9.91	218445	14.10	212680	16.21
ZZZZZZ	71164	4.59	277300	5.67	156260	7.73	275186	9.91	228853	14.10	223656	16.20

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-d10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E5P3811-CC3794	**Injection Date:**	12/20/21
Lab File ID:	5P80503.D	**Injection Time:**	10:03
Instrument ID:	GCMS5P	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	65647	4.58	243353	5.67	150829	7.73	272579	9.91	244965	14.10	268982	16.21
Upper Limit [a]	131294	5.08	486706	6.17	301658	8.23	545158	10.41	489930	14.60	537964	16.71
Lower Limit [b]	32824	4.08	121677	5.17	75415	7.23	136290	9.41	122483	13.60	134491	15.71

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP37151A-MB1	61393	4.58	231665	5.67	126803	7.72	217445	9.90	188376	14.09	193597	16.20
OP37151A-BS1	69867	4.58	252103	5.67	147803	7.73	255174	9.91	223425	14.09	231289	16.20
OP37151A-BSD	75517	4.58	282177	5.67	162274	7.73	279322	9.91	245984	14.09	241884	16.20
ZZZZZZ	75631	4.58	286979	5.67	160952	7.73	279910	9.90	242062	14.09	230214	16.20
ZZZZZZ	78276	4.58	303816	5.67	162597	7.73	277147	9.90	230812	14.09	236472	16.20
ZZZZZZ	71676	4.58	273427	5.67	152291	7.72	264005	9.90	222755	14.09	214321	16.20
ZZZZZZ	86177	4.58	327803	5.67	181988	7.72	309416	9.90	257112	14.09	260168	16.20
ZZZZZZ	85796	4.58	293746	5.67	148770	7.73	281195	9.91	241269	14.09	249421	16.20
ZZZZZZ	89002	4.58	330867	5.67	184342	7.73	309887	9.90	249125	14.09	236314	16.20
ZZZZZZ	82429	4.58	311625	5.67	176248	7.73	299552	9.90	247551	14.09	229391	16.20
ZZZZZZ	80470	4.58	304942	5.67	169942	7.72	292810	9.90	236469	14.09	220155	16.20
ZZZZZZ	90858	4.58	311361	5.67	168418	7.73	289361	9.91	303929	14.10	311178	16.21
ZZZZZZ	71771	4.59	275259	5.67	163483	7.73	283514	9.91	214295	14.09	191437	16.20
ZZZZZZ	47810	4.58	181792	5.67	105141	7.73	213914	9.91	363975	14.11	309115	16.22
ZZZZZZ	62225	4.58	262582	5.67	168923	7.73	309213	9.91	316041	14.10	308298	16.21
ZZZZZZ	63903	4.59	250733	5.67	171335	7.73	330702	9.91	333104	14.10	325989	16.21
JD36319-5	60552	4.58	244126	5.67	168603	7.73	324442	9.91	458794	14.11	379250	16.22

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-d10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E5P3819-CC3794	**Injection Date:**	12/28/21
Lab File ID:	5P80649.D	**Injection Time:**	15:06
Instrument ID:	GCMS5P	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	76363	4.42	293464	5.46	189318	7.46	325523	9.60	286276	13.75	293455	15.85
Upper Limit [a]	152726	4.92	586928	5.96	378636	7.96	651046	10.10	572552	14.25	586910	16.35
Lower Limit [b]	38182	3.92	146732	4.96	94659	6.96	162762	9.10	143138	13.25	146728	15.35

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP37111-MB1	62249	4.42	244346	5.46	153913	7.46	277898	9.60	249520	13.75	254506	15.85
ZZZZZZ	78721	4.42	310151	5.46	188124	7.46	355797	9.60	313200	13.75	301336	15.85
JD36319-2	102850	4.42	381050	5.46	193076	7.46	302164	9.60	194356	13.75	192612	15.86
JD36319-3	85415	4.42	336605	5.46	187499	7.46	320972	9.60	268720	13.75	259730	15.86
ZZZZZZ	83174	4.42	333791	5.46	204141	7.46	369031	9.60	309107	13.75	298029	15.86
ZZZZZZ	69423	4.42	275921	5.46	172354	7.46	325284	9.60	276165	13.75	275024	15.86
ZZZZZZ	71056	4.42	295986	5.46	198454	7.46	349346	9.60	276143	13.75	271968	15.85
ZZZZZZ	94384	4.42	370011	5.46	218035	7.46	366914	9.60	283529	13.75	261821	15.85
ZZZZZZ	102281	4.42	399906	5.46	232962	7.46	388934	9.60	294860	13.75	269412	15.86

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-d10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8270E **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD36319-2	5P80656.D	32	20	86	67	76	75
JD36319-3	5P80657.D	35	22	90	69	73	62
JD36319-4	5P80457.D	22	18	91	60	56	52
JD36319-5	5P80525.D	20	15	63	60	60	48
OP37045-BS1	5P80265.D	37	24	73	62	65	68
OP37045-BSD	5P80266.D	32	22	74	50	56	73
OP37045-MB1	5P80264.D	1* [a]	4* [a]	22* [a]	38	47	58
OP37046-BS1	5P80447.D	59	48	93	66	71	93
OP37046-BSD	5P80448.D	49	33	94	73	74	88
OP37046-MB1	5P80446.D	38	27	85	65	70	94

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-73%
S2 = Phenol-d5	10-64%
S3 = 2,4,6-Tribromophenol	31-130%
S4 = Nitrobenzene-d5	28-126%
S5 = 2-Fluorobiphenyl	26-114%
S6 = Terphenyl-d14	16-122%

(a) Outside of in house control limits.

Surrogate Recovery Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8270E BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JD36319-2	4P50039.D	109	93	87
JD36319-3	4P50040.D	110	69	85
JD36319-4	4P50135.D	85	71	55
JD36319-5	4P50136.D	89	69	53
OP37045A-BS12	4P49989.D	117	97	112
OP37045A-BSD12	4P49990.D	95	78	102
OP37045A-MB1	4P49988.D	69	65	89
OP37046A-BS12	4P50125.D	90	73	106
OP37046A-BSD12	4P50126.D	111	88	101
OP37046A-MB1	4P50103.D	103	89	117
OP37046A-MB1	4P50124.D	104	86	116

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	29-124%
S2 = 2-Fluorobiphenyl	23-122%
S3 = Terphenyl-d14	22-130%

Initial Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICC2551
Lab FileID: 4P48505.D

Response Factor Report MS4P

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Oct 21 09:41:06 2021
Response via : Initial Calibration

Calibration Files
1.0 =4p48504.D 0.5 =4p48507.D 0.2 =4p48505.D 0.1 =4p48508.D
0.04=4p48511.D 0.02=4p48506.D 0.01=4p48514.D .004=4p48509.D
.002=4p48513.D = = =

Compound	1.0	0.5	0.2	0.1	0.04	0.02	0.01	.004	.002	Avg	%RSD
1) I 1-Methylnaphthalene-d	----------ISTD----------										
2) 1,4-Dioxane	0.206	0.203	0.178	0.181	0.174	0.202	0.164			0.187	9.04
3) 2-Fluorophenol	0.582	0.514	0.506	0.461	0.513	0.470	0.501	0.454	0.465	0.496	8.04
4) Phenol-d5	1.054	0.987	0.918	0.896	0.920	0.922	0.940	0.923	0.913	0.941	5.21
5) Phenol	1.131	1.056	0.970	0.946	0.993	0.960	0.986	0.979	0.971	0.999	5.84
6) bis(2-Chloroethyl)ether										0.000#	-1.00
7) Nitrobenzene-d5	0.849	0.801	0.721	0.721	0.760	0.730	0.787	0.768	0.777	0.768	5.43
8) Naphthalene	2.530	2.312	2.144	2.041	2.083	2.189	2.226	2.349	2.732	2.290	9.73
9) Hexachlorobutadiene	0.572	0.534	0.492	0.481	0.506	0.580	0.602	0.705		0.559	13.17
10) 2-Methylnaphthalene	1.361	1.251	1.150	1.078	1.084	1.156	1.168	1.239	1.280	1.196	7.83
11) 1-Methylnaphthalene	1.306	1.184	1.089	0.986	1.066	1.129	1.180	1.328	1.095	1.152	9.68
12) Hexachlorocyclopentadiene	0.537	0.468	0.399	0.381	0.419	0.447	0.424	0.637		0.464	18.25
13) I Fluorene-d10	----------ISTD----------										
14) 2-Fluorobiphenyl	1.149	1.054	0.968	0.971	0.989	0.997	1.031	1.011	1.014	1.020	5.44
15) Acenaphthylene	1.752	1.539	1.377	1.378	1.378	1.346	1.456	1.556	1.630	1.490	9.33
16) Acenaphthene	1.065	0.980	0.889	0.882	0.884	0.874	0.892	0.974	1.120	0.951	9.49
17) Fluorene	1.302	1.154	1.064	1.043	1.101	1.078	1.121	1.145	1.320	1.148	8.67
18) 4,6-dinitro-2-methylphenol	0.192	0.150	0.113	0.103	0.094	0.074	0.065			0.113	39.49
---- Quadratic regression ---- Coefficient = 0.9997											
Response Ratio = -0.00290 + 0.10101 *A + 0.01473 *A^2											
19) 2,4,6-Tribromophenol	0.189	0.168	0.150	0.149	0.146	0.142	0.142	0.144	0.143	0.153	10.33
20) Fluoranthene-d10	----------ISTD----------										
21) Hexachlorobenzene	0.261	0.232	0.215	0.219	0.214	0.222	0.266	0.297	0.347	0.252	17.96

8.6.1

8

Initial Calibration Summary

Job Number: JD36319 **Sample:** E4P2551-ICC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P48505.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
22)  Pentachlorophenol
          0.171 0.155 0.133 0.126 0.130 0.127 0.113 0.151 0.172        0.142   14.84
23)  Phenanthrene
          1.135 1.022 0.940 0.910 0.908 0.975 1.076 1.203 1.528        1.078   18.32
24)  Anthracene
          1.127 1.034 0.934 0.935 0.964 0.927 1.010 1.240 1.129        1.033   10.65
25)  Fluoranthene
          1.239 1.113 1.027 0.988 1.079 1.160 1.248                    1.122    8.91
26)  Pyrene
          1.313 1.175 1.083 1.036 1.087 1.149 1.179 1.460 1.628        1.235   15.94
27)  Terphenyl-d14
          0.682 0.592 0.555 0.540 0.559 0.567 0.552 0.563 0.547        0.573    7.57
28)  Benzo[a]anthracene
          1.216 1.049 0.962 0.917 0.938 1.073 1.091 1.579              1.103   19.55
29)  Chrysene
          1.148 1.037 0.956 0.957 1.011 1.204 1.251                    1.081   11.10

30) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
31)  Benzo[b]fluoranthene
          1.819 1.630 1.574 1.645 2.088 2.859 3.428                    2.149   33.48
           ---- Quadratic regression ----  Coefficient =  0.9993
             Response Ratio = 0.02961 + 1.38761 *A + 0.32444 *A^2

32)  Benzo[k]fluoranthene
          1.573 1.493 1.446 1.446 1.587 1.734 2.278                    1.651   17.81
33)  Benzo[a]pyrene
          1.653 1.484 1.407 1.384 1.502 1.546 1.622                    1.514    6.69
34)  Indeno[1,2,3-cd]pyrene
          1.699 1.573 1.519 1.552 1.726 2.156 2.405                    1.804   18.94
35)  Dibenz[a,h]anthracene
          1.463 1.337 1.258 1.292 1.351 1.563 1.572                    1.405    9.11
36)  Benzo[g,h,i]perylene
          1.512 1.390 1.353 1.403 1.573 1.942                          1.529   14.31
------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4P2551SIMLVI.M        Thu Oct 21 09:57:50 2021   YING
```

8.6.1

8

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICV2551
Lab FileID: 4P48512.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2551\4p48512.D Vial: 11
Acq On : 21 Oct 2021 3:15 am Operator: chriss2
Sample : icv2551-0.2 Inst : MS4P
Misc : op35776a,e4p2551,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Oct 21 09:41:06 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	100	0.00	7.10
2	t	1,4-Dioxane	0.187	0.187	0.0	105	0.02	2.16
5		Phenol	0.999	0.997	0.2	103	0.00	4.73
8	t	Naphthalene	2.290	1.983	13.4	92	0.00	6.35
9	t	Hexachlorobutadiene	0.559	0.471	15.7	96	0.00	6.47
10	t	2-Methylnaphthalene	1.196	1.097	8.3	95	0.00	7.04
11	t	1-Methylnaphthalene	1.152	1.045	9.3	96	0.00	7.13
12		Hexachlorocyclopentadiene	0.464	0.814	-75.4#	204#	0.00	7.19
13	I	Fluorene-d10	1.000	1.000	0.0	94	0.00	8.58
15	t	Acenaphthylene	1.490	1.201	19.4	82	0.00	7.92
16	t	Acenaphthene	0.951	0.830	12.7	88	0.00	8.09
17	t	Fluorene	1.148	1.009	12.1	89	0.00	8.60
		----------	True	Calc.	% Drift	----------		
18		4,6-dinitro-2-methylpheno	1000.000	1168.570	-16.9	117	0.00	8.66
		----------	AvgRF	CCRF	% Dev	----------		
20		Fluoranthene-d10	1.000	1.000	0.0	95	0.00	10.71
21	t	Hexachlorobenzene	0.252	0.210	16.7	93	0.01	9.15
22	t	Pentachlorophenol	0.142	0.152	-7.0	109	0.00	9.34
23	t	Phenanthrene	1.078	0.903	16.2	91	0.01	9.55
24	t	Anthracene	1.033	0.890	13.8	91	0.00	9.60
25	t	Fluoranthene	1.122	0.964	14.1	89	0.00	10.73
26	t	Pyrene	1.235	0.963	22.0	85	0.00	10.95
28	t	Benzo[a]anthracene	1.103	0.838	24.0	83	0.00	12.14
29	t	Chrysene	1.081	0.868	19.7	86	0.00	12.17
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	85	0.00	13.40
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[b]fluoranthene	200.000	215.764	-7.9	92	0.00	13.13
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Benzo[k]fluoranthene	1.651	1.458	11.7	86	0.00	13.15
33	t	Benzo[a]pyrene	1.514	1.429	5.6	86	0.00	13.42
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.458	19.2	82	0.00	14.60
35	t	Dibenz[a,h]anthracene	1.405	1.209	14.0	82	0.00	14.62
36	t	Benzo[g,h,i]perylene	1.529	1.345	12.0	85	0.00	14.93

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICV2551
Lab FileID: 4P48512.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p48505.D M4P2551SIMLVI.M Thu Oct 21 09:55:50 2021 YING

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E4P2619-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P49983.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jeryllr\e4p2619\4p49983.d Vial: 2
Acq On : 11 Dec 2021 3:42 am Operator: chriss2
Sample : cc2551-0.2 Inst : MS4P
Misc : op36606a,e4p2619,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Nov 15 06:36:55 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	67	-0.04	6.85
2	t	1,4-Dioxane	0.187	0.192	-2.7	72	-0.05	1.88
3	S	2-Fluorophenol	0.496	0.431	13.1	57	-0.06	3.56
4	S	Phenol-d5	0.941	0.866	8.0	63	-0.04	4.51
5		Phenol	0.999	0.892	10.7	61	-0.04	4.52
6	t	bis(2-Chloroethyl)ether		----------NA----------				
7	S	Nitrobenzene-d5	0.768	0.970	-26.3#	90	-0.04	5.38
8	t	Naphthalene	2.290	1.854	19.0	58	-0.04	6.10
9	t	Hexachlorobutadiene	0.559	0.675	-20.8#	91	-0.04	6.23
10	t	2-Methylnaphthalene	1.196	1.074	10.2	62	-0.03	6.79
11	t	1-Methylnaphthalene	1.152	1.046	9.2	64	-0.03	6.89
12		Hexachlorocyclopentadiene	0.464	0.443	4.5	74	-0.03	6.95
13	I	Fluorene-d10	1.000	1.000	0.0	66	-0.04	8.33
14	S	2-Fluorobiphenyl	1.020	0.966	5.3	65	-0.05	7.17
15	t	Acenaphthylene	1.490	1.256	15.7	60	-0.05	7.67
16	t	Acenaphthene	0.951	0.887	6.7	65	-0.04	7.85
17	t	Fluorene	1.148	1.060	7.7	65	-0.04	8.36
		----------	True	Calc.	% Drift		----------	
18		4,6-dinitro-2-methylpheno	1000.000	1354.383	-35.4#	98	-0.04	8.43
		----------	AvgRF	CCRF	% Dev		----------	
19	S	2,4,6-Tribromophenol	0.153	0.200	-30.7#	87	-0.04	8.60
20		Fluoranthene-d10	1.000	1.000	0.0	74	-0.04	10.46
21	t	Hexachlorobenzene	0.252	0.264	-4.8	90	-0.04	8.90
22	t	Pentachlorophenol	0.142	0.132	7.0	73	-0.04	9.09
23	t	Phenanthrene	1.078	0.877	18.6	69	-0.04	9.30
24	t	Anthracene	1.033	0.789	23.6#	62	-0.04	9.34
25	t	Fluoranthene	1.122	0.992	11.6	71	-0.04	10.48
26	t	Pyrene	1.235	0.992	19.7	67	-0.04	10.69
27	S	Terphenyl-d14	0.573	0.570	0.5	76	-0.03	10.87
28	t	Benzo[a]anthracene	1.103	0.800	27.5#	61	-0.04	11.88
29	t	Chrysene	1.081	0.909	15.9	70	-0.04	11.91
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	62	-0.04	13.12
		----------	True	Calc.	% Drift		----------	
31	t	Benzo[b]fluoranthene	200.000	183.662	8.2	57	-0.03	12.86
		----------	AvgRF	CCRF	% Dev		----------	

8.6.3

8

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E4P2619-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P49983.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

32	t	Benzo[k]fluoranthene	1.651	1.728	-4.7	74	-0.03	12.89
33	t	Benzo[a]pyrene	1.514	1.491	1.5	65	-0.03	13.14
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.459	19.1	59	-0.04	14.21
35	t	Dibenz[a,h]anthracene	1.405	1.226	12.7	60	-0.05	14.23
36	t	Benzo[g,h,i]perylene	1.529	1.294	15.4	59	-0.05	14.49

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p48673.d M4P2551SIMLVI.M Sun Dec 12 11:15:52 2021

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E4P2620-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50023.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2620\4p50023.D Vial: 2
Acq On : 12 Dec 2021 10:42 am Operator: kristis
Sample : cc2551-0.1 Inst : MS4P
Misc : op36606a,e4p2620,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Dec 03 16:51:52 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	90	0.05	6.84
2	t	1,4-Dioxane	0.187	0.231	-23.5#	115	0.07	1.89
3	S	2-Fluorophenol	0.496	0.586	-18.1	115	0.03	3.55
4	S	Phenol-d5	0.941	1.042	-10.7	105	0.03	4.50
5		Phenol	0.999	1.100	-10.1	105	0.03	4.51
7	S	Nitrobenzene-d5	0.768	1.136	-47.9#	142	0.04	5.37
8	t	Naphthalene	2.290	2.267	1.0	100	0.05	6.09
9	t	Hexachlorobutadiene	0.559	0.752	-34.5#	141	0.04	6.22
10	t	2-Methylnaphthalene	1.196	1.304	-9.0	109	0.05	6.78
11	t	1-Methylnaphthalene	1.152	1.232	-6.9	113	0.05	6.88
12		Hexachlorocyclopentadiene	0.464	0.491	-5.8	116	0.05	6.94
13	I	Fluorene-d10	1.000	1.000	0.0	96	0.05	8.32
14	S	2-Fluorobiphenyl	1.020	1.117	-9.5	110	0.05	7.16
15	t	Acenaphthylene	1.490	1.402	5.9	97	0.05	7.67
16	t	Acenaphthene	0.951	1.011	-6.3	110	0.06	7.84
17	t	Fluorene	1.148	1.244	-8.4	114	0.06	8.35
		----------	True	Calc.	% Drift	----------		
18		4,6-dinitro-2-methylpheno	500.000	731.898	-46.4#	152	0.06	8.42
		----------	AvgRF	CCRF	% Dev	----------		
19	S	2,4,6-Tribromophenol	0.153	0.228	-49.0#	146	0.06	8.59
20		Fluoranthene-d10	1.000	1.000	0.0	108	0.06	10.45
21	t	Hexachlorobenzene	0.252	0.284	-12.7	141	0.05	8.88
22	t	Pentachlorophenol	0.142	0.102	28.2#	87	0.05	9.09
23	t	Phenanthrene	1.078	1.057	1.9	126	0.05	9.29
24	t	Anthracene	1.033	0.952	7.8	110	0.06	9.34
25	t	Fluoranthene	1.122	1.184	-5.5	130	0.06	10.47
26	t	Pyrene	1.235	1.166	5.6	122	0.07	10.69
27	S	Terphenyl-d14	0.573	0.669	-16.8	134	0.06	10.86
28	t	Benzo[a]anthracene	1.103	0.903	18.1	107	0.06	11.87
29	t	Chrysene	1.081	1.039	3.9	118	0.06	11.90
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	82	0.07	13.11
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[b]fluoranthene	100.000	105.630	-5.6	88	0.06	12.85
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Benzo[k]fluoranthene	1.651	1.991	-20.6#	114	0.06	12.88

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E4P2620-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50023.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

33	t	Benzo[a]pyrene	1.514	1.707	-12.7	102	0.06	13.13
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.500	16.9	80	0.09	14.19
35	t	Dibenz[a,h]anthracene	1.405	1.272	9.5	81	0.09	14.22
36	t	Benzo[g,h,i]perylene	1.529	1.350	11.7	79	0.10	14.48

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p49792.D M4P2551SIMLVI.M Mon Dec 13 09:17:19 2021 YING

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E4P2624-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50101.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...521\e4p2624\4p50101.d Vial: 2
Acq On : 15 Dec 2021 2:28 am Operator: chriss2
Sample : cc2551-0.1 Inst : MS4P
Misc : op36999a,e4p2624,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 13 02:54:29 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	82	0.05	6.81
2	t	1,4-Dioxane	0.187	0.181	3.2	82	0.07	1.84
3	S	2-Fluorophenol	0.496	0.468	5.6	83	0.06	3.52
4	S	Phenol-d5	0.941	0.887	5.7	81	0.05	4.47
5		Phenol	0.999	0.928	7.1	80	0.05	4.48
7	S	Nitrobenzene-d5	0.768	0.960	-25.0#	109	0.05	5.34
8	t	Naphthalene	2.290	1.910	16.6	76	0.05	6.06
9	t	Hexachlorobutadiene	0.559	0.659	-17.9	112	0.05	6.19
10	t	2-Methylnaphthalene	1.196	1.091	8.8	83	0.05	6.75
11	t	1-Methylnaphthalene	1.152	1.045	9.3	87	0.05	6.85
12		Hexachlorocyclopentadiene	0.464	0.461	0.6	99	0.05	6.91
13	I	Fluorene-d10	1.000	1.000	0.0	81	0.05	8.28
14	S	2-Fluorobiphenyl	1.020	1.009	1.1	84	0.05	7.13
15	t	Acenaphthylene	1.490	1.303	12.6	76	0.06	7.64
16	t	Acenaphthene	0.951	0.893	6.1	82	0.05	7.80
17	t	Fluorene	1.148	1.047	8.8	81	0.06	8.32
			True	Calc.	% Drift			
18		4,6-dinitro-2-methylpheno	500.000	601.438	-20.3#	102	0.05	8.39
			AvgRF	CCRF	% Dev			
19	S	2,4,6-Tribromophenol	0.153	0.189	-23.5#	102	0.06	8.56
20		Fluoranthene-d10	1.000	1.000	0.0	82	0.06	10.41
21	t	Hexachlorobenzene	0.252	0.274	-8.7	103	0.05	8.85
22	t	Pentachlorophenol	0.142	0.116	18.3	76	0.07	9.06
23	t	Phenanthrene	1.078	0.942	12.6	85	0.05	9.26
24	t	Anthracene	1.033	0.853	17.4	75	0.07	9.31
25	t	Fluoranthene	1.122	1.023	8.8	85	0.06	10.43
26	t	Pyrene	1.235	1.000	19.0	79	0.06	10.65
27	S	Terphenyl-d14	0.573	0.563	1.7	86	0.05	10.83
28	t	Benzo[a]anthracene	1.103	0.806	26.9#	72	0.06	11.83
29	t	Chrysene	1.081	0.884	18.2	76	0.06	11.86
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	66	0.07	13.07
			True	Calc.	% Drift			
31	t	Benzo[b]fluoranthene	100.000	90.436	9.6	61	0.07	12.82
			AvgRF	CCRF	% Dev			

8.6.5

8

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E4P2624-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50101.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

32	t	Benzo[k]fluoranthene	1.651	1.450	12.2	66	0.07	12.84
33	t	Benzo[a]pyrene	1.514	1.485	1.9	71	0.07	13.09
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.334	26.1#	57	0.10	14.14
35	t	Dibenz[a,h]anthracene	1.405	1.095	22.1#	56	0.09	14.16
36	t	Benzo[g,h,i]perylene	1.529	1.165	23.8#	55	0.10	14.42

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p49907.d M4P2551SIMLVI.M Wed Dec 15 05:20:08 2021

8.6.5

8

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E4P2625-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50120.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2625\4p50120.D Vial: 4
Acq On : 15 Dec 2021 4:36 pm Operator: kristis
Sample : cc2551-0.2 Inst : MS4P
Misc : op36999a,e4p2625,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 13 09:21:17 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	72	-0.03	6.81
2	t	1,4-Dioxane	0.187	0.243	-29.9#	98	-0.07	1.83
3	S	2-Fluorophenol	0.496	0.490	1.2	69	-0.03	3.52
4	S	Phenol-d5	0.941	0.884	6.1	69	-0.02	4.47
5		Phenol	0.999	0.923	7.6	68	-0.03	4.48
7	S	Nitrobenzene-d5	0.768	0.970	-26.3#	96	-0.03	5.35
8	t	Naphthalene	2.290	1.924	16.0	64	-0.03	6.06
9	t	Hexachlorobutadiene	0.559	0.679	-21.5#	99	-0.03	6.19
10	t	2-Methylnaphthalene	1.196	1.092	8.7	68	-0.03	6.75
11	t	1-Methylnaphthalene	1.152	1.046	9.2	69	-0.03	6.85
12		Hexachlorocyclopentadiene	0.464	0.542	-16.8	97	-0.03	6.91
13	I	Fluorene-d10	1.000	1.000	0.0	68	-0.03	8.28
14	S	2-Fluorobiphenyl	1.020	1.005	1.5	71	-0.03	7.13
15	t	Acenaphthylene	1.490	1.343	9.9	66	-0.03	7.64
16	t	Acenaphthene	0.951	0.909	4.4	70	-0.04	7.80
17	t	Fluorene	1.148	1.059	7.8	68	-0.03	8.32
		---------- True	Calc.	% Drift	----------			
18		4,6-dinitro-2-methylpheno 1000.000	1353.807	-35.4#	102	-0.03	8.39	
		---------- AvgRF	CCRF	% Dev	----------			
19	S	2,4,6-Tribromophenol	0.153	0.199	-30.1#	90	-0.03	8.56
20		Fluoranthene-d10	1.000	1.000	0.0	72	-0.04	10.41
21	t	Hexachlorobenzene	0.252	0.277	-9.9	92	-0.03	8.85
22	t	Pentachlorophenol	0.142	0.135	4.9	73	-0.03	9.06
23	t	Phenanthrene	1.078	0.901	16.4	69	-0.03	9.26
24	t	Anthracene	1.033	0.882	14.6	68	-0.04	9.30
25	t	Fluoranthene	1.122	1.019	9.2	71	-0.04	10.43
26	t	Pyrene	1.235	1.034	16.3	68	-0.04	10.65
27	S	Terphenyl-d14	0.573	0.568	0.9	73	-0.04	10.83
28	t	Benzo[a]anthracene	1.103	0.904	18.0	67	-0.04	11.83
29	t	Chrysene	1.081	0.909	15.9	68	-0.04	11.86
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	62	-0.04	13.07
		---------- True	Calc.	% Drift	----------			
31	t	Benzo[b]fluoranthene 200.000	189.765	5.1	59	-0.04	12.81	
		---------- AvgRF	CCRF	% Dev	----------			
32	t	Benzo[k]fluoranthene	1.651	1.545	6.4	66	-0.04	12.84

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E4P2625-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50120.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

33	t	Benzo[a]pyrene	1.514	1.478	2.4	65	-0.04	13.09
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.447	19.8	59	-0.06	14.14
35	t	Dibenz[a,h]anthracene	1.405	1.185	15.7	58	-0.06	14.16
36	t	Benzo[g,h,i]perylene	1.529	1.229	19.6	56	-0.06	14.42

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p49816.D M4P2551SIMLVI.M Thu Dec 16 10:00:33 2021 YING

Initial Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-ICC3785
Lab FileID: 5P79959.D

Response Factor Report MS5P

Method : C:\MSDCHEM\1\METHODS\M5P3785LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 02 08:35:47 2021
Response via : Initial Calibration

Calibration Files
10 =5p79959.D 20 =5p79957.D 16 =5p79958.D 5 =5p79960.D
2 =5p79961.D 1 =5p79962.D 0.4 =5p79963.D 0.2 =5p79964.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
103) 1,4-Dichlorobenzene-d	ISTD									
104) Benzaldehyde	1.130	1.121	1.071	1.171	1.072	1.054	1.154	1.095	1.108	3.80
105) Phenanthrene-d10a	ISTD									
106) Atrazine	0.099	0.101	0.093	0.094	0.087	0.088	0.074	0.070	0.088	12.63
107) Naphthalene-d8a	ISTD									
108) Caprolactam	0.124	0.126	0.117	0.121	0.115	0.102	0.130	0.114	0.119	7.17
111) Phenanthrene-d10b	ISTD									
112) 1-chloroocta	0.269	0.270	0.249	0.264	0.229	0.224	0.230	0.244	0.247	7.49
113) o-terphenyl	0.564	0.558	0.522	0.567	0.547	0.536	0.546	0.552	0.549	2.72

(#) = Out of Range ### Number of calibration levels exceeded format ###

M5P3784LVI.M Thu Dec 02 08:37:46 2021 RPT1

8.6.7

8

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-ICV3785
Lab FileID: 5P79965.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3785\5p79965.D Vial: 10
Acq On : 2 Dec 2021 1:45 am Operator: chriss2
Sample : icv3785-10 Inst : MS5P
Misc : op35621,e5p3785,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 02 08:35:47 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	100	0.00	4.70
104	Benzaldehyde	1.108	1.224	-10.5	109	0.00	4.37
105	Phenanthrene-d10a	1.000	1.000	0.0	102	0.00	10.09
106	Atrazine	0.088	0.103	-17.0	107	0.00	9.74
107	Naphthalene-d8a	1.000	1.000	0.0	101	0.00	5.81
108 t	Caprolactam	0.119	0.138	-16.0	113	0.00	6.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3784LVI.M Thu Dec 02 08:37:36 2021 RPT1

8.6.8

Initial Calibration Summary

Job Number: JD36319 **Sample:** E5P3794-ICC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80182.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report MS5P

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Initial Calibration

Calibration Files
10 =5p80182.D 20 =5p80184.D 16 =5p80183.D 5 =5p80181.D
2 =5p80180.D 1 =5p80179.D 0.4 =5p80178.D 0.2 =5p80177.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.589	0.611	0.601	0.550	0.503	0.549	0.500	0.594	0.562	7.76
3) Pyridine	1.480	1.544	1.539	1.496	1.341	1.276	1.283	1.042	1.375	12.64
4) N-Nitrosodim	0.892	0.937	0.929	0.865	0.749	0.721	0.731	0.729	0.819	11.67
5) 2-Fluorophen	1.383	1.453	1.458	1.390	1.244	1.188	1.095	1.147	1.295	11.08
6) Indene	2.149	2.056	2.102	2.202	2.229	2.197	2.273	2.093	2.162	3.47
7) Cumene	3.138	3.101	3.193	3.070	2.902	2.865	2.808	2.783	2.982	5.38
8) Phenol-d5	1.748	1.794	1.808	1.740	1.616	1.535	1.549	1.505	1.662	7.46
9) Phenol	1.816	1.781	1.822	1.836	1.730	1.701	1.720	1.647	1.756	3.84
10) Aniline	2.023	1.927	1.990	2.044	2.012	1.893	1.931	1.894	1.964	3.06
11) bis(2-Chloro	1.241	1.185	1.217	1.249	1.242	1.186	1.262	1.177	1.220	2.73
12) 2-Chlorophen	1.427	1.385	1.419	1.454	1.398	1.372	1.295	1.399	1.394	3.39
13) Decane	1.044	0.977	1.018	1.106	1.141	1.133	1.161	1.235	1.102	7.64
14) 1,3-Dichloro	1.553	1.521	1.545	1.591	1.525	1.489	1.539	1.524	1.536	1.93
15) 1,4-Dichloro	1.495	1.458	1.496	1.506	1.471	1.480	1.460	1.461	1.479	1.25
16) Benzyl alcoh	0.887	0.895	0.907	0.885	0.849	0.805	0.783	0.779	0.849	6.21
17) 1,2-Dichloro	1.421	1.385	1.417	1.466	1.438	1.401	1.410	1.305	1.405	3.36
18) Acetophenone	1.600	1.549	1.588	1.676	1.738	1.705	1.774	1.669	1.662	4.69
19) 2-Methylphen	1.153	1.109	1.126	1.192	1.161	1.160	1.076	1.056	1.129	4.11
20) 2,2'-oxybis(	1.364	1.262	1.302	1.454	1.471	1.526	1.577	1.613	1.446	8.80
21) 3&4-Methylph	1.146	1.091	1.117	1.216	1.221	1.183	1.160	1.164	1.162	3.87
22) n-Nitroso-di	0.753	0.700	0.726	0.790	0.839	0.792	0.876	0.833	0.789	7.61
23) Hexachloroet	0.487	0.500	0.491	0.486	0.490	0.493	0.499	0.525	0.496	2.55
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.298	0.294	0.304	0.302	0.301	0.304	0.297	0.307	0.301	1.46
26) Nitrobenzene	0.299	0.292	0.303	0.308	0.314	0.318	0.319	0.317	0.309	3.24
27) Quinoline	0.734	0.732	0.743	0.715	0.714	0.686	0.688	0.650	0.708	4.42
28) Isophorone	0.613	0.608	0.629	0.612	0.600	0.593	0.583	0.574	0.601	2.96
29) 2-Nitropheno	0.194	0.195	0.199	0.186	0.178	0.174	0.173	0.174	0.184	5.84
30) 2,4-Dimethyl	0.315	0.302	0.312	0.324	0.330	0.326	0.300	0.317	0.316	3.50
31) Benzoic acid	0.224	0.240	0.247	0.199	0.150				0.212	18.47
32) bis(2-Chloro	0.367	0.359	0.370	0.377	0.376	0.389	0.375	0.351	0.371	3.20
33) 2,4-Dichloro	0.298	0.301	0.306	0.298	0.296	0.269	0.273	0.270	0.289	5.36
34) 2,6-Dichloro	0.278	0.276	0.286	0.277	0.273	0.271	0.270	0.252	0.273	3.53
35) 1,3,5-Trichl	0.321	0.313	0.326	0.321	0.319	0.318	0.316	0.325	0.320	1.39
36) 1,2,4-Trichl	0.311	0.311	0.322	0.320	0.313	0.315	0.296	0.313	0.313	2.50
37) 1,2,3-Trichl	0.285	0.279	0.289	0.288	0.294	0.294	0.274	0.292	0.287	2.51
38) Naphthalene	0.986	0.970	1.007	0.998	0.998	0.986	0.990	1.004	0.992	1.22
39) 4-Chloroanil	0.419	0.409	0.424	0.424	0.420	0.415	0.401	0.400	0.414	2.33
40) 2,3-Dichloro	0.352	0.350	0.363	0.358	0.360	0.349	0.352	0.320	0.350	3.81
41) Hydroquinone	0.316	0.312	0.324	0.313	0.291	0.253	0.222		0.290	13.20
42) Hexachlorobu	0.167	0.169	0.174	0.171	0.169	0.172	0.158	0.176	0.169	3.24
43) 4-Chloro-3-m	0.283	0.287	0.295	0.286	0.270	0.256	0.255	0.242	0.272	7.01
44) 2-Methylnaph	0.648	0.640	0.661	0.646	0.639	0.633	0.626	0.618	0.639	2.11
45) 1-Methylnaph	0.606	0.588	0.613	0.610	0.611	0.617	0.602	0.602	0.606	1.46

Initial Calibration Summary

Job Number: JD36319 **Sample:** E5P3794-ICC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80182.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

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46) I   Acenaphthene-d10      ----------------ISTD---------------------
47) Hexachlorocy 0.336 0.337 0.343 0.330 0.308 0.308 0.287 0.284 0.317   7.36
48) 1,2,4,5-Tetr 0.525 0.507 0.518 0.533 0.527 0.529 0.536 0.542 0.527   2.05
49) 2,4,6-Trichl 0.359 0.362 0.363 0.355 0.334 0.339 0.327 0.303 0.343   6.17
50) 2,4,5-Trichl 0.381 0.376 0.382 0.378 0.368 0.361 0.354 0.314 0.364   6.24
51) 2-Fluorobiph 1.318 1.299 1.318 1.322 1.294 1.320 1.367 1.261 1.312   2.30
52) 2-Chloronaph 1.075 1.048 1.067 1.090 1.109 1.137 1.131 1.094 1.094   2.83
53) Biphenyl     1.495 1.461 1.504 1.505 1.470 1.519 1.464 1.465 1.485   1.54
54) 2-Nitroanili 0.268 0.270 0.275 0.265 0.252 0.236 0.248 0.234 0.256   6.20
55) Dimethylphth 1.362 1.345 1.354 1.337 1.300 1.286 1.319 1.290 1.324   2.24
56) Acenaphthyle 1.707 1.651 1.689 1.689 1.651 1.630 1.648 1.571 1.654   2.58
57) 2,6-Dinitrot 0.301 0.308 0.307 0.287 0.275 0.262 0.236 0.248 0.278   9.87
58) 3-Nitroanili 0.355 0.358 0.359 0.334 0.315 0.311 0.283 0.262 0.322  11.27
59) Acenaphthene 1.137 1.123 1.145 1.127 1.131 1.129 1.112 1.096 1.125   1.34
60) 2,4-Dinitrop 0.163 0.187 0.179 0.143 0.105 0.094 0.062       0.133  35.44
         ----- Quadratic regression -----               Coefficient =  0.9992
              Response Ratio = -0.00941 + 0.13575 *A + 0.01103 *A^2

61) 4-Nitropheno 0.139 0.143 0.145 0.134 0.120 0.118 0.109       0.130  10.78
62) Dibenzofuran 1.641 1.610 1.633 1.637 1.600 1.634 1.630 1.572 1.619   1.46
63) 2,4-Dinitrot 0.375 0.369 0.377 0.373 0.359 0.324 0.331 0.306 0.352   7.87
64) 2,3,4,6-Tetr 0.321 0.325 0.326 0.311 0.294 0.285 0.246 0.251 0.295  10.91
65) Diethylphtha 1.307 1.291 1.323 1.302 1.268 1.250 1.244 1.198 1.273   3.24
66) Fluorene     1.338 1.310 1.325 1.318 1.312 1.290 1.295 1.225 1.302   2.65
67) 4-Chlorophen 0.580 0.559 0.574 0.588 0.604 0.588 0.596 0.629 0.590   3.54
68) 4-Nitroanili 0.306 0.310 0.315 0.298 0.283 0.285 0.274 0.273 0.293   5.58

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro- 0.119 0.131 0.129 0.108 0.086 0.075 0.059       0.101  27.93
         ----- Quadratic regression -----               Coefficient =  0.9993
              Response Ratio = -0.00302 + 0.10458 *A + 0.01184 *A^2

71) n-Nitrosodip 0.667 0.666 0.670 0.659 0.630 0.631 0.602 0.596 0.640   4.66
72) Pentachloron 0.039 0.039 0.039 0.039 0.034 0.033 0.032 0.031 0.036# 10.11
73) 1,2-Diphenyl 0.647 0.627 0.646 0.662 0.647 0.662 0.639 0.677 0.651   2.37
74) 2,4,6-Tribro 0.111 0.115 0.115 0.109 0.097 0.096 0.087 0.082 0.102  12.55
75) 4-Bromopheny 0.228 0.237 0.235 0.221 0.204 0.196 0.189 0.199 0.214   8.79
76) Hexachlorobe 0.240 0.244 0.244 0.236 0.231 0.231 0.217 0.247 0.236   4.13
77) Pentachlorop 0.164 0.175 0.173 0.155 0.136 0.120 0.114       0.148  16.88
         ----- Quadratic regression -----               Coefficient =  0.9996
              Response Ratio = -0.00553 + 0.15251 *A + 0.00501 *A^2

78) Phenanthrene 1.043 1.042 1.053 1.039 1.004 1.027 1.038 1.046 1.037   1.46
79) Anthracene   1.074 1.071 1.086 1.066 1.037 1.049 1.004 1.024 1.051   2.69
80) Carbazole    1.066 1.081 1.095 1.049 0.994 0.975 0.958 0.948 1.021   5.75
81) Di-n-butylph 1.398 1.419 1.427 1.344 1.235 1.197 1.122 1.105 1.281  10.37
82) Fluoranthene 1.239 1.264 1.278 1.206 1.130 1.134 1.088 1.053 1.174   7.18
83) Octadecane   0.421 0.415 0.418 0.414 0.386 0.388 0.365 0.396 0.400   4.93

84) I   Chrysene-d12          ----------------ISTD---------------------
85) Benzidine    0.785 0.880 0.824 0.682 0.684 0.608             0.744  13.77
86) Pyrene       1.367 1.243 1.330 1.428 1.424 1.408 1.361 1.393 1.369   4.46
87) Terphenyl-d1 1.012 0.966 1.009 1.026 0.993 0.985 0.998 0.985 0.997   1.87
88) Butylbenzylp 0.676 0.682 0.698 0.652 0.598 0.571 0.543 0.519 0.617  11.12
89) Benzo[a]anth 1.294 1.340 1.355 1.254 1.190 1.171 1.198 1.261 1.258   5.48
90) 3,3'-Dichlor 0.479 0.499 0.503 0.451 0.419 0.390 0.370 0.343 0.432  14.10
91) Chrysene     1.136 1.147 1.151 1.125 1.098 1.108 1.137 1.096 1.125   1.91
92) bis(2-Ethylh 0.896 0.906 0.925 0.879 0.817 0.776 0.695 0.651 0.818  12.55
```

Initial Calibration Summary

Job Number: JD36319 **Sample:** E5P3794-ICC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80182.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

93)	I Perylene-d12					ISTD					
94)	Di-n-octylph	1.515	1.668	1.636	1.349	1.267	1.237	1.143		1.402	14.65
95)	Benzo[b]fluo	1.301	1.296	1.294	1.245	1.159	1.159	1.122	1.120	1.212	6.61
96)	Benzo[k]fluo	1.070	1.003	1.064	1.077	1.063	1.061	1.087	1.052	1.060	2.38
97)	Benzo[a]pyre	1.180	1.200	1.208	1.153	1.077	1.050	1.015	0.990	1.109	7.81
98)	Indeno[1,2,3	1.069	1.115	1.114	0.982	0.997	0.945	0.919	0.834	0.997	9.93
99)	Dibenz(a,h)a	1.013	1.080	1.094	0.963	0.927	0.888	0.867	0.852	0.960	9.77
100)	Dibenz[a,h]a	1.126	1.129	1.161	1.040	1.076	0.990	1.027	0.910	1.057	7.88
101)	7,12-Dimethy	0.522	0.526	0.529	0.488	0.464	0.464	0.484	0.461	0.492	5.92
102)	Benzo[g,h,i]	1.193	1.220	1.241	1.130	1.161	1.101	1.085	1.067	1.150	5.60

(#) = Out of Range ### Number of calibration levels exceeded format ###

M5P3794LVI.M Thu Dec 09 17:39:33 2021 RPT1

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80185.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80185.D Vial: 10
Acq On : 9 Dec 2021 4:47 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	-0.03	4.64
2	t	1,4-Dioxane	0.562	0.457	18.7	79	-0.05	2.20
6	t	Indene	2.162	1.832	15.3	87	-0.03	4.84
7	t	Cumene	2.982	2.689	9.8	88	-0.03	4.04
11	t	bis(2-Chloroethyl)ether	1.220	1.162	4.8	96	-0.03	4.44
13	t	Decane	1.102	0.971	11.9	95	-0.02	4.52
14	t	1,3-Dichlorobenzene	1.536	1.393	9.3	92	-0.02	4.60
15	t	1,4-Dichlorobenzene	1.479	1.331	10.0	91	-0.02	4.66
16	t	Benzyl alcohol	0.849	0.762	10.2	88	-0.02	4.75
17	t	1,2-Dichlorobenzene	1.405	1.267	9.8	91	-0.03	4.77
18	t	Acetophenone	1.662	1.514	8.9	97	-0.03	4.96
20	t	2,2'-oxybis(1-Chloropropa	1.446	1.227	15.1	92	-0.03	4.85
23	t	Hexachloroethane	0.496	0.450	9.3	94	-0.03	5.05
24	I	Naphthalene-d8	1.000	1.000	0.0	102	-0.03	5.74
26	t	Nitrobenzene	0.309	0.280	9.4	95	-0.03	5.10
27	t	Quinoline	0.708	0.632	10.7	88	-0.04	6.09
28	t	Isophorone	0.601	0.542	9.8	90	-0.03	5.30
32	t	bis(2-Chloroethoxy)methan	0.371	0.343	7.5	95	-0.03	5.50
35		1,3,5-Trichlorobenzene	0.320	0.292	8.8	92	-0.03	5.38
36	t	1,2,4-Trichlorobenzene	0.313	0.284	9.3	93	-0.03	5.68
37		1,2,3-Trichlorobenzene	0.287	0.262	8.7	93	-0.03	5.90
38	t	Naphthalene	0.992	0.903	9.0	93	-0.03	5.76
40	t	2,3-Dichloroaniline	0.350	0.319	8.9	92	-0.04	6.83
42	t	Hexachlorobutadiene	0.169	0.154	8.9	94	-0.03	5.88
44	t	2-Methylnaphthalene	0.639	0.584	8.6	92	-0.03	6.49
45	t	1-Methylnaphthalene	0.606	0.540	10.9	91	-0.04	6.61
46	I	Acenaphthene-d10	1.000	1.000	0.0	105	-0.04	7.81
47	t	Hexachlorocyclopentadiene	0.317	0.367	-15.8	108	-0.04	6.68
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.463	12.1	92	-0.04	6.69
52	t	2-Chloronaphthalene	1.094	0.968	11.5	94	-0.04	7.08
53	t	Biphenyl	1.485	1.345	9.4	94	-0.03	7.07
55	t	Dimethylphthalate	1.324	1.195	9.7	92	-0.04	7.48
57	t	2,6-Dinitrotoluene	0.278	0.257	7.6	90	-0.04	7.55
59	t	Acenaphthene	1.125	1.000	11.1	92	-0.04	7.86
62	t	Dibenzofuran	1.619	1.451	10.4	93	-0.04	8.10
63	t	2,4-Dinitrotoluene	0.352	0.324	8.0	91	-0.04	8.10
65	t	Diethylphthalate	1.273	1.177	7.5	94	-0.04	8.49
66	t	Fluorene	1.302	1.172	10.0	92	-0.04	8.59
67	t	4-Chlorophenyl-phenylethe	0.590	0.504	14.6	91	-0.04	8.62

Initial Calibration Verification

Job Number: JD36319 **Sample:** E5P3794-ICV3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80185.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

69	I	Phenanthrene-d10	1.000	1.000	0.0	105	-0.04	10.00
72	t	Pentachloronitrobenzene	0.036	0.036#	0.0	98	-0.04	9.73
73	t	1,2-Diphenylhydrazine	0.651	0.607	6.8	99	-0.04	8.85
75	t	4-Bromophenyl-phenylether	0.214	0.198	7.5	91	-0.04	9.35
76	t	Hexachlorobenzene	0.236	0.214	9.3	94	-0.04	9.40
78	t	Phenanthrene	1.037	0.923	11.0	93	-0.04	10.04
79	t	Anthracene	1.051	0.941	10.5	92	-0.04	10.11
80	t	Carbazole	1.021	0.929	9.0	92	-0.04	10.39
81	t	Di-n-butylphthalate	1.281	1.214	5.2	91	-0.04	11.04
82	t	Fluoranthene	1.174	1.122	4.4	95	-0.04	11.90
83	t	Octadecane	0.400	0.372	7.0	93	-0.04	9.97
84	I	Chrysene-d12	1.000	1.000	0.0	107	-0.04	14.19
86	t	Pyrene	1.369	1.235	9.8	97	-0.04	12.25
88	t	Butylbenzylphthalate	0.617	0.592	4.1	94	-0.04	13.42
89	t	Benzo[a]anthracene	1.258	1.123	10.7	93	-0.04	14.18
91	t	Chrysene	1.125	1.004	10.8	95	-0.04	14.23
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.779	4.8	93	-0.04	14.40
93	I	Perylene-d12	1.000	1.000	0.0	108	-0.04	16.30
94	t	Di-n-octylphthalate	1.402	1.262	10.0	90	-0.04	15.39
95	t	Benzo[b]fluoranthene	1.212	1.173	3.2	98	-0.04	15.78
96	t	Benzo[k]fluoranthene	1.060	0.957	9.7	97	-0.04	15.83
97	t	Benzo[a]pyrene	1.109	1.052	5.1	97	-0.04	16.22
98	t	Indeno[1,2,3-cd]pyrene	0.997	0.902	9.5	91	-0.05	17.84
99	t	Dibenz(a,h)acridine	0.960	0.865	9.9	93	-0.05	17.50
100	t	Dibenz[a,h]anthracene	1.057	0.968	8.4	93	-0.05	17.90
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.441	10.4	92	-0.04	15.79
102	t	Benzo[g,h,i]perylene	1.150	1.017	11.6	92	-0.05	18.28

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:13 2021 RPT1

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80186.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80186.D Vial: 11
Acq On : 9 Dec 2021 5:13 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	-0.03	4.64
9	t	Phenol	1.756	1.433	18.4	86	-0.02	4.37
12	t	2-Chlorophenol	1.394	1.249	10.4	95	-0.02	4.48
19	t	2-Methylphenol	1.129	1.043	7.6	99	-0.02	4.83
21	t	3&4-Methylphenol	1.162	1.081	7.0	103	-0.02	4.96
24	I	Naphthalene-d8	1.000	1.000	0.0	106	-0.03	5.74
29	t	2-Nitrophenol	0.184	0.175	4.9	96	-0.03	5.38
30	t	2,4-Dimethylphenol	0.316	0.296	6.3	100	-0.02	5.41
31	t	Benzoic acid	0.212	0.183	13.7	86	-0.01	5.50
33	t	2,4-Dichlorophenol	0.289	0.259	10.4	92	-0.02	5.60
34	t	2,6-Dichlorophenol	0.273	0.257	5.9	98	-0.03	5.82
41	t	Hydroquinone	0.290	0.315	-8.6	106	-0.02	6.15
43	t	4-Chloro-3-methylphenol	0.272	0.258	5.1	97	-0.03	6.32
46	I	Acenaphthene-d10	1.000	1.000	0.0	114	-0.04	7.81
49	t	2,4,6-Trichlorophenol	0.343	0.319	7.0	101	-0.04	6.83
50	t	2,4,5-Trichlorophenol	0.364	0.331	9.1	99	-0.03	6.87
		----------	True	Calc.	% Drift		----------	
60	t	2,4-Dinitrophenol	20.000	18.164	9.2	99	-0.03	7.92
		----------	AvgRF	CCRF	% Dev		----------	
61	t	4-Nitrophenol	0.130	0.122	6.2	100	-0.03	8.02
64		2,3,4,6-Tetrachlorophenol	0.295	0.271	8.1	96	-0.04	8.28
69	I	Phenanthrene-d10	1.000	1.000	0.0	119	-0.04	10.00
		----------	True	Calc.	% Drift		----------	
70	t	4,6-Dinitro-2-methylpheno	10.000	8.933	10.7	103	-0.04	8.69
		----------	True	Calc.	% Drift		----------	
77	t	Pentachlorophenol	20.000	16.597	17.0	96	-0.04	9.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:15 2021 RPT1

8.6.11

8

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80187.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80187.D Vial: 12
Acq On : 9 Dec 2021 5:40 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	-0.03	4.64
3	t	Pyridine	1.375	1.229	10.6	85	-0.05	2.51
4	t	N-Nitrosodimethylamine	0.819	0.755	7.8	87	-0.04	2.48
10		Aniline	1.964	1.892	3.7	96	-0.02	4.40
22	t	n-Nitroso-di-n-propylamin	0.789	0.845	-7.1	115	-0.03	4.96
24	I	Naphthalene-d8	1.000	1.000	0.0	105	-0.03	5.74
39	t	4-Chloroaniline	0.414	0.409	1.2	103	-0.03	5.81
46	I	Acenaphthene-d10	1.000	1.000	0.0	100	-0.04	7.81
54	t	2-Nitroaniline	0.256	0.295	-15.2	110	-0.03	7.22
58	t	3-Nitroaniline	0.322	0.368	-14.3	103	-0.03	7.77
68	t	4-Nitroaniline	0.293	0.347	-18.4	113	-0.04	8.64
69	I	Phenanthrene-d10	1.000	1.000	0.0	112	-0.05	9.99
71	t	n-Nitrosodiphenylamine	0.640	0.618	3.4	104	-0.04	8.80
84	I	Chrysene-d12	1.000	1.000	0.0	105	-0.05	14.18
85	t	Benzidine	0.744	0.658	11.6	88	-0.04	12.17
90	t	3,3'-Dichlorobenzidine	0.432	0.432	0.0	95	-0.04	14.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:17 2021 RPT1

8.6.12

8

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80188.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80188.D Vial: 13
Acq On : 9 Dec 2021 6:07 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	131	-0.03	4.64
5	S	2-Fluorophenol	1.295	1.365	-5.4	129	-0.02	3.65
8	S	Phenol-d5	1.662	1.608	3.2	120	-0.02	4.36
24	I	Naphthalene-d8	1.000	1.000	0.0	134	-0.03	5.74
25	S	Nitrobenzene-d5	0.301	0.318	-5.6	143	-0.03	5.08
46	I	Acenaphthene-d10	1.000	1.000	0.0	139	-0.04	7.81
51	S	2-Fluorobiphenyl	1.312	1.309	0.2	138	-0.04	6.94
69	I	Phenanthrene-d10	1.000	1.000	0.0	154	-0.05	9.99
74	S	2,4,6-Tribromophenol	0.102	0.102	0.0	142	-0.04	8.95
84	I	Chrysene-d12	1.000	1.000	0.0	150	-0.04	14.19
87	S	Terphenyl-d14	0.997	1.017	-2.0	151	-0.04	12.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:19 2021 RPT1

8.6.13

8

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3795-ICV3794
Lab FileID: 5P80192.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3795\5p80192.D Vial: 2
Acq On : 9 Dec 2021 12:58 pm Operator: kristis
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3795,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
46 I	Acenaphthene-d10	1.000	1.000	0.0	110	-0.04	7.81
56 t	Acenaphthylene	1.654	1.509	8.8	97	-0.04	7.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:53:36 2021 RPT1

8.6.14

8

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3799-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80259.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e5p3799\5p80259.d Vial: 2
Acq On : 12 Dec 2021 11:09 am Operator: kristis
Sample : cc3794-5 Inst : MS5P
Misc : op35621,e5p3799,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Sun Dec 12 23:12:05 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00	4.63
2	t	1,4-Dioxane	0.562	0.552	1.8	97	0.00	2.20
3	t	Pyridine	1.375	1.473	-7.1	95	0.00	2.51
4	t	N-Nitrosodimethylamine	0.819	0.824	-0.6	92	0.00	2.48
5	S	2-Fluorophenol	1.295	1.364	-5.3	95	0.00	3.64
6	t	Indene	2.162	2.191	-1.3	96	0.00	4.82
7	t	Cumene	2.982	3.122	-4.7	99	0.00	4.03
8	S	Phenol-d5	1.662	1.742	-4.8	97	0.00	4.36
9	t	Phenol	1.756	1.808	-3.0	95	0.00	4.36
10		Aniline	1.964	2.026	-3.2	96	0.00	4.38
11	t	bis(2-Chloroethyl)ether	1.220	1.188	2.6	92	0.00	4.43
12	t	2-Chlorophenol	1.394	1.417	-1.6	94	0.00	4.47
13	t	Decane	1.102	1.088	1.3	95	0.00	4.50
14	t	1,3-Dichlorobenzene	1.536	1.587	-3.3	97	0.00	4.58
15	t	1,4-Dichlorobenzene	1.479	1.510	-2.1	97	0.00	4.64
16	t	Benzyl alcohol	0.849	0.873	-2.8	95	0.00	4.73
17	t	1,2-Dichlorobenzene	1.405	1.479	-5.3	98	0.00	4.75
18	t	Acetophenone	1.662	1.653	0.5	96	0.00	4.94
19	t	2-Methylphenol	1.129	1.168	-3.5	95	0.00	4.82
20	t	2,2'-oxybis(1-Chloropropa	1.446	1.356	6.2	90	0.00	4.84
21	t	3&4-Methylphenol	1.162	1.177	-1.3	94	0.00	4.95
22	t	n-Nitroso-di-n-propylamin	0.789	0.745	5.6	91	0.00	4.95
23	t	Hexachloroethane	0.496	0.498	-0.4	99	0.00	5.03
24	I	Naphthalene-d8	1.000	1.000	0.0	95	0.00	5.71
25	S	Nitrobenzene-d5	0.301	0.302	-0.3	95	0.00	5.07
26	t	Nitrobenzene	0.309	0.306	1.0	94	0.00	5.08
27	t	Quinoline	0.708	0.722	-2.0	96	0.00	6.08
28	t	Isophorone	0.601	0.601	0.0	93	0.00	5.29
29	t	2-Nitrophenol	0.184	0.198	-7.6	101	0.00	5.36
30	t	2,4-Dimethylphenol	0.316	0.331	-4.7	97	0.00	5.39
31	t	Benzoic acid	0.212	0.206	2.8	98	0.00	5.47
32	t	bis(2-Chloroethoxy)methan	0.371	0.360	3.0	91	0.00	5.49
33	t	2,4-Dichlorophenol	0.289	0.304	-5.2	96	0.00	5.58
34	t	2,6-Dichlorophenol	0.273	0.286	-4.8	98	0.00	5.79
35		1,3,5-Trichlorobenzene	0.320	0.323	-0.9	95	0.00	5.37
36	t	1,2,4-Trichlorobenzene	0.313	0.322	-2.9	95	0.00	5.66
37		1,2,3-Trichlorobenzene	0.287	0.293	-2.1	96	0.00	5.88
38	t	Naphthalene	0.992	1.010	-1.8	96	0.00	5.74
39	t	4-Chloroaniline	0.414	0.423	-2.2	94	0.00	5.79
40	t	2,3-Dichloroaniline	0.350	0.367	-4.9	97	0.00	6.80
41	t	Hydroquinone	0.290	0.336	-15.9	102	0.00	6.13

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3799-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80259.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	t	Hexachlorobutadiene	0.169	0.173	-2.4	96	0.00	5.85
43	t	4-Chloro-3-methylphenol	0.272	0.289	-6.2	96	0.00	6.30
44	t	2-Methylnaphthalene	0.639	0.662	-3.6	97	0.00	6.47
45	t	1-Methylnaphthalene	0.606	0.622	-2.6	97	0.00	6.59
46	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.00	7.79
47	t	Hexachlorocyclopentadiene	0.317	0.330	-4.1	99	0.00	6.65
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.523	0.8	97	0.00	6.67
49	t	2,4,6-Trichlorophenol	0.343	0.353	-2.9	98	0.00	6.80
50	t	2,4,5-Trichlorophenol	0.364	0.374	-2.7	98	0.00	6.85
51	S	2-Fluorobiphenyl	1.312	1.296	1.2	97	0.00	6.92
52	t	2-Chloronaphthalene	1.094	1.093	0.1	99	0.00	7.06
53	t	Biphenyl	1.485	1.497	-0.8	98	0.00	7.04
54	t	2-Nitroaniline	0.256	0.271	-5.9	101	0.00	7.19
55	t	Dimethylphthalate	1.324	1.329	-0.4	98	0.00	7.46
56	t	Acenaphthylene	1.654	1.663	-0.5	97	0.00	7.60
57	t	2,6-Dinitrotoluene	0.278	0.302	-8.6	104	0.00	7.53
58	t	3-Nitroaniline	0.322	0.341	-5.9	101	0.00	7.75
59	t	Acenaphthene	1.125	1.137	-1.1	100	0.00	7.83
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	10.000	12.207	-22.1#	123	0.00	7.89
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.130	0.152	-16.9	112	0.00	8.01
62	t	Dibenzofuran	1.619	1.638	-1.2	99	0.00	8.08
63	t	2,4-Dinitrotoluene	0.352	0.384	-9.1	102	0.00	8.08
64		2,3,4,6-Tetrachlorophenol	0.295	0.305	-3.4	97	0.00	8.25
65	t	Diethylphthalate	1.273	1.314	-3.2	100	0.00	8.47
66	t	Fluorene	1.302	1.333	-2.4	100	0.00	8.57
67	t	4-Chlorophenyl-phenylethe	0.590	0.590	0.0	99	0.00	8.59
68	t	4-Nitroaniline	0.293	0.329	-12.3	109	0.00	8.62
69	I	Phenanthrene-d10	1.000	1.000	0.0	101	0.00	9.97
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	5.000	5.668	-13.4	115	0.00	8.66
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.640	0.648	-1.3	99	0.00	8.78
72	t	Pentachloronitrobenzene	0.036	0.040#	-11.1	102	0.00	9.71
73	t	1,2-Diphenylhydrazine	0.651	0.621	4.6	94	0.00	8.82
74	S	2,4,6-Tribromophenol	0.102	0.105	-2.9	97	0.00	8.92
75	t	4-Bromophenyl-phenylether	0.214	0.213	0.5	97	0.00	9.33
76	t	Hexachlorobenzene	0.236	0.230	2.5	98	0.00	9.37
		----------	True	Calc.	% Drift	----------		
77	t	Pentachlorophenol	10.000	10.039	-0.4	100	0.00	9.69
		----------	AvgRF	CCRF	% Dev	----------		
78	t	Phenanthrene	1.037	1.039	-0.2	101	0.00	10.00
79	t	Anthracene	1.051	1.066	-1.4	101	0.00	10.08
80	t	Carbazole	1.021	1.074	-5.2	103	0.00	10.36
81	t	Di-n-butylphthalate	1.281	1.339	-4.5	100	0.00	11.01
82	t	Fluoranthene	1.174	1.249	-6.4	104	0.00	11.87
83	t	Octadecane	0.400	0.381	4.8	93	0.00	9.94
84	I	Chrysene-d12	1.000	1.000	0.0	106	0.00	14.16
85	t	Benzidine	0.744	0.882	-18.5	137	0.00	12.15
86	t	Pyrene	1.369	1.408	-2.8	104	0.00	12.22

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3799-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80259.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

87	S	Terphenyl-d14	0.997	1.018	-2.1	105	0.00	12.55
88	t	Butylbenzylphthalate	0.617	0.680	-10.2	110	0.00	13.40
89	t	Benzo[a]anthracene	1.258	1.282	-1.9	108	0.00	14.14
90	t	3,3'-Dichlorobenzidine	0.432	0.469	-8.6	110	0.00	14.17
91	t	Chrysene	1.125	1.153	-2.5	108	0.00	14.20
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.912	-11.5	110	0.00	14.36
93	I	Perylene-d12	1.000	1.000	0.0	91	0.00	16.27
94	t	Di-n-octylphthalate	1.402	1.650	-17.7	111	0.00	15.36
95	t	Benzo[b]fluoranthene	1.212	1.278	-5.4	93	0.00	15.75
96	t	Benzo[k]fluoranthene	1.060	1.145	-8.0	97	0.00	15.79
97	t	Benzo[a]pyrene	1.109	1.184	-6.8	94	0.00	16.19
98	t	Indeno[1,2,3-cd]pyrene	0.997	1.050	-5.3	97	0.00	17.79
99	t	Dibenz(a,h)acridine	0.960	0.993	-3.4	94	0.00	17.46
100	t	Dibenz[a,h]anthracene	1.057	1.104	-4.4	97	0.00	17.85
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.532	-8.1	99	0.00	15.76
102	t	Benzo[g,h,i]perylene	1.150	1.162	-1.0	94	0.00	18.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p80260.d M5P3794LVI.M Sun Dec 12 23:12:18 2021

8.6.15

8

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3799-CC3785
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80260.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e5p3799\5p80260.d Vial: 3
Acq On : 12 Dec 2021 11:44 am Operator: kristis
Sample : cc3785-5 Inst : MS5P
Misc : op35621,e5p3799,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Sun Dec 12 23:12:05 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103		1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	94	0.00	4.62
104		Benzaldehyde	1.108	1.060	4.3	85	0.00	4.30
105		Phenanthrene-d10a	1.000	1.000	0.0	94	0.00	9.97
106		Atrazine	0.088	0.110	-25.0#	110	0.00	9.63
107		Naphthalene-d8a	1.000	1.000	0.0	89	0.00	5.71
108	t	Caprolactam	0.119	0.115	3.4	84	0.00	6.13
111		Phenanthrene-d10b	1.000	1.000	0.0	94	0.00	9.97
112	s	1-chlorooctadecane	0.247	0.262	-6.1	93	0.00	11.85
113	s	o-terphenyl	0.549	0.551	-0.4	92	0.00	10.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p80260.d M5P3794LVI.M Sun Dec 12 23:12:21 2021

8.6.16

8

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3808-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80438.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jeryllr\e5p3808\5p80438.d Vial: 2
Acq On : 16 Dec 2021 10:47 pm Operator: chriss2
Sample : cc3794-10 Inst : MS5P
Misc : op35621,e5p3808,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 16 00:12:40 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	86	-0.07	4.59
2	t	1,4-Dioxane	0.562	0.527	6.2	77	-0.10	2.15
3	t	Pyridine	1.375	1.393	-1.3	81	-0.09	2.47
4	t	N-Nitrosodimethylamine	0.819	0.775	5.4	74	-0.09	2.44
5	S	2-Fluorophenol	1.295	1.368	-5.6	85	-0.07	3.60
6	t	Indene	2.162	2.112	2.3	84	-0.08	4.79
7	t	Cumene	2.982	3.110	-4.3	85	-0.07	3.99
8	S	Phenol-d5	1.662	1.651	0.7	81	-0.06	4.32
9	t	Phenol	1.756	1.717	2.2	81	-0.06	4.33
10		Aniline	1.964	1.907	2.9	81	-0.07	4.35
11	t	bis(2-Chloroethyl)ether	1.220	1.154	5.4	80	-0.07	4.40
12	t	2-Chlorophenol	1.394	1.418	-1.7	85	-0.07	4.43
13	t	Decane	1.102	0.977	11.3	80	-0.07	4.46
14	t	1,3-Dichlorobenzene	1.536	1.527	0.6	84	-0.07	4.54
15	t	1,4-Dichlorobenzene	1.479	1.507	-1.9	86	-0.07	4.60
16	t	Benzyl alcohol	0.849	0.857	-0.9	83	-0.07	4.70
17	t	1,2-Dichlorobenzene	1.405	1.427	-1.6	86	-0.08	4.72
18	t	Acetophenone	1.662	1.618	2.6	87	-0.07	4.91
19	t	2-Methylphenol	1.129	1.101	2.5	82	-0.07	4.79
20	t	2,2'-oxybis(1-Chloropropa	1.446	1.190	17.7	75	-0.08	4.80
21	t	3&4-Methylphenol	1.162	1.096	5.7	82	-0.06	4.91
22	t	n-Nitroso-di-n-propylamin	0.789	0.726	8.0	83	-0.07	4.91
23	t	Hexachloroethane	0.496	0.491	1.0	86	-0.09	4.99
24	I	Naphthalene-d8	1.000	1.000	0.0	86	-0.09	5.67
25	S	Nitrobenzene-d5	0.301	0.293	2.7	85	-0.08	5.03
26	t	Nitrobenzene	0.309	0.295	4.5	85	-0.08	5.05
27	t	Quinoline	0.708	0.750	-5.9	88	-0.09	6.04
28	t	Isophorone	0.601	0.585	2.7	83	-0.07	5.26
29	t	2-Nitrophenol	0.184	0.197	-7.1	88	-0.09	5.32
30	t	2,4-Dimethylphenol	0.316	0.316	0.0	87	-0.07	5.36
31	t	Benzoic acid	0.212	0.227	-7.1	87	-0.04	5.46
32	t	bis(2-Chloroethoxy)methan	0.371	0.340	8.4	80	-0.08	5.45
33	t	2,4-Dichlorophenol	0.289	0.304	-5.2	88	-0.08	5.54
34	t	2,6-Dichlorophenol	0.273	0.285	-4.4	89	-0.09	5.76
35		1,3,5-Trichlorobenzene	0.320	0.315	1.6	85	-0.09	5.32
36	t	1,2,4-Trichlorobenzene	0.313	0.312	0.3	87	-0.09	5.62
37		1,2,3-Trichlorobenzene	0.287	0.283	1.4	86	-0.10	5.83
38	t	Naphthalene	0.992	1.002	-1.0	88	-0.09	5.69
39	t	4-Chloroaniline	0.414	0.420	-1.4	87	-0.09	5.75
40	t	2,3-Dichloroaniline	0.350	0.370	-5.7	91	-0.11	6.76
41	t	Hydroquinone	0.290	0.301	-3.8	82	-0.07	6.09

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3808-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80438.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	t	Hexachlorobutadiene	0.169	0.170	-0.6	88	-0.10	5.81
43	t	4-Chloro-3-methylphenol	0.272	0.296	-8.8	90	-0.09	6.26
44	t	2-Methylnaphthalene	0.639	0.668	-4.5	89	-0.10	6.43
45	t	1-Methylnaphthalene	0.606	0.621	-2.5	89	-0.11	6.54
46	I	Acenaphthene-d10	1.000	1.000	0.0	92	-0.11	7.74
47	t	Hexachlorocyclopentadiene	0.317	0.317	0.0	87	-0.11	6.61
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.498	5.5	88	-0.11	6.62
49	t	2,4,6-Trichlorophenol	0.343	0.352	-2.6	91	-0.10	6.76
50	t	2,4,5-Trichlorophenol	0.364	0.374	-2.7	91	-0.10	6.80
51	S	2-Fluorobiphenyl	1.312	1.274	2.9	89	-0.11	6.87
52	t	2-Chloronaphthalene	1.094	1.060	3.1	91	-0.11	7.01
53	t	Biphenyl	1.485	1.461	1.6	90	-0.11	6.99
54	t	2-Nitroaniline	0.256	0.267	-4.3	92	-0.10	7.15
55	t	Dimethylphthalate	1.324	1.364	-3.0	93	-0.11	7.41
56	t	Acenaphthylene	1.654	1.654	0.0	89	-0.12	7.54
57	t	2,6-Dinitrotoluene	0.278	0.309	-11.2	95	-0.11	7.48
58	t	3-Nitroaniline	0.322	0.353	-9.6	92	-0.10	7.70
59	t	Acenaphthene	1.125	1.139	-1.2	92	-0.11	7.78
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	20.000	23.570	-17.9	110	-0.10	7.85
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.130	0.158	-21.5#	105	-0.09	7.96
62	t	Dibenzofuran	1.619	1.628	-0.6	92	-0.12	8.02
63	t	2,4-Dinitrotoluene	0.352	0.395	-12.2	97	-0.11	8.03
64		2,3,4,6-Tetrachlorophenol	0.295	0.319	-8.1	92	-0.11	8.20
65	t	Diethylphthalate	1.273	1.379	-8.3	97	-0.12	8.41
66	t	Fluorene	1.302	1.357	-4.2	94	-0.12	8.51
67	t	4-Chlorophenyl-phenylethe	0.590	0.581	1.5	93	-0.12	8.54
68	t	4-Nitroaniline	0.293	0.327	-11.6	99	-0.10	8.57
69	I	Phenanthrene-d10	1.000	1.000	0.0	96	-0.13	9.91
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	10.000	10.959	-9.6	105	-0.11	8.62
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.640	0.651	-1.7	94	-0.12	8.72
72	t	Pentachloronitrobenzene	0.036	0.040#	-11.1	99	-0.12	9.65
73	t	1,2-Diphenylhydrazine	0.651	0.603	7.4	89	-0.12	8.78
74	S	2,4,6-Tribromophenol	0.102	0.113	-10.8	98	-0.12	8.87
75	t	4-Bromophenyl-phenylether	0.214	0.222	-3.7	94	-0.12	9.27
76	t	Hexachlorobenzene	0.236	0.240	-1.7	96	-0.12	9.32
		----------	True	Calc.	% Drift	----------		
77	t	Pentachlorophenol	20.000	20.333	-1.7	97	-0.12	9.64
		----------	AvgRF	CCRF	% Dev	----------		
78	t	Phenanthrene	1.037	1.040	-0.3	96	-0.12	9.95
79	t	Anthracene	1.051	1.071	-1.9	96	-0.12	10.03
80	t	Carbazole	1.021	1.091	-6.9	98	-0.12	10.31
81	t	Di-n-butylphthalate	1.281	1.450	-13.2	100	-0.12	10.96
82	t	Fluoranthene	1.174	1.281	-9.1	99	-0.13	11.81
83	t	Octadecane	0.400	0.362	9.5	83	-0.12	9.89
84	I	Chrysene-d12	1.000	1.000	0.0	96	-0.13	14.10
85	t	Benzidine	0.744	0.853	-14.7	104	-0.12	12.09
86	t	Pyrene	1.369	1.418	-3.6	99	-0.13	12.16

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3808-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80438.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

87	S	Terphenyl-d14	0.997	1.050	-5.3	99	-0.13	12.49
88	t	Butylbenzylphthalate	0.617	0.735	-19.1	104	-0.13	13.34
89	t	Benzo[a]anthracene	1.258	1.299	-3.3	96	-0.13	14.09
90	t	3,3'-Dichlorobenzidine	0.432	0.458	-6.0	92	-0.13	14.10
91	t	Chrysene	1.125	1.152	-2.4	97	-0.13	14.14
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.954	-16.6	102	-0.13	14.30
93	I	Perylene-d12	1.000	1.000	0.0	87	-0.13	16.21
94	t	Di-n-octylphthalate	1.402	1.698	-21.1#	98	-0.13	15.30
95	t	Benzo[b]fluoranthene	1.212	1.267	-4.5	85	-0.13	15.69
96	t	Benzo[k]fluoranthene	1.060	1.108	-4.5	90	-0.13	15.73
97	t	Benzo[a]pyrene	1.109	1.199	-8.1	88	-0.13	16.13
98	t	Indeno[1,2,3-cd]pyrene	0.997	1.045	-4.8	85	-0.18	17.71
99	t	Dibenz(a,h)acridine	0.960	0.996	-3.8	86	-0.17	17.38
100	t	Dibenz[a,h]anthracene	1.057	1.103	-4.4	85	-0.19	17.76
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.508	-3.3	85	-0.13	15.70
102	t	Benzo[g,h,i]perylene	1.150	1.154	-0.3	84	-0.19	18.14

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Fri Dec 17 05:51:28 2021

8.6.17

8

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3808-CC3785
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80439.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jeryllr\e5p3808\5p80439.d Vial: 3
Acq On : 16 Dec 2021 11:14 pm Operator: chriss2
Sample : cc3785-10 Inst : MS5P
Misc : op35621,e5p3808,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 16 00:12:40 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103		1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	81	-0.08	4.59
104		Benzaldehyde	1.108	1.043	5.9	75	-0.07	4.27
105		Phenanthrene-d10a	1.000	1.000	0.0	84	-0.13	9.91
106		Atrazine	0.088	0.113	-28.4#	96	-0.11	9.58
107		Naphthalene-d8a	1.000	1.000	0.0	79	-0.09	5.67
108	t	Caprolactam	0.119	0.109	8.4	69	-0.08	6.09
111		Phenanthrene-d10b	1.000	1.000	0.0	84	-0.13	9.91
112	s	1-chlorooctadecane	0.247	0.256	-3.6	80	-0.13	11.79
113	s	o-terphenyl	0.549	0.555	-1.1	83	-0.13	10.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Fri Dec 17 05:51:33 2021

8.6.18

8

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3811-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80503.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e5p3811\5p80503.d Vial: 2
Acq On : 20 Dec 2021 10:03 am Operator: jackleey
Sample : cc3794-10 Inst : MS5P
Misc : op35621,e5p3811,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Mon Dec 20 23:59:35 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	86	0.00	4.58
2	t	1,4-Dioxane	0.562	0.524	6.8	76	0.00	2.14
3	t	Pyridine	1.375	1.341	2.5	78	0.00	2.47
4	t	N-Nitrosodimethylamine	0.819	0.780	4.8	75	0.00	2.43
5	S	2-Fluorophenol	1.295	1.405	-8.5	87	0.00	3.60
6	t	Indene	2.162	2.131	1.4	85	0.00	4.78
7	t	Cumene	2.982	3.182	-6.7	87	0.00	3.98
8	S	Phenol-d5	1.662	1.644	1.1	81	0.00	4.33
9	t	Phenol	1.756	1.667	5.1	79	0.00	4.34
10		Aniline	1.964	1.876	4.5	79	0.00	4.34
11	t	bis(2-Chloroethyl)ether	1.220	1.117	8.4	77	0.00	4.40
12	t	2-Chlorophenol	1.394	1.388	0.4	83	0.00	4.43
13	t	Decane	1.102	0.947	14.1	78	0.00	4.46
14	t	1,3-Dichlorobenzene	1.536	1.551	-1.0	86	0.00	4.54
15	t	1,4-Dichlorobenzene	1.479	1.504	-1.7	86	0.00	4.60
16	t	Benzyl alcohol	0.849	0.841	0.9	81	0.00	4.70
17	t	1,2-Dichlorobenzene	1.405	1.412	-0.5	85	0.00	4.71
18	t	Acetophenone	1.662	1.642	1.2	88	0.00	4.90
19	t	2-Methylphenol	1.129	1.033	8.5	77	0.00	4.79
20	t	2,2'-oxybis(1-Chloropropa	1.446	1.127	22.1#	71	0.00	4.80
21	t	3&4-Methylphenol	1.162	1.070	7.9	80	0.00	4.91
22	t	n-Nitroso-di-n-propylamin	0.789	0.719	8.9	82	0.00	4.90
23	t	Hexachloroethane	0.496	0.489	1.4	86	0.00	4.98
24	I	Naphthalene-d8	1.000	1.000	0.0	82	0.00	5.67
25	S	Nitrobenzene-d5	0.301	0.297	1.3	82	0.00	5.03
26	t	Nitrobenzene	0.309	0.295	4.5	81	0.00	5.04
27	t	Quinoline	0.708	0.764	-7.9	86	0.00	6.04
28	t	Isophorone	0.601	0.582	3.2	78	0.00	5.25
29	t	2-Nitrophenol	0.184	0.202	-9.8	86	0.00	5.31
30	t	2,4-Dimethylphenol	0.316	0.328	-3.8	86	0.00	5.36
31	t	Benzoic acid	0.212	0.234	-10.4	86	0.00	5.46
32	t	bis(2-Chloroethoxy)methan	0.371	0.347	6.5	78	0.00	5.44
33	t	2,4-Dichlorophenol	0.289	0.305	-5.5	84	0.00	5.54
34	t	2,6-Dichlorophenol	0.273	0.289	-5.9	86	0.00	5.75
35		1,3,5-Trichlorobenzene	0.320	0.317	0.9	81	0.00	5.32
36	t	1,2,4-Trichlorobenzene	0.313	0.320	-2.2	85	0.00	5.61
37		1,2,3-Trichlorobenzene	0.287	0.289	-0.7	83	0.00	5.83
38	t	Naphthalene	0.992	1.012	-2.0	85	0.00	5.69
39	t	4-Chloroaniline	0.414	0.429	-3.6	84	0.00	5.75
40	t	2,3-Dichloroaniline	0.350	0.369	-5.4	86	0.00	6.76
41	t	Hydroquinone	0.290	0.339	-16.9	88	0.00	6.10

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3811-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80503.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	t	Hexachlorobutadiene	0.169	0.175	-3.6	86	0.00	5.81
43	t	4-Chloro-3-methylphenol	0.272	0.303	-11.4	88	0.00	6.27
44	t	2-Methylnaphthalene	0.639	0.674	-5.5	86	0.00	6.42
45	t	1-Methylnaphthalene	0.606	0.625	-3.1	85	0.00	6.53
46	I	Acenaphthene-d10	1.000	1.000	0.0	91	0.00	7.73
47	t	Hexachlorocyclopentadiene	0.317	0.319	-0.6	86	0.00	6.60
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.486	7.8	84	0.00	6.61
49	t	2,4,6-Trichlorophenol	0.343	0.345	-0.6	87	0.00	6.76
50	t	2,4,5-Trichlorophenol	0.364	0.374	-2.7	89	0.00	6.80
51	S	2-Fluorobiphenyl	1.312	1.261	3.9	87	0.00	6.86
52	t	2-Chloronaphthalene	1.094	1.041	4.8	88	0.00	7.00
53	t	Biphenyl	1.485	1.438	3.2	87	0.00	6.99
54	t	2-Nitroaniline	0.256	0.268	-4.7	91	0.00	7.15
55	t	Dimethylphthalate	1.324	1.374	-3.8	91	0.00	7.40
56	t	Acenaphthylene	1.654	1.660	-0.4	88	0.00	7.54
57	t	2,6-Dinitrotoluene	0.278	0.316	-13.7	95	0.00	7.48
58	t	3-Nitroaniline	0.322	0.365	-13.4	93	0.00	7.70
59	t	Acenaphthene	1.125	1.118	0.6	89	0.00	7.78
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	20.000	23.847	-19.2	109	0.00	7.85
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.130	0.170	-30.8#	111	0.00	7.98
62	t	Dibenzofuran	1.619	1.634	-0.9	90	0.00	8.02
63	t	2,4-Dinitrotoluene	0.352	0.404	-14.8	97	0.00	8.03
64		2,3,4,6-Tetrachlorophenol	0.295	0.320	-8.5	90	0.00	8.20
65	t	Diethylphthalate	1.273	1.380	-8.4	96	0.00	8.41
66	t	Fluorene	1.302	1.355	-4.1	92	0.00	8.51
67	t	4-Chlorophenyl-phenylethe	0.590	0.590	0.0	92	0.00	8.54
68	t	4-Nitroaniline	0.293	0.351	-19.8	104	0.00	8.57
69	I	Phenanthrene-d10	1.000	1.000	0.0	98	0.00	9.91
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	10.000	10.917	-9.2	107	0.00	8.61
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.640	0.630	1.6	92	0.00	8.72
72	t	Pentachloronitrobenzene	0.036	0.039#	-8.3	98	0.00	9.65
73	t	1,2-Diphenylhydrazine	0.651	0.581	10.8	88	0.00	8.77
74	S	2,4,6-Tribromophenol	0.102	0.106	-3.9	94	0.00	8.86
75	t	4-Bromophenyl-phenylether	0.214	0.217	-1.4	93	0.00	9.26
76	t	Hexachlorobenzene	0.236	0.227	3.8	93	0.00	9.31
		----------	True	Calc.	% Drift	----------		
77	t	Pentachlorophenol	20.000	18.653	6.7	90	0.00	9.64
		----------	AvgRF	CCRF	% Dev	----------		
78	t	Phenanthrene	1.037	1.027	1.0	96	0.00	9.95
79	t	Anthracene	1.051	1.061	-1.0	97	0.00	10.03
80	t	Carbazole	1.021	1.102	-7.9	101	0.00	10.31
81	t	Di-n-butylphthalate	1.281	1.446	-12.9	101	0.00	10.95
82	t	Fluoranthene	1.174	1.299	-10.6	103	0.00	11.81
83	t	Octadecane	0.400	0.349	12.8	81	0.00	9.88
84	I	Chrysene-d12	1.000	1.000	0.0	101	0.01	14.10
85	t	Benzidine	0.744	0.815	-9.5	104	0.00	12.09
86	t	Pyrene	1.369	1.386	-1.2	102	0.00	12.15

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3811-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80503.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

87	S	Terphenyl-d14	0.997	1.034	-3.7	103	0.00	12.48
88	t	Butylbenzylphthalate	0.617	0.731	-18.5	109	0.00	13.33
89	t	Benzo[a]anthracene	1.258	1.328	-5.6	103	0.00	14.08
90	t	3,3'-Dichlorobenzidine	0.432	0.472	-9.3	99	0.00	14.10
91	t	Chrysene	1.125	1.144	-1.7	101	0.00	14.13
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.967	-18.2	108	0.00	14.30
93	I	Perylene-d12	1.000	1.000	0.0	98	0.01	16.21
94	t	Di-n-octylphthalate	1.402	1.564	-11.6	101	0.00	15.30
95	t	Benzo[b]fluoranthene	1.212	1.277	-5.4	96	0.00	15.69
96	t	Benzo[k]fluoranthene	1.060	1.091	-2.9	100	0.00	15.73
97	t	Benzo[a]pyrene	1.109	1.187	-7.0	99	0.00	16.13
98	t	Indeno[1,2,3-cd]pyrene	0.997	1.097	-10.0	101	0.00	17.71
99	t	Dibenz(a,h)acridine	0.960	1.015	-5.7	98	0.00	17.38
100	t	Dibenz[a,h]anthracene	1.057	1.144	-8.2	100	0.00	17.76
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.498	-1.2	93	0.00	15.69
102	t	Benzo[g,h,i]perylene	1.150	1.234	-7.3	101	0.00	18.14

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p80504.d M5P3794LVI.M Tue Dec 21 00:01:31 2021

8.6.19

8

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3811-CC3785
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80504.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e5p3811\5p80504.d Vial: 3
Acq On : 20 Dec 2021 10:31 am Operator: jackleey
Sample : cc3785-10 Inst : MS5P
Misc : op35621,e5p3811,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Mon Dec 20 23:59:35 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103		1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	86	0.00	4.58
104		Benzaldehyde	1.108	1.016	8.3	78	0.00	4.26
105		Phenanthrene-d10a	1.000	1.000	0.0	82	0.00	9.90
106		Atrazine	0.088	0.112	-27.3#	93	0.00	9.57
107		Naphthalene-d8a	1.000	1.000	0.0	80	0.00	5.67
108	t	Caprolactam	0.119	0.104	12.6	67	0.00	6.09
111		Phenanthrene-d10b	1.000	1.000	0.0	82	0.00	9.90
112	s	1-chlorooctadecane	0.247	0.238	3.6	73	0.00	11.78
113	s	o-terphenyl	0.549	0.552	-0.5	81	0.00	10.55

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p80504.d M5P3794LVI.M Tue Dec 21 00:01:50 2021

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3819-CC3794
Lab FileID: 5P80649.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e5p3819\5p80649.d Vial: 2
Acq On : 28 Dec 2021 3:06 pm Operator: kristis
Sample : cc3794-5 Inst : MS5P
Misc : op35622,e5p3819,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Wed Dec 29 00:30:35 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	0.00	4.42
2	t	1,4-Dioxane	0.562	0.415	26.2#	70	0.00	1.94
3	t	Pyridine	1.375	0.938	31.8#	58	0.00	2.31
4	t	N-Nitrosodimethylamine	0.819	0.528	35.5#	56	0.00	2.26
5	S	2-Fluorophenol	1.295	1.149	11.3	76	0.00	3.46
6	t	Indene	2.162	2.004	7.3	84	0.00	4.61
7	t	Cumene	2.982	2.918	2.1	88	0.00	3.81
8	S	Phenol-d5	1.662	1.459	12.2	78	0.00	4.19
9	t	Phenol	1.756	1.435	18.3	72	0.00	4.20
10		Aniline	1.964	1.660	15.5	75	0.00	4.20
11	t	bis(2-Chloroethyl)ether	1.220	0.989	18.9	73	0.00	4.24
12	t	2-Chlorophenol	1.394	1.361	2.4	87	0.00	4.28
13	t	Decane	1.102	0.765	30.6#	64	0.00	4.28
14	t	1,3-Dichlorobenzene	1.536	1.567	-2.0	91	0.00	4.37
15	t	1,4-Dichlorobenzene	1.479	1.470	0.6	90	0.00	4.43
16	t	Benzyl alcohol	0.849	0.744	12.4	78	0.00	4.54
17	t	1,2-Dichlorobenzene	1.405	1.481	-5.4	93	0.00	4.54
18	t	Acetophenone	1.662	1.729	-4.0	95	0.00	4.73
19	t	2-Methylphenol	1.129	0.990	12.3	77	0.00	4.63
20	t	2,2'-oxybis(1-Chloropropa	1.446	0.874	39.6#	56	0.00	4.62
21	t	3&4-Methylphenol	1.162	1.057	9.0	80	0.00	4.76
22	t	n-Nitroso-di-n-propylamin	0.789	0.730	7.5	86	0.00	4.73
23	t	Hexachloroethane	0.496	0.526	-6.0	100	0.00	4.79
24	I	Naphthalene-d8	1.000	1.000	0.0	92	0.00	5.46
25	S	Nitrobenzene-d5	0.301	0.286	5.0	87	0.00	4.85
26	t	Nitrobenzene	0.309	0.298	3.6	89	0.00	4.87
27	t	Quinoline	0.708	0.770	-8.8	99	0.00	5.82
28	t	Isophorone	0.601	0.569	5.3	85	0.00	5.06
29	t	2-Nitrophenol	0.184	0.200	-8.7	99	0.00	5.13
30	t	2,4-Dimethylphenol	0.316	0.331	-4.7	94	0.00	5.18
31	t	Benzoic acid	0.212	0.207	2.4	96	0.00	5.29
32	t	bis(2-Chloroethoxy)methan	0.371	0.321	13.5	78	0.00	5.25
33	t	2,4-Dichlorophenol	0.289	0.311	-7.6	96	0.00	5.35
34	t	2,6-Dichlorophenol	0.273	0.300	-9.9	100	0.00	5.55
35		1,3,5-Trichlorobenzene	0.320	0.336	-5.0	96	0.00	5.12
36	t	1,2,4-Trichlorobenzene	0.313	0.320	-2.2	92	0.00	5.40
37		1,2,3-Trichlorobenzene	0.287	0.300	-4.5	95	0.00	5.62
38	t	Naphthalene	0.992	0.999	-0.7	92	0.00	5.48
39	t	4-Chloroaniline	0.414	0.420	-1.4	91	0.00	5.55
40	t	2,3-Dichloroaniline	0.350	0.385	-10.0	99	0.00	6.53
41	t	Hydroquinone	0.290	0.310	-6.9	91	0.00	5.93

8.6.21
8

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3819-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80649.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	t	Hexachlorobutadiene	0.169	0.186	-10.1	100	0.00	5.59
43	t	4-Chloro-3-methylphenol	0.272	0.311	-14.3	100	0.00	6.07
44	t	2-Methylnaphthalene	0.639	0.693	-8.5	98	0.00	6.18
45	t	1-Methylnaphthalene	0.606	0.650	-7.3	98	0.00	6.29
46	I	Acenaphthene-d10	1.000	1.000	0.0	105	0.00	7.46
47	t	Hexachlorocyclopentadiene	0.317	0.351	-10.7	112	0.00	6.35
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.498	5.5	98	0.00	6.37
49	t	2,4,6-Trichlorophenol	0.343	0.371	-8.2	110	0.00	6.52
50	t	2,4,5-Trichlorophenol	0.364	0.358	1.6	99	0.00	6.57
51	S	2-Fluorobiphenyl	1.312	1.212	7.6	96	0.00	6.62
52	t	2-Chloronaphthalene	1.094	1.030	5.9	99	0.00	6.75
53	t	Biphenyl	1.485	1.413	4.8	99	0.00	6.73
54	t	2-Nitroaniline	0.256	0.255	0.4	101	0.00	6.92
55	t	Dimethylphthalate	1.324	1.404	-6.0	110	0.00	7.16
56	t	Acenaphthylene	1.654	1.596	3.5	99	0.00	7.27
57	t	2,6-Dinitrotoluene	0.278	0.310	-11.5	113	0.00	7.23
58	t	3-Nitroaniline	0.322	0.311	3.4	98	0.00	7.47
59	t	Acenaphthene	1.125	1.131	-0.5	105	0.00	7.50
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	10.000	13.653	-36.5#	149	0.00	7.59
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.130	0.225	-73.1#	175	0.00	7.77
62	t	Dibenzofuran	1.619	1.626	-0.4	104	0.00	7.74
63	t	2,4-Dinitrotoluene	0.352	0.410	-16.5	115	0.00	7.77
64		2,3,4,6-Tetrachlorophenol	0.295	0.322	-9.2	109	0.00	7.94
65	t	Diethylphthalate	1.273	1.483	-16.5	119	0.00	8.13
66	t	Fluorene	1.302	1.329	-2.1	106	0.00	8.22
67	t	4-Chlorophenyl-phenylethe	0.590	0.590	0.0	105	0.00	8.25
68	t	4-Nitroaniline	0.293	0.314	-7.2	110	0.00	8.34
69	I	Phenanthrene-d10	1.000	1.000	0.0	107	0.00	9.60
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	5.000	6.151	-23.0#	134	0.00	8.34
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.640	0.652	-1.9	106	0.00	8.44
72	t	Pentachloronitrobenzene	0.036	0.041#	-13.9	112	0.00	9.34
73	t	1,2-Diphenylhydrazine	0.651	0.605	7.1	98	0.00	8.48
74	S	2,4,6-Tribromophenol	0.102	0.112	-9.8	110	0.00	8.57
75	t	4-Bromophenyl-phenylether	0.214	0.214	0.0	103	0.00	8.96
76	t	Hexachlorobenzene	0.236	0.239	-1.3	108	0.00	9.00
		----------	True	Calc.	% Drift	----------		
77	t	Pentachlorophenol	10.000	10.469	-4.7	112	0.00	9.35
		----------	AvgRF	CCRF	% Dev	----------		
78	t	Phenanthrene	1.037	1.030	0.7	106	0.00	9.64
79	t	Anthracene	1.051	1.043	0.8	105	0.00	9.72
80	t	Carbazole	1.021	1.070	-4.8	109	0.00	10.02
81	t	Di-n-butylphthalate	1.281	1.483	-15.8	118	0.00	10.63
82	t	Fluoranthene	1.174	1.276	-8.7	113	0.00	11.48
83	t	Octadecane	0.400	0.292	27.0#	75	0.00	9.53
84	I	Chrysene-d12	1.000	1.000	0.0	112	0.00	13.75
85	t	Benzidine	0.744	0.758	-1.9	124	0.00	11.79
86	t	Pyrene	1.369	1.422	-3.9	111	0.00	11.83

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3819-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80649.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

87	S	Terphenyl-d14	0.997	0.985	1.2	107	0.00	12.15
88	t	Butylbenzylphthalate	0.617	0.720	-16.7	123	0.00	13.00
89	t	Benzo[a]anthracene	1.258	1.251	0.6	111	0.00	13.74
90	t	3,3'-Dichlorobenzidine	0.432	0.414	4.2	102	0.00	13.79
91	t	Chrysene	1.125	1.082	3.8	107	0.00	13.80
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.942	-15.2	120	0.00	13.94
93	I	Perylene-d12	1.000	1.000	0.0	99	0.00	15.85
94	t	Di-n-octylphthalate	1.402	1.653	-17.9	121	0.00	14.92
95	t	Benzo[b]fluoranthene	1.212	1.244	-2.6	99	0.00	15.34
96	t	Benzo[k]fluoranthene	1.060	1.067	-0.7	98	0.00	15.37
97	t	Benzo[a]pyrene	1.109	1.174	-5.9	101	0.00	15.77
98	t	Indeno[1,2,3-cd]pyrene	0.997	1.107	-11.0	112	0.00	17.24
99	t	Dibenz(a,h)acridine	0.960	1.022	-6.5	105	0.00	16.94
100	t	Dibenz[a,h]anthracene	1.057	1.140	-7.9	108	0.00	17.28
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.501	-1.8	101	0.00	15.34
102	t	Benzo[g,h,i]perylene	1.150	1.221	-6.2	107	0.00	17.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p80650.d M5P3794LVI.M Wed Dec 29 00:30:51 2021

8.6.21

8

Continuing Calibration Summary

Job Number: JD36319 **Sample:** E5P3819-CC3785
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80650.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e5p3819\5p80650.d Vial: 3
Acq On : 28 Dec 2021 3:34 pm Operator: kristis
Sample : cc3785-5 Inst : MS5P
Misc : op35622,e5p3819,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Wed Dec 29 00:30:35 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	79	0.00	4.42
104	Benzaldehyde	1.108	0.976	11.9	66	0.00	4.11
105	Phenanthrene-d10a	1.000	1.000	0.0	99	0.00	9.60
106	Atrazine	0.088	0.107	-21.6#	113	0.00	9.28
107	Naphthalene-d8a	1.000	1.000	0.0	78	0.00	5.46
108 t	Caprolactam	0.119	0.099	16.8	64	0.00	5.90
111	Phenanthrene-d10b	1.000	1.000	0.0	99	0.00	9.60
112 s	1-chlorooctadecane	0.247	0.207	16.2	78	0.00	11.42
113 s	o-terphenyl	0.549	0.544	0.9	95	0.00	10.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p80650.d M5P3794LVI.M Wed Dec 29 00:30:54 2021

8.6.22

8

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2551 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2551-DFTPP	4P48502.D	10/20/21 22:19	n/a	DFTPP Tune
E4P2551-IC2551	4P48504.D	10/20/21 22:59	n/a	Initial cal 1
E4P2551-ICC2551	4P48505.D	10/20/21 23:23	n/a	Initial cal 0.2
E4P2551-IC2551	4P48506.D	10/20/21 23:46	n/a	Initial cal 0.02
E4P2551-IC2551	4P48507.D	10/21/21 00:10	n/a	Initial cal 0.5
E4P2551-IC2551	4P48508.D	10/21/21 00:33	n/a	Initial cal 0.1
E4P2551-IC2551	4P48509.D	10/21/21 00:57	n/a	Initial cal 0.004
E4P2551-IC2551	4P48511.D	10/21/21 01:44	n/a	Initial cal 0.04
E4P2551-IC2551	4P48513.D	10/21/21 02:16	n/a	Initial cal 0.002
E4P2551-IC2551	4P48514.D	10/21/21 02:39	n/a	Initial cal 0.01
E4P2551-ICV2551	4P48512.D	10/21/21 03:15	n/a	Initial cal verification 0.2
OP35848A-BSD12	4P48515.D	10/21/21 03:45	OP35848A	Blank Spike Duplicate

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2619 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2619-DFTPP	4P49980.D	12/11/21 02:36	n/a	DFTPP Tune
E4P2619-CC2551	4P49983.D	12/11/21 03:42	n/a	Continuing cal 0.2
OP36997A-MB1	4P49985A.D	12/11/21 04:41	OP36997A	Method Blank
OP36997A-BS12	4P49986.D	12/11/21 05:05	OP36997A	Blank Spike
OP36997A-BSD12	4P49987.D	12/11/21 05:29	OP36997A	Blank Spike Duplicate
OP37045A-MB1	4P49988.D	12/11/21 05:52	OP37045A	Method Blank
OP37045A-BS12	4P49989.D	12/11/21 06:15	OP37045A	Blank Spike
OP37045A-BSD12	4P49990.D	12/11/21 06:39	OP37045A	Blank Spike Duplicate
ZZZZZZ	4P49991.D	12/11/21 07:03	OP37045A	(unrelated sample)
ZZZZZZ	4P49992.D	12/11/21 07:26	OP36997A	(unrelated sample)
ZZZZZZ	4P49993.D	12/11/21 07:50	OP36997A	(unrelated sample)
ZZZZZZ	4P49994.D	12/11/21 08:14	OP36997A	(unrelated sample)
ZZZZZZ	4P49995.D	12/11/21 08:38	OP36997A	(unrelated sample)
ZZZZZZ	4P49996.D	12/11/21 09:01	OP36997A	(unrelated sample)

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2620 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2620-DFTPP	4P50022.D	12/12/21 10:16	n/a	DFTPP Tune
E4P2620-CC2551	4P50023.D	12/12/21 10:42	n/a	Continuing cal 0.1
OP37001A-MB1	4P50024.D	12/12/21 11:20	OP37001A	Method Blank
OP37001A-BS12	4P50025.D	12/12/21 11:43	OP37001A	Blank Spike
ZZZZZZ	4P50026.D	12/12/21 12:15	OP37001A	(unrelated sample)
ZZZZZZ	4P50027A.D	12/12/21 12:47	OP37001A	(unrelated sample)
JD36109-3	4P50028.D	12/12/21 13:10	OP37001A	(used for QC only; not part of job JD36319)
ZZZZZZ	4P50029.D	12/12/21 13:33	OP37001A	(unrelated sample)
ZZZZZZ	4P50030.D	12/12/21 13:57	OP37001A	(unrelated sample)
ZZZZZZ	4P50031.D	12/12/21 14:20	OP37001A	(unrelated sample)
OP37001A-MS	4P50032.D	12/12/21 14:44	OP37001A	Matrix Spike
OP37001A-MSD	4P50033.D	12/12/21 15:07	OP37001A	Matrix Spike Duplicate
ZZZZZZ	4P50034.D	12/12/21 15:31	OP36997A	(unrelated sample)
ZZZZZZ	4P50035.D	12/12/21 15:54	OP36997A	(unrelated sample)
ZZZZZZ	4P50036.D	12/12/21 16:18	OP37045A	(unrelated sample)
ZZZZZZ	4P50037.D	12/12/21 16:42	OP37045A	(unrelated sample)
ZZZZZZ	4P50038.D	12/12/21 17:05	OP37045A	(unrelated sample)
JD36319-2	4P50039.D	12/12/21 17:29	OP37045A	HOFF MW-A
JD36319-3	4P50040.D	12/12/21 17:52	OP37045A	HOFF MW-10
ZZZZZZ	4P50041.D	12/12/21 18:16	OP37045A	(unrelated sample)
ZZZZZZ	4P50042.D	12/12/21 18:40	OP37045A	(unrelated sample)
ZZZZZZ	4P50043.D	12/12/21 19:03	OP37045A	(unrelated sample)
ZZZZZZ	4P50044.D	12/12/21 19:27	OP37045A	(unrelated sample)
ZZZZZZ	4P50045.D	12/12/21 19:50	OP37045A	(unrelated sample)
ZZZZZZ	4P50046.D	12/12/21 20:14	OP37045A	(unrelated sample)
ZZZZZZ	4P50047.D	12/12/21 20:37	OP37045A	(unrelated sample)

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2624 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2624-DFTPP	4P50100.D	12/15/21 02:15	n/a	DFTPP Tune
E4P2624-CC2551	4P50101.D	12/15/21 02:28	n/a	Continuing cal 0.1
OP37046A-MB1	4P50103.D	12/15/21 03:39	OP37046A	Method Blank
ZZZZZZ	4P50106.D	12/15/21 04:50	OP37046A	(unrelated sample)
ZZZZZZ	4P50107.D	12/15/21 05:13	OP37046A	(unrelated sample)
ZZZZZZ	4P50108.D	12/15/21 05:37	OP37046A	(unrelated sample)
ZZZZZZ	4P50109.D	12/15/21 06:00	OP37046A	(unrelated sample)
ZZZZZZ	4P50110.D	12/15/21 06:24	OP37046A	(unrelated sample)
ZZZZZZ	4P50111.D	12/15/21 06:48	OP37046A	(unrelated sample)
ZZZZZZ	4P50112.D	12/15/21 07:11	OP37046A	(unrelated sample)
ZZZZZZ	4P50113.D	12/15/21 07:34	OP37046A	(unrelated sample)
ZZZZZZ	4P50115.D	12/15/21 08:21	OP37046A	(unrelated sample)

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2625 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2625-DFTPP	4P50117.D	12/15/21 15:07	n/a	DFTPP Tune
E4P2625-CC2551	4P50120.D	12/15/21 16:36	n/a	Continuing cal 0.2
OP37091A-MB1	4P50121.D	12/15/21 17:19	OP37091A	Method Blank
OP37091A-BS12	4P50122.D	12/15/21 17:47	OP37091A	Blank Spike
OP37091A-BSD12	4P50123.D	12/15/21 18:10	OP37091A	Blank Spike Duplicate
OP37046A-MB1	4P50124.D	12/15/21 18:34	OP37046A	Method Blank
OP37046A-BS12	4P50125.D	12/15/21 18:57	OP37046A	Blank Spike
OP37046A-BSD12	4P50126.D	12/15/21 19:21	OP37046A	Blank Spike Duplicate
OP37017A-MB1	4P50127.D	12/15/21 19:45	OP37017A	Method Blank
OP37017A-BS12	4P50128.D	12/15/21 20:08	OP37017A	Blank Spike
OP37017A-BSD12	4P50129.D	12/15/21 20:32	OP37017A	Blank Spike Duplicate
ZZZZZZ	4P50130.D	12/15/21 20:56	OP37017A	(unrelated sample)
ZZZZZZ	4P50131.D	12/15/21 21:20	OP36997A	(unrelated sample)
ZZZZZZ	4P50132.D	12/15/21 21:43	OP37091A	(unrelated sample)
ZZZZZZ	4P50133.D	12/15/21 22:07	OP37091A	(unrelated sample)
ZZZZZZ	4P50134.D	12/15/21 22:31	OP37091A	(unrelated sample)
JD36319-4	4P50135.D	12/15/21 22:54	OP37046A	HOFF MW-8DL
JD36319-5	4P50136.D	12/15/21 23:18	OP37046A	HOFF MW-8DU
ZZZZZZ	4P50137.D	12/15/21 23:42	OP37001A	(unrelated sample)
ZZZZZZ	4P50138.D	12/16/21 00:05	OP37001A	(unrelated sample)
ZZZZZZ	4P50139.D	12/16/21 00:29	OP37001A	(unrelated sample)
ZZZZZZ	4P50140.D	12/16/21 00:53	OP37001A	(unrelated sample)
ZZZZZZ	4P50141.D	12/16/21 01:17	OP37001A	(unrelated sample)
ZZZZZZ	4P50142.D	12/16/21 01:41	OP37001A	(unrelated sample)
ZZZZZZ	4P50143.D	12/16/21 02:05	OP37001A	(unrelated sample)

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3785	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3785-DFTPP	5P79956.D	12/01/21 21:49	n/a	DFTPP Tune
E5P3785-IC3785	5P79957.D	12/01/21 22:09	n/a	Initial cal 20
E5P3785-IC3785	5P79958.D	12/01/21 22:36	n/a	Initial cal 16
E5P3785-ICC3785	5P79959.D	12/01/21 23:02	n/a	Initial cal 10
E5P3785-IC3785	5P79960.D	12/01/21 23:30	n/a	Initial cal 5
E5P3785-IC3785	5P79961.D	12/01/21 23:57	n/a	Initial cal 2
E5P3785-IC3785	5P79962.D	12/02/21 00:24	n/a	Initial cal 1
E5P3785-IC3785	5P79963.D	12/02/21 00:51	n/a	Initial cal 0.4
E5P3785-IC3785	5P79964.D	12/02/21 01:17	n/a	Initial cal 0.2
E5P3785-ICV3785	5P79965.D	12/02/21 01:45	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3794	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3794-DFTPP	5P80176.D	12/09/21 00:53	n/a	DFTPP Tune
E5P3794-IC3794	5P80177.D	12/09/21 01:11	n/a	Initial cal 0.2
E5P3794-IC3794	5P80178.D	12/09/21 01:38	n/a	Initial cal 0.4
E5P3794-IC3794	5P80179.D	12/09/21 02:05	n/a	Initial cal 1
E5P3794-IC3794	5P80180.D	12/09/21 02:32	n/a	Initial cal 2
E5P3794-IC3794	5P80181.D	12/09/21 02:59	n/a	Initial cal 5
E5P3794-ICC3794	5P80182.D	12/09/21 03:26	n/a	Initial cal 10
E5P3794-IC3794	5P80183.D	12/09/21 03:53	n/a	Initial cal 16
E5P3794-IC3794	5P80184.D	12/09/21 04:19	n/a	Initial cal 20
E5P3794-ICV3794	5P80185.D	12/09/21 04:47	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80186.D	12/09/21 05:13	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80187.D	12/09/21 05:40	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80188.D	12/09/21 06:07	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3795	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3795-DFTPP	5P80191.D	12/09/21 12:44	n/a	DFTPP Tune
E5P3795-ICV3794	5P80192.D	12/09/21 12:58	n/a	Initial cal verification 10
E5P3795-CC3794	5P80193.D	12/09/21 13:25	n/a	Continuing cal 10
E5P3795-CC3785	5P80194.D	12/09/21 13:51	n/a	Continuing cal 10
OP36390-MB1	5P80195.D	12/09/21 14:46	OP36390	Method Blank
OP36390-BS1	5P80196.D	12/09/21 15:13	OP36390	Blank Spike
OP36390-BSD	5P80197.D	12/09/21 15:40	OP36390	Blank Spike Duplicate
ZZZZZZ	5P80198.D	12/09/21 16:07	OP36390	(unrelated sample)
E5P3795-ECC3794	5P80199.D	12/09/21 16:57	n/a	Ending cal 10
E5P3795-ECC3785	5P80200.D	12/09/21 17:36	n/a	Ending cal 10

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3799	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3799-DFTPP	5P80258.D	12/12/21 10:48	n/a	DFTPP Tune
E5P3799-CC3794	5P80259.D	12/12/21 11:09	n/a	Continuing cal 5
E5P3799-CC3785	5P80260.D	12/12/21 11:44	n/a	Continuing cal 5
OP36953-MB1	5P80261.D	12/12/21 12:31	OP36953	Method Blank
ZZZZZZ	5P80262.D	12/12/21 12:58	OP36953	(unrelated sample)
OP36953-BS1	5P80263.D	12/12/21 13:25	OP36953	Blank Spike
OP37045-MB1	5P80264.D	12/12/21 13:52	OP37045	Method Blank
OP37045-BS1	5P80265.D	12/12/21 14:19	OP37045	Blank Spike
OP37045-BSD	5P80266.D	12/12/21 14:46	OP37045	Blank Spike Duplicate
ZZZZZZ	5P80267.D	12/12/21 15:13	OP37045	(unrelated sample)
ZZZZZZ	5P80268.D	12/12/21 15:40	OP37045	(unrelated sample)
JD36087-3	5P80269.D	12/12/21 16:07	OP36953	(used for QC only; not part of job JD36319)
ZZZZZZ	5P80270.D	12/12/21 16:34	OP36953	(unrelated sample)
ZZZZZZ	5P80271.D	12/12/21 17:01	OP36953	(unrelated sample)
ZZZZZZ	5P80272.D	12/12/21 17:28	OP36953	(unrelated sample)
ZZZZZZ	5P80273.D	12/12/21 17:54	OP36953	(unrelated sample)
ZZZZZZ	5P80274.D	12/12/21 18:21	OP36953	(unrelated sample)
ZZZZZZ	5P80275.D	12/12/21 18:48	OP36953	(unrelated sample)
ZZZZZZ	5P80276.D	12/12/21 19:15	OP36953	(unrelated sample)
ZZZZZZ	5P80277.D	12/12/21 19:42	OP36953	(unrelated sample)
OP36953-MS	5P80278.D	12/12/21 20:08	OP36953	Matrix Spike
OP36953-MSD	5P80279.D	12/12/21 20:35	OP36953	Matrix Spike Duplicate

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3808	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3808-DFTPP	5P80437.D	12/16/21 22:29	n/a	DFTPP Tune
E5P3808-CC3794	5P80438.D	12/16/21 22:47	n/a	Continuing cal 10
E5P3808-CC3785	5P80439.D	12/16/21 23:14	n/a	Continuing cal 10
OP36997-MB1	5P80440.D	12/16/21 23:57	OP36997	Method Blank
OP36997-BS1	5P80441.D	12/17/21 00:24	OP36997	Blank Spike
OP36997-BSD	5P80442.D	12/17/21 00:51	OP36997	Blank Spike Duplicate
OP37091-BS1	5P80444.D	12/17/21 01:45	OP37091	Blank Spike
OP37091-BSD	5P80445.D	12/17/21 02:13	OP37091	Blank Spike Duplicate
OP37046-MB1	5P80446.D	12/17/21 02:40	OP37046	Method Blank
OP37046B-MB1	5P80446.D	12/17/21 02:40	OP37046B	Method Blank
OP37046-BS1	5P80447.D	12/17/21 03:08	OP37046	Blank Spike
OP37046B-BS1	5P80447.D	12/17/21 03:08	OP37046B	Blank Spike
OP37046-BSD	5P80448.D	12/17/21 03:35	OP37046	Blank Spike Duplicate
OP37046B-BSD	5P80448.D	12/17/21 03:35	OP37046B	Blank Spike Duplicate
ZZZZZZ	5P80449.D	12/17/21 04:02	OP37046	(unrelated sample)
ZZZZZZ	5P80450.D	12/17/21 04:29	OP36997	(unrelated sample)
ZZZZZZ	5P80451.D	12/17/21 04:56	OP37017	(unrelated sample)
ZZZZZZ	5P80452.D	12/17/21 05:23	OP37017	(unrelated sample)
ZZZZZZ	5P80453.D	12/17/21 05:50	OP37091	(unrelated sample)
ZZZZZZ	5P80454.D	12/17/21 06:17	OP37091	(unrelated sample)
ZZZZZZ	5P80455.D	12/17/21 06:44	OP37091	(unrelated sample)
ZZZZZZ	5P80456.D	12/17/21 07:11	OP37091	(unrelated sample)
JD36319-4	5P80457.D	12/17/21 07:38	OP37046	HOFF MW-8DL
ZZZZZZ	5P80458.D	12/17/21 08:05	OP37046	(unrelated sample)
ZZZZZZ	5P80459A.D	12/17/21 09:26	OP37046	(unrelated sample)
ZZZZZZ	5P80461.D	12/17/21 10:19	OP37046	(unrelated sample)

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3811	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3811-DFTPP	5P80502.D	12/20/21 09:29	n/a	DFTPP Tune
E5P3811-CC3794	5P80503.D	12/20/21 10:03	n/a	Continuing cal 10
E5P3811-CC3785	5P80504.D	12/20/21 10:31	n/a	Continuing cal 10
OP37151A-MB1	5P80506.D	12/20/21 11:48	OP37151A	Method Blank
OP37151A-BS1	5P80507.D	12/20/21 12:14	OP37151A	Blank Spike
OP37151A-BSD	5P80508.D	12/20/21 12:41	OP37151A	Blank Spike Duplicate
ZZZZZZ	5P80509.D	12/20/21 13:07	OP37151A	(unrelated sample)
ZZZZZZ	5P80510.D	12/20/21 13:34	OP37151A	(unrelated sample)
ZZZZZZ	5P80513.D	12/20/21 15:02	OP37151A	(unrelated sample)
ZZZZZZ	5P80514.D	12/20/21 15:28	OP37151A	(unrelated sample)
ZZZZZZ	5P80515.D	12/20/21 15:55	OP37151A	(unrelated sample)
ZZZZZZ	5P80516.D	12/20/21 16:22	OP37151A	(unrelated sample)
ZZZZZZ	5P80517.D	12/20/21 16:48	OP37151A	(unrelated sample)
ZZZZZZ	5P80518.D	12/20/21 17:15	OP37151A	(unrelated sample)
ZZZZZZ	5P80519.D	12/20/21 17:42	OP37046	(unrelated sample)
ZZZZZZ	5P80520.D	12/20/21 18:08	OP37046	(unrelated sample)
ZZZZZZ	5P80521.D	12/20/21 18:35	OP37046	(unrelated sample)
ZZZZZZ	5P80523.D	12/20/21 19:28	OP37046	(unrelated sample)
ZZZZZZ	5P80524.D	12/20/21 19:55	OP37046	(unrelated sample)
JD36319-5	5P80525.D	12/20/21 20:21	OP37046	HOFF MW-8DU

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3819	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3819-DFTPP	5P80648.D	12/28/21 14:52	n/a	DFTPP Tune
E5P3819-CC3794	5P80649.D	12/28/21 15:06	n/a	Continuing cal 5
E5P3819-CC3785	5P80650.D	12/28/21 15:34	n/a	Continuing cal 5
OP37111-MB1	5P80652.D	12/28/21 16:35	OP37111	Method Blank
ZZZZZZ	5P80655.D	12/28/21 17:56	OP37111	(unrelated sample)
JD36319-2	5P80656.D	12/28/21 18:23	OP37045	HOFF MW-A
JD36319-3	5P80657.D	12/28/21 18:50	OP37045	HOFF MW-10
ZZZZZZ	5P80658.D	12/28/21 19:17	OP37045	(unrelated sample)
ZZZZZZ	5P80659.D	12/28/21 19:44	OP37045	(unrelated sample)
ZZZZZZ	5P80663.D	12/28/21 21:31	OP37046	(unrelated sample)
ZZZZZZ	5P80670.D	12/29/21 00:39	OP37271	(unrelated sample)
ZZZZZZ	5P80671.D	12/29/21 01:06	OP37271	(unrelated sample)

MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e5p3819\
Data File : 5p80656.d
Acq On : 28 Dec 2021 6:23 pm
Operator : kristis
Sample : jd36319-2 Inst : MS5P
Misc : op37045,e5p3819,270,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 29 00:51:29 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Wed Dec 29 00:30:35 2021
Response via : Initial Calibration

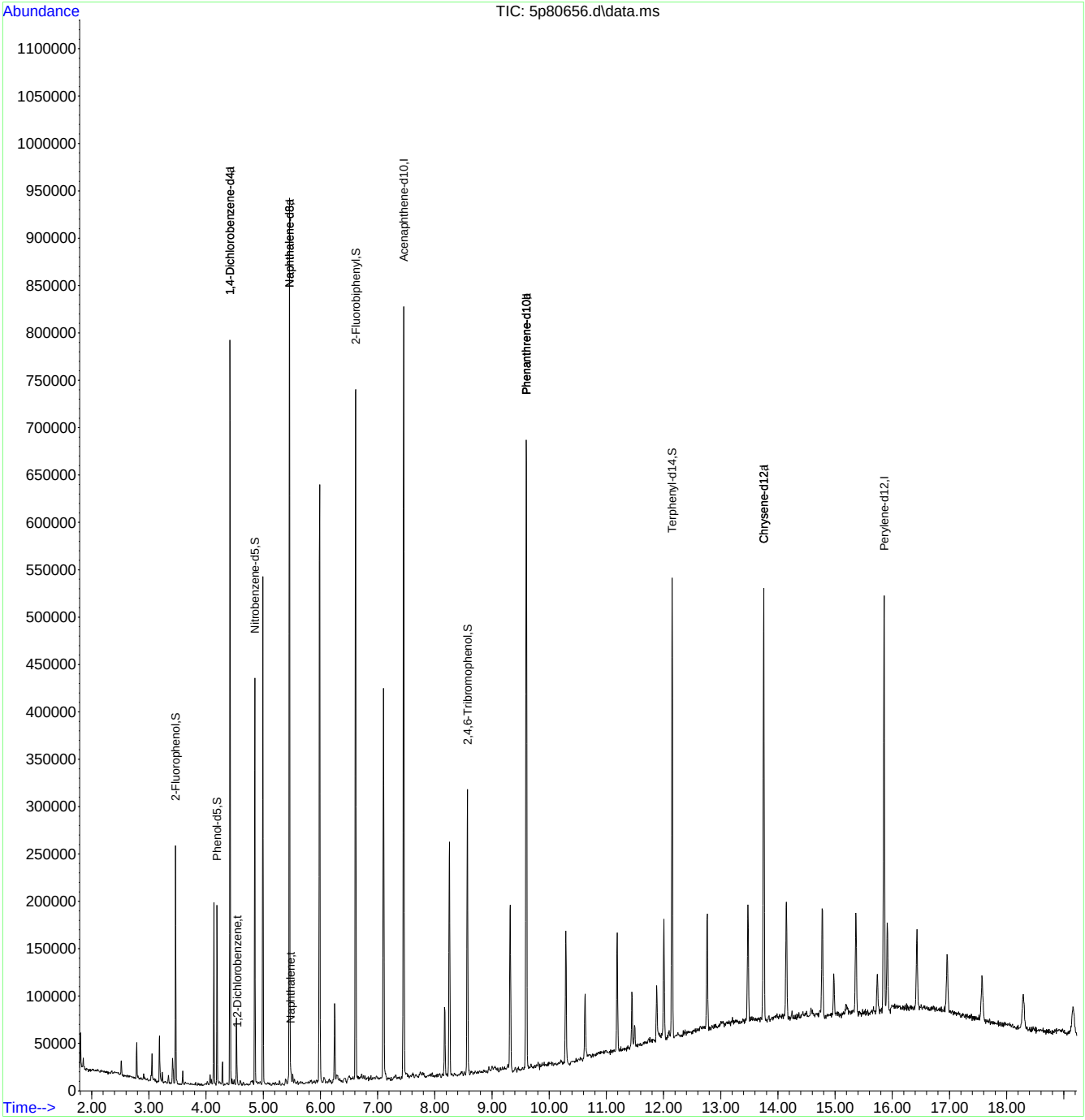
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.416	152	102850	8.00	ppm	0.00
24) Naphthalene-d8	5.458	136	381050	8.00	ppm	0.00
46) Acenaphthene-d10	7.456	164	193076	8.00	ppm	0.00
69) Phenanthrene-d10	9.598	188	302164	8.00	ppm	0.00
84) Chrysene-d12	13.754	240	194356	8.00	ppm	0.00
93) Perylene-d12	15.859	264	192612	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.416	152	102850	8.00	ppm	0.00
105) Phenanthrene-d10a	9.598	188	302164	8.00	ppm	0.00
107) Naphthalene-d8a	5.458	136	381050	8.00	ppm	0.00
109) Chrysene-d12a	13.754	240	194356	8.00	ppm	0.00
111) Phenanthrene-d10b	9.598	188	302164	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.465	112	52896	3.18	ppm	0.00
Spiked Amount 10.000			Recovery = 31.80%			
8) Phenol-d5	4.191	99	41884	1.96	ppm	0.00
Spiked Amount 10.000			Recovery = 19.60%			
25) Nitrobenzene-d5	4.854	82	96651	6.74	ppm	0.00
Spiked Amount 10.000			Recovery = 67.40%			
51) 2-Fluorobiphenyl	6.617	172	242002	7.64	ppm	0.00
Spiked Amount 10.000			Recovery = 76.40%			
74) 2,4,6-Tribromophenol	8.572	330	33174	8.64	ppm	0.00
Spiked Amount 10.000			Recovery = 86.40%			
87) Terphenyl-d14	12.151	244	182821	7.55	ppm	0.00
Spiked Amount 10.000			Recovery = 75.50%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
17) 1,2-Dichlorobenzene	4.544	146	1261	0.07	ppm	83
38) Naphthalene	5.479	128	2184	0.05	ppm	91

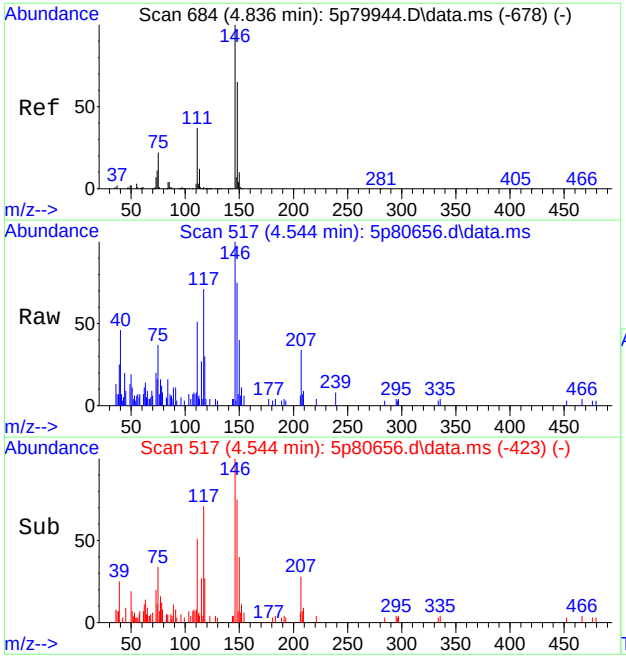
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e5p3819\
Data File : 5p80656.d
Acq On : 28 Dec 2021 6:23 pm
Operator : kristis
Sample : jd36319-2 Inst : MS5P
Misc : op37045,e5p3819,270,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 29 00:51:29 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Wed Dec 29 00:30:35 2021
Response via : Initial Calibration

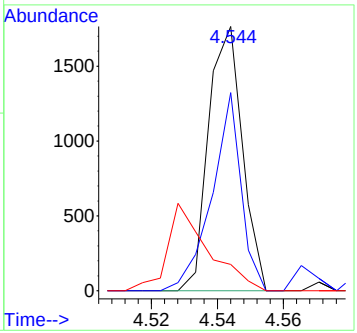


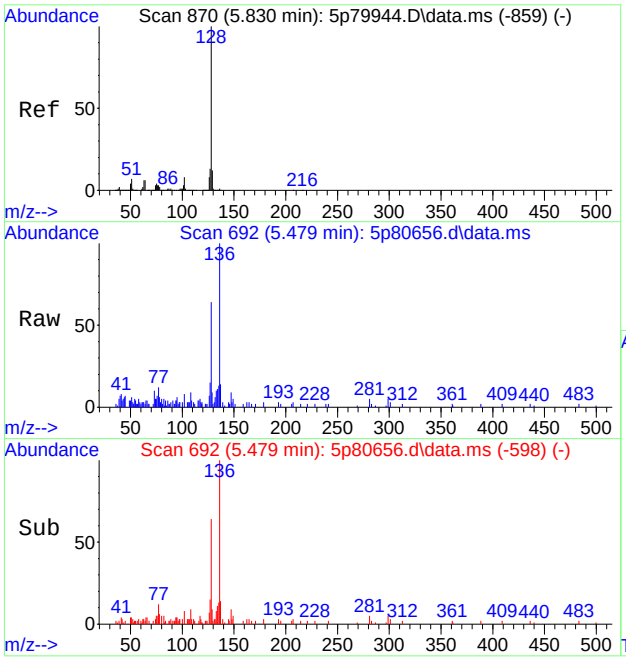


#17
1,2-Dichlorobenzene
Concen: 0.07 ppm
RT: 4.544 min Scan# 517
Delta R.T. 0.000 min
Lab File: 5p80656.d
Acq: 28 Dec 2021 6:23 pm

Tgt Ion:146 Resp: 1261

Ion	Ratio	Lower	Upper
146	100		
148	75.0	30.7	90.7
113	7.6	0.0	41.1

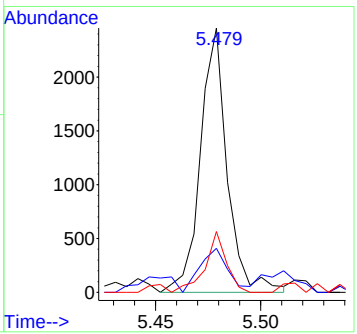




#38
Naphthalene
Concen: 0.05 ppm
RT: 5.479 min Scan# 692
Delta R.T. 0.000 min
Lab File: 5p80656.d
Acq: 28 Dec 2021 6:23 pm

Tgt Ion:128 Resp: 2184

Ion	Ratio	Lower	Upper
128	100		
129	9.9	0.0	41.3
127	20.2	0.0	44.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e5p3819\
Data File : 5p80657.d
Acq On : 28 Dec 2021 6:50 pm
Operator : kristis
Sample : jd36319-3 Inst : MS5P
Misc : op37045,e5p3819,250,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 29 00:53:49 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Wed Dec 29 00:30:35 2021
Response via : Initial Calibration

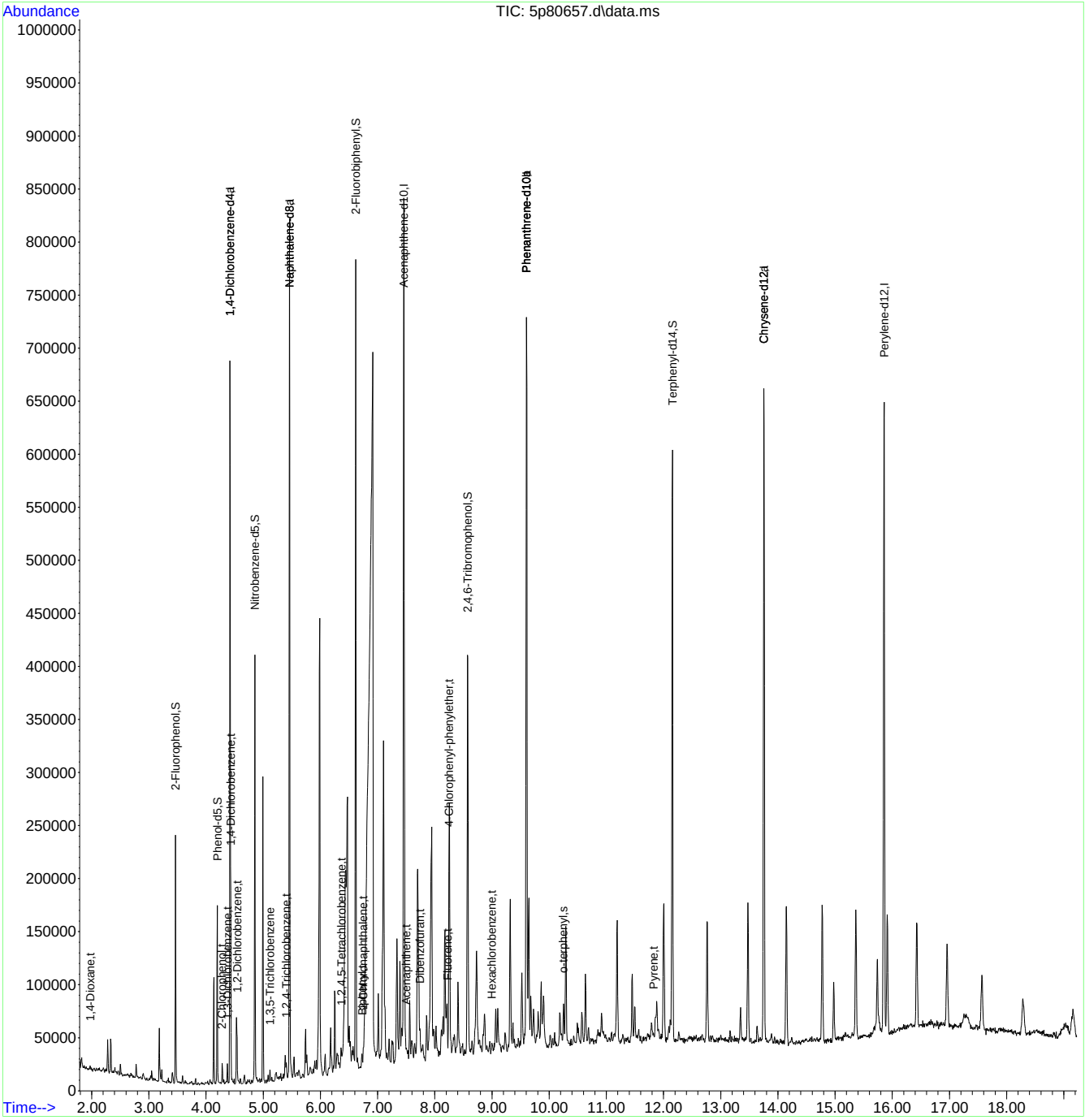
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.416	152	85415	8.00	ppm	0.00
24) Naphthalene-d8	5.457	136	336605	8.00	ppm	0.00
46) Acenaphthene-d10	7.455	164	187499	8.00	ppm	0.00
69) Phenanthrene-d10	9.603	188	320972	8.00	ppm	0.00
84) Chrysene-d12	13.754	240	268720	8.00	ppm	0.00
93) Perylene-d12	15.859	264	259730	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.416	152	85415	8.00	ppm	0.00
105) Phenanthrene-d10a	9.603	188	320972	8.00	ppm	0.00
107) Naphthalene-d8a	5.457	136	336605	8.00	ppm	0.00
109) Chrysene-d12a	13.754	240	268720	8.00	ppm	0.00
111) Phenanthrene-d10b	9.603	188	320972	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.465	112	48401	3.50	ppm	0.00
Spiked Amount 10.000			Recovery = 35.00%			
8) Phenol-d5	4.197	99	38935	2.19	ppm	0.00
Spiked Amount 10.000			Recovery = 21.90%			
25) Nitrobenzene-d5	4.854	82	87146	6.88	ppm	0.00
Spiked Amount 10.000			Recovery = 68.80%			
51) 2-Fluorobiphenyl	6.617	172	223561	7.27	ppm	0.00
Spiked Amount 10.000			Recovery = 72.70%			
74) 2,4,6-Tribromophenol	8.577	330	36882	9.04	ppm	0.00
Spiked Amount 10.000			Recovery = 90.40%			
87) Terphenyl-d14	12.157	244	206694	6.17	ppm	0.00
Spiked Amount 10.000			Recovery = 61.70%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	10.244	230	2662	0.12	ppm	0.00
Spiked Amount 10.000			Recovery = 1.20%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.974	88	1622	0.27	ppm	90
12) 2-Chlorophenol	4.277	128	1475	0.10	ppm	80
14) 1,3-Dichlorobenzene	4.373	146	2935	0.18	ppm	90
15) 1,4-Dichlorobenzene	4.432	146	30615	1.94	ppm	98
17) 1,2-Dichlorobenzene	4.544	146	4794	0.32	ppm	95
35) 1,3,5-Trichlorobenzene	5.116	180	1612	0.12	ppm	76
36) 1,2,4-Trichlorobenzene	5.404	180	1758	0.13	ppm	96
48) 1,2,4,5-Tetrachloroben...	6.366	216	2858	0.23	ppm	94
52) 2-Chloronaphthalene	6.745	162	3109	0.12	ppm	92
53) Biphenyl	6.734	154	3200	0.09	ppm	89
59) Acenaphthene	7.498	153	1607	0.06	ppm	80
62) Dibenzofuran	7.739	168	5091	0.13	ppm	90
66) Fluorene	8.219	166	2322	0.08	ppm	77
67) 4-Chlorophenyl-phenyle...	8.246	204	1619	0.12	ppm	78
76) Hexachlorobenzene	8.994	284	1006	0.11	ppm	86
86) Pyrene	11.825	202	2122	0.05	ppm	84

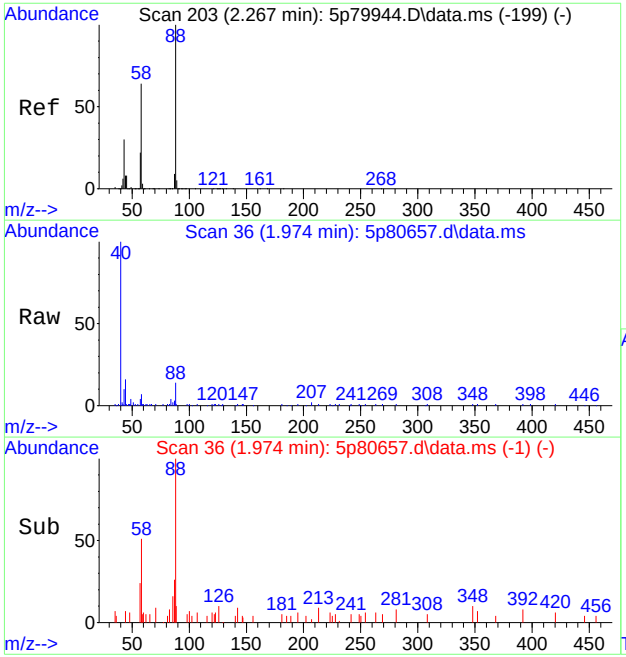
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e5p3819\
Data File : 5p80657.d
Acq On : 28 Dec 2021 6:50 pm
Operator : kristis
Sample : jd36319-3 Inst : MS5P
Misc : op37045,e5p3819,250,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 29 00:53:49 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Wed Dec 29 00:30:35 2021
Response via : Initial Calibration

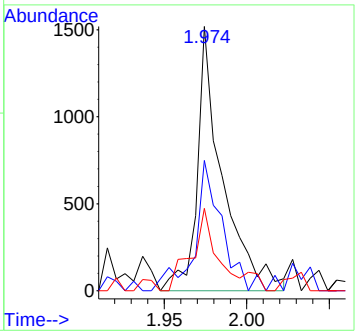


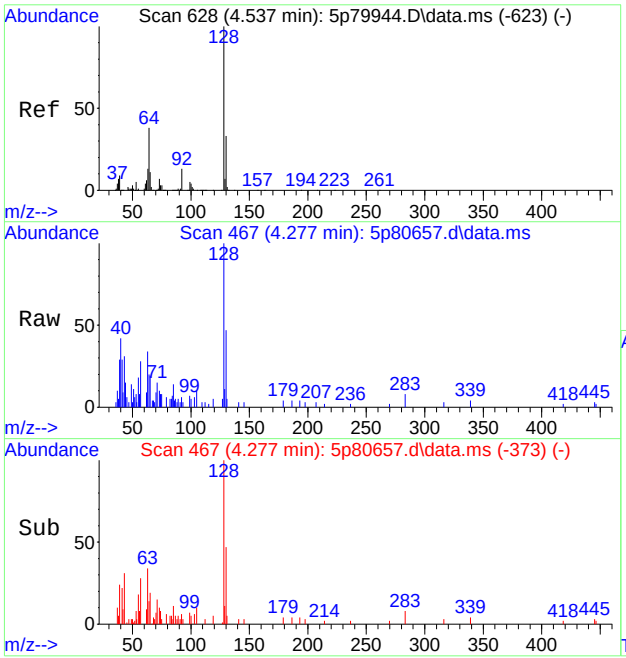


#2
1,4-Dioxane
Concen: 0.27 ppm
RT: 1.974 min Scan# 36
Delta R.T. 0.032 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion: 88 Resp: 1622

Ion	Ratio	Lower	Upper
88	100		
58	44.4	22.2	82.2
57	27.4	0.0	52.9

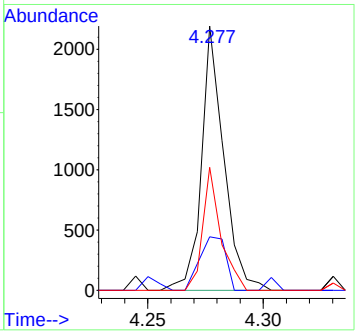


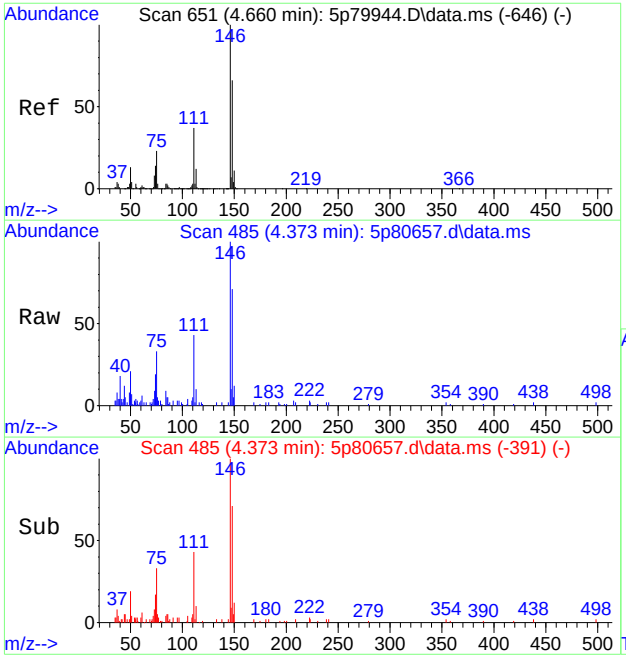


#12
2-Chlorophenol
Concen: 0.10 ppm
RT: 4.277 min Scan# 467
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:128 Resp: 1475

Ion	Ratio	Lower	Upper
128	100		
64	19.1	0.0	57.7
130	46.6	3.7	63.7

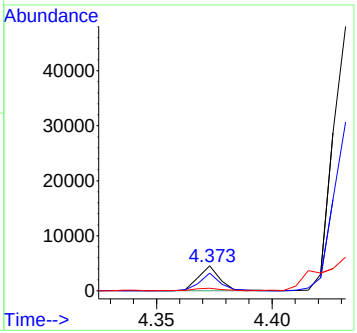


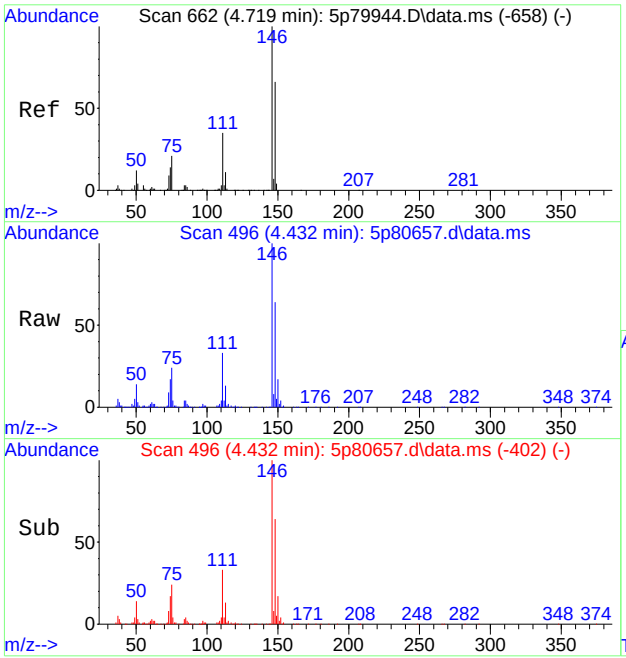


#14
1,3-Dichlorobenzene
Concen: 0.18 ppm
RT: 4.373 min Scan# 485
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:146 Resp: 2935

Ion	Ratio	Lower	Upper
146	100		
148	71.0	33.0	93.0
113	7.7	0.0	41.1

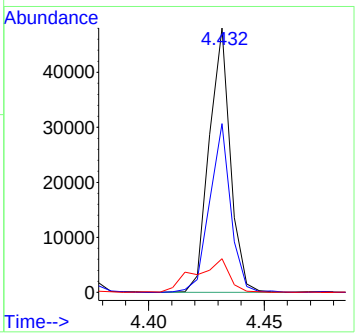


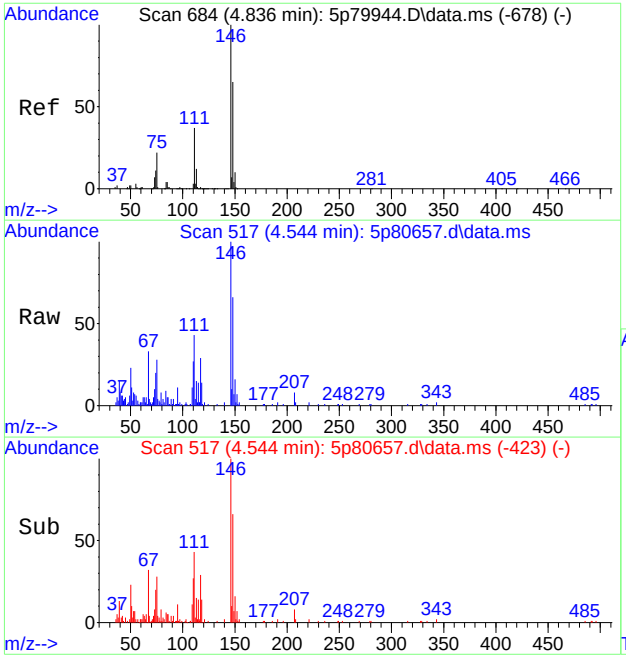


#15
1,4-Dichlorobenzene
Concen: 1.94 ppm
RT: 4.432 min Scan# 496
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:146 Resp: 30615

Ion	Ratio	Lower	Upper
146	100		
148	63.7	33.0	93.0
113	12.5	0.0	39.9

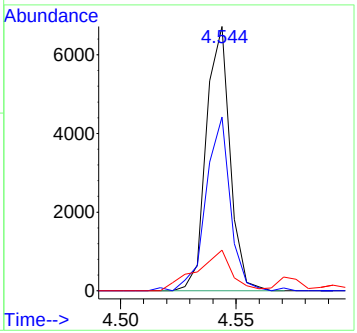


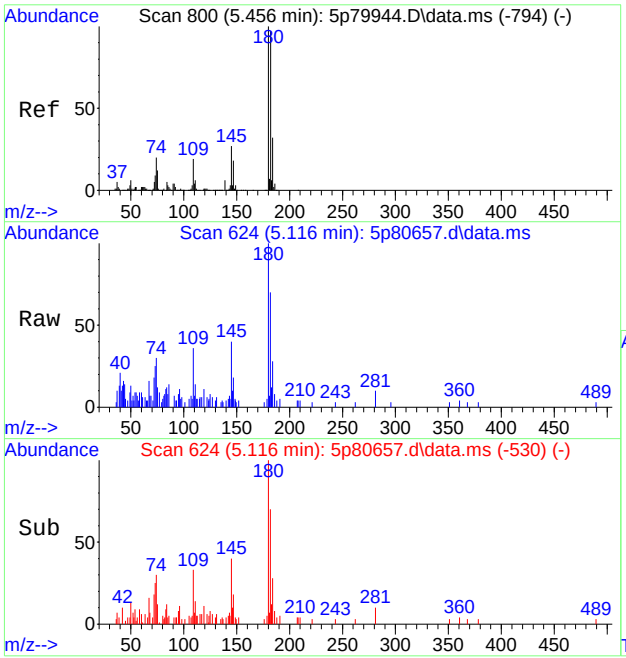


#17
1,2-Dichlorobenzene
Concen: 0.32 ppm
RT: 4.544 min Scan# 517
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:146 Resp: 4794

Ion	Ratio	Lower	Upper
146	100		
148	64.6	30.7	90.7
113	12.8	0.0	41.1

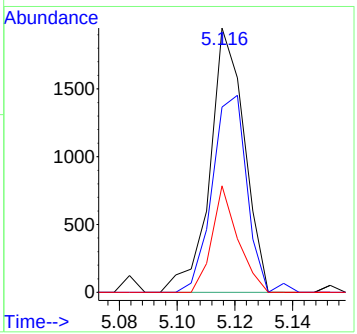


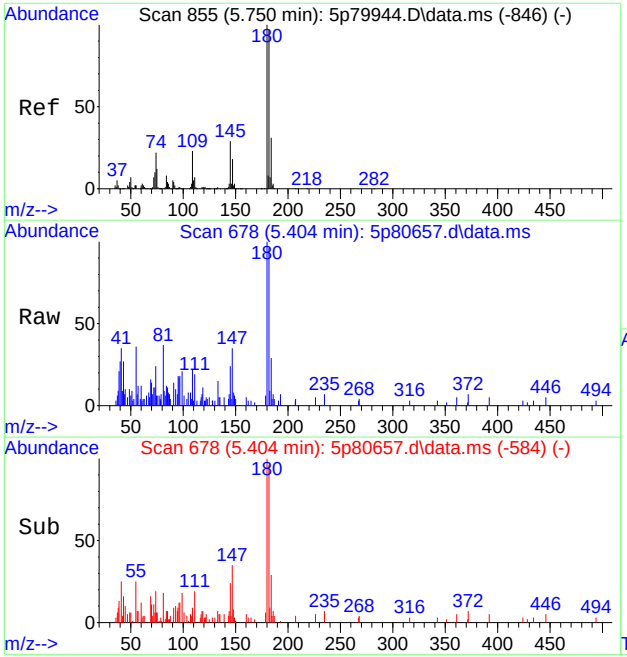


#35
1,3,5-Trichlorobenzene
Concen: 0.12 ppm
RT: 5.116 min Scan# 624
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:180 Resp: 1612

Ion	Ratio	Lower	Upper
180	100		
182	68.3	63.0	123.0
145	40.3	0.3	60.3

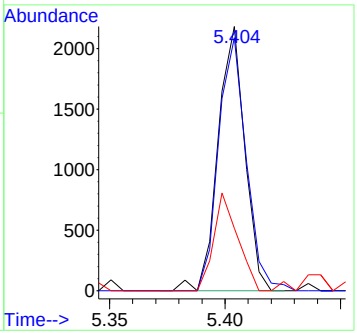


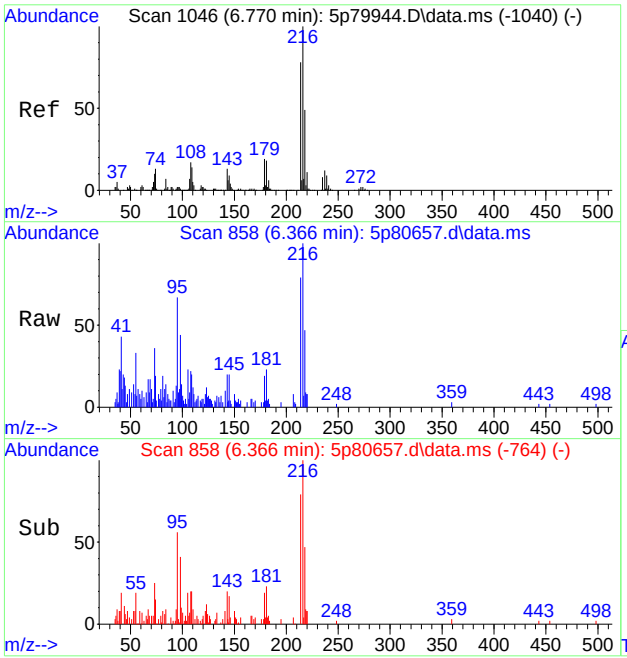


#36
1,2,4-Trichlorobenzene
Concen: 0.13 ppm
RT: 5.404 min Scan# 678
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:180 Resp: 1758

Ion	Ratio	Lower	Upper
180	100		
182	94.6	66.2	126.2
145	26.0	2.7	62.7

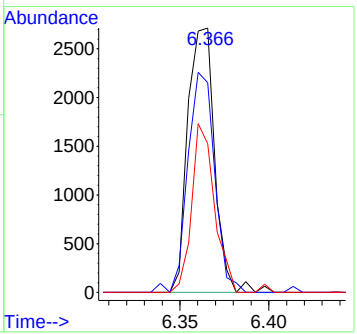


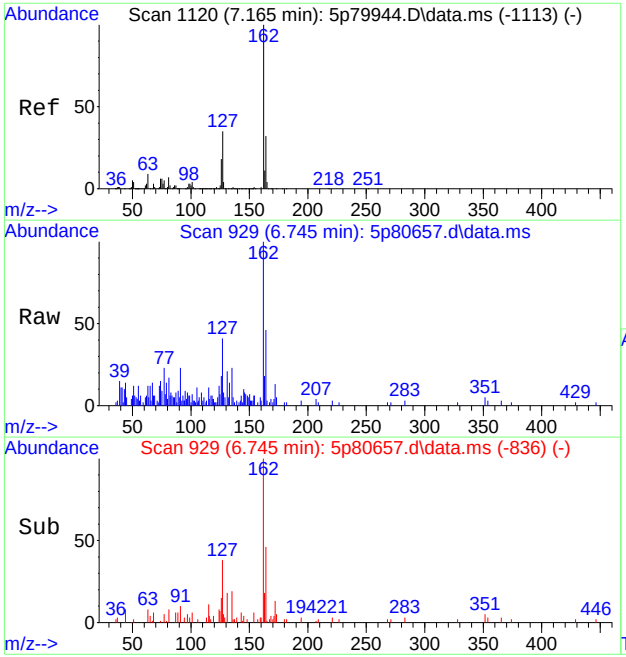


#48
1,2,4,5-Tetrachlorobenzene
Concen: 0.23 ppm
RT: 6.366 min Scan# 858
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:216 Resp: 2858

Ion	Ratio	Lower	Upper
216	100		
214	82.9	54.7	101.7
218	53.8	33.9	62.9

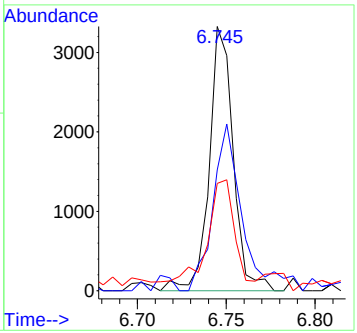


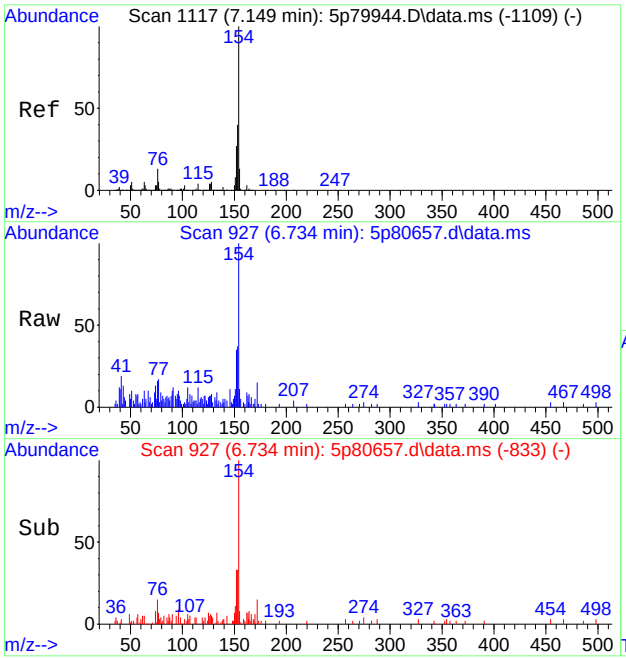


#52
2-Chloronaphthalene
Concen: 0.12 ppm
RT: 6.745 min Scan# 929
Delta R.T. -0.005 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:162 Resp: 3109

Ion	Ratio	Lower	Upper
162	100		
164	40.4	3.8	63.8
127	35.7	8.8	68.8

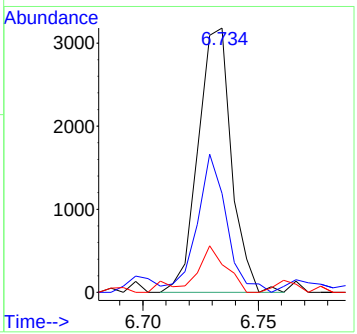


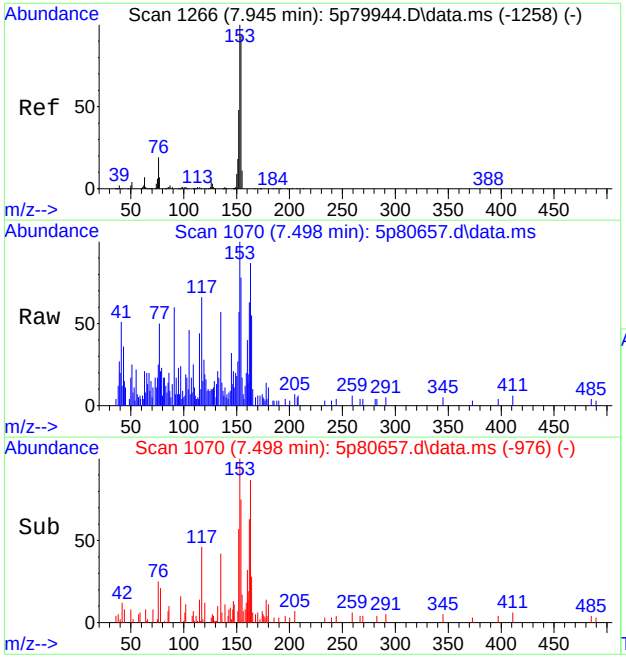


#53
Biphenyl
Concen: 0.09 ppm
RT: 6.734 min Scan# 927
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:154 Resp: 3200

Ion	Ratio	Lower	Upper
154	100		
153	35.1	10.7	70.7
155	6.1	0.0	43.3

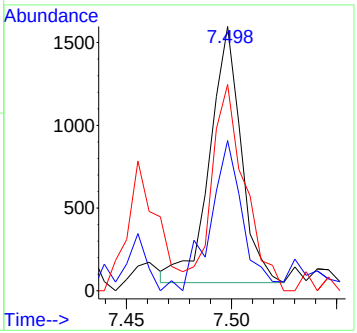


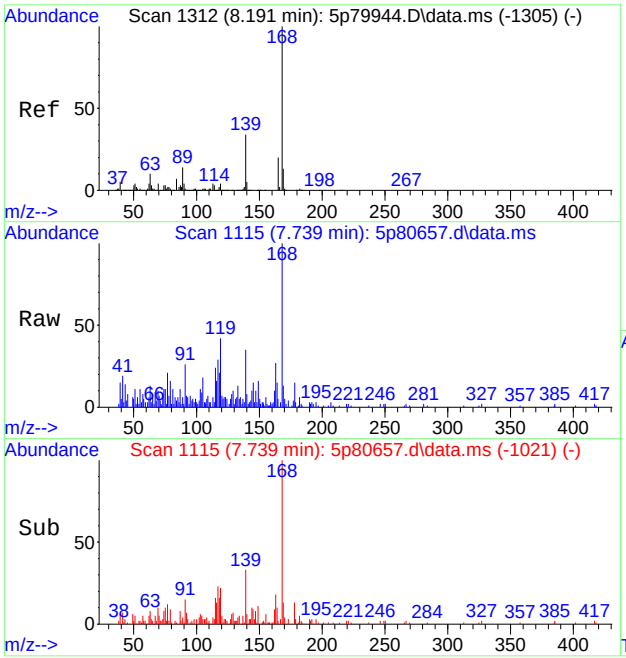


#59
Acenaphthene
Concen: 0.06 ppm
RT: 7.498 min Scan# 1070
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:153 Resp: 1607

Ion	Ratio	Lower	Upper
153	100		
152	58.2	16.5	76.5
154	67.6	57.5	117.5

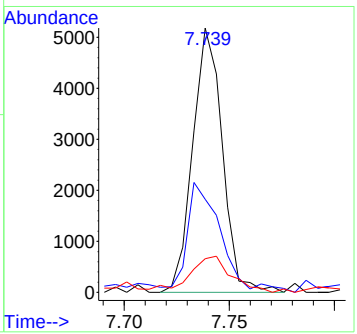


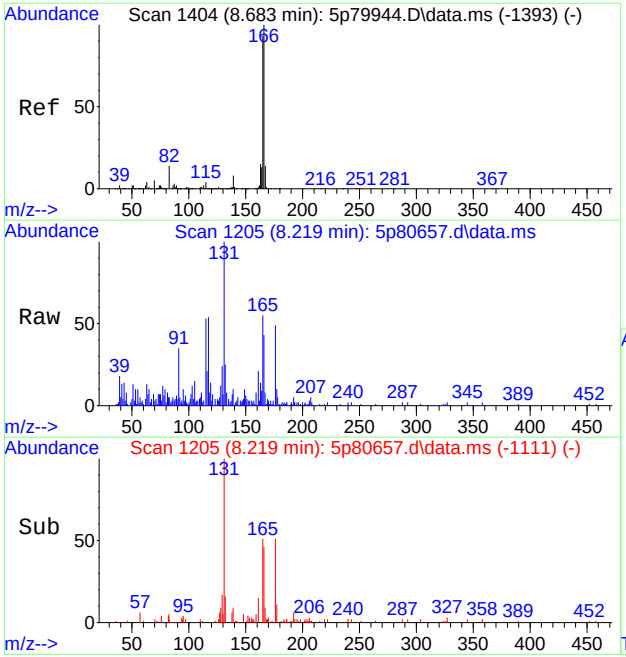


#62
Dibenzofuran
Concen: 0.13 ppm
RT: 7.739 min Scan# 1115
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:168 Resp: 5091

Ion	Ratio	Lower	Upper
168	100		
139	33.5	10.2	70.2
169	10.8	0.0	43.1

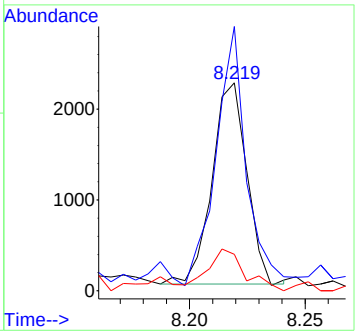


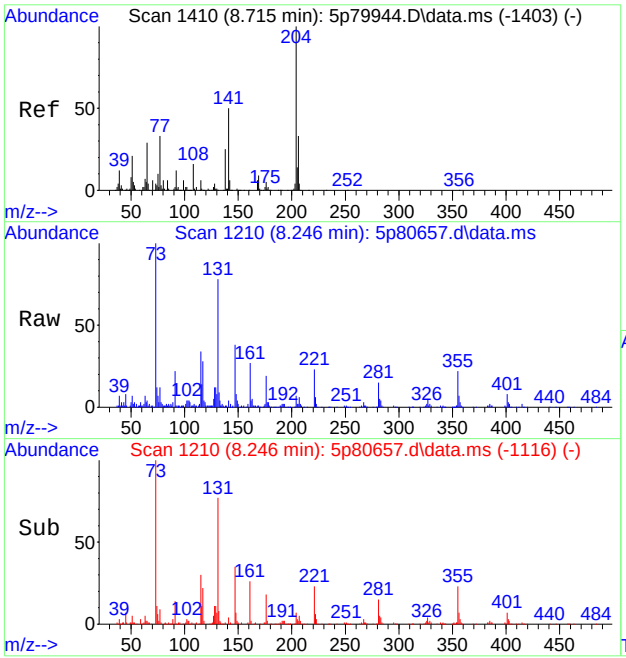


#66
Fluorene
Concen: 0.08 ppm
RT: 8.219 min Scan# 1205
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:166 Resp: 2322

Ion	Ratio	Lower	Upper
166	100		
165	121.9	67.0	127.0
167	10.4	0.0	42.5

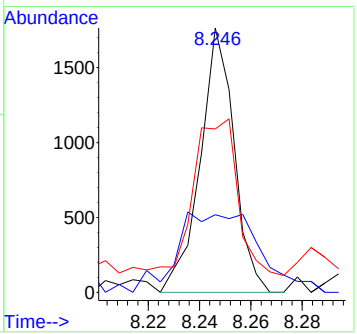


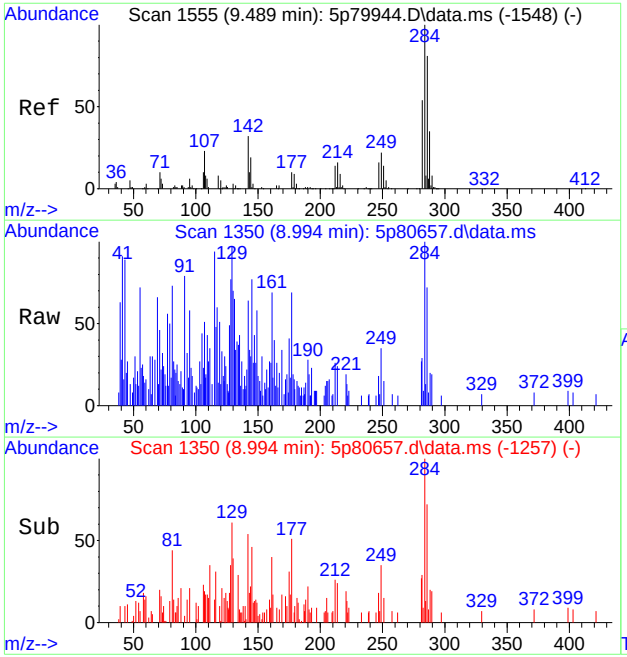


#67
4-Chlorophenyl-phenylether
Concen: 0.12 ppm
RT: 8.246 min Scan# 1210
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:204 Resp: 1619

Ion	Ratio	Lower	Upper
204	100		
206	24.1	6.5	66.5
141	53.8	42.2	102.2

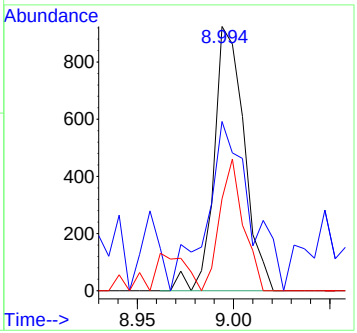


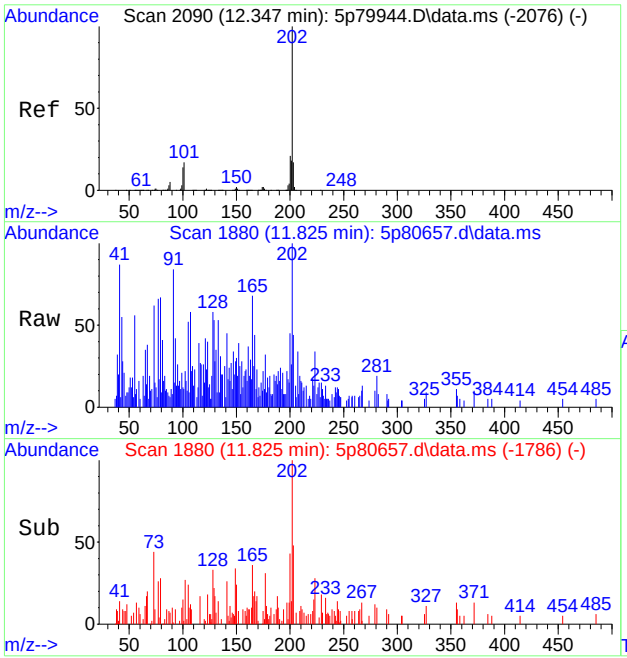


#76
Hexachlorobenzene
Concen: 0.11 ppm
RT: 8.994 min Scan# 1350
Delta R.T. -0.005 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:284 Resp: 1006

Ion	Ratio	Lower	Upper
284	100		
142	56.0	11.2	71.2
249	27.7	0.0	57.4

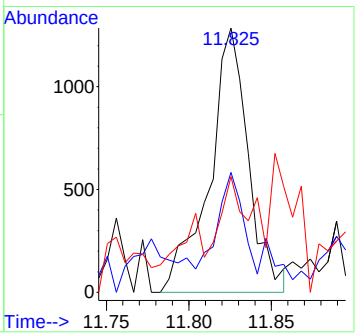




#86
Pyrene
Concen: 0.05 ppm
RT: 11.825 min Scan# 1880
Delta R.T. 0.000 min
Lab File: 5p80657.d
Acq: 28 Dec 2021 6:50 pm

Tgt Ion:202 Resp: 2122

Ion	Ratio	Lower	Upper
202	100		
200	34.9	0.0	52.1
203	19.5	0.0	47.9



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 15:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3808\
Data File : 5p80457.d
Acq On : 17 Dec 2021 7:38 am
Operator : chriss2
Sample : jd36319-4 Inst : MS5P
Misc : op37046,e5p3808,250,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 17 08:45:41 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Dec 17 05:56:41 2021
Response via : Initial Calibration

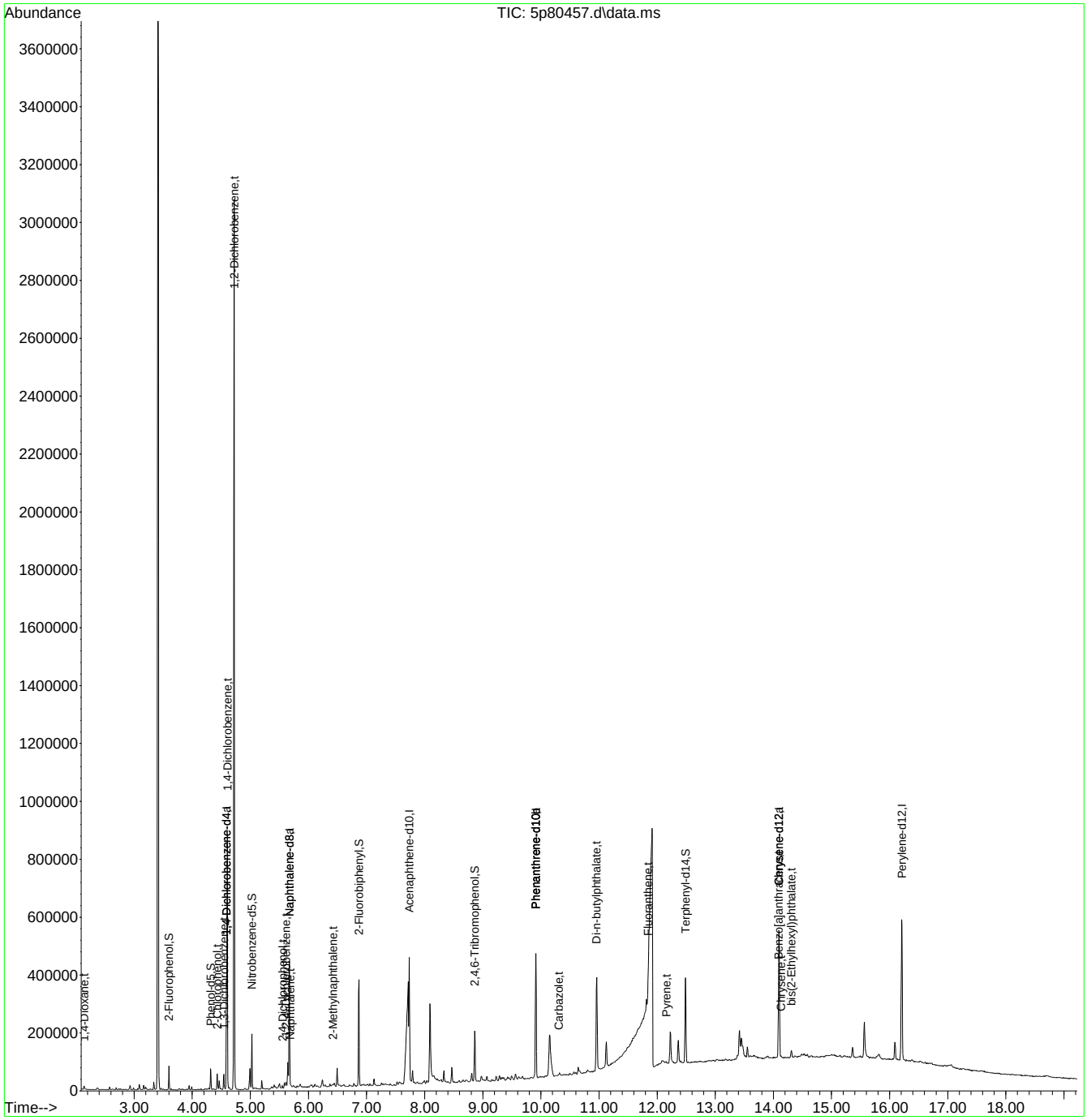
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.587	152	50271	8.00	ppm	0.00
24) Naphthalene-d8	5.672	136	195457	8.00	ppm	0.00
46) Acenaphthene-d10	7.734	164	138639	8.00	ppm	0.00
69) Phenanthrene-d10	9.914	188	197009	8.00	ppm	0.00
84) Chrysene-d12	14.097	240	191721	8.00	ppm	0.00
93) Perylene-d12	16.212	264	224050	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.587	152	50271	8.00	ppm	0.00
105) Phenanthrene-d10a	9.914	188	197009	8.00	ppm	0.00
107) Naphthalene-d8a	5.672	136	195457	8.00	ppm	0.00
109) Chrysene-d12a	14.097	240	191721	8.00	ppm	0.00
111) Phenanthrene-d10b	9.914	188	197009	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.599	112	18232	2.24	ppm	0.00
Spiked Amount 10.000			Recovery	=	22.40%	
8) Phenol-d5	4.320	99	18296	1.75	ppm	0.00
Spiked Amount 10.000			Recovery	=	17.50%	
25) Nitrobenzene-d5	5.026	82	44267	6.02	ppm	0.00
Spiked Amount 10.000			Recovery	=	60.20%	
51) 2-Fluorobiphenyl	6.869	172	127285	5.60	ppm	0.00
Spiked Amount 10.000			Recovery	=	56.00%	
74) 2,4,6-Tribromophenol	8.861	330	22670	9.06	ppm	0.00
Spiked Amount 10.000			Recovery	=	90.60%	
87) Terphenyl-d14	12.489	244	123277	5.16	ppm	0.00
Spiked Amount 10.000			Recovery	=	51.60%	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery	=	0.00%	
113) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.141	88	4453	1.26	ppm	97
12) 2-Chlorophenol	4.427	128	13076	1.49	ppm	92
14) 1,3-Dichlorobenzene	4.545	146	9884	1.02	ppm	100
15) 1,4-Dichlorobenzene	4.603	146	168068	18.09	ppm	99
17) 1,2-Dichlorobenzene	4.721	146	629881	71.33	ppm	97
33) 2,4-Dichlorophenol	5.554	162	1538	0.22	ppm	89
36) 1,2,4-Trichlorobenzene	5.613	180	2302	0.30	ppm	94
38) Naphthalene	5.688	128	2067	0.09	ppm	88
44) 2-Methylnaphthalene	6.425	141	1089	0.07	ppm	79
80) Carbazole	10.304	167	1892	0.08	ppm	98
81) Di-n-butylphthalate	10.955	149	133632	4.24	ppm	100
82) Fluoranthene	11.842	202	1479	0.05	ppm	95
86) Pyrene	12.157	202	1654	0.05	ppm	88
89) Benzo[a]anthracene	14.086	228	1691	0.06	ppm	74
91) Chrysene	14.129	228	939m	0.03	ppm	
92) bis(2-Ethylhexyl)phtha...	14.310	149	11110	0.57	ppm	99

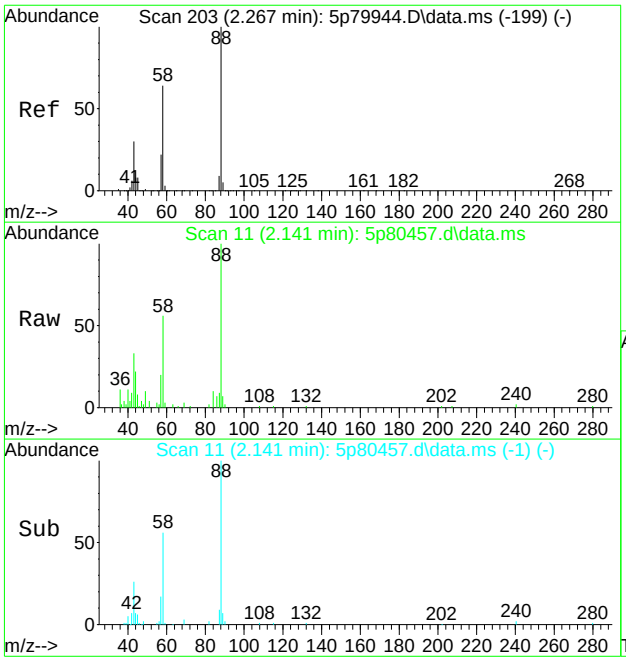
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3808\
Data File : 5p80457.d
Acq On : 17 Dec 2021 7:38 am
Operator : chriss2
Sample : jd36319-4 Inst : MS5P
Misc : op37046,e5p3808,250,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 17 08:45:41 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Dec 17 05:56:41 2021
Response via : Initial Calibration

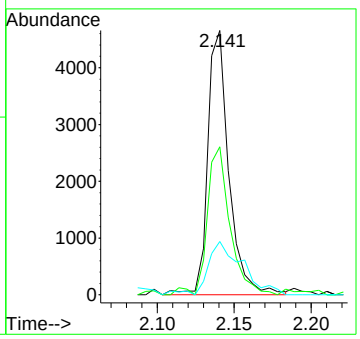


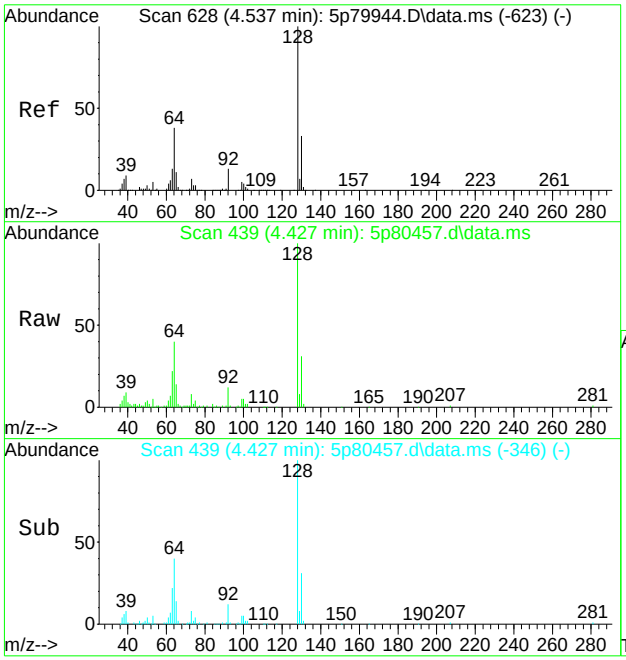


#2
1,4-Dioxane
Concen: 1.26 ppm
RT: 2.141 min Scan# 11
Delta R.T. -0.011 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion: 88 Resp: 4453

Ion	Ratio	Lower	Upper
88	100		
58	55.3	27.3	87.3
57	20.2	0.0	51.5

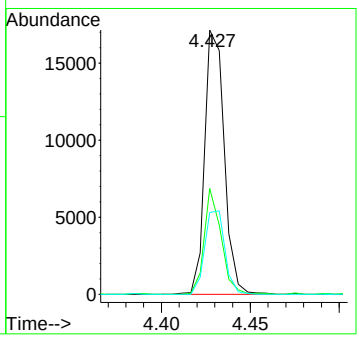


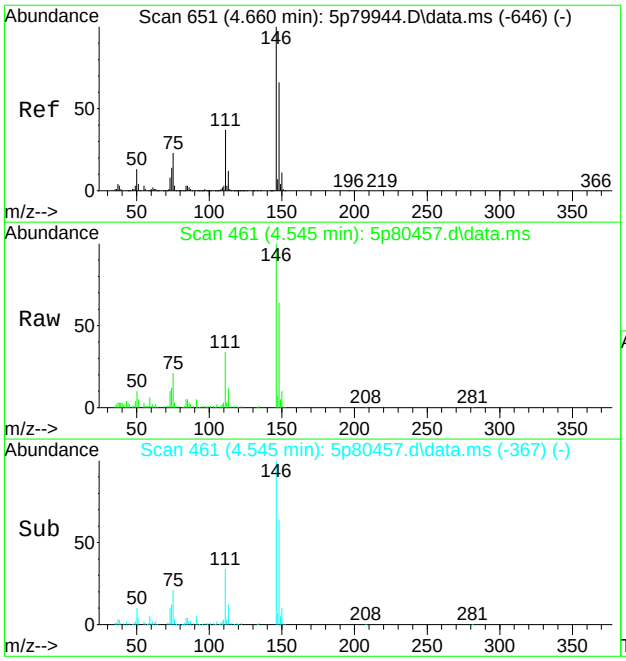


#12
2-Chlorophenol
Concen: 1.49 ppm
RT: 4.427 min Scan# 439
Delta R.T. -0.005 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:128 Resp: 13076

Ion	Ratio	Lower	Upper
128	100		
64	40.1	3.9	63.9
130	31.0	3.5	63.5

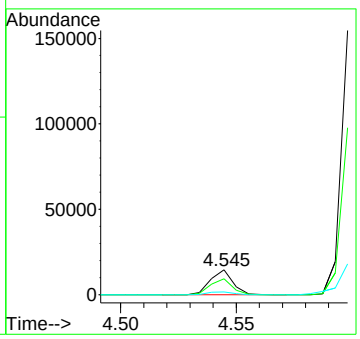


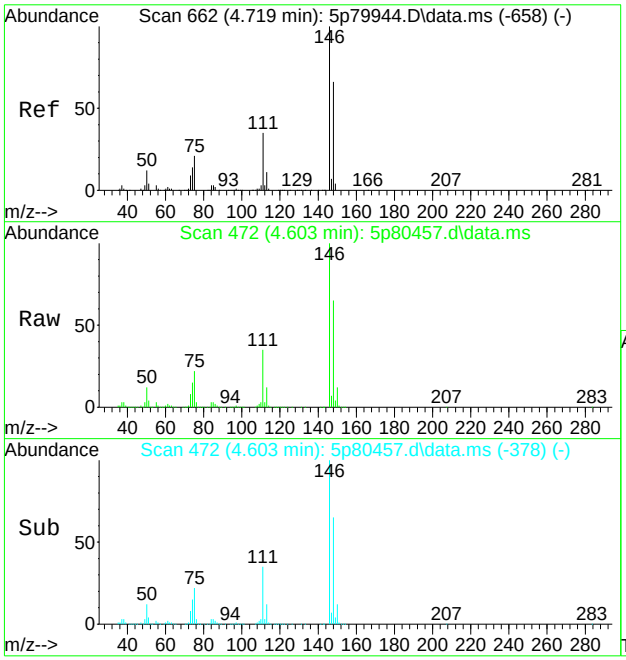


#14
1,3-Dichlorobenzene
Concen: 1.02 ppm
RT: 4.545 min Scan# 461
Delta R.T. 0.000 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:146 Resp: 9884

Ion	Ratio	Lower	Upper
146	100		
148	63.7	33.4	93.4
113	11.8	0.0	42.1

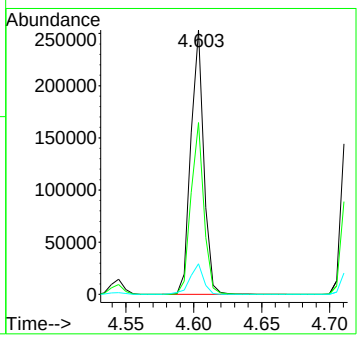


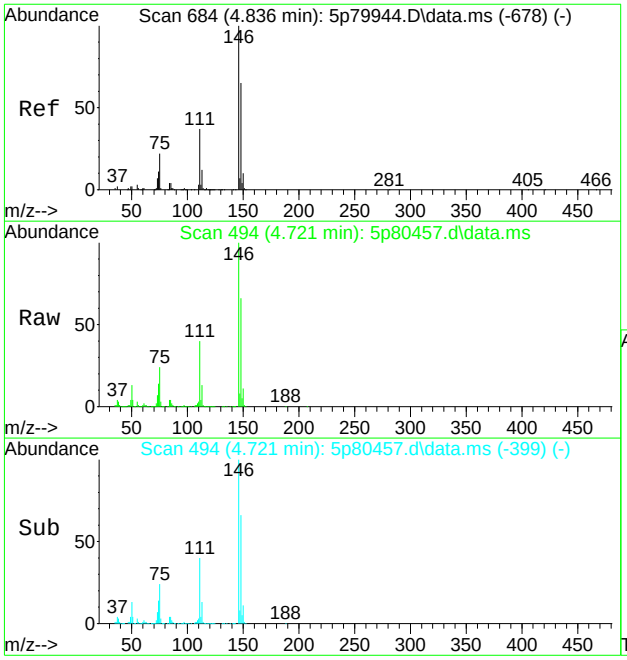


#15
1,4-Dichlorobenzene
Concen: 18.09 ppm
RT: 4.603 min Scan# 472
Delta R.T. 0.000 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:146 Resp: 168068

Ion	Ratio	Lower	Upper
146	100		
148	65.0	34.2	94.2
113	11.6	0.0	41.7

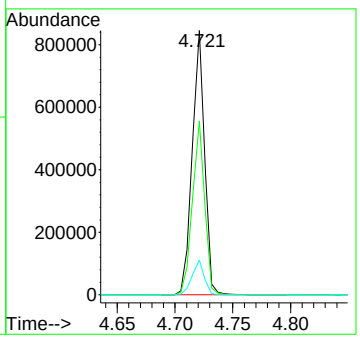


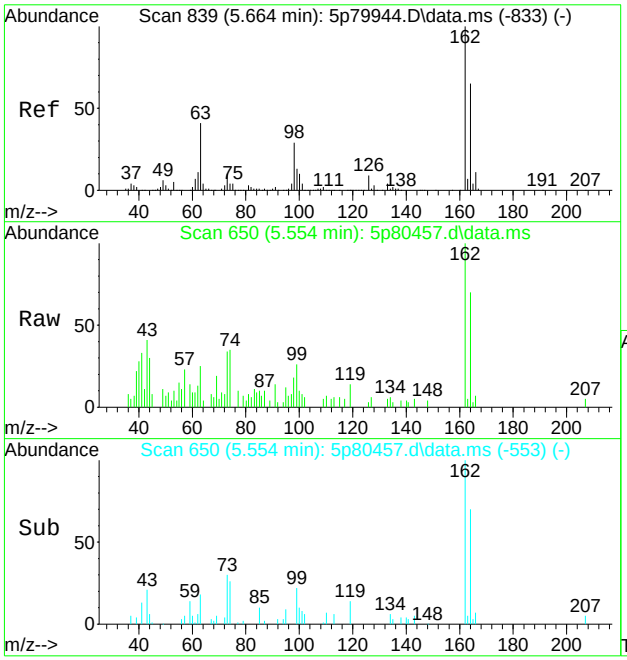


#17
1,2-Dichlorobenzene
Concen: 71.33 ppm
RT: 4.721 min Scan# 494
Delta R.T. 0.005 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:146 Resp: 629881

Ion	Ratio	Lower	Upper
146	100		
148	65.7	33.0	93.0
113	13.2	0.0	42.5

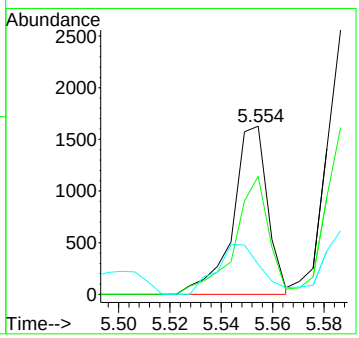


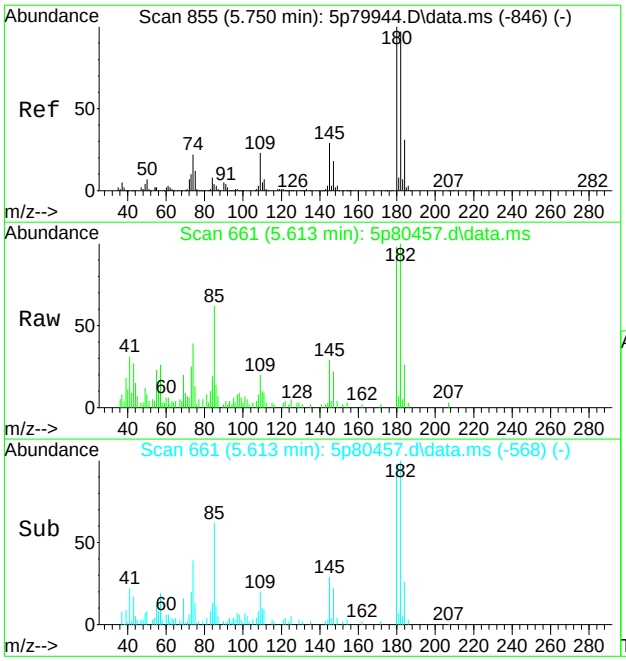


#33
2,4-Dichlorophenol
Concen: 0.22 ppm
RT: 5.554 min Scan# 650
Delta R.T. 0.016 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:162 Resp: 1538

Ion	Ratio	Lower	Upper
162	100		
164	69.9	36.2	96.2
98	16.2	0.0	60.0

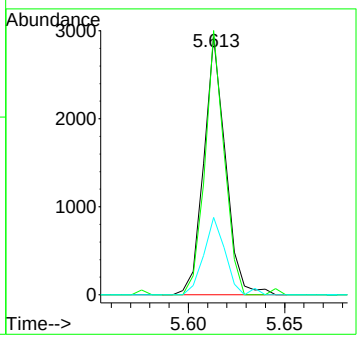


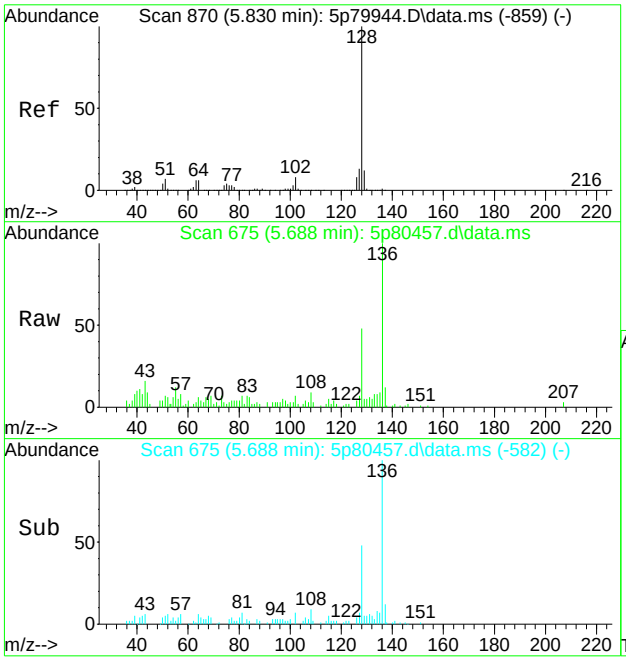


#36
1,2,4-Trichlorobenzene
Concen: 0.30 ppm
RT: 5.613 min Scan# 661
Delta R.T. -0.005 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:180 Resp: 2302

Ion	Ratio	Lower	Upper
180	100		
182	102.5	65.2	125.2
145	30.0	0.4	60.4

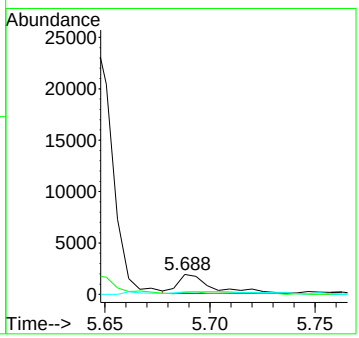


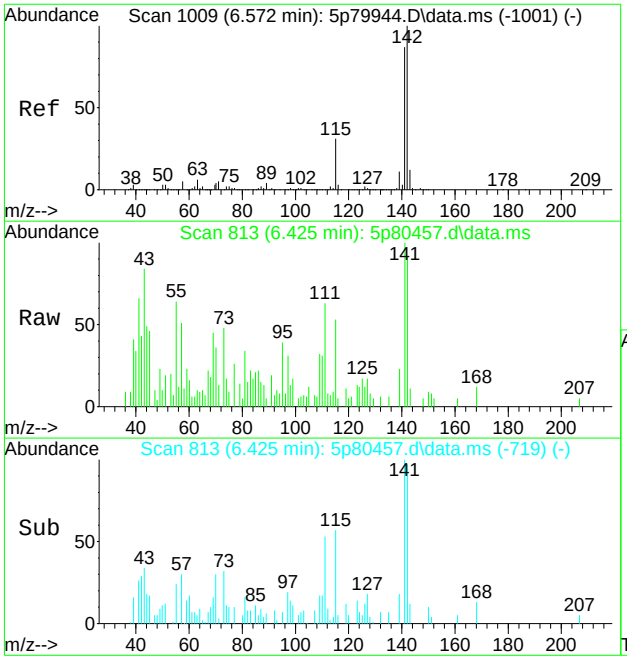


#38
Naphthalene
Concen: 0.09 ppm
RT: 5.688 min Scan# 675
Delta R.T. -0.005 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:128 Resp: 2067

Ion	Ratio	Lower	Upper
128	100		
129	8.2	0.0	41.2
127	6.8	0.0	43.2

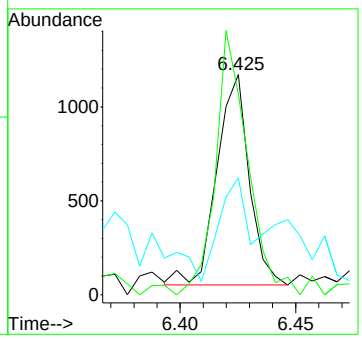


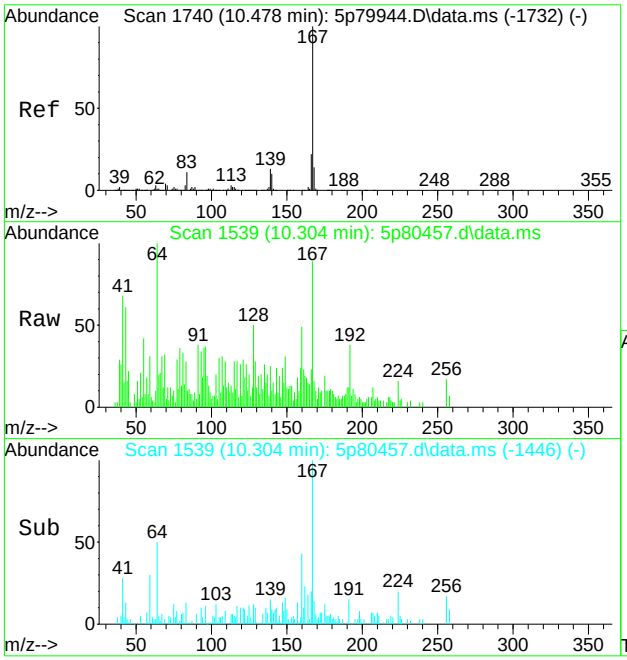


#44
2-Methylnaphthalene
Concen: 0.07 ppm
RT: 6.425 min Scan# 813
Delta R.T. 0.000 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:141 Resp: 1089

Ion	Ratio	Lower	Upper
141	100		
142	89.5	85.3	145.3
115	29.1	5.2	65.2

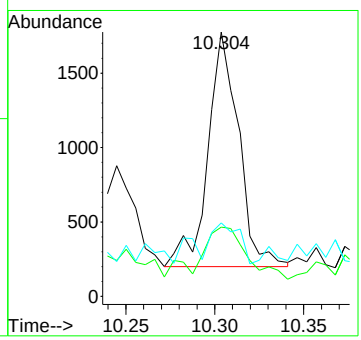


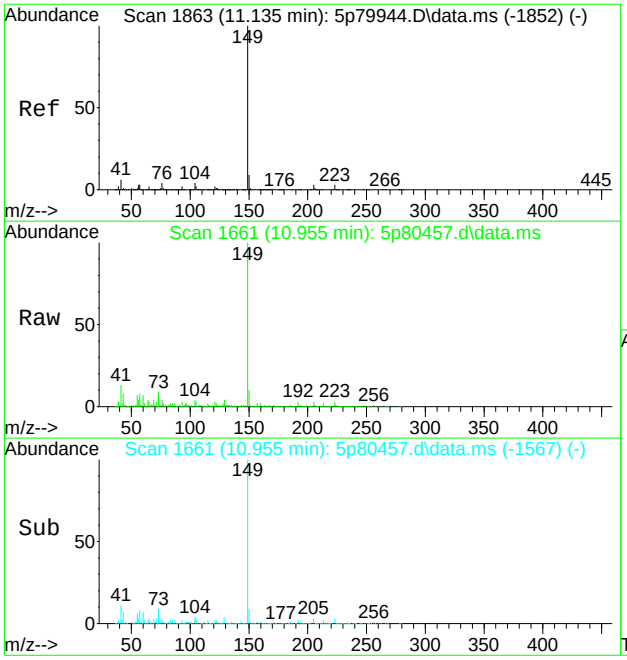


#80
Carbazole
Concen: 0.08 ppm
RT: 10.304 min Scan# 1539
Delta R.T. -0.005 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:167 Resp: 1892

Ion	Ratio	Lower	Upper
167	100		
166	21.9	0.0	50.9
139	14.1	0.0	42.9

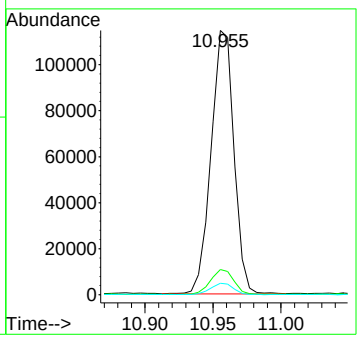


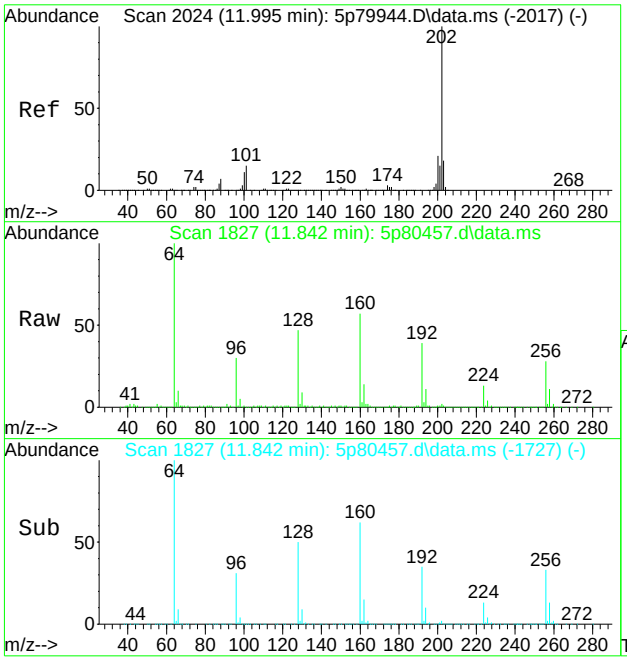


#81
Di-n-butylphthalate
Concen: 4.24 ppm
RT: 10.955 min Scan# 1661
Delta R.T. 0.000 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:149 Resp: 133632

Ion	Ratio	Lower	Upper
149	100		
150	9.4	0.0	39.2
104	4.3	0.0	34.4

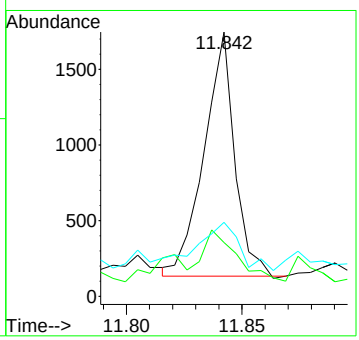


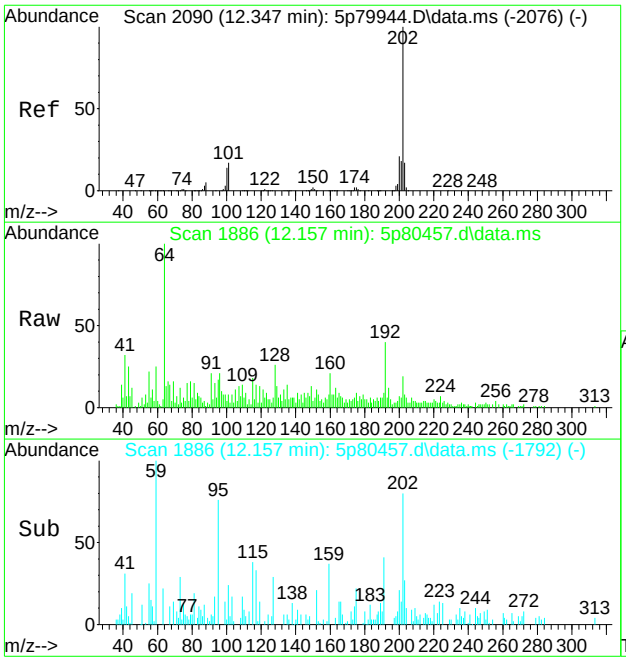


#82
Fluoranthene
Concen: 0.05 ppm
RT: 11.842 min Scan# 1827
Delta R.T. 0.032 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:202 Resp: 1479

Ion	Ratio	Lower	Upper
202	100		
101	11.3	0.0	43.3
203	15.4	0.0	47.7

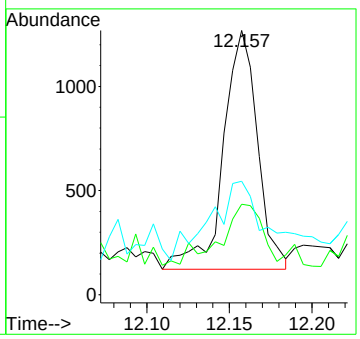


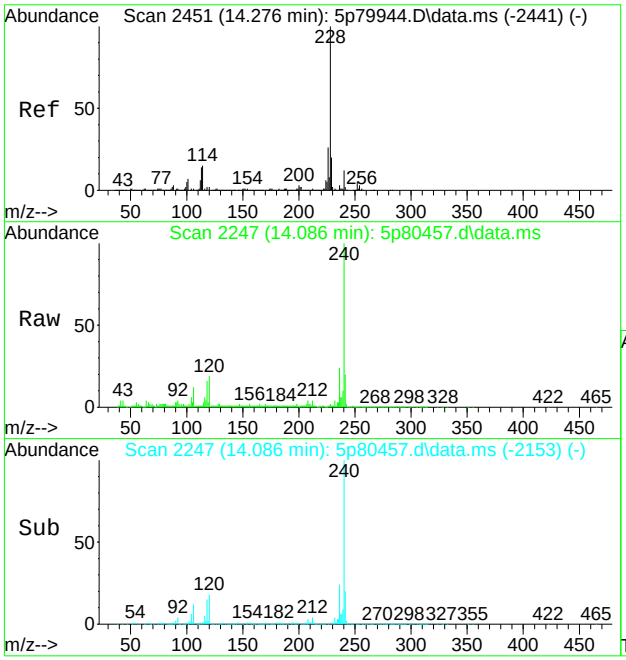


#86
Pyrene
Concen: 0.05 ppm
RT: 12.157 min Scan# 1886
Delta R.T. 0.000 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:202 Resp: 1654

Ion	Ratio	Lower	Upper
202	100		
200	23.9	0.0	50.2
203	25.5	0.0	48.2

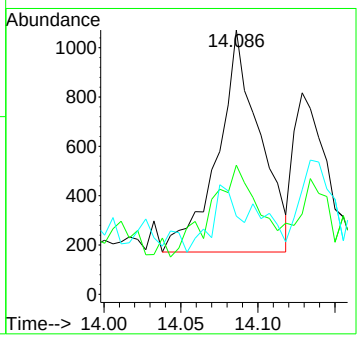


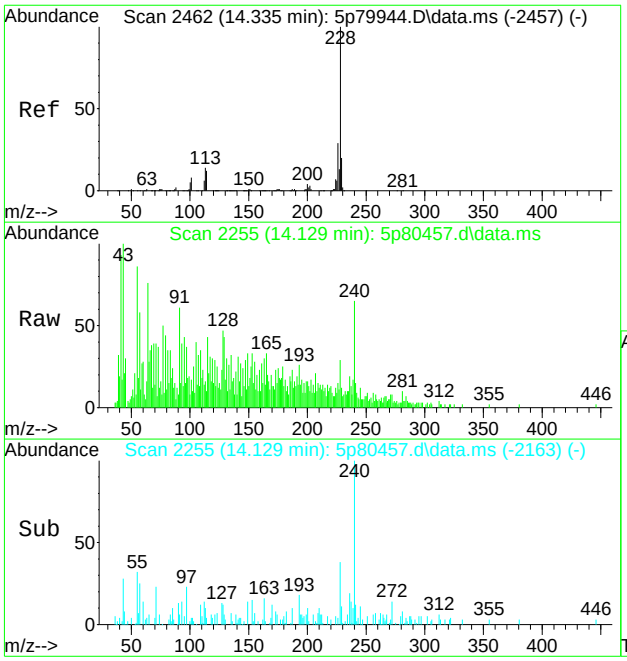


#89
Benzo[a]anthracene
Concen: 0.06 ppm
RT: 14.086 min Scan# 2247
Delta R.T. 0.000 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:228 Resp: 1691

Ion	Ratio	Lower	Upper
228	100		
229	32.1	0.0	49.7
226	13.6	0.0	56.1

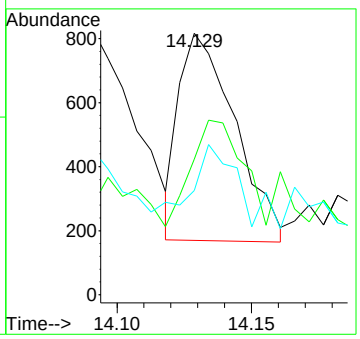


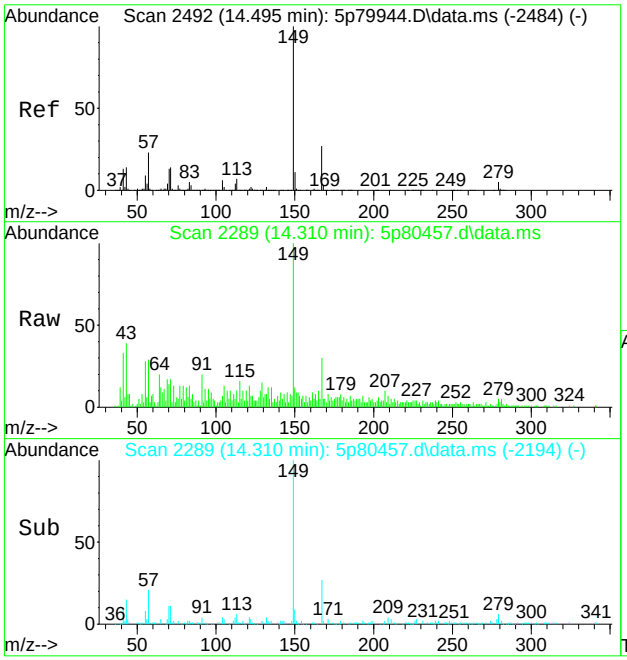


#91
Chrysene
Concen: 0.03 ppm m
RT: 14.129 min Scan# 2255
Delta R.T. -0.011 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:228 Resp: 939

Ion	Ratio	Lower	Upper
228	100		
226	51.9	0.0	58.9
229	39.9	0.0	49.4

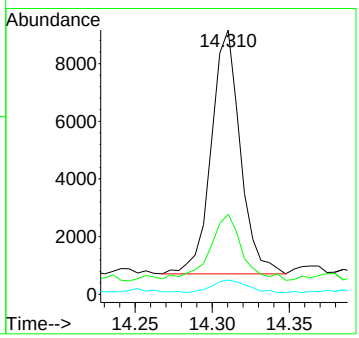




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.57 ppm
RT: 14.310 min Scan# 2289
Delta R.T. 0.005 min
Lab File: 5p80457.d
Acq: 17 Dec 2021 7:38 am

Tgt Ion:149 Resp: 11110

Ion	Ratio	Lower	Upper
149	100		
167	26.8	0.0	56.6
279	5.0	0.0	34.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e5p3811\
Data File : 5p80525.d
Acq On : 20 Dec 2021 8:21 pm
Operator : jackleey
Sample : JD36319-5 Inst : MS5P
Misc : op37046,e5p3811,250,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 21 00:41:23 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 20 23:59:35 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.582	152	60552	8.00	ppm	0.00
24) Naphthalene-d8	5.667	136	244126	8.00	ppm	0.00
46) Acenaphthene-d10	7.729	164	168603	8.00	ppm	0.00
69) Phenanthrene-d10	9.908	188	324442	8.00	ppm	0.00
84) Chrysene-d12	14.107	240	458794	8.00	ppm	0.02
93) Perylene-d12	16.218	264	379250	8.00	ppm	0.02
103) 1,4-Dichlorobenzene-d4a	4.582	152	60552	8.00	ppm	0.00
105) Phenanthrene-d10a	9.908	188	324442	8.00	ppm	0.00
107) Naphthalene-d8a	5.667	136	244126	8.00	ppm	0.00
109) Chrysene-d12a	14.107	240	458794	8.00	ppm	0.02
111) Phenanthrene-d10b	9.908	188	324442	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.599	112	19204	1.96	ppm	0.00
Spiked Amount 10.000			Recovery =	19.60%		
8) Phenol-d5	4.326	99	19306	1.53	ppm	0.00
Spiked Amount 10.000			Recovery =	15.30%		
25) Nitrobenzene-d5	5.020	82	54873	5.97	ppm	0.00
Spiked Amount 10.000			Recovery =	59.70%		
51) 2-Fluorobiphenyl	6.863	172	165793	5.99	ppm	0.00
Spiked Amount 10.000			Recovery =	59.90%		
74) 2,4,6-Tribromophenol	8.861	330	26086	6.33	ppm	0.00
Spiked Amount 10.000			Recovery =	63.30%		
87) Terphenyl-d14	12.494	244	272154	4.76	ppm	0.02
Spiked Amount 10.000			Recovery =	47.60%		
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery =	0.00%		
113) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
12) 2-Chlorophenol	4.427	128	52322	4.96	ppm	97
14) 1,3-Dichlorobenzene	4.539	146	23287	2.00	ppm	97
15) 1,4-Dichlorobenzene	4.598	146	307403	27.47	ppm	98
17) 1,2-Dichlorobenzene	4.716	146	1092070	102.67	ppm	97
33) 2,4-Dichlorophenol	5.554	162	8396	0.95	ppm	92
36) 1,2,4-Trichlorobenzene	5.608	180	16615	1.74	ppm	95
37) 1,2,3-Trichlorobenzene	5.827	180	2160	0.25	ppm	89
38) Naphthalene	5.661	128	138429	4.57	ppm	78
53) Biphenyl	6.981	154	2227	0.07	ppm	97
62) Dibenzofuran	8.017	168	1206	0.04	ppm	93
78) Phenanthrene	9.946	178	12724	0.30	ppm	97
79) Anthracene	10.021	178	1376	0.03	ppm	84
80) Carbazole	10.309	167	4513	0.11	ppm	98
81) Di-n-butylphthalate	10.950	149	87932	1.69	ppm	99
82) Fluoranthene	11.848	202	9020	0.19	ppm	95
86) Pyrene	12.190	202	10978	0.14	ppm	92
89) Benzo[a]anthracene	14.091	228	9081	0.13	ppm	91
91) Chrysene	14.139	228	8411	0.13	ppm	89
92) bis(2-Ethylhexyl)phtha...	14.305	149	82112	1.75	ppm	98
95) Benzo[b]fluoranthene	15.694	252	13515	0.24	ppm	94
96) Benzo[k]fluoranthene	15.731	252	4083	0.08	ppm	86
97) Benzo[a]pyrene	16.132	252	8639	0.16	ppm	97
98) Indeno[1,2,3-cd]pyrene	17.713	276	7258	0.15	ppm	89
102) Benzo[g,h,i]perylene	18.135	276	7246	0.13	ppm	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e5p3811\
Data File : 5p80525.d
Acq On : 20 Dec 2021 8:21 pm
Operator : jackleey
Sample : JD36319-5 Inst : MS5P
Misc : op37046,e5p3811,250,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 21 00:41:23 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 20 23:59:35 2021
Response via : Initial Calibration

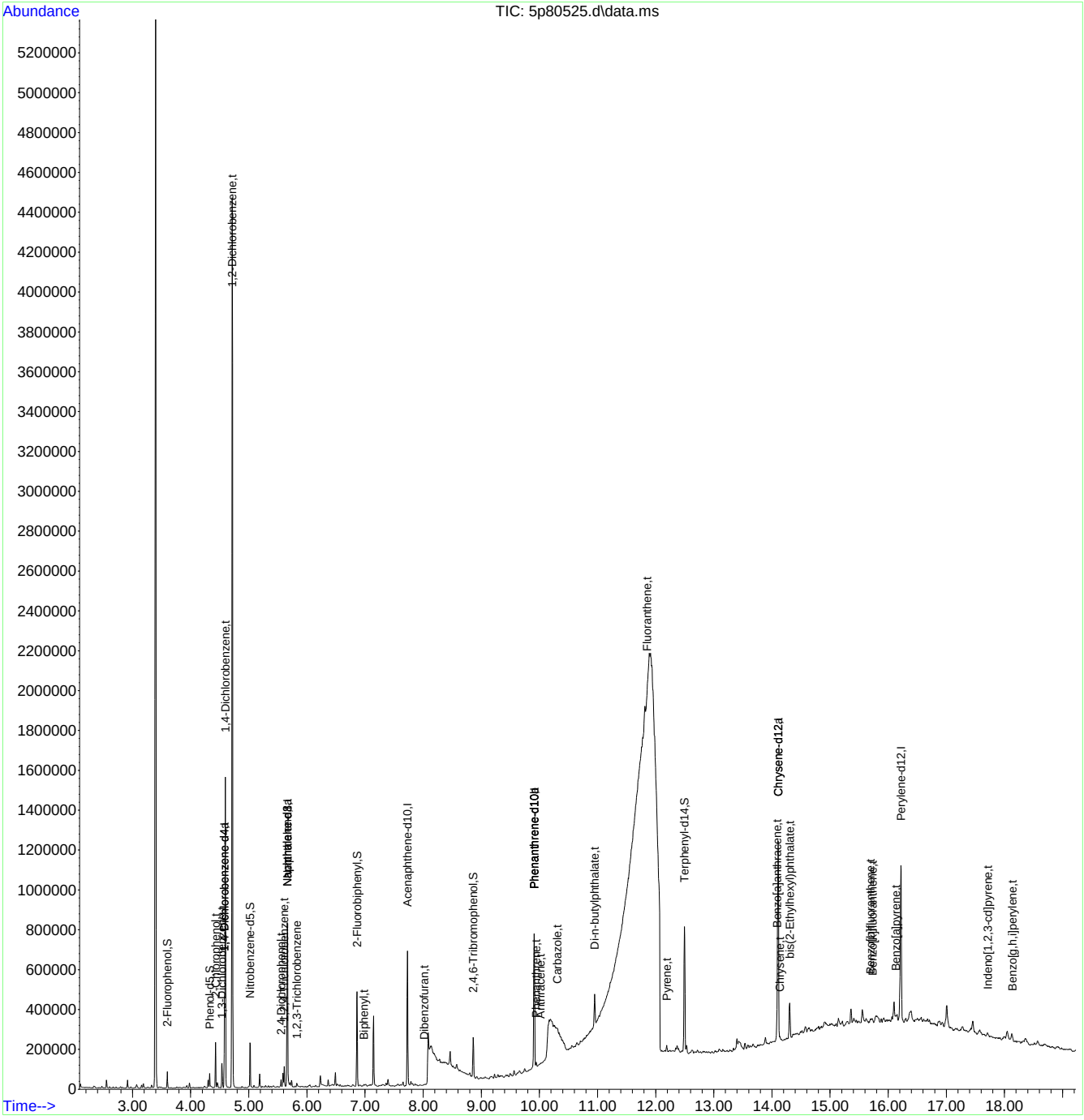
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

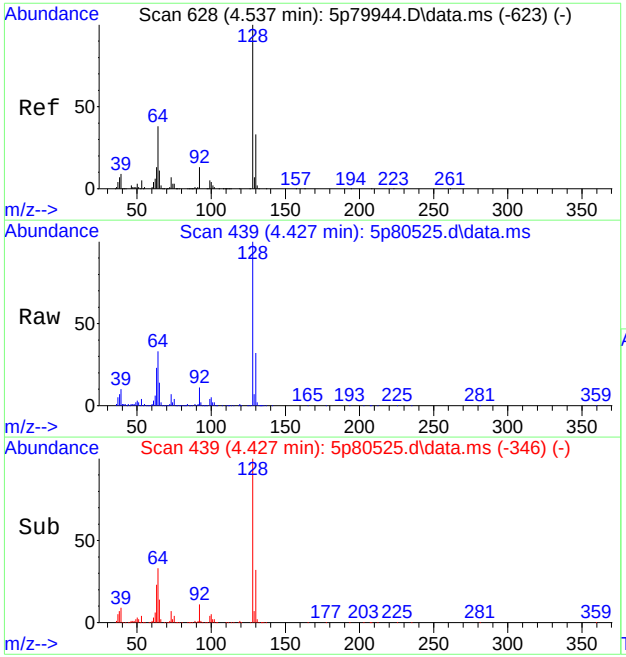
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e5p3811\
Data File : 5p80525.d
Acq On : 20 Dec 2021 8:21 pm
Operator : jackleey
Sample : JD36319-5 Inst : MS5P
Misc : op37046,e5p3811,250,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 21 00:41:23 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 20 23:59:35 2021
Response via : Initial Calibration

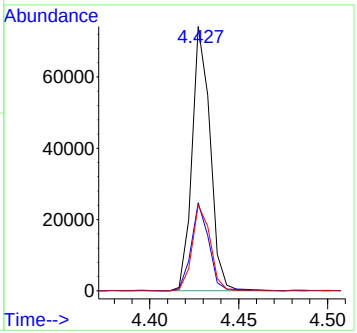


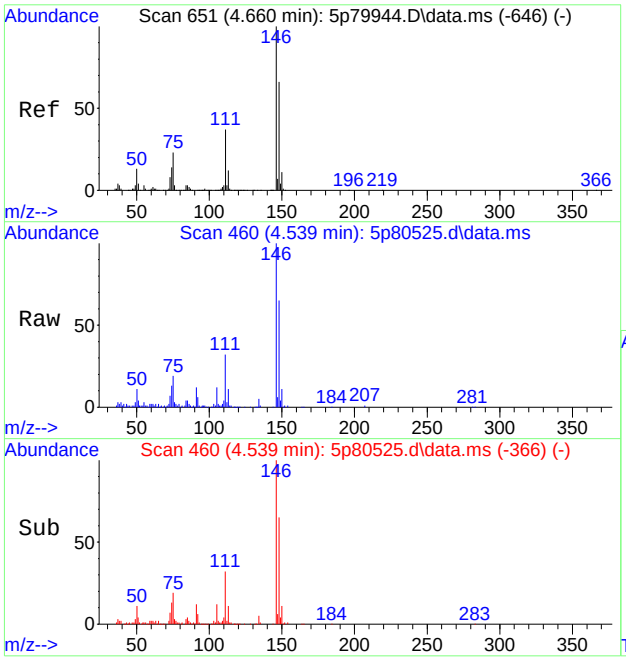


#12
2-Chlorophenol
Concen: 4.96 ppm
RT: 4.427 min Scan# 439
Delta R.T. -0.005 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:128 Resp: 52322

Ion	Ratio	Lower	Upper
128	100		
64	33.3	1.0	61.0
130	32.4	3.8	63.8

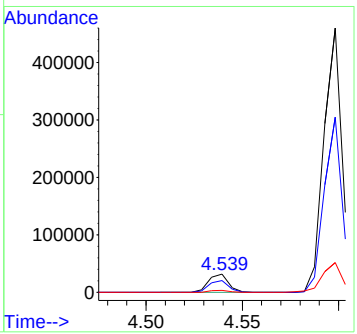


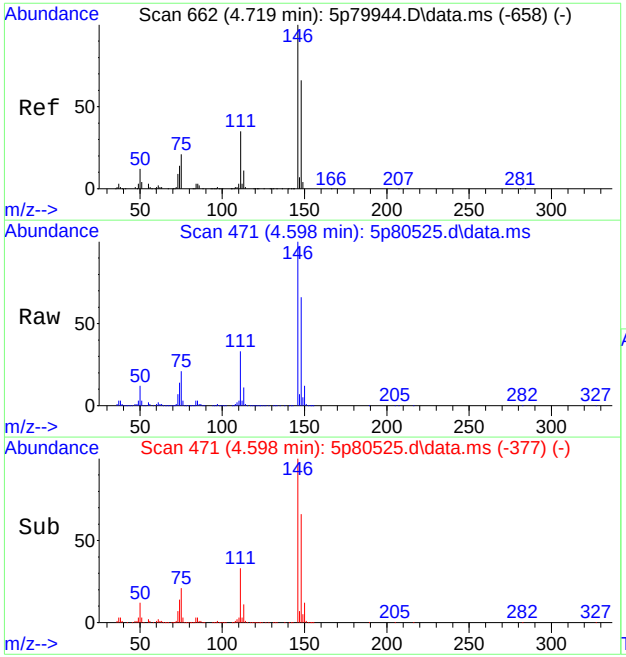


#14
1,3-Dichlorobenzene
Concen: 2.00 ppm
RT: 4.539 min Scan# 460
Delta R.T. -0.000 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:146 Resp: 23287

Ion	Ratio	Lower	Upper
146	100		
148	65.2	33.3	93.3
113	10.7	0.0	42.0

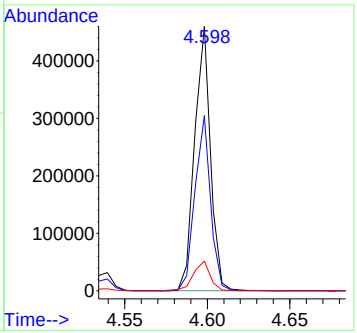


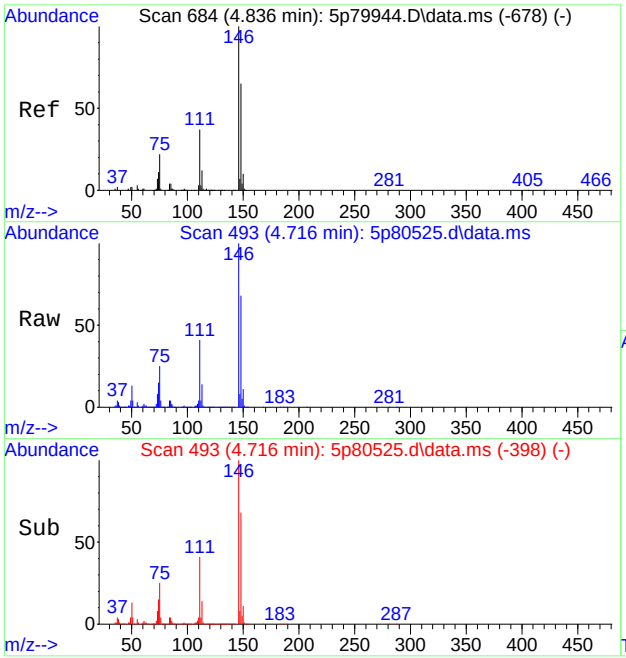


#15
1,4-Dichlorobenzene
Concen: 27.47 ppm
RT: 4.598 min Scan# 471
Delta R.T. -0.000 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:146 Resp: 307403

Ion	Ratio	Lower	Upper
146	100		
148	66.2	34.7	94.7
113	11.3	0.0	41.6

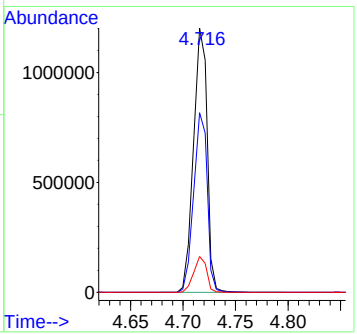


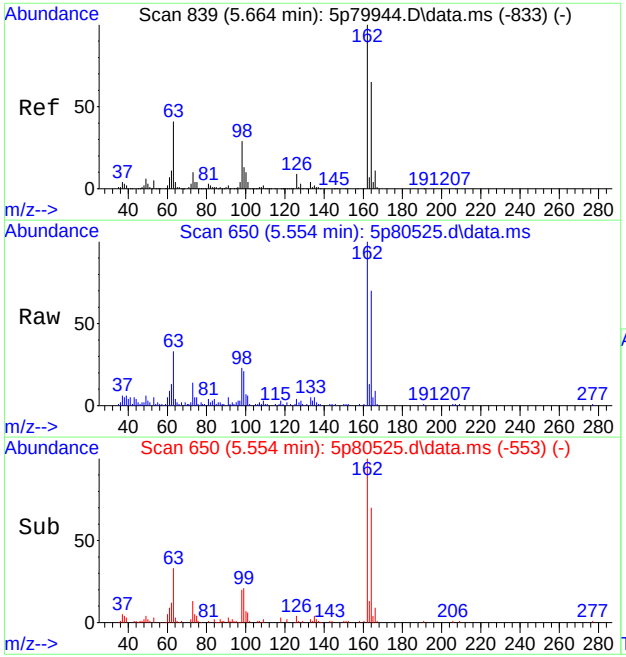


#17
1,2-Dichlorobenzene
Concen: 102.67 ppm
RT: 4.716 min Scan# 493
Delta R.T. 0.005 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:146 Resp: 1092070

Ion	Ratio	Lower	Upper
146	100		
148	67.9	35.2	95.2
113	13.6	0.0	42.5

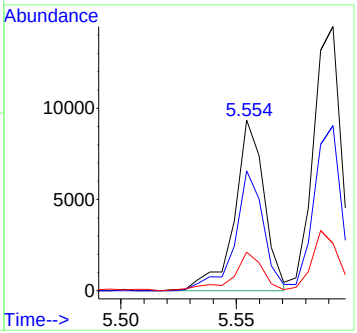


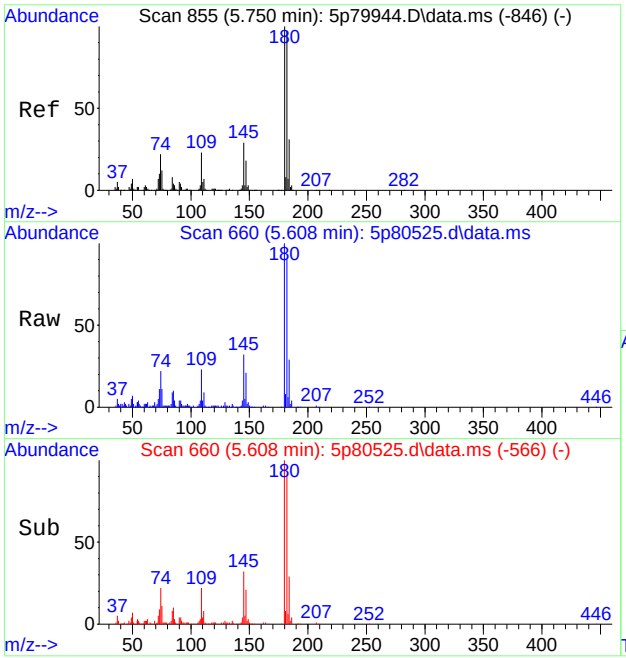


#33
2,4-Dichlorophenol
Concen: 0.95 ppm
RT: 5.554 min Scan# 650
Delta R.T. 0.016 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:162 Resp: 8396

Ion	Ratio	Lower	Upper
162	100		
164	70.2	35.7	95.7
98	22.9	0.0	59.6

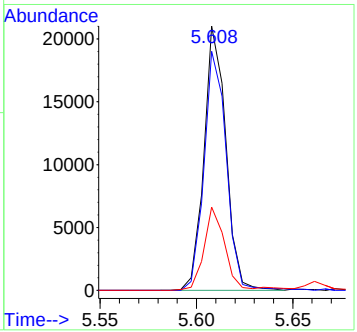


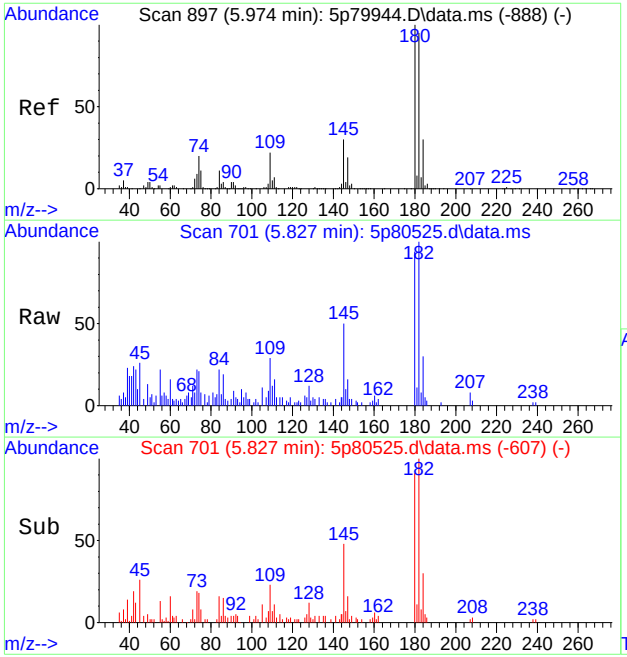


#36
1,2,4-Trichlorobenzene
Concen: 1.74 ppm
RT: 5.608 min Scan# 660
Delta R.T. -0.000 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:180 Resp: 16615

Ion	Ratio	Lower	Upper
180	100		
182	90.1	64.6	124.6
145	31.1	3.7	63.7

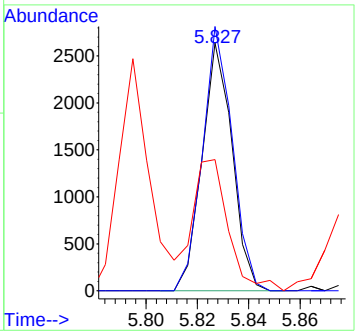


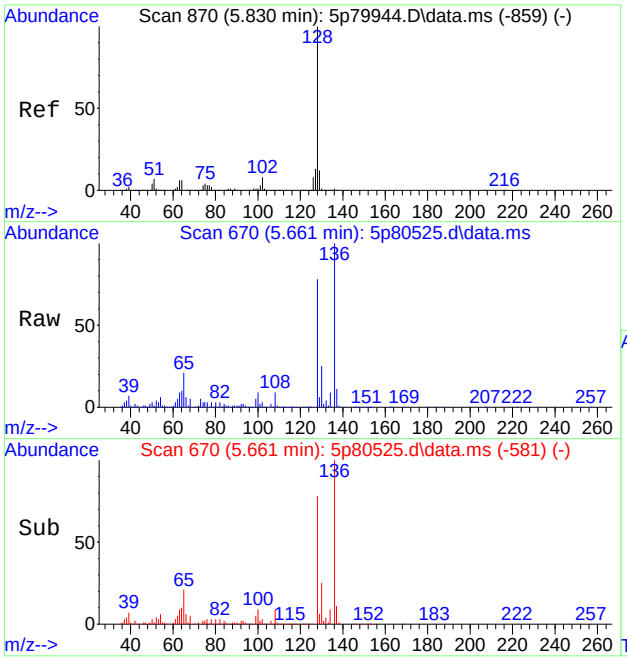


#37
1,2,3-Trichlorobenzene
Concen: 0.25 ppm
RT: 5.827 min Scan# 701
Delta R.T. -0.000 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:180 Resp: 2160

Ion	Ratio	Lower	Upper
180	100		
182	106.7	66.8	126.8
145	43.1	4.4	64.4

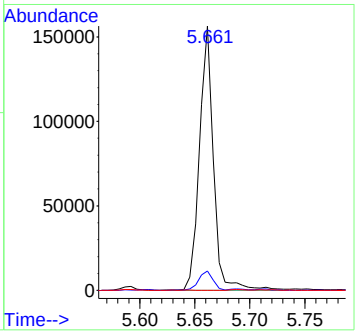


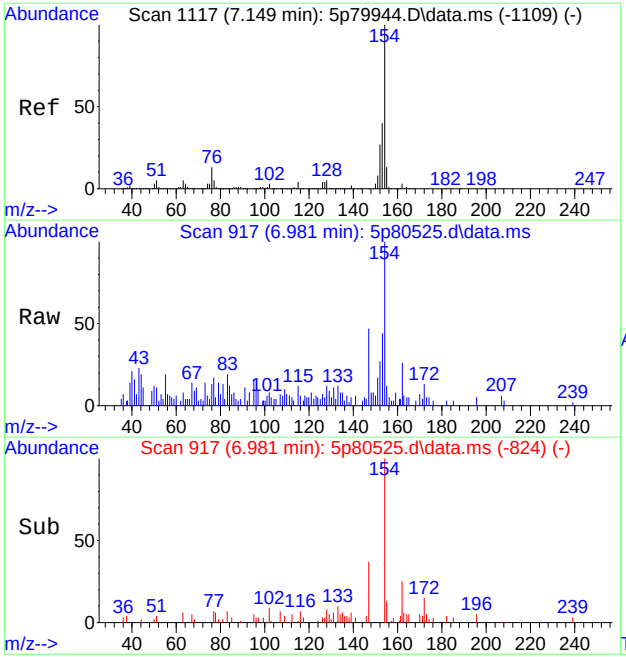


#38
Naphthalene
Concen: 4.57 ppm
RT: 5.661 min Scan# 670
Delta R.T. -0.027 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:128 Resp: 138429

Ion	Ratio	Lower	Upper
128	100		
129	7.3	0.0	40.9
127	0.0	0.0	43.2

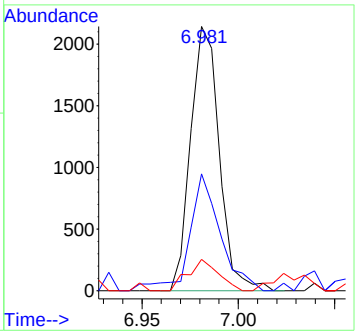


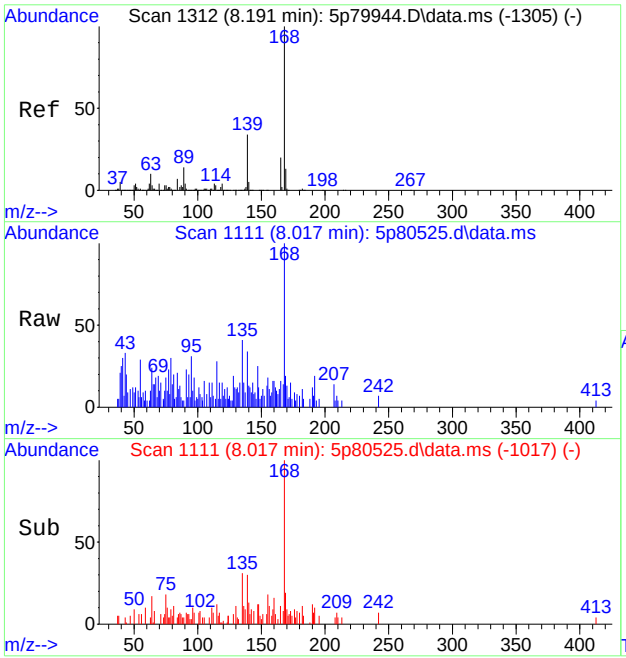


#53
Biphenyl
Concen: 0.07 ppm
RT: 6.981 min Scan# 917
Delta R.T. -0.005 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:154 Resp: 2227

Ion	Ratio	Lower	Upper
154	100		
153	41.3	11.4	71.4
155	8.6	0.0	43.4

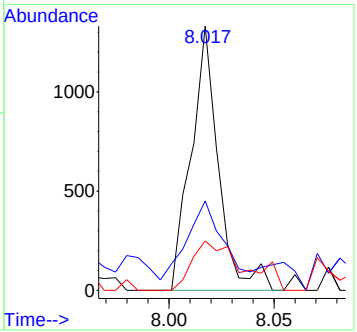


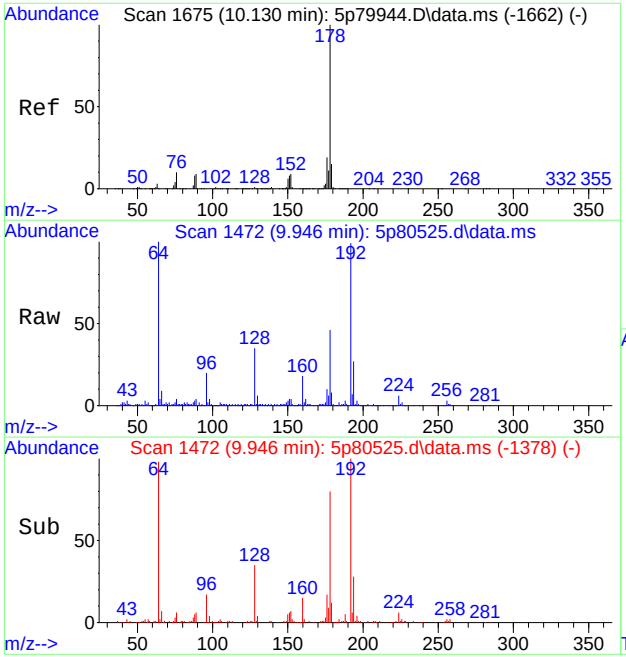


#62
Dibenzofuran
Concen: 0.04 ppm
RT: 8.017 min Scan# 1111
Delta R.T. -0.000 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:168 Resp: 1206

Ion	Ratio	Lower	Upper
168	100		
139	26.5	0.0	58.3
169	18.7	0.0	43.4

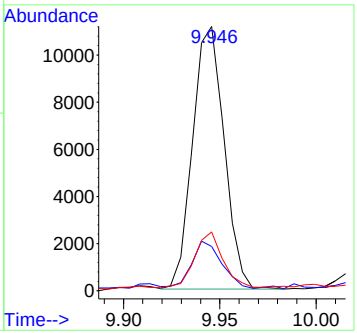


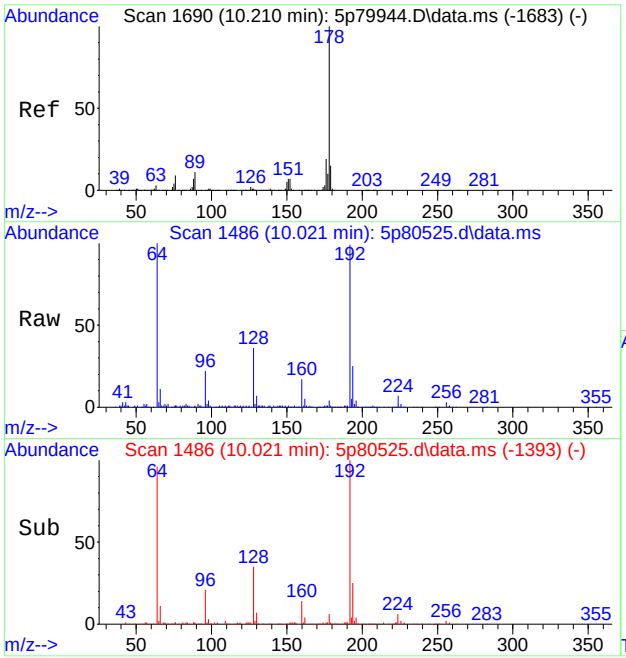


#78
Phenanthrene
Concen: 0.30 ppm
RT: 9.946 min Scan# 1472
Delta R.T. -0.000 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:178 Resp: 12724

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.3
176	21.0	0.0	49.0

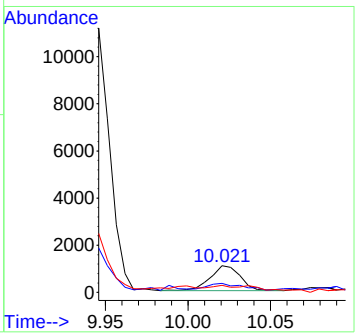


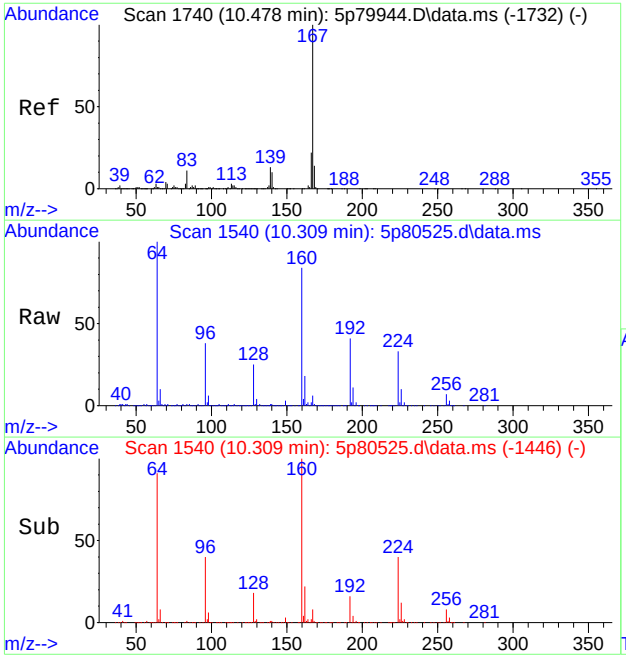


#79
Anthracene
Concen: 0.03 ppm
RT: 10.021 min Scan# 1486
Delta R.T. -0.005 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:178 Resp: 1376

Ion	Ratio	Lower	Upper
178	100		
179	25.0	0.0	45.3
176	14.0	0.0	48.4

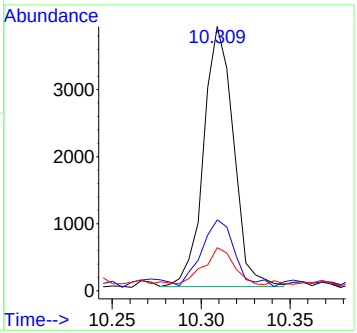


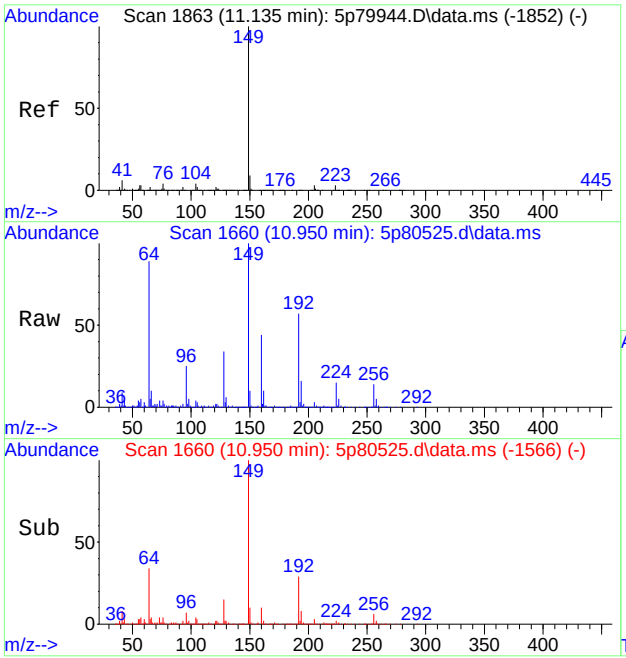


#80
Carbazole
Concen: 0.11 ppm
RT: 10.309 min Scan# 1540
Delta R.T. -0.000 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:167 Resp: 4513

Ion	Ratio	Lower	Upper
167	100		
166	23.5	0.0	52.2
139	13.6	0.0	43.4

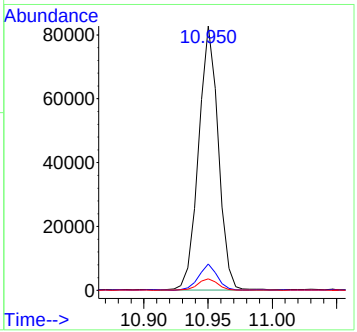


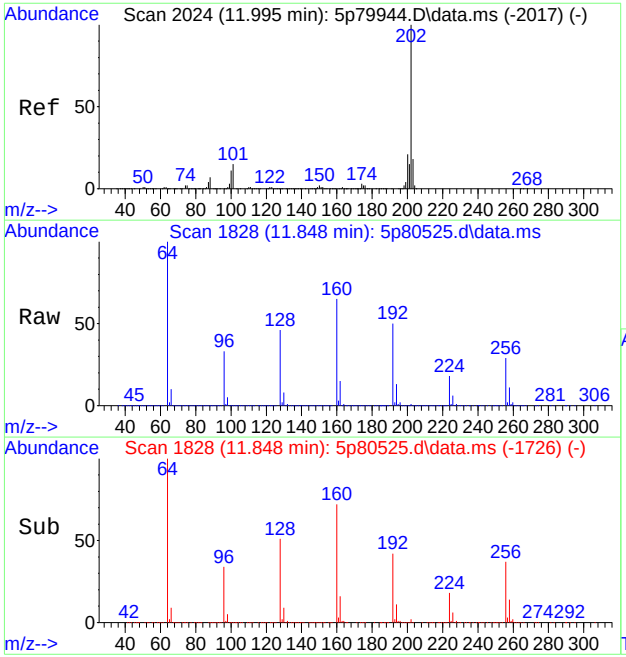


#81
Di-n-butylphthalate
Concen: 1.69 ppm
RT: 10.950 min Scan# 1660
Delta R.T. -0.000 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:149 Resp: 87932

Ion	Ratio	Lower	Upper
149	100		
150	9.8	0.0	39.2
104	4.3	0.0	34.2

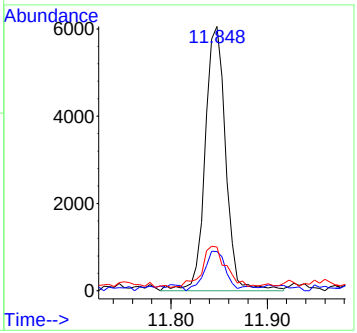


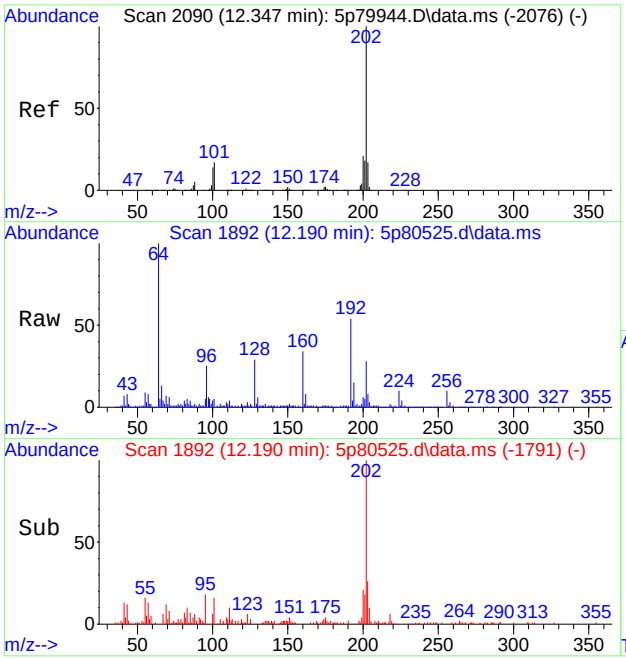


#82
Fluoranthene
Concen: 0.19 ppm
RT: 11.848 min Scan# 1828
Delta R.T. 0.043 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:202 Resp: 9020

Ion	Ratio	Lower	Upper
202	100		
101	12.9	0.0	42.5
203	14.4	0.0	47.6

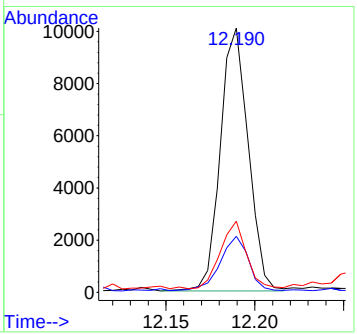


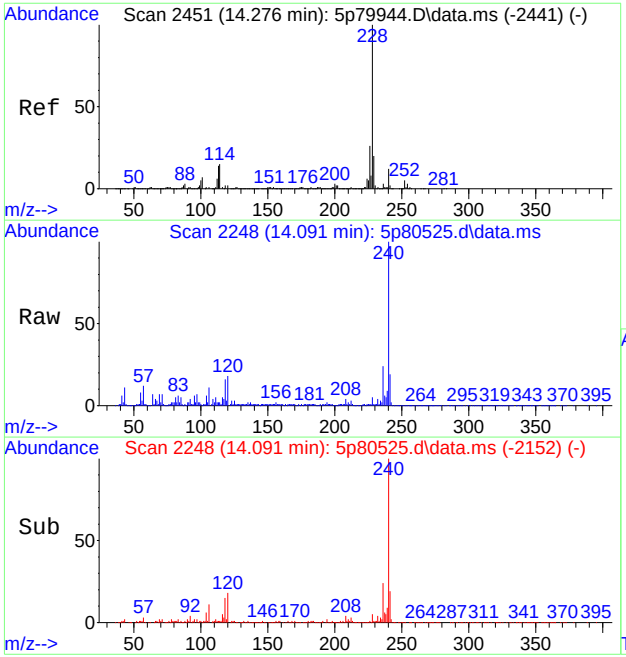


#86
Pyrene
Concen: 0.14 ppm
RT: 12.190 min Scan# 1892
Delta R.T. 0.037 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:202 Resp: 10978

Ion	Ratio	Lower	Upper
202	100		
200	20.3	0.0	49.9
203	25.2	0.0	48.4

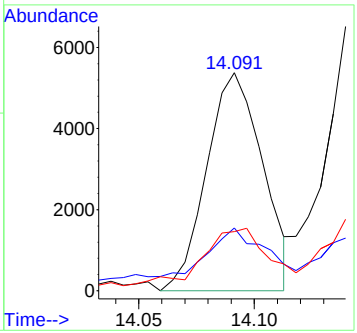


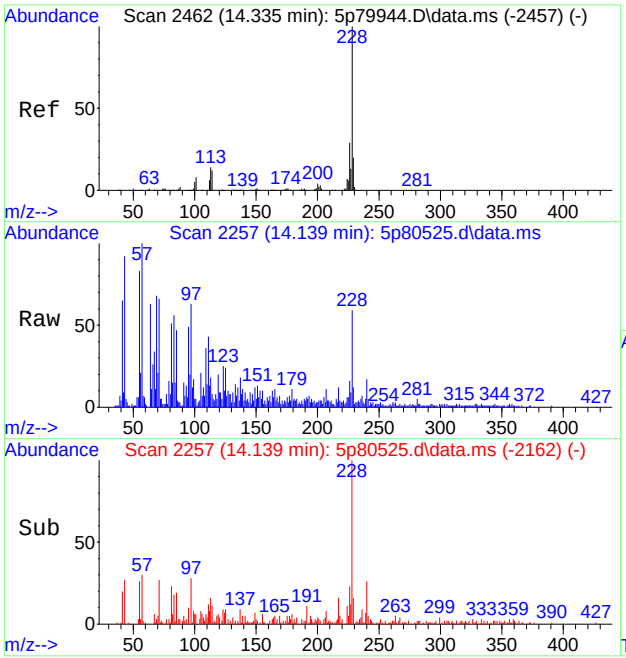


#89
Benzo[a]anthracene
Concen: 0.13 ppm
RT: 14.091 min Scan# 2248
Delta R.T. 0.011 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:228 Resp: 9081

Ion	Ratio	Lower	Upper
228	100		
229	22.2	0.0	49.4
226	20.3	0.0	55.9

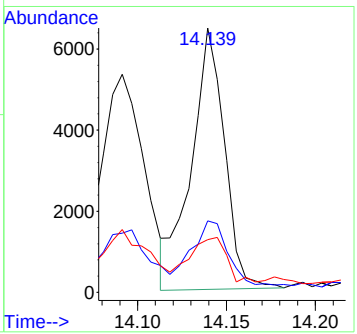


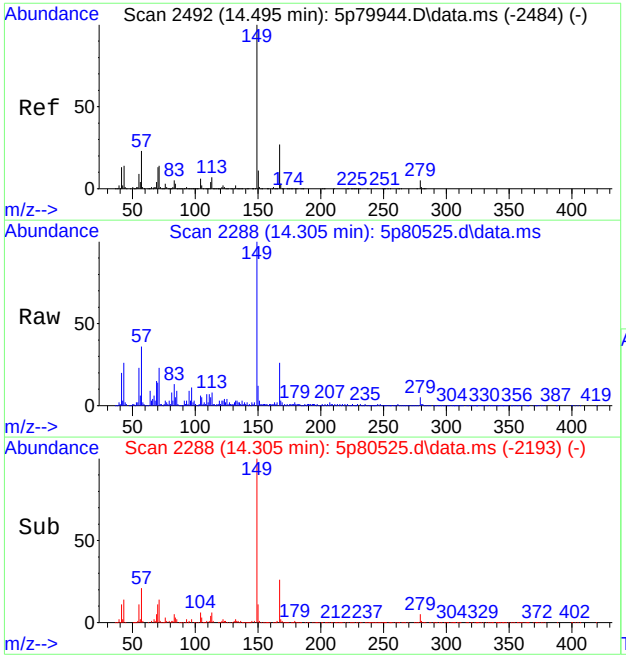


#91
Chrysene
Concen: 0.13 ppm
RT: 14.139 min Scan# 2257
Delta R.T. 0.005 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:228 Resp: 8411

Ion	Ratio	Lower	Upper
228	100		
226	22.9	0.0	58.3
229	14.1	0.0	49.8

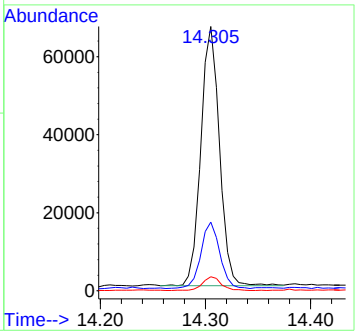


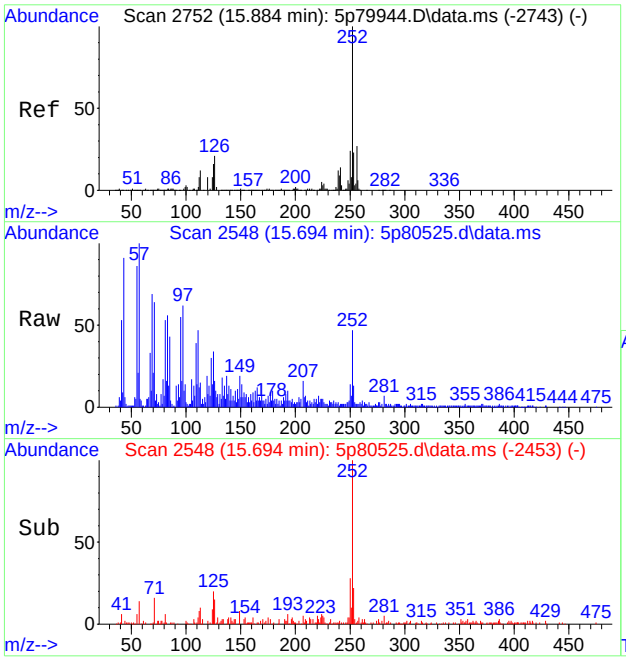


#92
bis(2-Ethylhexyl)phthalate
Concen: 1.75 ppm
RT: 14.305 min Scan# 2288
Delta R.T. 0.005 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:149 Resp: 82112

Ion	Ratio	Lower	Upper
149	100		
167	25.6	0.0	57.0
279	5.2	0.0	35.1

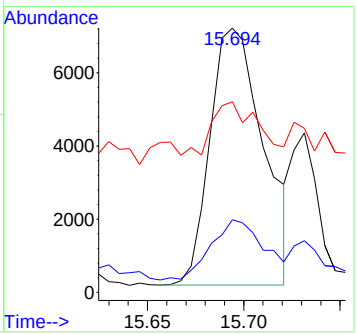


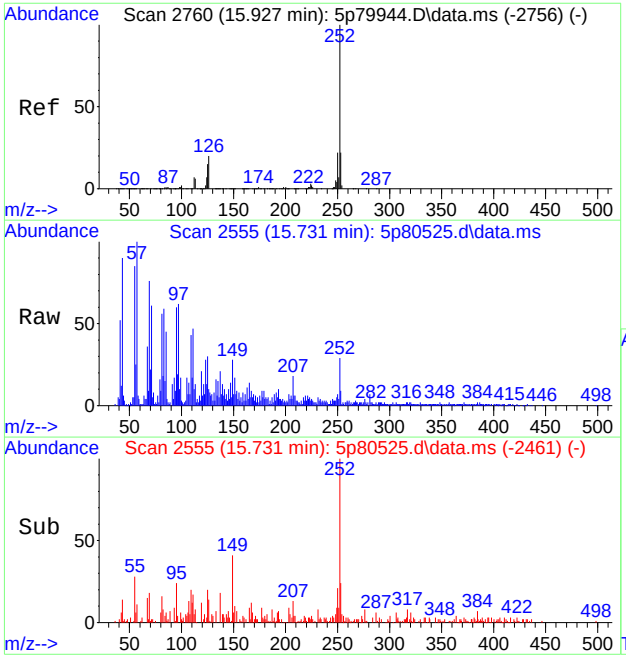


#95
Benzo[b]fluoranthene
Concen: 0.24 ppm
RT: 15.694 min Scan# 2548
Delta R.T. 0.005 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:252 Resp: 13515

Ion	Ratio	Lower	Upper
252	100		
253	24.8	0.0	53.6
125	20.7	0.0	46.2

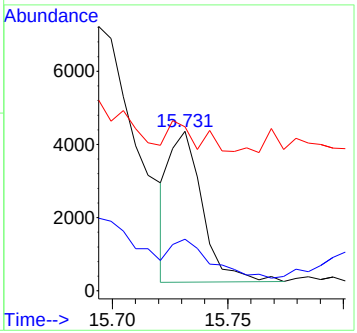


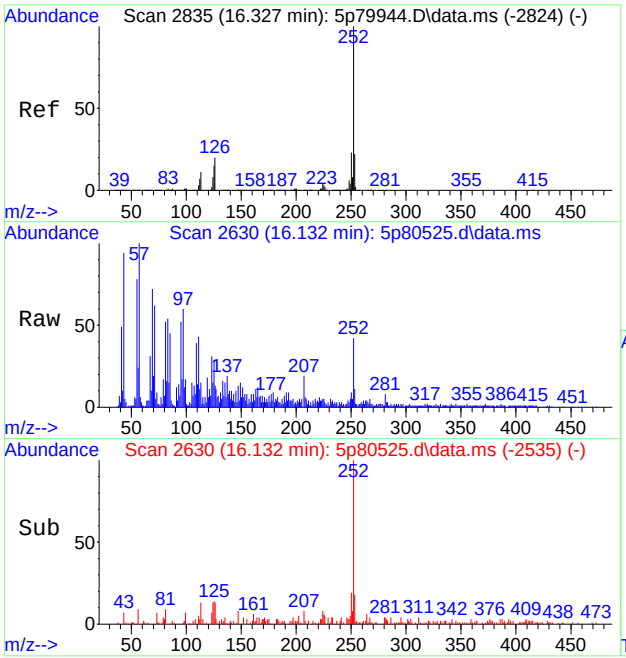


#96
Benzo[k]fluoranthene
Concen: 0.08 ppm
RT: 15.731 min Scan# 2555
Delta R.T. -0.000 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:252 Resp: 4083

Ion	Ratio	Lower	Upper
252	100		
253	28.9	0.0	52.0
125	20.4	0.0	44.8

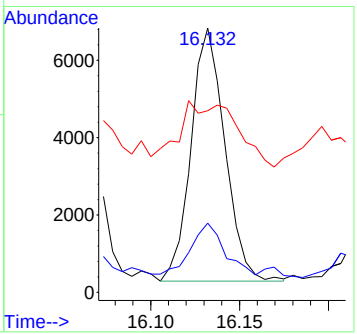


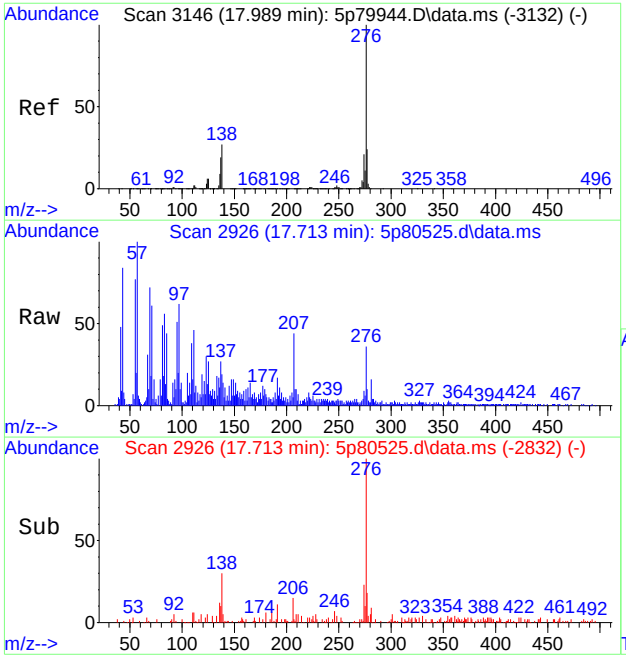


#97
Benzo[a]pyrene
Concen: 0.16 ppm
RT: 16.132 min Scan# 2630
Delta R.T. 0.005 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:252 Resp: 8639

Ion	Ratio	Lower	Upper
252	100		
253	20.5	0.0	52.5
125	16.9	0.0	46.3

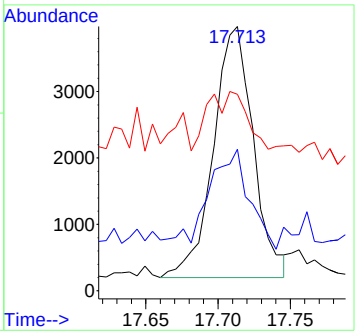


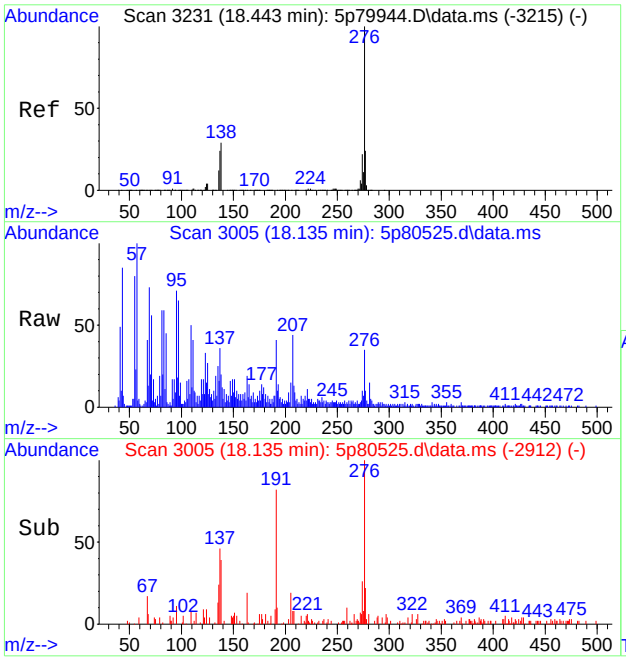


#98
Indeno[1,2,3-cd]pyrene
Concen: 0.15 ppm
RT: 17.713 min Scan# 2926
Delta R.T. -0.000 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:276 Resp: 7258

Ion	Ratio	Lower	Upper
276	100		
138	35.3	0.0	56.6
137	21.0	0.0	49.5

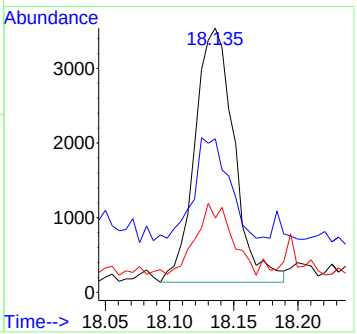




#102
Benzo[g,h,i]perylene
Concen: 0.13 ppm
RT: 18.135 min Scan# 3005
Delta R.T. -0.005 min
Lab File: 5p80525.d
Acq: 20 Dec 2021 8:21 pm

Tgt Ion:276 Resp: 7246

Ion	Ratio	Lower	Upper
276	100		
138	38.4	1.5	61.5
277	19.3	0.0	53.9



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya 12/14/21 08:54

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50039.D
Acq On : 12 Dec 2021 5:29 pm
Operator : kristis
Sample : jd36319-2
Misc : op37045a,e4p2620,270,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 13 09:55:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

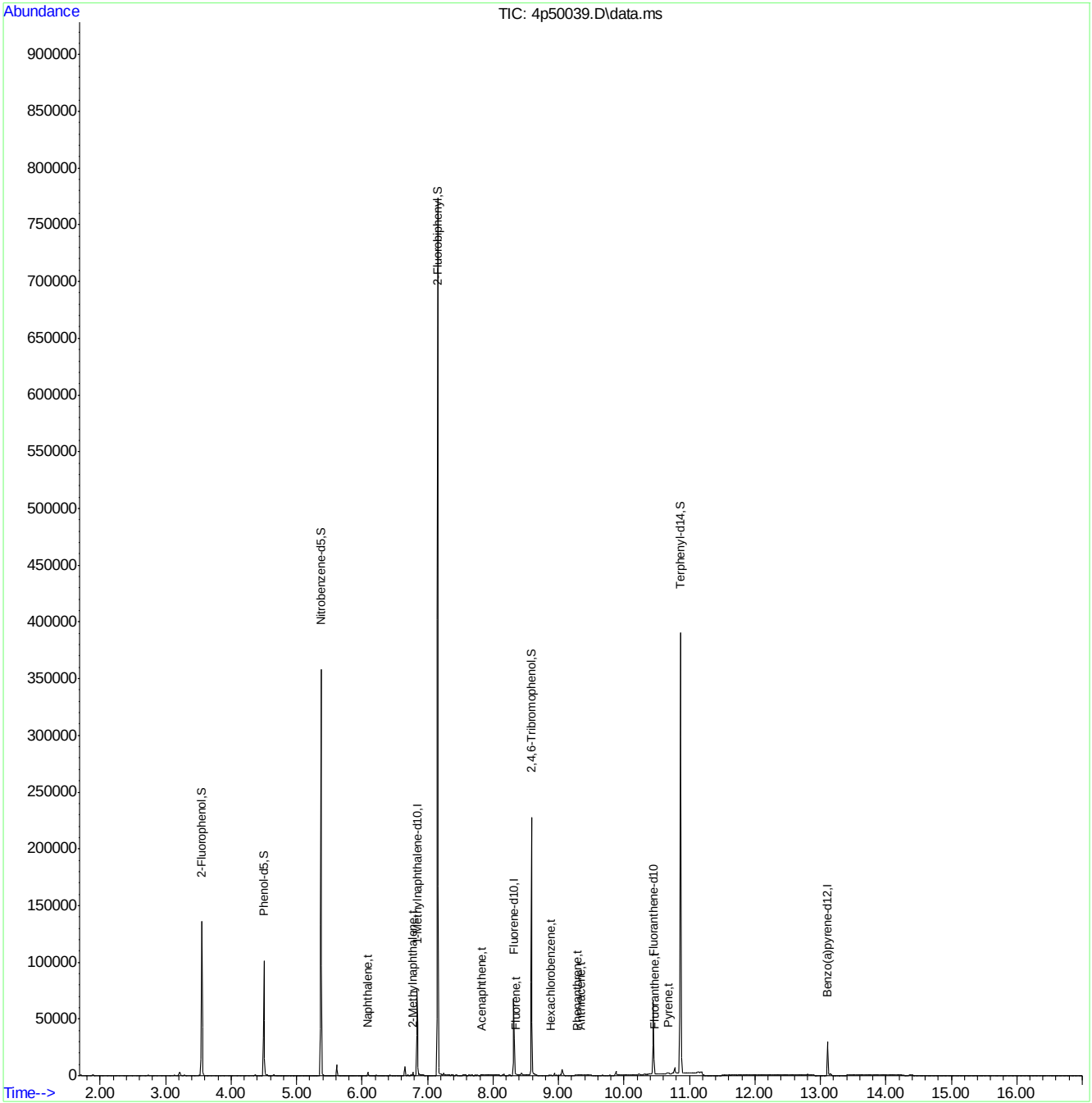
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.841	150	21057	800.00	ppm	0.00
13) Fluorene-d10	8.318	176	30593	800.00	ppm	0.00
20) Fluoranthene-d10	10.448	212	45200	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.111	264	17980	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.552	112	55565	4253.85	ppm	0.00
Spiked Amount 50.000			Recovery	= 8507.70%		
4) Phenol-d5	4.501	99	76508	3087.37	ppm	0.00
Spiked Amount 50.000			Recovery	= 6174.74%		
7) Nitrobenzene-d5	5.374	82	220766	10916.81	ppm	0.00
Spiked Amount 50.000			Recovery	= 21833.62%		
14) 2-Fluorobiphenyl	7.159	172	364515	9340.99	ppm	0.00
Spiked Amount 50.000			Recovery	= 18681.98%		
19) 2,4,6-Tribromophenol	8.591	330	76753	13145.74	ppm	0.00
Spiked Amount 50.000			Recovery	= 26291.48%		
27) Terphenyl-d14	10.863	244	280958	8678.14	ppm	0.00
Spiked Amount 50.000			Recovery	= 17356.28%		
Target Compounds						Qvalue
8) Naphthalene	6.094	128	2195	36.42	ppm	98
10) 2-Methylnaphthalene	6.782	141	908	28.84	ppm #	83
16) Acenaphthene	7.833	153	217m	5.97	ppm	
17) Fluorene	8.344	166	405m	9.23	ppm	
21) Hexachlorobenzene	8.884	284	58	4.07	ppm	75
23) Phenanthrene	9.290	178	305m	5.01	ppm	
24) Anthracene	9.345	178	376m	6.44	ppm	
25) Fluoranthene	10.467	202	448	7.07	ppm	90
26) Pyrene	10.678	202	561m	8.04	ppm	

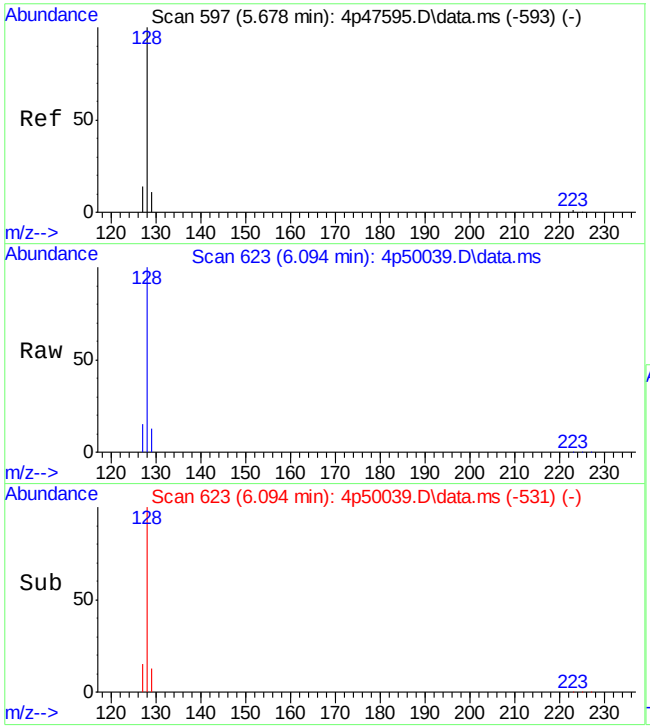
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50039.D
Acq On : 12 Dec 2021 5:29 pm
Operator : kristis
Sample : jd36319-2
Misc : op37045a,e4p2620,270,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 13 09:55:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

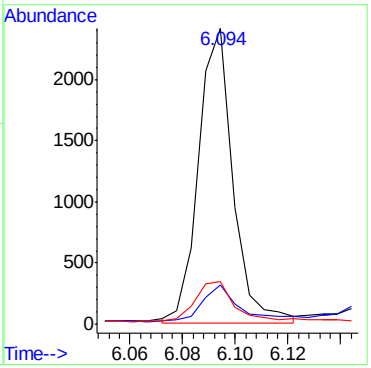


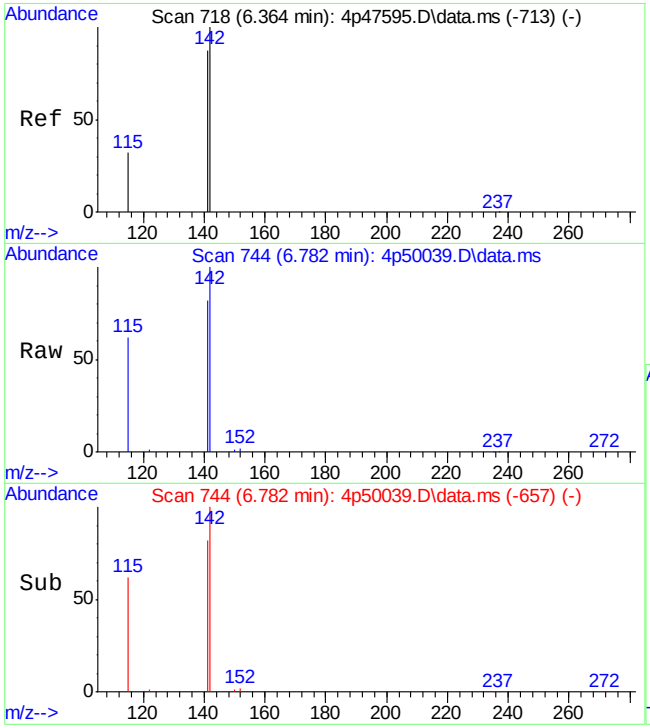


#8
Naphthalene
Concen: 36.42 ppm
RT: 6.094 min Scan# 623
Delta R.T. -0.000 min
Lab File: 4p50039.D
Acq: 12 Dec 2021 5:29 pm

Tgt Ion:128 Resp: 2195

Ion	Ratio	Lower	Upper
128	100		
129	11.6	0.0	41.1
127	13.3	0.0	42.0

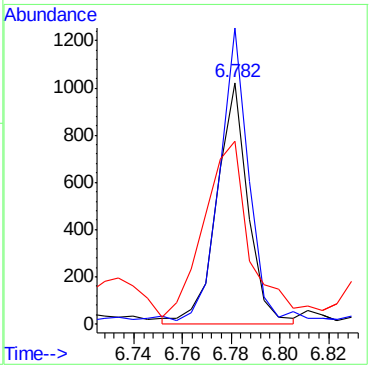


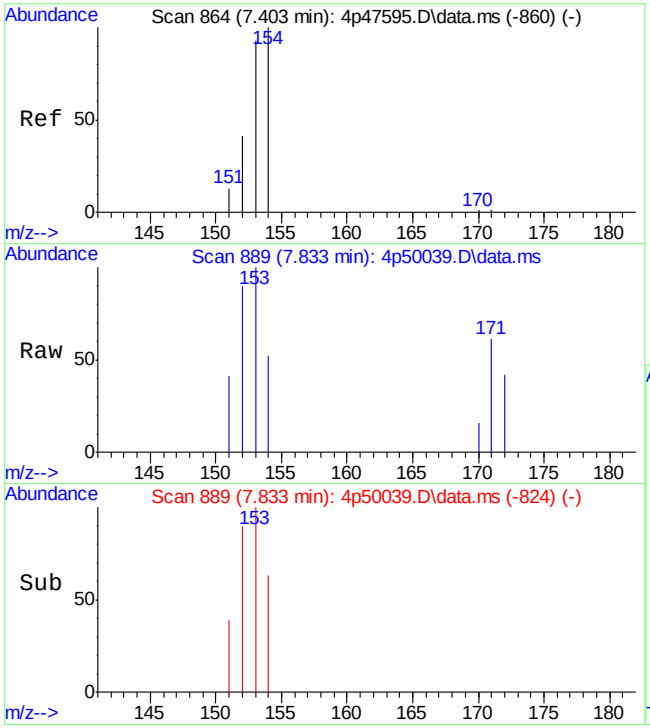


#10
2-Methylnaphthalene
Concen: 28.84 ppm
RT: 6.782 min Scan# 744
Delta R.T. -0.000 min
Lab File: 4p50039.D
Acq: 12 Dec 2021 5:29 pm

Tgt Ion:141 Resp: 908

Ion	Ratio	Lower	Upper
141	100		
142	121.3	96.1	156.1
115	72.7	7.9	67.9#

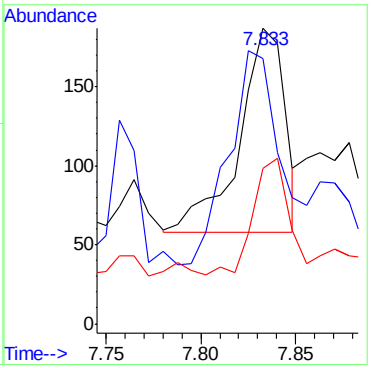


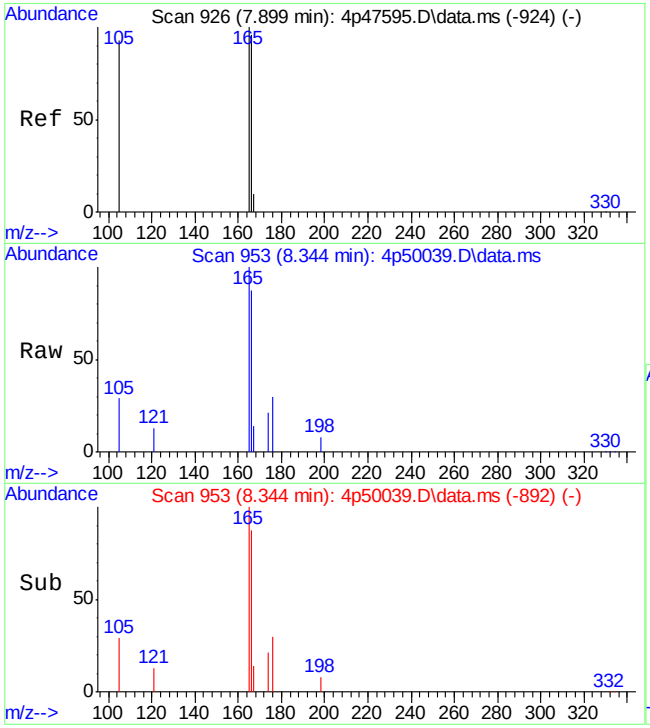


#16
Acenaphthene
Concen: 5.97 ppm m
RT: 7.833 min Scan# 889
Delta R.T. -0.008 min
Lab File: 4p50039.D
Acq: 12 Dec 2021 5:29 pm

Tgt Ion:153 Resp: 217

Ion	Ratio	Lower	Upper
153	100		
152	89.8	18.5	78.5#
154	52.4	59.1	119.1#

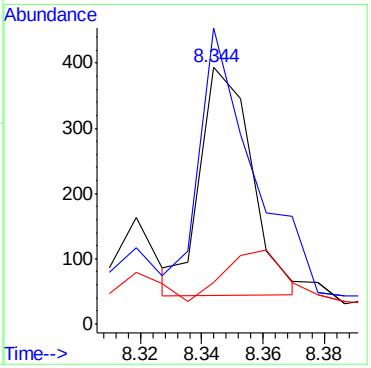


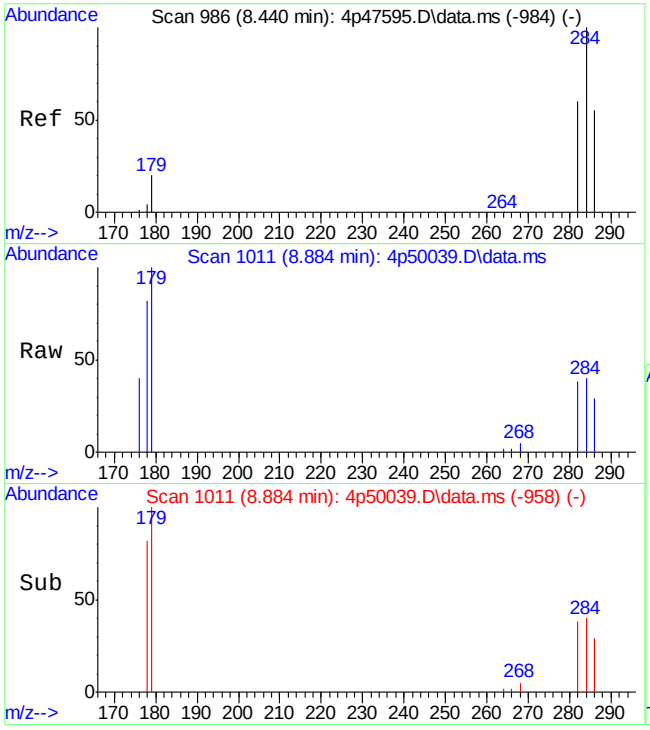


#17
Fluorene
Concen: 9.23 ppm m
RT: 8.344 min Scan# 953
Delta R.T. -0.009 min
Lab File: 4p50039.D
Acq: 12 Dec 2021 5:29 pm

Tgt Ion:166 Resp: 405

Ion	Ratio	Lower	Upper
166	100		
165	115.2	66.9	126.9
167	16.2	0.0	41.7

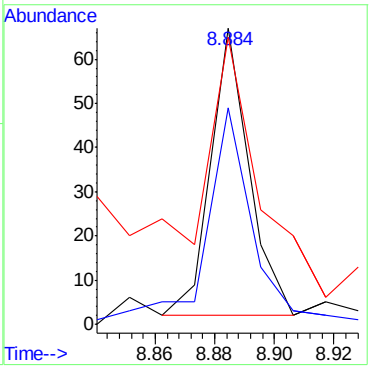


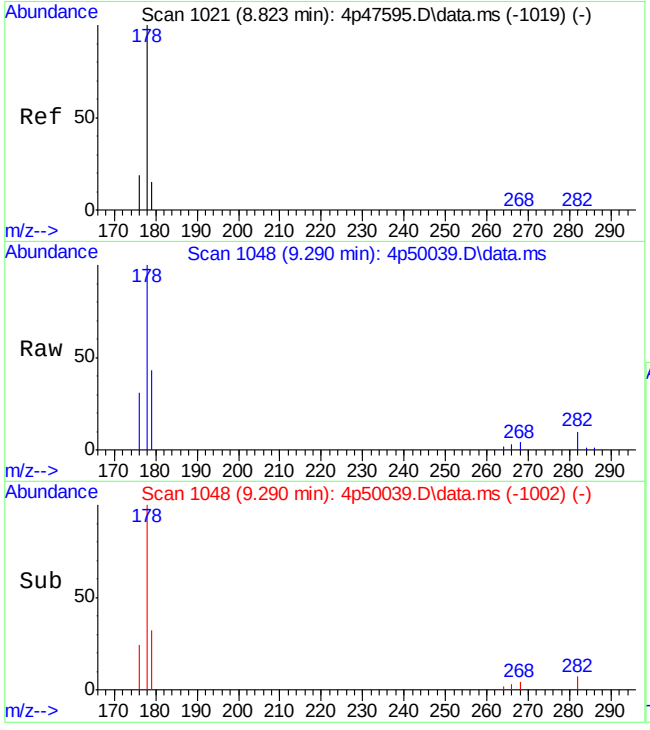


#21
Hexachlorobenzene
Concen: 4.07 ppm
RT: 8.884 min Scan# 1011
Delta R.T. -0.000 min
Lab File: 4p50039.D
Acq: 12 Dec 2021 5:29 pm

Tgt Ion:284 Resp: 58

Ion	Ratio	Lower	Upper
284	100		
286	69.2	57.8	117.8
282	66.2	13.6	73.6

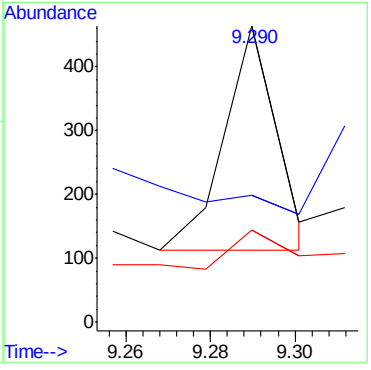


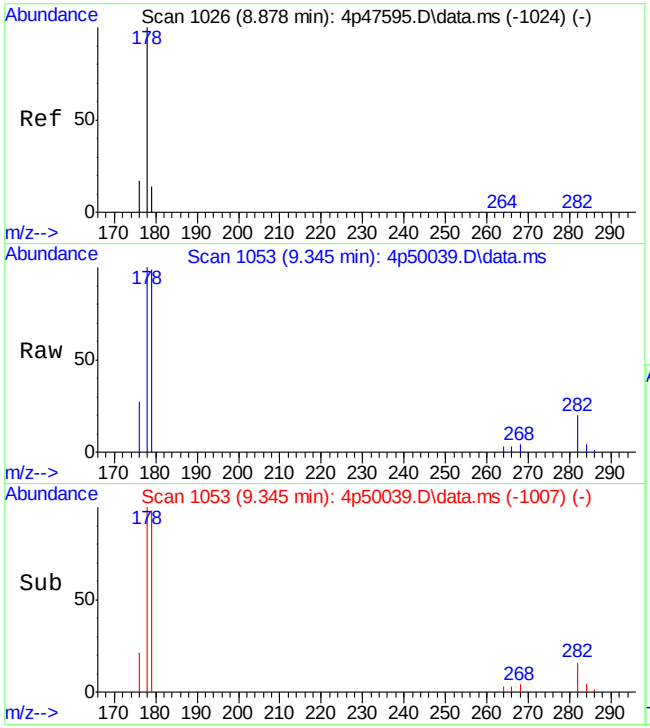


#23
Phenanthrene
Concen: 5.01 ppm m
RT: 9.290 min Scan# 1048
Delta R.T. -0.000 min
Lab File: 4p50039.D
Acq: 12 Dec 2021 5:29 pm

Tgt Ion:178 Resp: 305

Ion	Ratio	Lower	Upper
178	100		
179	42.7	0.0	46.0
176	31.0	0.0	45.6

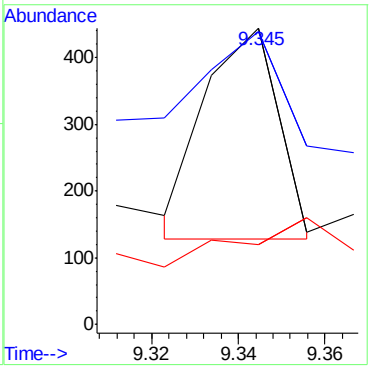


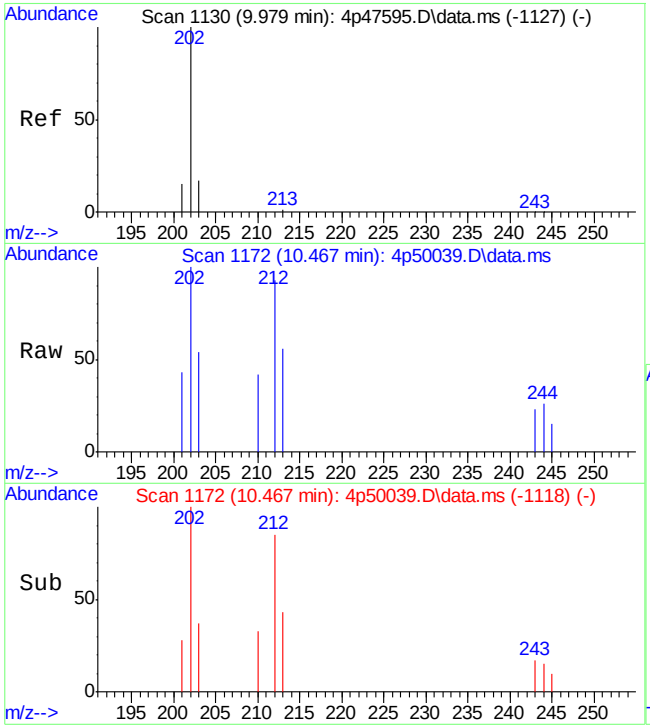


#24
Anthracene
Concen: 6.44 ppm m
RT: 9.345 min Scan# 1053
Delta R.T. -0.000 min
Lab File: 4p50039.D
Acq: 12 Dec 2021 5:29 pm

Tgt Ion:178 Resp: 376

Ion	Ratio	Lower	Upper
178	100		
179	98.9	0.0	43.0#
176	26.8	0.0	48.4

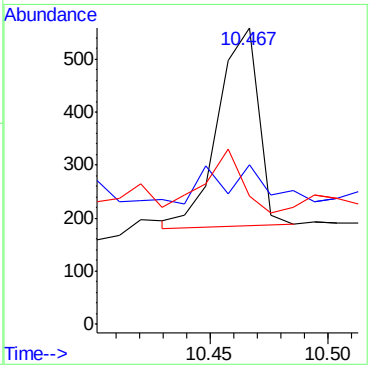


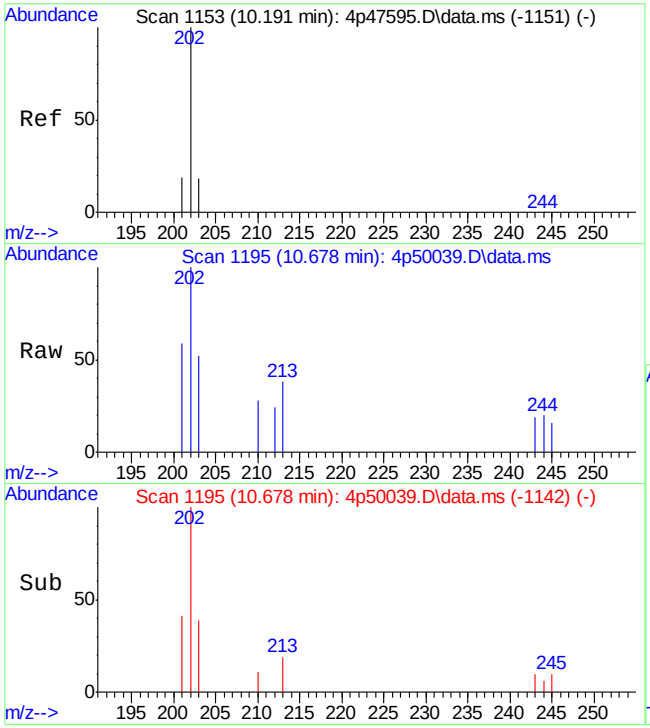


#25
Fluoranthene
Concen: 7.07 ppm
RT: 10.467 min Scan# 1172
Delta R.T. -0.000 min
Lab File: 4p50039.D
Acq: 12 Dec 2021 5:29 pm

Tgt Ion:202 Resp: 448

Ion	Ratio	Lower	Upper
202	100		
203	15.5	0.0	47.6
201	5.7	0.0	42.9

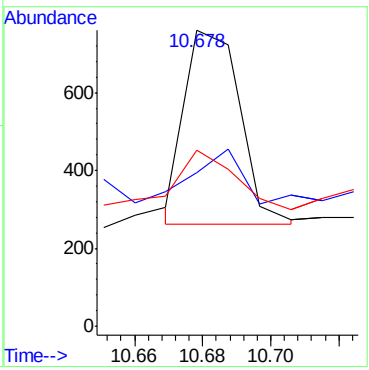




#26
Pyrene
Concen: 8.04 ppm m
RT: 10.678 min Scan# 1195
Delta R.T. -0.009 min
Lab File: 4p50039.D
Acq: 12 Dec 2021 5:29 pm

Tgt Ion:202 Resp: 561

Ion	Ratio	Lower	Upper
202	100		
203	52.0	0.0	47.6#
201	59.5	0.0	46.0#



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/14/21 08:54

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50040.D
Acq On : 12 Dec 2021 5:52 pm
Operator : kristis
Sample : jd36319-3
Misc : op37045a,e4p2620,250,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 13 09:56:43 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

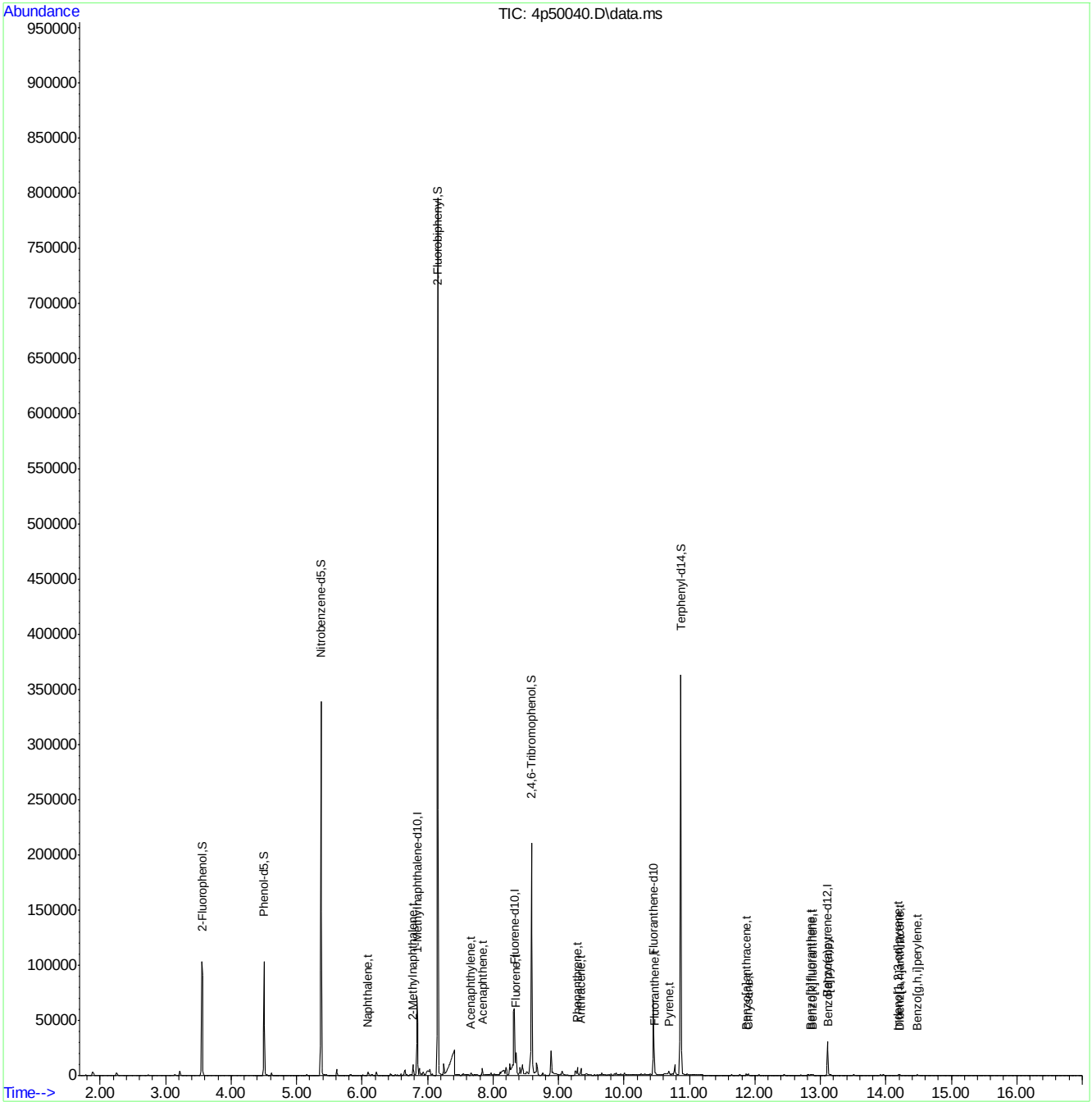
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	6.841	150	20852	800.00 ppm	0.00
13) Fluorene-d10	8.327	176	41545	800.00 ppm	0.00
20) Fluoranthene-d10	10.448	212	45962	800.00 ppm	0.00
30) Benzo(a)pyrene-d12	13.111	264	19231	800.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	3.563	112	58322	4508.81 ppm	0.01
Spiked Amount 50.000			Recovery	= 9017.62%	
4) Phenol-d5	4.506	99	78675	3206.03 ppm	0.00
Spiked Amount 50.000			Recovery	= 6412.06%	
7) Nitrobenzene-d5	5.374	82	219648	10968.31 ppm	0.00
Spiked Amount 50.000			Recovery	= 21936.62%	
14) 2-Fluorobiphenyl	7.159	172	363498	6859.35 ppm	0.00
Spiked Amount 50.000			Recovery	= 13718.70%	
19) 2,4,6-Tribromophenol	8.591	330	79727	10055.38 ppm	0.00
Spiked Amount 50.000			Recovery	= 20110.76%	
27) Terphenyl-d14	10.872	244	280776	8528.74 ppm	0.00
Spiked Amount 50.000			Recovery	= 17057.48%	
Target Compounds					Qvalue
8) Naphthalene	6.094	128	2890m	48.43 ppm	
10) 2-Methylnaphthalene	6.781	141	3211	102.98 ppm	75
15) Acenaphthylene	7.666	152	1350	17.44 ppm	97
16) Acenaphthene	7.840	153	2118	42.88 ppm	94
17) Fluorene	8.352	166	3696	62.02 ppm	98
23) Phenanthrene	9.290	178	4620m	74.63 ppm	
24) Anthracene	9.345	178	4969	83.69 ppm	93
25) Fluoranthene	10.467	202	2312	35.87 ppm	93
26) Pyrene	10.688	202	2154	30.37 ppm	84
28) Benzo[a]anthracene	11.868	228	861	13.59 ppm	86
29) Chrysene	11.904	228	809	13.03 ppm	95
31) Benzo[b]fluoranthene	12.857	252	583	0.41 ppm	99
32) Benzo[k]fluoranthene	12.877	252	641	16.15 ppm	87
33) Benzo[a]pyrene	13.126	252	432	11.87 ppm	81
34) Indeno[1,2,3-cd]pyrene	14.191	276	437	10.08 ppm	94
35) Dibenz[a,h]anthracene	14.215	278	310	9.18 ppm	95
36) Benzo[g,h,i]perylene	14.485	276	429	11.67 ppm	98

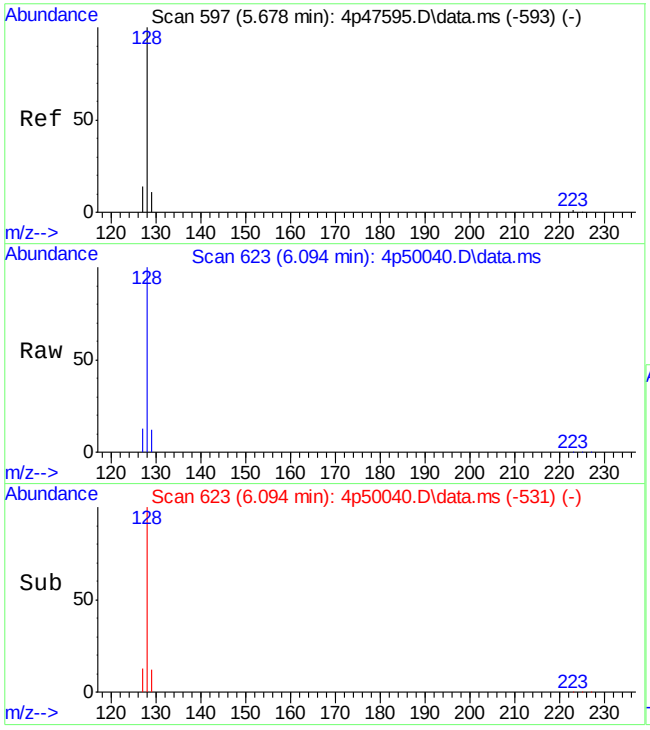
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2620\
Data File : 4p50040.D
Acq On : 12 Dec 2021 5:52 pm
Operator : kristis
Sample : jd36319-3
Misc : op37045a,e4p2620,250,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 13 09:56:43 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

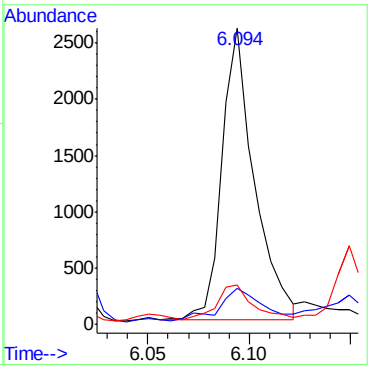


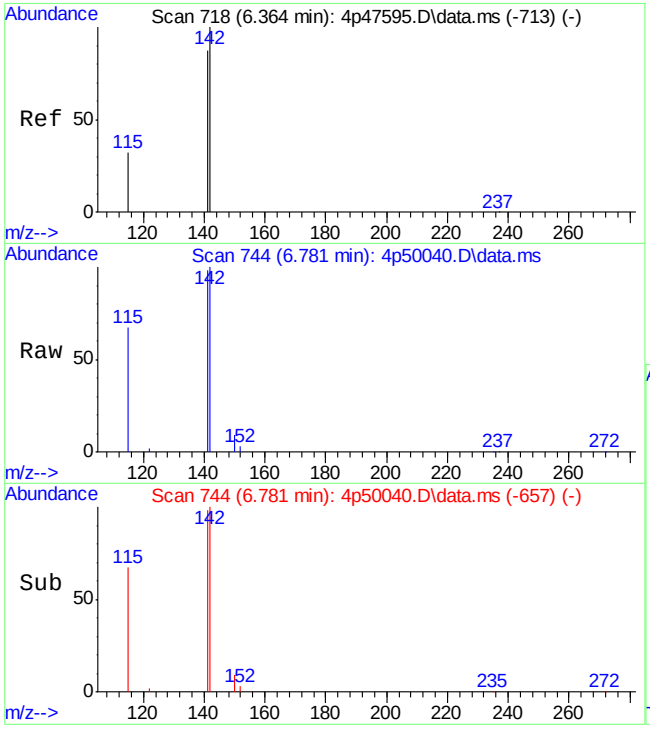


#8
Naphthalene
Concen: 48.43 ppm m
RT: 6.094 min Scan# 623
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:128 Resp: 2890

Ion	Ratio	Lower	Upper
128	100		
129	12.2	0.0	41.1
127	13.4	0.0	42.0

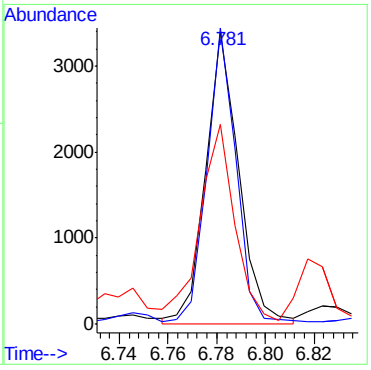


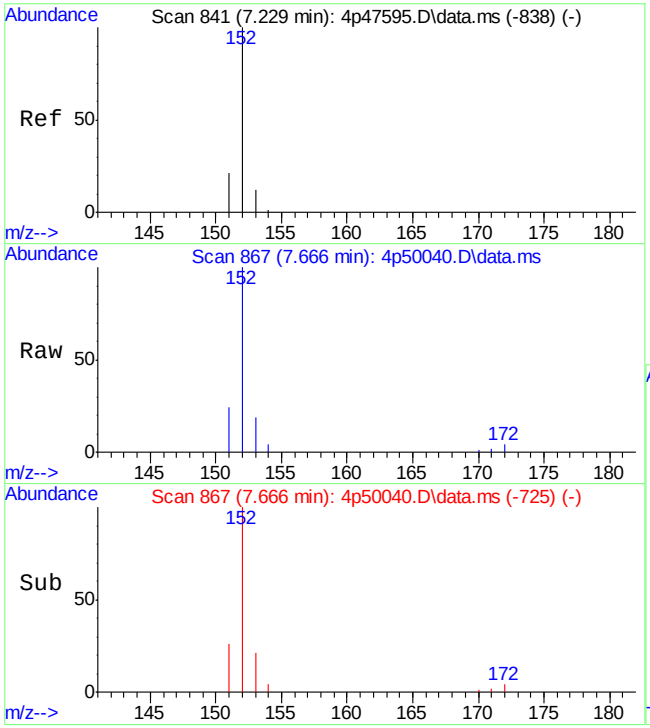


#10
2-Methylnaphthalene
Concen: 102.98 ppm
RT: 6.781 min Scan# 744
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:141 Resp: 3211

Ion	Ratio	Lower	Upper
141	100		
142	102.5	96.1	156.1
115	62.7	7.9	67.9

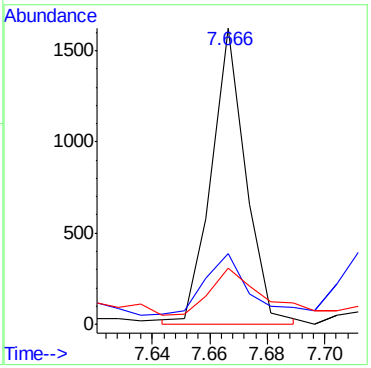


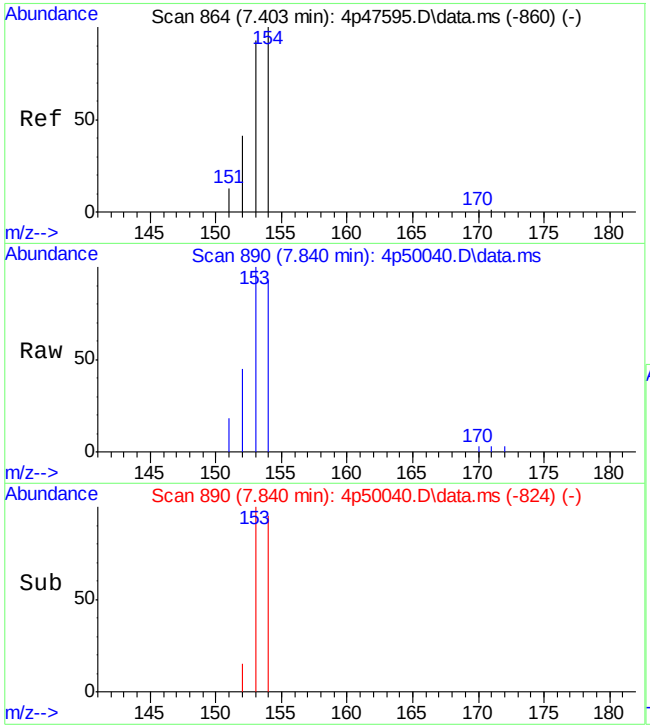


#15
Acenaphthylene
Concen: 17.44 ppm
RT: 7.666 min Scan# 867
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:152 Resp: 1350

Ion	Ratio	Lower	Upper
152	100		
151	19.8	0.0	50.8
153	13.9	0.0	42.2

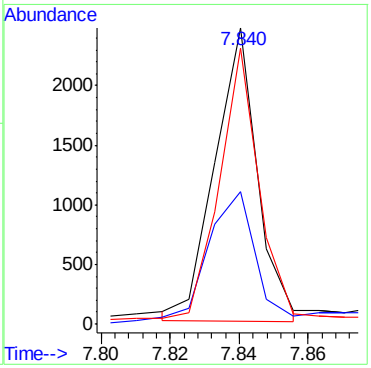


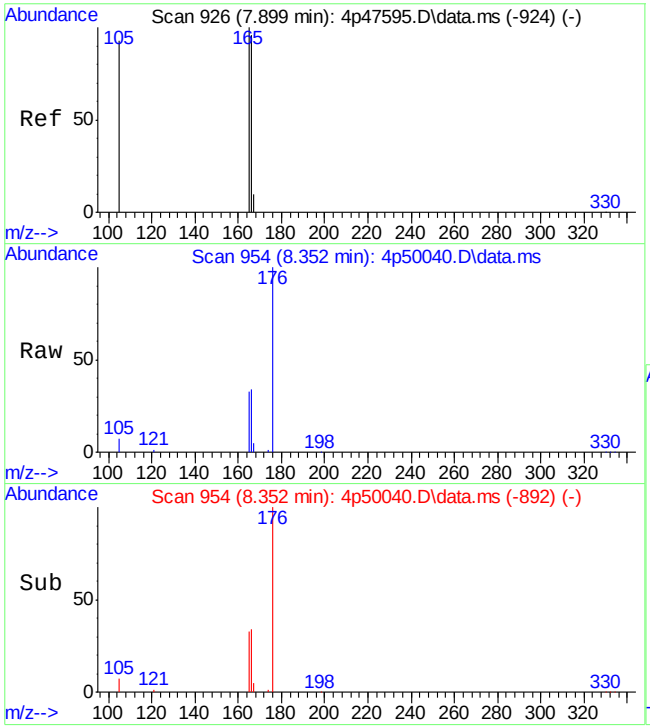


#16
Acenaphthene
Concen: 42.88 ppm
RT: 7.840 min Scan# 890
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:153 Resp: 2118

Ion	Ratio	Lower	Upper
153	100		
152	44.3	18.5	78.5
154	94.6	59.1	119.1

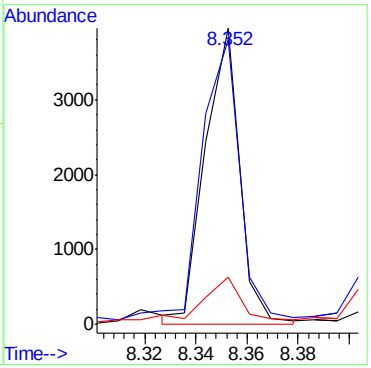


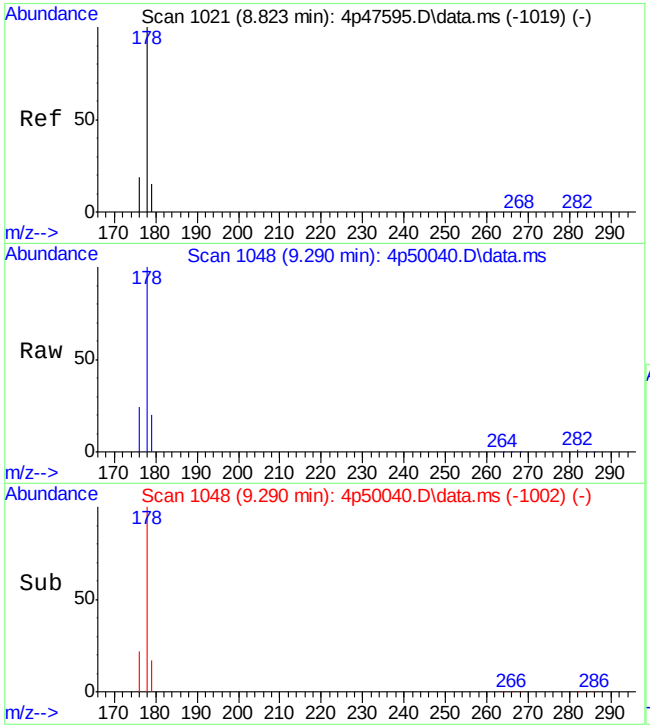


#17
Fluorene
Concen: 62.02 ppm
RT: 8.352 min Scan# 954
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:166 Resp: 3696

Ion	Ratio	Lower	Upper
166	100		
165	94.9	66.9	126.9
167	13.9	0.0	41.7

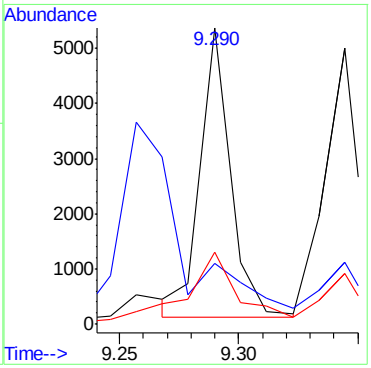


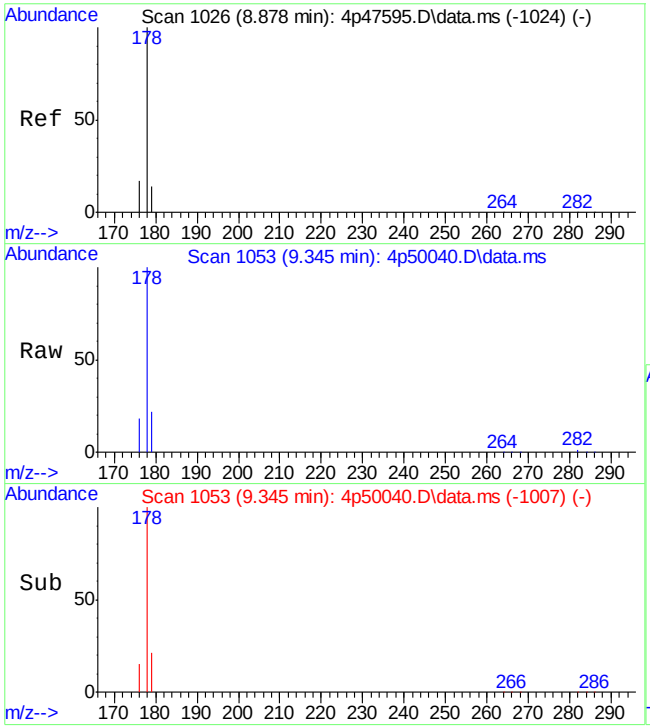


#23
Phenanthrene
Concen: 74.63 ppm m
RT: 9.290 min Scan# 1048
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:178 Resp: 4620

Ion	Ratio	Lower	Upper
178	100		
179	20.3	0.0	46.0
176	24.2	0.0	45.6

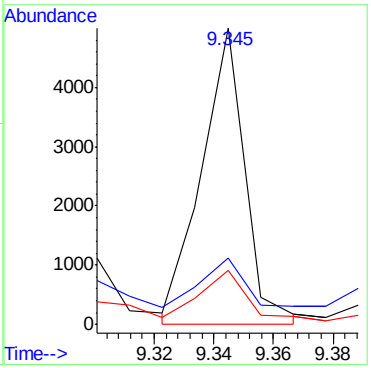


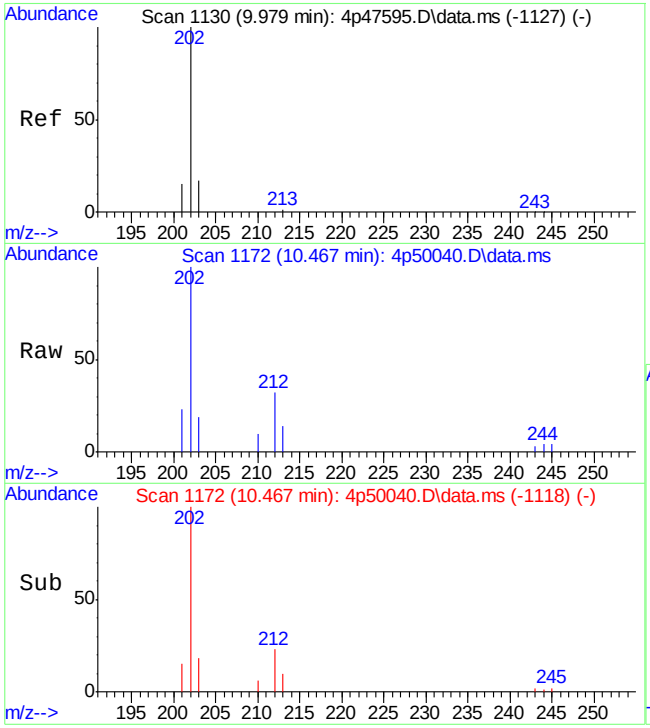


#24
Anthracene
Concen: 83.69 ppm
RT: 9.345 min Scan# 1053
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:178 Resp: 4969

Ion	Ratio	Lower	Upper
178	100		
179	17.0	0.0	43.0
176	16.2	0.0	48.4

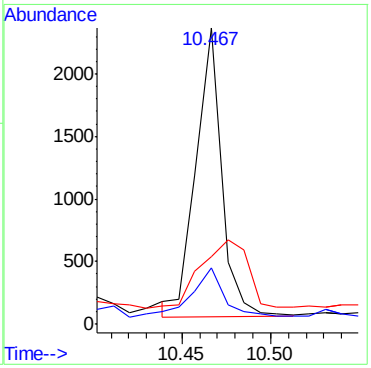


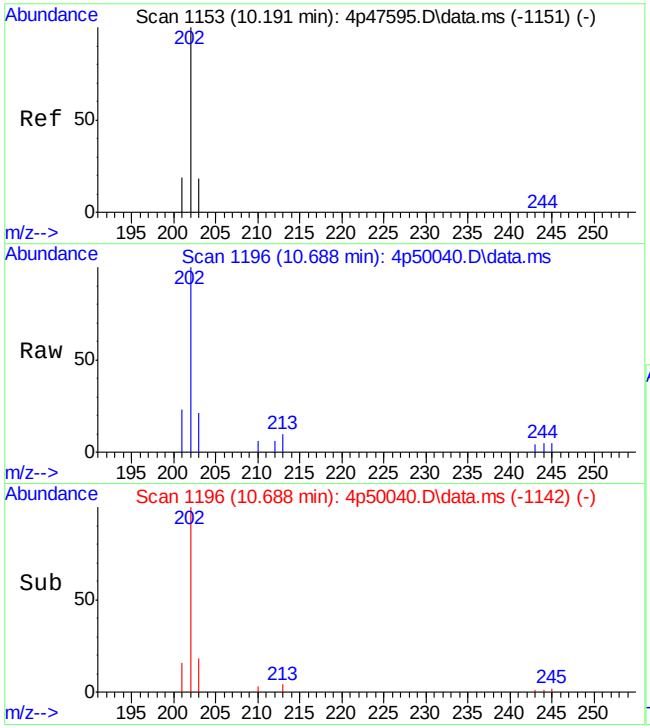


#25
Fluoranthene
Concen: 35.87 ppm
RT: 10.467 min Scan# 1172
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:202 Resp: 2312

Ion	Ratio	Lower	Upper
202	100		
203	16.3	0.0	47.6
201	17.7	0.0	42.9

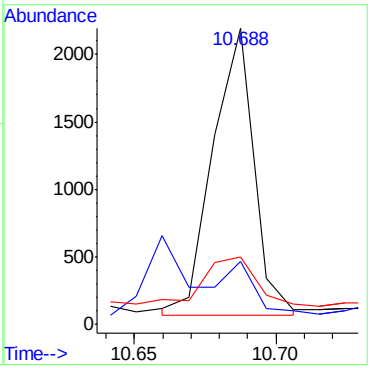


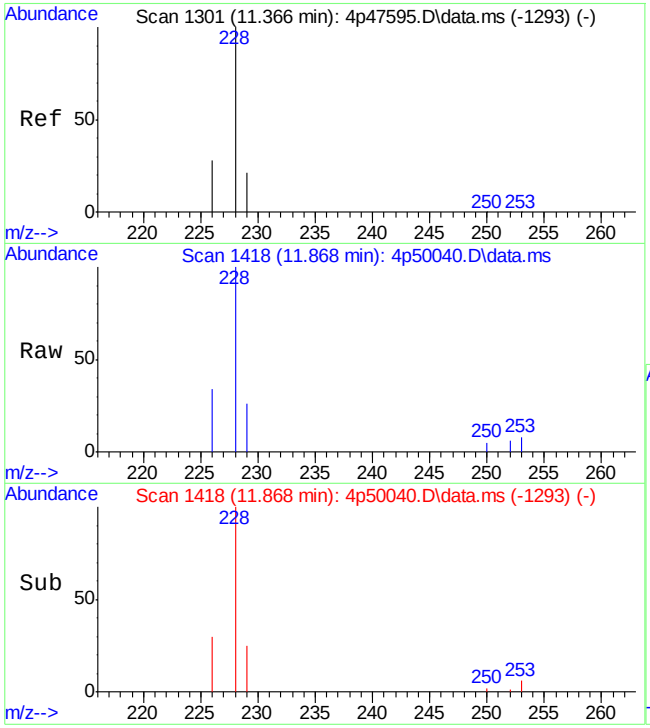


#26
Pyrene
Concen: 30.37 ppm
RT: 10.688 min Scan# 1196
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:202 Resp: 2154

Ion	Ratio	Lower	Upper
202	100		
203	4.1	0.0	47.6
201	16.1	0.0	46.0

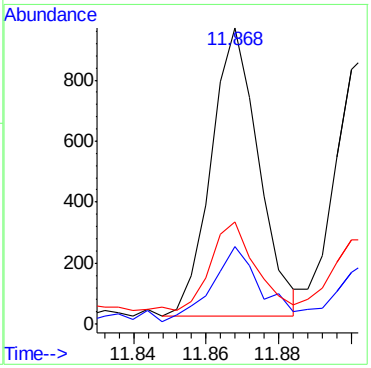


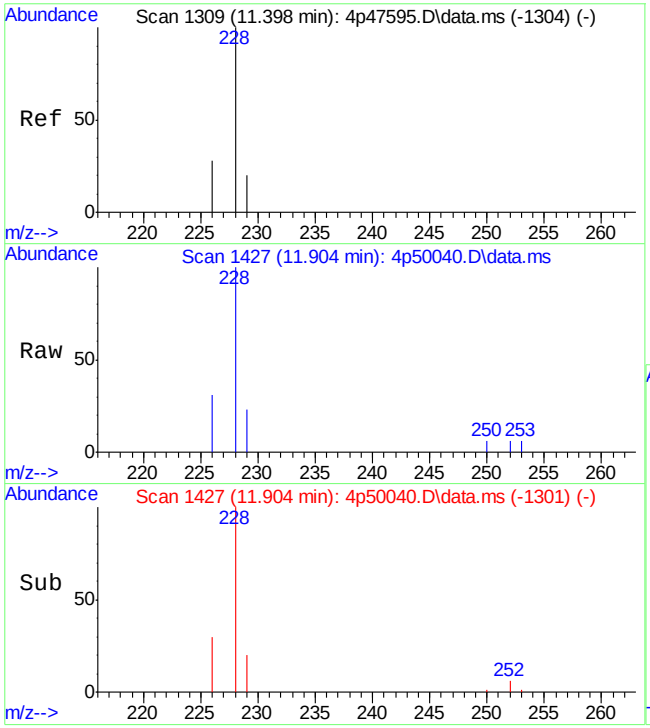


#28
Benzo[a]anthracene
Concen: 13.59 ppm
RT: 11.868 min Scan# 1418
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:228 Resp: 861

Ion	Ratio	Lower	Upper
228	100		
229	25.8	0.0	49.8
226	30.4	0.0	53.3

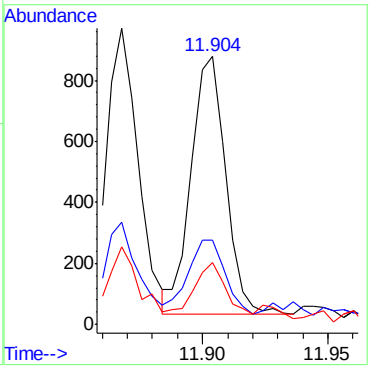


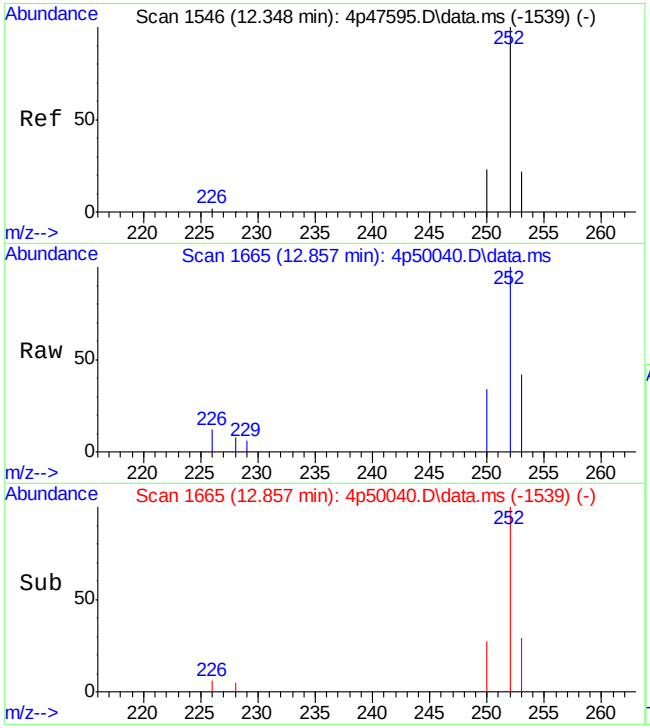


#29
Chrysene
Concen: 13.03 ppm
RT: 11.904 min Scan# 1427
Delta R.T. 0.004 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:228 Resp: 809

Ion	Ratio	Lower	Upper
228	100		
226	25.8	0.0	58.5
229	21.3	0.0	48.7

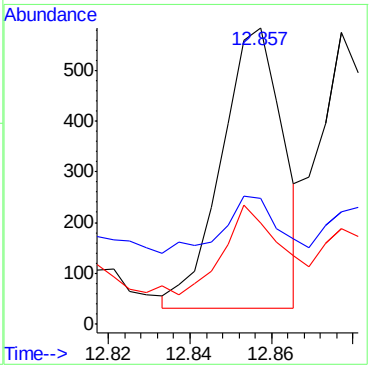


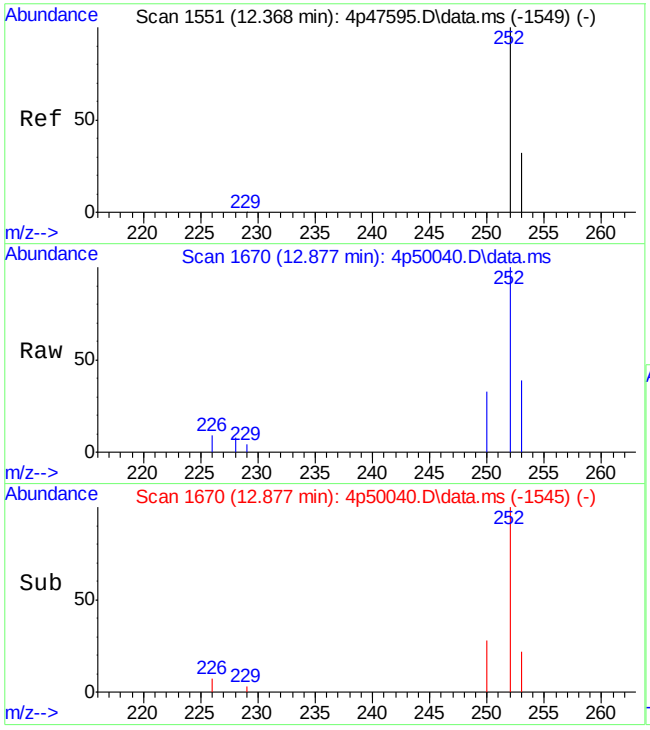


#31
Benzo[b]fluoranthene
Concen: 0.41 ppm
RT: 12.857 min Scan# 1665
Delta R.T. 0.004 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:252 Resp: 583

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	51.8
250	22.5	0.0	52.4

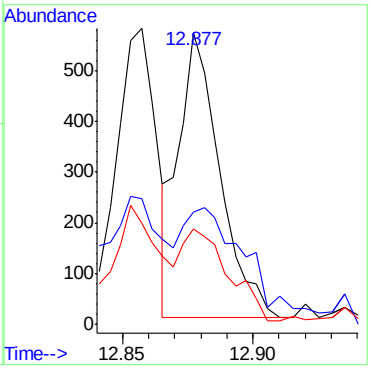


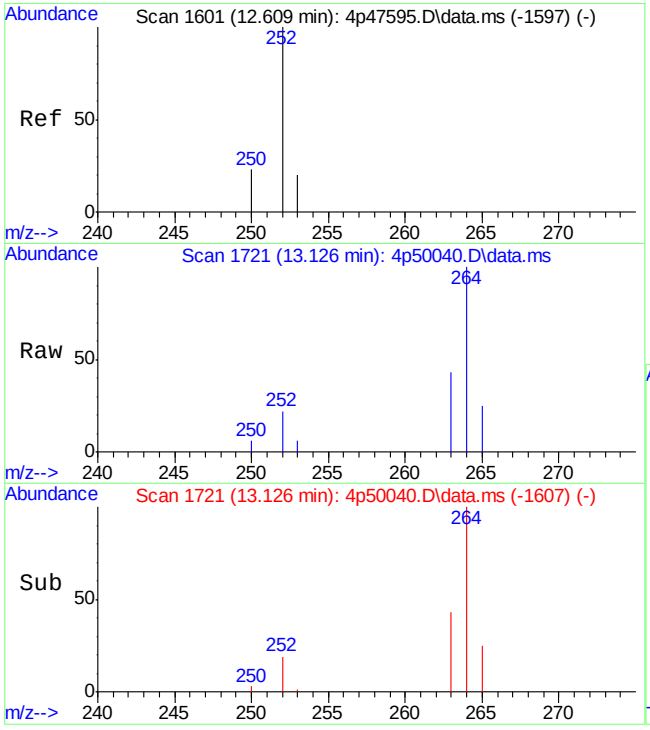


#32
Benzo[k]fluoranthene
Concen: 16.15 ppm
RT: 12.877 min Scan# 1670
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:252 Resp: 641

Ion	Ratio	Lower	Upper
252	100		
253	28.6	0.0	51.8
250	26.4	0.0	50.5

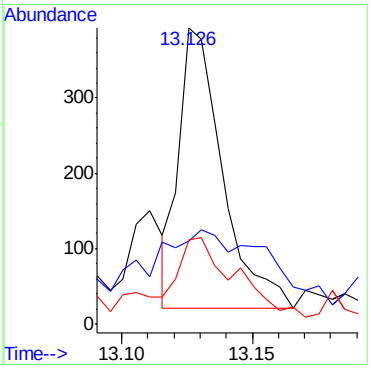


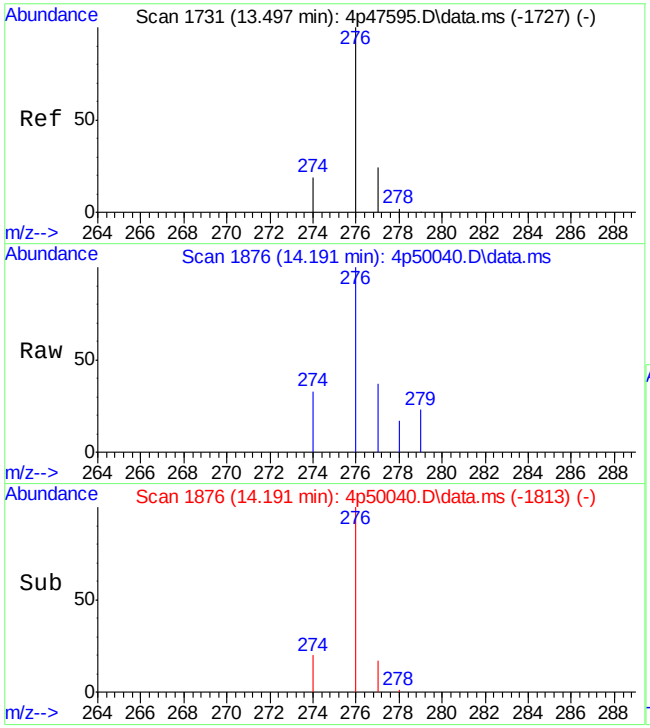


#33
Benzo[a]pyrene
Concen: 11.87 ppm
RT: 13.126 min Scan# 1721
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:252 Resp: 432

Ion	Ratio	Lower	Upper
252	100		
253	9.7	0.0	52.8
250	25.6	0.0	50.6

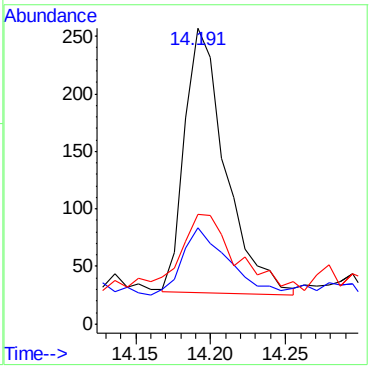


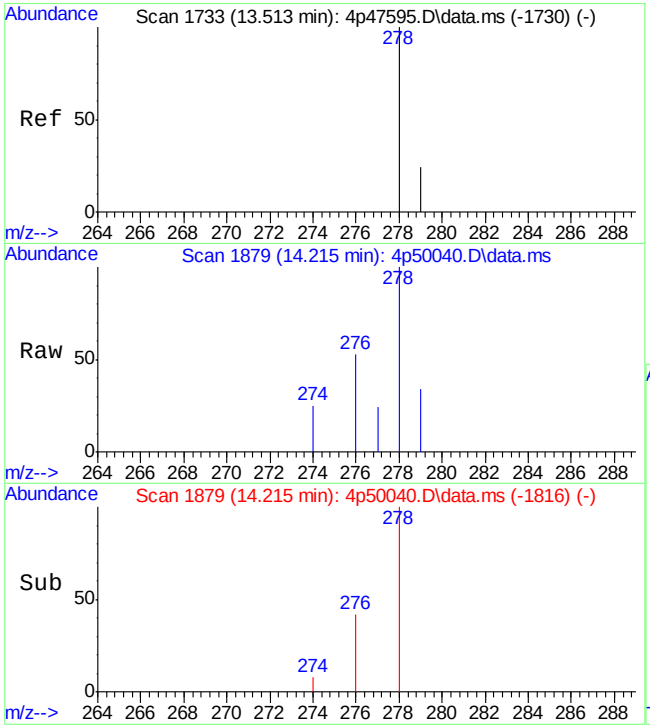


#34
Indeno[1,2,3-cd]pyrene
Concen: 10.08 ppm
RT: 14.191 min Scan# 1876
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:276 Resp: 437

Ion	Ratio	Lower	Upper
276	100		
274	23.6	0.0	49.3
277	24.7	0.0	53.2

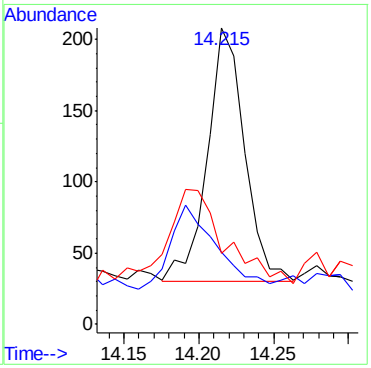


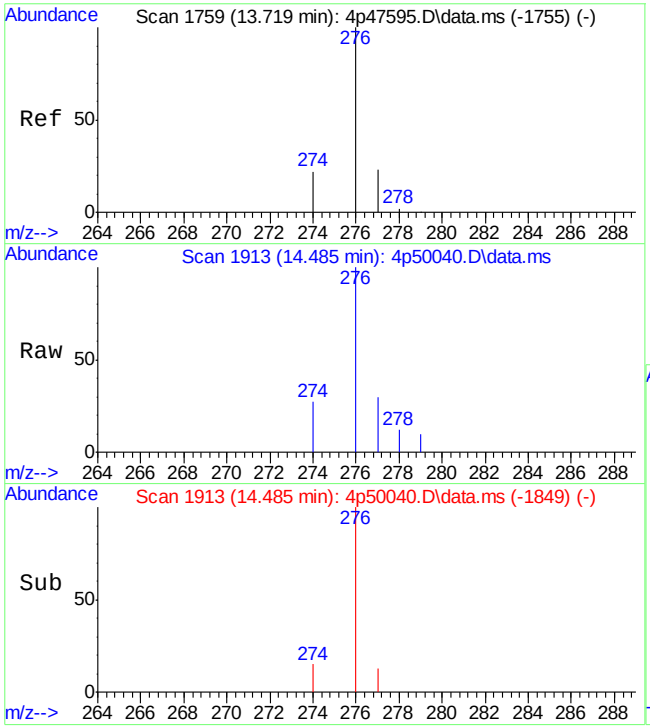


#35
Dibenz[a,h]anthracene
Concen: 9.18 ppm
RT: 14.215 min Scan# 1879
Delta R.T. -0.000 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:278 Resp: 310

Ion	Ratio	Lower	Upper
278	100		
274	8.2	0.0	35.2
277	6.2	0.0	36.7

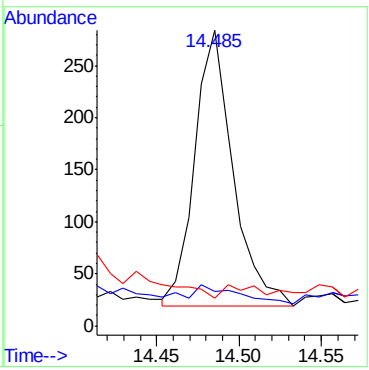




#36
Benzo[g,h,i]perylene
Concen: 11.67 ppm
RT: 14.485 min Scan# 1913
Delta R.T. 0.008 min
Lab File: 4p50040.D
Acq: 12 Dec 2021 5:52 pm

Tgt Ion:276 Resp: 429

Ion	Ratio	Lower	Upper
276	100		
278	3.2	0.0	32.5
279	0.0	0.0	30.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/16/21 10:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maritavb\e4p2625\
Data File : 4p50135.d
Acq On : 15 Dec 2021 10:54 pm
Operator : kristis
Sample : JD36319-4 Inst : MS4P
Misc : op37046a,e4p2625,250,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 16 03:19:25 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

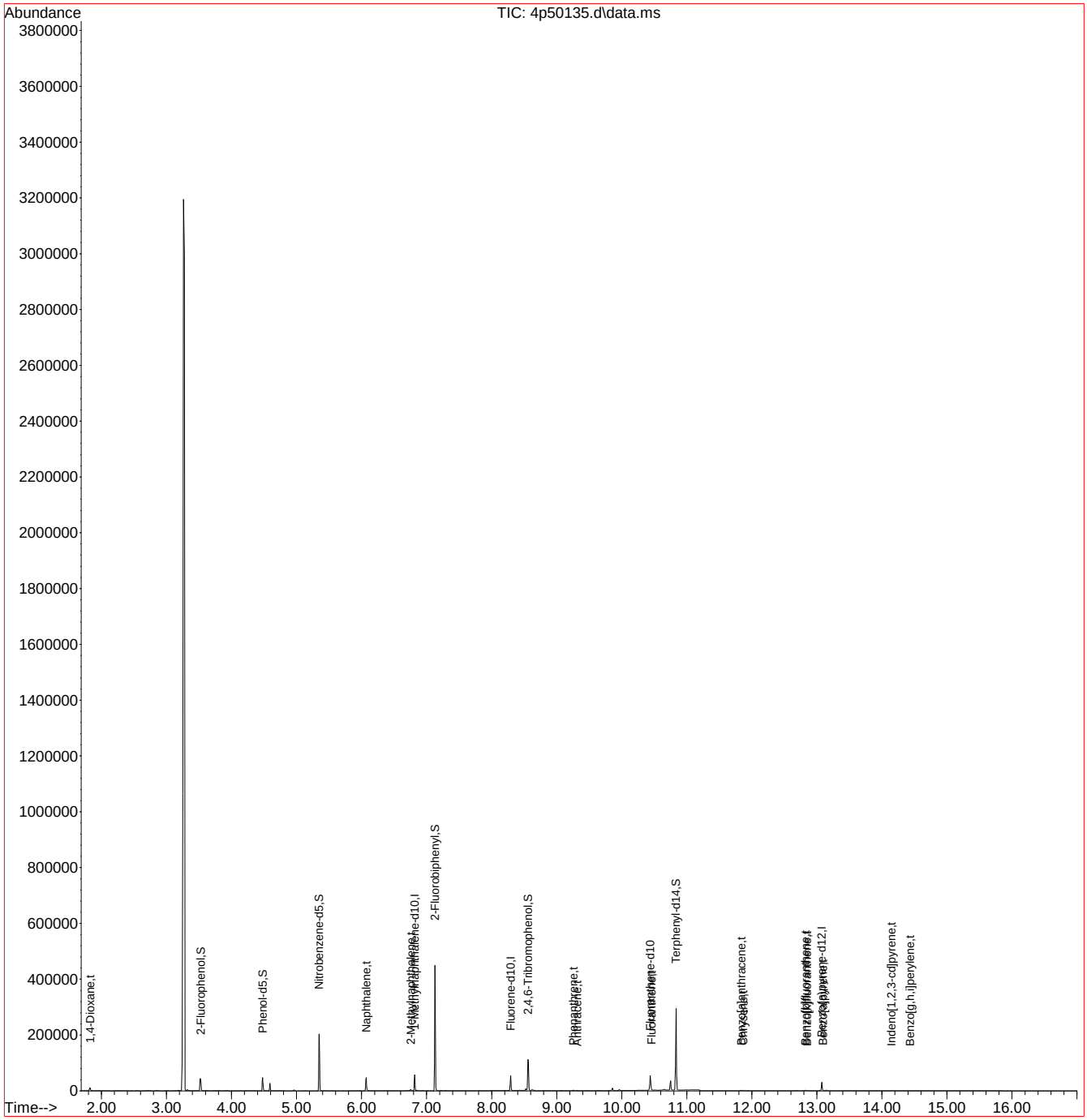
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.817	150	15834	800.00	ppm	-0.02
13) Fluorene-d10	8.293	176	23125	800.00	ppm	-0.03
20) Fluoranthene-d10	10.439	212	41906	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.075	264	18789	800.00	ppm	-0.04
System Monitoring Compounds						
3) 2-Fluorophenol	3.528	112	25331	2578.93	ppm	-0.02
Spiked Amount 50.000			Recovery = 5157.86%			
4) Phenol-d5	4.478	99	34768	1865.81	ppm	-0.02
Spiked Amount 50.000			Recovery = 3731.62%			
7) Nitrobenzene-d5	5.346	82	129441	8512.19	ppm	-0.03
Spiked Amount 50.000			Recovery = 17024.38%			
14) 2-Fluorobiphenyl	7.129	172	209837	7113.77	ppm	-0.03
Spiked Amount 50.000			Recovery = 14227.54%			
19) 2,4,6-Tribromophenol	8.557	330	49829	11290.48	ppm	-0.03
Spiked Amount 50.000			Recovery = 22580.96%			
27) Terphenyl-d14	10.835	244	164886	5493.27	ppm	-0.03
Spiked Amount 50.000			Recovery = 10986.54%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.825	88	7310	1976.39	ppm	82
8) Naphthalene	6.072	128	40944	903.52	ppm	83
10) 2-Methylnaphthalene	6.758	141	1486	62.76	ppm	90
23) Phenanthrene	9.257	178	1368m	24.24	ppm	
24) Anthracene	9.312	178	573m	10.59	ppm	
25) Fluoranthene	10.457	202	2802	47.68	ppm	97
28) Benzo[a]anthracene	11.836	228	1065m	18.43	ppm	
29) Chrysene	11.868	228	969m	17.12	ppm	
31) Benzo[b]fluoranthene	12.821	252	1317	23.18	ppm	97
32) Benzo[k]fluoranthene	12.845	252	496	12.79	ppm	98
33) Benzo[a]pyrene	13.095	252	977	27.47	ppm	90
34) Indeno[1,2,3-cd]pyrene	14.144	276	567	13.38	ppm	95
36) Benzo[g,h,i]perylene	14.430	276	536	14.93	ppm	95

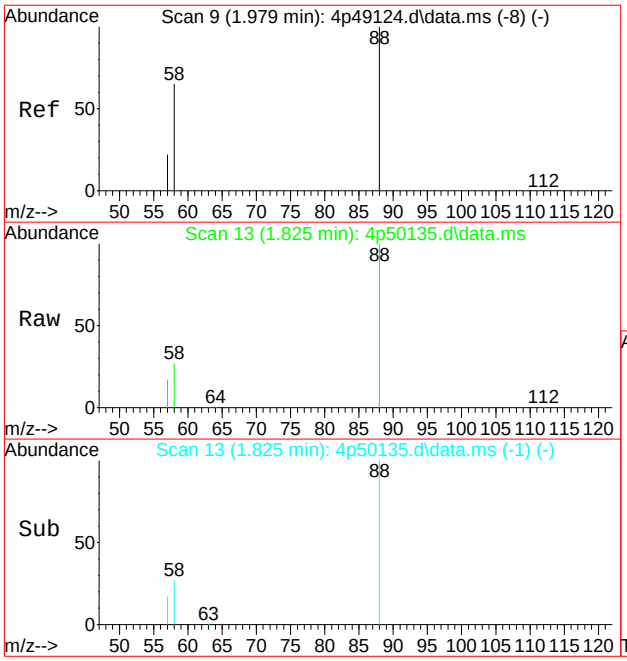
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maritavb\e4p2625\
Data File : 4p50135.d
Acq On : 15 Dec 2021 10:54 pm
Operator : kristis
Sample : JD36319-4 Inst : MS4P
Misc : op37046a,e4p2625,250,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 16 03:19:25 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

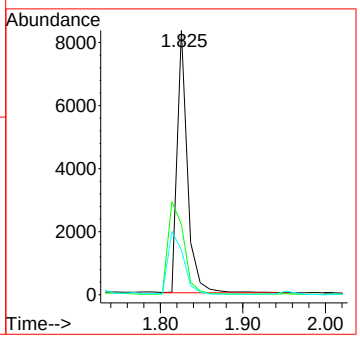


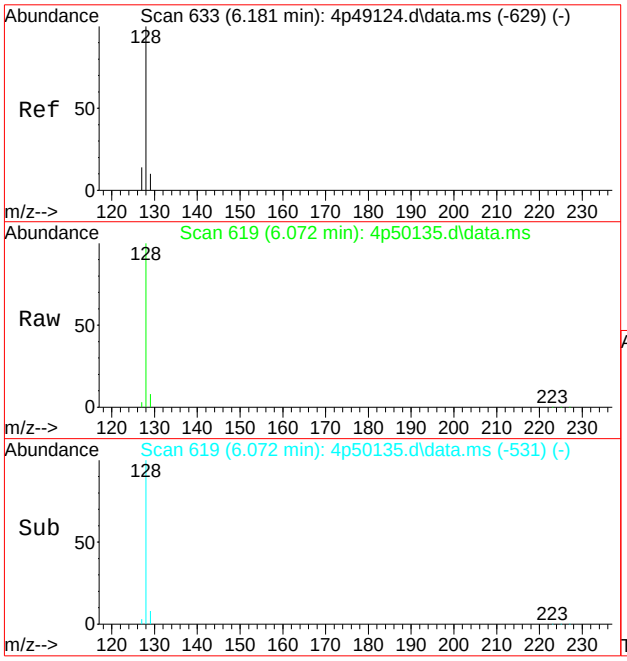


#2
1,4-Dioxane
Concen: 1976.39 ppm
RT: 1.825 min Scan# 13
Delta R.T. -0.069 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion: 88 Resp: 7310

Ion	Ratio	Lower	Upper
88	100		
58	26.5	0.1	40.1
57	16.3	0.0	24.7

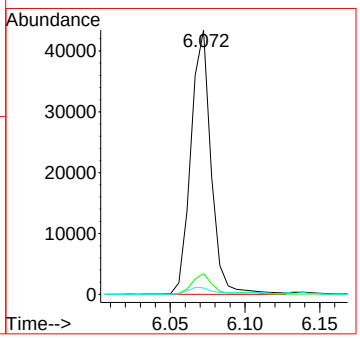


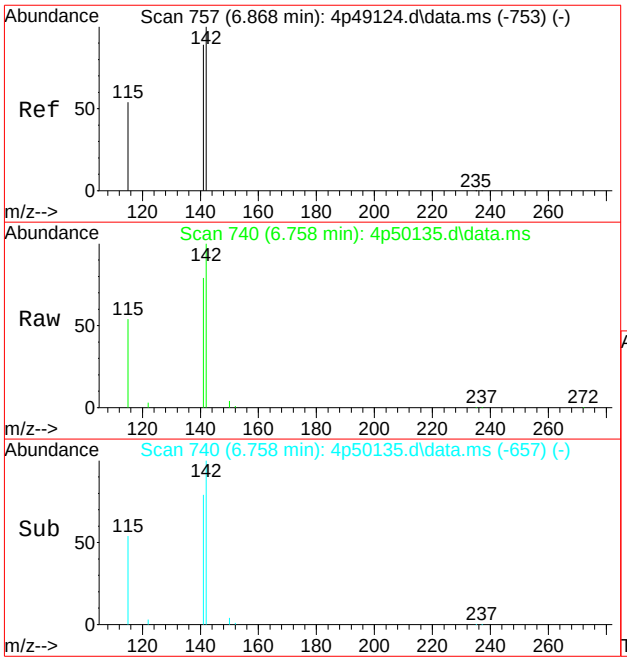


#8
Naphthalene
Concen: 903.52 ppm
RT: 6.072 min Scan# 619
Delta R.T. -0.022 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion:128 Resp: 40944

Ion	Ratio	Lower	Upper
128	100		
129	7.8	0.0	41.1
127	2.2	0.0	42.0

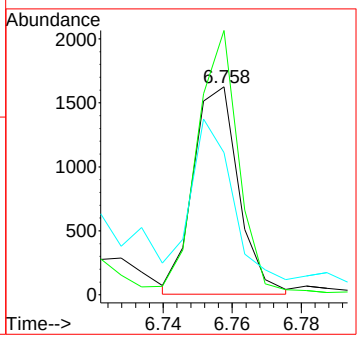


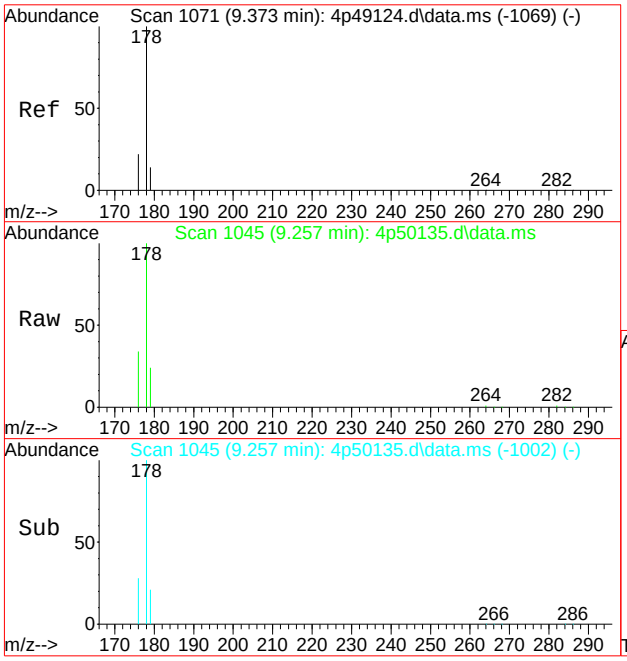


#10
2-Methylnaphthalene
Concen: 62.76 ppm
RT: 6.758 min Scan# 740
Delta R.T. -0.024 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion:141 Resp: 1486

Ion	Ratio	Lower	Upper
141	100		
142	128.4	96.1	156.1
115	59.2	7.9	67.9

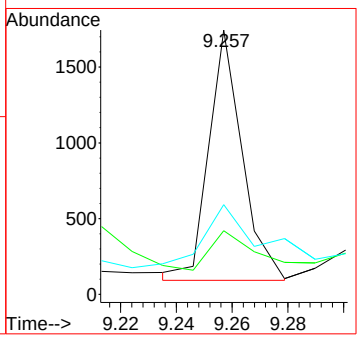


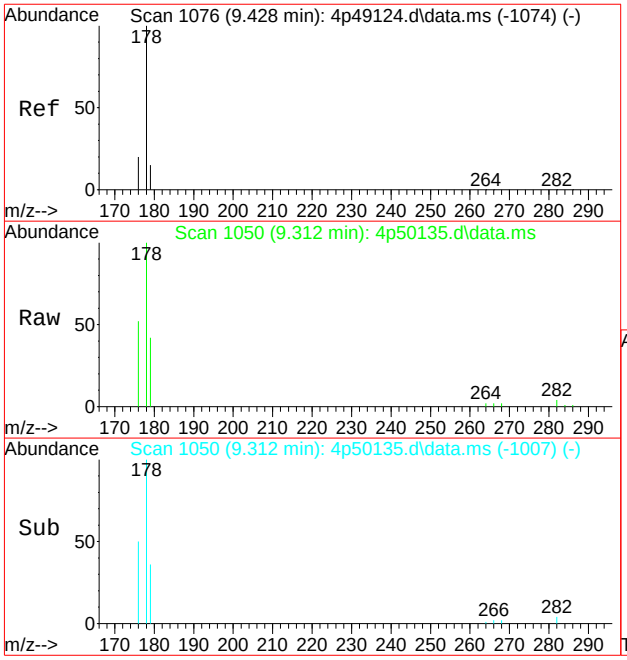


#23
Phenanthrene
Concen: 24.24 ppm m
RT: 9.257 min Scan# 1045
Delta R.T. -0.033 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion:178 Resp: 1368

Ion	Ratio	Lower	Upper
178	100		
179	24.1	0.0	46.0
176	33.9	0.0	45.6

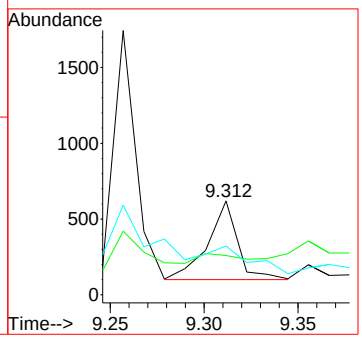


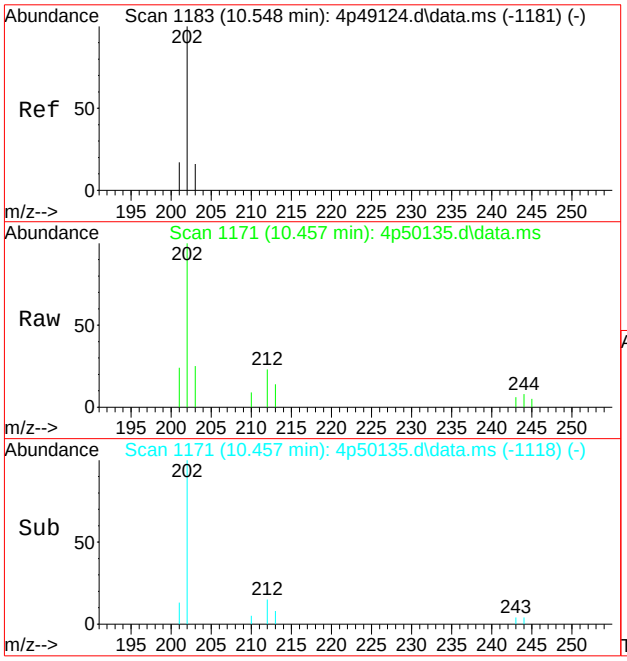


#24
Anthracene
Concen: 10.59 ppm m
RT: 9.312 min Scan# 1050
Delta R.T. -0.033 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion:178 Resp: 573

Ion	Ratio	Lower	Upper
178	100		
179	41.9	0.0	43.0
176	52.1	0.0	48.4#

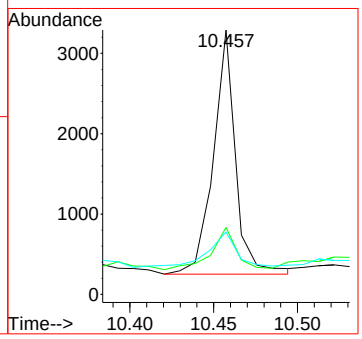


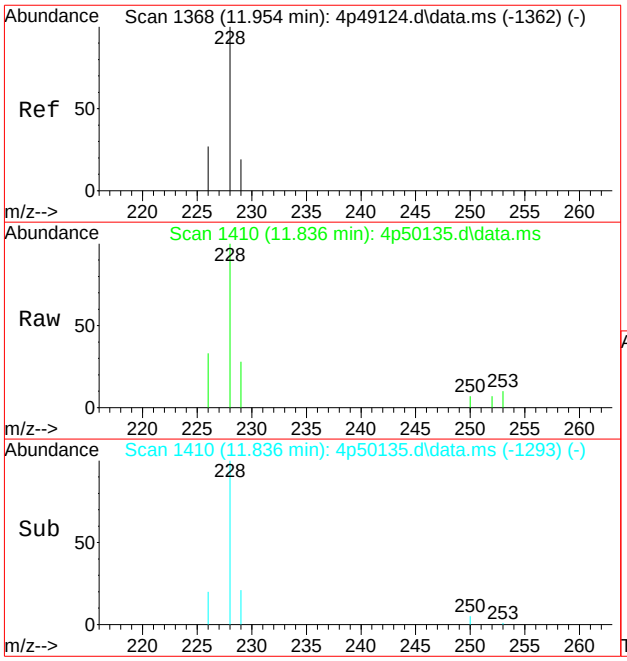


#25
Fluoranthene
Concen: 47.68 ppm
RT: 10.457 min Scan# 1171
Delta R.T. -0.009 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion:202 Resp: 2802

Ion	Ratio	Lower	Upper
202	100		
203	16.0	0.0	47.6
201	13.9	0.0	42.9

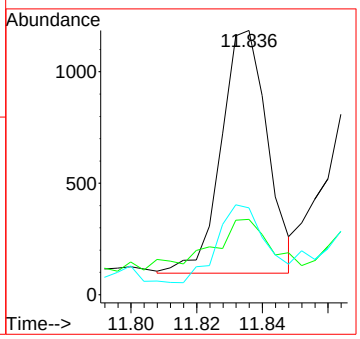


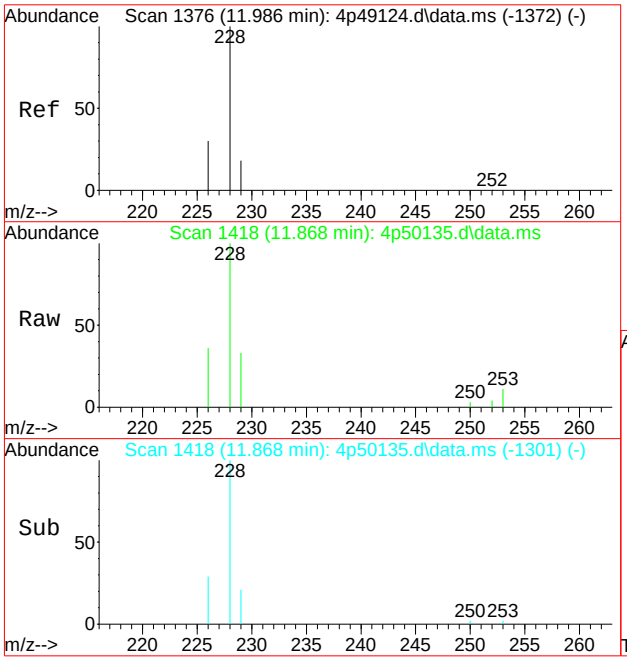


#28
Benzo[a]anthracene
Concen: 18.43 ppm m
RT: 11.836 min Scan# 1410
Delta R.T. -0.032 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion:228 Resp: 1065

Ion	Ratio	Lower	Upper
228	100		
229	28.5	0.0	49.8
226	32.9	0.0	53.3

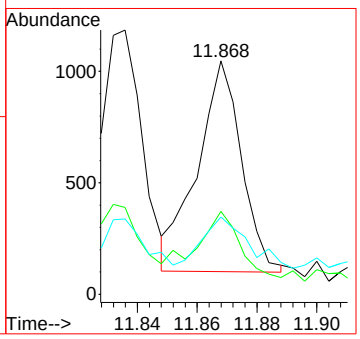


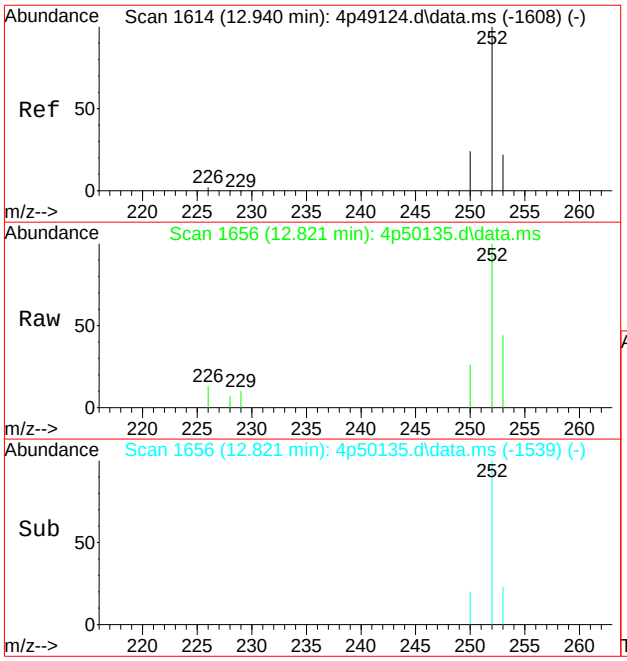


#29
Chrysene
Concen: 17.12 ppm m
RT: 11.868 min Scan# 1418
Delta R.T. -0.032 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion:228 Resp: 969

Ion	Ratio	Lower	Upper
228	100		
226	35.5	0.0	58.5
229	33.1	0.0	48.7

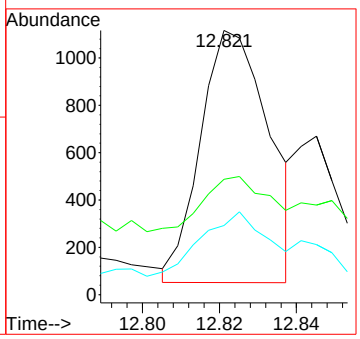


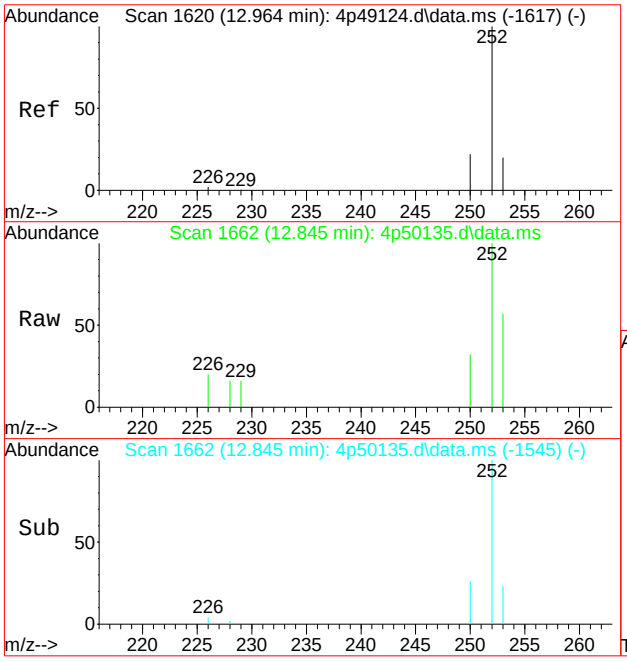


#31
Benzo[b]fluoranthene
Concen: 23.18 ppm
RT: 12.821 min Scan# 1656
Delta R.T. -0.032 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion:252 Resp: 1317

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.8
250	19.6	0.0	52.4

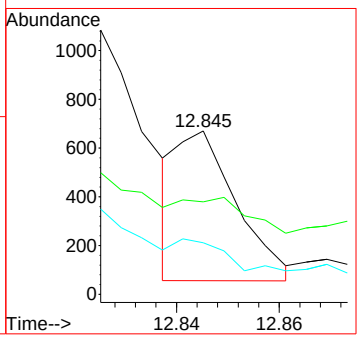


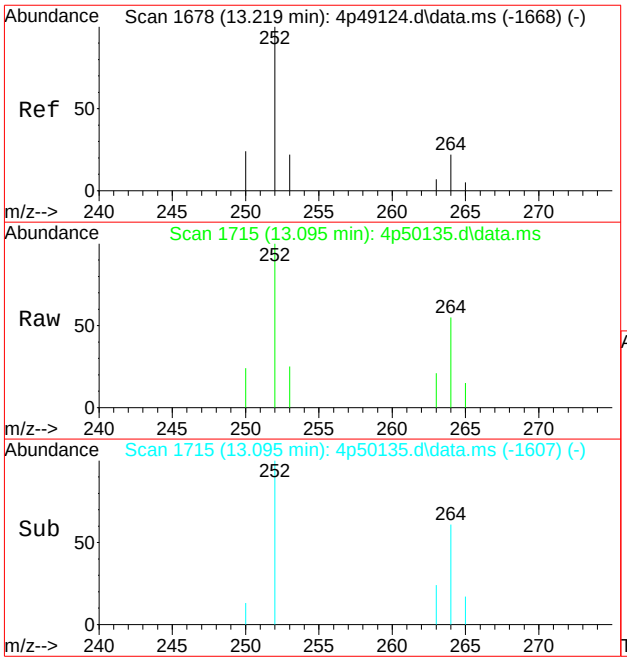


#32
Benzo[k]fluoranthene
Concen: 12.79 ppm
RT: 12.845 min Scan# 1662
Delta R.T. -0.032 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion:252 Resp: 496

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.8
250	21.8	0.0	50.5

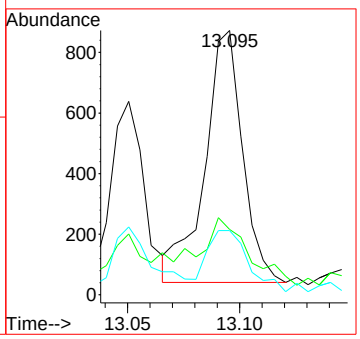


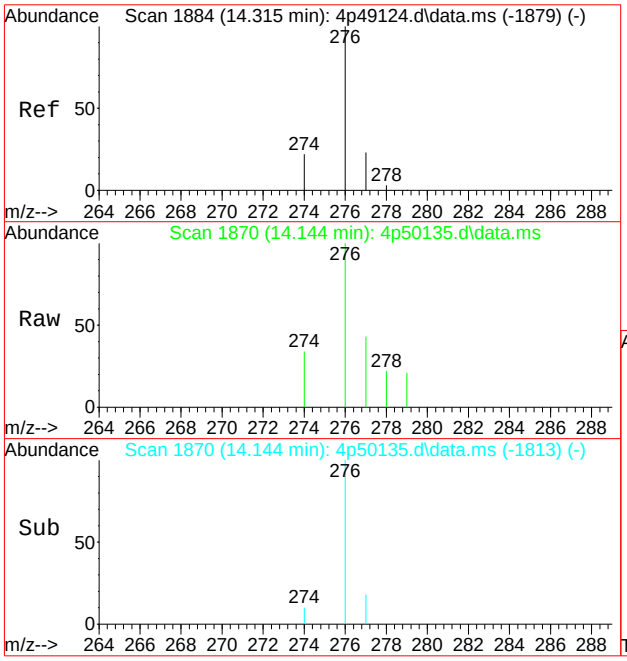


#33
Benzo[a]pyrene
Concen: 27.47 ppm
RT: 13.095 min Scan# 1715
Delta R.T. -0.030 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion:252 Resp: 977

Ion	Ratio	Lower	Upper
252	100		
253	14.7	0.0	52.8
250	21.4	0.0	50.6

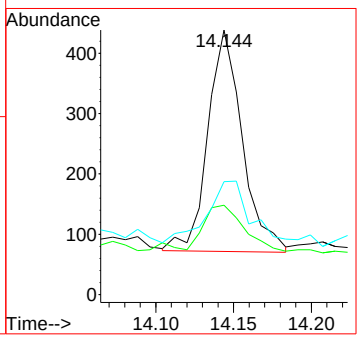


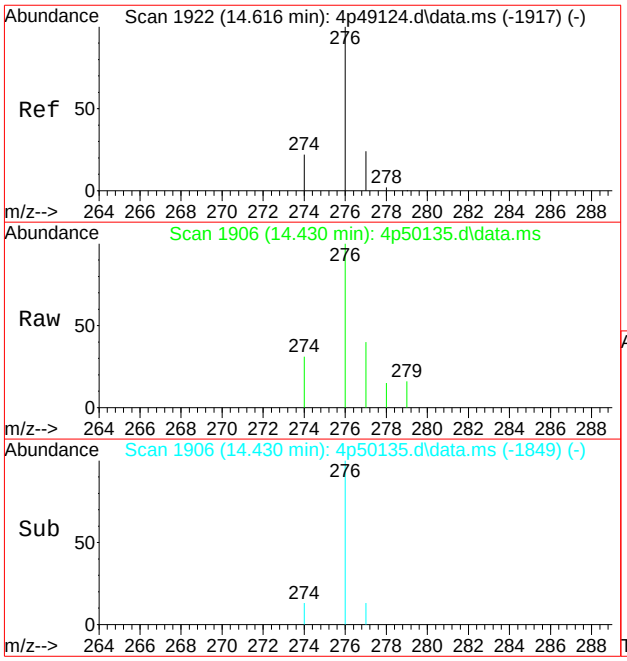


#34
Indeno[1,2,3-cd]pyrene
Concen: 13.38 ppm
RT: 14.144 min Scan# 1870
Delta R.T. -0.048 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion:276 Resp: 567

Ion	Ratio	Lower	Upper
276	100		
274	19.1	0.0	49.3
277	27.1	0.0	53.2

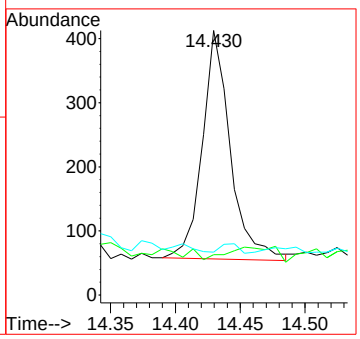




#36
Benzo[g,h,i]perylene
Concen: 14.93 ppm
RT: 14.430 min Scan# 1906
Delta R.T. -0.048 min
Lab File: 4p50135.d
Acq: 15 Dec 2021 10:54 pm

Tgt Ion:276 Resp: 536

Ion	Ratio	Lower	Upper
276	100		
278	0.4	0.0	32.5
279	0.0	0.0	30.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 18:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maritavb\e4p2625\
Data File : 4p50136.d
Acq On : 15 Dec 2021 11:18 pm
Operator : kristis
Sample : JD36319-5 Inst : MS4P
Misc : op37046a,e4p2625,250,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 16 03:25:36 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

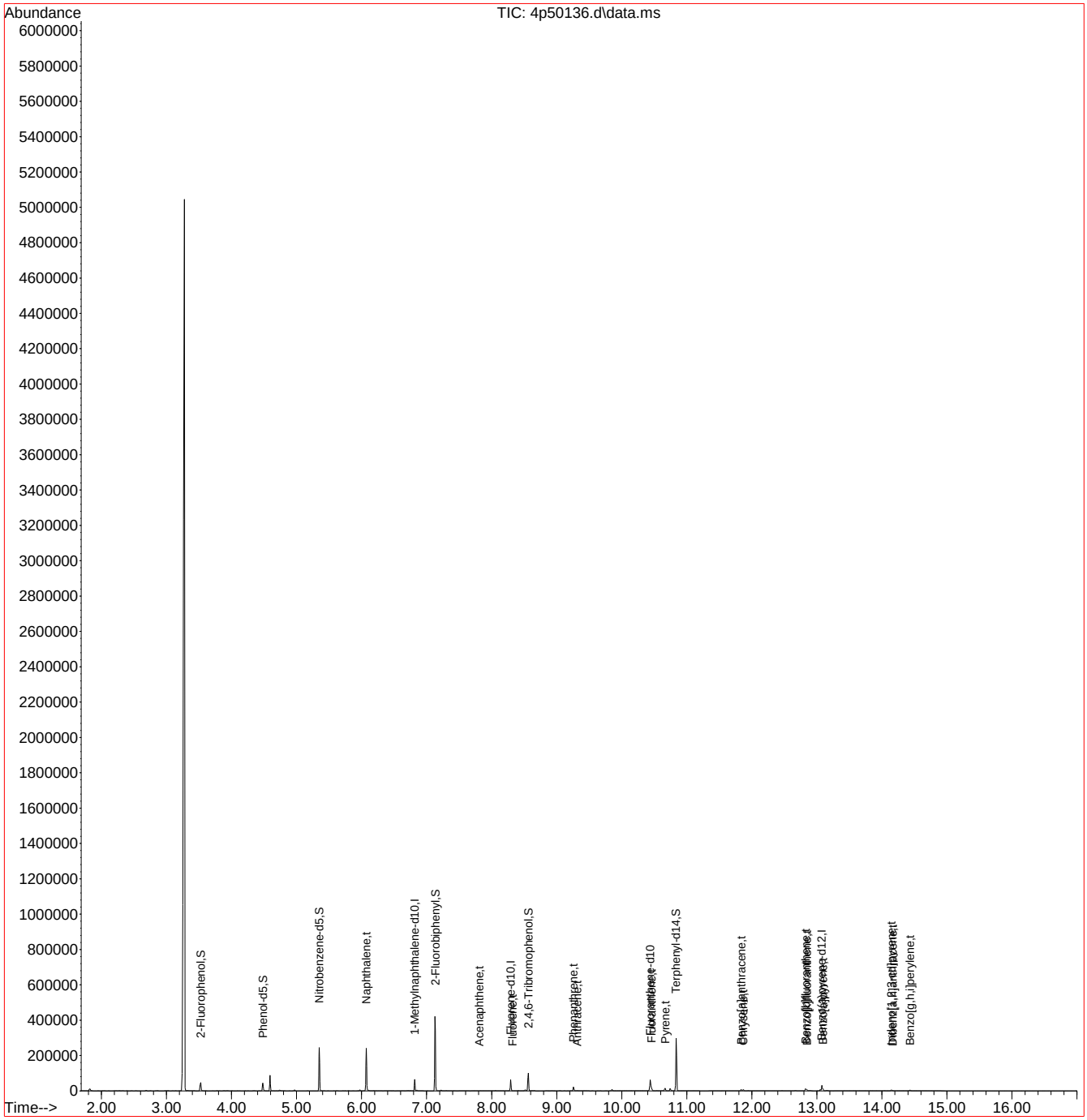
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.817	150	16776	800.00	ppm	-0.02
13) Fluorene-d10	8.293	176	25386	800.00	ppm	-0.03
20) Fluoranthene-d10	10.439	212	52464	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.076	264	19477	800.00	ppm	-0.04
System Monitoring Compounds						
3) 2-Fluorophenol	3.529	112	25115	2413.36	ppm	-0.02
Spiked Amount 50.000			Recovery = 4826.72%			
4) Phenol-d5	4.483	99	33576	1700.67	ppm	-0.01
Spiked Amount 50.000			Recovery = 3401.34%			
7) Nitrobenzene-d5	5.351	82	143375	8899.08	ppm	-0.02
Spiked Amount 50.000			Recovery = 17798.16%			
14) 2-Fluorobiphenyl	7.136	172	224839	6943.48	ppm	-0.02
Spiked Amount 50.000			Recovery = 13886.96%			
19) 2,4,6-Tribromophenol	8.565	330	40061	8268.74	ppm	-0.03
Spiked Amount 50.000			Recovery = 16537.48%			
27) Terphenyl-d14	10.835	244	199826	5317.58	ppm	-0.03
Spiked Amount 50.000			Recovery = 10635.16%			
Target Compounds						Qvalue
8) Naphthalene	6.072	128	177640	3699.90	ppm	82
16) Acenaphthene	7.810	153	422m	13.98	ppm	
17) Fluorene	8.318	166	379	10.41	ppm	91
23) Phenanthrene	9.257	178	15252	215.84	ppm	90
24) Anthracene	9.312	178	1370	20.21	ppm	95
25) Fluoranthene	10.457	202	11995	163.02	ppm	95
26) Pyrene	10.669	202	9752	120.45	ppm	94
28) Benzo[a]anthracene	11.836	228	4768m	65.92	ppm	
29) Chrysene	11.868	228	5027	70.94	ppm	95
31) Benzo[b]fluoranthene	12.825	252	9405m	243.93	ppm	
32) Benzo[k]fluoranthene	12.845	252	2854m	71.01	ppm	
33) Benzo[a]pyrene	13.096	252	5699	154.59	ppm	95
34) Indeno[1,2,3-cd]pyrene	14.144	276	4829	109.94	ppm	97
35) Dibenz[a,h]anthracene	14.168	278	1090	31.86	ppm	82
36) Benzo[g,h,i]perylene	14.430	276	4550	122.23	ppm	99

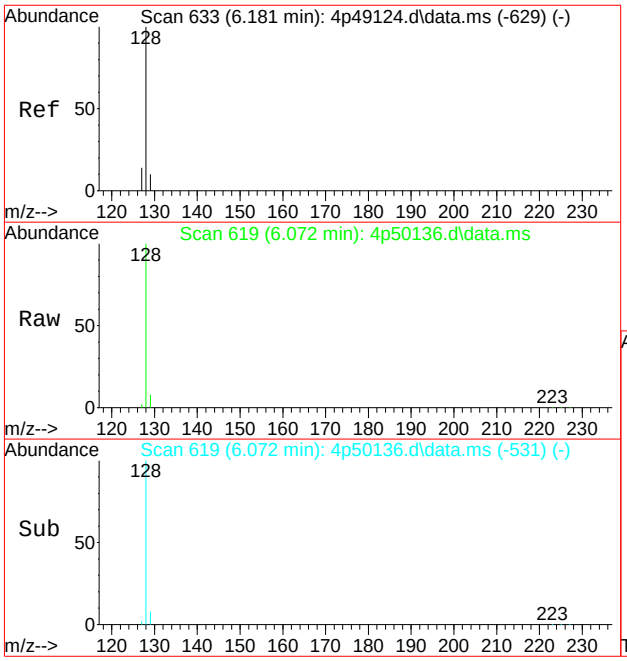
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maritavb\e4p2625\
Data File : 4p50136.d
Acq On : 15 Dec 2021 11:18 pm
Operator : kristis
Sample : JD36319-5 Inst : MS4P
Misc : op37046a,e4p2625,250,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 16 03:25:36 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Dec 13 09:21:17 2021
Response via : Initial Calibration

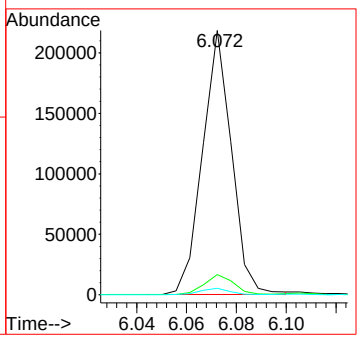


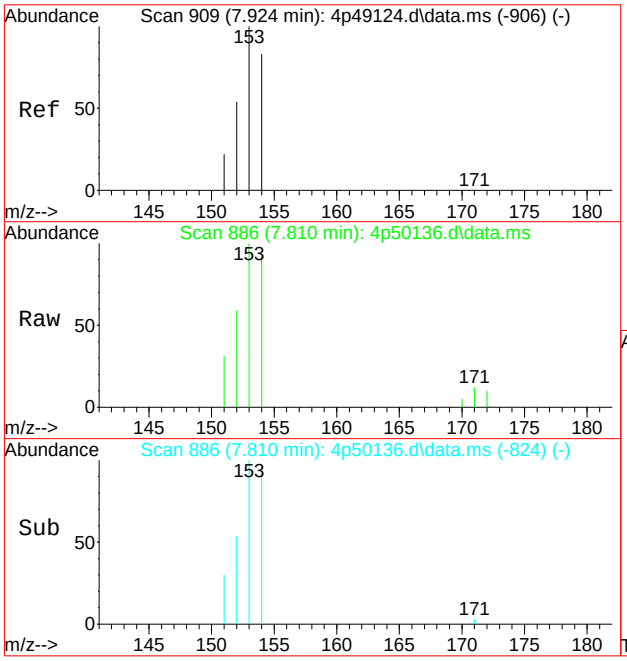


#8
Naphthalene
Concen: 3699.90 ppm
RT: 6.072 min Scan# 619
Delta R.T. -0.022 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:128 Resp: 177640

Ion	Ratio	Lower	Upper
128	100		
129	7.5	0.0	41.1
127	2.3	0.0	42.0

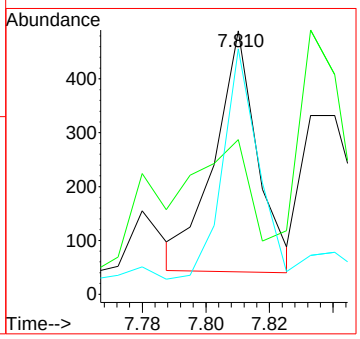


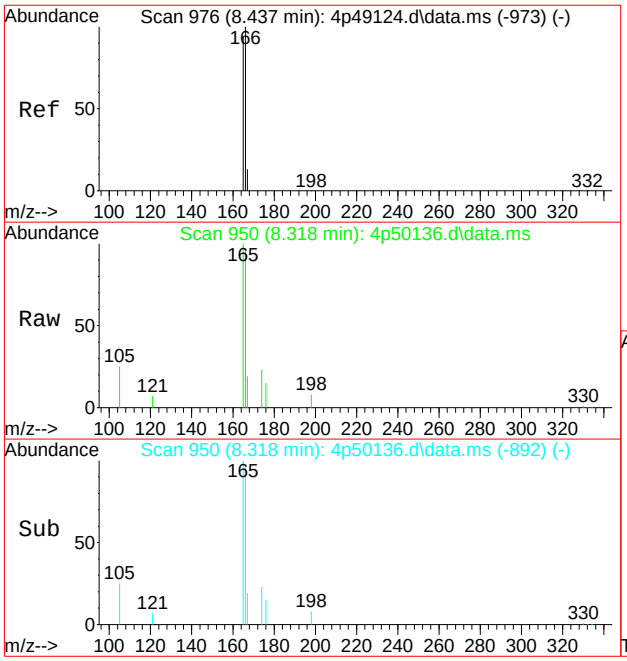


#16
Acenaphthene
Concen: 13.98 ppm m
RT: 7.810 min Scan# 886
Delta R.T. -0.030 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:153 Resp: 422

Ion	Ratio	Lower	Upper
153	100		
152	58.7	18.5	78.5
154	93.3	59.1	119.1

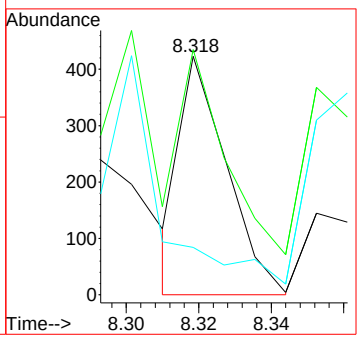


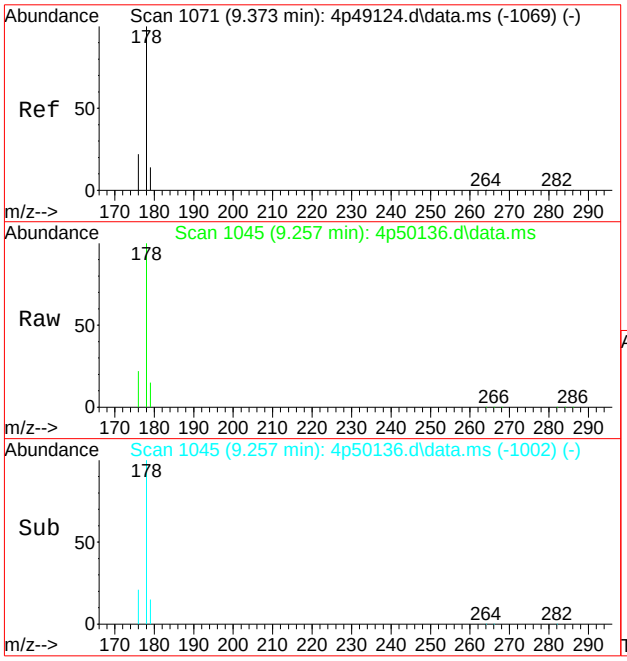


#17
Fluorene
Concen: 10.41 ppm
RT: 8.318 min Scan# 950
Delta R.T. -0.034 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:166 Resp: 379

Ion	Ratio	Lower	Upper
166	100		
165	88.7	66.9	126.9
167	7.6	0.0	41.7

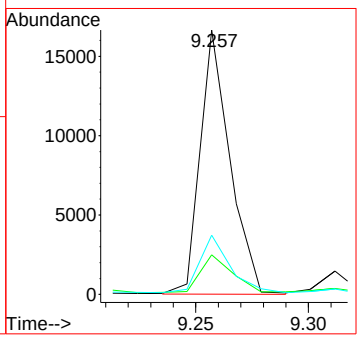


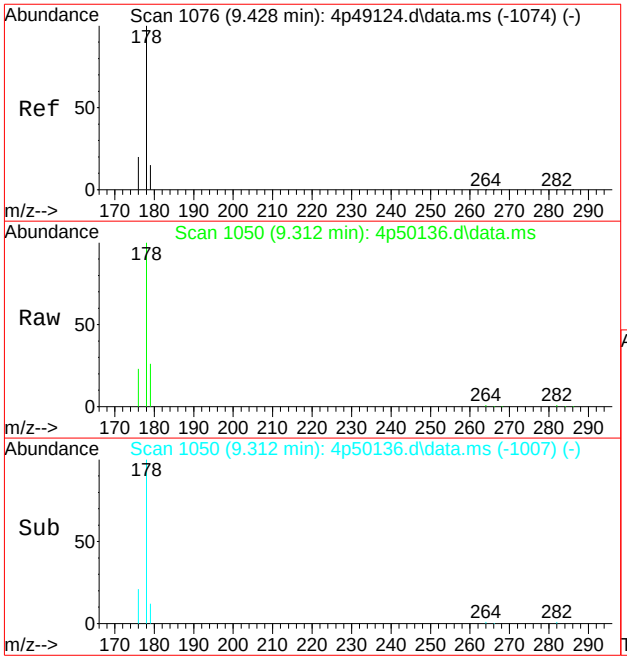


#23
Phenanthrene
Concen: 215.84 ppm
RT: 9.257 min Scan# 1045
Delta R.T. -0.033 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:178 Resp: 15252

Ion	Ratio	Lower	Upper
178	100		
179	14.1	0.0	46.0
176	21.9	0.0	45.6

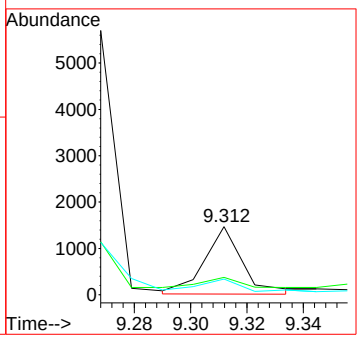


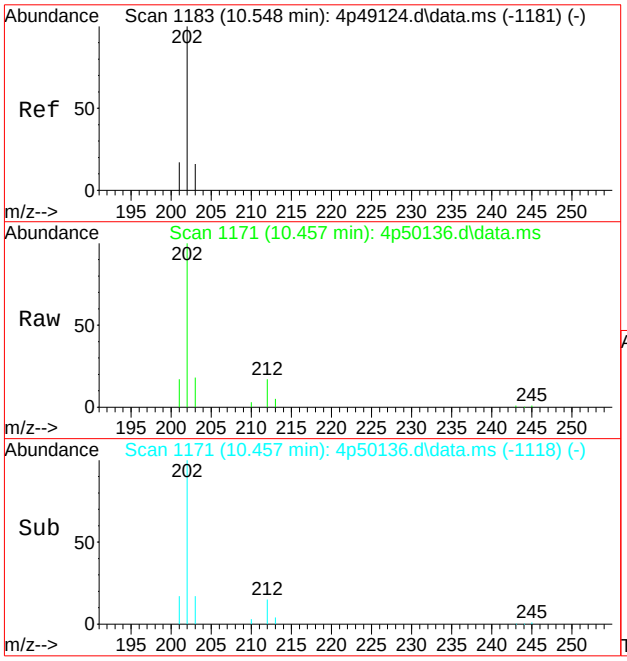


#24
Anthracene
Concen: 20.21 ppm
RT: 9.312 min Scan# 1050
Delta R.T. -0.033 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:178 Resp: 1370

Ion	Ratio	Lower	Upper
178	100		
179	16.2	0.0	43.0
176	17.3	0.0	48.4

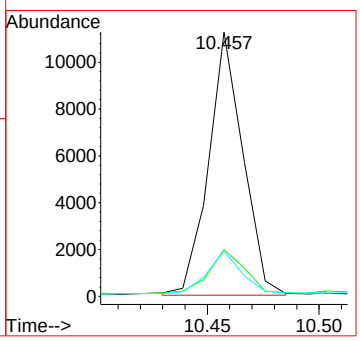


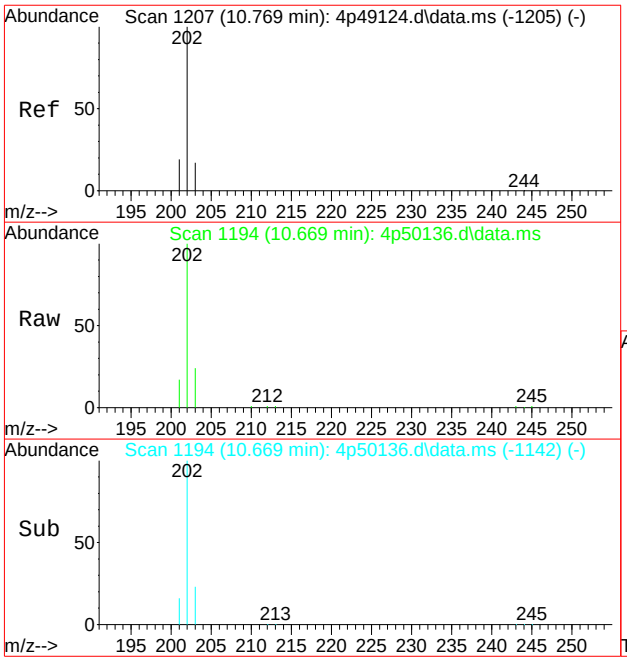


#25
Fluoranthene
Concen: 163.02 ppm
RT: 10.457 min Scan# 1171
Delta R.T. -0.009 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:202 Resp: 11995

Ion	Ratio	Lower	Upper
202	100		
203	16.6	0.0	47.6
201	16.1	0.0	42.9

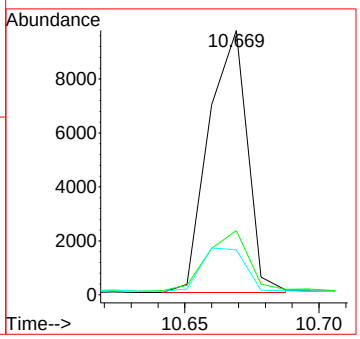


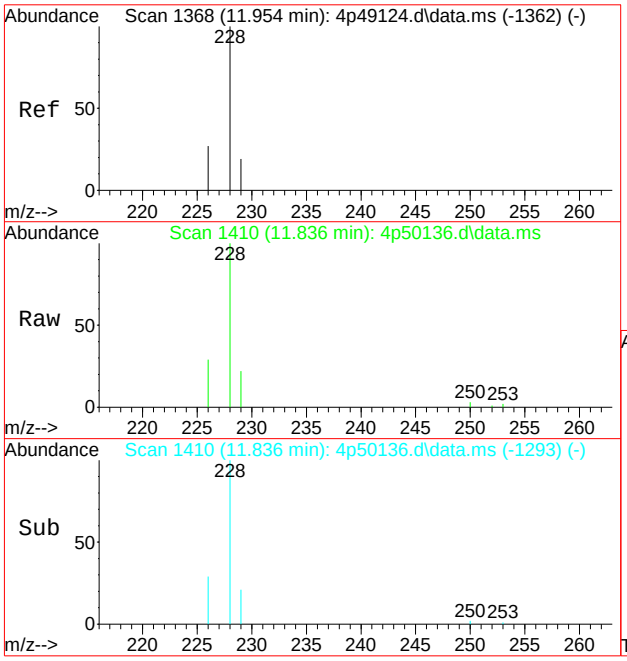


#26
Pyrene
Concen: 120.45 ppm
RT: 10.669 min Scan# 1194
Delta R.T. -0.018 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:202 Resp: 9752

Ion	Ratio	Lower	Upper
202	100		
203	22.7	0.0	47.6
201	15.7	0.0	46.0

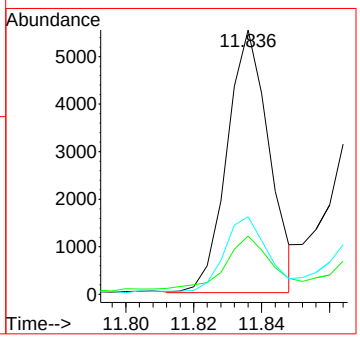


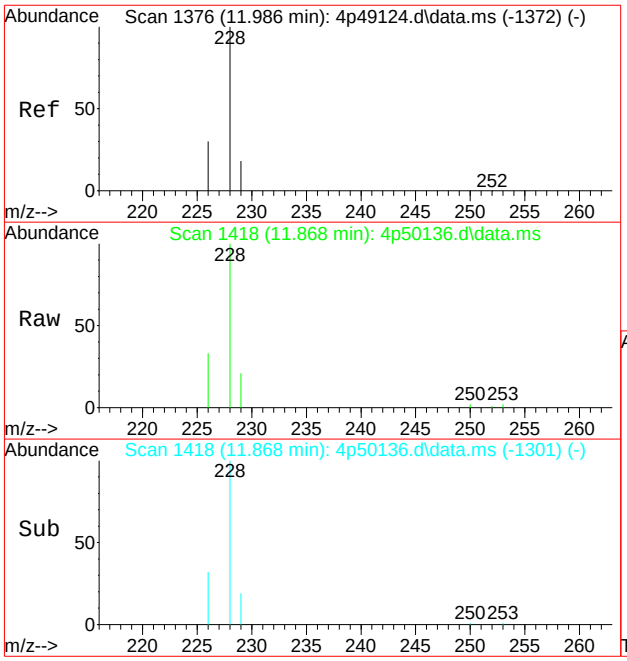


#28
Benzo[a]anthracene
Concen: 65.92 ppm m
RT: 11.836 min Scan# 1410
Delta R.T. -0.032 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:228 Resp: 4768

Ion	Ratio	Lower	Upper
228	100		
229	22.1	0.0	49.8
226	29.4	0.0	53.3

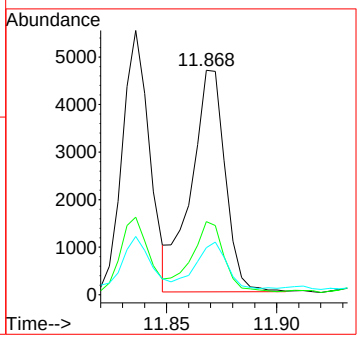


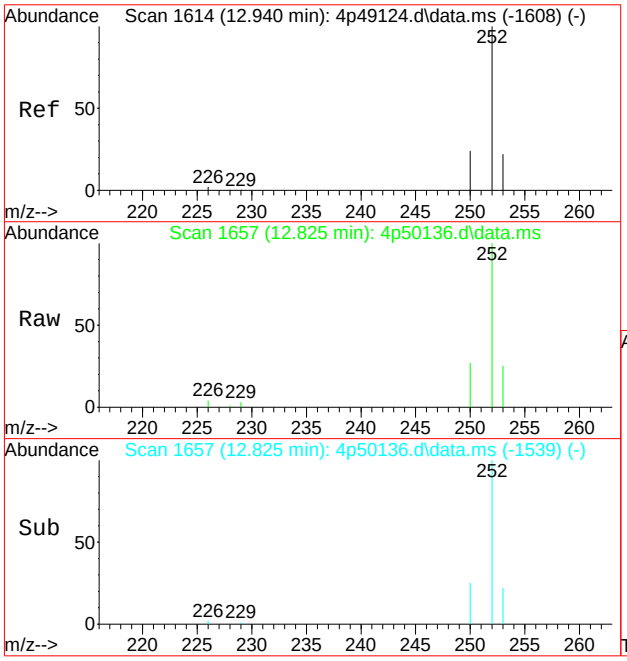


#29
Chrysene
Concen: 70.94 ppm
RT: 11.868 min Scan# 1418
Delta R.T. -0.032 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:228 Resp: 5027

Ion	Ratio	Lower	Upper
228	100		
226	32.1	0.0	58.5
229	17.9	0.0	48.7

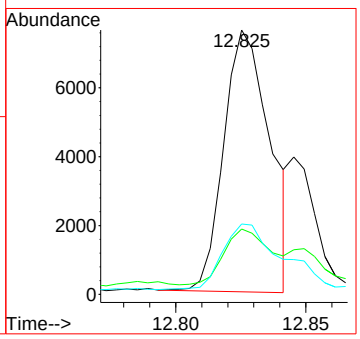


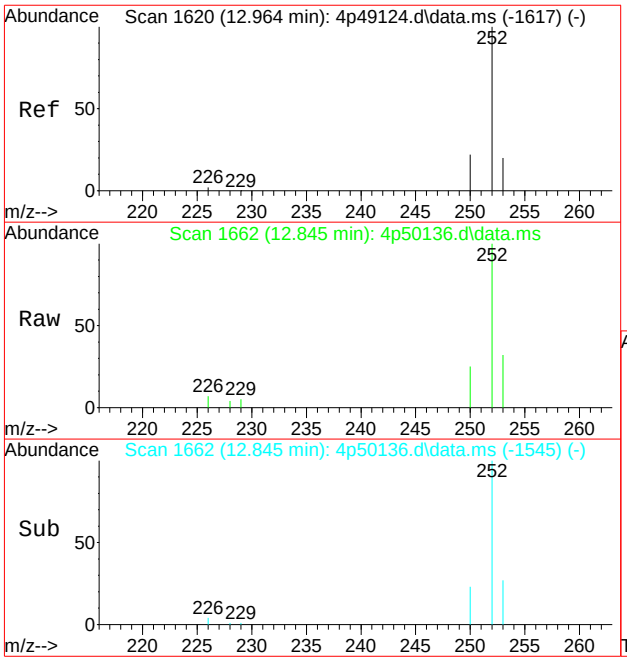


#31
Benzo[b]fluoranthene
Concen: 243.93 ppm m
RT: 12.825 min Scan# 1657
Delta R.T. -0.028 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:252 Resp: 9405

Ion	Ratio	Lower	Upper
252	100		
253	24.8	0.0	51.8
250	26.7	0.0	52.4

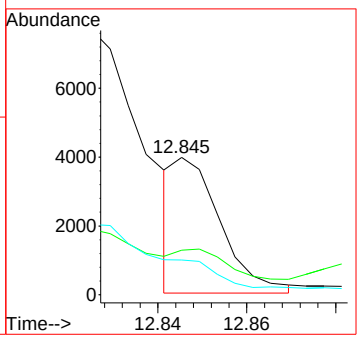


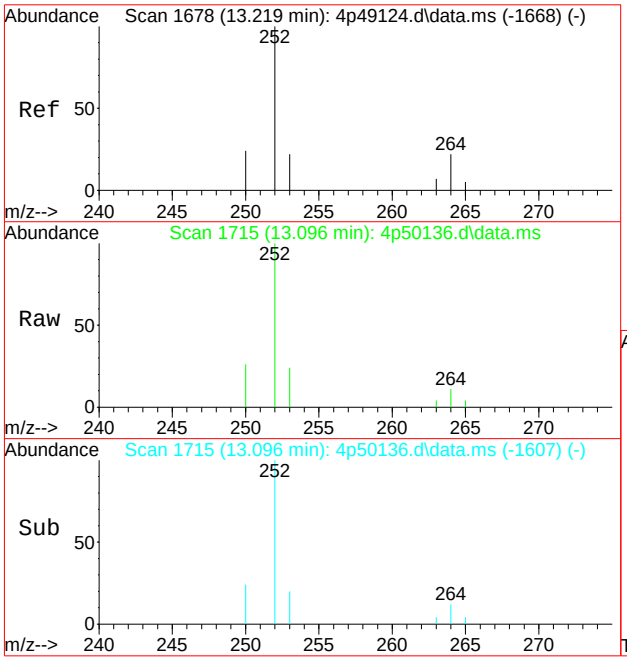


#32
Benzo[k]fluoranthene
Concen: 71.01 ppm m
RT: 12.845 min Scan# 1662
Delta R.T. -0.032 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:252 Resp: 2854

Ion	Ratio	Lower	Upper
252	100		
253	32.4	0.0	51.8
250	25.3	0.0	50.5

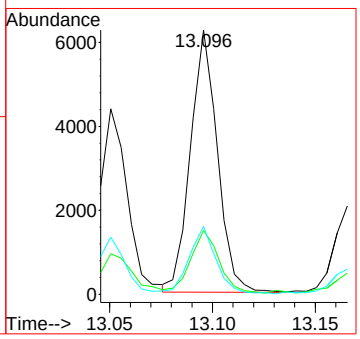


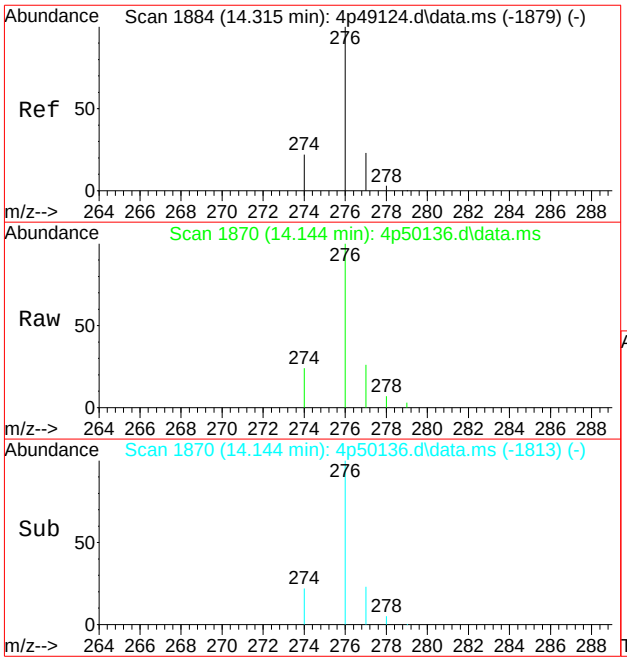


#33
Benzo[a]pyrene
Concen: 154.59 ppm
RT: 13.096 min Scan# 1715
Delta R.T. -0.030 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:252 Resp: 5699

Ion	Ratio	Lower	Upper
252	100		
253	23.3	0.0	52.8
250	25.1	0.0	50.6

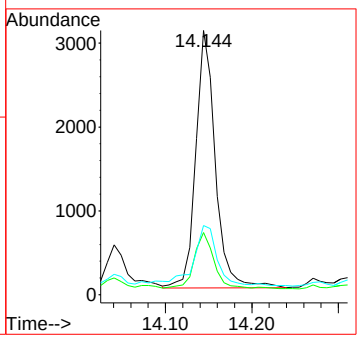


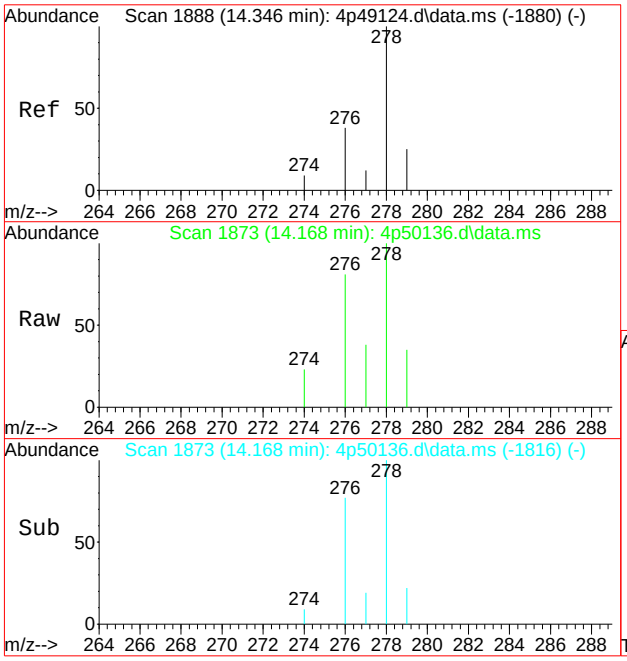


#34
Indeno[1,2,3-cd]pyrene
Concen: 109.94 ppm
RT: 14.144 min Scan# 1870
Delta R.T. -0.048 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:276 Resp: 4829

Ion	Ratio	Lower	Upper
276	100		
274	21.7	0.0	49.3
277	22.6	0.0	53.2

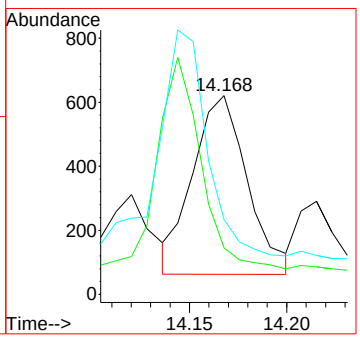


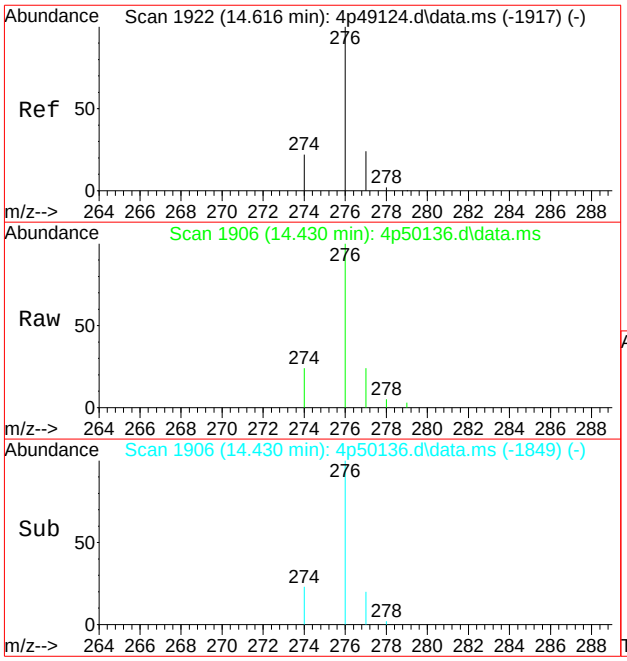


#35
Dibenz[a,h]anthracene
Concen: 31.86 ppm
RT: 14.168 min Scan# 1873
Delta R.T. -0.048 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:278 Resp: 1090

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	0.0	0.0	36.7

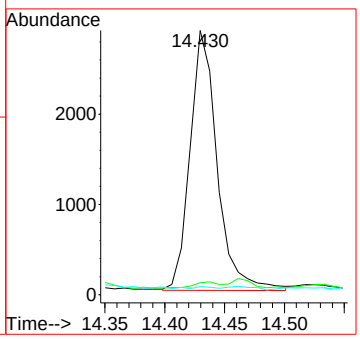




#36
Benzo[g,h,i]perylene
Concen: 122.23 ppm
RT: 14.430 min Scan# 1906
Delta R.T. -0.048 min
Lab File: 4p50136.d
Acq: 15 Dec 2021 11:18 pm

Tgt Ion:276 Resp: 4550

Ion	Ratio	Lower	Upper
276	100		
278	2.1	0.0	32.5
279	0.2	0.0	30.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/14/21 08:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e4p2619\
Data File : 4p49988.d
Acq On : 11 Dec 2021 5:52 am
Operator : chriss2
Sample : op37045a-mb1 Inst : MS4P
Misc : op37045a,e4p2619,250,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 12 11:34:25 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 12 11:19:27 2021
Response via : Initial Calibration

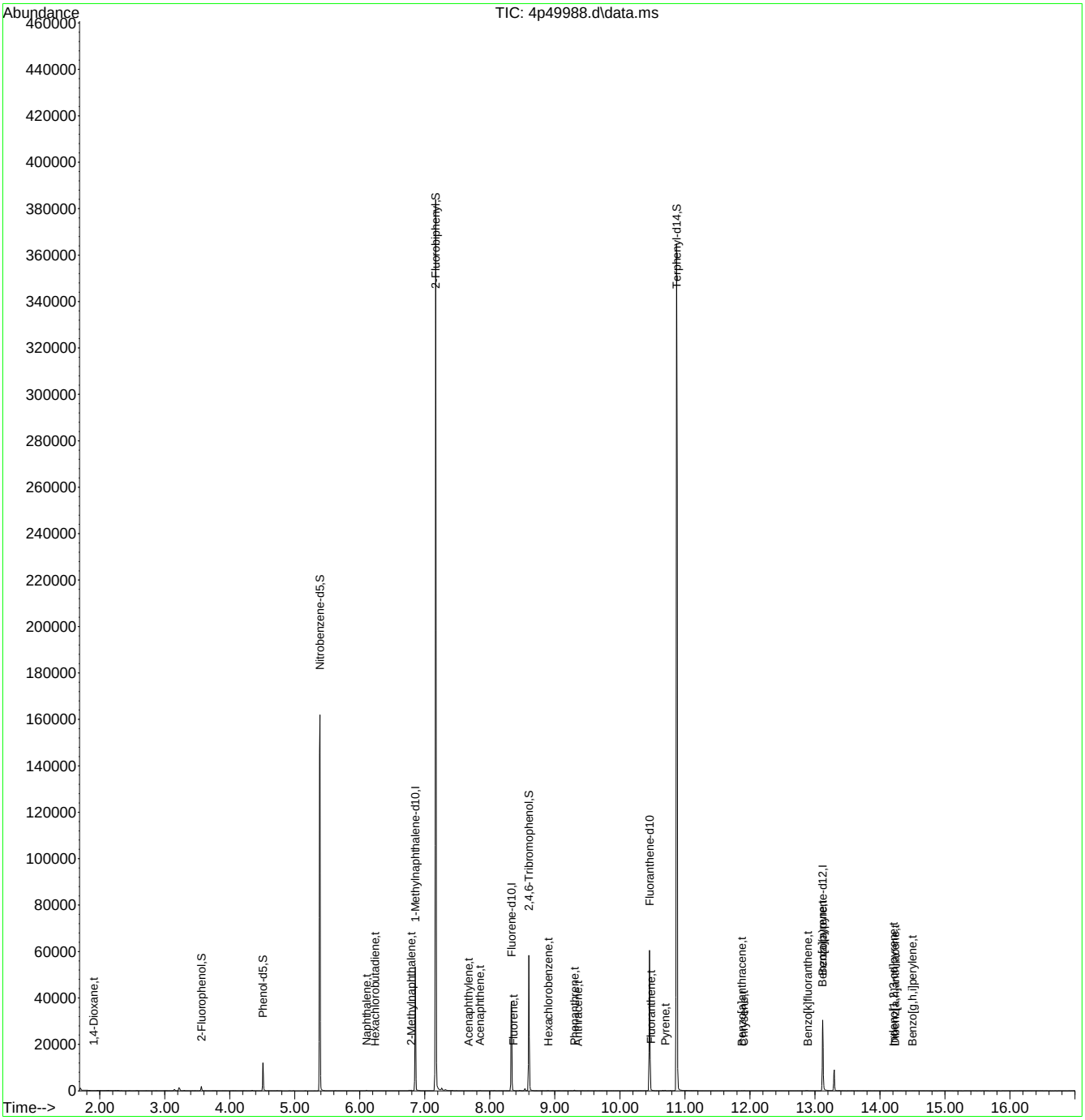
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.853	150	14983	800.00	ppm	0.00
13) Fluorene-d10	8.336	176	22144	800.00	ppm	0.00
20) Fluoranthene-d10	10.458	212	39773	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.121	264	18503	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.563	112	806	86.72	ppm	0.00
Spiked Amount 50.000			Recovery = 173.44%			
4) Phenol-d5	4.511	99	8500	482.06	ppm	0.00
Spiked Amount 50.000			Recovery = 964.12%			
7) Nitrobenzene-d5	5.386	82	99326	6902.78	ppm	0.00
Spiked Amount 50.000			Recovery = 13805.56%			
14) 2-Fluorobiphenyl	7.167	172	183761	6505.74	ppm	0.00
Spiked Amount 50.000			Recovery = 13011.48%			
19) 2,4,6-Tribromophenol	8.600	330	20309	4805.56	ppm	0.00
Spiked Amount 50.000			Recovery = 9611.12%			
27) Terphenyl-d14	10.872	244	253961	8914.61	ppm	0.00
Spiked Amount 50.000			Recovery = 17829.22%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.906	88	24m	6.86	ppm	
8) Naphthalene	6.105	128	182	4.24	ppm	94
9) Hexachlorobutadiene	6.232	225	23	2.20	ppm	82
10) 2-Methylnaphthalene	6.794	141	91	4.06	ppm	95
15) Acenaphthylene	7.674	152	35	0.85	ppm	77
16) Acenaphthene	7.848	153	45	1.71	ppm	87
17) Fluorene	8.361	166	45m	1.42	ppm	
21) Hexachlorobenzene	8.895	284	38	3.03	ppm	92
23) Phenanthrene	9.301	178	183	3.42	ppm	91
24) Anthracene	9.356	178	58	1.13	ppm	82
25) Fluoranthene	10.476	202	149m	2.67	ppm	
26) Pyrene	10.697	202	149	2.43	ppm	94
28) Benzo[a]anthracene	11.876	228	68	1.24	ppm	74
29) Chrysene	11.908	228	60	1.12	ppm	89
32) Benzo[k]fluoranthene	12.889	252	53m	1.39	ppm	
33) Benzo[a]pyrene	13.116	252	127	3.63	ppm	66
34) Indeno[1,2,3-cd]pyrene	14.208	276	23	0.55	ppm	66
35) Dibenz[a,h]anthracene	14.231	278	23	0.71	ppm	86
36) Benzo[g,h,i]perylene	14.501	276	36	1.02	ppm	61

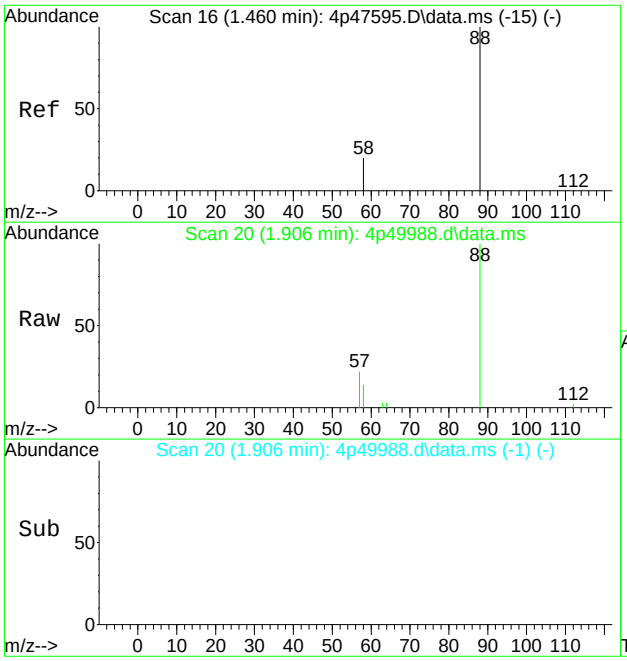
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e4p2619\
Data File : 4p49988.d
Acq On : 11 Dec 2021 5:52 am
Operator : chriss2
Sample : op37045a-mb1 Inst : MS4P
Misc : op37045a,e4p2619,250,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 12 11:34:25 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 12 11:19:27 2021
Response via : Initial Calibration

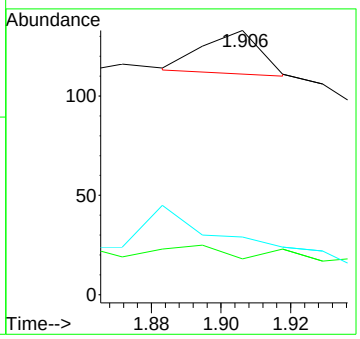


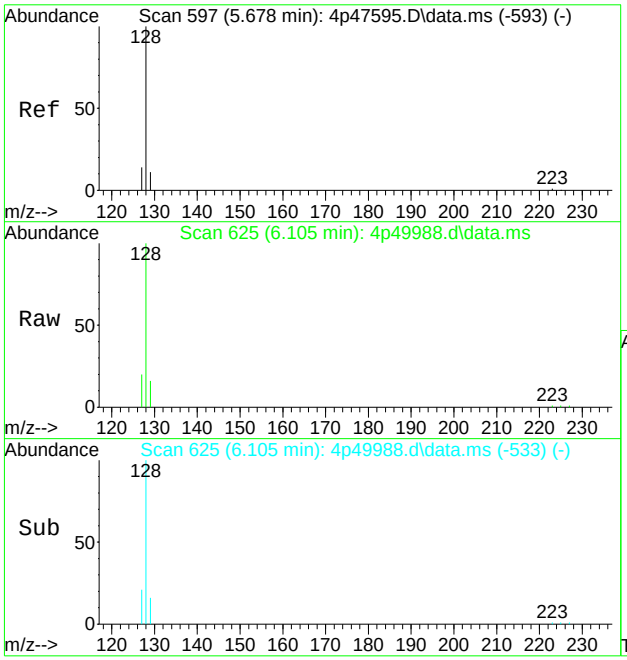


#2
1,4-Dioxane
Concen: 6.86 ppm m
RT: 1.906 min Scan# 20
Delta R.T. 0.023 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion: 88 Resp: 24

Ion	Ratio	Lower	Upper
88	100		
58	13.5	11.6	51.6
57	21.8	0.0	31.4

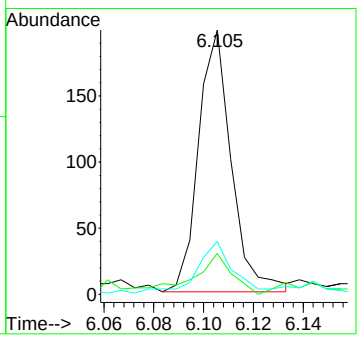


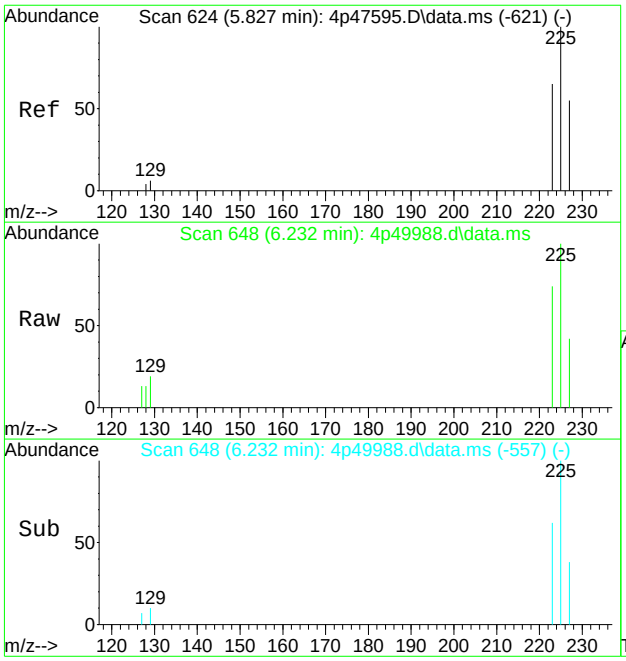


#8
Naphthalene
Concen: 4.24 ppm
RT: 6.105 min Scan# 625
Delta R.T. 0.006 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:128 Resp: 182

Ion	Ratio	Lower	Upper
128	100		
129	11.5	0.0	40.1
127	17.9	0.0	44.6

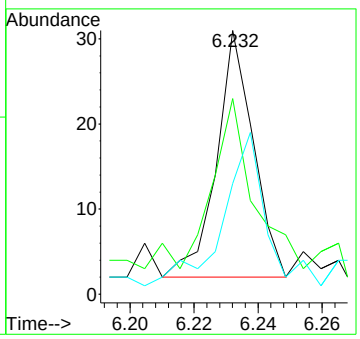


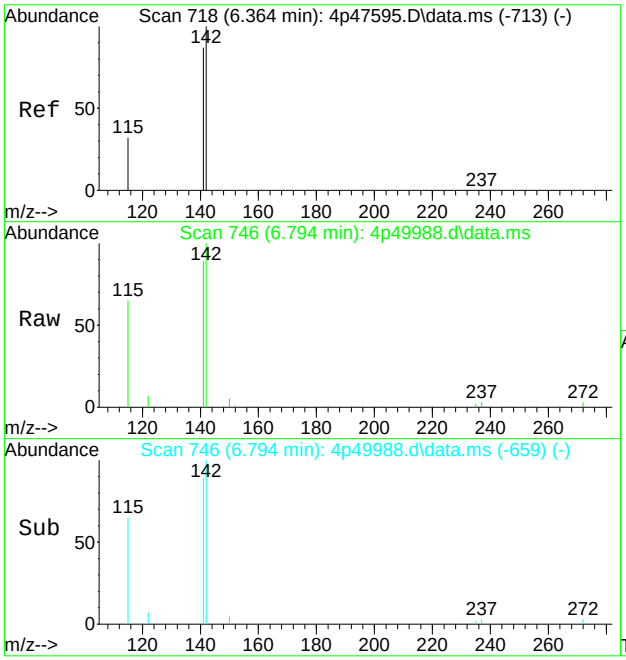


#9
Hexachlorobutadiene
Concen: 2.20 ppm
RT: 6.232 min Scan# 648
Delta R.T. 0.000 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:225 Resp: 23

Ion	Ratio	Lower	Upper
225	100		
223	56.9	31.9	91.9
227	37.9	30.8	90.8

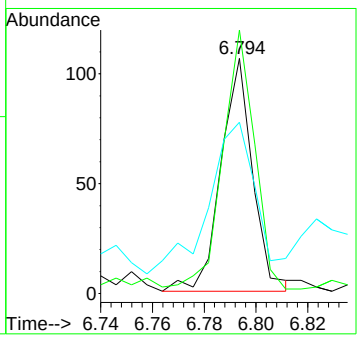


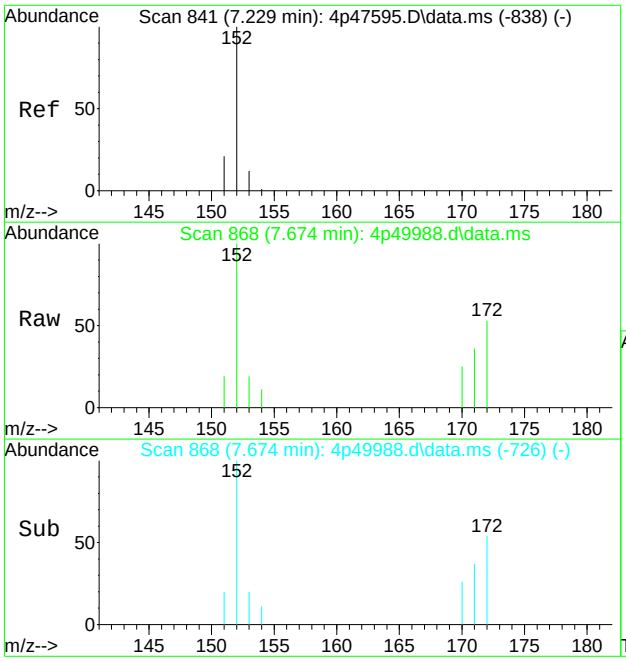


#10
2-Methylnaphthalene
Concen: 4.06 ppm
RT: 6.794 min Scan# 746
Delta R.T. 0.000 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:141 Resp: 91

Ion	Ratio	Lower	Upper
141	100		
142	113.5	92.2	152.2
115	60.4	30.7	90.7

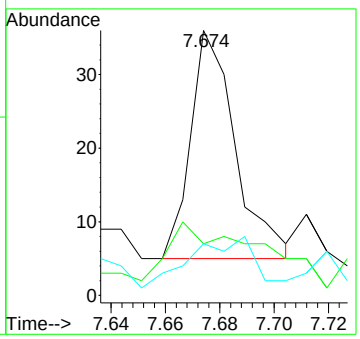


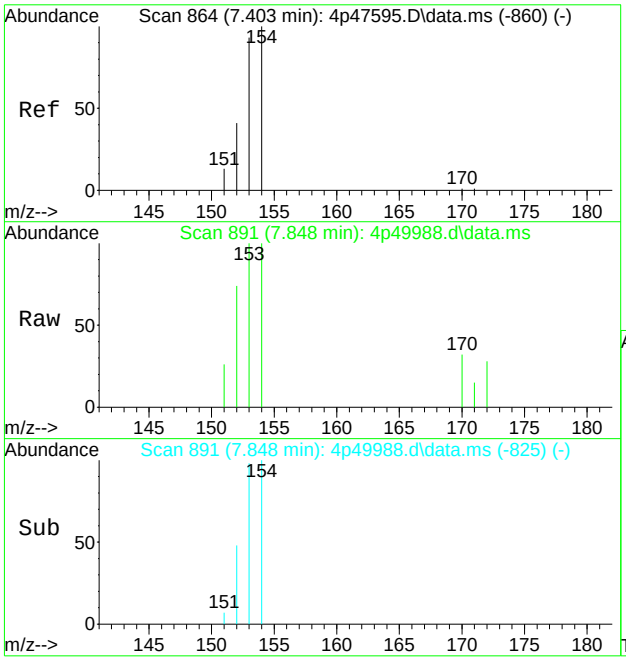


#15
Acenaphthylene
Concen: 0.85 ppm
RT: 7.674 min Scan# 868
Delta R.T. 0.000 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:152 Resp: 35

Ion	Ratio	Lower	Upper
152	100		
151	6.7	0.0	52.0
153	15.0	0.0	42.3

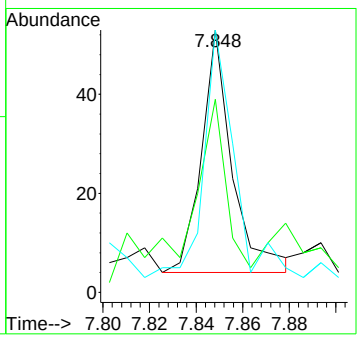


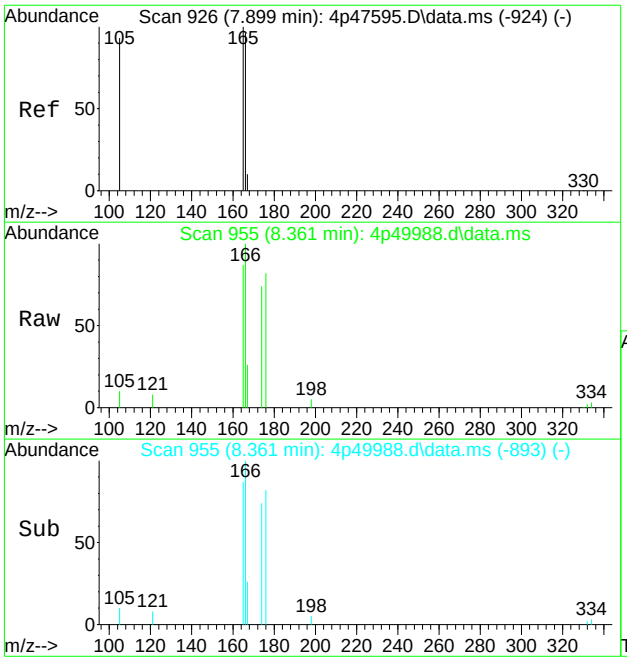


#16
Acenaphthene
Concen: 1.71 ppm
RT: 7.848 min Scan# 891
Delta R.T. 0.000 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:153 Resp: 45

Ion	Ratio	Lower	Upper
153	100		
152	55.8	18.6	78.6
154	101.1	58.0	118.0

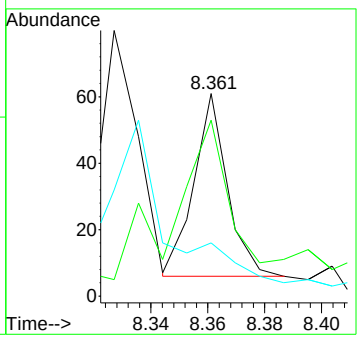


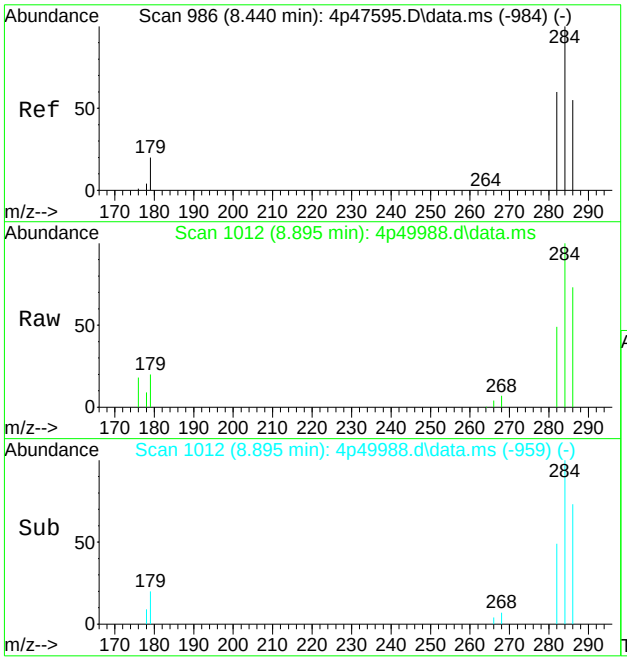


#17
Fluorene
Concen: 1.42 ppm m
RT: 8.361 min Scan# 955
Delta R.T. 0.000 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:166 Resp: 45

Ion	Ratio	Lower	Upper
166	100		
165	86.9	59.3	119.3
167	26.2	0.0	43.4

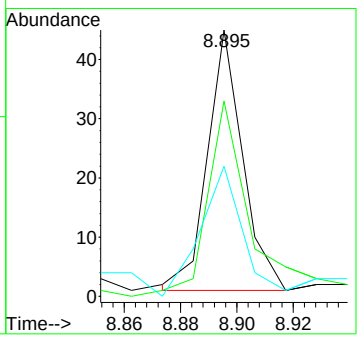


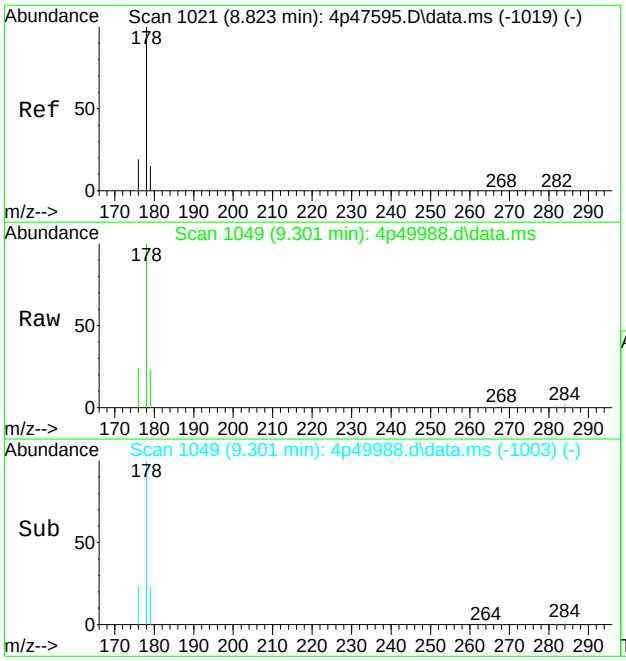


#21
Hexachlorobenzene
Concen: 3.03 ppm
RT: 8.895 min Scan# 1012
Delta R.T. 0.000 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:284 Resp: 38

Ion	Ratio	Lower	Upper
284	100		
286	69.0	50.6	110.6
282	49.4	19.9	79.9

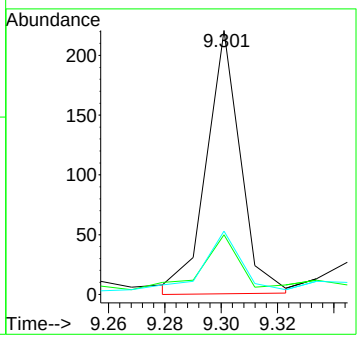


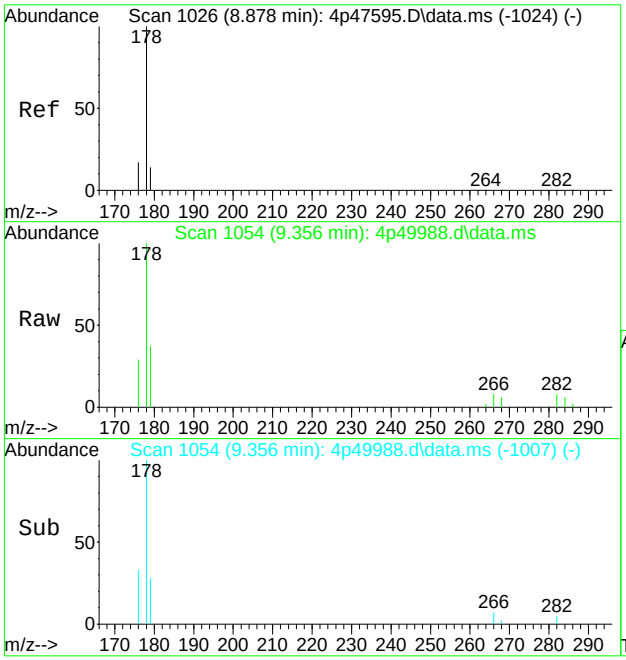


#23
Phenanthrene
Concen: 3.42 ppm
RT: 9.301 min Scan# 1049
Delta R.T. 0.000 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:178 Resp: 183

Ion	Ratio	Lower	Upper
178	100		
179	19.1	0.0	44.7
176	21.9	0.0	48.8

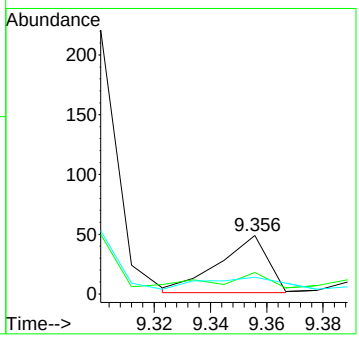


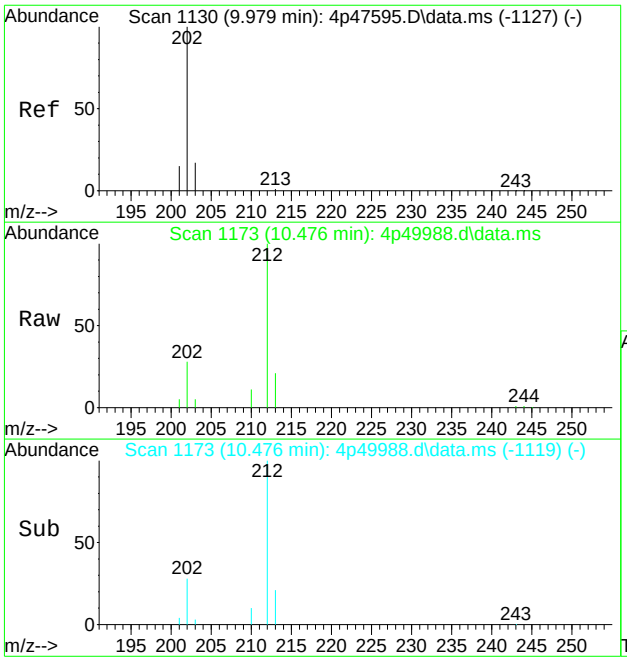


#24
Anthracene
Concen: 1.13 ppm
RT: 9.356 min Scan# 1054
Delta R.T. 0.011 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:178 Resp: 58

Ion	Ratio	Lower	Upper
178	100		
179	25.3	0.0	43.2
176	16.5	0.0	51.7

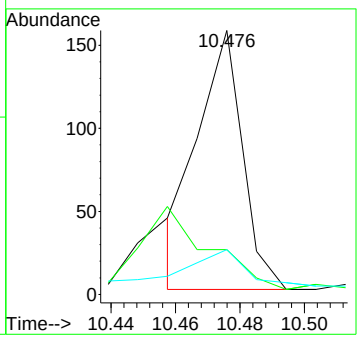


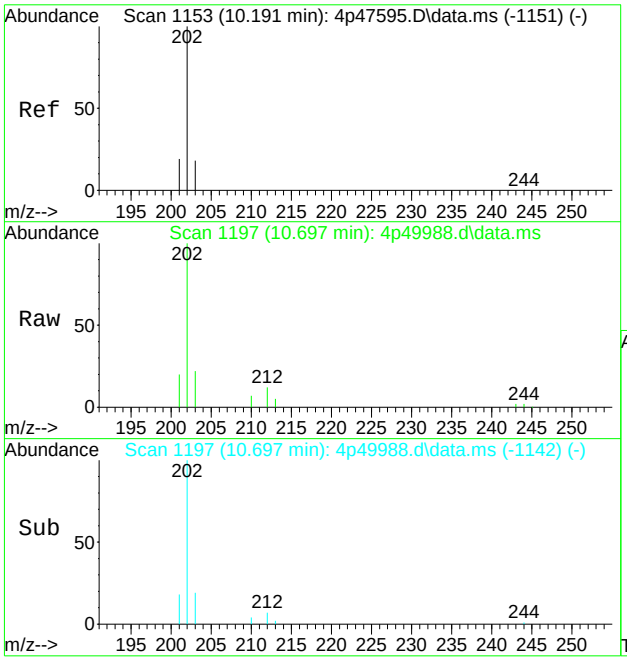


#25
Fluoranthene
Concen: 2.67 ppm m
RT: 10.476 min Scan# 1173
Delta R.T. 0.000 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:202 Resp: 149

Ion	Ratio	Lower	Upper
202	100		
203	17.0	0.0	48.6
201	17.0	0.0	44.1

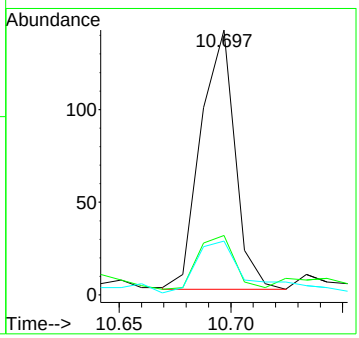


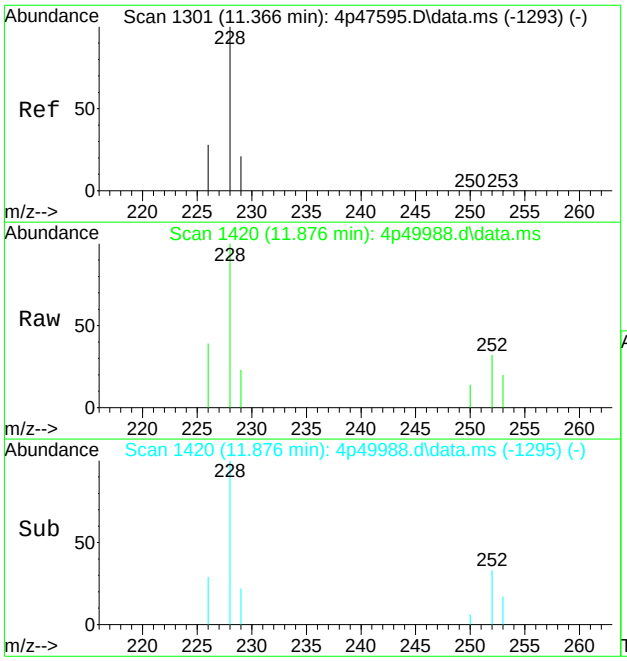


#26
Pyrene
Concen: 2.43 ppm
RT: 10.697 min Scan# 1197
Delta R.T. 0.009 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:202 Resp: 149

Ion	Ratio	Lower	Upper
202	100		
203	18.6	0.0	46.2
201	17.9	0.0	51.1

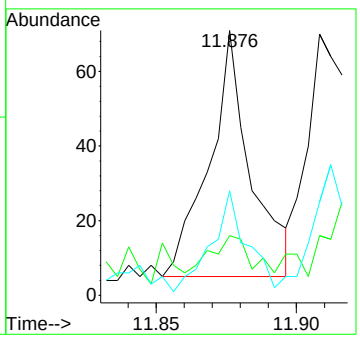


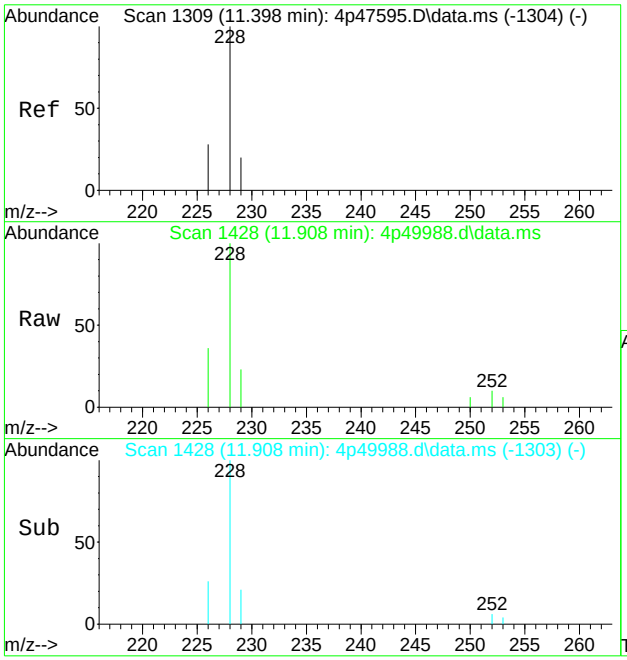


#28
Benzo[a]anthracene
Concen: 1.24 ppm
RT: 11.876 min Scan# 1420
Delta R.T. 0.000 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:228 Resp: 68

Ion	Ratio	Lower	Upper
228	100		
229	5.9	0.0	49.2
226	38.7	0.0	56.8

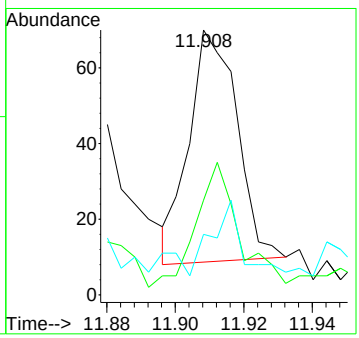


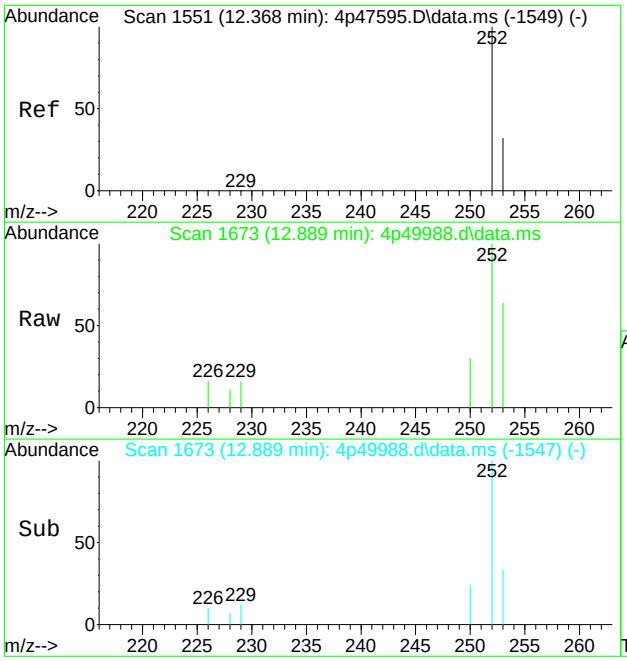


#29
Chrysene
Concen: 1.12 ppm
RT: 11.908 min Scan# 1428
Delta R.T. 0.000 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:228 Resp: 60

Ion	Ratio	Lower	Upper
228	100		
226	37.5	1.5	61.5
229	13.4	0.0	48.6

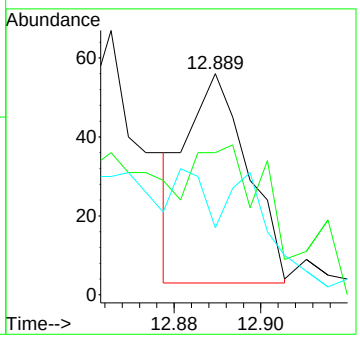


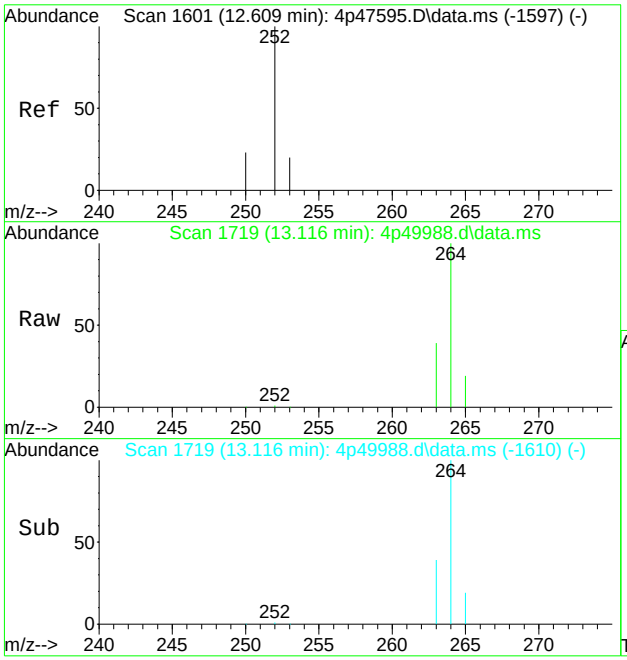


#32
Benzo[k]fluoranthene
Concen: 1.39 ppm m
RT: 12.889 min Scan# 1673
Delta R.T. 0.004 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:252 Resp: 53

Ion	Ratio	Lower	Upper
252	100		
253	64.3	0.0	51.2#
250	30.4	0.0	53.9

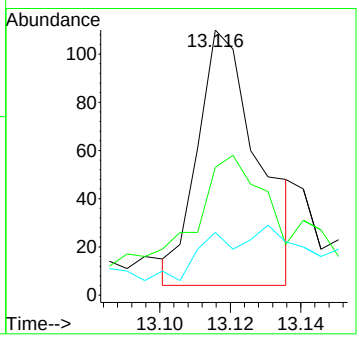


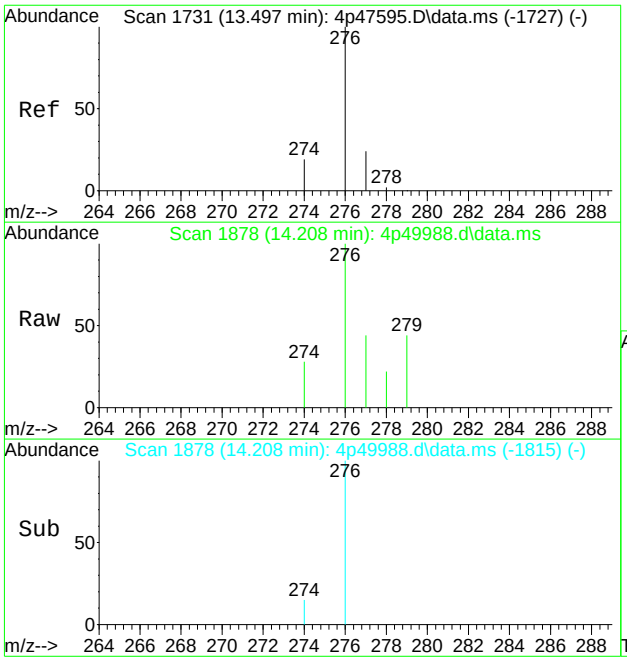


#33
Benzo[a]pyrene
Concen: 3.63 ppm
RT: 13.116 min Scan# 1719
Delta R.T. -0.020 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:252 Resp: 127

Ion	Ratio	Lower	Upper
252	100		
253	42.0	0.0	50.8
250	12.7	0.0	54.9

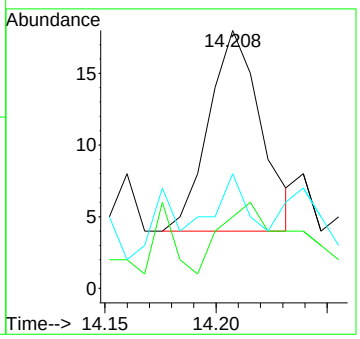


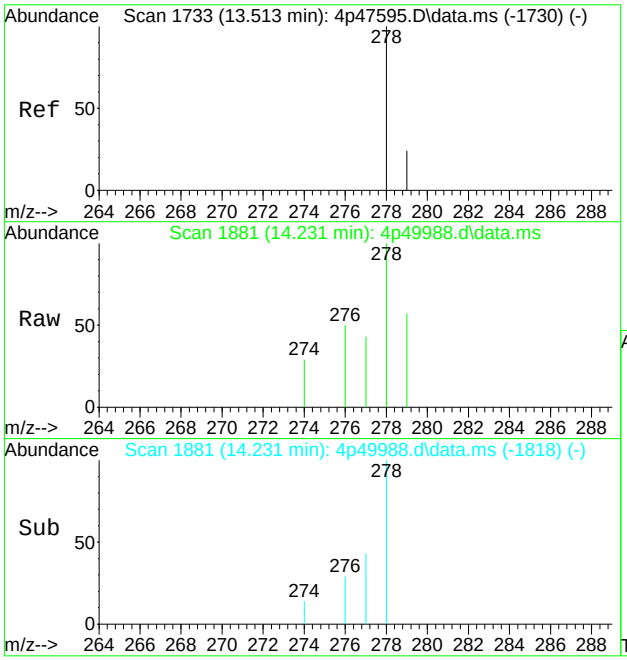


#34
Indeno[1,2,3-cd]pyrene
Concen: 0.55 ppm
RT: 14.208 min Scan# 1878
Delta R.T. 0.000 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:276 Resp: 23

Ion	Ratio	Lower	Upper
276	100		
274	0.0	0.0	50.5
277	12.0	0.0	54.7

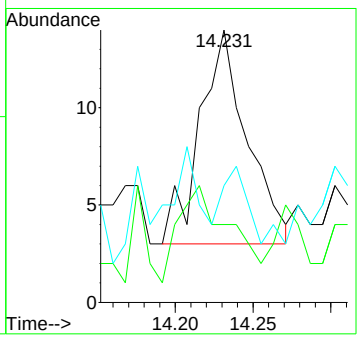


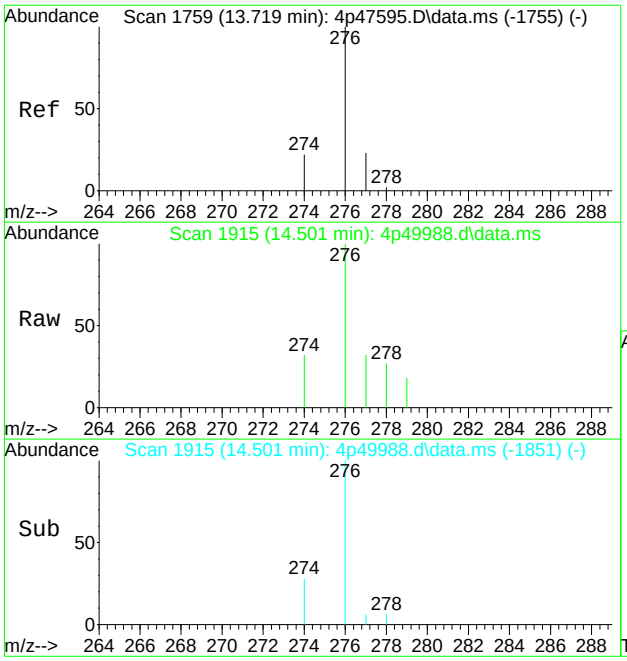


#35
Dibenz[a,h]anthracene
Concen: 0.71 ppm
RT: 14.231 min Scan# 1881
Delta R.T. 0.000 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:278 Resp: 23

Ion	Ratio	Lower	Upper
278	100		
274	9.5	0.0	38.4
277	19.0	0.0	40.4

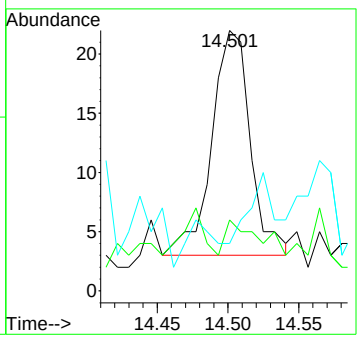




#36
Benzo[g,h,i]perylene
Concen: 1.02 ppm
RT: 14.501 min Scan# 1915
Delta R.T. 0.008 min
Lab File: 4p49988.d
Acq: 11 Dec 2021 5:52 am

Tgt Ion:276 Resp: 36

Ion	Ratio	Lower	Upper
276	100		
278	16.2	0.0	32.2
279	0.0	0.0	30.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\121521\e4p2624\
Data File : 4p50103.d
Acq On : 15 Dec 2021 3:39 am
Operator : chriss2
Sample : op37046a-mb1 Inst : MS4P
Misc : op37046a,e4p2624,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 15 05:29:15 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Dec 15 05:25:22 2021
Response via : Initial Calibration

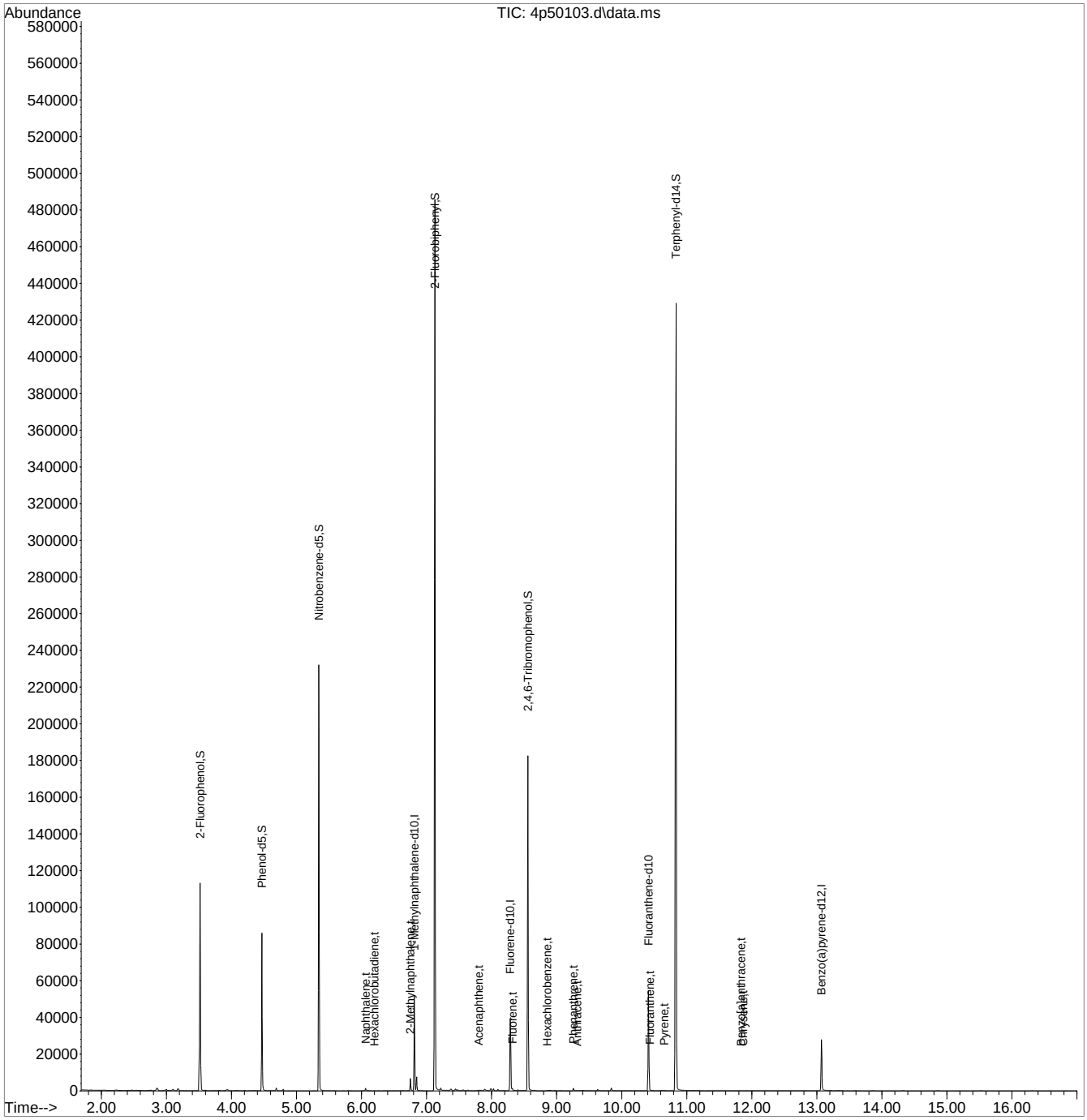
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.811	150	14075	800.00	ppm	0.00
13) Fluorene-d10	8.285	176	20237	800.00	ppm	0.00
20) Fluoranthene-d10	10.412	212	35219	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.071	264	16013	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.517	112	44971	5150.64	ppm	0.00
Spiked Amount 50.000			Recovery	= 10301.28%		
4) Phenol-d5	4.469	99	57812	3490.18	ppm	0.00
Spiked Amount 50.000			Recovery	= 6980.36%		
7) Nitrobenzene-d5	5.343	82	139309	10306.02	ppm	0.00
Spiked Amount 50.000			Recovery	= 20612.04%		
14) 2-Fluorobiphenyl	7.129	172	228652	8857.85	ppm	0.00
Spiked Amount 50.000			Recovery	= 17715.70%		
19) 2,4,6-Tribromophenol	8.557	330	57177	14804.27	ppm	0.00
Spiked Amount 50.000			Recovery	= 29608.54%		
27) Terphenyl-d14	10.835	244	294781	11685.47	ppm	0.00
Spiked Amount 50.000			Recovery	= 23370.94%		
Target Compounds						Qvalue
8) Naphthalene	6.061	128	925	22.96	ppm	94
9) Hexachlorobutadiene	6.194	225	31	3.15	ppm	91
10) 2-Methylnaphthalene	6.752	141	1794	85.24	ppm	95
16) Acenaphthene	7.803	153	149	6.19	ppm	95
17) Fluorene	8.319	166	549	18.91	ppm	86
21) Hexachlorobenzene	8.852	284	20	1.80	ppm	91
23) Phenanthrene	9.257	178	853	17.98	ppm	99
24) Anthracene	9.312	178	112	2.46	ppm	78
25) Fluoranthene	10.430	202	171	3.46	ppm	99
26) Pyrene	10.651	202	197	3.62	ppm	96
28) Benzo[a]anthracene	11.832	228	35	0.72	ppm	72
29) Chrysene	11.868	228	29	0.61	ppm	89

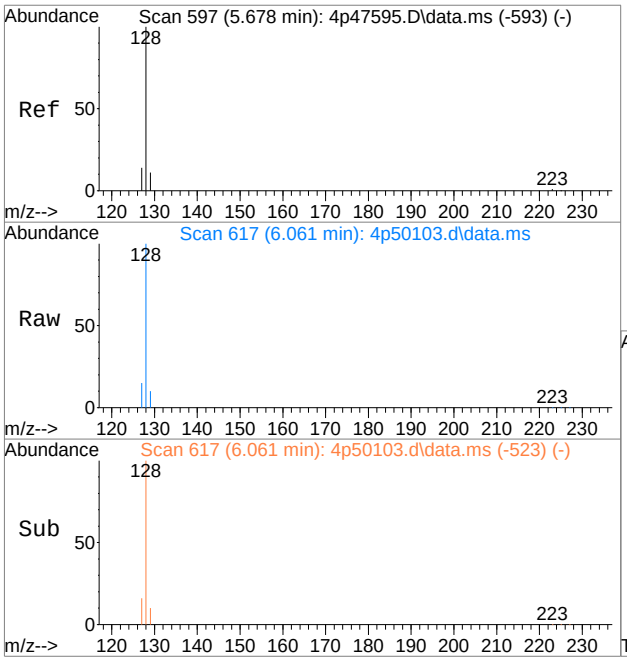
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\121521\e4p2624\
Data File : 4p50103.d
Acq On : 15 Dec 2021 3:39 am
Operator : chriss2
Sample : op37046a-mb1 Inst : MS4P
Misc : op37046a,e4p2624,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 15 05:29:15 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Dec 15 05:25:22 2021
Response via : Initial Calibration

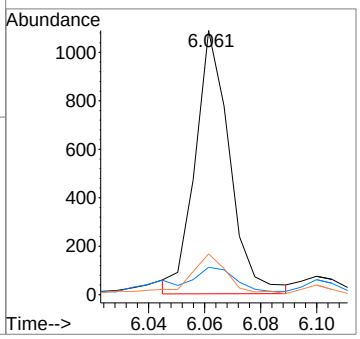


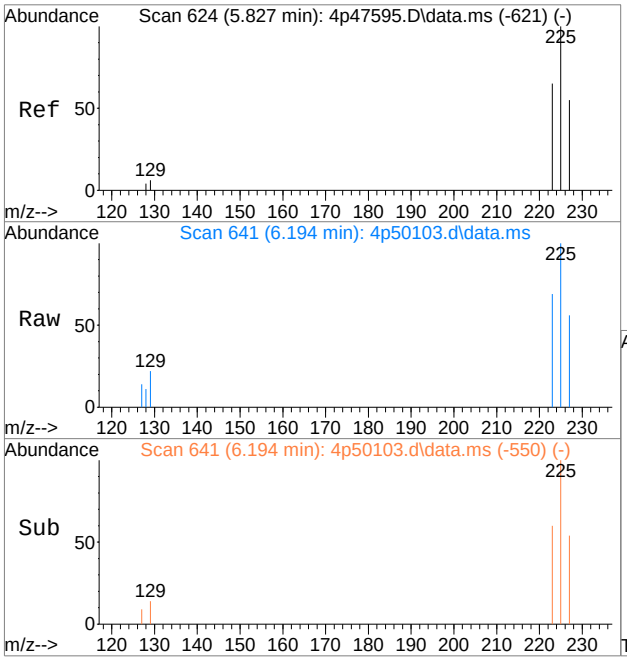


#8
Naphthalene
Concen: 22.96 ppm
RT: 6.061 min Scan# 617
Delta R.T. 0.000 min
Lab File: 4p50103.d
Acq: 15 Dec 2021 3:39 am

Tgt Ion:128 Resp: 925

Ion	Ratio	Lower	Upper
128	100		
129	7.3	0.0	40.9
127	15.0	0.0	43.9

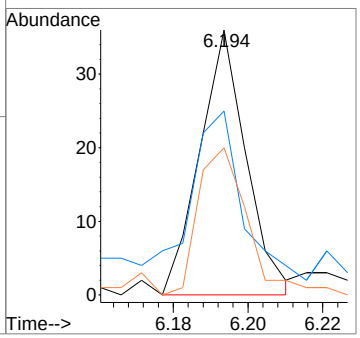


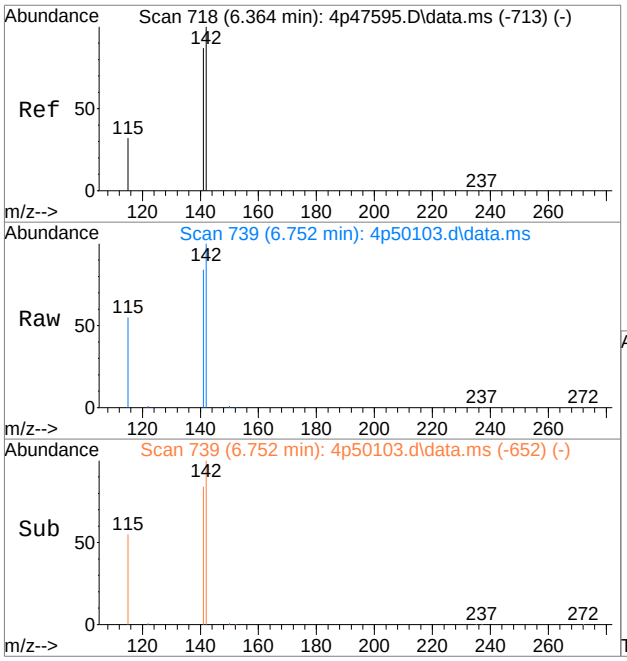


#9
Hexachlorobutadiene
Concen: 3.15 ppm
RT: 6.194 min Scan# 641
Delta R.T. 0.000 min
Lab File: 4p50103.d
Acq: 15 Dec 2021 3:39 am

Tgt Ion:225 Resp: 31

Ion	Ratio	Lower	Upper
225	100		
223	57.1	27.5	87.5
227	54.3	36.8	96.8

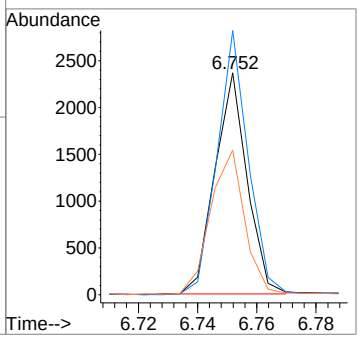


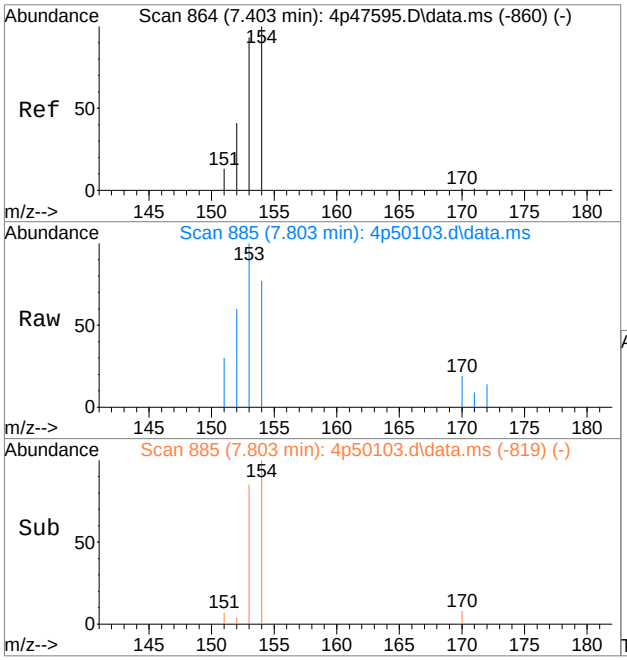


#10
2-Methylnaphthalene
Concen: 85.24 ppm
RT: 6.752 min Scan# 739
Delta R.T. 0.000 min
Lab File: 4p50103.d
Acq: 15 Dec 2021 3:39 am

Tgt Ion:141 Resp: 1794

Ion	Ratio	Lower	Upper
141	100		
142	119.3	83.8	143.8
115	65.3	32.0	92.0

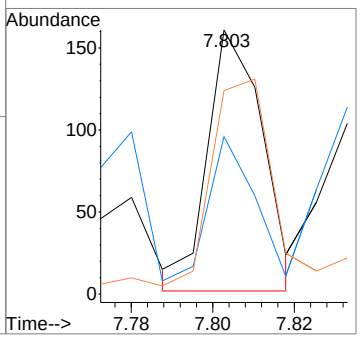


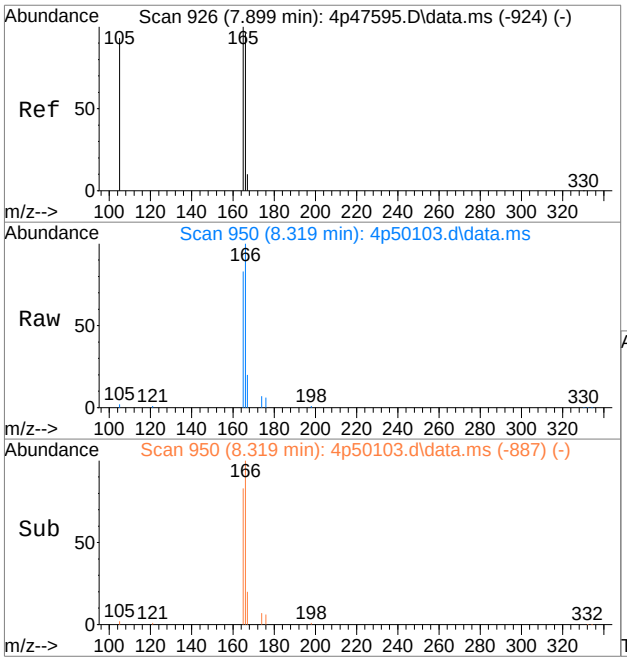


#16
Acenaphthene
Concen: 6.19 ppm
RT: 7.803 min Scan# 885
Delta R.T. 0.000 min
Lab File: 4p50103.d
Acq: 15 Dec 2021 3:39 am

Tgt Ion:153 Resp: 149

Ion	Ratio	Lower	Upper
153	100		
152	61.1	25.8	85.8
154	77.0	49.9	109.9

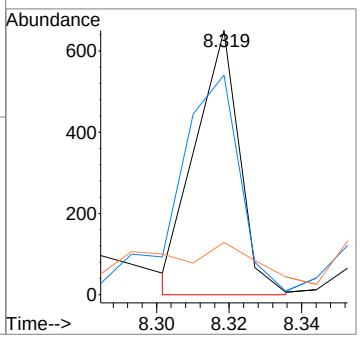


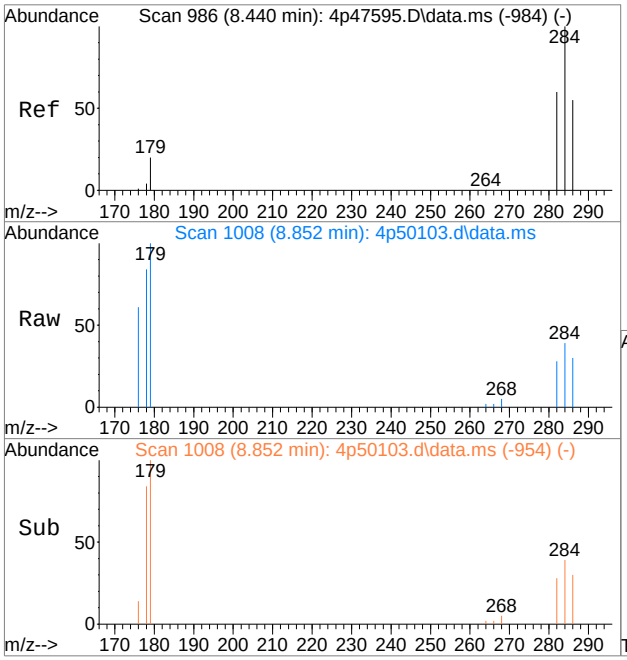


#17
Fluorene
Concen: 18.91 ppm
RT: 8.319 min Scan# 950
Delta R.T. 0.000 min
Lab File: 4p50103.d
Acq: 15 Dec 2021 3:39 am

Tgt Ion:166 Resp: 549

Ion	Ratio	Lower	Upper
166	100		
165	78.8	62.5	122.5
167	9.2	0.0	43.8

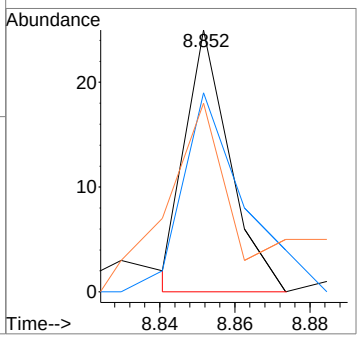


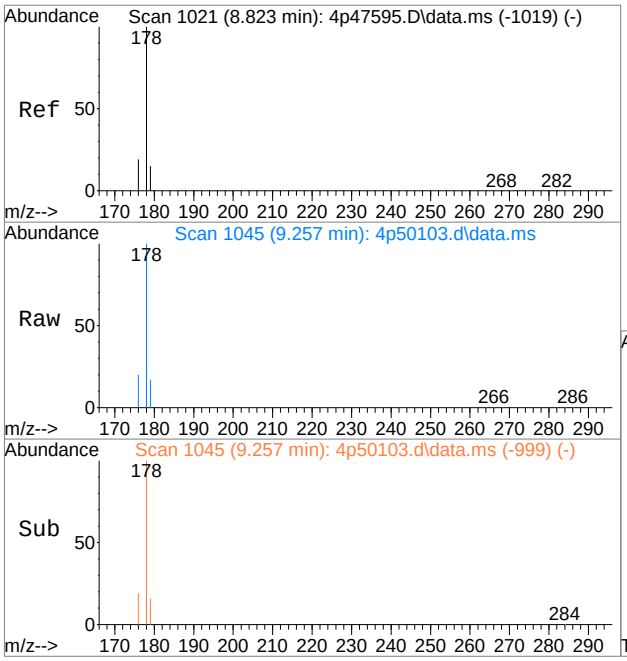


#21
Hexachlorobenzene
Concen: 1.80 ppm
RT: 8.852 min Scan# 1008
Delta R.T. 0.000 min
Lab File: 4p50103.d
Acq: 15 Dec 2021 3:39 am

Tgt Ion:284 Resp: 20

Ion	Ratio	Lower	Upper
284	100		
286	66.7	48.2	108.2
282	50.0	21.8	81.8

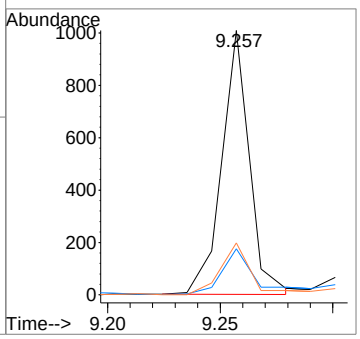


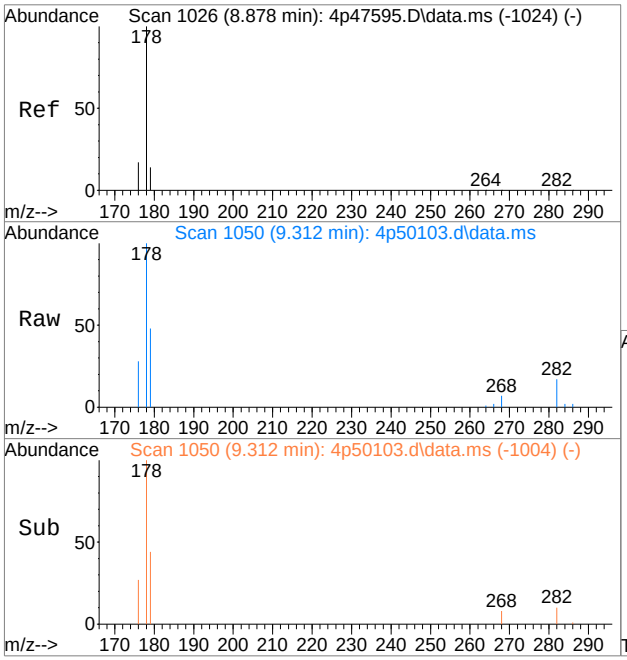


#23
Phenanthrene
Concen: 17.98 ppm
RT: 9.257 min Scan# 1045
Delta R.T. 0.000 min
Lab File: 4p50103.d
Acq: 15 Dec 2021 3:39 am

Tgt Ion:178 Resp: 853

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	45.8
176	19.0	0.0	48.8

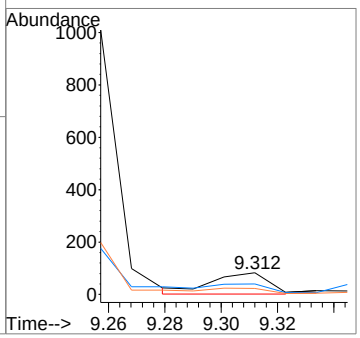


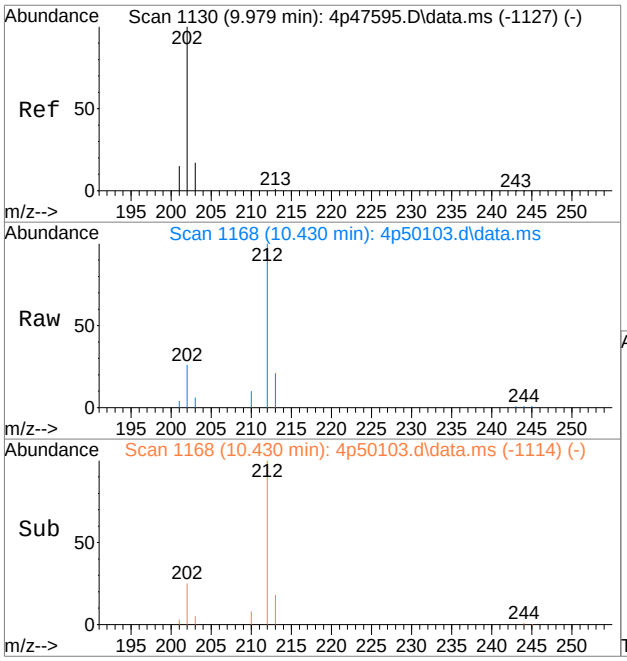


#24
Anthracene
Concen: 2.46 ppm
RT: 9.312 min Scan# 1050
Delta R.T. 0.000 min
Lab File: 4p50103.d
Acq: 15 Dec 2021 3:39 am

Tgt Ion:178 Resp: 112

Ion	Ratio	Lower	Upper
178	100		
179	33.1	0.0	45.9
176	18.8	0.0	46.7

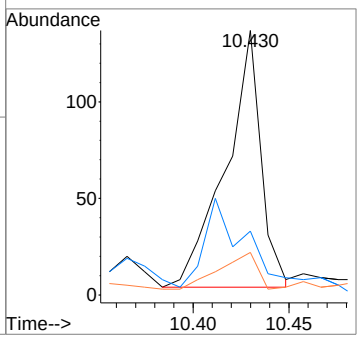


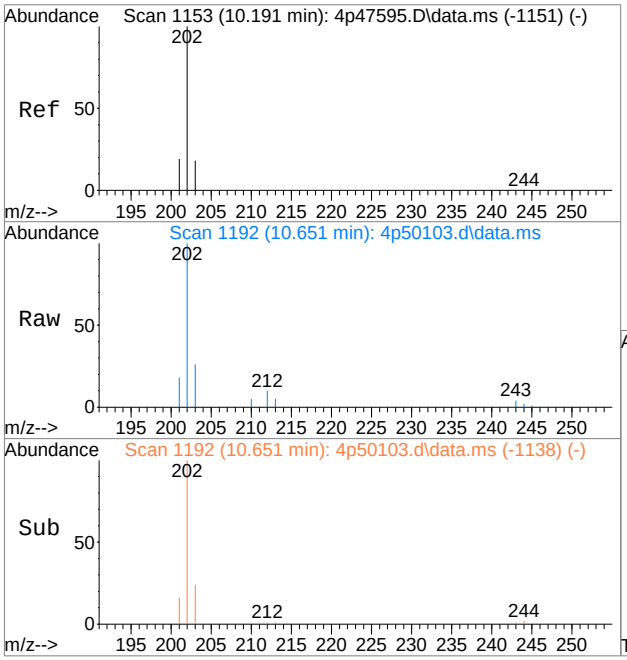


#25
Fluoranthene
Concen: 3.46 ppm
RT: 10.430 min Scan# 1168
Delta R.T. 0.000 min
Lab File: 4p50103.d
Acq: 15 Dec 2021 3:39 am

Tgt Ion:202 Resp: 171

Ion	Ratio	Lower	Upper
202	100		
203	18.7	0.0	47.8
201	14.1	0.0	43.9

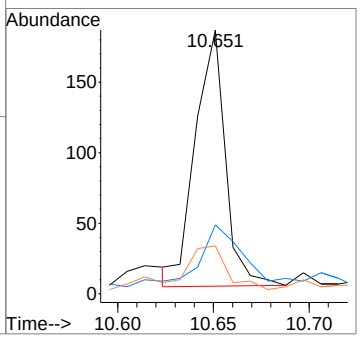


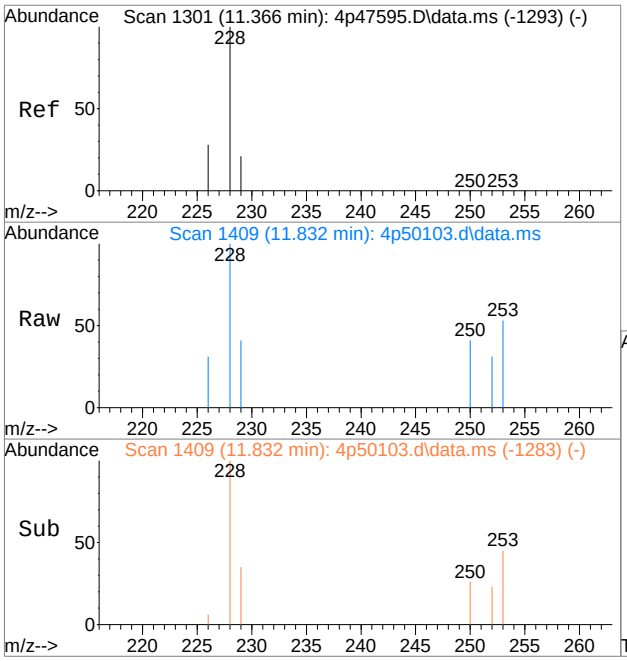


#26
Pyrene
Concen: 3.62 ppm
RT: 10.651 min Scan# 1192
Delta R.T. 0.000 min
Lab File: 4p50103.d
Acq: 15 Dec 2021 3:39 am

Tgt Ion:202 Resp: 197

Ion	Ratio	Lower	Upper
202	100		
203	22.3	0.0	49.7
201	15.8	0.0	46.2

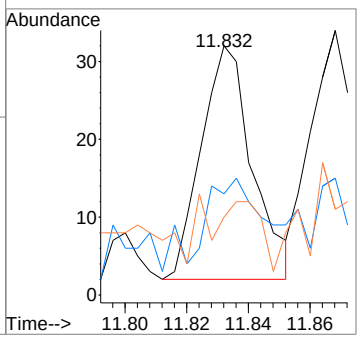


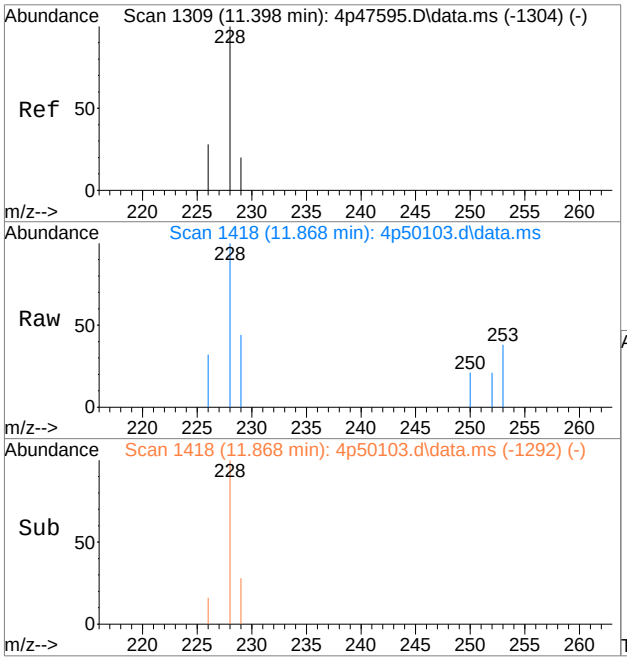


#28
Benzo[a]anthracene
Concen: 0.72 ppm
RT: 11.832 min Scan# 1409
Delta R.T. 0.004 min
Lab File: 4p50103.d
Acq: 15 Dec 2021 3:39 am

Tgt Ion:228 Resp: 35

Ion	Ratio	Lower	Upper
228	100		
229	25.5	0.0	49.5
226	9.1	0.0	59.3

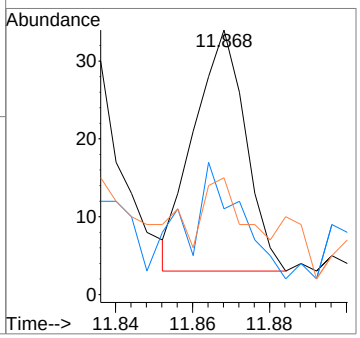




#29
Chrysene
Concen: 0.61 ppm
RT: 11.868 min Scan# 1418
Delta R.T. 0.004 min
Lab File: 4p50103.d
Acq: 15 Dec 2021 3:39 am

Tgt Ion:228 Resp: 29

Ion	Ratio	Lower	Upper
228	100		
226	20.7	0.6	60.6
229	19.0	0.0	49.2



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya 12/16/21 10:32

Quantitation Report (QT Reviewed)

Data Path : Z:\svoa-gcms\completed\00_2021\12_dec\12-16-2021\maritavb\e4p26
Data File : 4p50124.d
Acq On : 15 Dec 2021 6:34 pm
Operator : kristis
Sample : OP37046A-MB1
Misc : op37046a,e4p2625,250,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 16 12:35:01 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Dec 15 23:03:48 2021
Response via : Initial Calibration

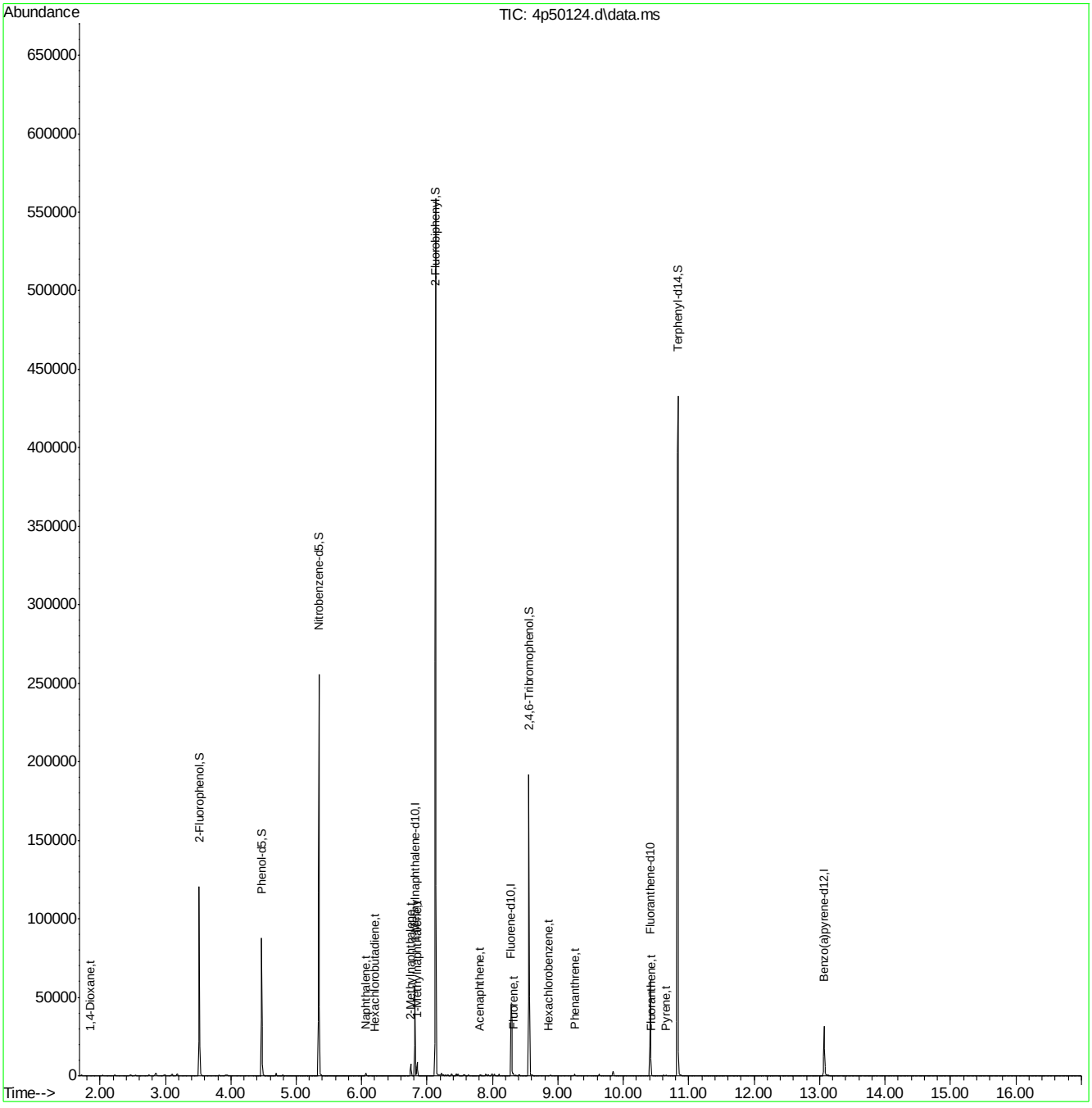
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.811	150	15641	800.00	ppm	0.00
13) Fluorene-d10	8.284	176	23038	800.00	ppm	0.00
20) Fluoranthene-d10	10.412	212	39977	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.071	264	18813	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.517	112	47925	4939.41	ppm	0.00
Spiked Amount 50.000			Recovery = 9878.82%			
4) Phenol-d5	4.469	99	63857	3469.15	ppm	0.00
Spiked Amount 50.000			Recovery = 6938.30%			
7) Nitrobenzene-d5	5.347	82	155524	10353.64	ppm	0.00
Spiked Amount 50.000			Recovery = 20707.28%			
14) 2-Fluorobiphenyl	7.129	172	252230	8583.24	ppm	0.00
Spiked Amount 50.000			Recovery = 17166.48%			
19) 2,4,6-Tribromophenol	8.557	330	61900	14078.54	ppm	0.00
Spiked Amount 50.000			Recovery = 28157.08%			
27) Terphenyl-d14	10.835	244	331884	11590.43	ppm	0.00
Spiked Amount 50.000			Recovery = 23180.86%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.849	88	36m	9.85	ppm	
8) Naphthalene	6.061	128	980	21.89	ppm	98
9) Hexachlorobutadiene	6.194	225	33	3.02	ppm	83
10) 2-Methylnaphthalene	6.752	141	2020	86.36	ppm	98
11) 1-Methylnaphthalene	6.847	141	2305	102.38	ppm	97
16) Acenaphthene	7.803	153	168	6.13	ppm	91
17) Fluorene	8.319	166	634	19.19	ppm	97
21) Hexachlorobenzene	8.852	284	28	2.22	ppm	88
23) Phenanthrene	9.257	178	995	18.48	ppm	99
25) Fluoranthene	10.430	202	165m	2.94	ppm	
26) Pyrene	10.651	202	215	3.48	ppm	90

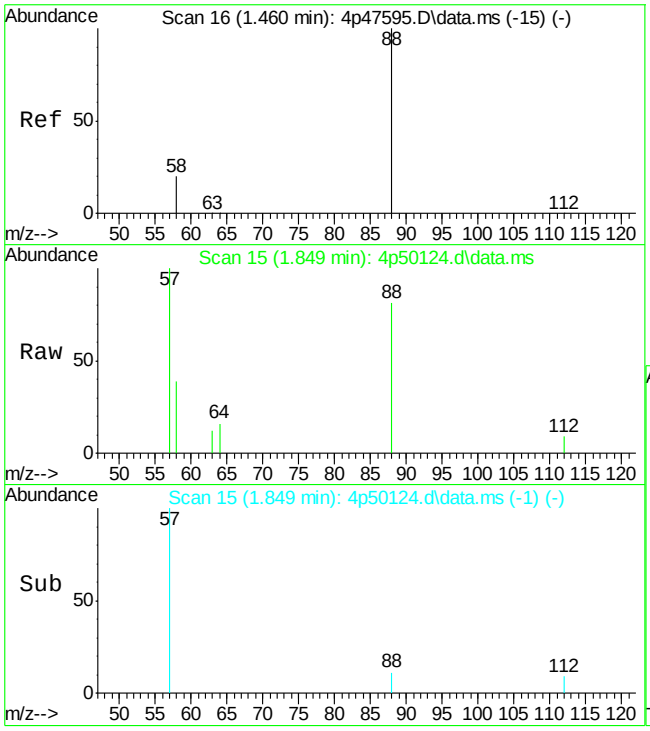
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\svoa-gcms\completed\00_2021\12_dec\12-16-2021\maritavb\e4p2625\
Data File : 4p50124.d
Acq On : 15 Dec 2021 6:34 pm
Operator : kristis
Sample : OP37046A-MB1
Misc : op37046a,e4p2625,250,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 16 12:35:01 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Dec 15 23:03:48 2021
Response via : Initial Calibration

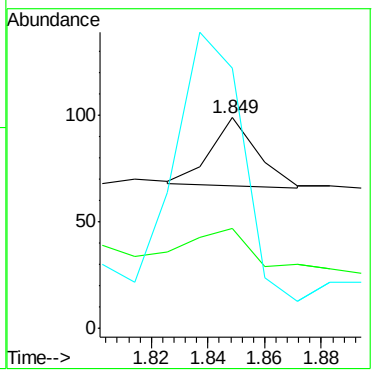


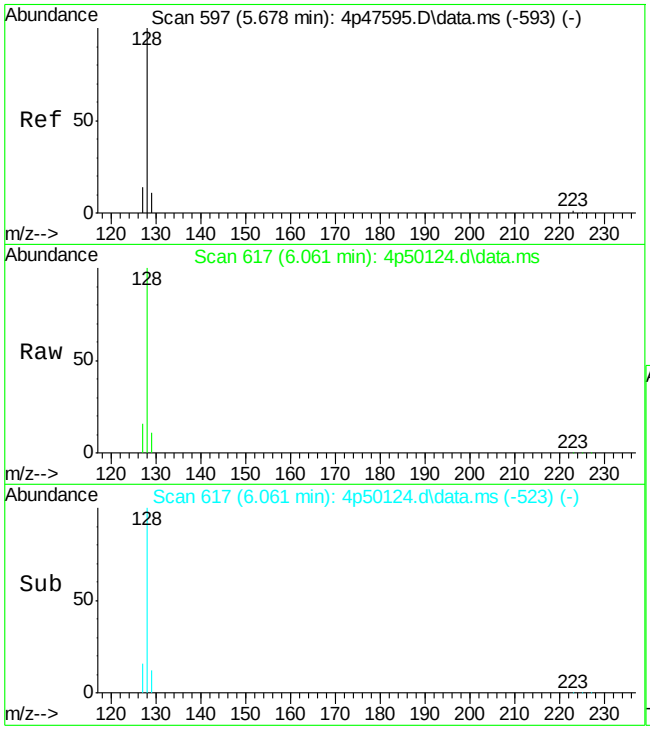


#2
1,4-Dioxane
Concen: 9.85 ppm m
RT: 1.849 min Scan# 15
Delta R.T. 0.023 min
Lab File: 4p50124.d
Acq: 15 Dec 2021 6:34 pm

Tgt Ion: 88 Resp: 36

Ion	Ratio	Lower	Upper
88	100		
58	47.5	42.0	82.0
57	123.2	2.5	42.5#

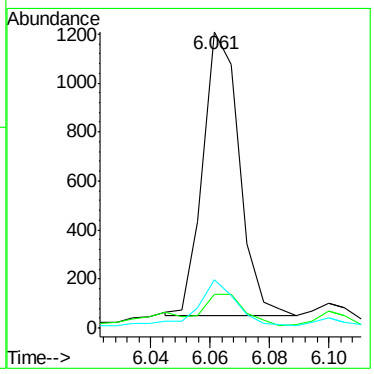


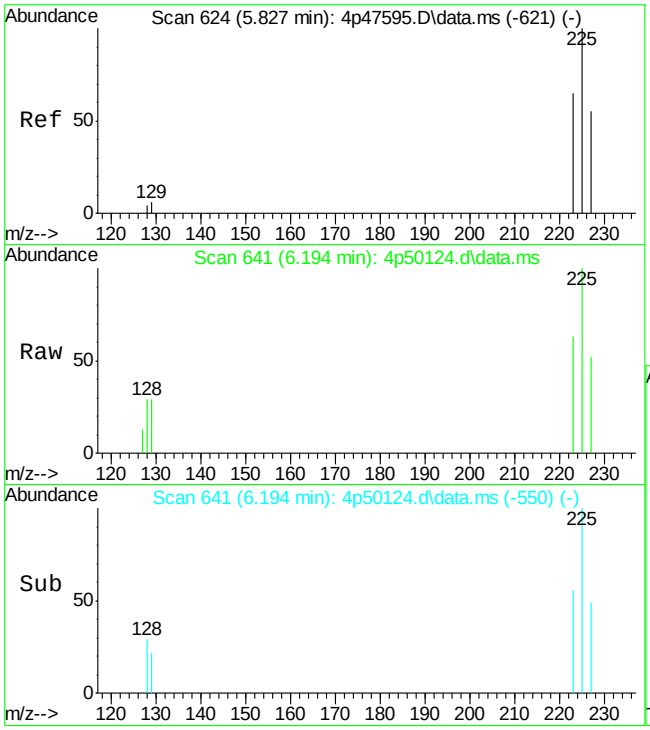


#8
Naphthalene
Concen: 21.89 ppm
RT: 6.061 min Scan# 617
Delta R.T. 0.000 min
Lab File: 4p50124.d
Acq: 15 Dec 2021 6:34 pm

Tgt Ion:128 Resp: 980

Ion	Ratio	Lower	Upper
128	100		
129	8.6	0.0	40.2
127	15.4	0.0	45.0

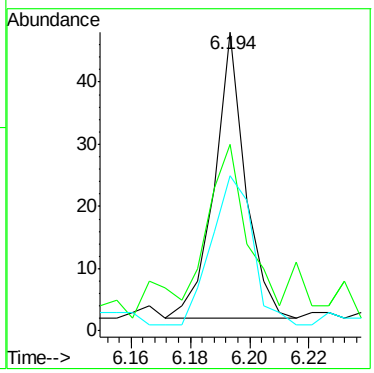


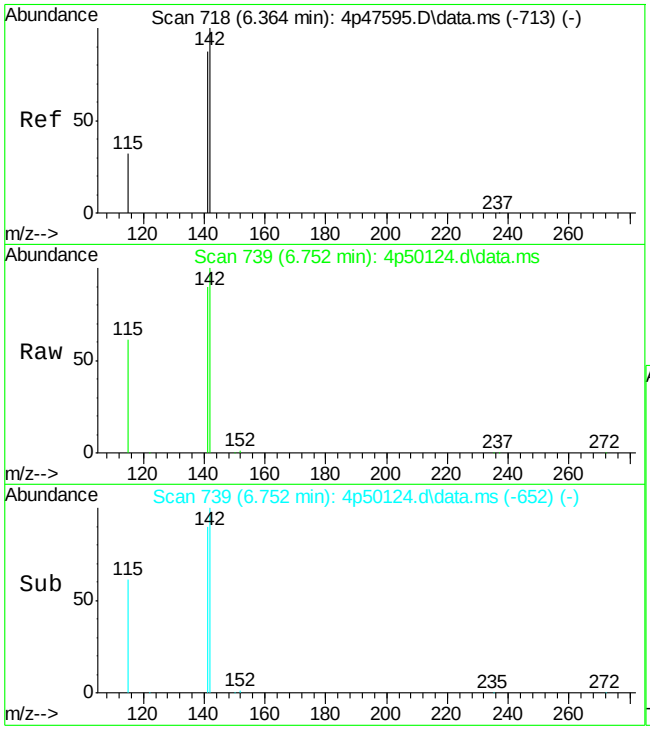


#9
Hexachlorobutadiene
Concen: 3.02 ppm
RT: 6.194 min Scan# 641
Delta R.T. 0.000 min
Lab File: 4p50124.d
Acq: 15 Dec 2021 6:34 pm

Tgt Ion:225 Resp: 33

Ion	Ratio	Lower	Upper
225	100		
223	45.7	30.3	90.3
227	52.2	32.9	92.9

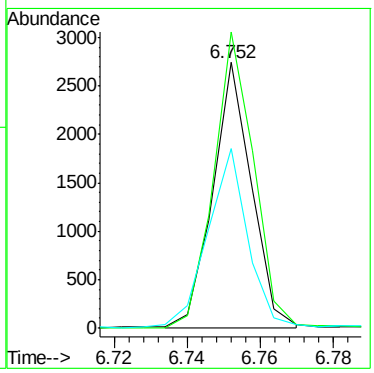


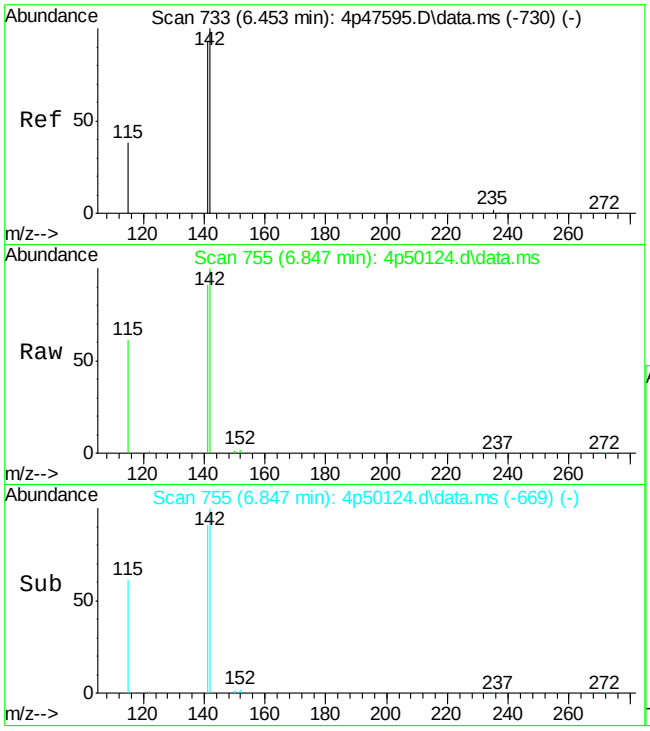


#10
2-Methylnaphthalene
Concen: 86.36 ppm
RT: 6.752 min Scan# 739
Delta R.T. 0.000 min
Lab File: 4p50124.d
Acq: 15 Dec 2021 6:34 pm

Tgt Ion:141 Resp: 2020

Ion	Ratio	Lower	Upper
141	100		
142	112.0	83.4	143.4
115	66.9	34.7	94.7

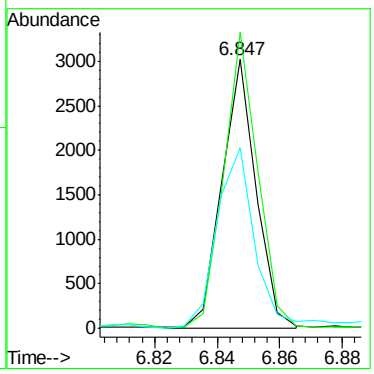


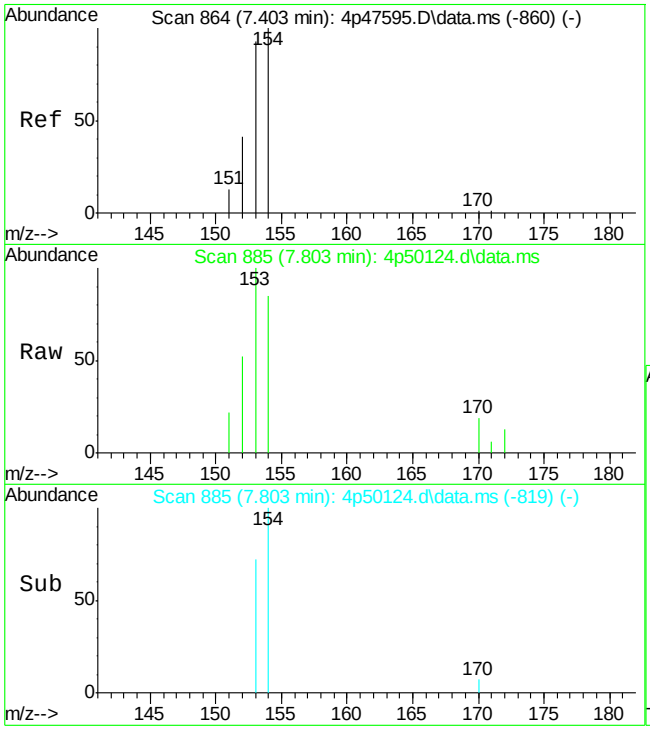


#11
1-Methylnaphthalene
Concen: 102.38 ppm
RT: 6.847 min Scan# 755
Delta R.T. 0.000 min
Lab File: 4p50124.d
Acq: 15 Dec 2021 6:34 pm

Tgt Ion:141 Resp: 2305

Ion	Ratio	Lower	Upper
141	100		
142	110.4	84.1	144.1
115	66.2	34.8	94.8

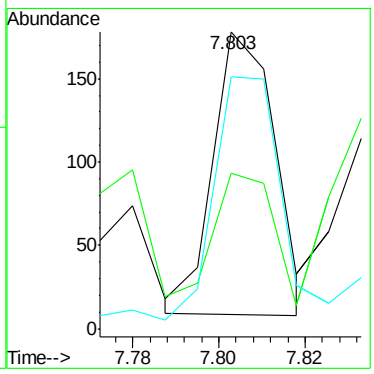


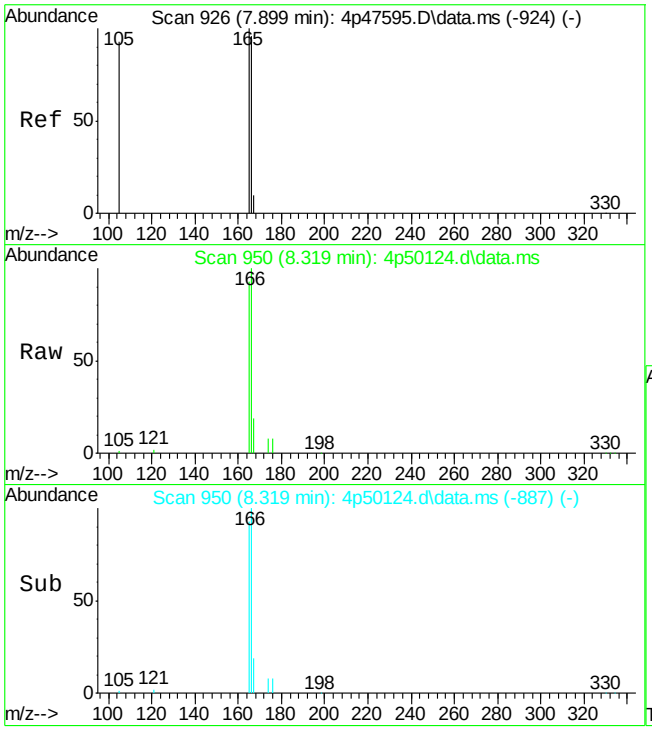


#16
Acenaphthene
Concen: 6.13 ppm
RT: 7.803 min Scan# 885
Delta R.T. 0.000 min
Lab File: 4p50124.d
Acq: 15 Dec 2021 6:34 pm

Tgt Ion:153 Resp: 168

Ion	Ratio	Lower	Upper
153	100		
152	50.2	24.8	84.8
154	88.9	49.6	109.6

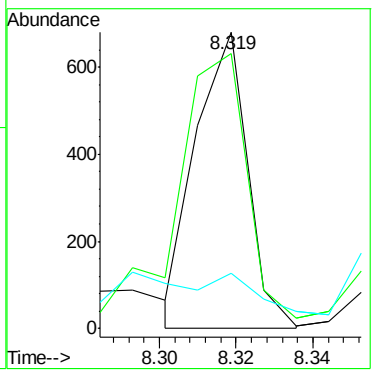


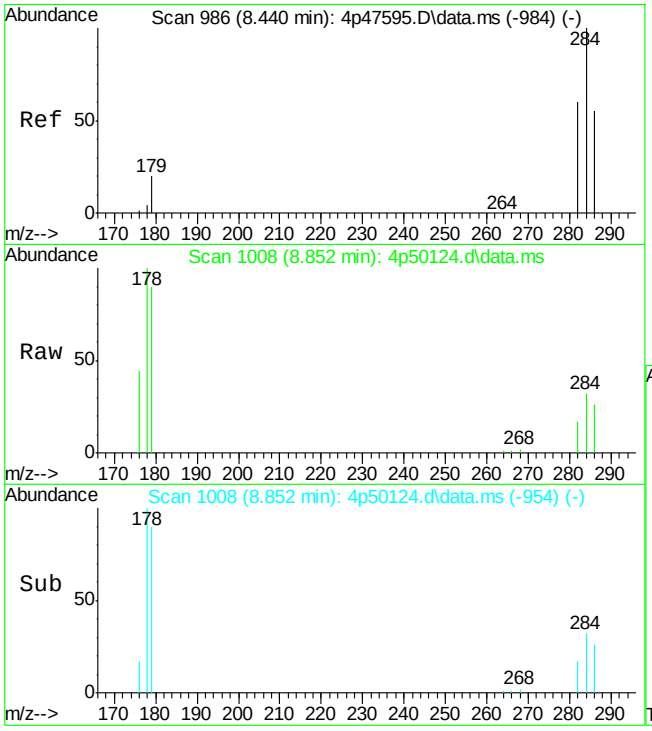


#17
Fluorene
Concen: 19.19 ppm
RT: 8.319 min Scan# 950
Delta R.T. 0.000 min
Lab File: 4p50124.d
Acq: 15 Dec 2021 6:34 pm

Tgt Ion:166 Resp: 634

Ion	Ratio	Lower	Upper
166	100		
165	86.9	55.7	115.7
167	8.8	0.0	44.1

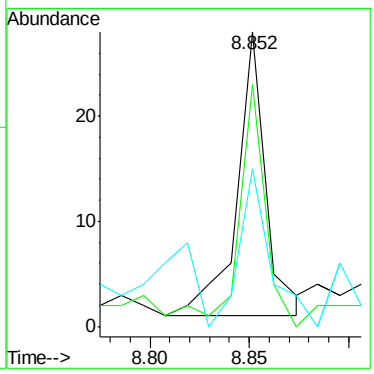


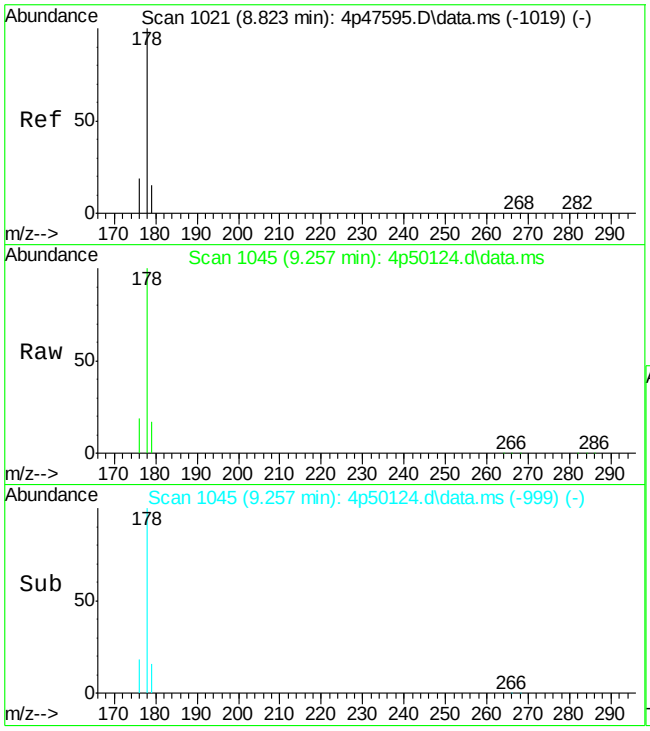


#21
Hexachlorobenzene
Concen: 2.22 ppm
RT: 8.852 min Scan# 1008
Delta R.T. 0.000 min
Lab File: 4p50124.d
Acq: 15 Dec 2021 6:34 pm

Tgt Ion:284 Resp: 28

Ion	Ratio	Lower	Upper
284	100		
286	86.5	47.4	107.4
282	40.4	20.9	80.9

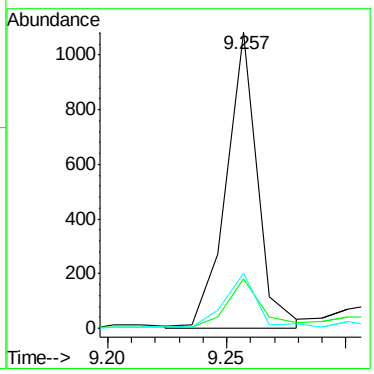


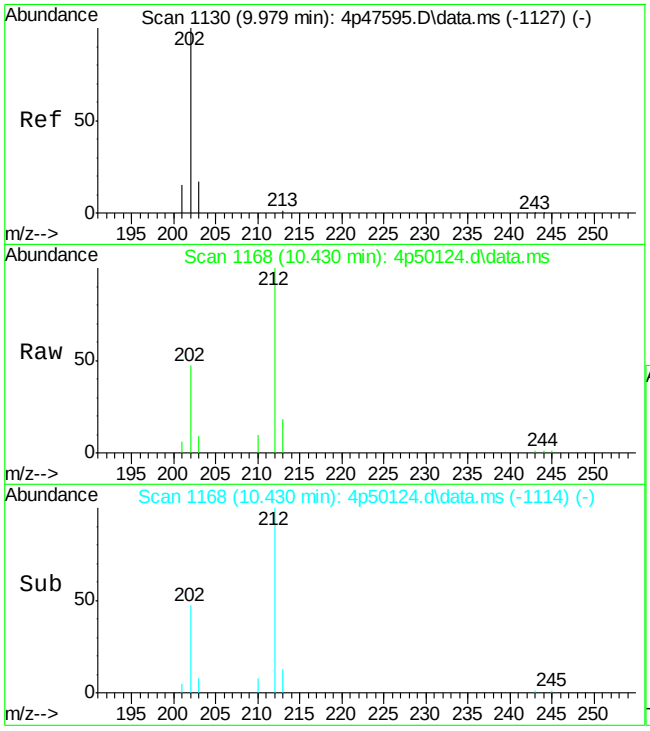


#23
Phenanthrene
Concen: 18.48 ppm
RT: 9.257 min Scan# 1045
Delta R.T. 0.000 min
Lab File: 4p50124.d
Acq: 15 Dec 2021 6:34 pm

Tgt Ion:178 Resp: 995

Ion	Ratio	Lower	Upper
178	100		
179	16.0	0.0	46.0
176	18.0	0.0	48.6

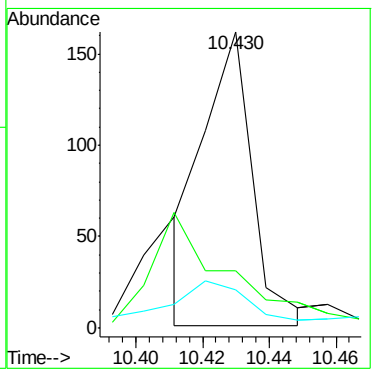


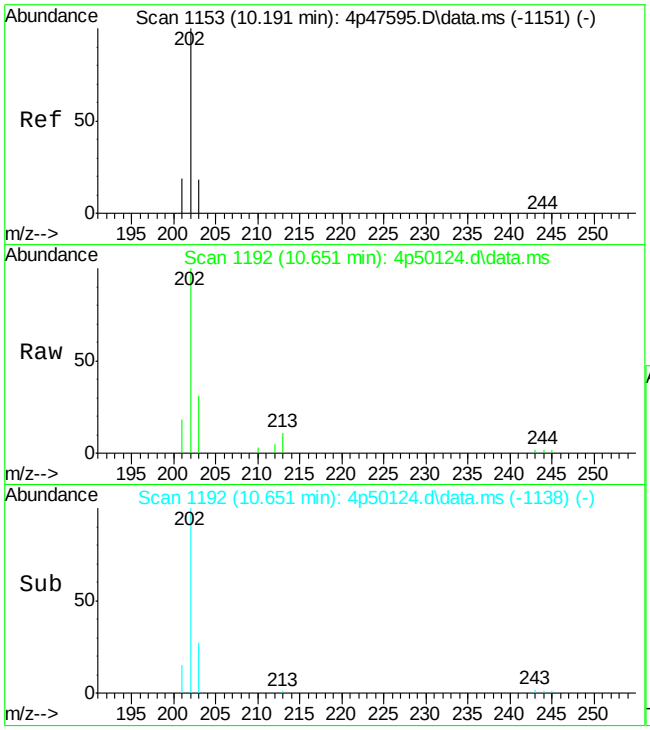


#25
Fluoranthene
Concen: 2.94 ppm m
RT: 10.430 min Scan# 1168
Delta R.T. 0.000 min
Lab File: 4p50124.d
Acq: 15 Dec 2021 6:34 pm

Tgt Ion:202 Resp: 165

Ion	Ratio	Lower	Upper
202	100		
203	19.1	0.0	48.7
201	13.0	0.0	44.2

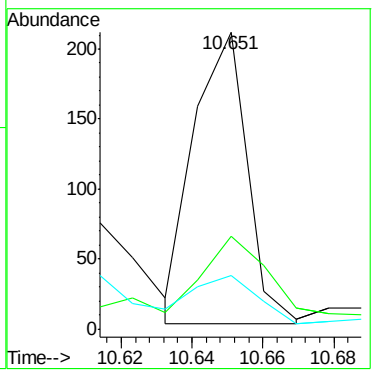




#26
Pyrene
Concen: 3.48 ppm
RT: 10.651 min Scan# 1192
Delta R.T. 0.000 min
Lab File: 4p50124.d
Acq: 15 Dec 2021 6:34 pm

Tgt Ion:202 Resp: 215

Ion	Ratio	Lower	Upper
202	100		
203	26.6	0.0	49.5
201	14.7	0.0	45.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e5p3799\
Data File : 5p80264.d
Acq On : 12 Dec 2021 1:52 pm
Operator : kristis
Sample : op37045-mb1 Inst : MS5P
Misc : op37045,e5p3799,250,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 12 23:28:24 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 12 23:12:05 2021
Response via : Initial Calibration

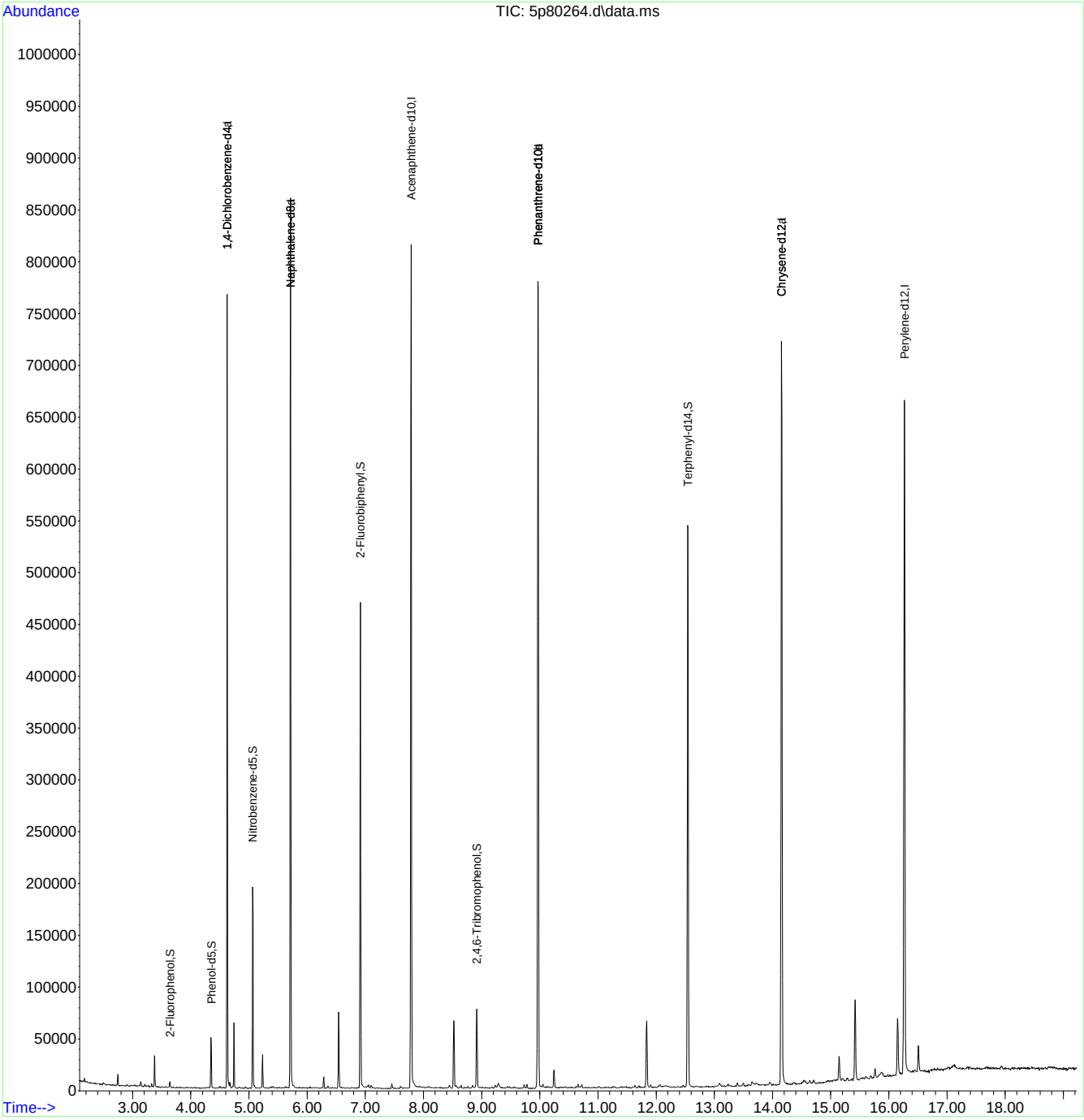
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.625	152	98373	8.00	ppm	0.00
24) Naphthalene-d8	5.715	136	372613	8.00	ppm	0.00
46) Acenaphthene-d10	7.787	164	202219	8.00	ppm	0.00
69) Phenanthrene-d10	9.972	188	368745	8.00	ppm	0.00
84) Chrysene-d12	14.155	240	317308	8.00	ppm	0.00
93) Perylene-d12	16.271	264	304839	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.625	152	98373	8.00	ppm	0.00
105) Phenanthrene-d10a	9.972	188	368745	8.00	ppm	0.00
107) Naphthalene-d8a	5.715	136	372613	8.00	ppm	0.00
109) Chrysene-d12a	14.155	240	317308	8.00	ppm	0.00
111) Phenanthrene-d10b	9.972	188	368745	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.642	112	1265	0.08	ppm	0.00
Spiked Amount 10.000			Recovery = 0.80%			
8) Phenol-d5	4.352	99	7216	0.35	ppm	0.00
Spiked Amount 10.000			Recovery = 3.50%			
25) Nitrobenzene-d5	5.063	82	53241	3.80	ppm	0.00
Spiked Amount 10.000			Recovery = 38.00%			
51) 2-Fluorobiphenyl	6.917	172	156769	4.73	ppm	0.00
Spiked Amount 10.000			Recovery = 47.30%			
74) 2,4,6-Tribromophenol	8.915	330	10100	2.16	ppm	0.00
Spiked Amount 10.000			Recovery = 21.60%			
87) Terphenyl-d14	12.547	244	229533	5.81	ppm	0.00
Spiked Amount 10.000			Recovery = 58.10%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e5p3799\
Data File : 5p80264.d
Acq On : 12 Dec 2021 1:52 pm
Operator : kristis
Sample : op37045-mb1 Inst : MS5P
Misc : op37045,e5p3799,250,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 12 23:28:24 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 12 23:12:05 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3808\
Data File : 5p80446.d
Acq On : 17 Dec 2021 2:40 am
Operator : chriss2
Sample : op37046-mb1 Inst : MS5P
Misc : op37046,e5p3808,250,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 17 06:44:20 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Dec 17 05:56:41 2021
Response via : Initial Calibration

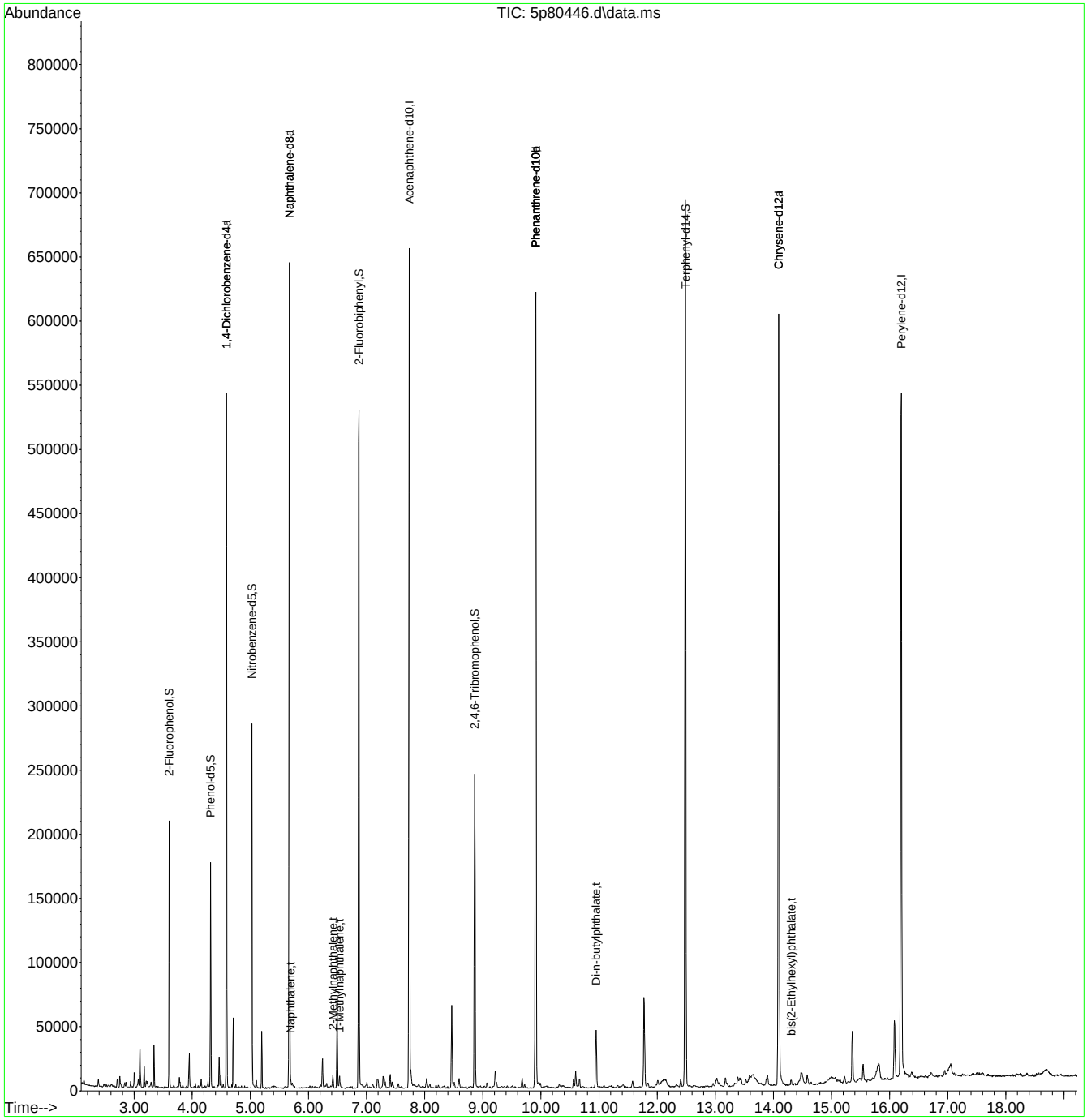
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.588	152	73994	8.00	ppm	0.00
24) Naphthalene-d8	5.672	136	288846	8.00	ppm	0.00
46) Acenaphthene-d10	7.734	164	163911	8.00	ppm	0.00
69) Phenanthrene-d10	9.914	188	291845	8.00	ppm	0.00
84) Chrysene-d12	14.091	240	249056	8.00	ppm	-0.01
93) Perylene-d12	16.202	264	241333	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.588	152	73994	8.00	ppm	0.00
105) Phenanthrene-d10a	9.914	188	291845	8.00	ppm	0.00
107) Naphthalene-d8a	5.672	136	288846	8.00	ppm	0.00
109) Chrysene-d12a	14.091	240	249056	8.00	ppm	-0.01
111) Phenanthrene-d10b	9.914	188	291845	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.605	112	45374	3.79	ppm	0.00
Spiked Amount 10.000			Recovery = 37.90%			
8) Phenol-d5	4.315	99	40776	2.65	ppm	0.00
Spiked Amount 10.000			Recovery = 26.50%			
25) Nitrobenzene-d5	5.026	82	70676	6.50	ppm	0.00
Spiked Amount 10.000			Recovery = 65.00%			
51) 2-Fluorobiphenyl	6.869	172	189403	7.04	ppm	0.00
Spiked Amount 10.000			Recovery = 70.40%			
74) 2,4,6-Tribromophenol	8.861	330	31656	8.54	ppm	0.00
Spiked Amount 10.000			Recovery = 85.40%			
87) Terphenyl-d14	12.489	244	291640	9.40	ppm	0.00
Spiked Amount 10.000			Recovery = 94.00%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
38) Naphthalene	5.693	128	1028	0.03	ppm	86
44) 2-Methylnaphthalene	6.420	141	1943	0.08	ppm	91
45) 1-Methylnaphthalene	6.532	141	2342	0.11	ppm	91
81) Di-n-butylphthalate	10.950	149	27546	0.59	ppm	98
92) bis(2-Ethylhexyl)phtha...	14.305	149	1892	0.07	ppm	94

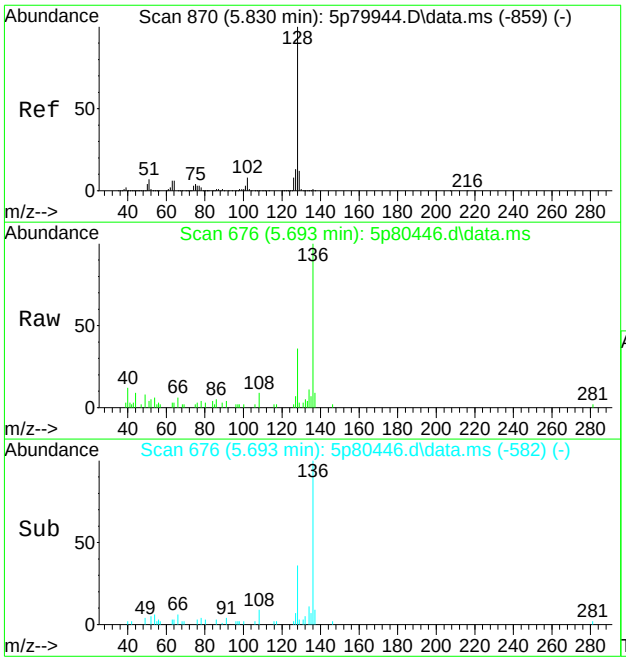
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3808\
Data File : 5p80446.d
Acq On : 17 Dec 2021 2:40 am
Operator : chriss2
Sample : op37046-mb1 Inst : MS5P
Misc : op37046,e5p3808,250,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 17 06:44:20 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Dec 17 05:56:41 2021
Response via : Initial Calibration

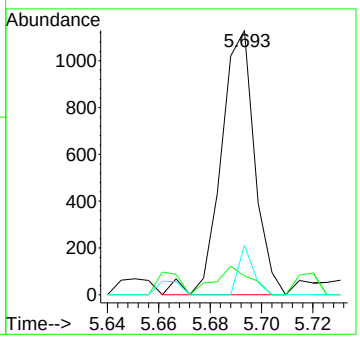


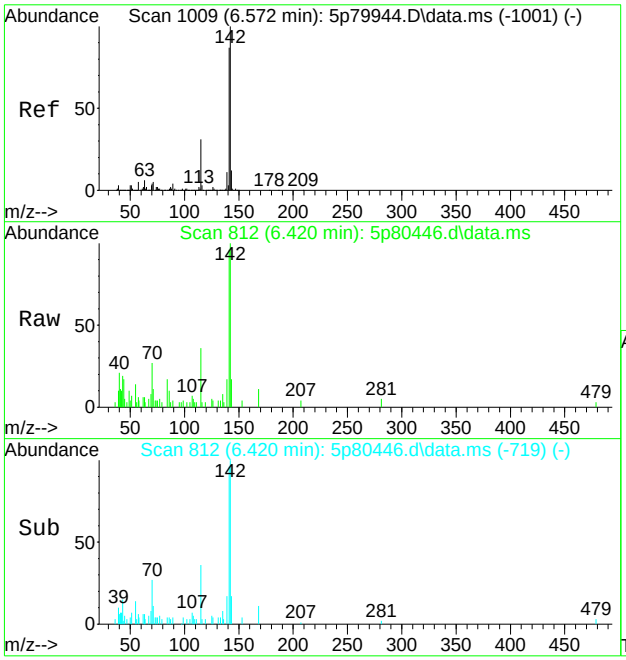


#38
Naphthalene
Concen: 0.03 ppm
RT: 5.693 min Scan# 676
Delta R.T. 0.000 min
Lab File: 5p80446.d
Acq: 17 Dec 2021 2:40 am

Tgt Ion:128 Resp: 1028

Ion	Ratio	Lower	Upper
128	100		
129	2.8	0.0	41.2
127	16.2	0.0	43.2

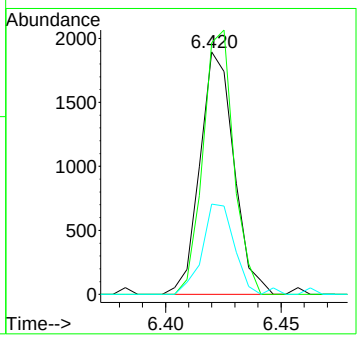


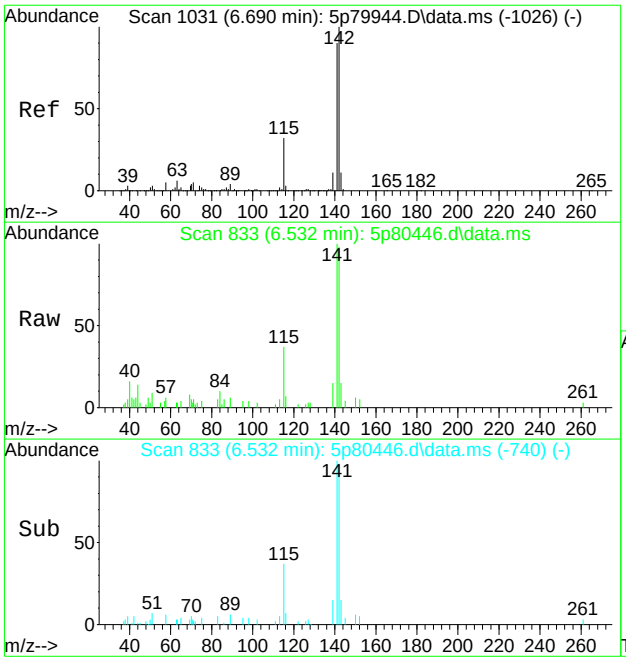


#44
2-Methylnaphthalene
Concen: 0.08 ppm
RT: 6.420 min Scan# 812
Delta R.T. -0.005 min
Lab File: 5p80446.d
Acq: 17 Dec 2021 2:40 am

Tgt Ion:141 Resp: 1943

Ion	Ratio	Lower	Upper
141	100		
142	103.7	85.3	145.3
115	37.3	5.2	65.2

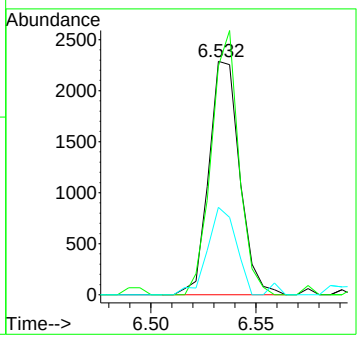


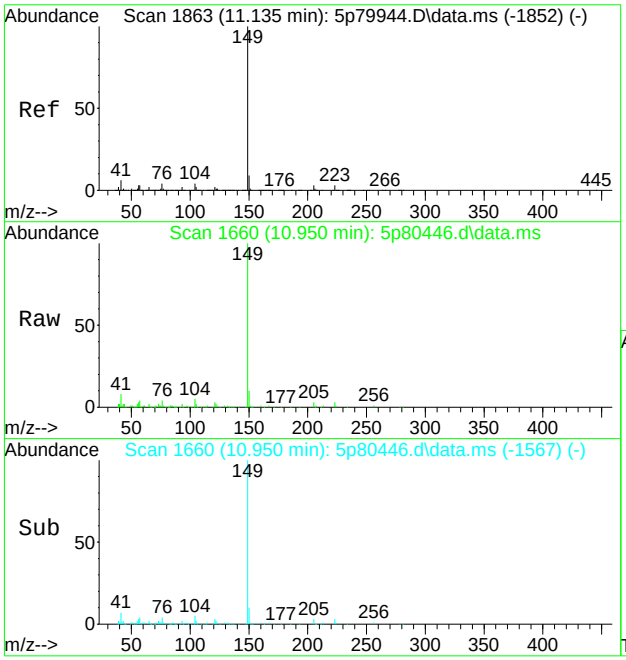


#45
1-Methylnaphthalene
Concen: 0.11 ppm
RT: 6.532 min Scan# 833
Delta R.T. -0.005 min
Lab File: 5p80446.d
Acq: 17 Dec 2021 2:40 am

Tgt Ion:141 Resp: 2342

Ion	Ratio	Lower	Upper
141	100		
142	97.9	79.7	139.7
115	37.4	5.6	65.6

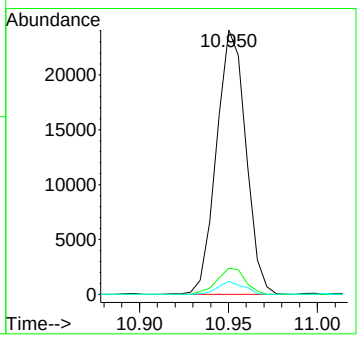


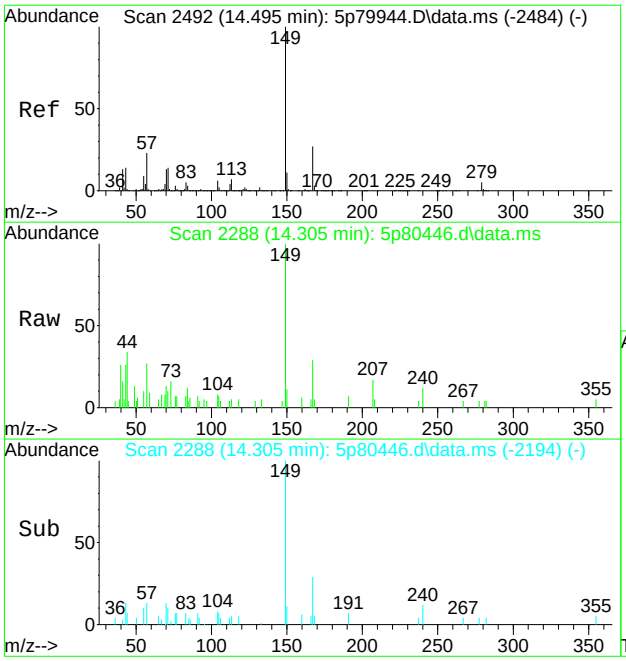


#81
Di-n-butylphthalate
Concen: 0.59 ppm
RT: 10.950 min Scan# 1660
Delta R.T. -0.005 min
Lab File: 5p80446.d
Acq: 17 Dec 2021 2:40 am

Tgt Ion:149 Resp: 27546

Ion	Ratio	Lower	Upper
149	100		
150	9.8	0.0	39.2
104	4.9	0.0	34.4

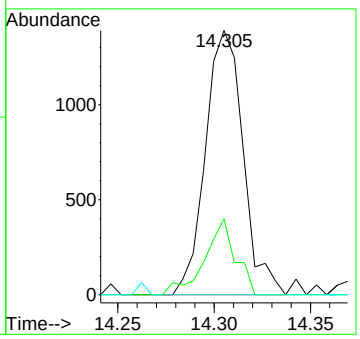




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.07 ppm
RT: 14.305 min Scan# 2288
Delta R.T. 0.000 min
Lab File: 5p80446.d
Acq: 17 Dec 2021 2:40 am

Tgt Ion:149 Resp: 1892

Ion	Ratio	Lower	Upper
149	100		
167	28.8	0.0	56.6
279	0.0	0.0	34.8



GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA2460-MB	AA92385.D	1	12/10/21	WC	n/a	n/a	GAA2460

The QC reported here applies to the following samples: **Method:** RSK-175

JD36319-2, JD36319-3

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.11	0.080	ug/l	
74-84-0	Ethane	ND	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

Laboratory Control Sample Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA2460-LCS	AA92382.D	1	12/10/21	WC	n/a	n/a	GAA2460

The QC reported here applies to the following samples: **Method:** RSK-175

JD36319-2, JD36319-3

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
74-82-8	Methane	11	11.7	106	59-134
74-84-0	Ethane	23	24.6	107	63-135
74-85-1	Ethene	31	33.0	106	62-133

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36243-11DUP	AA92387.D	1	12/10/21	WC	n/a	n/a	GAA2460
JD36243-11	AA92386.D	1	12/10/21	WC	n/a	n/a	GAA2460

The QC reported here applies to the following samples: **Method:** RSK-175

JD36319-2, JD36319-3

CAS No.	Compound	JD36243-11 ug/l	Q	DUP ug/l	Q	RPD	Limits
74-82-8	Methane	2.10		1.99		5	20
74-84-0	Ethane	ND		ND		nc	20
74-85-1	Ethene	0.43		0.41		6	20

* = Outside of Control Limits.

Initial Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2456-ICC2456
Lab FileID: AA92263.D

Response Factor Report GCAA

Method : C:\MSDCHEM\1\METHODS\MAA2456.M (ChemStation Integrator)
Title : METHOD V8015 DG by GC-FID
Last Update : Mon Dec 06 16:10:37 2021
Response via : Initial Calibration

Calibration Files
200 =AA92264.d 100 =AA92263.d 20 =AA92262.d 10 =AA92261.d
2 =AA92258.d 1 =AA92256.d 500 =AA92265.d 1000=AA92269.d
= =

Compound	200	100	20	10	2	1	500	1000	Avg	%RSD
1) Methane	2.585	2.531	2.152	2.154	2.718	3.010	2.286	2.195	2.454 E4	12.68
2) Ethane	4.867	4.800	3.704	4.135	4.795	4.358	4.277	4.192	4.391 E4	9.23
3) Ethene	4.908	4.814	3.689	4.094	5.190	4.127	4.310	4.210	4.418 E4	11.38
4) Propane	7.479	7.619	5.136	6.489	7.688	6.323	6.605	6.555	6.737 E4	12.65
5) n-Butane	0.965	1.028	0.705	0.864	1.029	0.940	0.868	0.870	0.909 E5	11.74
6) n-Pentane	1.130	1.243	1.041	1.125	1.267	1.169	1.053	1.085	1.139 E5	7.29
7) Hexane	1.197	1.337	1.165	1.503	1.503	1.741	1.135	1.307	1.361 E5	15.33

(#) = Out of Range ### Number of calibration levels exceeded format ###

MAA2456.M Tue Dec 07 13:09:06 2021

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2456-ICV2456
Lab FileID: AA92270.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
Data File : AA92270.d
Signal(s) : FID1A.ch
Acq On : 6 Dec 2021 4:14 pm
Operator : williamc
Sample : icv2456-100
Misc : GC58872,GAA2456,,,,,1
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 06 16:24:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	24.540	25.806 E3	-5.2	102	0.00
2	Ethane	43.912	48.133 E3	-9.6	100	0.00
3	Ethene	44.177	48.632 E3	-10.1	101	0.00
4	Propane	67.367	68.304 E3	-1.4	90	0.00
5	n-Butane	90.851	86.895 E3	4.4	85	0.00
6	n-Pentane	113.932	85.778 E3	24.7#	69	0.00
7	Hexane	136.098	82.086 E3	39.7#	61	0.01

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA2456.M Tue Dec 07 13:08:39 2021

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2460-CC2456
Lab FileID: AA92381.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
Data File : AA92381.d
Signal(s) : FID1A.ch
Acq On : 10 Dec 2021 8:07 am
Operator : williamc
Sample : cc2456-100
Misc : GC58905,GAA2460,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 10 08:17:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	24.540	24.482 E3	0.2	97	0.00
2	Ethane	43.912	45.295 E3	-3.1	94	0.00
3	Ethene	44.177	45.681 E3	-3.4	95	0.00
4	Propane	67.367	68.428 E3	-1.6	90	0.00
5	n-Butane	90.851	87.542 E3	3.6	85	0.00
6	n-Pentane	113.932	108.517 E3	4.8	87	0.01
7	Hexane	136.098	131.152 E3	3.6	98	0.03

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA2456.M Fri Dec 10 16:22:14 2021

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2460-CC2456
Lab FileID: AA92396.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
Data File : AA92396.d
Signal(s) : FID1A.ch
Acq On : 10 Dec 2021 11:29 am
Operator : williamc
Sample : cc2456-100
Misc : GC58905,GAA2460,,,,,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 10 11:39:47 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	24.540	24.828 E3	-1.2	98	0.00
2	Ethane	43.912	46.171 E3	-5.1	96	0.00
3	Ethene	44.177	46.344 E3	-4.9	96	-0.02
4	Propane	67.367	71.615 E3	-6.3	94	-0.01
5	n-Butane	90.851	94.948 E3	-4.5	92	-0.01
6	n-Pentane	113.932	117.397 E3	-3.0	94	-0.02
7	Hexane	136.098	130.414 E3	4.2	98	-0.03

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA2456.M Fri Dec 10 16:21:36 2021

10.4.4 10

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2460-CC2456
Lab FileID: AA92411.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
Data File : AA92411.d
Signal(s) : FID1A.ch
Acq On : 10 Dec 2021 2:57 pm
Operator : williamc
Sample : cc2456-100
Misc : GC58895,GAA2460,,,,,1
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 10 15:07:20 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	24.540	25.076 E3	-2.2	99	0.00
2	Ethane	43.912	45.835 E3	-4.4	95	0.00
3	Ethene	44.177	46.089 E3	-4.3	96	-0.01
4	Propane	67.367	71.313 E3	-5.9	94	0.00
5	n-Butane	90.851	94.955 E3	-4.5	92	0.00
6	n-Pentane	113.932	116.691 E3	-2.4	94	0.00
7	Hexane	136.098	125.434 E3	7.8	94	-0.02

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA2456.M Fri Dec 10 16:21:18 2021

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: GAA2456	**Method:** RSK-175	**Instrument ID:** GCAA

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
GAA2456-IC2456	AA92256.D	12/06/21 11:08	n/a	Initial cal 1
GAA2456-IC2456	AA92258.D	12/06/21 11:35	n/a	Initial cal 2
GAA2456-IC2456	AA92261.D	12/06/21 13:19	n/a	Initial cal 10
GAA2456-IC2456	AA92262.D	12/06/21 13:32	n/a	Initial cal 20
GAA2456-ICC2456	AA92263.D	12/06/21 13:46	n/a	Initial cal 100
GAA2456-IC2456	AA92264.D	12/06/21 13:59	n/a	Initial cal 200
GAA2456-IC2456	AA92265.D	12/06/21 14:28	n/a	Initial cal 500
GAA2456-IC2456	AA92269.D	12/06/21 15:58	n/a	Initial cal 1000
GAA2456-ICV2456	AA92270.D	12/06/21 16:14	n/a	Initial cal verification 100

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: GAA2460	**Method:** RSK-175	**Instrument ID:** GCAA

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
GAA2460-CC2456	AA92381.D	12/10/21 08:07	n/a	Continuing cal 100
GAA2460-LCS	AA92382.D	12/10/21 08:21	n/a	Laboratory Control Sample
GAA2460-MB	AA92385.D	12/10/21 09:04	n/a	Method Blank
JD36243-11	AA92386.D	12/10/21 09:19	n/a	(used for QC only; not part of job JD36319)
JD36243-11DUP	AA92387.D	12/10/21 09:32	n/a	Duplicate
ZZZZZZ	AA92388.D	12/10/21 09:45	n/a	(unrelated sample)
ZZZZZZ	AA92389.D	12/10/21 09:58	n/a	(unrelated sample)
ZZZZZZ	AA92390.D	12/10/21 10:12	n/a	(unrelated sample)
ZZZZZZ	AA92391.D	12/10/21 10:24	n/a	(unrelated sample)
ZZZZZZ	AA92392.D	12/10/21 10:37	n/a	(unrelated sample)
ZZZZZZ	AA92393.D	12/10/21 10:50	n/a	(unrelated sample)
ZZZZZZ	AA92394.D	12/10/21 11:03	n/a	(unrelated sample)
ZZZZZZ	AA92395.D	12/10/21 11:16	n/a	(unrelated sample)
GAA2460-CC2456	AA92396.D	12/10/21 11:29	n/a	Continuing cal 100
ZZZZZZ	AA92397.D	12/10/21 11:42	n/a	(unrelated sample)
ZZZZZZ	AA92398.D	12/10/21 11:55	n/a	(unrelated sample)
ZZZZZZ	AA92399.D	12/10/21 12:08	n/a	(unrelated sample)
JD36319-2	AA92400.D	12/10/21 12:26	n/a	HOFF MW-A
JD36319-3	AA92401.D	12/10/21 12:42	n/a	HOFF MW-10
JD36319-3	AA92402.D	12/10/21 12:58	n/a	HOFF MW-10
ZZZZZZ	AA92403.D	12/10/21 13:11	n/a	(unrelated sample)
JD36376-4	AA92404.D	12/10/21 13:25	n/a	(used for QC only; not part of job JD36319)
JD36376-4DUP	AA92405.D	12/10/21 13:38	n/a	Duplicate
ZZZZZZ	AA92406.D	12/10/21 13:52	n/a	(unrelated sample)
ZZZZZZ	AA92407.D	12/10/21 14:05	n/a	(unrelated sample)
ZZZZZZ	AA92408.D	12/10/21 14:18	n/a	(unrelated sample)
ZZZZZZ	AA92409.D	12/10/21 14:31	n/a	(unrelated sample)
ZZZZZZ	AA92410.D	12/10/21 14:44	n/a	(unrelated sample)
GAA2460-CC2456	AA92411.D	12/10/21 14:57	n/a	Continuing cal 100
ZZZZZZ	AA92412.D	12/10/21 15:11	n/a	(unrelated sample)
ZZZZZZ	AA92413.D	12/10/21 15:24	n/a	(unrelated sample)
GAA2460-CC2456	AA92414.D	12/10/21 15:39	n/a	Continuing cal 100

GC Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92400.d
Signal(s) : FID1A.ch
Acq On : 10 Dec 2021 12:26 pm
Operator : williamc
Sample : jd36319-2
Misc : GC58906,GAA2460,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 10 16:06:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.348	6821758	277.988	PPMV

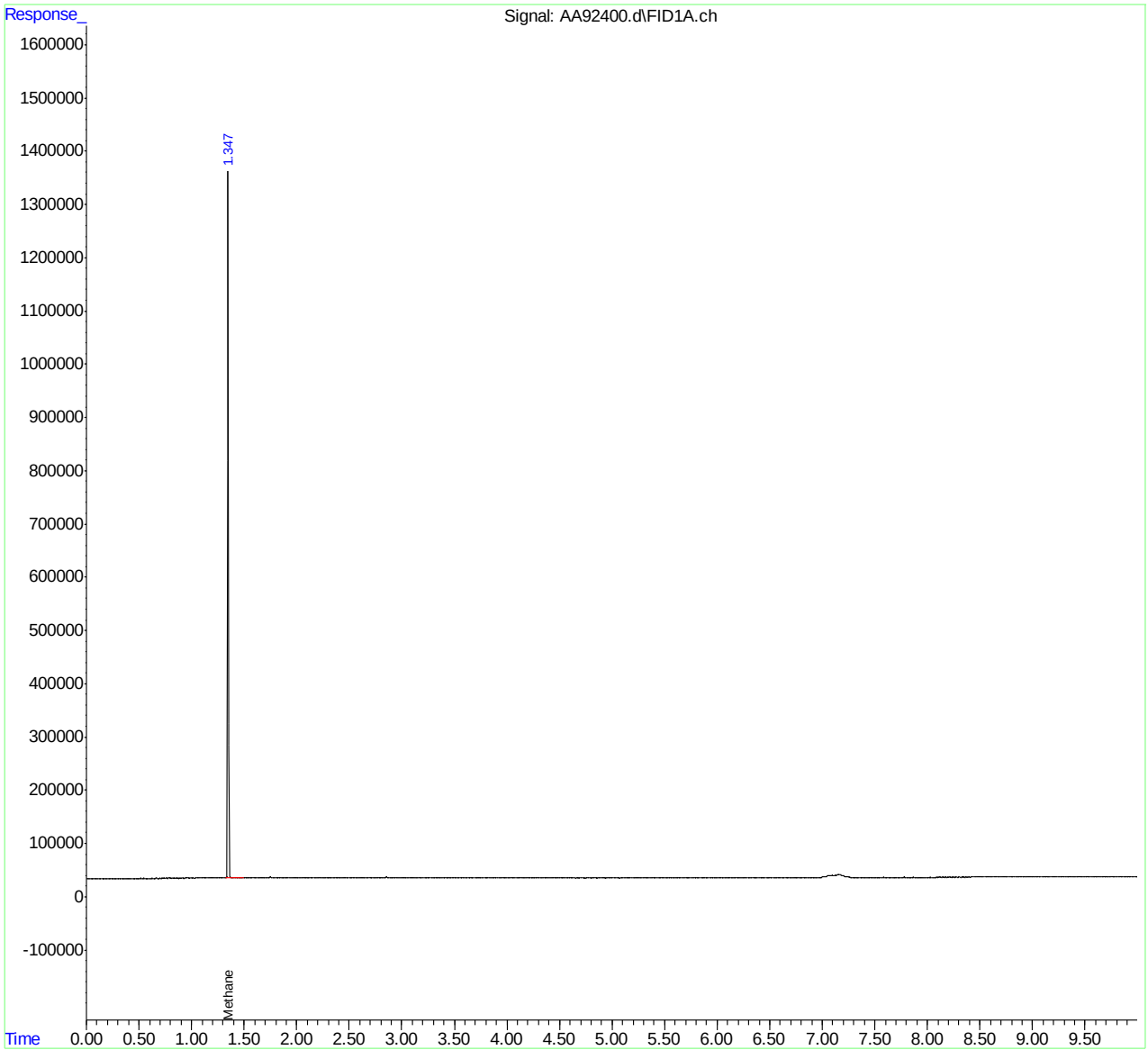
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92400.d
Signal(s) : FID1A.ch
Acq On : 10 Dec 2021 12:26 pm
Operator : williamc
Sample : jd36319-2
Misc : GC58906,GAA2460,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 10 16:06:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92400.d**
Date Acquired **12/10/2021 12:26**
Sample Name **jd36319-2**
Sample Multiplier **1**
Temperature(C) **23**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	296	24.29	6821758.2	17477	277.28	182.66	24.03	39820	6.183	30.22	0.11	**30.22**
Ethane	30	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	28640	#DIV/0!	#DIV/0!	0.23	**#DIV/0!**
Ethene	28	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10920	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	34744	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13451	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	60118	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	42425	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92401.d
Signal(s) : FID1A.ch
Acq On : 10 Dec 2021 12:42 pm
Operator : williamc
Sample : jd36319-3
Misc : GC58906,GAA2460,,,,,1
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 10 16:07:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.348	119605387	4873.948	PPMV

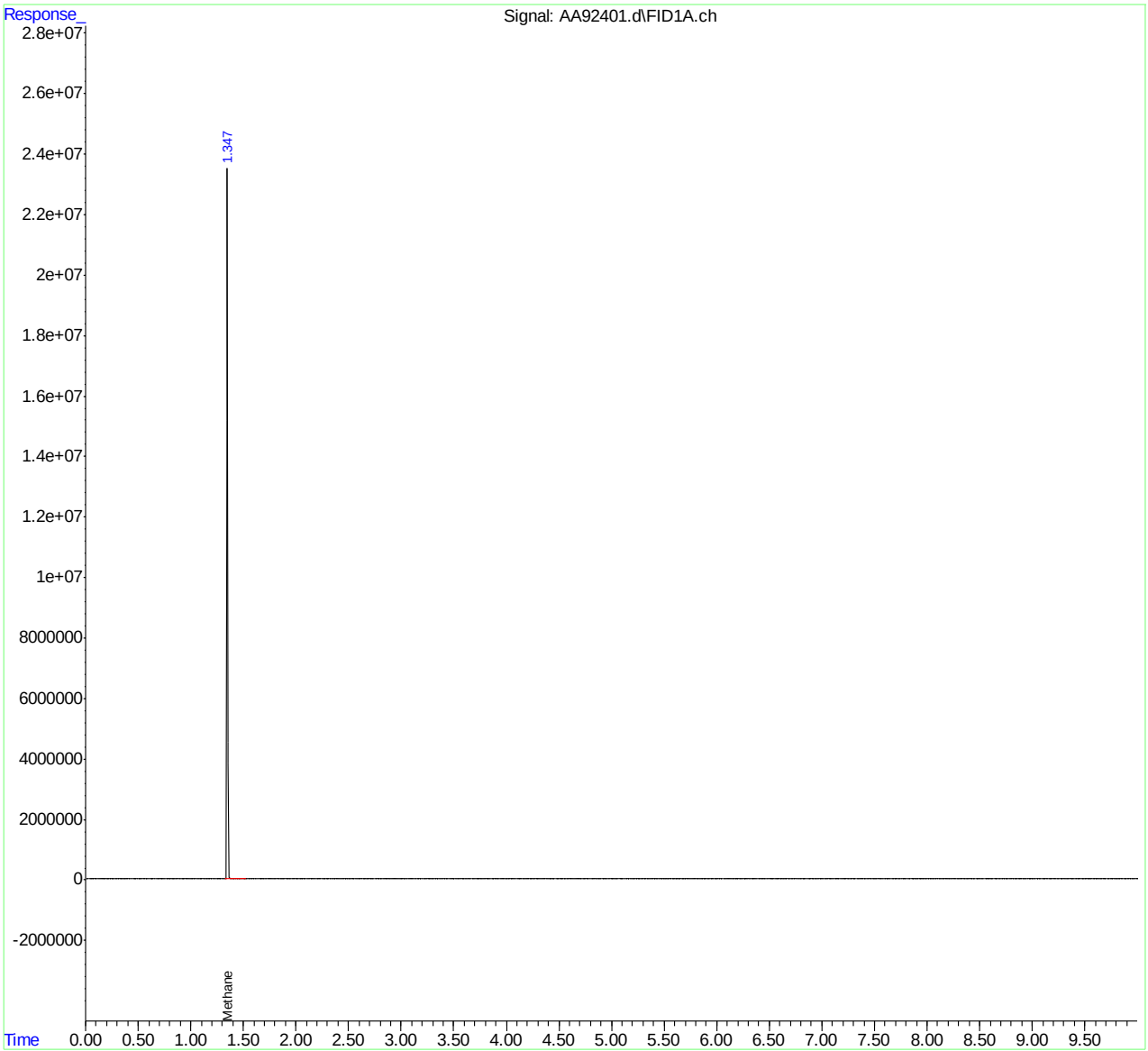
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92401.d
Signal(s) : FID1A.ch
Acq On : 10 Dec 2021 12:42 pm
Operator : williamc
Sample : jd36319-3
Misc : GC58906,GAA2460,,,,,1
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 10 16:07:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92401.d**
Date Acquired **12/10/2021 12:42**
Sample Name **jd36319-3**
Sample Multiplier **1**
Temperature(C) **23**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	296	24.29	119605387	17477	4873.24	3210.41	422.42	39820	108.675	531.10	0.11	**531.10**
Ethane	30	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	28640	#DIV/0!	#DIV/0!	0.23	**#DIV/0!**
Ethene	28	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10920	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	34744	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13451	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	60118	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	42425	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92402.d
Signal(s) : FID1A.ch
Acq On : 10 Dec 2021 12:58 pm
Operator : williamc
Sample : jd36319-3
Misc : GC58906,GAA2460,,,,,20
ALS Vial : 22 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Dec 10 16:08:29 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.353	12180580	9927.232	PPMV

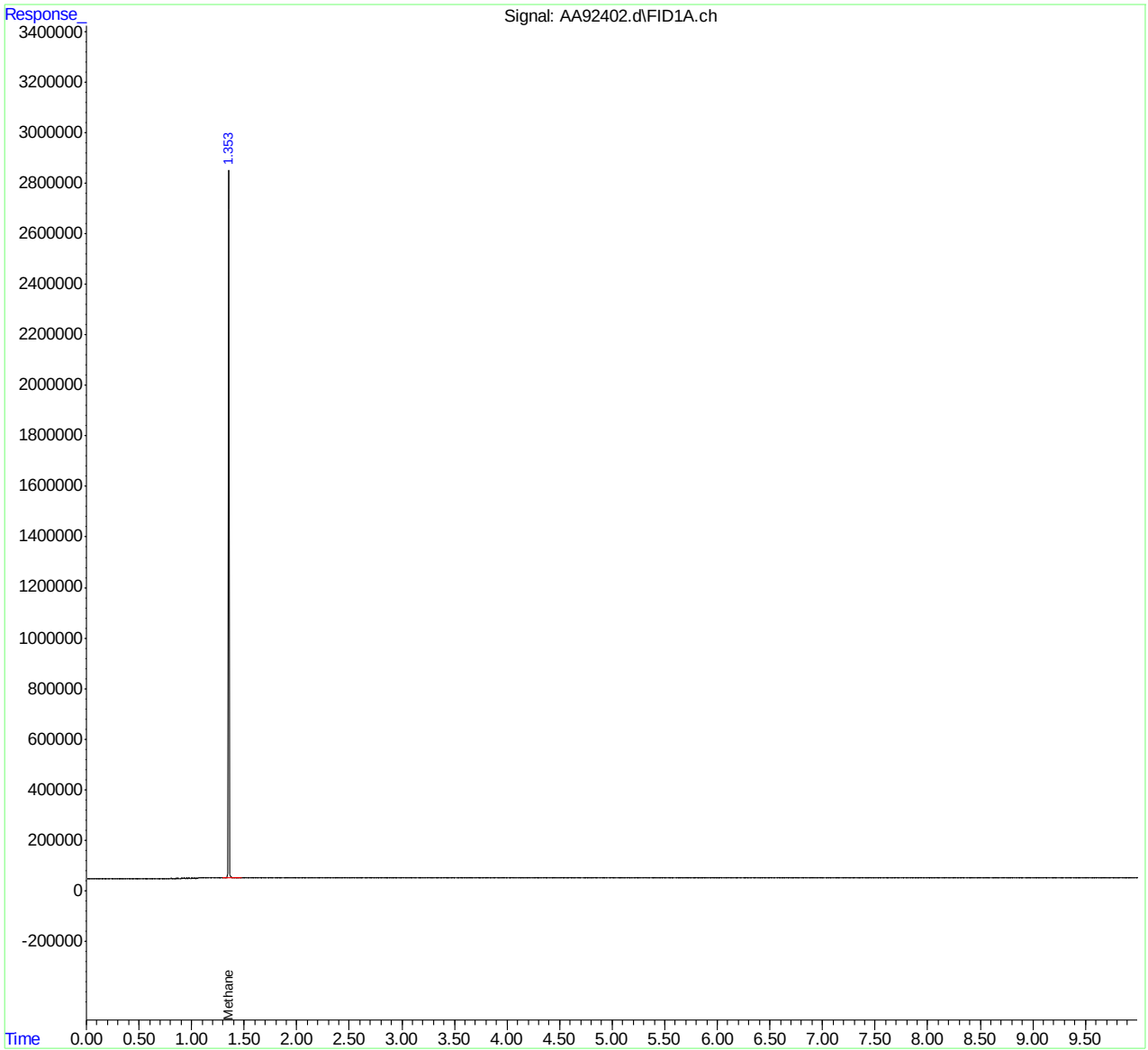
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92402.d
Signal(s) : FID1A.ch
Acq On : 10 Dec 2021 12:58 pm
Operator : williamc
Sample : jd36319-3
Misc : GC58906,GAA2460,,,,,20
ALS Vial : 22 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Dec 10 16:08:29 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92402.d**
Date Acquired **12/10/2021 12:58**
Sample Name **jd36319-3**
Sample Multiplier **20**
Temperature(C) **23**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	296	24.29	12180580	17477	9912.99	6530.52	859.28	39820	221.063	1080.34	2.20	**1080.34**
Ethane	30	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	28640	#DIV/0!	#DIV/0!	4.60	**#DIV/0!**
Ethene	28	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10920	#DIV/0!	#DIV/0!	6.20	**#DIV/0!**
Propane	44	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	34744	#DIV/0!	#DIV/0!	6.40	**#DIV/0!**
n-Butane	42	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13451	#DIV/0!	#DIV/0!	8.60	**#DIV/0!**
n-Pentane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	60118	#DIV/0!	#DIV/0!	7.60	**#DIV/0!**
Hexane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	42425	#DIV/0!	#DIV/0!	8.20	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92385.d
Signal(s) : FID1A.ch
Acq On : 10 Dec 2021 9:04 am
Operator : williamc
Sample : mb
Misc : GC58905,GAA2460,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 10 15:53:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc Units
Target Compounds			
1) Methane	1.334	25071	1.022 PPMV

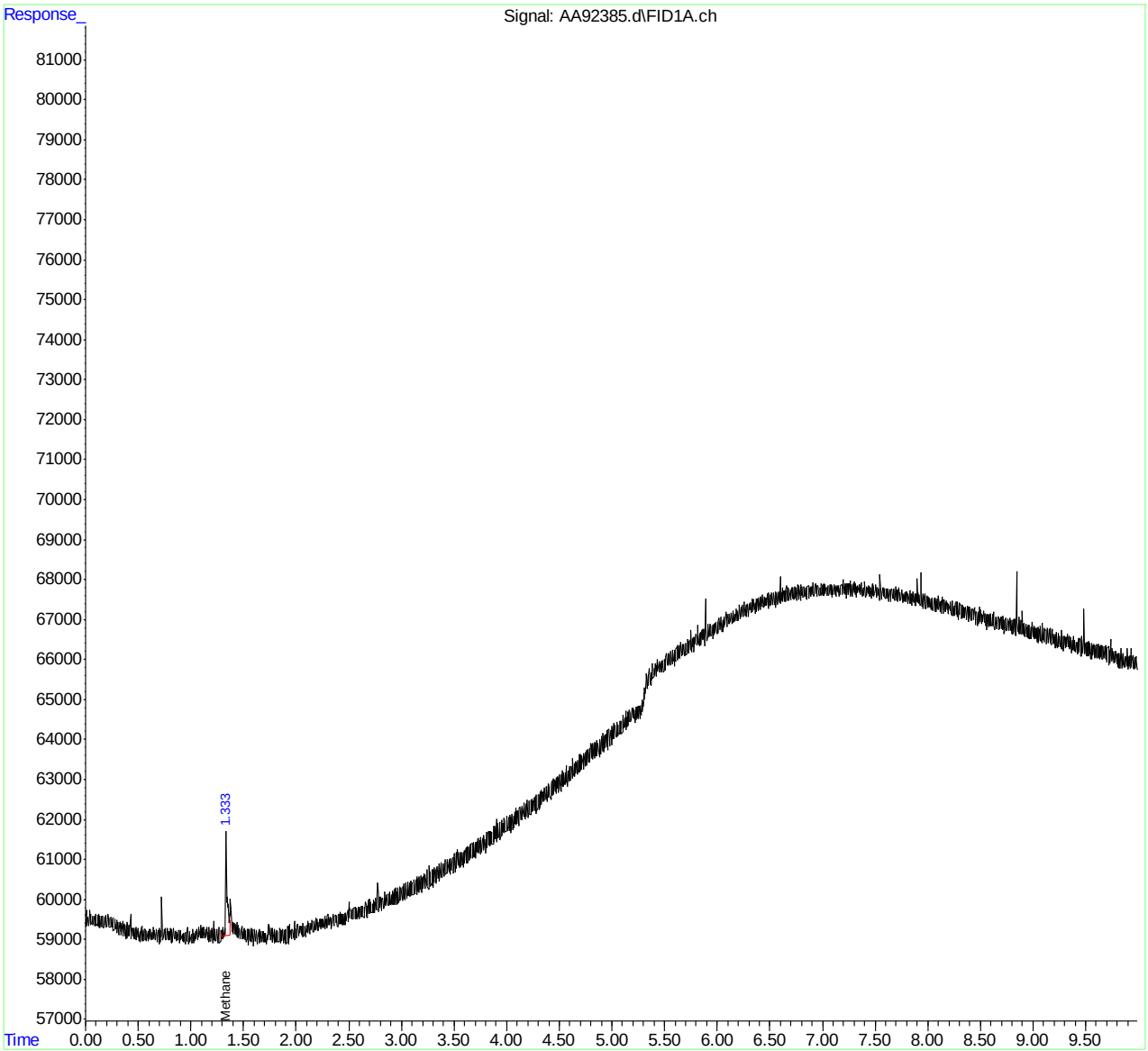
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92385.d
Signal(s) : FID1A.ch
Acq On : 10 Dec 2021 9:04 am
Operator : williamc
Sample : mb
Misc : GC58905,GAA2460,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 10 15:53:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



Dissolved Gas Calculation Worksheet

Data File Name **AA92385.d**
Date Acquired **12/10/2021 9:04**
Sample Name **mb**
Sample Multiplier **1**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	25070.721	17477	0.31	0.20	0.03	39080	0.007	0.03	0.11	**ND**
Ethane	30	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	27860	#DIV/0!	#DIV/0!	0.23	**#DIV/0!**
Ethene	28	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10680	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	33643	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12937	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	58287	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	40945	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- DDT/Endrin Breakdown Checks
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37055-MB1	6G81159.D	1	12/14/21	CP	12/10/21	OP37055	G6G2870

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	74%	10-190%
877-09-8	Tetrachloro-m-xylene	68%	10-190%
2051-24-3	Decachlorobiphenyl	49%	10-156%
2051-24-3	Decachlorobiphenyl	57%	10-156%

Method Blank Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37055-MB1 [a]	6G81216.D	1	12/15/21	CP	12/10/21	OP37055	G6G2871

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	76%	10-190%
877-09-8	Tetrachloro-m-xylene	67%	10-190%
2051-24-3	Decachlorobiphenyl	51%	10-156%
2051-24-3	Decachlorobiphenyl	60%	10-156%

(a) Had TBA cleanup.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37055-BS1	6G81160.D	1	12/14/21	CP	12/10/21	OP37055	G6G2870
OP37055-BSD	6G81161.D	1	12/14/21	CP	12/10/21	OP37055	G6G2870

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.2	0.20	100	0.21	105	5	54-152/36
319-84-6	alpha-BHC	0.2	0.18	90	0.19	95	5	50-161/35
319-85-7	beta-BHC	0.2	0.21	105	0.21	105	0	56-150/36
319-86-8	delta-BHC	0.2	0.20	100	0.20	100	0	10-183/39
58-89-9	gamma-BHC (Lindane)	0.2	0.20	100	0.21	105	5	53-157/36
5103-71-9	alpha-Chlordane	0.2	0.20	100	0.21	105	5	57-152/37
5103-74-2	gamma-Chlordane	0.2	0.20	100	0.21	105	5	55-153/37
57-74-9	Chlordane (alpha and gamma)	0.4	0.40	100	0.42	105	5	55-152/37
60-57-1	Dieldrin	0.2	0.20	100	0.21	105	5	56-163/36
72-54-8	4,4'-DDD	0.2	0.18	90	0.20	100	5	50-154/37
72-55-9	4,4'-DDE	0.2	0.19	95	0.21	105	10	47-157/43
50-29-3	4,4'-DDT	0.2	0.21	105	0.22	110	5	52-167/42
72-20-8	Endrin	0.2	0.20	100	0.22	110	5	55-165/36
1031-07-8	Endosulfan sulfate	0.2	0.17	85	0.17	85	0	43-150/36
7421-93-4	Endrin aldehyde	0.2	0.20	100	0.18	90	11	33-163/41
53494-70-5	Endrin ketone	0.2	0.20	100	0.20	100	0	42-178/38
959-98-8	Endosulfan-I	0.2	0.20	100	0.21	105	5	57-154/37
33213-65-9	Endosulfan-II	0.2	0.20	100	0.21	105	0	54-160/38
76-44-8	Heptachlor	0.2	0.19	95	0.20	100	5	55-151/37
1024-57-3	Heptachlor epoxide	0.2	0.21	105	0.22	110	5	58-157/36
72-43-5	Methoxychlor	0.2	0.18	90	0.20	100	0	55-155/39

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	94%	91%	10-190%
877-09-8	Tetrachloro-m-xylene	82%	83%	10-190%
2051-24-3	Decachlorobiphenyl	52%	71%	10-156%
2051-24-3	Decachlorobiphenyl	58%	71%	10-156%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37055-BS1	6G81160.D	1	12/14/21	CP	12/10/21	OP37055	G6G2870
OP37055-BSD [a]	6G81218.D	1	12/15/21	CP	12/10/21	OP37055	G6G2871

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.2	0.20	100	0.22	110	5	54-152/36
319-84-6	alpha-BHC	0.2	0.18	90	0.20	100	5	50-161/35
319-85-7	beta-BHC	0.2	0.21	105	0.22	110	0	56-150/36
319-86-8	delta-BHC	0.2	0.20	100	0.23	115	4	10-183/39
58-89-9	gamma-BHC (Lindane)	0.2	0.20	100	0.22	110	5	53-157/36
5103-71-9	alpha-Chlordane	0.2	0.20	100	0.22	110	5	57-152/37
5103-74-2	gamma-Chlordane	0.2	0.20	100	0.22	110	5	55-153/37
57-74-9	Chlordane (alpha and gamma)	0.4	0.40	100	0.44	110	5	55-152/37
60-57-1	Dieldrin	0.2	0.20	100	0.22	110	5	56-163/36
72-54-8	4,4'-DDD	0.2	0.18	90	0.21	105	5	50-154/37
72-55-9	4,4'-DDE	0.2	0.19	95	0.21	105	5	47-157/43
50-29-3	4,4'-DDT	0.2	0.21	105	0.23	115	9	52-167/42
72-20-8	Endrin	0.2	0.20	100	0.22	110	0	55-165/36
1031-07-8	Endosulfan sulfate	0.2	0.17	85	0.20	100	10	43-150/36
7421-93-4	Endrin aldehyde	0.2	0.20	100	0.14	70	7	33-163/41
53494-70-5	Endrin ketone	0.2	0.20	100	0.25	125	4	42-178/38
959-98-8	Endosulfan-I	0.2	0.20	100	0.22	110	5	57-154/37
33213-65-9	Endosulfan-II	0.2	0.20	100	0.22	110	0	54-160/38
76-44-8	Heptachlor	0.2	0.19	95	0.21	105	5	55-151/37
1024-57-3	Heptachlor epoxide	0.2	0.21	105	0.23	115	4	58-157/36
72-43-5	Methoxychlor	0.2	0.18	90	0.21	105	0	55-155/39

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	94%	93%	10-190%
877-09-8	Tetrachloro-m-xylene	82%	83%	10-190%
2051-24-3	Decachlorobiphenyl	52%	78%	10-156%
2051-24-3	Decachlorobiphenyl	58%	76%	10-156%

(a) Had TBA cleanup.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37055-MS	6G81198.D	1	12/15/21	CP	12/10/21	OP37055	G6G2871
OP37055-MSD	6G81199.D	1	12/15/21	CP	12/10/21	OP37055	G6G2871
JD36387-1	6G81197.D	1	12/15/21	CP	12/10/21	OP37055	G6G2871
JD36387-1	6G81240.D	5	12/17/21	CP	12/10/21	OP37055	G6G2873

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36319-2, JD36319-3, JD36319-4, JD36319-5

CAS No.	Compound	JD36387-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		0.192	0.15	78	0.185	0.15	81	0	10-200/61
319-84-6	alpha-BHC	ND		0.192	0.23	120	0.185	0.25	135	8	10-200/54
319-85-7	beta-BHC	ND		0.192	0.22	114	0.185	0.24	130	9	10-200/56
319-86-8	delta-BHC	ND		0.192	0.21	109	0.185	0.19	103	10	10-200/69
58-89-9	gamma-BHC (Lindane)	ND		0.192	0.19	99	0.185	0.19	103	0	10-200/56
5103-71-9	alpha-Chlordane	ND		0.192	0.19	99	0.185	0.20	108	5	10-200/53
5103-74-2	gamma-Chlordane	ND		0.192	0.18	94	0.185	0.22	119	20	10-200/65
57-74-9	Chlordane (alpha and gamma)	ND		0.385	0.35	91	0.37	0.37	100	6	10-177/61
60-57-1	Dieldrin	ND		0.192	0.18	94	0.185	0.19	103	5	10-200/60
72-54-8	4,4'-DDD	1.1 [b]		0.192	1.1	0* [a]	0.185	1.2	54	9	10-200/68
72-55-9	4,4'-DDE	0.075		0.192	0.20	65	0.185	0.21	73	5	10-200/58
50-29-3	4,4'-DDT	0.033		0.192	0.20	87	0.185	0.20	90	0	10-200/57
72-20-8	Endrin	ND		0.192	0.21	109	0.185	0.21	113	0	10-200/61
1031-07-8	Endosulfan sulfate	ND		0.192	0.16	83	0.185	0.14	76	13	10-200/58
7421-93-4	Endrin aldehyde	ND		0.192	0.062	32	0.185	0.14	76	77* [c]	10-200/62
53494-70-5	Endrin ketone	ND		0.192	0.25	130	0.185	0.30	162	18	10-200/58
959-98-8	Endosulfan-I	ND		0.192	0.22	114	0.185	0.23	124	4	10-200/111
33213-65-9	Endosulfan-II	ND		0.192	0.18	94	0.185	0.19	103	5	10-200/63
76-44-8	Heptachlor	ND		0.192	0.19	99	0.185	0.18	97	5	10-200/65
1024-57-3	Heptachlor epoxide	ND		0.192	0.21	109	0.185	0.22	119	5	10-200/66
72-43-5	Methoxychlor	ND		0.192	0.20	104	0.185	0.19	103	5	10-200/109
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JD36387-1	JD36387-1	Limits
877-09-8	Tetrachloro-m-xylene	126%	134%	224%* [d]	95%	10-190%
877-09-8	Tetrachloro-m-xylene	61%	78%	69%	77%	10-190%
2051-24-3	Decachlorobiphenyl	59%	54%	49%	41%	10-156%
2051-24-3	Decachlorobiphenyl	54%	48%	45%	82%	10-156%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.
(c) Analytical precision exceeds in-house control limits.
(d) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2870-CC2867	**Injection Date:**	12/14/21
Lab File ID:	6G81157.D	**Injection Time:**	04:06
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	567037002	2.06	828191840	1.68
Upper Limit [a]	1134074004	2.56	1656383680	2.18
Lower Limit [b]	283518501	1.56	414095920	1.18

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP37055-MB1	523198235	2.06	752416392	1.68
OP37055-BS1	503597780	2.06	707574516	1.68
OP37055-BSD	540783341	2.06	769173881	1.68
JD36319-2	481442898	2.06	667582910	1.68
JD36319-3	540086204	2.06	777893701	1.68
ZZZZZZ	527113456	2.06	761304071	1.68
ZZZZZZ	558670129	2.06	799050949	1.68
ZZZZZZ	522252738	2.06	737793283	1.69

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2871-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81188.D	**Injection Time:**	00:26
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	638521505	2.06	907769178	1.69
Upper Limit [a]	1277043010	2.56	1815538356	2.19
Lower Limit [b]	319260753	1.56	453884589	1.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
ZZZZZZ	585269658	2.06	701714592	1.69
ZZZZZZ	599065300	2.06	783095612	1.69
ZZZZZZ	546556983	2.07	731983433	1.69
ZZZZZZ	483011004	2.07	644136947	1.69
JD36387-1	615984557	2.07	663554439	1.69
OP37055-MS	600322752	2.06	716217546	1.69
OP37055-MSD	575174669	2.06	707094179	1.69
JD36387-1F	633992820	2.07	681004102	1.69
OP37055-MS2	539772568	2.06	598990103	1.69
OP37055-MSD2	633692714	2.06	706846937	1.69
JD36319-4	794017645	2.06	785493520	1.69
ZZZZZZ	662079638	2.06	700464634	1.69

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2871-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81209.D	**Injection Time:**	07:24
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	733286214	2.06	1078114902	1.69
Upper Limit [a]	1466572428	2.56	2156229804	2.19
Lower Limit [b]	366643107	1.56	539057451	1.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP36976-MB1 [c]	599432129	2.06	825472253	1.69
OP36976-BS1 [c]	621255329	2.06	852399466	1.69
OP37028-MB1 [c]	684604771	2.06	954528111	1.69
OP37028-BS1 [c]	623756561	2.06	867162957	1.69
OP37028-BSD [c]	654021362	2.06	901058995	1.69
OP37055-MB1 [c]	636774596	2.06	884997198	1.69
OP37055-BS1 [c]	601449410	2.06	826933245	1.69
OP37055-BSD [c]	639177229	2.06	886536785	1.69

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Had TBA cleanup.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2872-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81220.D	**Injection Time:**	22:51
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT
Check Std	622201605	2.06	889006402	1.69
Upper Limit [a]	1244403210	2.56	1778012804	2.19
Lower Limit [b]	311100803	1.56	444503201	1.19

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT
OP37101-MB1	563230035	2.06	745875404	1.69
OP37101-BS1	519722392	2.06	702039270	1.69
OP37101-BSD	624901096	2.07	828557292	1.69
ZZZZZZ	771022397	2.06	812328128	1.69
ZZZZZZ	651806446	2.06	908873851	1.69
ZZZZZZ	575088492	2.06	798372424	1.69
ZZZZZZ	550130429	2.06	754039492	1.69
ZZZZZZ	595853415	2.07	829419384	1.69
ZZZZZZ	546998373	2.06	762573382	1.69
ZZZZZZ	573995616	2.06	771001456	1.69
ZZZZZZ	591465723	2.06	836818872	1.69
ZZZZZZ	607698930	2.06	855302112	1.69
ZZZZZZ	589463723	2.06	731212856	1.69
ZZZZZZ	540171718	2.06	761999801	1.69
JD36319-3 [c]	641772619	2.06	933665934	1.69

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run.

Internal Standard Area Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2873-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81259.D	**Injection Time:**	08:00
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT
Check Std	650593697	2.06	956837774	1.69
Upper Limit [a]	1301187394	2.56	1913675548	2.19
Lower Limit [b]	325296849	1.56	478418887	1.19

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT
ZZZZZZ	583585080	2.06	809066177	1.69
ZZZZZZ	593692260	2.06	829193200	1.68
ZZZZZZ	597790594	2.06	847418217	1.69
ZZZZZZ	574606251	2.06	716153675	1.68
ZZZZZZ	584204095	2.06	748015632	1.69
ZZZZZZ	613895897	2.06	887262370	1.69
ZZZZZZ	601741912	2.06	813676600	1.68
ZZZZZZ	613015044	2.06	749380018	1.68
JD36319-5 [c]	899730904	2.06	688396912	1.69
ZZZZZZ	553192671	2.06	688312560	1.69

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Had TBA cleanup.

DDT/Endrin Breakdown Check

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	G6G2870-DDT	**Injection Date:**	12/14/21
Lab File ID:	6G81156.D	**Injection Time:**	03:49
Instrument ID:	GC6G		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	18553187	13413021
4,4'-DDE	29394483	23824968
4,4'-DDT	1698799181	1125174656
DDT Breakdown [a]	2.7 %	3.2 %
Endrin aldehyde	16154546	5502604
Endrin ketone	17867736	4881617
Endrin	1055129160	653822417
Endrin Breakdown [b]	3.1 %	1.6 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G2870-CC2867	6G81157.D	12/14/21	04:06	00:17	Continuing cal 50
OP37055-MB1	6G81159.D	12/14/21	04:42	00:53	Method Blank
OP37055-BS1	6G81160.D	12/14/21	05:00	01:11	Blank Spike
OP37055-BSD	6G81161.D	12/14/21	05:18	01:30	Blank Spike Duplicate
JD36319-2	6G81168.D	12/14/21	07:27	03:38	HOFF MW-A
JD36319-3	6G81169.D	12/14/21	07:45	03:56	HOFF MW-10
ZZZZZZ	6G81170.D	12/14/21	08:03	04:15	(unrelated sample)
ZZZZZZ	6G81171.D	12/14/21	08:22	04:33	(unrelated sample)
ZZZZZZ	6G81172.D	12/14/21	09:44	05:55	(unrelated sample)
G6G2870-CC2867	6G81178.D	12/14/21	11:33	07:44	Continuing cal 25
ZZZZZZ	6G81180.D	12/14/21	12:10	08:22	(unrelated sample)
ZZZZZZ	6G81181.D	12/14/21	12:29	08:40	(unrelated sample)
ZZZZZZ	6G81182.D	12/14/21	12:47	08:59	(unrelated sample)
ZZZZZZ	6G81183.D	12/14/21	13:06	09:17	(unrelated sample)
ZZZZZZ	6G81185.D	12/14/21	13:42	09:54	(unrelated sample)
ZZZZZZ	6G81186.D	12/14/21	14:01	10:12	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2871-DDT
Lab File ID: 6G81187.D
Instrument ID: GC6G
Injection Date: 12/15/21
Injection Time: 00:08

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	19603567	13254854
4,4'-DDE	34203680	16933715
4,4'-DDT	2001163442	1312292366
DDT Breakdown [a]	2.6 %	2.2 %
Endrin aldehyde	7036522	5839044
Endrin ketone	4613686	9058962
Endrin	1261981463	758636908
Endrin Breakdown [b]	0.9 %	1.9 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G2871-CC2867	6G81188.D	12/15/21	00:26	00:17	Continuing cal 50
ZZZZZZ	6G81190.D	12/15/21	01:37	01:29	(unrelated sample)
ZZZZZZ	6G81191.D	12/15/21	01:55	01:47	(unrelated sample)
ZZZZZZ	6G81192.D	12/15/21	02:13	02:05	(unrelated sample)
ZZZZZZ	6G81193.D	12/15/21	02:31	02:23	(unrelated sample)
JD36387-1	6G81197.D	12/15/21	03:44	03:36	(used for QC only; not part of job JD36319)
OP37055-MS	6G81198.D	12/15/21	04:03	03:55	Matrix Spike
OP37055-MSD	6G81199.D	12/15/21	04:21	04:13	Matrix Spike Duplicate
JD36387-1F	6G81200.D	12/15/21	04:40	04:31	(used for QC only; not part of job JD36319)
OP37055-MS2	6G81201.D	12/15/21	04:58	04:50	Matrix Spike
OP37055-MSD2	6G81202.D	12/15/21	05:16	05:08	Matrix Spike Duplicate
JD36319-4	6G81203.D	12/15/21	05:34	05:25	HOFF MW-8DL
ZZZZZZ	6G81205.D	12/15/21	06:10	06:02	(unrelated sample)
G6G2871-CC2867	6G81209.D	12/15/21	07:24	07:16	Continuing cal 25
OP36976-MB1	6G81211.D	12/15/21	08:01	07:52	Method Blank
OP36976-BS1	6G81212.D	12/15/21	08:19	08:11	Blank Spike
OP37028-MB1	6G81213.D	12/15/21	08:37	08:29	Method Blank
OP37028-BS1	6G81214.D	12/15/21	08:56	08:47	Blank Spike
OP37028-BSD	6G81215.D	12/15/21	09:13	09:05	Blank Spike Duplicate
OP37055-MB1	6G81216.D	12/15/21	09:31	09:23	Method Blank
OP37055-BS1	6G81217.D	12/15/21	09:50	09:41	Blank Spike
OP37055-BSD	6G81218.D	12/15/21	10:08	10:00	Blank Spike Duplicate

DDT/Endrin Breakdown Check

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	G6G2872-DDT	**Injection Date:**	12/15/21
Lab File ID:	6G81219.D	**Injection Time:**	22:33
Instrument ID:	GC6G		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	10764094	6615812
4,4'-DDE	13759335	12214906
4,4'-DDT	1939973897	1272748314
DDT Breakdown [a]	1.2 %	1.5 %
Endrin aldehyde	11197981	6882945
Endrin ketone	4987131	3784841
Endrin	1125731744	718548234
Endrin Breakdown [b]	1.4 %	1.5 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G2872-CC2867	6G81220.D	12/15/21	22:51	00:18	Continuing cal 50
OP37101-MB1	6G81222.D	12/15/21	23:45	01:12	Method Blank
OP37101-BS1	6G81223.D	12/16/21	00:03	01:30	Blank Spike
OP37101-BSD	6G81224.D	12/16/21	00:21	01:49	Blank Spike Duplicate
ZZZZZZ	6G81225.D	12/16/21	00:40	02:07	(unrelated sample)
ZZZZZZ	6G81226.D	12/16/21	00:58	02:25	(unrelated sample)
ZZZZZZ	6G81227.D	12/16/21	01:16	02:43	(unrelated sample)
ZZZZZZ	6G81228.D	12/16/21	01:35	03:02	(unrelated sample)
ZZZZZZ	6G81229.D	12/16/21	01:52	03:19	(unrelated sample)
ZZZZZZ	6G81230.D	12/16/21	02:11	03:38	(unrelated sample)
ZZZZZZ	6G81231.D	12/16/21	02:29	03:56	(unrelated sample)
ZZZZZZ	6G81232.D	12/16/21	02:47	04:14	(unrelated sample)
ZZZZZZ	6G81233.D	12/16/21	03:06	04:33	(unrelated sample)
ZZZZZZ	6G81234.D	12/16/21	03:24	04:51	(unrelated sample)
ZZZZZZ	6G81235.D	12/16/21	03:43	05:10	(unrelated sample)
JD36319-3	6G81236.D	12/16/21	04:01	05:28	HOFF MW-10

DDT/Endrin Breakdown Check

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2873-DDT
Lab File ID: 6G81237.D
Instrument ID: GC6G
Injection Date: 12/17/21
Injection Time: 00:22

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	18577192	8616164
4,4'-DDE	33052720	11331786
4,4'-DDT	2036025692	1354452234
DDT Breakdown [a]	2.5 %	1.5 %
Endrin aldehyde	9101933	1807855
Endrin ketone	14642887	5277579
Endrin	1241994494	763433210
Endrin Breakdown [b]	1.9 %	0.9 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G2873-CC2867	6G81238.D	12/17/21	00:40	00:18	Continuing cal 25
JD36387-1	6G81240.D	12/17/21	02:08	01:46	(used for QC only; not part of job JD36319)
ZZZZZZ	6G81243.D	12/17/21	03:01	02:39	(unrelated sample)
OP37053-MB2	6G81244.D	12/17/21	03:33	03:10	Method Blank
OP37162-MB1	6G81244.D	12/17/21	03:33	03:10	Method Blank
OP37053-BS2	6G81245.D	12/17/21	03:51	03:29	Blank Spike
OP37162-BS1	6G81245.D	12/17/21	03:51	03:29	Blank Spike
OP37162-BSD	6G81246.D	12/17/21	04:08	03:46	Blank Spike Duplicate
OP37053-BSD2	6G81246.D	12/17/21	04:08	03:46	Blank Spike Duplicate
ZZZZZZ	6G81247.D	12/17/21	04:26	04:04	(unrelated sample)
ZZZZZZ	6G81248.D	12/17/21	04:44	04:22	(unrelated sample)
ZZZZZZ	6G81249.D	12/17/21	05:02	04:40	(unrelated sample)
JD35487-4	6G81250.D	12/17/21	05:19	04:57	(used for QC only; not part of job JD36319)
OP37162-MS	6G81251.D	12/17/21	05:37	05:15	Matrix Spike
OP37162-LS13	6G81251.D	12/17/21	05:37	05:15	Leachate Spike
OP37162-MSD	6G81252.D	12/17/21	05:55	05:33	Matrix Spike Duplicate
ZZZZZZ	6G81253.D	12/17/21	06:13	05:51	(unrelated sample)
ZZZZZZ	6G81254.D	12/17/21	06:31	06:09	(unrelated sample)
ZZZZZZ	6G81255.D	12/17/21	06:49	06:26	(unrelated sample)
ZZZZZZ	6G81256.D	12/17/21	07:06	06:44	(unrelated sample)
OP37162-LB13	6G81257.D	12/17/21	07:24	07:02	Leachate Blank
OP37162-LB16	6G81258.D	12/17/21	07:42	07:20	Leachate Blank
G6G2873-CC2867	6G81259.D	12/17/21	08:00	07:38	Continuing cal 50
ZZZZZZ	6G81261.D	12/17/21	08:35	08:13	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	G6G2873-DDT	**Injection Date:**	12/17/21
Lab File ID:	6G81237.D	**Injection Time:**	00:22
Instrument ID:	GC6G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	6G81262.D	12/17/21	08:53	08:31	(unrelated sample)
ZZZZZZ	6G81263.D	12/17/21	09:11	08:49	(unrelated sample)
ZZZZZZ	6G81264.D	12/17/21	09:29	09:07	(unrelated sample)
ZZZZZZ	6G81265.D	12/17/21	09:47	09:25	(unrelated sample)
ZZZZZZ	6G81266.D	12/17/21	10:05	09:43	(unrelated sample)
ZZZZZZ	6G81267.D	12/17/21	10:23	10:01	(unrelated sample)
ZZZZZZ	6G81268.D	12/17/21	10:41	10:19	(unrelated sample)
JD36319-5	6G81269.D	12/17/21	10:59	10:37	HOFF MW-8DU
ZZZZZZ	6G81270.D	12/17/21	11:17	10:55	(unrelated sample)

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2870-CC2867	**Injection Date:**	12/14/21
Lab File ID:	6G81157.D	**Injection Time:**	04:06
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	JD36319-3	**Injection Date:**	12/14/21
Lab File ID:	6G81169.D	**Injection Time:**	07:45
Client ID:	HOFF MW-10		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
4,4'-DDE	1	4.91	4.89	0.10		ug/l	144.8
4,4'-DDE [a]	2 [b]	6.63	6.62	0.016		ug/l	

(a) More than 40 % RPD for detected concentrations between the two GC columns.
(b) Final result reported from this column.

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2870-CC2867	**Injection Date:**	12/14/21
Lab File ID:	6G81157.D	**Injection Time:**	04:06
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37055-BS1	**Injection Date:**	12/14/21
Lab File ID:	6G81160.D	**Injection Time:**	05:00
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.77	3.77	0.21		ug/l	4.9
Aldrin	2 [a]	5.01	5.01	0.20		ug/l	
alpha-BHC	1	2.71	2.71	0.21		ug/l	15.4
alpha-BHC	2 [a]	3.55	3.55	0.18		ug/l	
beta-BHC	1	3.06	3.06	0.29		ug/l	32.0
beta-BHC	2 [a]	4.07	4.07	0.21		ug/l	
delta-BHC	1	3.23	3.23	0.22		ug/l	9.5
delta-BHC	2 [a]	4.47	4.47	0.20		ug/l	
gamma-BHC (Lindane)	1	2.99	2.99	0.22		ug/l	9.5
gamma-BHC (Lindane)	2 [a]	3.98	3.98	0.20		ug/l	
alpha-Chlordane	1	4.77	4.77	0.23		ug/l	14.0
alpha-Chlordane	2 [a]	6.35	6.35	0.20		ug/l	
gamma-Chlordane	1	4.61	4.60	0.24		ug/l	18.2
gamma-Chlordane	2 [a]	6.12	6.13	0.20		ug/l	
Chlordane (alpha and gamma)	n/a [b]			0.40		ug/l	
Dieldrin	1	5.24	5.24	0.21		ug/l	4.9
Dieldrin	2 [a]	6.88	6.89	0.20		ug/l	
4,4'-DDD	1 [a]	5.69	5.69	0.18		ug/l	5.4
4,4'-DDD	2	7.57	7.57	0.19		ug/l	
4,4'-DDE	1	4.89	4.89	0.20		ug/l	5.1
4,4'-DDE	2 [a]	6.62	6.62	0.19		ug/l	
4,4'-DDT	1	6.10	6.10	0.21		ug/l	0.0
4,4'-DDT	2 [a]	8.10	8.10	0.21		ug/l	
Endrin	1 [a]	5.55	5.55	0.20		ug/l	4.9
Endrin	2	7.39	7.39	0.21		ug/l	
Endosulfan sulfate	1 [a]	7.13	7.13	0.17		ug/l	5.7
Endosulfan sulfate	2	8.78	8.78	0.18		ug/l	
Endrin aldehyde	1 [a]	6.47	6.47	0.20		ug/l	4.9
Endrin aldehyde	2	8.31	8.31	0.21		ug/l	
Endrin ketone	1 [a]	7.55	7.55	0.20		ug/l	14.0
Endrin ketone	2	9.74	9.74	0.23		ug/l	
Endosulfan-I	1	4.93	4.93	0.22		ug/l	9.5
Endosulfan-I	2 [a]	6.45	6.45	0.20		ug/l	
Endosulfan-II	1 [a]	5.86	5.86	0.20		ug/l	4.9
Endosulfan-II	2	7.74	7.74	0.21		ug/l	
Heptachlor	1	3.46	3.45	0.24		ug/l	23.3
Heptachlor	2 [a]	4.56	4.56	0.19		ug/l	
Heptachlor epoxide	1	4.45	4.45	0.25		ug/l	17.4
Heptachlor epoxide	2 [a]	5.84	5.84	0.21		ug/l	
Methoxychlor	1 [a]	6.88	6.88	0.18		ug/l	10.5
Methoxychlor	2	9.35	9.35	0.20		ug/l	

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2870-CC2867	**Injection Date:**	12/14/21
Lab File ID:	6G81157.D	**Injection Time:**	04:06
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37055-BS1	**Injection Date:**	12/14/21
Lab File ID:	6G81160.D	**Injection Time:**	05:00
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(a) QC results reported from this column.
(b) Final reported result.

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2871-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81209.D	**Injection Time:**	07:24
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37055-BS1	**Injection Date:**	12/15/21
Lab File ID:	6G81217.D	**Injection Time:**	09:50
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.77	3.77	0.22		ug/l	4.7
Aldrin	2 [a]	5.01	5.01	0.21		ug/l	
alpha-BHC	1	2.71	2.71	0.21		ug/l	10.0
alpha-BHC	2 [a]	3.55	3.55	0.19		ug/l	
beta-BHC	1	3.06	3.06	0.31		ug/l	34.0
beta-BHC	2 [a]	4.07	4.07	0.22		ug/l	
delta-BHC	1	3.23	3.23	0.26		ug/l	8.0
delta-BHC	2 [a]	4.47	4.47	0.24		ug/l	
gamma-BHC (Lindane)	1	2.99	2.99	0.23		ug/l	9.1
gamma-BHC (Lindane)	2 [a]	3.98	3.98	0.21		ug/l	
alpha-Chlordane	1	4.77	4.77	0.26		ug/l	21.3
alpha-Chlordane	2 [a]	6.35	6.35	0.21		ug/l	
gamma-Chlordane	1	4.60	4.60	0.26		ug/l	21.3
gamma-Chlordane	2 [a]	6.12	6.12	0.21		ug/l	
Chlordane (alpha and gamma)	n/a [b]			0.42		ug/l	
Dieldrin	1	5.24	5.24	0.24		ug/l	13.3
Dieldrin	2 [a]	6.88	6.88	0.21		ug/l	
4,4'-DDD	1	5.69	5.69	0.25		ug/l	22.2
4,4'-DDD	2 [a]	7.57	7.57	0.20		ug/l	
4,4'-DDE	1	4.89	4.89	0.22		ug/l	9.5
4,4'-DDE	2 [a]	6.61	6.62	0.20		ug/l	
4,4'-DDT	1	6.10	6.10	0.22		ug/l	4.7
4,4'-DDT	2 [a]	8.10	8.10	0.21		ug/l	
Endrin	1	5.55	5.55	0.24		ug/l	8.7
Endrin	2 [a]	7.38	7.39	0.22		ug/l	
Endosulfan sulfate	1 [a]	7.13	7.13	0.22		ug/l	0.0
Endosulfan sulfate	2	8.78	8.78	0.22		ug/l	
Endrin aldehyde	1	6.46	6.47	0.16		ug/l	6.5
Endrin aldehyde	2 [a]	8.31	8.31	0.15		ug/l	
Endrin ketone	1	7.55	7.55	0.26		ug/l	0.0
Endrin ketone	2 [a]	9.74	9.74	0.26		ug/l	
Endosulfan-I	1	4.93	4.93	0.24		ug/l	13.3
Endosulfan-I	2 [a]	6.44	6.45	0.21		ug/l	
Endosulfan-II	1	5.86	5.86	0.22		ug/l	0.0
Endosulfan-II	2 [a]	7.74	7.74	0.22		ug/l	
Heptachlor	1	3.46	3.46	0.24		ug/l	18.2
Heptachlor	2 [a]	4.56	4.56	0.20		ug/l	
Heptachlor epoxide	1	4.45	4.45	0.25		ug/l	12.8
Heptachlor epoxide	2 [a]	5.84	5.84	0.22		ug/l	
Methoxychlor	1	6.88	6.88	0.22		ug/l	4.7
Methoxychlor	2 [a]	9.34	9.34	0.21		ug/l	

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2871-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81209.D	**Injection Time:**	07:24
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37055-BS1	**Injection Date:**	12/15/21
Lab File ID:	6G81217.D	**Injection Time:**	09:50
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(a) QC results reported from this column.
(b) Final reported result.

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2870-CC2867	**Injection Date:**	12/14/21
Lab File ID:	6G81157.D	**Injection Time:**	04:06
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37055-BSD	**Injection Date:**	12/14/21
Lab File ID:	6G81161.D	**Injection Time:**	05:18
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.77	3.77	0.22		ug/l	4.7
Aldrin	2 [a]	5.01	5.01	0.21		ug/l	
alpha-BHC	1	2.71	2.71	0.21		ug/l	10.0
alpha-BHC	2 [a]	3.55	3.55	0.19		ug/l	
beta-BHC	1	3.06	3.06	0.26		ug/l	21.3
beta-BHC	2 [a]	4.07	4.07	0.21		ug/l	
delta-BHC	1	3.23	3.23	0.22		ug/l	9.5
delta-BHC	2 [a]	4.47	4.47	0.20		ug/l	
gamma-BHC (Lindane)	1	2.99	2.99	0.22		ug/l	4.7
gamma-BHC (Lindane)	2 [a]	3.98	3.98	0.21		ug/l	
alpha-Chlordane	1	4.77	4.77	0.29		ug/l	32.0
alpha-Chlordane	2 [a]	6.35	6.35	0.21		ug/l	
gamma-Chlordane	1	4.61	4.60	0.24		ug/l	13.3
gamma-Chlordane	2 [a]	6.13	6.13	0.21		ug/l	
Chlordane (alpha and gamma)	n/a [b]			0.42		ug/l	
Dieldrin	1	5.25	5.24	0.23		ug/l	9.1
Dieldrin	2 [a]	6.88	6.89	0.21		ug/l	
4,4'-DDD	1	5.69	5.69	0.21		ug/l	4.9
4,4'-DDD	2 [a]	7.57	7.57	0.20		ug/l	
4,4'-DDE	1	4.89	4.89	0.22		ug/l	4.7
4,4'-DDE	2 [a]	6.62	6.62	0.21		ug/l	
4,4'-DDT	1 [a]	6.10	6.10	0.22		ug/l	0.0
4,4'-DDT	2	8.10	8.10	0.22		ug/l	
Endrin	1	5.55	5.55	0.23		ug/l	4.4
Endrin	2 [a]	7.39	7.39	0.22		ug/l	
Endosulfan sulfate	1 [a]	7.13	7.13	0.17		ug/l	0.0
Endosulfan sulfate	2	8.78	8.78	0.17		ug/l	
Endrin aldehyde	1 [a]	6.47	6.47	0.18		ug/l	10.5
Endrin aldehyde	2	8.31	8.31	0.20		ug/l	
Endrin ketone	1 [a]	7.55	7.55	0.20		ug/l	9.5
Endrin ketone	2	9.74	9.74	0.22		ug/l	
Endosulfan-I	1	4.93	4.93	0.22		ug/l	4.7
Endosulfan-I	2 [a]	6.45	6.45	0.21		ug/l	
Endosulfan-II	1	5.86	5.86	0.21		ug/l	0.0
Endosulfan-II	2 [a]	7.74	7.74	0.21		ug/l	
Heptachlor	1	3.46	3.45	0.24		ug/l	18.2
Heptachlor	2 [a]	4.56	4.56	0.20		ug/l	
Heptachlor epoxide	1	4.45	4.45	0.25		ug/l	12.8
Heptachlor epoxide	2 [a]	5.84	5.84	0.22		ug/l	
Methoxychlor	1	6.88	6.88	0.23		ug/l	14.0
Methoxychlor	2 [a]	9.35	9.35	0.20		ug/l	

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2870-CC2867	**Injection Date:**	12/14/21
Lab File ID:	6G81157.D	**Injection Time:**	04:06
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37055-BSD	**Injection Date:**	12/14/21
Lab File ID:	6G81161.D	**Injection Time:**	05:18
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(a) QC results reported from this column.
(b) Final reported result.

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2871-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81209.D	**Injection Time:**	07:24
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37055-BSD	**Injection Date:**	12/15/21
Lab File ID:	6G81218.D	**Injection Time:**	10:08
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.77	3.77	0.23		ug/l	4.4
Aldrin	2 [a]	5.01	5.01	0.22		ug/l	
alpha-BHC	1	2.71	2.71	0.22		ug/l	9.5
alpha-BHC	2 [a]	3.55	3.55	0.20		ug/l	
beta-BHC	1	3.06	3.06	0.28		ug/l	24.0
beta-BHC	2 [a]	4.07	4.07	0.22		ug/l	
delta-BHC	1	3.23	3.23	0.25		ug/l	8.3
delta-BHC	2 [a]	4.47	4.47	0.23		ug/l	
gamma-BHC (Lindane)	1	2.99	2.99	0.24		ug/l	8.7
gamma-BHC (Lindane)	2 [a]	3.98	3.98	0.22		ug/l	
alpha-Chlordane	1	4.77	4.77	0.29		ug/l	27.5
alpha-Chlordane	2 [a]	6.35	6.35	0.22		ug/l	
gamma-Chlordane	1	4.60	4.60	0.29		ug/l	27.5
gamma-Chlordane	2 [a]	6.12	6.12	0.22		ug/l	
Chlordane (alpha and gamma)	n/a [b]			0.44		ug/l	
Dieldrin	1	5.24	5.24	0.25		ug/l	12.8
Dieldrin	2 [a]	6.88	6.88	0.22		ug/l	
4,4'-DDD	1	5.69	5.69	0.23		ug/l	9.1
4,4'-DDD	2 [a]	7.57	7.57	0.21		ug/l	
4,4'-DDE	1	4.89	4.89	0.23		ug/l	9.1
4,4'-DDE	2 [a]	6.61	6.62	0.21		ug/l	
4,4'-DDT	1	6.10	6.10	0.24		ug/l	4.3
4,4'-DDT	2 [a]	8.10	8.10	0.23		ug/l	
Endrin	1	5.55	5.55	0.24		ug/l	8.7
Endrin	2 [a]	7.38	7.39	0.22		ug/l	
Endosulfan sulfate	1	7.13	7.13	0.20		ug/l	0.0
Endosulfan sulfate	2 [a]	8.78	8.78	0.20		ug/l	
Endrin aldehyde	1	6.47	6.47	0.14		ug/l	0.0
Endrin aldehyde	2 [a]	8.31	8.31	0.14		ug/l	
Endrin ketone	1	7.55	7.55	0.25		ug/l	0.0
Endrin ketone	2 [a]	9.74	9.74	0.25		ug/l	
Endosulfan-I	1	4.93	4.93	0.24		ug/l	8.7
Endosulfan-I	2 [a]	6.44	6.45	0.22		ug/l	
Endosulfan-II	1	5.86	5.86	0.22		ug/l	0.0
Endosulfan-II	2 [a]	7.74	7.74	0.22		ug/l	
Heptachlor	1	3.46	3.46	0.24		ug/l	13.3
Heptachlor	2 [a]	4.56	4.56	0.21		ug/l	
Heptachlor epoxide	1	4.45	4.45	0.27		ug/l	16.0
Heptachlor epoxide	2 [a]	5.84	5.84	0.23		ug/l	
Methoxychlor	1	6.88	6.88	0.23		ug/l	9.1
Methoxychlor	2 [a]	9.34	9.34	0.21		ug/l	

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2871-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81209.D	**Injection Time:**	07:24
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37055-BSD	**Injection Date:**	12/15/21
Lab File ID:	6G81218.D	**Injection Time:**	10:08
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(a) QC results reported from this column.
(b) Final reported result.

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2871-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81188.D	**Injection Time:**	00:26
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37055-MS	**Injection Date:**	12/15/21
Lab File ID:	6G81198.D	**Injection Time:**	04:03
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.77	3.77	0.15		ug/l	6.5
Aldrin	2	5.01	5.01	0.16		ug/l	
alpha-BHC	1 [a]	2.71	2.71	0.23		ug/l	35.9
alpha-BHC	2	3.55	3.55	0.16		ug/l	
beta-BHC	1 [a]	3.06	3.06	0.22		ug/l	25.6
beta-BHC	2	4.07	4.07	0.17		ug/l	
delta-BHC	1 [a]	3.23	3.23	0.21		ug/l	21.1
delta-BHC	2	4.47	4.47	0.17		ug/l	
gamma-BHC (Lindane)	1 [a]	2.99	2.99	0.19		ug/l	27.3
gamma-BHC (Lindane)	2	3.98	3.98	0.25		ug/l	
alpha-Chlordane	1 [a]	4.77	4.77	0.19		ug/l	11.1
alpha-Chlordane	2	6.35	6.35	0.17		ug/l	
gamma-Chlordane	1 [a]	4.61	4.60	0.18		ug/l	0.0
gamma-Chlordane	2	6.12	6.12	0.18		ug/l	
Chlordane (alpha and gamma)	n/a [b]			0.35		ug/l	
Dieldrin	1 [a]	5.24	5.24	0.18		ug/l	11.8
Dieldrin	2	6.88	6.88	0.16		ug/l	
4,4'-DDD	1	5.69	5.69	1.4	E	ug/l	24.0
4,4'-DDD	2 [a]	7.57	7.57	1.1	E	ug/l	
4,4'-DDE	1 [a]	4.89	4.89	0.20		ug/l	5.1
4,4'-DDE	2	6.61	6.62	0.19		ug/l	
4,4'-DDT	1 [a]	6.10	6.10	0.20		ug/l	10.5
4,4'-DDT	2	8.10	8.10	0.18		ug/l	
Endrin	1 [a]	5.55	5.55	0.21		ug/l	21.1
Endrin	2	7.39	7.39	0.17		ug/l	
Endosulfan sulfate	1 [a]	7.13	7.13	0.16		ug/l	20.7
Endosulfan sulfate	2	8.78	8.78	0.13		ug/l	
Endrin aldehyde	1 [a]	6.47	6.47	0.062		ug/l	7.8
Endrin aldehyde	2	8.31	8.31	0.067		ug/l	
Endrin ketone	1 [a]	7.55	7.55	0.25		ug/l	12.8
Endrin ketone	2	9.74	9.74	0.22		ug/l	
Endosulfan-I	1 [a]	4.93	4.93	0.22		ug/l	37.8
Endosulfan-I	2	6.45	6.45	0.15		ug/l	
Endosulfan-II	1 [a]	5.86	5.86	0.18		ug/l	0.0
Endosulfan-II	2	7.74	7.74	0.18		ug/l	
Heptachlor	1 [a]	3.46	3.46	0.19		ug/l	30.3
Heptachlor	2	4.56	4.56	0.14		ug/l	
Heptachlor epoxide	1 [a]	4.45	4.45	0.21		ug/l	17.4
Heptachlor epoxide	2	5.84	5.84	0.25		ug/l	
Methoxychlor	1 [a]	6.88	6.88	0.20		ug/l	16.2
Methoxychlor	2	9.34	9.35	0.17		ug/l	

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2871-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81188.D	**Injection Time:**	00:26
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37055-MS	**Injection Date:**	12/15/21
Lab File ID:	6G81198.D	**Injection Time:**	04:03
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(a) QC results reported from this column.
(b) Final reported result.

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2871-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81188.D	**Injection Time:**	00:26
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37055-MSD	**Injection Date:**	12/15/21
Lab File ID:	6G81199.D	**Injection Time:**	04:21
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.77	3.77	0.15		ug/l	0.0
Aldrin	2	5.01	5.01	0.15		ug/l	
alpha-BHC	1 [a]	2.71	2.71	0.25		ug/l	38.1
alpha-BHC	2	3.55	3.55	0.17		ug/l	
beta-BHC	1 [a]	3.06	3.06	0.24		ug/l	34.1
beta-BHC	2	4.07	4.07	0.17		ug/l	
delta-BHC	1 [a]	3.23	3.23	0.19		ug/l	23.5
delta-BHC	2	4.47	4.47	0.15		ug/l	
gamma-BHC (Lindane)	1 [a]	2.99	2.99	0.19		ug/l	27.3
gamma-BHC (Lindane)	2	3.98	3.98	0.25		ug/l	
alpha-Chlordane	1 [a]	4.77	4.77	0.20		ug/l	5.1
alpha-Chlordane	2	6.35	6.35	0.19		ug/l	
gamma-Chlordane	1 [a]	4.60	4.60	0.22		ug/l	20.0
gamma-Chlordane	2	6.12	6.12	0.18		ug/l	
Chlordane (alpha and gamma)	n/a [b]			0.37		ug/l	
Dieldrin	1 [a]	5.24	5.24	0.19		ug/l	5.4
Dieldrin	2	6.88	6.88	0.18		ug/l	
4,4'-DDD	1	5.69	5.69	1.4	E	ug/l	15.4
4,4'-DDD	2 [a]	7.57	7.57	1.2	E	ug/l	
4,4'-DDE	1 [a]	4.89	4.89	0.21		ug/l	21.3
4,4'-DDE	2	6.61	6.62	0.26		ug/l	
4,4'-DDT	1 [a]	6.10	6.10	0.20		ug/l	5.1
4,4'-DDT	2	8.10	8.10	0.19		ug/l	
Endrin	1 [a]	5.55	5.55	0.21		ug/l	10.0
Endrin	2	7.39	7.39	0.19		ug/l	
Endosulfan sulfate	1 [a]	7.13	7.13	0.14		ug/l	15.4
Endosulfan sulfate	2	8.78	8.78	0.12		ug/l	
Endrin aldehyde	1 [a]	6.47	6.47	0.14		ug/l	24.0
Endrin aldehyde	2	8.31	8.31	0.11		ug/l	
Endrin ketone	1 [a]	7.55	7.55	0.30		ug/l	18.2
Endrin ketone	2	9.74	9.74	0.25		ug/l	
Endosulfan-I	1 [a]	4.93	4.93	0.23		ug/l	30.0
Endosulfan-I	2	6.45	6.45	0.17		ug/l	
Endosulfan-II	1 [a]	5.86	5.86	0.19		ug/l	10.0
Endosulfan-II	2	7.74	7.74	0.21		ug/l	
Heptachlor	1 [a]	3.46	3.46	0.18		ug/l	25.0
Heptachlor	2	4.56	4.56	0.14		ug/l	
Heptachlor epoxide	1 [a]	4.45	4.45	0.22		ug/l	0.0
Heptachlor epoxide	2	5.84	5.84	0.22		ug/l	
Methoxychlor	1 [a]	6.88	6.88	0.19		ug/l	5.4
Methoxychlor	2	9.34	9.35	0.18		ug/l	

GC Identification Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2871-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81188.D	**Injection Time:**	00:26
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37055-MSD	**Injection Date:**	12/15/21
Lab File ID:	6G81199.D	**Injection Time:**	04:21
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(a) QC results reported from this column.
(b) Final reported result.

Surrogate Recovery Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8081B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JD36319-2	6G81168.D	119	108	62	58
JD36319-3	6G81236.D	53	46	39	46
JD36319-3	6G81169.D	55	44	31	41
JD36319-4	6G81203.D	79	42	42	33
JD36319-5	6G81269.D	94	59	53	25
OP37055-BS1	6G81160.D	94	82	52	58
OP37055-BS1	6G81217.D	96	82	54	64
OP37055-BSD	6G81161.D	91	83	71	71
OP37055-BSD	6G81218.D	93	83	78	76
OP37055-MB1	6G81159.D	74	68	49	57
OP37055-MB1	6G81216.D	76	67	51	60
OP37055-MS	6G81198.D	126	61	59	54
OP37055-MSD	6G81199.D	134	78	54	48

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	10-190%
S2 = Decachlorobiphenyl	10-156%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2870-CC2867	**Injection Date:**	12/14/21
Lab File ID:	6G81157.D	**Injection Time:**	04:06
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.26	2.89	9.36	11.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP37055-MB1	6G81159.D	12/14/21	04:42	2.26	2.89	9.36	11.85
OP37055-BS1	6G81160.D	12/14/21	05:00	2.26	2.89	9.36	11.85
OP37055-BSD	6G81161.D	12/14/21	05:18	2.26	2.89	9.36	11.85
JD36319-2	6G81168.D	12/14/21	07:27	2.26	2.89	9.36	11.85
JD36319-3	6G81169.D	12/14/21	07:45	2.26	2.89	9.36	11.85
ZZZZZZ	6G81170.D	12/14/21	08:03	2.26	2.89	9.36	11.85
ZZZZZZ	6G81171.D	12/14/21	08:22	2.26	2.89	9.36	11.85
ZZZZZZ	6G81172.D	12/14/21	09:44	2.27	2.88	9.36	11.85

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2871-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81188.D	**Injection Time:**	00:26
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.26	2.89	9.36	11.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	6G81190.D	12/15/21	01:37	2.27	2.89	9.36	11.85
ZZZZZZ	6G81191.D	12/15/21	01:55	2.27	2.89	9.36	11.85
ZZZZZZ	6G81192.D	12/15/21	02:13	2.26	2.89	9.36	11.85
ZZZZZZ	6G81193.D	12/15/21	02:31	2.27	2.89	9.36	11.85
JD36387-1	6G81197.D	12/15/21	03:44	2.27	2.89	9.35	11.85
OP37055-MS	6G81198.D	12/15/21	04:03	2.27	2.89	9.35	11.85
OP37055-MSD	6G81199.D	12/15/21	04:21	2.27	2.89	9.35	11.85
JD36387-1F	6G81200.D	12/15/21	04:40	2.27	2.89	9.36	11.85
OP37055-MS2	6G81201.D	12/15/21	04:58	2.27	2.89	9.35	11.85
OP37055-MSD2	6G81202.D	12/15/21	05:16	2.27	2.89	9.35	11.85
JD36319-4	6G81203.D	12/15/21	05:34	2.27	2.89	9.35	11.85
ZZZZZZ	6G81205.D	12/15/21	06:10	2.27	2.89	9.35	11.85

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2871-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81209.D	**Injection Time:**	07:24
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.27	2.89	9.36	11.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP36976-MB1	6G81211.D	12/15/21	08:01	2.27	2.89	9.35	11.85
OP36976-BS1	6G81212.D	12/15/21	08:19	2.27	2.89	9.35	11.85
OP37028-MB1	6G81213.D	12/15/21	08:37	2.26	2.89	9.35	11.85
OP37028-BS1	6G81214.D	12/15/21	08:56	2.27	2.89	9.36	11.85
OP37028-BSD	6G81215.D	12/15/21	09:13	2.26	2.89	9.35	11.85
OP37055-MB1	6G81216.D	12/15/21	09:31	2.27	2.89	9.35	11.85
OP37055-BS1	6G81217.D	12/15/21	09:50	2.27	2.89	9.36	11.85
OP37055-BSD	6G81218.D	12/15/21	10:08	2.26	2.89	9.35	11.85

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2872-CC2867	**Injection Date:**	12/15/21
Lab File ID:	6G81220.D	**Injection Time:**	22:51
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.27	2.89	9.36	11.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP37101-MB1	6G81222.D	12/15/21	23:45	2.27	2.89	9.36	11.85
OP37101-BS1	6G81223.D	12/16/21	00:03	2.27	2.89	9.36	11.85
OP37101-BSD	6G81224.D	12/16/21	00:21	2.27	2.89	9.36	11.85
ZZZZZZ	6G81225.D	12/16/21	00:40	2.27	2.89	9.36	11.85
ZZZZZZ	6G81226.D	12/16/21	00:58	2.27	2.89	9.35	11.85
ZZZZZZ	6G81227.D	12/16/21	01:16	2.27	2.89	9.35	11.85
ZZZZZZ	6G81228.D	12/16/21	01:35	2.27	2.89	9.35	11.85
ZZZZZZ	6G81229.D	12/16/21	01:52	2.26	2.89	9.35	11.85
ZZZZZZ	6G81230.D	12/16/21	02:11	2.26	2.89	9.35	11.85
ZZZZZZ	6G81231.D	12/16/21	02:29	2.27	2.89	9.35	11.85
ZZZZZZ	6G81232.D	12/16/21	02:47	2.27	2.89	9.35	11.85
ZZZZZZ	6G81233.D	12/16/21	03:06	2.27	2.89	9.35	11.85
ZZZZZZ	6G81234.D	12/16/21	03:24	2.27	2.89	9.35	11.85
ZZZZZZ	6G81235.D	12/16/21	03:43	2.27	2.89	9.36	11.85
JD36319-3	6G81236.D	12/16/21	04:01	2.27	2.89	9.35	11.85

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2873-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81259.D	**Injection Time:**	08:00
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.26	2.89	9.35	11.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	6G81261.D	12/17/21	08:35	2.27	2.89	9.35	11.85
ZZZZZZ	6G81262.D	12/17/21	08:53	2.26	2.89	9.35	11.85
ZZZZZZ	6G81263.D	12/17/21	09:11	2.26	2.89	9.35	11.85
ZZZZZZ	6G81264.D	12/17/21	09:29	2.26	2.89	9.35	11.85
ZZZZZZ	6G81265.D	12/17/21	09:47	2.27	2.89	9.35	11.85
ZZZZZZ	6G81266.D	12/17/21	10:05	2.26	2.89	9.35	11.85
ZZZZZZ	6G81267.D	12/17/21	10:23	2.26	2.89	9.35	11.85
ZZZZZZ	6G81268.D	12/17/21	10:41	2.26	2.89	9.35	11.85
JD36319-5	6G81269.D	12/17/21	10:59	2.27	2.89	9.35	11.85
ZZZZZZ	6G81270.D	12/17/21	11:17	2.27	2.89	9.35	11.85

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICC2867
Lab FileID: 6G81077.D

Response Factor Report GC6G

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration

Calibration Files
5 =6g81079.d 10 =6g81078.d 25 =6g81077.d 50 =6g81076.d
100 =6g81074.d 1 =6g81081.d 75 =6g81075.d 2 =6g81080.d
= =

Compound	5	10	25	50	100	1	75	2	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-m-xylene	0.595	0.614	0.640	0.654	0.654	0.555	0.651	0.605	0.621	5.68
3) hexachlorobenzene	1.747	1.786	1.705	1.723	1.704	1.927	1.729	1.787	1.763	4.18
4) alpha-BHC	1.188	1.251	1.286	1.411	1.480	1.196	1.510	1.149	1.309	10.68
5) gamma-BHC	1.330	1.053	1.086	1.146	1.196	1.131	1.165	1.001	1.139	8.75
6) Heptachlor	0.991	1.016	1.043	1.083	1.169	0.862	1.118	1.111	1.049	9.08
7) beta-BHC	0.422	0.445	0.433	0.445	0.440	0.525	0.438	0.452	0.450	7.05
8) delta-BHC	0.893	0.947	1.017	1.122	1.183	1.167	1.135	0.910	1.047	11.41
9) Aldrin	1.064	0.990	1.101	1.091	1.168	1.025	1.125	1.313	1.110	8.96
10) alachlor	0.129	0.108	0.110	0.108	0.098		0.103		0.109	9.90
11) Heptachlor Epoxide	0.920	0.928	0.944	0.977	1.004	1.172	0.975	0.869	0.974	9.28
12) gamma-Chlordane	0.882	0.939	0.965	1.077	1.031	1.017	1.025	0.967	0.988	6.25
13) alpha-Chlordane	0.849	0.922	0.983	0.992	1.032	0.872	1.020	0.920	0.949	7.15
14) Endosulfan I	0.992	1.014	1.038	1.084	1.122	0.968	1.117	1.134	1.059	6.06
15) 4,4'-DDE	0.933	0.943	0.953	0.987	1.025	1.015	1.009	1.102	0.996	5.52
16) Dieldrin	1.039	1.097	1.046	1.091	1.132	1.061	1.113	0.983	1.070	4.48
17) Endrin	1.098	0.986	1.012	1.060	1.108	1.128	1.106	0.955	1.057	6.10
18) 4,4'-DDD	0.760	0.751	0.771	0.818	0.839	0.757	0.843	0.765	0.788	4.90
19) Endosulfan II	1.209	0.924	0.909	0.963	0.991	1.051	0.989	0.929	0.996	9.80
20) 4,4'-DDT	0.792	0.793	0.801	0.828	0.890	0.978	0.870	0.802	0.844	7.76
21) Endrin Aldehyde	0.708	0.688	0.698	0.731	0.727	0.878	0.730	0.929	0.761	11.84
22) Endosulfan Sulfate	1.073	0.950	0.911	0.989	0.995	0.864	0.988	1.019	0.973	6.63
23) Methoxychlor										

Initial Calibration Summary

Job Number: JD36319 **Sample:** G6G2867-ICC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81077.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
          0.464 0.458 0.460 0.485 0.467 0.408 0.472 0.464          0.460    4.85
 24)  Mirex
          0.759 0.765 0.762 0.775 0.756 0.843 0.756 0.833          0.781    4.55
 25)  Endrin Ketone
          0.923 0.859 0.846 0.953 0.958 0.873 0.985 1.140          0.942   10.06
 26)  Decachlorobiphenyl
          1.228 1.217 1.097 1.158       1.303 1.083 1.283          1.195    7.19

 27) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
 28)  Toxaphene{A}
                            0.020                                  0.020    0.00
 29)  Toxaphene{B}
                            0.026                                  0.026    0.00
 30)  Toxaphene{C}
                            0.024                                  0.024    0.00
 31)  Toxaphene{D}
                            0.021                                  0.021    0.00
 32)  Toxaphene{E}
                            0.023                                  0.023    0.00

 33) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
 34)  Chlordane {A}
                            0.073                                  0.073    0.00
 35)  Chlordane {B}
                            0.044                                  0.044    0.00
 36)  Chlordane {C}
                            0.138                                  0.138    0.00
 37)  Chlordane {D}
                            0.226                                  0.226    0.00
 38)  Chlordane {E}
                            0.035                                  0.035    0.00

Signal #2


  1) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
  2)  Tetrachloro-m-xylene
          0.916 0.913 0.897 0.888 0.878 0.920 0.884 0.974          0.909    3.38
  3)  hexachlorobenzene
          1.093 1.079 1.034 1.003 0.980 1.262 0.986 1.153          1.074    8.96
  4)  alpha-BHC
          1.293 1.319 1.325 1.346 1.356 1.514 1.356 1.330          1.355    5.00
  5)  gamma-BHC
          1.115 1.114 1.112 1.109 1.098 1.222 1.103 1.140          1.127    3.60
  6)  Heptachlor
          1.148 1.137 1.142 1.116 1.124 1.240 1.131 1.163          1.150    3.40
  7)  beta-BHC
          0.522 0.508 0.489 0.468 0.448 0.612 0.456 0.550          0.507   10.84
  8)  delta-BHC
          0.996 1.021 1.024 1.069 1.081 0.979 1.080 0.998          1.031    3.92
  9)  Aldrin
          1.063 1.035 1.029 1.027 1.025 1.113 1.021 1.054          1.046    2.94
 10)  alachlor
          0.149 0.148 0.148 0.140 0.128       0.132                0.141    6.48
 11)  Heptachlor Epoxide
          0.976 0.987 0.989 0.972 0.970 1.101 0.967 1.007          0.996    4.44
 12)  gamma-Chlordane
          1.016 1.029 1.008 1.008 1.000 1.140 1.005 1.065          1.034    4.63
 13)  alpha-Chlordane
          0.999 0.992 0.971 0.961 0.952 1.003 0.957 0.997          0.979    2.16
```

Initial Calibration Summary

Job Number: JD36319 **Sample:** G6G2867-ICC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81077.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
14)  Endosulfan I
          0.955 0.962 0.941 0.929 0.922 1.057 0.926 0.979          0.959    4.63
15)  4,4'-DDE
          0.967 1.016 0.981 0.980 0.986 1.126 0.983 0.991          1.004    5.12
16)  Dieldrin
          1.007 1.020 1.017 1.012 1.013 1.126 1.014 1.040          1.031    3.84
17)  Endrin
          0.967 0.981 0.988 0.966 0.994 1.078 0.976 0.977          0.991    3.69
18)  4,4'-DDD
          0.829 0.837 0.829 0.828 0.831 0.954 0.831 0.847          0.848    5.11
19)  Endosulfan II
          0.906 0.905 0.884 0.872 0.869 1.015 0.872 0.927          0.906    5.37
20)  4,4'-DDT
          0.790 0.821 0.825 0.840 0.845 0.805 0.845 0.779          0.819    3.10
21)  Endrin Aldehyde
          0.649 0.645 0.629 0.656 0.646 0.650 0.645 0.634          0.644    1.32
22)  Endosulfan Sulfate
          0.871 0.890 0.863 0.876 0.866 0.916 0.871 0.896          0.881    2.06
23)  Methoxychlor
          0.446 0.460 0.456 0.444 0.433 0.492 0.439 0.460          0.454    4.03
24)  Mirex
          0.751 0.733 0.722 0.688 0.661 0.850 0.672 0.792          0.734    8.73
25)  Endrin Ketone
          0.816 0.817 0.789 0.838 0.836 0.804 0.838 0.826          0.820    2.15
26)  Decachlorobiphenyl
          0.788 0.763 0.733 0.699       0.911 0.686 0.876          0.779   11.01

27) I   1-bromo-2-nitrobenzen ----------------ISTD--------------------
28)  Toxaphene{A}
                              0.013                                0.013    0.00
29)  Toxaphene{B}
                              0.021                                0.021    0.00
30)  Toxaphene{C}
                              0.040                                0.040    0.00
31)  Toxaphene{D}
                              0.019                                0.019    0.00
32)  Toxaphene{E}
                              0.024                                0.024    0.00

33) I   1-bromo-2-nitrobenzen ----------------ISTD--------------------
34)  Chlordane {A}
                              0.066                                0.066    0.00
35)  Chlordane {B}
                              0.036                                0.036    0.00
36)  Chlordane {C}
                              0.133                                0.133    0.00
37)  Chlordane {D}
                              0.217                                0.217    0.00
38)  Chlordane {E}
                              0.033                                0.033    0.00
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          6pst2867.m        Sun Dec 12 10:40:46 2021
```

12.9.1 12

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81084.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81084.d\ECD1A.CH Vial: 13
Acq On : 10 Dec 2021 6:57 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81084.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 6:57 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene	0.621	0.698	-12.4	110	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.309	1.505	-15.0	118	0.00	2.69- 2.75
5	MA	gamma-BHC	1.139	1.342	-17.8	125	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.210	-15.3	117	0.00	3.43- 3.49
7	B	beta-BHC	0.450	0.521	-15.8	121	0.00	3.04- 3.10
8	B	delta-BHC	1.047	1.157	-10.5	115	0.00	3.21- 3.27
9	MB	Aldrin	1.110	1.219	-9.8	112	0.00	3.75- 3.81
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide	0.974	1.139	-16.9	122	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	1.145	-15.9	120	0.00	4.58- 4.64
13	B	alpha-Chlordane	0.949	1.111	-17.1	114	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.178	-11.2	114	0.00	4.91- 4.97
15	B	4,4'-DDE	0.996	1.098	-10.2	116	0.00	4.87- 4.93
16	MA	Dieldrin	1.070	1.195	-11.7	115	0.00	5.22- 5.28
17	MA	Endrin	1.057	1.040	1.6	104	0.00	5.53- 5.59
18	A	4,4'-DDD	0.788	0.877	-11.3	115	0.00	5.67- 5.73
19	B	Endosulfan II	0.996	1.056	-6.0	117	0.00	5.84- 5.90
20	MA	4,4'-DDT	0.844	0.928	-10.0	117	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.752	1.2	109	0.00	6.44- 6.50
22	B	Endosulfan Sulfate	0.973	0.984	-1.1	109	0.00	7.10- 7.16
23	A	Methoxychlor	0.460	0.529	-15.0	116	0.00	6.85- 6.91
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.942	0.938	0.4	112	0.00	7.53- 7.59
26	SA	Decachlorobiphenyl	1.195	1.211	-1.3	111	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

12.9.2 12

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81084.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	0.990	-8.9	110	0.00	2.86- 2.92
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC	1.355	1.524	-12.5	114	0.00	3.53- 3.59
5	MA	gamma-BHC	1.127	1.309	-16.1	117	0.00	3.96- 4.02
6	MA	Heptachlor	1.150	1.330	-15.7	116	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.570	-12.4	116	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.193	-15.7	116	0.00	4.44- 4.50
9	MB	Aldrin	1.046	1.214	-16.1	117	0.00	4.98- 5.04
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide	0.996	1.144	-14.9	115	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.172	-13.3	116	0.00	6.10- 6.16
13	B	alpha-Chlordane	0.979	1.127	-15.1	115	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	1.067	-11.3	113	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	1.115	-11.1	113	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	1.171	-13.6	114	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.044	-5.3	105	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.943	-11.2	113	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	1.017	-12.3	114	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.946	-15.5	114	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.690	-7.1	109	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.944	-7.2	109	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.530	-16.7	116	0.00	9.32- 9.38
24		Mirex			----------NA----------			
25	B	Endrin Ketone	0.820	0.882	-7.6	111	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.848	-8.9	115	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
28	L8	Toxaphene{A}			----------NA----------			
29	L8	Toxaphene{B}			----------NA----------			
30	L8	Toxaphene{C}			----------NA----------			
31	L8	Toxaphene{D}			----------NA----------			
32	L8	Toxaphene{E}			----------NA----------			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Sun Dec 12 10:39:03 2021

12.9.2 12

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81085.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81085.d\ECD1A.CH Vial: 14
Acq On : 10 Dec 2021 7:15 am Operator: christp
Sample : icv2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81085.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:15 am Operator: christp
Sample : icc2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene	0.621	0.760	-22.4#	115	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	1.195	1.187	0.7	101	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.19- 2.19
34		Chlordane {A}	0.073	0.067	8.2	89	0.00	3.36- 3.56

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81085.D

35		Chlordane {B}	0.044	0.040	9.1	88	0.00	3.81- 4.01
36		Chlordane {C}	0.138	0.151	-9.4	106	0.00	4.51- 4.71
37		Chlordane {D}	0.226	0.232	-2.7	99	0.00	4.67- 4.87
38		Chlordane {E}	0.035	0.038	-8.6	106	0.00	5.68- 5.88
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	1.024	-12.7	114	0.00	2.86- 2.92
3		hexachlorobenzene	----------NA----------					
4	A	alpha-BHC	----------NA----------					
5	MA	gamma-BHC	----------NA----------					
6	MA	Heptachlor	----------NA----------					
7	B	beta-BHC	----------NA----------					
8	B	delta-BHC	----------NA----------					
9	MB	Aldrin	----------NA----------					
10		alachlor	----------NA----------					
11	B	Heptachlor Epoxide	----------NA----------					
12	B	gamma-Chlordane	----------NA----------					
13	B	alpha-Chlordane	----------NA----------					
14	A	Endosulfan I	----------NA----------					
15	B	4,4'-DDE	----------NA----------					
16	MA	Dieldrin	----------NA----------					
17	MA	Endrin	----------NA----------					
18	A	4,4'-DDD	----------NA----------					
19	B	Endosulfan II	----------NA----------					
20	MA	4,4'-DDT	----------NA----------					
21	B	Endrin Aldehyde	----------NA----------					
22	B	Endosulfan Sulfate	----------NA----------					
23	A	Methoxychlor	----------NA----------					
24		Mirex	----------NA----------					
25	B	Endrin Ketone	----------NA----------					
26	SA	Decachlorobiphenyl	0.779	0.774	0.6	109	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.57- 2.57
28	L8	Toxaphene{A}	----------NA----------					
29	L8	Toxaphene{B}	----------NA----------					
30	L8	Toxaphene{C}	----------NA----------					
31	L8	Toxaphene{D}	----------NA----------					
32	L8	Toxaphene{E}	----------NA----------					
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
34		Chlordane {A}	0.066	0.070	-6.1	105	0.00	4.46- 4.66
35		Chlordane {B}	0.036	0.038	-5.6	103	0.00	5.11- 5.31
36		Chlordane {C}	0.133	0.136	-2.3	102	0.00	6.02- 6.22
37		Chlordane {D}	0.217	0.222	-2.3	101	0.00	6.25- 6.45
38		Chlordane {E}	0.033	0.036	-9.1	109	0.00	7.72- 7.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6pst2867.m Sun Dec 12 10:40:04 2021

12.9.3 12

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81086.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81086.d\ECD1A.CH Vial: 15
Acq On : 10 Dec 2021 7:33 am Operator: christp
Sample : icv2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81086.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:33 am Operator: christp
Sample : icc2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene	0.621	0.768	-23.7#	116	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	1.195	1.146	4.1	98	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.20- 2.20
28	L8	Toxaphene{A}	0.020	0.018	10.0	89	0.00	5.51- 5.71
29	L8	Toxaphene{B}	0.026	0.024	7.7	92	0.00	5.75- 5.95
30	L8	Toxaphene{C}	0.024	0.023	4.2	96	0.00	5.93- 6.13
31	L8	Toxaphene{D}	0.021	0.022	-4.8	102	0.00	6.26- 6.46
32	L8	Toxaphene{E}	0.023	0.021	8.7	91	0.00	6.88- 7.08
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81086.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	1.059	-16.5	116	0.00	2.86- 2.92
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC			----------NA----------			
5	MA	gamma-BHC			----------NA----------			
6	MA	Heptachlor			----------NA----------			
7	B	beta-BHC			----------NA----------			
8	B	delta-BHC			----------NA----------			
9	MB	Aldrin			----------NA----------			
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide			----------NA----------			
12	B	gamma-Chlordane			----------NA----------			
13	B	alpha-Chlordane			----------NA----------			
14	A	Endosulfan I			----------NA----------			
15	B	4,4'-DDE			----------NA----------			
16	MA	Dieldrin			----------NA----------			
17	MA	Endrin			----------NA----------			
18	A	4,4'-DDD			----------NA----------			
19	B	Endosulfan II			----------NA----------			
20	MA	4,4'-DDT			----------NA----------			
21	B	Endrin Aldehyde			----------NA----------			
22	B	Endosulfan Sulfate			----------NA----------			
23	A	Methoxychlor			----------NA----------			
24		Mirex			----------NA----------			
25	B	Endrin Ketone			----------NA----------			
26	SA	Decachlorobiphenyl	0.779	0.805	-3.3	112	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.57- 2.57
28	L8	Toxaphene{A}	0.013	0.014	-7.7	107	0.00	6.75- 6.95
29	L8	Toxaphene{B}	0.021	0.021	0.0	103	0.00	7.61- 7.81
30	L8	Toxaphene{C}	0.040	0.041	-2.5	104	0.00	7.77- 7.97
31	L8	Toxaphene{D}	0.019	0.019	0.0	104	0.00	8.21- 8.41
32	L8	Toxaphene{E}	0.024	0.024	0.0	100	0.00	9.11- 9.31
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6pst2867.m Sun Dec 12 10:40:25 2021

12.9.4 12

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81087.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81087.d\ECD1A.CH Vial: 16
Acq On : 10 Dec 2021 7:52 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81087.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:52 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene		----------	NA	----------		
3		hexachlorobenzene		----------	NA	----------		
4	A	alpha-BHC		----------	NA	----------		
5	MA	gamma-BHC		----------	NA	----------		
6	MA	Heptachlor		----------	NA	----------		
7	B	beta-BHC		----------	NA	----------		
8	B	delta-BHC		----------	NA	----------		
9	MB	Aldrin		----------	NA	----------		
10		alachlor		----------	NA	----------		
11	B	Heptachlor Epoxide		----------	NA	----------		
12	B	gamma-Chlordane		----------	NA	----------		
13	B	alpha-Chlordane		----------	NA	----------		
14	A	Endosulfan I		----------	NA	----------		
15	B	4,4'-DDE		----------	NA	----------		
16	MA	Dieldrin		----------	NA	----------		
17	MA	Endrin		----------	NA	----------		
18	A	4,4'-DDD		----------	NA	----------		
19	B	Endosulfan II		----------	NA	----------		
20	MA	4,4'-DDT		----------	NA	----------		
21	B	Endrin Aldehyde		----------	NA	----------		
22	B	Endosulfan Sulfate		----------	NA	----------		
23	A	Methoxychlor		----------	NA	----------		
24		Mirex	0.781	0.804	-2.9	113	0.00	6.96- 7.02
25	B	Endrin Ketone		----------	NA	----------		
26	SA	Decachlorobiphenyl		----------	NA	----------		
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
28	L8	Toxaphene{A}		----------	NA	----------		
29	L8	Toxaphene{B}		----------	NA	----------		
30	L8	Toxaphene{C}		----------	NA	----------		
31	L8	Toxaphene{D}		----------	NA	----------		
32	L8	Toxaphene{E}		----------	NA	----------		
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
34		Chlordane {A}		----------	NA	----------		

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81087.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene			----------NA----------			
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC			----------NA----------			
5	MA	gamma-BHC			----------NA----------			
6	MA	Heptachlor			----------NA----------			
7	B	beta-BHC			----------NA----------			
8	B	delta-BHC			----------NA----------			
9	MB	Aldrin			----------NA----------			
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide			----------NA----------			
12	B	gamma-Chlordane			----------NA----------			
13	B	alpha-Chlordane			----------NA----------			
14	A	Endosulfan I			----------NA----------			
15	B	4,4'-DDE			----------NA----------			
16	MA	Dieldrin			----------NA----------			
17	MA	Endrin			----------NA----------			
18	A	4,4'-DDD			----------NA----------			
19	B	Endosulfan II			----------NA----------			
20	MA	4,4'-DDT			----------NA----------			
21	B	Endrin Aldehyde			----------NA----------			
22	B	Endosulfan Sulfate			----------NA----------			
23	A	Methoxychlor			----------NA----------			
24		Mirex	0.734	0.756	-3.0	112	0.00	9.64- 9.70
25	B	Endrin Ketone			----------NA----------			
26	SA	Decachlorobiphenyl			----------NA----------			
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
28	L8	Toxaphene{A}			----------NA----------			
29	L8	Toxaphene{B}			----------NA----------			
30	L8	Toxaphene{C}			----------NA----------			
31	L8	Toxaphene{D}			----------NA----------			
32	L8	Toxaphene{E}			----------NA----------			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Sun Dec 12 10:39:23 2021

12.9.5 12

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81088.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81088.d\ECD1A.CH Vial: 17
Acq On : 10 Dec 2021 8:10 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81088.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 8:10 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene	1.763	1.832	-3.9	112	0.00	2.55- 2.61
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor	0.109	0.105	3.7	100	0.00	3.89- 3.95
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
34		Chlordane {A}		----------NA----------				

12.9.6 12

Initial Calibration Verification

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81088.D

35		Chlordane {B}			----------NA----------				
36		Chlordane {C}			----------NA----------				
37		Chlordane {D}			----------NA----------				
38		Chlordane {E}			----------NA----------				
*****		Signal #2 *****							
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
2	SAB	Tetrachloro-m-xylene			----------NA----------				
3		hexachlorobenzene	1.074	1.092	-1.7	112	0.00	3.37-	3.43
4	A	alpha-BHC			----------NA----------				
5	MA	gamma-BHC			----------NA----------				
6	MA	Heptachlor			----------NA----------				
7	B	beta-BHC			----------NA----------				
8	B	delta-BHC			----------NA----------				
9	MB	Aldrin			----------NA----------				
10		alachlor	0.141	0.133	5.7	95	0.00	4.79-	4.85
11	B	Heptachlor Epoxide			----------NA----------				
12	B	gamma-Chlordane			----------NA----------				
13	B	alpha-Chlordane			----------NA----------				
14	A	Endosulfan I			----------NA----------				
15	B	4,4'-DDE			----------NA----------				
16	MA	Dieldrin			----------NA----------				
17	MA	Endrin			----------NA----------				
18	A	4,4'-DDD			----------NA----------				
19	B	Endosulfan II			----------NA----------				
20	MA	4,4'-DDT			----------NA----------				
21	B	Endrin Aldehyde			----------NA----------				
22	B	Endosulfan Sulfate			----------NA----------				
23	A	Methoxychlor			----------NA----------				
24		Mirex			----------NA----------				
25	B	Endrin Ketone			----------NA----------				
26	SA	Decachlorobiphenyl			----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
28	L8	Toxaphene{A}			----------NA----------				
29	L8	Toxaphene{B}			----------NA----------				
30	L8	Toxaphene{C}			----------NA----------				
31	L8	Toxaphene{D}			----------NA----------				
32	L8	Toxaphene{E}			----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
34		Chlordane {A}			----------NA----------				
35		Chlordane {B}			----------NA----------				
36		Chlordane {C}			----------NA----------				
37		Chlordane {D}			----------NA----------				
38		Chlordane {E}			----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Thu Dec 16 14:12:47 2021

12.9.6 12

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2870-CC2867
Lab FileID: 6G81157.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\tr...70\6g81157.d\ECD1A.CH Vial: 4
Signal #2 : C:\msdchem\1\data\trude\...6g2870\6g81157.d\ECD2B.CH
Acq On : 14-Dec-21, 04:06:35 Operator: christp
Sample : cc2867-50 Inst : GC6G
Misc : op37039,g6g2870,15.31,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Wed Dec 15 06:36:49 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.18- 2.18
2	SAB	Tetrachloro-m-xylene	0.621	0.590	5.0	93	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.593	9.6	95	0.00	2.54- 2.60
4	A	alpha-BHC	1.309	1.370	-4.7	100	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.253	-10.0	112	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.223	-16.6	116	0.00	3.42- 3.48
7	B	beta-BHC	0.450	0.477	-6.0	110	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.205	-15.1	110	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.185	-6.8	112	0.00	3.74- 3.80
10		alachlor	0.109	0.093	14.7	89	0.00	3.89- 3.95
11	B	Heptachlor Epoxide	0.974	1.166	-19.7	123	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	1.109	-12.2	106	0.00	4.57- 4.63
13	B	alpha-Chlordane	0.949	1.064	-12.1	110	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.146	-8.2	109	0.00	4.90- 4.96
15	B	4,4'-DDE	0.996	1.055	-5.9	110	0.00	4.86- 4.92
16	MA	Dieldrin	1.070	1.144	-6.9	108	0.00	5.21- 5.27
17	MA	Endrin	1.057	1.114	-5.4	108	0.00	5.52- 5.58
18	A	4,4'-DDD	0.788	0.851	-8.0	107	0.00	5.66- 5.72
19	B	Endosulfan II	0.996	0.990	0.6	106	0.00	5.83- 5.89
20	MA	4,4'-DDT	0.844	0.862	-2.1	107	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.781	-2.6	110	0.00	6.44- 6.50
22	B	Endosulfan Sulfate	0.973	0.914	6.1	95	0.00	7.10- 7.16
23	A	Methoxychlor	0.460	0.465	-1.1	99	0.00	6.85- 6.91
24		Mirex	0.781	0.765	2.0	102	0.00	6.96- 7.02
25	B	Endrin Ketone	0.942	0.992	-5.3	107	0.00	7.52- 7.58
26	SA	Decachlorobiphenyl	1.195	1.228	-2.8	109	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.18- 2.18
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.18- 2.18
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

12.9.7 12

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2870-CC2867
Lab FileID: 6G81157.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.827	9.0	93	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.948	11.7	94	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.285	5.2	95	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.163	-3.2	104	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.168	-1.6	104	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.500	1.4	106	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.089	-5.6	101	0.00	4.44- 4.50
9	MB	Aldrin	1.046	1.081	-3.3	105	0.00	4.98- 5.04
10		alachlor	0.141	0.133	5.7	94	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	1.019	-2.3	104	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.051	-1.6	104	0.00	6.10- 6.16
13	B	alpha-Chlordane	0.979	0.975	0.4	101	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.957	0.2	103	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	1.030	-2.6	105	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	1.047	-1.6	103	0.00	6.86- 6.92
17	MA	Endrin	0.991	1.025	-3.4	106	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.858	-1.2	103	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	0.907	-0.1	104	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.855	-4.4	101	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.711	-10.4	108	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.830	5.8	94	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.429	5.5	96	0.00	9.32- 9.38
24		Mirex	0.734	0.691	5.9	100	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.904	-10.2	107	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.713	8.5	102	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.56- 2.56
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.56- 2.56
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81157.d 6pst2867.m Wed Dec 15 06:41:26 2021

12.9.7 12

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2870-CC2867
Lab FileID: 6G81178.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\tr...70\6g81178.d\ECD1A.CH Vial: 2
Signal #2 : C:\msdchem\1\data\trude\...6g2870\6g81178.d\ECD2B.CH
Acq On : 14-Dec-21, 11:33:22 Operator: christp
Sample : cc2867-25 Inst : GC6G
Misc : op37055,g6g2870,270,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Wed Dec 15 06:36:49 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	116	0.00	1.18- 2.18
2	SAB	Tetrachloro-m-xylene	0.621	0.613	1.3	111	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.691	4.1	115	0.00	2.55- 2.61
4	A	alpha-BHC	1.309	1.342	-2.5	121	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.270	-11.5	136	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.205	-14.9	134	0.00	3.43- 3.49
7	B	beta-BHC	0.450	0.516	-14.7	139	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.213	-15.9	139	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.207	-8.7	127	0.00	3.74- 3.80
10		alachlor	0.109	0.098	10.1	104	0.00	3.89- 3.95
11	B	Heptachlor Epoxide	0.974	1.155	-18.6	142	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	1.201	-21.6#	145	0.00	4.58- 4.64
13	B	alpha-Chlordane	0.949	1.148	-21.0#	136	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.190	-12.4	133	0.00	4.90- 4.96
15	B	4,4'-DDE	0.996	1.112	-11.6	136	0.00	4.86- 4.92
16	MA	Dieldrin	1.070	1.185	-10.7	132	0.00	5.22- 5.28
17	MA	Endrin	1.057	1.146	-8.4	132	0.00	5.52- 5.58
18	A	4,4'-DDD	0.788	0.885	-12.3	133	0.00	5.66- 5.72
19	B	Endosulfan II	0.996	1.021	-2.5	131	0.00	5.83- 5.89
20	MA	4,4'-DDT	0.844	0.889	-5.3	129	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.883	-16.0	147	0.00	6.44- 6.50
22	B	Endosulfan Sulfate	0.973	0.804	17.4	103	0.00	7.10- 7.16
23	A	Methoxychlor	0.460	0.503	-9.3	127	0.00	6.85- 6.91
24		Mirex	0.781	0.824	-5.5	126	0.00	6.96- 7.02
25	B	Endrin Ketone	0.942	1.078	-14.4	148	0.00	7.52- 7.58
26	SA	Decachlorobiphenyl	1.195	1.093	8.5	116	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	116	0.00	1.18- 2.18
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	116	0.00	1.18- 2.18
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

12.9.8 12

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2870-CC2867
Lab FileID: 6G81178.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.839	7.7	107	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.982	8.6	109	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.308	3.5	113	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.181	-4.8	122	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.059	7.9	106	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.525	-3.6	123	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.145	-11.1	128	0.00	4.44- 4.50
9	MB	Aldrin	1.046	1.095	-4.7	122	0.00	4.98- 5.04
10		alachlor	0.141	0.147	-4.3	114	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	1.048	-5.2	121	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.081	-4.5	123	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	1.018	-4.0	120	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.993	-3.5	121	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	1.038	-3.4	121	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	1.069	-3.7	120	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.029	-3.8	119	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.863	-1.8	119	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	0.927	-2.3	120	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.793	3.2	110	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.742	-15.2	135	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.875	0.7	116	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.396	12.8	100	0.00	9.32- 9.38
24		Mirex	0.734	0.723	1.5	115	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.943	-15.0	137	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.709	9.0	111	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.56- 2.56
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.56- 2.56
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Wed Dec 15 06:59:07 2021

12.9.8 12

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2871-CC2867
Lab FileID: 6G81188.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\6g81188.d\ECD1A.CH Vial: 4
Signal #2 : C:\msdchem\1\data\6g81188.d\ECD2B.CH
Acq On : 15 Dec 2021 0:26 am Operator: christp
Sample : cc2867-50 Inst : GC6G
Misc : op37055,g6g2871,230,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene	0.621	0.596	4.0	103	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.606	8.9	105	0.00	2.55- 2.61
4	A	alpha-BHC	1.309	1.390	-6.2	111	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.279	-12.3	126	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.228	-17.1	128	0.00	3.43- 3.49
7	B	beta-BHC	0.450	0.492	-9.3	125	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.257	-20.1#	126	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.204	-8.5	124	0.00	3.74- 3.80
10		alachlor	0.109	0.104	4.6	109	0.00	3.89- 3.95
11	B	Heptachlor Epoxide	0.974	1.117	-14.7	129	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	1.214	-22.9#	127	0.00	4.57- 4.63
13	B	alpha-Chlordane	0.949	1.106	-16.5	126	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.172	-10.7	122	0.00	4.90- 4.96
15	B	4,4'-DDE	0.996	1.069	-7.3	122	0.00	4.86- 4.92
16	MA	Dieldrin	1.070	1.155	-7.9	119	0.00	5.21- 5.27
17	MA	Endrin	1.057	1.194	-13.0	127	0.00	5.52- 5.58
18	A	4,4'-DDD	0.788	0.936	-18.8	129	0.00	5.66- 5.72
19	B	Endosulfan II	0.996	1.030	-3.4	121	0.00	5.83- 5.89
20	MA	4,4'-DDT	0.844	0.874	-3.6	119	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.820	-7.8	127	0.00	6.44- 6.50
22	B	Endosulfan Sulfate	0.973	0.949	2.5	108	0.00	7.10- 7.16
23	A	Methoxychlor	0.460	0.472	-2.6	110	0.00	6.85- 6.91
24		Mirex	0.781	0.765	2.0	111	0.00	6.96- 7.02
25	B	Endrin Ketone	0.942	0.967	-2.7	114	0.00	7.52- 7.58
26	SA	Decachlorobiphenyl	1.195	1.134	5.1	110	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.19- 2.19
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

12.9.9 12

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2871-CC2867
Lab FileID: 6G81188.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.800	12.0	101	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.906	15.6	101	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.256	7.3	105	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.140	-1.2	115	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.140	0.9	115	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.483	4.7	116	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.097	-6.4	115	0.00	4.44- 4.50
9	MB	Aldrin	1.046	1.057	-1.1	115	0.00	4.98- 5.04
10		alachlor	0.141	0.130	7.8	104	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	0.998	-0.2	115	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.022	1.2	114	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	0.958	2.1	112	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.946	1.4	114	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	0.999	0.5	114	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	1.030	0.1	114	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.007	-1.6	117	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.841	0.8	114	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	0.893	1.4	115	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.854	-4.3	114	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.718	-11.5	123	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.841	4.5	108	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.438	3.5	111	0.00	9.32- 9.38
24		Mirex	0.734	0.694	5.4	113	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.933	-13.8	125	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.728	6.5	117	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	116	0.00	1.56- 2.56
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	0.00	1.56- 2.56
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6pst2867.m Thu Dec 16 12:29:12 2021

12.9.9 12

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2871-CC2867
Lab FileID: 6G81209.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ch...71\6g81209.d\ECD1A.CH Vial: 2
Signal #2 : C:\msdchem\1\data\chrisc2\g6g2871\6g81209.d\ECD2B.CH
Acq On : 15-Dec-21, 07:24:10 Operator: christp
Sample : cc2867-25 Inst : GC6G
Misc : op37055,g6g2871,260,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Thu Dec 16 00:26:03 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	135	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene	0.621	0.615	1.0	130	0.00	2.24- 2.30
3		hexachlorobenzene	1.763	1.662	5.7	132	0.00	2.55- 2.61
4	A	alpha-BHC	1.309	1.345	-2.8	141	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.256	-10.3	156#	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.207	-15.1	156#	0.00	3.43- 3.49
7	B	beta-BHC	0.450	0.505	-12.2	157#	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.213	-15.9	161#	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.184	-6.7	145	0.00	3.74- 3.80
10		alachlor	0.109	0.109	0.0	134	0.00	3.89- 3.95
11	B	Heptachlor Epoxide	0.974	1.108	-13.8	158#	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	1.164	-17.8	163#	0.00	4.57- 4.63
13	B	alpha-Chlordane	0.949	1.139	-20.0#	156#	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.178	-11.2	153#	0.00	4.90- 4.96
15	B	4,4'-DDE	0.996	1.081	-8.5	153#	0.00	4.86- 4.92
16	MA	Dieldrin	1.070	1.152	-7.7	149	0.00	5.21- 5.27
17	MA	Endrin	1.057	1.105	-4.5	147	0.00	5.52- 5.58
18	A	4,4'-DDD	0.788	0.839	-6.5	147	0.00	5.66- 5.72
19	B	Endosulfan II	0.996	1.025	-2.9	152#	0.00	5.83- 5.89
20	MA	4,4'-DDT	0.844	0.882	-4.5	149	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.854	-12.2	165#	0.00	6.44- 6.50
22	B	Endosulfan Sulfate	0.973	0.919	5.5	136	0.00	7.10- 7.16
23	A	Methoxychlor	0.460	0.442	3.9	130	0.00	6.85- 6.91
24		Mirex	0.781	0.759	2.8	134	0.00	6.96- 7.02
25	B	Endrin Ketone	0.942	0.945	-0.3	151#	0.00	7.52- 7.58
26	SA	Decachlorobiphenyl	1.195	1.152	3.6	142	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	135	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	135	0.00	1.19- 2.19
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

12.9.10 12

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2871-CC2867
Lab FileID: 6G81209.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	133	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.839	7.7	124	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.983	8.5	126	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.300	4.1	130	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.178	-4.5	141	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.179	-2.5	137	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.524	-3.4	142	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.154	-11.9	150	0.00	4.44- 4.50
9	MB	Aldrin	1.046	1.093	-4.5	141	0.00	4.98- 5.04
10		alachlor	0.141	0.148	-5.0	133	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	1.044	-4.8	140	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.070	-3.5	141	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	1.022	-4.4	140	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.991	-3.3	140	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	1.032	-2.8	140	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	1.070	-3.8	140	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.025	-3.4	138	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.875	-3.2	140	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	0.939	-3.6	141	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.861	-5.1	139	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.749	-16.3	158#	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.905	-2.7	139	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.455	-0.2	133	0.00	9.31- 9.37
24		Mirex	0.734	0.746	-1.6	137	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.974	-18.8	164#	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.747	4.1	135	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	133	0.00	1.56- 2.56
28	L8	Toxaphene{A}	----------NA----------					
29	L8	Toxaphene{B}	----------NA----------					
30	L8	Toxaphene{C}	----------NA----------					
31	L8	Toxaphene{D}	----------NA----------					
32	L8	Toxaphene{E}	----------NA----------					
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	133	0.00	1.56- 2.56
34		Chlordane {A}	----------NA----------					
35		Chlordane {B}	----------NA----------					
36		Chlordane {C}	----------NA----------					
37		Chlordane {D}	----------NA----------					
38		Chlordane {E}	----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Thu Dec 16 03:15:43 2021

12.9.10 12

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2872-CC2867
Lab FileID: 6G81220.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\tr...72\6g81220.d\ECD1A.CH Vial: 4
Signal #2 : C:\msdchem\1\data\trude\...6g2872\6g81220.d\ECD2B.CH
Acq On : 15-Dec-21, 22:51:45 Operator: christp
Sample : cc2867-50 Inst : GC6G
Misc : op37055,g6g2872,250,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Fri Dec 17 07:22:40 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene	0.621	0.610	1.8	103	0.00	2.24- 2.30
3		hexachlorobenzene	1.763	1.647	6.6	106	0.00	2.55- 2.61
4	A	alpha-BHC	1.309	1.412	-7.9	110	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.244	-9.2	120	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.197	-14.1	122	0.00	3.43- 3.49
7	B	beta-BHC	0.450	0.486	-8.0	121	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.266	-20.9#	125	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.170	-5.4	119	0.00	3.74- 3.80
10		alachlor	0.109	0.100	8.3	102	0.00	3.89- 3.95
11	B	Heptachlor Epoxide	0.974	1.064	-9.2	120	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	1.095	-10.8	112	0.00	4.58- 4.64
13	B	alpha-Chlordane	0.949	1.014	-6.8	113	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.092	-3.1	111	0.00	4.90- 4.96
15	B	4,4'-DDE	0.996	0.997	-0.1	112	0.00	4.86- 4.92
16	MA	Dieldrin	1.070	1.141	-6.6	115	0.00	5.21- 5.27
17	MA	Endrin	1.057	1.088	-2.9	113	0.00	5.52- 5.58
18	A	4,4'-DDD	0.788	0.813	-3.2	110	0.00	5.66- 5.72
19	B	Endosulfan II	0.996	0.975	2.1	112	0.00	5.83- 5.89
20	MA	4,4'-DDT	0.844	0.884	-4.7	118	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.787	-3.4	119	0.00	6.44- 6.50
22	B	Endosulfan Sulfate	0.973	0.951	2.3	106	0.00	7.10- 7.16
23	A	Methoxychlor	0.460	0.481	-4.6	110	0.00	6.85- 6.91
24		Mirex	0.781	0.769	1.5	110	0.00	6.96- 7.02
25	B	Endrin Ketone	0.942	0.967	-2.7	112	0.00	7.52- 7.58
26	SA	Decachlorobiphenyl	1.195	1.035	13.4	99	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	111	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.19- 2.19
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

12.9.11 12

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2872-CC2867
Lab FileID: 6G81220.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	109	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.828	8.9	102	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.945	12.0	103	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.299	4.1	105	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.165	-3.4	115	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.157	-0.6	113	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.499	1.6	116	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.152	-11.7	118	0.00	4.44- 4.50
9	MB	Aldrin	1.046	1.069	-2.2	114	0.00	4.98- 5.04
10		alachlor	0.141	0.136	3.5	106	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	0.988	0.8	111	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.015	1.8	110	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	0.960	1.9	109	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.938	2.2	110	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	0.988	1.6	110	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	1.020	1.1	110	0.00	6.85- 6.91
17	MA	Endrin	0.991	0.995	-0.4	113	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.835	1.5	110	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	0.879	3.0	110	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.866	-5.7	113	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.701	-8.9	117	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.872	1.0	109	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.432	4.8	106	0.00	9.32- 9.38
24		Mirex	0.734	0.694	5.4	110	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.894	-9.0	117	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.720	7.6	113	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	0.00	1.56- 2.56
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.56- 2.56
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81157.d 6pst2867.m Fri Dec 17 08:13:24 2021

12.9.11

12

Continuing Calibration Summary

Job Number: JD36319 **Sample:** G6G2873-CC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81259.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ch...73\6g81259.d\ECD1A.CH Vial: 4
Acq On : 17-Dec-21, 08:00:14 Operator: christp
Sample : cc2867-50 Inst : GC6G
Misc : op37162,g6g2873,30,,,2,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\chrisc2\g6g2873\6g81259.d\ECD2B.CH Vial: 0
Acq On : 17-Dec-21, 08:00:13 Operator: christp
Sample : cc2867-50 Inst : GC6G
Misc : op37162,g6g2873,30,,,2,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\MSDCHEM\1\METHODS\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Fri Dec 17 22:41:33 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	119	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene	0.621	0.609	1.9	111	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.658	6.0	114	0.00	2.55- 2.61
4	A	alpha-BHC	1.309	1.426	-8.9	120	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.300	-14.1	135	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.253	-19.4	137	0.00	3.43- 3.49
7	B	beta-BHC	0.450	0.502	-11.6	134	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.332	-27.2#	141	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.264	-13.9	138	0.00	3.74- 3.80
10		alachlor	0.109	0.103	5.5	114	0.00	3.88- 3.94
11	B	Heptachlor Epoxide	0.974	1.132	-16.2	138	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	1.228	-24.3#	136	0.00	4.57- 4.63
13	B	alpha-Chlordane	0.949	1.178	-24.1#	141	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.220	-15.2	134	0.00	4.90- 4.96
15	B	4,4'-DDE	0.996	1.090	-9.4	131	0.00	4.86- 4.92
16	MA	Dieldrin	1.070	1.177	-10.0	128	0.00	5.21- 5.27
17	MA	Endrin	1.057	1.117	-5.7	125	0.00	5.52- 5.58
18	A	4,4'-DDD	0.788	0.864	-9.6	126	0.00	5.66- 5.72
19	B	Endosulfan II	0.996	1.026	-3.0	127	0.00	5.83- 5.89
20	MA	4,4'-DDT	0.844	0.920	-9.0	132	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.846	-11.2	138	0.00	6.43- 6.49
22	B	Endosulfan Sulfate	0.973	1.034	-6.3	124	0.00	7.09- 7.15
23	A	Methoxychlor	0.460	0.461	-0.2	113	0.00	6.85- 6.91
24		Mirex	0.781	0.817	-4.6	125	0.00	6.95- 7.01
25	B	Endrin Ketone	0.942	1.137	-20.7#	142	0.00	7.52- 7.58
26	SA	Decachlorobiphenyl	1.195	1.120	6.3	115	0.00	9.32- 9.38
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	119	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	116	0.00	1.19- 2.19
34		Chlordane {A}		----------NA----------				

Continuing Calibration Summary

Job Number: JD36319 **Sample:** G6G2873-CC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81259.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	114	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.838	7.8	108	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.971	9.6	111	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.345	0.7	114	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.204	-6.8	124	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.198	-4.2	123	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.510	-0.6	124	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.193	-15.7	128	0.00	4.44- 4.50
9	MB	Aldrin	1.046	1.118	-6.9	124	0.00	4.98- 5.04
10		alachlor	0.141	0.141	0.0	116	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	1.049	-5.3	123	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.076	-4.1	122	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	1.025	-4.7	122	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.990	-3.2	122	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	1.036	-3.2	121	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	1.079	-4.7	122	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.015	-2.4	120	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.873	-2.9	120	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	0.922	-1.8	121	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.879	-7.3	120	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.752	-16.8	131	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.934	-6.0	122	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.446	1.8	115	0.00	9.31- 9.37
24		Mirex	0.734	0.725	1.2	120	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.988	-20.5#	135	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.747	4.1	122	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	118	0.00	1.56- 2.56
28	L8	Toxaphene{A}			----------NA----------			
29	L8	Toxaphene{B}			----------NA----------			
30	L8	Toxaphene{C}			----------NA----------			
31	L8	Toxaphene{D}			----------NA----------			
32	L8	Toxaphene{E}			----------NA----------			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.56- 2.56
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81220.d 6pst2867.m Sat Dec 18 01:38:42 2021

12.9.12

12

Continuing Calibration Summary

Job Number: JD36319 **Sample:** G6G2874-CC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81272.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\G6G2874\6g81272.d\ECD1A.CH Vial: 2
Signal #2 : C:\msdchem\1\data\G6G2874\6g81272.d\ECD2B.CH
Acq On : 17-Dec-21, 22:34:22 Operator: rebeccak
Sample : cc2867-25 Inst : GC6G
Misc : op37055,g6g2874,250,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6PST2867.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	131	0.00	1.18- 2.18
2	SAB	Tetrachloro-m-xylene	0.621	0.573	7.7	118	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.647	6.6	127	0.00	2.54- 2.60
4	A	alpha-BHC	1.309	1.330	-1.6	136	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.221	-7.2	148	0.00	2.95- 3.01
6	MA	Heptachlor	1.049	1.173	-11.8	148	0.00	3.42- 3.48
7	B	beta-BHC	0.450	0.483	-7.3	147	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.194	-14.0	154#	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.146	-3.2	137	0.00	3.74- 3.80
10		alachlor	0.109	0.103	5.5	123	-0.01	3.88- 3.94
11	B	Heptachlor Epoxide	0.974	1.103	-13.2	153#	0.00	4.41- 4.47
12	B	gamma-Chlordane	0.988	1.131	-14.5	154#	0.00	4.57- 4.63
13	B	alpha-Chlordane	0.949	1.092	-15.1	146	0.00	4.73- 4.79
14	A	Endosulfan I	1.059	1.142	-7.8	144	-0.01	4.90- 4.96
15	B	4,4'-DDE	0.996	1.041	-4.5	143	-0.01	4.86- 4.92
16	MA	Dieldrin	1.070	1.125	-5.1	141	-0.01	5.21- 5.27
17	MA	Endrin	1.057	1.072	-1.4	139	0.00	5.52- 5.58
18	A	4,4'-DDD	0.788	0.822	-4.3	140	-0.01	5.66- 5.72
19	B	Endosulfan II	0.996	0.991	0.5	143	0.00	5.83- 5.89
20	MA	4,4'-DDT	0.844	0.892	-5.7	146	0.00	6.06- 6.12
21	B	Endrin Aldehyde	0.761	0.820	-7.8	154#	0.00	6.43- 6.49
22	B	Endosulfan Sulfate	0.973	0.996	-2.4	144	-0.01	7.09- 7.15
23	A	Methoxychlor	0.460	0.508	-10.4	145	0.00	6.85- 6.91
24		Mirex	0.781	0.831	-6.4	143	-0.01	6.95- 7.01
25	B	Endrin Ketone	0.942	1.043	-10.7	162#	-0.01	7.52- 7.58
26	SA	Decachlorobiphenyl	1.195	1.223	-2.3	146	0.00	9.32- 9.38
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	131	0.00	1.18- 2.18
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	131	0.00	1.18- 2.18
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

12.9.13

12

Continuing Calibration Summary

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2874-CC2867
Lab FileID: 6G81272.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	131	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.822	9.6	120	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.977	9.0	124	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.315	3.0	130	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.171	-3.9	138	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.171	-1.8	134	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.513	-1.2	137	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.140	-10.6	146	0.00	4.43- 4.49
9	MB	Aldrin	1.046	1.079	-3.2	137	0.00	4.98- 5.04
10		alachlor	0.141	0.149	-5.7	132	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	1.024	-2.8	136	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.056	-2.1	137	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	0.988	-0.9	133	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.968	-0.9	135	0.00	6.41- 6.47
15	B	4,4'-DDE	1.004	1.005	-0.1	134	0.00	6.58- 6.64
16	MA	Dieldrin	1.031	1.047	-1.6	135	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.018	-2.7	135	0.00	7.35- 7.41
18	A	4,4'-DDD	0.848	0.855	-0.8	135	0.00	7.53- 7.59
19	B	Endosulfan II	0.906	0.915	-1.0	136	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.850	-3.8	135	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.718	-11.5	149	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.925	-5.0	140	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.467	-2.9	134	0.00	9.31- 9.37
24		Mirex	0.734	0.726	1.1	132	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.898	-9.5	149	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.788	-1.2	141	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	131	0.00	1.56- 2.56
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	131	0.00	1.56- 2.56
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6PST2867.M Fri Dec 17 22:53:52 2021

12.9.13

12

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2867	**Method:** EPA 608.3	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2867-IC2867	6G81074.D	12/10/21 03:54	n/a	Initial cal 100
G6G2867-IC2867	6G81075.D	12/10/21 04:13	n/a	Initial cal 75
G6G2867-IC2867	6G81076.D	12/10/21 04:31	n/a	Initial cal 50
G6G2867-ICC2867	6G81077.D	12/10/21 04:49	n/a	Initial cal 25
G6G2867-IC2867	6G81078.D	12/10/21 05:08	n/a	Initial cal 10
G6G2867-IC2867	6G81079.D	12/10/21 05:25	n/a	Initial cal 5
G6G2867-IC2867	6G81080.D	12/10/21 05:43	n/a	Initial cal 2
G6G2867-IC2867	6G81081.D	12/10/21 06:02	n/a	Initial cal 1
G6G2867-IC2867	6G81082.D	12/10/21 06:20	n/a	Initial cal 500
G6G2867-IC2867	6G81083.D	12/10/21 06:38	n/a	Initial cal 500
G6G2867-ICV2867	6G81084.D	12/10/21 06:57	n/a	Initial cal verification 25
G6G2867-ICV2867	6G81085.D	12/10/21 07:15	n/a	Initial cal verification 500
G6G2867-ICV2867	6G81086.D	12/10/21 07:33	n/a	Initial cal verification 500
G6G2867-ICV2867	6G81087.D	12/10/21 07:52	n/a	Initial cal verification 25
G6G2867-ICV2867	6G81088.D	12/10/21 08:10	n/a	Initial cal verification 25

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2870	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2870-DDT	6G81156.D	12/14/21 03:49	n/a	DDT/Endrin Breakdown Check
G6G2870-CC2867	6G81157.D	12/14/21 04:06	n/a	Continuing cal 50
OP37055-MB1	6G81159.D	12/14/21 04:42	OP37055	Method Blank
OP37055-BS1	6G81160.D	12/14/21 05:00	OP37055	Blank Spike
OP37055-BSD	6G81161.D	12/14/21 05:18	OP37055	Blank Spike Duplicate
JD36319-2	6G81168.D	12/14/21 07:27	OP37055	HOFF MW-A
JD36319-3	6G81169.D	12/14/21 07:45	OP37055	HOFF MW-10
ZZZZZZ	6G81170.D	12/14/21 08:03	OP37055	(unrelated sample)
ZZZZZZ	6G81171.D	12/14/21 08:22	OP37055	(unrelated sample)
ZZZZZZ	6G81172.D	12/14/21 09:44	OP37055	(unrelated sample)
G6G2870-CC2867	6G81178.D	12/14/21 11:33	n/a	Continuing cal 25
ZZZZZZ	6G81180.D	12/14/21 12:10	OP37055	(unrelated sample)
ZZZZZZ	6G81181.D	12/14/21 12:29	OP37055	(unrelated sample)
ZZZZZZ	6G81182.D	12/14/21 12:47	OP37055	(unrelated sample)
ZZZZZZ	6G81183.D	12/14/21 13:06	OP37055	(unrelated sample)
ZZZZZZ	6G81185.D	12/14/21 13:42	OP37055	(unrelated sample)
ZZZZZZ	6G81186.D	12/14/21 14:01	OP37055	(unrelated sample)

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2871	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2871-DDT	6G81187.D	12/15/21 00:08	n/a	DDT/Endrin Breakdown Check
G6G2871-CC2867	6G81188.D	12/15/21 00:26	n/a	Continuing cal 50
ZZZZZZ	6G81190.D	12/15/21 01:37	OP37028	(unrelated sample)
ZZZZZZ	6G81191.D	12/15/21 01:55	OP37028	(unrelated sample)
ZZZZZZ	6G81192.D	12/15/21 02:13	OP37028	(unrelated sample)
ZZZZZZ	6G81193.D	12/15/21 02:31	OP36976	(unrelated sample)
JD36387-1	6G81197.D	12/15/21 03:44	OP37055	(used for QC only; not part of job JD36319)
OP37055-MS	6G81198.D	12/15/21 04:03	OP37055	Matrix Spike
OP37055-MSD	6G81199.D	12/15/21 04:21	OP37055	Matrix Spike Duplicate
JD36387-1F	6G81200.D	12/15/21 04:40	OP37055	(used for QC only; not part of job JD36319)
OP37055-MS2	6G81201.D	12/15/21 04:58	OP37055	Matrix Spike
OP37055-MSD2	6G81202.D	12/15/21 05:16	OP37055	Matrix Spike Duplicate
JD36319-4	6G81203.D	12/15/21 05:34	OP37055	HOFF MW-8DL
ZZZZZZ	6G81205.D	12/15/21 06:10	OP37055	(unrelated sample)
G6G2871-CC2867	6G81209.D	12/15/21 07:24	n/a	Continuing cal 25
OP36976-MB1	6G81211.D	12/15/21 08:01	OP36976	Method Blank
OP36976-BS1	6G81212.D	12/15/21 08:19	OP36976	Blank Spike
OP37028-MB1	6G81213.D	12/15/21 08:37	OP37028	Method Blank
OP37028-BS1	6G81214.D	12/15/21 08:56	OP37028	Blank Spike
OP37028-BSD	6G81215.D	12/15/21 09:13	OP37028	Blank Spike Duplicate
OP37055-MB1	6G81216.D	12/15/21 09:31	OP37055	Method Blank
OP37055-BS1	6G81217.D	12/15/21 09:50	OP37055	Blank Spike
OP37055-BSD	6G81218.D	12/15/21 10:08	OP37055	Blank Spike Duplicate

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2872	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2872-DDT	6G81219.D	12/15/21 22:33	n/a	DDT/Endrin Breakdown Check
G6G2872-CC2867	6G81220.D	12/15/21 22:51	n/a	Continuing cal 50
OP37101-MB1	6G81222.D	12/15/21 23:45	OP37101	Method Blank
OP37101-BS1	6G81223.D	12/16/21 00:03	OP37101	Blank Spike
OP37101-BSD	6G81224.D	12/16/21 00:21	OP37101	Blank Spike Duplicate
ZZZZZZ	6G81225.D	12/16/21 00:40	OP37101	(unrelated sample)
ZZZZZZ	6G81226.D	12/16/21 00:58	OP37101	(unrelated sample)
ZZZZZZ	6G81227.D	12/16/21 01:16	OP37101	(unrelated sample)
ZZZZZZ	6G81228.D	12/16/21 01:35	OP37101	(unrelated sample)
ZZZZZZ	6G81229.D	12/16/21 01:52	OP37101	(unrelated sample)
ZZZZZZ	6G81230.D	12/16/21 02:11	OP37101	(unrelated sample)
ZZZZZZ	6G81231.D	12/16/21 02:29	OP37101	(unrelated sample)
ZZZZZZ	6G81232.D	12/16/21 02:47	OP37101	(unrelated sample)
ZZZZZZ	6G81233.D	12/16/21 03:06	OP37101	(unrelated sample)
ZZZZZZ	6G81234.D	12/16/21 03:24	OP37101	(unrelated sample)
ZZZZZZ	6G81235.D	12/16/21 03:43	OP37101	(unrelated sample)
JD36319-3	6G81236.D	12/16/21 04:01	OP37055	HOFF MW-10

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2873	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2873-DDT	6G81237.D	12/17/21 00:22	n/a	DDT/Endrin Breakdown Check
G6G2873-CC2867	6G81238.D	12/17/21 00:40	n/a	Continuing cal 25
JD36387-1	6G81240.D	12/17/21 02:08	OP37055	(used for QC only; not part of job JD36319)
ZZZZZZ	6G81243.D	12/17/21 03:01	OP37055	(unrelated sample)
OP37162-MB1	6G81244.D	12/17/21 03:33	OP37162	Method Blank
OP37053-MB2	6G81244.D	12/17/21 03:33	OP37053	Method Blank
OP37162-BS1	6G81245.D	12/17/21 03:51	OP37162	Blank Spike
OP37053-BS2	6G81245.D	12/17/21 03:51	OP37053	Blank Spike
OP37162-BSD	6G81246.D	12/17/21 04:08	OP37162	Blank Spike Duplicate
OP37053-BSD2	6G81246.D	12/17/21 04:08	OP37053	Blank Spike Duplicate
ZZZZZZ	6G81247.D	12/17/21 04:26	OP37053	(unrelated sample)
ZZZZZZ	6G81248.D	12/17/21 04:44	OP37053	(unrelated sample)
ZZZZZZ	6G81249.D	12/17/21 05:02	OP37053	(unrelated sample)
JD35487-4	6G81250.D	12/17/21 05:19	OP37162	(used for QC only; not part of job JD36319)
OP37162-MS	6G81251.D	12/17/21 05:37	OP37162	Matrix Spike
OP37162-LS13	6G81251.D	12/17/21 05:37	OP37162	Leachate Spike
OP37162-MSD	6G81252.D	12/17/21 05:55	OP37162	Matrix Spike Duplicate
ZZZZZZ	6G81253.D	12/17/21 06:13	OP37162	(unrelated sample)
ZZZZZZ	6G81254.D	12/17/21 06:31	OP37162	(unrelated sample)
ZZZZZZ	6G81255.D	12/17/21 06:49	OP37162	(unrelated sample)
ZZZZZZ	6G81256.D	12/17/21 07:06	OP37162	(unrelated sample)
OP37162-LB13	6G81257.D	12/17/21 07:24	OP37162	Leachate Blank
OP37162-LB16	6G81258.D	12/17/21 07:42	OP37162	Leachate Blank
G6G2873-CC2867	6G81259.D	12/17/21 08:00	n/a	Continuing cal 50
ZZZZZZ	6G81261.D	12/17/21 08:35	OP37162	(unrelated sample)
ZZZZZZ	6G81262.D	12/17/21 08:53	OP37162	(unrelated sample)
ZZZZZZ	6G81263.D	12/17/21 09:11	OP37162	(unrelated sample)
ZZZZZZ	6G81264.D	12/17/21 09:29	OP37162	(unrelated sample)
ZZZZZZ	6G81265.D	12/17/21 09:47	OP37162	(unrelated sample)
ZZZZZZ	6G81266.D	12/17/21 10:05	OP37162	(unrelated sample)
ZZZZZZ	6G81267.D	12/17/21 10:23	OP37162	(unrelated sample)
ZZZZZZ	6G81268.D	12/17/21 10:41	OP37162	(unrelated sample)
JD36319-5	6G81269.D	12/17/21 10:59	OP37055	HOFF MW-8DU
ZZZZZZ	6G81270.D	12/17/21 11:17	OP37055	(unrelated sample)

Run Sequence Report

Job Number: JD36319
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2874	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2874-DDT	6G81271.D	12/17/21 20:16	n/a	DDT/Endrin Breakdown Check
G6G2874-DDT	6G81271.D	12/17/21 22:16	n/a	DDT/Endrin Breakdown Check
G6G2874-CC2867	6G81272.D	12/17/21 22:34	n/a	Continuing cal 25
OP37120-MB1	6G81274.D	12/17/21 23:10	OP37120	Method Blank
OP37120-BS1	6G81275.D	12/17/21 23:28	OP37120	Blank Spike
OP37120-BSD	6G81276.D	12/17/21 23:46	OP37120	Blank Spike Duplicate
ZZZZZZ	6G81279.D	12/18/21 00:39	OP37120	(unrelated sample)
ZZZZZZ	6G81280.D	12/18/21 00:57	OP37120	(unrelated sample)
ZZZZZZ	6G81281.D	12/18/21 01:15	OP37120	(unrelated sample)
ZZZZZZ	6G81282.D	12/18/21 01:33	OP37120	(unrelated sample)
ZZZZZZ	6G81283.D	12/18/21 01:51	OP37120	(unrelated sample)
ZZZZZZ	6G81284.D	12/18/21 02:09	OP37120	(unrelated sample)
ZZZZZZ	6G81285.D	12/18/21 02:26	OP37120	(unrelated sample)
ZZZZZZ	6G81286.D	12/18/21 02:44	OP37120	(unrelated sample)
ZZZZZZ	6G81287.D	12/18/21 03:02	OP37120	(unrelated sample)
ZZZZZZ	6G81288.D	12/18/21 03:20	OP37120	(unrelated sample)
ZZZZZZ	6G81289.D	12/18/21 03:38	OP37120	(unrelated sample)
ZZZZZZ	6G81290.D	12/18/21 03:56	OP37120	(unrelated sample)
ZZZZZZ	6G81291.D	12/18/21 04:13	OP37120	(unrelated sample)
ZZZZZZ	6G81292.D	12/18/21 04:31	OP37120	(unrelated sample)

GC/LC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/15/21 13:56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 15\g6g2870\
Data File : 6g81168.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14-Dec-21, 07:27:03
Operator : christp
Sample : jd36319-2
Misc : op37055,g6g2870,255,,,2,1
ALS Vial : 69 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 15 07:16:27 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 15 06:36:49 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.683	2.059	667.6E6	481.4E6	50.000	50.000
27) I 1-bromo-2...	1.683	2.059	667.6E6	481.4E6	50.000	50.000
33) I 1-bromo-2...	1.683	2.059	667.6E6	481.4E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.261	2.886	393.3E6	376.8E6	47.434m	43.066
Spiked Amount 40.000	Range 30 - 150		Recovery = 118.58%		107.67%	
26) SA Decachlor...	9.356	11.850	398.6E6	175.4E6	24.971m	23.369m
Spiked Amount 40.000			Recovery = 62.43%		58.42%	
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

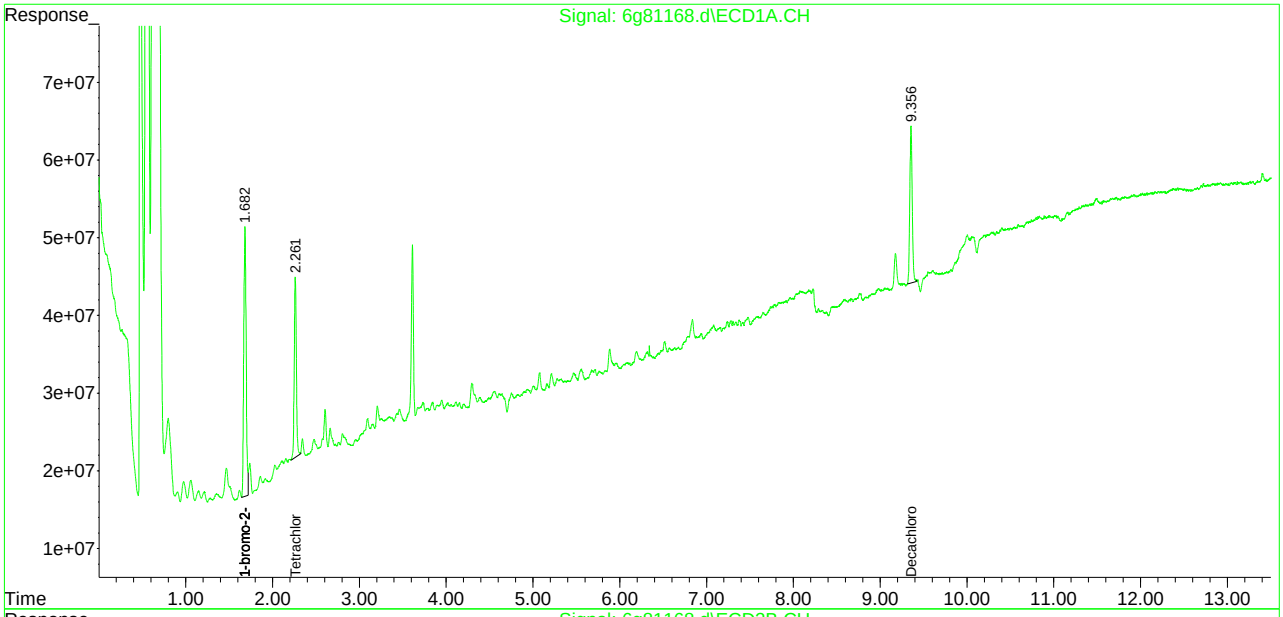
13.1.1
13

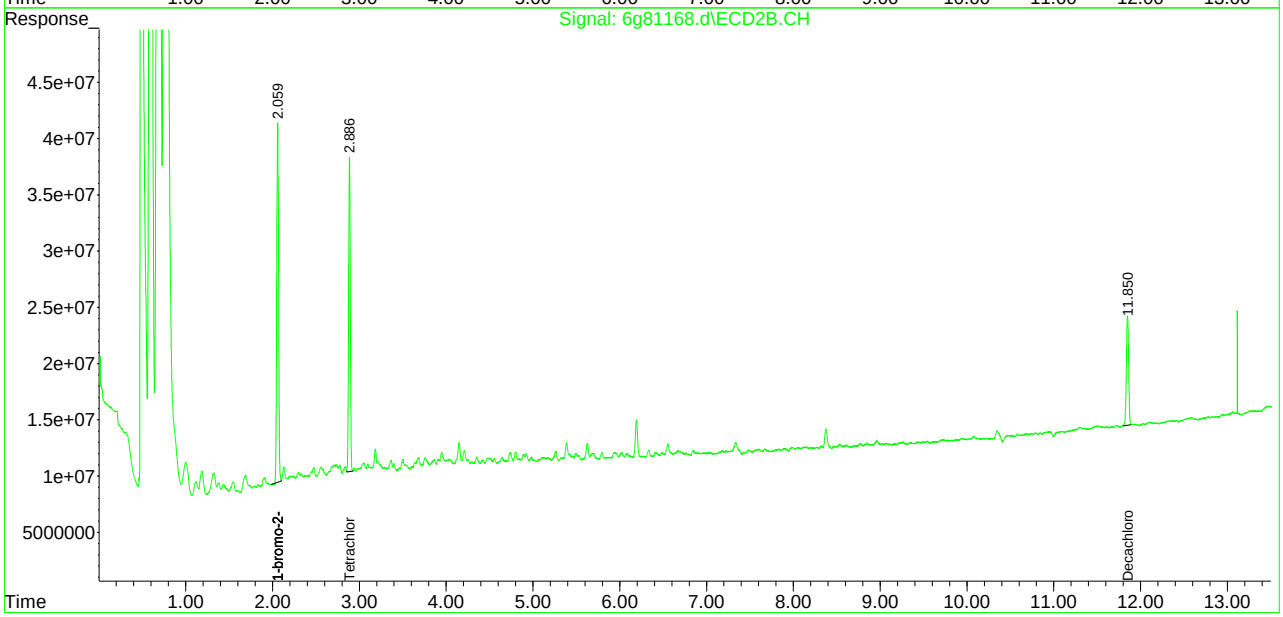
Quantitation Report (QT Reviewed)

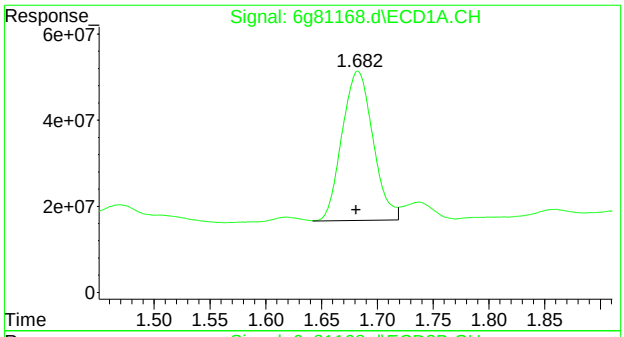
Data Path : C:\msdchem\1\data\trude\dec 15\g6g2870\
Data File : 6g81168.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14-Dec-21, 07:27:03
Operator : christp
Sample : jd36319-2
Misc : op37055,g6g2870,255,,,2,1
ALS Vial : 69 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 15 07:16:27 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 15 06:36:49 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

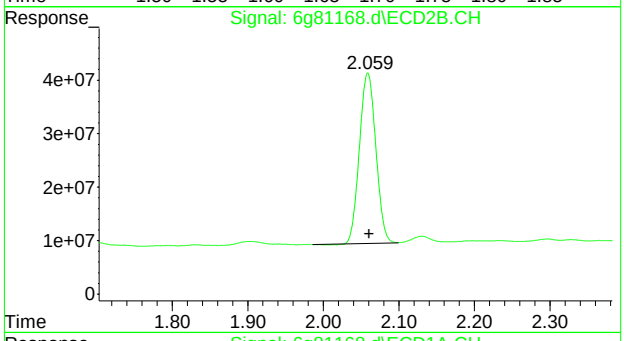






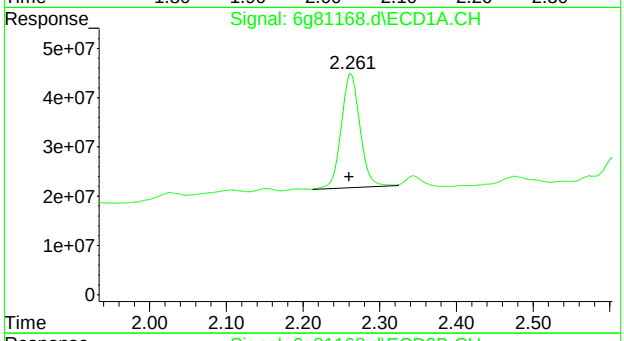
#1 1-bromo-2-nitrobenzene

R.T.: 1.683 min
Delta R.T.: 0.002 min
Response: 667582910
Conc: 50.00 PPB



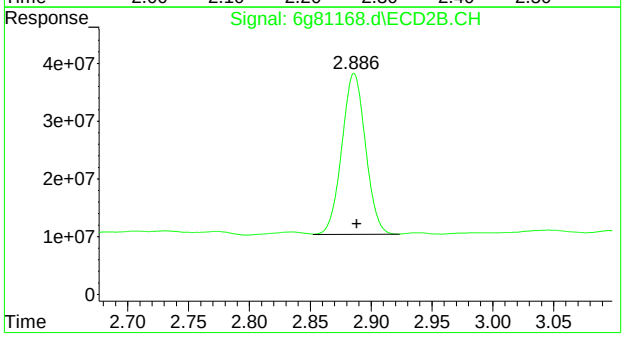
#1 1-bromo-2-nitrobenzene

R.T.: 2.059 min
Delta R.T.: -0.002 min
Response: 481442898
Conc: 50.00 PPB



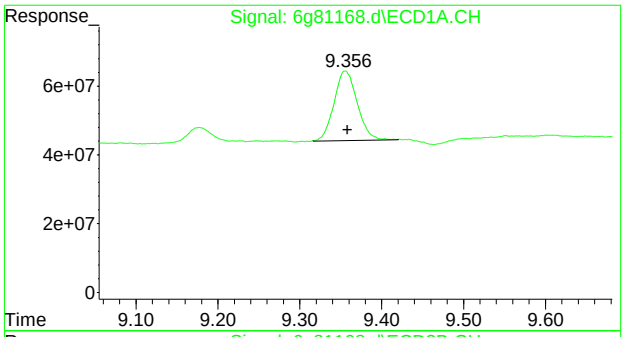
#2 Tetrachloro-m-xylene

R.T.: 2.261 min
Delta R.T.: 0.001 min
Response: 393257453
Conc: 47.43 PPB m



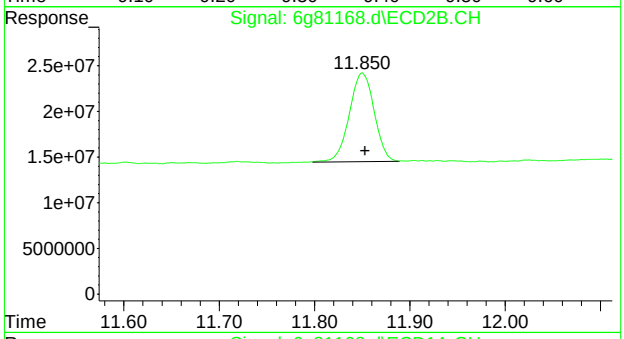
#2 Tetrachloro-m-xylene

R.T.: 2.886 min
Delta R.T.: -0.002 min
Response: 376782922
Conc: 43.07 PPB



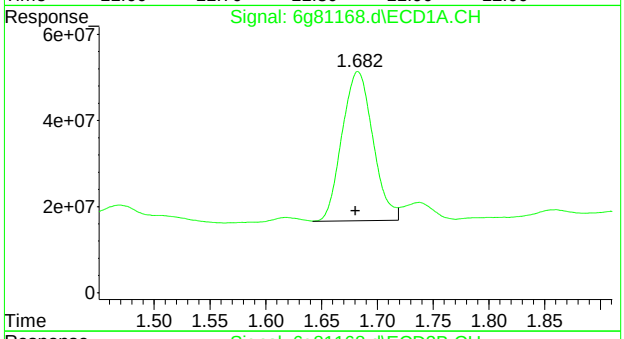
#26 Decachlorobiphenyl

R.T.: 9.356 min
Delta R.T.: -0.002 min
Response: 398577758
Conc: 24.97 PPB m



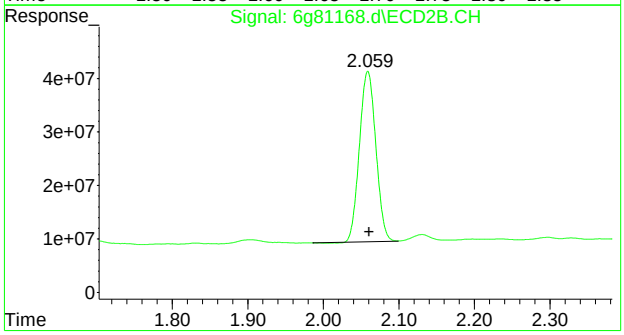
#26 Decachlorobiphenyl

R.T.: 11.850 min
Delta R.T.: -0.003 min
Response: 175365307
Conc: 23.37 PPB m



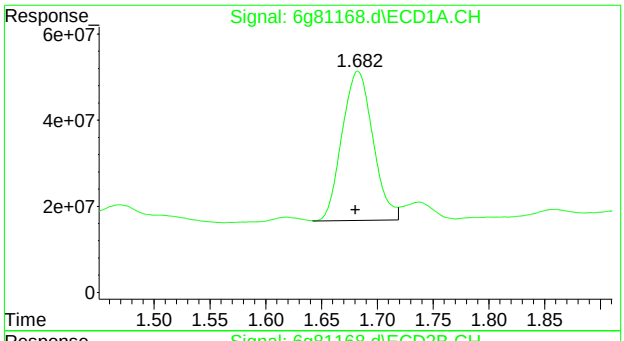
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.683 min
Delta R.T.: 0.002 min
Response: 667582910
Conc: 50.00 PPB



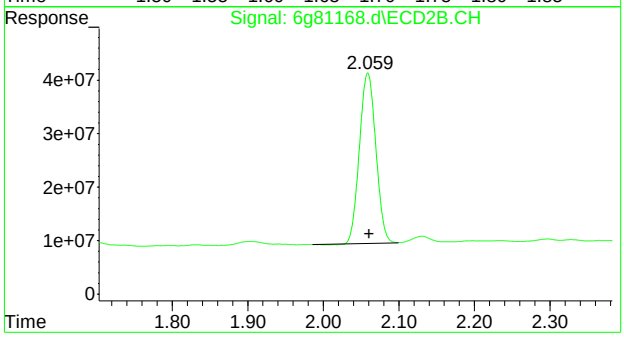
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.059 min
Delta R.T.: -0.002 min
Response: 481442898
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.683 min
Delta R.T.: 0.002 min
Response: 667582910
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.059 min
Delta R.T.: -0.002 min
Response: 481442898
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/17/21 11:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81169.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Dec 2021 7:45 am
Operator : christp
Sample : jd36319-3
Misc : op37055,g6g2870,255,,,2,1
ALS Vial : 70 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 15 14:01:02 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 15 06:36:49 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.681	2.058	777.9E6	540.1E6	50.000	50.000
27) I	1-bromo-2...	1.681	2.058	777.9E6	540.1E6	50.000	50.000
33) I	1-bromo-2...	1.681	2.058	777.9E6	540.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.260	2.886	211.1E6	173.9E6	21.853m	17.715m
	Spiked Amount 40.000	Range 30 - 150		Recovery =		54.63%	44.29%
26) SA	Decachlor...	9.357	11.851	233.0E6	137.0E6	12.527m	16.270 #
	Spiked Amount 40.000			Recovery =		31.32%	40.67%
	Target Compounds						
15) B	4,4'-DDE	4.907f	6.631	205.1E6	21484360	13.235	1.982m#
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

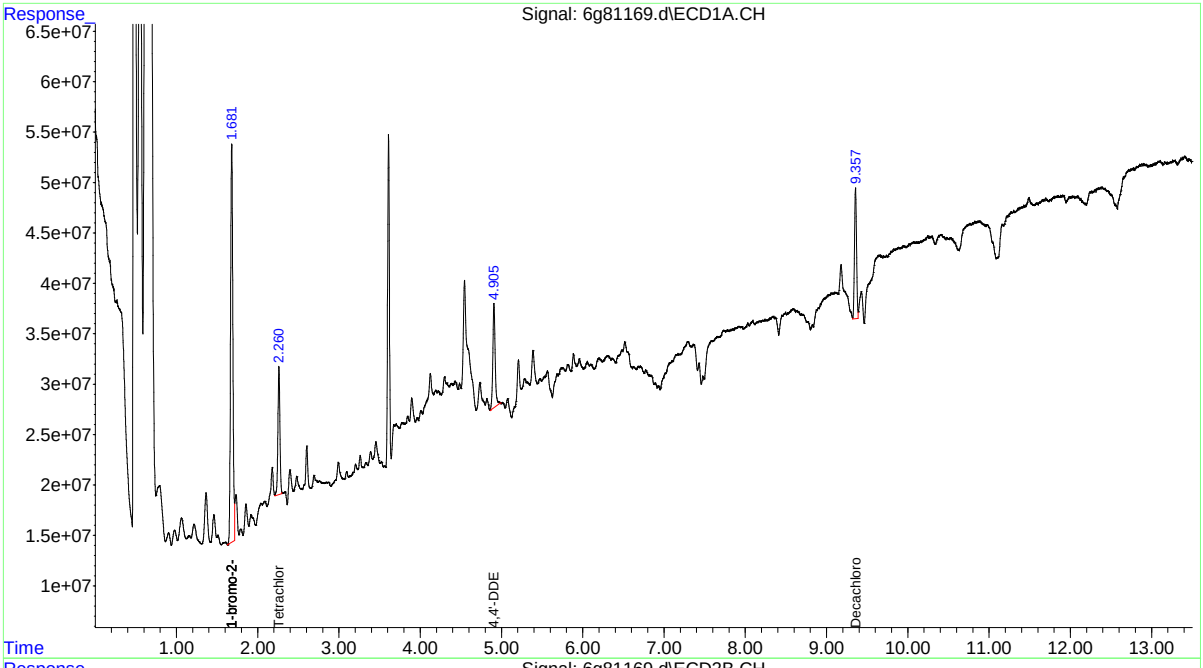
13.1.2
13

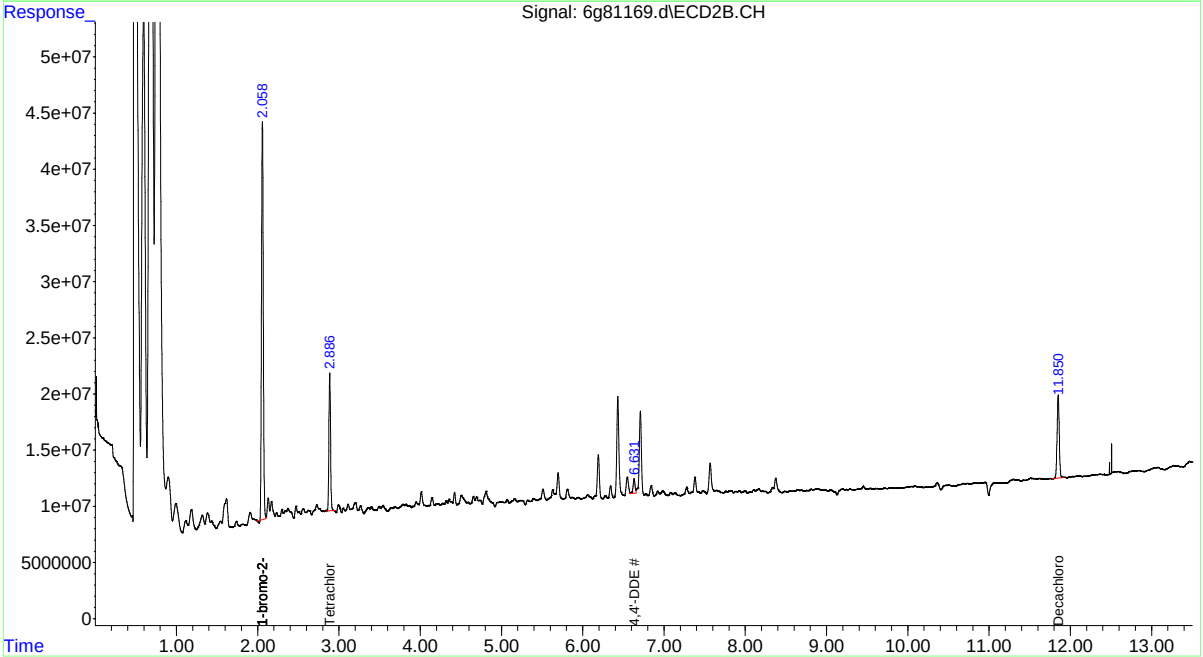
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81169.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Dec 2021 7:45 am
Operator : christp
Sample : jd36319-3
Misc : op37055,g6g2870,255,,,2,1
ALS Vial : 70 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 15 14:01:02 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 15 06:36:49 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/17/21 11:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81236.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Dec 2021 4:01 am
Operator : christp
Sample : jd36319-3
Misc : op37055,g6g2872,255,,,2,5
ALS Vial : 44 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 17 11:49:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:23 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.690	2.065	933.7E6	641.8E6	50.000	50.000
27) I	1-bromo-2...	1.690	2.065	933.7E6	641.8E6	50.000	50.000
33) I	1-bromo-2...	1.690	2.065	933.7E6	641.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.266	2.889	48875000	43345785	4.215	3.717
Spiked Amount	40.000	Range	30 - 150	Recovery	=	10.54%#	9.29%#
26) SA	Decachlor...	9.355	11.848	69081312	36823713	3.095	3.681
Spiked Amount	40.000			Recovery	=	7.74%	9.20%
	Target Compounds						
15) B	4,4'-DDE	4.907	6.632	42834006	6131454	2.303m	0.476m#
Sum Toxaphene				0	0	N.D.	N.D.
Average Toxaphene						0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

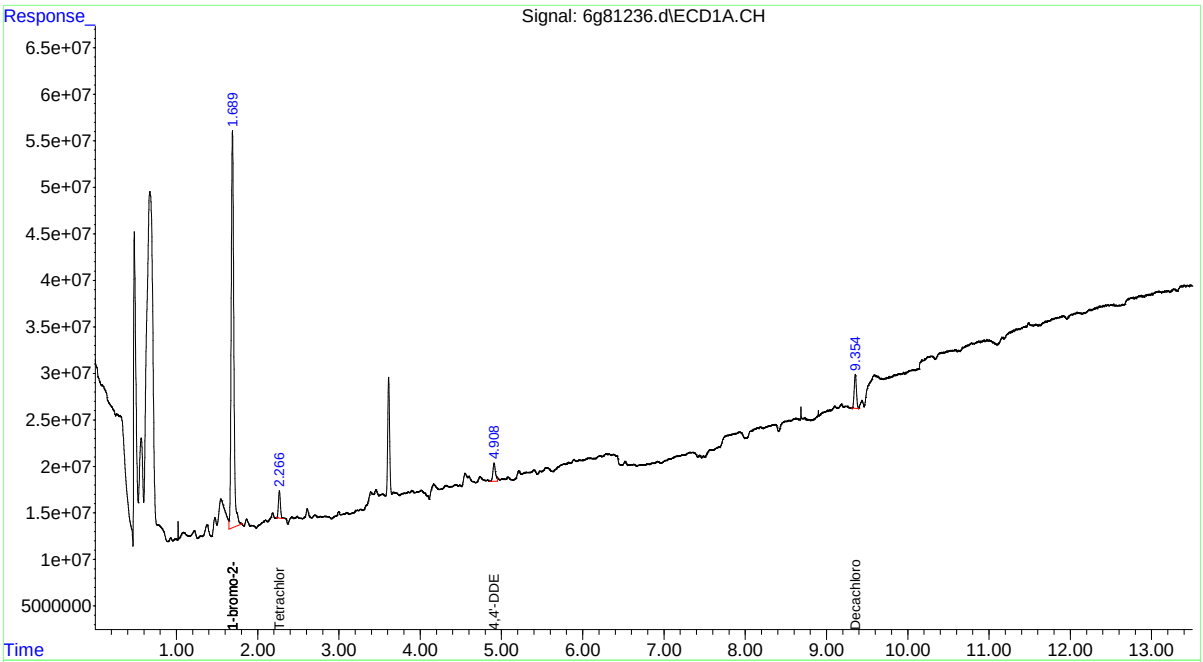
13.1.3
13

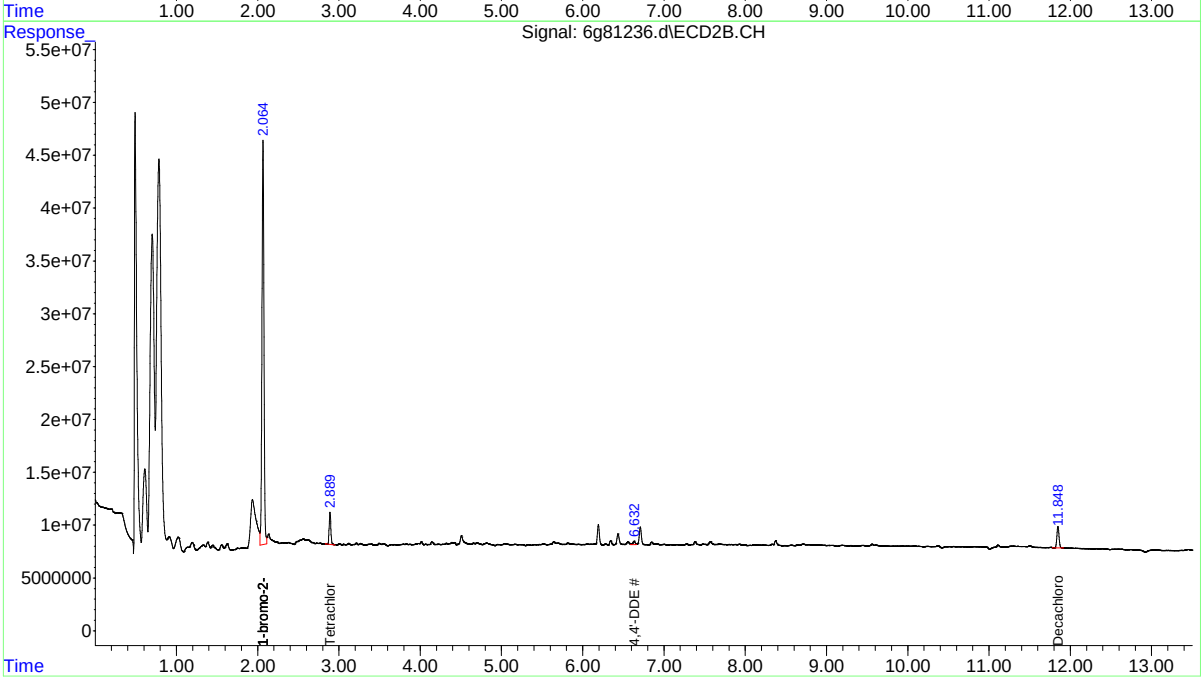
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81236.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Dec 2021 4:01 am
Operator : christp
Sample : jd36319-3
Misc : op37055,g6g2872,255,,,2,5
ALS Vial : 44 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 17 11:49:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:23 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/16/21 13:31

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81203.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Dec 2021 5:34 am
Operator : christp
Sample : jd36319-4
Misc : op37055,g6g2871,260,,,2,1
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 16 12:57:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Thu Dec 16 00:26:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.692	2.064	785.5E6	794.0E6	50.000	50.000
27) I 1-bromo-2...	1.692	2.064	785.5E6	794.0E6	50.000	50.000
33) I 1-bromo-2...	1.692	2.064	785.5E6	794.0E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.266	2.890	309.1E6	240.3E6	31.688	16.653m#
Spiked Amount 40.000	Range 30 - 150		Recovery =		79.22%	41.63%
26) SA Decachlor...	9.353	11.849	317.9E6	163.9E6	16.927m	13.245
Spiked Amount 40.000			Recovery =		42.32%	33.11%
Target Compounds						
21) B Endrin Al...	6.463	8.317	17002690	6708568	1.422m	0.656m#
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

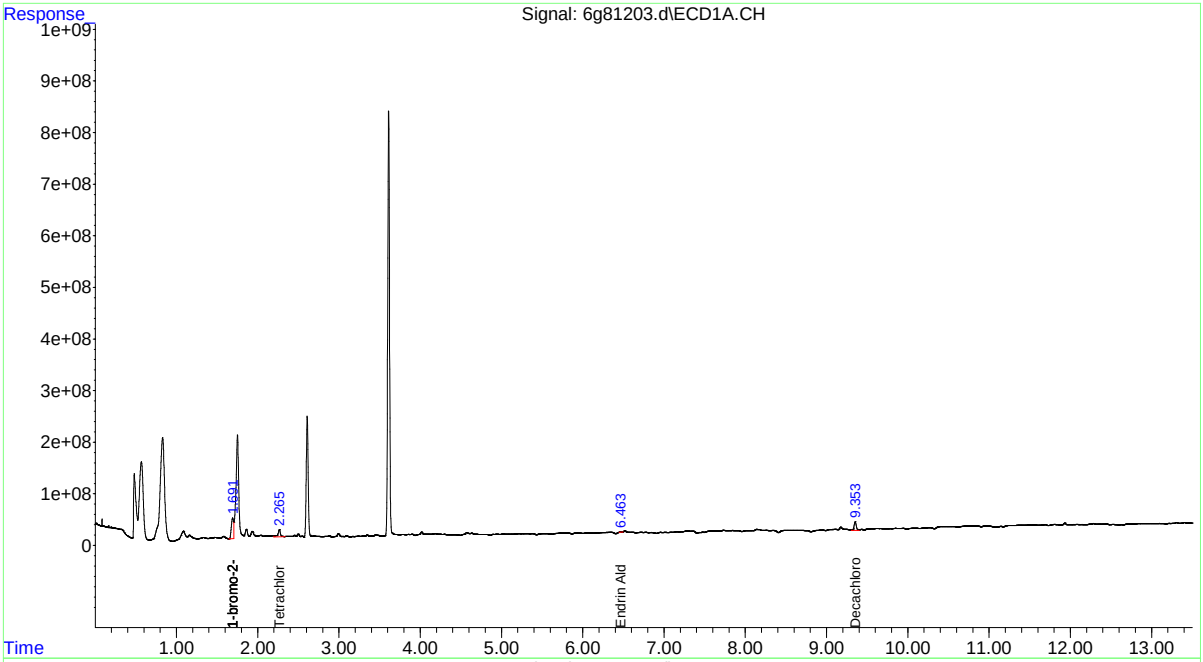
13.1.4
13

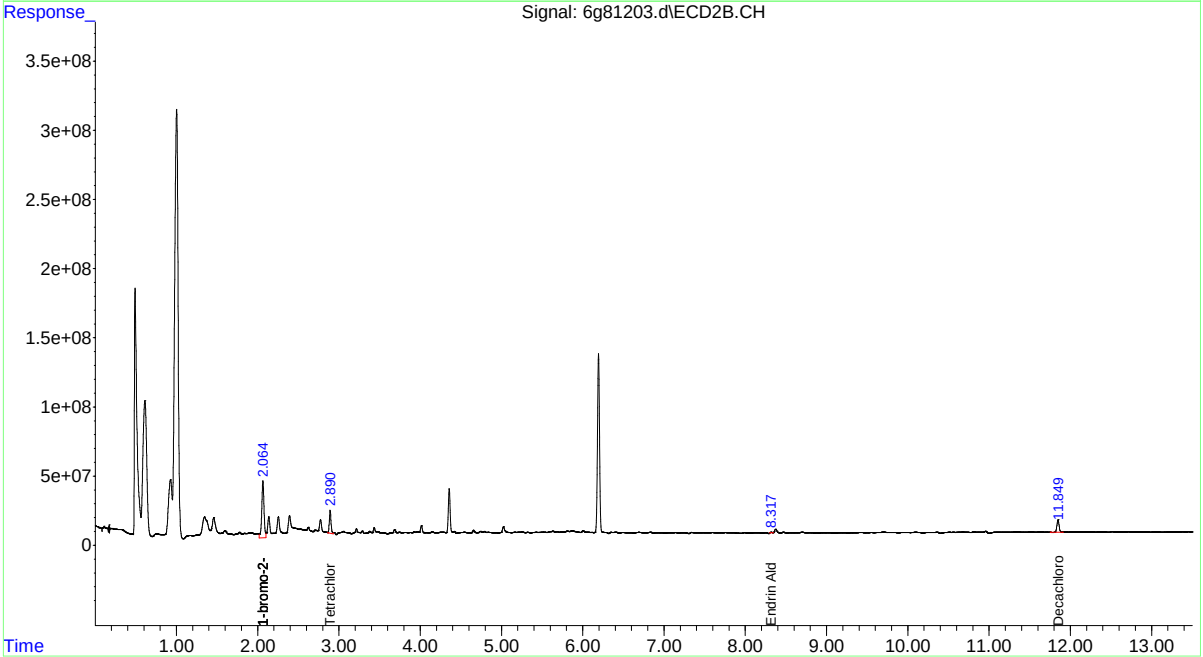
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81203.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Dec 2021 5:34 am
Operator : christp
Sample : jd36319-4
Misc : op37055,g6g2871,260,,,2,1
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 16 12:57:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Thu Dec 16 00:26:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\g6g2873\
Data File : 6g81269.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17-Dec-21, 10:59:18
Operator : christp
Sample : jd36319-5
Misc : op37055,g6g2873,250,,,2,1
ALS Vial : 72 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 18 01:36:24 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Fri Dec 17 22:41:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.687	2.059	688.4E6	899.7E6	50.000	50.000
27) I 1-bromo-2...	1.687	2.059	688.4E6	899.7E6	50.000	50.000
33) I 1-bromo-2...	1.687	2.059	688.4E6	899.7E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.265	2.888	321.3E6	383.0E6	37.584	23.425 #
Spiked Amount 40.000	Range 30 - 150		Recovery =		93.96%	58.56%
26) SA Decachlor...	9.351	11.847	347.4E6	137.8E6	21.107	9.829 #
Spiked Amount 40.000			Recovery =		52.77%	24.57%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

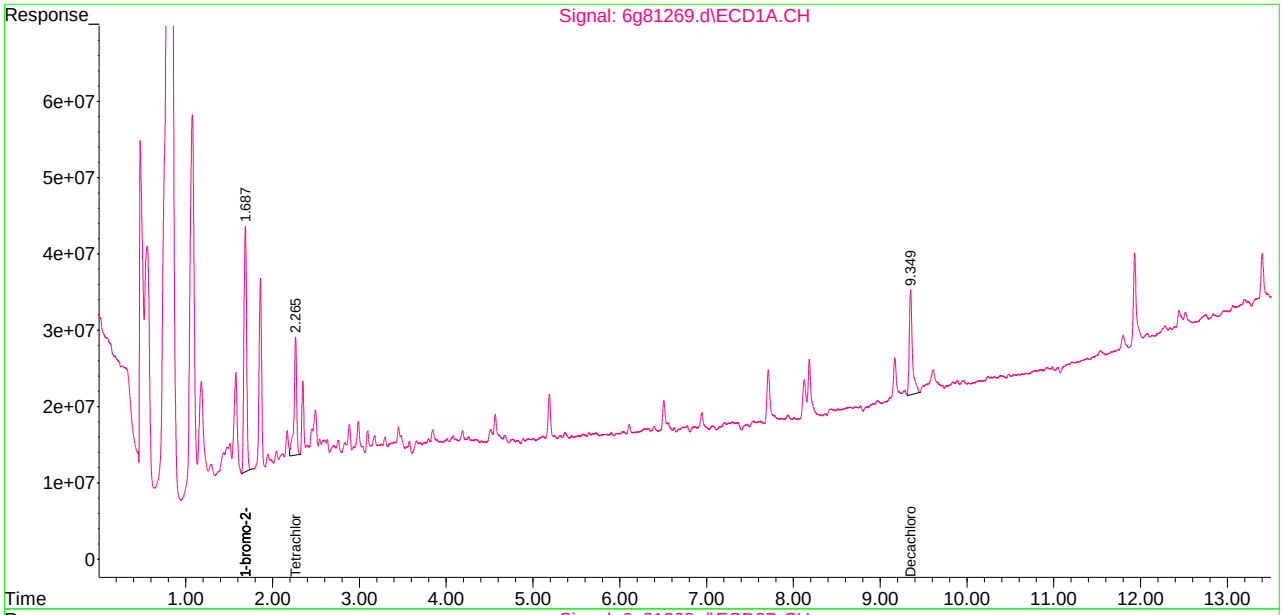
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

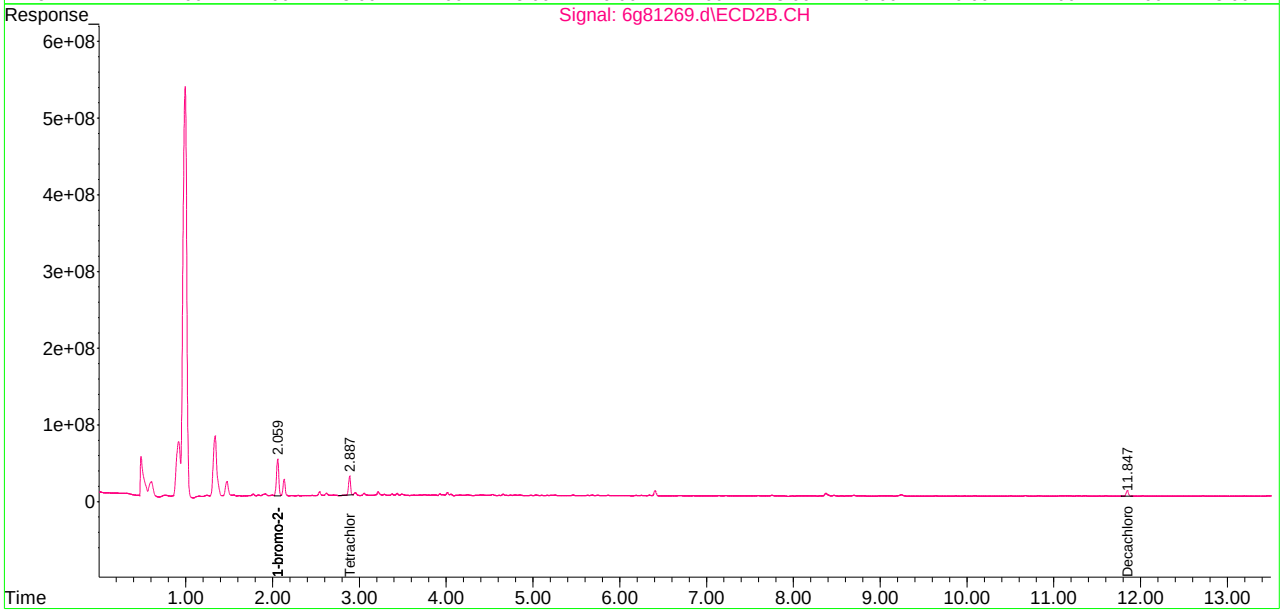
Quantitation Report (QT Reviewed)

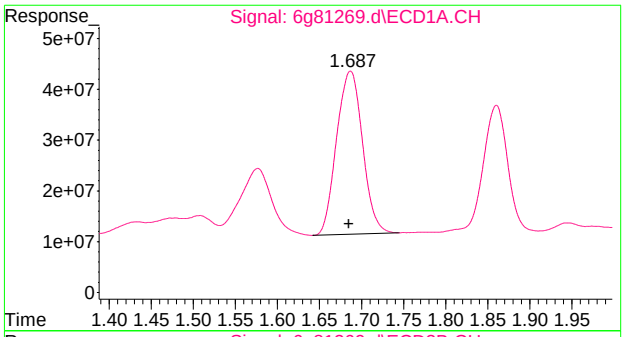
Data Path : C:\msdchem\1\data\chrisc2\g6g2873\
Data File : 6g81269.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17-Dec-21, 10:59:18
Operator : christp
Sample : jd36319-5
Misc : op37055,g6g2873,250,,,2,1
ALS Vial : 72 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 18 01:36:24 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Fri Dec 17 22:41:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

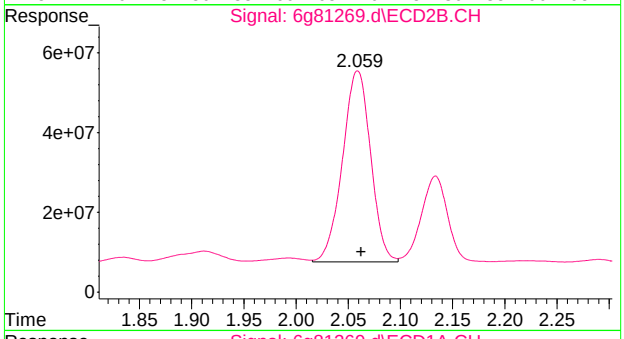






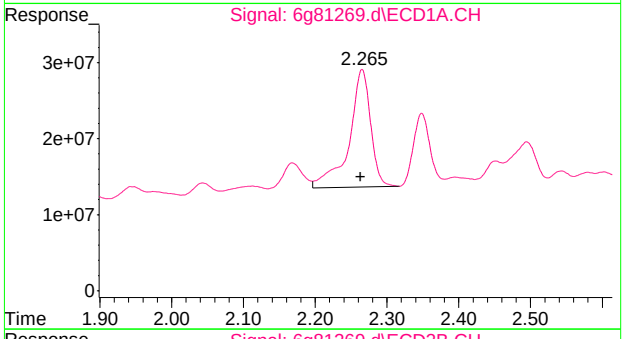
#1 1-bromo-2-nitrobenzene

R.T.: 1.687 min
Delta R.T.: 0.002 min
Response: 688396912
Conc: 50.00 PPB



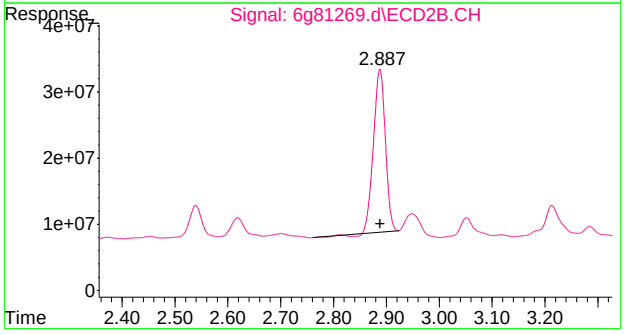
#1 1-bromo-2-nitrobenzene

R.T.: 2.059 min
Delta R.T.: -0.003 min
Response: 899730904
Conc: 50.00 PPB



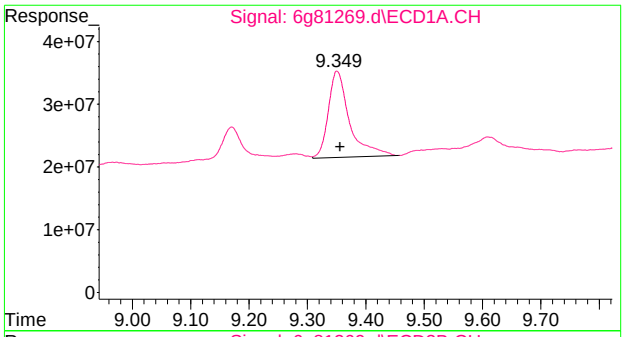
#2 Tetrachloro-m-xylene

R.T.: 2.265 min
Delta R.T.: 0.003 min
Response: 321311749
Conc: 37.58 PPB



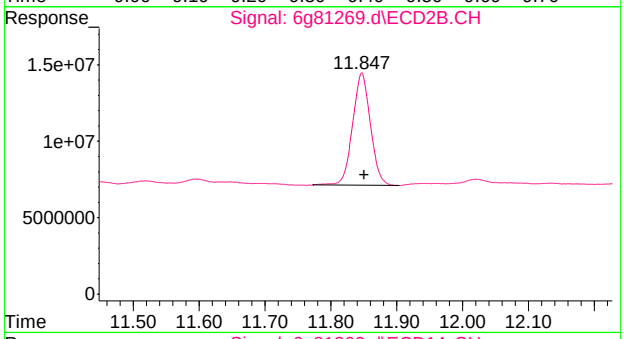
#2 Tetrachloro-m-xylene

R.T.: 2.888 min
Delta R.T.: 0.000 min
Response: 383007382
Conc: 23.43 PPB



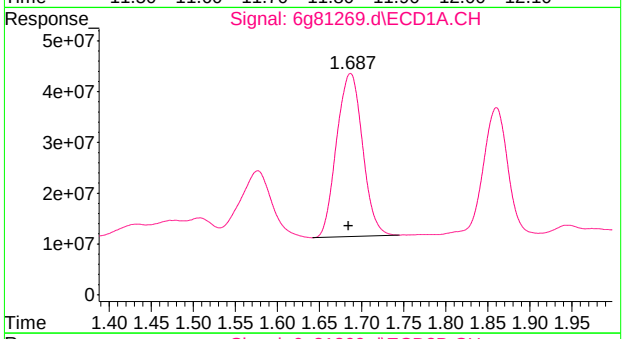
#26 Decachlorobiphenyl

R.T.: 9.351 min
Delta R.T.: -0.005 min
Response: 347416030
Conc: 21.11 PPB



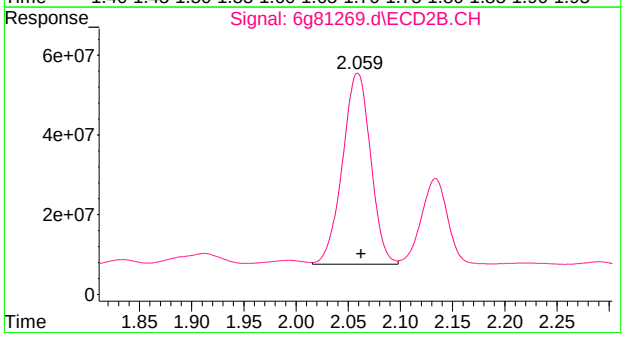
#26 Decachlorobiphenyl

R.T.: 11.847 min
Delta R.T.: -0.003 min
Response: 137846513
Conc: 9.83 PPB



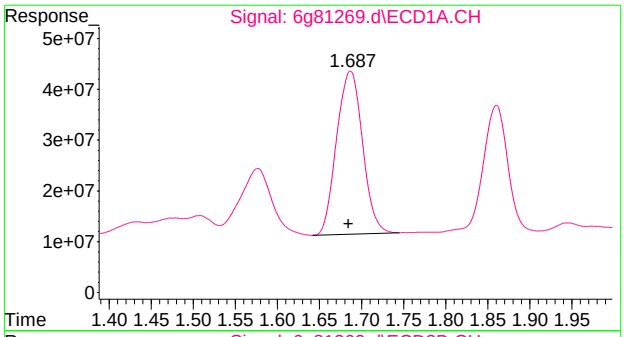
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.687 min
Delta R.T.: 0.002 min
Response: 688396912
Conc: 50.00 PPB



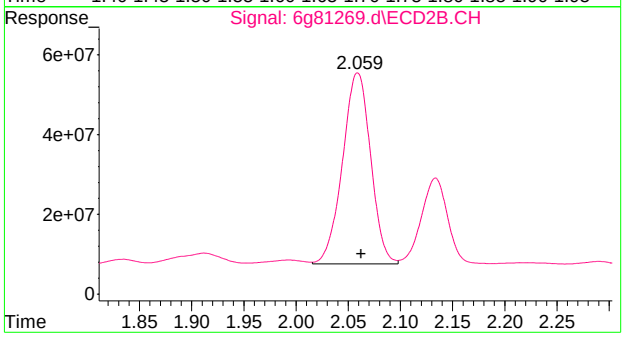
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.059 min
Delta R.T.: -0.003 min
Response: 899730904
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.687 min
Delta R.T.: 0.002 min
Response: 688396912
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.059 min
Delta R.T.: -0.003 min
Response: 899730904
Conc: 50.00 PPB

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 15\g6g2870\
Data File : 6g81159.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14-Dec-21, 04:42:22
Operator : christp
Sample : op37055-mb1
Misc : op37055,g6g2870,250,,,2,1
ALS Vial : 60 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 15 07:01:07 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 15 06:36:49 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.683	2.062	752.4E6	523.2E6	50.000	50.000
27) I 1-bromo-2...	1.683	2.062	752.4E6	523.2E6	50.000	50.000
33) I 1-bromo-2...	1.683	2.062	752.4E6	523.2E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.262	2.888	276.6E6	257.0E6	29.599	27.035
Spiked Amount 40.000	Range 30 - 150		Recovery =		74.00%	67.59%
26) SA Decachlor...	9.358	11.852	349.3E6	186.4E6	19.416	22.855
Spiked Amount 40.000			Recovery =		48.54%	57.14%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

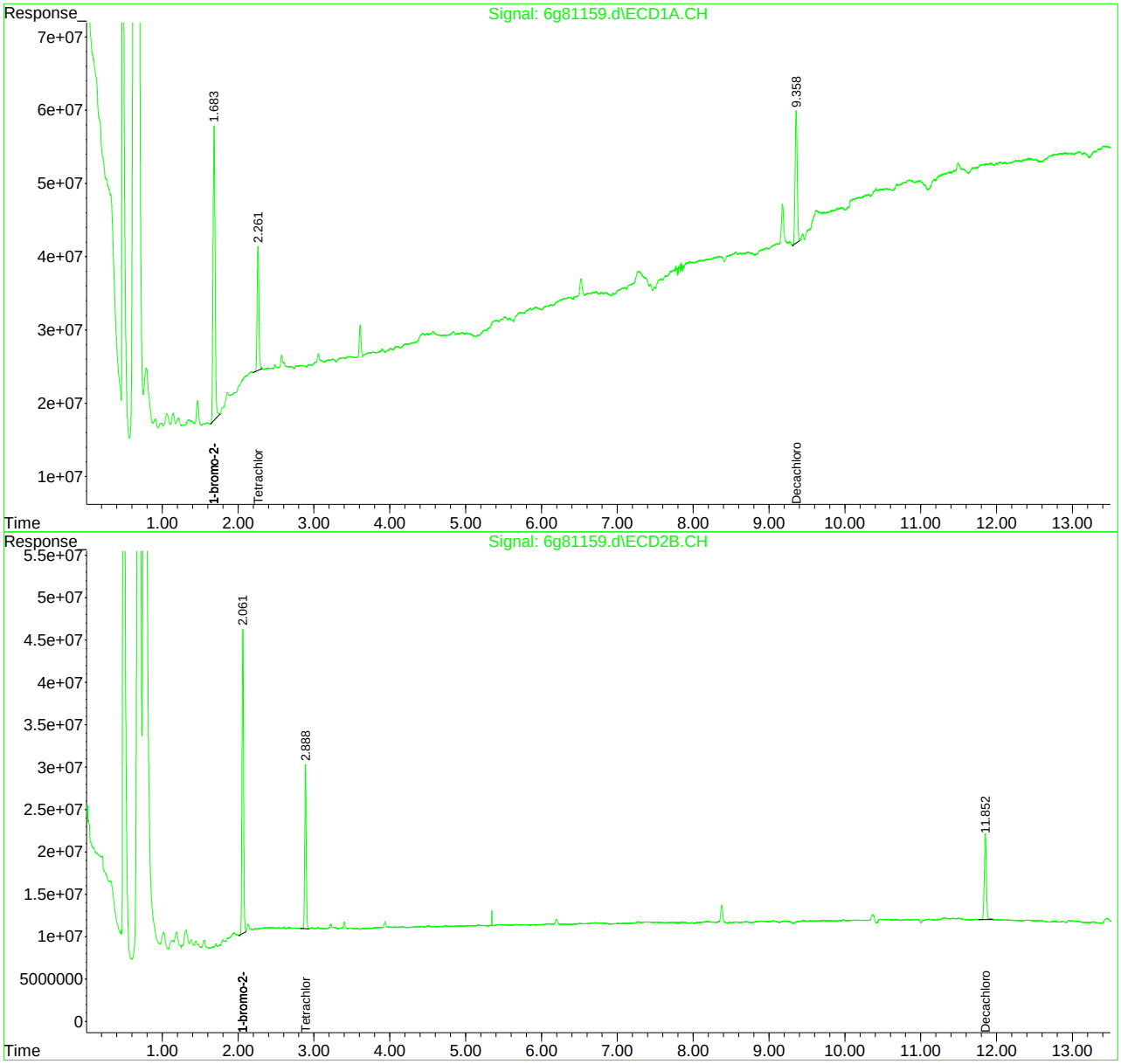
13.2.1
13

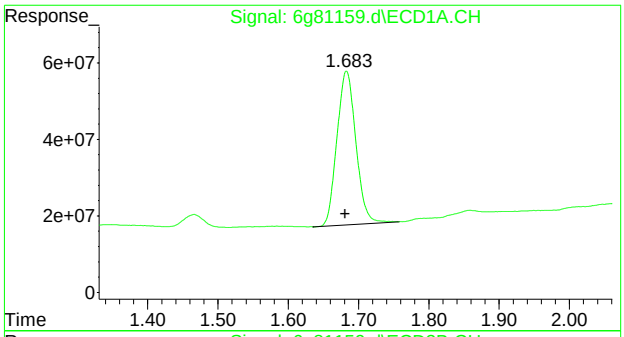
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 15\g6g2870\
Data File : 6g81159.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14-Dec-21, 04:42:22
Operator : christp
Sample : op37055-mb1
Misc : op37055,g6g2870,250,,,2,1
ALS Vial : 60 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 15 07:01:07 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 15 06:36:49 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

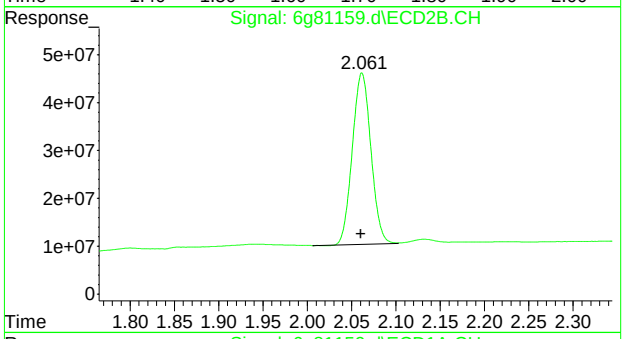
Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





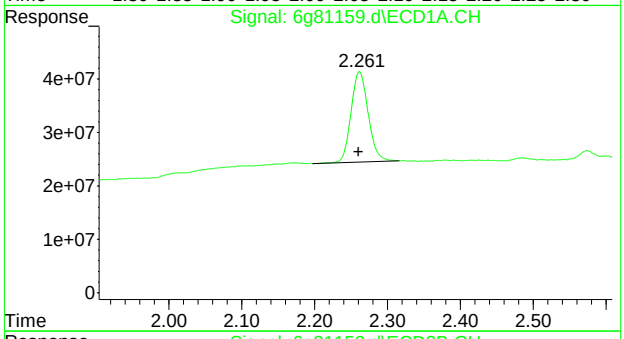
#1 1-bromo-2-nitrobenzene

R.T.: 1.683 min
Delta R.T.: 0.002 min
Response: 752416392
Conc: 50.00 PPB



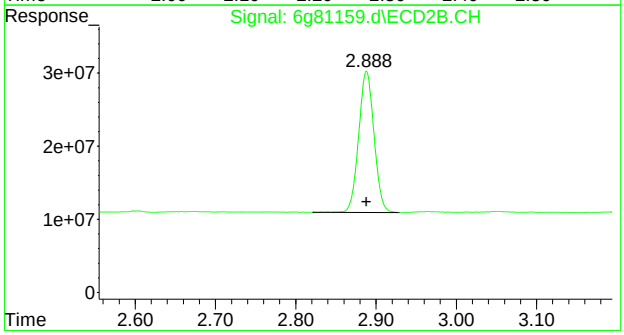
#1 1-bromo-2-nitrobenzene

R.T.: 2.062 min
Delta R.T.: 0.001 min
Response: 523198235
Conc: 50.00 PPB



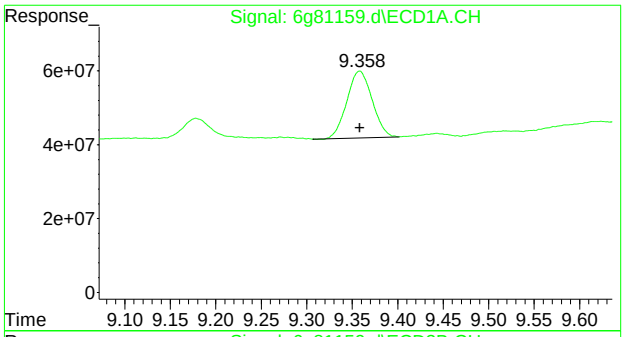
#2 Tetrachloro-m-xylene

R.T.: 2.262 min
Delta R.T.: 0.002 min
Response: 276575169
Conc: 29.60 PPB



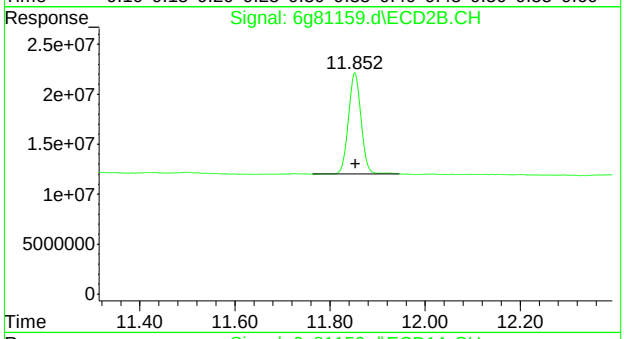
#2 Tetrachloro-m-xylene

R.T.: 2.888 min
Delta R.T.: 0.000 min
Response: 257042757
Conc: 27.04 PPB



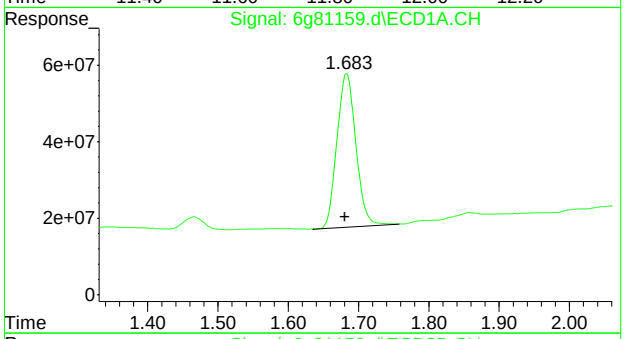
#26 Decachlorobiphenyl

R.T.: 9.358 min
Delta R.T.: 0.000 min
Response: 349297504
Conc: 19.42 PPB



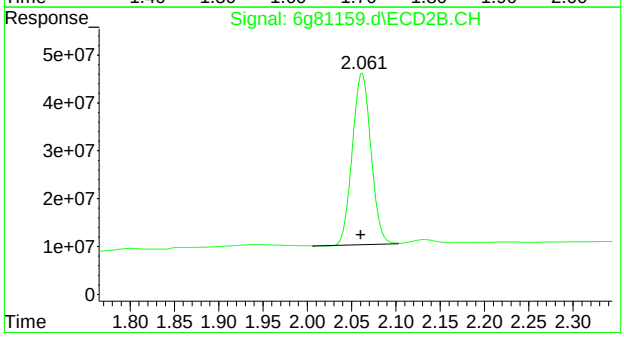
#26 Decachlorobiphenyl

R.T.: 11.852 min
Delta R.T.: 0.000 min
Response: 186387075
Conc: 22.86 PPB



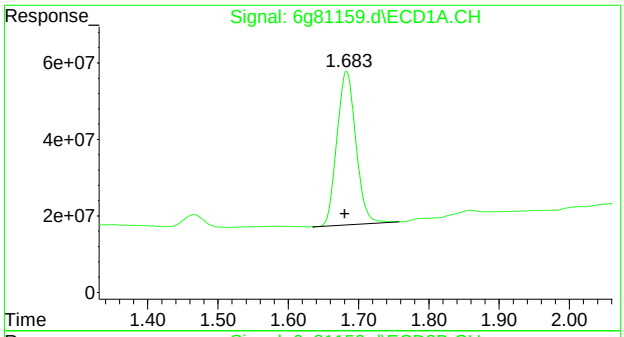
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.683 min
Delta R.T.: 0.002 min
Response: 752416392
Conc: 50.00 PPB



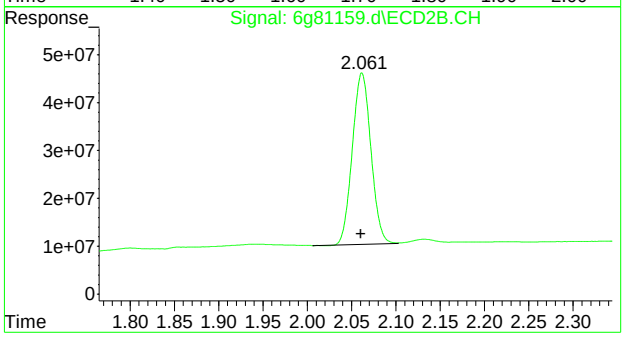
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.062 min
Delta R.T.: 0.001 min
Response: 523198235
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.683 min
Delta R.T.: 0.002 min
Response: 752416392
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.062 min
Delta R.T.: 0.001 min
Response: 523198235
Conc: 50.00 PPB

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\g6g2871\
Data File : 6g81216.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15-Dec-21, 09:31:43
Operator : christp
Sample : op37055-mb1
Misc : op37055,g6g2871,250,,,2,1
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 16 03:02:04 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Thu Dec 16 00:26:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.689	2.063	885.0E6	636.8E6	50.000	50.000
27) I 1-bromo-2...	1.689	2.063	885.0E6	636.8E6	50.000	50.000
33) I 1-bromo-2...	1.689	2.063	885.0E6	636.8E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.266	2.889	334.4E6	308.9E6	30.430	26.695
Spiked Amount 40.000	Range 30 - 150		Recovery =		76.08%	66.74%
26) SA Decachlor...	9.355	11.848	430.1E6	237.8E6	20.326	23.963
Spiked Amount 40.000			Recovery =		50.81%	59.91%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

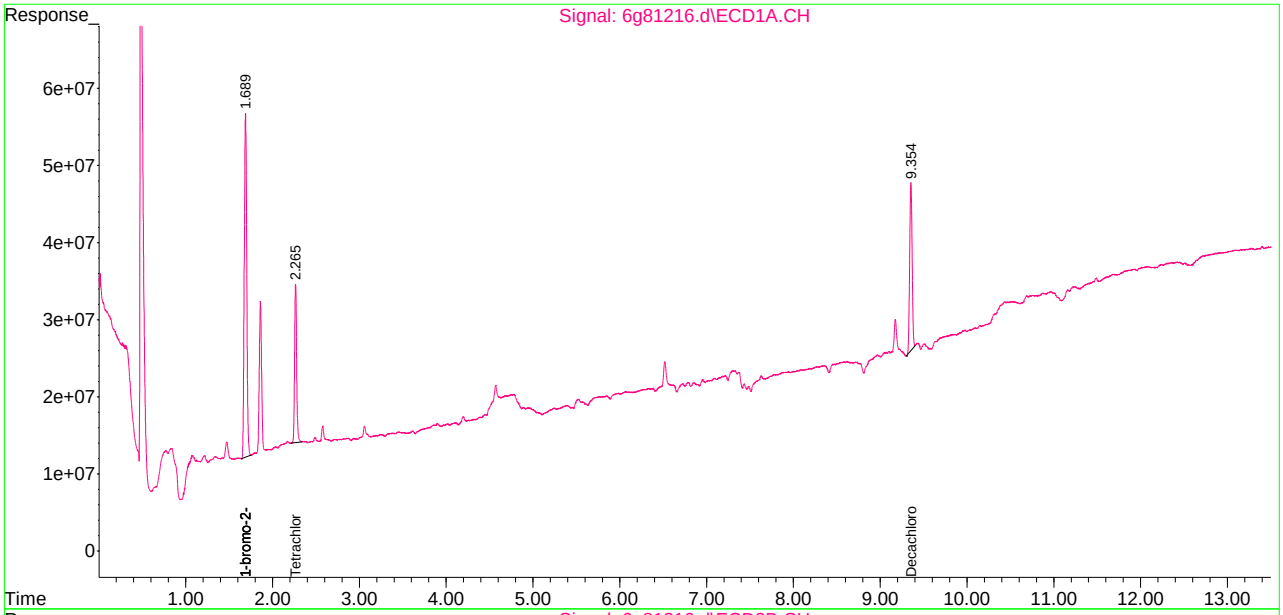
13.2.2
13

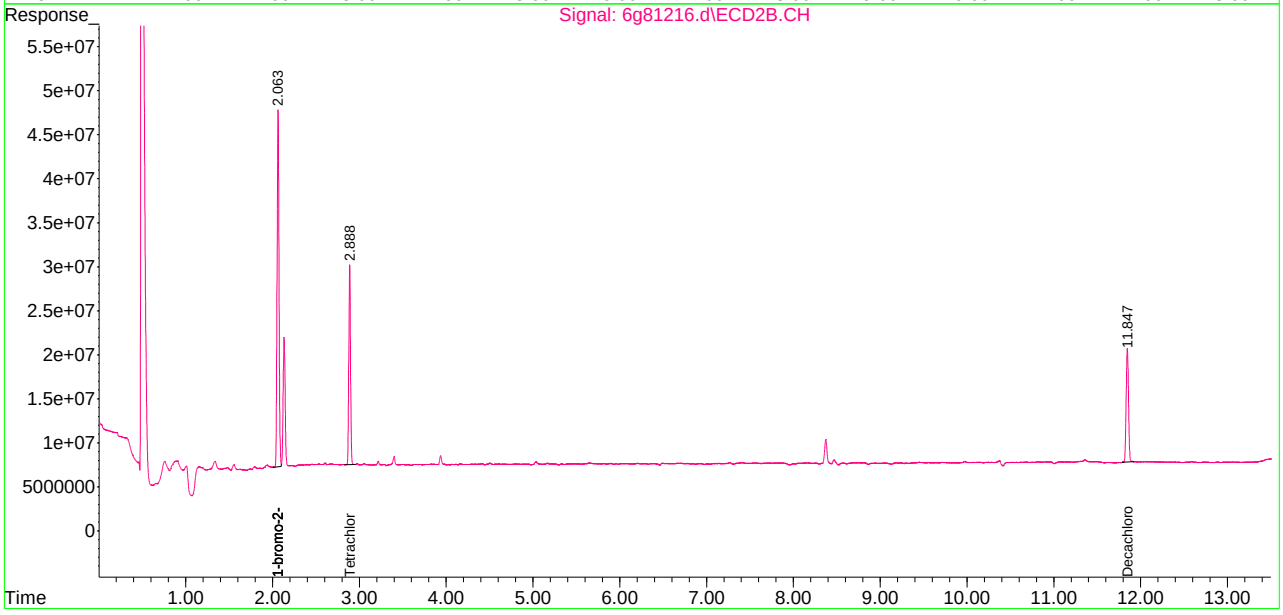
Quantitation Report (QT Reviewed)

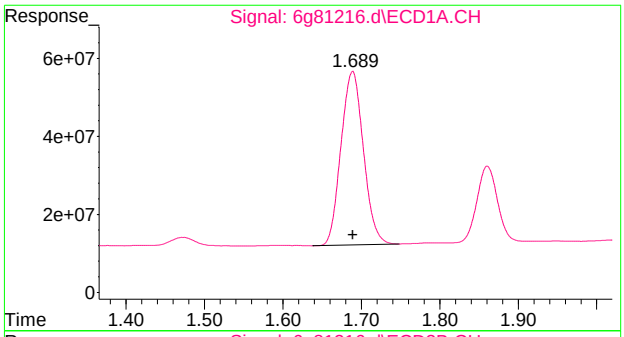
Data Path : C:\msdchem\1\data\chrisc2\g6g2871\
Data File : 6g81216.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15-Dec-21, 09:31:43
Operator : christp
Sample : op37055-mb1
Misc : op37055,g6g2871,250,,,2,1
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 16 03:02:04 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Thu Dec 16 00:26:03 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

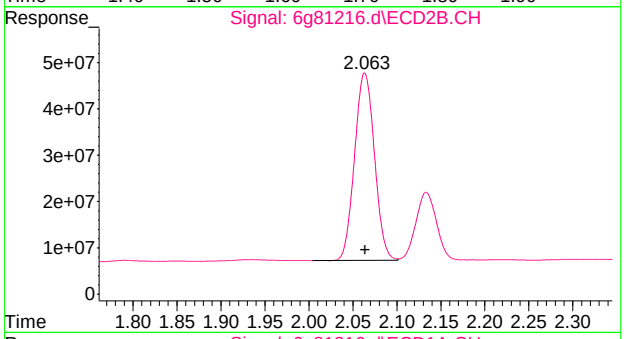






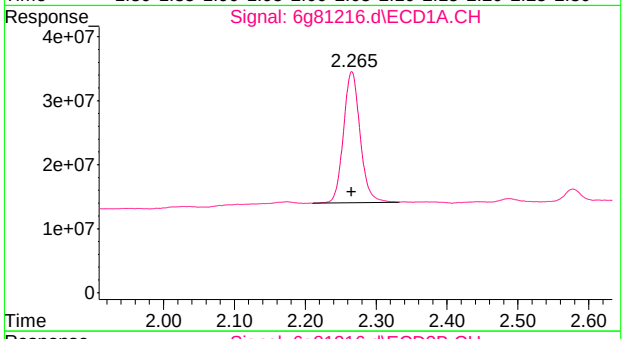
#1 1-bromo-2-nitrobenzene

R.T.: 1.689 min
Delta R.T.: 0.000 min
Response: 884997198
Conc: 50.00 PPB



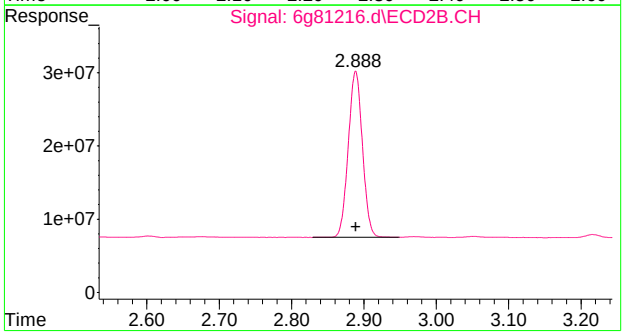
#1 1-bromo-2-nitrobenzene

R.T.: 2.063 min
Delta R.T.: 0.000 min
Response: 636774596
Conc: 50.00 PPB



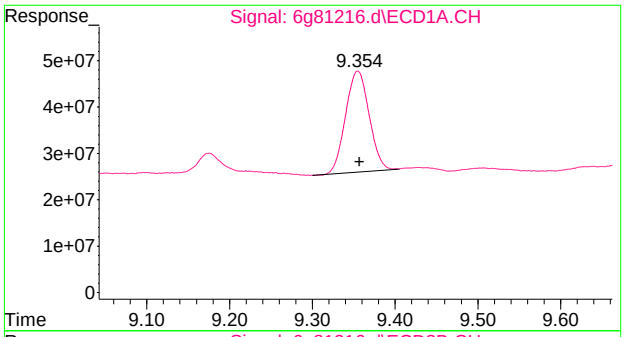
#2 Tetrachloro-m-xylene

R.T.: 2.266 min
Delta R.T.: 0.000 min
Response: 334446164
Conc: 30.43 PPB



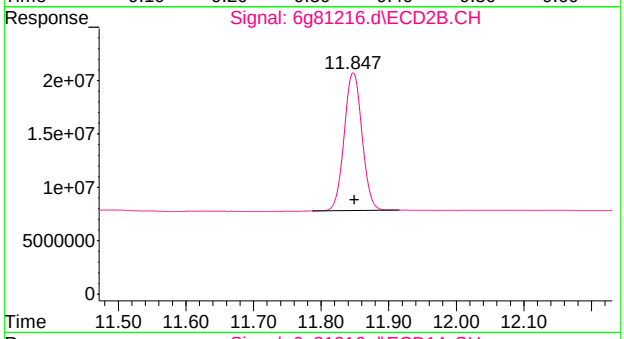
#2 Tetrachloro-m-xylene

R.T.: 2.889 min
Delta R.T.: 0.000 min
Response: 308902137
Conc: 26.69 PPB



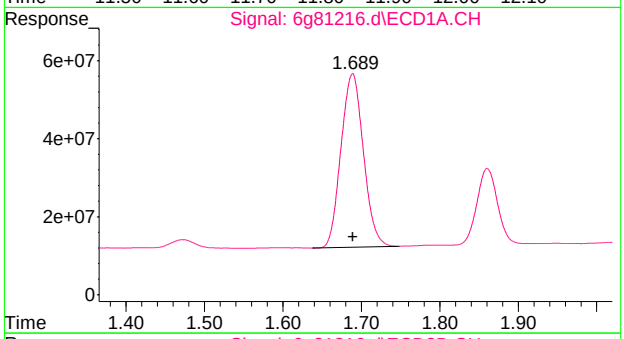
#26 Decachlorobiphenyl

R.T.: 9.355 min
Delta R.T.: -0.002 min
Response: 430103528
Conc: 20.33 PPB



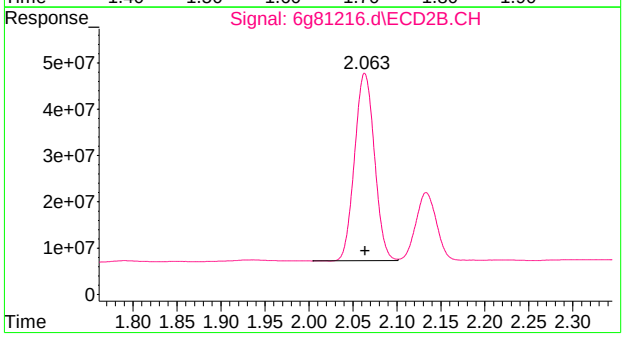
#26 Decachlorobiphenyl

R.T.: 11.848 min
Delta R.T.: -0.001 min
Response: 237840294
Conc: 23.96 PPB



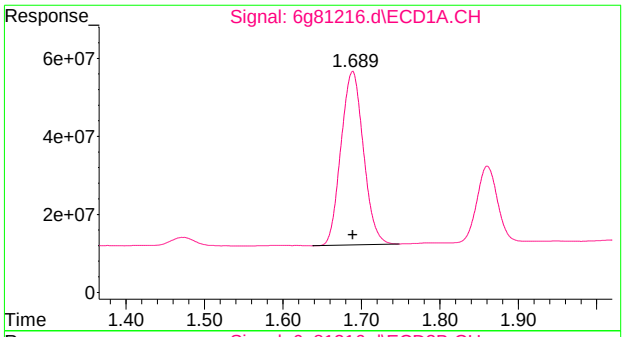
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.689 min
Delta R.T.: 0.000 min
Response: 884997198
Conc: 50.00 PPB



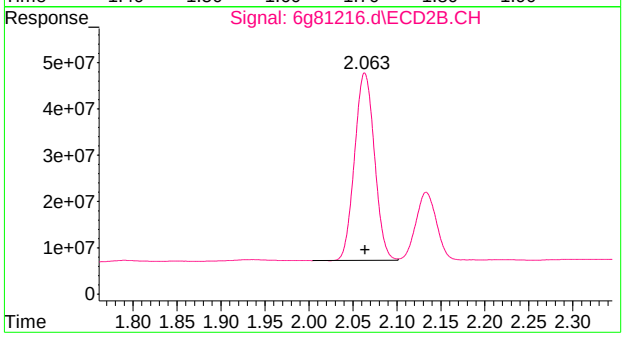
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.063 min
Delta R.T.: 0.000 min
Response: 636774596
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.689 min
Delta R.T.: 0.000 min
Response: 884997198
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.063 min
Delta R.T.: 0.000 min
Response: 636774596
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81077.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 4:49 am
Operator : christp
Sample : icc2867-25
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 08:41:06 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 08:39:34 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
		Internal Standards							
1)	I	1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
27)	I	1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
33)	I	1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
		System Monitoring Compounds							
2)	SAB	Tetrachlo...	2.268	2.889	255.6E6	247.5E6	27.942	25.988	
		Spiked Amount 40.000	Range 30 - 150		Recovery =		69.86%	64.97%	
26)	SA	Decachlor...	9.361	11.853	438.5E6	202.4E6	22.586m	28.026	
		Spiked Amount 40.000			Recovery =		56.46%	70.06%	
		Target Compounds							
3)		hexachlor...	2.581	3.400	681.4E6	285.6E6	26.546	25.055	
4)	A	alpha-BHC	2.714	3.555	513.9E6	365.8E6	21.637	25.439	
5)	MA	gamma-BHC	2.991	3.985	434.2E6	307.0E6	20.028	23.289	
6)	MA	Heptachlor	3.461	4.562	416.9E6	315.4E6	20.067	24.752	
7)	B	beta-BHC	3.064	4.070	173.0E6	135.0E6	20.133	21.978	
8)	B	delta-BHC	3.236	4.467	406.6E6	282.6E6	19.098m	23.262	
9)	MB	Aldrin	3.777	5.014	440.1E6	284.2E6	20.700	22.894	
10)		alachlor	3.922	4.825	43816318	40883081	31.937m	24.986	
11)	B	Heptachlo...	4.453	5.841	377.4E6	273.0E6	18.389	23.653	#
12)	B	gamma-Chl...	4.611	6.126	385.8E6	278.2E6	18.912	23.081	
13)	B	alpha-Chl...	4.774	6.352	392.8E6	268.1E6	19.962	23.729	
14)	A	Endosulfan I	4.938	6.447	414.9E6	259.8E6	21.462	23.483	
15)	B	4,4'-DDE	4.896	6.618	380.9E6	270.9E6	19.914	23.459	
16)	MA	Dieldrin	5.250	6.885	418.2E6	280.9E6	20.702	24.659	
17)	MA	Endrin	5.558	7.388	404.6E6	272.8E6	21.431	25.731	
18)	A	4,4'-DDD	5.697	7.570	308.3E6	228.8E6	20.877	24.816	
19)	B	Endosulfa...	5.867	7.741	363.2E6	244.0E6	20.937	24.705	
20)	MA	4,4'-DDT	6.102	8.103	320.0E6	227.7E6	20.678	25.144	
21)	B	Endrin Al...	6.473	8.315	279.1E6	173.8E6	19.630	21.385	
22)	B	Endosulfa...	7.134	8.782	364.1E6	238.3E6	21.795	25.847	
23)	A	Methoxychlor	6.883	9.348	184.0E6	125.9E6	26.356	27.933	
24)		Mirex	6.991	9.675	304.6E6	199.3E6	26.117	25.715	
25)	B	Endrin Ke...	7.557	9.742	337.9E6	217.8E6	20.265	21.830	
		Sum Toxaphene			0	0	N.D.	N.D.	
		Average Toxaphene					0.000	0.000	
		SemiQuant Compounds - Not Calibrated on this Instrument							

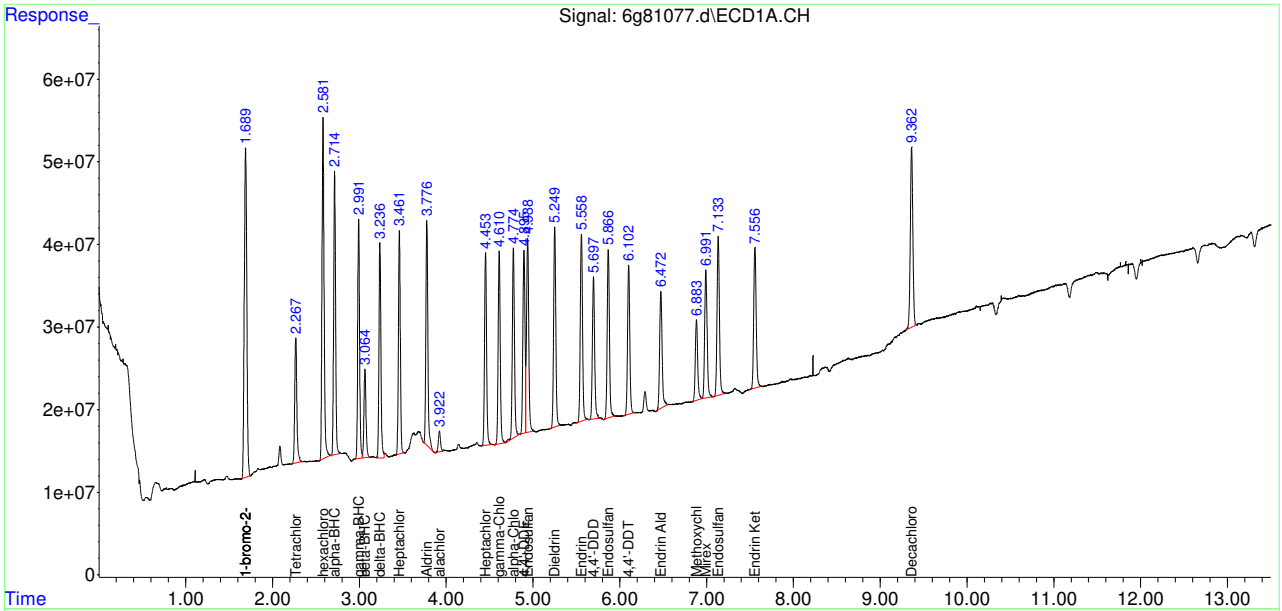
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

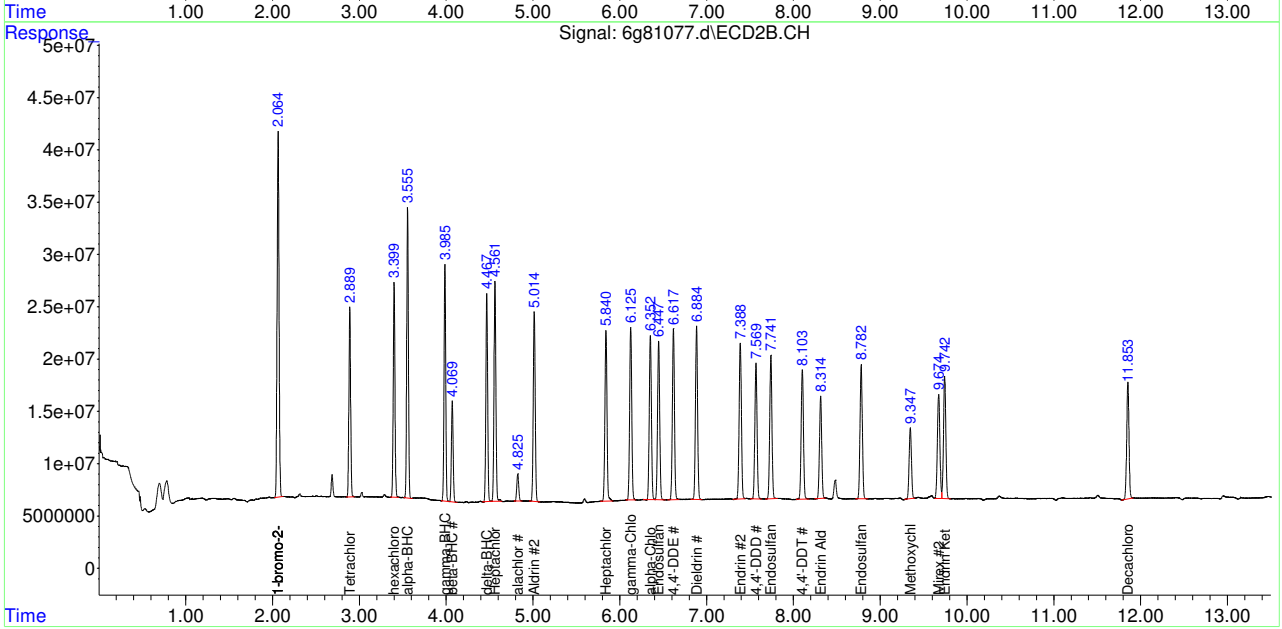
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81077.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 4:49 am
Operator : christp
Sample : icc2867-25
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 08:41:06 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 08:39:34 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81082.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:20 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:03:45 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:02:14 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000
27) I	1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000
33) I	1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.268	2.891	5806.8E6	5241.5E6	7.901	7.892
	Spiked Amount 40.000	Range 30 - 150		Recovery =		19.75%#	19.73%#
26) SA	Decachlor...	9.362	11.853	10772.8E6	4000.8E6	6.874m	6.911
	Spiked Amount 40.000			Recovery =		17.18%	17.28%
	Target Compounds						
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
34)	Chlordane...	3.461	4.562	597.5E6	374.1E6	1182.958	1382.044
35)	Chlordane...	3.914	5.209	365.7E6	205.2E6	702.530	688.043
36)	Chlordane...	4.610	6.126	1131.9E6	750.3E6	525.606	715.581 #
37)	Chlordane...	4.768	6.351	1859.4E6	1229.1E6	511.620	639.417m
38)	Chlordane...	5.779	7.818	284.4E6	185.6E6	468.892	682.840 #
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

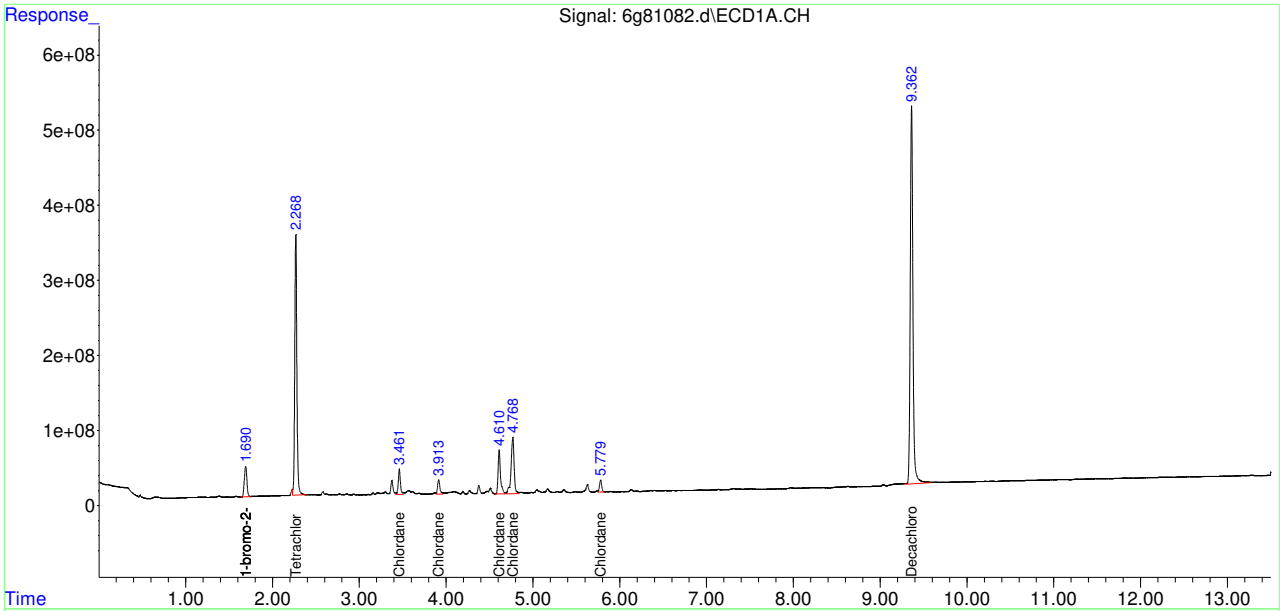
13.3.2
13

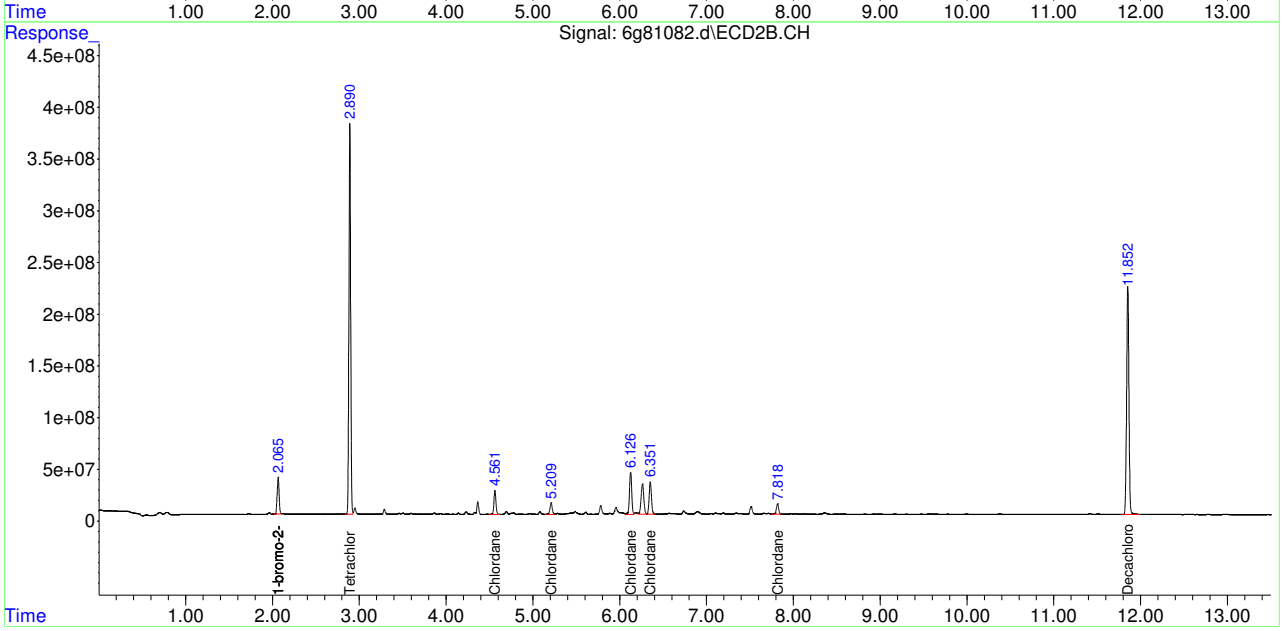
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81082.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:20 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:03:45 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:02:14 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81083.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:38 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:08:38 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:05:38 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
27)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
33)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.271	2.892	526.2E6	509.1E6	0.732	0.787
	Spiked Amount 40.000	Range 30 - 150		Recovery =		1.83%#	1.97%#
26)	SA Decachlor...	9.363	11.852	913.7E6	414.0E6	0.596	0.734
	Spiked Amount 40.000			Recovery =		1.49%	1.83%
	Target Compounds						
28)	L8 Toxaphene{A}	5.613	6.849	163.4E6	71929449	1242.670m	677.901m#
29)	L8 Toxaphene{B}	5.855	7.710	208.7E6	113.3E6	541.393m	632.663m
30)	L8 Toxaphene{C}	6.026	7.872	189.4E6	217.7E6	492.947m	636.971m#
31)	L8 Toxaphene{D}	6.361	8.310	167.8E6	102.1E6	571.511m	556.343m
32)	L8 Toxaphene{E}	6.982	9.214	183.5E6	131.3E6	543.649m	743.268 #
	Sum Toxaphene			912.9E6	636.3E6	3392.168	3247.146
Average Toxaphene						678.434	649.429

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

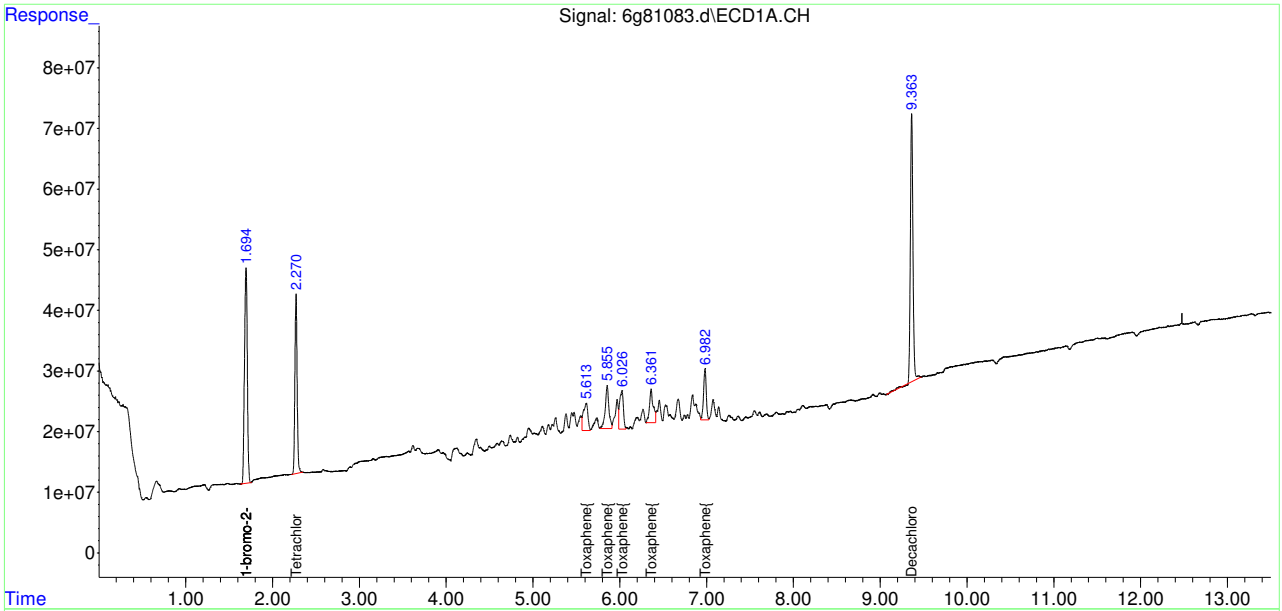
13.3.3
13

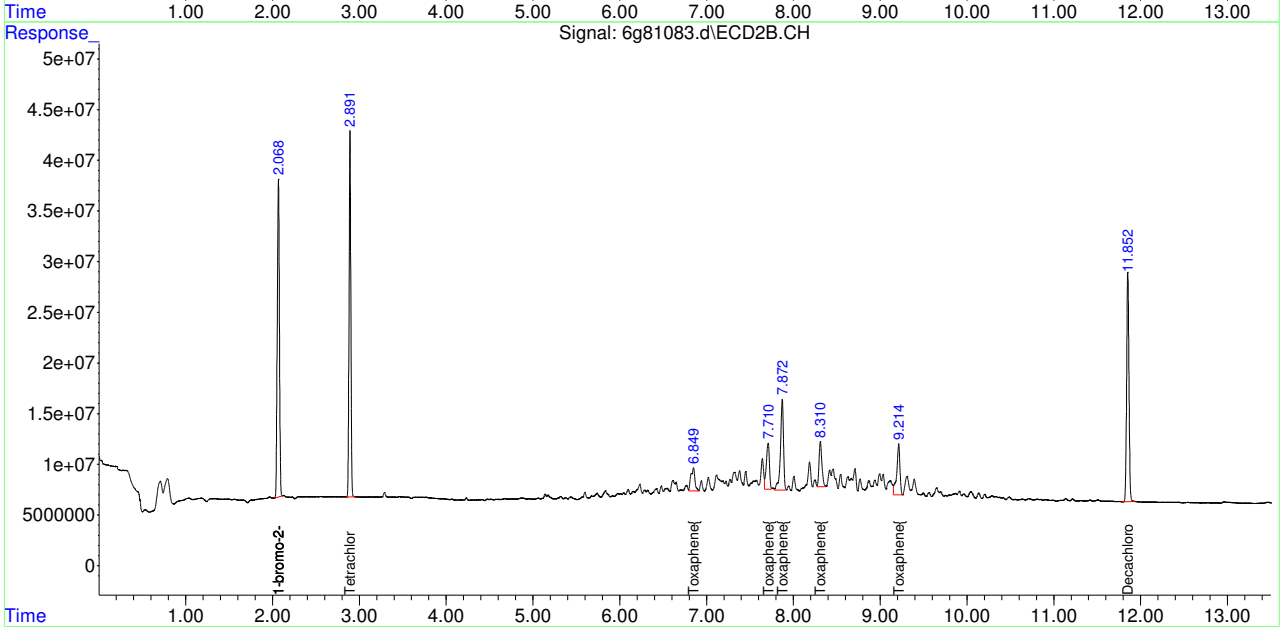
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81083.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:38 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:08:38 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:05:38 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51583
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:50	MA51583-STD1	1		b=2.4355e-004,c=-2.3101e-002,rho=0.9998858
12:51	MA51583-STD2	1		STDB
12:53	MA51583-STD3	1		STDC
12:54	MA51583-STD4	1		STDD
12:56	MA51583-STD5	1		STDE
12:58	MA51583-STD6	1		STDF
13:01	MA51583-ICV1	1		
13:02	MA51583-ICB1	1		
13:04	MA51583-CCV1	1		
13:06	MA51583-CCB1	1		
13:08	MA51583-CRI1	1		
13:11	MP30335-B1	1		
13:12	MP30335-S1	1		
13:14	MP30335-S2	1		
13:16	MA51583-CCV2	1		
13:18	MA51583-CCB2	1		
13:20	MP30335-MB1	1		
13:21	JD36305-2	1		(sample used for QC only; not part of login JD36319)
13:23	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:26	ZZZZZZ	1		
13:27	ZZZZZZ	1		
13:29	ZZZZZZ	1		
13:31	ZZZZZZ	1		
13:33	MA51583-CCV3	1		
13:35	MA51583-CCB3	1		
13:37	ZZZZZZ	1		
13:38	ZZZZZZ	1		
13:40	ZZZZZZ	1		
13:41	ZZZZZZ	1		
13:43	ZZZZZZ	1		
13:44	ZZZZZZ	1		
13:46	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51583
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:47	ZZZZZZ	1		
13:49	MA51583-CCV4	1		
13:51	MA51583-CCB4	1		
13:53	ZZZZZZ	1		
13:55	ZZZZZZ	1		
13:56	ZZZZZZ	1		
13:58	ZZZZZZ	1		
13:59	ZZZZZZ	1		
14:00	MP30337-B1	1		
14:02	MP30337-S1	1		
14:04	MP30337-S2	1		
14:06	MA51583-CCV5	1		
14:08	MA51583-CCB5	1		
14:10	MP30337-MB1	1		
14:11	JD36387-1	1		(sample used for QC only; not part of login JD36319)
14:12	JD36319-2	1		
14:14	JD36319-3	1		
14:15	JD36319-4	1		
14:17	JD36319-5	1		
14:18	JD36319-2F	1		
14:19	JD36319-3F	1		
14:21	JD36319-4F	1		
14:22	MA51583-CCV6	1		
14:24	MA51583-CCB6	1		
14:26	JD36319-5F	1		
---------->	Last reportable sample/prep for job JD36319			
14:27	ZZZZZZ	1		
14:28	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:31	ZZZZZZ	1		
14:33	ZZZZZZ	1		
14:34	MP30338-B1	1		
14:35	MP30338-S1	1		
14:37	MP30338-S2	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51583
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:39	MA51583-CCV7	1		
14:41	MA51583-CCB7	1		
---------->	Last reportable CCB for job JD36319			
14:43	MP30338-MB1	1		
14:45	JD36363-1	1		(sample used for QC only; not part of login JD36319)
14:46	ZZZZZZ	1		
14:48	ZZZZZZ	1		
14:50	ZZZZZZ	1		
14:51	ZZZZZZ	1		
14:52	ZZZZZZ	1		
14:54	ZZZZZZ	1		
14:55	ZZZZZZ	1		
14:57	MA51583-CCV8	1		
14:58	MA51583-CCB8	1		
15:00	ZZZZZZ	1		
15:01	ZZZZZZ	1		
15:03	ZZZZZZ	1		
15:04	ZZZZZZ	1		
15:06	ZZZZZZ	1		
15:07	ZZZZZZ	1		
15:09	MP30339-B1	1		
15:10	MP30339-S1	1		
15:12	MP30339-S2	1		
15:14	MA51583-CCV9	1		
15:16	MA51583-CCB9	1		
15:18	MP30339-MB1	1		
15:19	JD36387-2	1		(sample used for QC only; not part of login JD36319)
15:21	ZZZZZZ	1		
15:22	ZZZZZZ	1		
15:23	ZZZZZZ	1		
15:25	ZZZZZZ	1		
15:26	ZZZZZZ	1		
15:28	ZZZZZZ	1		
15:29	MA51583-CCV10	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51583
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:31	MA51583-CCB10	1		
15:33	ZZZZZZ	1		
15:34	ZZZZZZ	1		
15:35	ZZZZZZ	1		
15:37	ZZZZZZ	1		
15:38	ZZZZZZ	1		
15:40	ZZZZZZ	1		
15:41	ZZZZZZ	1		
15:42	MA51583-CCV11	1		
15:44	MA51583-CCB11	1		
15:46	ZZZZZZ	1		
15:47	ZZZZZZ	1		
15:49	ZZZZZZ	1		
15:50	ZZZZZZ	1		
15:52	ZZZZZZ	1		
15:54	ZZZZZZ	1		
15:55	MP30340-B1	1		
15:57	MA51583-CCV12	1		
15:59	MA51583-CCB12	1		
16:01	MP30340-MB1	1		
16:03	ZZZZZZ	1		
16:04	ZZZZZZ	1		
16:05	ZZZZZZ	1		
16:07	MP30341-B1	1		
16:08	MP30341-S1	1		
16:10	MP30341-S2	1		
16:12	MA51583-CCV13	1		
16:14	MA51583-CCB13	1		
16:16	MP30341-MB1	1		
16:18	JD35487-4	1		(sample used for QC only; not part of login JD36319)
16:19	ZZZZZZ	1		
16:21	ZZZZZZ	1		
16:22	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51583
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:23	MP30342-B1	1		
16:25	MP30342-S1	1		
16:27	MP30342-S2	1		
16:29	MA51583-CCV14	1		
16:31	MA51583-CCB14	1		
16:33	MP30342-MB1	1		
16:34	JD36408-1	1		(sample used for QC only; not part of login JD36319)
16:35	ZZZZZZ	1		
16:37	ZZZZZZ	1		
16:41	MA51583-CCV15	1		
16:43	MA51583-CCB15	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51583
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
13:01	MA51583-ICV1	1	X	
13:02	MA51583-ICB1	1	X	
13:04	MA51583-CCV1	1	X	
13:06	MA51583-CCB1	1	X	
13:08	MA51583-CRI1	1	X	
13:11	MP30335-B1	1	X	
13:12	MP30335-S1	1	X	
13:14	MP30335-S2	1	X	
13:16	MA51583-CCV2	1	X	
13:18	MA51583-CCB2	1	X	
13:20	MP30335-MB1	1	X	
13:21	JD36305-2	1	X	(a)
13:23	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:26	ZZZZZZ	1		
13:27	ZZZZZZ	1		
13:29	ZZZZZZ	1		
13:31	ZZZZZZ	1		
13:33	MA51583-CCV3	1	X	
13:35	MA51583-CCB3	1	X	
13:37	ZZZZZZ	1		
13:38	ZZZZZZ	1		
13:40	ZZZZZZ	1		
13:41	ZZZZZZ	1		
13:43	ZZZZZZ	1		
13:44	ZZZZZZ	1		
13:46	ZZZZZZ	1		
13:47	ZZZZZZ	1		
13:49	MA51583-CCV4	1	X	
13:51	MA51583-CCB4	1	X	
13:53	ZZZZZZ	1		
13:55	ZZZZZZ	1		
13:56	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51583
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
13:58	ZZZZZZ	1		
13:59	ZZZZZZ	1		
14:00	MP30337-B1	1	X	
14:02	MP30337-S1	1	X	
14:04	MP30337-S2	1	X	
14:06	MA51583-CCV5	1	X	
14:08	MA51583-CCB5	1	X	
14:10	MP30337-MB1	1	X	
14:11	JD36387-1	1	X	(a)
14:12	JD36319-2	1	X	
14:14	JD36319-3	1	X	
14:15	JD36319-4	1	X	
14:17	JD36319-5	1	X	
14:18	JD36319-2F	1	X	
14:19	JD36319-3F	1	X	
14:21	JD36319-4F	1	X	
14:22	MA51583-CCV6	1	X	
14:24	MA51583-CCB6	1	X	
14:26	JD36319-5F	1	X	
14:27	ZZZZZZ	1		
14:28	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:31	ZZZZZZ	1		
14:33	ZZZZZZ	1		
14:34	MP30338-B1	1	X	
14:35	MP30338-S1	1	X	
14:37	MP30338-S2	1	X	
14:39	MA51583-CCV7	1	X	
14:41	MA51583-CCB7	1	X	
14:43	MP30338-MB1	1	X	
14:45	JD36363-1	1	X	(a)
14:46	ZZZZZZ	1		
14:48	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51583
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
14:50	ZZZZZZ	1		
14:51	ZZZZZZ	1		
14:52	ZZZZZZ	1		
14:54	ZZZZZZ	1		
14:55	ZZZZZZ	1		
14:57	MA51583-CCV8	1	X	
14:58	MA51583-CCB8	1	X	
15:00	ZZZZZZ	1		
15:01	ZZZZZZ	1		
15:03	ZZZZZZ	1		
15:04	ZZZZZZ	1		
15:06	ZZZZZZ	1		
15:07	ZZZZZZ	1		
15:09	MP30339-B1	1	X	
15:10	MP30339-S1	1	X	
15:12	MP30339-S2	1	X	
15:14	MA51583-CCV9	1	X	
15:16	MA51583-CCB9	1	X	
15:18	MP30339-MB1	1	X	
15:19	JD36387-2	1	X	(a)
15:21	ZZZZZZ	1		
15:22	ZZZZZZ	1		
15:23	ZZZZZZ	1		
15:25	ZZZZZZ	1		
15:26	ZZZZZZ	1		
15:28	ZZZZZZ	1		
15:29	MA51583-CCV10	1	X	
15:31	MA51583-CCB10	1	X	
15:33	ZZZZZZ	1		
15:34	ZZZZZZ	1		
15:35	ZZZZZZ	1		
15:37	ZZZZZZ	1		
15:38	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51583
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
15:40	ZZZZZZ	1		
15:41	ZZZZZZ	1		
15:42	MA51583-CCV11	1	X	
15:44	MA51583-CCB11	1	X	
15:46	ZZZZZZ	1		
15:47	ZZZZZZ	1		
15:49	ZZZZZZ	1		
15:50	ZZZZZZ	1		
15:52	ZZZZZZ	1		
15:54	ZZZZZZ	1		
15:55	MP30340-B1	1	X	
15:57	MA51583-CCV12	1	X	
15:59	MA51583-CCB12	1	X	
16:01	MP30340-MB1	1	X	
16:03	ZZZZZZ	1		
16:04	ZZZZZZ	1		
16:05	ZZZZZZ	1		
16:07	MP30341-B1	1	X	
16:08	MP30341-S1	1	X	
16:10	MP30341-S2	1	X	
16:12	MA51583-CCV13	1	X	
16:14	MA51583-CCB13	1	X	
16:16	MP30341-MB1	1	X	
16:18	JD35487-4	1	X	(a)
16:19	ZZZZZZ	1		
16:21	ZZZZZZ	1		
16:22	ZZZZZZ	1		
16:23	MP30342-B1	1	X	
16:25	MP30342-S1	1	X	
16:27	MP30342-S2	1	X	
16:29	MA51583-CCV14	1	X	
16:31	MA51583-CCB14	1	X	
16:33	MP30342-MB1	1	X	
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51583
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg
16:34	JD36408-1	1	X (a)
16:35	ZZZZZZ	1	
16:37	ZZZZZZ	1	
16:41	MA51583-CCV15	1	X
16:43	MA51583-CCB15	1	X

(a) Sample used for QC only; not part of login JD36319.

Element: Hg

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51583 Units: ug/l

Time:			13:02		13:06		13:18		13:35	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0760	<0.20	-0.0816	<0.20	-0.0764	<0.20	-0.0855	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51583 Units: ug/l

Time:			13:51		14:08		14:24		14:41	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0796	<0.20	-0.0704	<0.20	-0.0638	<0.20	-0.0962	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51583 Units: ug/l

Time:		13:01			13:04			13:16	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	2.98	99.3	2.5	2.65	106.0	2.5	2.51	100.4

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51583 Units: ug/l

Time:		13:33			13:49			14:06	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.51	100.4	2.5	2.56	102.4	2.5	2.50	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51583 Units: ug/l

Time:		14:22			14:39	
Sample ID:	CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.57	102.8	2.5	2.53	101.2

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121321W2.CSV Date Analyzed: 12/13/21 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA51583 Units: ug/l

Time:			13:08	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Mercury	0.20		0.201	100.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:22	MA51592-STD1	1		Sample introduction not stable, see rerun.
18:26	MA51592-STD2	1		Sample introduction not stable, see rerun.
18:30	MA51592-STD3	1		STDA
18:33	MA51592-STD4	1		STDB
18:36	MA51592-STD5	1		STDC
18:40	MA51592-STD6	1		STDD
18:43	MA51592-STD7	1		STDE
18:46	MA51592-STD8	1		STDF
18:50	MA51592-STD9	1		STDG
18:53	MA51592-STD10	1		STDH
18:56	MA51592-STD11	1		STDI
18:59	MA51592-STD12	1		STDJ
19:03	ZZZZZZ	1		
19:06	MA51592-ICVA1	1		
19:14	MA51592-ICV1	1		
19:20	MA51592-ICB1	1		
19:23	MA51592-CCVA1	1		
19:26	MA51592-CCB1	1		
19:29	ZZZZZZ	1		
19:32	ZZZZZZ	1		
19:36	ZZZZZZ	1		
19:39	ZZZZZZ	1		
19:44	MA51592-CRI1	1		
19:48	ZZZZZZ	1		
19:51	ZZZZZZ	1		
19:54	MA51592-CCVA2	1		
19:57	MA51592-CCB2	1		
20:00	ZZZZZZ	1		
20:06	ZZZZZZ	1		
20:10	MP30266-B1	1		
20:13	ZZZZZZ	10		
20:16	MA51592-CRI2	1		
20:19	MA51592-ICSA1	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:22	MA51592-ICSAB1	1		
20:25	ZZZZZZ	1		
20:29	MA51592-CCVA3	1		
20:32	MA51592-CCB3	1		
20:35	ZZZZZZ	2		
20:38	ZZZZZZ	2		
20:41	ZZZZZZ	20		
20:44	ZZZZZZ	50		
20:47	ZZZZZZ	200		
20:50	JD36280-1F	20		(sample used for QC only; not part of login JD36319)
20:54	MP30298-SD1	100		
20:57	MP30298-S1	20		
21:00	MP30298-S2	20		
21:03	MA51592-CCVA4	1		
21:06	MA51592-CCB4	1		
21:09	ZZZZZZ	5		
21:12	ZZZZZZ	20		
21:15	ZZZZZZ	25		
21:18	ZZZZZZ	10		
21:22	MP30298-S1	100		
21:25	MP30298-S2	100		
21:28	JD36280-1F	100		(sample used for QC only; not part of login JD36319)
21:31	MP30298-SD1	500		
21:34	MA51592-CCVA5	1		
21:37	MA51592-CCB5	1		
21:40	MP30317-MB1	2		
21:44	MP30317-B1	2		
21:47	MP30317-S1	2		Ca, Mg, MN high
21:50	MP30317-S2	2		Ca, Mg, MN high
21:53	JD36281-1	2		(sample used for QC only; not part of login JD36319)
21:56	MP30317-SD1	10		Ca, Mg, MN high
21:59	ZZZZZZ	2		
22:02	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:05	MA51592-CCVA6	1		
22:08	MA51592-CCB6	1		
22:11	ZZZZZZ	2		
22:15	ZZZZZZ	2		
22:18	ZZZZZZ	2		
22:21	ZZZZZZ	10		
22:24	ZZZZZZ	2		
22:27	ZZZZZZ	2		
22:30	MA51592-CCVA7	1		
22:33	MA51592-CCB7	1		
22:36	JD36319-2	2		CCV out for Zn. ca, Mn, MG high
22:39	JD36319-3	2		CCV out for Zn. ca, Mn, MG high
22:42	JD36319-4	2		CCV out for Zn. ca, Mn, MG high
22:45	JD36319-5	2		Ca, Mn, MG, Zn high. rerun only on dilution
22:48	JD36319-2F	2		CCV out for Zn. ca, Mn, MG high
22:51	JD36319-3F	2		CCV out for Zn. ca, Mn, MG high
22:54	JD36319-4F	2		CCV out
22:58	JD36319-5F	2		CCV out
---------->	Last reportable sample/prep for job JD36319			
23:01	MA51592-CCVA8	1		
23:04	MA51592-CCB8	1		
---------->	Last reportable CCB for job JD36319			
23:07	MP30327A-MB1	2		CCV out
23:10	MP30327A-B2	2		CCV out
23:13	MP30327A-S3	2		CCV out
23:16	MP30327A-S4	2		CCV out
23:19	JD36451-6	2		(sample used for QC only; not part of login JD36319)
23:22	MP30327A-SD1	10		CCV out
23:25	MA51592-CCVA9	1		
23:28	MA51592-CCB9	1		
23:31	ZZZZZZ	2		
23:34	ZZZZZZ	2		
23:37	ZZZZZZ	2		
23:41	ZZZZZZ	2		
23:44	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:47	ZZZZZZ	2		
23:50	MA51592-CCVA10	1		
23:53	MA51592-CCB10	1		
23:56	MP30325-S1	5		
23:59	MP30325-S2	5		
00:02	JD36298-1	5		(sample used for QC only; not part of login JD36319)
00:05	ZZZZZZ	2		
00:08	ZZZZZZ	2		
00:11	ZZZZZZ	2		
00:14	ZZZZZZ	2		
00:17	ZZZZZZ	10		
00:20	MA51592-CCVA11	1		
00:23	MA51592-CCB11	1		
00:27	ZZZZZZ	2		
00:30	ZZZZZZ	1		
00:33	ZZZZZZ	1		
00:36	ZZZZZZ	1		
00:39	ZZZZZZ	1		
00:42	ZZZZZZ	1		
00:45	MA51592-CCVA12	1		
00:52	MA51592-CCB12	1		
00:59	ZZZZZZ	1		
01:02	ZZZZZZ	1		
01:05	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution	Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
19:03	ZZZZZZ	1																								
19:06	MA51592-ICVA1	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:14	MA51592-ICV1	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:20	MA51592-ICB1	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:23	MA51592-CCVA1	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:26	MA51592-CCB1	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:29	ZZZZZZ	1																								
19:32	ZZZZZZ	1																								
19:36	ZZZZZZ	1																								
19:39	ZZZZZZ	1																								
19:44	MA51592-CRI1	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:48	ZZZZZZ	1																								
19:51	ZZZZZZ	1																								
19:54	MA51592-CCVA2	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:57	MA51592-CCB2	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:00	ZZZZZZ	1																								
20:06	ZZZZZZ	1																								
20:10	MP30266-B1	1																				X				
20:13	ZZZZZZ	10																								
20:16	MA51592-CRI2	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:19	MA51592-ICSA1	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:22	MA51592-ICSAB1	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:25	ZZZZZZ	1																								
20:29	MA51592-CCVA3	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:32	MA51592-CCB3	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:35	ZZZZZZ	2																								
20:38	ZZZZZZ	2																								
20:41	ZZZZZZ	20																								
20:44	ZZZZZZ	50																								
20:47	ZZZZZZ	200																								
20:50	JD36280-1F	20													X				X							(a)
20:54	MP30298-SD1	100													X				X							
20:57	MP30298-S1	20													X				X							
			Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
21:00	MP30298-S2	20													X			X							
21:03	MA51592-CCVA4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
21:06	MA51592-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
21:09	ZZZZZZ	5																							
21:12	ZZZZZZ	20																							
21:15	ZZZZZZ	25																							
21:18	ZZZZZZ	10																							
21:22	MP30298-S1	100							X						X										
21:25	MP30298-S2	100							X						X										
21:28	JD36280-1F	100							X						X										(a)
21:31	MP30298-SD1	500							X						X										
21:34	MA51592-CCVA5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
21:37	MA51592-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
21:40	MP30317-MB1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
21:44	MP30317-B1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
21:47	MP30317-S1	2	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X	X	X	X	X	
21:50	MP30317-S2	2	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X	X	X	X	X	
21:53	JD36281-1	2						X		X		X		X			X							X	(a)
21:56	MP30317-SD1	10	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X	X	X	X	X	
21:59	ZZZZZZ	2																							
22:02	ZZZZZZ	2																							
22:05	MA51592-CCVA6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
22:08	MA51592-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
22:11	ZZZZZZ	2																							
22:15	ZZZZZZ	2																							
22:18	ZZZZZZ	2																							
22:21	ZZZZZZ	10																							
22:24	ZZZZZZ	2																							
22:27	ZZZZZZ	2																							
22:30	MA51592-CCVA7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
22:33	MA51592-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
22:36	JD36319-2	2	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X		X	X		
22:39	JD36319-3	2	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X		X	X		
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
22:42	JD36319-4	2	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X		X	X		
22:45	JD36319-5	2	X	X	X	X	X	X		X	X	X		X			X	X	X	X		X	X		
22:48	JD36319-2F	2	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X		X	X		
22:51	JD36319-3F	2	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X		X	X		
22:54	JD36319-4F	2	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X		X	X		
22:58	JD36319-5F	2	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X		X	X		
23:01	MA51592-CCVA8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
23:04	MA51592-CCB8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
23:07	MP30327A-MB1	2	CCV		out																				
23:10	MP30327A-B2	2	CCV		out																				
23:13	MP30327A-S3	2	CCV		out																				
23:16	MP30327A-S4	2	CCV		out																				
23:19	JD36451-6	2	CCV		out																				
23:22	MP30327A-SD1	10	CCV		out																				
23:25	MA51592-CCVA9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
23:28	MA51592-CCB9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
23:31	ZZZZZZ	2																							
23:34	ZZZZZZ	2																							
23:37	ZZZZZZ	2																							
23:41	ZZZZZZ	2																							
23:44	ZZZZZZ	2																							
23:47	ZZZZZZ	2																							
23:50	MA51592-CCVA10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
23:53	MA51592-CCB10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
23:56	MP30325-S1	5			X																			X	
23:59	MP30325-S2	5			X																			X	
00:02	JD36298-1	5			X																				(a)
00:05	ZZZZZZ	2																							
00:08	ZZZZZZ	2																							
00:11	ZZZZZZ	2																							
00:14	ZZZZZZ	2																							
00:17	ZZZZZZ	10																							
00:20	MA51592-CCVA11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn
00:23	MA51592-CCB11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
00:27	ZZZZZZ	2																						
00:30	ZZZZZZ	1																						
00:33	ZZZZZZ	1																						
00:36	ZZZZZZ	1																						
00:39	ZZZZZZ	1																						
00:42	ZZZZZZ	1																						
00:45	MA51592-CCVA12	1																						
00:52	MA51592-CCB12	1																						
00:59	ZZZZZZ	1																						
01:02	ZZZZZZ	1																						
01:05	ZZZZZZ	1																						

(a) Sample used for QC only; not part of login JD36319.

Element: Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Ni K Se Ag Na Tl V Zn

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:22	MA51592-STD1	100	100	100	100	100	100	100	100
18:26	MA51592-STD2	100	100	100	100	100	100	100	100
18:30	MA51592-STD3	100	100	100	100	100	100	100	100
18:33	MA51592-STD4	95.613	95.54	99.782	99.203	96.772	100.602	96.129	100.198
18:36	MA51592-STD5	94.657	95.693	98.832	99.819	96.157	99.392	96.139	99.626
18:40	MA51592-STD6	93.942	94.81	98.817	98.624	96.358	99.82	95.623	100.098
18:43	MA51592-STD7	93.168	94.219	98.35	96.704	95.897	100.076	94.463	99.859
18:46	MA51592-STD8	91.773	92.938	97.624	96.437	93.786	98.968	93.946	99.837
18:50	MA51592-STD9	90.662	91.117	96.536	99.66	92.663	97.968	92.143	97.966
18:53	MA51592-STD10	94.31	95.59	101.081	103.138	95.793	101.805	95.306	101.552
18:56	MA51592-STD11	95.592	95.972	101.657	103.889	97.23	103.294	95.356	100.659
18:59	MA51592-STD12	94.272	96.337	99.926	102.47	96.283	102.933	93.91	98.146
19:03	ZZZZZZ	97.131	97.682	100.542	102.236	98.207	101.24	97.776	101.125
19:06	MA51592-ICVA1	93.629	95.957	101.338	103.045	96.377	103.46	94.38	101.195
19:14	MA51592-ICV1	98.634	100.438	99.671	102.209	101.027	100.492	101.116	100.418
19:20	MA51592-ICB1	98.361	99.324	99.593	102.464	100.286	99.61	99.599	100.022
19:23	MA51592-CCVA1	94.481	96.323	101.104	101.11	97.305	103.354	95.312	101.104
19:26	MA51592-CCB1	92.49	94.302	100.217	104.41	95.096	101.371	94.764	101.485
19:29	ZZZZZZ	0.045 !	0.003 !	0.001 !	0 !	0.049 !	0.018 !	0.01 !	0.006 !
19:32	ZZZZZZ	0.029 !	0.003 !	0.001 !	0 !	0.049 !	0.013 !	0.008 !	0.006 !
19:36	ZZZZZZ	98.297	100.877	98.459	101.306	101.165	98.878	100.641	99.347
19:39	ZZZZZZ	0.04 !	0.003 !	0.002 !	0.003 !	0.057 !	0.021 !	0.019 !	0.016 !
19:44	MA51592-CRI1	99.503	102.285	99.491	100.987	103.052	100.943	103.272	101.05
19:48	ZZZZZZ	0.034 !	0.003 !	0.001 !	0 !	0.039 !	0.011 !	0.006 !	0.007 !
19:51	ZZZZZZ	0.024 !	0.003 !	0.001 !	0 !	0.035 !	0.011 !	0.007 !	0.005 !
19:54	MA51592-CCVA2	97.91	100.684	100.235	100.041	101.522	103.141	99.425	100.87
19:57	MA51592-CCB2	92.717	93.813	98.373	100.634	96.087	99.719	94.978	99.987
20:00	ZZZZZZ	0.042 !	0.003 !	0.001 !	0.001 !	0.045 !	0.013 !	0.009 !	0.007 !
20:06	ZZZZZZ	99.991	102.002	100.147	103.923	103.23	100.376	102.622	100.753
20:10	MP30266-B1	91.948	94.515	100.281	100.972	96.071	102.454	95.077	101.723
20:13	ZZZZZZ	86.724	88.716	96.004	96.508	91.768	97.94	91.259	98.484
20:16	MA51592-CRI2	85.979	88.76	91.886	95.661	90.883	93.638	90.309	93.94
20:19	MA51592-ICSA1	89.018	90.699	93.312	94.686	100.238	127.011 !	83.226	86.852

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
20:22	MA51592-ICSAB1	88.31	90.628	93.691	95.2	101.529	128.17 !	85.495	88.463
20:25	ZZZZZZ	79.871	89.217	93.322	106.012	93.35	97.176	92.883	97.303
20:29	MA51592-CCVA3	83.508	91.042	94.831	104.416	94.852	99.473	93.59	97.838
20:32	MA51592-CCB3	86.757	93.994	96.111	106.334	97.532	99.125	97.554	99.714
20:35	ZZZZZZ	89.103	95.446	98.379	107.27	98.36	102.001	98.437	101.887
20:38	ZZZZZZ	89.491	96.139	96.706	105.637	97.546	98.525	96.692	98.314
20:41	ZZZZZZ	91.69	95.809	99.769	106.24	99.878	105.584	99.026	103.133
20:44	ZZZZZZ	96.3	99.587	102.337	107.854	103.515	106.989	102.169	106.15
20:47	ZZZZZZ	97.072	100.429	104.022	108.827	104.499	108.341	103.409	108.449
20:50	JD36280-1F	92.809	97.908	101.057	106.566	99.805	103.496	99.621	104.131
20:54	MP30298-SD1	94.007	98.918	103.308	106.54	102.342	107.142	101.203	107.368
20:57	MP30298-S1	95.207	99.952	103.975	108.689	101.632	106.947	101.203	107.153
21:00	MP30298-S2	94.929	100.611	104.762	107.745	102.83	107.616	102.36	107.858
21:03	MA51592-CCVA4	89.64	96.821	102.128	106.484	98.356	105.908	97.602	104.064
21:06	MA51592-CCB4	92.907	97.751	101.354	111.181	100.199	103.643	99.406	103.989
21:09	ZZZZZZ	97.111	102.266	104.397	109.534	104.369	106.46	103.446	106.646
21:12	ZZZZZZ	99.344	104.349	106.444	109.237	106.591	108.861	107.135	109.403
21:15	ZZZZZZ	98.488	103.228	105.141	108.627	104.602	108.179	104.667	108.527
21:18	ZZZZZZ	94.612	100.184	102.031	108.182	100.917	103.63	100.337	104.201
21:22	MP30298-S1	100.161	103.427	108.244	110.658	106.984	111.681	106.245	111.838
21:25	MP30298-S2	99.833	103.12	108.361	110.156	105.784	112.251	105.526	111.955
21:28	JD36280-1F	100.248	103.401	107.496	110.207	105.583	110.756	105.004	111.106
21:31	MP30298-SD1	98.565	102.383	108.218	111.535	105.127	111.933	104.34	112.201
21:34	MA51592-CCVA5	94.778	100.299	103.944	107.757	100.576	107.561	100.022	105.12
21:37	MA51592-CCB5	95.761	100.367	103.265	111.09	102.049	105.214	101.625	105.008
21:40	MP30317-MB1	98.754	101.653	107.693	112.645	102.761	108.824	103.04	109.463
21:44	MP30317-B1	90.667	93.88	96.95	107.296	94.241	97.169	93.701	96.614
21:47	MP30317-S1	91.43	94.109	93.841	104.75	90.894	90.073	89.748	89.442
21:50	MP30317-S2	90.903	92.919	94.95	106.181	89.413	90.739	89.078	90.488
21:53	JD36281-1	95.819	97.812	93.062	108.932	92.764	88.996	92.521	88.943
21:56	MP30317-SD1	107.622	108.246	105.043	116.381	109.499	106.813	109.425	107.126
21:59	ZZZZZZ	91.94	94.708	94.214	111.695	93.486	92.274	93.124	92.478
22:02	ZZZZZZ	95.19	97.409	95.126	113.303	96.12	92.657	95.604	92.897

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
22:05	MA51592-CCVA6	104.527	104.933	107.411	115.095	107.036	111.023	106.442	108.885
22:08	MA51592-CCB6	105.126	105.86	107.512	115.312	107.522	109.064	107.393	109.154
22:11	ZZZZZZ	98.76	100.056	99.588	115.659	100.563	98.92	100.303	99.164
22:15	ZZZZZZ	99.558	98.942	96.56	112.259	97.034	93.613	96.445	93.861
22:18	ZZZZZZ	98.576	96.501	92.5	106.431	92.202	87.072	91.368	87.499
22:21	ZZZZZZ	107.273	105.433	105.157	115.469	110.37	115.691	107.17	106.71
22:24	ZZZZZZ	100.317	98.505	98.737	115.3	99.075	97.33	99.087	98.131
22:27	ZZZZZZ	102.51	101.436	100.282	113.406	100.134	98.114	100.434	98.304
22:30	MA51592-CCVA7	113.221	111.093	115.847	115.939	112.326	115.876	111.035	113.749
22:33	MA51592-CCB7	112.681	110.056	117.97	115.743	109.727	111.549	109.07	111.774
22:36	JD36319-2	99.117	98.59	98.076	110.617	96.774	97.806	97.212	96.803
22:39	JD36319-3	100.496	98.726	96.889	110.216	96.226	93.982	95.891	93.548
22:42	JD36319-4	99.905	98.624	97.091	111.897	98.059	97.402	97.213	94.804
22:45	JD36319-5	99.904	98.11	99.889	111.343	98.291	104.621	95.642	98.089
22:48	JD36319-2F	102.819	102.112	101.795	114.745	101.045	100.517	101.127	100.488
22:51	JD36319-3F	102.852	102.447	99.266	112.534	99.241	95.759	98.883	95.736
22:54	JD36319-4F	104.218	103.66	98.981	112.251	101.387	97.155	101.206	96.542
22:58	JD36319-5F	103.349	101.113	99.105	111.086	99.009	96.334	98.63	96.466
23:01	MA51592-CCVA8	114.656	111.293	118.405	115.206	112.042	114.756	110.788	112.936
23:04	MA51592-CCB8	116.461	112.858	118.612	114.308	113.082	111.654	112.31	112.041
23:07	MP30327A-MB1	No results reported for the elements associated with this internal standard.							
23:10	MP30327A-B2	No results reported for the elements associated with this internal standard.							
23:13	MP30327A-S3	No results reported for the elements associated with this internal standard.							
23:16	MP30327A-S4	No results reported for the elements associated with this internal standard.							
23:19	JD36451-6	No results reported for the elements associated with this internal standard.							
23:22	MP30327A-SD1	No results reported for the elements associated with this internal standard.							
23:25	MA51592-CCVA9	116.466	113.95	122.446	114.053	112.592	115.514	112.196	113.707
23:28	MA51592-CCB9	115.977	113.179	125.346	113.844	112.963	112.583	112.699	112.668
23:31	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:34	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:41	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
23:47	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:50	MA51592-CCVA10	114.471	111.332	109.993	112.472	112.251	112.462	111.044	110.218
23:53	MA51592-CCB10	111.094	110.521	112.151	111.175	110.668	108.48	110.747	108.757
23:56	MP30325-S1	109.132	106.677	108.122	109.767	107.85	109.841	107.162	109.246
23:59	MP30325-S2	105.602	104.264	107.179	109.401	104.89	109.115	104.481	108.3
00:02	JD36298-1	102.087	101.757	105.109	108.076	102.904	106.925	102.163	106.591
00:05	ZZZZZZ	100.959	100.468	102.526	109.849	100.636	104.796	99.626	102.559
00:08	ZZZZZZ	103.283	102.381	103.657	108.115	103.642	105.312	103.403	104.648
00:11	ZZZZZZ	102.987	103.44	104.149	109.865	103.07	107.568	100.51	103.535
00:14	ZZZZZZ	100.457	101.3	100.561	107.856	100.68	101.721	99.504	101.173
00:17	ZZZZZZ	105.492	105.91	106.404	109.339	107.574	108.618	106.698	108.798
00:20	MA51592-CCVA11	102.667	103.432	104.193	109.428	104.789	107.366	103.175	104.947
00:23	MA51592-CCB11	104.189	103.873	102.665	107.477	105.244	104.156	105.352	104.688
00:27	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:30	ZZZZZZ	98.88	100.268	98.573	108.582	102.948	100.616	102.643	101.203
00:33	ZZZZZZ	103.329	103.604	104.969	108.104	104.954	107.901	105.059	107.363
00:36	ZZZZZZ	103.344	103.184	101.583	108.82	104.594	103.425	104.928	103.8
00:39	ZZZZZZ	102.961	102.799	100.872	108.915	103.923	102.05	103.73	102.224
00:42	ZZZZZZ	102.857	101.866	99.955	108.459	104.078	101.313	104	101.952
00:45	MA51592-CCVA12	No results reported for the elements associated with this internal standard.							
00:52	MA51592-CCB12	No results reported for the elements associated with this internal standard.							
00:59	ZZZZZZ	339.58 !	339.122 !	297.654 !	252.733 !	335.785 !	267.229 !	333.88 !	267.016 !
01:02	ZZZZZZ	87.974	86.781	73.57	64.045 !	88.163	74.53	88.108	74.515
01:05	ZZZZZZ	93.801	91.582	86.561	76.257	93.312	87.903	92.654	87.866

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (74-1)	60-125 %	60-125 %
Istd#8	Germanium (74-2)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:22	MA51592-STD1	100	100	100	100	100	100	100	100
18:26	MA51592-STD2	100	100	100	100	100	100	100	100
18:30	MA51592-STD3	100	100	100	100	100	100	100	100
18:33	MA51592-STD4	100.06	95.859	99.319	99.289	94.236	99.326	95.559	99.717
18:36	MA51592-STD5	100.078	95.957	99.056	100.365	95.177	99.496	95.314	99.046
18:40	MA51592-STD6	100.615	96.064	97.077	98.508	94.615	97.696	95.474	98.847
18:43	MA51592-STD7	100.01	95.35	96.279	96.978	94.622	96.018	96.266	97.231
18:46	MA51592-STD8	101.05	93.156	94.939	98.366	93.447	94.571	94.008	96.311
18:50	MA51592-STD9	100.378	93.1	95.507	99.09	91.901	94.456	93.143	97.253
18:53	MA51592-STD10	104.332	95.722	99.656	101.732	95.764	99.329	95.743	100.069
18:56	MA51592-STD11	102.635	94.599	96.652	99.897	93.481	97.975	95.958	99.546
18:59	MA51592-STD12	101.151	91.64	94.958	99.661	92.257	96.336	93.427	98.39
19:03	ZZZZZZ	101.518	97.457	101.058	101.998	96.106	100.863	95.727	101.018
19:06	MA51592-ICVA1	102.835	92.752	95.739	98.998	92.394	96.464	93.084	99.497
19:14	MA51592-ICV1	101.302	100.821	102.45	103.163	99.324	102.425	100.548	103.387
19:20	MA51592-ICB1	100.305	99.447	101.933	104.009	98.574	101.731	98.984	102.546
19:23	MA51592-CCVA1	102.745	94.608	96.743	100.22	94.257	97.664	95.585	100.938
19:26	MA51592-CCB1	104.218	95.351	101.161	105.195	93.244	100.749	94.393	100.57
19:29	ZZZZZZ	0.008 !	0.001 !	0.001 !	0.002 !	0.002 !	0.001 !	0 !	0 !
19:32	ZZZZZZ	0.008 !	0.001 !	0.001 !	0.002 !	0.001 !	0.001 !	0 !	0 !
19:36	ZZZZZZ	99.655	99.993	101.496	101.98	99.85	101.546	99.64	102.609
19:39	ZZZZZZ	0.021 !	0.001 !	0.001 !	0.006 !	0.002 !	0.001 !	0 !	0 !
19:44	MA51592-CRI1	99.956	102.012	102.546	102.001	100.621	102.742	101.129	102.901
19:48	ZZZZZZ	0.008 !	0.001 !	0.001 !	0.002 !	0.001 !	0.001 !	0 !	0 !
19:51	ZZZZZZ	0.008 !	0.001 !	0.001 !	0.002 !	0.001 !	0.001 !	0 !	0 !
19:54	MA51592-CCVA2	100.375	97.705	97.465	98.811	97.941	98.85	100.048	101.939
19:57	MA51592-CCB2	101.598	95.457	99.299	101.372	94.263	100.419	95.528	100.346
20:00	ZZZZZZ	0.008 !	0.001 !	0.001 !	0.003 !	0.002 !	0.001 !	0 !	0 !
20:06	ZZZZZZ	100.944	101.154	102.915	104.931	100.88	103.833	101.317	104.272
20:10	MP30266-B1	102.97	93.802	96.492	99.925	93.728	98.077	95.164	99.456
20:13	ZZZZZZ	99.937	88.217	93.249	98.073	87.862	95.658	89.928	95.938
20:16	MA51592-CRI2	97.316	90.981	93.506	98.022	90.941	93.559	91.86	95.653
20:19	MA51592-ICSA1	101.534	80.489	81.662	115.764	84.784	87.436	92.208	93.128

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
20:22	MA51592-ICSAB1	104.524	82.831	82.738	118.793	87.555	87.579	95.403	94.971
20:25	ZZZZZZ	106.408	94.745	99.602	108.673	95.843	98.934	97.173	102.515
20:29	MA51592-CCVA3	106.079	93.016	96.158	103.483	93.545	95.442	96.064	99.154
20:32	MA51592-CCB3	106.702	98.451	101.439	107.151	98.566	99.862	98.848	101.961
20:35	ZZZZZZ	107.145	98.723	103.289	107.418	98.604	102.149	98.047	103.112
20:38	ZZZZZZ	107.361	97.533	97.459	105.447	98.394	95.809	100.384	100.928
20:41	ZZZZZZ	109.217	96.797	99.992	105.255	97.875	101.034	98.721	102.054
20:44	ZZZZZZ	108.691	101.193	103.148	106.704	99.908	104.209	100.092	103.41
20:47	ZZZZZZ	110.331	101.003	105.647	107.822	101.531	106.806	99.805	105.48
20:50	JD36280-1F	109.239	96.866	100.606	105.955	97.582	101.816	97.34	102.038
20:54	MP30298-SD1	109.821	99.444	105.086	106.577	98.491	103.885	97.061	103.659
20:57	MP30298-S1	111.393	98.843	102.467	107.329	98.504	103.593	99.306	103.902
21:00	MP30298-S2	111.245	99.666	103.187	106.867	100.076	104.087	99.933	104.962
21:03	MA51592-CCVA4	109.16	97.152	99.135	106.266	97.077	99.585	98.244	102.571
21:06	MA51592-CCB4	110.526	100.022	104.499	110.509	99.291	103.551	100.695	103.245
21:09	ZZZZZZ	111.19	102.465	104.664	108.817	102.183	104.161	101.915	105.638
21:12	ZZZZZZ	110.93	104.445	106.161	108.867	103.976	107.205	102.56	106.717
21:15	ZZZZZZ	111.105	101.795	105.554	109.631	103.205	105.927	101.788	105.793
21:18	ZZZZZZ	108.604	99.509	102.01	106.693	99.584	101.838	99.943	103.75
21:22	MP30298-S1	113.564	103.757	107.83	110.087	102.522	107.693	102.261	106.949
21:25	MP30298-S2	113.317	103.579	108.31	110.689	103.351	107.941	101.7	107.866
21:28	JD36280-1F	112.692	102.476	107.871	109.417	101.601	107.181	100.554	106.674
21:31	MP30298-SD1	111.955	102.299	109.295	109.857	101.154	109.016	99.421	107.316
21:34	MA51592-CCVA5	108.962	97.757	101.177	105.748	97.746	101.402	99.163	102.713
21:37	MA51592-CCB5	109.537	101.974	105.997	111.173	101.677	103.951	99.327	104.808
21:40	MP30317-MB1	112.153	101.209	109.06	111.491	99.993	107.794	98.705	106.556
21:44	MP30317-B1	106.368	95.036	97.059	106.824	94.039	95.592	96.298	100.874
21:47	MP30317-S1	115.346	89.794	88.382	131.694 !	93.959	90.408	97.929	95.892
21:50	MP30317-S2	117.613	88.813	89.522	134.623 !	93.457	90.901	97.155	97.428
21:53	JD36281-1	117.077	93.143	89.778	137.353 !	98.142	92.154	102.535	99.109
21:56	MP30317-SD1	115.825	107.981	106.617	114.814	109.499	106.829	110.136	110.171
21:59	ZZZZZZ	110.295	92.362	93.43	107.982	96.431	93.123	100.122	100.742
22:02	ZZZZZZ	110.803	94.729	93.754	110.049	98.472	92.733	102.89	100.96

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
22:05	MA51592-CCVA6	116.299	103.415	105.862	112.668	105.402	104.913	106.451	108.152
22:08	MA51592-CCB6	114.916	107.119	110.851	115.219	107.166	108.363	105.115	111.319
22:11	ZZZZZZ	112.395	102.426	104.979	114.731	102.737	101.185	104.305	105.446
22:15	ZZZZZZ	109.693	95.545	95.065	109.42	99.889	95.55	104.286	102.415
22:18	ZZZZZZ	114.766	91.993	90.046	136.78 !	97.63	91.388	103.07	99.469
22:21	ZZZZZZ	115.816	105.671	105.946	113.203	109.305	106.079	110.24	110.553
22:24	ZZZZZZ	113.38	99.253	100.355	113.437	102.707	99.129	105.64	105.735
22:27	ZZZZZZ	111.343	98.362	99.246	108.003	102.168	97.461	105.058	104.725
22:30	MA51592-CCVA7	116.338	108.768	109.011	112.499	109.581	109.193	111.389	111.783
22:33	MA51592-CCB7	114.244	109.563	112.932	114.941	108.816	111.075	108.016	112.002
22:36	JD36319-2	109.473	95.23	96.791	107.455	98.941	95.494	101.022	102.814
22:39	JD36319-3	107.468	92.998	93.277	106.581	97.696	94.534	101.918	102.287
22:42	JD36319-4	108.217	95.18	95.7	108.28	99.227	95.116	103.181	103.498
22:45	JD36319-5	110.739	94.208	95.987	107.578	97.887	95.398	101.563	102.812
22:48	JD36319-2F	112.687	98.547	100.228	109.256	101.443	99.501	104.686	105.242
22:51	JD36319-3F	109.365	95.507	95.213	107.298	99.802	96.19	103.64	102.789
22:54	JD36319-4F	109.065	98.729	97.565	107.051	102.908	97.274	106.294	103.52
22:58	JD36319-5F	108.926	96.268	96.174	106.699	99.487	96.105	102.403	103.213
23:01	MA51592-CCVA8	114.453	108.16	108.455	110.054	109.894	108.702	108.848	111.78
23:04	MA51592-CCB8	111.237	111.614	112.567	112.665	112.025	110.805	109.802	111.756
23:07	MP30327A-MB1	No results reported for the elements associated with this internal standard.							
23:10	MP30327A-B2	No results reported for the elements associated with this internal standard.							
23:13	MP30327A-S3	No results reported for the elements associated with this internal standard.							
23:16	MP30327A-S4	No results reported for the elements associated with this internal standard.							
23:19	JD36451-6	No results reported for the elements associated with this internal standard.							
23:22	MP30327A-SD1	No results reported for the elements associated with this internal standard.							
23:25	MA51592-CCVA9	113.324	108.53	108.859	109.218	110.14	109.152	109.057	110.495
23:28	MA51592-CCB9	111.058	111.272	111.939	111.555	110.842	112.548	108.184	111.336
23:31	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:34	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:41	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
23:47	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:50	MA51592-CCVA10	113.285	108.337	106.528	109.325	110.39	107.018	110.565	110.039
23:53	MA51592-CCB10	109.676	109.932	110.141	110.951	110.417	108.939	109.11	110.805
23:56	MP30325-S1	110.562	102.563	103.854	107.001	105.612	106.536	105.119	106.672
23:59	MP30325-S2	109.181	100.224	103.096	106.238	102.5	105.675	103.05	107.116
00:02	JD36298-1	108.504	97.879	101.909	105.271	100.927	105.067	100.953	106.099
00:05	ZZZZZZ	106.757	95.682	99.371	105.903	98.216	101.463	99.595	104.527
00:08	ZZZZZZ	107.767	100.135	102.609	106.617	102.488	104.25	102.044	106.196
00:11	ZZZZZZ	106.931	95.746	98.821	103.88	99.19	102.123	100.575	104.939
00:14	ZZZZZZ	105.568	94.407	98.2	104.891	98.712	101.707	100.866	104.093
00:17	ZZZZZZ	109.054	104.282	106.018	107.264	105.705	107.948	105.488	108.455
00:20	MA51592-CCVA11	108.778	101.009	102.143	106.903	104.355	103.365	104.331	106.476
00:23	MA51592-CCB11	105.983	106.256	106.424	108.837	106.403	105.978	104.478	106.817
00:27	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:30	ZZZZZZ	106.765	104.033	105.058	109.384	105.863	104.73	105.577	107.256
00:33	ZZZZZZ	109.694	104.007	104.366	108.716	105.117	103.856	105.268	107.34
00:36	ZZZZZZ	107.372	105.141	107.164	110.448	106.289	105.107	105.64	106.752
00:39	ZZZZZZ	105.915	103.824	105.438	109.148	105.334	105.449	104.694	106.421
00:42	ZZZZZZ	105.371	104.456	104.941	107.891	104.656	104.534	103.226	106.081
00:45	MA51592-CCVA12	No results reported for the elements associated with this internal standard.							
00:52	MA51592-CCB12	No results reported for the elements associated with this internal standard.							
00:59	ZZZZZZ	232.706 !	334.508 !	277.377 !	255.46 !	334.668 !	275.793 !	337.891 !	277.929 !
01:02	ZZZZZZ	69.626 !	87.769	79.773	73.021	88.028	79.19	88.272	79.55
01:05	ZZZZZZ	83.684	92.167	90.444	85.575	92.648	90.958	91.791	91.702

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#9	Germanium (74-3)	60-125 %	60-125 %
Istd#10	Rhodium (103-1)	60-125 %	60-125 %
Istd#11	Rhodium (103-2)	60-125 %	60-125 %
Istd#12	Rhodium (103-3)	60-125 %	60-125 %
Istd#13	Indium (115-1)	60-125 %	60-125 %
Istd#14	Indium (115-2)	60-125 %	60-125 %
Istd#15	Terbium (159-1)	60-125 %	60-125 %
Istd#16	Terbium (159-2)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
18:22	MA51592-STD1	100	100	100	100	100
18:26	MA51592-STD2	100	100	100	100	100
18:30	MA51592-STD3	100	100	100	100	100
18:33	MA51592-STD4	100.256	95.007	99.603	95.404	99.56
18:36	MA51592-STD5	100.778	95.609	99.063	96.372	99.141
18:40	MA51592-STD6	99.902	96.076	98.13	96.153	98.333
18:43	MA51592-STD7	99.074	95.812	97.78	96.254	97.595
18:46	MA51592-STD8	99.724	94.441	96.363	95.445	96.675
18:50	MA51592-STD9	100.522	93.736	97.135	93.344	96.581
18:53	MA51592-STD10	103.158	96.629	100.562	95.961	99.053
18:56	MA51592-STD11	103.489	96.299	99.809	93.097	96.032
18:59	MA51592-STD12	102.909	94.46	99.126	89.145	92.296
19:03	ZZZZZZ	101.63	96.361	101.004	97.186	100.758
19:06	MA51592-ICVA1	102.59	93.85	99.408	91.917	95.448
19:14	MA51592-ICV1	103.529	100.661	103.045	100.666	102.475
19:20	MA51592-ICB1	103.141	98.446	102.247	99.492	102.152
19:23	MA51592-CCVA1	103.138	96.255	100.156	93.672	96.163
19:26	MA51592-CCB1	104.451	94.338	100.279	94.776	100.954
19:29	ZZZZZZ	0 !	0 !	0 !	0.033 !	0.028 !
19:32	ZZZZZZ	0 !	0 !	0 !	0.021 !	0.018 !
19:36	ZZZZZZ	102.648	100.21	101.597	100.549	101.308
19:39	ZZZZZZ	0.005 !	0 !	0 !	0.026 !	0.023 !
19:44	MA51592-CRI1	102.313	100.71	102.476	101.607	102.095
19:48	ZZZZZZ	0 !	0 !	0 !	0.026 !	0.022 !
19:51	ZZZZZZ	0 !	0 !	0 !	0.016 !	0.015 !
19:54	MA51592-CCVA2	102.014	99.507	102.003	96.752	97.536
19:57	MA51592-CCB2	101.714	94.473	100.72	95.093	100.184
20:00	ZZZZZZ	0 !	0 !	0 !	0.032 !	0.028 !
20:06	ZZZZZZ	104.504	101.424	104.344	101.602	103.219
20:10	MP30266-B1	103.273	94.742	98.962	94.325	97.245
20:13	ZZZZZZ	100.322	89.401	96.831	90.329	95.723
20:16	MA51592-CRI2	99.256	91.962	95.003	92.516	94.337
20:19	MA51592-ICSA1	144.707 !	92.834	93.931	80.347	80.122

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
20:22	MA51592-ICSAB1	147.992 !	95.417	94.996	82.505	81.55
20:25	ZZZZZZ	109.057	97.588	102.204	96.159	102.404
20:29	MA51592-CCVA3	107.309	95.989	100.252	93.116	96.193
20:32	MA51592-CCB3	107.145	98.81	102.473	99.205	101.8
20:35	ZZZZZZ	106.791	98.503	103.832	98.591	103.955
20:38	ZZZZZZ	108.623	100.591	102.225	96.543	97.288
20:41	ZZZZZZ	106.411	97.664	101.893	97.936	100.642
20:44	ZZZZZZ	104.935	100.557	103.588	101.51	104.128
20:47	ZZZZZZ	106.11	99.678	105.551	101.324	106.213
20:50	JD36280-1F	105.515	97.958	102.788	96.569	100.78
20:54	MP30298-SD1	106.085	97.313	103.644	98.661	103.927
20:57	MP30298-S1	106.508	98.599	104.081	97.592	102.231
21:00	MP30298-S2	107.423	100.324	104.437	99.265	102.88
21:03	MA51592-CCVA4	107.48	98.136	102.598	94.052	98.257
21:06	MA51592-CCB4	108.209	99.873	103.674	98.766	102.705
21:09	ZZZZZZ	107.466	101.019	105.306	100.252	103.263
21:12	ZZZZZZ	107.462	102.539	106.695	102.431	105.312
21:15	ZZZZZZ	108.818	102.105	106.276	101.963	104.499
21:18	ZZZZZZ	107.974	100.351	103.609	98.067	100.916
21:22	MP30298-S1	108.485	102.116	107.432	103.057	106.615
21:25	MP30298-S2	108.762	101.963	107.389	102.076	107.372
21:28	JD36280-1F	109.001	100.861	106.638	101.912	105.925
21:31	MP30298-SD1	106.961	99.429	107.097	100.684	107.772
21:34	MA51592-CCVA5	107.365	98.751	102.718	94.241	98.998
21:37	MA51592-CCB5	107.65	99.995	105.492	100.199	103.741
21:40	MP30317-MB1	107.851	98.396	106.657	98.462	105.697
21:44	MP30317-B1	109.499	96.516	100.4	91.527	95.035
21:47	MP30317-S1	157.084 !	99.142	96.527	88.003	85.291
21:50	MP30317-S2	160.45 !	98.673	98.832	87.721	86.601
21:53	JD36281-1	166.028 !	103.023	99.971	91.537	88.191
21:56	MP30317-SD1	117.647	109.745	110.685	107.196	106.448
21:59	ZZZZZZ	116.035	101.736	101.022	91.59	91.417
22:02	ZZZZZZ	116.764	103.721	101.756	92.949	91.455

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
22:05	MA51592-CCVA6	114.743	106.741	108.331	102.619	103.917
22:08	MA51592-CCB6	113.208	105.74	111.213	105.891	109.418
22:11	ZZZZZZ	114.292	105.057	106.743	99.525	102.465
22:15	ZZZZZZ	117.93	105.013	103.32	94.763	93.693
22:18	ZZZZZZ	165.811 !	104.371	100.077	91.886	88.979
22:21	ZZZZZZ	117.325	111.281	110.059	107.468	107.541
22:24	ZZZZZZ	117.004	106.068	105.847	99.157	99.984
22:27	ZZZZZZ	114.168	105.973	104.558	95.432	95.336
22:30	MA51592-CCVA7	114.352	112.024	112.508	106.287	106.877
22:33	MA51592-CCB7	114.32	109.271	111.425	106.256	110.335
22:36	JD36319-2	113.613	102.881	104.051	93.899	94.61
22:39	JD36319-3	115.96	103.016	101.984	91.436	90.838
22:42	JD36319-4	116.498	103.809	103.808	92.96	93.503
22:45	JD36319-5	115.214	102.113	103.705	91.901	93.492
22:48	JD36319-2F	115.18	105.137	106.148	96.147	97.517
22:51	JD36319-3F	116.051	104.2	103.535	92.281	91.687
22:54	JD36319-4F	114.705	107.66	104.258	95.604	93.303
22:58	JD36319-5F	114.872	103.277	104.019	92.58	93.774
23:01	MA51592-CCVA8	112.091	109.724	111.785	103.953	105.832
23:04	MA51592-CCB8	110.954	109.702	112.127	107.936	110.154
23:07	MP30327A-MB1	No results reported for the elements associated with this internal standard.				
23:10	MP30327A-B2	No results reported for the elements associated with this internal standard.				
23:13	MP30327A-S3	No results reported for the elements associated with this internal standard.				
23:16	MP30327A-S4	No results reported for the elements associated with this internal standard.				
23:19	JD36451-6	No results reported for the elements associated with this internal standard.				
23:22	MP30327A-SD1	No results reported for the elements associated with this internal standard.				
23:25	MA51592-CCVA9	109.882	109.052	110.29	103.545	104.394
23:28	MA51592-CCB9	109.232	108.675	111.565	107.725	109.662
23:31	ZZZZZZ	No results reported for the elements associated with this internal standard.				
23:34	ZZZZZZ	No results reported for the elements associated with this internal standard.				
23:37	ZZZZZZ	No results reported for the elements associated with this internal standard.				
23:41	ZZZZZZ	No results reported for the elements associated with this internal standard.				
23:44	ZZZZZZ	No results reported for the elements associated with this internal standard.				

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51592
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21
23:47	ZZZZZZ	No results reported for the elements associated with this internal standard.				
23:50	MA51592-CCVA10	111.584	112.084	110.419	105.369	104.41
23:53	MA51592-CCB10	108.395	109.511	108.942	106.947	108.263
23:56	MP30325-S1	109.012	105.334	107.716	101.533	103.928
23:59	MP30325-S2	109.246	102.816	107.486	99.936	103.322
00:02	JD36298-1	108.902	101.269	106.478	97.773	102.439
00:05	ZZZZZZ	111.073	100.152	105.121	93.954	97.665
00:08	ZZZZZZ	110.241	102.576	106.492	100.172	103.466
00:11	ZZZZZZ	109.705	101.881	105.438	93.437	96.126
00:14	ZZZZZZ	111.255	101.14	104.964	95.117	97.689
00:17	ZZZZZZ	110.856	106.36	108.581	104.135	106.198
00:20	MA51592-CCVA11	110.48	104.781	106.334	100.861	101.774
00:23	MA51592-CCB11	107.935	105.722	107.658	104.092	105.611
00:27	ZZZZZZ	No results reported for the elements associated with this internal standard.				
00:30	ZZZZZZ	109.899	105.927	107.456	104.354	106.052
00:33	ZZZZZZ	110.85	106.4	108.094	103.317	104.84
00:36	ZZZZZZ	110.258	106.039	107.395	105.13	106.182
00:39	ZZZZZZ	109.166	104.447	106.497	103.469	105.937
00:42	ZZZZZZ	109.432	103.641	107.107	102.746	105.385
00:45	MA51592-CCVA12	No results reported for the elements associated with this internal standard.				
00:52	MA51592-CCB12	No results reported for the elements associated with this internal standard.				
00:59	ZZZZZZ	257.173 !	339.977 !	279.294 !	328.507 !	274.008 !
01:02	ZZZZZZ	73.679	87.969	79.785	87.659	78.645
01:05	ZZZZZZ	84.664	92.305	91.214	91.314	90.737

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#17	Terbium (159-3)	60-125 %	60-125 %
Istd#18	Holmium (165-1)	60-125 %	60-125 %
Istd#19	Holmium (165-2)	60-125 %	60-125 %
Istd#20	Bismuth (209-1)	60-125 %	60-125 %
Istd#21	Bismuth (209-2)	60-125 %	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51592 Units: ug/l

Time: / Sample ID:			19:20 ICB1		19:26 CCB1		19:57 CCB2		20:32 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27	-0.0561	<25	0.392	<25	0.748	<25	0.818	<50
Antimony	2.0	.022	0.00610	<2.0	0.0161	<2.0	0.0110	<2.0	0.00538	<2.0
Arsenic	0.50	.009	-0.0140	<0.50	-0.00732	<0.50	-0.00481	<0.50	-0.0000497	<1.0
Barium	1.0	.009	0.00487	<1.0	0.0202	<1.0	0.00662	<1.0	0.0123	<1.0
Beryllium	0.50	.003	0.00386	<0.50	0.00928	<0.50	0.00672	<0.50	0.00536	<0.50
Boron	25	.87								
Cadmium	0.50	.007	0.000383	<0.50	0.00281	<0.50	0.00592	<0.50	0.000325	<0.50
Calcium	250	7.6	-1.18	<250	-0.419	<250	-0.841	<250	-1.47	<250
Chromium	1.0	.015	0.120	<1.0	0.00486	<1.0	0.0739	<1.0	-0.0232	<4.0
Cobalt	0.50	.002	-0.00105	<0.50	0.00288	<0.50	0.00406	<0.50	-0.000738	<0.50
Copper	2.0	.012	-0.0419	<2.0	-0.0352	<2.0	-0.0354	<2.0	-0.0223	<4.0
Iron	25	.56	0.207	<25	0.920	<25	1.23	<25	2.00	<50
Lead	0.50	.007	0.0111	<0.50	0.0259	<0.50	0.0201	<0.50	0.0118	<0.50
Magnesium	250	.37	0.0672	<250	0.260	<250	0.558	<250	0.624	<250
Manganese	1.0	.009	-0.0126	<1.0	-0.0186	<1.0	-0.00905	<1.0	-0.0171	<1.0
Molybdenum	1.0	.027								
Nickel	1.0	.008	-0.0110	<1.0	-0.000339	<1.0	0.000663	<1.0	-0.00568	<4.0
Potassium	250	1.2	-0.724	<250	-0.463	<250	-0.0684	<250	-0.237	<250
Selenium	0.50	.35	0.000450	<0.50	-0.0117	<0.50	-0.00157	<0.50	0.110	<1.0
Silver	0.50	.002	0.00196	<0.50	0.0131	<0.50	0.0117	<0.50	0.0131	<2.0
Sodium	250	.53	-1.21	<250	-0.734	<250	-0.738	<250	1.36	<250
Strontium	5.0	.016								
Thallium	0.50	.009	0.00222	<0.50	0.0150	<0.50	0.0159	<0.50	0.0137	<0.50
Tin	5.0	.035								
Titanium	1.0	.045								
Vanadium	1.0	.017	0.0118	<1.0	0.00808	<1.0	0.0196	<1.0	-0.00467	<4.0
Zinc	5.0	.048	-0.00922	<5.0	0.0189	<5.0	0.0300	<5.0	0.0536	<10

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51592 Units: ug/l

Time: / Sample ID:			21:06 CCB4		21:37 CCB5		22:08 CCB6		22:33 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27	0.284	<25	0.454	<25	0.0287	<25	-0.0877	<25
Antimony	2.0	.022	0.0253	<2.0	0.00802	<2.0	0.00973	<2.0	0.00454	<2.0
Arsenic	0.50	.009	-0.0000507	<0.50	-0.00209	<0.50	-0.00488	<0.50	-0.0118	<0.50
Barium	1.0	.009	0.0307	<1.0	0.0119	<1.0	0.00811	<1.0	0.0199	<1.0
Beryllium	0.50	.003	0.0268	<0.50	0.00369	<0.50	0.00990	<0.50	0.00583	<0.50
Boron	25	.87								
Cadmium	0.50	.007	0.00514	<0.50	0.00149	<0.50	0.00365	<0.50	0.00126	<0.50
Calcium	250	7.6	11.9	<250	-0.695	<250	0.269	<250	-0.116	<250
Chromium	1.0	.015	-0.0186	<1.0	-0.00284	<1.0	-0.0687	<1.0	-0.0746	<1.0
Cobalt	0.50	.002	-0.000855	<0.50	0.000627	<0.50	-0.00131	<0.50	0.00167	<0.50
Copper	2.0	.012	-0.0255	<2.0	-0.0325	<2.0	-0.0376	<2.0	-0.0631	<2.0
Iron	25	.56	0.914	<25	0.747	<25	0.251	<25	0.506	<25
Lead	0.50	.007	0.0341	<0.50	0.00702	<0.50	0.0118	<0.50	0.0103	<0.50
Magnesium	250	.37	0.514	<250	0.311	<250	0.355	<250	0.507	<250
Manganese	1.0	.009	0.0115	<1.0	-0.0106	<1.0	0.00901	<1.0	0.0268	<1.0
Molybdenum	1.0	.027								
Nickel	1.0	.008	-0.00879	<1.0	-0.00579	<1.0	-0.0121	<1.0	-0.0117	<1.0
Potassium	250	1.2	-0.175	<250	-0.0615	<250	-0.744	<250	-1.01	<250
Selenium	0.50	.35	-0.00175	<0.50	0.0148	<0.50	-0.0110	<0.50	0.0605	<0.50
Silver	0.50	.002	0.0360	<0.50	0.0117	<0.50	0.0149	<0.50	0.0125	<0.50
Sodium	250	.53	-0.810	<250	-1.10	<250	0.575	<250	-0.223	<250
Strontium	5.0	.016								
Thallium	0.50	.009	0.0349	<0.50	0.0117	<0.50	0.0131	<0.50	0.0145	<0.50
Tin	5.0	.035								
Titanium	1.0	.045								
Vanadium	1.0	.017	-0.0120	<1.0	-0.00144	<1.0	-0.00541	<1.0	-0.00339	<1.0
Zinc	5.0	.048	0.0308	<5.0	0.0319	<5.0	0.0144	<5.0	0.0288	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51592 Units: ug/l

Time:			23:04	
Sample ID:			CCB8	
Metal	RL	IDL	raw	final
Aluminum	25	.27	0.797	<25
Antimony	2.0	.022	0.00242	<2.0
Arsenic	0.50	.009	0.00248	<0.50
Barium	1.0	.009	0.0128	<1.0
Beryllium	0.50	.003	0.00630	<0.50
Boron	25	.87		
Cadmium	0.50	.007	0.00519	<0.50
Calcium	250	7.6	2.21	<250
Chromium	1.0	.015	-0.0679	<1.0
Cobalt	0.50	.002	0.00387	<0.50
Copper	2.0	.012	-0.0649	<2.0
Iron	25	.56	1.53	<25
Lead	0.50	.007	0.00478	<0.50
Magnesium	250	.37	3.80	<250
Manganese	1.0	.009	0.157	<1.0
Molybdenum	1.0	.027		
Nickel	1.0	.008	-0.0100	<1.0
Potassium	250	1.2	0.242	<250
Selenium	0.50	.35	0.0380	<0.50
Silver	0.50	.002	0.0131	<0.50
Sodium	250	.53	2.71	<250
Strontium	5.0	.016		
Thallium	0.50	.009	0.0133	<0.50
Tin	5.0	.035		
Titanium	1.0	.045		
Vanadium	1.0	.017	-0.00194	<1.0
Zinc	5.0	.048	0.0137	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51592 Units: ug/l

Time:		19:06			19:14			19:23	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	5240	95.3	60	63.3	105.5	5000	4990	99.8
Antimony	60	60.3	100.5				50	50.6	101.2
Arsenic	60	61.8	103.0				50	51.6	103.2
Barium	60	59.4	99.0				50	48.8	97.6
Beryllium	60	60.0	100.0				50	49.9	99.8
Boron									
Cadmium	60	60.0	100.0				50	49.0	98.0
Calcium	5500	5270	95.8				5000	5030	100.6
Chromium	60	58.8	98.0				50	49.2	98.4
Cobalt	60	57.8	96.3				50	48.0	96.0
Copper	60	56.5	94.2				50	47.5	95.0
Iron	5500	5320	96.7				5000	5010	100.2
Lead	60	59.8	99.7				50	49.3	98.6
Magnesium	5500	5220	94.9				5000	5010	100.2
Manganese	60	58.6	97.7				50	48.9	97.8
Molybdenum									
Nickel	60	58.1	96.8				50	48.4	96.8
Potassium	5500	5200	94.5				5000	4940	98.8
Selenium	260	251	96.5				200	201	100.5
Silver	60	64.2	107.0				50	50.5	101.0
Sodium	5500	5150	93.6				5000	4900	98.0
Strontium									
Thallium	60	61.5	102.5				50	50.4	100.8
Tin									
Titanium									
Vanadium	60	59.3	98.8				50	49.9	99.8
Zinc	60	55.9	93.2				50	46.6	93.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51592 Units: ug/l

Time:		19:54			20:29			21:03	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	5070	101.4	5000	4920	98.4	5000	4810	96.2
Antimony	50	49.6	99.2	50	51.8	103.6	50	51.9	103.8
Arsenic	50	51.5	103.0	50	53.3	106.6	50	52.6	105.2
Barium	50	47.0	94.0	50	49.1	98.2	50	49.3	98.6
Beryllium	50	48.9	97.8	50	49.9	99.8	50	50.6	101.2
Boron									
Cadmium	50	47.8	95.6	50	49.7	99.4	50	49.8	99.6
Calcium	5000	5010	100.2	5000	5050	101.0	5000	5010	100.2
Chromium	50	49.7	99.4	50	50.5	101.0	50	49.8	99.6
Cobalt	50	47.9	95.8	50	49.5	99.0	50	48.8	97.6
Copper	50	47.6	95.2	50	49.3	98.6	50	48.5	97.0
Iron	5000	5070	101.4	5000	5140	102.8	5000	5000	100.0
Lead	50	49.2	98.4	50	49.9	99.8	50	50.2	100.4
Magnesium	5000	5040	100.8	5000	4950	99.0	5000	4850	97.0
Manganese	50	48.6	97.2	50	50.0	100.0	50	48.9	97.8
Molybdenum									
Nickel	50	48.3	96.6	50	49.8	99.6	50	48.8	97.6
Potassium	5000	5040	100.8	5000	4970	99.4	5000	4890	97.8
Selenium	200	198	99.0	200	201	100.5	200	202	101.0
Silver	50	51.9	103.8	50	51.1	102.2	50	51.3	102.6
Sodium	5000	4960	99.2	5000	4860	97.2	5000	4870	97.4
Strontium									
Thallium	50	51.4	102.8	50	51.3	102.6	50	51.3	102.6
Tin									
Titanium									
Vanadium	50	50.0	100.0	50	50.8	101.6	50	50.3	100.6
Zinc	50	46.6	93.2	50	49.1	98.2	50	48.0	96.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51592 Units: ug/l

Time:		21:34			22:05			22:30	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4960	99.2	5000	4980	99.6	5000	4800	96.0
Antimony	50	51.6	103.2	50	52.1	104.2	50	51.2	102.4
Arsenic	50	52.3	104.6	50	52.4	104.8	50	50.4	100.8
Barium	50	49.8	99.6	50	49.5	99.0	50	49.1	98.2
Beryllium	50	50.2	100.4	50	48.9	97.8	50	47.5	95.0
Boron									
Cadmium	50	49.8	99.6	50	49.6	99.2	50	50.1	100.2
Calcium	5000	5060	101.2	5000	5130	102.6	5000	5090	101.8
Chromium	50	50.2	100.4	50	50.3	100.6	50	48.6	97.2
Cobalt	50	48.9	97.8	50	49.2	98.4	50	47.5	95.0
Copper	50	48.6	97.2	50	48.6	97.2	50	46.9	93.8
Iron	5000	5050	101.0	5000	5090	101.8	5000	4950	99.0
Lead	50	50.2	100.4	50	50.4	100.8	50	49.6	99.2
Magnesium	5000	4940	98.8	5000	5040	100.8	5000	4960	99.2
Manganese	50	49.1	98.2	50	49.2	98.4	50	48.5	97.0
Molybdenum									
Nickel	50	49.1	98.2	50	49.2	98.4	50	47.6	95.2
Potassium	5000	4970	99.4	5000	4970	99.4	5000	4890	97.8
Selenium	200	201	100.5	200	202	101.0	200	201	100.5
Silver	50	52.2	104.4	50	53.5	107.0	50	52.4	104.8
Sodium	5000	4980	99.6	5000	5030	100.6	5000	4930	98.6
Strontium									
Thallium	50	51.4	102.8	50	51.4	102.8	50	50.8	101.6
Tin									
Titanium									
Vanadium	50	50.6	101.2	50	50.7	101.4	50	48.9	97.8
Zinc	50	47.8	95.6	50	48.1	96.2	50	46.4	92.8

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51592 Units: ug/l

Time:		23:01	
Sample ID:	CCVA	CCVA8	
Metal	True	Results	% Rec
Aluminum	5000	4730	94.6
Antimony	50	50.1	100.2
Arsenic	50	49.0	98.0
Barium	50	48.5	97.0
Beryllium	50	46.3	92.6
Boron			
Cadmium	50	48.7	97.4
Calcium	5000	5030	100.6
Chromium	50	46.7	93.4
Cobalt	50	45.5	91.0
Copper	50	45.1	90.2
Iron	5000	4780	95.6
Lead	50	49.2	98.4
Magnesium	5000	4770	95.4
Manganese	50	46.3	92.6
Molybdenum			
Nickel	50	45.6	91.2
Potassium	5000	4760	95.2
Selenium	200	198	99.0
Silver	50	52.0	104.0
Sodium	5000	4790	95.8
Strontium			
Thallium	50	50.9	101.8
Tin			
Titanium			
Vanadium	50	47.4	94.8
Zinc	50	44.4	88.8*(a)

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51592 Units: ug/l

Time:			19:44		20:16	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	25	25	25.6	102.4	25.2	100.8
Antimony	2.0	0.25	1.78	89.0	1.86	93.0
Arsenic	0.50	0.50	0.499	99.8	0.465	93.0
Barium	1.0	0.50	0.887	88.7	0.927	92.7
Beryllium	0.50	0.25	0.458	91.6	0.475	95.0
Boron	25	2.5				
Cadmium	0.50	0.25	0.475	95.0	0.445	89.0
Calcium	250	125	236	94.4	247	98.8
Chromium	1.0	2.0	1.15	115.0	0.975	97.5
Cobalt	0.50	0.25	0.468	93.6	0.477	95.4
Copper	2.0	2.0	1.98	99.0	1.99	99.5
Iron	25	25	24.2	96.8	24.4	97.6
Lead	0.50	0.25	0.435	87.0	0.463	92.6
Magnesium	250	125	250	100.0	252	100.8
Manganese	1.0	0.25	0.924	92.4	0.938	93.8
Molybdenum	1.0	0.50				
Nickel	1.0	2.0	0.934	93.4	0.969	96.9
Potassium	250	125	245	98.0	245	98.0
Selenium	0.50	0.50	0.439	87.8	0.483	96.6
Silver	0.50	1.0	0.467	93.4	0.510	102.0
Sodium	250	125	238	95.2	239	95.6
Strontium	5.0	0.50				
Thallium	0.50	0.25	0.421	84.2	0.453	90.6
Tin	5.0	0.50				
Titanium	1.0	0.50				
Vanadium	1.0	2.0	0.919	91.9	0.923	92.3
Zinc	5.0	2.0	11.0	220.0*(a	4.90	98.0

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB121221M1.CSV Date Analyzed: 12/12/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51592 Units: ug/l

Time:			20:19		20:22	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	92600	92.6	90500	90.5
Antimony			0.0496		0.173	
Arsenic		20	0.0980		19.2	96.0
Barium			0.350		0.297	
Beryllium			0.00907		0.122	
Boron		50	2.95		45.2	90.4
Cadmium		20	0.00213		18.3	91.5
Calcium	100000	100000	93300	93.3	92600	92.6
Chromium		20	0.877		20.7	103.5
Cobalt		20	0.0873		18.8	94.0
Copper		20	0.342		17.8	89.0
Iron	100000	100000	91600	91.6	91400	91.4
Lead			0.249		0.173	
Magnesium	100000	100000	91300	91.3	90300	90.3
Manganese		20	0.173		19.5	97.5
Molybdenum	2000	2000	2140HH	107.0	2110HH	105.5
Nickel		20	0.579		18.6	93.0
Potassium	100000	100000	93800	93.8	92900	92.9
Selenium		20	0.0361		20.2	101.0
Silver		20	0.0337		19.8	99.0
Sodium	100000	100000	93700	93.7	92600	92.6
Strontium	2000	2000	1710HH	85.5	1800HH	90.0
Thallium			0.0118		0.140	
Tin	2000	2000	1820HH	91.0	1820HH	91.0
Titanium	2000	2000	1860HH	93.0	1870HH	93.5
Vanadium		20	0.0797		21.5	107.5
Zinc		20	1.84		18.1	90.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:35	MA51609-STD1	1		Sample introduction not stable, see rerun.
13:41	MA51609-STD2	1		Sample introduction not stable, see rerun.
13:47	MA51609-STD3	1		STDA
13:53	MA51609-STD4	1		STDB
13:59	MA51609-STD5	1		STDC
14:05	MA51609-STD6	1		STDD
14:11	MA51609-STD7	1		STDE
14:17	MA51609-STD8	1		STDF
14:23	MA51609-STD9	1		STDG
14:29	MA51609-STD10	1		STDH
14:35	MA51609-STD11	1		STDI
14:41	MA51609-STD12	1		Sample introduction not stable, see rerun.
14:47	MA51609-STD13	1		STDI
14:53	MA51609-STD14	1		Sample introduction not stable, see rerun.
14:59	ZZZZZZ	1		
15:06	MA51609-ICVA1	1		
15:12	MA51609-ICV1	1		
15:18	MA51609-ICVA2	1		
15:25	MA51609-ICB1	1		
15:31	MA51609-CCVA1	1		
15:37	MA51609-CCB1	1		
15:43	MA51609-CRI1	1		
15:49	MA51609-ICSA1	1		
15:55	MA51609-ICSAB1	1		
16:01	ZZZZZZ	1		
16:08	MA51609-CCVA2	1		
16:14	MA51609-CCB2	1		
16:20	MP30344A-MB1	2		
16:26	MP30344A-B2	2		
16:32	MP30344A-S3	2		
16:39	MP30344A-S4	2		
16:45	JD36437-3	2		(sample used for QC only; not part of login JD36319)
16:51	MP30344A-SD1	10		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:57	ZZZZZZ	2		
17:04	ZZZZZZ	2		
17:10	MA51609-CCVA3	1		
17:16	MA51609-CCB3	1		
17:22	MP30317-S1	10		
17:28	MP30317-S2	10		
17:35	JD36281-1	10		(sample used for QC only; not part of login JD36319)
17:41	MP30317-SD1	50		
17:47	MP30317-S1	100		
17:53	MP30317-S2	100		
18:00	JD36281-1	100		(sample used for QC only; not part of login JD36319)
18:06	MP30317-SD1	500		
18:12	ZZZZZZ	10		
18:18	ZZZZZZ	100		
18:24	MA51609-CCVA4	1		
18:30	MA51609-CCB4	1		
18:37	ZZZZZZ	25		
18:43	ZZZZZZ	500		
18:49	ZZZZZZ	5		
18:55	ZZZZZZ	20		
19:01	JD36319-2	2		CA,MG,MN,NA high
19:07	JD36319-2	10		
19:14	JD36319-2	50		
19:20	JD36319-3	2		CA,MG,MN,NA high
19:26	JD36319-3	10		CA,MN high
19:32	JD36319-3	50		
19:38	MA51609-CCVA5	1		
19:44	MA51609-CCB5	1		
19:50	JD36319-4	2		CA,MG,MN,NA high
19:57	JD36319-4	10		CA high
20:03	JD36319-4	25		
20:09	JD36319-5	2		FE,ZN,CA,MG,MN,NA high
20:15	JD36319-5	20		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:21	JD36319-2F	2		
20:28	JD36319-2F	10		
20:34	JD36319-2F	50		
20:40	JD36319-3F	2		
20:46	JD36319-3F	10		
20:52	MA51609-CCVA6	1		
20:58	MA51609-CCB6	1		
21:04	JD36319-3F	50		
21:10	JD36319-4F	2		
21:17	JD36319-4F	20		
21:23	JD36319-5F	2		CA,MG,MN,NA high
21:29	JD36319-5F	5		CA,MG high
21:35	JD36319-5F	20		
---------->	Last reportable sample/prep for job JD36319			
21:41	MA51609-CCVA7	1		
21:47	MA51609-CCB7	1		
---------->	Last reportable CCB for job JD36319			
21:53	ZZZZZZ	2		
22:00	MP30346-B1	2		
22:06	MP30346-S1	2		CA,MN,NA high
22:12	MP30346-S2	2		CA,MN,NA high
22:18	JD36391-2	2		(sample used for QC only; not part of login JD36319)
22:24	MP30346-SD1	10		
22:31	ZZZZZZ	2		
22:37	ZZZZZZ	2		
22:43	ZZZZZZ	2		
22:49	MP30346-MB1	2		
22:55	MA51609-CCVA8	1		
23:02	MA51609-CCB8	1		
23:08	ZZZZZZ	2		
23:14	ZZZZZZ	2		
23:20	ZZZZZZ	2		
23:26	ZZZZZZ	2		
23:33	ZZZZZZ	2		
23:39	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:45	ZZZZZZ	2		
23:52	ZZZZZZ	2		
23:58	ZZZZZZ	2		
00:04	ZZZZZZ	2		
00:10	MA51609-CCVA9	1		
00:16	MA51609-CCB9	1		
00:22	MP30319-MB1	2		
00:29	MP30319-B1	2		
00:35	MP30319-S1	2		MN,NA,CA high
00:41	MP30319-S2	2		MG,MN,NA,CA high
00:47	JD36305-1	2		(sample used for QC only; not part of login JD36319)
00:53	MP30319-SD1	10		CA,MG,MN,NA high
00:59	ZZZZZZ	2		
01:06	ZZZZZZ	2		
01:12	ZZZZZZ	2		
01:18	ZZZZZZ	2		
01:24	MA51609-CCVA10	1		Sb,Be,Ca,Pb,Ag out
01:30	MA51609-CCB10	1		
01:36	ZZZZZZ	2		
01:42	ZZZZZZ	2		
01:49	ZZZZZZ	2		
01:55	ZZZZZZ	2		
02:01	ZZZZZZ	2		
02:07	ZZZZZZ	2		
02:13	ZZZZZZ	2		
02:20	ZZZZZZ	2		
02:26	ZZZZZZ	2		
02:32	ZZZZZZ	2		
02:38	MA51609-CCVA11	1		Sb,Be,Ca,Pb,Ag out; Ca high rsd
02:44	MA51609-CCB11	1		
02:50	ZZZZZZ	2		
02:56	ZZZZZZ	2		
03:03	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
03:09	ZZZZZZ	1		
03:15	MA51609-CCVA12	1		
03:21	MA51609-CCB12	1		
03:27	MP30322-MB1	1		SB CCV out
03:33	MP30322-B1	1		SB CCV out
03:40	MP30322-S1	1		MN,ZN high. CCV out
03:46	MP30322-S2	1		BE,PB,Ag high rsd; SB high
03:53	JD36351-1	1		(sample used for QC only; not part of login JD36319)
03:59	ZZZZZZ	1		
04:05	ZZZZZZ	1		
04:12	ZZZZZZ	1		
04:18	MA51609-CCVA13	1		SB out
04:24	MA51609-CCB13	1		
04:31	ZZZZZZ	1		
04:37	ZZZZZZ	1		
04:44	ZZZZZZ	1		
04:50	ZZZZZZ	1		
04:56	ZZZZZZ	1		
05:03	ZZZZZZ	1		
05:09	ZZZZZZ	2		
05:16	ZZZZZZ	2		
05:22	MA51609-CCVA14	1		
05:28	MA51609-CCB14	1		
05:35	ZZZZZZ	1		
05:41	ZZZZZZ	1		
05:47	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Element: Dilution	Ca	Fe	Mg	Mn	Na	Zn	
14:59	ZZZZZZ	1							
15:06	MA51609-ICVA1	1							
15:12	MA51609-ICV1	1							
15:18	MA51609-ICVA2	1	X	X	X	X	X	X	
15:25	MA51609-ICB1	1	X	X	X	X	X	X	
15:31	MA51609-CCVA1	1	X	X	X	X	X	X	
15:37	MA51609-CCB1	1	X	X	X	X	X	X	
15:43	MA51609-CRI1	1	X	X	X	X	X	X	
15:49	MA51609-ICSA1	1	X	X	X	X	X	X	
15:55	MA51609-ICSAB1	1	X	X	X	X	X	X	
16:01	ZZZZZZ	1							
16:08	MA51609-CCVA2	1	X	X	X	X	X	X	
16:14	MA51609-CCB2	1	X	X	X	X	X	X	
16:20	MP30344A-MB1	2							
16:26	MP30344A-B2	2							
16:32	MP30344A-S3	2							
16:39	MP30344A-S4	2							
16:45	JD36437-3	2							(a)
16:51	MP30344A-SD1	10							
16:57	ZZZZZZ	2							
17:04	ZZZZZZ	2							
17:10	MA51609-CCVA3	1	X	X	X	X	X	X	
17:16	MA51609-CCB3	1	X	X	X	X	X	X	
17:22	MP30317-S1	10			X				
17:28	MP30317-S2	10			X				
17:35	JD36281-1	10							(a)
17:41	MP30317-SD1	50			X				
17:47	MP30317-S1	100	X			X			
17:53	MP30317-S2	100	X			X			
18:00	JD36281-1	100							(a)
18:06	MP30317-SD1	500	X			X			
18:12	ZZZZZZ	10							
18:18	ZZZZZZ	100							
		Element:	Ca	Fe	Mg	Mn	Na	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Element: Dilution	Ca	Fe	Mg	Mn	Na	Zn
18:24	MA51609-CCVA4	1	X	X	X	X	X	X
18:30	MA51609-CCB4	1	X	X	X	X	X	X
18:37	ZZZZZZ	25						
18:43	ZZZZZZ	500						
18:49	ZZZZZZ	5						
18:55	ZZZZZZ	20						
19:01	JD36319-2	2						X
19:07	JD36319-2	10	X		X		X	
19:14	JD36319-2	50				X		
19:20	JD36319-3	2						X
19:26	JD36319-3	10			X		X	
19:32	JD36319-3	50	X			X		
19:38	MA51609-CCVA5	1	X	X	X	X	X	X
19:44	MA51609-CCB5	1	X	X	X	X	X	X
19:50	JD36319-4	2						X
19:57	JD36319-4	10			X	X	X	
20:03	JD36319-4	25	X					
20:09	JD36319-5	2						
20:15	JD36319-5	20	X	X	X	X	X	X
20:21	JD36319-2F	2						X
20:28	JD36319-2F	10	X		X		X	
20:34	JD36319-2F	50				X		
20:40	JD36319-3F	2						X
20:46	JD36319-3F	10			X		X	
20:52	MA51609-CCVA6	1	X	X	X	X	X	X
20:58	MA51609-CCB6	1	X	X	X	X	X	X
21:04	JD36319-3F	50	X			X		
21:10	JD36319-4F	2						X
21:17	JD36319-4F	20	X		X	X	X	
21:23	JD36319-5F	2						X
21:29	JD36319-5F	5				X	X	
21:35	JD36319-5F	20	X		X			
21:41	MA51609-CCVA7	1	X	X	X	X	X	X
		Element:	Ca	Fe	Mg	Mn	Na	Zn

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Dilution	Ca	Fe	Mg	Mn	Na	Zn	
21:47	MA51609-CCB7	1	X	X	X	X	X	X	
21:53	ZZZZZZ	2							
22:00	MP30346-B1	2	X	X	X	X	X		
22:06	MP30346-S1	2		X	X				
22:12	MP30346-S2	2		X	X				
22:18	JD36391-2	2		X					(a)
22:24	MP30346-SD1	10		X	X				
22:31	ZZZZZZ	2							
22:37	ZZZZZZ	2							
22:43	ZZZZZZ	2							
22:49	MP30346-MB1	2	X	X	X	X	X		
22:55	MA51609-CCVA8	1	X	X	X	X	X	X	
23:02	MA51609-CCB8	1	X	X	X	X	X	X	
23:08	ZZZZZZ	2							
23:14	ZZZZZZ	2							
23:20	ZZZZZZ	2							
23:26	ZZZZZZ	2							
23:33	ZZZZZZ	2							
23:39	ZZZZZZ	2							
23:45	ZZZZZZ	2							
23:52	ZZZZZZ	2							
23:58	ZZZZZZ	2							
00:04	ZZZZZZ	2							
00:10	MA51609-CCVA9	1	X	X	X	X	X	X	
00:16	MA51609-CCB9	1	X	X	X	X	X	X	
00:22	MP30319-MB1	2	X	X	X	X	X		
00:29	MP30319-B1	2		X	X	X	X		
00:35	MP30319-S1	2		X					
00:41	MP30319-S2	2		X					
00:47	JD36305-1	2		X					(a)
00:53	MP30319-SD1	10		X					
00:59	ZZZZZZ	2							
01:06	ZZZZZZ	2							
	Element:		Ca	Fe	Mg	Mn	Na	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Element: Dilution	Ca	Fe	Mg	Mn	Na	Zn	
01:12	ZZZZZZ	2							
01:18	ZZZZZZ	2							
01:24	MA51609-CCVA10	1	X	X	X	X	X	X	
01:30	MA51609-CCB10	1	X	X	X	X	X	X	
01:36	ZZZZZZ	2							
01:42	ZZZZZZ	2							
01:49	ZZZZZZ	2							
01:55	ZZZZZZ	2							
02:01	ZZZZZZ	2							
02:07	ZZZZZZ	2							
02:13	ZZZZZZ	2							
02:20	ZZZZZZ	2							
02:26	ZZZZZZ	2							
02:32	ZZZZZZ	2							
02:38	MA51609-CCVA11	1	X	X	X	X	X	X	
02:44	MA51609-CCB11	1	X	X	X	X	X	X	
02:50	ZZZZZZ	2							
02:56	ZZZZZZ	2							
03:03	ZZZZZZ	2							
03:09	ZZZZZZ	1							
03:15	MA51609-CCVA12	1	X	X	X	X	X	X	
03:21	MA51609-CCB12	1	X	X	X	X	X	X	
03:27	MP30322-MB1	1		X		X		X	
03:33	MP30322-B1	1		X		X		X	
03:40	MP30322-S1	1		X					
03:46	MP30322-S2	1		X					
03:53	JD36351-1	1		X		X			(a)
03:59	ZZZZZZ	1							
04:05	ZZZZZZ	1							
04:12	ZZZZZZ	1							
04:18	MA51609-CCVA13	1	X	X	X	X	X	X	
04:24	MA51609-CCB13	1	X	X	X	X	X	X	
04:31	ZZZZZZ	1							
		Element:	Ca	Fe	Mg	Mn	Na	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Element: Dilution	C a	F e	M g	M n	N a	Z n
04:37	ZZZZZZ	1						
04:44	ZZZZZZ	1						
04:50	ZZZZZZ	1						
04:56	ZZZZZZ	1						
05:03	ZZZZZZ	1						
05:09	ZZZZZZ	2						
05:16	ZZZZZZ	2						
05:22	MA51609-CCVA14	1	X	X	X	X	X	X
05:28	MA51609-CCB14	1	X	X	X	X	X	X
05:35	ZZZZZZ	1						
05:41	ZZZZZZ	1						
05:47	ZZZZZZ	1						

(a) Sample used for QC only; not part of login JD36319.

Element:	C a	F e	M g	M n	N a	Z n

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:35	MA51609-STD1	100	100	100	100	100	100	100	100
13:41	MA51609-STD2	100	100	100	100	100	100	100	100
13:47	MA51609-STD3	100	100	100	100	100	100	100	100
13:53	MA51609-STD4	100.246	100.852	100.448	100.302	99.937	99.761	100.363	100.482
13:59	MA51609-STD5	98.663	99.641	99.182	100.1	100.04	100.705	100.369	100.648
14:05	MA51609-STD6	98.522	99.194	97.906	100.375	99.434	96.007	100.336	99.566
14:11	MA51609-STD7	97.687	97.253	97.951	99.593	97.37	99.04	98.859	99.023
14:17	MA51609-STD8	96.573	97.432	95.574	100.893	98.477	98.593	100.57	97.962
14:23	MA51609-STD9	97.748	98.174	99.288	101.08	99.045	100.656	100.951	98.908
14:29	MA51609-STD10	97.517	99.027	99.372	101.074	98.939	100.23	101.61	100.023
14:35	MA51609-STD11	85.48	80.755	100.68	101.889	86.395	101.18	101.346	86.203
14:41	MA51609-STD12	99.954	100.041	102.529	103.156	100.083	101.984	101.526	99.732
14:47	MA51609-STD13	94.579	102.629	100.384	102.714	95.988	102.494	101.294	96.131
14:53	MA51609-STD14	99.471	100.984	101.128	102.797	100.789	101.773	101.997	101.523
14:59	ZZZZZZ	99.118	99.574	97.74	99.922	100.009	99.98	99.042	100.417
15:06	MA51609-ICVA1	No results reported for the elements associated with this internal standard.							
15:12	MA51609-ICV1	97.773	99.624	98.873	89.818	99.596	98.644	95.378	99.491
15:18	MA51609-ICVA2	96.449	99.331	99.623	100.668	99.137	100.959	99.81	99.745
15:25	MA51609-ICB1	96.897	98.888	98.409	98.24	99.641	98.671	98.22	98.547
15:31	MA51609-CCVA1	93.589	95.669	96.169	97.72	95.834	96.863	97.182	96.005
15:37	MA51609-CCB1	93.585	94.484	93.929	96.749	96.23	96.042	96.425	95.853
15:43	MA51609-CRI1	92.329	93.718	93.792	96.38	95.176	94.432	96.669	95.19
15:49	MA51609-ICSA1	98.504	99.515	102.148	98.659	98.102	100.573	96.801	95.876
15:55	MA51609-ICSAB1	111.879	107.991	104.884	101.987	106.834	102.904	100.166	104.015
16:01	ZZZZZZ	116.825	111.264	105.502	103.339	111.414	108.166	104.703	111.759
16:08	MA51609-CCVA2	103.187	97.401	104.449	104.699	100.798	107.454	104.544	101.027
16:14	MA51609-CCB2	105.35	104.705	99.898	99.583	104.886	103.484	102.147	105.941
16:20	MP30344A-MB1	102.678	102.69	96.62	101.586	103.382	97.743	102.206	103.269
16:26	MP30344A-B2	101.845	98.449	98.281	105.086	100.007	101.091	108.061	100.199
16:32	MP30344A-S3	97.203	97.461	94.931	103.065	96.356	99.242	106.299	97.905
16:39	MP30344A-S4	96.796	96.52	95.795	103.385	98.698	99.137	105.849	98.633
16:45	JD36437-3	96.934	95.701	91.029	102.266	98.155	95.172	105.655	97.945
16:51	MP30344A-SD1	96.045	97.435	96.932	102.293	97.063	99.476	102.927	98.749

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
16:57	ZZZZZZ	95.711	96.527	96.089	93.035	94.481	95.433	94.311	94.796
17:04	ZZZZZZ	97.517	96.297	94.967	101.355	98.951	98.519	104.971	98.804
17:10	MA51609-CCVA3	99.507	100.49	99.038	103.413	100.462	101.216	102.239	100.554
17:16	MA51609-CCB3	98.168	98.489	95.411	100.054	100.094	98.131	100.932	99.955
17:22	MP30317-S1	97.886	98.067	97.559	101.399	99.811	99.177	102.282	99.882
17:28	MP30317-S2	96.081	97.161	97.904	101.047	98.567	101.246	102.085	99.297
17:35	JD36281-1	94.641	96.479	95.92	100.092	97.845	98.951	100.736	98.397
17:41	MP30317-SD1	95.9	97.195	96.268	97.945	101.257	100.3	99.815	101.924
17:47	MP30317-S1	96.233	97.216	97.643	98.233	102.423	102.748	101.984	103.302
17:53	MP30317-S2	95.025	96.234	97.369	97.871	102.098	101.924	100.96	102.118
18:00	JD36281-1	100.647	107.552	97.967	98.828	105.873	101.391	101.344	107.268
18:06	MP30317-SD1	94.689	99.282	97.226	97.75	102.188	101.334	99.774	103.229
18:12	ZZZZZZ	93.078	95.96	91.135	98.096	97.193	93.644	98.464	98.468
18:18	ZZZZZZ	94.892	98.509	96.248	95.922	101.04	100.27	99.114	102.26
18:24	MA51609-CCVA4	93.374	97.795	96.118	98.357	98.599	98.305	99.445	99.491
18:30	MA51609-CCB4	94.155	97.162	94.829	97.773	98.291	99.224	99.169	98.815
18:37	ZZZZZZ	96.206	99.02	97.969	97.597	100.905	101.472	100.207	101.496
18:43	ZZZZZZ	97.389	100.569	98.5	96.991	102.868	102.042	99.142	104.043
18:49	ZZZZZZ	94.629	94.304	93.796	96.816	95.726	97.248	99.114	96.604
18:55	ZZZZZZ	83.997	79.05	94.992	96.672	87.74	98.546	99.413	87.981
19:01	JD36319-2	92.696	94.512	94.311	100.143	94.888	98.302	105.553	95.543
19:07	JD36319-2	92.456	95.301	96.639	99.615	97.78	97.27	99.793	97.816
19:14	JD36319-2	93.411	97.293	94.936	96.875	101.159	100.206	99.826	101.423
19:20	JD36319-3	93.247	94.581	92.358	98.119	93.984	97.103	103.475	94.913
19:26	JD36319-3	90.305	93.771	92.928	96.745	95.26	95.822	97.819	95.305
19:32	JD36319-3	91.967	96.227	94.94	97.965	99.818	99.028	100.148	100.551
19:38	MA51609-CCVA5	92.719	98.64	95.72	99.097	98.514	98.109	99.541	99.458
19:44	MA51609-CCB5	95.425	98.344	95.847	97.917	99.742	98.553	99.105	99.429
19:50	JD36319-4	95.466	96.627	95.889	100.985	97.321	98.619	105.417	98.057
19:57	JD36319-4	94.842	100.233	97.257	92.163	102.846	100.521	92.52	102.188
20:03	JD36319-4	95.788	101.478	97.256	95.288	102.957	101.805	95.773	103.498
20:09	JD36319-5	96.755	100.088	96.962	102.021	99.959	100.425	107.013	100.556
20:15	JD36319-5	99.275	103.243	99.925	100.478	106.874	104.759	103.697	108.094

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
20:21	JD36319-2F	97.898	97.751	91.831	100.638	100.528	98.03	107.777	100.743
20:28	JD36319-2F	96.54	99.588	96.681	100.66	101.415	100.088	101.624	102.514
20:34	JD36319-2F	97.416	99.706	99.545	99.822	104.648	100.456	101.233	104.938
20:40	JD36319-3F	97.505	97.986	93.723	98.91	99.446	98.976	107.279	99.587
20:46	JD36319-3F	94.72	99.041	94.415	99.837	100.807	98.398	101.617	101.157
20:52	MA51609-CCVA6	97.273	102.09	98.713	100.976	102.167	101.648	101.277	104.41
20:58	MA51609-CCB6	98.567	101.84	97.573	94.514	103.735	99.758	98.558	103.477
21:04	JD36319-3F	98.899	97.955	97.767	104.549	105.449	103.062	102.976	106.803
21:10	JD36319-4F	99.284	100.034	95.915	99.447	100.274	100.967	106.906	101.589
21:17	JD36319-4F	98.073	104.022	90.125	99.63	106.291	97.236	102.614	106.651
21:23	JD36319-5F	98.145	99.579	94.719	99.673	100.655	99.984	108.009	101.735
21:29	JD36319-5F	95.926	99.35	94.953	99.389	99.869	98.115	101.892	100.184
21:35	JD36319-5F	97.553	102.122	97.485	100.054	104.294	101.055	102.087	104.229
21:41	MA51609-CCVA7	97.545	101.906	99.345	100.011	103.267	102.749	101.654	104.928
21:47	MA51609-CCB7	89.8	99.286	97.089	98.968	93.857	100.881	101.229	93.946
21:53	ZZZZZZ	114.155	130.266 !	204.487 !	223.92 !	131.155 !	207.193 !	225.946 !	130.481 !
22:00	MP30346-B1	77.025	92.179	90.205	100.407	96.52	97.181	107.893	97.039
22:06	MP30346-S1	73.396	90.831	93.145	100.438	93.265	95.684	105.03	93.562
22:12	MP30346-S2	74.55	95.896	97.826	103.055	99.205	100.527	105.894	98.02
22:18	JD36391-2	78.496	97.565	99.441	102.449	101	102.206	105.504	101.146
22:24	MP30346-SD1	74.518	96.295	97.014	101.835	103.097	101.555	103.075	102.351
22:31	ZZZZZZ	77.403	96.057	95.825	102.287	103.485	102.935	110.098	103.469
22:37	ZZZZZZ	78.024	97.389	97.013	105.057	101.782	104.051	111.258	101.17
22:43	ZZZZZZ	72.407	90.998	91.336	103.26	96.487	99.193	109.263	96.738
22:49	MP30346-MB1	77.9	95.93	95.307	102.101	99.472	99.291	103.257	100.671
22:55	MA51609-CCVA8	79.985	100.312	98.179	102.238	101.829	101.726	101.865	102.688
23:02	MA51609-CCB8	79.701	98.88	97.955	101.121	103.366	102.597	102.817	104.134
23:08	ZZZZZZ	83.09	98	95.91	102.823	102.57	102.817	111.03	103.306
23:14	ZZZZZZ	82.676	98.458	92.663	103.249	102.466	99.183	110.067	102.672
23:20	ZZZZZZ	85.457	99.567	94.787	93.351	104.718	101.277	101.203	104.569
23:26	ZZZZZZ	79.484	95.973	96.337	94.246	98.555	97.393	99.983	99.217
23:33	ZZZZZZ	85.768	102.72	95.139	104.232	106.901	100.933	111.814	108.071
23:39	ZZZZZZ	78.15	95.197	88.106	102.137	100.08	95.442	109.423	100.38

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
23:45	ZZZZZZ	82.054	101.16	96.109	104.121	101.324	100.574	110.22	103.008
23:52	ZZZZZZ	79.632	97.13	96.043	103.305	100.881	101.905	111.116	101.278
23:58	ZZZZZZ	91.032	103.166	98.078	103.207	106.758	104.212	109.831	107.012
00:04	ZZZZZZ	90.029	100.893	98.998	101.575	105.555	104.991	112	105.953
00:10	MA51609-CCVA9	86.981	102.629	104.283	104.047	107.451	106.113	103.366	107.862
00:16	MA51609-CCB9	87.447	104.945	98.631	91.979	108.652	103.553	94.452	108.746
00:22	MP30319-MB1	84.565	102.824	104.023	100.753	107.795	107.875	102.548	107.958
00:29	MP30319-B1	98.98	107.43	102.085	103.15	110.624	107.389	110.431	111.105
00:35	MP30319-S1	98.32	106.243	103.204	102.884	108.636	104.449	107.441	108.925
00:41	MP30319-S2	98.953	108.117	102.189	102.996	109.735	105.629	109.25	109.601
00:47	JD36305-1	97.85	105.658	101.595	103.11	108.389	104.943	107.8	108.373
00:53	MP30319-SD1	98.515	111.374	103.733	100.484	112.788	106.571	103.509	113.169
00:59	ZZZZZZ	99.9	107.087	101.612	97.67	106.593	107.429	103.539	108.296
01:06	ZZZZZZ	105.101	111.219	101.235	102.915	114.213	107.501	112.941	115.34
01:12	ZZZZZZ	101.993	108.477	100.423	102.038	111.539	106.194	110.983	111.767
01:18	ZZZZZZ	97.551	103.46	99.766	101.737	106.035	105.841	109.266	106.317
01:24	MA51609-CCVA10	103.402	113.756	106.548	103.456	115.367	109.179	103.691	116.37
01:30	MA51609-CCB10	104.611	113.717	104.873	101.045	115.719	107.847	102.594	116.689
01:36	ZZZZZZ	102.765	109.122	100.618	101.463	112.152	107.434	108.882	111.373
01:42	ZZZZZZ	102.376	108.293	101.016	99.196	108.544	103.686	104.403	109.072
01:49	ZZZZZZ	102.786	107.831	100.903	92.68	108.145	103.546	99.02	108.298
01:55	ZZZZZZ	103.832	108.712	99.555	100.333	110.785	105.5	109.656	111.48
02:01	ZZZZZZ	104.169	106.856	100.479	99.669	108.623	104.002	106.822	109.274
02:07	ZZZZZZ	98.522	102.863	102.572	94.155	106.038	105.667	103.624	105.936
02:13	ZZZZZZ	105.666	108.811	99.976	99.823	113.801	106.842	109.766	114.515
02:20	ZZZZZZ	104.661	111.143	101.748	102.495	113.372	106.804	107.611	113.792
02:26	ZZZZZZ	102.518	108.79	97.778	101.276	111.019	102.545	108.756	111.532
02:32	ZZZZZZ	102.904	103.786	96.557	93.046	121.229	122.944	120.281	120.621
02:38	MA51609-CCVA11	97.985	101.509	105.101	107.089	107.746	109.151	103.286	108.31
02:44	MA51609-CCB11	106.968	115.699	104.457	100.258	116.93	108.672	102.019	117.363
02:50	ZZZZZZ	104.866	107.196	98.629	97.049	115.519	111.844	115.389	116.748
02:56	ZZZZZZ	106.63	108.249	99.754	97.675	117.408	113.353	115.628	117.003
03:03	ZZZZZZ	105.626	107.01	100.584	98.603	125.915	126.324	128.951	124.835

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
03:09	ZZZZZZ	104.151	114.067	103.675	100.258	115.205	105.134	102.769	115.573
03:15	MA51609-CCVA12	104.137	114.66	106.39	101.153	115.893	107.792	101.969	115.895
03:21	MA51609-CCB12	105.309	113.823	105.195	98.841	117.082	107.175	100.867	117.107
03:27	MP30322-MB1	105.292	113.351	102.58	104.374	114.664	105.886	105.335	116.532
03:33	MP30322-B1	104.008	113.993	105.515	99.767	117.167	108.065	100.721	118.119
03:40	MP30322-S1	108.645	126.591	!a108.229	100.057	119.861	108.343	99.527	121.482
03:46	MP30322-S2	107.011	118.365	108.844	99.611	117.661	108.158	99.381	119.214
03:53	JD36351-1	107.977	118.18	106.721	98.217	115.269	108.711	98.342	115.253
03:59	ZZZZZZ	107.877	119.871	100.94	96.859	117.679	106.015	97.784	118.505
04:05	ZZZZZZ	109.016	123.8	109.027	97.461	118.045	107.193	97.557	118.428
04:12	ZZZZZZ	113.856	119.302	105.88	97.39	119.824	108.853	99.726	120.604
04:18	MA51609-CCVA13	111.472	120.034	107.603	98.623	120.211	109.645	99.847	121.379
04:24	MA51609-CCB13	105.748	109.604	105.116	96.662	113.269	109.346	99.721	113.225
04:31	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:50	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:56	ZZZZZZ	No results reported for the elements associated with this internal standard.							
05:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
05:09	ZZZZZZ	156.395 !	153.135 !	130.111 !	99.884	154.437 !	131.043 !	102.736	154.872 !
05:16	ZZZZZZ	147.102 !	145.875 !	121.412	91.17	144.533 !	124.492	100.529	145.649 !
05:22	MA51609-CCVA14	134.339	!a138.007 !	118.744	94.343	141.791 !	121.458	97.252	142.65 !
05:28	MA51609-CCB14	132.212	!a136.539 !	115.318	93.175	137.742 !	118.049	96.436	138.438 !
05:35	ZZZZZZ	128.639	133.618 !	114.261	92.819	135.21 !	117.786	96.034	135.451 !
05:41	ZZZZZZ	125.118	131.471 !	111.195	87.032	132.279 !	115.988	92.406	133.874 !
05:47	ZZZZZZ	123.602	129.012	109.354	92.503	130.255 !	113.879	95.758	131.865 !

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (72-3)	60-125 %	60-125 %
Istd#8	Germanium (74-1)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:35	MA51609-STD1	100	100	100	100	100	100	100	100
13:41	MA51609-STD2	100	100	100	100	100	100	100	100
13:47	MA51609-STD3	100	100	100	100	100	100	100	100
13:53	MA51609-STD4	100.502	100.142	99.039	100.035	99.476	99.282	99.665	99.302
13:59	MA51609-STD5	99.097	100.189	98.231	98.757	99.571	98.864	99.068	98.093
14:05	MA51609-STD6	96.217	100.268	97.926	96.379	100.007	97.452	95.135	98.72
14:11	MA51609-STD7	98.371	99.298	97.315	97.828	98.813	97.649	96.659	97.799
14:17	MA51609-STD8	98.377	101.37	96.883	97.144	100.096	96.695	96.462	97.528
14:23	MA51609-STD9	99.246	100.952	96.32	98.916	99.534	97.523	98.796	97.179
14:29	MA51609-STD10	100.438	102.084	97.36	98.061	99.927	97.339	99.226	98.291
14:35	MA51609-STD11	99.467	100.628	80.869	97.313	97.779	82.203	98.581	83.788
14:41	MA51609-STD12	101.775	100.823	95.594	97.597	97	97.98	100.019	99.683
14:47	MA51609-STD13	100.582	100.753	93.923	98.279	97.957	95.37	99.068	97.517
14:53	MA51609-STD14	101.36	101.341	98.208	97.959	98.665	100.561	99.574	101.13
14:59	ZZZZZZ	99.294	99.542	98.229	98.358	99.251	99.641	97.881	99.187
15:06	MA51609-ICVA1	No results reported for the elements associated with this internal standard.							
15:12	MA51609-ICV1	96.751	95.997	98.182	97.688	94.604	98.564	98.624	98.585
15:18	MA51609-ICVA2	99.776	99.605	95.974	96.803	96.272	97.752	98.452	100.606
15:25	MA51609-ICB1	98.894	98.749	97.313	98.324	98.743	97.187	97.977	98.469
15:31	MA51609-CCVA1	95.988	97.089	91.744	93.13	94.431	94.517	93.786	95.57
15:37	MA51609-CCB1	95.09	96.681	93.588	94.11	96.323	94.909	94.2	95.037
15:43	MA51609-CRI1	94.396	96.54	93.774	93.61	96.471	93.708	94.282	94.206
15:49	MA51609-ICSA1	98.839	93.659	88.334	89.085	86.241	88.617	89.073	96.517
15:55	MA51609-ICSAB1	99.849	97.541	95.67	92.328	89.223	98.048	91.361	103.01
16:01	ZZZZZZ	107.389	104.682	109.76	106.185	104.756	110.569	105.787	107.294
16:08	MA51609-CCVA2	106.696	104.786	95.411	103.079	101.791	97.237	103.968	97.766
16:14	MA51609-CCB2	102.287	102.854	103.231	101.377	102.292	105.604	100.785	104.107
16:20	MP30344A-MB1	97.543	102.364	100.514	96.315	101.928	101.879	95.45	102.462
16:26	MP30344A-B2	101.341	108.677	94.624	96.668	100.868	96.436	96.075	98.547
16:32	MP30344A-S3	98.912	106.725	87.087	89.388	93.299	92.931	92.282	96.097
16:39	MP30344A-S4	99.362	105.822	87.053	90.056	93.553	93.331	92.811	96.927
16:45	JD36437-3	94.502	106.099	87.541	84.894	92.858	92.76	88.159	96.009
16:51	MP30344A-SD1	99.04	102.717	92.911	96.43	98.501	95.805	97.391	95.374

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
16:57	ZZZZZZ	95.931	93.994	83.865	85.228	81.9	91.056	90.251	95.078
17:04	ZZZZZZ	97.878	105.27	89.246	89.615	93.699	93.169	92.663	96.055
17:10	MA51609-CCVA3	99.921	103.069	95.993	96.144	99.657	99.158	96.834	101.097
17:16	MA51609-CCB3	97.534	100.92	97.094	96.779	99.634	98.671	96.206	99.45
17:22	MP30317-S1	98.427	101.875	95.773	95.991	98.393	98.726	97.841	100.269
17:28	MP30317-S2	99.38	102.205	95.646	95.632	98.306	99.489	97.737	101.12
17:35	JD36281-1	98.175	100.38	94.549	93.83	96.786	97.953	96.031	98.356
17:41	MP30317-SD1	99.84	100.756	98.113	97.16	97.898	101.412	98.633	100.471
17:47	MP30317-S1	101.294	101.069	99.197	99.503	98.535	101.963	100.077	101.712
17:53	MP30317-S2	101.407	101.012	99.08	98.243	99.522	102.438	99.439	101.226
18:00	JD36281-1	100.262	101.214	104.812	98.136	99.741	108.39	100.24	106.803
18:06	MP30317-SD1	101.38	99.662	99.179	99.305	98.626	101.665	99.374	102.34
18:12	ZZZZZZ	92.836	98.697	94.721	89.355	95.517	97.786	92.087	98.785
18:18	ZZZZZZ	100.102	98.737	99.054	98.148	98.036	101.368	99.449	101.837
18:24	MA51609-CCVA4	97.931	99.338	94.37	93.897	95.305	98.181	95.715	99.248
18:30	MA51609-CCB4	97.388	99.073	97.478	97.334	98.884	98.221	96.356	99.07
18:37	ZZZZZZ	100.35	98.877	98.173	96.329	97.009	100.728	98.898	101.597
18:43	ZZZZZZ	102.144	98.808	101.354	100.14	97.95	103.269	101.358	103.751
18:49	ZZZZZZ	95.856	98.382	93.138	94.177	95.481	96.845	94.27	97.846
18:55	ZZZZZZ	98.326	99.903	83.769	96.794	97.901	86.538	97.297	86.012
19:01	JD36319-2	97.482	105.542	87.996	89.911	94.955	91.088	91.387	95.37
19:07	JD36319-2	97.385	100.27	94.602	94.58	97.031	97.425	95.859	99.259
19:14	JD36319-2	100.103	99.389	97.538	97.243	98.721	100.026	98.26	101.128
19:20	JD36319-3	96.152	103.38	85.009	87.839	90.355	90.723	90.153	95.767
19:26	JD36319-3	95.854	98.439	91.595	92.149	94.464	95.617	93.569	95.725
19:32	JD36319-3	97.881	99.868	97.073	96.485	98.347	100.479	96.673	101.152
19:38	MA51609-CCVA5	96.989	99.787	95.188	95.311	96.456	97.615	96.087	100.691
19:44	MA51609-CCB5	97.271	99.452	98.046	96.592	99.648	99.665	96.682	101.316
19:50	JD36319-4	98.583	106.03	90.768	90.613	94.16	95.215	92.004	98.972
19:57	JD36319-4	100.254	91.698	98.137	96.8	89.091	101.937	98.36	103.708
20:03	JD36319-4	100.825	95.991	100.62	98.728	92.794	104.046	99.649	104.744
20:09	JD36319-5	100.211	106.774	91.716	91.752	94.805	97.23	92.997	101.207
20:15	JD36319-5	103.574	103.55	103.329	100.008	100.386	106.718	101.704	106.517

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
20:21	JD36319-2F	96.405	107.653	92.005	89.73	96.144	96.588	90.877	100.599
20:28	JD36319-2F	100.119	101.972	98.38	97.187	99.21	101.838	97.621	103.068
20:34	JD36319-2F	100.492	101.473	100.727	99.176	100.58	104.089	99.749	105.231
20:40	JD36319-3F	99.611	107.019	88.112	88.99	91.455	94.106	91.319	98.216
20:46	JD36319-3F	97.947	101.199	96.752	94.59	97.435	100.322	96.286	101.929
20:52	MA51609-CCVA6	100.416	101.185	99.459	96.738	98.882	102.09	97.818	104.149
20:58	MA51609-CCB6	99.328	98.169	101.864	98.541	97.899	103.625	99.212	103.683
21:04	JD36319-3F	102.978	102.021	102.489	99.697	100.687	105.799	100.527	103.838
21:10	JD36319-4F	100.046	107.593	92.172	91.906	94.316	97.712	93.704	102.337
21:17	JD36319-4F	96.517	102.267	103.099	93.252	100.869	106.094	93.954	104.832
21:23	JD36319-5F	99.694	108.064	91.212	90.409	93.538	97.21	92.555	101.375
21:29	JD36319-5F	98.305	101.878	94.956	93.903	97.313	99.383	96.47	102.977
21:35	JD36319-5F	101.547	102.733	101.138	99.232	100.215	104.703	100.503	105.832
21:41	MA51609-CCVA7	100.748	101.521	99.48	97.53	99.161	103.401	98.945	104.574
21:47	MA51609-CCB7	99.096	101.714	93.282	99.165	102.05	94.467	99.605	91.873
21:53	ZZZZZZ	205.395 !	224.746 !	127.156	194.569 !	208.692 !	127.69	204.508 !	122.63
22:00	MP30346-B1	97.223	107.632	91.81	87.909	93.703	94.431	91.09	94.712
22:06	MP30346-S1	95.809	105.269	83.297	81.194	86.47	89.366	89.405	92.015
22:12	MP30346-S2	100.808	105.828	87.841	84.399	87.988	92.926	93.042	95.485
22:18	JD36391-2	101.251	105.688	90.832	86.621	88.681	95.451	95.988	97.941
22:24	MP30346-SD1	100.89	102.008	96.982	91.437	94.32	99.04	98.216	99.946
22:31	ZZZZZZ	101.623	110.118	95.735	90.129	93.646	99.002	97.275	98.704
22:37	ZZZZZZ	102.624	110.939	92.823	90.615	94.596	97.647	96.207	98.375
22:43	ZZZZZZ	98.483	108.609	87.065	84.505	92.188	91.544	91.058	92.951
22:49	MP30346-MB1	99.261	103.731	99.393	94.146	100.614	100.352	96.528	99.264
22:55	MA51609-CCVA8	100.101	101.858	99.887	93.825	96.149	101.615	99.004	101.925
23:02	MA51609-CCB8	101.4	102.103	101.398	96.4	100.293	103.469	99.732	101.968
23:08	ZZZZZZ	102.823	110.4	95.564	90.828	95.994	98.835	96.37	98.632
23:14	ZZZZZZ	99.137	111.127	93.501	87.374	94.449	98.219	93.197	100.613
23:20	ZZZZZZ	100.708	101.391	99.206	94.999	89.65	101.089	96.766	101.452
23:26	ZZZZZZ	98.1	99.911	88.745	85.333	82.801	93.756	93.113	96.594
23:33	ZZZZZZ	100.826	111.811	98.497	89.53	97.329	102.434	95.196	103.34
23:39	ZZZZZZ	94.91	108.951	92.671	83.509	94.943	96.264	89.423	98.144

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
23:45	ZZZZZZ	100.167	109.925	93.889	89.171	94.666	98.241	93.619	98.264
23:52	ZZZZZZ	100.573	110.704	92.069	91.726	96.761	97.334	95.56	98.057
23:58	ZZZZZZ	102.829	110.754	96.176	91.708	95.425	103.595	97.48	104.476
00:04	ZZZZZZ	103.006	111.478	100.099	97.3	100.754	101.987	98.05	101.926
00:10	MA51609-CCVA9	104.672	104.498	103.053	99.555	99.25	106.023	103.647	106.269
00:16	MA51609-CCB9	102.696	94.754	106.49	97.911	92.323	107.421	101.158	105.623
00:22	MP30319-MB1	106.861	102.927	106.127	103.231	101.75	105.985	105.022	103.341
00:29	MP30319-B1	106.939	110.083	105.276	99.93	100.642	107.883	101.795	103.995
00:35	MP30319-S1	104.925	107.896	96.548	92.587	92.669	102.901	98.07	106.96
00:41	MP30319-S2	105.744	109.109	98.042	92.957	93.948	105.162	98.35	107.297
00:47	JD36305-1	105.488	107.874	96.895	92.696	94.038	103.394	98.807	104.491
00:53	MP30319-SD1	106.039	103.908	107.3	101.899	98.638	110.945	104.841	107.562
00:59	ZZZZZZ	106.083	103.354	98.011	95.976	89.719	104.044	99.883	106.481
01:06	ZZZZZZ	107	112.252	105.405	99.484	100.326	109.89	102.119	107.783
01:12	ZZZZZZ	105.637	110.367	100.98	95.842	96.469	106.427	99.147	109.342
01:18	ZZZZZZ	105.341	109.655	96.099	96.524	97.512	100.967	100.681	101.542
01:24	MA51609-CCVA10	108.958	103.784	111.194	103.966	101.375	115.118	106.397	107.876
01:30	MA51609-CCB10	107.532	102.831	113.739	106.007	103.403	114.992	107.853	108.675
01:36	ZZZZZZ	106.006	108.8	101.992	96.442	96.73	108.046	100.009	107.154
01:42	ZZZZZZ	102.879	104.112	96.85	92.356	90.243	104.419	97.73	107.616
01:49	ZZZZZZ	102.96	98.65	97.851	93.147	84.864	104.141	98.342	106.457
01:55	ZZZZZZ	104.174	108.754	102.41	97.242	97.717	108.265	99.898	105.528
02:01	ZZZZZZ	102.978	106.918	97.489	93.272	92.428	103.903	97.621	106.697
02:07	ZZZZZZ	103.817	103.159	95.206	95.033	89.218	99.877	99.132	101.245
02:13	ZZZZZZ	106.051	110.723	105.317	97.982	98.203	110.135	101.325	104.974
02:20	ZZZZZZ	105.882	106.667	102.117	96.436	95.55	108.668	99.632	105.837
02:26	ZZZZZZ	101.91	109.667	102.368	94.327	96.496	108.25	96.867	105.803
02:32	ZZZZZZ	122.306	120.748	96.237	92.719	88.796	102.161	94.954	105.976
02:38	MA51609-CCVA11	108.368	103.262	101.805	103.499	98.721	105.27	106.534	103.932
02:44	MA51609-CCB11	107.301	102.376	114.639	105.805	103.255	115.785	106.925	109.555
02:50	ZZZZZZ	111.614	114.659	95.219	90.997	88.909	102.063	95.886	107.605
02:56	ZZZZZZ	111.823	114.99	96.682	92.393	90.381	103.052	95.806	104.646
03:03	ZZZZZZ	125.989	128.674	98.916	97.488	95.483	104.861	99.99	105.217

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
03:09	ZZZZZZ	105.759	101.856	113.689	104.893	102.475	114.129	105.714	110.348
03:15	MA51609-CCVA12	108.077	101.828	111.021	104.195	99.87	115.407	106.583	108.98
03:21	MA51609-CCB12	107.098	101.487	115.285	105.452	101.926	115.7	106.459	109.459
03:27	MP30322-MB1	104.869	104.859	113.948	104.727	106.542	115.214	106.734	107.851
03:33	MP30322-B1	107.648	100.962	113.367	104.885	99.587	115.245	106.632	107.054
03:40	MP30322-S1	108.521	99.853	115.089	99.495	93.827	120.86	105.349	118.507
03:46	MP30322-S2	108.244	99.249	110.106	100.819	93.45	115.491	107.129	110.085
03:53	JD36351-1	107.566	98.348	108.106	100.991	93.4	114.535	108.031	110.529
03:59	ZZZZZZ	104.788	97.93	109.148	97.529	92.245	114.516	103.397	110.788
04:05	ZZZZZZ	107.573	96.865	108.305	99.713	91.891	114.715	106.412	110.795
04:12	ZZZZZZ	108.742	99.419	118.905	107.349	100.655	118.596	108.844	112.213
04:18	MA51609-CCVA13	108.636	100.003	115.743	105.563	98.277	117.415	108.522	111.4
04:24	MA51609-CCB13	108.088	99.298	109.483	107.334	101.355	111.297	109.328	104.855
04:31	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:50	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:56	ZZZZZZ	No results reported for the elements associated with this internal standard.							
05:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
05:09	ZZZZZZ	130.626 !	103.487	151.642 !	127.5 !	104.307	151.441 !	134.104 !	135.349 !
05:16	ZZZZZZ	123.469	100.571	139.709 !	118.09	92.582	140.609 !	122.004	128.433 !
05:22	MA51609-CCVA14	120.885	97.502	136.583 !	114.783	97.148	137.885	!a122.492	126.443
05:28	MA51609-CCB14	118.8	96.28	135.775 !	115.603	97.896	135.605	!a118.682	124.979
05:35	ZZZZZZ	116.157	96.223	132.997 !	113.585	98.057	132.439 !	117.875	122.631
05:41	ZZZZZZ	114.089	92.752	131.241 !	112.818	94.049	130.859 !	116.837	120.193
05:47	ZZZZZZ	112.989	95.49	128.78	110.581	97.541	129.289	114.522	118.702

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#9	Germanium (74-2)	60-125 %	60-125 %
Istd#10	Germanium (74-3)	60-125 %	60-125 %
Istd#11	Rhodium (103-1)	60-125 %	60-125 %
Istd#12	Rhodium (103-2)	60-125 %	60-125 %
Istd#13	Rhodium (103-3)	60-125 %	60-125 %
Istd#14	Indium (115-1)	60-125 %	60-125 %
Istd#15	Indium (115-2)	60-125 %	60-125 %
Istd#16	Terbium (159-1)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
13:35	MA51609-STD1	100	100	100	100	100	100
13:41	MA51609-STD2	100	100	100	100	100	100
13:47	MA51609-STD3	100	100	100	100	100	100
13:53	MA51609-STD4	98.664	99.767	99.502	99.351	100.318	99.465
13:59	MA51609-STD5	98.983	99.797	98.01	99.435	99.711	98.655
14:05	MA51609-STD6	95.817	99.862	98.293	96.435	100.227	96.762
14:11	MA51609-STD7	97.587	99.06	98.81	97.988	100.359	98.901
14:17	MA51609-STD8	97.093	100.002	98.174	98.109	99.883	98.311
14:23	MA51609-STD9	98.842	100.201	98.223	99.055	100.104	98.992
14:29	MA51609-STD10	99.861	100.843	98.923	100.195	99.346	99.893
14:35	MA51609-STD11	99.881	100.272	84.518	100.641	83.537	97.682
14:41	MA51609-STD12	100.568	100.485	100.281	101.685	97.795	96.582
14:47	MA51609-STD13	100.6	100.872	97.806	101.201	96.83	98.415
14:53	MA51609-STD14	101.023	100.804	101.854	101.652	99.154	98.662
14:59	ZZZZZZ	98.626	99.934	99.403	99.291	100.686	98.918
15:06	MA51609-ICVA1	No results reported for the elements associated with this internal standard.					
15:12	MA51609-ICV1	98.536	94.267	99.784	99.053	99.772	99.11
15:18	MA51609-ICVA2	99.353	99.436	99.572	99.974	99.049	97.957
15:25	MA51609-ICB1	98.355	99.068	98.797	99.297	99.488	99.67
15:31	MA51609-CCVA1	96.217	96.607	95.973	96.349	95.139	94.528
15:37	MA51609-CCB1	94.097	97.194	96.128	94.962	96.664	95.09
15:43	MA51609-CRI1	94.354	97.501	95.049	94.802	95.945	94.653
15:49	MA51609-ICSA1	95.807	93.098	96.593	96.366	89.259	88.489
15:55	MA51609-ICSAB1	98.345	96.143	103.696	98.627	94.697	89.674
16:01	ZZZZZZ	105.351	103.395	108.911	106.08	108.18	105.124
16:08	MA51609-CCVA2	104.542	102.282	97.958	105.359	95.93	102.675
16:14	MA51609-CCB2	100.576	101.776	104.403	101.77	104.316	101.745
16:20	MP30344A-MB1	95.102	100.902	103.747	95.627	102.462	96.071
16:26	MP30344A-B2	98.841	102.472	99.001	99.014	107.987	101.734
16:32	MP30344A-S3	95.623	98.706	96.273	96.959	91.125	90.524
16:39	MP30344A-S4	96.419	98.606	97.965	97.767	91.736	90.369
16:45	JD36437-3	91.416	98.382	96.77	92.697	91.343	85.668
16:51	MP30344A-SD1	96.83	100.049	97.64	97.781	96.524	96.251

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
16:57	ZZZZZZ	92.845	88.529	95.94	93.847	86.742	83.72
17:04	ZZZZZZ	95.803	98.214	96.876	97.195	92.373	90.327
17:10	MA51609-CCVA3	98.903	100.758	102.408	100.13	99.442	97.138
17:16	MA51609-CCB3	97.591	99.627	99.545	97.76	99.582	97.069
17:22	MP30317-S1	98.952	99.676	101.258	99.48	99.441	97.913
17:28	MP30317-S2	98.846	99.891	100.676	99.765	98.366	98.343
17:35	JD36281-1	97.08	98.722	99.117	97.569	97.731	96.444
17:41	MP30317-SD1	97.854	98.462	100.655	99.401	96.72	99.02
17:47	MP30317-S1	99.872	99.348	102.109	100.388	82.746	94.774
17:53	MP30317-S2	100.006	99.954	101.966	100.891	82.747	95.583
18:00	JD36281-1	100.215	100.037	108.128	100.911	98.464	101.09
18:06	MP30317-SD1	99.761	99.196	103.095	100.461	86.954	96.092
18:12	ZZZZZZ	92.688	97.367	99.168	93.218	98.715	92.73
18:18	ZZZZZZ	99.027	97.455	102.107	99.848	92.333	98.533
18:24	MA51609-CCVA4	97.349	97.836	99.761	98.975	97.671	96.698
18:30	MA51609-CCB4	97.363	98.606	100.045	97.805	100.029	97.589
18:37	ZZZZZZ	99.893	98.286	101.74	100.982	100.498	100.883
18:43	ZZZZZZ	100.366	98.372	103.897	101.504	91.876	97.763
18:49	ZZZZZZ	95.975	96.825	98.507	97.07	99.855	97.287
18:55	ZZZZZZ	97.16	98.885	85.999	98.723	83.853	99.297
19:01	JD36319-2	95.399	98.594	95.807	96.084	94.487	93.266
19:07	JD36319-2	98.845	98.673	100.143	98.84	99.125	98.31
19:14	JD36319-2	99.299	98.745	101.231	100.18	95.064	98.117
19:20	JD36319-3	94.409	96.27	96.754	95.743	91.133	90.486
19:26	JD36319-3	96.544	96.895	96.745	97.734	96.757	95.447
19:32	JD36319-3	98.438	98.947	101.513	98.767	95.191	97.571
19:38	MA51609-CCVA5	98.083	98.775	100.7	98.684	98.01	96.572
19:44	MA51609-CCB5	97.275	98.876	101.754	98.564	101.48	97.925
19:50	JD36319-4	97.298	98.876	100.065	98.487	96.023	92.871
19:57	JD36319-4	100.254	90.356	104.054	101.576	101.122	99.635
20:03	JD36319-4	100.961	95.579	104.912	101.333	102.014	100.992
20:09	JD36319-5	98.835	98.955	102.125	99.653	96.943	93.615
20:15	JD36319-5	102.513	100.917	107.297	103.844	104.522	103.448

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
20:21	JD36319-2F	94.863	99.54	100.866	96.095	97.309	92.073
20:28	JD36319-2F	99.335	100.507	103.378	100.725	102.883	99.369
20:34	JD36319-2F	99.502	99.562	105.558	100.585	93.118	101.923
20:40	JD36319-3F	96.5	97.303	98.646	97.693	94.109	91.684
20:46	JD36319-3F	99.289	100.038	102.373	100.209	101.367	97.883
20:52	MA51609-CCVA6	100.931	99.562	104.598	102.035	102.325	99.62
20:58	MA51609-CCB6	99.847	96.859	104.352	100.232	104.954	100.977
21:04	JD36319-3F	101.512	104.986	106.361	102.538	93.753	99.65
21:10	JD36319-4F	98.861	98.946	102.741	99.142	99.052	94.916
21:17	JD36319-4F	96.137	101.17	106.983	96.892	105.404	94.52
21:23	JD36319-5F	97.923	98.751	101.105	98.382	96.4	92.959
21:29	JD36319-5F	99.446	100.186	102.439	100.609	99.525	97.578
21:35	JD36319-5F	102.02	100.732	106.127	102.296	102.433	101.29
21:41	MA51609-CCVA7	101.862	99.404	105.736	102.75	103.289	100.445
21:47	MA51609-CCB7	100.327	100.133	93.215	101.205	94.225	101.56
21:53	ZZZZZZ	194.481 !	221.873 !	122.293	197.594 !	128.118	191.526 !
22:00	MP30346-B1	90.881	94.998	95.547	92.035	96.377	90.85
22:06	MP30346-S1	90.454	90.779	93.434	91.931	84.364	83.149
22:12	MP30346-S2	93.71	92.161	96.744	95.261	87.019	84.181
22:18	JD36391-2	95.19	92.37	98.006	96.276	89.21	85.791
22:24	MP30346-SD1	95.559	94.774	100.301	96.994	96.694	93.388
22:31	ZZZZZZ	95.286	96.017	100.473	96.702	95.906	92.17
22:37	ZZZZZZ	95.956	97.741	98.932	97.328	94.347	92.586
22:43	ZZZZZZ	92.303	95.413	93.943	93.277	88.629	87.301
22:49	MP30346-MB1	94.766	98.729	98.679	96.729	99.551	96.627
22:55	MA51609-CCVA8	97.731	96.686	101.093	99.001	99.642	96.063
23:02	MA51609-CCB8	97.734	97.299	102.011	98.844	102.399	98.354
23:08	ZZZZZZ	96.268	98.361	100.065	98.133	98.653	93.975
23:14	ZZZZZZ	93.46	97.943	99.94	95.254	95.504	89.475
23:20	ZZZZZZ	95.336	89.259	102.956	97.228	101.148	96.188
23:26	ZZZZZZ	92.964	86.598	98.022	94.724	88.029	84.396
23:33	ZZZZZZ	95.077	98.825	103.075	95.742	98.871	91.035
23:39	ZZZZZZ	89.54	97.694	98.911	91.002	94.351	85.51

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
23:45	ZZZZZZ	94.812	98.286	99.263	96.591	95.331	89.952
23:52	ZZZZZZ	97.604	98.638	99.82	98.369	95.101	93.463
23:58	ZZZZZZ	98.57	98.417	105.13	100.12	98.248	93.744
00:04	ZZZZZZ	98.489	98.935	101.017	99.954	102.008	98.486
00:10	MA51609-CCVA9	103.539	99.171	106.669	103.811	103.356	101.136
00:16	MA51609-CCB9	98.827	89.849	106.385	100.021	106.133	99.815
00:22	MP30319-MB1	104.542	99.579	105.569	104.938	103.548	104.779
00:29	MP30319-B1	104.387	101.192	108.377	105.329	107.963	102.623
00:35	MP30319-S1	101.52	97.312	108.157	102.507	98.493	93.213
00:41	MP30319-S2	101.827	98.665	108.442	103.129	98.276	93.943
00:47	JD36305-1	101.43	98.692	107.428	102.663	99.277	93.714
00:53	MP30319-SD1	105.013	99.222	110.739	106.364	109.817	104.12
00:59	ZZZZZZ	102.555	93.225	107.399	103.809	98.989	95.746
01:06	ZZZZZZ	104.43	101.96	110.436	104.73	108.092	102.127
01:12	ZZZZZZ	102.024	99.955	109.18	103.156	103.831	97.899
01:18	ZZZZZZ	103.039	100.529	104.283	104.569	98.396	98.144
01:24	MA51609-CCVA10	108.236	101.656	108.609	108.694	110.253	104.836
01:30	MA51609-CCB10	107.54	101.31	110.878	108.151	113.315	107.393
01:36	ZZZZZZ	103.269	100.263	108.162	104.616	104.962	99.584
01:42	ZZZZZZ	101.362	95.682	108.374	103.168	97.376	91.888
01:49	ZZZZZZ	101.826	89.967	107.987	102.519	98.494	93.752
01:55	ZZZZZZ	102.042	100.403	109.98	103.081	105.276	99.512
02:01	ZZZZZZ	101.069	97.547	108.923	103.028	99.103	94.279
02:07	ZZZZZZ	102.46	92.925	103.526	103.161	94.766	95.36
02:13	ZZZZZZ	103.602	99.859	108.514	104.482	105.452	101.426
02:20	ZZZZZZ	103.725	98.569	109.608	105.528	104.973	99.548
02:26	ZZZZZZ	100.61	100.626	110.495	102.032	103.918	96.061
02:32	ZZZZZZ	99.945	92.819	106.238	100.366	100.333	94.755
02:38	MA51609-CCVA11	108.577	102.627	104.472	109.538	102.198	105.728
02:44	MA51609-CCB11	106.677	101.009	111.06	107.796	114.537	107.227
02:50	ZZZZZZ	100.03	94.434	108.457	100.602	97.073	90.822
02:56	ZZZZZZ	100.279	96.281	107.414	102.461	98.52	92.411
03:03	ZZZZZZ	104.522	98.34	105.679	105.729	101.922	100.123

INTERNAL STANDARD SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51609
Parameters: Ca,Fe,Mg,Mn,Na,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
03:09	ZZZZZZ	106.302	100.969	110.474	107.519	112.267	107.103
03:15	MA51609-CCVA12	109.361	100.625	111.654	109.006	110.869	106.369
03:21	MA51609-CCB12	106.448	99.748	109.541	106.91	113.637	106.531
03:27	MP30322-MB1	106.418	104.885	108.902	106.94	111.834	106.756
03:33	MP30322-B1	107.809	100.258	107.903	108.452	113.103	107.575
03:40	MP30322-S1	107.957	97.837	119.381	109.173	109.737	101.799
03:46	MP30322-S2	109.531	97.861	109.489	110.458	107.532	102.678
03:53	JD36351-1	108.923	97.981	110.558	109.899	107.364	103.075
03:59	ZZZZZZ	106.259	97.096	111.664	107.721	107.007	98.145
04:05	ZZZZZZ	109.253	96.723	110.228	110.447	107.218	100.657
04:12	ZZZZZZ	109.121	99.5	112.156	109.878	116.307	110.195
04:18	MA51609-CCVA13	110.252	98.839	111.14	111.484	115.018	108.305
04:24	MA51609-CCB13	109.145	99.785	107.05	110.274	108.746	110.05
04:31	ZZZZZZ	No results reported for the elements associated with this internal standard.					
04:37	ZZZZZZ	No results reported for the elements associated with this internal standard.					
04:44	ZZZZZZ	No results reported for the elements associated with this internal standard.					
04:50	ZZZZZZ	No results reported for the elements associated with this internal standard.					
04:56	ZZZZZZ	No results reported for the elements associated with this internal standard.					
05:03	ZZZZZZ	No results reported for the elements associated with this internal standard.					
05:09	ZZZZZZ	125.297 !	102.673	134.42 !	126.529 !	139.648 !	128.497 !
05:16	ZZZZZZ	122.407	93.55	127.788 !	123.048	131.533 !	119.763
05:22	MA51609-CCVA14	121.888	98.775	126.875	122.839	128.735	119.569
05:28	MA51609-CCB14	118.158	98.271	123.985	118.915	128.188	119.118
05:35	ZZZZZZ	116.924	98.015	121.92	117.195	126.781	117.713
05:41	ZZZZZZ	116.046	93.678	120.382	116.513	125.053	116.503
05:47	ZZZZZZ	112.596	97.519	118.8	113.743	124.187	114.539

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	60-125 %	60-125 %
Istd#18	Terbium (159-3)	60-125 %	60-125 %
Istd#19	Holmium (165-1)	60-125 %	60-125 %
Istd#20	Holmium (165-2)	60-125 %	60-125 %
Istd#21	Bismuth (209-1)	60-125 %	60-125 %
Istd#22	Bismuth (209-2)	60-125 %	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51609 Units: ug/l

Time: / Sample ID:			15:25 ICB1		15:37 CCB1		16:14 CCB2		17:16 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	anr							
Antimony	2.0	.085	anr							
Arsenic	0.50	.025	anr							
Barium	1.0	.009								
Beryllium	0.50	.005	anr							
Boron	25	.85								
Cadmium	0.50	.01	anr							
Calcium	250	3.6	-1.43	<250	-0.208	<250	-0.768	<250	-0.974	<250
Chromium	1.0	.018	anr							
Cobalt	0.50	.003								
Copper	2.0	.024	anr							
Iron	25	.24	-0.891	<25	-0.209	<25	-0.0902	<25	-1.21	<25
Lead	0.50	.008	anr							
Magnesium	250	.19	-21.0	<250	-20.7	<250	-20.6	<250	-20.9	<250
Manganese	1.0	.012	-0.0116	<1.0	0.0184	<1.0	-0.0200	<1.0	0.755	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	anr							
Potassium	250	.78								
Selenium	0.50	.044								
Silver	0.50	.004	anr							
Sodium	250	1.5	-1.74	<250	-1.01	<250	-0.0803	<250	7.07	<250
Strontium	5.0	.014								
Thallium	0.50	.002								
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	anr							
Zinc	5.0	.078	-0.0831	<5.0	-0.0285	<5.0	-0.0814	<5.0	0.00538	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51609 Units: ug/l

Time: / Sample ID:			18:30 CCB4		19:44 CCB5		20:58 CCB6		21:47 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	anr							
Antimony	2.0	.085	anr							
Arsenic	0.50	.025	anr							
Barium	1.0	.009								
Beryllium	0.50	.005	anr							
Boron	25	.85								
Cadmium	0.50	.01	anr							
Calcium	250	3.6	-2.58	<250	-4.19	<250	-2.09	<250	-0.785	<250
Chromium	1.0	.018	anr							
Cobalt	0.50	.003								
Copper	2.0	.024	anr							
Iron	25	.24	-1.82	<25	-1.41	<25	-1.42	<25	-1.75	<25
Lead	0.50	.008	anr							
Magnesium	250	.19	-21.2	<250	-21.0	<250	-20.8	<250	-21.0	<250
Manganese	1.0	.012	0.140	<1.0	0.110	<1.0	0.135	<1.0	0.0201	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	anr							
Potassium	250	.78								
Selenium	0.50	.044								
Silver	0.50	.004	anr							
Sodium	250	1.5	0.299	<250	-0.773	<250	-1.57	<250	-1.41	<250
Strontium	5.0	.014								
Thallium	0.50	.002								
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	anr							
Zinc	5.0	.078	-0.193	<5.0	-0.113	<5.0	-0.131	<5.0	-0.125	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51609 Units: ug/l

Time:		15:12			15:18			15:31	
Sample ID:	ICV	ICV1		ICVA	ICVA2		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony									
Arsenic									
Barium									
Beryllium									
Boron									
Cadmium									
Calcium				5500	5450	99.1	5000	5210	104.2
Chromium									
Cobalt									
Copper									
Iron				5500	5540	100.7	5000	5200	104.0
Lead									
Magnesium				5500	5540	100.7	5000	5250	105.0
Manganese				60	61.7	102.8	50	51.4	102.8
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium				5500	5420	98.5	5000	5130	102.6
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc				60	60.9	101.5	50	52.0	104.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51609 Units: ug/l

Time:		16:08			17:10			18:24	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium									
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	5000	5920	118.4*(a	5000	5250	105.0	5000	5190	103.8
Chromium	anr								
Cobalt									
Copper	anr								
Iron	5000	5260	105.2	5000	5110	102.2	5000	5150	103.0
Lead	anr								
Magnesium	5000	5250	105.0	5000	5200	104.0	5000	5190	103.8
Manganese	50	51.9	103.8	50	51.6	103.2	50	52.0	104.0
Molybdenum									
Nickel	anr								
Potassium									
Selenium									
Silver	anr								
Sodium	5000	5160	103.2	5000	5100	102.0	5000	5060	101.2
Strontium									
Thallium									
Tin									
Titanium									
Vanadium	anr								
Zinc	50	52.4	104.8	50	51.5	103.0	50	51.5	103.0

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51609 Units: ug/l

Time:		19:38			20:52			21:41	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium									
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	5000	5200	104.0	5000	5130	102.6	5000	5230	104.6
Chromium	anr								
Cobalt									
Copper	anr								
Iron	5000	5140	102.8	5000	5120	102.4	5000	5070	101.4
Lead	anr								
Magnesium	5000	5180	103.6	5000	5170	103.4	5000	5190	103.8
Manganese	50	51.8	103.6	50	51.3	102.6	50	51.7	103.4
Molybdenum									
Nickel	anr								
Potassium									
Selenium									
Silver	anr								
Sodium	5000	5070	101.4	5000	5070	101.4	5000	5030	100.6
Strontium									
Thallium									
Tin									
Titanium									
Vanadium	anr								
Zinc	50	52.5	105.0	50	51.7	103.4	50	52.4	104.8

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51609 Units: ug/l

Time:			15:43	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	anr	
Antimony	2.0	0.25	anr	
Arsenic	0.50	0.50	anr	
Barium	1.0	0.50		
Beryllium	0.50	0.25	anr	
Boron	25	2.5		
Cadmium	0.50	0.25	anr	
Calcium	250	125	258	103.2
Chromium	1.0	2.0	anr	
Cobalt	0.50	0.25		
Copper	2.0	2.0	anr	
Iron	25	25	26.1	104.4
Lead	0.50	0.25	anr	
Magnesium	250	125	236	94.4
Manganese	1.0	0.25	0.950	95.0
Molybdenum	1.0	0.50		
Nickel	1.0	2.0	anr	
Potassium	250	125		
Selenium	0.50	0.50		
Silver	0.50	1.0	anr	
Sodium	250	125	250	100.0
Strontium	5.0	0.50		
Thallium	0.50	0.25		
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0	anr	
Zinc	5.0	2.0	5.34	106.8

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA121521M3.CSV Date Analyzed: 12/15/21 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51609 Units: ug/l

Time:			15:49		15:55	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	92900	92.9	94700	94.7
Antimony			0.142		0.0970	
Arsenic		20	0.0769		19.6	98.0
Barium			0.147		0.161	
Beryllium			0.00319		0.00511	
Boron		50	3.58		50.0	100.0
Cadmium		20	-0.165		20.3	101.5
Calcium	100000	100000	94800	94.8	98200	98.2
Chromium		20	0.883		20.9	104.5
Cobalt		20	0.118		19.1	95.5
Copper		20	-0.0878		19.8	99.0
Iron	100000	100000	93200	93.2	95400	95.4
Lead			0.0849		0.0660	
Magnesium	100000	100000	93000	93.0	94400	94.4
Manganese		20	0.293		20.2	101.0
Molybdenum	2000	2000	2240	112.0	2260	113.0
Nickel		20	0.417		18.5	92.5
Potassium	100000	100000	95600	95.6	97100	97.1
Selenium		20	0.161		20.3	101.5
Silver		20	0.0255		19.2	96.0
Sodium	100000	100000	92100	92.1	93800	93.8
Strontium	2000	2000	2280	114.0	2370	118.5
Thallium			0.00916		0.00972	
Tin	2000	2000	2090	104.5	2170	108.5
Titanium	2000	2000	1890	94.5	1920	96.0
Vanadium		20	0.0256		22.3	111.5
Zinc		20	0.440		18.3	91.5

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30317
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/11/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.54	32	-0.089	<50
Antimony	4.0	.044	1.7	-0.0022	<4.0
Arsenic	1.0	.018	.39	-0.026	<1.0
Barium	2.0	.018	.73	0.013	<2.0
Beryllium	1.0	.006	.15	0.0058	<1.0
Boron	50	1.7	14		
Cadmium	1.0	.014	.17	0.0063	<1.0
Calcium	500	15	200	-1.7	<500
Chromium	2.0	.03	.62	-0.085	<2.0
Cobalt	1.0	.004	.17	-0.00045	<1.0
Copper	4.0	.024	1.9	-0.059	<4.0
Iron	50	1.1	19	0.11	<50
Lead	1.0	.014	.52	-0.0069	<1.0
Magnesium	500	.74	46	0.58	<500
Manganese	2.0	.018	.63	-0.017	<2.0
Molybdenum	2.0	.054	.45		
Nickel	2.0	.016	.95	-0.016	<2.0
Potassium	500	2.4	68	0.052	<500
Selenium	1.0	.7	.55	-0.011	<1.0
Silver	1.0	.004	.16	0.0082	<1.0
Sodium	500	1.1	470	-2.8	<500
Strontium	10	.032	2.4		
Thallium	1.0	.018	.17	0.00034	<1.0
Tin	10	.07	2.6		
Titanium	2.0	.09	1.6		
Vanadium	2.0	.034	1.8	-0.16	<2.0
Zinc	10	.096	5.4	1.4	<10

Associated samples MP30317: JD36319-2, JD36319-3, JD36319-4, JD36319-5, JD36319-2F, JD36319-3F, JD36319-4F, JD36319-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30317
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/11/21

Metal	JD36281-1 Original	MS	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	43.2	3520	4000	86.9	75-125
Antimony	0.049	71.9	80	89.8	75-125
Arsenic	0.46	73.2	80	90.9	75-125
Barium	14.7	87.6	80	91.1	75-125
Beryllium	0.027	68.2	80	85.2	75-125
Boron					
Cadmium	0.25	71.2	80	88.7	75-125
Calcium	398000	435000	4000	925.0(a)	75-125
Chromium	0.23	76.5	80	95.3	75-125
Cobalt	14.0	88.1	80	92.6	75-125
Copper	4.4	73.7	80	86.6	75-125
Iron	494	4080	4000	89.7	75-125
Lead	0.12	76.4	80	95.4	75-125
Magnesium	56700	60200	4000	87.5	75-125
Manganese	6630	6700	80	87.5	75-125
Molybdenum					
Nickel	2.1	74.5	80	90.5	75-125
Potassium	10900	14300	4000	85.0	75-125
Selenium	0.81	375	400	93.5	75-125
Silver	0.037	76.3	80	95.3	75-125
Sodium	12300	15500	4000	80.0	75-125
Strontium					
Thallium	0.20	80.4	80	100.3	75-125
Tin					
Titanium					
Vanadium	1.4	79.8	80	98.0	75-125
Zinc	92.9	151	80	72.6N(b)	75-125

Associated samples MP30317: JD36319-2, JD36319-3, JD36319-4, JD36319-5, JD36319-2F, JD36319-3F, JD36319-4F, JD36319-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) Spike recovery indicates possible matrix interference.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30317
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/11/21

Metal	JD36281-1 Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum	43.2	3520	4000	86.9	0.0	20
Antimony	0.049	75.6	80	94.4	5.0	20
Arsenic	0.46	72.9	80	90.6	0.4	20
Barium	14.7	88.5	80	92.3	1.0	20
Beryllium	0.027	67.3	80	84.1	1.3	20
Boron						
Cadmium	0.25	69.2	80	86.2	2.8	20
Calcium	398000	446000	4000	1200.0(a	2.5	20
Chromium	0.23	73.5	80	91.6	4.0	20
Cobalt	14.0	85.4	80	89.3	3.1	20
Copper	4.4	71.5	80	83.9	3.0	20
Iron	494	4070	4000	89.4	0.2	20
Lead	0.12	76.9	80	96.0	0.7	20
Magnesium	56700	61300	4000	115.0	1.8	20
Manganese	6630	6840	80	262.5(a)	2.1	20
Molybdenum						
Nickel	2.1	72.4	80	87.9	2.9	20
Potassium	10900	14300	4000	85.0	0.0	20
Selenium	0.81	376	400	93.8	0.3	20
Silver	0.037	80.1	80	100.1	4.9	20
Sodium	12300	15500	4000	80.0	0.0	20
Strontium						
Thallium	0.20	81.2	80	101.3	1.0	20
Tin						
Titanium						
Vanadium	1.4	76.8	80	94.3	3.8	20
Zinc	92.9	148	80	68.9N(b)	2.0	20

Associated samples MP30317: JD36319-2, JD36319-3, JD36319-4, JD36319-5, JD36319-2F, JD36319-3F, JD36319-4F, JD36319-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) Spike recovery indicates possible matrix interference.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30317
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/11/21

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	3590	4000	89.8	80-120
Antimony	78.9	80	98.6	80-120
Arsenic	72.5	80	90.6	80-120
Barium	77.4	80	96.8	80-120
Beryllium	75.2	80	94.0	80-120
Boron				
Cadmium	72.4	80	90.5	80-120
Calcium	3950	4000	98.8	80-120
Chromium	76.1	80	95.1	80-120
Cobalt	75.5	80	94.4	80-120
Copper	74.4	80	93.0	80-120
Iron	3750	4000	93.8	80-120
Lead	78.7	80	98.4	80-120
Magnesium	3680	4000	92.0	80-120
Manganese	74.7	80	93.4	80-120
Molybdenum				
Nickel	75.8	80	94.8	80-120
Potassium	3660	4000	91.5	80-120
Selenium	354	400	88.5	80-120
Silver	85.1	80	106.4	80-120
Sodium	3610	4000	90.3	80-120
Strontium				
Thallium	82.2	80	102.8	80-120
Tin				
Titanium				
Vanadium	76.8	80	96.0	80-120
Zinc	65.1	80	81.4	80-120

Associated samples MP30317: JD36319-2, JD36319-3, JD36319-4, JD36319-5, JD36319-2F, JD36319-3F, JD36319-4F, JD36319-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30317
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/11/21

Metal	JD36281-1 Original	SDL 2:10	%DIF	QC Limits
Aluminum	43.2	41.2	4.7	0-10
Antimony	0.0490	0.00	100.0(a)	0-10
Arsenic	0.464	0.212	54.3 (a)	0-10
Barium	14.7	15.6	6.1	0-10
Beryllium	0.0268	0.0411	53.4 (a)	0-10
Boron				
Cadmium	0.248	0.312	26.0 (a)	0-10
Calcium	398000	439000	10.5*(b)	0-10
Chromium	0.231	0.00	100.0(a)	0-10
Cobalt	14.0	15.0	7.0	0-10
Copper	4.40	4.25	3.2	0-10
Iron	494	485	1.7	0-10
Lead	0.122	0.0917	24.9 (a)	0-10
Magnesium	56700	57000	0.5	0-10
Manganese	6630	6790	2.4	0-10
Molybdenum				
Nickel	2.08	2.21	5.9	0-10
Potassium	10900	11200	2.8	0-10
Selenium	0.809	0.00	100.0(a)	0-10
Silver	0.0368	0.0506	37.4 (a)	0-10
Sodium	12300	12500	1.9	0-10
Strontium				
Thallium	0.196	0.157	19.8 (a)	0-10
Tin				
Titanium				
Vanadium	1.38	0.00	100.0(a)	0-10
Zinc	92.9	120	28.7*(b)	0-10

Associated samples MP30317: JD36319-2, JD36319-3, JD36319-4, JD36319-5, JD36319-2F, JD36319-3F, JD36319-4F, JD36319-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30337
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/13/21

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.034	.095	0.0027	<0.20

Associated samples MP30337: JD36319-2, JD36319-3, JD36319-4, JD36319-5, JD36319-2F, JD36319-3F, JD36319-4F, JD36319-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30337
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/13/21

Metal	JD36387-1 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.079	2.0	2	96.1	75-125

Associated samples MP30337: JD36319-2, JD36319-3, JD36319-4, JD36319-5, JD36319-2F, JD36319-3F, JD36319-4F, JD36319-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30337
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/13/21

Metal	JD36387-1 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.079	2.0	2	96.1	0.0	20

Associated samples MP30337: JD36319-2, JD36319-3, JD36319-4, JD36319-5, JD36319-2F, JD36319-3F, JD36319-4F, JD36319-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36319
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30337
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/13/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	1.9	2	95.0	80-120

Associated samples MP30337: JD36319-2, JD36319-3, JD36319-4, JD36319-5, JD36319-2F, JD36319-3F, JD36319-4F, JD36319-5F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

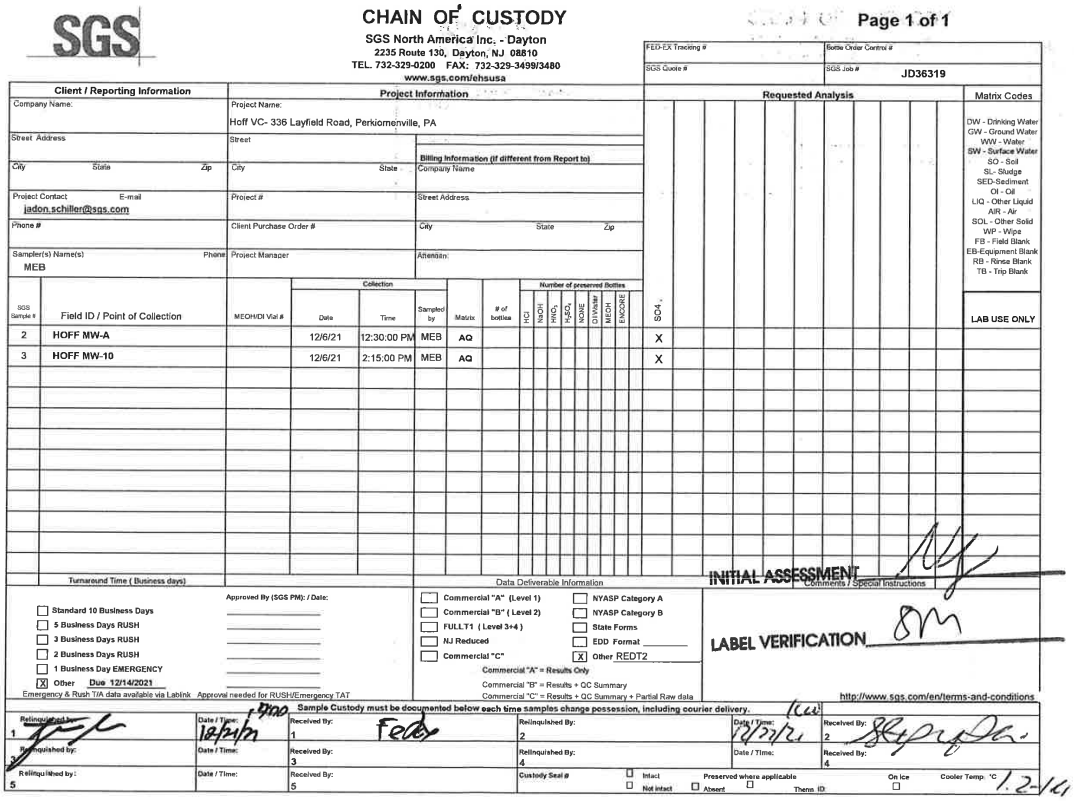
Misc. Forms

Custody Documents and Other Forms

(SGS Orlando, FL)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle



SGS

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

Page 1 of 1

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #: JD36319

Client / Reporting Information

Company Name:
Street Address:
City / State / Zip:
Project Contact: E-mail: jadon.schiller@sgs.com
Phone #:
Sampler(s) Name(s): MEB | Phone #:

Project Information

Project Name: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Street:
City / State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention:

Requested Analysis

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB-Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	HNO3	H2SO4	NaOH	Znacet	MEOH	ENCORE	SO4	LAB USE ONLY
2	HOFF MW-A		12/6/21	12:30:00 PM	MEB	AQ									X	
3	HOFF MW-10		12/6/21	2:15:00 PM	MEB	AQ									X	

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- [ ] Standard 10 Business Days
- [ ] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENCY
- [X] Other Due 12/14/2021

Emergency & Rush T/A data available via LabLink Approval needed for RUSH/Emergency TAT

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other REDT2

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

INITIAL ASSESSMENT

LABEL VERIFICATION 8M

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1	12/7/21 0900	1 Fedex	2	12/7/21	2
Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
3		3	4		4
Relinquished by:	Date / Time:	Received By:	Custody Seal #	Intact / Not intact	Preserved where applicable / Absent	On Ice	Cooler Temp. °C
5		5			Thermo ID		1.2-1.4

jd36319.xls
Rev. Date: 4/10/18

15.1 15

JD36319: Chain of Custody
Page 1 of 2
SGS Orlando, FL

SGS Sample Receipt Summary

Job Number: JD36319 **Client:** SGS NJ **Project:** HOFF VC - 336 LAYFIELD

Date / Time Received: 12/22/2021 4:00:00 PM **Delivery Method:** FX **Airbill #'s:**

Therm ID: IR 1; **Therm CF:** 0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (1.0);

Cooler Temps (Corrected) °C: Cooler 1: (1.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: STEPHENP Date: 12/22/2021 4:00:00 P Reviewer: _____ Date: _____

Internal Sample Tracking Chronicle

SGS Dayton, NJ

Job No: JD36319

TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Project No: TTPAL90539

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36319-2	Collected: 06-DEC-21 12:30 By: MEB		Received: 07-DEC-21 By:			
HOFF MW-A						
JD36319-2	EPA 300/SW846 9056A	27-DEC-21 16:15	JB	27-DEC-21	JB	SO4
JD36319-3	Collected: 06-DEC-21 14:15 By: MEB		Received: 07-DEC-21 By:			
HOFF MW-10						
JD36319-3	EPA 300/SW846 9056A	27-DEC-21 16:35	JB	27-DEC-21	JB	SO4

General Chemistry

QC Data Summaries

(SGS Orlando, FL)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD36319
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Sulfate	GP37253/GN90200	2.0	0.0	mg/l	50	51.1	102.2	90-110%

Associated Samples:
Batch GP37253: JD36319-2, JD36319-3
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD36319
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Sulfate	GP37253/GN90200	JD36624-6	mg/l	39.2	50	76.4	74.4N(a)	90-110%

Associated Samples:
Batch GP37253: JD36319-2, JD36319-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD36319
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Sulfate	GP37253/GN90200	JD36624-6	mg/l	39.2	50	77.2	1.0	15%

Associated Samples:
Batch GP37253: JD36319-2, JD36319-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: 42021122701.CSV Date Analyzed: 12/14/21 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN90200
Parameters: Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:12	GN90200-STD1	1		STDA
18:32	GN90200-STD2	1		STDB
18:51	GN90200-STD3	1		STDC
19:11	GN90200-STD4	1		STDD
19:30	GN90200-STD5	1		STDE
19:50	GN90200-STD6	1		STDF
20:09	GN90200-STD7	1		STDG
20:29	GN90200-STD8	1		STDH
20:48	GN90200-STD9	1		STDI
21:08	GN90200-STD10	1		STDJ
21:27	GN90200-STD11	1		STDK
21:47	GN90200-ICV1	1		
22:06	GN90200-ICB1	1		
22:26	GN90200-CRI1	1		
22:45	GN90200-CCV1	1		
23:05	GN90200-CCB1	1		
10:19	GN90200-CCV2	1		
10:43	GP37253-MB1	1		
11:03	GP37253-B1	1		
12:16	ZZZZZZ	5		
12:42	ZZZZZZ	1		
13:01	ZZZZZZ	10		
13:20	JD36277-4	5		(sample used for QC only; not part of login JD36319)
13:40	GP37253-S1	5		
13:59	GP37253-S2	5		
14:18	ZZZZZZ	1		
14:38	ZZZZZZ	25		
14:57	GN90200-CCV3	1		
15:16	GN90200-CCV4	1		
15:36	GN90200-CCV5	1		
15:55	GN90200-CCB2	1		
16:15	JD36319-2	1		
16:35	JD36319-3	10		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: 42021122701.CSV Date Analyzed: 12/14/21 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN90200
Parameters: Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:54	ZZZZZZ	5		
17:13	JD36624-6	10		(sample used for QC only; not part of login JD36319)
17:32	GP37253-S3	10		
17:52	GP37253-S4	10		
18:11	ZZZZZZ	10		
18:30	ZZZZZZ	10		
18:49	ZZZZZZ	50		
19:09	ZZZZZZ	1		
19:28	GN90200-CCV6	1		
19:48	GN90200-CCB3	1		
20:07	ZZZZZZ	10		
20:27	ZZZZZZ	10		
20:46	ZZZZZZ	25		
21:05	ZZZZZZ	25		
21:24	ZZZZZZ	100		
21:44	ZZZZZZ	10		
22:03	GP37254-MB1	1		
22:23	GP37254-B1	1		
22:42	JD36624-17	10		(sample used for QC only; not part of login JD36319)
23:01	GP37254-S1	10		
23:21	GN90200-CCV7	1		
23:40	GN90200-CCB4	1		
00:00	GP37254-S2	10		
00:19	ZZZZZZ	500		
00:38	ZZZZZZ	100		
00:57	ZZZZZZ	200		
01:17	ZZZZZZ	500		
01:36	ZZZZZZ	500		
01:55	ZZZZZZ	1		
02:15	ZZZZZZ	500		
02:34	JD36703-9	50		(sample used for QC only; not part of login JD36319)
02:53	GP37254-S3	50		
03:13	GN90200-CCV8	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36319
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: 42021122701.CSV Date Analyzed: 12/14/21 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN90200
Parameters: Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
03:32	GN90200-CCB5	1		
03:52	GP37254-S4	50		
04:11	ZZZZZZ	5		
04:30	ZZZZZZ	10		
04:49	ZZZZZZ	5		
05:09	ZZZZZZ	1		
05:28	ZZZZZZ	1		
05:48	ZZZZZZ	1		
06:07	ZZZZZZ	1		
06:27	ZZZZZZ	1		
07:06	GN90200-CCV9	1		
07:25	GN90200-CCB6	1		
07:45	ZZZZZZ	1		
08:04	ZZZZZZ	1		
08:24	GP37255-MB1	1		
08:43	GP37255-B1	1		
09:08	JD36761-2	1		(sample used for QC only; not part of login JD36319)
09:27	GP37255-S1	1		
09:47	GP37255-S2	1		
10:06	ZZZZZZ	1		
11:04	GN90200-CCV10	1		
11:24	GN90200-CCB7	1		
12:03	ZZZZZZ	1		
12:22	ZZZZZZ	1		
12:42	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:21	ZZZZZZ	1		
13:40	ZZZZZZ	5		
13:59	ZZZZZZ	5		
14:19	ZZZZZZ	50		
14:38	ZZZZZZ	5		
14:57	GN90200-CCV11	1		
15:17	GN90200-CCB8	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JD36319
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: 42021122701.CSV Date Analyzed: 12/14/21 Methods: EPA 300/SW846 9056A
Run ID: GN90200 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN90200-ICV1	Sulfate	50.4	2.0	0.60	50	100.8	90-110
GN90200-ICB1	Sulfate	0.60 U	2.0	0.60			
GN90200-CRI1	Sulfate	1.09	2.0	0.60	1	109.0	50-150
GN90200-CCV1	Sulfate	50.8	2.0	0.60	50	101.6	90-110
GN90200-CCB1	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV2	Sulfate	51.2	2.0	0.60	50	102.4	90-110
GN90200-CCV3	Sulfate	55.7	2.0	0.60	50	111.4!(a)	90-110
GN90200-CCV4	Sulfate	52.3	2.0	0.60	50	104.6	90-110
GN90200-CCV5	Sulfate	51.8	2.0	0.60	50	103.6	90-110
GN90200-CCB2	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV6	Sulfate	50.8	2.0	0.60	50	101.6	90-110
GN90200-CCB3	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV7	Sulfate	51.0	2.0	0.60	50	102.0	90-110
GN90200-CCB4	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV8	Sulfate	50.9	2.0	0.60	50	101.8	90-110
GN90200-CCB5	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV9	Sulfate	50.7	2.0	0.60	50	101.4	90-110
GN90200-CCB6	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV10	Sulfate	51.6	2.0	0.60	50	103.2	90-110
GN90200-CCB7	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV11	Sulfate	51.4	2.0	0.60	50	102.8	90-110
GN90200-CCB8	Sulfate	0.60 U	2.0	0.60			

(!) Outside of QC limits
(a) No samples for so4 reported in the area bracketed by this CCV.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Tetra Tech EC Inc.

Hoff VC- 336 Layfield Road, Perkiomenville, PA

SGS Job Number: JD36624

Sampling Dates: 12/07/21 - 12/10/21

Report to:

Tetra Tech EC Inc.
One Oxford Valley Suite 200
Langhorne, PA 19047
Jonathan.Dziekan@tetratech.com; Neb.Dedic@tetratech.com

ATTN: Jonathan Dziekan

Total number of pages in report: **1885**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Mike Earp
General Manager

Client Service contact: Jadon Schiller 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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SGS North America Inc.

Sample Summary

Tetra Tech EC Inc.

Job No: JD36624

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD36624-1	12/10/21	13:00	MEB	12/10/21	AQ	Trip Blank Water	TB-20211207
JD36624-2	12/07/21	15:30	MEB	12/10/21	AQ	Ground Water	HOFF MW-8
JD36624-2F	12/07/21	15:30	MEB	12/10/21	AQ	Groundwater Filtered	HOFF MW-8
JD36624-3	12/08/21	11:30	MEB	12/10/21	AQ	Ground Water	HOFF MW-4DL
JD36624-3F	12/08/21	11:30	MEB	12/10/21	AQ	Groundwater Filtered	HOFF MW-4DL
JD36624-4	12/08/21	13:00	MEB	12/10/21	AQ	Ground Water	HOFF MW-4DU
JD36624-4F	12/08/21	13:00	MEB	12/10/21	AQ	Groundwater Filtered	HOFF MW-4DU
JD36624-5	12/08/21	12:00	MEB	12/10/21	AQ	Ground Water	DUP-2021
JD36624-5F	12/08/21	12:00	MEB	12/10/21	AQ	Groundwater Filtered	DUP-2021
JD36624-6	12/08/21	14:55	MEB	12/10/21	AQ	Ground Water	HOFF MW-FA
JD36624-6F	12/08/21	14:55	MEB	12/10/21	AQ	Groundwater Filtered	HOFF MW-FA
JD36624-7	12/08/21	15:55	MEB	12/10/21	AQ	Ground Water	HOFF MW-FB

Sample Summary
(continued)

Tetra Tech EC Inc.

Job No: JD36624

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD36624-7F	12/08/21	15:55	MEB	12/10/21	AQ	Groundwater Filtered	HOFF MW-FB
JD36624-8	12/09/21	09:35	MEB	12/10/21	AQ	Ground Water	HOFF MW-13
JD36624-8F	12/09/21	09:35	MEB	12/10/21	AQ	Groundwater Filtered	HOFF MW-13
JD36624-9	12/09/21	11:20	MEB	12/10/21	AQ	Ground Water	HOFF MW-C
JD36624-9F	12/09/21	11:20	MEB	12/10/21	AQ	Groundwater Filtered	HOFF MW-C
JD36624-10	12/09/21	12:50	MEB	12/10/21	AQ	Ground Water	HOFF MW-D
JD36624-10F	12/09/21	12:50	MEB	12/10/21	AQ	Groundwater Filtered	HOFF MW-D
JD36624-11	12/09/21	14:30	MEB	12/10/21	AQ	Ground Water	HOFF IW-1A
JD36624-11F	12/09/21	14:30	MEB	12/10/21	AQ	Groundwater Filtered	HOFF IW-1A
JD36624-12	12/09/21	15:30	MEB	12/10/21	AQ	Ground Water	HOFF IW-1B
JD36624-12F	12/09/21	15:30	MEB	12/10/21	AQ	Groundwater Filtered	HOFF IW-1B
JD36624-13	12/10/21	09:15	MEB	12/10/21	AQ	Ground Water	HOFF IW-3A
JD36624-13F	12/10/21	09:15	MEB	12/10/21	AQ	Groundwater Filtered	HOFF IW-3A

Sample Summary
(continued)

Tetra Tech EC Inc.

Job No: JD36624

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD36624-14	12/10/21	09:40	MEB	12/10/21	AQ	Ground Water	HOFF IW-3B
JD36624-14F	12/10/21	09:40	MEB	12/10/21	AQ	Groundwater Filtered	HOFF IW-3B
JD36624-15	12/10/21	11:00	MEB	12/10/21	AQ	Ground Water	HOFF IW-2A
JD36624-15F	12/10/21	11:00	MEB	12/10/21	AQ	Groundwater Filtered	HOFF IW-2A
JD36624-16	12/10/21	12:00	MEB	12/10/21	AQ	Ground Water	HOFF IW-2B
JD36624-16F	12/10/21	12:00	MEB	12/10/21	AQ	Groundwater Filtered	HOFF IW-2B
JD36624-17	12/10/21	13:00	MEB	12/10/21	AQ	Ground Water	HOFF IW-B
JD36624-17F	12/10/21	13:00	MEB	12/10/21	AQ	Groundwater Filtered	HOFF IW-B

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Tetra Tech EC Inc. **Job No:** JD36624

Site: Hoff VC- 336 Layfield Road, Perkiomenville, PA **Report Date** 1/12/2022 2:19:42 PM

On 12/10/2021, 16 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.6 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD36624 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V1X8363

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36624-10MS, JD36624-10MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD36624-7: Dilution required due to high concentration of target compound.

Matrix: AQ **Batch ID:** V1X8364

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36822-2MS, JD36822-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** V1X8366

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36624-17MS, JD36624-17MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Chlorobenzene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JD36624-16: Dilution required due to high concentration of target compound.
- JD36624-17: Dilution required due to high concentration of target compound.
- JD36624-16 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36624-17 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36624-14 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD36624-15 for Dichlorodifluoromethane: Associated CCV outside of control limits high, sample was ND.

Matrix: AQ **Batch ID:** V2D8732

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36806-4MS, JD36806-5DUP were used as the QC samples indicated.
- JD36624-16 for 4-Bromofluorobenzene: Outside of in house control limits, but within reasonable method recovery limits.
- JD36624-17 for 4-Bromofluorobenzene: Outside in house control limits.
- V2D8732-MB for 4-Bromofluorobenzene: Outside of in house control limits, but within reasonable method recovery limits.

Matrix: AQ **Batch ID:** V2V3457

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V2V3457

- Sample(s) JD36696-3MS, JD36696-4DUP were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V3D7294

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36538-5MS, JD36538-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD36624-2: Dilution required due to high concentration of target compound.
- JD36624-6: Dilution required due to high concentration of target compound.
- JD36624-2 for Chloromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36624-6 for Chloromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36624-4 for Chloromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36624-5 for Chloromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36624-8 for Chloromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36624-3 for Tetrahydrofuran: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36624-3 for Chloromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36624-5 for Tetrahydrofuran: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36624-8 for Tetrahydrofuran: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD36624-4 for Tetrahydrofuran: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

MS Volatiles By Method SW846 8260D BY SIM

Matrix: AQ **Batch ID:** V3A7265

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36294-5MS, JD36294-5MSD were used as the QC samples indicated.
- JD36624-2 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.

Matrix: AQ **Batch ID:** V3A7266

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36624-10MS, JD36624-3DUP were used as the QC samples indicated.
- Sample(s) JD36624-1, JD36624-3, JD36624-7 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- RPD(s) for Duplicate for 1,4-Dioxane are outside control limits for sample JD36624-3DUP. High RPD due to low concentration of hit.
- JD36624-2: Confirmation run.
- JD36624-2 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36624-3DUP for 1,4-Dioxane-D8: Outside in house control limits.
- JD36624-4 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36624-6 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36624-7 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36624-5 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36624-9 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.

Matrix: AQ **Batch ID:** V3A7268

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36485-5DUP, JD36485-8MS were used as the QC samples indicated.
- Sample(s) JD36624-15, JD36624-16, JD36624-4, JD36624-5, JD36624-6 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- JD36624-7: Confirmation run.
- JD36624-7 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36624-16 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.

Matrix: AQ **Batch ID:** V3A7269

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36540-8MS, JD36617-4DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD36624-16: Confirmation run.
- JD36624-15: Confirmation run.
- JD36624-9: Confirmation run.
- JD36624-11: Confirmation run.
- JD36624-16 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36624-9 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36624-15 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.

Matrix: AQ **Batch ID:** V3A7273

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36682-2MS, JD36682-3DUP were used as the QC samples indicated.

MS Volatiles By Method SW846 8260D BY SIM

Matrix: AQ **Batch ID:** V3A7273

- JD36624-17: Confirmation run.
- JD36624-17 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.
- JD36624-17 for 1,4-Dioxane-d8: Outside control limits due to matrix interference.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ **Batch ID:** OP37108

- All samples were extracted within the recommended method holding time.
- Sample(s) JD36624-2, JD36624-4, JD36624-5, JD36624-6, JD36624-7 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- JD36624-4 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-6 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD36624-6 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-7 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-7 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD36624-7 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-5 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD36624-4 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-2 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-2 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-3 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD36624-2 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD36624-5 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-3 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-4 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD36624-3 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- OP37108-BS1 for Di-n-butyl phthalate: Outside of in house control limits.
- JD36624-5 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-6 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.

Matrix: AQ **Batch ID:** OP37113

- All samples were extracted within the recommended method holding time.
- Sample(s) JD36624-10, JD36624-11, JD36624-12, JD36624-8, JD36624-9 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- OP37113-BS1 for Di-n-butyl phthalate: Outside of in house control limits.
- JD36624-9 for Hexachlorocyclopentadiene: Associated CCV outside of control limits high, sample was ND.
- OP37113-BS1 for Pyridine: Outside of in house control limits.
- JD36624-10 for Hexachlorocyclopentadiene: Associated CCV outside of control limits high, sample was ND.
- JD36624-8 for Hexachlorocyclopentadiene: Associated CCV outside of control limits high, sample was ND.
- OP37113-BSD for Pyridine: Analytical precision exceeds in-house control limits.
- JD36624-11 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-9 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-12 for Hexachlorocyclopentadiene: Associated CCV outside of control limits high, sample was ND.
- JD36624-12 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-11 for Hexachlorocyclopentadiene: Associated CCV outside of control limits high, sample was ND.
- JD36624-10 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-8 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.

Matrix: AQ **Batch ID:** OP37115

- All samples were extracted within the recommended method holding time.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ **Batch ID:** OP37115

- Sample(s) JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- JD36624-13 for 4-Chloroaniline: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-15 for Phenol-d5: Outside of in house control limits.
- JD36624-13 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-13 for Aniline: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-17 for Aniline: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-13 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-17 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-17 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD36624-17 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-17 for 4-Chloroaniline: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-14 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-13 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-15 for Aniline: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-16 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-14 for Aniline: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-14 for 4-Chloroaniline: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-16 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD36624-16 for 4-Chloroaniline: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-17 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-16 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-14 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD36624-15 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD36624-16 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-14 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-15 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-15 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-15 for 4-Chloroaniline: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-15 for n-Nitrosodimethylamine: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-13 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD36624-14 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD36624-16 for Aniline: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: AQ **Batch ID:** OP37108A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JD36624-6: Confirmation run.
- JD36624-7: Confirmation run.
- JD36624-6 for Nitrobenzene-d5: Outside control limits due to matrix interference.
- JD36624-7 for Nitrobenzene-d5: Outside control limits due to matrix interference.
- JD36624-7 for Nitrobenzene-d5: Outside control limits due to matrix interference. Confirmed by reanalysis.
- JD36624-6 for Nitrobenzene-d5: Outside control limits due to matrix interference. Confirmed by reanalysis.
- JD36624-5 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-4 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-5 for Indeno(1,2,3-cd)pyrene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-5 for Anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-4 for Acenaphthylene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-4 for Indeno(1,2,3-cd)pyrene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-5 for Benzo(g,h,i)perylene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.

Matrix: AQ **Batch ID:** OP37113A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JD36624-8 for Anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-12 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-10 for Indeno(1,2,3-cd)pyrene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-10 for Anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-12 for Benzo(g,h,i)perylene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-12 for Anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-9 for Benzo(g,h,i)perylene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-8 for Benzo(g,h,i)perylene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: AQ **Batch ID:** OP37113A

- JD36624-8 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-12 for Indeno(1,2,3-cd)pyrene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-9 for Indeno(1,2,3-cd)pyrene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-9 for Anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-8 for Indeno(1,2,3-cd)pyrene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-10 for Benzo(g,h,i)perylene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-10 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-11 for Anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-11 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-11 for Benzo(g,h,i)perylene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-11 for Indeno(1,2,3-cd)pyrene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-9 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.

Matrix: AQ **Batch ID:** OP37115A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JD36624-13: Confirmation run for internal standard areas.
- JD36624-13 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-13 for Benzo(g,h,i)perylene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-16 for Benzo(g,h,i)perylene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-17 for Indeno(1,2,3-cd)pyrene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-15 for Benzo(g,h,i)perylene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-17 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-17 for Benzo(g,h,i)perylene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
- JD36624-14 for Benzo(g,h,i)perylene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-16 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: AQ **Batch ID:** OP37115A

- JD36624-14 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD36624-15 for Benzo(a)anthracene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

GC Volatiles By Method RSK-175

Matrix: AQ **Batch ID:** GAA2462

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36499-6DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD36624-6: Diluted due to high concentration of target compound.
- JD36624-8: Diluted due to high concentration of target compound.
- JD36624-7: Diluted due to high concentration of target compound.; 2 mm diameter bubble present in headspace.
- JD36624-2: Diluted due to high concentration of target compound.; Two 2 diameter bubbles present in headspace.
- JD36624-9: Diluted due to high concentration of target compound.

Matrix: AQ **Batch ID:** GAA2463

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD36624-10DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for Duplicate for Ethane are outside control limits for sample JD36624-10DUP.
- JD36624-10: Diluted due to high concentration of target compound.
- JD36624-15: Diluted due to high concentration of target compound.
- JD36624-13: Diluted due to high concentration of target compound.; 1mm diameter bubble present in headspace.
- JD36624-14: Diluted due to high concentration of target compound.
- JD36624-17: Diluted due to high concentration of target compound.
- JD36624-11: Diluted due to high concentration of target compound.
- JD36624-16: Diluted due to high concentration of target compound.; 2mm diameter bubble present in headspace.

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: AQ **Batch ID:** OP37120

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JD36624-8: Confirmation run.
- JD36624-2: Had TBA cleanup.
- JD36624-17: Confirmation run.
- JD36624-3: Had TBA cleanup.
- JD36624-7: Confirmation run.
- JD36624-16: Confirmation run.
- JD36624-17 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JD36624-15 for delta-BHC: Reported from 2nd signal. 1st signal used for confirmation.
- JD36624-6 for gamma-BHC (Lindane): More than 40 % RPD for detected concentrations between the two GC columns.
- JD36624-6 for Heptachlor epoxide: More than 40 % RPD for detected concentrations between the two GC columns.
- JD36624-8 for Aldrin: More than 40 % RPD for detected concentrations between the two GC columns.
- JD36624-6 for 4,4'-DDD: More than 40 % RPD for detected concentrations between the two GC columns.
- JD36624-8 for beta-BHC: More than 40 % RPD for detected concentrations between the two GC columns.
- JD36624-17 for delta-BHC: More than 40 % RPD for detected concentrations between the two GC columns.
- JD36624-5 for gamma-BHC (Lindane): More than 40 % RPD for detected concentrations between the two GC columns.
- JD36624-8 for Heptachlor: More than 40 % RPD for detected concentrations between the two GC columns.
- JD36624-8 for Endosulfan-II: More than 40 % RPD for detected concentrations between the two GC columns.
- OP37120-BSD for Endrin ketone: Reported from 2nd signal. 1st signal used for confirmation.

Metals Analysis By Method SW846 6020B

Matrix: AQ **Batch ID:** MP30440

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36624-5MS, JD36624-5MSD, JD36624-5SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Selenium, Beryllium, Cadmium, Copper, Lead, Silver, Thallium, Zinc are outside control limits for sample MP30440-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP30440-SD1 for Aluminum, Barium: Serial dilution indicates possible matrix interference.

Matrix: AQ **Batch ID:** MP30441

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36533-1MS, JD36533-1MSD, JD36533-1SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Sodium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Arsenic, Beryllium, Cadmium, Cobalt, Lead, Manganese, Selenium, Silver, Thallium, Vanadium are outside control limits for sample MP30441-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP30441-B1 for Silver: Spike blank indicates possible high bias, but all associated samples < RL.
- ,MP30441-SD1 for Copper, Iron: Serial dilution indicates possible matrix interference.

Matrix: AQ **Batch ID:** MP30471

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36804-8MS, JD36804-8MSD, JD36804-8SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Calcium, Magnesium, Manganese are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Cadmium, Selenium, Silver, Thallium are outside control limits for sample MP30471-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP30471-SD1 for Antimony, Barium, Lead: Serial dilution indicates possible matrix interference.

Metals Analysis By Method SW846 7470A

Matrix: AQ **Batch ID:** MP30380

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36567-4MS, JD36567-4MSD were used as the QC samples for metals.

Matrix: AQ **Batch ID:** MP30381

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36624-5MS, JD36624-5MSD were used as the QC samples for metals.
- JD36624-9 for Mercury: Elevated sample detection limit due to difficult sample matrix.

Matrix: AQ **Batch ID:** MP30402

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD36551-13MSD, JD36551-13MS were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Mercury are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** F:GP37253

- The data for EPA 300/SW846 9056A meets quality control requirements.
- JD36624-2 for Sulfate: Analysis performed at SGS Orlando, FL.
- JD36624-7 for Sulfate: Analysis performed at SGS Orlando, FL.
- JD36624-16 for Sulfate: Analysis performed at SGS Orlando, FL.
- JD36624-14 for Sulfate: Analysis performed at SGS Orlando, FL.
- JD36624-6 for Sulfate: Analysis performed at SGS Orlando, FL.
- JD36624-10 for Sulfate: Analysis performed at SGS Orlando, FL.
- JD36624-13 for Sulfate: Analysis performed at SGS Orlando, FL.
- JD36624-8 for Sulfate: Analysis performed at SGS Orlando, FL.
- JD36624-9 for Sulfate: Analysis performed at SGS Orlando, FL.
- JD36624-15 for Sulfate: Analysis performed at SGS Orlando, FL.
- JD36624-11 for Sulfate: Analysis performed at SGS Orlando, FL.
- JD36624-12 for Sulfate: Analysis performed at SGS Orlando, FL.

Matrix: AQ **Batch ID:** F:GP37254

- The data for EPA 300/SW846 9056A meets quality control requirements.
- JD36624-17 for Sulfate: Analysis performed at SGS Orlando, FL.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ **Job No:** JD36624

Site: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA **Report Date:** 12/29/2021 1:32:26

On 12/22/2021, 13 Sample(s), 0 Trip Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD36624 was Assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP37253

Sample(s) JD36624-6MSD, JD36624-6MS were used as the QC samples for Sulfate.

Matrix Spike Recovery(s) for Sulfate are outside control limits. Spike recovery indicates possible matrix interference.

Matrix: AQ **Batch ID:** GP37254

Sample(s) JD36624-17MSD, JD36624-17MS were used as the QC samples for Sulfate.

Matrix Spike Recovery(s) for Sulfate are outside control limits. Spike recovery indicates possible matrix interference.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

_____

Kim Benham, Client Services *(Signature on File)*

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD36624-1	**TB-20211207**					
1,4-Dioxane		0.20 JB	0.40	0.095	ug/l	SW846 8260D BY SIM
JD36624-2	**HOFF MW-8**					
Benzene [a]		47.8	2.5	2.1	ug/l	SW846 8260D
Chlorobenzene		2240	50	28	ug/l	SW846 8260D
Chloroethane [a]		4.1 J	5.0	3.6	ug/l	SW846 8260D
1,2-Dichlorobenzene [a]		215	5.0	2.7	ug/l	SW846 8260D
1,3-Dichlorobenzene [a]		6.6	5.0	2.7	ug/l	SW846 8260D
1,4-Dichlorobenzene [a]		66.2	5.0	2.5	ug/l	SW846 8260D
1,1-Dichloroethane [a]		22.0	5.0	2.8	ug/l	SW846 8260D
cis-1,2-Dichloroethene [a]		70.6	5.0	2.5	ug/l	SW846 8260D
trans-1,2-Dichloroethene [a]		5.4	5.0	2.7	ug/l	SW846 8260D
Ethylbenzene [a]		3.2 J	5.0	3.0	ug/l	SW846 8260D
Isopropylbenzene [a]		6.0	5.0	3.2	ug/l	SW846 8260D
Methyl Tert Butyl Ether [a]		7.5	5.0	2.5	ug/l	SW846 8260D
n-Propylbenzene [a]		3.7 J	10	3.0	ug/l	SW846 8260D
Tert Butyl Alcohol [a]		198	50	29	ug/l	SW846 8260D
Toluene [a]		24.9	5.0	2.7	ug/l	SW846 8260D
1,1,1-Trichloroethane [a]		3.8 J	5.0	2.7	ug/l	SW846 8260D
Trichloroethene [a]		7.6	5.0	2.6	ug/l	SW846 8260D
Vinyl chloride [a]		18.3	5.0	3.9	ug/l	SW846 8260D
1,4-Dioxane		37.8	0.40	0.095	ug/l	SW846 8260D BY SIM
2-Chlorophenol		7.1	4.0	0.37	ug/l	SW846 8270E
2,4-Dichlorophenol		0.72 J	2.0	0.52	ug/l	SW846 8270E
Phenol		0.33 J	2.0	0.26	ug/l	SW846 8270E
Di-n-butyl phthalate		18.8 B	2.0	0.53	ug/l	SW846 8270E
bis(2-Ethylhexyl)phthalate		2.0	2.0	1.3	ug/l	SW846 8270E
1,2,4-Trichlorobenzene		0.46 J	1.0	0.36	ug/l	SW846 8270E
Acenaphthene		0.0963	0.080	0.040	ug/l	SW846 8270E BY SIM
Anthracene		0.120	0.080	0.040	ug/l	SW846 8270E BY SIM
Benzo(a)anthracene		0.262	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(a)pyrene		0.223	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(b)fluoranthene		0.288	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene		0.153	0.080	0.040	ug/l	SW846 8270E BY SIM
Benzo(k)fluoranthene		0.112	0.080	0.040	ug/l	SW846 8270E BY SIM
Chrysene		0.139	0.080	0.040	ug/l	SW846 8270E BY SIM
Dibenzo(a,h)anthracene		0.0523 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Fluoranthene		0.270	0.080	0.040	ug/l	SW846 8270E BY SIM
Fluorene		0.111	0.080	0.040	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene		0.135	0.080	0.040	ug/l	SW846 8270E BY SIM
Phenanthrene		0.121	0.080	0.040	ug/l	SW846 8270E BY SIM
Pyrene		0.215	0.080	0.040	ug/l	SW846 8270E BY SIM

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Methane [b]		2400	5.5	4.0	ug/l	RSK-175
Ethane [b]		5.09	0.23	0.14	ug/l	RSK-175
Ethene [b]		5.91	0.31	0.16	ug/l	RSK-175
Aluminum		118	50		ug/l	SW846 6020B
Barium		62.4	2.0		ug/l	SW846 6020B
Calcium		133000	6300		ug/l	SW846 6020B
Cobalt		1.0	1.0		ug/l	SW846 6020B
Copper		8.3	4.0		ug/l	SW846 6020B
Iron		2870	50		ug/l	SW846 6020B
Lead		2.0	1.0		ug/l	SW846 6020B
Magnesium		32600	2500		ug/l	SW846 6020B
Manganese		3070	50		ug/l	SW846 6020B
Nickel		4.4	2.0		ug/l	SW846 6020B
Potassium		9250	500		ug/l	SW846 6020B
Sodium		38300	2500		ug/l	SW846 6020B
Vanadium		3.0	2.0		ug/l	SW846 6020B
Zinc		603	50		ug/l	SW846 6020B
Sulfate [c]		60.3	10		mg/l	EPA 300/SW846 9056A
JD36624-2F	**HOFF MW-8**					
Barium		61.8	2.0		ug/l	SW846 6020B
Calcium		132000	6300		ug/l	SW846 6020B
Iron		2480	50		ug/l	SW846 6020B
Magnesium		33200	2500		ug/l	SW846 6020B
Manganese		2860	50		ug/l	SW846 6020B
Nickel		3.4	2.0		ug/l	SW846 6020B
Potassium		8850	500		ug/l	SW846 6020B
Sodium		38800	2500		ug/l	SW846 6020B
Vanadium		2.2	2.0		ug/l	SW846 6020B
JD36624-3	**HOFF MW-4DL**					
Acetone		3.2 J	10	3.1	ug/l	SW846 8260D
Carbon disulfide		0.47 J	2.0	0.46	ug/l	SW846 8260D
Chlorobenzene		4.1	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene		16.1	1.0	0.53	ug/l	SW846 8260D
1,4-Dichlorobenzene		2.4	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane		1.2	1.0	0.57	ug/l	SW846 8260D
cis-1,2-Dichloroethene		66.7	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene		1.5	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		1.9	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride		28.9	1.0	0.79	ug/l	SW846 8260D
1,4-Dioxane		0.40 B	0.40	0.095	ug/l	SW846 8260D BY SIM
Di-n-butyl phthalate		24.6	2.0	0.53	ug/l	SW846 8270E

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
bis(2-Ethylhexyl)phthalate		3.1	2.0	1.3	ug/l	SW846 8270E
Acenaphthene		0.143	0.080	0.040	ug/l	SW846 8270E BY SIM
Anthracene		0.257	0.080	0.040	ug/l	SW846 8270E BY SIM
Benzo(a)anthracene		1.24	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(a)pyrene		1.38	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(b)fluoranthene		1.82	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene		0.845	0.080	0.040	ug/l	SW846 8270E BY SIM
Benzo(k)fluoranthene		0.632	0.080	0.040	ug/l	SW846 8270E BY SIM
Chrysene		1.08	0.080	0.040	ug/l	SW846 8270E BY SIM
Dibenzo(a,h)anthracene		0.218	0.080	0.040	ug/l	SW846 8270E BY SIM
Fluoranthene		1.65	0.080	0.040	ug/l	SW846 8270E BY SIM
Fluorene		0.0907	0.080	0.040	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene		0.842	0.080	0.040	ug/l	SW846 8270E BY SIM
Naphthalene		0.0598 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Phenanthrene		0.616	0.080	0.040	ug/l	SW846 8270E BY SIM
Pyrene		1.51	0.080	0.040	ug/l	SW846 8270E BY SIM
Aluminum		409	50		ug/l	SW846 6020B
Arsenic		6.5	1.0		ug/l	SW846 6020B
Barium		191	2.0		ug/l	SW846 6020B
Calcium		224000	25000		ug/l	SW846 6020B
Chromium		60.1	2.0		ug/l	SW846 6020B
Cobalt		7.1	1.0		ug/l	SW846 6020B
Copper		14.6	4.0		ug/l	SW846 6020B
Iron		4040	50		ug/l	SW846 6020B
Lead		1.9	1.0		ug/l	SW846 6020B
Magnesium		25600	1300		ug/l	SW846 6020B
Manganese		699	20		ug/l	SW846 6020B
Nickel		79.6	2.0		ug/l	SW846 6020B
Potassium		17700	500		ug/l	SW846 6020B
Sodium		676000	25000		ug/l	SW846 6020B
Vanadium		7.9	2.0		ug/l	SW846 6020B
Zinc		48.4	10		ug/l	SW846 6020B
JD36624-3F	**HOFF MW-4DL**					
Arsenic		5.4	1.0		ug/l	SW846 6020B
Barium		185	5.0		ug/l	SW846 6020B
Calcium		229000	25000		ug/l	SW846 6020B
Chromium		12.1	2.0		ug/l	SW846 6020B
Cobalt		4.4	1.0		ug/l	SW846 6020B
Iron		1520	50		ug/l	SW846 6020B
Magnesium		25100	1300		ug/l	SW846 6020B
Manganese		706	20		ug/l	SW846 6020B
Nickel		47.2	2.0		ug/l	SW846 6020B
Potassium		18100	500		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Sodium		685000	25000		ug/l	SW846 6020B
Vanadium		5.8	2.0		ug/l	SW846 6020B
JD36624-4	**HOFF MW-4DU**					
Benzene		11.5	0.50	0.43	ug/l	SW846 8260D
sec-Butylbenzene		1.1 J	2.0	0.62	ug/l	SW846 8260D
Chlorobenzene		175	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene		905	10	5.3	ug/l	SW846 8260D
1,3-Dichlorobenzene		7.6	1.0	0.54	ug/l	SW846 8260D
1,4-Dichlorobenzene		112	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane		186	1.0	0.57	ug/l	SW846 8260D
1,2-Dichloroethane		1.8	1.0	0.60	ug/l	SW846 8260D
1,1-Dichloroethene		179	10	5.9	ug/l	SW846 8260D
cis-1,2-Dichloroethene		1240	10	5.1	ug/l	SW846 8260D
trans-1,2-Dichloroethene		16.8	1.0	0.54	ug/l	SW846 8260D
1,2-Dichloropropane		1.3	1.0	0.51	ug/l	SW846 8260D
Methyl Tert Butyl Ether		71.8	1.0	0.51	ug/l	SW846 8260D
Tert Butyl Alcohol		113	10	5.8	ug/l	SW846 8260D
1,2,4-Trichlorobenzene		3.6	1.0	0.50	ug/l	SW846 8260D
1,1,1-Trichloroethane		7.9	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		189	10	5.3	ug/l	SW846 8260D
Vinyl chloride		79.1	1.0	0.79	ug/l	SW846 8260D
1,4-Dioxane		142 B	8.0	1.9	ug/l	SW846 8260D BY SIM
Di-n-butyl phthalate		20.2 B	2.0	0.54	ug/l	SW846 8270E
bis(2-Ethylhexyl)phthalate		2.4	2.0	1.3	ug/l	SW846 8270E
1,2,4-Trichlorobenzene		1.8	1.0	0.36	ug/l	SW846 8270E
Acenaphthene		0.0757 J	0.082	0.041	ug/l	SW846 8270E BY SIM
Anthracene		0.110	0.082	0.041	ug/l	SW846 8270E BY SIM
Benzo(a)anthracene [d]		0.493	0.041	0.024	ug/l	SW846 8270E BY SIM
Benzo(a)pyrene		0.430	0.041	0.024	ug/l	SW846 8270E BY SIM
Benzo(b)fluoranthene		0.577	0.041	0.024	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene		0.289	0.082	0.041	ug/l	SW846 8270E BY SIM
Benzo(k)fluoranthene		0.174	0.082	0.041	ug/l	SW846 8270E BY SIM
Chrysene		0.296	0.082	0.041	ug/l	SW846 8270E BY SIM
Dibenzo(a,h)anthracene		0.0797 J	0.082	0.041	ug/l	SW846 8270E BY SIM
Fluoranthene		0.825	0.082	0.041	ug/l	SW846 8270E BY SIM
Fluorene		0.0605 J	0.082	0.041	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene [d]		0.263	0.082	0.041	ug/l	SW846 8270E BY SIM
Naphthalene		0.104	0.082	0.041	ug/l	SW846 8270E BY SIM
Phenanthrene		0.571	0.082	0.041	ug/l	SW846 8270E BY SIM
Pyrene		0.730	0.082	0.041	ug/l	SW846 8270E BY SIM
gamma-BHC (Lindane)		0.046	0.0077	0.0046	ug/l	SW846 8081B
Aluminum		145	50		ug/l	SW846 6020B
Arsenic		3.0	1.0		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Barium		50.2	2.0		ug/l	SW846 6020B
Calcium		118000	5000		ug/l	SW846 6020B
Chromium		9.6	2.0		ug/l	SW846 6020B
Iron		635	50		ug/l	SW846 6020B
Magnesium		46100	5000		ug/l	SW846 6020B
Manganese		190	2.0		ug/l	SW846 6020B
Nickel		6.1	2.0		ug/l	SW846 6020B
Potassium		3490	500		ug/l	SW846 6020B
Sodium		24800	5000		ug/l	SW846 6020B
JD36624-4F	**HOFF MW-4DU**					
Arsenic		2.7	1.0		ug/l	SW846 6020B
Barium		43.7	2.0		ug/l	SW846 6020B
Calcium		117000	5000		ug/l	SW846 6020B
Chromium		2.9	2.0		ug/l	SW846 6020B
Iron		273	50		ug/l	SW846 6020B
Magnesium		46000	5000		ug/l	SW846 6020B
Manganese		181	2.0		ug/l	SW846 6020B
Nickel		3.1	2.0		ug/l	SW846 6020B
Potassium		3500	500		ug/l	SW846 6020B
Sodium		24400	5000		ug/l	SW846 6020B
JD36624-5	**DUP-2021**					
Benzene		11.2	0.50	0.43	ug/l	SW846 8260D
sec-Butylbenzene		1.1 J	2.0	0.62	ug/l	SW846 8260D
Chlorobenzene		170	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene		902	10	5.3	ug/l	SW846 8260D
1,3-Dichlorobenzene		7.4	1.0	0.54	ug/l	SW846 8260D
1,4-Dichlorobenzene		108	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane		182	1.0	0.57	ug/l	SW846 8260D
1,2-Dichloroethane		1.7	1.0	0.60	ug/l	SW846 8260D
1,1-Dichloroethene		160	10	5.9	ug/l	SW846 8260D
cis-1,2-Dichloroethene		1230	10	5.1	ug/l	SW846 8260D
trans-1,2-Dichloroethene		16.2	1.0	0.54	ug/l	SW846 8260D
1,2-Dichloropropane		1.2	1.0	0.51	ug/l	SW846 8260D
Methyl Tert Butyl Ether		70.7	1.0	0.51	ug/l	SW846 8260D
Tert Butyl Alcohol		110	10	5.8	ug/l	SW846 8260D
1,2,4-Trichlorobenzene		3.7	1.0	0.50	ug/l	SW846 8260D
1,1,1-Trichloroethane		7.7	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		200	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride		77.1	1.0	0.79	ug/l	SW846 8260D
1,4-Dioxane		243 B	8.0	1.9	ug/l	SW846 8260D BY SIM
Di-n-butyl phthalate		20.7 B	2.0	0.53	ug/l	SW846 8270E

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
bis(2-Ethylhexyl)phthalate	2.1	2.0	1.3	ug/l	SW846 8270E
1,2,4-Trichlorobenzene	1.9	1.0	0.36	ug/l	SW846 8270E
Anthracene [d]	0.101	0.080	0.040	ug/l	SW846 8270E BY SIM
Benzo(a)anthracene [d]	0.456	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(a)pyrene	0.415	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(b)fluoranthene	0.521	0.040	0.024	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene [d]	0.283	0.080	0.040	ug/l	SW846 8270E BY SIM
Benzo(k)fluoranthene	0.218	0.080	0.040	ug/l	SW846 8270E BY SIM
Chrysene	0.261	0.080	0.040	ug/l	SW846 8270E BY SIM
Dibenzo(a,h)anthracene	0.0816	0.080	0.040	ug/l	SW846 8270E BY SIM
Fluoranthene	0.816	0.080	0.040	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene [d]	0.246	0.080	0.040	ug/l	SW846 8270E BY SIM
Naphthalene	0.117	0.080	0.040	ug/l	SW846 8270E BY SIM
Phenanthrene	0.549	0.080	0.040	ug/l	SW846 8270E BY SIM
Pyrene	0.719	0.080	0.040	ug/l	SW846 8270E BY SIM
gamma-BHC (Lindane) [e]	0.037	0.0077	0.0046	ug/l	SW846 8081B
Aluminum	130	50		ug/l	SW846 6020B
Arsenic	2.7	1.0		ug/l	SW846 6020B
Barium	44.9	2.0		ug/l	SW846 6020B
Calcium	112000	5000		ug/l	SW846 6020B
Chromium	7.3	2.0		ug/l	SW846 6020B
Iron	559	50		ug/l	SW846 6020B
Magnesium	43200	5000		ug/l	SW846 6020B
Manganese	177	2.0		ug/l	SW846 6020B
Nickel	5.4	2.0		ug/l	SW846 6020B
Potassium	3240	500		ug/l	SW846 6020B
Sodium	23100	5000		ug/l	SW846 6020B
JD36624-5F DUP-2021					
Arsenic	2.8	1.0		ug/l	SW846 6020B
Barium	43.7	2.0		ug/l	SW846 6020B
Calcium	124000	5000		ug/l	SW846 6020B
Chromium	3.0	2.0		ug/l	SW846 6020B
Iron	289	50		ug/l	SW846 6020B
Magnesium	48200	5000		ug/l	SW846 6020B
Manganese	191	2.0		ug/l	SW846 6020B
Nickel	3.3	2.0		ug/l	SW846 6020B
Potassium	3710	500		ug/l	SW846 6020B
Sodium	25200	5000		ug/l	SW846 6020B
JD36624-6 HOFF MW-FA					
Benzene [a]	42.8	2.5	2.1	ug/l	SW846 8260D
sec-Butylbenzene [a]	4.2 J	10	3.1	ug/l	SW846 8260D

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Chlorobenzene [a]	856	5.0	2.8	ug/l	SW846 8260D
1,2-Dichlorobenzene [a]	425	5.0	2.7	ug/l	SW846 8260D
1,3-Dichlorobenzene [a]	22.0	5.0	2.7	ug/l	SW846 8260D
1,4-Dichlorobenzene [a]	186	5.0	2.5	ug/l	SW846 8260D
1,1-Dichloroethane [a]	28.1	5.0	2.8	ug/l	SW846 8260D
1,2-Dichloroethane [a]	13.3	5.0	3.0	ug/l	SW846 8260D
cis-1,2-Dichloroethene [a]	65.5	5.0	2.5	ug/l	SW846 8260D
trans-1,2-Dichloroethene [a]	3.1 J	5.0	2.7	ug/l	SW846 8260D
Isopropylbenzene [a]	4.1 J	5.0	3.2	ug/l	SW846 8260D
Methyl Tert Butyl Ether [a]	279	5.0	2.5	ug/l	SW846 8260D
Tert Butyl Alcohol [a]	336	50	29	ug/l	SW846 8260D
Toluene [a]	2.7 J	5.0	2.7	ug/l	SW846 8260D
1,2,4-Trichlorobenzene [a]	4.7 J	5.0	2.5	ug/l	SW846 8260D
Trichloroethene [a]	2.8 J	5.0	2.6	ug/l	SW846 8260D
Vinyl chloride [a]	43.0	5.0	3.9	ug/l	SW846 8260D
1,4-Dioxane	151 B	8.0	1.9	ug/l	SW846 8260D BY SIM
2-Chlorophenol	0.99 J	4.0	0.37	ug/l	SW846 8270E
2,4-Dichlorophenol	0.62 J	2.0	0.52	ug/l	SW846 8270E
Di-n-butyl phthalate	19.8 B	2.0	0.53	ug/l	SW846 8270E
bis(2-Ethylhexyl)phthalate	2.3	2.0	1.3	ug/l	SW846 8270E
1,2,4-Trichlorobenzene	2.4	1.0	0.36	ug/l	SW846 8270E
Acenaphthene	0.102	0.080	0.040	ug/l	SW846 8270E BY SIM
Anthracene	0.693	0.080	0.040	ug/l	SW846 8270E BY SIM
Fluoranthene	0.197	0.080	0.040	ug/l	SW846 8270E BY SIM
Fluorene	0.101	0.080	0.040	ug/l	SW846 8270E BY SIM
Naphthalene	0.227	0.080	0.040	ug/l	SW846 8270E BY SIM
Phenanthrene	0.280	0.080	0.040	ug/l	SW846 8270E BY SIM
Pyrene	0.209	0.080	0.040	ug/l	SW846 8270E BY SIM
Methane [f]	1010	2.2	1.6	ug/l	RSK-175
Ethane [f]	5.52	0.23	0.14	ug/l	RSK-175
Ethene [f]	2.2	0.31	0.16	ug/l	RSK-175
gamma-BHC (Lindane) [e]	0.023	0.0077	0.0046	ug/l	SW846 8081B
4,4'-DDD [e]	0.025	0.0077	0.0044	ug/l	SW846 8081B
Endrin	0.022	0.0077	0.0047	ug/l	SW846 8081B
Heptachlor epoxide [e]	0.039	0.0077	0.0046	ug/l	SW846 8081B
Aluminum	816	50		ug/l	SW846 6020B
Arsenic	2.7	1.0		ug/l	SW846 6020B
Barium	8.9	2.0		ug/l	SW846 6020B
Calcium	79800	5000		ug/l	SW846 6020B
Cobalt	7.0	1.0		ug/l	SW846 6020B
Copper	6.3	4.0		ug/l	SW846 6020B
Iron	1030	50		ug/l	SW846 6020B
Magnesium	67000	5000		ug/l	SW846 6020B
Manganese	6390	100		ug/l	SW846 6020B
Nickel	16.7	2.0		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Potassium		2760	500		ug/l	SW846 6020B
Sodium		99400	5000		ug/l	SW846 6020B
Vanadium		2.9	2.0		ug/l	SW846 6020B
Sulfate [c]		39.2	20		mg/l	EPA 300/SW846 9056A
JD36624-6F	**HOFF MW-FA**					
Arsenic		2.5	1.0		ug/l	SW846 6020B
Barium		7.2	2.0		ug/l	SW846 6020B
Calcium		81400	5000		ug/l	SW846 6020B
Cobalt		6.5	1.0		ug/l	SW846 6020B
Iron		189	50		ug/l	SW846 6020B
Magnesium		72000	5000		ug/l	SW846 6020B
Manganese		7050	100		ug/l	SW846 6020B
Nickel		16.1	2.0		ug/l	SW846 6020B
Potassium		2660	500		ug/l	SW846 6020B
Sodium		105000	5000		ug/l	SW846 6020B
JD36624-7	**HOFF MW-FB**					
Benzene [a]		11.1	2.5	2.1	ug/l	SW846 8260D
Chlorobenzene		2260	20	11	ug/l	SW846 8260D
Chloroethane [a]		12.0	5.0	3.6	ug/l	SW846 8260D
Chloroform [a]		7.8	5.0	2.5	ug/l	SW846 8260D
1,2-Dichlorobenzene		1900	20	11	ug/l	SW846 8260D
1,3-Dichlorobenzene [a]		20.4	5.0	2.7	ug/l	SW846 8260D
1,4-Dichlorobenzene [a]		354	5.0	2.5	ug/l	SW846 8260D
1,1-Dichloroethane [a]		170	5.0	2.8	ug/l	SW846 8260D
1,1-Dichloroethene [a]		30.6	5.0	3.0	ug/l	SW846 8260D
cis-1,2-Dichloroethene		2140	20	10	ug/l	SW846 8260D
trans-1,2-Dichloroethene [a]		76.0	5.0	2.7	ug/l	SW846 8260D
1,2,4-Trichlorobenzene [a]		8.5	5.0	2.5	ug/l	SW846 8260D
1,1,1-Trichloroethane [a]		84.3	5.0	2.7	ug/l	SW846 8260D
Trichloroethene [a]		18.2	5.0	2.6	ug/l	SW846 8260D
Vinyl chloride [a]		16.4	5.0	3.9	ug/l	SW846 8260D
1,4-Dioxane		76.3 B	0.40	0.095	ug/l	SW846 8260D BY SIM
2-Chlorophenol		35.5	4.0	0.37	ug/l	SW846 8270E
2,4-Dichlorophenol		5.1	2.0	0.52	ug/l	SW846 8270E
Di-n-butyl phthalate		19.6 B	2.0	0.53	ug/l	SW846 8270E
bis(2-Ethylhexyl)phthalate		2.3	2.0	1.3	ug/l	SW846 8270E
2-Methylnaphthalene		2.3	1.0	0.64	ug/l	SW846 8270E
Naphthalene		5.8	1.0	0.44	ug/l	SW846 8270E
1,2,4-Trichlorobenzene		5.5	1.0	0.36	ug/l	SW846 8270E
Acenaphthene		0.0663 J	0.080	0.040	ug/l	SW846 8270E BY SIM
Phenanthrene		0.765	0.080	0.040	ug/l	SW846 8270E BY SIM

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Methane [g]		862	2.2	1.6	ug/l	RSK-175
Ethane [g]		0.62	0.23	0.14	ug/l	RSK-175
Ethene [g]		0.60	0.31	0.16	ug/l	RSK-175
Aluminum		417	50		ug/l	SW846 6020B
Arsenic		1.6	1.0		ug/l	SW846 6020B
Barium		5.6	2.0		ug/l	SW846 6020B
Calcium		152000	6300		ug/l	SW846 6020B
Copper		13.2	4.0		ug/l	SW846 6020B
Iron		495	50		ug/l	SW846 6020B
Magnesium		65600	6300		ug/l	SW846 6020B
Manganese		815	25		ug/l	SW846 6020B
Nickel		5.8	2.0		ug/l	SW846 6020B
Potassium		8180	500		ug/l	SW846 6020B
Sodium		40600	6300		ug/l	SW846 6020B
Vanadium		19.9	2.0		ug/l	SW846 6020B
Sulfate [c]		376	20		mg/l	EPA 300/SW846 9056A
JD36624-7F	**HOFF MW-FB**					
Arsenic		1.5	1.0		ug/l	SW846 6020B
Barium		4.8	2.0		ug/l	SW846 6020B
Calcium		151000	6300		ug/l	SW846 6020B
Copper		6.0	4.0		ug/l	SW846 6020B
Magnesium		64800	6300		ug/l	SW846 6020B
Manganese		796	25		ug/l	SW846 6020B
Nickel		5.2	2.0		ug/l	SW846 6020B
Potassium		7940	500		ug/l	SW846 6020B
Sodium		40800	6300		ug/l	SW846 6020B
Vanadium		18.1	2.0		ug/l	SW846 6020B
JD36624-8	**HOFF MW-13**					
Acetone		20.8	10	3.1	ug/l	SW846 8260D
Carbon disulfide		1.1 J	2.0	0.46	ug/l	SW846 8260D
Chlorobenzene		1.2	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene		1.2	1.0	0.53	ug/l	SW846 8260D
1,1-Dichloroethane		2.3	1.0	0.57	ug/l	SW846 8260D
cis-1,2-Dichloroethene		1.2	1.0	0.51	ug/l	SW846 8260D
4-Methyl-2-pentanone(MIBK)		2.8 J	5.0	1.9	ug/l	SW846 8260D
Tert Butyl Alcohol		20.4	10	5.8	ug/l	SW846 8260D
1,4-Dioxane		4.5	0.80	0.19	ug/l	SW846 8260D BY SIM
Di-n-butyl phthalate		17.3 B	1.9	0.51	ug/l	SW846 8270E
N-Nitrosodiphenylamine		0.71 J	3.8	0.41	ug/l	SW846 8270E
Acenaphthylene		0.0409 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Anthracene [d]		0.0546 J	0.077	0.038	ug/l	SW846 8270E BY SIM

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(a)anthracene [d]		0.0962	0.038	0.023	ug/l	SW846 8270E BY SIM
Fluoranthene		0.0555 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Fluorene		0.0573 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Naphthalene		0.0645 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Phenanthrene		0.0518 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Pyrene		0.0498 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Methane [f]		571	2.2	1.6	ug/l	RSK-175
Ethane [f]		0.63	0.23	0.14	ug/l	RSK-175
Aldrin [e]		0.026	0.0077	0.0040	ug/l	SW846 8081B
beta-BHC [e]		0.17	0.0077	0.0061	ug/l	SW846 8081B
Endosulfan-II [e]		0.050	0.0077	0.0038	ug/l	SW846 8081B
Heptachlor [e]		0.021	0.0077	0.0035	ug/l	SW846 8081B
Aluminum		599	50		ug/l	SW846 6020B
Arsenic		23.8	1.0		ug/l	SW846 6020B
Barium		145	2.0		ug/l	SW846 6020B
Calcium		65500	2500		ug/l	SW846 6020B
Chromium		26.4	2.0		ug/l	SW846 6020B
Cobalt		15.7	1.0		ug/l	SW846 6020B
Copper		7.1	4.0		ug/l	SW846 6020B
Iron		16300	50		ug/l	SW846 6020B
Lead		1.9	1.0		ug/l	SW846 6020B
Magnesium		51200	2500		ug/l	SW846 6020B
Manganese		3750	50		ug/l	SW846 6020B
Nickel		16.9	2.0		ug/l	SW846 6020B
Potassium		45200	2500		ug/l	SW846 6020B
Sodium		164000	13000		ug/l	SW846 6020B
Vanadium		12.7	2.0		ug/l	SW846 6020B
Zinc		86.5	10		ug/l	SW846 6020B
Sulfate [c]		414	20		mg/l	EPA 300/SW846 9056A
JD36624-8F	**HOFF MW-13**					
Arsenic		13.1	1.0		ug/l	SW846 6020B
Barium		124	2.0		ug/l	SW846 6020B
Calcium		70600	2500		ug/l	SW846 6020B
Cobalt		15.1	1.0		ug/l	SW846 6020B
Iron		1880	50		ug/l	SW846 6020B
Magnesium		53600	2500		ug/l	SW846 6020B
Manganese		3780	50		ug/l	SW846 6020B
Nickel		10.9	2.0		ug/l	SW846 6020B
Potassium		47700	2500		ug/l	SW846 6020B
Sodium		168000	13000		ug/l	SW846 6020B
Zinc		46.8	10		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD36624-9	**HOFF MW-C**					
Acetone		128	10	3.1	ug/l	SW846 8260D
Benzene		1.0	0.50	0.43	ug/l	SW846 8260D
Bromochloromethane		0.91 J	1.0	0.48	ug/l	SW846 8260D
Bromomethane		13.8	2.0	1.6	ug/l	SW846 8260D
2-Butanone (MEK)		7.9 J	10	6.9	ug/l	SW846 8260D
Carbon disulfide		0.72 J	2.0	0.46	ug/l	SW846 8260D
Chlorobenzene		324	20	11	ug/l	SW846 8260D
Chloroethane		10	1.0	0.73	ug/l	SW846 8260D
Chloromethane		69.1	1.0	0.76	ug/l	SW846 8260D
1,2-Dichlorobenzene		599	20	11	ug/l	SW846 8260D
1,3-Dichlorobenzene		6.2	1.0	0.54	ug/l	SW846 8260D
1,4-Dichlorobenzene		131	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane		218	20	11	ug/l	SW846 8260D
1,2-Dichloroethane		0.72 J	1.0	0.60	ug/l	SW846 8260D
cis-1,2-Dichloroethene		270	20	10	ug/l	SW846 8260D
trans-1,2-Dichloroethene		44.6	1.0	0.54	ug/l	SW846 8260D
1,2-Dichloropropane		1.1	1.0	0.51	ug/l	SW846 8260D
Methylene chloride		1.3 J	2.0	1.0	ug/l	SW846 8260D
1,1,2,2-Tetrachloroethane		1.1	1.0	0.65	ug/l	SW846 8260D
1,2,3-Trichlorobenzene		1.4	1.0	0.50	ug/l	SW846 8260D
1,2,4-Trichlorobenzene		8.6	1.0	0.50	ug/l	SW846 8260D
1,1,1-Trichloroethane		74.6	1.0	0.54	ug/l	SW846 8260D
1,1,2-Trichloroethane		2.4	1.0	0.53	ug/l	SW846 8260D
Trichloroethene		13.5	1.0	0.53	ug/l	SW846 8260D
1,4-Dioxane		23.3	0.40	0.095	ug/l	SW846 8260D BY SIM
Acetophenone		1.2 J	1.9	0.50	ug/l	SW846 8270E
Benzyl Alcohol		3.7	1.9	0.95	ug/l	SW846 8270E
Di-n-butyl phthalate		33.8 B	1.9	0.51	ug/l	SW846 8270E
bis(2-Ethylhexyl)phthalate		4.3	1.9	1.3	ug/l	SW846 8270E
1,2,4-Trichlorobenzene		5.6	0.96	0.34	ug/l	SW846 8270E
Benzo(a)anthracene [d]		0.133	0.038	0.023	ug/l	SW846 8270E BY SIM
Benzo(a)pyrene		0.0577	0.038	0.023	ug/l	SW846 8270E BY SIM
Benzo(b)fluoranthene		0.275	0.038	0.023	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene [d]		0.123	0.077	0.038	ug/l	SW846 8270E BY SIM
Benzo(k)fluoranthene		0.116	0.077	0.038	ug/l	SW846 8270E BY SIM
Chrysene		0.139	0.077	0.038	ug/l	SW846 8270E BY SIM
Dibenzo(a,h)anthracene		0.0412 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Fluoranthene		0.124	0.077	0.038	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene [d]		0.121	0.077	0.038	ug/l	SW846 8270E BY SIM
Naphthalene		0.183	0.077	0.038	ug/l	SW846 8270E BY SIM
Phenanthrene		0.0842	0.077	0.038	ug/l	SW846 8270E BY SIM
Pyrene		0.0729 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Methane [f]		327	0.55	0.40	ug/l	RSK-175

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Ethane [f]		0.39	0.23	0.14	ug/l	RSK-175
Aluminum		3830	50		ug/l	SW846 6020B
Arsenic		16.9	1.0		ug/l	SW846 6020B
Barium		123	2.0		ug/l	SW846 6020B
Beryllium		1.5	1.0		ug/l	SW846 6020B
Calcium		365000	25000		ug/l	SW846 6020B
Chromium		143	2.0		ug/l	SW846 6020B
Cobalt		12.2	1.0		ug/l	SW846 6020B
Copper		30.7	4.0		ug/l	SW846 6020B
Iron		28400	250		ug/l	SW846 6020B
Lead		12.7	1.0		ug/l	SW846 6020B
Magnesium		349000	25000		ug/l	SW846 6020B
Manganese		503	10		ug/l	SW846 6020B
Mercury [h]		1.5	0.60		ug/l	SW846 7470A
Nickel		44.2	2.0		ug/l	SW846 6020B
Potassium		250000	25000		ug/l	SW846 6020B
Selenium		1.4	1.0		ug/l	SW846 6020B
Sodium		631000	25000		ug/l	SW846 6020B
Vanadium		36.0	2.0		ug/l	SW846 6020B
Zinc		60.9	10		ug/l	SW846 6020B
Sulfate [c]		1930	100		mg/l	EPA 300/SW846 9056A
JD36624-9F	**HOFF MW-C**					
Arsenic		3.6	1.0		ug/l	SW846 6020B
Barium		26.8	2.0		ug/l	SW846 6020B
Calcium		345000	25000		ug/l	SW846 6020B
Chromium		98.5	2.0		ug/l	SW846 6020B
Cobalt		3.2	1.0		ug/l	SW846 6020B
Copper		11.4	4.0		ug/l	SW846 6020B
Magnesium		360000	25000		ug/l	SW846 6020B
Manganese		23.1	2.0		ug/l	SW846 6020B
Mercury		0.49	0.20		ug/l	SW846 7470A
Nickel		31.3	2.0		ug/l	SW846 6020B
Potassium		263000	25000		ug/l	SW846 6020B
Selenium		1.2	1.0		ug/l	SW846 6020B
Sodium		673000	25000		ug/l	SW846 6020B
Vanadium		4.5	2.0		ug/l	SW846 6020B
Zinc		14.5	10		ug/l	SW846 6020B
JD36624-10	**HOFF MW-D**					
Chlorobenzene		5.1	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene		4.4	1.0	0.53	ug/l	SW846 8260D
1,4-Dichlorobenzene		0.90 J	1.0	0.51	ug/l	SW846 8260D

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,1-Dichloroethane		5.6	1.0	0.57	ug/l	SW846 8260D
cis-1,2-Dichloroethene		2.1	1.0	0.51	ug/l	SW846 8260D
Vinyl chloride		0.88 J	1.0	0.79	ug/l	SW846 8260D
1,4-Dioxane		2.3	0.40	0.095	ug/l	SW846 8260D BY SIM
Di-n-butyl phthalate		13.8 B	1.9	0.51	ug/l	SW846 8270E
Methane [f]		215	0.55	0.40	ug/l	RSK-175
Ethane [f]		0.38	0.23	0.14	ug/l	RSK-175
Aluminum		426	50		ug/l	SW846 6020B
Arsenic		3.0	1.0		ug/l	SW846 6020B
Barium		40.8	2.0		ug/l	SW846 6020B
Calcium		43300	2500		ug/l	SW846 6020B
Cobalt		5.4	1.0		ug/l	SW846 6020B
Iron		900	50		ug/l	SW846 6020B
Magnesium		20900	2500		ug/l	SW846 6020B
Manganese		2360	50		ug/l	SW846 6020B
Nickel		9.3	2.0		ug/l	SW846 6020B
Potassium		2930	500		ug/l	SW846 6020B
Sodium		34800	2500		ug/l	SW846 6020B
Vanadium		3.3	2.0		ug/l	SW846 6020B
Sulfate [c]		87.4	2.0		mg/l	EPA 300/SW846 9056A
JD36624-10F	**HOFF MW-D**					
Arsenic		2.9	1.0		ug/l	SW846 6020B
Barium		36.9	2.0		ug/l	SW846 6020B
Calcium		45600	2500		ug/l	SW846 6020B
Cobalt		5.1	1.0		ug/l	SW846 6020B
Magnesium		22200	2500		ug/l	SW846 6020B
Manganese		2460	50		ug/l	SW846 6020B
Nickel		9.0	2.0		ug/l	SW846 6020B
Potassium		2960	500		ug/l	SW846 6020B
Sodium		36700	2500		ug/l	SW846 6020B
Vanadium		2.3	2.0		ug/l	SW846 6020B
JD36624-11	**HOFF IW-1A**					
Acetone		63.4	10	3.1	ug/l	SW846 8260D
Bromomethane		9.5	2.0	1.6	ug/l	SW846 8260D
Chlorobenzene		9.9	1.0	0.56	ug/l	SW846 8260D
Chloroethane		0.81 J	1.0	0.73	ug/l	SW846 8260D
Chloromethane		23.2	1.0	0.76	ug/l	SW846 8260D
1,2-Dichlorobenzene		23.7	1.0	0.53	ug/l	SW846 8260D
1,3-Dichlorobenzene		0.65 J	1.0	0.54	ug/l	SW846 8260D
1,4-Dichlorobenzene		8.8	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane		23.1	1.0	0.57	ug/l	SW846 8260D

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
cis-1,2-Dichloroethene		1.9	1.0	0.51	ug/l	SW846 8260D
1,2,4-Trichlorobenzene		1.3	1.0	0.50	ug/l	SW846 8260D
1,1,1-Trichloroethane		1.9	1.0	0.54	ug/l	SW846 8260D
1,4-Dioxane		2.5	0.40	0.095	ug/l	SW846 8260D BY SIM
Acetophenone		1.1 J	1.9	0.48	ug/l	SW846 8270E
Di-n-butyl phthalate		16.2 B	1.9	0.49	ug/l	SW846 8270E
1,2,4-Trichlorobenzene		1.0	0.93	0.33	ug/l	SW846 8270E
Fluoranthene		0.0479 J	0.074	0.037	ug/l	SW846 8270E BY SIM
Fluorene		0.0482 J	0.074	0.037	ug/l	SW846 8270E BY SIM
Naphthalene		0.118	0.074	0.037	ug/l	SW846 8270E BY SIM
Phenanthrene		0.181	0.074	0.037	ug/l	SW846 8270E BY SIM
Methane [f]		286	0.55	0.40	ug/l	RSK-175
Ethane [f]		0.36	0.23	0.14	ug/l	RSK-175
Aluminum		182	50		ug/l	SW846 6020B
Arsenic		1.7	1.0		ug/l	SW846 6020B
Barium		34.5	2.0		ug/l	SW846 6020B
Calcium		123000	5000		ug/l	SW846 6020B
Chromium		9.6	2.0		ug/l	SW846 6020B
Cobalt		1.2	1.0		ug/l	SW846 6020B
Iron		647	50		ug/l	SW846 6020B
Magnesium		74200	5000		ug/l	SW846 6020B
Manganese		988	20		ug/l	SW846 6020B
Nickel		14.9	2.0		ug/l	SW846 6020B
Potassium		6600	500		ug/l	SW846 6020B
Sodium		197000	13000		ug/l	SW846 6020B
Vanadium		6.2	2.0		ug/l	SW846 6020B
Sulfate [c]		539	20		mg/l	EPA 300/SW846 9056A
JD36624-11F	**HOFF IW-1A**					
Arsenic		1.5	1.0		ug/l	SW846 6020B
Barium		28.0	2.0		ug/l	SW846 6020B
Calcium		128000	5000		ug/l	SW846 6020B
Chromium		8.9	2.0		ug/l	SW846 6020B
Cobalt		1.1	1.0		ug/l	SW846 6020B
Magnesium		77600	5000		ug/l	SW846 6020B
Manganese		1060	20		ug/l	SW846 6020B
Nickel		14.1	2.0		ug/l	SW846 6020B
Potassium		6430	500		ug/l	SW846 6020B
Sodium		199000	13000		ug/l	SW846 6020B
Vanadium		5.3	2.0		ug/l	SW846 6020B
JD36624-12	**HOFF IW-1B**					
Acetone		54.5	10	3.1	ug/l	SW846 8260D

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Bromomethane		5.8	2.0	1.6	ug/l	SW846 8260D
2-Butanone (MEK)		9.9 J	10	6.9	ug/l	SW846 8260D
Chlorobenzene		6.4	1.0	0.56	ug/l	SW846 8260D
Chloroethane		0.79 J	1.0	0.73	ug/l	SW846 8260D
Chloromethane		12.6	1.0	0.76	ug/l	SW846 8260D
1,2-Dichlorobenzene		104	1.0	0.53	ug/l	SW846 8260D
1,3-Dichlorobenzene		0.68 J	1.0	0.54	ug/l	SW846 8260D
1,4-Dichlorobenzene		18.6	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane		53.4	1.0	0.57	ug/l	SW846 8260D
1,1-Dichloroethene		1.7	1.0	0.59	ug/l	SW846 8260D
cis-1,2-Dichloroethene		44.2	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene		2.3	1.0	0.54	ug/l	SW846 8260D
1,2-Dichloropropane		0.90 J	1.0	0.51	ug/l	SW846 8260D
Tetrahydrofuran		12.8	10	3.2	ug/l	SW846 8260D
1,2,4-Trichlorobenzene		1.3	1.0	0.50	ug/l	SW846 8260D
1,1,1-Trichloroethane		1.2	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		44.0	1.0	0.53	ug/l	SW846 8260D
1,4-Dioxane		36.8	4.0	0.95	ug/l	SW846 8260D BY SIM
Di-n-butyl phthalate		16.4 B	1.9	0.51	ug/l	SW846 8270E
1,2,4-Trichlorobenzene		1.2	0.96	0.34	ug/l	SW846 8270E
Benzo(a)anthracene [d]		0.0883	0.038	0.023	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene [d]		0.0444 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene [d]		0.0402 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Naphthalene		0.0555 J	0.077	0.038	ug/l	SW846 8270E BY SIM
Phenanthrene		0.0904	0.077	0.038	ug/l	SW846 8270E BY SIM
Methane		84.9	0.11	0.080	ug/l	RSK-175
Ethane		0.31	0.23	0.14	ug/l	RSK-175
Aluminum		369	50		ug/l	SW846 6020B
Arsenic		1.4	1.0		ug/l	SW846 6020B
Barium		14.2	2.0		ug/l	SW846 6020B
Calcium		161000	13000		ug/l	SW846 6020B
Chromium		11.1	2.0		ug/l	SW846 6020B
Iron		544	50		ug/l	SW846 6020B
Magnesium		96100	13000		ug/l	SW846 6020B
Manganese		199	2.0		ug/l	SW846 6020B
Nickel		6.9	2.0		ug/l	SW846 6020B
Potassium		6970	500		ug/l	SW846 6020B
Sodium		241000	13000		ug/l	SW846 6020B
Vanadium		7.7	2.0		ug/l	SW846 6020B
Sulfate [c]		808	20		mg/l	EPA 300/SW846 9056A
JD36624-12F	**HOFF IW-1B**					
Barium		10.3	2.0		ug/l	SW846 6020B
Calcium		146000	13000		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Chromium		9.5	2.0		ug/l	SW846 6020B
Magnesium		86200	13000		ug/l	SW846 6020B
Manganese		174	2.0		ug/l	SW846 6020B
Nickel		5.8	2.0		ug/l	SW846 6020B
Potassium		6280	500		ug/l	SW846 6020B
Sodium		232000	13000		ug/l	SW846 6020B
Vanadium		6.1	2.0		ug/l	SW846 6020B
JD36624-13	**HOFF IW-3A**					
Acetone		76.9	10	3.1	ug/l	SW846 8260D
Benzene		1.2	0.50	0.43	ug/l	SW846 8260D
Bromomethane		33.9	2.0	1.6	ug/l	SW846 8260D
2-Butanone (MEK)		8.3 J	10	6.9	ug/l	SW846 8260D
Carbon disulfide		0.53 J	2.0	0.46	ug/l	SW846 8260D
Chlorobenzene		136	1.0	0.56	ug/l	SW846 8260D
Chloroethane		1.5	1.0	0.73	ug/l	SW846 8260D
Chloromethane		89.1	1.0	0.76	ug/l	SW846 8260D
1,2-Dichlorobenzene		270	10	5.3	ug/l	SW846 8260D
1,3-Dichlorobenzene		2.7	1.0	0.54	ug/l	SW846 8260D
1,4-Dichlorobenzene		42.1	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane		28.4	1.0	0.57	ug/l	SW846 8260D
cis-1,2-Dichloroethene		118	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene		19.8	1.0	0.54	ug/l	SW846 8260D
Tert Butyl Alcohol		15.5	10	5.8	ug/l	SW846 8260D
Tetrahydrofuran		11.0	10	3.2	ug/l	SW846 8260D
1,2,4-Trichlorobenzene		2.9	1.0	0.50	ug/l	SW846 8260D
1,1,1-Trichloroethane		1.6	1.0	0.54	ug/l	SW846 8260D
Trichloroethene		6.0	1.0	0.53	ug/l	SW846 8260D
1,4-Dioxane		31.4	4.0	0.95	ug/l	SW846 8260D BY SIM
Di-n-butyl phthalate		4.2 B	1.8	0.48	ug/l	SW846 8270E
Acenaphthene		0.211	0.073	0.036	ug/l	SW846 8270E BY SIM
Acenaphthylene		0.0753	0.073	0.036	ug/l	SW846 8270E BY SIM
Chrysene		0.0455 J	0.073	0.036	ug/l	SW846 8270E BY SIM
Fluoranthene		0.397	0.073	0.036	ug/l	SW846 8270E BY SIM
Fluorene		0.460	0.073	0.036	ug/l	SW846 8270E BY SIM
Naphthalene		0.604	0.073	0.036	ug/l	SW846 8270E BY SIM
Phenanthrene		2.07	0.073	0.036	ug/l	SW846 8270E BY SIM
Pyrene		0.107	0.073	0.036	ug/l	SW846 8270E BY SIM
Methane [i]		356	0.55	0.40	ug/l	RSK-175
Ethane [i]		0.82	0.23	0.14	ug/l	RSK-175
gamma-BHC (Lindane)		0.040	0.0074	0.0044	ug/l	SW846 8081B
Aluminum		5080	50		ug/l	SW846 6020B
Arsenic		3.8	1.0		ug/l	SW846 6020B
Barium		76.5	2.0		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36624
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Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Calcium		246000	13000		ug/l	SW846 6020B
Chromium		28.7	2.0		ug/l	SW846 6020B
Cobalt		5.4	1.0		ug/l	SW846 6020B
Copper		9.6	4.0		ug/l	SW846 6020B
Iron		9440	50		ug/l	SW846 6020B
Lead		3.6	1.0		ug/l	SW846 6020B
Magnesium		181000	13000		ug/l	SW846 6020B
Manganese		188	2.0		ug/l	SW846 6020B
Nickel		17.4	2.0		ug/l	SW846 6020B
Potassium		18300	500		ug/l	SW846 6020B
Sodium		358000	13000		ug/l	SW846 6020B
Vanadium		16.1	2.0		ug/l	SW846 6020B
Zinc		18.1	10		ug/l	SW846 6020B
Sulfate [c]		1060	50		mg/l	EPA 300/SW846 9056A
JD36624-13F	**HOFF IW-3A**					
Barium		17.4	2.0		ug/l	SW846 6020B
Calcium		235000	13000		ug/l	SW846 6020B
Chromium		20.2	2.0		ug/l	SW846 6020B
Magnesium		167000	13000		ug/l	SW846 6020B
Nickel		8.3	2.0		ug/l	SW846 6020B
Potassium		18700	500		ug/l	SW846 6020B
Sodium		352000	13000		ug/l	SW846 6020B
Vanadium		2.8	2.0		ug/l	SW846 6020B
JD36624-14	**HOFF IW-3B**					
Acetone		115	10	3.1	ug/l	SW846 8260D
Bromomethane		20.2	2.0	1.6	ug/l	SW846 8260D
2-Butanone (MEK)		24.3	10	6.9	ug/l	SW846 8260D
Carbon disulfide		0.78 J	2.0	0.46	ug/l	SW846 8260D
Chlorobenzene		10.9	1.0	0.56	ug/l	SW846 8260D
Chloroethane		1.9	1.0	0.73	ug/l	SW846 8260D
Chloromethane		140	1.0	0.76	ug/l	SW846 8260D
1,2-Dichlorobenzene		56.6	1.0	0.53	ug/l	SW846 8260D
1,4-Dichlorobenzene		9.9	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane		18.1	1.0	0.57	ug/l	SW846 8260D
cis-1,2-Dichloroethene		2.9	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene		0.68 J	1.0	0.54	ug/l	SW846 8260D
Tert Butyl Alcohol		20.8	10	5.8	ug/l	SW846 8260D
Tetrahydrofuran		28.8	10	3.2	ug/l	SW846 8260D
1,2,4-Trichlorobenzene		0.71 J	1.0	0.50	ug/l	SW846 8260D
1,4-Dioxane		25.8	4.0	0.95	ug/l	SW846 8260D BY SIM
Di-n-butyl phthalate		0.82 JB	1.8	0.48	ug/l	SW846 8270E

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
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Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Acenaphthylene		0.0374 J	0.071	0.036	ug/l	SW846 8270E BY SIM
Fluoranthene		0.0384 J	0.071	0.036	ug/l	SW846 8270E BY SIM
Naphthalene		0.139	0.071	0.036	ug/l	SW846 8270E BY SIM
Phenanthrene		0.391	0.071	0.036	ug/l	SW846 8270E BY SIM
Methane [f]		354	1.1	0.80	ug/l	RSK-175
Ethane [f]		1.1	0.23	0.14	ug/l	RSK-175
Aluminum		1450	50		ug/l	SW846 6020B
Arsenic		1.4	1.0		ug/l	SW846 6020B
Barium		26.0	2.0		ug/l	SW846 6020B
Calcium		269000	13000		ug/l	SW846 6020B
Chromium		26.7	2.0		ug/l	SW846 6020B
Cobalt		1.4	1.0		ug/l	SW846 6020B
Copper		4.8	4.0		ug/l	SW846 6020B
Iron		2330	50		ug/l	SW846 6020B
Lead		1.1	1.0		ug/l	SW846 6020B
Magnesium		193000	13000		ug/l	SW846 6020B
Manganese		44.0	2.0		ug/l	SW846 6020B
Mercury		0.29	0.20		ug/l	SW846 7470A
Nickel		12.1	2.0		ug/l	SW846 6020B
Potassium		18000	500		ug/l	SW846 6020B
Sodium		373000	13000		ug/l	SW846 6020B
Vanadium		6.3	2.0		ug/l	SW846 6020B
Sulfate [c]		1210	50		mg/l	EPA 300/SW846 9056A
JD36624-14F	**HOFF IW-3B**					
Barium		13.4	2.0		ug/l	SW846 6020B
Calcium		259000	13000		ug/l	SW846 6020B
Chromium		25.1	2.0		ug/l	SW846 6020B
Magnesium		194000	13000		ug/l	SW846 6020B
Nickel		9.4	2.0		ug/l	SW846 6020B
Potassium		18700	500		ug/l	SW846 6020B
Sodium		399000	13000		ug/l	SW846 6020B
Vanadium		3.3	2.0		ug/l	SW846 6020B
JD36624-15	**HOFF IW-2A**					
Acetone		727	10	3.1	ug/l	SW846 8260D
Benzene		0.77	0.50	0.43	ug/l	SW846 8260D
Bromochloromethane		2.7	1.0	0.48	ug/l	SW846 8260D
Bromoform		17.4	1.0	0.63	ug/l	SW846 8260D
Bromomethane		45.8	2.0	1.6	ug/l	SW846 8260D
2-Butanone (MEK)		77.2	10	6.9	ug/l	SW846 8260D
Chlorobenzene		5.4	1.0	0.56	ug/l	SW846 8260D
Chloroethane		3.4	1.0	0.73	ug/l	SW846 8260D

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Chloromethane	211	5.0	3.8	ug/l	SW846 8260D
Dibromochloromethane	1.7	1.0	0.56	ug/l	SW846 8260D
1,2-Dichlorobenzene	101	1.0	0.53	ug/l	SW846 8260D
1,3-Dichlorobenzene	1.1	1.0	0.54	ug/l	SW846 8260D
1,4-Dichlorobenzene	24.0	1.0	0.51	ug/l	SW846 8260D
1,1-Dichloroethane	89.9	1.0	0.57	ug/l	SW846 8260D
1,2-Dichloroethane	0.75 J	1.0	0.60	ug/l	SW846 8260D
cis-1,2-Dichloroethene	9.5	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene	1.9	1.0	0.54	ug/l	SW846 8260D
Methyl Tert Butyl Ether	1.0	1.0	0.51	ug/l	SW846 8260D
Methylene bromide	1.2	1.0	0.48	ug/l	SW846 8260D
Methylene chloride	1.7 J	2.0	1.0	ug/l	SW846 8260D
Tert Butyl Alcohol	24.6	10	5.8	ug/l	SW846 8260D
Tetrahydrofuran	11.8	10	3.2	ug/l	SW846 8260D
1,2,3-Trichlorobenzene	1.4	1.0	0.50	ug/l	SW846 8260D
1,2,4-Trichlorobenzene	4.9	1.0	0.50	ug/l	SW846 8260D
1,1,1-Trichloroethane	2.6	1.0	0.54	ug/l	SW846 8260D
1,1,2-Trichloroethane	0.88 J	1.0	0.53	ug/l	SW846 8260D
Trichloroethene	0.76 J	1.0	0.53	ug/l	SW846 8260D
1,4-Dioxane	16.5 B	0.40	0.095	ug/l	SW846 8260D BY SIM
Acetophenone	2.3	1.8	0.46	ug/l	SW846 8270E
Di-n-butyl phthalate	3.0 B	1.8	0.48	ug/l	SW846 8270E
1,2,4-Trichlorobenzene	1.8	0.89	0.32	ug/l	SW846 8270E
Benzo(a)pyrene	0.0307 J	0.036	0.021	ug/l	SW846 8270E BY SIM
Fluoranthene	0.0433 J	0.071	0.036	ug/l	SW846 8270E BY SIM
Naphthalene	0.0481 J	0.071	0.036	ug/l	SW846 8270E BY SIM
Methane [f]	228	0.55	0.40	ug/l	RSK-175
Ethane [f]	0.39	0.23	0.14	ug/l	RSK-175
delta-BHC [j]	0.019	0.0071	0.0047	ug/l	SW846 8081B
Aluminum	31900	130		ug/l	SW846 6020B
Arsenic	9.6	1.0		ug/l	SW846 6020B
Barium	286	5.0		ug/l	SW846 6020B
Beryllium	4.3	1.0		ug/l	SW846 6020B
Calcium	788000	25000		ug/l	SW846 6020B
Chromium	87.8	2.0		ug/l	SW846 6020B
Cobalt	19.8	1.0		ug/l	SW846 6020B
Copper	31.3	4.0		ug/l	SW846 6020B
Iron	32400	130		ug/l	SW846 6020B
Lead	22.8	1.0		ug/l	SW846 6020B
Magnesium	818000	25000		ug/l	SW846 6020B
Manganese	1100	20		ug/l	SW846 6020B
Mercury	1.3	0.20		ug/l	SW846 7470A
Nickel	56.2	2.0		ug/l	SW846 6020B
Potassium	83400	5000		ug/l	SW846 6020B
Selenium	2.9	1.0		ug/l	SW846 6020B

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Sodium		856000	25000		ug/l	SW846 6020B
Vanadium		76.4	2.0		ug/l	SW846 6020B
Zinc		75.5	10		ug/l	SW846 6020B
Sulfate [c]		3550	200		mg/l	EPA 300/SW846 9056A
JD36624-15F	**HOFF IW-2A**					
Arsenic		1.7	1.0		ug/l	SW846 6020B
Barium		37.2	2.0		ug/l	SW846 6020B
Calcium		813000	25000		ug/l	SW846 6020B
Chromium		52.6	2.0		ug/l	SW846 6020B
Magnesium		804000	25000		ug/l	SW846 6020B
Manganese		13.0	2.0		ug/l	SW846 6020B
Mercury		1.2	0.20		ug/l	SW846 7470A
Nickel		13.8	2.0		ug/l	SW846 6020B
Potassium		72900	2500		ug/l	SW846 6020B
Selenium		1.7	1.0		ug/l	SW846 6020B
Sodium		890000	25000		ug/l	SW846 6020B
Vanadium		5.9	2.0		ug/l	SW846 6020B
JD36624-16	**HOFF IW-2B**					
Chlorobenzene [a]		3320	50	28	ug/l	SW846 8260D
Chloroethane [a]		57.0	50	36	ug/l	SW846 8260D
Chloroform [a]		102	50	25	ug/l	SW846 8260D
Chloromethane [a]		64.2	50	38	ug/l	SW846 8260D
1,2-Dichlorobenzene [a]		7840	50	27	ug/l	SW846 8260D
1,3-Dichlorobenzene [a]		46.8 J	50	27	ug/l	SW846 8260D
1,4-Dichlorobenzene [a]		1000	50	25	ug/l	SW846 8260D
1,1-Dichloroethane [a]		719	50	28	ug/l	SW846 8260D
1,1-Dichloroethene [a]		171	50	30	ug/l	SW846 8260D
cis-1,2-Dichloroethene		12400	500	250	ug/l	SW846 8260D
trans-1,2-Dichloroethene [a]		277	50	27	ug/l	SW846 8260D
1,1,1-Trichloroethane [a]		387	50	27	ug/l	SW846 8260D
Trichloroethene [a]		37.3 J	50	26	ug/l	SW846 8260D
Vinyl chloride [a]		44.3 J	50	39	ug/l	SW846 8260D
1,4-Dioxane		124 B	0.40	0.095	ug/l	SW846 8260D BY SIM
2-Chlorophenol		6.8	3.6	0.33	ug/l	SW846 8270E
2,4-Dichlorophenol		3.0	1.8	0.46	ug/l	SW846 8270E
Pentachlorophenol		1.9 J	3.6	1.0	ug/l	SW846 8270E
Di-n-butyl phthalate		3.7 B	1.8	0.48	ug/l	SW846 8270E
2-Methylnaphthalene		12.2	0.89	0.58	ug/l	SW846 8270E
Naphthalene		38.2	0.89	0.39	ug/l	SW846 8270E
1,2,4-Trichlorobenzene		15.1	0.89	0.32	ug/l	SW846 8270E
Phenanthrene		0.800	0.071	0.036	ug/l	SW846 8270E BY SIM

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Methane [k]		1180	2.2	1.6	ug/l	RSK-175
Ethane [k]		1.8	0.23	0.14	ug/l	RSK-175
Ethene [k]		2.2	0.31	0.16	ug/l	RSK-175
Aluminum		800	50		ug/l	SW846 6020B
Arsenic		4.9	1.0		ug/l	SW846 6020B
Barium		433	20		ug/l	SW846 6020B
Calcium		70700	5000		ug/l	SW846 6020B
Chromium		2.1	2.0		ug/l	SW846 6020B
Cobalt		1.1	1.0		ug/l	SW846 6020B
Iron		6240	50		ug/l	SW846 6020B
Lead		2.2	1.0		ug/l	SW846 6020B
Magnesium		84800	5000		ug/l	SW846 6020B
Manganese		150	2.0		ug/l	SW846 6020B
Nickel		4.1	2.0		ug/l	SW846 6020B
Potassium		18400	500		ug/l	SW846 6020B
Sodium		108000	5000		ug/l	SW846 6020B
Vanadium		11.7	2.0		ug/l	SW846 6020B
Zinc		11.0	10		ug/l	SW846 6020B
Sulfate [c]		193	20		mg/l	EPA 300/SW846 9056A
JD36624-16F	**HOFF IW-2B**					
Arsenic		1.2	1.0		ug/l	SW846 6020B
Barium		19.9	2.0		ug/l	SW846 6020B
Calcium		82700	5000		ug/l	SW846 6020B
Magnesium		59100	5000		ug/l	SW846 6020B
Manganese		271	20		ug/l	SW846 6020B
Nickel		2.8	2.0		ug/l	SW846 6020B
Potassium		16300	500		ug/l	SW846 6020B
Sodium		91700	5000		ug/l	SW846 6020B
Vanadium		7.8	2.0		ug/l	SW846 6020B
JD36624-17	**HOFF IW-B**					
Benzene [a]		263	5.0	4.3	ug/l	SW846 8260D
Chlorobenzene		13600	200	110	ug/l	SW846 8260D
1,2-Dichlorobenzene [a]		509	10	5.3	ug/l	SW846 8260D
1,3-Dichlorobenzene [a]		48.2	10	5.4	ug/l	SW846 8260D
1,4-Dichlorobenzene [a]		270	10	5.1	ug/l	SW846 8260D
1,1-Dichloroethane [a]		26.6	10	5.7	ug/l	SW846 8260D
cis-1,2-Dichloroethene [a]		17.4	10	5.1	ug/l	SW846 8260D
n-Propylbenzene [a]		9.3 J	20	6.0	ug/l	SW846 8260D
o-Xylene [a]		12.0	10	5.9	ug/l	SW846 8260D
1,4-Dioxane		9.6	1.0	0.24	ug/l	SW846 8260D BY SIM
2-Chlorophenol		19.3	3.6	0.33	ug/l	SW846 8270E

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
2,4-Dichlorophenol	3.3	1.8	0.46	ug/l	SW846 8270E
Phenol	0.52 J	1.8	0.24	ug/l	SW846 8270E
Acetophenone	0.80 J	1.8	0.46	ug/l	SW846 8270E
Di-n-butyl phthalate	1.6 BJ	1.8	0.48	ug/l	SW846 8270E
bis(2-Ethylhexyl)phthalate	1.2 J	1.8	1.2	ug/l	SW846 8270E
2-Methylnaphthalene	1.9	0.89	0.58	ug/l	SW846 8270E
Naphthalene	10.3	0.89	0.39	ug/l	SW846 8270E
1,2,4-Trichlorobenzene	3.7	0.89	0.32	ug/l	SW846 8270E
Acenaphthene	0.205	0.071	0.036	ug/l	SW846 8270E BY SIM
Anthracene	0.0836	0.071	0.036	ug/l	SW846 8270E BY SIM
Benzo(a)anthracene [d]	0.595	0.036	0.021	ug/l	SW846 8270E BY SIM
Benzo(a)pyrene	0.906	0.036	0.021	ug/l	SW846 8270E BY SIM
Benzo(b)fluoranthene	2.18	0.036	0.021	ug/l	SW846 8270E BY SIM
Benzo(g,h,i)perylene [d]	1.20	0.071	0.036	ug/l	SW846 8270E BY SIM
Benzo(k)fluoranthene	0.665	0.071	0.036	ug/l	SW846 8270E BY SIM
Chrysene	1.05	0.071	0.036	ug/l	SW846 8270E BY SIM
Dibenzo(a,h)anthracene	0.223	0.071	0.036	ug/l	SW846 8270E BY SIM
Fluoranthene	1.29	0.071	0.036	ug/l	SW846 8270E BY SIM
Fluorene	0.197	0.071	0.036	ug/l	SW846 8270E BY SIM
Indeno(1,2,3-cd)pyrene [d]	0.993	0.071	0.036	ug/l	SW846 8270E BY SIM
Phenanthrene	0.357	0.071	0.036	ug/l	SW846 8270E BY SIM
Pyrene	1.41	0.071	0.036	ug/l	SW846 8270E BY SIM
Methane [f]	1890	2.2	1.6	ug/l	RSK-175
delta-BHC [e]	0.011	0.0080	0.0053	ug/l	SW846 8081B
Aluminum	30900	130		ug/l	SW846 6020B
Arsenic	13.9	1.0		ug/l	SW846 6020B
Barium	576	10		ug/l	SW846 6020B
Beryllium	2.0	1.0		ug/l	SW846 6020B
Calcium	88900	5000		ug/l	SW846 6020B
Chromium	95.5	2.0		ug/l	SW846 6020B
Cobalt	33.1	1.0		ug/l	SW846 6020B
Copper	103	4.0		ug/l	SW846 6020B
Iron	77300	250		ug/l	SW846 6020B
Lead	55.6	1.0		ug/l	SW846 6020B
Magnesium	71900	2500		ug/l	SW846 6020B
Manganese	5320	100		ug/l	SW846 6020B
Nickel	88.0	2.0		ug/l	SW846 6020B
Potassium	28000	2500		ug/l	SW846 6020B
Sodium	129000	25000		ug/l	SW846 6020B
Vanadium	156	2.0		ug/l	SW846 6020B
Zinc	415	50		ug/l	SW846 6020B
Sulfate [c]	179	20		mg/l	EPA 300/SW846 9056A

Summary of Hits

Job Number: JD36624
Account: Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Collected: 12/07/21 thru 12/10/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD36624-17F	**HOFF IW-B**					
Arsenic		3.3	1.0		ug/l	SW846 6020B
Barium		105	2.0		ug/l	SW846 6020B
Calcium		67400	5000		ug/l	SW846 6020B
Cobalt		6.7	1.0		ug/l	SW846 6020B
Iron		123	50		ug/l	SW846 6020B
Magnesium		41400	5000		ug/l	SW846 6020B
Manganese		4230	100		ug/l	SW846 6020B
Nickel		37.0	2.0		ug/l	SW846 6020B
Potassium		17000	500		ug/l	SW846 6020B
Sodium		122000	5000		ug/l	SW846 6020B
Vanadium		2.9	2.0		ug/l	SW846 6020B

(a) Dilution required due to high concentration of target compound.
(b) Diluted due to high concentration of target compound.; Two 2 diameter bubbles present in headspace.
(c) Analysis performed at SGS Orlando, FL.
(d) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
(e) More than 40 % RPD for detected concentrations between the two GC columns.
(f) Diluted due to high concentration of target compound.
(g) Diluted due to high concentration of target compound.; 2 mm diameter bubble present in headspace.
(h) Elevated sample detection limit due to difficult sample matrix.
(i) Diluted due to high concentration of target compound.; 1mm diameter bubble present in headspace.
(j) Reported from 2nd signal. 1st signal used for confirmation.
(k) Diluted due to high concentration of target compound.; 2mm diameter bubble present in headspace.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	TB-20211207		
Lab Sample ID:	JD36624-1	**Date Sampled:**	12/10/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167439.D	1	12/17/21 19:35	BK	n/a	n/a	V3A7266
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.20	0.40	0.095	ug/l	JB

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	136%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	TB-20211207		
Lab Sample ID:	JD36624-1	**Date Sampled:**	12/10/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X193046.D	1	12/17/21 19:54	BK	n/a	n/a	V1X8363
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB-20211207
Lab Sample ID: JD36624-1
Matrix: AQ - Trip Blank Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/10/21
Date Received: 12/10/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-20211207		
Lab Sample ID:	JD36624-1	**Date Sampled:**	12/10/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%		80-120%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	101%		82-114%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8		
Lab Sample ID:	JD36624-2	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167413.D	1	12/16/21 21:20	BK	n/a	n/a	V3A7265
Run #2 [a]	3A167428.D	10	12/17/21 13:04	BK	n/a	n/a	V3A7266

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	37.8	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	508% [b]	192% [b]	39-174%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8		
Lab Sample ID:	JD36624-2	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D171924.D	5	12/16/21 14:50	NH	n/a	n/a	V3D7294
Run #2	3D171927.D	50	12/16/21 16:12	NH	n/a	n/a	V3D7294

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	47.8	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	2240 [b]	50	28	ug/l	
75-00-3	Chloroethane	4.1	5.0	3.6	ug/l	J
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane [c]	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	215	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	6.6	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	66.2	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	22.0	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	70.6	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	5.4	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-8		
Lab Sample ID:	JD36624-2	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	3.2	5.0	3.0	ug/l	J
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
98-82-8	Isopropylbenzene	6.0	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	7.5	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	3.7	10	3.0	ug/l	J
100-42-5	Styrene	ND	5.0	2.4	ug/l	
75-65-0	Tert Butyl Alcohol	198	50	29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
109-99-9	Tetrahydrofuran [c]	ND	50	16	ug/l	
108-88-3	Toluene	24.9	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	3.8	5.0	2.7	ug/l	J
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	7.6	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	50	10	ug/l	
75-01-4	Vinyl chloride	18.3	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%	85%	80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-8		
Lab Sample ID:	JD36624-2	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	89%	93%	80-120%
2037-26-5	Toluene-D8	104%	101%	80-120%
460-00-4	4-Bromofluorobenzene	98%	97%	82-114%

(a) Dilution required due to high concentration of target compound.
(b) Result is from Run# 2
(c) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8		
Lab Sample ID:	JD36624-2	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80491.D	1	12/18/21 06:07	CS	12/14/21 18:08	OP37108	E5P3810
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	7.1	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	0.72	2.0	0.52	ug/l	J
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol [a]	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	0.33	2.0	0.26	ug/l	J
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	18.8	2.0	0.53	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-8		
Lab Sample ID:	JD36624-2	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	2.0	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline [a]	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.46	1.0	0.36	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	22%		10-73%
4165-62-2	Phenol-d5	18%		10-64%
118-79-6	2,4,6-Tribromophenol	93%		31-130%
4165-60-0	Nitrobenzene-d5	67%		28-126%
321-60-8	2-Fluorobiphenyl	75%		26-114%
1718-51-0	Terphenyl-d14	75%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8		
Lab Sample ID:	JD36624-2	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50291.D	1	12/28/21 01:19	KLS	12/14/21 18:08	OP37108A	E4P2635
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.0963	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	0.120	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	0.262	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	0.223	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	0.288	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.153	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	0.112	0.080	0.040	ug/l	
218-01-9	Chrysene	0.139	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.0523	0.080	0.040	ug/l	J
206-44-0	Fluoranthene	0.270	0.080	0.040	ug/l	
86-73-7	Fluorene	0.111	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.135	0.080	0.040	ug/l	
91-20-3	Naphthalene	ND	0.080	0.040	ug/l	
85-01-8	Phenanthrene	0.121	0.080	0.040	ug/l	
129-00-0	Pyrene	0.215	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	118%		29-124%
321-60-8	2-Fluorobiphenyl	95%		23-122%
1718-51-0	Terphenyl-d14	95%		22-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8		
Lab Sample ID:	JD36624-2	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92476.D	1	12/14/21 13:50	WC	n/a	n/a	GAA2462
Run #2 [a]	AA92477.D	50	12/14/21 14:03	WC	n/a	n/a	GAA2462

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	2400 [b]	5.5	4.0	ug/l	
74-84-0	Ethane	5.09	0.23	0.14	ug/l	
74-85-1	Ethene	5.91	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.; Two 2 diameter bubbles present in headspace.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-8		
Lab Sample ID:	JD36624-2	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	6G81357.D	1	12/21/21 05:56	CP	12/14/21 14:45	OP37120	G6G2878
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	124%		10-190%
877-09-8	Tetrachloro-m-xylene	69%		10-190%
2051-24-3	Decachlorobiphenyl	51%		10-156%
2051-24-3	Decachlorobiphenyl	39%		10-156%

(a) Had TBA cleanup.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-8		
Lab Sample ID:	JD36624-2	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	118	50	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	62.4	2.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	133000	6300	ug/l	25	12/21/21	01/10/22	NV	SW846 6020B [4]	SW846 3010A [6]
Chromium	< 2.0	2.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	8.3	4.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	2870	50	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	2.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	32600	2500	ug/l	10	12/21/21	01/08/22	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	3070	50	ug/l	50	12/21/21	01/08/22	NV	SW846 6020B [3]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	4.4	2.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	9250	500	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	38300	2500	ug/l	10	12/21/21	01/08/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	3.0	2.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	603	50	ug/l	10	12/21/21	01/08/22	NV	SW846 6020B [3]	SW846 3010A [6]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51689
(3) Instrument QC Batch: MA51703
(4) Instrument QC Batch: MA51708
(5) Prep QC Batch: MP30380
(6) Prep QC Batch: MP30471

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-8		
Lab Sample ID:	JD36624-2	**Date Sampled:**	12/07/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	60.3	10	mg/l	5	12/27/21 16:54	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF MW-8
Lab Sample ID: JD36624-2F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/07/21
Date Received: 12/10/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	61.8	2.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	132000	6300	ug/l	25	12/21/21	01/10/22	NV	SW846 6020B [4]	SW846 3010A [6]
Chromium	< 2.0	2.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	2480	50	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	33200	2500	ug/l	10	12/21/21	01/08/22	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	2860	50	ug/l	50	12/21/21	01/08/22	NV	SW846 6020B [3]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	3.4	2.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	8850	500	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	38800	2500	ug/l	10	12/21/21	01/08/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	2.2	2.0	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/21/21	01/06/22	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51689
(3) Instrument QC Batch: MA51703
(4) Instrument QC Batch: MA51708
(5) Prep QC Batch: MP30380
(6) Prep QC Batch: MP30471

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-4DL		
Lab Sample ID:	JD36624-3	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167460.D	1	12/20/21 14:12	BK	n/a	n/a	V3A7266
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.40	0.40	0.095	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	115%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-4DL		
Lab Sample ID:	JD36624-3	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D171933.D	1	12/16/21 18:55	NH	n/a	n/a	V3D7294
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	3.2	10	3.1	ug/l	J
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	0.47	2.0	0.46	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	4.1	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [a]	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	16.1	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	2.4	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	1.2	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	66.7	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.5	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-4DL
Lab Sample ID: JD36624-3
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/08/21
Date Received: 12/10/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	1.9	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	28.9	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-4DL		
Lab Sample ID:	JD36624-3	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	88%		80-120%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	98%		82-114%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-4DL		
Lab Sample ID:	JD36624-3	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80492.D	1	12/18/21 06:34	CS	12/14/21 18:08	OP37108	E5P3810
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol [a]	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	24.6	2.0	0.53	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-4DL		
Lab Sample ID:	JD36624-3	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	3.1	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline [a]	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%		10-73%
4165-62-2	Phenol-d5	31%		10-64%
118-79-6	2,4,6-Tribromophenol	103%		31-130%
4165-60-0	Nitrobenzene-d5	76%		28-126%
321-60-8	2-Fluorobiphenyl	79%		26-114%
1718-51-0	Terphenyl-d14	65%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-4DL		
Lab Sample ID:	JD36624-3	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50284.D	1	12/27/21 22:33	KLS	12/14/21 18:08	OP37108A	E4P2635
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.143	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	0.257	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	1.24	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	1.38	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	1.82	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.845	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	0.632	0.080	0.040	ug/l	
218-01-9	Chrysene	1.08	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.218	0.080	0.040	ug/l	
206-44-0	Fluoranthene	1.65	0.080	0.040	ug/l	
86-73-7	Fluorene	0.0907	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.842	0.080	0.040	ug/l	
91-20-3	Naphthalene	0.0598	0.080	0.040	ug/l	J
85-01-8	Phenanthrene	0.616	0.080	0.040	ug/l	
129-00-0	Pyrene	1.51	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	110%		29-124%
321-60-8	2-Fluorobiphenyl	92%		23-122%
1718-51-0	Terphenyl-d14	91%		22-130%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-4DL		
Lab Sample ID:	JD36624-3	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	6G81358.D	1	12/21/21 06:14	CP	12/14/21 14:45	OP37120	G6G2878
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		10-190%
877-09-8	Tetrachloro-m-xylene	70%		10-190%
2051-24-3	Decachlorobiphenyl	33%		10-156%
2051-24-3	Decachlorobiphenyl	32%		10-156%

(a) Had TBA cleanup.

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RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-4DL		
Lab Sample ID:	JD36624-3	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	409	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	6.5	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	191	2.0	ug/l	2	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	224000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	60.1	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	7.1	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	14.6	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	4040	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	1.9	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	25600	1300	ug/l	5	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	699	20	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	79.6	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	17700	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	676000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	7.9	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	48.4	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30380
(5) Prep QC Batch: MP30440

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-4DL		
Lab Sample ID:	JD36624-3F	**Date Sampled:**	12/08/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	5.4	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	185	5.0	ug/l	5	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	229000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	12.1	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	4.4	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	1520	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	25100	1300	ug/l	5	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	706	20	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	47.2	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	18100	500	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	685000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	5.8	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30380
(5) Prep QC Batch: MP30440

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-4DU		
Lab Sample ID:	JD36624-4	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167431.D	1	12/17/21 14:48	BK	n/a	n/a	V3A7266
Run #2	3A167466.D	20	12/20/21 17:05	BK	n/a	n/a	V3A7268

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	142 [a]	8.0	1.9	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	410% [b]	161%	39-174%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-4DU		
Lab Sample ID:	JD36624-4	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D171939.D	1	12/16/21 21:38	NH	n/a	n/a	V3D7294
Run #2	1X193034.D	10	12/17/21 14:43	BK	n/a	n/a	V1X8363

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	11.5	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.1	2.0	0.62	ug/l	J
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	175	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [a]	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	905 [b]	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	7.6	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	112	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	186	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	1.8	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	179 [b]	10	5.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	1240 [b]	10	5.1	ug/l	
156-60-5	trans-1,2-Dichloroethene	16.8	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	1.3	1.0	0.51	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-4DU		
Lab Sample ID:	JD36624-4	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	71.8	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	113	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	3.6	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	7.9	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	189 [b]	10	5.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	79.1	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%	101%	80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-4DU		
Lab Sample ID:	JD36624-4	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%	103%	80-120%
2037-26-5	Toluene-D8	101%	100%	80-120%
460-00-4	4-Bromofluorobenzene	98%	103%	82-114%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-4DU		
Lab Sample ID:	JD36624-4	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80493.D	1	12/18/21 07:01	CS	12/14/21 18:08	OP37108	E5P3810
Run #2							

	Initial Volume	Final Volume
Run #1	245 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.1	0.38	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.1	0.54	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.53	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.1	0.69	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	4.1	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.1	0.47	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.1	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.48	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.1	0.40	ug/l	
100-02-7	4-Nitrophenol [a]	ND	8.2	0.46	ug/l	
87-86-5	Pentachlorophenol	ND	4.1	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.27	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.1	0.65	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.1	0.50	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.1	0.60	ug/l	
98-86-2	Acetophenone	ND	2.0	0.53	ug/l	
62-53-3	Aniline	ND	2.0	0.78	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.56	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.88	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.44	ug/l	
106-47-8	4-Chloroaniline	ND	4.1	0.54	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.47	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.61	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.56	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.57	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.1	0.74	ug/l	
84-74-2	Di-n-butyl phthalate	20.2	2.0	0.54	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	2.0	1.7	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-4DU		
Lab Sample ID:	JD36624-4	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	2.0	0.59	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.56	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	2.4	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.55	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.36	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.2	1.0	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.56	ug/l	
78-59-1	Isophorone	ND	2.0	0.40	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	4.1	0.63	ug/l	
99-09-2	3-Nitroaniline	ND	4.1	0.65	ug/l	
100-01-6	4-Nitroaniline [a]	ND	4.1	0.76	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.66	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.1	0.43	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.1		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.49	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.8	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	31%		10-73%
4165-62-2	Phenol-d5	23%		10-64%
118-79-6	2,4,6-Tribromophenol	108%		31-130%
4165-60-0	Nitrobenzene-d5	65%		28-126%
321-60-8	2-Fluorobiphenyl	78%		26-114%
1718-51-0	Terphenyl-d14	94%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-4DU		
Lab Sample ID:	JD36624-4	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50435.D	1	01/04/22 17:01	KLS	12/14/21 18:08	OP37108A	E4P2640
Run #2							

	Initial Volume	Final Volume
Run #1	245 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.0757	0.082	0.041	ug/l	J
208-96-8	Acenaphthylene [a]	ND	0.082	0.041	ug/l	
120-12-7	Anthracene	0.110	0.082	0.041	ug/l	
56-55-3	Benzo(a)anthracene [b]	0.493	0.041	0.024	ug/l	
50-32-8	Benzo(a)pyrene	0.430	0.041	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	0.577	0.041	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.289	0.082	0.041	ug/l	
207-08-9	Benzo(k)fluoranthene	0.174	0.082	0.041	ug/l	
218-01-9	Chrysene	0.296	0.082	0.041	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.0797	0.082	0.041	ug/l	J
206-44-0	Fluoranthene	0.825	0.082	0.041	ug/l	
86-73-7	Fluorene	0.0605	0.082	0.041	ug/l	J
193-39-5	Indeno(1,2,3-cd)pyrene [b]	0.263	0.082	0.041	ug/l	
91-20-3	Naphthalene	0.104	0.082	0.041	ug/l	
85-01-8	Phenanthrene	0.571	0.082	0.041	ug/l	
129-00-0	Pyrene	0.730	0.082	0.041	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	117%		29-124%
321-60-8	2-Fluorobiphenyl	99%		23-122%
1718-51-0	Terphenyl-d14	112%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-4DU		
Lab Sample ID:	JD36624-4	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81279.D	1	12/18/21 00:39	RK	12/14/21 14:45	OP37120	G6G2874
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane)	0.046	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		10-190%
877-09-8	Tetrachloro-m-xylene	109%		10-190%
2051-24-3	Decachlorobiphenyl	44%		10-156%
2051-24-3	Decachlorobiphenyl	45%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-4DU
Lab Sample ID: JD36624-4
Matrix: AQ - Ground Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/08/21
Date Received: 12/10/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	145	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	3.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	50.2	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	118000	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	9.6	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	635	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	46100	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	190	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	6.1	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	3490	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	24800	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	< 2.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30380
(5) Prep QC Batch: MP30440

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF MW-4DU
Lab Sample ID: JD36624-4F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/08/21
Date Received: 12/10/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	2.7	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	43.7	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	117000	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	2.9	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	273	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	46000	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	181	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	3.1	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	3500	500	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	24400	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	< 2.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30380
(5) Prep QC Batch: MP30440

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	DUP-2021		
Lab Sample ID:	JD36624-5	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167433.D	1	12/17/21 15:46	BK	n/a	n/a	V3A7266
Run #2	3A167467.D	20	12/20/21 17:34	BK	n/a	n/a	V3A7268

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	243 [a]	8.0	1.9	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	299% [b]	157%	39-174%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DUP-2021		
Lab Sample ID:	JD36624-5	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D171940.D	1	12/16/21 22:05	NH	n/a	n/a	V3D7294
Run #2	1X193038.D	10	12/17/21 16:27	BK	n/a	n/a	V1X8363

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	11.2	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.1	2.0	0.62	ug/l	J
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	170	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [a]	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	902 [b]	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	7.4	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	108	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	182	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	1.7	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	160 [b]	10	5.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	1230 [b]	10	5.1	ug/l	
156-60-5	trans-1,2-Dichloroethene	16.2	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	1.2	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DUP-2021
Lab Sample ID: JD36624-5
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/08/21
Date Received: 12/10/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	70.7	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	110	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	3.7	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	7.7	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	200	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	77.1	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%	101%	80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-2021		
Lab Sample ID:	JD36624-5	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	89%	103%	80-120%
2037-26-5	Toluene-D8	100%	100%	80-120%
460-00-4	4-Bromofluorobenzene	98%	102%	82-114%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DUP-2021		
Lab Sample ID:	JD36624-5	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80494.D	1	12/18/21 07:27	CS	12/14/21 18:08	OP37108	E5P3810
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol [a]	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	20.7	2.0	0.53	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-2021		
Lab Sample ID:	JD36624-5	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	2.1	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline [a]	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.9	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	27%		10-73%
4165-62-2	Phenol-d5	19%		10-64%
118-79-6	2,4,6-Tribromophenol	97%		31-130%
4165-60-0	Nitrobenzene-d5	60%		28-126%
321-60-8	2-Fluorobiphenyl	71%		26-114%
1718-51-0	Terphenyl-d14	85%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DUP-2021		
Lab Sample ID:	JD36624-5	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50376.D	1	12/30/21 15:22	KLS	12/14/21 18:08	OP37108A	E4P2638
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene [a]	0.101	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene [a]	0.456	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	0.415	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	0.521	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene [a]	0.283	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	0.218	0.080	0.040	ug/l	
218-01-9	Chrysene	0.261	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.0816	0.080	0.040	ug/l	
206-44-0	Fluoranthene	0.816	0.080	0.040	ug/l	
86-73-7	Fluorene	ND	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene [a]	0.246	0.080	0.040	ug/l	
91-20-3	Naphthalene	0.117	0.080	0.040	ug/l	
85-01-8	Phenanthrene	0.549	0.080	0.040	ug/l	
129-00-0	Pyrene	0.719	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	123%		29-124%
321-60-8	2-Fluorobiphenyl	108%		23-122%
1718-51-0	Terphenyl-d14	126%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DUP-2021		
Lab Sample ID:	JD36624-5	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81280.D	1	12/18/21 00:57	RK	12/14/21 14:45	OP37120	G6G2874
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane) [a]	0.037	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	60%		10-190%
877-09-8	Tetrachloro-m-xylene	103%		10-190%
2051-24-3	Decachlorobiphenyl	39%		10-156%
2051-24-3	Decachlorobiphenyl	41%		10-156%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-2021		
Lab Sample ID:	JD36624-5	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	130	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	2.7	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	44.9	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	112000	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Chromium	7.3	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	559	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	43200	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Manganese	177	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	5.4	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	3240	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/11/22	NV	SW846 6020B [3]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	23100	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	< 2.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Instrument QC Batch: MA51719
(5) Prep QC Batch: MP30381
(6) Prep QC Batch: MP30440

RL = Reporting Limit

Report of Analysis

Client Sample ID: DUP-2021
Lab Sample ID: JD36624-5F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/08/21
Date Received: 12/10/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	2.8	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	43.7	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	124000	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	3.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	289	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	48200	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	191	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	3.3	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	3710	500	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	25200	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	< 2.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-FA		
Lab Sample ID:	JD36624-6	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167435.D	1	12/17/21 17:40	BK	n/a	n/a	V3A7266
Run #2	3A167468.D	20	12/20/21 18:03	BK	n/a	n/a	V3A7268

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	151 [a]	8.0	1.9	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	181% [b]	156%	39-174%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-FA		
Lab Sample ID:	JD36624-6	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D171937.D	5	12/16/21 20:43	NH	n/a	n/a	V3D7294
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	42.8	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	4.2	10	3.1	ug/l	J
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	856	5.0	2.8	ug/l	
75-00-3	Chloroethane	ND	5.0	3.6	ug/l	
67-66-3	Chloroform	ND	5.0	2.5	ug/l	
74-87-3	Chloromethane [b]	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	425	5.0	2.7	ug/l	
541-73-1	1,3-Dichlorobenzene	22.0	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	186	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	28.1	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	13.3	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	65.5	5.0	2.5	ug/l	
156-60-5	trans-1,2-Dichloroethene	3.1	5.0	2.7	ug/l	J
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-FA		
Lab Sample ID:	JD36624-6	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
98-82-8	Isopropylbenzene	4.1	5.0	3.2	ug/l	J
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	279	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
75-65-0	Tert Butyl Alcohol	336	50	29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
109-99-9	Tetrahydrofuran [b]	ND	50	16	ug/l	
108-88-3	Toluene	2.7	5.0	2.7	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	4.7	5.0	2.5	ug/l	J
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	2.8	5.0	2.6	ug/l	J
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	50	10	ug/l	
75-01-4	Vinyl chloride	43.0	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-FA		
Lab Sample ID:	JD36624-6	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		80-120%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	97%		82-114%

(a) Dilution required due to high concentration of target compound.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-FA		
Lab Sample ID:	JD36624-6	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80495.D	1	12/18/21 07:54	CS	12/14/21 18:08	OP37108	E5P3810
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	0.99	4.0	0.37	ug/l	J
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	0.62	2.0	0.52	ug/l	J
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol [a]	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	19.8	2.0	0.53	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-FA		
Lab Sample ID:	JD36624-6	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	2.3	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline [a]	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	2.4	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	27%		10-73%
4165-62-2	Phenol-d5	21%		10-64%
118-79-6	2,4,6-Tribromophenol	99%		31-130%
4165-60-0	Nitrobenzene-d5	64%		28-126%
321-60-8	2-Fluorobiphenyl	60%		26-114%
1718-51-0	Terphenyl-d14	74%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-FA		
Lab Sample ID:	JD36624-6	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50287.D	1	12/27/21 23:44	KLS	12/14/21 18:08	OP37108A	E4P2635
Run #2 [a]	4P50377.D	1	12/30/21 15:46	KLS	12/14/21 18:08	OP37108A	E4P2638

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2	250 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.102	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	0.693	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	0.197	0.080	0.040	ug/l	
86-73-7	Fluorene	0.101	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	0.227	0.080	0.040	ug/l	
85-01-8	Phenanthrene	0.280	0.080	0.040	ug/l	
129-00-0	Pyrene	0.209	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	129% [c]	131% [b]	29-124%
321-60-8	2-Fluorobiphenyl	114%	113%	23-122%
1718-51-0	Terphenyl-d14	117%	118%	22-130%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-FA		
Lab Sample ID:	JD36624-6	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92478.D	1	12/14/21 14:16	WC	n/a	n/a	GAA2462
Run #2 [a]	AA92479.D	20	12/14/21 14:29	WC	n/a	n/a	GAA2462

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1010 [b]	2.2	1.6	ug/l	
74-84-0	Ethane	5.52	0.23	0.14	ug/l	
74-85-1	Ethene	2.2	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-FA		
Lab Sample ID:	JD36624-6	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81281.D	1	12/18/21 01:15	RK	12/14/21 14:45	OP37120	G6G2874
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane) [a]	0.023	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD [a]	0.025	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	0.022	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide [a]	0.039	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%		10-190%
877-09-8	Tetrachloro-m-xylene	62%		10-190%
2051-24-3	Decachlorobiphenyl	48%		10-156%
2051-24-3	Decachlorobiphenyl	31%		10-156%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-FA
Lab Sample ID: JD36624-6
Matrix: AQ - Ground Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/08/21
Date Received: 12/10/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	816	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	2.7	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	8.9	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	79800	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	7.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	6.3	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	1030	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	67000	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	6390	100	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	16.7	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	2760	500	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	99400	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	2.9	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-FA		
Lab Sample ID:	JD36624-6	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	39.2	20	mg/l	10	12/27/21 17:13	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF MW-FA
Lab Sample ID: JD36624-6F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/08/21
Date Received: 12/10/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	2.5	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	7.2	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	81400	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	6.5	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	189	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	72000	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	7050	100	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	16.1	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	2660	500	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	105000	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	< 2.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-FB		
Lab Sample ID:	JD36624-7	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167429.D	1	12/17/21 13:33	BK	n/a	n/a	V3A7266
Run #2 [a]	3A167469.D	10	12/20/21 18:32	BK	n/a	n/a	V3A7268

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	76.3	0.40	0.095	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	258% [b]	203% [b]	39-174%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-FB		
Lab Sample ID:	JD36624-7	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1X193040.D	5	12/17/21 17:18	BK	n/a	n/a	V1X8363
Run #2	3D171938.D	20	12/16/21 21:10	NH	n/a	n/a	V3D7294

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/l	
71-43-2	Benzene	11.1	2.5	2.1	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.7	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.4	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.3	ug/l	
75-25-2	Bromoform	ND	5.0	3.2	ug/l	
74-83-9	Bromomethane	ND	10	8.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	34	ug/l	
104-51-8	n-Butylbenzene	ND	10	2.6	ug/l	
135-98-8	sec-Butylbenzene	ND	10	3.1	ug/l	
98-06-6	tert-Butylbenzene	ND	10	3.4	ug/l	
75-15-0	Carbon disulfide	ND	10	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	2.8	ug/l	
108-90-7	Chlorobenzene	2260 [b]	20	11	ug/l	
75-00-3	Chloroethane	12.0	5.0	3.6	ug/l	
67-66-3	Chloroform	7.8	5.0	2.5	ug/l	
74-87-3	Chloromethane	ND	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	10	3.2	ug/l	
106-43-4	p-Chlorotoluene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.6	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	2.8	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	2.4	ug/l	
95-50-1	1,2-Dichlorobenzene	1900 [b]	20	11	ug/l	
541-73-1	1,3-Dichlorobenzene	20.4	5.0	2.7	ug/l	
106-46-7	1,4-Dichlorobenzene	354	5.0	2.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.8	ug/l	
75-34-3	1,1-Dichloroethane	170	5.0	2.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	3.0	ug/l	
75-35-4	1,1-Dichloroethene	30.6	5.0	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	2140 [b]	20	10	ug/l	
156-60-5	trans-1,2-Dichloroethene	76.0	5.0	2.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	2.5	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-FB		
Lab Sample ID:	JD36624-7	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	2.1	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	2.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	2.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.2	ug/l	
100-41-4	Ethylbenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.7	ug/l	
591-78-6	2-Hexanone	ND	25	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	3.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	3.3	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	9.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	10	5.0	ug/l	
91-20-3	Naphthalene	ND	25	13	ug/l	
103-65-1	n-Propylbenzene	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	5.0	2.4	ug/l	
75-65-0	Tert Butyl Alcohol	ND	50	29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.3	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	4.5	ug/l	
109-99-9	Tetrahydrofuran	ND	50	16	ug/l	
108-88-3	Toluene	ND	5.0	2.7	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	8.5	5.0	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	84.3	5.0	2.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.7	ug/l	
79-01-6	Trichloroethene	18.2	5.0	2.6	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	50	10	ug/l	
75-01-4	Vinyl chloride	16.4	5.0	3.9	ug/l	
	m,p-Xylene	ND	5.0	3.9	ug/l	
95-47-6	o-Xylene	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	87%	80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-FB		
Lab Sample ID:	JD36624-7	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%	91%	80-120%
2037-26-5	Toluene-D8	98%	102%	80-120%
460-00-4	4-Bromofluorobenzene	102%	99%	82-114%

(a) Dilution required due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-FB		
Lab Sample ID:	JD36624-7	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80496.D	1	12/18/21 08:21	CS	12/14/21 18:08	OP37108	E5P3810
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	35.5	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	5.1	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol [a]	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	19.6	2.0	0.53	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	

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E = Indicates value exceeds calibration range
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-FB		
Lab Sample ID:	JD36624-7	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	2.3	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	2.3	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline [a]	ND	4.0	0.75	ug/l	
91-20-3	Naphthalene	5.8	1.0	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	5.5	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	29%		10-73%
4165-62-2	Phenol-d5	22%		10-64%
118-79-6	2,4,6-Tribromophenol	93%		31-130%
4165-60-0	Nitrobenzene-d5	71%		28-126%
321-60-8	2-Fluorobiphenyl	74%		26-114%
1718-51-0	Terphenyl-d14	75%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-FB		
Lab Sample ID:	JD36624-7	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50288.D	1	12/28/21 00:08	KLS	12/14/21 18:08	OP37108A	E4P2635
Run #2 [a]	4P50378.D	1	12/30/21 16:09	KLS	12/14/21 18:08	OP37108A	E4P2638

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2	250 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.0663	0.080	0.040	ug/l	J
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	ND	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	ND	0.080	0.040	ug/l	
86-73-7	Fluorene	ND	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
85-01-8	Phenanthrene	0.765	0.080	0.040	ug/l	
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	143% [c]	143% [b]	29-124%
321-60-8	2-Fluorobiphenyl	118%	119%	23-122%
1718-51-0	Terphenyl-d14	114%	118%	22-130%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-FB		
Lab Sample ID:	JD36624-7	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92480.D	1	12/14/21 14:42	WC	n/a	n/a	GAA2462
Run #2 [a]	AA92482.D	20	12/14/21 15:08	WC	n/a	n/a	GAA2462

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	862 [b]	2.2	1.6	ug/l	
74-84-0	Ethane	0.62	0.23	0.14	ug/l	
74-85-1	Ethene	0.60	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.; 2 mm diameter bubble present in headspace.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-FB		
Lab Sample ID:	JD36624-7	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81282.D	1	12/18/21 01:33	RK	12/14/21 14:45	OP37120	G6G2874
Run #2 [a]	6G81353.D	5	12/21/21 04:44	CP	12/14/21 14:45	OP37120	G6G2878

	Initial Volume	Final Volume
Run #1	270 ml	2.0 ml
Run #2	270 ml	2.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0074	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.0074	0.0039	ug/l	
319-85-7	beta-BHC	ND	0.0074	0.0059	ug/l	
319-86-8	delta-BHC	ND	0.0074	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0074	0.0044	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0074	0.0037	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0074	0.0032	ug/l	
60-57-1	Dieldrin	ND	0.0074	0.0057	ug/l	
72-54-8	4,4'-DDD	ND	0.0074	0.0043	ug/l	
72-55-9	4,4'-DDE	ND	0.0074	0.0037	ug/l	
50-29-3	4,4'-DDT	ND	0.0074	0.0051	ug/l	
72-20-8	Endrin	ND	0.0074	0.0045	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0074	0.0040	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0074	0.0050	ug/l	
53494-70-5	Endrin ketone	ND	0.0074	0.0046	ug/l	
959-98-8	Endosulfan-I	ND	0.0074	0.0039	ug/l	
33213-65-9	Endosulfan-II	ND	0.0074	0.0036	ug/l	
76-44-8	Heptachlor	ND	0.0074	0.0033	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0074	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0050	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	22%	55%	10-190%
877-09-8	Tetrachloro-m-xylene	19%	39%	10-190%
2051-24-3	Decachlorobiphenyl	18%	76%	10-156%
2051-24-3	Decachlorobiphenyl	13%	45%	10-156%

(a) Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-FB		
Lab Sample ID:	JD36624-7	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	417	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	1.6	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	5.6	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	152000	6300	ug/l	25	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	13.2	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	495	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	65600	6300	ug/l	25	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	815	25	ug/l	25	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	5.8	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	8180	500	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	40600	6300	ug/l	25	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	19.9	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-FB		
Lab Sample ID:	JD36624-7	**Date Sampled:**	12/08/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	376	20	mg/l	10	12/27/21 18:11	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-FB		
Lab Sample ID:	JD36624-7F	**Date Sampled:**	12/08/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	1.5	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	4.8	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	151000	6300	ug/l	25	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	6.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	64800	6300	ug/l	25	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	796	25	ug/l	25	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	5.2	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	7940	500	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	40800	6300	ug/l	25	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	18.1	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-13		
Lab Sample ID:	JD36624-8	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167494.D	2	12/21/21 14:01	BK	n/a	n/a	V3A7269
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	4.5	0.80	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	142%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-13		
Lab Sample ID:	JD36624-8	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D171934.D	1	12/16/21 19:22	NH	n/a	n/a	V3D7294
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	20.8	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	1.1	2.0	0.46	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	1.2	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [a]	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	1.2	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	2.3	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.2	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-13
Lab Sample ID: JD36624-8
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/09/21
Date Received: 12/10/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	2.8	5.0	1.9	ug/l	J
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	20.4	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran [a]	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-13		
Lab Sample ID:	JD36624-8	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	90%		80-120%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	97%		82-114%

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-13		
Lab Sample ID:	JD36624-8	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2M120969.D	1	12/22/21 06:18	CS	12/16/21 09:30	OP37113	E2M5439
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.8	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.8	0.51	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.50	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.8	0.65	ug/l	
51-28-5	2,4-Dinitrophenol	ND	3.8	1.8	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.8	0.44	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.8	1.5	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.45	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.8	0.38	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.7	0.43	ug/l	
87-86-5	Pentachlorophenol	ND	3.8	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.25	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.8	0.61	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.8	0.47	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.8	0.57	ug/l	
98-86-2	Acetophenone	ND	1.9	0.50	ug/l	
62-53-3	Aniline	ND	1.9	0.73	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.83	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.95	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	3.8	0.51	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.44	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.57	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.96	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.96	0.54	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.1	ug/l	
132-64-9	Dibenzofuran	ND	3.8	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	17.3	1.9	0.51	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	1.9	1.6	ug/l	

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-13		
Lab Sample ID:	JD36624-8	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.9	0.56	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.53	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	0.96	0.52	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.96	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene [a]	ND	7.7	0.94	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.53	ug/l	
78-59-1	Isophorone	ND	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.96	0.62	ug/l	
88-74-4	2-Nitroaniline	ND	3.8	0.59	ug/l	
99-09-2	3-Nitroaniline	ND	3.8	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	3.8	0.72	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.40	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.30	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.62	ug/l	
86-30-6	N-Nitrosodiphenylamine	0.71	3.8	0.41	ug/l	J
82-68-8	Pentachloronitrobenzene	ND	3.8		ug/l	
110-86-1	Pyridine	ND	1.9	0.30	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.96	0.34	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	37%		10-73%
4165-62-2	Phenol-d5	26%		10-64%
118-79-6	2,4,6-Tribromophenol	94%		31-130%
4165-60-0	Nitrobenzene-d5	76%		28-126%
321-60-8	2-Fluorobiphenyl	56%		26-114%
1718-51-0	Terphenyl-d14	61%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

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RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-13		
Lab Sample ID:	JD36624-8	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50370.D	1	12/30/21 12:59	KLS	12/16/21 09:30	OP37113A	E4P2638
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.077	0.038	ug/l	
208-96-8	Acenaphthylene	0.0409	0.077	0.038	ug/l	J
120-12-7	Anthracene [a]	0.0546	0.077	0.038	ug/l	J
56-55-3	Benzo(a)anthracene [a]	0.0962	0.038	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.038	0.023	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.038	0.023	ug/l	
191-24-2	Benzo(g,h,i)perylene [b]	ND	0.077	0.038	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.077	0.038	ug/l	
218-01-9	Chrysene	ND	0.077	0.038	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.077	0.038	ug/l	
206-44-0	Fluoranthene	0.0555	0.077	0.038	ug/l	J
86-73-7	Fluorene	0.0573	0.077	0.038	ug/l	J
193-39-5	Indeno(1,2,3-cd)pyrene [b]	ND	0.077	0.038	ug/l	
91-20-3	Naphthalene	0.0645	0.077	0.038	ug/l	J
85-01-8	Phenanthrene	0.0518	0.077	0.038	ug/l	J
129-00-0	Pyrene	0.0498	0.077	0.038	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	104%		29-124%
321-60-8	2-Fluorobiphenyl	96%		23-122%
1718-51-0	Terphenyl-d14	75%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-13		
Lab Sample ID:	JD36624-8	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92483.D	1	12/14/21 15:21	WC	n/a	n/a	GAA2462
Run #2 [a]	AA92484.D	20	12/14/21 15:34	WC	n/a	n/a	GAA2462

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	571 [b]	2.2	1.6	ug/l	
74-84-0	Ethane	0.63	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-13		
Lab Sample ID:	JD36624-8	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81283.D	1	12/18/21 01:51	RK	12/14/21 14:45	OP37120	G6G2874
Run #2 [a]	6G81354.D	5	12/21/21 05:02	CP	12/14/21 14:45	OP37120	G6G2878

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2	260 ml	2.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin [b]	0.026	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC [b]	0.17	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II [b]	0.050	0.0077	0.0038	ug/l	
76-44-8	Heptachlor [b]	0.021	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%	94%	10-190%
877-09-8	Tetrachloro-m-xylene	76%	77%	10-190%
2051-24-3	Decachlorobiphenyl	19%	23%	10-156%
2051-24-3	Decachlorobiphenyl	17%	24%	10-156%

(a) Confirmation run.
(b) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-13
Lab Sample ID: JD36624-8
Matrix: AQ - Ground Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/09/21
Date Received: 12/10/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	599	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	23.8	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	145	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	65500	2500	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	26.4	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	15.7	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	7.1	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	16300	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	1.9	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	51200	2500	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	3750	50	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	16.9	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	45200	2500	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	164000	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	12.7	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	86.5	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-13		
Lab Sample ID:	JD36624-8	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	414	20	mg/l	10	12/27/21 18:30	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF MW-13
Lab Sample ID: JD36624-8F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/09/21
Date Received: 12/10/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	13.1	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	124	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	70600	2500	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	15.1	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	1880	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	53600	2500	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	3780	50	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	10.9	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	47700	2500	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	168000	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	< 2.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	46.8	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-C		
Lab Sample ID:	JD36624-9	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167441.D	1	12/17/21 20:32	BK	n/a	n/a	V3A7266
Run #2 [a]	3A167495.D	10	12/21/21 14:29	BK	n/a	n/a	V3A7269

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	23.3	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	303% [b]	220% [b]	39-174%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-C		
Lab Sample ID:	JD36624-9	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X193039.D	1	12/17/21 16:53	BK	n/a	n/a	V1X8363
Run #2	1X193117.D	20	12/21/21 14:35	BK	n/a	n/a	V1X8366

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	128	10	3.1	ug/l	
71-43-2	Benzene	1.0	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	0.91	1.0	0.48	ug/l	J
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	13.8	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.9	10	6.9	ug/l	J
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	0.72	2.0	0.46	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	324 [a]	20	11	ug/l	
75-00-3	Chloroethane	10	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	69.1	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	599 [a]	20	11	ug/l	
541-73-1	1,3-Dichlorobenzene	6.2	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	131	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	218 [a]	20	11	ug/l	
107-06-2	1,2-Dichloroethane	0.72	1.0	0.60	ug/l	J
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	270 [a]	20	10	ug/l	
156-60-5	trans-1,2-Dichloroethene	44.6	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	1.1	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF MW-C
Lab Sample ID: JD36624-9
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/09/21
Date Received: 12/10/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	1.3	2.0	1.0	ug/l	J
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.4	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	8.6	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	74.6	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	2.4	1.0	0.53	ug/l	
79-01-6	Trichloroethene	13.5	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	101%	80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-C		
Lab Sample ID:	JD36624-9	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	102%	105%	80-120%
2037-26-5	Toluene-D8	97%	99%	80-120%
460-00-4	4-Bromofluorobenzene	101%	98%	82-114%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-C		
Lab Sample ID:	JD36624-9	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2M120970.D	1	12/22/21 06:43	CS	12/16/21 09:30	OP37113	E2M5439
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.8	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.8	0.51	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.50	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.8	0.65	ug/l	
51-28-5	2,4-Dinitrophenol	ND	3.8	1.8	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.8	0.44	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.8	1.5	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.45	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.8	0.38	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.7	0.43	ug/l	
87-86-5	Pentachlorophenol	ND	3.8	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.25	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.8	0.61	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.8	0.47	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.8	0.57	ug/l	
98-86-2	Acetophenone	1.2	1.9	0.50	ug/l	J
62-53-3	Aniline	ND	1.9	0.73	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.83	ug/l	
100-51-6	Benzyl Alcohol	3.7	1.9	0.95	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	3.8	0.51	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.44	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.57	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.96	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.96	0.54	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.1	ug/l	
132-64-9	Dibenzofuran	ND	3.8	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	33.8	1.9	0.51	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	1.9	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-C		
Lab Sample ID:	JD36624-9	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.9	0.56	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.53	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	4.3	1.9	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	0.96	0.52	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.96	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene [a]	ND	7.7	0.94	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.53	ug/l	
78-59-1	Isophorone	ND	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.96	0.62	ug/l	
88-74-4	2-Nitroaniline	ND	3.8	0.59	ug/l	
99-09-2	3-Nitroaniline	ND	3.8	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	3.8	0.72	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.40	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.30	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.62	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.8	0.41	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.8		ug/l	
110-86-1	Pyridine	ND	1.9	0.30	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	5.6	0.96	0.34	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	27%		10-73%
4165-62-2	Phenol-d5	17%		10-64%
118-79-6	2,4,6-Tribromophenol	74%		31-130%
4165-60-0	Nitrobenzene-d5	74%		28-126%
321-60-8	2-Fluorobiphenyl	77%		26-114%
1718-51-0	Terphenyl-d14	58%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-C		
Lab Sample ID:	JD36624-9	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50371.D	1	12/30/21 13:22	KLS	12/16/21 09:30	OP37113A	E4P2638
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.077	0.038	ug/l	
208-96-8	Acenaphthylene	ND	0.077	0.038	ug/l	
120-12-7	Anthracene [a]	ND	0.077	0.038	ug/l	
56-55-3	Benzo(a)anthracene [b]	0.133	0.038	0.023	ug/l	
50-32-8	Benzo(a)pyrene	0.0577	0.038	0.023	ug/l	
205-99-2	Benzo(b)fluoranthene	0.275	0.038	0.023	ug/l	
191-24-2	Benzo(g,h,i)perylene [b]	0.123	0.077	0.038	ug/l	
207-08-9	Benzo(k)fluoranthene	0.116	0.077	0.038	ug/l	
218-01-9	Chrysene	0.139	0.077	0.038	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.0412	0.077	0.038	ug/l	J
206-44-0	Fluoranthene	0.124	0.077	0.038	ug/l	
86-73-7	Fluorene	ND	0.077	0.038	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene [b]	0.121	0.077	0.038	ug/l	
91-20-3	Naphthalene	0.183	0.077	0.038	ug/l	
85-01-8	Phenanthrene	0.0842	0.077	0.038	ug/l	
129-00-0	Pyrene	0.0729	0.077	0.038	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	89%		29-124%
321-60-8	2-Fluorobiphenyl	74%		23-122%
1718-51-0	Terphenyl-d14	60%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-C		
Lab Sample ID:	JD36624-9	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92485.D	1	12/14/21 15:46	WC	n/a	n/a	GAA2462
Run #2 [a]	AA92486.D	5	12/14/21 15:59	WC	n/a	n/a	GAA2462

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	327 [b]	0.55	0.40	ug/l	
74-84-0	Ethane	0.39	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-C		
Lab Sample ID:	JD36624-9	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81284.D	1	12/18/21 02:09	RK	12/14/21 14:45	OP37120	G6G2874
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0071	0.0037	ug/l	
319-84-6	alpha-BHC	ND	0.0071	0.0037	ug/l	
319-85-7	beta-BHC	ND	0.0071	0.0057	ug/l	
319-86-8	delta-BHC	ND	0.0071	0.0047	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0071	0.0043	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0071	0.0035	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0071	0.0030	ug/l	
60-57-1	Dieldrin	ND	0.0071	0.0055	ug/l	
72-54-8	4,4'-DDD	ND	0.0071	0.0041	ug/l	
72-55-9	4,4'-DDE	ND	0.0071	0.0036	ug/l	
50-29-3	4,4'-DDT	ND	0.0071	0.0049	ug/l	
72-20-8	Endrin	ND	0.0071	0.0043	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0071	0.0039	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0071	0.0048	ug/l	
53494-70-5	Endrin ketone	ND	0.0071	0.0044	ug/l	
959-98-8	Endosulfan-I	ND	0.0071	0.0038	ug/l	
33213-65-9	Endosulfan-II	ND	0.0071	0.0035	ug/l	
76-44-8	Heptachlor	ND	0.0071	0.0032	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0071	0.0043	ug/l	
72-43-5	Methoxychlor	ND	0.014	0.0048	ug/l	
8001-35-2	Toxaphene	ND	0.18	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		10-190%
877-09-8	Tetrachloro-m-xylene	35%		10-190%
2051-24-3	Decachlorobiphenyl	31%		10-156%
2051-24-3	Decachlorobiphenyl	19%		10-156%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-C		
Lab Sample ID:	JD36624-9	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3830	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	16.9	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	123	2.0	ug/l	2	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Beryllium	1.5	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	365000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	143	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	12.2	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	30.7	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	28400	250	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Lead	12.7	1.0	ug/l	2	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Magnesium	349000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	503	10	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury [a]	1.5	0.60	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	44.2	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	250000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Selenium	1.4	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	631000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	36.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	60.9	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-C		
Lab Sample ID:	JD36624-9	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	1930	100	mg/l	50	12/27/21 18:49	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-C		
Lab Sample ID:	JD36624-9F	**Date Sampled:**	12/09/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	3.6	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	26.8	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	345000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	98.5	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	3.2	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	11.4	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	360000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	23.1	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	0.49	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	31.3	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	263000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Selenium	1.2	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	673000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	4.5	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	14.5	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-D		
Lab Sample ID:	JD36624-10	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167438.D	1	12/17/21 19:07	BK	n/a	n/a	V3A7266
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	2.3	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	161%		39-174%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-D		
Lab Sample ID:	JD36624-10	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X193037.D	1	12/17/21 16:01	BK	n/a	n/a	V1X8363
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	5.1	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	4.4	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	0.90	1.0	0.51	ug/l	J
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	5.6	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.1	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-D		
Lab Sample ID:	JD36624-10	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	0.88	1.0	0.79	ug/l	J
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-D		
Lab Sample ID:	JD36624-10	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	104%		80-120%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	102%		82-114%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-D		
Lab Sample ID:	JD36624-10	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2M120971.D	1	12/22/21 07:08	CS	12/16/21 09:30	OP37113	E2M5439
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.8	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.8	0.51	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.50	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.8	0.65	ug/l	
51-28-5	2,4-Dinitrophenol	ND	3.8	1.8	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.8	0.44	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.8	1.5	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.45	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.8	0.38	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.7	0.43	ug/l	
87-86-5	Pentachlorophenol	ND	3.8	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.25	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.8	0.61	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.8	0.47	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.8	0.57	ug/l	
98-86-2	Acetophenone	ND	1.9	0.50	ug/l	
62-53-3	Aniline	ND	1.9	0.73	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.83	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.95	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	3.8	0.51	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.44	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.57	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.96	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.96	0.54	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.1	ug/l	
132-64-9	Dibenzofuran	ND	3.8	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	13.8	1.9	0.51	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	1.9	1.6	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-D		
Lab Sample ID:	JD36624-10	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.9	0.56	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.53	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	0.96	0.52	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.96	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene [a]	ND	7.7	0.94	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.53	ug/l	
78-59-1	Isophorone	ND	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.96	0.62	ug/l	
88-74-4	2-Nitroaniline	ND	3.8	0.59	ug/l	
99-09-2	3-Nitroaniline	ND	3.8	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	3.8	0.72	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.40	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.30	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.62	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.8	0.41	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.8		ug/l	
110-86-1	Pyridine	ND	1.9	0.30	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.96	0.34	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		10-73%
4165-62-2	Phenol-d5	27%		10-64%
118-79-6	2,4,6-Tribromophenol	88%		31-130%
4165-60-0	Nitrobenzene-d5	76%		28-126%
321-60-8	2-Fluorobiphenyl	83%		26-114%
1718-51-0	Terphenyl-d14	64%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-D		
Lab Sample ID:	JD36624-10	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50372.D	1	12/30/21 13:47	KLS	12/16/21 09:30	OP37113A	E4P2638
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.077	0.038	ug/l	
208-96-8	Acenaphthylene	ND	0.077	0.038	ug/l	
120-12-7	Anthracene [a]	ND	0.077	0.038	ug/l	
56-55-3	Benzo(a)anthracene [a]	ND	0.038	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.038	0.023	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.038	0.023	ug/l	
191-24-2	Benzo(g,h,i)perylene [a]	ND	0.077	0.038	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.077	0.038	ug/l	
218-01-9	Chrysene	ND	0.077	0.038	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.077	0.038	ug/l	
206-44-0	Fluoranthene	ND	0.077	0.038	ug/l	
86-73-7	Fluorene	ND	0.077	0.038	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene [a]	ND	0.077	0.038	ug/l	
91-20-3	Naphthalene	ND	0.077	0.038	ug/l	
85-01-8	Phenanthrene	ND	0.077	0.038	ug/l	
129-00-0	Pyrene	ND	0.077	0.038	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	105%		29-124%
321-60-8	2-Fluorobiphenyl	89%		23-122%
1718-51-0	Terphenyl-d14	75%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

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N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-D		
Lab Sample ID:	JD36624-10	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92493.D	1	12/15/21 09:28	WC	n/a	n/a	GAA2463
Run #2 [a]	AA92494.D	5	12/15/21 09:40	WC	n/a	n/a	GAA2463

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	215 [b]	0.55	0.40	ug/l	
74-84-0	Ethane	0.38	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF MW-D		
Lab Sample ID:	JD36624-10	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81285.D	1	12/18/21 02:26	RK	12/14/21 14:45	OP37120	G6G2874
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		10-190%
877-09-8	Tetrachloro-m-xylene	70%		10-190%
2051-24-3	Decachlorobiphenyl	37%		10-156%
2051-24-3	Decachlorobiphenyl	33%		10-156%

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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF MW-D		
Lab Sample ID:	JD36624-10	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	426	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	3.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	40.8	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	43300	2500	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	5.4	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	900	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	20900	2500	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	2360	50	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	9.3	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	2930	500	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	34800	2500	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	3.3	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-D		
Lab Sample ID:	JD36624-10	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	87.4	2.0	mg/l	1	12/27/21 19:09	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF MW-D		
Lab Sample ID:	JD36624-10F	**Date Sampled:**	12/09/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	2.9	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	36.9	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	45600	2500	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	5.1	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	22200	2500	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	2460	50	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	9.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	2960	500	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	36700	2500	ug/l	10	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	2.3	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-1A		
Lab Sample ID:	JD36624-11	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167442.D	1	12/17/21 21:01	BK	n/a	n/a	V3A7266
Run #2 [a]	3A167496.D	1	12/21/21 14:59	BK	n/a	n/a	V3A7269

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	2.5	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	170%	140%	39-174%

(a) Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-1A		
Lab Sample ID:	JD36624-11	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X193044.D	1	12/17/21 19:02	BK	n/a	n/a	V1X8363
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	63.4	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	9.5	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	9.9	1.0	0.56	ug/l	
75-00-3	Chloroethane	0.81	1.0	0.73	ug/l	J
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	23.2	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	23.7	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.65	1.0	0.54	ug/l	J
106-46-7	1,4-Dichlorobenzene	8.8	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	23.1	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.9	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-1A		
Lab Sample ID:	JD36624-11	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.3	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	1.9	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-1A		
Lab Sample ID:	JD36624-11	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%		80-120%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	101%		82-114%

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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-1A		
Lab Sample ID:	JD36624-11	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2M120972.D	1	12/22/21 07:32	CS	12/16/21 09:30	OP37113	E2M5439
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.7	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.7	0.49	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.48	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.7	0.62	ug/l	
51-28-5	2,4-Dinitrophenol	ND	3.7	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.7	0.42	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.7	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.43	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.7	0.37	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.4	0.42	ug/l	
87-86-5	Pentachlorophenol	ND	3.7	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.7	0.59	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.7	0.45	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.7	0.55	ug/l	
98-86-2	Acetophenone	1.1	1.9	0.48	ug/l	J
62-53-3	Aniline	ND	1.9	0.70	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.51	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.80	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.91	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.40	ug/l	
106-47-8	4-Chloroaniline	ND	3.7	0.49	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.42	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.55	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.93	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.93	0.52	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.0	ug/l	
132-64-9	Dibenzofuran	ND	3.7	0.67	ug/l	
84-74-2	Di-n-butyl phthalate	16.2	1.9	0.49	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	1.9	1.5	ug/l	

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Report of Analysis

Client Sample ID:	HOFF IW-1A		
Lab Sample ID:	JD36624-11	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.9	0.54	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.51	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.93	0.50	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.93	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene [a]	ND	7.4	0.91	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.51	ug/l	
78-59-1	Isophorone	ND	1.9	0.36	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.93	0.60	ug/l	
88-74-4	2-Nitroaniline	ND	3.7	0.57	ug/l	
99-09-2	3-Nitroaniline	ND	3.7	0.59	ug/l	
100-01-6	4-Nitroaniline	ND	3.7	0.69	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.29	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.60	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.7	0.39	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.7		ug/l	
110-86-1	Pyridine	ND	1.9	0.29	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.45	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0	0.93	0.33	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		10-73%
4165-62-2	Phenol-d5	29%		10-64%
118-79-6	2,4,6-Tribromophenol	90%		31-130%
4165-60-0	Nitrobenzene-d5	79%		28-126%
321-60-8	2-Fluorobiphenyl	85%		26-114%
1718-51-0	Terphenyl-d14	78%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-1A		
Lab Sample ID:	JD36624-11	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50373.D	1	12/30/21 14:11	KLS	12/16/21 09:30	OP37113A	E4P2638
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.074	0.037	ug/l	
208-96-8	Acenaphthylene	ND	0.074	0.037	ug/l	
120-12-7	Anthracene [a]	ND	0.074	0.037	ug/l	
56-55-3	Benzo(a)anthracene [a]	ND	0.037	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.037	0.022	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.037	0.022	ug/l	
191-24-2	Benzo(g,h,i)perylene [a]	ND	0.074	0.037	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.074	0.037	ug/l	
218-01-9	Chrysene	ND	0.074	0.037	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.074	0.037	ug/l	
206-44-0	Fluoranthene	0.0479	0.074	0.037	ug/l	J
86-73-7	Fluorene	0.0482	0.074	0.037	ug/l	J
193-39-5	Indeno(1,2,3-cd)pyrene [a]	ND	0.074	0.037	ug/l	
91-20-3	Naphthalene	0.118	0.074	0.037	ug/l	
85-01-8	Phenanthrene	0.181	0.074	0.037	ug/l	
129-00-0	Pyrene	ND	0.074	0.037	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	106%		29-124%
321-60-8	2-Fluorobiphenyl	89%		23-122%
1718-51-0	Terphenyl-d14	88%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-1A		
Lab Sample ID:	JD36624-11	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92496.D	1	12/15/21 10:21	WC	n/a	n/a	GAA2463
Run #2 [a]	AA92497.D	5	12/15/21 10:34	WC	n/a	n/a	GAA2463

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	286 [b]	0.55	0.40	ug/l	
74-84-0	Ethane	0.36	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-1A		
Lab Sample ID:	JD36624-11	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81286.D	1	12/18/21 02:44	RK	12/14/21 14:45	OP37120	G6G2874
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	57%		10-190%
877-09-8	Tetrachloro-m-xylene	49%		10-190%
2051-24-3	Decachlorobiphenyl	41%		10-156%
2051-24-3	Decachlorobiphenyl	34%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF IW-1A
Lab Sample ID: JD36624-11
Matrix: AQ - Ground Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/09/21
Date Received: 12/10/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	182	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	1.7	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	34.5	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	123000	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	9.6	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	1.2	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	647	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	74200	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	988	20	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	14.9	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	6600	500	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	197000	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	6.2	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF IW-1A		
Lab Sample ID:	JD36624-11	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	539	20	mg/l	10	12/27/21 20:07	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF IW-1A
Lab Sample ID: JD36624-11F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/09/21
Date Received: 12/10/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	1.5	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	28.0	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	128000	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	8.9	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	1.1	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	< 50	50	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	77600	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	1060	20	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	14.1	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	6430	500	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	199000	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	5.3	2.0	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/08/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51703
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30440

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-1B		
Lab Sample ID:	JD36624-12	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167497.D	10	12/21/21 15:28	BK	n/a	n/a	V3A7269
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	36.8	4.0	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	131%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-1B		
Lab Sample ID:	JD36624-12	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X193045.D	1	12/17/21 19:28	BK	n/a	n/a	V1X8363
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	54.5	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	5.8	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	9.9	10	6.9	ug/l	J
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	6.4	1.0	0.56	ug/l	
75-00-3	Chloroethane	0.79	1.0	0.73	ug/l	J
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	12.6	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	104	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.68	1.0	0.54	ug/l	J
106-46-7	1,4-Dichlorobenzene	18.6	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	53.4	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	1.7	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	44.2	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	2.3	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	0.90	1.0	0.51	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF IW-1B
Lab Sample ID: JD36624-12
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/09/21
Date Received: 12/10/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	12.8	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.3	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	1.2	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	44.0	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-1B		
Lab Sample ID:	JD36624-12	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%		80-120%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	102%		82-114%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-1B		
Lab Sample ID:	JD36624-12	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2M120973.D	1	12/22/21 07:57	CS	12/16/21 09:30	OP37113	E2M5439
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.8	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.8	0.51	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	0.50	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.8	0.65	ug/l	
51-28-5	2,4-Dinitrophenol	ND	3.8	1.8	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.8	0.44	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.8	1.5	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.45	ug/l	
	3&4-Methylphenol	ND	1.9	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.8	0.38	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.7	0.43	ug/l	
87-86-5	Pentachlorophenol	ND	3.8	1.1	ug/l	
108-95-2	Phenol	ND	1.9	0.25	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.8	0.61	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.8	0.47	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.8	0.57	ug/l	
98-86-2	Acetophenone	ND	1.9	0.50	ug/l	
62-53-3	Aniline	ND	1.9	0.73	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.83	ug/l	
100-51-6	Benzyl Alcohol	ND	1.9	0.95	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	3.8	0.51	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.44	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.57	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.96	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.96	0.54	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	1.1	ug/l	
132-64-9	Dibenzofuran	ND	3.8	0.70	ug/l	
84-74-2	Di-n-butyl phthalate	16.4	1.9	0.51	ug/l	B
117-84-0	Di-n-octyl phthalate	ND	1.9	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-1B		
Lab Sample ID:	JD36624-12	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.9	0.56	ug/l	
131-11-3	Dimethyl phthalate	ND	1.9	0.53	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	0.96	0.52	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.96	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene [a]	ND	7.7	0.94	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.53	ug/l	
78-59-1	Isophorone	ND	1.9	0.38	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.96	0.62	ug/l	
88-74-4	2-Nitroaniline	ND	3.8	0.59	ug/l	
99-09-2	3-Nitroaniline	ND	3.8	0.61	ug/l	
100-01-6	4-Nitroaniline	ND	3.8	0.72	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.40	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	1.9	0.30	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.62	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.8	0.41	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.8		ug/l	
110-86-1	Pyridine	ND	1.9	0.30	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.2	0.96	0.34	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		10-73%
4165-62-2	Phenol-d5	33%		10-64%
118-79-6	2,4,6-Tribromophenol	94%		31-130%
4165-60-0	Nitrobenzene-d5	86%		28-126%
321-60-8	2-Fluorobiphenyl	89%		26-114%
1718-51-0	Terphenyl-d14	76%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-1B		
Lab Sample ID:	JD36624-12	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50374.D	1	12/30/21 14:35	KLS	12/16/21 09:30	OP37113A	E4P2638
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.077	0.038	ug/l	
208-96-8	Acenaphthylene	ND	0.077	0.038	ug/l	
120-12-7	Anthracene [a]	ND	0.077	0.038	ug/l	
56-55-3	Benzo(a)anthracene [b]	0.0883	0.038	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.038	0.023	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.038	0.023	ug/l	
191-24-2	Benzo(g,h,i)perylene [b]	0.0444	0.077	0.038	ug/l	J
207-08-9	Benzo(k)fluoranthene	ND	0.077	0.038	ug/l	
218-01-9	Chrysene	ND	0.077	0.038	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.077	0.038	ug/l	
206-44-0	Fluoranthene	ND	0.077	0.038	ug/l	
86-73-7	Fluorene	ND	0.077	0.038	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene [b]	0.0402	0.077	0.038	ug/l	J
91-20-3	Naphthalene	0.0555	0.077	0.038	ug/l	J
85-01-8	Phenanthrene	0.0904	0.077	0.038	ug/l	
129-00-0	Pyrene	ND	0.077	0.038	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	117%		29-124%
321-60-8	2-Fluorobiphenyl	99%		23-122%
1718-51-0	Terphenyl-d14	91%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-1B		
Lab Sample ID:	JD36624-12	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA92498.D	1	12/15/21 10:47	WC	n/a	n/a	GAA2463
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	84.9	0.11	0.080	ug/l	
74-84-0	Ethane	0.31	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-1B		
Lab Sample ID:	JD36624-12	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81287.D	1	12/18/21 03:02	RK	12/14/21 14:45	OP37120	G6G2874
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0074	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.0074	0.0039	ug/l	
319-85-7	beta-BHC	ND	0.0074	0.0059	ug/l	
319-86-8	delta-BHC	ND	0.0074	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0074	0.0044	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0074	0.0037	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0074	0.0032	ug/l	
60-57-1	Dieldrin	ND	0.0074	0.0057	ug/l	
72-54-8	4,4'-DDD	ND	0.0074	0.0043	ug/l	
72-55-9	4,4'-DDE	ND	0.0074	0.0037	ug/l	
50-29-3	4,4'-DDT	ND	0.0074	0.0051	ug/l	
72-20-8	Endrin	ND	0.0074	0.0045	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0074	0.0040	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0074	0.0050	ug/l	
53494-70-5	Endrin ketone	ND	0.0074	0.0046	ug/l	
959-98-8	Endosulfan-I	ND	0.0074	0.0039	ug/l	
33213-65-9	Endosulfan-II	ND	0.0074	0.0036	ug/l	
76-44-8	Heptachlor	ND	0.0074	0.0033	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0074	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0050	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		10-190%
877-09-8	Tetrachloro-m-xylene	46%		10-190%
2051-24-3	Decachlorobiphenyl	44%		10-156%
2051-24-3	Decachlorobiphenyl	29%		10-156%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-1B		
Lab Sample ID:	JD36624-12	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	369	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	1.4	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	14.2	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	161000	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Chromium	11.1	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	544	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	96100	13000	ug/l	50	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	199	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	6.9	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	6970	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	241000	13000	ug/l	50	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	7.7	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Instrument QC Batch: MA51719
(5) Prep QC Batch: MP30381
(6) Prep QC Batch: MP30441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF IW-1B		
Lab Sample ID:	JD36624-12	**Date Sampled:**	12/09/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	808	20	mg/l	10	12/27/21 20:27	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF IW-1B
Lab Sample ID: JD36624-12F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/09/21
Date Received: 12/10/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	10.3	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	146000	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Chromium	9.5	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	< 50	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	86200	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Manganese	174	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	5.8	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	6280	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	232000	13000	ug/l	50	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	6.1	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Instrument QC Batch: MA51719
(5) Prep QC Batch: MP30381
(6) Prep QC Batch: MP30441

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-3A		
Lab Sample ID:	JD36624-13	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167538.D	10	12/23/21 12:15	BK	n/a	n/a	V3A7273
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	31.4	4.0	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	142%		39-174%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-3A		
Lab Sample ID:	JD36624-13	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X193047.D	1	12/17/21 20:20	BK	n/a	n/a	V1X8363
Run #2	1X193066.D	10	12/20/21 16:23	BK	n/a	n/a	V1X8364

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	76.9	10	3.1	ug/l	
71-43-2	Benzene	1.2	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	33.9	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	8.3	10	6.9	ug/l	J
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	0.53	2.0	0.46	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	136	1.0	0.56	ug/l	
75-00-3	Chloroethane	1.5	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	89.1	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	270 [a]	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	2.7	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	42.1	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	28.4	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	118	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	19.8	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-3A		
Lab Sample ID:	JD36624-13	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	15.5	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	11.0	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	2.9	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	1.6	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	6.0	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	109%	80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-3A		
Lab Sample ID:	JD36624-13	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%	103%	80-120%
2037-26-5	Toluene-D8	99%	99%	80-120%
460-00-4	4-Bromofluorobenzene	103%	103%	82-114%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-3A		
Lab Sample ID:	JD36624-13	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80596.D	1	12/23/21 15:34	CS	12/17/21 10:00	OP37115	E5P3816
Run #2							

	Initial Volume	Final Volume
Run #1	275 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.6	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.6	0.48	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.8	0.47	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.6	0.61	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.6	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.6	0.41	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.8	0.43	ug/l	
	3&4-Methylphenol	ND	1.8	1.4	ug/l	
88-75-5	2-Nitrophenol	ND	3.6	0.36	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.3	0.41	ug/l	
87-86-5	Pentachlorophenol	ND	3.6	1.1	ug/l	
108-95-2	Phenol	ND	1.8	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.6	0.58	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.6	0.44	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.6	0.54	ug/l	
98-86-2	Acetophenone	ND	1.8	0.47	ug/l	
62-53-3	Aniline [b]	ND	1.8	0.69	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.8	0.50	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.8	0.78	ug/l	
100-51-6	Benzyl Alcohol	ND	1.8	0.90	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.8	0.39	ug/l	
106-47-8	4-Chloroaniline [b]	ND	3.6	0.48	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.8	0.41	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.8	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.8	0.54	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.91	0.50	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.91	0.51	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.8	1.0	ug/l	
132-64-9	Dibenzofuran	ND	3.6	0.66	ug/l	
84-74-2	Di-n-butyl phthalate	4.2	1.8	0.48	ug/l	B
117-84-0	Di-n-octyl phthalate [a]	ND	1.8	1.5	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-3A		
Lab Sample ID:	JD36624-13	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.8	0.53	ug/l	
131-11-3	Dimethyl phthalate	ND	1.8	0.50	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.8	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.91	0.49	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.91	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.3	0.89	ug/l	
67-72-1	Hexachloroethane	ND	1.8	0.50	ug/l	
78-59-1	Isophorone	ND	1.8	0.36	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.91	0.59	ug/l	
88-74-4	2-Nitroaniline	ND	3.6	0.56	ug/l	
99-09-2	3-Nitroaniline	ND	3.6	0.58	ug/l	
100-01-6	4-Nitroaniline	ND	3.6	0.68	ug/l	
98-95-3	Nitrobenzene	ND	1.8	0.38	ug/l	
62-75-9	n-Nitrosodimethylamine [b]	ND	1.8	0.29	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.8	0.59	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.6	0.39	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.6		ug/l	
110-86-1	Pyridine	ND	1.8	0.28	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.8	0.44	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.91	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	33%		10-73%
4165-62-2	Phenol-d5	21%		10-64%
118-79-6	2,4,6-Tribromophenol	86%		31-130%
4165-60-0	Nitrobenzene-d5	68%		28-126%
321-60-8	2-Fluorobiphenyl	72%		26-114%
1718-51-0	Terphenyl-d14	62%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-3A		
Lab Sample ID:	JD36624-13	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50223.D	1	12/18/21 08:41	CS	12/17/21 10:00	OP37115A	E4P2629
Run #2 [a]	4P50301.D	1	12/28/21 14:43	KLS	12/17/21 10:00	OP37115A	E4P2636

	Initial Volume	Final Volume
Run #1	275 ml	1.0 ml
Run #2	275 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.211	0.073	0.036	ug/l	
208-96-8	Acenaphthylene	0.0753	0.073	0.036	ug/l	
120-12-7	Anthracene	ND	0.073	0.036	ug/l	
56-55-3	Benzo(a)anthracene [b]	ND	0.036	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.036	0.022	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.036	0.022	ug/l	
191-24-2	Benzo(g,h,i)perylene [b]	ND	0.073	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.073	0.036	ug/l	
218-01-9	Chrysene	0.0455	0.073	0.036	ug/l	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.073	0.036	ug/l	
206-44-0	Fluoranthene	0.397	0.073	0.036	ug/l	
86-73-7	Fluorene	0.460	0.073	0.036	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.073	0.036	ug/l	
91-20-3	Naphthalene	0.604	0.073	0.036	ug/l	
85-01-8	Phenanthrene	2.07	0.073	0.036	ug/l	
129-00-0	Pyrene	0.107	0.073	0.036	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	123%	120%	29-124%
321-60-8	2-Fluorobiphenyl	107%	105%	23-122%
1718-51-0	Terphenyl-d14	76%	79%	22-130%

(a) Confirmation run for internal standard areas.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-3A		
Lab Sample ID:	JD36624-13	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92499.D	1	12/15/21 11:00	WC	n/a	n/a	GAA2463
Run #2 [a]	AA92500.D	5	12/15/21 11:13	WC	n/a	n/a	GAA2463

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	356 [b]	0.55	0.40	ug/l	
74-84-0	Ethane	0.82	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.; 1mm diameter bubble present in headspace.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-3A		
Lab Sample ID:	JD36624-13	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81288.D	1	12/18/21 03:20	RK	12/14/21 14:45	OP37120	G6G2874
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0074	0.0038	ug/l	
319-84-6	alpha-BHC	ND	0.0074	0.0039	ug/l	
319-85-7	beta-BHC	ND	0.0074	0.0059	ug/l	
319-86-8	delta-BHC	ND	0.0074	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	0.040	0.0074	0.0044	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0074	0.0037	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0074	0.0032	ug/l	
60-57-1	Dieldrin	ND	0.0074	0.0057	ug/l	
72-54-8	4,4'-DDD	ND	0.0074	0.0043	ug/l	
72-55-9	4,4'-DDE	ND	0.0074	0.0037	ug/l	
50-29-3	4,4'-DDT	ND	0.0074	0.0051	ug/l	
72-20-8	Endrin	ND	0.0074	0.0045	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0074	0.0040	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0074	0.0050	ug/l	
53494-70-5	Endrin ketone	ND	0.0074	0.0046	ug/l	
959-98-8	Endosulfan-I	ND	0.0074	0.0039	ug/l	
33213-65-9	Endosulfan-II	ND	0.0074	0.0036	ug/l	
76-44-8	Heptachlor	ND	0.0074	0.0033	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0074	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0050	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%		10-190%
877-09-8	Tetrachloro-m-xylene	50%		10-190%
2051-24-3	Decachlorobiphenyl	31%		10-156%
2051-24-3	Decachlorobiphenyl	27%		10-156%

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-3A		
Lab Sample ID:	JD36624-13	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	5080	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	3.8	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	76.5	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	246000	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Chromium	28.7	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	5.4	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	9.6	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	9440	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	3.6	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	181000	13000	ug/l	50	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	188	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	17.4	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	18300	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	358000	13000	ug/l	50	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	16.1	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	18.1	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Instrument QC Batch: MA51719
(5) Prep QC Batch: MP30381
(6) Prep QC Batch: MP30441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF IW-3A		
Lab Sample ID:	JD36624-13	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	1060	50	mg/l	25	12/27/21 20:46	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF IW-3A
Lab Sample ID: JD36624-13F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/10/21
Date Received: 12/10/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Arsenic	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Barium	17.4	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Calcium	235000	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Chromium	20.2	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Iron	< 50	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Magnesium	167000	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Manganese	< 2.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [4]
Nickel	8.3	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Potassium	18700	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Sodium	352000	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [3]	SW846 3010A [5]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Vanadium	2.8	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]
Zinc	< 10	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51719
(4) Prep QC Batch: MP30381
(5) Prep QC Batch: MP30441

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-3B		
Lab Sample ID:	JD36624-14	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167498.D	10	12/21/21 15:57	BK	n/a	n/a	V3A7269
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	25.8	4.0	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	150%		39-174%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-3B		
Lab Sample ID:	JD36624-14	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X193118.D	1	12/21/21 15:00	BK	n/a	n/a	V1X8366
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	115	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	20.2	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	24.3	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	0.78	2.0	0.46	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	10.9	1.0	0.56	ug/l	
75-00-3	Chloroethane	1.9	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	140	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	56.6	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	9.9	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	18.1	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.9	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.68	1.0	0.54	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-3B		
Lab Sample ID:	JD36624-14	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	20.8	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	28.8	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.71	1.0	0.50	ug/l	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-120%

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-3B		
Lab Sample ID:	JD36624-14	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	101%		80-120%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	102%		82-114%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-3B		
Lab Sample ID:	JD36624-14	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80597.D	1	12/23/21 16:00	CS	12/17/21 10:00	OP37115	E5P3816
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.6	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.6	0.47	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.8	0.46	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.6	0.60	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.6	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.6	0.41	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.8	0.42	ug/l	
	3&4-Methylphenol	ND	1.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.6	0.35	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.1	0.40	ug/l	
87-86-5	Pentachlorophenol	ND	3.6	1.0	ug/l	
108-95-2	Phenol	ND	1.8	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.6	0.57	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.6	0.44	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.6	0.53	ug/l	
98-86-2	Acetophenone	ND	1.8	0.46	ug/l	
62-53-3	Aniline [b]	ND	1.8	0.68	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.8	0.49	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.8	0.77	ug/l	
100-51-6	Benzyl Alcohol	ND	1.8	0.88	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.8	0.39	ug/l	
106-47-8	4-Chloroaniline [b]	ND	3.6	0.48	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.8	0.41	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.8	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.8	0.53	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.89	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.89	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.8	0.98	ug/l	
132-64-9	Dibenzofuran	ND	3.6	0.65	ug/l	
84-74-2	Di-n-butyl phthalate	0.82	1.8	0.48	ug/l	JB
117-84-0	Di-n-octyl phthalate [a]	ND	1.8	1.5	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-3B		
Lab Sample ID:	JD36624-14	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.8	0.52	ug/l	
131-11-3	Dimethyl phthalate	ND	1.8	0.49	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.8	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.89	0.48	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.89	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.1	0.88	ug/l	
67-72-1	Hexachloroethane	ND	1.8	0.49	ug/l	
78-59-1	Isophorone	ND	1.8	0.35	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.89	0.58	ug/l	
88-74-4	2-Nitroaniline	ND	3.6	0.55	ug/l	
99-09-2	3-Nitroaniline	ND	3.6	0.57	ug/l	
100-01-6	4-Nitroaniline	ND	3.6	0.67	ug/l	
98-95-3	Nitrobenzene	ND	1.8	0.38	ug/l	
62-75-9	n-Nitrosodimethylamine [b]	ND	1.8	0.28	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.8	0.58	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.6	0.38	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.6		ug/l	
110-86-1	Pyridine	ND	1.8	0.28	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.8	0.43	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.89	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	27%		10-73%
4165-62-2	Phenol-d5	15%		10-64%
118-79-6	2,4,6-Tribromophenol	83%		31-130%
4165-60-0	Nitrobenzene-d5	69%		28-126%
321-60-8	2-Fluorobiphenyl	71%		26-114%
1718-51-0	Terphenyl-d14	81%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-3B		
Lab Sample ID:	JD36624-14	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50224.D	1	12/18/21 09:04	CS	12/17/21 10:00	OP37115A	E4P2629
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.071	0.036	ug/l	
208-96-8	Acenaphthylene	0.0374	0.071	0.036	ug/l	J
120-12-7	Anthracene	ND	0.071	0.036	ug/l	
56-55-3	Benzo(a)anthracene [a]	ND	0.036	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.036	0.021	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.036	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene [a]	ND	0.071	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.071	0.036	ug/l	
218-01-9	Chrysene	ND	0.071	0.036	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.071	0.036	ug/l	
206-44-0	Fluoranthene	0.0384	0.071	0.036	ug/l	J
86-73-7	Fluorene	ND	0.071	0.036	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.071	0.036	ug/l	
91-20-3	Naphthalene	0.139	0.071	0.036	ug/l	
85-01-8	Phenanthrene	0.391	0.071	0.036	ug/l	
129-00-0	Pyrene	ND	0.071	0.036	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	115%		29-124%
321-60-8	2-Fluorobiphenyl	100%		23-122%
1718-51-0	Terphenyl-d14	96%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-3B		
Lab Sample ID:	JD36624-14	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92501.D	1	12/15/21 11:27	WC	n/a	n/a	GAA2463
Run #2 [a]	AA92502.D	10	12/15/21 11:40	WC	n/a	n/a	GAA2463

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	354 [b]	1.1	0.80	ug/l	
74-84-0	Ethane	1.1	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-3B		
Lab Sample ID:	JD36624-14	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81289.D	1	12/18/21 03:38	RK	12/14/21 14:45	OP37120	G6G2874
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	68%		10-190%
877-09-8	Tetrachloro-m-xylene	54%		10-190%
2051-24-3	Decachlorobiphenyl	25%		10-156%
2051-24-3	Decachlorobiphenyl	24%		10-156%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF IW-3B
Lab Sample ID: JD36624-14
Matrix: AQ - Ground Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/10/21
Date Received: 12/10/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	1450	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	1.4	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	26.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	269000	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Chromium	26.7	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	1.4	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	4.8	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	2330	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	1.1	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	193000	13000	ug/l	50	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	44.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	0.29	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	12.1	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	18000	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	373000	13000	ug/l	50	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	6.3	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Instrument QC Batch: MA51719
(5) Prep QC Batch: MP30381
(6) Prep QC Batch: MP30441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF IW-3B		
Lab Sample ID:	JD36624-14	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	1210	50	mg/l	25	12/27/21 21:05	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF IW-3B
Lab Sample ID: JD36624-14F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/10/21
Date Received: 12/10/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	13.4	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	259000	13000	ug/l	50	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Chromium	25.1	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	< 50	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	194000	13000	ug/l	50	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	< 2.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/15/21	12/15/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	9.4	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	18700	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	399000	13000	ug/l	50	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	3.3	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51602
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Instrument QC Batch: MA51719
(5) Prep QC Batch: MP30381
(6) Prep QC Batch: MP30441

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-2A		
Lab Sample ID:	JD36624-15	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167476.D	1	12/20/21 21:54	BK	n/a	n/a	V3A7268
Run #2 [a]	3A167499.D	5	12/21/21 16:26	BK	n/a	n/a	V3A7269

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	16.5	0.40	0.095	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	77%	185% [b]	39-174%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-2A		
Lab Sample ID:	JD36624-15	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X193119.D	1	12/21/21 15:26	BK	n/a	n/a	V1X8366
Run #2	2V83931.D	5	12/22/21 15:59	NW	n/a	n/a	V2V3457

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	727	10	3.1	ug/l	
71-43-2	Benzene	0.77	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	2.7	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	17.4	1.0	0.63	ug/l	
74-83-9	Bromomethane	45.8	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	77.2	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	5.4	1.0	0.56	ug/l	
75-00-3	Chloroethane	3.4	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	211 [a]	5.0	3.8	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	1.7	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	101	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	1.1	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	24.0	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	89.9	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.75	1.0	0.60	ug/l	J
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	9.5	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.9	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-2A		
Lab Sample ID:	JD36624-15	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.0	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	1.2	1.0	0.48	ug/l	
75-09-2	Methylene chloride	1.7	2.0	1.0	ug/l	J
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	24.6	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	11.8	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.4	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	4.9	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	2.6	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.88	1.0	0.53	ug/l	J
79-01-6	Trichloroethene	0.76	1.0	0.53	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	99%	80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-2A		
Lab Sample ID:	JD36624-15	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	102%	116%	80-120%
2037-26-5	Toluene-D8	97%	101%	80-120%
460-00-4	4-Bromofluorobenzene	103%	98%	82-114%

(a) Result is from Run# 2
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-2A		
Lab Sample ID:	JD36624-15	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80598.D	1	12/23/21 16:27	CS	12/17/21 10:00	OP37115	E5P3816
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	3.6	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.6	0.47	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.8	0.46	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.6	0.60	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.6	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.6	0.41	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.8	0.42	ug/l	
	3&4-Methylphenol	ND	1.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.6	0.35	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.1	0.40	ug/l	
87-86-5	Pentachlorophenol	ND	3.6	1.0	ug/l	
108-95-2	Phenol	ND	1.8	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.6	0.57	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.6	0.44	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.6	0.53	ug/l	
98-86-2	Acetophenone	2.3	1.8	0.46	ug/l	
62-53-3	Aniline [b]	ND	1.8	0.68	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.8	0.49	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.8	0.77	ug/l	
100-51-6	Benzyl Alcohol	ND	1.8	0.88	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.8	0.39	ug/l	
106-47-8	4-Chloroaniline [b]	ND	3.6	0.48	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.8	0.41	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.8	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.8	0.53	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.89	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.89	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.8	0.98	ug/l	
132-64-9	Dibenzofuran	ND	3.6	0.65	ug/l	
84-74-2	Di-n-butyl phthalate	3.0	1.8	0.48	ug/l	B
117-84-0	Di-n-octyl phthalate [a]	ND	1.8	1.5	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-2A		
Lab Sample ID:	JD36624-15	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.8	0.52	ug/l	
131-11-3	Dimethyl phthalate	ND	1.8	0.49	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.8	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.89	0.48	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.89	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.1	0.88	ug/l	
67-72-1	Hexachloroethane	ND	1.8	0.49	ug/l	
78-59-1	Isophorone	ND	1.8	0.35	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.89	0.58	ug/l	
88-74-4	2-Nitroaniline	ND	3.6	0.55	ug/l	
99-09-2	3-Nitroaniline	ND	3.6	0.57	ug/l	
100-01-6	4-Nitroaniline	ND	3.6	0.67	ug/l	
98-95-3	Nitrobenzene	ND	1.8	0.38	ug/l	
62-75-9	n-Nitrosodimethylamine [b]	ND	1.8	0.28	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.8	0.58	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.6	0.38	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.6		ug/l	
110-86-1	Pyridine	ND	1.8	0.28	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.8	0.43	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.8	0.89	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	10%		10-73%
4165-62-2	Phenol-d5	5% [c]		10-64%
118-79-6	2,4,6-Tribromophenol	50%		31-130%
4165-60-0	Nitrobenzene-d5	47%		28-126%
321-60-8	2-Fluorobiphenyl	52%		26-114%
1718-51-0	Terphenyl-d14	51%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
(c) Outside of in house control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-2A		
Lab Sample ID:	JD36624-15	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50225.D	1	12/18/21 09:28	CS	12/17/21 10:00	OP37115A	E4P2629
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.071	0.036	ug/l	
208-96-8	Acenaphthylene	ND	0.071	0.036	ug/l	
120-12-7	Anthracene	ND	0.071	0.036	ug/l	
56-55-3	Benzo(a)anthracene [a]	ND	0.036	0.021	ug/l	
50-32-8	Benzo(a)pyrene	0.0307	0.036	0.021	ug/l	J
205-99-2	Benzo(b)fluoranthene	ND	0.036	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene [a]	ND	0.071	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.071	0.036	ug/l	
218-01-9	Chrysene	ND	0.071	0.036	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.071	0.036	ug/l	
206-44-0	Fluoranthene	0.0433	0.071	0.036	ug/l	J
86-73-7	Fluorene	ND	0.071	0.036	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.071	0.036	ug/l	
91-20-3	Naphthalene	0.0481	0.071	0.036	ug/l	J
85-01-8	Phenanthrene	ND	0.071	0.036	ug/l	
129-00-0	Pyrene	ND	0.071	0.036	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		29-124%
321-60-8	2-Fluorobiphenyl	64%		23-122%
1718-51-0	Terphenyl-d14	60%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-2A		
Lab Sample ID:	JD36624-15	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92504.D	1	12/15/21 12:12	WC	n/a	n/a	GAA2463
Run #2 [a]	AA92505.D	5	12/15/21 12:28	WC	n/a	n/a	GAA2463

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	228 [b]	0.55	0.40	ug/l	
74-84-0	Ethane	0.39	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-2A		
Lab Sample ID:	JD36624-15	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81290.D	1	12/18/21 03:56	RK	12/14/21 14:45	OP37120	G6G2874
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0071	0.0037	ug/l	
319-84-6	alpha-BHC	ND	0.0071	0.0037	ug/l	
319-85-7	beta-BHC	ND	0.0071	0.0057	ug/l	
319-86-8	delta-BHC [a]	0.019	0.0071	0.0047	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0071	0.0043	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0071	0.0035	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0071	0.0030	ug/l	
60-57-1	Dieldrin	ND	0.0071	0.0055	ug/l	
72-54-8	4,4'-DDD	ND	0.0071	0.0041	ug/l	
72-55-9	4,4'-DDE	ND	0.0071	0.0036	ug/l	
50-29-3	4,4'-DDT	ND	0.0071	0.0049	ug/l	
72-20-8	Endrin	ND	0.0071	0.0043	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0071	0.0039	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0071	0.0048	ug/l	
53494-70-5	Endrin ketone	ND	0.0071	0.0044	ug/l	
959-98-8	Endosulfan-I	ND	0.0071	0.0038	ug/l	
33213-65-9	Endosulfan-II	ND	0.0071	0.0035	ug/l	
76-44-8	Heptachlor	ND	0.0071	0.0032	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0071	0.0043	ug/l	
72-43-5	Methoxychlor	ND	0.014	0.0048	ug/l	
8001-35-2	Toxaphene	ND	0.18	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82%		10-190%
877-09-8	Tetrachloro-m-xylene	68%		10-190%
2051-24-3	Decachlorobiphenyl	51%		10-156%
2051-24-3	Decachlorobiphenyl	40%		10-156%

(a) Reported from 2nd signal. 1st signal used for confirmation.

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-2A		
Lab Sample ID:	JD36624-15	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	31900	130	ug/l	5	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	9.6	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	286	5.0	ug/l	5	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Beryllium	4.3	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	788000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Chromium	87.8	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	19.8	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	31.3	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	32400	130	ug/l	5	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Lead	22.8	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	818000	25000	ug/l	100	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	1100	20	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Mercury	1.3	0.20	ug/l	1	12/16/21	12/16/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	56.2	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	83400	5000	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Selenium	2.9	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	856000	25000	ug/l	100	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	76.4	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	75.5	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51606
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Instrument QC Batch: MA51719
(5) Prep QC Batch: MP30402
(6) Prep QC Batch: MP30441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF IW-2A		
Lab Sample ID:	JD36624-15	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	3550	200	mg/l	100	12/27/21 21:24	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF IW-2A
Lab Sample ID: JD36624-15F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/10/21
Date Received: 12/10/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	1.7	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	37.2	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	813000	25000	ug/l	100	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Chromium	52.6	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	< 50	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	804000	25000	ug/l	100	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	13.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	1.2	0.20	ug/l	1	12/16/21	12/16/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	13.8	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	72900	2500	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Selenium	1.7	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	890000	25000	ug/l	100	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	5.9	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51606
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Instrument QC Batch: MA51719
(5) Prep QC Batch: MP30402
(6) Prep QC Batch: MP30441

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-2B		
Lab Sample ID:	JD36624-16	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167477.D	1	12/20/21 22:22	BK	n/a	n/a	V3A7268
Run #2 [a]	3A167500.D	20	12/21/21 16:54	BK	n/a	n/a	V3A7269

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	124	0.40	0.095	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	226% [b]	187% [b]	39-174%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-2B		
Lab Sample ID:	JD36624-16	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1X193120.D	50	12/21/21 15:52	BK	n/a	n/a	V1X8366
Run #2	2D200533.D	500	12/22/21 13:51	ED	n/a	n/a	V2D8732

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	150	ug/l	
71-43-2	Benzene	ND	25	21	ug/l	
108-86-1	Bromobenzene	ND	50	27	ug/l	
74-97-5	Bromochloromethane	ND	50	24	ug/l	
75-27-4	Bromodichloromethane	ND	50	23	ug/l	
75-25-2	Bromoform	ND	50	32	ug/l	
74-83-9	Bromomethane	ND	100	82	ug/l	
78-93-3	2-Butanone (MEK)	ND	500	340	ug/l	
104-51-8	n-Butylbenzene	ND	100	26	ug/l	
135-98-8	sec-Butylbenzene	ND	100	31	ug/l	
98-06-6	tert-Butylbenzene	ND	100	34	ug/l	
75-15-0	Carbon disulfide	ND	100	23	ug/l	
56-23-5	Carbon tetrachloride	ND	50	28	ug/l	
108-90-7	Chlorobenzene	3320	50	28	ug/l	
75-00-3	Chloroethane	57.0	50	36	ug/l	
67-66-3	Chloroform	102	50	25	ug/l	
74-87-3	Chloromethane	64.2	50	38	ug/l	
95-49-8	o-Chlorotoluene	ND	100	32	ug/l	
106-43-4	p-Chlorotoluene	ND	100	30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	26	ug/l	
124-48-1	Dibromochloromethane	ND	50	28	ug/l	
106-93-4	1,2-Dibromoethane	ND	50	24	ug/l	
95-50-1	1,2-Dichlorobenzene	7840	50	27	ug/l	
541-73-1	1,3-Dichlorobenzene	46.8	50	27	ug/l	J
106-46-7	1,4-Dichlorobenzene	1000	50	25	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	100	28	ug/l	
75-34-3	1,1-Dichloroethane	719	50	28	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	30	ug/l	
75-35-4	1,1-Dichloroethene	171	50	30	ug/l	
156-59-2	cis-1,2-Dichloroethene	12400 [c]	500	250	ug/l	
156-60-5	trans-1,2-Dichloroethene	277	50	27	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	25	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-2B		
Lab Sample ID:	JD36624-16	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	50	21	ug/l	
594-20-7	2,2-Dichloropropane	ND	50	26	ug/l	
563-58-6	1,1-Dichloropropene	ND	50	21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	24	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	22	ug/l	
100-41-4	Ethylbenzene	ND	50	30	ug/l	
87-68-3	Hexachlorobutadiene	ND	100	27	ug/l	
591-78-6	2-Hexanone	ND	250	100	ug/l	
98-82-8	Isopropylbenzene	ND	50	32	ug/l	
99-87-6	p-Isopropyltoluene	ND	100	33	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	50	25	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	250	93	ug/l	
74-95-3	Methylene bromide	ND	50	24	ug/l	
75-09-2	Methylene chloride	ND	100	50	ug/l	
91-20-3	Naphthalene	ND	250	130	ug/l	
103-65-1	n-Propylbenzene	ND	100	30	ug/l	
100-42-5	Styrene	ND	50	24	ug/l	
75-65-0	Tert Butyl Alcohol	ND	500	290	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	30	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	33	ug/l	
127-18-4	Tetrachloroethene	ND	50	45	ug/l	
109-99-9	Tetrahydrofuran	ND	500	160	ug/l	
108-88-3	Toluene	ND	50	27	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	50	25	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	25	ug/l	
71-55-6	1,1,1-Trichloroethane	387	50	27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	27	ug/l	
79-01-6	Trichloroethene	37.3	50	26	ug/l	J
75-69-4	Trichlorofluoromethane	ND	100	20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	100	35	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	100	50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	100	50	ug/l	
108-05-4	Vinyl Acetate	ND	500	100	ug/l	
75-01-4	Vinyl chloride	44.3	50	39	ug/l	J
	m,p-Xylene	ND	50	39	ug/l	
95-47-6	o-Xylene	ND	50	30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	107%	80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-2B		
Lab Sample ID:	JD36624-16	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	102%	94%	80-120%
2037-26-5	Toluene-D8	100%	106%	80-120%
460-00-4	4-Bromofluorobenzene	103%	80% [d]	82-114%

(a) Dilution required due to high concentration of target compound.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2
(d) Outside of in house control limits, but within reasonable method recovery limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-2B		
Lab Sample ID:	JD36624-16	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80599.D	1	12/23/21 16:54	CS	12/17/21 10:00	OP37115	E5P3816
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	6.8	3.6	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.6	0.47	ug/l	
120-83-2	2,4-Dichlorophenol	3.0	1.8	0.46	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.6	0.60	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.6	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.6	0.41	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.8	0.42	ug/l	
	3&4-Methylphenol	ND	1.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.6	0.35	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.1	0.40	ug/l	
87-86-5	Pentachlorophenol	1.9	3.6	1.0	ug/l	J
108-95-2	Phenol	ND	1.8	0.24	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.6	0.57	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.6	0.44	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.6	0.53	ug/l	
98-86-2	Acetophenone	ND	1.8	0.46	ug/l	
62-53-3	Aniline [b]	ND	1.8	0.68	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.8	0.49	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.8	0.77	ug/l	
100-51-6	Benzyl Alcohol	ND	1.8	0.88	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.8	0.39	ug/l	
106-47-8	4-Chloroaniline [b]	ND	3.6	0.48	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.8	0.41	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.8	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.8	0.53	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.89	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.89	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.8	0.98	ug/l	
132-64-9	Dibenzofuran	ND	3.6	0.65	ug/l	
84-74-2	Di-n-butyl phthalate	3.7	1.8	0.48	ug/l	B
117-84-0	Di-n-octyl phthalate [a]	ND	1.8	1.5	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-2B		
Lab Sample ID:	JD36624-16	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.8	0.52	ug/l	
131-11-3	Dimethyl phthalate	ND	1.8	0.49	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.8	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	0.89	0.48	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.89	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.1	0.88	ug/l	
67-72-1	Hexachloroethane	ND	1.8	0.49	ug/l	
78-59-1	Isophorone	ND	1.8	0.35	ug/l	
91-57-6	2-Methylnaphthalene	12.2	0.89	0.58	ug/l	
88-74-4	2-Nitroaniline	ND	3.6	0.55	ug/l	
99-09-2	3-Nitroaniline	ND	3.6	0.57	ug/l	
100-01-6	4-Nitroaniline	ND	3.6	0.67	ug/l	
91-20-3	Naphthalene	38.2	0.89	0.39	ug/l	
98-95-3	Nitrobenzene	ND	1.8	0.38	ug/l	
62-75-9	n-Nitrosodimethylamine [b]	ND	1.8	0.28	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.8	0.58	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.6	0.38	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.6		ug/l	
110-86-1	Pyridine	ND	1.8	0.28	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.8	0.43	ug/l	
120-82-1	1,2,4-Trichlorobenzene	15.1	0.89	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	34%		10-73%
4165-62-2	Phenol-d5	21%		10-64%
118-79-6	2,4,6-Tribromophenol	100%		31-130%
4165-60-0	Nitrobenzene-d5	64%		28-126%
321-60-8	2-Fluorobiphenyl	73%		26-114%
1718-51-0	Terphenyl-d14	65%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-2B		
Lab Sample ID:	JD36624-16	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50226.D	1	12/18/21 09:52	CS	12/17/21 10:00	OP37115A	E4P2629
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.071	0.036	ug/l	
208-96-8	Acenaphthylene	ND	0.071	0.036	ug/l	
120-12-7	Anthracene	ND	0.071	0.036	ug/l	
56-55-3	Benzo(a)anthracene [a]	ND	0.036	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.036	0.021	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.036	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene [a]	ND	0.071	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.071	0.036	ug/l	
218-01-9	Chrysene	ND	0.071	0.036	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.071	0.036	ug/l	
206-44-0	Fluoranthene	ND	0.071	0.036	ug/l	
86-73-7	Fluorene	ND	0.071	0.036	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.071	0.036	ug/l	
85-01-8	Phenanthrene	0.800	0.071	0.036	ug/l	
129-00-0	Pyrene	ND	0.071	0.036	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	98%		29-124%
321-60-8	2-Fluorobiphenyl	93%		23-122%
1718-51-0	Terphenyl-d14	76%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-2B		
Lab Sample ID:	JD36624-16	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92506.D	1	12/15/21 12:43	WC	n/a	n/a	GAA2463
Run #2 [a]	AA92507.D	20	12/15/21 12:56	WC	n/a	n/a	GAA2463

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1180 [b]	2.2	1.6	ug/l	
74-84-0	Ethane	1.8	0.23	0.14	ug/l	
74-85-1	Ethene	2.2	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.; 2mm diameter bubble present in headspace.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-2B		
Lab Sample ID:	JD36624-16	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81291.D	1	12/18/21 04:13	RK	12/14/21 14:45	OP37120	G6G2874
Run #2 [a]	6G81355.D	5	12/21/21 05:20	CP	12/14/21 14:45	OP37120	G6G2878

	Initial Volume	Final Volume
Run #1	260 ml	2.0 ml
Run #2	260 ml	2.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0077	0.0040	ug/l	
319-84-6	alpha-BHC	ND	0.0077	0.0040	ug/l	
319-85-7	beta-BHC	ND	0.0077	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.0077	0.0051	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0077	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0077	0.0038	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0077	0.0033	ug/l	
60-57-1	Dieldrin	ND	0.0077	0.0059	ug/l	
72-54-8	4,4'-DDD	ND	0.0077	0.0044	ug/l	
72-55-9	4,4'-DDE	ND	0.0077	0.0039	ug/l	
50-29-3	4,4'-DDT	ND	0.0077	0.0053	ug/l	
72-20-8	Endrin	ND	0.0077	0.0047	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0077	0.0042	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0077	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.0077	0.0048	ug/l	
959-98-8	Endosulfan-I	ND	0.0077	0.0041	ug/l	
33213-65-9	Endosulfan-II	ND	0.0077	0.0038	ug/l	
76-44-8	Heptachlor	ND	0.0077	0.0035	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0077	0.0046	ug/l	
72-43-5	Methoxychlor	ND	0.015	0.0052	ug/l	
8001-35-2	Toxaphene	ND	0.19	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%	184%	10-190%
877-09-8	Tetrachloro-m-xylene	25%	47%	10-190%
2051-24-3	Decachlorobiphenyl	57%	71%	10-156%
2051-24-3	Decachlorobiphenyl	12%	41%	10-156%

(a) Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HOFF IW-2B
Lab Sample ID: JD36624-16
Matrix: AQ - Ground Water
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/10/21
Date Received: 12/10/21
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	800	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	4.9	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	433	20	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	70700	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Chromium	2.1	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	1.1	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	6240	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	2.2	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	84800	5000	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	150	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/16/21	12/16/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	4.1	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	18400	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	108000	5000	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	11.7	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	11.0	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51606
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Instrument QC Batch: MA51719
(5) Prep QC Batch: MP30402
(6) Prep QC Batch: MP30441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF IW-2B		
Lab Sample ID:	JD36624-16	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	193	20	mg/l	10	12/27/21 21:44	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID: HOFF IW-2B
Lab Sample ID: JD36624-16F
Matrix: AQ - Groundwater Filtered
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Date Sampled: 12/10/21
Date Received: 12/10/21
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	1.2	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	19.9	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	82700	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Chromium	< 2.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	< 50	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	59100	5000	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	271	20	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/16/21	12/16/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	2.8	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	16300	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	91700	5000	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	7.8	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51606
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Instrument QC Batch: MA51719
(5) Prep QC Batch: MP30402
(6) Prep QC Batch: MP30441

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-B		
Lab Sample ID:	JD36624-17	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D BY SIM	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A167539.D	2.5	12/23/21 12:44	BK	n/a	n/a	V3A7273
Run #2 [a]	3A167545.D	10	12/23/21 15:36	BK	n/a	n/a	V3A7273

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	9.6	1.0	0.24	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-D8	269% [b]	204% [b]	39-174%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-B		
Lab Sample ID:	JD36624-17	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1X193122.D	10	12/21/21 16:44	BK	n/a	n/a	V1X8366
Run #2	2D200532.D	200	12/22/21 13:22	ED	n/a	n/a	V2D8732

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	31	ug/l	
71-43-2	Benzene	263	5.0	4.3	ug/l	
108-86-1	Bromobenzene	ND	10	5.5	ug/l	
74-97-5	Bromochloromethane	ND	10	4.8	ug/l	
75-27-4	Bromodichloromethane	ND	10	4.5	ug/l	
75-25-2	Bromoform	ND	10	6.3	ug/l	
74-83-9	Bromomethane	ND	20	16	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	69	ug/l	
104-51-8	n-Butylbenzene	ND	20	5.2	ug/l	
135-98-8	sec-Butylbenzene	ND	20	6.2	ug/l	
98-06-6	tert-Butylbenzene	ND	20	6.9	ug/l	
75-15-0	Carbon disulfide	ND	20	4.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.5	ug/l	
108-90-7	Chlorobenzene	13600 [b]	200	110	ug/l	
75-00-3	Chloroethane	ND	10	7.3	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	7.6	ug/l	
95-49-8	o-Chlorotoluene	ND	20	6.3	ug/l	
106-43-4	p-Chlorotoluene	ND	20	6.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	5.3	ug/l	
124-48-1	Dibromochloromethane	ND	10	5.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	4.8	ug/l	
95-50-1	1,2-Dichlorobenzene	509	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	48.2	10	5.4	ug/l	
106-46-7	1,4-Dichlorobenzene	270	10	5.1	ug/l	
75-71-8	Dichlorodifluoromethane [c]	ND	20	5.6	ug/l	
75-34-3	1,1-Dichloroethane	26.6	10	5.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	6.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	17.4	10	5.1	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.4	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	5.1	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-B		
Lab Sample ID:	JD36624-17	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	10	4.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	5.2	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	4.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	4.7	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	4.3	ug/l	
100-41-4	Ethylbenzene	ND	10	6.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	5.4	ug/l	
591-78-6	2-Hexanone	ND	50	20	ug/l	
98-82-8	Isopropylbenzene	ND	10	6.5	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	6.6	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.1	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	19	ug/l	
74-95-3	Methylene bromide	ND	10	4.8	ug/l	
75-09-2	Methylene chloride	ND	20	10	ug/l	
91-20-3	Naphthalene	ND	50	25	ug/l	
103-65-1	n-Propylbenzene	9.3	20	6.0	ug/l	J
100-42-5	Styrene	ND	10	4.9	ug/l	
75-65-0	Tert Butyl Alcohol	ND	100	58	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	6.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	6.5	ug/l	
127-18-4	Tetrachloroethene	ND	10	9.0	ug/l	
109-99-9	Tetrahydrofuran	ND	100	32	ug/l	
108-88-3	Toluene	ND	10	5.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.3	ug/l	
79-01-6	Trichloroethene	ND	10	5.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	4.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	7.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	10	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	10	ug/l	
108-05-4	Vinyl Acetate	ND	100	21	ug/l	
75-01-4	Vinyl chloride	ND	10	7.9	ug/l	
	m,p-Xylene	ND	10	7.8	ug/l	
95-47-6	o-Xylene	12.0	10	5.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	109%	80-120%

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-B		
Lab Sample ID:	JD36624-17	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	100%	97%	80-120%
2037-26-5	Toluene-D8	97%	107%	80-120%
460-00-4	4-Bromofluorobenzene	101%	79% [d]	82-114%

(a) Dilution required due to high concentration of target compound.
(b) Result is from Run# 2
(c) Associated CCV outside of control limits high, sample was ND.
(d) Outside in house control limits.

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-B		
Lab Sample ID:	JD36624-17	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P80600.D	1	12/23/21 17:21	CS	12/17/21 10:00	OP37115	E5P3816
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	19.3	3.6	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	3.6	0.47	ug/l	
120-83-2	2,4-Dichlorophenol	3.3	1.8	0.46	ug/l	
105-67-9	2,4-Dimethylphenol	ND	3.6	0.60	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	3.6	1.7	ug/l	
87-65-0	2,6-Dichlorophenol	ND	3.6	0.41	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	3.6	1.4	ug/l	
95-48-7	2-Methylphenol	ND	1.8	0.42	ug/l	
	3&4-Methylphenol	ND	1.8	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	3.6	0.35	ug/l	
100-02-7	4-Nitrophenol [a]	ND	7.1	0.40	ug/l	
87-86-5	Pentachlorophenol	ND	3.6	1.0	ug/l	
108-95-2	Phenol	0.52	1.8	0.24	ug/l	J
58-90-2	2,3,4,6-Tetrachlorophenol	ND	3.6	0.57	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	3.6	0.44	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	3.6	0.53	ug/l	
98-86-2	Acetophenone	0.80	1.8	0.46	ug/l	J
62-53-3	Aniline [b]	ND	1.8	0.68	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.8	0.49	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.8	0.77	ug/l	
100-51-6	Benzyl Alcohol	ND	1.8	0.88	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.8	0.39	ug/l	
106-47-8	4-Chloroaniline [b]	ND	3.6	0.48	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.8	0.41	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.8	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.8	0.53	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.89	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.89	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.8	0.98	ug/l	
132-64-9	Dibenzofuran	ND	3.6	0.65	ug/l	
84-74-2	Di-n-butyl phthalate	1.6	1.8	0.48	ug/l	BJ
117-84-0	Di-n-octyl phthalate [a]	ND	1.8	1.5	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-B		
Lab Sample ID:	JD36624-17	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	1.8	0.52	ug/l	
131-11-3	Dimethyl phthalate	ND	1.8	0.49	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	1.2	1.8	1.2	ug/l	J
118-74-1	Hexachlorobenzene	ND	0.89	0.48	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.89	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	7.1	0.88	ug/l	
67-72-1	Hexachloroethane	ND	1.8	0.49	ug/l	
78-59-1	Isophorone	ND	1.8	0.35	ug/l	
91-57-6	2-Methylnaphthalene	1.9	0.89	0.58	ug/l	
88-74-4	2-Nitroaniline	ND	3.6	0.55	ug/l	
99-09-2	3-Nitroaniline	ND	3.6	0.57	ug/l	
100-01-6	4-Nitroaniline	ND	3.6	0.67	ug/l	
91-20-3	Naphthalene	10.3	0.89	0.39	ug/l	
98-95-3	Nitrobenzene	ND	1.8	0.38	ug/l	
62-75-9	n-Nitrosodimethylamine [b]	ND	1.8	0.28	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.8	0.58	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	3.6	0.38	ug/l	
82-68-8	Pentachloronitrobenzene	ND	3.6		ug/l	
110-86-1	Pyridine	ND	1.8	0.28	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.8	0.43	ug/l	
120-82-1	1,2,4-Trichlorobenzene	3.7	0.89	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	26%		10-73%
4165-62-2	Phenol-d5	17%		10-64%
118-79-6	2,4,6-Tribromophenol	95%		31-130%
4165-60-0	Nitrobenzene-d5	64%		28-126%
321-60-8	2-Fluorobiphenyl	72%		26-114%
1718-51-0	Terphenyl-d14	85%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-B		
Lab Sample ID:	JD36624-17	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8270E BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P50227.D	1	12/18/21 10:15	CS	12/17/21 10:00	OP37115A	E4P2629
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.205	0.071	0.036	ug/l	
208-96-8	Acenaphthylene	ND	0.071	0.036	ug/l	
120-12-7	Anthracene	0.0836	0.071	0.036	ug/l	
56-55-3	Benzo(a)anthracene [a]	0.595	0.036	0.021	ug/l	
50-32-8	Benzo(a)pyrene	0.906	0.036	0.021	ug/l	
205-99-2	Benzo(b)fluoranthene	2.18	0.036	0.021	ug/l	
191-24-2	Benzo(g,h,i)perylene [a]	1.20	0.071	0.036	ug/l	
207-08-9	Benzo(k)fluoranthene	0.665	0.071	0.036	ug/l	
218-01-9	Chrysene	1.05	0.071	0.036	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.223	0.071	0.036	ug/l	
206-44-0	Fluoranthene	1.29	0.071	0.036	ug/l	
86-73-7	Fluorene	0.197	0.071	0.036	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene [a]	0.993	0.071	0.036	ug/l	
85-01-8	Phenanthrene	0.357	0.071	0.036	ug/l	
129-00-0	Pyrene	1.41	0.071	0.036	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	102%		29-124%
321-60-8	2-Fluorobiphenyl	92%		23-122%
1718-51-0	Terphenyl-d14	88%		22-130%

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Estimated value, due to corresponding failure in the batch associated CCV.

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N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-B		
Lab Sample ID:	JD36624-17	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	AA92508.D	1	12/15/21 13:09	WC	n/a	n/a	GAA2463
Run #2 [a]	AA92509.D	20	12/15/21 13:24	WC	n/a	n/a	GAA2463

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1890 [b]	2.2	1.6	ug/l	
74-84-0	Ethane	ND	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

(a) Diluted due to high concentration of target compound.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	HOFF IW-B		
Lab Sample ID:	JD36624-17	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G81292.D	1	12/18/21 04:31	RK	12/14/21 14:45	OP37120	G6G2874
Run #2 [a]	6G81356.D	5	12/21/21 05:38	CP	12/14/21 14:45	OP37120	G6G2878

	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2	250 ml	2.0 ml

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC [b]	0.011	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	55%	98%	10-190%
877-09-8	Tetrachloro-m-xylene	17%	47%	10-190%
2051-24-3	Decachlorobiphenyl	22%	73%	10-156%
2051-24-3	Decachlorobiphenyl	7% [c]	27%	10-156%

(a) Confirmation run.
(b) More than 40 % RPD for detected concentrations between the two GC columns.
(c) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOFF IW-B		
Lab Sample ID:	JD36624-17	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	30900	130	ug/l	5	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	13.9	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	576	10	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Beryllium	2.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	88900	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Chromium	95.5	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	33.1	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	103	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	77300	250	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Lead	55.6	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	71900	2500	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	5320	100	ug/l	100	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Mercury	< 0.60	0.60	ug/l	1	12/16/21	12/16/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	88.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	28000	2500	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	129000	25000	ug/l	100	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	156	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	415	50	ug/l	10	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]

(1) Instrument QC Batch: MA51606
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Instrument QC Batch: MA51719
(5) Prep QC Batch: MP30402
(6) Prep QC Batch: MP30441

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF IW-B		
Lab Sample ID:	JD36624-17	**Date Sampled:**	12/10/21
Matrix:	AQ - Ground Water	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate [a]	179	20	mg/l	10	12/27/21 22:42	AFL	EPA 300/SW846 9056A

(a) Analysis performed at SGS Orlando, FL.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HOFF IW-B		
Lab Sample ID:	JD36624-17F	**Date Sampled:**	12/10/21
Matrix:	AQ - Groundwater Filtered	**Date Received:**	12/10/21
		Percent Solids:	n/a
Project:	Hoff VC- 336 Layfield Road, Perkiomenville, PA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 50	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Antimony	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Arsenic	3.3	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Barium	105	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Beryllium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cadmium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Calcium	67400	5000	ug/l	20	12/20/21	01/11/22	MET	SW846 6020B [4]	SW846 3010A [6]
Chromium	< 2.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Cobalt	6.7	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Copper	< 4.0	4.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Iron	123	50	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Lead	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Magnesium	41400	5000	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Manganese	4230	100	ug/l	100	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Mercury	< 0.20	0.20	ug/l	1	12/16/21	12/16/21	SB	SW846 7470A [1]	SW846 7470A [5]
Nickel	37.0	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Potassium	17000	500	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Selenium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Silver	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Sodium	122000	5000	ug/l	20	12/20/21	01/10/22	NV	SW846 6020B [3]	SW846 3010A [6]
Thallium	< 1.0	1.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Vanadium	2.9	2.0	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]
Zinc	< 10	10	ug/l	2	12/20/21	01/07/22	NV	SW846 6020B [2]	SW846 3010A [6]

(1) Instrument QC Batch: MA51606
(2) Instrument QC Batch: MA51693
(3) Instrument QC Batch: MA51710
(4) Instrument QC Batch: MA51719
(5) Prep QC Batch: MP30402
(6) Prep QC Batch: MP30441

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

EHSA-QAC-0023-04-FORM-Standard COC

FED-EX Tracking # | Bottle Order Control # JS-112321-176
SGS Quote # | SGS Job # JD36624

Client / Reporting Information

Company Name: Tetra Tech Inc.
Street Address:
City State Zip:
Project Contact E-mail: Jonathan Dziekan
Phone #: 610-692-8756
Sampler(s) Name(s) Phone #: M. Blomer, N. Dench

Project Information

Project Name: Hoff
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager: Jonathan Dziekan

Billing Information (if different from Report to)

Company Name: Tetra Tech Inc.
Street Address:
City State Zip:
Attention:

Requested Analysis

Volatiles VB260SL; 1,4 Dioxane VB260 SIM Dox; Semi-Volatiles BLV8270 SIM PAH; Pesticides PB8081 Pest TCL; Metals TAL; Metals TAL Diss; Methane VRSK175DGMEE; Sulfate 504

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB-Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Source C=Normal ed (Y/N)	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only)	LAB USE ONLY
1	TB-20211207		12/7/2021	1200	MEB	G		TB	4	4								X	
2F	Hoff MW-B	*	12/7/2021	1530	MEB	G		GW	16	9		1		5				X X X X X X X X	
3F	Hoff MW-4OL		12/8/2021	1130	MEB	G		GW	12	6		2		4				X X X X X X	
4F	Hoff MW-4DU		12/8/2021	1300	MEB	G		GW	12	6		2		4				X X X X X X	
5F	Dup-20211		12/8/2021	1200	MEB	G		GW	12	6		2		4				X X X X X X	
6F	Hoff MW-FA		12/8/2021	1455	MEB	G		GW	16	9		2		5				X X X X X X X X	
7F	Hoff MW-FB	@	12/8/2021	1555	MEB	G		GW	17	10		2		5				X X X X X X X X	
8F	Hoff MW-13		12/9/2021	0935	MEB	G		GW	16	9		2		5				X X X X X X X X	
9F	Hoff MW-C		12/9/2021	1120	MEB	G		GW	16	9		2		5				X X X X X X X X	
10F	Hoff MW-D	@	12/9/2021	1250	MEB	G		GW	17	10		2		5				X X X X X X X X	
11F	Hoff IW-1A		12/9/2021	1430	MEB	G		GW	16	9		2		5				X X X X X X X X	
12F	Hoff IW-1B	*	12/9/2021	1530	MEB	G		GW	16	9		2		5				X X X X X X X X	

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [ ] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other

All data available via Lablink | * Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [ ] EDD Format
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

* VOA QC vial
# 2x250ml 8270LVI

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1	Marlui Erin Blomer	12/10/21 1505	Mike Gonnella	Mike Gonnella	12/10/21 1740	
2						
3						
4						
5						

Custody Seal # | Intact / Not intact / Absent | Therm ID: 4 | On Ice | Cooler Temp. °C: 3.0C/P 2.2C/P
See Sample Receipt Summary
HNO3 pH<2 2.8C/P 2.9C/P 2.9C/P

CHAIN OF CUSTODY

SGS

EHSA-QAC-0023-04-FORM-Standard COC

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #: JD36624

Client / Reporting Information

Company Name: Tetra Tech Inc.
Street Address:
City State Zip:
Project Contact: Jonathan Dziekan E-mail:
Phone #: 610-840-8756
Sampler(s) Name(s): M. Blomer & N. Deneb Phone #:

Project Information

~~Project Name~~: Hoff
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager: Jonathan Dziekan
Billing Information (if different from Report to)
Company Name: Tetra Tech Inc.
Street Address:
City State Zip:
Attention:

Requested Analysis

Volatiles VB36051 | 1,4 Dioxane VB260 SIM DJ# | Semivolatiles BLV8730 SIM BNA | Pesticides PB0081 Pest TCL | Metals TAL | Metals TAL Hg SI | Methane VRSK175D6ME | Sulfate 9056

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	Preserved Bottles: HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only)	LAB USE ONLY
13F	Hoff IW-3S		12/10/2021	0915	MEB	G		GW	16	4		2		5				X X X X X X X X	
14F	Hoff IW-3B		12/10/2021	0940	MEB	G		GW	16	4		2		5				X X X X X X X X	
15F	Hoff IW-2A		12/10/2021	1103	MEB	G		GW	16	4		2		5				X X X X X X X X	
16F	Hoff IW-2B		12/10/2021	1203	MEB	G		GW	16	4		2		5				X X X X X X X X	
17F	Hoff MW-6		12/10/2021	1300	MEB	G		GW	17	10		2		5				X X X X X X X X	

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [ ] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria_____
- [ ] CT RCP Criteria_____
- [ ] State Forms
- [ ] EDD Format _____
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date / Time:	Received By:
1	Markus Erik Blomer	12/13/21 1505	Mike Gonnella
2	Mike Gonnella	12/10/21 1745	
3			
4			
5			

Custody Seal #: ☐ Intact ☐ Not intact | ☐ Absent
Therm ID: See Sample Receipt Summary
On Ice: ☒ Cooler Temp. °C: 2.8C IP 2.9C IP 2.9C IP 2.8C IP 2.9C IP 2.9C IP

SGS Sample Receipt Summary

Job Number: JD36624 **Client:** TETRA TECH EC INC. **Project:** HOFF VC- 336 LAYFIELD ROAD, PERKIOMENV

Date / Time Received: 12/10/2021 5:40:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.0); Cooler 2: (2.9); Cooler 3: (2.8); Cooler 4: (2.9); Cooler 5: (2.9);

Cooler Temps (Corrected) °C: Cooler 1: (1.6); Cooler 2: (1.5); Cooler 3: (1.4); Cooler 4: (1.5); Cooler 5: (1.5);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	5		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

Job Change Order: JD36624

Requested Date: 12/30/2021 **Received Date:** 12/10/2021

Account Name: Tetra Tech EC Inc. **Due Date:** 12/30/2021

Project Description: Hoff VC- 336 Layfield Road, Perkiomenville, PA **Deliverable:** REDT2

C/O Initiated By: JADONS **PM:** JBS **TAT (Days):** 7

==========

Sample #: JD36624-2 thru 17

Dept:

TAT: 7

Change:
Please cancel ABLV8270SL and add ABLV8270SL1 on the original jol the original due date.

==========

Above Changes Per: Jadon Schiller **Date/Time:** 12/30/2021

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

JD36624: Chain of Custody
Page 4 of 4

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36624

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-1 Collected: 10-DEC-21 13:00 By: MEB TB-20211207			Received: 10-DEC-21 By: DG			
JD36624-1	SW846 8260D BY SIM	17-DEC-21 19:35	BK			V8260SIMDIOX
JD36624-1	SW846 8260D	17-DEC-21 19:54	BK			V8260SL
JD36624-2 Collected: 07-DEC-21 15:30 By: MEB HOFF MW-8			Received: 10-DEC-21 By: DG			
JD36624-2	RSK-175	14-DEC-21 13:50	WC			VRSK175DGMEE
JD36624-2	RSK-175	14-DEC-21 14:03	WC			VRSK175DGMEE
JD36624-2	SW846 7470A	15-DEC-21 13:39	SB	15-DEC-21	SB	HG
JD36624-2	SW846 8260D	16-DEC-21 14:50	NH			V8260SL
JD36624-2	SW846 8260D	16-DEC-21 16:12	NH			V8260SL
JD36624-2	SW846 8260D BY SIM	16-DEC-21 21:20	BK			V8260SIMDIOX
JD36624-2	SW846 8260D BY SIM	17-DEC-21 13:04	BK			
JD36624-2	SW846 8270E	18-DEC-21 06:07	CS	14-DEC-21	NT	ABLV8270SL
JD36624-2	SW846 8081B	21-DEC-21 05:56	CP	14-DEC-21	JL	P8081PESTTCL
JD36624-2	EPA 300/SW846 9056A	27-DEC-21 16:54	AFL	27-DEC-21	AFL	SO4
JD36624-2	SW846 8270E BY SIM	28-DEC-21 01:19	KLS	14-DEC-21	NT	BLV8270SIMPAH
JD36624-2	SW846 6020B	06-JAN-22 15:37	NV	21-DEC-21	AK	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS
JD36624-2	SW846 6020B	08-JAN-22 21:13	NV	21-DEC-21	AK	MGMS, NAMS, ZNMS
JD36624-2	SW846 6020B	08-JAN-22 21:18	NV	21-DEC-21	AK	MNMS
JD36624-2	SW846 6020B	10-JAN-22 14:07	NV	21-DEC-21	AK	CAMS
JD36624-3 Collected: 08-DEC-21 11:30 By: MEB HOFF MW-4DL			Received: 10-DEC-21 By: DG			
JD36624-3	SW846 7470A	15-DEC-21 13:40	SB	15-DEC-21	SB	HG
JD36624-3	SW846 8260D	16-DEC-21 18:55	NH			V8260SL
JD36624-3	SW846 8270E	18-DEC-21 06:34	CS	14-DEC-21	NT	ABLV8270SL
JD36624-3	SW846 8260D BY SIM	20-DEC-21 14:12	BK			V8260SIMDIOX
JD36624-3	SW846 8081B	21-DEC-21 06:14	CP	14-DEC-21	JL	P8081PESTTCL
JD36624-3	SW846 8270E BY SIM	27-DEC-21 22:33	KLS	14-DEC-21	NT	BLV8270SIMPAH

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36624

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-3	SW846 6020B	07-JAN-22 19:46	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BEMS,CDMS,COMS,CRMS,CUMS,FEMS,KMS,NIMS,PBMS,SBMS,TLMS,VMS,ZNMS
JD36624-3	SW846 6020B	11-JAN-22 18:27	MET	20-DEC-21	SF	BAMS,SEMS
JD36624-3	SW846 6020B	11-JAN-22 20:10	MET	20-DEC-21	SF	MGMS
JD36624-3	SW846 6020B	11-JAN-22 20:13	MET	20-DEC-21	SF	MNMS
JD36624-3	SW846 6020B	11-JAN-22 20:16	MET	20-DEC-21	SF	CAMS,NAMS
JD36624-4	Collected: 08-DEC-21 13:00 By: MEB			Received: 10-DEC-21 By: DG		
HOFF MW-4DU						
JD36624-4	SW846 7470A	15-DEC-21 13:42	SB	15-DEC-21	SB	HG
JD36624-4	SW846 8260D	16-DEC-21 21:38	NH			V8260SL
JD36624-4	SW846 8260D	17-DEC-21 14:43	BK			V8260SL
JD36624-4	SW846 8260D BY SIM	17-DEC-21 14:48	BK			
JD36624-4	SW846 8081B	18-DEC-21 00:39	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-4	SW846 8270E	18-DEC-21 07:01	CS	14-DEC-21	NT	ABLV8270SL
JD36624-4	SW846 8260D BY SIM	20-DEC-21 17:05	BK			V8260SIMDIOX
JD36624-4	SW846 8270E BY SIM	04-JAN-22 17:01	KLS	14-DEC-21	NT	BLV8270SIMPAH
JD36624-4	SW846 6020B	07-JAN-22 19:52	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BAMS,BEMS,CDMS,COMS,CRMS,CUMS,FEMS,KMS,MNMS,NIMS,PBMS,SBMS,TLMS,VMS,ZNMS
JD36624-4	SW846 6020B	11-JAN-22 18:30	MET	20-DEC-21	SF	SEMS
JD36624-4	SW846 6020B	11-JAN-22 20:19	MET	20-DEC-21	SF	CAMS,MGMS,NAMS
JD36624-5	Collected: 08-DEC-21 12:00 By: MEB			Received: 10-DEC-21 By: DG		
DUP-2021						
JD36624-5	SW846 7470A	15-DEC-21 14:03	SB	15-DEC-21	SB	HG
JD36624-5	SW846 8260D	16-DEC-21 22:05	NH			V8260SL
JD36624-5	SW846 8260D BY SIM	17-DEC-21 15:46	BK			
JD36624-5	SW846 8260D	17-DEC-21 16:27	BK			V8260SL
JD36624-5	SW846 8081B	18-DEC-21 00:57	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-5	SW846 8270E	18-DEC-21 07:27	CS	14-DEC-21	NT	ABLV8270SL
JD36624-5	SW846 8260D BY SIM	20-DEC-21 17:34	BK			V8260SIMDIOX
JD36624-5	SW846 8270E BY SIM	30-DEC-21 15:22	KLS	14-DEC-21	NT	BLV8270SIMPAH

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Job No: JD36624

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-5	SW846 6020B	07-JAN-22 19:35	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MNMS, NIMS, PBMS, SBMS, TLMS, VMS, ZNMS
JD36624-5	SW846 6020B	11-JAN-22 00:45	NV	20-DEC-21	SF	SEMS
JD36624-5	SW846 6020B	11-JAN-22 20:03	MET	20-DEC-21	SF	CAMS, MGMS, NAMS
JD36624-6	Collected: 08-DEC-21 14:55 By: MEB		Received: 10-DEC-21 By: DG			
HOFF MW-FA						
JD36624-6	RSK-175	14-DEC-21 14:16	WC			VRSK175DGMEE
JD36624-6	RSK-175	14-DEC-21 14:29	WC			VRSK175DGMEE
JD36624-6	SW846 7470A	15-DEC-21 14:04	SB	15-DEC-21	SB	HG
JD36624-6	SW846 8260D	16-DEC-21 20:43	NH			V8260SL
JD36624-6	SW846 8260D BY SIM	17-DEC-21 17:40	BK			
JD36624-6	SW846 8081B	18-DEC-21 01:15	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-6	SW846 8270E	18-DEC-21 07:54	CS	14-DEC-21	NT	ABLV8270SL
JD36624-6	SW846 8260D BY SIM	20-DEC-21 18:03	BK			V8260SIMDIOX
JD36624-6	EPA 300/SW846 9056A	27-DEC-21 17:13	AFL	27-DEC-21	AFL	SO4
JD36624-6	SW846 8270E BY SIM	27-DEC-21 23:44	KLS	14-DEC-21	NT	BLV8270SIMPAH
JD36624-6	SW846 8270E BY SIM	30-DEC-21 15:46	KLS	14-DEC-21	NT	BLV8270SIMPAH
JD36624-6	SW846 6020B	08-JAN-22 16:03	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-6	SW846 6020B	11-JAN-22 20:22	MET	20-DEC-21	SF	CAMS, MGMS, NAMS
JD36624-6	SW846 6020B	11-JAN-22 20:32	MET	20-DEC-21	SF	MNMS
JD36624-7	Collected: 08-DEC-21 15:55 By: MEB		Received: 10-DEC-21 By: DG			
HOFF MW-FB						
JD36624-7	RSK-175	14-DEC-21 14:42	WC			VRSK175DGMEE
JD36624-7	RSK-175	14-DEC-21 15:08	WC			VRSK175DGMEE
JD36624-7	SW846 7470A	15-DEC-21 14:06	SB	15-DEC-21	SB	HG
JD36624-7	SW846 8260D	16-DEC-21 21:10	NH			V8260SL
JD36624-7	SW846 8260D BY SIM	17-DEC-21 13:33	BK			V8260SIMDIOX
JD36624-7	SW846 8260D	17-DEC-21 17:18	BK			V8260SL
JD36624-7	SW846 8081B	18-DEC-21 01:33	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-7	SW846 8270E	18-DEC-21 08:21	CS	14-DEC-21	NT	ABLV8270SL
JD36624-7	SW846 8260D BY SIM	20-DEC-21 18:32	BK			

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Job No: JD36624

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Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-7	SW846 8081B	21-DEC-21 04:44	CP	14-DEC-21	JL	P8081PESTTCL
JD36624-7	EPA 300/SW846 9056A	27-DEC-21 18:11	AFL	27-DEC-21	AFL	SO4
JD36624-7	SW846 8270E BY SIM	28-DEC-21 00:08	KLS	14-DEC-21	NT	BLV8270SIMPAH
JD36624-7	SW846 8270E BY SIM	30-DEC-21 16:09	KLS	14-DEC-21	NT	BLV8270SIMPAH
JD36624-7	SW846 6020B	08-JAN-22 16:08	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BAMS,BEMS,CDMS,COMS,CRMS,CUMS,FEMS,KMS,NIMS,PBMS,SBMS,SEMS,TLMS,VMS,ZNMS
JD36624-7	SW846 6020B	11-JAN-22 20:35	MET	20-DEC-21	SF	CAMS,MGMS,MNMS,NAMS
JD36624-8	Collected: 09-DEC-21 09:35 By: MEB			Received: 10-DEC-21	By: DG	
HOFF MW-13						
JD36624-8	RSK-175	14-DEC-21 15:21	WC			VRSK175DGMEE
JD36624-8	RSK-175	14-DEC-21 15:34	WC			VRSK175DGMEE
JD36624-8	SW846 7470A	15-DEC-21 14:07	SB	15-DEC-21	SB	HG
JD36624-8	SW846 8260D	16-DEC-21 19:22	NH			V8260SL
JD36624-8	SW846 8081B	18-DEC-21 01:51	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-8	SW846 8081B	21-DEC-21 05:02	CP	14-DEC-21	JL	P8081PESTTCL
JD36624-8	SW846 8260D BY SIM	21-DEC-21 14:01	BK			V8260SIMDIOX
JD36624-8	SW846 8270E	22-DEC-21 06:18	CS	16-DEC-21	NT	ABLV8270SL
JD36624-8	EPA 300/SW846 9056A	27-DEC-21 18:30	AFL	27-DEC-21	AFL	SO4
JD36624-8	SW846 8270E BY SIM	30-DEC-21 12:59	KLS	16-DEC-21	NT	BLV8270SIMPAH
JD36624-8	SW846 6020B	08-JAN-22 16:14	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BAMS,BEMS,CDMS,COMS,CRMS,CUMS,FEMS,NIMS,PBMS,SBMS,SEMS,TLMS,VMS,ZNMS
JD36624-8	SW846 6020B	11-JAN-22 20:38	MET	20-DEC-21	SF	CAMS,KMS,MGMS
JD36624-8	SW846 6020B	11-JAN-22 20:42	MET	20-DEC-21	SF	MNMS,NAMS
JD36624-9	Collected: 09-DEC-21 11:20 By: MEB			Received: 10-DEC-21	By: DG	
HOFF MW-C						
JD36624-9	RSK-175	14-DEC-21 15:46	WC			VRSK175DGMEE
JD36624-9	RSK-175	14-DEC-21 15:59	WC			VRSK175DGMEE
JD36624-9	SW846 7470A	15-DEC-21 16:02	SB	15-DEC-21	SB	HG
JD36624-9	SW846 8260D	17-DEC-21 16:53	BK			V8260SL
JD36624-9	SW846 8260D BY SIM	17-DEC-21 20:32	BK			V8260SIMDIOX
JD36624-9	SW846 8081B	18-DEC-21 02:09	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-9	SW846 8260D BY SIM	21-DEC-21 14:29	BK			

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Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-9	SW846 8260D	21-DEC-21 14:35	BK			V8260SL
JD36624-9	SW846 8270E	22-DEC-21 06:43	CS	16-DEC-21	NT	ABLV8270SL
JD36624-9	EPA 300/SW846 9056A	27-DEC-21 18:49	AFL	27-DEC-21	AFL	SO4
JD36624-9	SW846 8270E BY SIM	30-DEC-21 13:22	KLS	16-DEC-21	NT	BLV8270SIMPAH
JD36624-9	SW846 6020B	08-JAN-22 16:20	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BEMS,CDMS, COMS,CRMS,CUMS,NIMS,SBMS, SEMS,TLMS,VMS,ZNMS
JD36624-9	SW846 6020B	11-JAN-22 20:45	MET	20-DEC-21	SF	BAMS,PBMS
JD36624-9	SW846 6020B	11-JAN-22 20:48	MET	20-DEC-21	SF	FEMS,MNMS
JD36624-9	SW846 6020B	11-JAN-22 20:51	MET	20-DEC-21	SF	CAMS,KMS,MGMS,NAMS
JD36624-10	Collected: 09-DEC-21 12:50 By: MEB			Received: 10-DEC-21 By: DG		
HOFF MW-D						
JD36624-10	RSK-175	15-DEC-21 09:28	WC			VRSK175DGMEE
JD36624-10	RSK-175	15-DEC-21 09:40	WC			VRSK175DGMEE
JD36624-10	SW846 7470A	15-DEC-21 14:10	SB	15-DEC-21	SB	HG
JD36624-10	SW846 8260D	17-DEC-21 16:01	BK			V8260SL
JD36624-10	SW846 8260D BY SIM	17-DEC-21 19:07	BK			V8260SIMDIOX
JD36624-10	SW846 8081B	18-DEC-21 02:26	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-10	SW846 8270E	22-DEC-21 07:08	CS	16-DEC-21	NT	ABLV8270SL
JD36624-10	EPA 300/SW846 9056A	27-DEC-21 19:09	AFL	27-DEC-21	AFL	SO4
JD36624-10	SW846 8270E BY SIM	30-DEC-21 13:47	KLS	16-DEC-21	NT	BLV8270SIMPAH
JD36624-10	SW846 6020B	08-JAN-22 16:26	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BAMS,BEMS, CDMS,COMS,CRMS,CUMS,FEMS, KMS,NIMS,PBMS,SBMS,SEMS, TLMS,VMS,ZNMS
JD36624-10	SW846 6020B	11-JAN-22 20:54	MET	20-DEC-21	SF	CAMS,MGMS,NAMS
JD36624-10	SW846 6020B	11-JAN-22 20:57	MET	20-DEC-21	SF	MNMS
JD36624-11	Collected: 09-DEC-21 14:30 By: MEB			Received: 10-DEC-21 By: DG		
HOFF IW-1A						
JD36624-11	RSK-175	15-DEC-21 10:21	WC			VRSK175DGMEE
JD36624-11	RSK-175	15-DEC-21 10:34	WC			VRSK175DGMEE
JD36624-11	SW846 7470A	15-DEC-21 14:11	SB	15-DEC-21	SB	HG
JD36624-11	SW846 8260D	17-DEC-21 19:02	BK			V8260SL
JD36624-11	SW846 8260D BY SIM	17-DEC-21 21:01	BK			V8260SIMDIOX
JD36624-11	SW846 8081B	18-DEC-21 02:44	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-11	SW846 8260D BY SIM	21-DEC-21 14:59	BK			

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Tetra Tech EC Inc.

Job No: JD36624

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-11	SW846 8270E	22-DEC-21 07:32	CS	16-DEC-21	NT	ABLV8270SL
JD36624-11	EPA 300/SW846 9056A	27-DEC-21 20:07	AFL	27-DEC-21	AFL	SO4
JD36624-11	SW846 8270E BY SIM	30-DEC-21 14:11	KLS	16-DEC-21	NT	BLV8270SIMPAH
JD36624-11	SW846 6020B	08-JAN-22 16:31	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BAMS,BEMS,CDMS,COMS,CRMS,CUMS,FEMS,KMS,NIMS,PBMS,SBMS,SEMS,TLMS,VMS,ZNMS
JD36624-11	SW846 6020B	11-JAN-22 21:07	MET	20-DEC-21	SF	CAMS,MGMS,MNMS
JD36624-11	SW846 6020B	11-JAN-22 21:10	MET	20-DEC-21	SF	NAMS
JD36624-12	Collected: 09-DEC-21 15:30 By: MEB		Received: 10-DEC-21 By: DG			
HOFF IW-1B						
JD36624-12	RSK-175	15-DEC-21 10:47	WC			VRSK175DGMEE
JD36624-12	SW846 7470A	15-DEC-21 14:16	SB	15-DEC-21	SB	HG
JD36624-12	SW846 8260D	17-DEC-21 19:28	BK			V8260SL
JD36624-12	SW846 8081B	18-DEC-21 03:02	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-12	SW846 8260D BY SIM	21-DEC-21 15:28	BK			V8260SIMDIOX
JD36624-12	SW846 8270E	22-DEC-21 07:57	CS	16-DEC-21	NT	ABLV8270SL
JD36624-12	EPA 300/SW846 9056A	27-DEC-21 20:27	AFL	27-DEC-21	AFL	SO4
JD36624-12	SW846 8270E BY SIM	30-DEC-21 14:35	KLS	16-DEC-21	NT	BLV8270SIMPAH
JD36624-12	SW846 6020B	07-JAN-22 17:07	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BAMS,BEMS,CDMS,COMS,CRMS,CUMS,FEMS,KMS,MNMS,NIMS,PBMS,SBMS,SEMS,TLMS,VMS,ZNMS
JD36624-12	SW846 6020B	10-JAN-22 21:25	NV	20-DEC-21	SF	MGMS,NAMS
JD36624-12	SW846 6020B	11-JAN-22 18:59	MET	20-DEC-21	SF	CAMS
JD36624-13	Collected: 10-DEC-21 09:15 By: MEB		Received: 10-DEC-21 By: DG			
HOFF IW-3A						
JD36624-13	RSK-175	15-DEC-21 11:00	WC			VRSK175DGMEE
JD36624-13	RSK-175	15-DEC-21 11:13	WC			VRSK175DGMEE
JD36624-13	SW846 7470A	15-DEC-21 14:18	SB	15-DEC-21	SB	HG
JD36624-13	SW846 8260D	17-DEC-21 20:20	BK			V8260SL
JD36624-13	SW846 8081B	18-DEC-21 03:20	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-13	SW846 8270E BY SIM	18-DEC-21 08:41	CS	17-DEC-21	TG	BLV8270SIMPAH
JD36624-13	SW846 8260D	20-DEC-21 16:23	BK			V8260SL
JD36624-13	SW846 8260D BY SIM	23-DEC-21 12:15	BK			V8260SIMDIOX
JD36624-13	SW846 8270E	23-DEC-21 15:34	CS	17-DEC-21	TG	ABLV8270SL

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Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-13	EPA 300/SW846 9056A	27-DEC-21 20:46	AFL	27-DEC-21	AFL	SO4
JD36624-13	SW846 8270E BY SIM	28-DEC-21 14:43	KLS	17-DEC-21	TG	BLV8270SIMPAH
JD36624-13	SW846 6020B	07-JAN-22 17:12	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BAMS,BEMS,CDMS,COMS,CRMS,CUMS,FEMS,KMS,MNMS,NIMS,PBMS,SBMS,SEMS,TLMS,VMS,ZNMS
JD36624-13	SW846 6020B	10-JAN-22 21:31	NV	20-DEC-21	SF	MGMS,NAMS
JD36624-13	SW846 6020B	11-JAN-22 19:02	MET	20-DEC-21	SF	CAMS
JD36624-14	Collected: 10-DEC-21 09:40 By: MEB		Received: 10-DEC-21 By: DG			
HOFF IW-3B						
JD36624-14	RSK-175	15-DEC-21 11:27	WC			VRSK175DGMEE
JD36624-14	RSK-175	15-DEC-21 11:40	WC			VRSK175DGMEE
JD36624-14	SW846 7470A	15-DEC-21 14:19	SB	15-DEC-21	SB	HG
JD36624-14	SW846 8081B	18-DEC-21 03:38	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-14	SW846 8270E BY SIM	18-DEC-21 09:04	CS	17-DEC-21	TG	BLV8270SIMPAH
JD36624-14	SW846 8260D	21-DEC-21 15:00	BK			V8260SL
JD36624-14	SW846 8260D BY SIM	21-DEC-21 15:57	BK			V8260SIMDIOX
JD36624-14	SW846 8270E	23-DEC-21 16:00	CS	17-DEC-21	TG	ABLV8270SL
JD36624-14	EPA 300/SW846 9056A	27-DEC-21 21:05	AFL	27-DEC-21	AFL	SO4
JD36624-14	SW846 6020B	07-JAN-22 17:18	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BAMS,BEMS,CDMS,COMS,CRMS,CUMS,FEMS,KMS,MNMS,NIMS,PBMS,SBMS,SEMS,TLMS,VMS,ZNMS
JD36624-14	SW846 6020B	10-JAN-22 21:36	NV	20-DEC-21	SF	MGMS,NAMS
JD36624-14	SW846 6020B	11-JAN-22 19:06	MET	20-DEC-21	SF	CAMS
JD36624-15	Collected: 10-DEC-21 11:00 By: MEB		Received: 10-DEC-21 By: DG			
HOFF IW-2A						
JD36624-15	RSK-175	15-DEC-21 12:12	WC			VRSK175DGMEE
JD36624-15	RSK-175	15-DEC-21 12:28	WC			VRSK175DGMEE
JD36624-15	SW846 7470A	16-DEC-21 14:50	SB	16-DEC-21	SB	HG
JD36624-15	SW846 8081B	18-DEC-21 03:56	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-15	SW846 8270E BY SIM	18-DEC-21 09:28	CS	17-DEC-21	TG	BLV8270SIMPAH
JD36624-15	SW846 8260D BY SIM	20-DEC-21 21:54	BK			V8260SIMDIOX
JD36624-15	SW846 8260D	21-DEC-21 15:26	BK			V8260SL
JD36624-15	SW846 8260D BY SIM	21-DEC-21 16:26	BK			
JD36624-15	SW846 8260D	22-DEC-21 15:59	NW			V8260SL

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Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-15	SW846 8270E	23-DEC-21 16:27	CS	17-DEC-21	TG	ABLV8270SL
JD36624-15	EPA 300/SW846 9056A	27-DEC-21 21:24	AFL	27-DEC-21	AFL	SO4
JD36624-15	SW846 6020B	07-JAN-22 17:24	NV	20-DEC-21	SF	AGMS,ASMS,BEMS,CDMS,COMS,CRMS,CUMS,NIMS,PBMS,SBMS,SEMS,TLMS,VMS,ZNMS
JD36624-15	SW846 6020B	10-JAN-22 21:42	NV	20-DEC-21	SF	BAMS,FEMS
JD36624-15	SW846 6020B	10-JAN-22 21:47	NV	20-DEC-21	SF	KMS,MNMS
JD36624-15	SW846 6020B	10-JAN-22 21:53	NV	20-DEC-21	SF	MGMS,NAMS
JD36624-15	SW846 6020B	11-JAN-22 19:09	MET	20-DEC-21	SF	ALMS
JD36624-15	SW846 6020B	11-JAN-22 19:12	MET	20-DEC-21	SF	CAMS
JD36624-16	Collected: 10-DEC-21 12:00 By: MEB			Received: 10-DEC-21 By: DG		
HOFF IW-2B						
JD36624-16	RSK-175	15-DEC-21 12:43	WC			VRSK175DGMEE
JD36624-16	RSK-175	15-DEC-21 12:56	WC			VRSK175DGMEE
JD36624-16	SW846 7470A	16-DEC-21 14:51	SB	16-DEC-21	SB	HG
JD36624-16	SW846 8081B	18-DEC-21 04:13	RK	14-DEC-21	JL	P8081PESTTCL
JD36624-16	SW846 8270E BY SIM	18-DEC-21 09:52	CS	17-DEC-21	TG	BLV8270SIMPAH
JD36624-16	SW846 8260D BY SIM	20-DEC-21 22:22	BK			V8260SIMDIOX
JD36624-16	SW846 8081B	21-DEC-21 05:20	CP	14-DEC-21	JL	P8081PESTTCL
JD36624-16	SW846 8260D	21-DEC-21 15:52	BK			V8260SL
JD36624-16	SW846 8260D BY SIM	21-DEC-21 16:54	BK			
JD36624-16	SW846 8260D	22-DEC-21 13:51	ED			V8260SL
JD36624-16	SW846 8270E	23-DEC-21 16:54	CS	17-DEC-21	TG	ABLV8270SL
JD36624-16	EPA 300/SW846 9056A	27-DEC-21 21:44	AFL	27-DEC-21	AFL	SO4
JD36624-16	SW846 6020B	07-JAN-22 17:30	NV	20-DEC-21	SF	AGMS,ALMS,ASMS,BEMS,CDMS,COMS,CRMS,CUMS,FEMS,KMS,MNMS,NIMS,PBMS,SBMS,SEMS,TLMS,VMS,ZNMS
JD36624-16	SW846 6020B	10-JAN-22 21:59	NV	20-DEC-21	SF	BAMS,MGMS,NAMS
JD36624-16	SW846 6020B	11-JAN-22 19:22	MET	20-DEC-21	SF	CAMS
JD36624-17	Collected: 10-DEC-21 13:00 By: MEB			Received: 10-DEC-21 By: DG		
HOFF IW-B						
JD36624-17	RSK-175	15-DEC-21 13:09	WC			VRSK175DGMEE
JD36624-17	RSK-175	15-DEC-21 13:24	WC			VRSK175DGMEE
JD36624-17	SW846 7470A	16-DEC-21 14:56	SB	16-DEC-21	SB	HG
JD36624-17	SW846 8081B	18-DEC-21 04:31	RK	14-DEC-21	JL	P8081PESTTCL

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36624

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-17	SW846 8270E BY SIM	18-DEC-21 10:15	CS	17-DEC-21	TG	BLV8270SIMPAH
JD36624-17	SW846 8081B	21-DEC-21 05:38	CP	14-DEC-21	JL	P8081PESTTCL
JD36624-17	SW846 8260D	21-DEC-21 16:44	BK			V8260SL
JD36624-17	SW846 8260D	22-DEC-21 13:22	ED			V8260SL
JD36624-17	SW846 8260D BY SIM	23-DEC-21 12:44	BK			V8260SIMDIOX
JD36624-17	SW846 8260D BY SIM	23-DEC-21 15:36	BK			
JD36624-17	SW846 8270E	23-DEC-21 17:21	CS	17-DEC-21	TG	ABLV8270SL
JD36624-17	EPA 300/SW846 9056A	27-DEC-21 22:42	AFL	27-DEC-21	AFL	SO4
JD36624-17	SW846 6020B	07-JAN-22 17:35	NV	20-DEC-21	SF	AGMS, ASMS, BEMS, CDMS, COMS, CRMS, CUMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS
JD36624-17	SW846 6020B	10-JAN-22 22:04	NV	20-DEC-21	SF	BAMS, FEMS, KMS, MGMS, ZNMS
JD36624-17	SW846 6020B	10-JAN-22 22:15	NV	20-DEC-21	SF	MNMS, NAMS
JD36624-17	SW846 6020B	11-JAN-22 19:25	MET	20-DEC-21	SF	ALMS
JD36624-17	SW846 6020B	11-JAN-22 19:28	MET	20-DEC-21	SF	CAMS
JD36624-2F	Collected: 07-DEC-21 15:30 By: MEB		Received: 10-DEC-21 By: DG			
HOFF MW-8						
JD36624-2F	SW846 7470A	15-DEC-21 13:47	SB	15-DEC-21	SB	HG
JD36624-2F	SW846 6020B	06-JAN-22 15:31	NV	21-DEC-21	AK	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-2F	SW846 6020B	08-JAN-22 21:01	NV	21-DEC-21	AK	MGMS, NAMS
JD36624-2F	SW846 6020B	08-JAN-22 21:07	NV	21-DEC-21	AK	MNMS
JD36624-2F	SW846 6020B	10-JAN-22 14:12	NV	21-DEC-21	AK	CAMS
JD36624-3F	Collected: 08-DEC-21 11:30 By: MEB		Received: 10-DEC-21 By: DG			
HOFF MW-4DL						
JD36624-3F	SW846 7470A	15-DEC-21 13:48	SB	15-DEC-21	SB	HG
JD36624-3F	SW846 6020B	08-JAN-22 16:37	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-3F	SW846 6020B	11-JAN-22 21:14	MET	20-DEC-21	SF	BAMS, MGMS
JD36624-3F	SW846 6020B	11-JAN-22 21:17	MET	20-DEC-21	SF	MNMS
JD36624-3F	SW846 6020B	11-JAN-22 21:20	MET	20-DEC-21	SF	CAMS, NAMS

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36624

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-4F	Collected: 08-DEC-21 13:00 By: MEB HOFF MW-4DU		Received: 10-DEC-21 By: DG			
JD36624-4F	SW846 7470A	15-DEC-21 13:49	SB	15-DEC-21	SB	HG
JD36624-4F	SW846 6020B	08-JAN-22 16:54	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-4F	SW846 6020B	11-JAN-22 21:23	MET	20-DEC-21	SF	CAMS, MGMS, NAMS
JD36624-5F	Collected: 08-DEC-21 12:00 By: MEB DUP-2021		Received: 10-DEC-21 By: DG			
JD36624-5F	SW846 7470A	15-DEC-21 14:21	SB	15-DEC-21	SB	HG
JD36624-5F	SW846 6020B	08-JAN-22 16:59	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-5F	SW846 6020B	11-JAN-22 21:26	MET	20-DEC-21	SF	CAMS, MGMS, NAMS
JD36624-6F	Collected: 08-DEC-21 14:55 By: MEB HOFF MW-FA		Received: 10-DEC-21 By: DG			
JD36624-6F	SW846 7470A	15-DEC-21 14:22	SB	15-DEC-21	SB	HG
JD36624-6F	SW846 6020B	08-JAN-22 17:05	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-6F	SW846 6020B	11-JAN-22 21:30	MET	20-DEC-21	SF	CAMS, MGMS, NAMS
JD36624-6F	SW846 6020B	11-JAN-22 21:33	MET	20-DEC-21	SF	MNMS
JD36624-7F	Collected: 08-DEC-21 15:55 By: MEB HOFF MW-FB		Received: 10-DEC-21 By: DG			
JD36624-7F	SW846 7470A	15-DEC-21 14:24	SB	15-DEC-21	SB	HG
JD36624-7F	SW846 6020B	08-JAN-22 17:11	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36624

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-7F	SW846 6020B	11-JAN-22 21:42	MET	20-DEC-21	SF	CAMS, MGMS, MNMS, NAMS
JD36624-8F	Collected: 09-DEC-21 09:35 By: MEB HOFF MW-13		Received: 10-DEC-21 By: DG			
JD36624-8F	SW846 7470A	15-DEC-21 14:25	SB	15-DEC-21	SB	HG
JD36624-8F	SW846 6020B	08-JAN-22 17:16	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-8F	SW846 6020B	11-JAN-22 21:46	MET	20-DEC-21	SF	CAMS, KMS, MGMS
JD36624-8F	SW846 6020B	11-JAN-22 21:49	MET	20-DEC-21	SF	MNMS, NAMS
JD36624-9F	Collected: 09-DEC-21 11:20 By: MEB HOFF MW-C		Received: 10-DEC-21 By: DG			
JD36624-9F	SW846 7470A	15-DEC-21 16:04	SB	15-DEC-21	SB	HG
JD36624-9F	SW846 6020B	08-JAN-22 17:22	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-9F	SW846 6020B	11-JAN-22 21:55	MET	20-DEC-21	SF	CAMS, KMS, MGMS, NAMS
JD36624-10F	Collected: 09-DEC-21 12:50 By: MEB HOFF MW-D		Received: 10-DEC-21 By: DG			
JD36624-10F	SW846 7470A	15-DEC-21 14:31	SB	15-DEC-21	SB	HG
JD36624-10F	SW846 6020B	08-JAN-22 17:28	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-10F	SW846 6020B	11-JAN-22 21:58	MET	20-DEC-21	SF	CAMS, MGMS, NAMS
JD36624-10F	SW846 6020B	11-JAN-22 22:02	MET	20-DEC-21	SF	MNMS
JD36624-11F	Collected: 09-DEC-21 14:30 By: MEB HOFF IW-1A		Received: 10-DEC-21 By: DG			
JD36624-11F	SW846 7470A	15-DEC-21 14:33	SB	15-DEC-21	SB	HG

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36624

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-11E	SW846 6020B	08-JAN-22 17:33	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-11E	SW846 6020B	11-JAN-22 22:05	MET	20-DEC-21	SF	CAMS, MGMS, MNMS
JD36624-11E	SW846 6020B	11-JAN-22 22:08	MET	20-DEC-21	SF	NAMS
JD36624-12F	Collected: 09-DEC-21 15:30 By: MEB			Received: 10-DEC-21	By: DG	
HOFF IW-1B						
JD36624-12E	SW846 7470A	15-DEC-21 14:34	SB	15-DEC-21	SB	HG
JD36624-12E	SW846 6020B	07-JAN-22 17:41	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-12E	SW846 6020B	10-JAN-22 22:32	NV	20-DEC-21	SF	NAMS
JD36624-12E	SW846 6020B	11-JAN-22 19:31	MET	20-DEC-21	SF	CAMS, MGMS
JD36624-13F	Collected: 10-DEC-21 09:15 By: MEB			Received: 10-DEC-21	By: DG	
HOFF IW-3A						
JD36624-13E	SW846 7470A	15-DEC-21 14:36	SB	15-DEC-21	SB	HG
JD36624-13E	SW846 6020B	07-JAN-22 17:47	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-13E	SW846 6020B	11-JAN-22 19:34	MET	20-DEC-21	SF	CAMS, MGMS, NAMS
JD36624-14F	Collected: 10-DEC-21 09:40 By: MEB			Received: 10-DEC-21	By: DG	
HOFF IW-3B						
JD36624-14E	SW846 7470A	15-DEC-21 14:37	SB	15-DEC-21	SB	HG
JD36624-14E	SW846 6020B	07-JAN-22 18:04	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-14E	SW846 6020B	10-JAN-22 22:43	NV	20-DEC-21	SF	MGMS, NAMS
JD36624-14E	SW846 6020B	11-JAN-22 19:38	MET	20-DEC-21	SF	CAMS

Internal Sample Tracking Chronicle

Tetra Tech EC Inc.

Job No: JD36624

Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-15F	Collected: 10-DEC-21 11:00 By: MEB			Received: 10-DEC-21 By: DG		
HOFF IW-2A						
JD36624-15F	SW846 7470A	16-DEC-21 14:58	SB	16-DEC-21	SB	HG
JD36624-15F	SW846 6020B	07-JAN-22 18:10	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, MNMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-15F	SW846 6020B	10-JAN-22 22:49	NV	20-DEC-21	SF	KMS
JD36624-15F	SW846 6020B	10-JAN-22 22:54	NV	20-DEC-21	SF	MGMS, NAMS
JD36624-15F	SW846 6020B	11-JAN-22 19:41	MET	20-DEC-21	SF	CAMS
JD36624-16F	Collected: 10-DEC-21 12:00 By: MEB			Received: 10-DEC-21 By: DG		
HOFF IW-2B						
JD36624-16F	SW846 7470A	16-DEC-21 14:59	SB	16-DEC-21	SB	HG
JD36624-16F	SW846 6020B	07-JAN-22 18:16	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, SEMS, TLMS, VMS, ZNMS
JD36624-16F	SW846 6020B	10-JAN-22 23:00	NV	20-DEC-21	SF	MGMS, MNMS, NAMS
JD36624-16F	SW846 6020B	11-JAN-22 19:44	MET	20-DEC-21	SF	CAMS
JD36624-17F	Collected: 10-DEC-21 13:00 By: MEB			Received: 10-DEC-21 By: DG		
HOFF IW-B						
JD36624-17F	SW846 7470A	16-DEC-21 15:01	SB	16-DEC-21	SB	HG
JD36624-17F	SW846 6020B	07-JAN-22 18:21	NV	20-DEC-21	SF	SEMS
JD36624-17F	SW846 6020B	07-JAN-22 19:18	NV	20-DEC-21	SF	AGMS, ALMS, ASMS, BAMS, BEMS, CDMS, COMS, CRMS, CUMS, FEMS, KMS, NIMS, PBMS, SBMS, TLMS, VMS, ZNMS
JD36624-17F	SW846 6020B	10-JAN-22 23:05	NV	20-DEC-21	SF	MGMS, NAMS
JD36624-17F	SW846 6020B	10-JAN-22 23:11	NV	20-DEC-21	SF	MNMS
JD36624-17F	SW846 6020B	11-JAN-22 19:47	MET	20-DEC-21	SF	CAMS

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-1.2	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-1.2	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-1.2	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-1.2	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-1.4	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-1.4	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-1.4	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-1.4	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-2.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-2.1	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-2.1	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-2.1	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-2.1	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-2.1.1	Dawnette Williams	Organics Prep	12/14/21 08:48	Extract from JD36624-2.1
JD36624-2.1.1	Organics Prep	Naisha Torres	12/15/21 12:54	Extract from JD36624-2.1
JD36624-2.1.1	Naisha Torres	Extract Storage	12/15/21 12:54	Return to Storage
JD36624-2.1.1	Extract Storage	Christopher Sowa	12/17/21 23:18	Retrieve from Storage
JD36624-2.1.1	Christopher Sowa	GCMS5P	12/17/21 23:18	Load on Instrument
JD36624-2.1.1	GCMS5P	Jackleen Youssef	12/20/21 11:58	Unload from Instrument
JD36624-2.1.1	Jackleen Youssef	Extract Freezer	12/20/21 11:58	Return to Storage
JD36624-2.1.1	Extract Freezer	Kristi Schollenberger	12/27/21 17:33	Retrieve from Storage
JD36624-2.1.1	Kristi Schollenberger	GCMS4P	12/27/21 17:34	Load on Instrument
JD36624-2.1.1	GCMS4P	Kristi Schollenberger	12/28/21 14:45	Unload from Instrument
JD36624-2.1.1	Kristi Schollenberger	Extract Freezer	12/28/21 14:45	Return to Storage
JD36624-2.1.2	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-2.1
JD36624-2.1.2	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-2.1
JD36624-2.1.2	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-2.1.2	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-2.1.2	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-2.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-2.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-2.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-2.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-2.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-2.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-2.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-2.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-2.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-2.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-2.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-2.5	Alyssa Koshy	Secured Storage	12/20/21 16:28	Return to Storage
JD36624-2.5	Stephen Sourour	Secured Storage	01/10/22 22:39	Return to Storage
storage				
JD36624-2.7	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-2.7	Tyler Strong		12/21/21 14:34	Subcontract
sub				
JD36624-2.8	Secured Storage	Taylor Sauter	12/16/21 14:21	Retrieve from Storage
JD36624-2.8	Taylor Sauter	GCMS3A	12/16/21 14:21	Load on Instrument
JD36624-2.8	GCMS3A	Bridget Kelly	12/17/21 08:45	Unload from Instrument
JD36624-2.8	Bridget Kelly	Secured Storage	12/17/21 08:45	Return to Storage
JD36624-2.9	Secured Storage	Nicole Hornlien	12/16/21 16:19	Retrieve from Storage
JD36624-2.9	Nicole Hornlien	GCMS3D	12/16/21 16:19	Load on Instrument
JD36624-2.9	GCMS3D	Nicole Hornlien	12/17/21 17:18	Unload from Instrument
JD36624-2.9	Nicole Hornlien	Secured Storage	12/17/21 17:18	Return to Storage
JD36624-2.11	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-2.11	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-2.11	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-2.11	William Cruser		12/28/21 08:30	Depleted
JD36624-2.14	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-2.14	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-2.14	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-2.14	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-2F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-2F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-2F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-2F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-2F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-2F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-2F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-2F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-2F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-2F.6	Stephen Sourour	Secured Storage	01/10/22 22:39	Return to Storage
storage				

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-3.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-3.1	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-3.1	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-3.1	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-3.1	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-3.1.1	Dawnette Williams	Organics Prep	12/14/21 08:48	Extract from JD36624-3.1
JD36624-3.1.1	Organics Prep	Naisha Torres	12/15/21 12:54	Extract from JD36624-3.1
JD36624-3.1.1	Naisha Torres	Extract Storage	12/15/21 12:54	Return to Storage
JD36624-3.1.1	Extract Storage	Christopher Sowa	12/17/21 23:18	Retrieve from Storage
JD36624-3.1.1	Christopher Sowa	GCMS5P	12/17/21 23:18	Load on Instrument
JD36624-3.1.1	GCMS5P	Jackleen Youssef	12/20/21 11:58	Unload from Instrument
JD36624-3.1.1	Jackleen Youssef	Extract Freezer	12/20/21 11:58	Return to Storage
JD36624-3.1.1	Extract Freezer	Kristi Schollenberger	12/27/21 17:33	Retrieve from Storage
JD36624-3.1.1	Kristi Schollenberger	GCMS4P	12/27/21 17:34	Load on Instrument
JD36624-3.1.1	GCMS4P	Kristi Schollenberger	12/28/21 14:45	Unload from Instrument
JD36624-3.1.1	Kristi Schollenberger	Extract Freezer	12/28/21 14:45	Return to Storage
JD36624-3.1.2	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-3.1
JD36624-3.1.2	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-3.1
JD36624-3.1.2	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-3.1.2	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-3.1.2	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-3.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-3.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-3.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-3.4	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-3.4	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-3.4	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-3.4	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-3.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-3.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-3.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-3.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-3.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-3.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-3.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-3.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-3.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-3.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-3.5
JD36624-3.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-3.5
JD36624-3.5.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-3.7	Secured Storage	Bridget Kelly	12/20/21 17:16	Retrieve from Storage
JD36624-3.7	Bridget Kelly	GCMS3A	12/20/21 17:16	Load on Instrument
JD36624-3.7	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-3.7	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-3.10	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-3.10	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-3.10	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-3.10	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-3.11	Secured Storage	Nicole Hornlien	12/16/21 16:19	Retrieve from Storage
JD36624-3.11	Nicole Hornlien	GCMS3D	12/16/21 16:19	Load on Instrument
JD36624-3.11	GCMS3D	Nicole Hornlien	12/17/21 17:18	Unload from Instrument
JD36624-3.11	Nicole Hornlien	Secured Storage	12/17/21 17:18	Return to Storage
JD36624-3F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-3F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-3F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-3F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-3F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-3F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-3F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-3F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-3F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-3F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-3F.6
JD36624-3F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-3F.6
JD36624-3F.6.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-4.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-4.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-4.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-4.3 stage	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
JD36624-4.3	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-4.3	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-4.3	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-4.3.1	Dawnette Williams	Organics Prep	12/14/21 08:48	Extract from JD36624-4.3
JD36624-4.3.1	Organics Prep	Naisha Torres	12/15/21 12:54	Extract from JD36624-4.3
JD36624-4.3.1	Naisha Torres	Extract Storage	12/15/21 12:54	Return to Storage
JD36624-4.3.1	Extract Storage	Christopher Sowa	12/17/21 23:18	Retrieve from Storage
JD36624-4.3.1	Christopher Sowa	GCMS5P	12/17/21 23:18	Load on Instrument
JD36624-4.3.1	GCMS5P	Jackleen Youssef	12/20/21 11:58	Unload from Instrument
JD36624-4.3.1	Jackleen Youssef	Extract Freezer	12/20/21 11:58	Return to Storage
JD36624-4.3.1	Extract Freezer	Kristi Schollenberger	12/27/21 17:33	Retrieve from Storage
JD36624-4.3.1	Kristi Schollenberger	GCMS4P	12/27/21 17:34	Load on Instrument
JD36624-4.3.1	GCMS4P	Kristi Schollenberger	12/28/21 14:45	Unload from Instrument
JD36624-4.3.1	Kristi Schollenberger	Extract Freezer	12/28/21 14:45	Return to Storage
JD36624-4.3.1	Extract Freezer	Kristi Schollenberger	12/28/21 14:48	Retrieve from Storage
JD36624-4.3.1	Kristi Schollenberger	GCMS4P	12/28/21 14:48	Load on Instrument
JD36624-4.3.1	GCMS4P	Kristi Schollenberger	01/04/22 14:58	Unload from Instrument
JD36624-4.3.1	Kristi Schollenberger	Extract Freezer	01/04/22 14:58	Return to Storage
JD36624-4.3.2	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-4.3
JD36624-4.3.2	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-4.3
JD36624-4.3.2	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-4.3.2	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-4.3.2	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-4.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-4.4	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-4.4	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-4.4	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-4.4	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-4.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-4.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-4.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-4.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-4.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-4.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-4.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-4.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-4.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-4.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-4.5
JD36624-4.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-4.5

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-4.5.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-4.7	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-4.7	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-4.7	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-4.7	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-4.8	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-4.8	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-4.8	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-4.8	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-4.9	Secured Storage	Bridget Kelly	12/20/21 17:16	Retrieve from Storage
JD36624-4.9	Bridget Kelly	GCMS3A	12/20/21 17:16	Load on Instrument
JD36624-4.9	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-4.9	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-4.10	Secured Storage	Nicole Hornlien	12/16/21 16:19	Retrieve from Storage
JD36624-4.10	Nicole Hornlien	GCMS3D	12/16/21 16:19	Load on Instrument
JD36624-4.10	GCMS3D	Nicole Hornlien	12/17/21 17:18	Unload from Instrument
JD36624-4.10	Nicole Hornlien	Secured Storage	12/17/21 17:18	Return to Storage
JD36624-4F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-4F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-4F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-4F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-4F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-4F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-4F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-4F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-4F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-4F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-4F.6
JD36624-4F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-4F.6
JD36624-4F.6.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-5.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-5.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-5.2	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-5.2	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-5.2	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-5.2	Rocquan Salters		12/23/21 20:06	Depleted

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-5.2.1	Dawnette Williams	Organics Prep	12/14/21 08:48	Extract from JD36624-5.2
JD36624-5.2.1	Organics Prep	Naisha Torres	12/15/21 12:54	Extract from JD36624-5.2
JD36624-5.2.1	Naisha Torres	Extract Storage	12/15/21 12:54	Return to Storage
JD36624-5.2.1	Extract Storage	Christopher Sowa	12/17/21 23:18	Retrieve from Storage
JD36624-5.2.1	Christopher Sowa	GCMS5P	12/17/21 23:18	Load on Instrument
JD36624-5.2.1	GCMS5P	Jackleen Youssef	12/20/21 11:58	Unload from Instrument
JD36624-5.2.1	Jackleen Youssef	Extract Freezer	12/20/21 11:58	Return to Storage
JD36624-5.2.1	Extract Freezer	Kristi Schollenberger	12/27/21 17:33	Retrieve from Storage
JD36624-5.2.1	Kristi Schollenberger	GCMS4P	12/27/21 17:34	Load on Instrument
JD36624-5.2.1	GCMS4P	Kristi Schollenberger	12/28/21 14:45	Unload from Instrument
JD36624-5.2.1	Kristi Schollenberger	Extract Freezer	12/28/21 14:45	Return to Storage
JD36624-5.2.1	Extract Freezer	Kristi Schollenberger	12/28/21 14:48	Retrieve from Storage
JD36624-5.2.1	Kristi Schollenberger	GCMS4P	12/28/21 14:48	Load on Instrument
JD36624-5.2.1	GCMS4P	Kristi Schollenberger	01/04/22 14:58	Unload from Instrument
JD36624-5.2.1	Kristi Schollenberger	Extract Freezer	01/04/22 14:58	Return to Storage
JD36624-5.2.2	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-5.2
JD36624-5.2.2	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-5.2
JD36624-5.2.2	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-5.2.2	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-5.2.2	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-5.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-5.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-5.4 stage	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
JD36624-5.4	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-5.4	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-5.4	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-5.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-5.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-5.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-5.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-5.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-5.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-5.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-5.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-5.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-5.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-5.5
JD36624-5.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-5.5

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-5.5.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-5.7	Secured Storage	Bridget Kelly	12/20/21 17:16	Retrieve from Storage
JD36624-5.7	Bridget Kelly	GCMS3A	12/20/21 17:16	Load on Instrument
JD36624-5.7	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-5.7	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-5.8	Secured Storage	Nicole Hornlien	12/16/21 16:19	Retrieve from Storage
JD36624-5.8	Nicole Hornlien	GCMS3D	12/16/21 16:19	Load on Instrument
JD36624-5.8	GCMS3D	Nicole Hornlien	12/17/21 17:18	Unload from Instrument
JD36624-5.8	Nicole Hornlien	Secured Storage	12/17/21 17:18	Return to Storage
JD36624-5.9	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-5.9	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-5.9	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-5.9	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-5.10	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-5.10	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-5.10	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-5.10	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-5F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-5F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-5F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-5F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-5F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-5F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-5F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-5F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-5F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-5F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-5F.6
JD36624-5F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-5F.6
JD36624-5F.6.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-6.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-6.1	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-6.1	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-6.1	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-6.1	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-6.1.1	Dawnette Williams	Organics Prep	12/14/21 08:48	Extract from JD36624-6.1

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-6.1.1	Organics Prep	Naisha Torres	12/15/21 12:54	Extract from JD36624-6.1
JD36624-6.1.1	Naisha Torres	Extract Storage	12/15/21 12:54	Return to Storage
JD36624-6.1.1	Extract Storage	Christopher Sowa	12/17/21 23:18	Retrieve from Storage
JD36624-6.1.1	Christopher Sowa	GCMS5P	12/17/21 23:18	Load on Instrument
JD36624-6.1.1	GCMS5P	Jackleen Youssef	12/20/21 11:58	Unload from Instrument
JD36624-6.1.1	Jackleen Youssef	Extract Freezer	12/20/21 11:58	Return to Storage
JD36624-6.1.1	Extract Freezer	Kristi Schollenberger	12/27/21 17:33	Retrieve from Storage
JD36624-6.1.1	Kristi Schollenberger	GCMS4P	12/27/21 17:34	Load on Instrument
JD36624-6.1.1	GCMS4P	Kristi Schollenberger	12/28/21 14:45	Unload from Instrument
JD36624-6.1.1	Kristi Schollenberger	Extract Freezer	12/28/21 14:45	Return to Storage
JD36624-6.1.1	Extract Freezer	Kristi Schollenberger	12/28/21 14:48	Retrieve from Storage
JD36624-6.1.1	Kristi Schollenberger	GCMS4P	12/28/21 14:48	Load on Instrument
JD36624-6.1.1	GCMS4P	Kristi Schollenberger	01/04/22 14:58	Unload from Instrument
JD36624-6.1.1	Kristi Schollenberger	Extract Freezer	01/04/22 14:58	Return to Storage
JD36624-6.1.2	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-6.1
JD36624-6.1.2	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-6.1
JD36624-6.1.2	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-6.1.2	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-6.1.2	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-6.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-6.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-6.3	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-6.3	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-6.3	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-6.3	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-6.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-6.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-6.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-6.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-6.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-6.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-6.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-6.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-6.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-6.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-6.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-6.5
JD36624-6.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-6.5

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-6.5.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-6.7	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-6.7 sub	Tyler Strong		12/21/21 14:34	Subcontract
JD36624-6.8	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-6.8	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-6.8	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-6.8	William Cruser		12/28/21 08:30	Depleted
JD36624-6.10	Secured Storage	Bridget Kelly	12/20/21 17:16	Retrieve from Storage
JD36624-6.10	Bridget Kelly	GCMS3A	12/20/21 17:16	Load on Instrument
JD36624-6.10	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-6.10	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-6.13	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-6.13	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-6.13	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-6.13	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-6.14	Secured Storage	Nicole Hornlien	12/16/21 16:19	Retrieve from Storage
JD36624-6.14	Nicole Hornlien	GCMS3D	12/16/21 16:19	Load on Instrument
JD36624-6.14	GCMS3D	Nicole Hornlien	12/17/21 17:18	Unload from Instrument
JD36624-6.14	Nicole Hornlien	Secured Storage	12/17/21 17:18	Return to Storage
JD36624-6F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-6F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-6F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-6F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-6F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-6F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-6F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-6F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-6F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-6F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-6F.6
JD36624-6F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-6F.6
JD36624-6F.6.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-7.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-7.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-7.2	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
stage				
JD36624-7.2	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-7.2	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-7.2	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-7.2.1	Dawnette Williams	Organics Prep	12/14/21 08:48	Extract from JD36624-7.2
JD36624-7.2.1	Organics Prep	Naisha Torres	12/15/21 12:54	Extract from JD36624-7.2
JD36624-7.2.1	Naisha Torres	Extract Storage	12/15/21 12:54	Return to Storage
JD36624-7.2.1	Extract Storage	Christopher Sowa	12/17/21 23:18	Retrieve from Storage
JD36624-7.2.1	Christopher Sowa	GCMS5P	12/17/21 23:18	Load on Instrument
JD36624-7.2.1	GCMS5P	Jackleen Youssef	12/20/21 11:58	Unload from Instrument
JD36624-7.2.1	Jackleen Youssef	Extract Freezer	12/20/21 11:58	Return to Storage
JD36624-7.2.1	Extract Freezer	Kristi Schollenberger	12/27/21 17:33	Retrieve from Storage
JD36624-7.2.1	Kristi Schollenberger	GCMS4P	12/27/21 17:34	Load on Instrument
JD36624-7.2.1	GCMS4P	Kristi Schollenberger	12/28/21 14:45	Unload from Instrument
JD36624-7.2.1	Kristi Schollenberger	Extract Freezer	12/28/21 14:45	Return to Storage
JD36624-7.2.1	Extract Freezer	Kristi Schollenberger	12/28/21 14:48	Retrieve from Storage
JD36624-7.2.1	Kristi Schollenberger	GCMS4P	12/28/21 14:48	Load on Instrument
JD36624-7.2.1	GCMS4P	Kristi Schollenberger	01/04/22 14:58	Unload from Instrument
JD36624-7.2.1	Kristi Schollenberger	Extract Freezer	01/04/22 14:58	Return to Storage
JD36624-7.2.2	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-7.2
JD36624-7.2.2	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-7.2
JD36624-7.2.2	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-7.2.2	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-7.2.2	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-7.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-7.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-7.4	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-7.4	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-7.4	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-7.4	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-7.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-7.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-7.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-7.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-7.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-7.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-7.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-7.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-7.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-7.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-7.5
JD36624-7.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-7.5
JD36624-7.5.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-7.7	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-7.7 sub	Tyler Strong		12/21/21 14:34	Subcontract
JD36624-7.8	Secured Storage	Bridget Kelly	12/20/21 17:16	Retrieve from Storage
JD36624-7.8	Bridget Kelly	GCMS3A	12/20/21 17:16	Load on Instrument
JD36624-7.8	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-7.8	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-7.10	Secured Storage	Nicole Hornlien	12/16/21 16:19	Retrieve from Storage
JD36624-7.10	Nicole Hornlien	GCMS3D	12/16/21 16:19	Load on Instrument
JD36624-7.10	GCMS3D	Nicole Hornlien	12/17/21 17:18	Unload from Instrument
JD36624-7.10	Nicole Hornlien	Secured Storage	12/17/21 17:18	Return to Storage
JD36624-7.11	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-7.11	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-7.11	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-7.11	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-7.12	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-7.12	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-7.12	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-7.12	William Cruser		12/28/21 08:30	Depleted
JD36624-7.16	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-7.16	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-7.16	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-7.16	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-7F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-7F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-7F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-7F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-7F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-7F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-7F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-7F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-7F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
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Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-7F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-7F.6
JD36624-7F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-7F.6
JD36624-7F.6.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-8.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-8.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-8.2	Secured Storage	Rocquan Salters	12/14/21 17:15	Retrieve from Storage
JD36624-8.2	Rocquan Salters	Secured Storage	12/14/21 23:55	Return to Storage
JD36624-8.2	Naisha Torres	Secured Storage	12/22/21 09:46	Return to Storage
Analyst chain of custody update error.				
JD36624-8.2.1	Rocquan Salters	Organics Prep	12/14/21 17:19	Extract from JD36624-8.2
JD36624-8.2.1	Naisha Torres	Extract Storage	12/15/21 12:54	Return to Storage
JD36624-8.2.1	Organics Prep	Naisha Torres	12/15/21 12:54	Extract from JD36624-8.2
JD36624-8.2.1	Extract Storage	Kristi Schollenberger	12/27/21 17:33	Retrieve from Storage
JD36624-8.2.1	Kristi Schollenberger	GCMS4P	12/27/21 17:33	Load on Instrument
JD36624-8.2.1	GCMS4P	Kristi Schollenberger	12/28/21 14:45	Unload from Instrument
JD36624-8.2.1	Kristi Schollenberger	Extract Freezer	12/28/21 14:45	Return to Storage
JD36624-8.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-8.3	Tyler Strong	Secured Staging Area	12/15/21 21:50	Return to Storage
stage				
JD36624-8.3	Secured Staging Area	Edward Rue	12/16/21 08:37	Retrieve from Storage
JD36624-8.3	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36624-8.3	Rocquan Salters		12/17/21 23:08	Depleted
JD36624-8.3.1	Edward Rue	Organics Prep	12/16/21 08:45	Extract from JD36624-8.3
JD36624-8.3.1	Organics Prep	Naisha Torres	12/16/21 16:18	Extract from JD36624-8.3
JD36624-8.3.1	Naisha Torres	Extract Storage	12/16/21 16:18	Return to Storage
JD36624-8.3.1	Extract Storage	Christopher Sowa	12/22/21 05:04	Retrieve from Storage
JD36624-8.3.1	Christopher Sowa	GCMS2M	12/22/21 05:04	Load on Instrument
JD36624-8.3.1	GCMS2M	Nina Pandya	12/22/21 14:33	Unload from Instrument
JD36624-8.3.1	Nina Pandya	Extract Freezer	12/22/21 14:33	Return to Storage
JD36624-8.3.1	Extract Freezer	Kristi Schollenberger	12/29/21 16:50	Retrieve from Storage
JD36624-8.3.1	Kristi Schollenberger	GCMS4P	12/29/21 16:50	Load on Instrument
JD36624-8.3.1	GCMS4P	Kristi Schollenberger	01/04/22 14:58	Unload from Instrument
JD36624-8.3.1	Kristi Schollenberger	Extract Freezer	01/04/22 14:58	Return to Storage
JD36624-8.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-8.4	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-8.4	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD36624
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Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-8.4	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-8.4	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-8.4.1	Dawnette Williams	Organics Prep	12/14/21 08:48	Extract from JD36624-8.4
JD36624-8.4.1	Naisha Torres	Extract Storage	12/15/21 12:54	Return to Storage
JD36624-8.4.1	Organics Prep	Naisha Torres	12/15/21 12:54	Extract from JD36624-8.4
JD36624-8.4.1	Extract Storage	Kristi Schollenberger	12/27/21 17:33	Retrieve from Storage
JD36624-8.4.1	Kristi Schollenberger	GCMS4P	12/27/21 17:33	Load on Instrument
JD36624-8.4.1	GCMS4P	Kristi Schollenberger	12/28/21 14:45	Unload from Instrument
JD36624-8.4.1	Kristi Schollenberger	Extract Freezer	12/28/21 14:45	Return to Storage
JD36624-8.4.2	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-8.4
JD36624-8.4.2	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-8.4
JD36624-8.4.2	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-8.4.2	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-8.4.2	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-8.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-8.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-8.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-8.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-8.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-8.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-8.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-8.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-8.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-8.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-8.5
JD36624-8.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-8.5
JD36624-8.5.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-8.7	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-8.7 sub	Tyler Strong		12/21/21 14:34	Subcontract
JD36624-8.8	Secured Storage	Nicole Hornlien	12/16/21 16:19	Retrieve from Storage
JD36624-8.8	Nicole Hornlien	GCMS3D	12/16/21 16:19	Load on Instrument
JD36624-8.8	GCMS3D	Nicole Hornlien	12/17/21 17:18	Unload from Instrument
JD36624-8.8	Nicole Hornlien	Secured Storage	12/17/21 17:18	Return to Storage
JD36624-8.9	Secured Storage	Taylor Sauter	12/21/21 15:21	Retrieve from Storage
JD36624-8.9	Taylor Sauter	GCMS3A	12/21/21 15:21	Load on Instrument
JD36624-8.9	GCMS3A	Bridget Kelly	12/22/21 17:40	Unload from Instrument
JD36624-8.9	Bridget Kelly	Secured Storage	12/22/21 17:40	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-8.13	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-8.13	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-8.13	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-8.13	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-8.14	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-8.14	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-8.14	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-8.14	William Cruser		12/28/21 08:30	Depleted
JD36624-8F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-8F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-8F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-8F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-8F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-8F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-8F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-8F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-8F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-8F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-8F.6
JD36624-8F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-8F.6
JD36624-8F.6.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-9.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-9.1	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-9.1	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-9.1	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-9.1	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-9.1.1	Dawnette Williams	Organics Prep	12/14/21 08:48	Extract from JD36624-9.1
JD36624-9.1.1	Organics Prep	Naisha Torres	12/15/21 12:54	Extract from JD36624-9.1
JD36624-9.1.1	Naisha Torres	Extract Storage	12/15/21 12:54	Return to Storage
JD36624-9.1.1	Extract Storage	Kristi Schollenberger	12/27/21 17:33	Retrieve from Storage
JD36624-9.1.1	Kristi Schollenberger	GCMS4P	12/27/21 17:33	Load on Instrument
JD36624-9.1.1	GCMS4P	Kristi Schollenberger	12/28/21 14:45	Unload from Instrument
JD36624-9.1.1	Kristi Schollenberger	Extract Freezer	12/28/21 14:45	Return to Storage
JD36624-9.1.2	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-9.1
JD36624-9.1.2	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-9.1
JD36624-9.1.2	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-9.1.2	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-9.1.2	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-9.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-9.2	Secured Storage	Rocquan Salters	12/14/21 17:15	Retrieve from Storage
JD36624-9.2	Rocquan Salters	Secured Storage	12/14/21 23:55	Return to Storage
JD36624-9.2.1	Rocquan Salters	Organics Prep	12/14/21 17:19	Extract from JD36624-9.2
JD36624-9.2.1	Organics Prep	Naisha Torres	12/15/21 12:54	Extract from JD36624-9.2
JD36624-9.2.1	Naisha Torres	Extract Storage	12/15/21 12:54	Return to Storage
JD36624-9.2.1	Extract Storage	Kristi Schollenberger	12/27/21 17:33	Retrieve from Storage
JD36624-9.2.1	Kristi Schollenberger	GCMS4P	12/27/21 17:33	Load on Instrument
JD36624-9.2.1	GCMS4P	Kristi Schollenberger	12/28/21 14:45	Unload from Instrument
JD36624-9.2.1	Kristi Schollenberger	Extract Freezer	12/28/21 14:45	Return to Storage
JD36624-9.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-9.3	Naisha Torres	Secured Storage	12/22/21 09:46	Return to Storage
Analyst chain of custody update error.				
JD36624-9.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-9.4	Tyler Strong	Secured Staging Area	12/15/21 21:50	Return to Storage
stage				
JD36624-9.4	Secured Staging Area	Edward Rue	12/16/21 08:37	Retrieve from Storage
JD36624-9.4	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36624-9.4	Rocquan Salters		12/17/21 23:08	Depleted
JD36624-9.4.1	Edward Rue	Organics Prep	12/16/21 08:45	Extract from JD36624-9.4
JD36624-9.4.1	Organics Prep	Naisha Torres	12/16/21 16:18	Extract from JD36624-9.4
JD36624-9.4.1	Naisha Torres	Extract Storage	12/16/21 16:18	Return to Storage
JD36624-9.4.1	Extract Storage	Christopher Sowa	12/22/21 05:04	Retrieve from Storage
JD36624-9.4.1	Christopher Sowa	GCMS2M	12/22/21 05:04	Load on Instrument
JD36624-9.4.1	GCMS2M	Nina Pandya	12/22/21 14:33	Unload from Instrument
JD36624-9.4.1	Nina Pandya	Extract Freezer	12/22/21 14:33	Return to Storage
JD36624-9.4.1	Extract Freezer	Kristi Schollenberger	12/29/21 16:50	Retrieve from Storage
JD36624-9.4.1	Kristi Schollenberger	GCMS4P	12/29/21 16:50	Load on Instrument
JD36624-9.4.1	GCMS4P	Kristi Schollenberger	01/04/22 14:58	Unload from Instrument
JD36624-9.4.1	Kristi Schollenberger	Extract Freezer	01/04/22 14:58	Return to Storage
JD36624-9.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-9.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-9.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-9.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-9.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-9.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-9.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-9.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-9.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-9.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-9.5
JD36624-9.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-9.5
JD36624-9.5.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-9.7	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-9.7 sub	Tyler Strong		12/21/21 14:34	Subcontract
JD36624-9.8	Secured Storage	Taylor Sauter	12/21/21 15:21	Retrieve from Storage
JD36624-9.8	Taylor Sauter	GCMS3A	12/21/21 15:21	Load on Instrument
JD36624-9.8	GCMS3A	Bridget Kelly	12/22/21 17:40	Unload from Instrument
JD36624-9.8	Bridget Kelly	Secured Storage	12/22/21 17:40	Return to Storage
JD36624-9.9	Secured Storage	Brittany Klimek	12/21/21 18:23	Retrieve from Storage
JD36624-9.9	Brittany Klimek	GCMS1X	12/21/21 18:23	Load on Instrument
JD36624-9.9	GCMS1X	Brittany Klimek	12/22/21 10:41	Unload from Instrument
JD36624-9.9	Brittany Klimek	Secured Storage	12/22/21 10:41	Return to Storage
JD36624-9.10	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-9.10	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-9.10	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-9.10	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-9.11	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-9.11	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-9.11	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-9.11	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-9.15	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-9.15	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-9.15	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-9.15	William Cruser		12/28/21 08:30	Depleted
JD36624-9F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-9F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-9F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-9F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-9F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-9F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-9F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-9F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-9F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-9F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-9F.6
JD36624-9F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-9F.6
JD36624-9F.6.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-10.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-10.1	Tyler Strong	Secured Staging Area	12/15/21 21:50	Return to Storage
stage				
JD36624-10.1	Secured Staging Area	Edward Rue	12/16/21 08:37	Retrieve from Storage
JD36624-10.1	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36624-10.1	Rocquan Salters		12/17/21 23:08	Depleted
JD36624-10.1.1	Edward Rue	Organics Prep	12/16/21 08:45	Extract from JD36624-10.1
JD36624-10.1.1	Organics Prep	Naisha Torres	12/16/21 16:18	Extract from JD36624-10.1
JD36624-10.1.1	Naisha Torres	Extract Storage	12/16/21 16:18	Return to Storage
JD36624-10.1.1	Extract Storage	Christopher Sowa	12/22/21 05:04	Retrieve from Storage
JD36624-10.1.1	Christopher Sowa	GCMS2M	12/22/21 05:04	Load on Instrument
JD36624-10.1.1	GCMS2M	Nina Pandya	12/22/21 14:33	Unload from Instrument
JD36624-10.1.1	Nina Pandya	Extract Freezer	12/22/21 14:33	Return to Storage
JD36624-10.1.1	Extract Freezer	Kristi Schollenberger	12/28/21 14:49	Retrieve from Storage
JD36624-10.1.1	Kristi Schollenberger	GCMS4P	12/28/21 14:49	Load on Instrument
JD36624-10.1.1	GCMS4P	Kristi Schollenberger	12/29/21 16:49	Unload from Instrument
JD36624-10.1.1	Kristi Schollenberger	Extract Freezer	12/29/21 16:49	Return to Storage
JD36624-10.1.1	Extract Freezer	Kristi Schollenberger	12/29/21 16:50	Retrieve from Storage
JD36624-10.1.1	Kristi Schollenberger	GCMS4P	12/29/21 16:50	Load on Instrument
JD36624-10.1.1	GCMS4P	Kristi Schollenberger	01/04/22 14:58	Unload from Instrument
JD36624-10.1.1	Kristi Schollenberger	Extract Freezer	01/04/22 14:58	Return to Storage
JD36624-10.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-10.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-10.3	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-10.3	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-10.3	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-10.3	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-10.3.1	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-10.3
JD36624-10.3.1	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-10.3
JD36624-10.3.1	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-10.3.1	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-10.3.1	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-10.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-10.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-10.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-10.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-10.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-10.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-10.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-10.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-10.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-10.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-10.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-10.5
JD36624-10.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-10.5
JD36624-10.5.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-10.7	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-10.7 sub	Tyler Strong		12/21/21 14:34	Subcontract
JD36624-10.8	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-10.8	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-10.8	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-10.8	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-10.10	Secured Storage	Bridget Kelly	12/20/21 17:16	Retrieve from Storage
JD36624-10.10	Bridget Kelly	GCMS3A	12/20/21 17:16	Load on Instrument
JD36624-10.10	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-10.10	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-10.11	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-10.11	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-10.11	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-10.11	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-10.12	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-10.12	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-10.12	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-10.12	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-10.13	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-10.13	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-10.13	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-10.13	William Cruser		12/28/21 08:30	Depleted

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-10.14	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-10.14	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-10.14	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-10.14	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-10.15	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-10.15	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-10.15	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-10.15	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-10F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-10F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-10F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-10F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-10F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-10F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-10F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-10F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-10F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-10F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-10F.6
JD36624-10F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-10F.6
JD36624-10F.6.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-11.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-11.1	Tyler Strong	Secured Staging Area	12/15/21 21:50	Return to Storage
stage				
JD36624-11.1	Secured Staging Area	Edward Rue	12/16/21 08:37	Retrieve from Storage
JD36624-11.1	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36624-11.1	Rocquan Salters		12/17/21 23:08	Depleted
JD36624-11.1.1	Edward Rue	Organics Prep	12/16/21 08:45	Extract from JD36624-11.1
JD36624-11.1.1	Organics Prep	Naisha Torres	12/16/21 16:18	Extract from JD36624-11.1
JD36624-11.1.1	Naisha Torres	Extract Storage	12/16/21 16:18	Return to Storage
JD36624-11.1.1	Extract Storage	Christopher Sowa	12/22/21 05:04	Retrieve from Storage
JD36624-11.1.1	Christopher Sowa	GCMS2M	12/22/21 05:04	Load on Instrument
JD36624-11.1.1	GCMS2M	Nina Pandya	12/22/21 14:33	Unload from Instrument
JD36624-11.1.1	Nina Pandya	Extract Freezer	12/22/21 14:33	Return to Storage
JD36624-11.1.1	Extract Freezer	Kristi Schollenberger	12/28/21 14:49	Retrieve from Storage
JD36624-11.1.1	Kristi Schollenberger	GCMS4P	12/28/21 14:49	Load on Instrument
JD36624-11.1.1	GCMS4P	Kristi Schollenberger	12/29/21 16:49	Unload from Instrument
JD36624-11.1.1	Kristi Schollenberger	Extract Freezer	12/29/21 16:49	Return to Storage
JD36624-11.1.1	Extract Freezer	Kristi Schollenberger	12/29/21 16:50	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-11.1.1	Kristi Schollenberger	GCMS4P	12/29/21 16:50	Load on Instrument
JD36624-11.1.1	GCMS4P	Kristi Schollenberger	01/04/22 14:58	Unload from Instrument
JD36624-11.1.1	Kristi Schollenberger	Extract Freezer	01/04/22 14:58	Return to Storage
JD36624-11.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-11.2	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-11.2	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-11.2	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-11.2	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-11.2.1	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-11.2
JD36624-11.2.1	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-11.2
JD36624-11.2.1	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-11.2.1	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-11.2.1	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-11.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-11.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-11.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-11.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-11.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-11.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-11.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-11.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-11.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-11.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-11.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-11.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-11.5
JD36624-11.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-11.5
JD36624-11.5.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-11.7	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-11.7	Tyler Strong		12/21/21 14:34	Subcontract
sub				
JD36624-11.9	Secured Storage	Nicole Hornlien	12/16/21 16:19	Retrieve from Storage
JD36624-11.9	Nicole Hornlien	GCMS3D	12/16/21 16:19	Load on Instrument
JD36624-11.9	GCMS3D	Nicole Hornlien	12/17/21 17:18	Unload from Instrument
JD36624-11.9	Nicole Hornlien	Secured Storage	12/17/21 17:18	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-11.10	Secured Storage	Taylor Sauter	12/21/21 15:21	Retrieve from Storage
JD36624-11.10	Taylor Sauter	GCMS3A	12/21/21 15:21	Load on Instrument
JD36624-11.10	GCMS3A	Bridget Kelly	12/22/21 17:40	Unload from Instrument
JD36624-11.10	Bridget Kelly	Secured Storage	12/22/21 17:40	Return to Storage
JD36624-11.11	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-11.11	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-11.11	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-11.11	William Cruser		12/28/21 08:30	Depleted
JD36624-11.13	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-11.13	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-11.13	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-11.13	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-11.14	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-11.14	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-11.14	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-11.14	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-11F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-11F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-11F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-11F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-11F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-11F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-11F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-11F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-11F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-11F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:10	Digestate from JD36624-11F.6
JD36624-11F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:10	Digestate from JD36624-11F.6
JD36624-11F.6.1	Alyssa Koshy	Sarah Fichot	12/27/21 08:29	Custody Transfer
JD36624-12.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-12.1	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-12.1	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-12.1	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-12.1	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-12.1.1	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-12.1
JD36624-12.1.1	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-12.1
JD36624-12.1.1	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-12.1.1	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-12.1.1	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-12.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-12.2	Tyler Strong	Secured Staging Area	12/15/21 21:50	Return to Storage
stage				
JD36624-12.2	Secured Staging Area	Edward Rue	12/16/21 08:37	Retrieve from Storage
JD36624-12.2	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36624-12.2	Rocquan Salters		12/17/21 23:08	Depleted
JD36624-12.2.1	Edward Rue	Organics Prep	12/16/21 08:45	Extract from JD36624-12.2
JD36624-12.2.1	Organics Prep	Naisha Torres	12/16/21 16:18	Extract from JD36624-12.2
JD36624-12.2.1	Naisha Torres	Extract Storage	12/16/21 16:18	Return to Storage
JD36624-12.2.1	Extract Storage	Christopher Sowa	12/22/21 05:04	Retrieve from Storage
JD36624-12.2.1	Christopher Sowa	GCMS2M	12/22/21 05:04	Load on Instrument
JD36624-12.2.1	GCMS2M	Nina Pandya	12/22/21 14:33	Unload from Instrument
JD36624-12.2.1	Nina Pandya	Extract Freezer	12/22/21 14:33	Return to Storage
JD36624-12.2.1	Extract Freezer	Kristi Schollenberger	12/29/21 16:50	Retrieve from Storage
JD36624-12.2.1	Kristi Schollenberger	GCMS4P	12/29/21 16:50	Load on Instrument
JD36624-12.2.1	GCMS4P	Kristi Schollenberger	01/04/22 14:58	Unload from Instrument
JD36624-12.2.1	Kristi Schollenberger	Extract Freezer	01/04/22 14:58	Return to Storage
JD36624-12.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-12.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-12.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-12.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-12.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-12.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-12.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-12.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-12.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-12.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-12.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-12.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36624-12.5
JD36624-12.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36624-12.5
JD36624-12.5.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36624-12.7	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-12.7	Tyler Strong		12/21/21 14:34	Subcontract
sub				

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-12.8	Secured Storage	Taylor Sauter	12/21/21 15:21	Retrieve from Storage
JD36624-12.8	Taylor Sauter	GCMS3A	12/21/21 15:21	Load on Instrument
JD36624-12.8	GCMS3A	Bridget Kelly	12/22/21 17:40	Unload from Instrument
JD36624-12.8	Bridget Kelly	Secured Storage	12/22/21 17:40	Return to Storage
JD36624-12.10	Secured Storage	Nicole Hornlien	12/16/21 16:19	Retrieve from Storage
JD36624-12.10	Nicole Hornlien	GCMS3D	12/16/21 16:19	Load on Instrument
JD36624-12.10	GCMS3D	Nicole Hornlien	12/17/21 17:18	Unload from Instrument
JD36624-12.10	Nicole Hornlien	Secured Storage	12/17/21 17:18	Return to Storage
JD36624-12.11	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-12.11	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-12.11	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-12.11	William Cruser		12/28/21 08:30	Depleted
JD36624-12.12	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-12.12	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-12.12	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-12.12	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-12.13	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-12.13	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-12.13	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-12.13	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-12F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-12F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-12F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-12F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-12F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-12F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-12F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-12F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-12F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-12F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36624-12F.6
JD36624-12F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36624-12F.6
JD36624-12F.6.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36624-13.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-13.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-13.2	Secured Storage	Joshua Reitan	12/16/21 20:09	Retrieve from Storage
JD36624-13.2	Joshua Reitan	Secured Staging Area	12/16/21 20:09	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-13.2	Secured Staging Area	Edward Rue	12/17/21 08:03	Retrieve from Storage
JD36624-13.2	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36624-13.2	Rocquan Salters		12/17/21 23:08	Depleted
JD36624-13.2.1	Edward Rue	Organics Prep	12/17/21 08:32	Extract from JD36624-13.2
JD36624-13.2.1	Organics Prep	Taylor Gorman	12/18/21 00:34	Extract from JD36624-13.2
JD36624-13.2.1	Taylor Gorman	Extract Storage	12/18/21 00:35	Return to Storage
JD36624-13.2.1	Extract Storage	Christopher Sowa	12/18/21 04:26	Retrieve from Storage
JD36624-13.2.1	Christopher Sowa	GCMS4P	12/18/21 04:26	Load on Instrument
JD36624-13.2.1	GCMS4P	Christopher Sowa	12/23/21 10:25	Unload from Instrument
JD36624-13.2.1	Christopher Sowa	GCMS5P	12/23/21 10:25	Load on Instrument
JD36624-13.2.1	GCMS5P	Kristi Schollenberger	12/28/21 14:47	Unload from Instrument
JD36624-13.2.1	Kristi Schollenberger	GCMS4P	12/28/21 14:47	Load on Instrument
JD36624-13.2.1	GCMS4P	Kristi Schollenberger	12/29/21 16:49	Unload from Instrument
JD36624-13.2.1	Kristi Schollenberger	Extract Freezer	12/29/21 16:49	Return to Storage
JD36624-13.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-13.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-13.4	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-13.4	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-13.4	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-13.4	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-13.4.1	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-13.4
JD36624-13.4.1	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-13.4
JD36624-13.4.1	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-13.4.1	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-13.4.1	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-13.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-13.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-13.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-13.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-13.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-13.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-13.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-13.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-13.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-13.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36624-13.5
JD36624-13.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36624-13.5
JD36624-13.5.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-13.7	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-13.7 sub	Tyler Strong		12/21/21 14:34	Subcontract
JD36624-13.8	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-13.8	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-13.8	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-13.8	William Cruser		12/28/21 08:30	Depleted
JD36624-13.10	Secured Storage	Taylor Sauter	12/17/21 17:49	Retrieve from Storage
JD36624-13.10	Taylor Sauter	GCMS3A	12/17/21 17:49	Load on Instrument
JD36624-13.10	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-13.10	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-13.11	Secured Storage	Bridget Kelly	12/23/21 15:28	Retrieve from Storage
JD36624-13.11	Bridget Kelly	GCMS3A	12/23/21 15:28	Load on Instrument
JD36624-13.11	GCMS3A	Bridget Kelly	12/27/21 13:46	Unload from Instrument
JD36624-13.11	Bridget Kelly	Secured Storage	12/27/21 13:46	Return to Storage
JD36624-13.12	Secured Storage	Brittany Klimek	12/20/21 18:07	Retrieve from Storage
JD36624-13.12	Brittany Klimek	GCMS1X	12/20/21 18:07	Load on Instrument
JD36624-13.12	Brittany Klimek	Secured Storage	12/21/21 10:25	Return to Storage
JD36624-13.12	GCMS1X	Brittany Klimek	12/21/21 10:25	Unload from Instrument
JD36624-13.13	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-13.13	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-13.13	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-13.13	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-13F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-13F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-13F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-13F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-13F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-13F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-13F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-13F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-13F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-13F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36624-13F.6
JD36624-13F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36624-13F.6
JD36624-13F.6.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-14.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-14.1	Secured Storage	Joshua Reitan	12/16/21 20:09	Retrieve from Storage
JD36624-14.1	Joshua Reitan	Secured Staging Area	12/16/21 20:09	Return to Storage
JD36624-14.1	Secured Staging Area	Edward Rue	12/17/21 08:03	Retrieve from Storage
JD36624-14.1	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36624-14.1	Rocquan Salters		12/17/21 23:08	Depleted
JD36624-14.1.1	Edward Rue	Organics Prep	12/17/21 08:32	Extract from JD36624-14.1
JD36624-14.1.1	Organics Prep	Taylor Gorman	12/18/21 00:34	Extract from JD36624-14.1
JD36624-14.1.1	Taylor Gorman	Extract Storage	12/18/21 00:35	Return to Storage
JD36624-14.1.1	Extract Storage	Christopher Sowa	12/18/21 04:26	Retrieve from Storage
JD36624-14.1.1	Christopher Sowa	GCMS4P	12/18/21 04:26	Load on Instrument
JD36624-14.1.1	GCMS4P	Christopher Sowa	12/23/21 10:25	Unload from Instrument
JD36624-14.1.1	Christopher Sowa	GCMS5P	12/23/21 10:25	Load on Instrument
JD36624-14.1.1	GCMS5P	Kristi Schollenberger	12/28/21 16:56	Unload from Instrument
JD36624-14.1.1	Kristi Schollenberger	Extract Freezer	12/28/21 16:56	Return to Storage
JD36624-14.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-14.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-14.3	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-14.3	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-14.3	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-14.3	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-14.3.1	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-14.3
JD36624-14.3.1	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-14.3
JD36624-14.3.1	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-14.3.1	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-14.3.1	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-14.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-14.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-14.5	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-14.5	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-14.5	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-14.5	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-14.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-14.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-14.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-14.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-14.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36624-14.5
JD36624-14.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36624-14.5
JD36624-14.5.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36624-14.7	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-14.7	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-14.7	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-14.7	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-14.7	Secured Storage	Brittany Klimek	12/21/21 18:23	Retrieve from Storage
JD36624-14.7	Brittany Klimek	GCMS1X	12/21/21 18:23	Load on Instrument
JD36624-14.7	GCMS1X	Brittany Klimek	12/22/21 10:41	Unload from Instrument
JD36624-14.7	Brittany Klimek	Secured Storage	12/22/21 10:41	Return to Storage
JD36624-14.9	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-14.9	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-14.9	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-14.9	William Cruser		12/28/21 08:30	Depleted
JD36624-14.12	Secured Storage	Bridget Kelly	12/20/21 17:16	Retrieve from Storage
JD36624-14.12	Bridget Kelly	GCMS3A	12/20/21 17:16	Load on Instrument
JD36624-14.12	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-14.12	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-14.14	Secured Storage	Taylor Sauter	12/21/21 15:21	Retrieve from Storage
JD36624-14.14	Taylor Sauter	GCMS3A	12/21/21 15:21	Load on Instrument
JD36624-14.14	GCMS3A	Bridget Kelly	12/22/21 17:40	Unload from Instrument
JD36624-14.14	Bridget Kelly	Secured Storage	12/22/21 17:40	Return to Storage
JD36624-14.16	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-14.16 sub	Tyler Strong		12/21/21 14:34	Subcontract
JD36624-14F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-14F.6	Secured Storage	Dave Hunkele	12/14/21 11:27	Retrieve from Storage
JD36624-14F.6	Dave Hunkele	Secured Staging Area	12/14/21 11:28	Return to Storage
JD36624-14F.6	Secured Staging Area	Tayah Martin	12/14/21 11:32	Retrieve from Storage
JD36624-14F.6	Tayah Martin	Secured Storage	12/14/21 13:23	Return to Storage
JD36624-14F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-14F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-14F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-14F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-14F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36624-14F.6
JD36624-14F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36624-14F.6

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-14F.6.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36624-15.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-15.1	Secured Storage	Joshua Reitan	12/16/21 20:09	Retrieve from Storage
JD36624-15.1	Joshua Reitan	Secured Staging Area	12/16/21 20:09	Return to Storage
JD36624-15.1	Secured Staging Area	Edward Rue	12/17/21 08:03	Retrieve from Storage
JD36624-15.1	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36624-15.1	Rocquan Salters		12/17/21 23:08	Depleted
JD36624-15.1.1	Edward Rue	Organics Prep	12/17/21 08:32	Extract from JD36624-15.1
JD36624-15.1.1	Organics Prep	Taylor Gorman	12/18/21 00:34	Extract from JD36624-15.1
JD36624-15.1.1	Taylor Gorman	Extract Storage	12/18/21 00:35	Return to Storage
JD36624-15.1.1	Extract Storage	Christopher Sowa	12/18/21 04:26	Retrieve from Storage
JD36624-15.1.1	Christopher Sowa	GCMS4P	12/18/21 04:26	Load on Instrument
JD36624-15.1.1	GCMS4P	Christopher Sowa	12/23/21 10:25	Unload from Instrument
JD36624-15.1.1	Christopher Sowa	GCMS5P	12/23/21 10:25	Load on Instrument
JD36624-15.1.1	GCMS5P	Kristi Schollenberger	12/28/21 16:56	Unload from Instrument
JD36624-15.1.1	Kristi Schollenberger	Extract Freezer	12/28/21 16:56	Return to Storage
JD36624-15.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-15.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-15.3	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-15.3	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-15.3	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-15.3	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-15.3.1	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-15.3
JD36624-15.3.1	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-15.3
JD36624-15.3.1	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-15.3.1	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-15.3.1	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-15.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-15.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-15.5	Secured Storage	Lauren Matthews	12/15/21 10:30	Retrieve from Storage
JD36624-15.5	Lauren Matthews	Secured Storage	12/15/21 16:58	Return to Storage
JD36624-15.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-15.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-15.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-15.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-15.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36624-15.5
JD36624-15.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36624-15.5
JD36624-15.5.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36624-15.7	Nicholas Weigand	GCMS2V	12/22/21 17:38	Load on Instrument
JD36624-15.7	GCMS2V	Nicholas Weigand	12/23/21 18:41	Unload from Instrument
JD36624-15.7	Nicholas Weigand	Secured Storage	12/23/21 18:41	Return to Storage
JD36624-15.8	Secured Storage	Taylor Sauter	12/21/21 15:21	Retrieve from Storage
JD36624-15.8	Taylor Sauter	GCMS3A	12/21/21 15:21	Load on Instrument
JD36624-15.8	GCMS3A	Bridget Kelly	12/22/21 17:40	Unload from Instrument
JD36624-15.8	Bridget Kelly	Secured Storage	12/22/21 17:40	Return to Storage
JD36624-15.9	Secured Storage	Bridget Kelly	12/20/21 17:16	Retrieve from Storage
JD36624-15.9	Bridget Kelly	GCMS3A	12/20/21 17:16	Load on Instrument
JD36624-15.9	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-15.9	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-15.10	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-15.10	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-15.10	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-15.10	William Cruser		12/28/21 08:30	Depleted
JD36624-15.11	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-15.11	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-15.11	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-15.11	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-15.11	Secured Storage	Brittany Klimek	12/21/21 18:23	Retrieve from Storage
JD36624-15.11	Brittany Klimek	GCMS1X	12/21/21 18:23	Load on Instrument
JD36624-15.11	GCMS1X	Brittany Klimek	12/22/21 10:41	Unload from Instrument
JD36624-15.11	Brittany Klimek	Secured Storage	12/22/21 10:41	Return to Storage
JD36624-15.16	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-15.16 sub	Tyler Strong		12/21/21 14:34	Subcontract
JD36624-15F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-15F.6	Secured Storage	Lauren Matthews	12/15/21 10:30	Retrieve from Storage
JD36624-15F.6	Lauren Matthews	Secured Storage	12/15/21 16:58	Return to Storage
JD36624-15F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-15F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-15F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-15F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-15F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36624-15F.6
JD36624-15F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36624-15F.6
JD36624-15F.6.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36624-16.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-16.1	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-16.1	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-16.1	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-16.1	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-16.1.1	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-16.1
JD36624-16.1.1	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-16.1
JD36624-16.1.1	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-16.1.1	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-16.1.1	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-16.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-16.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-16.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-16.4	Secured Storage	Joshua Reitan	12/16/21 20:09	Retrieve from Storage
JD36624-16.4	Joshua Reitan	Secured Staging Area	12/16/21 20:09	Return to Storage
JD36624-16.4	Secured Staging Area	Edward Rue	12/17/21 08:03	Retrieve from Storage
JD36624-16.4	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36624-16.4	Rocquan Salters		12/17/21 23:08	Depleted
JD36624-16.4.1	Edward Rue	Organics Prep	12/17/21 08:32	Extract from JD36624-16.4
JD36624-16.4.1	Organics Prep	Taylor Gorman	12/18/21 00:34	Extract from JD36624-16.4
JD36624-16.4.1	Taylor Gorman	Extract Storage	12/18/21 00:35	Return to Storage
JD36624-16.4.1	Extract Storage	Christopher Sowa	12/18/21 04:26	Retrieve from Storage
JD36624-16.4.1	Christopher Sowa	GCMS4P	12/18/21 04:26	Load on Instrument
JD36624-16.4.1	GCMS4P	Christopher Sowa	12/23/21 10:25	Unload from Instrument
JD36624-16.4.1	Christopher Sowa	GCMS5P	12/23/21 10:25	Load on Instrument
JD36624-16.4.1	GCMS5P	Kristi Schollenberger	12/28/21 16:56	Unload from Instrument
JD36624-16.4.1	Kristi Schollenberger	Extract Freezer	12/28/21 16:56	Return to Storage
JD36624-16.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-16.5	Secured Storage	Lauren Matthews	12/15/21 10:30	Retrieve from Storage
JD36624-16.5	Lauren Matthews	Secured Storage	12/15/21 16:58	Return to Storage
JD36624-16.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-16.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-16.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-16.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-16.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36624-16.5
JD36624-16.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36624-16.5
JD36624-16.5.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36624-16.12	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-16.12	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-16.12	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-16.12	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-16.12	Secured Storage	Brittany Klimek	12/21/21 18:23	Retrieve from Storage
JD36624-16.12	Brittany Klimek	GCMS1X	12/21/21 18:23	Load on Instrument
JD36624-16.12	GCMS1X	Brittany Klimek	12/22/21 10:41	Unload from Instrument
JD36624-16.12	Brittany Klimek	Secured Storage	12/22/21 10:41	Return to Storage
JD36624-16.13	Secured Storage	Bridget Kelly	12/20/21 17:16	Retrieve from Storage
JD36624-16.13	Bridget Kelly	GCMS3A	12/20/21 17:16	Load on Instrument
JD36624-16.13	GCMS3A	Bridget Kelly	12/21/21 08:16	Unload from Instrument
JD36624-16.13	Bridget Kelly	Secured Storage	12/21/21 08:16	Return to Storage
JD36624-16.14	Secured Storage	Taylor Sauter	12/21/21 15:21	Retrieve from Storage
JD36624-16.14	Taylor Sauter	GCMS3A	12/21/21 15:21	Load on Instrument
JD36624-16.14	GCMS3A	Bridget Kelly	12/22/21 17:40	Unload from Instrument
JD36624-16.14	Bridget Kelly	Secured Storage	12/22/21 17:40	Return to Storage
JD36624-16.15	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-16.15	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-16.15	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-16.15	William Cruser		12/28/21 08:30	Depleted
JD36624-16.16	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-16.16 sub	Tyler Strong		12/21/21 14:34	Subcontract
JD36624-16F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-16F.6	Secured Storage	Lauren Matthews	12/15/21 10:30	Retrieve from Storage
JD36624-16F.6	Lauren Matthews	Secured Storage	12/15/21 16:58	Return to Storage
JD36624-16F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-16F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-16F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-16F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-16F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36624-16F.6
JD36624-16F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36624-16F.6

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-16F.6.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36624-17.1	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-17.1	Tyler Strong	Secured Staging Area	12/13/21 22:17	Return to Storage
stage				
JD36624-17.1	Secured Staging Area	Dawnette Williams	12/14/21 08:01	Retrieve from Storage
JD36624-17.1	Dawnette Williams	Rocquan Salters	12/22/21 13:41	Custody Transfer
JD36624-17.1	Rocquan Salters		12/23/21 20:06	Depleted
JD36624-17.1.1	Dawnette Williams	Organics Prep	12/14/21 11:19	Extract from JD36624-17.1
JD36624-17.1.1	Organics Prep	Jesse Li	12/15/21 00:37	Extract from JD36624-17.1
JD36624-17.1.1	Jesse Li	Extract Storage	12/15/21 00:37	Return to Storage
JD36624-17.1.1	Extract Storage	Rebecca Krug	12/17/21 23:09	Retrieve from Storage
JD36624-17.1.1	Rebecca Krug	GC6G	12/17/21 23:09	Load on Instrument
JD36624-17.2	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-17.2	Secured Storage	Joshua Reitan	12/16/21 20:09	Retrieve from Storage
JD36624-17.2	Joshua Reitan	Secured Staging Area	12/16/21 20:09	Return to Storage
JD36624-17.2	Secured Staging Area	Edward Rue	12/17/21 08:03	Retrieve from Storage
JD36624-17.2	Edward Rue	Rocquan Salters	12/17/21 17:02	Custody Transfer
JD36624-17.2	Rocquan Salters		12/17/21 23:08	Depleted
JD36624-17.2.1	Edward Rue	Organics Prep	12/17/21 08:32	Extract from JD36624-17.2
JD36624-17.2.1	Organics Prep	Taylor Gorman	12/18/21 00:34	Extract from JD36624-17.2
JD36624-17.2.1	Taylor Gorman	Extract Storage	12/18/21 00:35	Return to Storage
JD36624-17.2.1	Extract Storage	Christopher Sowa	12/18/21 04:26	Retrieve from Storage
JD36624-17.2.1	Christopher Sowa	GCMS4P	12/18/21 04:26	Load on Instrument
JD36624-17.2.1	GCMS4P	Christopher Sowa	12/23/21 10:25	Unload from Instrument
JD36624-17.2.1	Christopher Sowa	GCMS5P	12/23/21 10:25	Load on Instrument
JD36624-17.2.1	GCMS5P	Kristi Schollenberger	12/28/21 16:56	Unload from Instrument
JD36624-17.2.1	Kristi Schollenberger	Extract Freezer	12/28/21 16:56	Return to Storage
JD36624-17.3	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-17.4	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-17.5	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-17.5	Secured Storage	Lauren Matthews	12/15/21 10:30	Retrieve from Storage
JD36624-17.5	Lauren Matthews	Secured Storage	12/15/21 16:58	Return to Storage
JD36624-17.5	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-17.5	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-17.5	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-17.5	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage

SGS Internal Chain of Custody

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Received: 12/10/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD36624-17.5.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36624-17.5
JD36624-17.5.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36624-17.5
JD36624-17.5.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage
JD36624-17.7	Dave Hunkele	Secured Storage	12/11/21 16:07	Return to Storage
JD36624-17.7 sub	Tyler Strong		12/21/21 14:34	Subcontract
JD36624-17.9	Secured Storage	Bridget Kelly	12/23/21 15:28	Retrieve from Storage
JD36624-17.9	Bridget Kelly	GCMS3A	12/23/21 15:28	Load on Instrument
JD36624-17.9	GCMS3A	Bridget Kelly	12/27/21 13:46	Unload from Instrument
JD36624-17.9	Bridget Kelly	Secured Storage	12/27/21 13:46	Return to Storage
JD36624-17.10	Secured Storage	Taylor Sauter	12/21/21 15:21	Retrieve from Storage
JD36624-17.10	Taylor Sauter	GCMS3A	12/21/21 15:21	Load on Instrument
JD36624-17.10	GCMS3A	Bridget Kelly	12/22/21 17:40	Unload from Instrument
JD36624-17.10	Bridget Kelly	Secured Storage	12/22/21 17:40	Return to Storage
JD36624-17.13	Secured Storage	William Cruser	12/14/21 11:14	Retrieve from Storage
JD36624-17.13	William Cruser	VOA Prep Storage	12/14/21 13:54	Return to Storage
JD36624-17.13	VOA Prep Storage	William Cruser	12/28/21 08:30	Retrieve from Storage
JD36624-17.13	William Cruser		12/28/21 08:30	Depleted
JD36624-17.14	Secured Storage	Brittany Klimek	12/21/21 18:23	Retrieve from Storage
JD36624-17.14	Brittany Klimek	GCMS1X	12/21/21 18:23	Load on Instrument
JD36624-17.14	GCMS1X	Brittany Klimek	12/22/21 10:41	Unload from Instrument
JD36624-17.14	Brittany Klimek	Secured Storage	12/22/21 10:41	Return to Storage
JD36624-17.16	Secured Storage	Brittany Klimek	12/17/21 14:49	Retrieve from Storage
JD36624-17.16	Brittany Klimek	GCMS1X	12/17/21 14:49	Load on Instrument
JD36624-17.16	GCMS1X	Brittany Klimek	12/20/21 10:12	Unload from Instrument
JD36624-17.16	Brittany Klimek	Secured Storage	12/20/21 10:12	Return to Storage
JD36624-17F.6	Dave Hunkele	Secured Storage	12/11/21 15:57	Return to Storage
JD36624-17F.6	Secured Storage	Lauren Matthews	12/15/21 10:30	Retrieve from Storage
JD36624-17F.6	Lauren Matthews	Secured Storage	12/15/21 16:58	Return to Storage
JD36624-17F.6	Secured Storage	Benjamin Gaines	12/19/21 13:41	Retrieve from Storage
JD36624-17F.6	Benjamin Gaines	Secured Staging Area	12/19/21 13:41	Return to Storage
JD36624-17F.6	Secured Staging Area	Alyssa Koshy	12/20/21 08:03	Retrieve from Storage
JD36624-17F.6	Alyssa Koshy	Secured Storage	12/20/21 10:28	Return to Storage
JD36624-17F.6.1	Alyssa Koshy	Metals Digestion	12/20/21 10:07	Digestate from JD36624-17F.6
JD36624-17F.6.1	Metals Digestion	Alyssa Koshy	12/20/21 10:09	Digestate from JD36624-17F.6
JD36624-17F.6.1	Alyssa Koshy	Metals Digestate Storage	12/20/21 10:09	Return to Storage

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7265-MB	3A167393.D	1	12/16/21	BK	n/a	n/a	V3A7265

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-2

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries		Limits
17647-74-4	1,4-Dioxane-D8	108%	39-174%

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7266-MB	3A167426.D	1	12/17/21	BK	n/a	n/a	V3A7266

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-1, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-9, JD36624-10, JD36624-11

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.17	0.40	0.095	ug/l	J

CAS No.	Surrogate Recoveries		Limits
17647-74-4	1,4-Dioxane-D8	125%	39-174%

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7266-MB2	3A167459A.D	1	12/20/21	BK	n/a	n/a	V3A7266

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-3

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.23	0.40	0.095	ug/l	J

CAS No.	Surrogate Recoveries		Limits
17647-74-4	1,4-Dioxane-D8	112%	39-174%

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7268-MB	3A167459.D	1	12/20/21	BK	n/a	n/a	V3A7268

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-4, JD36624-5, JD36624-6, JD36624-15, JD36624-16

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	0.23	0.40	0.095	ug/l	J

CAS No.	Surrogate Recoveries		Limits
17647-74-4	1,4-Dioxane-D8	112%	39-174%

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7269-MB	3A167487.D	1	12/21/21	BK	n/a	n/a	V3A7269

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-8, JD36624-12, JD36624-14

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries		Limits
17647-74-4	1,4-Dioxane-D8	128%	39-174%

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7273-MB	3A167534.D	1	12/23/21	BK	n/a	n/a	V3A7273

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-13, JD36624-17

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries		Limits
17647-74-4	1,4-Dioxane-D8	90%	39-174%

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7269-MB2	3A167534A.D	1	12/23/21	BK	n/a	n/a	V3A7269

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36617-4DUP

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.095	ug/l	

CAS No.	Surrogate Recoveries		Limits
17647-74-4	1,4-Dioxane-D8	90%	39-174%

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7294-MB	3D171918.D	1	12/16/21	NH	n/a	n/a	V3D7294

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7294-MB	3D171918.D	1	12/16/21	NH	n/a	n/a	V3D7294

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7294-MB	3D171918.D	1	12/16/21	NH	n/a	n/a	V3D7294

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	83%	80-120%
17060-07-0	1,2-Dichloroethane-D4	88%	80-120%
2037-26-5	Toluene-D8	105%	80-120%
460-00-4	4-Bromofluorobenzene	97%	82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8363-MB	1X193028.D	1	12/17/21	BK	n/a	n/a	V1X8363

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-1, JD36624-4, JD36624-5, JD36624-7, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8363-MB	1X193028.D	1	12/17/21	BK	n/a	n/a	V1X8363

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-1, JD36624-4, JD36624-5, JD36624-7, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8363-MB	1X193028.D	1	12/17/21	BK	n/a	n/a	V1X8363

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-1, JD36624-4, JD36624-5, JD36624-7, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	80-120%
17060-07-0	1,2-Dichloroethane-D4	102%	80-120%
2037-26-5	Toluene-D8	101%	80-120%
460-00-4	4-Bromofluorobenzene	102%	82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8364-MB	1X193061.D	1	12/20/21	BK	n/a	n/a	V1X8364

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-13

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	80-120%
17060-07-0	1,2-Dichloroethane-D4	102%	80-120%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	101%	82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8366-MB	1X193111.D	1	12/21/21	BK	n/a	n/a	V1X8366

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-9, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8366-MB	1X193111.D	1	12/21/21	BK	n/a	n/a	V1X8366

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-9, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8366-MB	1X193111.D	1	12/21/21	BK	n/a	n/a	V1X8366

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-9, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	80-120%
17060-07-0	1,2-Dichloroethane-D4	100%	80-120%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	104%	82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D8732-MB	2D200526.D	1	12/22/21	ED	n/a	n/a	V2D8732

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-16, JD36624-17

CAS No.	Compound	Result	RL	MDL	Units	Q
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	80-120%
17060-07-0	1,2-Dichloroethane-D4	97%	80-120%
2037-26-5	Toluene-D8	107%	80-120%
460-00-4	4-Bromofluorobenzene	81%* [a]	82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Outside of in house control limits, but within reasonable method recovery limits.

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3457-MB	2V83921.D	1	12/22/21	NW	n/a	n/a	V2V3457

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-15

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	95%	80-120%
17060-07-0	1,2-Dichloroethane-D4	111%	80-120%
2037-26-5	Toluene-D8	105%	80-120%
460-00-4	4-Bromofluorobenzene	99%	82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7265-BS	3A167391.D	1	12/16/21	BK	n/a	n/a	V3A7265

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
123-91-1	1,4-Dioxane	20	20.0	100	61-125

CAS No.	Surrogate Recoveries	BSP	Limits
17647-74-4	1,4-Dioxane-D8	121%	39-174%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7266-BS	3A167423.D	1	12/17/21	BK	n/a	n/a	V3A7266

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-1, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-9, JD36624-10, JD36624-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
123-91-1	1,4-Dioxane	20	19.4	97	61-125

CAS No.	Surrogate Recoveries	BSP	Limits
17647-74-4	1,4-Dioxane-D8	116%	39-174%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7268-BS	3A167457.D	1	12/20/21	BK	n/a	n/a	V3A7268

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-4, JD36624-5, JD36624-6, JD36624-15, JD36624-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
123-91-1	1,4-Dioxane	20	18.7	94	61-125

CAS No.	Surrogate Recoveries	BSP	Limits
17647-74-4	1,4-Dioxane-D8	118%	39-174%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7266-BS2	3A167457A.D	1	12/20/21	BK	n/a	n/a	V3A7266

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
123-91-1	1,4-Dioxane	20	18.7	94	61-125

CAS No.	Surrogate Recoveries	BSP	Limits
17647-74-4	1,4-Dioxane-D8	118%	39-174%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7269-BS	3A167486.D	1	12/21/21	BK	n/a	n/a	V3A7269

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-8, JD36624-12, JD36624-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
123-91-1	1,4-Dioxane	20	16.2	81	61-125

CAS No.	Surrogate Recoveries	BSP	Limits
17647-74-4	1,4-Dioxane-D8	93%	39-174%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A7273-BS	3A167533.D	1	12/23/21	BK	n/a	n/a	V3A7273

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-13, JD36624-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
123-91-1	1,4-Dioxane	20	17.3	87	61-125

CAS No.	Surrogate Recoveries	BSP	Limits
17647-74-4	1,4-Dioxane-D8	94%	39-174%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7294-BS	3D171916.D	1	12/16/21	NH	n/a	n/a	V3D7294

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	197	99	27-175
71-43-2	Benzene	50	45.2	90	80-115
108-86-1	Bromobenzene	50	55.9	112	79-119
74-97-5	Bromochloromethane	50	43.6	87	83-122
75-27-4	Bromodichloromethane	50	45.0	90	82-119
75-25-2	Bromoform	50	48.4	97	77-135
74-83-9	Bromomethane	50	40.8	82	40-162
78-93-3	2-Butanone (MEK)	200	200	100	61-150
104-51-8	n-Butylbenzene	50	60.4	121	77-124
135-98-8	sec-Butylbenzene	50	55.7	111	75-121
98-06-6	tert-Butylbenzene	50	58.4	117	74-120
75-15-0	Carbon disulfide	50	40.3	81	64-130
56-23-5	Carbon tetrachloride	50	43.8	88	75-127
108-90-7	Chlorobenzene	50	52.2	104	80-115
75-00-3	Chloroethane	50	48.1	96	56-144
67-66-3	Chloroform	50	40.2	80	75-116
74-87-3	Chloromethane	50	37.4	75	41-153
95-49-8	o-Chlorotoluene	50	55.0	110	79-119
106-43-4	p-Chlorotoluene	50	57.8	116	77-117
96-12-8	1,2-Dibromo-3-chloropropane	50	56.0	112	69-134
124-48-1	Dibromochloromethane	50	51.8	104	81-123
106-93-4	1,2-Dibromoethane	50	52.1	104	67-138
95-50-1	1,2-Dichlorobenzene	50	54.4	109	81-117
541-73-1	1,3-Dichlorobenzene	50	54.9	110	81-115
106-46-7	1,4-Dichlorobenzene	50	54.2	108	80-114
75-71-8	Dichlorodifluoromethane	50	43.8	88	43-152
75-34-3	1,1-Dichloroethane	50	42.4	85	75-125
107-06-2	1,2-Dichloroethane	50	39.9	80	73-117
75-35-4	1,1-Dichloroethene	50	44.3	89	70-124
156-59-2	cis-1,2-Dichloroethene	50	44.1	88	80-120
156-60-5	trans-1,2-Dichloroethene	50	45.3	91	77-121
78-87-5	1,2-Dichloropropane	50	47.5	95	79-121
142-28-9	1,3-Dichloropropane	50	50.2	100	81-117
594-20-7	2,2-Dichloropropane	50	40.6	81	70-131
563-58-6	1,1-Dichloropropene	50	44.1	88	77-122
10061-01-5	cis-1,3-Dichloropropene	50	46.3	93	83-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7294-BS	3D171916.D	1	12/16/21	NH	n/a	n/a	V3D7294

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	50.6	101	83-122
100-41-4	Ethylbenzene	50	49.4	99	78-116
87-68-3	Hexachlorobutadiene	50	52.4	105	55-136
591-78-6	2-Hexanone	200	221	111	66-136
98-82-8	Isopropylbenzene	50	49.8	100	78-121
99-87-6	p-Isopropyltoluene	50	55.3	111	78-121
1634-04-4	Methyl Tert Butyl Ether	50	40.6	81	76-123
108-10-1	4-Methyl-2-pentanone(MIBK)	200	193	97	73-134
74-95-3	Methylene bromide	50	46.2	92	82-117
75-09-2	Methylene chloride	50	40.9	82	73-123
91-20-3	Naphthalene	50	52.6	105	64-136
103-65-1	n-Propylbenzene	50	54.0	108	75-121
100-42-5	Styrene	50	50.8	102	81-125
75-65-0	Tert Butyl Alcohol	250	238	95	75-123
630-20-6	1,1,1,2-Tetrachloroethane	50	51.9	104	81-124
79-34-5	1,1,2,2-Tetrachloroethane	50	58.6	117	73-126
127-18-4	Tetrachloroethene	50	52.0	104	73-119
109-99-9	Tetrahydrofuran	50	40.1	80	63-133
108-88-3	Toluene	50	49.1	98	79-116
87-61-6	1,2,3-Trichlorobenzene	50	53.4	107	63-137
120-82-1	1,2,4-Trichlorobenzene	50	55.0	110	68-135
71-55-6	1,1,1-Trichloroethane	50	42.7	85	76-124
79-00-5	1,1,2-Trichloroethane	50	52.4	105	83-117
79-01-6	Trichloroethene	50	50.9	102	80-118
75-69-4	Trichlorofluoromethane	50	42.5	85	67-134
96-18-4	1,2,3-Trichloropropane	50	58.2	116	75-123
95-63-6	1,2,4-Trimethylbenzene	50	52.4	105	78-120
108-67-8	1,3,5-Trimethylbenzene	50	52.7	105	77-120
108-05-4	Vinyl Acetate	50	50.2	100	54-177
75-01-4	Vinyl chloride	50	42.2	84	52-146
	m,p-Xylene	100	103	103	79-119
95-47-6	o-Xylene	50	53.3	107	81-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7294-BS	3D171916.D	1	12/16/21	NH	n/a	n/a	V3D7294

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	86%	80-120%
17060-07-0	1,2-Dichloroethane-D4	83%	80-120%
2037-26-5	Toluene-D8	99%	80-120%
460-00-4	4-Bromofluorobenzene	102%	82-114%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8363-BS	1X193026.D	1	12/17/21	BK	n/a	n/a	V1X8363

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-1, JD36624-4, JD36624-5, JD36624-7, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	167	84	27-175
71-43-2	Benzene	50	45.9	92	80-115
108-86-1	Bromobenzene	50	49.4	99	79-119
74-97-5	Bromochloromethane	50	48.3	97	83-122
75-27-4	Bromodichloromethane	50	47.2	94	82-119
75-25-2	Bromoform	50	48.8	98	77-135
74-83-9	Bromomethane	50	49.0	98	40-162
78-93-3	2-Butanone (MEK)	200	172	86	61-150
104-51-8	n-Butylbenzene	50	47.4	95	77-124
135-98-8	sec-Butylbenzene	50	47.2	94	75-121
98-06-6	tert-Butylbenzene	50	46.5	93	74-120
75-15-0	Carbon disulfide	50	38.8	78	64-130
56-23-5	Carbon tetrachloride	50	48.1	96	75-127
108-90-7	Chlorobenzene	50	47.3	95	80-115
75-00-3	Chloroethane	50	56.2	112	56-144
67-66-3	Chloroform	50	46.2	92	75-116
74-87-3	Chloromethane	50	50.6	101	41-153
95-49-8	o-Chlorotoluene	50	47.5	95	79-119
106-43-4	p-Chlorotoluene	50	46.7	93	77-117
96-12-8	1,2-Dibromo-3-chloropropane	50	44.8	90	69-134
124-48-1	Dibromochloromethane	50	51.7	103	81-123
106-93-4	1,2-Dibromoethane	50	48.8	98	67-138
95-50-1	1,2-Dichlorobenzene	50	47.3	95	81-117
541-73-1	1,3-Dichlorobenzene	50	46.8	94	81-115
106-46-7	1,4-Dichlorobenzene	50	46.0	92	80-114
75-71-8	Dichlorodifluoromethane	50	53.8	108	43-152
75-34-3	1,1-Dichloroethane	50	45.3	91	75-125
107-06-2	1,2-Dichloroethane	50	46.6	93	73-117
75-35-4	1,1-Dichloroethene	50	43.0	86	70-124
156-59-2	cis-1,2-Dichloroethene	50	44.4	89	80-120
156-60-5	trans-1,2-Dichloroethene	50	43.6	87	77-121
78-87-5	1,2-Dichloropropane	50	49.1	98	79-121
142-28-9	1,3-Dichloropropane	50	48.6	97	81-117
594-20-7	2,2-Dichloropropane	50	47.5	95	70-131
563-58-6	1,1-Dichloropropene	50	46.1	92	77-122
10061-01-5	cis-1,3-Dichloropropene	50	48.2	96	83-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8363-BS	1X193026.D	1	12/17/21	BK	n/a	n/a	V1X8363

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-1, JD36624-4, JD36624-5, JD36624-7, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	51.0	102	83-122
100-41-4	Ethylbenzene	50	45.4	91	78-116
87-68-3	Hexachlorobutadiene	50	45.1	90	55-136
591-78-6	2-Hexanone	200	177	89	66-136
98-82-8	Isopropylbenzene	50	45.8	92	78-121
99-87-6	p-Isopropyltoluene	50	47.6	95	78-121
1634-04-4	Methyl Tert Butyl Ether	50	46.6	93	76-123
108-10-1	4-Methyl-2-pentanone(MIBK)	200	188	94	73-134
74-95-3	Methylene bromide	50	47.7	95	82-117
75-09-2	Methylene chloride	50	43.0	86	73-123
91-20-3	Naphthalene	50	45.4	91	64-136
103-65-1	n-Propylbenzene	50	47.3	95	75-121
100-42-5	Styrene	50	47.0	94	81-125
75-65-0	Tert Butyl Alcohol	250	238	95	75-123
630-20-6	1,1,1,2-Tetrachloroethane	50	48.8	98	81-124
79-34-5	1,1,2,2-Tetrachloroethane	50	49.0	98	73-126
127-18-4	Tetrachloroethene	50	46.9	94	73-119
109-99-9	Tetrahydrofuran	50	44.5	89	63-133
108-88-3	Toluene	50	47.3	95	79-116
87-61-6	1,2,3-Trichlorobenzene	50	45.8	92	63-137
120-82-1	1,2,4-Trichlorobenzene	50	46.6	93	68-135
71-55-6	1,1,1-Trichloroethane	50	47.2	94	76-124
79-00-5	1,1,2-Trichloroethane	50	48.8	98	83-117
79-01-6	Trichloroethene	50	45.3	91	80-118
75-69-4	Trichlorofluoromethane	50	53.7	107	67-134
96-18-4	1,2,3-Trichloropropane	50	48.6	97	75-123
95-63-6	1,2,4-Trimethylbenzene	50	46.9	94	78-120
108-67-8	1,3,5-Trimethylbenzene	50	46.3	93	77-120
108-05-4	Vinyl Acetate	50	49.1	98	54-177
75-01-4	Vinyl chloride	50	47.6	95	52-146
	m,p-Xylene	100	93.0	93	79-119
95-47-6	o-Xylene	50	45.6	91	81-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8363-BS	1X193026.D	1	12/17/21	BK	n/a	n/a	V1X8363

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-1, JD36624-4, JD36624-5, JD36624-7, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	80-120%
17060-07-0	1,2-Dichloroethane-D4	101%	80-120%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	102%	82-114%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8364-BS	1X193059.D	1	12/20/21	BK	n/a	n/a	V1X8364

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	50	50.5	101	81-117

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	80-120%
17060-07-0	1,2-Dichloroethane-D4	101%	80-120%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	100%	82-114%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8366-BS	1X193109.D	1	12/21/21	BK	n/a	n/a	V1X8366

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-9, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	179	90	27-175
71-43-2	Benzene	50	54.7	109	80-115
108-86-1	Bromobenzene	50	55.4	111	79-119
74-97-5	Bromochloromethane	50	54.0	108	83-122
75-27-4	Bromodichloromethane	50	53.2	106	82-119
75-25-2	Bromoform	50	52.0	104	77-135
74-83-9	Bromomethane	50	53.2	106	40-162
78-93-3	2-Butanone (MEK)	200	187	94	61-150
104-51-8	n-Butylbenzene	50	53.7	107	77-124
135-98-8	sec-Butylbenzene	50	53.8	108	75-121
98-06-6	tert-Butylbenzene	50	54.0	108	74-120
75-15-0	Carbon disulfide	50	51.9	104	64-130
56-23-5	Carbon tetrachloride	50	55.0	110	75-127
108-90-7	Chlorobenzene	50	55.2	110	80-115
75-00-3	Chloroethane	50	56.4	113	56-144
67-66-3	Chloroform	50	52.9	106	75-116
74-87-3	Chloromethane	50	54.9	110	41-153
95-49-8	o-Chlorotoluene	50	53.2	106	79-119
106-43-4	p-Chlorotoluene	50	52.9	106	77-117
96-12-8	1,2-Dibromo-3-chloropropane	50	48.2	96	69-134
124-48-1	Dibromochloromethane	50	56.1	112	81-123
106-93-4	1,2-Dibromoethane	50	53.1	106	67-138
95-50-1	1,2-Dichlorobenzene	50	51.9	104	81-117
541-73-1	1,3-Dichlorobenzene	50	52.4	105	81-115
106-46-7	1,4-Dichlorobenzene	50	51.0	102	80-114
75-71-8	Dichlorodifluoromethane	50	62.1	124	43-152
75-34-3	1,1-Dichloroethane	50	53.9	108	75-125
107-06-2	1,2-Dichloroethane	50	51.5	103	73-117
75-35-4	1,1-Dichloroethene	50	54.0	108	70-124
156-59-2	cis-1,2-Dichloroethene	50	51.9	104	80-120
156-60-5	trans-1,2-Dichloroethene	50	53.4	107	77-121
78-87-5	1,2-Dichloropropane	50	55.4	111	79-121
142-28-9	1,3-Dichloropropane	50	53.6	107	81-117
594-20-7	2,2-Dichloropropane	50	55.4	111	70-131
563-58-6	1,1-Dichloropropene	50	53.8	108	77-122
10061-01-5	cis-1,3-Dichloropropene	50	55.6	111	83-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8366-BS	1X193109.D	1	12/21/21	BK	n/a	n/a	V1X8366

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-9, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	56.3	113	83-122
100-41-4	Ethylbenzene	50	52.1	104	78-116
87-68-3	Hexachlorobutadiene	50	54.1	108	55-136
591-78-6	2-Hexanone	200	191	96	66-136
98-82-8	Isopropylbenzene	50	52.7	105	78-121
99-87-6	p-Isopropyltoluene	50	54.3	109	78-121
1634-04-4	Methyl Tert Butyl Ether	50	52.2	104	76-123
108-10-1	4-Methyl-2-pentanone(MIBK)	200	205	103	73-134
74-95-3	Methylene bromide	50	51.9	104	82-117
75-09-2	Methylene chloride	50	50.3	101	73-123
91-20-3	Naphthalene	50	47.6	95	64-136
103-65-1	n-Propylbenzene	50	54.0	108	75-121
100-42-5	Styrene	50	53.4	107	81-125
75-65-0	Tert Butyl Alcohol	250	257	103	75-123
630-20-6	1,1,1,2-Tetrachloroethane	50	55.0	110	81-124
79-34-5	1,1,2,2-Tetrachloroethane	50	51.1	102	73-126
127-18-4	Tetrachloroethene	50	54.5	109	73-119
109-99-9	Tetrahydrofuran	50	48.8	98	63-133
108-88-3	Toluene	50	55.6	111	79-116
87-61-6	1,2,3-Trichlorobenzene	50	50.6	101	63-137
120-82-1	1,2,4-Trichlorobenzene	50	52.6	105	68-135
71-55-6	1,1,1-Trichloroethane	50	55.0	110	76-124
79-00-5	1,1,2-Trichloroethane	50	52.5	105	83-117
79-01-6	Trichloroethene	50	53.2	106	80-118
75-69-4	Trichlorofluoromethane	50	56.2	112	67-134
96-18-4	1,2,3-Trichloropropane	50	51.3	103	75-123
95-63-6	1,2,4-Trimethylbenzene	50	53.6	107	78-120
108-67-8	1,3,5-Trimethylbenzene	50	53.9	108	77-120
108-05-4	Vinyl Acetate	50	53.3	107	54-177
75-01-4	Vinyl chloride	50	50.0	100	52-146
	m,p-Xylene	100	108	108	79-119
95-47-6	o-Xylene	50	52.1	104	81-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8366-BS	1X193109.D	1	12/21/21	BK	n/a	n/a	V1X8366

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-9, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	80-120%
17060-07-0	1,2-Dichloroethane-D4	98%	80-120%
2037-26-5	Toluene-D8	99%	80-120%
460-00-4	4-Bromofluorobenzene	99%	82-114%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2D8732-BS	2D200524.D	1	12/22/21	ED	n/a	n/a	V2D8732

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-16, JD36624-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-90-7	Chlorobenzene	50	56.3	113	80-115
156-59-2	cis-1,2-Dichloroethene	50	56.8	114	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	108%	80-120%
17060-07-0	1,2-Dichloroethane-D4	96%	80-120%
2037-26-5	Toluene-D8	98%	80-120%
460-00-4	4-Bromofluorobenzene	84%	82-114%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V3457-BS	2V83919.D	1	12/22/21	NW	n/a	n/a	V2V3457

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
74-87-3	Chloromethane	50	59.2	118	41-153

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	80-120%
17060-07-0	1,2-Dichloroethane-D4	110%	80-120%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	98%	82-114%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36624-10MS	3A167461.D	1	12/20/21	BK	n/a	n/a	V3A7266
JD36624-10	3A167438.D	1	12/17/21	BK	n/a	n/a	V3A7266

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-1, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-9, JD36624-10, JD36624-11

CAS No.	Compound	JD36624-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
123-91-1	1,4-Dioxane	2.3		20	27.9	128	36-157

CAS No.	Surrogate Recoveries	MS	JD36624-10	Limits
17647-74-4	1,4-Dioxane-D8	149%	161%	39-174%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36485-8MS	3A167470.D	1	12/20/21	BK	n/a	n/a	V3A7268
JD36485-8	3A167465.D	1	12/20/21	BK	n/a	n/a	V3A7268

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-4, JD36624-5, JD36624-6, JD36624-15, JD36624-16

CAS No.	Compound	JD36485-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
123-91-1	1,4-Dioxane	ND		20	17.8	89	36-157

CAS No.	Surrogate Recoveries	MS	JD36485-8	Limits
17647-74-4	1,4-Dioxane-D8	95%	109%	39-174%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36540-8MS	3A167501.D	1	12/21/21	BK	n/a	n/a	V3A7269
JD36540-8	3A167493.D	1	12/21/21	BK	n/a	n/a	V3A7269

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-8, JD36624-12, JD36624-14

CAS No.	Compound	JD36540-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
123-91-1	1,4-Dioxane	ND		20	17.3	87	36-157

CAS No.	Surrogate Recoveries	MS	JD36540-8	Limits
17647-74-4	1,4-Dioxane-D8	99%	128%	39-174%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36682-2MS	3A167547.D	1	12/23/21	BK	n/a	n/a	V3A7273
JD36682-2	3A167540.D	1	12/23/21	BK	n/a	n/a	V3A7273

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-13, JD36624-17

CAS No.	Compound	JD36682-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
123-91-1	1,4-Dioxane	3.6		20	19.8	81	36-157

CAS No.	Surrogate Recoveries	MS	JD36682-2	Limits
17647-74-4	1,4-Dioxane-D8	115%	127%	39-174%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36806-4MS	2D200534.D	1	12/22/21	ED	n/a	n/a	V2D8732
JD36806-4	2D200529.D	1	12/22/21	ED	n/a	n/a	V2D8732

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-16, JD36624-17

CAS No.	Compound	JD36806-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
108-90-7	Chlorobenzene	ND		50	59.0	118	68-123
156-59-2	cis-1,2-Dichloroethene	ND		50	58.8	118	52-140

CAS No.	Surrogate Recoveries	MS	JD36806-4	Limits
1868-53-7	Dibromofluoromethane	107%	107%	80-120%
17060-07-0	1,2-Dichloroethane-D4	95%	97%	80-120%
2037-26-5	Toluene-D8	101%	106%	80-120%
460-00-4	4-Bromofluorobenzene	84%	80%* [a]	82-114%

(a) Outside of in house control limits, but within reasonable method recovery limits.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36696-3MS	2V83930.D	1	12/22/21	NW	n/a	n/a	V2V3457
JD36696-3	2V83922.D	1	12/22/21	NW	n/a	n/a	V2V3457

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-15

CAS No.	Compound	JD36696-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
74-87-3	Chloromethane	ND		50	62.7	125	35-156

CAS No.	Surrogate Recoveries	MS	JD36696-3	Limits
1868-53-7	Dibromofluoromethane	100%	95%	80-120%
17060-07-0	1,2-Dichloroethane-D4	114%	111%	80-120%
2037-26-5	Toluene-D8	99%	105%	80-120%
460-00-4	4-Bromofluorobenzene	97%	100%	82-114%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36294-5MS	3A167402.D	1	12/16/21	BK	n/a	n/a	V3A7265
JD36294-5MSD	3A167403.D	1	12/16/21	BK	n/a	n/a	V3A7265
JD36294-5	3A167406.D	1	12/16/21	BK	n/a	n/a	V3A7265

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-2

CAS No.	Compound	JD36294-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
123-91-1	1,4-Dioxane	0.26		20	23.1	114	20	25.1	124	8	36-157/42

CAS No.	Surrogate Recoveries	MS	MSD	JD36294-5	Limits
17647-74-4	1,4-Dioxane-D8	135%	170%	135%	39-174%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36538-5MS	3D171925.D	1	12/16/21	NH	n/a	n/a	V3D7294
JD36538-5MSD	3D171926.D	1	12/16/21	NH	n/a	n/a	V3D7294
JD36538-5	3D171919.D	1	12/16/21	NH	n/a	n/a	V3D7294

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8

CAS No.	Compound	JD36538-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		200	149	75	200	152	76	2	22-134/19
71-43-2	Benzene	7.7		50	50.1	85	50	50.4	85	1	49-137/12
108-86-1	Bromobenzene	ND		50	51.1	102	50	51.9	104	2	72-122/13
74-97-5	Bromochloromethane	ND		50	41.4	83	50	40.8	82	1	78-122/12
75-27-4	Bromodichloromethane	ND		50	43.1	86	50	43.5	87	1	76-121/12
75-25-2	Bromoform	ND		50	42.0	84	50	43.2	86	3	70-133/13
74-83-9	Bromomethane	ND		50	29.5	59	50	37.7	75	24	27-164/38
78-93-3	2-Butanone (MEK)	ND		200	169	85	200	168	84	1	52-137/17
104-51-8	n-Butylbenzene	ND		50	56.1	112	50	57.6	115	3	70-130/14
135-98-8	sec-Butylbenzene	ND		50	52.9	106	50	53.7	107	2	69-127/14
98-06-6	tert-Butylbenzene	ND		50	54.4	109	50	55.7	111	2	69-124/14
75-15-0	Carbon disulfide	ND		50	39.1	78	50	37.4	75	4	54-136/16
56-23-5	Carbon tetrachloride	ND		50	42.8	86	50	42.4	85	1	70-132/13
108-90-7	Chlorobenzene	6.4		50	55.0	97	50	55.7	99	1	68-123/12
75-00-3	Chloroethane	ND		50	51.8	104	50	47.5	95	9	48-152/17
67-66-3	Chloroform	ND		50	38.5	77	50	38.5	77	0	68-120/13
74-87-3	Chloromethane	ND		50	37.8	76	50	36.2	72	4	35-156/18
95-49-8	o-Chlorotoluene	ND		50	51.8	104	50	53.0	106	2	73-123/13
106-43-4	p-Chlorotoluene	ND		50	53.2	106	50	54.2	108	2	71-120/13
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	48.3	97	50	50.6	101	5	63-134/16
124-48-1	Dibromochloromethane	ND		50	45.7	91	50	46.8	94	2	75-122/12
106-93-4	1,2-Dibromoethane	ND		50	45.2	90	50	46.5	93	3	63-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	50.0	100	50	50.3	101	1	74-119/12
541-73-1	1,3-Dichlorobenzene	ND		50	50.7	101	50	51.8	104	2	75-117/12
106-46-7	1,4-Dichlorobenzene	0.51	J	50	49.7	98	50	51.4	102	3	72-117/12
75-71-8	Dichlorodifluoromethane	ND		50	46.1	92	50	42.5	85	8	34-163/16
75-34-3	1,1-Dichloroethane	ND		50	41.3	83	50	41.0	82	1	68-129/13
107-06-2	1,2-Dichloroethane	ND		50	38.2	76	50	38.5	77	1	66-120/13
75-35-4	1,1-Dichloroethene	ND		50	42.8	86	50	42.0	84	2	59-133/15
156-59-2	cis-1,2-Dichloroethene	ND		50	42.4	85	50	41.9	84	1	52-140/12
156-60-5	trans-1,2-Dichloroethene	ND		50	44.2	88	50	43.9	88	1	70-125/13
78-87-5	1,2-Dichloropropane	ND		50	45.6	91	50	46.1	92	1	73-124/12
142-28-9	1,3-Dichloropropane	ND		50	45.2	90	50	45.9	92	2	74-117/11
594-20-7	2,2-Dichloropropane	ND		50	38.2	76	50	38.1	76	0	62-138/13
563-58-6	1,1-Dichloropropene	ND		50	42.8	86	50	43.1	86	1	71-129/13
10061-01-5	cis-1,3-Dichloropropene	ND		50	44.8	90	50	45.4	91	1	75-125/13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36538-5MS	3D171925.D	1	12/16/21	NH	n/a	n/a	V3D7294
JD36538-5MSD	3D171926.D	1	12/16/21	NH	n/a	n/a	V3D7294
JD36538-5	3D171919.D	1	12/16/21	NH	n/a	n/a	V3D7294

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8

CAS No.	Compound	JD36538-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		50	45.0	90	50	45.8	92	2	75-122/12
100-41-4	Ethylbenzene	ND		50	46.5	93	50	47.0	94	1	37-144/12
87-68-3	Hexachlorobutadiene	ND		50	48.7	97	50	49.2	98	1	49-141/19
591-78-6	2-Hexanone	ND		200	187	94	200	192	96	3	56-132/16
98-82-8	Isopropylbenzene	ND		50	47.5	95	50	47.7	95	0	71-126/13
99-87-6	p-Isopropyltoluene	ND		50	51.8	104	50	52.8	106	2	71-126/13
1634-04-4	Methyl Tert Butyl Ether	ND		50	38.1	76	50	37.8	76	1	66-124/12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	176	88	200	178	89	1	65-135/14
74-95-3	Methylene bromide	ND		50	42.5	85	50	43.5	87	2	76-116/12
75-09-2	Methylene chloride	ND		50	39.0	78	50	38.7	77	1	66-125/14
91-20-3	Naphthalene	ND		50	46.7	93	50	48.8	98	4	49-146/18
103-65-1	n-Propylbenzene	ND		50	50.6	101	50	51.4	103	2	60-131/14
100-42-5	Styrene	ND		50	47.4	95	50	47.8	96	1	71-133/12
75-65-0	Tert Butyl Alcohol	ND		250	242	97	250	262	105	8	63-133/15
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	47.0	94	50	48.3	97	3	75-125/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	52.5	105	50	54.1	108	3	68-127/14
127-18-4	Tetrachloroethene	ND		50	49.3	99	50	50.6	101	3	58-132/13
109-99-9	Tetrahydrofuran	ND		50	35.2	70	50	35.9	72	2	54-134/18
108-88-3	Toluene	ND		50	46.0	92	50	47.3	95	3	46-139/12
87-61-6	1,2,3-Trichlorobenzene	ND		50	47.3	95	50	49.5	99	5	57-136/17
120-82-1	1,2,4-Trichlorobenzene	ND		50	49.8	100	50	51.3	103	3	61-137/16
71-55-6	1,1,1-Trichloroethane	ND		50	41.6	83	50	41.6	83	0	67-132/13
79-00-5	1,1,2-Trichloroethane	ND		50	47.8	96	50	48.3	97	1	75-120/12
79-01-6	Trichloroethene	ND		50	49.2	98	50	51.4	103	4	56-136/12
75-69-4	Trichlorofluoromethane	ND		50	45.9	92	50	42.8	86	7	61-145/16
96-18-4	1,2,3-Trichloropropane	ND		50	51.6	103	50	52.8	106	2	68-124/14
95-63-6	1,2,4-Trimethylbenzene	ND		50	48.6	97	50	49.9	100	3	39-147/13
108-67-8	1,3,5-Trimethylbenzene	ND		50	49.2	98	50	50.0	100	2	56-136/14
108-05-4	Vinyl Acetate	ND		50	43.6	87	50	45.7	91	5	68-167/16
75-01-4	Vinyl chloride	ND		50	45.8	92	50	42.8	86	7	41-156/16
	m,p-Xylene	ND		100	95.6	96	100	97.8	98	2	32-151/12
95-47-6	o-Xylene	ND		50	48.8	98	50	49.7	99	2	50-139/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36538-5MS	3D171925.D	1	12/16/21	NH	n/a	n/a	V3D7294
JD36538-5MSD	3D171926.D	1	12/16/21	NH	n/a	n/a	V3D7294
JD36538-5	3D171919.D	1	12/16/21	NH	n/a	n/a	V3D7294

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8

CAS No.	Surrogate Recoveries	MS	MSD	JD36538-5	Limits
1868-53-7	Dibromofluoromethane	89%	88%	85%	80-120%
17060-07-0	1,2-Dichloroethane-D4	87%	88%	92%	80-120%
2037-26-5	Toluene-D8	96%	97%	103%	80-120%
460-00-4	4-Bromofluorobenzene	101%	102%	98%	82-114%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36624-10MS	1X193041.D	1	12/17/21	BK	n/a	n/a	V1X8363
JD36624-10MSD	1X193042.D	1	12/17/21	BK	n/a	n/a	V1X8363
JD36624-10	1X193037.D	1	12/17/21	BK	n/a	n/a	V1X8363

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-1, JD36624-4, JD36624-5, JD36624-7, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13

CAS No.	Compound	JD36624-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		200	179	90	200	183	92	2	22-134/19
71-43-2	Benzene	ND		50	51.5	103	50	52.8	106	2	49-137/12
108-86-1	Bromobenzene	ND		50	52.3	105	50	53.5	107	2	72-122/13
74-97-5	Bromochloromethane	ND		50	50.1	100	50	50.1	100	0	78-122/12
75-27-4	Bromodichloromethane	ND		50	50.4	101	50	51.1	102	1	76-121/12
75-25-2	Bromoform	ND		50	51.2	102	50	52.4	105	2	70-133/13
74-83-9	Bromomethane	ND		50	48.2	96	50	47.0	94	3	27-164/38
78-93-3	2-Butanone (MEK)	ND		200	196	98	200	199	100	2	52-137/17
104-51-8	n-Butylbenzene	ND		50	54.0	108	50	54.9	110	2	70-130/14
135-98-8	sec-Butylbenzene	ND		50	52.8	106	50	54.5	109	3	69-127/14
98-06-6	tert-Butylbenzene	ND		50	51.8	104	50	53.9	108	4	69-124/14
75-15-0	Carbon disulfide	ND		50	44.0	88	50	45.0	90	2	54-136/16
56-23-5	Carbon tetrachloride	ND		50	54.6	109	50	55.3	111	1	70-132/13
108-90-7	Chlorobenzene	5.1		50	57.6	105	50	58.2	106	1	68-123/12
75-00-3	Chloroethane	ND		50	51.5	103	50	49.1	98	5	48-152/17
67-66-3	Chloroform	ND		50	49.0	98	50	49.6	99	1	68-120/13
74-87-3	Chloromethane	ND		50	43.7	87	50	42.1	84	4	35-156/18
95-49-8	o-Chlorotoluene	ND		50	51.9	104	50	53.2	106	2	73-123/13
106-43-4	p-Chlorotoluene	ND		50	50.9	102	50	51.8	104	2	71-120/13
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	50.9	102	50	53.2	106	4	63-134/16
124-48-1	Dibromochloromethane	ND		50	54.0	108	50	54.6	109	1	75-122/12
106-93-4	1,2-Dibromoethane	ND		50	50.1	100	50	51.6	103	3	63-134/12
95-50-1	1,2-Dichlorobenzene	4.4		50	55.1	101	50	56.3	104	2	74-119/12
541-73-1	1,3-Dichlorobenzene	ND		50	50.0	100	50	51.5	103	3	75-117/12
106-46-7	1,4-Dichlorobenzene	0.90	J	50	50.0	98	50	52.0	102	4	72-117/12
75-71-8	Dichlorodifluoromethane	ND		50	35.1	70	50	35.2	70	0	34-163/16
75-34-3	1,1-Dichloroethane	5.6		50	57.3	103	50	57.8	104	1	68-129/13
107-06-2	1,2-Dichloroethane	ND		50	48.8	98	50	49.6	99	2	66-120/13
75-35-4	1,1-Dichloroethene	ND		50	48.5	97	50	49.7	99	2	59-133/15
156-59-2	cis-1,2-Dichloroethene	2.1		50	52.4	101	50	52.6	101	0	52-140/12
156-60-5	trans-1,2-Dichloroethene	ND		50	49.6	99	50	51.2	102	3	70-125/13
78-87-5	1,2-Dichloropropane	ND		50	53.2	106	50	53.4	107	0	73-124/12
142-28-9	1,3-Dichloropropane	ND		50	49.8	100	50	50.7	101	2	74-117/11
594-20-7	2,2-Dichloropropane	ND		50	53.9	108	50	55.2	110	2	62-138/13
563-58-6	1,1-Dichloropropene	ND		50	52.3	105	50	53.0	106	1	71-129/13
10061-01-5	cis-1,3-Dichloropropene	ND		50	51.5	103	50	52.3	105	2	75-125/13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36624-10MS	1X193041.D	1	12/17/21	BK	n/a	n/a	V1X8363
JD36624-10MSD	1X193042.D	1	12/17/21	BK	n/a	n/a	V1X8363
JD36624-10	1X193037.D	1	12/17/21	BK	n/a	n/a	V1X8363

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-1, JD36624-4, JD36624-5, JD36624-7, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13

CAS No.	Compound	JD36624-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		50	52.7	105	50	53.6	107	2	75-122/12
100-41-4	Ethylbenzene	ND		50	50.5	101	50	51.6	103	2	37-144/12
87-68-3	Hexachlorobutadiene	ND		50	51.8	104	50	53.4	107	3	49-141/19
591-78-6	2-Hexanone	ND		200	208	104	200	216	108	4	56-132/16
98-82-8	Isopropylbenzene	ND		50	51.3	103	50	52.5	105	2	71-126/13
99-87-6	p-Isopropyltoluene	ND		50	53.4	107	50	54.8	110	3	71-126/13
1634-04-4	Methyl Tert Butyl Ether	ND		50	48.5	97	50	49.6	99	2	66-124/12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	219	110	200	225	113	3	65-135/14
74-95-3	Methylene bromide	ND		50	49.6	99	50	50.7	101	2	76-116/12
75-09-2	Methylene chloride	ND		50	44.9	90	50	45.8	92	2	66-125/14
91-20-3	Naphthalene	ND		50	48.6	97	50	51.3	103	5	49-146/18
103-65-1	n-Propylbenzene	ND		50	53.2	106	50	54.1	108	2	60-131/14
100-42-5	Styrene	ND		50	50.0	100	50	51.4	103	3	71-133/12
75-65-0	Tert Butyl Alcohol	ND		250	237	95	250	255	102	7	63-133/15
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	52.2	104	50	53.4	107	2	75-125/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	52.8	106	50	54.2	108	3	68-127/14
127-18-4	Tetrachloroethene	ND		50	52.3	105	50	53.7	107	3	58-132/13
109-99-9	Tetrahydrofuran	ND		50	47.7	95	50	50.6	101	6	54-134/18
108-88-3	Toluene	ND		50	53.0	106	50	53.9	108	2	46-139/12
87-61-6	1,2,3-Trichlorobenzene	ND		50	47.7	95	50	50.2	100	5	57-136/17
120-82-1	1,2,4-Trichlorobenzene	ND		50	48.8	98	50	52.3	105	7	61-137/16
71-55-6	1,1,1-Trichloroethane	ND		50	53.0	106	50	54.5	109	3	67-132/13
79-00-5	1,1,2-Trichloroethane	ND		50	49.8	100	50	52.2	104	5	75-120/12
79-01-6	Trichloroethene	ND		50	51.5	103	50	52.5	105	2	56-136/12
75-69-4	Trichlorofluoromethane	ND		50	48.8	98	50	48.5	97	1	61-145/16
96-18-4	1,2,3-Trichloropropane	ND		50	51.3	103	50	52.6	105	3	68-124/14
95-63-6	1,2,4-Trimethylbenzene	ND		50	51.6	103	50	53.2	106	3	39-147/13
108-67-8	1,3,5-Trimethylbenzene	ND		50	51.3	103	50	53.0	106	3	56-136/14
108-05-4	Vinyl Acetate	ND		50	49.0	98	50	53.7	107	9	68-167/16
75-01-4	Vinyl chloride	0.88	J	50	42.8	84	50	41.2	81	4	41-156/16
	m,p-Xylene	ND		100	104	104	100	106	106	2	32-151/12
95-47-6	o-Xylene	ND		50	50.1	100	50	51.1	102	2	50-139/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36624-10MS	1X193041.D	1	12/17/21	BK	n/a	n/a	V1X8363
JD36624-10MSD	1X193042.D	1	12/17/21	BK	n/a	n/a	V1X8363
JD36624-10	1X193037.D	1	12/17/21	BK	n/a	n/a	V1X8363

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-1, JD36624-4, JD36624-5, JD36624-7, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13

CAS No.	Surrogate Recoveries	MS	MSD	JD36624-10	Limits
1868-53-7	Dibromofluoromethane	99%	98%	102%	80-120%
17060-07-0	1,2-Dichloroethane-D4	101%	101%	104%	80-120%
2037-26-5	Toluene-D8	100%	100%	100%	80-120%
460-00-4	4-Bromofluorobenzene	100%	101%	102%	82-114%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36822-2MS	1X193072.D	25	12/20/21	BK	n/a	n/a	V1X8364
JD36822-2MSD	1X193073.D	25	12/20/21	BK	n/a	n/a	V1X8364
JD36822-2 [a]	1X193070.D	25	12/20/21	BK	n/a	n/a	V1X8364

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-13

CAS No.	Compound	JD36822-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND		1250	1300	104	1250	1350	108	4	74-119/12

CAS No.	Surrogate Recoveries	MS	MSD	JD36822-2	Limits
1868-53-7	Dibromofluoromethane	103%	102%	105%	80-120%
17060-07-0	1,2-Dichloroethane-D4	100%	100%	102%	80-120%
2037-26-5	Toluene-D8	100%	99%	99%	80-120%
460-00-4	4-Bromofluorobenzene	100%	100%	100%	82-114%

(a) Dilution required due to high concentration of target compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36624-17MS	1X193123.D	10	12/21/21	BK	n/a	n/a	V1X8366
JD36624-17MSD	1X193124.D	10	12/21/21	BK	n/a	n/a	V1X8366
JD36624-17 [a]	1X193122.D	10	12/21/21	BK	n/a	n/a	V1X8366

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-9, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	JD36624-17 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		2000	1700	85	2000	1840	92	8	22-134/19
71-43-2	Benzene	263		500	741	96	500	772	102	4	49-137/12
108-86-1	Bromobenzene	ND		500	525	105	500	543	109	3	72-122/13
74-97-5	Bromochloromethane	ND		500	524	105	500	547	109	4	78-122/12
75-27-4	Bromodichloromethane	ND		500	507	101	500	526	105	4	76-121/12
75-25-2	Bromoform	ND		500	497	99	500	532	106	7	70-133/13
74-83-9	Bromomethane	ND		500	537	107	500	538	108	0	27-164/38
78-93-3	2-Butanone (MEK)	ND		2000	1820	91	2000	1930	97	6	52-137/17
104-51-8	n-Butylbenzene	ND		500	498	100	500	531	106	6	70-130/14
135-98-8	sec-Butylbenzene	ND		500	496	99	500	527	105	6	69-127/14
98-06-6	tert-Butylbenzene	ND		500	492	98	500	531	106	8	69-124/14
75-15-0	Carbon disulfide	ND		500	415	83	500	438	88	5	54-136/16
56-23-5	Carbon tetrachloride	ND		500	503	101	500	530	106	5	70-132/13
108-90-7	Chlorobenzene	13800	E	500	12400	-280* [b]	500	12900	-180* [b]	4	68-123/12
75-00-3	Chloroethane	ND		500	531	106	500	554	111	4	48-152/17
67-66-3	Chloroform	ND		500	483	97	500	507	101	5	68-120/13
74-87-3	Chloromethane	ND		500	522	104	500	543	109	4	35-156/18
95-49-8	o-Chlorotoluene	ND		500	500	100	500	529	106	6	73-123/13
106-43-4	p-Chlorotoluene	ND		500	505	101	500	526	105	4	71-120/13
96-12-8	1,2-Dibromo-3-chloropropane	ND		500	446	89	500	484	97	8	63-134/16
124-48-1	Dibromochloromethane	ND		500	529	106	500	559	112	6	75-122/12
106-93-4	1,2-Dibromoethane	ND		500	495	99	500	519	104	5	63-134/12
95-50-1	1,2-Dichlorobenzene	509		500	960	90	500	981	94	2	74-119/12
541-73-1	1,3-Dichlorobenzene	48.2		500	542	99	500	562	103	4	75-117/12
106-46-7	1,4-Dichlorobenzene	270		500	729	92	500	754	97	3	72-117/12
75-71-8	Dichlorodifluoromethane	ND		500	565	113	500	590	118	4	34-163/16
75-34-3	1,1-Dichloroethane	26.6		500	521	99	500	552	105	6	68-129/13
107-06-2	1,2-Dichloroethane	ND		500	501	100	500	507	101	1	66-120/13
75-35-4	1,1-Dichloroethene	ND		500	454	91	500	484	97	6	59-133/15
156-59-2	cis-1,2-Dichloroethene	17.4		500	498	96	500	523	101	5	52-140/12
156-60-5	trans-1,2-Dichloroethene	ND		500	481	96	500	503	101	4	70-125/13
78-87-5	1,2-Dichloropropane	ND		500	521	104	500	548	110	5	73-124/12
142-28-9	1,3-Dichloropropane	ND		500	499	100	500	528	106	6	74-117/11
594-20-7	2,2-Dichloropropane	ND		500	516	103	500	544	109	5	62-138/13
563-58-6	1,1-Dichloropropene	ND		500	496	99	500	519	104	5	71-129/13
10061-01-5	cis-1,3-Dichloropropene	ND		500	531	106	500	549	110	3	75-125/13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36624-17MS	1X193123.D	10	12/21/21	BK	n/a	n/a	V1X8366
JD36624-17MSD	1X193124.D	10	12/21/21	BK	n/a	n/a	V1X8366
JD36624-17 [a]	1X193122.D	10	12/21/21	BK	n/a	n/a	V1X8366

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-9, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	JD36624-17 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND		500	531	106	500	556	111	5	75-122/12
100-41-4	Ethylbenzene	ND		500	483	97	500	521	104	8	37-144/12
87-68-3	Hexachlorobutadiene	ND		500	506	101	500	532	106	5	49-141/19
591-78-6	2-Hexanone	ND		2000	1750	88	2000	1920	96	9	56-132/16
98-82-8	Isopropylbenzene	ND		500	480	96	500	516	103	7	71-126/13
99-87-6	p-Isopropyltoluene	ND		500	505	101	500	537	107	6	71-126/13
1634-04-4	Methyl Tert Butyl Ether	ND		500	503	101	500	519	104	3	66-124/12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		2000	1940	97	2000	2100	105	8	65-135/14
74-95-3	Methylene bromide	ND		500	501	100	500	512	102	2	76-116/12
75-09-2	Methylene chloride	ND		500	462	92	500	477	95	3	66-125/14
91-20-3	Naphthalene	ND		500	467	93	500	495	99	6	49-146/18
103-65-1	n-Propylbenzene	9.3	J	500	509	100	500	542	107	6	60-131/14
100-42-5	Styrene	ND		500	497	99	500	523	105	5	71-133/12
75-65-0	Tert Butyl Alcohol	ND		2500	2560	102	2500	2670	107	4	63-133/15
630-20-6	1,1,1,2-Tetrachloroethane	ND		500	517	103	500	544	109	5	75-125/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		500	501	100	500	532	106	6	68-127/14
127-18-4	Tetrachloroethene	ND		500	492	98	500	534	107	8	58-132/13
109-99-9	Tetrahydrofuran	ND		500	474	95	500	506	101	7	54-134/18
108-88-3	Toluene	ND		500	502	100	500	538	108	7	46-139/12
87-61-6	1,2,3-Trichlorobenzene	ND		500	491	98	500	516	103	5	57-136/17
120-82-1	1,2,4-Trichlorobenzene	ND		500	514	103	500	534	107	4	61-137/16
71-55-6	1,1,1-Trichloroethane	ND		500	510	102	500	534	107	5	67-132/13
79-00-5	1,1,2-Trichloroethane	ND		500	501	100	500	526	105	5	75-120/12
79-01-6	Trichloroethene	ND		500	491	98	500	524	105	7	56-136/12
75-69-4	Trichlorofluoromethane	ND		500	519	104	500	546	109	5	61-145/16
96-18-4	1,2,3-Trichloropropane	ND		500	475	95	500	518	104	9	68-124/14
95-63-6	1,2,4-Trimethylbenzene	ND		500	509	102	500	540	108	6	39-147/13
108-67-8	1,3,5-Trimethylbenzene	ND		500	499	100	500	526	105	5	56-136/14
108-05-4	Vinyl Acetate	ND		500	526	105	500	535	107	2	68-167/16
75-01-4	Vinyl chloride	ND		500	464	93	500	486	97	5	41-156/16
	m,p-Xylene	ND		1000	998	100	1000	1070	107	7	32-151/12
95-47-6	o-Xylene	12.0		500	489	95	500	522	102	7	50-139/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36624-17MS	1X193123.D	10	12/21/21	BK	n/a	n/a	V1X8366
JD36624-17MSD	1X193124.D	10	12/21/21	BK	n/a	n/a	V1X8366
JD36624-17 [a]	1X193122.D	10	12/21/21	BK	n/a	n/a	V1X8366

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-9, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Surrogate Recoveries	MS	MSD	JD36624-17	Limits
1868-53-7	Dibromofluoromethane	98%	97%	99%	80-120%
17060-07-0	1,2-Dichloroethane-D4	97%	96%	100%	80-120%
2037-26-5	Toluene-D8	97%	97%	97%	80-120%
460-00-4	4-Bromofluorobenzene	99%	100%	101%	82-114%

(a) Dilution required due to high concentration of target compound.
(b) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36624-3DUP	3A167430.D	1	12/17/21	BK	n/a	n/a	V3A7266
JD36624-3	3A167460.D	1	12/20/21	BK	n/a	n/a	V3A7266

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-1, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-9, JD36624-10, JD36624-11

CAS No.	Compound	JD36624-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
123-91-1	1,4-Dioxane	0.40	B	1.1		93* [a]	36

CAS No.	Surrogate Recoveries	DUP	JD36624-3	Limits
17647-74-4	1,4-Dioxane-D8	211%* [b]	115%	39-174%

(a) High RPD due to low concentration of hit.
(b) Outside in house control limits.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36485-5DUP	3A167472.D	1	12/20/21	BK	n/a	n/a	V3A7268
JD36485-5	3A167463.D	1	12/20/21	BK	n/a	n/a	V3A7268

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-4, JD36624-5, JD36624-6, JD36624-15, JD36624-16

CAS No.	Compound	JD36485-5 ug/l	Q	DUP ug/l	Q	RPD	Limits
123-91-1	1,4-Dioxane	1.0	B	1.1	B	10	36

CAS No.	Surrogate Recoveries	DUP	JD36485-5	Limits
17647-74-4	1,4-Dioxane-D8	102%	105%	39-174%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36617-4DUP	3A167535.D	1	12/23/21	BK	n/a	n/a	V3A7269
JD36617-4	3A167506.D	1	12/21/21	BK	n/a	n/a	V3A7269

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-8, JD36624-12, JD36624-14

CAS No.	Compound	JD36617-4 ug/l	Q	DUP ug/l	Q	RPD	Limits
123-91-1	1,4-Dioxane	ND		ND		nc	36

CAS No.	Surrogate Recoveries	DUP	JD36617-4	Limits
17647-74-4	1,4-Dioxane-D8	170%	138%	39-174%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36682-3DUP	3A167548.D	1	12/23/21	BK	n/a	n/a	V3A7273
JD36682-3	3A167541.D	1	12/23/21	BK	n/a	n/a	V3A7273

The QC reported here applies to the following samples: **Method:** SW846 8260D BY SIM

JD36624-13, JD36624-17

CAS No.	Compound	JD36682-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
123-91-1	1,4-Dioxane	3.6		3.7		3	36

CAS No.	Surrogate Recoveries	DUP	JD36682-3	Limits
17647-74-4	1,4-Dioxane-D8	111%	114%	39-174%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36806-5DUP	2D200536.D	1	12/22/21	ED	n/a	n/a	V2D8732
JD36806-5	2D200530.D	1	12/22/21	ED	n/a	n/a	V2D8732

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-16, JD36624-17

CAS No.	Compound	JD36806-5 ug/l	Q	DUP ug/l	Q	RPD	Limits
108-90-7	Chlorobenzene	ND		ND		nc	10
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	10

CAS No.	Surrogate Recoveries	DUP	JD36806-5	Limits
1868-53-7	Dibromofluoromethane	108%	109%	80-120%
17060-07-0	1,2-Dichloroethane-D4	98%	96%	80-120%
2037-26-5	Toluene-D8	106%	107%	80-120%
460-00-4	4-Bromofluorobenzene	81%* [a]	80%* [a]	82-114%

(a) Outside of in house control limits, but within reasonable method recovery limits.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36696-4DUP	2V83932.D	1	12/22/21	NW	n/a	n/a	V2V3457
JD36696-4	2V83923.D	1	12/22/21	NW	n/a	n/a	V2V3457

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD36624-15

CAS No.	Compound	JD36696-4 ug/l	Q	DUP ug/l	Q	RPD	Limits
74-87-3	Chloromethane	ND		ND		nc	10

CAS No.	Surrogate Recoveries	DUP	JD36696-4	Limits
1868-53-7	Dibromofluoromethane	97%	97%	80-120%
17060-07-0	1,2-Dichloroethane-D4	112%	113%	80-120%
2037-26-5	Toluene-D8	105%	105%	80-120%
460-00-4	4-Bromofluorobenzene	100%	98%	82-114%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-BFB
Lab File ID: 1X192528.D
Instrument ID: GCMS1X
Injection Date: 11/17/21
Injection Time: 19:07

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	20418	22.0		Pass
75	30.0 - 60.0% of mass 95	45120	48.7		Pass
95	Base peak, 100% relative abundance	92688	100.0		Pass
96	5.0 - 9.0% of mass 95	6083	6.56		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	86586	93.4		Pass
175	5.0 - 9.0% of mass 174	6662	7.19	(7.69) [a]	Pass
176	95.0 - 101.0% of mass 174	85501	92.2	(98.7) [a]	Pass
177	5.0 - 9.0% of mass 176	5877	6.34	(6.87) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1X8342-IC8342	1X192530.D	11/17/21	19:41	00:34	Initial cal 0.2
V1X8342-IC8342	1X192532.D	11/17/21	20:15	01:08	Initial cal 0.5
V1X8342-IC8342	1X192534.D	11/17/21	20:49	01:42	Initial cal 1
V1X8342-IC8342	1X192536.D	11/17/21	21:22	02:15	Initial cal 2
V1X8342-IC8342	1X192538.D	11/17/21	21:56	02:49	Initial cal 4
V1X8342-IC8342	1X192540.D	11/17/21	22:30	03:23	Initial cal 8
V1X8342-IC8342	1X192542.D	11/17/21	23:04	03:57	Initial cal 20
V1X8342-ICC8342	1X192544.D	11/17/21	23:38	04:31	Initial cal 50
V1X8342-IC8342	1X192546.D	11/18/21	00:12	05:05	Initial cal 100
V1X8342-IC8342	1X192548.D	11/18/21	00:45	05:38	Initial cal 200
V1X8342-ICV8342	1X192554.D	11/18/21	02:25	07:18	Initial cal verification 50
V1X8342-ICV8342	1X192556.D	11/18/21	02:59	07:52	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V1X8342-BFB2	**Injection Date:**	11/23/21
Lab File ID:	1X192566.D	**Injection Time:**	10:03
Instrument ID:	GCMS1X		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15983	22.4		Pass
75	30.0 - 60.0% of mass 95	35298	49.6		Pass
95	Base peak, 100% relative abundance	71226	100.0		Pass
96	5.0 - 9.0% of mass 95	4783	6.72		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	65664	92.2		Pass
175	5.0 - 9.0% of mass 174	4944	6.94	(7.53) [a]	Pass
176	95.0 - 101.0% of mass 174	64024	89.9	(97.5) [a]	Pass
177	5.0 - 9.0% of mass 176	4107	5.77	(6.41) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1X8342-ICV8342	1X192568.D	11/23/21	10:46	00:43	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8363-BFB
Lab File ID: 1X193024.D
Instrument ID: GCMS1X
Injection Date: 12/17/21
Injection Time: 10:17

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	33904	24.0		Pass
75	30.0 - 60.0% of mass 95	70256	49.8		Pass
95	Base peak, 100% relative abundance	141027	100.0		Pass
96	5.0 - 9.0% of mass 95	9094	6.45		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	135139	95.8		Pass
175	5.0 - 9.0% of mass 174	10496	7.44	(7.77) [a]	Pass
176	95.0 - 101.0% of mass 174	132755	94.1	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	8631	6.12	(6.50) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1X8363-CC8342	1X193024.D	12/17/21	10:17	00:00	Continuing cal 20
V1X8363-BS	1X193026.D	12/17/21	11:16	00:59	Blank Spike
V1X8363-MB	1X193028.D	12/17/21	12:07	01:50	Method Blank
ZZZZZZ	1X193029.D	12/17/21	12:33	02:16	(unrelated sample)
ZZZZZZ	1X193030.D	12/17/21	12:59	02:42	(unrelated sample)
ZZZZZZ	1X193031.D	12/17/21	13:25	03:08	(unrelated sample)
ZZZZZZ	1X193032.D	12/17/21	13:51	03:34	(unrelated sample)
ZZZZZZ	1X193033.D	12/17/21	14:17	04:00	(unrelated sample)
JD36624-4	1X193034.D	12/17/21	14:43	04:26	HOFF MW-4DU
JD36624-10	1X193037.D	12/17/21	16:01	05:44	HOFF MW-D
JD36624-5	1X193038.D	12/17/21	16:27	06:10	DUP-2021
JD36624-9	1X193039.D	12/17/21	16:53	06:36	HOFF MW-C
JD36624-7	1X193040.D	12/17/21	17:18	07:01	HOFF MW-FB
JD36624-10MS	1X193041.D	12/17/21	17:44	07:27	Matrix Spike
JD36624-10MSD	1X193042.D	12/17/21	18:11	07:54	Matrix Spike Duplicate
ZZZZZZ	1X193043.D	12/17/21	18:36	08:19	(unrelated sample)
JD36624-11	1X193044.D	12/17/21	19:02	08:45	HOFF IW-1A
JD36624-12	1X193045.D	12/17/21	19:28	09:11	HOFF IW-1B
JD36624-1	1X193046.D	12/17/21	19:54	09:37	TB-20211207
JD36624-13	1X193047.D	12/17/21	20:20	10:03	HOFF IW-3A

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8364-BFB
Lab File ID: 1X193057.D
Instrument ID: GCMS1X
Injection Date: 12/20/21
Injection Time: 12:00

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	33213	24.7		Pass
75	30.0 - 60.0% of mass 95	67965	50.6		Pass
95	Base peak, 100% relative abundance	134392	100.0		Pass
96	5.0 - 9.0% of mass 95	9200	6.85		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	126451	94.1		Pass
175	5.0 - 9.0% of mass 174	9621	7.16	(7.61) [a]	Pass
176	95.0 - 101.0% of mass 174	121944	90.7	(96.4) [a]	Pass
177	5.0 - 9.0% of mass 176	8049	5.99	(6.60) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1X8364-CC8342	1X193057.D	12/20/21	12:00	00:00	Continuing cal 20
V1X8364-BS	1X193059.D	12/20/21	12:54	00:54	Blank Spike
V1X8364-MB	1X193061.D	12/20/21	14:10	02:10	Method Blank
ZZZZZZ	1X193062.D	12/20/21	14:39	02:39	(unrelated sample)
ZZZZZZ	1X193063.D	12/20/21	15:05	03:05	(unrelated sample)
ZZZZZZ	1X193064.D	12/20/21	15:31	03:31	(unrelated sample)
ZZZZZZ	1X193065.D	12/20/21	15:57	03:57	(unrelated sample)
JD36624-13	1X193066.D	12/20/21	16:23	04:23	HOFF IW-3A
ZZZZZZ	1X193067.D	12/20/21	16:55	04:55	(unrelated sample)
ZZZZZZ	1X193068.D	12/20/21	17:21	05:21	(unrelated sample)
ZZZZZZ	1X193069.D	12/20/21	17:46	05:46	(unrelated sample)
JD36822-2	1X193070.D	12/20/21	18:12	06:12	(used for QC only; not part of job JD36624)
ZZZZZZ	1X193071.D	12/20/21	18:38	06:38	(unrelated sample)
JD36822-2MS	1X193072.D	12/20/21	19:04	07:04	Matrix Spike
JD36822-2MSD	1X193073.D	12/20/21	19:30	07:30	Matrix Spike Duplicate
ZZZZZZ	1X193075.D	12/20/21	20:22	08:22	(unrelated sample)
ZZZZZZ	1X193076.D	12/20/21	20:48	08:48	(unrelated sample)
ZZZZZZ	1X193077.D	12/20/21	21:14	09:14	(unrelated sample)
ZZZZZZ	1X193078.D	12/20/21	21:40	09:40	(unrelated sample)
ZZZZZZ	1X193079.D	12/20/21	22:06	10:06	(unrelated sample)
ZZZZZZ	1X193080.D	12/20/21	22:32	10:32	(unrelated sample)
ZZZZZZ	1X193081.D	12/20/21	22:57	10:57	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8366-BFB
Lab File ID: 1X193108.D
Instrument ID: GCMS1X
Injection Date: 12/21/21
Injection Time: 10:37

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	37013	24.2		Pass
75	30.0 - 60.0% of mass 95	75573	49.4		Pass
95	Base peak, 100% relative abundance	153005	100.0		Pass
96	5.0 - 9.0% of mass 95	10161	6.64		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	136181	89.0		Pass
175	5.0 - 9.0% of mass 174	10622	6.94	(7.80) [a]	Pass
176	95.0 - 101.0% of mass 174	132099	86.3	(97.0) [a]	Pass
177	5.0 - 9.0% of mass 176	8903	5.82	(6.74) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1X8366-CC8342	1X193108.D	12/21/21	10:37	00:00	Continuing cal 20
V1X8366-BS	1X193109.D	12/21/21	11:08	00:31	Blank Spike
V1X8366-MB	1X193111.D	12/21/21	11:59	01:22	Method Blank
ZZZZZZ	1X193112.D	12/21/21	12:25	01:48	(unrelated sample)
ZZZZZZ	1X193113.D	12/21/21	12:51	02:14	(unrelated sample)
ZZZZZZ	1X193114.D	12/21/21	13:17	02:40	(unrelated sample)
ZZZZZZ	1X193115.D	12/21/21	13:43	03:06	(unrelated sample)
ZZZZZZ	1X193116.D	12/21/21	14:09	03:32	(unrelated sample)
JD36624-9	1X193117.D	12/21/21	14:35	03:58	HOFF MW-C
JD36624-14	1X193118.D	12/21/21	15:00	04:23	HOFF IW-3B
JD36624-15	1X193119.D	12/21/21	15:26	04:49	HOFF IW-2A
JD36624-16	1X193120.D	12/21/21	15:52	05:15	HOFF IW-2B
ZZZZZZ	1X193121.D	12/21/21	16:18	05:41	(unrelated sample)
JD36624-17	1X193122.D	12/21/21	16:44	06:07	HOFF IW-B
JD36624-17MS	1X193123.D	12/21/21	17:15	06:38	Matrix Spike
JD36624-17MSD	1X193124.D	12/21/21	17:41	07:04	Matrix Spike Duplicate
ZZZZZZ	1X193126.D	12/21/21	18:33	07:56	(unrelated sample)
ZZZZZZ	1X193135.D	12/21/21	22:25	11:48	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2D8694-BFB
Lab File ID: 2D199712.D
Instrument ID: GCMS2D
Injection Date: 11/17/21
Injection Time: 18:47

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	40221	20.7		Pass
75	30.0 - 60.0% of mass 95	84392	43.5		Pass
95	Base peak, 100% relative abundance	194154	100.0		Pass
96	5.0 - 9.0% of mass 95	12376	6.37		Pass
173	Less than 2.0% of mass 174	1132	0.58	(0.68) [a]	Pass
174	50.0 - 120.0% of mass 95	167466	86.3		Pass
175	5.0 - 9.0% of mass 174	11369	5.86	(6.79) [a]	Pass
176	95.0 - 101.0% of mass 174	164010	84.5	(97.9) [a]	Pass
177	5.0 - 9.0% of mass 176	11530	5.94	(7.03) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D8694-IC8694	2D199713.D	11/17/21	19:16	00:29	Initial cal 0.2
V2D8694-IC8694	2D199714.D	11/17/21	19:45	00:58	Initial cal 0.5
V2D8694-IC8694	2D199715.D	11/17/21	20:14	01:27	Initial cal 1
V2D8694-IC8694	2D199716.D	11/17/21	20:43	01:56	Initial cal 2
V2D8694-IC8694	2D199717.D	11/17/21	21:13	02:26	Initial cal 4
V2D8694-IC8694	2D199718.D	11/17/21	21:42	02:55	Initial cal 8
V2D8694-IC8694	2D199719.D	11/17/21	22:11	03:24	Initial cal 20
V2D8694-ICC8694	2D199720.D	11/17/21	22:41	03:54	Initial cal 50
V2D8694-IC8694	2D199721.D	11/17/21	23:10	04:23	Initial cal 100
V2D8694-IC8694	2D199722.D	11/17/21	23:39	04:52	Initial cal 200
V2D8694-ICV8694	2D199725.D	11/18/21	01:06	06:19	Initial cal verification 50
V2D8694-ICV8694	2D199726.D	11/18/21	01:35	06:48	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2D8732-BFB
Lab File ID: 2D200523.D
Instrument ID: GCMS2D
Injection Date: 12/22/21
Injection Time: 08:30

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	36725	24.3		Pass
75	30.0 - 60.0% of mass 95	73725	48.9		Pass
95	Base peak, 100% relative abundance	150827	100.0		Pass
96	5.0 - 9.0% of mass 95	10185	6.75		Pass
173	Less than 2.0% of mass 174	844	0.56	(0.62) [a]	Pass
174	50.0 - 120.0% of mass 95	135280	89.7		Pass
175	5.0 - 9.0% of mass 174	10083	6.69	(7.45) [a]	Pass
176	95.0 - 101.0% of mass 174	130848	86.8	(96.7) [a]	Pass
177	5.0 - 9.0% of mass 176	8947	5.93	(6.84) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2D8732-CC8694	2D200523.D	12/22/21	08:30	00:00	Continuing cal 20
V2D8732-BS	2D200524.D	12/22/21	09:10	00:40	Blank Spike
V2D8732-MB	2D200526.D	12/22/21	10:21	01:51	Method Blank
ZZZZZZ	2D200527.D	12/22/21	10:57	02:27	(unrelated sample)
ZZZZZZ	2D200528.D	12/22/21	11:26	02:56	(unrelated sample)
JD36806-4	2D200529.D	12/22/21	11:55	03:25	(used for QC only; not part of job JD36624)
JD36806-5	2D200530.D	12/22/21	12:24	03:54	(used for QC only; not part of job JD36624)
ZZZZZZ	2D200531.D	12/22/21	12:53	04:23	(unrelated sample)
JD36624-17	2D200532.D	12/22/21	13:22	04:52	HOFF IW-B
JD36624-16	2D200533.D	12/22/21	13:51	05:21	HOFF IW-2B
JD36806-4MS	2D200534.D	12/22/21	14:21	05:51	Matrix Spike
JD36806-5DUP	2D200536.D	12/22/21	15:19	06:49	Duplicate
ZZZZZZ	2D200537.D	12/22/21	15:48	07:18	(unrelated sample)
ZZZZZZ	2D200538.D	12/22/21	16:17	07:47	(unrelated sample)
ZZZZZZ	2D200539.D	12/22/21	16:47	08:17	(unrelated sample)
ZZZZZZ	2D200540.D	12/22/21	17:16	08:46	(unrelated sample)
ZZZZZZ	2D200541.D	12/22/21	17:45	09:15	(unrelated sample)
ZZZZZZ	2D200542.D	12/22/21	18:14	09:44	(unrelated sample)
ZZZZZZ	2D200543.D	12/22/21	18:43	10:13	(unrelated sample)
ZZZZZZ	2D200544.D	12/22/21	19:12	10:42	(unrelated sample)
ZZZZZZ	2D200545.D	12/22/21	19:41	11:11	(unrelated sample)
ZZZZZZ	2D200546.D	12/22/21	20:10	11:40	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-BFB
Lab File ID: 2V82658.D
Instrument ID: GCMS2V
Injection Date: 11/17/21
Injection Time: 18:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16263	19.7		Pass
75	30.0 - 60.0% of mass 95	36856	44.6		Pass
95	Base peak, 100% relative abundance	82621	100.0		Pass
96	5.0 - 9.0% of mass 95	5234	6.33		Pass
173	Less than 2.0% of mass 174	452	0.55	(0.64) [a]	Pass
174	50.0 - 120.0% of mass 95	70272	85.1		Pass
175	5.0 - 9.0% of mass 174	5260	6.37	(7.49) [a]	Pass
176	95.0 - 101.0% of mass 174	70213	85.0	(99.9) [a]	Pass
177	5.0 - 9.0% of mass 176	4519	5.47	(6.44) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3410-IC3410	2V82659.D	11/17/21	19:09	00:25	Initial cal 0.2
V2V3410-IC3410	2V82660.D	11/17/21	19:35	00:51	Initial cal 0.5
V2V3410-IC3410	2V82661.D	11/17/21	20:00	01:16	Initial cal 1
V2V3410-IC3410	2V82662.D	11/17/21	20:26	01:42	Initial cal 2
V2V3410-IC3410	2V82663.D	11/17/21	20:51	02:07	Initial cal 4
V2V3410-IC3410	2V82664.D	11/17/21	21:17	02:33	Initial cal 8
V2V3410-IC3410	2V82665.D	11/17/21	21:43	02:59	Initial cal 20
V2V3410-ICC3410	2V82666.D	11/17/21	22:08	03:24	Initial cal 50
V2V3410-IC3410	2V82667.D	11/17/21	22:34	03:50	Initial cal 100
V2V3410-IC3410	2V82668.D	11/17/21	22:59	04:15	Initial cal 200
V2V3410-ICV3410	2V82671.D	11/18/21	00:15	05:31	Initial cal verification 50
V2V3410-ICV3410	2V82672.D	11/18/21	00:41	05:57	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V2V3410-BFB2	**Injection Date:**	11/18/21
Lab File ID:	2V82677.D	**Injection Time:**	11:00
Instrument ID:	GCMS2V		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16043	19.2		Pass
75	30.0 - 60.0% of mass 95	36659	43.9		Pass
95	Base peak, 100% relative abundance	83536	100.0		Pass
96	5.0 - 9.0% of mass 95	5523	6.61		Pass
173	Less than 2.0% of mass 174	710	0.85	(0.98) [a]	Pass
174	50.0 - 120.0% of mass 95	72229	86.5		Pass
175	5.0 - 9.0% of mass 174	5646	6.76	(7.82) [a]	Pass
176	95.0 - 101.0% of mass 174	72875	87.2	(100.9) [a]	Pass
177	5.0 - 9.0% of mass 176	4796	5.74	(6.58) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3410-ICV3410	2V82678.D	11/18/21	11:34	00:34	Initial cal verification 50
V2V3410-ICV3410	2V82679.D	11/18/21	11:59	00:59	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3457-BFB
Lab File ID: 2V83917.D
Instrument ID: GCMS2V
Injection Date: 12/22/21
Injection Time: 09:34

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	29843	26.2		Pass
75	30.0 - 60.0% of mass 95	55339	48.6		Pass
95	Base peak, 100% relative abundance	113797	100.0		Pass
96	5.0 - 9.0% of mass 95	7598	6.68		Pass
173	Less than 2.0% of mass 174	659	0.58	(0.73) [a]	Pass
174	50.0 - 120.0% of mass 95	89912	79.0		Pass
175	5.0 - 9.0% of mass 174	7077	6.22	(7.87) [a]	Pass
176	95.0 - 101.0% of mass 174	86771	76.3	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	5693	5.00	(6.56) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V3457-CC3410	2V83917.D	12/22/21	09:34	00:00	Continuing cal 20
V2V3457-BS	2V83919.D	12/22/21	10:43	01:09	Blank Spike
V2V3457-MB	2V83921.D	12/22/21	11:44	02:10	Method Blank
JD36696-3	2V83922.D	12/22/21	12:09	02:35	(used for QC only; not part of job JD36624)
JD36696-4	2V83923.D	12/22/21	12:35	03:01	(used for QC only; not part of job JD36624)
ZZZZZZ	2V83924.D	12/22/21	13:00	03:26	(unrelated sample)
ZZZZZZ	2V83925.D	12/22/21	13:26	03:52	(unrelated sample)
ZZZZZZ	2V83926.D	12/22/21	13:51	04:17	(unrelated sample)
ZZZZZZ	2V83927.D	12/22/21	14:17	04:43	(unrelated sample)
ZZZZZZ	2V83928.D	12/22/21	14:42	05:08	(unrelated sample)
ZZZZZZ	2V83929.D	12/22/21	15:08	05:34	(unrelated sample)
JD36696-3MS	2V83930.D	12/22/21	15:33	05:59	Matrix Spike
JD36624-15	2V83931.D	12/22/21	15:59	06:25	HOFF IW-2A
JD36696-4DUP	2V83932.D	12/22/21	16:24	06:50	Duplicate
ZZZZZZ	2V83933.D	12/22/21	16:50	07:16	(unrelated sample)
ZZZZZZ	2V83934.D	12/22/21	17:16	07:42	(unrelated sample)
ZZZZZZ	2V83935.D	12/22/21	17:41	08:07	(unrelated sample)
ZZZZZZ	2V83936.D	12/22/21	18:07	08:33	(unrelated sample)
ZZZZZZ	2V83937.D	12/22/21	18:32	08:58	(unrelated sample)
ZZZZZZ	2V83938.D	12/22/21	18:58	09:24	(unrelated sample)
ZZZZZZ	2V83939.D	12/22/21	19:23	09:49	(unrelated sample)
ZZZZZZ	2V83940.D	12/22/21	19:49	10:15	(unrelated sample)
ZZZZZZ	2V83941.D	12/22/21	20:14	10:40	(unrelated sample)
ZZZZZZ	2V83942.D	12/22/21	20:40	11:06	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V2V3457-BFB	**Injection Date:**	12/22/21
Lab File ID:	2V83917.D	**Injection Time:**	09:34
Instrument ID:	GCMS2V		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	2V83943.D	12/22/21	21:06	11:32	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V3A7257-BFB	**Injection Date:**	12/06/21
Lab File ID:	3A167227.D	**Injection Time:**	09:39
Instrument ID:	GCMS3A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	7175	21.9		Pass
75	30.0 - 60.0% of mass 95	17383	53.0		Pass
95	Base peak, 100% relative abundance	32826	100.0		Pass
96	5.0 - 9.0% of mass 95	1848	5.63		Pass
173	Less than 2.0% of mass 174	448	1.36	(1.39) [a]	Pass
174	50.0 - 120.0% of mass 95	32168	98.0		Pass
175	5.0 - 9.0% of mass 174	2750	8.38	(8.55) [a]	Pass
176	95.0 - 101.0% of mass 174	32485	99.0	(101.0) [a]	Pass
177	5.0 - 9.0% of mass 176	2405	7.33	(7.40) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7257-IC7257	3A167232.D	12/06/21	13:29	03:50	Initial cal 1
V3A7257-IC7257	3A167233.D	12/06/21	13:58	04:19	Initial cal 2
V3A7257-IC7257	3A167234.D	12/06/21	14:27	04:48	Initial cal 5
V3A7257-ICC7257	3A167235.D	12/06/21	14:56	05:17	Initial cal 20
V3A7257-IC7257	3A167236.D	12/06/21	15:25	05:46	Initial cal 50
V3A7257-IC7257	3A167237.D	12/06/21	15:54	06:15	Initial cal 100
V3A7257-IC7257	3A167242.D	12/06/21	18:20	08:41	Initial cal 0.25
V3A7257-IC7257	3A167243.D	12/06/21	18:49	09:10	Initial cal 0.40
V3A7257-IC7257	3A167245.D	12/06/21	19:47	10:08	Initial cal 200
V3A7257-ICV7257	3A167248.D	12/06/21	21:13	11:34	Initial cal verification 20

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7265-BFB
Lab File ID: 3A167389.D
Instrument ID: GCMS3A
Injection Date: 12/16/21
Injection Time: 09:52

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	29469	18.4		Pass
75	30.0 - 60.0% of mass 95	82552	51.6		Pass
95	Base peak, 100% relative abundance	159957	100.0		Pass
96	5.0 - 9.0% of mass 95	10136	6.34		Pass
173	Less than 2.0% of mass 174	2004	1.25	(1.28) [a]	Pass
174	50.0 - 120.0% of mass 95	156394	97.8		Pass
175	5.0 - 9.0% of mass 174	12010	7.51	(7.68) [a]	Pass
176	95.0 - 101.0% of mass 174	151850	94.9	(97.1) [a]	Pass
177	5.0 - 9.0% of mass 176	10012	6.26	(6.59) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7265-CC7257	3A167390.D	12/16/21	10:21	00:29	Continuing cal 20
V3A7265-BS	3A167391.D	12/16/21	11:00	01:08	Blank Spike
V3A7265-MB	3A167393.D	12/16/21	11:58	02:06	Method Blank
ZZZZZZ	3A167396.D	12/16/21	13:10	03:18	(unrelated sample)
ZZZZZZ	3A167397.D	12/16/21	13:39	03:47	(unrelated sample)
ZZZZZZ	3A167398.D	12/16/21	14:08	04:16	(unrelated sample)
ZZZZZZ	3A167399.D	12/16/21	14:37	04:45	(unrelated sample)
ZZZZZZ	3A167400.D	12/16/21	15:06	05:14	(unrelated sample)
ZZZZZZ	3A167401.D	12/16/21	15:35	05:43	(unrelated sample)
JD36294-5MS	3A167402.D	12/16/21	16:04	06:12	Matrix Spike
JD36294-5MSD	3A167403.D	12/16/21	16:33	06:41	Matrix Spike Duplicate
ZZZZZZ	3A167405.D	12/16/21	17:30	07:38	(unrelated sample)
JD36294-5	3A167406.D	12/16/21	17:59	08:07	(used for QC only; not part of job JD36624)
ZZZZZZ	3A167407.D	12/16/21	18:28	08:36	(unrelated sample)
ZZZZZZ	3A167408.D	12/16/21	18:56	09:04	(unrelated sample)
ZZZZZZ	3A167409.D	12/16/21	19:25	09:33	(unrelated sample)
ZZZZZZ	3A167411.D	12/16/21	20:23	10:31	(unrelated sample)
ZZZZZZ	3A167412.D	12/16/21	20:51	10:59	(unrelated sample)
JD36624-2	3A167413.D	12/16/21	21:20	11:28	HOFF MW-8

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	V3A7266-BFB	**Injection Date:**	12/17/21
Lab File ID:	3A167421.D	**Injection Time:**	09:56
Instrument ID:	GCMS3A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	30890	19.8		Pass
75	30.0 - 60.0% of mass 95	78733	50.4		Pass
95	Base peak, 100% relative abundance	156266	100.0		Pass
96	5.0 - 9.0% of mass 95	9562	6.12		Pass
173	Less than 2.0% of mass 174	2135	1.37	(1.36) [a]	Pass
174	50.0 - 120.0% of mass 95	157098	100.5		Pass
175	5.0 - 9.0% of mass 174	11925	7.63	(7.59) [a]	Pass
176	95.0 - 101.0% of mass 174	155520	99.5	(99.0) [a]	Pass
177	5.0 - 9.0% of mass 176	10232	6.55	(6.58) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7266-CC7257	3A167422.D	12/17/21	10:25	00:29	Continuing cal 5
V3A7266-BS	3A167423.D	12/17/21	10:56	01:00	Blank Spike
V3A7266-MB	3A167426.D	12/17/21	12:07	02:11	Method Blank
ZZZZZZ	3A167427.D	12/17/21	12:36	02:40	(unrelated sample)
JD36624-2	3A167428.D	12/17/21	13:04	03:08	HOFF MW-8
JD36624-7	3A167429.D	12/17/21	13:33	03:37	HOFF MW-FB
JD36624-3DUP	3A167430.D	12/17/21	14:03	04:07	Duplicate
JD36624-4	3A167431.D	12/17/21	14:48	04:52	HOFF MW-4DU
JD36624-5	3A167433.D	12/17/21	15:46	05:50	DUP-2021
JD36452-8	3A167434.D	12/17/21	17:11	07:15	(used for QC only; not part of job JD36624)
JD36624-6	3A167435.D	12/17/21	17:40	07:44	HOFF MW-FA
JD36624-10	3A167438.D	12/17/21	19:07	09:11	HOFF MW-D
JD36624-1	3A167439.D	12/17/21	19:35	09:39	TB-20211207
JD36624-9	3A167441.D	12/17/21	20:32	10:36	HOFF MW-C
JD36624-11	3A167442.D	12/17/21	21:01	11:05	HOFF IW-1A

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7268-BFB
Lab File ID: 3A167453.D
Instrument ID: GCMS3A
Injection Date: 12/20/21
Injection Time: 10:25

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	45632	19.3		Pass
75	30.0 - 60.0% of mass 95	119746	50.7		Pass
95	Base peak, 100% relative abundance	236074	100.0		Pass
96	5.0 - 9.0% of mass 95	15825	6.70		Pass
173	Less than 2.0% of mass 174	2575	1.09	(1.15) [a]	Pass
174	50.0 - 120.0% of mass 95	223744	94.8		Pass
175	5.0 - 9.0% of mass 174	16956	7.18	(7.58) [a]	Pass
176	95.0 - 101.0% of mass 174	219989	93.2	(98.3) [a]	Pass
177	5.0 - 9.0% of mass 176	13542	5.74	(6.16) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7268-CC7257	3A167455.D	12/20/21	11:23	00:58	Continuing cal 20
V3A7266-BS2	3A167457A.D	12/20/21	12:39	02:14	Blank Spike
V3A7268-BS	3A167457.D	12/20/21	12:39	02:14	Blank Spike
V3A7268-MB	3A167459.D	12/20/21	13:37	03:12	Method Blank
V3A7266-MB2	3A167459A.D	12/20/21	13:37	03:12	Method Blank
JD36624-3	3A167460.D	12/20/21	14:12	03:47	HOFF MW-4DL
JD36624-10MS	3A167461.D	12/20/21	14:41	04:16	Matrix Spike
JD36485-5	3A167463.D	12/20/21	15:39	05:14	(used for QC only; not part of job JD36624)
JD36485-8	3A167465.D	12/20/21	16:36	06:11	(used for QC only; not part of job JD36624)
JD36624-4	3A167466.D	12/20/21	17:05	06:40	HOFF MW-4DU
JD36624-5	3A167467.D	12/20/21	17:34	07:09	DUP-2021
JD36624-6	3A167468.D	12/20/21	18:03	07:38	HOFF MW-FA
JD36624-7	3A167469.D	12/20/21	18:32	08:07	HOFF MW-FB
JD36485-8MS	3A167470.D	12/20/21	19:01	08:36	Matrix Spike
JD36485-5DUP	3A167472.D	12/20/21	19:58	09:33	Duplicate
ZZZZZZ	3A167473.D	12/20/21	20:27	10:02	(unrelated sample)
ZZZZZZ	3A167474.D	12/20/21	20:56	10:31	(unrelated sample)
JD36624-15	3A167476.D	12/20/21	21:54	11:29	HOFF IW-2A
JD36624-16	3A167477.D	12/20/21	22:22	11:57	HOFF IW-2B

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7269-BFB
Lab File ID: 3A167484.D
Instrument ID: GCMS3A
Injection Date: 12/21/21
Injection Time: 09:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	46624	19.6		Pass
75	30.0 - 60.0% of mass 95	119812	50.4		Pass
95	Base peak, 100% relative abundance	237671	100.0		Pass
96	5.0 - 9.0% of mass 95	15312	6.44		Pass
173	Less than 2.0% of mass 174	2651	1.12	(1.17) [a]	Pass
174	50.0 - 120.0% of mass 95	226602	95.3		Pass
175	5.0 - 9.0% of mass 174	17488	7.36	(7.72) [a]	Pass
176	95.0 - 101.0% of mass 174	221290	93.1	(97.7) [a]	Pass
177	5.0 - 9.0% of mass 176	14027	5.90	(6.34) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7269-CC7257	3A167485.D	12/21/21	09:40	00:29	Continuing cal 5
V3A7269-BS	3A167486.D	12/21/21	10:10	00:59	Blank Spike
V3A7269-MB	3A167487.D	12/21/21	10:39	01:28	Method Blank
ZZZZZZ	3A167488.D	12/21/21	11:08	01:57	(unrelated sample)
ZZZZZZ	3A167489.D	12/21/21	11:36	02:25	(unrelated sample)
ZZZZZZ	3A167490.D	12/21/21	12:05	02:54	(unrelated sample)
ZZZZZZ	3A167491.D	12/21/21	12:34	03:23	(unrelated sample)
JD36540-8	3A167493.D	12/21/21	13:31	04:20	(used for QC only; not part of job JD36624)
JD36624-8	3A167494.D	12/21/21	14:01	04:50	HOFF MW-13
JD36624-9	3A167495.D	12/21/21	14:29	05:18	HOFF MW-C
JD36624-11	3A167496.D	12/21/21	14:59	05:48	HOFF IW-1A
JD36624-12	3A167497.D	12/21/21	15:28	06:17	HOFF IW-1B
JD36624-14	3A167498.D	12/21/21	15:57	06:46	HOFF IW-3B
JD36624-15	3A167499.D	12/21/21	16:26	07:15	HOFF IW-2A
JD36624-16	3A167500.D	12/21/21	16:54	07:43	HOFF IW-2B
JD36540-8MS	3A167501.D	12/21/21	17:23	08:12	Matrix Spike
ZZZZZZ	3A167503.D	12/21/21	18:21	09:10	(unrelated sample)
ZZZZZZ	3A167504.D	12/21/21	18:49	09:38	(unrelated sample)
ZZZZZZ	3A167505.D	12/21/21	19:18	10:07	(unrelated sample)
JD36617-4	3A167506.D	12/21/21	19:46	10:35	(used for QC only; not part of job JD36624)
ZZZZZZ	3A167507.D	12/21/21	20:15	11:04	(unrelated sample)
ZZZZZZ	3A167508.D	12/21/21	20:44	11:33	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7273-BFB
Lab File ID: 3A167531.D
Instrument ID: GCMS3A
Injection Date: 12/23/21
Injection Time: 08:46

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	55496	19.2		Pass
75	30.0 - 60.0% of mass 95	148477	51.3		Pass
95	Base peak, 100% relative abundance	289514	100.0		Pass
96	5.0 - 9.0% of mass 95	18705	6.46		Pass
173	Less than 2.0% of mass 174	3318	1.15	(1.22) [a]	Pass
174	50.0 - 120.0% of mass 95	270869	93.6		Pass
175	5.0 - 9.0% of mass 174	21357	7.38	(7.88) [a]	Pass
176	95.0 - 101.0% of mass 174	267029	92.2	(98.6) [a]	Pass
177	5.0 - 9.0% of mass 176	17806	6.15	(6.67) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A7273-CC7257	3A167532.D	12/23/21	09:16	00:30	Continuing cal 5
V3A7269-BS2	3A167533A.D	12/23/21	09:45	00:59	Blank Spike
V3A7273-BS	3A167533.D	12/23/21	09:45	00:59	Blank Spike
V3A7273-MB	3A167534.D	12/23/21	10:14	01:28	Method Blank
V3A7269-MB2	3A167534A.D	12/23/21	10:14	01:28	Method Blank
JD36617-4DUP	3A167535.D	12/23/21	10:49	02:03	Duplicate
JD36624-13	3A167538.D	12/23/21	12:15	03:29	HOFF IW-3A
JD36624-17	3A167539.D	12/23/21	12:44	03:58	HOFF IW-B
JD36682-2	3A167540.D	12/23/21	13:12	04:26	(used for QC only; not part of job JD36624)
JD36682-3	3A167541.D	12/23/21	13:41	04:55	(used for QC only; not part of job JD36624)
ZZZZZZ	3A167542.D	12/23/21	14:09	05:23	(unrelated sample)
ZZZZZZ	3A167543.D	12/23/21	14:38	05:52	(unrelated sample)
ZZZZZZ	3A167544.D	12/23/21	15:07	06:21	(unrelated sample)
JD36624-17	3A167545.D	12/23/21	15:36	06:50	HOFF IW-B
ZZZZZZ	3A167546.D	12/23/21	16:05	07:19	(unrelated sample)
JD36682-2MS	3A167547.D	12/23/21	16:34	07:48	Matrix Spike
JD36682-3DUP	3A167548.D	12/23/21	17:03	08:17	Duplicate
ZZZZZZ	3A167549.D	12/23/21	17:31	08:45	(unrelated sample)
ZZZZZZ	3A167550.D	12/23/21	18:01	09:15	(unrelated sample)
ZZZZZZ	3A167551.D	12/23/21	18:29	09:43	(unrelated sample)
ZZZZZZ	3A167552.D	12/23/21	18:59	10:13	(unrelated sample)
ZZZZZZ	3A167553.D	12/23/21	19:28	10:42	(unrelated sample)
ZZZZZZ	3A167554.D	12/23/21	19:56	11:10	(unrelated sample)
ZZZZZZ	3A167555.D	12/23/21	20:25	11:39	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3D7187-BFB
Lab File ID: 3D169267.D
Instrument ID: GCMS3D
Injection Date: 10/03/21
Injection Time: 20:52

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	35970	18.9		Pass
75	30.0 - 60.0% of mass 95	93648	49.2		Pass
95	Base peak, 100% relative abundance	190442	100.0		Pass
96	5.0 - 9.0% of mass 95	12636	6.64		Pass
173	Less than 2.0% of mass 174	869	0.46	(0.54) [a]	Pass
174	50.0 - 120.0% of mass 95	160384	84.2		Pass
175	5.0 - 9.0% of mass 174	12144	6.38	(7.57) [a]	Pass
176	95.0 - 101.0% of mass 174	157034	82.5	(97.9) [a]	Pass
177	5.0 - 9.0% of mass 176	10984	5.77	(6.99) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D7187-IC7187	3D169268.D	10/03/21	21:24	00:32	Initial cal 0.2
V3D7187-IC7187	3D169269.D	10/03/21	21:52	01:00	Initial cal 0.5
V3D7187-IC7187	3D169270.D	10/03/21	22:19	01:27	Initial cal 1
V3D7187-IC7187	3D169271.D	10/03/21	22:46	01:54	Initial cal 2
V3D7187-IC7187	3D169272.D	10/03/21	23:14	02:22	Initial cal 4
V3D7187-IC7187	3D169273.D	10/03/21	23:41	02:49	Initial cal 8
V3D7187-IC7187	3D169274.D	10/04/21	00:08	03:16	Initial cal 20
V3D7187-ICC7187	3D169275.D	10/04/21	00:36	03:44	Initial cal 50
V3D7187-IC7187	3D169276.D	10/04/21	01:03	04:11	Initial cal 100
V3D7187-IC7187	3D169277.D	10/04/21	01:30	04:38	Initial cal 200
V3D7187-ICV7187	3D169280.D	10/04/21	02:52	06:00	Initial cal verification 50
V3D7187-ICV7187	3D169281.D	10/04/21	03:19	06:27	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3D7294-BFB
Lab File ID: 3D171914.D
Instrument ID: GCMS3D
Injection Date: 12/16/21
Injection Time: 10:07

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	45963	18.4		Pass
75	30.0 - 60.0% of mass 95	122120	48.9		Pass
95	Base peak, 100% relative abundance	249920	100.0		Pass
96	5.0 - 9.0% of mass 95	16737	6.70		Pass
173	Less than 2.0% of mass 174	1303	0.52	(0.66) [a]	Pass
174	50.0 - 120.0% of mass 95	197973	79.2		Pass
175	5.0 - 9.0% of mass 174	15097	6.04	(7.63) [a]	Pass
176	95.0 - 101.0% of mass 174	196032	78.4	(99.0) [a]	Pass
177	5.0 - 9.0% of mass 176	12961	5.19	(6.61) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D7294-CC7187	3D171914.D	12/16/21	10:07	00:00	Continuing cal 20
V3D7294-BS	3D171916.D	12/16/21	11:06	00:59	Blank Spike
V3D7294-MB	3D171918.D	12/16/21	12:00	01:53	Method Blank
JD36538-5	3D171919.D	12/16/21	12:34	02:27	(used for QC only; not part of job JD36624)
ZZZZZZ	3D171920.D	12/16/21	13:01	02:54	(unrelated sample)
ZZZZZZ	3D171921.D	12/16/21	13:29	03:22	(unrelated sample)
ZZZZZZ	3D171922.D	12/16/21	13:56	03:49	(unrelated sample)
ZZZZZZ	3D171923.D	12/16/21	14:23	04:16	(unrelated sample)
JD36624-2	3D171924.D	12/16/21	14:50	04:43	HOFF MW-8
JD36538-5MS	3D171925.D	12/16/21	15:17	05:10	Matrix Spike
JD36538-5MSD	3D171926.D	12/16/21	15:44	05:37	Matrix Spike Duplicate
JD36624-2	3D171927.D	12/16/21	16:12	06:05	HOFF MW-8
ZZZZZZ	3D171928.D	12/16/21	16:39	06:32	(unrelated sample)
ZZZZZZ	3D171928A.D	12/16/21	16:39	06:32	(unrelated sample)
ZZZZZZ	3D171929.D	12/16/21	17:06	06:59	(unrelated sample)
ZZZZZZ	3D171929A.D	12/16/21	17:06	06:59	(unrelated sample)
ZZZZZZ	3D171930.D	12/16/21	17:33	07:26	(unrelated sample)
ZZZZZZ	3D171932.D	12/16/21	18:28	08:21	(unrelated sample)
JD36624-3	3D171933.D	12/16/21	18:55	08:48	HOFF MW-4DL
JD36624-8	3D171934.D	12/16/21	19:22	09:15	HOFF MW-13
JD36624-6	3D171937.D	12/16/21	20:43	10:36	HOFF MW-FA
JD36624-7	3D171938.D	12/16/21	21:10	11:03	HOFF MW-FB
JD36624-4	3D171939.D	12/16/21	21:38	11:31	HOFF MW-4DU
JD36624-5	3D171940.D	12/16/21	22:05	11:58	DUP-2021

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V1X8363-CC8342	**Injection Date:**	12/17/21
Lab File ID:	1X193024.D	**Injection Time:**	10:17
Instrument ID:	GCMS1X	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	179294	2.53	355625	3.61	508396	4.11	473028	6.20	213585	7.99
Upper Limit [a]	358588	3.03	711250	4.11	1016792	4.61	946056	6.70	427170	8.49
Lower Limit [b]	89647	2.03	177813	3.11	254198	3.61	236514	5.70	106793	7.49

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V1X8363-BS	185025	2.53	360811	3.61	514169	4.11	481470	6.20	213763	7.99
V1X8363-MB	173508	2.54	343348	3.61	495098	4.11	451816	6.20	197483	7.99
ZZZZZZ	201430	2.54	337786	3.62	484406	4.12	452928	6.20	200846	7.99
ZZZZZZ	188998	2.53	361638	3.61	512185	4.11	482228	6.20	215631	7.99
ZZZZZZ	208757	2.53	352761	3.61	504800	4.11	465363	6.20	204743	7.99
ZZZZZZ	198508	2.53	349292	3.61	503838	4.11	434251	6.20	182825	7.99
ZZZZZZ	222850	2.54	332288	3.61	480542	4.11	448174	6.20	196459	7.99
JD36624-4	185072	2.53	356146	3.61	511574	4.11	476671	6.20	207193	7.99
JD36624-10	198886	2.53	340419	3.61	491270	4.11	453833	6.20	197514	7.99
JD36624-5	174679	2.53	346266	3.61	498584	4.11	461247	6.20	203033	7.99
JD36624-9	194293	2.53	348727	3.61	494856	4.11	469761	6.20	203925	7.99
JD36624-7 [c]	177909	2.53	349895	3.61	501914	4.11	475289	6.20	205041	7.99
JD36624-10MS	228933	2.53	364854	3.61	520339	4.11	492498	6.20	219321	7.99
JD36624-10MSD	235145	2.53	374061	3.61	535428	4.11	503799	6.20	223303	7.99
ZZZZZZ	193957	2.52	369035	3.61	523685	4.11	480436	6.19	215058	7.99
JD36624-11	197198	2.52	352469	3.61	509267	4.11	469328	6.19	209228	7.99
JD36624-12	196337	2.53	348879	3.61	505449	4.11	463638	6.19	204901	7.99
JD36624-1	176523	2.53	351066	3.61	507693	4.11	463399	6.19	206910	7.99
JD36624-13	181419	2.53	351519	3.61	506176	4.11	474482	6.19	207375	7.99

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Dilution required due to high concentration of target compound.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V1X8364-CC8342	**Injection Date:**	12/20/21
Lab File ID:	1X193057.D	**Injection Time:**	12:00
Instrument ID:	GCMS1X	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	136664	2.52	312910	3.60	462686	4.10	428577	6.19	197897	7.98
Upper Limit [a]	273328	3.02	625820	4.10	925372	4.60	857154	6.69	395794	8.48
Lower Limit [b]	68332	2.02	156455	3.10	231343	3.60	214289	5.69	98949	7.48

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V1X8364-BS	166467	2.52	324870	3.61	481301	4.10	455014	6.19	205169	7.98
V1X8364-MB	180515	2.53	356487	3.60	539804	4.10	501141	6.19	221499	7.98
ZZZZZZ	156436	2.52	341825	3.61	518640	4.10	479447	6.19	214998	7.98
ZZZZZZ	151523	2.52	330229	3.61	506251	4.10	467195	6.19	208665	7.98
ZZZZZZ	153857	2.53	326053	3.61	496160	4.10	468104	6.19	205892	7.98
ZZZZZZ	168666	2.53	327739	3.61	501474	4.10	471793	6.19	207641	7.98
JD36624-13	160714	2.52	325724	3.61	496122	4.10	463933	6.19	204686	7.98
ZZZZZZ	134789	2.52	322524	3.61	491455	4.10	461061	6.19	206585	7.98
ZZZZZZ	165978	2.53	319032	3.61	488805	4.11	456124	6.19	201339	7.98
ZZZZZZ	185014	2.53	320594	3.61	490501	4.11	459331	6.19	205133	7.98
JD36822-2	190686	2.52	326653	3.61	495826	4.10	467937	6.19	213512	7.98
ZZZZZZ	201476	2.52	329174	3.61	492420	4.10	464711	6.19	208070	7.98
JD36822-2MS	213670	2.53	348598	3.61	518730	4.11	494920	6.19	225585	7.98
JD36822-2MSD	224405	2.52	357803	3.61	529674	4.10	504025	6.19	226620	7.98
ZZZZZZ	182578	2.52	336790	3.61	502469	4.10	465849	6.19	209464	7.98
ZZZZZZ	180739	2.53	335123	3.61	499808	4.11	464706	6.19	205691	7.98
ZZZZZZ	192560	2.54	374738	3.61	548139	4.10	513135	6.19	218894	7.98
ZZZZZZ	194911	2.54	388892	3.61	561780	4.10	528512	6.19	210110	7.98
ZZZZZZ	192794	2.54	388543	3.61	563589	4.10	522554	6.19	226940	7.98
ZZZZZZ	187591	2.54	390402	3.61	567693	4.10	523079	6.19	228021	7.98
ZZZZZZ	183396	2.54	392820	3.61	572174	4.10	524621	6.19	229822	7.98

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V1X8366-CC8342	**Injection Date:**	12/21/21
Lab File ID:	1X193108.D	**Injection Time:**	10:37
Instrument ID:	GCMS1X	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	209204	2.53	373203	3.61	531451	4.11	504232	6.20	225189	7.99
Upper Limit [a]	418408	3.03	746406	4.11	1062902	4.61	1008464	6.70	450378	8.49
Lower Limit [b]	104602	2.03	186602	3.11	265726	3.61	252116	5.70	112595	7.49

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V1X8366-BS	192732	2.53	376662	3.61	538424	4.11	507466	6.20	226305	7.99
V1X8366-MB	164172	2.53	357368	3.61	518527	4.12	475555	6.20	209675	7.99
ZZZZZZ	186866	2.54	347744	3.61	502973	4.12	460726	6.20	204526	7.99
ZZZZZZ	197339	2.54	361731	3.61	526713	4.12	481201	6.20	216845	7.99
ZZZZZZ	213489	2.54	359771	3.62	516871	4.12	476185	6.20	210610	7.99
ZZZZZZ	197165	2.53	353020	3.61	508127	4.12	467527	6.20	207010	8.00
ZZZZZZ	173998	2.54	355094	3.62	511207	4.12	473871	6.20	210113	7.99
JD36624-9	171433	2.54	351343	3.62	495345	4.12	451438	6.20	201841	8.00
JD36624-14	174299	2.54	358315	3.62	515689	4.11	476150	6.20	212396	7.99
JD36624-15	217486	2.54	359203	3.62	520861	4.12	479563	6.20	212757	7.99
JD36624-16 [c]	173170	2.54	359954	3.62	512931	4.11	476737	6.20	208002	7.99
ZZZZZZ	174655	2.54	354887	3.62	512626	4.11	474031	6.20	209607	7.99
JD36624-17 [c]	170543	2.54	353961	3.62	517436	4.12	489849	6.20	209525	8.00
JD36624-17MS	175762	2.54	366515	3.62	530928	4.12	510125	6.20	222144	7.99
JD36624-17MSD	200345	2.54	375654	3.62	544250	4.12	516765	6.20	228255	7.99
ZZZZZZ	200680	2.54	362236	3.62	522220	4.11	480081	6.20	214293	7.99
ZZZZZZ	204827	2.54	356000	3.62	508046	4.12	478141	6.21	214364	8.00

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Dilution required due to high concentration of target compound.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V2D8732-CC8694	**Injection Date:**	12/22/21
Lab File ID:	2D200523.D	**Injection Time:**	08:30
Instrument ID:	GCMS2D	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	101603	7.06	319692	9.74	513786	10.89	546042	15.13	300617	17.99
Upper Limit [a]	203206	7.56	639384	10.24	1027572	11.39	1092084	15.63	601234	18.49
Lower Limit [b]	50802	6.56	159846	9.24	256893	10.39	273021	14.63	150309	17.49

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2D8732-BS	103916	7.04	314839	9.74	504400	10.88	565012	15.13	311818	17.99
V2D8732-MB	109886	7.05	353119	9.74	533770	10.89	535002	15.13	314186	17.99
ZZZZZZ	100786	7.05	315977	9.74	482827	10.88	484189	15.13	283035	17.99
ZZZZZZ	93746	7.06	297687	9.74	458800	10.89	461665	15.13	267092	17.99
JD36806-4	102526	7.05	324435	9.74	498778	10.89	501513	15.13	289588	17.99
JD36806-5	101019	7.05	322797	9.74	501150	10.89	505135	15.13	291500	17.99
ZZZZZZ	119942	7.05	350730	9.75	531631	10.89	539947	15.13	309277	17.99
JD36624-17	109616	7.06	343874	9.75	531132	10.89	537878	15.13	310413	17.99
JD36624-16	102737	7.06	336523	9.74	520447	10.89	523348	15.13	301367	17.99
JD36806-4MS	93936	7.05	316384	9.74	505890	10.89	539782	15.13	302996	17.99
JD36806-5DUP	124284	7.05	380476	9.74	581799	10.88	593962	15.13	341478	17.99
ZZZZZZ	109783	7.06	345985	9.74	530077	10.88	540310	15.13	315505	17.99
ZZZZZZ	119414	7.05	358886	9.74	546882	10.88	557218	15.13	317978	17.99
ZZZZZZ	116848	7.05	351260	9.74	550109	10.88	552276	15.13	320421	17.99
ZZZZZZ	106069	7.04	354719	9.74	535808	10.88	565256	15.13	320249	17.99
ZZZZZZ	110593	7.05	393738	9.73	584636	10.88	588936	15.13	335513	17.99
ZZZZZZ	111466	7.04	353287	9.73	541921	10.88	544656	15.12	312759	17.98
ZZZZZZ	122305	7.04	375615	9.73	571106	10.88	610015	15.12	354097	17.98
ZZZZZZ	136299	7.04	470493	9.73	693704	10.87	709832	15.12	385595	17.98
ZZZZZZ	141669	7.04	495875	9.73	734319	10.87	729757	15.12	397790	17.98
ZZZZZZ	157454	7.04	518958	9.73	755962	10.87	755285	15.12	424217	17.98

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std: V2V3457-CC3410 **Injection Date:** 12/22/21
Lab File ID: 2V83917.D **Injection Time:** 09:34
Instrument ID: GCMS2V **Method:** SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	197425	2.59	375260	3.75	542178	4.29	428091	6.64	170164	8.83
Upper Limit [a]	394850	3.09	750520	4.25	1084356	4.79	856182	7.14	340328	9.33
Lower Limit [b]	98713	2.09	187630	3.25	271089	3.79	214046	6.14	85082	8.33

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2V3457-BS	212372	2.59	377235	3.75	544062	4.29	440598	6.64	178873	8.83
V2V3457-MB	229008	2.59	404089	3.75	575297	4.29	440395	6.64	173178	8.83
JD36696-3	218613	2.59	405816	3.75	578640	4.29	445357	6.64	172370	8.83
JD36696-4	237137	2.59	403208	3.75	574679	4.29	442714	6.64	176892	8.83
ZZZZZZ	223508	2.59	394357	3.75	580973	4.29	444502	6.64	173785	8.83
ZZZZZZ	221577	2.59	387110	3.75	560456	4.29	434260	6.64	170774	8.83
ZZZZZZ	240309	2.59	383682	3.75	559912	4.29	439828	6.64	175504	8.82
ZZZZZZ	217115	2.59	374624	3.75	542572	4.29	434120	6.64	172974	8.83
ZZZZZZ	222286	2.59	380035	3.75	556506	4.29	439931	6.64	172602	8.83
ZZZZZZ	209664	2.59	376193	3.75	553618	4.29	434368	6.64	170481	8.83
JD36696-3MS	205564	2.59	367153	3.75	538996	4.29	445507	6.64	181728	8.82
JD36624-15	216893	2.59	395910	3.75	573504	4.29	449328	6.64	179561	8.83
JD36696-4DUP	224031	2.59	389456	3.75	562105	4.29	433856	6.64	168897	8.83
ZZZZZZ	223807	2.59	383911	3.75	556625	4.29	431602	6.64	168370	8.83
ZZZZZZ	230188	2.59	380178	3.75	553304	4.29	432258	6.64	171874	8.83
ZZZZZZ	214838	2.59	385524	3.75	557532	4.29	434863	6.64	171754	8.83
ZZZZZZ	227245	2.59	373735	3.75	548184	4.29	427615	6.64	173532	8.83
ZZZZZZ	205057	2.59	380312	3.75	551010	4.29	421924	6.64	162521	8.83
ZZZZZZ	216355	2.59	378075	3.75	552321	4.29	425480	6.64	165985	8.83
ZZZZZZ	215710	2.59	372244	3.75	541952	4.29	421024	6.64	166783	8.83
ZZZZZZ	225840	2.59	374508	3.75	548972	4.29	433869	6.64	173867	8.83
ZZZZZZ	209853	2.59	372183	3.75	544756	4.29	425074	6.64	165067	8.83
ZZZZZZ	226020	2.59	377676	3.75	551194	4.29	433235	6.64	172004	8.83
ZZZZZZ	217037	2.59	374518	3.75	551318	4.29	430536	6.64	170512	8.83

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V3A7265-CC7257	**Injection Date:**	12/16/21
Lab File ID:	3A167390.D	**Injection Time:**	10:21
Instrument ID:	GCMS3A	**Method:**	SW846 8260D BY SIM

	IS 1 AREA	RT
Check Std	17766	15.60
Upper Limit [a]	35532	16.10
Lower Limit [b]	8883	15.10

Lab Sample ID	IS 1 AREA	RT
V3A7265-BS	16818	15.60
V3A7265-MB	15950	15.60
ZZZZZZ	15069	15.60
ZZZZZZ	14114	15.60
ZZZZZZ	15403	15.60
ZZZZZZ	8870[c]	15.60
ZZZZZZ	6572[c]	15.60
ZZZZZZ	7438[c]	15.60
JD36294-5MS	14931	15.60
JD36294-5MSD	15210	15.60
ZZZZZZ	14114	15.60
JD36294-5	14504	15.60
ZZZZZZ	14422	15.60
ZZZZZZ	15079	15.60
ZZZZZZ	14855	15.60
ZZZZZZ	13222	15.60
ZZZZZZ	14353	15.60
JD36624-2	4959[c]	15.60

IS 1 = 4-Bromofluorobenzene

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to matrix interference.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V3A7266-CC7257	**Injection Date:**	12/17/21
Lab File ID:	3A167422.D	**Injection Time:**	10:25
Instrument ID:	GCMS3A	**Method:**	SW846 8260D BY SIM

	IS 1 AREA	RT
Check Std	18059	15.60
Upper Limit [a]	36118	16.10
Lower Limit [b]	9030	15.10

Lab Sample ID	IS 1 AREA	RT
V3A7266-BS	17248	15.60
V3A7266-MB	16461	15.60
ZZZZZZ	15193	15.60
JD36624-2 [c]	9018[d]	15.60
JD36624-7	6569[d]	15.60
JD36624-3DUP	9274	15.60
JD36624-4	6301[d]	15.60
JD36624-5	6109[d]	15.60
JD36452-8	14332	15.60
JD36624-6	6508[d]	15.60
JD36624-10	10021	15.60
JD36624-1	13764	15.60
JD36624-9	2507[d]	15.60
JD36624-11	7094[d]	15.60

IS 1 = 4-Bromofluorobenzene

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run.
(d) Outside control limits due to matrix interference.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V3A7268-CC7257	**Injection Date:**	12/20/21
Lab File ID:	3A167455.D	**Injection Time:**	11:23
Instrument ID:	GCMS3A	**Method:**	SW846 8260D BY SIM

	IS 1 AREA	RT
Check Std	17762	15.60
Upper Limit [a]	35524	16.10
Lower Limit [b]	8881	15.10

Lab Sample ID	IS 1 AREA	RT
V3A7268-BS	17704	15.60
V3A7266-BS2	17704	15.60
V3A7266-MB2	15872	15.60
V3A7268-MB	15872	15.60
JD36624-3	10456	15.60
JD36624-10MS	10975	15.60
JD36485-5	15250	15.60
JD36485-8	15402	15.60
JD36624-4	9904	15.60
JD36624-5	9556	15.60
JD36624-6	8988	15.60
JD36624-7 [c]	6789[d]	15.60
JD36485-8MS	14654	15.60
JD36485-5DUP	14083	15.60
ZZZZZZ	14354	15.60
ZZZZZZ	13887	15.60
JD36624-15	3809[d]	15.60
JD36624-16	9918	15.60

IS 1 = 4-Bromofluorobenzene

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run.
(d) Outside control limits due to matrix interference.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V3A7269-CC7257	**Injection Date:**	12/21/21
Lab File ID:	3A167485.D	**Injection Time:**	09:40
Instrument ID:	GCMS3A	**Method:**	SW846 8260D BY SIM

	IS 1 AREA	RT
Check Std	17458	15.60
Upper Limit [a]	34916	16.10
Lower Limit [b]	8729	15.10

Lab Sample ID	IS 1 AREA	RT
V3A7269-BS	16152	15.60
V3A7269-MB	14673	15.60
ZZZZZZ	15416	15.60
ZZZZZZ	14680	15.60
ZZZZZZ	15662	15.60
ZZZZZZ	14847	15.60
JD36540-8	14906	15.60
JD36624-8	9493	15.60
JD36624-9 [c]	5622[d]	15.60
JD36624-11 [c]	8019[d]	15.60
JD36624-12	11304	15.60
JD36624-14	8892	15.60
JD36624-15 [c]	5803[d]	15.60
JD36624-16 [c]	6171[d]	15.60
JD36540-8MS	14170	15.60
ZZZZZZ	14296	15.60
ZZZZZZ	13781	15.60
ZZZZZZ	13758	15.60
JD36617-4	10958	15.60
ZZZZZZ	14488	15.60
ZZZZZZ	13908	15.60

IS 1 = 4-Bromofluorobenzene

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run.
(d) Outside control limits due to matrix interference.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	V3A7273-CC7257	**Injection Date:**	12/23/21
Lab File ID:	3A167532.D	**Injection Time:**	09:16
Instrument ID:	GCMS3A	**Method:**	SW846 8260D BY SIM

	IS 1 AREA	RT
Check Std	18213	15.60
Upper Limit [a]	36426	16.10
Lower Limit [b]	9107	15.10

Lab Sample ID	IS 1 AREA	RT
V3A7273-BS	16572	15.60
V3A7269-BS2	16572	15.60
V3A7269-MB2	15713	15.60
V3A7273-MB	15713	15.60
JD36617-4DUP	12196	15.60
JD36624-13	9253	15.60
JD36624-17	5615[c]	15.60
JD36682-2	12264	15.60
JD36682-3	12535	15.60
ZZZZZZ	11175	15.60
ZZZZZZ	13817	15.60
ZZZZZZ	13409	15.60
JD36624-17 [d]	6651[c]	15.60
ZZZZZZ	13990	15.60
JD36682-2MS	14465	15.60
JD36682-3DUP	11947	15.60
ZZZZZZ	13776	15.60
ZZZZZZ	11070	15.60
ZZZZZZ	11396	15.60
ZZZZZZ	10558	15.60
ZZZZZZ	13423	15.60
ZZZZZZ	11305	15.60
ZZZZZZ	11956	15.60

IS 1 = 4-Bromofluorobenzene

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to matrix interference.
(d) Confirmation run.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std: V3D7294-CC7187 **Injection Date:** 12/16/21
Lab File ID: 3D171914.D **Injection Time:** 10:07
Instrument ID: GCMS3D **Method:** SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	542637	2.95	742828	4.15	1069959	4.72	429357	9.29	915408	7.10
Upper Limit [a]	1085274	3.45	1485656	4.65	2139918	5.22	858714	9.79	1830816	7.60
Lower Limit [b]	271319	2.45	371414	3.65	534980	4.22	214679	8.79	457704	6.60

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3D7294-BS	542418	2.95	714435	4.15	1059111	4.72	423227	9.29	917775	7.10
V3D7294-MB	569090	2.95	792071	4.15	1084113	4.71	444710	9.29	897233	7.10
JD36538-5	557626	2.95	772997	4.15	1069483	4.72	450748	9.29	904073	7.10
ZZZZZZ	579274	2.95	779410	4.15	1079757	4.72	444223	9.29	910582	7.10
ZZZZZZ	535849	2.95	756719	4.15	1051856	4.72	440716	9.29	891373	7.10
ZZZZZZ	581076	2.95	792789	4.15	1118547	4.72	464976	9.29	956694	7.10
ZZZZZZ	564590	2.95	758518	4.15	1083793	4.72	458713	9.29	918302	7.10
JD36624-2 [c]	536296	2.95	759345	4.15	1081453	4.72	444324	9.29	905357	7.10
JD36538-5MS	537927	2.95	699374	4.15	1037853	4.71	430272	9.29	922997	7.10
JD36538-5MSD	547619	2.95	729002	4.15	1066974	4.71	438104	9.29	946662	7.10
JD36624-2	597430	2.95	797155	4.15	1095028	4.71	464609	9.29	949388	7.10
ZZZZZZ	568733	2.95	794775	4.15	1107369	4.71	458464	9.29	928171	7.10
ZZZZZZ	568733	2.95	794775	4.15	1107369	4.71	458464	9.29	928171	7.10
ZZZZZZ	580642	2.95	755071	4.15	1063096	4.72	433794	9.29	899902	7.10
ZZZZZZ	580642	2.95	755071	4.15	1063096	4.72	433794	9.29	899902	7.10
ZZZZZZ	585947	2.95	780507	4.15	1097112	4.71	460248	9.29	932501	7.10
ZZZZZZ	576301	2.95	792408	4.15	1103582	4.72	460948	9.29	940282	7.10
JD36624-3	527369	2.95	719478	4.15	1025856	4.71	433764	9.29	877643	7.10
JD36624-8	507608	2.95	711902	4.15	1012904	4.71	424709	9.29	853677	7.10
JD36624-6 [c]	562164	2.95	743894	4.15	1061486	4.72	452635	9.29	919671	7.10
JD36624-7	541517	2.95	747881	4.15	1074100	4.71	444597	9.29	917312	7.10
JD36624-4	526408	2.95	721838	4.15	1058396	4.72	456980	9.29	942261	7.10
JD36624-5	545589	2.95	730054	4.15	1075288	4.71	463969	9.29	946517	7.10

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Chlorobenzene-D5

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Dilution required due to high concentration of target compound.

Surrogate Recovery Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
JD36624-1	3A167439.D	136
JD36624-2	3A167428.D	192* [a]
JD36624-2	3A167413.D	508* [a]
JD36624-3	3A167460.D	115
JD36624-4	3A167466.D	161
JD36624-4	3A167431.D	410* [a]
JD36624-5	3A167467.D	157
JD36624-5	3A167433.D	299* [a]
JD36624-6	3A167468.D	156
JD36624-6	3A167435.D	181* [a]
JD36624-7	3A167469.D	203* [a]
JD36624-7	3A167429.D	258* [a]
JD36624-8	3A167494.D	142
JD36624-9	3A167495.D	220* [a]
JD36624-9	3A167441.D	303* [a]
JD36624-10	3A167438.D	161
JD36624-11	3A167496.D	140
JD36624-11	3A167442.D	170
JD36624-12	3A167497.D	131
JD36624-13	3A167538.D	142
JD36624-14	3A167498.D	150
JD36624-15	3A167499.D	185* [a]
JD36624-15	3A167476.D	77
JD36624-16	3A167500.D	187* [a]
JD36624-16	3A167477.D	226* [a]
JD36624-17	3A167539.D	269* [a]
JD36624-17	3A167545.D	204* [a]
JD36294-5MS	3A167402.D	135
JD36294-5MSD	3A167403.D	170
JD36485-5DUP	3A167472.D	102
JD36485-8MS	3A167470.D	95
JD36540-8MS	3A167501.D	99
JD36617-4DUP	3A167535.D	170
JD36624-10MS	3A167461.D	149
JD36624-3DUP	3A167430.D	211* [b]
JD36682-2MS	3A167547.D	115
JD36682-3DUP	3A167548.D	111
V3A7265-BS	3A167391.D	121
V3A7265-MB	3A167393.D	108
V3A7266-BS	3A167423.D	116

Surrogate Recovery Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1
V3A7266-BS2	3A167457A.D	118
V3A7266-MB	3A167426.D	125
V3A7266-MB2	3A167459A.D	112
V3A7268-BS	3A167457.D	118
V3A7268-MB	3A167459.D	112
V3A7269-BS	3A167486.D	93
V3A7269-MB	3A167487.D	128
V3A7273-BS	3A167533.D	94
V3A7273-MB	3A167534.D	90
V3A7269-MB2	3A167534A.D	90

Surrogate Compounds	Recovery Limits
S1 = 1,4-Dioxane-D8	39-174%

(a) Outside control limits due to matrix interference.
(b) Outside in house control limits.

Surrogate Recovery Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD36624-1	1X193046.D	101	103	101	101
JD36624-2	3D171927.D	85	93	101	97
JD36624-2	3D171924.D	85	89	104	98
JD36624-3	3D171933.D	85	88	103	98
JD36624-4	1X193034.D	101	103	100	103
JD36624-4	3D171939.D	87	91	101	98
JD36624-5	1X193038.D	101	103	100	102
JD36624-5	3D171940.D	88	89	100	98
JD36624-6	3D171937.D	87	93	101	97
JD36624-7	1X193040.D	100	103	98	102
JD36624-7	3D171938.D	87	91	102	99
JD36624-8	3D171934.D	86	90	103	97
JD36624-9	1X193039.D	100	102	97	101
JD36624-9	1X193117.D	101	105	99	98
JD36624-10	1X193037.D	102	104	100	102
JD36624-11	1X193044.D	102	103	100	101
JD36624-12	1X193045.D	101	103	101	102
JD36624-13	1X193066.D	109	103	99	103
JD36624-13	1X193047.D	102	103	99	103
JD36624-14	1X193118.D	100	101	98	102
JD36624-15	2V83931.D	99	116	101	98
JD36624-15	1X193119.D	100	102	97	103
JD36624-16	2D200533.D	107	94	106	80* [a]
JD36624-16	1X193120.D	99	102	100	103
JD36624-17	2D200532.D	109	97	107	79* [b]
JD36624-17	1X193122.D	99	100	97	101
JD36538-5MS	3D171925.D	89	87	96	101
JD36538-5MSD	3D171926.D	88	88	97	102
JD36624-10MS	1X193041.D	99	101	100	100
JD36624-10MSD	1X193042.D	98	101	100	101
JD36624-17MS	1X193123.D	98	97	97	99
JD36624-17MSD	1X193124.D	97	96	97	100
JD36696-3MS	2V83930.D	100	114	99	97
JD36696-4DUP	2V83932.D	97	112	105	100
JD36806-4MS	2D200534.D	107	95	101	84
JD36806-5DUP	2D200536.D	108	98	106	81* [a]
JD36822-2MS	1X193072.D	103	100	100	100
JD36822-2MSD	1X193073.D	102	100	99	100
V1X8363-BS	1X193026.D	99	101	100	102
V1X8363-MB	1X193028.D	100	102	101	102

Surrogate Recovery Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8260D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
V1X8364-BS	1X193059.D	104	101	100	100
V1X8364-MB	1X193061.D	103	102	100	101
V1X8366-BS	1X193109.D	97	98	99	99
V1X8366-MB	1X193111.D	100	100	100	104
V2D8732-BS	2D200524.D	108	96	98	84
V2D8732-MB	2D200526.D	106	97	107	81* [a]
V2V3457-BS	2V83919.D	97	110	100	98
V2V3457-MB	2V83921.D	95	111	105	99
V3D7294-BS	3D171916.D	86	83	99	102
V3D7294-MB	3D171918.D	83	88	105	97

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	80-120%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	82-114%

(a) Outside of in house control limits, but within reasonable method recovery limits.
(b) Outside in house control limits.

Initial Calibration Summary

Job Number: JD36624 **Sample:** V1X8342-ICC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X192544.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report ACC-VOA-M

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Calibration Files
1 =1X192534.D 2 =1X192536.D 100 =1X192546.D 50 =1X192544.D
20 =1X192542.D 200 =1X192548.D 4 =1X192538.D 8 =1X192540.D
0.5 =1X192532.D 0.2 =1X192530.D = =

Compound	1	2	100	50	20	200	4	8	0.5	0.2	Avg	%RSD
1) I tert butyl alcohol-d9	----------ISTD----------											
2) ethanol	0.065	0.068	0.051	0.054	0.054	0.045	0.060	0.060			0.057	13.30
3) tertiary butyl alcohol	0.679	0.790	0.723	0.704	0.722	0.704	0.701	0.711			0.717	4.54
4) 1,4-dioxane	0.046	0.063	0.063	0.062	0.064	0.057	0.064				0.060	10.87
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	0.359	0.438	0.395	0.396	0.390	0.389	0.377	0.419			0.395	6.18
7) dichlorodifluoromethane	0.338	0.416	0.362	0.375	0.373	0.407	0.320	0.372			0.370	8.60
8) chloromethane	0.470	0.482	0.388	0.409	0.424	0.419	0.412	0.432	0.424	0.398	0.426	6.97
9) vinyl chloride	0.363	0.422	0.355	0.370	0.372	0.384	0.363	0.396			0.378	5.82
10) bromomethane	0.211	0.233	0.149	0.171	0.192		0.212	0.213	0.173		0.194	14.34
11) chloroethane	0.173	0.203	0.157	0.173	0.182	0.137	0.176	0.189			0.174	11.39
12) trichlorofluoromethane	0.498	0.580	0.506	0.518	0.515	0.520	0.452	0.516			0.513	6.80
13) 1,3-butadiene	0.279	0.378	0.324	0.336	0.333	0.320	0.306	0.352			0.328	9.04
14) ethyl ether	0.106	0.131	0.139	0.135	0.135	0.138	0.124	0.136			0.131	8.54
15) acrolein	0.046	0.051	0.061	0.061	0.057	0.058	0.047	0.056			0.055	10.64
16) 1,1-dichloroethene	0.211	0.272	0.270	0.267	0.259	0.276	0.244	0.269			0.258	8.35
17) freon 113	0.321	0.319	0.311	0.298	0.319	0.269	0.309				0.307	5.95
18) acetone	0.029	0.035	0.031	0.031	0.035	0.039	0.033	0.035			0.034	9.46
19) acetonitrile	0.043	0.051	0.048	0.049	0.048	0.047	0.053	0.052	0.037		0.047	10.04
20) iodomethane	0.297	0.355	0.359	0.349	0.329	0.369	0.301	0.332	0.266		0.328	10.37
21) carbon disulfide	0.652	0.797	0.743	0.731	0.691	0.753	0.658	0.726			0.719	6.86
22) methylene chloride	0.266	0.273	0.256	0.252	0.251	0.255	0.241	0.258	0.231	0.284	0.257	5.92
23) methyl acetate												

0.294 0.325 0.323 0.318 0.333 0.297 0.321 0.323 0.243 0.309 8.99
24) methyl tert butyl ether
0.732 0.824 0.789 0.754 0.775 0.779 0.724 0.767 0.615 0.751 7.89
25) acrylonitrile
0.121 0.142 0.143 0.143 0.144 0.142 0.129 0.139 0.138 6.06
26) trans-1,2-dichloroethene
0.223 0.298 0.284 0.280 0.275 0.290 0.259 0.282 0.274 8.59
27) hexane
0.558 0.615 0.588 0.553 0.617 0.472 0.562 0.566 8.68
28) di-isopropyl ether
0.901 0.998 1.025 0.980 0.980 1.018 0.952 0.976 0.708 0.949 10.26
29) 2-butanone
0.037 0.037 0.036 0.036 0.037 0.034 0.036 0.036 3.22
30) 1,1-dichloroethane
0.473 0.551 0.544 0.539 0.534 0.548 0.514 0.545 0.531 4.93
31) chloroprene
0.498 0.522 0.519 0.508 0.529 0.464 0.521 0.509 4.35
32) vinyl acetate
0.064 0.061 0.057 0.056 0.043 0.054 0.056 12.97
33) ethyl tert-butyl ether
0.830 0.921 0.962 0.916 0.932 0.957 0.875 0.900 0.701 0.888 9.15
34) ethyl acetate
0.058 0.064 0.062 0.063 0.062 0.059 0.055 0.060 5.01
35) 2,2-dichloropropane
0.392 0.443 0.458 0.450 0.436 0.463 0.411 0.456 0.439 5.70
36) cis-1,2-dichloroethene
0.288 0.304 0.302 0.293 0.295 0.306 0.269 0.297 0.294 4.09
37) methyl acrylate
0.357 0.396 0.416 0.412 0.404 0.409 0.388 0.403 0.398 4.76
38) propionitrile
0.054 0.058 0.056 0.056 0.056 0.054 0.055 0.056 0.041 0.054 9.37
39) tert-butyl formate
0.182 0.266 0.246 0.228 0.253 0.191 0.209 0.225 14.24
40) bromochloromethane
0.135 0.157 0.146 0.144 0.147 0.145 0.146 0.151 0.146 4.22
41) tetrahydrofuran
0.131 0.128 0.116 0.113 0.112 0.110 0.125 0.121 0.123 0.124 0.120 6.07
42) chloroform
0.485 0.562 0.506 0.497 0.504 0.509 0.490 0.506 0.463 0.604 0.513 7.96
43) dibromofluoromethane (s)
0.508 0.515 0.492 0.498 0.503 0.488 0.513 0.506 0.511 0.509 0.504 1.78
44) methacrylonitrile
0.094 0.119 0.133 0.128 0.129 0.133 0.113 0.129 0.122 10.95
45) 1,1,1-trichloroethane
0.454 0.532 0.510 0.506 0.495 0.519 0.473 0.514 0.346 0.483 11.74
46) cyclohexane
0.349 0.398 0.389 0.388 0.378 0.438 0.335 0.373 0.381 8.22
47) tert amyl alcohol
0.011 0.013 0.012 0.013 0.012 0.013 0.012 0.012 5.82
48) 1,1-dichloropropene
0.332 0.409 0.421 0.411 0.400 0.426 0.365 0.410 0.397 8.04
49) isobutyl alcohol
0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 3.93
50) carbon tetrachloride
0.366 0.473 0.490 0.476 0.453 0.498 0.407 0.465 0.453 9.93
51) isopropyl acetate
0.056 0.054 0.069 0.065 0.066 0.070 0.061 0.065 0.063 8.91

52) I 1,4-difluorobenzene ----------ISTD----------
53) 1,2-dichloroethane-d4 (s)

```
      0.435 0.435 0.414 0.421 0.433 0.404 0.435 0.438 0.432 0.431  0.428    2.62
54)  iso-octane
            0.767 0.812 0.779 0.759 0.798 0.655 0.784              0.765    6.75
55)  epichlorohydrin
      0.024 0.026 0.029 0.028 0.028 0.028 0.026 0.027              0.027    5.77
56)  n-butyl alcohol
                  0.006 0.006 0.005 0.006 0.004 0.005              0.005   17.17
57)  benzene
      0.625 0.759 0.746 0.731 0.723 0.751 0.680 0.738 0.501        0.695   12.12
58)  tert-amyl methyl ether
      0.541 0.551 0.610 0.574 0.577 0.604 0.541 0.565 0.406        0.552   10.90
59)  heptane
            0.142 0.152 0.146 0.142 0.152 0.115 0.148              0.142    9.04
60)  1,2-dichloroethane
      0.333 0.348 0.311 0.303 0.315 0.300 0.306 0.315 0.330        0.318    4.94
61)  trichloroethene
      0.206 0.242 0.244 0.238 0.232 0.252 0.215 0.240              0.234    6.73
62)  ethyl acrylate
      0.264 0.297 0.315 0.301 0.306 0.314 0.280 0.306              0.298    5.94
63)  2-nitropropane
            0.079 0.086 0.085 0.084 0.079 0.080 0.078              0.082    4.28
64)  2-chloroethyl vinyl ether
      0.118 0.133 0.143 0.136 0.137 0.138 0.125 0.135              0.133    5.99
65)  methyl methacrylate
            0.056 0.060 0.056 0.057 0.061 0.050 0.052              0.056    7.00
66)  1,2-dichloropropane
      0.056 0.078 0.086 0.083 0.084 0.085 0.075 0.086              0.079   12.88
67)  dibromomethane
      0.130 0.138 0.134 0.127 0.129 0.130 0.126 0.129 0.095        0.127    9.75
68)  methylcyclohexane
            0.321 0.364 0.344 0.327 0.375 0.277 0.327              0.334    9.56
69)  bromodichloromethane
      0.234 0.259 0.269 0.258 0.262 0.269 0.247 0.254              0.256    4.60
70)  cis-1,3-dichloropropene
      0.248 0.276 0.318 0.302 0.302 0.319 0.269 0.291              0.291    8.56
71)  4-methyl-2-pentanone
      0.079 0.087 0.094 0.089 0.091 0.093 0.085 0.091 0.066        0.086   10.08
72)  3-methyl-1-butanol  *This compound fails Initial Calibration criteria*
                  0.005 0.004 0.003 0.005 0.001 0.002              0.003   39.62

73) I   chlorobenzene-d5      ----------------ISTD---------------------
74)  toluene-d8 (s)
      1.217 1.221 1.205 1.209 1.221 1.209 1.222 1.210 1.223 1.218  1.216    0.54
75)  toluene
      0.429 0.499 0.498 0.481 0.477 0.506 0.454 0.483 0.338 0.388  0.455   12.07
76)  trans-1,3-dichloropropene
      0.235 0.275 0.318 0.299 0.297 0.322 0.262 0.276              0.286   10.27
77)  ethyl methacrylate
      0.229 0.247 0.273 0.255 0.261 0.272 0.236 0.251 0.190        0.246   10.45
78)  1,1,2-trichloroethane
      0.140 0.139 0.158 0.150 0.152 0.157 0.151 0.150              0.150    4.53
79)  tetrachloroethene
      0.174 0.199 0.207 0.199 0.194 0.216 0.176 0.193              0.195    7.28
80)  1,3-dichloropropane
      0.254 0.301 0.305 0.290 0.291 0.302 0.279 0.283              0.288    5.74
81)  2-hexanone
      0.088 0.095 0.096 0.092 0.096 0.099 0.092 0.097 0.069        0.092    9.99
82)  butyl acetate
      0.137 0.154 0.168 0.160 0.160 0.172 0.152 0.159              0.158    6.70
83)  dibromochloromethane
```

```
      0.212 0.222 0.254 0.237 0.240 0.252 0.215 0.224 0.160        0.224   12.70
 84)  1,2-dibromoethane
      0.189 0.202 0.218 0.208 0.206 0.215 0.194 0.205              0.205    4.81
 85)  n-butyl ether
      0.745 0.852 0.927 0.899 0.877 0.923 0.790 0.862              0.859    7.43
 86)  chlorobenzene
      0.498 0.565 0.576 0.555 0.551 0.580 0.520 0.547 0.406        0.533   10.18
 87)  1,1,1,2-tetrachloroethane
      0.179 0.201 0.234 0.219 0.214 0.236 0.190 0.205              0.210    9.65
 88)  ethylbenzene
      0.840 0.940 0.972 0.948 0.926 0.970 0.852 0.924              0.921    5.44
 89)  m,p-xylene
      0.333 0.369 0.389 0.375 0.366 0.391 0.335 0.365 0.248        0.352   12.50
 90)  o-xylene
      0.628 0.707 0.767 0.743 0.719 0.771 0.670 0.716              0.715    6.77
 91)  styrene
      0.477 0.547 0.635 0.598 0.586 0.632 0.501 0.558              0.567   10.15
 92)  butyl acrylate
            0.393 0.490 0.458 0.454 0.489 0.387 0.424              0.442    9.49
 93)  n-amyl acetate
            0.133 0.165 0.152 0.153 0.167 0.136 0.145              0.150    8.82
 94)  bromoform
      0.143 0.153 0.189 0.175 0.168 0.189 0.141 0.154              0.164   11.67
 95)  isopropylbenzene
      0.767 0.925 0.984 0.950 0.919 0.986 0.827 0.918              0.910    8.38
 96)  cis-1,4-dichloro-2-butene
                  0.115 0.106 0.103 0.111 0.082 0.094              0.102   11.64

 97) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 98)  4-bromofluorobenzene (s)
      1.013 1.000 0.963 0.976 0.982 0.994 1.001 0.995 1.007 1.007  0.994    1.58
 99)  bromobenzene
      0.498 0.538 0.569 0.545 0.536 0.585 0.509 0.539 0.392        0.523   10.70
100)  1,1,2,2-tetrachloroethane
      0.503 0.558 0.549 0.536 0.538 0.539 0.530 0.538 0.407        0.522    8.74
101)  trans-1,4-dichloro-2-butene
      0.171 0.185 0.216 0.208 0.207 0.211 0.188 0.205              0.199    7.80
102)  1,2,3-trichloropropane
      0.141 0.171 0.168 0.165 0.164 0.170 0.163 0.174              0.165    6.16
103)  n-propylbenzene
      1.982 2.319 2.402 2.375 2.303 2.455 2.114 2.356              2.288    6.96
104)  2-chlorotoluene
      0.438 0.509 0.519 0.511 0.501 0.543 0.468 0.503              0.499    6.45
105)  4-chlorotoluene
      1.188 1.354 1.411 1.365 1.352 1.429 1.237 1.341              1.335    6.16
106)  1,3,5-trimethylbenzene
      1.345 1.569 1.653 1.601 1.564 1.687 1.422 1.581              1.553    7.38
107)  tert-butylbenzene
      1.280 1.504 1.545 1.501 1.447 1.597 1.330 1.504              1.463    7.34
108)  1,2,4-trimethylbenzene
      1.284 1.558 1.668 1.613 1.564 1.712 1.445 1.569              1.551    8.67
109)  sec-butylbenzene
      1.712 1.994 2.186 2.141 2.044 2.231 1.823 2.095              2.028    8.87
110)  1,3-dichlorobenzene
      0.847 0.986 1.036 0.996 0.976 1.059 0.923 0.967              0.974    6.79
111)  p-isopropyltoluene
      1.469 1.734 1.957 1.916 1.792 2.002 1.584 1.810              1.783   10.33
112)  1,4-dichlorobenzene
      0.968 1.027 1.051 1.018 1.003 1.070 0.924 0.999              1.007    4.58
113)  1,2-dichlorobenzene
```

Initial Calibration Summary

Job Number: JD36624 **Sample:** V1X8342-ICC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X192544.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
       0.856 0.922 0.987 0.944 0.933 1.000 0.853 0.911              0.926    5.77
114)  benzyl chloride
                  1.175 1.111 1.049 1.185 0.833 0.960              1.052   12.96
115)  n-butylbenzene
       0.647 0.769 0.875 0.852 0.814 0.904 0.708 0.815             0.798   10.84
116)  1,2-dibromo-3-chloropropane
             0.113 0.155 0.149 0.145 0.160 0.119 0.141             0.140   12.71
117)  1,3,5-trichlorobenzene
       0.502 0.617 0.688 0.661 0.630 0.745 0.581 0.621             0.630   11.45
118)  hexachlorobutadiene
             0.217 0.258 0.247 0.225 0.285 0.187 0.226             0.235   13.37
119)  naphthalene
       1.558 1.681 1.883 1.764 1.757 1.961 1.584 1.713             1.738    7.90
120)  1,2,4-trichlorobenzene
       0.474 0.518 0.631 0.582 0.548 0.677 0.485 0.525             0.555   12.74
121)  1,2,3-trichlorobenzene
       0.483 0.522 0.609 0.550 0.531 0.639 0.470 0.503             0.538   11.00
122)  hexachloroethane
             0.232 0.296 0.276 0.250 0.316 0.209 0.234             0.259   14.78
123)  2-methylnaphthalene
                  0.907 0.835 0.794 0.975 0.679 0.754             0.824   12.94
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M1X8342.M         Wed Dec 01 10:50:35 2021   GCMSX
```

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192554.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VX8342\1X192554.D Vial: 31
Acq On : 18 Nov 2021 2:25 am Operator: benk
Sample : icv8342-50 Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	97	0.00	2.55
2		ethanol	0.057	0.057	0.0	101	0.00	2.04
3		tertiary butyl alcohol	0.717	0.702	2.1	96	0.00	2.59
4		1,4-dioxane	0.060	0.066	-10.0	101	0.00	4.49
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	3.62
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane	0.370	0.319	13.8	89	0.00	1.32
8		chloromethane	0.426	0.385	9.6	98	0.00	1.45
9		vinyl chloride	0.378	0.352	6.9	99	0.00	1.52
10		bromomethane	0.194	0.182	6.2	111	0.00	1.74
11		chloroethane	0.174	0.162	6.9	98	0.00	1.80
12		trichlorofluoromethane	0.513	0.472	8.0	96	0.00	1.96
13		1,3-butadiene	0.328	0.308	6.1	96	0.00	1.55
14		ethyl ether	0.131	0.129	1.5	100	0.00	2.12
15		acrolein	0.055	0.055	0.0	95	0.00	2.21
16		1,1-dichloroethene	0.258	0.228	11.6	89	0.00	2.28
17		freon 113	0.307	0.268	12.7	90	0.00	2.27
18		acetone	0.034	0.037	-8.8	125	0.00	2.29
19		acetonitrile		----------NA----------				
20		iodomethane	0.328	0.338	-3.0	102	0.00	2.38
21		carbon disulfide	0.719	0.632	12.1	91	0.00	2.43
22		methylene chloride	0.257	0.237	7.8	98	0.00	2.57
23		methyl acetate	0.309	0.272	12.0	90	0.00	2.47
24		methyl tert butyl ether	0.751	0.720	4.1	100	0.00	2.72
25		acrylonitrile		----------NA----------				
26		trans-1,2-dichloroethene	0.274	0.255	6.9	95	0.00	2.73
27		hexane	0.566	0.446	21.2	80	0.00	2.89
28		di-isopropyl ether	0.949	0.870	8.3	93	0.00	2.98
29		2-butanone	0.036	0.037	-2.8	109	0.00	3.30
30		1,1-dichloroethane	0.531	0.496	6.6	96	0.00	2.99
31		chloroprene	0.509	0.492	3.3	99	0.00	3.04
32		vinyl acetate	0.056	0.047	16.1	80	0.00	2.97
33		ethyl tert-butyl ether	0.888	0.822	7.4	94	0.00	3.20
34		ethyl acetate	0.060	0.060	0.0	102	0.00	3.32
35		2,2-dichloropropane	0.439	0.406	7.5	95	0.00	3.34
36		cis-1,2-dichloroethene	0.294	0.279	5.1	100	0.00	3.33
37		methyl acrylate	0.398	0.378	5.0	96	0.00	3.35
38		propionitrile	0.054	0.047	13.0	89	0.00	3.35
39		tert-butyl formate	0.225	0.221	1.8	94	0.00	3.54
40		bromochloromethane	0.146	0.145	0.7	105	0.00	3.48
41		tetrahydrofuran	0.120	0.107	10.8	99	0.00	3.49

Initial Calibration Verification

Job Number: JD36624 **Sample:** V1X8342-ICV8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X192554.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42		chloroform	0.513	0.474	7.6	100	0.00	3.53
43	S	dibromofluoromethane (s)	0.504	0.491	2.6	103	0.00	3.62
44		methacrylonitrile	0.122	0.127	-4.1	104	0.00	3.44
45		1,1,1-trichloroethane	0.483	0.467	3.3	97	0.00	3.65
46		cyclohexane	0.381	0.412	-8.1	111	0.00	3.70
47	m	tert amyl alcohol	0.012	0.012	0.0	99	0.00	3.83
48		1,1-dichloropropene	0.397	0.383	3.5	98	0.00	3.74
49		isobutyl alcohol	0.007	0.006	14.3	92	0.00	3.92
50		carbon tetrachloride	0.453	0.439	3.1	96	0.00	3.75
51		isopropyl acetate	0.063	0.060	4.8	96	0.00	3.85
52	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	4.12
53	S	1,2-dichloroethane-d4 (s)	0.428	0.422	1.4	103	0.00	3.84
54		iso-octane	0.765	0.651	14.9	86	0.00	3.93
55		epichlorohydrin	0.027	0.028	-3.7	102	0.00	4.84
56		n-butyl alcohol	0.005	0.006	-20.0	104	0.00	4.17
57		benzene	0.695	0.692	0.4	97	0.00	3.87
58		tert-amyl methyl ether	0.552	0.502	9.1	90	0.00	3.93
59		heptane	0.142	0.135	4.9	95	0.00	4.02
60		1,2-dichloroethane	0.318	0.295	7.2	100	0.00	3.90
61		trichloroethene	0.234	0.231	1.3	100	0.00	4.29
62	m	ethyl acrylate	0.298	0.224	24.8	77	0.00	4.30
63		2-nitropropane	0.082	0.083	-1.2	100	0.00	4.77
64		2-chloroethyl vinyl ether	0.133	0.148	-11.3	112	0.00	4.79
65		methyl methacrylate	0.056	0.056	0.0	104	0.00	4.46
66		1,2-dichloropropane	0.079	0.082	-3.8	101	0.00	4.46
67		dibromomethane	0.127	0.127	0.0	104	0.00	4.52
68		methylcyclohexane	0.334	0.335	-0.3	100	0.00	4.45
69		bromodichloromethane	0.256	0.257	-0.4	103	0.00	4.62
70		cis-1,3-dichloropropene	0.291	0.302	-3.8	103	0.00	4.92
71		4-methyl-2-pentanone	0.086	0.087	-1.2	100	0.00	5.01
72		3-methyl-1-butanol	0.003	0.004	-33.3#	111	0.00	5.03
73	I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	6.20
74	S	toluene-d8 (s)	1.216	1.200	1.3	103	0.00	5.11
75		toluene	0.455	0.457	-0.4	99	0.00	5.16
76		trans-1,3-dichloropropene	0.286	0.296	-3.5	103	0.00	5.31
77		ethyl methacrylate	0.246	0.247	-0.4	100	0.00	5.33
78		1,1,2-trichloroethane	0.150	0.149	0.7	103	0.00	5.46
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane	0.288	0.285	1.0	102	0.00	5.59
81		2-hexanone	0.092	0.093	-1.1	105	0.00	5.60
82		butyl acetate	0.158	0.151	4.4	98	0.00	5.68
83		dibromochloromethane	0.224	0.236	-5.4	104	0.00	5.75
84		1,2-dibromoethane	0.205	0.206	-0.5	103	0.00	5.85
85	m	n-butyl ether	0.859	0.672	21.8	78	0.00	6.26
86		chlorobenzene	0.533	0.538	-0.9	101	0.00	6.22
87		1,1,1,2-tetrachloroethane	0.210	0.216	-2.9	102	0.00	6.28
88		ethylbenzene	0.921	0.897	2.6	98	0.00	6.29
89		m,p-xylene	0.352	0.357	-1.4	99	0.00	6.38
90		o-xylene	0.715	0.693	3.1	97	0.00	6.69
91		styrene	0.567	0.584	-3.0	101	0.00	6.70
92		butyl acrylate	0.442	0.409	7.5	93	0.00	6.62
93		n-amyl acetate	0.150	0.139	7.3	95	0.00	6.80
94		bromoform	0.164	0.177	-7.9	105	0.00	6.86
95		isopropylbenzene	0.910	0.916	-0.7	100	0.00	6.98
96		cis-1,4-dichloro-2-butene	0.102	0.100	2.0	98	0.00	7.02
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	7.99
98	S	4-bromofluorobenzene (s)	0.994	0.973	2.1	105	0.00	7.12

Initial Calibration Verification

Job Number: JD36624 **Sample:** V1X8342-ICV8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X192554.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	bromobenzene	0.523	0.530	-1.3	103	0.00	7.24
100	1,1,2,2-tetrachloroethane	0.522	0.511	2.1	101	0.00	7.22
101	trans-1,4-dichloro-2-bute	0.199	0.200	-0.5	101	0.00	7.24
102	1,2,3-trichloropropane	0.165	0.162	1.8	103	0.00	7.26
103	n-propylbenzene	2.288	2.222	2.9	99	0.00	7.30
104	2-chlorotoluene	0.499	0.485	2.8	100	0.00	7.38
105	4-chlorotoluene	1.335	1.284	3.8	99	0.00	7.47
106	1,3,5-trimethylbenzene	1.553	1.524	1.9	100	0.00	7.44
107	tert-butylbenzene	1.463	1.739	-18.9	122	0.00	7.68
108	1,2,4-trimethylbenzene	1.551	1.540	0.7	101	0.00	7.72
109	sec-butylbenzene	2.028	2.000	1.4	99	0.00	7.84
110	1,3-dichlorobenzene	0.974	0.963	1.1	102	0.00	7.93
111	p-isopropyltoluene	1.783	1.788	-0.3	98	0.00	7.95
112	1,4-dichlorobenzene	1.007	0.978	2.9	101	0.00	8.01
113	1,2-dichlorobenzene	0.926	0.930	-0.4	104	0.00	8.26
114	benzyl chloride	1.052	0.950	9.7	90	0.00	8.08
115	n-butylbenzene	0.798	0.794	0.5	98	0.00	8.24
116	1,2-dibromo-3-chloropropa	0.140	0.148	-5.7	105	0.00	8.79
117	1,3,5-trichlorobenzene	0.630	0.656	-4.1	105	0.00	8.91
118	hexachlorobutadiene	0.235	0.242	-3.0	103	0.00	9.40
119	naphthalene	1.738	1.764	-1.5	105	0.00	9.48
120	1,2,4-trichlorobenzene	0.555	0.585	-5.4	106	0.00	9.31
121 m	1,2,3-trichlorobenzene	0.538	0.564	-4.8	108	0.00	9.62
122	hexachloroethane	0.259	0.274	-5.8	105	0.00	8.45
123	2-methylnaphthalene	0.824	0.817	0.8	103	0.00	10.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192544.D M1X8342.M Wed Dec 01 10:50:09 2021 GCMSX

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192556.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VX8342\1X192556.D Vial: 33
Acq On : 18 Nov 2021 2:59 am Operator: benk
Sample : icv8342-50 Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Tue Nov 23 09:12:27 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	90	0.00	2.54
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	3.62
6		chlorodifluoromethane	0.395	0.485	-22.8	129	0.00	1.33
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		1,1-dichloroethene		----------NA----------				
17		freon 113		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile	0.047	0.049	-4.3	107	0.00	2.46
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		acrylonitrile	0.138	0.163	-18.1	120	0.00	2.70
26		trans-1,2-dichloroethene		----------NA----------				
27		hexane		----------NA----------				
28		di-isopropyl ether		----------NA----------				
29		2-butanone		----------NA----------				
30		1,1-dichloroethane		----------NA----------				
31		chloroprene		----------NA----------				
32		vinyl acetate		----------NA----------				
33		ethyl tert-butyl ether		----------NA----------				
34		ethyl acetate		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		methyl acrylate		----------NA----------				
38		propionitrile		----------NA----------				
39		tert-butyl formate		----------NA----------				
40		bromochloromethate		----------NA----------				
41		tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192556.D

42		chloroform		----------NA----------					
43	S	dibromofluoromethane (s)	0.504	0.487	3.4	103	0.00		3.62
44		methacrylonitrile		----------NA----------					
45		1,1,1-trichloroethane		----------NA----------					
46		cyclohexane		----------NA----------					
47	m	tert amyl alcohol		----------NA----------					
48		1,1-dichloropropene		----------NA----------					
49		isobutyl alcohol		----------NA----------					
50		carbon tetrachloride		----------NA----------					
51		isopropyl acetate		----------NA----------					
52	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00		4.12
53	S	1,2-dichloroethane-d4 (s)	0.428	0.424	0.9	104	0.00		3.84
54		iso-octane		----------NA----------					
55		epichlorohydrin		----------NA----------					
56		n-butyl alcohol		----------NA----------					
57		benzene		----------NA----------					
58		tert-amyl methyl ether		----------NA----------					
59		heptane		----------NA----------					
60		1,2-dichloroethane		----------NA----------					
61		trichloroethene		----------NA----------					
62	m	ethyl acrylate		----------NA----------					
63		2-nitropropane		----------NA----------					
64		2-chloroethyl vinyl ether		----------NA----------					
65		methyl methacrylate		----------NA----------					
66		1,2-dichloropropane		----------NA----------					
67		dibromomethane		----------NA----------					
68		methylcyclohexane		----------NA----------					
69		bromodichloromethane		----------NA----------					
70		cis-1,3-dichloropropene		----------NA----------					
71		4-methyl-2-pentanone		----------NA----------					
72		3-methyl-1-butanol		----------NA----------					
73	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00		6.20
74	S	toluene-d8 (s)	1.216	1.211	0.4	104	0.00		5.11
75		toluene		----------NA----------					
76		trans-1,3-dichloropropene		----------NA----------					
77		ethyl methacrylate		----------NA----------					
78		1,1,2-trichloroethane		----------NA----------					
79		tetrachloroethene	0.195	0.292	-49.7#	152	0.00		5.54
80		1,3-dichloropropane		----------NA----------					
81		2-hexanone		----------NA----------					
82		butyl acetate		----------NA----------					
83		dibromochloromethane		----------NA----------					
84		1,2-dibromoethane		----------NA----------					
85	m	n-butyl ether		----------NA----------					
86		chlorobenzene		----------NA----------					
87		1,1,1,2-tetrachloroethane		----------NA----------					
88		ethylbenzene		----------NA----------					
89		m,p-xylene		----------NA----------					
90		o-xylene		----------NA----------					
91		styrene		----------NA----------					
92		butyl acrylate		----------NA----------					
93		n-amyl acetate		----------NA----------					
94		bromoform		----------NA----------					
95		isopropylbenzene		----------NA----------					
96		cis-1,4-dichloro-2-butene		----------NA----------					
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	0.00		7.99
98	S	4-bromofluorobenzene (s)	0.994	0.993	0.1	103	0.00		7.12

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192556.D

99		bromobenzene	----------NA----------
100		1,1,2,2-tetrachloroethane	----------NA----------
101		trans-1,4-dichloro-2-bute	----------NA----------
102		1,2,3-trichloropropane	----------NA----------
103		n-propylbenzene	----------NA----------
104		2-chlorotoluene	----------NA----------
105		4-chlorotoluene	----------NA----------
106		1,3,5-trimethylbenzene	----------NA----------
107		tert-butylbenzene	----------NA----------
108		1,2,4-trimethylbenzene	----------NA----------
109		sec-butylbenzene	----------NA----------
110		1,3-dichlorobenzene	----------NA----------
111		p-isopropyltoluene	----------NA----------
112		1,4-dichlorobenzene	----------NA----------
113		1,2-dichlorobenzene	----------NA----------
114		benzyl chloride	----------NA----------
115		n-butylbenzene	----------NA----------
116		1,2-dibromo-3-chloropropa	----------NA----------
117		1,3,5-trichlorobenzene	----------NA----------
118		hexachlorobutadiene	----------NA----------
119		naphthalene	----------NA----------
120		1,2,4-trichlorobenzene	----------NA----------
121	m	1,2,3-trichlorobenzene	----------NA----------
122		hexachloroethane	----------NA----------
123		2-methylnaphthalene	----------NA----------

(#) = Out of Range SPCC's out = 0 CCC's out = 0

1X192544.D M1X8342.M Sat Nov 27 09:41:15 2021 GCMSX

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192568.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VX8342\1X192568.D Vial: 45
Acq On : 23 Nov 2021 10:46 am Operator: benk
Sample : icv8342-50 Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Tue Nov 23 09:12:27 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	52	0.00	2.54
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	62	0.00	3.62
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		1,1-dichloroethene		----------NA----------				
17		freon 113		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile		----------NA----------				
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		acrylonitrile		----------NA----------				
26		trans-1,2-dichloroethene		----------NA----------				
27		hexane		----------NA----------				
28		di-isopropyl ether		----------NA----------				
29		2-butanone		----------NA----------				
30		1,1-dichloroethane		----------NA----------				
31		chloroprene		----------NA----------				
32		vinyl acetate		----------NA----------				
33		ethyl tert-butyl ether		----------NA----------				
34		ethyl acetate		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		methyl acrylate		----------NA----------				
38		propionitrile		----------NA----------				
39		tert-butyl formate		----------NA----------				
40		bromochloromethane		----------NA----------				
41		tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192568.D

42		chloroform		----------NA----------				
43	S	dibromofluoromethane (s)	0.504	0.538	-6.7	67	0.00	3.62
44		methacrylonitrile		----------NA----------				
45		1,1,1-trichloroethane		----------NA----------				
46		cyclohexane		----------NA----------				
47	m	tert amyl alcohol		----------NA----------				
48		1,1-dichloropropene		----------NA----------				
49		isobutyl alcohol		----------NA----------				
50		carbon tetrachloride		----------NA----------				
51		isopropyl acetate		----------NA----------				
52	I	1,4-difluorobenzene	1.000	1.000	0.0	67	0.00	4.12
53	S	1,2-dichloroethane-d4 (s)	0.428	0.423	1.2	67	0.00	3.85
54		iso-octane		----------NA----------				
55		epichlorohydrin		----------NA----------				
56		n-butyl alcohol		----------NA----------				
57		benzene		----------NA----------				
58		tert-amyl methyl ether		----------NA----------				
59		heptane		----------NA----------				
60		1,2-dichloroethane		----------NA----------				
61		trichloroethene		----------NA----------				
62	m	ethyl acrylate		----------NA----------				
63		2-nitropropane		----------NA----------				
64		2-chloroethyl vinyl ether		----------NA----------				
65		methyl methacrylate		----------NA----------				
66		1,2-dichloropropane		----------NA----------				
67		dibromomethane		----------NA----------				
68		methylcyclohexane		----------NA----------				
69		bromodichloromethane		----------NA----------				
70		cis-1,3-dichloropropene		----------NA----------				
71		4-methyl-2-pentanone		----------NA----------				
72		3-methyl-1-butanol		----------NA----------				
73	I	chlorobenzene-d5	1.000	1.000	0.0	64	0.00	6.20
74	S	toluene-d8 (s)	1.216	1.235	-1.6	65	0.00	5.12
75		toluene		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		ethyl methacrylate		----------NA----------				
78		1,1,2-trichloroethane		----------NA----------				
79		tetrachloroethene	0.195	0.187	4.1	60	0.00	5.55
80		1,3-dichloropropane		----------NA----------				
81		2-hexanone		----------NA----------				
82		butyl acetate		----------NA----------				
83		dibromochloromethane		----------NA----------				
84		1,2-dibromoethane		----------NA----------				
85	m	n-butyl ether		----------NA----------				
86		chlorobenzene		----------NA----------				
87		1,1,1,2-tetrachloroethane		----------NA----------				
88		ethylbenzene		----------NA----------				
89		m,p-xylene		----------NA----------				
90		o-xylene		----------NA----------				
91		styrene		----------NA----------				
92		butyl acrylate		----------NA----------				
93		n-amyl acetate		----------NA----------				
94		bromoform		----------NA----------				
95		isopropylbenzene		----------NA----------				
96		cis-1,4-dichloro-2-butene		----------NA----------				
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	62	0.00	7.99
98	S	4-bromofluorobenzene (s)	0.994	0.989	0.5	63	0.00	7.13

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V1X8342-ICV8342
Lab FileID: 1X192568.D

99		bromobenzene	----------NA----------
100		1,1,2,2-tetrachloroethane	----------NA----------
101		trans-1,4-dichloro-2-bute	----------NA----------
102		1,2,3-trichloropropane	----------NA----------
103		n-propylbenzene	----------NA----------
104		2-chlorotoluene	----------NA----------
105		4-chlorotoluene	----------NA----------
106		1,3,5-trimethylbenzene	----------NA----------
107		tert-butylbenzene	----------NA----------
108		1,2,4-trimethylbenzene	----------NA----------
109		sec-butylbenzene	----------NA----------
110		1,3-dichlorobenzene	----------NA----------
111		p-isopropyltoluene	----------NA----------
112		1,4-dichlorobenzene	----------NA----------
113		1,2-dichlorobenzene	----------NA----------
114		benzyl chloride	----------NA----------
115		n-butylbenzene	----------NA----------
116		1,2-dibromo-3-chloropropa	----------NA----------
117		1,3,5-trichlorobenzene	----------NA----------
118		hexachlorobutadiene	----------NA----------
119		naphthalene	----------NA----------
120		1,2,4-trichlorobenzene	----------NA----------
121	m	1,2,3-trichlorobenzene	----------NA----------
122		hexachloroethane	----------NA----------
123		2-methylnaphthalene	----------NA----------

(#) = Out of Range SPCC's out = 0 CCC's out = 0

1X192544.D M1X8342.M Sat Nov 27 09:41:16 2021 GCMSX

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8363-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193024.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ke...63-partial\1x193024.d Vial: 2
Acq On : 17 Dec 2021 10:17 am Operator: brittank
Sample : CC8342-20 Inst : ACC-VOA-MSX
Misc : MS55613,V1X8363,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	132	-0.02	2.53
2		ethanol	0.057	0.072	-26.3#	177	-0.02	2.02
3		tertiary butyl alcohol	0.717	0.730	-1.8	134	-0.02	2.58
4		1,4-dioxane	0.060	0.068	-13.3	146	0.00	4.49
5	I	pentafluorobenzene	1.000	1.000	0.0	150	0.00	3.61
6		chlorodifluoromethane	0.395	0.345	12.7	133	-0.02	1.31
7		dichlorodifluoromethane	0.370	0.419	-13.2	168	-0.02	1.30
8		chloromethane	0.426	0.463	-8.7	163	-0.02	1.43
9		vinyl chloride	0.378	0.381	-0.8	154	-0.02	1.50
10		bromomethane	0.194	0.190	2.1	148	-0.02	1.72
11		chloroethane	0.174	0.204	-17.2	168	-0.01	1.79
12		trichlorofluoromethane	0.513	0.553	-7.8	161	-0.02	1.94
13		1,3-butadiene	0.328	0.244	25.6#	110	-0.02	1.53
14		ethyl ether	0.131	0.130	0.8	145	-0.02	2.10
15		acrolein	0.055	0.050	9.1	132	-0.01	2.19
16		1,1-dichloroethene	0.258	0.250	3.1	145	-0.01	2.26
17		freon 113	0.307	0.290	5.5	146	-0.01	2.26
18		acetone	0.034	0.028	17.6	122	-0.01	2.27
19		acetonitrile	0.047	0.051	-8.5	157	-0.02	2.44
20		iodomethane	0.328	0.216	34.1#	98	-0.01	2.36
21		carbon disulfide	0.719	0.645	10.3	140	-0.01	2.41
22		methylene chloride	0.257	0.250	2.7	149	-0.01	2.55
23		methyl acetate	0.309	0.314	-1.6	141	-0.01	2.46
24		methyl tert butyl ether	0.751	0.766	-2.0	148	-0.01	2.70
25		acrylonitrile	0.138	0.121	12.3	126	-0.02	2.68
26		trans-1,2-dichloroethene	0.274	0.273	0.4	149	-0.01	2.72
27		hexane	0.566	0.468	17.3	127	-0.01	2.87
28		di-isopropyl ether	0.949	1.074	-13.2	164	-0.01	2.97
29		2-butanone	0.036	0.033	8.3	136	-0.01	3.29
30		1,1-dichloroethane	0.531	0.543	-2.3	152	0.00	2.98
31		chloroprene	0.509	0.533	-4.7	157	-0.01	3.02
32		vinyl acetate	0.056	0.055	1.8	144	-0.01	2.96
33		ethyl tert-butyl ether	0.888	0.939	-5.7	151	-0.01	3.19
34		ethyl acetate	0.060	0.063	-5.0	149	-0.01	3.30
35		2,2-dichloropropane	0.439	0.462	-5.2	159	0.00	3.33
36		cis-1,2-dichloroethene	0.294	0.289	1.7	147	0.00	3.32
37		methyl acrylate	0.398	0.401	-0.8	149	-0.01	3.34
38		propionitrile	0.054	0.056	-3.7	150	-0.01	3.34
39		tert-butyl formate	0.225	0.301	-33.8#	198	0.00	3.53
40		bromochloromethane	0.146	0.154	-5.5	157	0.00	3.47
41		tetrahydrofuran	0.120	0.114	5.0	152	0.00	3.47

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8363-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193024.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42		chloroform	0.513	0.552	-7.6	164	0.00	3.52
43	S	dibromofluoromethane (s)	0.504	0.505	-0.2	150	-0.01	3.61
44		methacrylonitrile	0.122	0.122	0.0	142	-0.01	3.43
45		1,1,1-trichloroethane	0.483	0.507	-5.0	154	0.00	3.64
46		cyclohexane	0.381	0.439	-15.2	174	0.00	3.69
47	m	tert amyl alcohol	0.012	0.012	0.0	145	0.00	3.82
48		1,1-dichloropropene	0.397	0.408	-2.8	153	0.00	3.73
49		isobutyl alcohol	0.007	0.008	-14.3	163	0.00	3.92
50		carbon tetrachloride	0.453	0.475	-4.9	157	0.00	3.74
51		isopropyl acetate	0.063	0.063	0.0	144	0.00	3.84
52	I	1,4-difluorobenzene	1.000	1.000	0.0	150	0.00	4.11
53	S	1,2-dichloroethane-d4 (s)	0.428	0.442	-3.3	153	0.00	3.84
54		iso-octane	0.765	0.737	3.7	146	0.00	3.92
55		epichlorohydrin	0.027	0.027	0.0	147	0.00	4.84
56		n-butyl alcohol	0.005	0.006	-20.0	170	-0.01	4.16
57		benzene	0.695	0.710	-2.2	147	0.00	3.86
58		tert-amyl methyl ether	0.552	0.552	0.0	144	0.00	3.92
59		heptane	0.142	0.148	-4.2	156	0.00	4.02
60		1,2-dichloroethane	0.318	0.333	-4.7	159	0.00	3.89
61		trichloroethene	0.234	0.236	-0.9	153	0.00	4.28
62	m	ethyl acrylate	0.298	0.301	-1.0	147	0.00	4.30
63		2-nitropropane	0.082	0.081	1.2	144	0.00	4.76
64		2-chloroethyl vinyl ether	0.133	0.150	-12.8	165	0.00	4.79
65		methyl methacrylate	0.056	0.052	7.1	138	0.00	4.46
66		1,2-dichloropropane	0.079	0.086	-8.9	152	0.00	4.45
67		dibromomethane	0.127	0.134	-5.5	156	0.00	4.51
68		methylcyclohexane	0.334	0.338	-1.2	155	0.00	4.44
69		bromodichloromethane	0.256	0.268	-4.7	154	0.00	4.62
70		cis-1,3-dichloropropene	0.291	0.309	-6.2	153	0.00	4.92
71		4-methyl-2-pentanone	0.086	0.086	0.0	143	0.00	5.00
72		3-methyl-1-butanol	0.003	0.004	-33.3#	185	0.00	5.02
73	I	chlorobenzene-d5	1.000	1.000	0.0	146	0.00	6.20
74	S	toluene-d8 (s)	1.216	1.225	-0.7	146	0.00	5.11
75		toluene	0.455	0.484	-6.4	148	0.00	5.16
76		trans-1,3-dichloropropene	0.286	0.315	-10.1	154	0.00	5.31
77		ethyl methacrylate	0.246	0.247	-0.4	138	0.00	5.33
78		1,1,2-trichloroethane	0.150	0.160	-6.7	154	0.00	5.46
79		tetrachloroethene	0.195	0.203	-4.1	152	0.00	5.54
80		1,3-dichloropropane	0.288	0.305	-5.9	153	0.00	5.58
81		2-hexanone	0.092	0.088	4.3	133	0.00	5.60
82		butyl acetate	0.158	0.157	0.6	144	0.00	5.68
83		dibromochloromethane	0.224	0.253	-12.9	154	0.00	5.75
84		1,2-dibromoethane	0.205	0.218	-6.3	154	0.00	5.85
85	m	n-butyl ether	0.859	0.884	-2.9	147	0.00	6.26
86		chlorobenzene	0.533	0.557	-4.5	147	0.00	6.22
87		1,1,1,2-tetrachloroethane	0.210	0.224	-6.7	153	0.00	6.28
88		ethylbenzene	0.921	0.925	-0.4	146	0.00	6.28
89		m,p-xylene	0.352	0.368	-4.5	146	0.00	6.38
90		o-xylene	0.715	0.719	-0.6	146	0.00	6.69
91		styrene	0.567	0.582	-2.6	145	0.00	6.70
92		butyl acrylate	0.442	0.462	-4.5	148	0.00	6.62
93		n-amyl acetate	0.150	0.148	1.3	141	0.00	6.80
94		bromoform	0.164	0.170	-3.7	147	0.00	6.86
95		isopropylbenzene	0.910	0.920	-1.1	146	0.00	6.98
96		cis-1,4-dichloro-2-butene	0.102	0.103	-1.0	146	0.00	7.02
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	142	0.00	7.99
98	S	4-bromofluorobenzene (s)	0.994	0.990	0.4	143	0.00	7.13

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8363-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193024.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	bromobenzene	0.523	0.558	-6.7	148	0.00	7.24
100	1,1,2,2-tetrachloroethane	0.522	0.548	-5.0	145	0.00	7.22
101	trans-1,4-dichloro-2-bute	0.199	0.229	-15.1	157	0.00	7.25
102	1,2,3-trichloropropane	0.165	0.173	-4.8	150	0.00	7.27
103	n-propylbenzene	2.288	2.366	-3.4	146	0.00	7.31
104	2-chlorotoluene	0.499	0.516	-3.4	146	0.00	7.38
105	4-chlorotoluene	1.335	1.362	-2.0	143	0.00	7.47
106	1,3,5-trimethylbenzene	1.553	1.558	-0.3	142	0.00	7.44
107	tert-butylbenzene	1.463	1.474	-0.8	145	0.00	7.67
108	1,2,4-trimethylbenzene	1.551	1.592	-2.6	145	0.00	7.72
109	sec-butylbenzene	2.028	2.031	-0.1	141	0.00	7.84
110	1,3-dichlorobenzene	0.974	0.982	-0.8	143	0.00	7.94
111	p-isopropyltoluene	1.783	1.821	-2.1	144	0.00	7.95
112	1,4-dichlorobenzene	1.007	1.005	0.2	142	0.00	8.01
113	1,2-dichlorobenzene	0.926	0.922	0.4	140	0.00	8.26
114	benzyl chloride	1.052	1.054	-0.2	143	0.00	8.09
115	n-butylbenzene	0.798	0.822	-3.0	144	0.00	8.24
116	1,2-dibromo-3-chloropropa	0.140	0.129	7.9	126	0.00	8.79
117	1,3,5-trichlorobenzene	0.630	0.629	0.2	142	0.00	8.91
118	hexachlorobutadiene	0.235	0.225	4.3	142	0.00	9.40
119	naphthalene	1.738	1.635	5.9	132	0.00	9.48
120	1,2,4-trichlorobenzene	0.555	0.543	2.2	141	0.00	9.32
121 m	1,2,3-trichlorobenzene	0.538	0.517	3.9	138	0.00	9.62
122	hexachloroethane	0.259	0.233	10.0	133	0.00	8.45
123	2-methylnaphthalene	0.824	0.633	23.2#	113	0.00	10.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192542.D M1X8342.M Mon Dec 20 08:56:31 2021

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8364-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193057.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...64-partial\1x193057.d Vial: 5
Acq On : 20 Dec 2021 12:00 pm Operator: brittank
Sample : cc8342-20 Inst : ACC-VOA-MSX
Misc : MS55745,V1X8364,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	101	-0.03	2.52
2		ethanol	0.057	0.079	-38.6#	148	-0.03	2.01
3		tertiary butyl alcohol	0.717	0.742	-3.5	104	-0.03	2.57
4		1,4-dioxane	0.060	0.075	-25.0#	123	-0.02	4.48
5	I	pentafluorobenzene	1.000	1.000	0.0	132	-0.02	3.60
6		chlorodifluoromethane	0.395	0.234	40.8#	79	-0.03	1.30
7		dichlorodifluoromethane	0.370	0.522	-41.1#	184	-0.03	1.29
8		chloromethane	0.426	0.528	-23.9#	164	-0.03	1.42
9		vinyl chloride	0.378	0.423	-11.9	150	-0.02	1.49
10		bromomethane	0.194	0.228	-17.5	156	-0.02	1.71
11		chloroethane	0.174	0.216	-24.1#	157	-0.02	1.78
12		trichlorofluoromethane	0.513	0.602	-17.3	154	-0.02	1.94
13		1,3-butadiene	0.328	0.161	50.9#	64	-0.02	1.52
14		ethyl ether	0.131	0.130	0.8	127	-0.02	2.10
15		acrolein	0.055	0.057	-3.6	134	-0.02	2.18
16		1,1-dichloroethene	0.258	0.243	5.8	124	-0.02	2.25
17		freon 113	0.307	0.300	2.3	133	-0.02	2.25
18		acetone	0.034	0.027	20.6#	103	-0.02	2.26
19		acetonitrile	0.047	0.048	-2.1	132	-0.02	2.43
20		iodomethane	0.328	0.276	15.9	111	-0.02	2.35
21		carbon disulfide	0.719	0.621	13.6	118	-0.02	2.40
22		methylene chloride	0.257	0.255	0.8	134	-0.02	2.55
23		methyl acetate	0.309	0.294	4.9	116	-0.02	2.44
24		methyl tert butyl ether	0.751	0.761	-1.3	129	-0.02	2.69
25		acrylonitrile	0.138	0.131	5.1	120	-0.02	2.67
26		trans-1,2-dichloroethene	0.274	0.280	-2.2	134	-0.02	2.71
27		hexane	0.566	0.500	11.7	119	-0.02	2.87
28		di-isopropyl ether	0.949	1.103	-16.2	148	-0.02	2.96
29		2-butanone	0.036	0.032	11.1	114	-0.02	3.29
30		1,1-dichloroethane	0.531	0.559	-5.3	138	-0.02	2.97
31		chloroprene	0.509	0.557	-9.4	145	-0.02	3.01
32		vinyl acetate	0.056	0.057	-1.8	133	-0.02	2.95
33		ethyl tert-butyl ether	0.888	0.977	-10.0	138	-0.02	3.18
34		ethyl acetate	0.060	0.060	0.0	126	-0.02	3.30
35		2,2-dichloropropane	0.439	0.476	-8.4	144	-0.02	3.32
36		cis-1,2-dichloroethene	0.294	0.303	-3.1	135	-0.02	3.31
37		methyl acrylate	0.398	0.393	1.3	128	-0.02	3.34
38		propionitrile	0.054	0.052	3.7	124	-0.02	3.33
39		tert-butyl formate	0.225	0.287	-27.6#	166	-0.02	3.52
40		bromochloromethane	0.146	0.158	-8.2	141	-0.02	3.46
41		tetrahydrofuran	0.120	0.109	9.2	128	-0.02	3.46

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8364-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193057.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42		chloroform	0.513	0.575	-12.1	150	-0.02	3.51
43	S	dibromofluoromethane (s)	0.504	0.532	-5.6	140	-0.02	3.61
44		methacrylonitrile	0.122	0.121	0.8	124	-0.02	3.43
45		1,1,1-trichloroethane	0.483	0.522	-8.1	139	-0.02	3.63
46		cyclohexane	0.381	0.440	-15.5	154	-0.02	3.68
47	m	tert amyl alcohol	0.012	0.011	8.3	108	-0.02	3.81
48		1,1-dichloropropene	0.397	0.425	-7.1	140	-0.01	3.73
49		isobutyl alcohol	0.007	0.008	-14.3	137	-0.01	3.91
50		carbon tetrachloride	0.453	0.501	-10.6	146	-0.02	3.73
51		isopropyl acetate	0.063	0.060	4.8	120	-0.01	3.84
52	I	1,4-difluorobenzene	1.000	1.000	0.0	137	-0.02	4.10
53	S	1,2-dichloroethane-d4 (s)	0.428	0.447	-4.4	141	-0.02	3.83
54		iso-octane	0.765	0.726	5.1	131	-0.01	3.91
55		epichlorohydrin	0.027	0.025	7.4	125	-0.01	4.82
56		n-butyl alcohol	0.005	0.005	0.0	129	-0.02	4.15
57		benzene	0.695	0.713	-2.6	135	-0.02	3.85
58		tert-amyl methyl ether	0.552	0.554	-0.4	131	-0.01	3.91
59		heptane	0.142	0.147	-3.5	142	-0.02	4.01
60		1,2-dichloroethane	0.318	0.331	-4.1	143	-0.02	3.87
61		trichloroethene	0.234	0.237	-1.3	140	-0.01	4.27
62	m	ethyl acrylate	0.298	0.283	5.0	126	-0.02	4.29
63		2-nitropropane	0.082	0.074	9.8	120	-0.01	4.75
64		2-chloroethyl vinyl ether	0.133	0.143	-7.5	143	-0.01	4.78
65		methyl methacrylate	0.056	0.052	7.1	125	-0.01	4.45
66		1,2-dichloropropane	0.079	0.085	-7.6	137	-0.02	4.44
67		dibromomethane	0.127	0.135	-6.3	143	-0.01	4.50
68		methylcyclohexane	0.334	0.338	-1.2	141	-0.02	4.43
69		bromodichloromethane	0.256	0.267	-4.3	139	-0.01	4.61
70		cis-1,3-dichloropropene	0.291	0.306	-5.2	138	-0.01	4.90
71		4-methyl-2-pentanone	0.086	0.077	10.5	116	-0.01	4.99
72		3-methyl-1-butanol	0.003	0.003	0.0	129	-0.02	5.01
73	I	chlorobenzene-d5	1.000	1.000	0.0	132	-0.01	6.19
74	S	toluene-d8 (s)	1.216	1.215	0.1	131	-0.01	5.10
75		toluene	0.455	0.479	-5.3	133	-0.01	5.15
76		trans-1,3-dichloropropene	0.286	0.315	-10.1	140	-0.01	5.30
77		ethyl methacrylate	0.246	0.239	2.8	121	0.00	5.32
78		1,1,2-trichloroethane	0.150	0.157	-4.7	136	-0.01	5.45
79		tetrachloroethene	0.195	0.201	-3.1	136	-0.01	5.53
80		1,3-dichloropropane	0.288	0.305	-5.9	138	0.00	5.58
81		2-hexanone	0.092	0.077	16.3	106	0.00	5.59
82		butyl acetate	0.158	0.145	8.2	120	0.00	5.67
83		dibromochloromethane	0.224	0.258	-15.2	142	0.00	5.74
84		1,2-dibromoethane	0.205	0.218	-6.3	140	-0.01	5.84
85	m	n-butyl ether	0.859	0.900	-4.8	135	-0.01	6.25
86		chlorobenzene	0.533	0.660	-23.8#	158	-0.01	6.21
87		1,1,1,2-tetrachloroethane	0.210	0.226	-7.6	139	0.00	6.27
88		ethylbenzene	0.921	0.933	-1.3	133	0.00	6.28
89		m,p-xylene	0.352	0.369	-4.8	133	0.00	6.38
90		o-xylene	0.715	0.721	-0.8	132	0.00	6.68
91		styrene	0.567	0.588	-3.7	132	0.00	6.70
92		butyl acrylate	0.442	0.446	-0.9	130	-0.01	6.61
93		n-amyl acetate	0.150	0.143	4.7	123	0.00	6.79
94		bromoform	0.164	0.171	-4.3	134	0.00	6.85
95		isopropylbenzene	0.910	0.919	-1.0	132	0.00	6.97
96		cis-1,4-dichloro-2-butene	0.102	0.095	6.9	122	0.00	7.01
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	132	0.00	7.98
98	S	4-bromofluorobenzene (s)	0.994	0.976	1.8	131	0.00	7.11

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8364-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193057.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	bromobenzene	0.523	0.546	-4.4	134	0.00	7.23
100	1,1,2,2-tetrachloroethane	0.522	0.512	1.9	125	0.00	7.21
101	trans-1,4-dichloro-2-bute	0.199	0.201	-1.0	128	0.00	7.24
102	1,2,3-trichloropropane	0.165	0.158	4.2	127	0.00	7.26
103	n-propylbenzene	2.288	2.313	-1.1	132	0.00	7.30
104	2-chlorotoluene	0.499	0.503	-0.8	132	0.00	7.37
105	4-chlorotoluene	1.335	1.352	-1.3	132	0.00	7.46
106	1,3,5-trimethylbenzene	1.553	1.525	1.8	128	0.00	7.43
107	tert-butylbenzene	1.463	1.451	0.8	132	0.00	7.67
108	1,2,4-trimethylbenzene	1.551	1.570	-1.2	132	0.00	7.71
109	sec-butylbenzene	2.028	2.030	-0.1	131	0.00	7.83
110	1,3-dichlorobenzene	0.974	0.965	0.9	130	0.00	7.93
111	p-isopropyltoluene	1.783	1.792	-0.5	132	0.00	7.94
112	1,4-dichlorobenzene	1.007	0.989	1.8	130	0.00	8.00
113	1,2-dichlorobenzene	0.926	0.917	1.0	129	0.00	8.26
114	benzyl chloride	1.052	0.964	8.4	121	0.00	8.07
115	n-butylbenzene	0.798	0.796	0.3	129	0.00	8.23
116	1,2-dibromo-3-chloropropa	0.140	0.124	11.4	113	0.00	8.78
117	1,3,5-trichlorobenzene	0.630	0.624	1.0	131	0.00	8.91
118	hexachlorobutadiene	0.235	0.225	4.3	131	0.00	9.39
119	naphthalene	1.738	1.489	14.3	112	0.00	9.48
120	1,2,4-trichlorobenzene	0.555	0.535	3.6	129	0.00	9.31
121 m	1,2,3-trichlorobenzene	0.538	0.495	8.0	123	0.00	9.61
122	hexachloroethane	0.259	0.236	8.9	124	0.00	8.44
123	2-methylnaphthalene	0.824	0.587	28.8#	97	0.00	10.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192542.D M1X8342.M Tue Dec 21 02:03:40 2021

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8365-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193087.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kr...021\vx8365\1x193087.d Vial: 51
Acq On : 21 Dec 2021 1:32 am Operator: brittank
Sample : cc8342-50 Inst : ACC-VOA-MSX
Misc : MS55620, V1X8365,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	132	-0.02	2.53
2		ethanol	0.057	0.064	-12.3	156	-0.02	2.02
3		tertiary butyl alcohol	0.717	0.717	0.0	135	-0.02	2.58
4		1,4-dioxane	0.060	0.059	1.7	123	-0.01	4.48
5	I	pentafluorobenzene	1.000	1.000	0.0	157	0.00	3.61
6		chlorodifluoromethane	0.395	0.404	-2.3	161	-0.02	1.31
7		dichlorodifluoromethane	0.370	0.450	-21.6#	189	-0.02	1.30
8		chloromethane	0.426	0.445	-4.5	171	-0.02	1.43
9		vinyl chloride	0.378	0.357	5.6	152	-0.01	1.51
10		bromomethane	0.194	0.206	-6.2	189	-0.02	1.72
11		chloroethane	0.174	0.185	-6.3	168	-0.01	1.79
12		trichlorofluoromethane	0.513	0.524	-2.1	159	-0.02	1.94
13		1,3-butadiene	0.328	0.267	18.6	125	-0.02	1.53
14		ethyl ether	0.131	0.141	-7.6	164	-0.01	2.11
15		acrolein	0.055	0.059	-7.3	154	-0.01	2.19
16		1,1-dichloroethene	0.258	0.264	-2.3	156	-0.01	2.26
17		freon 113	0.307	0.295	3.9	149	-0.01	2.26
18		acetone	0.034	0.030	11.8	149	-0.01	2.27
19		acetonitrile	0.047	0.048	-2.1	155	-0.02	2.44
20		iodomethane	0.328	0.336	-2.4	152	-0.01	2.36
21		carbon disulfide	0.719	0.681	5.3	147	-0.01	2.41
22		methylene chloride	0.257	0.247	3.9	154	-0.01	2.55
23		methyl acetate	0.309	0.326	-5.5	162	-0.01	2.46
24		methyl tert butyl ether	0.751	0.774	-3.1	161	-0.01	2.70
25		acrylonitrile	0.138	0.162	-17.4	178	-0.01	2.68
26		trans-1,2-dichloroethene	0.274	0.275	-0.4	154	-0.01	2.72
27		hexane	0.566	0.451	20.3#	121	-0.01	2.87
28		di-isopropyl ether	0.949	1.107	-16.6	178	-0.01	2.97
29		2-butanone	0.036	0.033	8.3	145	-0.01	3.29
30		1,1-dichloroethane	0.531	0.553	-4.1	161	0.00	2.98
31		chloroprene	0.509	0.547	-7.5	166	-0.01	3.02
32		vinyl acetate	0.056	0.058	-3.6	149	-0.01	2.96
33		ethyl tert-butyl ether	0.888	0.975	-9.8	167	-0.01	3.19
34		ethyl acetate	0.060	0.064	-6.7	164	0.00	3.31
35		2,2-dichloropropane	0.439	0.402	8.4	141	0.00	3.33
36		cis-1,2-dichloroethene	0.294	0.293	0.3	157	0.00	3.32
37		methyl acrylate	0.398	0.405	-1.8	155	-0.01	3.34
38		propionitrile	0.054	0.054	0.0	153	-0.01	3.34
39		tert-butyl formate	0.225	0.319	-41.8#	204#	0.00	3.53
40		bromochloromethane	0.146	0.158	-8.2	172	0.00	3.47
41		tetrahydrofuran	0.120	0.115	4.2	160	0.00	3.47

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8365-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193087.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42		chloroform	0.513	0.513	0.0	162	0.00	3.52
43	S	dibromofluoromethane (s)	0.504	0.497	1.4	157	-0.01	3.61
44		methacrylonitrile	0.122	0.125	-2.5	153	-0.01	3.43
45		1,1,1-trichloroethane	0.483	0.514	-6.4	160	0.00	3.64
46		cyclohexane	0.381	0.388	-1.8	157	0.00	3.69
47	m	tert amyl alcohol	0.012	0.012	0.0	153	0.00	3.82
48		1,1-dichloropropene	0.397	0.405	-2.0	155	0.00	3.73
49		isobutyl alcohol	0.007	0.007	0.0	163	0.00	3.92
50		carbon tetrachloride	0.453	0.481	-6.2	159	0.00	3.74
51		isopropyl acetate	0.063	0.064	-1.6	155	0.00	3.84
52	I	1,4-difluorobenzene	1.000	1.000	0.0	157	0.00	4.11
53	S	1,2-dichloroethane-d4 (s)	0.428	0.432	-0.9	161	0.00	3.84
54		iso-octane	0.765	0.706	7.7	143	0.00	3.92
55		epichlorohydrin	0.027	0.026	3.7	146	0.00	4.83
56		n-butyl alcohol	0.005	0.006	-20.0	159	-0.01	4.16
57		benzene	0.695	0.737	-6.0	159	0.00	3.86
58		tert-amyl methyl ether	0.552	0.567	-2.7	155	0.00	3.92
59		heptane	0.142	0.135	4.9	146	0.00	4.02
60		1,2-dichloroethane	0.318	0.327	-2.8	170	0.00	3.89
61		trichloroethene	0.234	0.237	-1.3	157	0.00	4.28
62	m	ethyl acrylate	0.298	0.304	-2.0	159	0.00	4.30
63		2-nitropropane	0.082	0.078	4.9	144	0.00	4.76
64		2-chloroethyl vinyl ether	0.133	0.152	-14.3	175	0.00	4.79
65		methyl methacrylate	0.056	0.053	5.4	150	0.00	4.46
66		1,2-dichloropropane	0.079	0.088	-11.4	165	0.00	4.45
67		dibromomethane	0.127	0.131	-3.1	163	0.00	4.51
68		methylcyclohexane	0.334	0.335	-0.3	153	0.00	4.44
69		bromodichloromethane	0.256	0.267	-4.3	163	0.00	4.62
70		cis-1,3-dichloropropene	0.291	0.303	-4.1	158	0.00	4.92
71		4-methyl-2-pentanone	0.086	0.085	1.2	149	0.00	5.00
72		3-methyl-1-butanol	0.003	0.004	-33.3#	172	-0.01	5.02
73	I	chlorobenzene-d5	1.000	1.000	0.0	155	0.00	6.20
74	S	toluene-d8 (s)	1.216	1.205	0.9	154	0.00	5.11
75		toluene	0.455	0.475	-4.4	153	0.00	5.16
76		trans-1,3-dichloropropene	0.286	0.308	-7.7	159	0.00	5.31
77		ethyl methacrylate	0.246	0.243	1.2	147	0.00	5.33
78		1,1,2-trichloroethane	0.150	0.155	-3.3	160	0.00	5.46
79		tetrachloroethene	0.195	0.197	-1.0	153	0.00	5.53
80		1,3-dichloropropane	0.288	0.302	-4.9	162	0.00	5.58
81		2-hexanone	0.092	0.082	10.9	139	0.00	5.60
82		butyl acetate	0.158	0.152	3.8	147	0.00	5.67
83		dibromochloromethane	0.224	0.244	-8.9	160	0.00	5.75
84		1,2-dibromoethane	0.205	0.214	-4.4	160	0.00	5.85
85	m	n-butyl ether	0.859	0.889	-3.5	153	0.00	6.26
86		chlorobenzene	0.533	0.555	-4.1	155	0.00	6.22
87		1,1,1,2-tetrachloroethane	0.210	0.223	-6.2	158	0.00	6.28
88		ethylbenzene	0.921	0.907	1.5	148	0.00	6.28
89		m,p-xylene	0.352	0.359	-2.0	148	0.00	6.38
90		o-xylene	0.715	0.715	0.0	149	0.00	6.69
91		styrene	0.567	0.580	-2.3	150	0.00	6.70
92		butyl acrylate	0.442	0.453	-2.5	153	0.00	6.62
93		n-amyl acetate	0.150	0.141	6.0	144	0.00	6.80
94		bromoform	0.164	0.168	-2.4	149	0.00	6.86
95		isopropylbenzene	0.910	0.895	1.6	146	0.00	6.98
96		cis-1,4-dichloro-2-butene	0.102	0.097	4.9	142	0.00	7.02
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	149	0.00	7.99
98	S	4-bromofluorobenzene (s)	0.994	0.993	0.1	152	0.00	7.12

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8365-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193087.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	bromobenzene	0.523	0.559	-6.9	153	0.00	7.24
100	1,1,2,2-tetrachloroethane	0.522	0.532	-1.9	148	0.00	7.22
101	trans-1,4-dichloro-2-bute	0.199	0.211	-6.0	152	0.00	7.24
102	1,2,3-trichloropropane	0.165	0.165	0.0	149	0.00	7.26
103	n-propylbenzene	2.288	2.286	0.1	144	0.00	7.30
104	2-chlorotoluene	0.499	0.507	-1.6	148	0.00	7.38
105	4-chlorotoluene	1.335	1.341	-0.4	147	0.00	7.47
106	1,3,5-trimethylbenzene	1.553	1.574	-1.4	147	0.00	7.44
107	tert-butylbenzene	1.463	1.475	-0.8	147	0.00	7.67
108	1,2,4-trimethylbenzene	1.551	1.586	-2.3	147	0.00	7.72
109	sec-butylbenzene	2.028	2.025	0.1	141	0.00	7.84
110	1,3-dichlorobenzene	0.974	0.974	0.0	146	0.00	7.93
111	p-isopropyltoluene	1.783	1.810	-1.5	141	0.00	7.95
112	1,4-dichlorobenzene	1.007	0.993	1.4	146	0.00	8.01
113	1,2-dichlorobenzene	0.926	0.936	-1.1	148	0.00	8.26
114	benzyl chloride	1.052	0.813	22.7#	109	0.00	8.08
115	n-butylbenzene	0.798	0.781	2.1	137	0.00	8.24
116	1,2-dibromo-3-chloropropa	0.140	0.132	5.7	132	0.00	8.79
117	1,3,5-trichlorobenzene	0.630	0.655	-4.0	148	0.00	8.91
118	hexachlorobutadiene	0.235	0.231	1.7	140	0.00	9.40
119	naphthalene	1.738	1.676	3.6	142	0.00	9.48
120	1,2,4-trichlorobenzene	0.555	0.569	-2.5	146	0.00	9.32
121 m	1,2,3-trichlorobenzene	0.538	0.538	0.0	146	0.00	9.62
122	hexachloroethane	0.259	0.247	4.6	134	0.00	8.45
123	2-methylnaphthalene	0.824	0.732	11.2	131	0.00	10.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192544.D M1X8342.M Wed Dec 22 08:40:43 2021

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8366-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193108.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...66-partial\1x193108.d Vial: 1
Acq On : 21 Dec 2021 10:37 am Operator: brittank
Sample : cc8342-20 Inst : ACC-VOA-MSX
Misc : MS55549, V1X8366,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	154	-0.02	2.53
2		ethanol	0.057	0.066	-15.8	189	-0.02	2.02
3		tertiary butyl alcohol	0.717	0.715	0.3	153	-0.02	2.58
4		1,4-dioxane	0.060	0.061	-1.7	152	0.00	4.49
5	I	pentafluorobenzene	1.000	1.000	0.0	157	0.00	3.61
6		chlorodifluoromethane	0.395	0.401	-1.5	162	-0.02	1.31
7		dichlorodifluoromethane	0.370	0.452	-22.2#	190	-0.02	1.30
8		chloromethane	0.426	0.447	-4.9	166	-0.02	1.43
9		vinyl chloride	0.378	0.363	4.0	153	-0.02	1.50
10		bromomethane	0.194	0.210	-8.2	172	-0.02	1.72
11		chloroethane	0.174	0.185	-6.3	160	-0.02	1.78
12		trichlorofluoromethane	0.513	0.545	-6.2	167	-0.02	1.94
13		1,3-butadiene	0.328	0.268	18.3	126	-0.02	1.53
14		ethyl ether	0.131	0.137	-4.6	160	-0.02	2.10
15		acrolein	0.055	0.055	0.0	153	-0.01	2.19
16		1,1-dichloroethene	0.258	0.247	4.3	150	-0.01	2.26
17		freon 113	0.307	0.290	5.5	153	-0.01	2.26
18		acetone	0.034	0.030	11.8	133	-0.02	2.27
19		acetonitrile	0.047	0.050	-6.4	164	-0.02	2.44
20		iodomethane	0.328	0.282	14.0	134	-0.02	2.36
21		carbon disulfide	0.719	0.668	7.1	152	-0.01	2.41
22		methylene chloride	0.257	0.245	4.7	154	-0.01	2.55
23		methyl acetate	0.309	0.327	-5.8	154	-0.01	2.46
24		methyl tert butyl ether	0.751	0.751	0.0	153	-0.01	2.70
25		acrylonitrile	0.138	0.134	2.9	147	-0.02	2.68
26		trans-1,2-dichloroethene	0.274	0.264	3.6	151	-0.01	2.72
27		hexane	0.566	0.490	13.4	139	-0.01	2.87
28		di-isopropyl ether	0.949	1.070	-12.8	172	-0.01	2.97
29		2-butanone	0.036	0.033	8.3	143	-0.01	3.29
30		1,1-dichloroethane	0.531	0.521	1.9	153	0.00	2.98
31		chloroprene	0.509	0.517	-1.6	160	-0.01	3.02
32		vinyl acetate	0.056	0.059	-5.4	161	-0.01	2.96
33		ethyl tert-butyl ether	0.888	0.929	-4.6	157	-0.01	3.19
34		ethyl acetate	0.060	0.069	-15.0	173	-0.01	3.30
35		2,2-dichloropropane	0.439	0.448	-2.1	162	-0.01	3.33
36		cis-1,2-dichloroethene	0.294	0.278	5.4	148	0.00	3.32
37		methyl acrylate	0.398	0.416	-4.5	162	-0.01	3.34
38		propionitrile	0.054	0.056	-3.7	157	-0.01	3.34
39		tert-butyl formate	0.225	0.289	-28.4#	199	0.00	3.53
40		bromochloromethane	0.146	0.146	0.0	156	-0.01	3.46
41		tetrahydrofuran	0.120	0.122	-1.7	171	0.00	3.47

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8366-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193108.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42		chloroform	0.513	0.524	-2.1	164	0.00	3.52
43	S	dibromofluoromethane (s)	0.504	0.488	3.2	153	-0.01	3.61
44		methacrylonitrile	0.122	0.128	-4.9	156	-0.01	3.43
45		1,1,1-trichloroethane	0.483	0.484	-0.2	154	-0.01	3.63
46		cyclohexane	0.381	0.407	-6.8	169	0.00	3.69
47	m	tert amyl alcohol	0.012	0.014	-16.7	167	0.00	3.82
48		1,1-dichloropropene	0.397	0.386	2.8	152	0.00	3.73
49		isobutyl alcohol	0.007	0.007	0.0	160	0.00	3.92
50		carbon tetrachloride	0.453	0.447	1.3	155	0.00	3.74
51		isopropyl acetate	0.063	0.063	0.0	151	0.00	3.84
52	I	1,4-difluorobenzene	1.000	1.000	0.0	157	0.00	4.11
53	S	1,2-dichloroethane-d4 (s)	0.428	0.436	-1.9	158	0.00	3.84
54		iso-octane	0.765	0.751	1.8	155	0.00	3.92
55		epichlorohydrin	0.027	0.028	-3.7	155	0.00	4.84
56		n-butyl alcohol	0.005	0.007	-40.0#	192	-0.01	4.16
57		benzene	0.695	0.699	-0.6	152	0.00	3.86
58		tert-amyl methyl ether	0.552	0.538	2.5	146	0.00	3.92
59		heptane	0.142	0.149	-4.9	165	0.00	4.02
60		1,2-dichloroethane	0.318	0.309	2.8	154	0.00	3.89
61		trichloroethene	0.234	0.223	4.7	151	0.00	4.28
62	m	ethyl acrylate	0.298	0.314	-5.4	161	0.00	4.30
63		2-nitropropane	0.082	0.074	9.8	138	0.00	4.76
64		2-chloroethyl vinyl ether	0.133	0.146	-9.8	167	0.00	4.79
65		methyl methacrylate	0.056	0.055	1.8	152	0.00	4.46
66		1,2-dichloropropane	0.079	0.084	-6.3	156	0.00	4.45
67		dibromomethane	0.127	0.127	0.0	154	0.00	4.51
68		methylcyclohexane	0.334	0.333	0.3	159	0.00	4.44
69		bromodichloromethane	0.256	0.246	3.9	148	0.00	4.62
70		cis-1,3-dichloropropene	0.291	0.296	-1.7	154	0.00	4.92
71		4-methyl-2-pentanone	0.086	0.086	0.0	149	0.00	5.00
72		3-methyl-1-butanol	0.003	0.004	-33.3#	202#	-0.01	5.02
73	I	chlorobenzene-d5	1.000	1.000	0.0	155	0.00	6.20
74	S	toluene-d8 (s)	1.216	1.204	1.0	153	0.00	5.11
75		toluene	0.455	0.455	0.0	148	0.00	5.16
76		trans-1,3-dichloropropene	0.286	0.291	-1.7	152	0.00	5.31
77		ethyl methacrylate	0.246	0.242	1.6	144	0.00	5.33
78		1,1,2-trichloroethane	0.150	0.150	0.0	153	0.00	5.46
79		tetrachloroethene	0.195	0.186	4.6	148	0.00	5.54
80		1,3-dichloropropane	0.288	0.289	-0.3	154	0.00	5.58
81		2-hexanone	0.092	0.086	6.5	139	0.00	5.60
82		butyl acetate	0.158	0.155	1.9	151	0.00	5.68
83		dibromochloromethane	0.224	0.229	-2.2	148	0.00	5.75
84		1,2-dibromoethane	0.205	0.203	1.0	153	0.00	5.85
85	m	n-butyl ether	0.859	0.854	0.6	151	0.00	6.26
86		chlorobenzene	0.533	0.538	-0.9	152	0.00	6.22
87		1,1,1,2-tetrachloroethane	0.210	0.206	1.9	150	0.00	6.28
88		ethylbenzene	0.921	0.870	5.5	146	0.00	6.28
89		m,p-xylene	0.352	0.342	2.8	145	0.00	6.38
90		o-xylene	0.715	0.677	5.3	146	0.00	6.69
91		styrene	0.567	0.537	5.3	142	0.00	6.70
92		butyl acrylate	0.442	0.439	0.7	150	0.00	6.62
93		n-amyl acetate	0.150	0.139	7.3	141	0.00	6.80
94		bromoform	0.164	0.156	4.9	143	0.00	6.86
95		isopropylbenzene	0.910	0.855	6.0	145	0.00	6.98
96		cis-1,4-dichloro-2-butene	0.102	0.094	7.8	142	0.00	7.02
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	150	0.00	7.99
98	S	4-bromofluorobenzene (s)	0.994	0.997	-0.3	152	0.00	7.12

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8366-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193108.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	bromobenzene	0.523	0.534	-2.1	149	0.00	7.24
100	1,1,2,2-tetrachloroethane	0.522	0.520	0.4	145	0.00	7.22
101	trans-1,4-dichloro-2-bute	0.199	0.215	-8.0	156	0.00	7.24
102	1,2,3-trichloropropane	0.165	0.164	0.6	150	0.00	7.26
103	n-propylbenzene	2.288	2.217	3.1	144	0.00	7.31
104	2-chlorotoluene	0.499	0.480	3.8	144	0.00	7.38
105	4-chlorotoluene	1.335	1.292	3.2	143	0.00	7.47
106	1,3,5-trimethylbenzene	1.553	1.498	3.5	144	0.00	7.44
107	tert-butylbenzene	1.463	1.404	4.0	145	0.00	7.67
108	1,2,4-trimethylbenzene	1.551	1.513	2.5	145	0.00	7.72
109	sec-butylbenzene	2.028	1.935	4.6	142	0.00	7.84
110	1,3-dichlorobenzene	0.974	0.918	5.7	141	0.00	7.94
111	p-isopropyltoluene	1.783	1.726	3.2	144	0.00	7.95
112	1,4-dichlorobenzene	1.007	0.940	6.7	140	0.00	8.01
113	1,2-dichlorobenzene	0.926	0.877	5.3	141	0.00	8.26
114	benzyl chloride	1.052	0.982	6.7	140	0.00	8.09
115	n-butylbenzene	0.798	0.755	5.4	139	0.00	8.24
116	1,2-dibromo-3-chloropropa	0.140	0.125	10.7	130	0.00	8.79
117	1,3,5-trichlorobenzene	0.630	0.613	2.7	146	0.00	8.91
118	hexachlorobutadiene	0.235	0.223	5.1	148	0.00	9.40
119	naphthalene	1.738	1.572	9.6	134	0.00	9.48
120	1,2,4-trichlorobenzene	0.555	0.530	4.5	145	0.00	9.32
121 m	1,2,3-trichlorobenzene	0.538	0.503	6.5	142	0.00	9.62
122	hexachloroethane	0.259	0.221	14.7	133	0.00	8.45
123	2-methylnaphthalene	0.824	0.648	21.4#	122	0.00	10.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192542.D M1X8342.M Wed Dec 22 04:14:00 2021

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8367-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193138.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kr...x8367-rush\1x193138.d Vial: 1
Acq On : 21 Dec 2021 11:43 pm Operator: brittank
Sample : cc8342-50 Inst : ACC-VOA-MSX
Misc : MS55615, V1X8367,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	131	0.00	2.54
2		ethanol	0.057	0.073	-28.1#	177	0.00	2.03
3		tertiary butyl alcohol	0.717	0.763	-6.4	142	0.00	2.59
4		1,4-dioxane	0.060	0.068	-13.3	141	0.01	4.50
5	I	pentafluorobenzene	1.000	1.000	0.0	154	0.00	3.62
6		chlorodifluoromethane	0.395	0.401	-1.5	156	-0.01	1.32
7		dichlorodifluoromethane	0.370	0.360	2.7	148	-0.01	1.31
8		chloromethane	0.426	0.400	6.1	151	-0.01	1.44
9		vinyl chloride	0.378	0.328	13.2	137	0.00	1.51
10		bromomethane	0.194	0.190	2.1	171	0.00	1.73
11		chloroethane	0.174	0.181	-4.0	161	0.00	1.80
12		trichlorofluoromethane	0.513	0.525	-2.3	156	0.00	1.95
13		1,3-butadiene	0.328	0.267	18.6	122	0.00	1.54
14		ethyl ether	0.131	0.138	-5.3	158	0.00	2.11
15		acrolein	0.055	0.061	-10.9	156	0.00	2.20
16		1,1-dichloroethene	0.258	0.269	-4.3	155	0.00	2.27
17		freon 113	0.307	0.308	-0.3	153	0.00	2.27
18		acetone	0.034	0.034	0.0	168	0.00	2.28
19		acetonitrile	0.047	0.049	-4.3	157	0.00	2.45
20		iodomethane	0.328	0.336	-2.4	149	0.00	2.38
21		carbon disulfide	0.719	0.695	3.3	147	0.00	2.42
22		methylene chloride	0.257	0.250	2.7	153	0.00	2.57
23		methyl acetate	0.309	0.318	-2.9	154	0.00	2.47
24		methyl tert butyl ether	0.751	0.782	-4.1	160	0.00	2.71
25		acrylonitrile	0.138	0.139	-0.7	150	0.00	2.70
26		trans-1,2-dichloroethene	0.274	0.281	-2.6	154	0.00	2.73
27		hexane	0.566	0.506	10.6	133	0.00	2.89
28		di-isopropyl ether	0.949	1.126	-18.7	177	0.00	2.98
29		2-butanone	0.036	0.034	5.6	148	0.00	3.31
30		1,1-dichloroethane	0.531	0.552	-4.0	158	0.00	2.99
31		chloroprene	0.509	0.557	-9.4	165	0.00	3.03
32		vinyl acetate	0.056	0.055	1.8	138	0.00	2.97
33		ethyl tert-butyl ether	0.888	0.983	-10.7	165	0.00	3.20
34		ethyl acetate	0.060	0.066	-10.0	165	0.00	3.32
35		2,2-dichloropropane	0.439	0.453	-3.2	155	0.00	3.34
36		cis-1,2-dichloroethene	0.294	0.296	-0.7	156	0.00	3.33
37		methyl acrylate	0.398	0.408	-2.5	153	0.00	3.36
38		propionitrile	0.054	0.054	0.0	150	0.00	3.35
39		tert-butyl formate	0.225	0.288	-28.0#	181	0.00	3.54
40		bromochloromethane	0.146	0.159	-8.9	170	0.00	3.48
41		tetrahydrofuran	0.120	0.114	5.0	155	0.00	3.49

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8367-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193138.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42		chloroform	0.513	0.531	-3.5	165	0.00	3.53
43	S	dibromofluoromethane (s)	0.504	0.492	2.4	153	0.00	3.63
44		methacrylonitrile	0.122	0.124	-1.6	149	0.00	3.45
45		1,1,1-trichloroethane	0.483	0.522	-8.1	159	0.00	3.65
46		cyclohexane	0.381	0.412	-8.1	164	0.01	3.70
47	m	tert amyl alcohol	0.012	0.012	0.0	154	0.00	3.83
48		1,1-dichloropropene	0.397	0.418	-5.3	157	0.01	3.75
49		isobutyl alcohol	0.007	0.007	0.0	168	0.00	3.93
50		carbon tetrachloride	0.453	0.491	-8.4	159	0.01	3.75
51		isopropyl acetate	0.063	0.064	-1.6	152	0.00	3.85
52	I	1,4-difluorobenzene	1.000	1.000	0.0	154	0.00	4.12
53	S	1,2-dichloroethane-d4 (s)	0.428	0.422	1.4	155	0.00	3.85
54		iso-octane	0.765	0.794	-3.8	157	0.01	3.93
55		epichlorohydrin	0.027	0.027	0.0	150	0.01	4.85
56		n-butyl alcohol	0.005	0.006	-20.0	169	0.00	4.17
57		benzene	0.695	0.738	-6.2	156	0.00	3.87
58		tert-amyl methyl ether	0.552	0.567	-2.7	153	0.01	3.93
59		heptane	0.142	0.155	-9.2	165	0.00	4.03
60		1,2-dichloroethane	0.318	0.328	-3.1	167	0.01	3.90
61		trichloroethene	0.234	0.243	-3.8	157	0.01	4.29
62	m	ethyl acrylate	0.298	0.303	-1.7	156	0.00	4.31
63		2-nitropropane	0.082	0.082	0.0	149	0.01	4.77
64		2-chloroethyl vinyl ether	0.133	0.151	-13.5	171	0.01	4.80
65		methyl methacrylate	0.056	0.054	3.6	149	0.01	4.47
66		1,2-dichloropropane	0.079	0.086	-8.9	160	0.00	4.46
67		dibromomethane	0.127	0.130	-2.4	159	0.01	4.53
68		methylcyclohexane	0.334	0.362	-8.4	162	0.01	4.46
69		bromodichloromethane	0.256	0.268	-4.7	161	0.02	4.63
70		cis-1,3-dichloropropene	0.291	0.314	-7.9	161	0.01	4.93
71		4-methyl-2-pentanone	0.086	0.086	0.0	148	0.01	5.01
72		3-methyl-1-butanol	0.003	0.004	-33.3#	173	0.00	5.03
73	I	chlorobenzene-d5	1.000	1.000	0.0	151	0.01	6.21
74	S	toluene-d8 (s)	1.216	1.211	0.4	151	0.01	5.12
75		toluene	0.455	0.487	-7.0	153	0.01	5.17
76		trans-1,3-dichloropropene	0.286	0.314	-9.8	158	0.01	5.32
77		ethyl methacrylate	0.246	0.250	-1.6	148	0.02	5.34
78		1,1,2-trichloroethane	0.150	0.156	-4.0	157	0.01	5.47
79		tetrachloroethene	0.195	0.208	-6.7	158	0.01	5.55
80		1,3-dichloropropane	0.288	0.307	-6.6	160	0.02	5.60
81		2-hexanone	0.092	0.086	6.5	141	0.02	5.61
82		butyl acetate	0.158	0.156	1.3	147	0.02	5.69
83		dibromochloromethane	0.224	0.250	-11.6	159	0.02	5.76
84		1,2-dibromoethane	0.205	0.215	-4.9	156	0.02	5.87
85	m	n-butyl ether	0.859	0.935	-8.8	157	0.02	6.28
86		chlorobenzene	0.533	0.571	-7.1	155	0.02	6.23
87		1,1,1,2-tetrachloroethane	0.210	0.231	-10.0	159	0.02	6.29
88		ethylbenzene	0.921	0.940	-2.1	150	0.02	6.30
89		m,p-xylene	0.352	0.374	-6.3	150	0.02	6.40
90		o-xylene	0.715	0.728	-1.8	148	0.02	6.70
91		styrene	0.567	0.597	-5.3	151	0.02	6.72
92		butyl acrylate	0.442	0.466	-5.4	153	0.01	6.63
93		n-amyl acetate	0.150	0.147	2.0	145	0.02	6.82
94		bromoform	0.164	0.173	-5.5	150	0.02	6.87
95		isopropylbenzene	0.910	0.937	-3.0	149	0.02	6.99
96		cis-1,4-dichloro-2-butene	0.102	0.102	0.0	145	0.02	7.03
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	146	0.02	8.00
98	S	4-bromofluorobenzene (s)	0.994	0.995	-0.1	149	0.02	7.14

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V1X8367-CC8342
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 1X193138.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	bromobenzene	0.523	0.568	-8.6	152	0.02	7.25
100	1,1,2,2-tetrachloroethane	0.522	0.524	-0.4	143	0.02	7.23
101	trans-1,4-dichloro-2-bute	0.199	0.217	-9.0	152	0.02	7.26
102	1,2,3-trichloropropane	0.165	0.164	0.6	144	0.02	7.28
103	n-propylbenzene	2.288	2.404	-5.1	148	0.02	7.32
104	2-chlorotoluene	0.499	0.525	-5.2	150	0.02	7.39
105	4-chlorotoluene	1.335	1.391	-4.2	149	0.02	7.48
106	1,3,5-trimethylbenzene	1.553	1.628	-4.8	148	0.02	7.45
107	tert-butylbenzene	1.463	1.542	-5.4	150	0.02	7.69
108	1,2,4-trimethylbenzene	1.551	1.621	-4.5	147	0.02	7.73
109	sec-butylbenzene	2.028	2.140	-5.5	146	0.02	7.85
110	1,3-dichlorobenzene	0.974	1.004	-3.1	147	0.02	7.95
111	p-isopropyltoluene	1.783	1.915	-7.4	146	0.01	7.96
112	1,4-dichlorobenzene	1.007	1.014	-0.7	145	0.01	8.02
113	1,2-dichlorobenzene	0.926	0.947	-2.3	146	0.02	8.27
114	benzyl chloride	1.052	1.003	4.7	132	0.02	8.10
115	n-butylbenzene	0.798	0.833	-4.4	143	0.01	8.25
116	1,2-dibromo-3-chloropropa	0.140	0.131	6.4	128	0.02	8.80
117	1,3,5-trichlorobenzene	0.630	0.676	-7.3	149	0.02	8.92
118	hexachlorobutadiene	0.235	0.252	-7.2	149	0.02	9.41
119	naphthalene	1.738	1.643	5.5	136	0.01	9.49
120	1,2,4-trichlorobenzene	0.555	0.575	-3.6	144	0.02	9.33
121 m	1,2,3-trichlorobenzene	0.538	0.540	-0.4	143	0.02	9.63
122	hexachloroethane	0.259	0.261	-0.8	138	0.02	8.46
123	2-methylnaphthalene	0.824	0.712	13.6	124	0.02	10.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192544.D M1X8342.M Wed Dec 22 10:57:20 2021

Initial Calibration Summary

Job Number: JD36624 **Sample:** V2D8694-ICC8694
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2D199720.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report MS2D

Method : C:\msdchem\1\METHODS\M2D8694.M (RTE Integrator)
Title : SW-846 Method 8260C/D / EPA 624.1, DB624 60m x 0.2Thu Nov 18 15:34:03 2021
Last Update : Thu Nov 18 15:34:03 2021
Response via : Initial Calibration

Calibration Files
1 =2D199715.D 2 =2D199716.D 100 =2D199721.D 50 =2D199720.D
20 =2D199719.D 200 =2D199722.D 4 =2D199717.D 0.5 =2D199714.D
8 =2D199718.D 0.2 =2D199713.D = =

Compound	1	2	100	50	20	200	4	0.5	8	0.2	Avg	%RSD
1) I tert butyl alcohol-d9 ----------ISTD----------												
2) tertiary butyl alcohol	1.428	1.673	1.839	1.669	1.699	1.915	1.824		1.476		1.690	10.15
3) ethanol	0.188	0.182	0.155	0.146	0.160	0.154	0.162		0.151		0.162	9.22
4) 1,4-dioxane		0.068	0.095	0.089	0.097	0.098	0.098		0.089		0.091	11.63
5) I pentafluorobenzene ----------ISTD----------												
6) chlorodifluoromethane *This compound fails the initial calibration criteria.*	0.771	0.826	1.013	0.974	0.950	0.990	1.006	0.723	0.935		0.910	11.92
7) dichlorodifluoromethane	0.589	0.636	0.746	0.728	0.723	0.875	0.697		0.644		0.705	12.40
8) chloromethane	1.051	1.073	1.096	1.088	1.100	1.169	1.180	1.261	1.104	1.325	1.145	7.76
9) vinyl chloride	0.742	0.781	0.846	0.832	0.839	0.894	0.889	0.839	0.834	0.776	0.827	5.83
10) 1,3-butadiene	0.781	0.983	0.877	0.881	0.917	0.839	1.045	0.741	0.964		0.892	10.92
11) bromomethane	0.474	0.455	0.433	0.428	0.426	0.453	0.488	0.589	0.445		0.466	10.86
12) chloroethane	0.393	0.412	0.402	0.398	0.403	0.428	0.452	0.394	0.401		0.409	4.69
13) trichlorofluoromethane	0.720	0.838	0.871	0.839	0.853	0.937	0.837	0.718	0.792		0.823	8.53
14) ethyl ether	0.254	0.266	0.277	0.269	0.278	0.264	0.292	0.211	0.268		0.264	8.52
15) acrolein	0.113	0.144	0.125	0.125	0.124	0.122	0.137		0.123		0.127	7.59
16) 1,1-dichloroethene	0.458	0.516	0.488	0.493	0.500	0.477	0.538	0.435	0.491		0.488	6.14
17) freon 113	0.261	0.398	0.433	0.425	0.442	0.447	0.458	0.271	0.436		0.397	19.19
18) acetone	0.061	0.073	0.067	0.075	0.080	0.072	0.084	0.063	0.063		0.071	11.40
19) acetonitrile		0.079	0.076	0.078	0.080	0.072	0.085		0.072		0.077	5.61
20) iodomethane	0.830	0.972	1.035	1.020	1.013	1.030	1.070	0.763	0.997		0.970	10.65
21) carbon disulfide	1.439	1.684	1.704	1.697	1.713	1.717	1.898	1.390	1.715	1.577	1.653	8.97
22) methylene chloride	0.606	0.601	0.577	0.569	0.581	0.559	0.640	0.568	0.556		0.584	4.67
23) methyl acetate												

Initial Calibration Summary

Job Number: JD36624 **Sample:** V2D8694-ICC8694
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2D199720.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

0.540 0.456 0.484 0.484 0.495 0.463 0.528 0.447 0.487 6.80

24) methyl tert butyl ether
1.276 1.389 1.322 1.322 1.377 1.253 1.454 1.130 1.305 1.291 1.312 6.67

25) trans-1,2-dichloroethene
0.513 0.576 0.537 0.533 0.547 0.513 0.615 0.431 0.548 0.540 0.535 8.85

26) hexane
0.903 1.420 1.473 1.423 1.510 1.482 1.505 1.444 1.395 14.45

27) di-isopropyl ether
2.294 2.541 2.518 2.555 2.682 2.349 2.785 2.053 2.589 2.268 2.463 8.90

28) 2-butanone
0.036 0.043 0.047 0.048 0.049 0.048 0.049 0.046 0.046 9.37

29) 1,1-dichloroethane
1.052 1.201 1.270 1.236 1.277 1.233 1.344 0.951 1.234 1.060 1.186 10.38

30) chloroprene
0.972 1.092 1.100 1.065 1.104 1.068 1.206 0.761 1.104 1.052 11.87

31) acrylonitrile
0.244 0.250 0.288 0.283 0.286 0.279 0.261 0.258 0.269 6.51

32) vinyl acetate
0.074 0.094 0.086 0.092 0.083 0.075 0.084 0.084 9.16

33) ethyl tert-butyl ether
2.268 2.497 2.457 2.480 2.573 2.307 2.719 1.938 2.433 1.999 2.367 10.36

34) ethyl acetate
0.068 0.078 0.088 0.086 0.072 0.090 0.087 0.081 10.66

35) 2,2-dichloropropane
0.752 0.811 0.788 0.786 0.804 0.761 0.918 0.686 0.836 0.794 7.98

36) cis-1,2-dichloroethene
0.531 0.613 0.587 0.578 0.587 0.558 0.646 0.482 0.581 0.468 0.563 9.89

37) propionitrile
0.076 0.088 0.087 0.088 0.094 0.083 0.096 0.088 0.087 6.84

38) tert-butyl formate
0.467 0.532 0.546 0.506 0.532 0.502 0.580 0.379 0.526 0.508 11.32

39) bromochloromethane
0.260 0.299 0.299 0.290 0.305 0.290 0.323 0.248 0.280 0.288 7.94

40) tetrahydrofuran
0.174 0.158 0.159 0.177 0.148 0.198 0.155 0.167 10.43

41) chloroform
0.996 1.026 0.989 0.965 1.000 0.960 1.077 1.012 0.960 0.998 3.76

42) dibromofluoromethane (s)
0.528 0.538 0.547 0.538 0.542 0.541 0.539 0.521 0.542 0.521 0.536 1.71

43) methacrylonitrile
0.147 0.201 0.191 0.195 0.197 0.183 0.179 0.185 9.88

44) 1,1,1-trichloroethane
0.696 0.897 0.925 0.889 0.897 0.930 0.938 0.634 0.863 0.729 0.840 13.15

45) cyclohexane
0.584 0.690 0.668 0.655 0.664 0.718 0.695 0.549 0.645 0.652 8.31

46) 1,1-dichloropropene
0.537 0.660 0.687 0.663 0.676 0.675 0.772 0.531 0.673 0.561 0.643 11.90

47) isobutyl alcohol
0.026 0.020 0.021 0.022 0.019 0.024 0.024 0.022 10.99

48) carbon tetrachloride
0.688 0.789 0.784 0.765 0.790 0.784 0.852 0.543 0.771 0.593 0.736 13.28

49) tert-amyl alcohol
0.016 0.019 0.019 0.019 0.020 0.023 0.018 0.019 10.10

50) I 1,4-difluorobenzene ----------ISTD----------

51) 1,2-dichloroethane-d4 (s)
0.426 0.433 0.431 0.431 0.428 0.412 0.436 0.420 0.440 0.410 0.427 2.30

52) benzene
1.253 1.322 1.271 1.254 1.314 1.195 1.431 1.034 1.290 1.150 1.251 8.58

53) iso-octane

Initial Calibration Summary

Job Number: JD36624 **Sample:** V2D8694-ICC8694
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2D199720.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
          1.436 1.968 1.950 1.921 2.040 1.942 2.060 1.402 2.040        1.862   13.75
54)  tert-amyl methyl ether
          1.099 1.064 0.950 0.966 1.037 0.862 1.135 0.887 1.009        1.001    9.29
55)  heptane
          0.305 0.379 0.374 0.356 0.369 0.373 0.394 0.269 0.374        0.355   11.42
56)  isopropyl acetate
               0.060 0.062 0.063 0.064 0.059 0.059       0.057        0.061    3.84
57)  1,2-dichloroethane
          0.609 0.600 0.567 0.564 0.600 0.522 0.656 0.533 0.564 0.636  0.585    7.31
58)  n-butyl alcohol
          0.009 0.010 0.010 0.010 0.011 0.010 0.010       0.009        0.010    4.37
59)  ethyl acrylate
               0.479 0.581 0.574 0.580 0.552 0.587       0.528        0.554    7.05
60)  trichloroethene
          0.323 0.367 0.382 0.367 0.379 0.371 0.407 0.284 0.365 0.346  0.359    9.57
61)  2-nitropropane
               0.104 0.089 0.087 0.089 0.086 0.105       0.088        0.093    8.68
62)  2-chloroethyl vinyl ether
          0.234 0.248 0.255 0.260 0.272 0.236 0.288 0.194 0.260 0.197  0.244   12.37
63)  methyl methacrylate
          0.154 0.157 0.198 0.191 0.194 0.190 0.207       0.193        0.186   10.37
64)  1,2-dichloropropane
          0.410 0.444 0.448 0.447 0.460 0.414 0.508 0.379 0.455 0.428  0.439    7.89
65)  dibromomethane
          0.214 0.232 0.228 0.224 0.233 0.220 0.247 0.203 0.222 0.244  0.227    5.86
66)  methylcyclohexane
          0.369 0.595 0.591 0.585 0.597 0.581 0.617       0.592        0.566   14.17
67)  bromodichloromethane
          0.476 0.479 0.524 0.508 0.522 0.503 0.550 0.375 0.496 0.461  0.489    9.80
68)  epichlorohydrin
               0.047 0.043 0.043 0.044 0.043 0.047       0.042        0.044    4.04
69)  cis-1,3-dichloropropene
          0.527 0.573 0.619 0.603 0.629 0.590 0.663 0.468 0.584 0.477  0.573   11.17
70)  4-methyl-2-pentanone
          0.156 0.163 0.166 0.169 0.177 0.155 0.190 0.144 0.165 0.134  0.162    9.79
71)  3-methyl-1-butanol
          0.016 0.019 0.017 0.017 0.018 0.016 0.020 0.014 0.018        0.017    9.51

72) I   chlorobenzene-d5      ----------------ISTD---------------------
73)  toluene-d8 (s)
          1.175 1.161 1.100 1.106 1.124 1.085 1.138 1.167 1.151 1.159  1.137    2.76
74)  toluene
          0.695 0.755 0.756 0.743 0.773 0.732 0.839 0.616 0.767 0.655  0.733    8.68
75)  trans-1,3-dichloropropene
          0.455 0.488 0.512 0.502 0.513 0.486 0.510 0.374 0.480 0.400  0.472   10.26
76)  ethyl methacrylate
               0.284 0.370 0.367 0.369 0.356 0.358       0.322        0.346    9.28
77)  1,1,2-trichloroethane
          0.235 0.252 0.245 0.242 0.252 0.230 0.272 0.194 0.249 0.224  0.240    8.71
78)  tetrachloroethene
          0.270 0.319 0.278 0.279 0.287 0.265 0.330 0.266 0.297 0.218  0.281   11.09
79)  1,3-dichloropropane
          0.470 0.486 0.455 0.463 0.490 0.425 0.537 0.368 0.484 0.437  0.461    9.80
80)  2-hexanone
          0.140 0.142 0.141 0.148 0.160 0.137 0.171       0.148        0.148    8.04
81)  butyl acetate
          0.300 0.295 0.292 0.294 0.308 0.282 0.312       0.307        0.299    3.43
82)  dibromochloromethane
          0.371 0.401 0.377 0.372 0.381 0.363 0.398 0.290 0.363 0.447  0.376   10.46
83)  1,2-dibromoethane
```

Initial Calibration Summary

Job Number: JD36624 **Sample:** V2D8694-ICC8694
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2D199720.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
           0.312 0.325 0.327 0.321 0.330 0.315 0.354 0.244 0.321        0.317    9.44
 84)  n-butyl ether
           1.978 2.181 2.015 2.042 2.192 1.859 2.371 1.759 2.173 1.985  2.055    8.70
 85)  chlorobenzene
           0.816 0.891 0.911 0.890 0.912 0.875 0.983 0.759 0.893 0.887  0.882    6.73
 86)  1,1,1,2-tetrachloroethane
           0.354 0.347 0.348 0.352 0.365 0.339 0.384 0.263 0.353 0.319  0.342    9.48
 87)  ethylbenzene
           1.396 1.517 1.401 1.419 1.514 1.336 1.695 1.254 1.542 1.485  1.456    8.44
 88)  m,p-xylene
           1.155 1.262 1.095 1.117 1.192 1.030 1.363 1.004 1.230 1.007  1.146   10.33
 89)  o-xylene
           0.579 0.650 0.582 0.593 0.627 0.551 0.701 0.561 0.641 0.575  0.606    7.79
 90)  styrene
           0.860 0.998 0.933 0.942 1.019 0.873 1.114 0.727 1.009 0.841  0.931   11.86
 91)  butyl acrylate
           0.892 0.918 0.968 0.968 0.993 0.928 0.986       0.906        0.945    4.08
 92)  n-amyl acetate
           0.175 0.208 0.212 0.214 0.227 0.207 0.249       0.218        0.214    9.73
 93)  bromoform
           0.249 0.258 0.258 0.255 0.263 0.253 0.277 0.257 0.249        0.258    3.28
 94)  isopropylbenzene
           1.432 1.654 1.537 1.554 1.639 1.466 1.805 1.313 1.678 1.498  1.558    9.07
 95)  cis-1,4-dichloro-2-butene
           0.093 0.094 0.131 0.128 0.125 0.129 0.111       0.113        0.115   13.31

 96) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 97)  4-bromofluorobenzene (s)
           1.026 1.040 1.085 1.088 1.071 1.123 1.054 1.019 1.060 1.009  1.057    3.35
 98)  bromobenzene
           0.830 0.910 0.967 0.961 0.984 0.925 1.007 0.806 0.900 0.906  0.920    7.02
 99)  1,1,2,2-tetrachloroethane
           0.740 0.716 0.906 0.879 0.881 0.882 0.883 0.670 0.801 0.739  0.810   10.73
100)  trans-1,4-dichloro-2-butene
           0.219 0.234 0.325 0.326 0.319 0.312 0.302       0.266        0.288   14.78
101)  1,2,3-trichloropropane
           0.233 0.211 0.223 0.220 0.236 0.218 0.247       0.217        0.226    5.27
102)  n-propylbenzene
           3.616 4.049 4.197 4.149 4.307 4.060 4.636 3.395 4.218 3.574  4.020    9.47
103)  2-chlorotoluene
           0.710 0.830 0.896 0.887 0.910 0.885 0.952 0.617 0.862 0.721  0.827   13.03
104)  4-chlorotoluene
           2.408 2.659 2.591 2.544 2.653 2.523 2.866 2.296 2.584 2.611  2.573    5.92
105)  1,3,5-trimethylbenzene
           2.658 2.783 2.945 2.917 3.012 2.861 3.224 2.543 2.965 2.590  2.850    7.36
106)  tert-butylbenzene
           2.136 2.505 2.677 2.631 2.658 2.582 2.802 2.110 2.569 1.962  2.463   11.61
107)  1,2,4-trimethylbenzene
           2.775 3.025 3.048 3.033 3.152 2.905 3.451 2.487 3.105 2.795  2.978    8.68
108)  sec-butylbenzene
           3.383 3.714 4.010 3.966 4.091 3.860 4.369 3.109 4.004 3.515  3.802    9.86
109)  1,3-dichlorobenzene
           1.705 1.862 1.747 1.739 1.864 1.661 1.997 1.698 1.839 1.843  1.795    5.74
110)  p-isopropyltoluene
           2.831 3.217 3.297 3.276 3.407 3.155 3.686 2.657 3.336 2.663  3.152   10.64
111)  1,2,3-trimethylbenzene
           2.805 2.983 3.068 3.043 3.154 2.930 3.374 2.480 3.016 2.793  2.965    8.06
112)  1,4-dichlorobenzene
           1.639 1.767 1.843 1.790 1.852 1.780 1.917 1.582 1.741 1.968  1.788    6.55
113)  1,2-dichlorobenzene
```

Initial Calibration Summary

Job Number: JD36624 **Sample:** V2D8694-ICC8694
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2D199720.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
           1.568 1.727 1.833 1.829 1.889 1.755 1.962 1.330 1.791 1.662  1.735   10.44
114)  benzyl chloride
           1.674 1.735 1.975 1.961 2.025 1.938 1.968 1.547 1.802 1.706  1.833    8.84
115)  n-butylbenzene
           1.493 1.654 1.825 1.797 1.830 1.750 1.879 1.242 1.738 1.325  1.653   13.55
116)  1,2-dibromo-3-chloropropane
           0.152 0.187 0.233 0.220 0.218 0.232 0.203       0.195        0.205   13.21
117)  1,3,5-trichlorobenzene
           1.276 1.347 1.558 1.555 1.586 1.437 1.573 1.088 1.452 1.232  1.410   12.05
118)  hexachlorobutadiene
           0.562 0.577 0.604 0.612 0.617 0.576 0.653 0.384 0.615 0.456  0.566   14.60
119)  naphthalene
           2.469 2.440 2.889 2.934 2.931 2.721 2.899 2.255 2.692 2.617  2.685    8.84
120)  1,2,4-trichlorobenzene
           1.124 1.177 1.396 1.412 1.411 1.296 1.390 1.066 1.305 1.305  1.288    9.72
121)  1,2,3-trichlorobenzene
           0.939 1.018 1.225 1.227 1.217 1.147 1.143 0.859 1.098 1.218  1.109   11.76
122)  hexachloroethane
           0.427 0.463 0.599 0.574 0.562 0.580 0.592       0.538        0.542   11.73
123)  2-methylnaphthalene
                 1.201 1.739 1.703 1.641 1.708 1.424       1.315        1.533   14.17
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M2D8694.M         Thu Nov 18 15:35:24 2021   GCMS2D
```

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2D8694-ICV8694
Lab FileID: 2D199725.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2D8694\2D199725.D Vial: 16
Acq On : 18 Nov 2021 1:06 am Operator: jons2
Sample : icv8694-50 Inst : MS2D
Misc : MS54720,V2D8694,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2D8694.M (RTE Integrator)
Title : SW-846 Method 8260C/D / EPA 624.1, DB624 60m x 0.2Thu Nov 18 15:34:03 2021
Last Update : Thu Nov 18 15:34:03 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	94	0.00	7.03
2	tertiary butyl alcohol	1.690	1.647	2.5	93	0.00	7.16
3	ethanol	0.162	0.143	11.7	92	0.00	5.70
4	1,4-dioxane	0.091	0.086	5.5	91	0.01	11.81
5 I	pentafluorobenzene	1.000	1.000	0.0	99	0.00	9.72
6	chlorodifluoromethane		----------NA----------				
7	dichlorodifluoromethane	0.705	0.753	-6.8	102	0.00	3.69
8	chloromethane	1.145	1.213	-5.9	110	0.00	4.06
9	vinyl chloride	0.827	0.992	-20.0	118	0.00	4.27
10	1,3-butadiene	0.892	1.007	-12.9	113	0.00	4.30
11	bromomethane	0.466	0.502	-7.7	116	0.00	4.87
12	chloroethane	0.409	0.435	-6.4	108	0.01	5.02
13	trichlorofluoromethane	0.823	0.915	-11.2	108	0.00	5.49
14	ethyl ether	0.264	0.285	-8.0	105	0.00	5.89
15	acrolein	0.127	0.127	0.0	100	0.00	6.12
16	1,1-dichloroethene	0.488	0.497	-1.8	100	0.00	6.31
17	freon 113	0.397	0.428	-7.8	100	0.00	6.32
18	acetone	0.071	0.088	-23.9	116	0.00	6.35
19	acetonitrile	0.077	0.067	13.0	84	0.00	6.79
20	iodomethane	0.970	1.056	-8.9	102	0.00	6.57
21	carbon disulfide	1.653	1.723	-4.2	100	0.00	6.71
22	methylene chloride	0.584	0.560	4.1	97	0.00	7.05
23	methyl acetate	0.487	0.423	13.1	86	0.00	6.86
24	methyl tert butyl ether	1.312	1.338	-2.0	100	0.00	7.47
25	trans-1,2-dichloroethene	0.535	0.549	-2.6	102	0.00	7.48
26	hexane	1.395	1.311	6.0	91	0.00	7.89
27	di-isopropyl ether	2.463	2.442	0.9	95	0.00	8.19
28	2-butanone	0.046	0.054	-17.4	112	0.00	8.99
29	1,1-dichloroethane	1.186	1.289	-8.7	103	0.00	8.13
30	chloroprene	1.052	1.186	-12.7	110	0.00	8.27
31	acrylonitrile	0.269	0.279	-3.7	98	0.00	7.41
32	vinyl acetate	0.084	0.086	-2.4	100	0.00	8.15
33	ethyl tert-butyl ether	2.367	2.346	0.9	94	0.00	8.74
34	ethyl acetate	0.081	0.091	-12.3	102	0.01	9.06
35	2,2-dichloropropane	0.794	0.794	0.0	100	0.00	9.04
36	cis-1,2-dichloroethene	0.563	0.597	-6.0	102	0.00	9.01
37	propionitrile	0.087	0.079	9.2	89	0.00	9.08
38	tert-butyl formate	0.508	0.522	-2.8	102	0.00	9.55
39	bromochloromethane	0.288	0.305	-5.9	104	0.00	9.38
40	tetrahydrofuran	0.167	0.157	6.0	98	0.00	9.45
41	chloroform	0.998	1.009	-1.1	103	0.00	9.47

Initial Calibration Verification

Job Number: JD36624 **Sample:** V2D8694-ICV8694
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2D199725.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	S	dibromofluoromethane (s)	0.536	0.551	-2.8	101	0.00	9.71
43		methacrylonitrile	0.185	0.203	-9.7	105	0.00	9.33
44		1,1,1-trichloroethane	0.840	0.922	-9.8	103	0.00	9.80
45		cyclohexane	0.652	0.819	-25.6	124	0.00	9.91
46		1,1-dichloropropene	0.643	0.721	-12.1	108	0.00	10.03
47		isobutyl alcohol	0.022	0.021	4.5	98	0.00	10.06
48		carbon tetrachloride	0.736	0.807	-9.6	104	0.00	10.06
49		tert-amyl alcohol	0.019	0.019	0.0	97	0.00	10.23
50	I	1,4-difluorobenzene	1.000	1.000	0.0	101	0.00	10.86
51	S	1,2-dichloroethane-d4 (s)	0.427	0.428	-0.2	100	0.00	10.24
52		benzene	1.251	1.288	-3.0	103	0.00	10.35
53		iso-octane	1.862	1.850	0.6	97	0.00	10.45
54		tert-amyl methyl ether	1.001	0.874	12.7	91	0.00	10.46
55		heptane	0.355	0.398	-12.1	113	0.00	10.68
56		isopropyl acetate	0.061	0.058	4.9	93	0.00	10.34
57		1,2-dichloroethane	0.585	0.565	3.4	101	0.00	10.35
58		n-butyl alcohol	0.010	0.009	10.0	94	0.00	11.04
59		ethyl acrylate	0.554	0.447	19.3	79	0.00	11.36
60		trichloroethene	0.359	0.388	-8.1	106	0.00	11.29
61		2-nitropropane	0.093	0.088	5.4	102	0.00	12.33
62		2-chloroethyl vinyl ether	0.244	0.284	-16.4	110	0.00	12.40
63		methyl methacrylate	0.186	0.192	-3.2	101	0.00	11.72
64		1,2-dichloropropane	0.439	0.441	-0.5	99	0.00	11.63
65		dibromomethane	0.227	0.219	3.5	98	0.00	11.82
66		methylcyclohexane	0.566	0.597	-5.5	103	0.00	11.62
67		bromodichloromethane	0.489	0.519	-6.1	103	0.00	12.01
68		epichlorohydrin	0.044	0.044	0.0	102	0.00	12.52
69		cis-1,3-dichloropropene	0.573	0.608	-6.1	101	0.00	12.66
70		4-methyl-2-pentanone	0.162	0.168	-3.7	100	0.00	12.85
71		3-methyl-1-butanol	0.017	0.016	5.9	93	0.00	12.88
72	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	15.11
73	S	toluene-d8 (s)	1.137	1.105	2.8	100	0.00	13.08
74		toluene	0.733	0.777	-6.0	105	0.00	13.18
75		trans-1,3-dichloropropene	0.472	0.510	-8.1	102	0.00	13.45
76		ethyl methacrylate	0.346	0.370	-6.9	101	0.00	13.52
77		1,1,2-trichloroethane	0.240	0.249	-3.8	103	0.00	13.72
78		tetrachloroethene	0.281	0.350	-24.6	125	0.00	13.97
79		1,3-dichloropropane	0.461	0.472	-2.4	102	0.00	13.97
80		2-hexanone	0.148	0.155	-4.7	105	0.00	14.03
81		butyl acetate	0.299	0.287	4.0	98	0.00	14.17
82		dibromochloromethane	0.376	0.378	-0.5	102	0.00	14.30
83		1,2-dibromoethane	0.317	0.327	-3.2	102	0.00	14.49
84	m	n-butyl ether	2.055	1.685	18.0	82	0.00	15.19
85		chlorobenzene	0.882	0.924	-4.8	104	0.00	15.16
86		1,1,1,2-tetrachloroethane	0.342	0.361	-5.6	102	0.00	15.24
87		ethylbenzene	1.456	1.487	-2.1	105	0.00	15.27
88		m,p-xylene	1.146	1.167	-1.8	104	0.00	15.42
89		o-xylene	0.606	0.608	-0.3	102	0.00	15.96
90		styrene	0.931	0.980	-5.3	104	0.00	15.97
91		butyl acrylate	0.945	0.898	5.0	93	0.00	15.81
92		n-amyl acetate	0.214	0.197	7.9	92	0.00	16.10
93		bromoform	0.258	0.263	-1.9	103	0.00	16.26
94		isopropylbenzene	1.558	1.632	-4.7	105	0.00	16.43
95		cis-1,4-dichloro-2-butene	0.115	0.124	-7.8	97	0.00	16.49
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	17.97
97	S	4-bromofluorobenzene (s)	1.057	1.085	-2.6	100	0.00	16.64
98		bromobenzene	0.920	0.979	-6.4	102	0.00	16.86

Initial Calibration Verification

Job Number: JD36624 **Sample:** V2D8694-ICV8694
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2D199725.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	1,1,2,2-tetrachloroethane	0.810	0.897	-10.7	102	0.00	16.78
100	trans-1,4-dichloro-2-bute	0.288	0.319	-10.8	98	0.00	16.84
101	1,2,3-trichloropropane	0.226	0.226	0.0	103	0.00	16.86
102	n-propylbenzene	4.020	4.348	-8.2	105	0.00	16.94
103	2-chlorotoluene	0.827	0.911	-10.2	103	0.00	17.07
104	4-chlorotoluene	2.573	2.611	-1.5	103	0.00	17.19
105	1,3,5-trimethylbenzene	2.850	3.020	-6.0	104	0.00	17.13
106	tert-butylbenzene	2.463	2.771	-12.5	106	0.00	17.51
107	1,2,4-trimethylbenzene	2.978	3.058	-2.7	101	0.00	17.57
108	sec-butylbenzene	3.802	4.187	-10.1	106	0.00	17.76
109	1,3-dichlorobenzene	1.795	1.805	-0.6	104	0.00	17.91
110	p-isopropyltoluene	3.152	3.390	-7.6	104	0.00	17.89
111	1,2,3-trimethylbenzene	----------NA----------					
112	1,4-dichlorobenzene	1.788	1.858	-3.9	104	0.00	18.00
113	1,2-dichlorobenzene	1.735	1.883	-8.5	103	0.00	18.39
114	benzyl chloride	1.833	1.785	2.6	91	0.00	18.12
115	n-butylbenzene	1.653	1.901	-15.0	106	0.00	18.32
116	1,2-dibromo-3-chloropropa	0.205	0.227	-10.7	103	0.00	19.12
117	1,3,5-trichlorobenzene	1.410	1.613	-14.4	104	0.00	19.31
118	hexachlorobutadiene	0.566	0.637	-12.5	104	0.00	20.00
119	naphthalene	2.685	2.904	-8.2	99	0.00	20.12
120	1,2,4-trichlorobenzene	1.288	1.436	-11.5	102	0.00	19.87
121 m	1,2,3-trichlorobenzene	1.109	1.237	-11.5	101	0.00	20.33
122	hexachloroethane	0.542	0.606	-11.8	106	0.00	18.66
123	2-methylnaphthalene	1.533	1.690	-10.2	99	0.00	21.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D199720.D M2D8694.M Thu Nov 18 15:35:01 2021 GCMS2D

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2D8694-ICV8694
Lab FileID: 2D199726.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2D8694\2D199726.D Vial: 17
Acq On : 18 Nov 2021 1:35 am Operator: jons2
Sample : icv8694-50 Inst : MS2D
Misc : MS54720,V2D8694,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2D8694.M (RTE Integrator)
Title : SW-846 Method 8260C/D / EPA 624.1, DB624 60m x 0.2Thu Nov 18 15:16:13 2021
Last Update : Thu Nov 18 15:16:13 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	107	-0.01	7.02
2		tertiary butyl alcohol		----------NA----------				
3		ethanol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	106	0.00	9.72
6		chlorodifluoromethane	0.910	1.277	-40.3#	139	-0.01	3.70
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		1,3-butadiene		----------NA----------				
11		bromomethane		----------NA----------				
12		chloroethane		----------NA----------				
13		trichlorofluoromethane		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		1,1-dichloroethene		----------NA----------				
17		freon 113		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile	0.077	0.084	-9.1	114	0.00	6.78
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		di-isopropyl ether		----------NA----------				
28		2-butanone		----------NA----------				
29		1,1-dichloroethane		----------NA----------				
30		chloroprene		----------NA----------				
31		acrylonitrile	0.269	0.340	-26.4	128	0.00	7.41
32		vinyl acetate		----------NA----------				
33		ethyl tert-butyl ether		----------NA----------				
34		ethyl acetate		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		propionitrile		----------NA----------				
38		tert-butyl formate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				
41		chloroform		----------NA----------				

Initial Calibration Verification

Job Number: JD36624 **Sample:** V2D8694-ICV8694
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2D199726.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	S	dibromofluoromethane (s)	0.536	0.537	-0.2	106	0.00	9.71
43		methacrylonitrile		----------NA----------				
44		1,1,1-trichloroethane		----------NA----------				
45		cyclohexane		----------NA----------				
46		1,1-dichloropropene		----------NA----------				
47		isobutyl alcohol		----------NA----------				
48		carbon tetrachloride		----------NA----------				
49		tert-amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	105	0.00	10.86
51	S	1,2-dichloroethane-d4 (s)	0.427	0.432	-1.2	105	0.00	10.24
52		benzene		----------NA----------				
53		iso-octane		----------NA----------				
54		tert-amyl methyl ether		----------NA----------				
55		heptane		----------NA----------				
56		isopropyl acetate		----------NA----------				
57		1,2-dichloroethane		----------NA----------				
58		n-butyl alcohol		----------NA----------				
59		ethyl acrylate		----------NA----------				
60		trichloroethene		----------NA----------				
61		2-nitropropane		----------NA----------				
62		2-chloroethyl vinyl ether		----------NA----------				
63		methyl methacrylate		----------NA----------				
64		1,2-dichloropropane		----------NA----------				
65		dibromomethane		----------NA----------				
66		methylcyclohexane		----------NA----------				
67		bromodichloromethane		----------NA----------				
68		epichlorohydrin		----------NA----------				
69		cis-1,3-dichloropropene		----------NA----------				
70		4-methyl-2-pentanone		----------NA----------				
71		3-methyl-1-butanol		----------NA----------				
72	I	chlorobenzene-d5	1.000	1.000	0.0	99	0.00	15.11
73	S	toluene-d8 (s)	1.137	1.184	-4.1	105	0.00	13.08
74		toluene		----------NA----------				
75		trans-1,3-dichloropropene		----------NA----------				
76		ethyl methacrylate		----------NA----------				
77		1,1,2-trichloroethane		----------NA----------				
78		tetrachloroethene	0.281	0.471	-67.6#	166	0.00	13.97
79		1,3-dichloropropane		----------NA----------				
80		2-hexanone		----------NA----------				
81		butyl acetate		----------NA----------				
82		dibromochloromethane		----------NA----------				
83		1,2-dibromoethane		----------NA----------				
84	m	n-butyl ether		----------NA----------				
85		chlorobenzene		----------NA----------				
86		1,1,1,2-tetrachloroethane		----------NA----------				
87		ethylbenzene		----------NA----------				
88		m,p-xylene		----------NA----------				
89		o-xylene		----------NA----------				
90		styrene		----------NA----------				
91		butyl acrylate		----------NA----------				
92		n-amyl acetate		----------NA----------				
93		bromoform		----------NA----------				
94		isopropylbenzene		----------NA----------				
95		cis-1,4-dichloro-2-butene		----------NA----------				
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	112	0.00	17.97
97	S	4-bromofluorobenzene (s)	1.057	1.028	2.7	106	0.00	16.64
98		bromobenzene		----------NA----------				

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2D8694-ICV8694
Lab FileID: 2D199726.D

99	1,1,2,2-tetrachloroethane	----------NA----------					
100	trans-1,4-dichloro-2-bute	----------NA----------					
101	1,2,3-trichloropropane	----------NA----------					
102	n-propylbenzene	----------NA----------					
103	2-chlorotoluene	----------NA----------					
104	4-chlorotoluene	----------NA----------					
105	1,3,5-trimethylbenzene	----------NA----------					
106	tert-butylbenzene	----------NA----------					
107	1,2,4-trimethylbenzene	----------NA----------					
108	sec-butylbenzene	----------NA----------					
109	1,3-dichlorobenzene	----------NA----------					
110	p-isopropyltoluene	----------NA----------					
111	1,2,3-trimethylbenzene	2.965	3.618	-22.0	133	0.00	18.03
112	1,4-dichlorobenzene	----------NA----------					
113	1,2-dichlorobenzene	----------NA----------					
114	benzyl chloride	----------NA----------					
115	n-butylbenzene	----------NA----------					
116	1,2-dibromo-3-chloropropa	----------NA----------					
117	1,3,5-trichlorobenzene	----------NA----------					
118	hexachlorobutadiene	----------NA----------					
119	naphthalene	----------NA----------					
120	1,2,4-trichlorobenzene	----------NA----------					
121 m	1,2,3-trichlorobenzene	----------NA----------					
122	hexachloroethane	----------NA----------					
123	2-methylnaphthalene	----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D199720.D M2D8694.M Thu Nov 18 15:33:17 2021 GCMS2D

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V2D8732-CC8694
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2D200523.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ke...21\v2d8732\2d200523.d Vial: 1
Acq On : 22 Dec 2021 8:30 am Operator: edwardd
Sample : cc8694-20 Inst : MS2D
Misc : MS55625,V2D8732,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2D8694.M (RTE Integrator)
Title : SW-846 Method 8260C/D / EPA 624.1, DB624 60m x 0.2Thu Nov 18 15:34:03 2021
Last Update : Thu Nov 18 15:34:03 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	66	0.03	7.06
2	tertiary butyl alcohol	1.690	1.511	10.6	59	0.01	7.18
3	ethanol	0.162	0.188	-16.0	77	0.02	5.71
4	1,4-dioxane	0.091	0.107	-17.6	72	0.03	11.83
5 I	pentafluorobenzene	1.000	1.000	0.0	81	0.02	9.74
6	chlorodifluoromethane	0.910	1.291	-41.9#	110	0.01	3.73
7	dichlorodifluoromethane	0.705	1.168	-65.7#	131	0.02	3.71
8	chloromethane	1.145	1.746	-52.5#	129	0.00	4.06
9	vinyl chloride	0.827	1.156	-39.8#	112	0.00	4.28
10	1,3-butadiene	0.892	1.061	-18.9	94	0.01	4.31
11	bromomethane	0.466	0.591	-26.8#	112	0.02	4.88
12	chloroethane	0.409	0.557	-36.2#	112	0.02	5.03
13	trichlorofluoromethane	0.823	1.037	-26.0#	98	-0.02	5.47
14	ethyl ether	0.264	0.252	4.5	73	0.02	5.91
15	acrolein	0.127	0.102	19.7	66	0.02	6.14
16	1,1-dichloroethene	0.488	0.519	-6.4	84	0.02	6.33
17	freon 113	0.397	0.457	-15.1	84	0.02	6.34
18	acetone	0.071	0.067	5.6	68	0.02	6.36
19	acetonitrile	0.077	0.069	10.4	70	0.03	6.81
20	iodomethane	0.970	1.080	-11.3	86	0.02	6.59
21	carbon disulfide	1.653	1.904	-15.2	90	0.02	6.72
22	methylene chloride	0.584	0.627	-7.4	87	0.02	7.07
23	methyl acetate	0.487	0.408	16.2	67	0.02	6.88
24	methyl tert butyl ether	1.312	1.273	3.0	75	0.02	7.50
25	trans-1,2-dichloroethene	0.535	0.578	-8.0	86	0.02	7.51
26	hexane	1.395	1.378	1.2	74	0.03	7.91
27	di-isopropyl ether	2.463	2.974	-20.7#	90	0.02	8.21
28	2-butanone	0.046	0.042	8.7	70	0.04	9.02
29	1,1-dichloroethane	1.186	1.401	-18.1	89	0.03	8.15
30	chloroprene	1.052	1.195	-13.6	88	0.03	8.30
31	acrylonitrile	0.269	0.221	17.8	63	0.04	7.44
32	vinyl acetate	0.084	0.083	1.2	72	0.03	8.18
33	ethyl tert-butyl ether	2.367	2.658	-12.3	84	0.02	8.76
34	ethyl acetate	0.081	0.089	-9.9	84	0.03	9.08
35	2,2-dichloropropane	0.794	0.902	-13.6	91	0.02	9.06
36	cis-1,2-dichloroethene	0.563	0.640	-13.7	88	0.03	9.04
37	propionitrile	0.087	0.080	8.0	69	0.03	9.10
38	tert-butyl formate	0.508	0.644	-26.8#	98	0.02	9.57
39	bromochloromethane	0.288	0.298	-3.5	79	0.03	9.40
40	tetrahydrofuran	0.167	0.127	24.0#	58	0.04	9.49
41	chloroform	0.998	1.207	-20.9#	98	0.03	9.49

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V2D8732-CC8694
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2D200523.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	S	dibromofluoromethane (s)	0.536	0.588	-9.7	88	0.02	9.73
43		methacrylonitrile	0.185	0.161	13.0	67	0.03	9.35
44		1,1,1-trichloroethane	0.840	0.982	-16.9	89	0.03	9.83
45		cyclohexane	0.652	0.787	-20.7#	96	0.02	9.93
46		1,1-dichloropropene	0.643	0.728	-13.2	87	0.03	10.06
47		isobutyl alcohol	0.022	0.019	13.6	70	0.03	10.09
48		carbon tetrachloride	0.736	0.887	-20.5#	91	0.03	10.09
49		tert-amyl alcohol	0.019	0.015	21.1#	62	0.02	10.25
50	I	1,4-difluorobenzene	1.000	1.000	0.0	85	0.03	10.89
51	S	1,2-dichloroethane-d4 (s)	0.427	0.409	4.2	82	0.03	10.26
52		benzene	1.251	1.341	-7.2	87	0.03	10.38
53		iso-octane	1.862	2.012	-8.1	84	0.02	10.46
54		tert-amyl methyl ether	1.001	0.916	8.5	75	0.02	10.49
55		heptane	0.355	0.398	-12.1	92	0.02	10.70
56		isopropyl acetate	0.061	0.050	18.0	67	0.03	10.36
57		1,2-dichloroethane	0.585	0.570	2.6	81	0.02	10.37
58		n-butyl alcohol	0.010	0.008	20.0	63	0.03	11.07
59		ethyl acrylate	0.554	0.486	12.3	72	0.03	11.39
60		trichloroethene	0.359	0.377	-5.0	85	0.03	11.32
61		2-nitropropane	0.093	0.069	25.8#	66	0.03	12.36
62		2-chloroethyl vinyl ether	0.244	0.244	0.0	77	0.02	12.43
63		methyl methacrylate	0.186	0.162	12.9	71	0.03	11.74
64		1,2-dichloropropane	0.439	0.499	-13.7	93	0.02	11.65
65		dibromomethane	0.227	0.220	3.1	81	0.03	11.84
66		methylcyclohexane	0.566	0.633	-11.8	90	0.02	11.64
67		bromodichloromethane	0.489	0.535	-9.4	87	0.03	12.04
68		epichlorohydrin	0.044	0.036	18.2	70	0.02	12.54
69		cis-1,3-dichloropropene	0.573	0.607	-5.9	82	0.03	12.69
70		4-methyl-2-pentanone	0.162	0.155	4.3	75	0.03	12.87
71		3-methyl-1-butanol	0.017	0.014	17.6	67	0.03	12.91
72	I	chlorobenzene-d5	1.000	1.000	0.0	85	0.02	15.13
73	S	toluene-d8 (s)	1.137	1.154	-1.5	87	0.02	13.11
74		toluene	0.733	0.824	-12.4	90	0.03	13.20
75		trans-1,3-dichloropropene	0.472	0.494	-4.7	81	0.03	13.47
76		ethyl methacrylate	0.346	0.319	7.8	73	0.03	13.55
77		1,1,2-trichloroethane	0.240	0.248	-3.3	83	0.03	13.74
78		tetrachloroethene	0.281	0.314	-11.7	92	0.03	14.00
79		1,3-dichloropropane	0.461	0.471	-2.2	81	0.03	13.99
80		2-hexanone	0.148	0.140	5.4	74	0.03	14.05
81		butyl acetate	0.299	0.282	5.7	77	0.03	14.20
82		dibromochloromethane	0.376	0.386	-2.7	86	0.02	14.32
83		1,2-dibromoethane	0.317	0.294	7.3	76	0.03	14.52
84	m	n-butyl ether	2.055	2.433	-18.4	94	0.02	15.21
85		chlorobenzene	0.882	0.977	-10.8	91	0.02	15.18
86		1,1,1,2-tetrachloroethane	0.342	0.385	-12.6	89	0.02	15.27
87		ethylbenzene	1.456	1.614	-10.9	90	0.03	15.30
88		m,p-xylene	1.146	1.265	-10.4	90	0.02	15.44
89		o-xylene	0.606	0.682	-12.5	92	0.02	15.98
90		styrene	0.931	1.096	-17.7	91	0.02	15.99
91		butyl acrylate	0.945	0.930	1.6	79	0.03	15.84
92		n-amyl acetate	0.214	0.209	2.3	78	0.02	16.13
93		bromoform	0.258	0.249	3.5	80	0.02	16.28
94		isopropylbenzene	1.558	1.772	-13.7	91	0.02	16.45
95		cis-1,4-dichloro-2-butene	0.115	0.068	40.9#	46#	0.02	16.51
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.02	17.99
97	S	4-bromofluorobenzene (s)	1.057	0.881	16.7	87	0.02	16.67
98		bromobenzene	0.920	0.894	2.8	95	0.02	16.88

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V2D8732-CC8694
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2D200523.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	1,1,2,2-tetrachloroethane	0.810	0.680	16.0	81	0.02	16.80
100	trans-1,4-dichloro-2-bute	0.288	0.140	51.4#	46#	0.02	16.86
101	1,2,3-trichloropropane	0.226	0.177	21.7#	79	0.02	16.88
102	n-propylbenzene	4.020	3.911	2.7	96	0.02	16.96
103	2-chlorotoluene	0.827	0.832	-0.6	96	0.02	17.10
104	4-chlorotoluene	2.573	2.348	8.7	93	0.02	17.21
105	1,3,5-trimethylbenzene	2.850	2.660	6.7	93	0.02	17.15
106	tert-butylbenzene	2.463	2.381	3.3	94	0.02	17.54
107	1,2,4-trimethylbenzene	2.978	2.834	4.8	95	0.02	17.58
108	sec-butylbenzene	3.802	3.730	1.9	96	0.02	17.77
109	1,3-dichlorobenzene	1.795	1.776	1.1	100	0.02	17.93
110	p-isopropyltoluene	3.152	3.090	2.0	95	0.02	17.91
111	1,2,3-trimethylbenzene	2.965	2.822	4.8	94	0.02	18.05
112	1,4-dichlorobenzene	1.788	1.716	4.0	97	0.02	18.02
113	1,2-dichlorobenzene	1.735	1.777	-2.4	99	0.02	18.41
114	benzyl chloride	1.833	1.474	19.6	77	0.02	18.14
115	n-butylbenzene	1.653	1.700	-2.8	98	0.02	18.33
116	1,2-dibromo-3-chloropropa	0.205	0.155	24.4#	75	0.02	19.14
117	1,3,5-trichlorobenzene	1.410	1.600	-13.5	106	0.02	19.32
118	hexachlorobutadiene	0.566	0.609	-7.6	104	0.02	20.02
119	naphthalene	2.685	2.169	19.2	78	0.02	20.14
120	1,2,4-trichlorobenzene	1.288	1.282	0.5	96	0.02	19.89
121 m	1,2,3-trichlorobenzene	1.109	1.066	3.9	92	0.02	20.35
122	hexachloroethane	0.542	0.570	-5.2	107	0.02	18.67
123	2-methylnaphthalene	1.533	0.959	37.4#	61	0.02	21.17

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2D199719.D M2D8694.M Thu Dec 23 08:17:20 2021

Initial Calibration Summary

Job Number: JD36624 **Sample:** V2V3410-ICC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82666.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report MS2V

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 17:15:16 2021
Response via : Initial Calibration

Calibration Files
4 =2V82663.D 0.5 =2V82660.D 8 =2V82664.D 50 =2V82666.D
100 =2V82667.D 1 =2V82661.D 200 =2V82668.D 20 =2V82665.D
2 =2V82662.D 0.2 =2V82659.D = =

Compound	4	0.5	8	50	100	1	200	20	2	0.2	Avg	%RSD
1) I tert butyl alcohol-d9	----------ISTD----------											
2) ethanol	0.204	0.180	0.192	0.193	0.169	0.198	0.133	0.185	0.210		0.185	12.45
3) tertiary butyl alcohol	2.010	1.677	1.920	2.044	1.941	1.881	1.846	1.917	2.006		1.916	5.75
4) 1,4-dioxane	0.156		0.150	0.153	0.146	0.126	0.140	0.148	0.144		0.145	6.34
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	0.556		0.584	0.671	0.666	0.543	0.613	0.632	0.592		0.607	7.79
7) dichlorodifluoromethane	0.458		0.486	0.609	0.603	0.507	0.627	0.585	0.549		0.553	11.40
8) chloromethane	0.187	0.228	0.189	0.221	0.214	0.241	0.221	0.204	0.207		0.212	8.35
9) vinyl chloride	0.504	0.520	0.514	0.625	0.617	0.580	0.625	0.578	0.554	0.507	0.562	8.84
10) bromomethane	0.189		0.206	0.241	0.233		0.225	0.190			0.214	10.47
11) chloroethane	0.293		0.292	0.334	0.315	0.386	0.292	0.312	0.320		0.318	9.89
12) trichlorofluoromethane	0.629	0.594	0.668	0.815	0.802	0.700	0.775	0.770	0.720		0.719	10.85
13) 1,3-butadiene	0.498	0.449	0.496	0.583	0.578	0.489	0.524	0.550	0.546	0.613	0.532	9.51
14) ethyl ether	0.250		0.257	0.274	0.274	0.223	0.267	0.264	0.246		0.257	6.61
15) acrolein	0.115		0.112	0.118	0.119	0.097	0.114	0.116	0.111		0.113	6.28
16) freon 113	0.339		0.368	0.432	0.436		0.404	0.415	0.379		0.396	9.06
17) 1,1-dichloroethene	0.680		0.678	0.796	0.782	0.653	0.717	0.748	0.706		0.720	7.14
18) acetone	0.317		0.329	0.222	0.319	0.317	0.260	0.296	0.347		0.301	13.58
19) acetonitrile	0.099		0.091	0.088	0.089		0.082	0.089	0.111		0.093	10.05
20) iodomethane *This compound fails Initial Calibration criteria*	0.090		0.134	0.457	0.523	0.047	0.513	0.258	0.073		0.262	78.66
21) carbon disulfide	1.120	1.056	1.126	1.305	1.289	1.110	1.182	1.219	1.178	1.325	1.191	7.71
22) methylene chloride	0.472	0.486	0.468	0.499	0.495	0.503	0.470	0.490	0.488	0.640	0.501	10.01
23) methyl acetate												

0.595 0.599 0.565 0.566 0.673 0.540 0.549 0.622 0.589 7.42

24) methyl tert butyl ether
1.338 1.063 1.330 1.402 1.390 1.301 1.342 1.373 1.313 1.173 1.303 8.11

25) trans-1,2-dichloroethene
0.441 0.375 0.429 0.498 0.495 0.436 0.460 0.482 0.454 0.367 0.444 10.17

26) hexane
0.380 0.428 0.517 0.521 0.489 0.486 0.470 11.73

27) di-isopropyl ether
1.774 1.486 1.750 1.880 1.832 1.734 1.731 1.833 1.778 1.610 1.741 6.65

28) ethyl tert-butyl ether
1.673 1.399 1.670 1.801 1.776 1.678 1.724 1.750 1.692 1.450 1.661 8.01

29) 1,1-dichloroethane
0.862 0.675 0.859 0.955 0.934 0.816 0.869 0.933 0.886 0.732 0.852 10.53

30) chloroprene
0.708 0.726 0.837 0.821 0.670 0.747 0.797 0.738 0.756 7.65

31) acrylonitrile
0.247 0.261 0.269 0.271 0.223 0.261 0.267 0.244 0.255 6.40

32) vinyl acetate
0.106 0.105 0.118 0.114 0.089 0.114 0.113 0.096 0.107 9.24

33) ethyl acetate
0.111 0.123 0.116 0.118 0.089 0.111 0.116 0.098 0.110 10.37

34) 2-butanone
0.081 0.081 0.073 0.085 0.068 0.076 0.079 0.078 0.077 6.88

35) 2,2-dichloropropane
0.661 0.546 0.670 0.738 0.725 0.626 0.666 0.718 0.691 0.671 8.78

36) cis-1,2-dichloroethene
0.499 0.389 0.504 0.551 0.545 0.479 0.512 0.534 0.519 0.423 0.495 10.62

37) propionitrile
0.103 0.088 0.104 0.105 0.105 0.101 0.096 0.106 0.102 0.090 0.100 6.47

38) methyl acrylate
0.089 0.091 0.099 0.098 0.095 0.096 0.087 0.093 4.97

39) bromochloromethane
0.278 0.275 0.296 0.287 0.264 0.267 0.285 0.282 0.279 3.78

40) tetrahydrofuran
0.086 0.082 0.080 0.082 0.078 0.078 0.087 0.082 4.51

41) chloroform
0.842 0.845 0.843 0.902 0.893 0.903 0.837 0.869 0.919 0.872 3.68

42) dibromofluoromethane (s)
0.459 0.462 0.461 0.465 0.471 0.468 0.472 0.464 0.458 0.455 0.464 1.23

43) methacrylonitrile
0.235 0.236 0.241 0.245 0.219 0.236 0.244 0.232 0.236 3.55

44) 1,1,1-trichloroethane
0.713 0.619 0.714 0.803 0.797 0.662 0.744 0.770 0.761 0.646 0.723 8.82

45) cyclohexane
0.506 0.527 0.629 0.617 0.546 0.617 0.609 0.609 0.582 8.25

46) 1,1-dichloropropene
0.571 0.446 0.583 0.664 0.649 0.557 0.605 0.626 0.596 0.589 10.88

47) carbon tetrachloride
0.597 0.623 0.717 0.706 0.533 0.652 0.684 0.625 0.642 9.53

48) isobutyl alcohol
0.024 0.024 0.024 0.024 0.022 0.022 0.024 0.023 0.023 4.70

49) tert-amyl alcohol
0.037 0.036 0.034 0.034 0.031 0.035 0.038 0.035 7.35

50) I 1,4-difluorobenzene ----------ISTD----------

51) 1,2-dichloroethane-d4 (s)
0.315 0.324 0.320 0.317 0.322 0.324 0.325 0.325 0.316 0.318 0.321 1.15

52) n-butyl alcohol
0.018 0.018 0.018 0.018 0.017 0.017 0.019 0.018 0.018 3.65

53) benzene

```
      1.213 0.987 1.225 1.340 1.292 1.176 1.201 1.296 1.268 1.135  1.213    8.29
54)  tert-amyl methyl ether
      1.053 0.885 1.040 1.091 1.063 1.052 1.031 1.076 1.047 0.927  1.027    6.49
55)  iso-octane
      1.007       1.112 1.302 1.295       1.211 1.244 1.130        1.186    9.12
56)  heptane
      0.188       0.208 0.252 0.251       0.241 0.232 0.215        0.227   10.47
57)  isopropyl acetate
      0.092       0.092 0.093 0.094 0.076 0.090 0.093 0.083        0.089    7.10
58)  1,2-dichloroethane
      0.492 0.451 0.487 0.509 0.496 0.500 0.475 0.503 0.501 0.572  0.499    6.20
59)  trichloroethene
      0.329 0.266 0.336 0.379 0.375 0.310 0.351 0.361 0.352        0.340   10.39
60)  ethyl acrylate
      0.624 0.633 0.623 0.630 0.628 0.656 0.602 0.626 0.651        0.630    2.53
61)  2-nitropropane
      0.135       0.125 0.121 0.121       0.118 0.122 0.152        0.128    9.50
62)  2-chloroethyl vinyl ether
      0.177       0.192 0.226 0.229       0.220 0.214 0.156        0.202   13.70
63)  methyl methacrylate
      0.108       0.114 0.115 0.117 0.089 0.112 0.115 0.109        0.110    8.05
64)  1,2-dichloropropane
      0.355 0.261 0.361 0.387 0.378 0.332 0.362 0.373 0.355        0.351   10.61
65)  methylcyclohexane
      0.443       0.475 0.563 0.559       0.528 0.532 0.482        0.512    8.91
66)  dibromomethane
      0.228 0.184 0.231 0.242 0.238 0.212 0.231 0.235 0.233 0.238  0.227    7.64
67)  bromodichloromethane
      0.443 0.374 0.438 0.477 0.473 0.436 0.458 0.463 0.434 0.506  0.450    7.76
68)  epichlorohydrin
      0.047 0.051 0.048 0.050 0.053 0.050 0.050 0.048 0.049 0.046  0.049    4.04
69)  cis-1,3-dichloropropene
      0.526 0.409 0.534 0.583 0.573 0.505 0.556 0.560 0.519        0.530    9.83
70)  4-methyl-2-pentanone
      0.190 0.145 0.189 0.194 0.192 0.178 0.180 0.191 0.185 0.153  0.180    9.50
71)  3-methyl-1-butanol
      0.014       0.014 0.015 0.015 0.013 0.014 0.015 0.013        0.014    5.76

72) I   chlorobenzene-d5      ----------------ISTD---------------------
73)  toluene-d8 (s)
      1.294 1.282 1.271 1.238 1.218 1.291 1.195 1.255 1.296 1.299  1.264    2.87
74)  toluene
      0.900 0.728 0.885 0.950 0.919 0.857 0.852 0.928 0.945 0.856  0.882    7.41
75)  ethyl methacrylate
      0.544 0.479 0.537 0.549 0.541 0.514 0.514 0.549 0.553 0.547  0.533    4.39
76)  trans-1,3-dichloropropene
      0.531 0.433 0.539 0.574 0.563 0.520 0.539 0.556 0.535 0.405  0.519   10.72
77)  1,1,2-trichloroethane
      0.300 0.240 0.298 0.305 0.297 0.277 0.286 0.302 0.313 0.269  0.289    7.45
78)  2-hexanone
      0.237 0.182 0.232 0.215 0.225 0.205 0.200 0.226 0.229 0.189  0.214    8.89
79)  tetrachloroethene
      0.344 0.252 0.343 0.373 0.359 0.320 0.332 0.362 0.357        0.338   10.70
80)  1,3-dichloropropane
      0.568 0.426 0.556 0.573 0.559 0.549 0.532 0.569 0.578 0.426  0.534   10.88
81)  butyl acetate
      0.364 0.332 0.366 0.361 0.355 0.383 0.335 0.358 0.348 0.349  0.355    4.25
82)  dibromochloromethane
      0.438 0.333 0.436 0.458 0.455 0.413 0.434 0.447 0.445 0.390  0.425    8.93
83)  1,2-dibromoethane
```

0.393 0.315 0.395 0.407 0.401 0.370 0.383 0.403 0.402 0.385 7.51

84) n-butyl ether
1.707 1.400 1.699 1.828 1.755 1.602 1.606 1.778 1.740 1.715 1.683 7.21

85) chlorobenzene
1.031 0.853 1.038 1.113 1.087 0.989 1.027 1.077 1.071 0.945 1.023 7.57

86) 1,1,1,2-tetrachloroethane
0.402 0.296 0.391 0.424 0.413 0.360 0.383 0.411 0.405 0.387 10.06

87) ethylbenzene
1.660 1.393 1.636 1.770 1.702 1.598 1.546 1.722 1.722 1.500 1.625 7.21

88) m,p-xylene
0.648 0.534 0.646 0.692 0.670 0.605 0.610 0.674 0.674 0.539 0.629 8.96

89) o-xylene
1.335 1.110 1.327 1.416 1.367 1.314 1.263 1.394 1.386 1.241 1.315 6.94

90) styrene
1.058 0.781 1.053 1.139 1.099 0.948 1.024 1.112 1.051 1.030 10.51

91) butyl acrylate
0.423 0.371 0.423 0.451 0.443 0.394 0.427 0.438 0.428 0.429 0.423 5.59

92) n-amyl acetate
0.295 0.210 0.288 0.301 0.295 0.245 0.282 0.297 0.285 0.278 10.89

93) bromoform
0.306 0.307 0.330 0.330 0.273 0.318 0.317 0.291 0.309 6.27

94) isopropylbenzene
1.546 1.258 1.562 1.723 1.664 1.484 1.527 1.659 1.598 1.401 1.542 8.88

95) cis-1,4-dichloro-2-butene
0.151 0.160 0.183 0.182 0.176 0.172 0.142 0.167 9.49

96) I 1,4-dichlorobenzene-d ----------ISTD----------

97) 4-bromofluorobenzene (s)
1.143 1.144 1.140 1.124 1.132 1.152 1.134 1.137 1.145 1.156 1.141 0.82

98) bromobenzene
1.196 1.173 1.267 1.235 1.043 1.176 1.228 1.225 1.193 5.73

99) 1,1,2,2-tetrachloroethane
1.334 1.107 1.361 1.341 1.317 1.307 1.291 1.351 1.345 1.196 1.295 6.28

100) trans-1,4-dichloro-2-butene
0.374 0.411 0.437 0.447 0.330 0.422 0.424 0.386 0.404 9.58

101) 1,2,3-trichloropropane
0.394 0.401 0.388 0.384 0.310 0.362 0.387 0.366 0.374 7.73

102) n-propylbenzene
4.751 3.842 4.775 5.236 5.053 4.463 4.634 5.028 4.864 4.356 4.700 8.60

103) 2-chlorotoluene
1.049 0.789 1.073 1.155 1.118 0.996 1.051 1.110 1.112 1.050 10.36

104) 4-chlorotoluene
1.064 0.788 1.075 1.165 1.135 1.028 1.059 1.119 1.092 1.058 10.37

105) 1,3,5-trimethylbenzene
3.277 2.577 3.332 3.660 3.541 2.983 3.275 3.524 3.492 3.026 3.269 10.03

106) tert-butylbenzene
2.883 2.289 2.894 3.214 3.142 2.678 2.892 3.062 2.931 2.506 2.849 10.04

107) 1,2,4-trimethylbenzene
3.369 2.739 3.411 3.700 3.597 3.242 3.351 3.542 3.521 3.273 3.375 7.90

108) sec-butylbenzene
3.915 3.969 4.526 4.393 3.635 4.037 4.284 4.061 4.103 6.98

109) 1,3-dichlorobenzene
1.943 1.614 1.960 2.158 2.137 1.775 2.025 2.056 1.970 1.960 8.81

110) p-isopropyltoluene
3.314 3.422 3.881 3.748 3.053 3.456 3.663 3.483 3.503 7.45

111) 1,2,3-trimethylbenzene
3.401 2.667 3.422 3.609 3.502 3.157 3.278 3.494 3.398 2.760 3.269 9.74

112) 1,4-dichlorobenzene
1.977 1.546 1.992 2.151 2.112 1.916 2.012 2.047 2.036 1.977 8.91

113) 1,2-dichlorobenzene

Initial Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICC3410
Lab FileID: 2V82666.D

```
       1.858       1.863 2.000 1.977 1.743 1.875 1.926 1.866       1.889    4.25
114)  benzyl chloride
       2.195       2.304 2.566 2.589 1.980 2.516 2.413 2.157       2.340    9.35
115)  n-butylbenzene
       1.444       1.476 1.758 1.729       1.639 1.617 1.444       1.587    8.39
116)  hexachloroethane
       0.472       0.510 0.610 0.617       0.597 0.549 0.455       0.544   12.27
117)  1,2-dibromo-3-chloropropane
       0.290       0.302 0.337 0.357       0.355 0.326 0.277       0.320    9.86
118)  1,3,5-trichlorobenzene
       1.192       1.243 1.434 1.442 1.005 1.410 1.313 1.175       1.277   11.97
119)  1,2,4-trichlorobenzene
       0.954       1.008 1.191 1.221 0.728 1.209 1.089 0.925       1.040   16.47
120)  hexachlorobutadiene
       0.410       0.434 0.524 0.526       0.497 0.472 0.405       0.467   11.02
121)  naphthalene
       2.778       2.854 3.189 3.279       3.174 3.032 2.642       2.993    7.99
122)  1,2,3-trichlorobenzene
       0.792       0.863 0.980 1.005 0.665 0.975 0.906 0.796       0.873   13.43
123)  2-methylnaphthalene
       0.444       0.487 0.564 0.611       0.537 0.576             0.537   11.45
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M2V3410.M         Thu Nov 18 17:17:11 2021   RPT1
```

Initial Calibration Verification

Job Number: JD36624 **Sample:** V2V3410-ICV3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82671.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V3410\2V82671.D Vial: 16
Acq On : 18 Nov 2021 12:15 am Operator: edwardd
Sample : icv3410-50 Inst : MS2V
Misc : MS54991,V2V3410,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 17:15:16 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	105	0.00	2.59
2		ethanol	0.185	0.188	-1.6	102	0.00	2.07
3		tertiary butyl alcohol	1.916	1.864	2.7	96	0.00	2.65
4		1,4-dioxane	0.145	0.148	-2.1	101	0.00	4.71
5	I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	3.75
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane	0.553	0.559	-1.1	95	0.00	1.34
8		chloromethane	0.212	0.230	-8.5	107	0.00	1.47
9		vinyl chloride	0.562	0.670	-19.2	111	0.00	1.54
10		bromomethane		----------NA----------				
11		chloroethane	0.318	0.330	-3.8	102	0.00	1.82
12		trichlorofluoromethane	0.719	0.801	-11.4	102	0.00	1.99
13		1,3-butadiene	0.532	0.598	-12.4	106	0.00	1.57
14		ethyl ether	0.257	0.268	-4.3	101	0.00	2.15
15		acrolein	0.113	0.114	-0.9	100	0.00	2.24
16		freon 113	0.396	0.397	-0.3	95	0.00	2.31
17		1,1-dichloroethene	0.720	0.730	-1.4	95	0.00	2.31
18		acetone	0.301	0.377	-25.2	175	0.00	2.32
19		acetonitrile		----------NA----------				
20		iodomethane	0.262	0.366	-39.7#	83	0.00	2.42
21		carbon disulfide	1.191	1.227	-3.0	97	0.00	2.46
22		methylene chloride	0.501	0.477	4.8	99	0.00	2.61
23		methyl acetate	0.589	0.490	16.8	90	0.00	2.51
24		methyl tert butyl ether	1.303	1.347	-3.4	99	0.00	2.77
25		trans-1,2-dichloroethene	0.444	0.478	-7.7	99	0.00	2.78
26		hexane	0.470	0.422	10.2	85	0.00	2.96
27		di-isopropyl ether	1.741	1.711	1.7	94	0.00	3.06
28		ethyl tert-butyl ether	1.661	1.614	2.8	93	0.00	3.30
29		1,1-dichloroethane	0.852	0.920	-8.0	100	0.00	3.06
30		chloroprene	0.756	0.843	-11.5	104	0.00	3.11
31		acrylonitrile		----------NA----------				
32		vinyl acetate	0.107	0.100	6.5	88	0.00	3.04
33		ethyl acetate	0.110	0.118	-7.3	105	0.00	3.42
34		2-butanone	0.077	0.094	-22.1	134	0.00	3.40
35		2,2-dichloropropane	0.671	0.709	-5.7	99	0.00	3.43
36		cis-1,2-dichloroethene	0.495	0.536	-8.3	101	0.00	3.43
37		propionitrile	0.100	0.091	9.0	89	0.00	3.44
38		methyl acrylate	0.093	0.096	-3.2	101	0.00	3.46
39		bromochloromethane	0.279	0.290	-3.9	101	0.00	3.58
40		tetrahydrofuran	0.082	0.078	4.9	101	0.00	3.60
41		chloroform	0.872	0.891	-2.2	102	0.00	3.64

Initial Calibration Verification

Job Number: JD36624 **Sample:** V2V3410-ICV3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82671.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	S	dibromofluoromethane (s)	0.464	0.468	-0.9	104	0.00	3.75
43		methacrylonitrile	0.236	0.241	-2.1	103	0.00	3.54
44		1,1,1-trichloroethane	0.723	0.781	-8.0	101	0.00	3.77
45		cyclohexane	0.582	0.715	-22.9	118	0.00	3.83
46		1,1-dichloropropene	0.589	0.658	-11.7	102	0.00	3.87
47		carbon tetrachloride	0.642	0.696	-8.4	100	0.00	3.88
48		isobutyl alcohol	0.023	0.024	-4.3	105	0.00	3.89
49		tert-amyl alcohol	0.035	0.034	2.9	105	0.00	3.98
50	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.317	1.2	104	0.00	3.98
52		n-butyl alcohol	0.018	0.018	0.0	101	0.00	4.36
53		benzene	1.213	1.286	-6.0	100	0.00	4.01
54		tert-amyl methyl ether	1.027	0.934	9.1	89	0.00	4.08
55		iso-octane	1.186	1.152	2.9	92	0.00	4.08
56		heptane	0.227	0.250	-10.1	103	0.00	4.20
57		isopropyl acetate	0.089	0.087	2.2	97	0.00	4.00
58		1,2-dichloroethane	0.499	0.486	2.6	99	0.00	4.04
59		trichloroethene	0.340	0.375	-10.3	103	0.00	4.47
60		ethyl acrylate	0.630	0.473	24.9	78	0.00	4.50
61		2-nitropropane	0.128	0.120	6.3	103	0.00	5.01
62		2-chloroethyl vinyl ether	0.202	0.240	-18.8	110	0.00	5.05
63		methyl methacrylate	0.110	0.114	-3.6	102	0.00	4.68
64		1,2-dichloropropane	0.351	0.373	-6.3	100	0.00	4.66
65		methylcyclohexane	0.512	0.560	-9.4	103	0.00	4.65
66		dibromomethane	0.227	0.232	-2.2	100	0.00	4.73
67		bromodichloromethane	0.450	0.462	-2.7	101	0.00	4.85
68		epichlorohydrin	0.049	0.050	-2.0	104	0.00	5.09
69		cis-1,3-dichloropropene	0.530	0.567	-7.0	101	0.00	5.18
70		4-methyl-2-pentanone	0.180	0.187	-3.9	100	0.00	5.29
71		3-methyl-1-butanol	0.014	0.014	0.0	99	0.00	5.33
72	I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.232	2.5	103	0.00	5.40
74		toluene	0.882	0.929	-5.3	101	0.00	5.46
75		ethyl methacrylate	0.533	0.525	1.5	99	0.00	5.67
76		trans-1,3-dichloropropene	0.519	0.554	-6.7	100	0.00	5.63
77		1,1,2-trichloroethane	0.289	0.299	-3.5	101	0.00	5.80
78		2-hexanone	0.214	0.237	-10.7	114	0.00	5.97
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane	0.534	0.558	-4.5	101	0.00	5.94
81		butyl acetate	0.355	0.341	3.9	98	0.00	6.06
82		dibromochloromethane	0.425	0.446	-4.9	101	0.00	6.13
83		1,2-dibromoethane	0.385	0.398	-3.4	101	0.00	6.23
84		n-butyl ether	1.683	1.437	14.6	81	0.00	6.74
85		chlorobenzene	1.023	1.094	-6.9	102	0.00	6.66
86		1,1,1,2-tetrachloroethane	0.387	0.419	-8.3	102	0.00	6.74
87		ethylbenzene	1.625	1.745	-7.4	102	0.00	6.75
88		m,p-xylene	0.629	0.688	-9.4	103	0.00	6.86
89		o-xylene	1.315	1.363	-3.7	100	0.00	7.21
90		styrene	1.030	1.115	-8.3	101	0.00	7.23
91		butyl acrylate	0.423	0.395	6.6	91	0.00	7.16
92		n-amyl acetate	0.278	0.271	2.5	93	0.00	7.36
93		bromoform	0.309	0.327	-5.8	103	0.00	7.40
94		isopropylbenzene	1.542	1.708	-10.8	103	0.00	7.55
95		cis-1,4-dichloro-2-butene	0.167	0.168	-0.6	95	0.00	7.60
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.135	0.5	105	0.00	7.71
98		bromobenzene	1.193	1.244	-4.3	102	0.00	7.85

Initial Calibration Verification

Job Number: JD36624 **Sample:** V2V3410-ICV3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82671.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	1,1,2,2-tetrachloroethane	1.295	1.303	-0.6	101	0.00	7.83
100	trans-1,4-dichloro-2-bute	0.404	0.432	-6.9	103	0.00	7.87
101	1,2,3-trichloropropane	0.374	0.379	-1.3	102	0.00	7.89
102	n-propylbenzene	4.700	5.121	-9.0	102	0.00	7.94
103	2-chlorotoluene	1.050	1.134	-8.0	102	0.00	8.03
104	4-chlorotoluene	1.058	1.135	-7.3	102	0.00	8.14
105	1,3,5-trimethylbenzene	3.269	3.604	-10.2	103	0.00	8.11
106	tert-butylbenzene	2.849	3.622	-27.1	117	0.00	8.41
107	1,2,4-trimethylbenzene	3.375	3.580	-6.1	101	0.00	8.48
108	sec-butylbenzene	4.103	4.461	-8.7	103	0.00	8.63
109	1,3-dichlorobenzene	1.960	2.121	-8.2	102	0.00	8.74
110	p-isopropyltoluene	3.503	3.785	-8.1	102	0.00	8.78
111	1,2,3-trimethylbenzene		----------NA----------				
112	1,4-dichlorobenzene	1.977	2.111	-6.8	102	0.00	8.84
113	1,2-dichlorobenzene	1.889	1.960	-3.8	102	0.00	9.19
114	benzyl chloride	2.340	2.244	4.1	91	0.00	8.95
115	n-butylbenzene	1.587	1.722	-8.5	102	0.00	9.18
116	hexachloroethane	0.544	0.618	-13.6	106	0.00	9.46
117	1,2-dibromo-3-chloropropa	0.320	0.335	-4.7	104	0.00	9.96
118	1,3,5-trichlorobenzene	1.277	1.430	-12.0	104	0.00	10.15
119	1,2,4-trichlorobenzene	1.040	1.172	-12.7	103	0.00	10.77
120	hexachlorobutadiene	0.467	0.513	-9.9	102	0.00	10.91
121	naphthalene	2.993	3.047	-1.8	100	0.00	11.01
122	1,2,3-trichlorobenzene	0.873	0.938	-7.4	100	0.00	11.22
123	2-methylnaphthalene	0.537	0.481	10.4	89	0.00	12.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82666.D M2V3410.M Thu Nov 18 17:16:58 2021 RPT1

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82672.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V3410\2V82672.D Vial: 17
Acq On : 18 Nov 2021 12:41 am Operator: edwardd
Sample : icv3410-50 Inst : MS2V
Misc : MS54991,V2V3410,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 11:29:02 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	99	0.00	2.59
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	104	0.00	3.75
6		chlorodifluoromethane	0.607	0.748	-23.2	116	0.00	1.35
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		freon 113		----------NA----------				
17		1,1-dichloroethene		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile	0.093	0.090	3.2	106	0.00	2.49
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		di-isopropyl ether		----------NA----------				
28		ethyl tert-butyl ether		----------NA----------				
29		1,1-dichloroethane		----------NA----------				
30		chloroprene		----------NA----------				
31		acrylonitrile	0.255	0.310	-21.6	120	0.00	2.75
32		vinyl acetate		----------NA----------				
33		ethyl acetate		----------NA----------				
34		2-butanone		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		propionitrile		----------NA----------				
38		methyl acrylate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				
41		chloroform		----------NA----------				

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82672.D

42	S	dibromofluoromethane (s)	0.464	0.463	0.2	103	0.00	3.75
43		methacrylonitrile		----------NA----------				
44		1,1,1-trichloroethane		----------NA----------				
45		cyclohexane		----------NA----------				
46		1,1-dichloropropene		----------NA----------				
47		carbon tetrachloride		----------NA----------				
48		isobutyl alcohol		----------NA----------				
49		tert-amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.318	0.9	105	0.00	3.98
52		n-butyl alcohol		----------NA----------				
53		benzene		----------NA----------				
54		tert-amyl methyl ether		----------NA----------				
55		iso-octane		----------NA----------				
56		heptane		----------NA----------				
57		isopropyl acetate		----------NA----------				
58		1,2-dichloroethane		----------NA----------				
59		trichloroethene		----------NA----------				
60		ethyl acrylate		----------NA----------				
61		2-nitropropane		----------NA----------				
62		2-chloroethyl vinyl ether		----------NA----------				
63		methyl methacrylate		----------NA----------				
64		1,2-dichloropropane		----------NA----------				
65		methylcyclohexane		----------NA----------				
66		dibromomethane		----------NA----------				
67		bromodichloromethane		----------NA----------				
68		epichlorohydrin		----------NA----------				
69		cis-1,3-dichloropropene		----------NA----------				
70		4-methyl-2-pentanone		----------NA----------				
71		3-methyl-1-butanol		----------NA----------				
72	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.291	-2.1	104	0.00	5.40
74		toluene		----------NA----------				
75		ethyl methacrylate		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		1,1,2-trichloroethane		----------NA----------				
78		2-hexanone		----------NA----------				
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane		----------NA----------				
81		butyl acetate		----------NA----------				
82		dibromochloromethane		----------NA----------				
83		1,2-dibromoethane		----------NA----------				
84		n-butyl ether		----------NA----------				
85		chlorobenzene		----------NA----------				
86		1,1,1,2-tetrachloroethane		----------NA----------				
87		ethylbenzene		----------NA----------				
88		m,p-xylene		----------NA----------				
89		o-xylene		----------NA----------				
90		styrene		----------NA----------				
91		butyl acrylate		----------NA----------				
92		n-amyl acetate		----------NA----------				
93		bromoform		----------NA----------				
94		isopropylbenzene		----------NA----------				
95		cis-1,4-dichloro-2-butene		----------NA----------				
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.122	1.7	101	0.00	7.71
98		bromobenzene		----------NA----------				

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82672.D

99	1,1,2,2-tetrachloroethane		----------NA----------				
100	trans-1,4-dichloro-2-bute		----------NA----------				
101	1,2,3-trichloropropane		----------NA----------				
102	n-propylbenzene		----------NA----------				
103	2-chlorotoluene		----------NA----------				
104	4-chlorotoluene		----------NA----------				
105	1,3,5-trimethylbenzene		----------NA----------				
106	tert-butylbenzene		----------NA----------				
107	1,2,4-trimethylbenzene		----------NA----------				
108	sec-butylbenzene		----------NA----------				
109	1,3-dichlorobenzene		----------NA----------				
110	p-isopropyltoluene		----------NA----------				
111	1,2,3-trimethylbenzene	3.269	4.119	-26.0	115	0.00	8.87
112	1,4-dichlorobenzene		----------NA----------				
113	1,2-dichlorobenzene		----------NA----------				
114	benzyl chloride		----------NA----------				
115	n-butylbenzene		----------NA----------				
116	hexachloroethane		----------NA----------				
117	1,2-dibromo-3-chloropropa		----------NA----------				
118	1,3,5-trichlorobenzene		----------NA----------				
119	1,2,4-trichlorobenzene		----------NA----------				
120	hexachlorobutadiene		----------NA----------				
121	naphthalene		----------NA----------				
122	1,2,3-trichlorobenzene		----------NA----------				
123	2-methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2V82666.D M2V3410.M Thu Nov 18 16:27:25 2021 RPT1

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82678.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V3410\2V82678.D Vial: 23
Acq On : 18 Nov 2021 11:34 am Operator: edwardd
Sample : icv3410-50 Inst : MS2V
Misc : MS54991,V2V3410,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 11:29:02 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	112	0.00	2.59
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	3.75
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane	0.214	0.180	15.9	82	0.00	1.76
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		freon 113		----------NA----------				
17		1,1-dichloroethene		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile		----------NA----------				
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		di-isopropyl ether		----------NA----------				
28		ethyl tert-butyl ether		----------NA----------				
29		1,1-dichloroethane		----------NA----------				
30		chloroprene		----------NA----------				
31		acrylonitrile		----------NA----------				
32		vinyl acetate		----------NA----------				
33		ethyl acetate		----------NA----------				
34		2-butanone		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		propionitrile		----------NA----------				
38		methyl acrylate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				
41		chloroform		----------NA----------				

Initial Calibration Verification

Job Number: JD36624 **Sample:** V2V3410-ICV3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V82678.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	S	dibromofluoromethane (s)	0.464	0.464	0.0	109	0.00	3.74
43		methacrylonitrile		----------NA----------				
44		1,1,1-trichloroethane		----------NA----------				
45		cyclohexane		----------NA----------				
46		1,1-dichloropropene		----------NA----------				
47		carbon tetrachloride		----------NA----------				
48		isobutyl alcohol		----------NA----------				
49		tert-amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	109	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.318	0.9	109	0.00	3.98
52		n-butyl alcohol		----------NA----------				
53		benzene		----------NA----------				
54		tert-amyl methyl ether		----------NA----------				
55		iso-octane		----------NA----------				
56		heptane		----------NA----------				
57		isopropyl acetate		----------NA----------				
58		1,2-dichloroethane		----------NA----------				
59		trichloroethene		----------NA----------				
60		ethyl acrylate		----------NA----------				
61		2-nitropropane		----------NA----------				
62		2-chloroethyl vinyl ether		----------NA----------				
63		methyl methacrylate		----------NA----------				
64		1,2-dichloropropane		----------NA----------				
65		methylcyclohexane		----------NA----------				
66		dibromomethane		----------NA----------				
67		bromodichloromethane		----------NA----------				
68		epichlorohydrin		----------NA----------				
69		cis-1,3-dichloropropene		----------NA----------				
70		4-methyl-2-pentanone		----------NA----------				
71		3-methyl-1-butanol		----------NA----------				
72	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.269	-0.4	108	0.00	5.40
74		toluene		----------NA----------				
75		ethyl methacrylate		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		1,1,2-trichloroethane		----------NA----------				
78		2-hexanone		----------NA----------				
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane		----------NA----------				
81		butyl acetate		----------NA----------				
82		dibromochloromethane		----------NA----------				
83		1,2-dibromoethane		----------NA----------				
84		n-butyl ether		----------NA----------				
85		chlorobenzene		----------NA----------				
86		1,1,1,2-tetrachloroethane		----------NA----------				
87		ethylbenzene		----------NA----------				
88		m,p-xylene		----------NA----------				
89		o-xylene		----------NA----------				
90		styrene		----------NA----------				
91		butyl acrylate		----------NA----------				
92		n-amyl acetate		----------NA----------				
93		bromoform		----------NA----------				
94		isopropylbenzene		----------NA----------				
95		cis-1,4-dichloro-2-butene		----------NA----------				
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.123	1.6	106	0.00	7.71
98		bromobenzene		----------NA----------				

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82678.D

99	1,1,2,2-tetrachloroethane	----------NA----------	
100	trans-1,4-dichloro-2-bute	----------NA----------	
101	1,2,3-trichloropropane	----------NA----------	
102	n-propylbenzene	----------NA----------	
103	2-chlorotoluene	----------NA----------	
104	4-chlorotoluene	----------NA----------	
105	1,3,5-trimethylbenzene	----------NA----------	
106	tert-butylbenzene	----------NA----------	
107	1,2,4-trimethylbenzene	----------NA----------	
108	sec-butylbenzene	----------NA----------	
109	1,3-dichlorobenzene	----------NA----------	
110	p-isopropyltoluene	----------NA----------	
111	1,2,3-trimethylbenzene	----------NA----------	
112	1,4-dichlorobenzene	----------NA----------	
113	1,2-dichlorobenzene	----------NA----------	
114	benzyl chloride	----------NA----------	
115	n-butylbenzene	----------NA----------	
116	hexachloroethane	----------NA----------	
117	1,2-dibromo-3-chloropropa	----------NA----------	
118	1,3,5-trichlorobenzene	----------NA----------	
119	1,2,4-trichlorobenzene	----------NA----------	
120	hexachlorobutadiene	----------NA----------	
121	naphthalene	----------NA----------	
122	1,2,3-trichlorobenzene	----------NA----------	
123	2-methylnaphthalene	----------NA----------	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82666.D M2V3410.M Thu Nov 18 16:27:26 2021 RPT1

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82679.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V3410\2V82679.D Vial: 24
Acq On : 18 Nov 2021 11:59 am Operator: edwardd
Sample : icv3410-50 Inst : MS2V
Misc : MS54991,V2V3410,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 11:29:02 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	114	0.00	2.59
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	3.75
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		freon 113		----------NA----------				
17		1,1-dichloroethene		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile		----------NA----------				
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		trans-1,2-dichloroethene		----------NA----------				
26		hexane		----------NA----------				
27		di-isopropyl ether		----------NA----------				
28		ethyl tert-butyl ether		----------NA----------				
29		1,1-dichloroethane		----------NA----------				
30		chloroprene		----------NA----------				
31		acrylonitrile		----------NA----------				
32		vinyl acetate		----------NA----------				
33		ethyl acetate		----------NA----------				
34		2-butanone		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		propionitrile		----------NA----------				
38		methyl acrylate		----------NA----------				
39		bromochloromethane		----------NA----------				
40		tetrahydrofuran		----------NA----------				
41		chloroform		----------NA----------				

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82679.D

42	S	dibromofluoromethane (s)	0.464	0.464	0.0	108	0.00	3.75
43		methacrylonitrile		----------NA----------				
44		1,1,1-trichloroethane		----------NA----------				
45		cyclohexane		----------NA----------				
46		1,1-dichloropropene		----------NA----------				
47		carbon tetrachloride		----------NA----------				
48		isobutyl alcohol		----------NA----------				
49		tert-amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	109	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.320	0.3	110	0.00	3.98
52		n-butyl alcohol		----------NA----------				
53		benzene		----------NA----------				
54		tert-amyl methyl ether		----------NA----------				
55		iso-octane		----------NA----------				
56		heptane		----------NA----------				
57		isopropyl acetate		----------NA----------				
58		1,2-dichloroethane		----------NA----------				
59		trichloroethene		----------NA----------				
60		ethyl acrylate		----------NA----------				
61		2-nitropropane		----------NA----------				
62		2-chloroethyl vinyl ether		----------NA----------				
63		methyl methacrylate		----------NA----------				
64		1,2-dichloropropane		----------NA----------				
65		methylcyclohexane		----------NA----------				
66		dibromomethane		----------NA----------				
67		bromodichloromethane		----------NA----------				
68		epichlorohydrin		----------NA----------				
69		cis-1,3-dichloropropene		----------NA----------				
70		4-methyl-2-pentanone		----------NA----------				
71		3-methyl-1-butanol		----------NA----------				
72	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.270	-0.5	108	0.00	5.40
74		toluene		----------NA----------				
75		ethyl methacrylate		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		1,1,2-trichloroethane		----------NA----------				
78		2-hexanone		----------NA----------				
79		tetrachloroethene	0.338	0.317	6.2	89	0.00	5.89
80		1,3-dichloropropane		----------NA----------				
81		butyl acetate		----------NA----------				
82		dibromochloromethane		----------NA----------				
83		1,2-dibromoethane		----------NA----------				
84		n-butyl ether		----------NA----------				
85		chlorobenzene		----------NA----------				
86		1,1,1,2-tetrachloroethane		----------NA----------				
87		ethylbenzene		----------NA----------				
88		m,p-xylene		----------NA----------				
89		o-xylene		----------NA----------				
90		styrene		----------NA----------				
91		butyl acrylate		----------NA----------				
92		n-amyl acetate		----------NA----------				
93		bromoform		----------NA----------				
94		isopropylbenzene		----------NA----------				
95		cis-1,4-dichloro-2-butene		----------NA----------				
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	8.82
97	S	4-bromofluorobenzene (s)	1.141	1.138	0.3	107	0.00	7.71
98		bromobenzene		----------NA----------				

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3410-ICV3410
Lab FileID: 2V82679.D

99	1,1,2,2-tetrachloroethane	----------NA----------	
100	trans-1,4-dichloro-2-bute	----------NA----------	
101	1,2,3-trichloropropane	----------NA----------	
102	n-propylbenzene	----------NA----------	
103	2-chlorotoluene	----------NA----------	
104	4-chlorotoluene	----------NA----------	
105	1,3,5-trimethylbenzene	----------NA----------	
106	tert-butylbenzene	----------NA----------	
107	1,2,4-trimethylbenzene	----------NA----------	
108	sec-butylbenzene	----------NA----------	
109	1,3-dichlorobenzene	----------NA----------	
110	p-isopropyltoluene	----------NA----------	
111	1,2,3-trimethylbenzene	----------NA----------	
112	1,4-dichlorobenzene	----------NA----------	
113	1,2-dichlorobenzene	----------NA----------	
114	benzyl chloride	----------NA----------	
115	n-butylbenzene	----------NA----------	
116	hexachloroethane	----------NA----------	
117	1,2-dibromo-3-chloropropa	----------NA----------	
118	1,3,5-trichlorobenzene	----------NA----------	
119	1,2,4-trichlorobenzene	----------NA----------	
120	hexachlorobutadiene	----------NA----------	
121	naphthalene	----------NA----------	
122	1,2,3-trichlorobenzene	----------NA----------	
123	2-methylnaphthalene	----------NA----------	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82666.D M2V3410.M Thu Nov 18 16:27:27 2021 RPT1

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V2V3457-CC3410
Lab FileID: 2V83917.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kr...021\v2v3457\2v83917.d Vial: 1
Acq On : 22 Dec 2021 9:34 am Operator: nickw
Sample : CC3410-20 Inst : MS2V
Misc : MS55598,V2V3457,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V3410.M (RTE Integrator)
Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Thu Nov 18 17:15:16 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	133	0.00	2.59
2		ethanol	0.185	0.230	-24.3#	165	0.00	2.07
3		tertiary butyl alcohol	1.916	2.105	-9.9	146	0.00	2.65
4		1,4-dioxane	0.145	0.139	4.1	125	0.00	4.71
5	I	pentafluorobenzene	1.000	1.000	0.0	137	0.00	3.75
6		chlorodifluoromethane	0.607	0.735	-21.1#	159	0.00	1.35
7		dichlorodifluoromethane	0.553	0.597	-8.0	140	0.00	1.34
8		chloromethane	0.212	0.241	-13.7	162	0.00	1.47
9		vinyl chloride	0.562	0.565	-0.5	134	0.00	1.54
10		bromomethane	0.214	0.237	-10.7	144	0.00	1.76
11		chloroethane	0.318	0.351	-10.4	154	0.00	1.83
12		trichlorofluoromethane	0.719	0.834	-16.0	148	0.00	1.99
13		1,3-butadiene	0.532	0.497	6.6	124	0.00	1.57
14		ethyl ether	0.257	0.261	-1.6	136	0.00	2.15
15		acrolein	0.113	0.094	16.8	111	0.00	2.24
16		freon 113	0.396	0.325	17.9	107	0.00	2.31
17		1,1-dichloroethene	0.720	0.833	-15.7	152	0.00	2.31
18		acetone	0.301	0.486	-61.5#	224#	0.00	2.32
19		acetonitrile	0.093	0.110	-18.3	169	0.00	2.49
20		iodomethane	0.262	0.234	10.7	124	0.00	2.41
21		carbon disulfide	1.191	1.244	-4.5	140	0.00	2.46
22		methylene chloride	0.501	0.479	4.4	134	0.00	2.62
23		methyl acetate	0.589	0.671	-13.9	167	0.00	2.51
24		methyl tert butyl ether	1.303	1.374	-5.4	137	0.00	2.77
25		trans-1,2-dichloroethene	0.444	0.448	-0.9	127	0.00	2.78
26		hexane	0.470	0.440	6.4	124	0.00	2.96
27		di-isopropyl ether	1.741	2.289	-31.5#	171	0.00	3.07
28		ethyl tert-butyl ether	1.661	1.926	-16.0	151	0.00	3.30
29		1,1-dichloroethane	0.852	1.014	-19.0	149	0.00	3.06
30		chloroprene	0.756	0.933	-23.4#	160	0.00	3.11
31		acrylonitrile	0.255	0.219	14.1	112	0.00	2.75
32		vinyl acetate	0.107	0.109	-1.9	132	0.00	3.04
33		ethyl acetate	0.110	0.148	-34.5#	175	0.00	3.42
34		2-butanone	0.077	0.092	-19.5	161	0.00	3.40
35		2,2-dichloropropane	0.671	0.731	-8.9	139	0.00	3.44
36		cis-1,2-dichloroethene	0.495	0.499	-0.8	128	0.00	3.43
37		propionitrile	0.100	0.127	-27.0#	165	0.00	3.44
38		methyl acrylate	0.093	0.089	4.3	126	0.00	3.45
39		bromochloromethane	0.279	0.249	10.8	120	0.00	3.59
40		tetrahydrofuran	0.082	0.073	11.0	129	0.00	3.60
41		chloroform	0.872	0.892	-2.3	140	0.00	3.64

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V2V3457-CC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V83917.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	S	dibromofluoromethane (s)	0.464	0.449	3.2	132	0.00	3.75
43		methacrylonitrile	0.236	0.244	-3.4	137	0.00	3.55
44		1,1,1-trichloroethane	0.723	0.747	-3.3	133	0.00	3.77
45		cyclohexane	0.582	0.611	-5.0	137	0.00	3.83
46		1,1-dichloropropene	0.589	0.627	-6.5	137	0.00	3.88
47		carbon tetrachloride	0.642	0.633	1.4	127	0.00	3.88
48		isobutyl alcohol	0.023	0.027	-17.4	150	0.00	3.89
49		tert-amyl alcohol	0.035	0.040	-14.3	155	0.00	3.98
50	I	1,4-difluorobenzene	1.000	1.000	0.0	139	0.00	4.29
51	S	1,2-dichloroethane-d4 (s)	0.321	0.354	-10.3	152	0.00	3.98
52		n-butyl alcohol	0.018	0.019	-5.6	146	0.00	4.36
53		benzene	1.213	1.225	-1.0	132	0.00	4.01
54		tert-amyl methyl ether	1.027	0.982	4.4	127	0.00	4.09
55		iso-octane	1.186	1.224	-3.2	137	0.00	4.09
56		heptane	0.227	0.245	-7.9	147	0.00	4.20
57		isopropyl acetate	0.089	0.084	5.6	126	0.00	4.00
58		1,2-dichloroethane	0.499	0.568	-13.8	157	0.00	4.04
59		trichloroethene	0.340	0.331	2.6	128	0.00	4.48
60		ethyl acrylate	0.630	0.703	-11.6	157	0.00	4.51
61		2-nitropropane	0.128	0.134	-4.7	152	0.00	5.01
62		2-chloroethyl vinyl ether	0.202	0.231	-14.4	151	0.00	5.05
63		methyl methacrylate	0.110	0.100	9.1	121	0.00	4.68
64		1,2-dichloropropane	0.351	0.397	-13.1	148	0.00	4.67
65		methylcyclohexane	0.512	0.469	8.4	123	0.00	4.66
66		dibromomethane	0.227	0.233	-2.6	138	0.00	4.73
67		bromodichloromethane	0.450	0.464	-3.1	140	0.00	4.85
68		epichlorohydrin	0.049	0.056	-14.3	162	0.00	5.09
69		cis-1,3-dichloropropene	0.530	0.538	-1.5	134	0.00	5.19
70		4-methyl-2-pentanone	0.180	0.214	-18.9	156	0.00	5.29
71		3-methyl-1-butanol	0.014	0.012	14.3	115	0.00	5.33
72	I	chlorobenzene-d5	1.000	1.000	0.0	123	0.00	6.64
73	S	toluene-d8 (s)	1.264	1.296	-2.5	127	0.00	5.41
74		toluene	0.882	0.945	-7.1	125	0.00	5.46
75		ethyl methacrylate	0.533	0.586	-9.9	131	0.00	5.67
76		trans-1,3-dichloropropene	0.519	0.620	-19.5	137	0.00	5.64
77		1,1,2-trichloroethane	0.289	0.328	-13.5	134	0.00	5.80
78		2-hexanone	0.214	0.310	-44.9#	168	0.00	5.98
79		tetrachloroethene	0.338	0.351	-3.8	119	0.00	5.90
80		1,3-dichloropropane	0.534	0.637	-19.3	137	0.00	5.94
81		butyl acetate	0.355	0.452	-27.3#	155	0.00	6.07
82		dibromochloromethane	0.425	0.457	-7.5	126	0.00	6.13
83		1,2-dibromoethane	0.385	0.435	-13.0	132	0.00	6.24
84		n-butyl ether	1.683	2.158	-28.2#	149	0.00	6.74
85		chlorobenzene	1.023	1.064	-4.0	121	0.00	6.67
86		1,1,1,2-tetrachloroethane	0.387	0.402	-3.9	120	0.00	6.74
87		ethylbenzene	1.625	1.747	-7.5	125	0.00	6.75
88		m,p-xylene	0.629	0.682	-8.4	124	0.00	6.87
89		o-xylene	1.315	1.424	-8.3	125	0.00	7.21
90		styrene	1.030	1.114	-8.2	123	0.00	7.23
91		butyl acrylate	0.423	0.538	-27.2#	151	0.00	7.16
92		n-amyl acetate	0.278	0.309	-11.2	127	0.00	7.37
93		bromoform	0.309	0.308	0.3	119	0.00	7.40
94		isopropylbenzene	1.542	1.632	-5.8	121	0.00	7.55
95		cis-1,4-dichloro-2-butene	0.167	0.177	-6.0	126	0.00	7.61
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	132	0.00	8.83
97	S	4-bromofluorobenzene (s)	1.141	1.134	0.6	131	0.00	7.72
98		bromobenzene	1.193	1.055	11.6	113	0.00	7.85

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V2V3457-CC3410
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2V83917.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

99	1,1,2,2-tetrachloroethane	1.295	1.338	-3.3	130	0.00	7.84
100	trans-1,4-dichloro-2-bute	0.404	0.515	-27.5#	160	0.00	7.87
101	1,2,3-trichloropropane	0.374	0.388	-3.7	132	0.00	7.89
102	n-propylbenzene	4.700	4.710	-0.2	123	0.00	7.95
103	2-chlorotoluene	1.050	0.955	9.0	113	0.01	8.04
104	4-chlorotoluene	1.058	0.987	6.7	116	0.00	8.15
105	1,3,5-trimethylbenzene	3.269	3.158	3.4	118	0.00	8.12
106	tert-butylbenzene	2.849	2.637	7.4	113	0.01	8.42
107	1,2,4-trimethylbenzene	3.375	3.294	2.4	122	0.01	8.48
108	sec-butylbenzene	4.103	3.839	6.4	118	0.00	8.64
109	1,3-dichlorobenzene	1.960	1.763	10.1	113	0.01	8.75
110	p-isopropyltoluene	3.503	3.151	10.0	113	0.00	8.79
111	1,2,3-trimethylbenzene	3.269	3.219	1.5	121	0.00	8.88
112	1,4-dichlorobenzene	1.977	1.791	9.4	115	0.00	8.85
113	1,2-dichlorobenzene	1.889	1.687	10.7	115	0.00	9.20
114	benzyl chloride	2.340	2.109	9.9	115	0.00	8.96
115	n-butylbenzene	1.587	1.478	6.9	120	0.00	9.18
116	hexachloroethane	0.544	0.419	23.0#	100	0.01	9.47
117	1,2-dibromo-3-chloropropa	0.320	0.260	18.8	105	0.01	9.97
118	1,3,5-trichlorobenzene	1.277	1.087	14.9	109	0.01	10.16
119	1,2,4-trichlorobenzene	1.040	0.848	18.5	103	0.01	10.77
120	hexachlorobutadiene	0.467	0.343	26.6#	96	0.01	10.92
121	naphthalene	2.993	2.298	23.2#	100	0.01	11.02
122	1,2,3-trichlorobenzene	0.873	0.665	23.8#	97	0.01	11.23
123	2-methylnaphthalene	0.537	0.260	51.6#	59	0.01	12.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V82665.D M2V3410.M Thu Dec 23 05:37:20 2021

Initial Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7257-ICC7257
Lab FileID: 3A167235.D

Response Factor Report MS3A

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

Calibration Files
0.4 =3A167243.D 1 =3A167232.D 2 =3A167233.D 5 =3A167234.D
0.25=3A167242.D 20 =3A167235.D 50 =3A167236.D 200 =3A167245.D
100 =3A167237.D = = =

Compound	0.4	1	2	5	0.25	20	50	200	100	Avg	%RSD
1) I 4-bromofluorobenzene	----------ISTD----------										
2) 1,4-dioxane-d8	0.034	0.030	0.028	0.029	0.023	0.025	0.034	0.021	0.026	0.028	16.15
3) 1,4-dioxane	0.038	0.037	0.034	0.030	0.038	0.025	0.032	0.020	0.026	0.031	19.97

(#) = Out of Range ### Number of calibration levels exceeded format ###

M3A7257.M Tue Dec 07 12:07:20 2021 ACCUNJ

6.9.20
6

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7257-ICV7257
Lab FileID: 3A167248.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7257\3A167248.D Vial: 24
Acq On : 6 Dec 2021 9:13 pm Operator: BridgetK
Sample : icv7257-20 Inst : MS3A
Misc : MS32930,V3A7257,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	116	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.024	14.3	116	0.00	11.85
3 M	1,4-dioxane	0.031	0.025	19.4	114	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167235.D M3A7257.M Tue Dec 07 12:07:06 2021 ACCUNJ

6.9.21
6

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7265-CC7257
Lab FileID: 3A167390.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7265\3A167390.D Vial: 2
Acq On : 16 Dec 2021 10:21 am Operator: BridgetK
Sample : cc7257-20 Inst : MS3A
Misc : MS55474,V3A7265,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	156	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.030	-7.1	193	0.00	11.85
3 M	1,4-dioxane	0.031	0.028	9.7	174	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167235.D M3A7257.M Thu Dec 16 15:02:52 2021 ACCUNJ

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7266-CC7257
Lab FileID: 3A167422.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7266\3A167422.D Vial: 5
Acq On : 17 Dec 2021 10:25 am Operator: BridgetK
Sample : cc7257-5 Inst : MS3A
Misc : MS55469,V3A7266,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	162	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.029	-3.6	162	0.00	11.85
3 M	1,4-dioxane	0.031	0.035	-12.9	191	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167234.D M3A7257.M Fri Dec 17 14:50:32 2021 ACCUNJ

6.9.23
6

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V3A7268-CC7257
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3A167455.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7268\3A167455.D Vial: 6
Acq On : 20 Dec 2021 11:23 am Operator: BridgetK
Sample : cc7257-20 Inst : MS3A
Misc : MS55469,V3A7268,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	156	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.029	-3.6	186	0.00	11.85
3 M	1,4-dioxane	0.031	0.037	-19.4	229#	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167235.D M3A7257.M Mon Dec 20 16:19:06 2021 ACCUNJ

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7269-CC7257
Lab FileID: 3A167485.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7269\3A167485.D Vial: 2
Acq On : 21 Dec 2021 9:40 am Operator: BridgetK
Sample : cc7257-5 Inst : MS3A
Misc : MS55558,V3A7269,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	157	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.026	7.1	141	0.00	11.85
3 M	1,4-dioxane	0.031	0.027	12.9	141	0.00	11.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167234.D M3A7257.M Tue Dec 21 14:31:51 2021 ACCUNJ

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3A7273-CC7257
Lab FileID: 3A167532.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3A7273\3A167532.D Vial: 3
Acq On : 23 Dec 2021 9:16 am Operator: BridgetK
Sample : cc7257-5 Inst : MS3A
Misc : MS55558,V3A7273,5.0,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3A7257.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Dec 07 10:11:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	4-bromofluorobenzene	1.000	1.000	0.0	163	0.00	15.60
2 S	1,4-dioxane-d8	0.028	0.026	7.1	145	0.00	11.85
3 M	1,4-dioxane	0.031	0.030	3.2	167	-0.01	11.90

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3A167234.D M3A7257.M Thu Dec 23 11:15:38 2021 ACCUNJ

Initial Calibration Summary

Job Number: JD36624 **Sample:** V3D7187-ICC7187
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3D169275.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report MS3D

Method : C:\msdchem\1\METHODS\M3D7187.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xTue Oct 05 15:29:35 2021
Last Update : Tue Oct 05 15:29:35 2021
Response via : Initial Calibration

Calibration Files
1 =3D169270.D 0.5 =3D169269.D 100 =3D169276.D 50 =3D169275.D
20 =3D169274.D 200 =3D169277.D 4 =3D169272.D 2 =3D169271.D
8 =3D169273.D 0.2 =3D169268.D = =

Compound	1	0.5	100	50	20	200	4	2	8	0.2	Avg	%RSD
1) tert butyl alcohol-d9 ----------ISTD----------												
2) tertiary butyl alcohol	1.405	1.703	1.164	1.252	1.312	1.195	1.410	1.324	1.308		1.342	11.86
3) ethanol	0.132	0.143	0.103	0.120	0.126	0.085	0.130	0.114	0.127		0.120	14.41
4) 1,4-dioxane	0.115	0.116	0.100	0.110	0.116	0.107	0.119	0.100	0.113		0.111	6.47
5) I pentafluorobenzene ----------ISTD----------												
6) chlorodifluoromethane compound failed initial calibration	0.335	0.323	0.259	0.285	0.308		0.333	0.277	0.332		0.307	9.57
7) dichlorodifluoromethane	0.769	0.673	0.736	0.764	0.783	0.670	0.736	0.624	0.760	0.665	0.718	7.67
8) chloromethane	0.912	0.964	0.755	0.823	0.860	0.687	0.814	0.852	0.846		0.835	9.71
9) vinyl chloride	0.612	0.623	0.630	0.659	0.674	0.575	0.655	0.574	0.685	0.794	0.648	9.84
10) 1,3-butadiene compound failed initial calibration			0.193	0.219	0.234		0.264	0.256	0.248		0.236	11.10
11) bromomethane			0.165	0.198	0.230		0.265	0.289	0.251		0.233	19.58
12) chloroethane	0.357	0.461	0.332	0.363	0.368	0.269	0.374	0.345	0.375		0.360	13.91
13) trichlorofluoromethane	0.727	0.653	0.728	0.758	0.740	0.662	0.706	0.635	0.738	0.755	0.710	6.26
14) vinyl bromide											0.000#	-1.00
15) ethyl ether	0.231	0.235	0.242	0.255	0.253	0.266	0.246	0.222	0.261	0.201	0.241	8.14
16) acrolein compound failed initial calibration			0.093	0.102	0.097	0.134	0.101		0.104		0.105	14.01
17) freon 113	0.270	0.252	0.243	0.262	0.270	0.295	0.274	0.239	0.270		0.264	6.49
18) 1,1-dichloroethene	0.299	0.346	0.274	0.287	0.299	0.340	0.305	0.274	0.312	0.368	0.310	10.11
19) acetone	0.077	0.091	0.065	0.068	0.067	0.074	0.069	0.062	0.066		0.071	12.16
20) acetonitrile	0.125	0.120	0.097	0.104	0.108	0.096	0.112	0.104	0.113		0.109	8.80
21) iodomethane			0.359	0.305	0.228	0.453	0.173	0.133	0.190		0.263	43.50

----- Quadratic regression ----- Coefficient = 0.9994
Response Ratio = -0.00669 + 0.25306 *A + 0.05090 *A^2

Initial Calibration Summary

Job Number: JD36624 **Sample:** V3D7187-ICC7187
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3D169275.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

22) carbon disulfide
0.904 0.973 0.714 0.755 0.790 0.964 0.836 0.839 0.832 0.845 10.46
23) methylene chloride
0.457 0.567 0.381 0.398 0.406 0.412 0.424 0.391 0.417 0.428 13.18
24) methyl acetate
0.673 0.821 0.522 0.547 0.562 0.533 0.571 0.539 0.567 0.593 16.22
25) methyl tert butyl ether
1.257 1.186 1.215 1.314 1.321 1.191 1.339 1.172 1.350 1.371 1.272 5.97
26) trans-1,2-dichloroethene
0.348 0.367 0.330 0.347 0.367 0.365 0.347 0.357 0.376 0.372 0.358 4.05
27) di-isopropyl ether
1.354 1.467 1.309 1.420 1.490 1.241 1.552 1.438 1.576 1.518 1.437 7.50
28) 2-butanone
0.080 0.076 0.085 0.089 0.088 0.086 0.086 0.073 0.089 0.100 0.085 8.81
29) 1,1-dichloroethane
0.694 0.681 0.646 0.686 0.721 0.668 0.730 0.683 0.727 0.772 0.701 5.23
30) chloroprene
0.606 0.670 0.598 0.632 0.650 0.631 0.634 0.594 0.669 0.638 0.632 4.23
31) acrylonitrile
0.249 0.219 0.220 0.228 0.224 0.273 0.233 0.242 0.226 0.279 0.239 9.05
32) hexane
0.272 0.292 0.301 0.343 0.390 0.336 0.322 13.17
33) vinyl acetate
0.105 0.102 0.110 0.118 0.123 0.127 0.122 0.096 0.111 0.113 9.30
34) ethyl tert-butyl ether
1.287 1.389 1.268 1.345 1.375 1.250 1.403 1.276 1.420 1.580 1.359 7.28
35) ethyl acetate
0.145 0.118 0.114 0.119 0.117 0.116 0.128 0.113 0.133 0.161 0.127 12.53
36) 2,2-dichloropropane
0.681 0.656 0.540 0.570 0.616 0.554 0.623 0.597 0.617 0.768 0.622 10.79
37) cis-1,2-dichloroethene
0.454 0.418 0.393 0.407 0.422 0.406 0.459 0.415 0.422 0.422 5.17
38) methyl acrylate
0.102 0.095 0.099 0.101 0.103 0.105 0.095 0.101 0.100 3.71
39) propionitrile
0.123 0.118 0.104 0.114 0.118 0.103 0.120 0.104 0.120 0.129 0.115 7.71
40) bromochloromethane
0.237 0.213 0.208 0.217 0.213 0.213 0.231 0.197 0.223 0.257 0.221 7.74
41) tetrahydrofuran
0.222 0.234 0.235 0.233 0.301 0.309 0.256 0.256 13.79
42) chloroform
0.631 0.442 0.455 0.473 0.445 0.493 0.507 0.503 0.494 12.36
43) t-butyl formate
0.328 0.329 0.331 0.354 0.348 0.388 0.340 0.322 0.349 0.343 5.87
44) dibromofluoromethane (s)
0.419 0.409 0.461 0.447 0.437 0.462 0.437 0.438 0.445 0.422 0.438 3.94
45) methacrylonitrile
0.293 0.335 0.255 0.265 0.269 0.269 0.276 0.241 0.268 0.275 9.73
46) 1,1,1-trichloroethane
0.580 0.653 0.587 0.596 0.613 0.610 0.583 0.581 0.608 0.715 0.613 6.90
47) cyclohexane
0.736 0.637 0.657 0.686 0.701 0.622 0.675 0.622 0.713 0.678 0.673 5.72
48) 1,1-dichloropropene
0.515 0.559 0.519 0.539 0.550 0.543 0.547 0.491 0.548 0.495 0.531 4.49
49) iso-butyl alcohol
0.044 0.069 0.043 0.048 0.047 0.042 0.048 0.045 0.050 0.048 16.55
50) carbon tetrachloride
0.484 0.565 0.500 0.511 0.533 0.519 0.545 0.463 0.533 0.461 0.512 6.75
51) tert amyl alcohol
0.056 0.064 0.040 0.043 0.045 0.038 0.049 0.044 0.046 0.047 17.56

52) I 1,4-difluorobenzene ----------ISTD----------
53) 1,2-dichloroethane-d4 (s)
0.339 0.322 0.320 0.323 0.335 0.313 0.336 0.338 0.334 0.338 0.330 2.84
54) n-butyl alcohol
0.019 0.022 0.019 0.021 0.022 0.018 0.021 0.019 0.022 0.023 0.020 7.73
55) 2,2,4-trimethylpentane
0.549 0.654 0.502 0.540 0.564 0.520 0.610 0.541 0.589 0.591 0.566 8.04
56) benzene
1.040 1.110 0.886 0.954 1.024 0.862 1.081 0.999 1.049 1.082 1.009 8.31
57) tert-amyl methyl ether
0.214 0.233 0.196 0.203 0.216 0.201 0.216 0.181 0.215 0.204 0.208 6.71
58) heptane
0.199 0.237 0.166 0.175 0.176 0.183 0.200 0.176 0.185 0.281 0.198 17.83
59) isopropyl acetate
0.100 0.108 0.091 0.096 0.095 0.096 0.085 0.081 0.101 0.095 8.73
60) 1,2-dichloroethane
0.424 0.492 0.341 0.361 0.385 0.342 0.409 0.387 0.396 0.393 11.84
61) trichloroethene
0.256 0.309 0.274 0.278 0.284 0.279 0.270 0.227 0.281 0.213 0.267 10.63
62) ethyl acrylate
0.557 0.634 0.478 0.515 0.526 0.471 0.533 0.471 0.529 0.524 9.78
63) 2-nitropropane
0.215 0.141 0.143 0.148 0.151 0.169 0.157 0.151 0.159 15.09
64) 2-chloroethyl vinyl ether
0.202 0.192 0.179 0.195 0.206 0.169 0.208 0.184 0.207 0.201 0.194 6.77
65) methyl methacrylate
0.122 0.128 0.110 0.113 0.114 0.109 0.118 0.100 0.115 0.114 7.15
66) 1,2-dichloropropane
0.281 0.249 0.263 0.275 0.291 0.260 0.292 0.260 0.283 0.317 0.277 7.25
67) dibromomethane
0.195 0.188 0.155 0.164 0.167 0.161 0.177 0.168 0.171 0.171 0.172 6.99
68) methylcyclohexane
0.447 0.470 0.405 0.438 0.451 0.420 0.463 0.400 0.444 0.554 0.449 9.68
69) bromodichloromethane
0.347 0.404 0.341 0.351 0.355 0.346 0.364 0.317 0.351 0.450 0.363 10.38
70) epichlorohydrin
0.061 0.062 0.048 0.050 0.052 0.047 0.053 0.047 0.052 0.052 10.47
71) cis-1,3-dichloropropene
0.447 0.451 0.448 0.466 0.472 0.431 0.461 0.429 0.487 0.540 0.463 6.98
72) 4-methyl-2-pentanone
0.178 0.172 0.158 0.172 0.180 0.150 0.181 0.157 0.186 0.182 0.172 7.17
73) 3-methyl-1-butanol
0.033 0.036 0.028 0.031 0.033 0.027 0.034 0.029 0.033 0.045 0.033 15.10

74) I chlorobenzene-d5 ----------ISTD----------
75) toluene-d8 (s)
1.315 1.318 1.220 1.213 1.255 1.202 1.282 1.286 1.267 1.317 1.268 3.48
76) toluene
0.776 0.877 0.669 0.704 0.759 0.651 0.765 0.710 0.780 0.893 0.758 10.57
77) trans-1,3-dichloropropene
0.442 0.493 0.460 0.472 0.477 0.444 0.473 0.438 0.478 0.524 0.470 5.59
78) ethyl methacrylate
0.516 0.523 0.460 0.491 0.511 0.438 0.523 0.456 0.527 0.594 0.504 8.96
79) 1,1,2-trichloroethane
0.252 0.263 0.227 0.234 0.237 0.222 0.259 0.225 0.252 0.218 0.239 6.84
80) tetrachloroethene
0.241 0.261 0.241 0.246 0.264 0.243 0.261 0.237 0.265 0.290 0.255 6.43
81) 1,3-dichloropropane
0.543 0.541 0.463 0.490 0.515 0.442 0.554 0.481 0.530 0.540 0.510 7.57

Initial Calibration Summary

Job Number: JD36624 **Sample:** V3D7187-ICC7187
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3D169275.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

82) 2-hexanone
0.197 0.194 0.168 0.186 0.205 0.150 0.211 0.181 0.204 0.186 0.188 9.79
83) butyl acetate
0.361 0.344 0.302 0.322 0.337 0.294 0.353 0.298 0.346 0.429 0.338 11.79
84) dibromochloromethane
0.329 0.349 0.307 0.313 0.314 0.306 0.323 0.300 0.313 0.359 0.321 5.97
85) 1,2-dibromoethane
0.327 0.312 0.300 0.308 0.315 0.298 0.317 0.293 0.317 0.416 0.320 11.03
86) n-butyl ether
1.400 1.459 1.192 1.329 1.480 1.030 1.469 1.355 1.469 1.505 1.369 11.11
87) chlorobenzene
0.863 0.865 0.766 0.793 0.848 0.718 0.858 0.750 0.850 0.909 0.822 7.48
88) 1,1,1,2-tetrachloroethane
0.300 0.296 0.280 0.292 0.309 0.267 0.310 0.262 0.311 0.313 0.294 6.32
89) ethylbenzene
1.466 1.538 1.173 1.297 1.462 1.035 1.502 1.399 1.491 1.589 1.395 12.56
90) m,p-xylene
0.614 0.583 0.498 0.540 0.582 0.458 0.619 0.573 0.602 0.598 0.567 9.30
91) o-xylene
0.584 0.654 0.522 0.555 0.599 0.485 0.625 0.575 0.607 0.534 0.574 8.86
92) styrene
0.940 0.965 0.843 0.912 1.003 0.754 1.009 0.973 1.018 1.081 0.950 9.95
93) bromoform
0.271 0.259 0.255 0.264 0.264 0.251 0.273 0.233 0.257 0.294 0.262 6.07
94) butyl acrylate
0.746 0.767 0.707 0.765 0.795 0.652 0.795 0.719 0.776 0.821 0.754 6.63
95) n-amyl acetate
0.348 0.378 0.305 0.326 0.341 0.289 0.342 0.286 0.341 0.367 0.332 9.27
96) isopropylbenzene
1.592 1.687 1.281 1.410 1.547 1.126 1.620 1.457 1.582 1.708 1.501 12.31
97) cis-1,4-dichloro-2-butene
0.196 0.190 0.185 0.195 0.200 0.177 0.204 0.185 0.187 0.191 4.42

98) I 1,4-dichlorobenzene-d ----------ISTD----------
99) 4-bromofluorobenzene (s)
0.981 0.973 1.046 1.023 1.005 1.061 0.989 0.971 0.991 0.977 1.002 3.16
100) bromobenzene
0.687 0.767 0.714 0.730 0.750 0.711 0.720 0.671 0.733 0.700 0.718 3.97
101) 1,1,2,2-tetrachloroethane
0.903 0.967 0.897 0.932 0.931 0.907 0.931 0.776 0.933 0.990 0.917 6.23
102) trans-1,4-dichloro-2-butene
0.339 0.478 0.339 0.352 0.346 0.339 0.343 0.311 0.330 0.489 0.367 17.07
103) 1,2,3-trichloropropane
0.264 0.322 0.300 0.307 0.305 0.308 0.322 0.302 0.316 0.229 0.298 9.75
104) n-propylbenzene
3.319 3.680 2.985 3.220 3.484 2.775 3.471 3.139 3.501 3.818 3.339 9.51
105) 2-chlorotoluene
0.665 0.699 0.679 0.696 0.719 0.698 0.727 0.642 0.730 0.926 0.718 10.87
106) 4-chlorotoluene
0.698 0.702 0.677 0.704 0.729 0.693 0.722 0.673 0.724 0.769 0.709 3.99
107) 1,3,5-trimethylbenzene
2.418 2.535 2.235 2.409 2.554 2.129 2.537 2.310 2.567 2.655 2.435 6.86
108) tert-butylbenzene
0.571 0.559 0.558 0.575 0.580 0.565 0.566 0.515 0.566 0.535 0.559 3.53
109) 1,2,4-trimethylbenzene
2.552 2.667 2.287 2.448 2.608 2.144 2.647 2.315 2.659 2.691 2.502 7.70
110) sec-butylbenzene
2.916 3.037 2.769 2.988 3.174 2.588 3.240 2.725 3.192 3.134 2.976 7.46
111) 1,3-dichlorobenzene
1.301 1.408 1.313 1.364 1.409 1.295 1.415 1.272 1.425 1.554 1.376 6.18

Initial Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3D7187-ICC7187
Lab FileID: 3D169275.D

```
112)  p-isopropyltoluene
       2.465 2.502 2.317 2.528 2.703 2.172 2.746 2.376 2.761 2.532  2.510    7.61
113)  1,4-dichlorobenzene
       1.349 1.404 1.271 1.325 1.355 1.256 1.364 1.254 1.356 1.592  1.353    7.25
114)  1,2,3-trimethylbenzene
       2.449 2.523 2.168 2.343 2.480 2.049 2.515 2.330 2.489 2.657  2.401    7.56
115)  benzyl chloride
       1.870 1.906 1.775 1.866 1.916 1.744 1.852 1.659 1.886 2.336  1.881    9.53
116)  1,2-dichlorobenzene
       1.357 1.301 1.229 1.295 1.344 1.182 1.384 1.226 1.377 1.403  1.310    5.83
117)  n-butylbenzene
       1.098 1.182 1.196 1.237 1.263 1.184 1.145 1.084 1.206 1.238  1.183    5.01
118)  1,2-dibromo-3-chloropropane
       0.254 0.312 0.303 0.307 0.306 0.324 0.286 0.249 0.269 0.260  0.287    9.48
119)  1,3,5-trichlorobenzene
       0.897 0.962 0.956 0.988 1.030 0.972 0.994 0.877 1.011 1.069  0.975    5.93
120)  2-ethylhexyl acrylate     compound failed initial calibration
       0.151       0.122 0.116 0.111 0.138 0.095 0.095 0.103        0.116   17.22
121)  1,2,4-trichlorobenzene
       0.887 0.845 0.884 0.906 0.906 0.903 0.928 0.771 0.882 0.931  0.884    5.31
122)  hexachlorobutadiene
       0.302 0.410 0.348 0.348 0.354 0.357 0.347 0.327 0.362 0.349  0.350    7.75
123)  naphthalene
       2.995 3.056 2.604 2.872 3.040 2.470 3.050 2.633 3.071 3.451  2.924    9.86
124)  1,2,3-trichlorobenzene
       0.787 0.947 0.794 0.816 0.846 0.823 0.799 0.720 0.833 0.880  0.824    7.29
125)  hexachloroethane
       0.362 0.462 0.435 0.431 0.415 0.448 0.403 0.343 0.408 0.423  0.413    8.88
126)  2-methylnaphthalene
       1.365 1.512 1.560 1.553 1.507 1.640 1.387 1.182 1.433 1.967  1.511   13.61
 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M3D7187.M         Tue Oct 05 15:30:49 2021   3D
```

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3D7187-ICV7187
Lab FileID: 3D169280.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V3D7187\3D169280.D Vial: 14
Acq On : 4 Oct 2021 2:52 am Operator: edwardd
Sample : icv7187-50 Inst : MS3D
Misc : MS53431,V3D7187,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M3D7187.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xTue Oct 05 15:29:35 2021
Last Update : Tue Oct 05 15:29:35 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	98	0.00	2.95
2	M	tertiary butyl alcohol	1.342	1.178	12.2	92	0.00	3.01
3		ethanol	0.120	0.124	-3.3	101	0.00	2.39
4	M	1,4-dioxane	0.111	0.109	1.8	97	0.00	5.14
5	I	pentafluorobenzene	1.000	1.000	0.0	99	0.00	4.15
7	M	dichlorodifluoromethane	0.718	0.608	15.3	79	0.00	1.59
8	M	chloromethane	0.835	0.733	12.2	88	0.00	1.73
9	M	vinyl chloride	0.648	0.633	2.3	95	0.00	1.81
10		1,3-butadiene	0.236	0.512	-116.9#	231#	0.00	1.84
11	M	bromomethane	0.233	0.246	-5.6	122	0.00	2.05
12	M	chloroethane	0.360	0.335	6.9	91	0.00	2.13
13	M	trichlorofluoromethane	0.710	0.699	1.5	91	0.00	2.31
15	M	ethyl ether	0.241	0.285	-18.3	110	0.00	2.49
16	M	acrolein	0.105	0.144	-37.1#	140	0.00	2.58
17		freon 113	0.264	0.311	-17.8	117	0.00	2.66
18	M	1,1-dichloroethene	0.310	0.345	-11.3	119	0.00	2.67
19	M	acetone	0.071	0.070	1.4	101	0.00	2.67
20	M	acetonitrile	0.109	0.103	5.5	97	0.00	2.84
		----------	True	Calc.	% Drift	----------		
21	M	iodomethane	50.000	63.768	-27.5	129	0.00	2.78
		----------	AvgRF	CCRF	% Dev	----------		
22	M	carbon disulfide	0.845	0.998	-18.1	130	0.00	2.83
23	M	methylene chloride	0.428	0.415	3.0	103	0.00	2.98
24	M	methyl acetate	0.593	0.520	12.3	94	0.00	2.87
25	M	methyl tert butyl ether	1.272	1.367	-7.5	103	0.00	3.15
26	M	trans-1,2-dichloroethene	0.358	0.373	-4.2	106	0.00	3.17
27	M	di-isopropyl ether	1.437	1.354	5.8	94	0.00	3.45
28	M	2-butanone	0.085	0.093	-9.4	104	0.00	3.80
29	M	1,1-dichloroethane	0.701	0.711	-1.4	102	0.00	3.45
30	M	chloroprene	0.632	0.682	-7.9	106	0.00	3.51
31	M	acrylonitrile	0.239	0.286	-19.7	123	0.00	3.11
32		hexane	0.322	0.354	-9.9	120	0.00	3.35
33	M	vinyl acetate	0.113	0.123	-8.8	103	0.00	3.42
34	M	ethyl tert-butyl ether	1.359	1.412	-3.9	104	0.00	3.70
35	M	ethyl acetate	0.127	0.123	3.1	101	0.00	3.82
36	M	2,2-dichloropropane	0.622	0.562	9.6	97	0.00	3.84
37	M	cis-1,2-dichloroethene	0.422	0.421	0.2	102	0.00	3.83
38		methyl acrylate	0.100	0.098	2.0	97	0.00	3.86
39	M	propionitrile	0.115	0.115	0.0	100	0.00	3.84

Initial Calibration Verification

Job Number: JD36624 **Sample:** V3D7187-ICV7187
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3D169280.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

40	M	bromochloromethane	0.221	0.226	-2.3	102	0.00	4.00
41	M	tetrahydrofuran	0.256	0.240	6.3	101	0.00	4.01
42	M	chloroform	0.494	0.455	7.9	99	0.00	4.05
43	M	t-butyl formate	0.343	0.359	-4.7	100	0.00	4.07
44	S	dibromofluoromethane (s)	0.438	0.451	-3.0	100	0.00	4.16
45	M	methacrylonitrile	0.275	0.266	3.3	99	0.00	3.95
46	M	1,1,1-trichloroethane	0.613	0.624	-1.8	103	0.00	4.20
47		cyclohexane	0.673	0.667	0.9	96	0.00	4.26
48		1,1-dichloropropene	0.531	0.558	-5.1	102	0.00	4.30
49		iso-butyl alcohol	0.048	0.050	-4.2	102	0.00	4.30
50		carbon tetrachloride	0.512	0.530	-3.5	102	0.00	4.31
51		tert amyl alcohol	0.047	0.043	8.5	99	0.00	4.39
52	I	1,4-difluorobenzene	1.000	1.000	0.0	99	0.00	4.72
53	S	1,2-dichloroethane-d4 (s)	0.330	0.314	4.8	97	0.00	4.40
54	M	n-butyl alcohol	0.020	0.020	0.0	96	0.00	4.77
55		2,2,4-trimethylpentane	0.566	0.724	-27.9	133	0.00	4.52
56	M	benzene	1.009	0.979	3.0	102	0.00	4.45
57	M	tert-amyl methyl ether	0.208	0.196	5.8	96	0.00	4.51
58	M	heptane	0.198	0.187	5.6	106	0.00	4.63
59	M	isopropyl acetate	0.095	0.090	5.3	93	0.00	4.42
60	M	1,2-dichloroethane	0.393	0.366	6.9	101	0.00	4.46
61	M	trichloroethene	0.267	0.283	-6.0	101	0.00	4.92
62		ethyl acrylate	0.524	0.509	2.9	98	0.00	4.93
63	M	2-nitropropane	0.159	0.145	8.8	101	0.00	5.44
64	M	2-chloroethyl vinyl ether	0.194	0.229	-18.0	117	0.00	5.48
65	M	methyl methacrylate	0.114	0.116	-1.8	102	0.00	5.11
66	M	1,2-dichloropropane	0.277	0.269	2.9	97	0.00	5.11
67	M	dibromomethane	0.172	0.156	9.3	95	0.00	5.17
68	M	methylcyclohexane	0.449	0.443	1.3	100	0.00	5.11
69	M	bromodichloromethane	0.363	0.344	5.2	97	0.00	5.29
70		epichlorohydrin	0.052	0.056	-7.7	110	0.00	5.53
71	M	cis-1,3-dichloropropene	0.463	0.444	4.1	95	0.00	5.63
72	M	4-methyl-2-pentanone	0.172	0.169	1.7	98	0.00	5.73
73	M	3-methyl-1-butanol	0.033	0.030	9.1	96	0.00	5.75
74	I	chlorobenzene-d5	1.000	1.000	0.0	100	0.00	7.10
75	S	toluene-d8 (s)	1.268	1.213	4.3	100	0.00	5.86
76		toluene	0.758	0.705	7.0	100	0.00	5.92
77		trans-1,3-dichloropropene	0.470	0.465	1.1	98	0.00	6.08
78		ethyl methacrylate	0.504	0.485	3.8	99	0.00	6.11
79		1,1,2-trichloroethane	0.239	0.227	5.0	97	0.00	6.25
80	M	tetrachloroethene	0.255	0.263	-3.1	107	0.00	6.36
81	M	1,3-dichloropropane	0.510	0.481	5.7	98	0.00	6.39
82		2-hexanone	0.188	0.185	1.6	99	0.00	6.41
83	M	butyl acetate	0.338	0.308	8.9	95	0.00	6.50
84	M	dibromochloromethane	0.321	0.318	0.9	101	0.00	6.59
85	M	1,2-dibromoethane	0.320	0.306	4.4	99	0.00	6.70
86		n-butyl ether	1.369	1.283	6.3	96	0.00	7.19
87	M	chlorobenzene	0.822	0.791	3.8	100	0.00	7.13
88	M	1,1,1,2-tetrachloroethane	0.294	0.286	2.7	98	0.00	7.20
89	M	ethylbenzene	1.395	1.288	7.7	99	0.00	7.21
90	M	m,p-xylene	0.567	0.536	5.5	99	0.00	7.32
91	M	o-xylene	0.574	0.549	4.4	99	0.00	7.68
92	M	styrene	0.950	0.894	5.9	98	0.00	7.69
93	M	bromoform	0.262	0.262	0.0	99	0.00	7.86
94		butyl acrylate	0.754	0.760	-0.8	99	0.00	7.60
95		n-amyl acetate	0.332	0.293	11.7	90	0.00	7.81
96		isopropylbenzene	1.501	1.387	7.6	98	0.00	8.01
97		cis-1,4-dichloro-2-butene	0.191	0.194	-1.6	99	0.00	8.06

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3D7187-ICV7187
Lab FileID: 3D169280.D

98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	9.29
99	S	4-bromofluorobenzene (s)	1.002	1.022	-2.0	99	0.00	8.18
100	M	bromobenzene	0.718	0.721	-0.4	98	0.00	8.32
101	M	1,1,2,2-tetrachloroethane	0.917	0.926	-1.0	98	0.00	8.29
102	M	trans-1,4-dichloro-2-bute	0.367	0.344	6.3	97	0.00	8.32
103	M	1,2,3-trichloropropane	0.298	0.306	-2.7	98	0.00	8.35
104	M	n-propylbenzene	3.339	3.198	4.2	98	0.00	8.41
105	M	2-chlorotoluene	0.718	0.702	2.2	100	0.00	8.50
106	M	4-chlorotoluene	0.709	0.702	1.0	98	0.00	8.62
107	M	1,3,5-trimethylbenzene	2.435	2.416	0.8	99	0.00	8.58
108	M	tert-butylbenzene	0.559	0.608	-8.8	104	0.00	8.89
109	M	1,2,4-trimethylbenzene	2.502	2.412	3.6	97	0.00	8.94
110	M	sec-butylbenzene	2.976	2.948	0.9	98	0.00	9.10
111	M	1,3-dichlorobenzene	1.376	1.377	-0.1	100	0.00	9.22
112	M	p-isopropyltoluene	2.510	2.487	0.9	97	0.00	9.24
113	M	1,4-dichlorobenzene	1.353	1.298	4.1	97	0.00	9.32
115		benzyl chloride	1.881	1.745	7.2	92	0.00	9.42
116	M	1,2-dichlorobenzene	1.310	1.280	2.3	98	0.00	9.67
117	M	n-butylbenzene	1.183	1.222	-3.3	98	0.00	9.65
118	M	1,2-dibromo-3-chloropropa	0.287	0.301	-4.9	97	0.00	10.43
119		1,3,5-trichlorobenzene	0.975	0.991	-1.6	99	0.00	10.63
120		2-ethylhexyl acrylate	0.116	0.157	-35.3#	134	0.00	11.44
121	M	1,2,4-trichlorobenzene	0.884	0.878	0.7	96	0.00	11.26
122	M	hexachlorobutadiene	0.350	0.338	3.4	96	0.00	11.41
123	M	naphthalene	2.924	2.809	3.9	97	0.00	11.51
124	M	1,2,3-trichlorobenzene	0.824	0.815	1.1	99	0.00	11.74
125	m	hexachloroethane	0.413	0.440	-6.5	101	0.00	9.95
126		2-methylnaphthalene	1.511	1.581	-4.6	101	0.00	12.65

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3D169275.D M3D7187.M Tue Oct 05 15:30:59 2021 3D

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: V3D7187-ICV7187
Lab FileID: 3D169281.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V3D7187\3D169281.D Vial: 15
Acq On : 4 Oct 2021 3:19 am Operator: edwardd
Sample : icv7187-50 Inst : MS3D
Misc : MS53431,V3D7187,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M3D7187.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xTue Oct 05 15:29:35 2021
Last Update : Tue Oct 05 15:29:35 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	tert butyl alcohol-d9	1.000	1.000	0.0	98	0.00	2.95
5 I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	4.15
6	chlorodifluoromethane	0.307	0.758	-146.9#	291#	0.00	1.60
20 M	acetonitrile	0.109	0.108	0.9	113	0.00	2.84
31 M	acrylonitrile	0.239	0.297	-24.3	142	0.00	3.11
44 S	dibromofluoromethane (s)	0.438	0.439	-0.2	107	0.00	4.16
52 I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	4.71
53 S	1,2-dichloroethane-d4 (s)	0.330	0.330	0.0	107	0.00	4.40
74 I	chlorobenzene-d5	1.000	1.000	0.0	97	0.00	7.10
75 S	toluene-d8 (s)	1.268	1.321	-4.2	106	0.00	5.86
98 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	9.29
99 S	4-bromofluorobenzene (s)	1.002	0.960	4.2	102	0.00	8.18
114	1,2,3-trimethylbenzene	2.401	2.619	-9.1	122	0.00	9.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3D169275.D M3D7187.M Tue Oct 05 15:41:22 2021 3D

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V3D7294-CC7187
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3D171914.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\lo...94-partial\3d171914.d Vial: 2
Acq On : 16 Dec 2021 10:07 am Operator: nicoleh
Sample : cc7187-20 Inst : MS3D
Misc : MS55565,V3D7294,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M3D7187.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
Last Update : Wed Oct 06 08:27:57 2021
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	118	0.00	2.95
2	M	tertiary butyl alcohol	1.342	1.285	4.2	115	0.00	3.01
3		ethanol	0.120	0.142	-18.3	133	0.00	2.39
4	M	1,4-dioxane	0.111	0.139	-25.2#	141	0.00	5.14
5	I	pentafluorobenzene	1.000	1.000	0.0	160	0.00	4.15
6		chlorodifluoromethane	0.307	0.315	-2.6	163	0.00	1.60
7	M	dichlorodifluoromethane	0.718	0.614	14.5	126	0.00	1.59
8	M	chloromethane	0.835	0.643	23.0#	120	0.00	1.73
9	M	vinyl chloride	0.648	0.547	15.6	130	0.00	1.81
10		1,3-butadiene	0.236	0.218	7.6	149	0.00	1.84
11	M	bromomethane	0.233	0.236	-1.3	164	0.00	2.05
12	M	chloroethane	0.360	0.336	6.7	146	0.00	2.13
13	M	trichlorofluoromethane	0.710	0.590	16.9	128	0.00	2.31
14		vinyl bromide	----------NA----------					
15	M	ethyl ether	0.241	0.227	5.8	144	0.00	2.49
16	M	acrolein	0.105	0.106	-1.0	176	0.00	2.58
17		freon 113	0.264	0.241	8.7	143	0.00	2.66
18	M	1,1-dichloroethene	0.310	0.274	11.6	147	0.00	2.66
19	M	acetone	0.071	0.062	12.7	147	0.00	2.67
20	M	acetonitrile	0.109	0.090	17.4	134	0.00	2.84
		----------	True	Calc.	% Drift	----------		
21	M	iodomethane	20.000	10.647	46.8#	87	0.00	2.77
		----------	AvgRF	CCRF	% Dev	----------		
22	M	carbon disulfide	0.845	0.691	18.2	140	0.00	2.83
23	M	methylene chloride	0.428	0.367	14.3	145	0.00	2.98
24	M	methyl acetate	0.593	0.456	23.1#	130	0.00	2.87
25	M	methyl tert butyl ether	1.272	1.062	16.5	129	0.00	3.15
26	M	trans-1,2-dichloroethene	0.358	0.329	8.1	143	0.00	3.17
27	M	di-isopropyl ether	1.437	1.238	13.8	133	0.00	3.45
28	M	2-butanone	0.085	0.078	8.2	142	0.00	3.80
29	M	1,1-dichloroethane	0.701	0.614	12.4	136	0.00	3.45
30	M	chloroprene	0.632	0.509	19.5	125	0.00	3.50
31	M	acrylonitrile	0.239	0.211	11.7	150	0.00	3.11
32		hexane	0.322	0.243	24.5#	129	0.00	3.34
33	M	vinyl acetate	0.113	0.117	-3.5	152	0.00	3.42
34	M	ethyl tert-butyl ether	1.359	1.182	13.0	138	0.00	3.70
35	M	ethyl acetate	0.127	0.101	20.5#	138	0.00	3.82
36	M	2,2-dichloropropane	0.622	0.505	18.8	131	0.00	3.84
37	M	cis-1,2-dichloroethene	0.422	0.382	9.5	145	0.00	3.83

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V3D7294-CC7187
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3D171914.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

38		methyl acrylate	0.100	0.083	17.0	131	0.00	3.86
39	M	propionitrile	0.115	0.096	16.5	130	0.00	3.83
40	M	bromochloromethane	0.221	0.195	11.8	146	0.00	3.99
41	M	tetrahydrofuran	0.256	0.192	25.0#	131	0.00	4.01
42	M	chloroform	0.494	0.407	17.6	138	0.00	4.05
43	M	t-butyl formate	0.343	0.321	6.4	147	0.00	4.07
44	S	dibromofluoromethane (s)	0.438	0.377	13.9	138	0.00	4.15
45	M	methacrylonitrile	0.275	0.223	18.9	133	0.00	3.95
46	M	1,1,1-trichloroethane	0.613	0.512	16.5	134	0.00	4.19
47		cyclohexane	0.673	0.594	11.7	136	0.00	4.26
48		1,1-dichloropropene	0.531	0.457	13.9	133	0.00	4.30
49		iso-butyl alcohol	0.048	0.035	27.1#	120	0.00	4.29
50		carbon tetrachloride	0.512	0.432	15.6	130	0.00	4.31
51		tert amyl alcohol	0.047	0.035	25.5#	124	0.00	4.39
52	I	1,4-difluorobenzene	1.000	1.000	0.0	150	0.00	4.72
53	S	1,2-dichloroethane-d4 (s)	0.330	0.283	14.2	126	0.00	4.40
54	M	n-butyl alcohol	0.020	0.018	10.0	123	0.00	4.77
55		2,2,4-trimethylpentane	0.566	0.711	-25.6#	189	0.00	4.51
56	M	benzene	1.009	0.956	5.3	140	0.00	4.44
57	M	tert-amyl methyl ether	0.208	0.191	8.2	132	0.00	4.51
58	M	heptane	0.198	0.179	9.6	152	0.00	4.63
59	M	isopropyl acetate	0.095	0.093	2.1	146	0.00	4.42
60	M	1,2-dichloroethane	0.393	0.328	16.5	127	0.00	4.46
61	M	trichloroethene	0.267	0.273	-2.2	144	0.00	4.92
62		ethyl acrylate	0.524	0.456	13.0	130	0.00	4.92
63	M	2-nitropropane	0.159	0.106	33.3#	107	0.00	5.43
64	M	2-chloroethyl vinyl ether	0.194	0.215	-10.8	156	0.00	5.48
65	M	methyl methacrylate	0.114	0.101	11.4	132	0.00	5.11
66	M	1,2-dichloropropane	0.277	0.257	7.2	132	0.00	5.10
67	M	dibromomethane	0.172	0.162	5.8	145	0.00	5.17
68	M	methylcyclohexane	0.449	0.423	5.8	140	0.00	5.11
69	M	bromodichloromethane	0.363	0.312	14.0	132	0.00	5.29
70		epichlorohydrin	0.052	0.053	-1.9	153	0.00	5.53
71	M	cis-1,3-dichloropropene	0.463	0.415	10.4	132	0.00	5.63
72	M	4-methyl-2-pentanone	0.172	0.164	4.7	136	0.00	5.72
73	M	3-methyl-1-butanol	0.033	0.025	24.2#	112	0.00	5.75
74	I	chlorobenzene-d5	1.000	1.000	0.0	139	0.00	7.10
75	S	toluene-d8 (s)	1.268	1.266	0.2	140	0.00	5.86
76		toluene	0.758	0.761	-0.4	139	0.00	5.92
77		trans-1,3-dichloropropene	0.470	0.443	5.7	129	0.00	6.07
78		ethyl methacrylate	0.504	0.501	0.6	136	0.00	6.11
79		1,1,2-trichloroethane	0.239	0.249	-4.2	146	0.00	6.25
80	M	tetrachloroethene	0.255	0.266	-4.3	140	0.00	6.36
81	M	1,3-dichloropropane	0.510	0.520	-2.0	140	0.00	6.39
82		2-hexanone	0.188	0.207	-10.1	140	0.00	6.41
83	M	butyl acetate	0.338	0.314	7.1	130	0.00	6.50
84	M	dibromochloromethane	0.321	0.311	3.1	137	0.00	6.59
85	M	1,2-dibromoethane	0.320	0.324	-1.3	143	0.00	6.70
86		n-butyl ether	1.369	1.408	-2.8	132	0.00	7.18
87	M	chlorobenzene	0.822	0.881	-7.2	144	0.00	7.13
88	M	1,1,1,2-tetrachloroethane	0.294	0.298	-1.4	134	0.00	7.20
89	M	ethylbenzene	1.395	1.468	-5.2	140	0.00	7.21
90	M	m,p-xylene	0.567	0.600	-5.8	143	0.00	7.32
91	M	o-xylene	0.574	0.621	-8.2	144	0.00	7.68
92	M	styrene	0.950	0.987	-3.9	137	0.00	7.69
93	M	bromoform	0.262	0.225	14.1	118	0.00	7.86
94		butyl acrylate	0.754	0.761	-0.9	133	0.00	7.59
95		n-amyl acetate	0.332	0.340	-2.4	139	0.00	7.80

Continuing Calibration Summary

Job Number: JD36624 **Sample:** V3D7294-CC7187
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 3D171914.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

96		isopropylbenzene	1.501	1.531	-2.0	138	0.00	8.01
97		cis-1,4-dichloro-2-butene	0.191	0.162	15.2	112	0.00	8.05
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	132	0.00	9.29
99	S	4-bromofluorobenzene (s)	1.002	1.023	-2.1	134	0.00	8.18
100	M	bromobenzene	0.718	0.786	-9.5	138	0.00	8.32
101	M	1,1,2,2-tetrachloroethane	0.917	1.026	-11.9	146	0.00	8.29
102	M	trans-1,4-dichloro-2-bute	0.367	0.337	8.2	128	0.00	8.32
103	M	1,2,3-trichloropropane	0.298	0.333	-11.7	145	0.00	8.34
104	M	n-propylbenzene	3.339	3.715	-11.3	141	0.00	8.40
105	M	2-chlorotoluene	0.718	0.800	-11.4	147	0.00	8.50
106	M	4-chlorotoluene	0.709	0.821	-15.8	149	0.00	8.61
107	M	1,3,5-trimethylbenzene	2.435	2.586	-6.2	134	0.00	8.57
108	M	tert-butylbenzene	0.559	0.623	-11.4	142	0.00	8.88
109	M	1,2,4-trimethylbenzene	2.502	2.651	-6.0	134	0.00	8.94
110	M	sec-butylbenzene	2.976	3.373	-13.3	140	0.00	9.10
111	M	1,3-dichlorobenzene	1.376	1.511	-9.8	142	0.00	9.22
112	M	p-isopropyltoluene	2.510	2.823	-12.5	138	0.00	9.24
113	M	1,4-dichlorobenzene	1.353	1.470	-8.6	143	0.00	9.32
114		1,2,3-trimethylbenzene	2.401	2.525	-5.2	134	0.00	9.34
115		benzyl chloride	1.881	1.844	2.0	127	0.00	9.42
116	M	1,2-dichlorobenzene	1.310	1.427	-8.9	140	0.00	9.67
117	M	n-butylbenzene	1.183	1.382	-16.8	144	0.00	9.64
118	M	1,2-dibromo-3-chloropropa	0.287	0.293	-2.1	126	0.00	10.43
119		1,3,5-trichlorobenzene	0.975	1.056	-8.3	135	0.00	10.63
120		2-ethylhexyl acrylate	0.116	0.081	30.2#	97	0.00	11.44
121	M	1,2,4-trichlorobenzene	0.884	0.930	-5.2	136	0.00	11.26
122	M	hexachlorobutadiene	0.350	0.347	0.9	130	0.00	11.40
123	M	naphthalene	2.924	3.037	-3.9	132	0.00	11.51
124	M	1,2,3-trichlorobenzene	0.824	0.847	-2.8	132	0.00	11.74
125	m	hexachloroethane	0.413	0.364	11.9	116	0.00	9.95
126		2-methylnaphthalene	1.511	1.201	20.5#	105	0.00	12.65

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3D169274.D M3D7187.M Fri Dec 17 01:45:29 2021

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V1X8342	**Method:** SW846 8260D	**Instrument ID:** GCMS1X

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1X8342-BFB	1X192528.D	11/17/21 19:07	n/a	BFB Tune
V1X8342-IC8342	1X192530.D	11/17/21 19:41	n/a	Initial cal 0.2
V1X8342-IC8342	1X192532.D	11/17/21 20:15	n/a	Initial cal 0.5
V1X8342-IC8342	1X192534.D	11/17/21 20:49	n/a	Initial cal 1
V1X8342-IC8342	1X192536.D	11/17/21 21:22	n/a	Initial cal 2
V1X8342-IC8342	1X192538.D	11/17/21 21:56	n/a	Initial cal 4
V1X8342-IC8342	1X192540.D	11/17/21 22:30	n/a	Initial cal 8
V1X8342-IC8342	1X192542.D	11/17/21 23:04	n/a	Initial cal 20
V1X8342-ICC8342	1X192544.D	11/17/21 23:38	n/a	Initial cal 50
V1X8342-IC8342	1X192546.D	11/18/21 00:12	n/a	Initial cal 100
V1X8342-IC8342	1X192548.D	11/18/21 00:45	n/a	Initial cal 200
V1X8342-ICV8342	1X192554.D	11/18/21 02:25	n/a	Initial cal verification 50
V1X8342-ICV8342	1X192556.D	11/18/21 02:59	n/a	Initial cal verification 50
V1X8342-BFB2	1X192566.D	11/23/21 10:03	n/a	BFB Tune
V1X8342-ICV8342	1X192568.D	11/23/21 10:46	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V1X8363	**Method:** SW846 8260D	**Instrument ID:** GCMS1X

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1X8363-BFB	1X193024.D	12/17/21 10:17	n/a	BFB Tune
V1X8363-CC8342	1X193024.D	12/17/21 10:17	n/a	Continuing cal 20
V1X8363-BS	1X193026.D	12/17/21 11:16	n/a	Blank Spike
V1X8363-MB	1X193028.D	12/17/21 12:07	n/a	Method Blank
ZZZZZZ	1X193029.D	12/17/21 12:33	n/a	(unrelated sample)
ZZZZZZ	1X193030.D	12/17/21 12:59	n/a	(unrelated sample)
ZZZZZZ	1X193031.D	12/17/21 13:25	n/a	(unrelated sample)
ZZZZZZ	1X193032.D	12/17/21 13:51	n/a	(unrelated sample)
ZZZZZZ	1X193033.D	12/17/21 14:17	n/a	(unrelated sample)
JD36624-4	1X193034.D	12/17/21 14:43	n/a	HOFF MW-4DU
JD36624-10	1X193037.D	12/17/21 16:01	n/a	HOFF MW-D
JD36624-5	1X193038.D	12/17/21 16:27	n/a	DUP-2021
JD36624-9	1X193039.D	12/17/21 16:53	n/a	HOFF MW-C
JD36624-7	1X193040.D	12/17/21 17:18	n/a	HOFF MW-FB
JD36624-10MS	1X193041.D	12/17/21 17:44	n/a	Matrix Spike
JD36624-10MSD	1X193042.D	12/17/21 18:11	n/a	Matrix Spike Duplicate
ZZZZZZ	1X193043.D	12/17/21 18:36	n/a	(unrelated sample)
JD36624-11	1X193044.D	12/17/21 19:02	n/a	HOFF IW-1A
JD36624-12	1X193045.D	12/17/21 19:28	n/a	HOFF IW-1B
JD36624-1	1X193046.D	12/17/21 19:54	n/a	TB-20211207
JD36624-13	1X193047.D	12/17/21 20:20	n/a	HOFF IW-3A

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V1X8364	**Method:** SW846 8260D	**Instrument ID:** GCMS1X

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1X8364-BFB	1X193057.D	12/20/21 12:00	n/a	BFB Tune
V1X8364-CC8342	1X193057.D	12/20/21 12:00	n/a	Continuing cal 20
V1X8364-BS	1X193059.D	12/20/21 12:54	n/a	Blank Spike
V1X8364-MB	1X193061.D	12/20/21 14:10	n/a	Method Blank
ZZZZZZ	1X193062.D	12/20/21 14:39	n/a	(unrelated sample)
ZZZZZZ	1X193063.D	12/20/21 15:05	n/a	(unrelated sample)
ZZZZZZ	1X193064.D	12/20/21 15:31	n/a	(unrelated sample)
ZZZZZZ	1X193065.D	12/20/21 15:57	n/a	(unrelated sample)
JD36624-13	1X193066.D	12/20/21 16:23	n/a	HOFF IW-3A
ZZZZZZ	1X193067.D	12/20/21 16:55	n/a	(unrelated sample)
ZZZZZZ	1X193068.D	12/20/21 17:21	n/a	(unrelated sample)
ZZZZZZ	1X193069.D	12/20/21 17:46	n/a	(unrelated sample)
JD36822-2	1X193070.D	12/20/21 18:12	n/a	(used for QC only; not part of job JD36624)
ZZZZZZ	1X193071.D	12/20/21 18:38	n/a	(unrelated sample)
JD36822-2MS	1X193072.D	12/20/21 19:04	n/a	Matrix Spike
JD36822-2MSD	1X193073.D	12/20/21 19:30	n/a	Matrix Spike Duplicate
ZZZZZZ	1X193075.D	12/20/21 20:22	n/a	(unrelated sample)
ZZZZZZ	1X193076.D	12/20/21 20:48	n/a	(unrelated sample)
ZZZZZZ	1X193077.D	12/20/21 21:14	n/a	(unrelated sample)
ZZZZZZ	1X193078.D	12/20/21 21:40	n/a	(unrelated sample)
ZZZZZZ	1X193079.D	12/20/21 22:06	n/a	(unrelated sample)
ZZZZZZ	1X193080.D	12/20/21 22:32	n/a	(unrelated sample)
ZZZZZZ	1X193081.D	12/20/21 22:57	n/a	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V1X8365	**Method:** SW846 8260D	**Instrument ID:** GCMS1X

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1X8365-BFB	1X193087.D	12/21/21 01:32	n/a	BFB Tune
V1X8365-CC8342	1X193087.D	12/21/21 01:32	n/a	Continuing cal 50
V1X8365-BS	1X193088.D	12/21/21 01:58	n/a	Blank Spike
V1X8365-MB	1X193090.D	12/21/21 02:50	n/a	Method Blank
JD36514-36	1X193091.D	12/21/21 03:16	n/a	(used for QC only; not part of job JD36624)
JD36514-37	1X193092.D	12/21/21 03:42	n/a	(used for QC only; not part of job JD36624)
ZZZZZZ	1X193093.D	12/21/21 04:08	n/a	(unrelated sample)
ZZZZZZ	1X193094.D	12/21/21 04:33	n/a	(unrelated sample)
ZZZZZZ	1X193095.D	12/21/21 04:59	n/a	(unrelated sample)
ZZZZZZ	1X193096.D	12/21/21 05:25	n/a	(unrelated sample)
ZZZZZZ	1X193097.D	12/21/21 05:51	n/a	(unrelated sample)
ZZZZZZ	1X193098.D	12/21/21 06:17	n/a	(unrelated sample)
ZZZZZZ	1X193099.D	12/21/21 06:43	n/a	(unrelated sample)
ZZZZZZ	1X193100.D	12/21/21 07:09	n/a	(unrelated sample)
ZZZZZZ	1X193101.D	12/21/21 07:35	n/a	(unrelated sample)
ZZZZZZ	1X193102.D	12/21/21 08:01	n/a	(unrelated sample)
ZZZZZZ	1X193103.D	12/21/21 08:27	n/a	(unrelated sample)
ZZZZZZ	1X193104.D	12/21/21 08:53	n/a	(unrelated sample)
JD36514-36MS	1X193105.D	12/21/21 09:19	n/a	Matrix Spike
JD36514-37DUP	1X193107.D	12/21/21 10:11	n/a	Duplicate

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V1X8366	**Method:** SW846 8260D	**Instrument ID:** GCMS1X

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1X8366-BFB	1X193108.D	12/21/21 10:37	n/a	BFB Tune
V1X8366-CC8342	1X193108.D	12/21/21 10:37	n/a	Continuing cal 20
V1X8366-BS	1X193109.D	12/21/21 11:08	n/a	Blank Spike
V1X8366-MB	1X193111.D	12/21/21 11:59	n/a	Method Blank
ZZZZZZ	1X193112.D	12/21/21 12:25	n/a	(unrelated sample)
ZZZZZZ	1X193113.D	12/21/21 12:51	n/a	(unrelated sample)
ZZZZZZ	1X193114.D	12/21/21 13:17	n/a	(unrelated sample)
ZZZZZZ	1X193115.D	12/21/21 13:43	n/a	(unrelated sample)
ZZZZZZ	1X193116.D	12/21/21 14:09	n/a	(unrelated sample)
JD36624-9	1X193117.D	12/21/21 14:35	n/a	HOFF MW-C
JD36624-14	1X193118.D	12/21/21 15:00	n/a	HOFF IW-3B
JD36624-15	1X193119.D	12/21/21 15:26	n/a	HOFF IW-2A
JD36624-16	1X193120.D	12/21/21 15:52	n/a	HOFF IW-2B
ZZZZZZ	1X193121.D	12/21/21 16:18	n/a	(unrelated sample)
JD36624-17	1X193122.D	12/21/21 16:44	n/a	HOFF IW-B
JD36624-17MS	1X193123.D	12/21/21 17:15	n/a	Matrix Spike
JD36624-17MSD	1X193124.D	12/21/21 17:41	n/a	Matrix Spike Duplicate
ZZZZZZ	1X193126.D	12/21/21 18:33	n/a	(unrelated sample)
ZZZZZZ	1X193135.D	12/21/21 22:25	n/a	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V1X8367	**Method:** SW846 8260D	**Instrument ID:** GCMS1X

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1X8367-BFB	1X193138.D	12/21/21 23:43	n/a	BFB Tune
V1X8367-CC8342	1X193138.D	12/21/21 23:43	n/a	Continuing cal 50
V1X8367-BS	1X193140.D	12/22/21 00:35	n/a	Blank Spike
V1X8367-MB	1X193142.D	12/22/21 01:26	n/a	Method Blank
ZZZZZZ	1X193143.D	12/22/21 01:52	n/a	(unrelated sample)
ZZZZZZ	1X193144.D	12/22/21 02:18	n/a	(unrelated sample)
JD36738-5	1X193145.D	12/22/21 02:44	n/a	(used for QC only; not part of job JD36624)
JD36738-5MS	1X193146.D	12/22/21 03:10	n/a	Matrix Spike
JD36738-5MSD	1X193147.D	12/22/21 03:36	n/a	Matrix Spike Duplicate
JD36738-5	1X193148.D	12/22/21 04:01	n/a	(used for QC only; not part of job JD36624)
ZZZZZZ	1X193149.D	12/22/21 04:27	n/a	(unrelated sample)
ZZZZZZ	1X193150.D	12/22/21 04:53	n/a	(unrelated sample)
ZZZZZZ	1X193151.D	12/22/21 05:19	n/a	(unrelated sample)
ZZZZZZ	1X193152.D	12/22/21 05:45	n/a	(unrelated sample)
ZZZZZZ	1X193153.D	12/22/21 06:11	n/a	(unrelated sample)
ZZZZZZ	1X193154.D	12/22/21 06:36	n/a	(unrelated sample)
ZZZZZZ	1X193155.D	12/22/21 07:02	n/a	(unrelated sample)
ZZZZZZ	1X193156.D	12/22/21 07:28	n/a	(unrelated sample)
ZZZZZZ	1X193157.D	12/22/21 07:54	n/a	(unrelated sample)
ZZZZZZ	1X193158.D	12/22/21 08:20	n/a	(unrelated sample)
ZZZZZZ	1X193159.D	12/22/21 08:46	n/a	(unrelated sample)
ZZZZZZ	1X193160.D	12/22/21 09:12	n/a	(unrelated sample)
ZZZZZZ	1X193161.D	12/22/21 09:38	n/a	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V2D8694	**Method:** SW846 8260D	**Instrument ID:** GCMS2D

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2D8694-BFB	2D199712.D	11/17/21 18:47	n/a	BFB Tune
V2D8694-IC8694	2D199713.D	11/17/21 19:16	n/a	Initial cal 0.2
V2D8694-IC8694	2D199714.D	11/17/21 19:45	n/a	Initial cal 0.5
V2D8694-IC8694	2D199715.D	11/17/21 20:14	n/a	Initial cal 1
V2D8694-IC8694	2D199716.D	11/17/21 20:43	n/a	Initial cal 2
V2D8694-IC8694	2D199717.D	11/17/21 21:13	n/a	Initial cal 4
V2D8694-IC8694	2D199718.D	11/17/21 21:42	n/a	Initial cal 8
V2D8694-IC8694	2D199719.D	11/17/21 22:11	n/a	Initial cal 20
V2D8694-ICC8694	2D199720.D	11/17/21 22:41	n/a	Initial cal 50
V2D8694-IC8694	2D199721.D	11/17/21 23:10	n/a	Initial cal 100
V2D8694-IC8694	2D199722.D	11/17/21 23:39	n/a	Initial cal 200
V2D8694-ICV8694	2D199725.D	11/18/21 01:06	n/a	Initial cal verification 50
V2D8694-ICV8694	2D199726.D	11/18/21 01:35	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V2D8732	**Method:** SW846 8260D	**Instrument ID:** GCMS2D

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2D8732-BFB	2D200523.D	12/22/21 08:30	n/a	BFB Tune
V2D8732-CC8694	2D200523.D	12/22/21 08:30	n/a	Continuing cal 20
V2D8732-BS	2D200524.D	12/22/21 09:10	n/a	Blank Spike
V2D8732-MB	2D200526.D	12/22/21 10:21	n/a	Method Blank
ZZZZZZ	2D200527.D	12/22/21 10:57	n/a	(unrelated sample)
ZZZZZZ	2D200528.D	12/22/21 11:26	n/a	(unrelated sample)
JD36806-4	2D200529.D	12/22/21 11:55	n/a	(used for QC only; not part of job JD36624)
JD36806-5	2D200530.D	12/22/21 12:24	n/a	(used for QC only; not part of job JD36624)
ZZZZZZ	2D200531.D	12/22/21 12:53	n/a	(unrelated sample)
JD36624-17	2D200532.D	12/22/21 13:22	n/a	HOFF IW-B
JD36624-16	2D200533.D	12/22/21 13:51	n/a	HOFF IW-2B
JD36806-4MS	2D200534.D	12/22/21 14:21	n/a	Matrix Spike
JD36806-5DUP	2D200536.D	12/22/21 15:19	n/a	Duplicate
ZZZZZZ	2D200537.D	12/22/21 15:48	n/a	(unrelated sample)
ZZZZZZ	2D200538.D	12/22/21 16:17	n/a	(unrelated sample)
ZZZZZZ	2D200539.D	12/22/21 16:47	n/a	(unrelated sample)
ZZZZZZ	2D200540.D	12/22/21 17:16	n/a	(unrelated sample)
ZZZZZZ	2D200541.D	12/22/21 17:45	n/a	(unrelated sample)
ZZZZZZ	2D200542.D	12/22/21 18:14	n/a	(unrelated sample)
ZZZZZZ	2D200543.D	12/22/21 18:43	n/a	(unrelated sample)
ZZZZZZ	2D200544.D	12/22/21 19:12	n/a	(unrelated sample)
ZZZZZZ	2D200545.D	12/22/21 19:41	n/a	(unrelated sample)
ZZZZZZ	2D200546.D	12/22/21 20:10	n/a	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V2V3410	**Method:** SW846 8260D	**Instrument ID:** GCMS2V

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2V3410-BFB	2V82658.D	11/17/21 18:44	n/a	BFB Tune
V2V3410-IC3410	2V82659.D	11/17/21 19:09	n/a	Initial cal 0.2
V2V3410-IC3410	2V82660.D	11/17/21 19:35	n/a	Initial cal 0.5
V2V3410-IC3410	2V82661.D	11/17/21 20:00	n/a	Initial cal 1
V2V3410-IC3410	2V82662.D	11/17/21 20:26	n/a	Initial cal 2
V2V3410-IC3410	2V82663.D	11/17/21 20:51	n/a	Initial cal 4
V2V3410-IC3410	2V82664.D	11/17/21 21:17	n/a	Initial cal 8
V2V3410-IC3410	2V82665.D	11/17/21 21:43	n/a	Initial cal 20
V2V3410-ICC3410	2V82666.D	11/17/21 22:08	n/a	Initial cal 50
V2V3410-IC3410	2V82667.D	11/17/21 22:34	n/a	Initial cal 100
V2V3410-IC3410	2V82668.D	11/17/21 22:59	n/a	Initial cal 200
V2V3410-ICV3410	2V82671.D	11/18/21 00:15	n/a	Initial cal verification 50
V2V3410-ICV3410	2V82672.D	11/18/21 00:41	n/a	Initial cal verification 50
V2V3410-BFB2	2V82677.D	11/18/21 11:00	n/a	BFB Tune
V2V3410-ICV3410	2V82678.D	11/18/21 11:34	n/a	Initial cal verification 50
V2V3410-ICV3410	2V82679.D	11/18/21 11:59	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V2V3457	**Method:** SW846 8260D	**Instrument ID:** GCMS2V

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2V3457-BFB	2V83917.D	12/22/21 09:34	n/a	BFB Tune
V2V3457-CC3410	2V83917.D	12/22/21 09:34	n/a	Continuing cal 20
V2V3457-BS	2V83919.D	12/22/21 10:43	n/a	Blank Spike
V2V3457-MB	2V83921.D	12/22/21 11:44	n/a	Method Blank
JD36696-3	2V83922.D	12/22/21 12:09	n/a	(used for QC only; not part of job JD36624)
JD36696-4	2V83923.D	12/22/21 12:35	n/a	(used for QC only; not part of job JD36624)
ZZZZZZ	2V83924.D	12/22/21 13:00	n/a	(unrelated sample)
ZZZZZZ	2V83925.D	12/22/21 13:26	n/a	(unrelated sample)
ZZZZZZ	2V83926.D	12/22/21 13:51	n/a	(unrelated sample)
ZZZZZZ	2V83927.D	12/22/21 14:17	n/a	(unrelated sample)
ZZZZZZ	2V83928.D	12/22/21 14:42	n/a	(unrelated sample)
ZZZZZZ	2V83929.D	12/22/21 15:08	n/a	(unrelated sample)
JD36696-3MS	2V83930.D	12/22/21 15:33	n/a	Matrix Spike
JD36624-15	2V83931.D	12/22/21 15:59	n/a	HOFF IW-2A
JD36696-4DUP	2V83932.D	12/22/21 16:24	n/a	Duplicate
ZZZZZZ	2V83933.D	12/22/21 16:50	n/a	(unrelated sample)
ZZZZZZ	2V83934.D	12/22/21 17:16	n/a	(unrelated sample)
ZZZZZZ	2V83935.D	12/22/21 17:41	n/a	(unrelated sample)
ZZZZZZ	2V83936.D	12/22/21 18:07	n/a	(unrelated sample)
ZZZZZZ	2V83937.D	12/22/21 18:32	n/a	(unrelated sample)
ZZZZZZ	2V83938.D	12/22/21 18:58	n/a	(unrelated sample)
ZZZZZZ	2V83939.D	12/22/21 19:23	n/a	(unrelated sample)
ZZZZZZ	2V83940.D	12/22/21 19:49	n/a	(unrelated sample)
ZZZZZZ	2V83941.D	12/22/21 20:14	n/a	(unrelated sample)
ZZZZZZ	2V83942.D	12/22/21 20:40	n/a	(unrelated sample)
ZZZZZZ	2V83943.D	12/22/21 21:06	n/a	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7257 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7257-BFB	3A167227.D	12/06/21 09:39	n/a	BFB Tune
V3A7257-IC7257	3A167232.D	12/06/21 13:29	n/a	Initial cal 1
V3A7257-IC7257	3A167233.D	12/06/21 13:58	n/a	Initial cal 2
V3A7257-IC7257	3A167234.D	12/06/21 14:27	n/a	Initial cal 5
V3A7257-ICC7257	3A167235.D	12/06/21 14:56	n/a	Initial cal 20
V3A7257-IC7257	3A167236.D	12/06/21 15:25	n/a	Initial cal 50
V3A7257-IC7257	3A167237.D	12/06/21 15:54	n/a	Initial cal 100
V3A7257-IC7257	3A167242.D	12/06/21 18:20	n/a	Initial cal 0.25
V3A7257-IC7257	3A167243.D	12/06/21 18:49	n/a	Initial cal 0.40
V3A7257-IC7257	3A167245.D	12/06/21 19:47	n/a	Initial cal 200
V3A7257-ICV7257	3A167248.D	12/06/21 21:13	n/a	Initial cal verification 20

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7265 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7265-BFB	3A167389.D	12/16/21 09:52	n/a	BFB Tune
V3A7265-CC7257	3A167390.D	12/16/21 10:21	n/a	Continuing cal 20
V3A7265-BS	3A167391.D	12/16/21 11:00	n/a	Blank Spike
V3A7265-MB	3A167393.D	12/16/21 11:58	n/a	Method Blank
ZZZZZZ	3A167396.D	12/16/21 13:10	n/a	(unrelated sample)
ZZZZZZ	3A167397.D	12/16/21 13:39	n/a	(unrelated sample)
ZZZZZZ	3A167398.D	12/16/21 14:08	n/a	(unrelated sample)
ZZZZZZ	3A167399.D	12/16/21 14:37	n/a	(unrelated sample)
ZZZZZZ	3A167400.D	12/16/21 15:06	n/a	(unrelated sample)
ZZZZZZ	3A167401.D	12/16/21 15:35	n/a	(unrelated sample)
JD36294-5MS	3A167402.D	12/16/21 16:04	n/a	Matrix Spike
JD36294-5MSD	3A167403.D	12/16/21 16:33	n/a	Matrix Spike Duplicate
ZZZZZZ	3A167405.D	12/16/21 17:30	n/a	(unrelated sample)
JD36294-5	3A167406.D	12/16/21 17:59	n/a	(used for QC only; not part of job JD36624)
ZZZZZZ	3A167407.D	12/16/21 18:28	n/a	(unrelated sample)
ZZZZZZ	3A167408.D	12/16/21 18:56	n/a	(unrelated sample)
ZZZZZZ	3A167409.D	12/16/21 19:25	n/a	(unrelated sample)
ZZZZZZ	3A167411.D	12/16/21 20:23	n/a	(unrelated sample)
ZZZZZZ	3A167412.D	12/16/21 20:51	n/a	(unrelated sample)
JD36624-2	3A167413.D	12/16/21 21:20	n/a	HOFF MW-8

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7266 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7266-BFB	3A167421.D	12/17/21 09:56	n/a	BFB Tune
V3A7266-CC7257	3A167422.D	12/17/21 10:25	n/a	Continuing cal 5
V3A7266-BS	3A167423.D	12/17/21 10:56	n/a	Blank Spike
V3A7266-MB	3A167426.D	12/17/21 12:07	n/a	Method Blank
ZZZZZZ	3A167427.D	12/17/21 12:36	n/a	(unrelated sample)
JD36624-2	3A167428.D	12/17/21 13:04	n/a	HOFF MW-8
JD36624-7	3A167429.D	12/17/21 13:33	n/a	HOFF MW-FB
JD36624-3DUP	3A167430.D	12/17/21 14:03	n/a	Duplicate
JD36624-4	3A167431.D	12/17/21 14:48	n/a	HOFF MW-4DU
JD36624-5	3A167433.D	12/17/21 15:46	n/a	DUP-2021
JD36452-8	3A167434.D	12/17/21 17:11	n/a	(used for QC only; not part of job JD36624)
JD36624-6	3A167435.D	12/17/21 17:40	n/a	HOFF MW-FA
JD36624-10	3A167438.D	12/17/21 19:07	n/a	HOFF MW-D
JD36624-1	3A167439.D	12/17/21 19:35	n/a	TB-20211207
JD36624-9	3A167441.D	12/17/21 20:32	n/a	HOFF MW-C
JD36624-11	3A167442.D	12/17/21 21:01	n/a	HOFF IW-1A
V3A7266-BS2	3A167457A.D	12/20/21 12:39	n/a	Blank Spike
V3A7266-MB2	3A167459A.D	12/20/21 13:37	n/a	Method Blank
JD36624-3	3A167460.D	12/20/21 14:12	n/a	HOFF MW-4DL
JD36624-10MS	3A167461.D	12/20/21 14:41	n/a	Matrix Spike

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7268 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7268-BFB	3A167453.D	12/20/21 10:25	n/a	BFB Tune
V3A7268-CC7257	3A167455.D	12/20/21 11:23	n/a	Continuing cal 20
V3A7268-BS	3A167457.D	12/20/21 12:39	n/a	Blank Spike
V3A7268-MB	3A167459.D	12/20/21 13:37	n/a	Method Blank
JD36485-5	3A167463.D	12/20/21 15:39	n/a	(used for QC only; not part of job JD36624)
JD36485-8	3A167465.D	12/20/21 16:36	n/a	(used for QC only; not part of job JD36624)
JD36624-4	3A167466.D	12/20/21 17:05	n/a	HOFF MW-4DU
JD36624-5	3A167467.D	12/20/21 17:34	n/a	DUP-2021
JD36624-6	3A167468.D	12/20/21 18:03	n/a	HOFF MW-FA
JD36624-7	3A167469.D	12/20/21 18:32	n/a	HOFF MW-FB
JD36485-8MS	3A167470.D	12/20/21 19:01	n/a	Matrix Spike
JD36485-5DUP	3A167472.D	12/20/21 19:58	n/a	Duplicate
ZZZZZZ	3A167473.D	12/20/21 20:27	n/a	(unrelated sample)
ZZZZZZ	3A167474.D	12/20/21 20:56	n/a	(unrelated sample)
JD36624-15	3A167476.D	12/20/21 21:54	n/a	HOFF IW-2A
JD36624-16	3A167477.D	12/20/21 22:22	n/a	HOFF IW-2B

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7269 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7269-BFB	3A167484.D	12/21/21 09:11	n/a	BFB Tune
V3A7269-CC7257	3A167485.D	12/21/21 09:40	n/a	Continuing cal 5
V3A7269-BS	3A167486.D	12/21/21 10:10	n/a	Blank Spike
V3A7269-MB	3A167487.D	12/21/21 10:39	n/a	Method Blank
ZZZZZZ	3A167488.D	12/21/21 11:08	n/a	(unrelated sample)
ZZZZZZ	3A167489.D	12/21/21 11:36	n/a	(unrelated sample)
ZZZZZZ	3A167490.D	12/21/21 12:05	n/a	(unrelated sample)
ZZZZZZ	3A167491.D	12/21/21 12:34	n/a	(unrelated sample)
JD36540-8	3A167493.D	12/21/21 13:31	n/a	(used for QC only; not part of job JD36624)
JD36624-8	3A167494.D	12/21/21 14:01	n/a	HOFF MW-13
JD36624-9	3A167495.D	12/21/21 14:29	n/a	HOFF MW-C
JD36624-11	3A167496.D	12/21/21 14:59	n/a	HOFF IW-1A
JD36624-12	3A167497.D	12/21/21 15:28	n/a	HOFF IW-1B
JD36624-14	3A167498.D	12/21/21 15:57	n/a	HOFF IW-3B
JD36624-15	3A167499.D	12/21/21 16:26	n/a	HOFF IW-2A
JD36624-16	3A167500.D	12/21/21 16:54	n/a	HOFF IW-2B
JD36540-8MS	3A167501.D	12/21/21 17:23	n/a	Matrix Spike
ZZZZZZ	3A167503.D	12/21/21 18:21	n/a	(unrelated sample)
ZZZZZZ	3A167504.D	12/21/21 18:49	n/a	(unrelated sample)
ZZZZZZ	3A167505.D	12/21/21 19:18	n/a	(unrelated sample)
JD36617-4	3A167506.D	12/21/21 19:46	n/a	(used for QC only; not part of job JD36624)
ZZZZZZ	3A167507.D	12/21/21 20:15	n/a	(unrelated sample)
ZZZZZZ	3A167508.D	12/21/21 20:44	n/a	(unrelated sample)
V3A7269-BS2	3A167533A.D	12/23/21 09:45	n/a	Blank Spike
V3A7269-MB2	3A167534A.D	12/23/21 10:14	n/a	Method Blank
JD36617-4DUP	3A167535.D	12/23/21 10:49	n/a	Duplicate

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3A7273 **Method:** SW846 8260D BY SIM **Instrument ID:** GCMS3A

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3A7273-BFB	3A167531.D	12/23/21 08:46	n/a	BFB Tune
V3A7273-CC7257	3A167532.D	12/23/21 09:16	n/a	Continuing cal 5
V3A7273-BS	3A167533.D	12/23/21 09:45	n/a	Blank Spike
V3A7273-MB	3A167534.D	12/23/21 10:14	n/a	Method Blank
JD36624-13	3A167538.D	12/23/21 12:15	n/a	HOFF IW-3A
JD36624-17	3A167539.D	12/23/21 12:44	n/a	HOFF IW-B
JD36682-2	3A167540.D	12/23/21 13:12	n/a	(used for QC only; not part of job JD36624)
JD36682-3	3A167541.D	12/23/21 13:41	n/a	(used for QC only; not part of job JD36624)
ZZZZZZ	3A167542.D	12/23/21 14:09	n/a	(unrelated sample)
ZZZZZZ	3A167543.D	12/23/21 14:38	n/a	(unrelated sample)
ZZZZZZ	3A167544.D	12/23/21 15:07	n/a	(unrelated sample)
JD36624-17	3A167545.D	12/23/21 15:36	n/a	HOFF IW-B
ZZZZZZ	3A167546.D	12/23/21 16:05	n/a	(unrelated sample)
JD36682-2MS	3A167547.D	12/23/21 16:34	n/a	Matrix Spike
JD36682-3DUP	3A167548.D	12/23/21 17:03	n/a	Duplicate
ZZZZZZ	3A167549.D	12/23/21 17:31	n/a	(unrelated sample)
ZZZZZZ	3A167550.D	12/23/21 18:01	n/a	(unrelated sample)
ZZZZZZ	3A167551.D	12/23/21 18:29	n/a	(unrelated sample)
ZZZZZZ	3A167552.D	12/23/21 18:59	n/a	(unrelated sample)
ZZZZZZ	3A167553.D	12/23/21 19:28	n/a	(unrelated sample)
ZZZZZZ	3A167554.D	12/23/21 19:56	n/a	(unrelated sample)
ZZZZZZ	3A167555.D	12/23/21 20:25	n/a	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3D7187	**Method:** SW846 8260D	**Instrument ID:** GCMS3D

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3D7187-BFB	3D169267.D	10/03/21 20:52	n/a	BFB Tune
V3D7187-IC7187	3D169268.D	10/03/21 21:24	n/a	Initial cal 0.2
V3D7187-IC7187	3D169269.D	10/03/21 21:52	n/a	Initial cal 0.5
V3D7187-IC7187	3D169270.D	10/03/21 22:19	n/a	Initial cal 1
V3D7187-IC7187	3D169271.D	10/03/21 22:46	n/a	Initial cal 2
V3D7187-IC7187	3D169272.D	10/03/21 23:14	n/a	Initial cal 4
V3D7187-IC7187	3D169273.D	10/03/21 23:41	n/a	Initial cal 8
V3D7187-IC7187	3D169274.D	10/04/21 00:08	n/a	Initial cal 20
V3D7187-ICC7187	3D169275.D	10/04/21 00:36	n/a	Initial cal 50
V3D7187-IC7187	3D169276.D	10/04/21 01:03	n/a	Initial cal 100
V3D7187-IC7187	3D169277.D	10/04/21 01:30	n/a	Initial cal 200
V3D7187-ICV7187	3D169280.D	10/04/21 02:52	n/a	Initial cal verification 50
V3D7187-ICV7187	3D169281.D	10/04/21 03:19	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: V3D7294	**Method:** SW846 8260D	**Instrument ID:** GCMS3D

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V3D7294-BFB	3D171914.D	12/16/21 10:07	n/a	BFB Tune
V3D7294-CC7187	3D171914.D	12/16/21 10:07	n/a	Continuing cal 20
V3D7294-BS	3D171916.D	12/16/21 11:06	n/a	Blank Spike
V3D7294-MB	3D171918.D	12/16/21 12:00	n/a	Method Blank
JD36538-5	3D171919.D	12/16/21 12:34	n/a	(used for QC only; not part of job JD36624)
ZZZZZZ	3D171920.D	12/16/21 13:01	n/a	(unrelated sample)
ZZZZZZ	3D171921.D	12/16/21 13:29	n/a	(unrelated sample)
ZZZZZZ	3D171922.D	12/16/21 13:56	n/a	(unrelated sample)
ZZZZZZ	3D171923.D	12/16/21 14:23	n/a	(unrelated sample)
JD36624-2	3D171924.D	12/16/21 14:50	n/a	HOFF MW-8
JD36538-5MS	3D171925.D	12/16/21 15:17	n/a	Matrix Spike
JD36538-5MSD	3D171926.D	12/16/21 15:44	n/a	Matrix Spike Duplicate
JD36624-2	3D171927.D	12/16/21 16:12	n/a	HOFF MW-8
ZZZZZZ	3D171928.D	12/16/21 16:39	n/a	(unrelated sample)
ZZZZZZ	3D171928A.D	12/16/21 16:39	n/a	(unrelated sample)
ZZZZZZ	3D171929.D	12/16/21 17:06	n/a	(unrelated sample)
ZZZZZZ	3D171929A.D	12/16/21 17:06	n/a	(unrelated sample)
ZZZZZZ	3D171930.D	12/16/21 17:33	n/a	(unrelated sample)
ZZZZZZ	3D171932.D	12/16/21 18:28	n/a	(unrelated sample)
JD36624-3	3D171933.D	12/16/21 18:55	n/a	HOFF MW-4DL
JD36624-8	3D171934.D	12/16/21 19:22	n/a	HOFF MW-13
JD36624-6	3D171937.D	12/16/21 20:43	n/a	HOFF MW-FA
JD36624-7	3D171938.D	12/16/21 21:10	n/a	HOFF MW-FB
JD36624-4	3D171939.D	12/16/21 21:38	n/a	HOFF MW-4DU
JD36624-5	3D171940.D	12/16/21 22:05	n/a	DUP-2021

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7266\
Data File : 3A167439.D
Acq On : 17 Dec 2021 7:35 pm
Operator : BridgetK
Sample : jd36624-1
Misc : MS55557,V3A7266,5.0,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 20 08:22:30 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

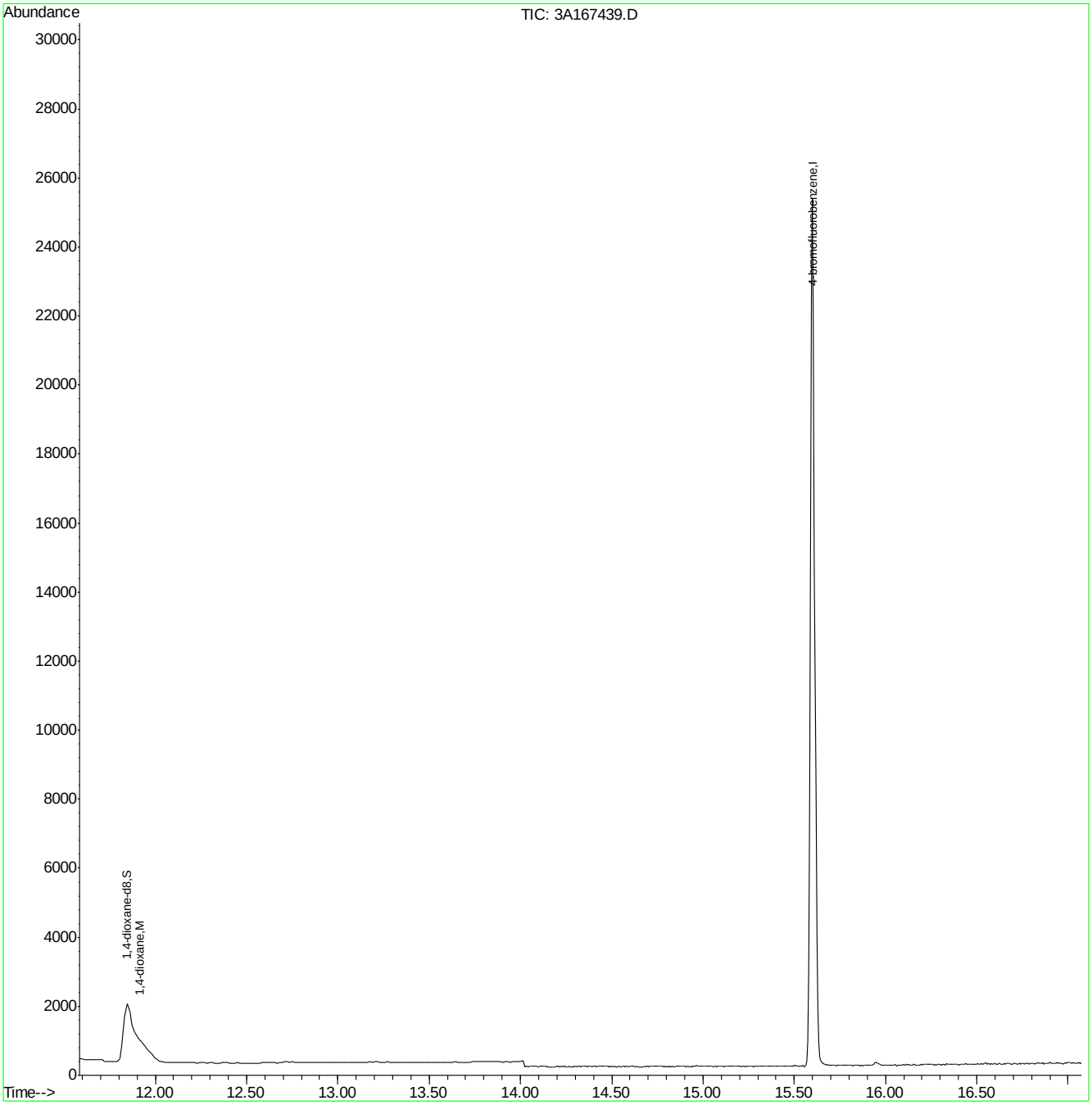
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	13764	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	5177	13.58	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 135.80%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	85	0.20	ug/L	65

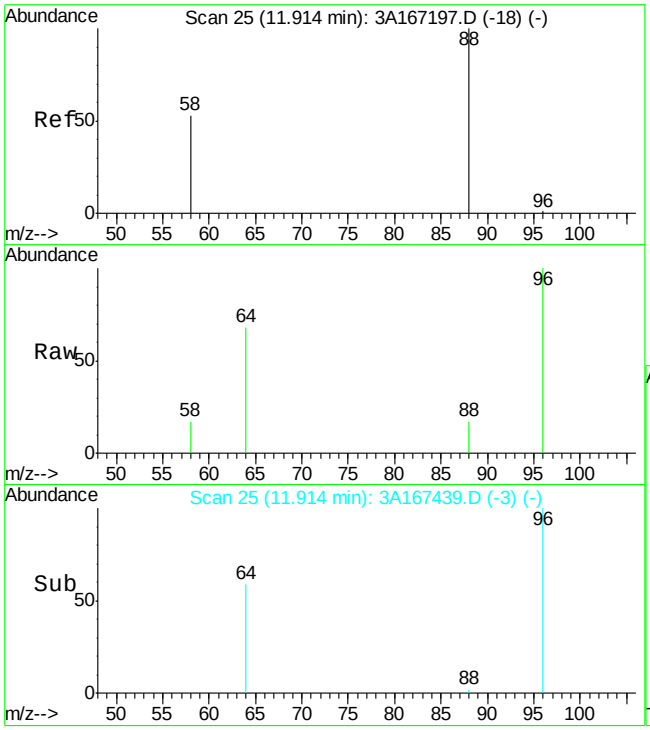
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7266\
Data File : 3A167439.D
Acq On : 17 Dec 2021 7:35 pm
Operator : BridgetK
Sample : jd36624-1
Misc : MS55557,V3A7266,5.0,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 20 08:22:30 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

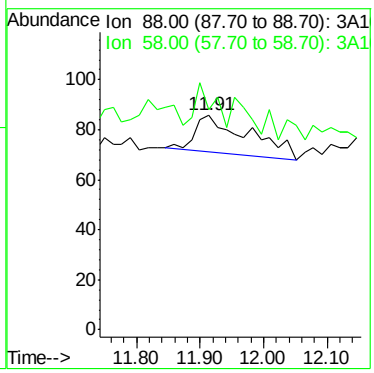




#3
1,4-dioxane
Concen: 0.20 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167439.D
Acq: 17 Dec 2021 7:35 pm

Tgt Ion: 88 Resp: 85

Ion	Ratio	Lower	Upper
88	100		
58	33.3	30.0	90.0



7.1.1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7265\
Data File : 3A167413.D
Acq On : 16 Dec 2021 9:20 pm
Operator : BridgetK
Sample : jd36624-2
Misc : MS55558,V3A7265,5.0,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 17 08:21:33 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

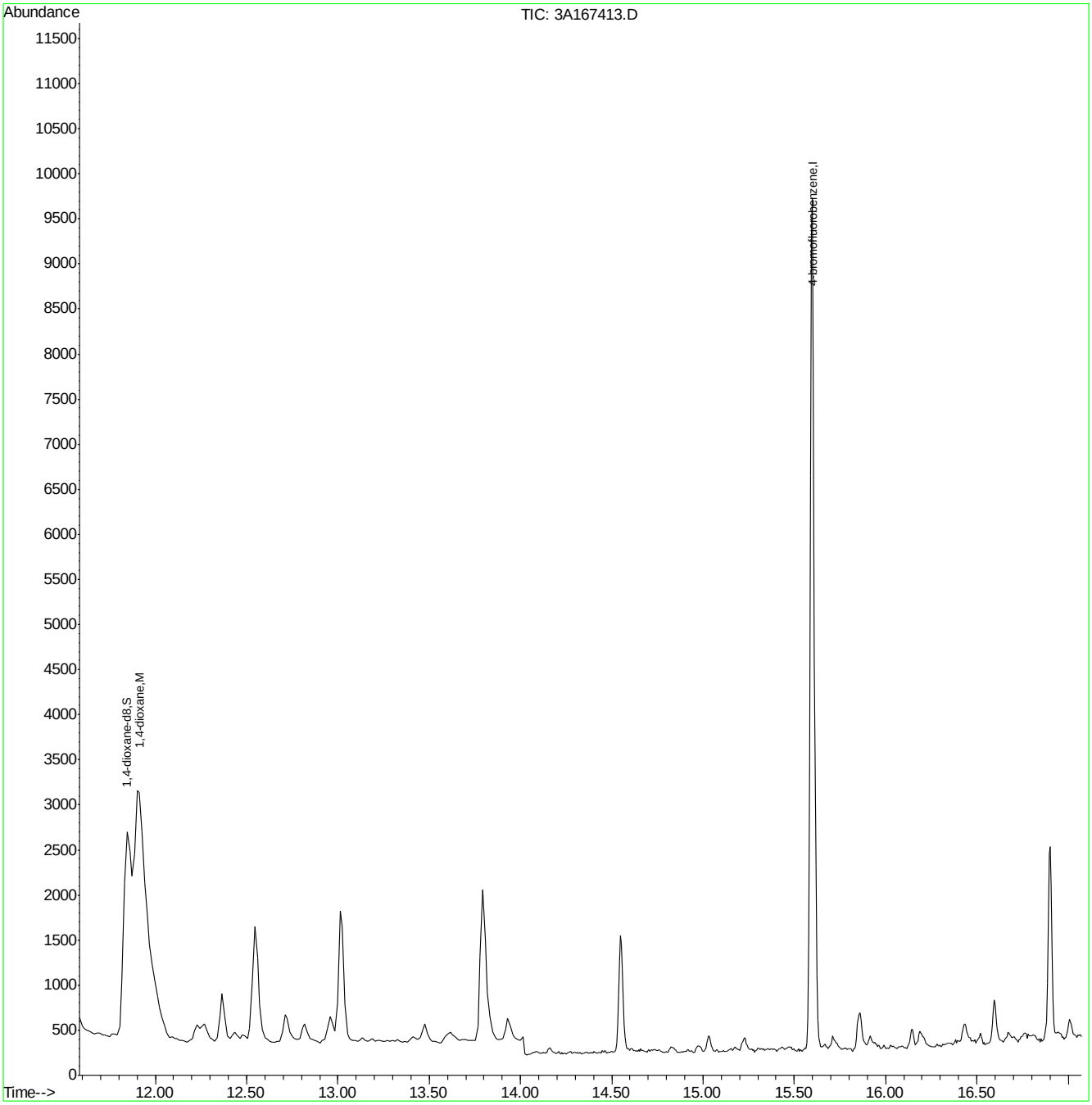
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	4959	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6974	50.79	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 507.90%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	5838	37.80	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

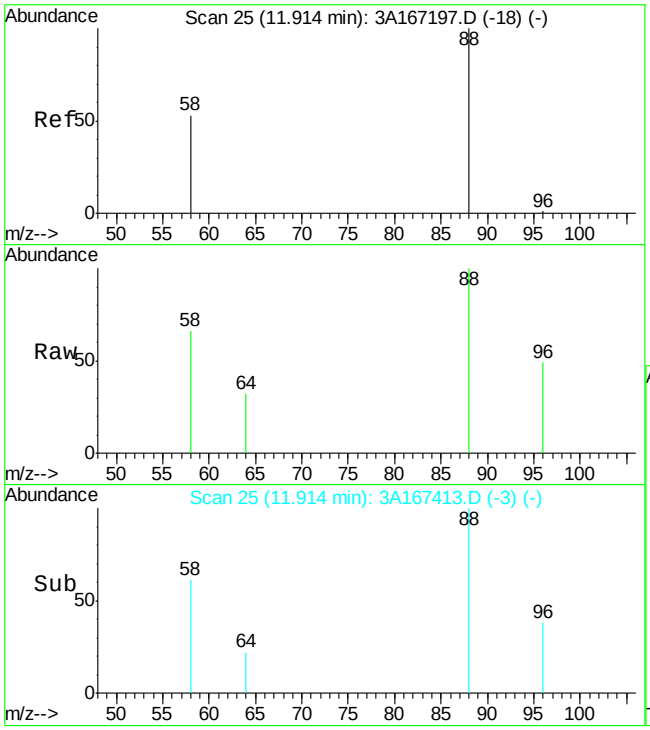
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7265\
Data File : 3A167413.D
Acq On : 16 Dec 2021 9:20 pm
Operator : BridgetK
Sample : jd36624-2
Misc : MS55558,V3A7265,5.0,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 17 08:21:33 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



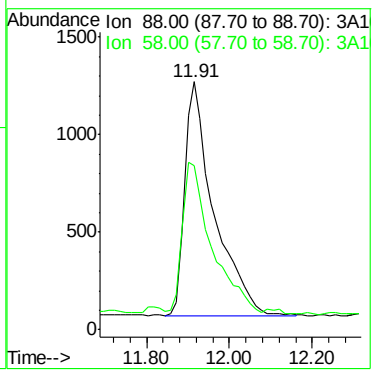
M3A7257.M Fri Dec 17 08:26:10 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 37.80 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167413.D
Acq: 16 Dec 2021 9:20 pm

Tgt Ion: 88 Resp: 5838

Ion	Ratio	Lower	Upper
88	100		
58	63.4	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7266\
Data File : 3A167428.D
Acq On : 17 Dec 2021 1:04 pm
Operator : BridgetK
Sample : jd36624-2
Misc : MS55558,V3A7266,5.0,,,,10
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 17 14:49:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

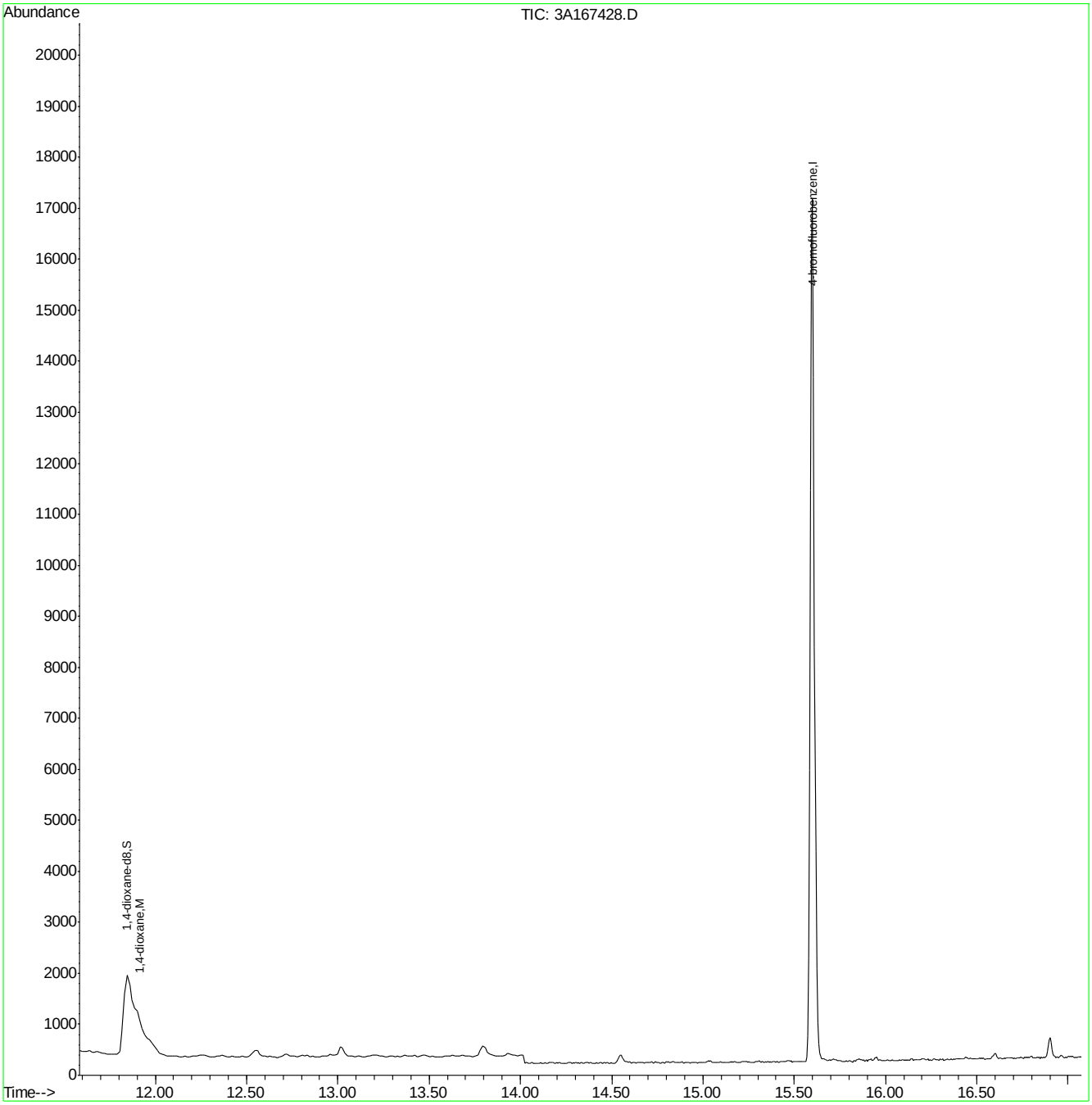
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	9018	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4788	19.18	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 191.80%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	564	2.01	ug/L	93

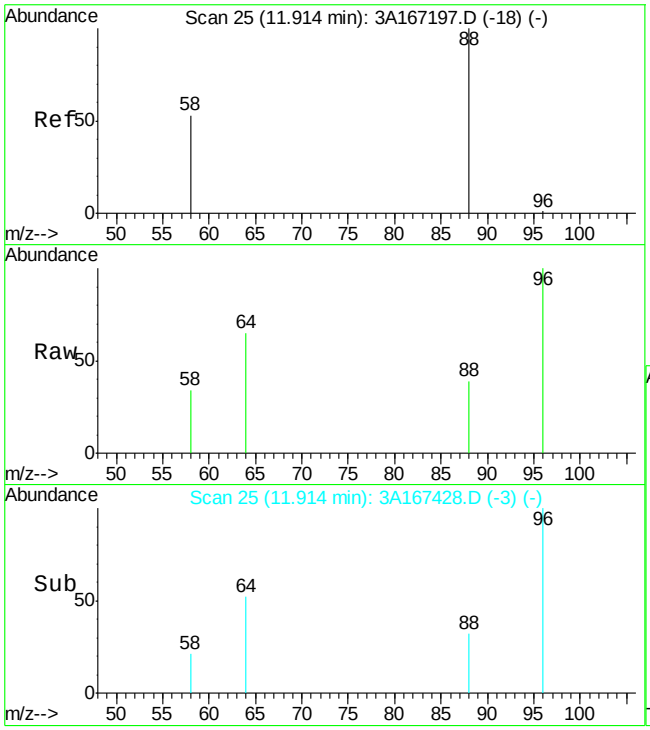
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7266\
Data File : 3A167428.D
Acq On : 17 Dec 2021 1:04 pm
Operator : BridgetK
Sample : jd36624-2
Misc : MS55558,V3A7266,5.0,,,,10
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 17 14:49:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

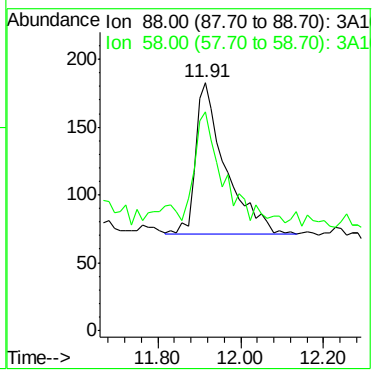




#3
1,4-dioxane
Concen: 2.01 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167428.D
Acq: 17 Dec 2021 1:04 pm

Tgt Ion: 88 Resp: 564

Ion	Ratio	Lower	Upper
88	100		
58	65.2	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7268\
Data File : 3A167460.D
Acq On : 20 Dec 2021 2:12 pm
Operator : BridgetK
Sample : jd36624-3
Misc : MS55558,V3A7266,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 20 16:18:02 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

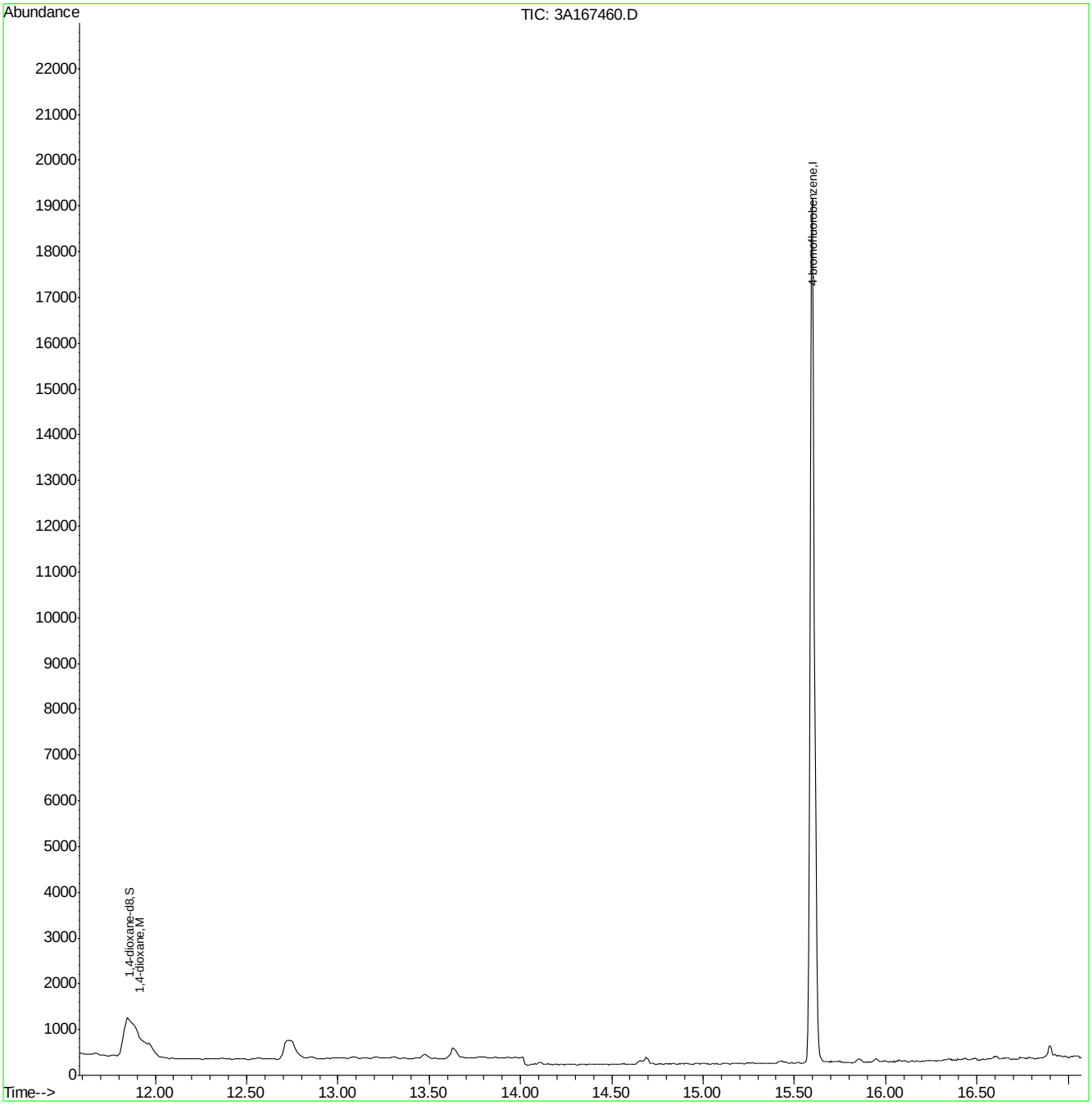
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	10456	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.86	96	3340	11.54	ug/L	0.01
Spiked Amount 10.000	Range 39 - 174		Recovery = 115.40%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	129	0.40	ug/L	77

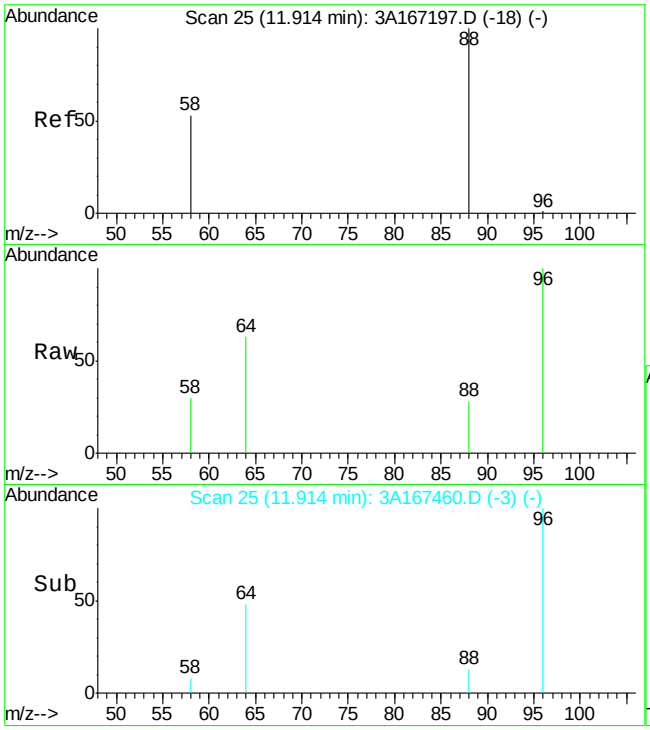
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7268\
Data File : 3A167460.D
Acq On : 20 Dec 2021 2:12 pm
Operator : BridgetK
Sample : jd36624-3
Misc : MS55558,V3A7266,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 20 16:18:02 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

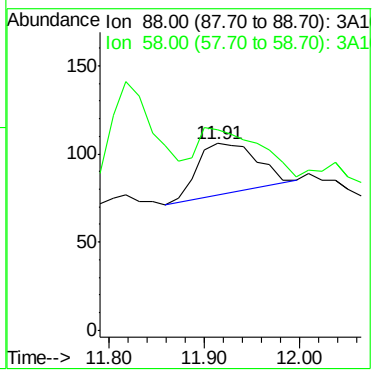




#3
1,4-dioxane
Concen: 0.40 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167460.D
Acq: 20 Dec 2021 2:12 pm

Tgt Ion: 88 Resp: 129

Ion	Ratio	Lower	Upper
88	100		
58	77.1	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7266\
Data File : 3A167431.D
Acq On : 17 Dec 2021 2:48 pm
Operator : BridgetK
Sample : jd36624-4
Misc : MS55558,V3A7266,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 17 17:03:34 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

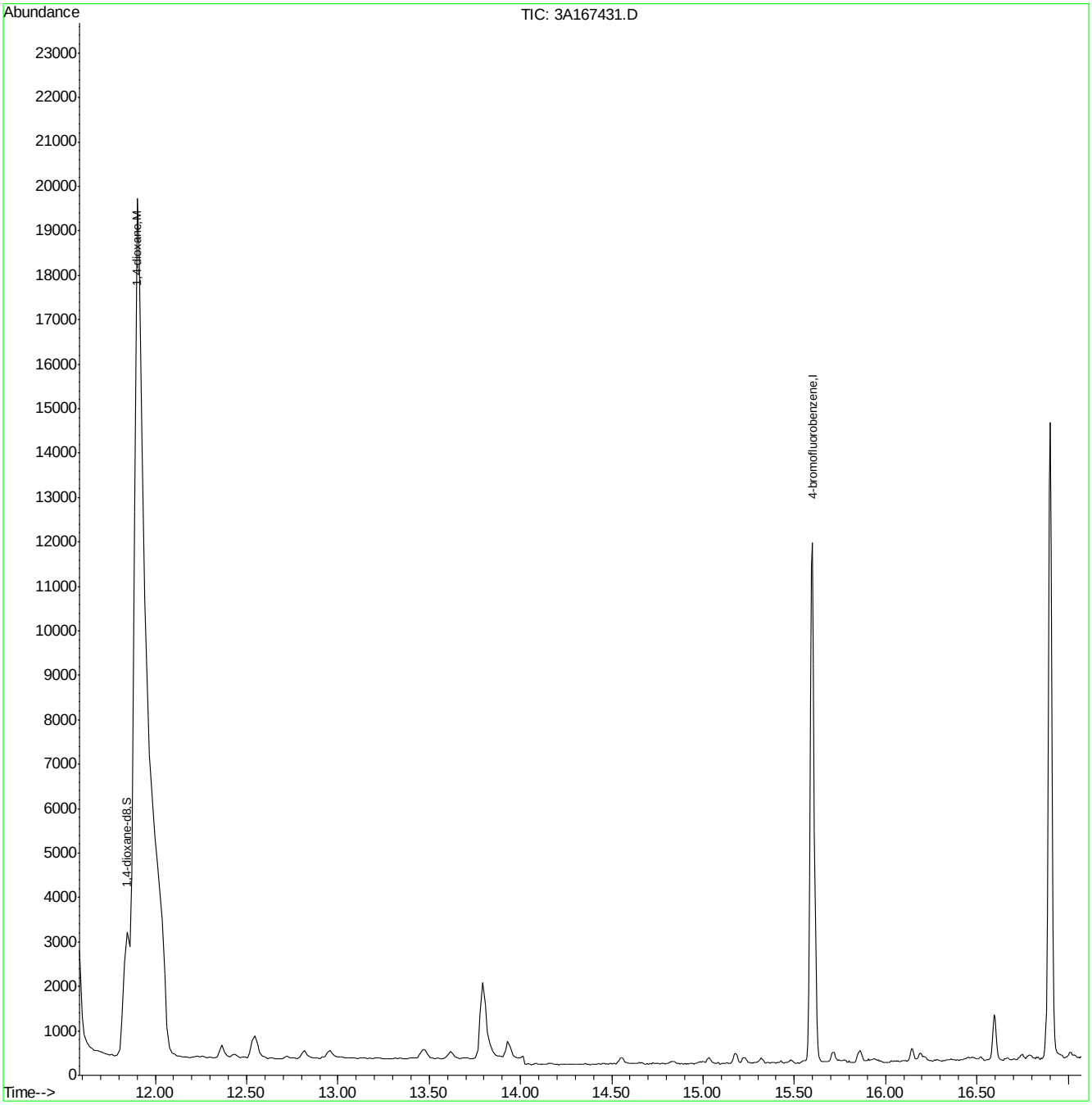
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	6301	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	7150	40.98	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 409.80%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	55808	284.40	ug/L	90

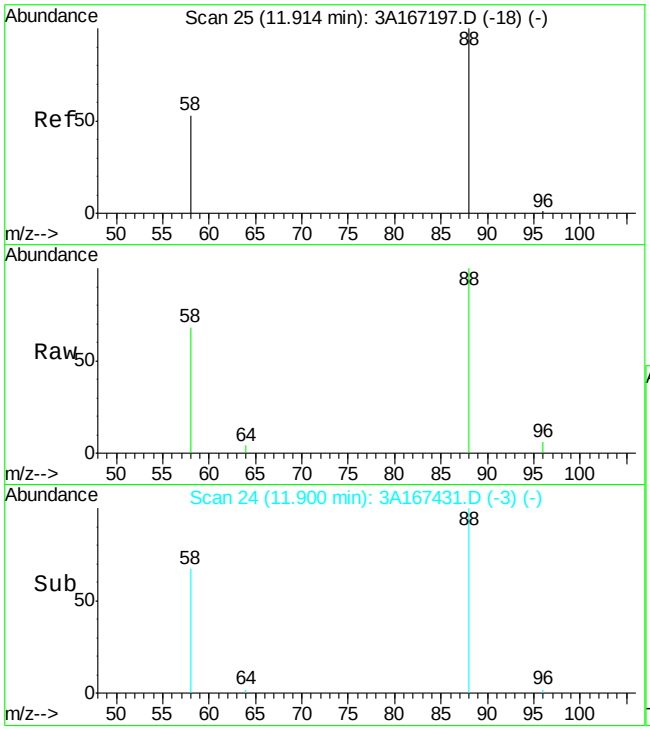
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7266\
Data File : 3A167431.D
Acq On : 17 Dec 2021 2:48 pm
Operator : BridgetK
Sample : jd36624-4
Misc : MS55558,V3A7266,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 17 17:03:34 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

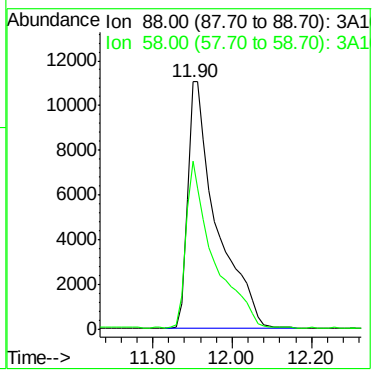




#3
1,4-dioxane
Concen: 284.40 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167431.D
Acq: 17 Dec 2021 2:48 pm

Tgt Ion: 88 Resp: 55808

Ion	Ratio	Lower	Upper
88	100		
58	67.5	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7268\
Data File : 3A167466.D
Acq On : 20 Dec 2021 5:05 pm
Operator : BridgetK
Sample : jd36624-4
Misc : MS55558,V3A7268,5.0,,,,20
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 20 17:48:27 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

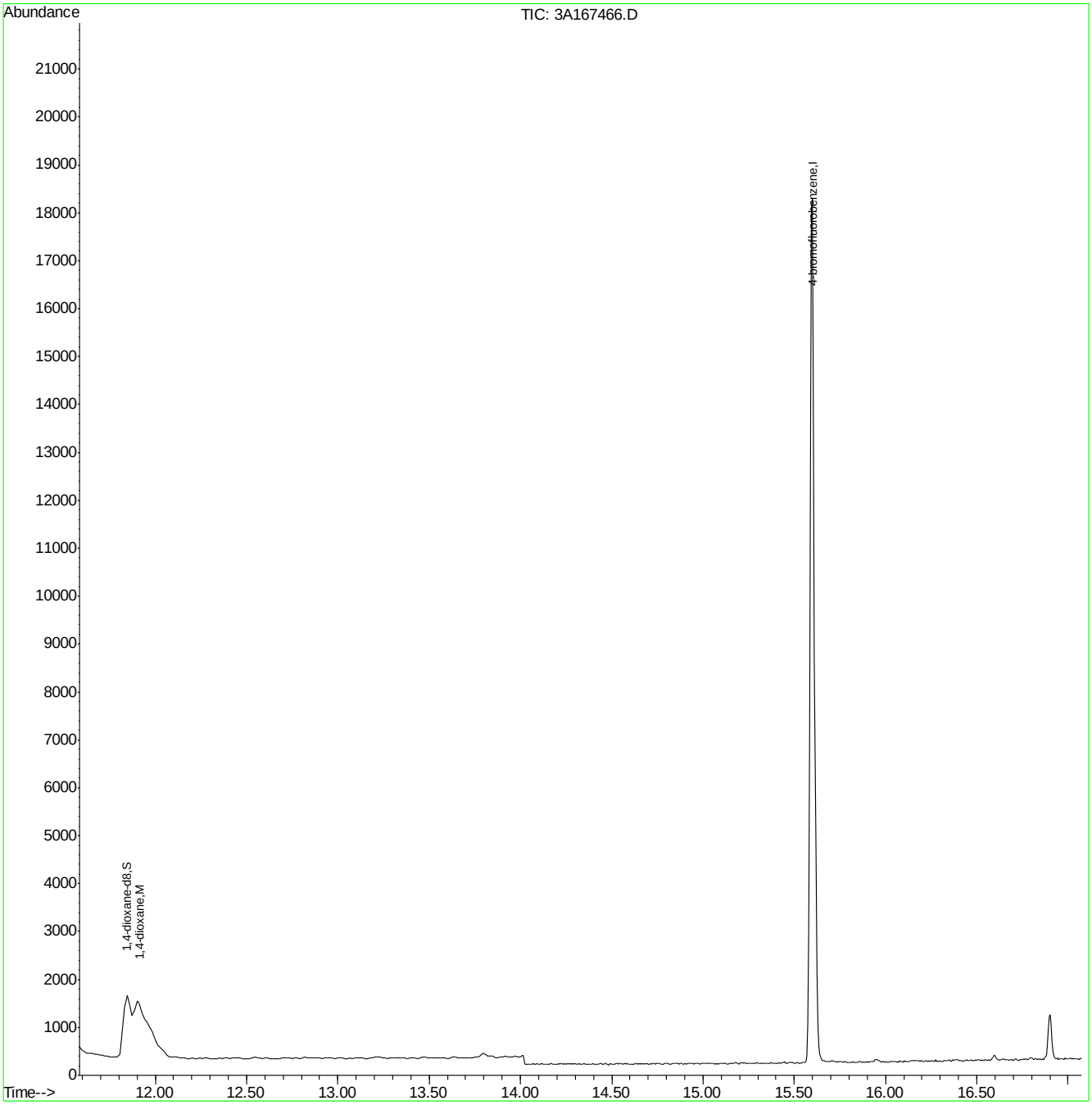
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	9904	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4408	16.07	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 160.70%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	2193	7.11	ug/L	97

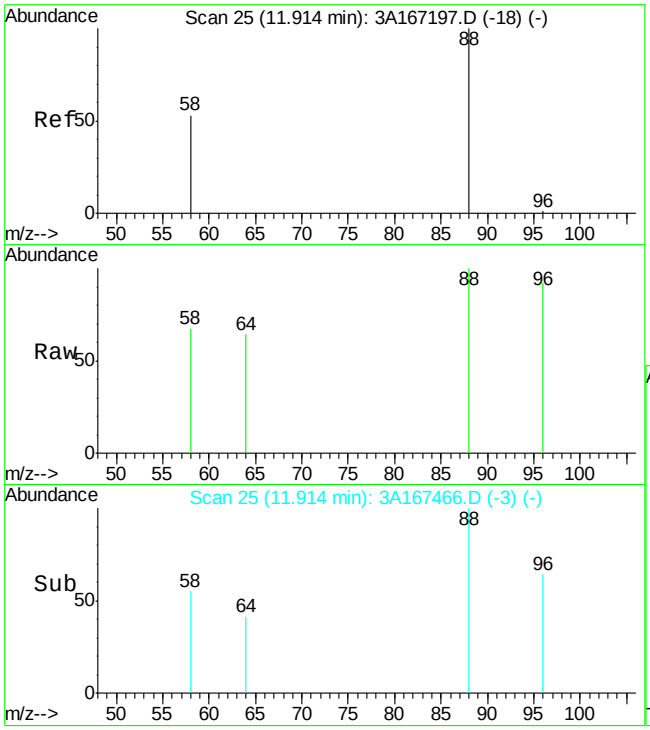
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7268\
Data File : 3A167466.D
Acq On : 20 Dec 2021 5:05 pm
Operator : BridgetK
Sample : jd36624-4
Misc : MS55558,V3A7268,5.0,,,,20
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 20 17:48:27 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

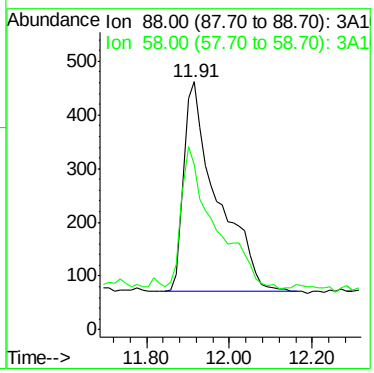




#3
1,4-dioxane
Concen: 7.11 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167466.D
Acq: 20 Dec 2021 5:05 pm

Tgt Ion: 88 Resp: 2193

Ion	Ratio	Lower	Upper
88	100		
58	58.1	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7266\
Data File : 3A167433.D
Acq On : 17 Dec 2021 3:46 pm
Operator : BridgetK
Sample : jd36624-5
Misc : MS55558,V3A7266,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 17 17:03:36 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

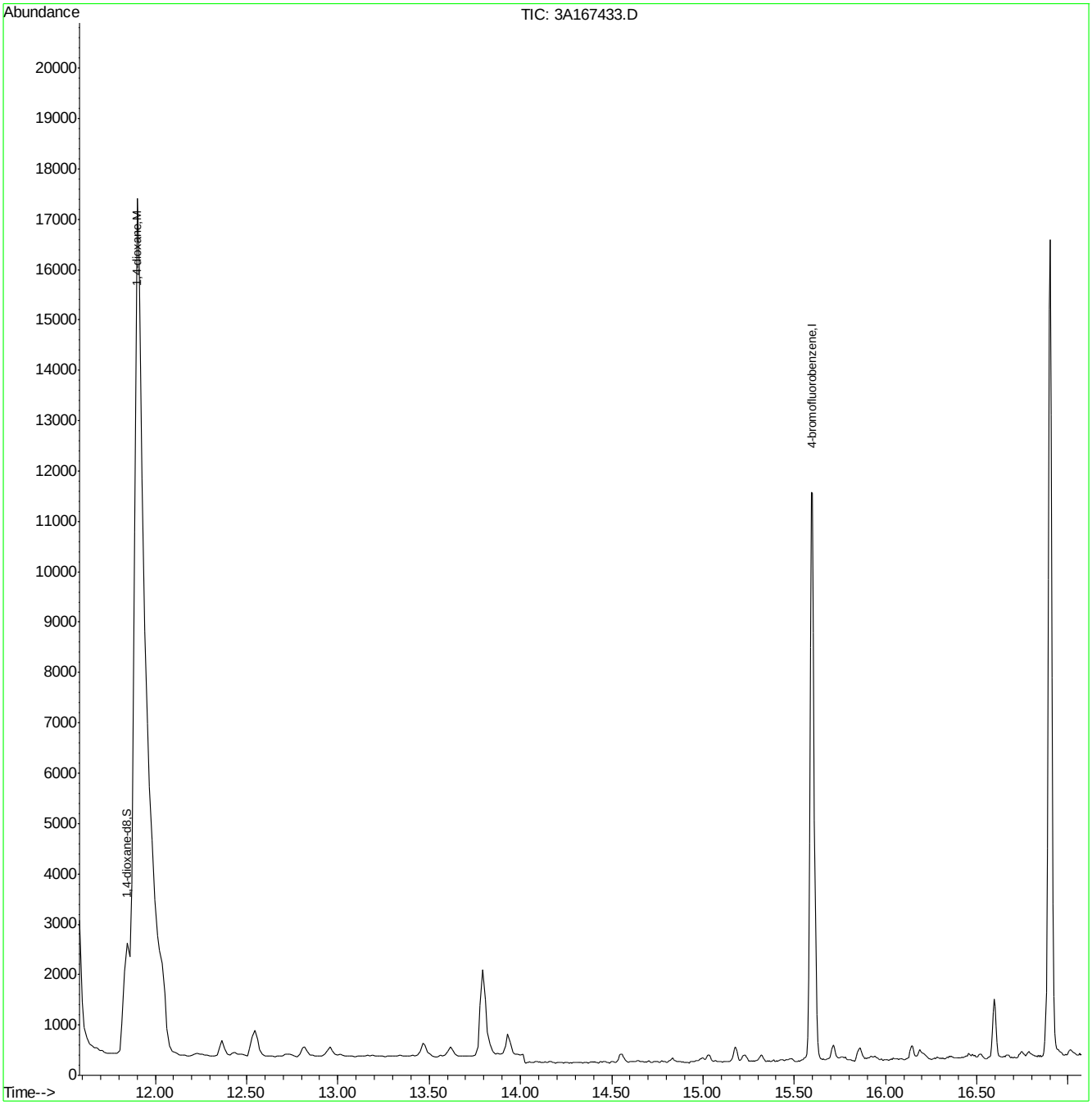
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	6109	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	5060	29.92	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 299.20%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	44842	235.70	ug/L	89

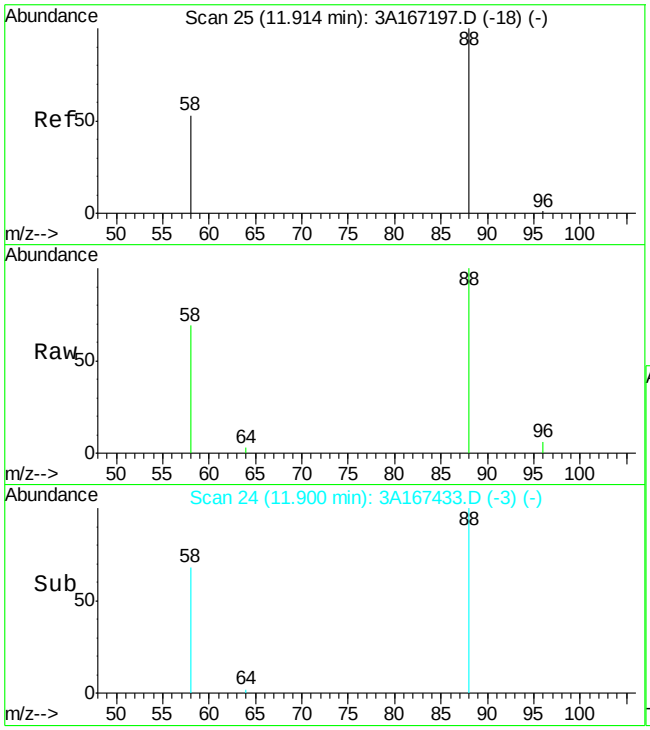
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7266\
Data File : 3A167433.D
Acq On : 17 Dec 2021 3:46 pm
Operator : BridgetK
Sample : jd36624-5
Misc : MS55558,V3A7266,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 17 17:03:36 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

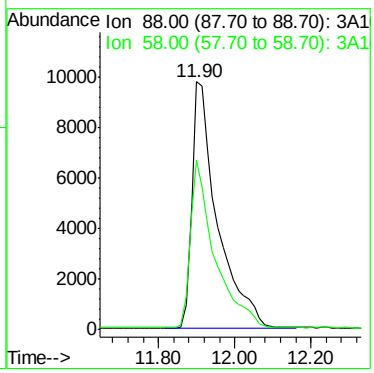




#3
1,4-dioxane
Concen: 235.70 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167433.D
Acq: 17 Dec 2021 3:46 pm

Tgt Ion: 88 Resp: 44842

Ion	Ratio	Lower	Upper
88	100		
58	68.1	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7268\
Data File : 3A167467.D
Acq On : 20 Dec 2021 5:34 pm
Operator : BridgetK
Sample : jd36624-5
Misc : MS55558,V3A7268,5.0,,,,20
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 21 08:17:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

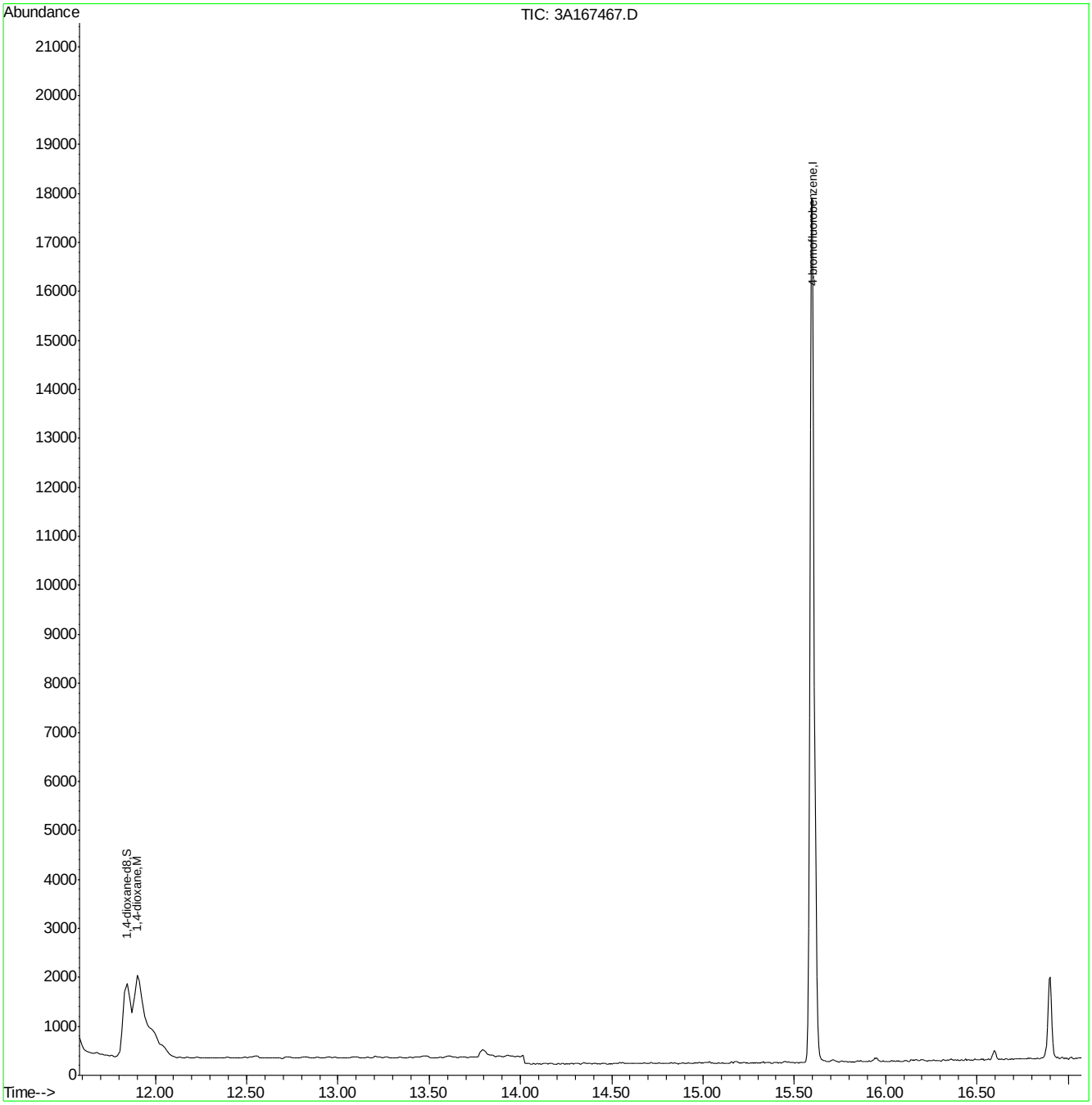
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	9556	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.84	96	4151	15.69	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 156.90%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	3621	12.17	ug/L	92

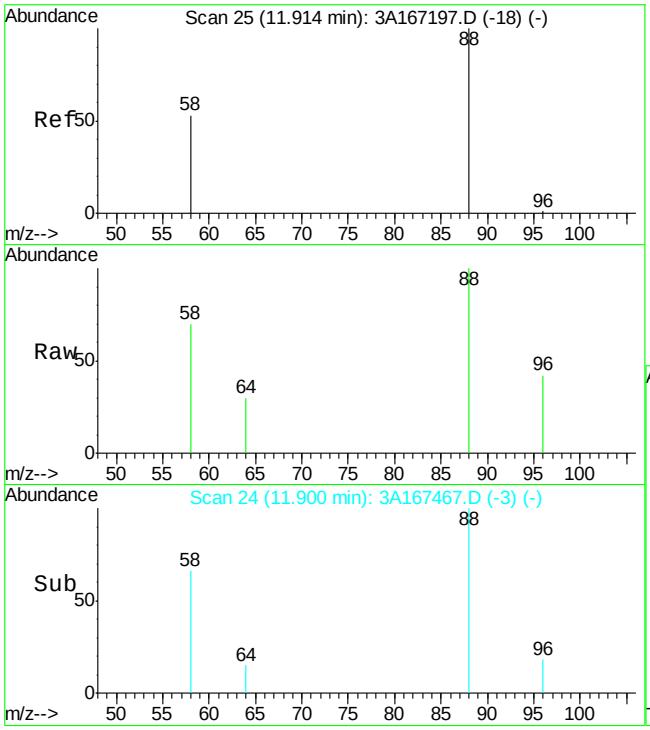
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7268\
Data File : 3A167467.D
Acq On : 20 Dec 2021 5:34 pm
Operator : BridgetK
Sample : jd36624-5
Misc : MS55558,V3A7268,5.0,,,,20
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 21 08:17:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

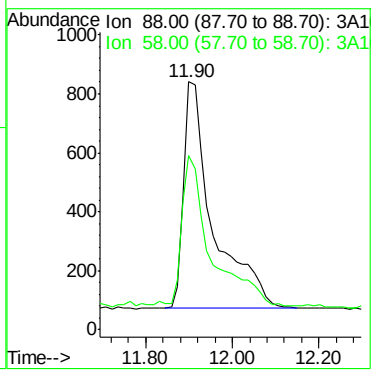




#3
1,4-dioxane
Concen: 12.17 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167467.D
Acq: 20 Dec 2021 5:34 pm

Tgt Ion: 88 Resp: 3621

Ion	Ratio	Lower	Upper
88	100		
58	66.4	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7266\
Data File : 3A167435.D
Acq On : 17 Dec 2021 5:40 pm
Operator : BridgetK
Sample : jd36624-6
Misc : MS55558,V3A7266,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 20 08:22:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

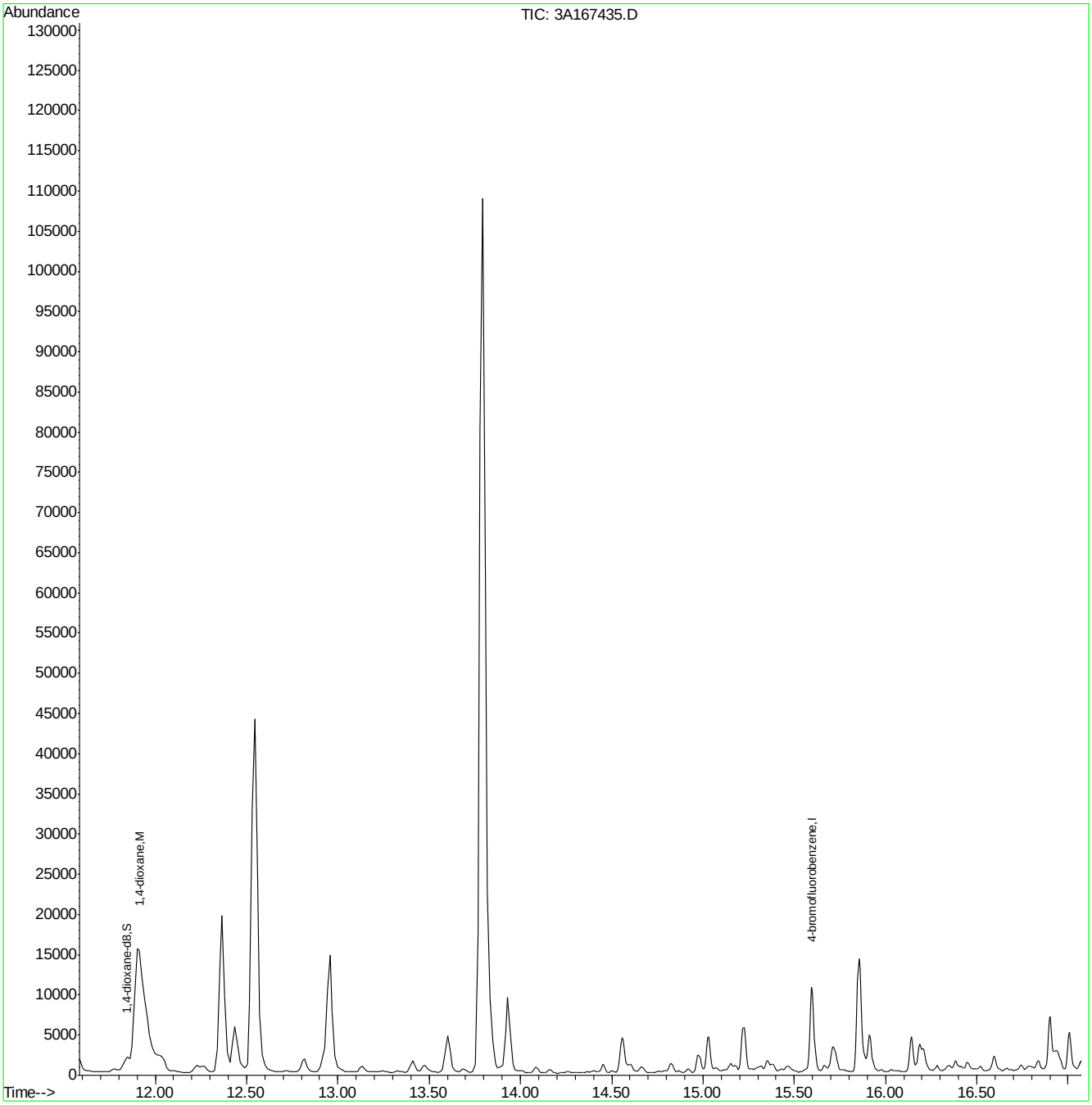
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	6508	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3266	18.13	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 181.30%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	42752	210.94	ug/L	99

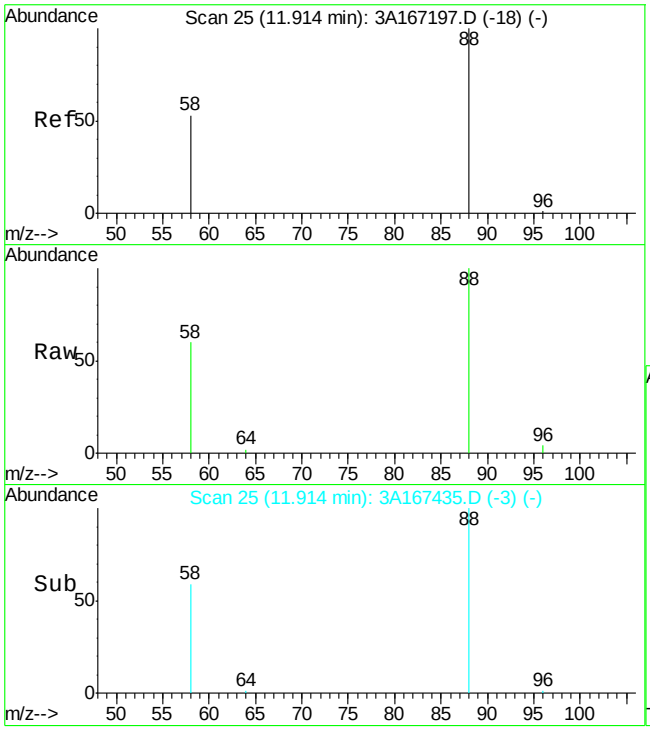
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7266\
Data File : 3A167435.D
Acq On : 17 Dec 2021 5:40 pm
Operator : BridgetK
Sample : jd36624-6
Misc : MS55558,V3A7266,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 20 08:22:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

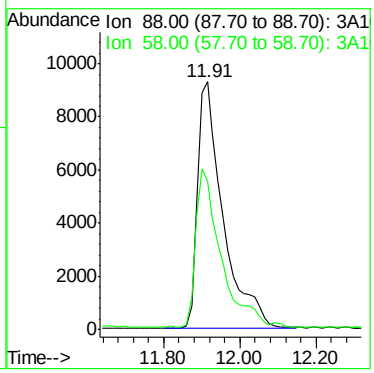




#3
1,4-dioxane
Concen: 210.94 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167435.D
Acq: 17 Dec 2021 5:40 pm

Tgt Ion: 88 Resp: 42752

Ion	Ratio	Lower	Upper
88	100		
58	59.4	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7268\
Data File : 3A167468.D
Acq On : 20 Dec 2021 6:03 pm
Operator : BridgetK
Sample : jd36624-6
Misc : MS55558,V3A7268,5.0,,,,20
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 21 08:17:43 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

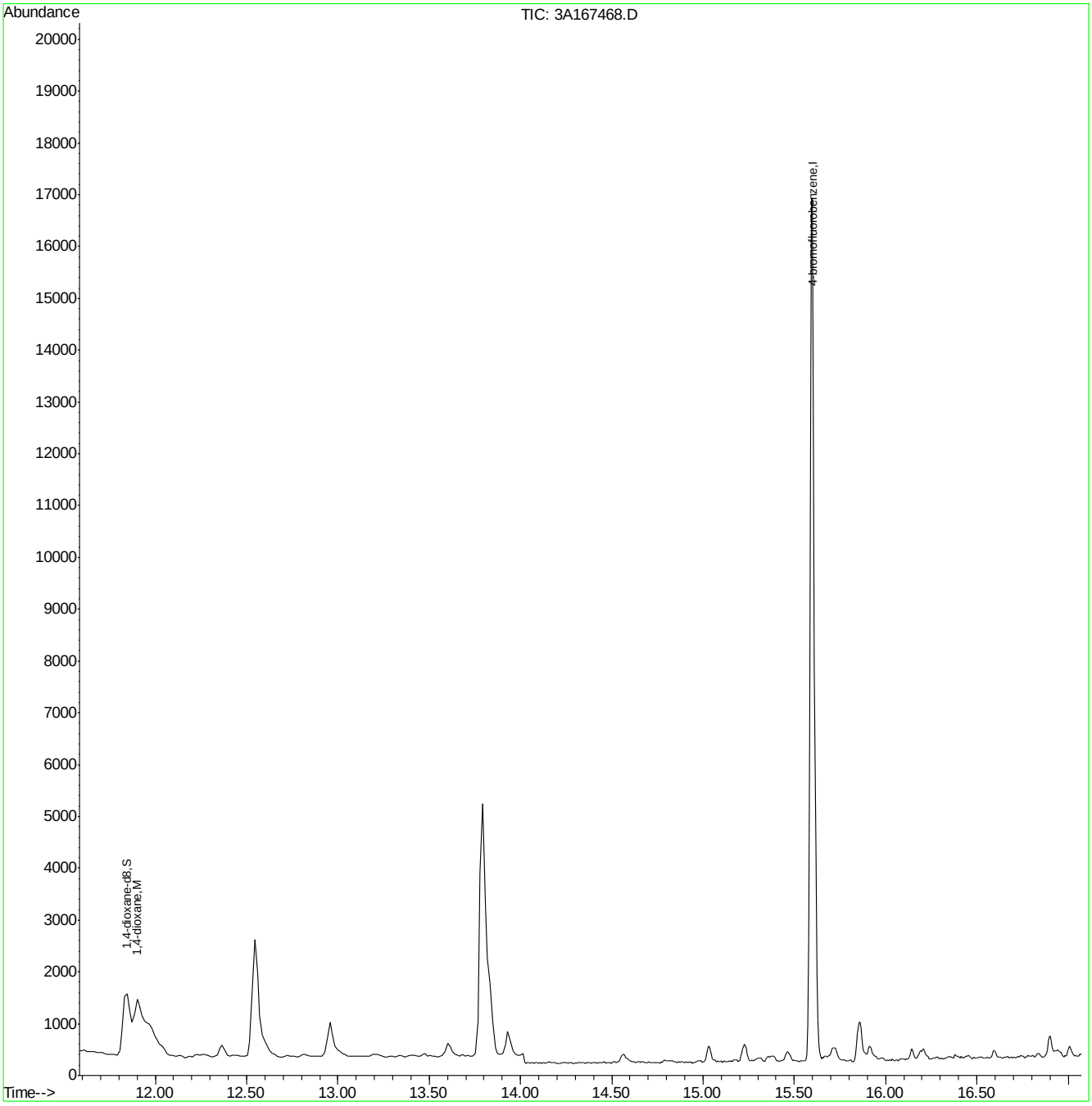
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	8988	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3880	15.59	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 155.90%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	2117	7.56	ug/L	89

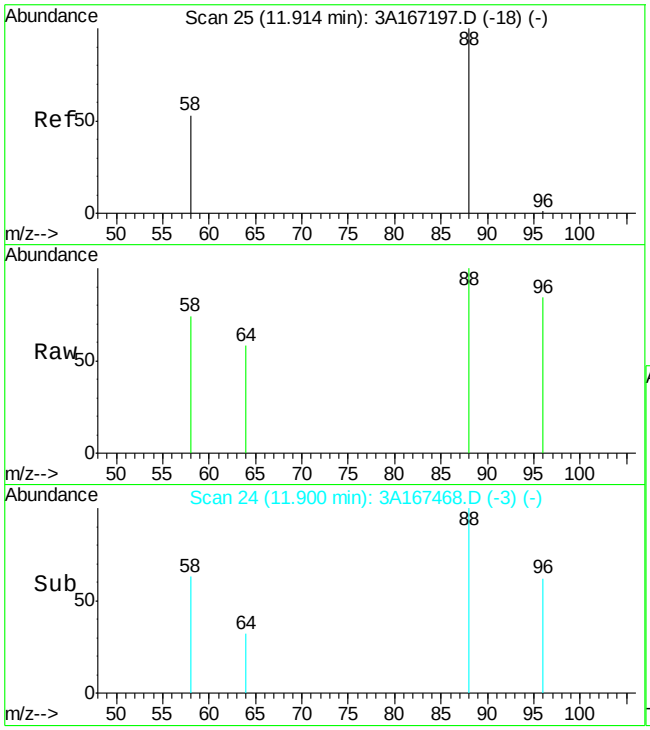
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7268\
Data File : 3A167468.D
Acq On : 20 Dec 2021 6:03 pm
Operator : BridgetK
Sample : jd36624-6
Misc : MS55558,V3A7268,5.0,,,,20
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 21 08:17:43 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

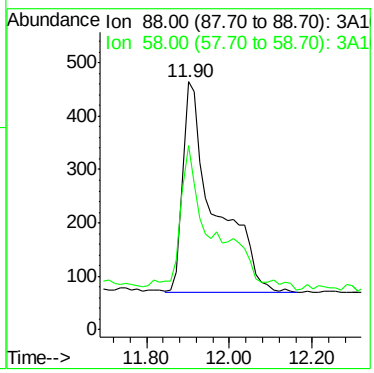




#3
1,4-dioxane
Concen: 7.56 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167468.D
Acq: 20 Dec 2021 6:03 pm

Tgt Ion: 88 Resp: 2117

Ion	Ratio	Lower	Upper
88	100		
58	68.4	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7266\
Data File : 3A167429.D
Acq On : 17 Dec 2021 1:33 pm
Operator : BridgetK
Sample : jd36624-7
Misc : MS55558,V3A7266,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 17 14:49:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

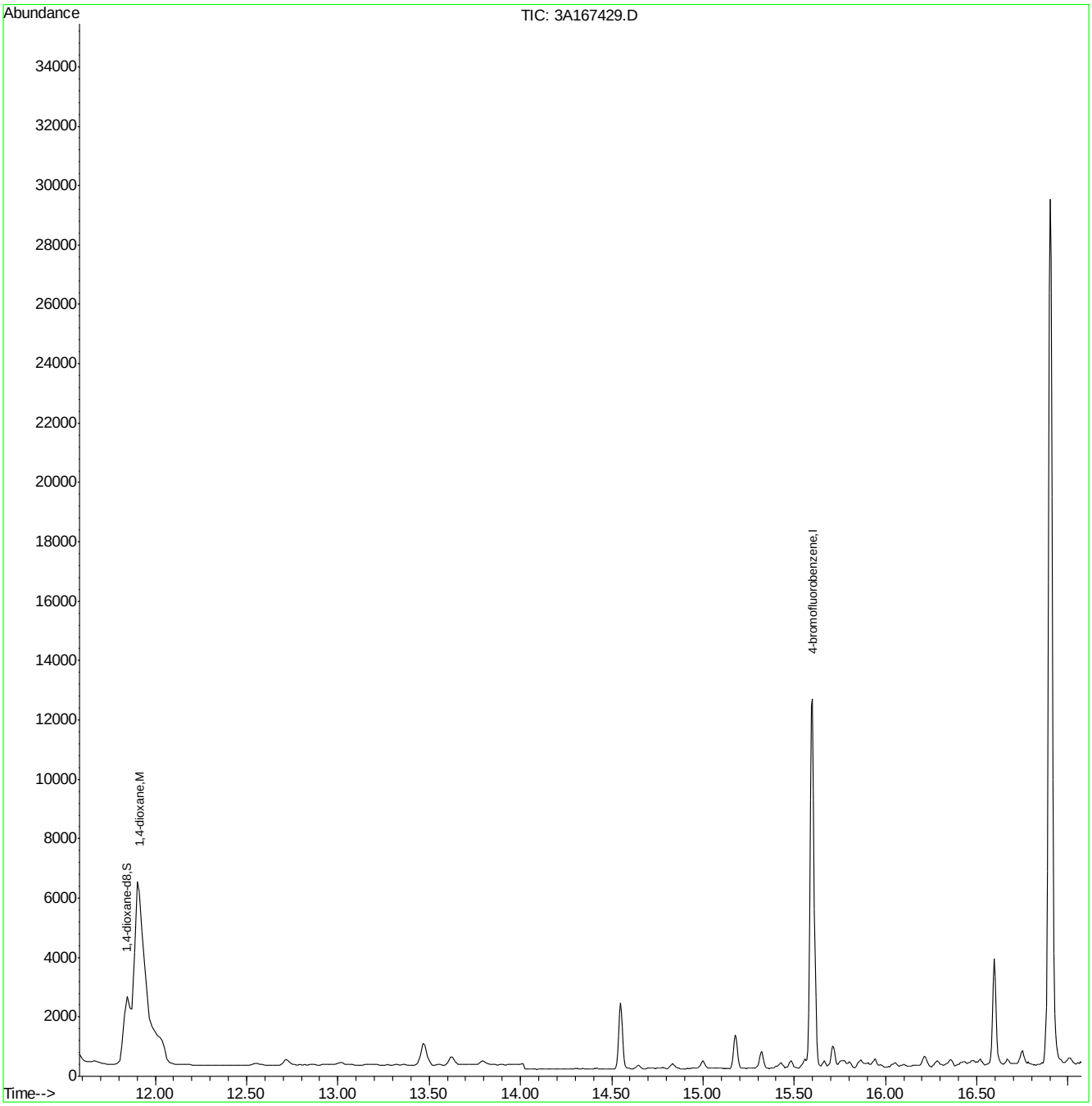
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	6569	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4689	25.78	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery =	257.80%#		
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	15603	76.27	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

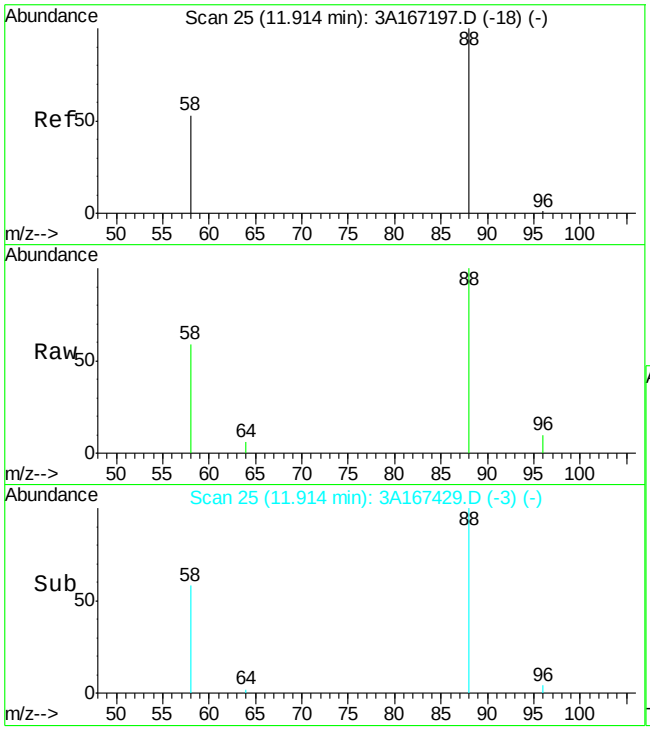
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7266\
Data File : 3A167429.D
Acq On : 17 Dec 2021 1:33 pm
Operator : BridgetK
Sample : jd36624-7
Misc : MS55558,V3A7266,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 17 14:49:42 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



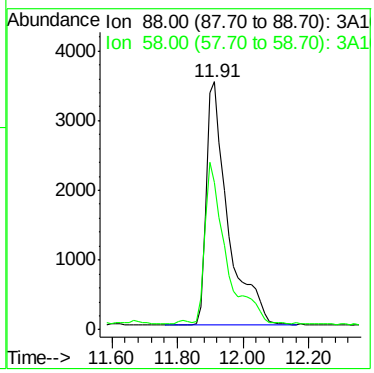
M3A7257.M Fri Dec 17 14:51:14 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 76.27 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167429.D
Acq: 17 Dec 2021 1:33 pm

Tgt Ion: 88 Resp: 15603

Ion	Ratio	Lower	Upper
88	100		
58	57.8	30.0	90.0



7.1.11

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7268\
Data File : 3A167469.D
Acq On : 20 Dec 2021 6:32 pm
Operator : BridgetK
Sample : jd36624-7
Misc : MS55558,V3A7268,5.0,,,,10
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 21 08:17:44 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

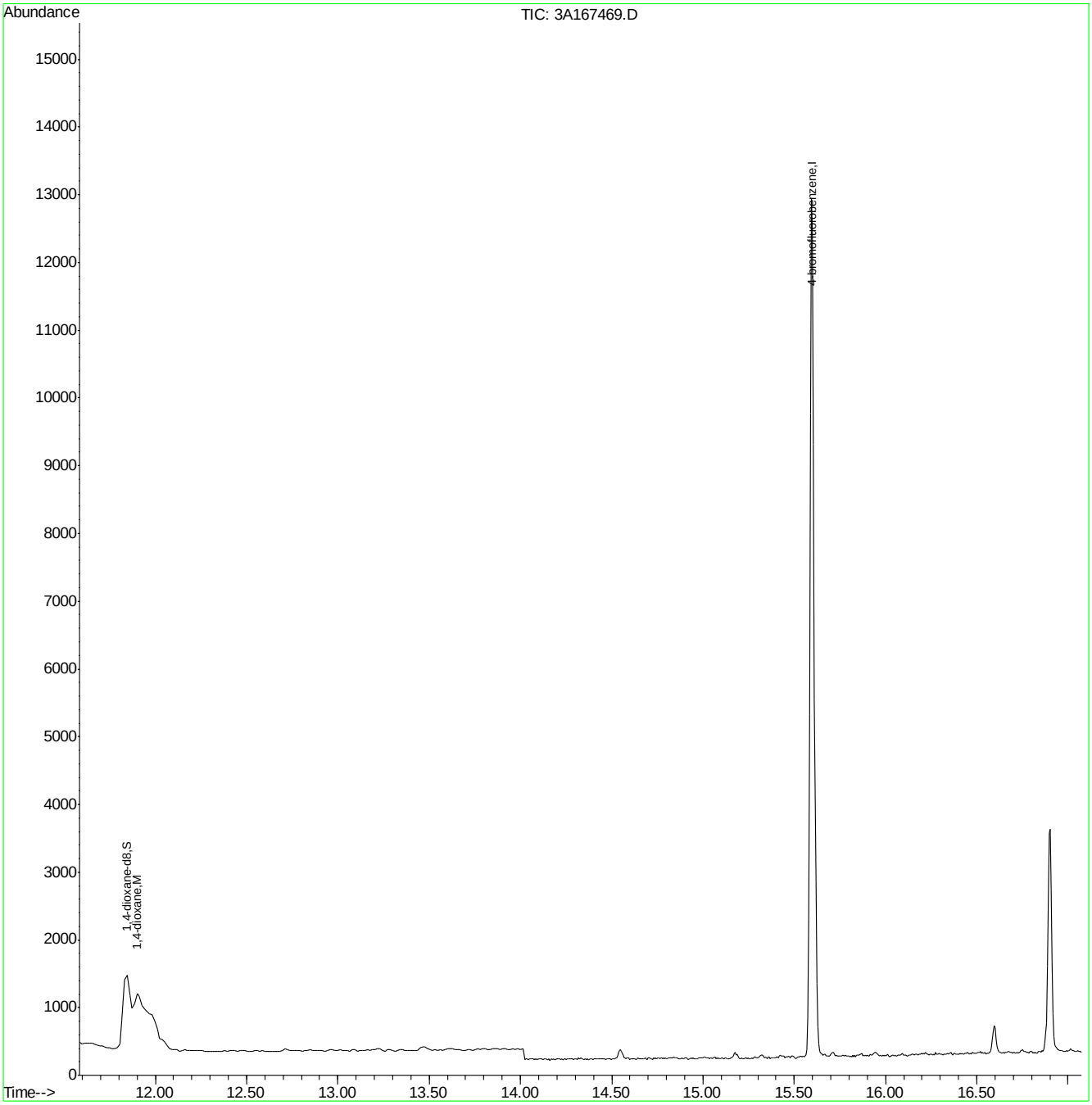
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	6789	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3823	20.34	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 203.40%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	1439	6.81	ug/L	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

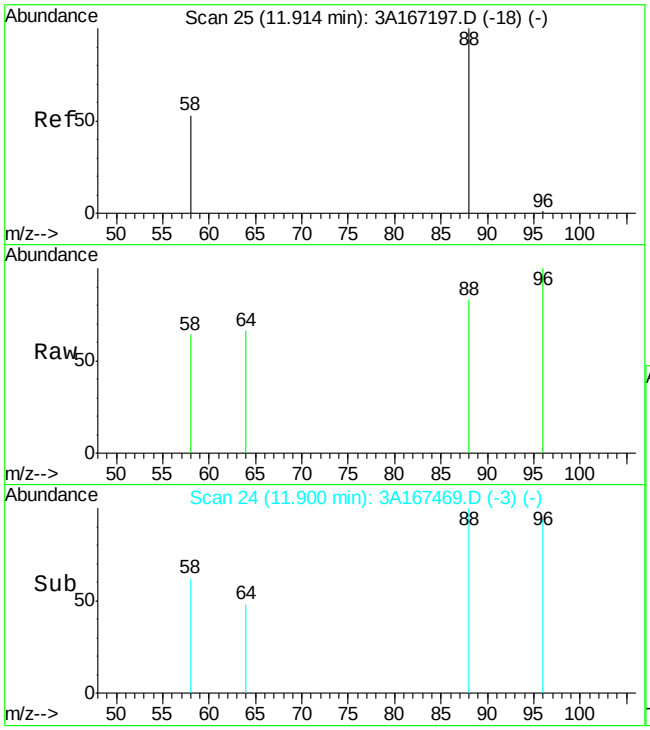
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7268\
Data File : 3A167469.D
Acq On : 20 Dec 2021 6:32 pm
Operator : BridgetK
Sample : jd36624-7
Misc : MS55558,V3A7268,5.0,,,,10
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 21 08:17:44 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



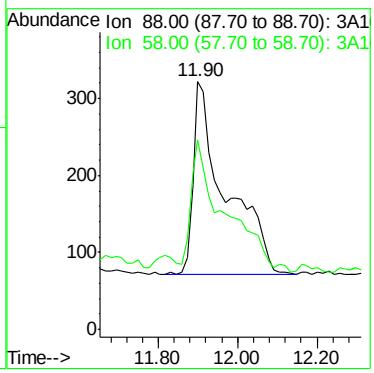
M3A7257.M Tue Dec 21 08:45:41 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 6.81 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167469.D
Acq: 20 Dec 2021 6:32 pm

Tgt Ion: 88 Resp: 1439

Ion	Ratio	Lower	Upper
88	100		
58	67.7	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7269\
Data File : 3A167494.D
Acq On : 21 Dec 2021 2:01 pm
Operator : BridgetK
Sample : jd36624-8
Misc : MS55558,V3A7269,5.0,,,,2
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 21 14:30:38 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

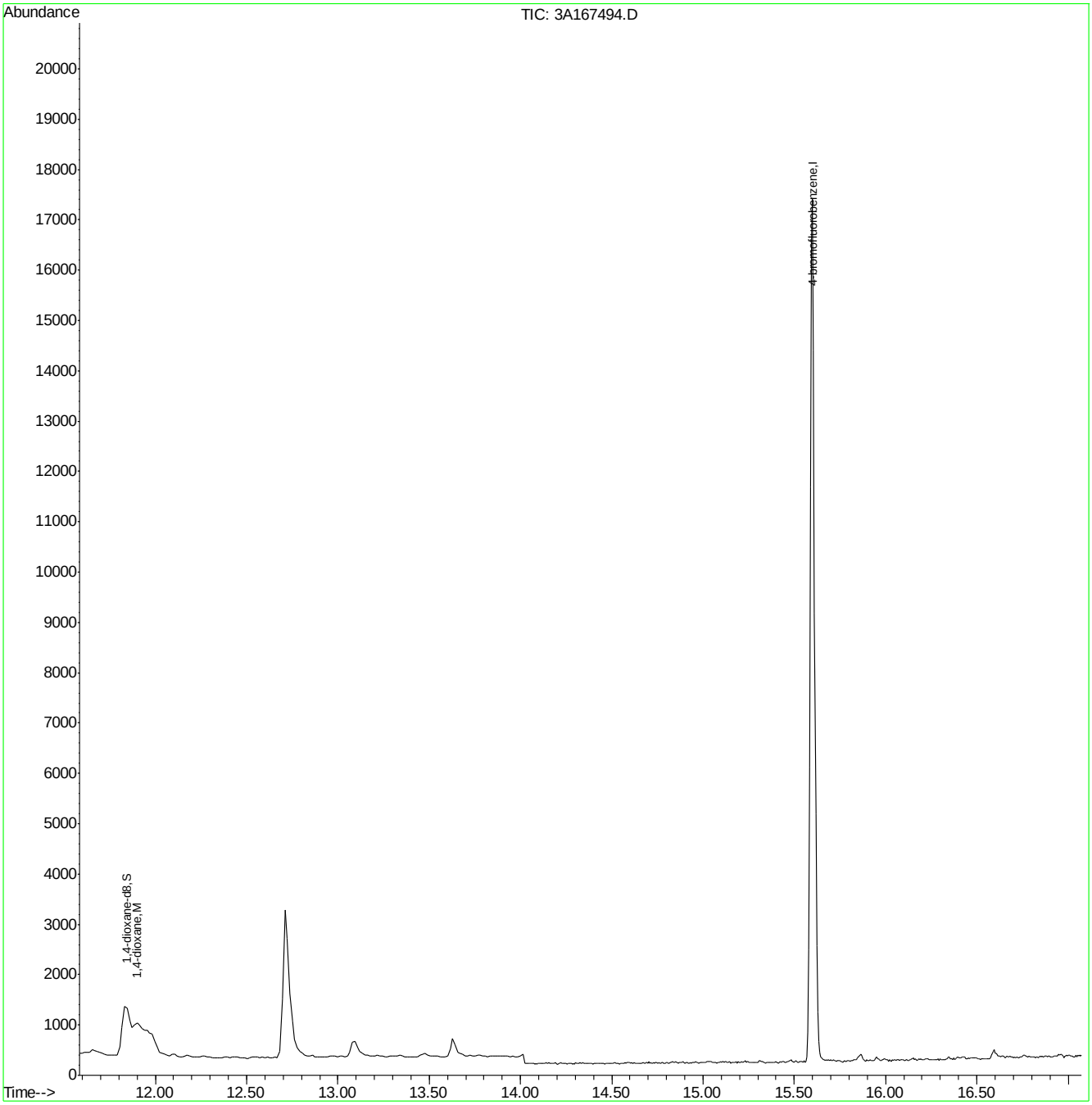
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	9493	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3736	14.21	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 142.10%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	663	2.24	ug/L	88

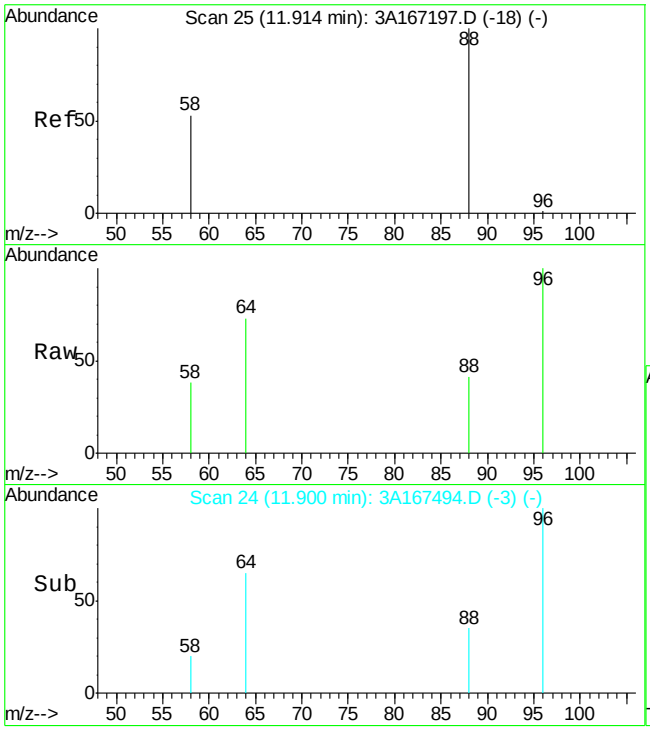
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7269\
Data File : 3A167494.D
Acq On : 21 Dec 2021 2:01 pm
Operator : BridgetK
Sample : jd36624-8
Misc : MS55558,V3A7269,5.0,,,,2
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 21 14:30:38 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

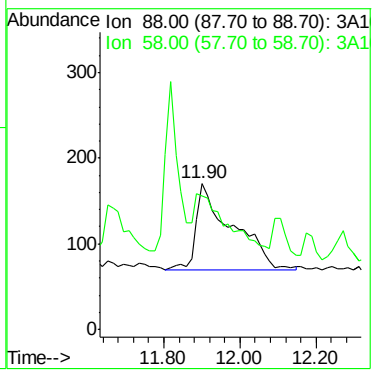




#3
1,4-dioxane
Concen: 2.24 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167494.D
Acq: 21 Dec 2021 2:01 pm

Tgt Ion: 88 Resp: 663

Ion	Ratio	Lower	Upper
88	100		
58	69.3	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7266\
Data File : 3A167441.D
Acq On : 17 Dec 2021 8:32 pm
Operator : BridgetK
Sample : jd36624-9
Misc : MS55557,V3A7266,5.0,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 20 08:22:32 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

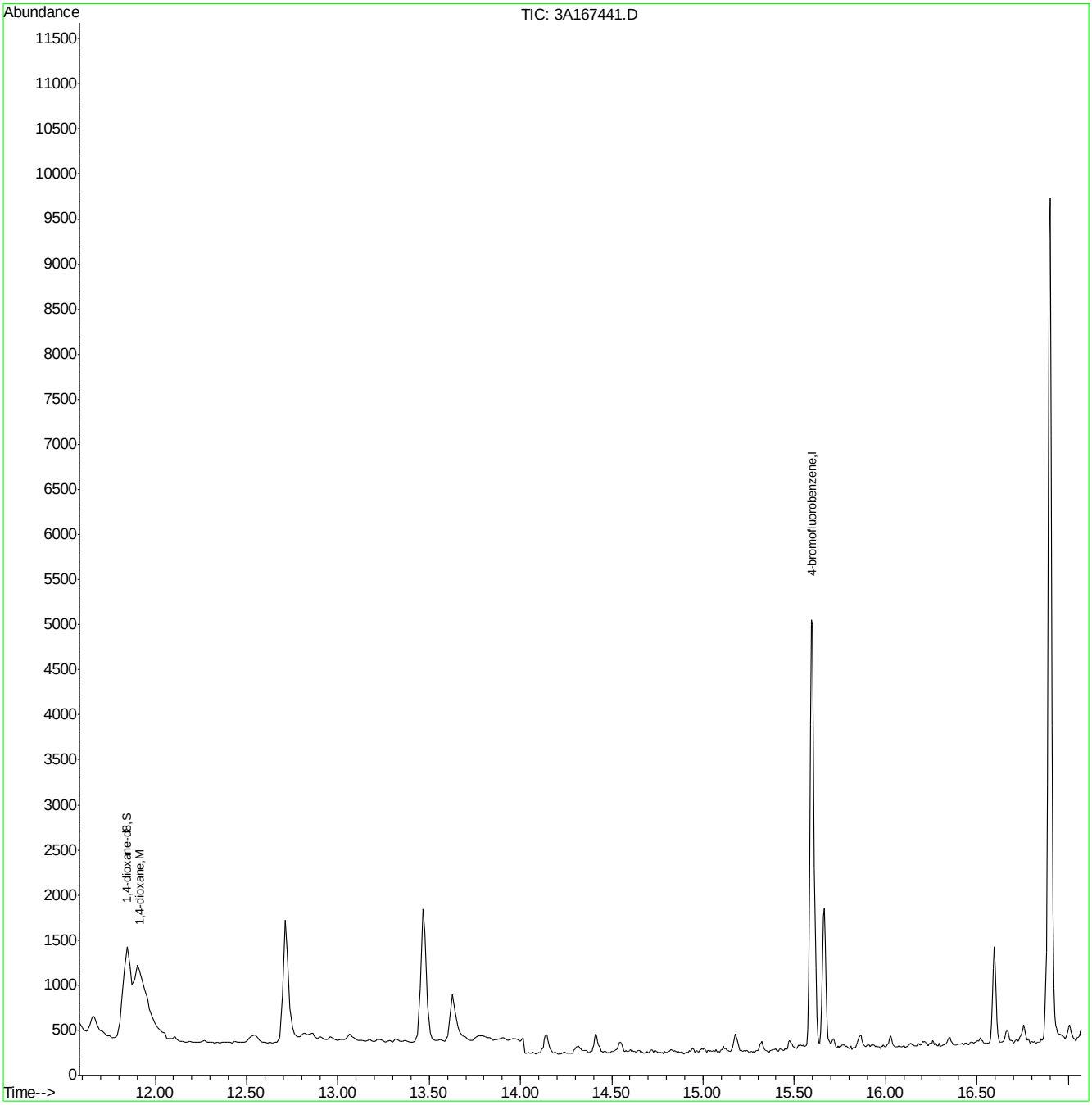
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	2507	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	2102	30.28	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery =	302.80%#		
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	1821	23.32	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

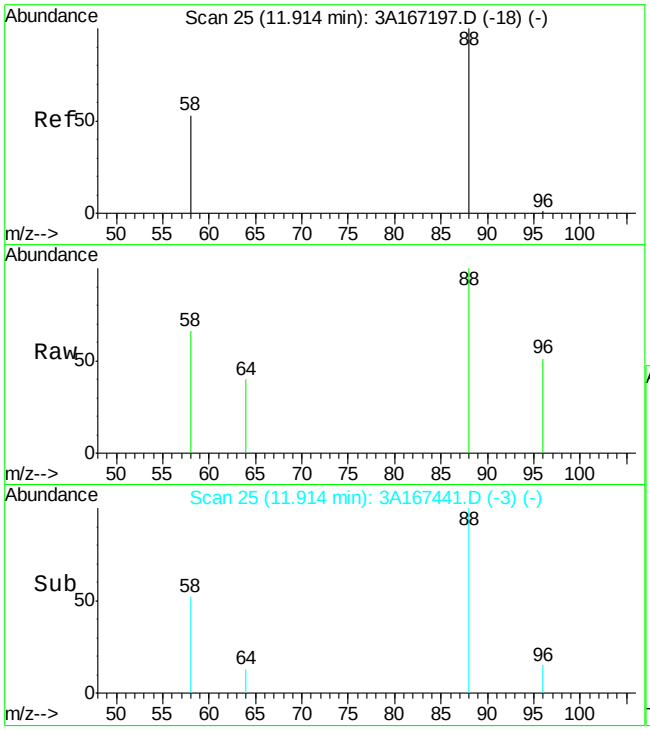
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7266\
Data File : 3A167441.D
Acq On : 17 Dec 2021 8:32 pm
Operator : BridgetK
Sample : jd36624-9
Misc : MS55557,V3A7266,5.0,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 20 08:22:32 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



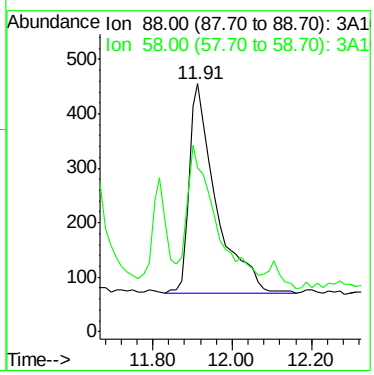
M3A7257.M Mon Dec 20 08:24:02 2021 ACCUNJ



#3
1,4-dioxane
Concen: 23.32 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167441.D
Acq: 17 Dec 2021 8:32 pm

Tgt Ion: 88 Resp: 1821

Ion	Ratio	Lower	Upper
88	100		
58	58.1	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7269\
Data File : 3A167495.D
Acq On : 21 Dec 2021 2:29 pm
Operator : BridgetK
Sample : jd36624-9
Misc : MS55558,V3A7269,5.0,,,,10
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 21 14:53:52 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

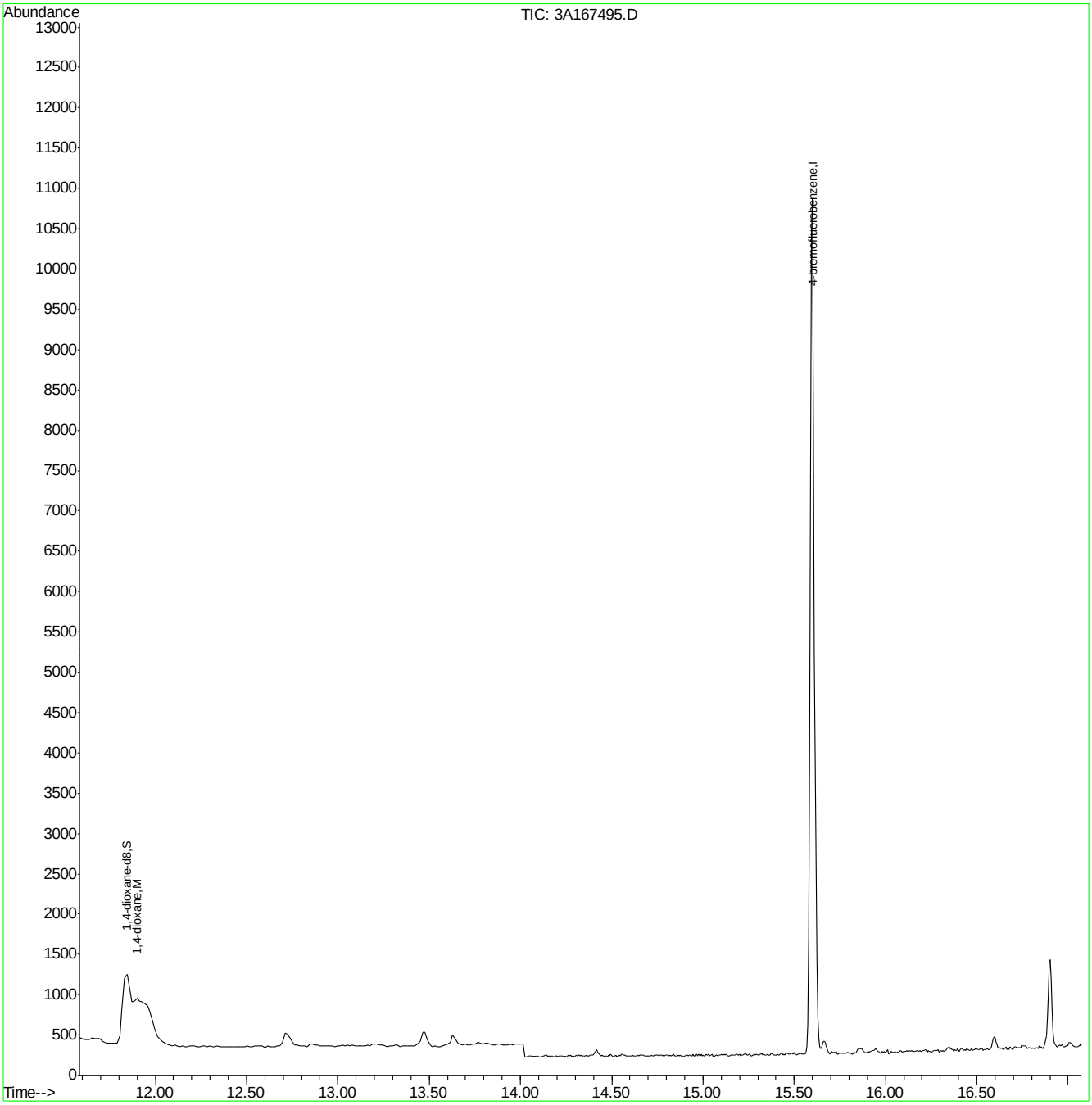
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	5622	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3431	22.04	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 220.40%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	486	2.78	ug/L	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed

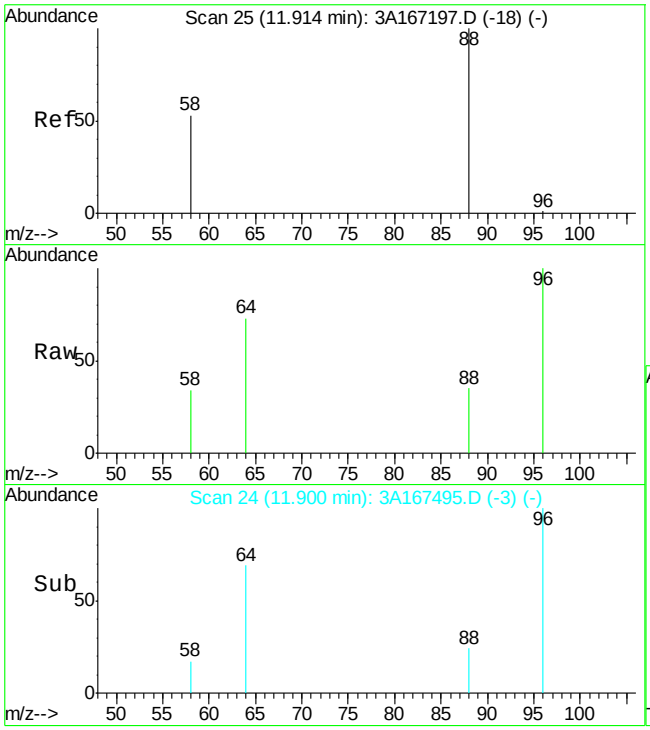
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7269\
Data File : 3A167495.D
Acq On : 21 Dec 2021 2:29 pm
Operator : BridgetK
Sample : jd36624-9
Misc : MS55558,V3A7269,5.0,,,,10
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 21 14:53:52 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



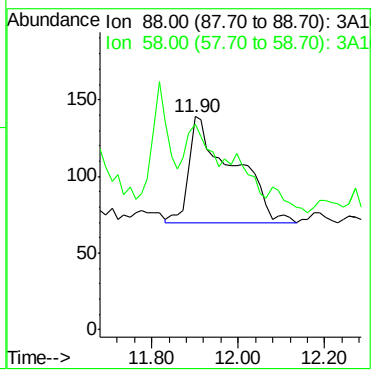
M3A7257.M Tue Dec 21 14:54:00 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 2.78 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167495.D
Acq: 21 Dec 2021 2:29 pm

Tgt Ion: 88 Resp: 486

Ion	Ratio	Lower	Upper
88	100		
58	78.3	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7266\
Data File : 3A167438.D
Acq On : 17 Dec 2021 7:07 pm
Operator : BridgetK
Sample : jd36624-10
Misc : MS55558,V3A7266,5.0,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 20 08:22:29 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	10021	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.86	96	4465	16.09	ug/L	0.01
Spiked Amount 10.000	Range 39 - 174		Recovery = 160.90%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	731	2.34	ug/L	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

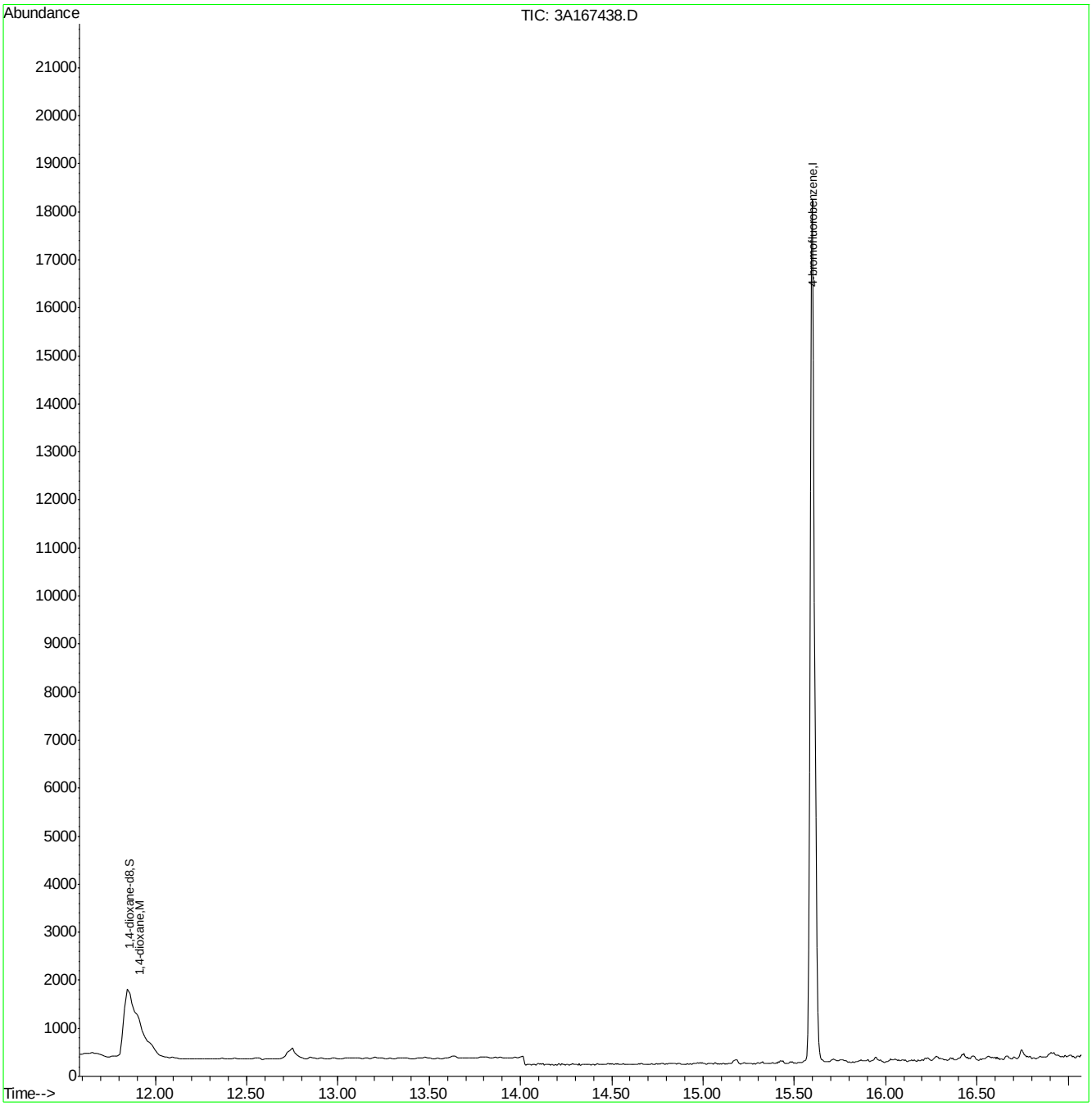
7.1.16

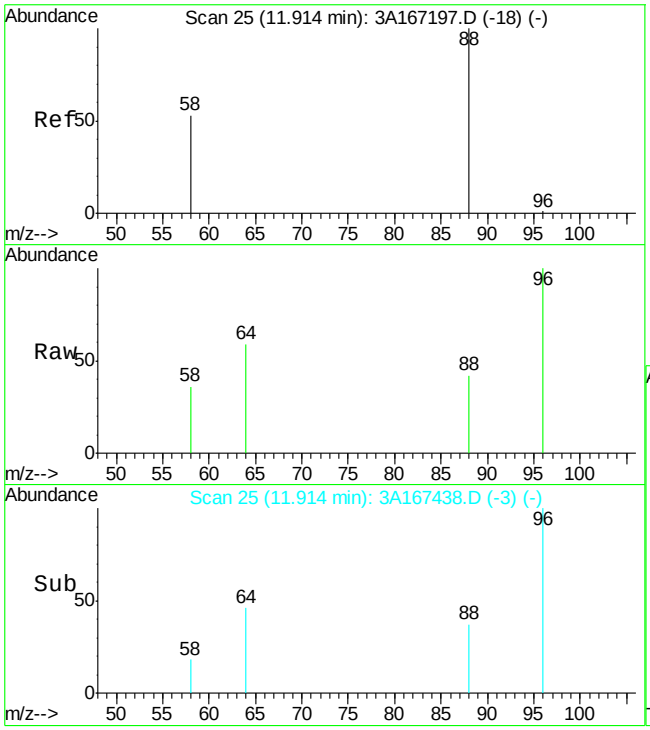
7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7266\
Data File : 3A167438.D
Acq On : 17 Dec 2021 7:07 pm
Operator : BridgetK
Sample : jd36624-10
Misc : MS55558,V3A7266,5.0,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 20 08:22:29 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

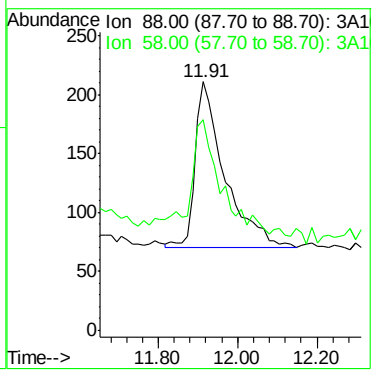




#3
1,4-dioxane
Concen: 2.34 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167438.D
Acq: 17 Dec 2021 7:07 pm

Tgt Ion: 88 Resp: 731

Ion	Ratio	Lower	Upper
88	100		
58	66.0	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7266\
Data File : 3A167442.D
Acq On : 17 Dec 2021 9:01 pm
Operator : BridgetK
Sample : jd36624-11
Misc : MS55557,V3A7266,5.0,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 20 08:22:33 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

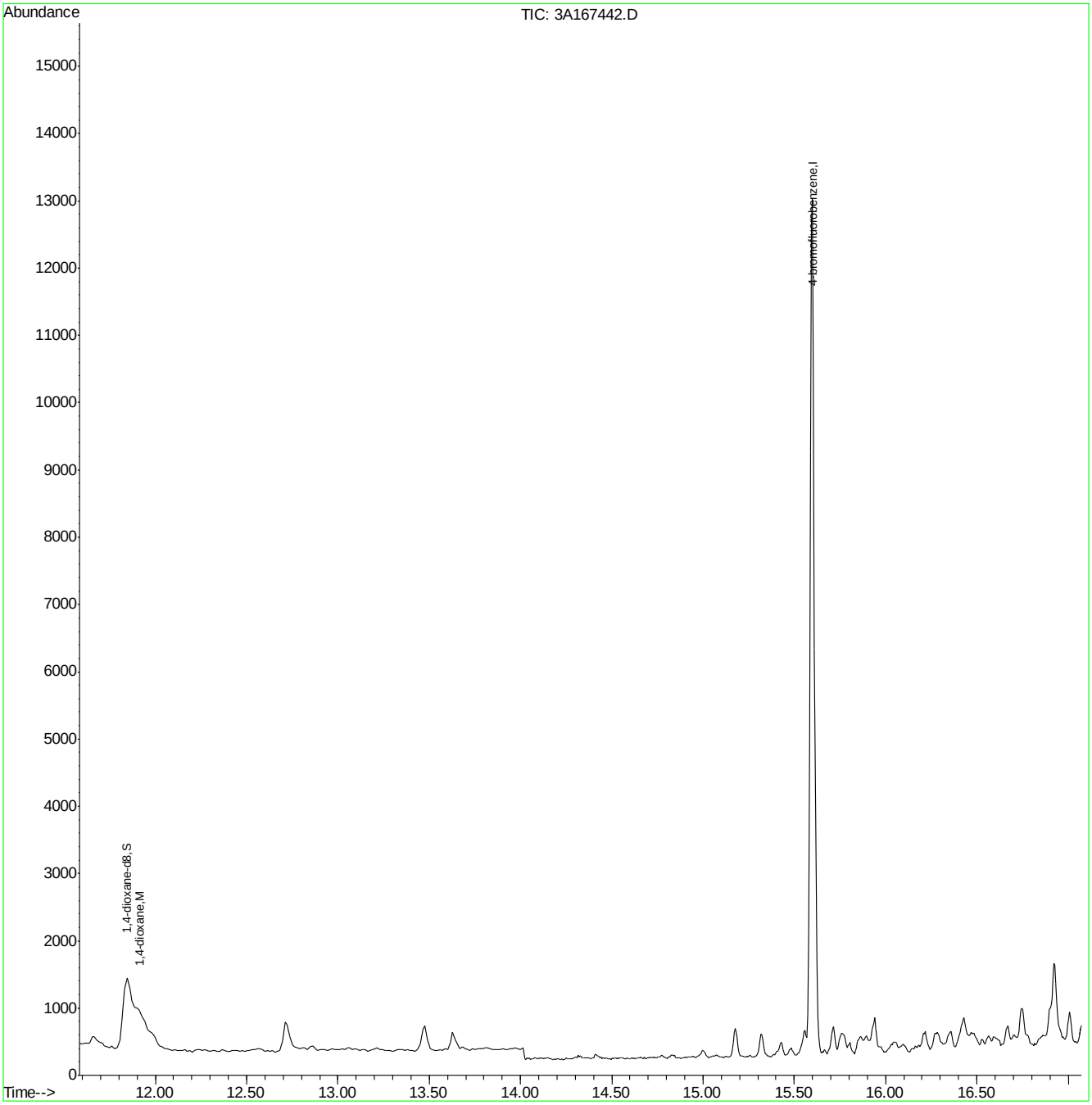
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	7094	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3332	16.96	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 169.60%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	554	2.51	ug/L	96

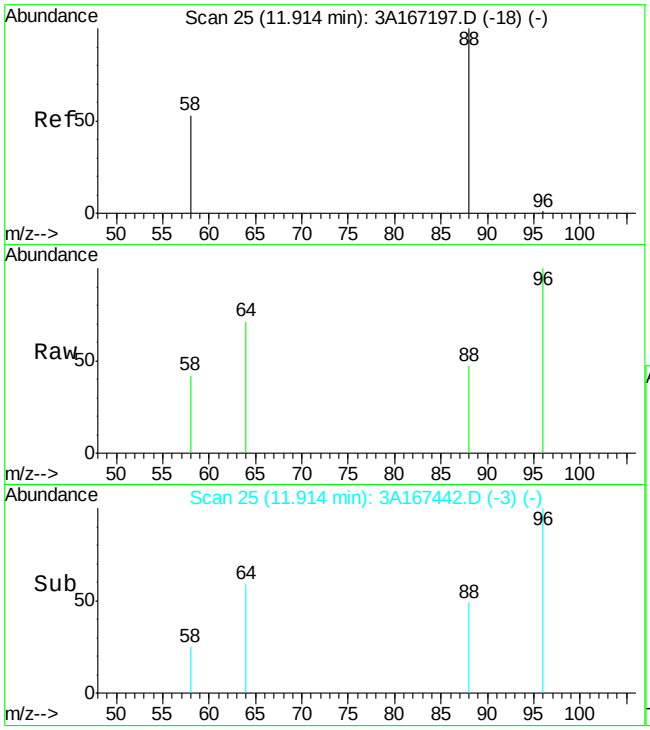
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7266\
Data File : 3A167442.D
Acq On : 17 Dec 2021 9:01 pm
Operator : BridgetK
Sample : jd36624-11
Misc : MS55557,V3A7266,5.0,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 20 08:22:33 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

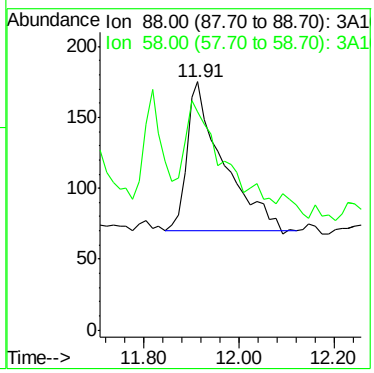




#3
1,4-dioxane
Concen: 2.51 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167442.D
Acq: 17 Dec 2021 9:01 pm

Tgt Ion: 88 Resp: 554

Ion	Ratio	Lower	Upper
88	100		
58	62.9	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7269\
Data File : 3A167496.D
Acq On : 21 Dec 2021 2:59 pm
Operator : BridgetK
Sample : jd36624-11
Misc : MS55558,V3A7269,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 21 16:27:56 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

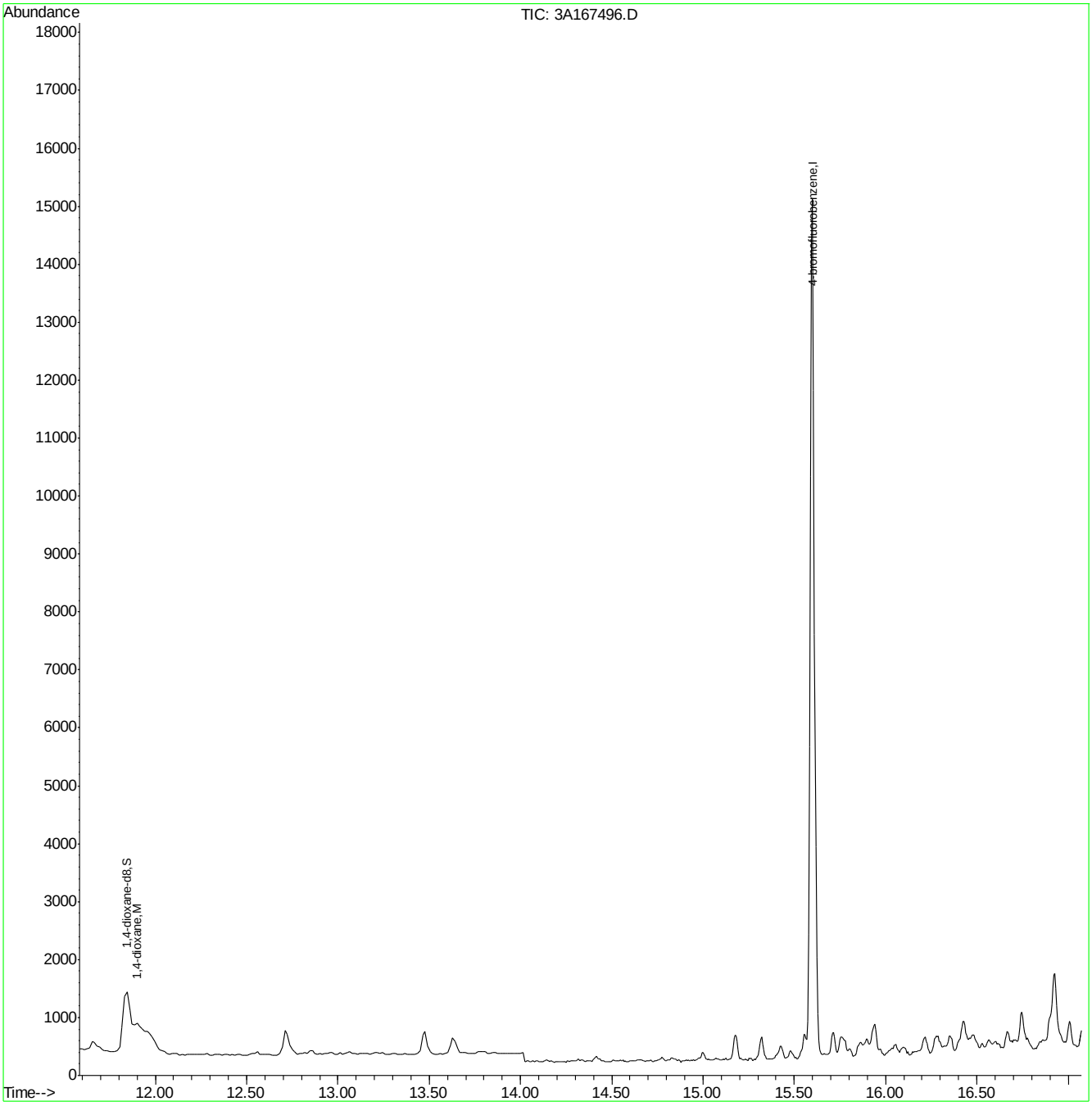
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	8019	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3105	13.98	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 139.80%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	539	2.16	ug/L	74

(#) = qualifier out of range (m) = manual integration (+) = signals summed

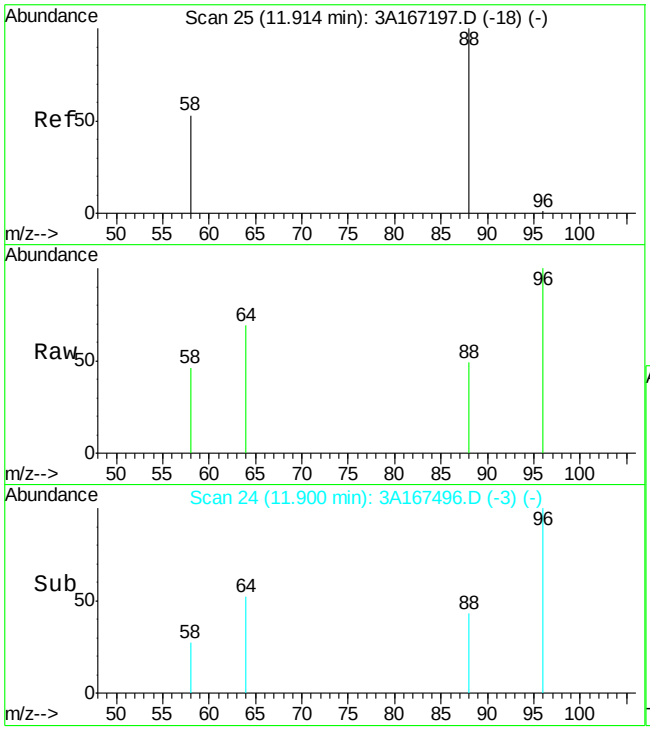
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7269\
Data File : 3A167496.D
Acq On : 21 Dec 2021 2:59 pm
Operator : BridgetK
Sample : jd36624-11
Misc : MS55558,V3A7269,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 21 16:27:56 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



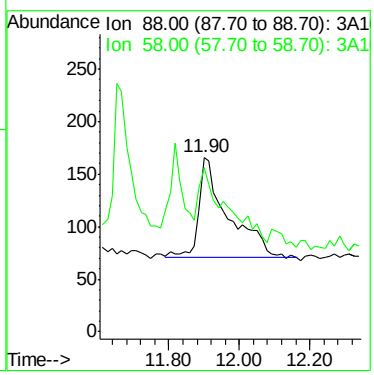
M3A7257.M Tue Dec 21 16:28:14 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 2.16 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167496.D
Acq: 21 Dec 2021 2:59 pm

Tgt Ion: 88 Resp: 539

Ion	Ratio	Lower	Upper
88	100		
58	80.0	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7269\
Data File : 3A167497.D
Acq On : 21 Dec 2021 3:28 pm
Operator : BridgetK
Sample : jd36624-12
Misc : MS55558,V3A7269,5.0,,,,10
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 21 16:27:57 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

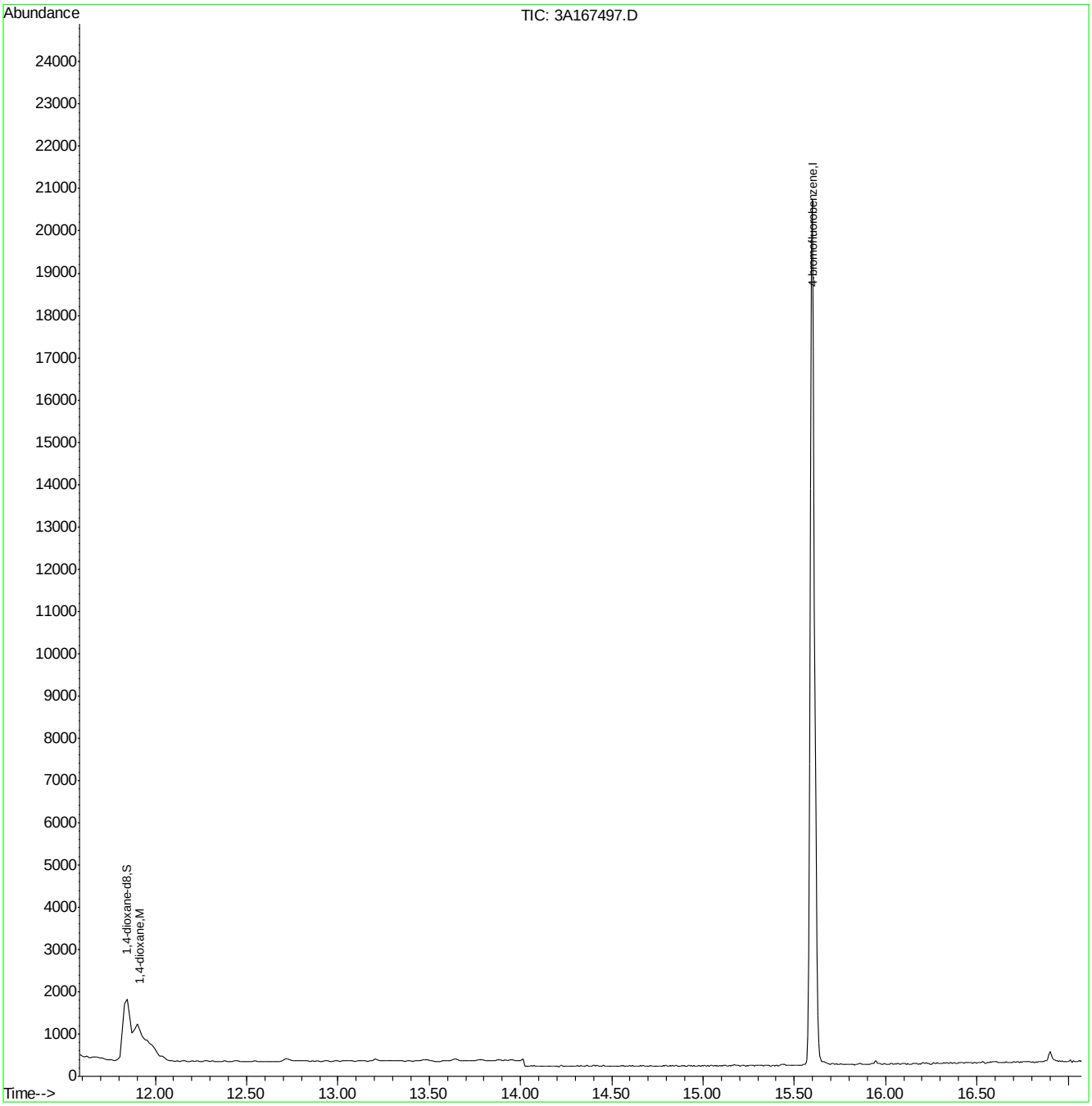
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	11304	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4099	13.10	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 131.00%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	1297	3.68	ug/L	85

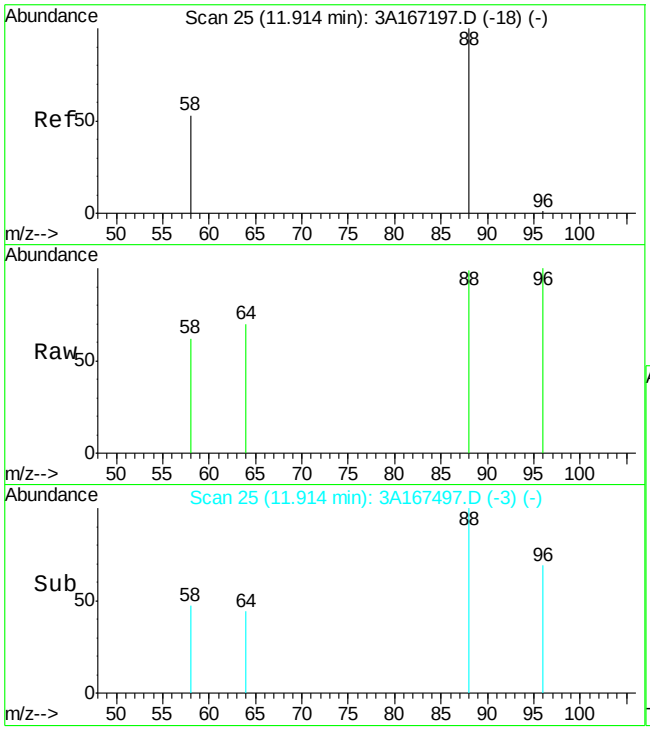
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7269\
Data File : 3A167497.D
Acq On : 21 Dec 2021 3:28 pm
Operator : BridgetK
Sample : jd36624-12
Misc : MS55558,V3A7269,5.0,,,,10
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 21 16:27:57 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

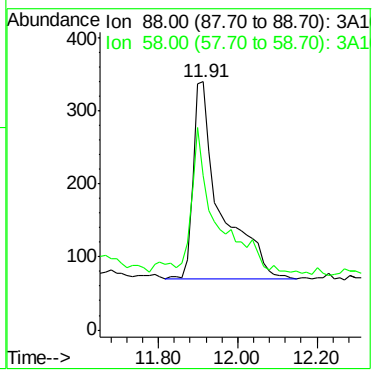




#3
1,4-dioxane
Concen: 3.68 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167497.D
Acq: 21 Dec 2021 3:28 pm

Tgt Ion: 88 Resp: 1297

Ion	Ratio	Lower	Upper
88	100		
58	48.9	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167538.D
Acq On : 23 Dec 2021 12:15 pm
Operator : BridgetK
Sample : jd36624-13
Misc : MS55558,V3A7273,5.0,,,,10
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 23 15:02:45 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

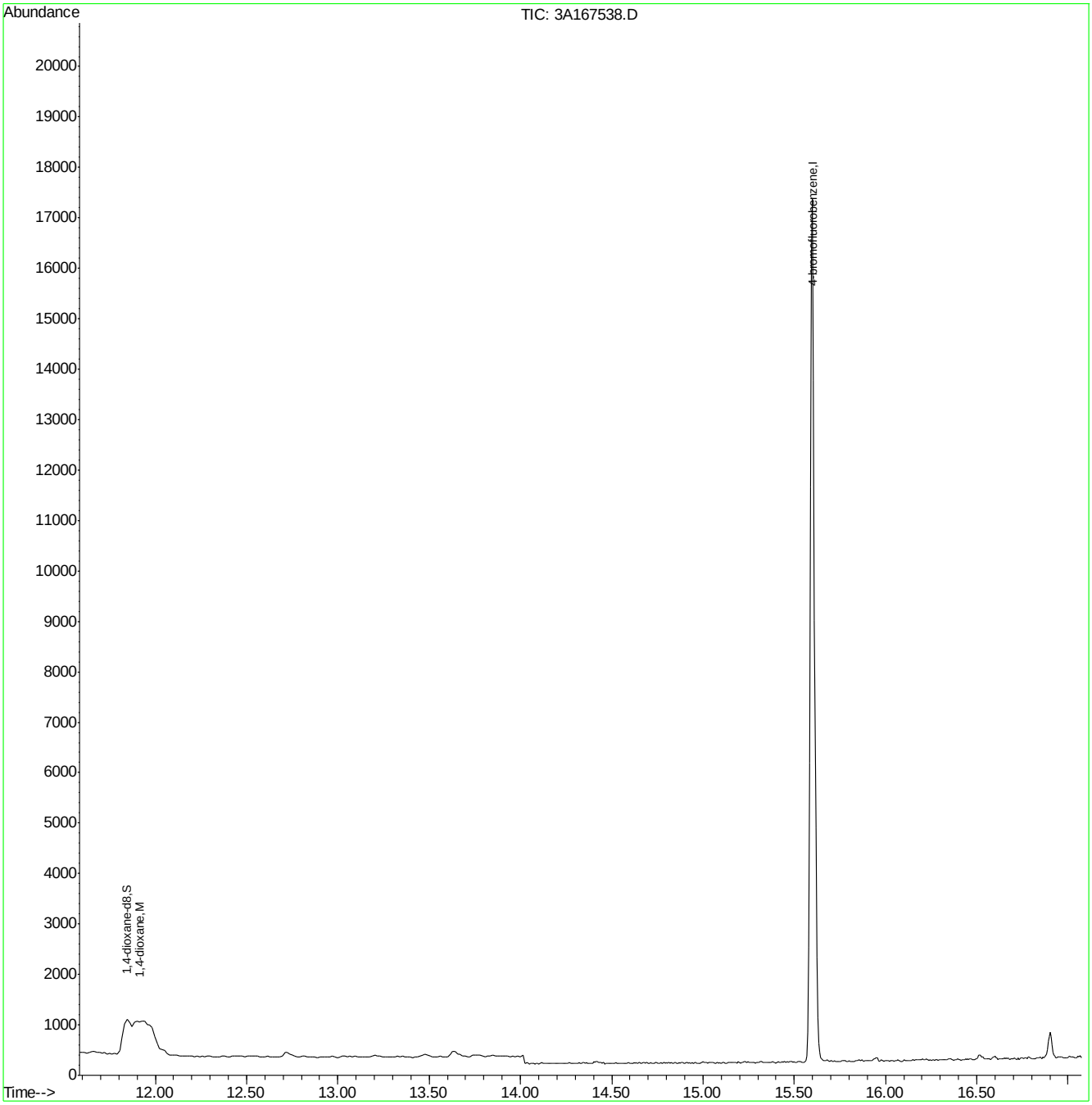
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	9253	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3629	14.17	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 141.70%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	904	3.14	ug/L	79

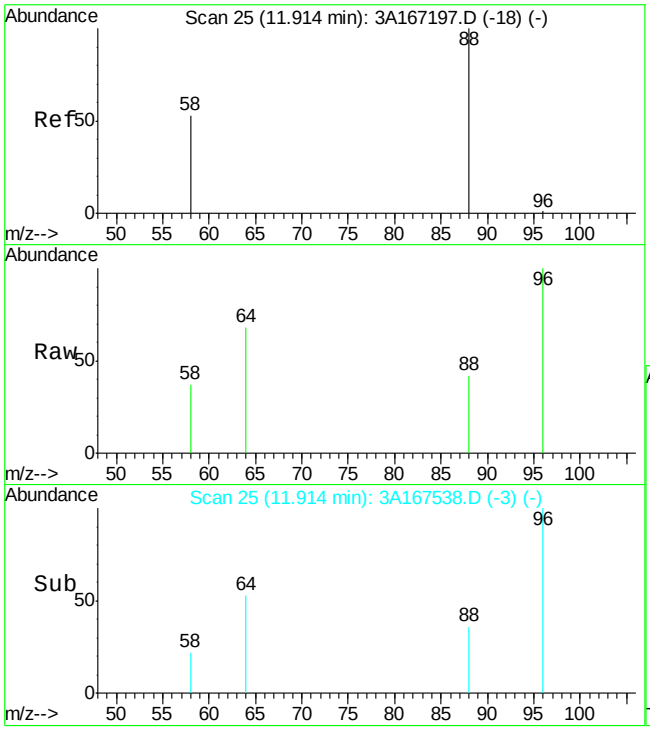
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167538.D
Acq On : 23 Dec 2021 12:15 pm
Operator : BridgetK
Sample : jd36624-13
Misc : MS55558,V3A7273,5.0,,,,10
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 23 15:02:45 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

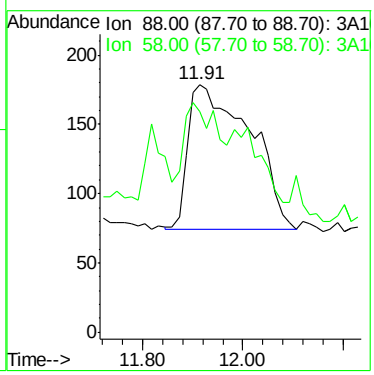




#3
1,4-dioxane
Concen: 3.14 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167538.D
Acq: 23 Dec 2021 12:15 pm

Tgt Ion: 88 Resp: 904

Ion	Ratio	Lower	Upper
88	100		
58	43.8	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7269\
Data File : 3A167498.D
Acq On : 21 Dec 2021 3:57 pm
Operator : BridgetK
Sample : jd36624-14
Misc : MS55558,V3A7269,5.0,,,,10
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 21 16:27:58 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	8892	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3705	15.05	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 150.50%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	714	2.58	ug/L	78

(#) = qualifier out of range (m) = manual integration (+) = signals summed

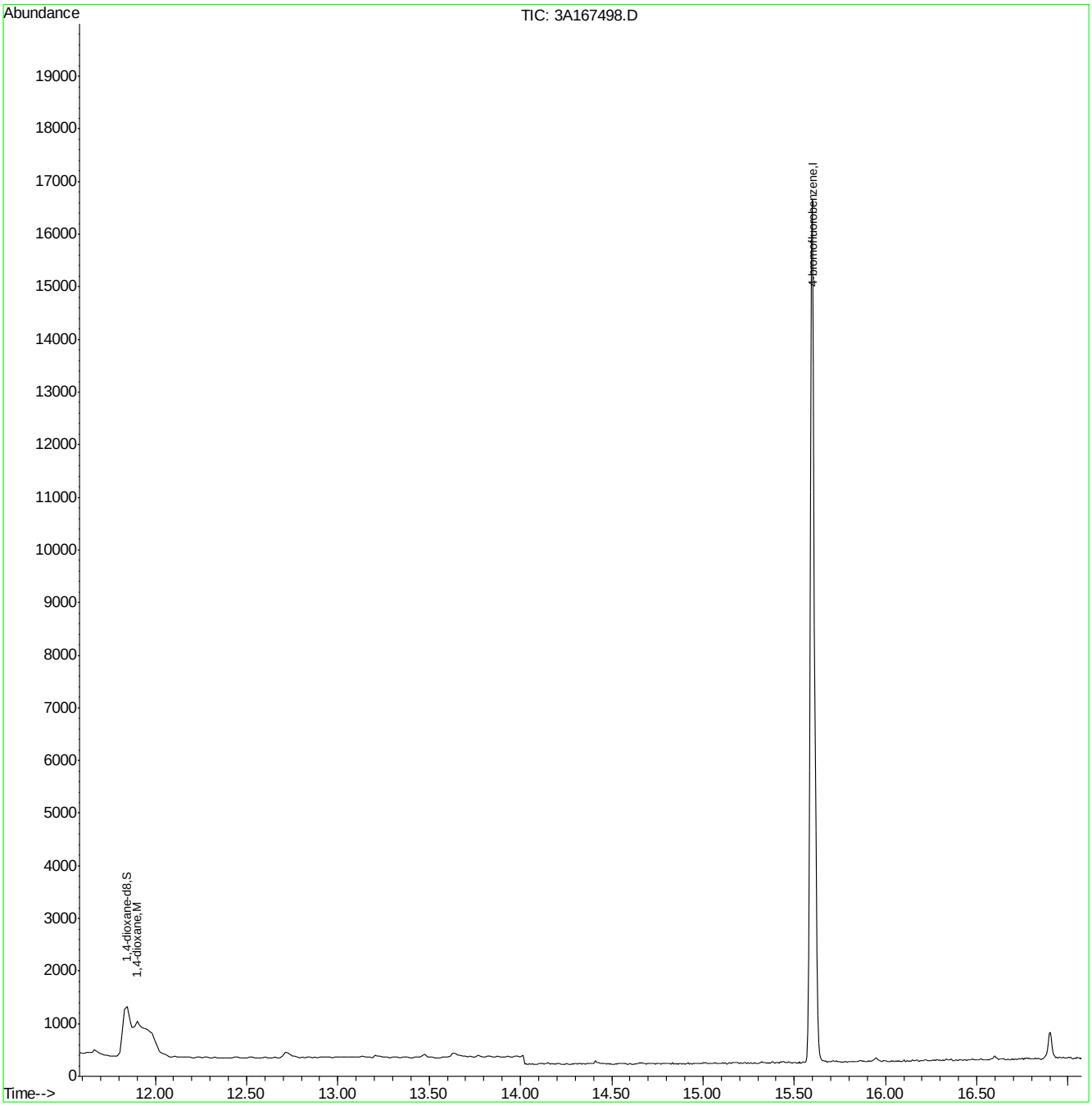
7.1.21

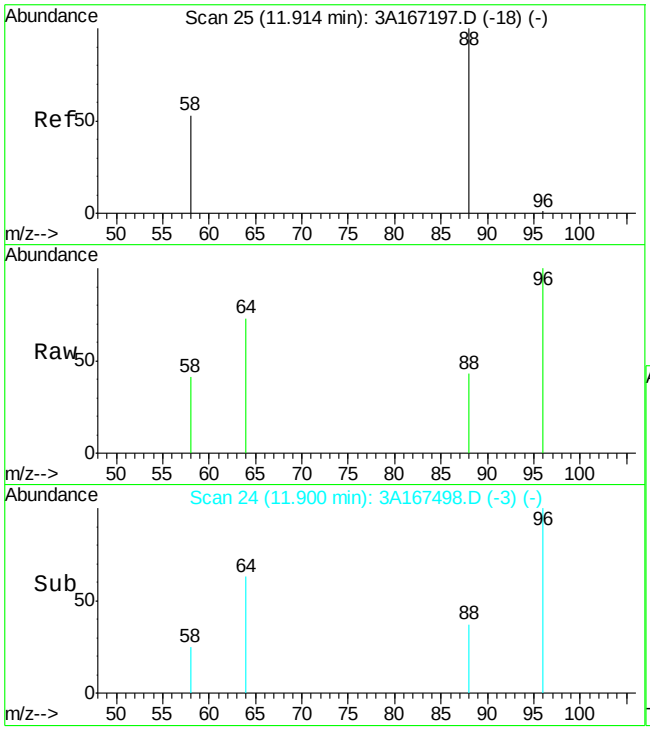
7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7269\
Data File : 3A167498.D
Acq On : 21 Dec 2021 3:57 pm
Operator : BridgetK
Sample : jd36624-14
Misc : MS55558,V3A7269,5.0,,,,10
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 21 16:27:58 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

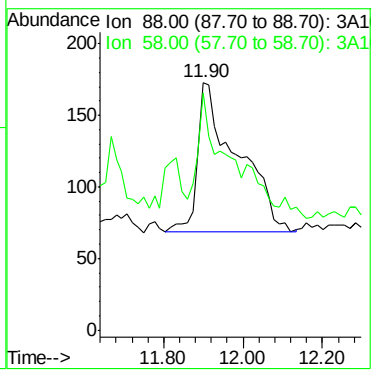




#3
1,4-dioxane
Concen: 2.58 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167498.D
Acq: 21 Dec 2021 3:57 pm

Tgt Ion: 88 Resp: 714

Ion	Ratio	Lower	Upper
88	100		
58	76.9	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7268\
Data File : 3A167476.D
Acq On : 20 Dec 2021 9:54 pm
Operator : BridgetK
Sample : jd36624-15
Misc : MS55558,V3A7268,5.0,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 21 08:17:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

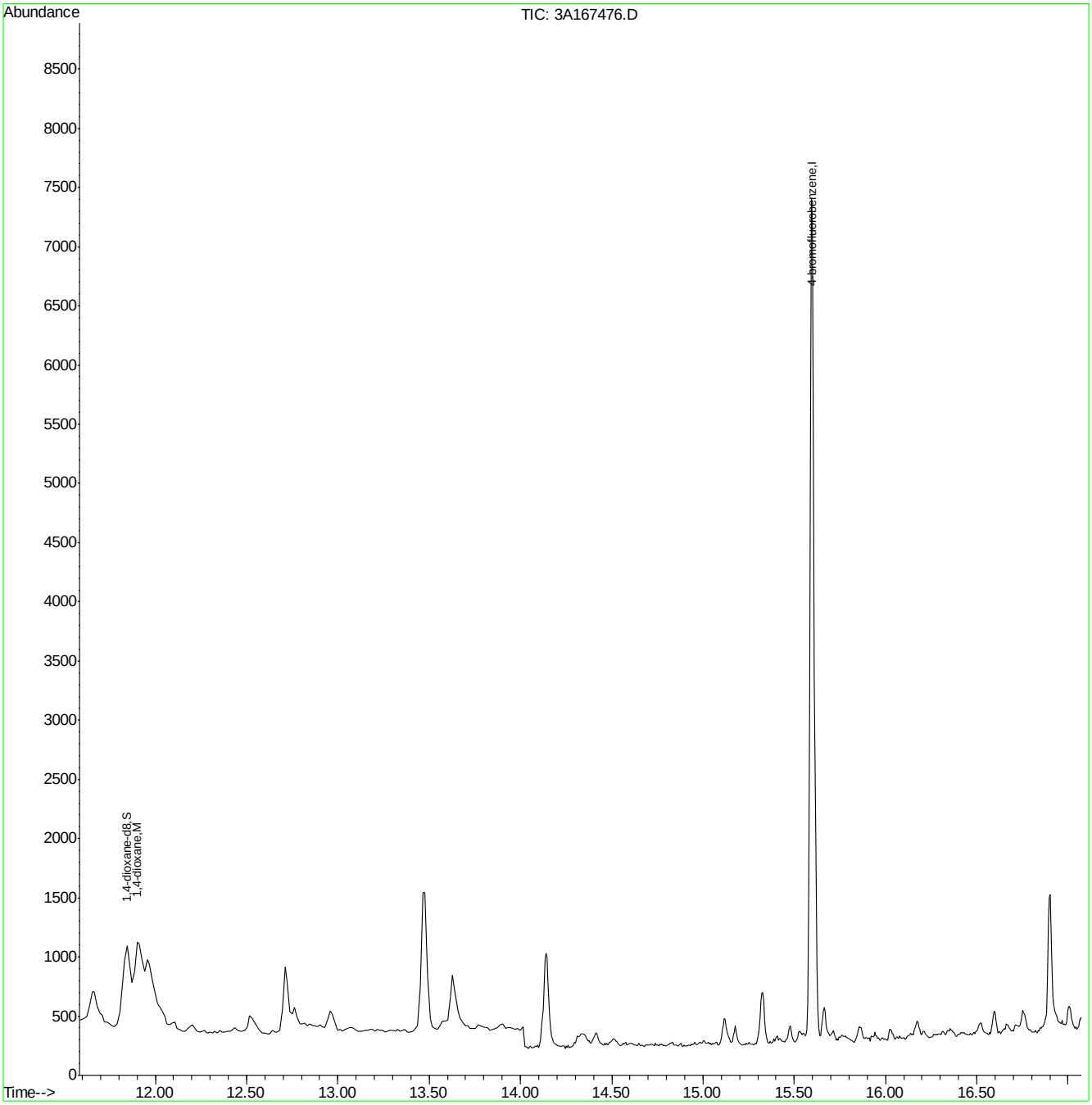
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	3809	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	816	7.74	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 77.40%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	1962	16.54	ug/L	95

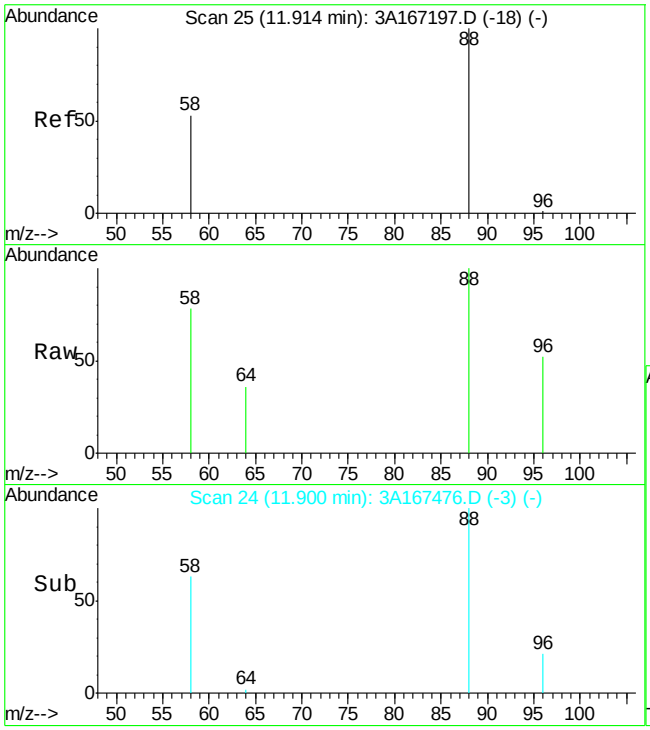
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7268\
Data File : 3A167476.D
Acq On : 20 Dec 2021 9:54 pm
Operator : BridgetK
Sample : jd36624-15
Misc : MS55558,V3A7268,5.0,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 21 08:17:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

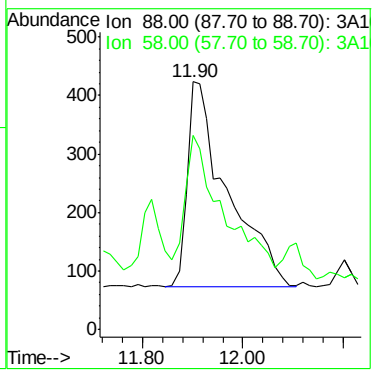




#3
1,4-dioxane
Concen: 16.54 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167476.D
Acq: 20 Dec 2021 9:54 pm

Tgt Ion: 88 Resp: 1962

Ion	Ratio	Lower	Upper
88	100		
58	56.3	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7269\
Data File : 3A167499.D
Acq On : 21 Dec 2021 4:26 pm
Operator : BridgetK
Sample : jd36624-15
Misc : MS55558,V3A7269,5.0,,,,5
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 22 08:44:22 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

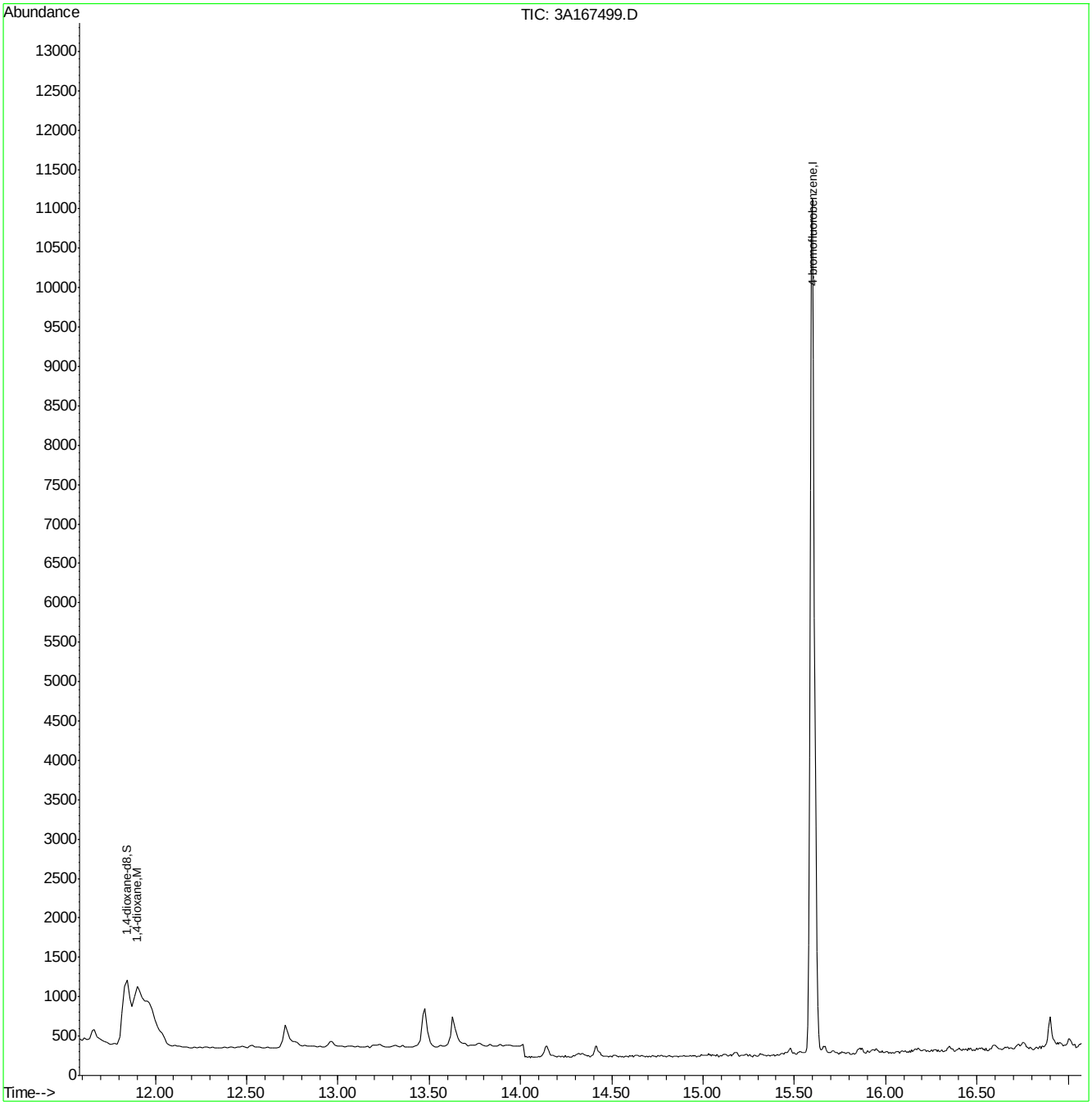
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	5803	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	2965	18.45	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 184.50%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	1414	7.82	ug/L	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

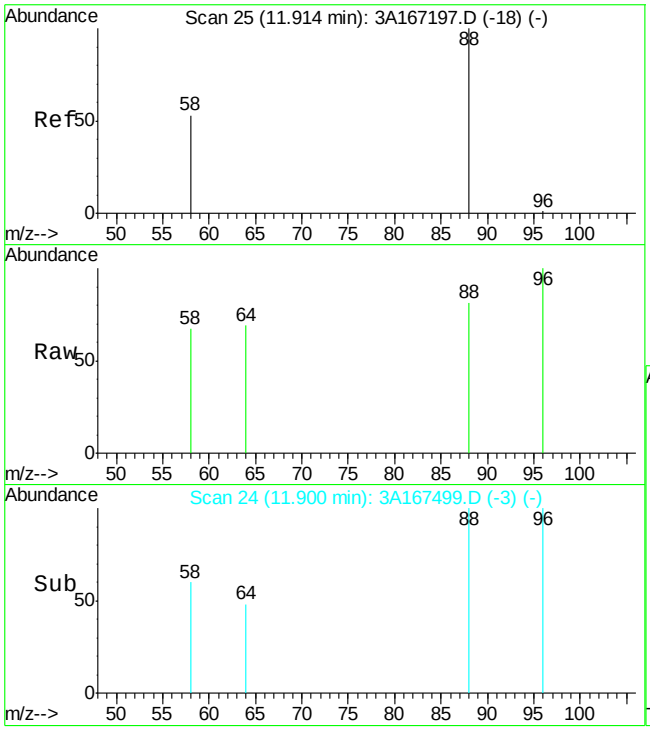
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7269\
Data File : 3A167499.D
Acq On : 21 Dec 2021 4:26 pm
Operator : BridgetK
Sample : jd36624-15
Misc : MS55558,V3A7269,5.0,,,,5
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 22 08:44:22 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



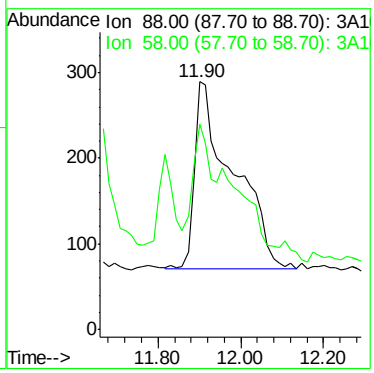
M3A7257.M Wed Dec 22 08:46:06 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 7.82 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167499.D
Acq: 21 Dec 2021 4:26 pm

Tgt Ion: 88 Resp: 1414

Ion	Ratio	Lower	Upper
88	100		
58	68.8	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7268\
Data File : 3A167477.D
Acq On : 20 Dec 2021 10:22 pm
Operator : BridgetK
Sample : jd36624-16
Misc : MS55558,V3A7268,5.0,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 21 08:17:52 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

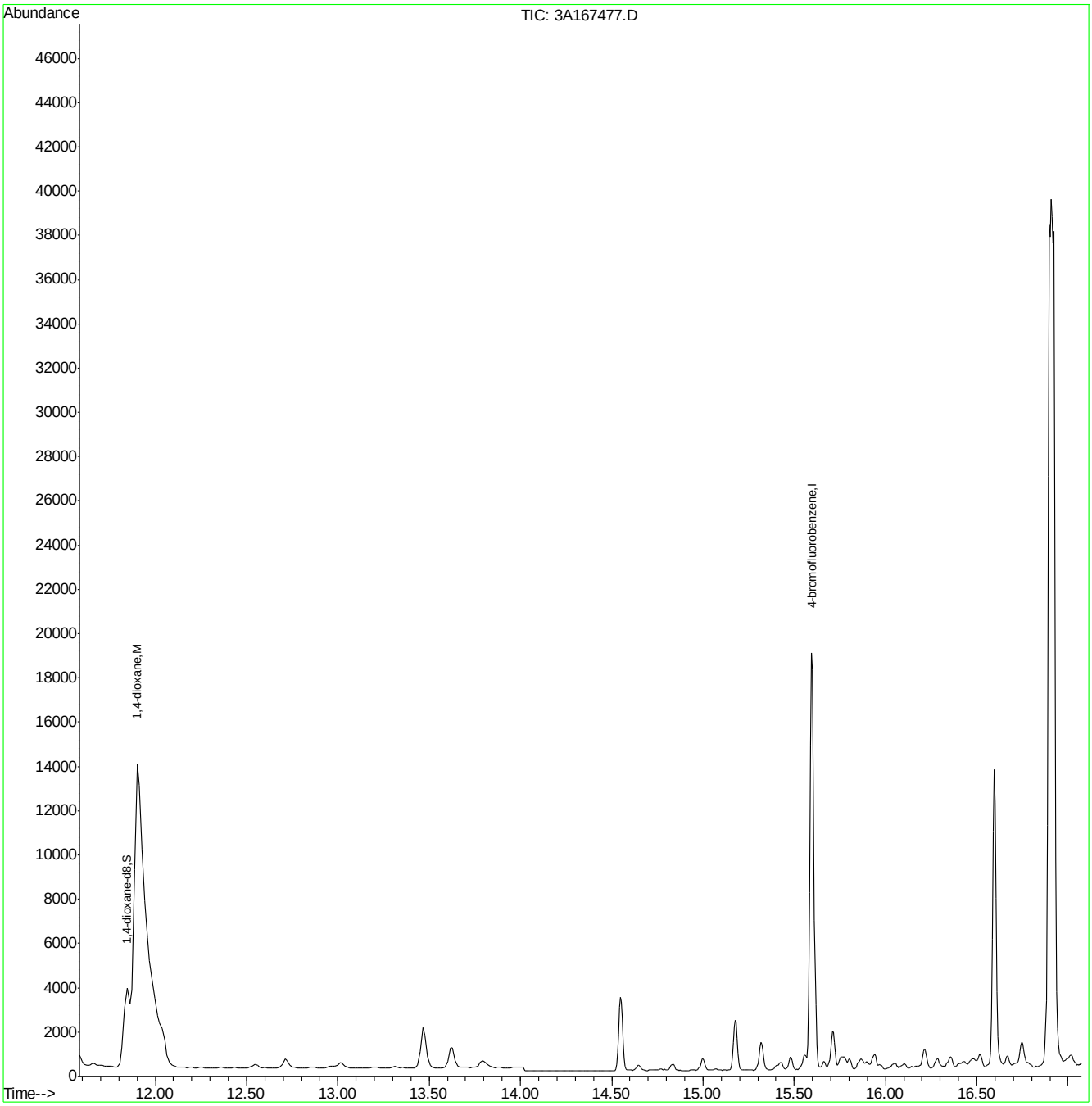
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	9918	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	6196	22.56	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 225.60%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.90	88	38313	124.04	ug/L	90

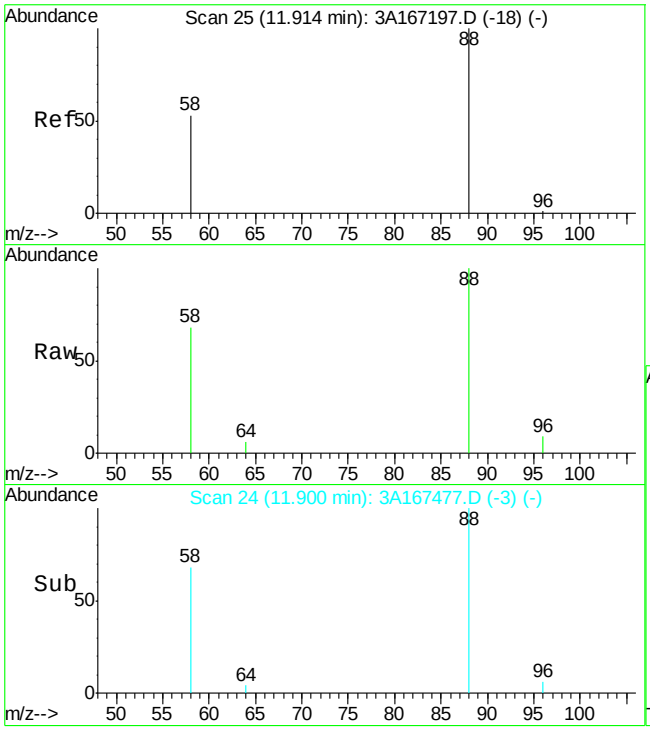
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7268\
Data File : 3A167477.D
Acq On : 20 Dec 2021 10:22 pm
Operator : BridgetK
Sample : jd36624-16
Misc : MS55558,V3A7268,5.0,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 21 08:17:52 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

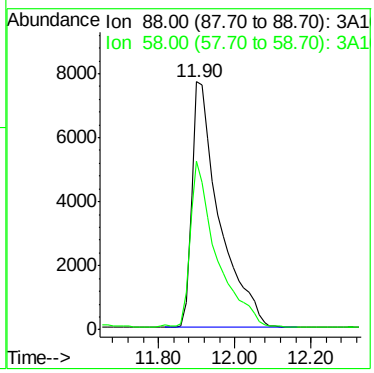




#3
1,4-dioxane
Concen: 124.04 ug/L
RT: 11.90 min Scan# 24
Delta R.T. -0.01 min
Lab File: 3A167477.D
Acq: 20 Dec 2021 10:22 pm

Tgt Ion: 88 Resp: 38313

Ion	Ratio	Lower	Upper
88	100		
58	67.6	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7269\
Data File : 3A167500.D
Acq On : 21 Dec 2021 4:54 pm
Operator : BridgetK
Sample : jd36624-16
Misc : MS55558,V3A7269,5.0,,,,20
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 22 08:44:23 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

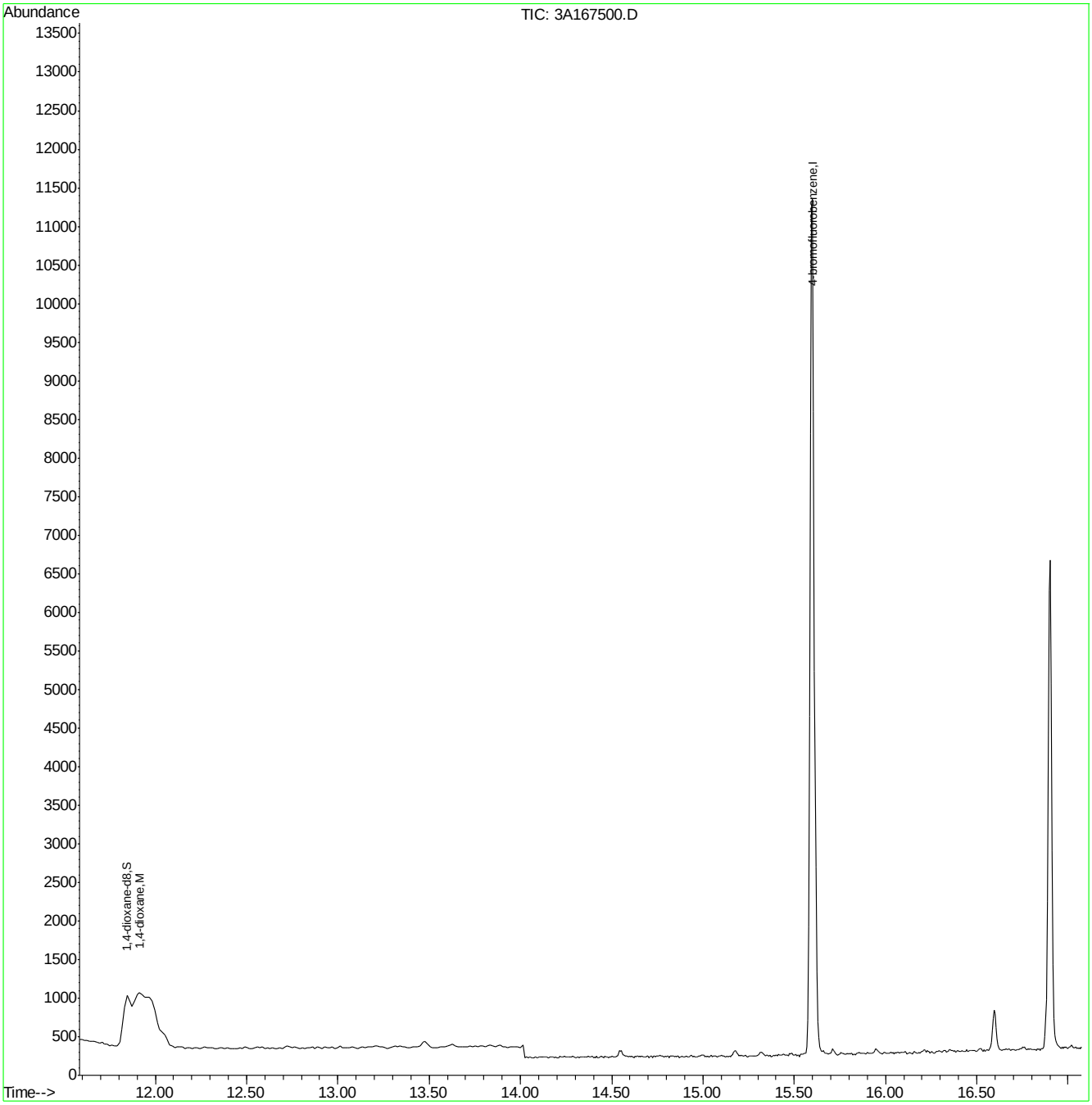
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	6171	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3193	18.69	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 186.90%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	1365	7.10	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

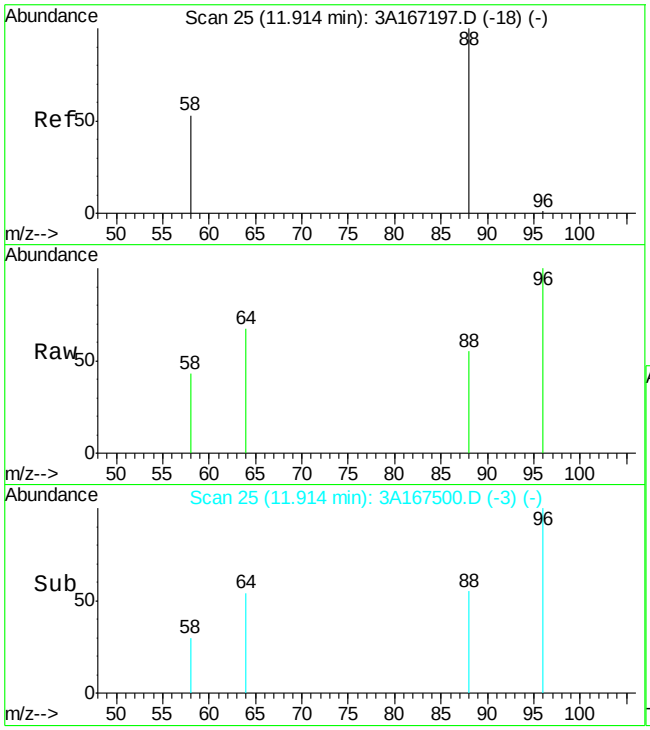
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7269\
Data File : 3A167500.D
Acq On : 21 Dec 2021 4:54 pm
Operator : BridgetK
Sample : jd36624-16
Misc : MS55558,V3A7269,5.0,,,,20
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 22 08:44:23 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



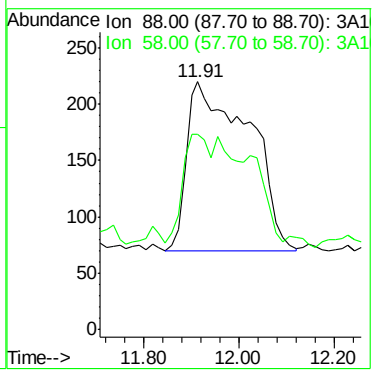
M3A7257.M Wed Dec 22 08:46:12 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 7.10 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167500.D
Acq: 21 Dec 2021 4:54 pm

Tgt Ion: 88 Resp: 1365

Ion	Ratio	Lower	Upper
88	100		
58	64.0	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167539.D
Acq On : 23 Dec 2021 12:44 pm
Operator : BridgetK
Sample : jd36624-17
Misc : MS55558,V3A7273,5.0,,,,2.5
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 23 15:03:23 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

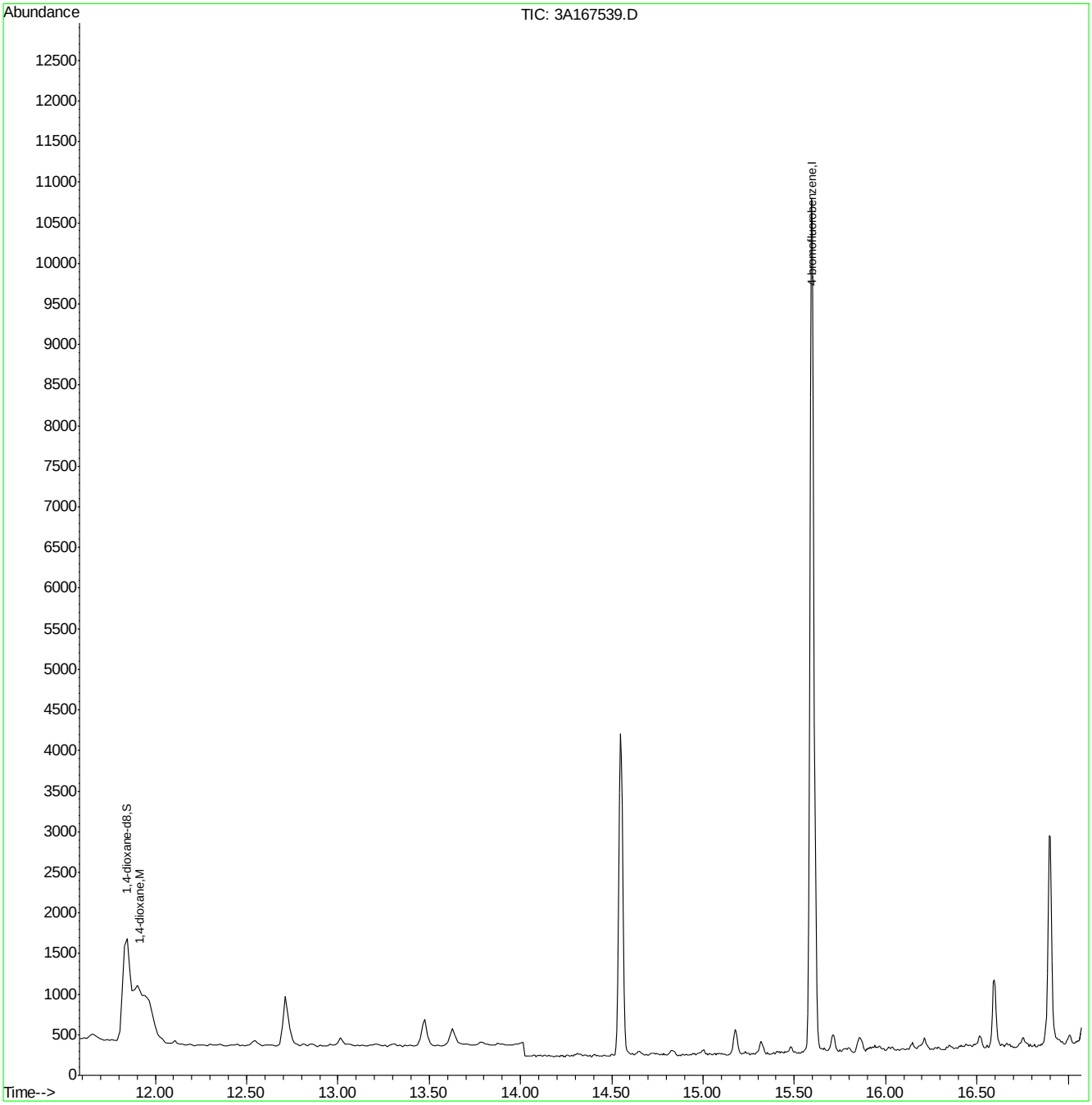
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	5615	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4176	26.86	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 268.60%#			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	669	3.83	ug/L	79

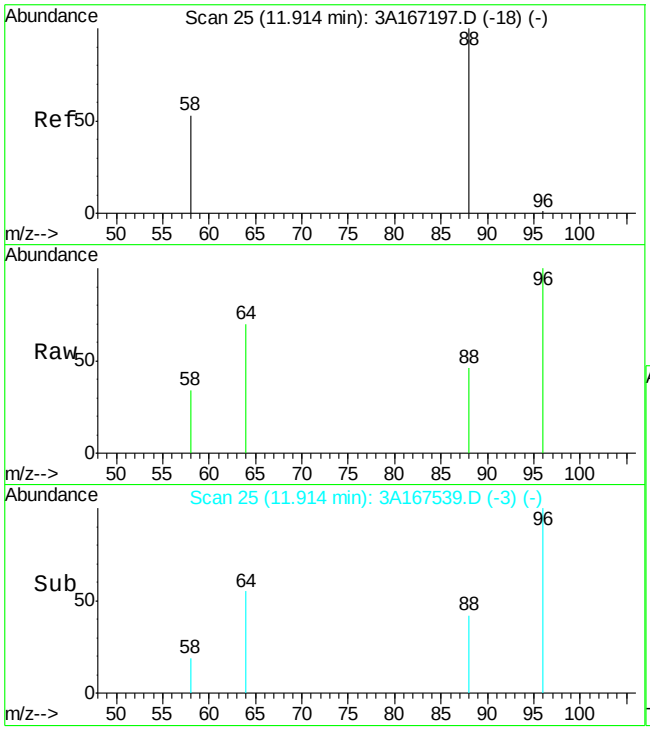
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167539.D
Acq On : 23 Dec 2021 12:44 pm
Operator : BridgetK
Sample : jd36624-17
Misc : MS55558,V3A7273,5.0,,,,2.5
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 23 15:03:23 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

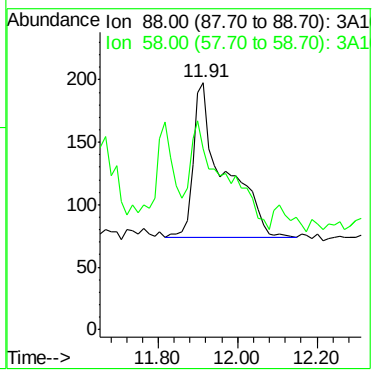




#3
1,4-dioxane
Concen: 3.83 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167539.D
Acq: 23 Dec 2021 12:44 pm

Tgt Ion: 88 Resp: 669

Ion	Ratio	Lower	Upper
88	100		
58	44.4	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7273\
Data File : 3A167545.D
Acq On : 23 Dec 2021 3:36 pm
Operator : BridgetK
Sample : jd36624-17
Misc : MS55558,V3A7273,5.0,,,,10
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 23 16:23:38 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	6651	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.86	96	3758	20.41	ug/L	0.01
Spiked Amount 10.000	Range 39 - 174		Recovery = 204.10%#			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

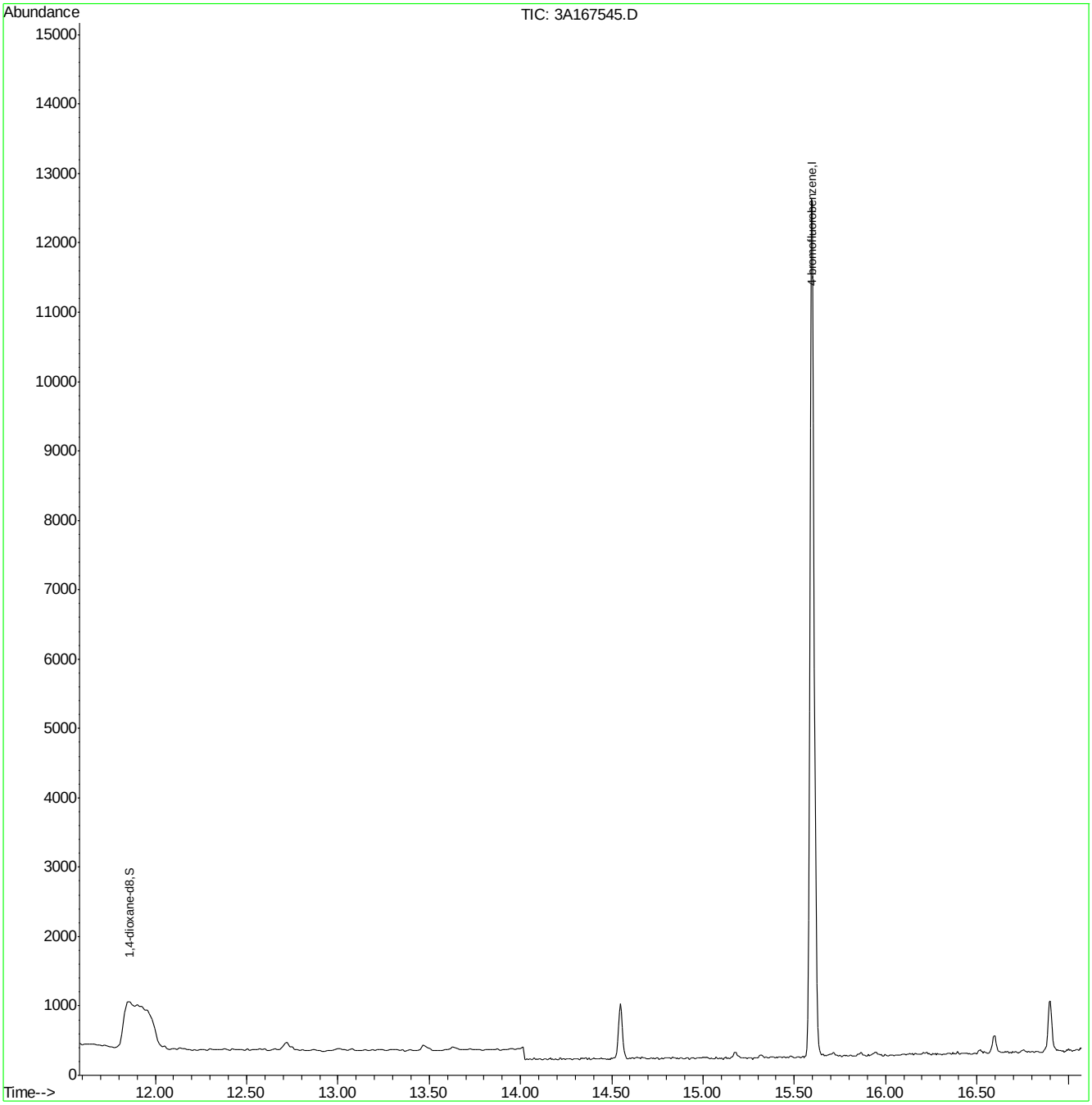
7.1.27

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7273\
Data File : 3A167545.D
Acq On : 23 Dec 2021 3:36 pm
Operator : BridgetK
Sample : jd36624-17
Misc : MS55558,V3A7273,5.0,,,,10
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 23 16:23:38 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



M3A7257.M Thu Dec 23 16:23:55 2021 ACCUNJ Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193046.d
Acq On : 17 Dec 2021 7:54 pm
Operator : brittank
Sample : JD36624-1 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 08:32:07 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

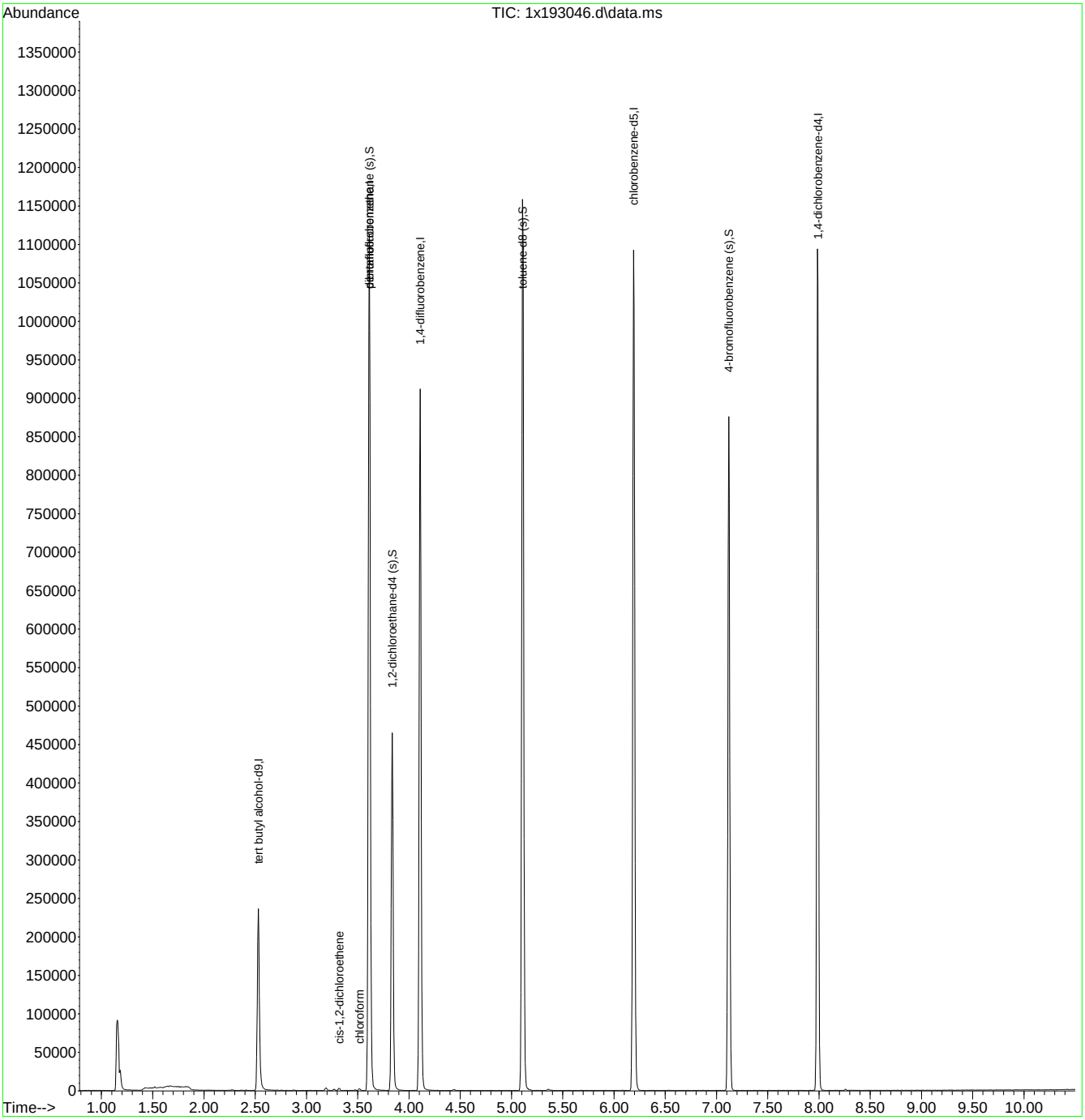
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.530	65	176523	500.00	ug/L	-0.02
5) pentafluorobenzene	3.613	168	351066	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.109	114	507693	50.00	ug/L	0.00
73) chlorobenzene-d5	6.191	117	463399	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.989	152	206910	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.613	113	178732	50.49	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.98%			
53) 1,2-dichloroethane-d4 (s)	3.837	65	224580	51.70	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 103.40%			
74) toluene-d8 (s)	5.107	98	569321	50.53	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.06%			
98) 4-bromofluorobenzene (s)	7.120	95	208678	50.74	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.48%			
Target Compounds						Qvalue
36) cis-1,2-dichloroethene	3.320	96	827	0.40	ug/L	89
42) chloroform	3.517	83	1311	0.36	ug/L	90

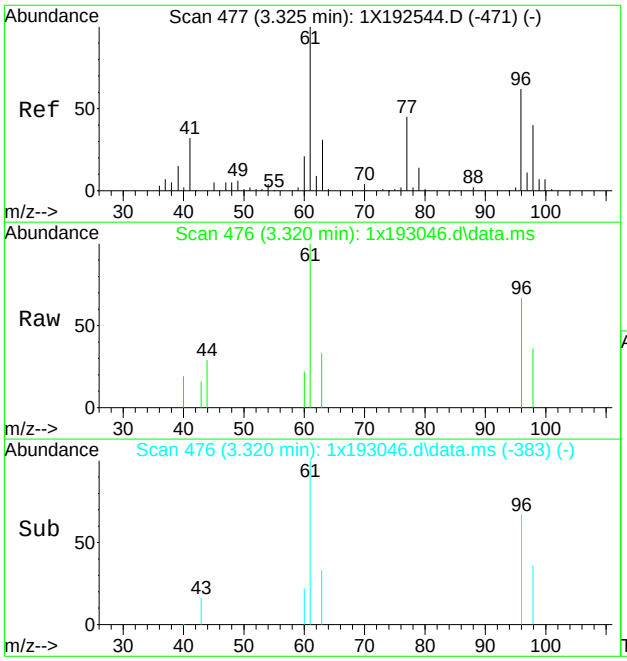
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193046.d
Acq On : 17 Dec 2021 7:54 pm
Operator : brittank
Sample : JD36624-1 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 08:32:07 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

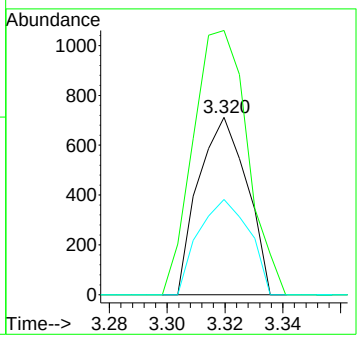


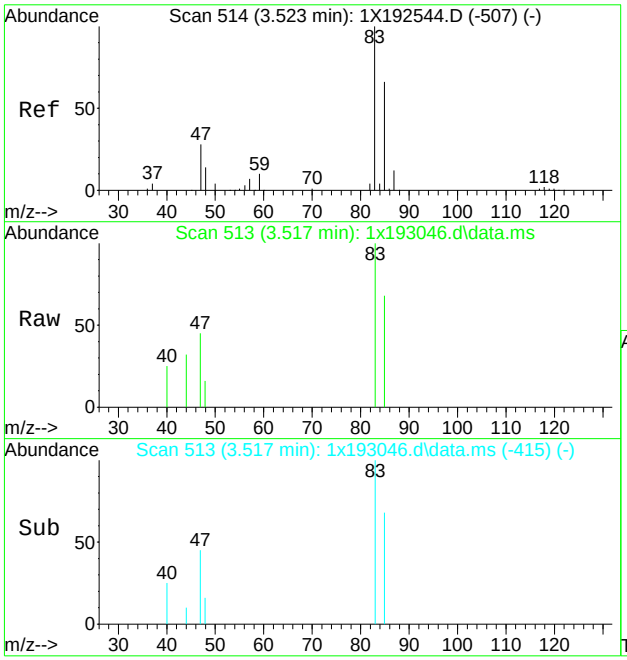


#36
cis-1,2-dichloroethene
Concen: 0.40 ug/L
RT: 3.320 min Scan# 476
Delta R.T. -0.006 min
Lab File: 1x193046.d
Acq: 17 Dec 2021 7:54 pm

Tgt Ion: 96 Resp: 827

Ion	Ratio	Lower	Upper
96	100		
61	149.0	131.2	191.2
98	53.7	34.7	94.7

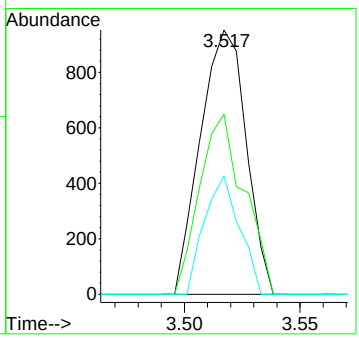




#42
chloroform
Concen: 0.36 ug/L
RT: 3.517 min Scan# 513
Delta R.T. -0.006 min
Lab File: 1x193046.d
Acq: 17 Dec 2021 7:54 pm

Tgt Ion: 83 Resp: 1311

Ion	Ratio	Lower	Upper
83	100		
85	68.1	35.8	95.8
47	44.8	0.1	60.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA-SVOA\Dec-21\12-17\v3d7294-partial\
Data File : 3d171924.d
Acq On : 16 Dec 2021 2:50 pm
Operator : nicoleh
Sample : JD36624-2 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,5
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 17 02:05:27 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

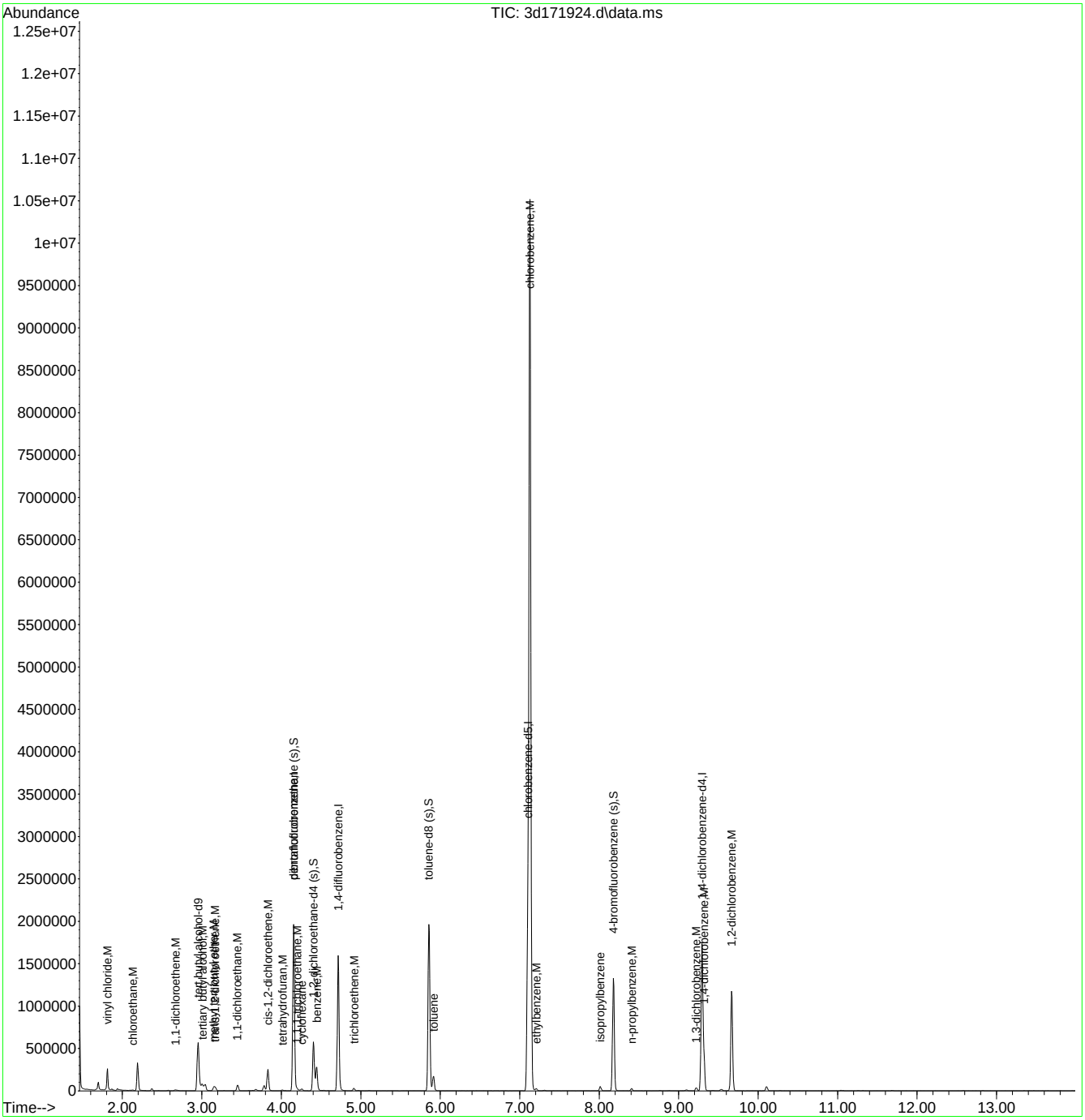
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	2.953	65	536296	500.00	ug/L		0.00
5) pentafluorobenzene	4.154	168	759345	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.715	114	1081453	50.00	ug/L		0.00
74) chlorobenzene-d5	7.105	117	905357	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	9.294	152	444324	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	4.154	113	281289	42.32	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 84.64%				
53) 1,2-dichloroethane-d4 (s)	4.404	65	316920	44.46	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 88.92%				
75) toluene-d8 (s)	5.855	98	1193672	52.01	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.02%				
99) 4-bromofluorobenzene (s)	8.178	95	434928	48.86	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.72%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.008	59	56956	39.58	ug/L		69
9) vinyl chloride	1.813	62	35940	3.65	ug/L		96
12) chloroethane	2.130	64	4438	0.81	ug/L		91
18) 1,1-dichloroethene	2.667	96	2246	0.48	ug/L	#	75
25) methyl tert butyl ether	3.148	73	28861	1.49	ug/L		99
26) trans-1,2-dichloroethene	3.167	96	5817	1.07	ug/L	#	79
29) 1,1-dichloroethane	3.447	63	46871	4.40	ug/L		98
37) cis-1,2-dichloroethene	3.831	96	90472	14.12	ug/L	#	83
41) tetrahydrofuran	4.014	42	5685	1.46	ug/L		85
46) 1,1,1-trichloroethane	4.197	97	7159	0.77	ug/L	#	56
47) cyclohexane	4.258	84	6190	0.61	ug/L	#	49
56) benzene	4.447	78	208531	9.56	ug/L		99
61) trichloroethene	4.916	130	8803	1.52	ug/L		91
76) toluene	5.916	92	68346	4.98	ug/L		98
87) chlorobenzene	7.129	112	5011077	336.68	ug/L		86
89) ethylbenzene	7.209	91	16328	0.65	ug/L		85
96) isopropylbenzene	8.013	105	32380	1.19	ug/L		98
104) n-propylbenzene	8.410	91	22243	0.75	ug/L		93
111) 1,3-dichlorobenzene	9.220	146	16063	1.31	ug/L		87
113) 1,4-dichlorobenzene	9.318	146	159235	13.25	ug/L		100
116) 1,2-dichlorobenzene	9.665	146	500835	43.03	ug/L		98

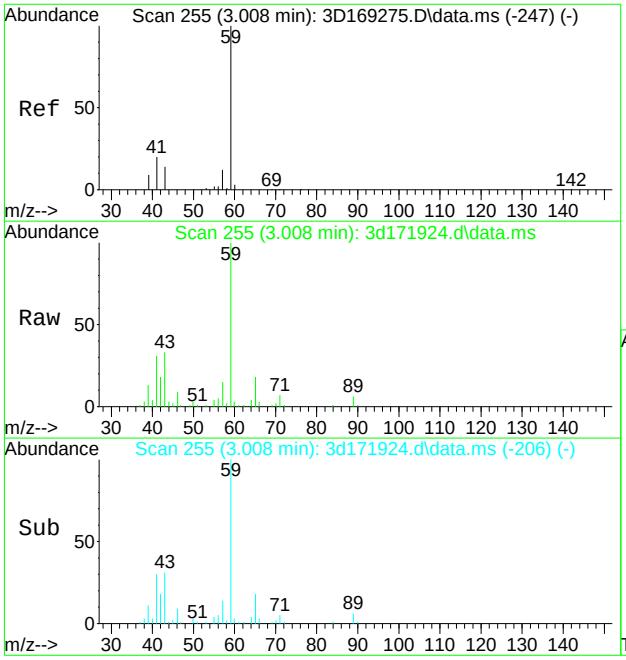
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA-SVOA\Dec-21\12-17\v3d7294-partial\
Data File : 3d171924.d
Acq On : 16 Dec 2021 2:50 pm
Operator : nicoleh
Sample : JD36624-2 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,5
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 17 02:05:27 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

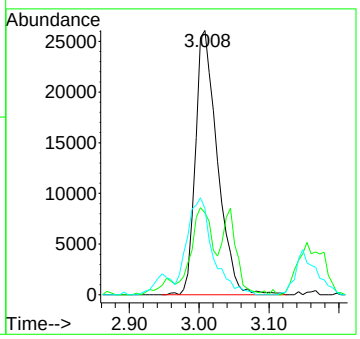


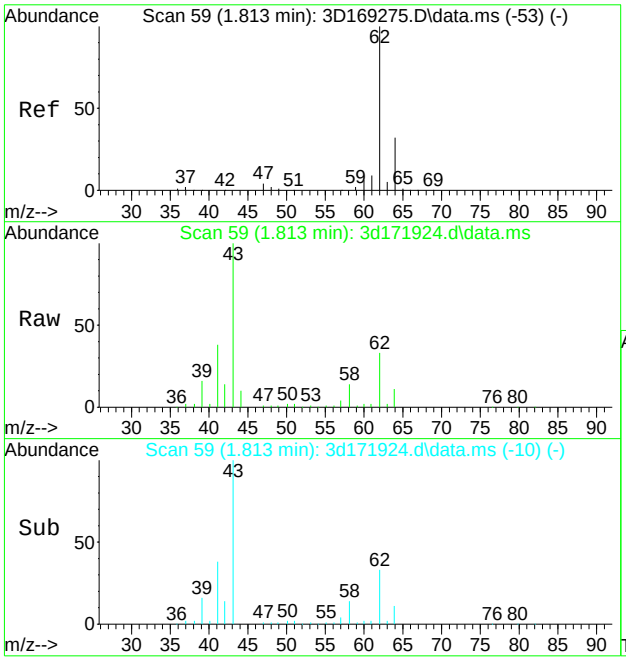


#2
tertiary butyl alcohol
Concen: 39.58 ug/L
RT: 3.008 min Scan# 255
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 59 Resp: 56956

Ion	Ratio	Lower	Upper
59	100		
41	29.8	0.0	49.9
43	31.8	0.0	44.1

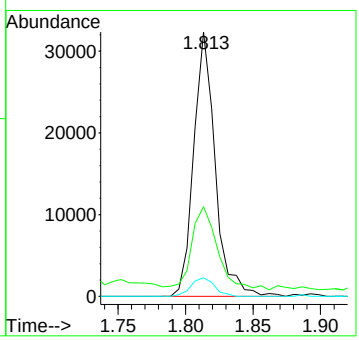


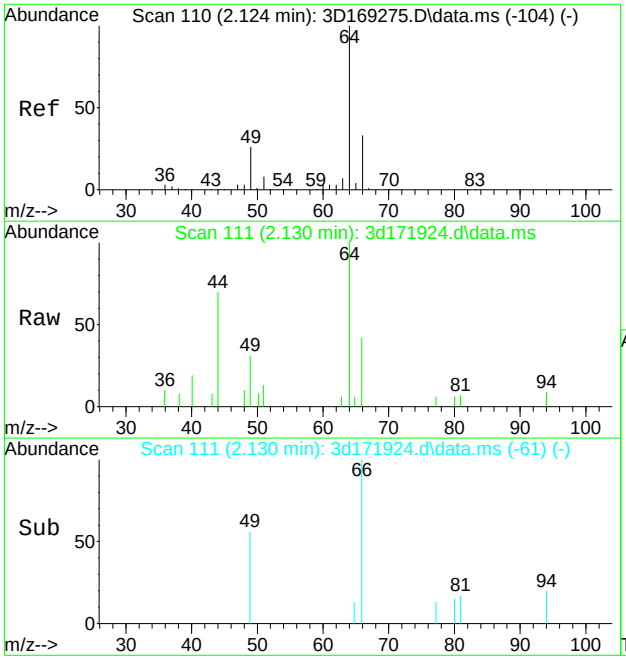


#9
vinyl chloride
Concen: 3.65 ug/L
RT: 1.813 min Scan# 59
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 62 Resp: 35940

Ion	Ratio	Lower	Upper
62	100		
64	30.5	2.4	62.4
61	7.0	0.0	39.2

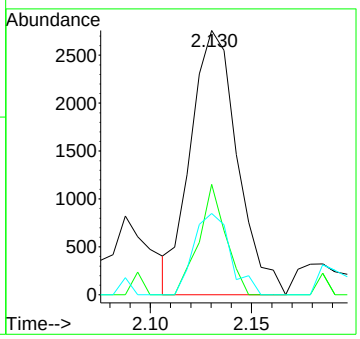


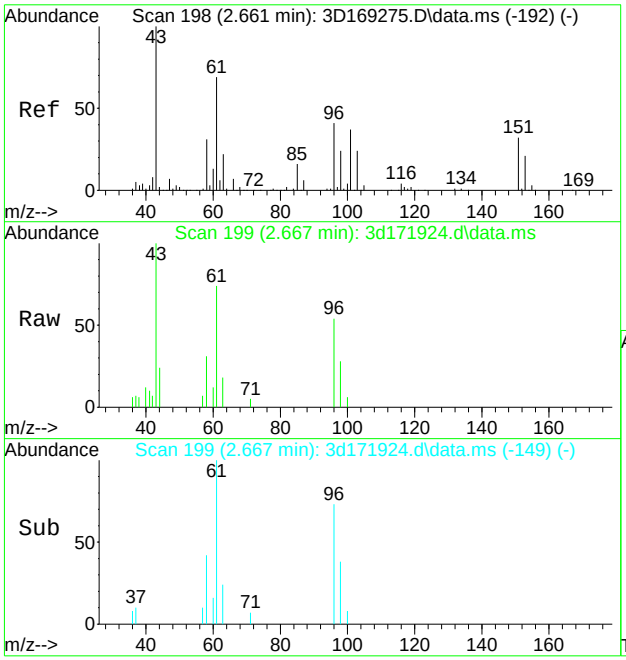


#12
chloroethane
Concen: 0.81 ug/L
RT: 2.130 min Scan# 111
Delta R.T. 0.006 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 64 Resp: 4438

Ion	Ratio	Lower	Upper
64	100		
66	39.6	3.1	63.1
49	29.1	0.0	55.9

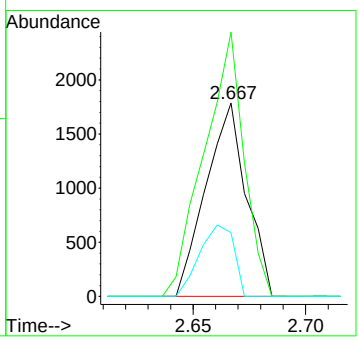


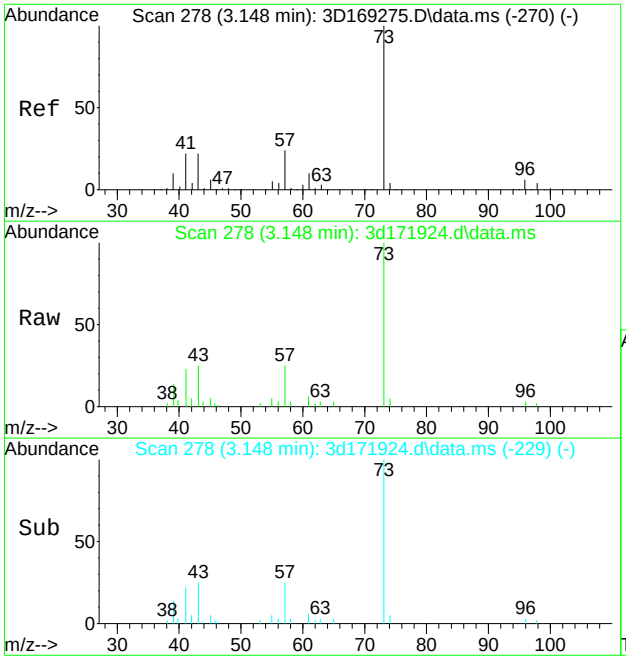


#18
1,1-dichloroethene
Concen: 0.48 ug/L
RT: 2.667 min Scan# 199
Delta R.T. 0.006 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 96 Resp: 2246

Ion	Ratio	Lower	Upper
96	100		
61	136.7	139.8	199.8#
63	32.9	23.5	83.5

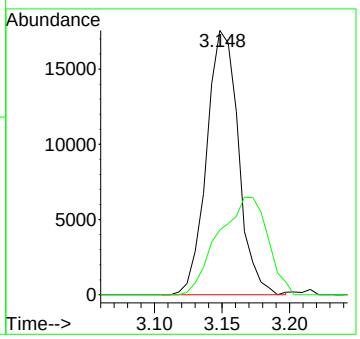


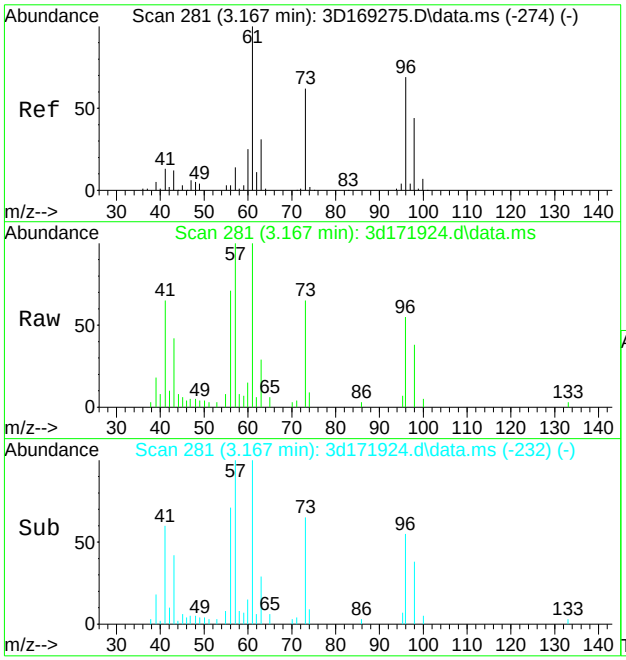


#25
methyl tert butyl ether
Concen: 1.49 ug/L
RT: 3.148 min Scan# 278
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 73 Resp: 28861

Ion	Ratio	Lower	Upper
73	100		
57	24.5	0.0	224.2

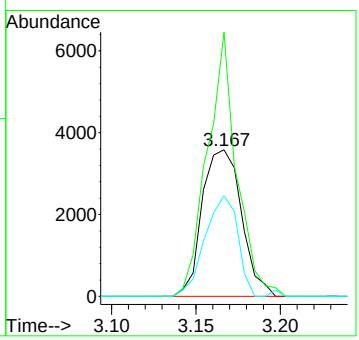


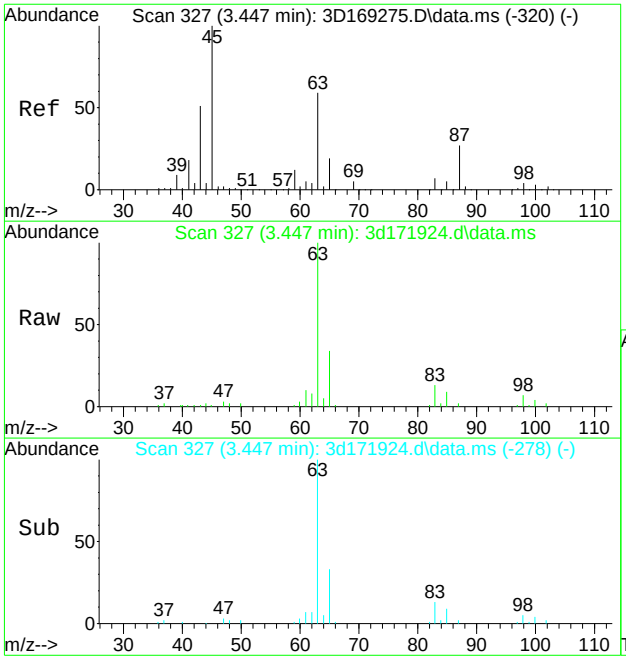


#26
trans-1,2-dichloroethene
Concen: 1.07 ug/L
RT: 3.167 min Scan# 281
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 96 Resp: 5817

Ion	Ratio	Lower	Upper
96	100		
61	180.5	115.9	175.9#
98	68.8	33.6	93.6

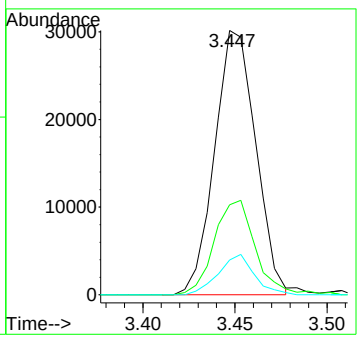


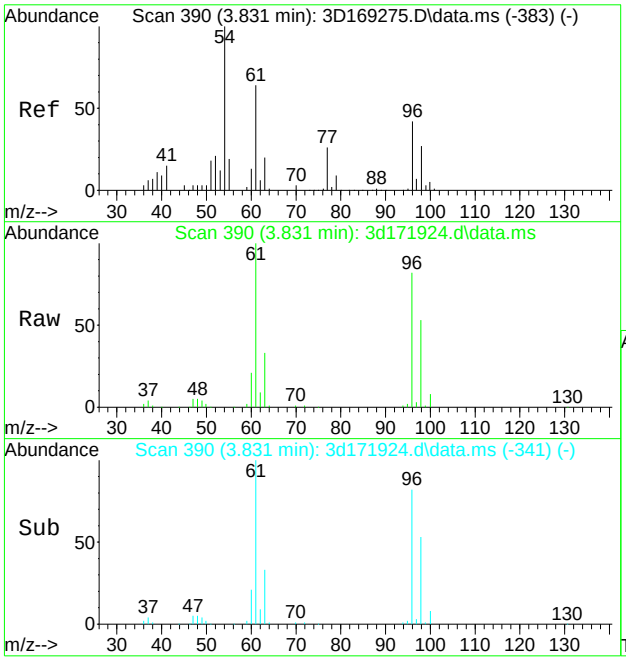


#29
1,1-dichloroethane
Concen: 4.40 ug/L
RT: 3.447 min Scan# 327
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 63 Resp: 46871

Ion	Ratio	Lower	Upper
63	100		
65	34.1	2.4	62.4
83	13.1	0.0	42.8

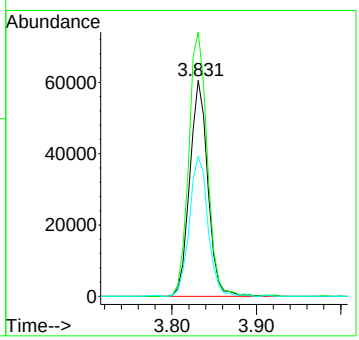


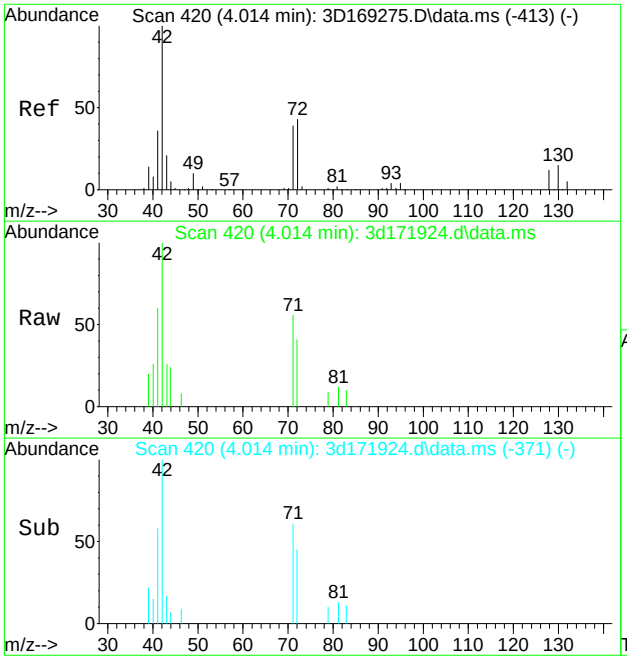


#37
cis-1,2-dichloroethene
Concen: 14.12 ug/L
RT: 3.831 min Scan# 390
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 96 Resp: 90472

Ion	Ratio	Lower	Upper
96	100		
61	122.3	122.7	182.7#
98	64.9	34.6	94.6

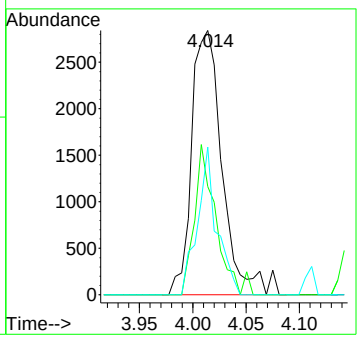


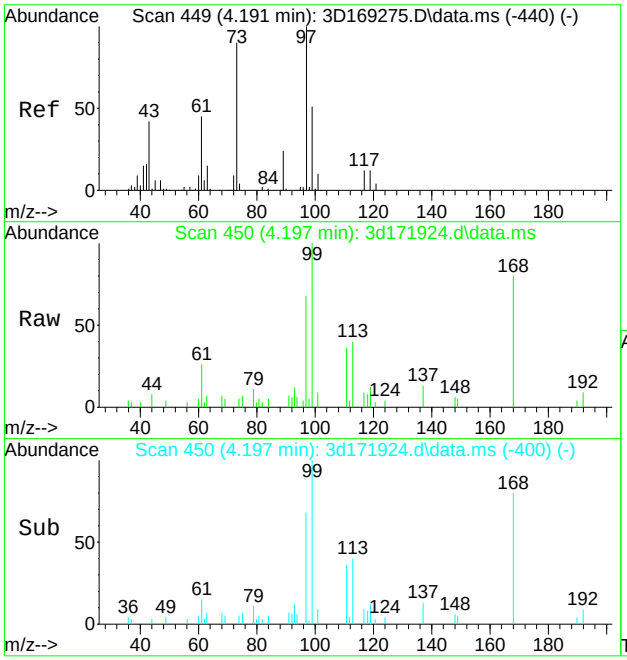


#41
tetrahydrofuran
Concen: 1.46 ug/L
RT: 4.014 min Scan# 420
Delta R.T. 0.001 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 42 Resp: 5685

Ion	Ratio	Lower	Upper
42	100		
72	41.0	13.2	73.2
71	55.8	9.2	69.2

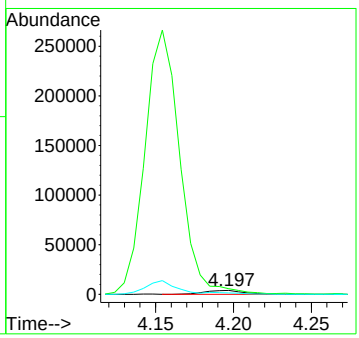


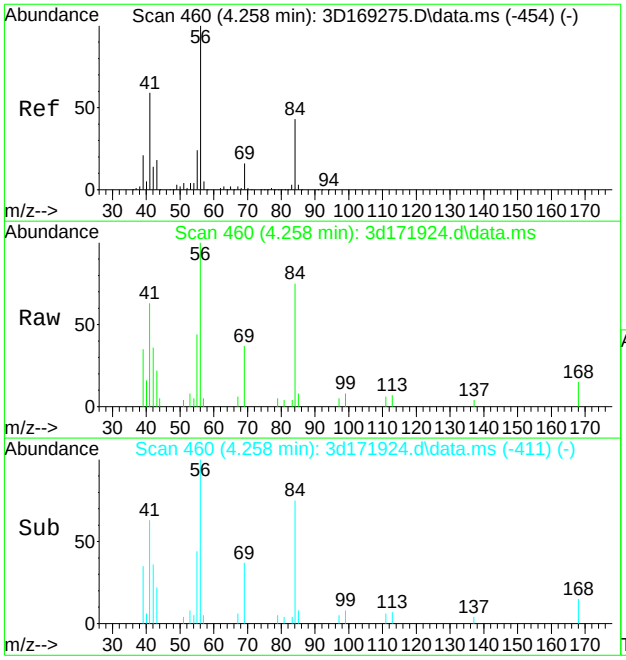


#46
1,1,1-trichloroethane
Concen: 0.77 ug/L
RT: 4.197 min Scan# 450
Delta R.T. 0.006 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 97 Resp: 7159

Ion	Ratio	Lower	Upper
97	100		
99	118.7	35.8	95.8#
61	38.8	15.4	75.4

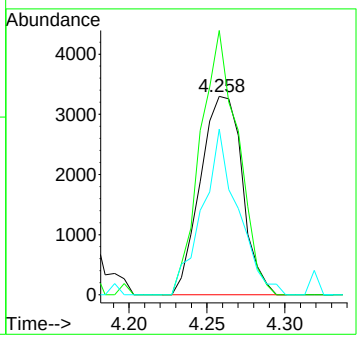


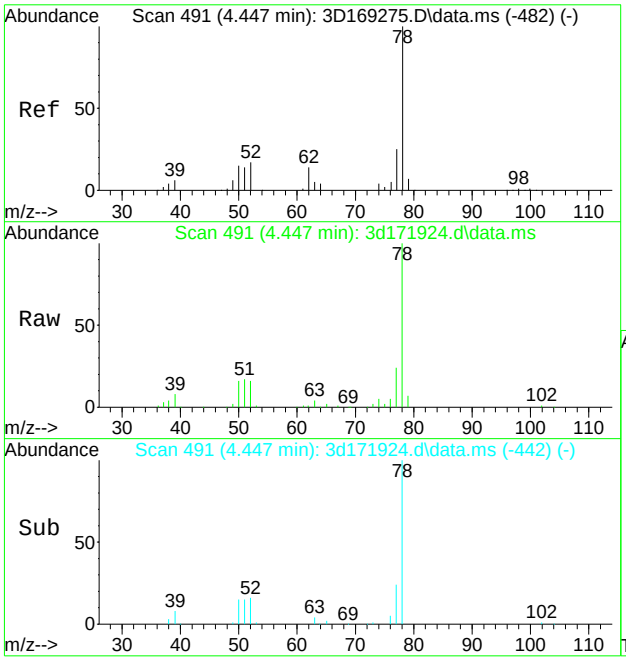


#47
cyclohexane
Concen: 0.61 ug/L
RT: 4.258 min Scan# 460
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 84 Resp: 6190

Ion	Ratio	Lower	Upper
84	100		
56	139.7	211.9	251.9#
41	83.6	115.8	155.8#

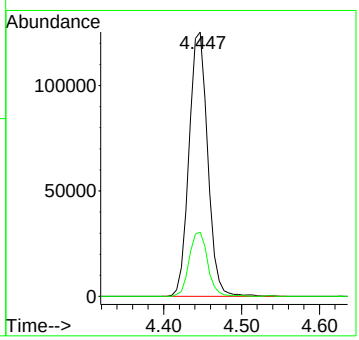


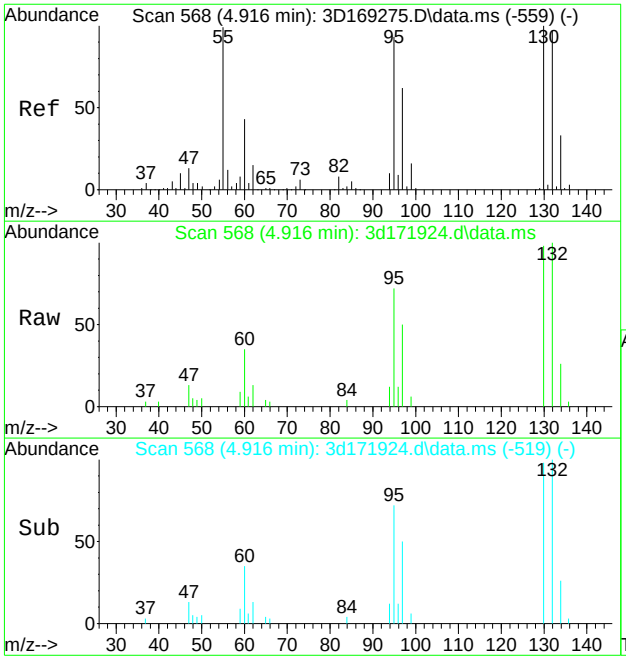


#56
benzene
Concen: 9.56 ug/L
RT: 4.447 min Scan# 491
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 78 Resp: 208531

Ion	Ratio	Lower	Upper
78	100		
77	24.3	0.0	54.9

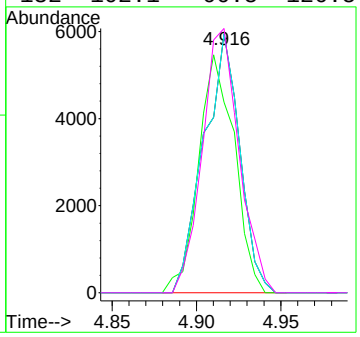


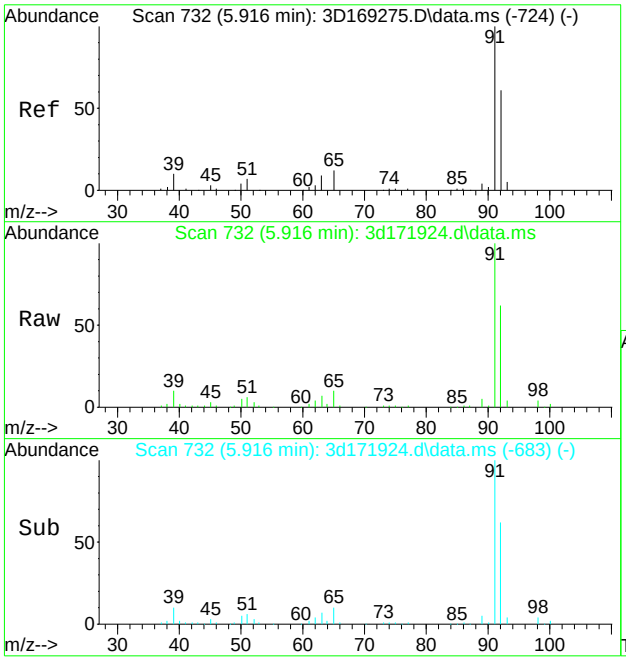


#61
trichloroethene
Concen: 1.52 ug/L
RT: 4.916 min Scan# 568
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion:130 Resp: 8803

Ion	Ratio	Lower	Upper
130	100		
95	73.6	63.4	123.4
130	100.0	70.0	130.0
132	102.1	66.5	126.5

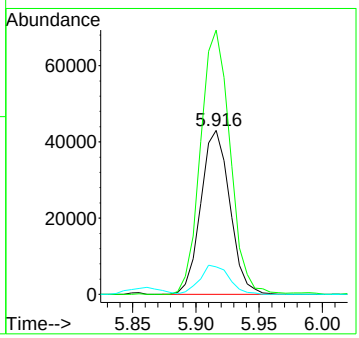


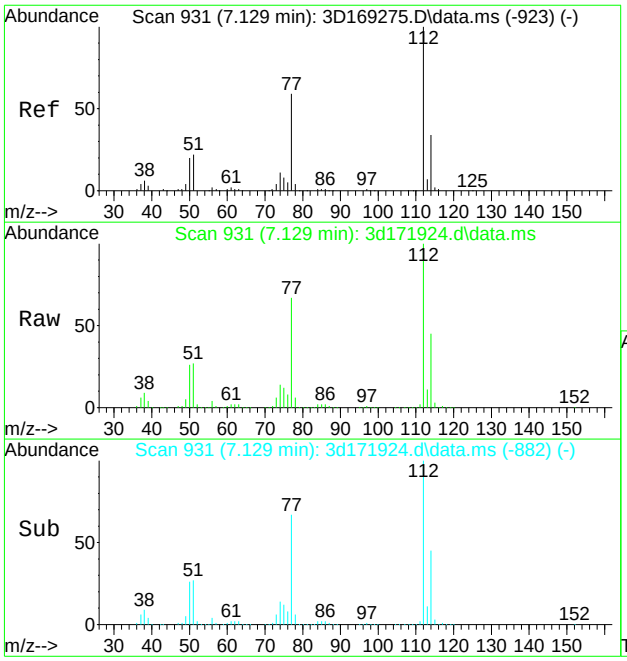


#76
toluene
Concen: 4.98 ug/L
RT: 5.916 min Scan# 732
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 92 Resp: 68346

Ion	Ratio	Lower	Upper
92	100		
91	161.3	143.0	183.0
65	16.9	0.2	40.2

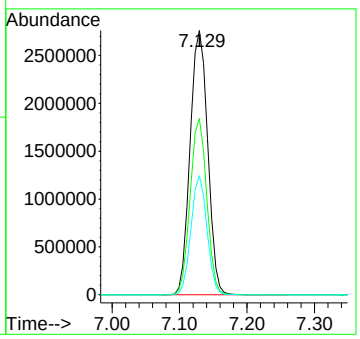


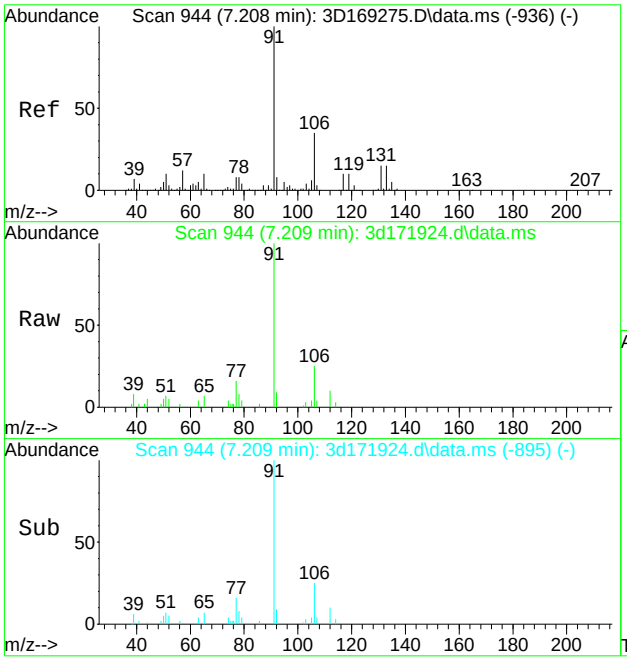


#87
chlorobenzene
Concen: 336.68 ug/L
RT: 7.129 min Scan# 931
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion:112 Resp: 5011077

Ion	Ratio	Lower	Upper
112	100		
77	66.7	29.0	89.0
114	45.1	4.0	64.0

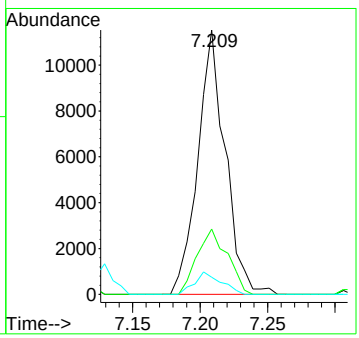


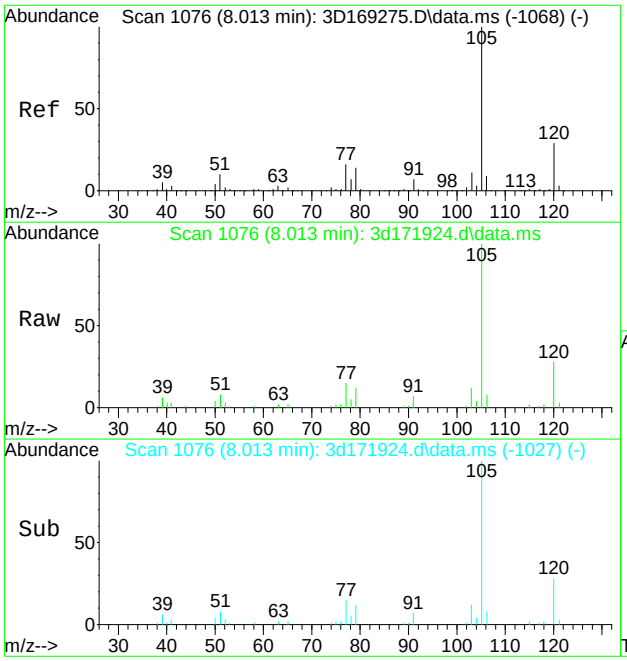


#89
ethylbenzene
Concen: 0.65 ug/L
RT: 7.209 min Scan# 944
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 91 Resp: 16328

Ion	Ratio	Lower	Upper
91	100		
106	24.7	4.5	64.5
65	6.5	0.0	39.7

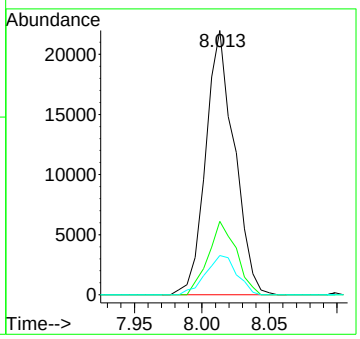


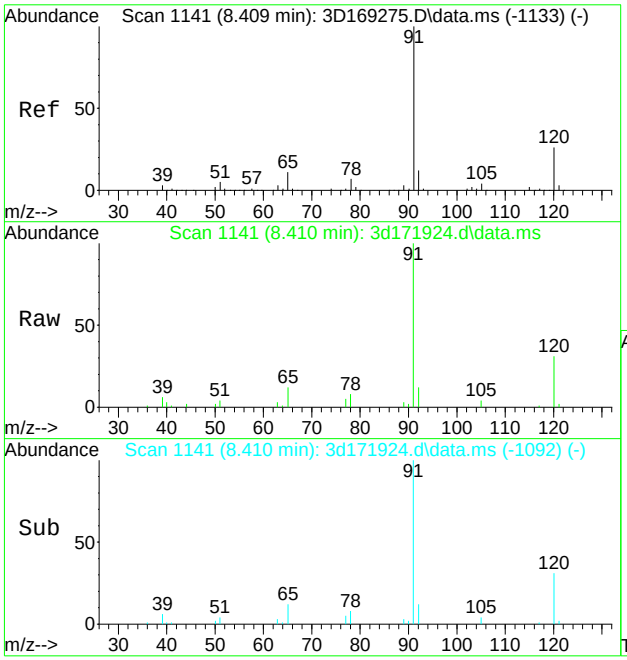


#96
isopropylbenzene
Concen: 1.19 ug/L
RT: 8.013 min Scan# 1076
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion:105 Resp: 32380

Ion	Ratio	Lower	Upper
105	100		
120	27.8	8.6	48.6
77	14.9	0.0	36.3

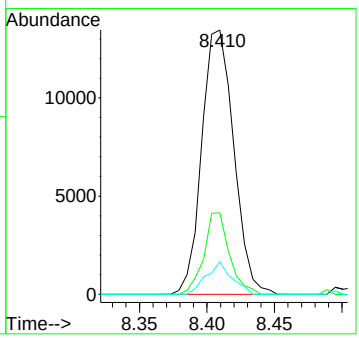


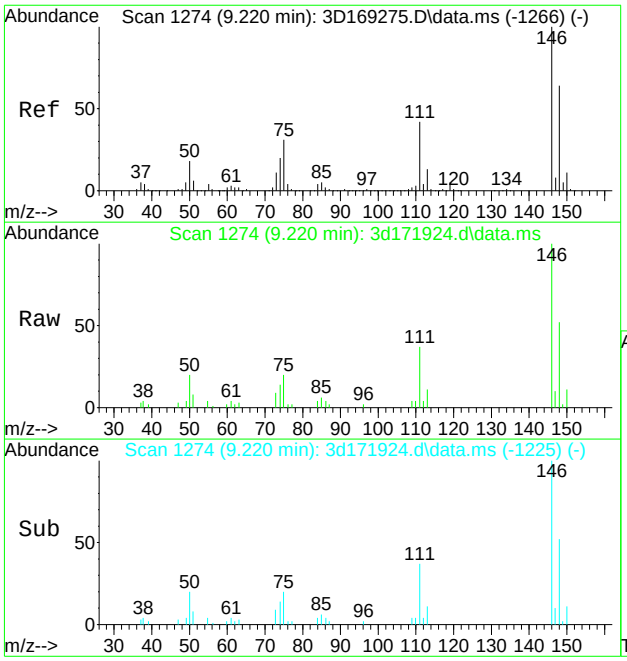


#104
n-propylbenzene
Concen: 0.75 ug/L
RT: 8.410 min Scan# 1141
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion: 91 Resp: 22243

Ion	Ratio	Lower	Upper
91	100		
120	30.8	0.0	56.3
65	12.4	0.0	41.5

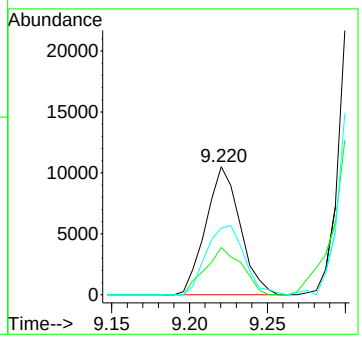


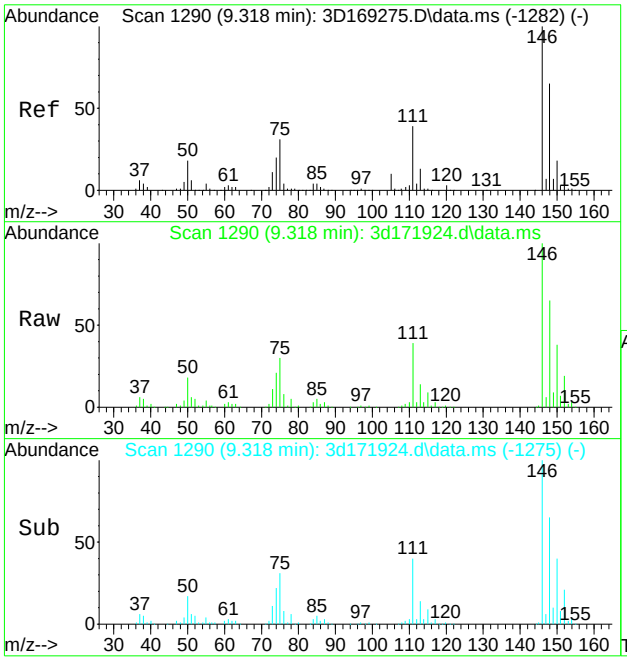


#111
1,3-dichlorobenzene
Concen: 1.31 ug/L
RT: 9.220 min Scan# 1274
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion:146 Resp: 16063

Ion	Ratio	Lower	Upper
146	100		
111	36.9	12.1	72.1
148	52.0	34.4	94.4

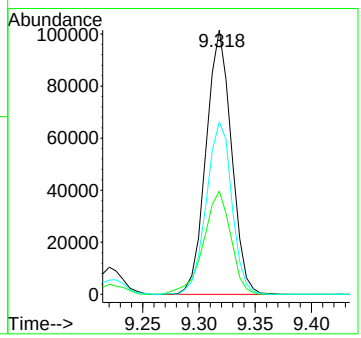


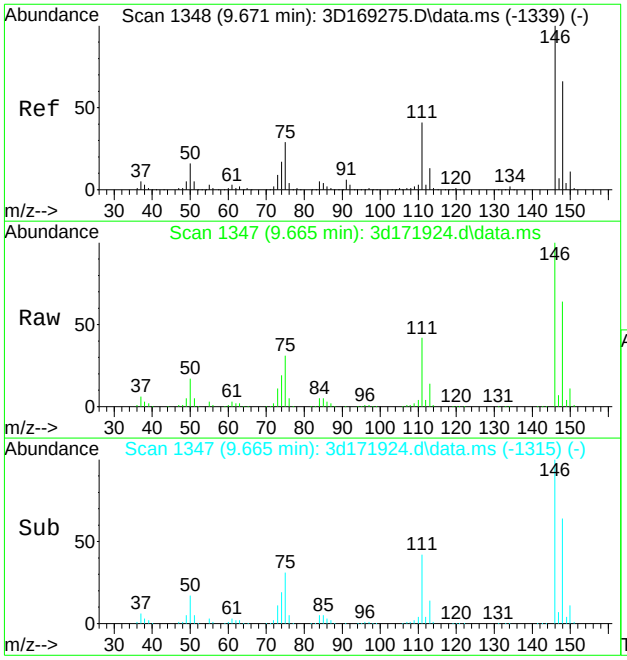


#113
1,4-dichlorobenzene
Concen: 13.25 ug/L
RT: 9.318 min Scan# 1290
Delta R.T. 0.000 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion:146 Resp: 159235

Ion	Ratio	Lower	Upper
146	100		
111	39.1	8.7	68.7
148	65.2	35.3	95.3

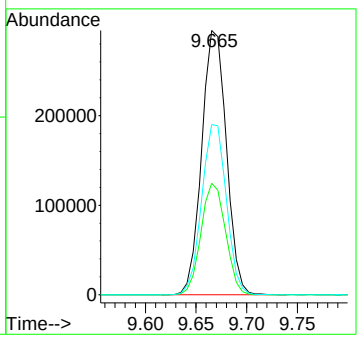




#116
1,2-dichlorobenzene
Concen: 43.03 ug/L
RT: 9.665 min Scan# 1347
Delta R.T. -0.006 min
Lab File: 3d171924.d
Acq: 16 Dec 2021 2:50 pm

Tgt Ion:146 Resp: 500835

Ion	Ratio	Lower	Upper
146	100		
111	42.2	11.3	71.3
148	64.4	35.9	95.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA-SVOA\Dec-21\12-17\v3d7294-partial\
Data File : 3d171927.d
Acq On : 16 Dec 2021 4:12 pm
Operator : nicoleh
Sample : JD36624-2 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,50
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 17 02:12:00 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

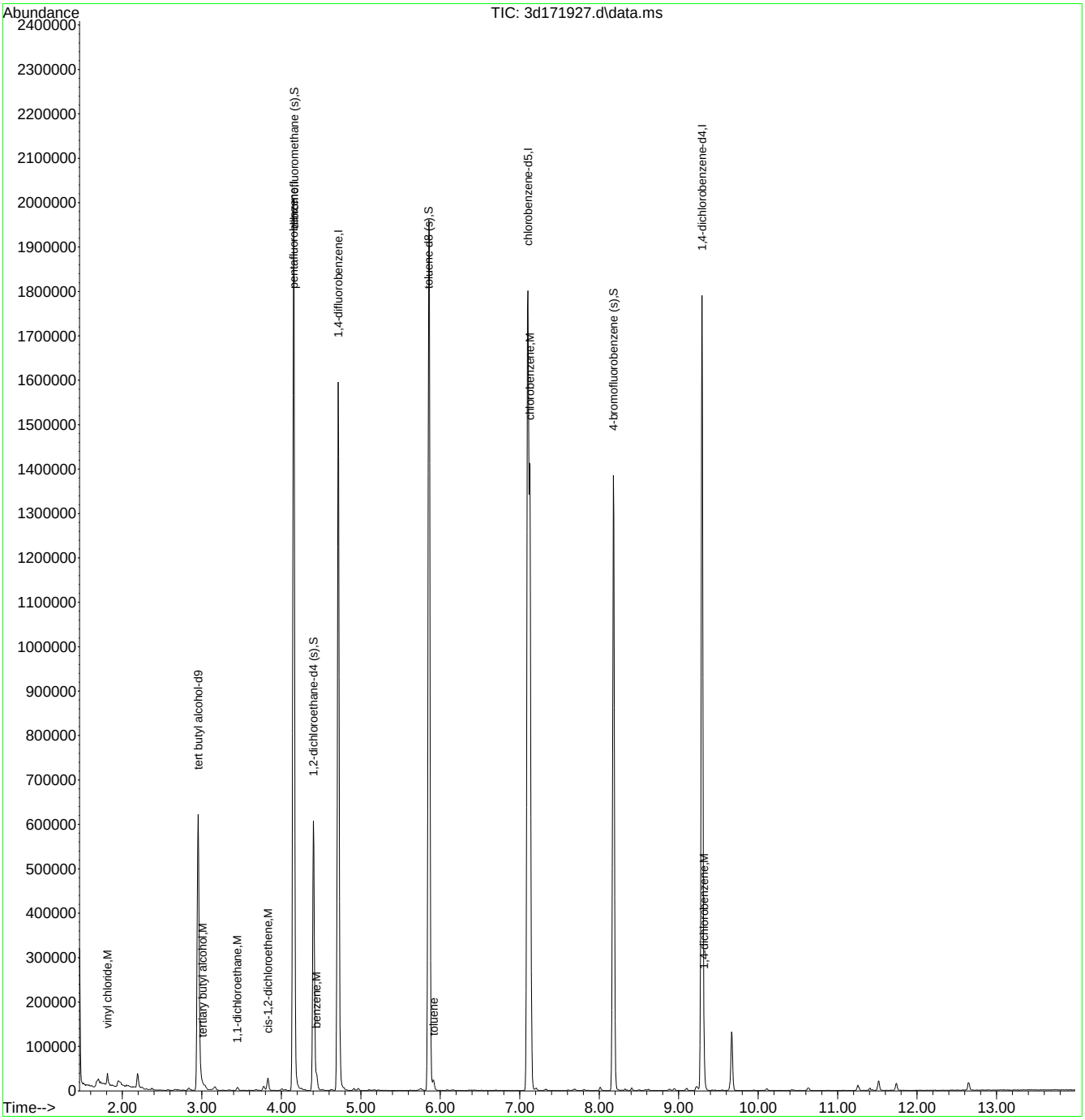
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.953	65	597430	500.00	ug/L	0.00
5) pentafluorobenzene	4.154	168	797155	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.715	114	1095028	50.00	ug/L	0.00
74) chlorobenzene-d5	7.105	117	949388	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.293	152	464609	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.160	113	297872	42.69	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 85.38%			
53) 1,2-dichloroethane-d4 (s)	4.404	65	335133	46.43	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 92.86%			
75) toluene-d8 (s)	5.855	98	1214493	50.46	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.92%			
99) 4-bromofluorobenzene (s)	8.178	95	450106	48.36	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.72%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	3.008	59	6837	4.27	ug/L	65
9) vinyl chloride	1.813	62	4654	0.45	ug/L	94
29) 1,1-dichloroethane	3.447	63	5186	0.46	ug/L	88
37) cis-1,2-dichloroethene	3.831	96	10455	1.55	ug/L #	79
56) benzene	4.441	78	21461	0.97	ug/L	96
76) toluene	5.916	92	6941	0.48	ug/L	98
87) chlorobenzene	7.129	112	699479	44.82	ug/L	97
113) 1,4-dichlorobenzene	9.318	146	18468	1.47	ug/L	99

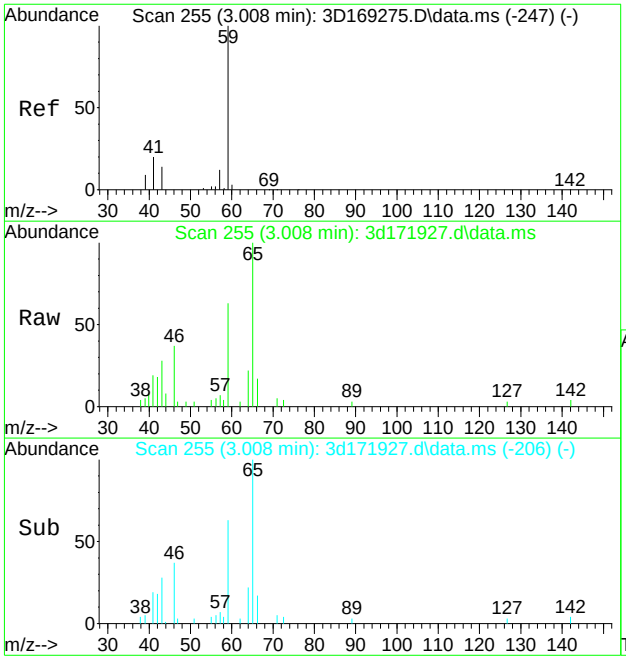
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA-SVOA\Dec-21\12-17\v3d7294-partial\
Data File : 3d171927.d
Acq On : 16 Dec 2021 4:12 pm
Operator : nicoleh
Sample : JD36624-2 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,50
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 17 02:12:00 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

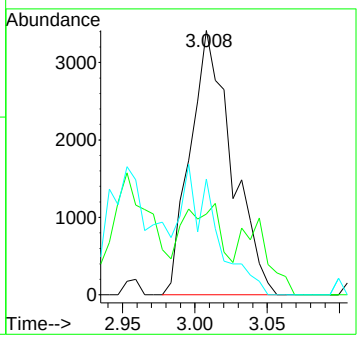


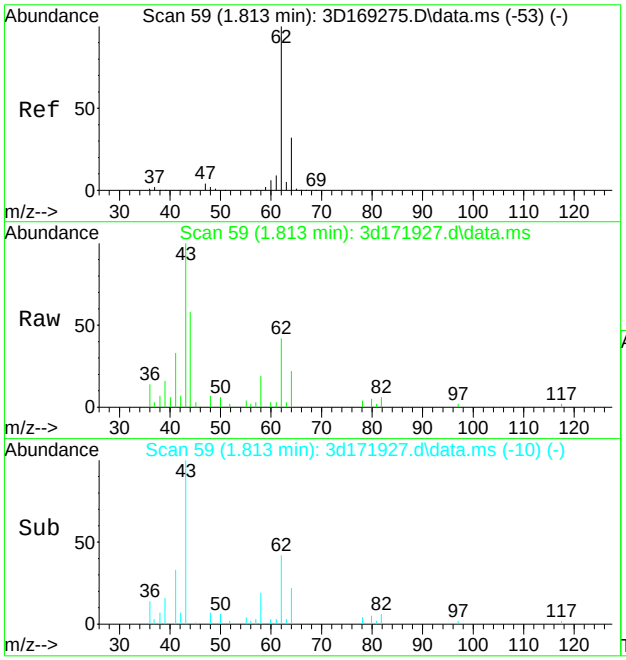


#2
tertiary butyl alcohol
Concen: 4.27 ug/L
RT: 3.008 min Scan# 255
Delta R.T. -0.000 min
Lab File: 3d171927.d
Acq: 16 Dec 2021 4:12 pm

Tgt Ion: 59 Resp: 6837

Ion	Ratio	Lower	Upper
59	100		
41	23.6	0.0	49.9
43	43.8	0.0	44.1

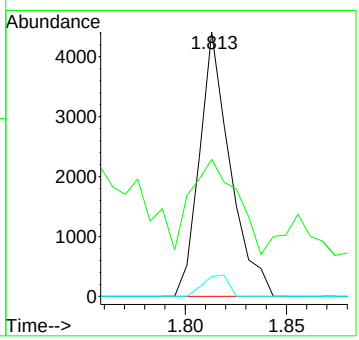


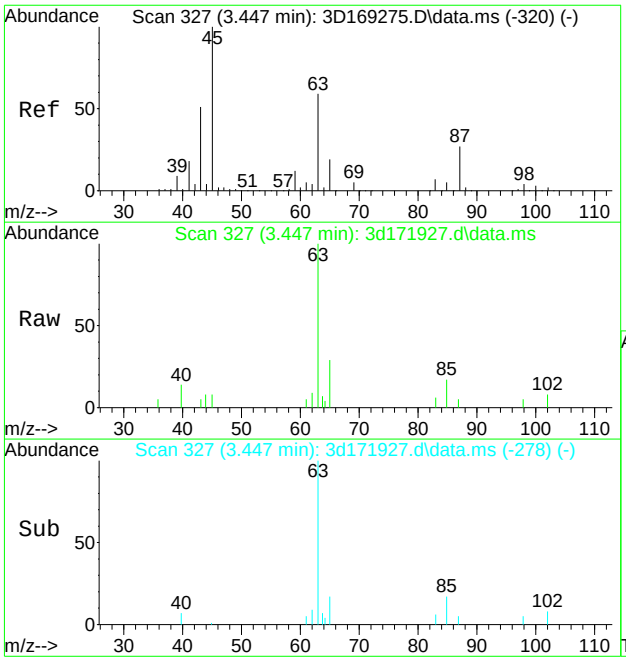


#9
vinyl chloride
Concen: 0.45 ug/L
RT: 1.813 min Scan# 59
Delta R.T. -0.000 min
Lab File: 3d171927.d
Acq: 16 Dec 2021 4:12 pm

Tgt Ion: 62 Resp: 4654

Ion	Ratio	Lower	Upper
62	100		
64	28.7	2.4	62.4
61	7.5	0.0	39.2

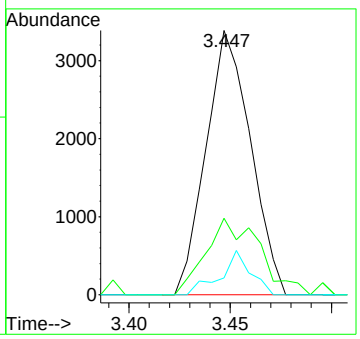


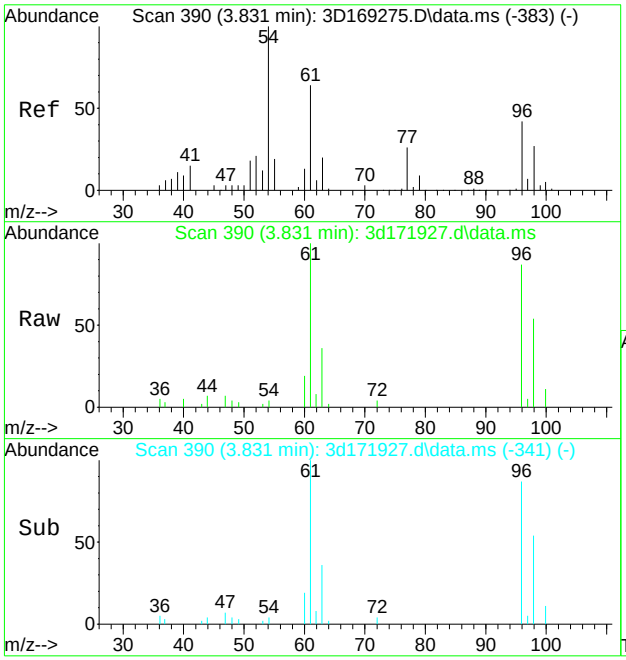


#29
1,1-dichloroethane
Concen: 0.46 ug/L
RT: 3.447 min Scan# 327
Delta R.T. -0.000 min
Lab File: 3d171927.d
Acq: 16 Dec 2021 4:12 pm

Tgt Ion: 63 Resp: 5186

Ion	Ratio	Lower	Upper
63	100		
65	27.0	2.4	62.4
83	6.0	0.0	42.8

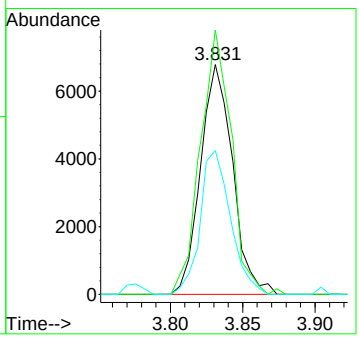


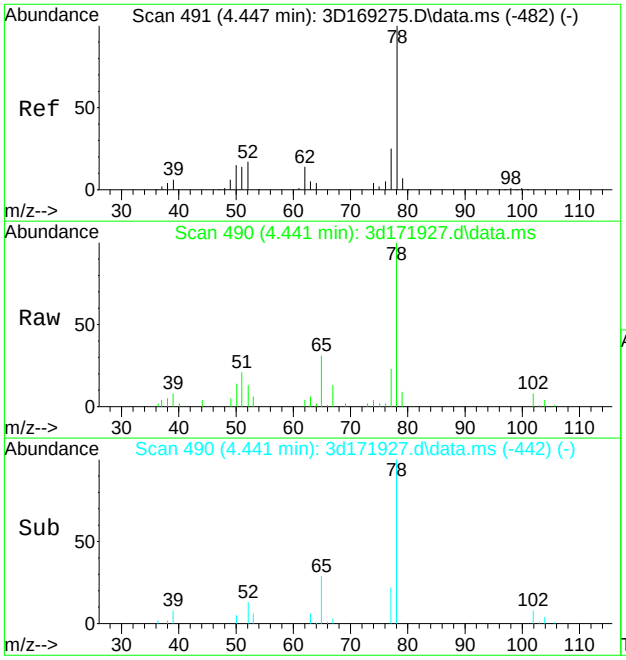


#37
cis-1,2-dichloroethene
Concen: 1.55 ug/L
RT: 3.831 min Scan# 390
Delta R.T. -0.000 min
Lab File: 3d171927.d
Acq: 16 Dec 2021 4:12 pm

Tgt Ion: 96 Resp: 10455

Ion	Ratio	Lower	Upper
96	100		
61	115.1	122.7	182.7#
98	62.6	34.6	94.6

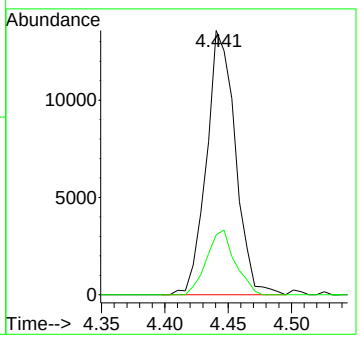


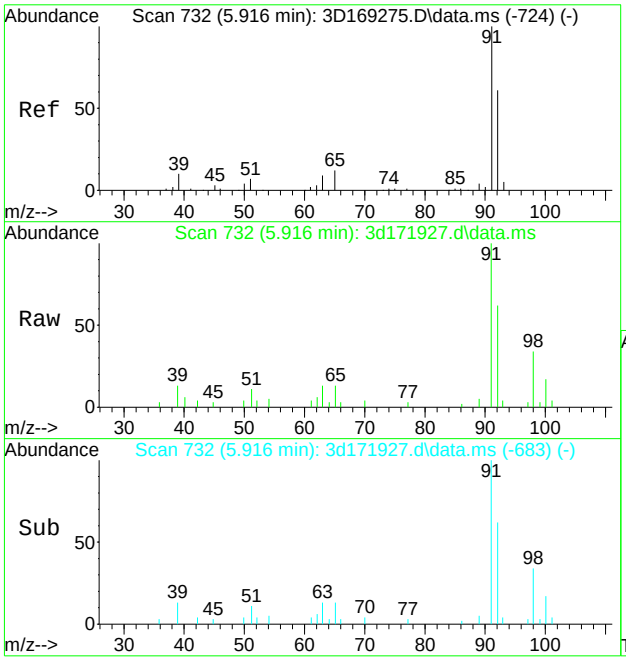


#56
benzene
Concen: 0.97 ug/L
RT: 4.441 min Scan# 490
Delta R.T. -0.006 min
Lab File: 3d171927.d
Acq: 16 Dec 2021 4:12 pm

Tgt Ion: 78 Resp: 21461

Ion	Ratio	Lower	Upper
78	100		
77	22.7	0.0	54.9

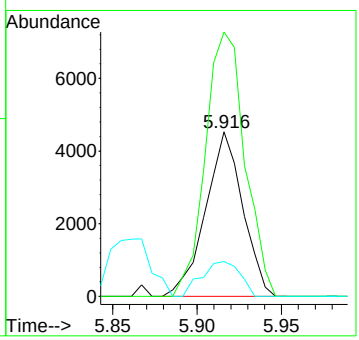


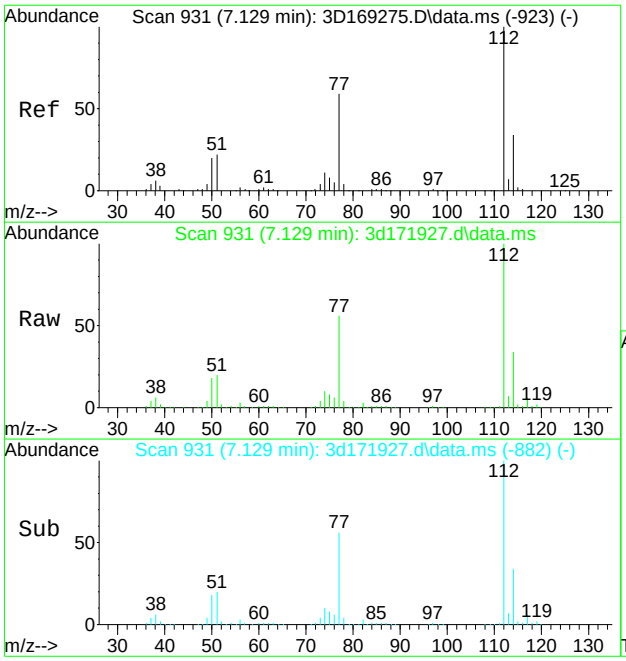


#76
toluene
Concen: 0.48 ug/L
RT: 5.916 min Scan# 732
Delta R.T. -0.000 min
Lab File: 3d171927.d
Acq: 16 Dec 2021 4:12 pm

Tgt Ion: 92 Resp: 6941

Ion	Ratio	Lower	Upper
92	100		
91	160.6	143.0	183.0
65	21.1	0.2	40.2

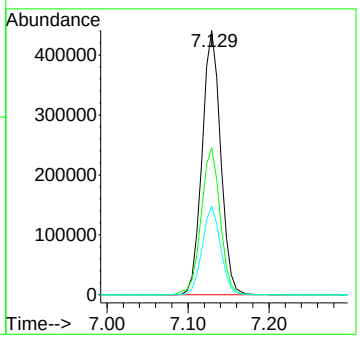


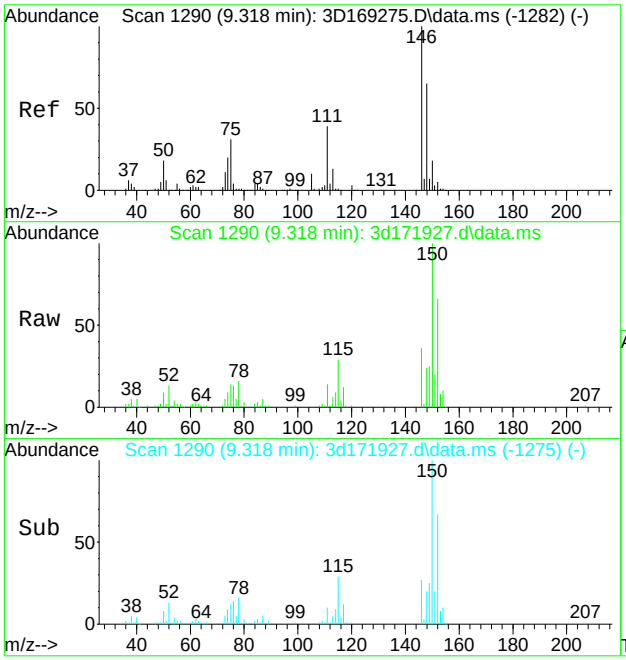


#87
chlorobenzene
Concen: 44.82 ug/L
RT: 7.129 min Scan# 931
Delta R.T. -0.000 min
Lab File: 3d171927.d
Acq: 16 Dec 2021 4:12 pm

Tgt Ion:112 Resp: 699479

Ion	Ratio	Lower	Upper
112	100		
77	55.6	29.0	89.0
114	33.6	4.0	64.0

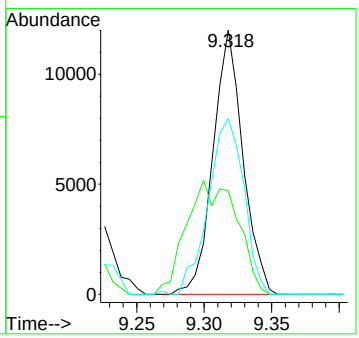




#113
1,4-dichlorobenzene
Concen: 1.47 ug/L
RT: 9.318 min Scan# 1290
Delta R.T. -0.000 min
Lab File: 3d171927.d
Acq: 16 Dec 2021 4:12 pm

Tgt Ion:146 Resp: 18468

Ion	Ratio	Lower	Upper
146	100		
111	39.2	8.7	68.7
148	66.5	35.3	95.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA-SVOA\Dec-21\12-17\v3d7294-partial\
Data File : 3d171933.d
Acq On : 16 Dec 2021 6:55 pm
Operator : nicoleh
Sample : JD36624-3 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 17 02:25:44 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

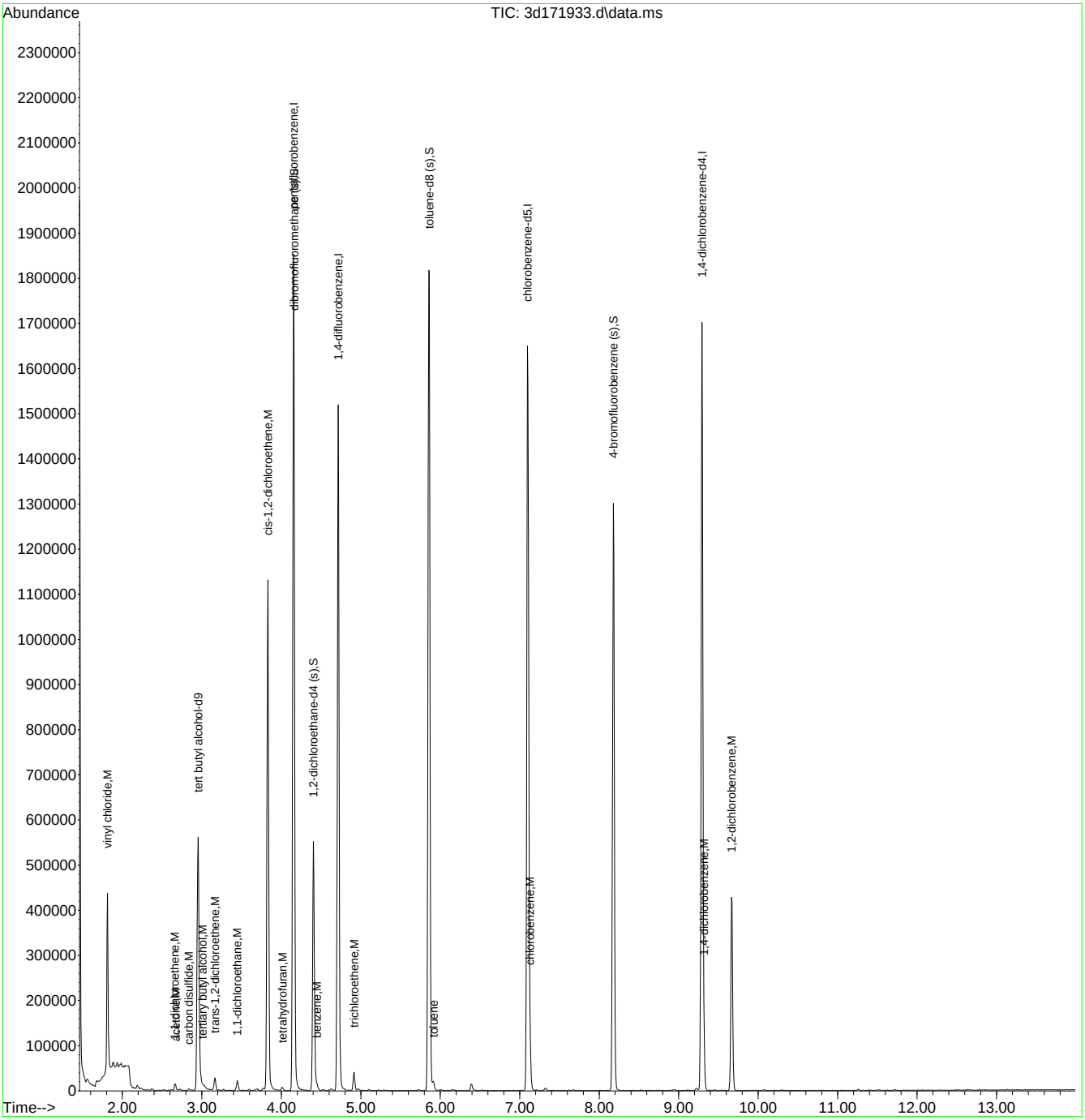
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.953	65	527369	500.00	ug/L	0.00
5) pentafluorobenzene	4.154	168	719478	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.715	114	1025856	50.00	ug/L	0.00
74) chlorobenzene-d5	7.099	117	877643	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.293	152	433764	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.160	113	268309	42.61	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 85.22%			
53) 1,2-dichloroethane-d4 (s)	4.404	65	297817	44.04	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 88.08%			
75) toluene-d8 (s)	5.861	98	1145499	51.49	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.98%			
99) 4-bromofluorobenzene (s)	8.178	95	426057	49.03	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.06%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	3.008	59	5011	3.54	ug/L	70
9) vinyl chloride	1.813	62	269348	28.88	ug/L	95
18) 1,1-dichloroethene	2.661	96	1710	0.38	ug/L	95
19) acetone	2.673	58	3260	3.18	ug/L #	52
22) carbon disulfide	2.837	76	5698	0.47	ug/L	81
26) trans-1,2-dichloroethene	3.167	96	7653	1.49	ug/L #	78
29) 1,1-dichloroethane	3.447	63	11626	1.15	ug/L	89
37) cis-1,2-dichloroethene	3.831	96	404647	66.67	ug/L	84
41) tetrahydrofuran	4.014	42	3713	1.01	ug/L	78
56) benzene	4.447	78	8407	0.41	ug/L	86
61) trichloroethene	4.916	130	10572	1.93	ug/L	98
76) toluene	5.916	92	5365	0.40	ug/L	95
87) chlorobenzene	7.129	112	59627	4.13	ug/L	97
113) 1,4-dichlorobenzene	9.318	146	28324	2.41	ug/L	94
116) 1,2-dichlorobenzene	9.665	146	183475	16.15	ug/L	94

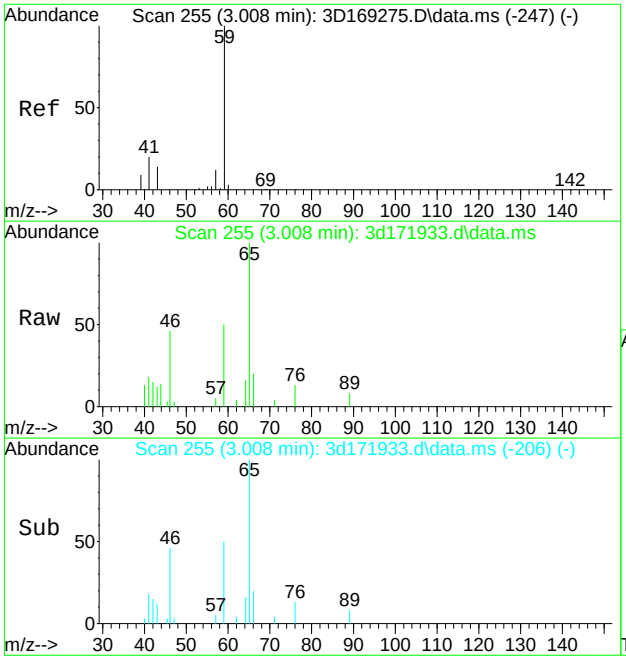
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA-SVOA\Dec-21\12-17\v3d7294-partial\
Data File : 3d171933.d
Acq On : 16 Dec 2021 6:55 pm
Operator : nicoleh
Sample : JD36624-3 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 17 02:25:44 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

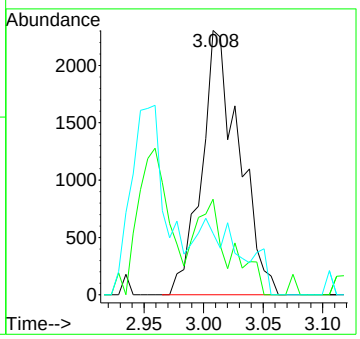


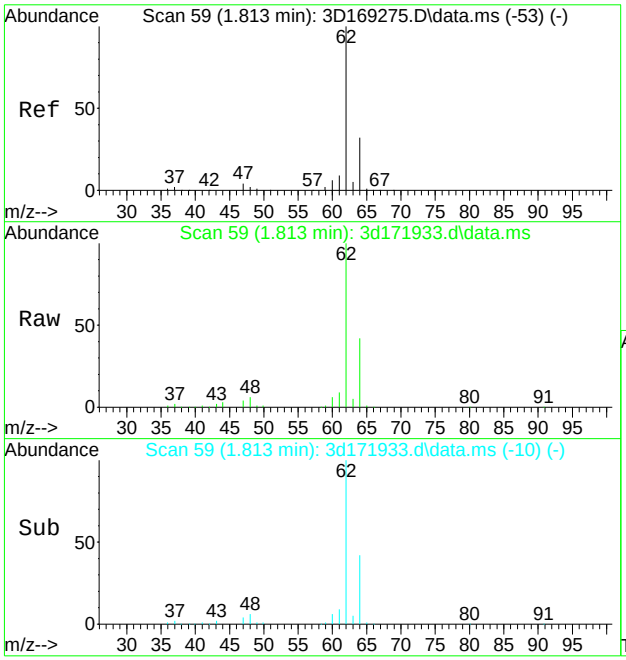


#2
tertiary butyl alcohol
Concen: 3.54 ug/L
RT: 3.008 min Scan# 255
Delta R.T. 0.000 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion: 59 Resp: 5011

Ion	Ratio	Lower	Upper
59	100		
41	36.2	0.0	49.9
43	23.2	0.0	44.1

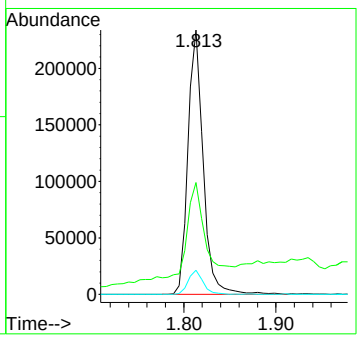


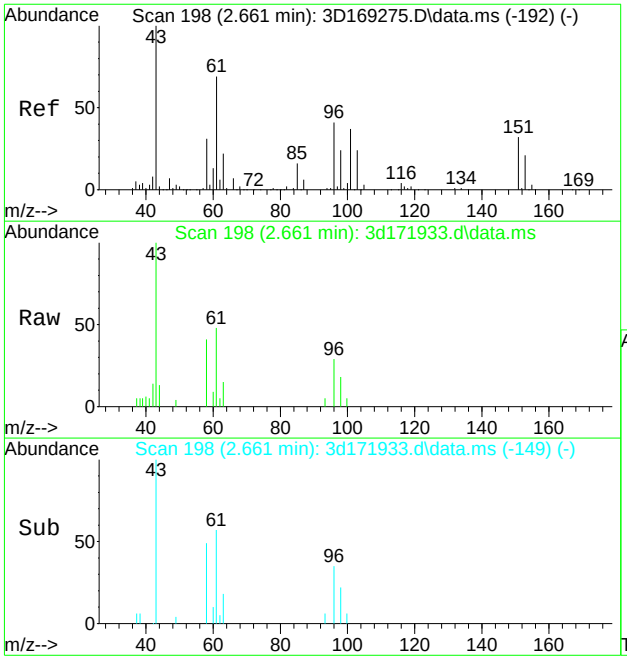


#9
vinyl chloride
Concen: 28.88 ug/L
RT: 1.813 min Scan# 59
Delta R.T. 0.000 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion: 62 Resp: 269348

Ion	Ratio	Lower	Upper
62	100		
64	36.1	2.4	62.4
61	9.1	0.0	39.2

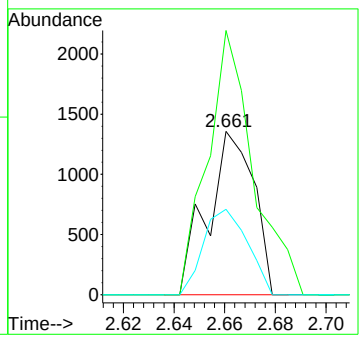


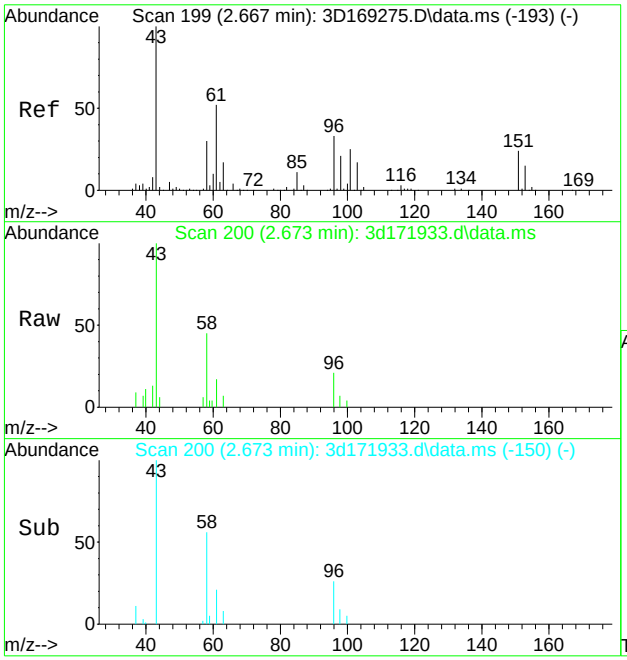


#18
1,1-dichloroethene
Concen: 0.38 ug/L
RT: 2.661 min Scan# 198
Delta R.T. 0.000 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion: 96 Resp: 1710

Ion	Ratio	Lower	Upper
96	100		
61	161.9	139.8	199.8
63	52.4	23.5	83.5

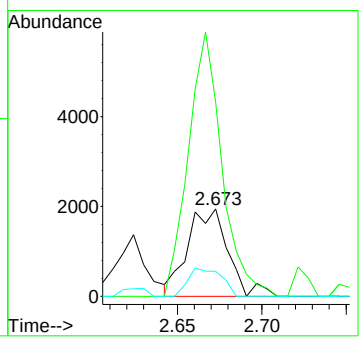


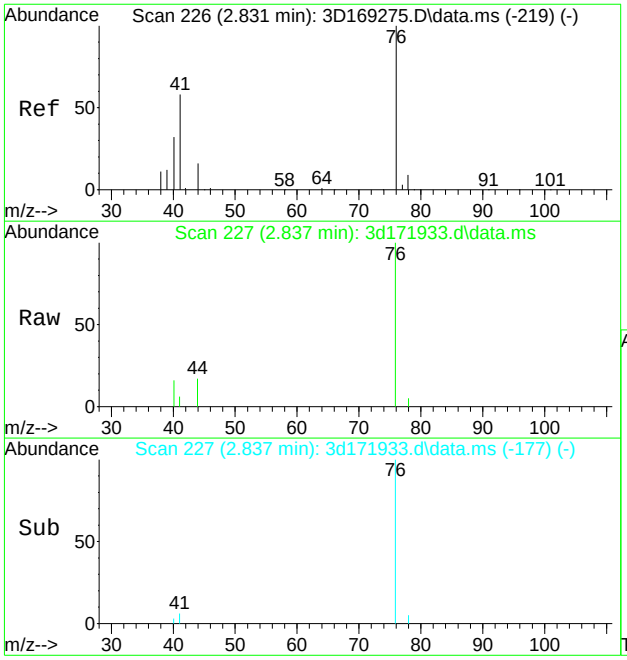


#19
acetone
Concen: 3.18 ug/L
RT: 2.673 min Scan# 200
Delta R.T. 0.006 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion: 58 Resp: 3260

Ion	Ratio	Lower	Upper
58	100		
43	222.8	300.9	360.9#
42	28.8	0.0	58.1

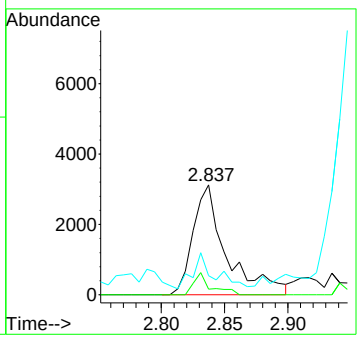


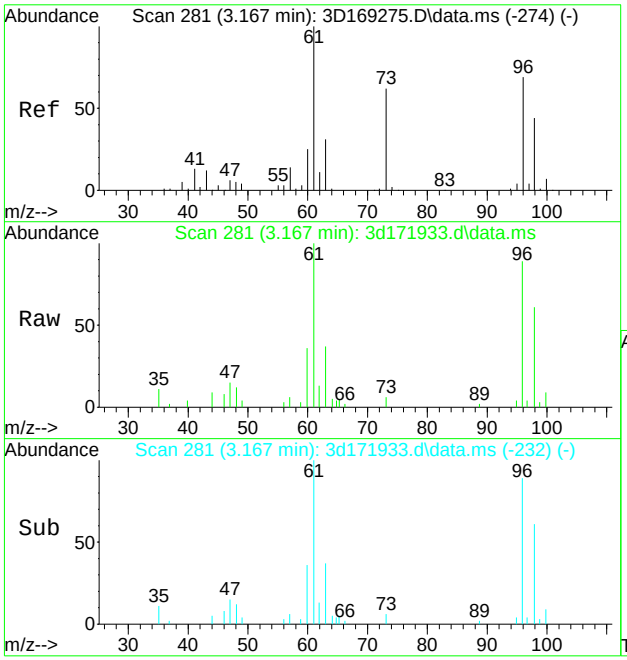


#22
carbon disulfide
Concen: 0.47 ug/L
RT: 2.837 min Scan# 227
Delta R.T. 0.006 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion: 76 Resp: 5698

Ion	Ratio	Lower	Upper
76	100		
78	5.3	0.0	39.4
44	5.9	0.0	45.8

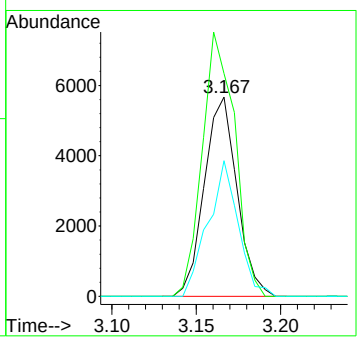


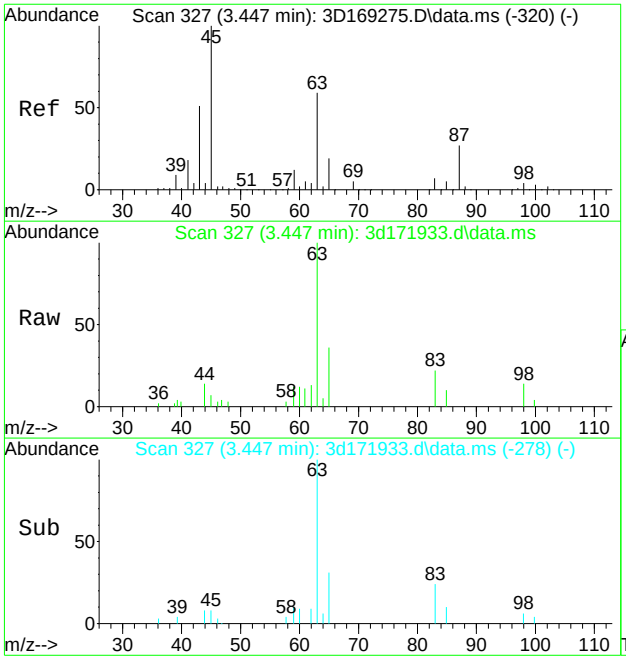


#26
trans-1,2-dichloroethene
Concen: 1.49 ug/L
RT: 3.167 min Scan# 281
Delta R.T. 0.000 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion: 96 Resp: 7653

Ion	Ratio	Lower	Upper
96	100		
61	107.6	115.9	175.9#
98	65.5	33.6	93.6

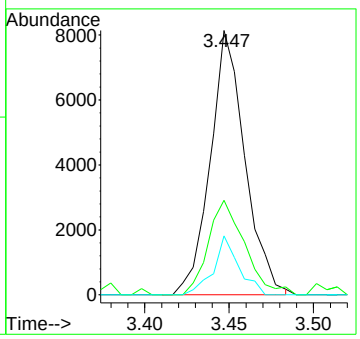


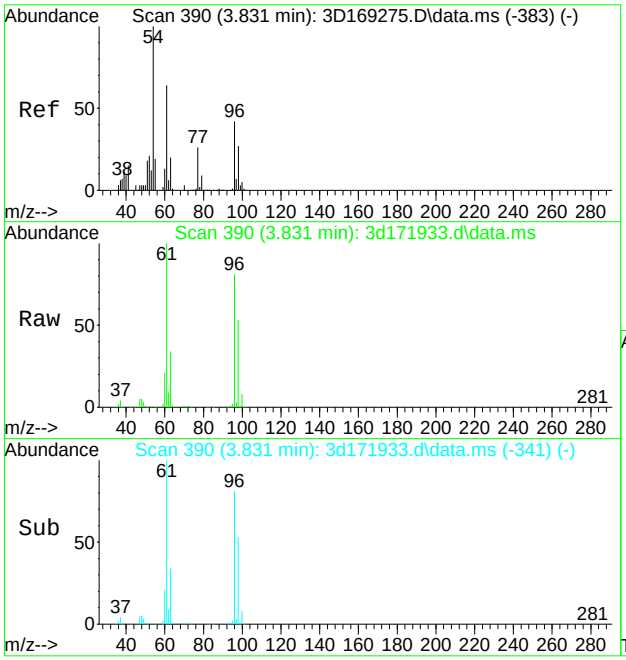


#29
1,1-dichloroethane
Concen: 1.15 ug/L
RT: 3.447 min Scan# 327
Delta R.T. 0.000 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion: 63 Resp: 11626

Ion	Ratio	Lower	Upper
63	100		
65	35.7	2.4	62.4
83	22.3	0.0	42.8

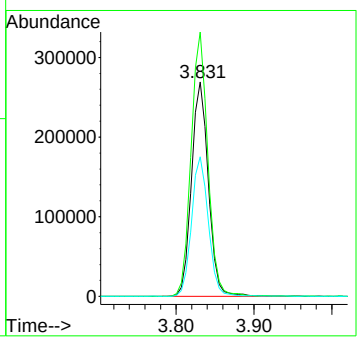


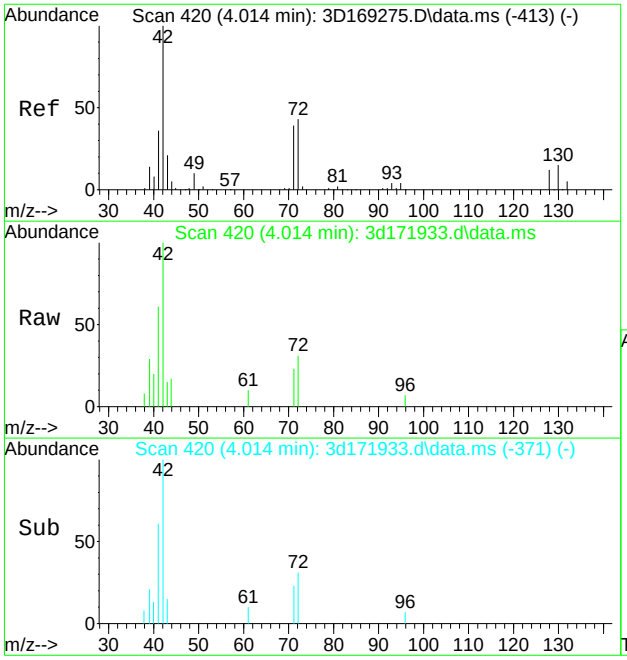


#37
cis-1,2-dichloroethene
Concen: 66.67 ug/L
RT: 3.831 min Scan# 390
Delta R.T. 0.000 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion: 96 Resp: 404647

Ion	Ratio	Lower	Upper
96	100		
61	123.3	122.7	182.7
98	65.1	34.6	94.6

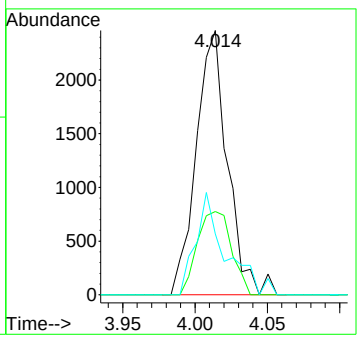


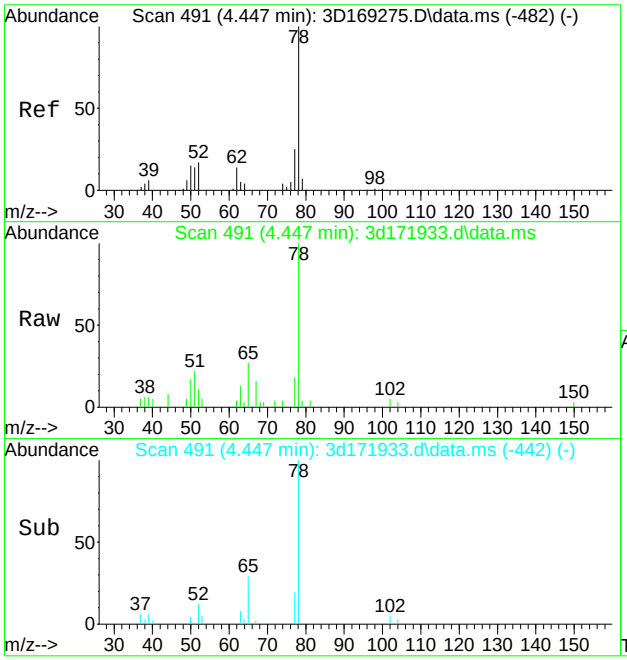


#41
tetrahydrofuran
Concen: 1.01 ug/L
RT: 4.014 min Scan# 420
Delta R.T. 0.001 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion: 42 Resp: 3713

Ion	Ratio	Lower	Upper
42	100		
72	31.5	13.2	73.2
71	23.0	9.2	69.2

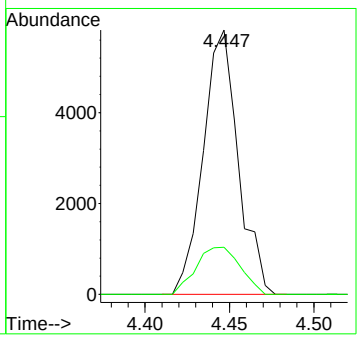


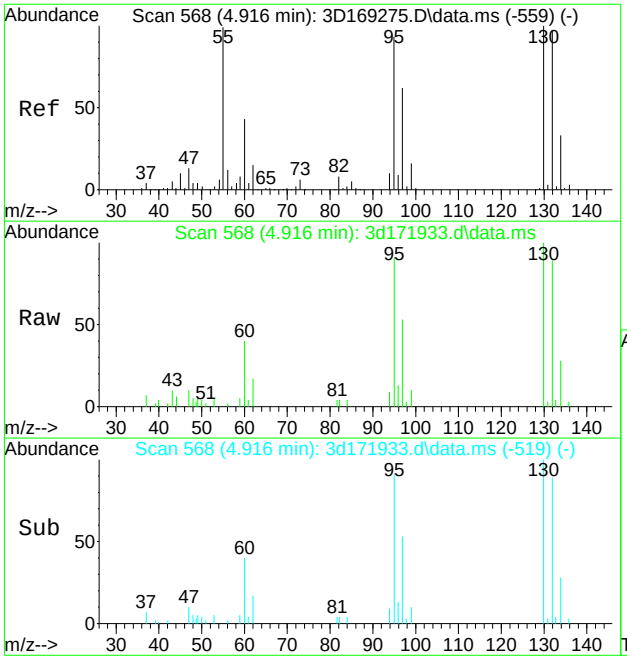


#56
benzene
Concen: 0.41 ug/L
RT: 4.447 min Scan# 491
Delta R.T. 0.000 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion: 78 Resp: 8407

Ion	Ratio	Lower	Upper
78	100		
77	17.8	0.0	54.9

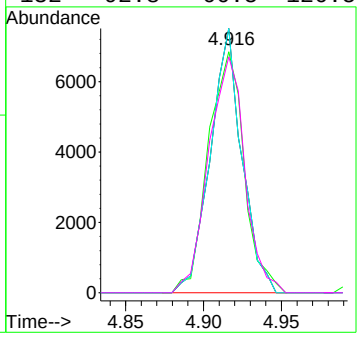


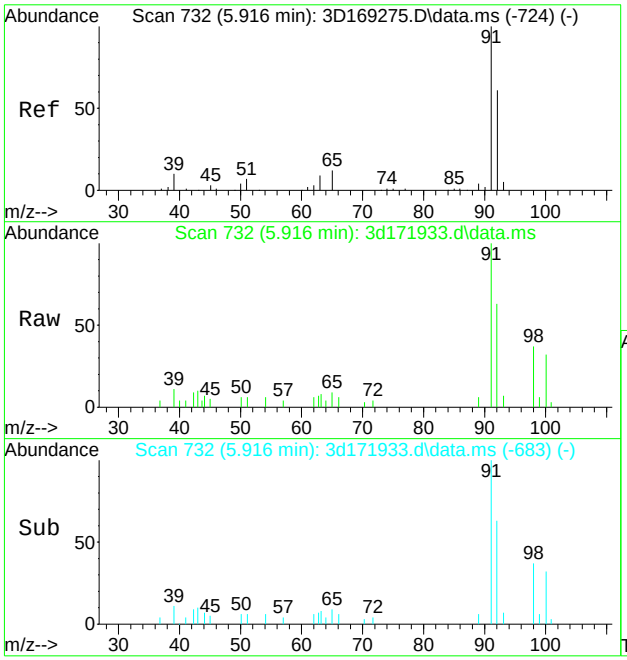


#61
trichloroethene
Concen: 1.93 ug/L
RT: 4.916 min Scan# 568
Delta R.T. 0.000 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion:130 Resp: 10572

Ion	Ratio	Lower	Upper
130	100		
95	91.2	63.4	123.4
130	100.0	70.0	130.0
132	92.8	66.5	126.5

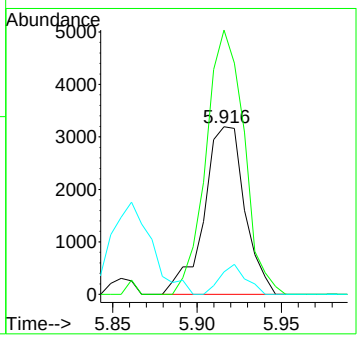


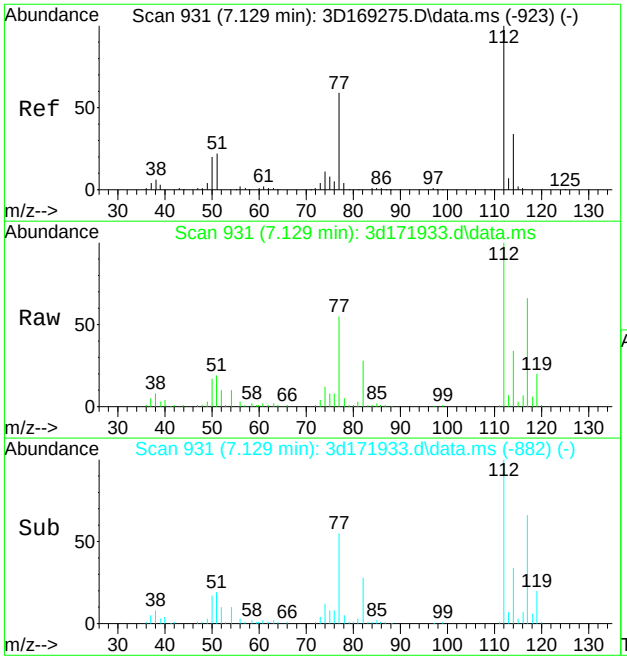


#76
toluene
Concen: 0.40 ug/L
RT: 5.916 min Scan# 732
Delta R.T. 0.000 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion: 92 Resp: 5365

Ion	Ratio	Lower	Upper
92	100		
91	157.8	143.0	183.0
65	13.5	0.2	40.2

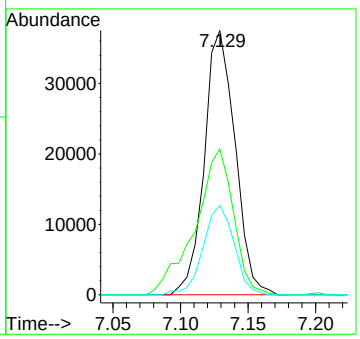


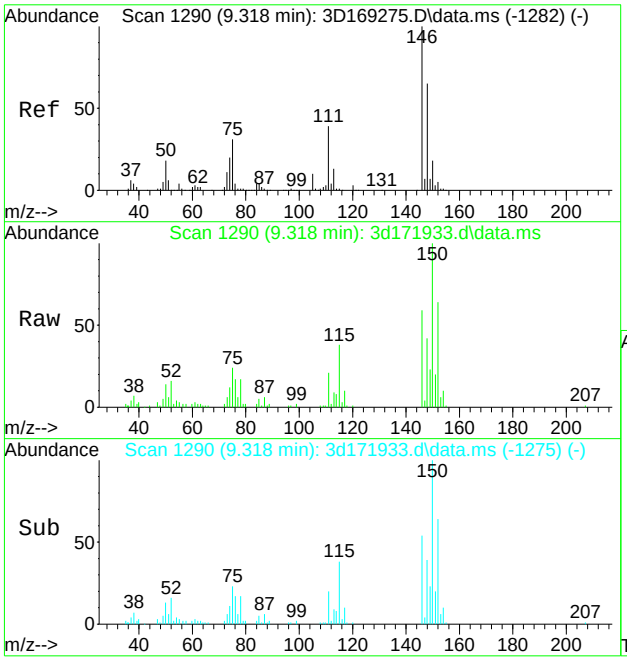


#87
chlorobenzene
Concen: 4.13 ug/L
RT: 7.129 min Scan# 931
Delta R.T. 0.000 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion:112 Resp: 59627

Ion	Ratio	Lower	Upper
112	100		
77	55.3	29.0	89.0
114	33.9	4.0	64.0

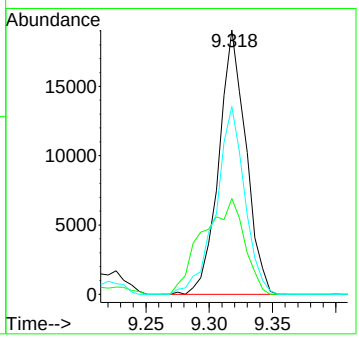


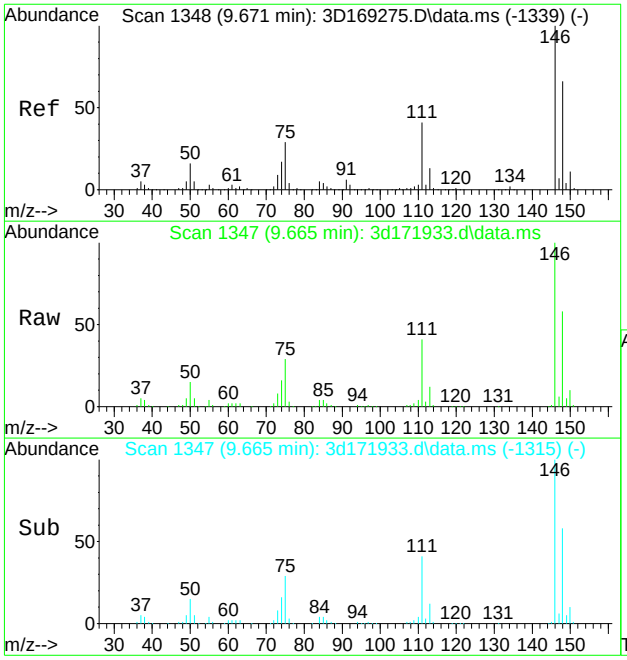


#113
1,4-dichlorobenzene
Concen: 2.41 ug/L
RT: 9.318 min Scan# 1290
Delta R.T. 0.000 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion:146 Resp: 28324

Ion	Ratio	Lower	Upper
146	100		
111	36.3	8.7	68.7
148	71.0	35.3	95.3

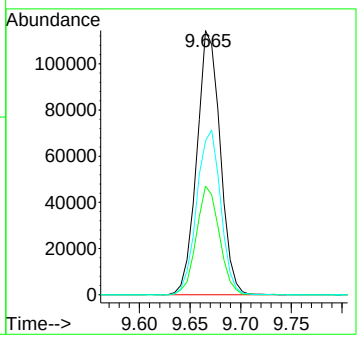




#116
1,2-dichlorobenzene
Concen: 16.15 ug/L
RT: 9.665 min Scan# 1347
Delta R.T. -0.006 min
Lab File: 3d171933.d
Acq: 16 Dec 2021 6:55 pm

Tgt Ion:146 Resp: 183475

Ion	Ratio	Lower	Upper
146	100		
111	41.1	11.3	71.3
148	58.2	35.9	95.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193034.d
Acq On : 17 Dec 2021 2:43 pm
Operator : brittank
Sample : JD36624-4 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,10
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 08:01:28 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

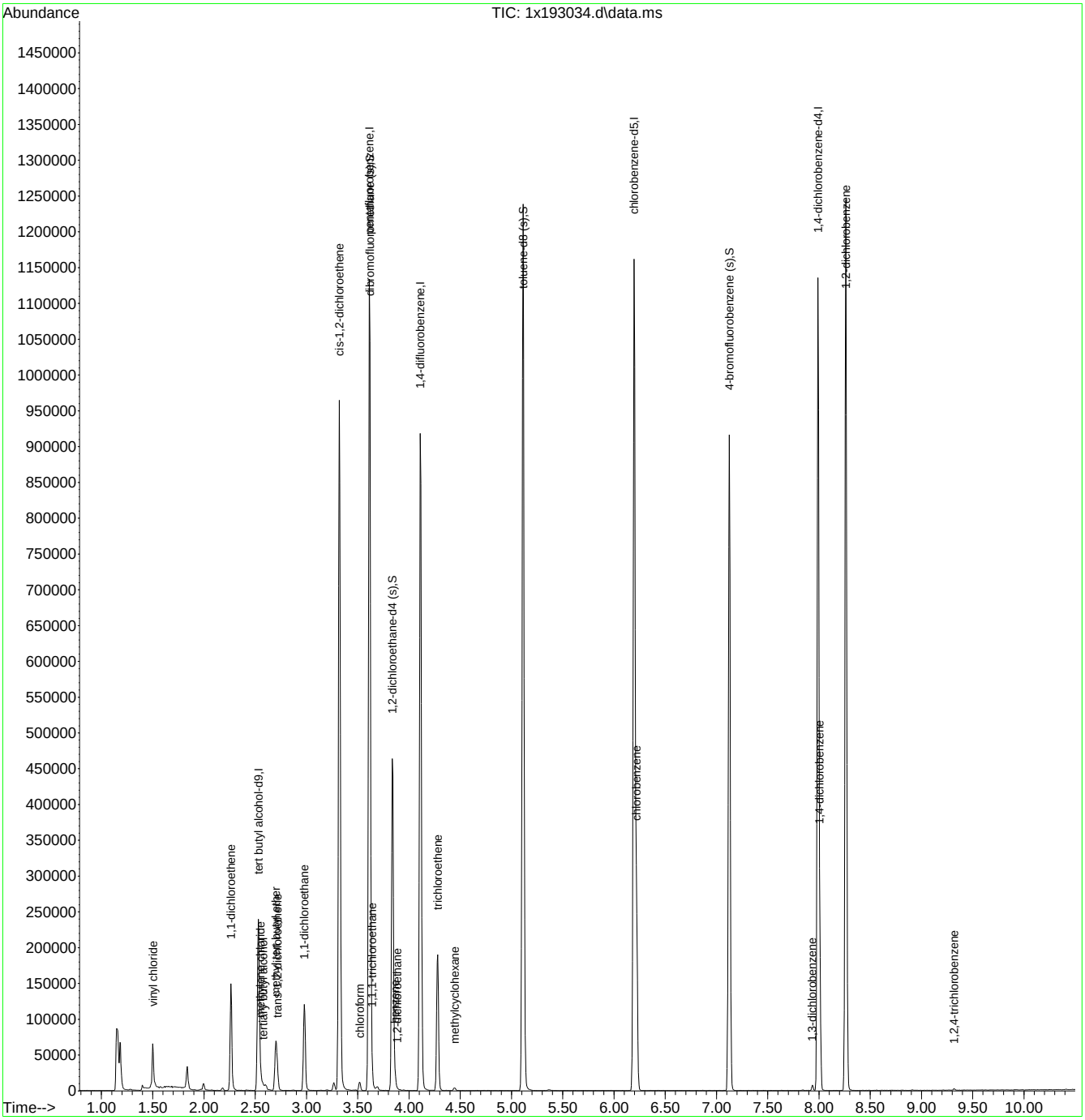
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.530	65	185072	500.00	ug/L	-0.02
5) pentafluorobenzene	3.613	168	356146	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.110	114	511574	50.00	ug/L	0.00
73) chlorobenzene-d5	6.196	117	476671	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.990	152	207193	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.619	113	181149	50.44	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.88%			
53) 1,2-dichloroethane-d4 (s)	3.837	65	226383	51.72	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 103.44%			
74) toluene-d8 (s)	5.113	98	578417	49.91	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.82%			
98) 4-bromofluorobenzene (s)	7.125	95	212736	51.66	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.32%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	2.578	59	3119	11.76	ug/L	76
9) vinyl chloride	1.505	62	26579	9.87	ug/L	99
16) 1,1-dichloroethene	2.263	96	32936	17.89	ug/L	96
22) methylene chloride	2.551	84	869	0.48	ug/L	89
24) methyl tert butyl ether	2.701	73	43125	8.06	ug/L	97
26) trans-1,2-dichloroethene	2.717	96	2982	1.53	ug/L	83
30) 1,1-dichloroethane	2.978	63	77713	20.55	ug/L	98
36) cis-1,2-dichloroethene	3.320	96	260790	124.38	ug/L	92
42) chloroform	3.523	83	5749	1.57	ug/L	91
45) 1,1,1-trichloroethane	3.640	97	3057	0.89	ug/L #	1
57) benzene	3.864	78	7952	1.12	ug/L	99
60) 1,2-dichloroethane	3.885	62	1031	0.32	ug/L	86
61) trichloroethene	4.280	130	45224	18.91	ug/L	99
68) methylcyclohexane	4.446	83	855	0.25	ug/L	97
86) chlorobenzene	6.218	112	99197	19.51	ug/L	97
110) 1,3-dichlorobenzene	7.931	146	2319	0.57	ug/L	92
112) 1,4-dichlorobenzene	8.006	146	47091	11.28	ug/L	97
113) 1,2-dichlorobenzene	8.262	146	347333	90.54	ug/L	99
120) 1,2,4-trichlorobenzene	9.318	180	669	0.29	ug/L	85

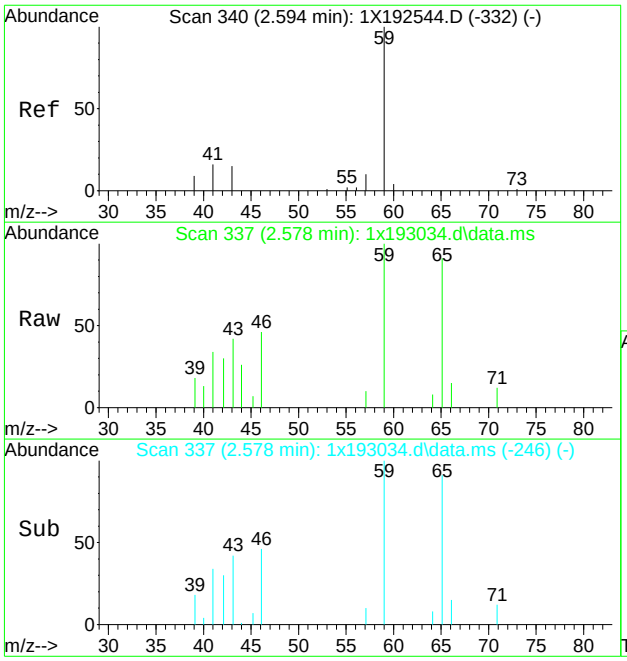
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193034.d
Acq On : 17 Dec 2021 2:43 pm
Operator : brittank
Sample : JD36624-4 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,10
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 08:01:28 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

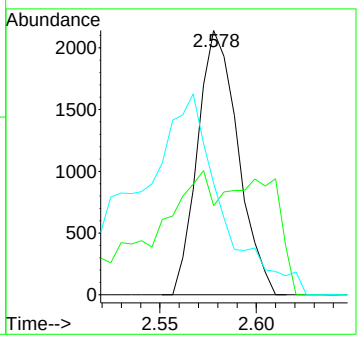


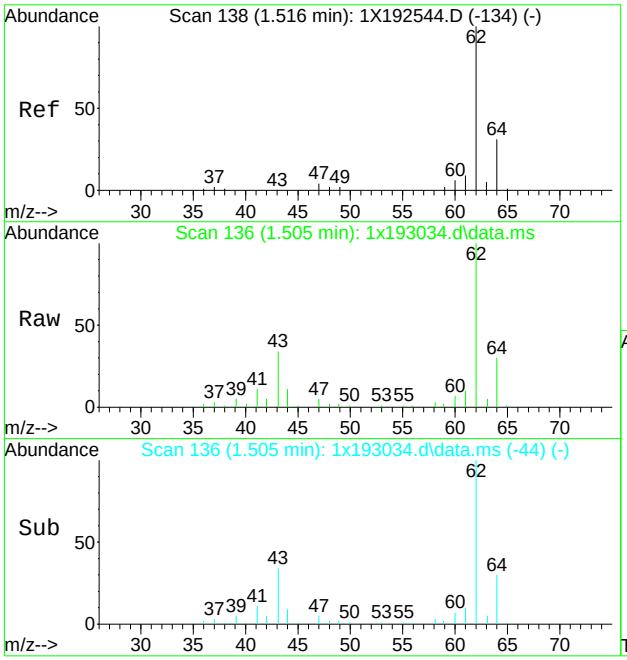


#3
tertiary butyl alcohol
Concen: 11.76 ug/L
RT: 2.578 min Scan# 337
Delta R.T. -0.016 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 59 Resp: 3119

Ion	Ratio	Lower	Upper
59	100		
41	15.2	0.0	46.0
43	35.0	0.0	45.1

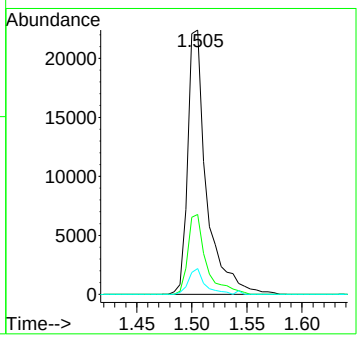


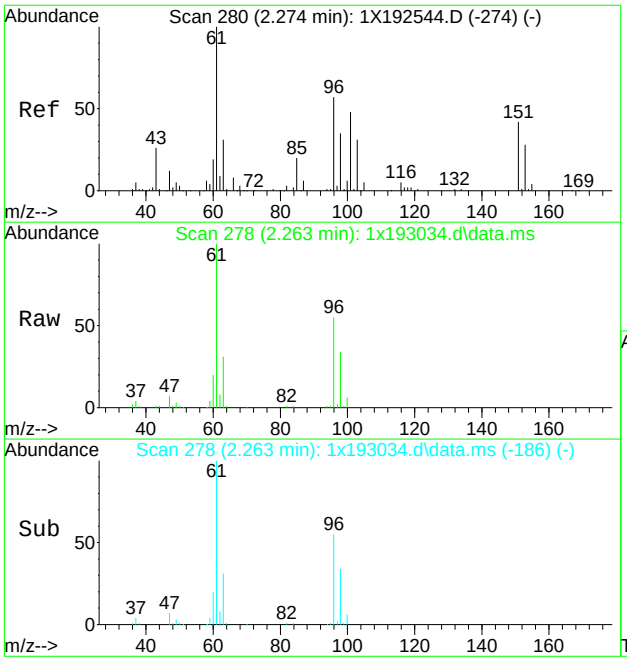


#9
vinyl chloride
Concen: 9.87 ug/L
RT: 1.505 min Scan# 136
Delta R.T. -0.011 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 62 Resp: 26579

Ion	Ratio	Lower	Upper
62	100		
64	30.2	0.5	60.5
61	9.8	0.0	38.7

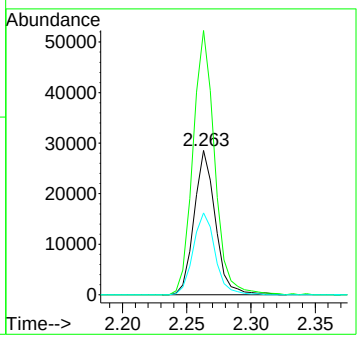


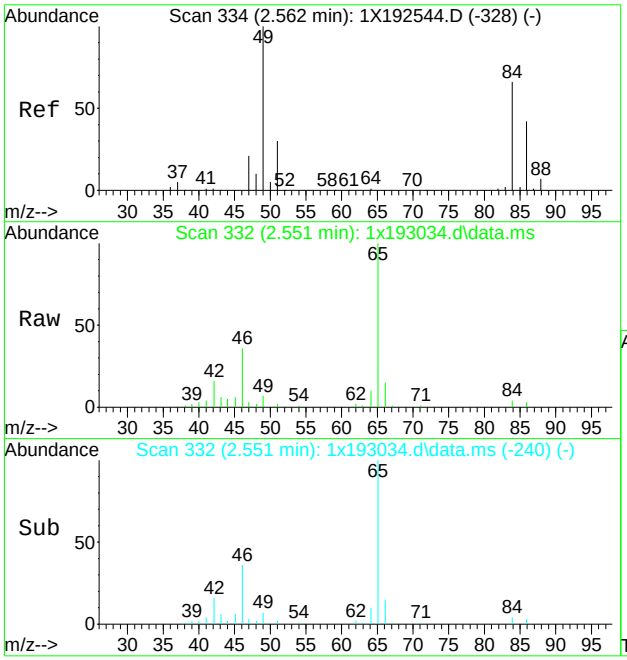


#16
1,1-dichloroethene
Concen: 17.89 ug/L
RT: 2.263 min Scan# 278
Delta R.T. -0.011 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 96 Resp: 32936

Ion	Ratio	Lower	Upper
96	100		
61	183.0	146.8	206.8
63	56.7	25.5	85.5

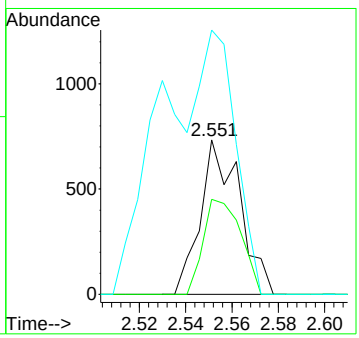


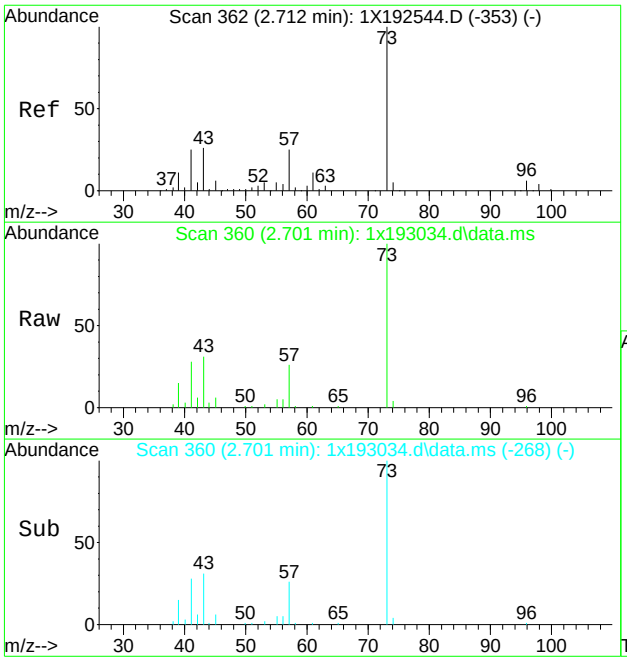


#22
methylene chloride
Concen: 0.48 ug/L
RT: 2.551 min Scan# 332
Delta R.T. -0.011 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 84 Resp: 869

Ion	Ratio	Lower	Upper
84	100		
86	61.4	34.3	94.3
49	171.1	122.9	182.9

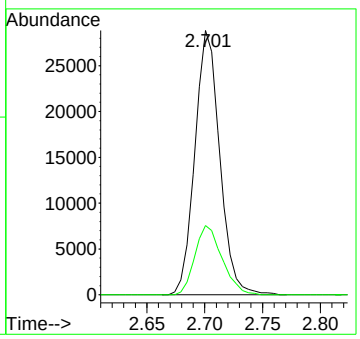


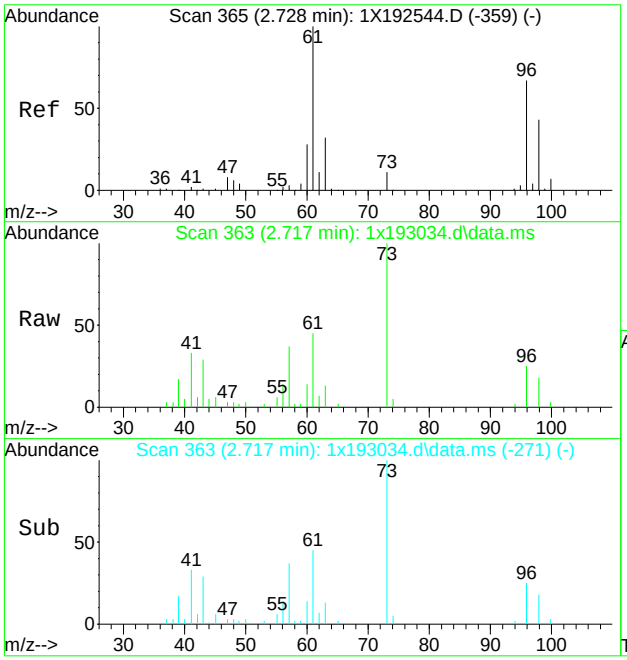


#24
methyl tert butyl ether
Concen: 8.06 ug/L
RT: 2.701 min Scan# 360
Delta R.T. -0.011 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 73 Resp: 43125

Ion	Ratio	Lower	Upper
73	100		
57	26.1	0.0	54.6

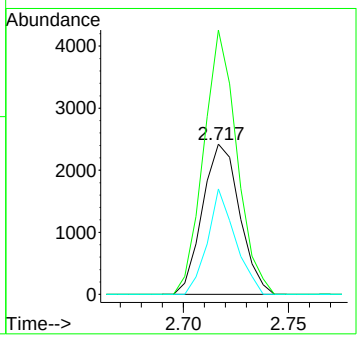


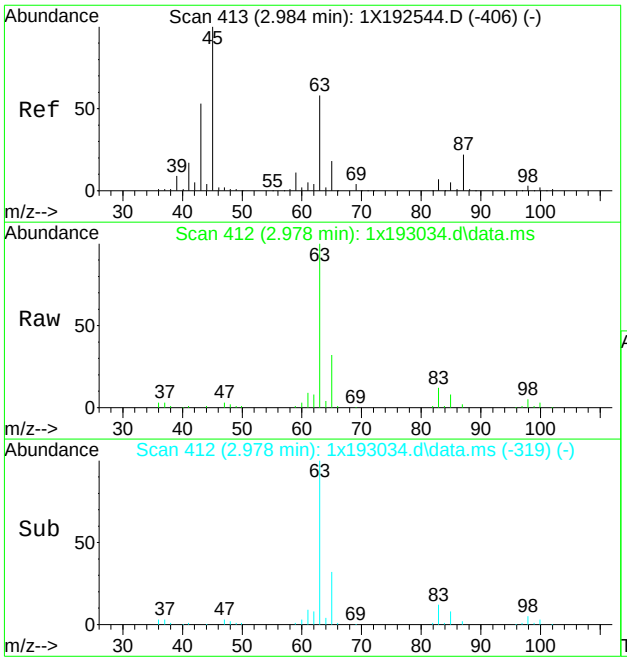


#26
trans-1,2-dichloroethene
Concen: 1.53 ug/L
RT: 2.717 min Scan# 363
Delta R.T. -0.011 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 96 Resp: 2982

Ion	Ratio	Lower	Upper
96	100		
61	176.1	120.2	180.2
98	70.2	34.0	94.0

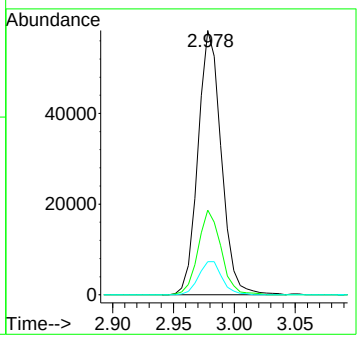


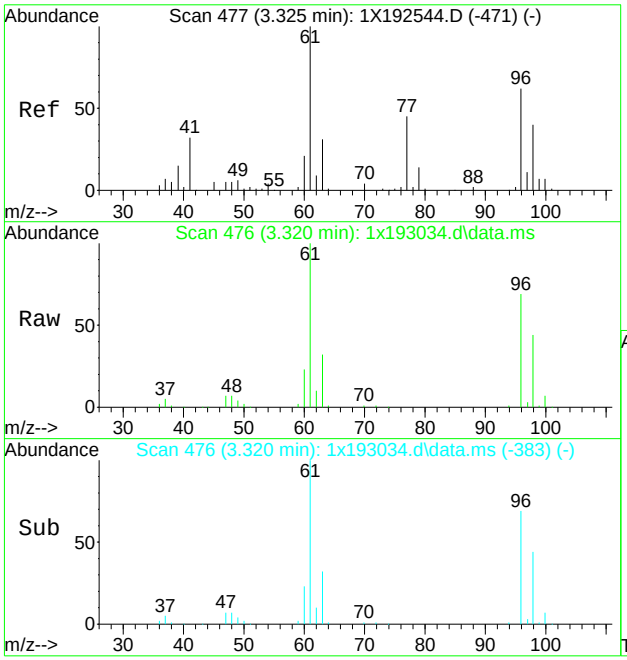


#30
1,1-dichloroethane
Concen: 20.55 ug/L
RT: 2.978 min Scan# 412
Delta R.T. -0.006 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 63 Resp: 77713

Ion	Ratio	Lower	Upper
63	100		
65	32.1	0.9	60.9
83	12.5	0.0	42.5

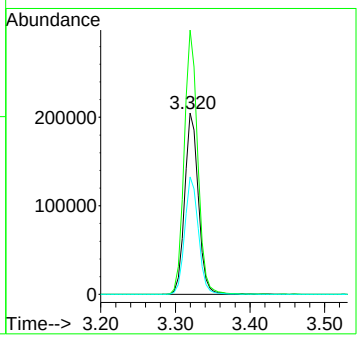


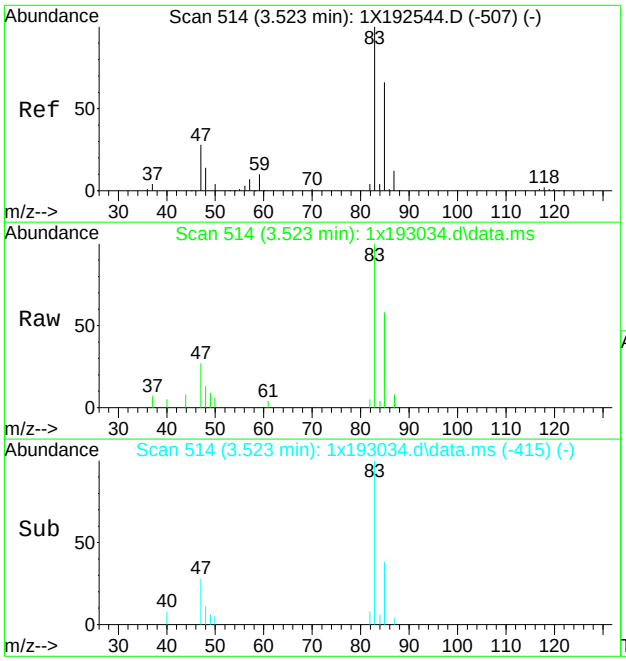


#36
cis-1,2-dichloroethene
Concen: 124.38 ug/L
RT: 3.320 min Scan# 476
Delta R.T. -0.006 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 96 Resp: 260790

Ion	Ratio	Lower	Upper
96	100		
61	145.7	131.2	191.2
98	64.7	34.7	94.7

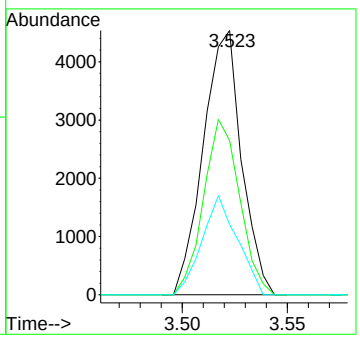


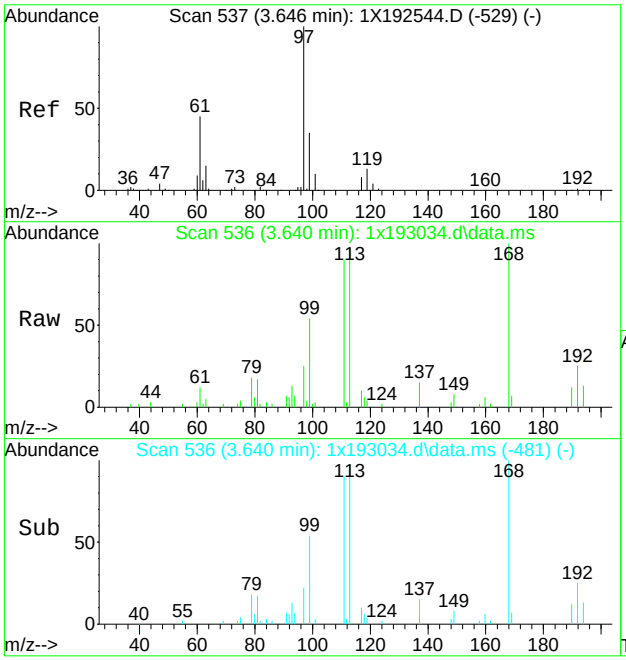


#42
chloroform
Concen: 1.57 ug/L
RT: 3.523 min Scan# 514
Delta R.T. -0.000 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 83 Resp: 5749

Ion	Ratio	Lower	Upper
83	100		
85	58.3	35.8	95.8
47	26.5	0.1	60.1

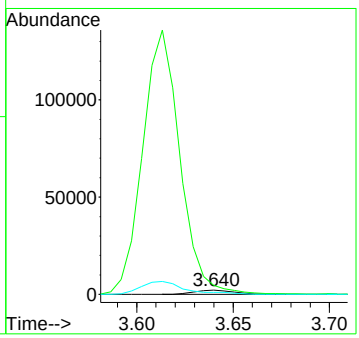


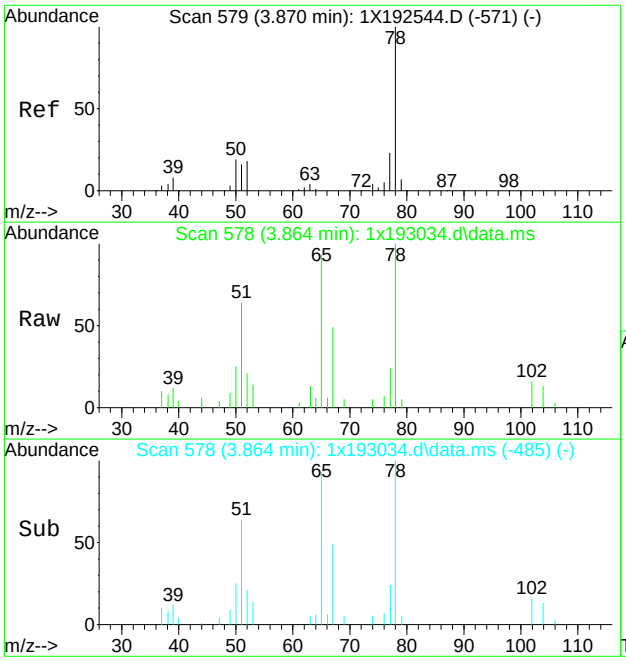


#45
1,1,1-trichloroethane
Concen: 0.89 ug/L
RT: 3.640 min Scan# 536
Delta R.T. -0.006 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 97 Resp: 3057

Ion	Ratio	Lower	Upper
97	100		
99	202.9	37.2	97.2#
61	47.3	16.0	76.0

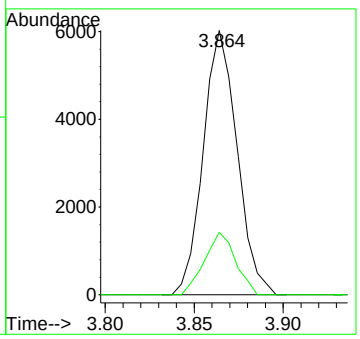


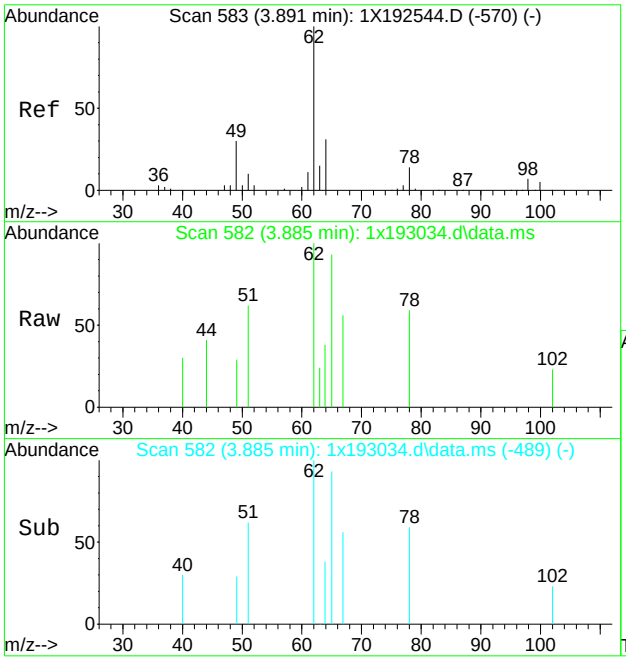


#57
benzene
Concen: 1.12 ug/L
RT: 3.864 min Scan# 578
Delta R.T. -0.006 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 78 Resp: 7952

Ion	Ratio	Lower	Upper
78	100		
77	23.6	0.0	53.3

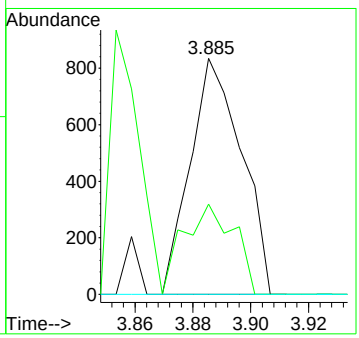


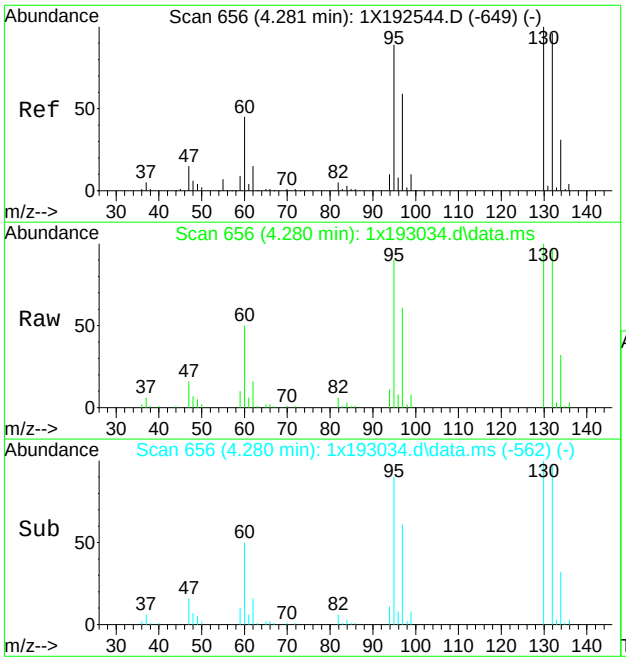


#60
1,2-dichloroethane
Concen: 0.32 ug/L
RT: 3.885 min Scan# 582
Delta R.T. -0.006 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 62 Resp: 1031

Ion	Ratio	Lower	Upper
62	100		
64	38.2	1.2	61.2
98	0.0	0.0	37.4

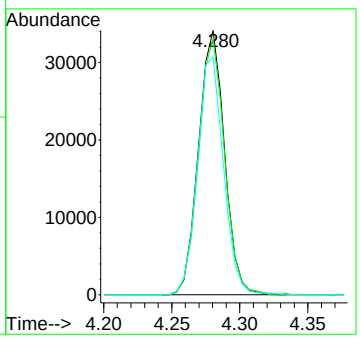


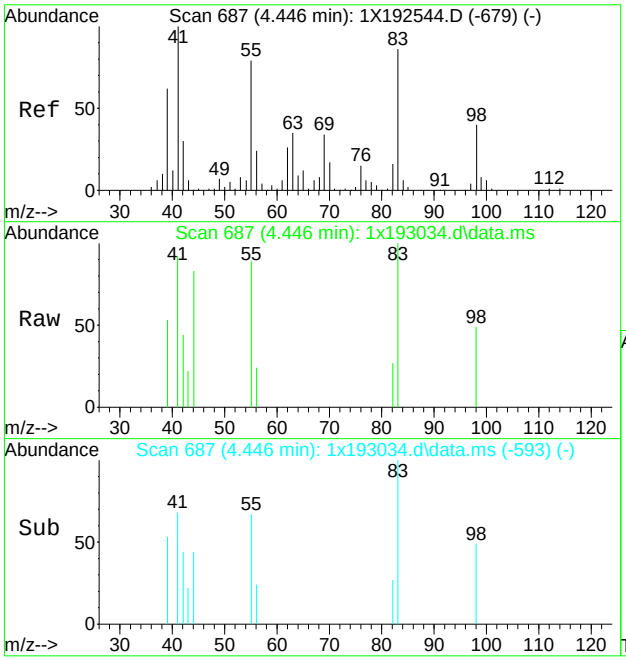


#61
trichloroethene
Concen: 18.91 ug/L
RT: 4.280 min Scan# 656
Delta R.T. -0.000 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion:130 Resp: 45224

Ion	Ratio	Lower	Upper
130	100		
132	96.9	65.5	125.5
95	90.1	58.7	118.7

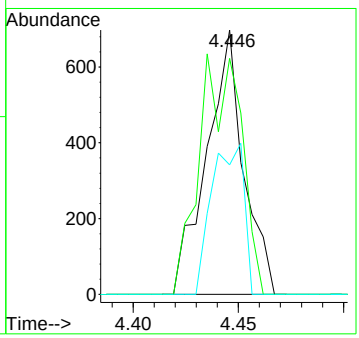


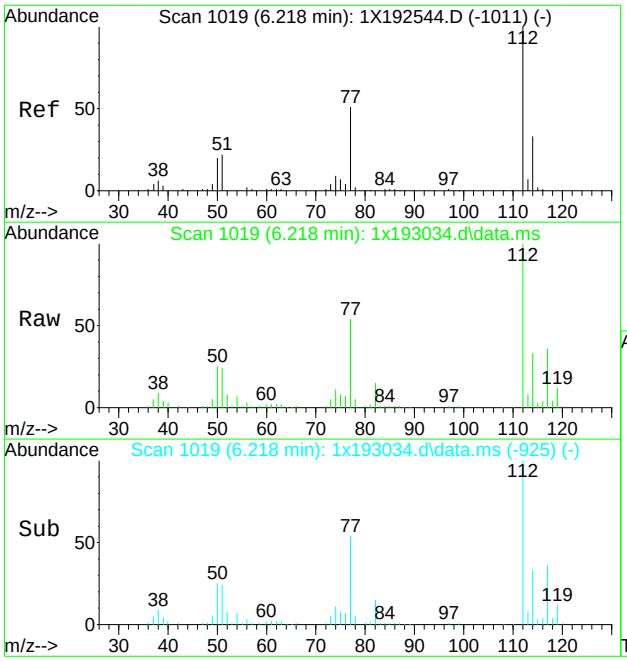


#68
methylcyclohexane
Concen: 0.25 ug/L
RT: 4.446 min Scan# 687
Delta R.T. -0.000 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion: 83 Resp: 855

Ion	Ratio	Lower	Upper
83	100		
55	89.3	61.4	121.4
98	49.0	16.6	76.6

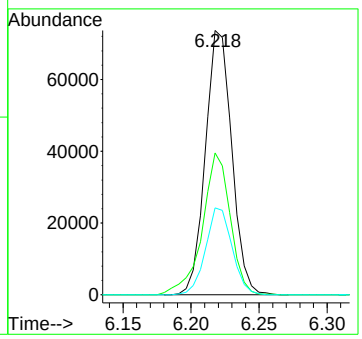


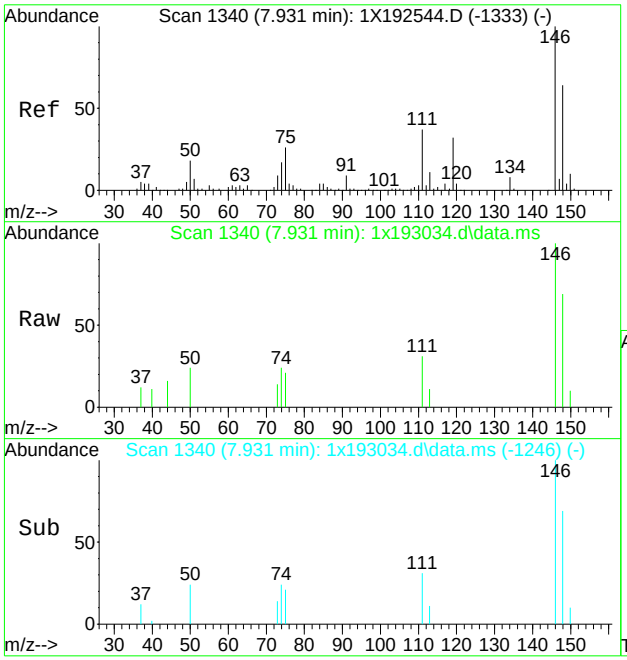


#86
chlorobenzene
Concen: 19.51 ug/L
RT: 6.218 min Scan# 1019
Delta R.T. -0.000 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion:112 Resp: 99197

Ion	Ratio	Lower	Upper
112	100		
77	53.6	20.6	80.6
114	32.9	2.6	62.6

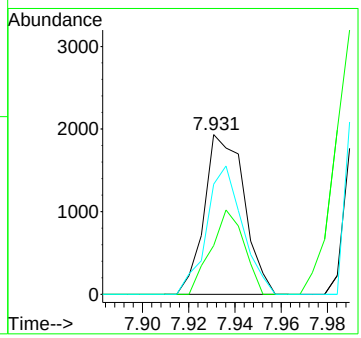


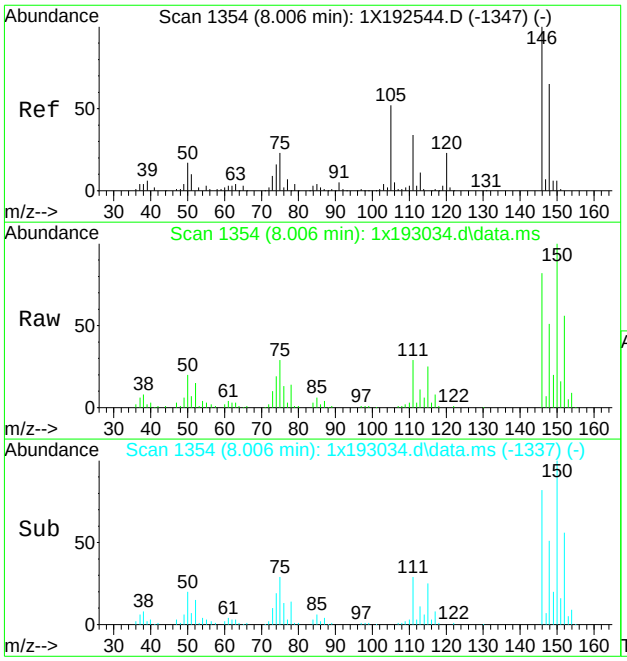


#110
1,3-dichlorobenzene
Concen: 0.57 ug/L
RT: 7.931 min Scan# 1340
Delta R.T. -0.000 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion:146 Resp: 2319

Ion	Ratio	Lower	Upper
146	100		
111	30.5	6.7	66.7
148	68.9	34.1	94.1

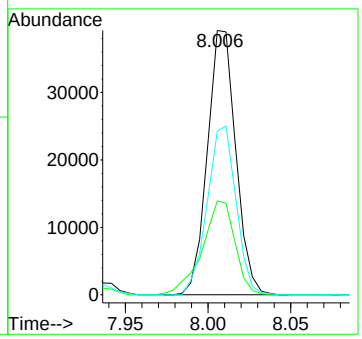


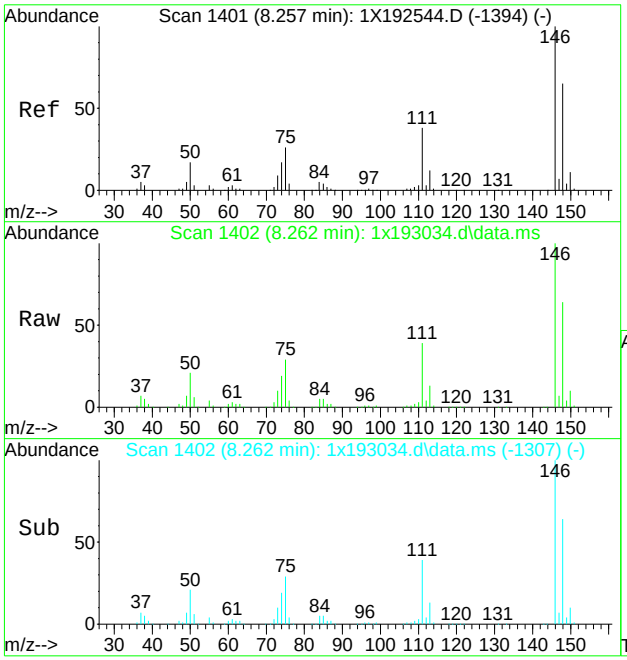


#112
1,4-dichlorobenzene
Concen: 11.28 ug/L
RT: 8.006 min Scan# 1354
Delta R.T. -0.000 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion:146 Resp: 47091

Ion	Ratio	Lower	Upper
146	100		
111	35.5	4.4	64.4
148	61.9	34.6	94.6

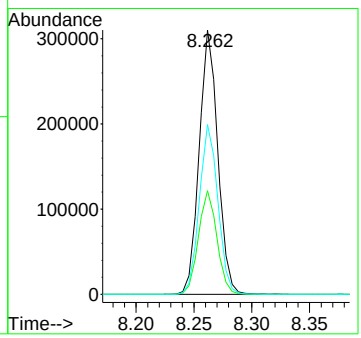


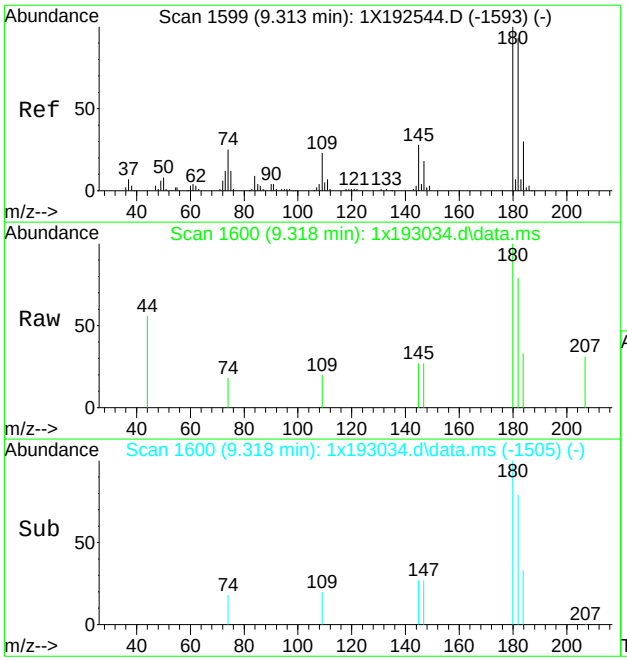


#113
1,2-dichlorobenzene
Concen: 90.54 ug/L
RT: 8.262 min Scan# 1402
Delta R.T. 0.005 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion:146 Resp: 347333

Ion	Ratio	Lower	Upper
146	100		
111	39.2	8.0	68.0
148	64.2	34.7	94.7

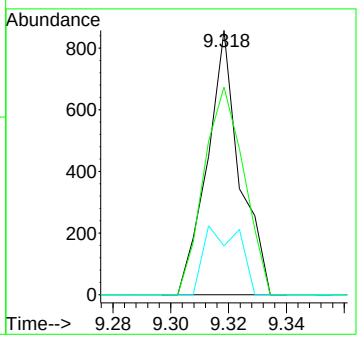




#120
1,2,4-trichlorobenzene
Concen: 0.29 ug/L
RT: 9.318 min Scan# 1600
Delta R.T. 0.005 min
Lab File: 1x193034.d
Acq: 17 Dec 2021 2:43 pm

Tgt Ion:180 Resp: 669

Ion	Ratio	Lower	Upper
180	100		
182	78.6	63.3	123.3
74	18.4	0.0	55.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-18-2021\v3d7294-rest of batch\
Data File : 3d171939.d
Acq On : 16 Dec 2021 9:38 pm
Operator : nicoleh
Sample : JD36624-4 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 18 03:26:08 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

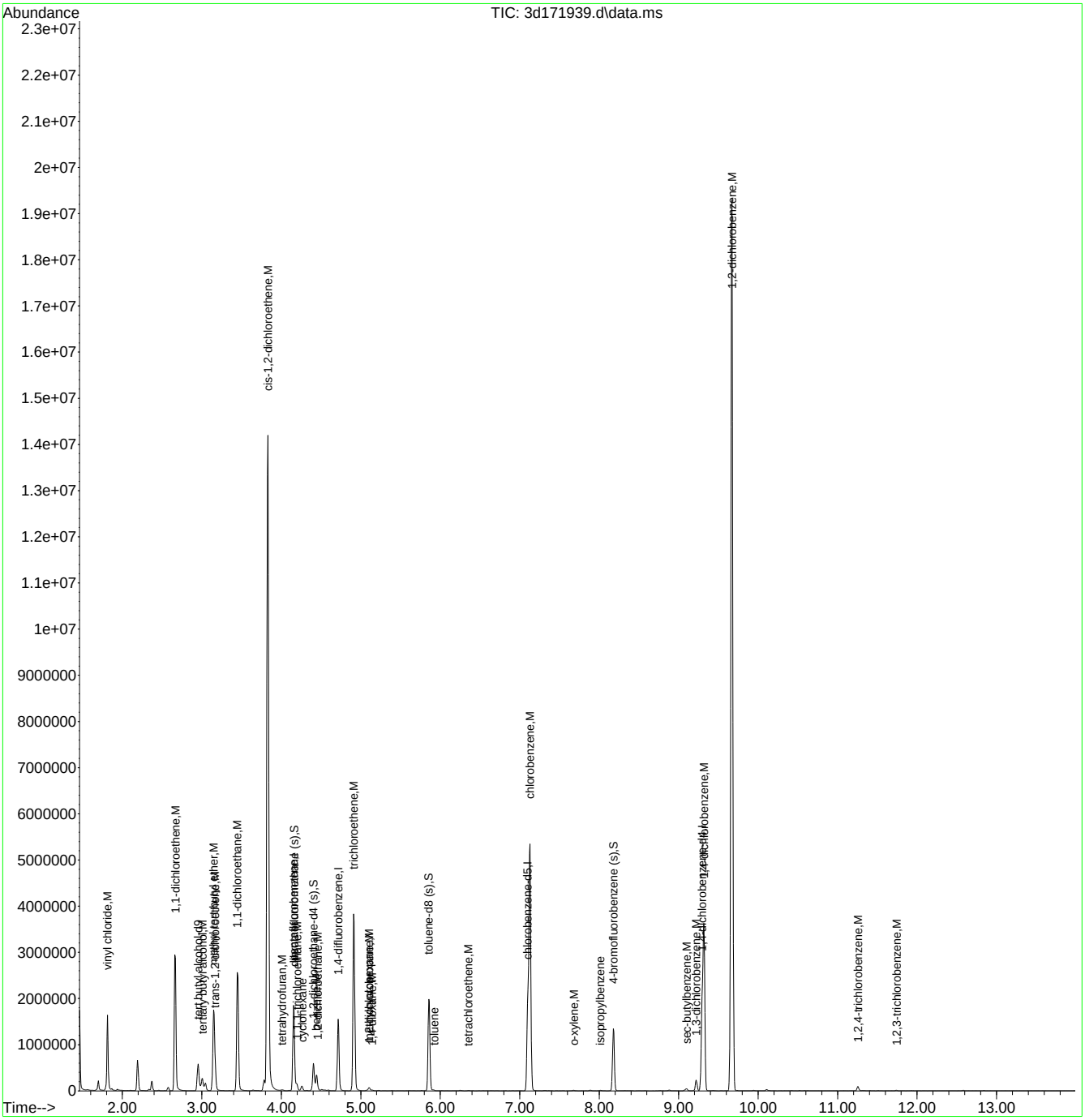
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.953	65	526408	500.00	ug/L	0.00
5) pentafluorobenzene	4.154	168	721838	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.715	114	1058396	50.00	ug/L	0.00
74) chlorobenzene-d5	7.099	117	942261	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.293	152	456980	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.160	113	276405	43.75	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 87.50%			
53) 1,2-dichloroethane-d4 (s)	4.404	65	318252	45.62	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 91.24%			
75) toluene-d8 (s)	5.855	98	1200761	50.27	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.54%			
99) 4-bromofluorobenzene (s)	8.178	95	448098	48.95	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.90%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	3.008	59	159935	113.23	ug/L #	50
4) 1,4-dioxane	5.142	88	14372	123.42	ug/L	95
9) vinyl chloride	1.813	62	740158	79.10	ug/L	98
18) 1,1-dichloroethene	2.667	96	931281	207.78	ug/L	85
25) methyl tert butyl ether	3.148	73	1317850	71.78	ug/L	99
26) trans-1,2-dichloroethene	3.167	96	86488	16.75	ug/L	93
29) 1,1-dichloroethane	3.447	63	1881640	185.94	ug/L	95
37) cis-1,2-dichloroethene	3.831	96	5193874	852.92	ug/L #	72
41) tetrahydrofuran	4.008	42	6420	1.74	ug/L	96
46) 1,1,1-trichloroethane	4.197	97	69724	7.88	ug/L	92
47) cyclohexane	4.264	84	32333	3.33	ug/L #	34
56) benzene	4.441	78	244596	11.46	ug/L	95
60) 1,2-dichloroethane	4.459	62	14838	1.78	ug/L	87
61) trichloroethene	4.910	130	1150615	203.55	ug/L	98
66) 1,2-dichloropropane	5.105	63	7453	1.27	ug/L	70
68) methylcyclohexane	5.105	83	16965	1.78	ug/L	90
76) toluene	5.922	92	5231	0.37	ug/L #	75
80) tetrachloroethene	6.355	164	1921	0.40	ug/L	91
87) chlorobenzene	7.129	112	2716881	175.39	ug/L	97
91) o-xylene	7.684	106	4081	0.38	ug/L #	70
96) isopropylbenzene	8.013	105	9145	0.32	ug/L	94
110) sec-butylbenzene	9.098	105	30843	1.13	ug/L	97
111) 1,3-dichlorobenzene	9.220	146	94976	7.55	ug/L	96
113) 1,4-dichlorobenzene	9.318	146	1384848	112.02	ug/L	96
116) 1,2-dichlorobenzene	9.671	146	6749656	563.78	ug/L	77
121) 1,2,4-trichlorobenzene	11.257	180	28768	3.56	ug/L	94
124) 1,2,3-trichlorobenzene	11.744	180	3676	0.49	ug/L	88

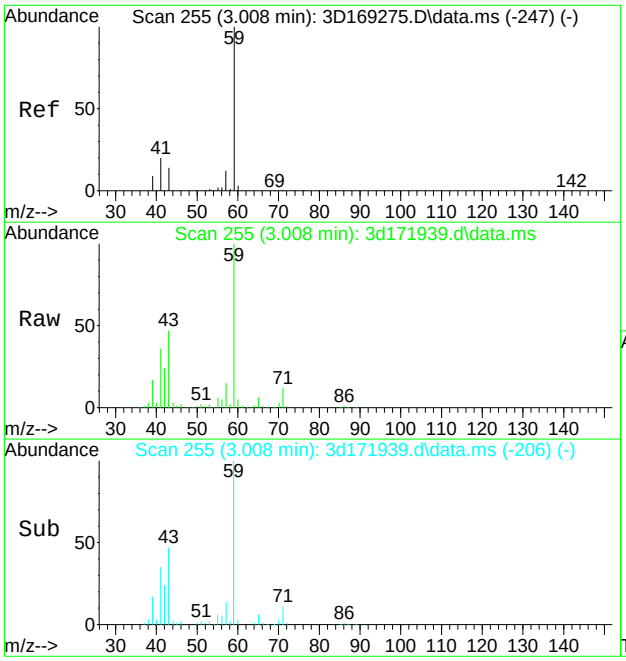
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-18-2021\v3d7294-rest of batch\
Data File : 3d171939.d
Acq On : 16 Dec 2021 9:38 pm
Operator : nicoleh
Sample : JD36624-4 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 18 03:26:08 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

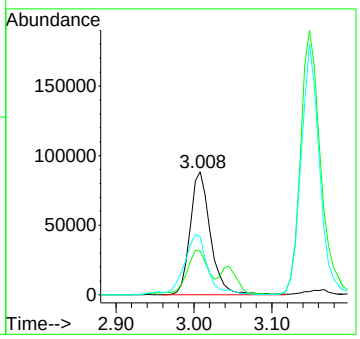


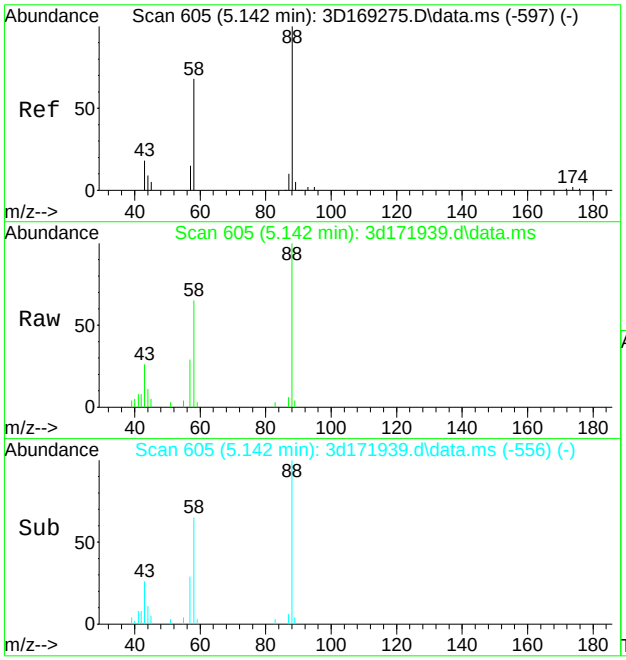


#2
tertiary butyl alcohol
Concen: 113.23 ug/L
RT: 3.008 min Scan# 255
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 59 Resp: 159935

Ion	Ratio	Lower	Upper
59	100		
41	34.0	0.0	49.9
43	45.2	0.0	44.1#

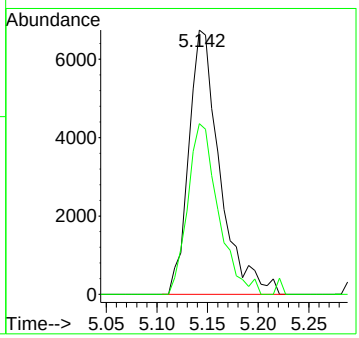


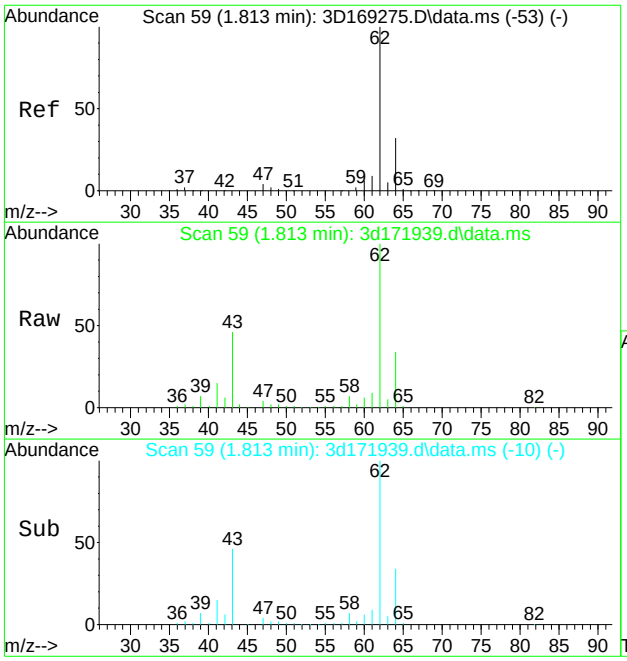


#4
1,4-dioxane
Concen: 123.42 ug/L
RT: 5.142 min Scan# 605
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 88 Resp: 14372

Ion	Ratio	Lower	Upper
88	100		
58	64.5	38.9	98.9

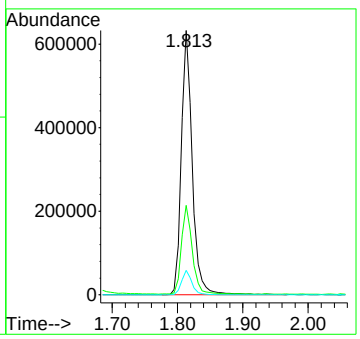


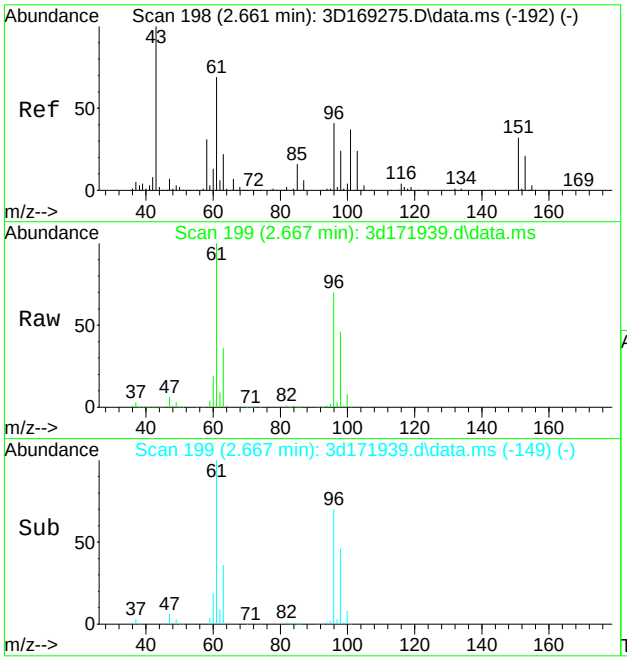


#9
vinyl chloride
Concen: 79.10 ug/L
RT: 1.813 min Scan# 59
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 62 Resp: 740158

Ion	Ratio	Lower	Upper
62	100		
64	33.5	2.4	62.4
61	9.2	0.0	39.2

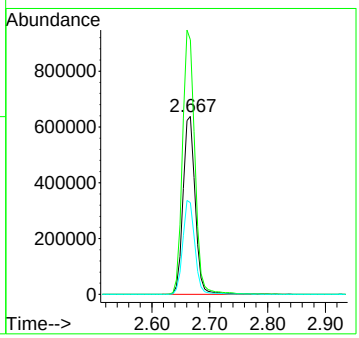


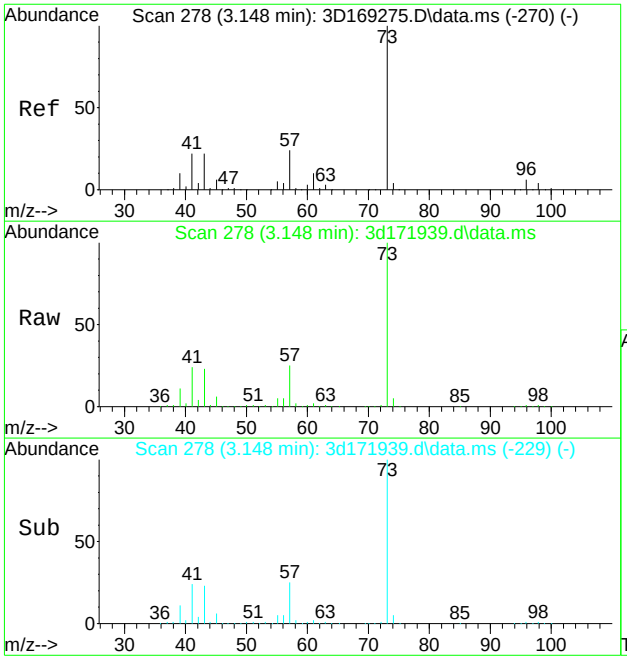


#18
1,1-dichloroethene
Concen: 207.78 ug/L
RT: 2.667 min Scan# 199
Delta R.T. 0.006 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 96 Resp: 931281

Ion	Ratio	Lower	Upper
96	100		
61	143.1	139.8	199.8
63	51.6	23.5	83.5

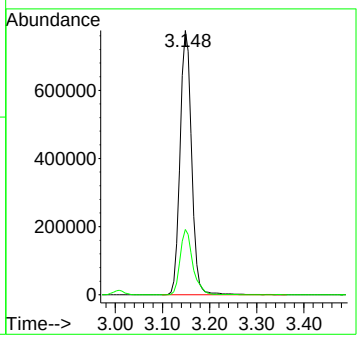


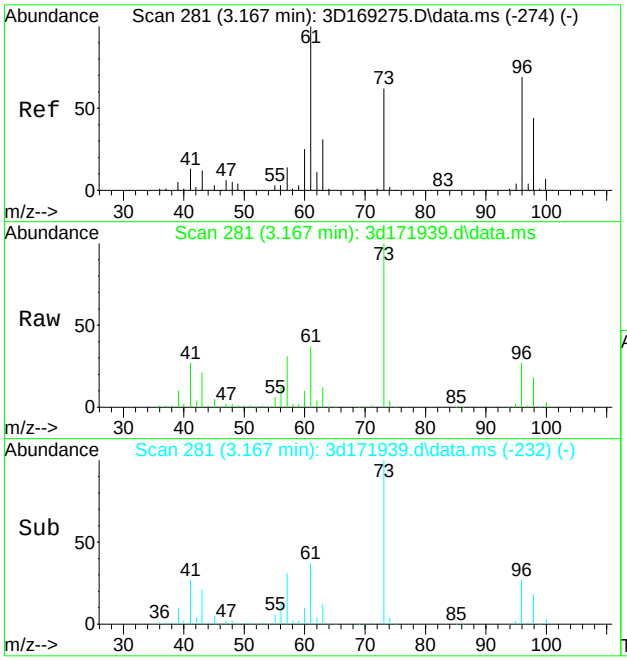


#25
methyl tert butyl ether
Concen: 71.78 ug/L
RT: 3.148 min Scan# 278
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 73 Resp: 1317850

Ion	Ratio	Lower	Upper
73	100		
57	24.7	0.0	224.2

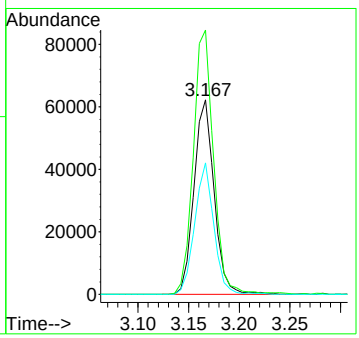


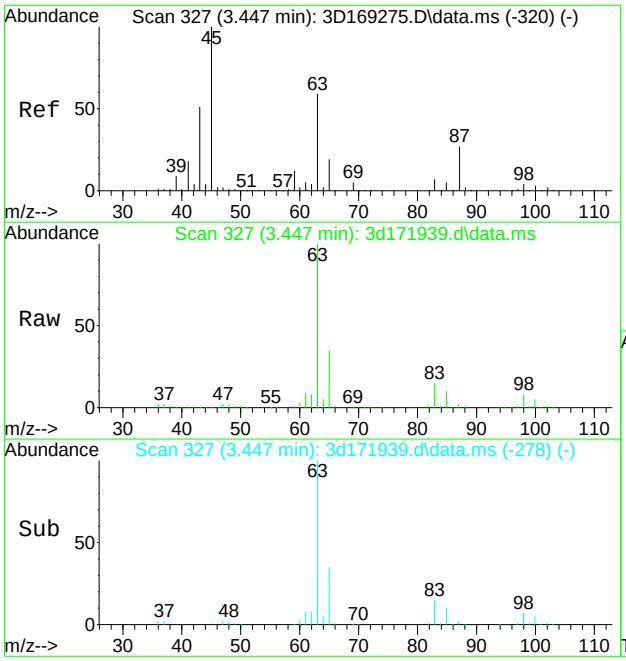


#26
trans-1,2-dichloroethene
Concen: 16.75 ug/L
RT: 3.167 min Scan# 281
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 96 Resp: 86488

Ion	Ratio	Lower	Upper
96	100		
61	135.9	115.9	175.9
98	67.5	33.6	93.6

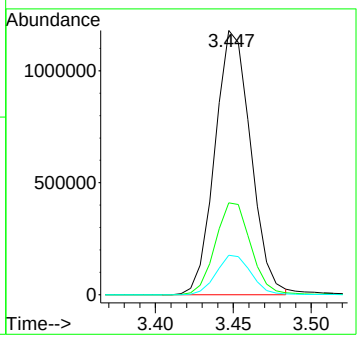


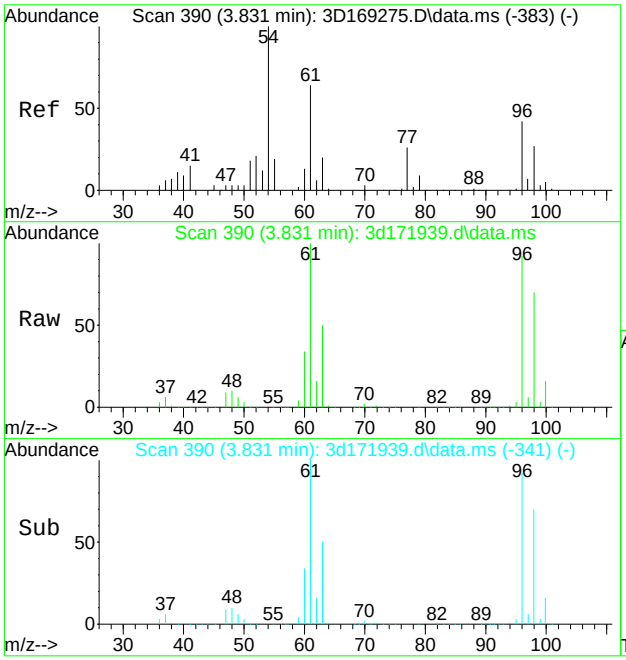


#29
1,1-dichloroethane
Concen: 185.94 ug/L
RT: 3.447 min Scan# 327
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 63 Resp: 1881640

Ion	Ratio	Lower	Upper
63	100		
65	34.8	2.4	62.4
83	15.0	0.0	42.8

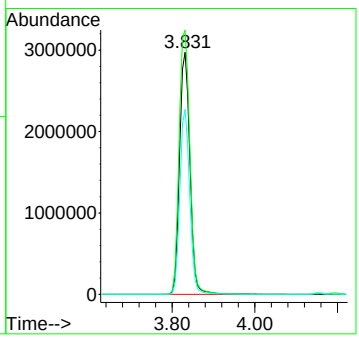


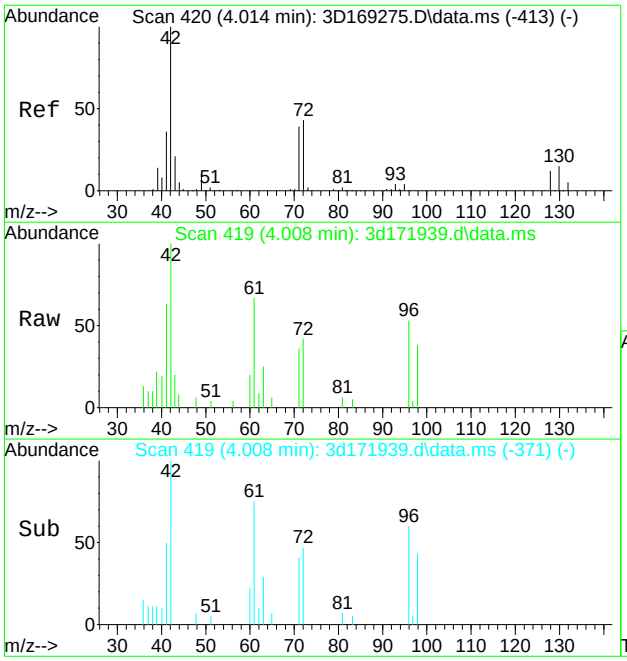


#37
cis-1,2-dichloroethene
Concen: 852.92 ug/L
RT: 3.831 min Scan# 390
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 96 Resp: 5193874

Ion	Ratio	Lower	Upper
96	100		
61	109.2	122.7	182.7#
98	76.4	34.6	94.6

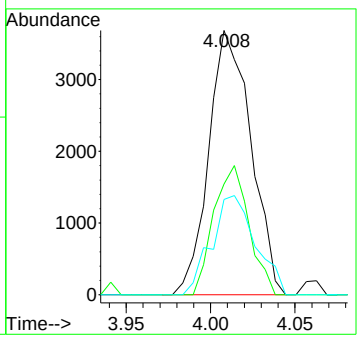


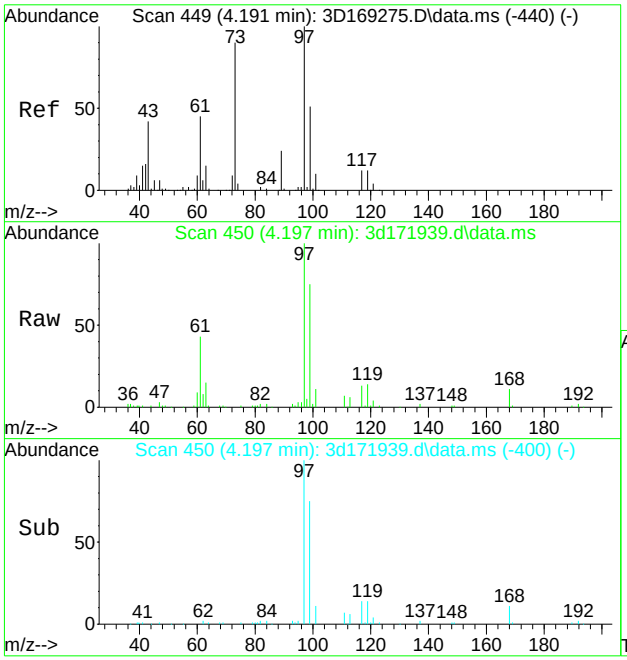


#41
tetrahydrofuran
Concen: 1.74 ug/L
RT: 4.008 min Scan# 419
Delta R.T. -0.005 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 42 Resp: 6420

Ion	Ratio	Lower	Upper
42	100		
72	41.9	13.2	73.2
71	36.0	9.2	69.2

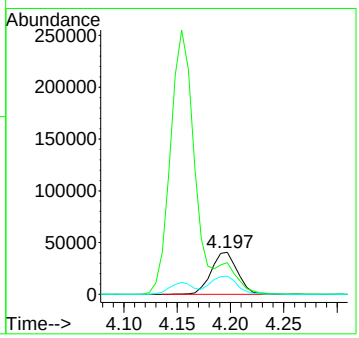


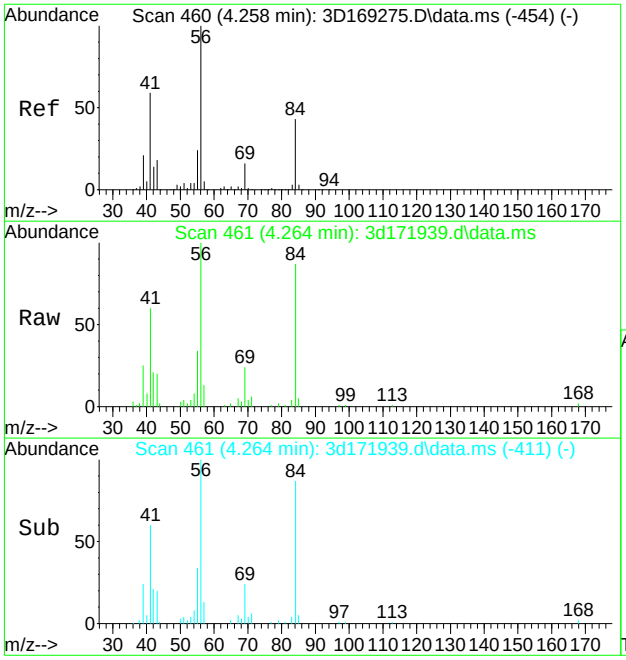


#46
1,1,1-trichloroethane
Concen: 7.88 ug/L
RT: 4.197 min Scan# 450
Delta R.T. 0.006 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 97 Resp: 69724

Ion	Ratio	Lower	Upper
97	100		
99	74.4	35.8	95.8
61	42.9	15.4	75.4

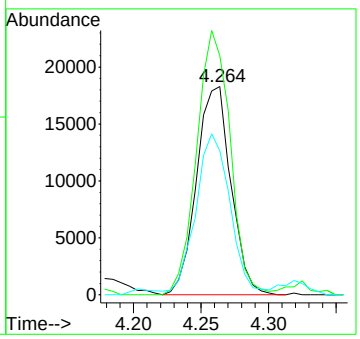


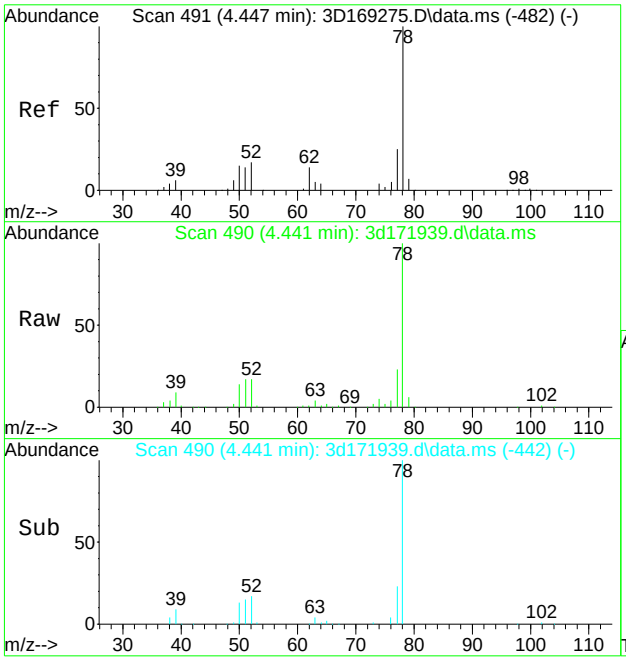


#47
cyclohexane
Concen: 3.33 ug/L
RT: 4.264 min Scan# 461
Delta R.T. 0.006 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 84 Resp: 32333

Ion	Ratio	Lower	Upper
84	100		
56	114.8	211.9	251.9#
41	67.4	115.8	155.8#

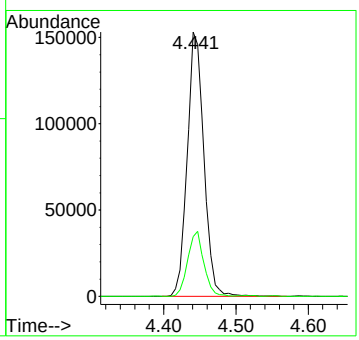


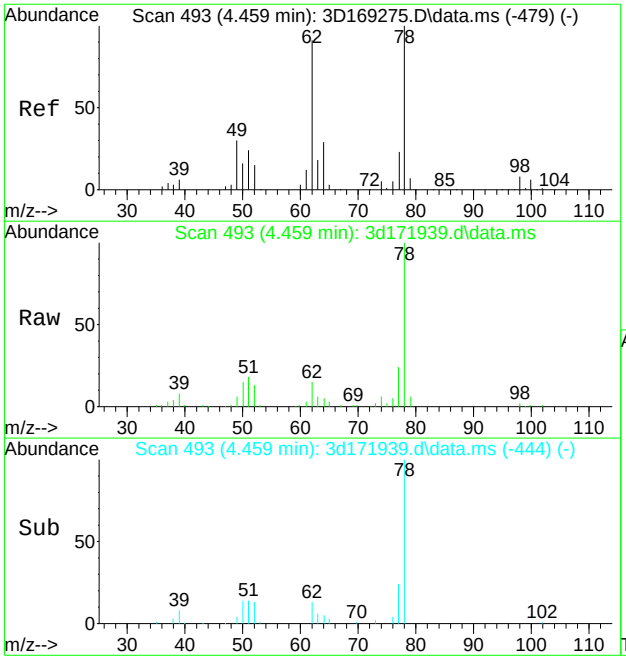


#56
benzene
Concen: 11.46 ug/L
RT: 4.441 min Scan# 490
Delta R.T. -0.006 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 78 Resp: 244596

Ion	Ratio	Lower	Upper
78	100		
77	22.6	0.0	54.9

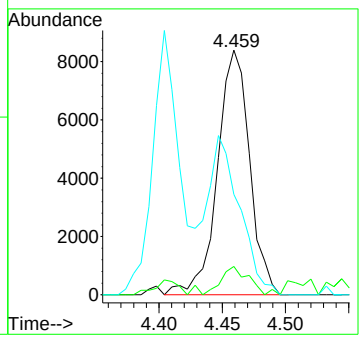


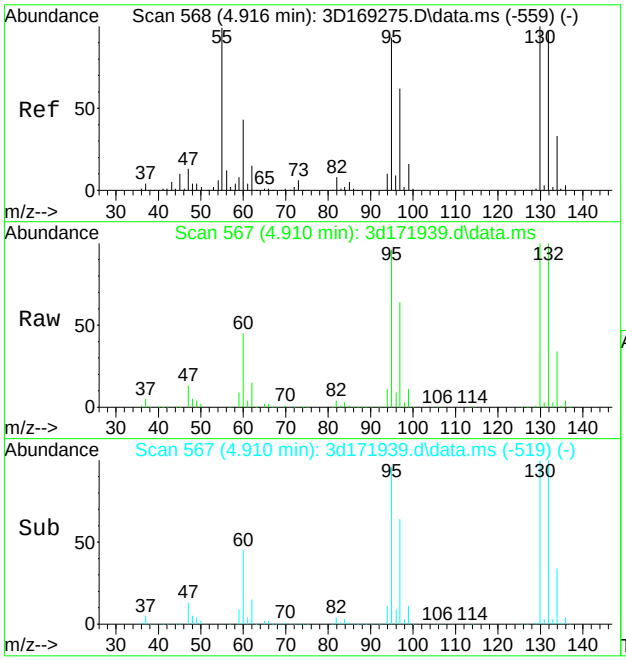


#60
1,2-dichloroethane
Concen: 1.78 ug/L
RT: 4.459 min Scan# 493
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 62 Resp: 14838

Ion	Ratio	Lower	Upper
62	100		
98	5.8	0.0	39.3
49	41.1	3.1	63.1

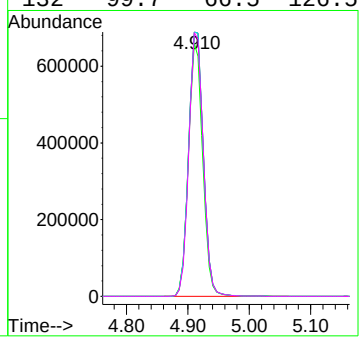


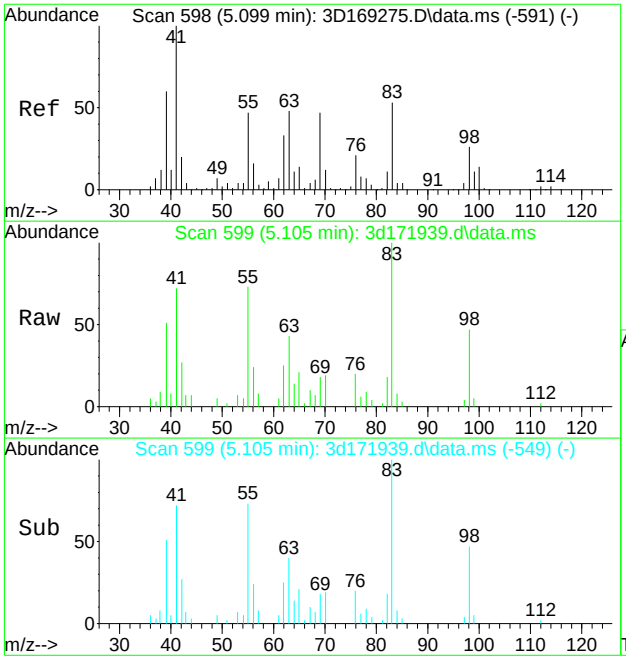


#61
trichloroethene
Concen: 203.55 ug/L
RT: 4.910 min Scan# 567
Delta R.T. -0.006 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion:130 Resp: 1150615

Ion	Ratio	Lower	Upper
130	100		
95	95.6	63.4	123.4
130	100.0	70.0	130.0
132	99.7	66.5	126.5

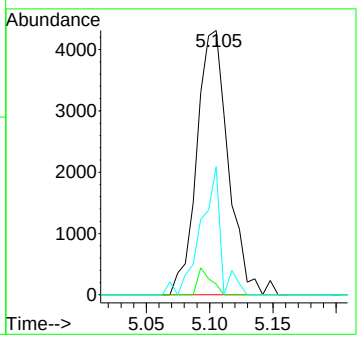


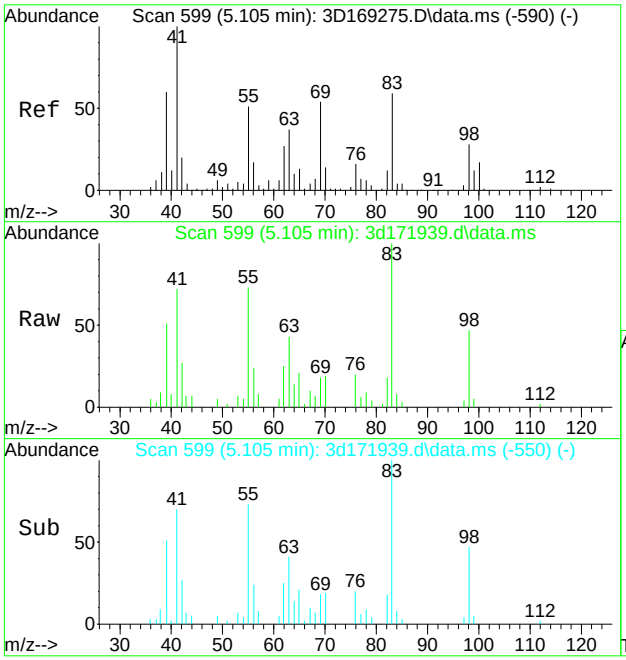


#66
1,2-dichloropropane
Concen: 1.27 ug/L
RT: 5.105 min Scan# 599
Delta R.T. 0.006 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 63 Resp: 7453

Ion	Ratio	Lower	Upper
63	100		
112	4.0	0.0	34.2
65	48.4	0.2	60.2

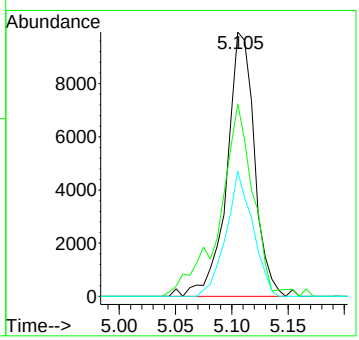


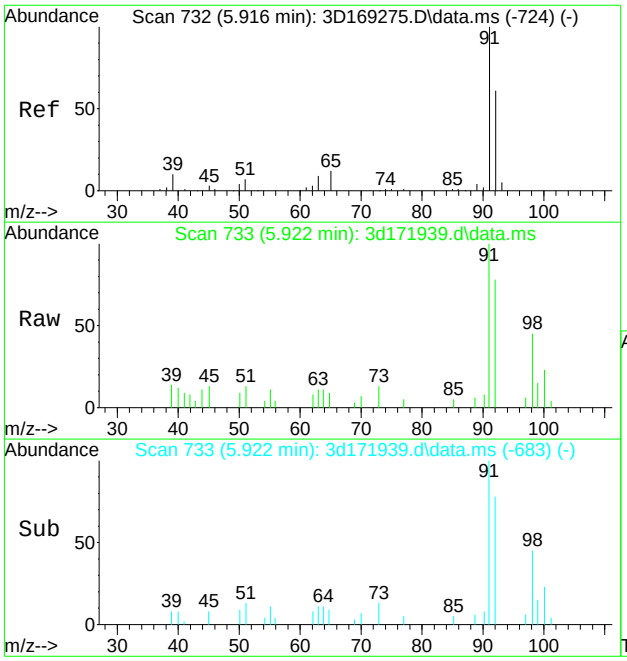


#68
methylcyclohexane
Concen: 1.78 ug/L
RT: 5.105 min Scan# 599
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 83 Resp: 16965

Ion	Ratio	Lower	Upper
83	100		
55	72.8	56.7	116.7
98	47.4	17.8	77.8

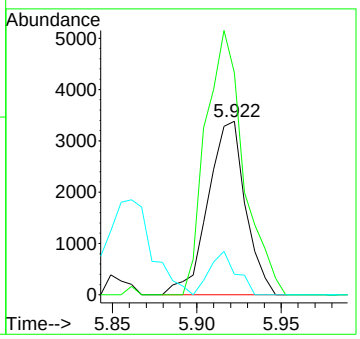


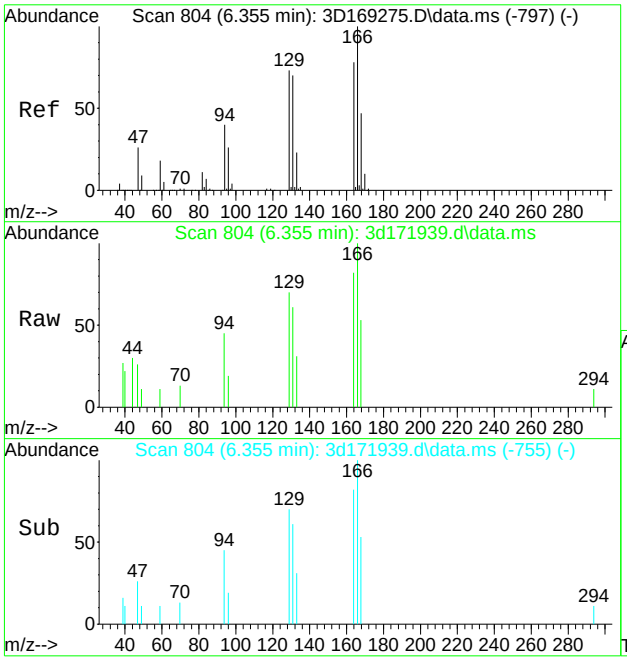


#76
toluene
Concen: 0.37 ug/L
RT: 5.922 min Scan# 733
Delta R.T. 0.006 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion: 92 Resp: 5231

Ion	Ratio	Lower	Upper
92	100		
91	128.0	143.0	183.0#
65	11.8	0.2	40.2

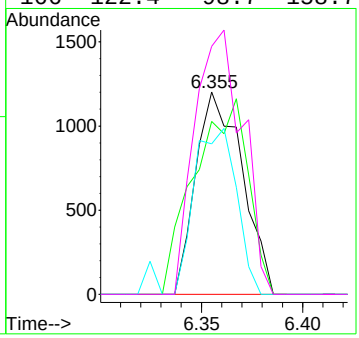


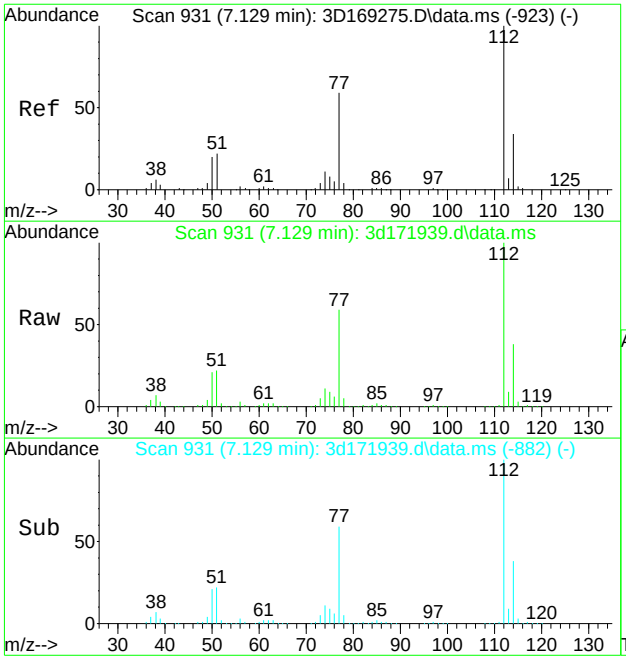


#80
tetrachloroethene
Concen: 0.40 ug/L
RT: 6.355 min Scan# 804
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion:164 Resp: 1921

Ion	Ratio	Lower	Upper
164	100		
129	85.5	63.5	123.5
131	74.3	59.6	119.6
166	122.4	98.7	158.7

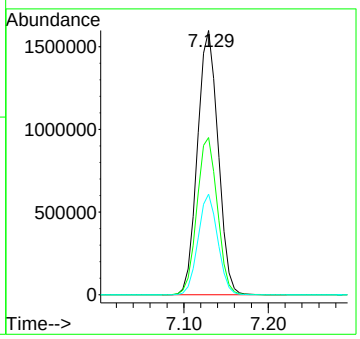


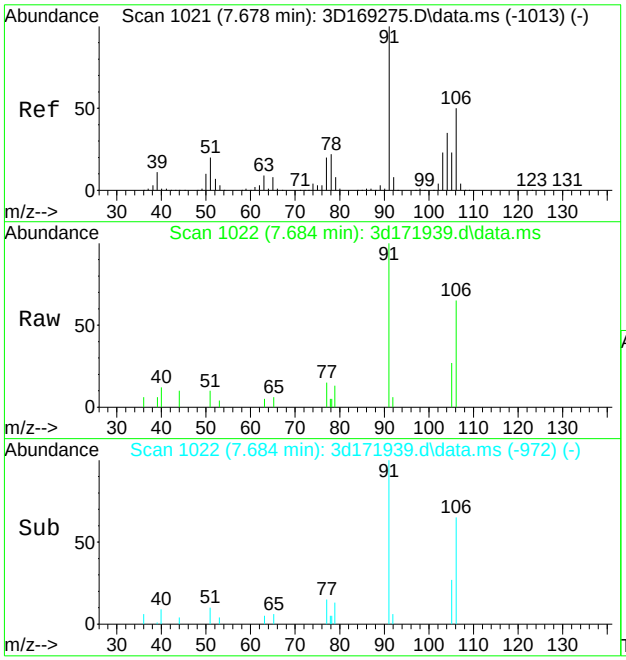


#87
chlorobenzene
Concen: 175.39 ug/L
RT: 7.129 min Scan# 931
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion:112 Resp: 2716881

Ion	Ratio	Lower	Upper
112	100		
77	59.5	29.0	89.0
114	38.0	4.0	64.0

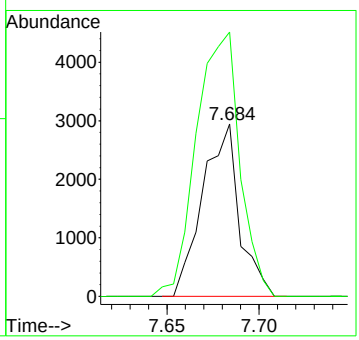


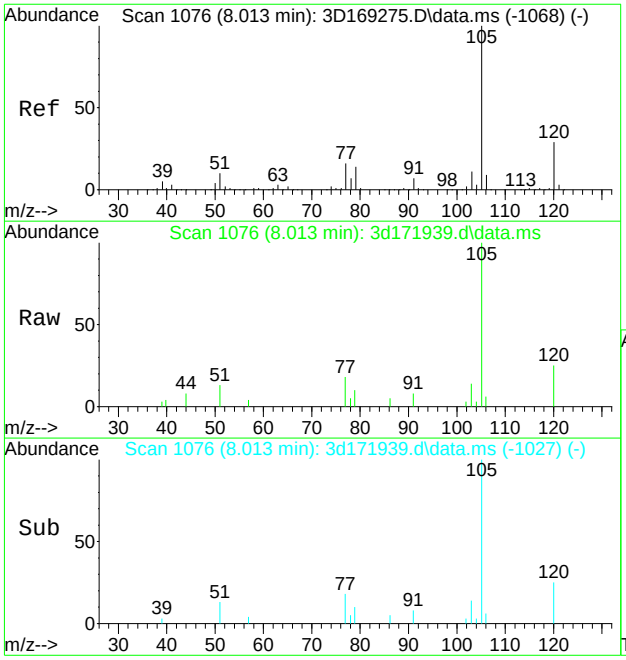


#91
o-xylene
Concen: 0.38 ug/L
RT: 7.684 min Scan# 1022
Delta R.T. 0.006 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion:106 Resp: 4081

Ion	Ratio	Lower	Upper
106	100		
91	153.5	168.5	228.5#

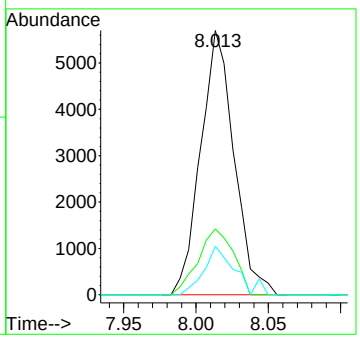


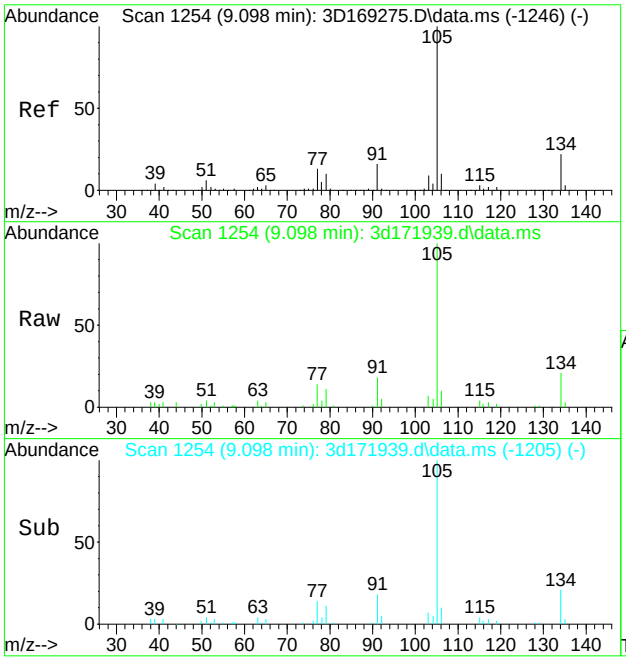


#96
isopropylbenzene
Concen: 0.32 ug/L
RT: 8.013 min Scan# 1076
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion:105 Resp: 9145

Ion	Ratio	Lower	Upper
105	100		
120	25.0	8.6	48.6
77	18.3	0.0	36.3

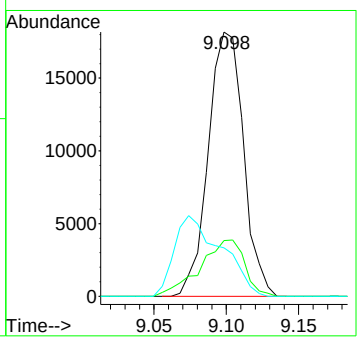


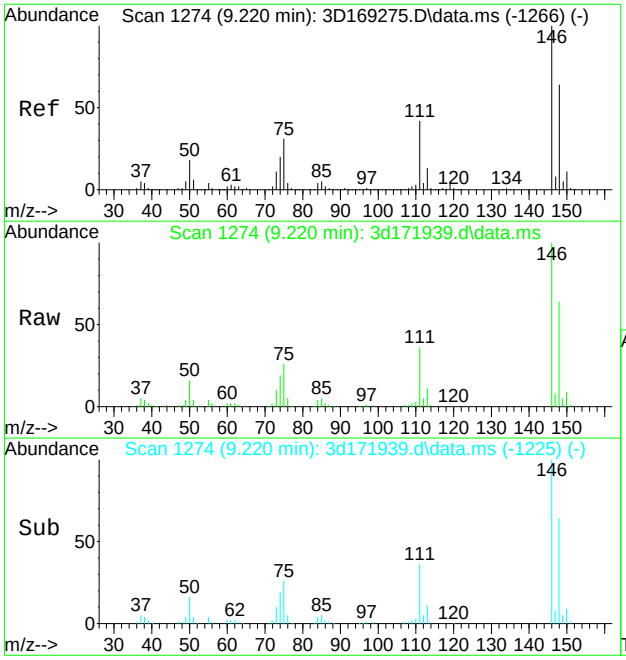


#110
sec-butylbenzene
Concen: 1.13 ug/L
RT: 9.098 min Scan# 1254
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion:105 Resp: 30843

Ion	Ratio	Lower	Upper
105	100		
134	21.1	0.0	51.6
91	18.3	0.0	46.0

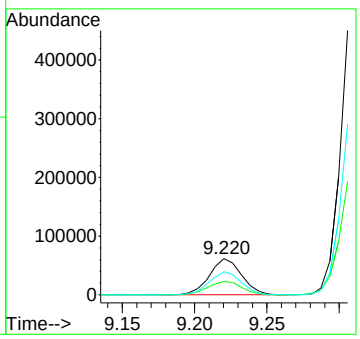


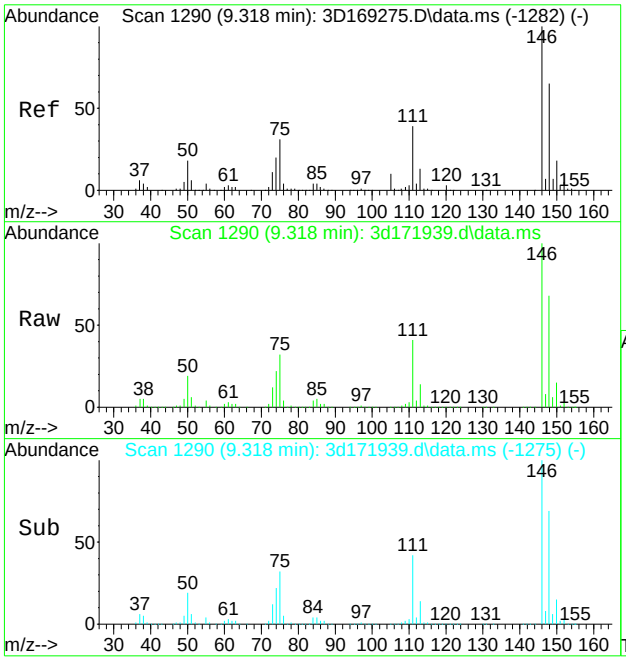


#111
1,3-dichlorobenzene
Concen: 7.55 ug/L
RT: 9.220 min Scan# 1274
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion:146 Resp: 94976

Ion	Ratio	Lower	Upper
146	100		
111	36.3	12.1	72.1
148	63.6	34.4	94.4

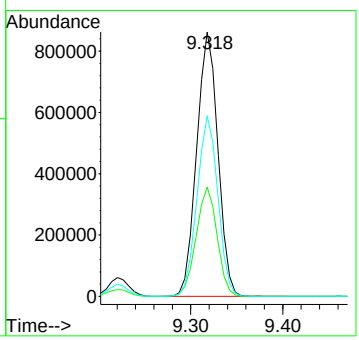


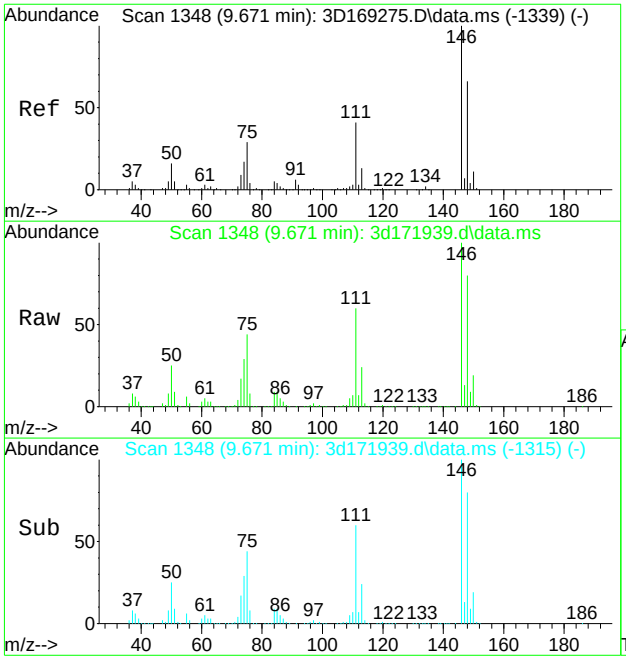


#113
1,4-dichlorobenzene
Concen: 112.02 ug/L
RT: 9.318 min Scan# 1290
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion:146 Resp: 1384848

Ion	Ratio	Lower	Upper
146	100		
111	41.3	8.7	68.7
148	68.2	35.3	95.3

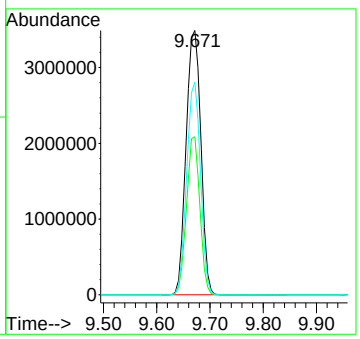


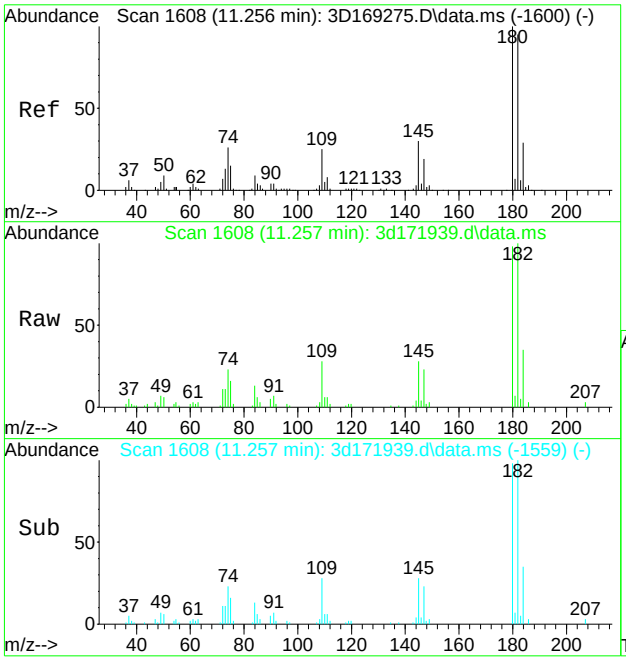


#116
1,2-dichlorobenzene
Concen: 563.78 ug/L
RT: 9.671 min Scan# 1348
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion:146 Resp: 6749656

Ion	Ratio	Lower	Upper
146	100		
111	59.8	11.3	71.3
148	80.5	35.9	95.9

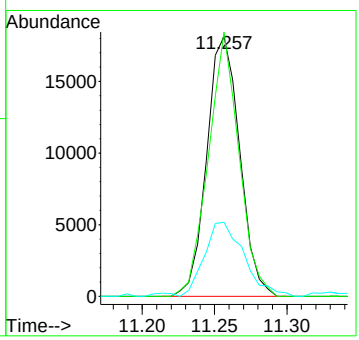


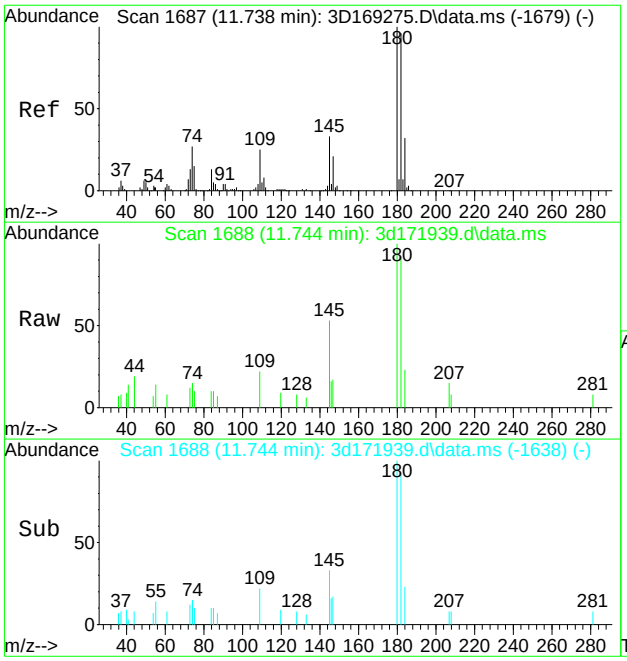


#121
1,2,4-trichlorobenzene
Concen: 3.56 ug/L
RT: 11.257 min Scan# 1608
Delta R.T. 0.000 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion:180 Resp: 28768

Ion	Ratio	Lower	Upper
180	100		
182	101.8	64.8	124.8
145	27.2	0.0	59.5

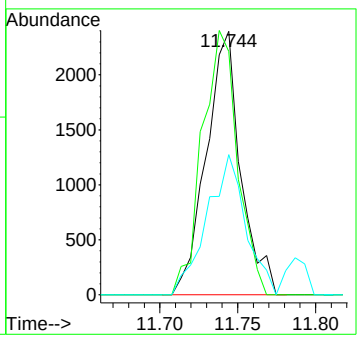




#124
1,2,3-trichlorobenzene
Concen: 0.49 ug/L
RT: 11.744 min Scan# 1688
Delta R.T. 0.006 min
Lab File: 3d171939.d
Acq: 16 Dec 2021 9:38 pm

Tgt Ion:180 Resp: 3676

Ion	Ratio	Lower	Upper
180	100		
182	92.4	65.8	125.8
145	53.2	2.9	62.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193038.d
Acq On : 17 Dec 2021 4:27 pm
Operator : brittank
Sample : JD36624-5 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,10
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 08:09:20 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

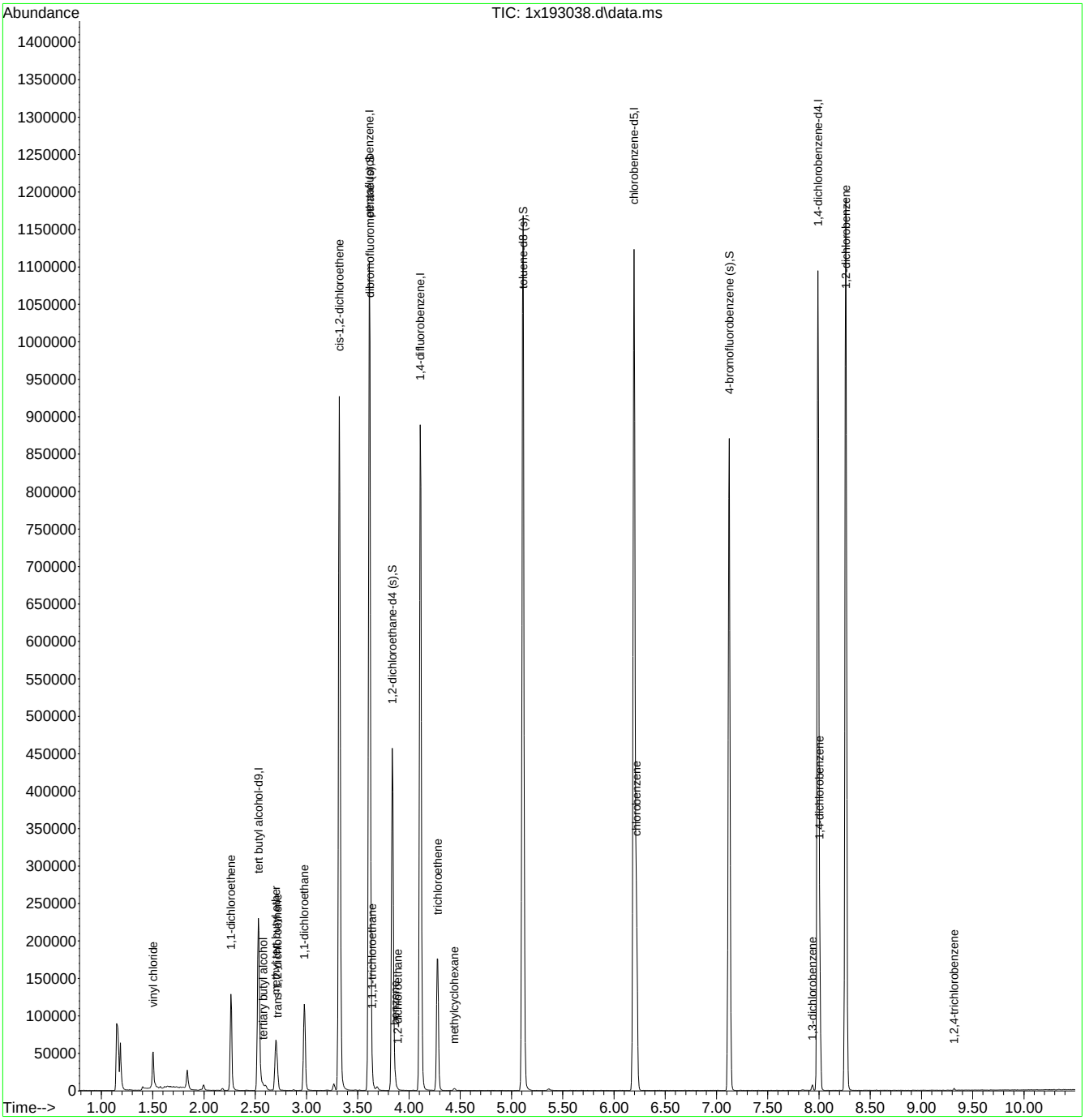
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.530	65	174679	500.00	ug/L	-0.02
5) pentafluorobenzene	3.613	168	346266	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.110	114	498584	50.00	ug/L	0.00
73) chlorobenzene-d5	6.196	117	461247	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.989	152	203033	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.619	113	176226	50.47	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.94%			
53) 1,2-dichloroethane-d4 (s)	3.837	65	219049	51.35	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.70%			
74) toluene-d8 (s)	5.113	98	561207	50.04	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.08%			
98) 4-bromofluorobenzene (s)	7.125	95	205202	50.85	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.70%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	2.578	59	2869	11.46	ug/L	58
9) vinyl chloride	1.505	62	21998	8.40	ug/L	98
16) 1,1-dichloroethene	2.263	96	28663	16.01	ug/L	90
24) methyl tert butyl ether	2.701	73	42228	8.12	ug/L	98
26) trans-1,2-dichloroethene	2.717	96	2717	1.43	ug/L	94
30) 1,1-dichloroethane	2.978	63	73050	19.87	ug/L	99
36) cis-1,2-dichloroethene	3.320	96	249746	122.51	ug/L	92
45) 1,1,1-trichloroethane	3.640	97	2663	0.80	ug/L #	1
57) benzene	3.864	78	7240	1.04	ug/L	99
60) 1,2-dichloroethane	3.891	62	973	0.31	ug/L	84
61) trichloroethene	4.280	130	42518	18.24	ug/L	99
68) methylcyclohexane	4.440	83	777	0.23	ug/L #	71
86) chlorobenzene	6.218	112	94784	19.27	ug/L	97
110) 1,3-dichlorobenzene	7.936	146	2294	0.58	ug/L	92
112) 1,4-dichlorobenzene	8.005	146	45743	11.18	ug/L	96
113) 1,2-dichlorobenzene	8.262	146	339225	90.24	ug/L	99
120) 1,2,4-trichlorobenzene	9.318	180	662	0.29	ug/L	86

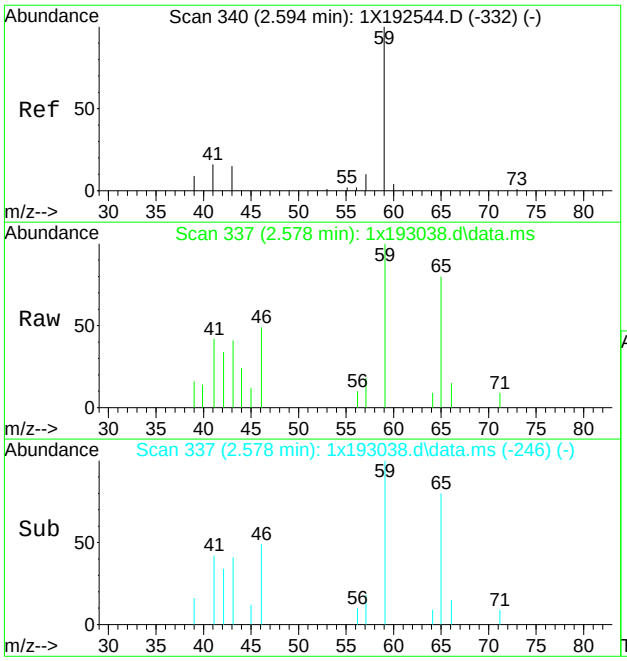
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193038.d
Acq On : 17 Dec 2021 4:27 pm
Operator : brittank
Sample : JD36624-5 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,10
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 08:09:20 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

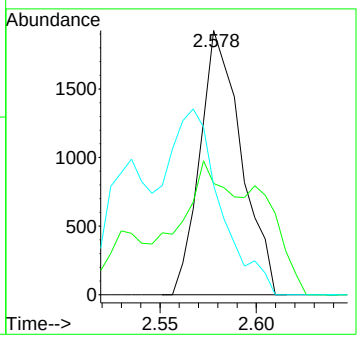


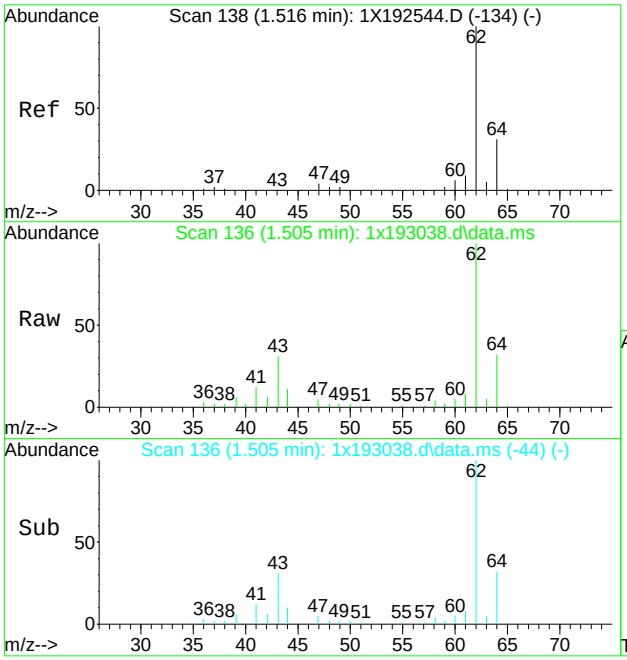


#3
tertiary butyl alcohol
Concen: 11.46 ug/L
RT: 2.578 min Scan# 337
Delta R.T. -0.016 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion: 59 Resp: 2869

Ion	Ratio	Lower	Upper
59	100		
41	25.4	0.0	46.0
43	41.4	0.0	45.1

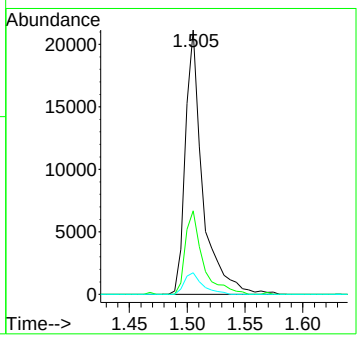


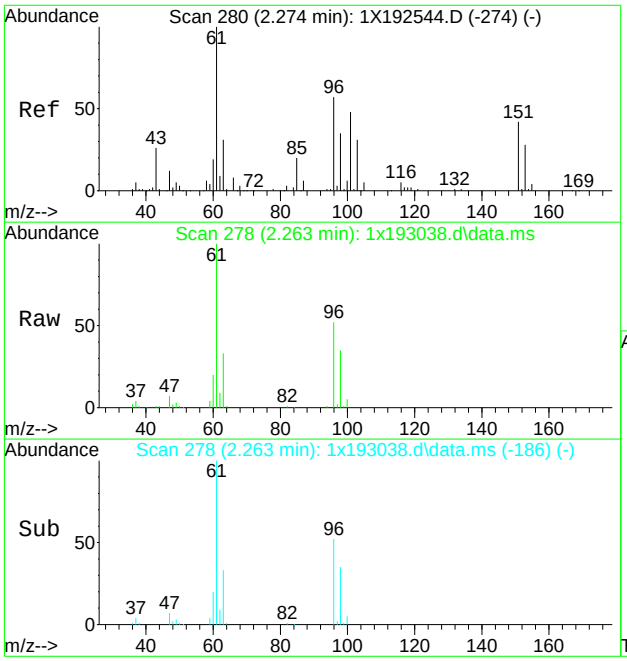


#9
vinyl chloride
Concen: 8.40 ug/L
RT: 1.505 min Scan# 136
Delta R.T. -0.011 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion: 62 Resp: 21998

Ion	Ratio	Lower	Upper
62	100		
64	31.6	0.5	60.5
61	8.2	0.0	38.7

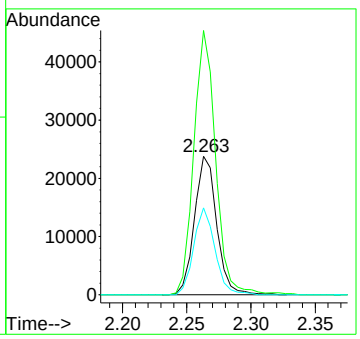


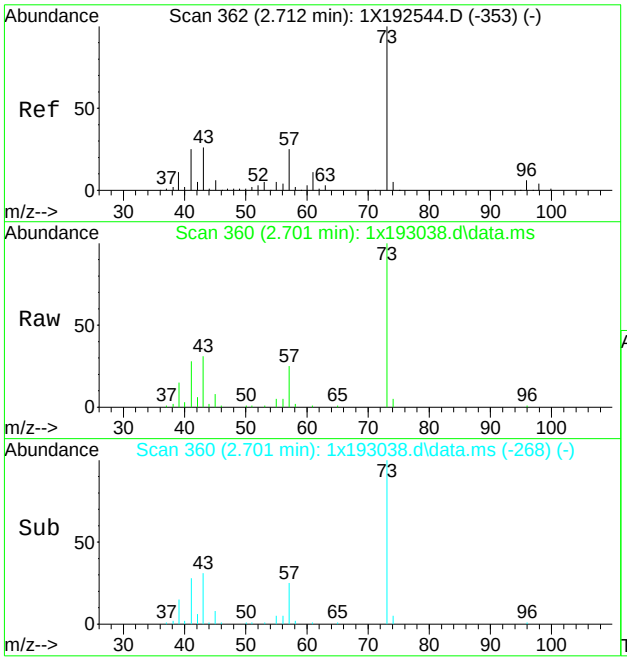


#16
1,1-dichloroethene
Concen: 16.01 ug/L
RT: 2.263 min Scan# 278
Delta R.T. -0.011 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion: 96 Resp: 28663

Ion	Ratio	Lower	Upper
96	100		
61	190.8	146.8	206.8
63	62.7	25.5	85.5

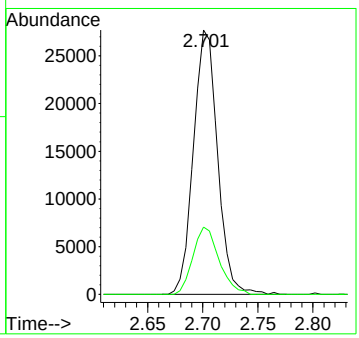


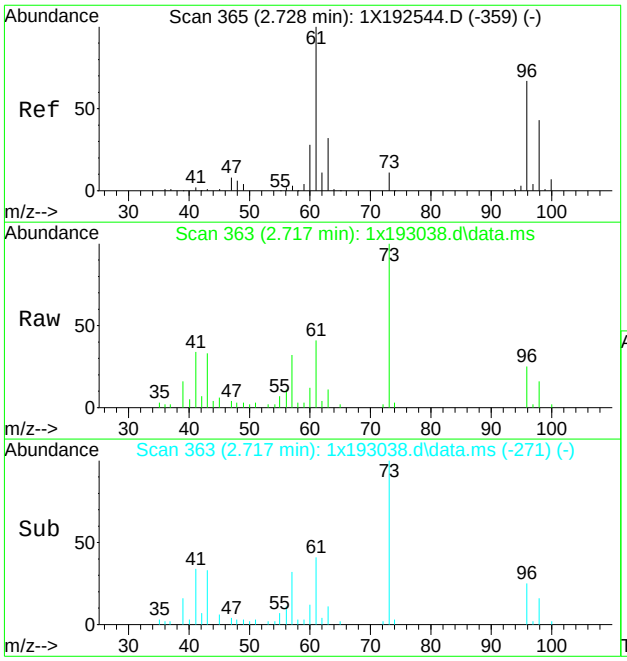


#24
methyl tert butyl ether
Concen: 8.12 ug/L
RT: 2.701 min Scan# 360
Delta R.T. -0.011 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion: 73 Resp: 42228

Ion	Ratio	Lower	Upper
73	100		
57	25.4	0.0	54.6

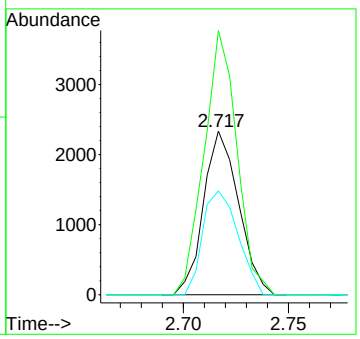


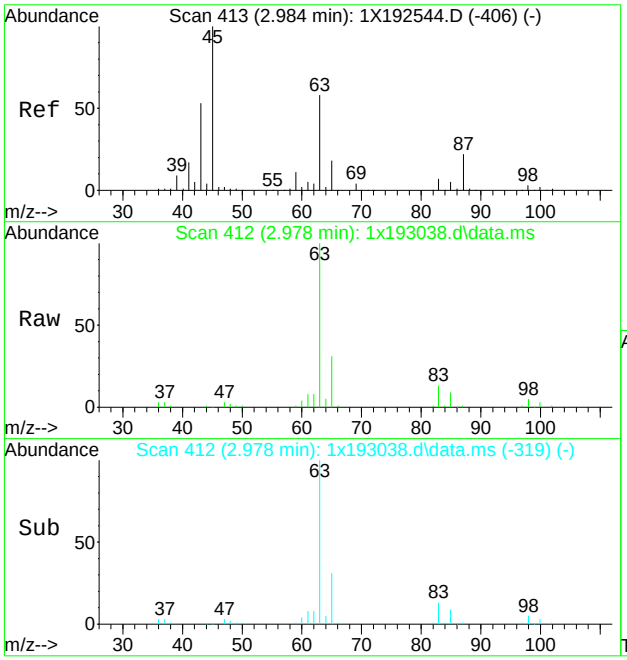


#26
trans-1,2-dichloroethene
Concen: 1.43 ug/L
RT: 2.717 min Scan# 363
Delta R.T. -0.011 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion: 96 Resp: 2717

Ion	Ratio	Lower	Upper
96	100		
61	161.6	120.2	180.2
98	63.7	34.0	94.0

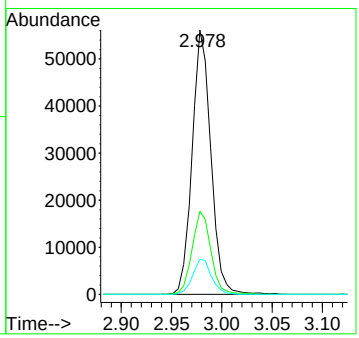


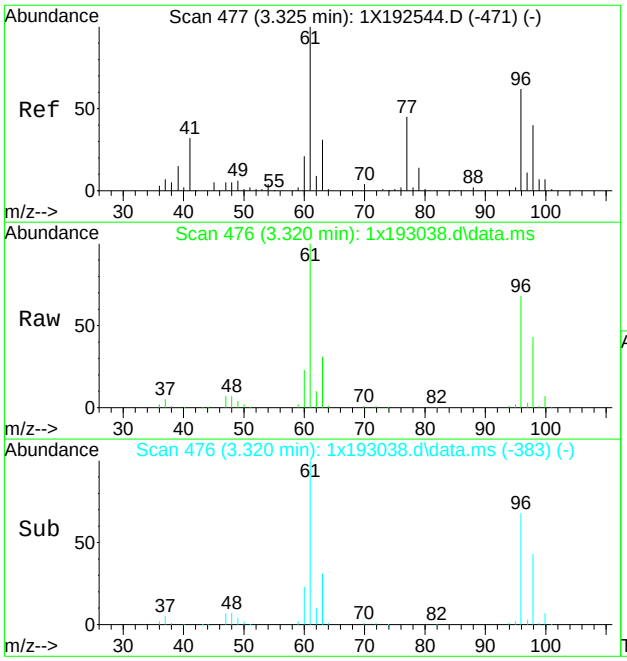


#30
1,1-dichloroethane
Concen: 19.87 ug/L
RT: 2.978 min Scan# 412
Delta R.T. -0.006 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion: 63 Resp: 73050

Ion	Ratio	Lower	Upper
63	100		
65	31.3	0.9	60.9
83	13.3	0.0	42.5

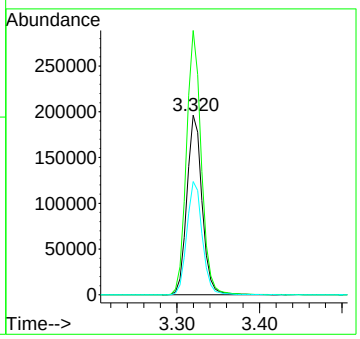


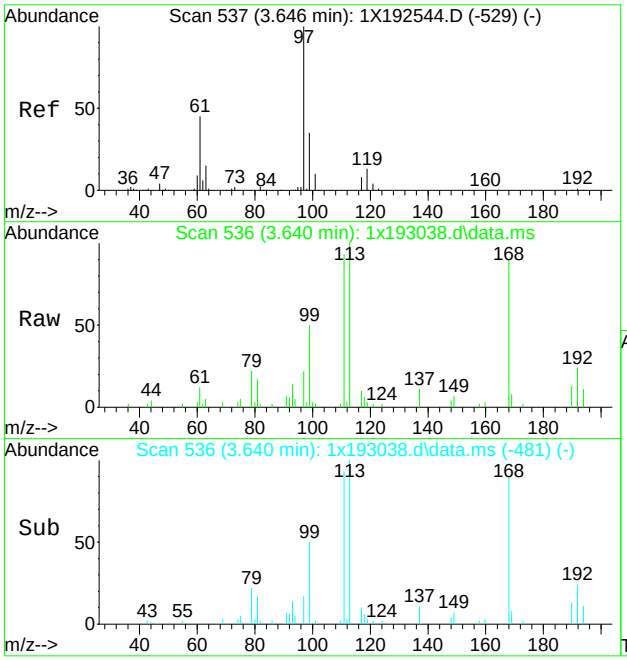


#36
cis-1,2-dichloroethene
Concen: 122.51 ug/L
RT: 3.320 min Scan# 476
Delta R.T. -0.006 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion: 96 Resp: 249746

Ion	Ratio	Lower	Upper
96	100		
61	147.1	131.2	191.2
98	63.1	34.7	94.7

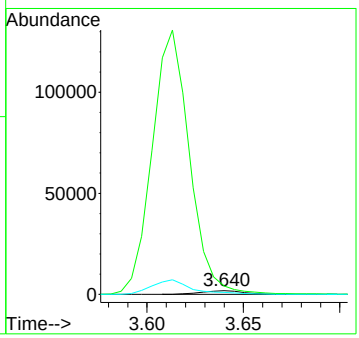


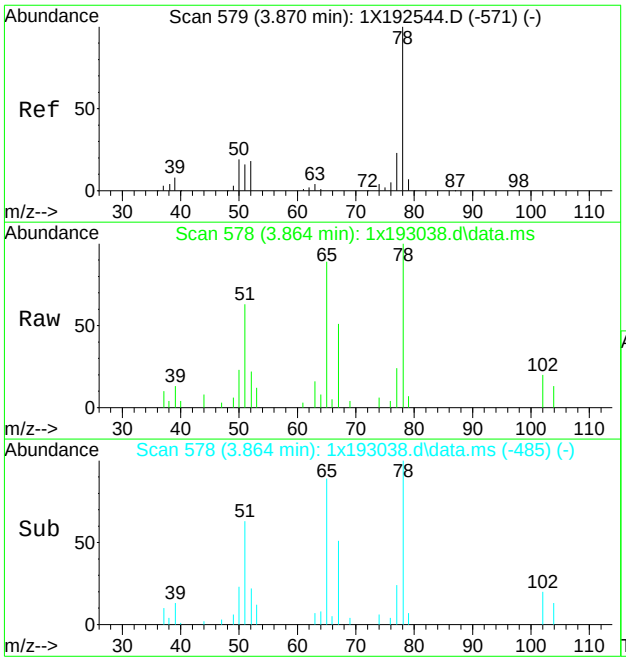


#45
1,1,1-trichloroethane
Concen: 0.80 ug/L
RT: 3.640 min Scan# 536
Delta R.T. -0.006 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion: 97 Resp: 2663

Ion	Ratio	Lower	Upper
97	100		
99	208.6	37.2	97.2#
61	53.6	16.0	76.0

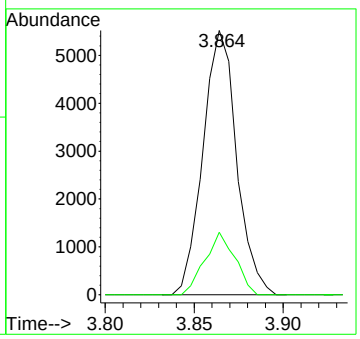


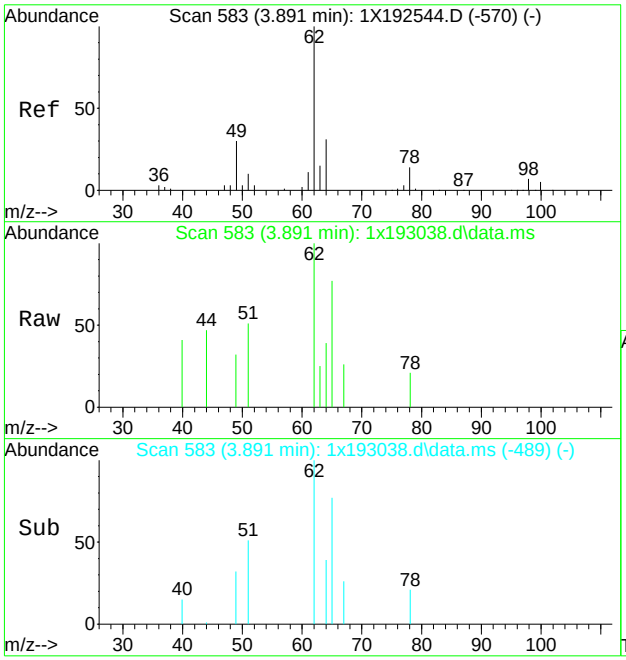


#57
benzene
Concen: 1.04 ug/L
RT: 3.864 min Scan# 578
Delta R.T. -0.006 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion: 78 Resp: 7240

Ion	Ratio	Lower	Upper
78	100		
77	23.7	0.0	53.3

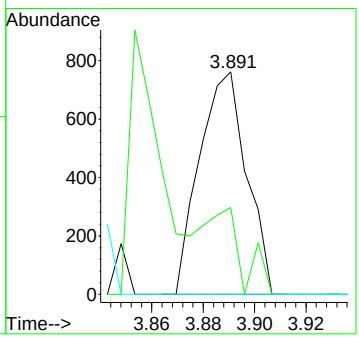


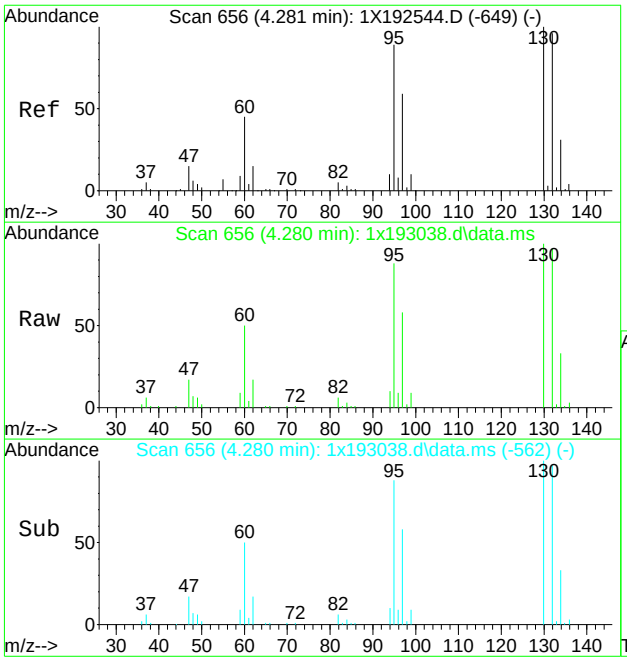


#60
1,2-dichloroethane
Concen: 0.31 ug/L
RT: 3.891 min Scan# 583
Delta R.T. -0.000 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion: 62 Resp: 973

Ion	Ratio	Lower	Upper
62	100		
64	39.1	1.2	61.2
98	0.0	0.0	37.4

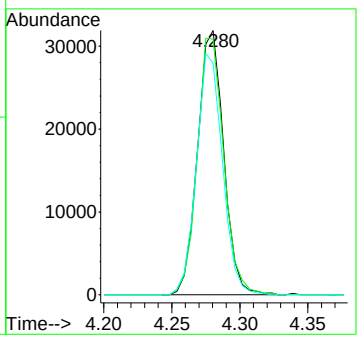


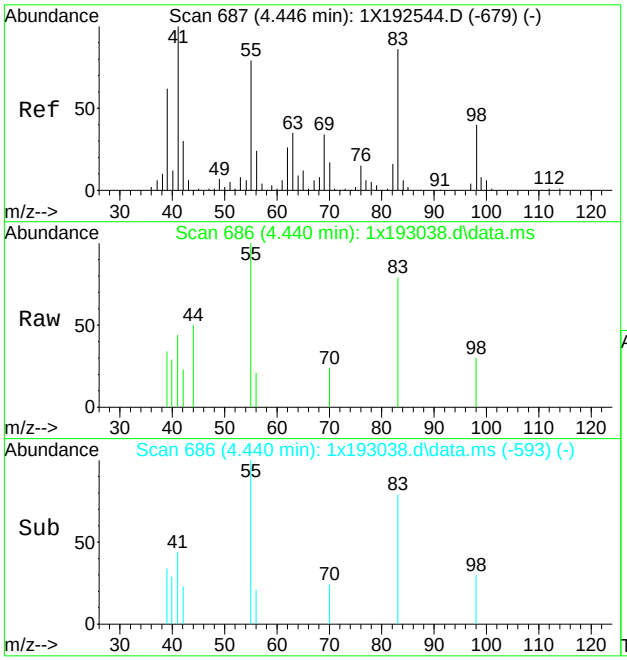


#61
trichloroethene
Concen: 18.24 ug/L
RT: 4.280 min Scan# 656
Delta R.T. -0.000 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion:130 Resp: 42518

Ion	Ratio	Lower	Upper
130	100		
132	96.6	65.5	125.5
95	87.5	58.7	118.7

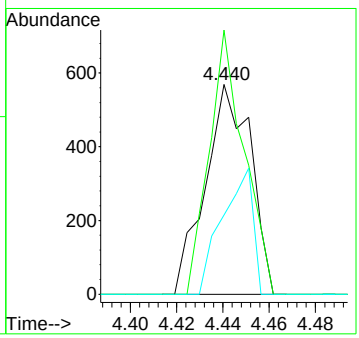


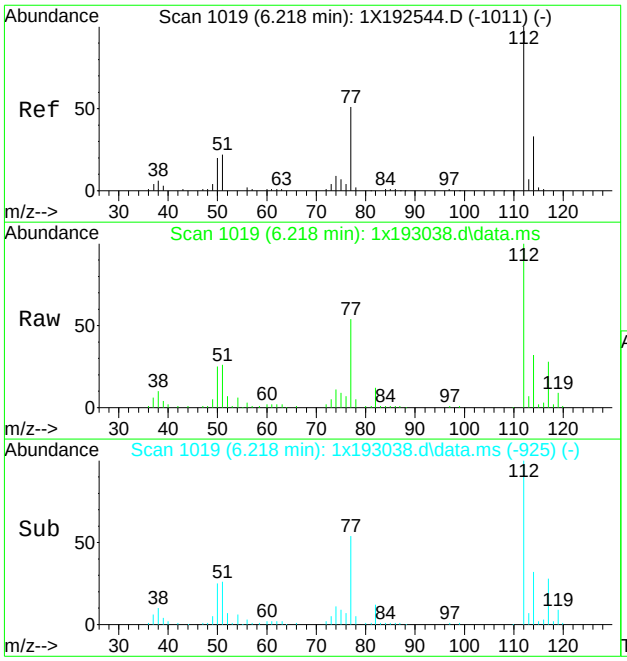


#68
methylcyclohexane
Concen: 0.23 ug/L
RT: 4.440 min Scan# 686
Delta R.T. -0.006 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion: 83 Resp: 777

Ion	Ratio	Lower	Upper
83	100		
55	126.0	61.4	121.4#
98	37.8	16.6	76.6

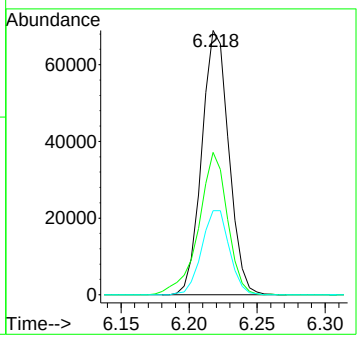


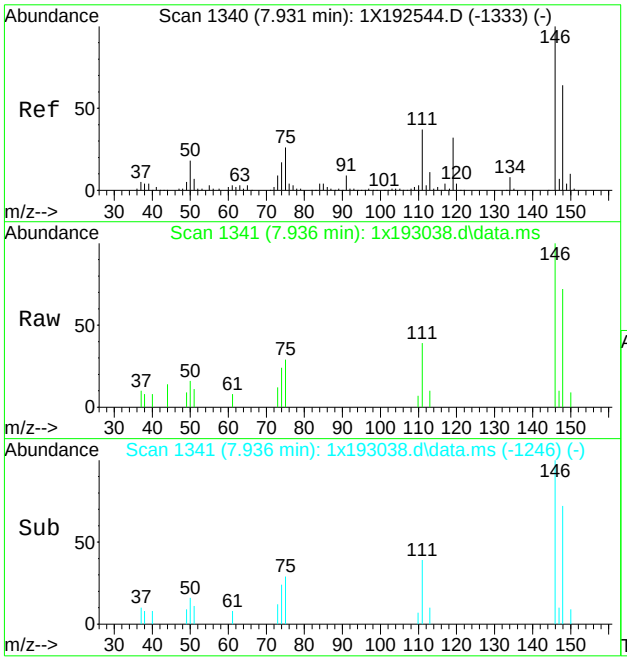


#86
chlorobenzene
Concen: 19.27 ug/L
RT: 6.218 min Scan# 1019
Delta R.T. -0.000 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion:112 Resp: 94784

Ion	Ratio	Lower	Upper
112	100		
77	53.9	20.6	80.6
114	31.8	2.6	62.6

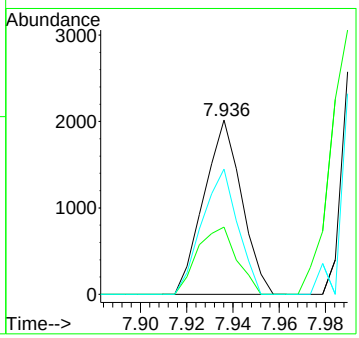


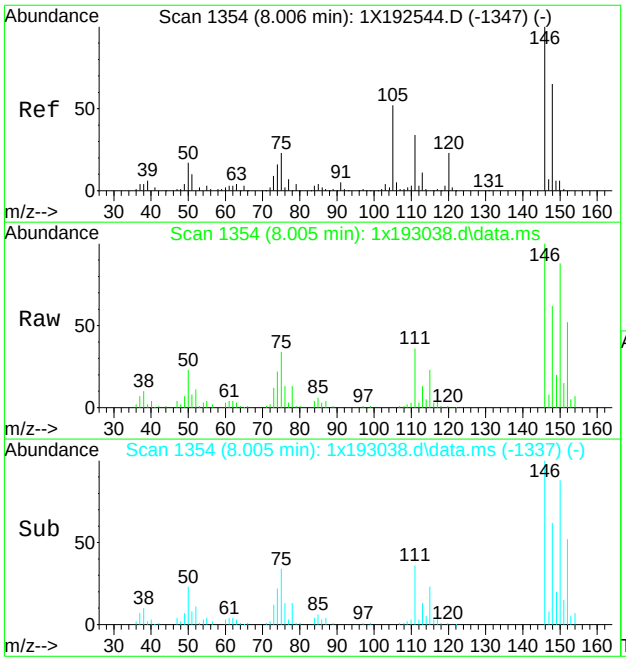


#110
1,3-dichlorobenzene
Concen: 0.58 ug/L
RT: 7.936 min Scan# 1341
Delta R.T. 0.005 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion:146 Resp: 2294

Ion	Ratio	Lower	Upper
146	100		
111	38.7	6.7	66.7
148	71.9	34.1	94.1

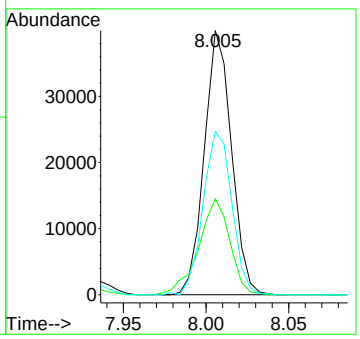


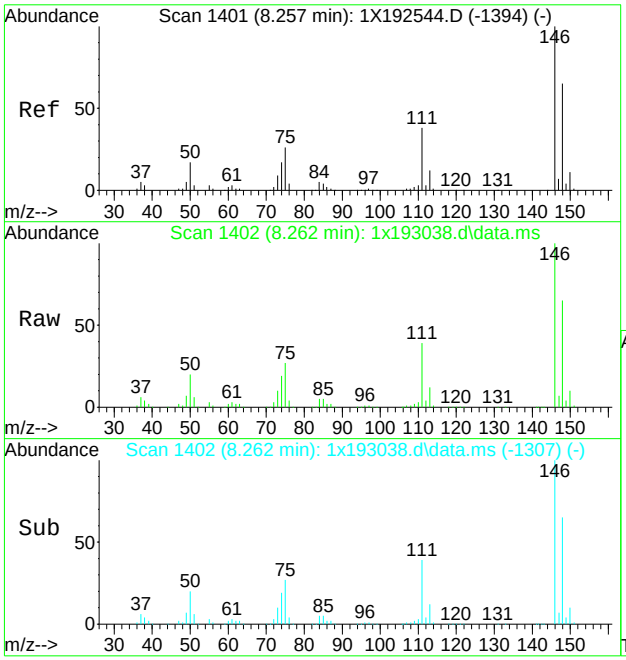


#112
1,4-dichlorobenzene
Concen: 11.18 ug/L
RT: 8.005 min Scan# 1354
Delta R.T. -0.000 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion:146 Resp: 45743

Ion	Ratio	Lower	Upper
146	100		
111	36.4	4.4	64.4
148	61.8	34.6	94.6

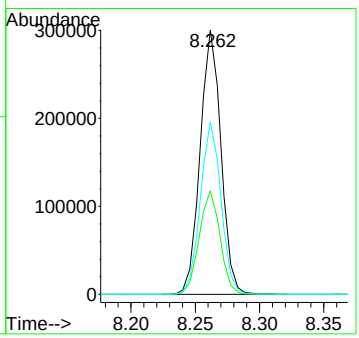


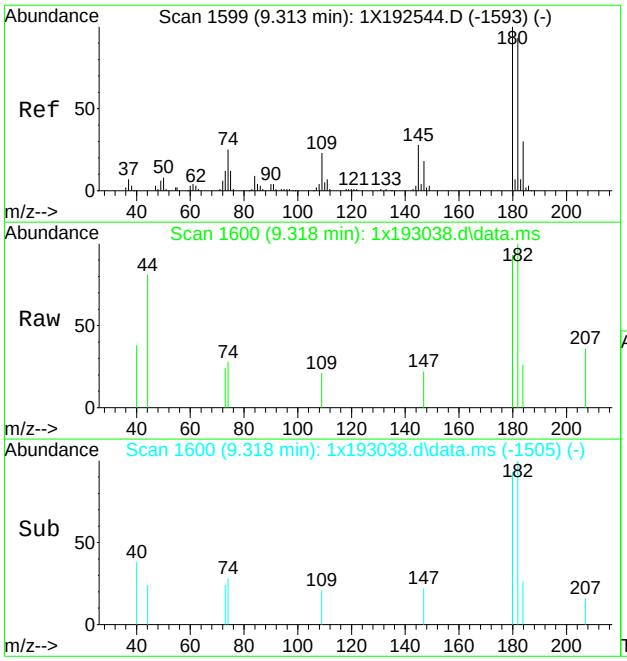


#113
1,2-dichlorobenzene
Concen: 90.24 ug/L
RT: 8.262 min Scan# 1402
Delta R.T. 0.005 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion:146 Resp: 339225

Ion	Ratio	Lower	Upper
146	100		
111	39.2	8.0	68.0
148	65.2	34.7	94.7

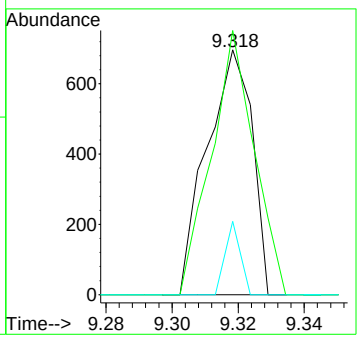




#120
1,2,4-trichlorobenzene
Concen: 0.29 ug/L
RT: 9.318 min Scan# 1600
Delta R.T. 0.005 min
Lab File: 1x193038.d
Acq: 17 Dec 2021 4:27 pm

Tgt Ion:180 Resp: 662

Ion	Ratio	Lower	Upper
180	100		
182	107.9	63.3	123.3
74	30.0	0.0	55.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-18-2021\v3d7294-rest of batch\
Data File : 3d171940.d
Acq On : 16 Dec 2021 10:05 pm
Operator : nicoleh
Sample : JD36624-5 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 18 03:28:24 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

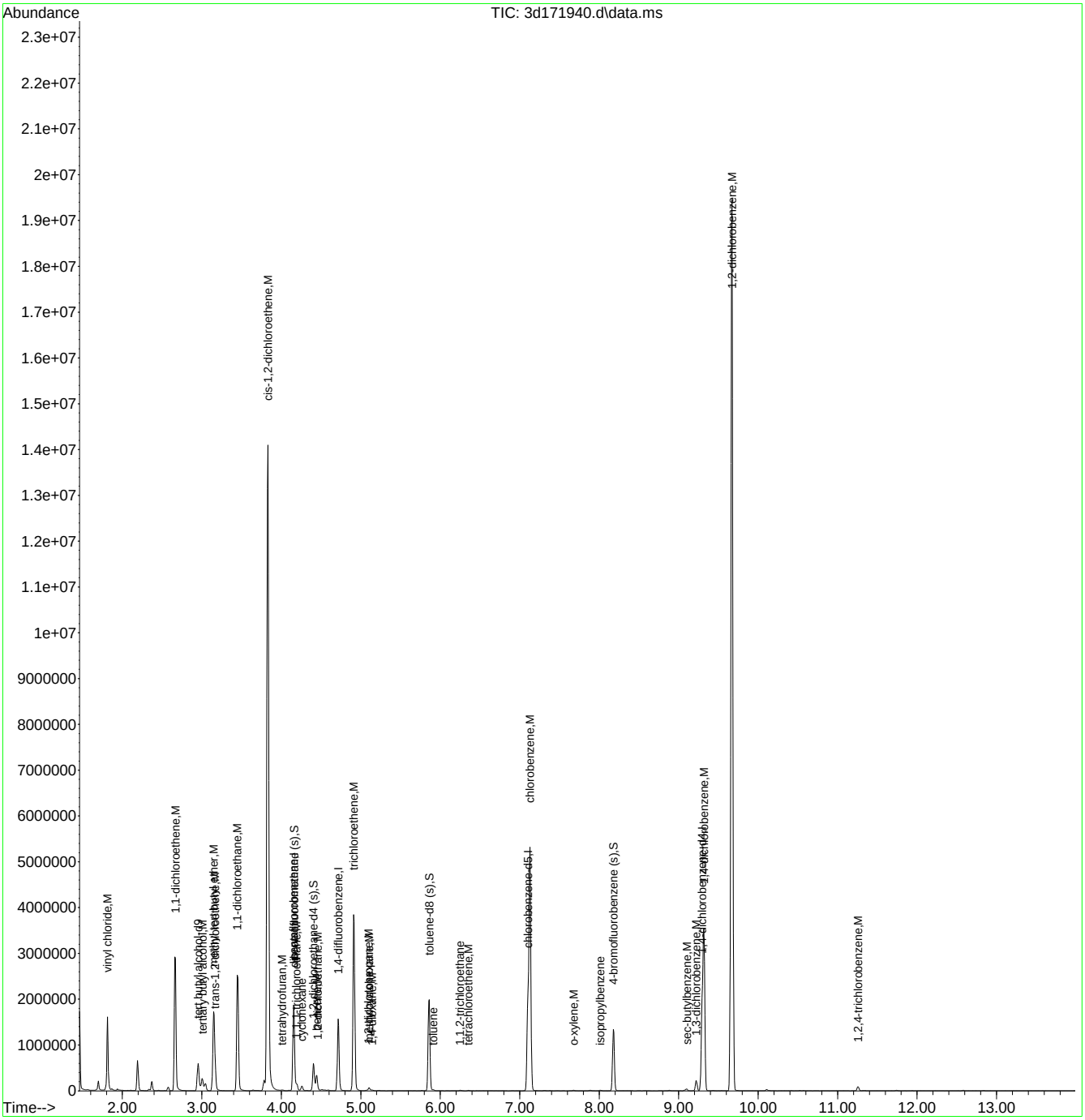
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	2.953	65	545589	500.00	ug/L		0.00
5) pentafluorobenzene	4.154	168	730054	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.715	114	1075288	50.00	ug/L		0.00
74) chlorobenzene-d5	7.105	117	946517	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	9.293	152	463969	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	4.160	113	281724	44.09	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 88.18%				
53) 1,2-dichloroethane-d4 (s)	4.404	65	315231	44.47	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 88.94%				
75) toluene-d8 (s)	5.861	98	1203911	50.17	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.34%				
99) 4-bromofluorobenzene (s)	8.178	95	453542	48.79	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.58%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.008	59	160910	109.92	ug/L		52
4) 1,4-dioxane	5.142	88	14338	118.80	ug/L		85
9) vinyl chloride	1.813	62	729267	77.06	ug/L		98
18) 1,1-dichloroethene	2.666	96	925749	204.22	ug/L		84
25) methyl tert butyl ether	3.148	73	1312887	70.71	ug/L		100
26) trans-1,2-dichloroethene	3.166	96	84562	16.20	ug/L		92
29) 1,1-dichloroethane	3.447	63	1864483	182.17	ug/L		95
37) cis-1,2-dichloroethene	3.831	96	5155133	837.03	ug/L	#	71
41) tetrahydrofuran	4.008	42	6659	1.78	ug/L		91
46) 1,1,1-trichloroethane	4.191	97	69250	7.74	ug/L		96
47) cyclohexane	4.258	84	32071	3.27	ug/L	#	41
56) benzene	4.447	78	242798	11.19	ug/L		97
60) 1,2-dichloroethane	4.459	62	14783	1.75	ug/L		72
61) trichloroethene	4.910	130	1145828	199.52	ug/L		99
66) 1,2-dichloropropane	5.099	63	6928	1.16	ug/L		97
68) methylcyclohexane	5.105	83	15230	1.58	ug/L		85
76) toluene	5.910	92	4652	0.32	ug/L	#	74
79) 1,1,2-trichloroethane	6.245	83	2265	0.50	ug/L		87
80) tetrachloroethene	6.355	164	1750	0.36	ug/L	#	80
87) chlorobenzene	7.129	112	2650073	170.31	ug/L		96
91) o-xylene	7.678	106	3679	0.34	ug/L		98
96) isopropylbenzene	8.013	105	8303	0.29	ug/L		83
110) sec-butylbenzene	9.104	105	29026	1.05	ug/L		97
111) 1,3-dichlorobenzene	9.220	146	94979	7.44	ug/L		95
113) 1,4-dichlorobenzene	9.318	146	1354605	107.93	ug/L		96
116) 1,2-dichlorobenzene	9.671	146	6683957	549.88	ug/L		78
121) 1,2,4-trichlorobenzene	11.256	180	30050	3.66	ug/L		97

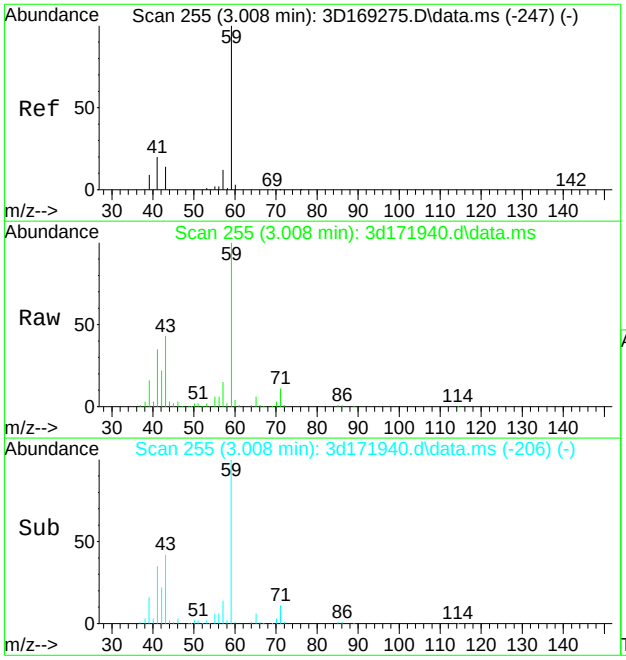
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-18-2021\v3d7294-rest of batch\
Data File : 3d171940.d
Acq On : 16 Dec 2021 10:05 pm
Operator : nicoleh
Sample : JD36624-5 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 18 03:28:24 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

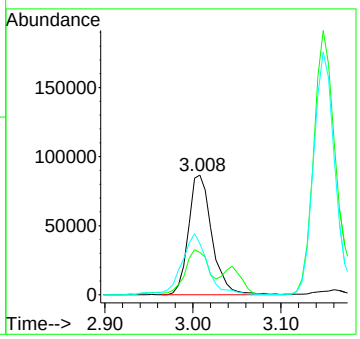


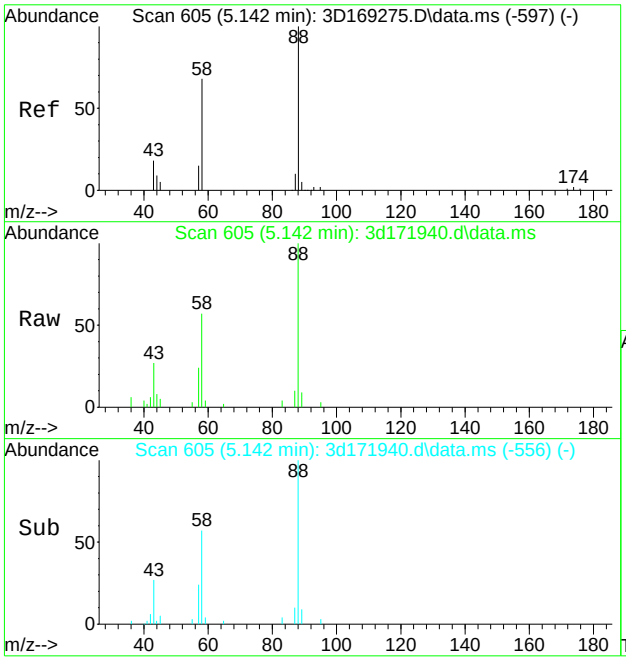


#2
tertiary butyl alcohol
Concen: 109.92 ug/L
RT: 3.008 min Scan# 255
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 59 Resp: 160910

Ion	Ratio	Lower	Upper
59	100		
41	35.0	0.0	49.9
43	42.3	0.0	44.1

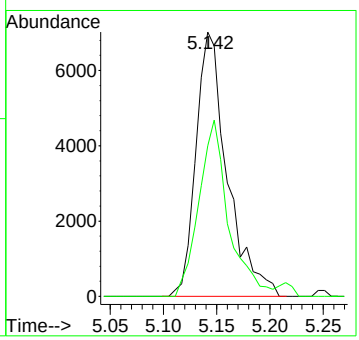


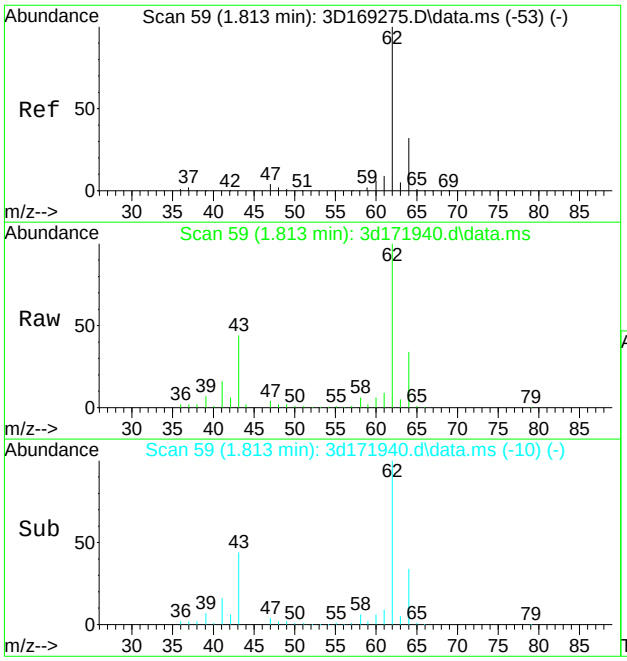


#4
1,4-dioxane
Concen: 118.80 ug/L
RT: 5.142 min Scan# 605
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 88 Resp: 14338

Ion	Ratio	Lower	Upper
88	100		
58	56.9	38.9	98.9

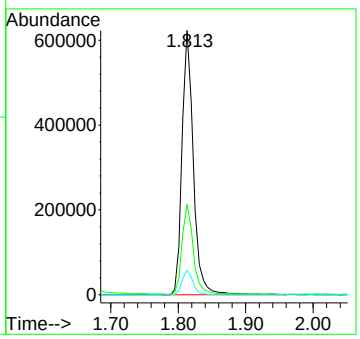


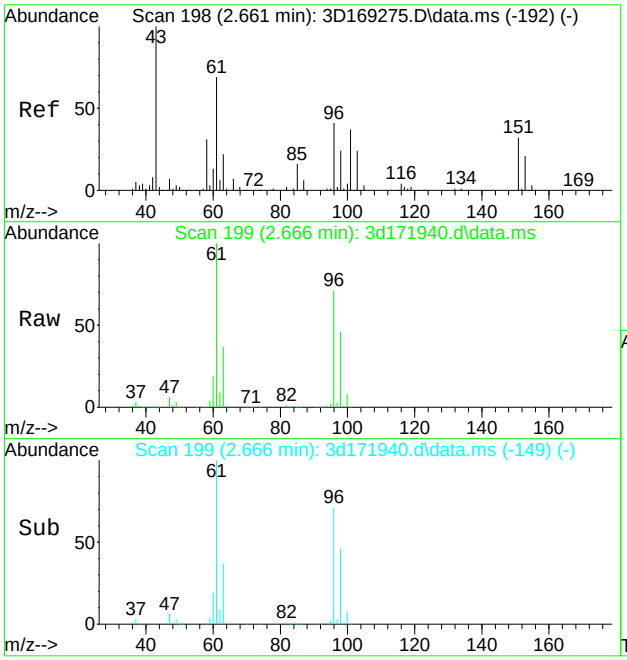


#9
vinyl chloride
Concen: 77.06 ug/L
RT: 1.813 min Scan# 59
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 62 Resp: 729267

Ion	Ratio	Lower	Upper
62	100		
64	34.0	2.4	62.4
61	9.3	0.0	39.2

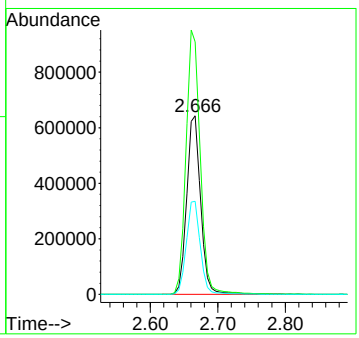


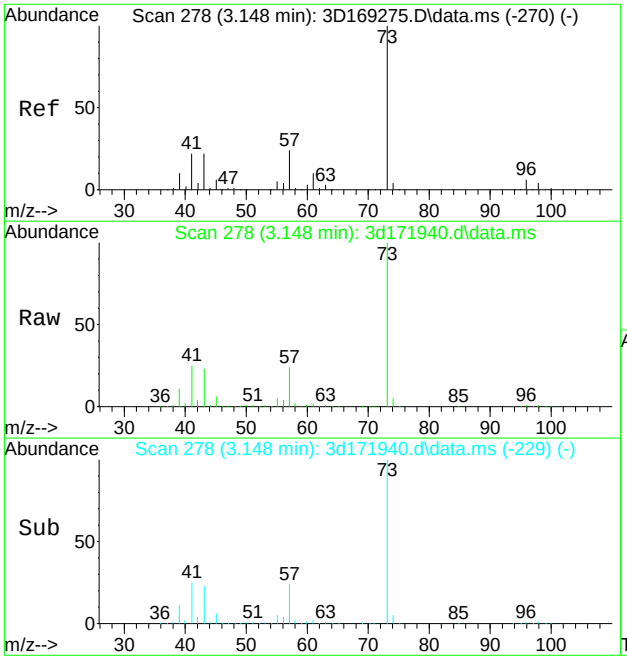


#18
1,1-dichloroethene
Concen: 204.22 ug/L
RT: 2.666 min Scan# 199
Delta R.T. 0.006 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 96 Resp: 925749

Ion	Ratio	Lower	Upper
96	100		
61	141.5	139.8	199.8
63	52.1	23.5	83.5

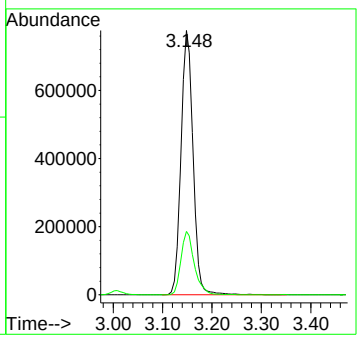


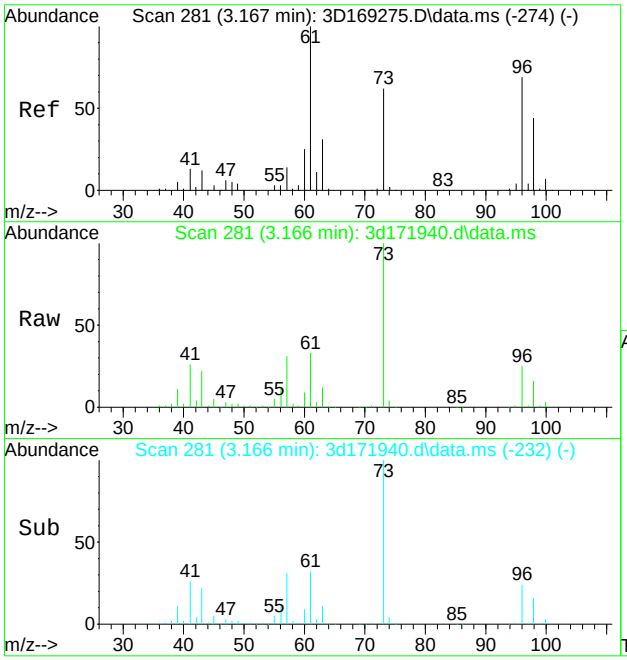


#25
methyl tert butyl ether
Concen: 70.71 ug/L
RT: 3.148 min Scan# 278
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 73 Resp: 1312887

Ion	Ratio	Lower	Upper
73	100		
57	24.0	0.0	224.2

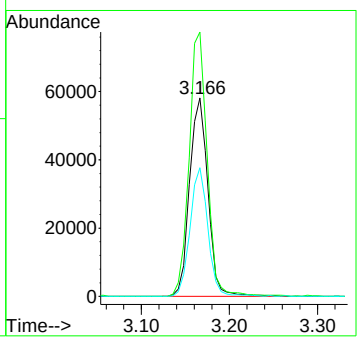


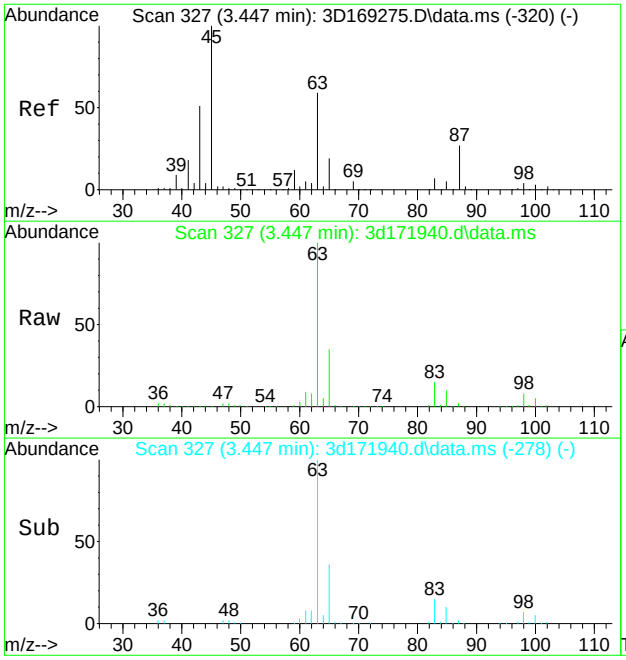


#26
trans-1,2-dichloroethene
Concen: 16.20 ug/L
RT: 3.166 min Scan# 281
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 96 Resp: 84562

Ion	Ratio	Lower	Upper
96	100		
61	133.2	115.9	175.9
98	64.9	33.6	93.6

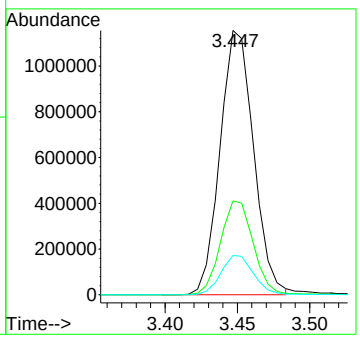


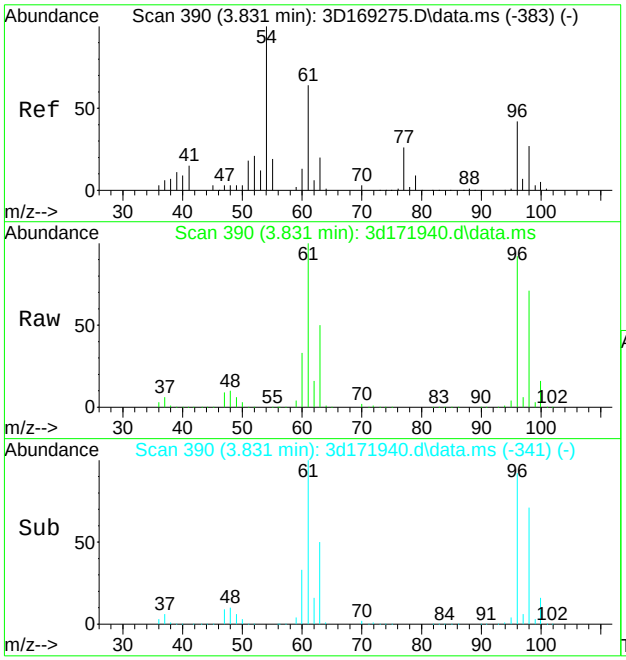


#29
1,1-dichloroethane
Concen: 182.17 ug/L
RT: 3.447 min Scan# 327
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 63 Resp: 1864483

Ion	Ratio	Lower	Upper
63	100		
65	35.5	2.4	62.4
83	14.9	0.0	42.8

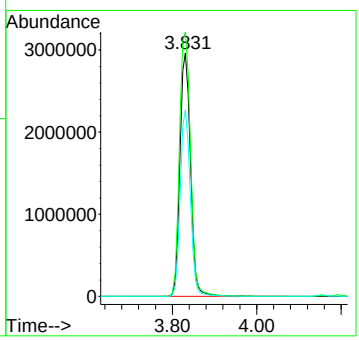


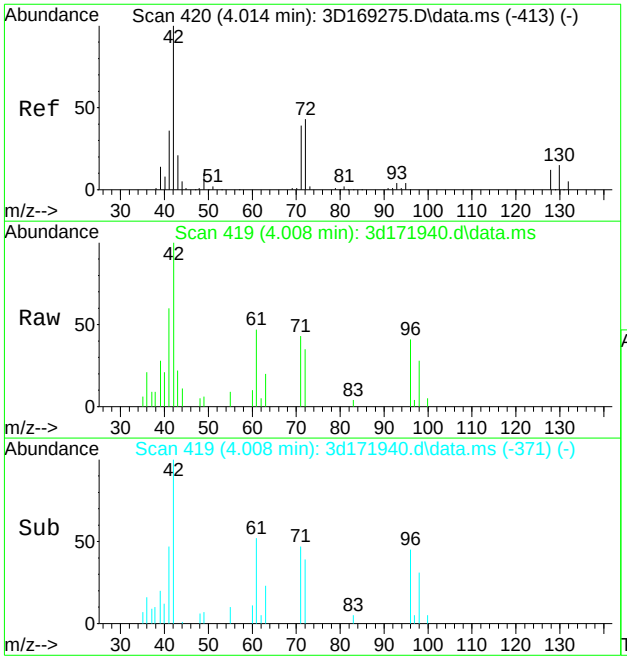


#37
cis-1,2-dichloroethene
Concen: 837.03 ug/L
RT: 3.831 min Scan# 390
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 96 Resp: 5155133

Ion	Ratio	Lower	Upper
96	100		
61	108.7	122.7	182.7#
98	76.7	34.6	94.6

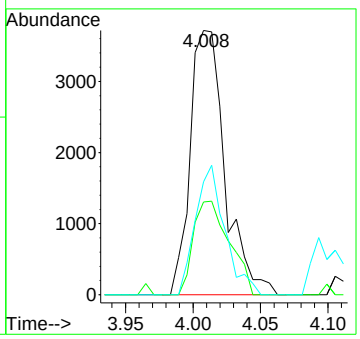


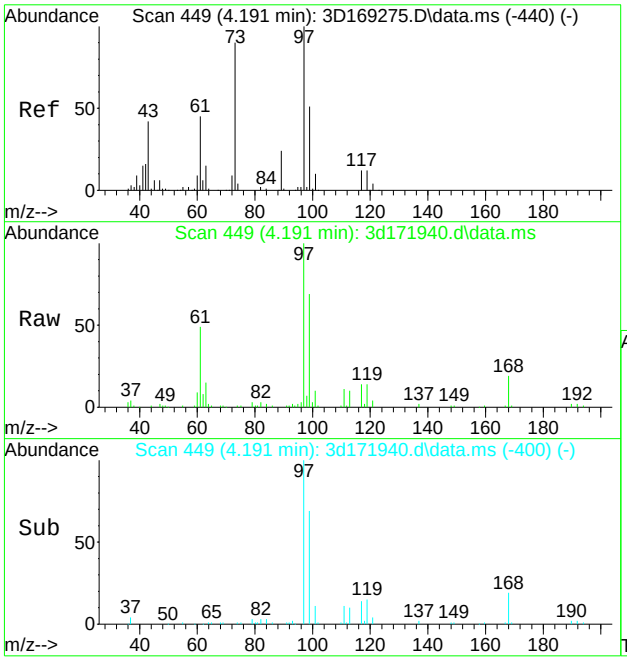


#41
tetrahydrofuran
Concen: 1.78 ug/L
RT: 4.008 min Scan# 419
Delta R.T. -0.005 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 42 Resp: 6659

Ion	Ratio	Lower	Upper
42	100		
72	35.1	13.2	73.2
71	42.7	9.2	69.2

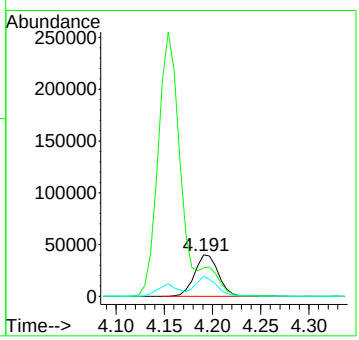


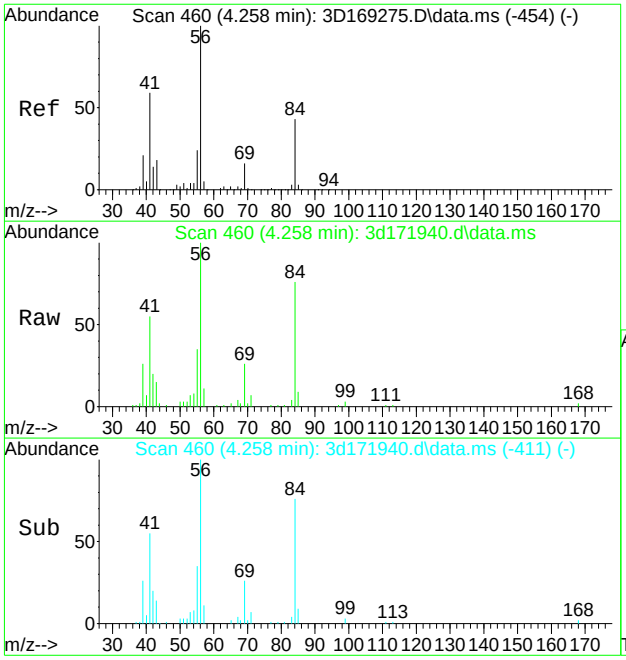


#46
1,1,1-trichloroethane
Concen: 7.74 ug/L
RT: 4.191 min Scan# 449
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 97 Resp: 69250

Ion	Ratio	Lower	Upper
97	100		
99	67.8	35.8	95.8
61	49.1	15.4	75.4

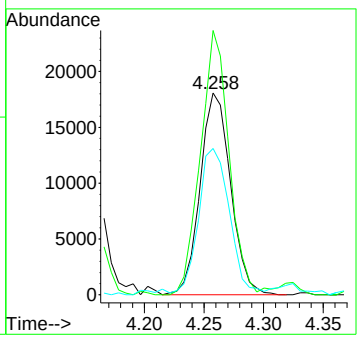


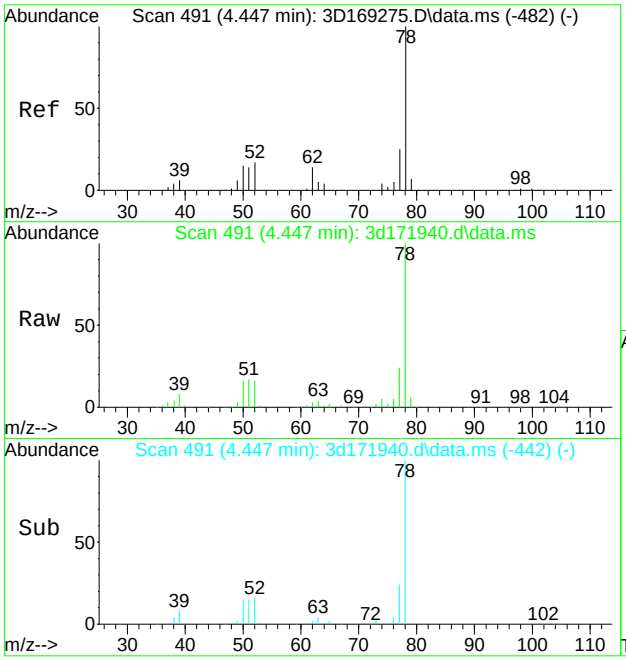


#47
cyclohexane
Concen: 3.27 ug/L
RT: 4.258 min Scan# 460
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 84 Resp: 32071

Ion	Ratio	Lower	Upper
84	100		
56	131.1	211.9	251.9#
41	69.8	115.8	155.8#

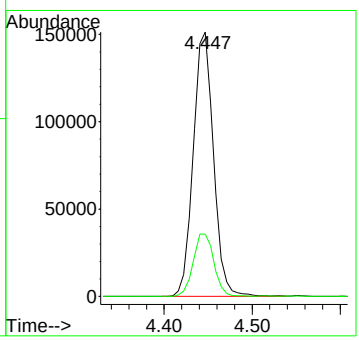


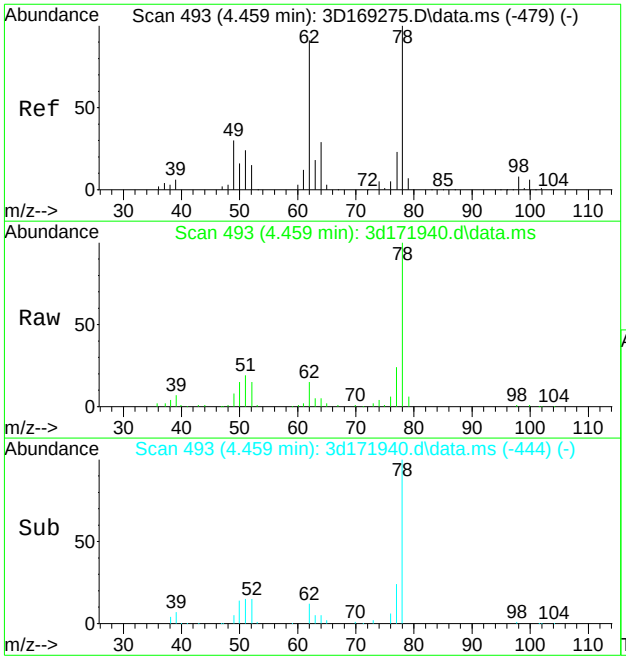


#56
benzene
Concen: 11.19 ug/L
RT: 4.447 min Scan# 491
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 78 Resp: 242798

Ion	Ratio	Lower	Upper
78	100		
77	23.6	0.0	54.9

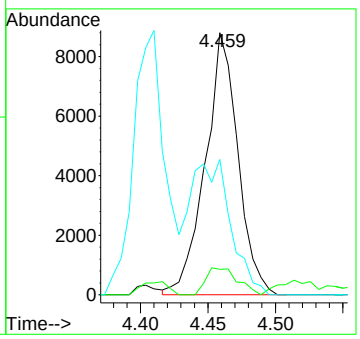


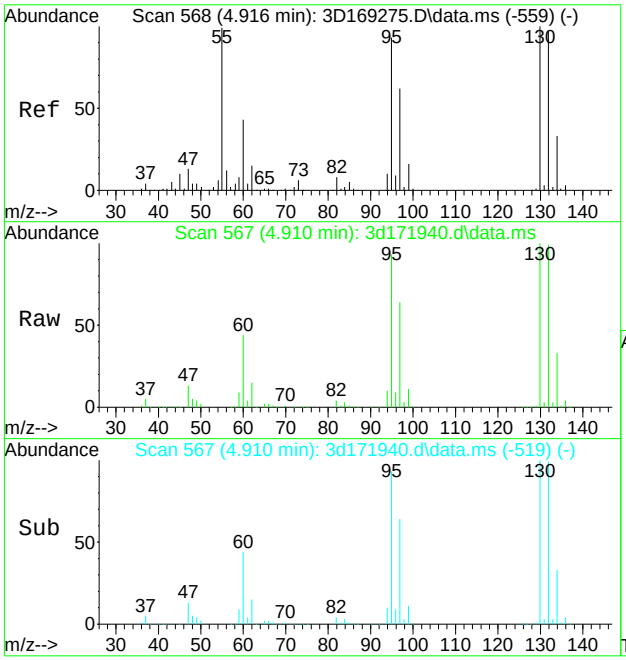


#60
1,2-dichloroethane
Concen: 1.75 ug/L
RT: 4.459 min Scan# 493
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 62 Resp: 14783

Ion	Ratio	Lower	Upper
62	100		
98	5.9	0.0	39.3
49	51.7	3.1	63.1

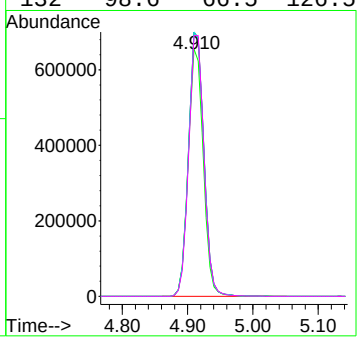


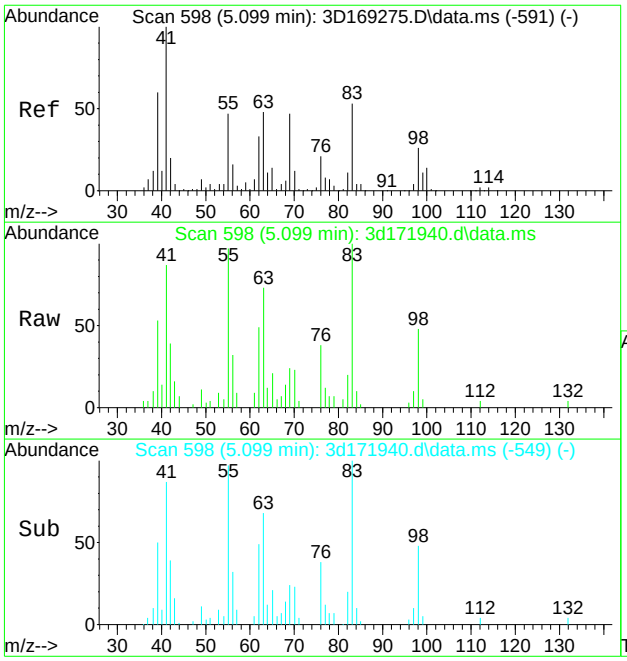


#61
trichloroethene
Concen: 199.52 ug/L
RT: 4.910 min Scan# 567
Delta R.T. -0.006 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion:130 Resp: 1145828

Ion	Ratio	Lower	Upper
130	100		
95	93.4	63.4	123.4
130	100.0	70.0	130.0
132	98.6	66.5	126.5

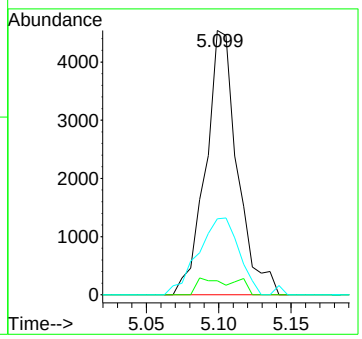


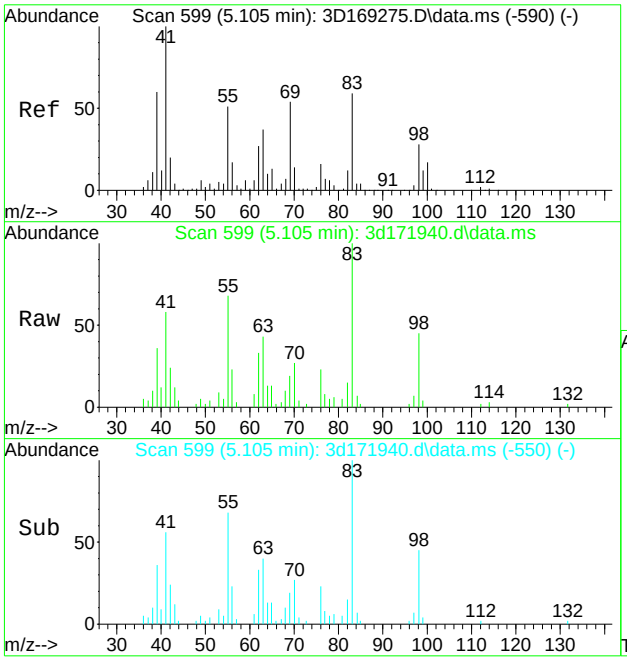


#66
1,2-dichloropropane
Concen: 1.16 ug/L
RT: 5.099 min Scan# 598
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 63 Resp: 6928

Ion	Ratio	Lower	Upper
63	100		
112	5.3	0.0	34.2
65	28.8	0.2	60.2

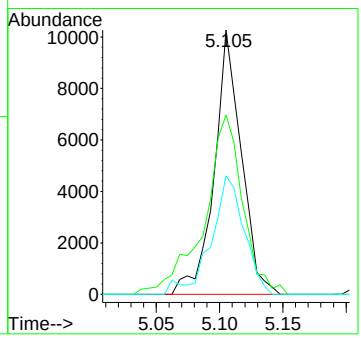


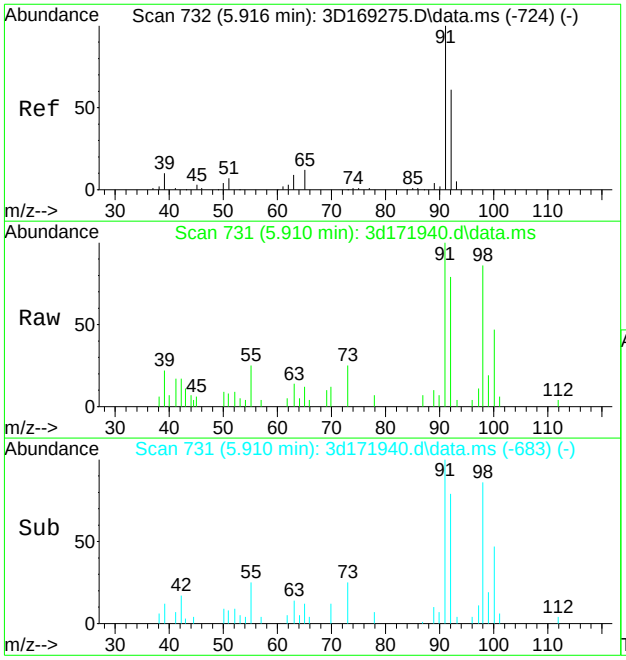


#68
methylcyclohexane
Concen: 1.58 ug/L
RT: 5.105 min Scan# 599
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 83 Resp: 15230

Ion	Ratio	Lower	Upper
83	100		
55	67.8	56.7	116.7
98	44.8	17.8	77.8

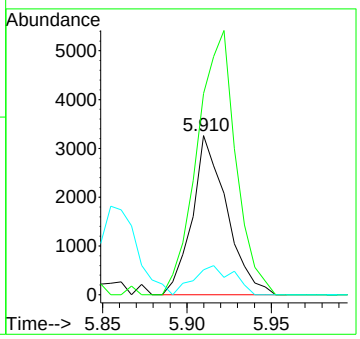


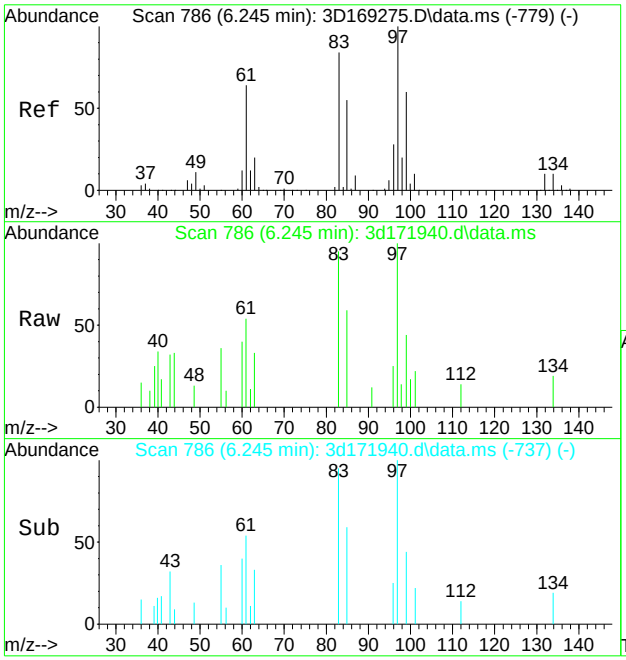


#76
toluene
Concen: 0.32 ug/L
RT: 5.910 min Scan# 731
Delta R.T. -0.006 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 92 Resp: 4652

Ion	Ratio	Lower	Upper
92	100		
91	126.3	143.0	183.0#
65	15.7	0.2	40.2

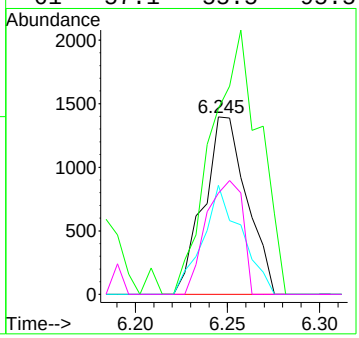


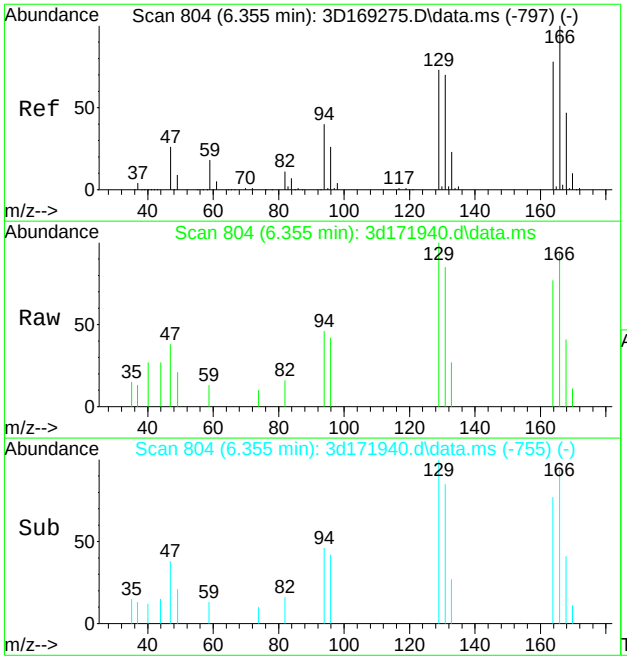


#79
1,1,2-trichloroethane
Concen: 0.50 ug/L
RT: 6.245 min Scan# 786
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion: 83 Resp: 2265

Ion	Ratio	Lower	Upper
83	100		
97	104.9	98.5	138.5
85	61.5	45.0	85.0
61	57.1	55.5	95.5

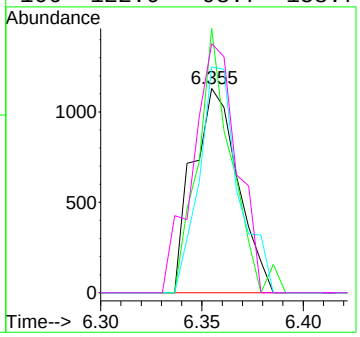


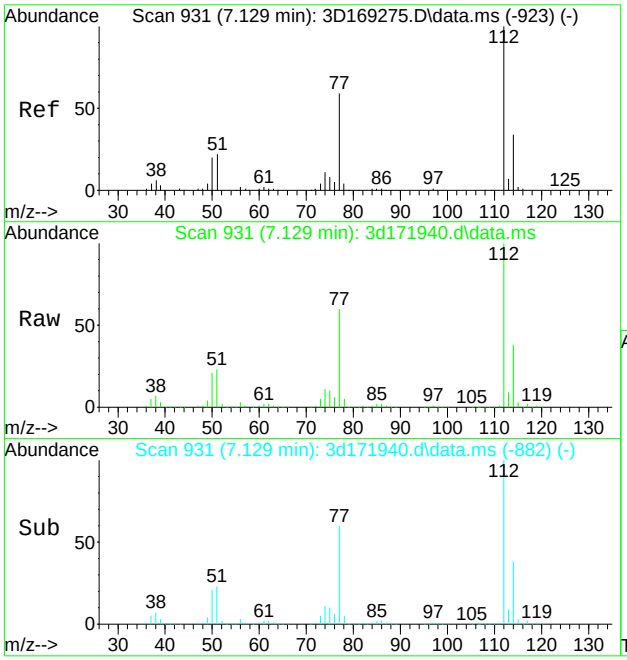


#80
tetrachloroethene
Concen: 0.36 ug/L
RT: 6.355 min Scan# 804
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion:164 Resp: 1750

Ion	Ratio	Lower	Upper
164	100		
129	129.5	63.5	123.5#
131	110.6	59.6	119.6
166	122.0	98.7	158.7

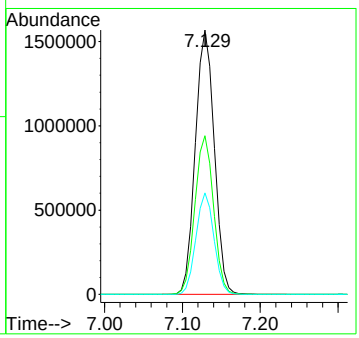


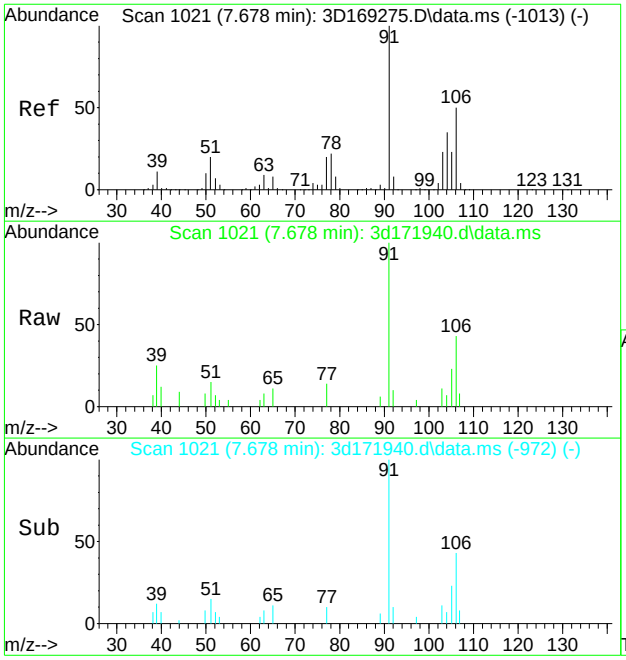


#87
chlorobenzene
Concen: 170.31 ug/L
RT: 7.129 min Scan# 931
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion:112 Resp: 2650073

Ion	Ratio	Lower	Upper
112	100		
77	60.0	29.0	89.0
114	38.4	4.0	64.0

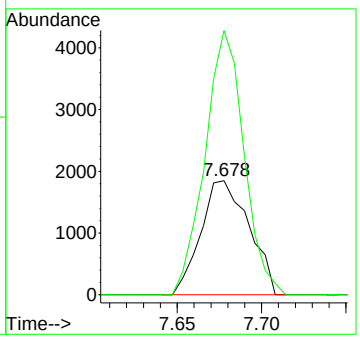


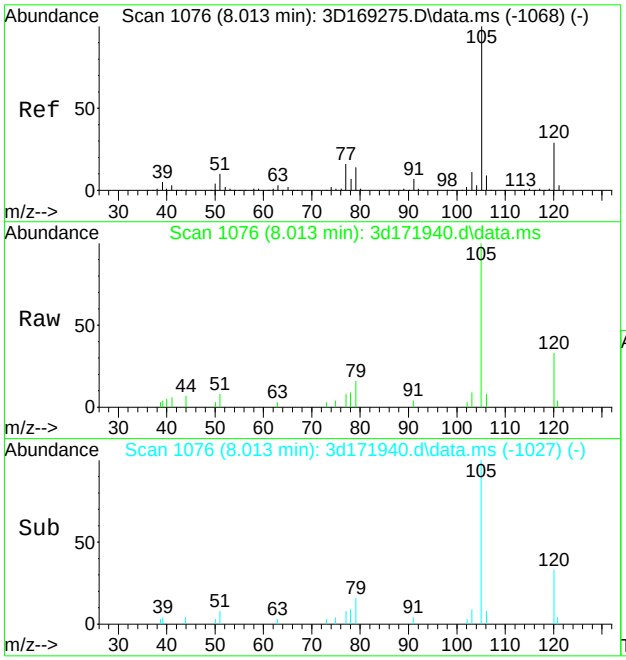


#91
o-xylene
Concen: 0.34 ug/L
RT: 7.678 min Scan# 1021
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion:106 Resp: 3679

Ion	Ratio	Lower	Upper
106	100		
91	195.5	168.5	228.5

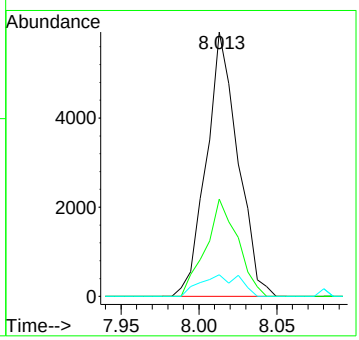


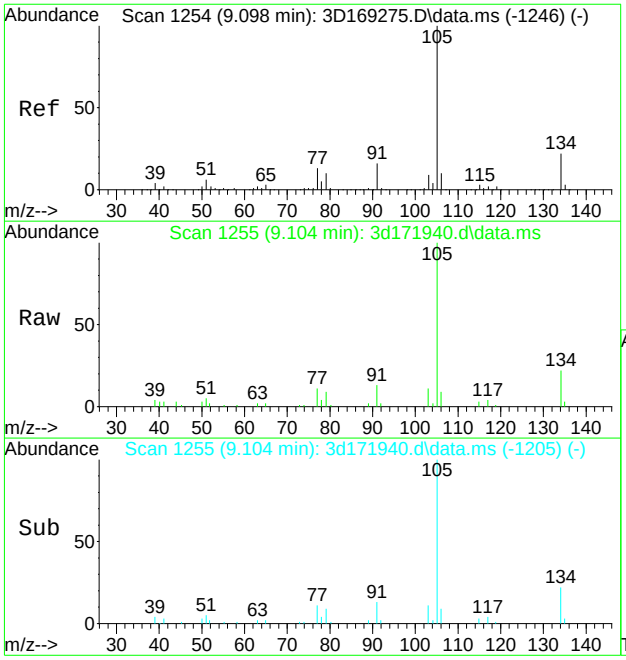


#96
isopropylbenzene
Concen: 0.29 ug/L
RT: 8.013 min Scan# 1076
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion:105 Resp: 8303

Ion	Ratio	Lower	Upper
105	100		
120	36.8	8.6	48.6
77	8.2	0.0	36.3

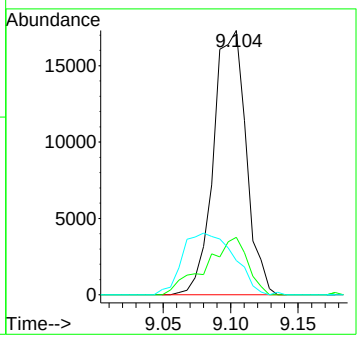


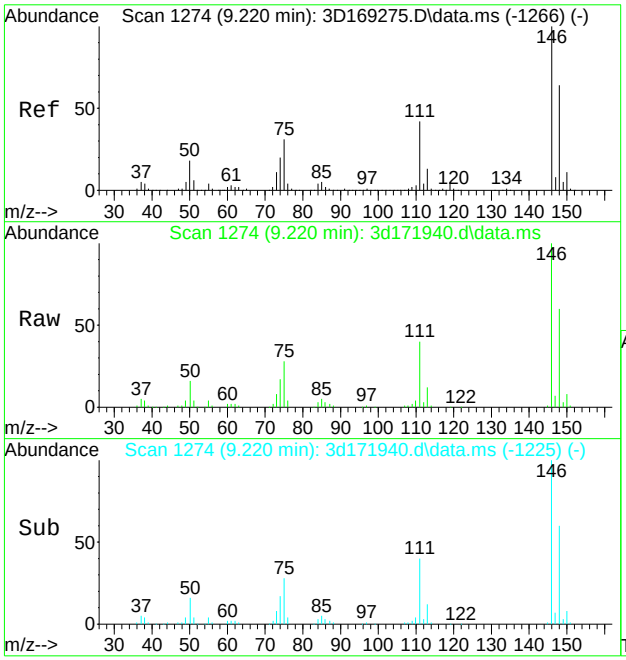


#110
sec-butylbenzene
Concen: 1.05 ug/L
RT: 9.104 min Scan# 1255
Delta R.T. 0.006 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion:105 Resp: 29026

Ion	Ratio	Lower	Upper
105	100		
134	21.8	0.0	51.6
91	12.9	0.0	46.0

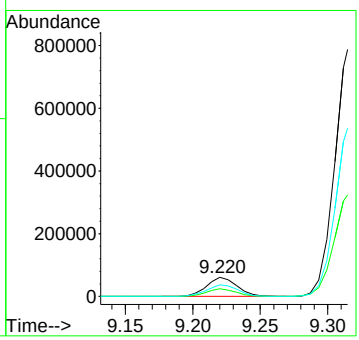


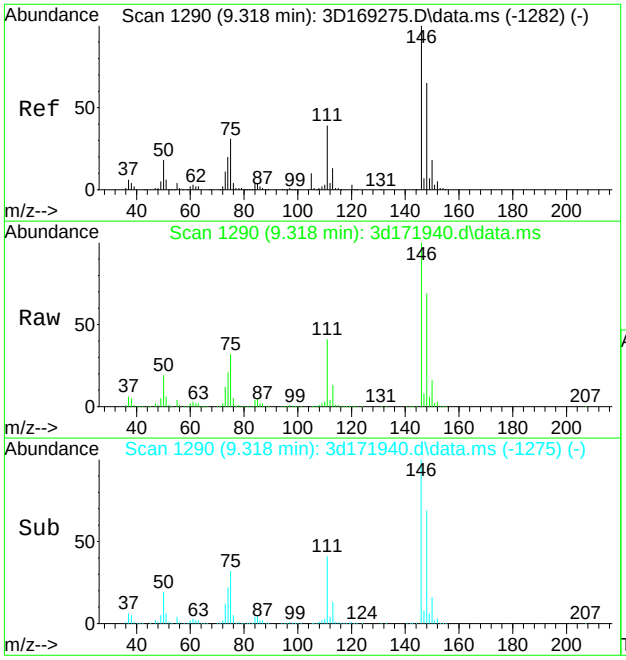


#111
1,3-dichlorobenzene
Concen: 7.44 ug/L
RT: 9.220 min Scan# 1274
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion:146 Resp: 94979

Ion	Ratio	Lower	Upper
146	100		
111	40.0	12.1	72.1
148	60.0	34.4	94.4

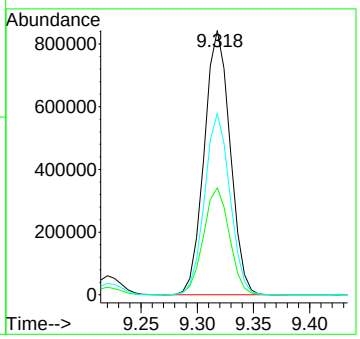


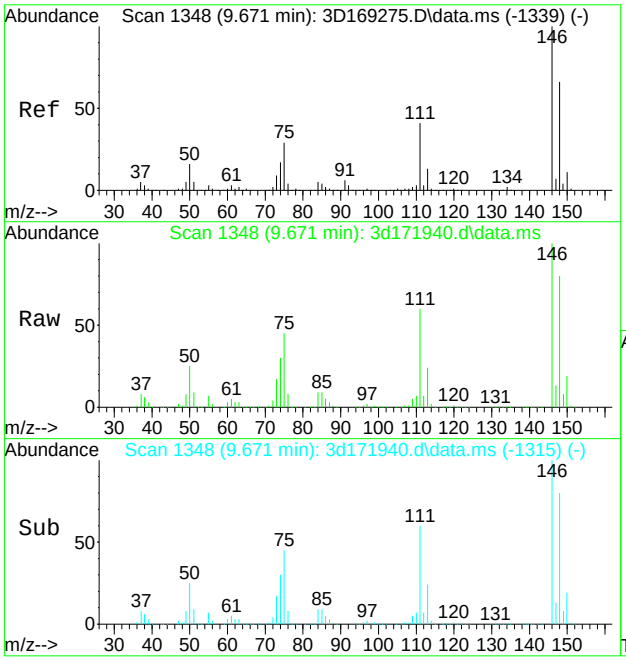


#113
1,4-dichlorobenzene
Concen: 107.93 ug/L
RT: 9.318 min Scan# 1290
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion:146 Resp: 1354605

Ion	Ratio	Lower	Upper
146	100		
111	40.5	8.7	68.7
148	68.6	35.3	95.3

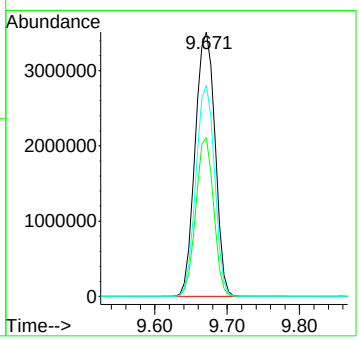


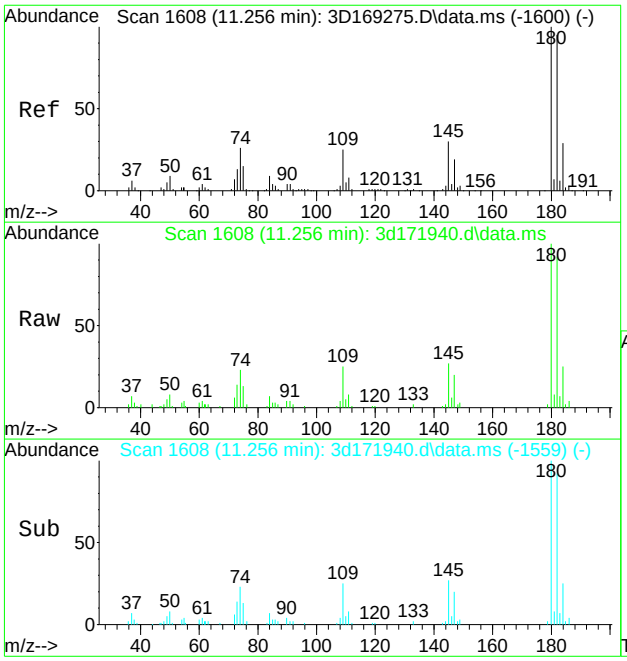


#116
1,2-dichlorobenzene
Concen: 549.88 ug/L
RT: 9.671 min Scan# 1348
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion:146 Resp: 6683957

Ion	Ratio	Lower	Upper
146	100		
111	60.1	11.3	71.3
148	79.8	35.9	95.9

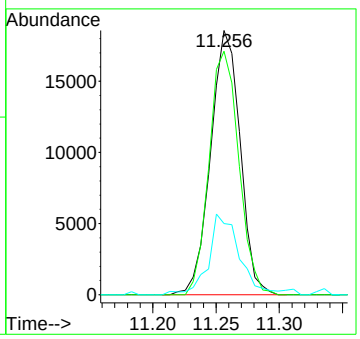




#121
1,2,4-trichlorobenzene
Concen: 3.66 ug/L
RT: 11.256 min Scan# 1608
Delta R.T. -0.000 min
Lab File: 3d171940.d
Acq: 16 Dec 2021 10:05 pm

Tgt Ion:180 Resp: 30050

Ion	Ratio	Lower	Upper
180	100		
182	92.1	64.8	124.8
145	27.0	0.0	59.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA-SVOA\Dec-21\12-17\v3d7294-partial\
Data File : 3d171937.d
Acq On : 16 Dec 2021 8:43 pm
Operator : nicoleh
Sample : JD36624-6 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,5
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 17 02:43:51 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

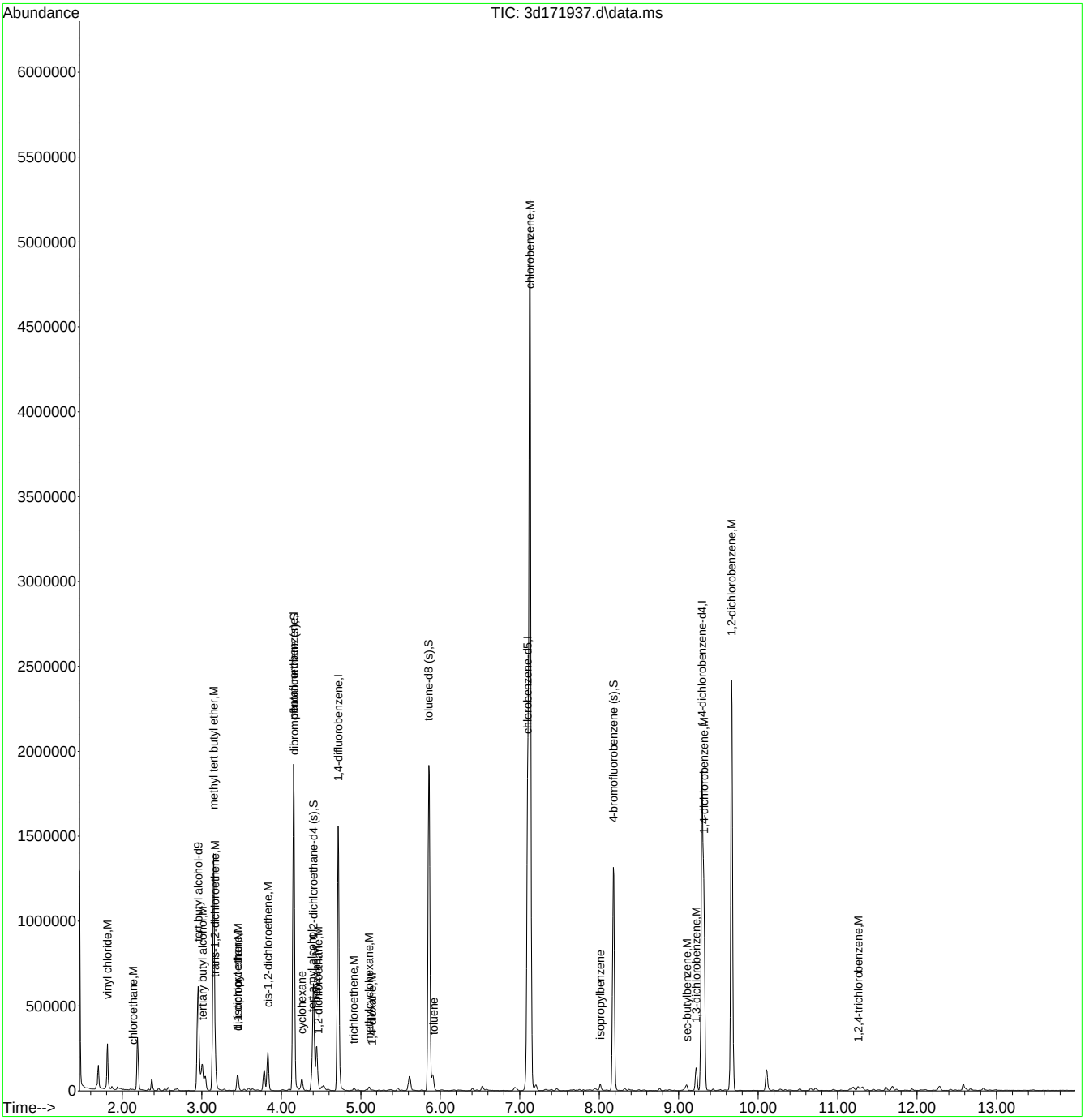
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.953	65	562164	500.00	ug/L	0.00
5) pentafluorobenzene	4.154	168	743894	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.715	114	1061486	50.00	ug/L	0.00
74) chlorobenzene-d5	7.099	117	919671	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.293	152	452635	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.160	113	282420	43.37	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 86.74%			
53) 1,2-dichloroethane-d4 (s)	4.404	65	323987	46.30	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 92.60%			
75) toluene-d8 (s)	5.855	98	1174399	50.37	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.74%			
99) 4-bromofluorobenzene (s)	8.178	95	438481	48.35	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.70%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	3.008	59	101277	67.14	ug/L	62
4) 1,4-dioxane	5.142	88	3685	29.63	ug/L	96
9) vinyl chloride	1.813	62	82932	8.60	ug/L	96
12) chloroethane	2.136	64	3696	0.69	ug/L	76
25) methyl tert butyl ether	3.148	73	1054034	55.71	ug/L	100
26) trans-1,2-dichloroethene	3.167	96	3334	0.63	ug/L	83
27) di-isopropyl ether	3.453	45	6231	0.29	ug/L	87
29) 1,1-dichloroethane	3.453	63	58701	5.63	ug/L	99
37) cis-1,2-dichloroethene	3.831	96	82205	13.10	ug/L	87
47) cyclohexane	4.258	84	20518	2.05	ug/L #	43
51) tert amyl alcohol	4.386	55	32238	45.88	ug/L #	61
56) benzene	4.441	78	183239	8.56	ug/L	99
60) 1,2-dichloroethane	4.465	62	22245	2.67	ug/L	94
61) trichloroethene	4.910	130	3123	0.55	ug/L	91
68) methylcyclohexane	5.105	83	6628	0.70	ug/L	83
76) toluene	5.916	92	7670	0.55	ug/L	93
87) chlorobenzene	7.129	112	2588798	171.23	ug/L	97
96) isopropylbenzene	8.013	105	22820	0.83	ug/L	99
110) sec-butylbenzene	9.104	105	22788	0.85	ug/L	93
111) 1,3-dichlorobenzene	9.220	146	54738	4.40	ug/L	97
113) 1,4-dichlorobenzene	9.318	146	455495	37.20	ug/L	99
116) 1,2-dichlorobenzene	9.665	146	1009137	85.10	ug/L	97
121) 1,2,4-trichlorobenzene	11.263	180	7446	0.93	ug/L	97

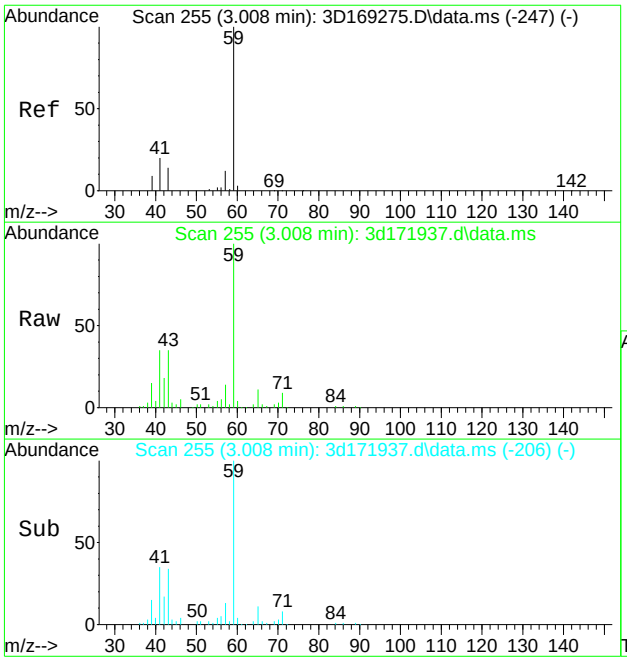
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA-SVOA\Dec-21\12-17\v3d7294-partial\
Data File : 3d171937.d
Acq On : 16 Dec 2021 8:43 pm
Operator : nicoleh
Sample : JD36624-6 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,5
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 17 02:43:51 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

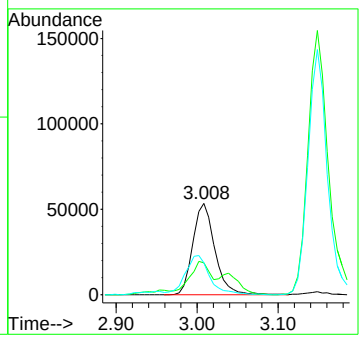


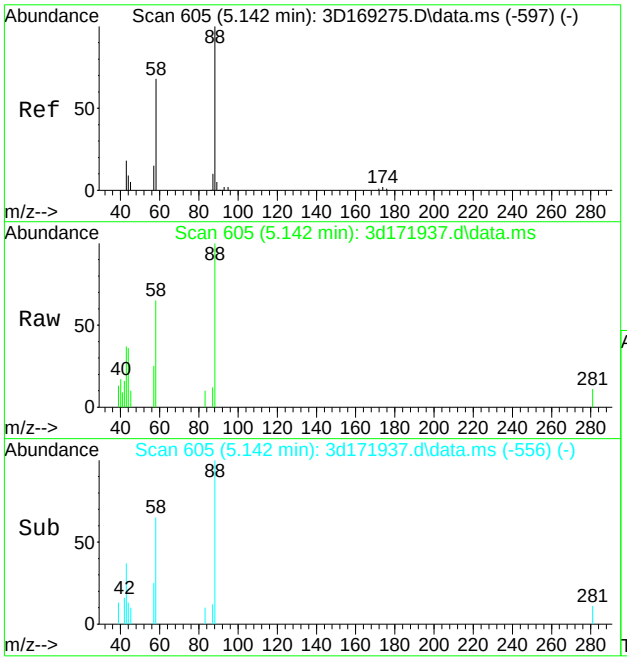


#2
tertiary butyl alcohol
Concen: 67.14 ug/L
RT: 3.008 min Scan# 255
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 59 Resp: 101277

Ion	Ratio	Lower	Upper
59	100		
41	33.8	0.0	49.9
43	34.3	0.0	44.1

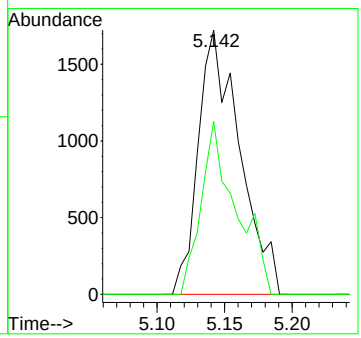


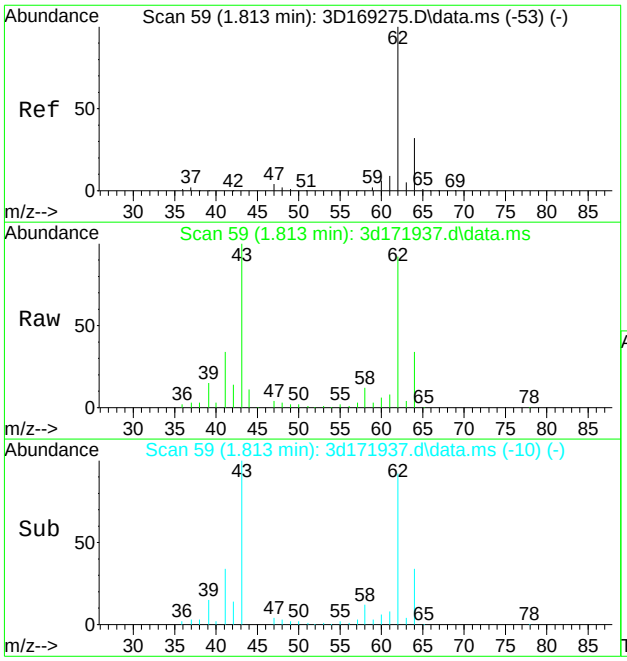


#4
1,4-dioxane
Concen: 29.63 ug/L
RT: 5.142 min Scan# 605
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 88 Resp: 3685

Ion	Ratio	Lower	Upper
88	100		
58	65.5	38.9	98.9

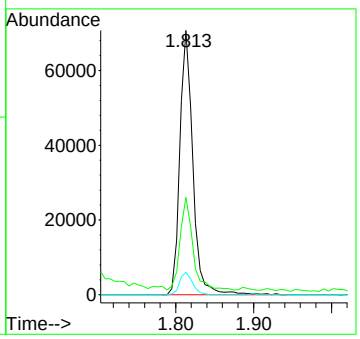


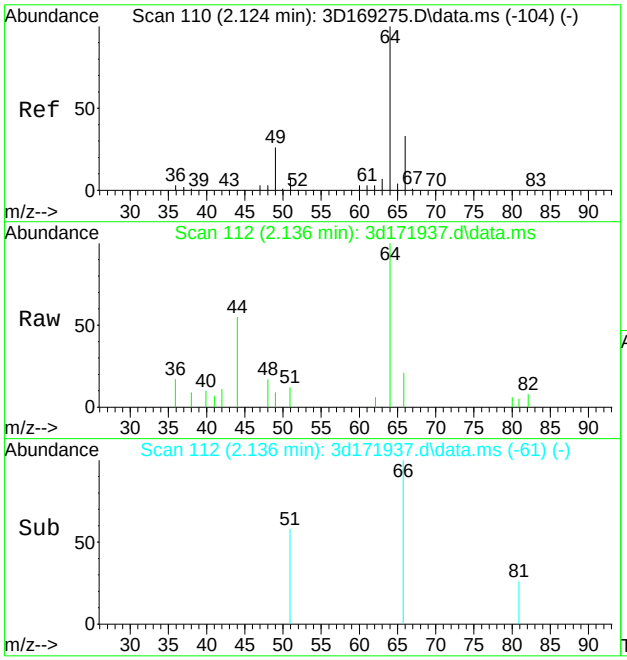


#9
vinyl chloride
Concen: 8.60 ug/L
RT: 1.813 min Scan# 59
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 62 Resp: 82932

Ion	Ratio	Lower	Upper
62	100		
64	35.1	2.4	62.4
61	8.5	0.0	39.2

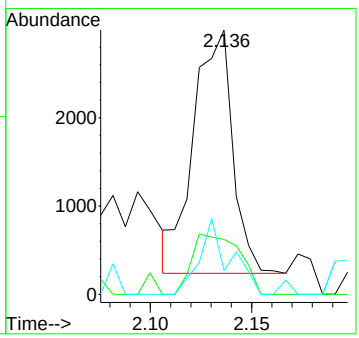


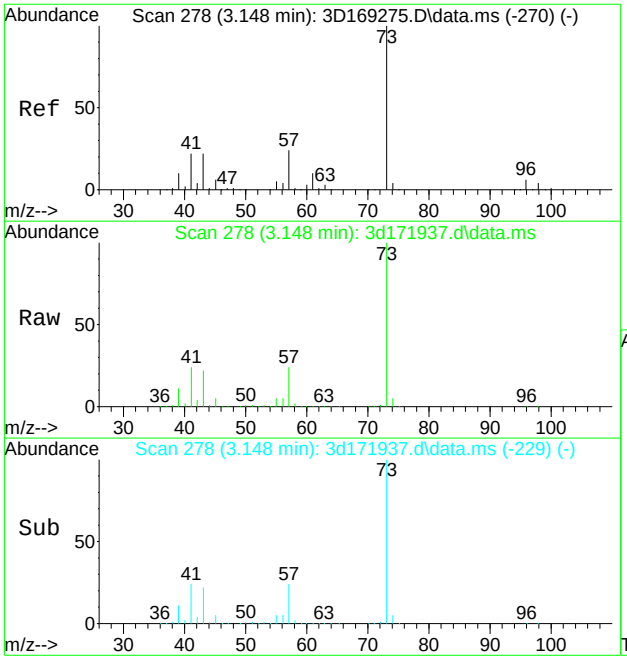


#12
chloroethane
Concen: 0.69 ug/L
RT: 2.136 min Scan# 112
Delta R.T. 0.012 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 64 Resp: 3696

Ion	Ratio	Lower	Upper
64	100		
66	22.5	3.1	63.1
49	9.8	0.0	55.9

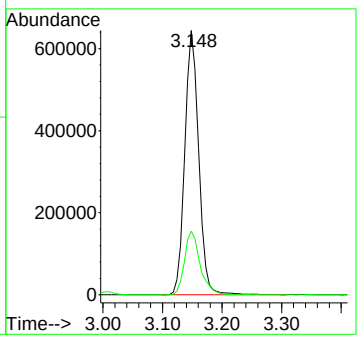


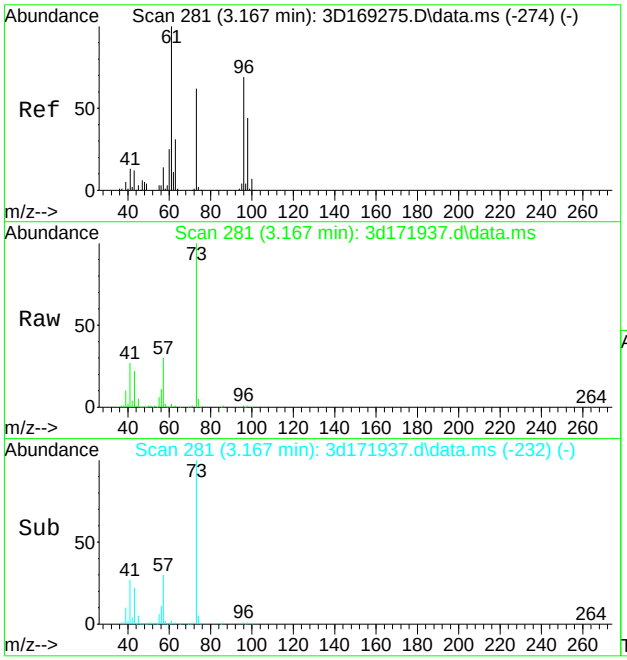


#25
methyl tert butyl ether
Concen: 55.71 ug/L
RT: 3.148 min Scan# 278
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 73 Resp: 1054034

Ion	Ratio	Lower	Upper
73	100		
57	24.1	0.0	224.2

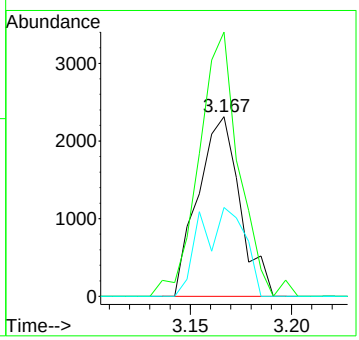


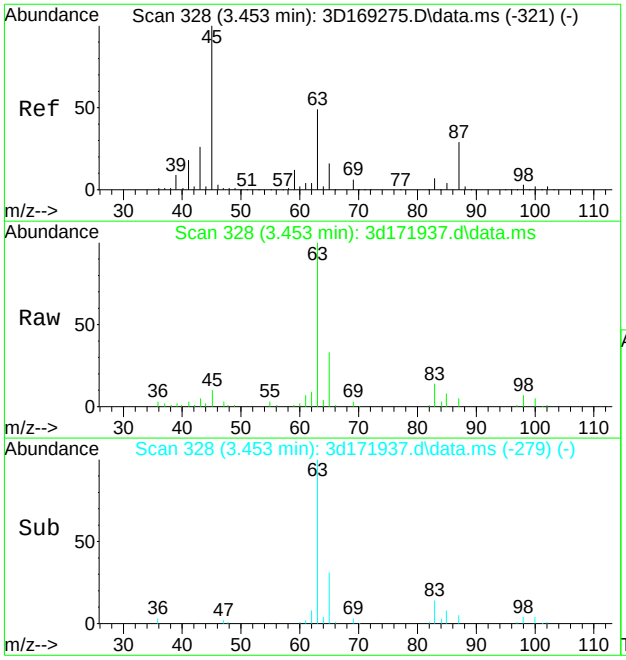


#26
trans-1,2-dichloroethene
Concen: 0.63 ug/L
RT: 3.167 min Scan# 281
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 96 Resp: 3334

Ion	Ratio	Lower	Upper
96	100		
61	128.6	115.9	175.9
98	46.0	33.6	93.6

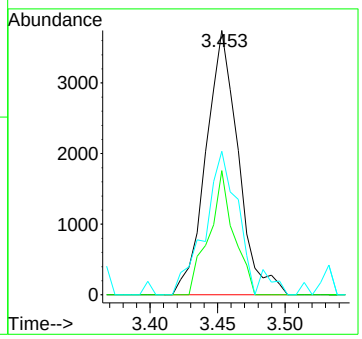


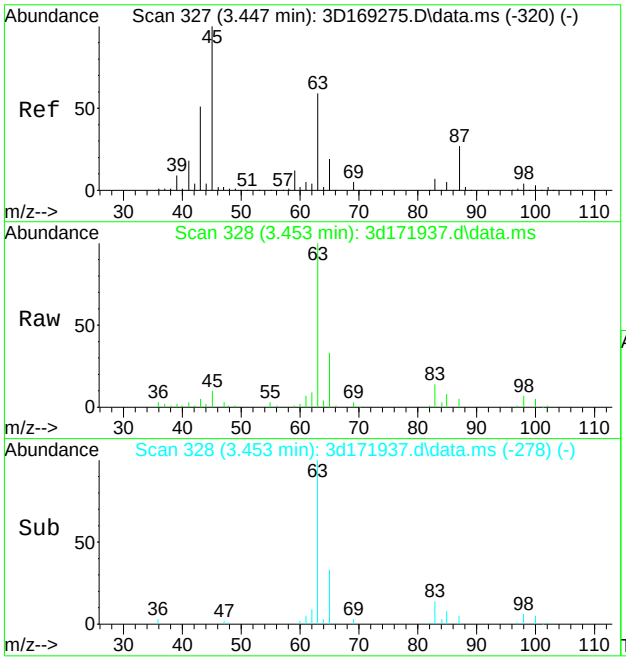


#27
di-isopropyl ether
Concen: 0.29 ug/L
RT: 3.453 min Scan# 328
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 45 Resp: 6231

Ion	Ratio	Lower	Upper
45	100		
87	46.9	0.0	59.2
43	54.3	22.8	82.8

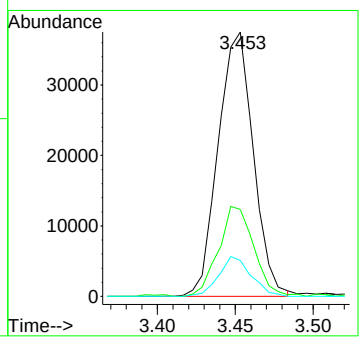


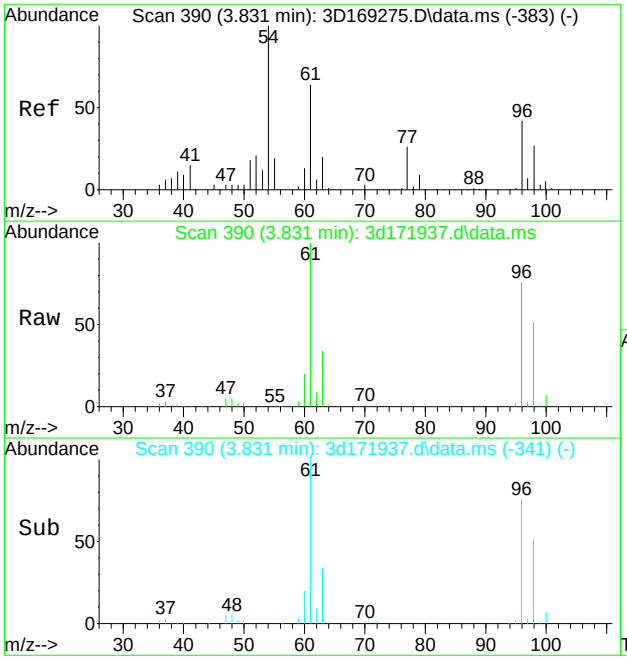


#29
1,1-dichloroethane
Concen: 5.63 ug/L
RT: 3.453 min Scan# 328
Delta R.T. 0.006 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 63 Resp: 58701

Ion	Ratio	Lower	Upper
63	100		
65	32.2	2.4	62.4
83	13.6	0.0	42.8

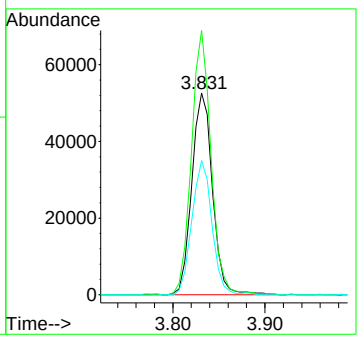


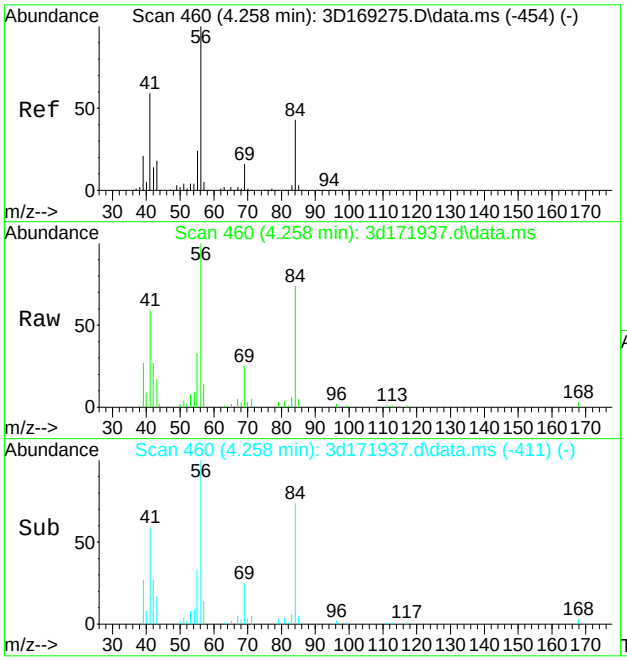


#37
cis-1,2-dichloroethene
Concen: 13.10 ug/L
RT: 3.831 min Scan# 390
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 96 Resp: 82205

Ion	Ratio	Lower	Upper
96	100		
61	131.0	122.7	182.7
98	66.5	34.6	94.6

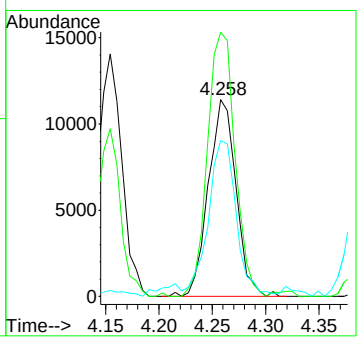


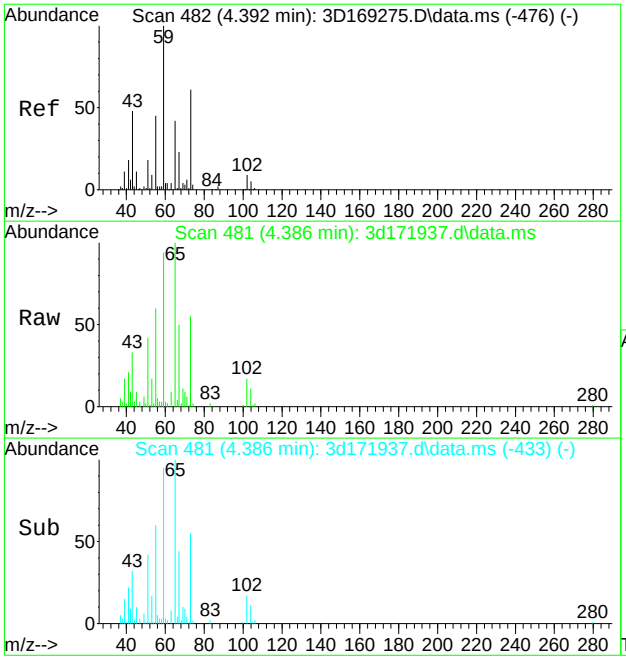


#47
cyclohexane
Concen: 2.05 ug/L
RT: 4.258 min Scan# 460
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 84 Resp: 20518

Ion	Ratio	Lower	Upper
84	100		
56	132.5	211.9	251.9#
41	74.8	115.8	155.8#

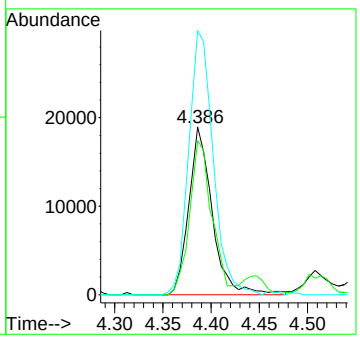


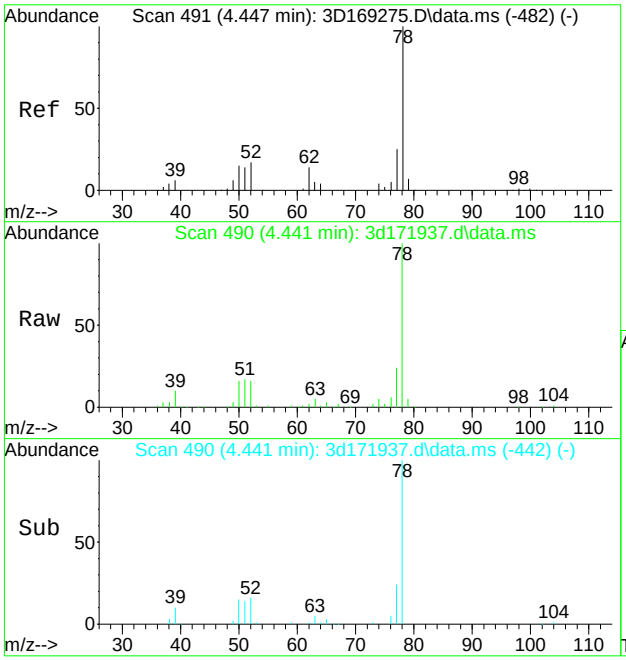


#51
tert amyl alcohol
Concen: 45.88 ug/L
RT: 4.386 min Scan# 481
Delta R.T. -0.006 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 55 Resp: 32238

Ion	Ratio	Lower	Upper
55	100		
73	91.9	106.1	166.1#
59	157.6	191.3	251.3#

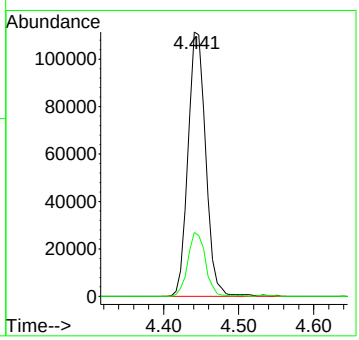


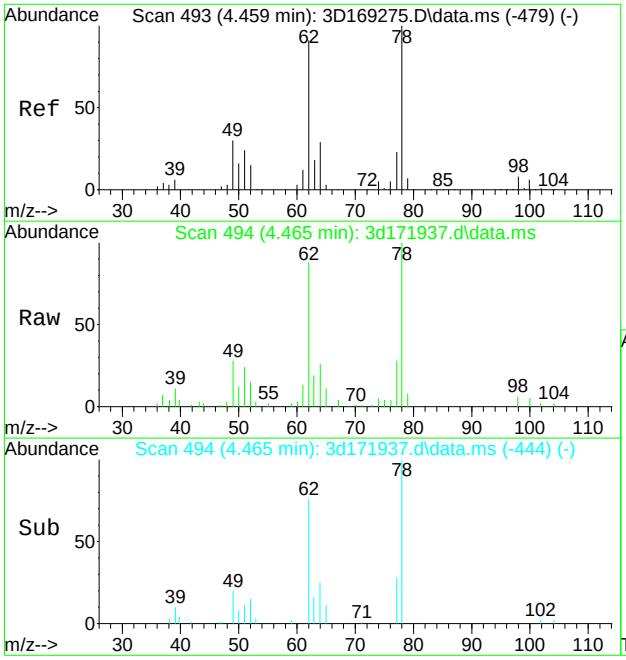


#56
benzene
Concen: 8.56 ug/L
RT: 4.441 min Scan# 490
Delta R.T. -0.006 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 78 Resp: 183239

Ion	Ratio	Lower	Upper
78	100		
77	24.2	0.0	54.9

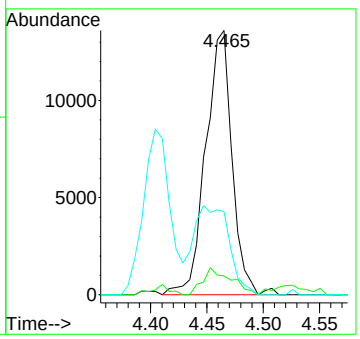


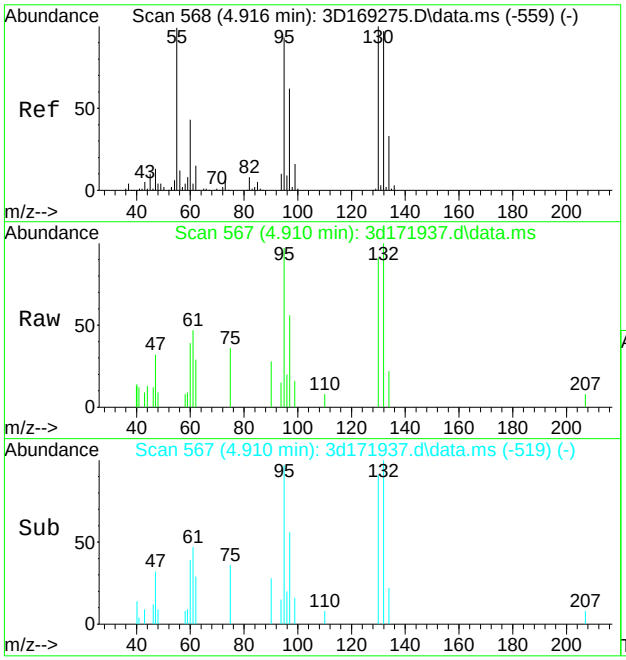


#60
1,2-dichloroethane
Concen: 2.67 ug/L
RT: 4.465 min Scan# 494
Delta R.T. 0.006 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 62 Resp: 22245

Ion	Ratio	Lower	Upper
62	100		
98	3.6	0.0	39.3
49	31.5	3.1	63.1

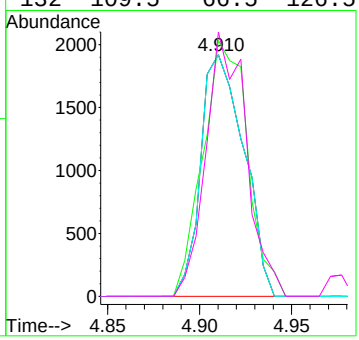


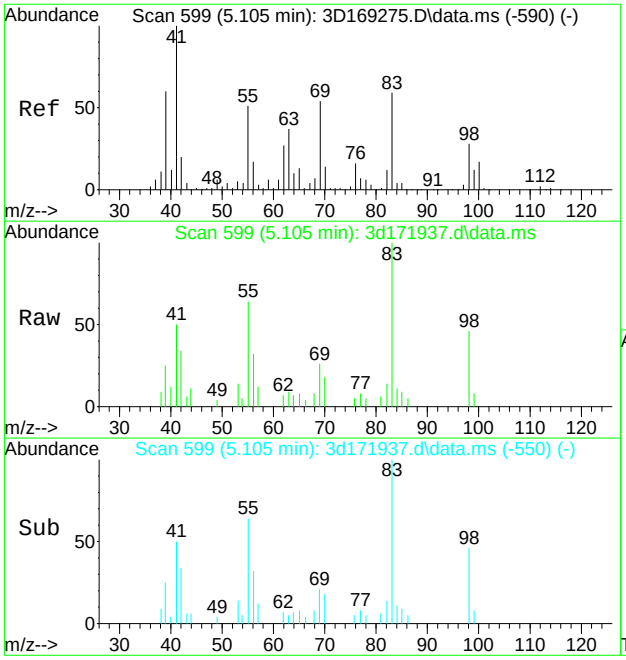


#61
trichloroethene
Concen: 0.55 ug/L
RT: 4.910 min Scan# 567
Delta R.T. -0.006 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion:130 Resp: 3123

Ion	Ratio	Lower	Upper
130	100		
95	105.9	63.4	123.4
130	100.0	70.0	130.0
132	109.5	66.5	126.5

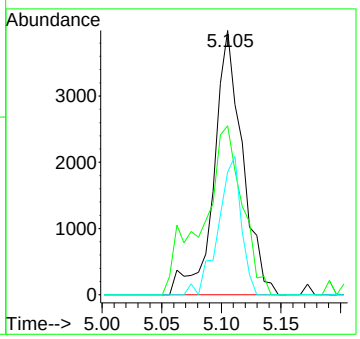


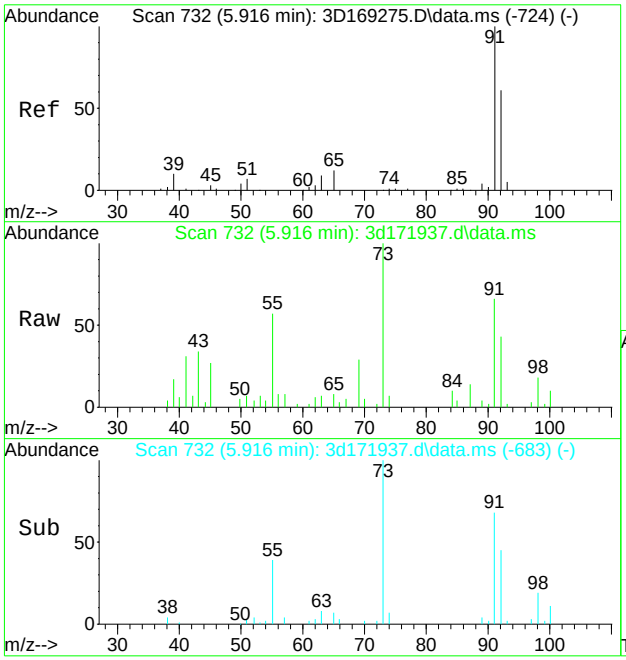


#68
methylcyclohexane
Concen: 0.70 ug/L
RT: 5.105 min Scan# 599
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 83 Resp: 6628

Ion	Ratio	Lower	Upper
83	100		
55	63.9	56.7	116.7
98	46.4	17.8	77.8

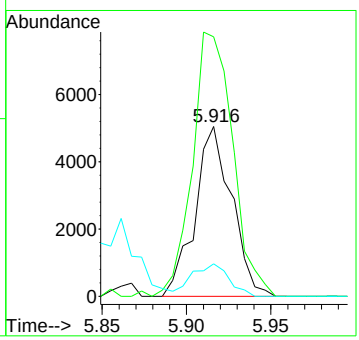


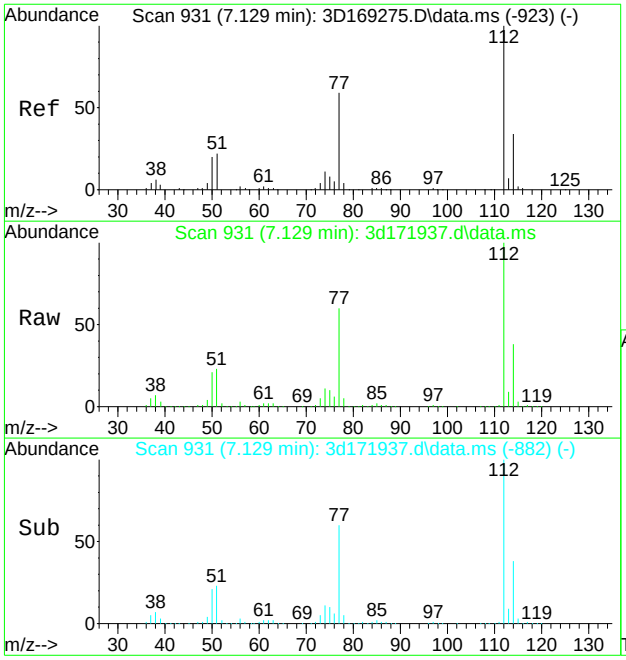


#76
toluene
Concen: 0.55 ug/L
RT: 5.916 min Scan# 732
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion: 92 Resp: 7670

Ion	Ratio	Lower	Upper
92	100		
91	152.9	143.0	183.0
65	19.1	0.2	40.2

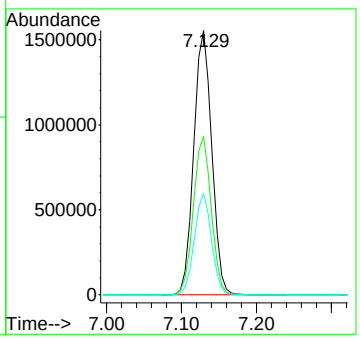


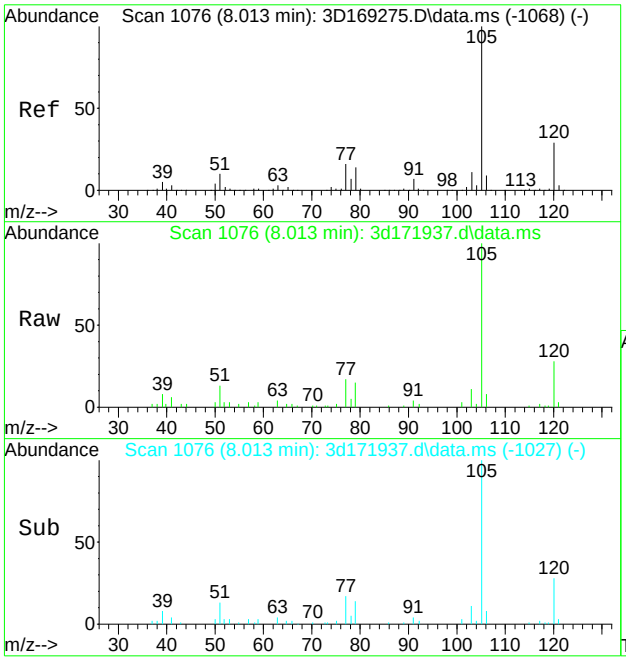


#87
chlorobenzene
Concen: 171.23 ug/L
RT: 7.129 min Scan# 931
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion:112 Resp: 2588798

Ion	Ratio	Lower	Upper
112	100		
77	59.8	29.0	89.0
114	38.4	4.0	64.0

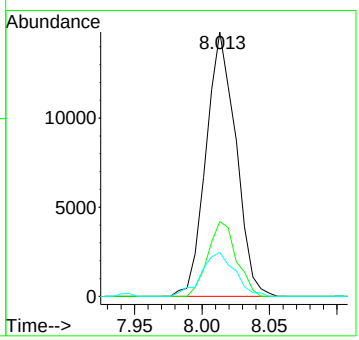


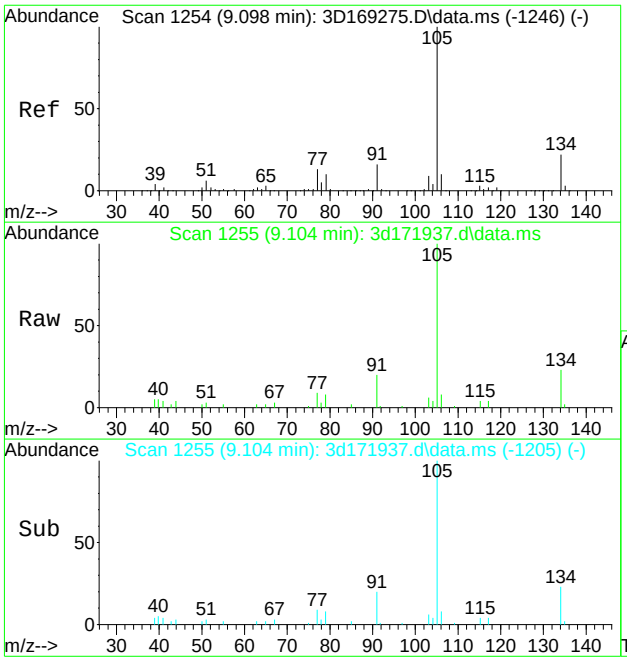


#96
isopropylbenzene
Concen: 0.83 ug/L
RT: 8.013 min Scan# 1076
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion:105 Resp: 22820

Ion	Ratio	Lower	Upper
105	100		
120	28.3	8.6	48.6
77	16.6	0.0	36.3

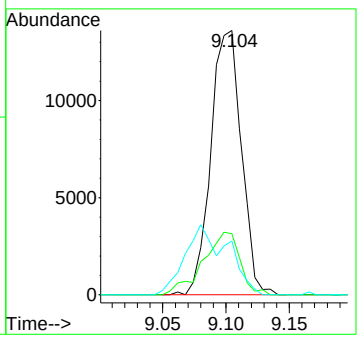


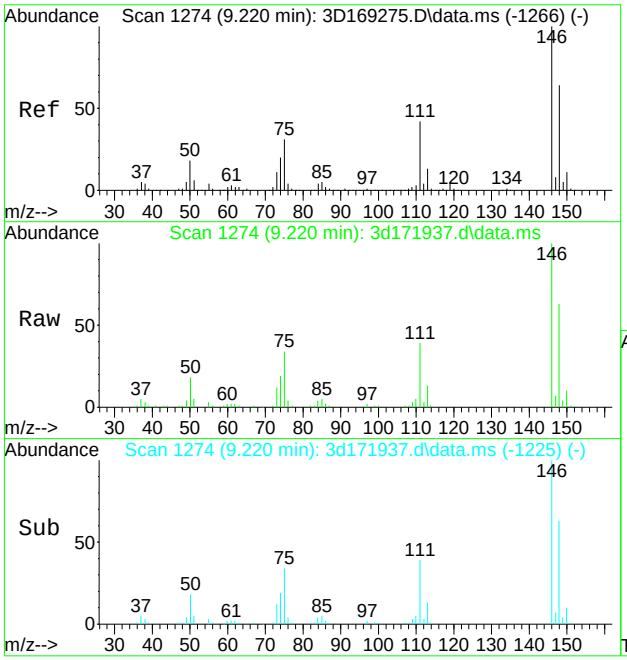


#110
sec-butylbenzene
Concen: 0.85 ug/L
RT: 9.104 min Scan# 1255
Delta R.T. 0.006 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion:105 Resp: 22788

Ion	Ratio	Lower	Upper
105	100		
134	23.1	0.0	51.6
91	21.6	0.0	46.0

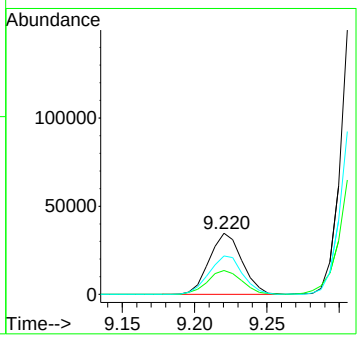


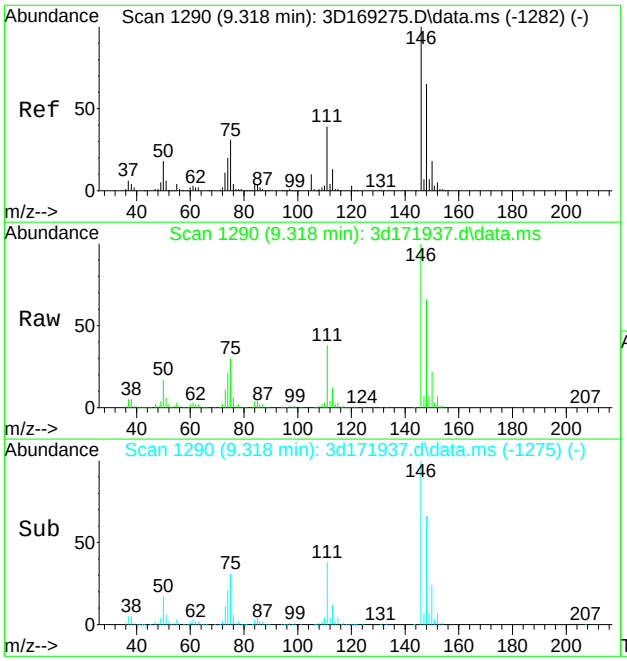


#111
1,3-dichlorobenzene
Concen: 4.40 ug/L
RT: 9.220 min Scan# 1274
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion:146 Resp: 54738

Ion	Ratio	Lower	Upper
146	100		
111	39.0	12.1	72.1
148	62.8	34.4	94.4

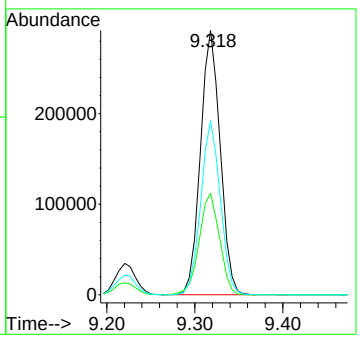


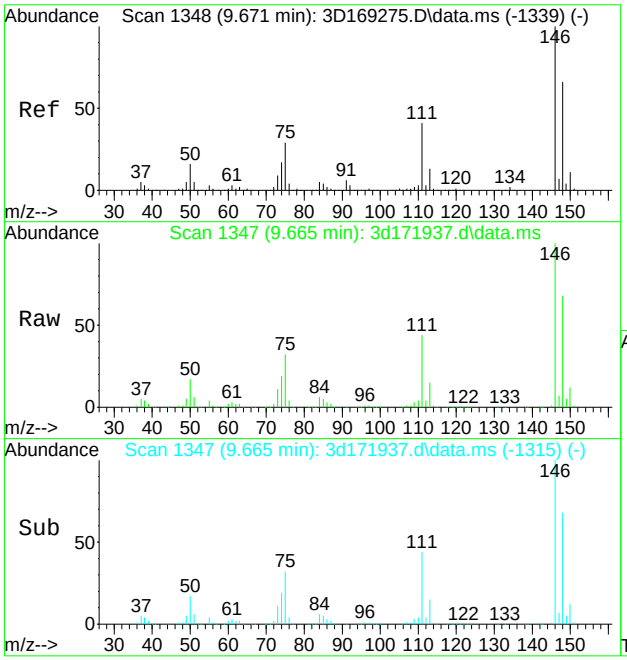


#113
1,4-dichlorobenzene
Concen: 37.20 ug/L
RT: 9.318 min Scan# 1290
Delta R.T. 0.000 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion:146 Resp: 455495

Ion	Ratio	Lower	Upper
146	100		
111	38.4	8.7	68.7
148	65.8	35.3	95.3

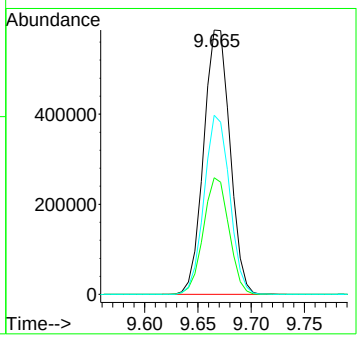


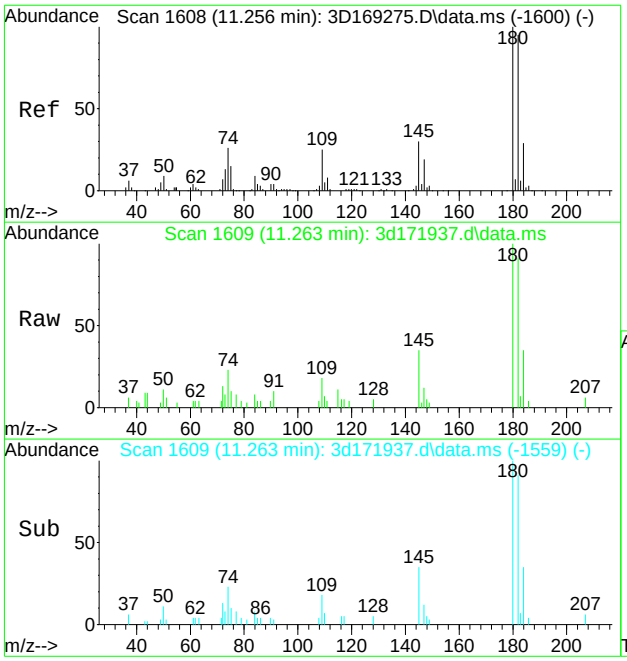


#116
1,2-dichlorobenzene
Concen: 85.10 ug/L
RT: 9.665 min Scan# 1347
Delta R.T. -0.006 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion:146 Resp: 1009137

Ion	Ratio	Lower	Upper
146	100		
111	44.1	11.3	71.3
148	67.7	35.9	95.9

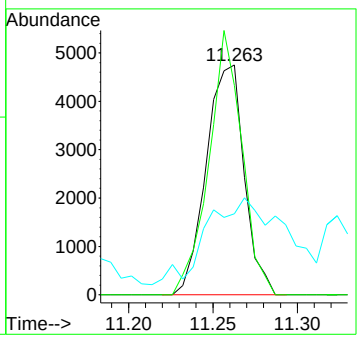




#121
1,2,4-trichlorobenzene
Concen: 0.93 ug/L
RT: 11.263 min Scan# 1609
Delta R.T. 0.006 min
Lab File: 3d171937.d
Acq: 16 Dec 2021 8:43 pm

Tgt Ion:180 Resp: 7446

Ion	Ratio	Lower	Upper
180	100		
182	91.1	64.8	124.8
145	28.4	0.0	59.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\Completed\12-20-2021\vx8363-partial\
Data File : 1x193040.d
Acq On : 17 Dec 2021 5:18 pm
Operator : brittank
Sample : JD36624-7 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,5
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 28 08:27:27 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

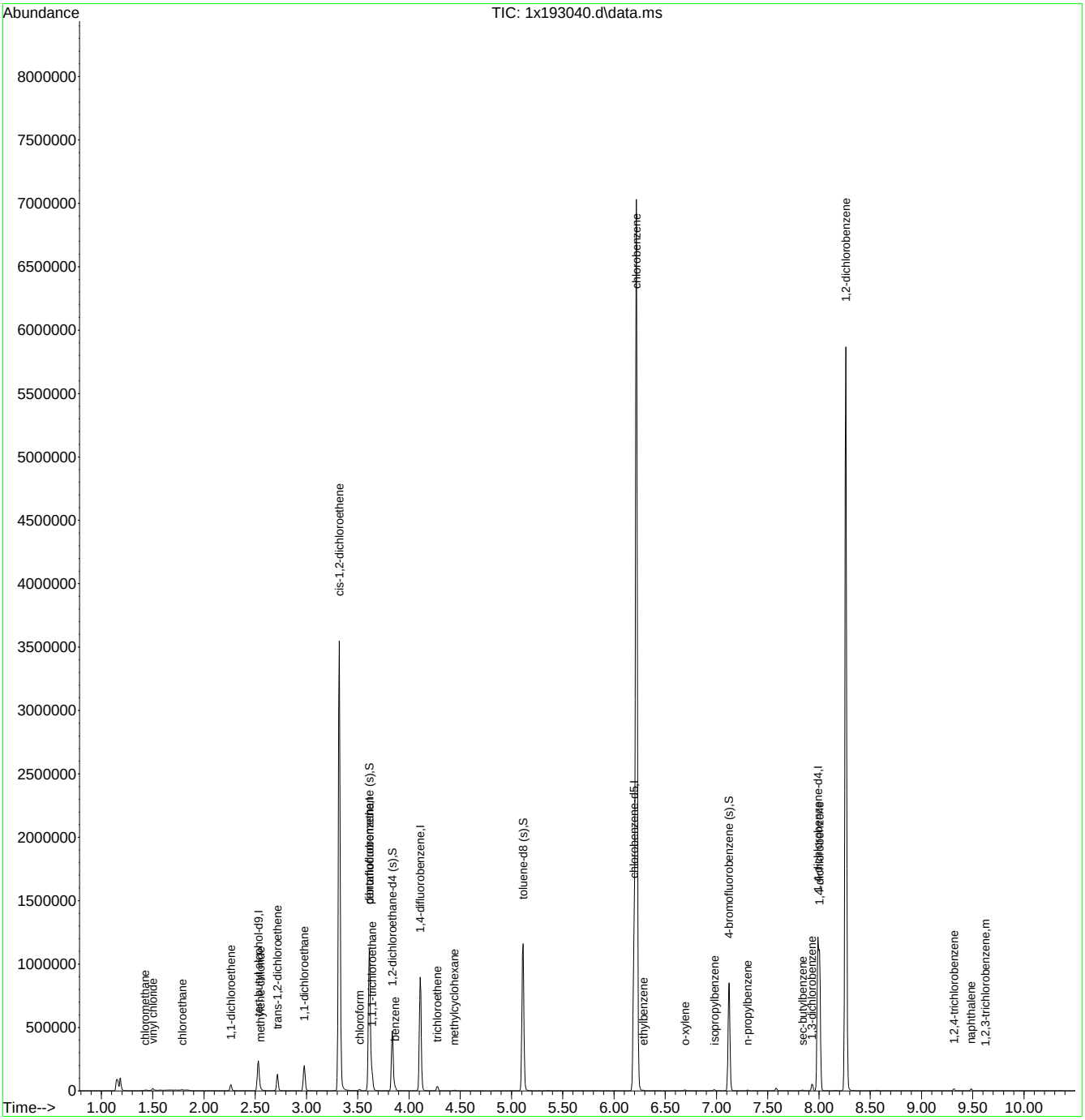
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.530	65	177909	500.00	ug/L	-0.02
5) pentafluorobenzene	3.613	168	349895	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.110	114	501914	50.00	ug/L	0.00
73) chlorobenzene-d5	6.196	117	475289	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.990	152	205041	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.613	113	177169	50.21	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.42%			
53) 1,2-dichloroethane-d4 (s)	3.838	65	220142	51.27	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.54%			
74) toluene-d8 (s)	5.113	98	566962	49.06	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.12%			
98) 4-bromofluorobenzene (s)	7.120	95	208798	51.23	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.46%			
Target Compounds						Qvalue
8) chloromethane	1.425	50	2014	0.68	ug/L	91
9) vinyl chloride	1.500	62	8682	3.28	ug/L	97
11) chloroethane	1.788	64	2913	2.39	ug/L	97
16) 1,1-dichloroethene	2.263	96	11069	6.12	ug/L	98
22) methylene chloride	2.551	84	856	0.48	ug/L #	70
26) trans-1,2-dichloroethene	2.717	96	29154	15.21	ug/L	93
30) 1,1-dichloroethane	2.978	63	126608	34.08	ug/L	99
36) cis-1,2-dichloroethene	3.320	96	940653	456.64	ug/L	90
42) chloroform	3.517	83	5579	1.56	ug/L	90
45) 1,1,1-trichloroethane	3.640	97	57045	16.87	ug/L	95
57) benzene	3.864	78	15424	2.21	ug/L	99
61) trichloroethene	4.275	130	8528	3.63	ug/L	95
68) methylcyclohexane	4.441	83	943	0.28	ug/L #	69
86) chlorobenzene	6.218	112	2763321	545.18	ug/L	98
88) ethylbenzene	6.287	91	2216	0.25	ug/L	88
90) o-xylene	6.693	91	3537	0.52	ug/L	100
95) isopropylbenzene	6.981	105	5411	0.63	ug/L	91
103) n-propylbenzene	7.301	91	4776	0.51	ug/L	98
109) sec-butylbenzene	7.840	105	3333	0.40	ug/L	98
110) 1,3-dichlorobenzene	7.931	146	16329	4.09	ug/L	96
112) 1,4-dichlorobenzene	8.006	146	292543	70.82	ug/L	98
113) 1,2-dichlorobenzene	8.262	146	1682445	443.18	ug/L	100
119) naphthalene	9.484	128	8442	1.18	ug/L	90
120) 1,2,4-trichlorobenzene	9.319	180	3865	1.70	ug/L	98
121) 1,2,3-trichlorobenzene	9.623	180	681	0.31	ug/L #	77

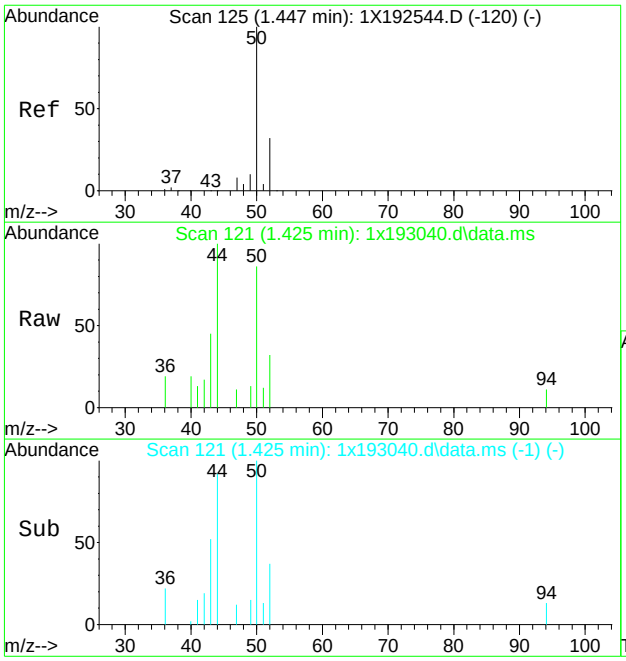
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\Completed\12-20-2021\vx8363-partial\
Data File : 1x193040.d
Acq On : 17 Dec 2021 5:18 pm
Operator : brittank
Sample : JD36624-7 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,5
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 28 08:27:27 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

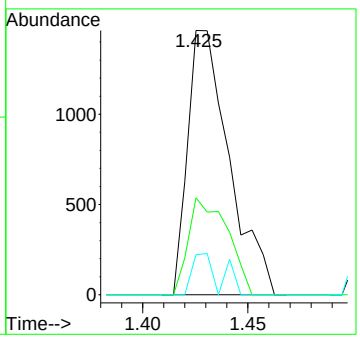


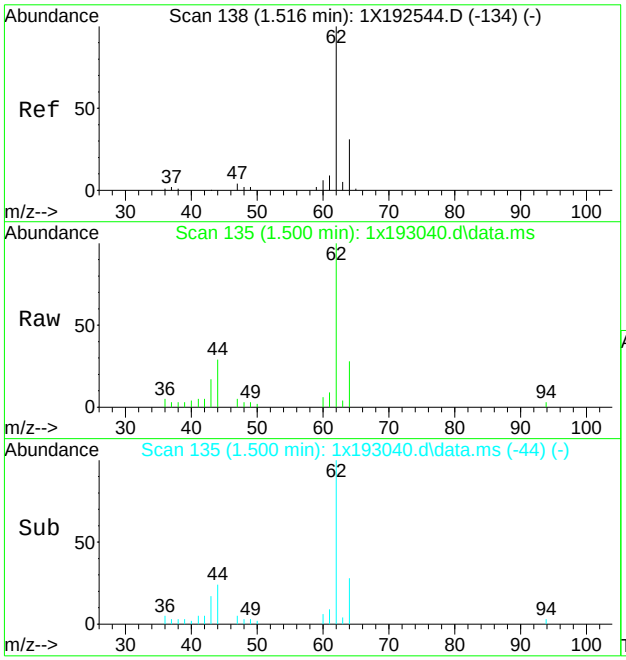


#8
chloromethane
Concen: 0.68 ug/L
RT: 1.425 min Scan# 121
Delta R.T. -0.022 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 50 Resp: 2014

Ion	Ratio	Lower	Upper
50	100		
52	36.7	2.2	62.2
49	15.2	0.0	40.5

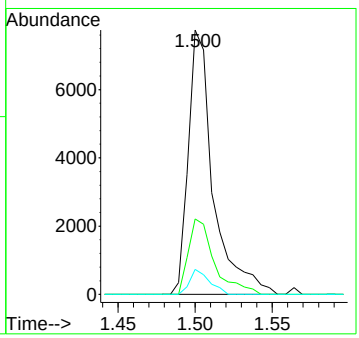


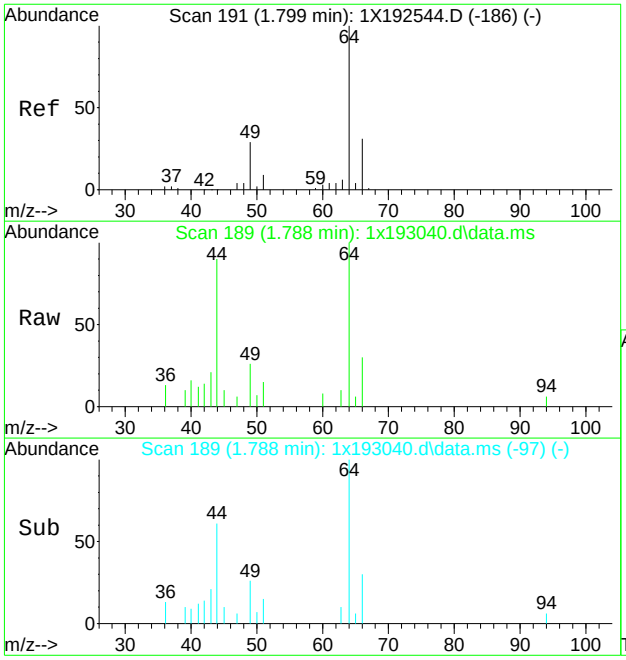


#9
vinyl chloride
Concen: 3.28 ug/L
RT: 1.500 min Scan# 135
Delta R.T. -0.016 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 62 Resp: 8682

Ion	Ratio	Lower	Upper
62	100		
64	28.5	0.5	60.5
61	9.5	0.0	38.7

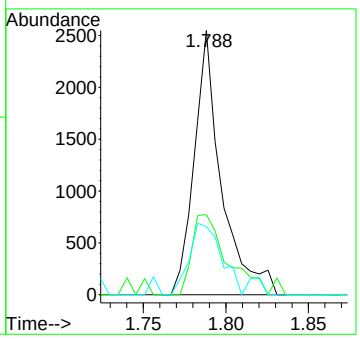


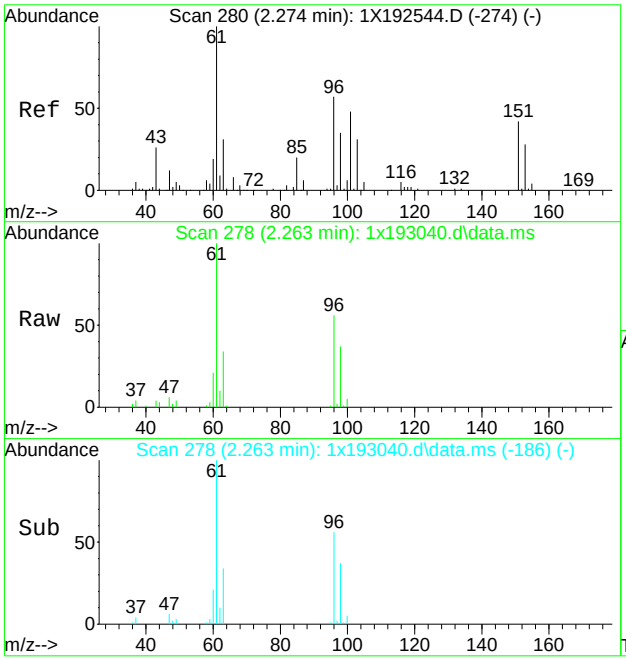


#11
chloroethane
Concen: 2.39 ug/L
RT: 1.788 min Scan# 189
Delta R.T. -0.011 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 64 Resp: 2913

Ion	Ratio	Lower	Upper
64	100		
66	30.3	0.6	60.6
49	25.8	0.0	59.3

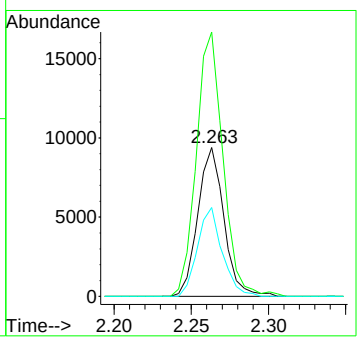


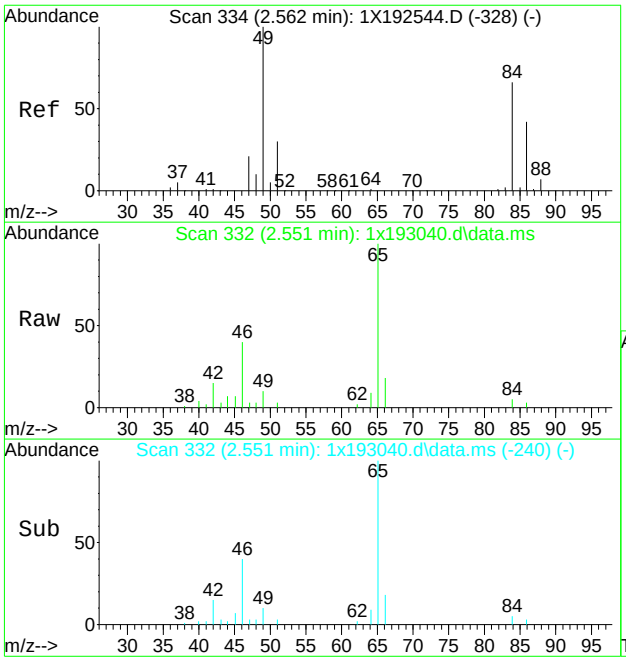


#16
1,1-dichloroethene
Concen: 6.12 ug/L
RT: 2.263 min Scan# 278
Delta R.T. -0.011 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 96 Resp: 11069

Ion	Ratio	Lower	Upper
96	100		
61	177.7	146.8	206.8
63	59.8	25.5	85.5

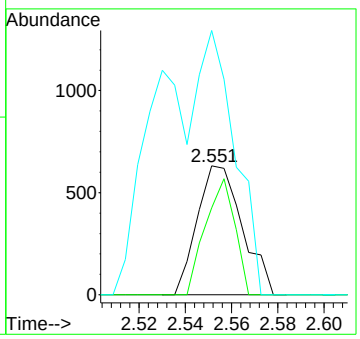


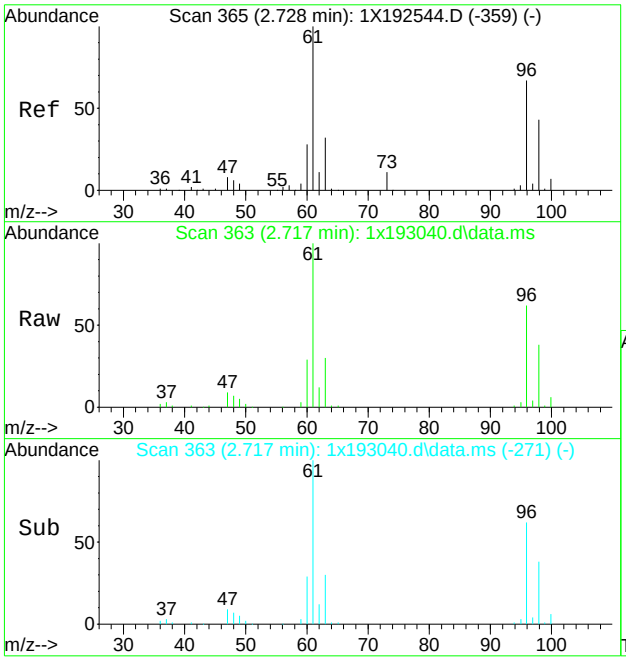


#22
methylene chloride
Concen: 0.48 ug/L
RT: 2.551 min Scan# 332
Delta R.T. -0.011 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 84 Resp: 856

Ion	Ratio	Lower	Upper
84	100		
86	67.2	34.3	94.3
49	204.9	122.9	182.9#

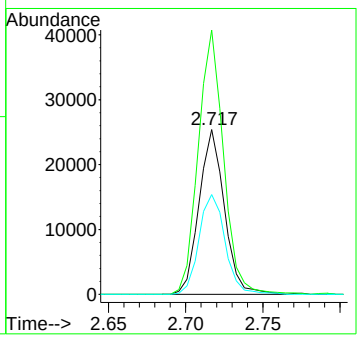


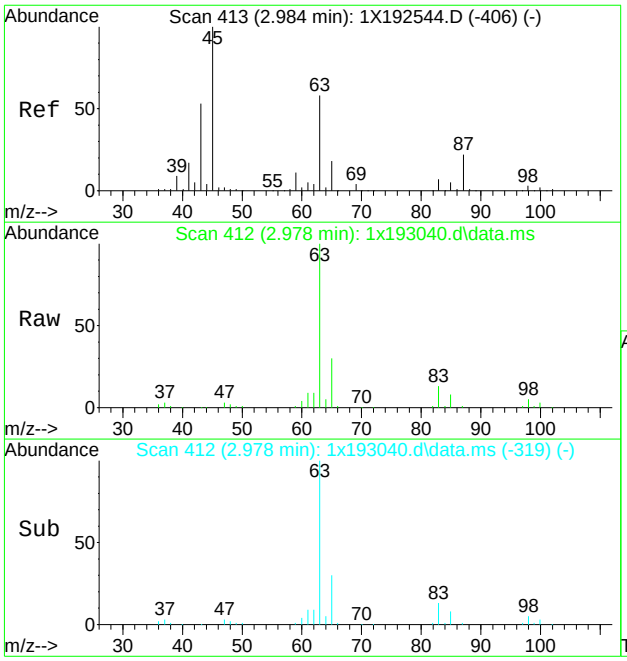


#26
trans-1,2-dichloroethene
Concen: 15.21 ug/L
RT: 2.717 min Scan# 363
Delta R.T. -0.011 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 96 Resp: 29154

Ion	Ratio	Lower	Upper
96	100		
61	160.3	120.2	180.2
98	60.5	34.0	94.0

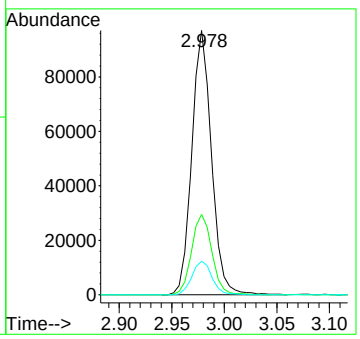


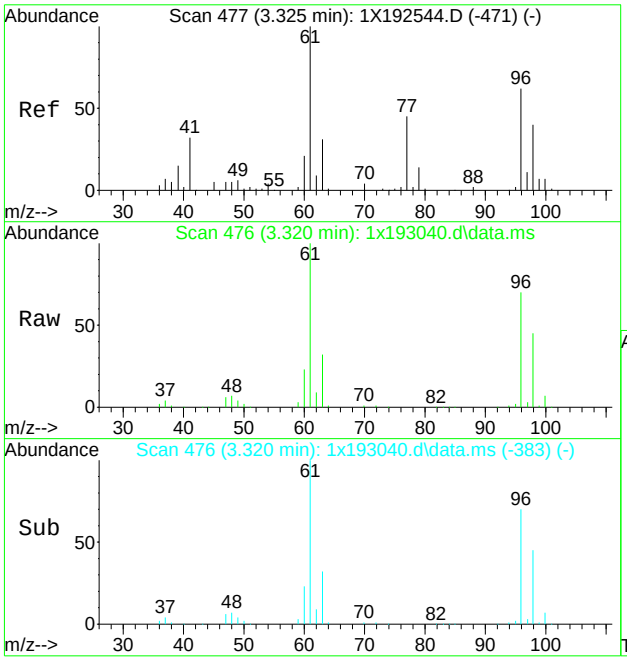


#30
1,1-dichloroethane
Concen: 34.08 ug/L
RT: 2.978 min Scan# 412
Delta R.T. -0.006 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 63 Resp: 126608

Ion	Ratio	Lower	Upper
63	100		
65	30.4	0.9	60.9
83	12.7	0.0	42.5

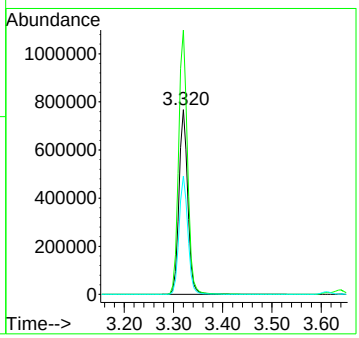


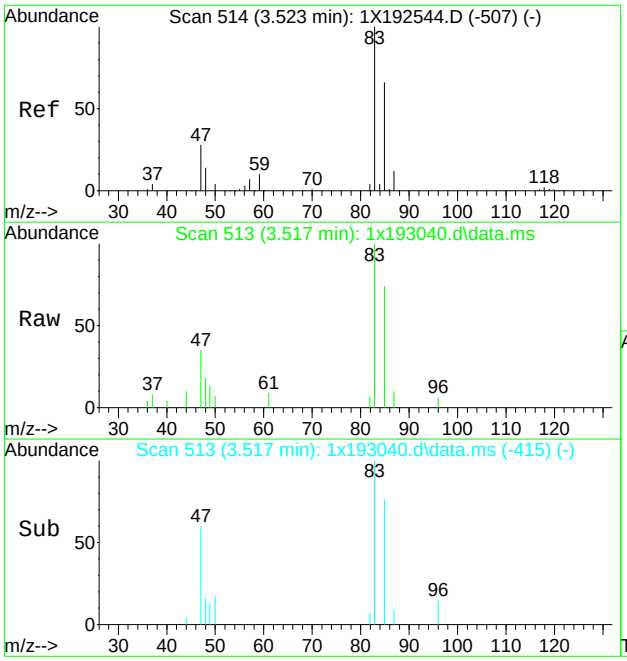


#36
cis-1,2-dichloroethene
Concen: 456.64 ug/L
RT: 3.320 min Scan# 476
Delta R.T. -0.006 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 96 Resp: 940653

Ion	Ratio	Lower	Upper
96	100		
61	143.1	131.2	191.2
98	64.1	34.7	94.7

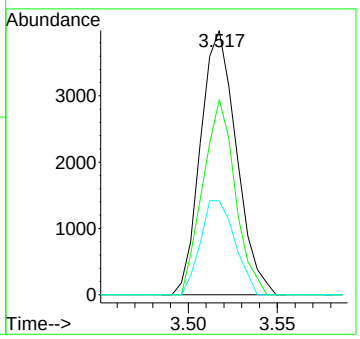


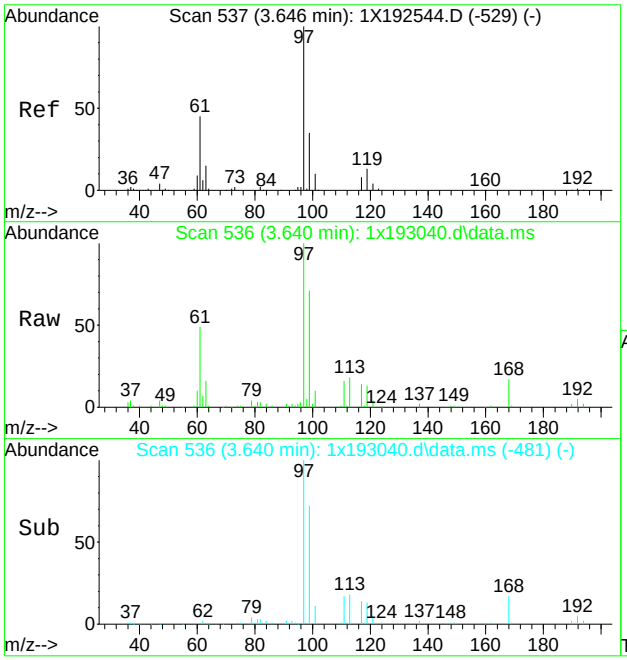


#42
chloroform
Concen: 1.56 ug/L
RT: 3.517 min Scan# 513
Delta R.T. -0.006 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 83 Resp: 5579

Ion	Ratio	Lower	Upper
83	100		
85	73.7	35.8	95.8
47	35.5	0.1	60.1

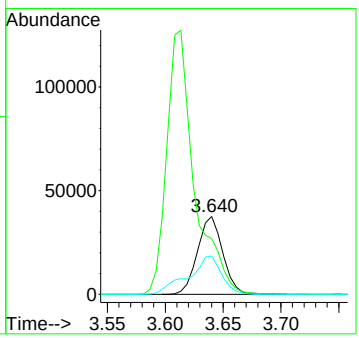


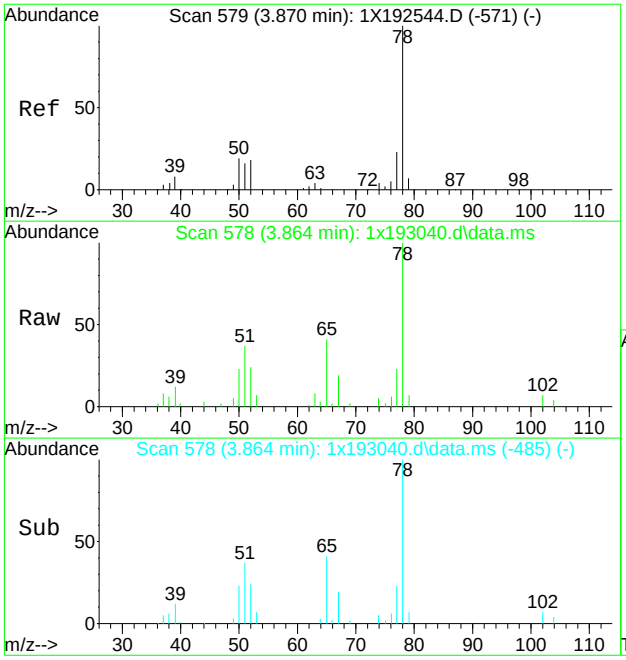


#45
1,1,1-trichloroethane
Concen: 16.87 ug/L
RT: 3.640 min Scan# 536
Delta R.T. -0.006 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 97 Resp: 57045

Ion	Ratio	Lower	Upper
97	100		
99	71.0	37.2	97.2
61	49.3	16.0	76.0

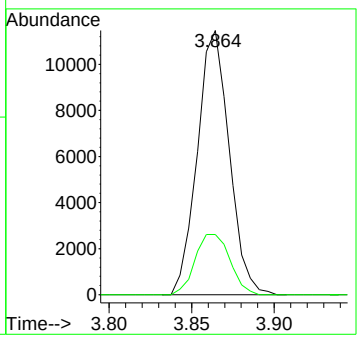


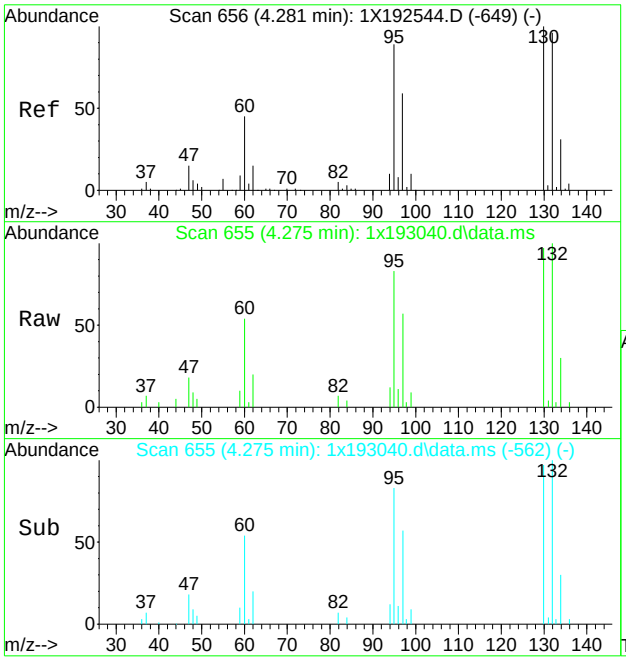


#57
benzene
Concen: 2.21 ug/L
RT: 3.864 min Scan# 578
Delta R.T. -0.006 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 78 Resp: 15424

Ion	Ratio	Lower	Upper
78	100		
77	22.8	0.0	53.3

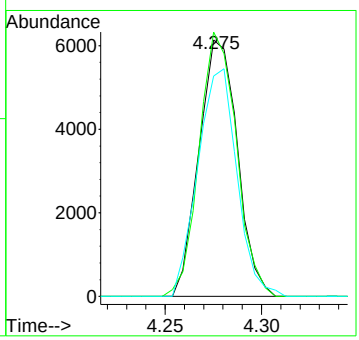


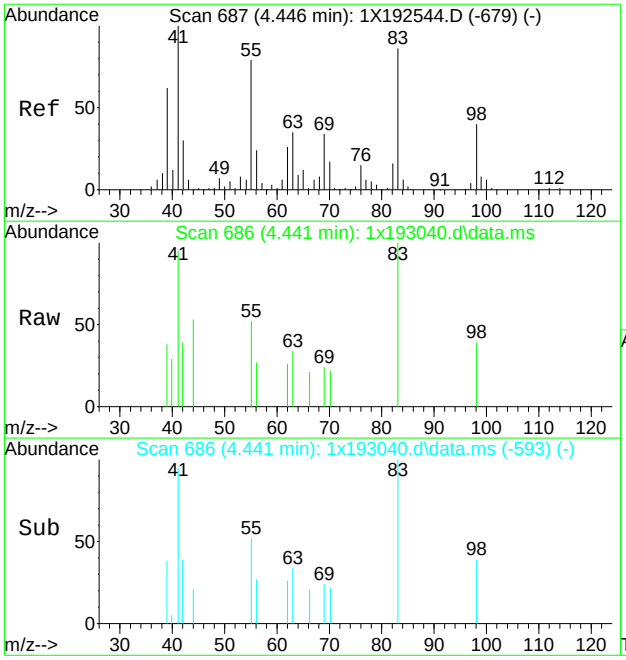


#61
trichloroethene
Concen: 3.63 ug/L
RT: 4.275 min Scan# 655
Delta R.T. -0.006 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion:130 Resp: 8528

Ion	Ratio	Lower	Upper
130	100		
132	103.1	65.5	125.5
95	86.0	58.7	118.7

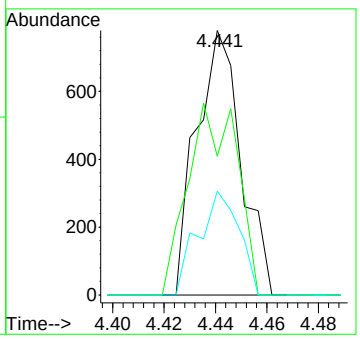


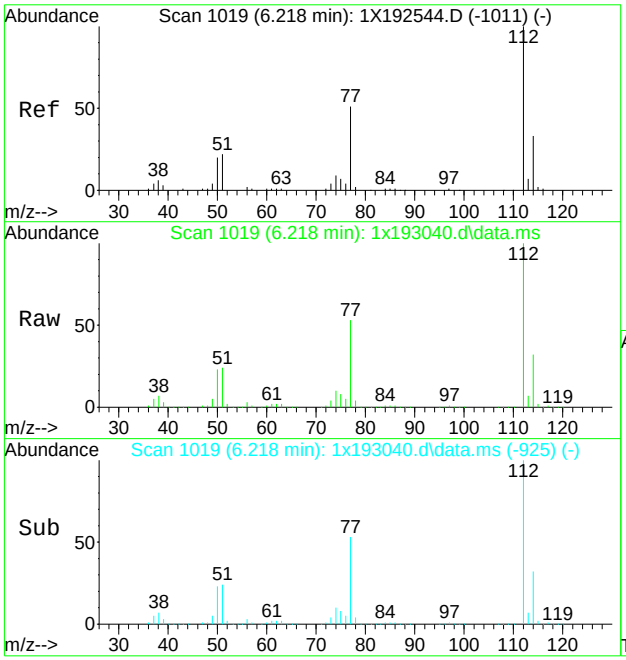


#68
methylcyclohexane
Concen: 0.28 ug/L
RT: 4.441 min Scan# 686
Delta R.T. -0.005 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 83 Resp: 943

Ion	Ratio	Lower	Upper
83	100		
55	52.4	61.4	121.4#
98	39.2	16.6	76.6

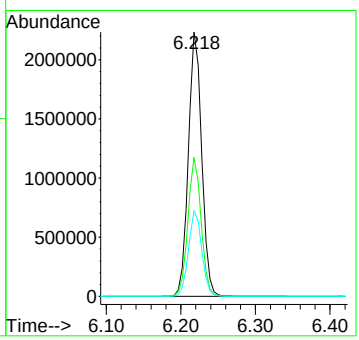


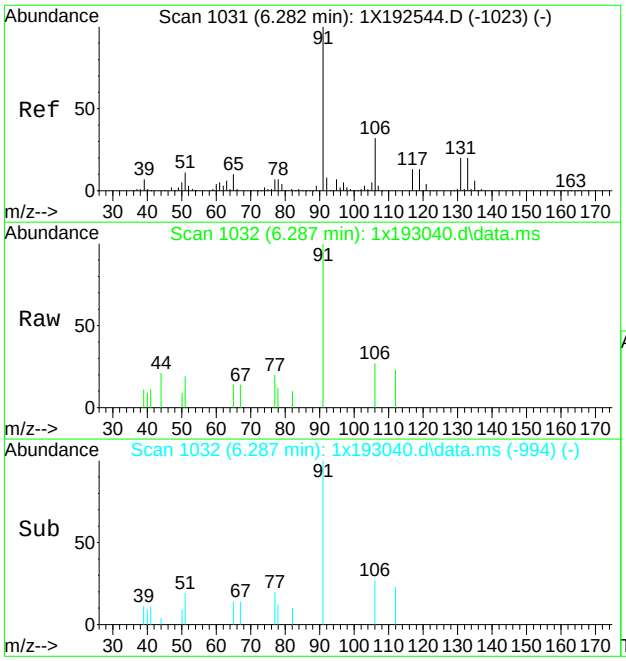


#86
chlorobenzene
Concen: 545.18 ug/L
RT: 6.218 min Scan# 1019
Delta R.T. -0.000 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion:112 Resp: 2763321

Ion	Ratio	Lower	Upper
112	100		
77	52.6	20.6	80.6
114	32.4	2.6	62.6

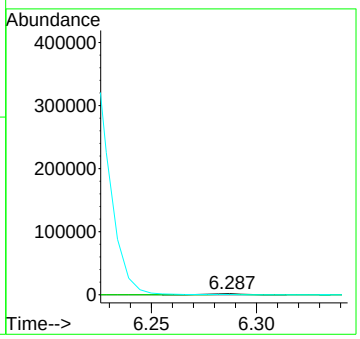


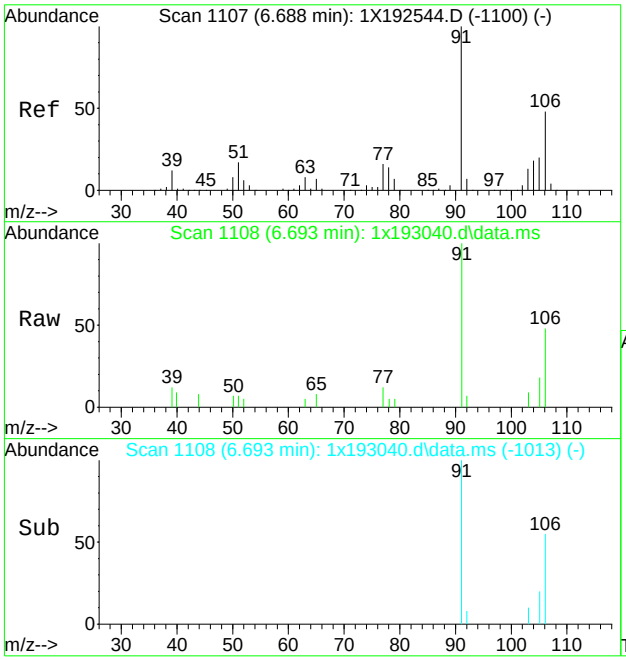


#88
ethylbenzene
Concen: 0.25 ug/L
RT: 6.287 min Scan# 1032
Delta R.T. 0.005 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 91 Resp: 2216

Ion	Ratio	Lower	Upper
91	100		
106	26.8	2.4	62.4
51	18.6	0.0	41.7

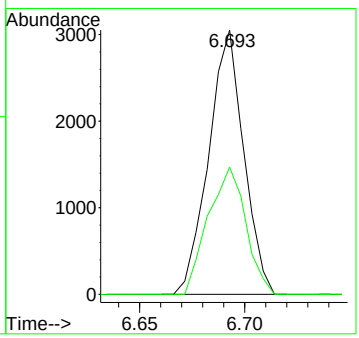


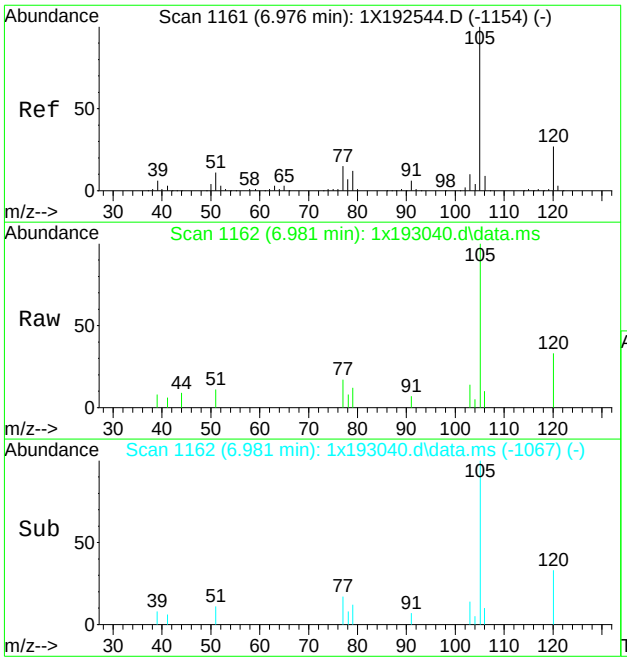


#90
o-xylene
Concen: 0.52 ug/L
RT: 6.693 min Scan# 1108
Delta R.T. 0.005 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 91 Resp: 3537

Ion	Ratio	Lower	Upper
91	100		
106	48.1	18.3	78.3

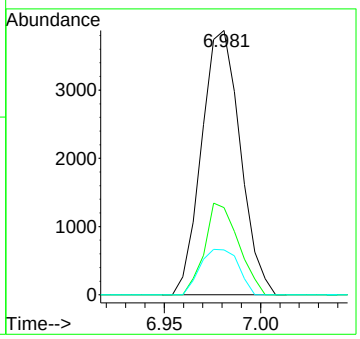


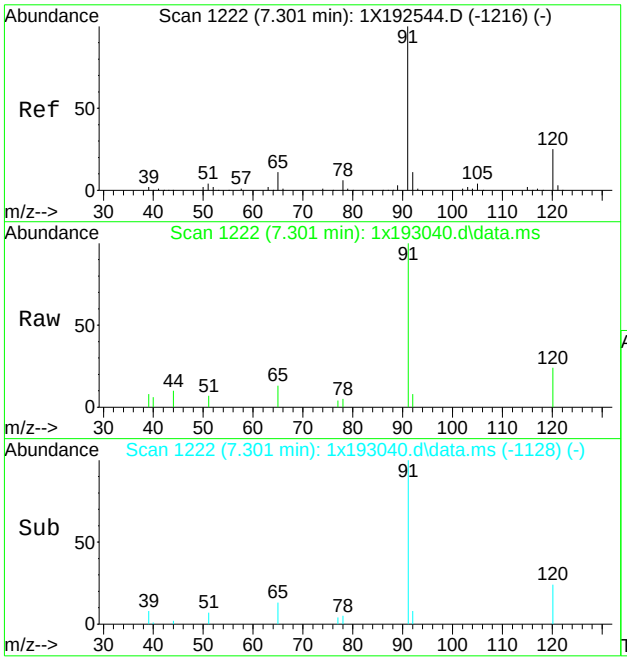


#95
isopropylbenzene
Concen: 0.63 ug/L
RT: 6.981 min Scan# 1162
Delta R.T. 0.005 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion:105 Resp: 5411

Ion	Ratio	Lower	Upper
105	100		
120	33.0	7.2	47.2
77	17.0	0.0	35.4

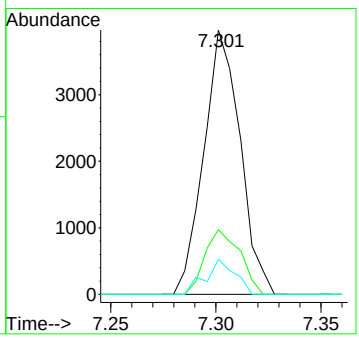


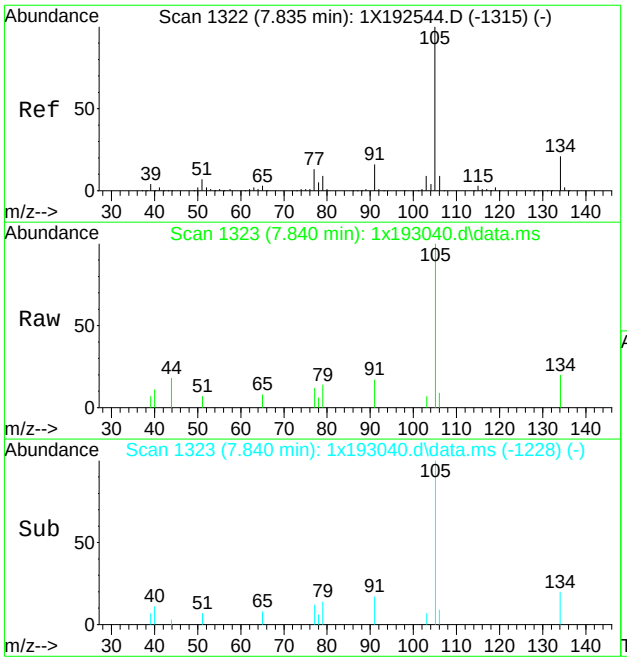


#103
n-propylbenzene
Concen: 0.51 ug/L
RT: 7.301 min Scan# 1222
Delta R.T. -0.000 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion: 91 Resp: 4776

Ion	Ratio	Lower	Upper
91	100		
120	24.5	0.0	55.0
65	13.2	0.0	41.3

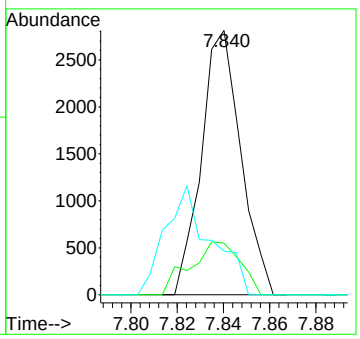


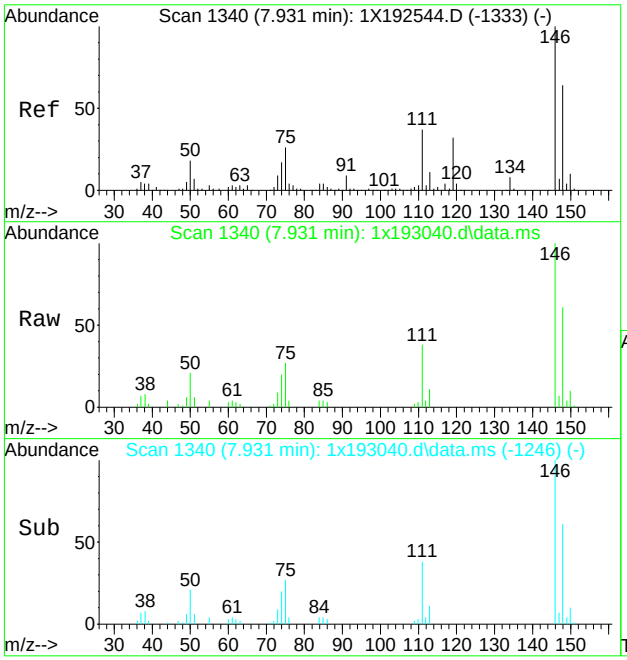


#109
sec-butylbenzene
Concen: 0.40 ug/L
RT: 7.840 min Scan# 1323
Delta R.T. 0.005 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion:105 Resp: 3333

Ion	Ratio	Lower	Upper
105	100		
134	19.5	0.0	50.5
91	16.5	0.0	45.8

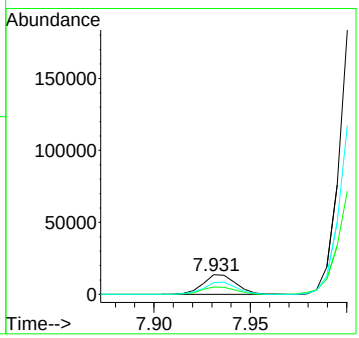


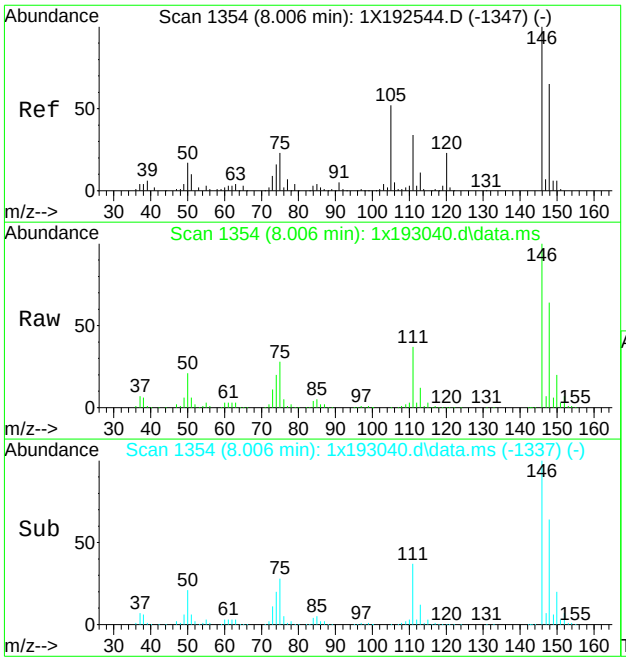


#110
1,3-dichlorobenzene
Concen: 4.09 ug/L
RT: 7.931 min Scan# 1340
Delta R.T. -0.000 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion:146 Resp: 16329

Ion	Ratio	Lower	Upper
146	100		
111	37.9	6.7	66.7
148	60.6	34.1	94.1

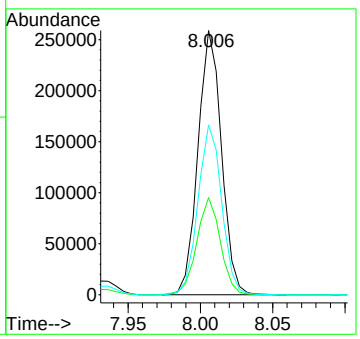


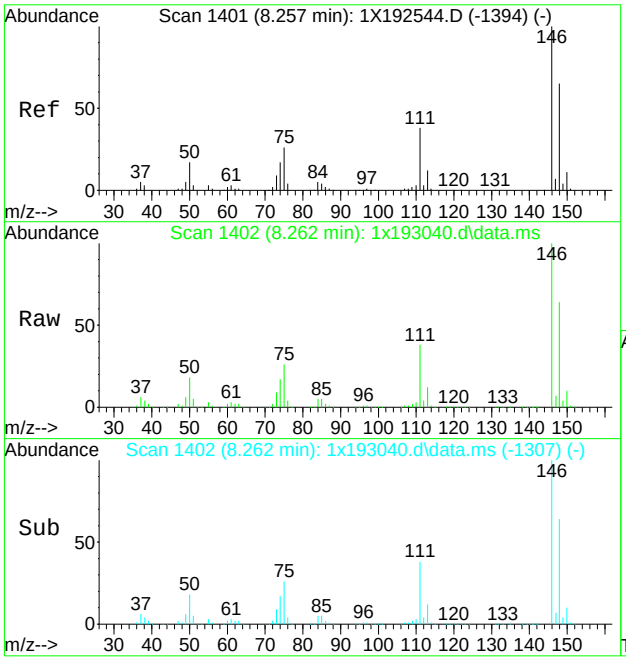


#112
1,4-dichlorobenzene
Concen: 70.82 ug/L
RT: 8.006 min Scan# 1354
Delta R.T. -0.000 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion:146 Resp: 292543

Ion	Ratio	Lower	Upper
146	100		
111	36.8	4.4	64.4
148	64.3	34.6	94.6

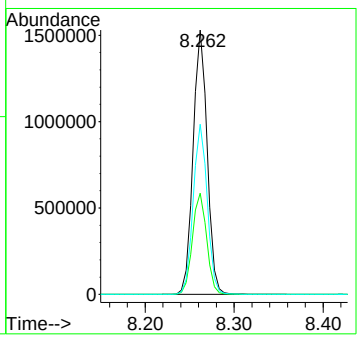


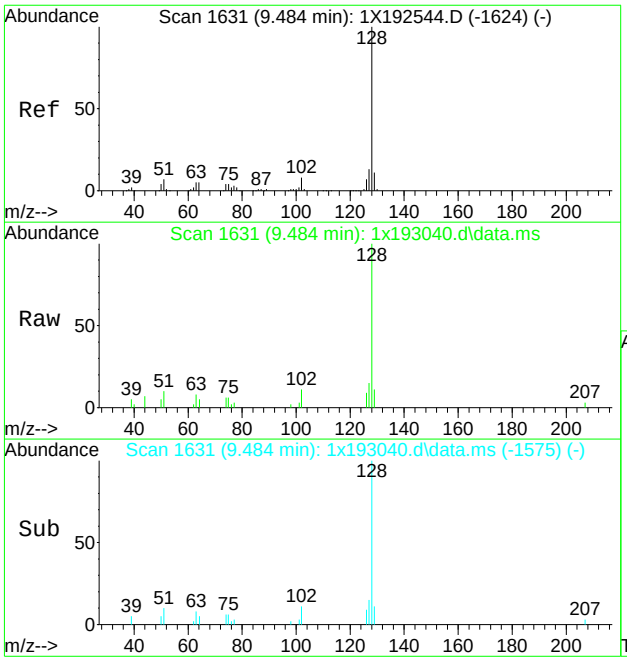


#113
1,2-dichlorobenzene
Concen: 443.18 ug/L
RT: 8.262 min Scan# 1402
Delta R.T. 0.005 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion:146 Resp: 1682445

Ion	Ratio	Lower	Upper
146	100		
111	38.2	8.0	68.0
148	64.4	34.7	94.7

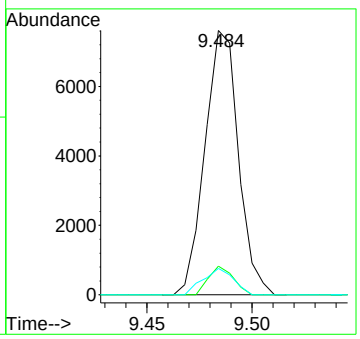


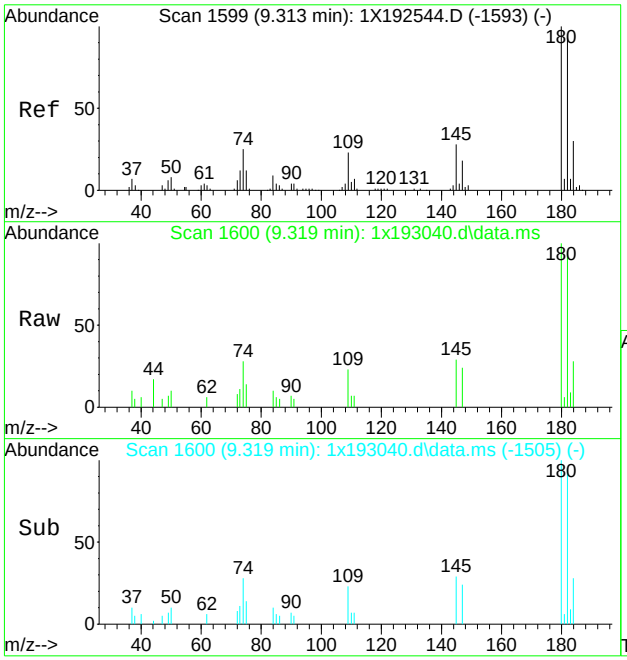


#119
naphthalene
Concen: 1.18 ug/L
RT: 9.484 min Scan# 1631
Delta R.T. -0.000 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion:128 Resp: 8442

Ion	Ratio	Lower	Upper
128	100		
102	10.9	0.0	37.7
51	10.0	0.0	36.5

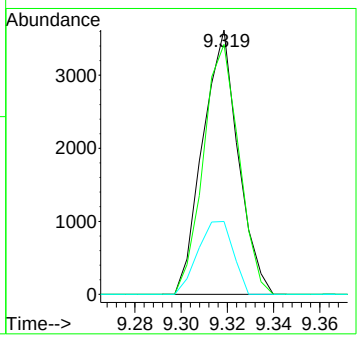


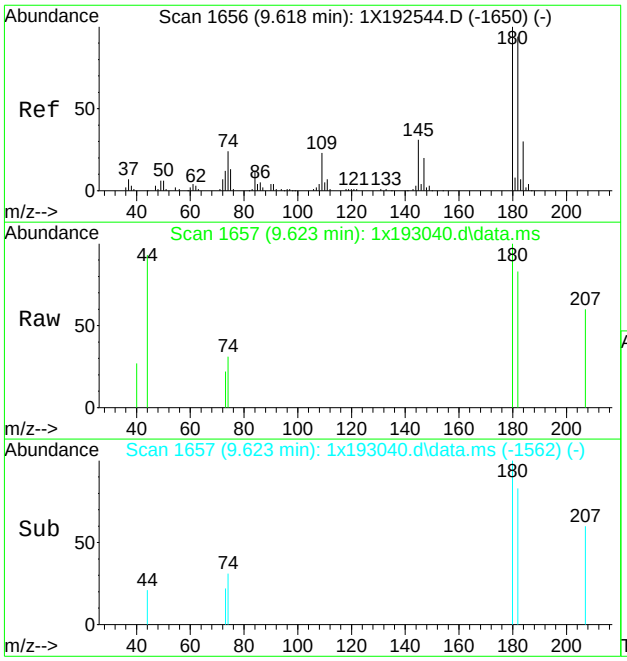


#120
1,2,4-trichlorobenzene
Concen: 1.70 ug/L
RT: 9.319 min Scan# 1600
Delta R.T. 0.005 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion:180 Resp: 3865

Ion	Ratio	Lower	Upper
180	100		
182	94.5	63.3	123.3
74	27.5	0.0	55.0

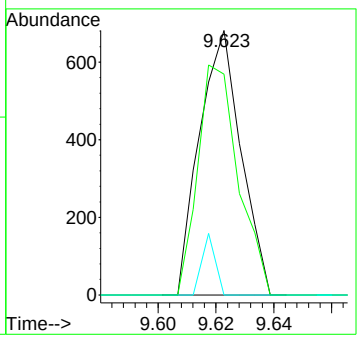




#121
1,2,3-trichlorobenzene
Concen: 0.31 ug/L
RT: 9.623 min Scan# 1657
Delta R.T. 0.005 min
Lab File: 1x193040.d
Acq: 17 Dec 2021 5:18 pm

Tgt Ion:180 Resp: 681

Ion	Ratio	Lower	Upper
180	100		
182	83.4	64.5	124.5
145	0.0	1.1	61.1#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-18-2021\v3d7294-rest of batch\
Data File : 3d171938.d
Acq On : 16 Dec 2021 9:10 pm
Operator : nicoleh
Sample : JD36624-7 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,20
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 18 03:23:11 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

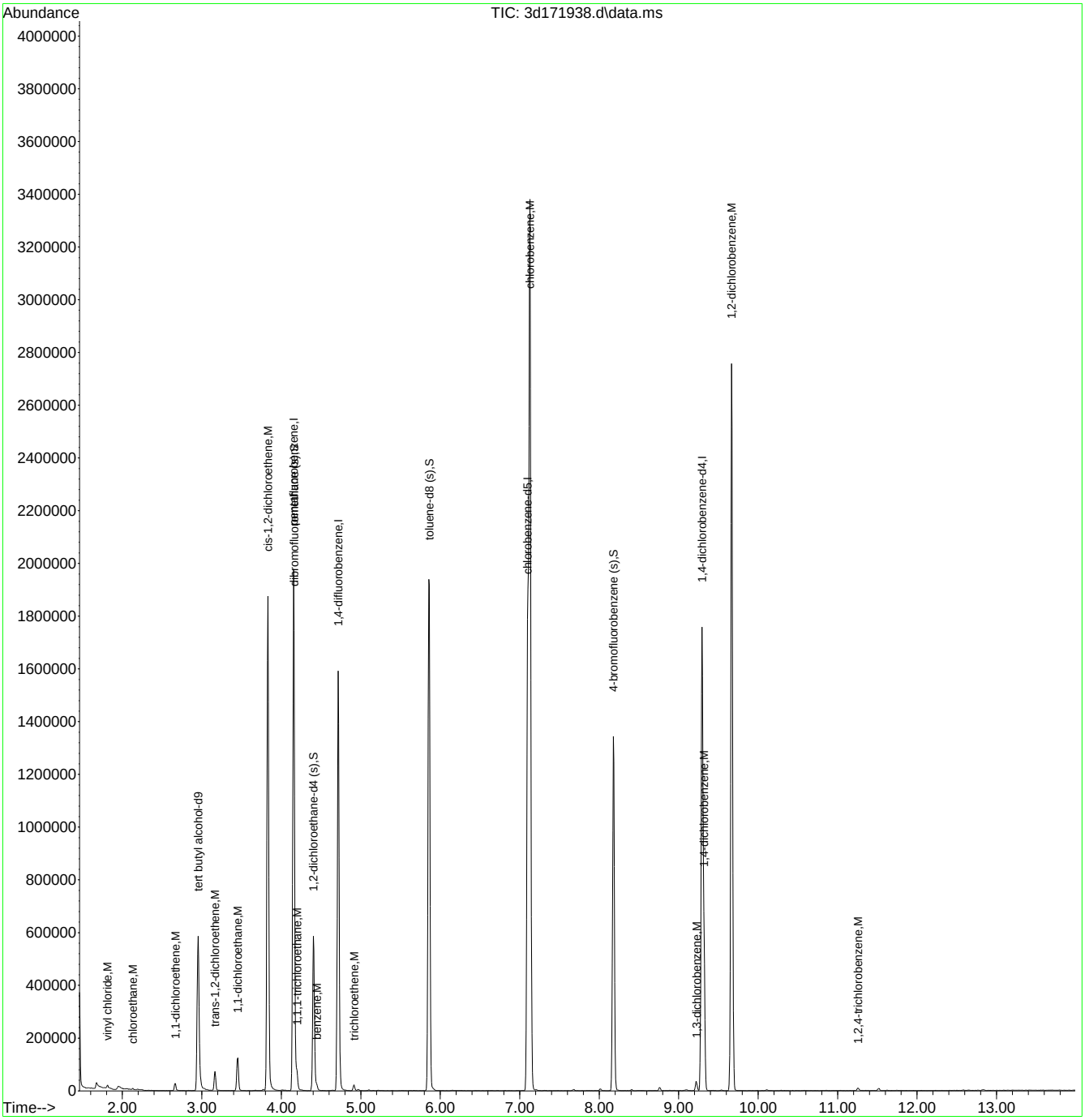
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	2.953	65	541517	500.00	ug/L		0.00
5) pentafluorobenzene	4.154	168	747881	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.715	114	1074100	50.00	ug/L		0.00
74) chlorobenzene-d5	7.099	117	917312	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	9.293	152	444597	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	4.160	113	283222	43.27	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 86.54%				
53) 1,2-dichloroethane-d4 (s)	4.404	65	323619	45.71	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 91.42%				
75) toluene-d8 (s)	5.861	98	1190314	51.19	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.38%				
99) 4-bromofluorobenzene (s)	8.178	95	440908	49.50	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.00%				
Target Compounds							Qvalue
9) vinyl chloride	1.813	62	7500	0.77	ug/L		93
12) chloroethane	2.130	64	4135	0.77	ug/L		76
18) 1,1-dichloroethene	2.667	96	7796	1.68	ug/L		90
26) trans-1,2-dichloroethene	3.167	96	21199	3.96	ug/L		95
29) 1,1-dichloroethane	3.453	63	92715	8.84	ug/L		96
37) cis-1,2-dichloroethene	3.831	96	675654	107.09	ug/L		83
46) 1,1,1-trichloroethane	4.197	97	32604	3.56	ug/L		82
56) benzene	4.447	78	12922	0.60	ug/L		86
61) trichloroethene	4.916	130	6047	1.05	ug/L	#	86
87) chlorobenzene	7.129	112	1701686	112.84	ug/L		97
111) 1,3-dichlorobenzene	9.226	146	13854	1.13	ug/L		94
113) 1,4-dichlorobenzene	9.318	146	227910	18.95	ug/L		97
116) 1,2-dichlorobenzene	9.665	146	1104167	94.80	ug/L		97
121) 1,2,4-trichlorobenzene	11.256	180	3447	0.44	ug/L		76

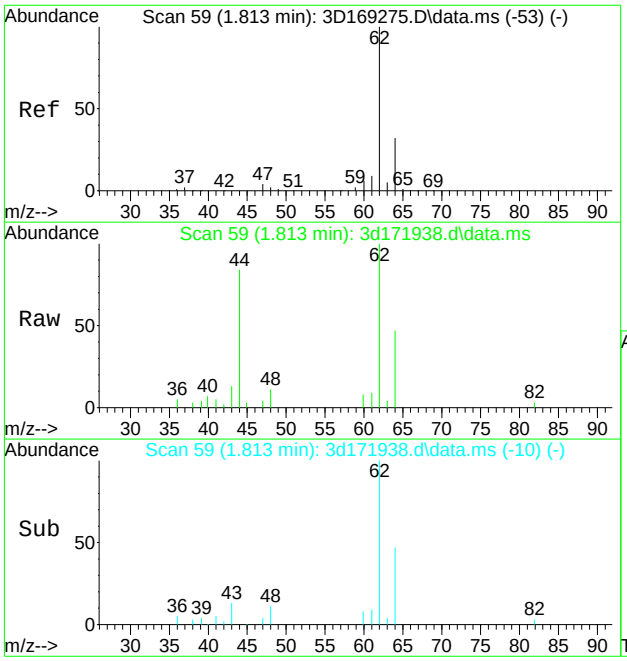
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-18-2021\v3d7294-rest of batch\
Data File : 3d171938.d
Acq On : 16 Dec 2021 9:10 pm
Operator : nicoleh
Sample : JD36624-7 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,20
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 18 03:23:11 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

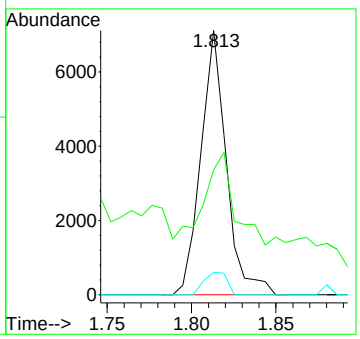


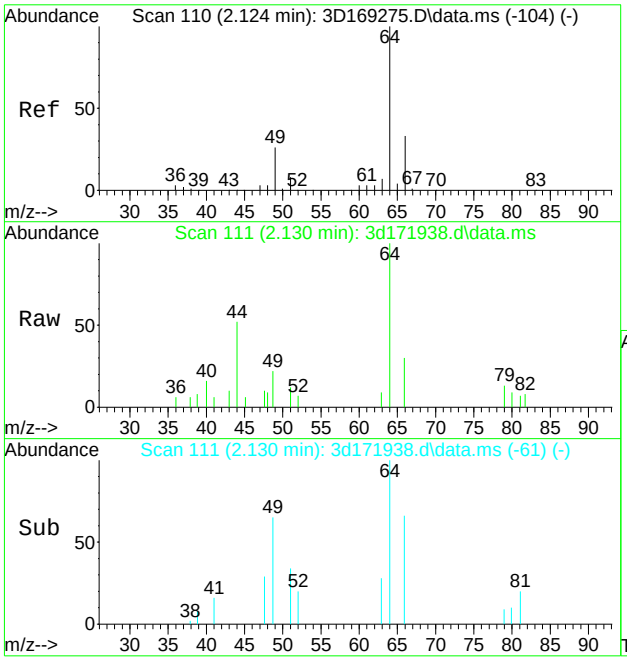


#9
vinyl chloride
Concen: 0.77 ug/L
RT: 1.813 min Scan# 59
Delta R.T. -0.000 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion: 62 Resp: 7500

Ion	Ratio	Lower	Upper
62	100		
64	27.6	2.4	62.4
61	8.5	0.0	39.2

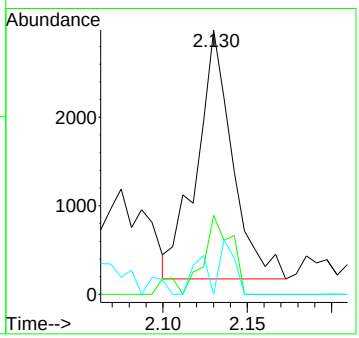


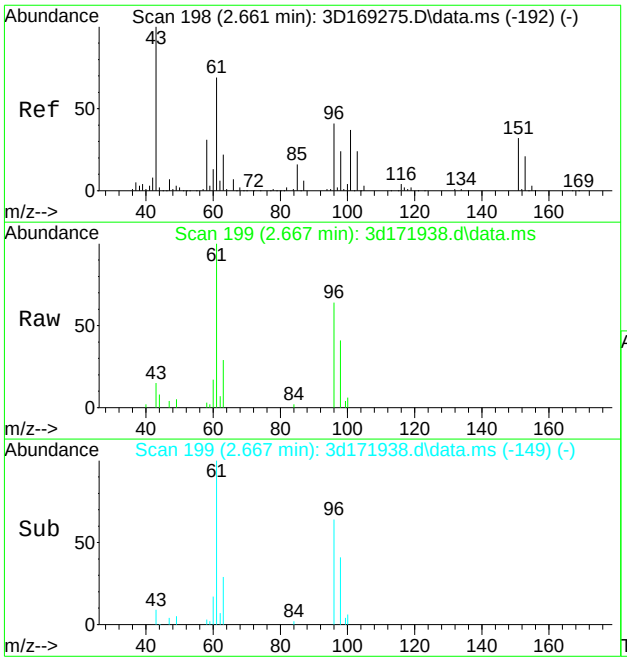


#12
chloroethane
Concen: 0.77 ug/L
RT: 2.130 min Scan# 111
Delta R.T. 0.006 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion: 64 Resp: 4135

Ion	Ratio	Lower	Upper
64	100		
66	31.7	3.1	63.1
49	0.0	0.0	55.9

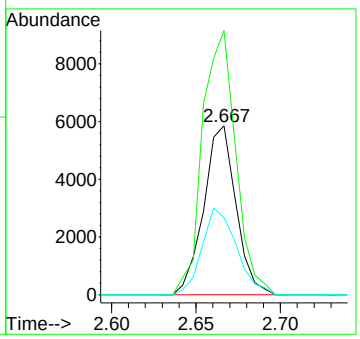


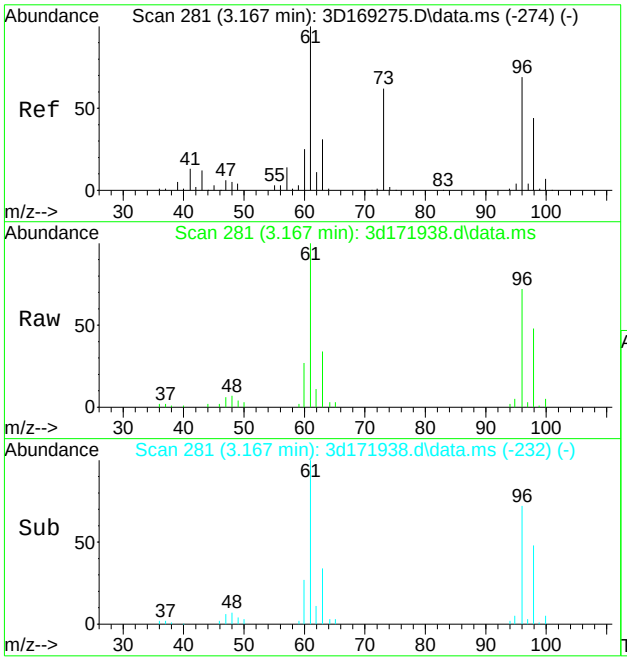


#18
1,1-dichloroethene
Concen: 1.68 ug/L
RT: 2.667 min Scan# 199
Delta R.T. 0.006 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion: 96 Resp: 7796

Ion	Ratio	Lower	Upper
96	100		
61	156.5	139.8	199.8
63	45.7	23.5	83.5

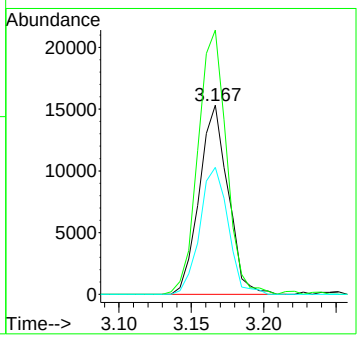


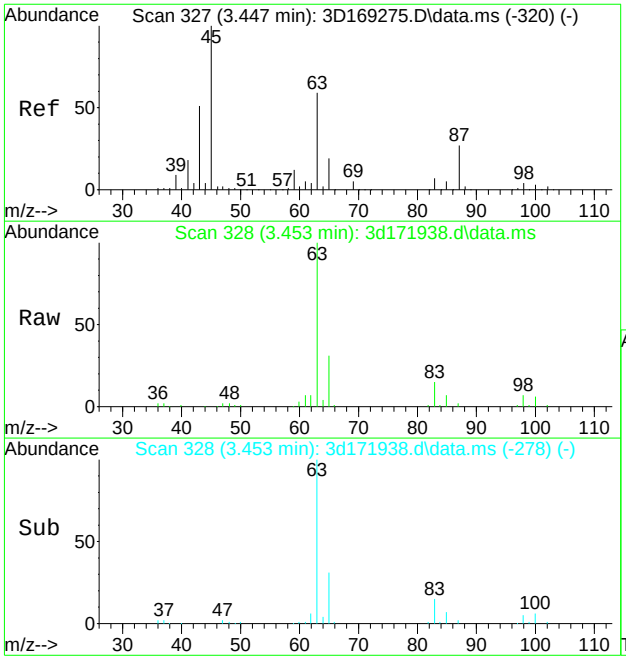


#26
trans-1,2-dichloroethene
Concen: 3.96 ug/L
RT: 3.167 min Scan# 281
Delta R.T. -0.000 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion: 96 Resp: 21199

Ion	Ratio	Lower	Upper
96	100		
61	139.8	115.9	175.9
98	67.1	33.6	93.6

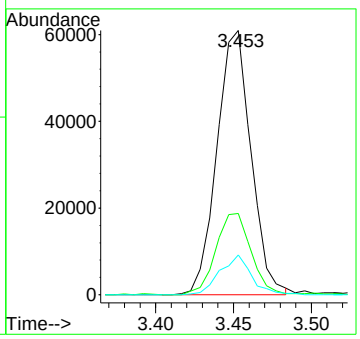


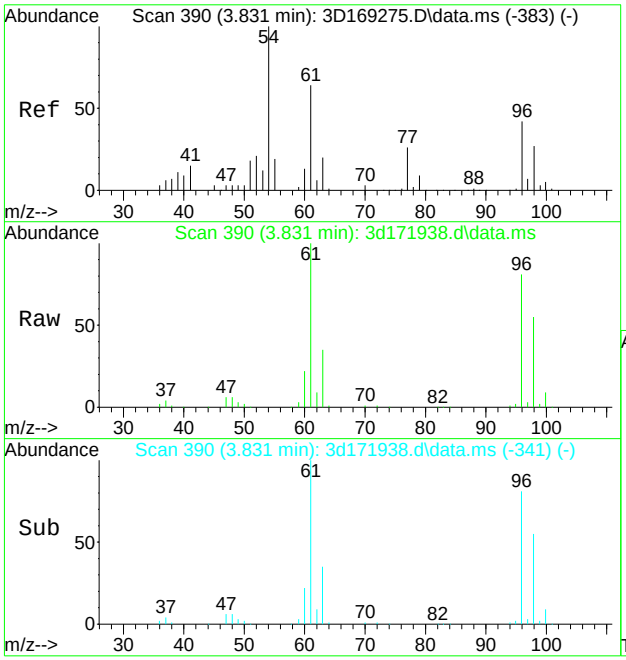


#29
1,1-dichloroethane
Concen: 8.84 ug/L
RT: 3.453 min Scan# 328
Delta R.T. 0.006 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion: 63 Resp: 92715

Ion	Ratio	Lower	Upper
63	100		
65	30.7	2.4	62.4
83	15.1	0.0	42.8

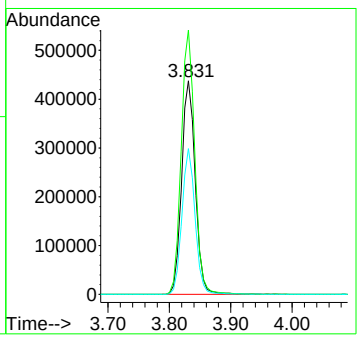


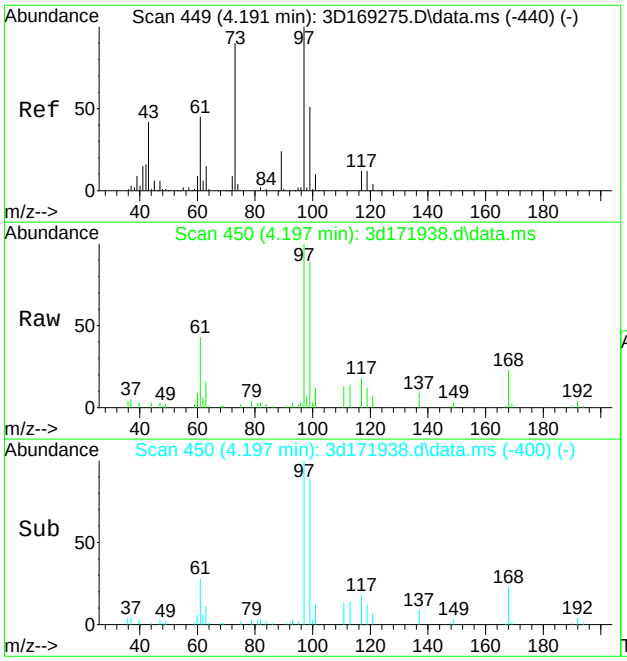


#37
cis-1,2-dichloroethene
Concen: 107.09 ug/L
RT: 3.831 min Scan# 390
Delta R.T. -0.000 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion: 96 Resp: 675654

Ion	Ratio	Lower	Upper
96	100		
61	123.7	122.7	182.7
98	68.2	34.6	94.6

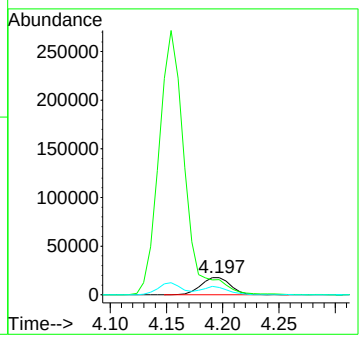


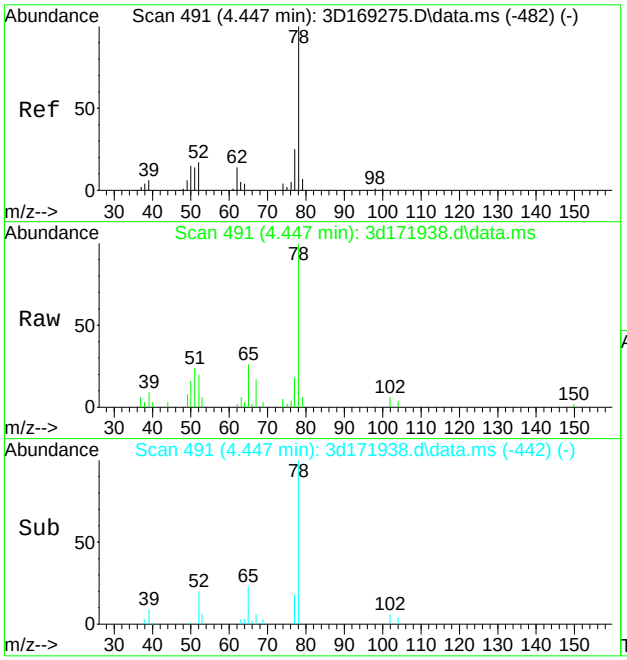


#46
1,1,1-trichloroethane
Concen: 3.56 ug/L
RT: 4.197 min Scan# 450
Delta R.T. 0.006 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion: 97 Resp: 32604

Ion	Ratio	Lower	Upper
97	100		
99	86.3	35.8	95.8
61	41.6	15.4	75.4

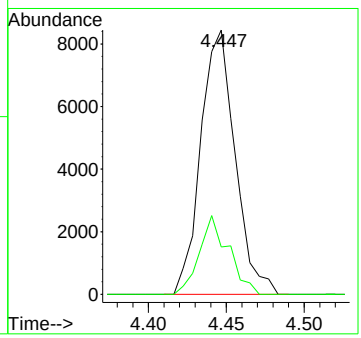


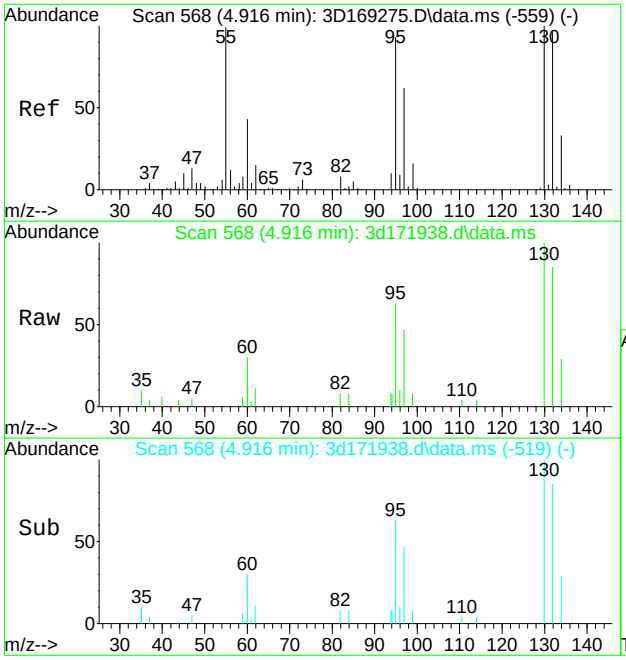


#56
benzene
Concen: 0.60 ug/L
RT: 4.447 min Scan# 491
Delta R.T. -0.000 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion: 78 Resp: 12922

Ion	Ratio	Lower	Upper
78	100		
77	17.9	0.0	54.9

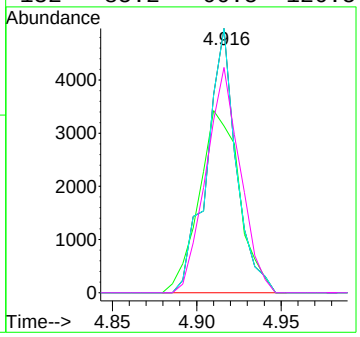


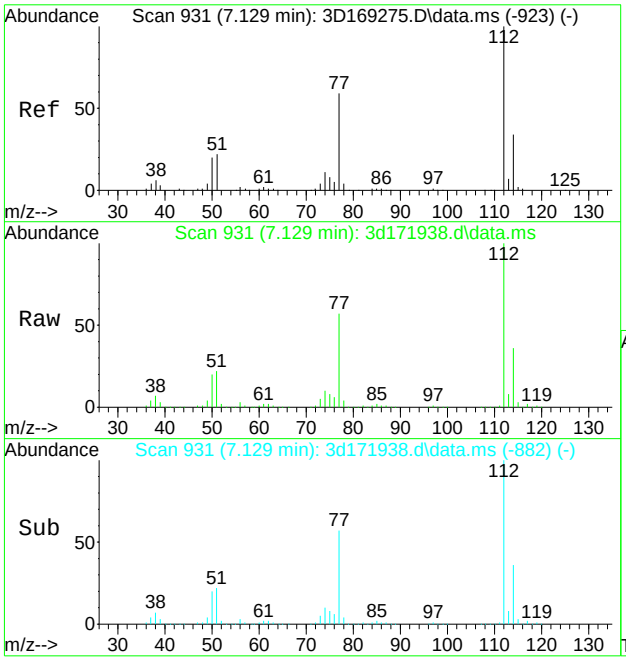


#61
trichloroethene
Concen: 1.05 ug/L
RT: 4.916 min Scan# 568
Delta R.T. 0.000 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion:130 Resp: 6047

Ion	Ratio	Lower	Upper
130	100		
95	63.1	63.4	123.4#
130	100.0	70.0	130.0
132	85.2	66.5	126.5

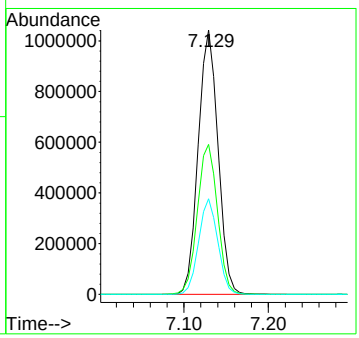


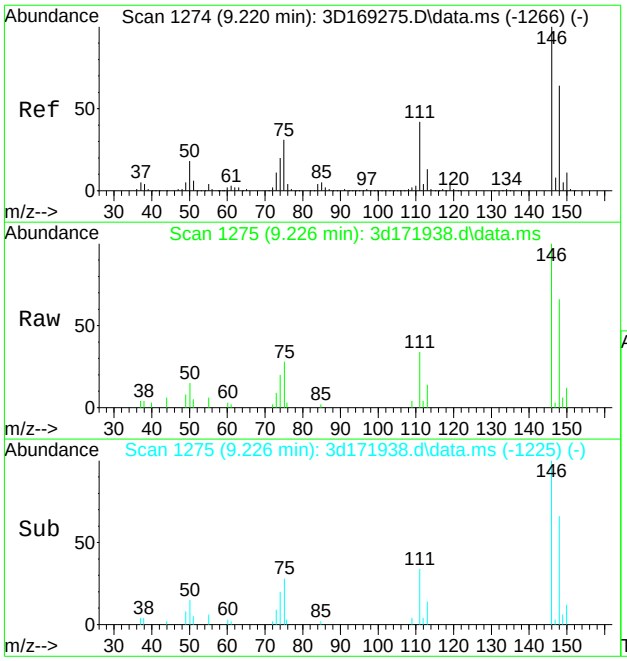


#87
chlorobenzene
Concen: 112.84 ug/L
RT: 7.129 min Scan# 931
Delta R.T. 0.000 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion:112 Resp: 1701686

Ion	Ratio	Lower	Upper
112	100		
77	56.7	29.0	89.0
114	36.2	4.0	64.0

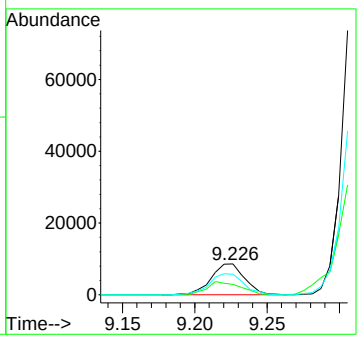


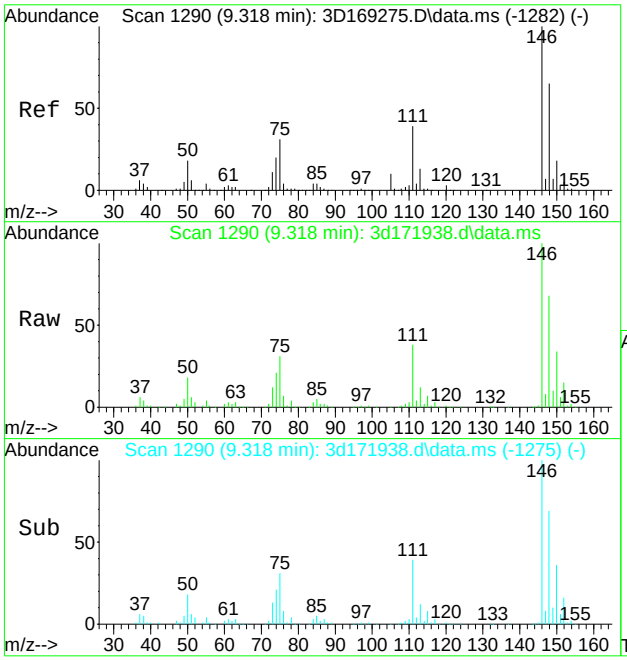


#111
1,3-dichlorobenzene
Concen: 1.13 ug/L
RT: 9.226 min Scan# 1275
Delta R.T. 0.006 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion:146 Resp: 13854

Ion	Ratio	Lower	Upper
146	100		
111	34.2	12.1	72.1
148	66.3	34.4	94.4

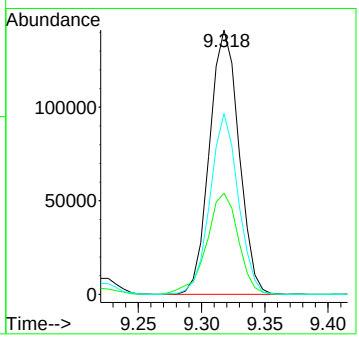


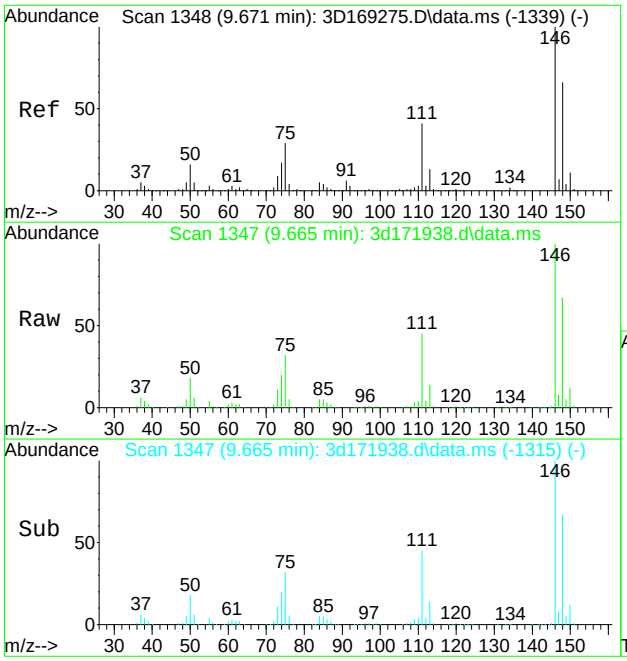


#113
1,4-dichlorobenzene
Concen: 18.95 ug/L
RT: 9.318 min Scan# 1290
Delta R.T. -0.000 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion:146 Resp: 227910

Ion	Ratio	Lower	Upper
146	100		
111	38.2	8.7	68.7
148	68.5	35.3	95.3

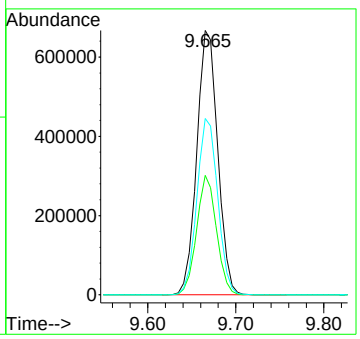


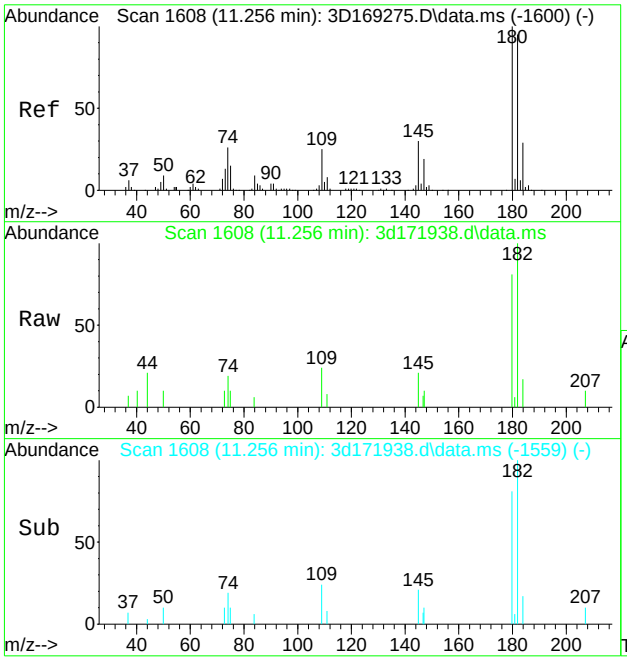


#116
1,2-dichlorobenzene
Concen: 94.80 ug/L
RT: 9.665 min Scan# 1347
Delta R.T. -0.006 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion:146 Resp: 1104167

Ion	Ratio	Lower	Upper
146	100		
111	45.2	11.3	71.3
148	66.7	35.9	95.9

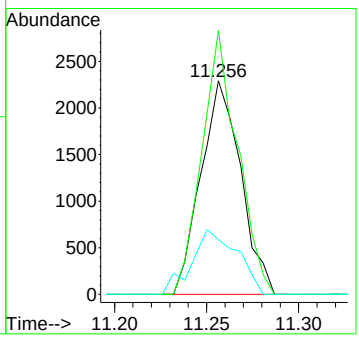




#121
1,2,4-trichlorobenzene
Concen: 0.44 ug/L
RT: 11.256 min Scan# 1608
Delta R.T. -0.000 min
Lab File: 3d171938.d
Acq: 16 Dec 2021 9:10 pm

Tgt Ion:180 Resp: 3447

Ion	Ratio	Lower	Upper
180	100		
182	123.8	64.8	124.8
145	25.8	0.0	59.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA-SVOA\Dec-21\12-17\v3d7294-partial\
Data File : 3d171934.d
Acq On : 16 Dec 2021 7:22 pm
Operator : nicoleh
Sample : JD36624-8 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 17 02:30:03 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

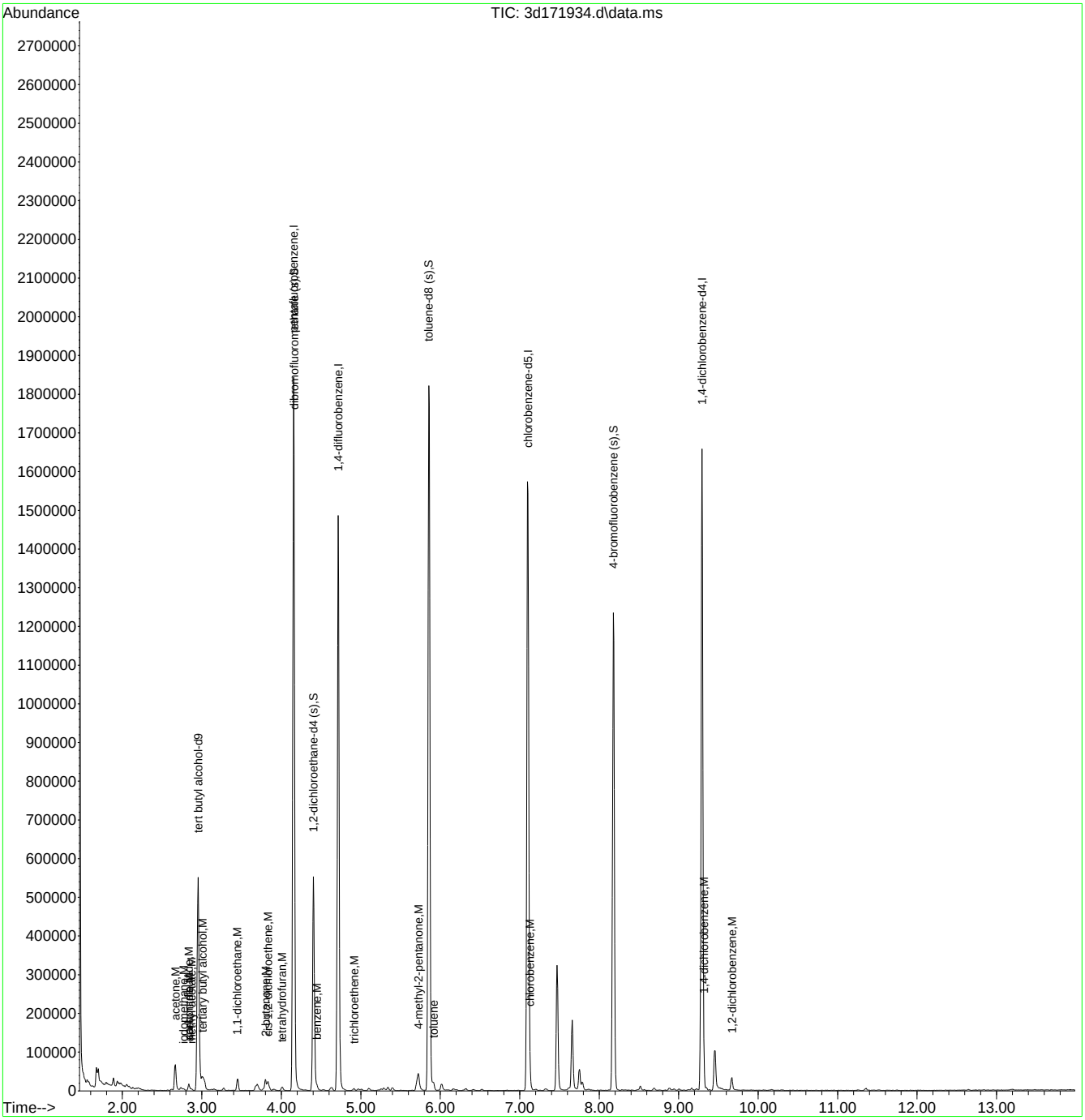
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	2.953	65	507608	500.00	ug/L		0.00
5) pentafluorobenzene	4.154	168	711902	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.715	114	1012904	50.00	ug/L		0.00
74) chlorobenzene-d5	7.105	117	853677	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	9.293	152	424709	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	4.160	113	269002	43.17	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 86.34%				
53) 1,2-dichloroethane-d4 (s)	4.404	65	300222	44.97	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 89.94%				
75) toluene-d8 (s)	5.855	98	1115129	51.53	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.06%				
99) 4-bromofluorobenzene (s)	8.178	95	413925	48.65	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.30%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	3.008	59	27798	20.41	ug/L		91
19) acetone	2.667	58	21048	20.77	ug/L		88
20) acetonitrile	2.843	41	4832	3.12	ug/L		99
21) iodomethane	2.770	142	3162	2.18	ug/L		97
22) carbon disulfide	2.837	76	12793	1.06	ug/L		93
24) methyl acetate	2.868	43	3786	0.45	ug/L		94
28) 2-butanone	3.807	72	6909	5.70	ug/L	#	84
29) 1,1-dichloroethane	3.447	63	22609	2.27	ug/L		91
37) cis-1,2-dichloroethene	3.831	96	7309	1.22	ug/L	#	80
41) tetrahydrofuran	4.008	42	5442	1.50	ug/L		89
56) benzene	4.447	78	7352	0.36	ug/L		95
61) trichloroethene	4.916	130	1525	0.28	ug/L		85
72) 4-methyl-2-pentanone	5.727	58	9611	2.76	ug/L		92
76) toluene	5.916	92	5453	0.42	ug/L	#	81
87) chlorobenzene	7.129	112	16144	1.15	ug/L		96
113) 1,4-dichlorobenzene	9.318	146	4426	0.39	ug/L		93
116) 1,2-dichlorobenzene	9.671	146	12997	1.17	ug/L		93

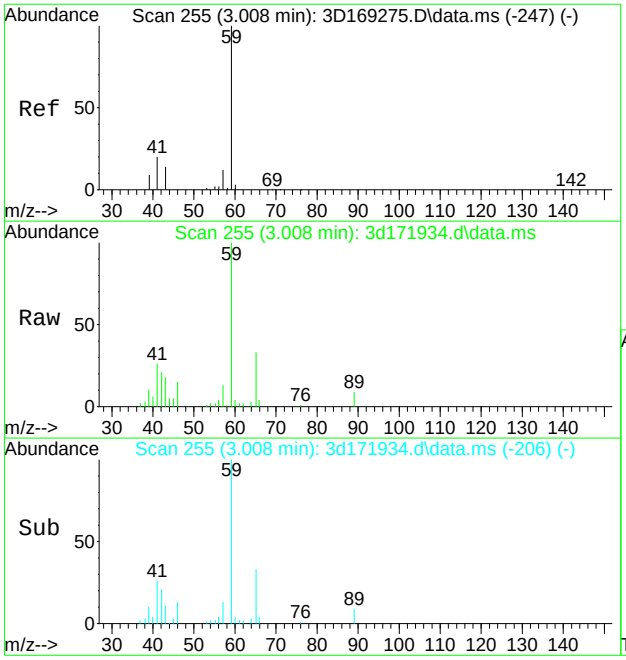
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA-SVOA\Dec-21\12-17\v3d7294-partial\
Data File : 3d171934.d
Acq On : 16 Dec 2021 7:22 pm
Operator : nicoleh
Sample : JD36624-8 Inst : MS3D
Misc : MS55557,V3D7294,5,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 17 02:30:03 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

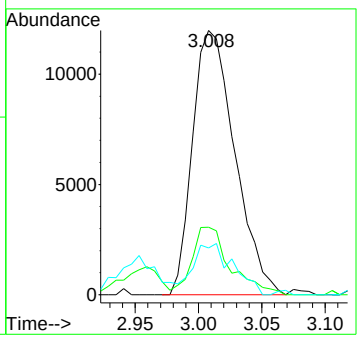


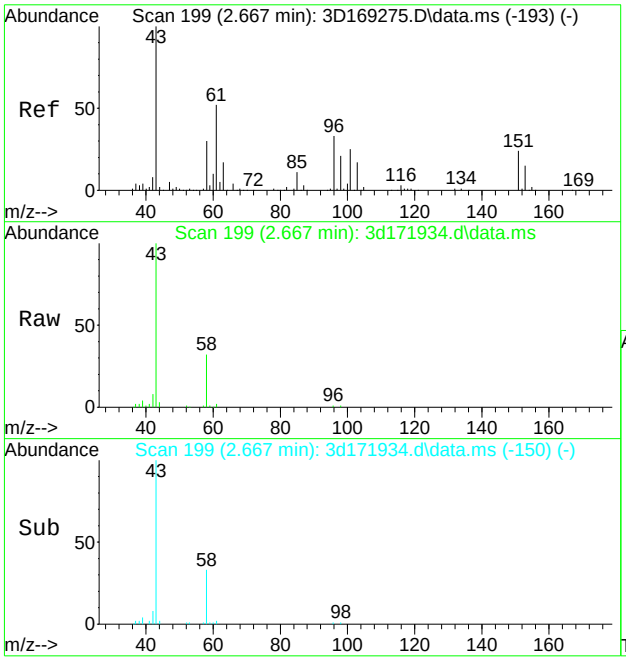


#2
tertiary butyl alcohol
Concen: 20.41 ug/L
RT: 3.008 min Scan# 255
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion: 59 Resp: 27798

Ion	Ratio	Lower	Upper
59	100		
41	25.5	0.0	49.9
43	16.0	0.0	44.1

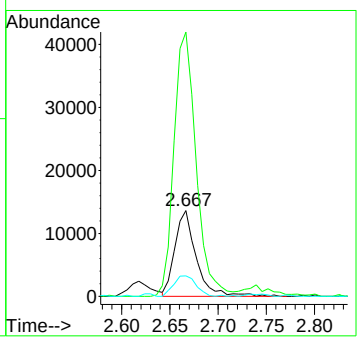


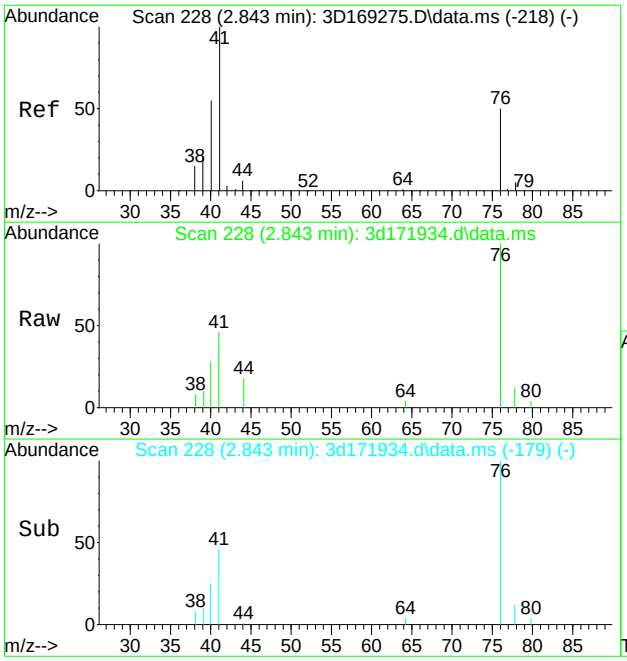


#19
acetone
Concen: 20.77 ug/L
RT: 2.667 min Scan# 199
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion: 58 Resp: 21048

Ion	Ratio	Lower	Upper
58	100		
43	305.5	300.9	360.9
42	24.0	0.0	58.1

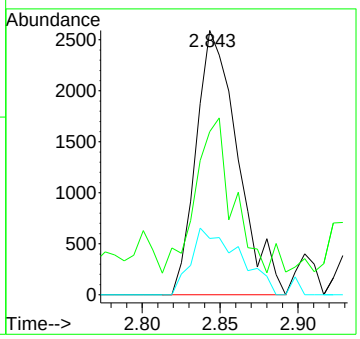


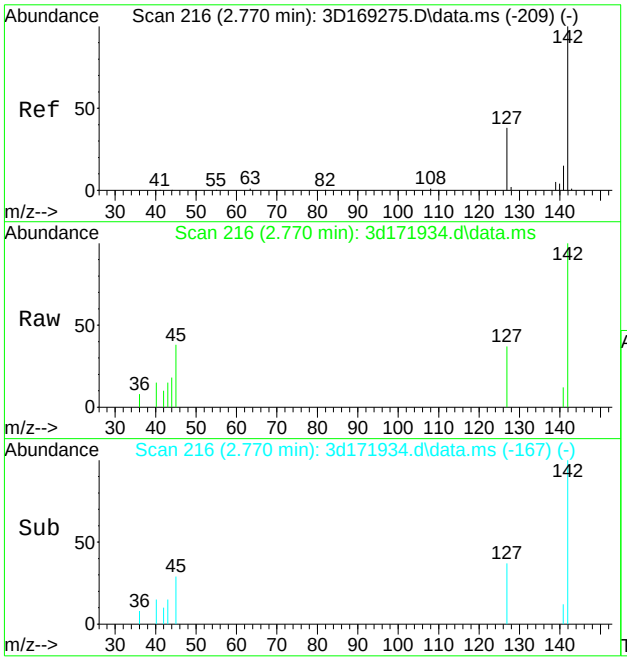


#20
acetonitrile
Concen: 3.12 ug/L
RT: 2.843 min Scan# 228
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion: 41 Resp: 4832

Ion	Ratio	Lower	Upper
41	100		
40	53.5	24.7	84.7
39	21.3	0.0	51.0

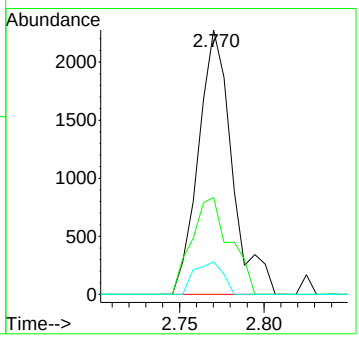


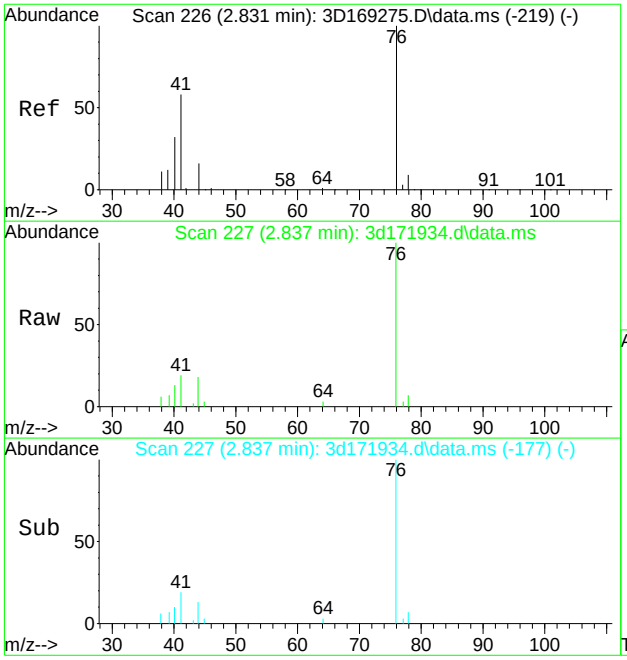


#21
iodomethane
Concen: 2.18 ug/L
RT: 2.770 min Scan# 216
Delta R.T. 0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion:142 Resp: 3162

Ion	Ratio	Lower	Upper
142	100		
127	36.7	8.1	68.1
141	12.3	0.0	45.0

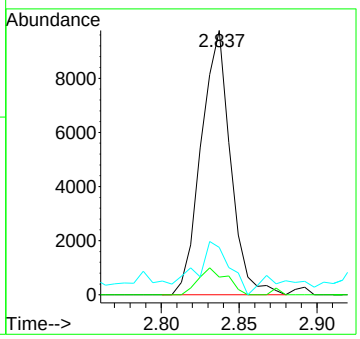


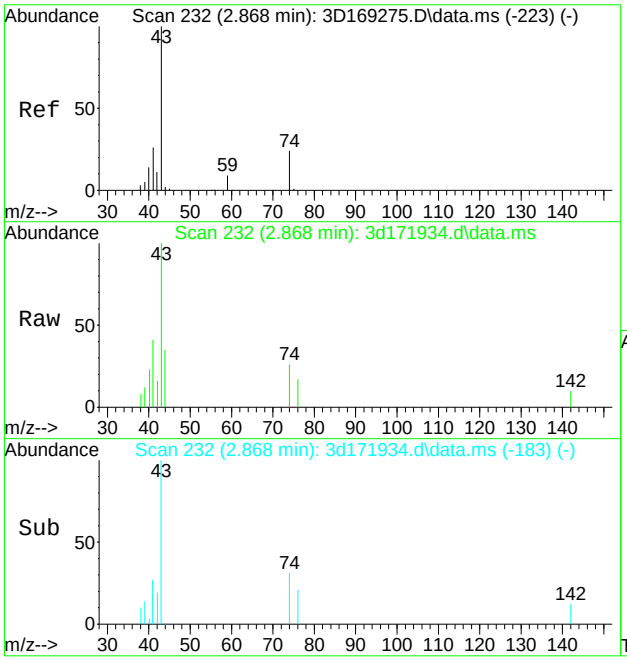


#22
carbon disulfide
Concen: 1.06 ug/L
RT: 2.837 min Scan# 227
Delta R.T. 0.006 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion: 76 Resp: 12793

Ion	Ratio	Lower	Upper
76	100		
78	6.7	0.0	39.4
44	12.7	0.0	45.8

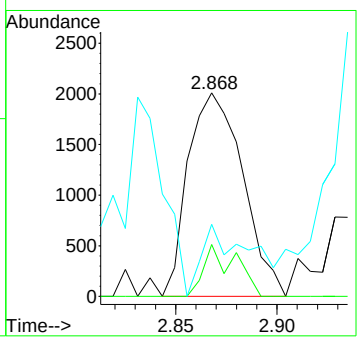


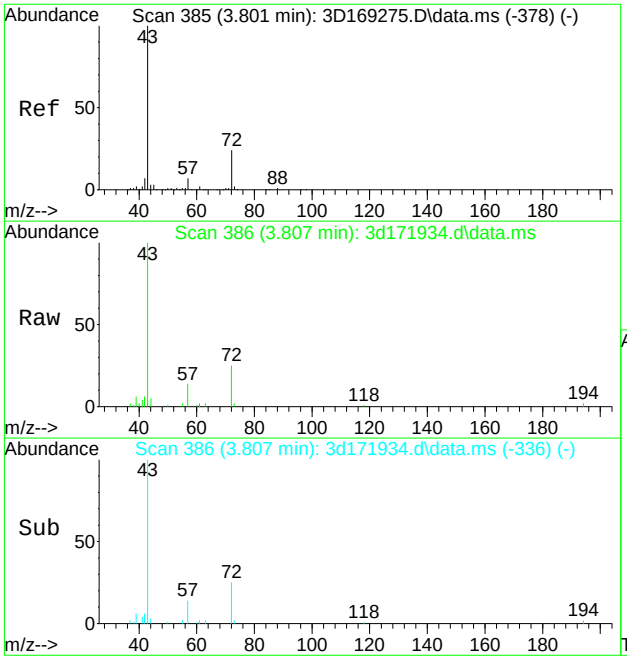


#24
methyl acetate
Concen: 0.45 ug/L
RT: 2.868 min Scan# 232
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion: 43 Resp: 3786

Ion	Ratio	Lower	Upper
43	100		
74	25.6	0.0	53.6
44	12.3	0.0	32.2

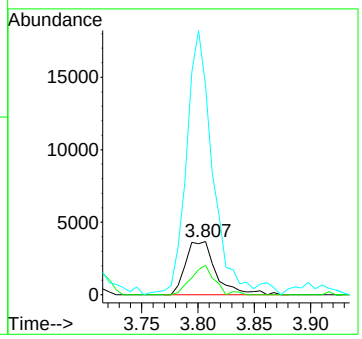


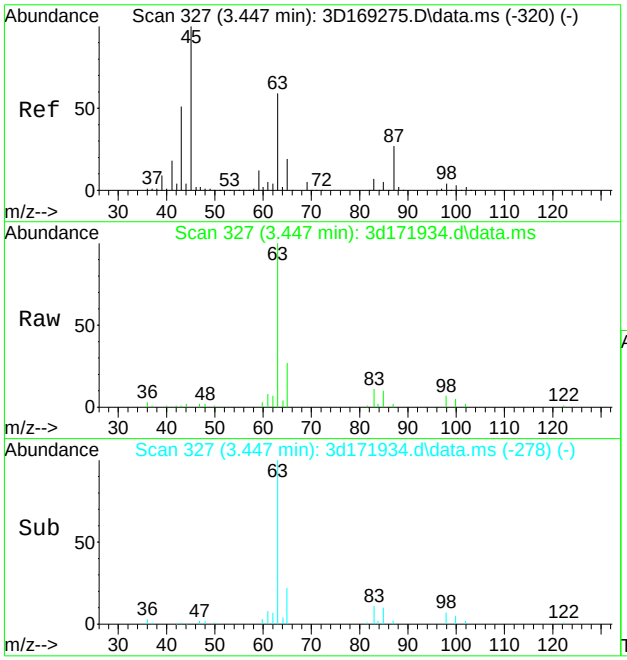


#28
2-butanone
Concen: 5.70 ug/L
RT: 3.807 min Scan# 386
Delta R.T. 0.006 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion: 72 Resp: 6909

Ion	Ratio	Lower	Upper
72	100		
57	55.2	1.0	61.0
43	384.6	387.7	447.7#

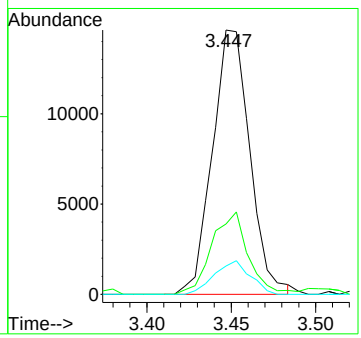


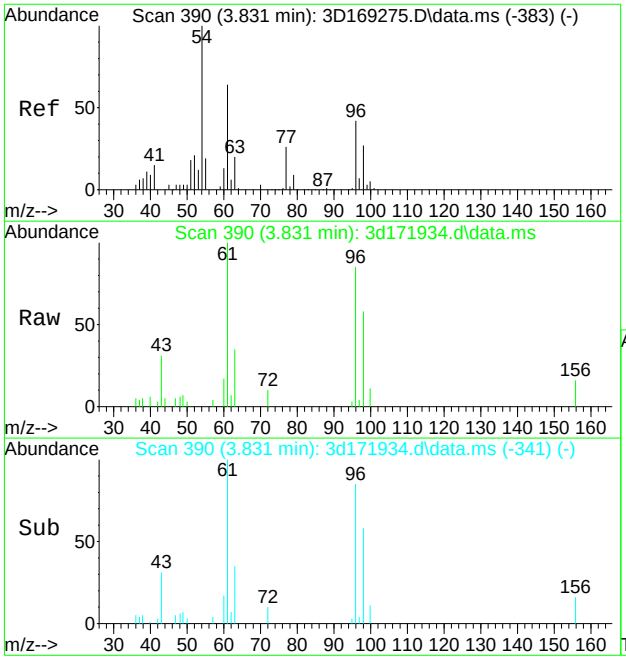


#29
1,1-dichloroethane
Concen: 2.27 ug/L
RT: 3.447 min Scan# 327
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion: 63 Resp: 22609

Ion	Ratio	Lower	Upper
63	100		
65	26.6	2.4	62.4
83	10.8	0.0	42.8

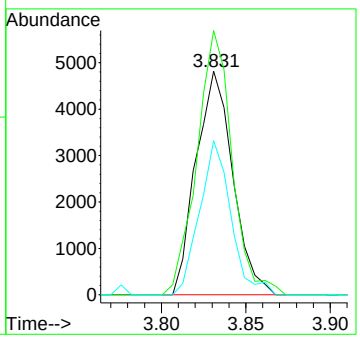


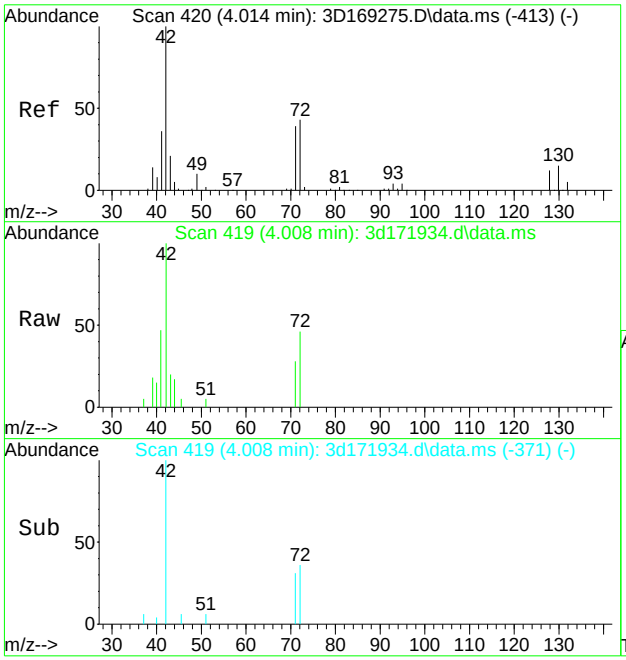


#37
cis-1,2-dichloroethene
Concen: 1.22 ug/L
RT: 3.831 min Scan# 390
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion: 96 Resp: 7309

Ion	Ratio	Lower	Upper
96	100		
61	118.3	122.7	182.7#
98	69.0	34.6	94.6

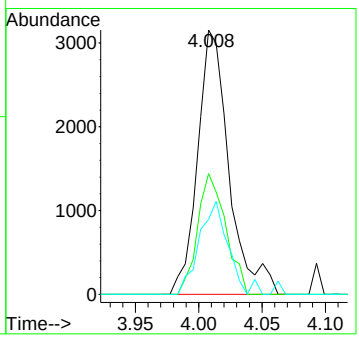


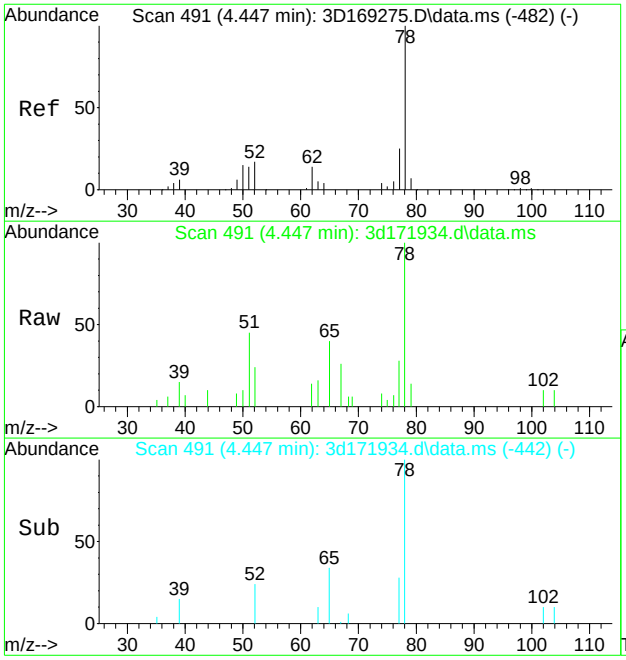


#41
tetrahydrofuran
Concen: 1.50 ug/L
RT: 4.008 min Scan# 419
Delta R.T. -0.005 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion: 42 Resp: 5442

Ion	Ratio	Lower	Upper
42	100		
72	45.7	13.2	73.2
71	28.3	9.2	69.2

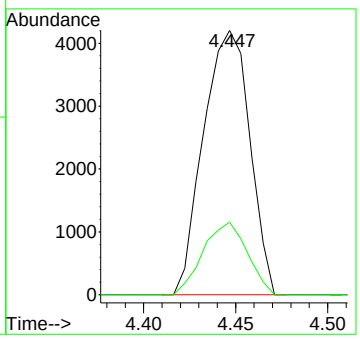


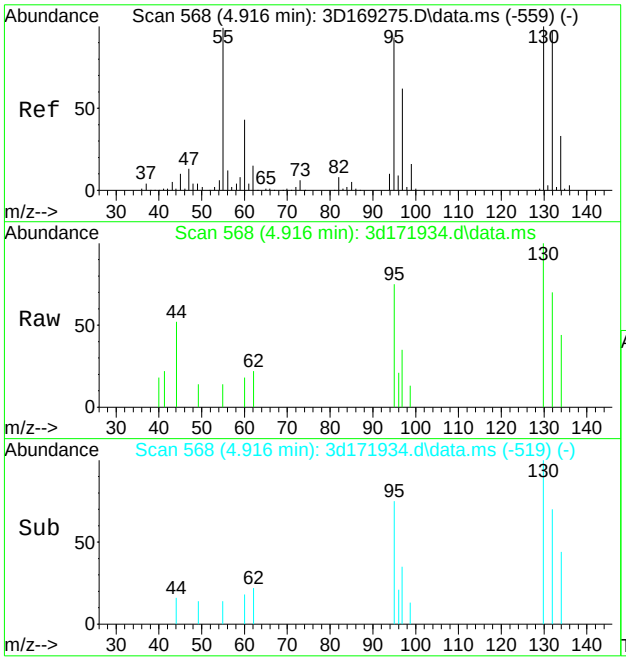


#56
benzene
Concen: 0.36 ug/L
RT: 4.447 min Scan# 491
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion: 78 Resp: 7352

Ion	Ratio	Lower	Upper
78	100		
77	27.5	0.0	54.9

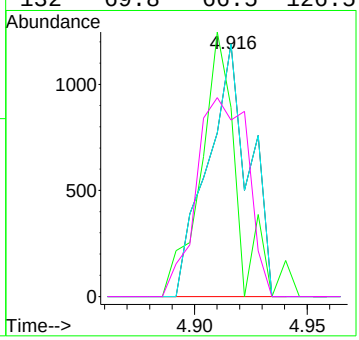


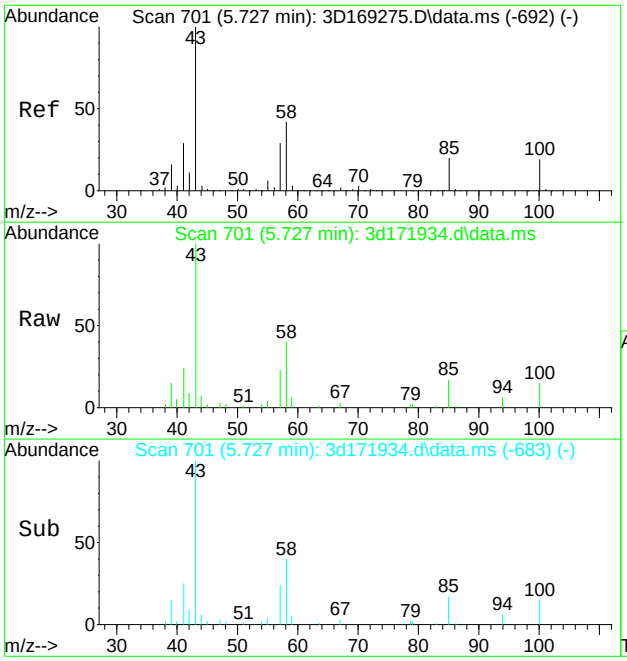


#61
trichloroethene
Concen: 0.28 ug/L
RT: 4.916 min Scan# 568
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion:130 Resp: 1525

Ion	Ratio	Lower	Upper
130	100		
95	74.8	63.4	123.4
130	100.0	70.0	130.0
132	69.8	66.5	126.5

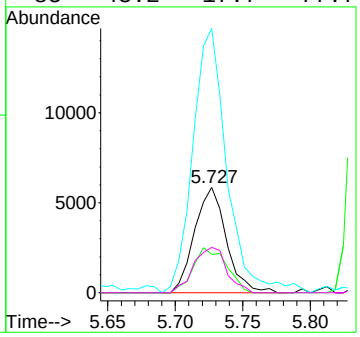


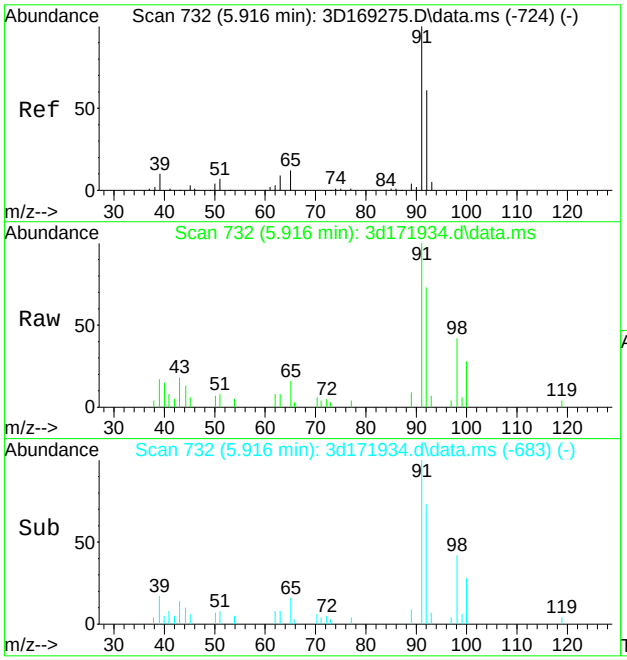


#72
4-methyl-2-pentanone
Concen: 2.76 ug/L
RT: 5.727 min Scan# 701
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion: 58 Resp: 9611

Ion	Ratio	Lower	Upper
58	100		
100	36.6	14.6	74.6
43	251.2	208.8	268.8
85	43.2	17.7	77.7

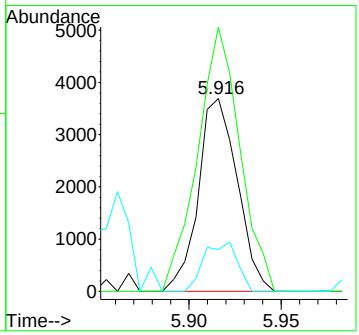


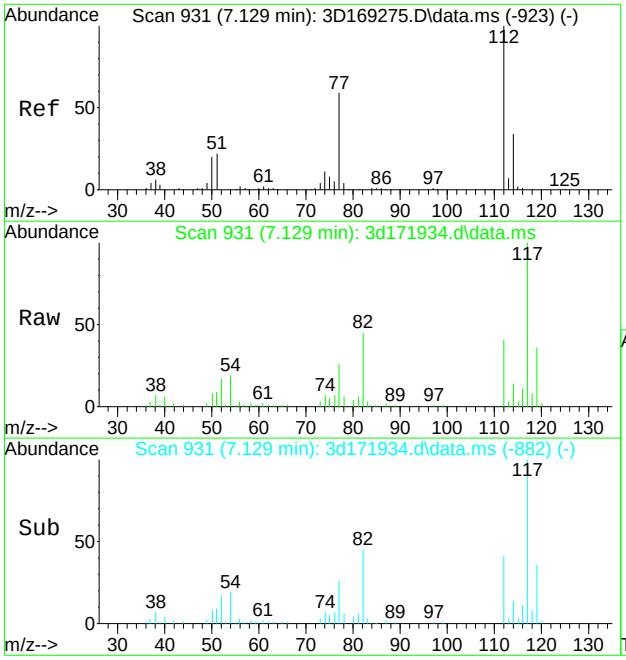


#76
toluene
Concen: 0.42 ug/L
RT: 5.916 min Scan# 732
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion: 92 Resp: 5453

Ion	Ratio	Lower	Upper
92	100		
91	137.1	143.0	183.0#
65	26.0	0.2	40.2

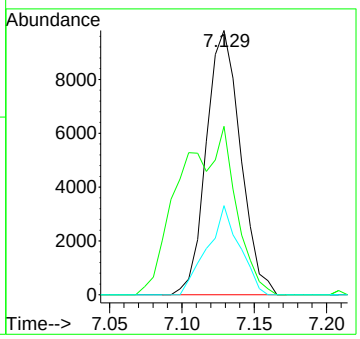


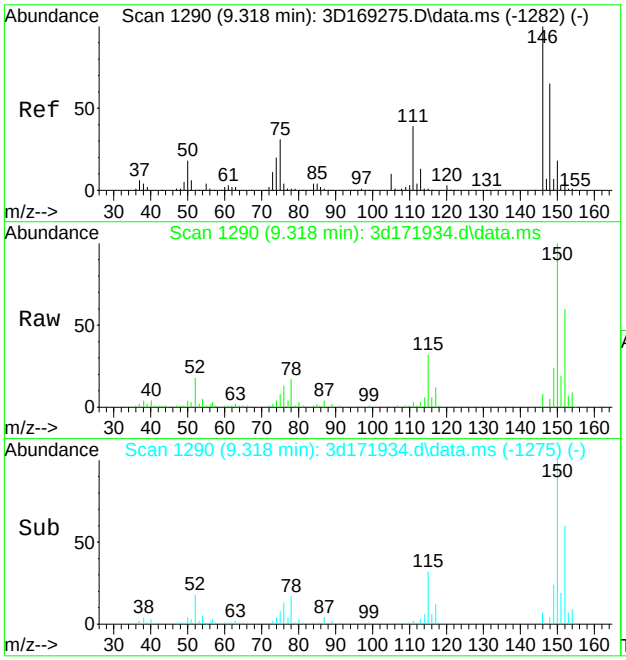


#87
chlorobenzene
Concen: 1.15 ug/L
RT: 7.129 min Scan# 931
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion:112 Resp: 16144

Ion	Ratio	Lower	Upper
112	100		
77	63.8	29.0	89.0
114	33.7	4.0	64.0

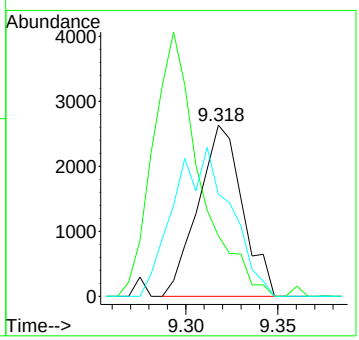


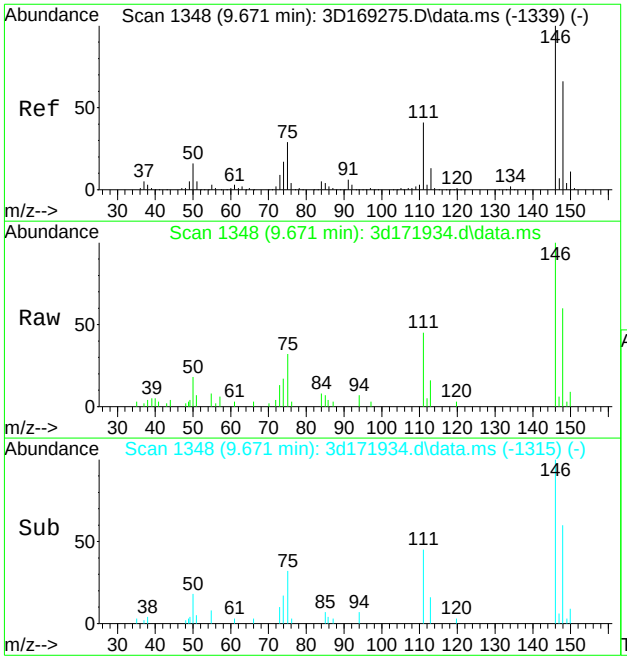


#113
1,4-dichlorobenzene
Concen: 0.39 ug/L
RT: 9.318 min Scan# 1290
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion:146 Resp: 4426

Ion	Ratio	Lower	Upper
146	100		
111	35.4	8.7	68.7
148	59.6	35.3	95.3

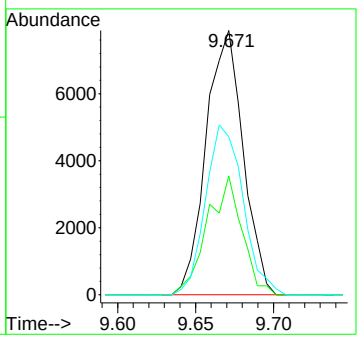




#116
1,2-dichlorobenzene
Concen: 1.17 ug/L
RT: 9.671 min Scan# 1348
Delta R.T. -0.000 min
Lab File: 3d171934.d
Acq: 16 Dec 2021 7:22 pm

Tgt Ion:146 Resp: 12997

Ion	Ratio	Lower	Upper
146	100		
111	45.0	11.3	71.3
148	59.8	35.9	95.9



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 12/27/21 11:46

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193039.d
Acq On : 17 Dec 2021 4:53 pm
Operator : brittank
Sample : JD36624-9 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 08:12:40 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

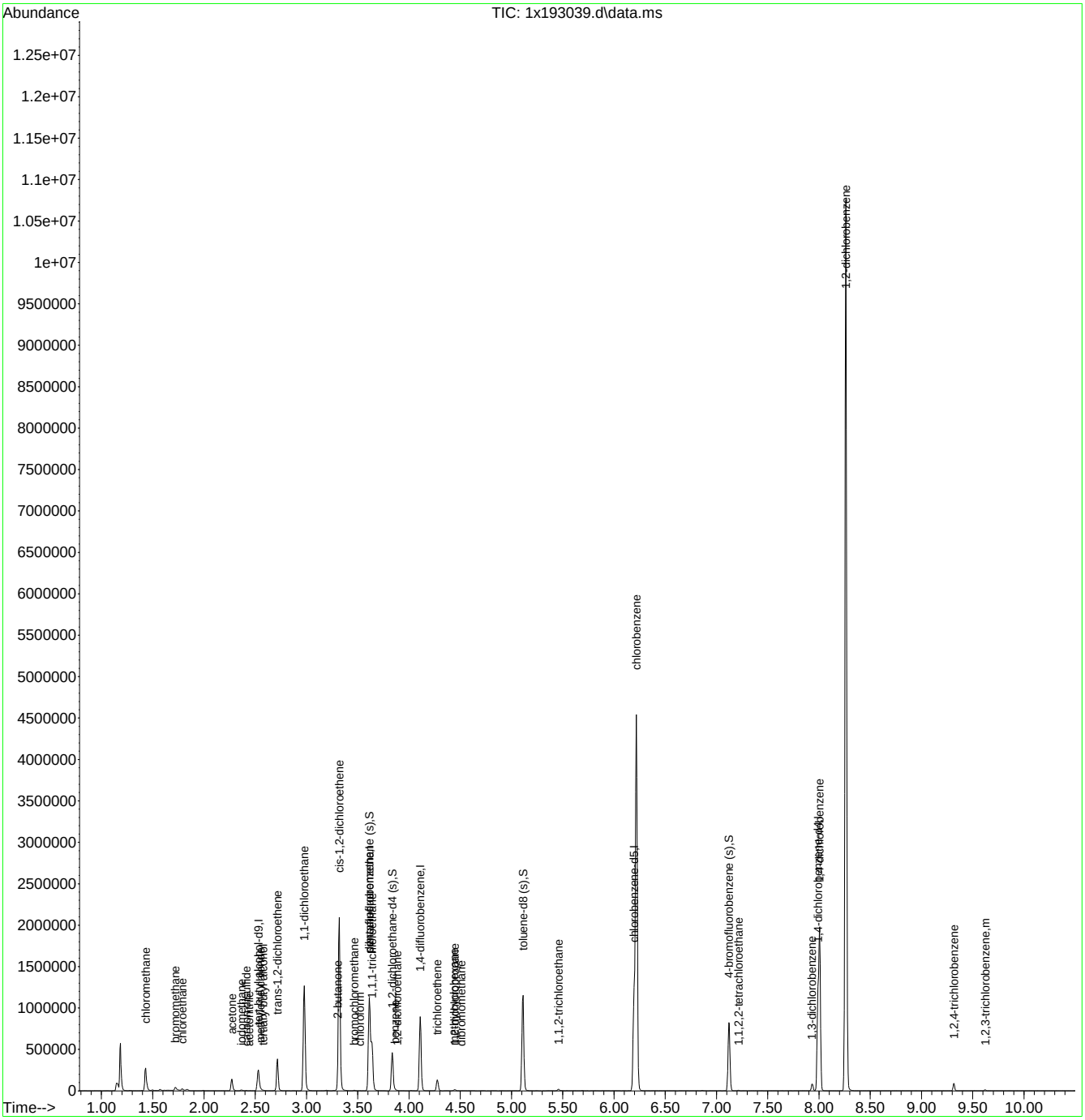
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.530	65	194293	500.00	ug/L	-0.02
5) pentafluorobenzene	3.613	168	348727	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.110	114	494856	50.00	ug/L	0.00
73) chlorobenzene-d5	6.196	117	469761	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.990	152	203925	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.613	113	174983	49.76	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.52%			
53) 1,2-dichloroethane-d4 (s)	3.838	65	216582	51.16	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.32%			
74) toluene-d8 (s)	5.113	98	552819	48.40	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.80%			
98) 4-bromofluorobenzene (s)	7.120	95	203768	50.27	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.54%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	2.578	59	1585	5.69	ug/L #	13
8) chloromethane	1.431	50	205235	69.11	ug/L	99
10) bromomethane	1.719	96	18662	13.77	ug/L	94
11) chloroethane	1.788	64	12121	9.99	ug/L	95
18) acetone	2.274	58	30025	128.26	ug/L	100
19) acetonitrile	2.439	41	1298	3.92	ug/L	88
20) iodomethane	2.365	142	9211	4.02	ug/L	89
21) carbon disulfide	2.413	76	3601	0.72	ug/L	94
22) methylene chloride	2.551	84	2247	1.26	ug/L #	81
26) trans-1,2-dichloroethene	2.717	96	85131	44.56	ug/L	96
29) 2-butanone	3.304	72	1992m	7.92	ug/L	
30) 1,1-dichloroethane	2.978	63	813023	219.59	ug/L	99
36) cis-1,2-dichloroethene	3.320	96	555754	270.69	ug/L	91
40) bromochloromethane	3.464	128	925	0.91	ug/L	84
42) chloroform	3.523	83	760	0.21	ug/L	77
45) 1,1,1-trichloroethane	3.640	97	251363	74.58	ug/L	98
57) benzene	3.864	78	6900	1.00	ug/L	93
60) 1,2-dichloroethane	3.886	62	2279	0.72	ug/L	95
61) trichloroethene	4.275	130	31259	13.51	ug/L	97
66) 1,2-dichloropropane	4.446	76	861	1.10	ug/L	96
67) dibromomethane	4.510	93	434	0.35	ug/L	85
68) methylcyclohexane	4.441	83	1520	0.46	ug/L	88
78) 1,1,2-trichloroethane	5.460	83	3402	2.42	ug/L	97
86) chlorobenzene	6.218	112	1798558	359.02	ug/L	98
100) 1,1,2,2-tetrachloroethane	7.216	83	2318	1.09	ug/L	83
110) 1,3-dichlorobenzene	7.931	146	24742	6.23	ug/L	95
112) 1,4-dichlorobenzene	8.006	146	537672	130.87	ug/L	99
113) 1,2-dichlorobenzene	8.262	146	3016720	799.00	ug/L	99
120) 1,2,4-trichlorobenzene	9.319	180	19548	8.63	ug/L	98
121) 1,2,3-trichlorobenzene	9.623	180	3065	1.40	ug/L	94

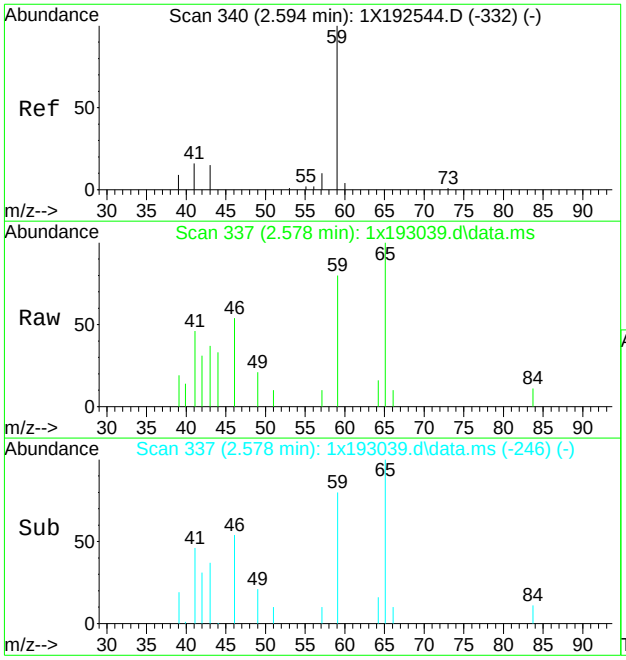
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193039.d
Acq On : 17 Dec 2021 4:53 pm
Operator : brittank
Sample : JD36624-9 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 08:12:40 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

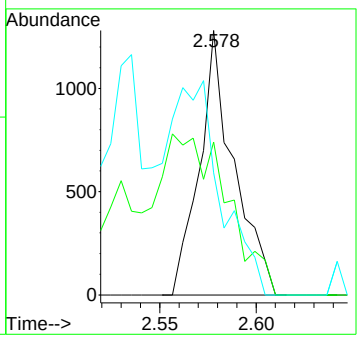


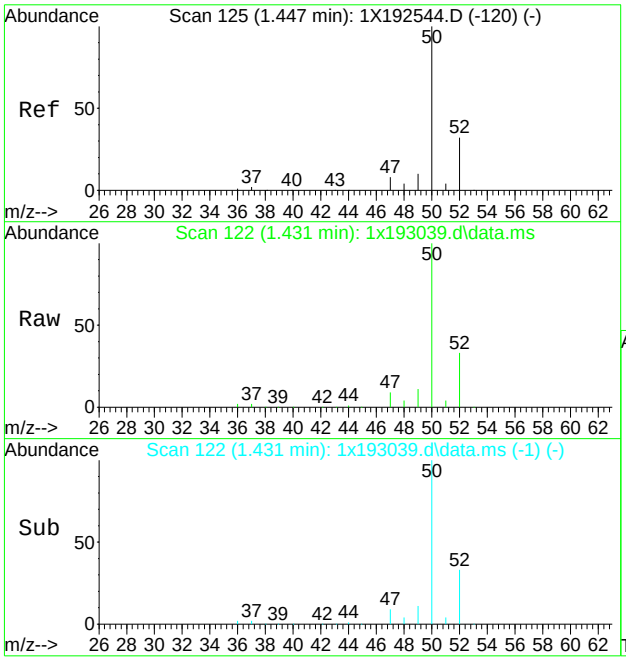


#3
tertiary butyl alcohol
Concen: 5.69 ug/L
RT: 2.578 min Scan# 337
Delta R.T. -0.016 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 59 Resp: 1585

Ion	Ratio	Lower	Upper
59	100		
41	57.8	0.0	46.0#
43	46.1	0.0	45.1#

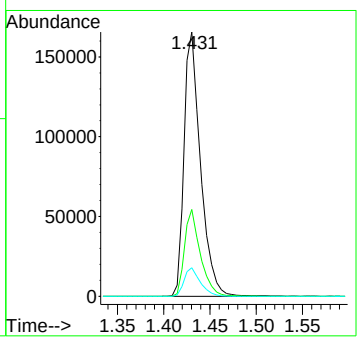


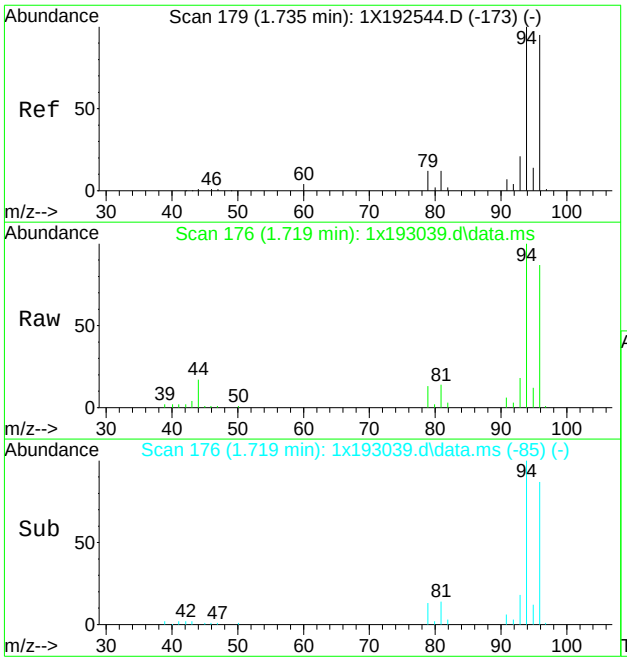


#8
chloromethane
Concen: 69.11 ug/L
RT: 1.431 min Scan# 122
Delta R.T. -0.016 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 50 Resp: 205235

Ion	Ratio	Lower	Upper
50	100		
52	32.9	2.2	62.2
49	10.8	0.0	40.5

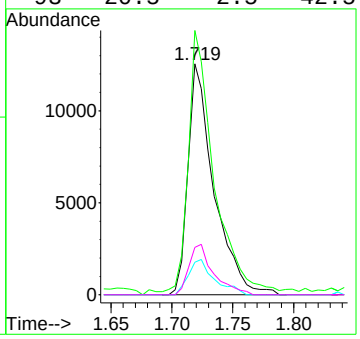


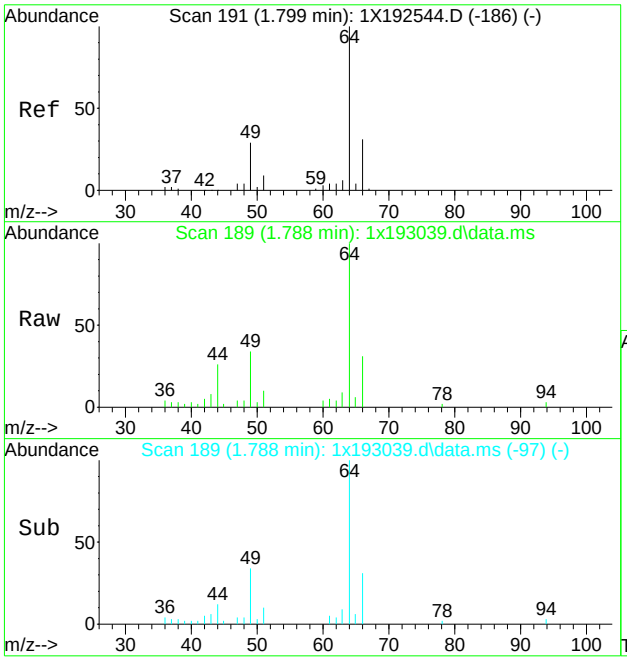


#10
bromomethane
Concen: 13.77 ug/L
RT: 1.719 min Scan# 176
Delta R.T. -0.016 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 96 Resp: 18662

Ion	Ratio	Lower	Upper
96	100		
94	113.1	85.7	125.7
95	14.1	0.0	34.9
93	20.5	2.5	42.5

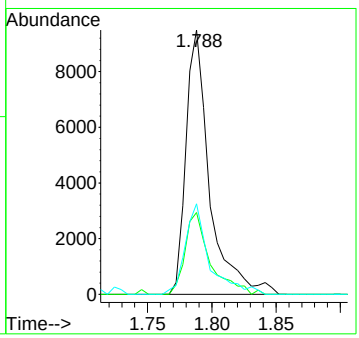


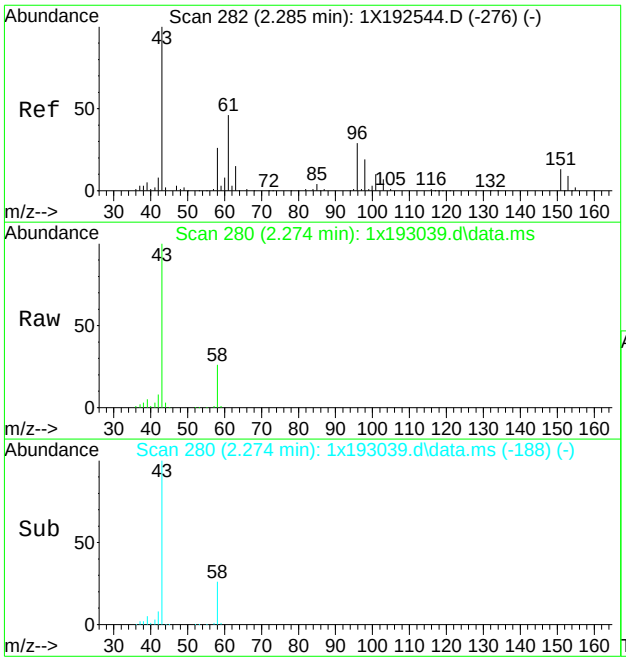


#11
chloroethane
Concen: 9.99 ug/L
RT: 1.788 min Scan# 189
Delta R.T. -0.011 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 64 Resp: 12121

Ion	Ratio	Lower	Upper
64	100		
66	31.0	0.6	60.6
49	34.3	0.0	59.3

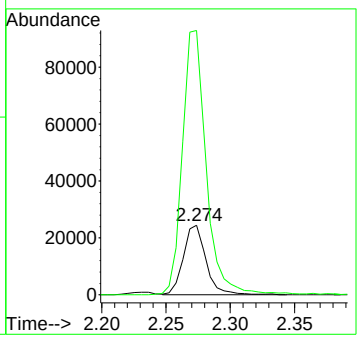


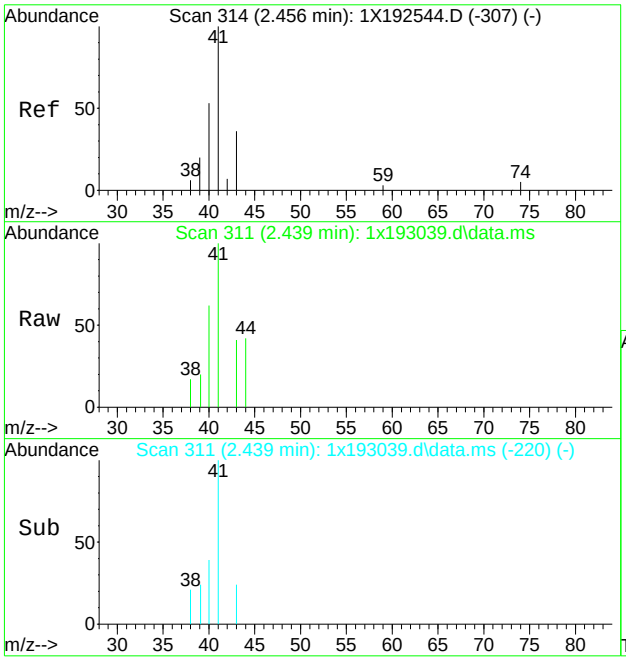


#18
acetone
Concen: 128.26 ug/L
RT: 2.274 min Scan# 280
Delta R.T. -0.011 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 58 Resp: 30025

Ion	Ratio	Lower	Upper
58	100		
43	378.8	348.5	408.5

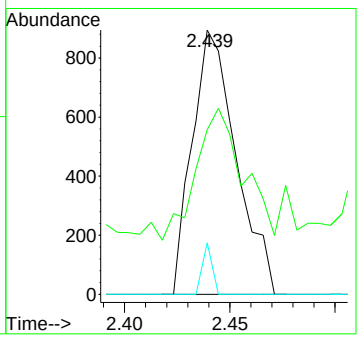


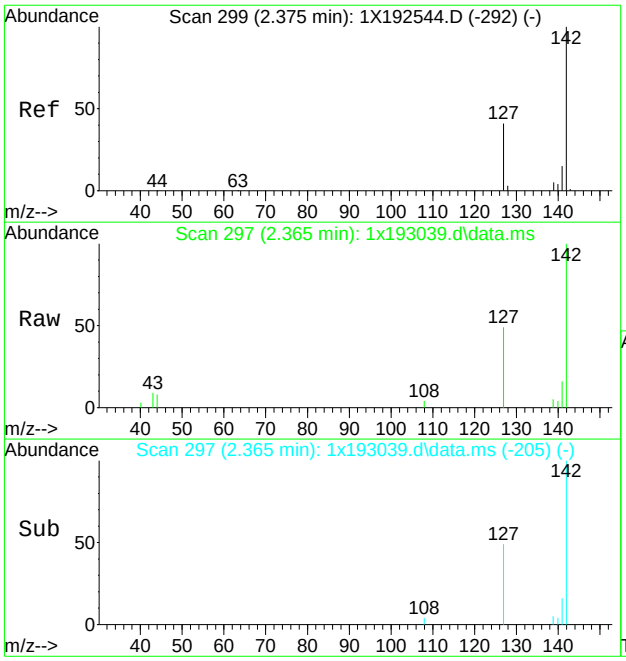


#19
acetonitrile
Concen: 3.92 ug/L
RT: 2.439 min Scan# 311
Delta R.T. -0.016 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 41 Resp: 1298

Ion	Ratio	Lower	Upper
41	100		
40	41.8	22.9	82.9
39	19.6	0.0	49.9

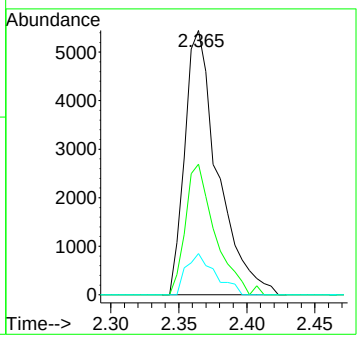


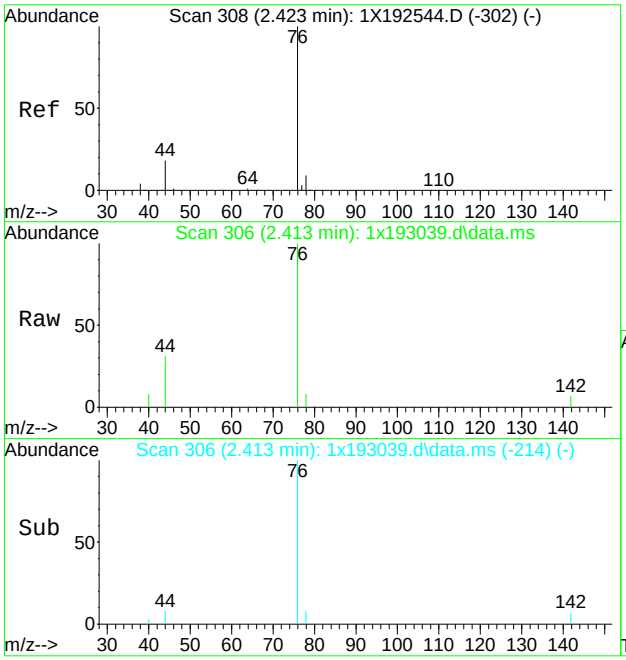


#20
iodomethane
Concen: 4.02 ug/L
RT: 2.365 min Scan# 297
Delta R.T. -0.011 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion:142 Resp: 9211

Ion	Ratio	Lower	Upper
142	100		
127	49.4	11.0	71.0
141	15.7	0.0	44.6

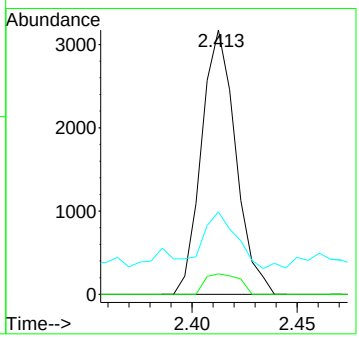


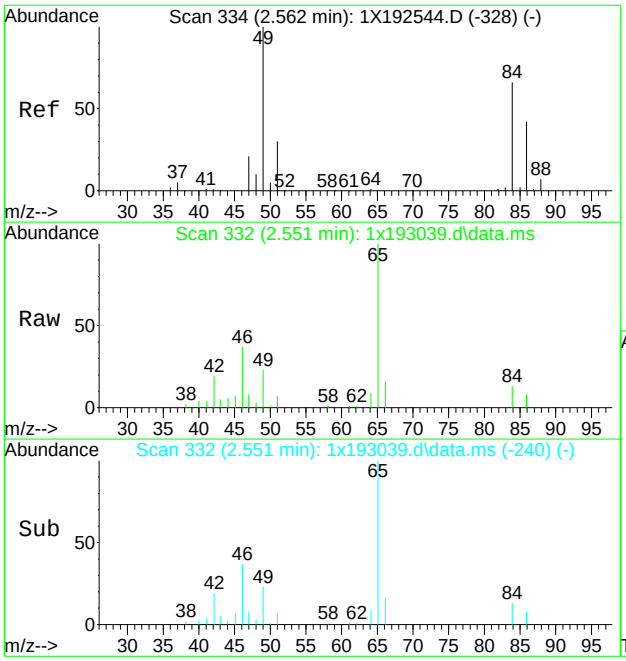


#21
carbon disulfide
Concen: 0.72 ug/L
RT: 2.413 min Scan# 306
Delta R.T. -0.011 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 76 Resp: 3601

Ion	Ratio	Lower	Upper
76	100		
78	7.8	0.0	38.9
44	21.3	0.0	48.2

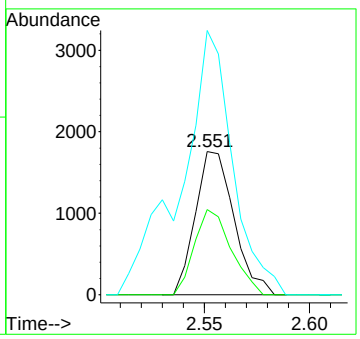


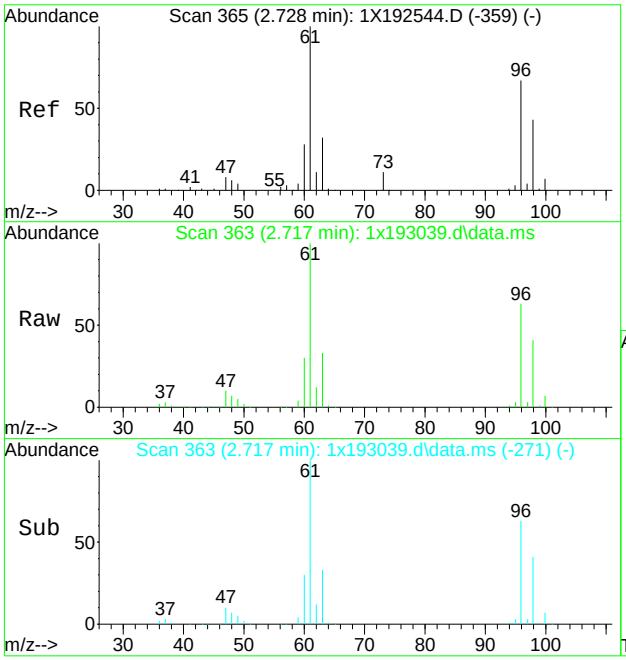


#22
methylene chloride
Concen: 1.26 ug/L
RT: 2.551 min Scan# 332
Delta R.T. -0.011 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 84 Resp: 2247

Ion	Ratio	Lower	Upper
84	100		
86	59.6	34.3	94.3
49	184.5	122.9	182.9#

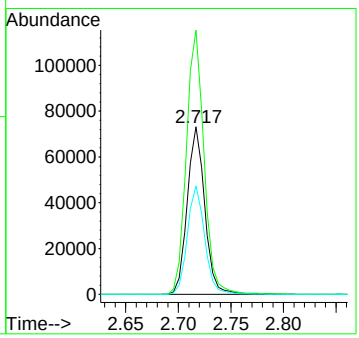


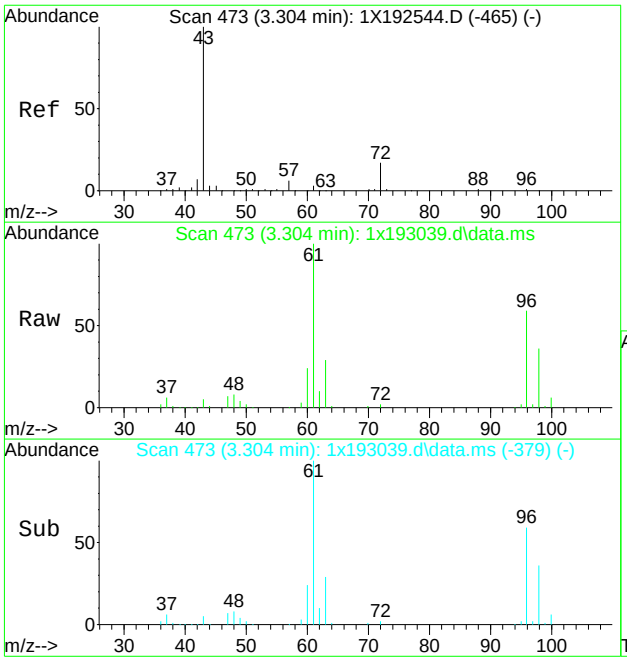


#26
trans-1,2-dichloroethene
Concen: 44.56 ug/L
RT: 2.717 min Scan# 363
Delta R.T. -0.011 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 96 Resp: 85131

Ion	Ratio	Lower	Upper
96	100		
61	157.8	120.2	180.2
98	64.7	34.0	94.0

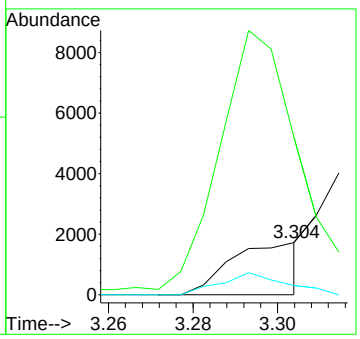


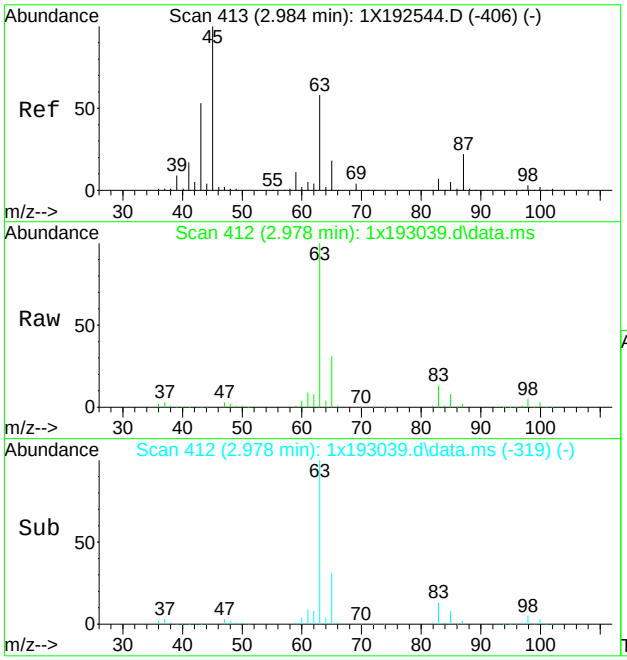


#29
2-butanone
Concen: 7.92 ug/L m
RT: 3.304 min Scan# 473
Delta R.T. -0.000 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 72 Resp: 1992

Ion	Ratio	Lower	Upper
72	100		
43	302.4	567.1	627.1#
57	17.8	4.0	64.0

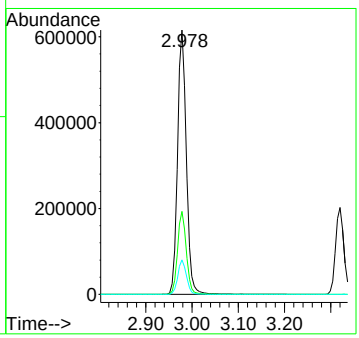


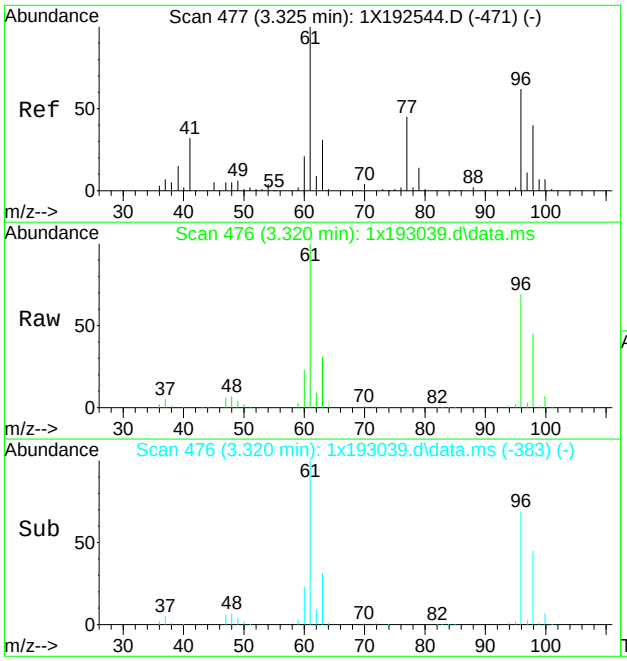


#30
1,1-dichloroethane
Concen: 219.59 ug/L
RT: 2.978 min Scan# 412
Delta R.T. -0.006 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 63 Resp: 813023

Ion	Ratio	Lower	Upper
63	100		
65	31.3	0.9	60.9
83	13.0	0.0	42.5

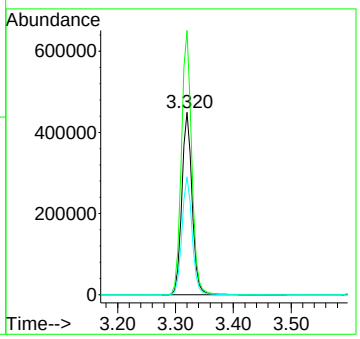


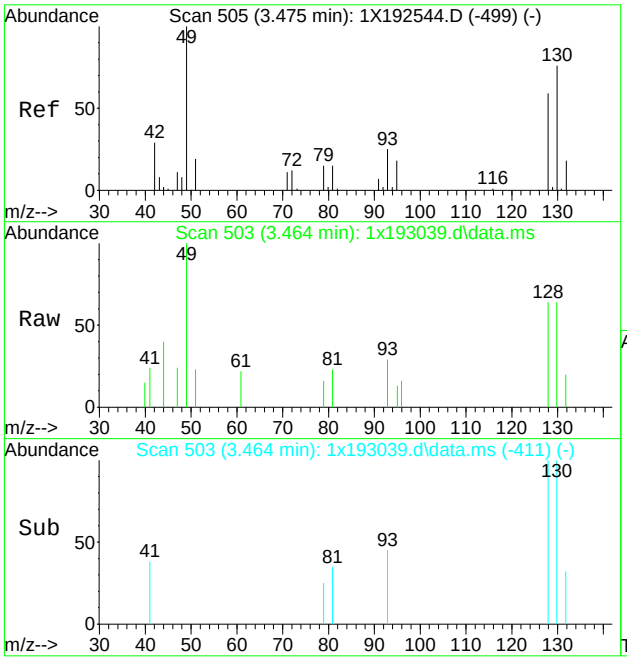


#36
cis-1,2-dichloroethene
Concen: 270.69 ug/L
RT: 3.320 min Scan# 476
Delta R.T. -0.006 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 96 Resp: 555754

Ion	Ratio	Lower	Upper
96	100		
61	145.0	131.2	191.2
98	64.7	34.7	94.7

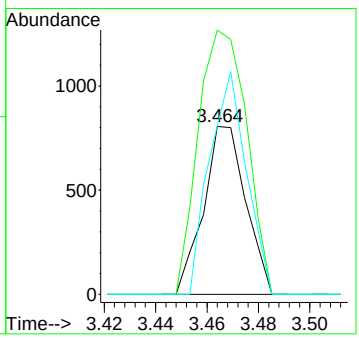


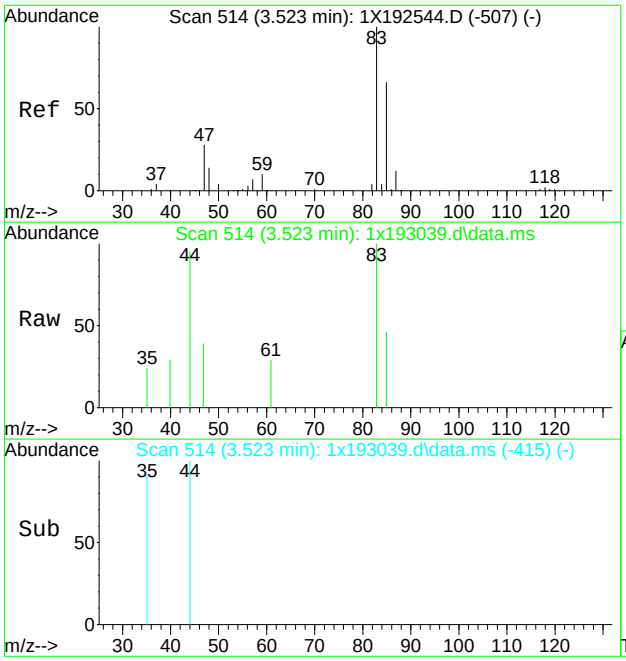


#40
bromochloromethane
Concen: 0.91 ug/L
RT: 3.464 min Scan# 503
Delta R.T. -0.011 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion:128 Resp: 925

Ion	Ratio	Lower	Upper
128	100		
49	157.4	140.3	200.3
130	100.4	99.9	159.9

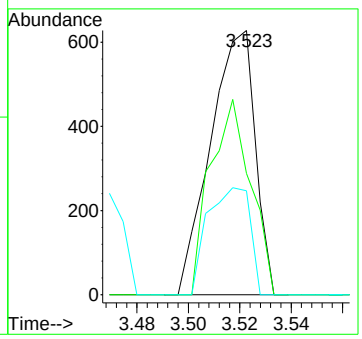


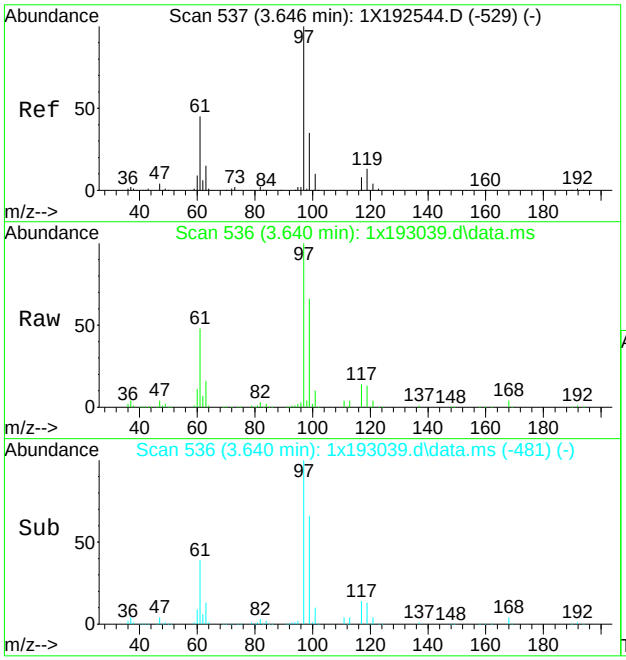


#42
chloroform
Concen: 0.21 ug/L
RT: 3.523 min Scan# 514
Delta R.T. -0.000 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 83 Resp: 760

Ion	Ratio	Lower	Upper
83	100		
85	45.9	35.8	95.8
47	39.3	0.1	60.1

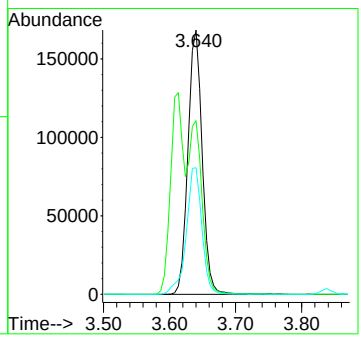


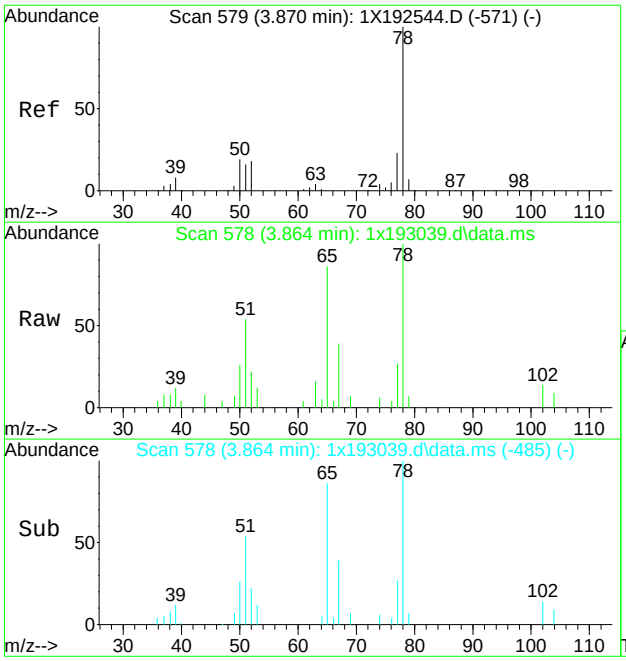


#45
1,1,1-trichloroethane
Concen: 74.58 ug/L
RT: 3.640 min Scan# 536
Delta R.T. -0.006 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 97 Resp: 251363

Ion	Ratio	Lower	Upper
97	100		
99	65.7	37.2	97.2
61	48.0	16.0	76.0

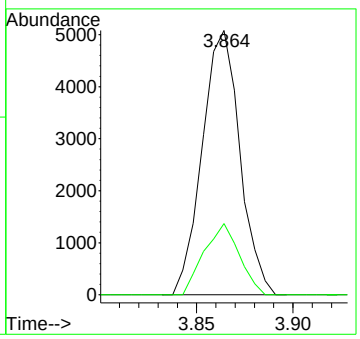


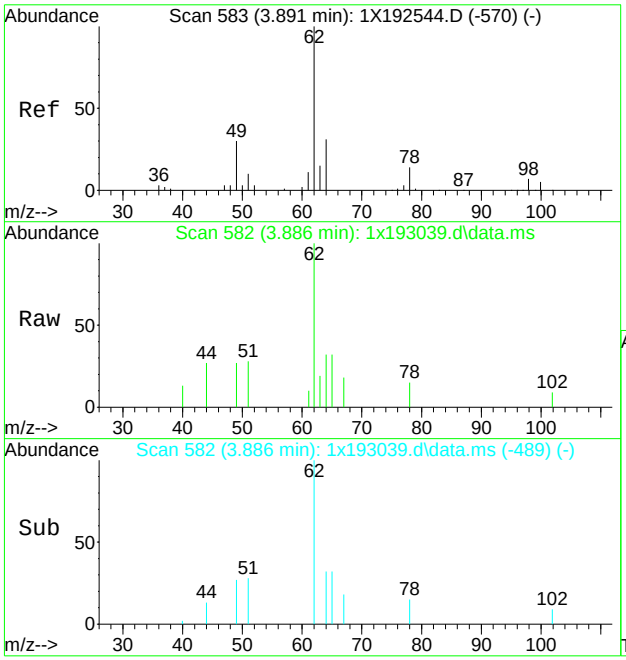


#57
benzene
Concen: 1.00 ug/L
RT: 3.864 min Scan# 578
Delta R.T. -0.006 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 78 Resp: 6900

Ion	Ratio	Lower	Upper
78	100		
77	26.9	0.0	53.3

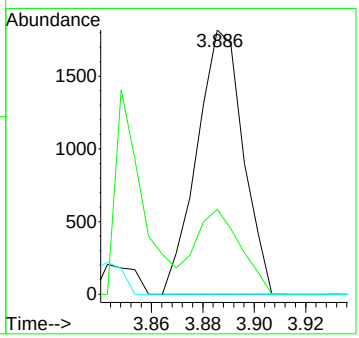


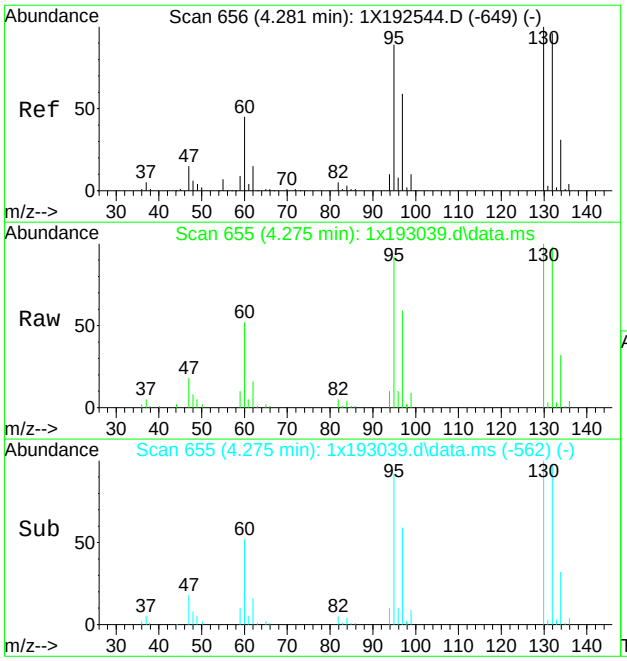


#60
1,2-dichloroethane
Concen: 0.72 ug/L
RT: 3.886 min Scan# 582
Delta R.T. -0.006 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 62 Resp: 2279

Ion	Ratio	Lower	Upper
62	100		
64	32.1	1.2	61.2
98	0.0	0.0	37.4

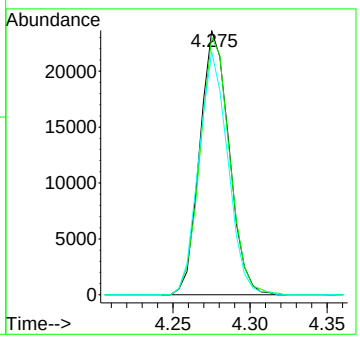


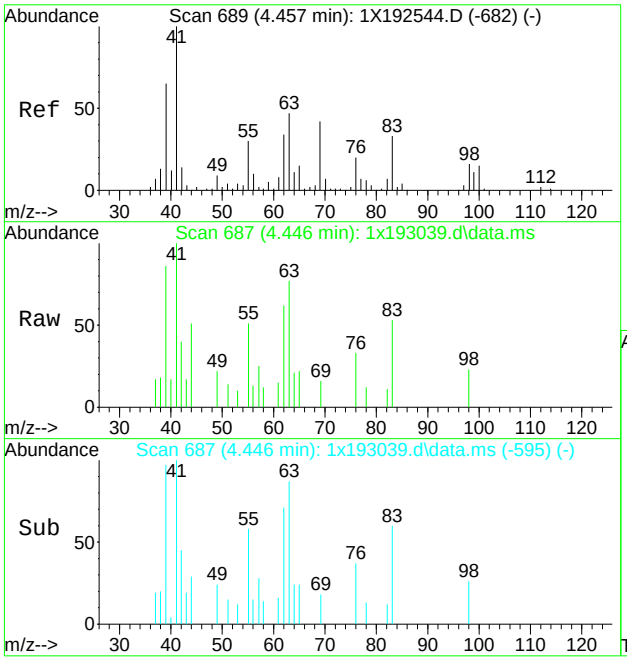


#61
trichloroethene
Concen: 13.51 ug/L
RT: 4.275 min Scan# 655
Delta R.T. -0.006 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion:130 Resp: 31259

Ion	Ratio	Lower	Upper
130	100		
132	97.5	65.5	125.5
95	91.9	58.7	118.7

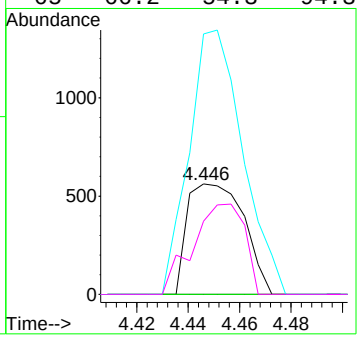


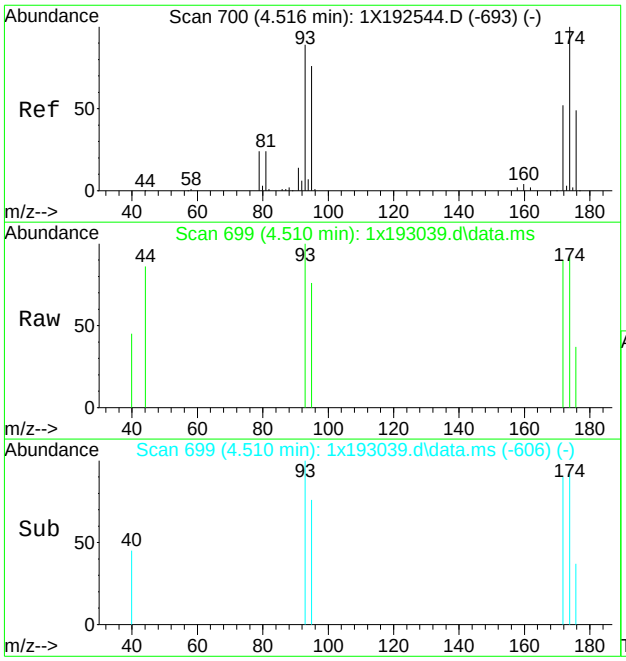


#66
1,2-dichloropropane
Concen: 1.10 ug/L
RT: 4.446 min Scan# 687
Delta R.T. -0.011 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 76 Resp: 861

Ion	Ratio	Lower	Upper
76	100		
112	0.0	0.0	39.2
63	235.6	203.7	263.7
65	66.2	54.3	94.3

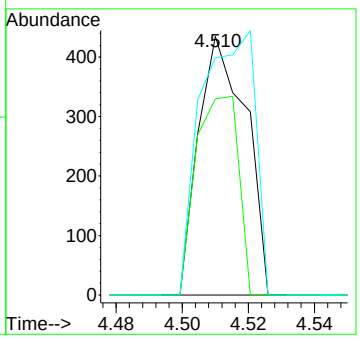


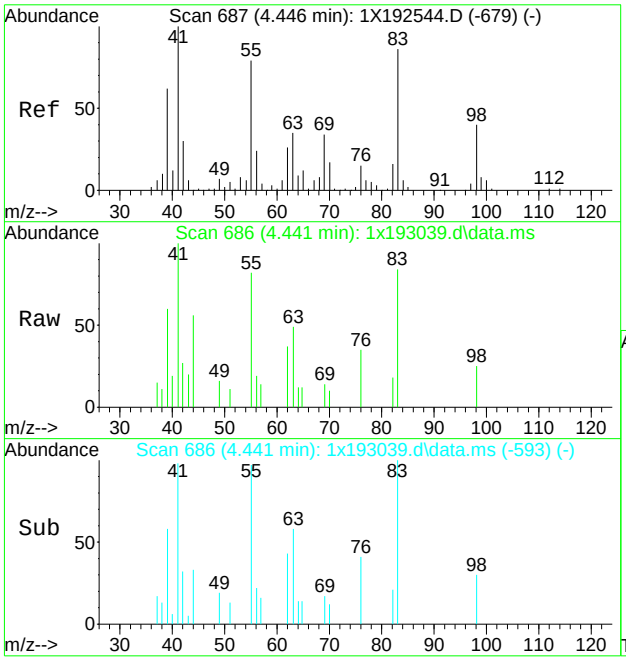


#67
dibromomethane
Concen: 0.35 ug/L
RT: 4.510 min Scan# 699
Delta R.T. -0.006 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 93 Resp: 434

Ion	Ratio	Lower	Upper
93	100		
95	75.9	55.1	115.1
174	91.7	82.1	142.1

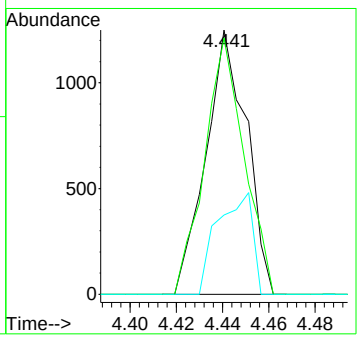


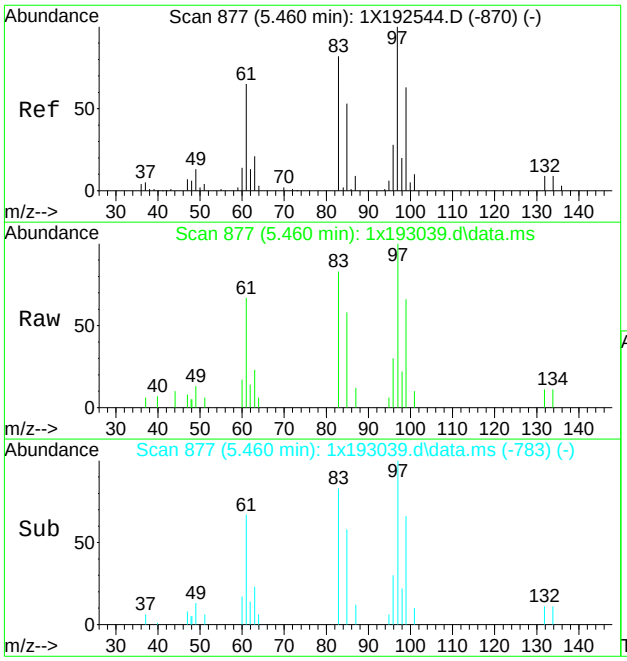


#68
methylcyclohexane
Concen: 0.46 ug/L
RT: 4.441 min Scan# 686
Delta R.T. -0.005 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 83 Resp: 1520

Ion	Ratio	Lower	Upper
83	100		
55	97.0	61.4	121.4
98	30.0	16.6	76.6

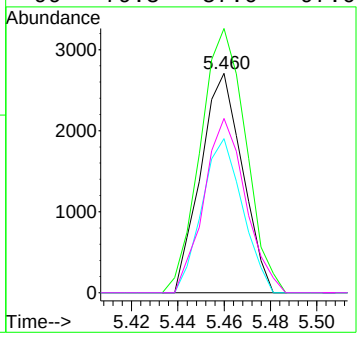


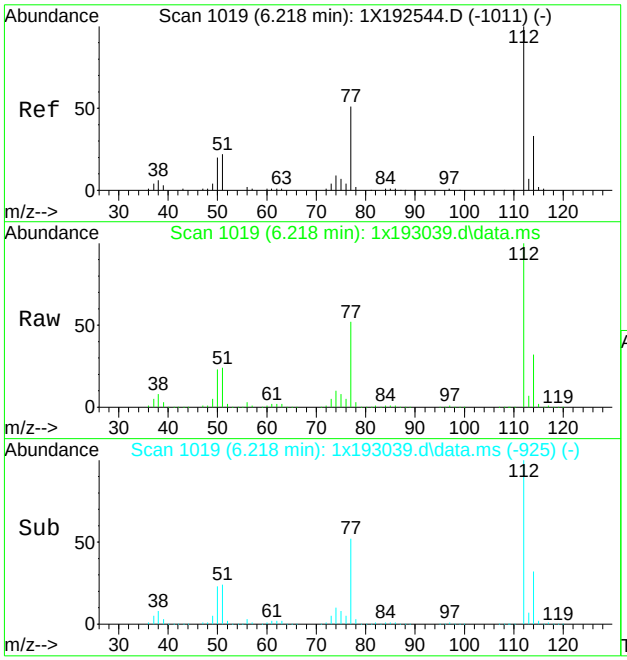


#78
1,1,2-trichloroethane
Concen: 2.42 ug/L
RT: 5.460 min Scan# 877
Delta R.T. -0.000 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 83 Resp: 3402

Ion	Ratio	Lower	Upper
83	100		
97	120.5	101.6	141.6
85	70.3	44.6	84.6
99	79.5	57.0	97.0

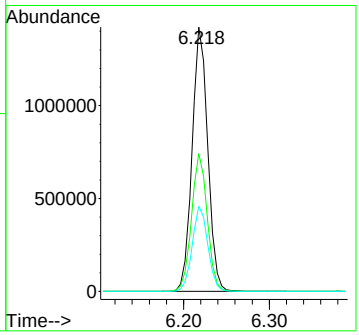


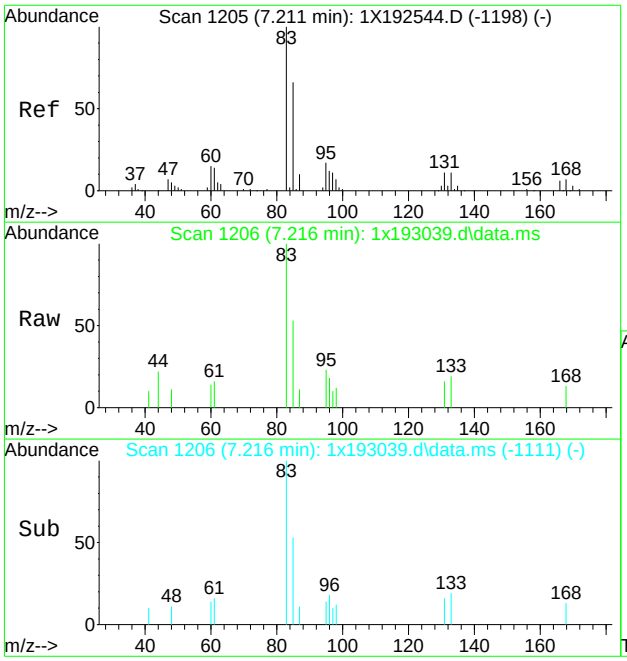


#86
chlorobenzene
Concen: 359.02 ug/L
RT: 6.218 min Scan# 1019
Delta R.T. -0.000 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion:112 Resp: 1798558

Ion	Ratio	Lower	Upper
112	100		
77	52.1	20.6	80.6
114	32.3	2.6	62.6

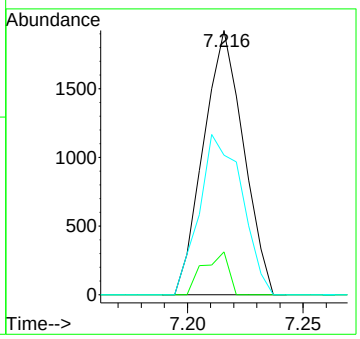


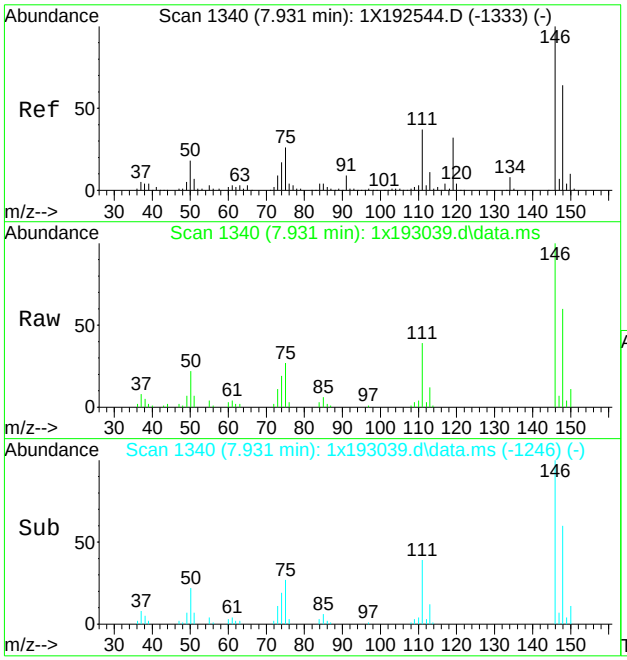


#100
1,1,2,2-tetrachloroethane
Concen: 1.09 ug/L
RT: 7.216 min Scan# 1206
Delta R.T. 0.005 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion: 83 Resp: 2318

Ion	Ratio	Lower	Upper
83	100		
131	16.3	0.0	41.1
85	52.8	36.5	96.5

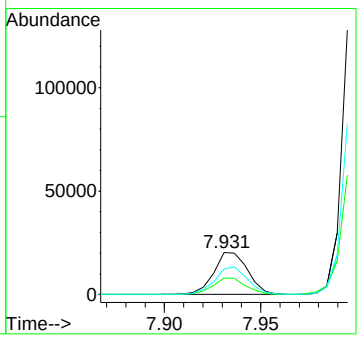


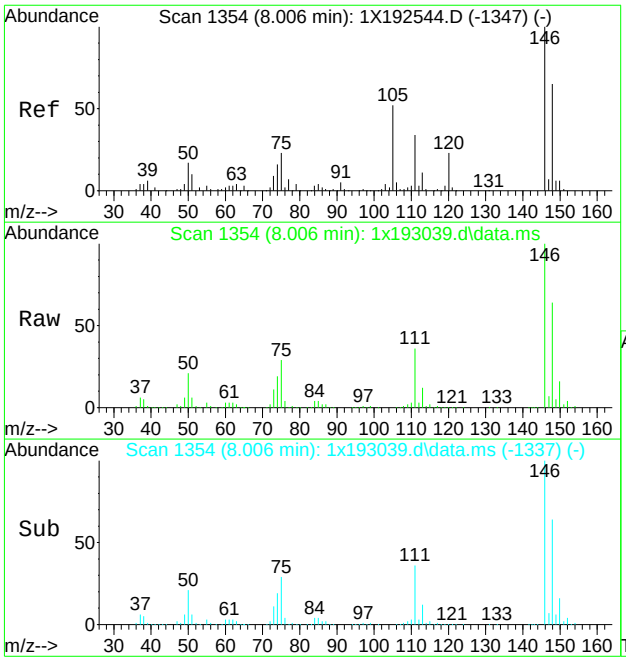


#110
1,3-dichlorobenzene
Concen: 6.23 ug/L
RT: 7.931 min Scan# 1340
Delta R.T. -0.000 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion:146 Resp: 24742

Ion	Ratio	Lower	Upper
146	100		
111	39.1	6.7	66.7
148	60.3	34.1	94.1

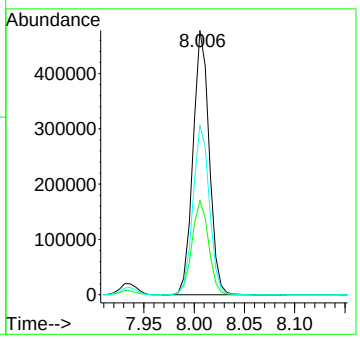


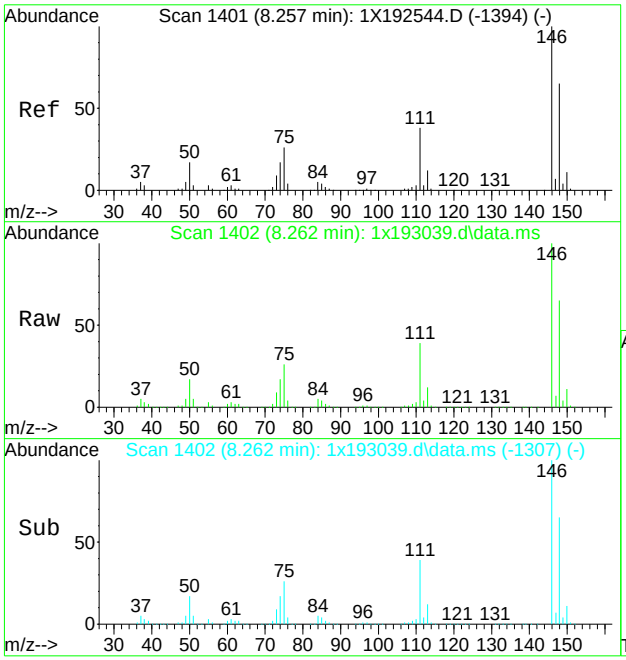


#112
1,4-dichlorobenzene
Concen: 130.87 ug/L
RT: 8.006 min Scan# 1354
Delta R.T. -0.000 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion:146 Resp: 537672

Ion	Ratio	Lower	Upper
146	100		
111	35.7	4.4	64.4
148	64.3	34.6	94.6

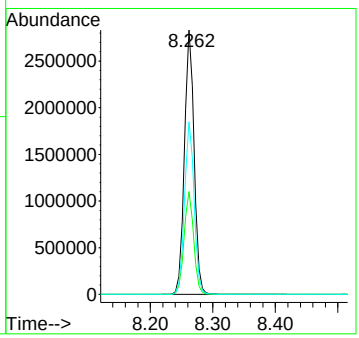


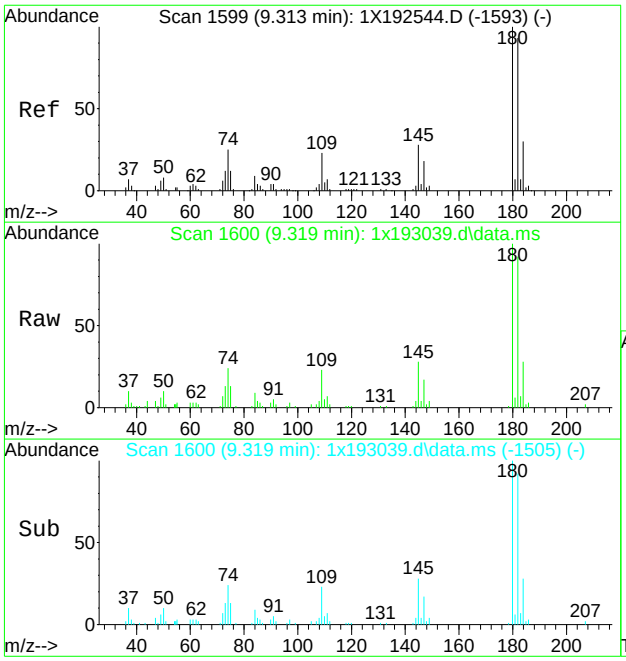


#113
1,2-dichlorobenzene
Concen: 799.00 ug/L
RT: 8.262 min Scan# 1402
Delta R.T. 0.005 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion:146 Resp: 3016720

Ion	Ratio	Lower	Upper
146	100		
111	38.9	8.0	68.0
148	65.3	34.7	94.7

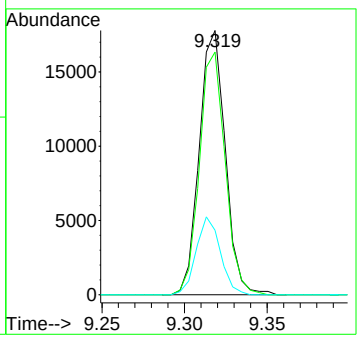


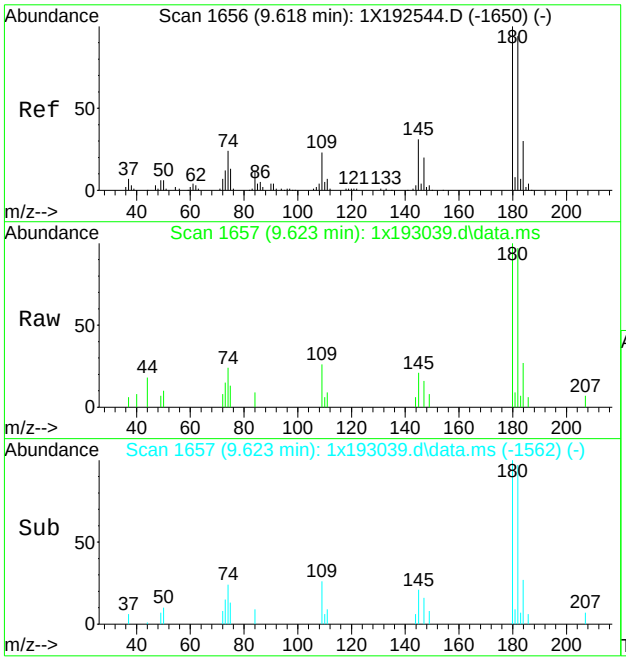


#120
1,2,4-trichlorobenzene
Concen: 8.63 ug/L
RT: 9.319 min Scan# 1600
Delta R.T. 0.005 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion:180 Resp: 19548

Ion	Ratio	Lower	Upper
180	100		
182	91.8	63.3	123.3
74	24.4	0.0	55.0

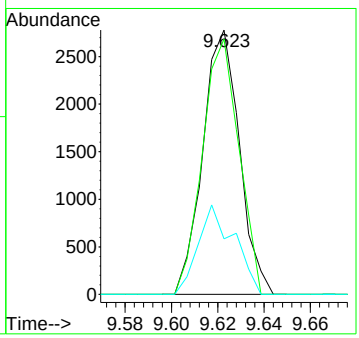




#121
1,2,3-trichlorobenzene
Concen: 1.40 ug/L
RT: 9.623 min Scan# 1657
Delta R.T. 0.005 min
Lab File: 1x193039.d
Acq: 17 Dec 2021 4:53 pm

Tgt Ion:180 Resp: 3065

Ion	Ratio	Lower	Upper
180	100		
182	96.5	64.5	124.5
145	21.0	1.1	61.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-22-2021\vx8366-partial\
Data File : 1x193117.d
Acq On : 21 Dec 2021 2:35 pm
Operator : brittank
Sample : JD36624-9 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8366,5,,,,20
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 22 04:27:56 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

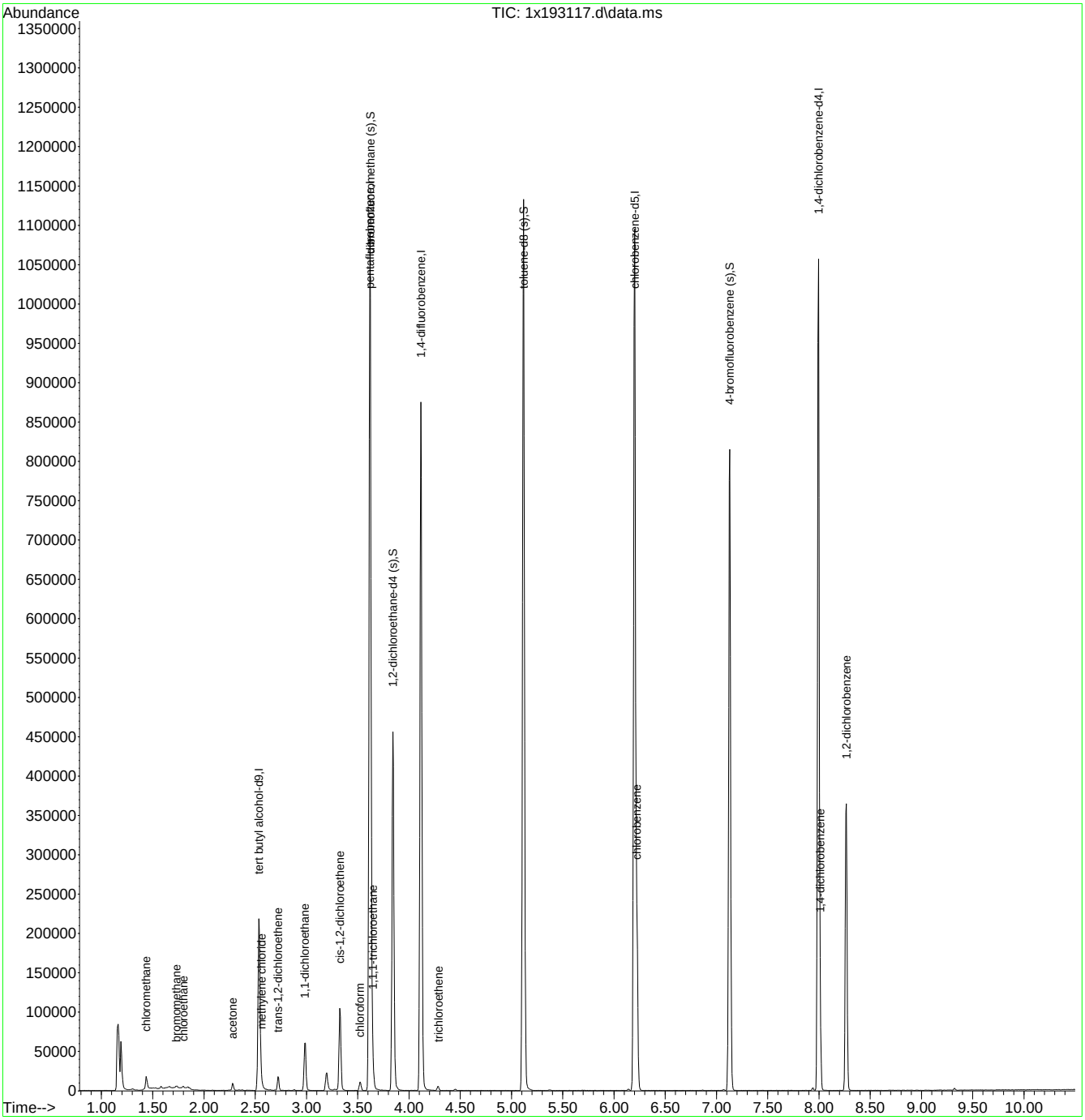
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.535	65	171433	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	351343	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	495345	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	451438	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	201841	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	178421	50.36	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.72%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	221876	52.35	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 104.70%			
74) toluene-d8 (s)	5.118	98	543967	49.56	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.12%			
98) 4-bromofluorobenzene (s)	7.130	95	197374	49.20	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.40%			
Target Compounds						Qvalue
8) chloromethane	1.436	50	10465	3.50	ug/L	97
10) bromomethane	1.730	96	1017	0.74	ug/L #	72
11) chloroethane	1.799	64	1005	0.82	ug/L	95
18) acetone	2.279	58	1615	6.85	ug/L	94
22) methylene chloride	2.562	84	870	0.48	ug/L	85
26) trans-1,2-dichloroethene	2.722	96	3994	2.07	ug/L	97
30) 1,1-dichloroethane	2.984	63	40704	10.91	ug/L	99
36) cis-1,2-dichloroethene	3.325	96	27975	13.52	ug/L	89
42) chloroform	3.523	83	5562	1.54	ug/L	99
45) 1,1,1-trichloroethane	3.645	97	12390	3.65	ug/L	77
61) trichloroethene	4.286	130	1460	0.63	ug/L	94
86) chlorobenzene	6.223	112	78089	16.22	ug/L	98
112) 1,4-dichlorobenzene	8.011	146	22940	5.64	ug/L	98
113) 1,2-dichlorobenzene	8.267	146	111892	29.94	ug/L	99

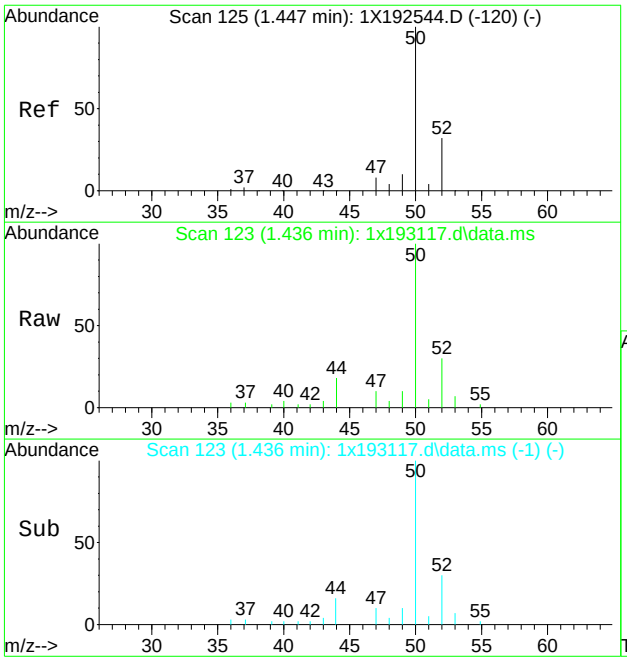
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-22-2021\vx8366-partial\
Data File : 1x193117.d
Acq On : 21 Dec 2021 2:35 pm
Operator : brittank
Sample : JD36624-9 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8366,5,,,,20
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 22 04:27:56 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

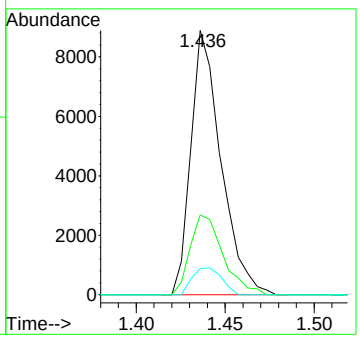


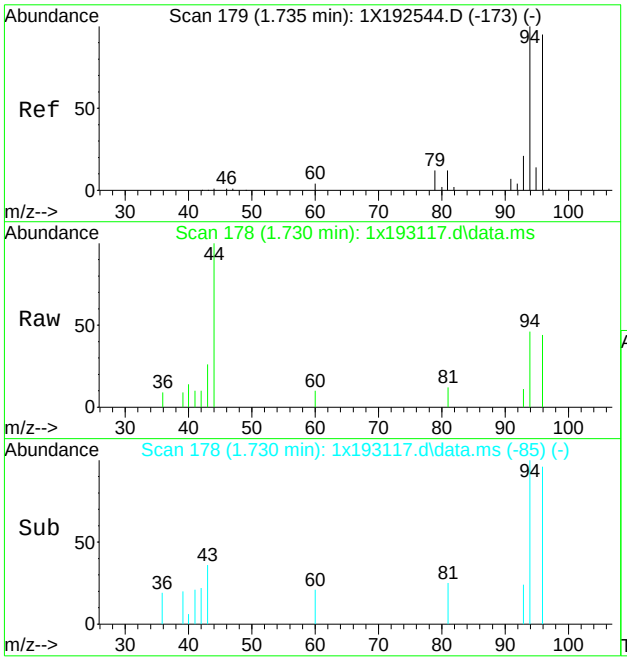


#8
chloromethane
Concen: 3.50 ug/L
RT: 1.436 min Scan# 123
Delta R.T. -0.011 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion: 50 Resp: 10465

Ion	Ratio	Lower	Upper
50	100		
52	30.2	2.2	62.2
49	9.8	0.0	40.5

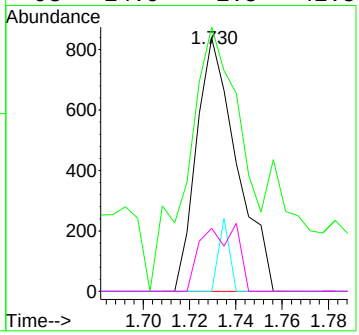


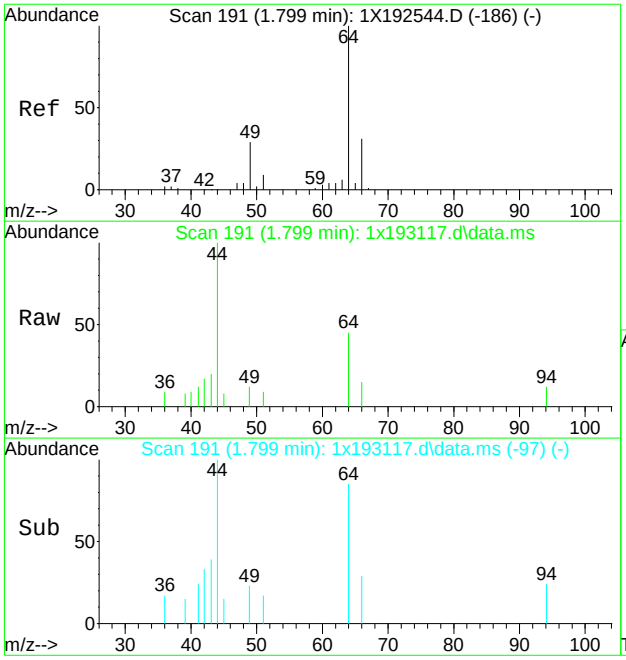


#10
bromomethane
Concen: 0.74 ug/L
RT: 1.730 min Scan# 178
Delta R.T. -0.005 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion: 96 Resp: 1017

Ion	Ratio	Lower	Upper
96	100		
94	72.8	85.7	125.7#
95	0.0	0.0	34.9
93	24.9	2.5	42.5

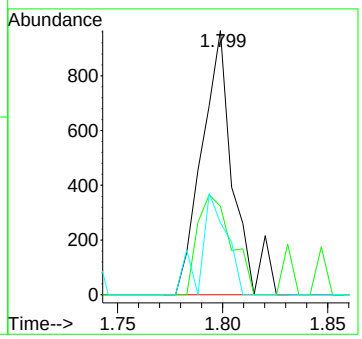


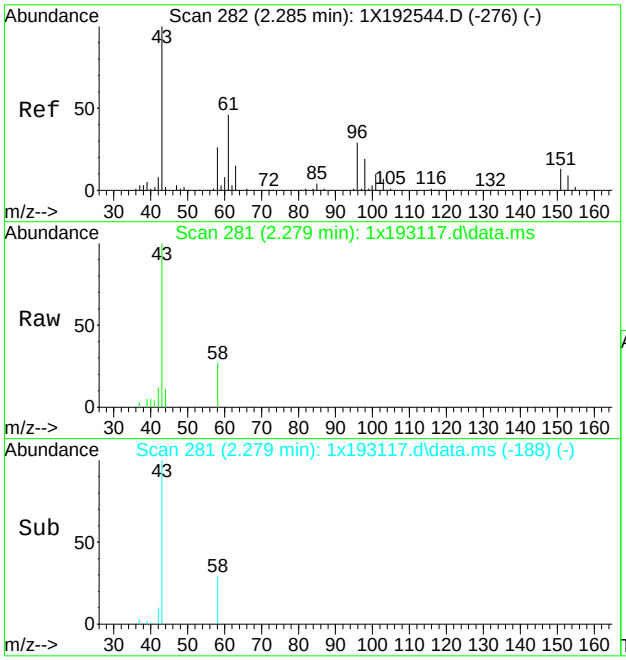


#11
chloroethane
Concen: 0.82 ug/L
RT: 1.799 min Scan# 191
Delta R.T. -0.000 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion: 64 Resp: 1005

Ion	Ratio	Lower	Upper
64	100		
66	33.5	0.6	60.6
49	27.2	0.0	59.3

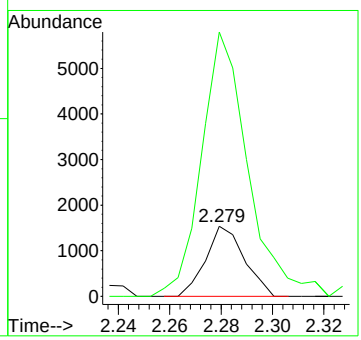


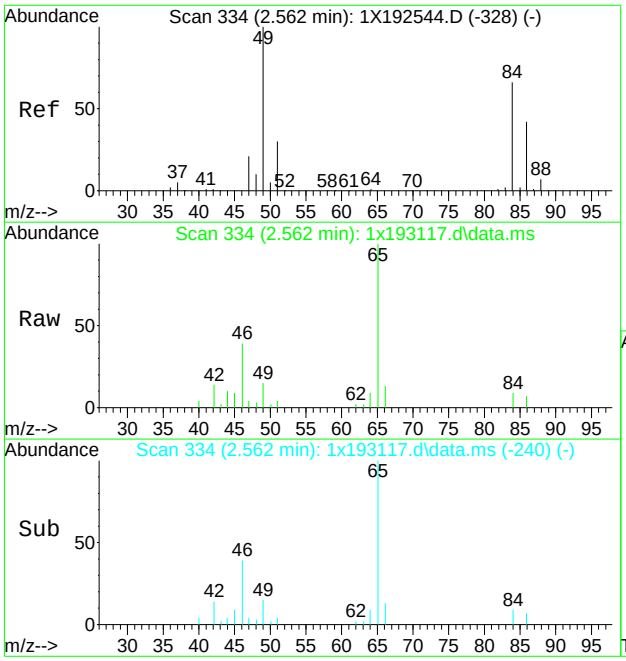


#18
acetone
Concen: 6.85 ug/L
RT: 2.279 min Scan# 281
Delta R.T. -0.006 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion: 58 Resp: 1615

Ion	Ratio	Lower	Upper
58	100		
43	365.3	348.5	408.5

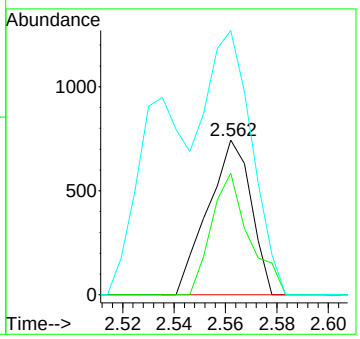


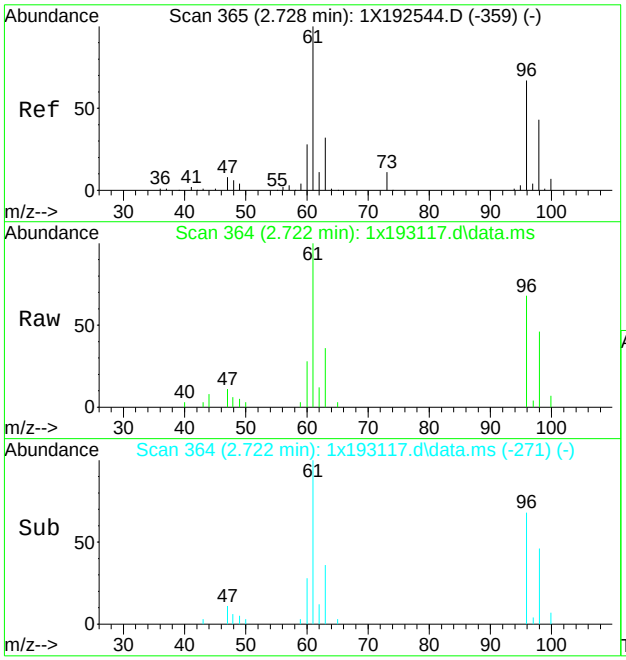


#22
methylene chloride
Concen: 0.48 ug/L
RT: 2.562 min Scan# 334
Delta R.T. -0.000 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion: 84 Resp: 870

Ion	Ratio	Lower	Upper
84	100		
86	78.6	34.3	94.3
49	170.8	122.9	182.9

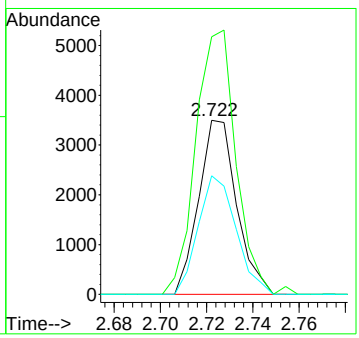


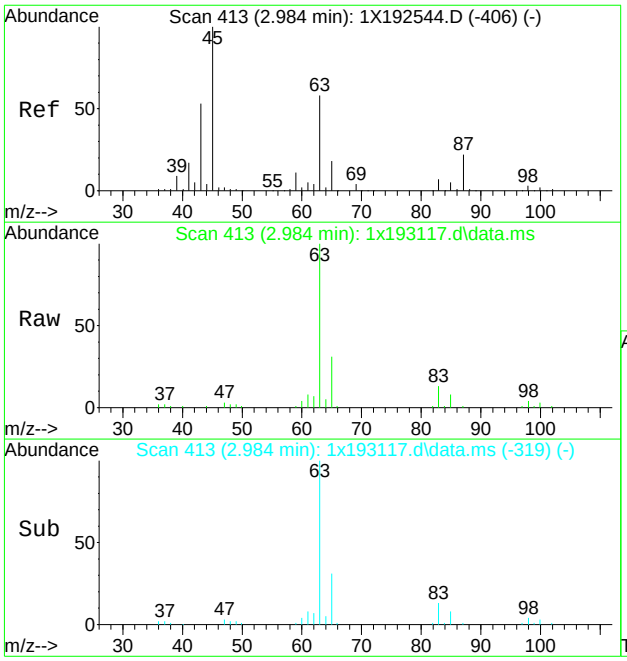


#26
trans-1,2-dichloroethene
Concen: 2.07 ug/L
RT: 2.722 min Scan# 364
Delta R.T. -0.006 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion: 96 Resp: 3994

Ion	Ratio	Lower	Upper
96	100		
61	148.0	120.2	180.2
98	68.1	34.0	94.0

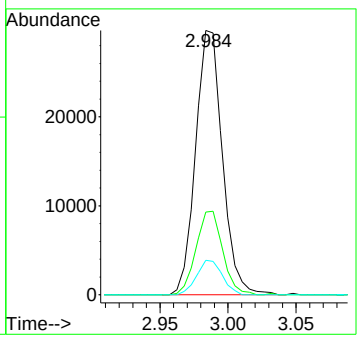


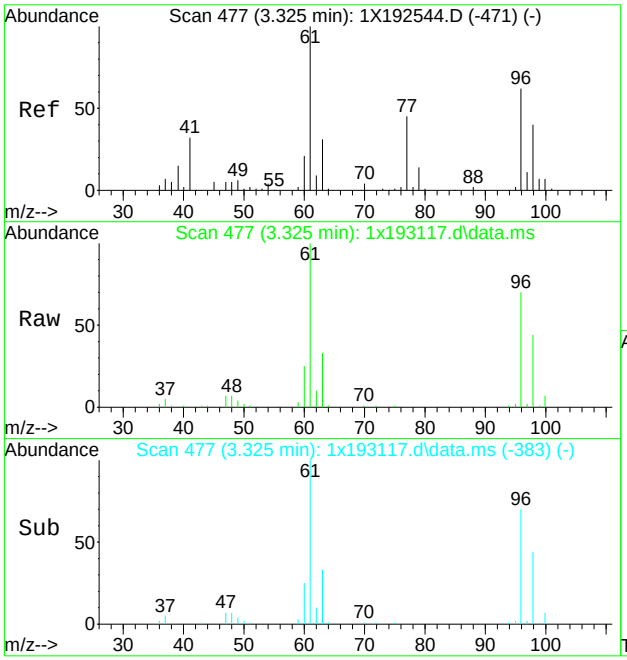


#30
1,1-dichloroethane
Concen: 10.91 ug/L
RT: 2.984 min Scan# 413
Delta R.T. -0.000 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion: 63 Resp: 40704

Ion	Ratio	Lower	Upper
63	100		
65	31.3	0.9	60.9
83	13.1	0.0	42.5

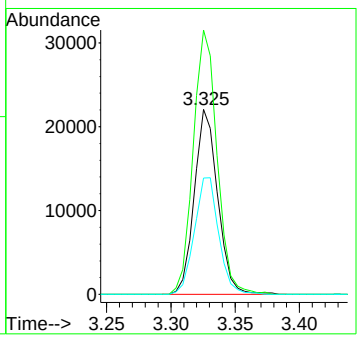


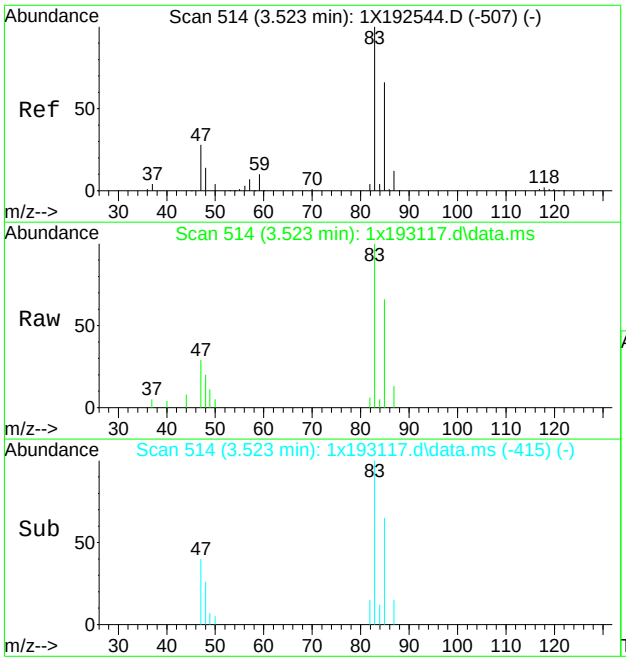


#36
cis-1,2-dichloroethene
Concen: 13.52 ug/L
RT: 3.325 min Scan# 477
Delta R.T. -0.000 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion: 96 Resp: 27975

Ion	Ratio	Lower	Upper
96	100		
61	142.8	131.2	191.2
98	62.9	34.7	94.7

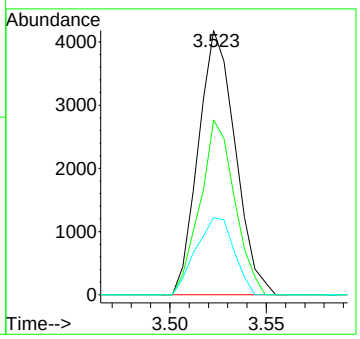


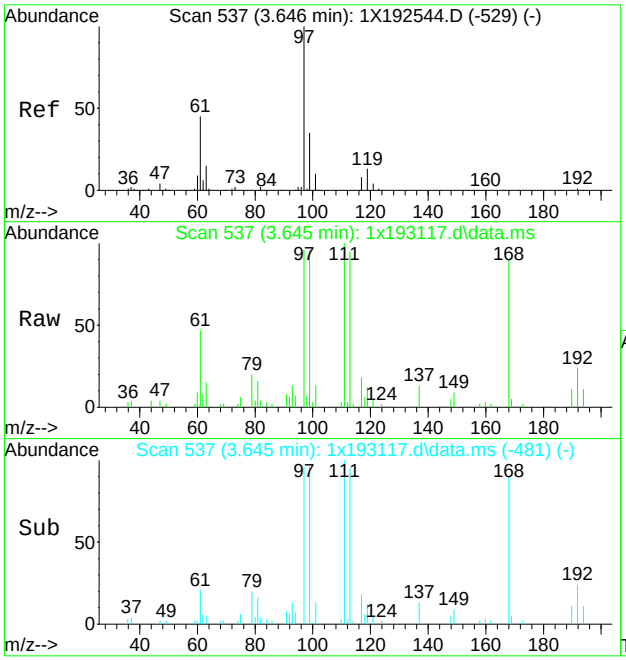


#42
chloroform
Concen: 1.54 ug/L
RT: 3.523 min Scan# 514
Delta R.T. -0.000 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion: 83 Resp: 5562

Ion	Ratio	Lower	Upper
83	100		
85	66.2	35.8	95.8
47	29.2	0.1	60.1

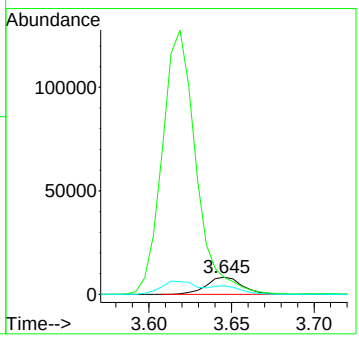


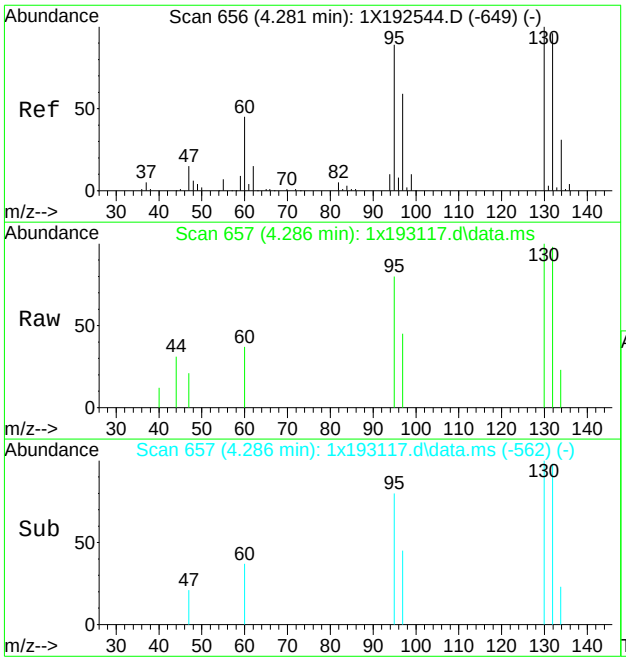


#45
1,1,1-trichloroethane
Concen: 3.65 ug/L
RT: 3.645 min Scan# 537
Delta R.T. -0.000 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion: 97 Resp: 12390

Ion	Ratio	Lower	Upper
97	100		
99	96.0	37.2	97.2
61	48.5	16.0	76.0

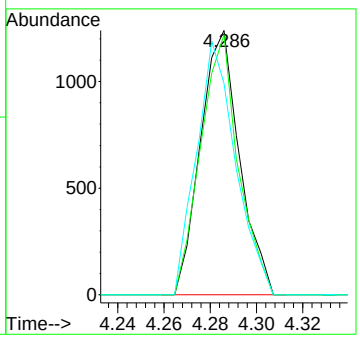


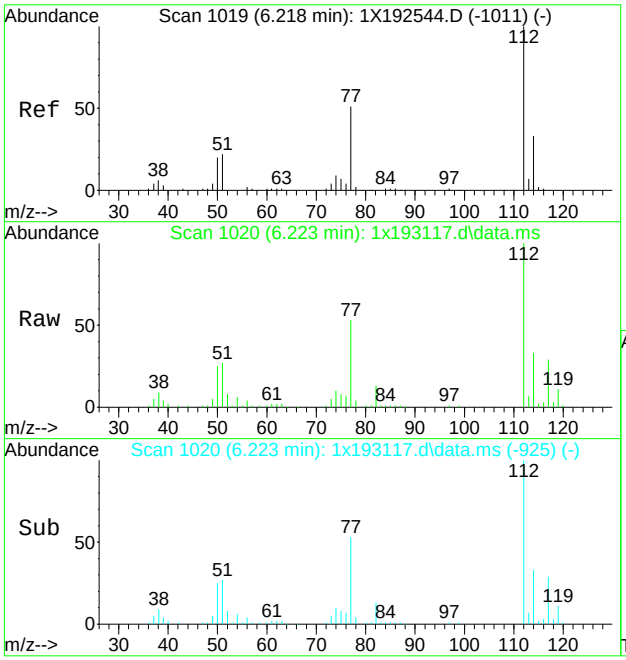


#61
trichloroethene
Concen: 0.63 ug/L
RT: 4.286 min Scan# 657
Delta R.T. 0.005 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion:130 Resp: 1460

Ion	Ratio	Lower	Upper
130	100		
132	98.4	65.5	125.5
95	79.9	58.7	118.7

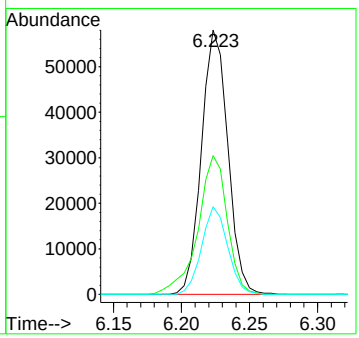


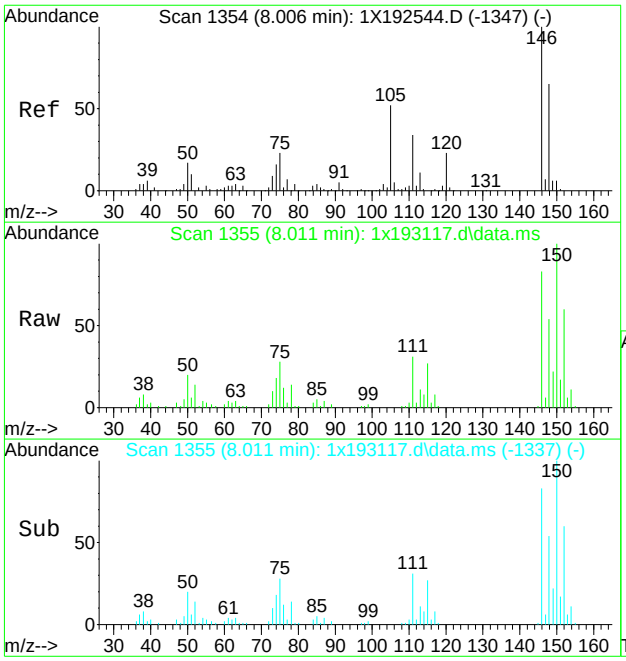


#86
chlorobenzene
Concen: 16.22 ug/L
RT: 6.223 min Scan# 1020
Delta R.T. 0.005 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion:112 Resp: 78089

Ion	Ratio	Lower	Upper
112	100		
77	52.5	20.6	80.6
114	33.2	2.6	62.6

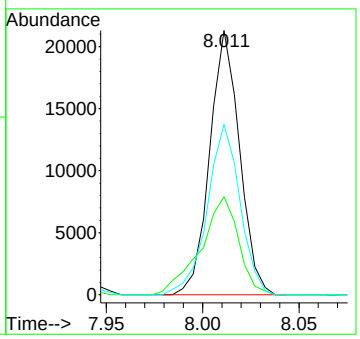


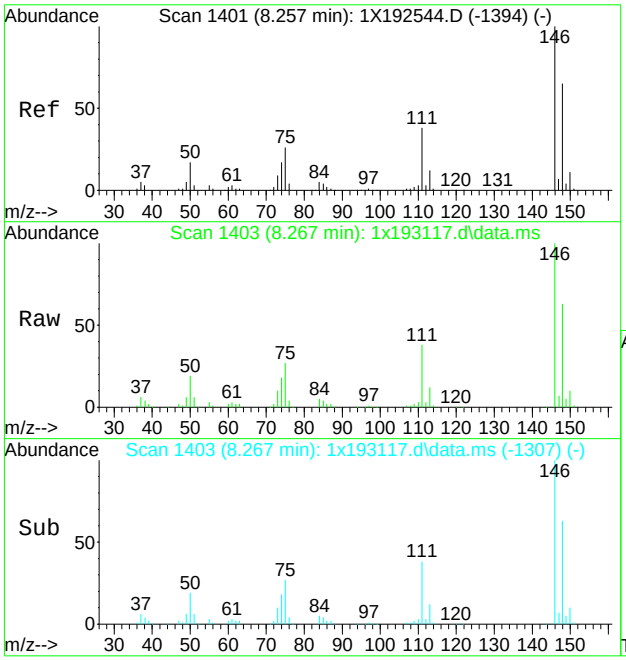


#112
1,4-dichlorobenzene
Concen: 5.64 ug/L
RT: 8.011 min Scan# 1355
Delta R.T. 0.005 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion:146 Resp: 22940

Ion	Ratio	Lower	Upper
146	100		
111	37.1	4.4	64.4
148	64.4	34.6	94.6

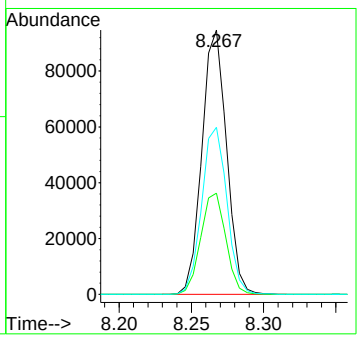




#113
1,2-dichlorobenzene
Concen: 29.94 ug/L
RT: 8.267 min Scan# 1403
Delta R.T. 0.011 min
Lab File: 1x193117.d
Acq: 21 Dec 2021 2:35 pm

Tgt Ion:146 Resp: 111892

Ion	Ratio	Lower	Upper
146	100		
111	38.3	8.0	68.0
148	63.2	34.7	94.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\Completed\12-20-2021\vx8363-partial\
Data File : 1x193037.d
Acq On : 17 Dec 2021 4:01 pm
Operator : brittank
Sample : JD36624-10 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 28 08:25:49 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

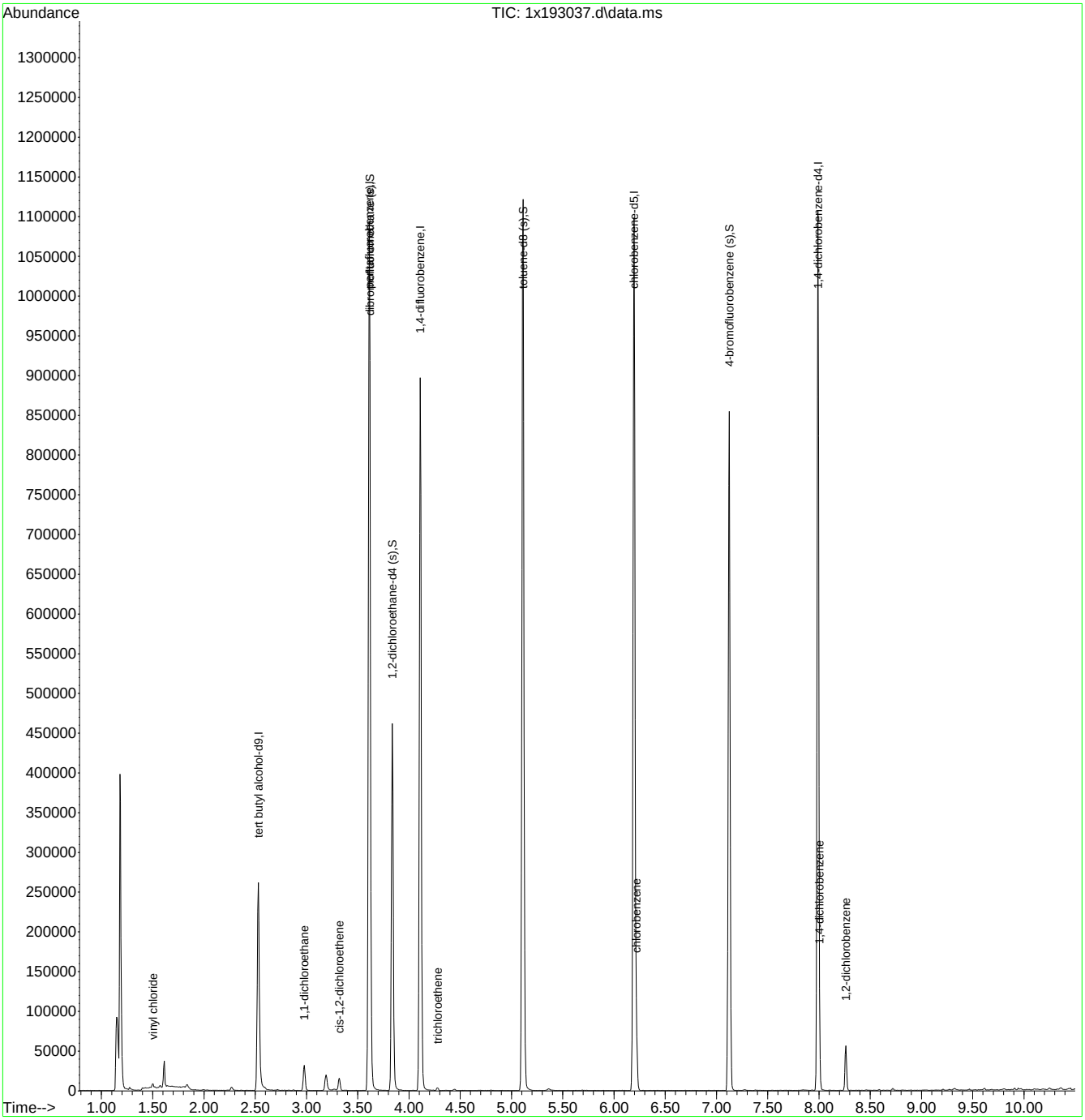
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.530	65	198886	500.00	ug/L	-0.02
5) pentafluorobenzene	3.613	168	340419	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.110	114	491270	50.00	ug/L	0.00
73) chlorobenzene-d5	6.196	117	453833	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.990	152	197514	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.619	113	174881	50.94	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.88%			
53) 1,2-dichloroethane-d4 (s)	3.837	65	217574	51.76	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 103.52%			
74) toluene-d8 (s)	5.113	98	553412	50.15	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.30%			
98) 4-bromofluorobenzene (s)	7.125	95	200903	51.17	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.34%			
Target Compounds						Qvalue
9) vinyl chloride	1.505	62	2266	0.88	ug/L	93
30) 1,1-dichloroethane	2.978	63	20250	5.60	ug/L	98
36) cis-1,2-dichloroethene	3.320	96	4207	2.10	ug/L #	83
61) trichloroethene	4.280	130	965	0.42	ug/L	81
86) chlorobenzene	6.218	112	24586	5.08	ug/L	95
112) 1,4-dichlorobenzene	8.006	146	3590	0.90	ug/L	81
113) 1,2-dichlorobenzene	8.262	146	16107	4.40	ug/L	97

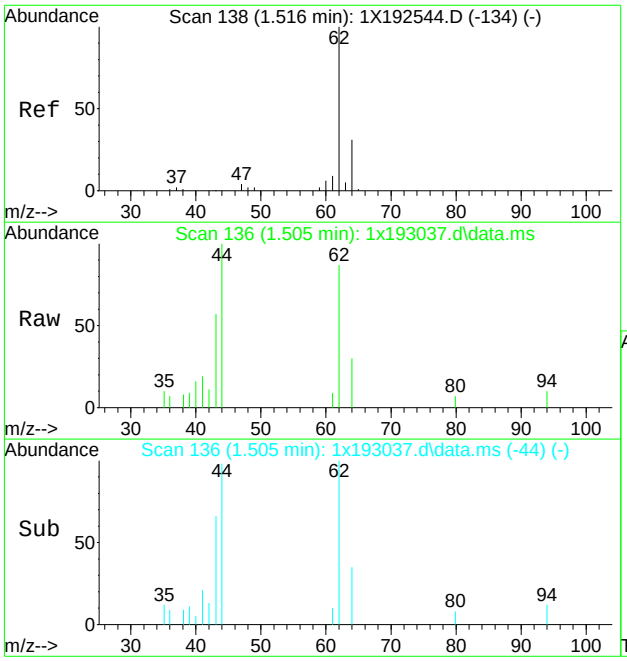
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\Completed\12-20-2021\vx8363-partial\
Data File : 1x193037.d
Acq On : 17 Dec 2021 4:01 pm
Operator : brittank
Sample : JD36624-10 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 28 08:25:49 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

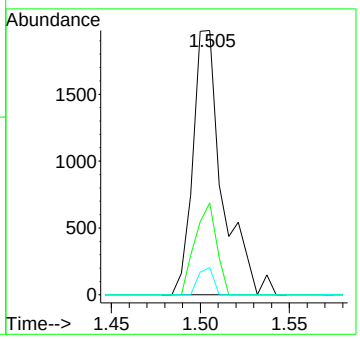


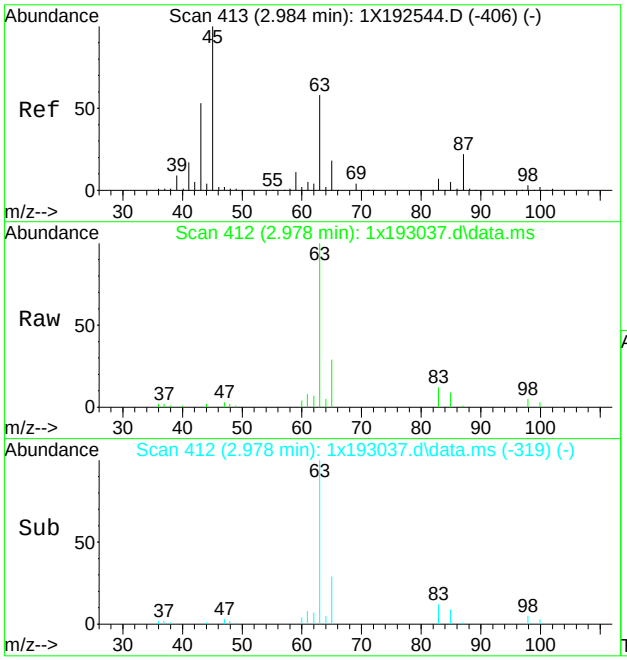


#9
vinyl chloride
Concen: 0.88 ug/L
RT: 1.505 min Scan# 136
Delta R.T. -0.011 min
Lab File: 1x193037.d
Acq: 17 Dec 2021 4:01 pm

Tgt Ion: 62 Resp: 2266

Ion	Ratio	Lower	Upper
62	100		
64	34.8	0.5	60.5
61	10.3	0.0	38.7

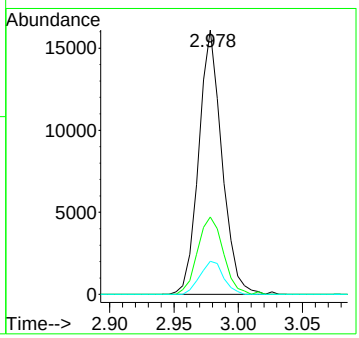


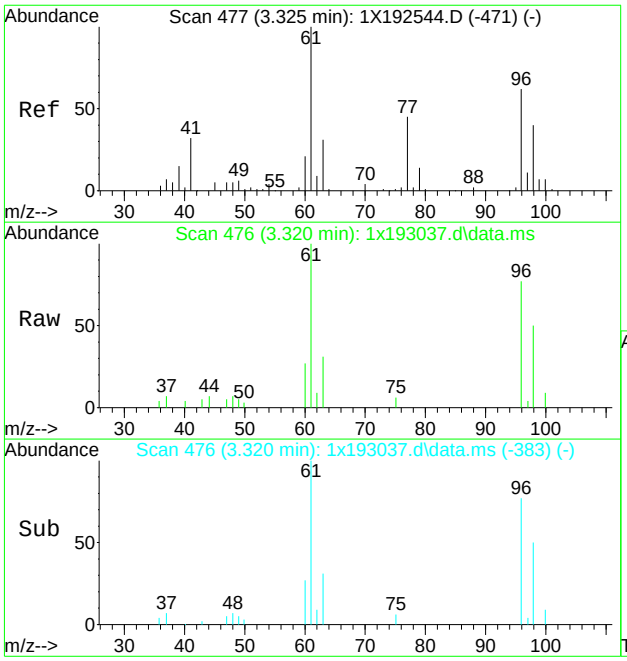


#30
1,1-dichloroethane
Concen: 5.60 ug/L
RT: 2.978 min Scan# 412
Delta R.T. -0.006 min
Lab File: 1x193037.d
Acq: 17 Dec 2021 4:01 pm

Tgt Ion: 63 Resp: 20250

Ion	Ratio	Lower	Upper
63	100		
65	29.2	0.9	60.9
83	12.5	0.0	42.5

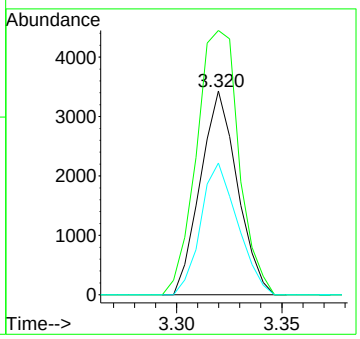


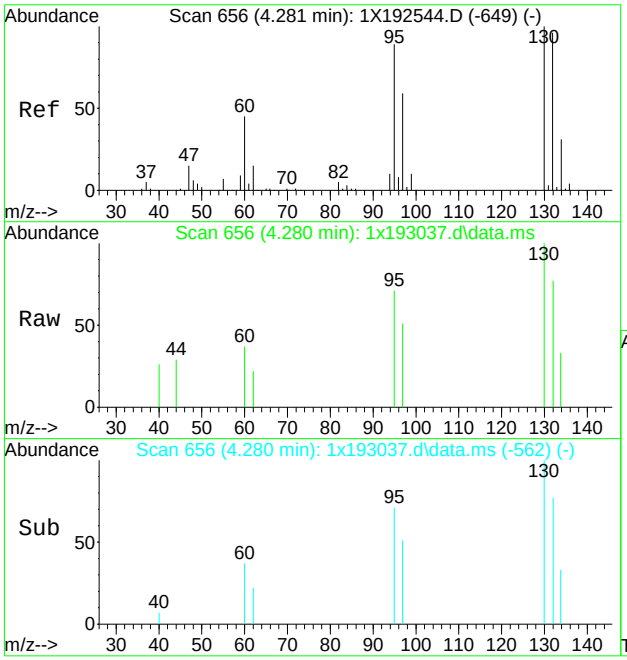


#36
cis-1,2-dichloroethene
Concen: 2.10 ug/L
RT: 3.320 min Scan# 476
Delta R.T. -0.006 min
Lab File: 1x193037.d
Acq: 17 Dec 2021 4:01 pm

Tgt Ion: 96 Resp: 4207

Ion	Ratio	Lower	Upper
96	100		
61	129.7	131.2	191.2#
98	64.6	34.7	94.7

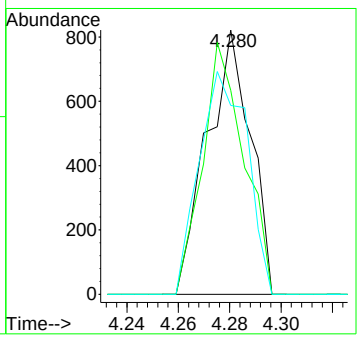


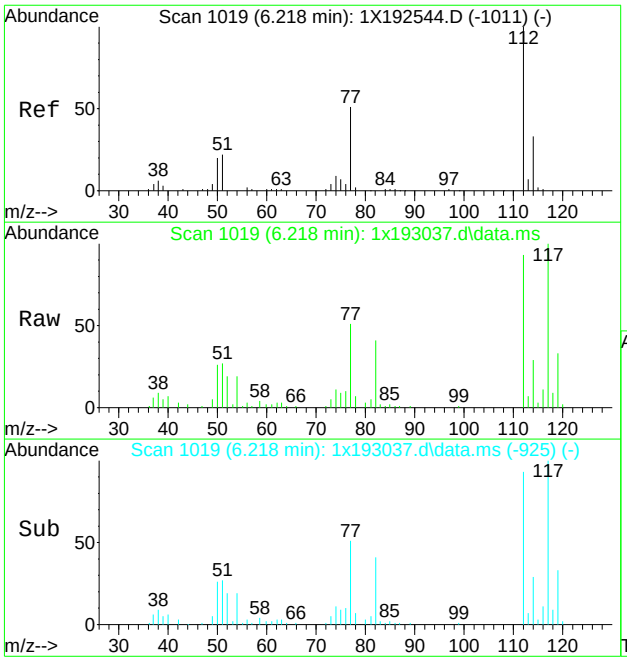


#61
trichloroethene
Concen: 0.42 ug/L
RT: 4.280 min Scan# 656
Delta R.T. -0.000 min
Lab File: 1x193037.d
Acq: 17 Dec 2021 4:01 pm

Tgt Ion:130 Resp: 965

Ion	Ratio	Lower	Upper
130	100		
132	77.1	65.5	125.5
95	71.4	58.7	118.7

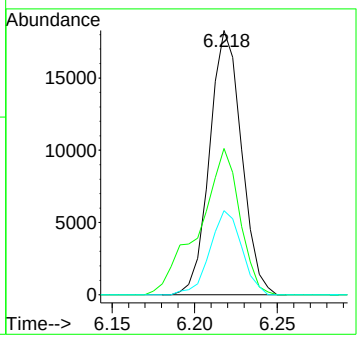


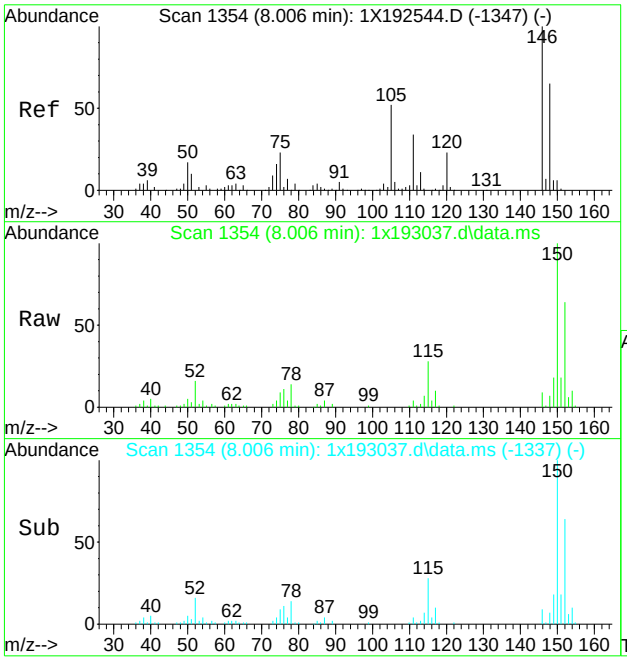


#86
chlorobenzene
Concen: 5.08 ug/L
RT: 6.218 min Scan# 1019
Delta R.T. -0.000 min
Lab File: 1x193037.d
Acq: 17 Dec 2021 4:01 pm

Tgt Ion:112 Resp: 24586

Ion	Ratio	Lower	Upper
112	100		
77	55.4	20.6	80.6
114	31.8	2.6	62.6

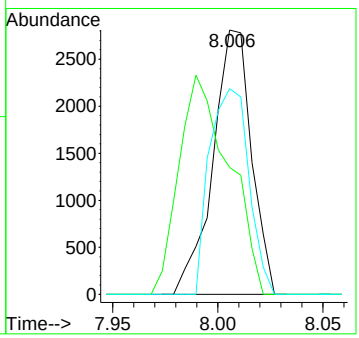


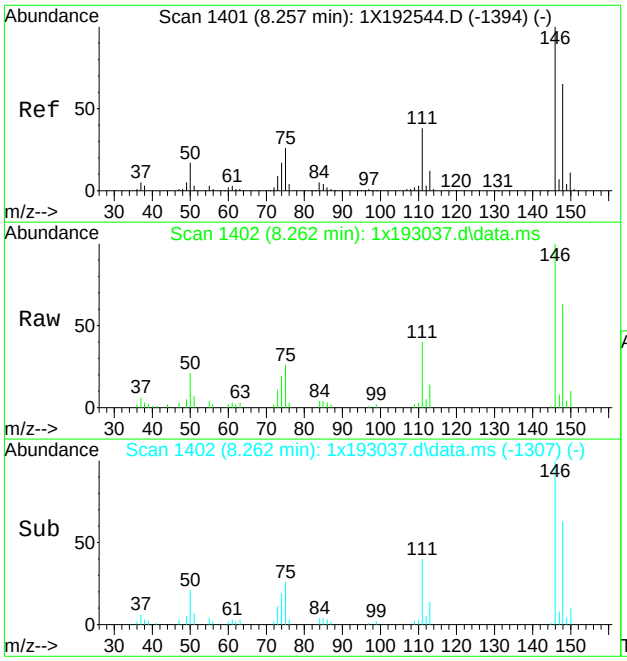


#112
1,4-dichlorobenzene
Concen: 0.90 ug/L
RT: 8.006 min Scan# 1354
Delta R.T. -0.000 min
Lab File: 1x193037.d
Acq: 17 Dec 2021 4:01 pm

Tgt Ion:146 Resp: 3590

Ion	Ratio	Lower	Upper
146	100		
111	48.0	4.4	64.4
148	77.8	34.6	94.6

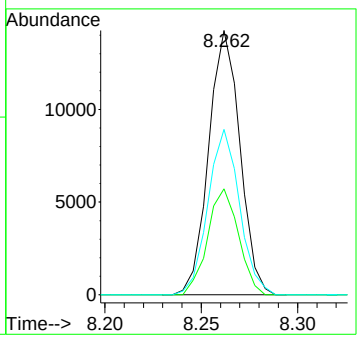




#113
1,2-dichlorobenzene
Concen: 4.40 ug/L
RT: 8.262 min Scan# 1402
Delta R.T. 0.005 min
Lab File: 1x193037.d
Acq: 17 Dec 2021 4:01 pm

Tgt Ion:146 Resp: 16107

Ion	Ratio	Lower	Upper
146	100		
111	40.1	8.0	68.0
148	62.6	34.7	94.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193044.d
Acq On : 17 Dec 2021 7:02 pm
Operator : brittank
Sample : JD36624-11 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 08:27:07 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

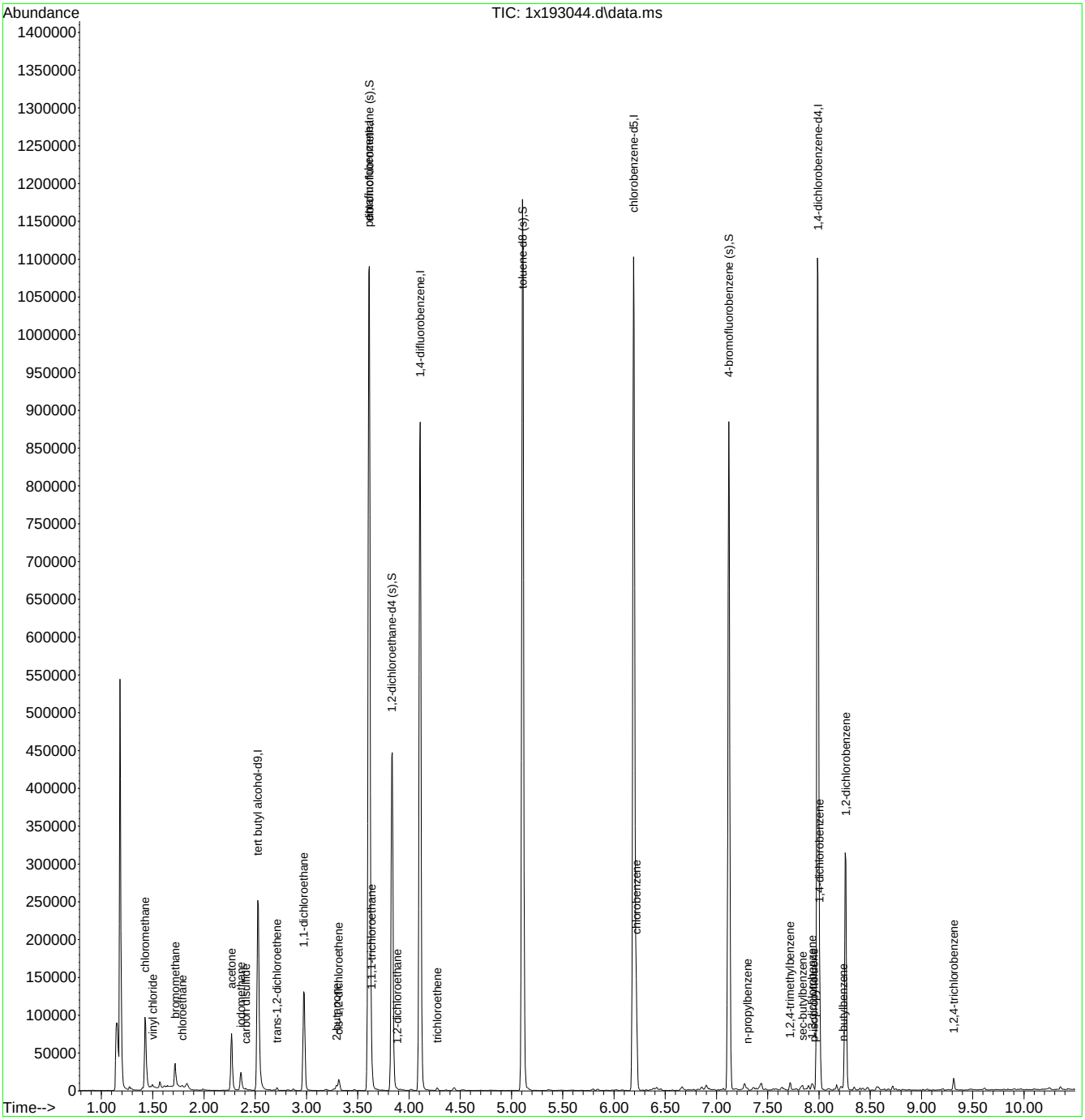
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.525	65	197198	500.00	ug/L	-0.02
5) pentafluorobenzene	3.608	168	352469	50.00	ug/L	-0.01
52) 1,4-difluorobenzene	4.110	114	509267	50.00	ug/L	0.00
73) chlorobenzene-d5	6.191	117	469328	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.990	152	209228	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.613	113	181090	50.95	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.90%			
53) 1,2-dichloroethane-d4 (s)	3.832	65	225159	51.68	ug/L	-0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 103.36%			
74) toluene-d8 (s)	5.108	98	568872	49.85	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.70%			
98) 4-bromofluorobenzene (s)	7.120	95	209364	50.34	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.68%			
Target Compounds						Qvalue
8) chloromethane	1.425	50	69565	23.18	ug/L	99
9) vinyl chloride	1.500	62	1249	0.47	ug/L	89
10) bromomethane	1.719	96	12979	9.48	ug/L	99
11) chloroethane	1.788	64	998	0.81	ug/L	89
18) acetone	2.269	58	14991	63.36	ug/L	95
20) iodomethane	2.359	142	19680	8.50	ug/L	98
21) carbon disulfide	2.407	76	1519	0.30	ug/L	80
26) trans-1,2-dichloroethene	2.712	96	403	0.21	ug/L	92
29) 2-butanone	3.293	72	1030	4.05	ug/L	98
30) 1,1-dichloroethane	2.973	63	86331	23.07	ug/L	99
36) cis-1,2-dichloroethene	3.315	96	3954	1.91	ug/L	92
45) 1,1,1-trichloroethane	3.635	97	6414	1.88	ug/L #	28
60) 1,2-dichloroethane	3.886	62	686	0.21	ug/L	89
61) trichloroethene	4.275	130	840	0.35	ug/L	84
86) chlorobenzene	6.218	112	49594	9.91	ug/L	99
103) n-propylbenzene	7.301	91	2054	0.21	ug/L	96
108) 1,2,4-trimethylbenzene	7.718	105	3695	0.57	ug/L	95
109) sec-butylbenzene	7.840	105	2754	0.32	ug/L	88
110) 1,3-dichlorobenzene	7.931	146	2639	0.65	ug/L	84
111) p-isopropyltoluene	7.947	119	1961	0.26	ug/L	97
112) 1,4-dichlorobenzene	8.006	146	36890	8.75	ug/L	96
113) 1,2-dichlorobenzene	8.262	146	91967	23.74	ug/L	99
115) n-butylbenzene	8.235	92	825	0.25	ug/L	98
120) 1,2,4-trichlorobenzene	9.313	180	2970	1.28	ug/L	90

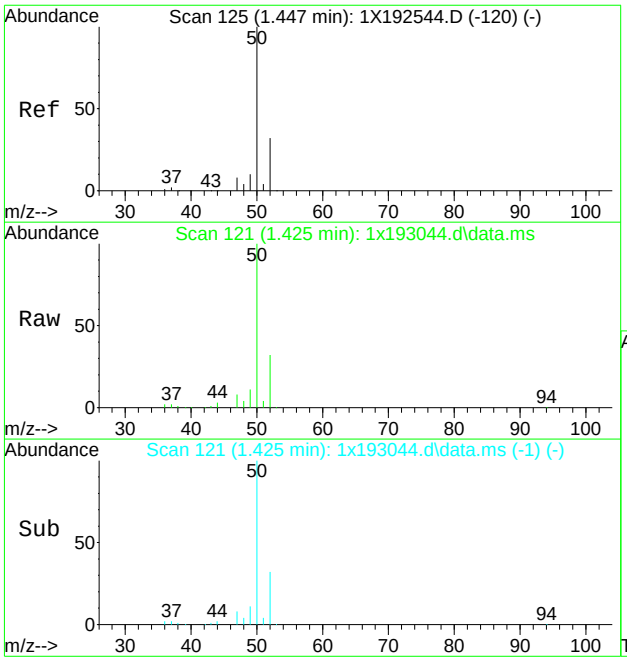
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193044.d
Acq On : 17 Dec 2021 7:02 pm
Operator : brittank
Sample : JD36624-11 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 08:27:07 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

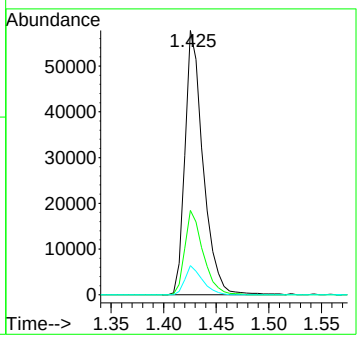


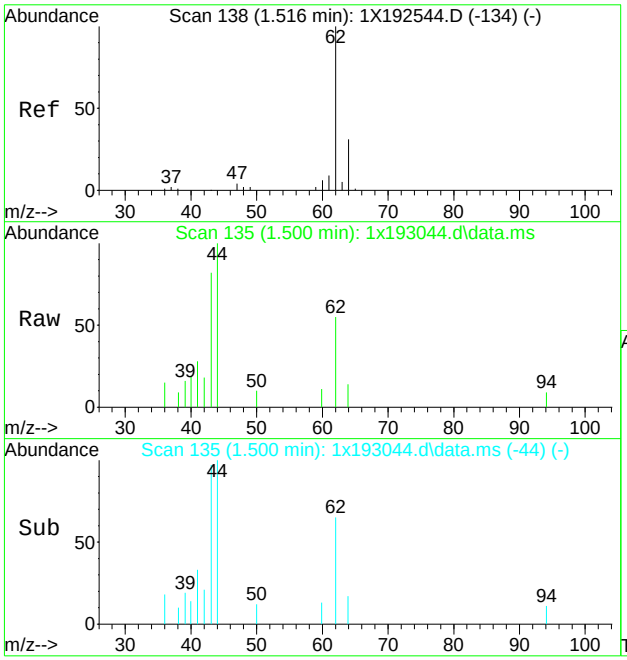


#8
chloromethane
Concen: 23.18 ug/L
RT: 1.425 min Scan# 121
Delta R.T. -0.022 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 50 Resp: 69565

Ion	Ratio	Lower	Upper
50	100		
52	31.9	2.2	62.2
49	11.0	0.0	40.5

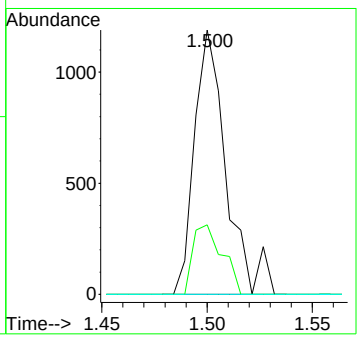


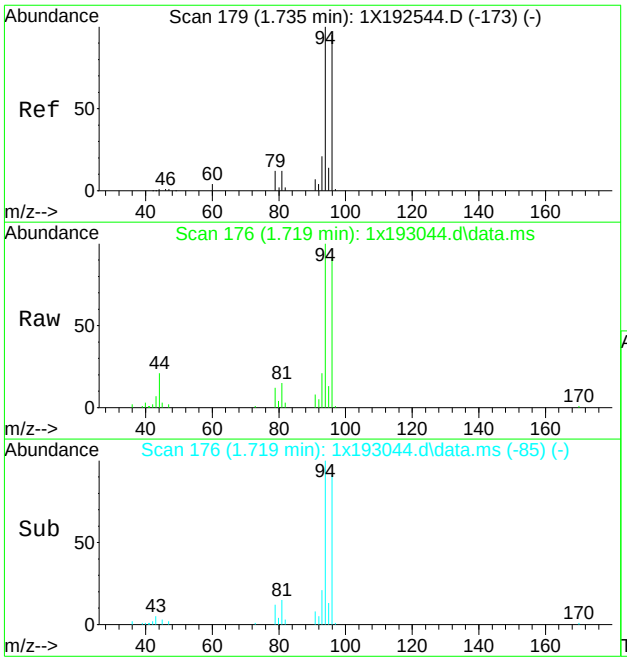


#9
vinyl chloride
Concen: 0.47 ug/L
RT: 1.500 min Scan# 135
Delta R.T. -0.016 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 62 Resp: 1249

Ion	Ratio	Lower	Upper
62	100		
64	26.3	0.5	60.5
61	0.0	0.0	38.7

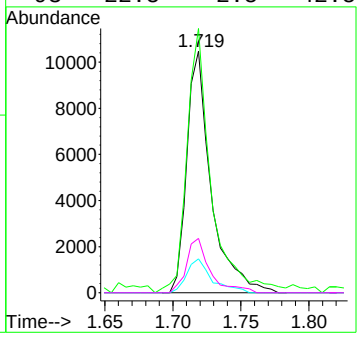


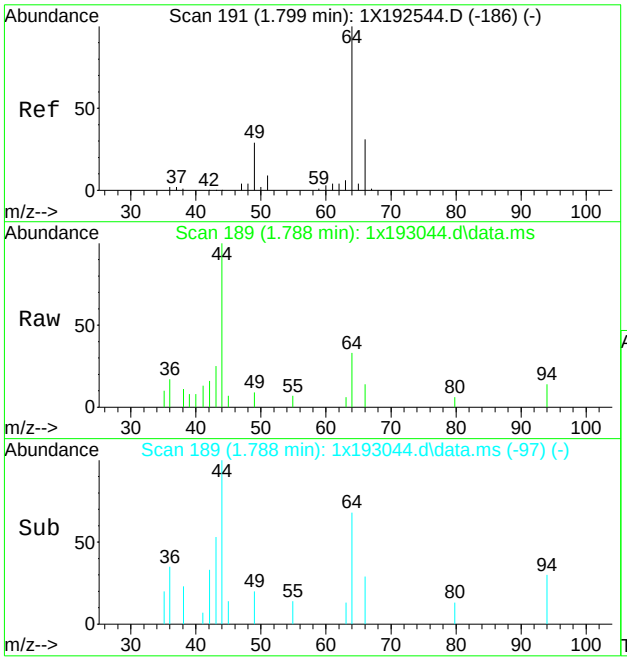


#10
bromomethane
Concen: 9.48 ug/L
RT: 1.719 min Scan# 176
Delta R.T. -0.016 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 96 Resp: 12979

Ion	Ratio	Lower	Upper
96	100		
94	107.5	85.7	125.7
95	14.1	0.0	34.9
93	22.5	2.5	42.5

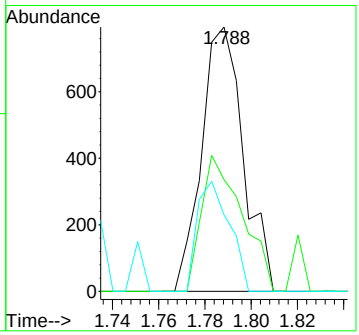


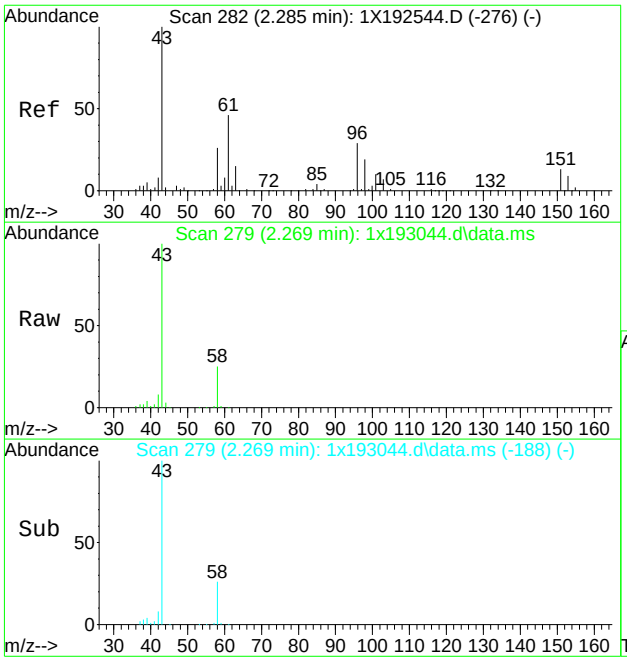


#11
chloroethane
Concen: 0.81 ug/L
RT: 1.788 min Scan# 189
Delta R.T. -0.011 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 64 Resp: 998

Ion	Ratio	Lower	Upper
64	100		
66	42.3	0.6	60.6
49	28.9	0.0	59.3

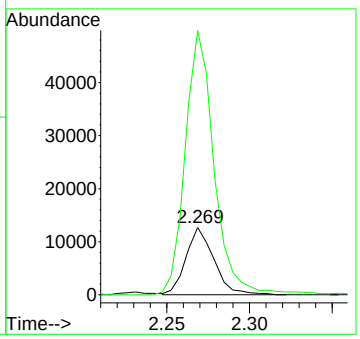


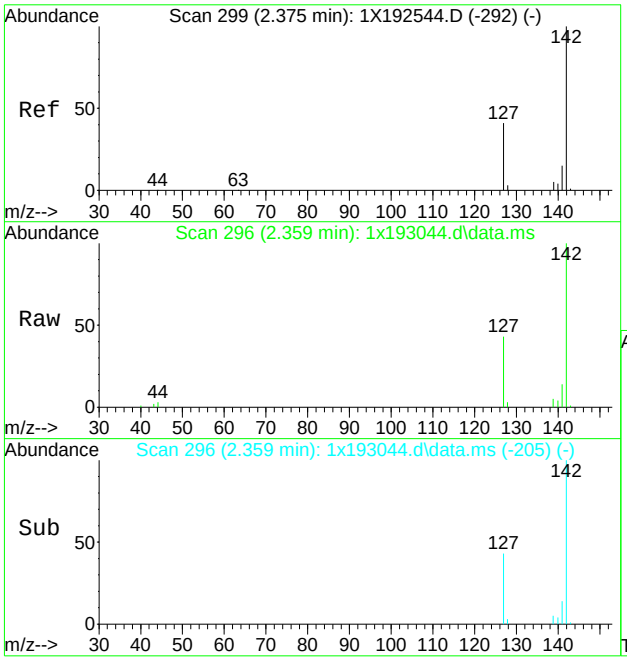


#18
acetone
Concen: 63.36 ug/L
RT: 2.269 min Scan# 279
Delta R.T. -0.016 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 58 Resp: 14991

Ion	Ratio	Lower	Upper
58	100		
43	388.9	348.5	408.5

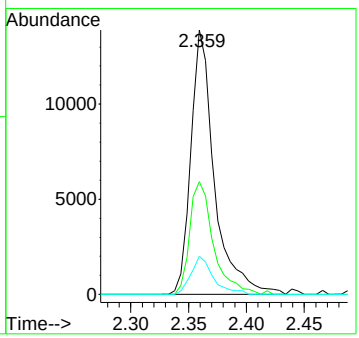


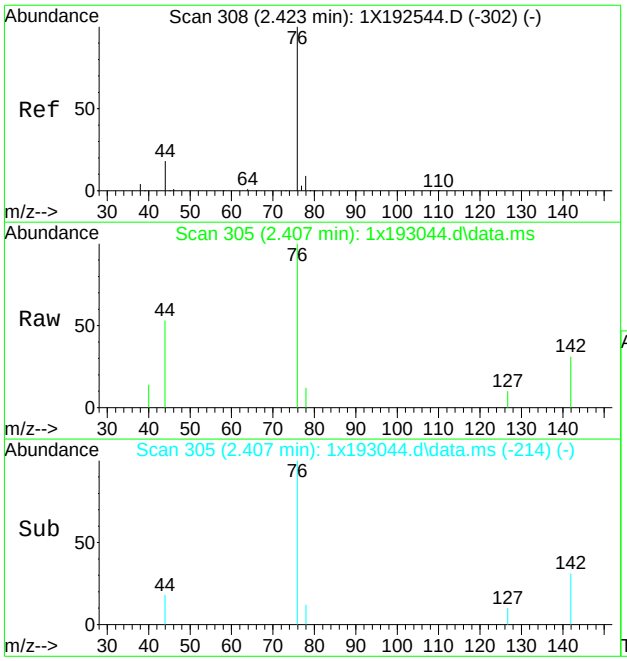


#20
iodomethane
Concen: 8.50 ug/L
RT: 2.359 min Scan# 296
Delta R.T. -0.016 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion:142 Resp: 19680

Ion	Ratio	Lower	Upper
142	100		
127	42.6	11.0	71.0
141	14.5	0.0	44.6

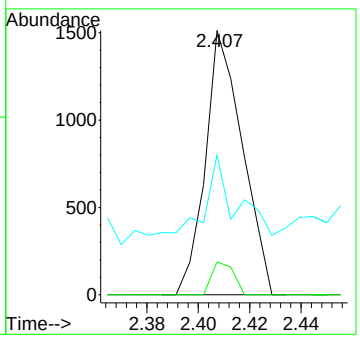


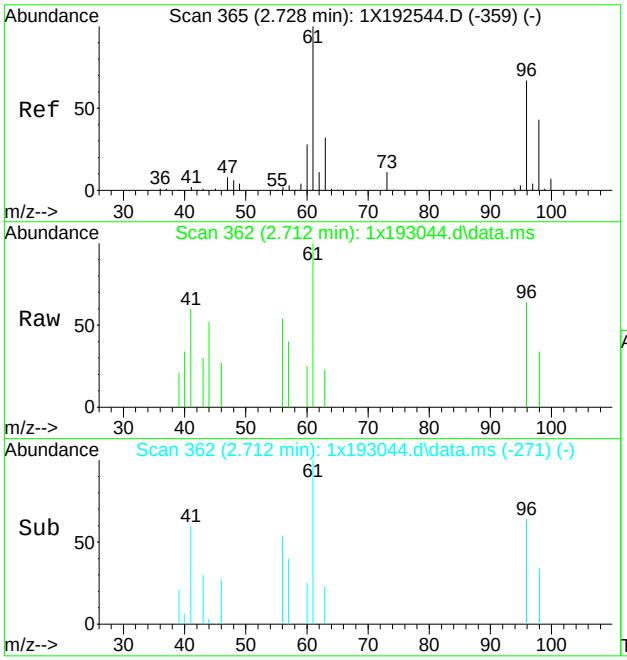


#21
carbon disulfide
Concen: 0.30 ug/L
RT: 2.407 min Scan# 305
Delta R.T. -0.016 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 76 Resp: 1519

Ion	Ratio	Lower	Upper
76	100		
78	12.5	0.0	38.9
44	29.4	0.0	48.2

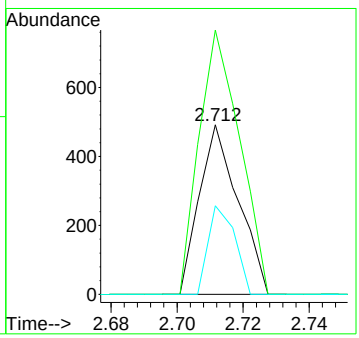


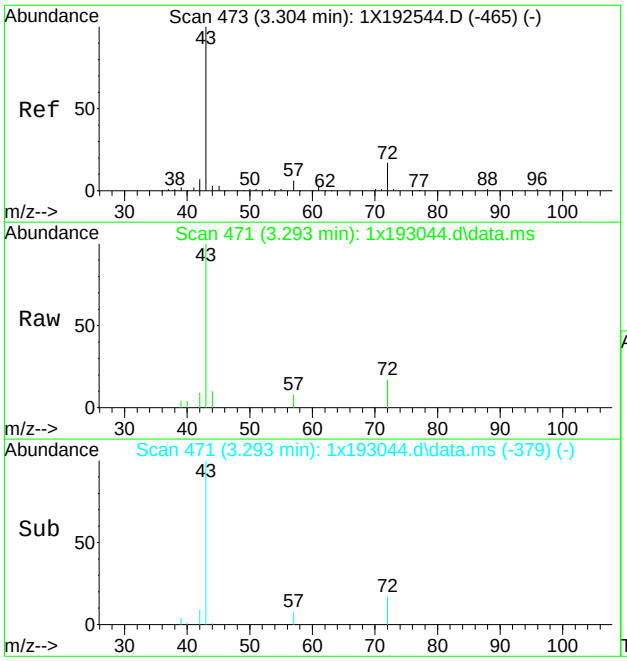


#26
trans-1,2-dichloroethene
Concen: 0.21 ug/L
RT: 2.712 min Scan# 362
Delta R.T. -0.016 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 96 Resp: 403

Ion	Ratio	Lower	Upper
96	100		
61	155.9	120.2	180.2
98	52.2	34.0	94.0

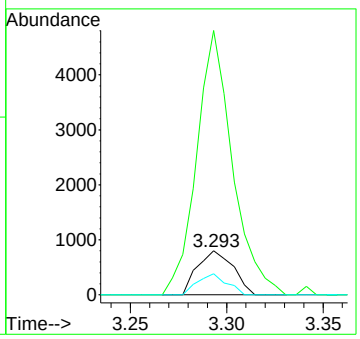


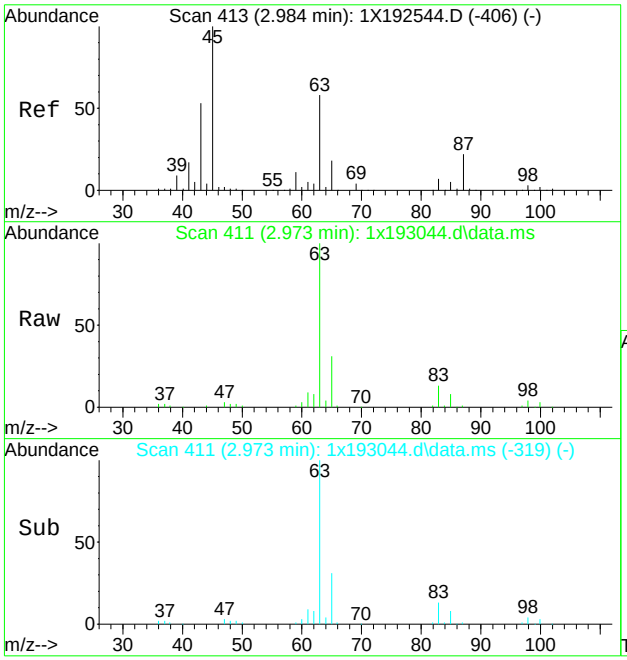


#29
2-butanone
Concen: 4.05 ug/L
RT: 3.293 min Scan# 471
Delta R.T. -0.011 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 72 Resp: 1030

Ion	Ratio	Lower	Upper
72	100		
43	599.0	567.1	627.1
57	47.8	4.0	64.0

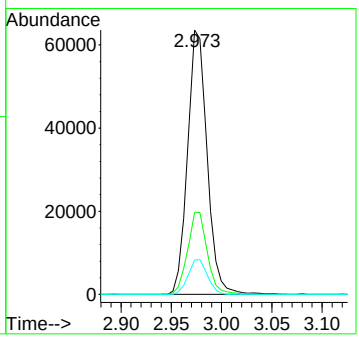


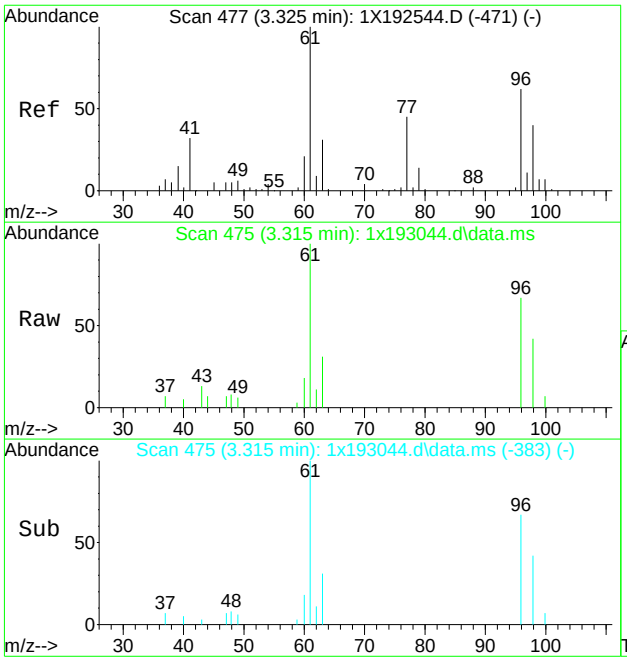


#30
1,1-dichloroethane
Concen: 23.07 ug/L
RT: 2.973 min Scan# 411
Delta R.T. -0.011 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 63 Resp: 86331

Ion	Ratio	Lower	Upper
63	100		
65	31.1	0.9	60.9
83	13.0	0.0	42.5

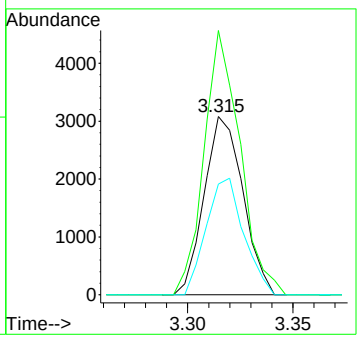


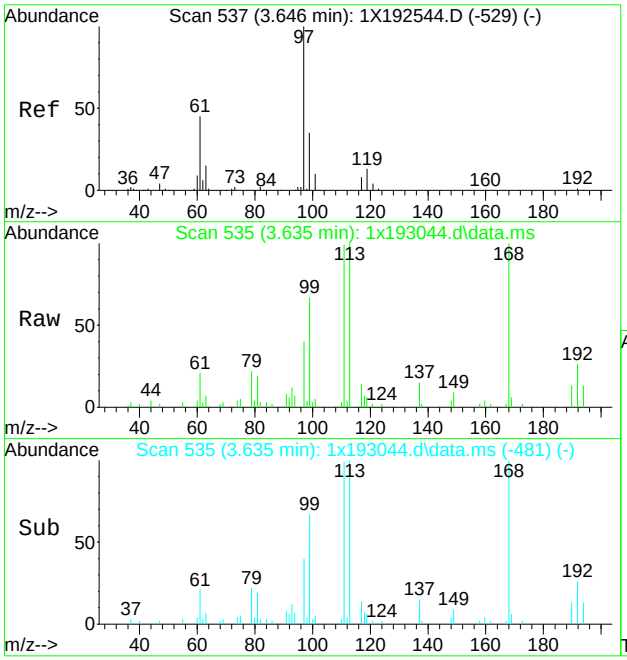


#36
cis-1,2-dichloroethene
Concen: 1.91 ug/L
RT: 3.315 min Scan# 475
Delta R.T. -0.011 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 96 Resp: 3954

Ion	Ratio	Lower	Upper
96	100		
61	148.4	131.2	191.2
98	62.2	34.7	94.7

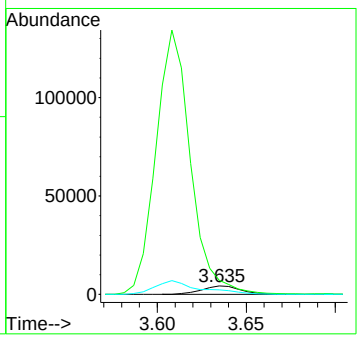


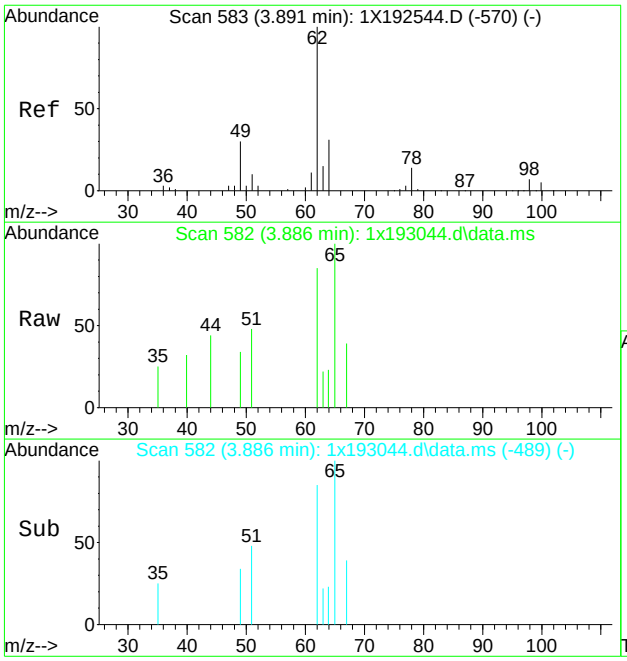


#45
1,1,1-trichloroethane
Concen: 1.88 ug/L
RT: 3.635 min Scan# 535
Delta R.T. -0.011 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 97 Resp: 6414

Ion	Ratio	Lower	Upper
97	100		
99	159.2	37.2	97.2#
61	52.2	16.0	76.0

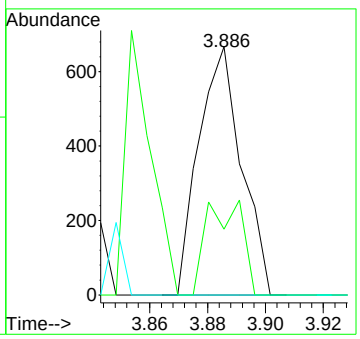


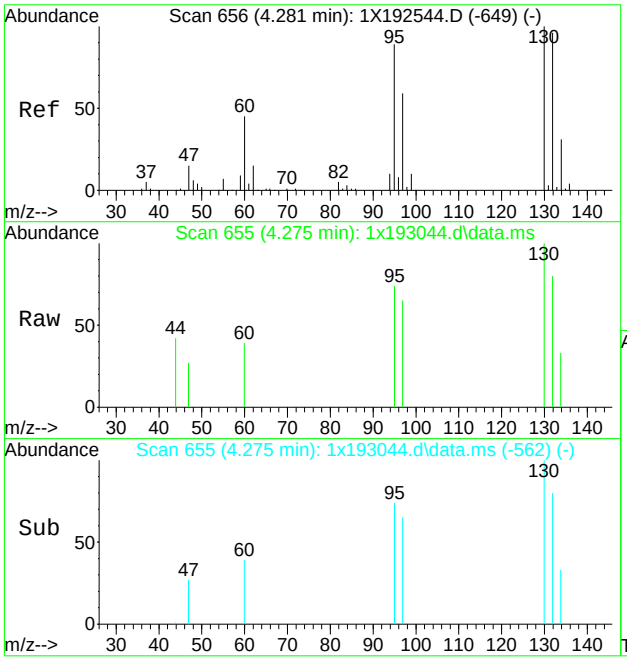


#60
1,2-dichloroethane
Concen: 0.21 ug/L
RT: 3.886 min Scan# 582
Delta R.T. -0.005 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 62 Resp: 686

Ion	Ratio	Lower	Upper
62	100		
64	26.5	1.2	61.2
98	0.0	0.0	37.4

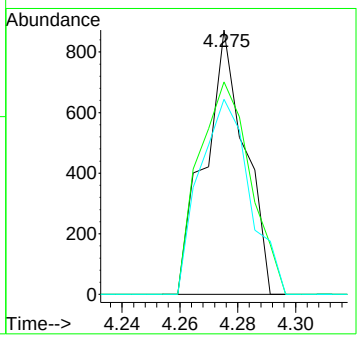


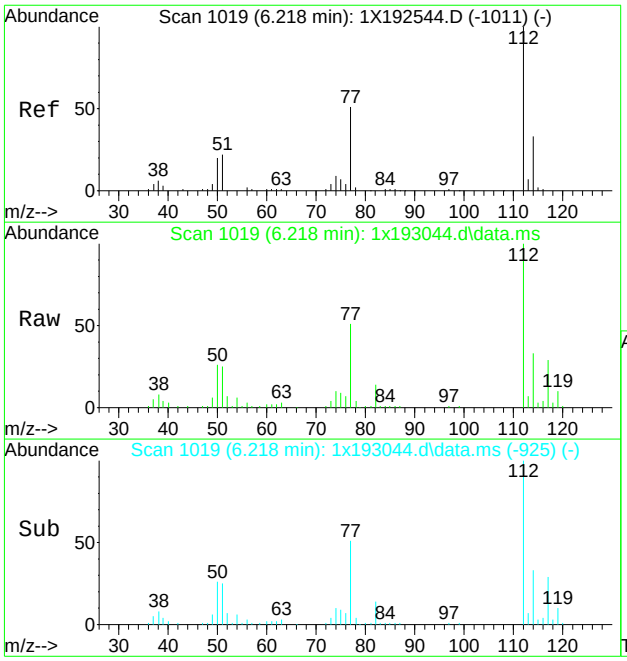


#61
trichloroethene
Concen: 0.35 ug/L
RT: 4.275 min Scan# 655
Delta R.T. -0.005 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion:130 Resp: 840

Ion	Ratio	Lower	Upper
130	100		
132	80.3	65.5	125.5
95	73.8	58.7	118.7

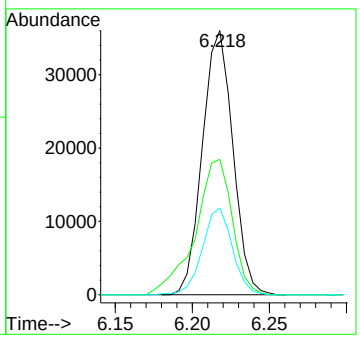


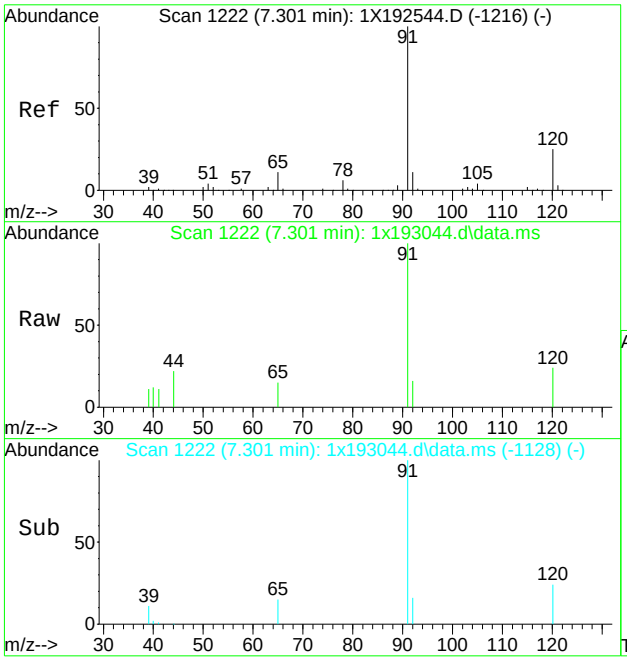


#86
chlorobenzene
Concen: 9.91 ug/L
RT: 6.218 min Scan# 1019
Delta R.T. -0.000 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion:112 Resp: 49594

Ion	Ratio	Lower	Upper
112	100		
77	51.2	20.6	80.6
114	32.8	2.6	62.6

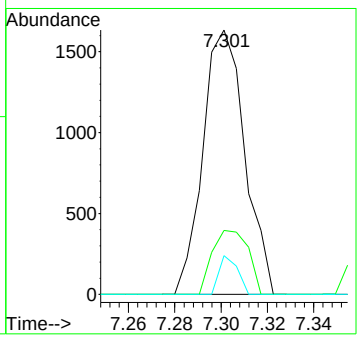


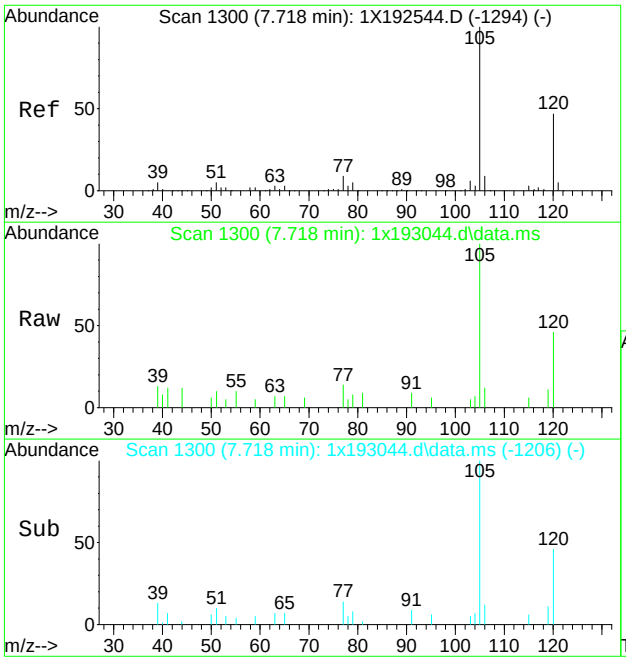


#103
n-propylbenzene
Concen: 0.21 ug/L
RT: 7.301 min Scan# 1222
Delta R.T. -0.000 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 91 Resp: 2054

Ion	Ratio	Lower	Upper
91	100		
120	24.2	0.0	55.0
65	14.7	0.0	41.3

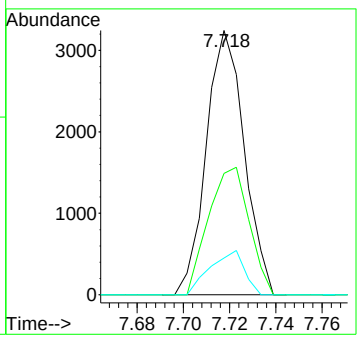


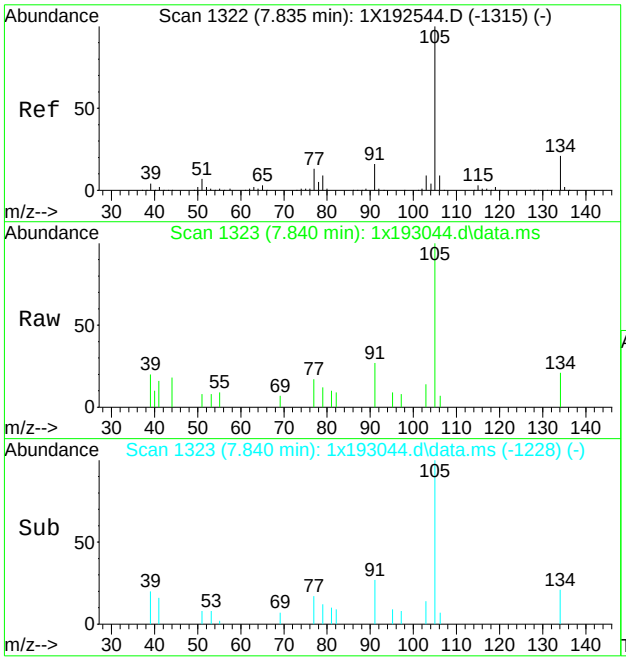


#108
1,2,4-trimethylbenzene
Concen: 0.57 ug/L
RT: 7.718 min Scan# 1300
Delta R.T. -0.000 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion:105 Resp: 3695

Ion	Ratio	Lower	Upper
105	100		
120	45.9	19.6	79.6
77	13.9	0.0	42.4

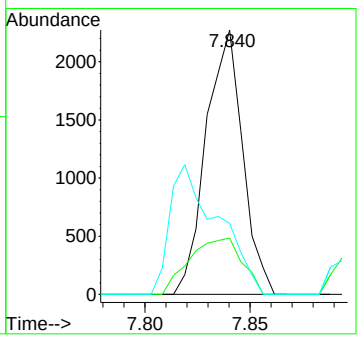


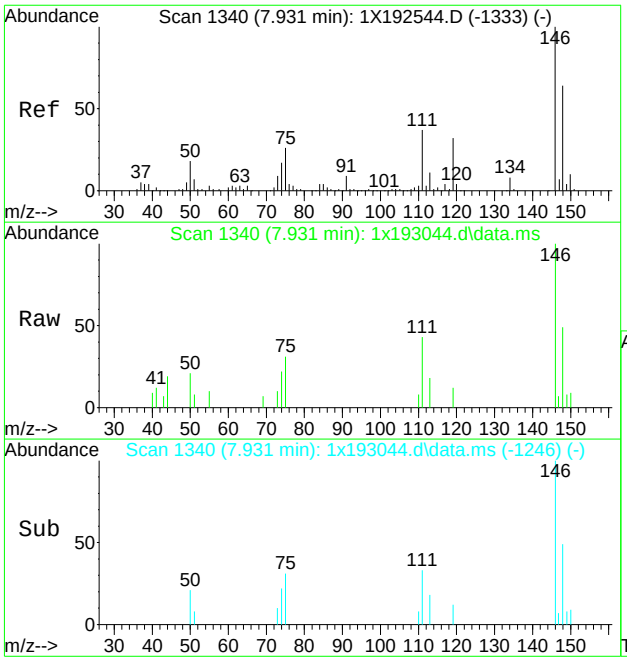


#109
sec-butylbenzene
Concen: 0.32 ug/L
RT: 7.840 min Scan# 1323
Delta R.T. 0.005 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion:105 Resp: 2754

Ion	Ratio	Lower	Upper
105	100		
134	21.3	0.0	50.5
91	26.8	0.0	45.8

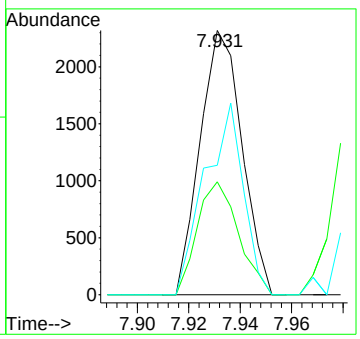


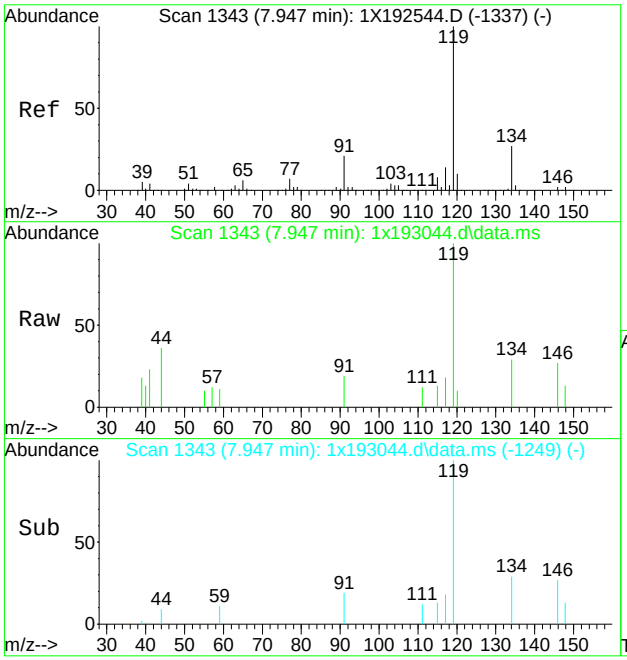


#110
1,3-dichlorobenzene
Concen: 0.65 ug/L
RT: 7.931 min Scan# 1340
Delta R.T. -0.000 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion:146 Resp: 2639

Ion	Ratio	Lower	Upper
146	100		
111	42.8	6.7	66.7
148	49.0	34.1	94.1

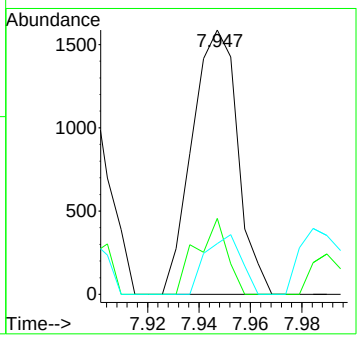


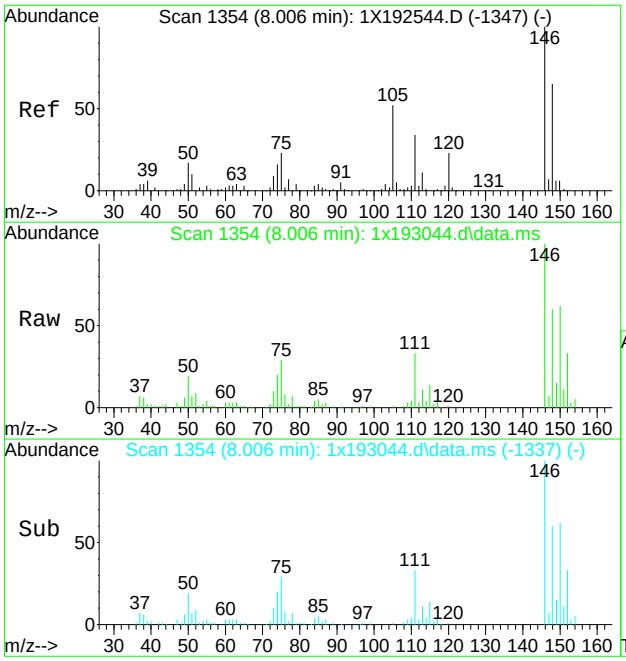


#111
p-isopropyltoluene
Concen: 0.26 ug/L
RT: 7.947 min Scan# 1343
Delta R.T. -0.000 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion:119 Resp: 1961

Ion	Ratio	Lower	Upper
119	100		
134	28.7	0.0	57.3
91	19.2	0.0	50.9

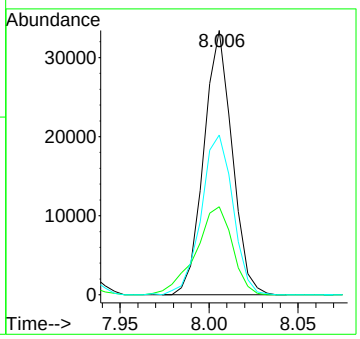


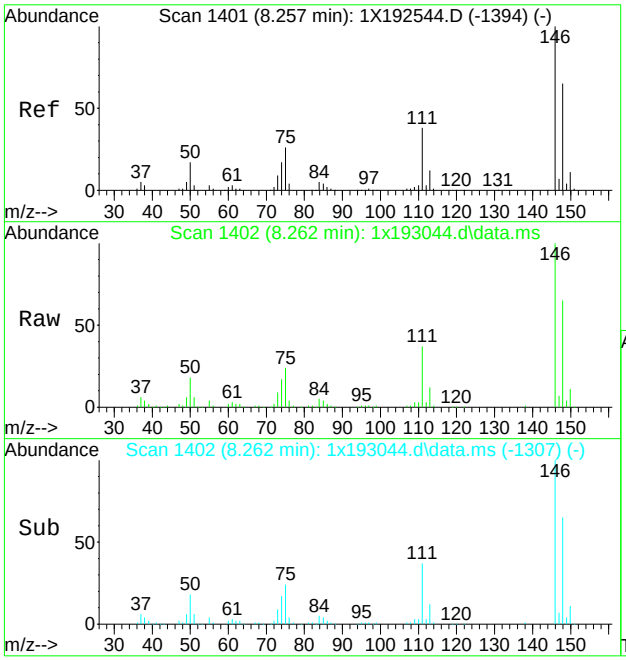


#112
1,4-dichlorobenzene
Concen: 8.75 ug/L
RT: 8.006 min Scan# 1354
Delta R.T. -0.000 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion:146 Resp: 36890

Ion	Ratio	Lower	Upper
146	100		
111	33.3	4.4	64.4
148	60.5	34.6	94.6

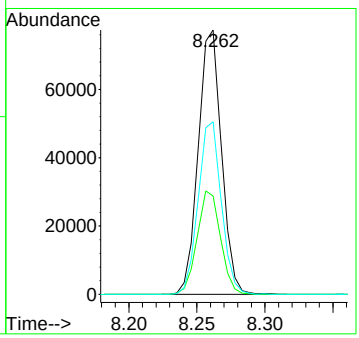


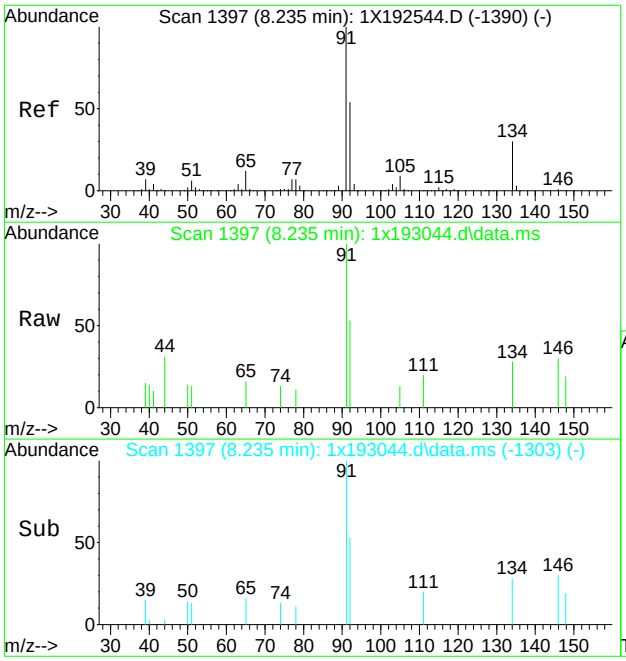


#113
1,2-dichlorobenzene
Concen: 23.74 ug/L
RT: 8.262 min Scan# 1402
Delta R.T. 0.005 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion:146 Resp: 91967

Ion	Ratio	Lower	Upper
146	100		
111	37.2	8.0	68.0
148	65.3	34.7	94.7

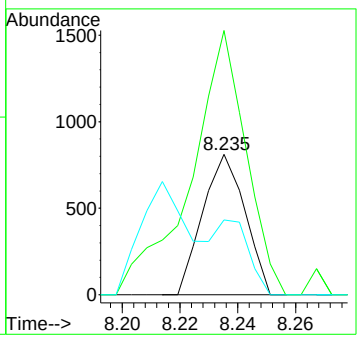


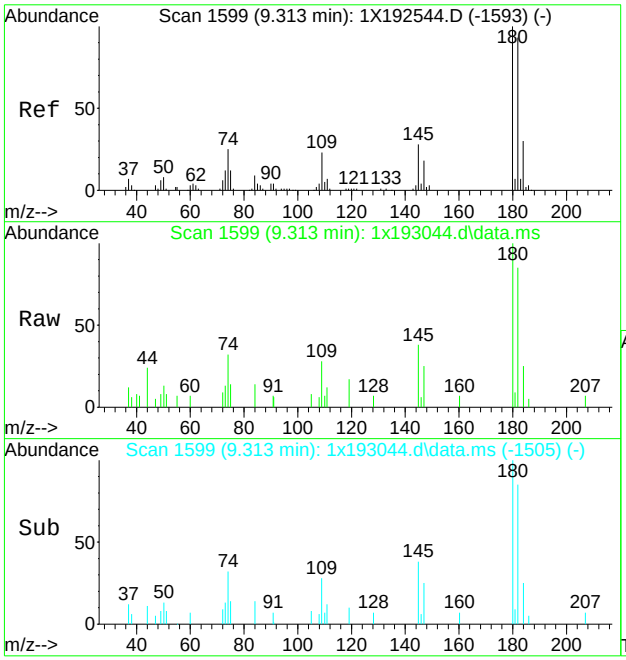


#115
n-butylbenzene
Concen: 0.25 ug/L
RT: 8.235 min Scan# 1397
Delta R.T. -0.000 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion: 92 Resp: 825

Ion	Ratio	Lower	Upper
92	100		
91	188.4	155.5	215.5
134	53.3	25.0	85.0

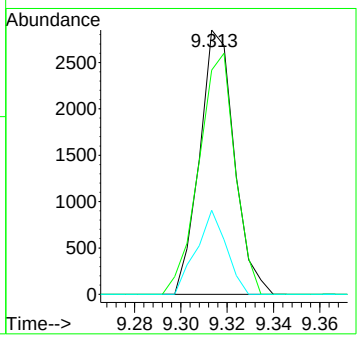




#120
1,2,4-trichlorobenzene
Concen: 1.28 ug/L
RT: 9.313 min Scan# 1599
Delta R.T. -0.000 min
Lab File: 1x193044.d
Acq: 17 Dec 2021 7:02 pm

Tgt Ion:180 Resp: 2970

Ion	Ratio	Lower	Upper
180	100		
182	84.8	63.3	123.3
74	31.8	0.0	55.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193045.d
Acq On : 17 Dec 2021 7:28 pm
Operator : brittank
Sample : JD36624-12 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 08:30:54 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

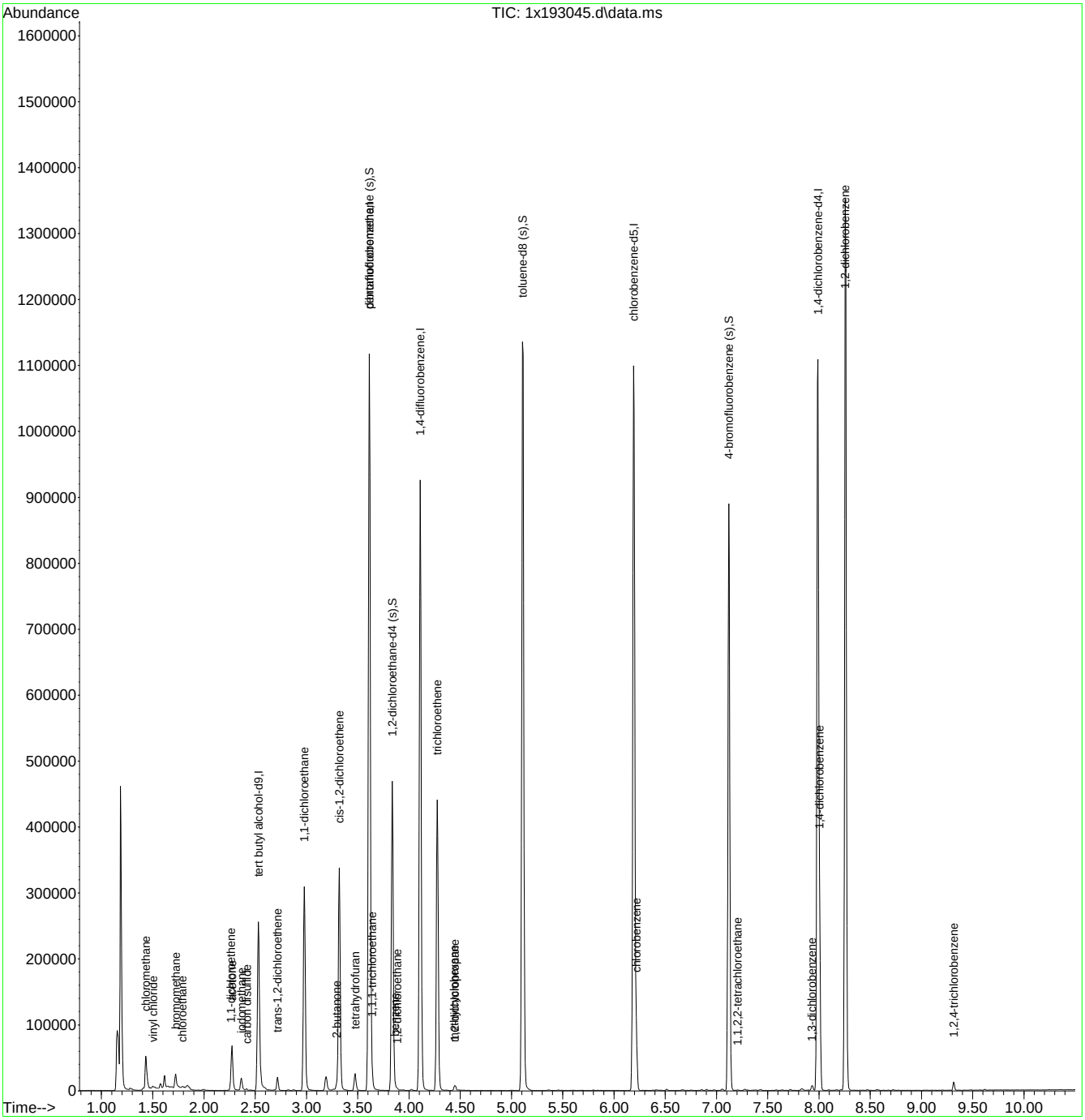
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.530	65	196337	500.00	ug/L	-0.02
5) pentafluorobenzene	3.613	168	348879	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.110	114	505449	50.00	ug/L	0.00
73) chlorobenzene-d5	6.191	117	463638	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.989	152	204901	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.613	113	176928	50.29	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.58%			
53) 1,2-dichloroethane-d4 (s)	3.837	65	222664	51.49	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.98%			
74) toluene-d8 (s)	5.108	98	568534	50.43	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.86%			
98) 4-bromofluorobenzene (s)	7.120	95	206842	50.79	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.58%			
Target Compounds						Qvalue
8) chloromethane	1.430	50	37367	12.58	ug/L	99
9) vinyl chloride	1.505	62	721	0.27	ug/L	75
10) bromomethane	1.724	96	7916	5.84	ug/L	99
11) chloroethane	1.788	64	959	0.79	ug/L	96
16) 1,1-dichloroethene	2.263	96	3001	1.66	ug/L	94
18) acetone	2.274	58	12774	54.54	ug/L	95
20) iodomethane	2.364	142	15039	6.56	ug/L	95
21) carbon disulfide	2.418	76	1910	0.38	ug/L	81
26) trans-1,2-dichloroethene	2.717	96	4309	2.25	ug/L	94
29) 2-butanone	3.293	72	2488	9.88	ug/L	90
30) 1,1-dichloroethane	2.978	63	197623	53.35	ug/L	99
36) cis-1,2-dichloroethene	3.320	96	90762	44.19	ug/L	92
41) tetrahydrofuran	3.474	42	10766	12.82	ug/L	97
45) 1,1,1-trichloroethane	3.640	97	4152	1.23	ug/L #	49
57) benzene	3.864	78	1684	0.24	ug/L	87
60) 1,2-dichloroethane	3.885	62	1055	0.33	ug/L	88
61) trichloroethene	4.275	130	103876	43.96	ug/L	96
66) 1,2-dichloropropane	4.446	76	720	0.90	ug/L #	72
68) methylcyclohexane	4.440	83	770	0.23	ug/L	82
86) chlorobenzene	6.218	112	31467	6.36	ug/L	94
100) 1,1,2,2-tetrachloroethane	7.205	83	497	0.23	ug/L	64
110) 1,3-dichlorobenzene	7.931	146	2722	0.68	ug/L	97
112) 1,4-dichlorobenzene	8.005	146	76920	18.63	ug/L	98
113) 1,2-dichlorobenzene	8.256	146	395687	104.30	ug/L	97
120) 1,2,4-trichlorobenzene	9.313	180	3037	1.34	ug/L	97

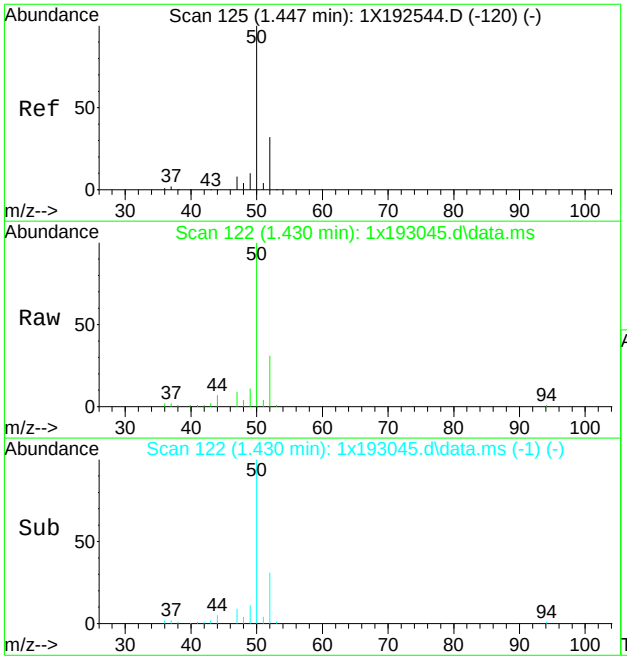
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193045.d
Acq On : 17 Dec 2021 7:28 pm
Operator : brittank
Sample : JD36624-12 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 08:30:54 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

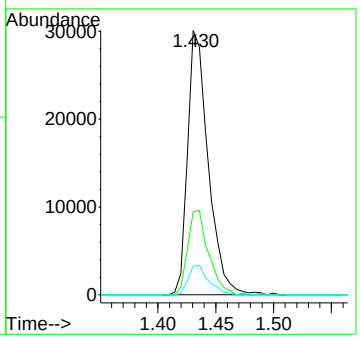


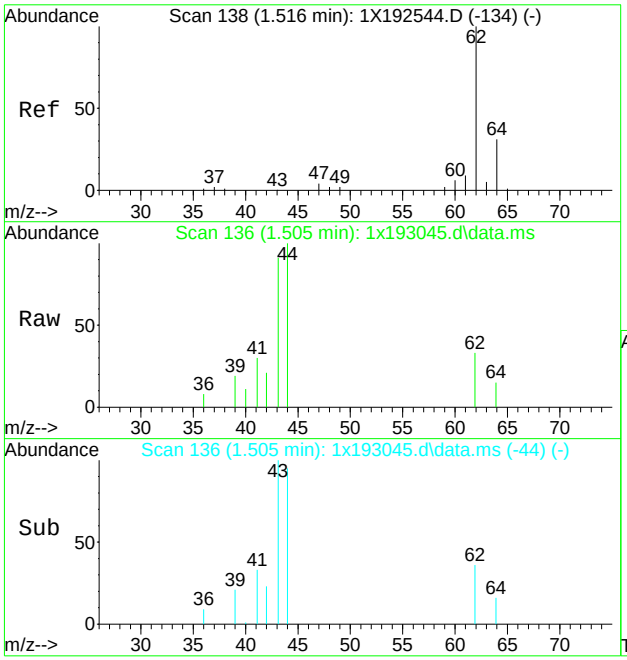


#8
chloromethane
Concen: 12.58 ug/L
RT: 1.430 min Scan# 122
Delta R.T. -0.016 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 50 Resp: 37367

Ion	Ratio	Lower	Upper
50	100		
52	31.4	2.2	62.2
49	10.8	0.0	40.5

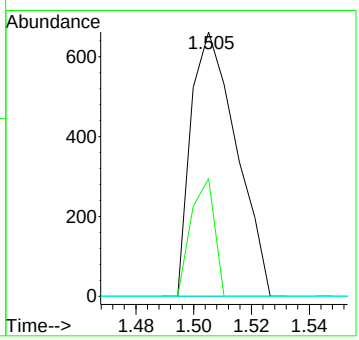


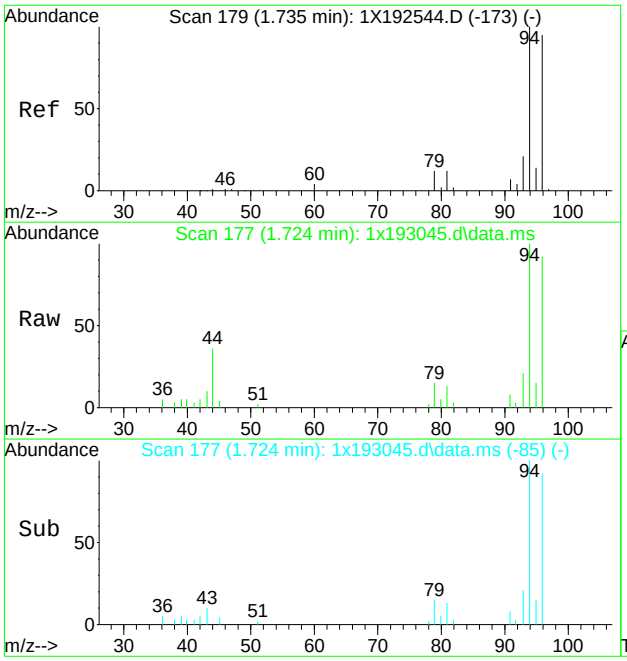


#9
vinyl chloride
Concen: 0.27 ug/L
RT: 1.505 min Scan# 136
Delta R.T. -0.011 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 62 Resp: 721

Ion	Ratio	Lower	Upper
62	100		
64	44.6	0.5	60.5
61	0.0	0.0	38.7

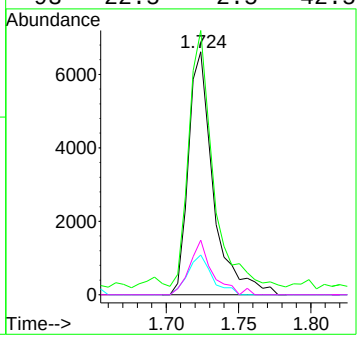


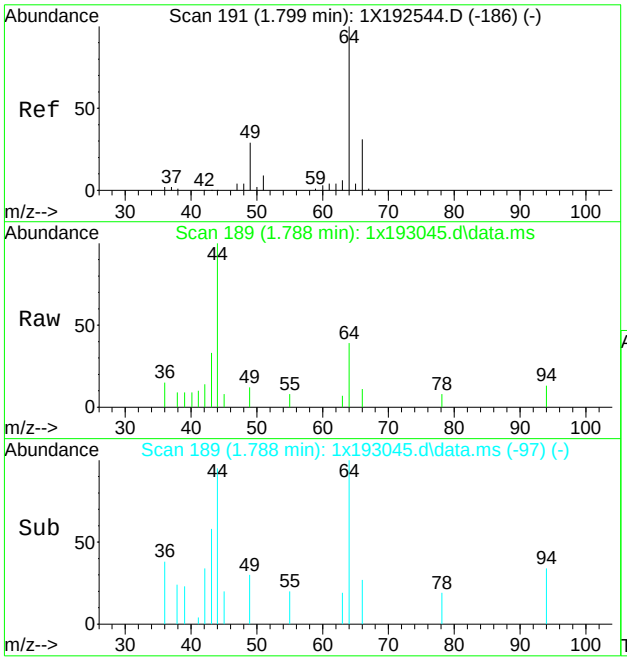


#10
bromomethane
Concen: 5.84 ug/L
RT: 1.724 min Scan# 177
Delta R.T. -0.011 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 96 Resp: 7916

Ion	Ratio	Lower	Upper
96	100		
94	105.5	85.7	125.7
95	16.4	0.0	34.9
93	22.5	2.5	42.5

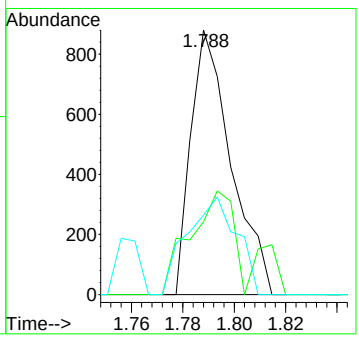


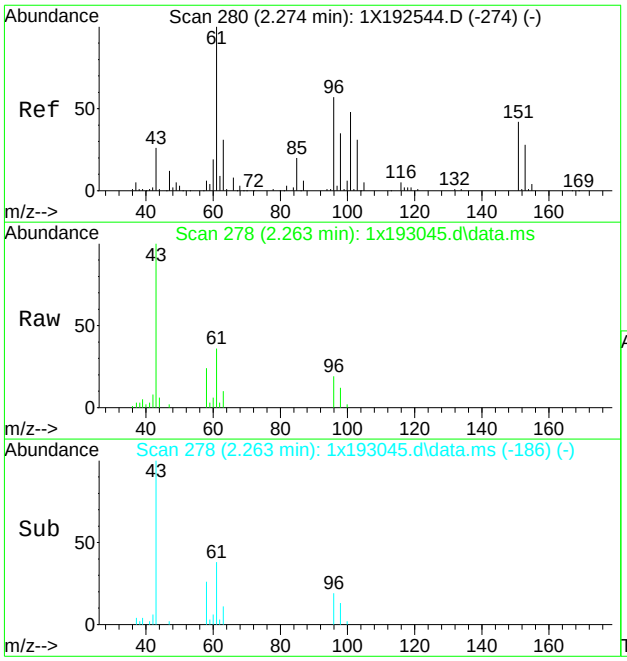


#11
chloroethane
Concen: 0.79 ug/L
RT: 1.788 min Scan# 189
Delta R.T. -0.011 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 64 Resp: 959

Ion	Ratio	Lower	Upper
64	100		
66	27.5	0.6	60.6
49	30.1	0.0	59.3

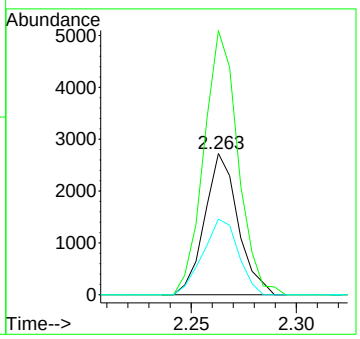


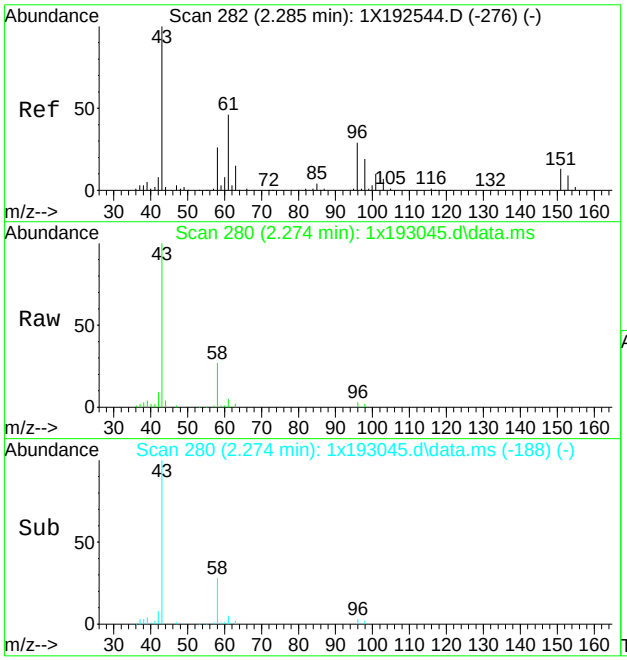


#16
1,1-dichloroethene
Concen: 1.66 ug/L
RT: 2.263 min Scan# 278
Delta R.T. -0.011 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 96 Resp: 3001

Ion	Ratio	Lower	Upper
96	100		
61	187.0	146.8	206.8
63	53.6	25.5	85.5

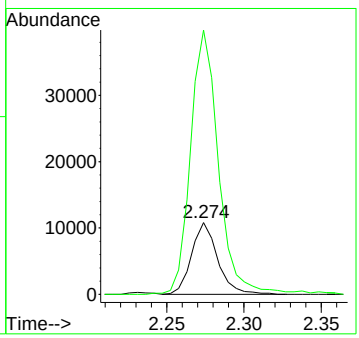


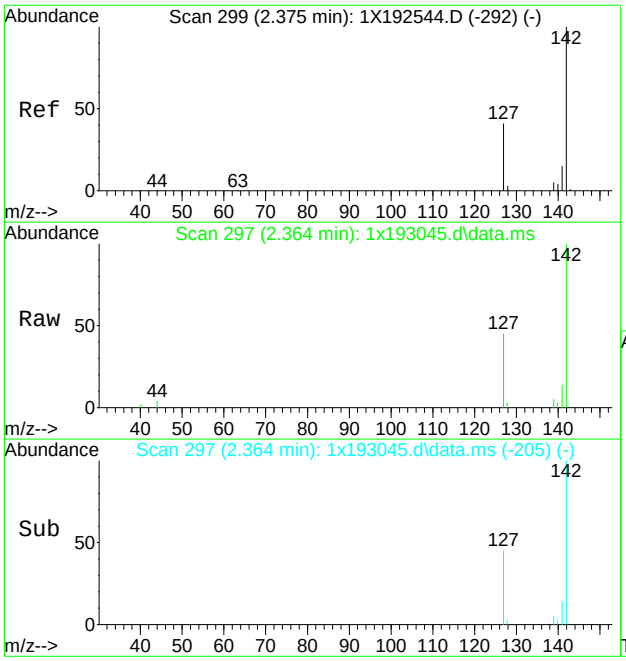


#18
acetone
Concen: 54.54 ug/L
RT: 2.274 min Scan# 280
Delta R.T. -0.011 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 58 Resp: 12774

Ion	Ratio	Lower	Upper
58	100		
43	366.8	348.5	408.5

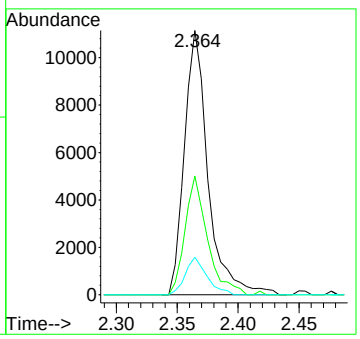


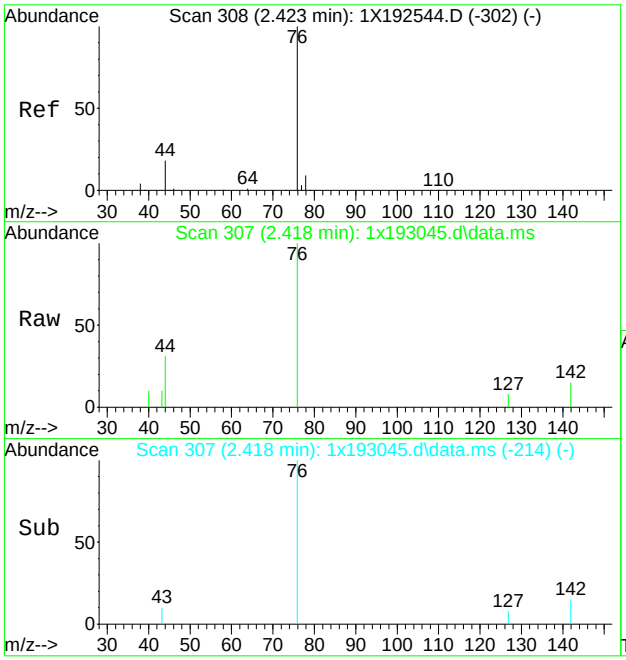


#20
iodomethane
Concen: 6.56 ug/L
RT: 2.364 min Scan# 297
Delta R.T. -0.011 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion:142 Resp: 15039

Ion	Ratio	Lower	Upper
142	100		
127	44.9	11.0	71.0
141	14.2	0.0	44.6

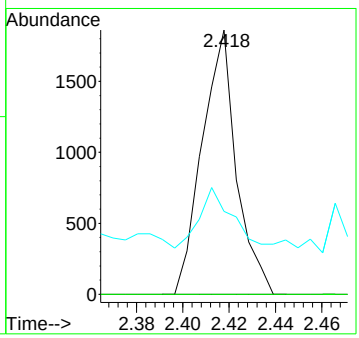


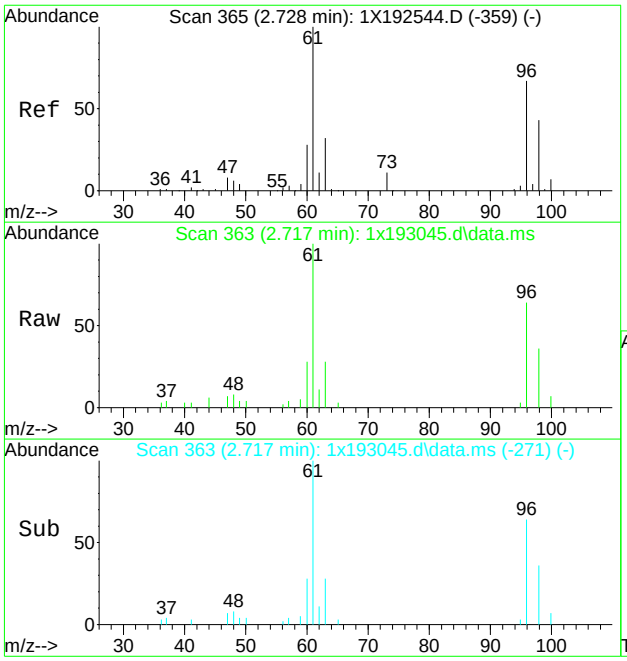


#21
carbon disulfide
Concen: 0.38 ug/L
RT: 2.418 min Scan# 307
Delta R.T. -0.006 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 76 Resp: 1910

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	38.9
44	10.8	0.0	48.2

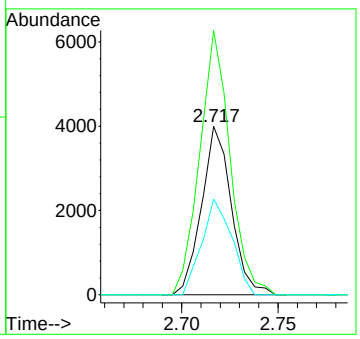


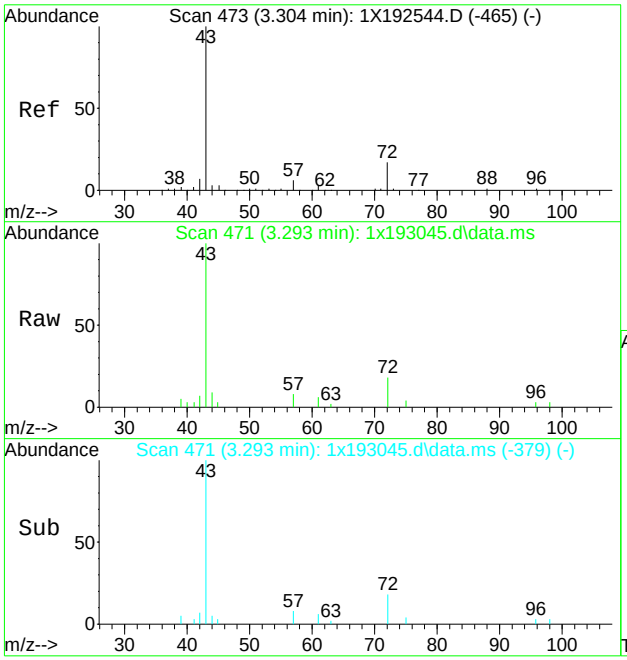


#26
trans-1,2-dichloroethene
Concen: 2.25 ug/L
RT: 2.717 min Scan# 363
Delta R.T. -0.011 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 96 Resp: 4309

Ion	Ratio	Lower	Upper
96	100		
61	156.9	120.2	180.2
98	57.0	34.0	94.0

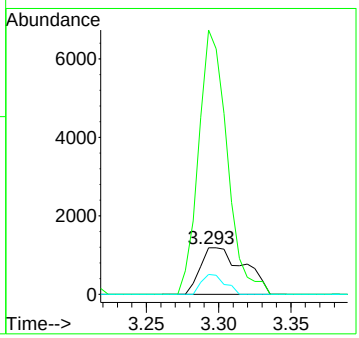


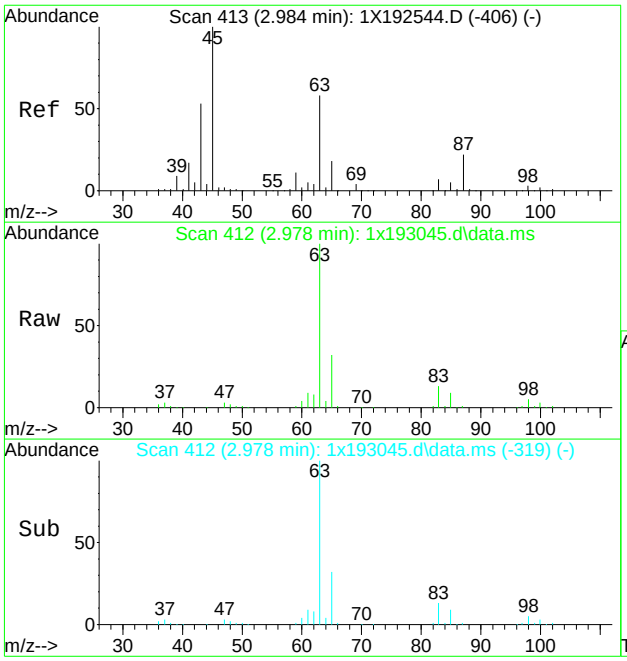


#29
2-butanone
Concen: 9.88 ug/L
RT: 3.293 min Scan# 471
Delta R.T. -0.011 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 72 Resp: 2488

Ion	Ratio	Lower	Upper
72	100		
43	567.6	567.1	627.1
57	42.9	4.0	64.0

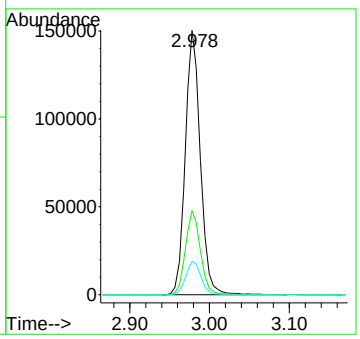


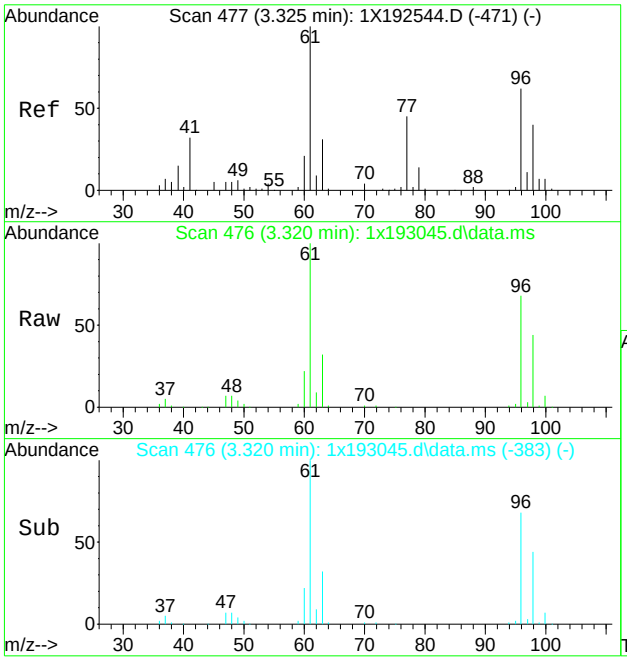


#30
1,1-dichloroethane
Concen: 53.35 ug/L
RT: 2.978 min Scan# 412
Delta R.T. -0.006 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 63 Resp: 197623

Ion	Ratio	Lower	Upper
63	100		
65	31.8	0.9	60.9
83	12.6	0.0	42.5

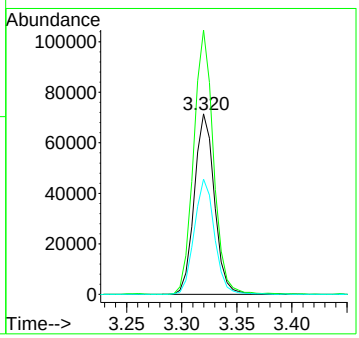


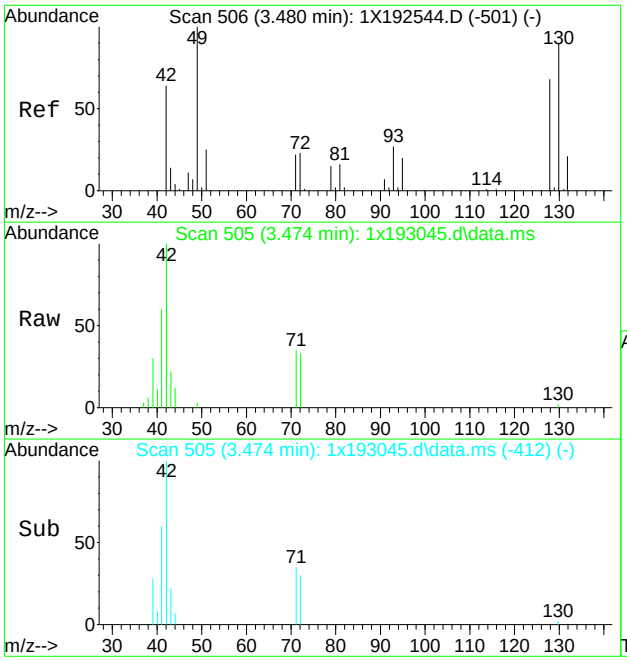


#36
cis-1,2-dichloroethene
Concen: 44.19 ug/L
RT: 3.320 min Scan# 476
Delta R.T. -0.006 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 96 Resp: 90762

Ion	Ratio	Lower	Upper
96	100		
61	146.6	131.2	191.2
98	63.9	34.7	94.7

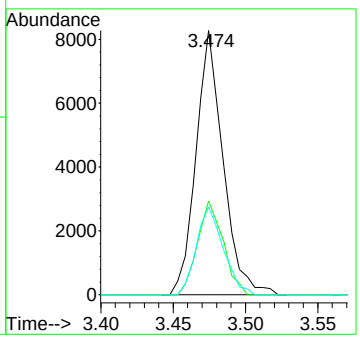


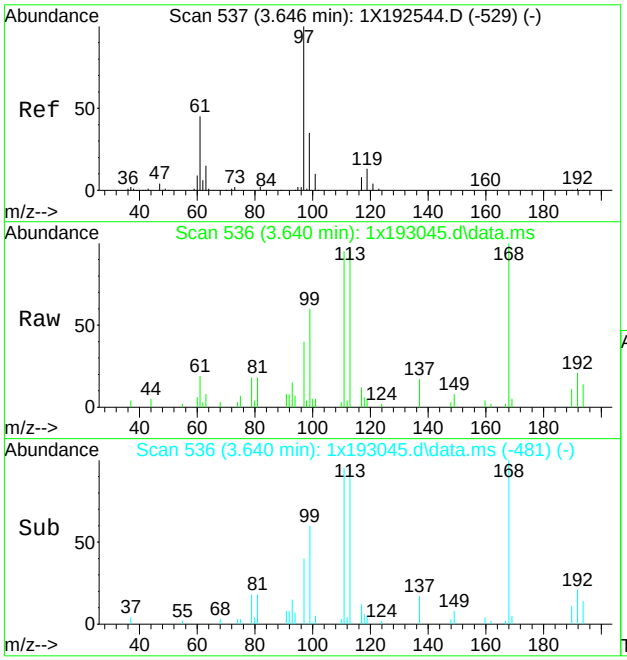


#41
tetrahydrofuran
Concen: 12.82 ug/L
RT: 3.474 min Scan# 505
Delta R.T. -0.006 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 42 Resp: 10766

Ion	Ratio	Lower	Upper
42	100		
71	35.5	5.0	65.0
72	33.2	6.5	66.5

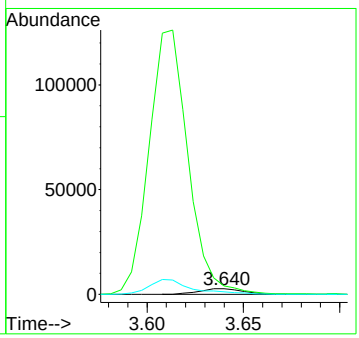


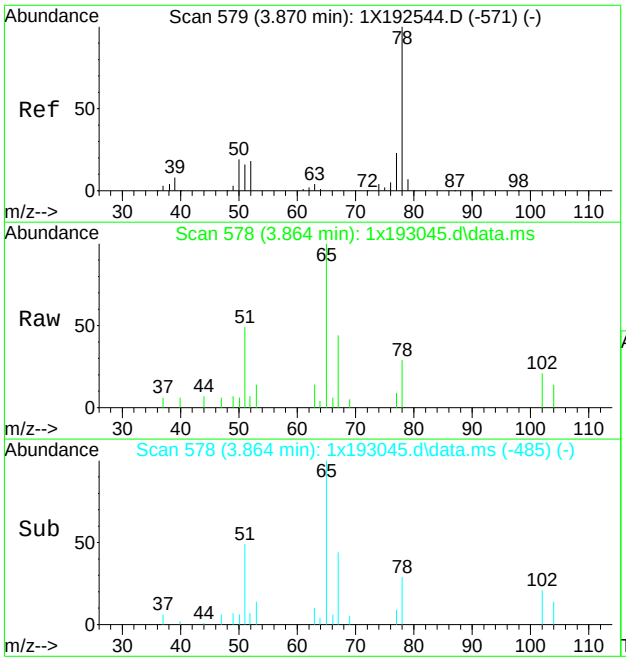


#45
1,1,1-trichloroethane
Concen: 1.23 ug/L
RT: 3.640 min Scan# 536
Delta R.T. -0.006 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 97 Resp: 4152

Ion	Ratio	Lower	Upper
97	100		
99	135.5	37.2	97.2#
61	47.4	16.0	76.0

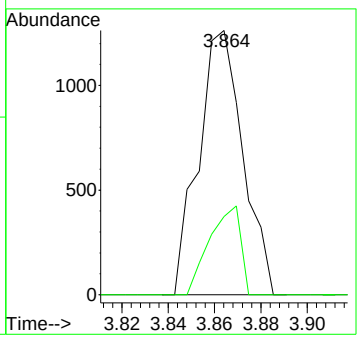


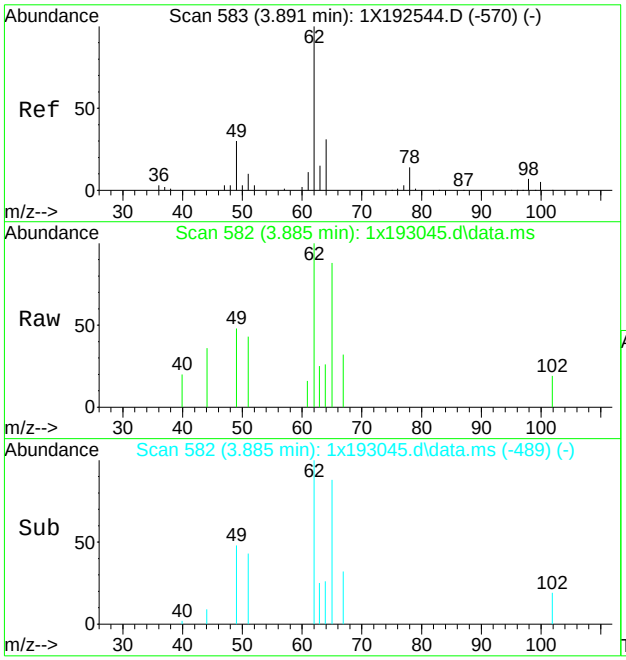


#57
benzene
Concen: 0.24 ug/L
RT: 3.864 min Scan# 578
Delta R.T. -0.006 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 78 Resp: 1684

Ion	Ratio	Lower	Upper
78	100		
77	29.5	0.0	53.3

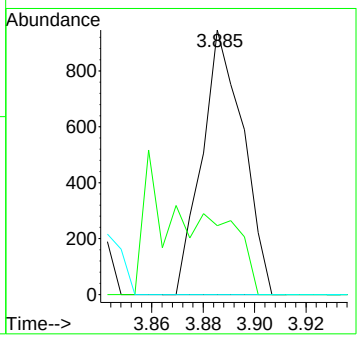


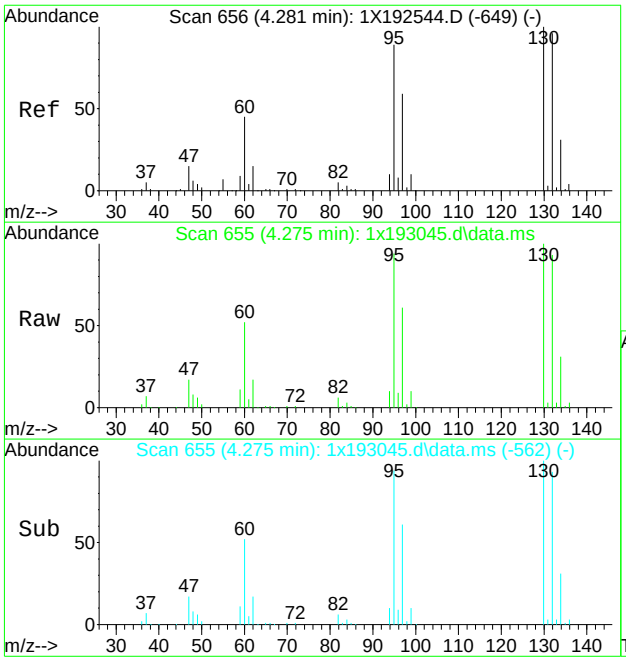


#60
1,2-dichloroethane
Concen: 0.33 ug/L
RT: 3.885 min Scan# 582
Delta R.T. -0.006 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 62 Resp: 1055

Ion	Ratio	Lower	Upper
62	100		
64	26.0	1.2	61.2
98	0.0	0.0	37.4

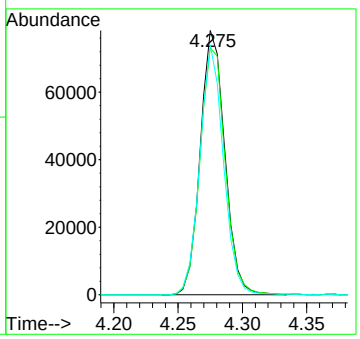


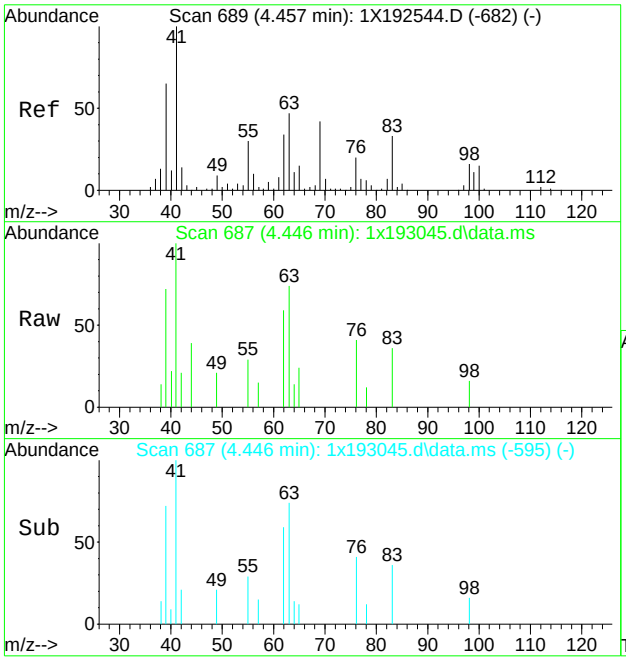


#61
trichloroethene
Concen: 43.96 ug/L
RT: 4.275 min Scan# 655
Delta R.T. -0.006 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion:130 Resp: 103876

Ion	Ratio	Lower	Upper
130	100		
132	93.3	65.5	125.5
95	94.5	58.7	118.7

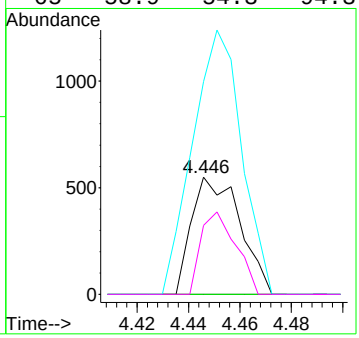


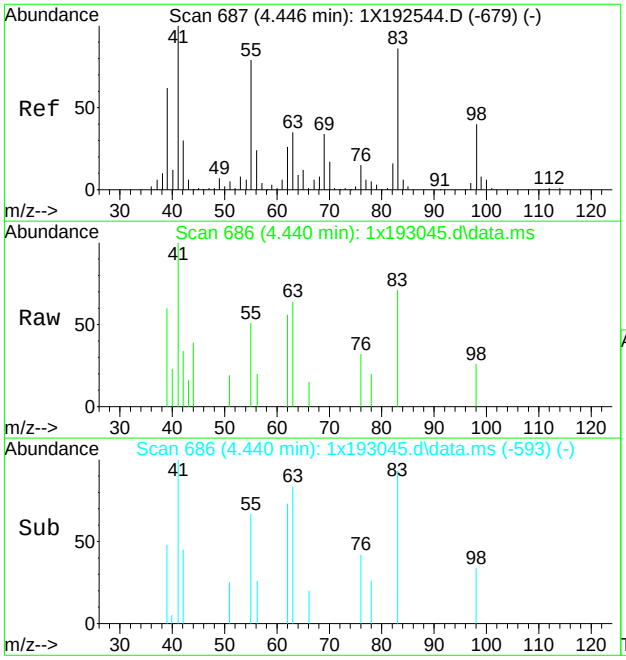


#66
1,2-dichloropropane
Concen: 0.90 ug/L
RT: 4.446 min Scan# 687
Delta R.T. -0.011 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 76 Resp: 720

Ion	Ratio	Lower	Upper
76	100		
112	0.0	0.0	39.2
63	181.3	203.7	263.7#
65	58.9	54.3	94.3

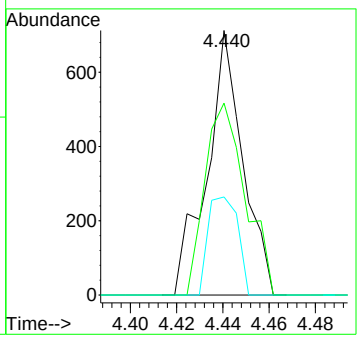


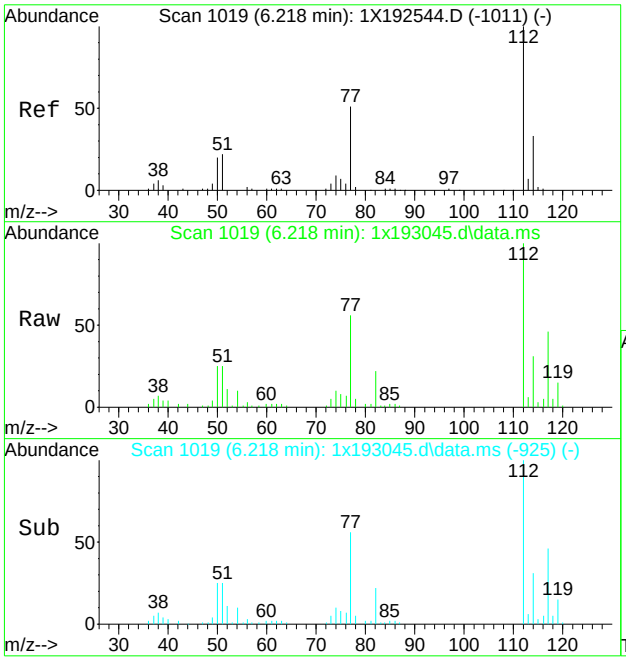


#68
methylcyclohexane
Concen: 0.23 ug/L
RT: 4.440 min Scan# 686
Delta R.T. -0.006 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 83 Resp: 770

Ion	Ratio	Lower	Upper
83	100		
55	72.5	61.4	121.4
98	37.0	16.6	76.6

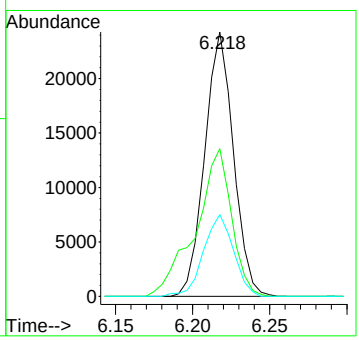


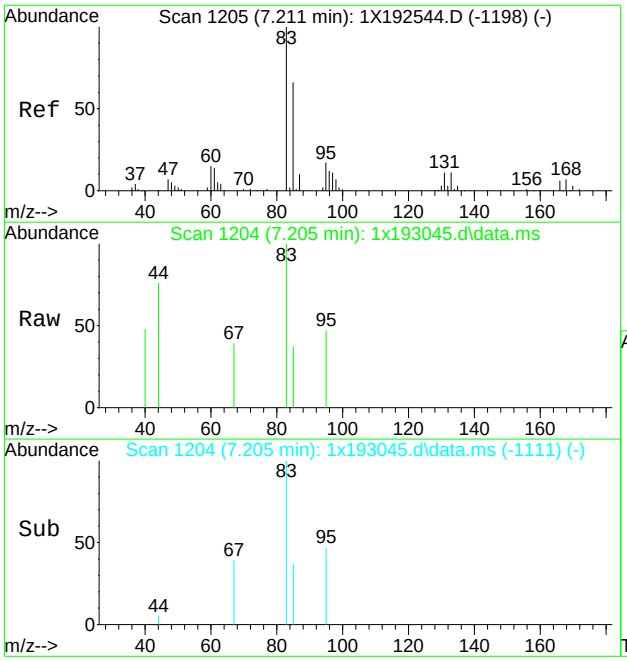


#86
chlorobenzene
Concen: 6.36 ug/L
RT: 6.218 min Scan# 1019
Delta R.T. -0.000 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion:112 Resp: 31467

Ion	Ratio	Lower	Upper
112	100		
77	55.8	20.6	80.6
114	30.9	2.6	62.6

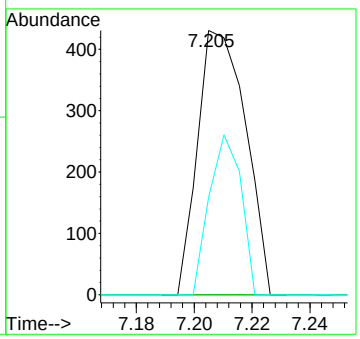


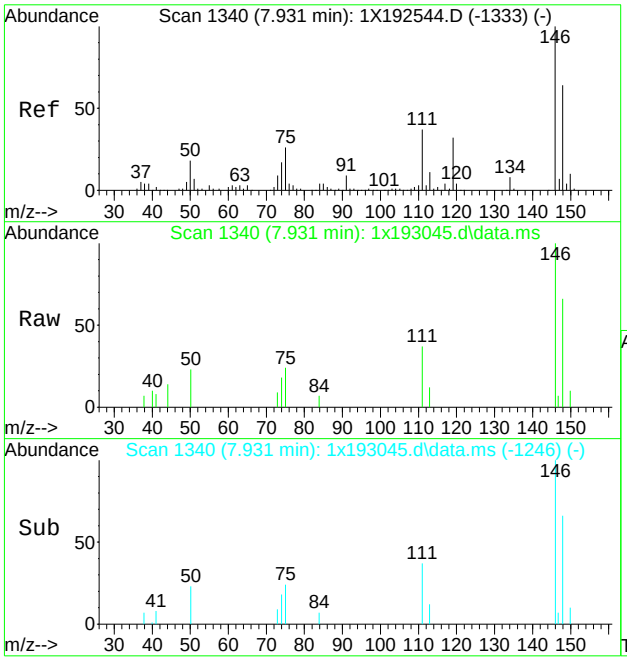


#100
1,1,2,2-tetrachloroethane
Concen: 0.23 ug/L
RT: 7.205 min Scan# 1204
Delta R.T. -0.006 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion: 83 Resp: 497

Ion	Ratio	Lower	Upper
83	100		
131	0.0	0.0	41.1
85	36.9	36.5	96.5

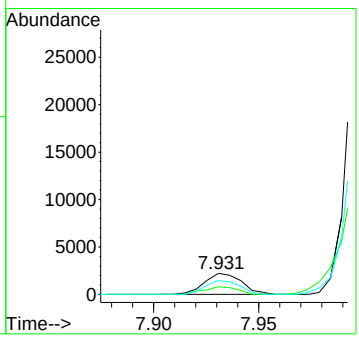


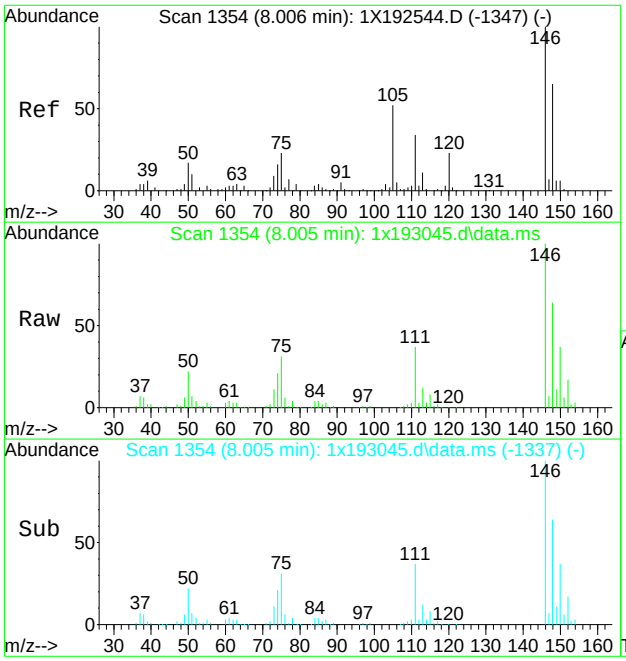


#110
1,3-dichlorobenzene
Concen: 0.68 ug/L
RT: 7.931 min Scan# 1340
Delta R.T. -0.000 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion:146 Resp: 2722

Ion	Ratio	Lower	Upper
146	100		
111	34.4	6.7	66.7
148	61.6	34.1	94.1

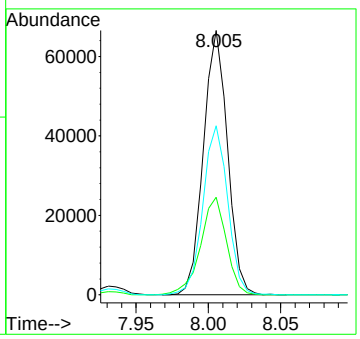


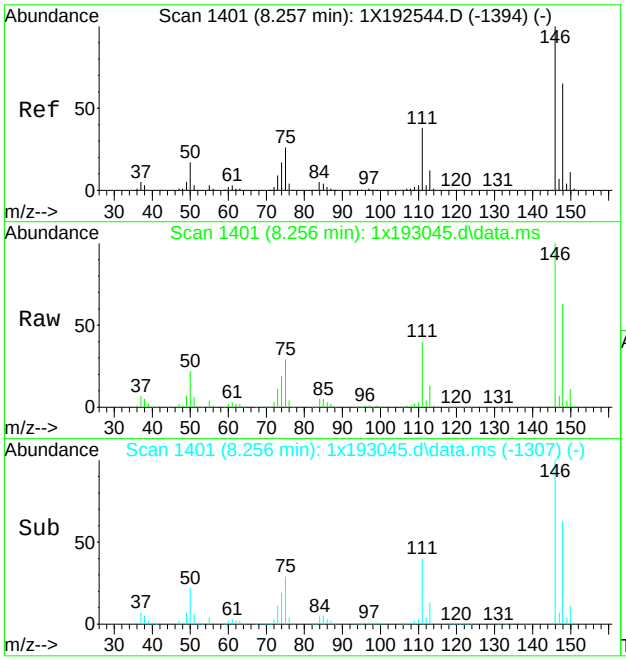


#112
1,4-dichlorobenzene
Concen: 18.63 ug/L
RT: 8.005 min Scan# 1354
Delta R.T. -0.000 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion:146 Resp: 76920

Ion	Ratio	Lower	Upper
146	100		
111	36.9	4.4	64.4
148	63.9	34.6	94.6

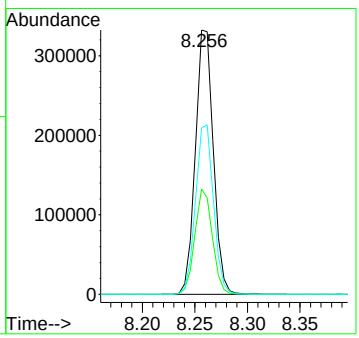


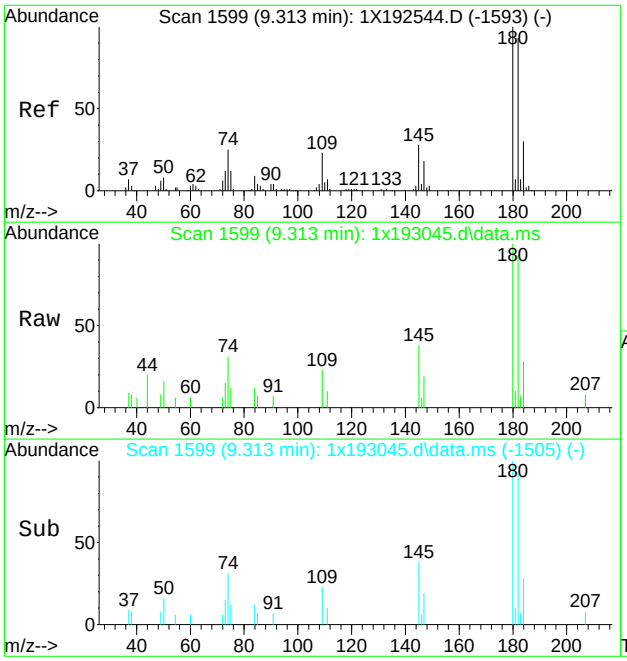


#113
1,2-dichlorobenzene
Concen: 104.30 ug/L
RT: 8.256 min Scan# 1401
Delta R.T. -0.000 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion:146 Resp: 395687

Ion	Ratio	Lower	Upper
146	100		
111	39.9	8.0	68.0
148	62.9	34.7	94.7

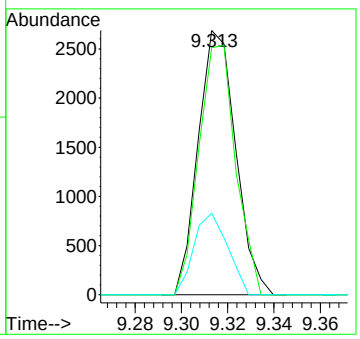




#120
1,2,4-trichlorobenzene
Concen: 1.34 ug/L
RT: 9.313 min Scan# 1599
Delta R.T. -0.000 min
Lab File: 1x193045.d
Acq: 17 Dec 2021 7:28 pm

Tgt Ion:180 Resp: 3037

Ion	Ratio	Lower	Upper
180	100		
182	93.5	63.3	123.3
74	30.8	0.0	55.0



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 12/21/21 14:43

Quantitation Report (QT Reviewed)

Data Path : X:\voa-gcms\complete\2021\dayton 202112\12-20-2021\kenrickb\vx8363
Data File : 1x193047.d
Acq On : 17 Dec 2021 8:20 pm
Operator : brittank
Sample : JD36624-13 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 21 14:36:12 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

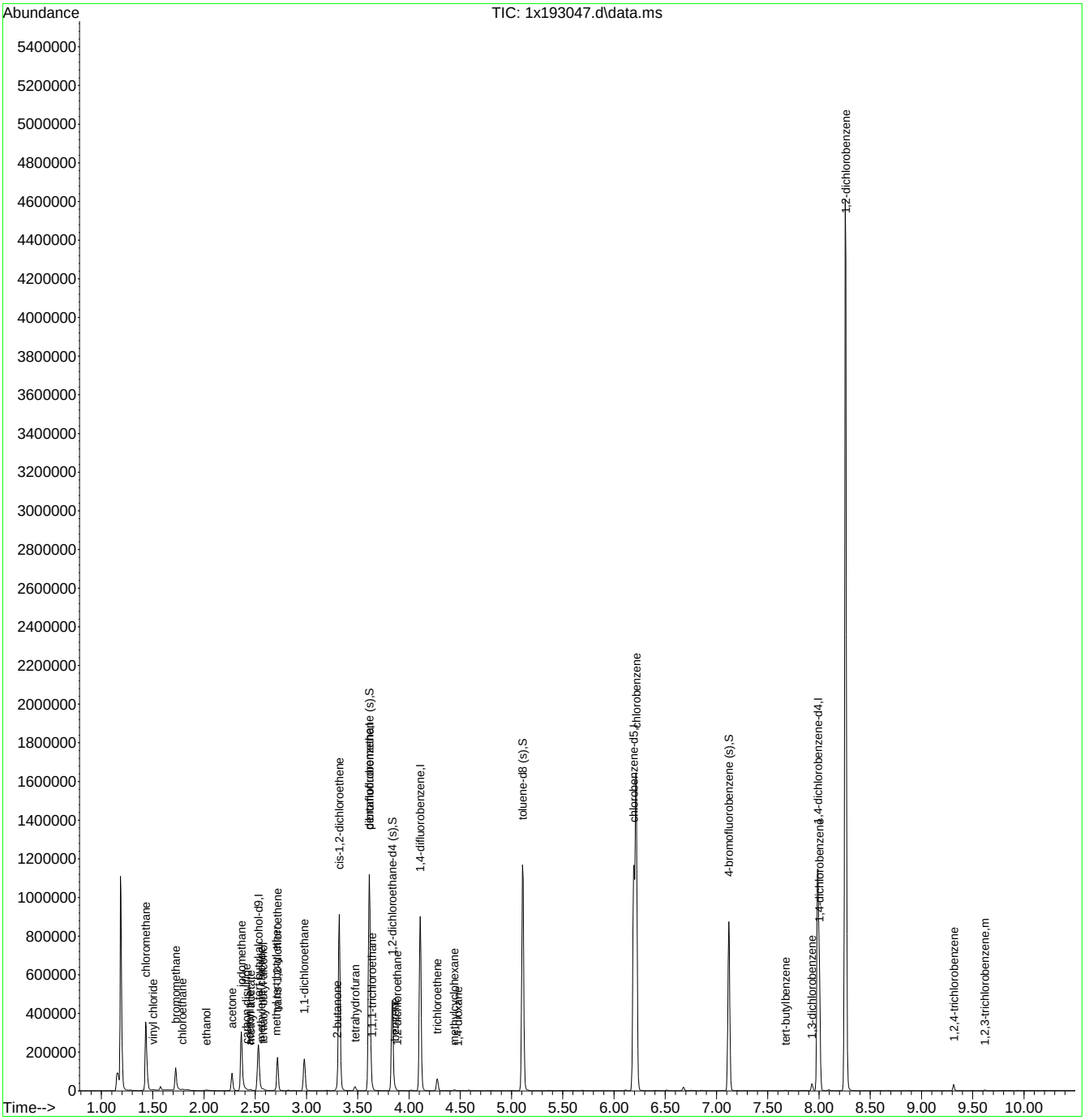
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.530	65	181419	500.00	ug/L	-0.02
5) pentafluorobenzene	3.613	168	351519	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.110	114	506176	50.00	ug/L	0.00
73) chlorobenzene-d5	6.191	117	474482	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.990	152	207375	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.613	113	180149	50.82	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.64%			
53) 1,2-dichloroethane-d4 (s)	3.837	65	223220	51.54	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 103.08%			
74) toluene-d8 (s)	5.108	98	571503	49.54	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.08%			
98) 4-bromofluorobenzene (s)	7.120	95	211734	51.37	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.74%			
Target Compounds						Qvalue
2) ethanol	2.023	45	5958	287.56	ug/L	90
3) tertiary butyl alcohol	2.578	59	4042	15.54	ug/L	63
4) 1,4-dioxane	4.478	88	613	28.16	ug/L	86
8) chloromethane	1.431	50	266813	89.13	ug/L	100
9) vinyl chloride	1.505	62	800	0.30	ug/L	91
10) bromomethane	1.724	96	46255	33.86	ug/L	98
11) chloroethane	1.788	64	1803	1.47	ug/L	88
18) acetone	2.274	58	18137	76.86	ug/L	93
19) acetonitrile	2.445	41	1367	4.10	ug/L	72
20) iodomethane	2.364	142	251562	108.93	ug/L	97
21) carbon disulfide	2.413	76	2666	0.53	ug/L	96
22) methylene chloride	2.557	84	515	0.29	ug/L	98
23) methyl acetate	2.455	43	4449	2.05	ug/L	95
24) methyl tert butyl ether	2.706	73	2406	0.46	ug/L	99
26) trans-1,2-dichloroethene	2.717	96	38213	19.84	ug/L	94
29) 2-butanone	3.298	72	2111m	8.32	ug/L	
30) 1,1-dichloroethane	2.978	63	105961	28.39	ug/L	99
36) cis-1,2-dichloroethene	3.320	96	245146	118.46	ug/L	90
41) tetrahydrofuran	3.475	42	9288	10.98	ug/L	96
45) 1,1,1-trichloroethane	3.640	97	5554	1.63	ug/L #	46
57) benzene	3.864	78	8341	1.19	ug/L	95
60) 1,2-dichloroethane	3.886	62	958	0.30	ug/L	92
61) trichloroethene	4.275	130	14231	6.01	ug/L	95
68) methylcyclohexane	4.441	83	853	0.25	ug/L	86
86) chlorobenzene	6.218	112	686907	135.75	ug/L	99
107) tert-butylbenzene	7.675	119	1344	0.22	ug/L	97
110) 1,3-dichlorobenzene	7.931	146	10857	2.69	ug/L	99
112) 1,4-dichlorobenzene	8.006	146	175888	42.10	ug/L	98
113) 1,2-dichlorobenzene	8.262	146	1344895	350.28	ug/L	99
120) 1,2,4-trichlorobenzene	9.318	180	6645	2.89	ug/L	94
121) 1,2,3-trichlorobenzene	9.617	180	1035	0.46	ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

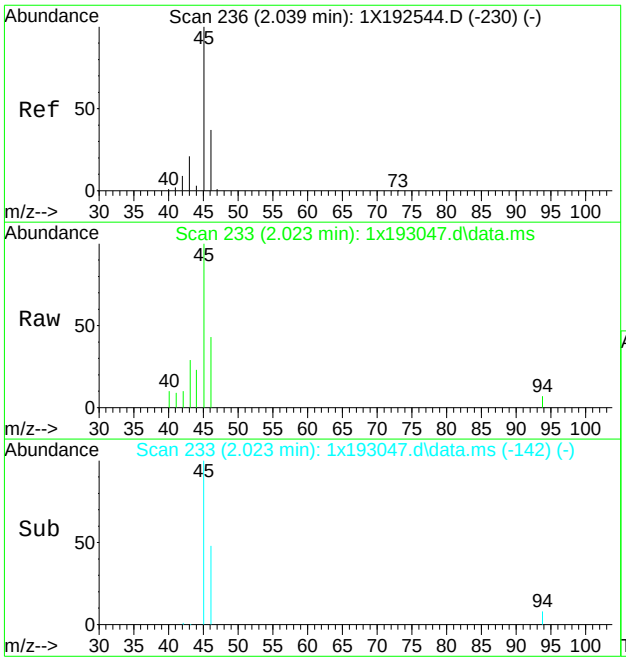
Quantitation Report (QT Reviewed)

Data Path : X:\voa-gcms\complete\2021\dayton 202112\12-20-2021\kenrickb\vx8363-partial\
Data File : 1x193047.d
Acq On : 17 Dec 2021 8:20 pm
Operator : brittank
Sample : JD36624-13 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8363,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 21 14:36:12 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



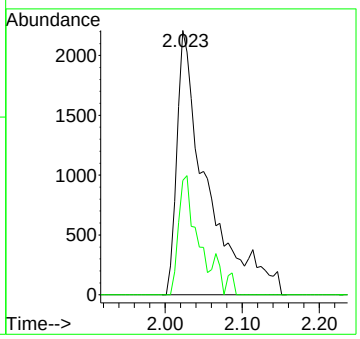
M1X8342.M Tue Dec 21 14:41:05 2021 RT1 Page: 2

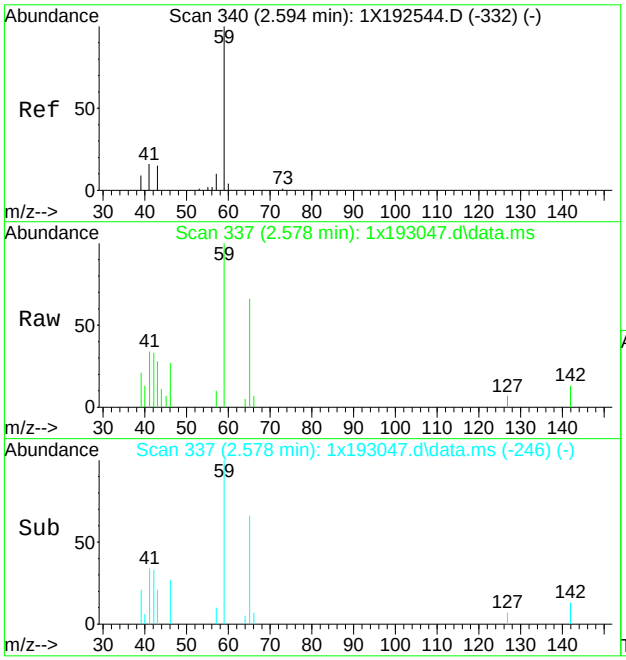


#2
ethanol
Concen: 287.56 ug/L
RT: 2.023 min Scan# 233
Delta R.T. -0.016 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 45 Resp: 5958

Ion	Ratio	Lower	Upper
45	100		
46	43.3	17.4	57.4

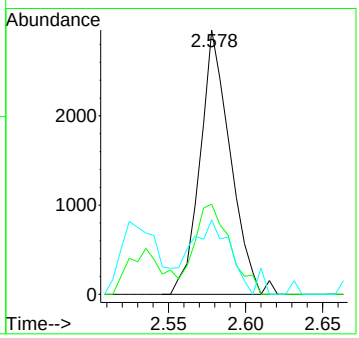


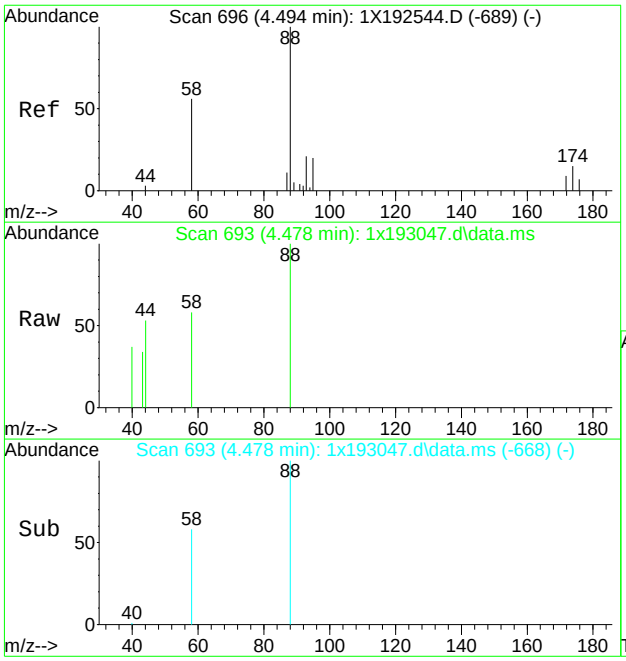


#3
tertiary butyl alcohol
Concen: 15.54 ug/L
RT: 2.578 min Scan# 337
Delta R.T. -0.016 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 59 Resp: 4042

Ion	Ratio	Lower	Upper
59	100		
41	34.2	0.0	46.0
43	28.1	0.0	45.1

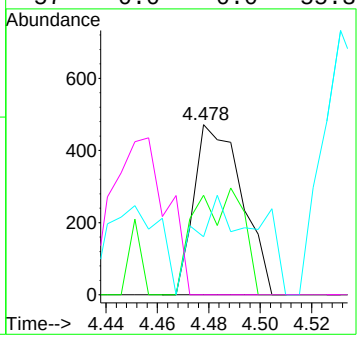


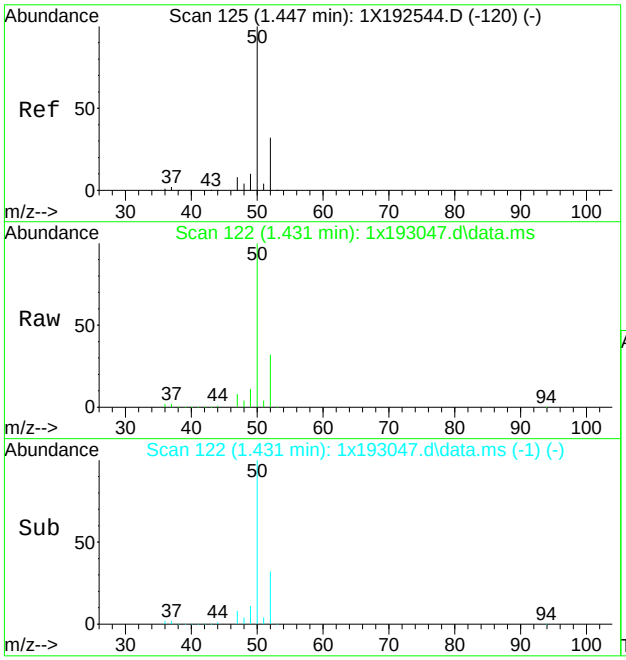


#4
1,4-dioxane
Concen: 28.16 ug/L
RT: 4.478 min Scan# 693
Delta R.T. -0.016 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 88 Resp: 613

Ion	Ratio	Lower	Upper
88	100		
58	58.5	33.6	93.6
43	34.1	3.4	63.4
57	0.0	0.0	55.3

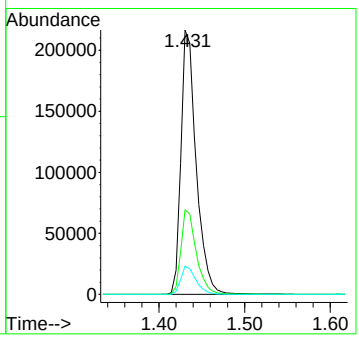


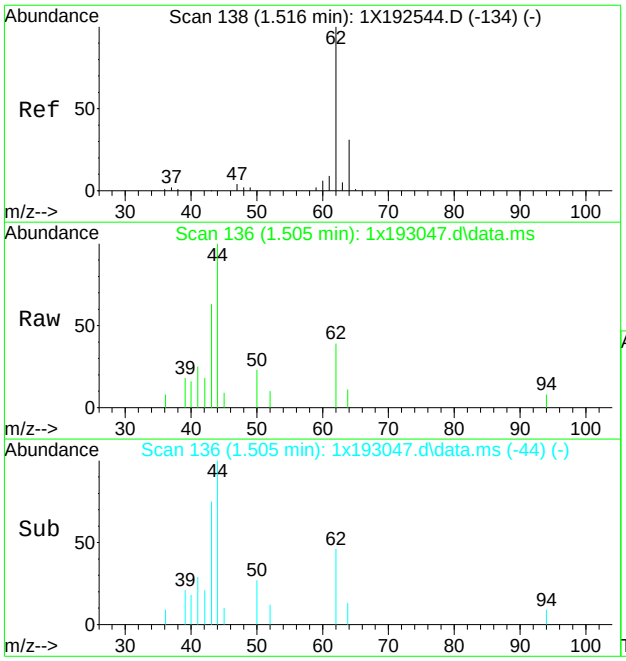


#8
chloromethane
Concen: 89.13 ug/L
RT: 1.431 min Scan# 122
Delta R.T. -0.016 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 50 Resp: 266813

Ion	Ratio	Lower	Upper
50	100		
52	32.1	2.2	62.2
49	10.8	0.0	40.5

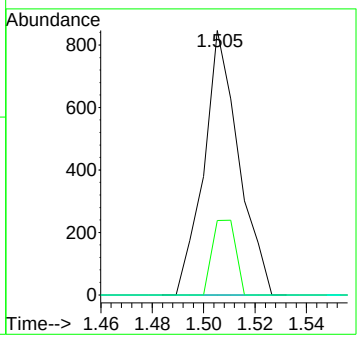


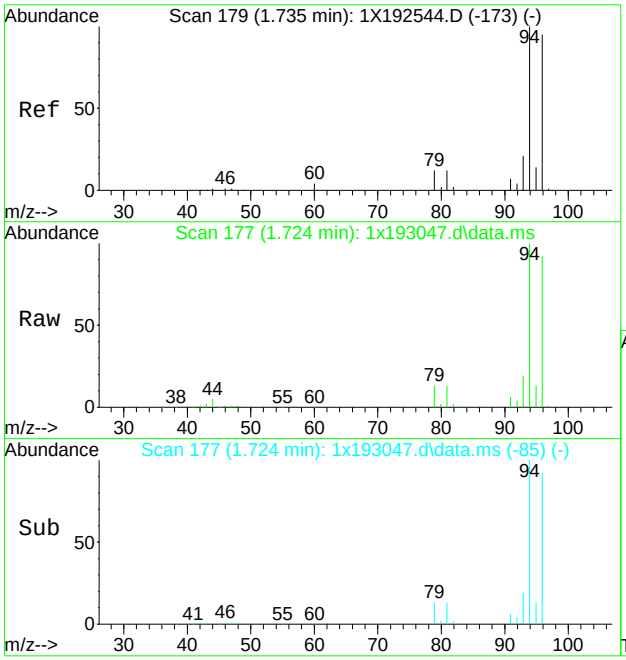


#9
vinyl chloride
Concen: 0.30 ug/L
RT: 1.505 min Scan# 136
Delta R.T. -0.011 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 62 Resp: 800

Ion	Ratio	Lower	Upper
62	100		
64	28.1	0.5	60.5
61	0.0	0.0	38.7

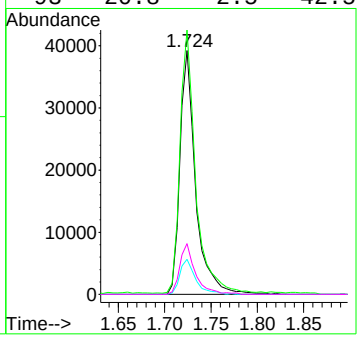


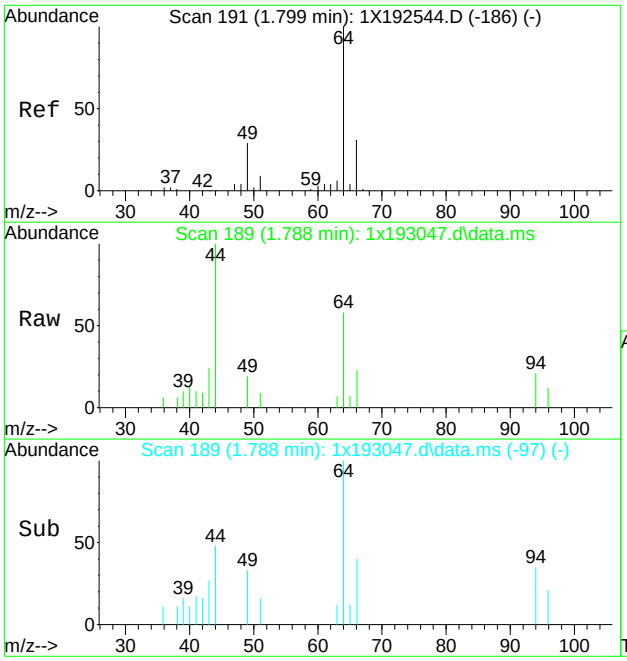


#10
bromomethane
Concen: 33.86 ug/L
RT: 1.724 min Scan# 177
Delta R.T. -0.011 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 96 Resp: 46255

Ion	Ratio	Lower	Upper
96	100		
94	108.0	85.7	125.7
95	14.4	0.0	34.9
93	20.8	2.5	42.5

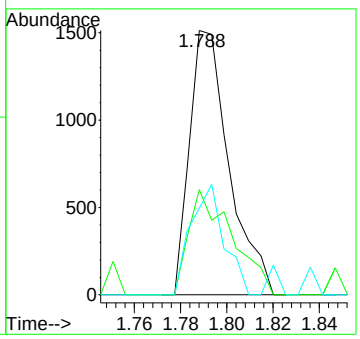


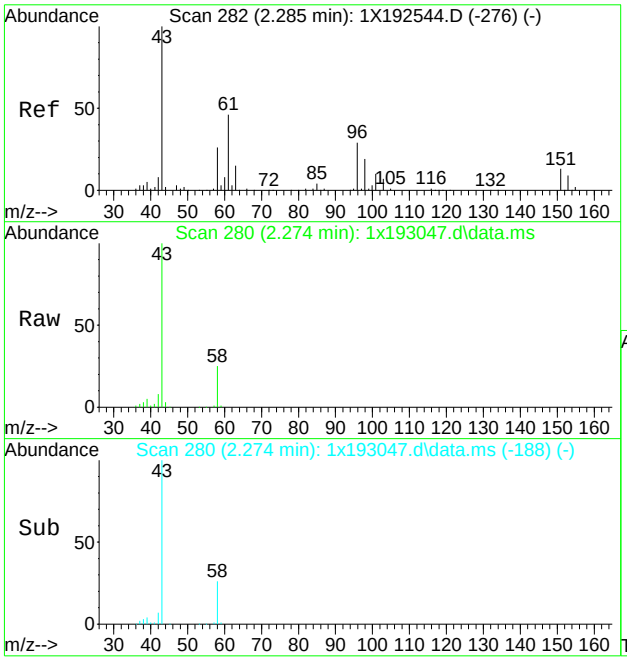


#11
chloroethane
Concen: 1.47 ug/L
RT: 1.788 min Scan# 189
Delta R.T. -0.011 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 64 Resp: 1803

Ion	Ratio	Lower	Upper
64	100		
66	39.8	0.6	60.6
49	32.8	0.0	59.3

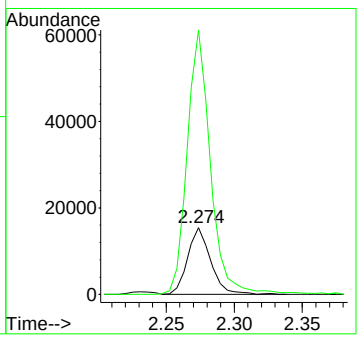


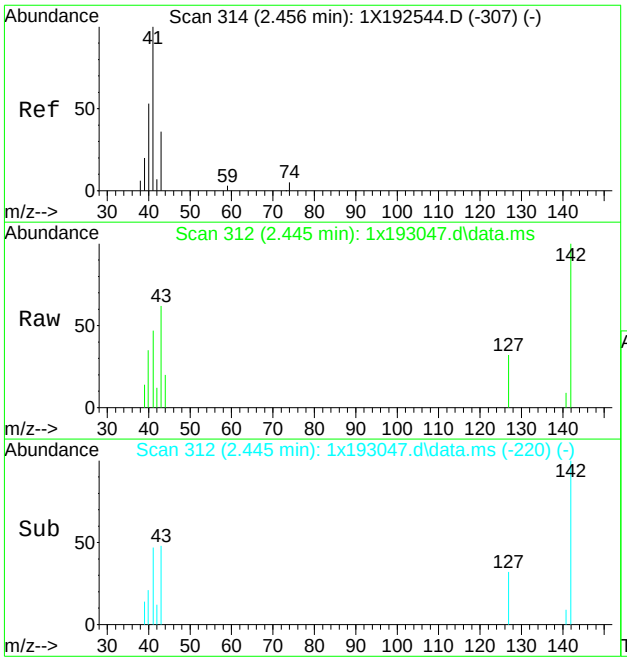


#18
acetone
Concen: 76.86 ug/L
RT: 2.274 min Scan# 280
Delta R.T. -0.011 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 58 Resp: 18137

Ion	Ratio	Lower	Upper
58	100		
43	395.2	348.5	408.5

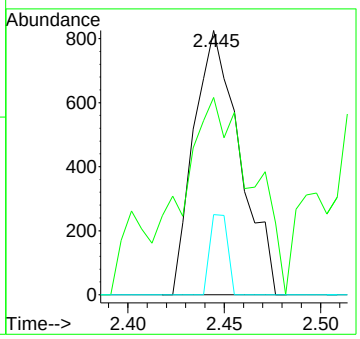


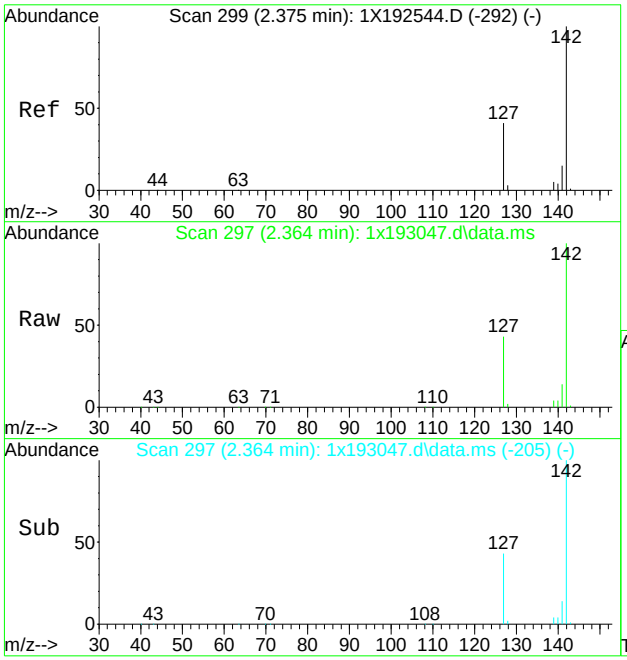


#19
acetonitrile
Concen: 4.10 ug/L
RT: 2.445 min Scan# 312
Delta R.T. -0.011 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 41 Resp: 1367

Ion	Ratio	Lower	Upper
41	100		
40	74.6	22.9	82.9
39	30.3	0.0	49.9

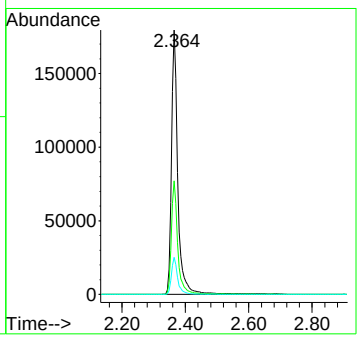


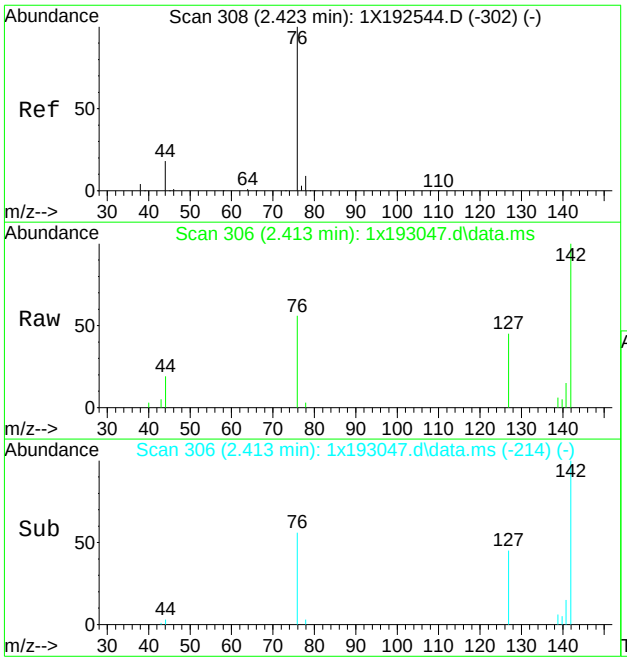


#20
iodomethane
Concen: 108.93 ug/L
RT: 2.364 min Scan# 297
Delta R.T. -0.011 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion:142 Resp: 251562

Ion	Ratio	Lower	Upper
142	100		
127	43.0	11.0	71.0
141	14.0	0.0	44.6

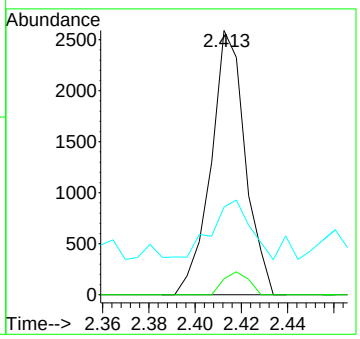


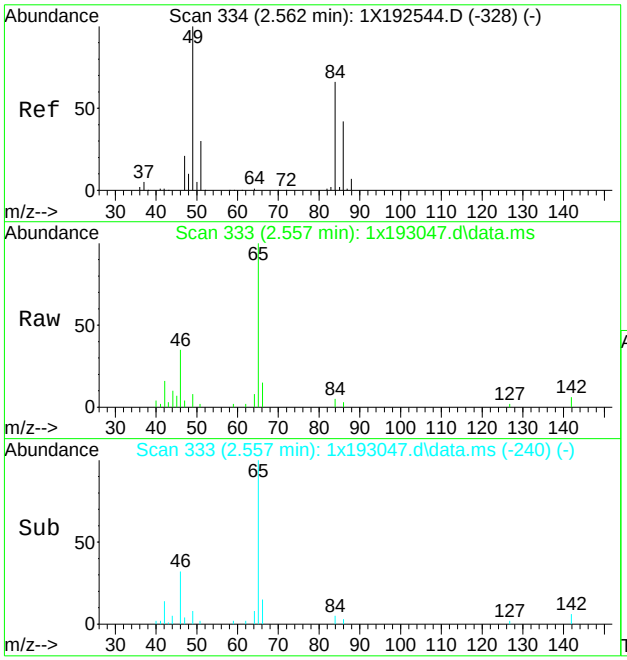


#21
carbon disulfide
Concen: 0.53 ug/L
RT: 2.413 min Scan# 306
Delta R.T. -0.011 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 76 Resp: 2666

Ion	Ratio	Lower	Upper
76	100		
78	6.1	0.0	38.9
44	19.1	0.0	48.2

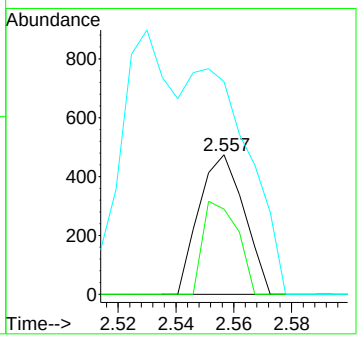


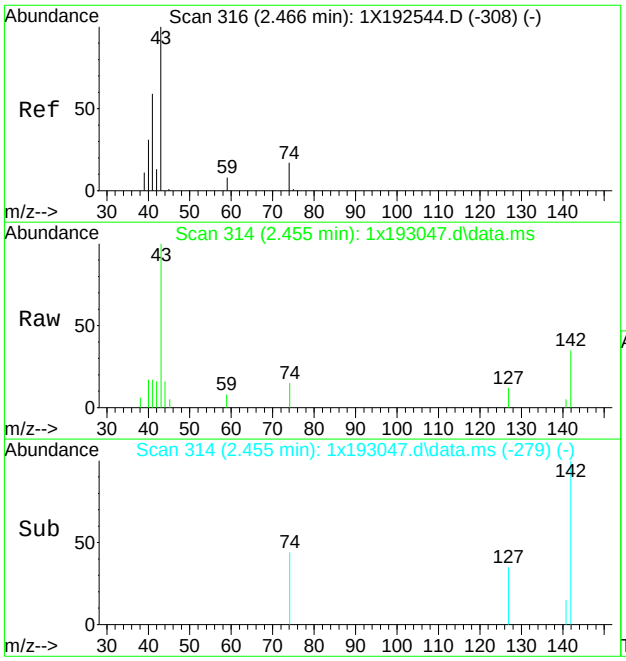


#22
methylene chloride
Concen: 0.29 ug/L
RT: 2.557 min Scan# 333
Delta R.T. -0.006 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 84 Resp: 515

Ion	Ratio	Lower	Upper
84	100		
86	61.0	34.3	94.3
49	152.3	122.9	182.9

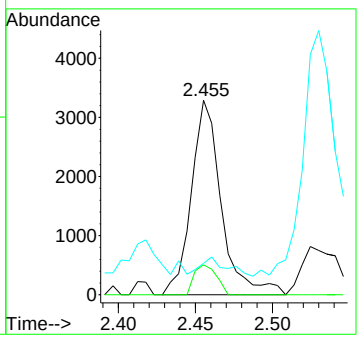


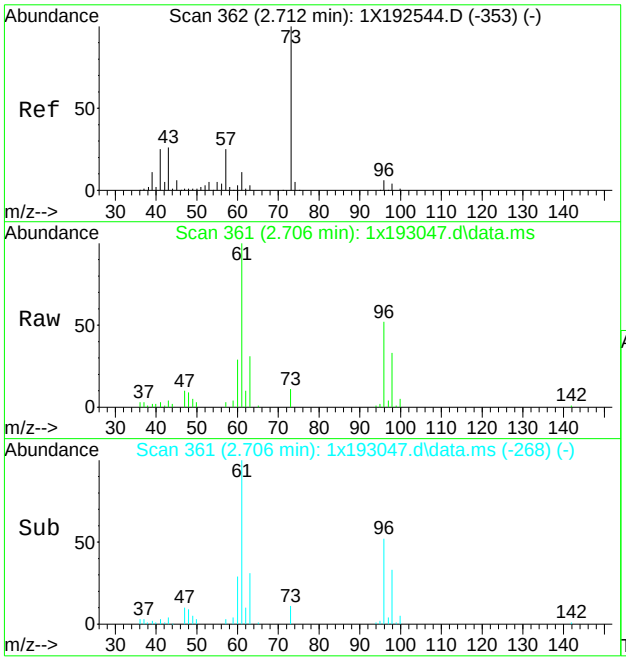


#23
methyl acetate
Concen: 2.05 ug/L
RT: 2.455 min Scan# 314
Delta R.T. -0.011 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 43 Resp: 4449

Ion	Ratio	Lower	Upper
43	100		
74	15.4	0.0	47.4
44	0.7	0.0	33.6

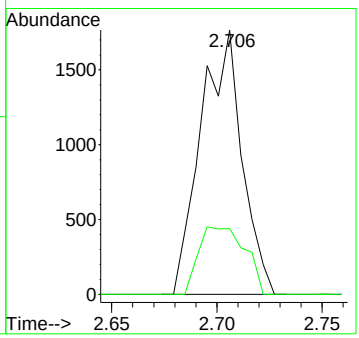


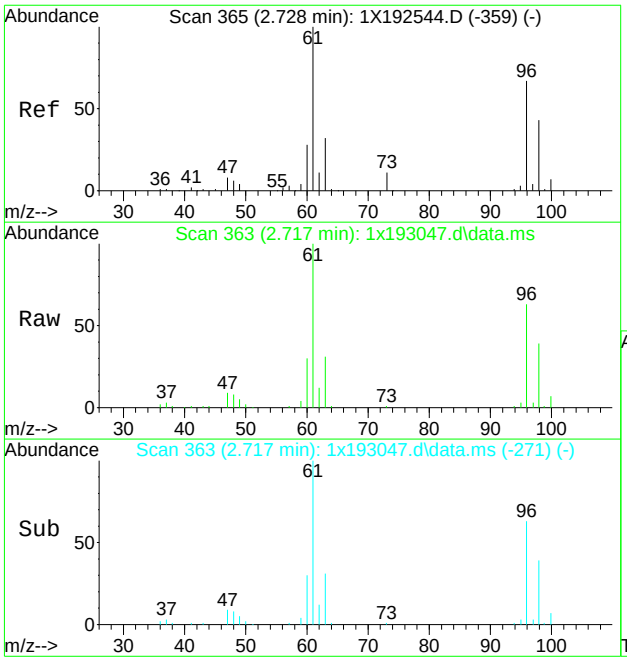


#24
methyl tert butyl ether
Concen: 0.46 ug/L
RT: 2.706 min Scan# 361
Delta R.T. -0.006 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 73 Resp: 2406

Ion	Ratio	Lower	Upper
73	100		
57	24.9	0.0	54.6

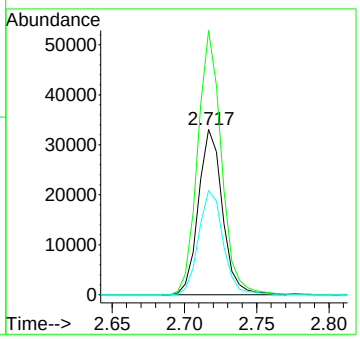


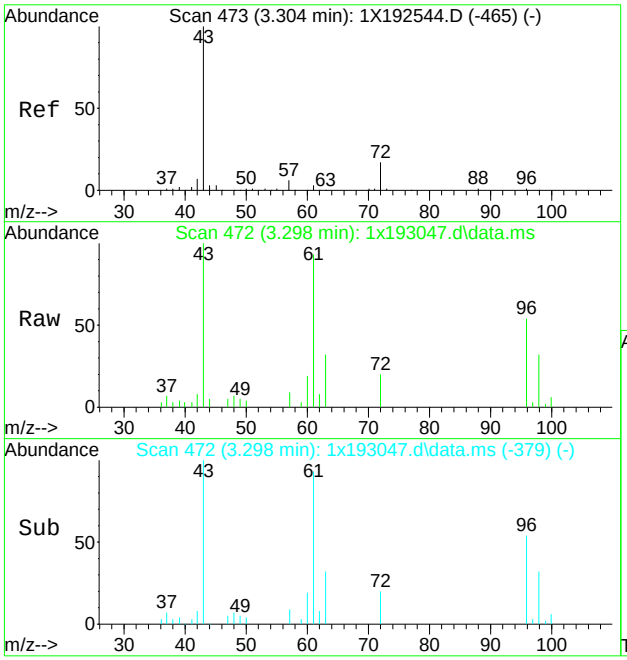


#26
trans-1,2-dichloroethene
Concen: 19.84 ug/L
RT: 2.717 min Scan# 363
Delta R.T. -0.011 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 96 Resp: 38213

Ion	Ratio	Lower	Upper
96	100		
61	159.8	120.2	180.2
98	63.0	34.0	94.0

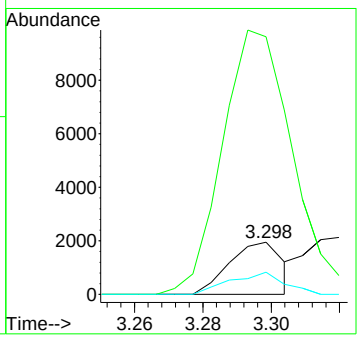


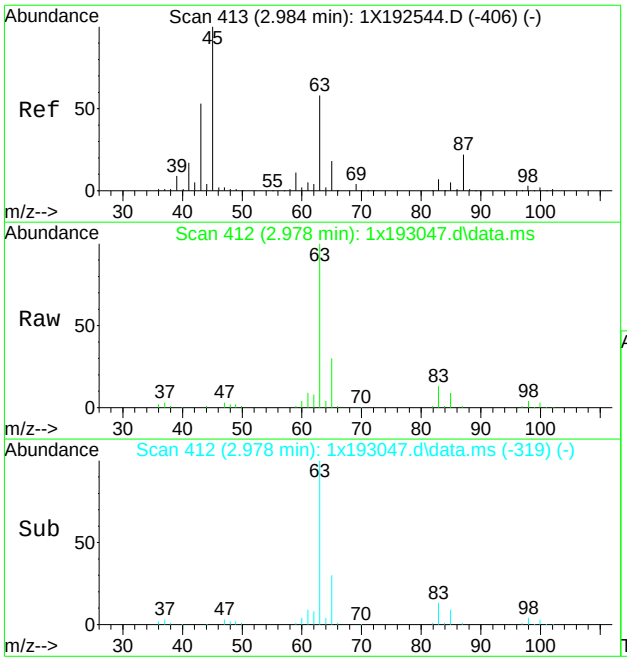


#29
2-butanone
Concen: 8.32 ug/L m
RT: 3.298 min Scan# 472
Delta R.T. -0.006 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 72 Resp: 2111

Ion	Ratio	Lower	Upper
72	100		
43	492.1	567.1	627.1#
57	42.6	4.0	64.0

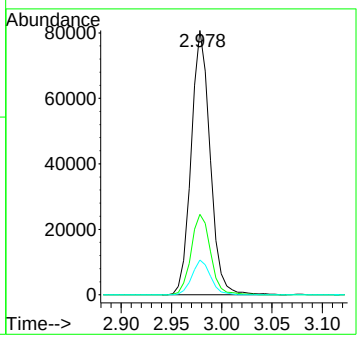


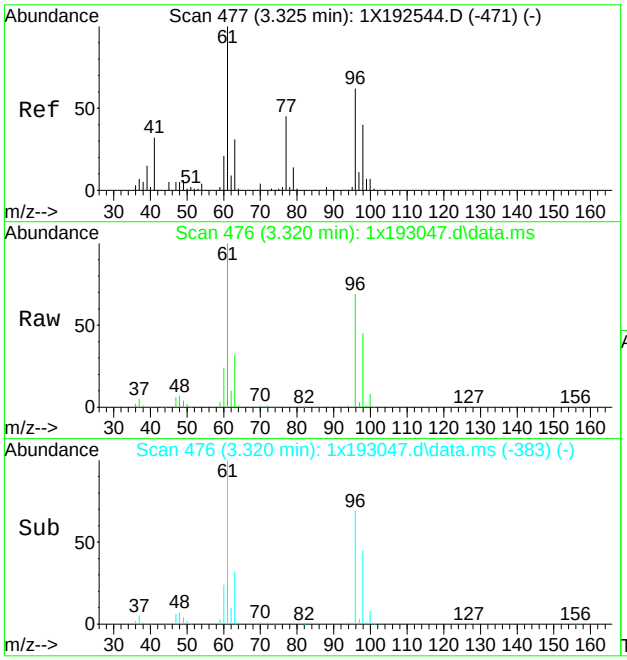


#30
1,1-dichloroethane
Concen: 28.39 ug/L
RT: 2.978 min Scan# 412
Delta R.T. -0.006 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 63 Resp: 105961

Ion	Ratio	Lower	Upper
63	100		
65	30.5	0.9	60.9
83	13.1	0.0	42.5

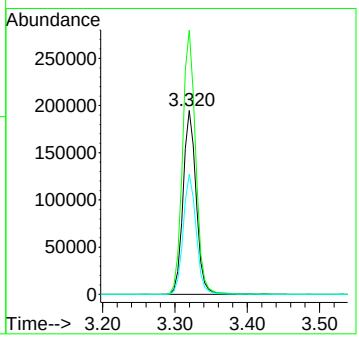


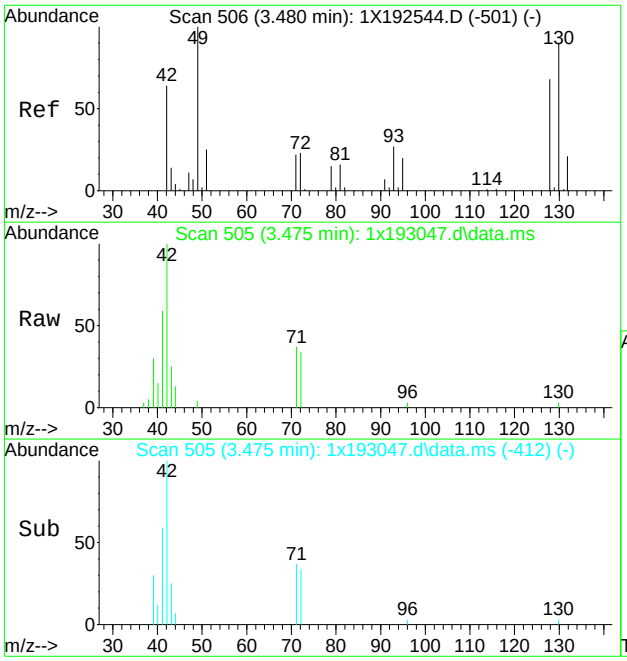


#36
cis-1,2-dichloroethene
Concen: 118.46 ug/L
RT: 3.320 min Scan# 476
Delta R.T. -0.006 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 96 Resp: 245146

Ion	Ratio	Lower	Upper
96	100		
61	143.9	131.2	191.2
98	65.4	34.7	94.7

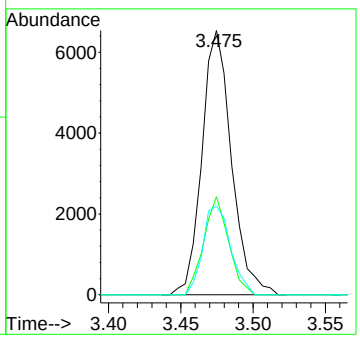


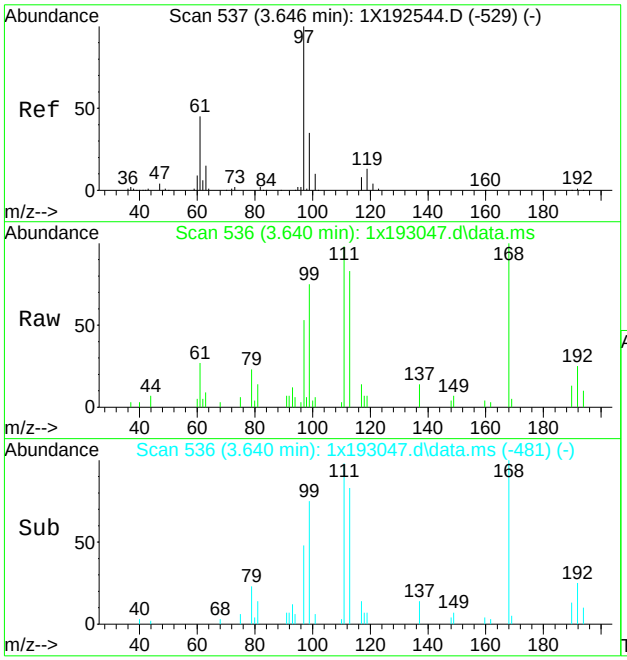


#41
tetrahydrofuran
Concen: 10.98 ug/L
RT: 3.475 min Scan# 505
Delta R.T. -0.006 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 42 Resp: 9288

Ion	Ratio	Lower	Upper
42	100		
71	37.2	5.0	65.0
72	33.6	6.5	66.5

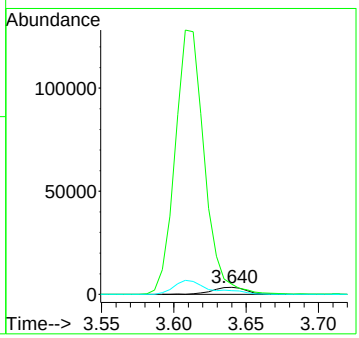


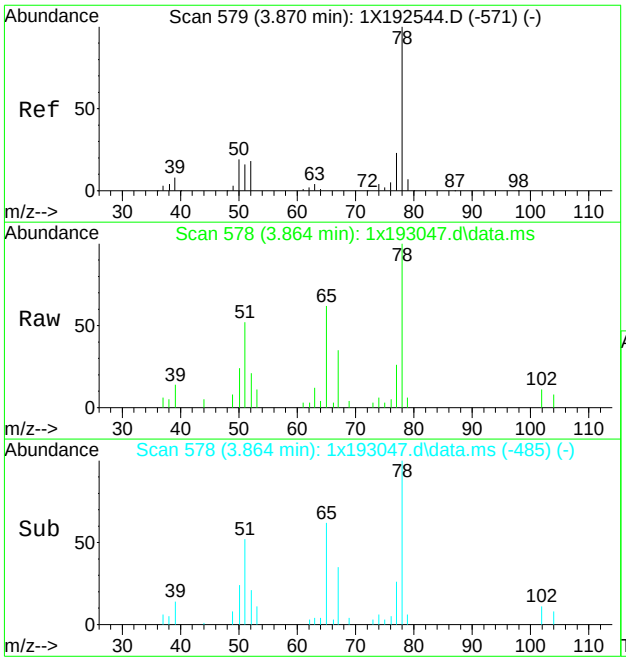


#45
1,1,1-trichloroethane
Concen: 1.63 ug/L
RT: 3.640 min Scan# 536
Delta R.T. -0.006 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 97 Resp: 5554

Ion	Ratio	Lower	Upper
97	100		
99	135.4	37.2	97.2#
61	52.2	16.0	76.0

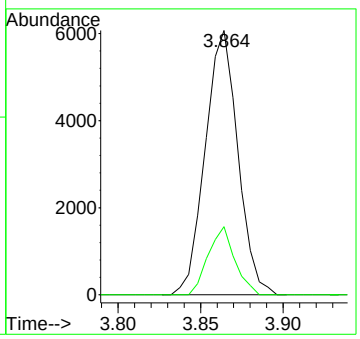


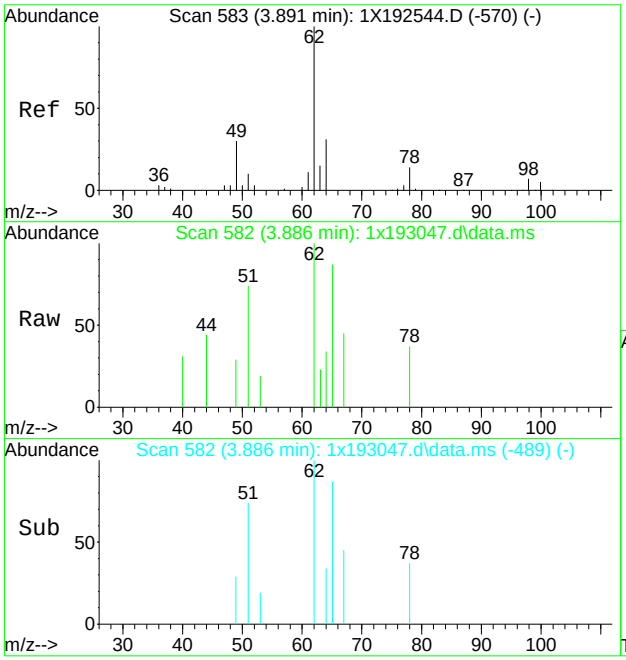


#57
benzene
Concen: 1.19 ug/L
RT: 3.864 min Scan# 578
Delta R.T. -0.006 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 78 Resp: 8341

Ion	Ratio	Lower	Upper
78	100		
77	25.8	0.0	53.3

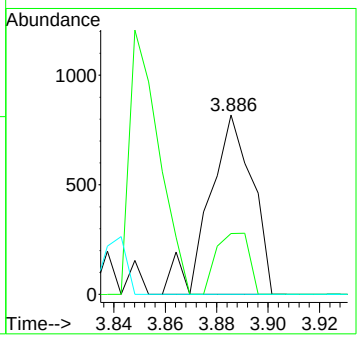


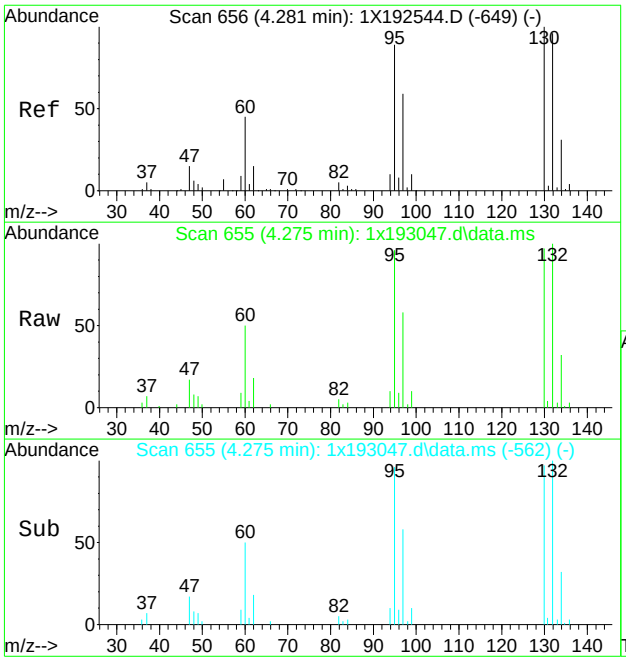


#60
1,2-dichloroethane
Concen: 0.30 ug/L
RT: 3.886 min Scan# 582
Delta R.T. -0.006 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 62 Resp: 958

Ion	Ratio	Lower	Upper
62	100		
64	33.9	1.2	61.2
98	0.0	0.0	37.4

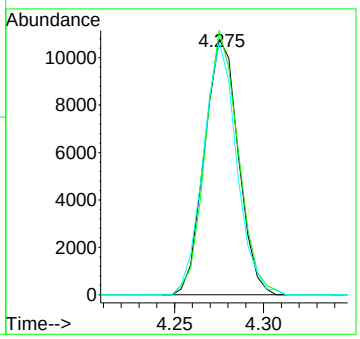


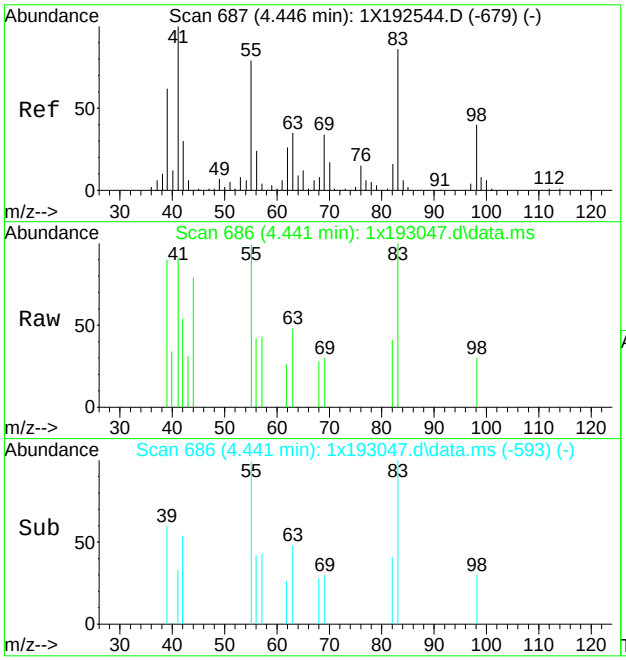


#61
trichloroethene
Concen: 6.01 ug/L
RT: 4.275 min Scan# 655
Delta R.T. -0.006 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion:130 Resp: 14231

Ion	Ratio	Lower	Upper
130	100		
132	99.5	65.5	125.5
95	95.0	58.7	118.7

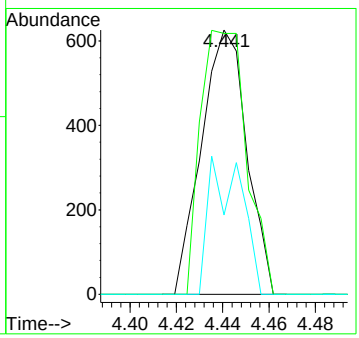


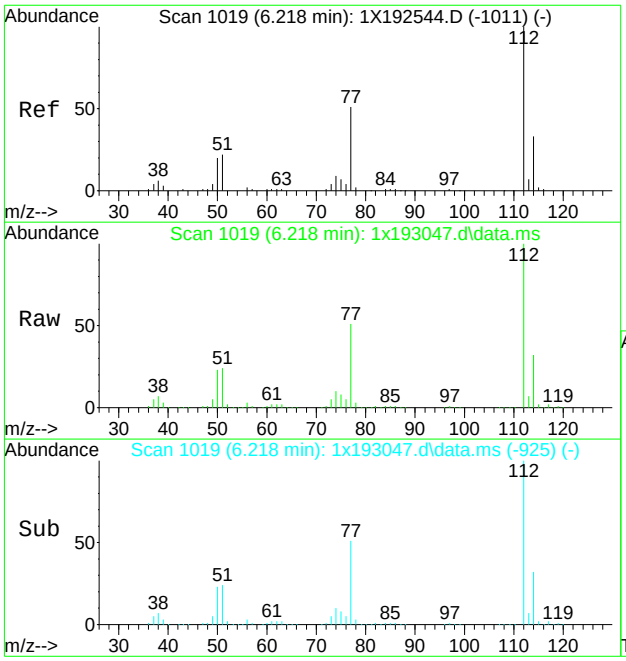


#68
methylcyclohexane
Concen: 0.25 ug/L
RT: 4.441 min Scan# 686
Delta R.T. -0.005 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion: 83 Resp: 853

Ion	Ratio	Lower	Upper
83	100		
55	98.7	61.4	121.4
98	30.0	16.6	76.6

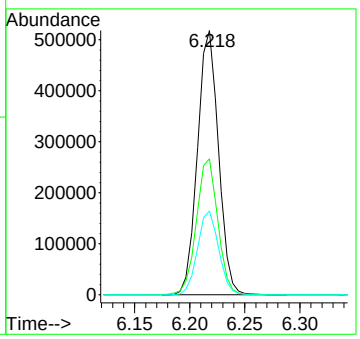


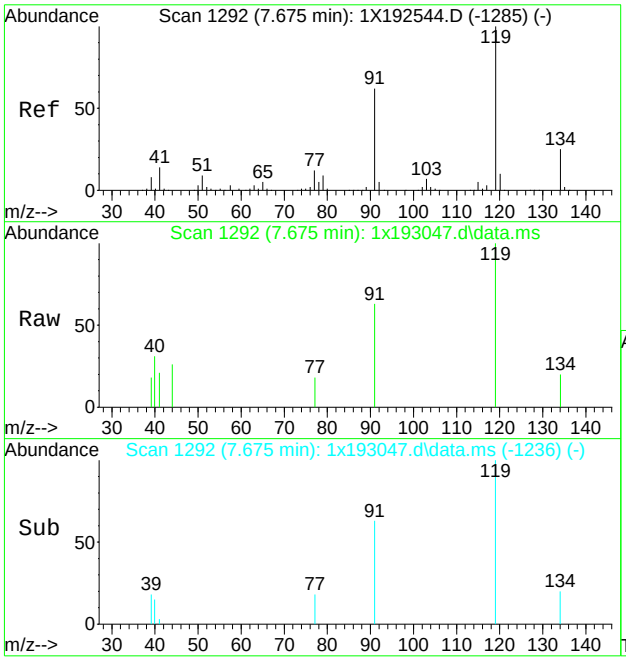


#86
chlorobenzene
Concen: 135.75 ug/L
RT: 6.218 min Scan# 1019
Delta R.T. -0.000 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion:112 Resp: 686907

Ion	Ratio	Lower	Upper
112	100		
77	51.4	20.6	80.6
114	31.7	2.6	62.6

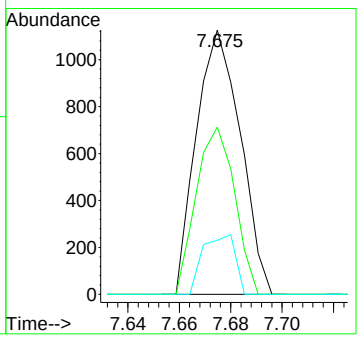


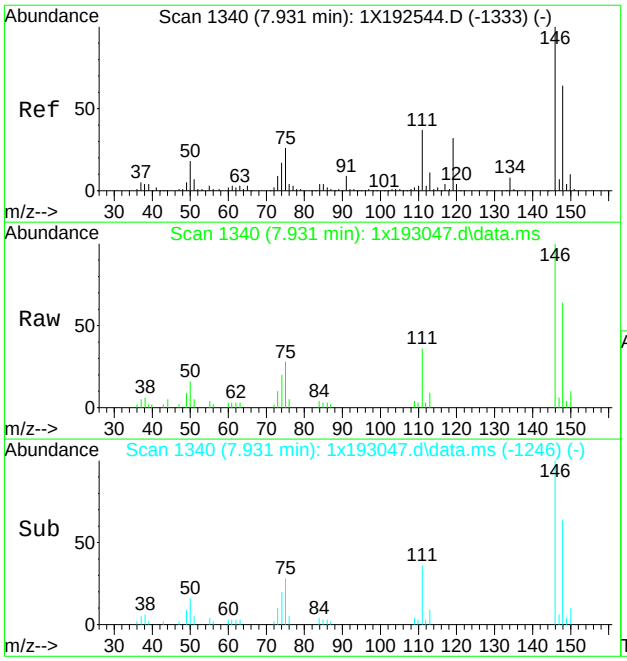


#107
tert-butylbenzene
Concen: 0.22 ug/L
RT: 7.675 min Scan# 1292
Delta R.T. -0.000 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion:119 Resp: 1344

Ion	Ratio	Lower	Upper
119	100		
91	63.3	32.4	92.4
134	20.5	0.0	54.6

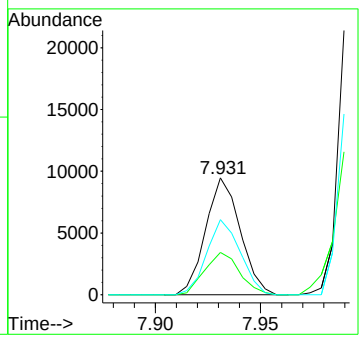


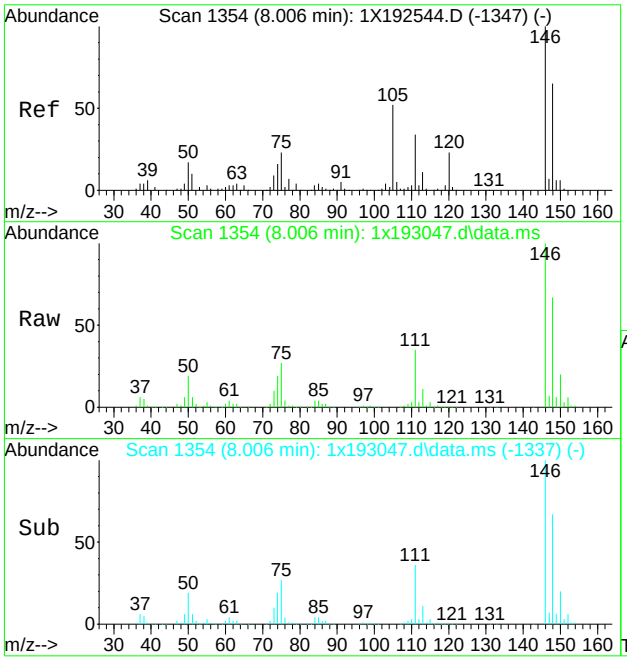


#110
1,3-dichlorobenzene
Concen: 2.69 ug/L
RT: 7.931 min Scan# 1340
Delta R.T. -0.000 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion:146 Resp: 10857

Ion	Ratio	Lower	Upper
146	100		
111	36.1	6.7	66.7
148	64.4	34.1	94.1

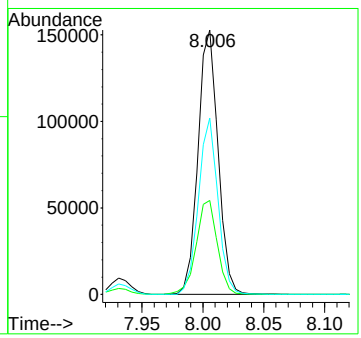


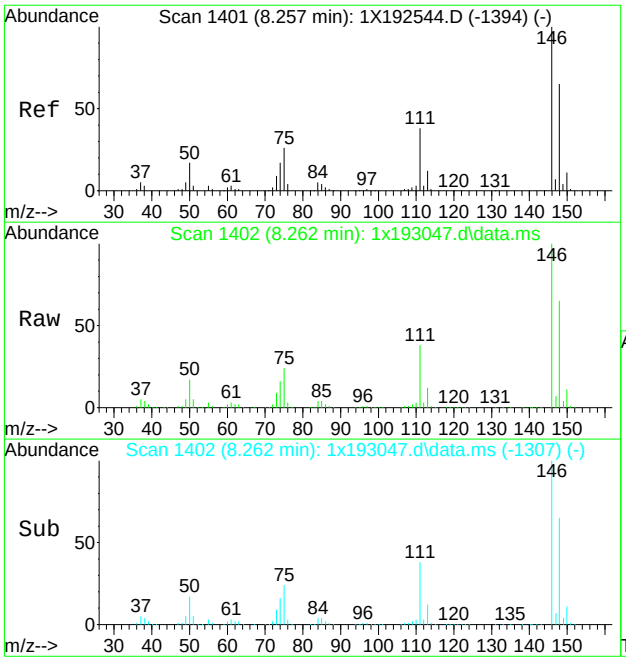


#112
1,4-dichlorobenzene
Concen: 42.10 ug/L
RT: 8.006 min Scan# 1354
Delta R.T. -0.000 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion:146 Resp: 175888

Ion	Ratio	Lower	Upper
146	100		
111	35.5	4.4	64.4
148	66.7	34.6	94.6

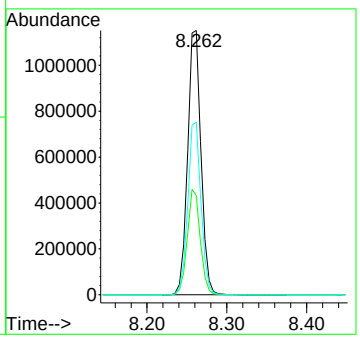


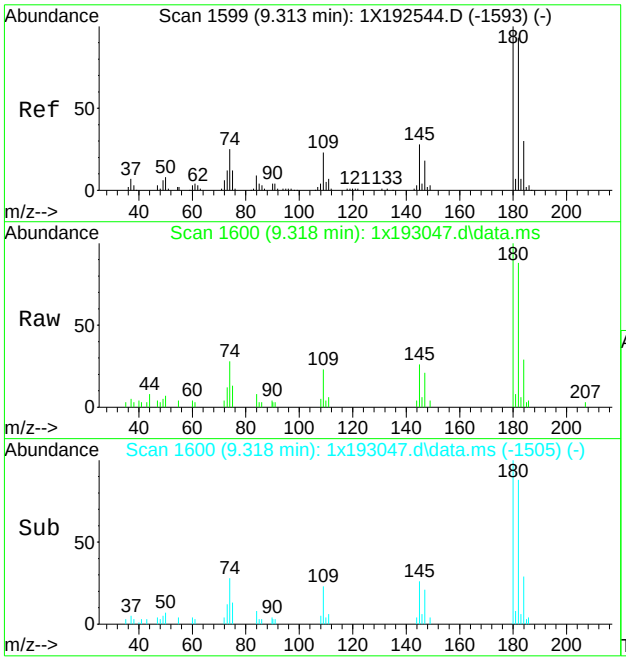


#113
1,2-dichlorobenzene
Concen: 350.28 ug/L
RT: 8.262 min Scan# 1402
Delta R.T. 0.005 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion:146 Resp: 1344895

Ion	Ratio	Lower	Upper
146	100		
111	37.6	8.0	68.0
148	65.3	34.7	94.7

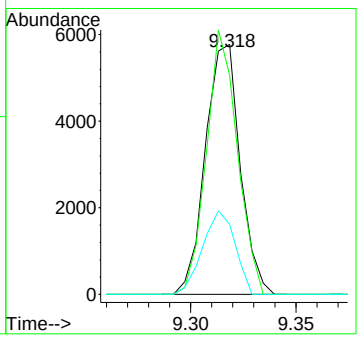


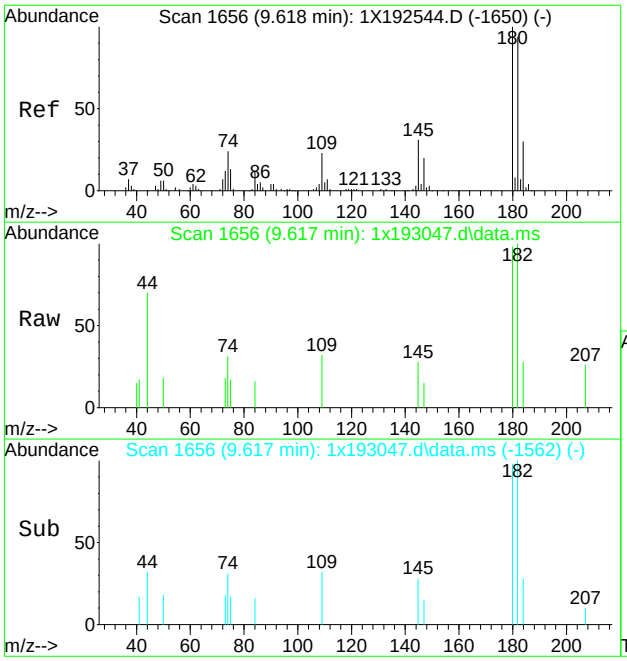


#120
1,2,4-trichlorobenzene
Concen: 2.89 ug/L
RT: 9.318 min Scan# 1600
Delta R.T. 0.005 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion:180 Resp: 6645

Ion	Ratio	Lower	Upper
180	100		
182	87.8	63.3	123.3
74	28.0	0.0	55.0

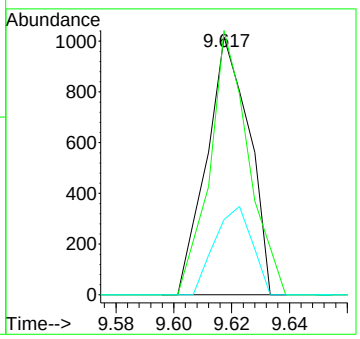




#121
1,2,3-trichlorobenzene
Concen: 0.46 ug/L
RT: 9.617 min Scan# 1656
Delta R.T. -0.000 min
Lab File: 1x193047.d
Acq: 17 Dec 2021 8:20 pm

Tgt Ion:180 Resp: 1035

Ion	Ratio	Lower	Upper
180	100		
182	102.6	64.5	124.5
145	29.2	1.1	61.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-21-2021\vx8364-partial\
Data File : 1x193066.d
Acq On : 20 Dec 2021 4:23 pm
Operator : brittank
Sample : JD36624-13 Inst : ACC-VOA-MSX
Misc : MS55557, V1X8364,5,,,,10
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 21 01:14:47 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

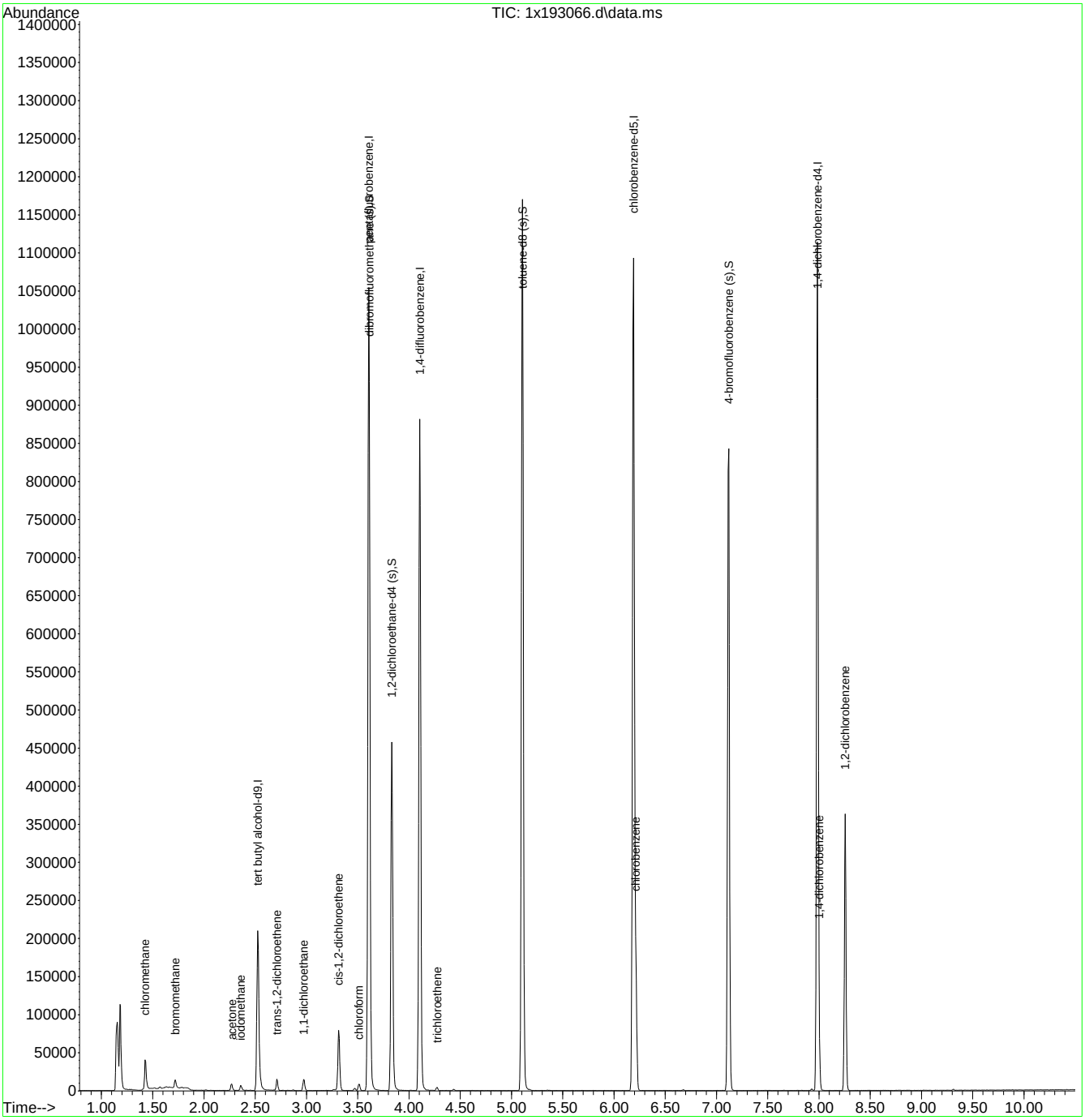
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.525	65	160714	500.00	ug/L	-0.02
5) pentafluorobenzene	3.608	168	325724	50.00	ug/L	-0.01
52) 1,4-difluorobenzene	4.104	114	496122	50.00	ug/L	-0.01
73) chlorobenzene-d5	6.191	117	463933	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.984	152	204686	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.613	113	178365	54.30	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 108.60%			
53) 1,2-dichloroethane-d4 (s)	3.832	65	219587	51.73	ug/L	-0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 103.46%			
74) toluene-d8 (s)	5.108	98	555893	49.28	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.56%			
98) 4-bromofluorobenzene (s)	7.120	95	208533	51.26	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.52%			
Target Compounds						Qvalue
8) chloromethane	1.425	50	27087	9.77	ug/L	98
10) bromomethane	1.719	96	4220	3.33	ug/L	84
18) acetone	2.274	58	1823	8.34	ug/L #	77
20) iodomethane	2.359	142	5346	2.50	ug/L	90
26) trans-1,2-dichloroethene	2.712	96	3412	1.91	ug/L	92
30) 1,1-dichloroethane	2.973	63	9619	2.78	ug/L	97
36) cis-1,2-dichloroethene	3.315	96	21756	11.35	ug/L	88
42) chloroform	3.512	83	4427	1.33	ug/L	91
61) trichloroethene	4.275	130	1125	0.49	ug/L	93
86) chlorobenzene	6.213	112	61849	12.50	ug/L	96
112) 1,4-dichlorobenzene	8.000	146	13822	3.35	ug/L	95
113) 1,2-dichlorobenzene	8.257	146	102401	27.02	ug/L	100

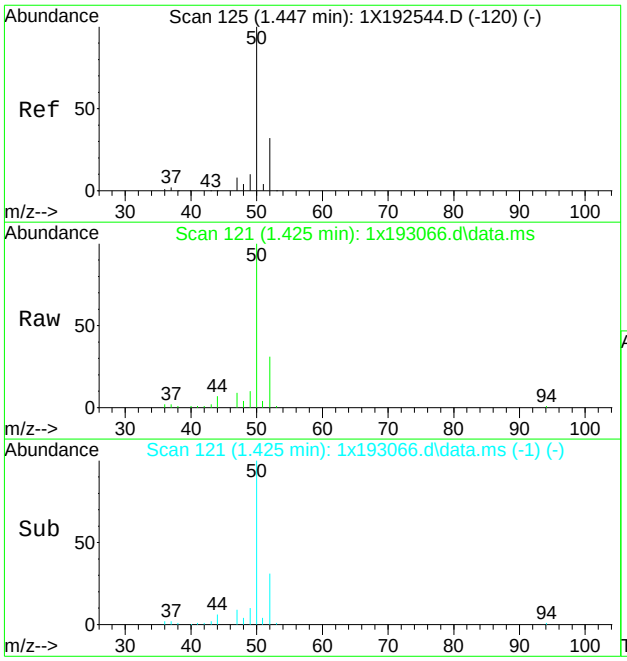
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-21-2021\vx8364-partial\
Data File : 1x193066.d
Acq On : 20 Dec 2021 4:23 pm
Operator : brittank
Sample : JD36624-13 Inst : ACC-VOA-MSX
Misc : MS55557, V1X8364,5,,,,10
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 21 01:14:47 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

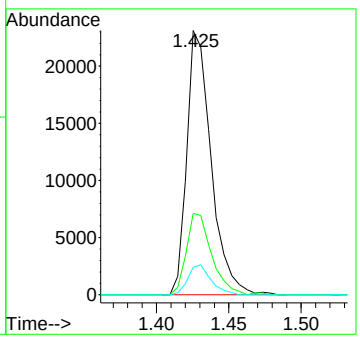


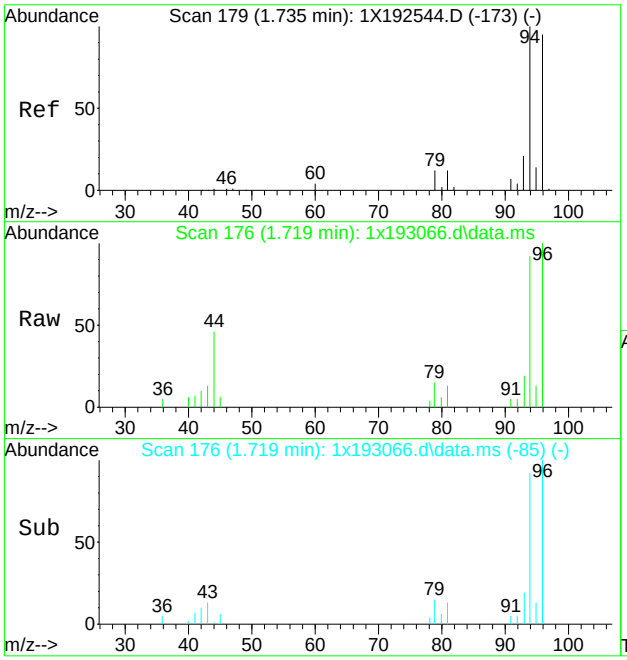


#8
chloromethane
Concen: 9.77 ug/L
RT: 1.425 min Scan# 121
Delta R.T. -0.022 min
Lab File: 1x193066.d
Acq: 20 Dec 2021 4:23 pm

Tgt Ion: 50 Resp: 27087

Ion	Ratio	Lower	Upper
50	100		
52	30.7	2.2	62.2
49	10.4	0.0	40.5

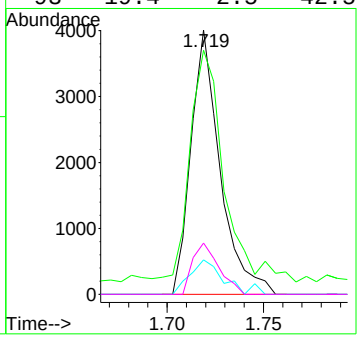


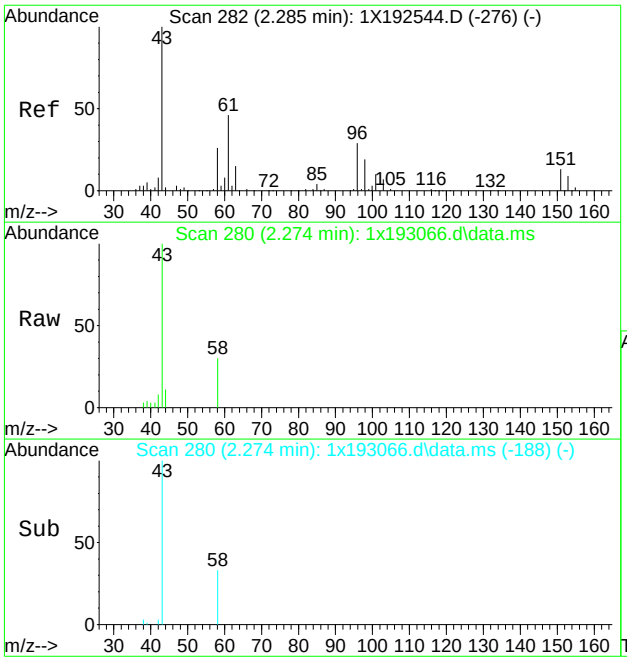


#10
bromomethane
Concen: 3.33 ug/L
RT: 1.719 min Scan# 176
Delta R.T. -0.016 min
Lab File: 1x193066.d
Acq: 20 Dec 2021 4:23 pm

Tgt Ion: 96 Resp: 4220

Ion	Ratio	Lower	Upper
96	100		
94	85.8	85.7	125.7
95	13.0	0.0	34.9
93	19.4	2.5	42.5

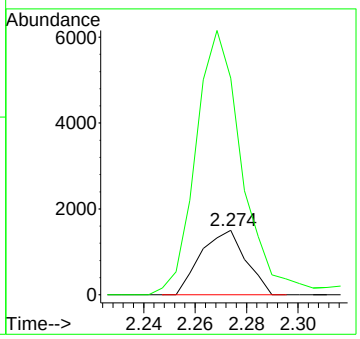


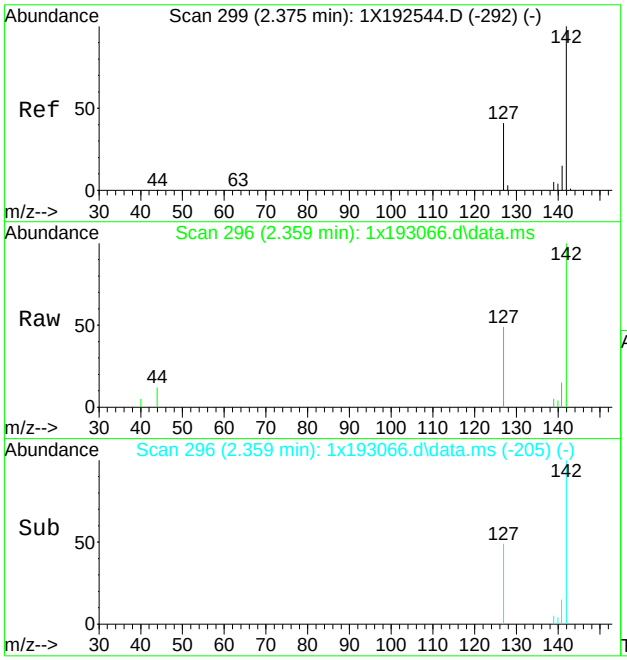


#18
acetone
Concen: 8.34 ug/L
RT: 2.274 min Scan# 280
Delta R.T. -0.011 min
Lab File: 1x193066.d
Acq: 20 Dec 2021 4:23 pm

Tgt Ion: 58 Resp: 1823

Ion	Ratio	Lower	Upper
58	100		
43	325.2	348.5	408.5#

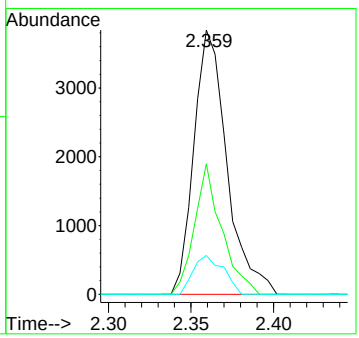


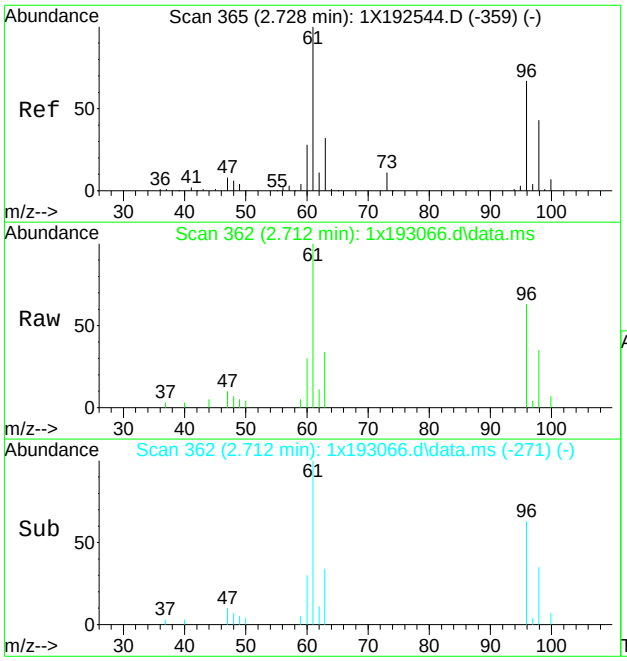


#20
iodomethane
Concen: 2.50 ug/L
RT: 2.359 min Scan# 296
Delta R.T. -0.016 min
Lab File: 1x193066.d
Acq: 20 Dec 2021 4:23 pm

Tgt Ion:142 Resp: 5346

Ion	Ratio	Lower	Upper
142	100		
127	49.4	11.0	71.0
141	14.8	0.0	44.6

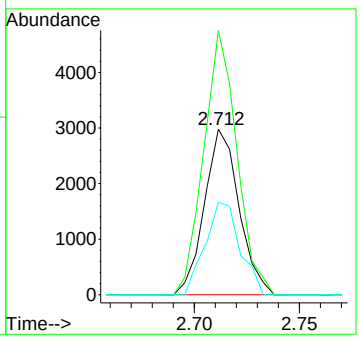


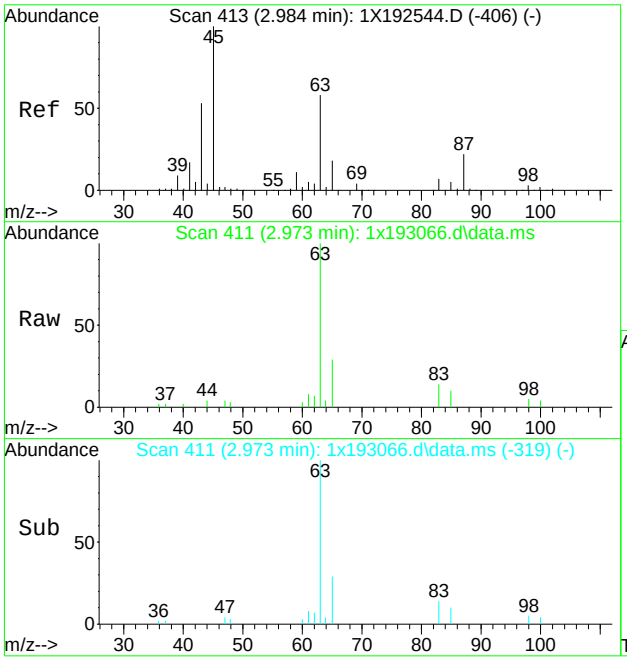


#26
trans-1,2-dichloroethene
Concen: 1.91 ug/L
RT: 2.712 min Scan# 362
Delta R.T. -0.016 min
Lab File: 1x193066.d
Acq: 20 Dec 2021 4:23 pm

Tgt Ion: 96 Resp: 3412

Ion	Ratio	Lower	Upper
96	100		
61	159.5	120.2	180.2
98	55.8	34.0	94.0

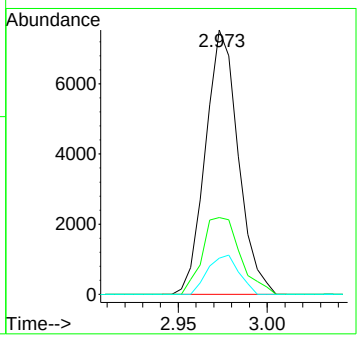


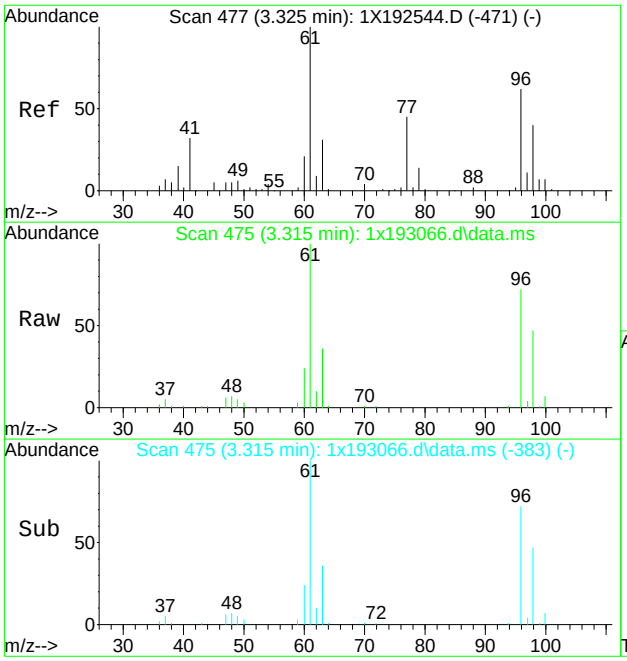


#30
1,1-dichloroethane
Concen: 2.78 ug/L
RT: 2.973 min Scan# 411
Delta R.T. -0.011 min
Lab File: 1x193066.d
Acq: 20 Dec 2021 4:23 pm

Tgt Ion: 63 Resp: 9619

Ion	Ratio	Lower	Upper
63	100		
65	29.1	0.9	60.9
83	13.7	0.0	42.5

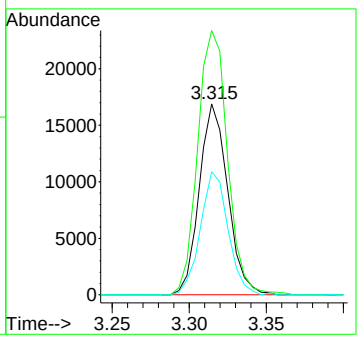


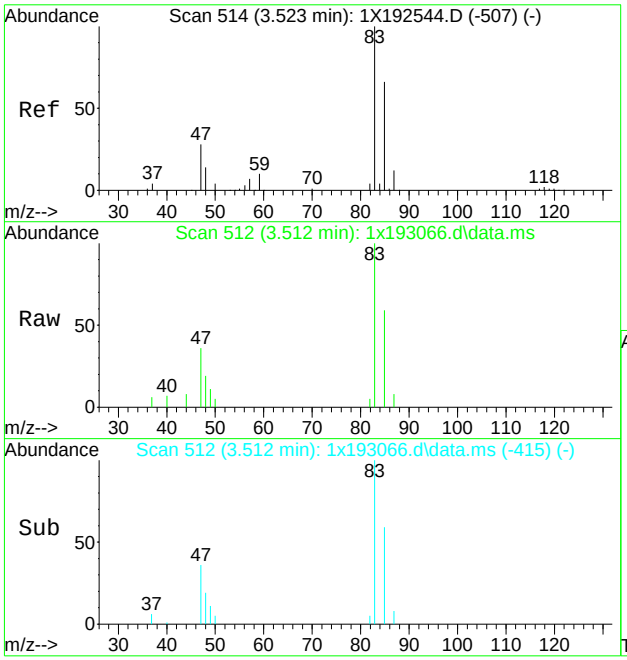


#36
cis-1,2-dichloroethene
Concen: 11.35 ug/L
RT: 3.315 min Scan# 475
Delta R.T. -0.011 min
Lab File: 1x193066.d
Acq: 20 Dec 2021 4:23 pm

Tgt Ion: 96 Resp: 21756

Ion	Ratio	Lower	Upper
96	100		
61	138.4	131.2	191.2
98	64.4	34.7	94.7

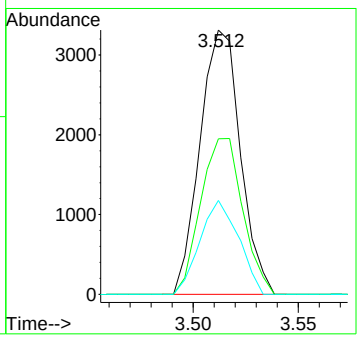


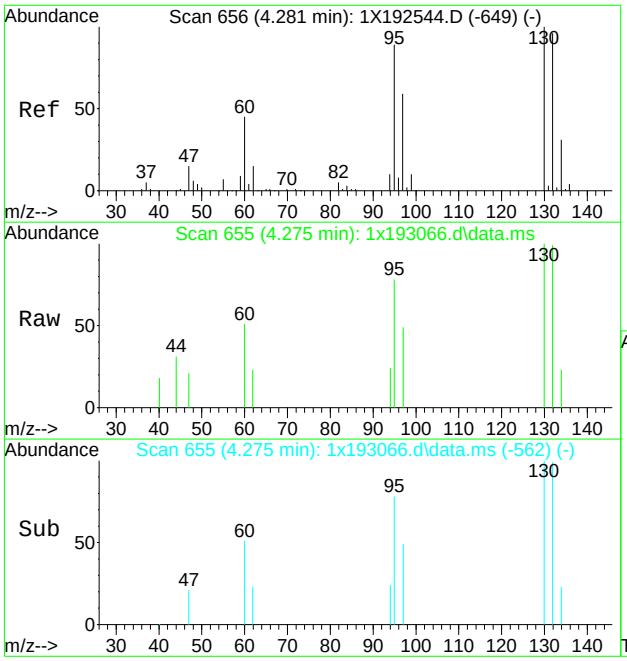


#42
chloroform
Concen: 1.33 ug/L
RT: 3.512 min Scan# 512
Delta R.T. -0.011 min
Lab File: 1x193066.d
Acq: 20 Dec 2021 4:23 pm

Tgt Ion: 83 Resp: 4427

Ion	Ratio	Lower	Upper
83	100		
85	58.8	35.8	95.8
47	35.5	0.1	60.1

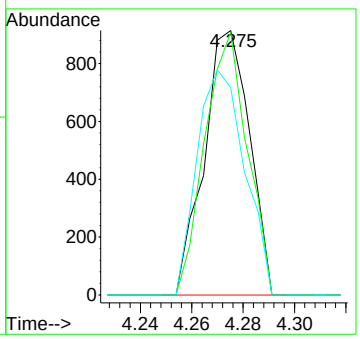


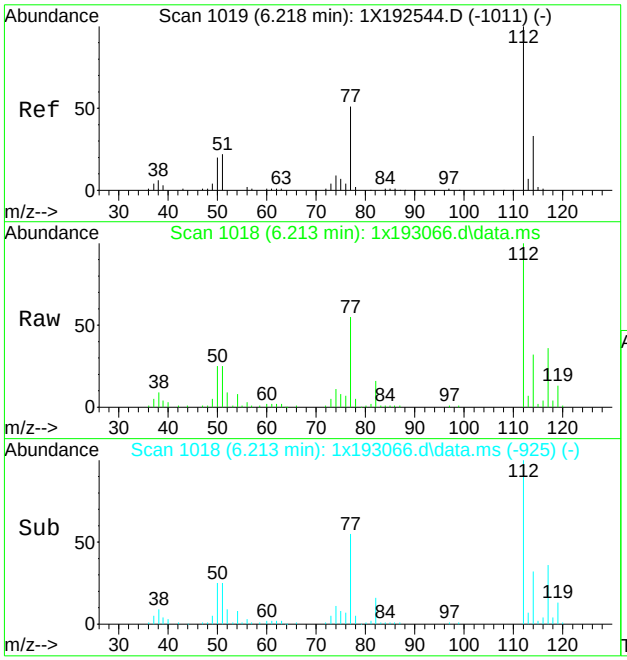


#61
trichloroethene
Concen: 0.49 ug/L
RT: 4.275 min Scan# 655
Delta R.T. -0.006 min
Lab File: 1x193066.d
Acq: 20 Dec 2021 4:23 pm

Tgt Ion:130 Resp: 1125

Ion	Ratio	Lower	Upper
130	100		
132	99.3	65.5	125.5
95	78.4	58.7	118.7

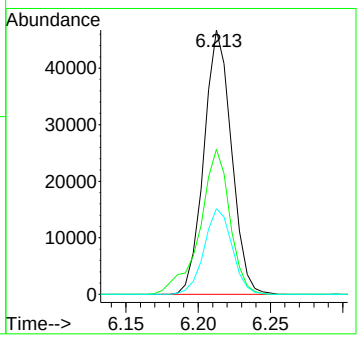


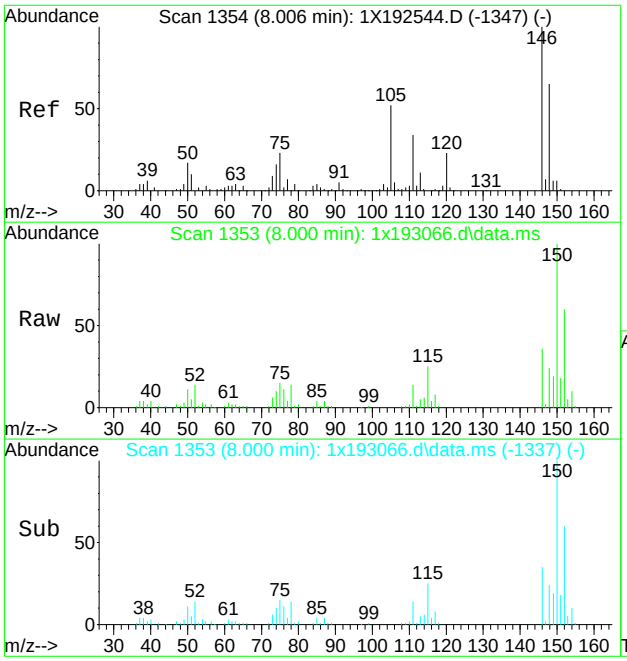


#86
chlorobenzene
Concen: 12.50 ug/L
RT: 6.213 min Scan# 1018
Delta R.T. -0.006 min
Lab File: 1x193066.d
Acq: 20 Dec 2021 4:23 pm

Tgt Ion:112 Resp: 61849

Ion	Ratio	Lower	Upper
112	100		
77	54.9	20.6	80.6
114	32.5	2.6	62.6

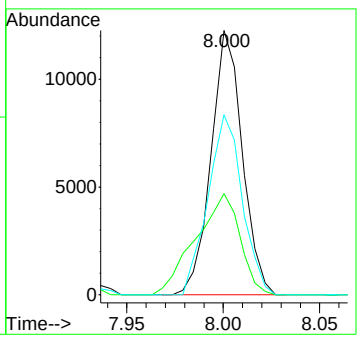


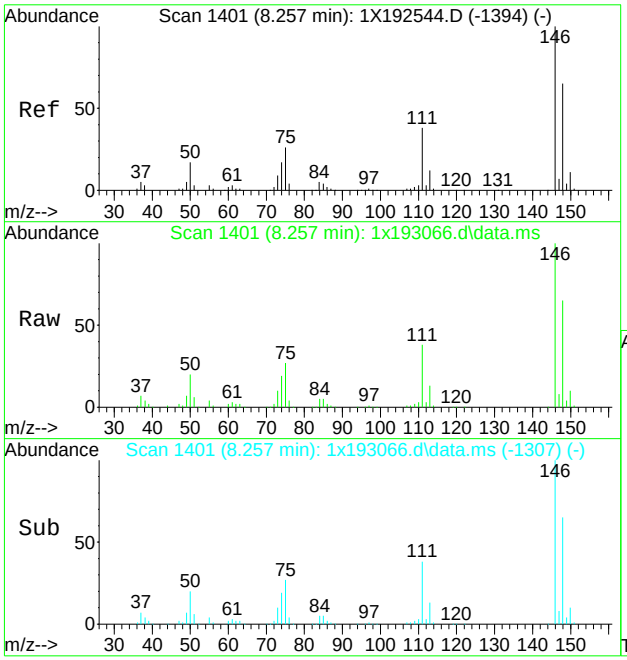


#112
1,4-dichlorobenzene
Concen: 3.35 ug/L
RT: 8.000 min Scan# 1353
Delta R.T. -0.006 min
Lab File: 1x193066.d
Acq: 20 Dec 2021 4:23 pm

Tgt Ion:146 Resp: 13822

Ion	Ratio	Lower	Upper
146	100		
111	38.3	4.4	64.4
148	68.1	34.6	94.6

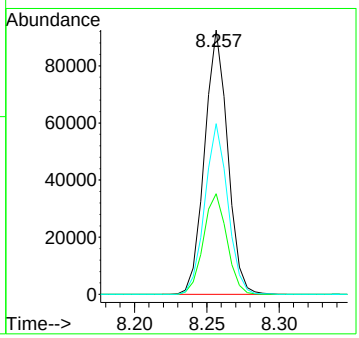




#113
1,2-dichlorobenzene
Concen: 27.02 ug/L
RT: 8.257 min Scan# 1401
Delta R.T. -0.000 min
Lab File: 1x193066.d
Acq: 20 Dec 2021 4:23 pm

Tgt Ion:146 Resp: 102401

Ion	Ratio	Lower	Upper
146	100		
111	38.0	8.0	68.0
148	64.6	34.7	94.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-22-2021\vx8366-partial\
Data File : 1x193118.d
Acq On : 21 Dec 2021 3:00 pm
Operator : brittank
Sample : JD36624-14 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8366,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 22 04:29:24 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

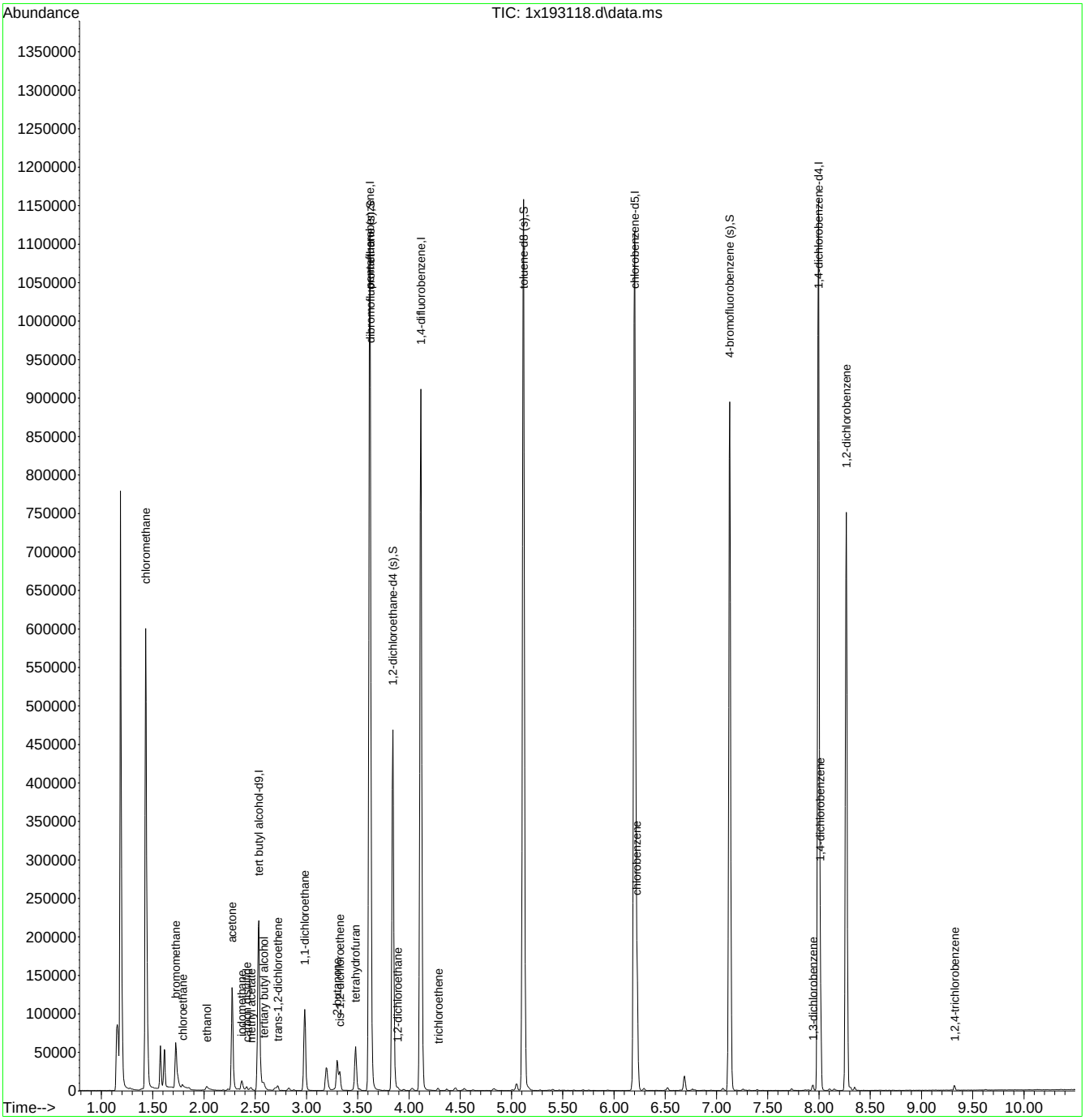
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.535	65	174299	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	358315	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	515689	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	476150	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	212396	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	179891	49.79	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.58%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	222815	50.50	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.00%			
74) toluene-d8 (s)	5.118	98	565265	48.83	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.66%			
98) 4-bromofluorobenzene (s)	7.130	95	214830	50.89	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.78%			
Target Compounds						Qvalue
2) ethanol	2.028	45	6398	321.41	ug/L	87
3) tertiary butyl alcohol	2.583	59	5186	20.76	ug/L	77
8) chloromethane	1.430	50	427838	140.21	ug/L	99
10) bromomethane	1.724	96	28082	20.17	ug/L	97
11) chloroethane	1.793	64	2332	1.87	ug/L	82
18) acetone	2.274	58	27682	115.09	ug/L	96
20) iodomethane	2.370	142	10691	4.54	ug/L	98
21) carbon disulfide	2.418	76	4012	0.78	ug/L	88
23) methyl acetate	2.460	43	2725	1.23	ug/L	87
26) trans-1,2-dichloroethene	2.722	96	1338	0.68	ug/L	96
29) 2-butanone	3.298	72	6270	24.25	ug/L #	77
30) 1,1-dichloroethane	2.983	63	68699	18.06	ug/L	99
36) cis-1,2-dichloroethene	3.325	96	6028	2.86	ug/L	95
41) tetrahydrofuran	3.480	42	24843	28.81	ug/L	95
60) 1,2-dichloroethane	3.891	62	1290	0.39	ug/L	64
61) trichloroethene	4.286	130	791	0.33	ug/L	91
86) chlorobenzene	6.223	112	55439	10.92	ug/L	99
110) 1,3-dichlorobenzene	7.941	146	2186	0.53	ug/L	95
112) 1,4-dichlorobenzene	8.011	146	42221	9.87	ug/L	96
113) 1,2-dichlorobenzene	8.267	146	222716	56.64	ug/L	99
120) 1,2,4-trichlorobenzene	9.324	180	1665	0.71	ug/L	99

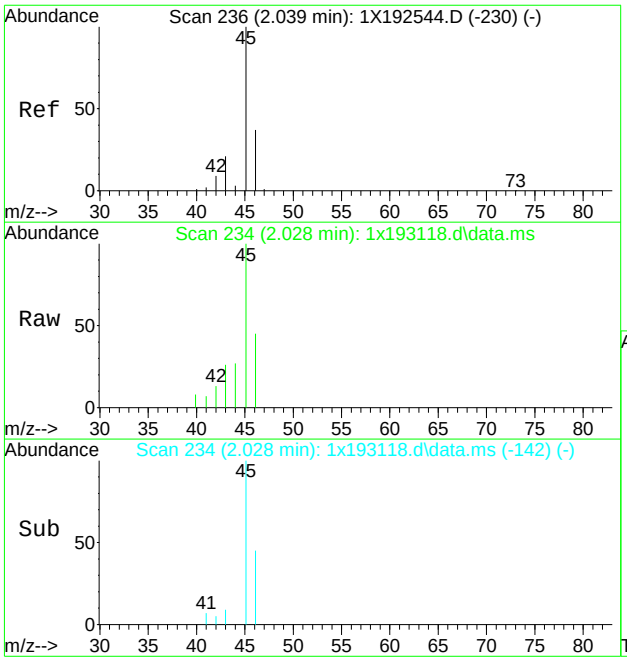
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-22-2021\vx8366-partial\
Data File : 1x193118.d
Acq On : 21 Dec 2021 3:00 pm
Operator : brittank
Sample : JD36624-14 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8366,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 22 04:29:24 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

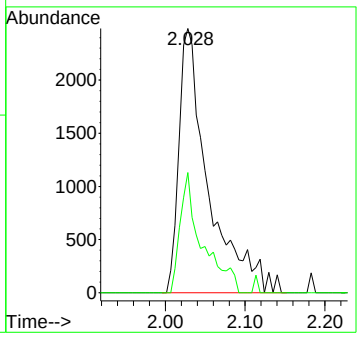


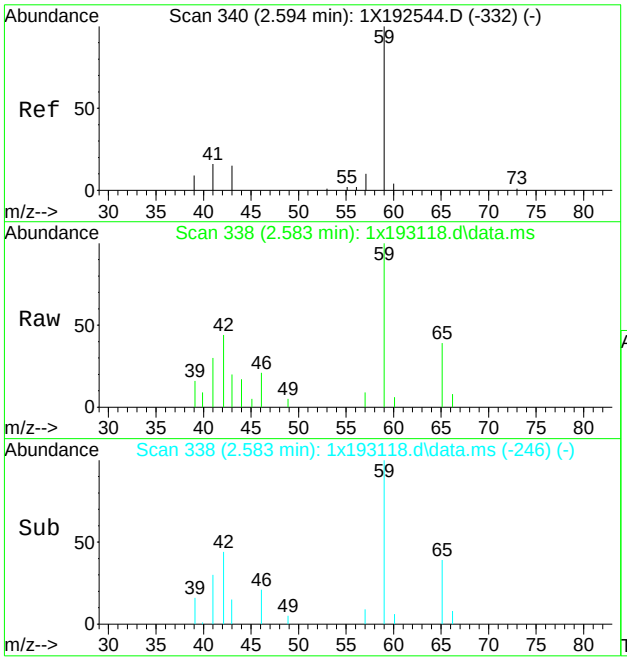


#2
ethanol
Concen: 321.41 ug/L
RT: 2.028 min Scan# 234
Delta R.T. -0.011 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 45 Resp: 6398

Ion	Ratio	Lower	Upper
45	100		
46	45.4	17.4	57.4

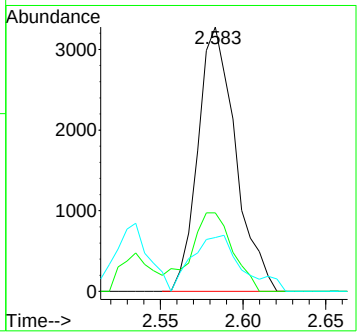


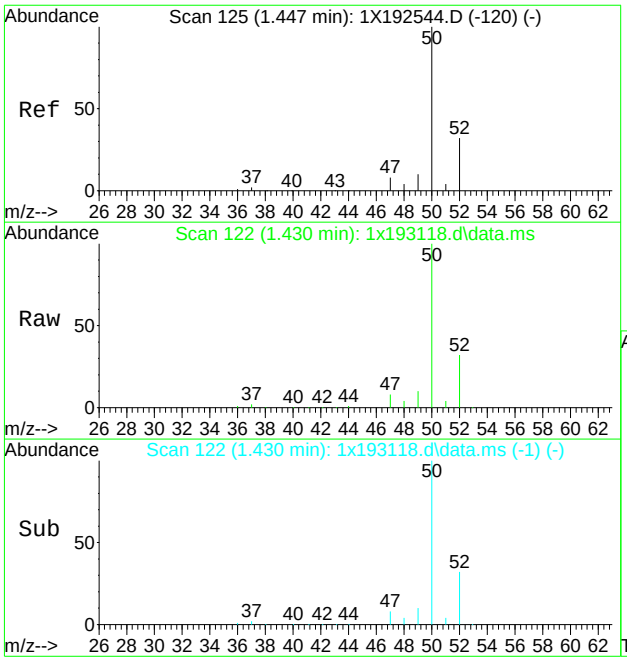


#3
tertiary butyl alcohol
Concen: 20.76 ug/L
RT: 2.583 min Scan# 338
Delta R.T. -0.011 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 59 Resp: 5186

Ion	Ratio	Lower	Upper
59	100		
41	29.7	0.0	46.0
43	20.4	0.0	45.1

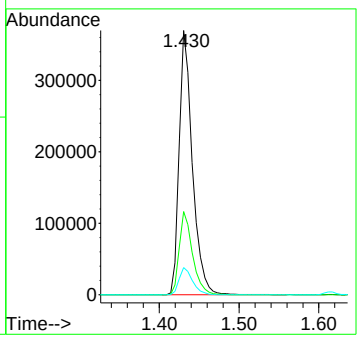


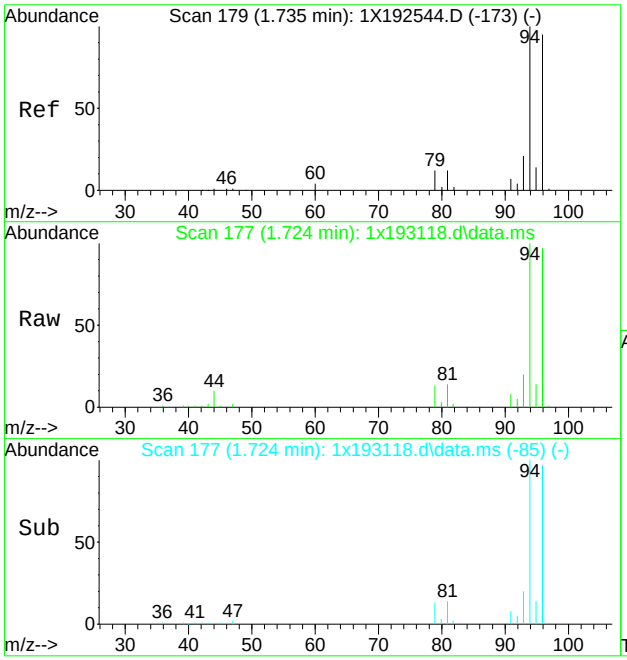


#8
chloromethane
Concen: 140.21 ug/L
RT: 1.430 min Scan# 122
Delta R.T. -0.016 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 50 Resp: 427838

Ion	Ratio	Lower	Upper
50	100		
52	31.5	2.2	62.2
49	10.3	0.0	40.5

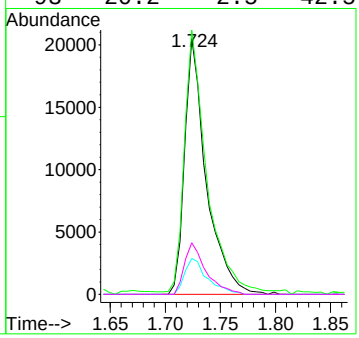


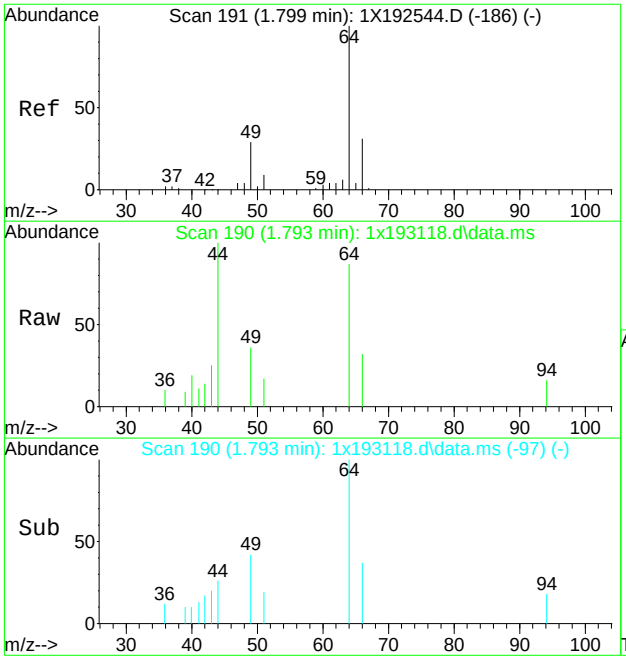


#10
bromomethane
Concen: 20.17 ug/L
RT: 1.724 min Scan# 177
Delta R.T. -0.011 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 96 Resp: 28082

Ion	Ratio	Lower	Upper
96	100		
94	102.3	85.7	125.7
95	14.0	0.0	34.9
93	20.2	2.5	42.5

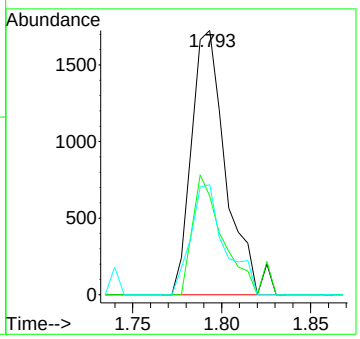


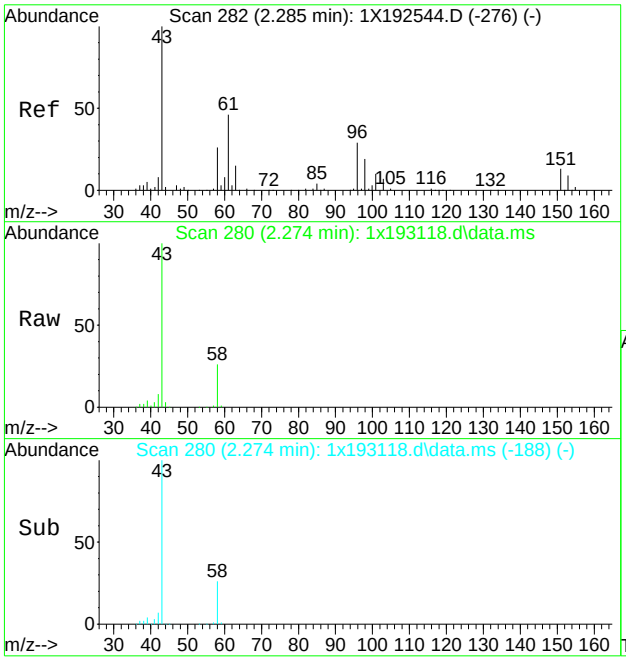


#11
chloroethane
Concen: 1.87 ug/L
RT: 1.793 min Scan# 190
Delta R.T. -0.006 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 64 Resp: 2332

Ion	Ratio	Lower	Upper
64	100		
66	37.3	0.6	60.6
49	41.7	0.0	59.3

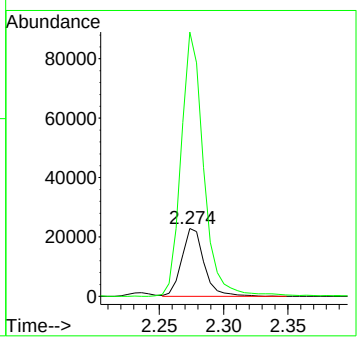


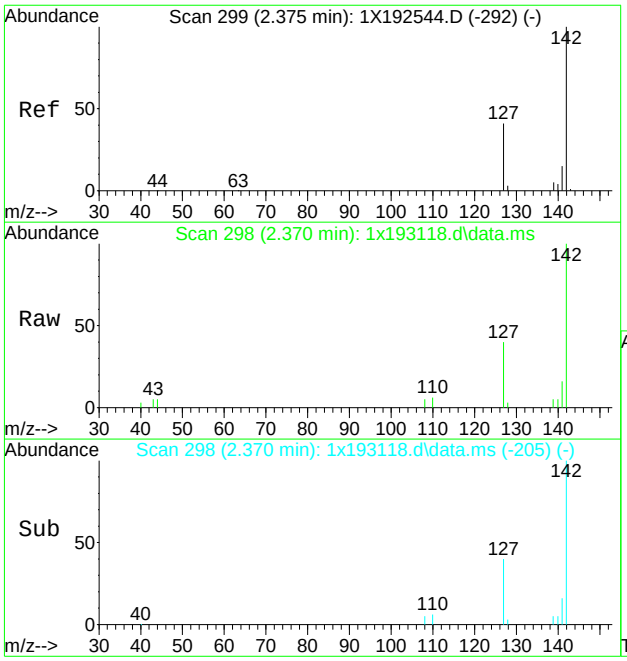


#18
acetone
Concen: 115.09 ug/L
RT: 2.274 min Scan# 280
Delta R.T. -0.011 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 58 Resp: 27682

Ion	Ratio	Lower	Upper
58	100		
43	387.8	348.5	408.5

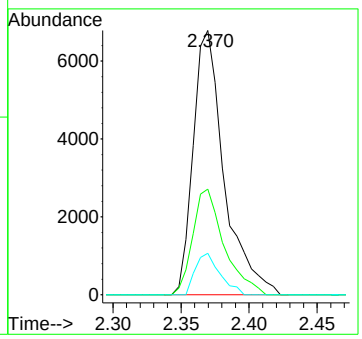


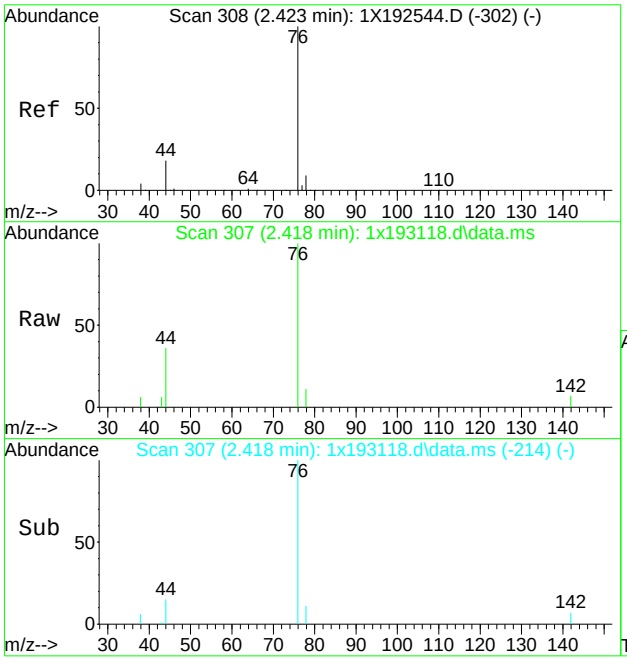


#20
iodomethane
Concen: 4.54 ug/L
RT: 2.370 min Scan# 298
Delta R.T. -0.006 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion:142 Resp: 10691

Ion	Ratio	Lower	Upper
142	100		
127	39.9	11.0	71.0
141	15.7	0.0	44.6

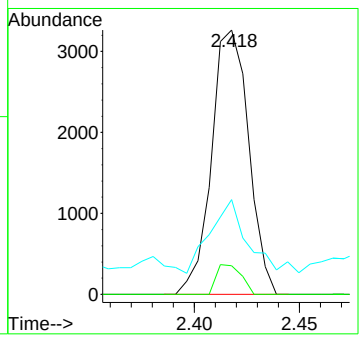


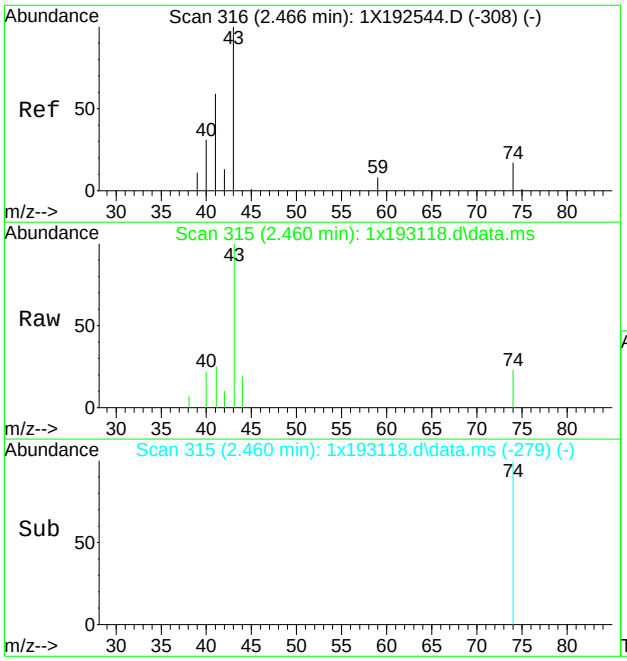


#21
carbon disulfide
Concen: 0.78 ug/L
RT: 2.418 min Scan# 307
Delta R.T. -0.006 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 76 Resp: 4012

Ion	Ratio	Lower	Upper
76	100		
78	10.8	0.0	38.9
44	25.1	0.0	48.2

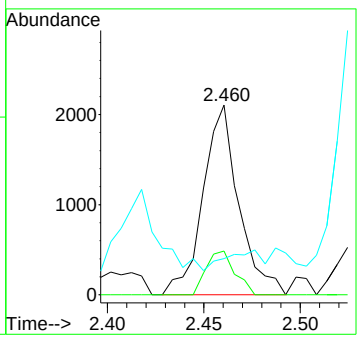


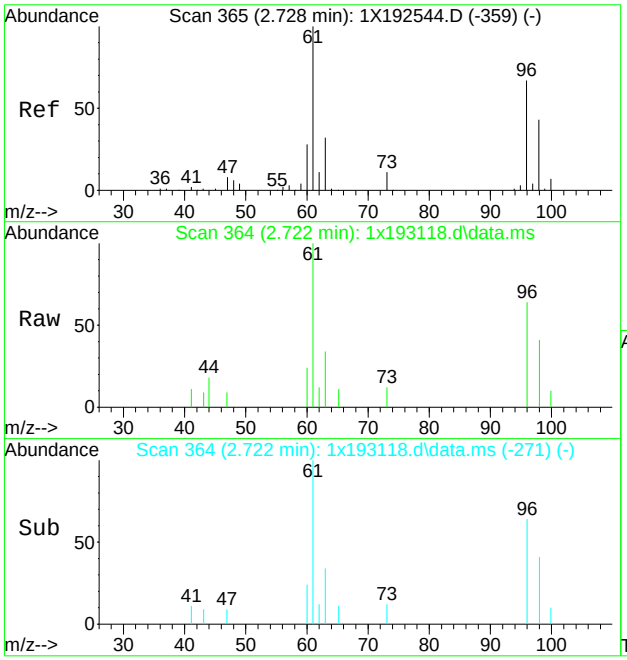


#23
methyl acetate
Concen: 1.23 ug/L
RT: 2.460 min Scan# 315
Delta R.T. -0.006 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 43 Resp: 2725

Ion	Ratio	Lower	Upper
43	100		
74	23.0	0.0	47.4
44	0.0	0.0	33.6

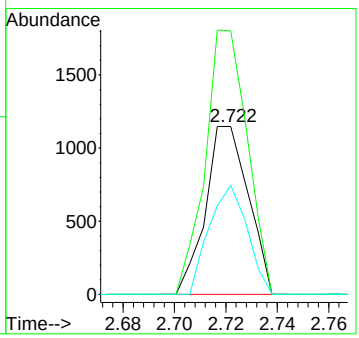


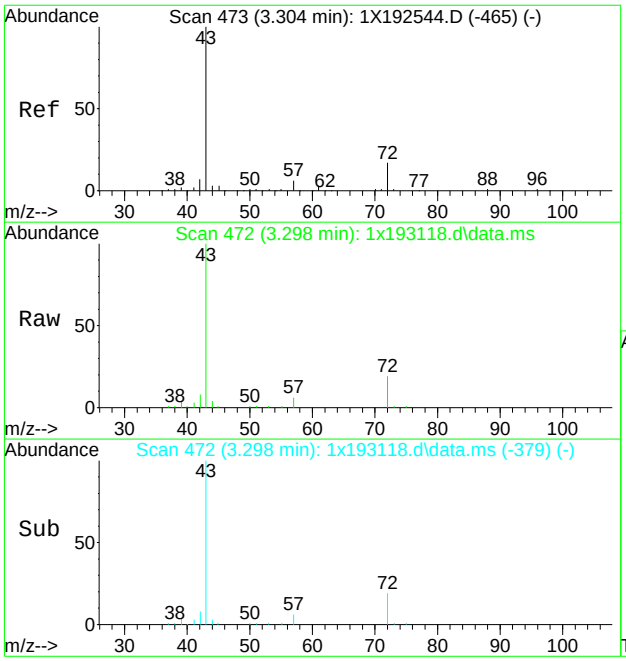


#26
trans-1,2-dichloroethene
Concen: 0.68 ug/L
RT: 2.722 min Scan# 364
Delta R.T. -0.006 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 96 Resp: 1338

Ion	Ratio	Lower	Upper
96	100		
61	156.8	120.2	180.2
98	64.9	34.0	94.0

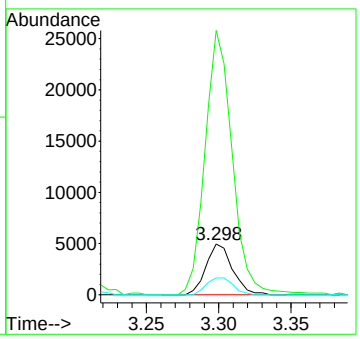


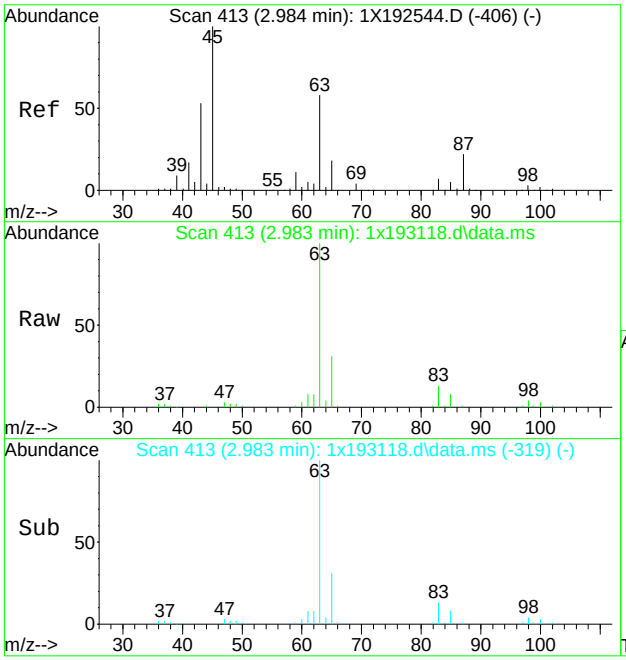


#29
2-butanone
Concen: 24.25 ug/L
RT: 3.298 min Scan# 472
Delta R.T. -0.006 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 72 Resp: 6270

Ion	Ratio	Lower	Upper
72	100		
43	522.1	567.1	627.1#
57	33.6	4.0	64.0

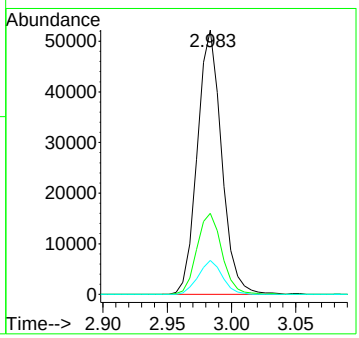


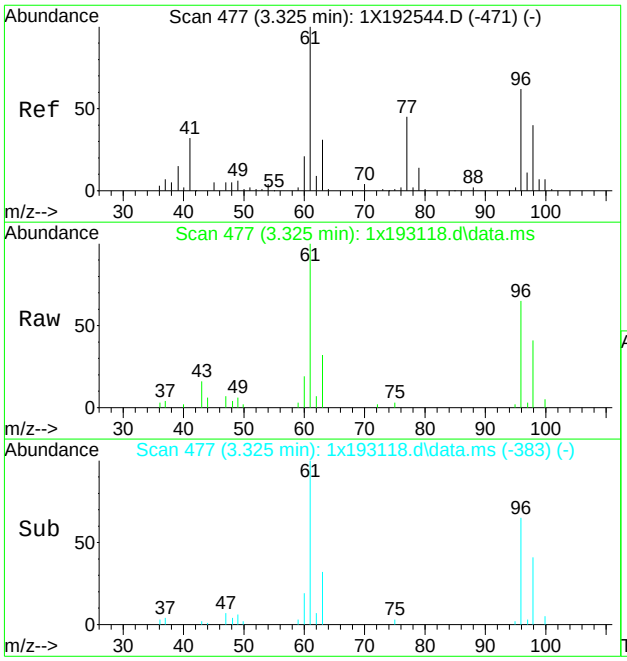


#30
1,1-dichloroethane
Concen: 18.06 ug/L
RT: 2.983 min Scan# 413
Delta R.T. -0.000 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 63 Resp: 68699

Ion	Ratio	Lower	Upper
63	100		
65	30.6	0.9	60.9
83	12.8	0.0	42.5

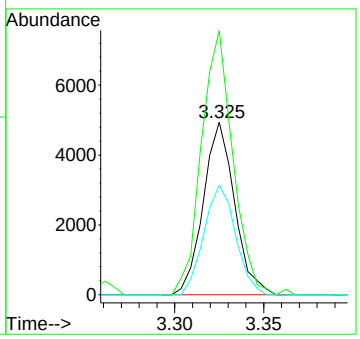


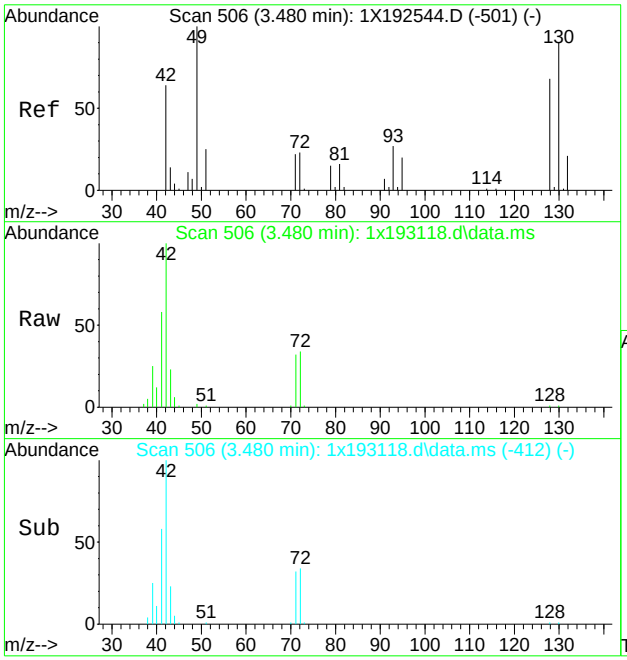


#36
cis-1,2-dichloroethene
Concen: 2.86 ug/L
RT: 3.325 min Scan# 477
Delta R.T. -0.000 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 96 Resp: 6028

Ion	Ratio	Lower	Upper
96	100		
61	153.1	131.2	191.2
98	63.4	34.7	94.7

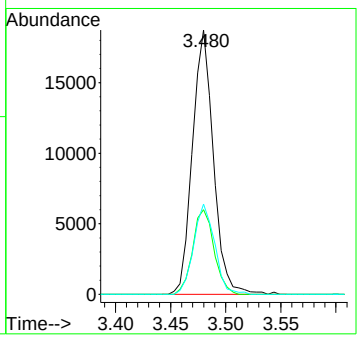


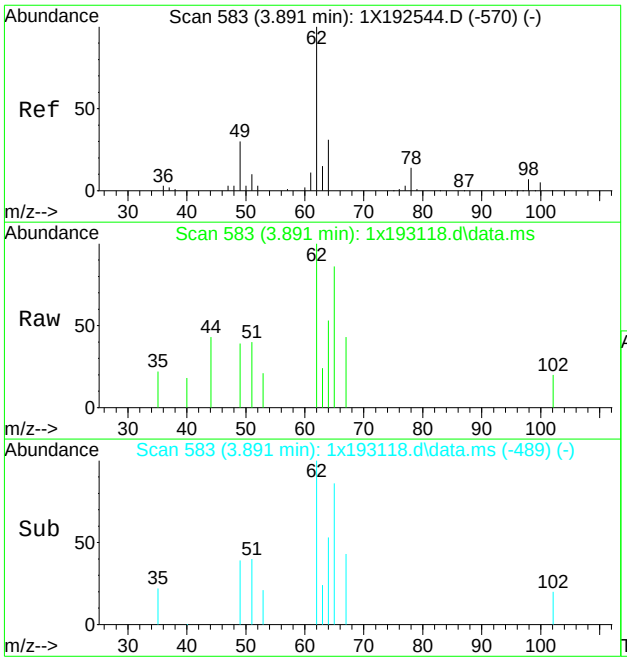


#41
tetrahydrofuran
Concen: 28.81 ug/L
RT: 3.480 min Scan# 506
Delta R.T. -0.000 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 42 Resp: 24843

Ion	Ratio	Lower	Upper
42	100		
71	32.0	5.0	65.0
72	34.2	6.5	66.5

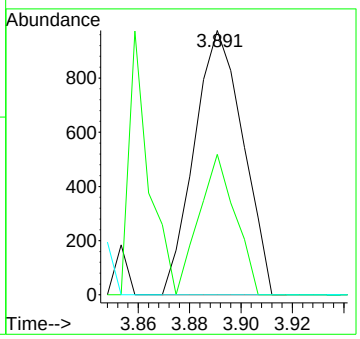


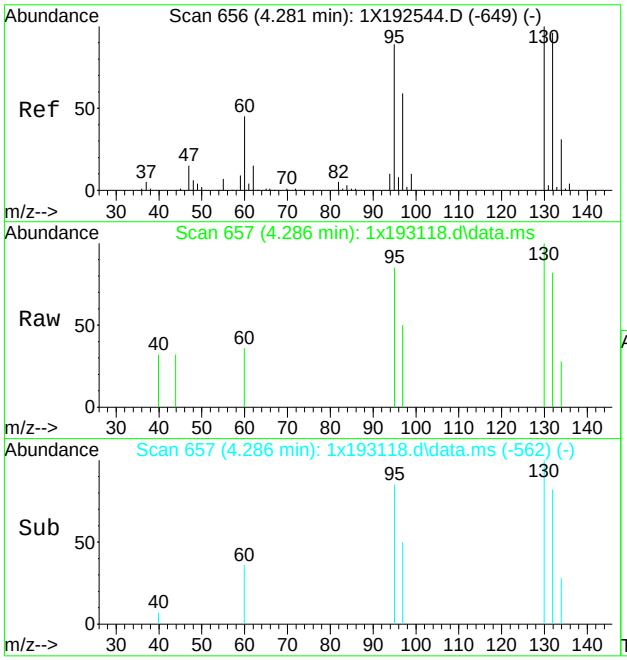


#60
1,2-dichloroethane
Concen: 0.39 ug/L
RT: 3.891 min Scan# 583
Delta R.T. -0.000 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion: 62 Resp: 1290

Ion	Ratio	Lower	Upper
62	100		
64	53.2	1.2	61.2
98	0.0	0.0	37.4

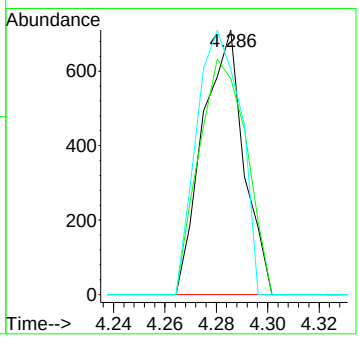


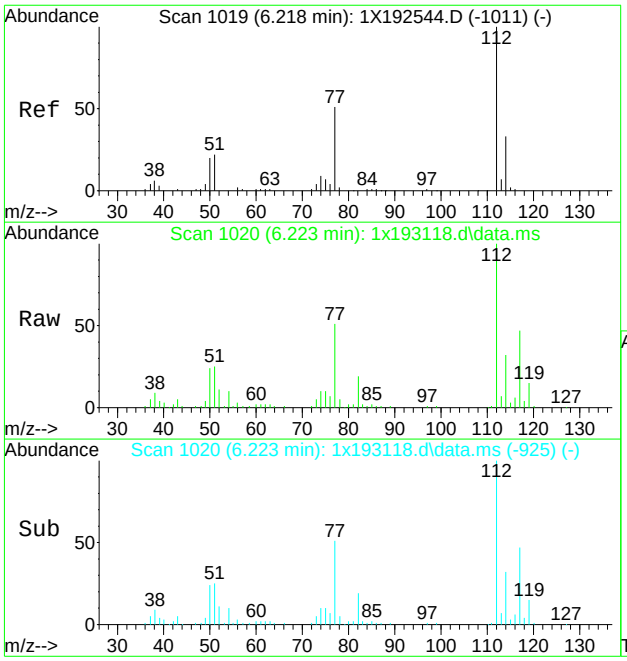


#61
trichloroethene
Concen: 0.33 ug/L
RT: 4.286 min Scan# 657
Delta R.T. 0.005 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion:130 Resp: 791

Ion	Ratio	Lower	Upper
130	100		
132	81.6	65.5	125.5
95	85.1	58.7	118.7

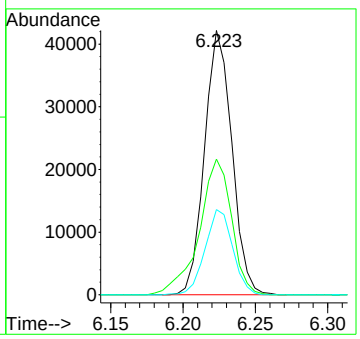


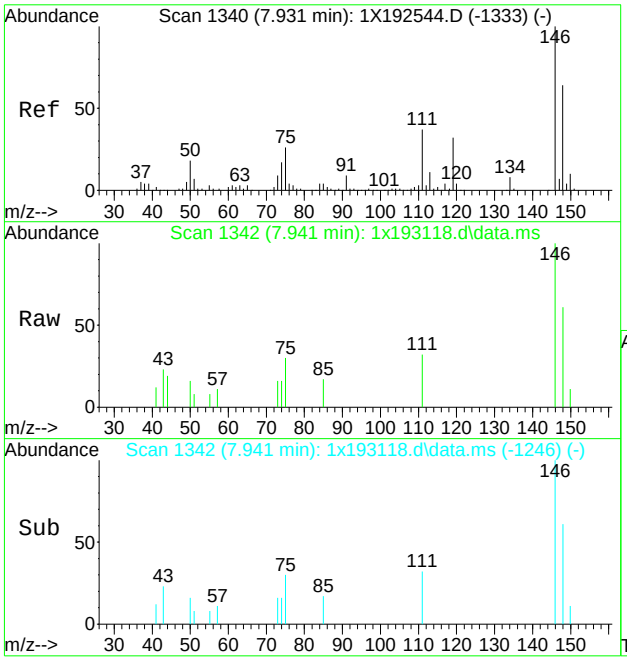


#86
chlorobenzene
Concen: 10.92 ug/L
RT: 6.223 min Scan# 1020
Delta R.T. 0.005 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion:112 Resp: 55439

Ion	Ratio	Lower	Upper
112	100		
77	51.3	20.6	80.6
114	32.2	2.6	62.6

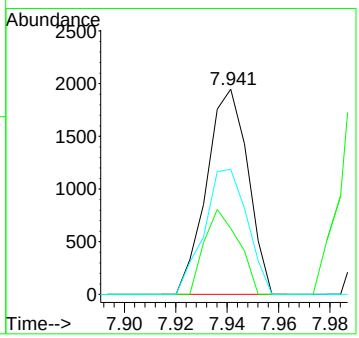


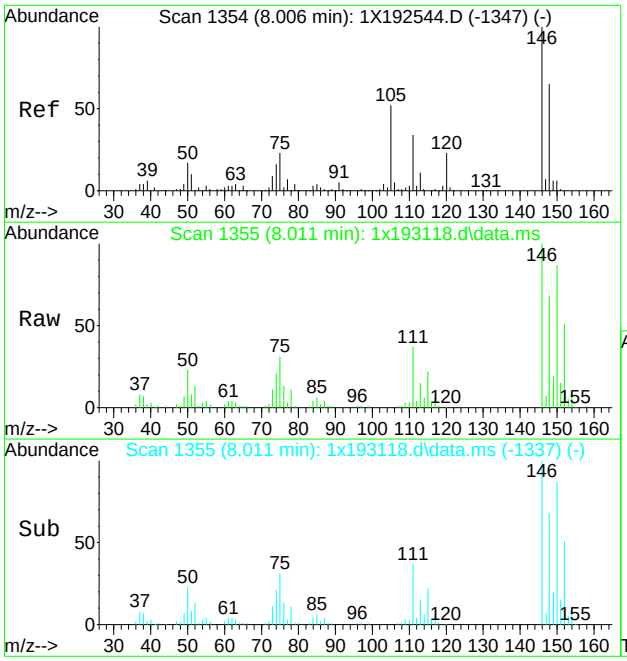


#110
1,3-dichlorobenzene
Concen: 0.53 ug/L
RT: 7.941 min Scan# 1342
Delta R.T. 0.010 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion:146 Resp: 2186

Ion	Ratio	Lower	Upper
146	100		
111	32.1	6.7	66.7
148	60.9	34.1	94.1

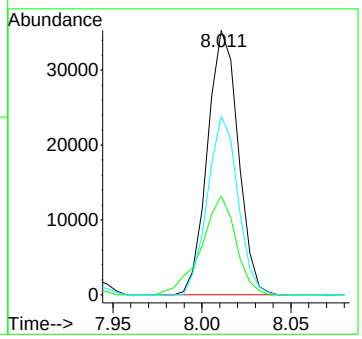


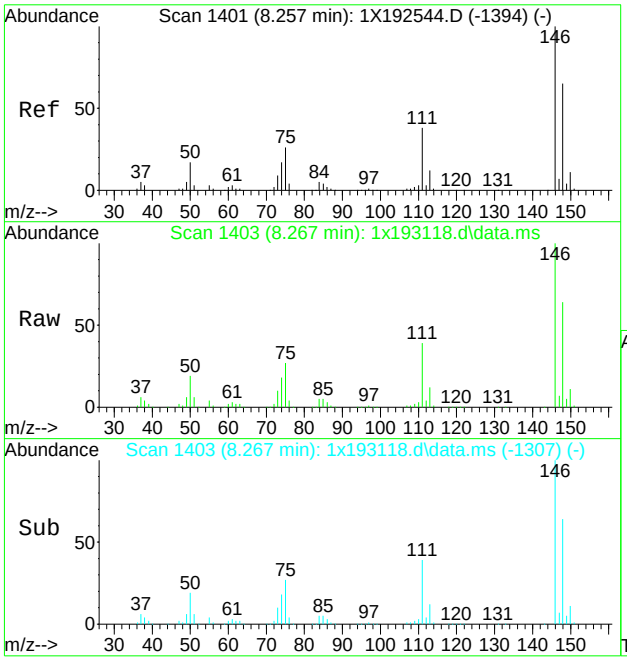


#112
1,4-dichlorobenzene
Concen: 9.87 ug/L
RT: 8.011 min Scan# 1355
Delta R.T. 0.005 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion:146 Resp: 42221

Ion	Ratio	Lower	Upper
146	100		
111	37.3	4.4	64.4
148	67.6	34.6	94.6

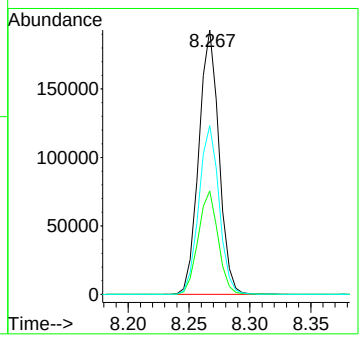


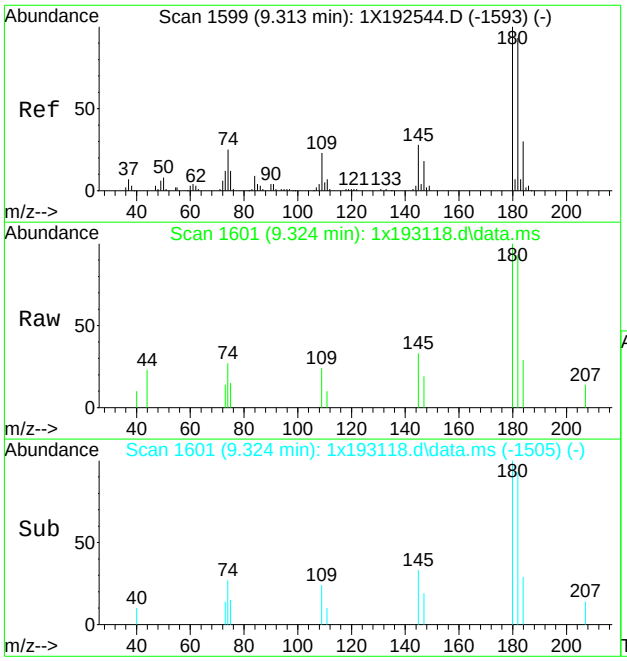


#113
1,2-dichlorobenzene
Concen: 56.64 ug/L
RT: 8.267 min Scan# 1403
Delta R.T. 0.010 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion:146 Resp: 222716

Ion	Ratio	Lower	Upper
146	100		
111	39.1	8.0	68.0
148	63.8	34.7	94.7

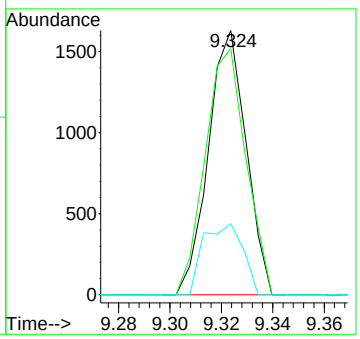




#120
1,2,4-trichlorobenzene
Concen: 0.71 ug/L
RT: 9.324 min Scan# 1601
Delta R.T. 0.010 min
Lab File: 1x193118.d
Acq: 21 Dec 2021 3:00 pm

Tgt Ion:180 Resp: 1665

Ion	Ratio	Lower	Upper
180	100		
182	93.1	63.3	123.3
74	27.0	0.0	55.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-22-2021\vx8366-partial\
Data File : 1x193119.d
Acq On : 21 Dec 2021 3:26 pm
Operator : brittank
Sample : JD36624-15 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8366,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 22 04:31:11 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

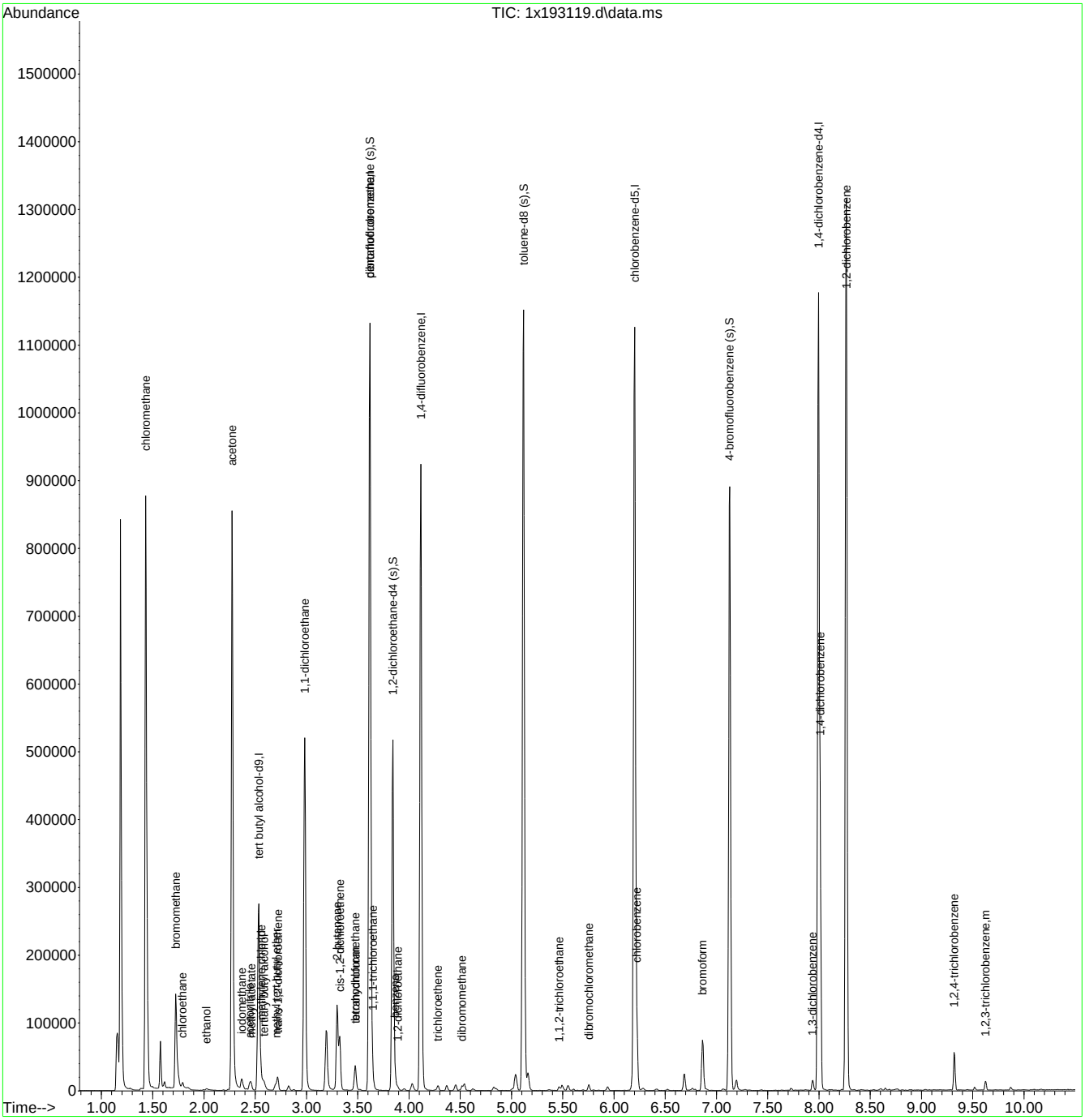
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	2.535	65	217486	500.00	ug/L		-0.01
5) pentafluorobenzene	3.619	168	359203	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.115	114	520861	50.00	ug/L		0.00
73) chlorobenzene-d5	6.202	117	479563	50.00	ug/L		0.00
97) 1,4-dichlorobenzene-d4	7.995	152	212757	50.00	ug/L		0.01
System Monitoring Compounds							
43) dibromofluoromethane (s)	3.619	113	181868	50.21	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.42%				
53) 1,2-dichloroethane-d4 (s)	3.843	65	228240	51.22	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.44%				
74) toluene-d8 (s)	5.118	98	567302	48.65	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.30%				
98) 4-bromofluorobenzene (s)	7.125	95	217718	51.48	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.96%				
Target Compounds							Qvalue
2) ethanol	2.023	45	3353	135.00	ug/L		100
3) tertiary butyl alcohol	2.583	59	7657	24.56	ug/L		80
8) chloromethane	1.431	50	627787	205.23	ug/L		99
10) bromomethane	1.724	96	63963	45.83	ug/L		98
11) chloroethane	1.788	64	4291	3.43	ug/L		93
18) acetone	2.274	58	175256	726.83	ug/L		97
19) acetonitrile	2.445	41	8423	24.69	ug/L		96
20) iodomethane	2.370	142	12787	5.42	ug/L		96
22) methylene chloride	2.557	84	3086	1.67	ug/L		94
23) methyl acetate	2.461	43	6864	3.10	ug/L		96
24) methyl tert butyl ether	2.706	73	5453	1.01	ug/L		99
26) trans-1,2-dichloroethene	2.722	96	3818	1.94	ug/L		95
29) 2-butanone	3.299	72	19996	77.16	ug/L	#	78
30) 1,1-dichloroethane	2.984	63	342754	89.87	ug/L		99
36) cis-1,2-dichloroethene	3.325	96	20015	9.46	ug/L		94
40) bromochloromethane	3.475	128	2857	2.72	ug/L		88
41) tetrahydrofuran	3.480	42	10215	11.82	ug/L		95
45) 1,1,1-trichloroethane	3.645	97	8931	2.57	ug/L		84
57) benzene	3.864	78	5594	0.77	ug/L		100
60) 1,2-dichloroethane	3.891	62	2479	0.75	ug/L		87
61) trichloroethene	4.280	130	1857	0.76	ug/L		97
67) dibromomethane	4.515	93	1578	1.20	ug/L		84
78) 1,1,2-trichloroethane	5.465	83	1259	0.88	ug/L	#	84
83) dibromochloromethane	5.753	129	3652	1.70	ug/L		94
86) chlorobenzene	6.223	112	27597	5.40	ug/L		97
94) bromoform	6.864	173	27374	17.40	ug/L		97
110) 1,3-dichlorobenzene	7.936	146	4449	1.07	ug/L		95
112) 1,4-dichlorobenzene	8.011	146	103005	24.03	ug/L		97
113) 1,2-dichlorobenzene	8.267	146	396163	100.57	ug/L		99
120) 1,2,4-trichlorobenzene	9.319	180	11586	4.90	ug/L		97
121) 1,2,3-trichlorobenzene	9.623	180	3293	1.44	ug/L		93

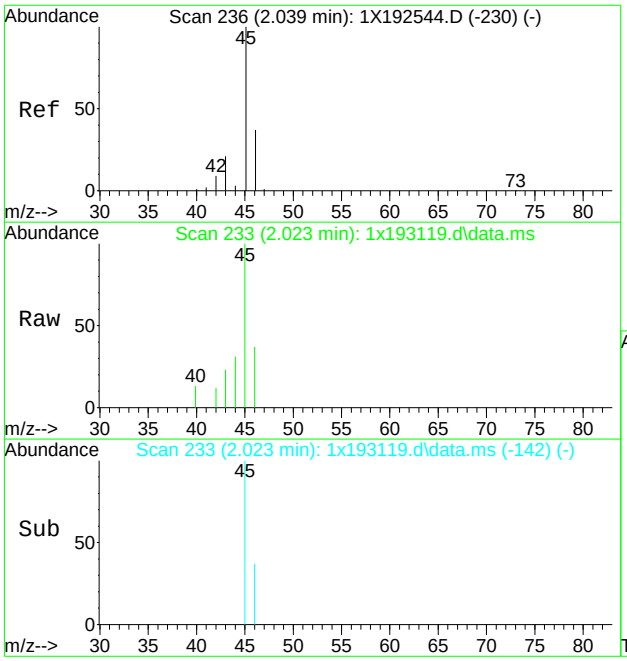
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-22-2021\vx8366-partial\
Data File : 1x193119.d
Acq On : 21 Dec 2021 3:26 pm
Operator : brittank
Sample : JD36624-15 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8366,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 22 04:31:11 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

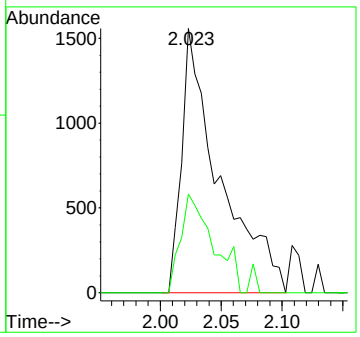


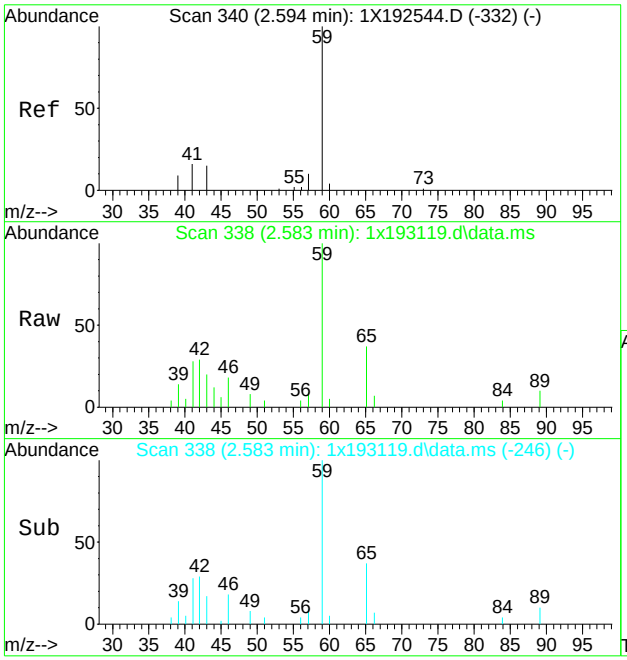


#2
ethanol
Concen: 135.00 ug/L
RT: 2.023 min Scan# 233
Delta R.T. -0.016 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 45 Resp: 3353

Ion	Ratio	Lower	Upper
45	100		
46	37.3	17.4	57.4

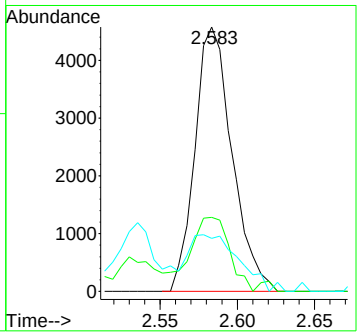


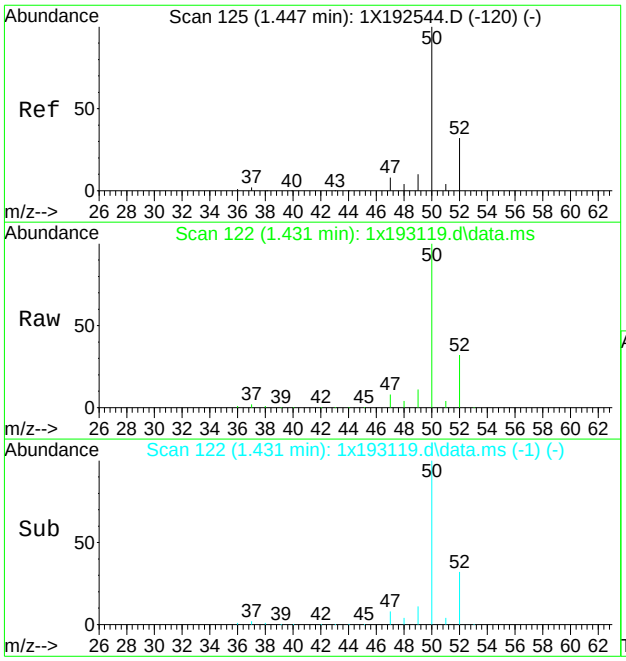


#3
tertiary butyl alcohol
Concen: 24.56 ug/L
RT: 2.583 min Scan# 338
Delta R.T. -0.011 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 59 Resp: 7657

Ion	Ratio	Lower	Upper
59	100		
41	28.0	0.0	46.0
43	20.1	0.0	45.1

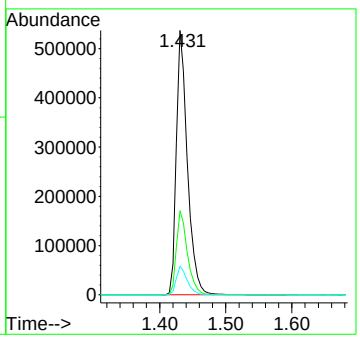


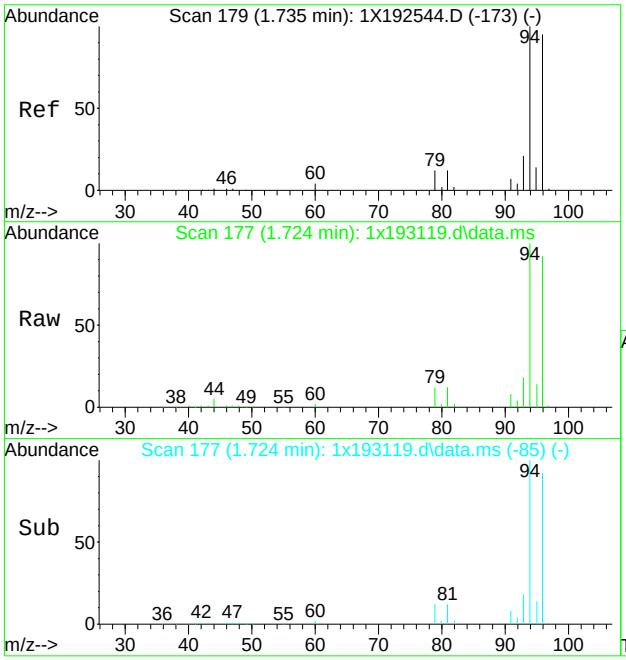


#8
chloromethane
Concen: 205.23 ug/L
RT: 1.431 min Scan# 122
Delta R.T. -0.016 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 50 Resp: 627787

Ion	Ratio	Lower	Upper
50	100		
52	31.9	2.2	62.2
49	10.8	0.0	40.5

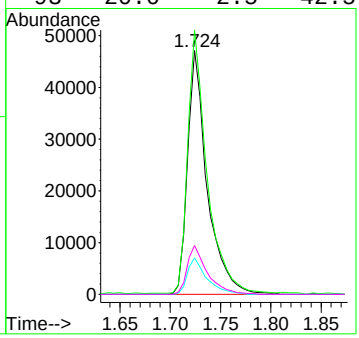


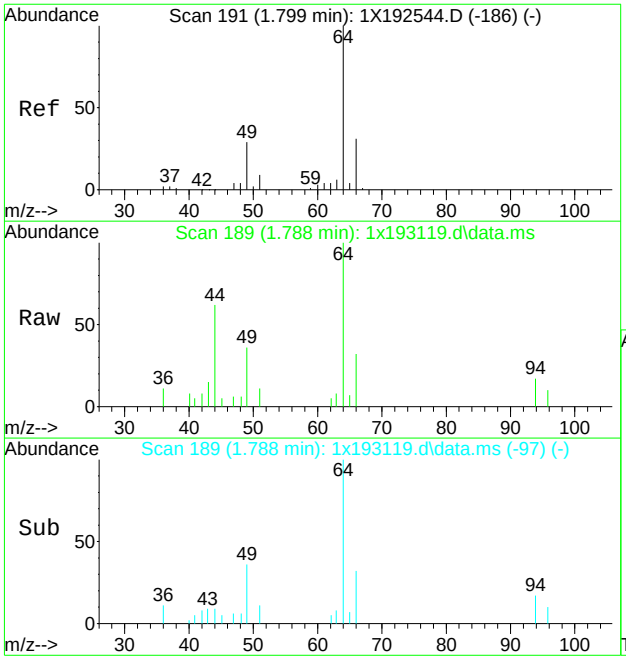


#10
bromomethane
Concen: 45.83 ug/L
RT: 1.724 min Scan# 177
Delta R.T. -0.011 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 96 Resp: 63963

Ion	Ratio	Lower	Upper
96	100		
94	108.0	85.7	125.7
95	14.9	0.0	34.9
93	20.0	2.5	42.5

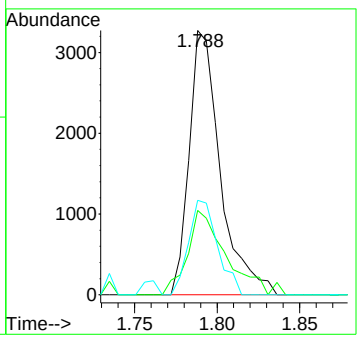


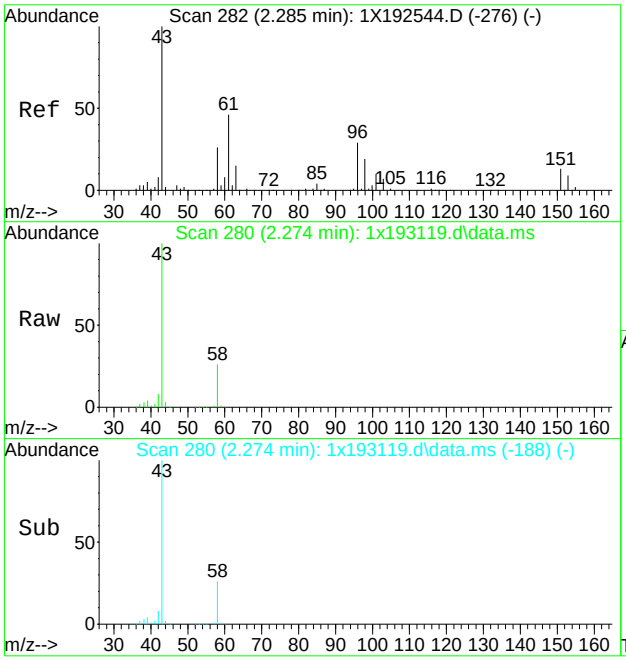


#11
chloroethane
Concen: 3.43 ug/L
RT: 1.788 min Scan# 189
Delta R.T. -0.011 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 64 Resp: 4291

Ion	Ratio	Lower	Upper
64	100		
66	31.9	0.6	60.6
49	35.7	0.0	59.3

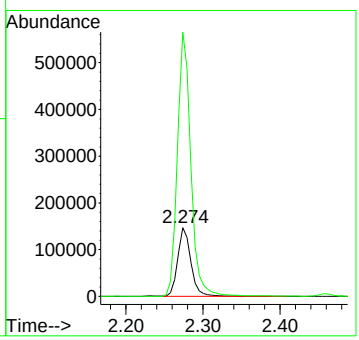


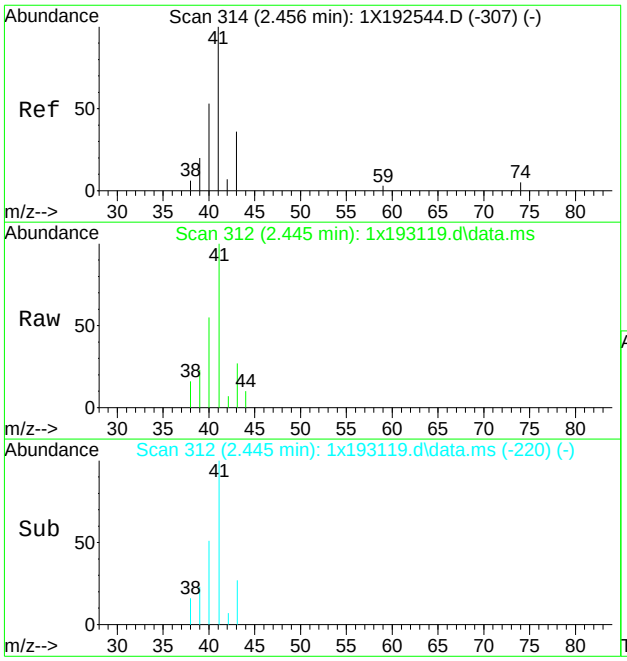


#18
acetone
Concen: 726.83 ug/L
RT: 2.274 min Scan# 280
Delta R.T. -0.011 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 58 Resp: 175256

Ion	Ratio	Lower	Upper
58	100		
43	384.9	348.5	408.5

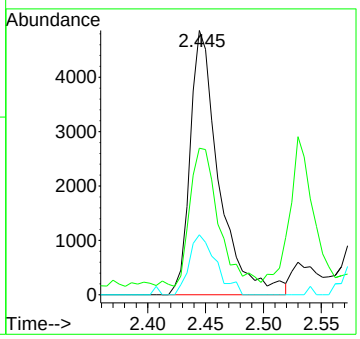


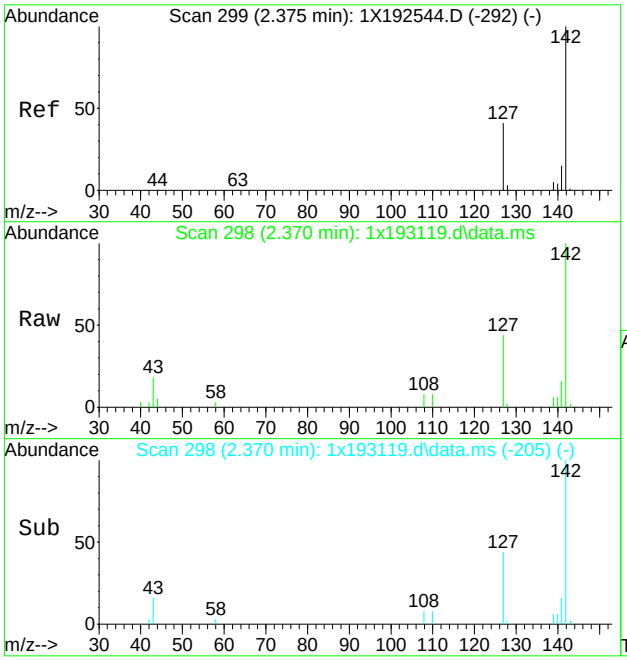


#19
acetonitrile
Concen: 24.69 ug/L
RT: 2.445 min Scan# 312
Delta R.T. -0.011 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 41 Resp: 8423

Ion	Ratio	Lower	Upper
41	100		
40	50.2	22.9	82.9
39	22.7	0.0	49.9

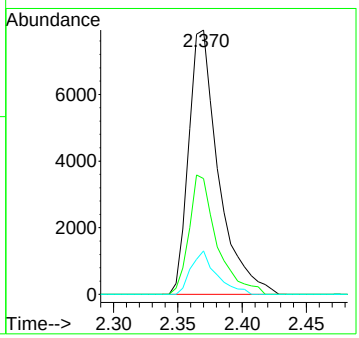


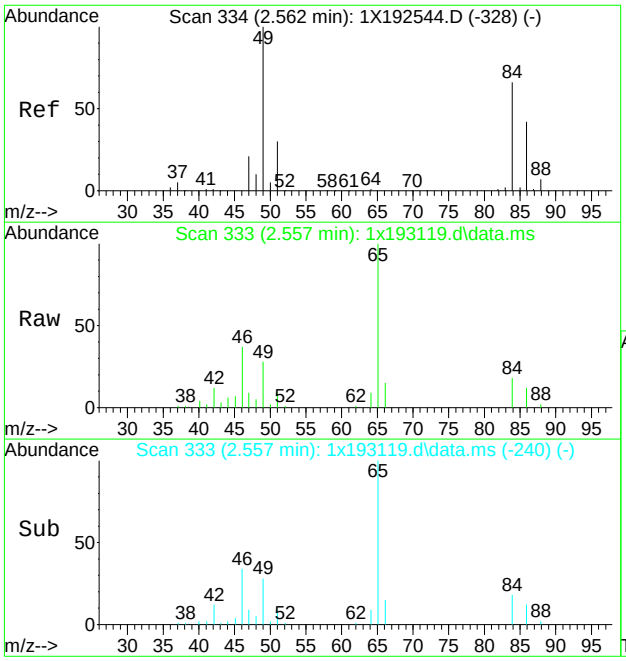


#20
iodomethane
Concen: 5.42 ug/L
RT: 2.370 min Scan# 298
Delta R.T. -0.006 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion:142 Resp: 12787

Ion	Ratio	Lower	Upper
142	100		
127	43.8	11.0	71.0
141	16.4	0.0	44.6

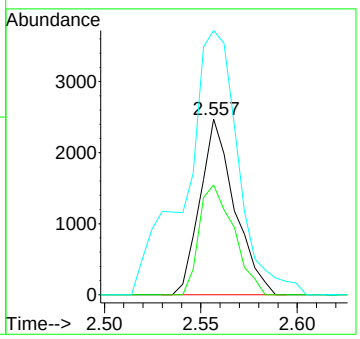


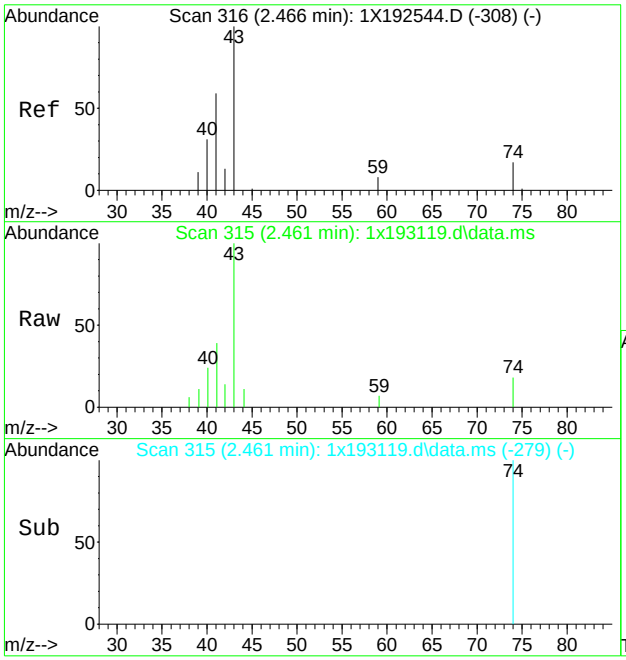


#22
methylene chloride
Concen: 1.67 ug/L
RT: 2.557 min Scan# 333
Delta R.T. -0.006 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 84 Resp: 3086

Ion	Ratio	Lower	Upper
84	100		
86	62.6	34.3	94.3
49	142.7	122.9	182.9

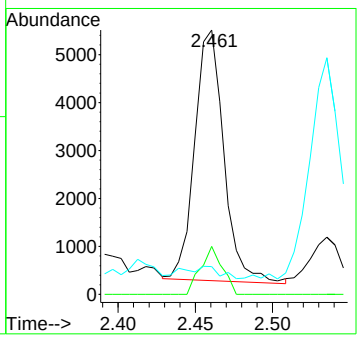


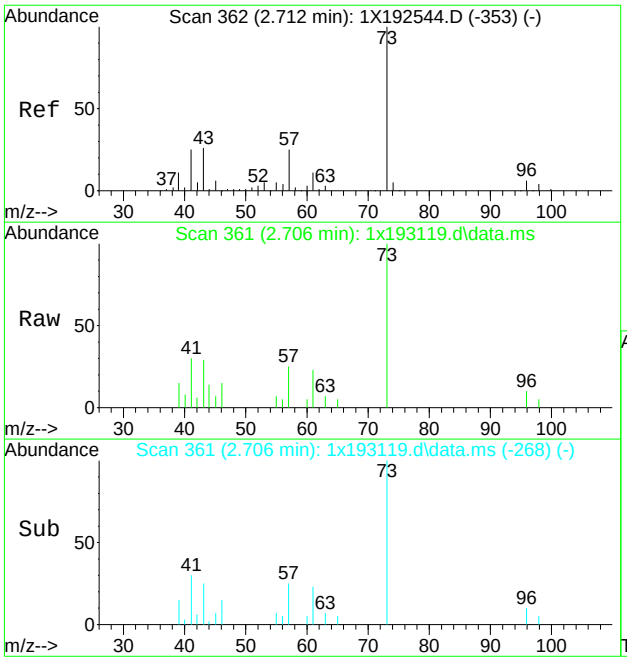


#23
methyl acetate
Concen: 3.10 ug/L
RT: 2.461 min Scan# 315
Delta R.T. -0.006 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 43 Resp: 6864

Ion	Ratio	Lower	Upper
43	100		
74	19.3	0.0	47.4
44	3.6	0.0	33.6

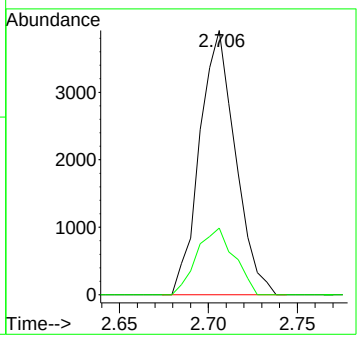


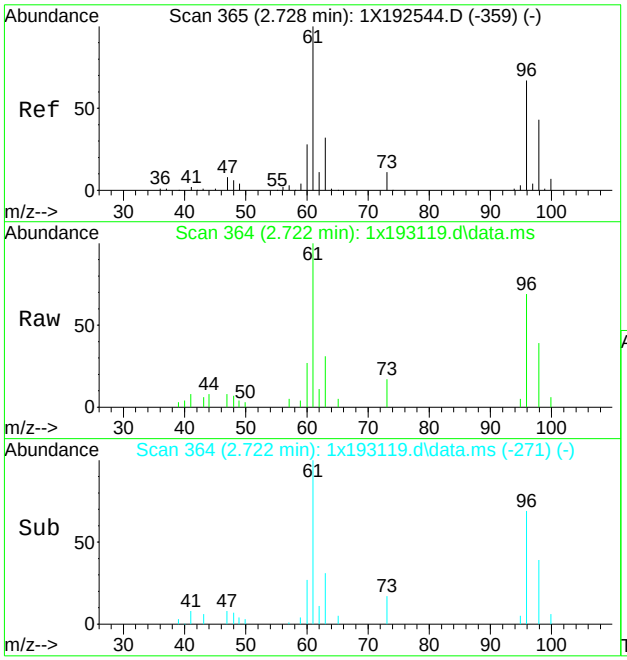


#24
methyl tert butyl ether
Concen: 1.01 ug/L
RT: 2.706 min Scan# 361
Delta R.T. -0.006 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 73 Resp: 5453

Ion	Ratio	Lower	Upper
73	100		
57	25.2	0.0	54.6

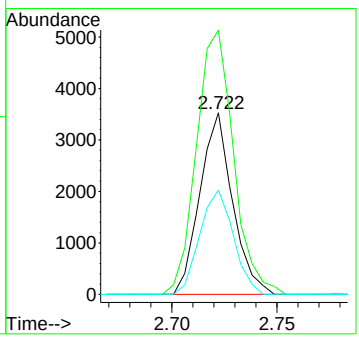


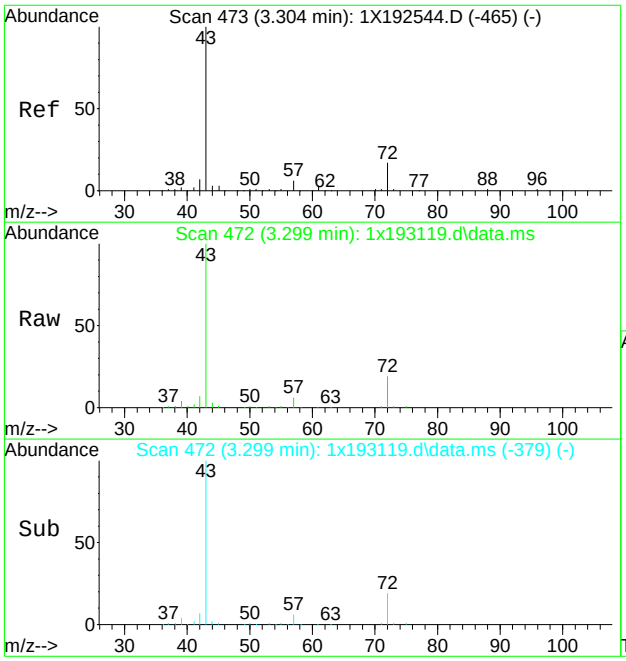


#26
trans-1,2-dichloroethene
Concen: 1.94 ug/L
RT: 2.722 min Scan# 364
Delta R.T. -0.006 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 96 Resp: 3818

Ion	Ratio	Lower	Upper
96	100		
61	145.6	120.2	180.2
98	57.4	34.0	94.0

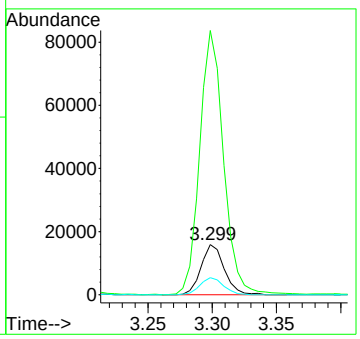


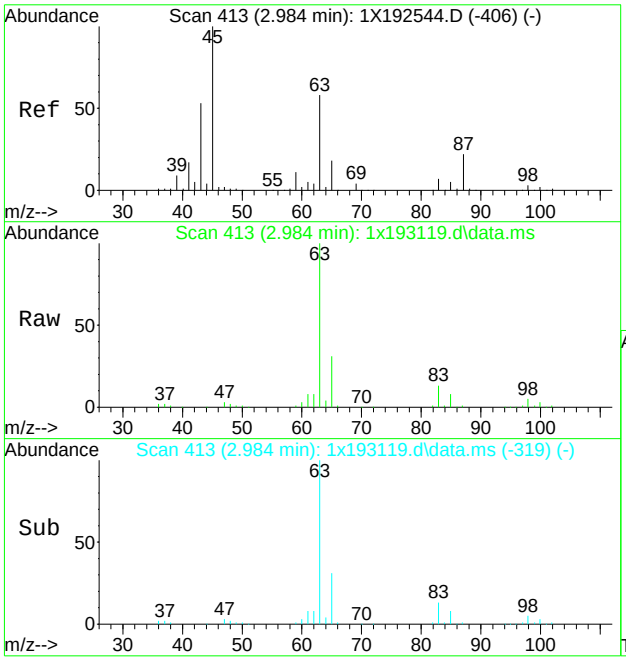


#29
2-butanone
Concen: 77.16 ug/L
RT: 3.299 min Scan# 472
Delta R.T. -0.006 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 72 Resp: 19996

Ion	Ratio	Lower	Upper
72	100		
43	525.6	567.1	627.1#
57	33.8	4.0	64.0

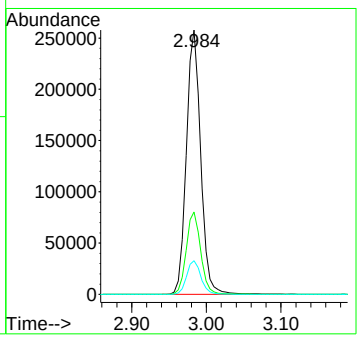


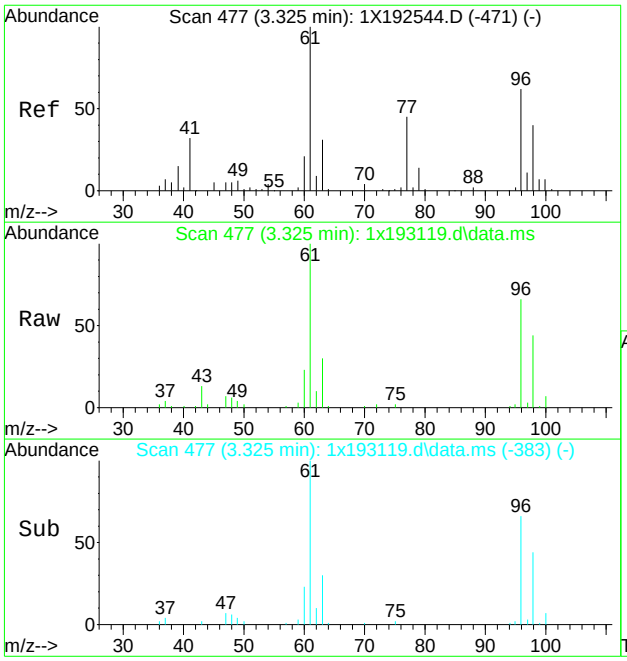


#30
1,1-dichloroethane
Concen: 89.87 ug/L
RT: 2.984 min Scan# 413
Delta R.T. -0.000 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 63 Resp: 342754

Ion	Ratio	Lower	Upper
63	100		
65	31.2	0.9	60.9
83	12.7	0.0	42.5

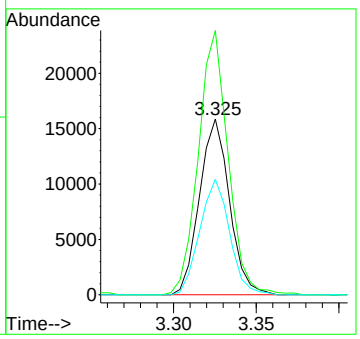


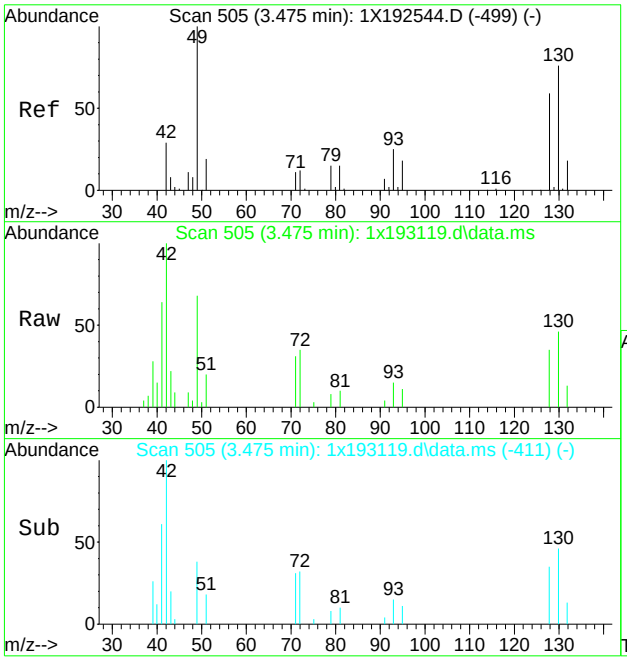


#36
cis-1,2-dichloroethene
Concen: 9.46 ug/L
RT: 3.325 min Scan# 477
Delta R.T. -0.000 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 96 Resp: 20015

Ion	Ratio	Lower	Upper
96	100		
61	150.4	131.2	191.2
98	65.7	34.7	94.7

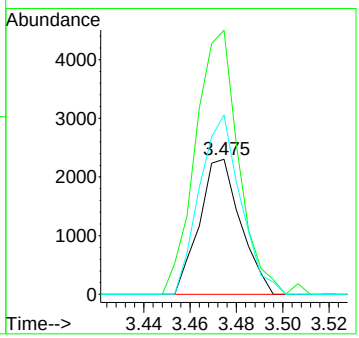


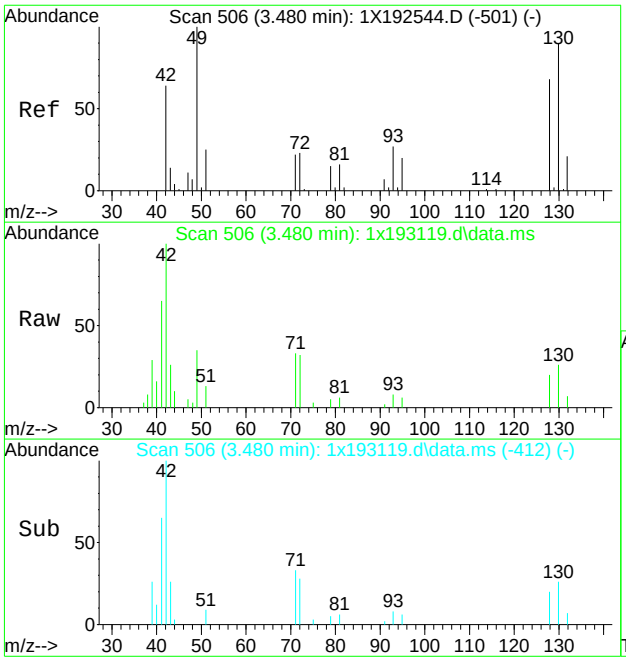


#40
bromochloromethane
Concen: 2.72 ug/L
RT: 3.475 min Scan# 505
Delta R.T. -0.000 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion:128 Resp: 2857

Ion	Ratio	Lower	Upper
128	100		
49	195.8	140.3	200.3
130	132.8	99.9	159.9

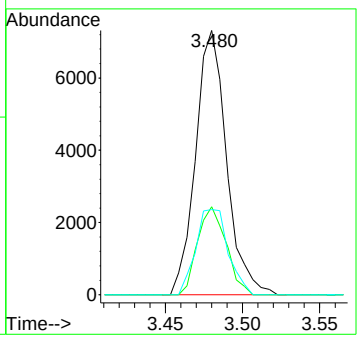


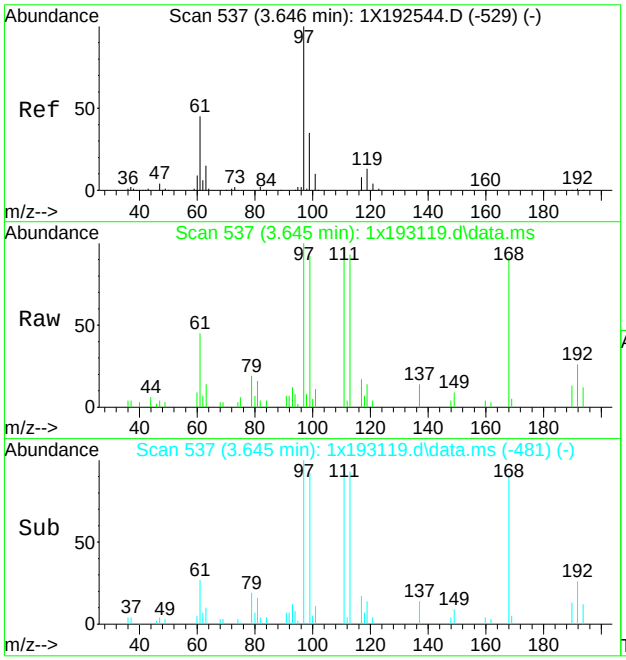


#41
tetrahydrofuran
Concen: 11.82 ug/L
RT: 3.480 min Scan# 506
Delta R.T. -0.000 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 42 Resp: 10215

Ion	Ratio	Lower	Upper
42	100		
71	33.3	5.0	65.0
72	32.2	6.5	66.5

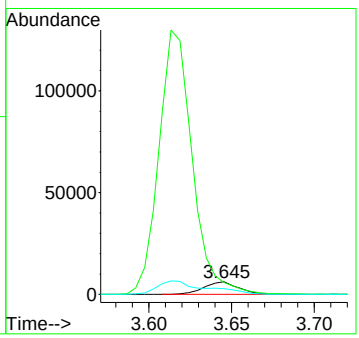


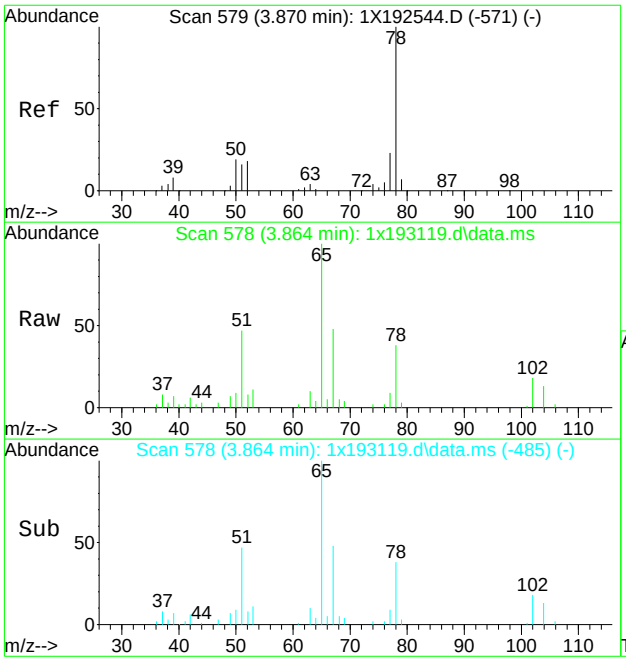


#45
1,1,1-trichloroethane
Concen: 2.57 ug/L
RT: 3.645 min Scan# 537
Delta R.T. -0.000 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 97 Resp: 8931

Ion	Ratio	Lower	Upper
97	100		
99	88.0	37.2	97.2
61	45.0	16.0	76.0

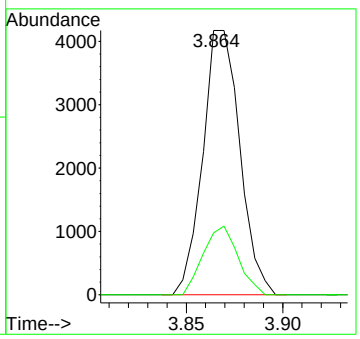


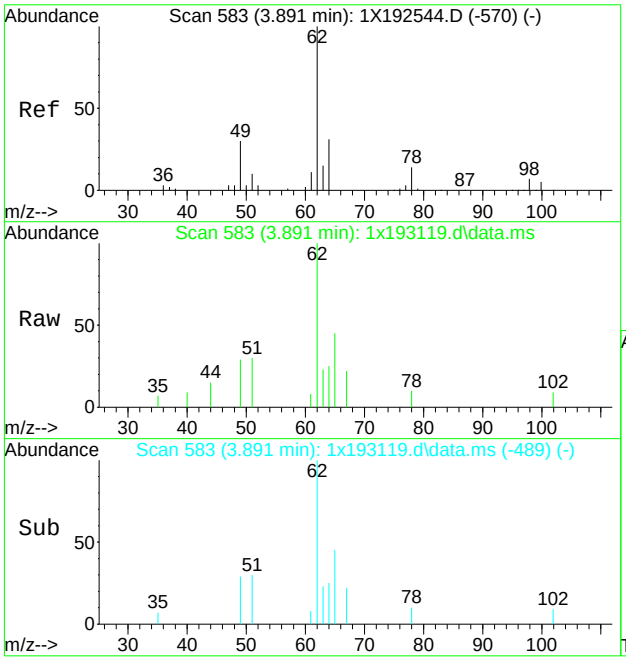


#57
benzene
Concen: 0.77 ug/L
RT: 3.864 min Scan# 578
Delta R.T. -0.006 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 78 Resp: 5594

Ion	Ratio	Lower	Upper
78	100		
77	23.5	0.0	53.3

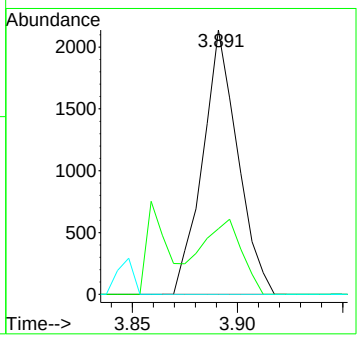


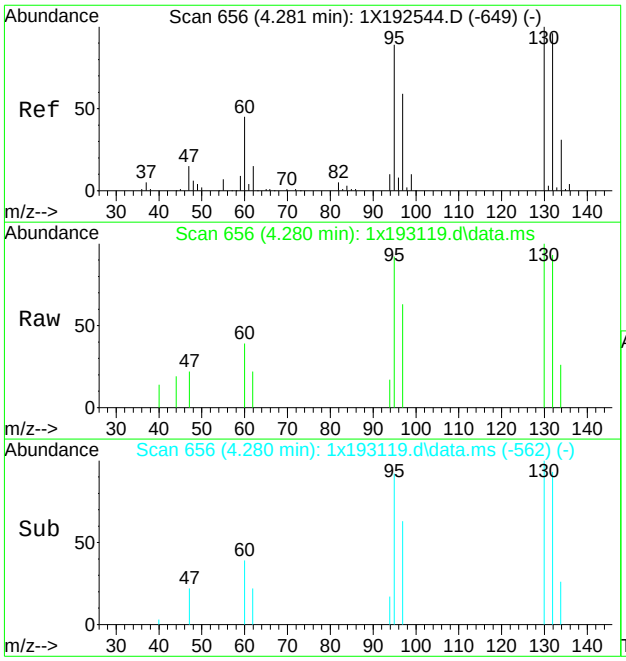


#60
1,2-dichloroethane
Concen: 0.75 ug/L
RT: 3.891 min Scan# 583
Delta R.T. -0.000 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 62 Resp: 2479

Ion	Ratio	Lower	Upper
62	100		
64	24.8	1.2	61.2
98	0.0	0.0	37.4

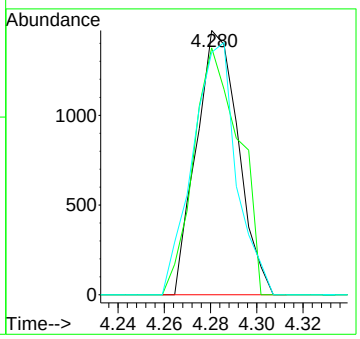


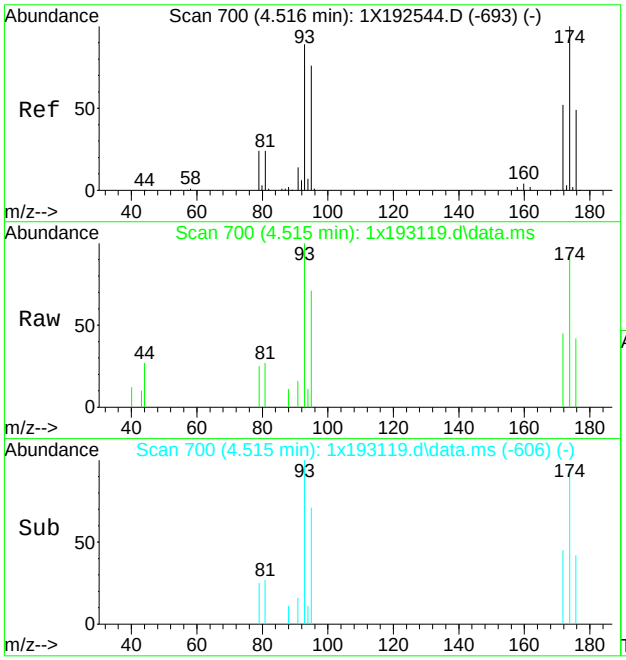


#61
trichloroethene
Concen: 0.76 ug/L
RT: 4.280 min Scan# 656
Delta R.T. -0.000 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion:130 Resp: 1857

Ion	Ratio	Lower	Upper
130	100		
132	93.3	65.5	125.5
95	91.6	58.7	118.7

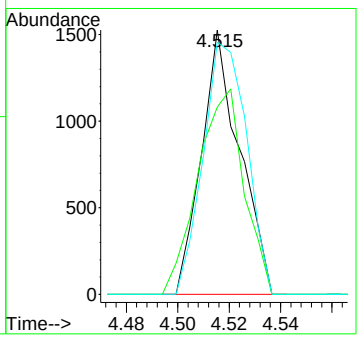


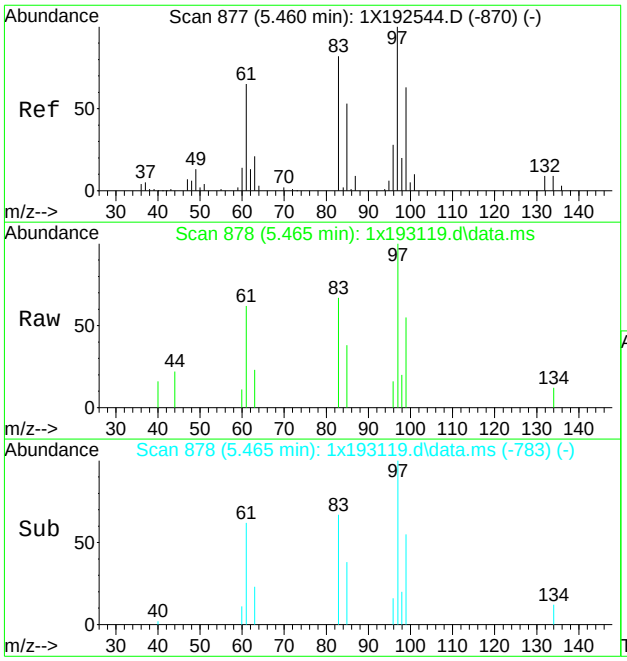


#67
dibromomethane
Concen: 1.20 ug/L
RT: 4.515 min Scan# 700
Delta R.T. -0.000 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 93 Resp: 1578

Ion	Ratio	Lower	Upper
93	100		
95	70.8	55.1	115.1
174	95.4	82.1	142.1

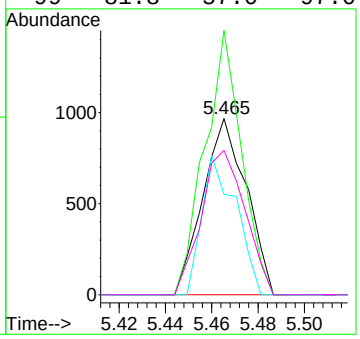


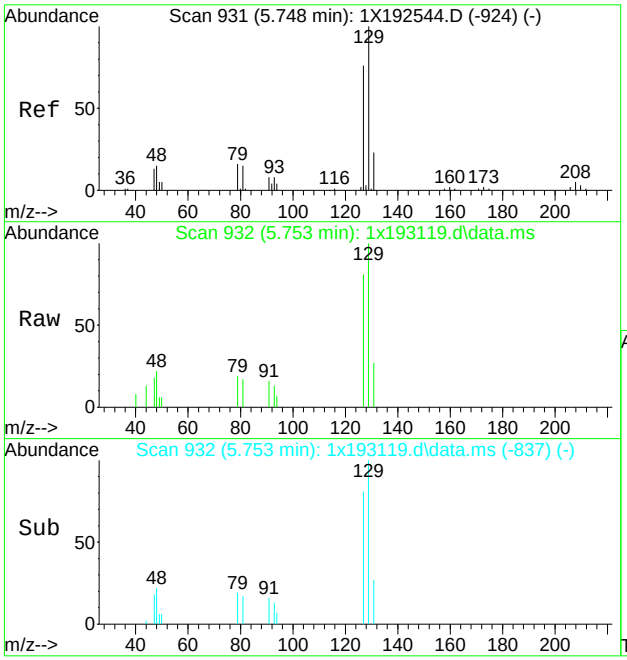


#78
1,1,2-trichloroethane
Concen: 0.88 ug/L
RT: 5.465 min Scan# 878
Delta R.T. 0.005 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion: 83 Resp: 1259

Ion	Ratio	Lower	Upper
83	100		
97	149.9	101.6	141.6#
85	56.9	44.6	84.6
99	81.8	57.0	97.0

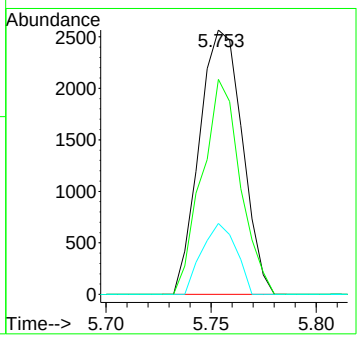


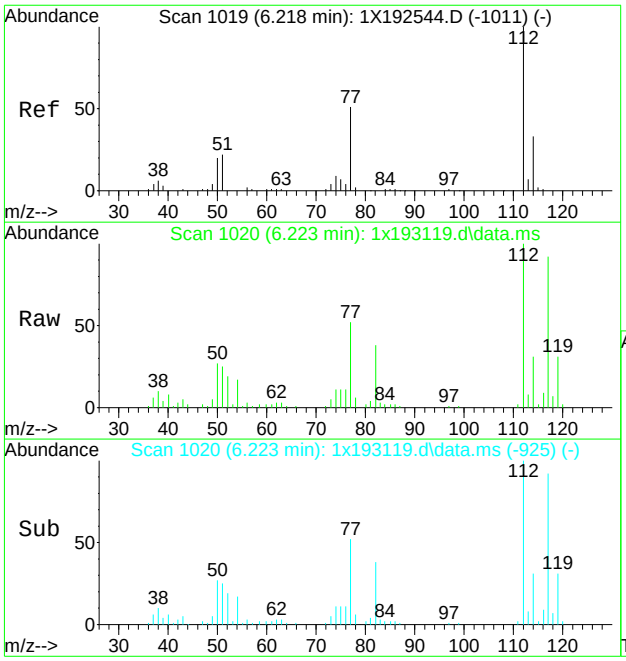


#83
dibromochloromethane
Concen: 1.70 ug/L
RT: 5.753 min Scan# 932
Delta R.T. 0.005 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion:129 Resp: 3652

Ion	Ratio	Lower	Upper
129	100		
127	81.3	46.5	106.5
131	26.9	0.0	53.5

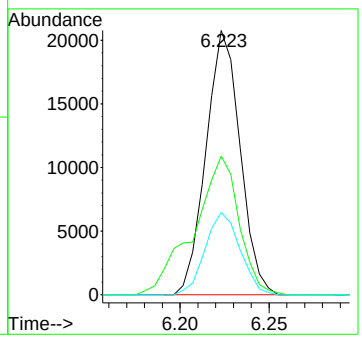


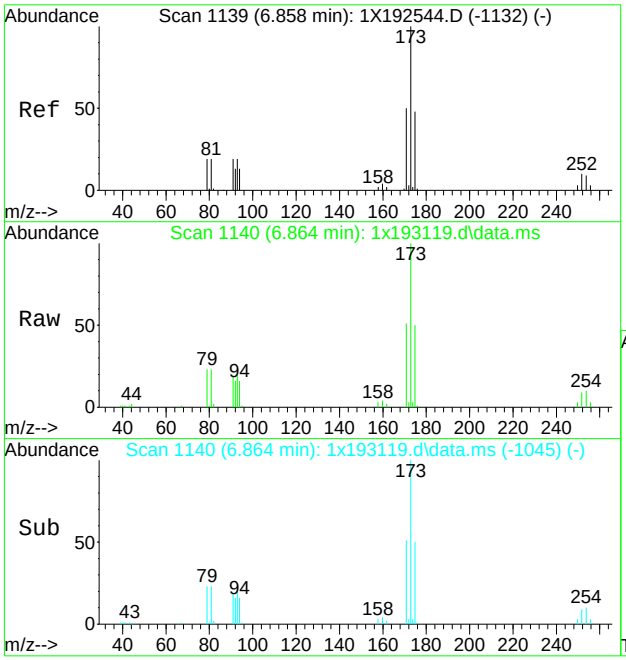


#86
chlorobenzene
Concen: 5.40 ug/L
RT: 6.223 min Scan# 1020
Delta R.T. 0.005 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion:112 Resp: 27597

Ion	Ratio	Lower	Upper
112	100		
77	52.5	20.6	80.6
114	31.1	2.6	62.6

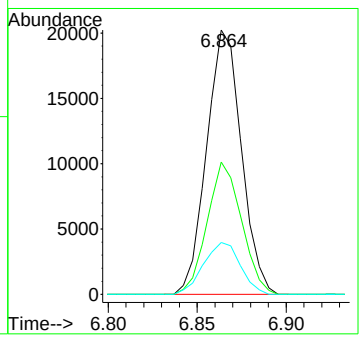


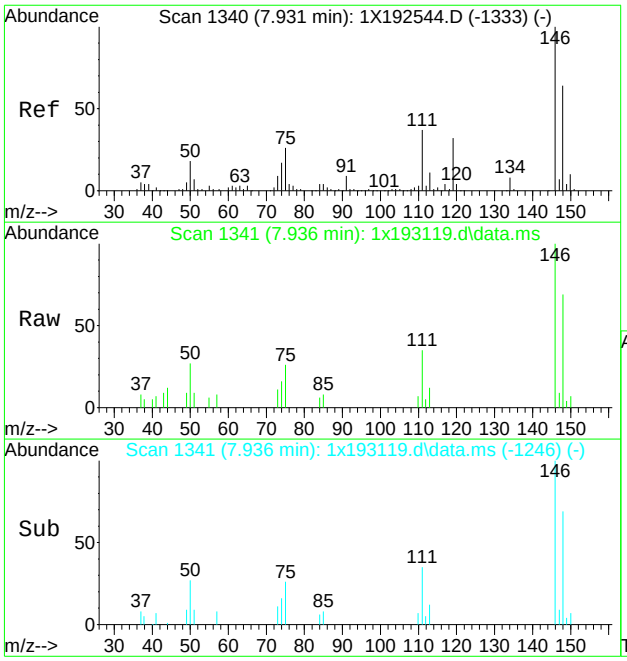


#94
bromoform
Concen: 17.40 ug/L
RT: 6.864 min Scan# 1140
Delta R.T. 0.005 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion:173 Resp: 27374

Ion	Ratio	Lower	Upper
173	100		
175	50.0	18.1	78.1
93	19.6	0.0	48.9

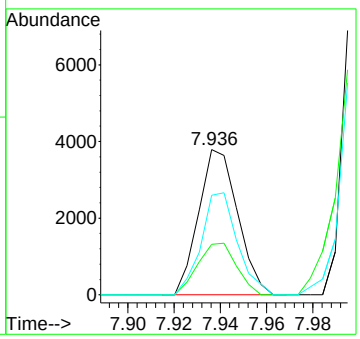


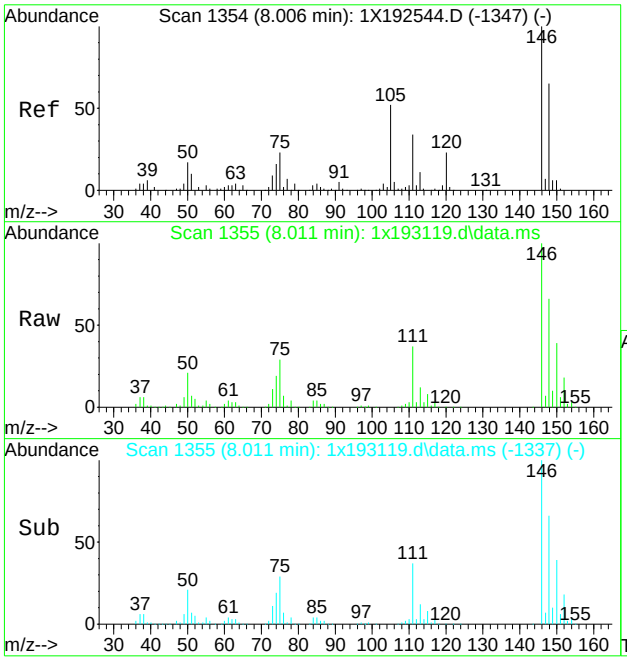


#110
1,3-dichlorobenzene
Concen: 1.07 ug/L
RT: 7.936 min Scan# 1341
Delta R.T. 0.005 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion:146 Resp: 4449

Ion	Ratio	Lower	Upper
146	100		
111	34.8	6.7	66.7
148	68.7	34.1	94.1

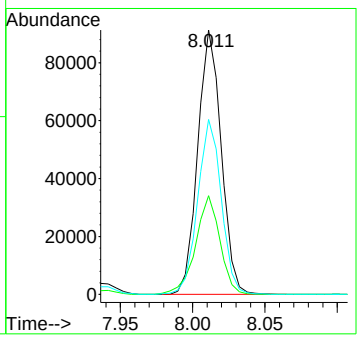


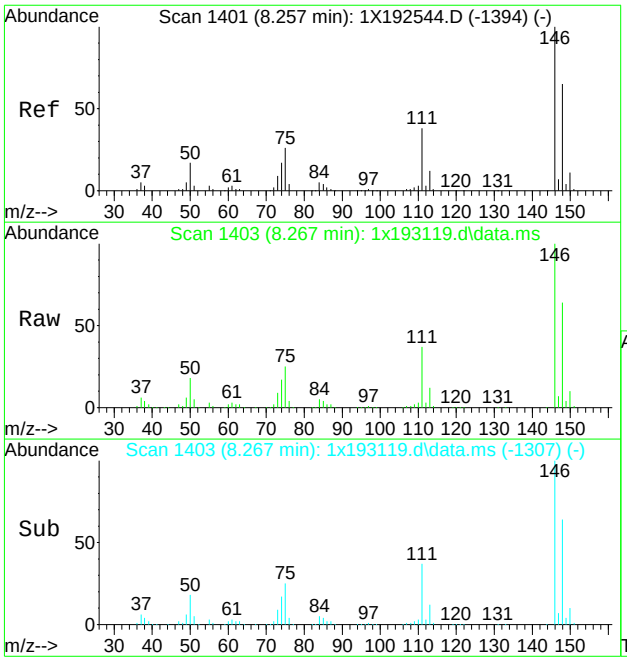


#112
1,4-dichlorobenzene
Concen: 24.03 ug/L
RT: 8.011 min Scan# 1355
Delta R.T. 0.005 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion:146 Resp: 103005

Ion	Ratio	Lower	Upper
146	100		
111	37.4	4.4	64.4
148	66.2	34.6	94.6

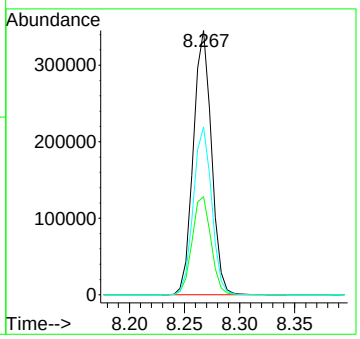


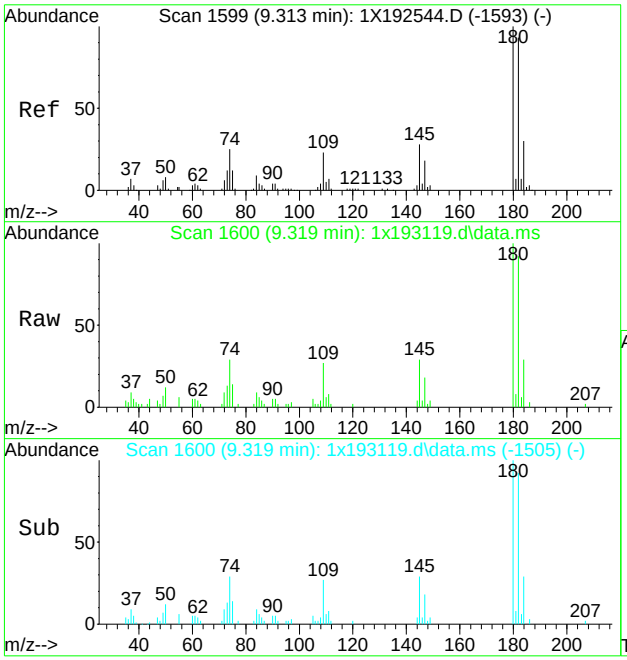


#113
1,2-dichlorobenzene
Concen: 100.57 ug/L
RT: 8.267 min Scan# 1403
Delta R.T. 0.010 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion:146 Resp: 396163

Ion	Ratio	Lower	Upper
146	100		
111	37.1	8.0	68.0
148	63.5	34.7	94.7

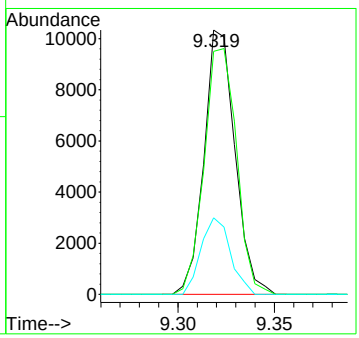


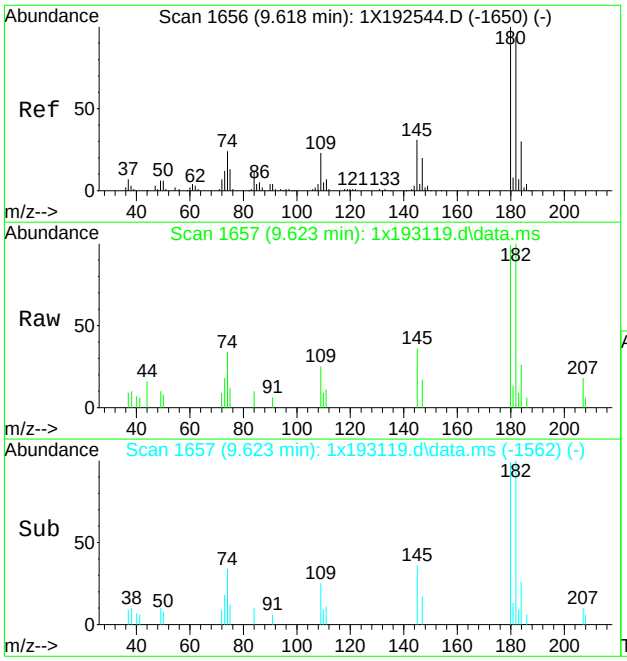


#120
1,2,4-trichlorobenzene
Concen: 4.90 ug/L
RT: 9.319 min Scan# 1600
Delta R.T. 0.005 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion:180 Resp: 11586

Ion	Ratio	Lower	Upper
180	100		
182	91.9	63.3	123.3
74	29.0	0.0	55.0

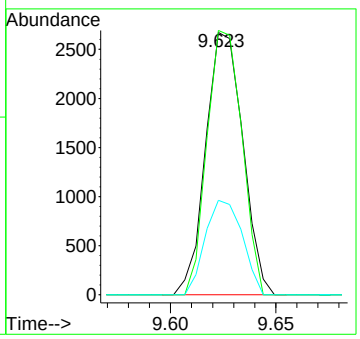




#121
1,2,3-trichlorobenzene
Concen: 1.44 ug/L
RT: 9.623 min Scan# 1657
Delta R.T. 0.005 min
Lab File: 1x193119.d
Acq: 21 Dec 2021 3:26 pm

Tgt Ion:180 Resp: 3293

Ion	Ratio	Lower	Upper
180	100		
182	100.8	64.5	124.5
145	36.0	1.1	61.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12232021\v2v3457\
Data File : 2v83931.d
Acq On : 22 Dec 2021 3:59 pm
Operator : nickw
Sample : jd36624-15 Inst : MS2V
Misc : MS55557,V2V3457,5,,,,5
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 27 01:23:59 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 17:15:16 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	2.594	65	216893	500.00	ug/L		0.00
5) pentafluorobenzene	3.753	168	395910	50.00	ug/L		0.00
50) 1,4-difluorobenzene	4.293	114	573504	50.00	ug/L		0.00
72) chlorobenzene-d5	6.642	117	449328	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	8.828	152	179561	50.00	ug/L		0.00
System Monitoring Compounds							
42) dibromofluoromethane (s)	3.747	113	181422	49.43	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.86%				
51) 1,2-dichloroethane-d4 (s)	3.983	65	214014	58.18	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 116.36%				
73) toluene-d8 (s)	5.409	98	571285	50.30	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.60%				
97) 4-bromofluorobenzene (s)	7.716	95	201759	49.24	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.48%				
Target Compounds							Qvalue
2) ethanol	2.070	45	2268	28.28	ug/L		85
3) tertiary butyl alcohol	2.646	59	6483	7.80	ug/L		69
8) chloromethane	1.467	52	70850	42.13	ug/L		93
10) bromomethane	1.760	96	14343	8.46	ug/L		96
11) chloroethane	1.828	64	2761	1.10	ug/L		93
18) acetone	2.321	43	231255	96.99	ug/L		94
19) acetonitrile	2.494	41	4215	5.73	ug/L		95
20) iodomethane	2.416	142	6623	3.19	ug/L		98
21) carbon disulfide	2.468	76	3095	0.33	ug/L		80
22) methylene chloride	2.610	84	2726	0.69	ug/L		85
23) methyl acetate	2.515	43	6222	1.34	ug/L		97
25) trans-1,2-dichloroethene	2.788	96	1764	0.50	ug/L		87
29) 1,1-dichloroethane	3.061	63	110010	16.31	ug/L		99
34) 2-butanone	3.401	72	6988	11.40	ug/L		95
36) cis-1,2-dichloroethene	3.428	96	10935	2.79	ug/L		97
39) bromochloromethane	3.585	128	1928	0.87	ug/L	#	76
40) tetrahydrofuran	3.601	71	1598	2.47	ug/L	#	73
41) chloroform	3.643	83	2301	0.33	ug/L		91
44) 1,1,1-trichloroethane	3.774	97	2919	0.51	ug/L	#	1
53) benzene	4.015	78	4734	0.34	ug/L		88
58) 1,2-dichloroethane	4.041	62	1553	0.27	ug/L		87
66) dibromomethane	4.728	93	1254	0.48	ug/L		87
78) 2-hexanone	5.981	58	1320	0.69	ug/L		94
85) chlorobenzene	6.663	112	16577	1.80	ug/L		89
93) bromoform	7.397	173	4332	1.56	ug/L		90
102) n-propylbenzene	7.947	91	4560	0.27	ug/L		96
106) tert-butylbenzene	8.424	119	2661	0.26	ug/L		86
107) 1,2,4-trimethylbenzene	8.482	105	3447	0.28	ug/L		88
108) sec-butylbenzene	8.639	105	4781	0.32	ug/L		89
109) 1,3-dichlorobenzene	8.755	146	2655	0.38	ug/L		85
110) p-isopropyltoluene	8.786	119	4222	0.34	ug/L		96
112) 1,4-dichlorobenzene	8.849	146	26200	3.69	ug/L		97
113) 1,2-dichlorobenzene	9.195	146	93805	13.83	ug/L		98
115) n-butylbenzene	9.190	92	2680	0.47	ug/L		93
118) 1,3,5-trichlorobenzene	10.165	180	1676	0.37	ug/L	#	56
119) 1,2,4-trichlorobenzene	10.773	180	4850	1.30	ug/L		97
120) hexachlorobutadiene	10.925	225	648	0.39	ug/L		78
122) 1,2,3-trichlorobenzene	11.234	180	3979	1.27	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12232021\v2v3457\
Data File : 2v83931.d
Acq On : 22 Dec 2021 3:59 pm
Operator : nickw
Sample : jd36624-15 Inst : MS2V
Misc : MS55557,V2V3457,5,,,,5
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 27 01:23:59 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 17:15:16 2021
Response via : Initial Calibration

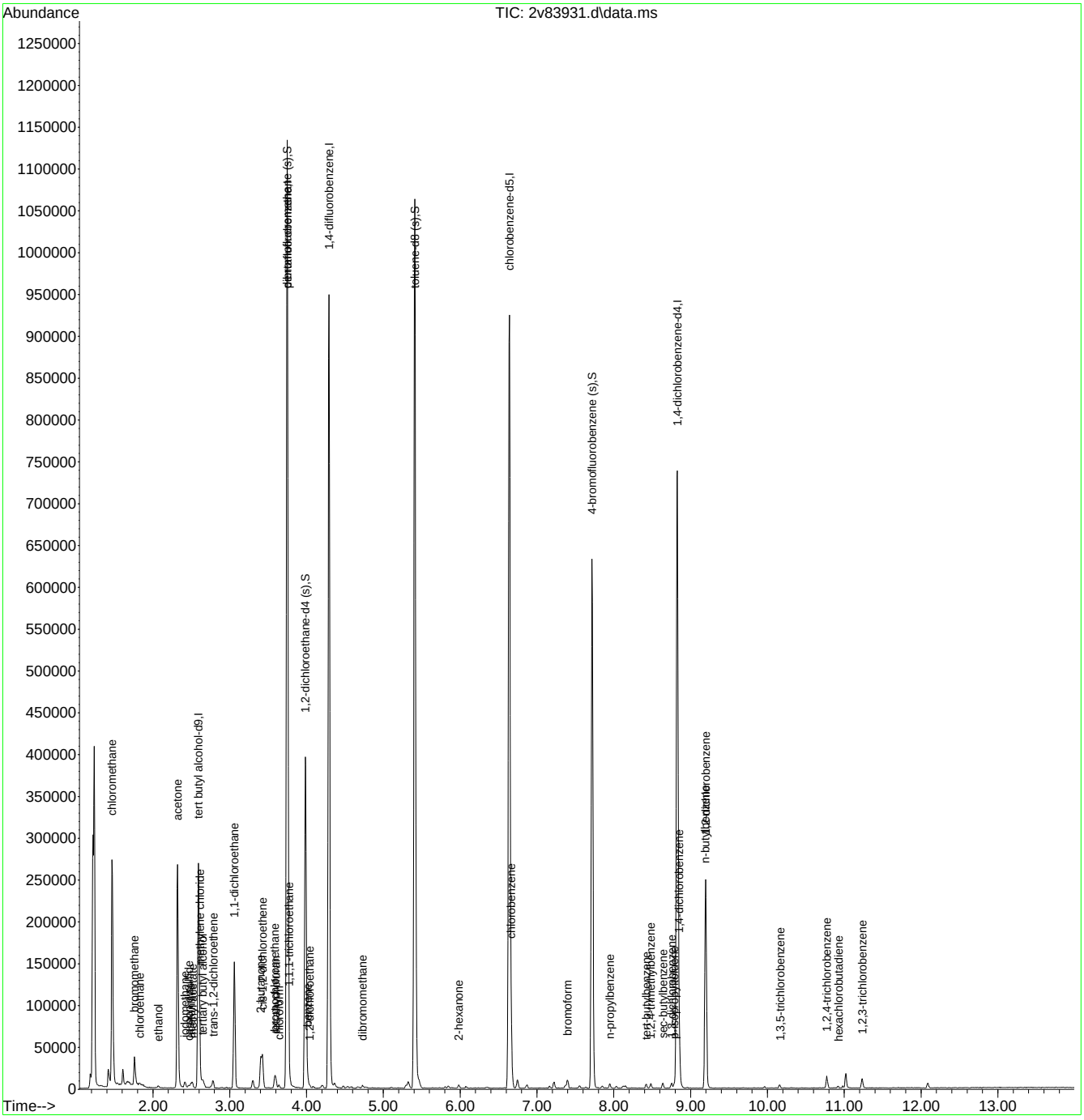
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

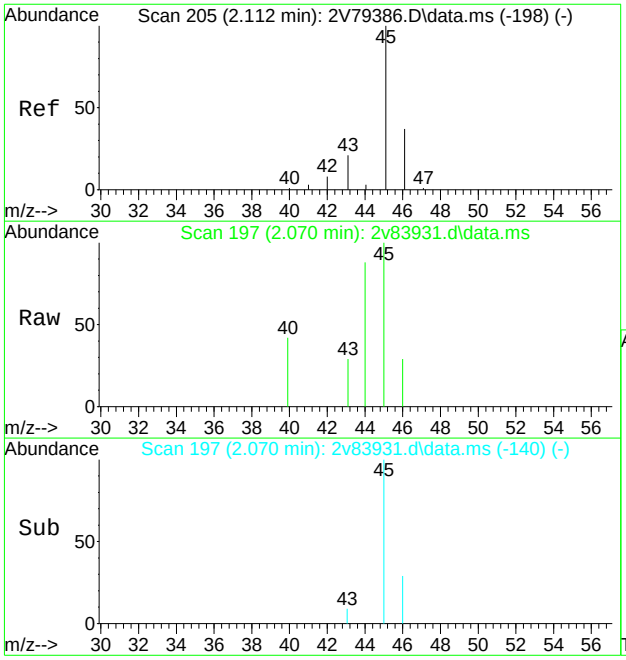
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12232021\v2v3457\
Data File : 2v83931.d
Acq On : 22 Dec 2021 3:59 pm
Operator : nickw
Sample : jd36624-15 Inst : MS2V
Misc : MS55557,V2V3457,5,,,,5
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 27 01:23:59 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 17:15:16 2021
Response via : Initial Calibration

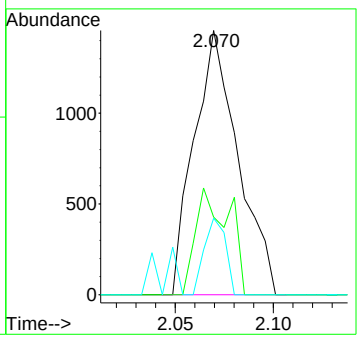


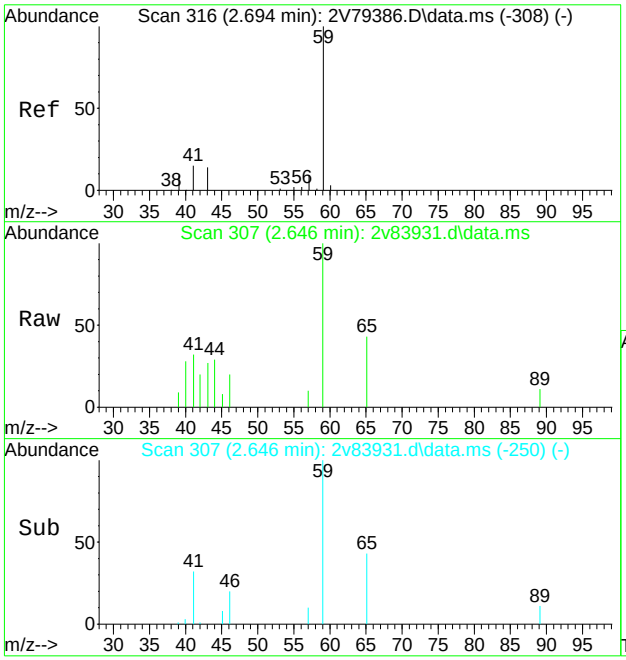


#2
ethanol
Concen: 28.28 ug/L
RT: 2.070 min Scan# 197
Delta R.T. -0.000 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 45 Resp: 2268

Ion	Ratio	Lower	Upper
45	100		
46	29.4	17.3	57.3
43	29.0	0.6	40.6

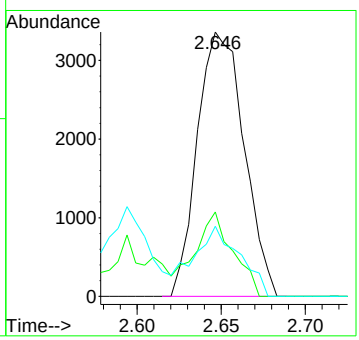


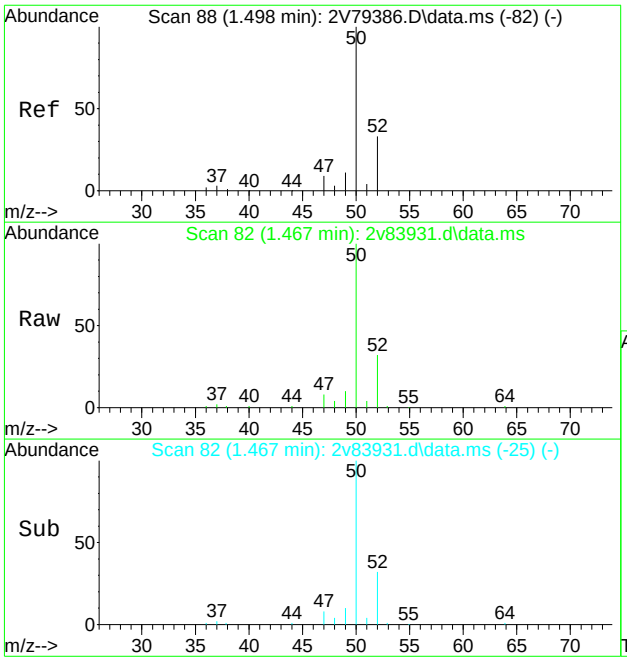


#3
tertiary butyl alcohol
Concen: 7.80 ug/L
RT: 2.646 min Scan# 307
Delta R.T. 0.000 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 59 Resp: 6483

Ion	Ratio	Lower	Upper
59	100		
41	31.9	0.0	48.5
43	26.5	0.0	43.9

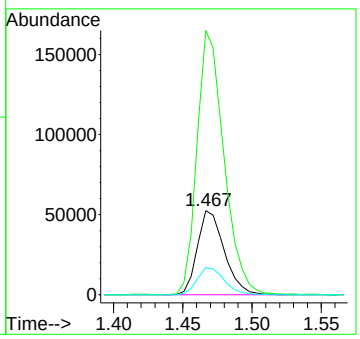


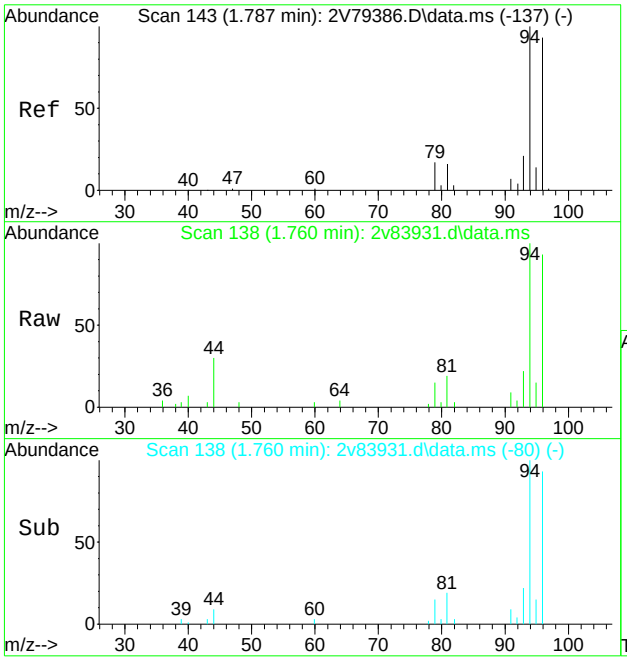


#8
chloromethane
Concen: 42.13 ug/L
RT: 1.467 min Scan# 82
Delta R.T. -0.000 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 52 Resp: 70850

Ion	Ratio	Lower	Upper
52	100		
50	315.4	271.6	331.6
49	32.7	0.7	60.7

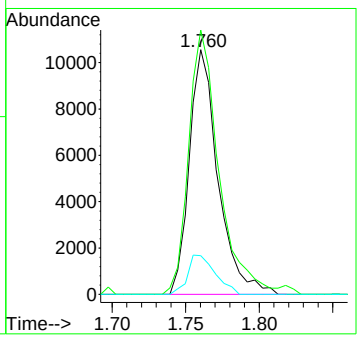


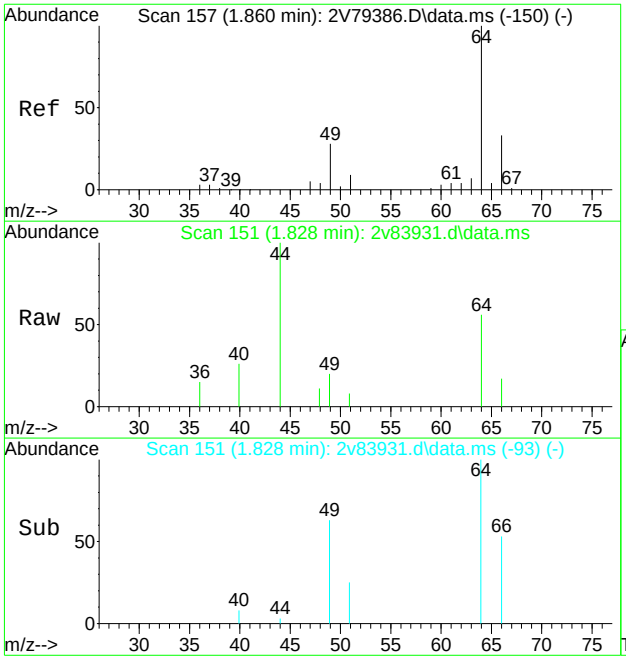


#10
bromomethane
Concen: 8.46 ug/L
RT: 1.760 min Scan# 138
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 96 Resp: 14343

Ion	Ratio	Lower	Upper
96	100		
94	108.1	73.7	133.7
95	15.8	0.0	44.2

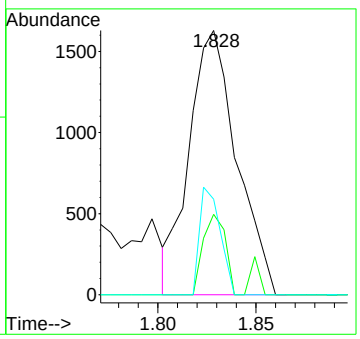


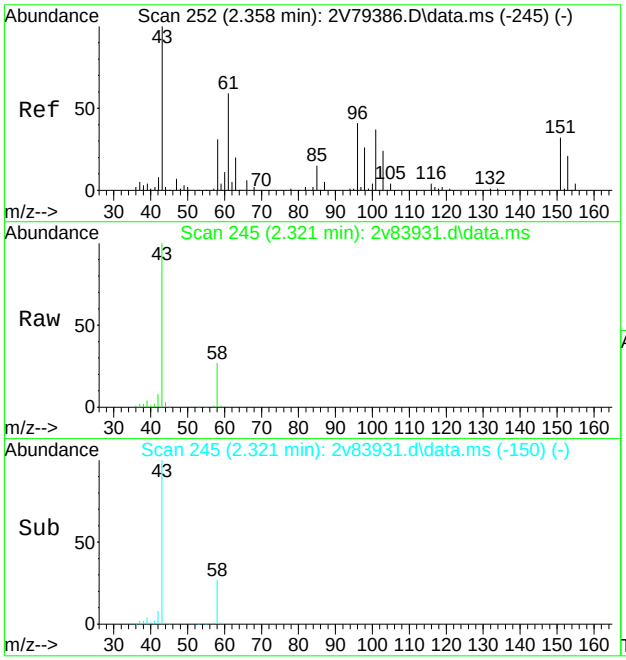


#11
chloroethane
Concen: 1.10 ug/L
RT: 1.828 min Scan# 151
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 64 Resp: 2761

Ion	Ratio	Lower	Upper
64	100		
66	30.4	1.2	61.2
49	36.2	0.0	59.1

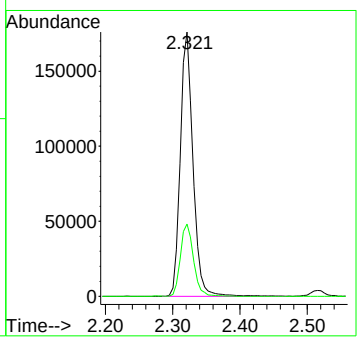


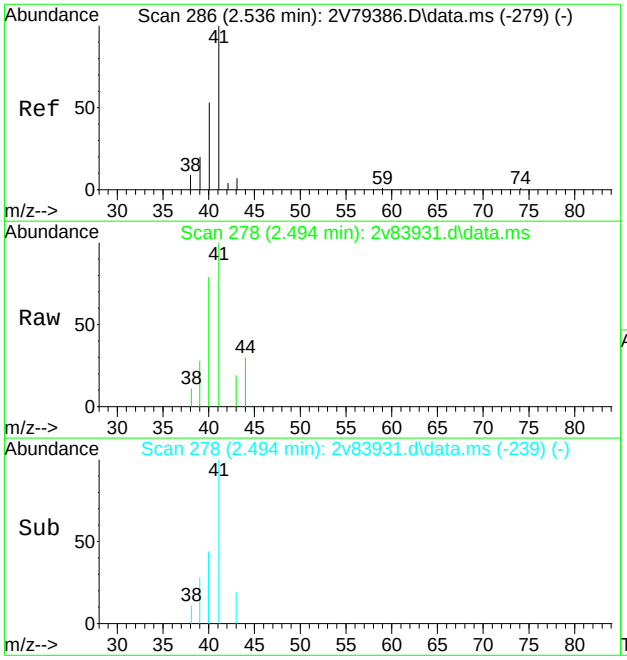


#18
acetone
Concen: 96.99 ug/L
RT: 2.321 min Scan# 245
Delta R.T. 0.000 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 43 Resp: 231255

Ion	Ratio	Lower	Upper
43	100		
58	27.3	0.9	60.9

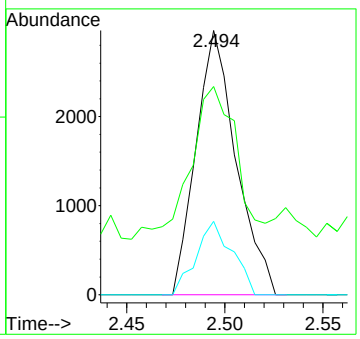


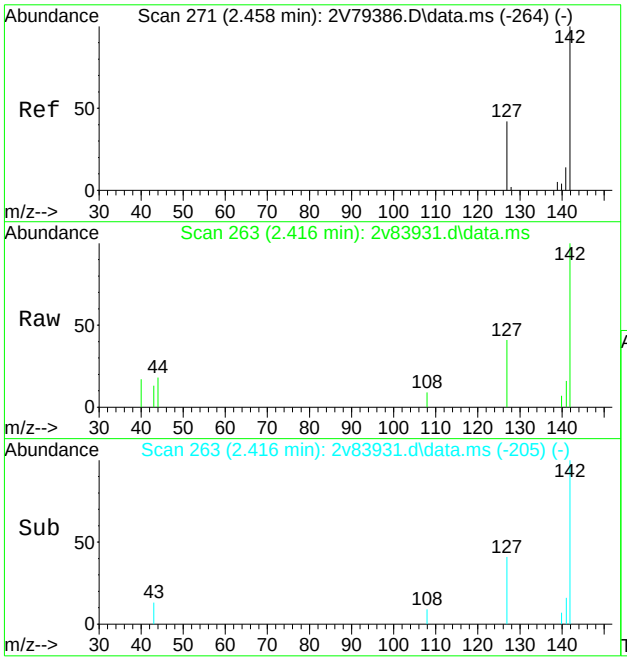


#19
acetonitrile
Concen: 5.73 ug/L
RT: 2.494 min Scan# 278
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 41 Resp: 4215

Ion	Ratio	Lower	Upper
41	100		
40	53.0	22.7	82.7
39	27.8	0.0	49.3

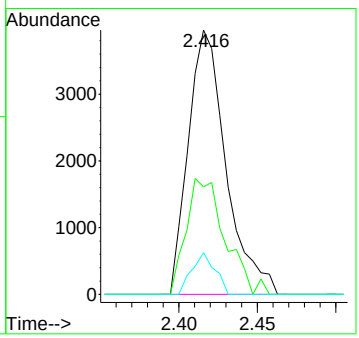


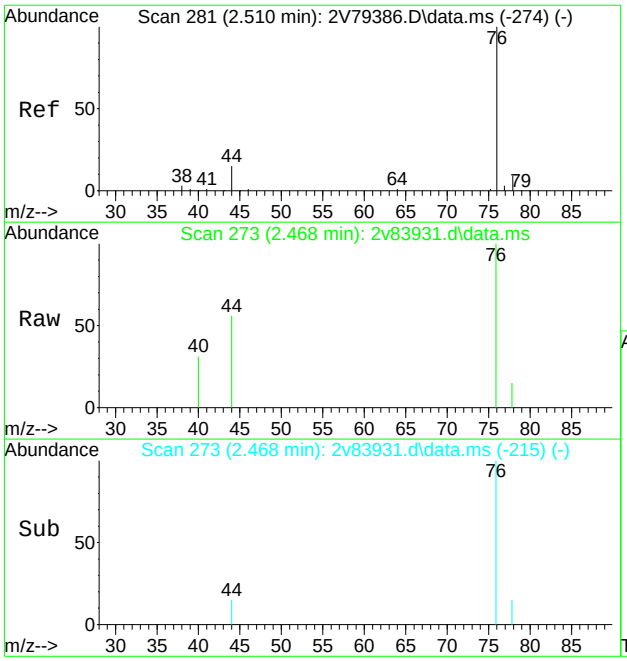


#20
iodomethane
Concen: 3.19 ug/L
RT: 2.416 min Scan# 263
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:142 Resp: 6623

Ion	Ratio	Lower	Upper
142	100		
127	40.7	11.3	71.3
141	15.8	0.0	44.3

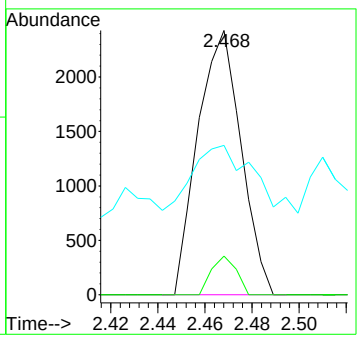


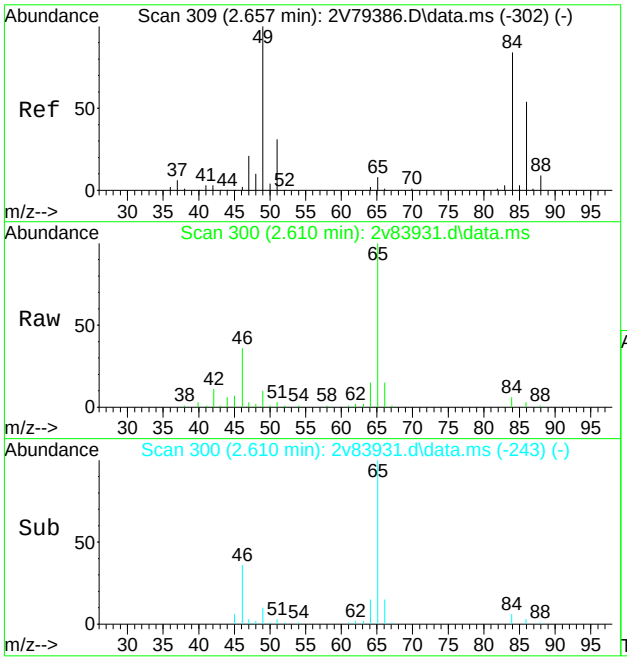


#21
carbon disulfide
Concen: 0.33 ug/L
RT: 2.468 min Scan# 273
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 76 Resp: 3095

Ion	Ratio	Lower	Upper
76	100		
78	14.7	0.0	38.9
44	24.5	0.0	45.2

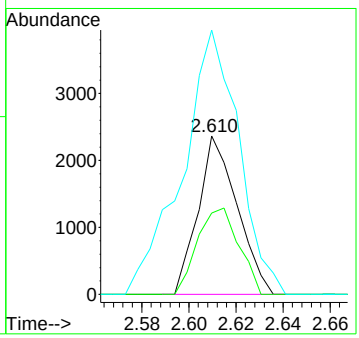


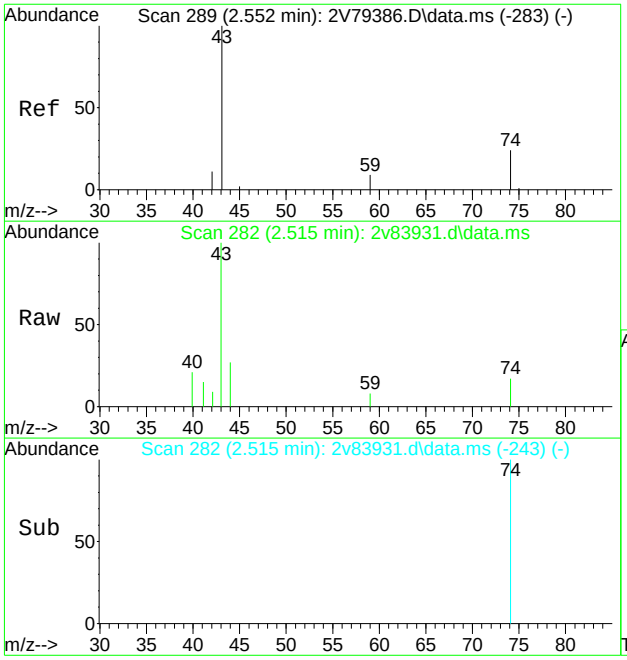


#22
methylene chloride
Concen: 0.69 ug/L
RT: 2.610 min Scan# 300
Delta R.T. -0.000 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 84 Resp: 2726

Ion	Ratio	Lower	Upper
84	100		
86	51.3	36.3	96.3
49	167.0	119.8	179.8

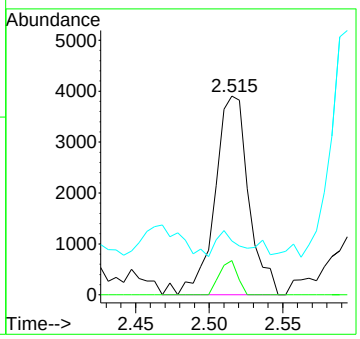


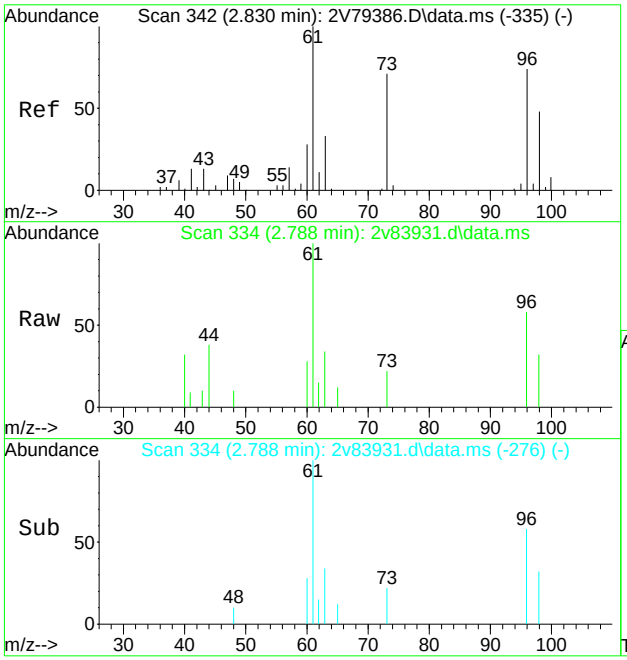


#23
methyl acetate
Concen: 1.34 ug/L
RT: 2.515 min Scan# 282
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 43 Resp: 6222

Ion	Ratio	Lower	Upper
43	100		
74	17.3	0.0	48.5
44	5.2	0.0	32.6

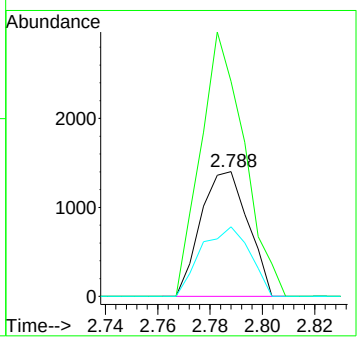


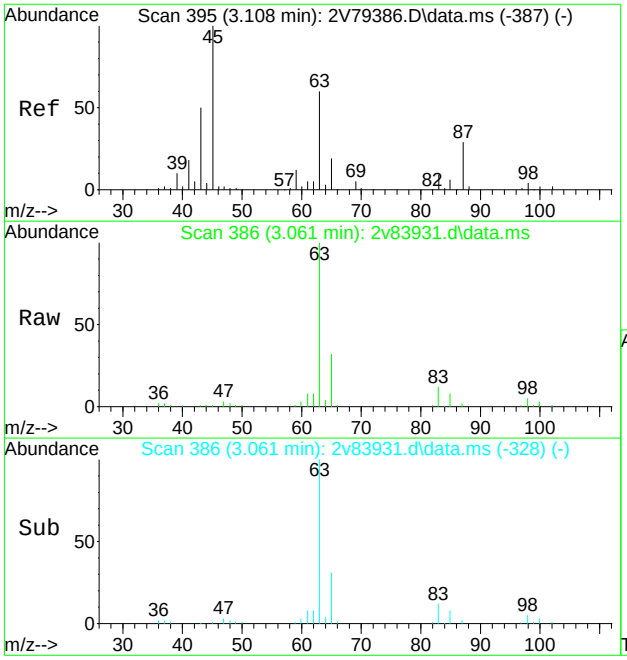


#25
trans-1,2-dichloroethene
Concen: 0.50 ug/L
RT: 2.788 min Scan# 334
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 96 Resp: 1764

Ion	Ratio	Lower	Upper
96	100		
61	172.3	125.0	185.0
98	55.7	35.0	95.0

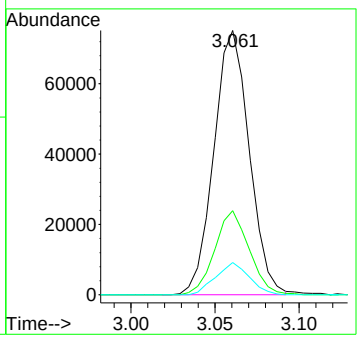


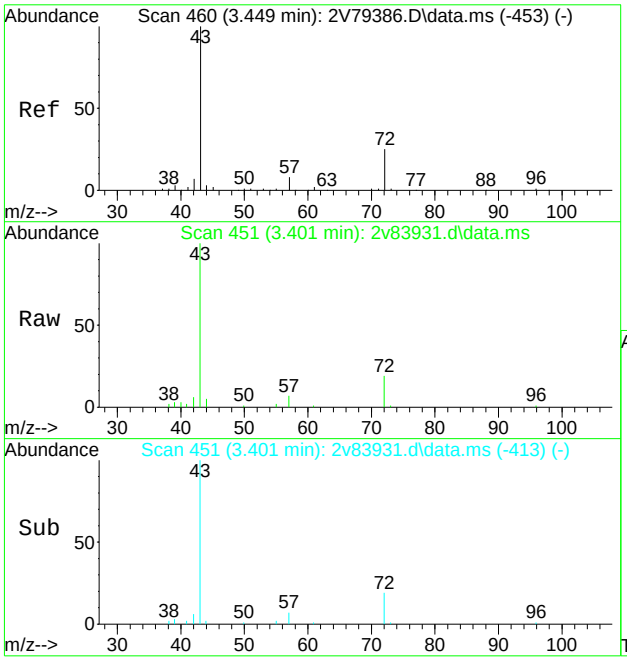


#29
1,1-dichloroethane
Concen: 16.31 ug/L
RT: 3.061 min Scan# 386
Delta R.T. 0.006 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 63 Resp: 110010

Ion	Ratio	Lower	Upper
63	100		
65	31.8	1.1	61.1
83	12.3	0.0	42.5

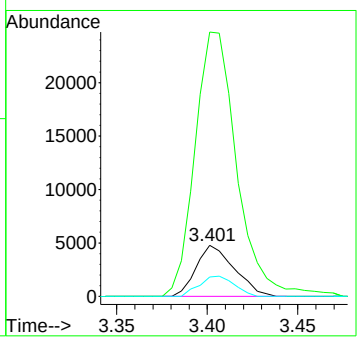


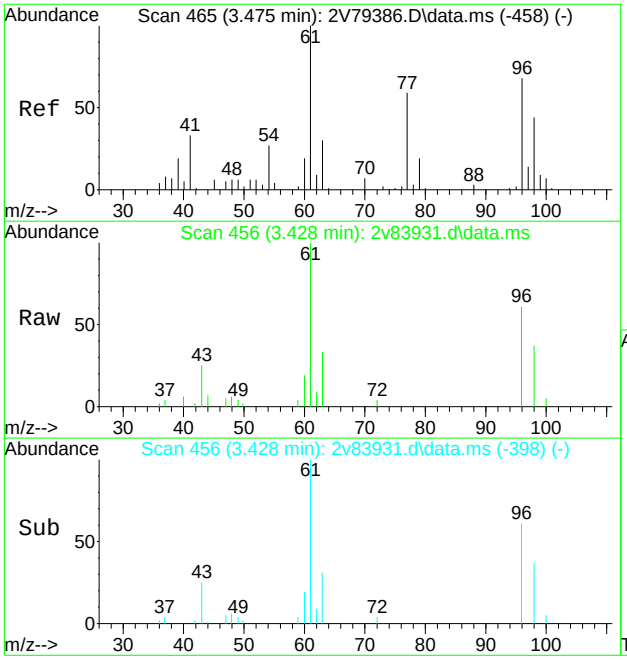


#34
2-butanone
Concen: 11.40 ug/L
RT: 3.401 min Scan# 451
Delta R.T. 0.000 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 72 Resp: 6988

Ion	Ratio	Lower	Upper
72	100		
43	518.3	483.2	523.2
57	38.1	15.9	55.9

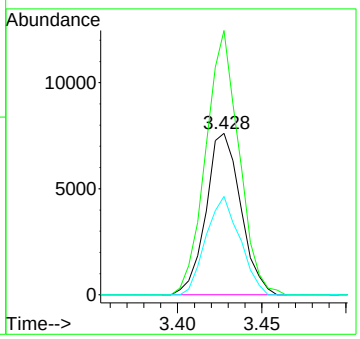


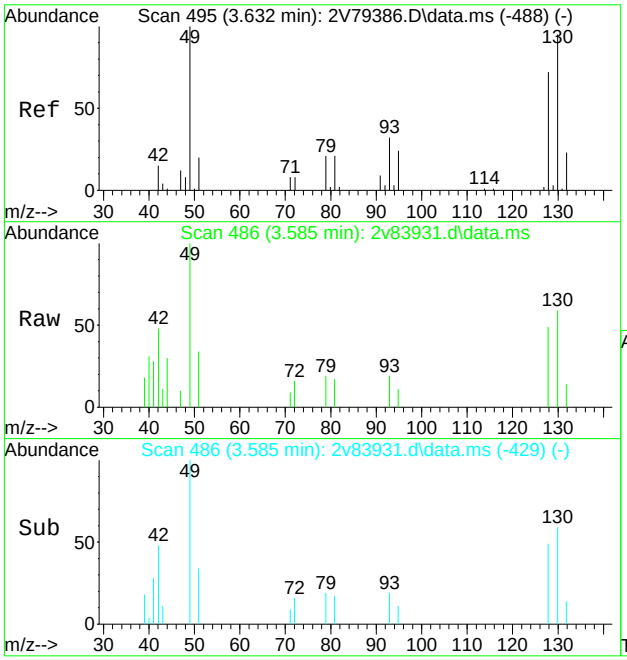


#36
cis-1,2-dichloroethene
Concen: 2.79 ug/L
RT: 3.428 min Scan# 456
Delta R.T. 0.006 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 96 Resp: 10935

Ion	Ratio	Lower	Upper
96	100		
61	163.8	137.0	197.0
98	61.0	34.8	94.8

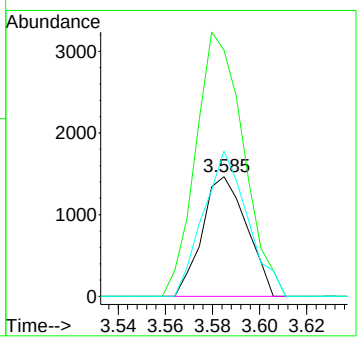


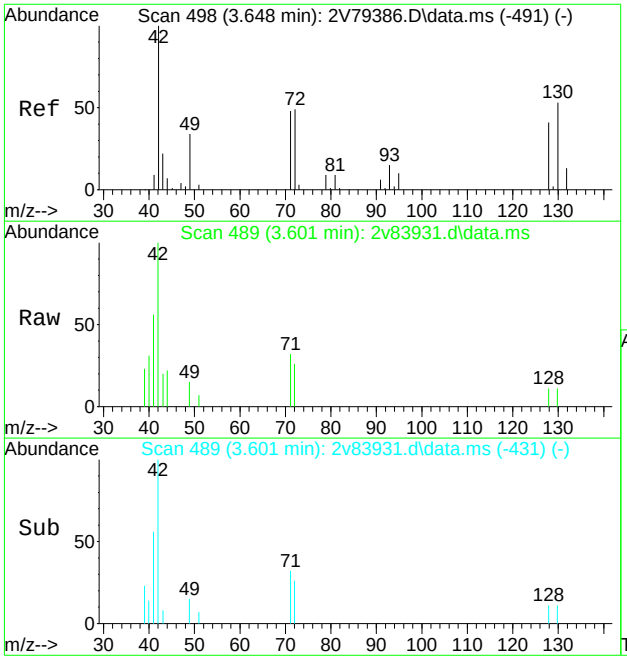


#39
bromochloromethane
Concen: 0.87 ug/L
RT: 3.585 min Scan# 486
Delta R.T. -0.000 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:128 Resp: 1928

Ion	Ratio	Lower	Upper
128	100		
49	205.3	123.4	183.4#
130	121.2	95.4	155.4

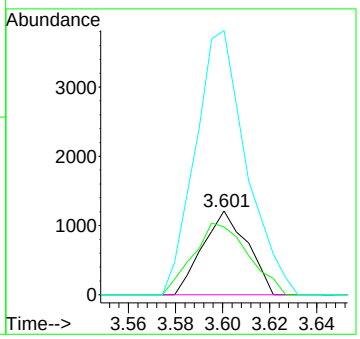


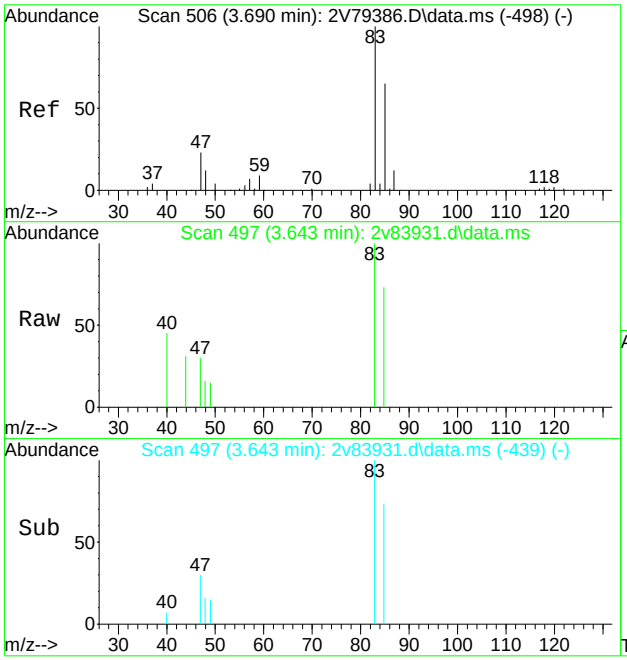


#40
tetrahydrofuran
Concen: 2.47 ug/L
RT: 3.601 min Scan# 489
Delta R.T. 0.006 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 71 Resp: 1598

Ion	Ratio	Lower	Upper
71	100		
72	81.2	71.4	131.4
42	316.0	232.5	292.5#

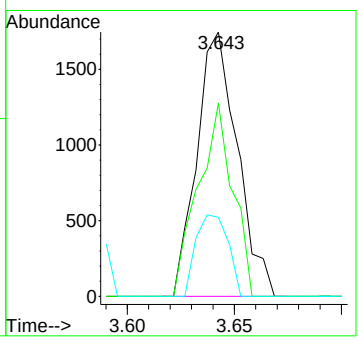


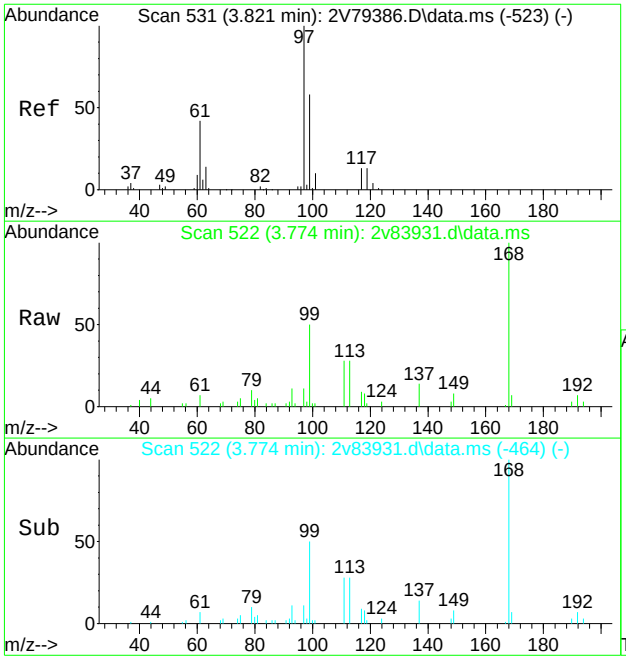


#41
chloroform
Concen: 0.33 ug/L
RT: 3.643 min Scan# 497
Delta R.T. 0.006 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 83 Resp: 2301

Ion	Ratio	Lower	Upper
83	100		
85	73.2	35.3	95.3
47	29.9	0.0	55.9

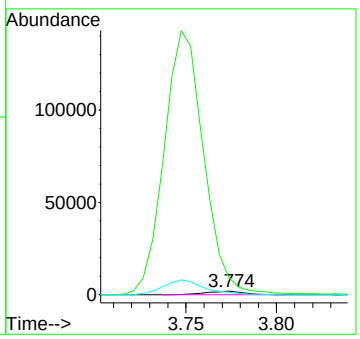


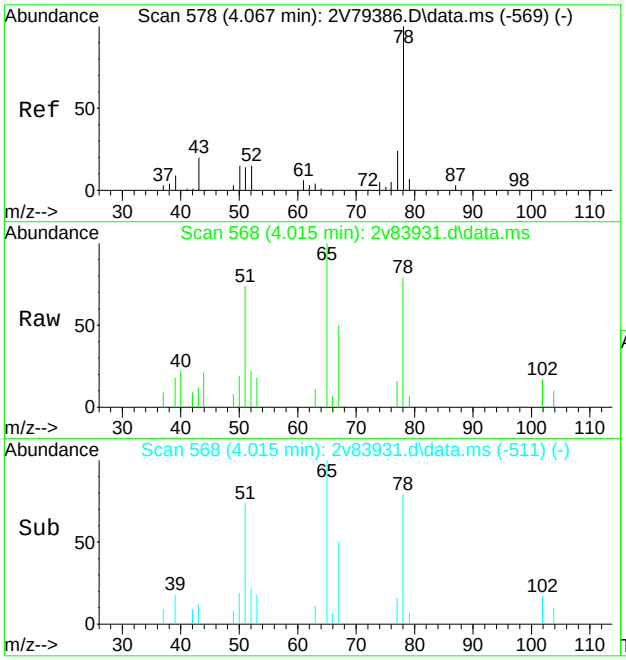


#44
1,1,1-trichloroethane
Concen: 0.51 ug/L
RT: 3.774 min Scan# 522
Delta R.T. 0.006 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 97 Resp: 2919

Ion	Ratio	Lower	Upper
97	100		
99	423.9	40.9	100.9#
61	68.7	16.4	76.4

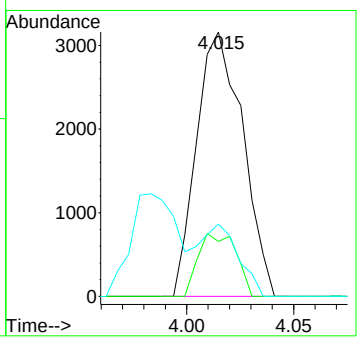


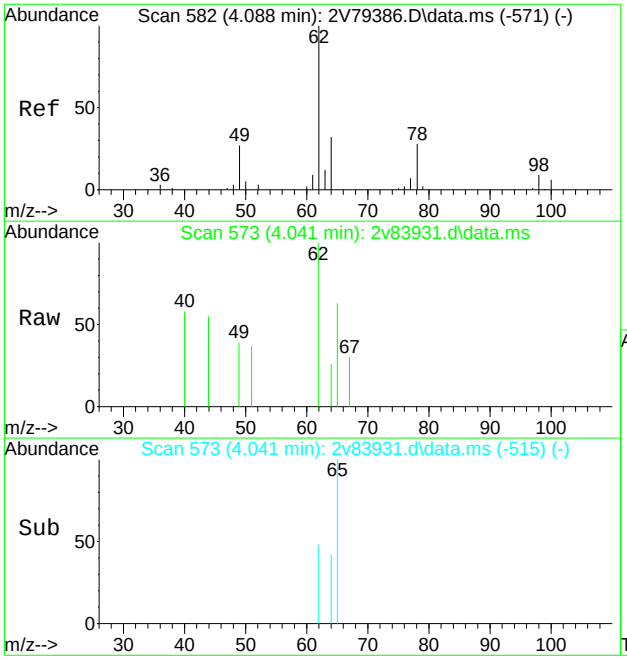


#53
benzene
Concen: 0.34 ug/L
RT: 4.015 min Scan# 568
Delta R.T. -0.000 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 78 Resp: 4734

Ion	Ratio	Lower	Upper
78	100		
77	20.8	0.0	53.4
52	27.4	0.0	48.4

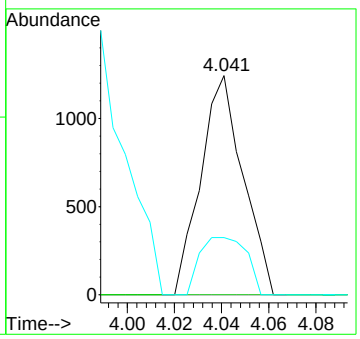


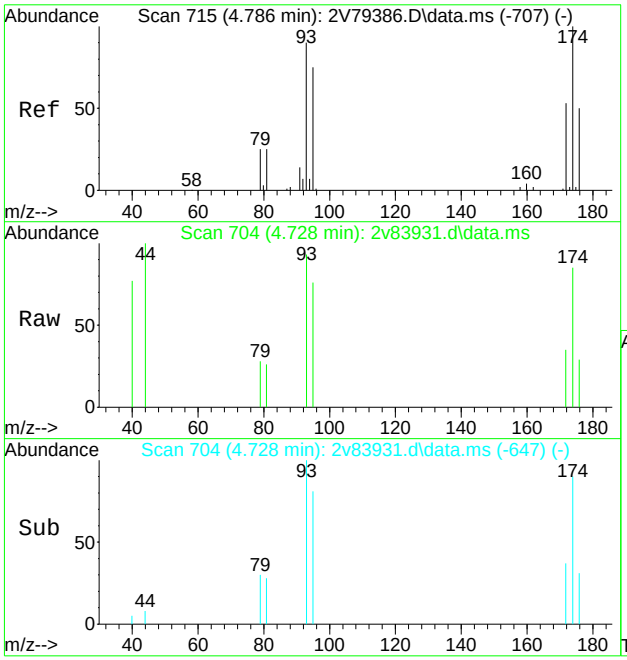


#58
1,2-dichloroethane
Concen: 0.27 ug/L
RT: 4.041 min Scan# 573
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 62 Resp: 1553

Ion	Ratio	Lower	Upper
62	100		
98	0.0	0.0	38.8
64	26.1	1.7	61.7

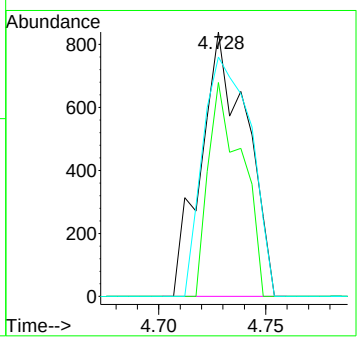


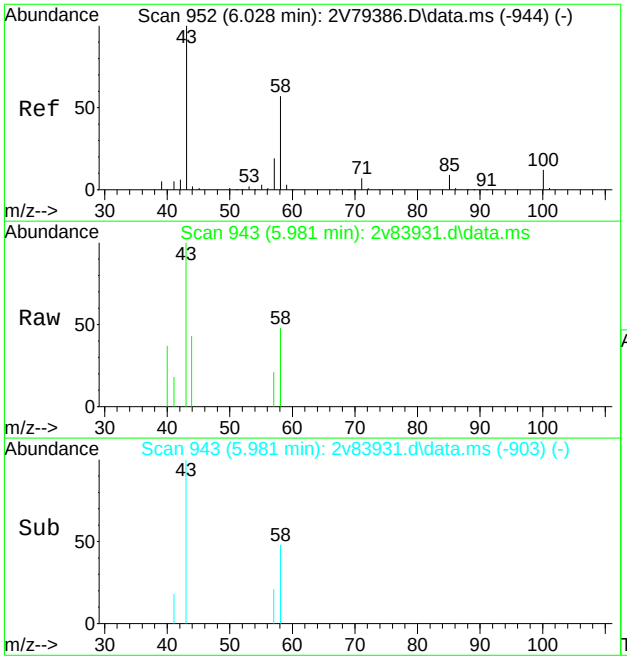


#66
dibromomethane
Concen: 0.48 ug/L
RT: 4.728 min Scan# 704
Delta R.T. -0.000 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 93 Resp: 1254

Ion	Ratio	Lower	Upper
93	100		
95	80.8	53.4	113.4
174	90.5	81.5	141.5

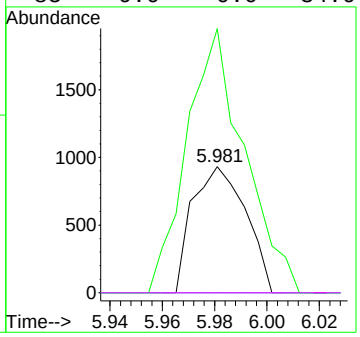


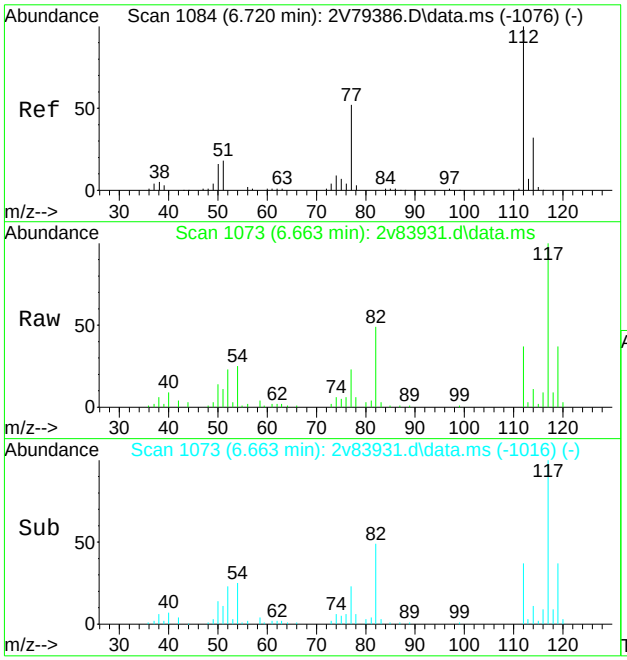


#78
2-hexanone
Concen: 0.69 ug/L
RT: 5.981 min Scan# 943
Delta R.T. 0.010 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 58 Resp: 1320

Ion	Ratio	Lower	Upper
58	100		
43	181.6	161.1	201.1
100	0.0	0.0	38.6
85	0.0	0.0	34.0

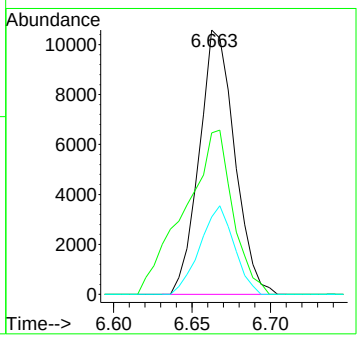


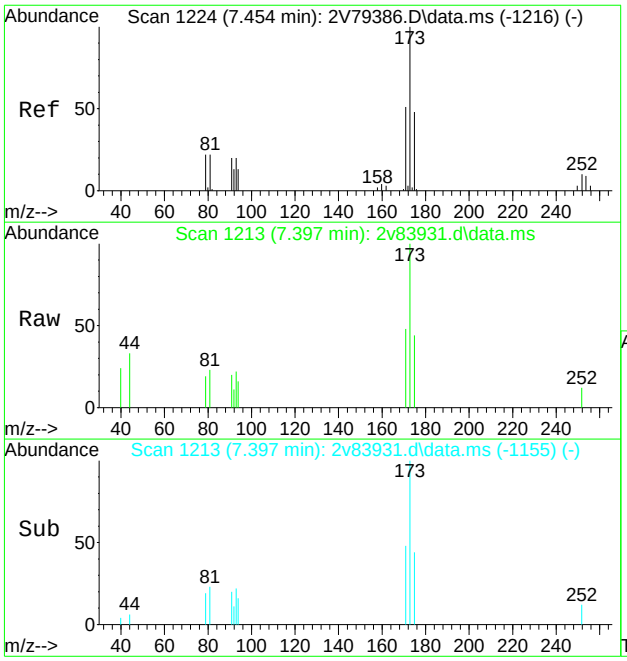


#85
chlorobenzene
Concen: 1.80 ug/L
RT: 6.663 min Scan# 1073
Delta R.T. -0.000 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:112 Resp: 16577

Ion	Ratio	Lower	Upper
112	100		
77	61.0	20.6	80.6
114	29.3	2.1	62.1

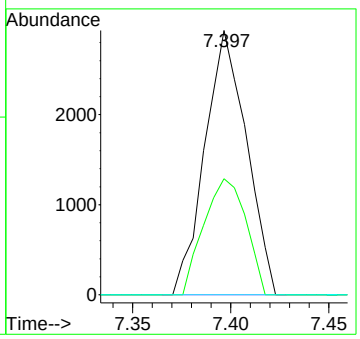


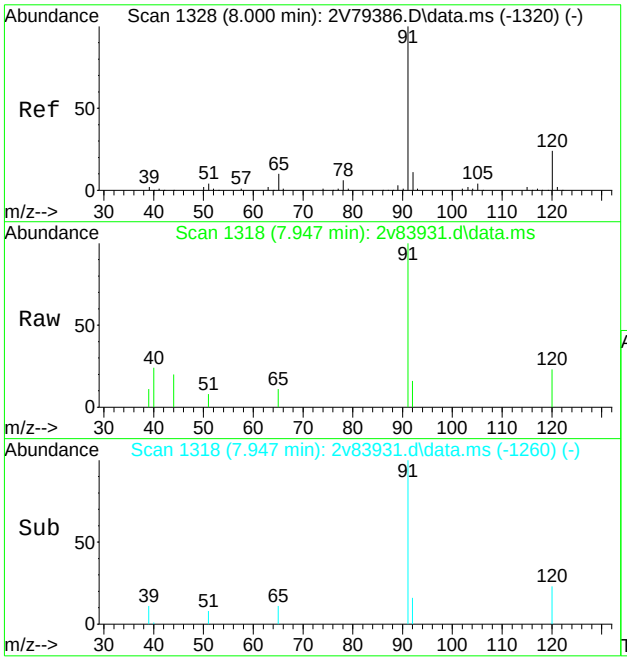


#93
bromoform
Concen: 1.56 ug/L
RT: 7.397 min Scan# 1213
Delta R.T. 0.006 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:173 Resp: 4332

Ion	Ratio	Lower	Upper
173	100		
175	43.9	18.5	78.5
254	0.0	0.0	39.3

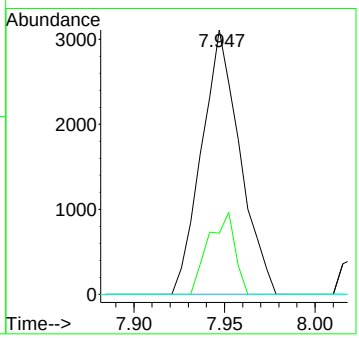


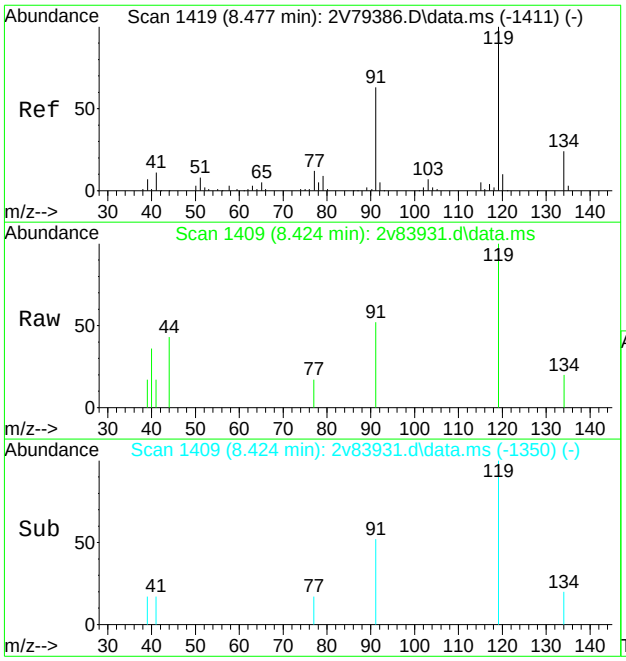


#102
n-propylbenzene
Concen: 0.27 ug/L
RT: 7.947 min Scan# 1318
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 91 Resp: 4560

Ion	Ratio	Lower	Upper
91	100		
120	23.2	0.0	54.3
105	0.0	0.0	33.9

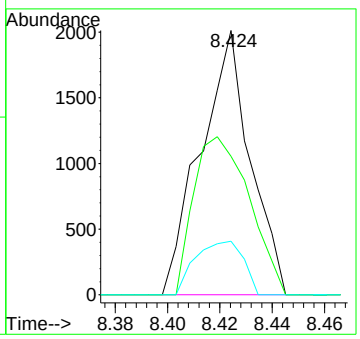


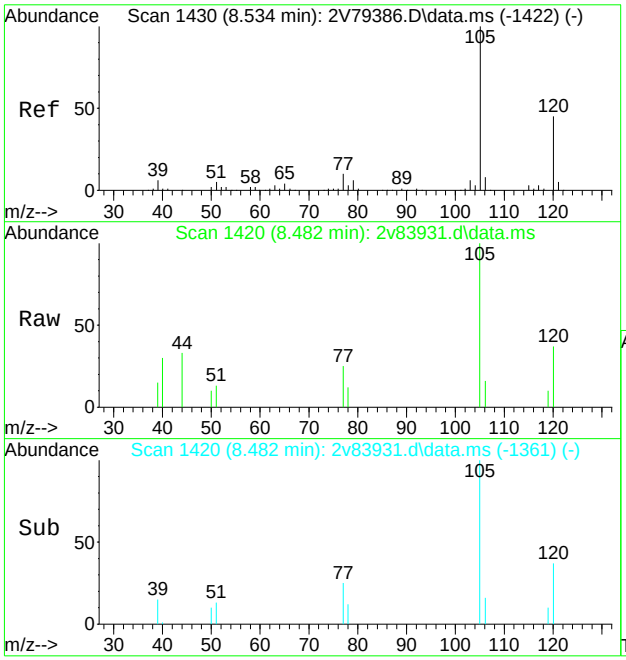


#106
tert-butylbenzene
Concen: 0.26 ug/L
RT: 8.424 min Scan# 1409
Delta R.T. 0.010 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:119 Resp: 2661

Ion	Ratio	Lower	Upper
119	100		
91	52.4	35.1	95.1
134	20.3	0.0	55.1

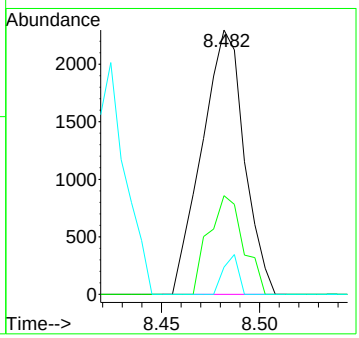


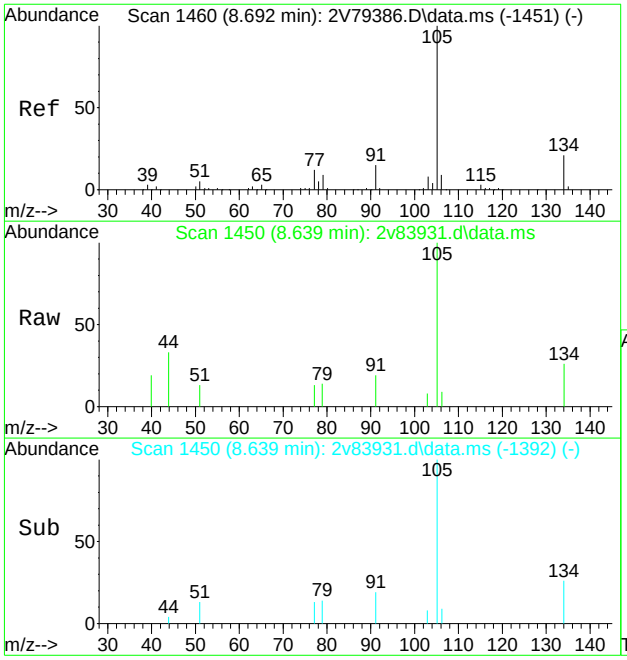


#107
1,2,4-trimethylbenzene
Concen: 0.28 ug/L
RT: 8.482 min Scan# 1420
Delta R.T. 0.011 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:105 Resp: 3447

Ion	Ratio	Lower	Upper
105	100		
120	37.3	16.8	76.8
119	10.3	0.0	42.2

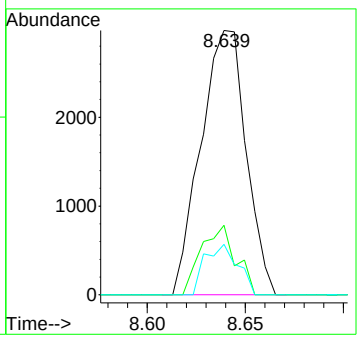


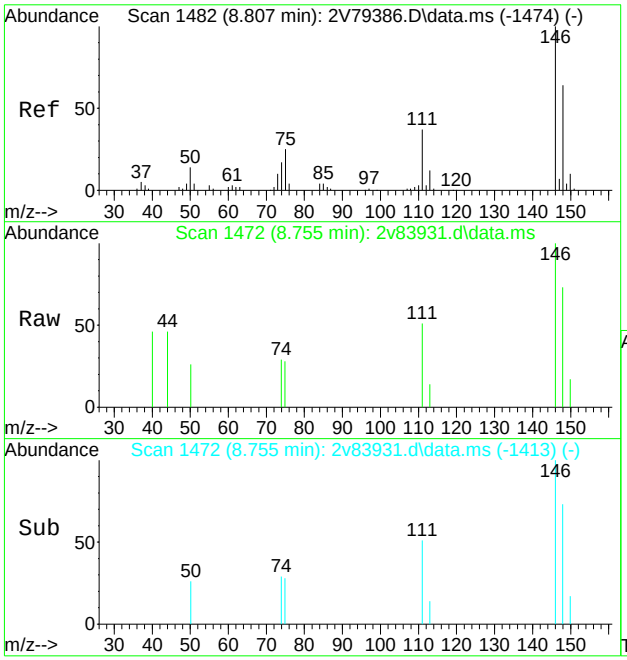


#108
sec-butylbenzene
Concen: 0.32 ug/L
RT: 8.639 min Scan# 1450
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:105 Resp: 4781

Ion	Ratio	Lower	Upper
105	100		
134	26.3	0.0	51.1
91	19.1	0.0	44.9

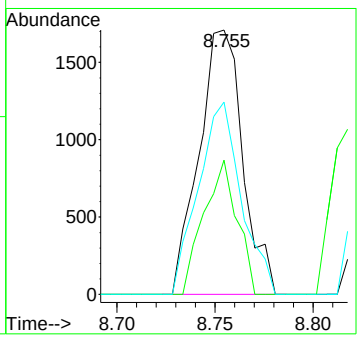


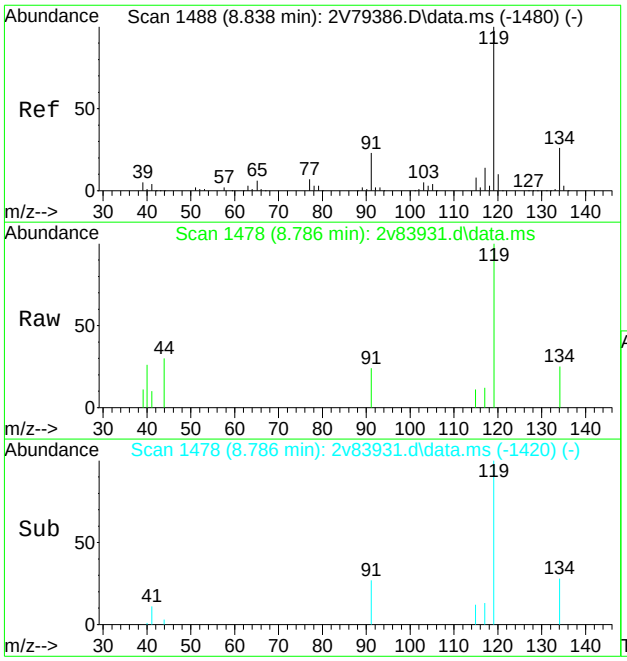


#109
1,3-dichlorobenzene
Concen: 0.38 ug/L
RT: 8.755 min Scan# 1472
Delta R.T. 0.011 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:146 Resp: 2655

Ion	Ratio	Lower	Upper
146	100		
111	50.8	8.1	68.1
148	72.7	34.1	94.1

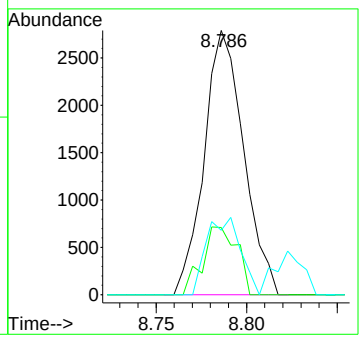


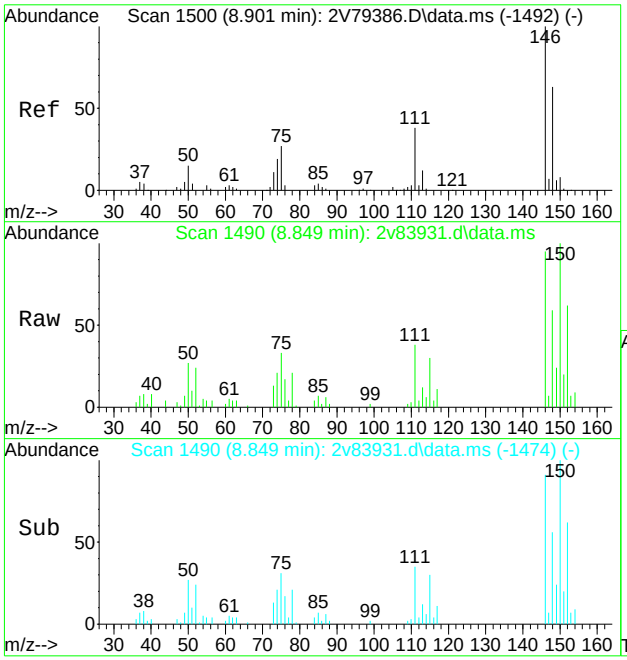


#110
p-isopropyltoluene
Concen: 0.34 ug/L
RT: 8.786 min Scan# 1478
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:119 Resp: 4222

Ion	Ratio	Lower	Upper
119	100		
134	25.4	0.0	57.5
91	24.4	0.0	52.3

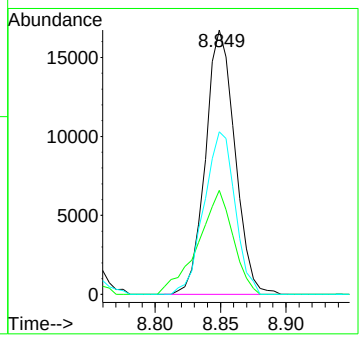


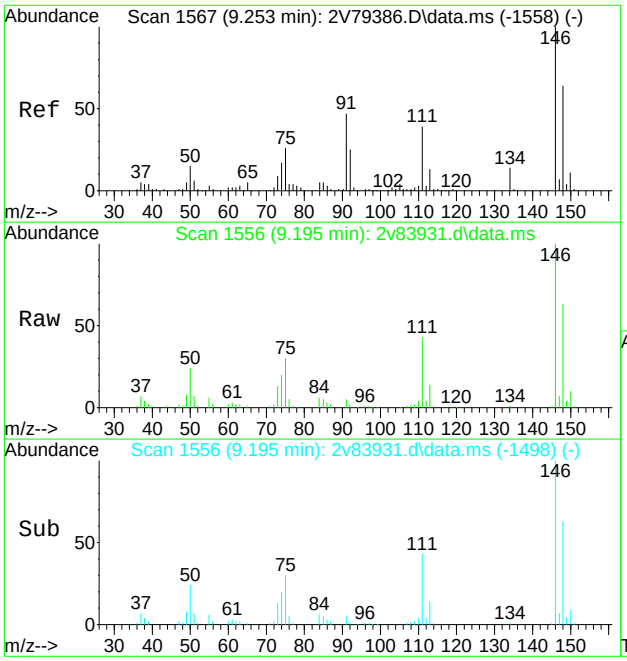


#112
1,4-dichlorobenzene
Concen: 3.69 ug/L
RT: 8.849 min Scan# 1490
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:146 Resp: 26200

Ion	Ratio	Lower	Upper
146	100		
111	39.3	7.3	67.3
148	61.5	33.7	93.7

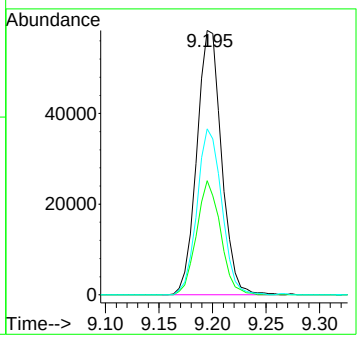


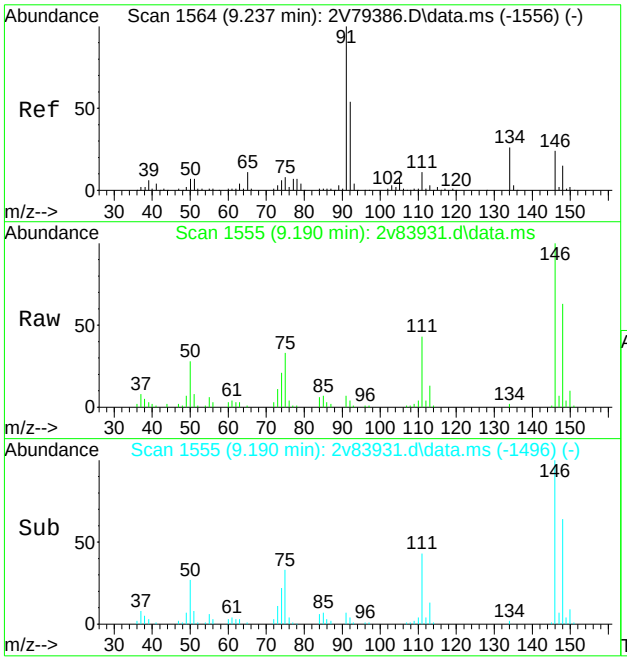


#113
1,2-dichlorobenzene
Concen: 13.83 ug/L
RT: 9.195 min Scan# 1556
Delta R.T. 0.005 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:146 Resp: 93805

Ion	Ratio	Lower	Upper
146	100		
111	43.2	10.6	70.6
148	62.8	33.1	93.1

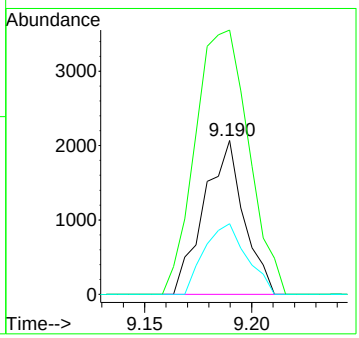


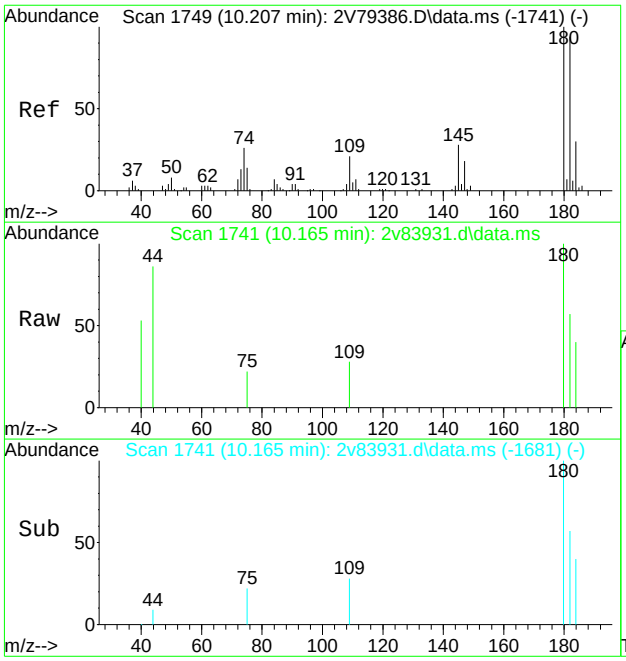


#115
n-butylbenzene
Concen: 0.47 ug/L
RT: 9.190 min Scan# 1555
Delta R.T. 0.011 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion: 92 Resp: 2680

Ion	Ratio	Lower	Upper
92	100		
91	171.9	150.5	210.5
134	46.0	22.4	82.4

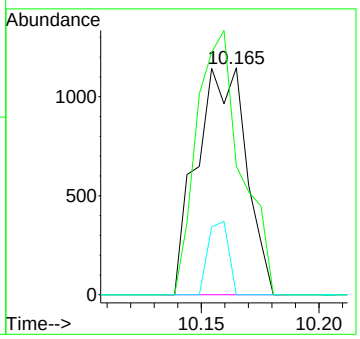


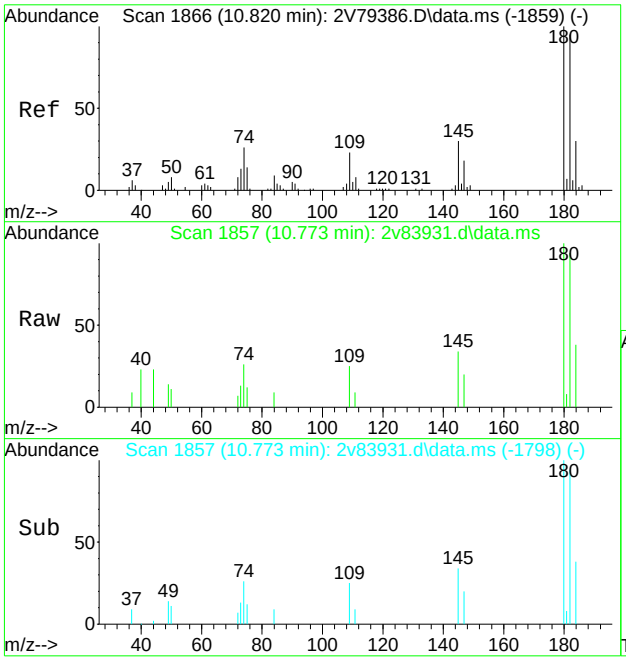


#118
1,3,5-trichlorobenzene
Concen: 0.37 ug/L
RT: 10.165 min Scan# 1741
Delta R.T. 0.016 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:180 Resp: 1676

Ion	Ratio	Lower	Upper
180	100		
182	56.7	76.5	116.5#
145	0.0	8.8	48.8#

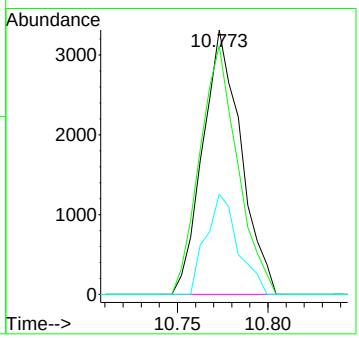


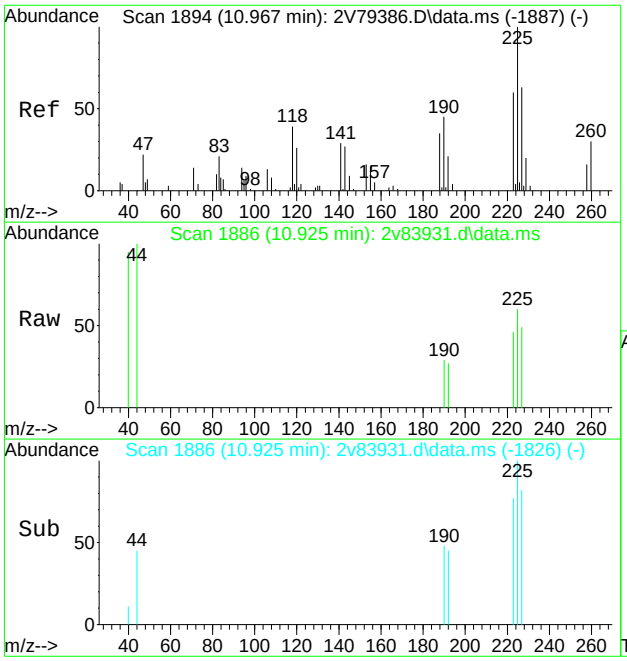


#119
1,2,4-trichlorobenzene
Concen: 1.30 ug/L
RT: 10.773 min Scan# 1857
Delta R.T. 0.010 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:180 Resp: 4850

Ion	Ratio	Lower	Upper
180	100		
182	94.1	64.3	124.3
184	38.0	0.9	60.9

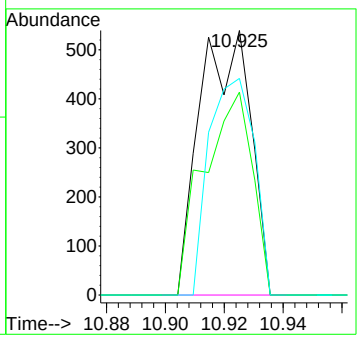


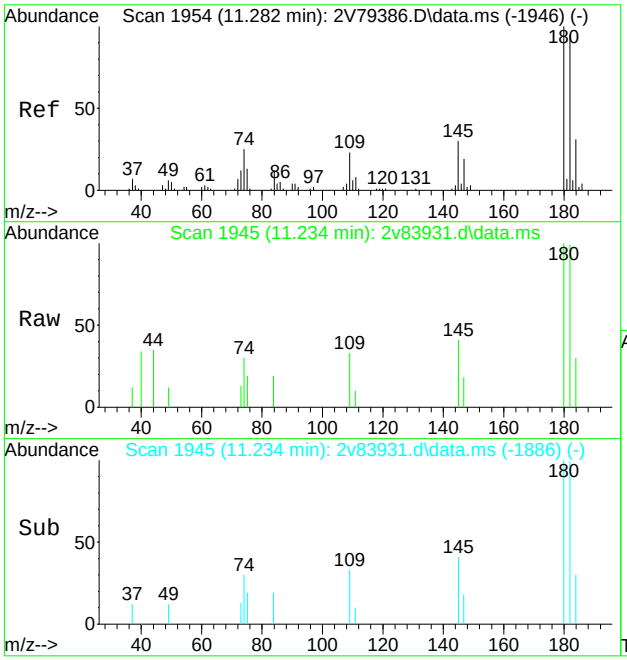


#120
hexachlorobutadiene
Concen: 0.39 ug/L
RT: 10.925 min Scan# 1886
Delta R.T. 0.016 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:225 Resp: 648

Ion	Ratio	Lower	Upper
225	100		
223	76.7	31.8	91.8
227	81.9	33.3	93.3

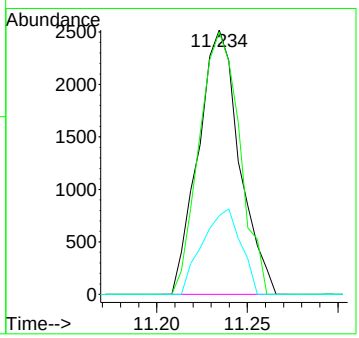




#122
1,2,3-trichlorobenzene
Concen: 1.27 ug/L
RT: 11.234 min Scan# 1945
Delta R.T. 0.010 min
Lab File: 2v83931.d
Acq: 22 Dec 2021 3:59 pm

Tgt Ion:180 Resp: 3979

Ion	Ratio	Lower	Upper
180	100		
182	99.2	65.9	125.9
184	29.8	1.1	61.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-22-2021\vx8366-partial\
Data File : 1x193120.d
Acq On : 21 Dec 2021 3:52 pm
Operator : brittank
Sample : JD36624-16 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8366,5,,,,50
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 22 04:32:41 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

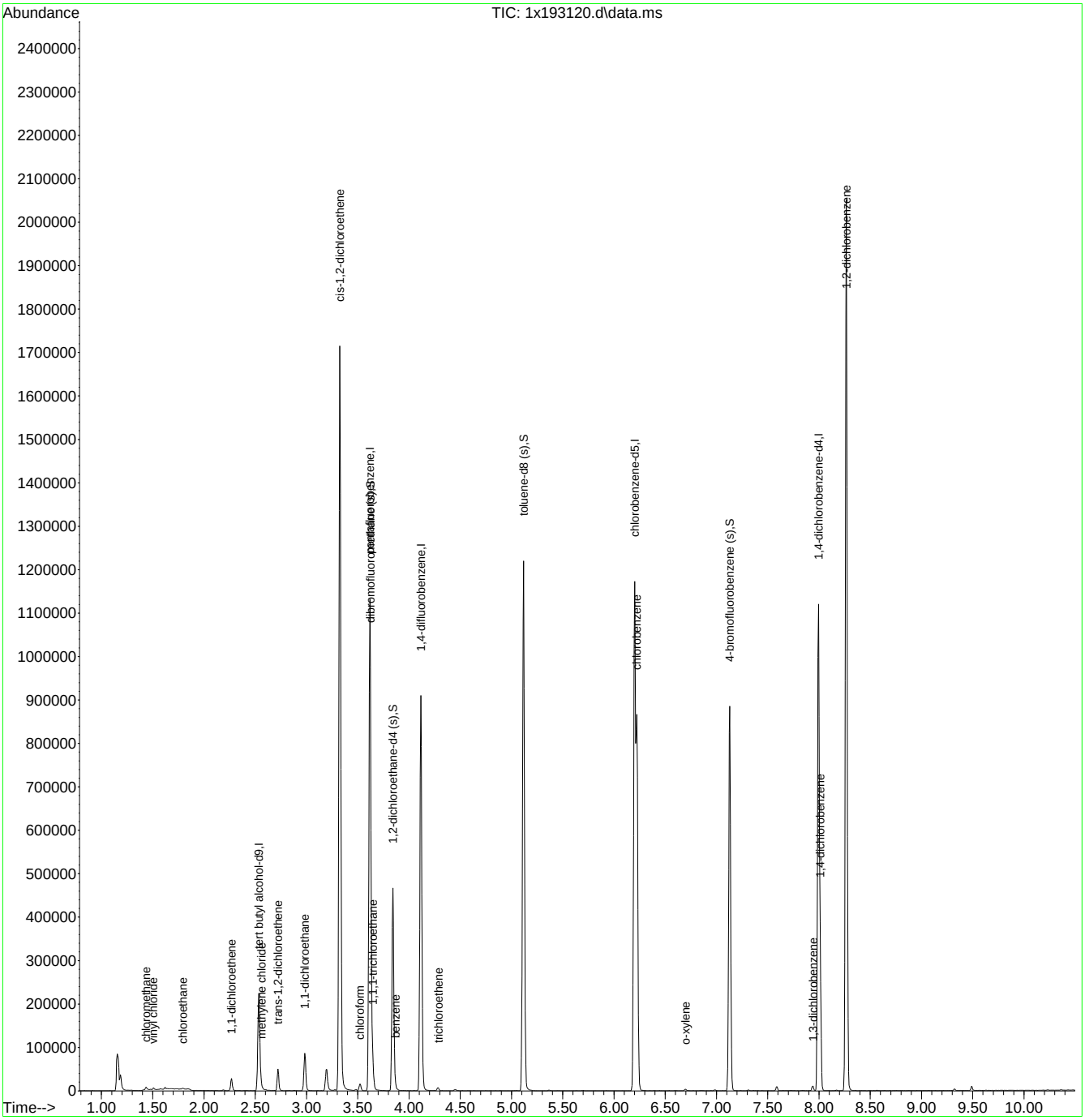
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.535	65	173170	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	359954	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	512931	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	476737	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	208002	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	179263	49.39	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.78%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	223657	50.96	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.92%			
74) toluene-d8 (s)	5.118	98	581581	50.17	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.34%			
98) 4-bromofluorobenzene (s)	7.130	95	212909	51.50	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.00%			
Target Compounds						Qvalue
8) chloromethane	1.436	50	3937	1.28	ug/L	93
9) vinyl chloride	1.505	62	2412	0.89	ug/L	96
11) chloroethane	1.793	64	1426	1.14	ug/L	85
16) 1,1-dichloroethene	2.268	96	6350	3.41	ug/L	99
22) methylene chloride	2.562	84	934	0.51	ug/L	98
26) trans-1,2-dichloroethene	2.722	96	10939	5.55	ug/L	98
30) 1,1-dichloroethane	2.984	63	54969	14.38	ug/L	97
36) cis-1,2-dichloroethene	3.325	96	456040	215.20	ug/L	91
42) chloroform	3.523	83	7555	2.05	ug/L	90
45) 1,1,1-trichloroethane	3.645	97	26903	7.73	ug/L	91
57) benzene	3.869	78	2750	0.39	ug/L	98
61) trichloroethene	4.286	130	1788	0.75	ug/L	94
86) chlorobenzene	6.223	112	337271	66.34	ug/L	98
90) o-xylene	6.698	91	2033	0.30	ug/L	90
110) 1,3-dichlorobenzene	7.942	146	3793	0.94	ug/L	96
112) 1,4-dichlorobenzene	8.011	146	84090	20.07	ug/L	98
113) 1,2-dichlorobenzene	8.267	146	603613	156.74	ug/L	100

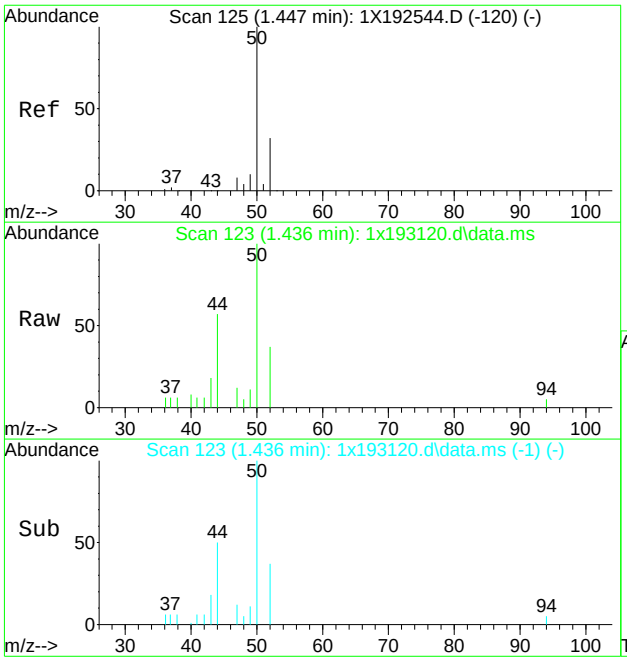
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-22-2021\vx8366-partial\
Data File : 1x193120.d
Acq On : 21 Dec 2021 3:52 pm
Operator : brittank
Sample : JD36624-16 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8366,5,,,,50
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 22 04:32:41 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

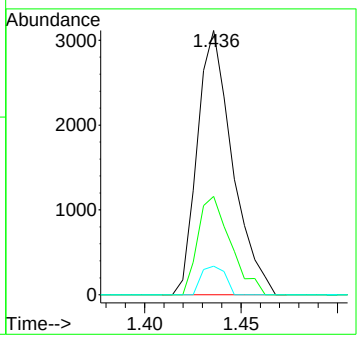


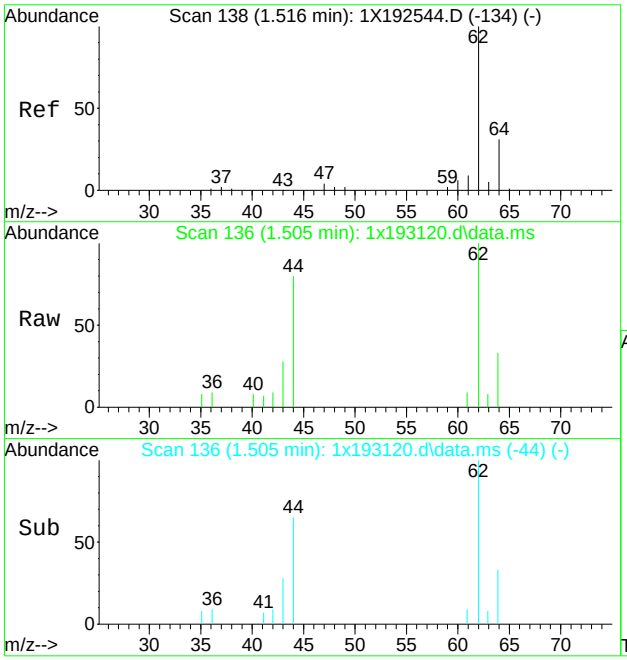


#8
chloromethane
Concen: 1.28 ug/L
RT: 1.436 min Scan# 123
Delta R.T. -0.011 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion: 50 Resp: 3937

Ion	Ratio	Lower	Upper
50	100		
52	37.2	2.2	62.2
49	10.8	0.0	40.5

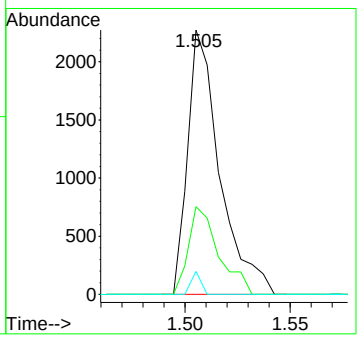


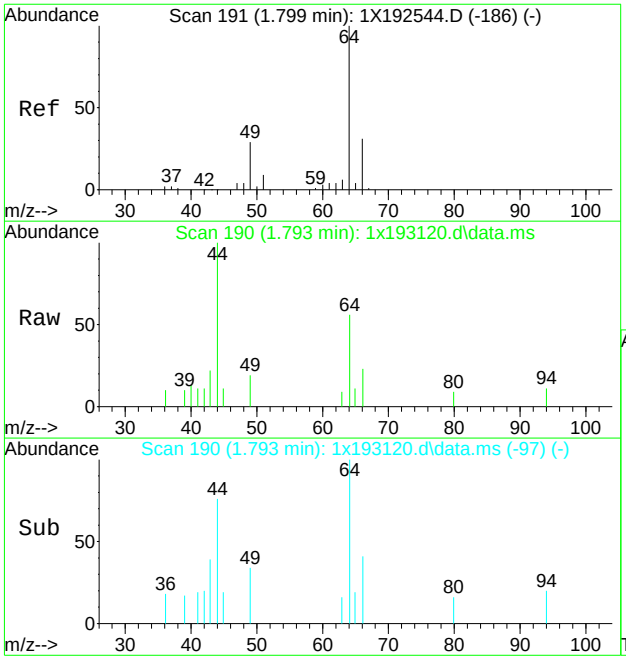


#9
vinyl chloride
Concen: 0.89 ug/L
RT: 1.505 min Scan# 136
Delta R.T. -0.011 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion: 62 Resp: 2412

Ion	Ratio	Lower	Upper
62	100		
64	33.2	0.5	60.5
61	8.7	0.0	38.7

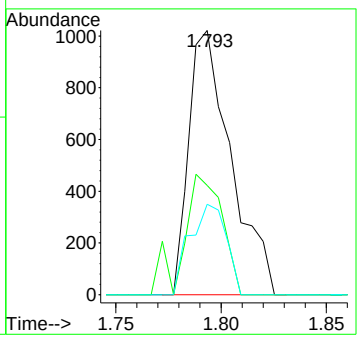


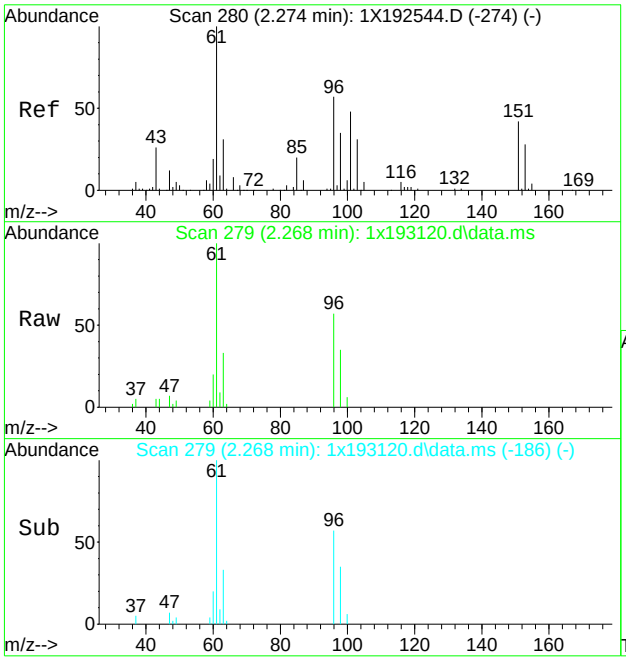


#11
chloroethane
Concen: 1.14 ug/L
RT: 1.793 min Scan# 190
Delta R.T. -0.006 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion: 64 Resp: 1426

Ion	Ratio	Lower	Upper
64	100		
66	41.3	0.6	60.6
49	34.2	0.0	59.3

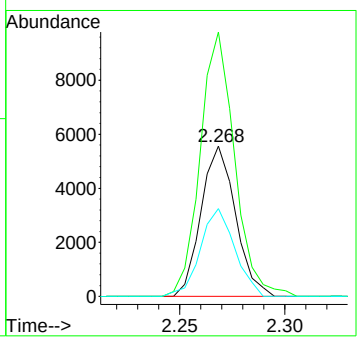


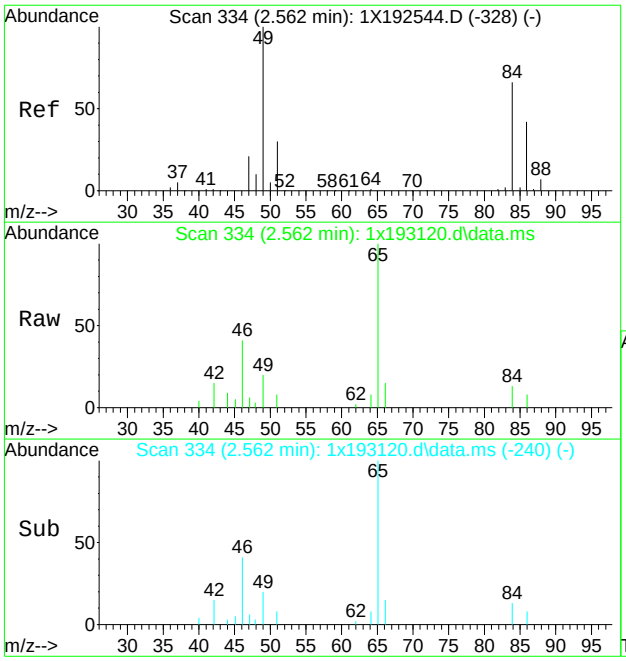


#16
1,1-dichloroethene
Concen: 3.41 ug/L
RT: 2.268 min Scan# 279
Delta R.T. -0.006 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion: 96 Resp: 6350

Ion	Ratio	Lower	Upper
96	100		
61	176.0	146.8	206.8
63	58.4	25.5	85.5

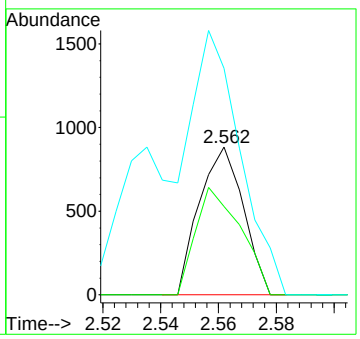


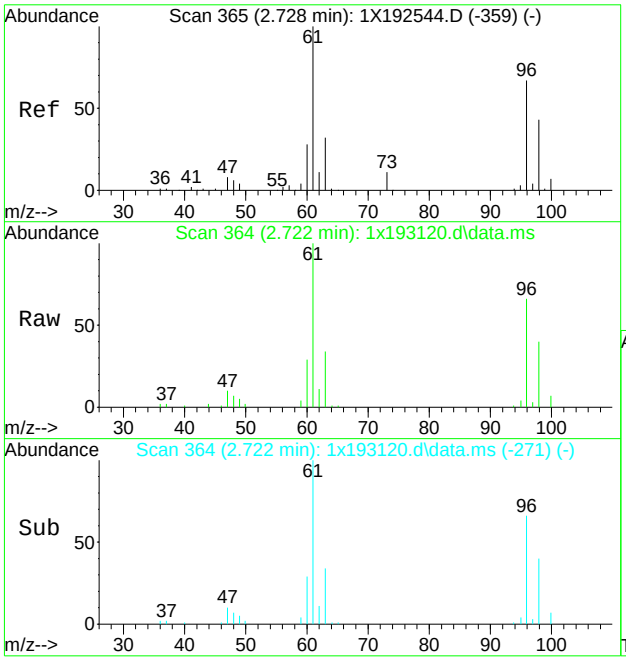


#22
methylene chloride
Concen: 0.51 ug/L
RT: 2.562 min Scan# 334
Delta R.T. -0.000 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion: 84 Resp: 934

Ion	Ratio	Lower	Upper
84	100		
86	59.9	34.3	94.3
49	153.3	122.9	182.9

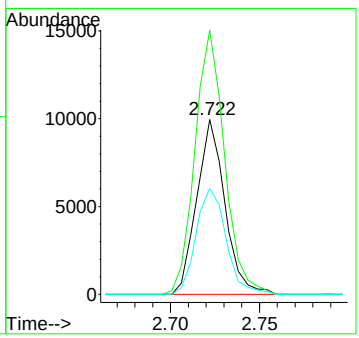


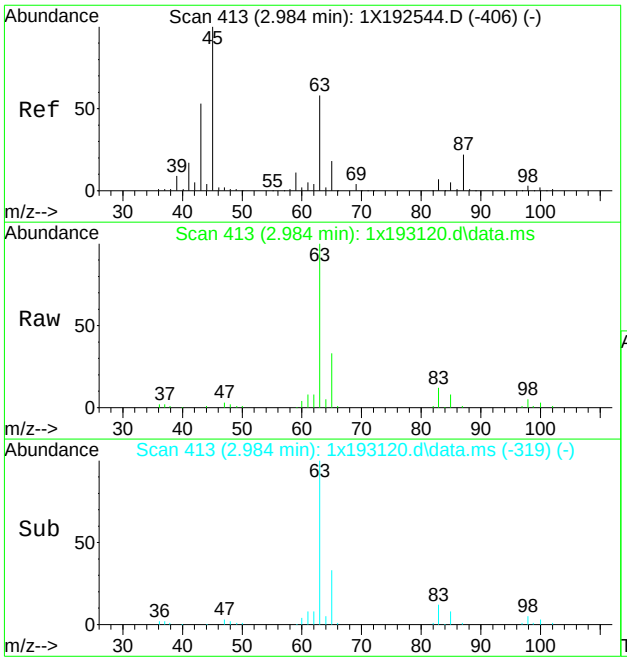


#26
trans-1,2-dichloroethene
Concen: 5.55 ug/L
RT: 2.722 min Scan# 364
Delta R.T. -0.006 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion: 96 Resp: 10939

Ion	Ratio	Lower	Upper
96	100		
61	151.2	120.2	180.2
98	60.6	34.0	94.0

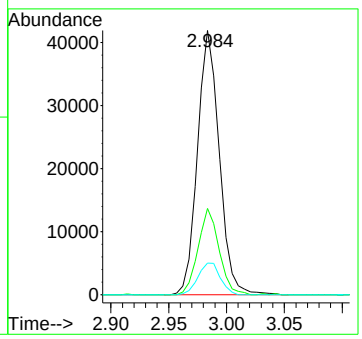


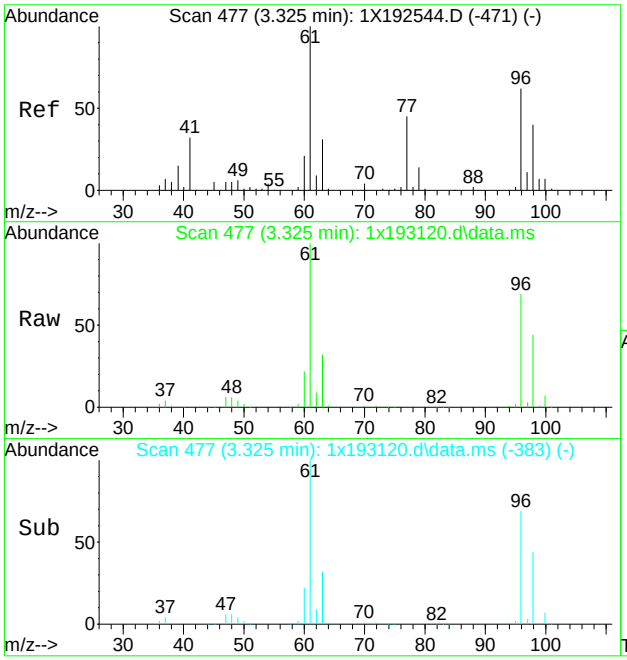


#30
1,1-dichloroethane
Concen: 14.38 ug/L
RT: 2.984 min Scan# 413
Delta R.T. -0.000 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion: 63 Resp: 54969

Ion	Ratio	Lower	Upper
63	100		
65	32.7	0.9	60.9
83	12.0	0.0	42.5

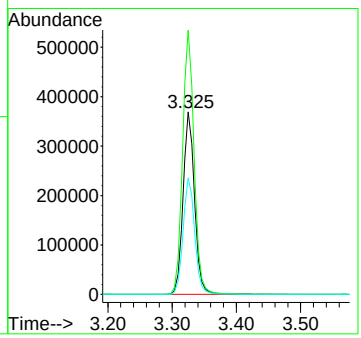


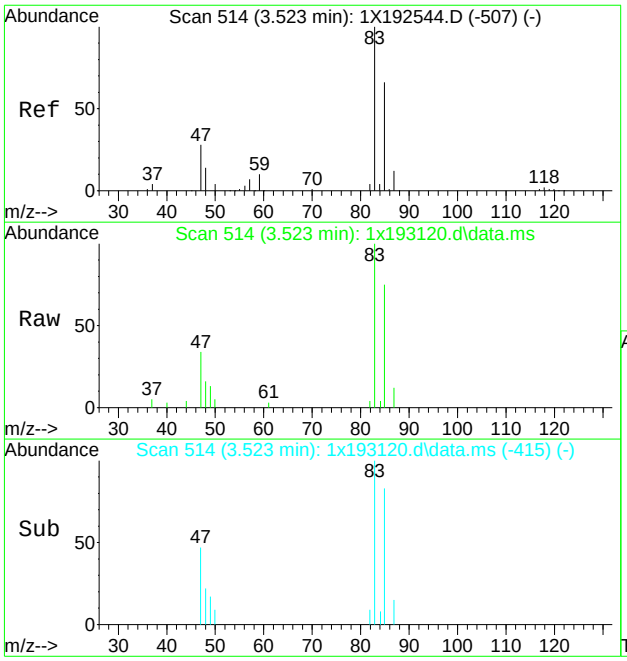


#36
cis-1,2-dichloroethene
Concen: 215.20 ug/L
RT: 3.325 min Scan# 477
Delta R.T. -0.000 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion: 96 Resp: 456040

Ion	Ratio	Lower	Upper
96	100		
61	144.8	131.2	191.2
98	63.8	34.7	94.7

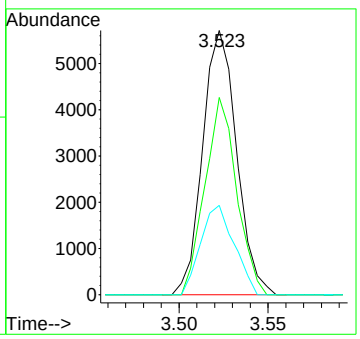


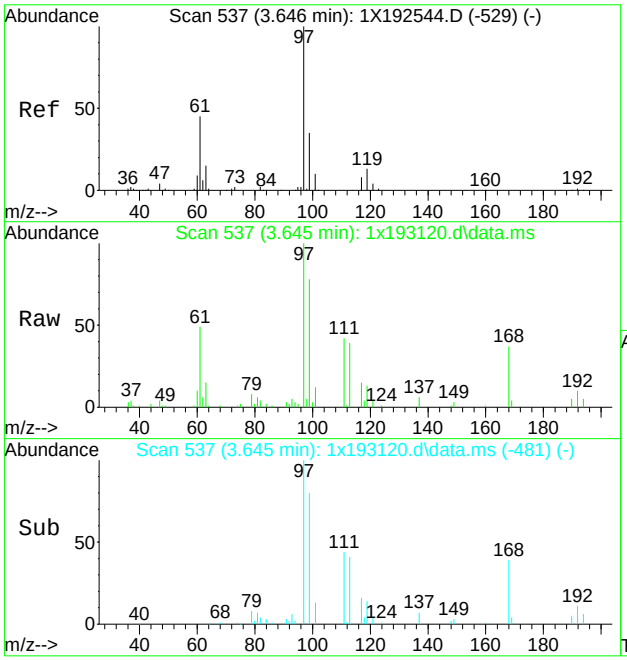


#42
chloroform
Concen: 2.05 ug/L
RT: 3.523 min Scan# 514
Delta R.T. -0.000 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion: 83 Resp: 7555

Ion	Ratio	Lower	Upper
83	100		
85	74.7	35.8	95.8
47	33.8	0.1	60.1

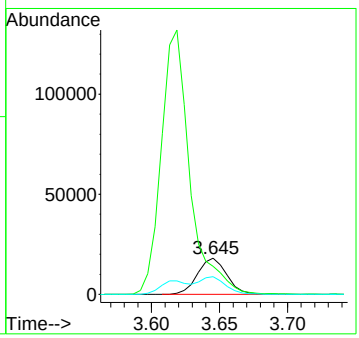


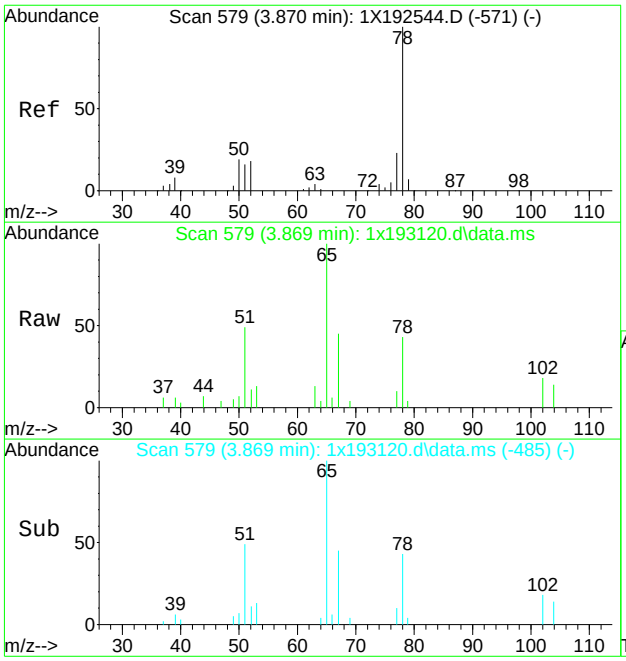


#45
1,1,1-trichloroethane
Concen: 7.73 ug/L
RT: 3.645 min Scan# 537
Delta R.T. -0.000 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion: 97 Resp: 26903

Ion	Ratio	Lower	Upper
97	100		
99	76.5	37.2	97.2
61	49.1	16.0	76.0

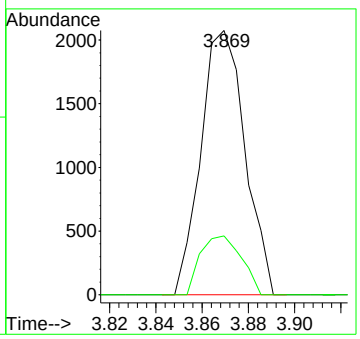


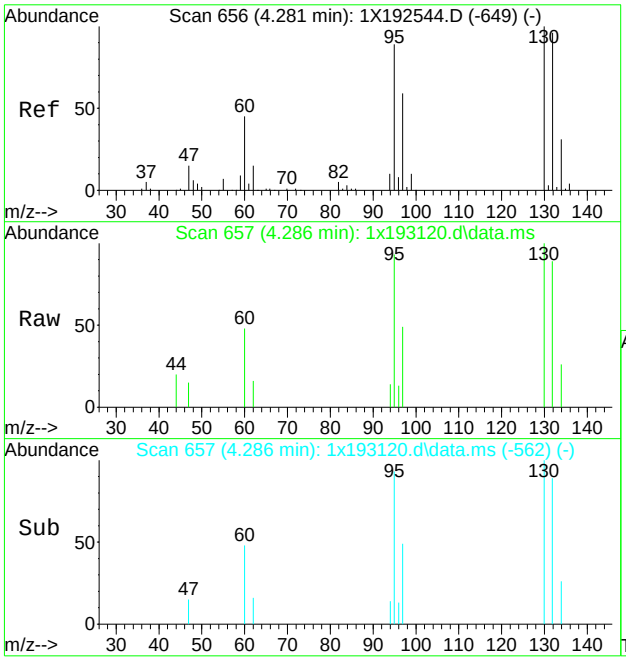


#57
benzene
Concen: 0.39 ug/L
RT: 3.869 min Scan# 579
Delta R.T. -0.000 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion: 78 Resp: 2750

Ion	Ratio	Lower	Upper
78	100		
77	22.3	0.0	53.3

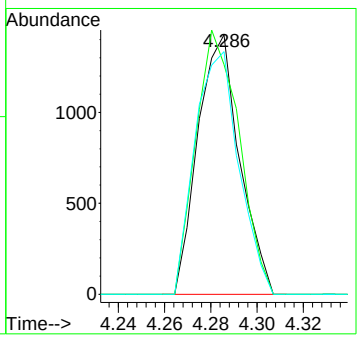


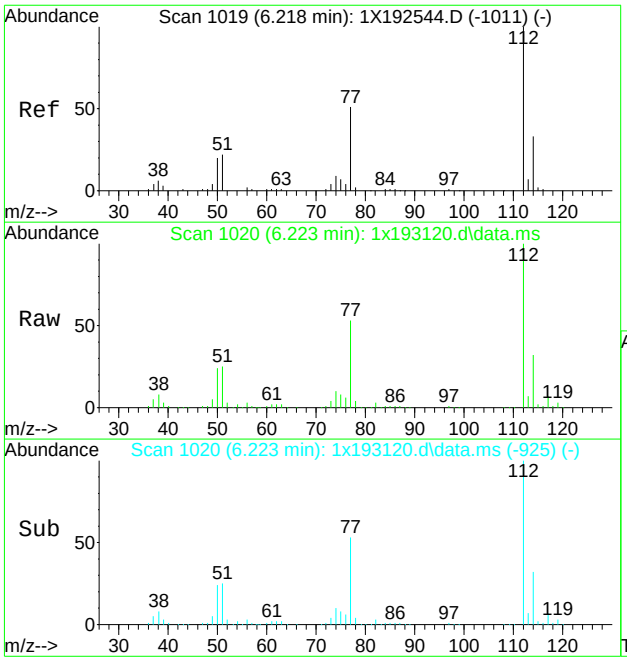


#61
trichloroethene
Concen: 0.75 ug/L
RT: 4.286 min Scan# 657
Delta R.T. 0.005 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion:130 Resp: 1788

Ion	Ratio	Lower	Upper
130	100		
132	88.6	65.5	125.5
95	93.5	58.7	118.7

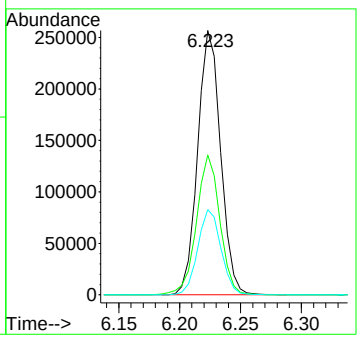


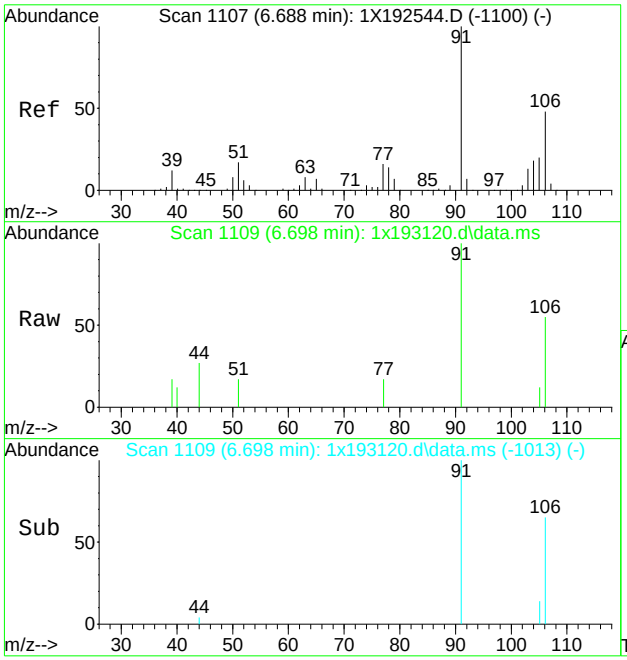


#86
chlorobenzene
Concen: 66.34 ug/L
RT: 6.223 min Scan# 1020
Delta R.T. 0.005 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion:112 Resp: 337271

Ion	Ratio	Lower	Upper
112	100		
77	52.9	20.6	80.6
114	32.3	2.6	62.6

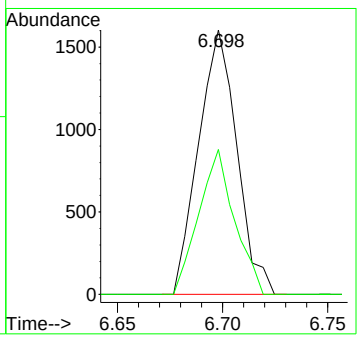


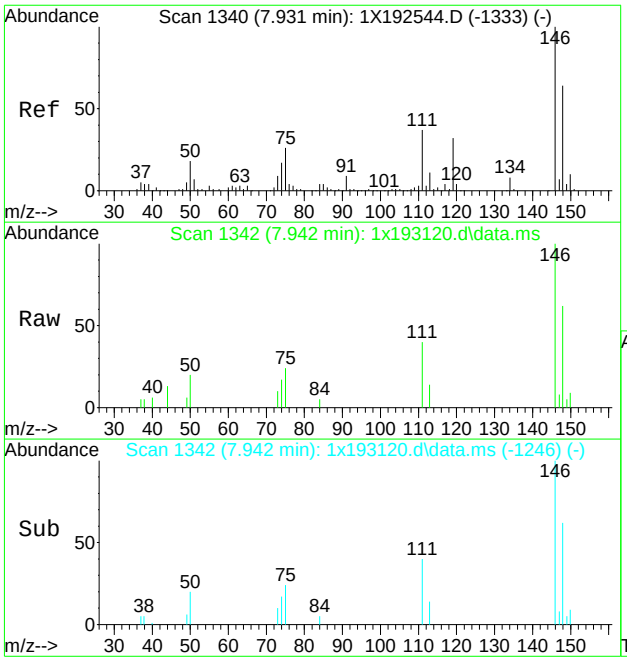


#90
o-xylene
Concen: 0.30 ug/L
RT: 6.698 min Scan# 1109
Delta R.T. 0.010 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion: 91 Resp: 2033

Ion	Ratio	Lower	Upper
91	100		
106	54.9	18.3	78.3

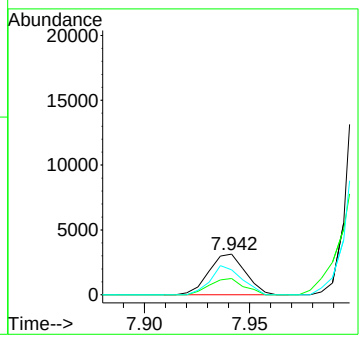


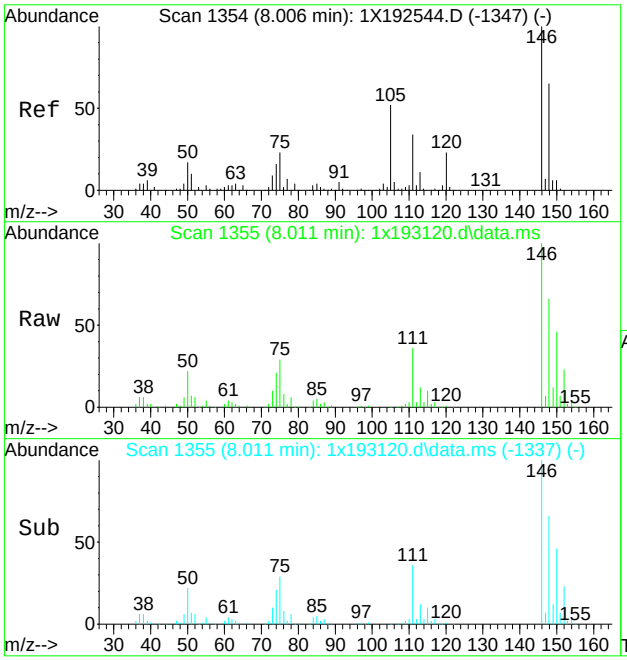


#110
1,3-dichlorobenzene
Concen: 0.94 ug/L
RT: 7.942 min Scan# 1342
Delta R.T. 0.010 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion:146 Resp: 3793

Ion	Ratio	Lower	Upper
146	100		
111	39.9	6.7	66.7
148	61.8	34.1	94.1

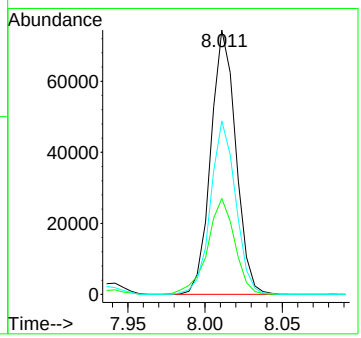


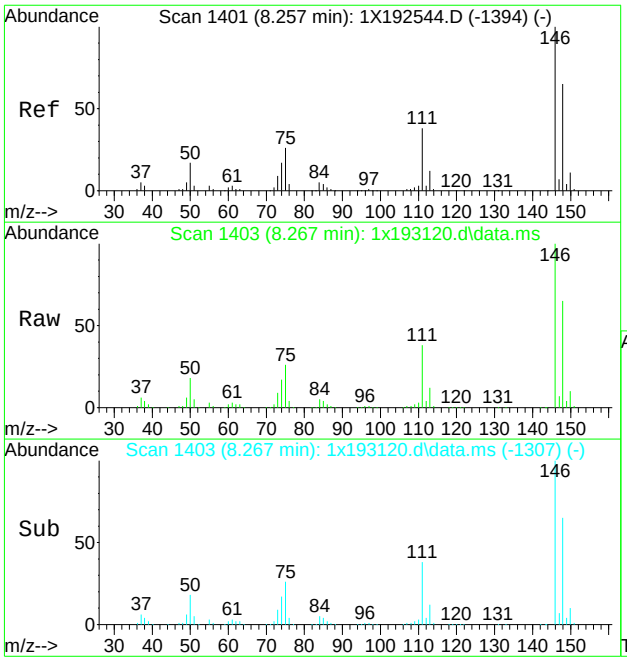


#112
1,4-dichlorobenzene
Concen: 20.07 ug/L
RT: 8.011 min Scan# 1355
Delta R.T. 0.005 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion:146 Resp: 84090

Ion	Ratio	Lower	Upper
146	100		
111	36.3	4.4	64.4
148	65.6	34.6	94.6

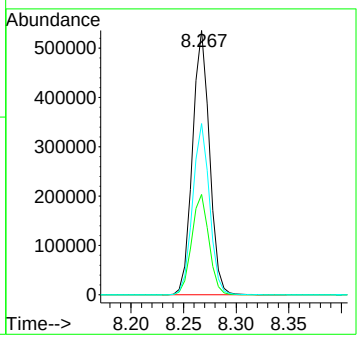




#113
1,2-dichlorobenzene
Concen: 156.74 ug/L
RT: 8.267 min Scan# 1403
Delta R.T. 0.010 min
Lab File: 1x193120.d
Acq: 21 Dec 2021 3:52 pm

Tgt Ion:146 Resp: 603613

Ion	Ratio	Lower	Upper
146	100		
111	38.0	8.0	68.0
148	64.7	34.7	94.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-23-2021\v2d8732\
Data File : 2d200533.d
Acq On : 22 Dec 2021 1:51 pm
Operator : edwardd
Sample : JD36624-16 Inst : MS2D
Misc : MS55557,V2D8732,5,,,,500
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2D8694.M
Quant Results File: M2D8694.RES
Quant Time: Dec 23 08:06:37 2021
Quant Title : SW-846 Method 8260C/D / EPA 624.1, DB624 60m x 0.2Thu Nov 18 15:34:03 2021
QLast Update : Thu Nov 18 15:34:03 2021
Response via : Initial Calibration

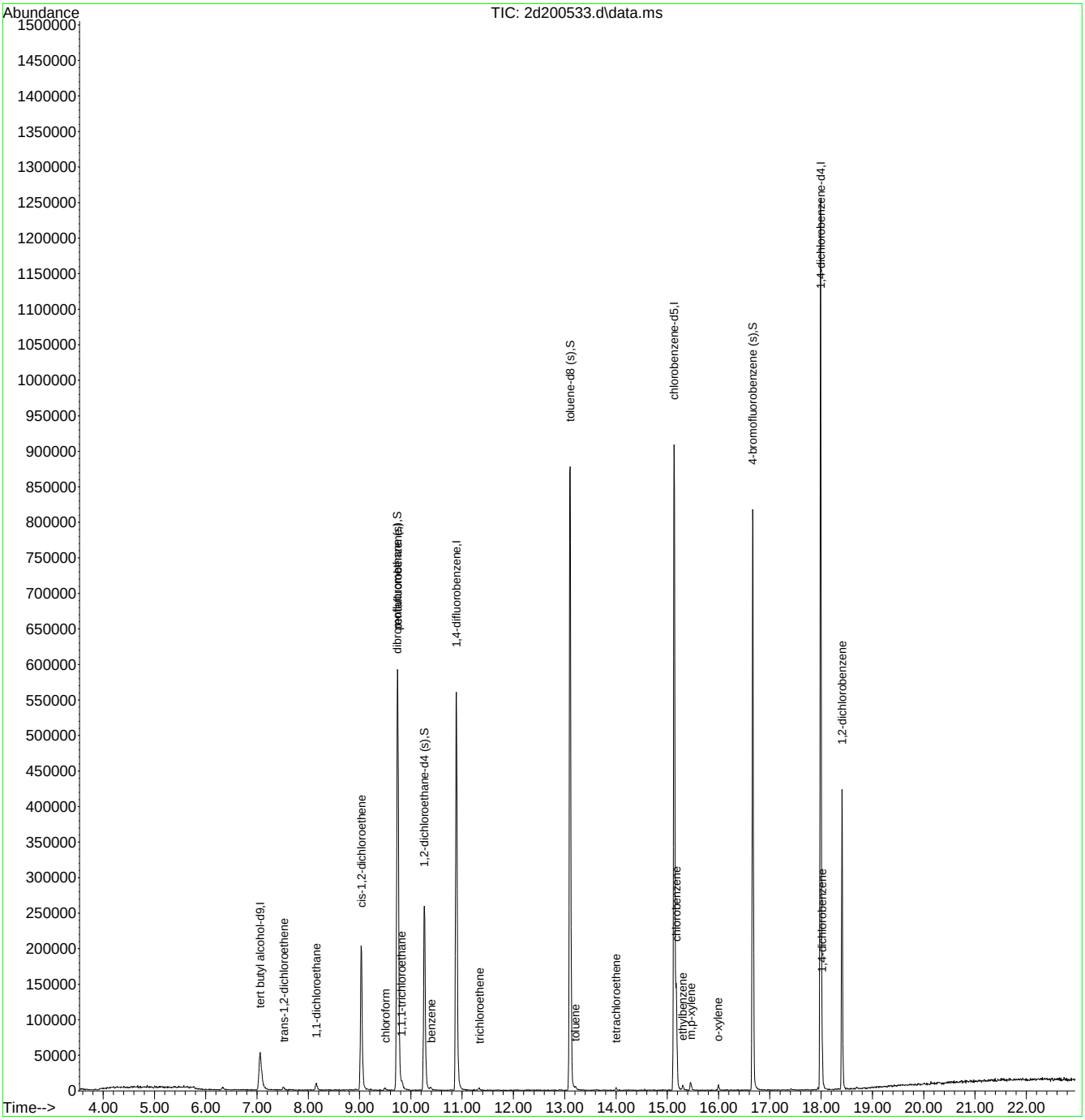
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.060	65	102737	500.00	ug/L	0.03
5) pentafluorobenzene	9.745	168	336523	50.00	ug/L	0.02
50) 1,4-difluorobenzene	10.888	114	520447	50.00	ug/L	0.03
72) chlorobenzene-d5	15.134	117	523348	50.00	ug/L	0.02
96) 1,4-dichlorobenzene-d4	17.992	152	301367	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	9.734	113	192398	53.35	ug/L	0.03
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.70%			
51) 1,2-dichloroethane-d4 (s)	10.258	65	209622	47.20	ug/L	0.02
Spiked Amount 50.000	Range 81 - 124		Recovery = 94.40%			
73) toluene-d8 (s)	13.105	98	630881	53.03	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.06%			
97) 4-bromofluorobenzene (s)	16.665	95	255910	40.15	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 80.30%			
Target Compounds						Qvalue
25) trans-1,2-dichloroethene	7.522	96	1885	0.52	ug/L #	62
29) 1,1-dichloroethane	8.156	63	13201	1.65	ug/L	88
36) cis-1,2-dichloroethene	9.037	96	94274	24.88	ug/L	98
41) chloroform	9.503	83	2228	0.33	ug/L	79
44) 1,1,1-trichloroethane	9.818	97	5436	0.96	ug/L	85
52) benzene	10.395	78	2910	0.22	ug/L	81
60) trichloroethene	11.338	130	1207	0.32	ug/L #	65
74) toluene	13.205	92	1909	0.25	ug/L	88
78) tetrachloroethene	14.002	164	896	0.30	ug/L	84
85) chlorobenzene	15.176	112	78478	8.50	ug/L	96
87) ethylbenzene	15.302	91	5149	0.34	ug/L	96
88) m,p-xylene	15.465	91	7720	0.64	ug/L	91
89) o-xylene	15.994	106	2029	0.32	ug/L	95
112) 1,4-dichlorobenzene	18.018	146	22440	2.08	ug/L	92
113) 1,2-dichlorobenzene	18.406	146	158006	15.11	ug/L	98

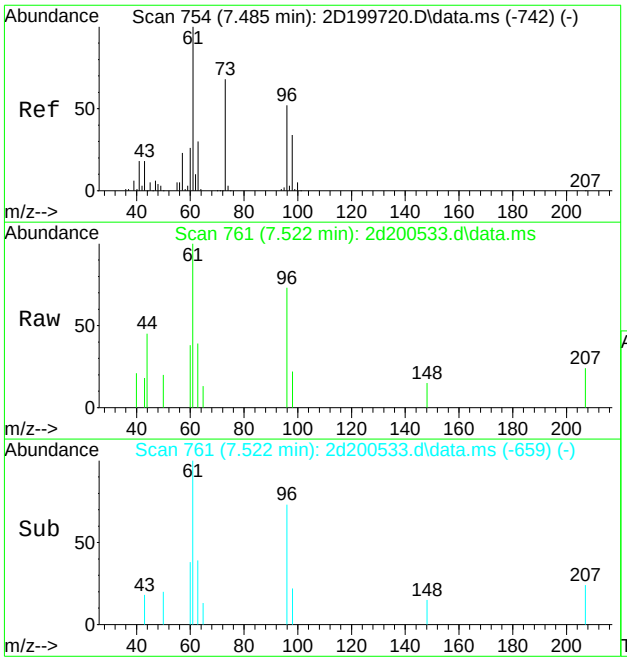
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-23-2021\v2d8732\
Data File : 2d200533.d
Acq On : 22 Dec 2021 1:51 pm
Operator : edwardd
Sample : JD36624-16 Inst : MS2D
Misc : MS55557,V2D8732,5,,,,500
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2D8694.M
Quant Results File: M2D8694.RES
Quant Time: Dec 23 08:06:37 2021
Quant Title : SW-846 Method 8260C/D / EPA 624.1, DB624 60m x 0.2Thu Nov 18 15:34:03 2021
QLast Update : Thu Nov 18 15:34:03 2021
Response via : Initial Calibration

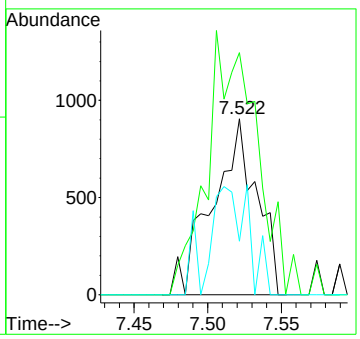


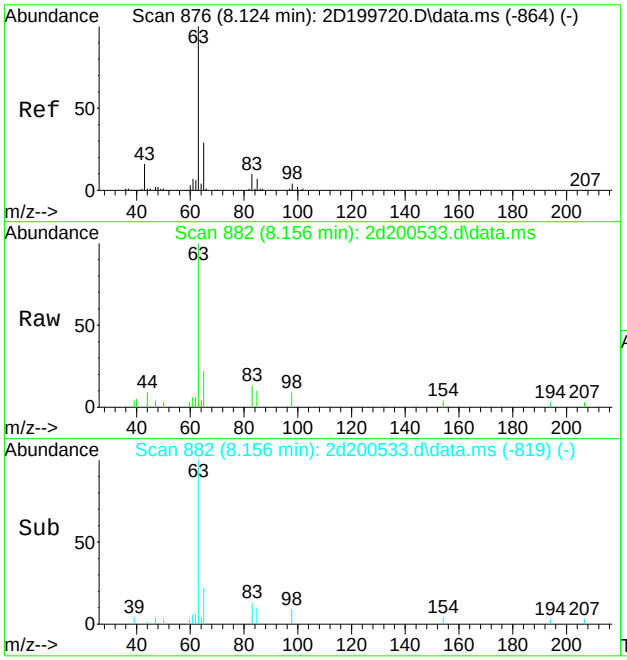


#25
trans-1,2-dichloroethene
Concen: 0.52 ug/L
RT: 7.522 min Scan# 761
Delta R.T. 0.037 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion: 96 Resp: 1885

Ion	Ratio	Lower	Upper
96	100		
61	137.5	161.1	221.1#
98	30.5	35.2	95.2#

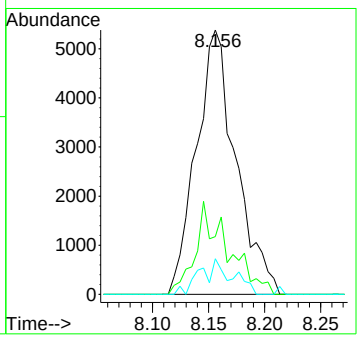


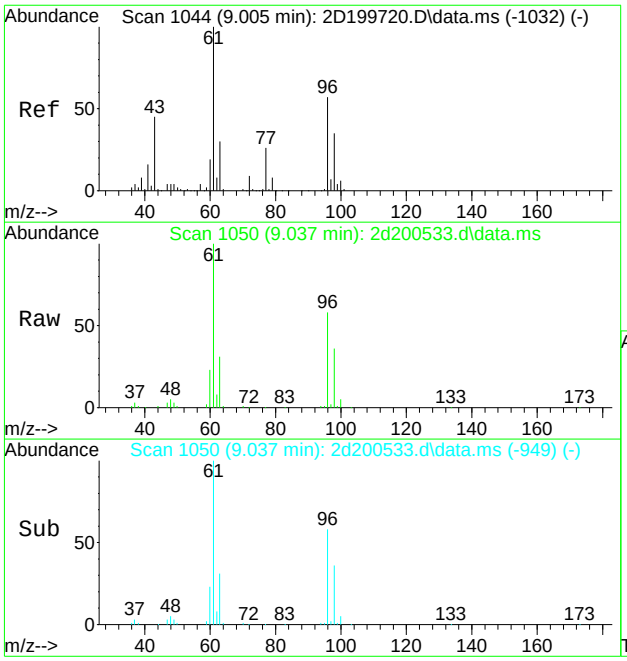


#29
1,1-dichloroethane
Concen: 1.65 ug/L
RT: 8.156 min Scan# 882
Delta R.T. 0.031 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion: 63 Resp: 13201

Ion	Ratio	Lower	Upper
63	100		
65	21.8	0.0	59.0
83	13.4	0.0	40.2

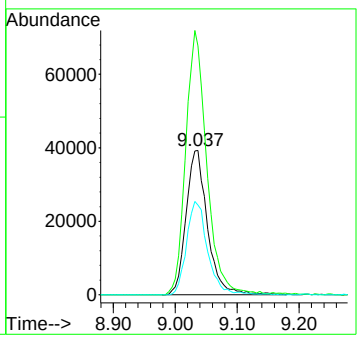


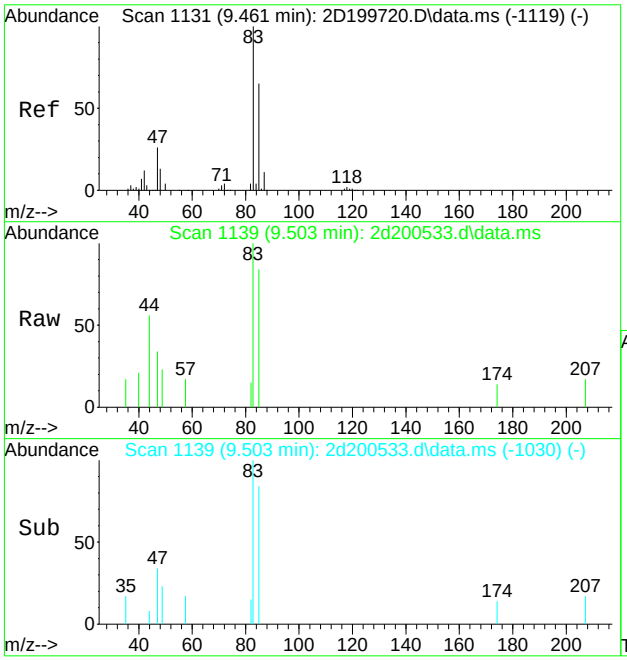


#36
cis-1,2-dichloroethene
Concen: 24.88 ug/L
RT: 9.037 min Scan# 1050
Delta R.T. 0.031 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion: 96 Resp: 94274

Ion	Ratio	Lower	Upper
96	100		
61	172.5	146.9	206.9
98	62.2	32.2	92.2

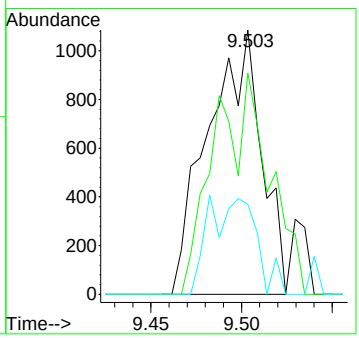


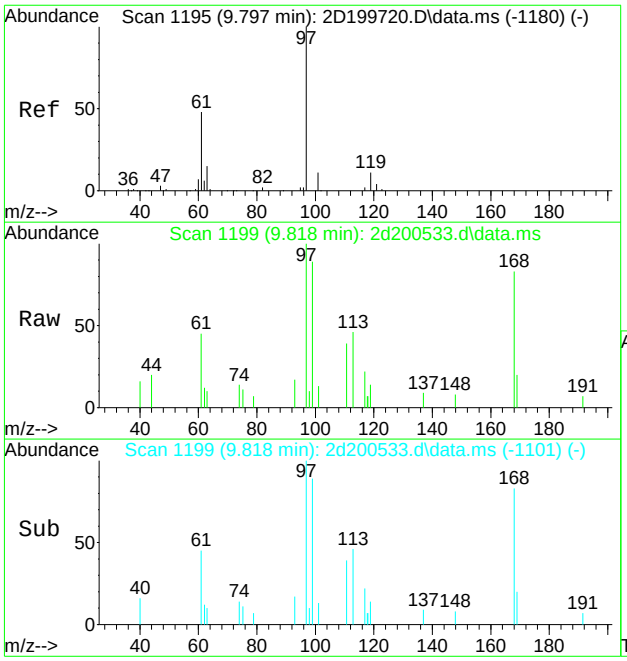


#41
chloroform
Concen: 0.33 ug/L
RT: 9.503 min Scan# 1139
Delta R.T. 0.042 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion: 83 Resp: 2228

Ion	Ratio	Lower	Upper
83	100		
85	83.7	34.7	94.7
47	34.0	0.0	57.5

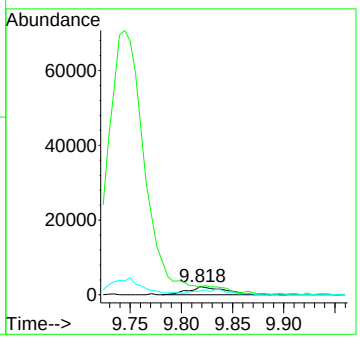


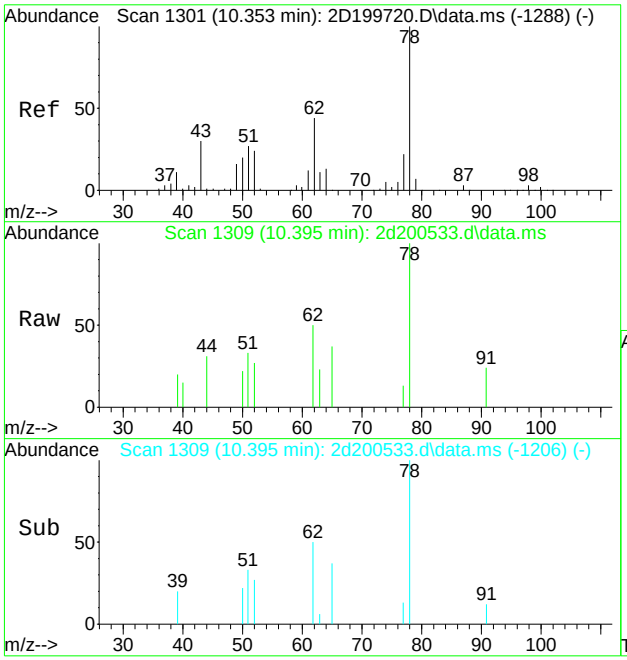


#44
1,1,1-trichloroethane
Concen: 0.96 ug/L
RT: 9.818 min Scan# 1199
Delta R.T. 0.016 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion: 97 Resp: 5436

Ion	Ratio	Lower	Upper
97	100		
99	81.5	35.2	95.2
61	45.3	21.4	81.4

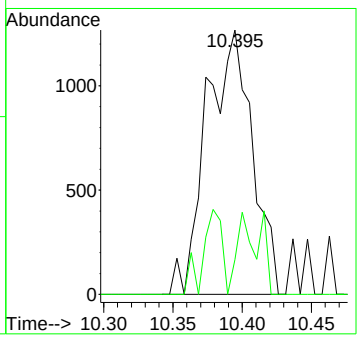


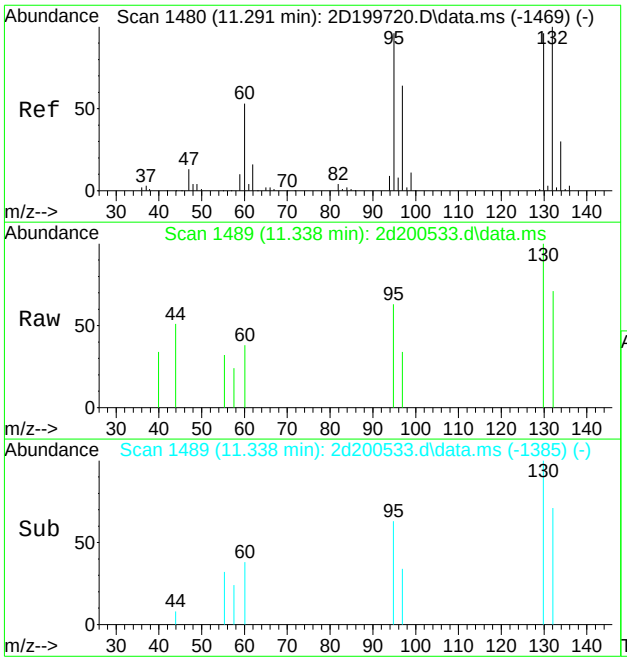


#52
benzene
Concen: 0.22 ug/L
RT: 10.395 min Scan# 1309
Delta R.T. 0.042 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion: 78 Resp: 2910

Ion	Ratio	Lower	Upper
78	100		
77	13.2	0.0	52.1

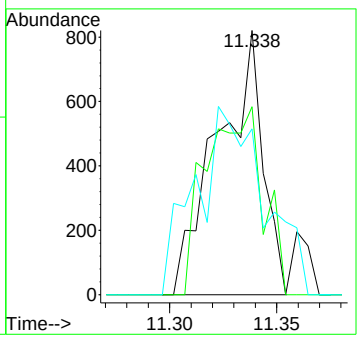


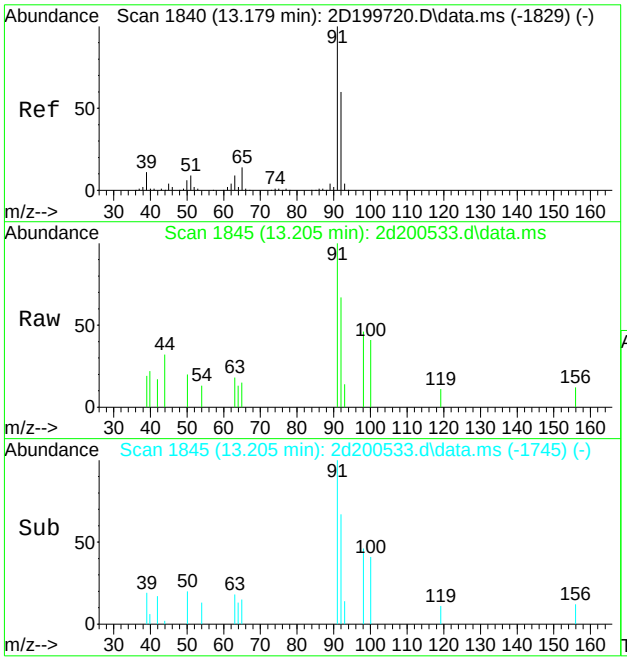


#60
trichloroethene
Concen: 0.32 ug/L
RT: 11.338 min Scan# 1489
Delta R.T. 0.047 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion:130 Resp: 1207

Ion	Ratio	Lower	Upper
130	100		
132	71.1	74.7	134.7#
95	62.7	70.7	130.7#

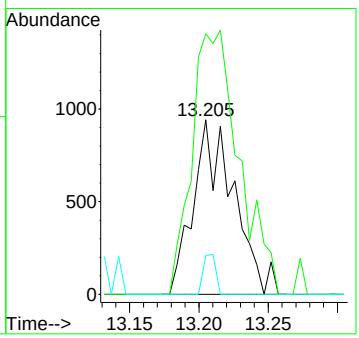


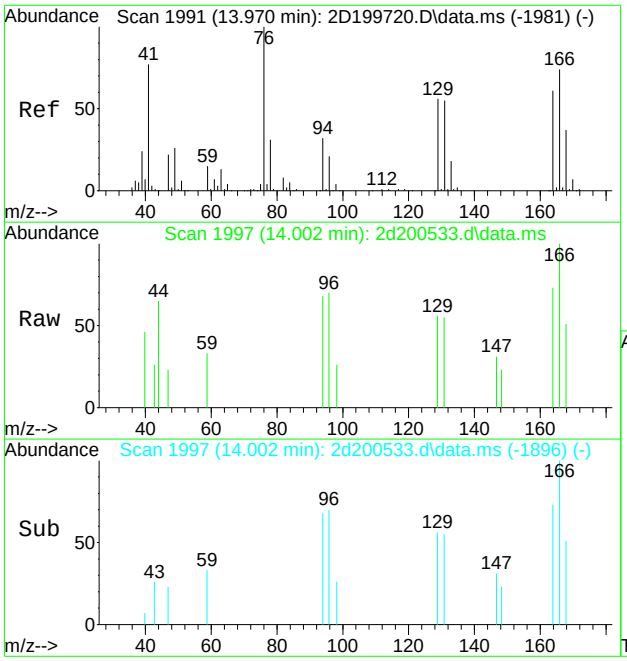


#74
toluene
Concen: 0.25 ug/L
RT: 13.205 min Scan# 1845
Delta R.T. 0.026 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion: 92 Resp: 1909

Ion	Ratio	Lower	Upper
92	100		
91	149.3	147.0	187.0
65	22.4	2.7	42.7

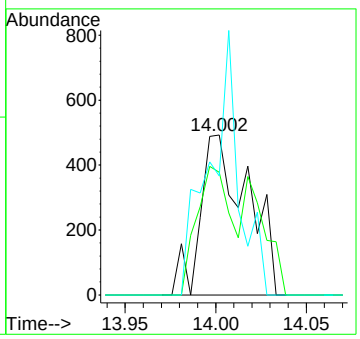


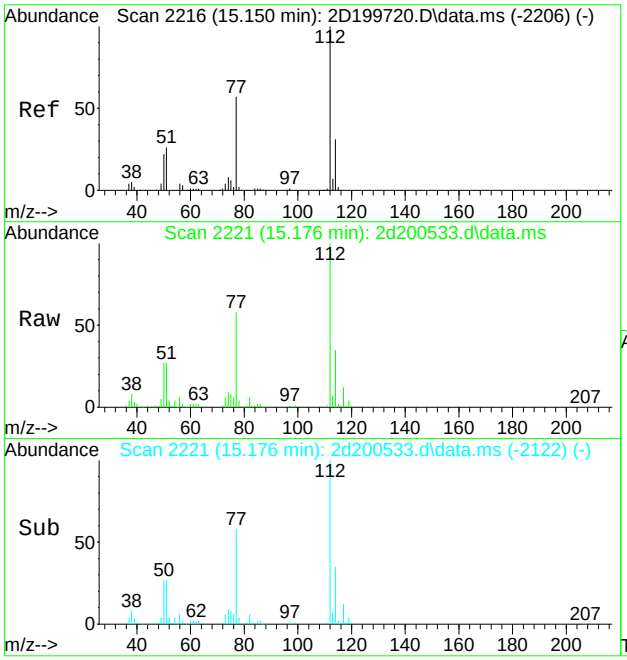


#78
tetrachloroethene
Concen: 0.30 ug/L
RT: 14.002 min Scan# 1997
Delta R.T. 0.031 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion:164 Resp: 896

Ion	Ratio	Lower	Upper
164	100		
129	76.7	61.2	121.2
131	74.4	60.2	120.2

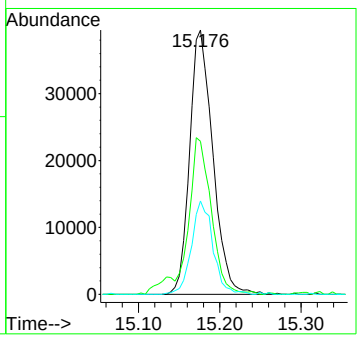


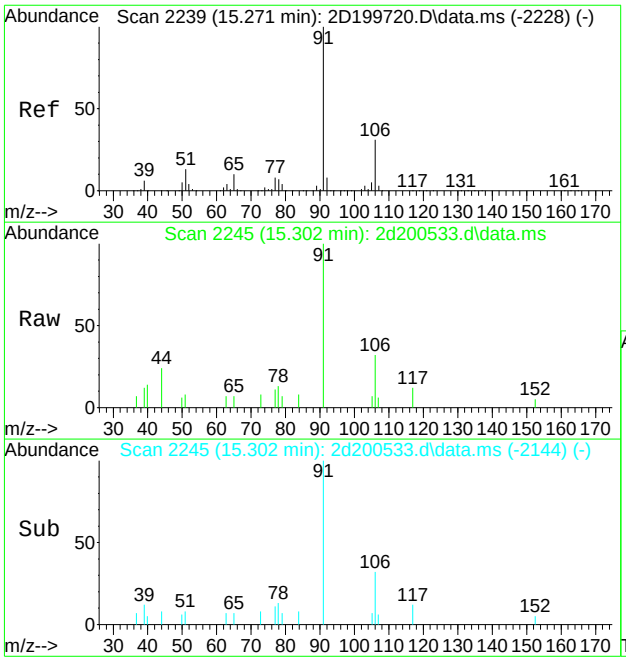


#85
chlorobenzene
Concen: 8.50 ug/L
RT: 15.176 min Scan# 2221
Delta R.T. 0.021 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion:112 Resp: 78478

Ion	Ratio	Lower	Upper
112	100		
77	57.8	26.7	86.7
114	35.3	1.2	61.2

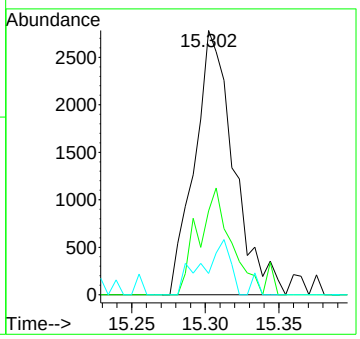


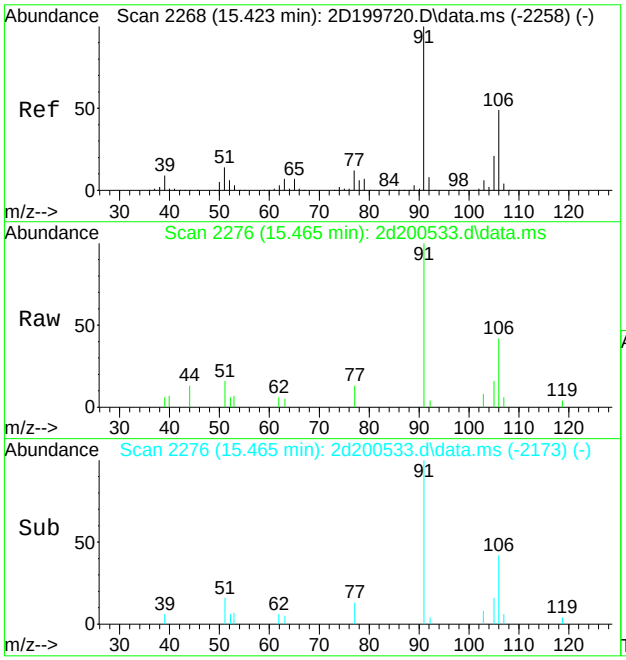


#87
ethylbenzene
Concen: 0.34 ug/L
RT: 15.302 min Scan# 2245
Delta R.T. 0.031 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion: 91 Resp: 5149

Ion	Ratio	Lower	Upper
91	100		
106	31.7	1.4	61.4
51	8.0	0.0	43.4

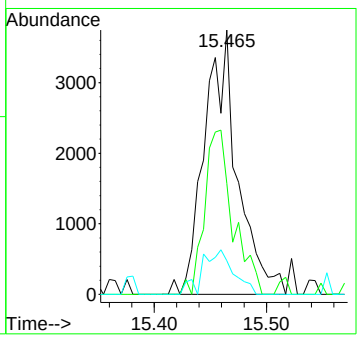


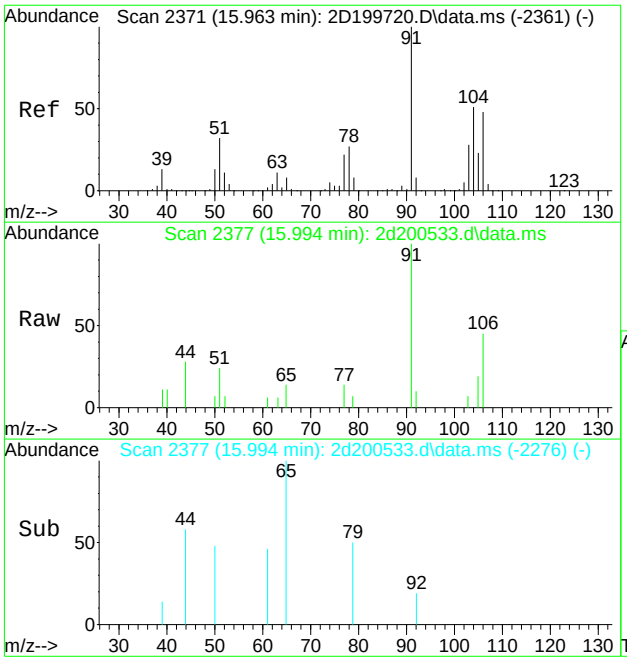


#88
m,p-xylene
Concen: 0.64 ug/L
RT: 15.465 min Scan# 2276
Delta R.T. 0.042 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion: 91 Resp: 7720

Ion	Ratio	Lower	Upper
91	100		
106	42.0	19.3	79.3
77	12.7	0.0	42.3

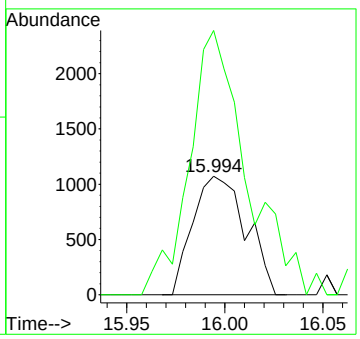


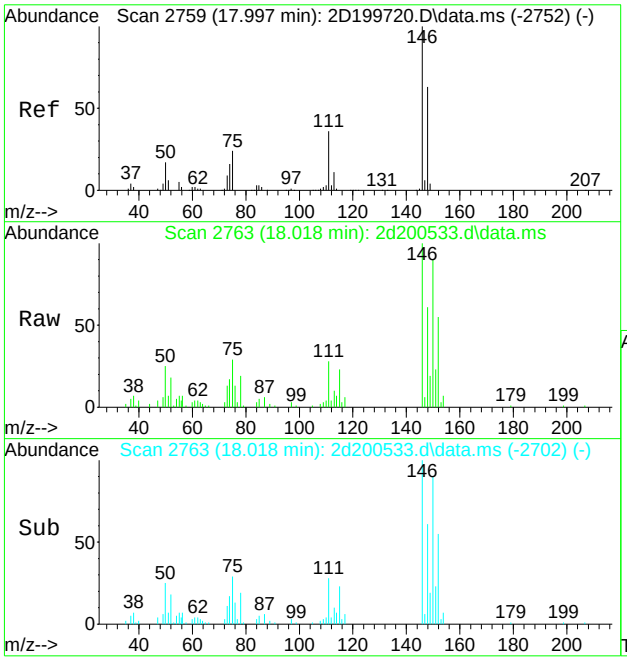


#89
o-xylene
Concen: 0.32 ug/L
RT: 15.994 min Scan# 2377
Delta R.T. 0.031 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion:106 Resp: 2029

Ion	Ratio	Lower	Upper
106	100		
91	198.7	177.1	237.1

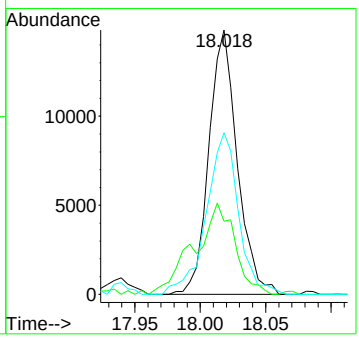


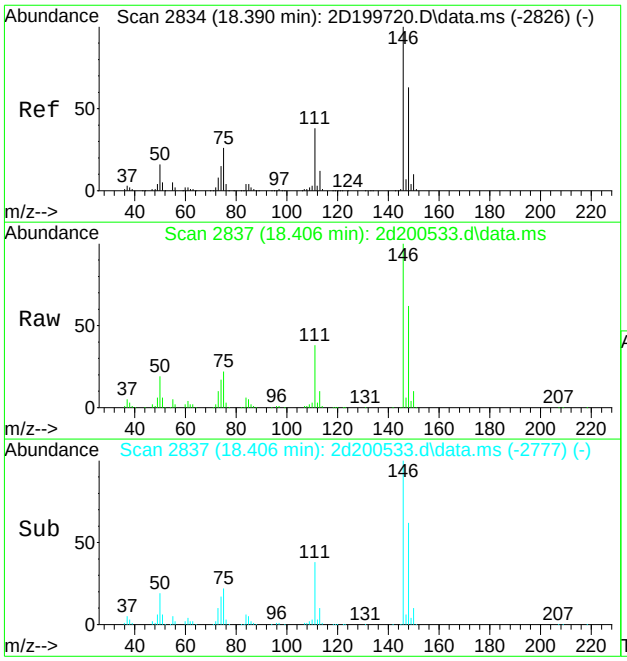


#112
1,4-dichlorobenzene
Concen: 2.08 ug/L
RT: 18.018 min Scan# 2763
Delta R.T. 0.021 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion:146 Resp: 22440

Ion	Ratio	Lower	Upper
146	100		
111	26.6	6.7	66.7
148	61.2	33.5	93.5

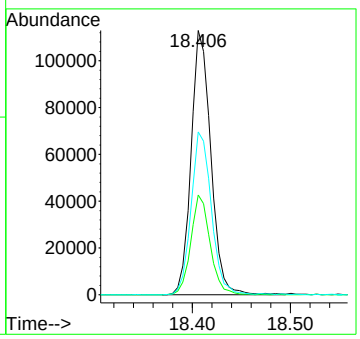




#113
1,2-dichlorobenzene
Concen: 15.11 ug/L
RT: 18.406 min Scan# 2837
Delta R.T. 0.016 min
Lab File: 2d200533.d
Acq: 22 Dec 2021 1:51 pm

Tgt Ion:146 Resp: 158006

Ion	Ratio	Lower	Upper
146	100		
111	37.7	8.2	68.2
148	61.6	33.1	93.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-22-2021\vx8366-partial\
Data File : 1x193122.d
Acq On : 21 Dec 2021 4:44 pm
Operator : brittank
Sample : JD36624-17 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8366,5,,,,10
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 22 04:35:56 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

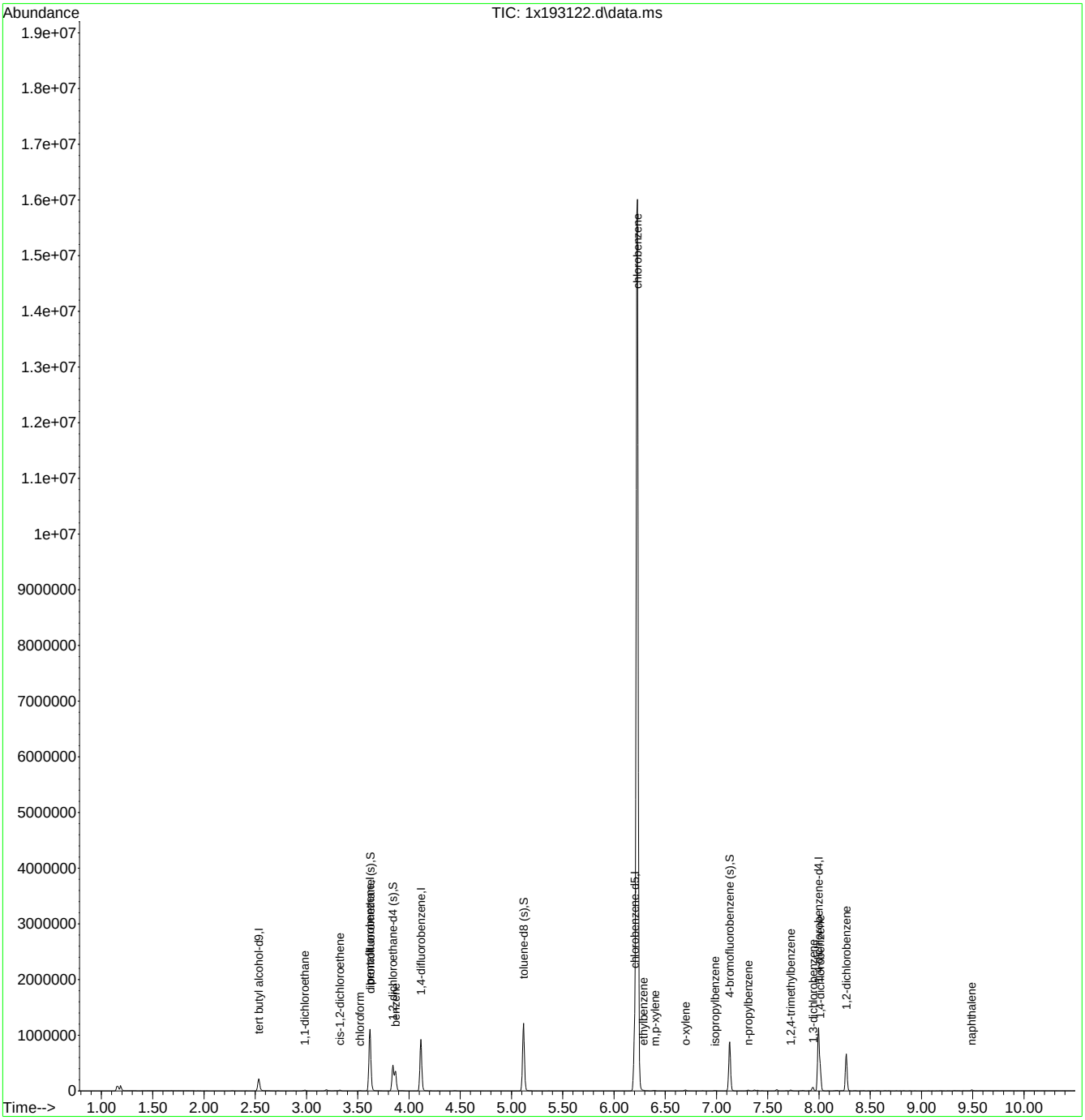
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.535	65	170543	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	353961	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	517436	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	489849	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	209525	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	177452	49.72	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.44%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	220370	49.78	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.56%			
74) toluene-d8 (s)	5.118	98	580226	48.72	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.44%			
98) 4-bromofluorobenzene (s)	7.130	95	210596	50.57	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.14%			
Target Compounds						Qvalue
30) 1,1-dichloroethane	2.984	63	9980	2.66	ug/L	98
36) cis-1,2-dichloroethene	3.325	96	3629	1.74	ug/L	90
42) chloroform	3.523	83	1154	0.32	ug/L	88
57) benzene	3.870	78	189273	26.32	ug/L	98
86) chlorobenzene	6.229	112	7185979	1375.59	ug/L	97
88) ethylbenzene	6.287	91	4857	0.54	ug/L	87
89) m,p-xylene	6.399	106	1812	0.52	ug/L	82
90) o-xylene	6.698	91	8437	1.20	ug/L	98
95) isopropylbenzene	6.986	105	3434	0.39	ug/L	95
103) n-propylbenzene	7.312	91	8887	0.93	ug/L	98
108) 1,2,4-trimethylbenzene	7.723	105	6128	0.94	ug/L	98
110) 1,3-dichlorobenzene	7.942	146	19685	4.82	ug/L	98
112) 1,4-dichlorobenzene	8.011	146	113765	26.95	ug/L	98
113) 1,2-dichlorobenzene	8.267	146	197439	50.90	ug/L	99
119) naphthalene	9.489	128	8903	1.22	ug/L	99

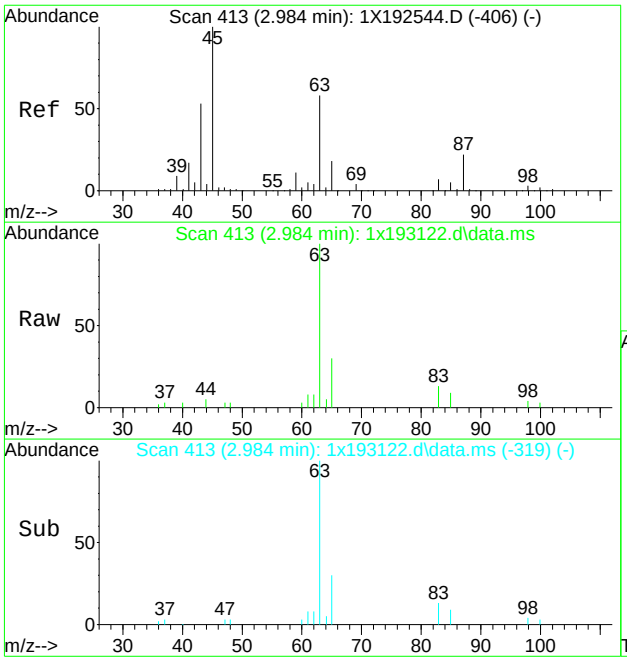
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-22-2021\vx8366-partial\
Data File : 1x193122.d
Acq On : 21 Dec 2021 4:44 pm
Operator : brittank
Sample : JD36624-17 Inst : ACC-VOA-MSX
Misc : MS55557,V1X8366,5,,,,10
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 22 04:35:56 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

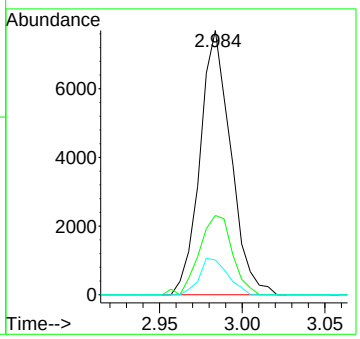


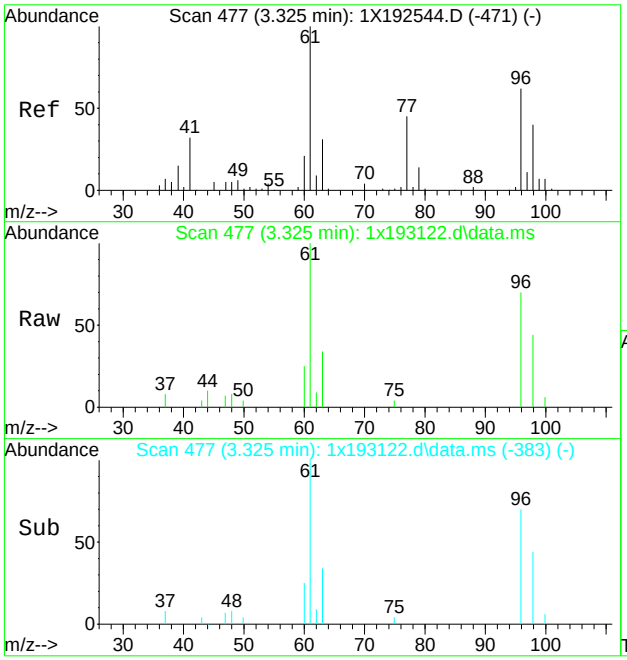


#30
1,1-dichloroethane
Concen: 2.66 ug/L
RT: 2.984 min Scan# 413
Delta R.T. -0.000 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion: 63 Resp: 9980

Ion	Ratio	Lower	Upper
63	100		
65	30.0	0.9	60.9
83	13.1	0.0	42.5

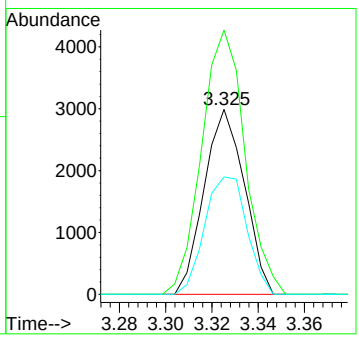


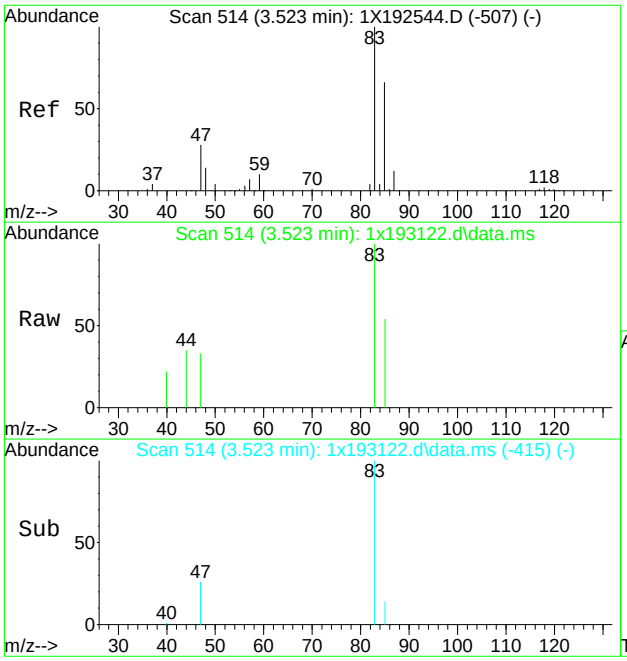


#36
cis-1,2-dichloroethene
Concen: 1.74 ug/L
RT: 3.325 min Scan# 477
Delta R.T. -0.000 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion: 96 Resp: 3629

Ion	Ratio	Lower	Upper
96	100		
61	142.8	131.2	191.2
98	63.4	34.7	94.7

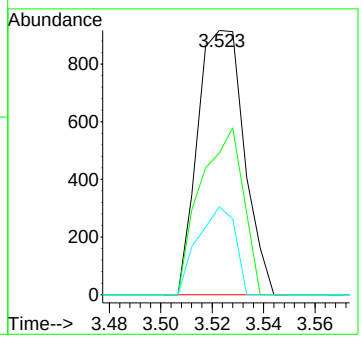


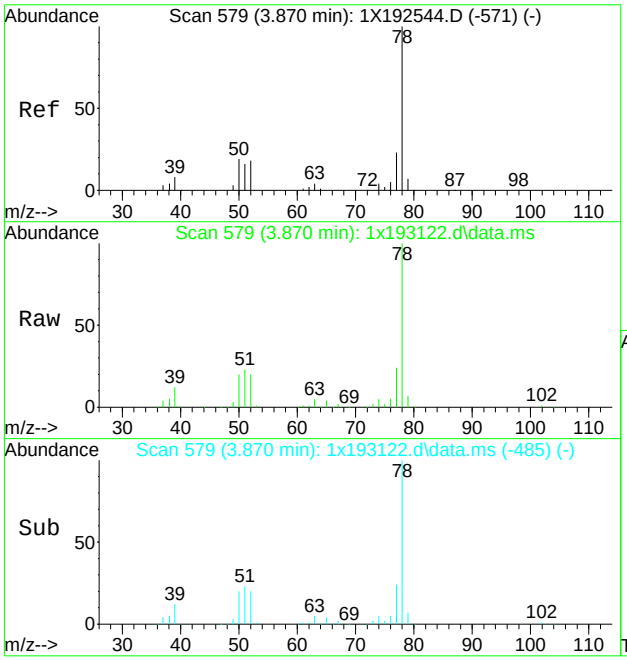


#42
chloroform
Concen: 0.32 ug/L
RT: 3.523 min Scan# 514
Delta R.T. -0.000 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion: 83 Resp: 1154

Ion	Ratio	Lower	Upper
83	100		
85	53.5	35.8	95.8
47	33.3	0.1	60.1

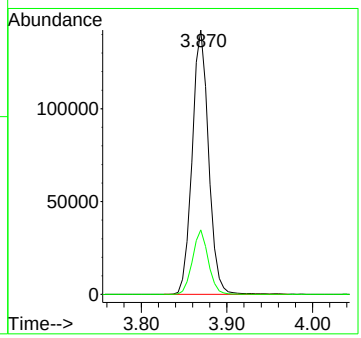


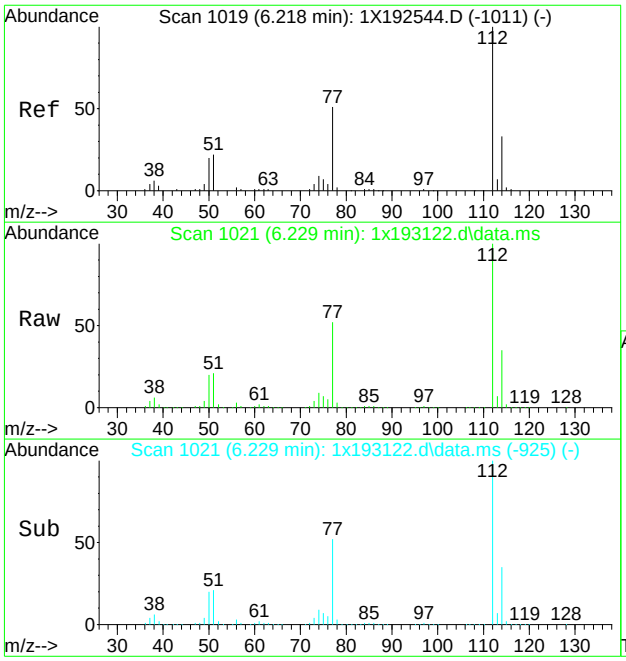


#57
benzene
Concen: 26.32 ug/L
RT: 3.870 min Scan# 579
Delta R.T. -0.000 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion: 78 Resp: 189273

Ion	Ratio	Lower	Upper
78	100		
77	24.4	0.0	53.3

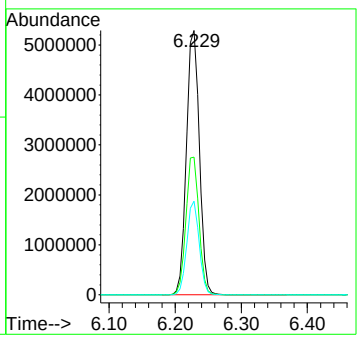


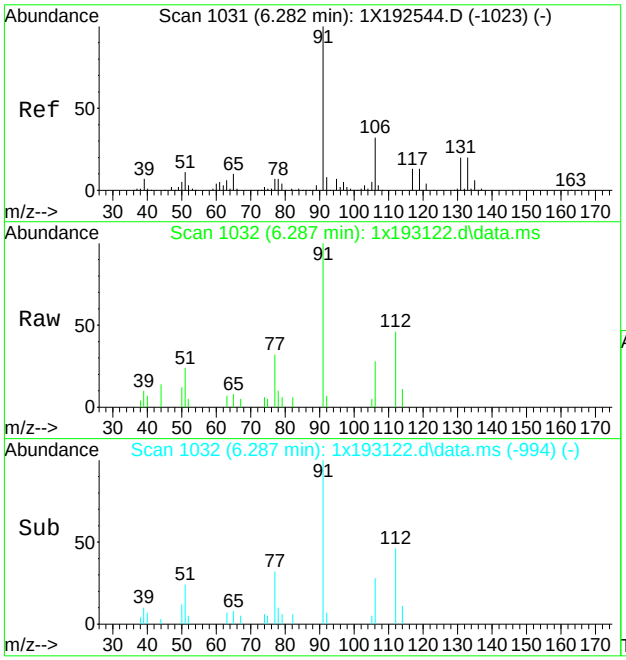


#86
chlorobenzene
Concen: 1375.59 ug/L
RT: 6.229 min Scan# 1021
Delta R.T. 0.010 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion:112 Resp: 7185979

Ion	Ratio	Lower	Upper
112	100		
77	52.1	20.6	80.6
114	35.4	2.6	62.6

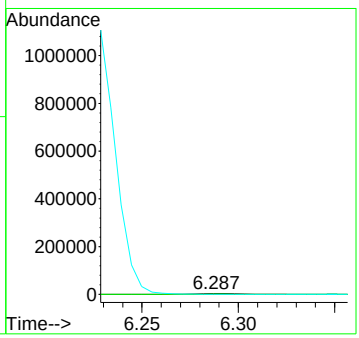


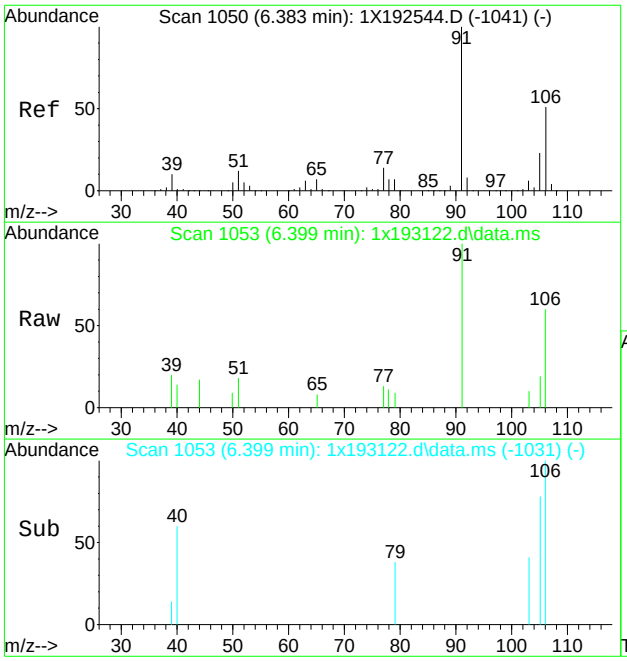


#88
ethylbenzene
Concen: 0.54 ug/L
RT: 6.287 min Scan# 1032
Delta R.T. 0.005 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion: 91 Resp: 4857

Ion	Ratio	Lower	Upper
91	100		
106	28.3	2.4	62.4
51	23.5	0.0	41.7

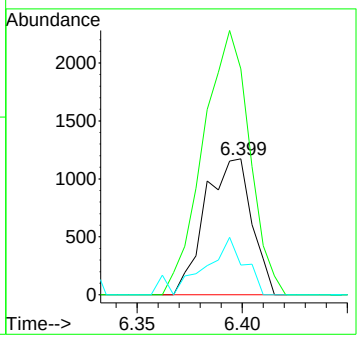


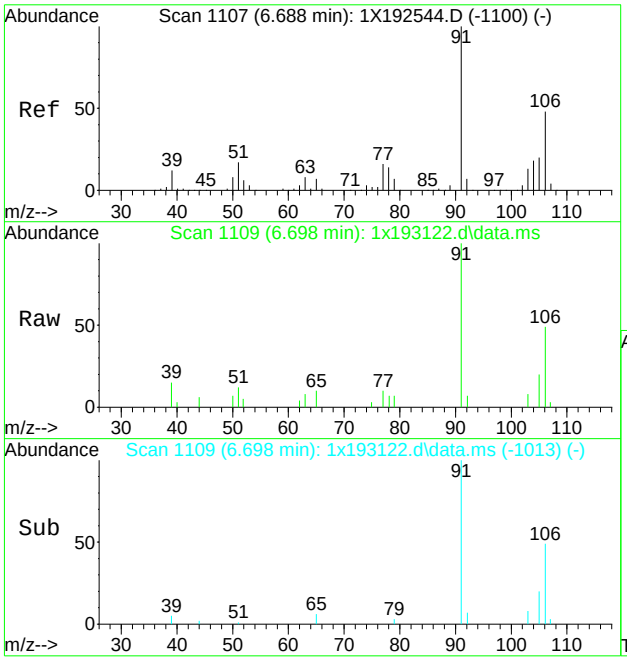


#89
m,p-xylene
Concen: 0.52 ug/L
RT: 6.399 min Scan# 1053
Delta R.T. 0.016 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion:106 Resp: 1812

Ion	Ratio	Lower	Upper
106	100		
91	166.2	164.7	224.7
77	21.9	0.0	56.6

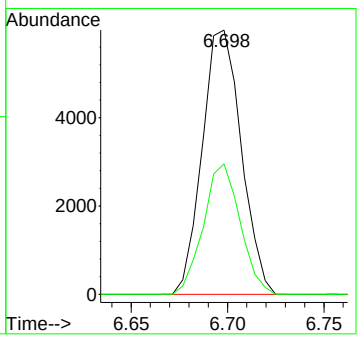


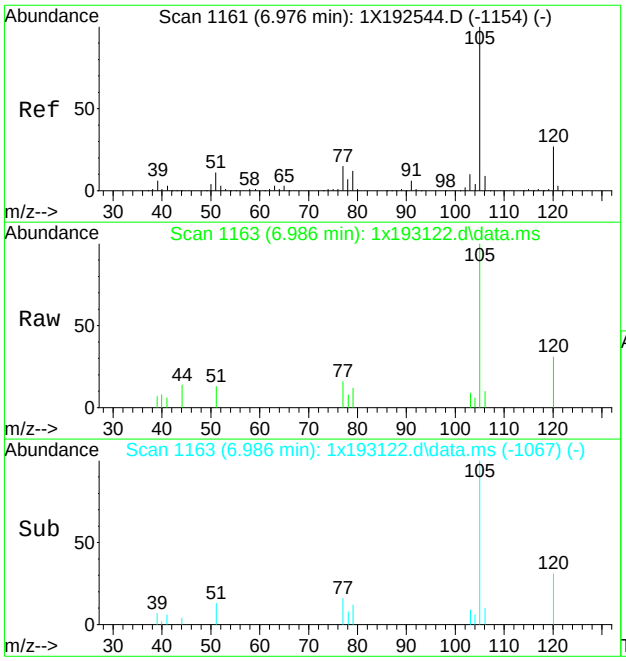


#90
o-xylene
Concen: 1.20 ug/L
RT: 6.698 min Scan# 1109
Delta R.T. 0.010 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion: 91 Resp: 8437

Ion	Ratio	Lower	Upper
91	100		
106	49.4	18.3	78.3

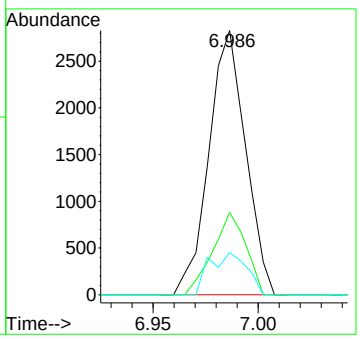


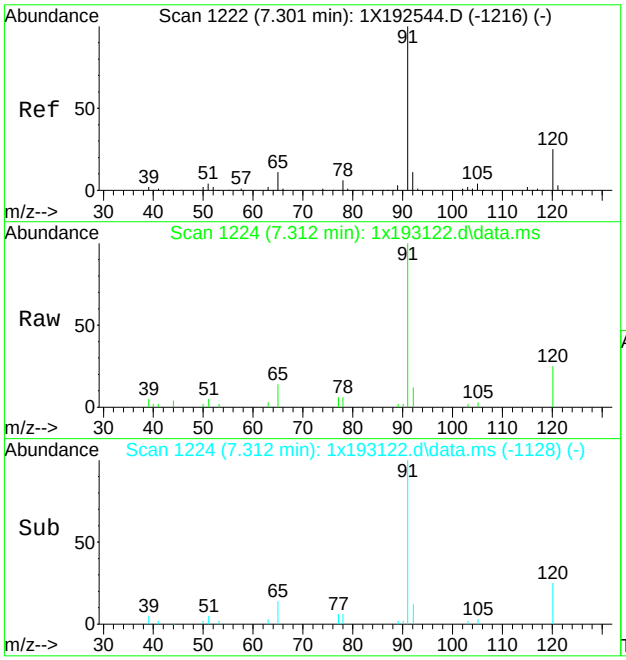


#95
isopropylbenzene
Concen: 0.39 ug/L
RT: 6.986 min Scan# 1163
Delta R.T. 0.010 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion:105 Resp: 3434

Ion	Ratio	Lower	Upper
105	100		
120	31.2	7.2	47.2
77	16.0	0.0	35.4

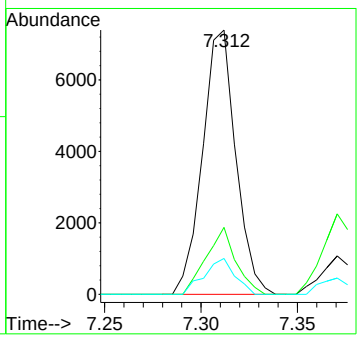


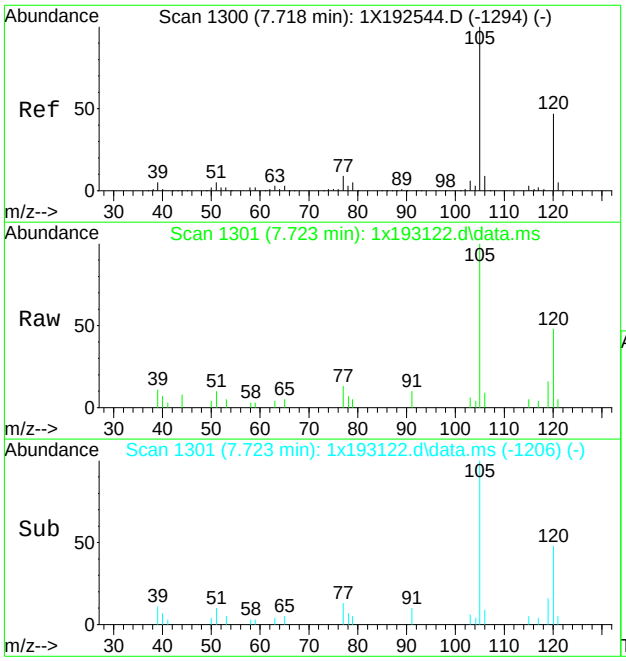


#103
n-propylbenzene
Concen: 0.93 ug/L
RT: 7.312 min Scan# 1224
Delta R.T. 0.010 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion: 91 Resp: 8887

Ion	Ratio	Lower	Upper
91	100		
120	25.3	0.0	55.0
65	13.6	0.0	41.3

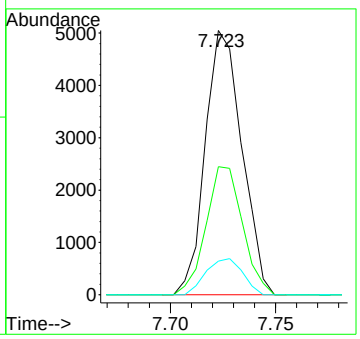


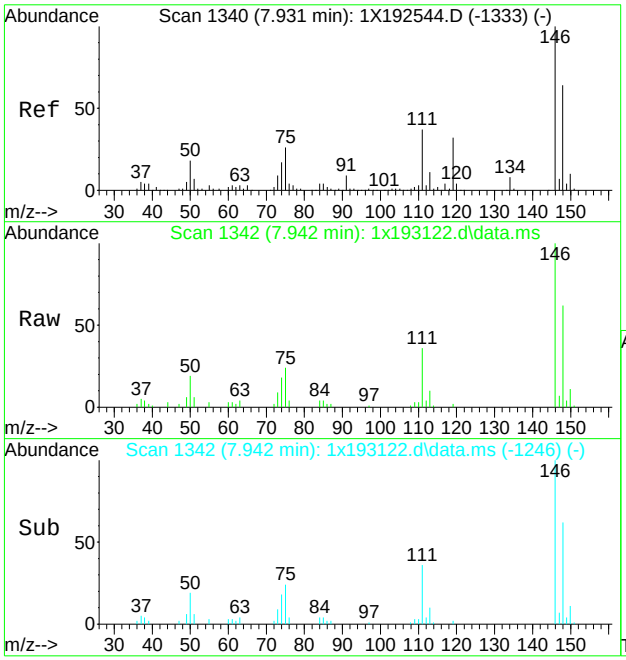


#108
1,2,4-trimethylbenzene
Concen: 0.94 ug/L
RT: 7.723 min Scan# 1301
Delta R.T. 0.005 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion:105 Resp: 6128

Ion	Ratio	Lower	Upper
105	100		
120	48.4	19.6	79.6
77	12.7	0.0	42.4

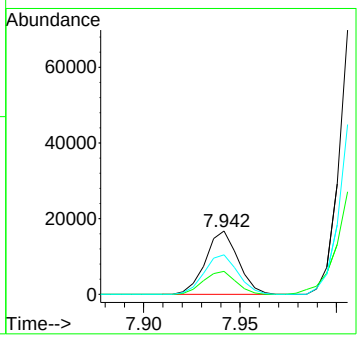


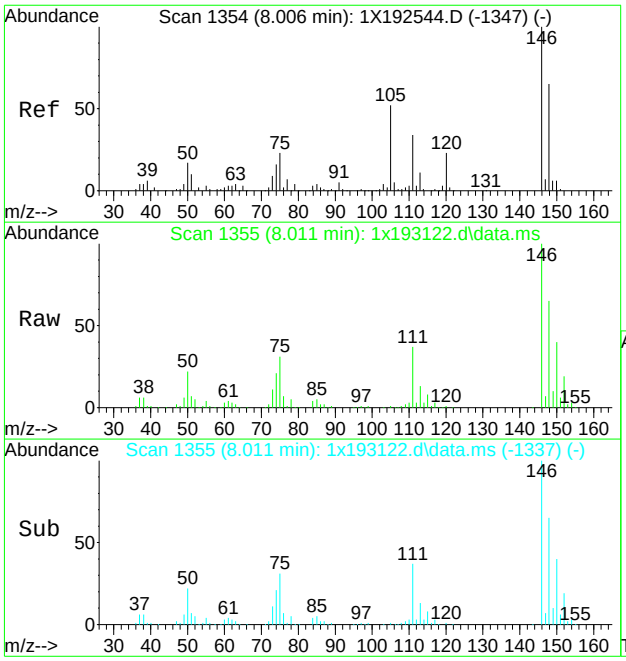


#110
1,3-dichlorobenzene
Concen: 4.82 ug/L
RT: 7.942 min Scan# 1342
Delta R.T. 0.010 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion:146 Resp: 19685

Ion	Ratio	Lower	Upper
146	100		
111	36.2	6.7	66.7
148	62.5	34.1	94.1

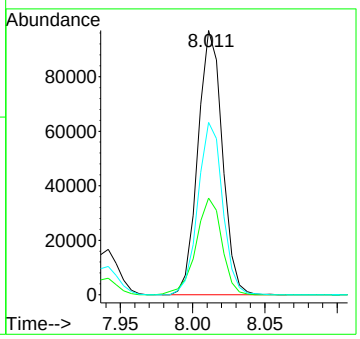


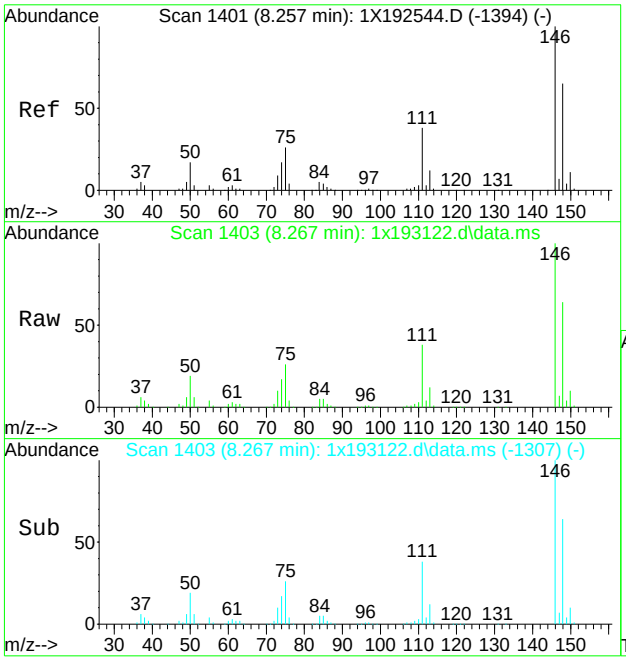


#112
1,4-dichlorobenzene
Concen: 26.95 ug/L
RT: 8.011 min Scan# 1355
Delta R.T. 0.005 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion:146 Resp: 113765

Ion	Ratio	Lower	Upper
146	100		
111	36.6	4.4	64.4
148	65.2	34.6	94.6

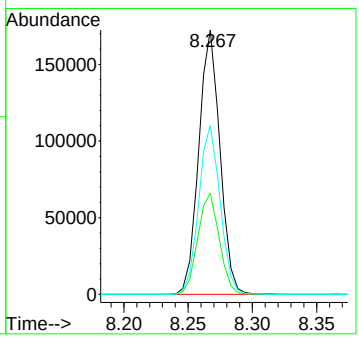


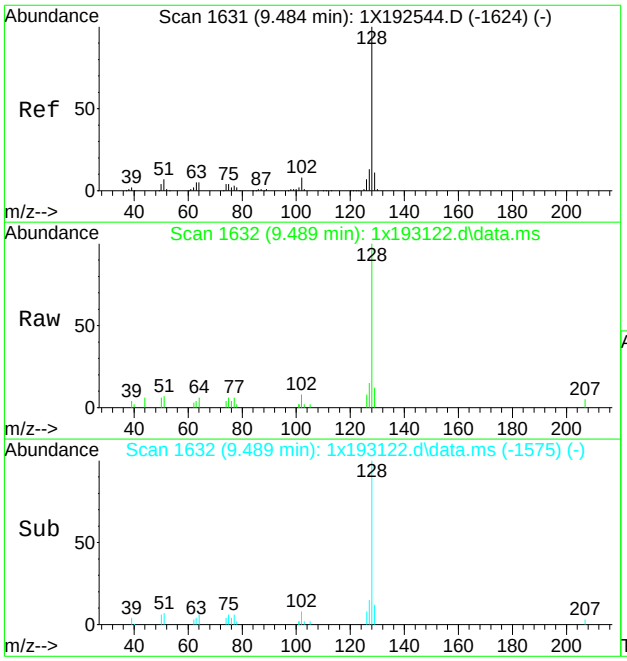


#113
1,2-dichlorobenzene
Concen: 50.90 ug/L
RT: 8.267 min Scan# 1403
Delta R.T. 0.010 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion:146 Resp: 197439

Ion	Ratio	Lower	Upper
146	100		
111	38.2	8.0	68.0
148	63.9	34.7	94.7

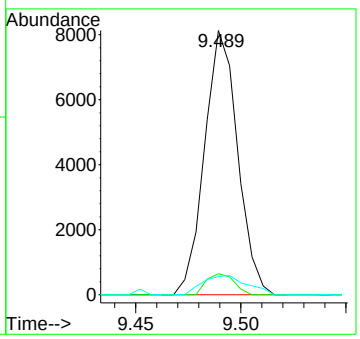




#119
naphthalene
Concen: 1.22 ug/L
RT: 9.489 min Scan# 1632
Delta R.T. 0.005 min
Lab File: 1x193122.d
Acq: 21 Dec 2021 4:44 pm

Tgt Ion:128 Resp: 8903

Ion	Ratio	Lower	Upper
128	100		
102	7.9	0.0	37.7
51	6.9	0.0	36.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-23-2021\v2d8732\
Data File : 2d200532.d
Acq On : 22 Dec 2021 1:22 pm
Operator : edwardd
Sample : JD36624-17 Inst : MS2D
Misc : MS55557,V2D8732,5,,,,200
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2D8694.M
Quant Results File: M2D8694.RES
Quant Time: Dec 23 08:04:48 2021
Quant Title : SW-846 Method 8260C/D / EPA 624.1, DB624 60m x 0.2Thu Nov 18 15:34:03 2021
QLast Update : Thu Nov 18 15:34:03 2021
Response via : Initial Calibration

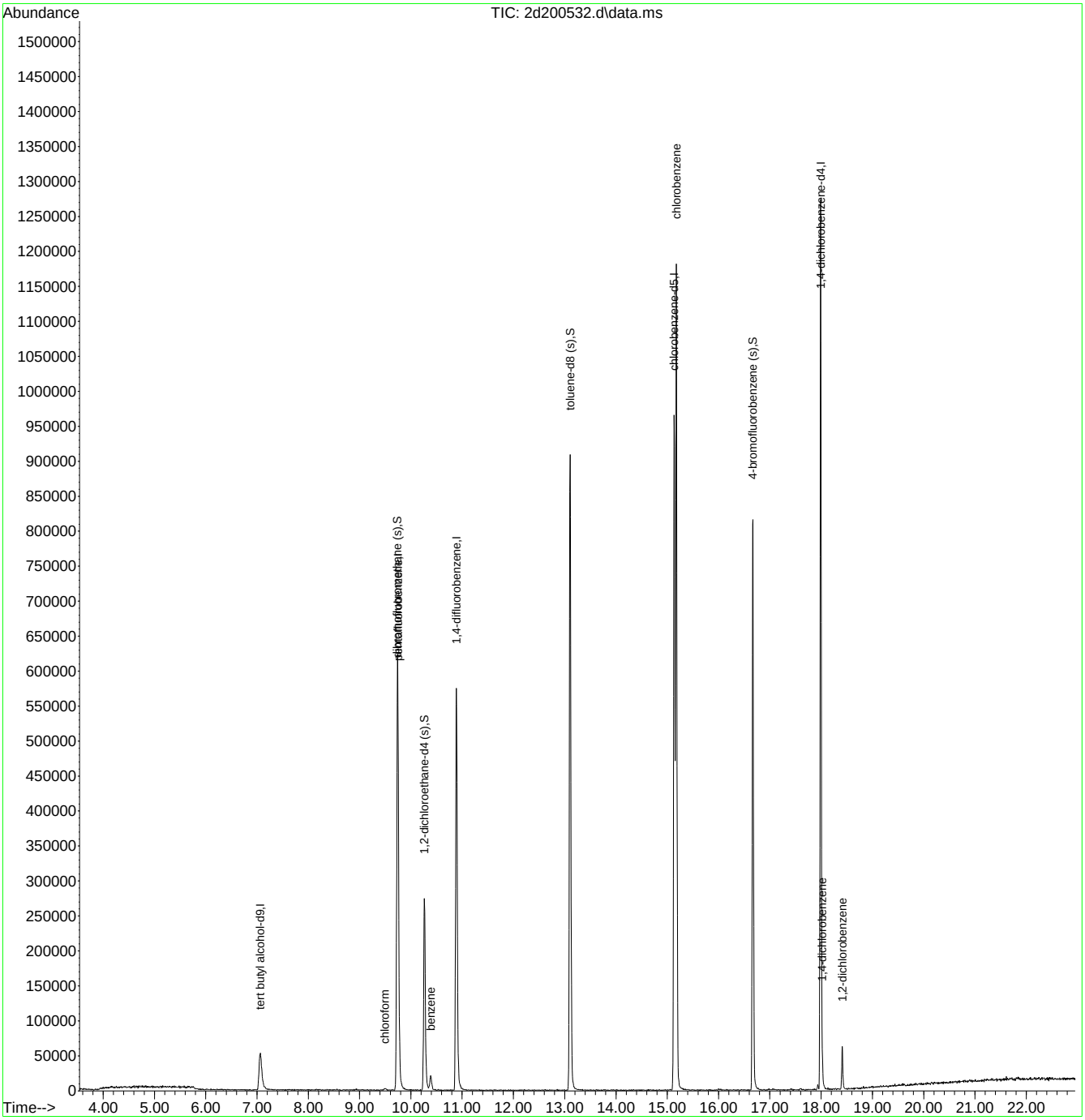
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.060	65	109616	500.00	ug/L	0.03
5) pentafluorobenzene	9.750	168	343874	50.00	ug/L	0.03
50) 1,4-difluorobenzene	10.887	114	531132	50.00	ug/L	0.03
72) chlorobenzene-d5	15.134	117	537878	50.00	ug/L	0.02
96) 1,4-dichlorobenzene-d4	17.992	152	310413	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	9.734	113	200079	54.30	ug/L	0.03
Spiked Amount 50.000	Range 80 - 120		Recovery = 108.60%			
51) 1,2-dichloroethane-d4 (s)	10.263	65	219292	48.38	ug/L	0.03
Spiked Amount 50.000	Range 81 - 124		Recovery = 96.76%			
73) toluene-d8 (s)	13.105	98	651379	53.27	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.54%			
97) 4-bromofluorobenzene (s)	16.665	95	258334	39.35	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 78.70%#			
Target Compounds						Qvalue
41) chloroform	9.493	83	2730	0.40	ug/L	95
52) benzene	10.384	78	19558	1.47	ug/L	97
85) chlorobenzene	15.176	112	644506	67.94	ug/L	99
112) 1,4-dichlorobenzene	18.018	146	13616	1.23	ug/L	92
113) 1,2-dichlorobenzene	18.411	146	25356	2.35	ug/L	95

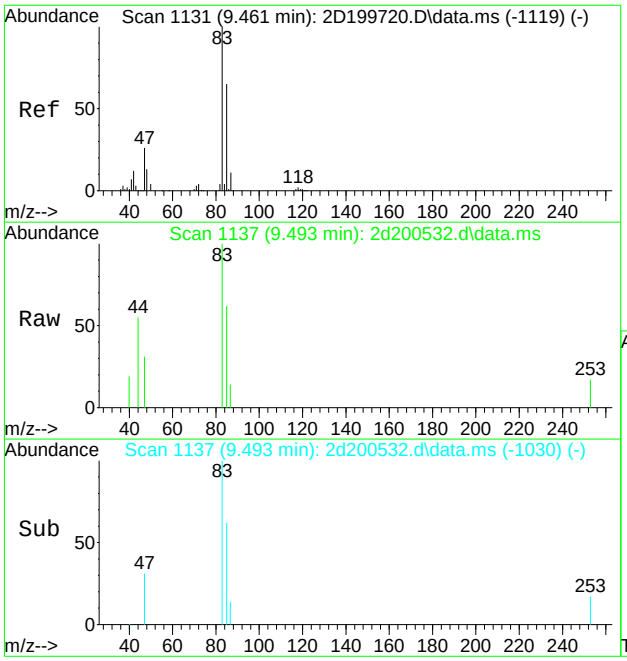
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-23-2021\v2d8732\
Data File : 2d200532.d
Acq On : 22 Dec 2021 1:22 pm
Operator : edwardd
Sample : JD36624-17 Inst : MS2D
Misc : MS55557,V2D8732,5,,,,200
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2D8694.M
Quant Results File: M2D8694.RES
Quant Time: Dec 23 08:04:48 2021
Quant Title : SW-846 Method 8260C/D / EPA 624.1, DB624 60m x 0.2Thu Nov 18 15:34:03 2021
QLast Update : Thu Nov 18 15:34:03 2021
Response via : Initial Calibration

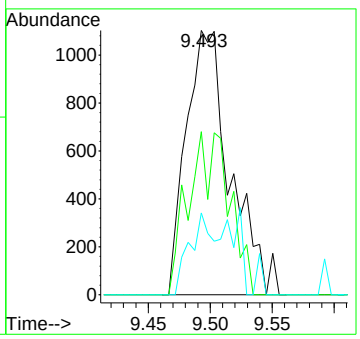


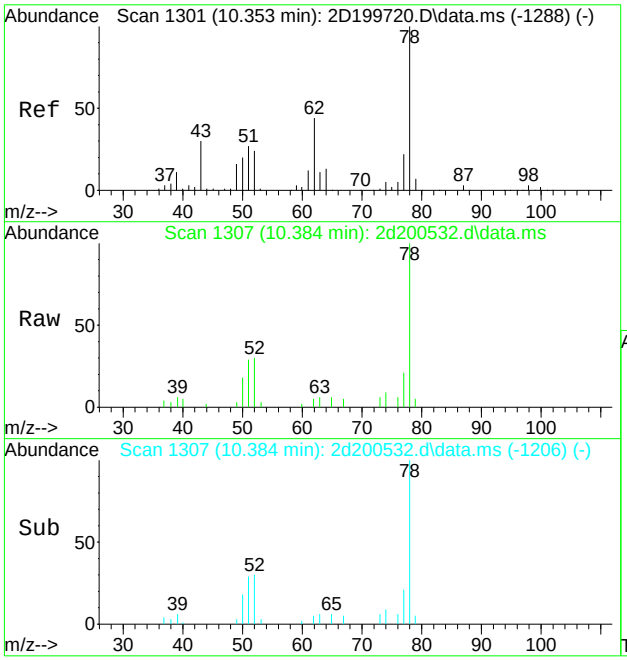


#41
chloroform
Concen: 0.40 ug/L
RT: 9.493 min Scan# 1137
Delta R.T. 0.031 min
Lab File: 2d200532.d
Acq: 22 Dec 2021 1:22 pm

Tgt Ion: 83 Resp: 2730

Ion	Ratio	Lower	Upper
83	100		
85	61.7	34.7	94.7
47	31.0	0.0	57.5

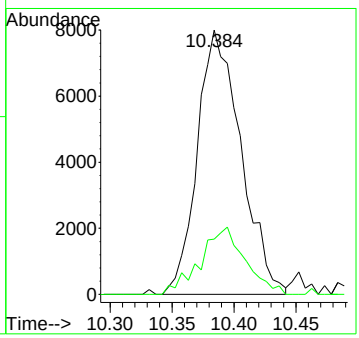


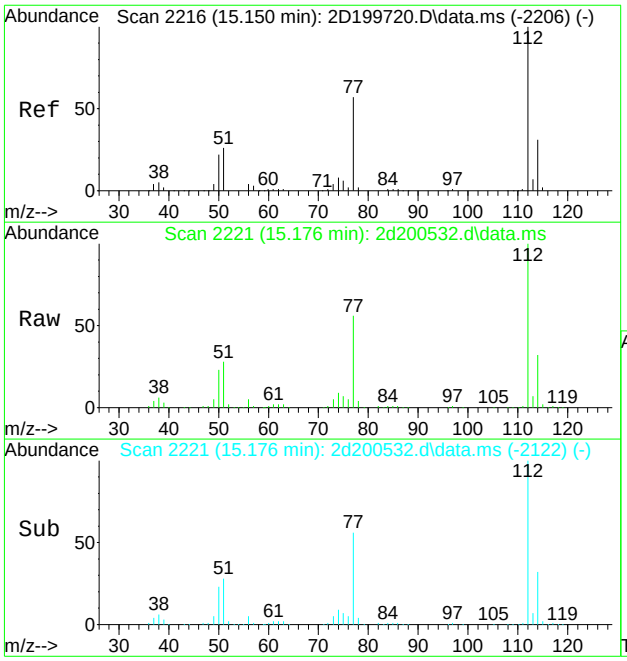


#52
benzene
Concen: 1.47 ug/L
RT: 10.384 min Scan# 1307
Delta R.T. 0.031 min
Lab File: 2d200532.d
Acq: 22 Dec 2021 1:22 pm

Tgt Ion: 78 Resp: 19558

Ion	Ratio	Lower	Upper
78	100		
77	20.9	0.0	52.1

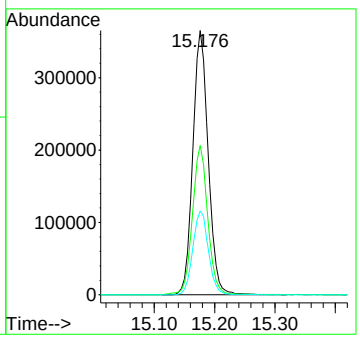


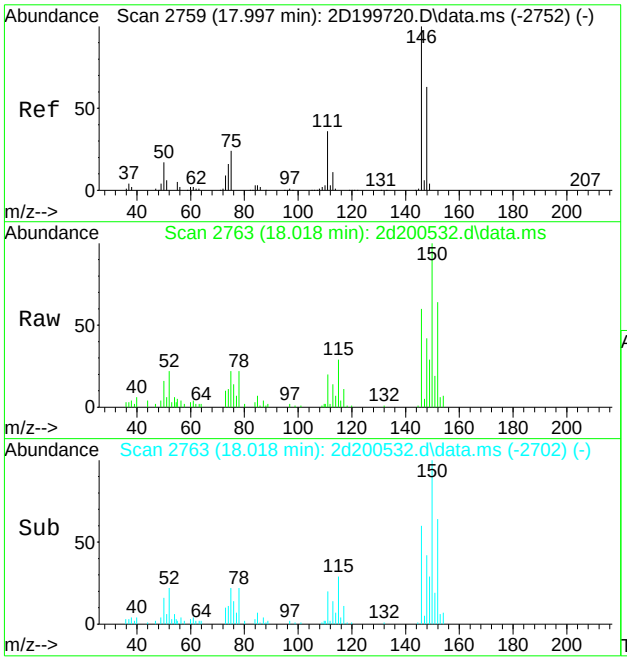


#85
chlorobenzene
Concen: 67.94 ug/L
RT: 15.176 min Scan# 2221
Delta R.T. 0.021 min
Lab File: 2d200532.d
Acq: 22 Dec 2021 1:22 pm

Tgt Ion:112 Resp: 644506

Ion	Ratio	Lower	Upper
112	100		
77	56.4	26.7	86.7
114	31.7	1.2	61.2

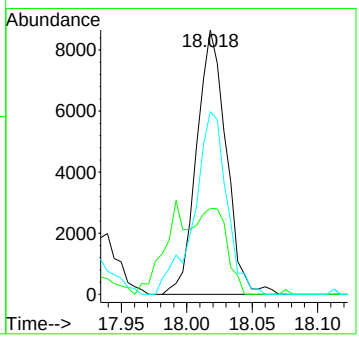


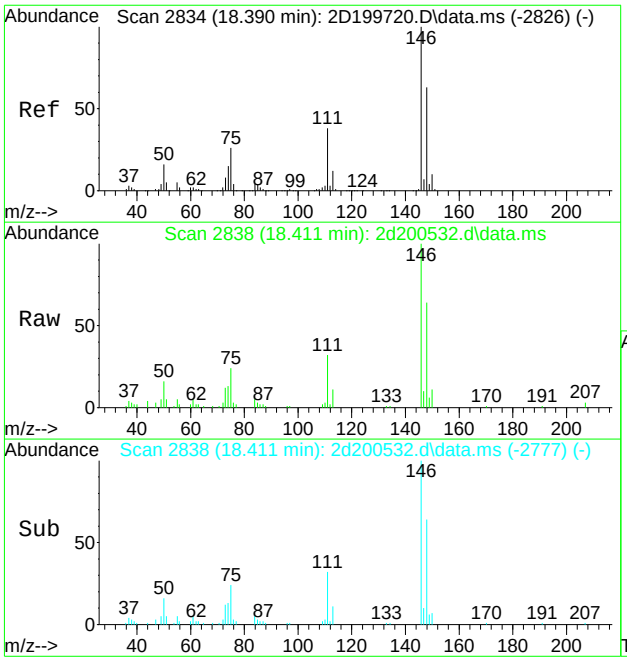


#112
1,4-dichlorobenzene
Concen: 1.23 ug/L
RT: 18.018 min Scan# 2763
Delta R.T. 0.021 min
Lab File: 2d200532.d
Acq: 22 Dec 2021 1:22 pm

Tgt Ion:146 Resp: 13616

Ion	Ratio	Lower	Upper
146	100		
111	30.7	6.7	66.7
148	69.1	33.5	93.5

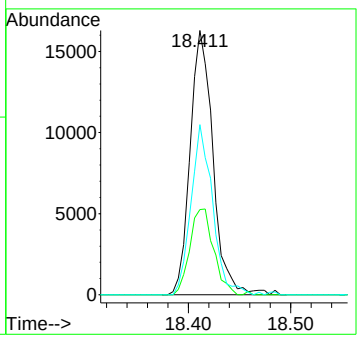




#113
1,2-dichlorobenzene
Concen: 2.35 ug/L
RT: 18.411 min Scan# 2838
Delta R.T. 0.021 min
Lab File: 2d200532.d
Acq: 22 Dec 2021 1:22 pm

Tgt Ion:146 Resp: 25356

Ion	Ratio	Lower	Upper
146	100		
111	32.2	8.2	68.2
148	64.3	33.1	93.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193028.d
Acq On : 17 Dec 2021 12:07 pm
Operator : brittank
Sample : mb Inst : ACC-VOA-MSX
Misc : MS55615,V1X8363,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 07:28:33 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

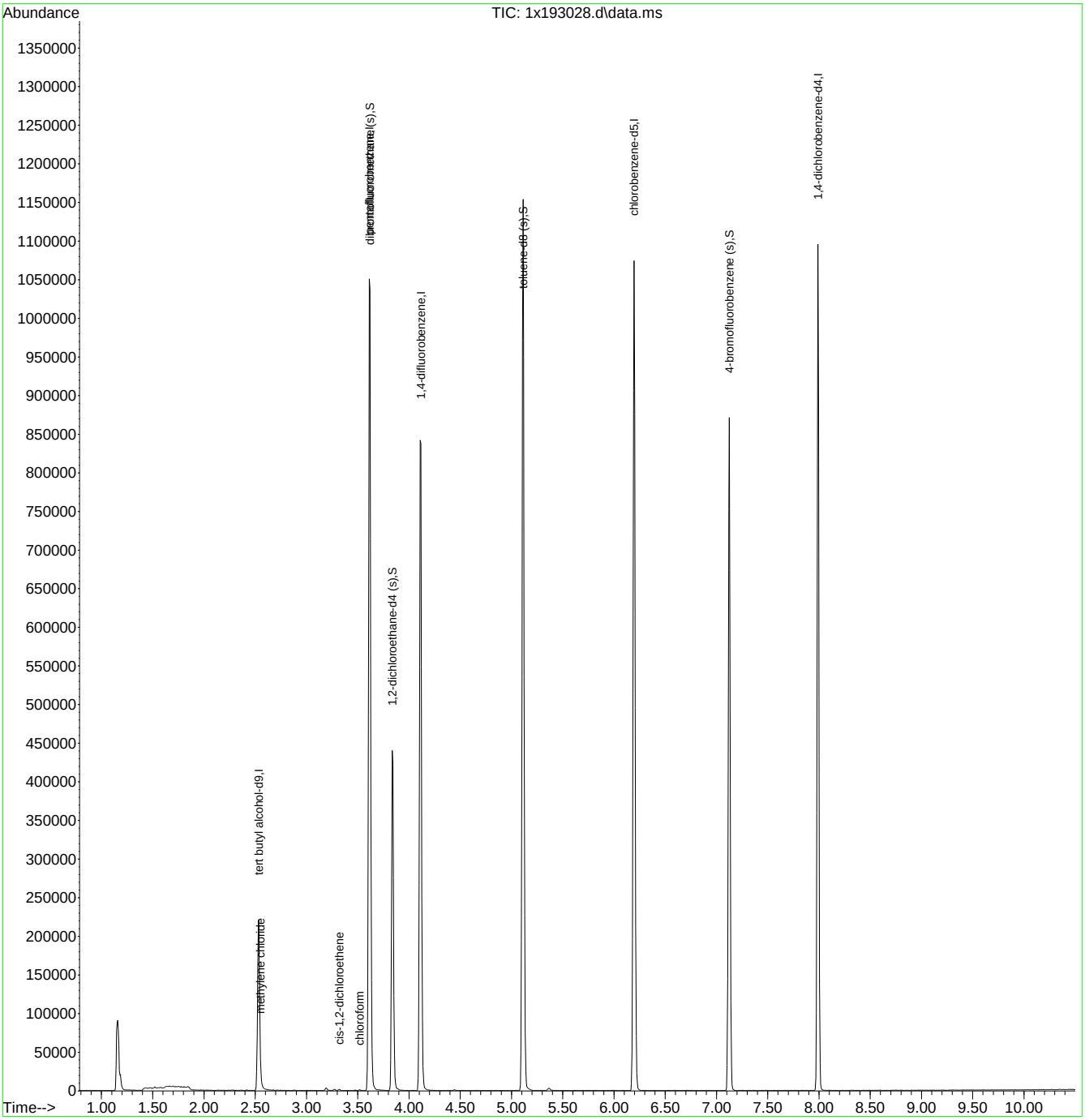
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.535	65	173508	500.00	ug/L	-0.01
5) pentafluorobenzene	3.613	168	343348	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	495098	50.00	ug/L	0.00
73) chlorobenzene-d5	6.196	117	451816	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.990	152	197483	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.619	113	173743	50.18	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.36%			
53) 1,2-dichloroethane-d4 (s)	3.837	65	216990	51.23	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.46%			
74) toluene-d8 (s)	5.113	98	553914	50.42	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.84%			
98) 4-bromofluorobenzene (s)	7.125	95	200393	51.05	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.10%			
Target Compounds						Qvalue
22) methylene chloride	2.551	84	209	0.12	ug/L #	74
36) cis-1,2-dichloroethene	3.320	96	355	0.18	ug/L #	77
42) chloroform	3.517	83	454	0.13	ug/L	92

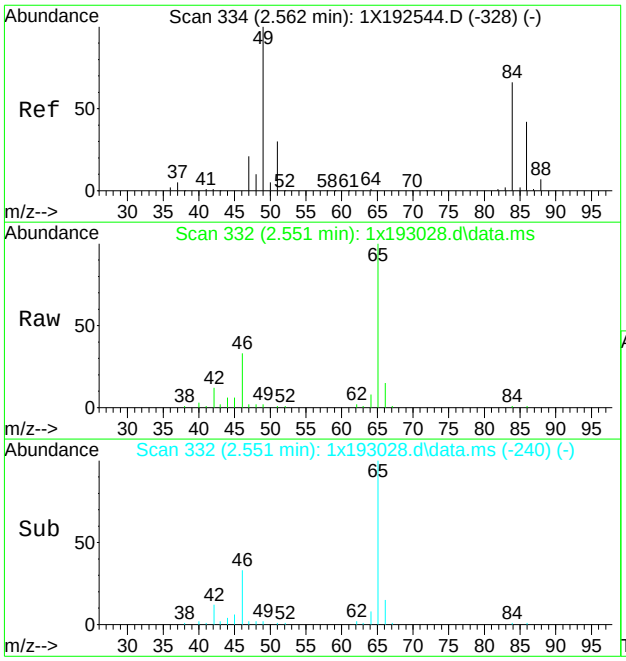
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-20-2021\vx8363-partial\
Data File : 1x193028.d
Acq On : 17 Dec 2021 12:07 pm
Operator : brittank
Sample : mb Inst : ACC-VOA-MSX
Misc : MS55615,V1X8363,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 20 07:28:33 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

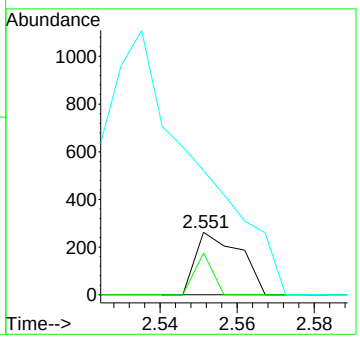


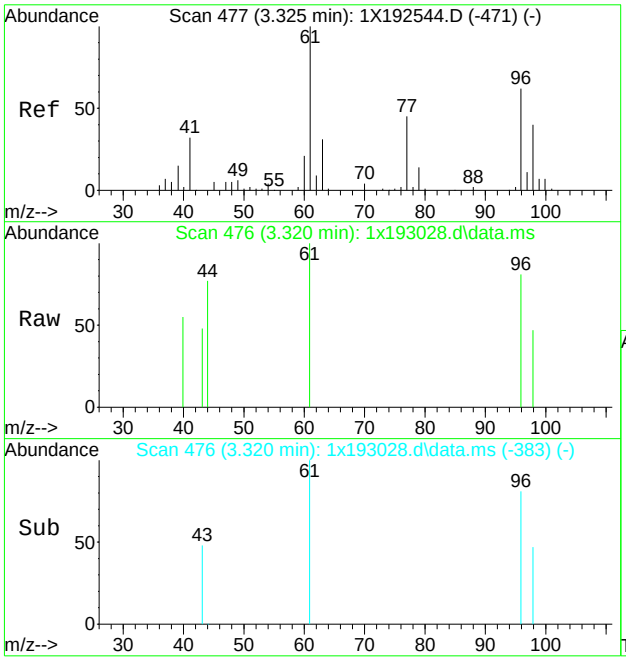


#22
methylene chloride
Concen: 0.12 ug/L
RT: 2.551 min Scan# 332
Delta R.T. -0.011 min
Lab File: 1x193028.d
Acq: 17 Dec 2021 12:07 pm

Tgt Ion: 84 Resp: 209

Ion	Ratio	Lower	Upper
84	100		
86	66.8	34.3	94.3
49	198.9	122.9	182.9#

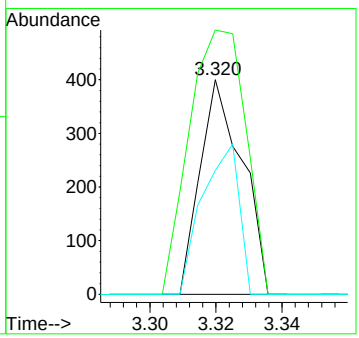


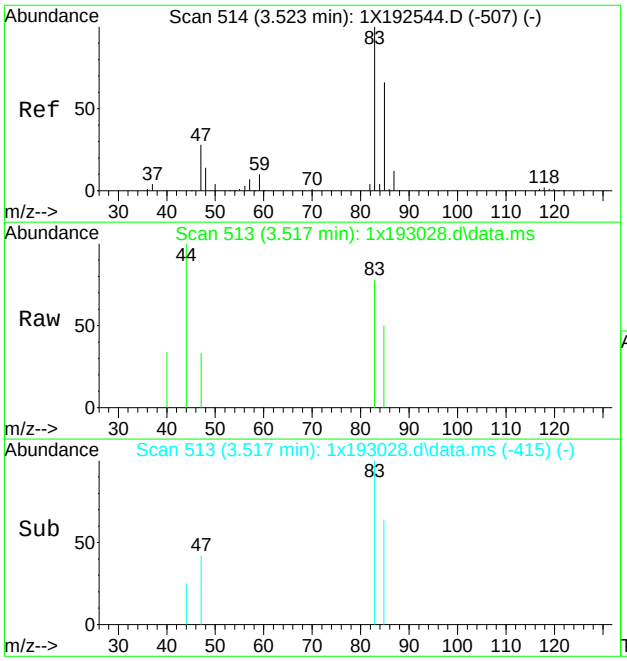


#36
cis-1,2-dichloroethene
Concen: 0.18 ug/L
RT: 3.320 min Scan# 476
Delta R.T. -0.006 min
Lab File: 1x193028.d
Acq: 17 Dec 2021 12:07 pm

Tgt Ion: 96 Resp: 355

Ion	Ratio	Lower	Upper
96	100		
61	123.3	131.2	191.2#
98	57.8	34.7	94.7

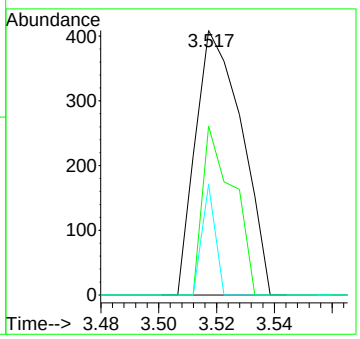




#42
chloroform
Concen: 0.13 ug/L
RT: 3.517 min Scan# 513
Delta R.T. -0.006 min
Lab File: 1x193028.d
Acq: 17 Dec 2021 12:07 pm

Tgt Ion: 83 Resp: 454

Ion	Ratio	Lower	Upper
83	100		
85	63.8	35.8	95.8
47	41.8	0.1	60.1



7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-21-2021\vx8364-partial\
Data File : 1x193061.d
Acq On : 20 Dec 2021 2:10 pm
Operator : brittank
Sample : mb Inst : ACC-VOA-MSX
Misc : MS55745,V1X8364,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 21 01:05:20 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

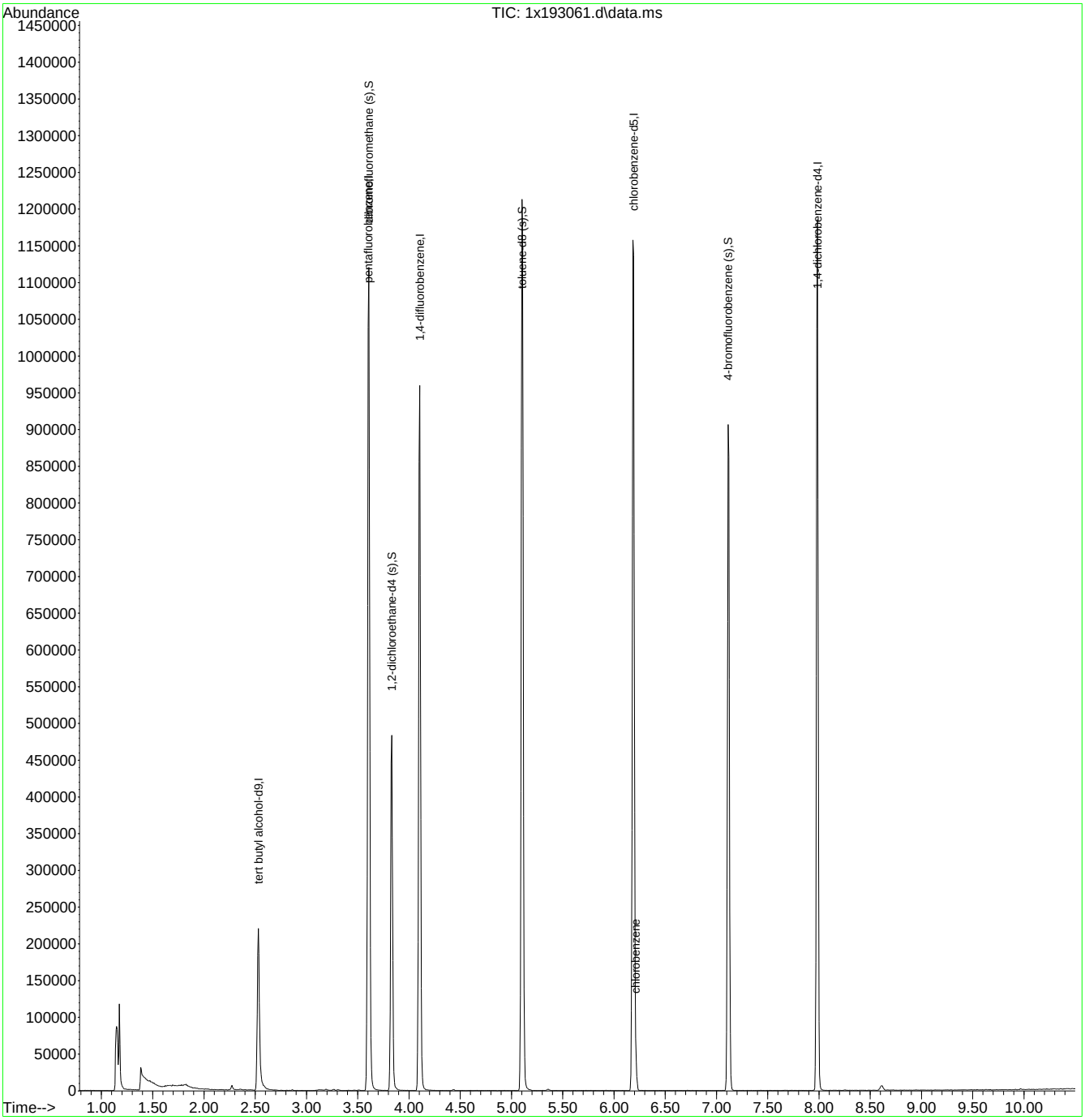
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.530	65	180515	500.00	ug/L	-0.02
5) pentafluorobenzene	3.603	168	356487	50.00	ug/L	-0.02
52) 1,4-difluorobenzene	4.104	114	539804	50.00	ug/L	-0.01
73) chlorobenzene-d5	6.191	117	501141	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.984	152	221499	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.608	113	184981	51.46	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.92%			
53) 1,2-dichloroethane-d4 (s)	3.832	65	235337	50.96	ug/L	-0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.92%			
74) toluene-d8 (s)	5.102	98	609263	50.00	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.00%			
98) 4-bromofluorobenzene (s)	7.114	95	222454	50.53	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.06%			
Target Compounds						Qvalue
86) chlorobenzene	6.212	112	13553	2.54	ug/L	99

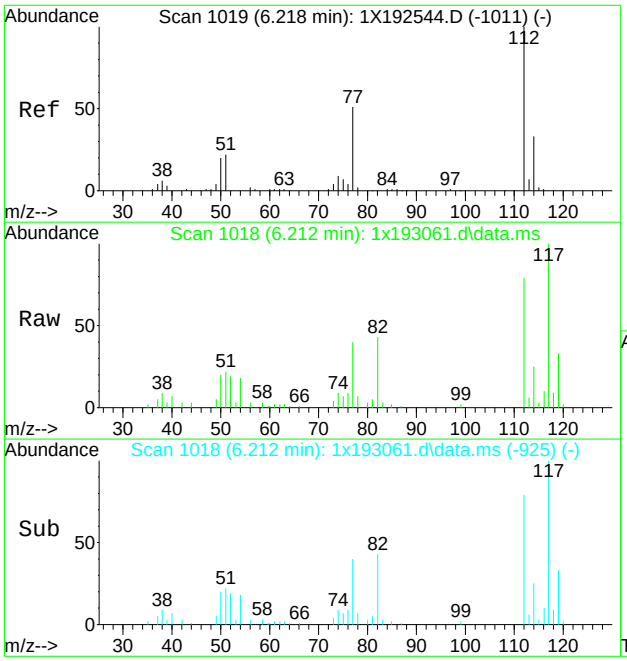
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-21-2021\vx8364-partial\
Data File : 1x193061.d
Acq On : 20 Dec 2021 2:10 pm
Operator : brittank
Sample : mb Inst : ACC-VOA-MSX
Misc : MS55745,V1X8364,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 21 01:05:20 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

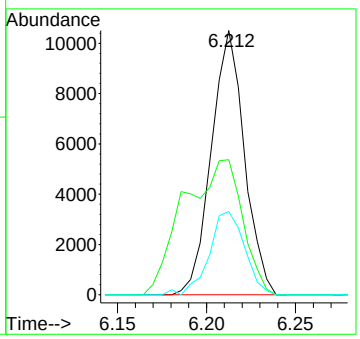




#86
chlorobenzene
Concen: 2.54 ug/L
RT: 6.212 min Scan# 1018
Delta R.T. -0.006 min
Lab File: 1x193061.d
Acq: 20 Dec 2021 2:10 pm

Tgt Ion:112 Resp: 13553

Ion	Ratio	Lower	Upper
112	100		
77	51.1	20.6	80.6
114	31.5	2.6	62.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-22-2021\vx8366-partial\
Data File : 1x193111.d
Acq On : 21 Dec 2021 11:59 am
Operator : brittank
Sample : mb Inst : ACC-VOA-MSX
Misc : MS55549,V1X8366,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 22 04:18:51 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

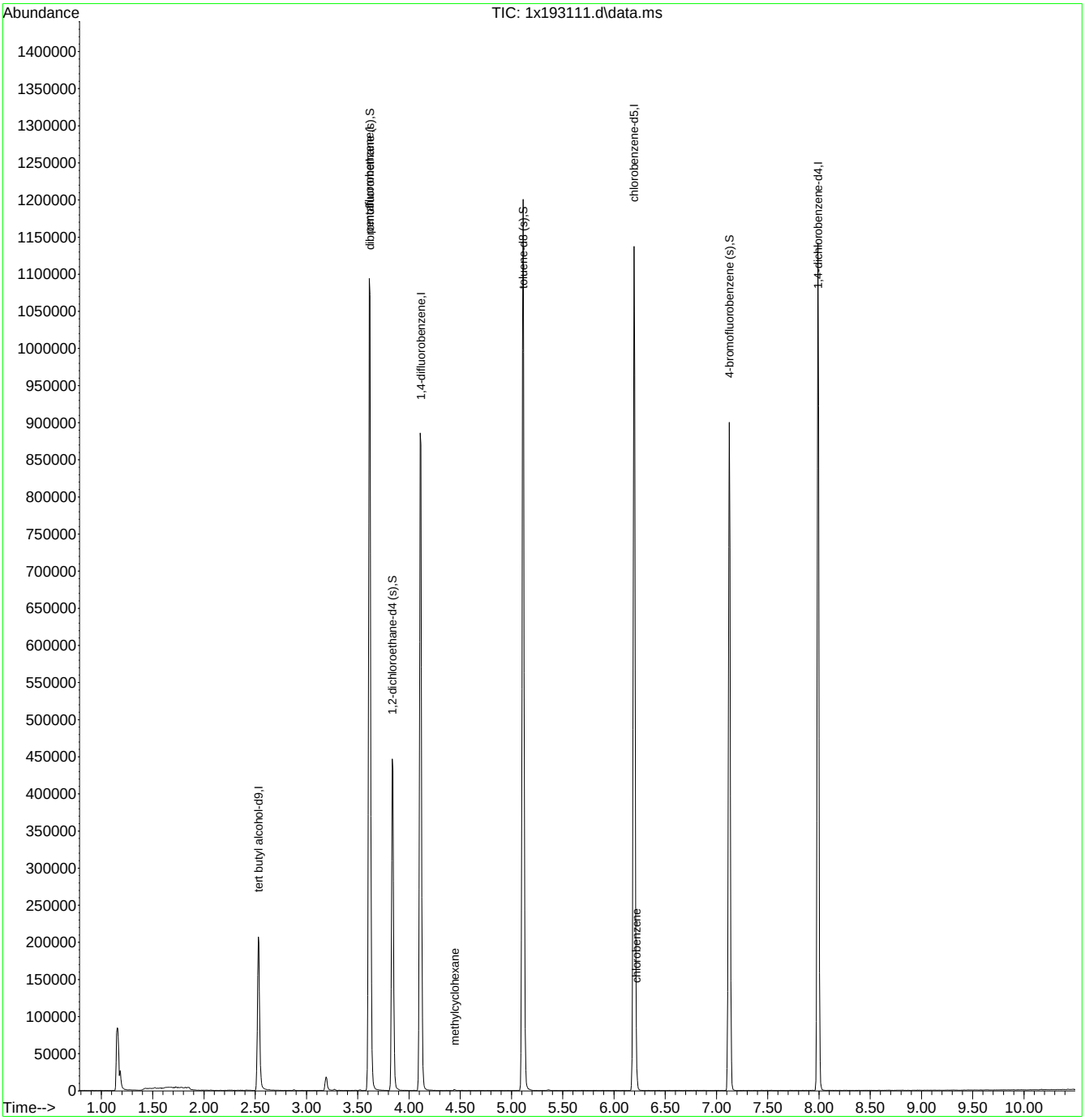
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.530	65	164172	500.00	ug/L	-0.02
5) pentafluorobenzene	3.613	168	357368	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	518527	50.00	ug/L	0.00
73) chlorobenzene-d5	6.197	117	475555	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.990	152	209675	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.619	113	180548	50.10	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.20%			
53) 1,2-dichloroethane-d4 (s)	3.838	65	221702	49.97	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.94%			
74) toluene-d8 (s)	5.113	98	577733	49.97	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.94%			
98) 4-bromofluorobenzene (s)	7.125	95	215691	51.75	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.50%			
Target Compounds						Qvalue
68) methylcyclohexane	4.446	83	485	0.14	ug/L #	70
86) chlorobenzene	6.218	112	2635	0.52	ug/L	90

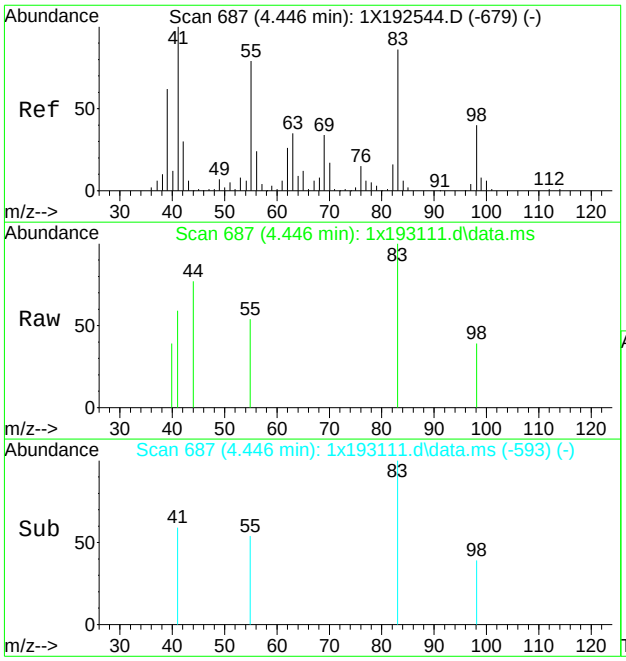
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nizele\2021\12_dec\12-22-2021\vx8366-partial\
Data File : 1x193111.d
Acq On : 21 Dec 2021 11:59 am
Operator : brittank
Sample : mb Inst : ACC-VOA-MSX
Misc : MS55549,V1X8366,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 22 04:18:51 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

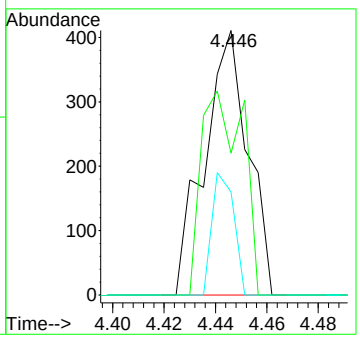


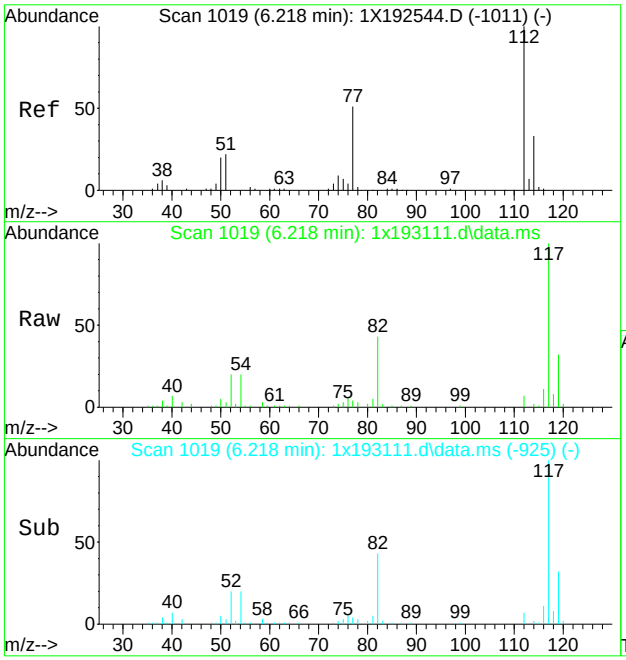


#68
methylcyclohexane
Concen: 0.14 ug/L
RT: 4.446 min Scan# 687
Delta R.T. 0.000 min
Lab File: 1x193111.d
Acq: 21 Dec 2021 11:59 am

Tgt Ion: 83 Resp: 485

Ion	Ratio	Lower	Upper
83	100		
55	53.5	61.4	121.4#
98	38.9	16.6	76.6

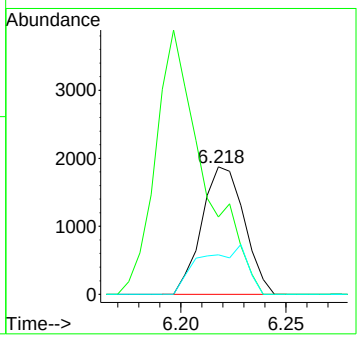




#86
chlorobenzene
Concen: 0.52 ug/L
RT: 6.218 min Scan# 1019
Delta R.T. -0.000 min
Lab File: 1x193111.d
Acq: 21 Dec 2021 11:59 am

Tgt Ion:112 Resp: 2635

Ion	Ratio	Lower	Upper
112	100		
77	60.8	20.6	80.6
114	31.1	2.6	62.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-23-2021\v2d8732\
Data File : 2d200526.d
Acq On : 22 Dec 2021 10:21 am
Operator : edwardd
Sample : mb Inst : MS2D
Misc : MS37677,V2D8732,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2D8694.M
Quant Results File: M2D8694.RES
Quant Time: Dec 23 08:13:01 2021
Quant Title : SW-846 Method 8260C/D / EPA 624.1, DB624 60m x 0.2Thu Nov 18 15:34:03 2021
QLast Update : Thu Nov 18 15:34:03 2021
Response via : Initial Calibration

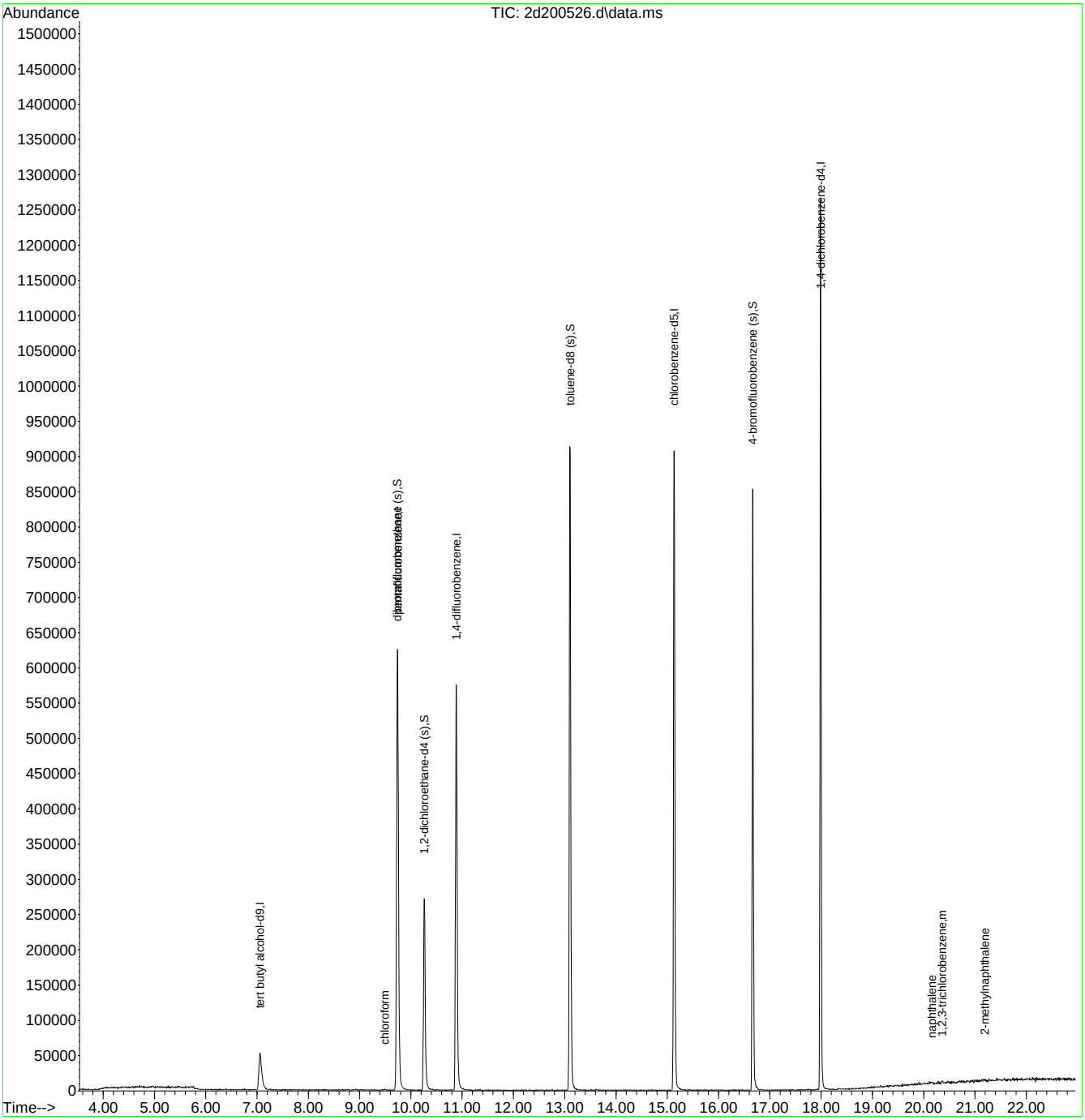
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.055	65	109886	500.00	ug/L	0.02
5) pentafluorobenzene	9.744	168	353119	50.00	ug/L	0.02
50) 1,4-difluorobenzene	10.887	114	533770	50.00	ug/L	0.03
72) chlorobenzene-d5	15.134	117	535002	50.00	ug/L	0.02
96) 1,4-dichlorobenzene-d4	17.992	152	314186	50.00	ug/L	0.02
System Monitoring Compounds						
42) dibromofluoromethane (s)	9.734	113	199682	52.77	ug/L	0.03
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.54%			
51) 1,2-dichloroethane-d4 (s)	10.264	65	220412	48.39	ug/L	0.03
Spiked Amount 50.000	Range 81 - 124		Recovery = 96.78%			
73) toluene-d8 (s)	13.105	98	652951	53.69	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 107.38%			
97) 4-bromofluorobenzene (s)	16.665	95	269537	40.56	ug/L	0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 81.12%			
Target Compounds						Qvalue
41) chloroform	9.493	83	943	0.13	ug/L	65
119) naphthalene	20.157	128	1865	0.11	ug/L	82
121) 1,2,3-trichlorobenzene	20.362	180	786	0.11	ug/L	82
123) 2-methylnaphthalene	21.190	142	1167	0.12	ug/L	85

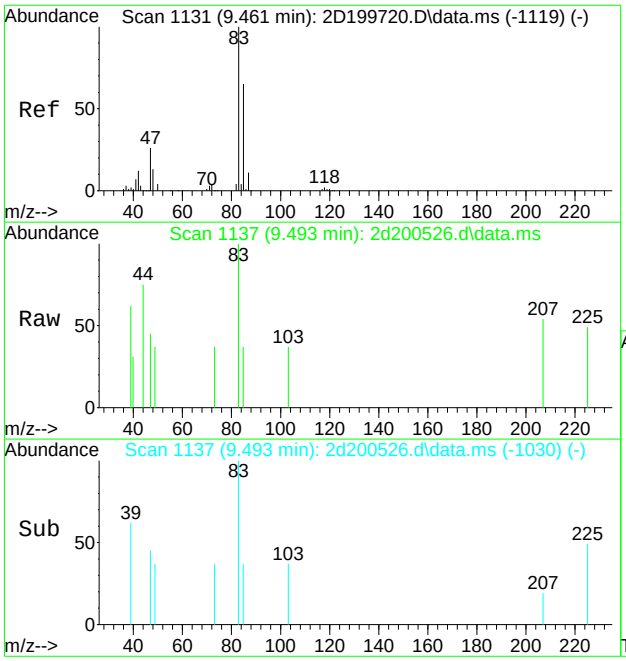
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-23-2021\v2d8732\
Data File : 2d200526.d
Acq On : 22 Dec 2021 10:21 am
Operator : edwardd
Sample : mb Inst : MS2D
Misc : MS37677,V2D8732,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2D8694.M
Quant Results File: M2D8694.RES
Quant Time: Dec 23 08:13:01 2021
Quant Title : SW-846 Method 8260C/D / EPA 624.1, DB624 60m x 0.2Thu Nov 18 15:34:03 2021
QLast Update : Thu Nov 18 15:34:03 2021
Response via : Initial Calibration

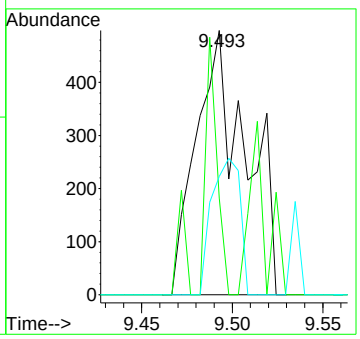


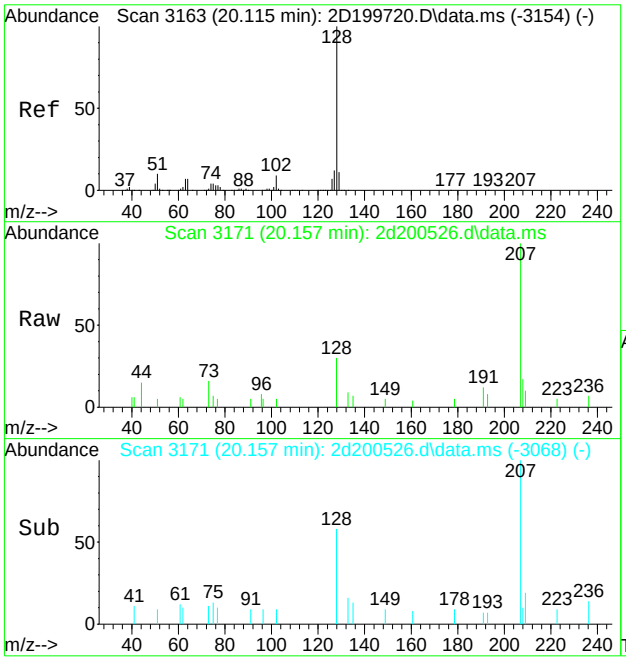


#41
chloroform
Concen: 0.13 ug/L
RT: 9.493 min Scan# 1137
Delta R.T. 0.031 min
Lab File: 2d200526.d
Acq: 22 Dec 2021 10:21 am

Tgt Ion: 83 Resp: 943

Ion	Ratio	Lower	Upper
83	100		
85	36.5	34.7	94.7
47	44.8	0.0	57.5

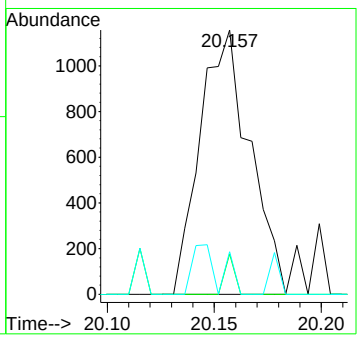


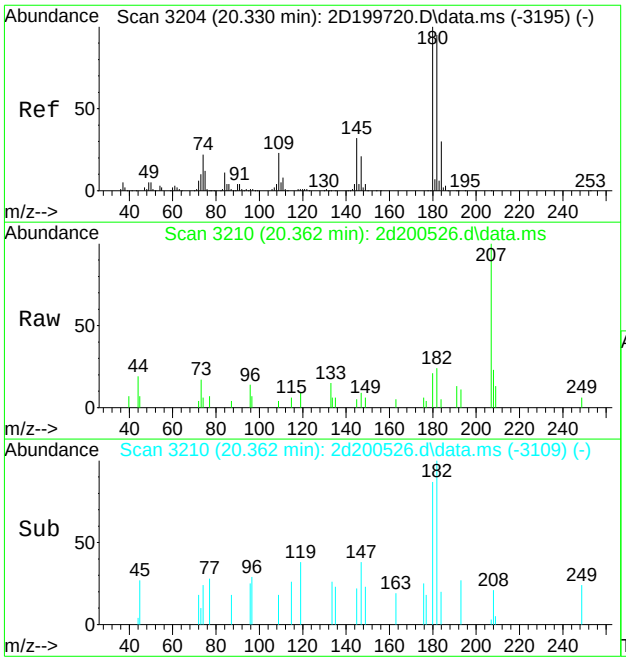


#119
naphthalene
Concen: 0.11 ug/L
RT: 20.157 min Scan# 3171
Delta R.T. 0.042 min
Lab File: 2d200526.d
Acq: 22 Dec 2021 10:21 am

Tgt Ion:128 Resp: 1865

Ion	Ratio	Lower	Upper
128	100		
102	15.3	0.0	38.6
51	16.1	0.0	39.7

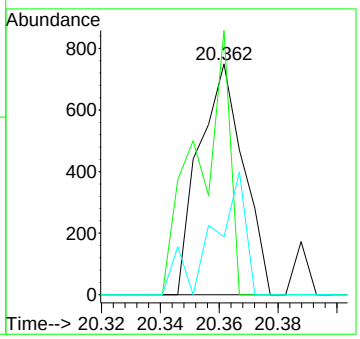


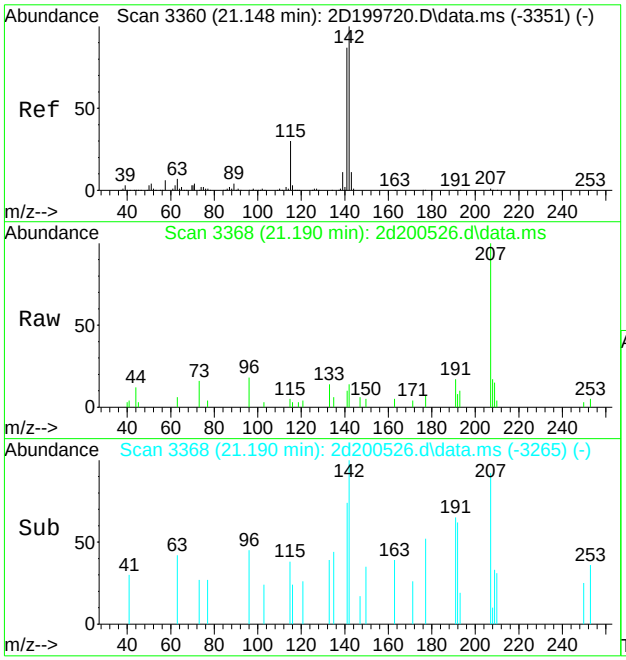


#121
1,2,3-trichlorobenzene
Concen: 0.11 ug/L
RT: 20.362 min Scan# 3210
Delta R.T. 0.031 min
Lab File: 2d200526.d
Acq: 22 Dec 2021 10:21 am

Tgt Ion:180 Resp: 786

Ion	Ratio	Lower	Upper
180	100		
182	114.5	64.7	124.7
145	25.1	1.6	61.6

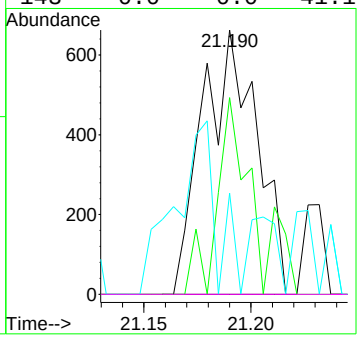




#123
2-methylnaphthalene
Concen: 0.12 ug/L
RT: 21.190 min Scan# 3368
Delta R.T. 0.042 min
Lab File: 2d200526.d
Acq: 22 Dec 2021 10:21 am

Tgt Ion:142 Resp: 1167

Ion	Ratio	Lower	Upper
142	100		
141	74.4	67.0	107.0
115	38.3	0.2	60.2
143	0.0	0.0	41.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12232021\v2v3457\
Data File : 2v83921.d
Acq On : 22 Dec 2021 11:44 am
Operator : nickw
Sample : mb Inst : MS2V
Misc : MS37677,V2V3457,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 23 04:50:32 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

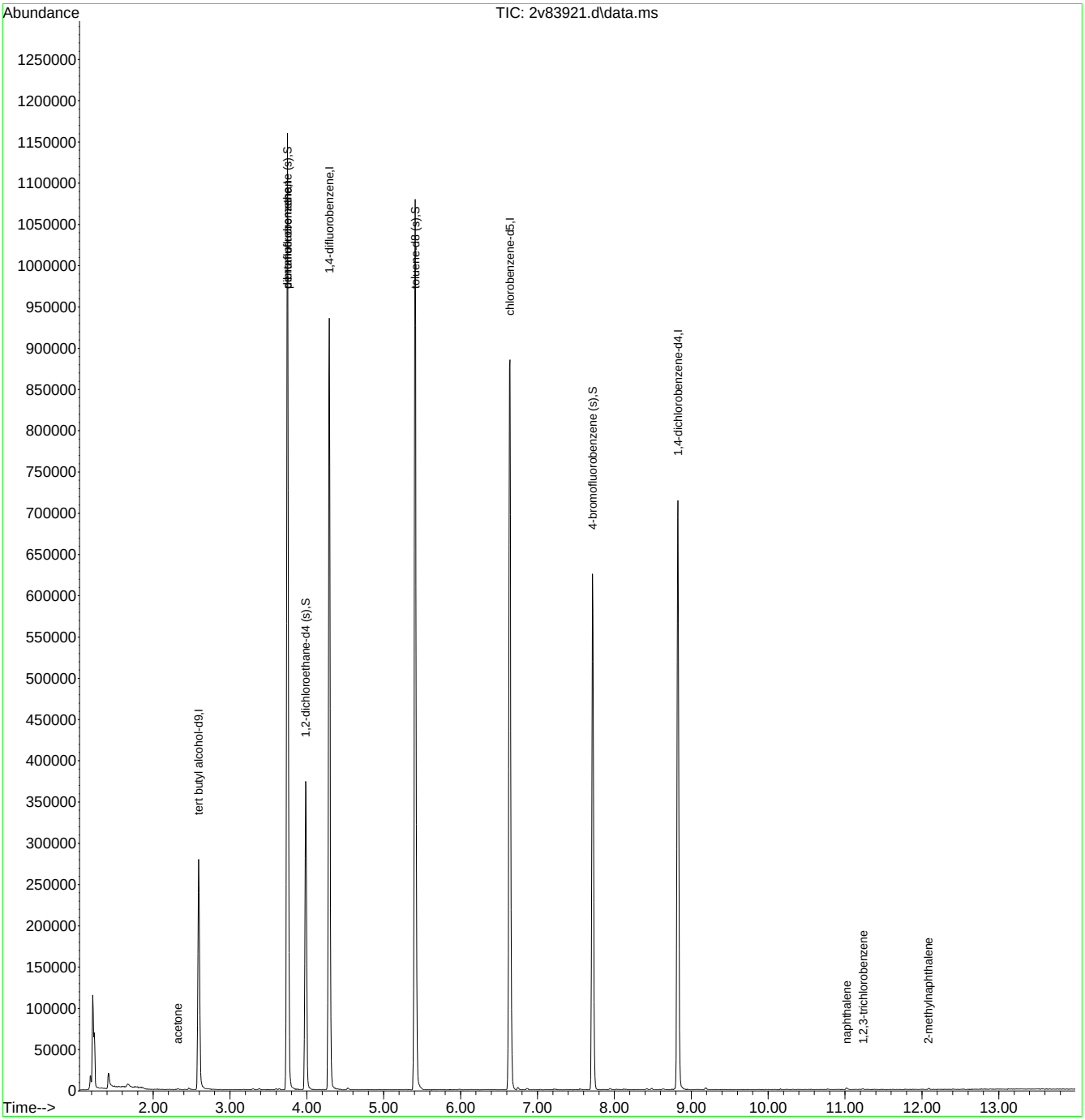
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.594	65	229008	500.00	ug/L	0.00
5) pentafluorobenzene	3.747	168	404089	50.00	ug/L	0.00
50) 1,4-difluorobenzene	4.293	114	575297	50.00	ug/L	0.00
72) chlorobenzene-d5	6.642	117	440395	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	8.828	152	173178	50.00	ug/L	0.00
System Monitoring Compounds						
42) dibromofluoromethane (s)	3.747	113	177835	47.47	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.94%			
51) 1,2-dichloroethane-d4 (s)	3.983	65	204745	55.48	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 110.96%			
73) toluene-d8 (s)	5.410	98	584809	52.53	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.06%			
97) 4-bromofluorobenzene (s)	7.716	95	195326	49.43	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.86%			
Target Compounds						Qvalue
18) acetone	2.321	43	1222	0.50	ug/L	62
121) naphthalene	11.020	128	2822	0.27	ug/L	69
122) 1,2,3-trichlorobenzene	11.235	180	631	0.21	ug/L #	64
123) 2-methylnaphthalene	12.084	142	790	0.42	ug/L #	79

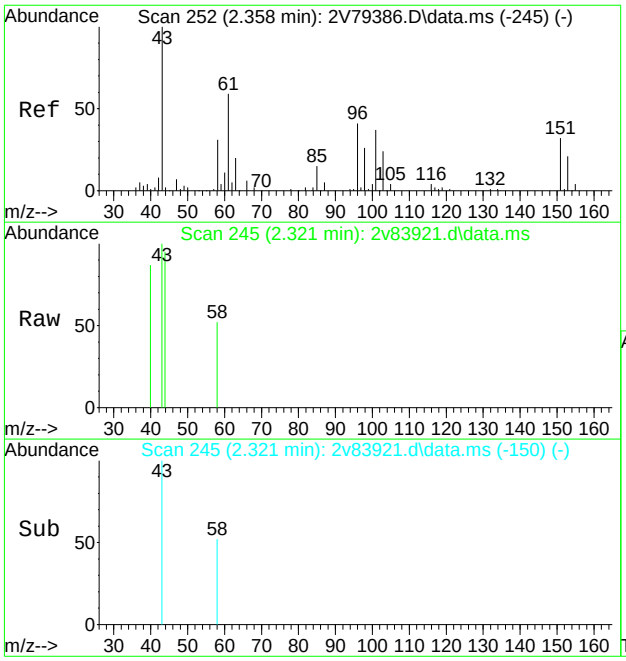
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\2021\december 2021\12232021\v2v3457\
Data File : 2v83921.d
Acq On : 22 Dec 2021 11:44 am
Operator : nickw
Sample : mb Inst : MS2V
Misc : MS37677,V2V3457,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V3410.M
Quant Results File: M2V3410.RES
Quant Time: Dec 23 04:50:32 2021
Quant Title : SW 846 Method 8260C/D, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Nov 18 10:20:28 2021
Response via : Initial Calibration

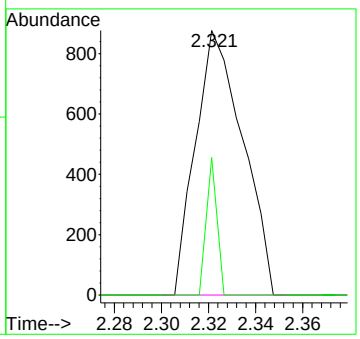


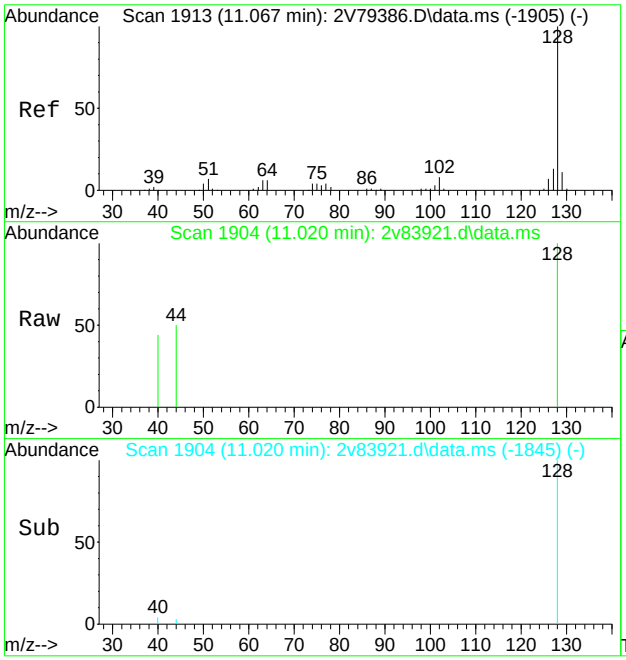


#18
acetone
Concen: 0.50 ug/L
RT: 2.321 min Scan# 245
Delta R.T. 0.000 min
Lab File: 2v83921.d
Acq: 22 Dec 2021 11:44 am

Tgt Ion: 43 Resp: 1222

Ion	Ratio	Lower	Upper
43	100		
58	51.9	0.9	60.9

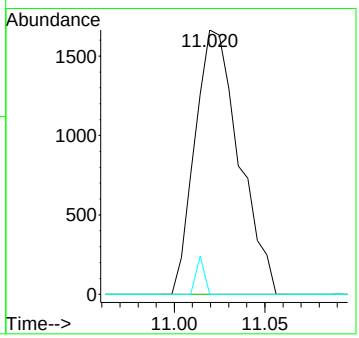


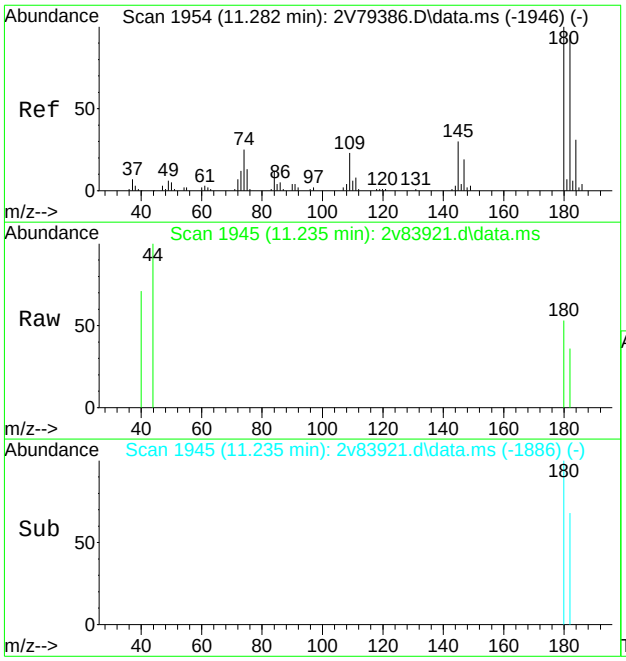


#121
naphthalene
Concen: 0.27 ug/L
RT: 11.020 min Scan# 1904
Delta R.T. 0.011 min
Lab File: 2v83921.d
Acq: 22 Dec 2021 11:44 am

Tgt Ion:128 Resp: 2822

Ion	Ratio	Lower	Upper
128	100		
129	0.0	0.0	40.9
127	0.0	0.0	43.1

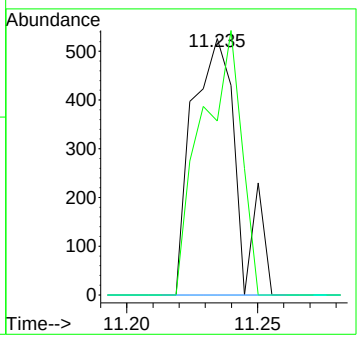


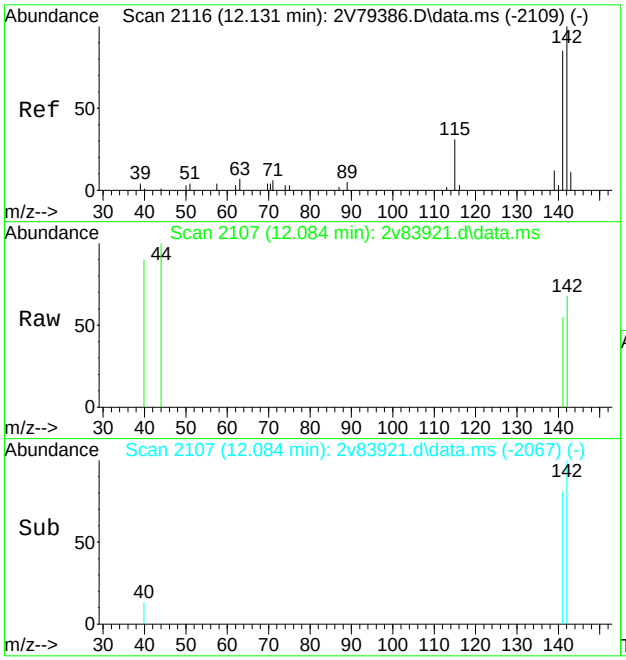


#122
1,2,3-trichlorobenzene
Concen: 0.21 ug/L
RT: 11.235 min Scan# 1945
Delta R.T. 0.011 min
Lab File: 2v83921.d
Acq: 22 Dec 2021 11:44 am

Tgt Ion:180 Resp: 631

Ion	Ratio	Lower	Upper
180	100		
182	67.9	65.9	125.9
184	0.0	1.1	61.1#

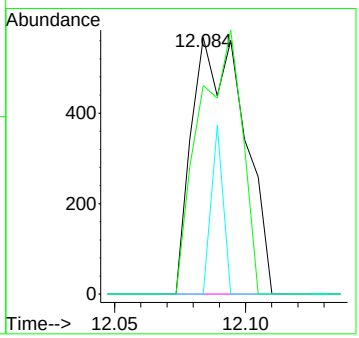




#123
2-methylnaphthalene
Concen: 0.42 ug/L
RT: 12.084 min Scan# 2107
Delta R.T. 0.011 min
Lab File: 2v83921.d
Acq: 22 Dec 2021 11:44 am

Tgt Ion:142 Resp: 790

Ion	Ratio	Lower	Upper
142	100		
141	81.3	69.0	109.0
115	0.0	11.6	51.6#



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7265\
Data File : 3A167393.D
Acq On : 16 Dec 2021 11:58 am
Operator : BridgetK
Sample : mb
Misc : MS55474,V3A7265,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 16 15:00:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

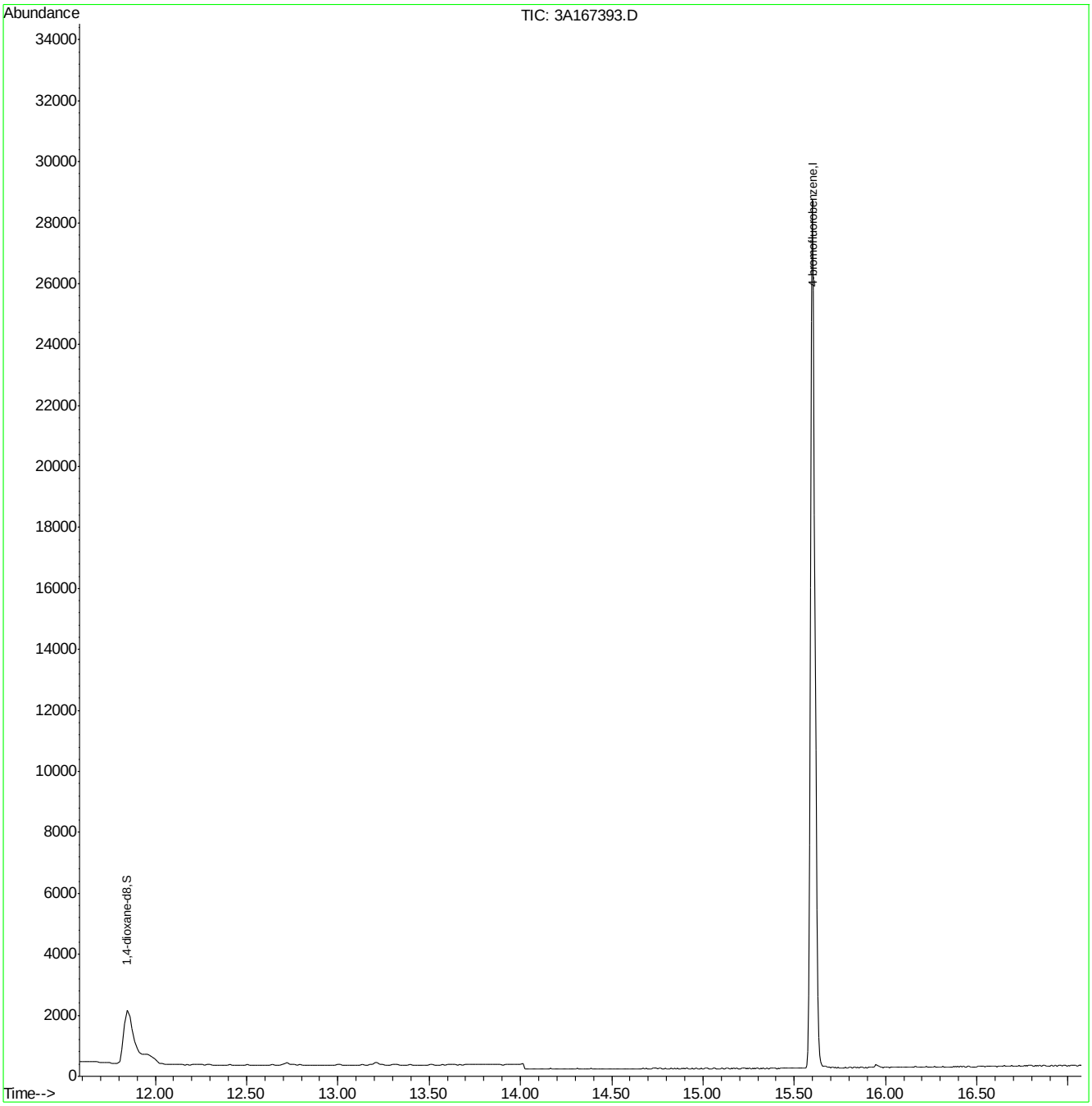
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15950	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4772	10.81	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 108.10%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7265\
Data File : 3A167393.D
Acq On : 16 Dec 2021 11:58 am
Operator : BridgetK
Sample : mb
Misc : MS55474,V3A7265,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 16 15:00:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7266\
Data File : 3A167426.D
Acq On : 17 Dec 2021 12:07 pm
Operator : BridgetK
Sample : mb
Misc : MS55469,V3A7266,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 17 14:49:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

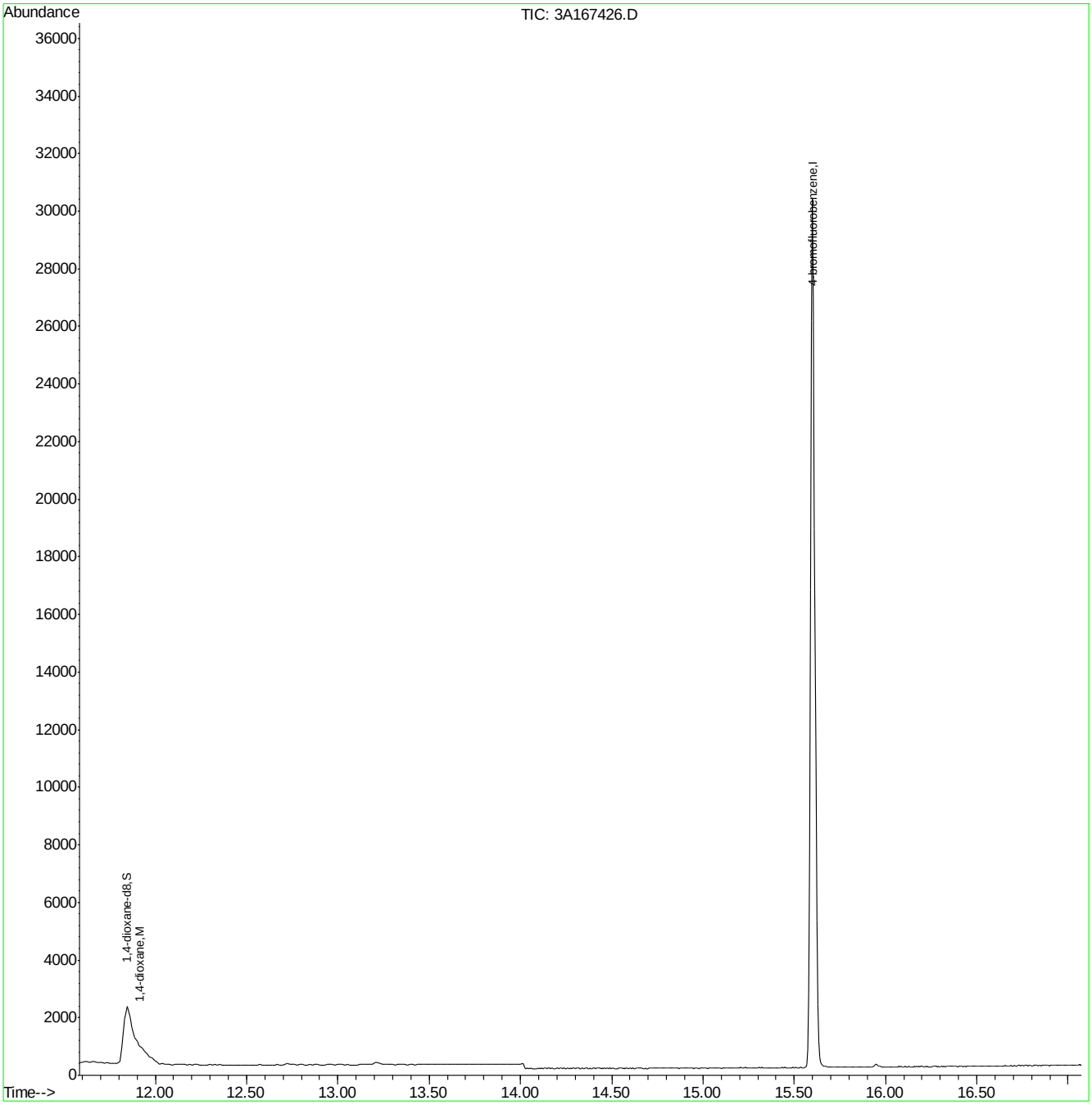
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	16461	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	5696	12.50	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 125.00%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	85	0.17	ug/L	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

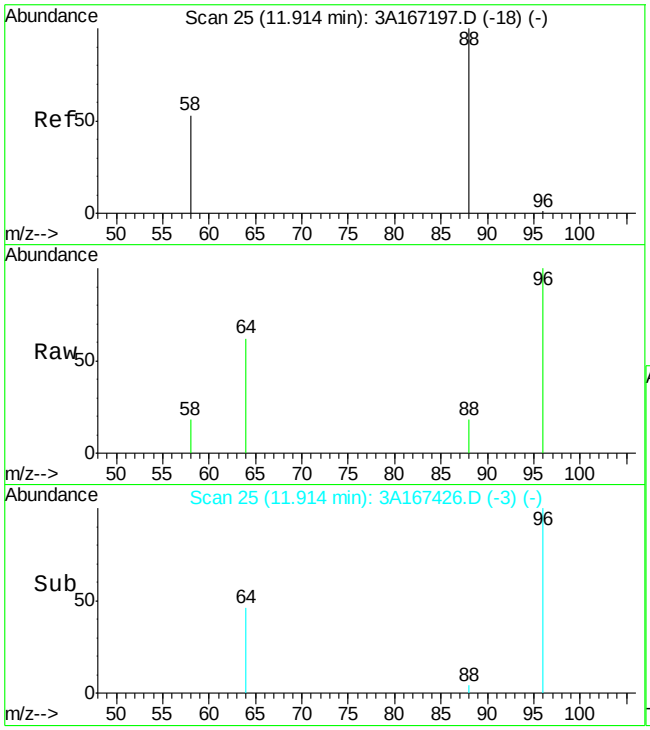
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7266\
Data File : 3A167426.D
Acq On : 17 Dec 2021 12:07 pm
Operator : BridgetK
Sample : mb
Misc : MS55469,V3A7266,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 17 14:49:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



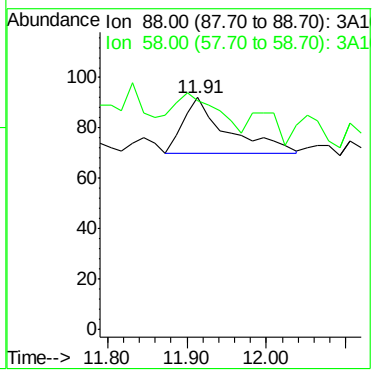
M3A7257.M Fri Dec 17 14:50:52 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 0.17 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167426.D
Acq: 17 Dec 2021 12:07 pm

Tgt Ion: 88 Resp: 85

Ion	Ratio	Lower	Upper
88	100		
58	45.5	30.0	90.0



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7268\
Data File : 3A167459A.D
Acq On : 20 Dec 2021 1:37 pm
Operator : BridgetK
Sample : mb2
Misc : MS55469,V3A7266,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 20 16:18:01 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

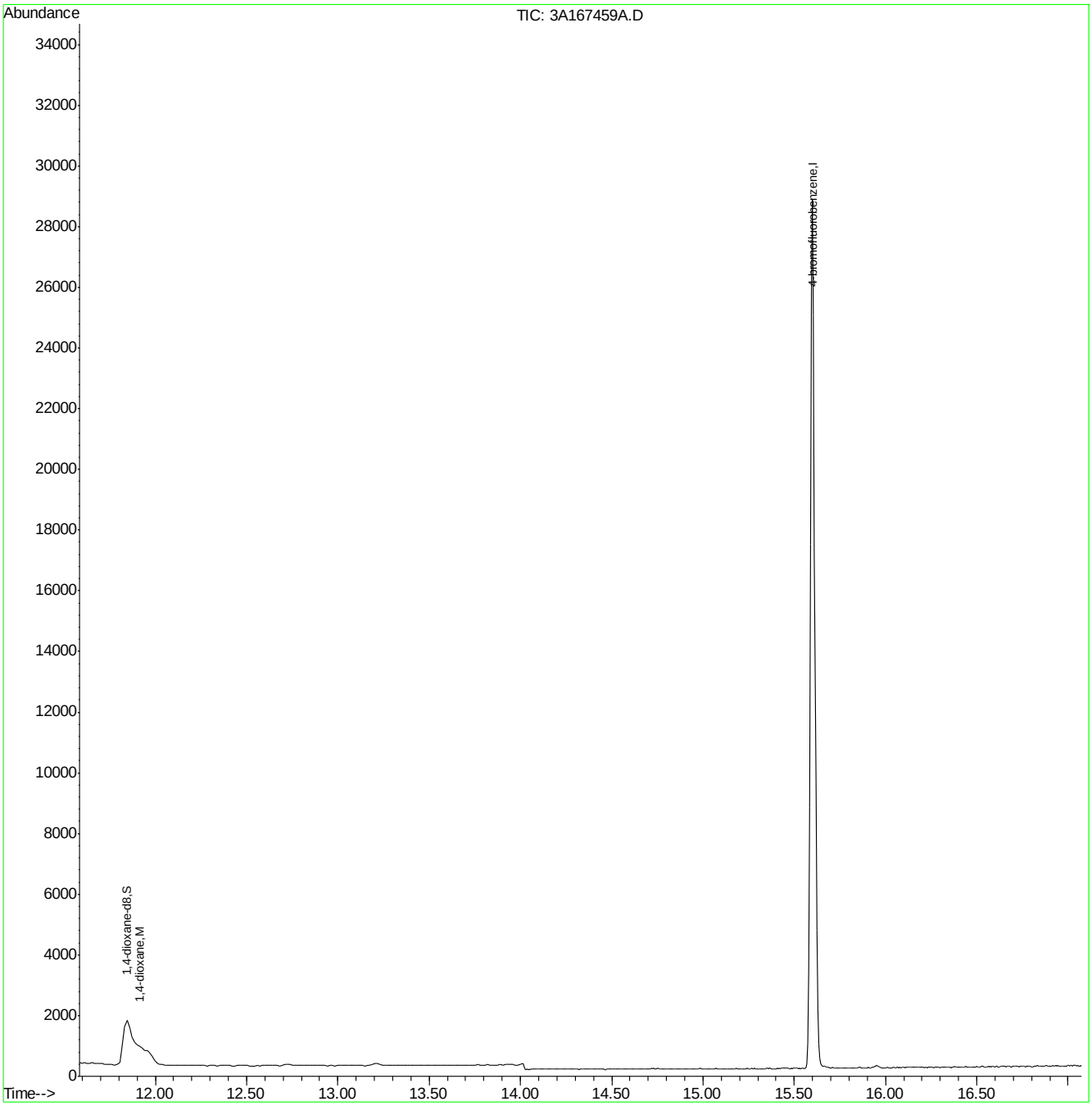
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15872	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4908	11.17	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 111.70%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	113	0.23	ug/L	# 56

(#) = qualifier out of range (m) = manual integration (+) = signals summed

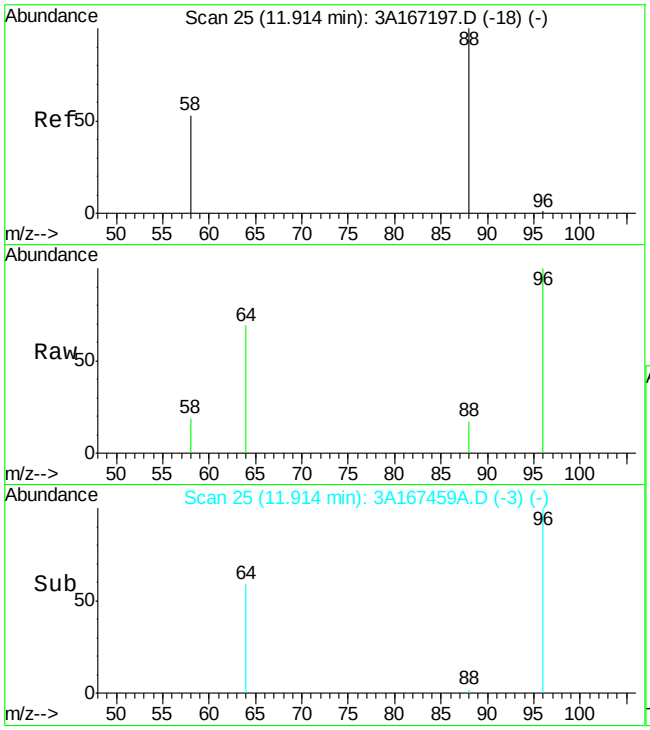
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7268\
Data File : 3A167459A.D
Acq On : 20 Dec 2021 1:37 pm
Operator : BridgetK
Sample : mb2
Misc : MS55469,V3A7266,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 20 16:18:01 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



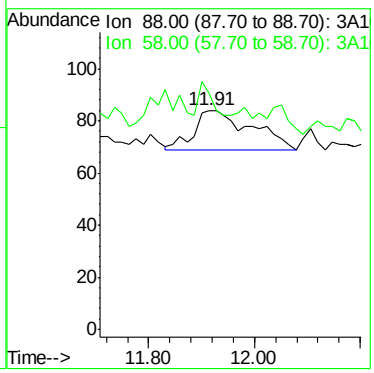
M3A7257.M Mon Dec 20 16:19:57 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 0.23 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167459A.D
Acq: 20 Dec 2021 1:37 pm

Tgt Ion: 88 Resp: 113

Ion	Ratio	Lower	Upper
88	100		
58	93.3	30.0	90.0#



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7268\
Data File : 3A167459.D
Acq On : 20 Dec 2021 1:37 pm
Operator : BridgetK
Sample : mb
Misc : MS55469,V3A7268,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 20 16:18:00 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

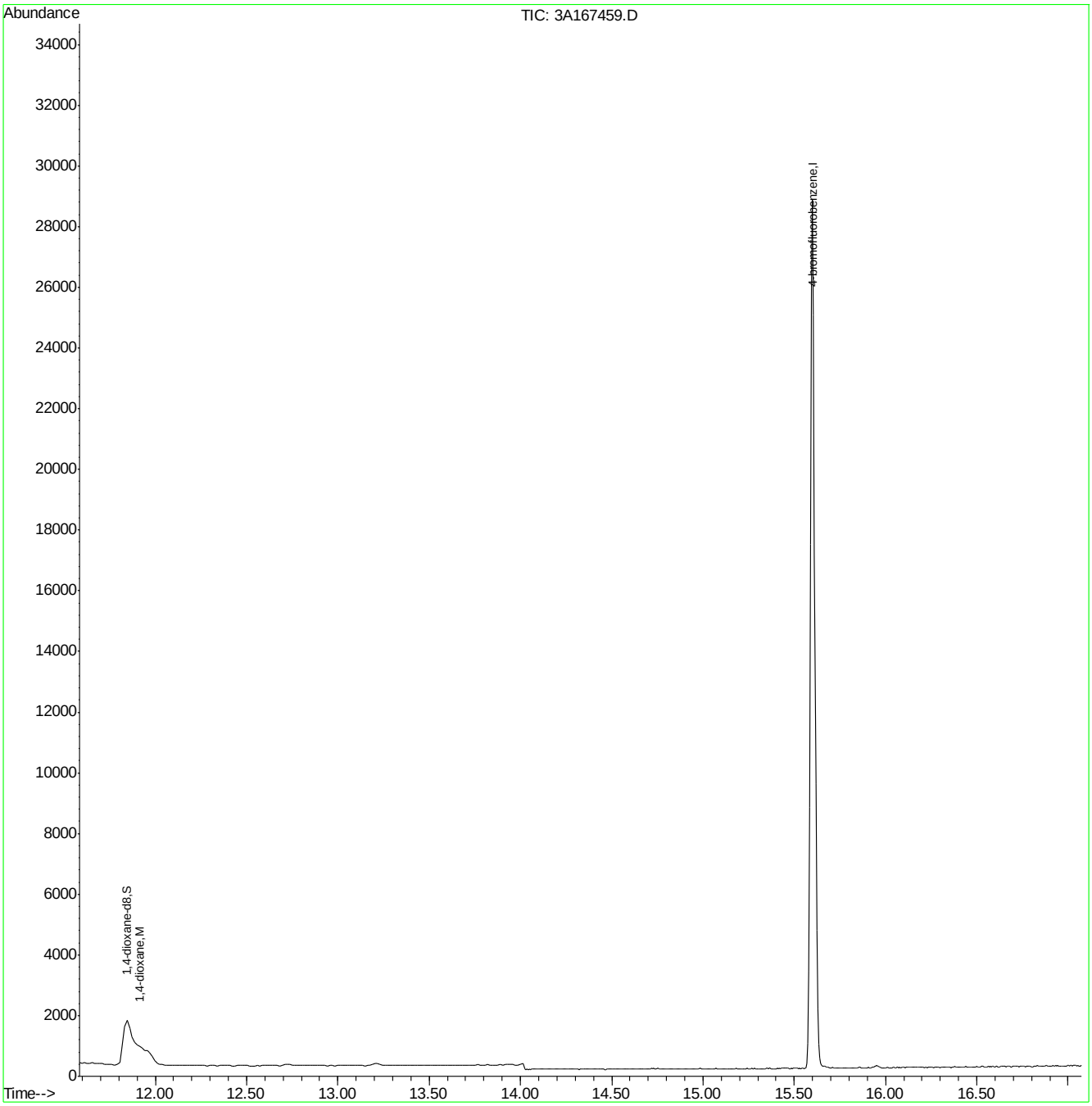
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15872	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	4908	11.17	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 111.70%			
Target Compounds						Qvalue
3) 1,4-dioxane	11.91	88	113	0.23	ug/L	# 56

(#) = qualifier out of range (m) = manual integration (+) = signals summed

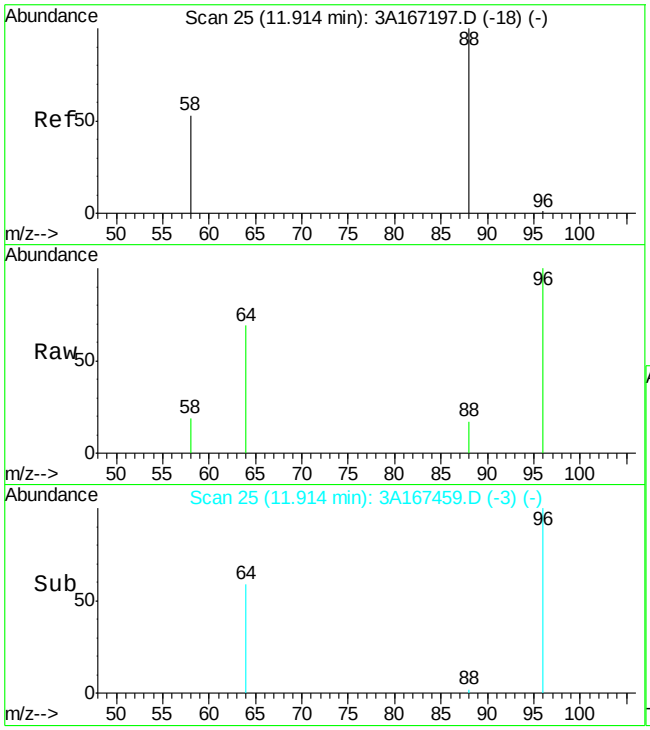
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3A7268\
Data File : 3A167459.D
Acq On : 20 Dec 2021 1:37 pm
Operator : BridgetK
Sample : mb
Misc : MS55469,V3A7268,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 20 16:18:00 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



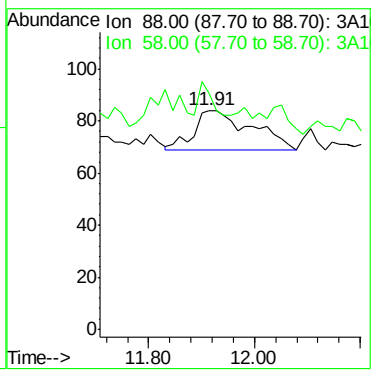
M3A7257.M Mon Dec 20 16:19:49 2021 ACCUNJ Page: 2



#3
1,4-dioxane
Concen: 0.23 ug/L
RT: 11.91 min Scan# 25
Delta R.T. 0.00 min
Lab File: 3A167459.D
Acq: 20 Dec 2021 1:37 pm

Tgt Ion: 88 Resp: 113

Ion	Ratio	Lower	Upper
88	100		
58	93.3	30.0	90.0#



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7269\
Data File : 3A167487.D
Acq On : 21 Dec 2021 10:39 am
Operator : BridgetK
Sample : mb
Misc : MS55558,V3A7269,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 21 14:30:31 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

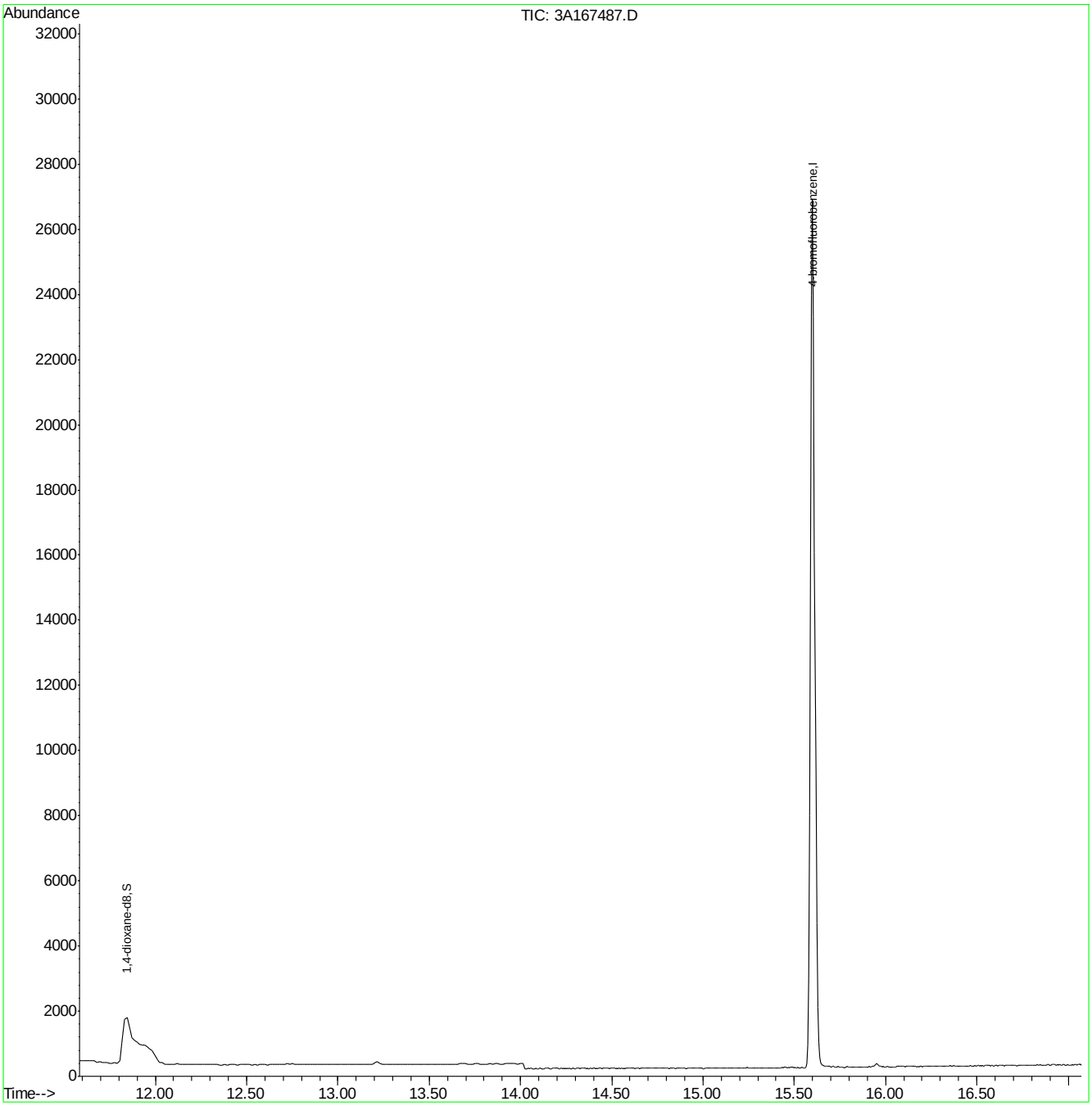
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	14673	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	5200	12.80	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 128.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7269\
Data File : 3A167487.D
Acq On : 21 Dec 2021 10:39 am
Operator : BridgetK
Sample : mb
Misc : MS55558,V3A7269,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 21 14:30:31 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167534.D
Acq On : 23 Dec 2021 10:14 am
Operator : BridgetK
Sample : mb
Misc : MS55558,V3A7273,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 23 11:14:11 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 4-bromofluorobenzene	15.60	95	15713	1.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-dioxane-d8	11.85	96	3904	8.97	ug/L	0.00
Spiked Amount 10.000	Range 39 - 174		Recovery = 89.70%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

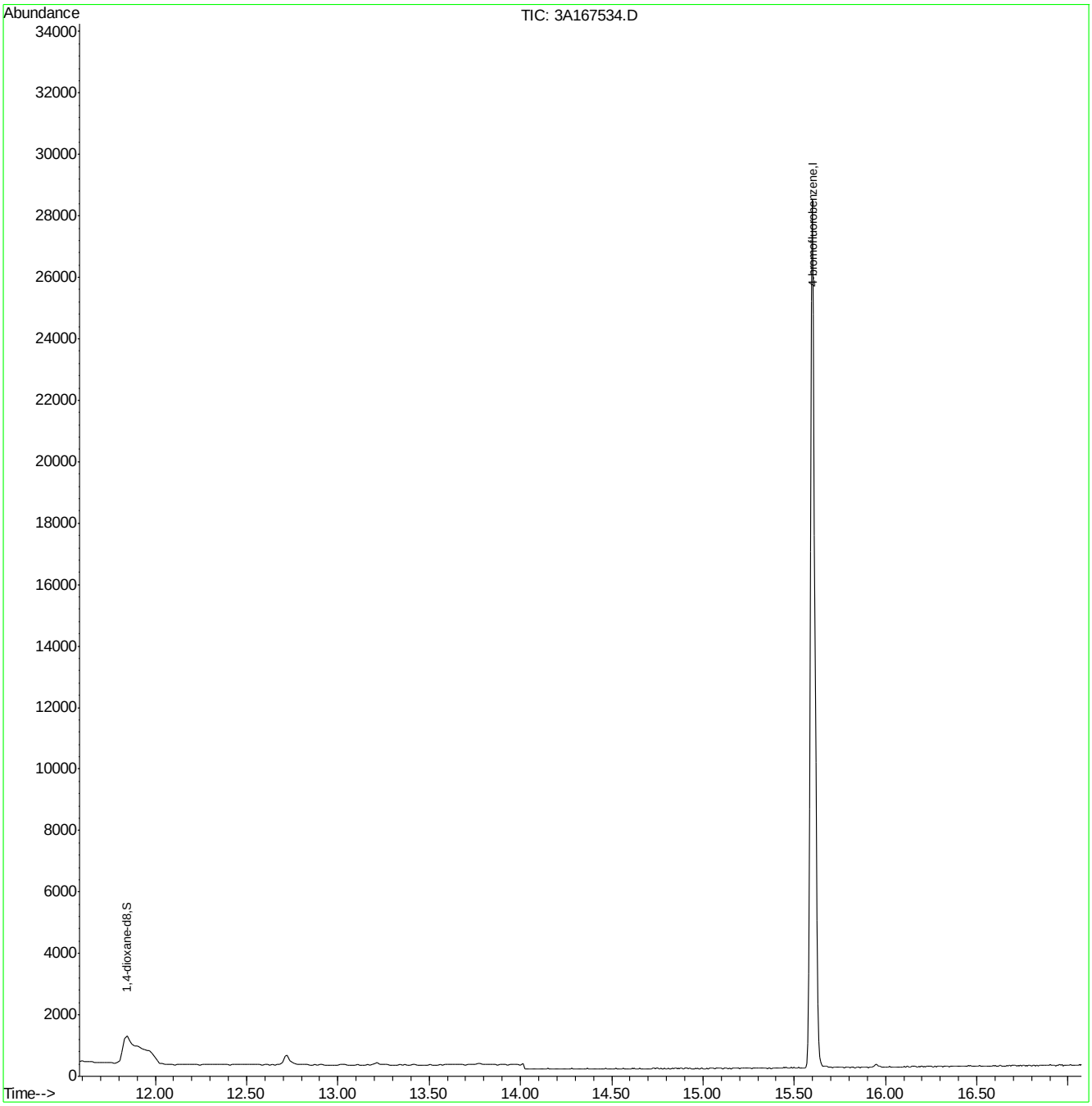
7.2.11

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\V3A7273\
Data File : 3A167534.D
Acq On : 23 Dec 2021 10:14 am
Operator : BridgetK
Sample : mb
Misc : MS55558,V3A7273,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 23 11:14:11 2021
Quant Method : C:\MSDCHEM\1\METHODS\M3A7257.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Dec 07 10:11:42 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA-SVOA\Dec-21\12-17\v3d7294-partial\
Data File : 3d171918.d
Acq On : 16 Dec 2021 12:00 pm
Operator : nicoleh
Sample : mb Inst : MS3D
Misc : MS46075,V3D7294,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 17 01:52:55 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

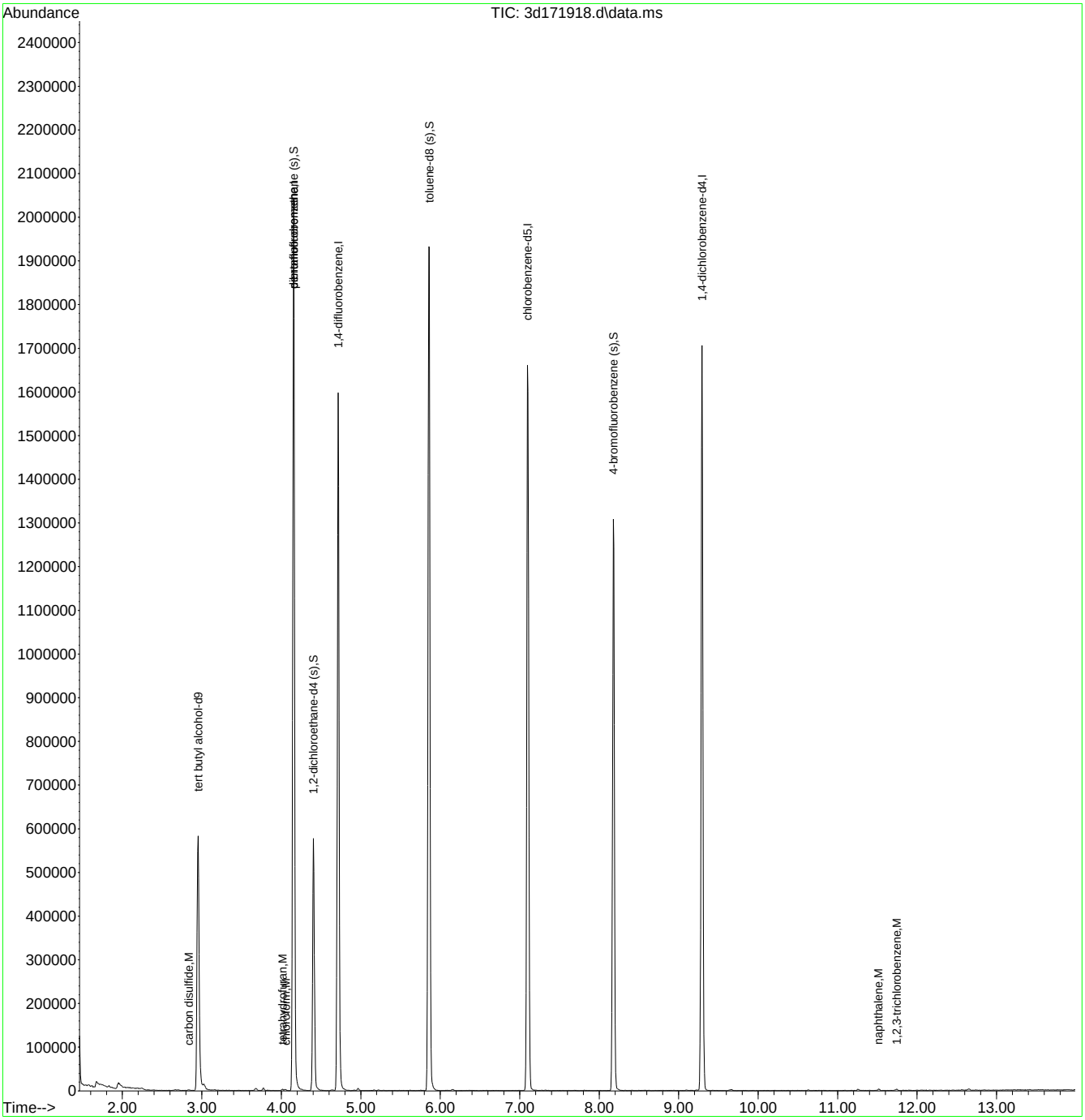
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	2.953	65	569090	500.00	ug/L		0.00
5) pentafluorobenzene	4.154	168	792071	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.715	114	1084113	50.00	ug/L		0.00
74) chlorobenzene-d5	7.099	117	897233	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	9.293	152	444710	50.00	ug/L		0.00
System Monitoring Compounds							
44) dibromofluoromethane (s)	4.154	113	288881	41.67	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 83.34%				
53) 1,2-dichloroethane-d4 (s)	4.404	65	315156	44.10	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 88.20%				
75) toluene-d8 (s)	5.861	98	1193964	52.49	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.98%				
99) 4-bromofluorobenzene (s)	8.178	95	431456	48.43	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.86%				
Target Compounds							Qvalue
22) carbon disulfide	2.837	76	1705	0.13	ug/L		88
41) tetrahydrofuran	4.014	42	1186	0.29	ug/L		76
42) chloroform	4.057	85	1014	0.13	ug/L	#	56
123) naphthalene	11.512	128	3786	0.15	ug/L		68
124) 1,2,3-trichlorobenzene	11.744	180	1100	0.15	ug/L		93

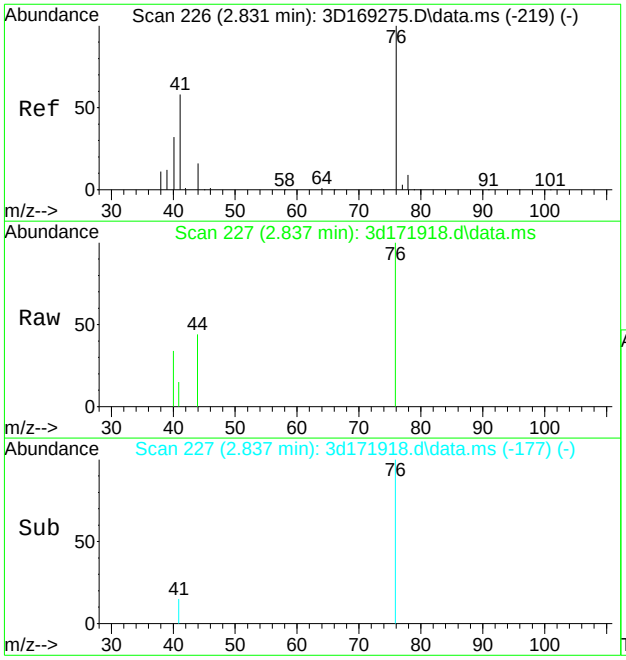
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\lotusa\VOA-SVOA\Dec-21\12-17\v3d7294-partial\
Data File : 3d171918.d
Acq On : 16 Dec 2021 12:00 pm
Operator : nicoleh
Sample : mb Inst : MS3D
Misc : MS46075,V3D7294,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M3D7187.M
Quant Results File: M3D7187.RES
Quant Time: Dec 17 01:52:55 2021
Quant Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xWed Oct 06 08:27:57 2021
QLast Update : Wed Oct 06 08:27:57 2021
Response via : Initial Calibration

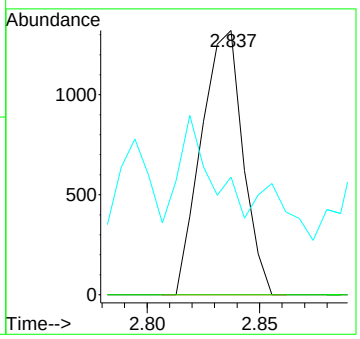


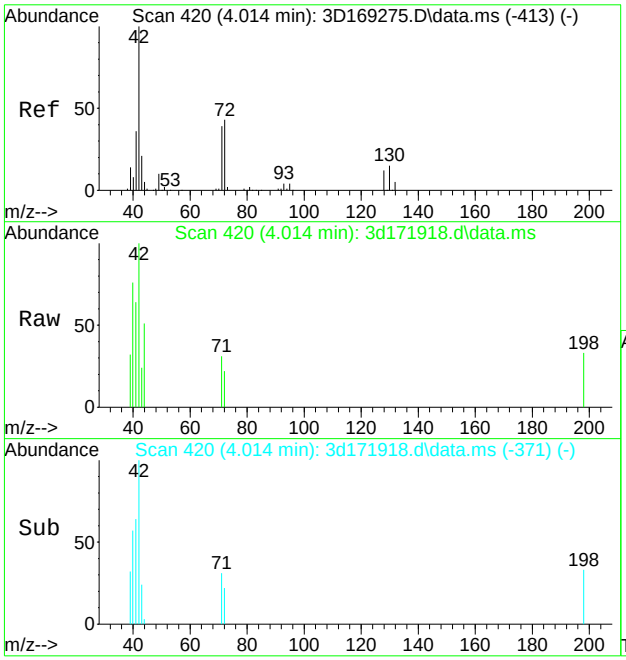


#22
carbon disulfide
Concen: 0.13 ug/L
RT: 2.837 min Scan# 227
Delta R.T. 0.006 min
Lab File: 3d171918.d
Acq: 16 Dec 2021 12:00 pm

Tgt Ion: 76 Resp: 1705

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	39.4
44	17.4	0.0	45.8

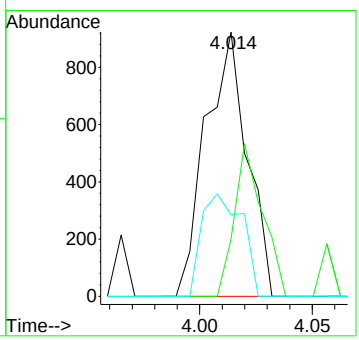


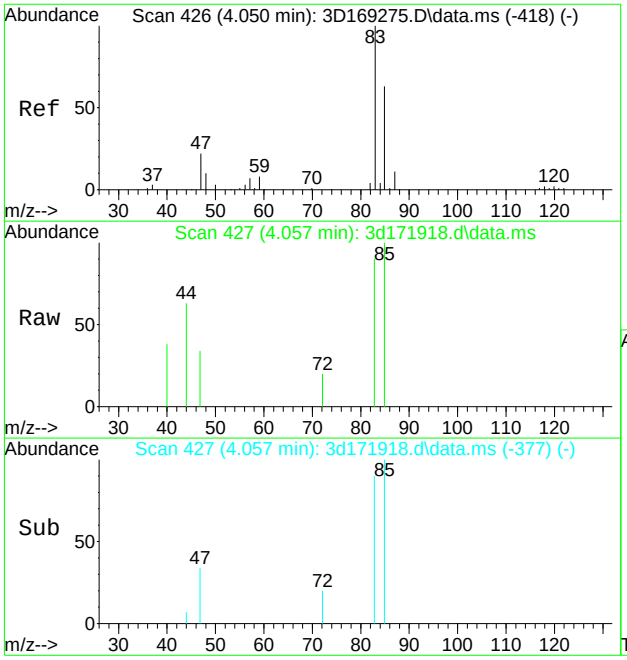


#41
tetrahydrofuran
Concen: 0.29 ug/L
RT: 4.014 min Scan# 420
Delta R.T. 0.001 min
Lab File: 3d171918.d
Acq: 16 Dec 2021 12:00 pm

Tgt Ion: 42 Resp: 1186

Ion	Ratio	Lower	Upper
42	100		
72	21.6	13.2	73.2
71	30.8	9.2	69.2

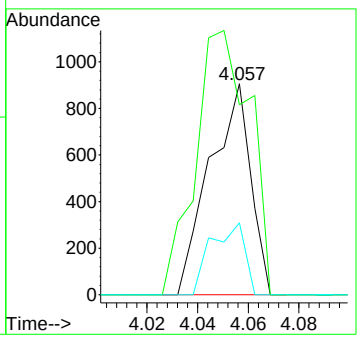


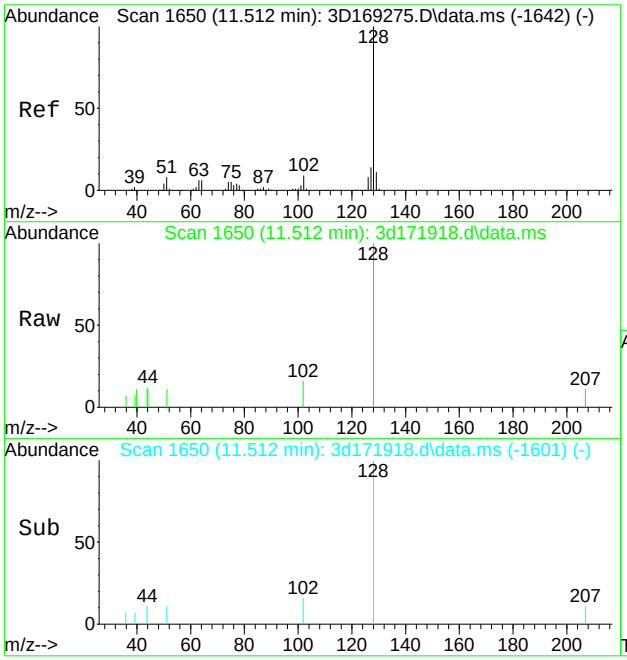


#42
chloroform
Concen: 0.13 ug/L
RT: 4.057 min Scan# 427
Delta R.T. 0.006 min
Lab File: 3d171918.d
Acq: 16 Dec 2021 12:00 pm

Tgt Ion: 85 Resp: 1014

Ion	Ratio	Lower	Upper
85	100		
83	90.1	128.7	188.7#
47	34.1	10.6	70.6

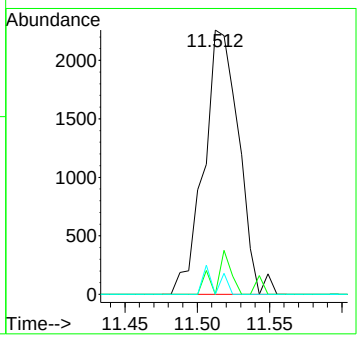


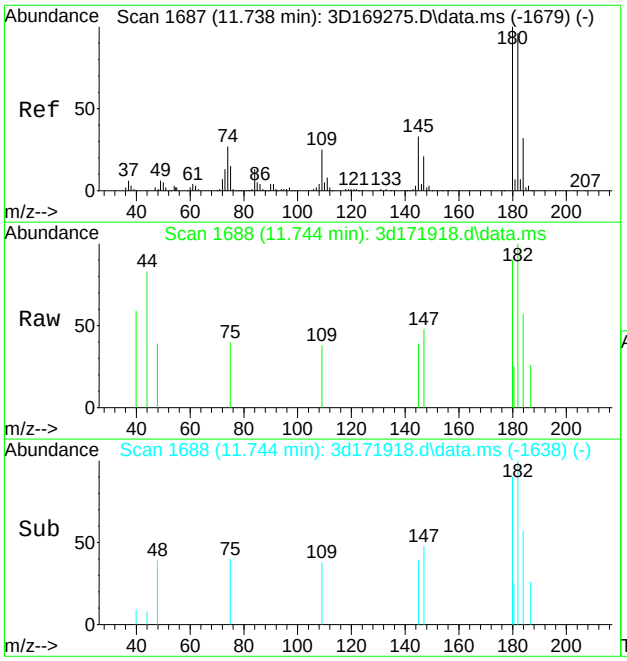


#123
naphthalene
Concen: 0.15 ug/L
RT: 11.512 min Scan# 1650
Delta R.T. -0.000 min
Lab File: 3d171918.d
Acq: 16 Dec 2021 12:00 pm

Tgt Ion:128 Resp: 3786

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	43.9
129	0.0	0.0	41.2

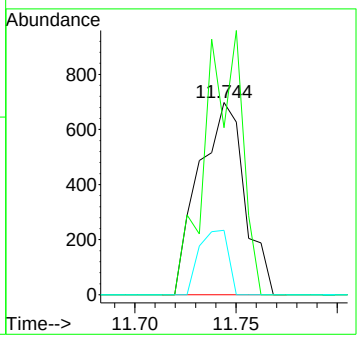




#124
1,2,3-trichlorobenzene
Concen: 0.15 ug/L
RT: 11.744 min Scan# 1688
Delta R.T. 0.006 min
Lab File: 3d171918.d
Acq: 16 Dec 2021 12:00 pm

Tgt Ion:180 Resp: 1100

Ion	Ratio	Lower	Upper
180	100		
182	86.8	65.8	125.8
145	33.5	2.9	62.9



7.2.12

7

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37108-MB1	5P80475.D	1	12/17/21	CS	12/14/21	OP37108	E5P3810

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	10.4	2.0	0.53	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37108-MB1	5P80475.D	1	12/17/21	CS	12/14/21	OP37108	E5P3810

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
91-20-3	Naphthalene	ND	1.0	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	28%	10-73%
4165-62-2	Phenol-d5	19%	10-64%
118-79-6	2,4,6-Tribromophenol	83%	31-130%
4165-60-0	Nitrobenzene-d5	60%	28-126%
321-60-8	2-Fluorobiphenyl	64%	26-114%
1718-51-0	Terphenyl-d14	94%	16-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	13.39	13	ug/l	J
	Unknown	13.42	11	ug/l	J
	Unknown	13.42	4.1	ug/l	J
	Unknown	13.52	4.1	ug/l	J
	Unknown phthalate	15.35	5.9	ug/l	J

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37108-MB1	5P80475.D	1	12/17/21	CS	12/14/21	OP37108	E5P3810

The QC reported here applies to the following samples: **Method:**

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	15.54	14	ug/l	J
	Total TIC, Semi-Volatile		52.1	ug/l	J

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37113-MB1	2M120966.D	1	12/22/21	CS	12/16/21	OP37113	E2M5439

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	10.1	2.0	0.53	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37113-MB1	2M120966.D	1	12/22/21	CS	12/16/21	OP37113	E2M5439

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	45%	10-73%
4165-62-2	Phenol-d5	30%	10-64%
118-79-6	2,4,6-Tribromophenol	82%	31-130%
4165-60-0	Nitrobenzene-d5	79%	28-126%
321-60-8	2-Fluorobiphenyl	84%	26-114%
1718-51-0	Terphenyl-d14	96%	16-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	4.25	3.2	ug/l	J
	Unknown	13.04	5.8	ug/l	J
301-02-0	9-Octadecenamide, (Z)-	13.07	7.8	ug/l	JN
	Unknown	13.29	4.6	ug/l	J
	Unknown	13.32	3.5	ug/l	J
	Unknown	14.64	3.2	ug/l	J

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37113-MB1	2M120966.D	1	12/22/21	CS	12/16/21	OP37113	E2M5439

The QC reported here applies to the following samples: **Method:**

JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	14.73	3.4	ug/l	J
	Unknown	15.02	4.2	ug/l	J
	Unknown	15.20	6.7	ug/l	J
	Unknown	15.46	3.4	ug/l	J
	Total TIC, Semi-Volatile		45.8	ug/l	J

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37115-MB1	5P80583.D	1	12/23/21	CS	12/17/21	OP37115	E5P3816

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.0	0.53	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	0.52	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.0	0.67	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.0	1.9	ug/l	
87-65-0	2,6-Dichlorophenol	ND	4.0	0.46	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.47	ug/l	
	3&4-Methylphenol	ND	2.0	1.5	ug/l	
88-75-5	2-Nitrophenol	ND	4.0	0.40	ug/l	
100-02-7	4-Nitrophenol	ND	8.0	0.45	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.2	ug/l	
108-95-2	Phenol	ND	2.0	0.26	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.0	0.64	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.0	0.49	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	0.59	ug/l	
98-86-2	Acetophenone	ND	2.0	0.52	ug/l	
62-53-3	Aniline	ND	2.0	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.86	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.99	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	4.0	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.46	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.60	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.56	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	1.1	ug/l	
132-64-9	Dibenzofuran	ND	4.0	0.73	ug/l	
84-74-2	Di-n-butyl phthalate	2.1	2.0	0.53	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	1.6	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.58	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.55	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.3	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.54	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37115-MB1	5P80583.D	1	12/23/21	CS	12/17/21	OP37115	E5P3816

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	1.0	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	8.0	0.98	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.55	ug/l	
78-59-1	Isophorone	ND	2.0	0.39	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.64	ug/l	
88-74-4	2-Nitroaniline	ND	4.0	0.62	ug/l	
99-09-2	3-Nitroaniline	ND	4.0	0.64	ug/l	
100-01-6	4-Nitroaniline	ND	4.0	0.75	ug/l	
91-20-3	Naphthalene	ND	1.0	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.32	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.65	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.0	0.42	ug/l	
82-68-8	Pentachloronitrobenzene	ND	4.0		ug/l	
110-86-1	Pyridine	ND	2.0	0.31	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.36	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	30%	10-73%
4165-62-2	Phenol-d5	18%	10-64%
118-79-6	2,4,6-Tribromophenol	65%	31-130%
4165-60-0	Nitrobenzene-d5	64%	28-126%
321-60-8	2-Fluorobiphenyl	69%	26-114%
1718-51-0	Terphenyl-d14	76%	16-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact	1.84	6.4	ug/l	J
	Internal standard added for SIM test	6.28	3.4	ug/l	J
	Internal standard added for SIM test	11.49	3.4	ug/l	J
	Unknown	15.03	5.4	ug/l	J
	Internal standard added for SIM test	15.79	3.3	ug/l	J

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37115-MB1	5P80583.D	1	12/23/21	CS	12/17/21	OP37115	E5P3816

The QC reported here applies to the following samples: **Method:**

JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		5.4	ug/l	J

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37108A-MB1	4P50271.D	1	12/27/21	KLS	12/14/21	OP37108A	E4P2635

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	ND	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	ND	0.080	0.040	ug/l	
86-73-7	Fluorene	ND	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	ND	0.080	0.040	ug/l	
85-01-8	Phenanthrene	ND	0.080	0.040	ug/l	
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	41%	15-110%
4165-62-2	Phenol-d5	20%	12-110%
118-79-6	2,4,6-Tribromophenol	111%	32-143%
4165-60-0	Nitrobenzene-d5	82%	29-124%
321-60-8	2-Fluorobiphenyl	65%	23-122%
1718-51-0	Terphenyl-d14	95%	22-130%

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37113A-MB1	4P50298.D	1	12/28/21	KLS	12/16/21	OP37113A	E4P2636

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	ND	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	ND	0.080	0.040	ug/l	
86-73-7	Fluorene	ND	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	ND	0.080	0.040	ug/l	
85-01-8	Phenanthrene	ND	0.080	0.040	ug/l	
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	51%	15-110%
4165-62-2	Phenol-d5	29%	12-110%
118-79-6	2,4,6-Tribromophenol	102%	32-143%
4165-60-0	Nitrobenzene-d5	99%	29-124%
321-60-8	2-Fluorobiphenyl	81%	23-122%
1718-51-0	Terphenyl-d14	101%	22-130%

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37115A-MB1	4P50209.D	1	12/18/21	CS	12/17/21	OP37115A	E4P2629

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.080	0.040	ug/l	
208-96-8	Acenaphthylene	ND	0.080	0.040	ug/l	
120-12-7	Anthracene	ND	0.080	0.040	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.040	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.040	0.024	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.040	0.024	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.080	0.040	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.080	0.040	ug/l	
218-01-9	Chrysene	ND	0.080	0.040	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.080	0.040	ug/l	
206-44-0	Fluoranthene	ND	0.080	0.040	ug/l	
86-73-7	Fluorene	ND	0.080	0.040	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.080	0.040	ug/l	
91-20-3	Naphthalene	ND	0.080	0.040	ug/l	
85-01-8	Phenanthrene	ND	0.080	0.040	ug/l	
129-00-0	Pyrene	ND	0.080	0.040	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	47%	15-110%
4165-62-2	Phenol-d5	30%	12-110%
118-79-6	2,4,6-Tribromophenol	135%	32-143%
4165-60-0	Nitrobenzene-d5	114%	29-124%
321-60-8	2-Fluorobiphenyl	90%	23-122%
1718-51-0	Terphenyl-d14	108%	22-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37108-BS1	5P80476.D	1	12/17/21	CS	12/14/21	OP37108	E5P3810
OP37108-BSD	5P80477.D	1	12/17/21	CS	12/14/21	OP37108	E5P3810

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	40	29.9	75	23.4	59	24	33-102/34
59-50-7	4-Chloro-3-methyl phenol	40	39.4	99	32.9	82	18	46-113/28
120-83-2	2,4-Dichlorophenol	40	35.8	90	29.1	73	21	45-111/31
105-67-9	2,4-Dimethylphenol	40	32.8	82	27.2	68	19	39-124/30
51-28-5	2,4-Dinitrophenol	80	91.6	115	86.7	108	5	30-156/30
87-65-0	2,6-Dichlorophenol	40	35.8	90	29.9	75	18	45-114/28
534-52-1	4,6-Dinitro-o-cresol	40	43.9	110	41.0	103	7	41-138/29
95-48-7	2-Methylphenol	40	27.7	69	21.1	53	27	26-101/32
	3&4-Methylphenol	80	52.1	65	40.1	50	26	23-98/32
88-75-5	2-Nitrophenol	40	35.5	89	29.8	75	17	42-125/34
100-02-7	4-Nitrophenol	40	27.2	68	23.3	58	15	10-91/35
87-86-5	Pentachlorophenol	80	75.8	95	69.8	88	8	37-147/31
108-95-2	Phenol	40	13.7	34	9.9	25	32	10-77/35
58-90-2	2,3,4,6-Tetrachlorophenol	40	41.6	104	38.0	95	9	41-131/29
95-95-4	2,4,5-Trichlorophenol	40	37.4	94	35.0	88	7	39-125/28
88-06-2	2,4,6-Trichlorophenol	40	37.2	93	33.9	85	9	40-127/28
98-86-2	Acetophenone	40	32.7	82	28.6	72	13	44-110/30
62-53-3	Aniline	40	8.5	21	12.1	30	35	10-109/44
101-55-3	4-Bromophenyl phenyl ether	40	38.9	97	33.7	84	14	44-115/29
85-68-7	Butyl benzyl phthalate	40	47.6	119	42.3	106	12	49-121/29
100-51-6	Benzyl Alcohol	40	29.4	74	23.0	58	24	31-110/31
91-58-7	2-Chloronaphthalene	40	29.9	75	26.2	66	13	29-112/29
106-47-8	4-Chloroaniline	40	26.4	66	25.7	64	3	15-88/48
111-91-1	bis(2-Chloroethoxy)methane	40	32.5	81	27.7	69	16	44-115/29
111-44-4	bis(2-Chloroethyl)ether	40	29.5	74	24.1	60	20	38-116/32
7005-72-3	4-Chlorophenyl phenyl ether	40	34.0	85	30.9	77	10	35-119/28
121-14-2	2,4-Dinitrotoluene	40	41.8	105	40.7	102	3	47-128/27
606-20-2	2,6-Dinitrotoluene	40	41.9	105	38.7	97	8	48-127/28
91-94-1	3,3'-Dichlorobenzidine	40	29.0	72	29.4	74	1	18-103/38
132-64-9	Dibenzofuran	40	34.6	87	31.1	78	11	35-119/27
84-74-2	Di-n-butyl phthalate	40	58.4	146* [a]	58.0	145* [a]	1	50-122/29
117-84-0	Di-n-octyl phthalate	40	45.2	113	38.7	97	15	40-127/28
84-66-2	Diethyl phthalate	40	41.7	104	39.1	98	6	49-117/28
131-11-3	Dimethyl phthalate	40	39.4	99	36.1	90	9	49-114/28
117-81-7	bis(2-Ethylhexyl)phthalate	40	48.1	120	43.2	108	11	44-127/29
118-74-1	Hexachlorobenzene	40	37.8	95	33.7	84	11	46-113/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37108-BS1	5P80476.D	1	12/17/21	CS	12/14/21	OP37108	E5P3810
OP37108-BSD	5P80477.D	1	12/17/21	CS	12/14/21	OP37108	E5P3810

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	40	24.2	61	18.9	47	25	17-111/37
77-47-4	Hexachlorocyclopentadiene	80	37.5	47	28.0	35	29	10-112/40
67-72-1	Hexachloroethane	40	22.1	55	17.2	43	25	18-101/38
78-59-1	Isophorone	40	34.0	85	29.2	73	15	47-119/28
91-57-6	2-Methylnaphthalene	40	30.9	77	25.0	63	21	30-116/32
88-74-4	2-Nitroaniline	40	37.9	95	33.9	85	11	35-133/28
99-09-2	3-Nitroaniline	40	36.0	90	35.4	89	2	31-102/39
100-01-6	4-Nitroaniline	40	39.4	99	37.0	93	6	51-118/30
91-20-3	Naphthalene	40	29.0	73	23.5	59	21	36-110/31
98-95-3	Nitrobenzene	40	31.4	79	26.3	66	18	36-120/29
62-75-9	n-Nitrosodimethylamine	40	17.6	44	12.9	32	31	10-85/37
621-64-7	N-Nitroso-di-n-propylamine	40	31.7	79	28.6	72	10	41-118/30
86-30-6	N-Nitrosodiphenylamine	40	37.1	93	33.9	85	9	46-112/29
82-68-8	Pentachloronitrobenzene	40	42.0	105	38.6	97	8	43-126/28
110-86-1	Pyridine	40	1.6	4*	3.0	8*	61*	10-78/57
95-94-3	1,2,4,5-Tetrachlorobenzene	40	27.3	68	22.8	57	18	20-114/31
120-82-1	1,2,4-Trichlorobenzene	40	25.8	65	19.8	50	26	24-104/33

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	48%	32%	10-73%
4165-62-2	Phenol-d5	34%	23%	10-64%
118-79-6	2,4,6-Tribromophenol	107%	93%	31-130%
4165-60-0	Nitrobenzene-d5	78%	64%	28-126%
321-60-8	2-Fluorobiphenyl	81%	69%	26-114%
1718-51-0	Terphenyl-d14	102%	87%	16-122%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37113-BS1	2M120967.D	1	12/22/21	CS	12/16/21	OP37113	E2M5439
OP37113-BSD	2M120968.D	1	12/22/21	CS	12/16/21	OP37113	E2M5439

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	40	26.8	67	27.4	69	2	33-102/34
59-50-7	4-Chloro-3-methyl phenol	40	36.5	91	34.5	86	6	46-113/28
120-83-2	2,4-Dichlorophenol	40	33.4	84	32.4	81	3	45-111/31
105-67-9	2,4-Dimethylphenol	40	32.8	82	29.5	74	11	39-124/30
51-28-5	2,4-Dinitrophenol	80	80.7	101	71.3	89	12	30-156/30
87-65-0	2,6-Dichlorophenol	40	34.7	87	33.0	83	5	45-114/28
534-52-1	4,6-Dinitro-o-cresol	40	37.2	93	34.9	87	6	41-138/29
95-48-7	2-Methylphenol	40	26.3	66	26.4	66	0	26-101/32
	3&4-Methylphenol	80	52.1	65	53.3	67	2	23-98/32
88-75-5	2-Nitrophenol	40	33.1	83	32.9	82	1	42-125/34
100-02-7	4-Nitrophenol	40	26.7	67	26.6	67	0	10-91/35
87-86-5	Pentachlorophenol	80	79.1	99	72.2	91	9	37-147/31
108-95-2	Phenol	40	13.8	35	15.0	38	8	10-77/35
58-90-2	2,3,4,6-Tetrachlorophenol	40	39.0	98	35.9	90	8	41-131/29
95-95-4	2,4,5-Trichlorophenol	40	37.7	94	35.6	89	6	39-125/28
88-06-2	2,4,6-Trichlorophenol	40	37.5	94	35.7	89	5	40-127/28
98-86-2	Acetophenone	40	31.3	78	30.8	77	2	44-110/30
62-53-3	Aniline	40	15.9	40	17.9	45	12	10-109/44
101-55-3	4-Bromophenyl phenyl ether	40	36.5	91	34.6	87	5	44-115/29
85-68-7	Butyl benzyl phthalate	40	37.1	93	35.4	89	5	49-121/29
100-51-6	Benzyl Alcohol	40	25.8	65	26.8	67	4	31-110/31
91-58-7	2-Chloronaphthalene	40	34.0	85	32.9	82	3	29-112/29
106-47-8	4-Chloroaniline	40	29.8	75	29.4	74	1	15-88/48
111-91-1	bis(2-Chloroethoxy)methane	40	31.3	78	31.0	78	1	44-115/29
111-44-4	bis(2-Chloroethyl)ether	40	27.1	68	27.4	69	1	38-116/32
7005-72-3	4-Chlorophenyl phenyl ether	40	36.2	91	33.8	85	7	35-119/28
121-14-2	2,4-Dinitrotoluene	40	42.0	105	39.5	99	6	47-128/27
606-20-2	2,6-Dinitrotoluene	40	40.4	101	37.4	94	8	48-127/28
91-94-1	3,3'-Dichlorobenzidine	40	32.6	82	33.4	84	2	18-103/38
132-64-9	Dibenzofuran	40	35.7	89	33.5	84	6	35-119/27
84-74-2	Di-n-butyl phthalate	40	52.6	132* [a]	49.0	123* [a]	7	50-122/29
117-84-0	Di-n-octyl phthalate	40	39.0	98	37.1	93	5	40-127/28
84-66-2	Diethyl phthalate	40	39.3	98	36.2	91	8	49-117/28
131-11-3	Dimethyl phthalate	40	37.7	94	35.6	89	6	49-114/28
117-81-7	bis(2-Ethylhexyl)phthalate	40	39.9	100	39.5	99	1	44-127/29
118-74-1	Hexachlorobenzene	40	36.6	92	34.1	85	7	46-113/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37113-BS1	2M120967.D	1	12/22/21	CS	12/16/21	OP37113	E2M5439
OP37113-BSD	2M120968.D	1	12/22/21	CS	12/16/21	OP37113	E2M5439

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	40	32.5	81	33.4	84	3	17-111/37
77-47-4	Hexachlorocyclopentadiene	80	52.4	66	53.4	67	2	10-112/40
67-72-1	Hexachloroethane	40	27.6	69	27.8	70	1	18-101/38
78-59-1	Isophorone	40	32.2	81	30.9	77	4	47-119/28
91-57-6	2-Methylnaphthalene	40	33.2	83	32.5	81	2	30-116/32
88-74-4	2-Nitroaniline	40	37.2	93	35.7	89	4	35-133/28
99-09-2	3-Nitroaniline	40	33.9	85	33.1	83	2	31-102/39
100-01-6	4-Nitroaniline	40	35.1	88	34.4	86	2	51-118/30
98-95-3	Nitrobenzene	40	31.2	78	31.1	78	0	36-120/29
62-75-9	n-Nitrosodimethylamine	40	16.4	41	17.6	44	7	10-85/37
621-64-7	N-Nitroso-di-n-propylamine	40	32.5	81	31.6	79	3	41-118/30
86-30-6	N-Nitrosodiphenylamine	40	34.9	87	33.3	83	5	46-112/29
82-68-8	Pentachloronitrobenzene	40	39.4	99	35.8	90	10	43-126/28
110-86-1	Pyridine	40	2.1	5* [a]	4.8	12	78* [b]	10-78/57
95-94-3	1,2,4,5-Tetrachlorobenzene	40	33.0	83	33.0	83	0	20-114/31
120-82-1	1,2,4-Trichlorobenzene	40	30.2	76	29.7	74	2	24-104/33

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	43%	49%	10-73%
4165-62-2	Phenol-d5	31%	34%	10-64%
118-79-6	2,4,6-Tribromophenol	97%	93%	31-130%
4165-60-0	Nitrobenzene-d5	75%	78%	28-126%
321-60-8	2-Fluorobiphenyl	86%	86%	26-114%
1718-51-0	Terphenyl-d14	82%	81%	16-122%

(a) Outside of in house control limits.
(b) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37115-BS1	5P80584.D	1	12/23/21	CS	12/17/21	OP37115	E5P3816
OP37115-BSD	5P80585.D	1	12/23/21	CS	12/17/21	OP37115	E5P3816

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	40	23.3	58	25.9	65	11	33-102/34
59-50-7	4-Chloro-3-methyl phenol	40	28.6	72	33.3	83	15	46-113/28
120-83-2	2,4-Dichlorophenol	40	27.4	69	32.5	81	17	45-111/31
105-67-9	2,4-Dimethylphenol	40	25.4	64	27.6	69	8	39-124/30
51-28-5	2,4-Dinitrophenol	80	80.0	100	84.0	105	5	30-156/30
87-65-0	2,6-Dichlorophenol	40	27.8	70	33.6	84	19	45-114/28
534-52-1	4,6-Dinitro-o-cresol	40	38.8	97	40.7	102	5	41-138/29
95-48-7	2-Methylphenol	40	19.5	49	22.5	56	14	26-101/32
	3&4-Methylphenol	80	37.9	48	43.9	55	15	23-98/32
88-75-5	2-Nitrophenol	40	26.6	67	31.5	79	17	42-125/34
100-02-7	4-Nitrophenol	40	24.1	60	25.4	64	5	10-91/35
87-86-5	Pentachlorophenol	80	63.2	79	67.8	85	7	37-147/31
108-95-2	Phenol	40	10.2	26	12.1	30	17	10-77/35
58-90-2	2,3,4,6-Tetrachlorophenol	40	33.6	84	35.8	90	6	41-131/29
95-95-4	2,4,5-Trichlorophenol	40	30.8	77	35.0	88	13	39-125/28
88-06-2	2,4,6-Trichlorophenol	40	29.9	75	36.1	90	19	40-127/28
98-86-2	Acetophenone	40	23.9	60	28.2	71	17	44-110/30
62-53-3	Aniline	40	13.8	35	16.0	40	15	10-109/44
101-55-3	4-Bromophenyl phenyl ether	40	31.4	79	35.7	89	13	44-115/29
85-68-7	Butyl benzyl phthalate	40	37.8	95	44.3	111	16	49-121/29
100-51-6	Benzyl Alcohol	40	18.7	47	22.5	56	18	31-110/31
91-58-7	2-Chloronaphthalene	40	25.5	64	30.1	75	17	29-112/29
106-47-8	4-Chloroaniline	40	20.7	52	25.3	63	20	15-88/48
111-91-1	bis(2-Chloroethoxy)methane	40	22.2	56	28.1	70	23	44-115/29
111-44-4	bis(2-Chloroethyl)ether	40	20.8	52	24.3	61	16	38-116/32
7005-72-3	4-Chlorophenyl phenyl ether	40	28.3	71	31.1	78	9	35-119/28
121-14-2	2,4-Dinitrotoluene	40	35.7	89	36.2	91	1	47-128/27
606-20-2	2,6-Dinitrotoluene	40	33.5	84	36.0	90	7	48-127/28
91-94-1	3,3'-Dichlorobenzidine	40	25.7	64	28.6	72	11	18-103/38
132-64-9	Dibenzofuran	40	29.0	73	32.9	82	13	35-119/27
84-74-2	Di-n-butyl phthalate	40	36.8	92	40.3	101	9	50-122/29
117-84-0	Di-n-octyl phthalate	40	46.0	115	47.0	118	2	40-127/28
84-66-2	Diethyl phthalate	40	34.0	85	36.8	92	8	49-117/28
131-11-3	Dimethyl phthalate	40	31.9	80	34.6	87	8	49-114/28
117-81-7	bis(2-Ethylhexyl)phthalate	40	37.6	94	44.4	111	17	44-127/29
118-74-1	Hexachlorobenzene	40	32.0	80	34.1	85	6	46-113/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37115-BS1	5P80584.D	1	12/23/21	CS	12/17/21	OP37115	E5P3816
OP37115-BSD	5P80585.D	1	12/23/21	CS	12/17/21	OP37115	E5P3816

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	40	23.8	60	28.1	70	17	17-111/37
77-47-4	Hexachlorocyclopentadiene	80	34.6	43	43.2	54	22	10-112/40
67-72-1	Hexachloroethane	40	20.7	52	23.5	59	13	18-101/38
78-59-1	Isophorone	40	22.8	57	28.4	71	22	47-119/28
91-57-6	2-Methylnaphthalene	40	24.8	62	30.0	75	19	30-116/32
88-74-4	2-Nitroaniline	40	28.9	72	32.6	82	12	35-133/28
99-09-2	3-Nitroaniline	40	25.7	64	26.6	67	3	31-102/39
100-01-6	4-Nitroaniline	40	31.3	78	33.0	83	5	51-118/30
91-20-3	Naphthalene	40	23.7	59	28.1	70	17	36-110/31
98-95-3	Nitrobenzene	40	24.9	62	29.1	73	16	36-120/29
62-75-9	n-Nitrosodimethylamine	40	13.4	34	14.0	35	4	10-85/37
621-64-7	N-Nitroso-di-n-propylamine	40	21.7	54	26.0	65	18	41-118/30
86-30-6	N-Nitrosodiphenylamine	40	31.6	79	34.3	86	8	46-112/29
82-68-8	Pentachloronitrobenzene	40	35.2	88	38.7	97	9	43-126/28
110-86-1	Pyridine	40	9.5	24	9.9	25	4	10-78/57
95-94-3	1,2,4,5-Tetrachlorobenzene	40	25.3	63	29.5	74	15	20-114/31
120-82-1	1,2,4-Trichlorobenzene	40	22.5	56	26.9	67	18	24-104/33

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	40%	48%	10-73%
4165-62-2	Phenol-d5	24%	30%	10-64%
118-79-6	2,4,6-Tribromophenol	87%	101%	31-130%
4165-60-0	Nitrobenzene-d5	62%	73%	28-126%
321-60-8	2-Fluorobiphenyl	64%	77%	26-114%
1718-51-0	Terphenyl-d14	88%	102%	16-122%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37108A-BS12	4P50272.D	1	12/27/21	KLS	12/14/21	OP37108A	E4P2635
OP37108A-BSD12	4P50275.D	1	12/27/21	KLS	12/14/21	OP37108A	E4P2635

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	0.8	0.535	67	0.538	67	1	31-135/38
208-96-8	Acenaphthylene	0.8	0.346	43	0.358	45	3	28-130/42
120-12-7	Anthracene	0.8	0.532	67	0.558	70	5	40-125/32
56-55-3	Benzo(a)anthracene	0.8	0.541	68	0.590	74	9	38-132/31
50-32-8	Benzo(a)pyrene	0.8	0.631	79	0.708	89	12	31-110/37
205-99-2	Benzo(b)fluoranthene	0.8	0.734	92	0.789	99	7	31-113/37
191-24-2	Benzo(g,h,i)perylene	0.8	0.551	69	0.628	79	13	18-110/54
207-08-9	Benzo(k)fluoranthene	0.8	0.679	85	0.774	97	13	31-119/43
218-01-9	Chrysene	0.8	0.590	74	0.639	80	8	43-119/33
53-70-3	Dibenzo(a,h)anthracene	0.8	0.550	69	0.640	80	15	20-112/50
206-44-0	Fluoranthene	0.8	0.637	80	0.703	88	10	48-118/27
86-73-7	Fluorene	0.8	0.569	71	0.582	73	2	42-123/34
193-39-5	Indeno(1,2,3-cd)pyrene	0.8	0.507	63	0.589	74	15	18-113/49
91-20-3	Naphthalene	0.8	0.423	53	0.379	47	11	30-114/40
85-01-8	Phenanthrene	0.8	0.589	74	0.644	81	9	45-125/31
129-00-0	Pyrene	0.8	0.595	74	0.646	81	8	48-125/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	36%	45%	15-110%
4165-62-2	Phenol-d5	20%	27%	12-110%
118-79-6	2,4,6-Tribromophenol	120%	131%	32-143%
4165-60-0	Nitrobenzene-d5	83%	82%	29-124%
321-60-8	2-Fluorobiphenyl	69%	70%	23-122%
1718-51-0	Terphenyl-d14	87%	104%	22-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37113A-BS12	4P50299.D	1	12/28/21	KLS	12/16/21	OP37113A	E4P2636
OP37113A-BSD12	4P50300.D	1	12/28/21	KLS	12/16/21	OP37113A	E4P2636

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	0.8	0.537	67	0.636	80	17	31-135/38
208-96-8	Acenaphthylene	0.8	0.353	44	0.424	53	18	28-130/42
120-12-7	Anthracene	0.8	0.518	65	0.660	83	24	40-125/32
56-55-3	Benzo(a)anthracene	0.8	0.451	56	0.534	67	17	38-132/31
50-32-8	Benzo(a)pyrene	0.8	0.495	62	0.656	82	28	31-110/37
205-99-2	Benzo(b)fluoranthene	0.8	0.607	76	0.733	92	19	31-113/37
191-24-2	Benzo(g,h,i)perylene	0.8	0.331	41	0.455	57	32	18-110/54
207-08-9	Benzo(k)fluoranthene	0.8	0.521	65	0.635	79	20	31-119/43
218-01-9	Chrysene	0.8	0.469	59	0.563	70	18	43-119/33
53-70-3	Dibenzo(a,h)anthracene	0.8	0.355	44	0.481	60	30	20-112/50
206-44-0	Fluoranthene	0.8	0.589	74	0.687	86	15	48-118/27
86-73-7	Fluorene	0.8	0.555	69	0.674	84	19	42-123/34
193-39-5	Indeno(1,2,3-cd)pyrene	0.8	0.323	40	0.437	55	30	18-113/49
91-20-3	Naphthalene	0.8	0.514	64	0.507	63	1	30-114/40
85-01-8	Phenanthrene	0.8	0.594	74	0.722	90	19	45-125/31
129-00-0	Pyrene	0.8	0.515	64	0.606	76	16	48-125/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	49%	59%	15-110%
4165-62-2	Phenol-d5	29%	35%	12-110%
118-79-6	2,4,6-Tribromophenol	129%	144%* [a]	32-143%
4165-60-0	Nitrobenzene-d5	100%	108%	29-124%
321-60-8	2-Fluorobiphenyl	81%	91%	23-122%
1718-51-0	Terphenyl-d14	102%	107%	22-130%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37115A-BS12	4P50212.D	1	12/18/21	CS	12/17/21	OP37115A	E4P2629
OP37115A-BSD12	4P50213A.D	1	12/18/21	CS	12/17/21	OP37115A	E4P2629

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	0.8	0.651	81	0.652	82	0	31-135/38
208-96-8	Acenaphthylene	0.8	0.428	54	0.435	54	2	28-130/42
120-12-7	Anthracene	0.8	0.703	88	0.664	83	6	40-125/32
56-55-3	Benzo(a)anthracene	0.8	0.568	71	0.547	68	4	38-132/31
50-32-8	Benzo(a)pyrene	0.8	0.649	81	0.676	85	4	31-110/37
205-99-2	Benzo(b)fluoranthene	0.8	0.776	97	0.807	101	4	31-113/37
191-24-2	Benzo(g,h,i)perylene	0.8	0.415	52	0.434	54	4	18-110/54
207-08-9	Benzo(k)fluoranthene	0.8	0.624	78	0.662	83	6	31-119/43
218-01-9	Chrysene	0.8	0.602	75	0.587	73	3	43-119/33
53-70-3	Dibenzo(a,h)anthracene	0.8	0.414	52	0.439	55	6	20-112/50
206-44-0	Fluoranthene	0.8	0.724	91	0.700	88	3	48-118/27
86-73-7	Fluorene	0.8	0.695	87	0.661	83	5	42-123/34
193-39-5	Indeno(1,2,3-cd)pyrene	0.8	0.384	48	0.402	50	5	18-113/49
91-20-3	Naphthalene	0.8	0.564	71	0.530	66	6	30-114/40
85-01-8	Phenanthrene	0.8	0.724	91	0.679	85	6	45-125/31
129-00-0	Pyrene	0.8	0.647	81	0.631	79	3	48-125/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	48%	56%	15-110%
4165-62-2	Phenol-d5	34%	40%	12-110%
118-79-6	2,4,6-Tribromophenol	141%	146%* [a]	32-143%
4165-60-0	Nitrobenzene-d5	111%	117%	29-124%
321-60-8	2-Fluorobiphenyl	90%	94%	23-122%
1718-51-0	Terphenyl-d14	107%	110%	22-130%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5435-DFTPP
Lab File ID: 2M120880.D
Instrument ID: GCMS2M
Injection Date: 12/16/21
Injection Time: 00:57

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	116994	34.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	98410	29.0		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	150298	44.2		Pass
197	Less than 1.0% of mass 198	747	0.22		Pass
198	Base peak, 100% relative abundance	339712	100.0		Pass
199	5.0 - 9.0% of mass 198	23001	6.77		Pass
275	10.0 - 30.0% of mass 198	83517	24.6		Pass
365	1.0 - 100.0% of mass 198	9558	2.81		Pass
441	Present, but less than mass 443	34328	10.1	(79.7) [b]	Pass
442	40.0 - 100.0% of mass 198	217298	64.0		Pass
443	17.0 - 23.0% of mass 442	43072	12.7	(19.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M5435-IC5435	2M120881.D	12/16/21	01:10	00:13	Initial cal 0.2
E2M5435-IC5435	2M120882.D	12/16/21	01:43	00:46	Initial cal 0.4
E2M5435-IC5435	2M120883.D	12/16/21	02:08	01:11	Initial cal 1
E2M5435-IC5435	2M120884.D	12/16/21	02:33	01:36	Initial cal 2
E2M5435-IC5435	2M120885.D	12/16/21	02:58	02:01	Initial cal 5
E2M5435-ICC5435	2M120886.D	12/16/21	03:23	02:26	Initial cal 10
E2M5435-IC5435	2M120887.D	12/16/21	03:48	02:51	Initial cal 16
E2M5435-IC5435	2M120888.D	12/16/21	04:13	03:16	Initial cal 20
E2M5435-ICV5435	2M120889.D	12/16/21	04:38	03:41	Initial cal verification 10
E2M5435-ICV5435	2M120890.D	12/16/21	05:03	04:06	Initial cal verification 10
E2M5435-ICV5435	2M120891.D	12/16/21	05:28	04:31	Initial cal verification 10
E2M5435-ICV5435	2M120892.D	12/16/21	05:53	04:56	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5436-DFTPP **Injection Date:** 12/16/21
Lab File ID: 2M120894.D **Injection Time:** 06:36
Instrument ID: GCMS2M

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	114314	32.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	97943	27.6		Pass
70	Less than 2.0% of mass 69	669	0.19	(0.68) [a]	Pass
127	40.0 - 60.0% of mass 198	151642	42.8		Pass
197	Less than 1.0% of mass 198	499	0.14		Pass
198	Base peak, 100% relative abundance	354709	100.0		Pass
199	5.0 - 9.0% of mass 198	23676	6.67		Pass
275	10.0 - 30.0% of mass 198	88333	24.9		Pass
365	1.0 - 100.0% of mass 198	10081	2.84		Pass
441	Present, but less than mass 443	39093	11.0	(81.2) [b]	Pass
442	40.0 - 100.0% of mass 198	250832	70.7		Pass
443	17.0 - 23.0% of mass 442	48165	13.6	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M5436-IC5436	2M120895.D	12/16/21	06:47	00:11	Initial cal 20
E2M5436-IC5436	2M120896.D	12/16/21	07:13	00:37	Initial cal 16
E2M5436-ICC5436	2M120897.D	12/16/21	07:38	01:02	Initial cal 10
E2M5436-IC5436	2M120898.D	12/16/21	08:03	01:27	Initial cal 5
E2M5436-IC5436	2M120899.D	12/16/21	08:28	01:52	Initial cal 2
E2M5436-IC5436	2M120900.D	12/16/21	08:53	02:17	Initial cal 1
E2M5436-IC5436	2M120901.D	12/16/21	09:18	02:42	Initial cal 0.4
E2M5436-IC5436	2M120902.D	12/16/21	09:43	03:07	Initial cal 0.2
E2M5436-ICV5436	2M120903.D	12/16/21	10:08	03:32	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5437-DFTPP
Lab File ID: 2M120906.D
Instrument ID: GCMS2M
Injection Date: 12/18/21
Injection Time: 01:56

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	111724	33.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	93419	28.1		Pass
70	Less than 2.0% of mass 69	709	0.21	(0.76) [a]	Pass
127	40.0 - 60.0% of mass 198	143749	43.3		Pass
197	Less than 1.0% of mass 198	693	0.21		Pass
198	Base peak, 100% relative abundance	332032	100.0		Pass
199	5.0 - 9.0% of mass 198	22115	6.66		Pass
275	10.0 - 30.0% of mass 198	79755	24.0		Pass
365	1.0 - 100.0% of mass 198	9084	2.74		Pass
441	Present, but less than mass 443	34232	10.3	(80.2) [b]	Pass
442	40.0 - 100.0% of mass 198	217555	65.5		Pass
443	17.0 - 23.0% of mass 442	42689	12.9	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M5437-ICV5435	2M120907.D	12/18/21	02:08	00:12	Initial cal verification 10
E2M5437-CC5435	2M120908.D	12/18/21	02:36	00:40	Continuing cal 10
E2M5437-CC5436	2M120909.D	12/18/21	03:01	01:05	Continuing cal 10
OP37092-MB1	2M120910.D	12/18/21	03:37	01:41	Method Blank
OP37092-BS1	2M120911.D	12/18/21	04:02	02:06	Blank Spike
OP37092-BSD	2M120912.D	12/18/21	04:26	02:30	Blank Spike Duplicate
ZZZZZZ	2M120913.D	12/18/21	04:51	02:55	(unrelated sample)
ZZZZZZ	2M120914.D	12/18/21	05:16	03:20	(unrelated sample)
ZZZZZZ	2M120915.D	12/18/21	05:41	03:45	(unrelated sample)
ZZZZZZ	2M120916.D	12/18/21	06:05	04:09	(unrelated sample)
ZZZZZZ	2M120917.D	12/18/21	06:30	04:34	(unrelated sample)
ZZZZZZ	2M120918.D	12/18/21	06:54	04:58	(unrelated sample)
ZZZZZZ	2M120919.D	12/18/21	07:19	05:23	(unrelated sample)
ZZZZZZ	2M120920.D	12/18/21	07:44	05:48	(unrelated sample)
ZZZZZZ	2M120921.D	12/18/21	08:08	06:12	(unrelated sample)
ZZZZZZ	2M120922.D	12/18/21	08:33	06:37	(unrelated sample)
ZZZZZZ	2M120923.D	12/18/21	08:58	07:02	(unrelated sample)
ZZZZZZ	2M120924.D	12/18/21	09:22	07:26	(unrelated sample)
ZZZZZZ	2M120925.D	12/18/21	09:47	07:51	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E2M5437-DFTPP	**Injection Date:**	12/18/21
Lab File ID:	2M120906.D	**Injection Time:**	01:56
Instrument ID:	GCMS2M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	2M120926.D	12/18/21	10:12	08:16	(unrelated sample)
ZZZZZZ	2M120927.D	12/18/21	10:36	08:40	(unrelated sample)
ZZZZZZ	2M120928.D	12/18/21	11:01	09:05	(unrelated sample)
ZZZZZZ	2M120929.D	12/18/21	11:25	09:29	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5439-DFTPP
Lab File ID: 2M120961.D
Instrument ID: GCMS2M
Injection Date: 12/22/21
Injection Time: 03:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	184143	35.2		Pass
68	Less than 2.0% of mass 69	454	0.09	(0.30) [a]	Pass
69	Mass 69 relative abundance	150645	28.8		Pass
70	Less than 2.0% of mass 69	929	0.18	(0.62) [a]	Pass
127	40.0 - 60.0% of mass 198	234176	44.8		Pass
197	Less than 1.0% of mass 198	649	0.12		Pass
198	Base peak, 100% relative abundance	523051	100.0		Pass
199	5.0 - 9.0% of mass 198	35965	6.88		Pass
275	10.0 - 30.0% of mass 198	138645	26.5		Pass
365	1.0 - 100.0% of mass 198	18085	3.46		Pass
441	Present, but less than mass 443	53129	10.2	(80.1) [b]	Pass
442	40.0 - 100.0% of mass 198	348499	66.6		Pass
443	17.0 - 23.0% of mass 442	66309	12.7	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M5439-CC5435	2M120962.D	12/22/21	03:17	00:13	Continuing cal 5
E2M5439-CC5436	2M120964.D	12/22/21	04:08	01:04	Continuing cal 5
OP37113-MB1	2M120966.D	12/22/21	05:04	02:00	Method Blank
OP37113-BS1	2M120967.D	12/22/21	05:29	02:25	Blank Spike
OP37113-BSD	2M120968.D	12/22/21	05:54	02:50	Blank Spike Duplicate
JD36624-8	2M120969.D	12/22/21	06:18	03:14	HOFF MW-13
JD36624-9	2M120970.D	12/22/21	06:43	03:39	HOFF MW-C
JD36624-10	2M120971.D	12/22/21	07:08	04:04	HOFF MW-D
JD36624-11	2M120972.D	12/22/21	07:32	04:28	HOFF IW-1A
JD36624-12	2M120973.D	12/22/21	07:57	04:53	HOFF IW-1B
ZZZZZZ	2M120974.D	12/22/21	08:22	05:18	(unrelated sample)
ZZZZZZ	2M120975.D	12/22/21	08:46	05:42	(unrelated sample)
ZZZZZZ	2M120976.D	12/22/21	09:11	06:07	(unrelated sample)
ZZZZZZ	2M120977.D	12/22/21	09:36	06:32	(unrelated sample)
ZZZZZZ	2M120978.D	12/22/21	10:00	06:56	(unrelated sample)
ZZZZZZ	2M120979.D	12/22/21	10:25	07:21	(unrelated sample)
ZZZZZZ	2M120980.D	12/22/21	10:50	07:46	(unrelated sample)
ZZZZZZ	2M120981.D	12/22/21	11:14	08:10	(unrelated sample)
ZZZZZZ	2M120982.D	12/22/21	11:39	08:35	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E2M5439-DFTPP	**Injection Date:**	12/22/21
Lab File ID:	2M120961.D	**Injection Time:**	03:04
Instrument ID:	GCMS2M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	2M120983.D	12/22/21	12:03	08:59	(unrelated sample)
ZZZZZZ	2M120984.D	12/22/21	12:28	09:24	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2551-DFTPP	**Injection Date:**	10/20/21
Lab File ID:	4P48502.D	**Injection Time:**	22:19
Instrument ID:	GCMS4P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	23059	30.3		Pass
68	Less than 2.0% of mass 69	101	0.13	(0.34) [a]	Pass
69	Mass 69 relative abundance	29864	39.3		Pass
70	Less than 2.0% of mass 69	124	0.16	(0.42) [a]	Pass
127	40.0 - 60.0% of mass 198	30794	40.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	76018	100.0		Pass
199	5.0 - 9.0% of mass 198	5791	7.62		Pass
275	10.0 - 30.0% of mass 198	18191	23.9		Pass
365	1.0 - 100.0% of mass 198	1857	2.44		Pass
441	Present, but less than mass 443	4086	5.38	(39.2) [b]	Pass
442	40.0 - 100.0% of mass 198	51528	67.8		Pass
443	17.0 - 23.0% of mass 442	10411	13.7	(20.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2551-IC2551	4P48504.D	10/20/21	22:59	00:40	Initial cal 1
E4P2551-ICC2551	4P48505.D	10/20/21	23:23	01:04	Initial cal 0.2
E4P2551-IC2551	4P48506.D	10/20/21	23:46	01:27	Initial cal 0.02
E4P2551-IC2551	4P48507.D	10/21/21	00:10	01:51	Initial cal 0.5
E4P2551-IC2551	4P48508.D	10/21/21	00:33	02:14	Initial cal 0.1
E4P2551-IC2551	4P48509.D	10/21/21	00:57	02:38	Initial cal 0.004
E4P2551-IC2551	4P48511.D	10/21/21	01:44	03:25	Initial cal 0.04
E4P2551-IC2551	4P48513.D	10/21/21	02:16	03:57	Initial cal 0.002
E4P2551-IC2551	4P48514.D	10/21/21	02:39	04:20	Initial cal 0.01
E4P2551-ICV2551	4P48512.D	10/21/21	03:15	04:56	Initial cal verification 0.2
OP35848A-BSD12	4P48515.D	10/21/21	03:45	05:26	Blank Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2629-DFTPP
Lab File ID: 4P50206.D
Instrument ID: GCMS4P
Injection Date: 12/18/21
Injection Time: 01:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	29300	42.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	33902	49.1		Pass
70	Less than 2.0% of mass 69	218	0.32	(0.64) [a]	Pass
127	40.0 - 60.0% of mass 198	31653	45.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	69093	100.0		Pass
199	5.0 - 9.0% of mass 198	4436	6.42		Pass
275	10.0 - 30.0% of mass 198	17200	24.9		Pass
365	1.0 - 100.0% of mass 198	2755	3.99		Pass
441	Present, but less than mass 443	5542	8.02	(85.1) [b]	Pass
442	40.0 - 100.0% of mass 198	36397	52.7		Pass
443	17.0 - 23.0% of mass 442	6510	9.42	(17.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2629-CC2551	4P50207.D	12/18/21	02:05	00:12	Continuing cal 0.2
OP37115A-MB1	4P50209.D	12/18/21	03:03	01:10	Method Blank
ZZZZZZ	4P50210.D	12/18/21	03:27	01:34	(unrelated sample)
ZZZZZZ	4P50211.D	12/18/21	03:50	01:57	(unrelated sample)
OP37115A-BS12	4P50212.D	12/18/21	04:14	02:21	Blank Spike
OP37115A-BSD12	4P50213A.D	12/18/21	04:45	02:52	Blank Spike Duplicate
ZZZZZZ	4P50214.D	12/18/21	05:08	03:15	(unrelated sample)
ZZZZZZ	4P50215.D	12/18/21	05:32	03:39	(unrelated sample)
ZZZZZZ	4P50216.D	12/18/21	05:56	04:03	(unrelated sample)
ZZZZZZ	4P50217.D	12/18/21	06:19	04:26	(unrelated sample)
ZZZZZZ	4P50218.D	12/18/21	06:43	04:50	(unrelated sample)
ZZZZZZ	4P50219.D	12/18/21	07:07	05:14	(unrelated sample)
ZZZZZZ	4P50220.D	12/18/21	07:30	05:37	(unrelated sample)
ZZZZZZ	4P50221.D	12/18/21	07:54	06:01	(unrelated sample)
ZZZZZZ	4P50222.D	12/18/21	08:17	06:24	(unrelated sample)
JD36624-13	4P50223.D	12/18/21	08:41	06:48	HOFF IW-3A
JD36624-14	4P50224.D	12/18/21	09:04	07:11	HOFF IW-3B
JD36624-15	4P50225.D	12/18/21	09:28	07:35	HOFF IW-2A
JD36624-16	4P50226.D	12/18/21	09:52	07:59	HOFF IW-2B

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2629-DFTPP	**Injection Date:**	12/18/21
Lab File ID:	4P50206.D	**Injection Time:**	01:53
Instrument ID:	GCMS4P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JD36624-17	4P50227.D	12/18/21	10:15	08:22	HOFF IW-B

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2635-DFTPP
Lab File ID: 4P50268.D
Instrument ID: GCMS4P
Injection Date: 12/27/21
Injection Time: 14:26

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	49592	46.8		Pass
68	Less than 2.0% of mass 69	865	0.82	(1.52) [a]	Pass
69	Mass 69 relative abundance	56830	53.6		Pass
70	Less than 2.0% of mass 69	372	0.35	(0.65) [a]	Pass
127	40.0 - 60.0% of mass 198	51341	48.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	106018	100.0		Pass
199	5.0 - 9.0% of mass 198	6976	6.58		Pass
275	10.0 - 30.0% of mass 198	22530	21.3		Pass
365	1.0 - 100.0% of mass 198	3192	3.01		Pass
441	Present, but less than mass 443	7522	7.10	(79.4) [b]	Pass
442	40.0 - 100.0% of mass 198	52374	49.4		Pass
443	17.0 - 23.0% of mass 442	9471	8.93	(18.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2635-CC2551	4P50269.D	12/27/21	14:54	00:28	Continuing cal 0.1
OP37297A-MB1	4P50270.D	12/27/21	15:43	01:17	Method Blank
OP37108A-MB1	4P50271.D	12/27/21	16:18	01:52	Method Blank
OP37108A-BS12	4P50272.D	12/27/21	16:42	02:16	Blank Spike
OP37297A-BS12	4P50273.D	12/27/21	17:15	02:49	Blank Spike
OP37297A-BSD12	4P50274A.D	12/27/21	18:37	04:11	Blank Spike Duplicate
OP37108A-BSD12	4P50275.D	12/27/21	19:01	04:35	Blank Spike Duplicate
ZZZZZZ	4P50276.D	12/27/21	19:25	04:59	(unrelated sample)
ZZZZZZ	4P50277.D	12/27/21	19:48	05:22	(unrelated sample)
ZZZZZZ	4P50278.D	12/27/21	20:12	05:46	(unrelated sample)
ZZZZZZ	4P50279.D	12/27/21	20:35	06:09	(unrelated sample)
ZZZZZZ	4P50280.D	12/27/21	20:59	06:33	(unrelated sample)
ZZZZZZ	4P50281.D	12/27/21	21:22	06:56	(unrelated sample)
ZZZZZZ	4P50282.D	12/27/21	21:46	07:20	(unrelated sample)
ZZZZZZ	4P50283.D	12/27/21	22:10	07:44	(unrelated sample)
JD36624-3	4P50284.D	12/27/21	22:33	08:07	HOFF MW-4DL
JD36624-6	4P50287.D	12/27/21	23:44	09:18	HOFF MW-FA
JD36624-7	4P50288.D	12/28/21	00:08	09:42	HOFF MW-FB
ZZZZZZ	4P50289.D	12/28/21	00:32	10:06	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2635-DFTPP	**Injection Date:**	12/27/21
Lab File ID:	4P50268.D	**Injection Time:**	14:26
Instrument ID:	GCMS4P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4P50290.D	12/28/21	00:56	10:30	(unrelated sample)
JD36624-2	4P50291.D	12/28/21	01:19	10:53	HOFF MW-8
ZZZZZZ	4P50292.D	12/28/21	01:43	11:17	(unrelated sample)
ZZZZZZ	4P50293.D	12/28/21	02:07	11:41	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2636-DFTPP
Lab File ID: 4P50294.D
Instrument ID: GCMS4P
Injection Date: 12/28/21
Injection Time: 11:49

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	39004	38.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	47369	47.1		Pass
70	Less than 2.0% of mass 69	42	0.04	(0.09) [a]	Pass
127	40.0 - 60.0% of mass 198	47530	47.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	100560	100.0		Pass
199	5.0 - 9.0% of mass 198	6200	6.17		Pass
275	10.0 - 30.0% of mass 198	24357	24.2		Pass
365	1.0 - 100.0% of mass 198	4219	4.20		Pass
441	Present, but less than mass 443	8790	8.74	(78.7) [b]	Pass
442	40.0 - 100.0% of mass 198	59162	58.8		Pass
443	17.0 - 23.0% of mass 442	11172	11.1	(18.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2636-CC2551	4P50296.D	12/28/21	12:24	00:35	Continuing cal 0.2
OP37113A-MB1	4P50298.D	12/28/21	13:32	01:43	Method Blank
OP37113A-BS12	4P50299.D	12/28/21	13:56	02:07	Blank Spike
OP37113A-BSD12	4P50300.D	12/28/21	14:19	02:30	Blank Spike Duplicate
JD36624-13	4P50301.D	12/28/21	14:43	02:54	HOFF IW-3A

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2638-DFTPP	**Injection Date:**	12/30/21
Lab File ID:	4P50360.D	**Injection Time:**	08:43
Instrument ID:	GCMS4P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	31346	35.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	40438	45.6		Pass
70	Less than 2.0% of mass 69	119	0.13	(0.29) [a]	Pass
127	40.0 - 60.0% of mass 198	38967	43.9		Pass
197	Less than 1.0% of mass 198	40	0.05		Pass
198	Base peak, 100% relative abundance	88664	100.0		Pass
199	5.0 - 9.0% of mass 198	6800	7.67		Pass
275	10.0 - 30.0% of mass 198	22062	24.9		Pass
365	1.0 - 100.0% of mass 198	3694	4.17		Pass
441	Present, but less than mass 443	8853	9.98	(88.9) [b]	Pass
442	40.0 - 100.0% of mass 198	53994	60.9		Pass
443	17.0 - 23.0% of mass 442	9953	11.2	(18.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2638-CC2551	4P50361.D	12/30/21	08:58	00:15	Continuing cal 0.2
ZZZZZZ	4P50363.D	12/30/21	10:12	01:29	(unrelated sample)
ZZZZZZ	4P50364.D	12/30/21	10:36	01:53	(unrelated sample)
ZZZZZZ	4P50365.D	12/30/21	11:00	02:17	(unrelated sample)
ZZZZZZ	4P50366.D	12/30/21	11:24	02:41	(unrelated sample)
ZZZZZZ	4P50367.D	12/30/21	11:48	03:05	(unrelated sample)
ZZZZZZ	4P50368.D	12/30/21	12:11	03:28	(unrelated sample)
ZZZZZZ	4P50369.D	12/30/21	12:35	03:52	(unrelated sample)
JD36624-8	4P50370.D	12/30/21	12:59	04:16	HOFF MW-13
JD36624-9	4P50371.D	12/30/21	13:22	04:39	HOFF MW-C
JD36624-10	4P50372.D	12/30/21	13:47	05:04	HOFF MW-D
JD36624-11	4P50373.D	12/30/21	14:11	05:28	HOFF IW-1A
JD36624-12	4P50374.D	12/30/21	14:35	05:52	HOFF IW-1B
JD36624-5	4P50376.D	12/30/21	15:22	06:39	DUP-2021
JD36624-6	4P50377.D	12/30/21	15:46	07:03	HOFF MW-FA
JD36624-7	4P50378.D	12/30/21	16:09	07:26	HOFF MW-FB
ZZZZZZ	4P50379.D	12/30/21	16:33	07:50	(unrelated sample)
ZZZZZZ	4P50380.D	12/30/21	16:57	08:14	(unrelated sample)
ZZZZZZ	4P50381.D	12/30/21	17:21	08:38	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2638-DFTPP	**Injection Date:**	12/30/21
Lab File ID:	4P50360.D	**Injection Time:**	08:43
Instrument ID:	GCMS4P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4P50382.D	12/30/21	17:45	09:02	(unrelated sample)
ZZZZZZ	4P50383.D	12/30/21	18:09	09:26	(unrelated sample)
ZZZZZZ	4P50384.D	12/30/21	18:32	09:49	(unrelated sample)
ZZZZZZ	4P50385.D	12/30/21	18:56	10:13	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2640-DFTPP
Lab File ID: 4P50414.D
Instrument ID: GCMS4P
Injection Date: 01/04/22
Injection Time: 13:23

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	35496	46.7		Pass
68	Less than 2.0% of mass 69	312	0.41	(0.76) [a]	Pass
69	Mass 69 relative abundance	41181	54.2		Pass
70	Less than 2.0% of mass 69	167	0.22	(0.41) [a]	Pass
127	40.0 - 60.0% of mass 198	35653	46.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	75997	100.0		Pass
199	5.0 - 9.0% of mass 198	4739	6.24		Pass
275	10.0 - 30.0% of mass 198	18580	24.4		Pass
365	1.0 - 100.0% of mass 198	3427	4.51		Pass
441	Present, but less than mass 443	5809	7.64	(80.8) [b]	Pass
442	40.0 - 100.0% of mass 198	34883	45.9		Pass
443	17.0 - 23.0% of mass 442	7189	9.46	(20.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P2640-CC2551	4P50415.D	01/04/22	13:35	00:12	Continuing cal 0.2
OP37409A-MB1	4P50417.D	01/04/22	14:21	00:58	Method Blank
OP37227A-MB1	4P50418.D	01/04/22	14:57	01:34	Method Blank
OP37227A-BS12	4P50419.D	01/04/22	15:20	01:57	Blank Spike
OP37227A-BSD12	4P50420A.D	01/04/22	15:51	02:28	Blank Spike Duplicate
OP37409A-BS12	4P50421.D	01/04/22	16:14	02:51	Blank Spike
OP37409A-BSD12	4P50422.D	01/04/22	16:38	03:15	Blank Spike Duplicate
JD36624-4	4P50435.D	01/04/22	17:01	03:38	HOFF MW-4DU
ZZZZZZ	4P50423.D	01/04/22	17:25	04:02	(unrelated sample)
ZZZZZZ	4P50424.D	01/04/22	17:49	04:26	(unrelated sample)
ZZZZZZ	4P50425.D	01/04/22	18:13	04:50	(unrelated sample)
ZZZZZZ	4P50426.D	01/04/22	18:36	05:13	(unrelated sample)
ZZZZZZ	4P50427.D	01/04/22	18:59	05:36	(unrelated sample)
ZZZZZZ	4P50428.D	01/04/22	19:23	06:00	(unrelated sample)
ZZZZZZ	4P50429.D	01/04/22	19:46	06:23	(unrelated sample)
ZZZZZZ	4P50430.D	01/04/22	20:09	06:46	(unrelated sample)
ZZZZZZ	4P50431.D	01/04/22	20:33	07:10	(unrelated sample)
ZZZZZZ	4P50432.D	01/04/22	20:56	07:33	(unrelated sample)
ZZZZZZ	4P50433.D	01/04/22	21:19	07:56	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E4P2640-DFTPP	**Injection Date:**	01/04/22
Lab File ID:	4P50414.D	**Injection Time:**	13:23
Instrument ID:	GCMS4P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4P50434.D	01/04/22	21:42	08:19	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-DFTPP
Lab File ID: 5P79956.D
Instrument ID: GCMS5P
Injection Date: 12/01/21
Injection Time: 21:49

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	91864	30.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	101906	33.7		Pass
70	Less than 2.0% of mass 69	672	0.22	(0.66) [a]	Pass
127	40.0 - 60.0% of mass 198	141221	46.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	302357	100.0		Pass
199	5.0 - 9.0% of mass 198	20705	6.85		Pass
275	10.0 - 30.0% of mass 198	84325	27.9		Pass
365	1.0 - 100.0% of mass 198	10108	3.34		Pass
441	Present, but less than mass 443	30682	10.1	(84.2) [b]	Pass
442	40.0 - 100.0% of mass 198	191162	63.2		Pass
443	17.0 - 23.0% of mass 442	36428	12.0	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3785-IC3785	5P79957.D	12/01/21	22:09	00:20	Initial cal 20
E5P3785-IC3785	5P79958.D	12/01/21	22:36	00:47	Initial cal 16
E5P3785-ICC3785	5P79959.D	12/01/21	23:02	01:13	Initial cal 10
E5P3785-IC3785	5P79960.D	12/01/21	23:30	01:41	Initial cal 5
E5P3785-IC3785	5P79961.D	12/01/21	23:57	02:08	Initial cal 2
E5P3785-IC3785	5P79962.D	12/02/21	00:24	02:35	Initial cal 1
E5P3785-IC3785	5P79963.D	12/02/21	00:51	03:02	Initial cal 0.4
E5P3785-IC3785	5P79964.D	12/02/21	01:17	03:28	Initial cal 0.2
E5P3785-ICV3785	5P79965.D	12/02/21	01:45	03:56	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-DFTPP
Lab File ID: 5P80176.D
Instrument ID: GCMS5P
Injection Date: 12/09/21
Injection Time: 00:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18190	31.0		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	21015	35.8		Pass
70	Less than 2.0% of mass 69	84	0.14	(0.40) [a]	Pass
127	40.0 - 60.0% of mass 198	29550	50.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	58650	100.0		Pass
199	5.0 - 9.0% of mass 198	3881	6.62		Pass
275	10.0 - 30.0% of mass 198	14712	25.1		Pass
365	1.0 - 100.0% of mass 198	1822	3.11		Pass
441	Present, but less than mass 443	5848	9.97	(82.8) [b]	Pass
442	40.0 - 100.0% of mass 198	36738	62.6		Pass
443	17.0 - 23.0% of mass 442	7065	12.0	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3794-IC3794	5P80177.D	12/09/21	01:11	00:18	Initial cal 0.2
E5P3794-IC3794	5P80178.D	12/09/21	01:38	00:45	Initial cal 0.4
E5P3794-IC3794	5P80179.D	12/09/21	02:05	01:12	Initial cal 1
E5P3794-IC3794	5P80180.D	12/09/21	02:32	01:39	Initial cal 2
E5P3794-IC3794	5P80181.D	12/09/21	02:59	02:06	Initial cal 5
E5P3794-ICC3794	5P80182.D	12/09/21	03:26	02:33	Initial cal 10
E5P3794-IC3794	5P80183.D	12/09/21	03:53	03:00	Initial cal 16
E5P3794-IC3794	5P80184.D	12/09/21	04:19	03:26	Initial cal 20
E5P3794-ICV3794	5P80185.D	12/09/21	04:47	03:54	Initial cal verification 10
E5P3794-ICV3794	5P80186.D	12/09/21	05:13	04:20	Initial cal verification 10
E5P3794-ICV3794	5P80187.D	12/09/21	05:40	04:47	Initial cal verification 10
E5P3794-ICV3794	5P80188.D	12/09/21	06:07	05:14	Initial cal verification 10

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3795-DFTPP	**Injection Date:**	12/09/21
Lab File ID:	5P80191.D	**Injection Time:**	12:44
Instrument ID:	GCMS5P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18799	32.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	21518	37.4		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	28913	50.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	57581	100.0		Pass
199	5.0 - 9.0% of mass 198	3946	6.85		Pass
275	10.0 - 30.0% of mass 198	14549	25.3		Pass
365	1.0 - 100.0% of mass 198	1899	3.30		Pass
441	Present, but less than mass 443	5422	9.42	(86.8) [b]	Pass
442	40.0 - 100.0% of mass 198	32893	57.1		Pass
443	17.0 - 23.0% of mass 442	6248	10.9	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3795-ICV3794	5P80192.D	12/09/21	12:58	00:14	Initial cal verification 10
E5P3795-CC3794	5P80193.D	12/09/21	13:25	00:41	Continuing cal 10
E5P3795-CC3785	5P80194.D	12/09/21	13:51	01:07	Continuing cal 10
OP36390-MB1	5P80195.D	12/09/21	14:46	02:02	Method Blank
OP36390-BS1	5P80196.D	12/09/21	15:13	02:29	Blank Spike
OP36390-BSD	5P80197.D	12/09/21	15:40	02:56	Blank Spike Duplicate
ZZZZZZ	5P80198.D	12/09/21	16:07	03:23	(unrelated sample)
E5P3795-ECC3794	5P80199.D	12/09/21	16:57	04:13	Ending cal 10
E5P3795-ECC3785	5P80200.D	12/09/21	17:36	04:52	Ending cal 10

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3810-DFTPP
Lab File ID: 5P80472.D
Instrument ID: GCMS5P
Injection Date: 12/17/21
Injection Time: 21:47

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	17110	30.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	21939	39.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	29291	52.9		Pass
197	Less than 1.0% of mass 198	178	0.32		Pass
198	Base peak, 100% relative abundance	55331	100.0		Pass
199	5.0 - 9.0% of mass 198	3658	6.61		Pass
275	10.0 - 30.0% of mass 198	13163	23.8		Pass
365	1.0 - 100.0% of mass 198	1565	2.83		Pass
441	Present, but less than mass 443	5103	9.22	(88.0) [b]	Pass
442	40.0 - 100.0% of mass 198	30290	54.7		Pass
443	17.0 - 23.0% of mass 442	5799	10.5	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3810-CC3794	5P80473.D	12/17/21	22:00	00:13	Continuing cal 5
E5P3810-CC3785	5P80474.D	12/17/21	22:27	00:40	Continuing cal 5
OP37108-MB1	5P80475.D	12/17/21	22:57	01:10	Method Blank
OP37108-BS1	5P80476.D	12/17/21	23:24	01:37	Blank Spike
OP37108-BSD	5P80477.D	12/17/21	23:51	02:04	Blank Spike Duplicate
ZZZZZZ	5P80479.D	12/18/21	00:45	02:58	(unrelated sample)
ZZZZZZ	5P80480.D	12/18/21	01:12	03:25	(unrelated sample)
ZZZZZZ	5P80481.D	12/18/21	01:39	03:52	(unrelated sample)
ZZZZZZ	5P80482.D	12/18/21	02:05	04:18	(unrelated sample)
ZZZZZZ	5P80483.D	12/18/21	02:32	04:45	(unrelated sample)
ZZZZZZ	5P80484.D	12/18/21	02:59	05:12	(unrelated sample)
ZZZZZZ	5P80485.D	12/18/21	03:25	05:38	(unrelated sample)
ZZZZZZ	5P80486.D	12/18/21	03:52	06:05	(unrelated sample)
ZZZZZZ	5P80487.D	12/18/21	04:19	06:32	(unrelated sample)
ZZZZZZ	5P80488.D	12/18/21	04:46	06:59	(unrelated sample)
ZZZZZZ	5P80489.D	12/18/21	05:13	07:26	(unrelated sample)
ZZZZZZ	5P80490.D	12/18/21	05:40	07:53	(unrelated sample)
JD36624-2	5P80491.D	12/18/21	06:07	08:20	HOFF MW-8
JD36624-3	5P80492.D	12/18/21	06:34	08:47	HOFF MW-4DL

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3810-DFTPP	**Injection Date:**	12/17/21
Lab File ID:	5P80472.D	**Injection Time:**	21:47
Instrument ID:	GCMS5P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JD36624-4	5P80493.D	12/18/21	07:01	09:14	HOFF MW-4DU
JD36624-5	5P80494.D	12/18/21	07:27	09:40	DUP-2021
JD36624-6	5P80495.D	12/18/21	07:54	10:07	HOFF MW-FA
JD36624-7	5P80496.D	12/18/21	08:21	10:34	HOFF MW-FB
ZZZZZZ	5P80497.D	12/18/21	08:48	11:01	(unrelated sample)
ZZZZZZ	5P80498.D	12/18/21	09:15	11:28	(unrelated sample)
ZZZZZZ	5P80499.D	12/18/21	09:42	11:55	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3816-DFTPP	**Injection Date:**	12/23/21
Lab File ID:	5P80578.D	**Injection Time:**	07:28
Instrument ID:	GCMS5P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	23324	31.0		Pass
68	Less than 2.0% of mass 69	136	0.18	(0.49) [a]	Pass
69	Mass 69 relative abundance	27853	37.1		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	39845	53.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	75160	100.0		Pass
199	5.0 - 9.0% of mass 198	5290	7.04		Pass
275	10.0 - 30.0% of mass 198	18282	24.3		Pass
365	1.0 - 100.0% of mass 198	2433	3.24		Pass
441	Present, but less than mass 443	6535	8.69	(93.8) [b]	Pass
442	40.0 - 100.0% of mass 198	38443	51.1		Pass
443	17.0 - 23.0% of mass 442	6969	9.27	(18.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P3816-CC3794	5P80579.D	12/23/21	07:52	00:24	Continuing cal 10
E5P3816-CC3785	5P80580.D	12/23/21	08:18	00:50	Continuing cal 10
OP37115-MB1	5P80583.D	12/23/21	09:45	02:17	Method Blank
OP37115-BS1	5P80584.D	12/23/21	10:12	02:44	Blank Spike
OP37115-BSD	5P80585.D	12/23/21	10:39	03:11	Blank Spike Duplicate
OP37297-MB1	5P80586.D	12/23/21	11:06	03:38	Method Blank
OP37297-BS1	5P80587.D	12/23/21	11:33	04:05	Blank Spike
OP37297-BSD	5P80588.D	12/23/21	12:00	04:32	Blank Spike Duplicate
OP37091-MB1	5P80589.D	12/23/21	12:27	04:59	Method Blank
ZZZZZZ	5P80590.D	12/23/21	12:54	05:26	(unrelated sample)
ZZZZZZ	5P80591.D	12/23/21	13:20	05:52	(unrelated sample)
ZZZZZZ	5P80592.D	12/23/21	13:47	06:19	(unrelated sample)
ZZZZZZ	5P80593.D	12/23/21	14:14	06:46	(unrelated sample)
ZZZZZZ	5P80594.D	12/23/21	14:40	07:12	(unrelated sample)
ZZZZZZ	5P80595.D	12/23/21	15:07	07:39	(unrelated sample)
JD36624-13	5P80596.D	12/23/21	15:34	08:06	HOFF IW-3A
JD36624-14	5P80597.D	12/23/21	16:00	08:32	HOFF IW-3B
JD36624-15	5P80598.D	12/23/21	16:27	08:59	HOFF IW-2A
JD36624-16	5P80599.D	12/23/21	16:54	09:26	HOFF IW-2B

Instrument Performance Check (DFTPP)

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	E5P3816-DFTPP	**Injection Date:**	12/23/21
Lab File ID:	5P80578.D	**Injection Time:**	07:28
Instrument ID:	GCMS5P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JD36624-17	5P80600.D	12/23/21	17:21	09:53	HOFF IW-B
ZZZZZZ	5P80601.D	12/23/21	17:48	10:20	(unrelated sample)
ZZZZZZ	5P80602.D	12/23/21	18:15	10:47	(unrelated sample)
ZZZZZZ	5P80603.D	12/23/21	18:42	11:14	(unrelated sample)
ZZZZZZ	5P80604.D	12/23/21	19:09	11:41	(unrelated sample)

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E2M5439-CC5435	**Injection Date:**	12/22/21
Lab File ID:	2M120962.D	**Injection Time:**	03:17
Instrument ID:	GCMS2M	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	429172	4.41	1765109	5.46	1024303	7.47	1810393	9.62	1638590	13.79	1922353	15.89
Check Std [b]	402304	4.37	1591094	5.40	948744	7.40	1837587	9.54	1764741	13.70	2161070	15.81
Upper Limit [c]	804608	4.54	3182188	5.57	1897488	7.57	3675174	9.71	3529482	13.87	4322140	15.98
Lower Limit [d]	201152	4.20	795547	5.23	474372	7.23	918794	9.37	882371	13.53	1080535	15.64

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP37113-MB1	329508	4.37	1327244	5.40	809600	7.40	1619369	9.54	1453025	13.70	1742885	15.80
OP37113-BS1	352736	4.37	1434544	5.40	851452	7.40	1604476	9.54	1561940	13.70	1881708	15.81
OP37113-BSD	380190	4.37	1535181	5.40	906325	7.40	1667837	9.54	1589725	13.70	1899685	15.80
JD36624-8	364805	4.37	1410338	5.40	1236187	7.40	1469486	9.54	1544572	13.70	1662982	15.81
JD36624-9	338245	4.37	1365468	5.40	785728	7.40	1419514	9.54	1434042	13.70	1588777	15.81
JD36624-10	340785	4.37	1376920	5.40	788525	7.40	1374948	9.54	1473769	13.70	1650372	15.81
JD36624-11	310485	4.37	1223454	5.40	710969	7.40	1298287	9.54	1399908	13.70	1530289	15.81
JD36624-12	330309	4.37	1320534	5.40	764439	7.40	1395084	9.54	1505631	13.70	1650177	15.81
ZZZZZZ	342745	4.37	1357064	5.40	778720	7.40	1437910	9.54	1574915	13.70	1718695	15.81
ZZZZZZ	331735	4.37	1295383	5.40	746778	7.40	1403660	9.54	1593522	13.70	1748683	15.81
ZZZZZZ	345612	4.37	1367114	5.40	778405	7.40	1433711	9.54	1515228	13.70	1558333	15.81
ZZZZZZ	318486	4.37	1272632	5.40	727076	7.40	1360134	9.54	1538545	13.70	1609587	15.81
ZZZZZZ	309152	4.37	1239764	5.40	706823	7.40	1328388	9.54	1480026	13.70	1624629	15.81
ZZZZZZ	317154	4.37	1249500	5.40	705788	7.40	1346966	9.54	1470237	13.70	1627592	15.81
ZZZZZZ	302114	4.37	1185178	5.40	676142	7.40	1284353	9.54	1407562	13.70	1547811	15.81
ZZZZZZ	317556	4.37	1263561	5.40	721172	7.40	1387782	9.54	1495632	13.71	1608367	15.81
ZZZZZZ	312724	4.37	1246087	5.40	713062	7.40	1391300	9.54	1538317	13.70	1645459	15.81
ZZZZZZ	310565	4.37	1220393	5.40	695530	7.40	1352831	9.54	1484944	13.70	1588257	15.81
ZZZZZZ	313639	4.37	1241877	5.40	704545	7.40	1354842	9.54	1497644	13.70	1600428	15.81

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-d10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: E2M5435-ICC5435 2M120886.D 12/16/21 03:23
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2629-CC2551	**Injection Date:**	12/18/21
Lab File ID:	4P50207.D	**Injection Time:**	02:05
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	21861	6.79	32640	8.26	59386	10.38	28031	13.04
Upper Limit [a]	43722	7.29	65280	8.76	118772	10.88	56062	13.54
Lower Limit [b]	10931	6.29	16320	7.76	29693	9.88	14016	12.54

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37115A-MB1	13712	6.79	20079	8.26	35671	10.38	15386	13.04
ZZZZZZ	13831	6.79	19784	8.26	35625	10.38	16626	13.04
ZZZZZZ	14601	6.79	21208	8.26	36806	10.38	16520	13.04
OP37115A-BS12	14332	6.79	20360	8.26	36644	10.38	17307	13.04
OP37115A-BSD12	15342	6.79	21965	8.26	37408	10.38	16042	13.04
ZZZZZZ	13415	6.79	18994	8.26	35032	10.38	16153	13.04
ZZZZZZ	15039	6.79	21064	8.26	33532	10.38	15742	13.04
ZZZZZZ	14858	6.79	20804	8.26	34959	10.38	16525	13.04
ZZZZZZ	16050	6.79	22579	8.26	36826	10.38	16444	13.04
ZZZZZZ	15809	6.79	21948	8.26	34499	10.38	15573	13.04
ZZZZZZ	15759	6.79	22740	8.26	36643	10.38	16406	13.04
ZZZZZZ	15483	6.79	22237	8.26	36829	10.38	17071	13.04
ZZZZZZ	15308	6.79	20996	8.26	36016	10.38	16795	13.04
ZZZZZZ	16476	6.79	22785	8.26	36779	10.38	16632	13.04
JD36624-13	15902	6.79	21678	8.26	32715	10.38	13698[c]	13.04
JD36624-14	16200	6.79	22271	8.26	36114	10.38	15243	13.04
JD36624-15	15688	6.79	22070	8.26	36836	10.38	16044	13.04
JD36624-16	17755	6.79	23263	8.26	35782	10.38	15791	13.04
JD36624-17	17153	6.79	22735	8.26	34243	10.38	15660	13.05

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Internal standard failing low.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std: E4P2635-CC2551 **Injection Date:** 12/27/21
Lab File ID: 4P50269.D **Injection Time:** 14:54
Instrument ID: GCMS4P **Method:** SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	28443	6.75	40601	8.22	69364	10.35	35050	13.00
Upper Limit [a]	56886	7.25	81202	8.72	138728	10.85	70100	13.50
Lower Limit [b]	14222	6.25	20301	7.72	34682	9.85	17525	12.50

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37297A-MB1	19441	6.75	27942	8.22	46071	10.35	22585	13.01
OP37108A-MB1	17822	6.75	25516	8.22	42111	10.35	21761	13.00
OP37108A-BS12	18332	6.75	26615	8.22	44233	10.35	22604	13.00
OP37297A-BS12	18663	6.75	27194	8.22	47159	10.35	22542	13.00
OP37297A-BSD12	20137	6.75	29821	8.22	51734	10.35	24679	13.01
OP37108A-BSD12	19339	6.75	28271	8.22	47647	10.35	23535	13.00
ZZZZZZ	20315	6.75	29025	8.22	47322	10.35	23481	13.00
ZZZZZZ	17753	6.75	24606	8.22	39857	10.35	20382	13.01
ZZZZZZ	19691	6.75	27031	8.22	42449	10.35	22559	13.00
ZZZZZZ	22251	6.75	30739	8.22	48630	10.35	24343	13.00
ZZZZZZ	20251	6.75	28335	8.22	46314	10.35	22748	13.01
ZZZZZZ	23907	6.75	33400	8.22	53352	10.35	27069	13.01
ZZZZZZ	24855	6.75	34933	8.22	52570	10.35	26223	13.01
ZZZZZZ	23034	6.75	32525	8.22	50189	10.35	25381	13.01
JD36624-3	21704	6.75	29013	8.22	47409	10.36	33605	13.03
JD36624-6	18376	6.76	25298	8.23	39613	10.36	19222	13.02
JD36624-7	18294	6.76	25672	8.23	41014	10.36	21106	13.02
ZZZZZZ	19876	6.76	28106	8.23	46117	10.36	23833	13.02
ZZZZZZ	20158	6.76	28289	8.23	46726	10.36	23487	13.02
JD36624-2	17320	6.76	25428	8.23	40663	10.36	20671	13.02
ZZZZZZ	21210	6.76	29895	8.23	49573	10.36	24712	13.02
ZZZZZZ	21106	6.76	30789	8.23	48457	10.36	25952	13.02

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2636-CC2551	**Injection Date:**	12/28/21
Lab File ID:	4P50296.D	**Injection Time:**	12:24
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	25376	6.75	41022	8.22	75114	10.35	36447	13.01
Upper Limit [a]	50752	7.25	82044	8.72	150228	10.85	72894	13.51
Lower Limit [b]	12688	6.25	20511	7.72	37557	9.85	18224	12.51

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37113A-MB1	22048	6.75	34002	8.22	59138	10.35	27041	13.01
OP37113A-BS12	21122	6.75	33311	8.22	57122	10.35	24469	13.01
OP37113A-BSD12	21692	6.75	33256	8.22	56759	10.35	24738	13.01
JD36624-13 [c]	16678	6.75	24121	8.22	37621	10.35	14783[d]	13.01
ZZZZZZ	24476	6.75	36764	8.22	59417	10.35	26112	13.01
ZZZZZZ	23303	6.75	35499	8.22	58293	10.35	25227	13.01
ZZZZZZ	27495	6.75	41662	8.22	68618	10.35	30490	13.01
ZZZZZZ	26367	6.75	40620	8.22	65097	10.35	29162	13.01
ZZZZZZ	25863	6.75	44915	8.22	63666	10.35	28807	13.01
ZZZZZZ	25950	6.75	39172	8.22	62110	10.35	27287	13.01
ZZZZZZ	25687	6.75	53913	8.22	61952	10.35	28162	13.01
ZZZZZZ	26277	6.75	37630	8.22	57525	10.35	26301	13.01
ZZZZZZ	25908	6.75	37390	8.22	57544	10.35	26481	13.01
ZZZZZZ	25034	6.75	36390	8.22	57181	10.35	25864	13.01
ZZZZZZ	23919	6.75	35437	8.22	56700	10.35	25256	13.01
ZZZZZZ	22250	6.75	32101	8.22	46261	10.35	20391	13.01
ZZZZZZ	20924	6.75	31148	8.22	48183	10.35	21593	13.01
ZZZZZZ	23512	6.75	31695	8.22	41672	10.35	19275	13.01
ZZZZZZ	19235	6.75	27637	8.22	42487	10.35	19530	13.01

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run for internal standard areas.
(d) Internal standard failing low.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2638-CC2551	**Injection Date:**	12/30/21
Lab File ID:	4P50361.D	**Injection Time:**	08:58
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	19608	6.74	30681	8.21	54105	10.33	26259	12.99
Upper Limit [a]	39216	7.24	61362	8.71	108210	10.83	52518	13.49
Lower Limit [b]	9804	6.24	15341	7.71	27053	9.83	13130	12.49

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
ZZZZZZ	15412	6.74	24739	8.22	44497	10.34	22458	12.99
ZZZZZZ	17774	6.74	27992	8.21	48033	10.33	23385	12.99
ZZZZZZ	17565	6.74	28062	8.21	49876	10.33	24005	12.99
ZZZZZZ	18964	6.74	29508	8.21	50768	10.33	23364	12.99
ZZZZZZ	19941	6.74	31397	8.22	53274	10.33	25048	12.99
ZZZZZZ	40476*	6.74	34368	8.22	48279	10.34	22456	13.00
ZZZZZZ	18231	6.74	29395	8.22	54851	10.35	23920	12.99
JD36624-8	21570	6.74	28998	8.22	45713	10.34	24905	13.00
JD36624-9	23365	6.74	32507	8.22	45129	10.34	21961	13.00
JD36624-10	21062	6.74	28827	8.22	40324	10.34	21221	13.00
JD36624-11	20277	6.74	29407	8.22	43859	10.34	22675	13.00
JD36624-12	18265	6.75	25299	8.22	36342	10.34	19043	13.00
JD36624-5	16455	6.75	23630	8.22	38361	10.34	19584	13.00
JD36624-6 [c]	14441	6.75	20540	8.22	32276	10.34	17714	13.00
JD36624-7 [c]	18973	6.75	27447	8.22	44149	10.34	22706	13.00
ZZZZZZ	20559	6.75	28577	8.22	43497	10.34	22201	13.00
ZZZZZZ	19733	6.74	27564	8.22	41047	10.34	22034	13.00
ZZZZZZ	18789	6.75	27309	8.22	41839	10.34	21884	13.00
ZZZZZZ	20440	6.75	29219	8.22	44881	10.34	24937	13.00
ZZZZZZ	18918	6.75	28743	8.22	46941	10.34	25679	13.00
ZZZZZZ	16991	6.75	25529	8.22	39799	10.34	20998	13.00
ZZZZZZ	17651	6.75	26844	8.22	41644	10.34	22964	13.00

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E4P2640-CC2551	**Injection Date:**	01/04/22
Lab File ID:	4P50415.D	**Injection Time:**	13:35
Instrument ID:	GCMS4P	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	19467	6.72	30524	8.20	52423	10.32	27653	12.98
Upper Limit [a]	38934	7.22	61048	8.70	104846	10.82	55306	13.48
Lower Limit [b]	9734	6.22	15262	7.70	26212	9.82	13827	12.48

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP37409A-MB1	15873	6.72	29435	8.19	52780	10.32	28002	12.97
OP37227A-MB1	14357	6.72	22088	8.20	39804	10.32	20455	12.98
OP37227A-BS12	16579	6.72	25976	8.19	47637	10.32	25085	12.97
OP37227A-BSD12	16092	6.72	25497	8.20	45270	10.32	23994	12.98
OP37409A-BS12	15360	6.72	23654	8.19	42692	10.32	22496	12.97
OP37409A-BSD12	15896	6.72	25039	8.19	43513	10.32	23408	12.97
JD36624-4	16815	6.72	24532	8.19	43392	10.32	22031	12.98
ZZZZZZ	15929	6.72	24126	8.19	42599	10.31	22147	12.97
ZZZZZZ	15988	6.72	23978	8.19	41961	10.32	21605	12.97
ZZZZZZ	16603	6.72	24726	8.19	42528	10.32	22110	12.97
ZZZZZZ	17524	6.72	26740	8.19	45375	10.32	22866	12.97
ZZZZZZ	16806	6.72	25537	8.19	43423	10.32	22172	12.97
ZZZZZZ	19003	6.72	27878	8.19	47610	10.32	25344	12.97
ZZZZZZ	19221	6.72	33303	8.20	47209	10.32	24071	12.98
ZZZZZZ	24776	6.72	40915	8.21	64331	10.33	26806	12.98
ZZZZZZ	19716	6.72	32561	8.20	48628	10.32	25748	12.98
ZZZZZZ	65378[c]	6.73	115477[c]	8.23	144952[c]	10.36	323634[c]	13.05
ZZZZZZ	20203	6.72	30800	8.20	52032	10.32	26670	12.98
ZZZZZZ	21624	6.72	32757	8.20	56748	10.32	28398	12.98

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Internal standard double spiked; The recovery re-calculated based on the spike amount.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std: E5P3810-CC3794 **Injection Date:** 12/17/21
Lab File ID: 5P80473.D **Injection Time:** 22:00
Instrument ID: GCMS5P **Method:** SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	67871	4.59	261532	5.67	159540	7.73	291174	9.91	275335	14.09	289114	16.20
Upper Limit [a]	135742	5.09	523064	6.17	319080	8.23	582348	10.41	550670	14.59	578228	16.70
Lower Limit [b]	33936	4.09	130766	5.17	79770	7.23	145587	9.41	137668	13.59	144557	15.70
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP37108-MB1	84323	4.59	329905	5.67	189067	7.73	331544	9.91	283727	14.09	279566	16.20
OP37108-BS1	79339	4.59	304626	5.67	181555	7.73	307853	9.91	271416	14.09	290386	16.20
OP37108-BSD	66145	4.59	259356	5.67	149725	7.73	262424	9.91	245441	14.09	274026	16.20
ZZZZZZ	69295	4.58	274101	5.67	157126	7.73	283837	9.90	251807	14.09	259544	16.20
ZZZZZZ	63144	4.59	252530	5.67	149171	7.73	269696	9.90	241096	14.09	243319	16.19
ZZZZZZ	83944	4.59	344583	5.67	204825	7.73	379248	9.91	355354	14.09	342816	16.20
ZZZZZZ	77158	4.58	301051	5.67	176412	7.73	341992	9.90	335536	14.09	335978	16.20
ZZZZZZ	67885	4.59	275469	5.67	161236	7.73	307062	9.90	299089	14.09	302986	16.20
ZZZZZZ	78835	4.59	308147	5.67	178867	7.73	307064	9.90	259088	14.09	258545	16.20
ZZZZZZ	66737	4.59	260050	5.67	154341	7.73	279536	9.90	246762	14.09	247167	16.20
ZZZZZZ	72079	4.59	283563	5.67	159749	7.73	289999	9.90	257952	14.09	259501	16.20
ZZZZZZ	75905	4.59	297555	5.67	176315	7.73	318153	9.90	280279	14.09	276347	16.20
ZZZZZZ	69339	4.59	260008	5.67	167742	7.73	304989	9.90	270297	14.09	276860	16.20
ZZZZZZ	73155	4.59	294210	5.67	171060	7.73	309376	9.90	259011	14.09	262231	16.19
ZZZZZZ	61275	4.59	247926	5.67	157331	7.73	299270	9.90	271917	14.09	274332	16.19
JD36624-2	80870	4.59	315731	5.67	179060	7.73	298402	9.91	254268	14.09	281925	16.20
JD36624-3	46769	4.58	205046	5.67	121837	7.73	219685	9.91	259791	14.11	251251	16.23
JD36624-4	94038	4.59	358849	5.67	207157	7.73	344185	9.91	284031	14.10	295163	16.21
JD36624-5	98059	4.59	376132	5.67	212053	7.73	361608	9.91	289984	14.10	272582	16.21
JD36624-6	85282	4.59	334317	5.67	219472	7.73	302862	9.92	274974	14.10	298628	16.21
JD36624-7	87738	4.59	332932	5.67	206067	7.73	361637	9.91	300842	14.10	293040	16.21
ZZZZZZ	90384	4.59	360736	5.67	203263	7.73	345053	9.91	287325	14.10	286580	16.21
ZZZZZZ	95253	4.59	363630	5.67	204277	7.73	350098	9.91	285203	14.10	287503	16.21
ZZZZZZ	90908	4.59	354136	5.67	196420	7.73	343326	9.91	288676	14.10	283773	16.21

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-d10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	E5P3816-CC3794	**Injection Date:**	12/23/21
Lab File ID:	5P80579.D	**Injection Time:**	07:52
Instrument ID:	GCMS5P	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	73423	4.44	252793	5.49	149416	7.49	247936	9.65	221221	13.81	193497	15.91
Upper Limit [a]	146846	4.94	505586	5.99	298832	7.99	495872	10.15	442442	14.31	386994	16.41
Lower Limit [b]	36712	3.94	126397	4.99	74708	6.99	123968	9.15	110611	13.31	96749	15.41

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP37115-MB1	79976	4.44	286911	5.48	155040	7.49	264747	9.65	229620	13.80	212013	15.91
OP37115-BS1	76293	4.44	273287	5.49	154761	7.49	252364	9.65	228530	13.81	190718	15.91
OP37115-BSD	88394	4.44	310880	5.49	176190	7.49	280264	9.65	211225	13.81	189767	15.91
OP37297-MB1	93525	4.44	333464	5.48	178545	7.49	301373	9.64	247913	13.80	223047	15.90
OP37297-BS1	79874	4.44	278629	5.49	158027	7.49	268271	9.65	242067	13.81	205215	15.90
OP37297-BSD	75982	4.44	269034	5.49	150562	7.49	247636	9.65	211570	13.80	173174	15.90
OP37091-MB1	74499	4.44	271172	5.48	146009	7.49	247693	9.64	207097	13.80	189394	15.90
ZZZZZZ	87938	4.44	314210	5.48	167942	7.49	278490	9.64	231385	13.80	205688	15.90
ZZZZZZ	80363	4.44	289297	5.48	156681	7.49	260726	9.64	227068	13.80	205779	15.90
ZZZZZZ	76898	4.44	274483	5.48	149174	7.49	249788	9.64	220279	13.80	203900	15.90
ZZZZZZ	84512	4.44	297628	5.48	163483	7.49	273390	9.64	226790	13.80	195119	15.90
ZZZZZZ	79757	4.44	287159	5.48	152789	7.49	255266	9.64	200781	13.80	164450	15.90
ZZZZZZ	81010	4.44	296708	5.48	164181	7.49	276028	9.64	201635	13.80	197659	15.91
JD36624-13	79682	4.44	286690	5.48	172070	7.49	262559	9.64	208071	13.80	173170	15.91
JD36624-14	87343	4.44	308361	5.48	178646	7.49	269316	9.65	201545	13.80	168996	15.90
JD36624-15	85424	4.44	299447	5.49	158787	7.49	263884	9.65	210131	13.80	179237	15.90
JD36624-16	75377	4.45	281682	5.49	162129	7.49	272638	9.65	221065	13.80	190322	15.91
JD36624-17	75144	4.44	280102	5.49	161661	7.49	251121	9.65	164767	13.80	196239	15.91
ZZZZZZ	104387	4.44	361244	5.49	181951	7.49	276897	9.65	184682	13.80	164531	15.91
ZZZZZZ	87730	4.44	306630	5.49	163800	7.49	262835	9.65	200644	13.80	167880	15.91
ZZZZZZ	89883	4.44	306136	5.49	156794	7.49	259136	9.65	189380	13.80	163765	15.91
ZZZZZZ	74962	4.44	261969	5.49	139305	7.49	225248	9.65	157648	13.80	150448	15.91

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-d10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8270E **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD36624-2	5P80491.D	22	18	93	67	75	75
JD36624-3	5P80492.D	41	31	103	76	79	65
JD36624-4	5P80493.D	31	23	108	65	78	94
JD36624-5	5P80494.D	27	19	97	60	71	85
JD36624-6	5P80495.D	27	21	99	64	60	74
JD36624-7	5P80496.D	29	22	93	71	74	75
JD36624-8	2M120969.D	37	26	94	76	56	61
JD36624-9	2M120970.D	27	17	74	74	77	58
JD36624-10	2M120971.D	43	27	88	76	83	64
JD36624-11	2M120972.D	44	29	90	79	85	78
JD36624-12	2M120973.D	50	33	94	86	89	76
JD36624-13	5P80596.D	33	21	86	68	72	62
JD36624-14	5P80597.D	27	15	83	69	71	81
JD36624-15	5P80598.D	10	5* [a]	50	47	52	51
JD36624-16	5P80599.D	34	21	100	64	73	65
JD36624-17	5P80600.D	26	17	95	64	72	85
OP37108-BS1	5P80476.D	48	34	107	78	81	102
OP37108-BSD	5P80477.D	32	23	93	64	69	87
OP37108-MB1	5P80475.D	28	19	83	60	64	94
OP37113-BS1	2M120967.D	43	31	97	75	86	82
OP37113-BSD	2M120968.D	49	34	93	78	86	81
OP37113-MB1	2M120966.D	45	30	82	79	84	96
OP37115-BS1	5P80584.D	40	24	87	62	64	88
OP37115-BSD	5P80585.D	48	30	101	73	77	102
OP37115-MB1	5P80583.D	30	18	65	64	69	76

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-73%
S2 = Phenol-d5	10-64%
S3 = 2,4,6-Tribromophenol	31-130%
S4 = Nitrobenzene-d5	28-126%
S5 = 2-Fluorobiphenyl	26-114%
S6 = Terphenyl-d14	16-122%

(a) Outside of in house control limits.

Surrogate Recovery Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8270E BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JD36624-2	4P50291.D	118	95	95
JD36624-3	4P50284.D	110	92	91
JD36624-4	4P50435.D	117	99	112
JD36624-5	4P50376.D	123	108	126
JD36624-6	4P50377.D	131* [a]	113	118
JD36624-6	4P50287.D	129* [b]	114	117
JD36624-7	4P50378.D	143* [a]	119	118
JD36624-7	4P50288.D	143* [b]	118	114
JD36624-8	4P50370.D	104	96	75
JD36624-9	4P50371.D	89	74	60
JD36624-10	4P50372.D	105	89	75
JD36624-11	4P50373.D	106	89	88
JD36624-12	4P50374.D	117	99	91
JD36624-13	4P50301.D	120	105	79
JD36624-13	4P50223.D	123	107	76
JD36624-14	4P50224.D	115	100	96
JD36624-15	4P50225.D	79	64	60
JD36624-16	4P50226.D	98	93	76
JD36624-17	4P50227.D	102	92	88
OP37108A-BS12	4P50272.D	83	69	87
OP37108A-BSD12	4P50275.D	82	70	104
OP37108A-MB1	4P50271.D	82	65	95
OP37113A-BS12	4P50299.D	100	81	102
OP37113A-BSD12	4P50300.D	108	91	107
OP37113A-MB1	4P50298.D	99	81	101
OP37115A-BS12	4P50212.D	111	90	107
OP37115A-BSD12	4P50213A.D	117	94	110
OP37115A-MB1	4P50209.D	114	90	108

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	29-124%
S2 = 2-Fluorobiphenyl	23-122%
S3 = Terphenyl-d14	22-130%

(a) Outside control limits due to matrix interference.
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

Initial Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5435-ICC5435
Lab FileID: 2M120886.D

Response Factor Report MS2M

Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Fri Dec 17 08:10:24 2021
Response via : Initial Calibration

Calibration Files
10 =2m120886.D 20 =2m120888.D 16 =2m120887.D 5 =2m120885.D
2 =2m120884.D 1 =2m120883.D 0.4 =2m120882.D 0.2 =2m120881.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.479	0.480	0.488	0.487	0.467	0.482	0.515	0.510	0.489	3.31
3) Pyridine	1.412	1.396	1.410	1.352	1.325	1.378	1.359	1.290	1.365	3.14
4) N-Nitrosodim	0.775	0.781	0.785	0.773	0.745	0.728	0.743	0.748	0.760	2.78
5) 2-Fluorophen	1.256	1.243	1.259	1.257	1.238	1.237	1.220	1.247	1.245	1.05
6) Indene	2.137	1.837	1.992	2.293	2.287	2.297	2.218	2.238	2.162	7.72
7) Cumene	2.794	2.581	2.707	2.859	2.792	2.857	2.758	2.840	2.774	3.37
8) Phenol-d5	1.607	1.536	1.596	1.610	1.571	1.592	1.556	1.576	1.580	1.62
9) Phenol	1.765	1.648	1.754	1.809	1.744	1.756	1.736	1.745	1.745	2.58
10) Aniline	2.081	1.965	2.048	2.091	2.061	2.051	2.018	2.065	2.047	1.95
11) bis(2-Chloro	1.224	1.144	1.211	1.230	1.200	1.219	1.209	1.217	1.207	2.23
12) 2-Chlorophen	1.390	1.348	1.379	1.383	1.327	1.362	1.315	1.374	1.360	2.02
13) Decane	1.485	1.378	1.443	1.533	1.514	1.558	1.552	1.537	1.500	4.15
14) 1,3-Dichloro	1.507	1.419	1.478	1.544	1.498	1.529	1.491	1.512	1.497	2.52
15) 1,4-Dichloro	1.526	1.406	1.479	1.553	1.511	1.542	1.530	1.566	1.514	3.37
16) Benzyl alcoh	0.925	0.870	0.915	0.942	0.885	0.879	0.848	0.896	0.895	3.45
17) 1,2-Dichloro	1.461	1.361	1.428	1.492	1.462	1.475	1.454	1.488	1.453	2.90
18) Acetophenone	1.696	1.556	1.636	1.868	1.888	1.914	1.901	1.877	1.792	7.85
19) 2-Methylphen	1.187	1.057	1.122	1.276	1.255	1.276	1.244	1.197	1.202	6.56
20) 2,2'-oxybis(	1.962	1.912	1.938	1.972	1.939	1.923	1.881	1.878	1.926	1.79
21) 3&4-Methylph	1.140	0.989	1.066	1.275	1.292	1.302	1.288	1.278	1.204	10.14
22) n-Nitroso-di	0.760	0.737	0.745	0.829	0.847	0.858	0.830	0.836	0.805	6.10
23) Hexachloroet	0.533	0.511	0.530	0.541	0.529	0.530	0.530	0.527	0.529	1.58
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.310	0.304	0.312	0.306	0.295	0.290	0.278	0.283	0.297	4.30
26) Nitrobenzene	0.316	0.306	0.318	0.314	0.303	0.296	0.291	0.297	0.305	3.38
27) Quinoline	0.711	0.695	0.713	0.729	0.710	0.702	0.703	0.702	0.708	1.44
28) Isophorone	0.623	0.593	0.623	0.639	0.620	0.608	0.620	0.610	0.617	2.17
29) 2-Nitropheno	0.179	0.159	0.173	0.178	0.164	0.159	0.153	0.147	0.164	7.04
30) 2,4-Dimethyl	0.318	0.300	0.311	0.324	0.307	0.314	0.319	0.309	0.313	2.44
31) Benzoic acid	0.244	0.261	0.260	0.232	0.190	0.140			0.221	21.41
---- Quadratic regression ---- Coefficient = 0.9998										
Response Ratio = -0.01390 + 0.24755 *A + 0.00812 *A^2										
32) bis(2-Chloro	0.385	0.361	0.379	0.395	0.381	0.381	0.370	0.390	0.380	2.86
33) 2,4-Dichloro	0.295	0.281	0.291	0.297	0.284	0.287	0.279	0.280	0.287	2.45
34) 2,6-Dichloro	0.276	0.248	0.264	0.292	0.282	0.285	0.273	0.274	0.274	4.96
35) 1,3,5-Trichl	0.319	0.282	0.306	0.333	0.327	0.329	0.327	0.327	0.319	5.30
36) 1,2,4-Trichl	0.317	0.298	0.312	0.327	0.319	0.320	0.323	0.326	0.318	2.94
37) 1,2,3-Trichl	0.309	0.287	0.304	0.314	0.308	0.310	0.313	0.313	0.307	2.89
38) Naphthalene	1.012	0.911	0.973	1.051	1.010	1.021	1.018	1.024	1.003	4.26
39) 4-Chloroanil	0.419	0.363	0.396	0.443	0.435	0.440	0.437	0.426	0.420	6.58
40) 2,3-Dichloro	0.341	0.303	0.324	0.369	0.361	0.364	0.358	0.339	0.345	6.61
41) Hydroquinone	0.338	0.322	0.341	0.350	0.321	0.305	0.243		0.317	11.37
42) Hexachlorobu	0.173	0.159	0.168	0.177	0.171	0.175	0.177	0.173	0.172	3.43

8.6.1

8

Initial Calibration Summary

Job Number: JD36624 **Sample:** E2M5435-ICC5435
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2M120886.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

43)	4-Chloro-3-m	0.282	0.265	0.278	0.289	0.278	0.278	0.273	0.261	0.275	3.34
44)	2-Methylnaph	0.621	0.569	0.601	0.647	0.624	0.627	0.630	0.615	0.617	3.76
45)	1-Methylnaph	0.597	0.549	0.579	0.610	0.600	0.599	0.605	0.602	0.593	3.34
46)	I Acenaphthene-d10	----------ISTD----------									
47)	Hexachlorocy	0.303	0.281	0.295	0.302	0.277	0.262	0.247	0.227	0.274	9.92
48)	1,2,4,5-Tetr	0.539	0.485	0.514	0.562	0.547	0.556	0.554	0.539	0.537	4.75
49)	2,4,6-Trichl	0.364	0.320	0.345	0.377	0.371	0.372	0.367	0.356	0.359	5.23
50)	2,4,5-Trichl	0.421	0.404	0.420	0.420	0.399	0.396	0.377	0.369	0.401	4.97
51)	2-Fluorobiph	1.339	1.238	1.316	1.350	1.312	1.336	1.302	1.311	1.313	2.64
52)	2-Chloronaph	1.135	1.030	1.099	1.167	1.140	1.159	1.117	1.145	1.124	3.90
53)	Biphenyl	1.480	1.310	1.415	1.518	1.480	1.486	1.466	1.498	1.456	4.56
54)	2-Nitroanili	0.298	0.298	0.301	0.290	0.277	0.274	0.260	0.242	0.280	7.43
55)	Dimethylphth	1.347	1.286	1.335	1.370	1.356	1.374	1.362	1.378	1.351	2.20
56)	Acenaphthyle	1.679	1.588	1.659	1.699	1.655	1.666	1.593	1.642	1.648	2.37
57)	2,6-Dinitrot	0.287	0.285	0.290	0.280	0.260	0.251	0.221	0.200	0.259	12.89
58)	3-Nitroanili	0.338	0.344	0.348	0.336	0.316	0.303	0.287	0.276	0.318	8.64
59)	Acenaphthene	1.204	1.119	1.179	1.231	1.198	1.205	1.198	1.234	1.196	3.00
60)	2,4-Dinitrop	0.180	0.189	0.189	0.164	0.138	0.114	0.095		0.153	24.69
	---- Quadratic regression ---- Coefficient = 0.9993										
	Response Ratio = -0.00935 + 0.16504 *A + 0.00577 *A^2										
61)	4-Nitropheno	0.145	0.147	0.147	0.140	0.135	0.128	0.130	0.131	0.138	5.78
62)	Dibenzofuran	1.661	1.544	1.616	1.711	1.688	1.721	1.693	1.677	1.664	3.51
63)	2,4-Dinitrot	0.382	0.379	0.386	0.381	0.352	0.334	0.307	0.275	0.349	11.72
64)	2,3,4,6-Tetr	0.337	0.329	0.340	0.341	0.331	0.327	0.315	0.312	0.329	3.28
65)	Diethylphtha	1.318	1.264	1.311	1.335	1.334	1.343	1.327	1.299	1.316	1.95
66)	Fluorene	1.351	1.247	1.308	1.368	1.344	1.362	1.341	1.323	1.331	2.93
67)	4-Chlorophen	0.635	0.601	0.626	0.654	0.648	0.661	0.647	0.679	0.644	3.70
68)	4-Nitroanili	0.328	0.332	0.339	0.325	0.305	0.296	0.284	0.265	0.309	8.49
69)	I Phenanthrene-d10	----------ISTD----------									
70)	4,6-Dinitro-	0.122	0.139	0.133	0.112	0.092	0.080			0.113	20.59
	---- Quadratic regression ---- Coefficient = 0.9999										
	Response Ratio = -0.00432 + 0.10988 *A + 0.01238 *A^2										
71)	n-Nitrosodip	0.660	0.668	0.669	0.646	0.610	0.615	0.615	0.587	0.634	4.88
72)	Pentachloron	0.043	0.046	0.045	0.042	0.038	0.036	0.031		0.040#	12.95
73)	1,2-Diphenyl	0.643	0.664	0.665	0.625	0.604	0.602	0.575	0.575	0.619	5.83
74)	2,4,6-Tribro	0.115	0.128	0.122	0.110	0.100	0.100	0.093	0.091	0.107	12.62
75)	4-Bromopheny	0.222	0.229	0.229	0.220	0.210	0.210	0.206	0.197	0.215	5.36
76)	Hexachlorobe	0.245	0.256	0.252	0.242	0.231	0.234	0.235	0.228	0.240	4.29
77)	Pentachlorop	0.160	0.165	0.165	0.156	0.143	0.142	0.132	0.135	0.150	8.94
78)	Phenanthrene	1.114	1.120	1.133	1.116	1.076	1.100	1.084	1.082	1.103	1.89
79)	Anthracene	1.155	1.171	1.169	1.143	1.107	1.108	1.084	1.060	1.125	3.65
80)	Carbazole	1.063	1.096	1.086	1.042	0.991	1.007	0.988	0.952	1.028	5.01
81)	Di-n-butylph	1.278	1.311	1.319	1.249	1.161	1.148	1.119	1.081	1.208	7.61
82)	Fluoranthene	1.215	1.237	1.237	1.203	1.132	1.134	1.093	1.104	1.169	5.13
83)	Octadecane	0.467	0.472	0.473	0.461	0.438	0.441	0.416	0.405	0.446	5.83
84)	I Chrysene-d12	----------ISTD----------									
85)	Benzidine	0.900	0.990	0.930	0.881	0.809	0.803	0.775	1.033	0.890	10.38
86)	Pyrene	1.385	1.402	1.412	1.383	1.338	1.350	1.317	1.314	1.363	2.78
87)	Terphenyl-d1	1.023	1.029	1.046	1.026	0.979	0.995	0.964	0.990	1.007	2.83
88)	Butylbenzylp	0.602	0.630	0.625	0.577	0.531	0.531	0.493	0.471	0.557	10.78
89)	Benzo[a]anth	1.287	1.317	1.316	1.259	1.207	1.225	1.246	1.285	1.268	3.21
90)	3,3'-Dichlor	0.514	0.537	0.537	0.506	0.482	0.480	0.475	0.439	0.496	6.81
91)	Chrysene	1.270	1.287	1.301	1.271	1.218	1.232	1.190	1.222	1.249	3.10
92)	bis(2-Ethylh	0.881	0.915	0.914	0.856	0.807	0.805	0.774	0.765	0.839	7.16

Initial Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5435-ICC5435
Lab FileID: 2M120886.D

93)	I	Perylene-d12				ISTD					
94)	Di-n-octylph	1.362	1.331	1.367	1.360	1.328	1.325	1.318	1.290	1.335	1.98
95)	Benzo[b]fluo	1.210	1.173	1.209	1.212	1.235	1.242	1.231	1.251	1.220	2.04
96)	Benzo[k]fluo	1.100	1.032	1.083	1.160	1.113	1.141	1.123	1.104	1.107	3.50
97)	Benzo[a]pyre	1.156	1.110	1.145	1.181	1.150	1.152	1.153	1.137	1.148	1.72
98)	Indeno[1,2,3	1.009	1.026	1.020	1.029	1.017	1.020	0.982	1.036	1.017	1.63
99)	Dibenz(a,h)a	0.938	0.919	0.935	0.960	0.940	0.947	0.922	0.930	0.936	1.40
100)	Dibenz[a,h]a	1.092	1.063	1.085	1.090	1.080	1.076	1.035	1.057	1.072	1.80
101)	7,12-Dimethy	0.459	0.452	0.461	0.466	0.458	0.462	0.480	0.485	0.465	2.45
102)	Benzo[g,h,i]	1.111	1.088	1.113	1.144	1.121	1.137	1.130	1.098	1.118	1.70

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2M5435LVI.M Fri Dec 17 08:23:59 2021

8.6.1

8

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5435-ICV5435
Lab FileID: 2M120889.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2M5435\2m120889.D Vial: 10
Acq On : 16 Dec 2021 4:38 am Operator: chriss2
Sample : icv5435-10 Inst : MS2M
Misc : op35473,e2m5435,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Fri Dec 17 08:10:24 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	94	0.00	4.41
2	t	1,4-Dioxane	0.489	0.430	12.1	84	0.00	1.94
6	t	Indene	2.162	1.965	9.1	86	0.00	4.60
7	t	Cumene	2.774	2.515	9.3	84	0.00	3.82
11	t	bis(2-Chloroethyl)ether	1.207	1.105	8.5	85	0.00	4.23
13	t	Decane	1.500	1.329	11.4	84	0.00	4.30
14	t	1,3-Dichlorobenzene	1.497	1.362	9.0	85	0.00	4.37
15	t	1,4-Dichlorobenzene	1.514	1.389	8.3	85	0.00	4.42
16	t	Benzyl alcohol	0.895	0.818	8.6	83	0.00	4.52
17	t	1,2-Dichlorobenzene	1.453	1.342	7.6	86	0.00	4.54
18	t	Acetophenone	1.792	1.742	2.8	96	0.00	4.72
20	t	2,2'-oxybis(1-Chloropropa	1.926	1.747	9.3	84	0.00	4.62
23	t	Hexachloroethane	0.529	0.493	6.8	87	0.00	4.79
24	I	Naphthalene-d8	1.000	1.000	0.0	95	0.00	5.46
26	t	Nitrobenzene	0.305	0.284	6.9	86	0.00	4.85
27	t	Quinoline	0.708	0.619	12.6	83	-0.01	5.80
28	t	Isophorone	0.617	0.554	10.2	85	0.00	5.05

		----------	AvgRF	CCRF	% Dev	----------		
32	t	bis(2-Chloroethoxy)methan	0.380	0.347	8.7	86	0.00	5.24
35		1,3,5-Trichlorobenzene	0.319	0.296	7.2	88	0.00	5.12
36	t	1,2,4-Trichlorobenzene	0.318	0.287	9.7	86	0.00	5.40
37		1,2,3-Trichlorobenzene	0.307	0.281	8.5	87	0.00	5.61
38	t	Naphthalene	1.003	0.918	8.5	86	0.00	5.47
40	t	2,3-Dichloroaniline	0.345	0.320	7.2	89	0.00	6.50
42	t	Hexachlorobutadiene	0.172	0.155	9.9	85	0.00	5.59
44	t	2-Methylnaphthalene	0.617	0.564	8.6	86	0.00	6.18
45	t	1-Methylnaphthalene	0.593	0.541	8.8	86	0.00	6.29
46	I	Acenaphthene-d10	1.000	1.000	0.0	96	0.00	7.46
48	t	1,2,4,5-Tetrachlorobenzen	0.537	0.505	6.0	89	0.00	6.37
52	t	2-Chloronaphthalene	1.124	1.043	7.2	88	0.00	6.75
53	t	Biphenyl	1.456	1.353	7.1	87	0.00	6.73
55	t	Dimethylphthalate	1.351	1.251	7.4	89	0.00	7.15
57	t	2,6-Dinitrotoluene	0.259	0.259	0.0	86	0.00	7.22
59	t	Acenaphthene	1.196	1.104	7.7	88	0.00	7.50

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5435-ICV5435
Lab FileID: 2M120889.D

			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.664	1.520	8.7	87	0.00	7.75
63	t	2,4-Dinitrotoluene	0.349	0.331	5.2	83	0.00	7.76
65	t	Diethylphthalate	1.316	1.219	7.4	88	0.00	8.14
66	t	Fluorene	1.331	1.233	7.4	87	0.00	8.23
67	t	4-Chlorophenyl-phenylethe	0.644	0.587	8.9	88	0.00	8.26
69	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00	9.61

			AvgRF	CCRF	% Dev			
72	t	Pentachloronitrobenzene	0.040	0.038#	5.0	87	0.00	9.36
73	t	1,2-Diphenylhydrazine	0.619	0.565	8.7	88	0.00	8.49
75	t	4-Bromophenyl-phenylether	0.215	0.195	9.3	88	0.00	8.98
76	t	Hexachlorobenzene	0.240	0.217	9.6	89	0.00	9.02
78	t	Phenanthrene	1.103	0.989	10.3	89	0.00	9.65
79	t	Anthracene	1.125	1.015	9.8	88	0.00	9.73
80	t	Carbazole	1.028	0.923	10.2	87	0.00	10.01
81	t	Di-n-butylphthalate	1.208	1.123	7.0	88	0.00	10.68
82	t	Fluoranthene	1.169	1.092	6.6	90	0.00	11.50
83	t	Octadecane	0.446	0.406	9.0	87	0.00	9.62
84	I	Chrysene-d12	1.000	1.000	0.0	102	0.00	13.78
86	t	Pyrene	1.363	1.203	11.7	89	0.00	11.84
88	t	Butylbenzylphthalate	0.557	0.507	9.0	86	0.00	13.05
89	t	Benzo[a]anthracene	1.268	1.090	14.0	87	0.00	13.77
91	t	Chrysene	1.249	1.091	12.7	88	0.00	13.83
92	t	bis(2-Ethylhexyl)phthalat	0.839	0.743	11.4	86	0.00	14.03
93	I	Perylene-d12	1.000	1.000	0.0	96	0.00	15.89
94	t	Di-n-octylphthalate	1.335	1.237	7.3	87	0.00	15.02
95	t	Benzo[b]fluoranthene	1.220	1.107	9.3	88	0.00	15.37
96	t	Benzo[k]fluoranthene	1.107	0.996	10.0	87	0.00	15.42
97	t	Benzo[a]pyrene	1.148	1.034	9.9	86	0.00	15.81
98	t	Indeno[1,2,3-cd]pyrene	1.017	0.933	8.3	89	-0.01	17.29
99	t	Dibenz(a,h)acridine	0.936	0.859	8.2	88	0.00	16.99
100	t	Dibenz[a,h]anthracene	1.072	0.994	7.3	87	0.00	17.35
101	t	7,12-Dimethylbenz(a)anthr	0.465	0.393	15.5	82	0.00	15.38
102	t	Benzo[g,h,i]perylene	1.118	1.019	8.9	88	-0.01	17.68

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m120886.D M2M5435LVI.M Fri Dec 17 08:24:28 2021

8.6.2

8

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5435-ICV5435
Lab FileID: 2M120890.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2M5435\2m120890.D Vial: 11
Acq On : 16 Dec 2021 5:03 am Operator: chriss2
Sample : icv5435-10 Inst : MS2M
Misc : op35473,e2m5435,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Fri Dec 17 08:10:24 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	0.00	4.41
9	t	Phenol	1.745	1.469	15.8	79	0.00	4.15
12	t	2-Chlorophenol	1.360	1.229	9.6	84	0.00	4.25
19	t	2-Methylphenol	1.202	1.111	7.6	89	0.00	4.60
21	t	3&4-Methylphenol	1.204	1.169	2.9	97	-0.01	4.72
24	I	Naphthalene-d8	1.000	1.000	0.0	96	0.00	5.45
29	t	2-Nitrophenol	0.164	0.162	1.2	87	0.00	5.11
30	t	2,4-Dimethylphenol	0.313	0.282	9.9	85	0.00	5.15
		----------	True	Calc.	% Drift		----------	
31	t	Benzoic acid	10.000	9.027	9.7	87	-0.02	5.24
		----------	AvgRF	CCRF	% Dev		----------	
33	t	2,4-Dichlorophenol	0.287	0.258	10.1	84	0.00	5.32
34	t	2,6-Dichlorophenol	0.274	0.257	6.2	89	0.00	5.53
41	t	Hydroquinone	0.317	0.346	-9.1	98	0.00	5.86
43	t	4-Chloro-3-methylphenol	0.275	0.255	7.3	87	0.00	6.02
46	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.00	7.46
49	t	2,4,6-Trichlorophenol	0.359	0.344	4.2	93	0.00	6.50
50	t	2,4,5-Trichlorophenol	0.401	0.369	8.0	87	0.00	6.54
		----------	True	Calc.	% Drift		----------	
60	t	2,4-Dinitrophenol	20.000	18.745	6.3	90	0.00	7.57
		----------	AvgRF	CCRF	% Dev		----------	
61	t	4-Nitrophenol	0.138	0.132	4.3	90	-0.01	7.68
64		2,3,4,6-Tetrachlorophenol	0.329	0.308	6.4	90	0.00	7.92
69	I	Phenanthrene-d10	1.000	1.000	0.0	110	0.00	9.61
		----------	True	Calc.	% Drift		----------	
70	t	4,6-Dinitro-2-methylpheno	10.000	8.367	16.3	90	0.00	8.33
77	t	Pentachlorophenol	0.150	0.129	14.0	89	0.00	9.33

8.6.3

8

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5435-ICV5435
Lab FileID: 2M120890.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m120886.D M2M5435LVI.M Fri Dec 17 08:24:30 2021

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5435-ICV5435
Lab FileID: 2M120891.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2M5435\2m120891.D Vial: 12
Acq On : 16 Dec 2021 5:28 am Operator: chriss2
Sample : icv5435-10 Inst : MS2M
Misc : op35473,e2m5435,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Fri Dec 17 08:10:24 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	88	0.00	4.41
3	t	Pyridine	1.365	1.374	-0.7	86	0.00	2.26
4	t	N-Nitrosodimethylamine	0.760	0.762	-0.3	87	0.00	2.23
10		Aniline	2.047	1.973	3.6	84	0.00	4.17
22	t	n-Nitroso-di-n-propylamin	0.805	0.849	-5.5	99	-0.01	4.72
24	I	Naphthalene-d8	1.000	1.000	0.0	88	0.00	5.45
39	t	4-Chloroaniline	0.420	0.429	-2.1	90	0.00	5.53
46	I	Acenaphthene-d10	1.000	1.000	0.0	91	0.00	7.46
54	t	2-Nitroaniline	0.280	0.295	-5.4	90	0.00	6.88
58	t	3-Nitroaniline	0.318	0.341	-7.2	92	0.00	7.42
68	t	4-Nitroaniline	0.309	0.329	-6.5	91	-0.02	8.27
69	I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00	9.61
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.634	0.605	4.6	92	0.00	8.44
84	I	Chrysene-d12	1.000	1.000	0.0	97	-0.01	13.78
85	t	Benzidine	0.890	0.739	17.0	79	0.00	11.79
90	t	3,3'-Dichlorobenzidine	0.496	0.486	2.0	91	0.00	13.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m120886.D M2M5435LVI.M Fri Dec 17 08:24:32 2021

8.6.4

8

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5435-ICV5435
Lab FileID: 2M120892.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2M5435\2m120892.D Vial: 13
Acq On : 16 Dec 2021 5:53 am Operator: chriss2
Sample : icv5435-10 Inst : MS2M
Misc : op35473,e2m5435,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Fri Dec 17 08:10:24 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	127	0.00	4.41
5	S	2-Fluorophenol	1.245	1.288	-3.5	130	0.02	3.43
8	S	Phenol-d5	1.580	1.497	5.3	118	0.00	4.15
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	5.45
25	S	Nitrobenzene-d5	0.297	0.310	-4.4	123	0.00	4.84
46	I	Acenaphthene-d10	1.000	1.000	0.0	123	0.00	7.46
51	S	2-Fluorobiphenyl	1.313	1.313	0.0	120	0.00	6.62
69	I	Phenanthrene-d10	1.000	1.000	0.0	134	0.00	9.61
74	S	2,4,6-Tribromophenol	0.107	0.109	-1.9	127	0.00	8.57
84	I	Chrysene-d12	1.000	1.000	0.0	118	-0.01	13.78
87	S	Terphenyl-d14	1.007	1.066	-5.9	123	0.00	12.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m120886.D M2M5435LVI.M Fri Dec 17 08:24:34 2021

8.6.5

8

Initial Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5436-ICC5436
Lab FileID: 2M120897.D

Response Factor Report MS2M

Method : C:\MSDCHEM\1\METHODS\M2M5436LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Fri Dec 17 08:55:40 2021
Response via : Initial Calibration

Calibration Files
10 =2m120897.D 20 =2m120895.D 16 =2m120896.D 5 =2m120898.D
2 =2m120899.D 1 =2m120900.D 0.4 =2m120901.D 0.2 =2m120902.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
103) 1,4-Dichlorobenzene-d	ISTD									
104) Benzaldehyde	1.108	1.069	1.012	1.116	1.081	1.046	1.116	1.165	1.089	4.38
105) Phenanthrene-d10a	ISTD									
106) Atrazine	0.100	0.096	0.092	0.100	0.095	0.097	0.095	0.100	0.097	3.05
107) Naphthalene-d8a	ISTD									
108) Caprolactam	0.158	0.157	0.149	0.156	0.148	0.144	0.151	0.157	0.152	3.30
111) Phenanthrene-d10b	ISTD									
112) 1-chloroocta	0.324	0.306	0.295	0.325	0.308	0.295	0.291	0.297	0.305	4.32
113) o-terphenyl	0.554	0.506	0.500	0.568	0.550	0.537	0.557	0.555	0.541	4.61

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2M5435LVI.M Fri Dec 17 08:57:12 2021

8.6.6

8

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5436-ICV5436
Lab FileID: 2M120903.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2M5436\2m120903.D Vial: 10
Acq On : 16 Dec 2021 10:08 am Operator: chriss2
Sample : icv5436-10 Inst : MS2M
Misc : op35473,e2m5436,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Fri Dec 17 08:55:40 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	100	0.00	4.41
104	Benzaldehyde	1.089	1.196	-9.8	108	0.00	4.09
105	Phenanthrene-d10a	1.000	1.000	0.0	103	0.00	9.61
106	Atrazine	0.097	0.106	-9.3	108	0.00	9.29
107	Naphthalene-d8a	1.000	1.000	0.0	100	0.00	5.45
108 t	Caprolactam	0.152	0.172	-13.2	110	0.01	5.86

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m120897a.D M2M5435LVI.M Fri Dec 17 08:57:30 2021

8.6.7

8

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5437-ICV5435
Lab FileID: 2M120907.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2M5437\2m120907.D Vial: 2
Acq On : 18 Dec 2021 2:08 am Operator: chriss2
Sample : icv5435-10 Inst : MS2M
Misc : op35473,e2m5437,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Fri Dec 17 08:55:40 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
46 I	Acenaphthene-d10	1.000	1.000	0.0	91	-0.02	7.45
47 t	Hexachlorocyclopentadiene	0.274	0.303	-10.6	90	-0.02	6.34
56 t	Acenaphthylene	1.648	1.539	6.6	83	-0.02	7.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m120897a.D M2M5435LVI.M Mon Dec 20 21:10:04 2021

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E2M5439-CC5435
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2M120962.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e2m5439\2m120962.d Vial: 2
Acq On : 22 Dec 2021 3:17 am Operator: chriss2
Sample : cc5435-5 Inst : MS2M
Misc : op35473,e2m5439,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 23 04:04:48 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	0.00	4.37
2	t	1,4-Dioxane	0.489	0.479	2.0	94	0.00	1.85
3	t	Pyridine	1.365	1.263	7.5	89	0.00	2.18
4	t	N-Nitrosodimethylamine	0.760	0.693	8.8	85	0.00	2.15
5	S	2-Fluorophenol	1.245	1.174	5.7	89	0.00	3.36
6	t	Indene	2.162	2.147	0.7	89	0.00	4.56
7	t	Cumene	2.774	2.825	-1.8	94	0.00	3.77
8	S	Phenol-d5	1.580	1.446	8.5	86	0.00	4.10
9	t	Phenol	1.745	1.615	7.4	85	0.00	4.11
10		Aniline	2.047	1.839	10.2	84	0.00	4.12
11	t	bis(2-Chloroethyl)ether	1.207	1.136	5.9	88	0.00	4.18
12	t	2-Chlorophenol	1.360	1.316	3.2	91	0.00	4.21
13	t	Decane	1.500	1.497	0.2	93	0.00	4.26
14	t	1,3-Dichlorobenzene	1.497	1.511	-0.9	93	0.00	4.32
15	t	1,4-Dichlorobenzene	1.514	1.533	-1.3	94	0.00	4.38
16	t	Benzyl alcohol	0.895	0.837	6.5	85	0.00	4.47
17	t	1,2-Dichlorobenzene	1.453	1.464	-0.8	94	0.00	4.49
18	t	Acetophenone	1.792	1.757	2.0	90	0.00	4.68
19	t	2-Methylphenol	1.202	1.132	5.8	85	0.00	4.56
20	t	2,2'-oxybis(1-Chloropropa	1.926	1.870	2.9	90	0.00	4.58
21	t	3&4-Methylphenol	1.204	1.152	4.3	86	0.00	4.68
22	t	n-Nitroso-di-n-propylamin	0.805	0.800	0.6	92	0.00	4.68
23	t	Hexachloroethane	0.529	0.550	-4.0	97	0.00	4.75
24	I	Naphthalene-d8	1.000	1.000	0.0	92	0.00	5.40
25	S	Nitrobenzene-d5	0.297	0.301	-1.3	90	0.00	4.79
26	t	Nitrobenzene	0.305	0.312	-2.3	91	0.00	4.80
27	t	Quinoline	0.708	0.686	3.1	86	0.00	5.75
28	t	Isophorone	0.617	0.593	3.9	85	0.00	5.00
29	t	2-Nitrophenol	0.164	0.176	-7.3	91	0.00	5.07
30	t	2,4-Dimethylphenol	0.313	0.321	-2.6	91	0.00	5.11
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	5.000	4.605	7.9	83	0.00	5.18
		----------	AvgRF	CCRF	% Dev	----------		
32	t	bis(2-Chloroethoxy)methan	0.380	0.369	2.9	86	0.00	5.19
33	t	2,4-Dichlorophenol	0.287	0.292	-1.7	90	0.00	5.27
34	t	2,6-Dichlorophenol	0.274	0.292	-6.6	92	0.00	5.48
35		1,3,5-Trichlorobenzene	0.319	0.340	-6.6	94	0.00	5.07
36	t	1,2,4-Trichlorobenzene	0.318	0.334	-5.0	94	0.00	5.35
37		1,2,3-Trichlorobenzene	0.307	0.326	-6.2	95	0.00	5.56

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E2M5439-CC5435
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2M120962.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

38	t	Naphthalene	1.003	1.017	-1.4	89	0.00	5.42
39	t	4-Chloroaniline	0.420	0.428	-1.9	88	0.00	5.48
40	t	2,3-Dichloroaniline	0.345	0.368	-6.7	91	0.00	6.45
41	t	Hydroquinone	0.317	0.336	-6.0	88	0.00	5.81
42	t	Hexachlorobutadiene	0.172	0.200	-16.3	104	0.00	5.54
43	t	4-Chloro-3-methylphenol	0.275	0.285	-3.6	90	0.00	5.97
44	t	2-Methylnaphthalene	0.617	0.644	-4.4	91	0.00	6.13
45	t	1-Methylnaphthalene	0.593	0.614	-3.5	92	0.00	6.24
46	I	Acenaphthene-d10	1.000	1.000	0.0	92	0.00	7.40
47	t	Hexachlorocyclopentadiene	0.274	0.332	-21.2#	101	0.00	6.31
48	t	1,2,4,5-Tetrachlorobenzen	0.537	0.580	-8.0	95	0.00	6.31
49	t	2,4,6-Trichlorophenol	0.359	0.387	-7.8	95	0.00	6.45
50	t	2,4,5-Trichlorophenol	0.401	0.426	-6.2	93	0.00	6.49
51	S	2-Fluorobiphenyl	1.313	1.409	-7.3	96	0.00	6.56
52	t	2-Chloronaphthalene	1.124	1.166	-3.7	92	0.00	6.69
53	t	Biphenyl	1.456	1.532	-5.2	93	0.00	6.68
54	t	2-Nitroaniline	0.280	0.283	-1.1	90	0.00	6.83
55	t	Dimethylphthalate	1.351	1.381	-2.2	93	0.00	7.09
56	t	Acenaphthylene	1.648	1.664	-1.0	90	0.00	7.21
57	t	2,6-Dinitrotoluene	0.259	0.277	-6.9	91	0.00	7.16
58	t	3-Nitroaniline	0.318	0.325	-2.2	89	0.00	7.37
59	t	Acenaphthene	1.196	1.234	-3.2	92	0.00	7.44
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	10.000	10.935	-9.4	102	0.00	7.51
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.138	0.175	-26.8#	115	0.00	7.62
62	t	Dibenzofuran	1.664	1.725	-3.7	93	0.00	7.68
63	t	2,4-Dinitrotoluene	0.349	0.387	-10.9	94	0.00	7.69
64		2,3,4,6-Tetrachlorophenol	0.329	0.346	-5.2	93	0.00	7.86
65	t	Diethylphthalate	1.316	1.364	-3.6	94	0.00	8.08
66	t	Fluorene	1.331	1.389	-4.4	93	0.00	8.16
67	t	4-Chlorophenyl-phenylethe	0.644	0.668	-3.7	94	0.00	8.20
68	t	4-Nitroaniline	0.309	0.304	1.6	86	0.00	8.21
69	I	Phenanthrene-d10	1.000	1.000	0.0	97	0.00	9.54
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	5.000	5.076	-1.5	98	0.00	8.26
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.634	0.615	3.0	92	0.00	8.38
72	t	Pentachloronitrobenzene	0.040	0.038#	5.0	89	0.00	9.29
73	t	1,2-Diphenylhydrazine	0.619	0.567	8.4	88	0.00	8.42
74	S	2,4,6-Tribromophenol	0.107	0.107	0.0	94	0.00	8.50
75	t	4-Bromophenyl-phenylether	0.215	0.215	0.0	95	0.00	8.92
76	t	Hexachlorobenzene	0.240	0.236	1.7	94	0.00	8.95
77	t	Pentachlorophenol	0.150	0.154	-2.7	96	0.00	9.26
78	t	Phenanthrene	1.103	1.078	2.3	94	0.00	9.58
79	t	Anthracene	1.125	1.092	2.9	92	0.00	9.65
80	t	Carbazole	1.028	0.983	4.4	91	0.00	9.93
81	t	Di-n-butylphthalate	1.208	1.098	9.1	85	0.00	10.61
82	t	Fluoranthene	1.169	1.132	3.2	91	0.00	11.43
83	t	Octadecane	0.446	0.427	4.3	89	0.00	9.55
84	I	Chrysene-d12	1.000	1.000	0.0	104	0.00	13.70
85	t	Benzidine	0.890	0.694	22.0#	82	0.00	11.71
86	t	Pyrene	1.363	1.233	9.5	93	0.00	11.77

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E2M5439-CC5435
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 2M120962.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

87	S	Terphenyl-d14	1.007	0.886	12.0	90	0.00	12.11
88	t	Butylbenzylphthalate	0.557	0.450	19.2	81	0.00	12.98
89	t	Benzo[a]anthracene	1.268	1.179	7.0	97	0.00	13.69
90	t	3,3'-Dichlorobenzidine	0.496	0.466	6.0	96	0.00	13.72
91	t	Chrysene	1.249	1.235	1.1	101	0.00	13.74
92	t	bis(2-Ethylhexyl)phthalat	0.839	0.714	14.9	87	0.00	13.96
93	I	Perylene-d12	1.000	1.000	0.0	113	0.00	15.81
94	t	Di-n-octylphthalate	1.335	1.153	13.6	96	0.00	14.96
95	t	Benzo[b]fluoranthene	1.220	1.215	0.4	113	0.00	15.29
96	t	Benzo[k]fluoranthene	1.107	1.136	-2.6	110	0.00	15.33
97	t	Benzo[a]pyrene	1.148	1.137	1.0	108	0.00	15.73
98	t	Indeno[1,2,3-cd]pyrene	1.017	1.003	1.4	110	0.00	17.19
99	t	Dibenz(a,h)acridine	0.936	0.933	0.3	110	0.00	16.90
100	t	Dibenz[a,h]anthracene	1.072	1.096	-2.2	113	0.00	17.24
101	t	7,12-Dimethylbenz(a)anthr	0.465	0.456	1.9	110	0.00	15.30
102	t	Benzo[g,h,i]perylene	1.118	1.150	-2.9	113	0.00	17.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m120964.d M2M5435LVI.M Thu Dec 23 04:05:13 2021

8.6.9

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E2M5439-CC5436
Lab FileID: 2M120964.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e2m5439\2m120964.d Vial: 3
Acq On : 22 Dec 2021 4:08 am Operator: chriss2
Sample : cc5436-5 Inst : MS2M
Misc : op35473,e2m5439,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 23 04:04:48 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103		1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	103	0.00	4.37
104		Benzaldehyde	1.089	1.036	4.9	96	0.00	4.04
105		Phenanthrene-d10a	1.000	1.000	0.0	105	0.00	9.54
106		Atrazine	0.097	0.089	8.2	94	0.00	9.23
107		Naphthalene-d8a	1.000	1.000	0.0	103	0.00	5.40
108	t	Caprolactam	0.152	0.135	11.2	90	0.00	5.80
111		Phenanthrene-d10b	1.000	1.000	0.0	105	0.00	9.54
112	s	1-chlorooctadecane	0.305	0.272	10.8	88	0.00	11.45
113	s	o-terphenyl	0.541	0.554	-2.4	102	0.00	10.21

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m120964.d M2M5435LVI.M Thu Dec 23 04:05:18 2021

8.6.10

8

Initial Calibration Summary

Job Number: JD36624 **Sample:** E4P2551-ICC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P48505.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report MS4P

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Oct 21 09:41:06 2021
Response via : Initial Calibration

Calibration Files
1.0 =4p48504.D 0.5 =4p48507.D 0.2 =4p48505.D 0.1 =4p48508.D
0.04=4p48511.D 0.02=4p48506.D 0.01=4p48514.D .004=4p48509.D
.002=4p48513.D = = =

Compound	1.0	0.5	0.2	0.1	0.04	0.02	0.01	.004	.002	Avg	%RSD
1) I 1-Methylnaphthalene-d	----------ISTD----------										
2) 1,4-Dioxane	0.206	0.203	0.178	0.181	0.174	0.202	0.164			0.187	9.04
3) 2-Fluorophenol	0.582	0.514	0.506	0.461	0.513	0.470	0.501	0.454	0.465	0.496	8.04
4) Phenol-d5	1.054	0.987	0.918	0.896	0.920	0.922	0.940	0.923	0.913	0.941	5.21
5) Phenol	1.131	1.056	0.970	0.946	0.993	0.960	0.986	0.979	0.971	0.999	5.84
6) bis(2-Chloroethyl)ether										0.000#	-1.00
7) Nitrobenzene-d5	0.849	0.801	0.721	0.721	0.760	0.730	0.787	0.768	0.777	0.768	5.43
8) Naphthalene	2.530	2.312	2.144	2.041	2.083	2.189	2.226	2.349	2.732	2.290	9.73
9) Hexachlorobutadiene	0.572	0.534	0.492	0.481	0.506	0.580	0.602	0.705		0.559	13.17
10) 2-Methylnaphthalene	1.361	1.251	1.150	1.078	1.084	1.156	1.168	1.239	1.280	1.196	7.83
11) 1-Methylnaphthalene	1.306	1.184	1.089	0.986	1.066	1.129	1.180	1.328	1.095	1.152	9.68
12) Hexachlorocyclopentadiene	0.537	0.468	0.399	0.381	0.419	0.447	0.424	0.637		0.464	18.25
13) I Fluorene-d10	----------ISTD----------										
14) 2-Fluorobiphenyl	1.149	1.054	0.968	0.971	0.989	0.997	1.031	1.011	1.014	1.020	5.44
15) Acenaphthylene	1.752	1.539	1.377	1.378	1.378	1.346	1.456	1.556	1.630	1.490	9.33
16) Acenaphthene	1.065	0.980	0.889	0.882	0.884	0.874	0.892	0.974	1.120	0.951	9.49
17) Fluorene	1.302	1.154	1.064	1.043	1.101	1.078	1.121	1.145	1.320	1.148	8.67
18) 4,6-dinitro-2-methylphenol	0.192	0.150	0.113	0.103	0.094	0.074	0.065			0.113	39.49
---- Quadratic regression ---- Coefficient = 0.9997											
Response Ratio = -0.00290 + 0.10101 *A + 0.01473 *A^2											
19) 2,4,6-Tribromophenol	0.189	0.168	0.150	0.149	0.146	0.142	0.142	0.144	0.143	0.153	10.33
20) Fluoranthene-d10	----------ISTD----------										
21) Hexachlorobenzene	0.261	0.232	0.215	0.219	0.214	0.222	0.266	0.297	0.347	0.252	17.96

8.6.11
8

Initial Calibration Summary

Job Number: JD36624 **Sample:** E4P2551-ICC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P48505.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
22)  Pentachlorophenol
          0.171 0.155 0.133 0.126 0.130 0.127 0.113 0.151 0.172        0.142   14.84
23)  Phenanthrene
          1.135 1.022 0.940 0.910 0.908 0.975 1.076 1.203 1.528        1.078   18.32
24)  Anthracene
          1.127 1.034 0.934 0.935 0.964 0.927 1.010 1.240 1.129        1.033   10.65
25)  Fluoranthene
          1.239 1.113 1.027 0.988 1.079 1.160 1.248                    1.122    8.91
26)  Pyrene
          1.313 1.175 1.083 1.036 1.087 1.149 1.179 1.460 1.628        1.235   15.94
27)  Terphenyl-d14
          0.682 0.592 0.555 0.540 0.559 0.567 0.552 0.563 0.547        0.573    7.57
28)  Benzo[a]anthracene
          1.216 1.049 0.962 0.917 0.938 1.073 1.091 1.579              1.103   19.55
29)  Chrysene
          1.148 1.037 0.956 0.957 1.011 1.204 1.251                    1.081   11.10

30) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
31)  Benzo[b]fluoranthene
          1.819 1.630 1.574 1.645 2.088 2.859 3.428                    2.149   33.48
           ---- Quadratic regression ----  Coefficient =  0.9993
             Response Ratio = 0.02961 + 1.38761 *A + 0.32444 *A^2

32)  Benzo[k]fluoranthene
          1.573 1.493 1.446 1.446 1.587 1.734 2.278                    1.651   17.81
33)  Benzo[a]pyrene
          1.653 1.484 1.407 1.384 1.502 1.546 1.622                    1.514    6.69
34)  Indeno[1,2,3-cd]pyrene
          1.699 1.573 1.519 1.552 1.726 2.156 2.405                    1.804   18.94
35)  Dibenz[a,h]anthracene
          1.463 1.337 1.258 1.292 1.351 1.563 1.572                    1.405    9.11
36)  Benzo[g,h,i]perylene
          1.512 1.390 1.353 1.403 1.573 1.942                          1.529   14.31
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4P2551SIMLVI.M        Thu Oct 21 09:57:50 2021   YING
```

8.6.11

8

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICV2551
Lab FileID: 4P48512.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2551\4p48512.D Vial: 11
Acq On : 21 Oct 2021 3:15 am Operator: chriss2
Sample : icv2551-0.2 Inst : MS4P
Misc : op35776a,e4p2551,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Oct 21 09:41:06 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	100	0.00	7.10
2	t	1,4-Dioxane	0.187	0.187	0.0	105	0.02	2.16
5		Phenol	0.999	0.997	0.2	103	0.00	4.73
8	t	Naphthalene	2.290	1.983	13.4	92	0.00	6.35
9	t	Hexachlorobutadiene	0.559	0.471	15.7	96	0.00	6.47
10	t	2-Methylnaphthalene	1.196	1.097	8.3	95	0.00	7.04
11	t	1-Methylnaphthalene	1.152	1.045	9.3	96	0.00	7.13
12		Hexachlorocyclopentadiene	0.464	0.814	-75.4#	204#	0.00	7.19
13	I	Fluorene-d10	1.000	1.000	0.0	94	0.00	8.58
15	t	Acenaphthylene	1.490	1.201	19.4	82	0.00	7.92
16	t	Acenaphthene	0.951	0.830	12.7	88	0.00	8.09
17	t	Fluorene	1.148	1.009	12.1	89	0.00	8.60
			True	Calc.	% Drift			
18		4,6-dinitro-2-methylpheno	1000.000	1168.570	-16.9	117	0.00	8.66
			AvgRF	CCRF	% Dev			
20		Fluoranthene-d10	1.000	1.000	0.0	95	0.00	10.71
21	t	Hexachlorobenzene	0.252	0.210	16.7	93	0.01	9.15
22	t	Pentachlorophenol	0.142	0.152	-7.0	109	0.00	9.34
23	t	Phenanthrene	1.078	0.903	16.2	91	0.01	9.55
24	t	Anthracene	1.033	0.890	13.8	91	0.00	9.60
25	t	Fluoranthene	1.122	0.964	14.1	89	0.00	10.73
26	t	Pyrene	1.235	0.963	22.0	85	0.00	10.95
28	t	Benzo[a]anthracene	1.103	0.838	24.0	83	0.00	12.14
29	t	Chrysene	1.081	0.868	19.7	86	0.00	12.17
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	85	0.00	13.40
			True	Calc.	% Drift			
31	t	Benzo[b]fluoranthene	200.000	215.764	-7.9	92	0.00	13.13
			AvgRF	CCRF	% Dev			
32	t	Benzo[k]fluoranthene	1.651	1.458	11.7	86	0.00	13.15
33	t	Benzo[a]pyrene	1.514	1.429	5.6	86	0.00	13.42
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.458	19.2	82	0.00	14.60
35	t	Dibenz[a,h]anthracene	1.405	1.209	14.0	82	0.00	14.62
36	t	Benzo[g,h,i]perylene	1.529	1.345	12.0	85	0.00	14.93

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2551-ICV2551
Lab FileID: 4P48512.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p48505.D M4P2551SIMLVI.M Thu Oct 21 09:55:50 2021 YING

8.6.12

8

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E4P2629-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50207.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\e4p2629\4p50207.d Vial: 2
Acq On : 18 Dec 2021 2:05 am Operator: chriss2
Sample : cc2551-0.2 Inst : MS4P
Misc : op37092a,e4p2629,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Dec 19 23:01:53 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	71	0.00	6.79
2	t	1,4-Dioxane	0.187	0.308	-64.7#	123	0.00	1.81
3	S	2-Fluorophenol	0.496	0.535	-7.9	76	0.00	3.49
4	S	Phenol-d5	0.941	0.904	3.9	70	0.00	4.45
5		Phenol	0.999	0.927	7.2	68	0.00	4.46
7	S	Nitrobenzene-d5	0.768	0.991	-29.0#	98	0.00	5.32
8	t	Naphthalene	2.290	1.882	17.8	63	0.00	6.03
9	t	Hexachlorobutadiene	0.559	0.689	-23.3#	100	0.00	6.17
10	t	2-Methylnaphthalene	1.196	1.075	10.1	67	0.00	6.72
11	t	1-Methylnaphthalene	1.152	1.028	10.8	67	0.00	6.82
12		Hexachlorocyclopentadiene	0.464	0.577	-24.4#	103	0.00	6.88
13	I	Fluorene-d10	1.000	1.000	0.0	67	0.00	8.26
14	S	2-Fluorobiphenyl	1.020	1.008	1.2	70	0.00	7.11
15	t	Acenaphthylene	1.490	1.287	13.6	63	0.00	7.61
16	t	Acenaphthene	0.951	0.894	6.0	68	0.00	7.78
17	t	Fluorene	1.148	1.067	7.1	68	0.00	8.29
			True	Calc.	% Drift			
18		4,6-dinitro-2-methylpheno	1000.000	1198.747	-19.9	87	0.00	8.36
			AvgRF	CCRF	% Dev			
19	S	2,4,6-Tribromophenol	0.153	0.195	-27.5#	88	0.00	8.53
20		Fluoranthene-d10	1.000	1.000	0.0	73	0.00	10.38
21	t	Hexachlorobenzene	0.252	0.248	1.6	84	0.00	8.83
22	t	Pentachlorophenol	0.142	0.145	-2.1	79	0.00	9.03
23	t	Phenanthrene	1.078	0.876	18.7	68	0.00	9.22
24	t	Anthracene	1.033	0.849	17.8	66	0.00	9.28
25	t	Fluoranthene	1.122	1.020	9.1	72	0.00	10.40
26	t	Pyrene	1.235	1.003	18.8	67	0.00	10.62
27	S	Terphenyl-d14	0.573	0.565	1.4	74	0.00	10.81
28	t	Benzo[a]anthracene	1.103	0.796	27.8#	60	0.00	11.80
29	t	Chrysene	1.081	0.909	15.9	69	0.00	11.84
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	56	0.00	13.04
			True	Calc.	% Drift			
31	t	Benzo[b]fluoranthene	200.000	203.894	-1.9	58	0.00	12.79
			AvgRF	CCRF	% Dev			
32	t	Benzo[k]fluoranthene	1.651	1.508	8.7	59	0.00	12.81

8.6.13

8

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2629-CC2551
Lab FileID: 4P50207.D

33	t	Benzo[a]pyrene	1.514	1.479	2.3	59	0.00	13.06
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.339	25.8#	50#	0.00	14.10
35	t	Dibenz[a,h]anthracene	1.405	1.159	17.5	52	0.00	14.12
36	t	Benzo[g,h,i]perylene	1.529	1.201	21.5#	50#	0.00	14.37

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p50207.d M4P2551SIMLVI.M Sun Dec 19 23:02:17 2021

8.6.13

8

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E4P2635-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50269.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2635\4p50269.D Vial: 2
Acq On : 27 Dec 2021 2:54 pm Operator: kristis
Sample : cc2551-0.1 Inst : MS4P
Misc : op37092a,e4p2635,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 13 09:21:17 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	107	-0.09	6.75
2	t	1,4-Dioxane	0.187	0.417	-123.0#	246#	-0.10	1.79
3	S	2-Fluorophenol	0.496	0.839	-69.2#	194	-0.09	3.46
4	S	Phenol-d5	0.941	1.144	-21.6#	136	-0.09	4.41
5		Phenol	0.999	1.175	-17.6	132	-0.09	4.42
7	S	Nitrobenzene-d5	0.768	1.257	-63.7#	186	-0.09	5.28
8	t	Naphthalene	2.290	2.325	-1.5	121	-0.09	6.00
9	t	Hexachlorobutadiene	0.559	0.822	-47.0#	182	-0.09	6.13
10	t	2-Methylnaphthalene	1.196	1.287	-7.6	127	-0.10	6.69
11	t	1-Methylnaphthalene	1.152	1.194	-3.6	129	-0.10	6.78
12		Hexachlorocyclopentadiene	0.464	0.650	-40.1#	182	-0.10	6.84
13	I	Fluorene-d10	1.000	1.000	0.0	102	-0.09	8.22
14	S	2-Fluorobiphenyl	1.020	1.216	-19.2	127	-0.09	7.07
15	t	Acenaphthylene	1.490	1.526	-2.4	112	-0.10	7.57
16	t	Acenaphthene	0.951	1.059	-11.4	122	-0.10	7.74
17	t	Fluorene	1.148	1.198	-4.4	117	-0.10	8.25
		----------	True	Calc.	% Drift	----------		
18		4,6-dinitro-2-methylpheno	500.000	708.756	-41.8#	155	-0.10	8.32
		----------	AvgRF	CCRF	% Dev	----------		
19	S	2,4,6-Tribromophenol	0.153	0.228	-49.0#	155	-0.10	8.49
20		Fluoranthene-d10	1.000	1.000	0.0	101	-0.10	10.35
21	t	Hexachlorobenzene	0.252	0.327	-29.8#	151	-0.10	8.79
22	t	Pentachlorophenol	0.142	0.190	-33.8#	152	-0.10	8.99
23	t	Phenanthrene	1.078	1.063	1.4	118	-0.10	9.19
24	t	Anthracene	1.033	0.985	4.6	106	-0.11	9.24
25	t	Fluoranthene	1.122	1.187	-5.8	121	-0.11	10.36
26	t	Pyrene	1.235	1.157	6.3	113	-0.11	10.58
27	S	Terphenyl-d14	0.573	0.677	-18.2	127	-0.10	10.76
28	t	Benzo[a]anthracene	1.103	0.910	17.5	100	-0.10	11.76
29	t	Chrysene	1.081	1.026	5.1	108	-0.10	11.80
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	82	-0.11	13.00
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[b]fluoranthene	100.000	100.312	-0.3	83	-0.10	12.75
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Benzo[k]fluoranthene	1.651	1.706	-3.3	96	-0.10	12.77

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2635-CC2551
Lab FileID: 4P50269.D

33	t	Benzo[a]pyrene	1.514	1.752	-15.7	103	-0.11	13.02
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.536	14.9	81	-0.15	14.04
35	t	Dibenz[a,h]anthracene	1.405	1.284	8.6	81	-0.15	14.06
36	t	Benzo[g,h,i]perylene	1.529	1.434	6.2	83	-0.17	14.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p50023.D M4P2551SIMLVI.M Tue Dec 28 09:36:34 2021 YING

8.9.14

8

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E4P2636-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50296.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2636\4p50296.D Vial: 2
Acq On : 28 Dec 2021 12:24 pm Operator: kristis
Sample : cc2551-0.2 Inst : MS4P
Misc : op37092a,e4p2636,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Dec 28 09:37:18 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	83	0.00	6.75
2	t	1,4-Dioxane	0.187	0.226	-20.9#	105	0.01	1.80
3	S	2-Fluorophenol	0.496	0.658	-32.7#	108	0.01	3.47
4	S	Phenol-d5	0.941	0.919	2.3	83	0.02	4.43
5		Phenol	0.999	0.931	6.8	79	0.01	4.44
7	S	Nitrobenzene-d5	0.768	0.980	-27.6#	113	0.00	5.28
8	t	Naphthalene	2.290	1.853	19.1	72	0.00	6.00
9	t	Hexachlorobutadiene	0.559	0.700	-25.2#	118	0.00	6.13
10	t	2-Methylnaphthalene	1.196	1.062	11.2	77	0.00	6.69
11	t	1-Methylnaphthalene	1.152	1.021	11.4	78	0.00	6.79
12		Hexachlorocyclopentadiene	0.464	0.482	-3.9	100	0.00	6.84
13	I	Fluorene-d10	1.000	1.000	0.0	85	0.00	8.22
14	S	2-Fluorobiphenyl	1.020	0.968	5.1	85	0.00	7.07
15	t	Acenaphthylene	1.490	1.254	15.8	77	0.00	7.57
16	t	Acenaphthene	0.951	0.837	12.0	80	0.00	7.74
17	t	Fluorene	1.148	1.046	8.9	83	0.00	8.25
			True	Calc.	% Drift			
18		4,6-dinitro-2-methylpheno	1000.000	1263.309	-26.3#	116	0.00	8.33
			AvgRF	CCRF	% Dev			
19	S	2,4,6-Tribromophenol	0.153	0.201	-31.4#	113	0.00	8.50
20		Fluoranthene-d10	1.000	1.000	0.0	92	0.00	10.35
21	t	Hexachlorobenzene	0.252	0.275	-9.1	118	0.00	8.79
22	t	Pentachlorophenol	0.142	0.123	13.4	85	0.00	8.99
23	t	Phenanthrene	1.078	0.898	16.7	88	0.00	9.19
24	t	Anthracene	1.033	0.843	18.4	83	0.01	9.25
25	t	Fluoranthene	1.122	1.003	10.6	90	0.00	10.37
26	t	Pyrene	1.235	0.969	21.5#	82	0.00	10.59
27	S	Terphenyl-d14	0.573	0.565	1.4	94	0.00	10.77
28	t	Benzo[a]anthracene	1.103	0.835	24.3#	80	0.00	11.77
29	t	Chrysene	1.081	0.865	20.0	83	0.00	11.80
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	73	0.00	13.01
			True	Calc.	% Drift			
31	t	Benzo[b]fluoranthene	200.000	201.462	-0.7	74	0.00	12.75
			AvgRF	CCRF	% Dev			
32	t	Benzo[k]fluoranthene	1.651	1.474	10.7	75	0.00	12.78

8.6.15

8

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E4P2636-CC2551
Lab FileID: 4P50296.D

33	t	Benzo[a]pyrene	1.514	1.456	3.8	76	0.00	13.03
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.390	22.9#	67	0.00	14.04
35	t	Dibenz[a,h]anthracene	1.405	1.156	17.7	67	0.00	14.06
36	t	Benzo[g,h,i]perylene	1.529	1.210	20.9#	65	0.00	14.32

(#) = Out of Range SPCC's out = 0 CCC's out = 0

4p49816.D M4P2551SIMLVI.M Wed Dec 29 09:35:23 2021 YING

8.6.15

8

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E4P2638-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50361.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2638\4p50361.D Vial: 2
Acq On : 30 Dec 2021 8:58 am Operator: kristis
Sample : cc2551-0.2 Inst : MS4P
Misc : op37092a,e4p2638,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Dec 28 09:37:18 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	64	-0.01	6.74
2	t	1,4-Dioxane	0.187	0.462	-147.1#	166	-0.02	1.77
3	S	2-Fluorophenol	0.496	0.651	-31.3#	82	0.00	3.46
4	S	Phenol-d5	0.941	1.036	-10.1	72	0.00	4.41
5		Phenol	0.999	1.044	-4.5	69	0.00	4.43
7	S	Nitrobenzene-d5	0.768	1.007	-31.1#	89	0.00	5.27
8	t	Naphthalene	2.290	1.848	19.3	55	-0.01	5.99
9	t	Hexachlorobutadiene	0.559	0.733	-31.1#	95	-0.01	6.12
10	t	2-Methylnaphthalene	1.196	1.064	11.0	59	0.00	6.68
11	t	1-Methylnaphthalene	1.152	0.998	13.4	59	-0.01	6.77
12		Hexachlorocyclopentadiene	0.464	0.490	-5.6	79	-0.01	6.83
13	I	Fluorene-d10	1.000	1.000	0.0	63	-0.02	8.21
14	S	2-Fluorobiphenyl	1.020	0.981	3.8	64	-0.01	7.05
15	t	Acenaphthylene	1.490	1.231	17.4	57	0.00	7.56
16	t	Acenaphthene	0.951	0.846	11.0	60	-0.01	7.73
17	t	Fluorene	1.148	1.039	9.5	62	0.00	8.24
		---------- True	Calc.	% Drift	----------			
18		4,6-dinitro-2-methylpheno	1000.000	1068.064	-6.8	71	0.00	8.32
		---------- AvgRF	CCRF	% Dev	----------			
19	S	2,4,6-Tribromophenol	0.153	0.191	-24.8#	80	0.00	8.48
20		Fluoranthene-d10	1.000	1.000	0.0	66	-0.02	10.33
21	t	Hexachlorobenzene	0.252	0.270	-7.1	83	-0.01	8.77
22	t	Pentachlorophenol	0.142	0.114	19.7	57	-0.01	8.98
23	t	Phenanthrene	1.078	0.870	19.3	61	-0.01	9.18
24	t	Anthracene	1.033	0.809	21.7#	57	-0.01	9.22
25	t	Fluoranthene	1.122	1.018	9.3	66	0.00	10.35
26	t	Pyrene	1.235	0.994	19.5	61	0.00	10.57
27	S	Terphenyl-d14	0.573	0.580	-1.2	69	0.00	10.75
28	t	Benzo[a]anthracene	1.103	0.814	26.2#	56	-0.02	11.75
29	t	Chrysene	1.081	0.873	19.2	61	-0.01	11.78
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	53	0.00	12.99
		---------- True	Calc.	% Drift	----------			
31	t	Benzo[b]fluoranthene	200.000	187.135	6.4	50	-0.02	12.73
		---------- AvgRF	CCRF	% Dev	----------			
32	t	Benzo[k]fluoranthene	1.651	1.544	6.5	56	-0.02	12.76

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E4P2638-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50361.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

33	t	Benzo[a]pyrene	1.514	1.487	1.8	56	-0.01	13.01
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.372	23.9#	48#	-0.02	14.02
35	t	Dibenz[a,h]anthracene	1.405	1.173	16.5	49#	-0.02	14.04
36	t	Benzo[g,h,i]perylene	1.529	1.209	20.9#	47#	-0.02	14.29

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p49816.D M4P2551SIMLVI.M Thu Dec 30 12:39:17 2021 YING

8.6.16

8

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E4P2640-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50415.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2640\4p50415.D Vial: 2
Acq On : 4 Jan 2022 1:35 pm Operator: kristis
Sample : cc2551-0.2 Inst : MS4P
Misc : op37409a,e4p2640,250,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2551SIMLVI.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Dec 31 08:56:57 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	64	-0.03	6.72
2	t	1,4-Dioxane	0.187	0.190	-1.6	68	-0.03	1.76
3	S	2-Fluorophenol	0.496	0.454	8.5	57	-0.01	3.45
4	S	Phenol-d5	0.941	0.894	5.0	62	0.00	4.41
5		Phenol	0.999	0.914	8.5	60	0.00	4.42
7	S	Nitrobenzene-d5	0.768	1.033	-34.5#	91	-0.03	5.25
8	t	Naphthalene	2.290	1.843	19.5	55	-0.03	5.97
9	t	Hexachlorobutadiene	0.559	0.728	-30.2#	94	-0.03	6.10
10	t	2-Methylnaphthalene	1.196	1.055	11.8	58	-0.03	6.66
11	t	1-Methylnaphthalene	1.152	1.005	12.8	59	-0.03	6.75
12		Hexachlorocyclopentadiene	0.464	0.365	21.3#	58	-0.03	6.81
13	I	Fluorene-d10	1.000	1.000	0.0	63	-0.03	8.20
14	S	2-Fluorobiphenyl	1.020	0.991	2.8	65	-0.03	7.04
15	t	Acenaphthylene	1.490	1.175	21.1#	54	-0.03	7.54
16	t	Acenaphthene	0.951	0.842	11.5	60	-0.03	7.71
17	t	Fluorene	1.148	1.036	9.8	61	-0.03	8.22
			True	Calc.	% Drift			
18		4,6-dinitro-2-methylpheno	1000.000	1160.116	-16.0	78	-0.02	8.30
			AvgRF	CCRF	% Dev			
19	S	2,4,6-Tribromophenol	0.153	0.182	-19.0	76	-0.03	8.46
20		Fluoranthene-d10	1.000	1.000	0.0	64	-0.03	10.32
21	t	Hexachlorobenzene	0.252	0.248	1.6	74	-0.03	8.75
22	t	Pentachlorophenol	0.142	0.098	31.0#	47#	-0.02	8.97
23	t	Phenanthrene	1.078	0.919	14.7	63	-0.03	9.16
24	t	Anthracene	1.033	0.838	18.9	58	-0.02	9.21
25	t	Fluoranthene	1.122	1.019	9.2	64	-0.03	10.33
26	t	Pyrene	1.235	1.007	18.5	60	-0.03	10.55
27	S	Terphenyl-d14	0.573	0.585	-2.1	68	-0.03	10.73
28	t	Benzo[a]anthracene	1.103	0.792	28.2#	53	-0.03	11.74
29	t	Chrysene	1.081	0.949	12.2	64	-0.03	11.77
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	55	-0.02	12.98
			True	Calc.	% Drift			
31	t	Benzo[b]fluoranthene	200.000	197.621	1.2	55	-0.03	12.72
			AvgRF	CCRF	% Dev			
32	t	Benzo[k]fluoranthene	1.651	1.511	8.5	58	-0.03	12.75

8.6.17

8

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E4P2640-CC2551
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 4P50415.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

33	t	Benzo[a]pyrene	1.514	1.480	2.2	58	-0.03	12.99
34	t	Indeno[1,2,3-cd]pyrene	1.804	1.427	20.9#	52	-0.04	14.00
35	t	Dibenz[a,h]anthracene	1.405	1.212	13.7	53	-0.04	14.02
36	t	Benzo[g,h,i]perylene	1.529	1.287	15.8	53	-0.04	14.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p49816.D M4P2551SIMLVI.M Tue Jan 04 15:14:13 2022 YING

8.6.17

8

Initial Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-ICC3785
Lab FileID: 5P79959.D

Response Factor Report MS5P

Method : C:\MSDCHEM\1\METHODS\M5P3785LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 02 08:35:47 2021
Response via : Initial Calibration

Calibration Files
10 =5p79959.D 20 =5p79957.D 16 =5p79958.D 5 =5p79960.D
2 =5p79961.D 1 =5p79962.D 0.4 =5p79963.D 0.2 =5p79964.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
103) 1,4-Dichlorobenzene-d	ISTD									
104) Benzaldehyde	1.130	1.121	1.071	1.171	1.072	1.054	1.154	1.095	1.108	3.80
105) Phenanthrene-d10a	ISTD									
106) Atrazine	0.099	0.101	0.093	0.094	0.087	0.088	0.074	0.070	0.088	12.63
107) Naphthalene-d8a	ISTD									
108) Caprolactam	0.124	0.126	0.117	0.121	0.115	0.102	0.130	0.114	0.119	7.17
111) Phenanthrene-d10b	ISTD									
112) 1-chloroocta	0.269	0.270	0.249	0.264	0.229	0.224	0.230	0.244	0.247	7.49
113) o-terphenyl	0.564	0.558	0.522	0.567	0.547	0.536	0.546	0.552	0.549	2.72

(#) = Out of Range ### Number of calibration levels exceeded format ###

M5P3784LVI.M Thu Dec 02 08:37:46 2021 RPT1

8.6.18

8

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3785-ICV3785
Lab FileID: 5P79965.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3785\5p79965.D Vial: 10
Acq On : 2 Dec 2021 1:45 am Operator: chriss2
Sample : icv3785-10 Inst : MS5P
Misc : op35621,e5p3785,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3784LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 02 08:35:47 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	100	0.00	4.70
104	Benzaldehyde	1.108	1.224	-10.5	109	0.00	4.37
105	Phenanthrene-d10a	1.000	1.000	0.0	102	0.00	10.09
106	Atrazine	0.088	0.103	-17.0	107	0.00	9.74
107	Naphthalene-d8a	1.000	1.000	0.0	101	0.00	5.81
108 t	Caprolactam	0.119	0.138	-16.0	113	0.00	6.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3784LVI.M Thu Dec 02 08:37:36 2021 RPT1

8.6.19

8

Initial Calibration Summary

Job Number: JD36624 **Sample:** E5P3794-ICC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80182.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Response Factor Report MS5P

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Initial Calibration

Calibration Files
10 =5p80182.D 20 =5p80184.D 16 =5p80183.D 5 =5p80181.D
2 =5p80180.D 1 =5p80179.D 0.4 =5p80178.D 0.2 =5p80177.D

Compound	10	20	16	5	2	1	0.4	0.2	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.589	0.611	0.601	0.550	0.503	0.549	0.500	0.594	0.562	7.76
3) Pyridine	1.480	1.544	1.539	1.496	1.341	1.276	1.283	1.042	1.375	12.64
4) N-Nitrosodim	0.892	0.937	0.929	0.865	0.749	0.721	0.731	0.729	0.819	11.67
5) 2-Fluorophen	1.383	1.453	1.458	1.390	1.244	1.188	1.095	1.147	1.295	11.08
6) Indene	2.149	2.056	2.102	2.202	2.229	2.197	2.273	2.093	2.162	3.47
7) Cumene	3.138	3.101	3.193	3.070	2.902	2.865	2.808	2.783	2.982	5.38
8) Phenol-d5	1.748	1.794	1.808	1.740	1.616	1.535	1.549	1.505	1.662	7.46
9) Phenol	1.816	1.781	1.822	1.836	1.730	1.701	1.720	1.647	1.756	3.84
10) Aniline	2.023	1.927	1.990	2.044	2.012	1.893	1.931	1.894	1.964	3.06
11) bis(2-Chloro	1.241	1.185	1.217	1.249	1.242	1.186	1.262	1.177	1.220	2.73
12) 2-Chlorophen	1.427	1.385	1.419	1.454	1.398	1.372	1.295	1.399	1.394	3.39
13) Decane	1.044	0.977	1.018	1.106	1.141	1.133	1.161	1.235	1.102	7.64
14) 1,3-Dichloro	1.553	1.521	1.545	1.591	1.525	1.489	1.539	1.524	1.536	1.93
15) 1,4-Dichloro	1.495	1.458	1.496	1.506	1.471	1.480	1.460	1.461	1.479	1.25
16) Benzyl alcoh	0.887	0.895	0.907	0.885	0.849	0.805	0.783	0.779	0.849	6.21
17) 1,2-Dichloro	1.421	1.385	1.417	1.466	1.438	1.401	1.410	1.305	1.405	3.36
18) Acetophenone	1.600	1.549	1.588	1.676	1.738	1.705	1.774	1.669	1.662	4.69
19) 2-Methylphen	1.153	1.109	1.126	1.192	1.161	1.160	1.076	1.056	1.129	4.11
20) 2,2'-oxybis(	1.364	1.262	1.302	1.454	1.471	1.526	1.577	1.613	1.446	8.80
21) 3&4-Methylph	1.146	1.091	1.117	1.216	1.221	1.183	1.160	1.164	1.162	3.87
22) n-Nitroso-di	0.753	0.700	0.726	0.790	0.839	0.792	0.876	0.833	0.789	7.61
23) Hexachloroet	0.487	0.500	0.491	0.486	0.490	0.493	0.499	0.525	0.496	2.55
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.298	0.294	0.304	0.302	0.301	0.304	0.297	0.307	0.301	1.46
26) Nitrobenzene	0.299	0.292	0.303	0.308	0.314	0.318	0.319	0.317	0.309	3.24
27) Quinoline	0.734	0.732	0.743	0.715	0.714	0.686	0.688	0.650	0.708	4.42
28) Isophorone	0.613	0.608	0.629	0.612	0.600	0.593	0.583	0.574	0.601	2.96
29) 2-Nitropheno	0.194	0.195	0.199	0.186	0.178	0.174	0.173	0.174	0.184	5.84
30) 2,4-Dimethyl	0.315	0.302	0.312	0.324	0.330	0.326	0.300	0.317	0.316	3.50
31) Benzoic acid	0.224	0.240	0.247	0.199	0.150				0.212	18.47
32) bis(2-Chloro	0.367	0.359	0.370	0.377	0.376	0.389	0.375	0.351	0.371	3.20
33) 2,4-Dichloro	0.298	0.301	0.306	0.298	0.296	0.269	0.273	0.270	0.289	5.36
34) 2,6-Dichloro	0.278	0.276	0.286	0.277	0.273	0.271	0.270	0.252	0.273	3.53
35) 1,3,5-Trichl	0.321	0.313	0.326	0.321	0.319	0.318	0.316	0.325	0.320	1.39
36) 1,2,4-Trichl	0.311	0.311	0.322	0.320	0.313	0.315	0.296	0.313	0.313	2.50
37) 1,2,3-Trichl	0.285	0.279	0.289	0.288	0.294	0.294	0.274	0.292	0.287	2.51
38) Naphthalene	0.986	0.970	1.007	0.998	0.998	0.986	0.990	1.004	0.992	1.22
39) 4-Chloroanil	0.419	0.409	0.424	0.424	0.420	0.415	0.401	0.400	0.414	2.33
40) 2,3-Dichloro	0.352	0.350	0.363	0.358	0.360	0.349	0.352	0.320	0.350	3.81
41) Hydroquinone	0.316	0.312	0.324	0.313	0.291	0.253	0.222		0.290	13.20
42) Hexachlorobu	0.167	0.169	0.174	0.171	0.169	0.172	0.158	0.176	0.169	3.24
43) 4-Chloro-3-m	0.283	0.287	0.295	0.286	0.270	0.256	0.255	0.242	0.272	7.01
44) 2-Methylnaph	0.648	0.640	0.661	0.646	0.639	0.633	0.626	0.618	0.639	2.11
45) 1-Methylnaph	0.606	0.588	0.613	0.610	0.611	0.617	0.602	0.602	0.606	1.46

Initial Calibration Summary

Job Number: JD36624 **Sample:** E5P3794-ICC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80182.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
46) I   Acenaphthene-d10      ----------------ISTD---------------------
47) Hexachlorocy 0.336 0.337 0.343 0.330 0.308 0.308 0.287 0.284 0.317   7.36
48) 1,2,4,5-Tetr 0.525 0.507 0.518 0.533 0.527 0.529 0.536 0.542 0.527   2.05
49) 2,4,6-Trichl 0.359 0.362 0.363 0.355 0.334 0.339 0.327 0.303 0.343   6.17
50) 2,4,5-Trichl 0.381 0.376 0.382 0.378 0.368 0.361 0.354 0.314 0.364   6.24
51) 2-Fluorobiph 1.318 1.299 1.318 1.322 1.294 1.320 1.367 1.261 1.312   2.30
52) 2-Chloronaph 1.075 1.048 1.067 1.090 1.109 1.137 1.131 1.094 1.094   2.83
53) Biphenyl     1.495 1.461 1.504 1.505 1.470 1.519 1.464 1.465 1.485   1.54
54) 2-Nitroanili 0.268 0.270 0.275 0.265 0.252 0.236 0.248 0.234 0.256   6.20
55) Dimethylphth 1.362 1.345 1.354 1.337 1.300 1.286 1.319 1.290 1.324   2.24
56) Acenaphthyle 1.707 1.651 1.689 1.689 1.651 1.630 1.648 1.571 1.654   2.58
57) 2,6-Dinitrot 0.301 0.308 0.307 0.287 0.275 0.262 0.236 0.248 0.278   9.87
58) 3-Nitroanili 0.355 0.358 0.359 0.334 0.315 0.311 0.283 0.262 0.322  11.27
59) Acenaphthene 1.137 1.123 1.145 1.127 1.131 1.129 1.112 1.096 1.125   1.34
60) 2,4-Dinitrop 0.163 0.187 0.179 0.143 0.105 0.094 0.062       0.133  35.44
         ----- Quadratic regression -----               Coefficient =  0.9992
              Response Ratio = -0.00941 + 0.13575 *A + 0.01103 *A^2

61) 4-Nitropheno 0.139 0.143 0.145 0.134 0.120 0.118 0.109       0.130  10.78
62) Dibenzofuran 1.641 1.610 1.633 1.637 1.600 1.634 1.630 1.572 1.619   1.46
63) 2,4-Dinitrot 0.375 0.369 0.377 0.373 0.359 0.324 0.331 0.306 0.352   7.87
64) 2,3,4,6-Tetr 0.321 0.325 0.326 0.311 0.294 0.285 0.246 0.251 0.295  10.91
65) Diethylphtha 1.307 1.291 1.323 1.302 1.268 1.250 1.244 1.198 1.273   3.24
66) Fluorene     1.338 1.310 1.325 1.318 1.312 1.290 1.295 1.225 1.302   2.65
67) 4-Chlorophen 0.580 0.559 0.574 0.588 0.604 0.588 0.596 0.629 0.590   3.54
68) 4-Nitroanili 0.306 0.310 0.315 0.298 0.283 0.285 0.274 0.273 0.293   5.58

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro- 0.119 0.131 0.129 0.108 0.086 0.075 0.059       0.101  27.93
         ----- Quadratic regression -----               Coefficient =  0.9993
              Response Ratio = -0.00302 + 0.10458 *A + 0.01184 *A^2

71) n-Nitrosodip 0.667 0.666 0.670 0.659 0.630 0.631 0.602 0.596 0.640   4.66
72) Pentachloron 0.039 0.039 0.039 0.039 0.034 0.033 0.032 0.031 0.036# 10.11
73) 1,2-Diphenyl 0.647 0.627 0.646 0.662 0.647 0.662 0.639 0.677 0.651   2.37
74) 2,4,6-Tribro 0.111 0.115 0.115 0.109 0.097 0.096 0.087 0.082 0.102  12.55
75) 4-Bromopheny 0.228 0.237 0.235 0.221 0.204 0.196 0.189 0.199 0.214   8.79
76) Hexachlorobe 0.240 0.244 0.244 0.236 0.231 0.231 0.217 0.247 0.236   4.13
77) Pentachlorop 0.164 0.175 0.173 0.155 0.136 0.120 0.114       0.148  16.88
         ----- Quadratic regression -----               Coefficient =  0.9996
              Response Ratio = -0.00553 + 0.15251 *A + 0.00501 *A^2

78) Phenanthrene 1.043 1.042 1.053 1.039 1.004 1.027 1.038 1.046 1.037   1.46
79) Anthracene   1.074 1.071 1.086 1.066 1.037 1.049 1.004 1.024 1.051   2.69
80) Carbazole    1.066 1.081 1.095 1.049 0.994 0.975 0.958 0.948 1.021   5.75
81) Di-n-butylph 1.398 1.419 1.427 1.344 1.235 1.197 1.122 1.105 1.281  10.37
82) Fluoranthene 1.239 1.264 1.278 1.206 1.130 1.134 1.088 1.053 1.174   7.18
83) Octadecane   0.421 0.415 0.418 0.414 0.386 0.388 0.365 0.396 0.400   4.93

84) I   Chrysene-d12          ----------------ISTD---------------------
85) Benzidine    0.785 0.880 0.824 0.682 0.684 0.608             0.744  13.77
86) Pyrene       1.367 1.243 1.330 1.428 1.424 1.408 1.361 1.393 1.369   4.46
87) Terphenyl-d1 1.012 0.966 1.009 1.026 0.993 0.985 0.998 0.985 0.997   1.87
88) Butylbenzylp 0.676 0.682 0.698 0.652 0.598 0.571 0.543 0.519 0.617  11.12
89) Benzo[a]anth 1.294 1.340 1.355 1.254 1.190 1.171 1.198 1.261 1.258   5.48
90) 3,3'-Dichlor 0.479 0.499 0.503 0.451 0.419 0.390 0.370 0.343 0.432  14.10
91) Chrysene     1.136 1.147 1.151 1.125 1.098 1.108 1.137 1.096 1.125   1.91
92) bis(2-Ethylh 0.896 0.906 0.925 0.879 0.817 0.776 0.695 0.651 0.818  12.55
```

Initial Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICC3794
Lab FileID: 5P80182.D

```
 93) I   Perylene-d12          ----------------ISTD--------------------
 94) Di-n-octylph 1.515 1.668 1.636 1.349 1.267 1.237 1.143       1.402  14.65
 95) Benzo[b]fluo 1.301 1.296 1.294 1.245 1.159 1.159 1.122 1.120 1.212   6.61
 96) Benzo[k]fluo 1.070 1.003 1.064 1.077 1.063 1.061 1.087 1.052 1.060   2.38
 97) Benzo[a]pyre 1.180 1.200 1.208 1.153 1.077 1.050 1.015 0.990 1.109   7.81
 98) Indeno[1,2,3 1.069 1.115 1.114 0.982 0.997 0.945 0.919 0.834 0.997   9.93
 99) Dibenz(a,h)a 1.013 1.080 1.094 0.963 0.927 0.888 0.867 0.852 0.960   9.77
100) Dibenz[a,h]a 1.126 1.129 1.161 1.040 1.076 0.990 1.027 0.910 1.057   7.88
101) 7,12-Dimethy 0.522 0.526 0.529 0.488 0.464 0.464 0.484 0.461 0.492   5.92
102) Benzo[g,h,i] 1.193 1.220 1.241 1.130 1.161 1.101 1.085 1.067 1.150   5.60

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 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M5P3794LVI.M        Thu Dec 09 17:39:33 2021   RPT1
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8.6.20

8

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80185.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80185.D Vial: 10
Acq On : 9 Dec 2021 4:47 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	-0.03	4.64
2	t	1,4-Dioxane	0.562	0.457	18.7	79	-0.05	2.20
6	t	Indene	2.162	1.832	15.3	87	-0.03	4.84
7	t	Cumene	2.982	2.689	9.8	88	-0.03	4.04
11	t	bis(2-Chloroethyl)ether	1.220	1.162	4.8	96	-0.03	4.44
13	t	Decane	1.102	0.971	11.9	95	-0.02	4.52
14	t	1,3-Dichlorobenzene	1.536	1.393	9.3	92	-0.02	4.60
15	t	1,4-Dichlorobenzene	1.479	1.331	10.0	91	-0.02	4.66
16	t	Benzyl alcohol	0.849	0.762	10.2	88	-0.02	4.75
17	t	1,2-Dichlorobenzene	1.405	1.267	9.8	91	-0.03	4.77
18	t	Acetophenone	1.662	1.514	8.9	97	-0.03	4.96
20	t	2,2'-oxybis(1-Chloropropa	1.446	1.227	15.1	92	-0.03	4.85
23	t	Hexachloroethane	0.496	0.450	9.3	94	-0.03	5.05
24	I	Naphthalene-d8	1.000	1.000	0.0	102	-0.03	5.74
26	t	Nitrobenzene	0.309	0.280	9.4	95	-0.03	5.10
27	t	Quinoline	0.708	0.632	10.7	88	-0.04	6.09
28	t	Isophorone	0.601	0.542	9.8	90	-0.03	5.30
32	t	bis(2-Chloroethoxy)methan	0.371	0.343	7.5	95	-0.03	5.50
35		1,3,5-Trichlorobenzene	0.320	0.292	8.8	92	-0.03	5.38
36	t	1,2,4-Trichlorobenzene	0.313	0.284	9.3	93	-0.03	5.68
37		1,2,3-Trichlorobenzene	0.287	0.262	8.7	93	-0.03	5.90
38	t	Naphthalene	0.992	0.903	9.0	93	-0.03	5.76
40	t	2,3-Dichloroaniline	0.350	0.319	8.9	92	-0.04	6.83
42	t	Hexachlorobutadiene	0.169	0.154	8.9	94	-0.03	5.88
44	t	2-Methylnaphthalene	0.639	0.584	8.6	92	-0.03	6.49
45	t	1-Methylnaphthalene	0.606	0.540	10.9	91	-0.04	6.61
46	I	Acenaphthene-d10	1.000	1.000	0.0	105	-0.04	7.81
47	t	Hexachlorocyclopentadiene	0.317	0.367	-15.8	108	-0.04	6.68
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.463	12.1	92	-0.04	6.69
52	t	2-Chloronaphthalene	1.094	0.968	11.5	94	-0.04	7.08
53	t	Biphenyl	1.485	1.345	9.4	94	-0.03	7.07
55	t	Dimethylphthalate	1.324	1.195	9.7	92	-0.04	7.48
57	t	2,6-Dinitrotoluene	0.278	0.257	7.6	90	-0.04	7.55
59	t	Acenaphthene	1.125	1.000	11.1	92	-0.04	7.86
62	t	Dibenzofuran	1.619	1.451	10.4	93	-0.04	8.10
63	t	2,4-Dinitrotoluene	0.352	0.324	8.0	91	-0.04	8.10
65	t	Diethylphthalate	1.273	1.177	7.5	94	-0.04	8.49
66	t	Fluorene	1.302	1.172	10.0	92	-0.04	8.59
67	t	4-Chlorophenyl-phenylethe	0.590	0.504	14.6	91	-0.04	8.62

8.6.21
8

Initial Calibration Verification

Job Number: JD36624 **Sample:** E5P3794-ICV3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80185.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

69	I	Phenanthrene-d10	1.000	1.000	0.0	105	-0.04	10.00
72	t	Pentachloronitrobenzene	0.036	0.036#	0.0	98	-0.04	9.73
73	t	1,2-Diphenylhydrazine	0.651	0.607	6.8	99	-0.04	8.85
75	t	4-Bromophenyl-phenylether	0.214	0.198	7.5	91	-0.04	9.35
76	t	Hexachlorobenzene	0.236	0.214	9.3	94	-0.04	9.40
78	t	Phenanthrene	1.037	0.923	11.0	93	-0.04	10.04
79	t	Anthracene	1.051	0.941	10.5	92	-0.04	10.11
80	t	Carbazole	1.021	0.929	9.0	92	-0.04	10.39
81	t	Di-n-butylphthalate	1.281	1.214	5.2	91	-0.04	11.04
82	t	Fluoranthene	1.174	1.122	4.4	95	-0.04	11.90
83	t	Octadecane	0.400	0.372	7.0	93	-0.04	9.97
84	I	Chrysene-d12	1.000	1.000	0.0	107	-0.04	14.19
86	t	Pyrene	1.369	1.235	9.8	97	-0.04	12.25
88	t	Butylbenzylphthalate	0.617	0.592	4.1	94	-0.04	13.42
89	t	Benzo[a]anthracene	1.258	1.123	10.7	93	-0.04	14.18
91	t	Chrysene	1.125	1.004	10.8	95	-0.04	14.23
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.779	4.8	93	-0.04	14.40
93	I	Perylene-d12	1.000	1.000	0.0	108	-0.04	16.30
94	t	Di-n-octylphthalate	1.402	1.262	10.0	90	-0.04	15.39
95	t	Benzo[b]fluoranthene	1.212	1.173	3.2	98	-0.04	15.78
96	t	Benzo[k]fluoranthene	1.060	0.957	9.7	97	-0.04	15.83
97	t	Benzo[a]pyrene	1.109	1.052	5.1	97	-0.04	16.22
98	t	Indeno[1,2,3-cd]pyrene	0.997	0.902	9.5	91	-0.05	17.84
99	t	Dibenz(a,h)acridine	0.960	0.865	9.9	93	-0.05	17.50
100	t	Dibenz[a,h]anthracene	1.057	0.968	8.4	93	-0.05	17.90
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.441	10.4	92	-0.04	15.79
102	t	Benzo[g,h,i]perylene	1.150	1.017	11.6	92	-0.05	18.28

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:13 2021 RPT1

8.6.21

8

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80186.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80186.D Vial: 11
Acq On : 9 Dec 2021 5:13 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	-0.03	4.64
9	t	Phenol	1.756	1.433	18.4	86	-0.02	4.37
12	t	2-Chlorophenol	1.394	1.249	10.4	95	-0.02	4.48
19	t	2-Methylphenol	1.129	1.043	7.6	99	-0.02	4.83
21	t	3&4-Methylphenol	1.162	1.081	7.0	103	-0.02	4.96
24	I	Naphthalene-d8	1.000	1.000	0.0	106	-0.03	5.74
29	t	2-Nitrophenol	0.184	0.175	4.9	96	-0.03	5.38
30	t	2,4-Dimethylphenol	0.316	0.296	6.3	100	-0.02	5.41
31	t	Benzoic acid	0.212	0.183	13.7	86	-0.01	5.50
33	t	2,4-Dichlorophenol	0.289	0.259	10.4	92	-0.02	5.60
34	t	2,6-Dichlorophenol	0.273	0.257	5.9	98	-0.03	5.82
41	t	Hydroquinone	0.290	0.315	-8.6	106	-0.02	6.15
43	t	4-Chloro-3-methylphenol	0.272	0.258	5.1	97	-0.03	6.32
46	I	Acenaphthene-d10	1.000	1.000	0.0	114	-0.04	7.81
49	t	2,4,6-Trichlorophenol	0.343	0.319	7.0	101	-0.04	6.83
50	t	2,4,5-Trichlorophenol	0.364	0.331	9.1	99	-0.03	6.87
		----------	True	Calc.	% Drift		----------	
60	t	2,4-Dinitrophenol	20.000	18.164	9.2	99	-0.03	7.92
		----------	AvgRF	CCRF	% Dev		----------	
61	t	4-Nitrophenol	0.130	0.122	6.2	100	-0.03	8.02
64		2,3,4,6-Tetrachlorophenol	0.295	0.271	8.1	96	-0.04	8.28
69	I	Phenanthrene-d10	1.000	1.000	0.0	119	-0.04	10.00
		----------	True	Calc.	% Drift		----------	
70	t	4,6-Dinitro-2-methylpheno	10.000	8.933	10.7	103	-0.04	8.69
		----------	True	Calc.	% Drift		----------	
77	t	Pentachlorophenol	20.000	16.597	17.0	96	-0.04	9.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:15 2021 RPT1

8.6.22

8

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80187.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80187.D Vial: 12
Acq On : 9 Dec 2021 5:40 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	-0.03	4.64
3	t	Pyridine	1.375	1.229	10.6	85	-0.05	2.51
4	t	N-Nitrosodimethylamine	0.819	0.755	7.8	87	-0.04	2.48
10		Aniline	1.964	1.892	3.7	96	-0.02	4.40
22	t	n-Nitroso-di-n-propylamin	0.789	0.845	-7.1	115	-0.03	4.96
24	I	Naphthalene-d8	1.000	1.000	0.0	105	-0.03	5.74
39	t	4-Chloroaniline	0.414	0.409	1.2	103	-0.03	5.81
46	I	Acenaphthene-d10	1.000	1.000	0.0	100	-0.04	7.81
54	t	2-Nitroaniline	0.256	0.295	-15.2	110	-0.03	7.22
58	t	3-Nitroaniline	0.322	0.368	-14.3	103	-0.03	7.77
68	t	4-Nitroaniline	0.293	0.347	-18.4	113	-0.04	8.64
69	I	Phenanthrene-d10	1.000	1.000	0.0	112	-0.05	9.99
71	t	n-Nitrosodiphenylamine	0.640	0.618	3.4	104	-0.04	8.80
84	I	Chrysene-d12	1.000	1.000	0.0	105	-0.05	14.18
85	t	Benzidine	0.744	0.658	11.6	88	-0.04	12.17
90	t	3,3'-Dichlorobenzidine	0.432	0.432	0.0	95	-0.04	14.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:17 2021 RPT1

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3794-ICV3794
Lab FileID: 5P80188.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3794\5p80188.D Vial: 13
Acq On : 9 Dec 2021 6:07 am Operator: chriss2
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3794,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	131	-0.03	4.64
5	S	2-Fluorophenol	1.295	1.365	-5.4	129	-0.02	3.65
8	S	Phenol-d5	1.662	1.608	3.2	120	-0.02	4.36
24	I	Naphthalene-d8	1.000	1.000	0.0	134	-0.03	5.74
25	S	Nitrobenzene-d5	0.301	0.318	-5.6	143	-0.03	5.08
46	I	Acenaphthene-d10	1.000	1.000	0.0	139	-0.04	7.81
51	S	2-Fluorobiphenyl	1.312	1.309	0.2	138	-0.04	6.94
69	I	Phenanthrene-d10	1.000	1.000	0.0	154	-0.05	9.99
74	S	2,4,6-Tribromophenol	0.102	0.102	0.0	142	-0.04	8.95
84	I	Chrysene-d12	1.000	1.000	0.0	150	-0.04	14.19
87	S	Terphenyl-d14	0.997	1.017	-2.0	151	-0.04	12.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:39:19 2021 RPT1

8.6.24
8

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: E5P3795-ICV3794
Lab FileID: 5P80192.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P3795\5p80192.D Vial: 2
Acq On : 9 Dec 2021 12:58 pm Operator: kristis
Sample : icv3794-10 Inst : MS5P
Misc : op35621,e5p3795,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 09 11:12:42 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
46 I	Acenaphthene-d10	1.000	1.000	0.0	110	-0.04	7.81
56 t	Acenaphthylene	1.654	1.509	8.8	97	-0.04	7.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Thu Dec 09 17:53:36 2021 RPT1

8.6.25

8

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E5P3810-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80473.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...021\e5p3810\5p80473.d Vial: 2
Acq On : 17 Dec 2021 10:00 pm Operator: chriss2
Sample : cc3794-5 Inst : MS5P
Misc : op35621,e5p3810,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 16 06:19:54 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	82	-0.01	4.59
2	t	1,4-Dioxane	0.562	0.495	11.9	74	-0.06	2.13
3	t	Pyridine	1.375	1.301	5.4	71	-0.04	2.46
4	t	N-Nitrosodimethylamine	0.819	0.734	10.4	70	-0.05	2.42
5	S	2-Fluorophenol	1.295	1.316	-1.6	78	-0.02	3.59
6	t	Indene	2.162	2.173	-0.5	81	-0.02	4.78
7	t	Cumene	2.982	3.006	-0.8	81	-0.02	3.99
8	S	Phenol-d5	1.662	1.673	-0.7	79	-0.02	4.32
9	t	Phenol	1.756	1.732	1.4	78	-0.02	4.33
10		Aniline	1.964	1.930	1.7	78	-0.01	4.34
11	t	bis(2-Chloroethyl)ether	1.220	1.170	4.1	77	-0.02	4.39
12	t	2-Chlorophenol	1.394	1.433	-2.8	81	-0.01	4.43
13	t	Decane	1.102	0.982	10.9	73	-0.02	4.46
14	t	1,3-Dichlorobenzene	1.536	1.562	-1.7	81	-0.01	4.54
15	t	1,4-Dichlorobenzene	1.479	1.519	-2.7	83	-0.01	4.60
16	t	Benzyl alcohol	0.849	0.869	-2.4	81	-0.01	4.69
17	t	1,2-Dichlorobenzene	1.405	1.440	-2.5	81	-0.02	4.71
18	t	Acetophenone	1.662	1.734	-4.3	85	-0.01	4.90
19	t	2-Methylphenol	1.129	1.133	-0.4	78	-0.01	4.78
20	t	2,2'-oxybis(1-Chloropropa	1.446	1.252	13.4	71	-0.02	4.80
21	t	3&4-Methylphenol	1.162	1.158	0.3	78	-0.02	4.90
22	t	n-Nitroso-di-n-propylamin	0.789	0.778	1.4	81	-0.02	4.90
23	t	Hexachloroethane	0.496	0.491	1.0	83	-0.01	4.98
24	I	Naphthalene-d8	1.000	1.000	0.0	82	-0.01	5.67
25	S	Nitrobenzene-d5	0.301	0.307	-2.0	83	-0.01	5.03
26	t	Nitrobenzene	0.309	0.310	-0.3	82	-0.01	5.04
27	t	Quinoline	0.708	0.765	-8.1	87	-0.02	6.03
28	t	Isophorone	0.601	0.600	0.2	80	-0.02	5.24
29	t	2-Nitrophenol	0.184	0.199	-8.2	87	-0.01	5.31
30	t	2,4-Dimethylphenol	0.316	0.333	-5.4	84	-0.01	5.35
31	t	Benzoic acid	0.212	0.216	-1.9	89	-0.03	5.43
32	t	bis(2-Chloroethoxy)methan	0.371	0.358	3.5	78	-0.01	5.44
33	t	2,4-Dichlorophenol	0.289	0.311	-7.6	85	-0.01	5.53
34	t	2,6-Dichlorophenol	0.273	0.287	-5.1	85	-0.02	5.75
35		1,3,5-Trichlorobenzene	0.320	0.323	-0.9	82	-0.01	5.32
36	t	1,2,4-Trichlorobenzene	0.313	0.317	-1.3	81	-0.02	5.61
37		1,2,3-Trichlorobenzene	0.287	0.292	-1.7	83	-0.02	5.83
38	t	Naphthalene	0.992	1.025	-3.3	84	-0.01	5.69
39	t	4-Chloroaniline	0.414	0.428	-3.4	83	-0.02	5.74
40	t	2,3-Dichloroaniline	0.350	0.374	-6.9	85	-0.02	6.75
41	t	Hydroquinone	0.290	0.321	-10.7	84	-0.01	6.09

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E5P3810-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80473.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	t	Hexachlorobutadiene	0.169	0.172	-1.8	83	-0.02	5.81
43	t	4-Chloro-3-methylphenol	0.272	0.300	-10.3	86	-0.01	6.25
44	t	2-Methylnaphthalene	0.639	0.659	-3.1	83	-0.01	6.42
45	t	1-Methylnaphthalene	0.606	0.624	-3.0	84	-0.02	6.53
46	I	Acenaphthene-d10	1.000	1.000	0.0	88	-0.02	7.73
47	t	Hexachlorocyclopentadiene	0.317	0.310	2.2	83	-0.02	6.60
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.494	6.3	82	-0.01	6.61
49	t	2,4,6-Trichlorophenol	0.343	0.352	-2.6	88	-0.01	6.76
50	t	2,4,5-Trichlorophenol	0.364	0.373	-2.5	87	-0.02	6.79
51	S	2-Fluorobiphenyl	1.312	1.276	2.7	85	-0.02	6.86
52	t	2-Chloronaphthalene	1.094	1.073	1.9	87	-0.02	7.00
53	t	Biphenyl	1.485	1.474	0.7	87	-0.02	6.99
54	t	2-Nitroaniline	0.256	0.278	-8.6	93	-0.02	7.14
55	t	Dimethylphthalate	1.324	1.380	-4.2	91	-0.02	7.40
56	t	Acenaphthylene	1.654	1.689	-2.1	88	-0.02	7.54
57	t	2,6-Dinitrotoluene	0.278	0.309	-11.2	95	-0.02	7.47
58	t	3-Nitroaniline	0.322	0.367	-14.0	97	-0.02	7.69
59	t	Acenaphthene	1.125	1.136	-1.0	89	-0.02	7.77
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	10.000	12.807	-28.1#	117	-0.02	7.84
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.130	0.175	-34.6#	115	-0.02	7.95
62	t	Dibenzofuran	1.619	1.667	-3.0	90	-0.02	8.02
63	t	2,4-Dinitrotoluene	0.352	0.414	-17.6	98	-0.02	8.02
64		2,3,4,6-Tetrachlorophenol	0.295	0.322	-9.2	92	-0.01	8.20
65	t	Diethylphthalate	1.273	1.405	-10.4	95	-0.02	8.41
66	t	Fluorene	1.302	1.388	-6.6	93	-0.02	8.51
67	t	4-Chlorophenyl-phenylethe	0.590	0.611	-3.6	92	-0.02	8.54
68	t	4-Nitroaniline	0.293	0.352	-20.1#	104	-0.02	8.56
69	I	Phenanthrene-d10	1.000	1.000	0.0	96	-0.02	9.91
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	5.000	5.743	-14.9	111	-0.02	8.60
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.640	0.642	-0.3	93	-0.02	8.72
72	t	Pentachloronitrobenzene	0.036	0.039#	-8.3	94	-0.02	9.64
73	t	1,2-Diphenylhydrazine	0.651	0.604	7.2	87	-0.02	8.77
74	S	2,4,6-Tribromophenol	0.102	0.100	2.0	88	-0.02	8.86
75	t	4-Bromophenyl-phenylether	0.214	0.209	2.3	90	-0.02	9.26
76	t	Hexachlorobenzene	0.236	0.222	5.9	90	-0.02	9.30
		----------	True	Calc.	% Drift	----------		
77	t	Pentachlorophenol	10.000	9.869	1.3	94	-0.02	9.63
		----------	AvgRF	CCRF	% Dev	----------		
78	t	Phenanthrene	1.037	1.032	0.5	95	-0.02	9.95
79	t	Anthracene	1.051	1.074	-2.2	96	-0.02	10.02
80	t	Carbazole	1.021	1.104	-8.1	101	-0.02	10.30
81	t	Di-n-butylphthalate	1.281	1.429	-11.6	102	-0.02	10.95
82	t	Fluoranthene	1.174	1.305	-11.2	104	-0.02	11.80
83	t	Octadecane	0.400	0.354	11.5	82	-0.02	9.88
84	I	Chrysene-d12	1.000	1.000	0.0	107	-0.02	14.09
85	t	Benzidine	0.744	0.752	-1.1	118	-0.02	12.08
86	t	Pyrene	1.369	1.387	-1.3	104	-0.02	12.15

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E5P3810-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80473.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

87	S	Terphenyl-d14	0.997	0.987	1.0	103	-0.02	12.48
88	t	Butylbenzylphthalate	0.617	0.704	-14.1	116	-0.02	13.33
89	t	Benzo[a]anthracene	1.258	1.280	-1.7	110	-0.02	14.08
90	t	3,3'-Dichlorobenzidine	0.432	0.458	-6.0	109	-0.02	14.10
91	t	Chrysene	1.125	1.121	0.4	107	-0.02	14.13
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.924	-13.0	113	-0.02	14.30
93	I	Perylene-d12	1.000	1.000	0.0	97	-0.02	16.20
94	t	Di-n-octylphthalate	1.402	1.589	-13.3	115	-0.02	15.29
95	t	Benzo[b]fluoranthene	1.212	1.254	-3.5	98	-0.02	15.68
96	t	Benzo[k]fluoranthene	1.060	1.103	-4.1	100	-0.03	15.72
97	t	Benzo[a]pyrene	1.109	1.168	-5.3	99	-0.02	16.12
98	t	Indeno[1,2,3-cd]pyrene	0.997	1.063	-6.6	105	-0.04	17.69
99	t	Dibenz(a,h)acridine	0.960	0.993	-3.4	100	-0.03	17.36
100	t	Dibenz[a,h]anthracene	1.057	1.105	-4.5	104	-0.03	17.75
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.489	0.6	98	-0.02	15.68
102	t	Benzo[g,h,i]perylene	1.150	1.216	-5.7	105	-0.04	18.11

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p80203.d M5P3794LVI.M Sun Dec 19 23:43:46 2021

8.6.26

8

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E5P3810-CC3785
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80474.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...021\e5p3810\5p80474.d Vial: 3
Acq On : 17 Dec 2021 10:27 pm Operator: chriss2
Sample : cc3785-5 Inst : MS5P
Misc : op35621,e5p3810,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Thu Dec 16 06:19:54 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103		1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	86	-0.01	4.59
104		Benzaldehyde	1.108	1.042	6.0	77	-0.02	4.26
105		Phenanthrene-d10a	1.000	1.000	0.0	91	-0.02	9.90
106		Atrazine	0.088	0.107	-21.6#	104	-0.02	9.57
107		Naphthalene-d8a	1.000	1.000	0.0	81	-0.01	5.67
108	t	Caprolactam	0.119	0.108	9.2	72	-0.01	6.08
111		Phenanthrene-d10b	1.000	1.000	0.0	91	-0.02	9.90
112	s	1-chlorooctadecane	0.247	0.263	-6.5	91	-0.02	11.78
113	s	o-terphenyl	0.549	0.553	-0.7	89	-0.02	10.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p80203.d M5P3794LVI.M Sun Dec 19 23:43:50 2021

8.6.27

8

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E5P3816-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80579.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jeryllr\e5p3816\5p80579.d Vial: 2
Acq On : 23 Dec 2021 7:52 am Operator: chriss2
Sample : cc3794-10 Inst : MS5P
Misc : op35622,e5p3816,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Wed Dec 22 21:44:21 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	0.00	4.44
2	t	1,4-Dioxane	0.562	0.510	9.3	83	-0.12	2.03
3	t	Pyridine	1.375	1.185	13.8	77	-0.04	2.40
4	t	N-Nitrosodimethylamine	0.819	0.626	23.6#	67	-0.07	2.33
5	S	2-Fluorophenol	1.295	1.292	0.2	89	0.00	3.50
6	t	Indene	2.162	1.977	8.6	88	0.00	4.63
7	t	Cumene	2.982	3.051	-2.3	93	-0.03	3.84
8	S	Phenol-d5	1.662	1.454	12.5	80	0.05	4.22
9	t	Phenol	1.756	1.415	19.4	75	0.05	4.23
10		Aniline	1.964	1.267	35.5#	60	0.02	4.22
11	t	bis(2-Chloroethyl)ether	1.220	1.020	16.4	79	0.00	4.26
12	t	2-Chlorophenol	1.394	1.334	4.3	90	0.02	4.30
13	t	Decane	1.102	0.838	24.0#	77	-0.02	4.30
14	t	1,3-Dichlorobenzene	1.536	1.531	0.3	94	0.00	4.39
15	t	1,4-Dichlorobenzene	1.479	1.461	1.2	94	0.00	4.45
16	t	Benzyl alcohol	0.849	0.692	18.5	75	0.03	4.57
17	t	1,2-Dichlorobenzene	1.405	1.492	-6.2	101	0.00	4.57
18	t	Acetophenone	1.662	1.505	9.4	90	0.02	4.76
19	t	2-Methylphenol	1.129	0.945	16.3	79	0.05	4.67
20	t	2,2'-oxybis(1-Chloropropa	1.446	0.938	35.1#	66	0.00	4.65
21	t	3&4-Methylphenol	1.162	0.974	16.2	81	0.05	4.79
22	t	n-Nitroso-di-n-propylamin	0.789	0.638	19.1	81	0.02	4.76
23	t	Hexachloroethane	0.496	0.497	-0.2	98	0.00	4.82
24	I	Naphthalene-d8	1.000	1.000	0.0	86	0.00	5.49
25	S	Nitrobenzene-d5	0.301	0.292	3.0	84	0.01	4.88
26	t	Nitrobenzene	0.309	0.294	4.9	84	0.01	4.90
27	t	Quinoline	0.708	0.701	1.0	82	0.02	5.86
28	t	Isophorone	0.601	0.534	11.1	75	0.02	5.09
29	t	2-Nitrophenol	0.184	0.197	-7.1	87	0.00	5.16
30	t	2,4-Dimethylphenol	0.316	0.332	-5.1	90	0.04	5.21
31	t	Benzoic acid	0.212	0.216	-1.9	82	0.09	5.33
32	t	bis(2-Chloroethoxy)methan	0.371	0.321	13.5	75	0.02	5.28
33	t	2,4-Dichlorophenol	0.289	0.310	-7.3	89	0.03	5.38
34	t	2,6-Dichlorophenol	0.273	0.303	-11.0	93	0.02	5.59
35		1,3,5-Trichlorobenzene	0.320	0.351	-9.7	93	-0.01	5.14
36	t	1,2,4-Trichlorobenzene	0.313	0.327	-4.5	90	0.00	5.43
37		1,2,3-Trichlorobenzene	0.287	0.296	-3.1	89	0.00	5.64
38	t	Naphthalene	0.992	1.005	-1.3	87	0.00	5.51
39	t	4-Chloroaniline	0.414	0.329	20.5#	67	0.03	5.59
40	t	2,3-Dichloroaniline	0.350	0.351	-0.3	85	0.03	6.56
41	t	Hydroquinone	0.290	0.302	-4.1	82	0.09	5.97

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E5P3816-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80579.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

42	t	Hexachlorobutadiene	0.169	0.191	-13.0	98	0.00	5.62
43	t	4-Chloro-3-methylphenol	0.272	0.283	-4.0	85	0.06	6.10
44	t	2-Methylnaphthalene	0.639	0.659	-3.1	87	0.00	6.22
45	t	1-Methylnaphthalene	0.606	0.613	-1.2	87	0.00	6.32
46	I	Acenaphthene-d10	1.000	1.000	0.0	90	0.00	7.49
47	t	Hexachlorocyclopentadiene	0.317	0.373	-17.7	99	-0.03	6.38
48	t	1,2,4,5-Tetrachlorobenzen	0.527	0.511	3.0	87	-0.02	6.40
49	t	2,4,6-Trichlorophenol	0.343	0.368	-7.3	92	0.00	6.56
50	t	2,4,5-Trichlorophenol	0.364	0.381	-4.7	90	-0.02	6.61
51	S	2-Fluorobiphenyl	1.312	1.250	4.7	85	0.00	6.65
52	t	2-Chloronaphthalene	1.094	1.043	4.7	87	-0.01	6.78
53	t	Biphenyl	1.485	1.421	4.3	85	0.00	6.77
54	t	2-Nitroaniline	0.256	0.242	5.5	81	0.04	6.96
55	t	Dimethylphthalate	1.324	1.321	0.2	87	0.03	7.20
56	t	Acenaphthylene	1.654	1.580	4.5	83	0.00	7.31
57	t	2,6-Dinitrotoluene	0.278	0.297	-6.8	89	0.03	7.27
58	t	3-Nitroaniline	0.322	0.274	14.9	69	0.07	7.51
59	t	Acenaphthene	1.125	1.111	1.2	88	0.00	7.54
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	20.000	24.471	-22.4#	112	0.05	7.64
			AvgRF	CCRF	% Dev			
61	t	4-Nitrophenol	0.130	0.164	-26.2#	106	0.00	7.82
62	t	Dibenzofuran	1.619	1.613	0.4	88	0.01	7.78
63	t	2,4-Dinitrotoluene	0.352	0.380	-8.0	91	0.05	7.81
64		2,3,4,6-Tetrachlorophenol	0.295	0.314	-6.4	88	0.04	7.97
65	t	Diethylphthalate	1.273	1.328	-4.3	91	0.04	8.18
66	t	Fluorene	1.302	1.289	1.0	86	0.02	8.26
67	t	4-Chlorophenyl-phenylethe	0.590	0.556	5.8	86	0.02	8.29
68	t	4-Nitroaniline	0.293	0.295	-0.7	86	0.11	8.38
69	I	Phenanthrene-d10	1.000	1.000	0.0	89	0.00	9.65
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylpheno	10.000	11.264	-12.6	101	0.00	8.38
			AvgRF	CCRF	% Dev			
71	t	n-Nitrosodiphenylamine	0.640	0.647	-1.1	86	-0.01	8.48
72	t	Pentachloronitrobenzene	0.036	0.039#	-8.3	88	0.00	9.38
73	t	1,2-Diphenylhydrazine	0.651	0.586	10.0	81	-0.02	8.52
74	S	2,4,6-Tribromophenol	0.102	0.108	-5.9	87	-0.02	8.61
75	t	4-Bromophenyl-phenylether	0.214	0.221	-3.3	86	-0.02	9.00
76	t	Hexachlorobenzene	0.236	0.230	2.5	85	-0.02	9.04
			True	Calc.	% Drift			
77	t	Pentachlorophenol	20.000	20.089	-0.4	89	0.02	9.39
			AvgRF	CCRF	% Dev			
78	t	Phenanthrene	1.037	1.031	0.6	88	0.00	9.68
79	t	Anthracene	1.051	1.047	0.4	87	0.00	9.76
80	t	Carbazole	1.021	1.075	-5.3	90	0.05	10.07
81	t	Di-n-butylphthalate	1.281	1.411	-10.1	90	0.04	10.68
82	t	Fluoranthene	1.174	1.257	-7.1	90	0.06	11.53
83	t	Octadecane	0.400	0.320	20.0#	68	-0.04	9.58
84	I	Chrysene-d12	1.000	1.000	0.0	91	0.00	13.81
85	t	Benzidine	0.744	0.407	45.3#	47#	0.00	11.85
86	t	Pyrene	1.369	1.388	-1.4	92	-0.05	11.87

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E5P3816-CC3794
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80579.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

87	S	Terphenyl-d14	0.997	0.993	0.4	89	-0.04	12.20
88	t	Butylbenzylphthalate	0.617	0.687	-11.3	92	-0.02	13.05
89	t	Benzo[a]anthracene	1.258	1.246	1.0	87	0.00	13.79
90	t	3,3'-Dichlorobenzidine	0.432	0.396	8.3	75	0.03	13.84
91	t	Chrysene	1.125	1.108	1.5	89	0.00	13.85
92	t	bis(2-Ethylhexyl)phthalat	0.818	0.913	-11.6	92	-0.02	13.99
93	I	Perylene-d12	1.000	1.000	0.0	71	0.00	15.91
94	t	Di-n-octylphthalate	1.402	1.860	-32.7#	87	-0.05	14.98
95	t	Benzo[b]fluoranthene	1.212	1.278	-5.4	69	-0.01	15.39
96	t	Benzo[k]fluoranthene	1.060	1.126	-6.2	74	-0.01	15.43
97	t	Benzo[a]pyrene	1.109	1.163	-4.9	70	0.00	15.83
98	t	Indeno[1,2,3-cd]pyrene	0.997	1.155	-15.8	76	-0.10	17.32
99	t	Dibenz(a,h)acridine	0.960	1.028	-7.1	72	-0.07	17.01
100	t	Dibenz[a,h]anthracene	1.057	1.196	-13.2	75	0.00	17.35
101	t	7,12-Dimethylbenz(a)anthr	0.492	0.587	-19.3	79	-0.01	15.39
102	t	Benzo[g,h,i]perylene	1.150	1.304	-13.4	77	-0.14	17.71

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Mon Dec 27 03:19:56 2021

8.6.28

8

Continuing Calibration Summary

Job Number: JD36624 **Sample:** E5P3816-CC3785
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 5P80580.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jeryllr\e5p3816\5p80580.d Vial: 3
Acq On : 23 Dec 2021 8:18 am Operator: chriss2
Sample : cc3785-10 Inst : MS5P
Misc : op35622,e5p3816,250,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Wed Dec 22 21:44:21 2021
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103		1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	102	0.00	4.44
104		Benzaldehyde	1.108	0.927	16.3	84	0.00	4.13
105		Phenanthrene-d10a	1.000	1.000	0.0	85	0.00	9.64
106		Atrazine	0.088	0.107	-21.6#	92	0.03	9.34
107		Naphthalene-d8a	1.000	1.000	0.0	90	0.00	5.48
108	t	Caprolactam	0.119	0.082	31.1#	59	0.08	5.97
111		Phenanthrene-d10b	1.000	1.000	0.0	85	0.00	9.64
112	s	1-chlorooctadecane	0.247	0.217	12.1	69	0.02	11.47
113	s	o-terphenyl	0.549	0.542	1.3	82	0.02	10.29

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p79959a.D M5P3794LVI.M Mon Dec 27 03:20:00 2021

8.6.29

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Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E2M5435	**Method:** SW846 8270E	**Instrument ID:** GCMS2M

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E2M5435-DFTPP	2M120880.D	12/16/21 00:57	n/a	DFTPP Tune
E2M5435-IC5435	2M120881.D	12/16/21 01:10	n/a	Initial cal 0.2
E2M5435-IC5435	2M120882.D	12/16/21 01:43	n/a	Initial cal 0.4
E2M5435-IC5435	2M120883.D	12/16/21 02:08	n/a	Initial cal 1
E2M5435-IC5435	2M120884.D	12/16/21 02:33	n/a	Initial cal 2
E2M5435-IC5435	2M120885.D	12/16/21 02:58	n/a	Initial cal 5
E2M5435-ICC5435	2M120886.D	12/16/21 03:23	n/a	Initial cal 10
E2M5435-IC5435	2M120887.D	12/16/21 03:48	n/a	Initial cal 16
E2M5435-IC5435	2M120888.D	12/16/21 04:13	n/a	Initial cal 20
E2M5435-ICV5435	2M120889.D	12/16/21 04:38	n/a	Initial cal verification 10
E2M5435-ICV5435	2M120890.D	12/16/21 05:03	n/a	Initial cal verification 10
E2M5435-ICV5435	2M120891.D	12/16/21 05:28	n/a	Initial cal verification 10
E2M5435-ICV5435	2M120892.D	12/16/21 05:53	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E2M5436	**Method:** SW846 8270E	**Instrument ID:** GCMS2M

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E2M5436-DFTPP	2M120894.D	12/16/21 06:36	n/a	DFTPP Tune
E2M5436-IC5436	2M120895.D	12/16/21 06:47	n/a	Initial cal 20
E2M5436-IC5436	2M120896.D	12/16/21 07:13	n/a	Initial cal 16
E2M5436-ICC5436	2M120897.D	12/16/21 07:38	n/a	Initial cal 10
E2M5436-IC5436	2M120898.D	12/16/21 08:03	n/a	Initial cal 5
E2M5436-IC5436	2M120899.D	12/16/21 08:28	n/a	Initial cal 2
E2M5436-IC5436	2M120900.D	12/16/21 08:53	n/a	Initial cal 1
E2M5436-IC5436	2M120901.D	12/16/21 09:18	n/a	Initial cal 0.4
E2M5436-IC5436	2M120902.D	12/16/21 09:43	n/a	Initial cal 0.2
E2M5436-ICV5436	2M120903.D	12/16/21 10:08	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E2M5437	**Method:** SW846 8270E	**Instrument ID:** GCMS2M

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E2M5437-DFTPP	2M120906.D	12/18/21 01:56	n/a	DFTPP Tune
E2M5437-ICV5435	2M120907.D	12/18/21 02:08	n/a	Initial cal verification 10
E2M5437-CC5435	2M120908.D	12/18/21 02:36	n/a	Continuing cal 10
E2M5437-CC5436	2M120909.D	12/18/21 03:01	n/a	Continuing cal 10
OP37092-MB1	2M120910.D	12/18/21 03:37	OP37092	Method Blank
OP37092-BS1	2M120911.D	12/18/21 04:02	OP37092	Blank Spike
OP37092-BSD	2M120912.D	12/18/21 04:26	OP37092	Blank Spike Duplicate
ZZZZZZ	2M120913.D	12/18/21 04:51	OP37092	(unrelated sample)
ZZZZZZ	2M120914.D	12/18/21 05:16	OP37092	(unrelated sample)
ZZZZZZ	2M120915.D	12/18/21 05:41	OP37092	(unrelated sample)
ZZZZZZ	2M120916.D	12/18/21 06:05	OP37092	(unrelated sample)
ZZZZZZ	2M120917.D	12/18/21 06:30	OP37092	(unrelated sample)
ZZZZZZ	2M120918.D	12/18/21 06:54	OP37092	(unrelated sample)
ZZZZZZ	2M120919.D	12/18/21 07:19	OP37092	(unrelated sample)
ZZZZZZ	2M120920.D	12/18/21 07:44	OP37092	(unrelated sample)
ZZZZZZ	2M120921.D	12/18/21 08:08	OP37092	(unrelated sample)
ZZZZZZ	2M120922.D	12/18/21 08:33	OP37092	(unrelated sample)
ZZZZZZ	2M120923.D	12/18/21 08:58	OP37092	(unrelated sample)
ZZZZZZ	2M120924.D	12/18/21 09:22	OP37092	(unrelated sample)
ZZZZZZ	2M120925.D	12/18/21 09:47	OP37092	(unrelated sample)
ZZZZZZ	2M120926.D	12/18/21 10:12	OP37092	(unrelated sample)
ZZZZZZ	2M120927.D	12/18/21 10:36	OP37092	(unrelated sample)
ZZZZZZ	2M120928.D	12/18/21 11:01	OP37092	(unrelated sample)
ZZZZZZ	2M120929.D	12/18/21 11:25	OP37092	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E2M5439	**Method:** SW846 8270E	**Instrument ID:** GCMS2M

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E2M5439-DFTPP	2M120961.D	12/22/21 03:04	n/a	DFTPP Tune
E2M5439-CC5435	2M120962.D	12/22/21 03:17	n/a	Continuing cal 5
E2M5439-CC5436	2M120964.D	12/22/21 04:08	n/a	Continuing cal 5
OP37113-MB1	2M120966.D	12/22/21 05:04	OP37113	Method Blank
OP37113-BS1	2M120967.D	12/22/21 05:29	OP37113	Blank Spike
OP37113-BSD	2M120968.D	12/22/21 05:54	OP37113	Blank Spike Duplicate
JD36624-8	2M120969.D	12/22/21 06:18	OP37113	HOFF MW-13
JD36624-9	2M120970.D	12/22/21 06:43	OP37113	HOFF MW-C
JD36624-10	2M120971.D	12/22/21 07:08	OP37113	HOFF MW-D
JD36624-11	2M120972.D	12/22/21 07:32	OP37113	HOFF IW-1A
JD36624-12	2M120973.D	12/22/21 07:57	OP37113	HOFF IW-1B
ZZZZZZ	2M120974.D	12/22/21 08:22	OP37113	(unrelated sample)
ZZZZZZ	2M120975.D	12/22/21 08:46	OP37113	(unrelated sample)
ZZZZZZ	2M120976.D	12/22/21 09:11	OP37113	(unrelated sample)
ZZZZZZ	2M120977.D	12/22/21 09:36	OP37113	(unrelated sample)
ZZZZZZ	2M120978.D	12/22/21 10:00	OP37113	(unrelated sample)
ZZZZZZ	2M120979.D	12/22/21 10:25	OP37113	(unrelated sample)
ZZZZZZ	2M120980.D	12/22/21 10:50	OP37113	(unrelated sample)
ZZZZZZ	2M120981.D	12/22/21 11:14	OP37113	(unrelated sample)
ZZZZZZ	2M120982.D	12/22/21 11:39	OP37113	(unrelated sample)
ZZZZZZ	2M120983.D	12/22/21 12:03	OP37113	(unrelated sample)
ZZZZZZ	2M120984.D	12/22/21 12:28	OP37113	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2551 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2551-DFTPP	4P48502.D	10/20/21 22:19	n/a	DFTPP Tune
E4P2551-IC2551	4P48504.D	10/20/21 22:59	n/a	Initial cal 1
E4P2551-ICC2551	4P48505.D	10/20/21 23:23	n/a	Initial cal 0.2
E4P2551-IC2551	4P48506.D	10/20/21 23:46	n/a	Initial cal 0.02
E4P2551-IC2551	4P48507.D	10/21/21 00:10	n/a	Initial cal 0.5
E4P2551-IC2551	4P48508.D	10/21/21 00:33	n/a	Initial cal 0.1
E4P2551-IC2551	4P48509.D	10/21/21 00:57	n/a	Initial cal 0.004
E4P2551-IC2551	4P48511.D	10/21/21 01:44	n/a	Initial cal 0.04
E4P2551-IC2551	4P48513.D	10/21/21 02:16	n/a	Initial cal 0.002
E4P2551-IC2551	4P48514.D	10/21/21 02:39	n/a	Initial cal 0.01
E4P2551-ICV2551	4P48512.D	10/21/21 03:15	n/a	Initial cal verification 0.2
OP35848A-BSD12	4P48515.D	10/21/21 03:45	OP35848A	Blank Spike Duplicate

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2629 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2629-DFTPP	4P50206.D	12/18/21 01:53	n/a	DFTPP Tune
E4P2629-CC2551	4P50207.D	12/18/21 02:05	n/a	Continuing cal 0.2
OP37115A-MB1	4P50209.D	12/18/21 03:03	OP37115A	Method Blank
ZZZZZZ	4P50210.D	12/18/21 03:27	OP37115A	(unrelated sample)
ZZZZZZ	4P50211.D	12/18/21 03:50	OP37115A	(unrelated sample)
OP37115A-BS12	4P50212.D	12/18/21 04:14	OP37115A	Blank Spike
OP37115A-BSD12	4P50213A.D	12/18/21 04:45	OP37115A	Blank Spike Duplicate
ZZZZZZ	4P50214.D	12/18/21 05:08	OP37115A	(unrelated sample)
ZZZZZZ	4P50215.D	12/18/21 05:32	OP37115A	(unrelated sample)
ZZZZZZ	4P50216.D	12/18/21 05:56	OP37115A	(unrelated sample)
ZZZZZZ	4P50217.D	12/18/21 06:19	OP37115A	(unrelated sample)
ZZZZZZ	4P50218.D	12/18/21 06:43	OP37115A	(unrelated sample)
ZZZZZZ	4P50219.D	12/18/21 07:07	OP37115A	(unrelated sample)
ZZZZZZ	4P50220.D	12/18/21 07:30	OP37115A	(unrelated sample)
ZZZZZZ	4P50221.D	12/18/21 07:54	OP37115A	(unrelated sample)
ZZZZZZ	4P50222.D	12/18/21 08:17	OP37115A	(unrelated sample)
JD36624-13	4P50223.D	12/18/21 08:41	OP37115A	HOFF IW-3A
JD36624-14	4P50224.D	12/18/21 09:04	OP37115A	HOFF IW-3B
JD36624-15	4P50225.D	12/18/21 09:28	OP37115A	HOFF IW-2A
JD36624-16	4P50226.D	12/18/21 09:52	OP37115A	HOFF IW-2B
JD36624-17	4P50227.D	12/18/21 10:15	OP37115A	HOFF IW-B

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2635 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2635-DFTPP	4P50268.D	12/27/21 14:26	n/a	DFTPP Tune
E4P2635-CC2551	4P50269.D	12/27/21 14:54	n/a	Continuing cal 0.1
OP37297A-MB1	4P50270.D	12/27/21 15:43	OP37297A	Method Blank
OP37108A-MB1	4P50271.D	12/27/21 16:18	OP37108A	Method Blank
OP37108A-BS12	4P50272.D	12/27/21 16:42	OP37108A	Blank Spike
OP37297A-BS12	4P50273.D	12/27/21 17:15	OP37297A	Blank Spike
OP37297A-BSD12	4P50274A.D	12/27/21 18:37	OP37297A	Blank Spike Duplicate
OP37108A-BSD12	4P50275.D	12/27/21 19:01	OP37108A	Blank Spike Duplicate
ZZZZZZ	4P50276.D	12/27/21 19:25	OP37297A	(unrelated sample)
ZZZZZZ	4P50277.D	12/27/21 19:48	OP37297A	(unrelated sample)
ZZZZZZ	4P50278.D	12/27/21 20:12	OP37297A	(unrelated sample)
ZZZZZZ	4P50279.D	12/27/21 20:35	OP37297A	(unrelated sample)
ZZZZZZ	4P50280.D	12/27/21 20:59	OP37297A	(unrelated sample)
ZZZZZZ	4P50281.D	12/27/21 21:22	OP37297A	(unrelated sample)
ZZZZZZ	4P50282.D	12/27/21 21:46	OP37297A	(unrelated sample)
ZZZZZZ	4P50283.D	12/27/21 22:10	OP37297A	(unrelated sample)
JD36624-3	4P50284.D	12/27/21 22:33	OP37108A	HOFF MW-4DL
JD36624-6	4P50287.D	12/27/21 23:44	OP37108A	HOFF MW-FA
JD36624-7	4P50288.D	12/28/21 00:08	OP37108A	HOFF MW-FB
ZZZZZZ	4P50289.D	12/28/21 00:32	OP37108A	(unrelated sample)
ZZZZZZ	4P50290.D	12/28/21 00:56	OP37108A	(unrelated sample)
JD36624-2	4P50291.D	12/28/21 01:19	OP37108A	HOFF MW-8
ZZZZZZ	4P50292.D	12/28/21 01:43	OP37108A	(unrelated sample)
ZZZZZZ	4P50293.D	12/28/21 02:07	OP37108A	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2636 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2636-DFTPP	4P50294.D	12/28/21 11:49	n/a	DFTPP Tune
E4P2636-CC2551	4P50296.D	12/28/21 12:24	n/a	Continuing cal 0.2
OP37113A-MB1	4P50298.D	12/28/21 13:32	OP37113A	Method Blank
OP37113A-BS12	4P50299.D	12/28/21 13:56	OP37113A	Blank Spike
OP37113A-BSD12	4P50300.D	12/28/21 14:19	OP37113A	Blank Spike Duplicate
JD36624-13	4P50301.D	12/28/21 14:43	OP37115A	HOFF IW-3A
ZZZZZZ	4P50302A.D	12/28/21 16:37	OP37108A	(unrelated sample)
ZZZZZZ	4P50303.D	12/28/21 17:00	OP37108A	(unrelated sample)
ZZZZZZ	4P50304.D	12/28/21 17:24	OP37108A	(unrelated sample)
ZZZZZZ	4P50305.D	12/28/21 17:48	OP37108A	(unrelated sample)
ZZZZZZ	4P50306.D	12/28/21 18:12	OP37108A	(unrelated sample)
ZZZZZZ	4P50307.D	12/28/21 18:35	OP37108A	(unrelated sample)
ZZZZZZ	4P50308.D	12/28/21 18:59	OP37108A	(unrelated sample)
ZZZZZZ	4P50313.D	12/28/21 20:59	OP37108A	(unrelated sample)
ZZZZZZ	4P50314.D	12/28/21 21:23	OP37108A	(unrelated sample)
ZZZZZZ	4P50315.D	12/28/21 21:47	OP37108A	(unrelated sample)
ZZZZZZ	4P50316.D	12/28/21 22:11	OP37108A	(unrelated sample)
ZZZZZZ	4P50317.D	12/28/21 22:35	OP37113A	(unrelated sample)
ZZZZZZ	4P50318.D	12/28/21 22:59	OP37113A	(unrelated sample)
ZZZZZZ	4P50319.D	12/28/21 23:24	OP37113A	(unrelated sample)
ZZZZZZ	4P50320.D	12/28/21 23:48	OP37113A	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2638 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2638-DFTPP	4P50360.D	12/30/21 08:43	n/a	DFTPP Tune
E4P2638-CC2551	4P50361.D	12/30/21 08:58	n/a	Continuing cal 0.2
ZZZZZZ	4P50363.D	12/30/21 10:12	OP37188A	(unrelated sample)
ZZZZZZ	4P50364.D	12/30/21 10:36	OP37188A	(unrelated sample)
ZZZZZZ	4P50365.D	12/30/21 11:00	OP37188A	(unrelated sample)
ZZZZZZ	4P50366.D	12/30/21 11:24	OP37188A	(unrelated sample)
ZZZZZZ	4P50367.D	12/30/21 11:48	OP37188A	(unrelated sample)
ZZZZZZ	4P50368.D	12/30/21 12:11	OP37188A	(unrelated sample)
ZZZZZZ	4P50369.D	12/30/21 12:35	OP37188A	(unrelated sample)
JD36624-8	4P50370.D	12/30/21 12:59	OP37113A	HOFF MW-13
JD36624-9	4P50371.D	12/30/21 13:22	OP37113A	HOFF MW-C
JD36624-10	4P50372.D	12/30/21 13:47	OP37113A	HOFF MW-D
JD36624-11	4P50373.D	12/30/21 14:11	OP37113A	HOFF IW-1A
JD36624-12	4P50374.D	12/30/21 14:35	OP37113A	HOFF IW-1B
JD36624-5	4P50376.D	12/30/21 15:22	OP37108A	DUP-2021
JD36624-6	4P50377.D	12/30/21 15:46	OP37108A	HOFF MW-FA
JD36624-7	4P50378.D	12/30/21 16:09	OP37108A	HOFF MW-FB
ZZZZZZ	4P50379.D	12/30/21 16:33	OP37113A	(unrelated sample)
ZZZZZZ	4P50380.D	12/30/21 16:57	OP37113A	(unrelated sample)
ZZZZZZ	4P50381.D	12/30/21 17:21	OP37113A	(unrelated sample)
ZZZZZZ	4P50382.D	12/30/21 17:45	OP37113A	(unrelated sample)
ZZZZZZ	4P50383.D	12/30/21 18:09	OP37113A	(unrelated sample)
ZZZZZZ	4P50384.D	12/30/21 18:32	OP37113A	(unrelated sample)
ZZZZZZ	4P50385.D	12/30/21 18:56	OP37113A	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E4P2640 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS4P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4P2640-DFTPP	4P50414.D	01/04/22 13:23	n/a	DFTPP Tune
E4P2640-CC2551	4P50415.D	01/04/22 13:35	n/a	Continuing cal 0.2
OP37409A-MB1	4P50417.D	01/04/22 14:21	OP37409A	Method Blank
OP37227A-MB1	4P50418.D	01/04/22 14:57	OP37227A	Method Blank
OP37227A-BS12	4P50419.D	01/04/22 15:20	OP37227A	Blank Spike
OP37227A-BSD12	4P50420A.D	01/04/22 15:51	OP37227A	Blank Spike Duplicate
OP37409A-BS12	4P50421.D	01/04/22 16:14	OP37409A	Blank Spike
OP37409A-BSD12	4P50422.D	01/04/22 16:38	OP37409A	Blank Spike Duplicate
JD36624-4	4P50435.D	01/04/22 17:01	OP37108A	HOFF MW-4DU
ZZZZZZ	4P50423.D	01/04/22 17:25	OP37409A	(unrelated sample)
ZZZZZZ	4P50424.D	01/04/22 17:49	OP37409A	(unrelated sample)
ZZZZZZ	4P50425.D	01/04/22 18:13	OP37409A	(unrelated sample)
ZZZZZZ	4P50426.D	01/04/22 18:36	OP37409A	(unrelated sample)
ZZZZZZ	4P50427.D	01/04/22 18:59	OP37409A	(unrelated sample)
ZZZZZZ	4P50428.D	01/04/22 19:23	OP37227A	(unrelated sample)
ZZZZZZ	4P50429.D	01/04/22 19:46	OP37227A	(unrelated sample)
ZZZZZZ	4P50430.D	01/04/22 20:09	OP37227A	(unrelated sample)
ZZZZZZ	4P50431.D	01/04/22 20:33	OP37227A	(unrelated sample)
ZZZZZZ	4P50432.D	01/04/22 20:56	OP37227A	(unrelated sample)
ZZZZZZ	4P50433.D	01/04/22 21:19	OP37227A	(unrelated sample)
ZZZZZZ	4P50434.D	01/04/22 21:42	OP37227A	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3785	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3785-DFTPP	5P79956.D	12/01/21 21:49	n/a	DFTPP Tune
E5P3785-IC3785	5P79957.D	12/01/21 22:09	n/a	Initial cal 20
E5P3785-IC3785	5P79958.D	12/01/21 22:36	n/a	Initial cal 16
E5P3785-ICC3785	5P79959.D	12/01/21 23:02	n/a	Initial cal 10
E5P3785-IC3785	5P79960.D	12/01/21 23:30	n/a	Initial cal 5
E5P3785-IC3785	5P79961.D	12/01/21 23:57	n/a	Initial cal 2
E5P3785-IC3785	5P79962.D	12/02/21 00:24	n/a	Initial cal 1
E5P3785-IC3785	5P79963.D	12/02/21 00:51	n/a	Initial cal 0.4
E5P3785-IC3785	5P79964.D	12/02/21 01:17	n/a	Initial cal 0.2
E5P3785-ICV3785	5P79965.D	12/02/21 01:45	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3794	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3794-DFTPP	5P80176.D	12/09/21 00:53	n/a	DFTPP Tune
E5P3794-IC3794	5P80177.D	12/09/21 01:11	n/a	Initial cal 0.2
E5P3794-IC3794	5P80178.D	12/09/21 01:38	n/a	Initial cal 0.4
E5P3794-IC3794	5P80179.D	12/09/21 02:05	n/a	Initial cal 1
E5P3794-IC3794	5P80180.D	12/09/21 02:32	n/a	Initial cal 2
E5P3794-IC3794	5P80181.D	12/09/21 02:59	n/a	Initial cal 5
E5P3794-ICC3794	5P80182.D	12/09/21 03:26	n/a	Initial cal 10
E5P3794-IC3794	5P80183.D	12/09/21 03:53	n/a	Initial cal 16
E5P3794-IC3794	5P80184.D	12/09/21 04:19	n/a	Initial cal 20
E5P3794-ICV3794	5P80185.D	12/09/21 04:47	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80186.D	12/09/21 05:13	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80187.D	12/09/21 05:40	n/a	Initial cal verification 10
E5P3794-ICV3794	5P80188.D	12/09/21 06:07	n/a	Initial cal verification 10

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3795	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3795-DFTPP	5P80191.D	12/09/21 12:44	n/a	DFTPP Tune
E5P3795-ICV3794	5P80192.D	12/09/21 12:58	n/a	Initial cal verification 10
E5P3795-CC3794	5P80193.D	12/09/21 13:25	n/a	Continuing cal 10
E5P3795-CC3785	5P80194.D	12/09/21 13:51	n/a	Continuing cal 10
OP36390-MB1	5P80195.D	12/09/21 14:46	OP36390	Method Blank
OP36390-BS1	5P80196.D	12/09/21 15:13	OP36390	Blank Spike
OP36390-BSD	5P80197.D	12/09/21 15:40	OP36390	Blank Spike Duplicate
ZZZZZZ	5P80198.D	12/09/21 16:07	OP36390	(unrelated sample)
E5P3795-ECC3794	5P80199.D	12/09/21 16:57	n/a	Ending cal 10
E5P3795-ECC3785	5P80200.D	12/09/21 17:36	n/a	Ending cal 10

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3810	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3810-DFTPP	5P80472.D	12/17/21 21:47	n/a	DFTPP Tune
E5P3810-CC3794	5P80473.D	12/17/21 22:00	n/a	Continuing cal 5
E5P3810-CC3785	5P80474.D	12/17/21 22:27	n/a	Continuing cal 5
OP37108-MB1	5P80475.D	12/17/21 22:57	OP37108	Method Blank
OP37108-BS1	5P80476.D	12/17/21 23:24	OP37108	Blank Spike
OP37108-BSD	5P80477.D	12/17/21 23:51	OP37108	Blank Spike Duplicate
ZZZZZZ	5P80479.D	12/18/21 00:45	OP37108	(unrelated sample)
ZZZZZZ	5P80480.D	12/18/21 01:12	OP37108	(unrelated sample)
ZZZZZZ	5P80481.D	12/18/21 01:39	OP37046	(unrelated sample)
ZZZZZZ	5P80482.D	12/18/21 02:05	OP37046B	(unrelated sample)
ZZZZZZ	5P80483.D	12/18/21 02:32	OP37046B	(unrelated sample)
ZZZZZZ	5P80484.D	12/18/21 02:59	OP37108	(unrelated sample)
ZZZZZZ	5P80485.D	12/18/21 03:25	OP37108	(unrelated sample)
ZZZZZZ	5P80486.D	12/18/21 03:52	OP37108	(unrelated sample)
ZZZZZZ	5P80487.D	12/18/21 04:19	OP37108	(unrelated sample)
ZZZZZZ	5P80488.D	12/18/21 04:46	OP37108	(unrelated sample)
ZZZZZZ	5P80489.D	12/18/21 05:13	OP37108	(unrelated sample)
ZZZZZZ	5P80490.D	12/18/21 05:40	OP37108	(unrelated sample)
JD36624-2	5P80491.D	12/18/21 06:07	OP37108	HOFF MW-8
JD36624-3	5P80492.D	12/18/21 06:34	OP37108	HOFF MW-4DL
JD36624-4	5P80493.D	12/18/21 07:01	OP37108	HOFF MW-4DU
JD36624-5	5P80494.D	12/18/21 07:27	OP37108	DUP-2021
JD36624-6	5P80495.D	12/18/21 07:54	OP37108	HOFF MW-FA
JD36624-7	5P80496.D	12/18/21 08:21	OP37108	HOFF MW-FB
ZZZZZZ	5P80497.D	12/18/21 08:48	OP37108	(unrelated sample)
ZZZZZZ	5P80498.D	12/18/21 09:15	OP37108	(unrelated sample)
ZZZZZZ	5P80499.D	12/18/21 09:42	OP37108	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: E5P3816	**Method:** SW846 8270E	**Instrument ID:** GCMS5P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E5P3816-DFTPP	5P80578.D	12/23/21 07:28	n/a	DFTPP Tune
E5P3816-CC3794	5P80579.D	12/23/21 07:52	n/a	Continuing cal 10
E5P3816-CC3785	5P80580.D	12/23/21 08:18	n/a	Continuing cal 10
OP37115-MB1	5P80583.D	12/23/21 09:45	OP37115	Method Blank
OP37115-BS1	5P80584.D	12/23/21 10:12	OP37115	Blank Spike
OP37115-BSD	5P80585.D	12/23/21 10:39	OP37115	Blank Spike Duplicate
OP37297-MB1	5P80586.D	12/23/21 11:06	OP37297	Method Blank
OP37297-BS1	5P80587.D	12/23/21 11:33	OP37297	Blank Spike
OP37297-BSD	5P80588.D	12/23/21 12:00	OP37297	Blank Spike Duplicate
OP37091-MB1	5P80589.D	12/23/21 12:27	OP37091	Method Blank
ZZZZZZ	5P80590.D	12/23/21 12:54	OP37115	(unrelated sample)
ZZZZZZ	5P80591.D	12/23/21 13:20	OP37115	(unrelated sample)
ZZZZZZ	5P80592.D	12/23/21 13:47	OP37297	(unrelated sample)
ZZZZZZ	5P80593.D	12/23/21 14:14	OP37297	(unrelated sample)
ZZZZZZ	5P80594.D	12/23/21 14:40	OP37297	(unrelated sample)
ZZZZZZ	5P80595.D	12/23/21 15:07	OP37297	(unrelated sample)
JD36624-13	5P80596.D	12/23/21 15:34	OP37115	HOFF IW-3A
JD36624-14	5P80597.D	12/23/21 16:00	OP37115	HOFF IW-3B
JD36624-15	5P80598.D	12/23/21 16:27	OP37115	HOFF IW-2A
JD36624-16	5P80599.D	12/23/21 16:54	OP37115	HOFF IW-2B
JD36624-17	5P80600.D	12/23/21 17:21	OP37115	HOFF IW-B
ZZZZZZ	5P80601.D	12/23/21 17:48	OP37115	(unrelated sample)
ZZZZZZ	5P80602.D	12/23/21 18:15	OP37115	(unrelated sample)
ZZZZZZ	5P80603.D	12/23/21 18:42	OP37115	(unrelated sample)
ZZZZZZ	5P80604.D	12/23/21 19:09	OP37115	(unrelated sample)

MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80491.d
Acq On : 18 Dec 2021 6:07 am
Operator : chriss2
Sample : jd36624-2 Inst : MS5P
Misc : op37108,e5p3810,250,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 02:08:43 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

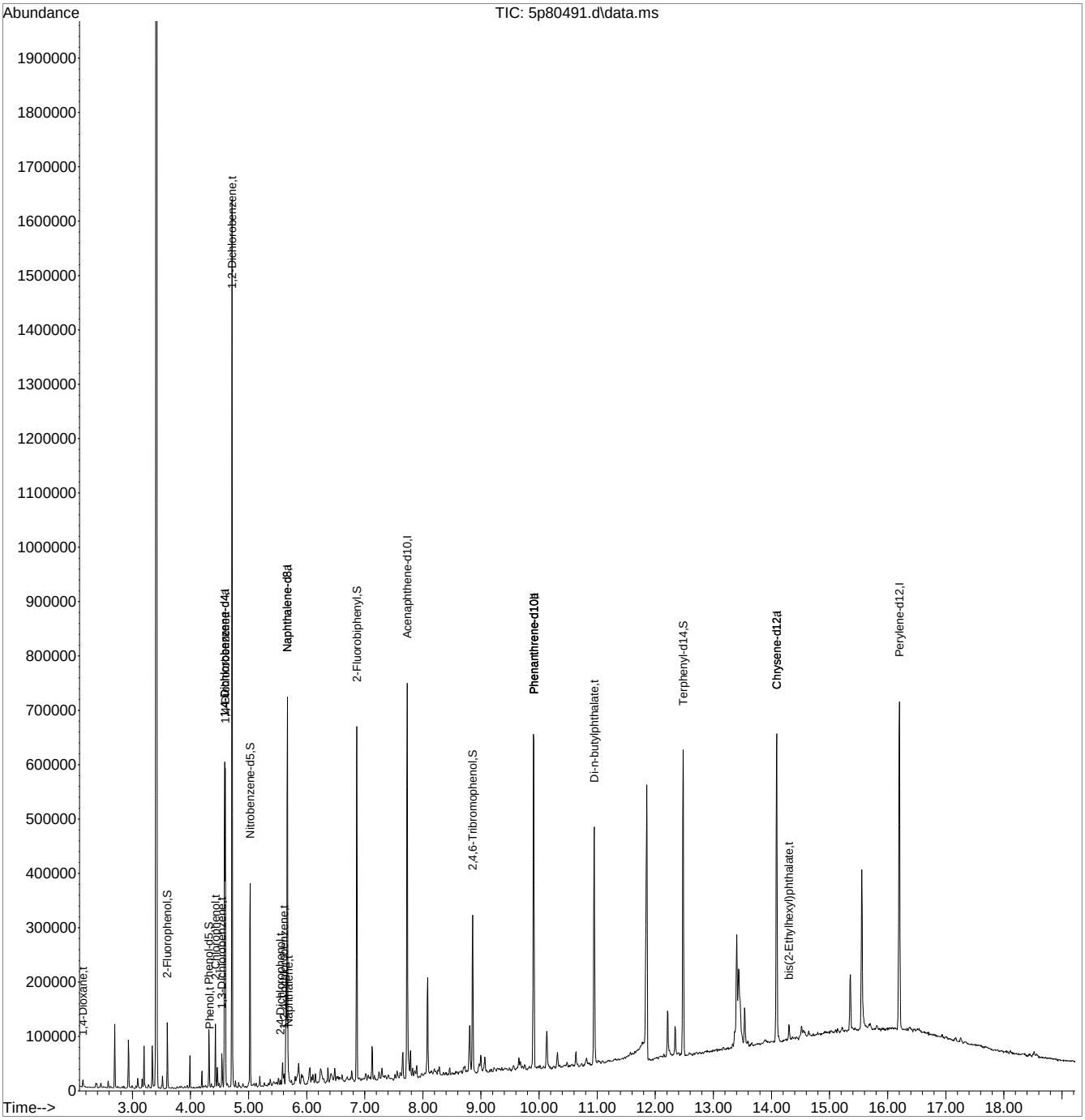
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.588	152	80870	8.00	ppm		0.00
24) Naphthalene-d8	5.667	136	315731	8.00	ppm		0.00
46) Acenaphthene-d10	7.729	164	179060	8.00	ppm		0.00
69) Phenanthrene-d10	9.909	188	298402	8.00	ppm		0.00
84) Chrysene-d12	14.092	240	254268	8.00	ppm		0.00
93) Perylene-d12	16.202	264	281925	8.00	ppm		0.00
103) 1,4-Dichlorobenzene-d4a	4.588	152	80870	8.00	ppm		0.00
105) Phenanthrene-d10a	9.909	188	298402	8.00	ppm		0.00
107) Naphthalene-d8a	5.667	136	315731	8.00	ppm		0.00
109) Chrysene-d12a	14.092	240	254268	8.00	ppm		0.00
111) Phenanthrene-d10b	9.909	188	298402	8.00	ppm		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	3.599	112	28771	2.20	ppm		0.00
Spiked Amount 10.000			Recovery = 22.00%				
8) Phenol-d5	4.315	99	30567	1.82	ppm		0.00
Spiked Amount 10.000			Recovery = 18.20%				
25) Nitrobenzene-d5	5.026	82	79631	6.70	ppm		0.00
Spiked Amount 10.000			Recovery = 67.00%				
51) 2-Fluorobiphenyl	6.863	172	221557	7.54	ppm		0.00
Spiked Amount 10.000			Recovery = 75.40%				
74) 2,4,6-Tribromophenol	8.856	330	35329	9.32	ppm		0.00
Spiked Amount 10.000			Recovery = 93.20%				
87) Terphenyl-d14	12.478	244	238475	7.53	ppm		0.00
Spiked Amount 10.000			Recovery = 75.30%				
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm		
Spiked Amount 10.000			Recovery = 0.00%				
113) o-terphenyl	0.000	230	0	0.00	ppm		
Spiked Amount 10.000			Recovery = 0.00%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.146	88	4693	0.83	ppm		93
9) Phenol	4.326	94	1474	0.08	ppm		81
12) 2-Chlorophenol	4.427	128	25078	1.78	ppm		98
14) 1,3-Dichlorobenzene	4.540	146	10177	0.66	ppm		95
15) 1,4-Dichlorobenzene	4.598	146	106772	7.14	ppm		98
17) 1,2-Dichlorobenzene	4.716	146	328477	23.12	ppm		98
33) 2,4-Dichlorophenol	5.549	162	2059	0.18	ppm		84
36) 1,2,4-Trichlorobenzene	5.608	180	1405	0.11	ppm	#	71
38) Naphthalene	5.688	128	3310	0.08	ppm		82
81) Di-n-butylphthalate	10.950	149	224645	4.70	ppm		100
92) bis(2-Ethylhexyl)phtha...	14.300	149	12754	0.49	ppm		98

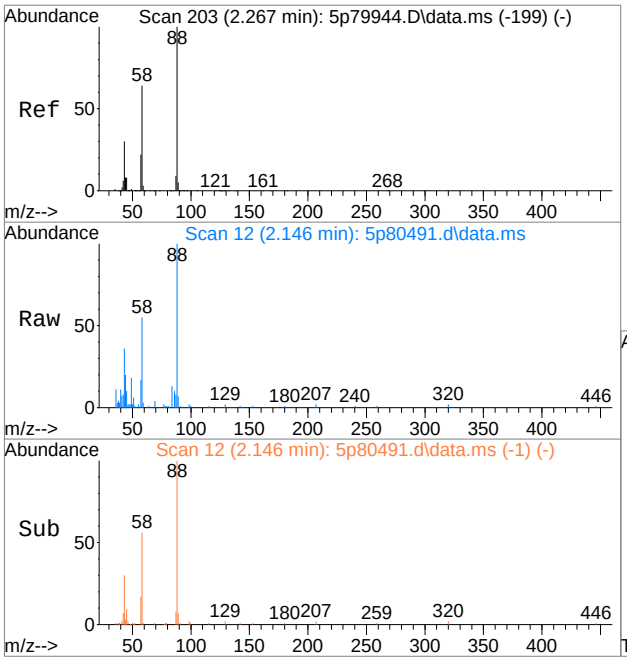
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80491.d
Acq On : 18 Dec 2021 6:07 am
Operator : chriss2
Sample : jd36624-2 Inst : MS5P
Misc : op37108,e5p3810,250,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 02:08:43 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

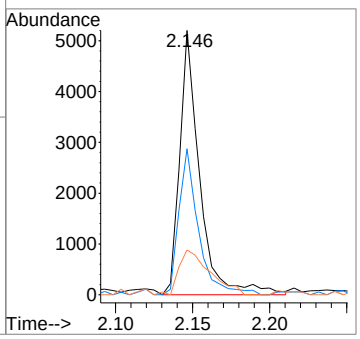


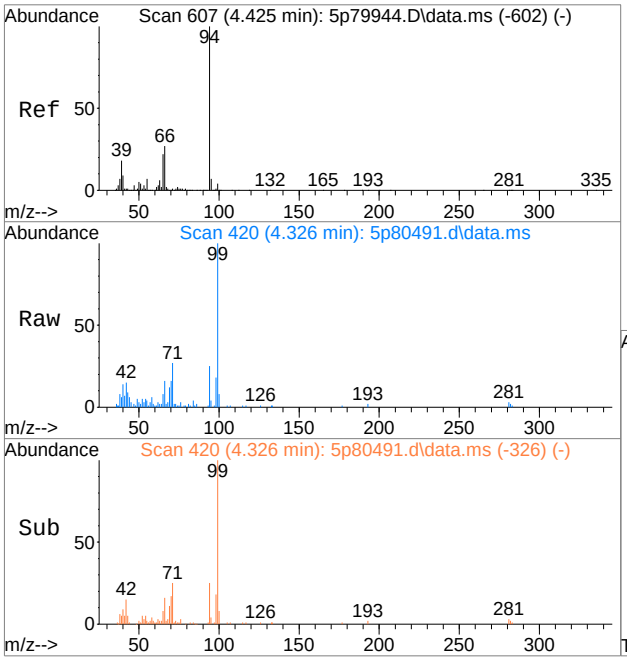


#2
1,4-Dioxane
Concen: 0.83 ppm
RT: 2.146 min Scan# 12
Delta R.T. 0.016 min
Lab File: 5p80491.d
Acq: 18 Dec 2021 6:07 am

Tgt Ion: 88 Resp: 4693

Ion	Ratio	Lower	Upper
88	100		
58	55.1	30.1	90.1
57	16.1	0.0	50.3

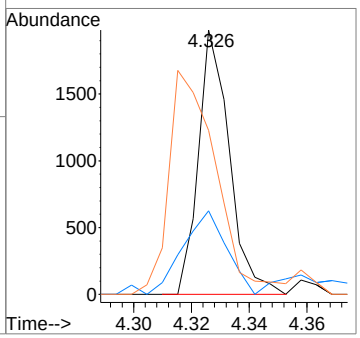


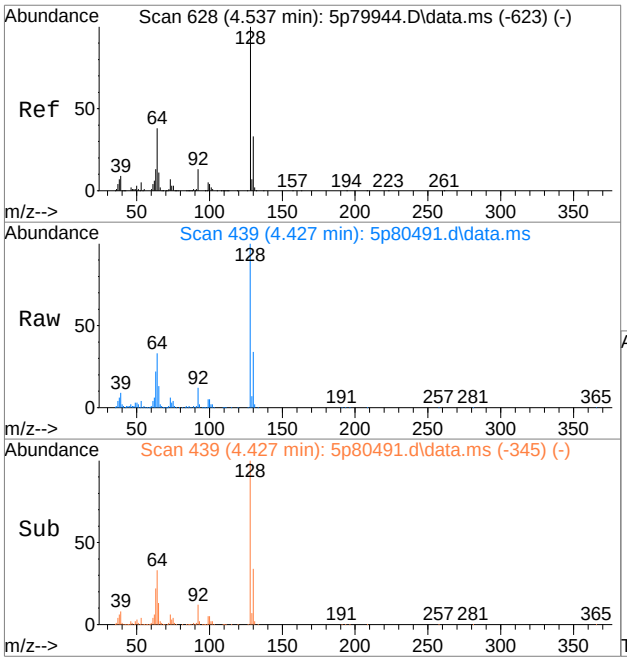


#9
Phenol
Concen: 0.08 ppm
RT: 4.326 min Scan# 420
Delta R.T. 0.000 min
Lab File: 5p80491.d
Acq: 18 Dec 2021 6:07 am

Tgt Ion: 94 Resp: 1474

Ion	Ratio	Lower	Upper
94	100		
65	26.4	0.0	56.7
66	51.1	1.8	61.8

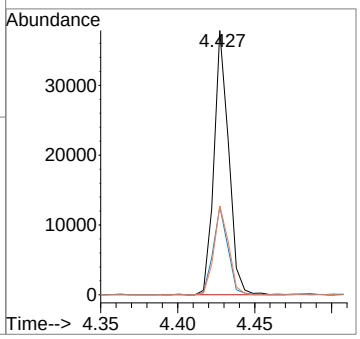


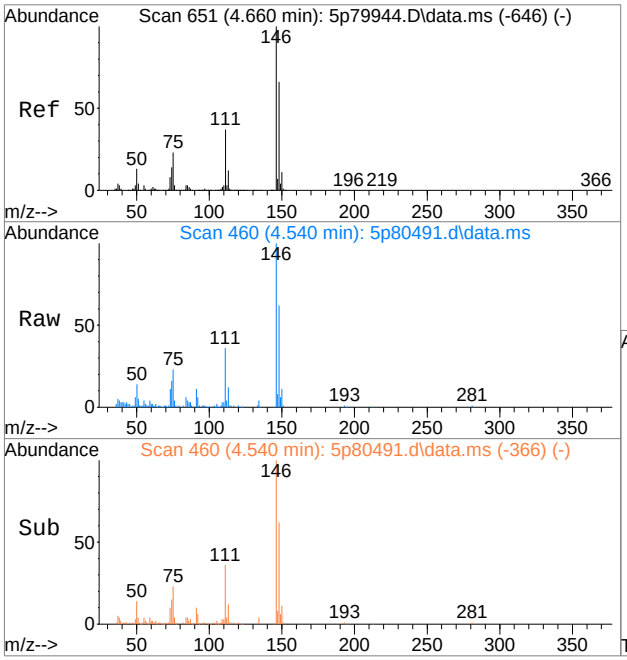


#12
2-Chlorophenol
Concen: 1.78 ppm
RT: 4.427 min Scan# 439
Delta R.T. 0.000 min
Lab File: 5p80491.d
Acq: 18 Dec 2021 6:07 am

Tgt Ion:128 Resp: 25078

Ion	Ratio	Lower	Upper
128	100		
64	33.4	4.3	64.3
130	33.6	2.5	62.5

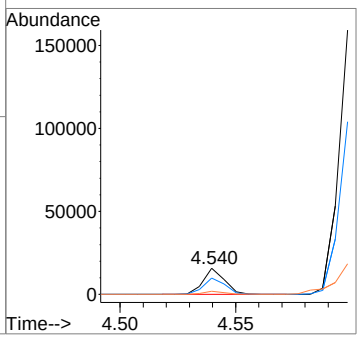


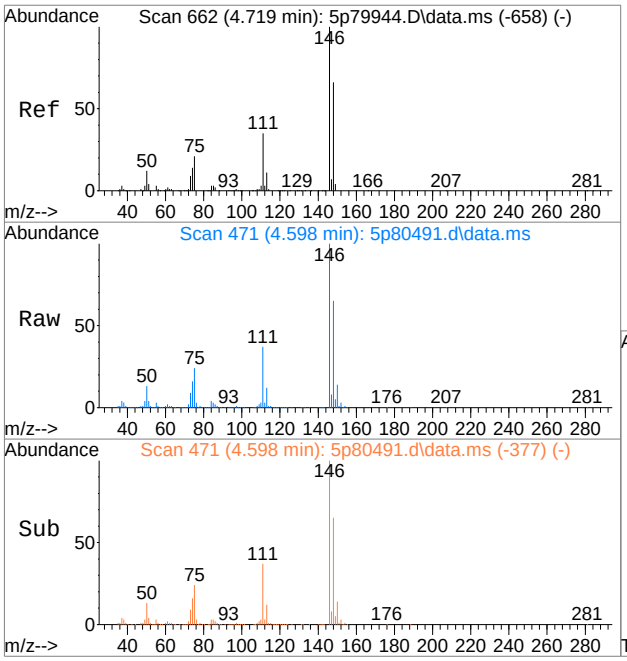


#14
1,3-Dichlorobenzene
Concen: 0.66 ppm
RT: 4.540 min Scan# 460
Delta R.T. 0.000 min
Lab File: 5p80491.d
Acq: 18 Dec 2021 6:07 am

Tgt Ion:146 Resp: 10177

Ion	Ratio	Lower	Upper
146	100		
148	62.1	36.2	96.2
113	11.9	0.0	41.6

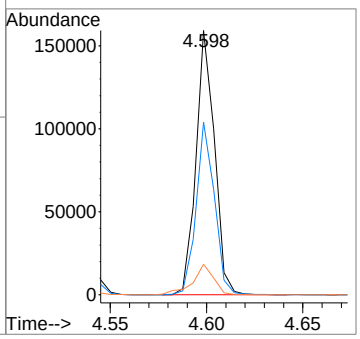


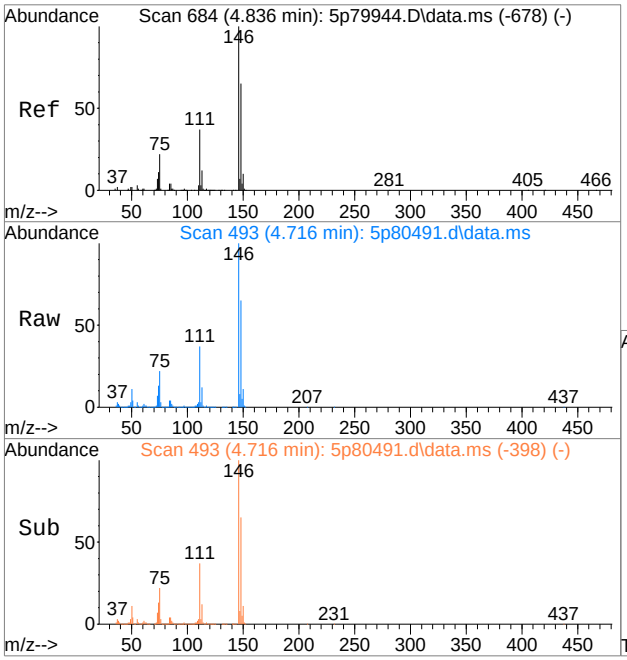


#15
1,4-Dichlorobenzene
Concen: 7.14 ppm
RT: 4.598 min Scan# 471
Delta R.T. 0.000 min
Lab File: 5p80491.d
Acq: 18 Dec 2021 6:07 am

Tgt Ion:146 Resp: 106772

Ion	Ratio	Lower	Upper
146	100		
148	65.3	33.3	93.3
113	11.4	0.0	41.7

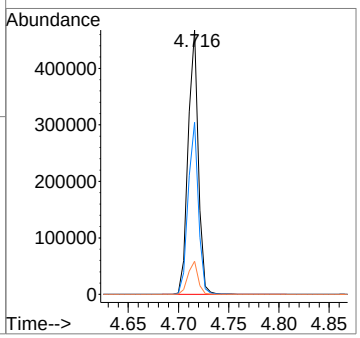


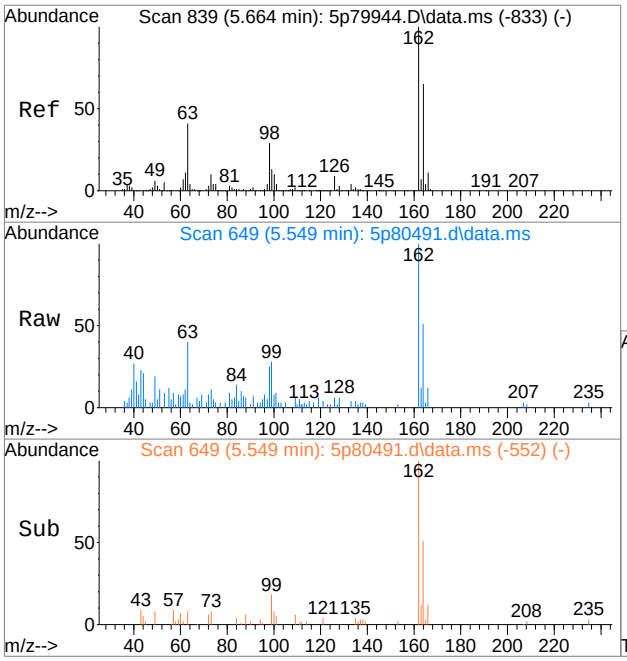


#17
1,2-Dichlorobenzene
Concen: 23.12 ppm
RT: 4.716 min Scan# 493
Delta R.T. 0.006 min
Lab File: 5p80491.d
Acq: 18 Dec 2021 6:07 am

Tgt Ion:146 Resp: 328477

Ion	Ratio	Lower	Upper
146	100		
148	65.1	33.7	93.7
113	12.5	0.0	42.3

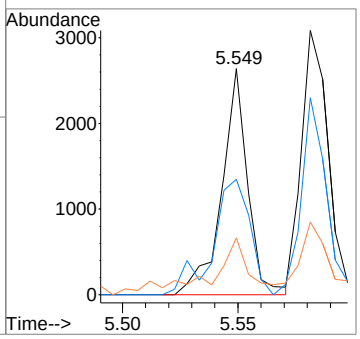


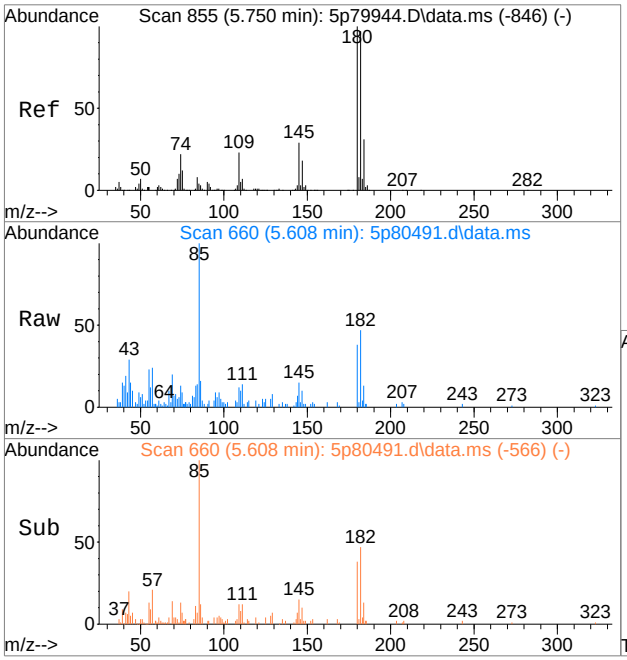


#33
2,4-Dichlorophenol
Concen: 0.18 ppm
RT: 5.549 min Scan# 649
Delta R.T. 0.016 min
Lab File: 5p80491.d
Acq: 18 Dec 2021 6:07 am

Tgt Ion:162 Resp: 2059

Ion	Ratio	Lower	Upper
162	100		
164	49.6	32.4	92.4
98	21.3	0.0	59.3

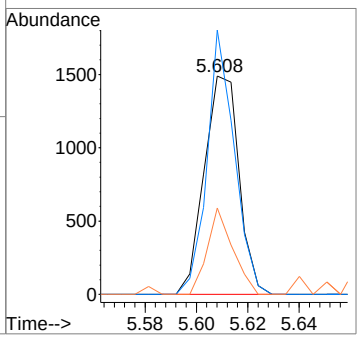


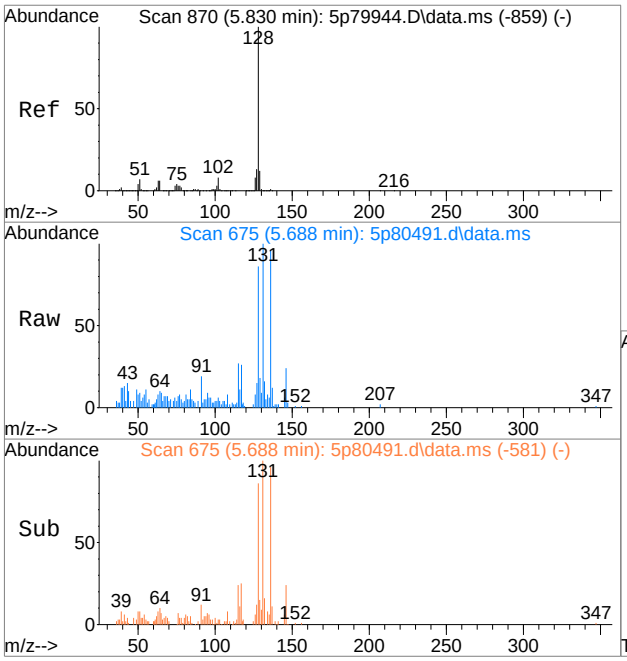


#36
1,2,4-Trichlorobenzene
Concen: 0.11 ppm
RT: 5.608 min Scan# 660
Delta R.T. 0.000 min
Lab File: 5p80491.d
Acq: 18 Dec 2021 6:07 am

Tgt Ion:180 Resp: 1405

Ion	Ratio	Lower	Upper
180	100		
182	121.2	59.8	119.8#
145	39.6	1.1	61.1

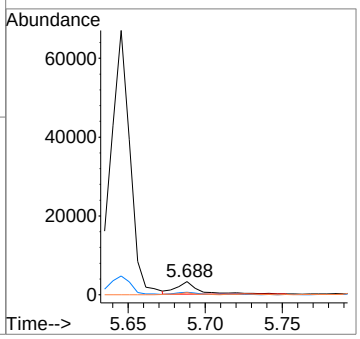


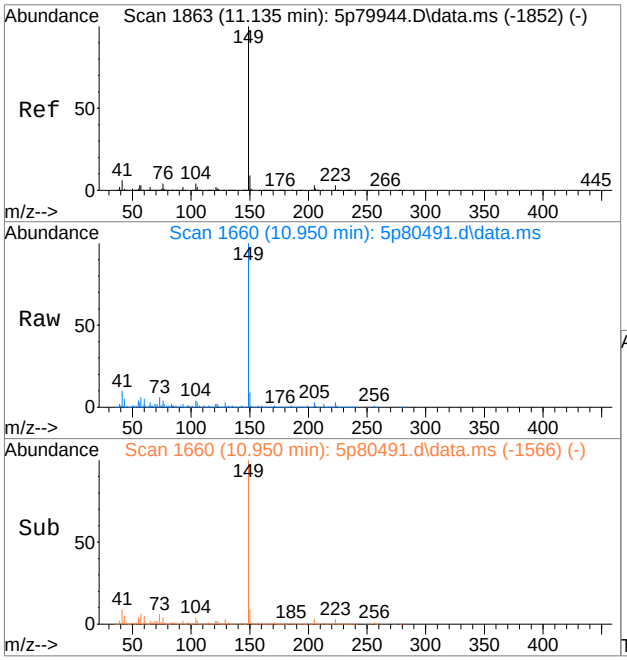


#38
Naphthalene
Concen: 0.08 ppm
RT: 5.688 min Scan# 675
Delta R.T. 0.000 min
Lab File: 5p80491.d
Acq: 18 Dec 2021 6:07 am

Tgt Ion:128 Resp: 3310

Ion	Ratio	Lower	Upper
128	100		
129	20.3	0.0	41.0
127	17.8	0.0	42.9

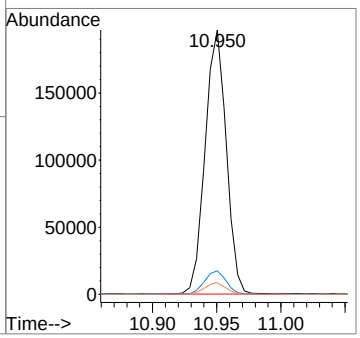


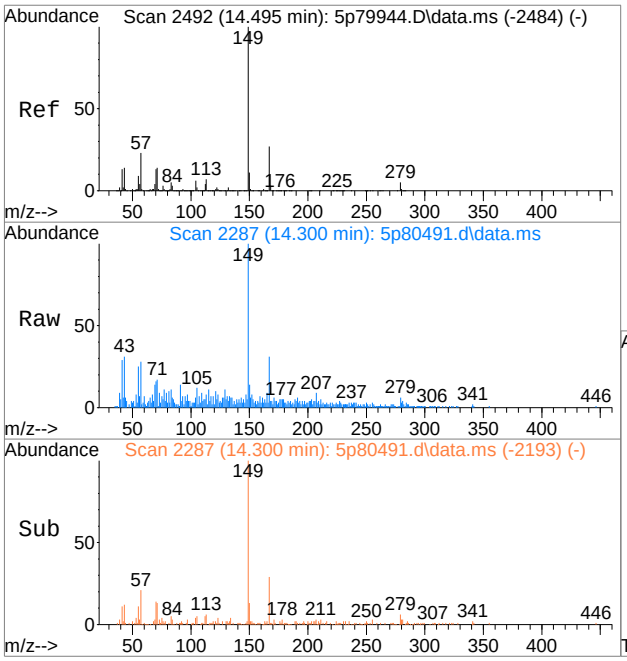


#81
Di-n-butylphthalate
Concen: 4.70 ppm
RT: 10.950 min Scan# 1660
Delta R.T. 0.000 min
Lab File: 5p80491.d
Acq: 18 Dec 2021 6:07 am

Tgt Ion:149 Resp: 224645

Ion	Ratio	Lower	Upper
149	100		
150	8.9	0.0	38.9
104	4.4	0.0	34.2

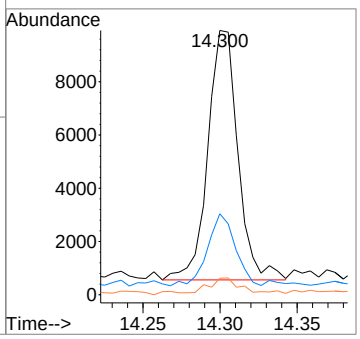




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.49 ppm
RT: 14.300 min Scan# 2287
Delta R.T. 0.000 min
Lab File: 5p80491.d
Acq: 18 Dec 2021 6:07 am

Tgt Ion:149 Resp: 12754

Ion	Ratio	Lower	Upper
149	100		
167	28.1	0.0	57.4
279	5.8	0.0	34.7



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 15:40

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80492.d
Acq On : 18 Dec 2021 6:34 am
Operator : chriss2
Sample : jd36624-3 Inst : MS5P
Misc : op37108,e5p3810,250,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 02:26:07 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

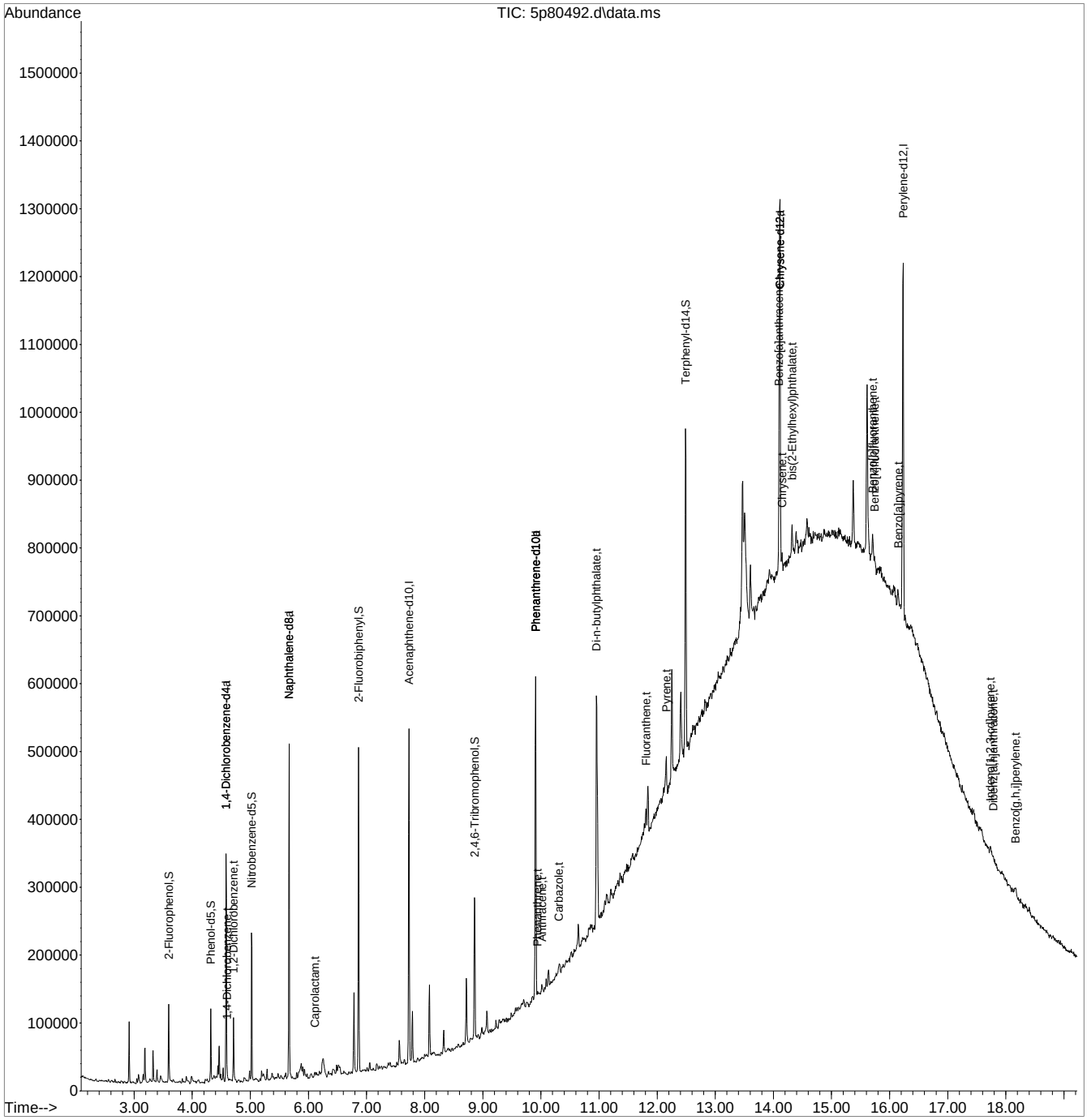
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.582	152	46769	8.00	ppm	0.00
24) Naphthalene-d8	5.667	136	205046	8.00	ppm	0.00
46) Acenaphthene-d10	7.729	164	121837	8.00	ppm	0.00
69) Phenanthrene-d10	9.908	188	219685	8.00	ppm	0.00
84) Chrysene-d12	14.113	240	259791	8.00	ppm	0.02
93) Perylene-d12	16.234	264	251251	8.00	ppm	0.04
103) 1,4-Dichlorobenzene-d4a	4.582	152	46769	8.00	ppm	0.00
105) Phenanthrene-d10a	9.908	188	219685	8.00	ppm	0.00
107) Naphthalene-d8a	5.667	136	205046	8.00	ppm	0.00
109) Chrysene-d12a	14.113	240	259791	8.00	ppm	0.02
111) Phenanthrene-d10b	9.908	188	219685	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.594	112	30728	4.06	ppm	0.00
Spiked Amount 10.000			Recovery = 40.60%			
8) Phenol-d5	4.320	99	30177	3.11	ppm	0.00
Spiked Amount 10.000			Recovery = 31.10%			
25) Nitrobenzene-d5	5.020	82	58902	7.63	ppm	0.00
Spiked Amount 10.000			Recovery = 76.30%			
51) 2-Fluorobiphenyl	6.863	172	158623	7.94	ppm	0.00
Spiked Amount 10.000			Recovery = 79.40%			
74) 2,4,6-Tribromophenol	8.861	330	28873	10.34	ppm	0.00
Spiked Amount 10.000			Recovery = 103.40%			
87) Terphenyl-d14	12.489	244	211702	6.54	ppm	0.01
Spiked Amount 10.000			Recovery = 65.40%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
15) 1,4-Dichlorobenzene	4.598	146	2731	0.32	ppm	89
17) 1,2-Dichlorobenzene	4.710	146	19012	2.31	ppm	99
78) Phenanthrene	9.940	178	5903	0.21	ppm	93
79) Anthracene	10.021	178	2689	0.09	ppm	92
80) Carbazole	10.309	167	3605	0.13	ppm	69
81) Di-n-butylphthalate	10.955	149	216262	6.15	ppm	99
82) Fluoranthene	11.810	202	18101	0.56	ppm	99
86) Pyrene	12.157	202	17982	0.40	ppm	96
89) Benzo[a]anthracene	14.097	228	12574	0.31	ppm	98
91) Chrysene	14.150	228	12138	0.33	ppm	95
92) bis(2-Ethylhexyl)phtha...	14.321	149	20648	0.78	ppm	99
95) Benzo[b]fluoranthene	15.710	252	20294	0.53	ppm	95
96) Benzo[k]fluoranthene	15.742	252	6985	0.21	ppm	88
97) Benzo[a]pyrene	16.148	252	13805	0.40	ppm	90
98) Indeno[1,2,3-cd]pyrene	17.735	276	9096	0.29	ppm	91
100) Dibenz[a,h]anthracene	17.783	278	2532	0.08	ppm	78
102) Benzo[g,h,i]perylene	18.167	276	9323	0.26	ppm	97
108) Caprolactam	6.110	55	977m	0.32	ppm	

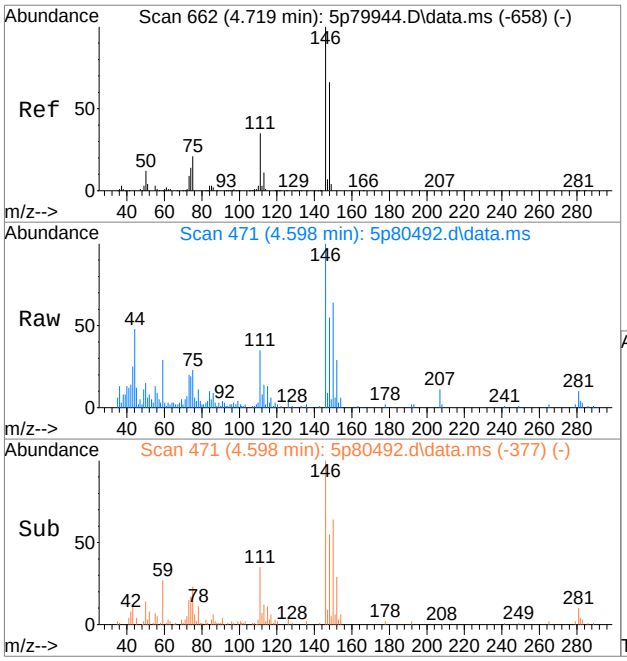
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80492.d
Acq On : 18 Dec 2021 6:34 am
Operator : chriss2
Sample : jd36624-3 Inst : MS5P
Misc : op37108,e5p3810,250,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 02:26:07 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

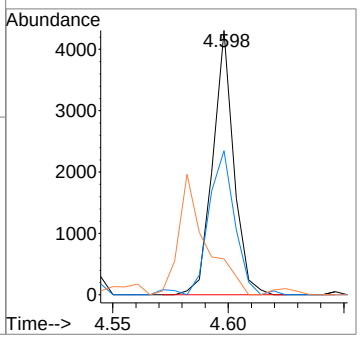


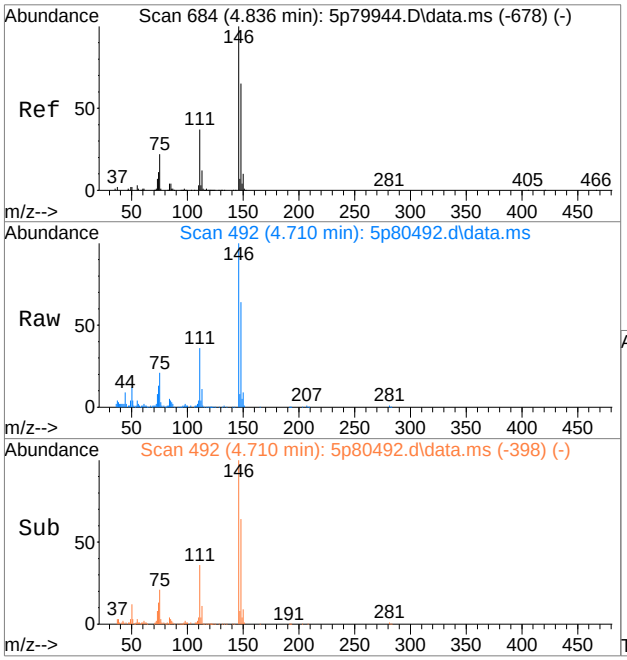


#15
1,4-Dichlorobenzene
Concen: 0.32 ppm
RT: 4.598 min Scan# 471
Delta R.T. -0.000 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:146 Resp: 2731

Ion	Ratio	Lower	Upper
146	100		
148	53.6	33.3	93.3
113	11.8	0.0	41.7

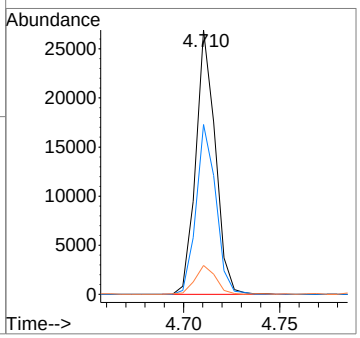


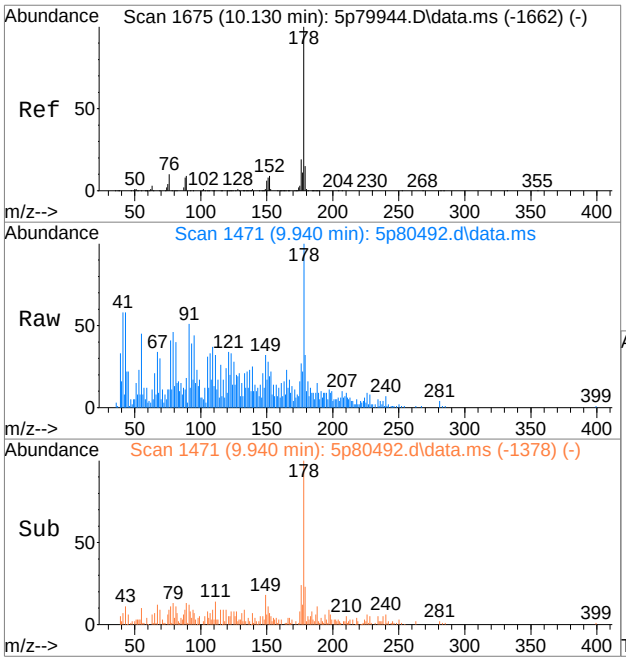


#17
1,2-Dichlorobenzene
Concen: 2.31 ppm
RT: 4.710 min Scan# 492
Delta R.T. -0.000 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:146 Resp: 19012

Ion	Ratio	Lower	Upper
146	100		
148	64.3	33.7	93.7
113	10.8	0.0	42.3

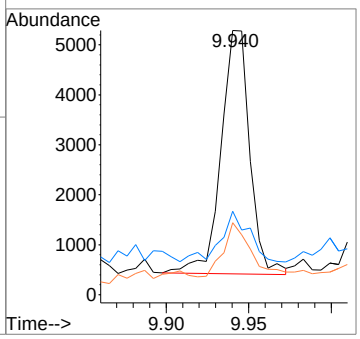


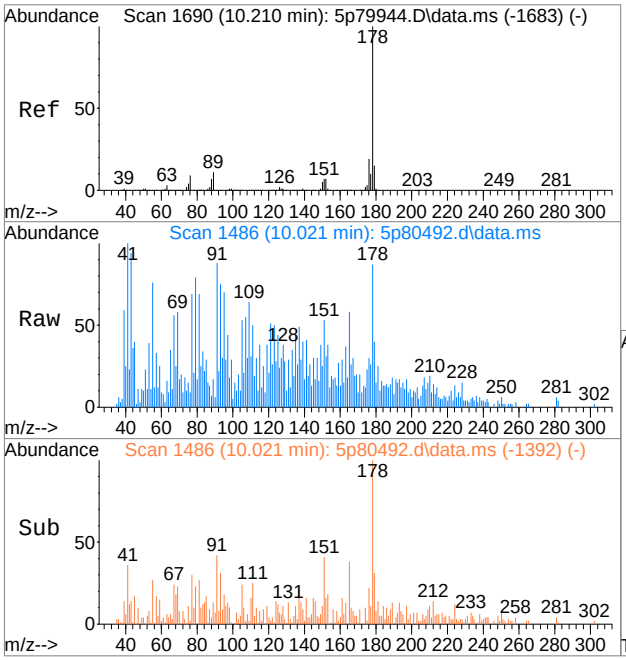


#78
Phenanthrene
Concen: 0.21 ppm
RT: 9.940 min Scan# 1471
Delta R.T. -0.005 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:178 Resp: 5903

Ion	Ratio	Lower	Upper
178	100		
179	18.9	0.0	44.9
176	21.1	0.0	48.7

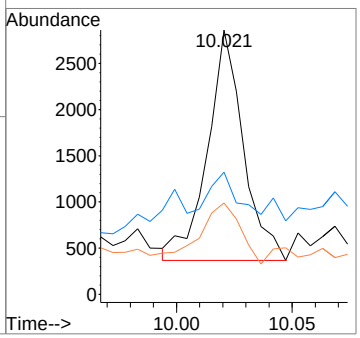


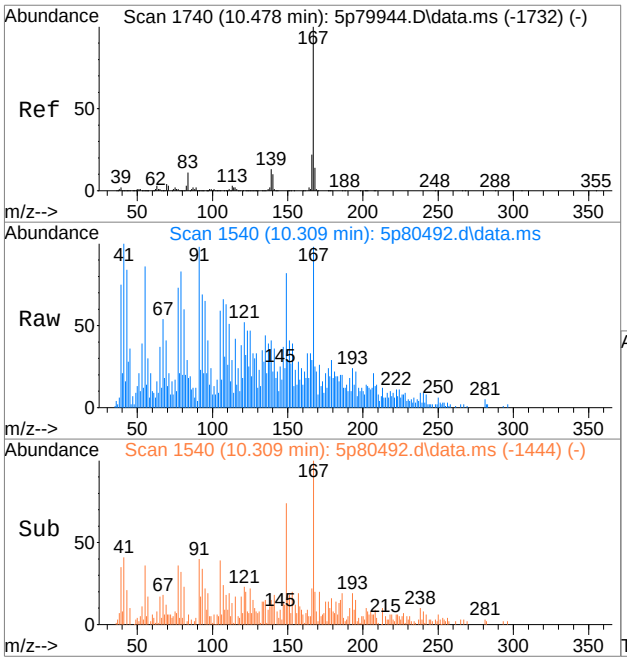


#79
Anthracene
Concen: 0.09 ppm
RT: 10.021 min Scan# 1486
Delta R.T. -0.000 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:178 Resp: 2689

Ion	Ratio	Lower	Upper
178	100		
179	19.3	0.0	45.5
176	21.1	0.0	47.8

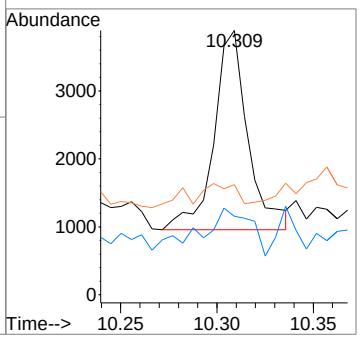


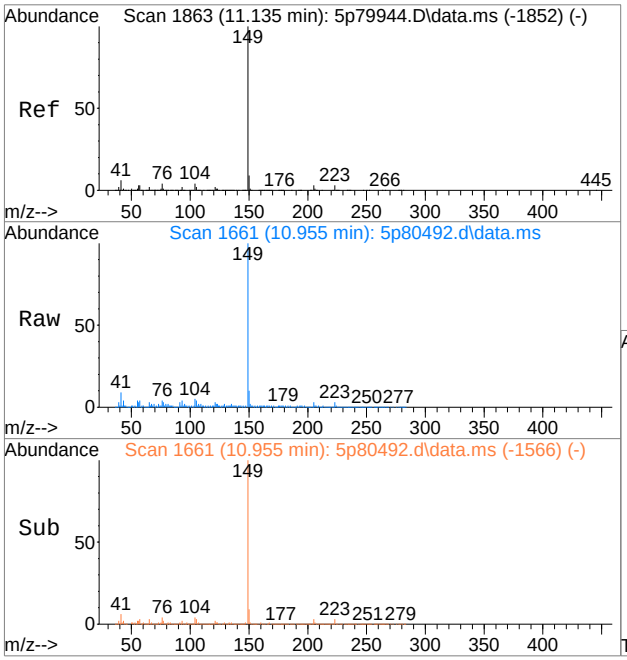


#80
Carbazole
Concen: 0.13 ppm
RT: 10.309 min Scan# 1540
Delta R.T. 0.011 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:167 Resp: 3605

Ion	Ratio	Lower	Upper
167	100		
166	3.6	0.0	51.0
139	4.6	0.0	42.7

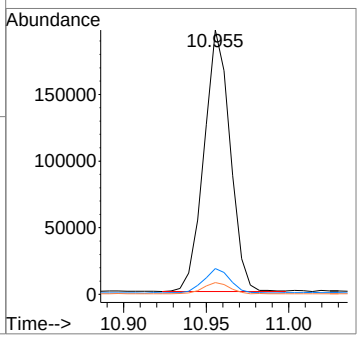


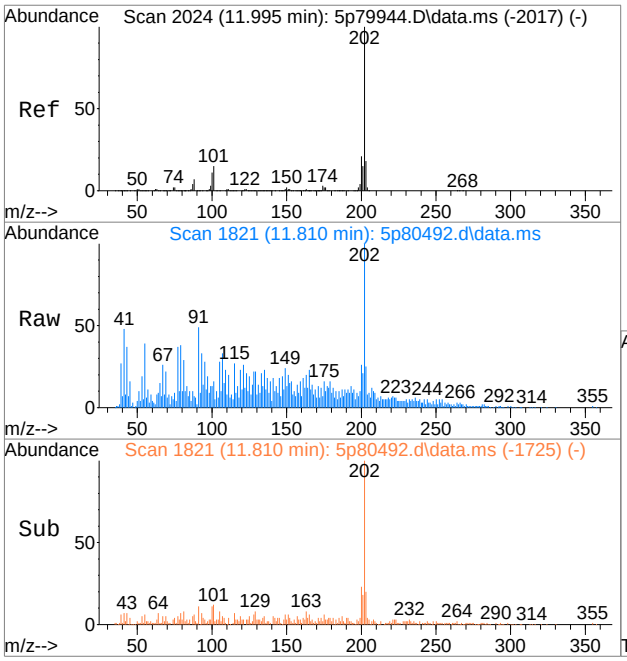


#81
Di-n-butylphthalate
Concen: 6.15 ppm
RT: 10.955 min Scan# 1661
Delta R.T. 0.005 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:149 Resp: 216262

Ion	Ratio	Lower	Upper
149	100		
150	9.3	0.0	38.9
104	4.3	0.0	34.2

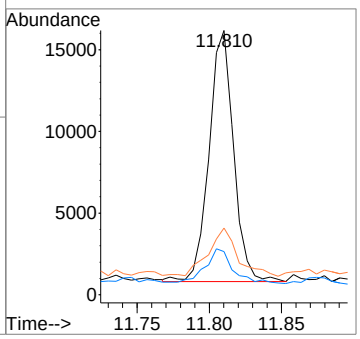


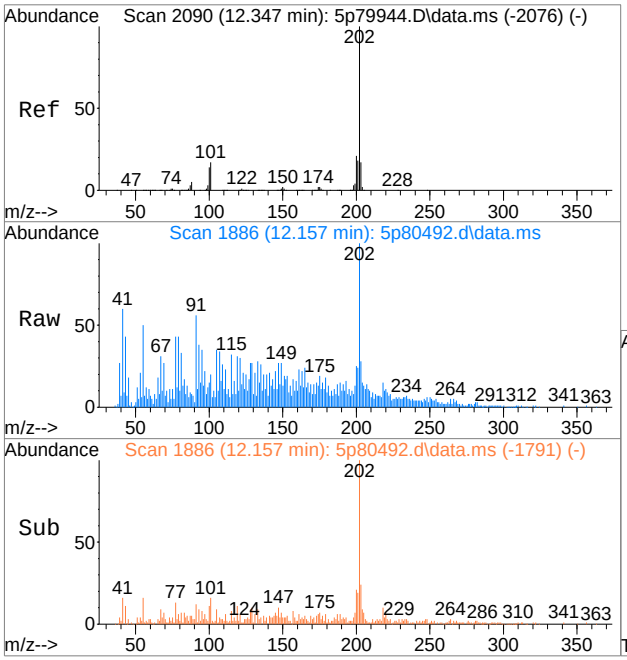


#82
Fluoranthene
Concen: 0.56 ppm
RT: 11.810 min Scan# 1821
Delta R.T. 0.011 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:202 Resp: 18101

Ion	Ratio	Lower	Upper
202	100		
101	12.4	0.0	42.9
203	18.4	0.0	48.1

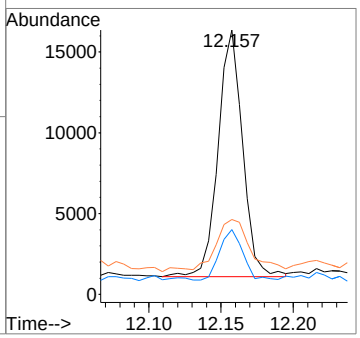


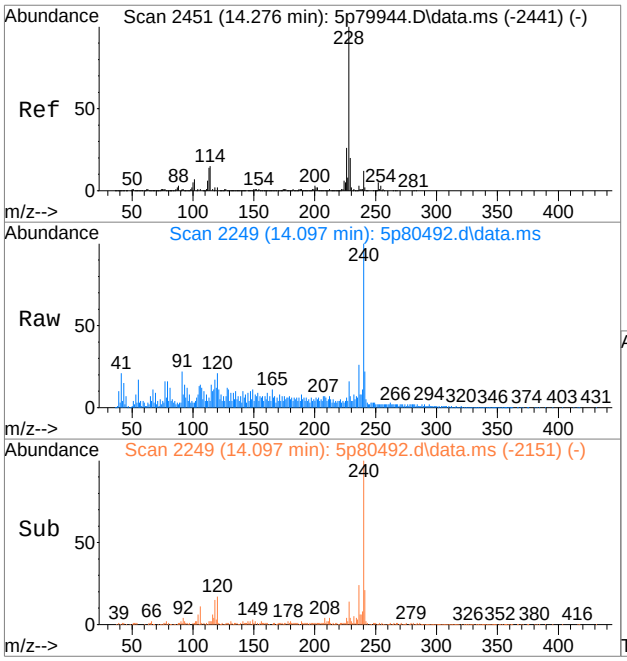


#86
Pyrene
Concen: 0.40 ppm
RT: 12.157 min Scan# 1886
Delta R.T. 0.005 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:202 Resp: 17982

Ion	Ratio	Lower	Upper
202	100		
200	19.8	0.0	50.2
203	20.6	0.0	47.7

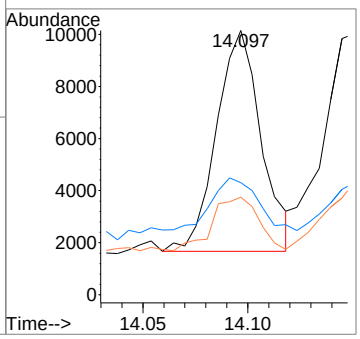


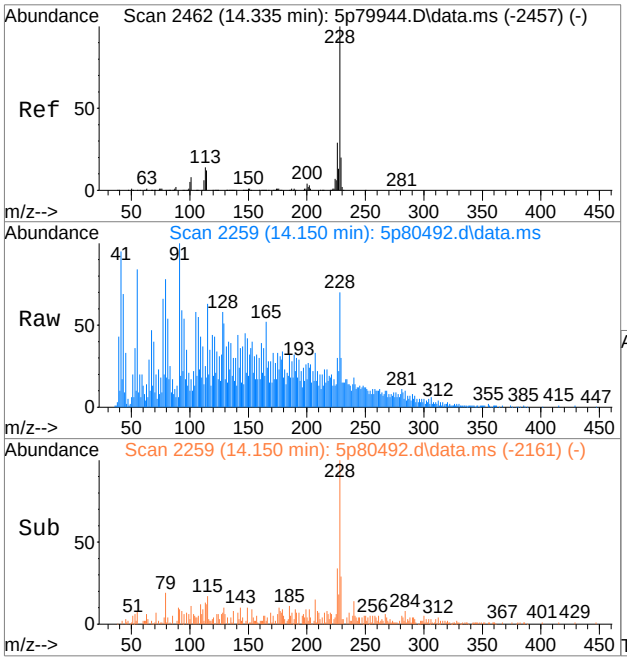


#89
Benzo[a]anthracene
Concen: 0.31 ppm
RT: 14.097 min Scan# 2249
Delta R.T. 0.021 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:228 Resp: 12574

Ion	Ratio	Lower	Upper
228	100		
229	22.2	0.0	50.7
226	26.0	0.0	56.3

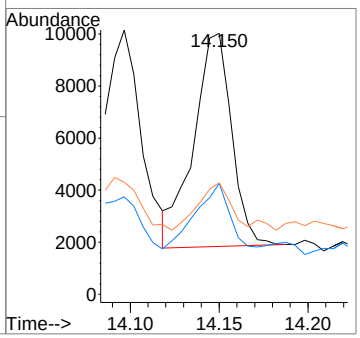


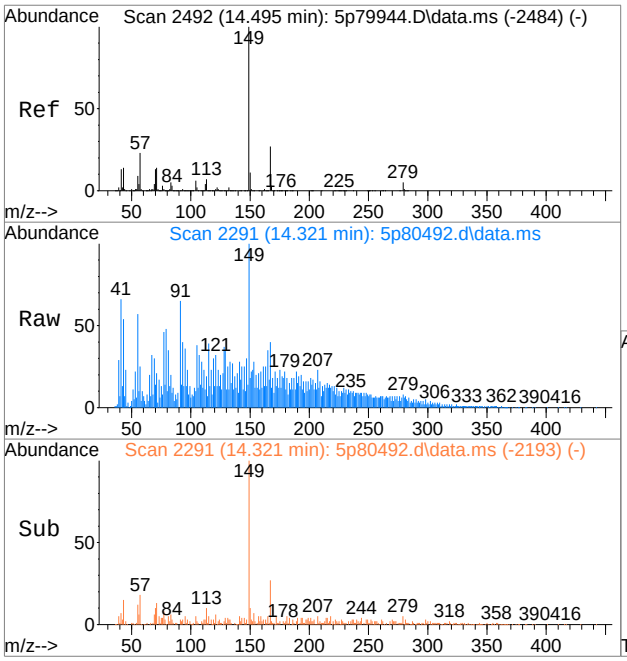


#91
Chrysene
Concen: 0.33 ppm
RT: 14.150 min Scan# 2259
Delta R.T. 0.021 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:228 Resp: 12138

Ion	Ratio	Lower	Upper
228	100		
226	32.1	0.0	59.0
229	21.1	0.0	49.7

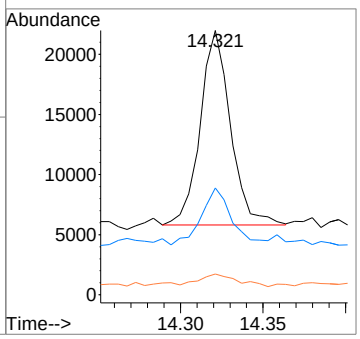


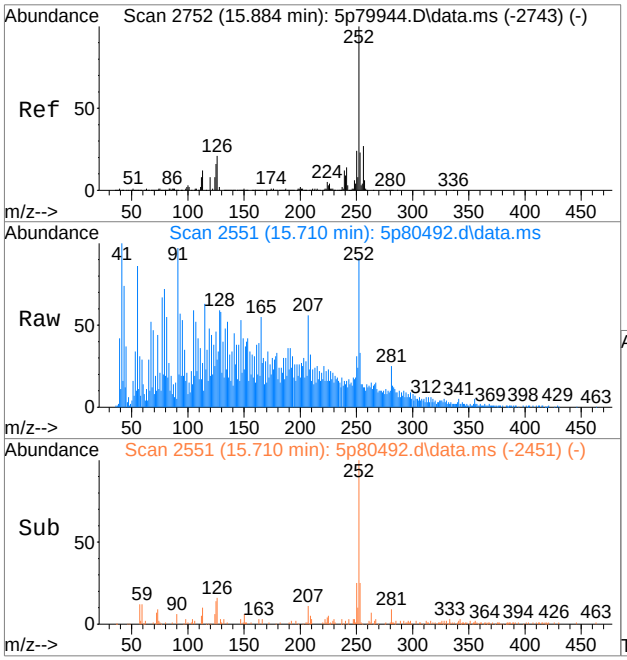


#92
bis(2-Ethylhexyl)phthalate
Concen: 0.78 ppm
RT: 14.321 min Scan# 2291
Delta R.T. 0.021 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:149 Resp: 20648

Ion	Ratio	Lower	Upper
149	100		
167	26.9	0.0	57.4
279	5.0	0.0	34.7

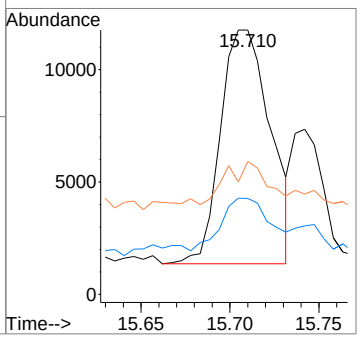


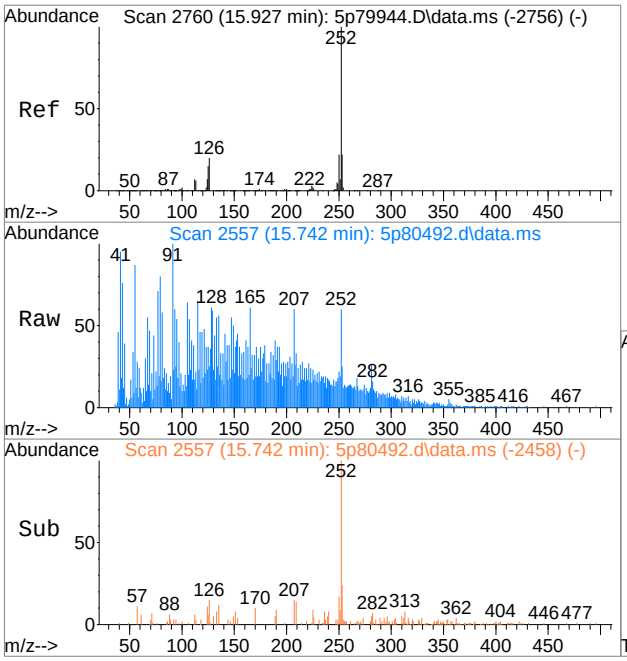


#95
Benzo[b]fluoranthene
Concen: 0.53 ppm
RT: 15.710 min Scan# 2551
Delta R.T. 0.032 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:252 Resp: 20294

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	53.8
125	19.8	0.0	47.1

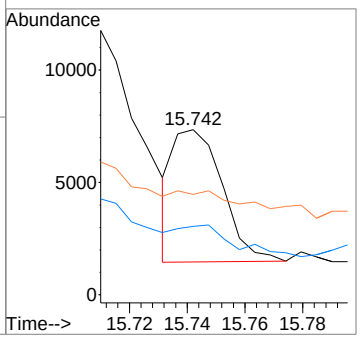


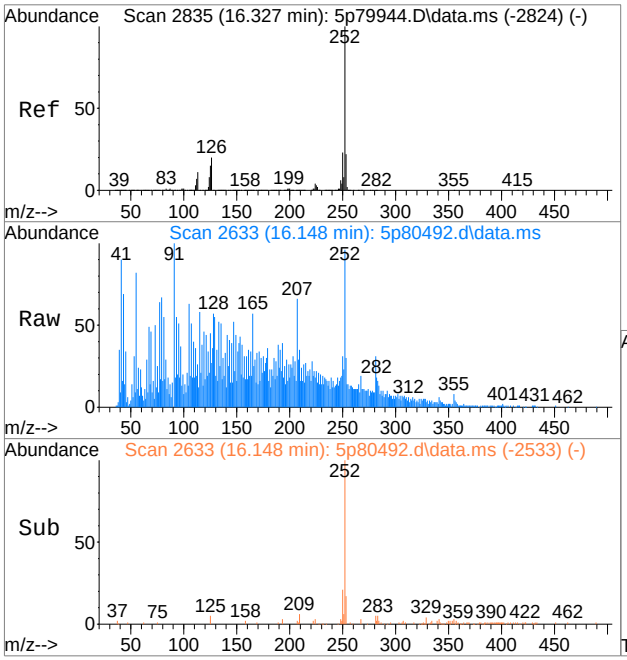


#96
Benzo[k]fluoranthene
Concen: 0.21 ppm
RT: 15.742 min Scan# 2557
Delta R.T. 0.027 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:252 Resp: 6985

Ion	Ratio	Lower	Upper
252	100		
253	18.2	0.0	51.9
125	7.9	0.0	45.4

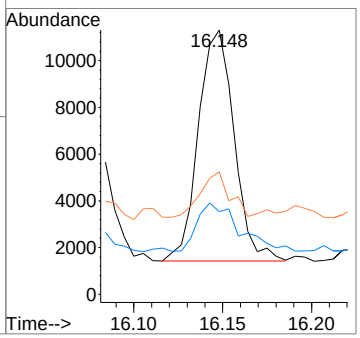


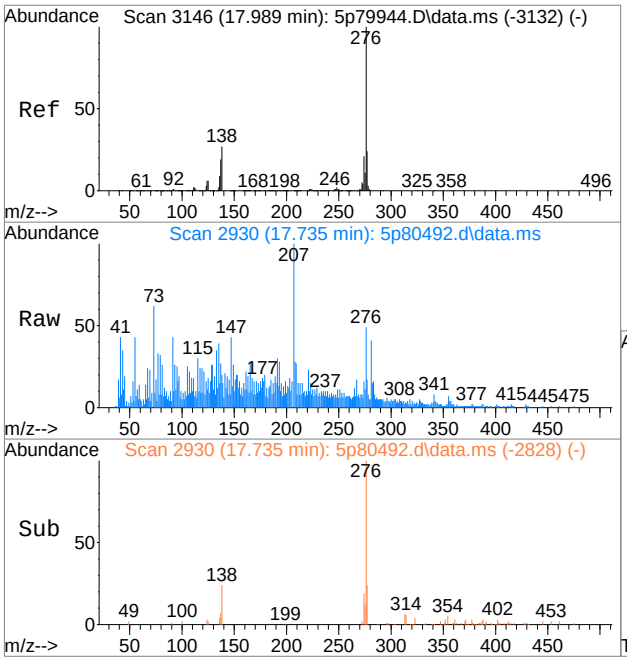


#97
Benzo[a]pyrene
Concen: 0.40 ppm
RT: 16.148 min Scan# 2633
Delta R.T. 0.032 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:252 Resp: 13805

Ion	Ratio	Lower	Upper
252	100		
253	15.3	0.0	52.5
125	18.3	0.0	46.9

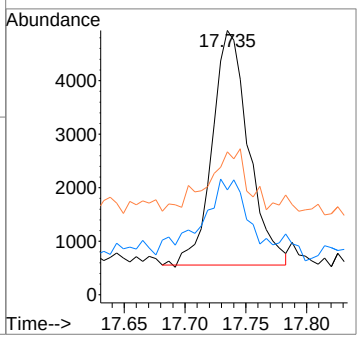


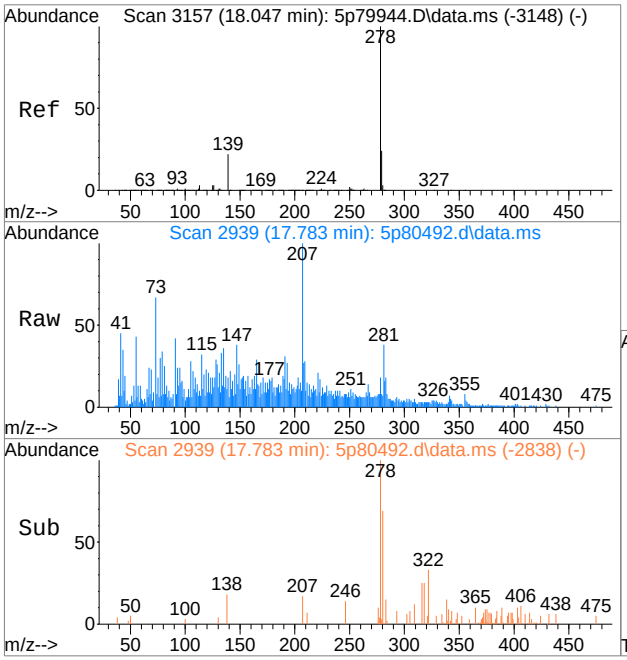


#98
Indeno[1,2,3-cd]pyrene
Concen: 0.29 ppm
RT: 17.735 min Scan# 2930
Delta R.T. 0.043 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:276 Resp: 9096

Ion	Ratio	Lower	Upper
276	100		
138	20.6	0.0	58.6
137	22.4	0.0	51.5

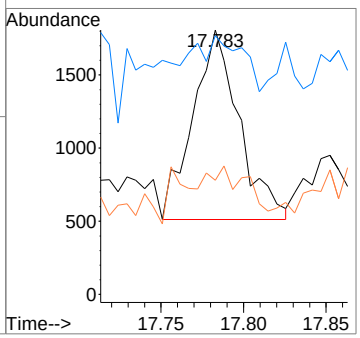


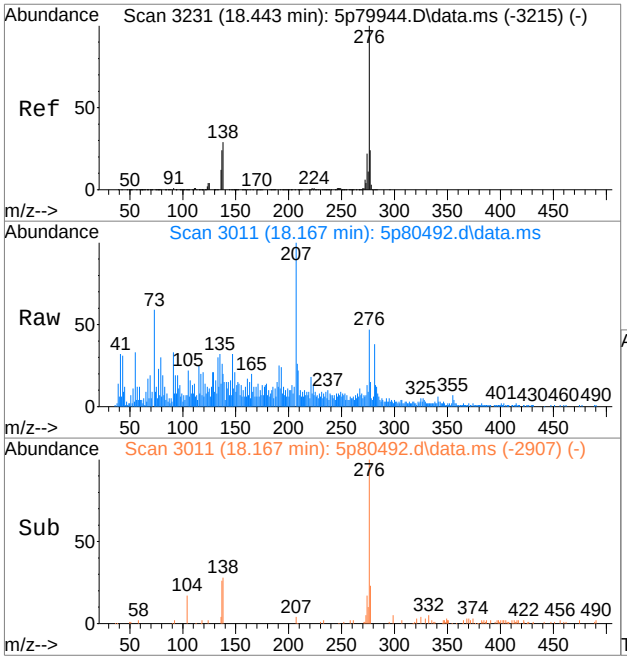


#100
Dibenz[a,h]anthracene
Concen: 0.08 ppm
RT: 17.783 min Scan# 2939
Delta R.T. 0.037 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:278 Resp: 2532

Ion	Ratio	Lower	Upper
278	100		
139	8.4	0.0	53.5
279	18.0	0.0	54.6

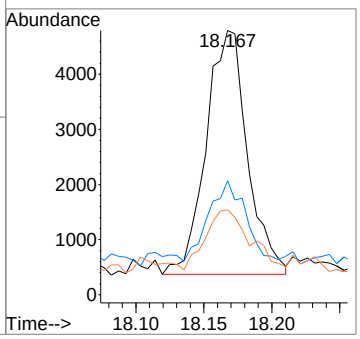


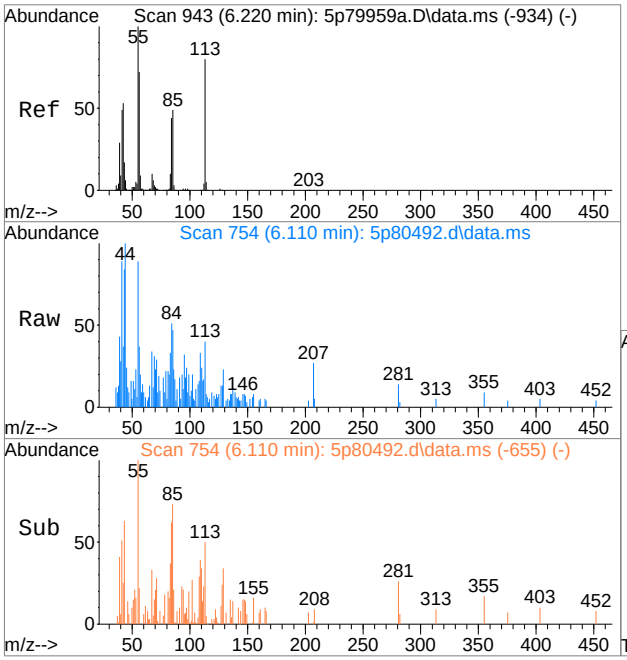


#102
Benzo[g,h,i]perylene
Concen: 0.26 ppm
RT: 18.167 min Scan# 3011
Delta R.T. 0.053 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion:276 Resp: 9323

Ion	Ratio	Lower	Upper
276	100		
138	31.6	3.9	63.9
277	23.1	0.0	54.4

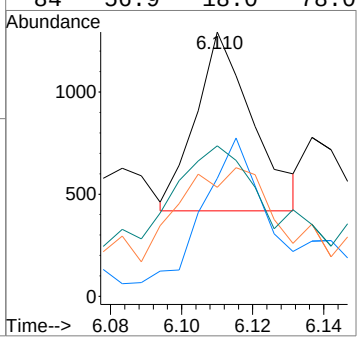




#108
Caprolactam
Concen: 0.32 ppm m
RT: 6.110 min Scan# 754
Delta R.T. 0.027 min
Lab File: 5p80492.d
Acq: 18 Dec 2021 6:34 am

Tgt Ion: 55 Resp: 977

Ion	Ratio	Lower	Upper
55	100		
113	44.6	64.2	124.2#
56	41.3	40.6	100.6
84	56.9	18.0	78.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80493.d
Acq On : 18 Dec 2021 7:01 am
Operator : chriss2
Sample : jd36624-4 Inst : MS5P
Misc : op37108,e5p3810,245,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 02:04:01 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

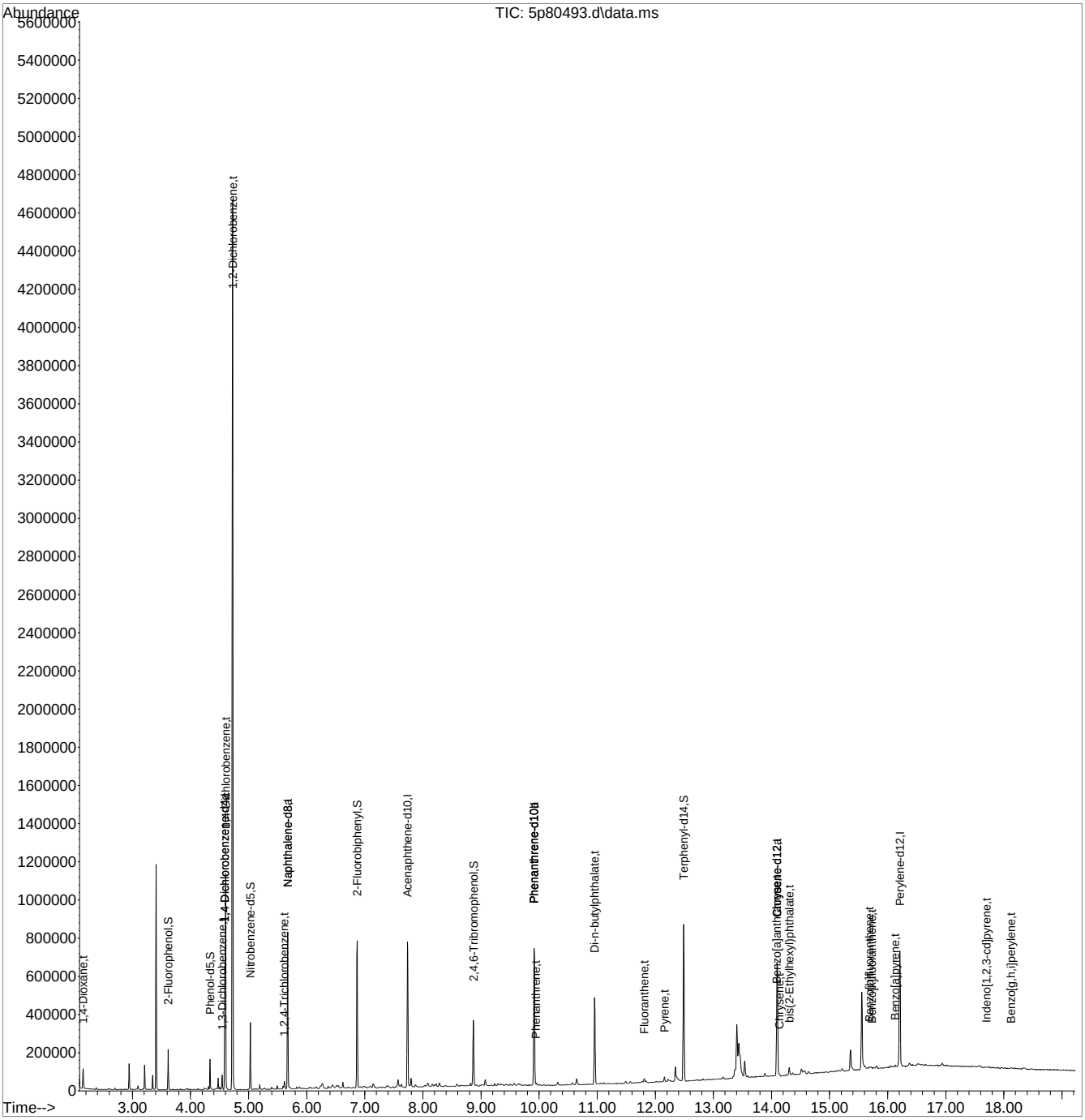
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.588	152	94038	8.00	ppm	0.00
24) Naphthalene-d8	5.672	136	358849	8.00	ppm	0.00
46) Acenaphthene-d10	7.734	164	207157	8.00	ppm	0.00
69) Phenanthrene-d10	9.914	188	344185	8.00	ppm	0.00
84) Chrysene-d12	14.097	240	284031	8.00	ppm	0.00
93) Perylene-d12	16.212	264	295163	8.00	ppm	0.02
103) 1,4-Dichlorobenzene-d4a	4.588	152	94038	8.00	ppm	0.00
105) Phenanthrene-d10a	9.914	188	344185	8.00	ppm	0.00
107) Naphthalene-d8a	5.672	136	358849	8.00	ppm	0.00
109) Chrysene-d12a	14.097	240	284031	8.00	ppm	0.00
111) Phenanthrene-d10b	9.914	188	344185	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.615	112	47037	3.09	ppm	0.02
Spiked Amount 10.000			Recovery = 30.90%			
8) Phenol-d5	4.336	99	44434	2.27	ppm	0.02
Spiked Amount 10.000			Recovery = 22.70%			
25) Nitrobenzene-d5	5.031	82	87359	6.47	ppm	0.00
Spiked Amount 10.000			Recovery = 64.70%			
51) 2-Fluorobiphenyl	6.869	172	266095	7.83	ppm	0.00
Spiked Amount 10.000			Recovery = 78.30%			
74) 2,4,6-Tribromophenol	8.872	330	47239	10.80	ppm	0.01
Spiked Amount 10.000			Recovery = 108.00%			
87) Terphenyl-d14	12.489	244	333384	9.42	ppm	0.01
Spiked Amount 10.000			Recovery = 94.20%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.151	88	37037	5.61	ppm	93
14) 1,3-Dichlorobenzene	4.545	146	13039	0.72	ppm	100
15) 1,4-Dichlorobenzene	4.604	146	211628	12.18	ppm	98
17) 1,2-Dichlorobenzene	4.726	146	1182354	71.57	ppm	95
36) 1,2,4-Trichlorobenzene	5.613	180	6315	0.45	ppm	97
78) Phenanthrene	9.946	178	5728	0.13	ppm	95
81) Di-n-butylphthalate	10.955	149	273312	4.96	ppm	100
82) Fluoranthene	11.810	202	10894	0.22	ppm	99
86) Pyrene	12.157	202	10488	0.22	ppm	93
89) Benzo[a]anthracene	14.086	228	5315	0.12	ppm	91
91) Chrysene	14.139	228	3591	0.09	ppm	97
92) bis(2-Ethylhexyl)phtha...	14.305	149	16743	0.58	ppm	97
95) Benzo[b]fluoranthene	15.683	252	5737	0.13	ppm	90
96) Benzo[k]fluoranthene	15.726	252	2477	0.06	ppm	89
97) Benzo[a]pyrene	16.127	252	4492	0.11	ppm	92
98) Indeno[1,2,3-cd]pyrene	17.697	276	3428	0.09	ppm	72
102) Benzo[g,h,i]perylene	18.125	276	3110	0.07	ppm	85

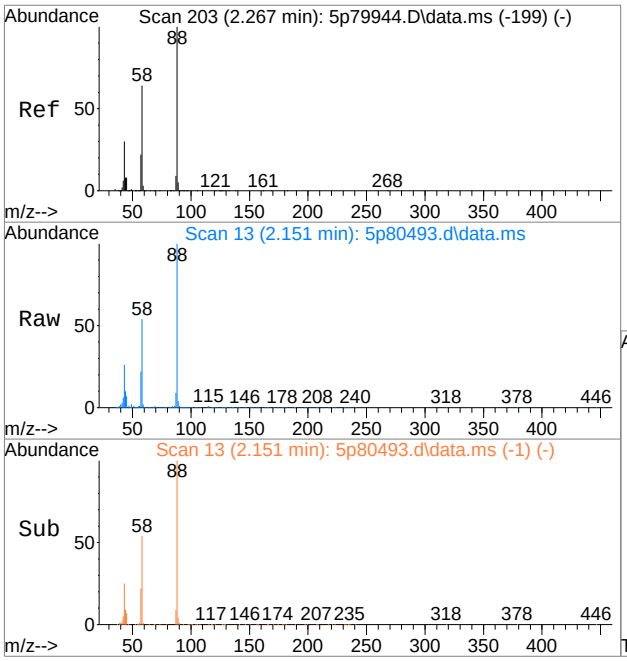
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80493.d
Acq On : 18 Dec 2021 7:01 am
Operator : chriss2
Sample : jd36624-4 Inst : MS5P
Misc : op37108,e5p3810,245,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 02:04:01 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

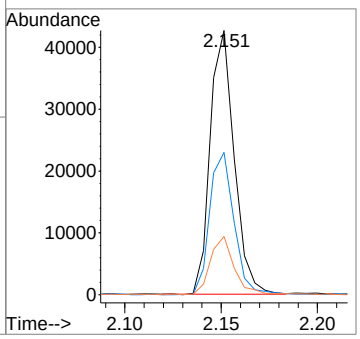


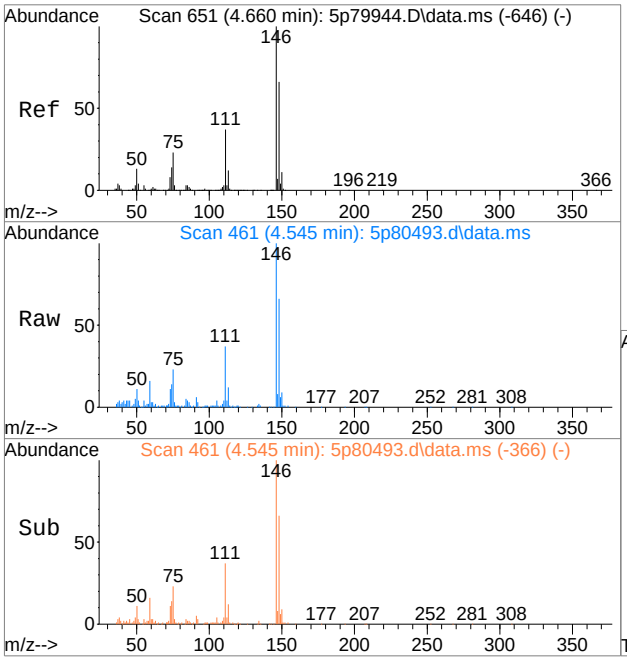


#2
1,4-Dioxane
Concen: 5.61 ppm
RT: 2.151 min Scan# 13
Delta R.T. 0.021 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion: 88 Resp: 37037

Ion	Ratio	Lower	Upper
88	100		
58	53.8	30.1	90.1
57	21.9	0.0	50.3

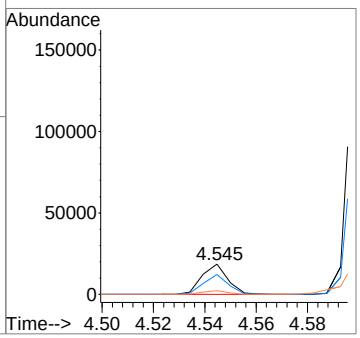


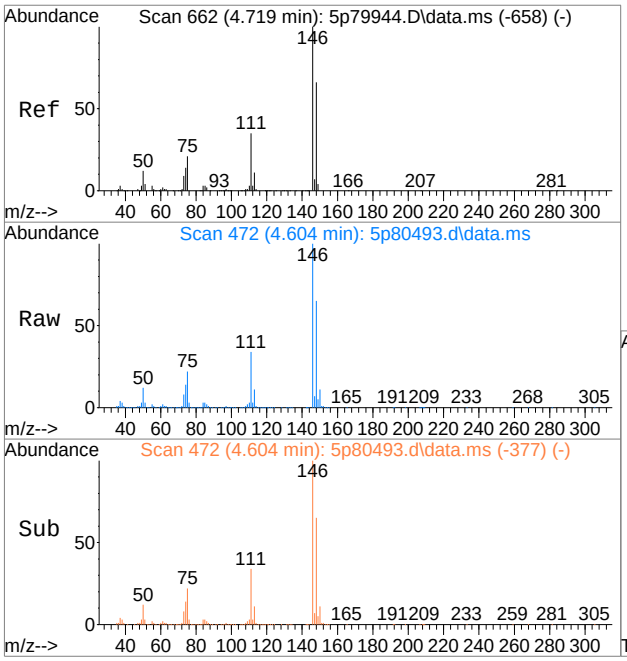


#14
1,3-Dichlorobenzene
Concen: 0.72 ppm
RT: 4.545 min Scan# 461
Delta R.T. 0.005 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:146 Resp: 13039

Ion	Ratio	Lower	Upper
146	100		
148	66.0	36.2	96.2
113	12.1	0.0	41.6

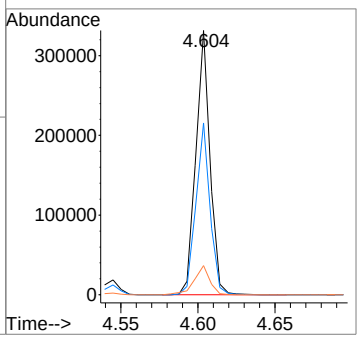


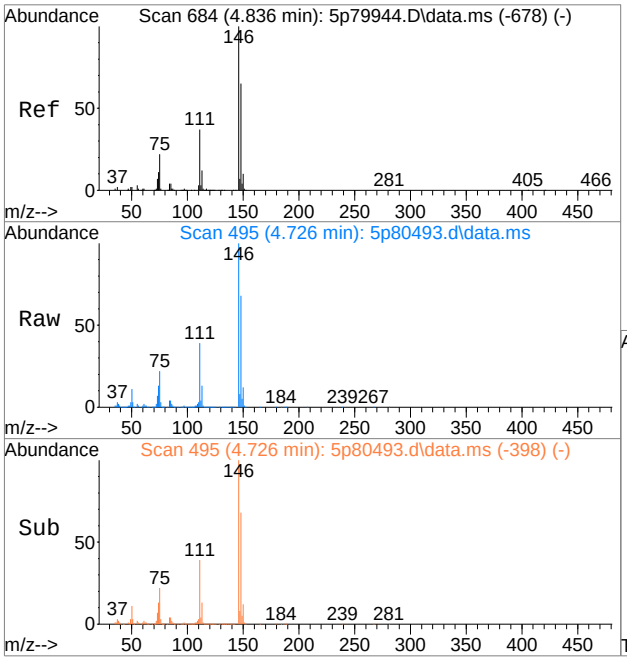


#15
1,4-Dichlorobenzene
Concen: 12.18 ppm
RT: 4.604 min Scan# 472
Delta R.T. 0.005 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:146 Resp: 211628

Ion	Ratio	Lower	Upper
146	100		
148	64.9	33.3	93.3
113	11.0	0.0	41.7

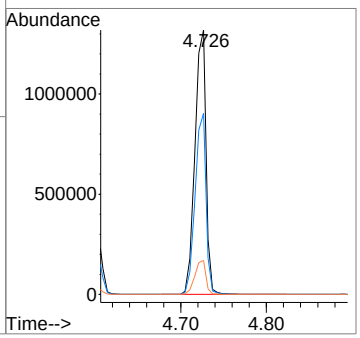


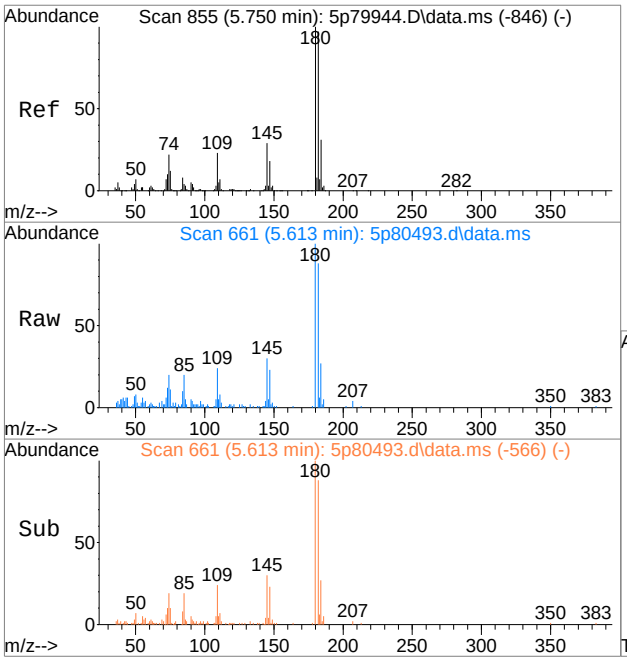


#17
1,2-Dichlorobenzene
Concen: 71.57 ppm
RT: 4.726 min Scan# 495
Delta R.T. 0.016 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:146 Resp: 1182354

Ion	Ratio	Lower	Upper
146	100		
148	68.5	33.7	93.7
113	12.8	0.0	42.3

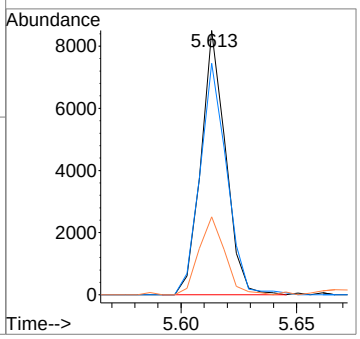


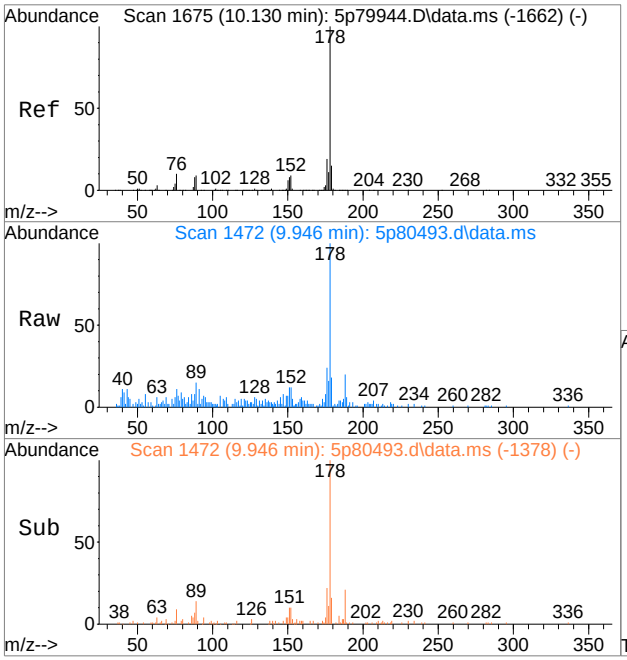


#36
1,2,4-Trichlorobenzene
Concen: 0.45 ppm
RT: 5.613 min Scan# 661
Delta R.T. 0.005 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:180 Resp: 6315

Ion	Ratio	Lower	Upper
180	100		
182	87.2	59.8	119.8
145	29.0	1.1	61.1

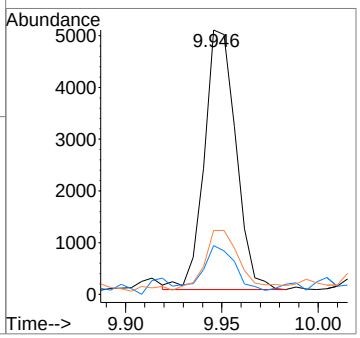


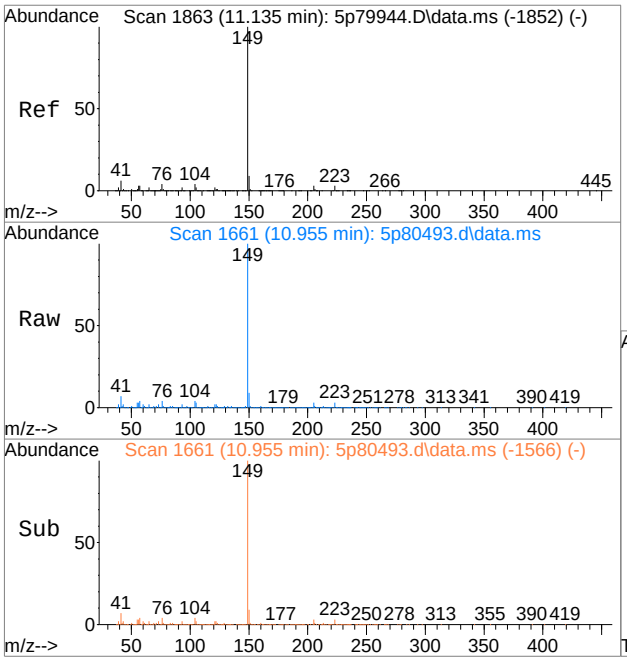


#78
Phenanthrene
Concen: 0.13 ppm
RT: 9.946 min Scan# 1472
Delta R.T. 0.000 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:178 Resp: 5728

Ion	Ratio	Lower	Upper
178	100		
179	13.8	0.0	44.9
176	21.6	0.0	48.7

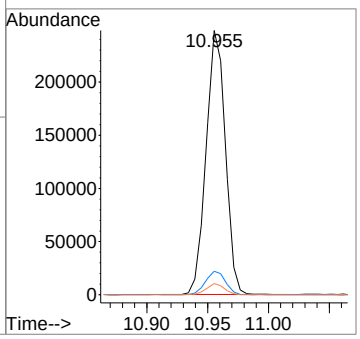


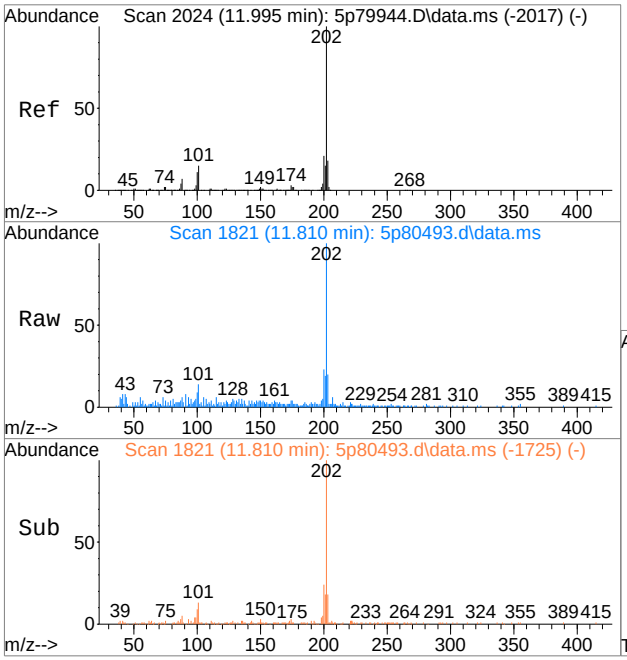


#81
Di-n-butylphthalate
Concen: 4.96 ppm
RT: 10.955 min Scan# 1661
Delta R.T. 0.005 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:149 Resp: 273312

Ion	Ratio	Lower	Upper
149	100		
150	8.9	0.0	38.9
104	4.3	0.0	34.2

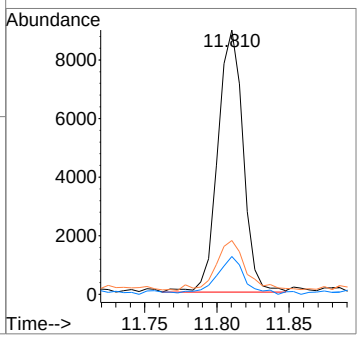


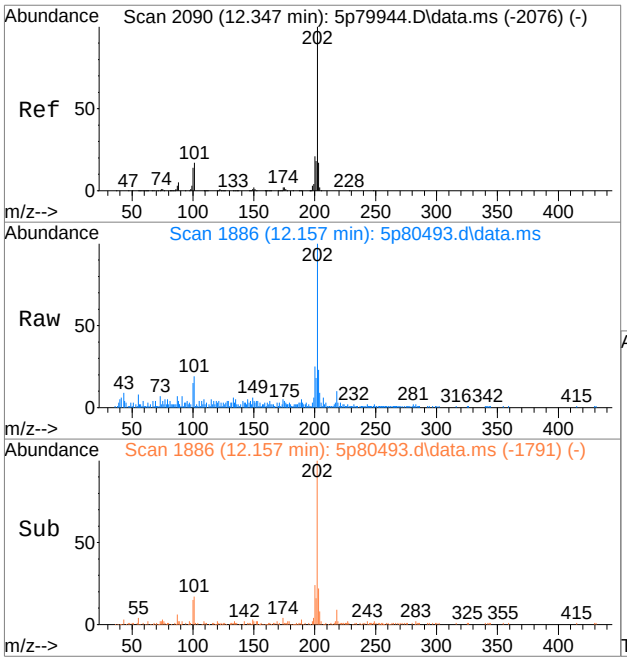


#82
Fluoranthene
Concen: 0.22 ppm
RT: 11.810 min Scan# 1821
Delta R.T. 0.011 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:202 Resp: 10894

Ion	Ratio	Lower	Upper
202	100		
101	13.6	0.0	42.9
203	18.6	0.0	48.1

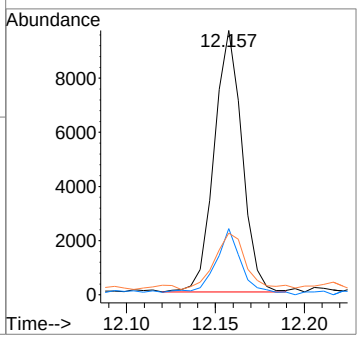


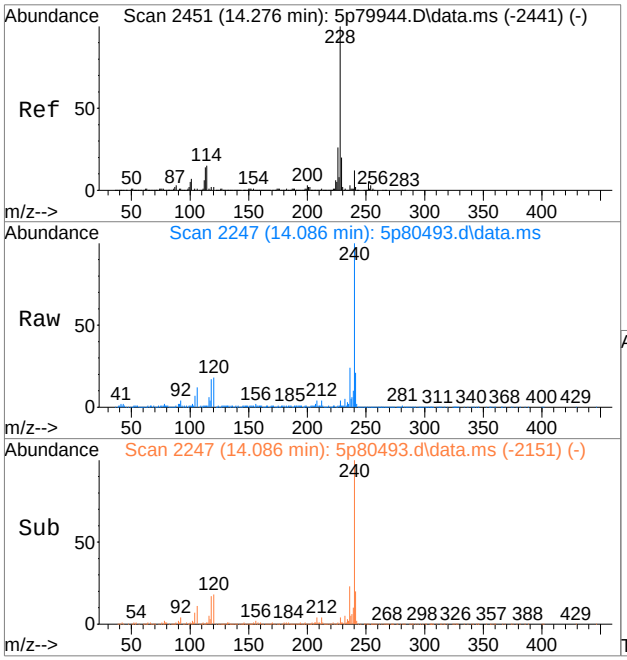


#86
Pyrene
Concen: 0.22 ppm
RT: 12.157 min Scan# 1886
Delta R.T. 0.005 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:202 Resp: 10488

Ion	Ratio	Lower	Upper
202	100		
200	24.3	0.0	50.2
203	20.0	0.0	47.7

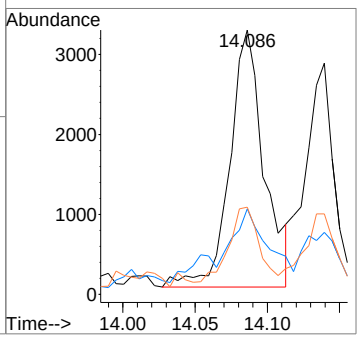


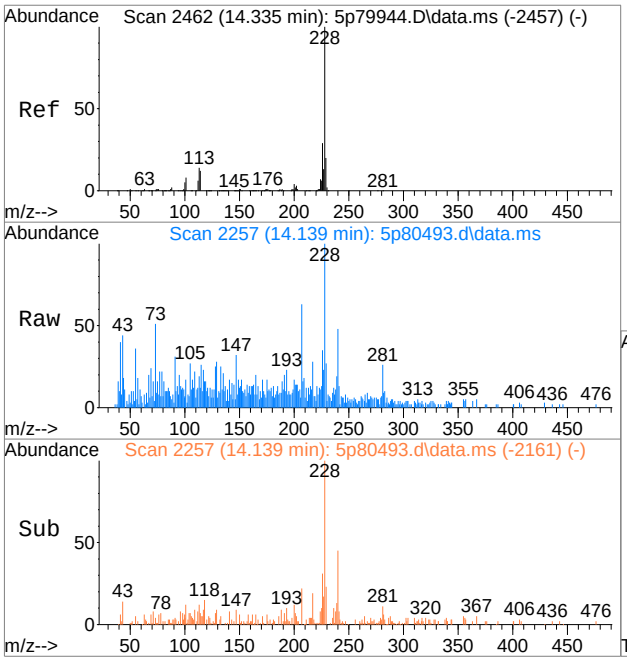


#89
Benzo[a]anthracene
Concen: 0.12 ppm
RT: 14.086 min Scan# 2247
Delta R.T. 0.011 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:228 Resp: 5315

Ion	Ratio	Lower	Upper
228	100		
229	26.5	0.0	50.7
226	29.4	0.0	56.3

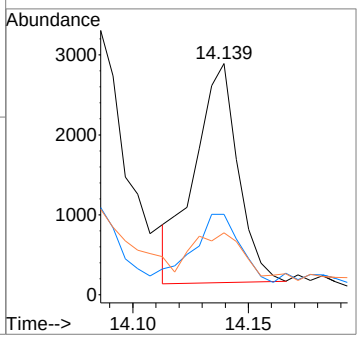


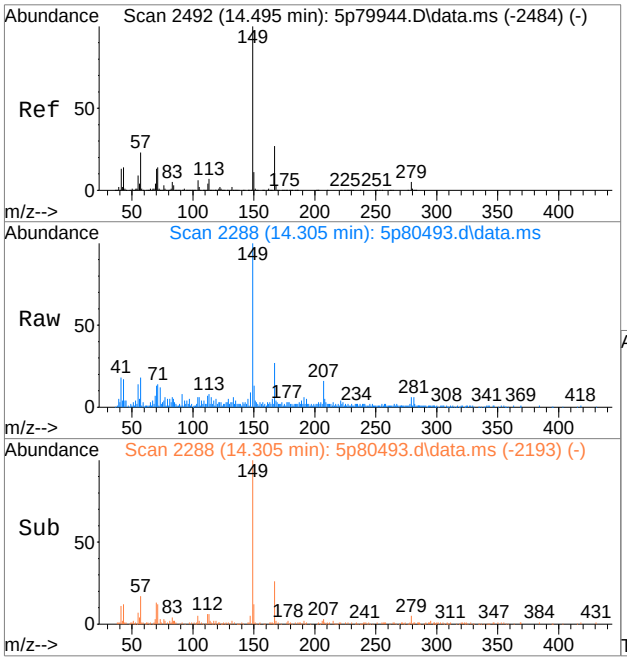


#91
Chrysene
Concen: 0.09 ppm
RT: 14.139 min Scan# 2257
Delta R.T. 0.011 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:228 Resp: 3591

Ion	Ratio	Lower	Upper
228	100		
226	30.0	0.0	59.0
229	17.0	0.0	49.7

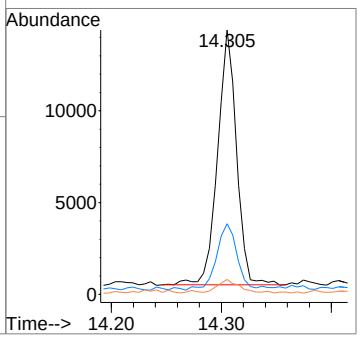


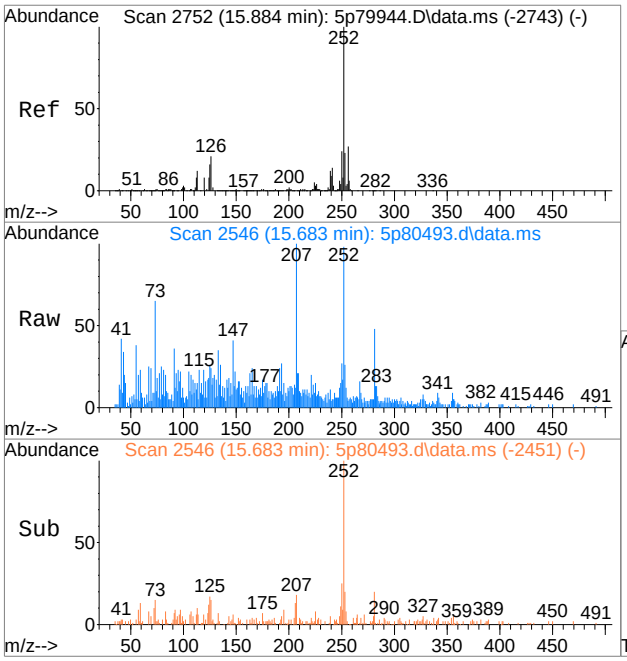


#92
bis(2-Ethylhexyl)phthalate
Concen: 0.58 ppm
RT: 14.305 min Scan# 2288
Delta R.T. 0.005 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:149 Resp: 16743

Ion	Ratio	Lower	Upper
149	100		
167	25.4	0.0	57.4
279	5.0	0.0	34.7

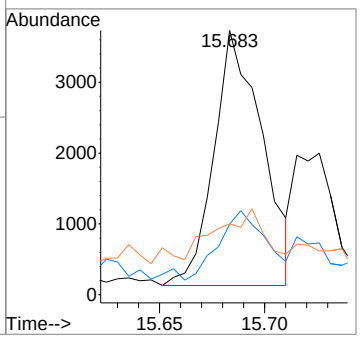


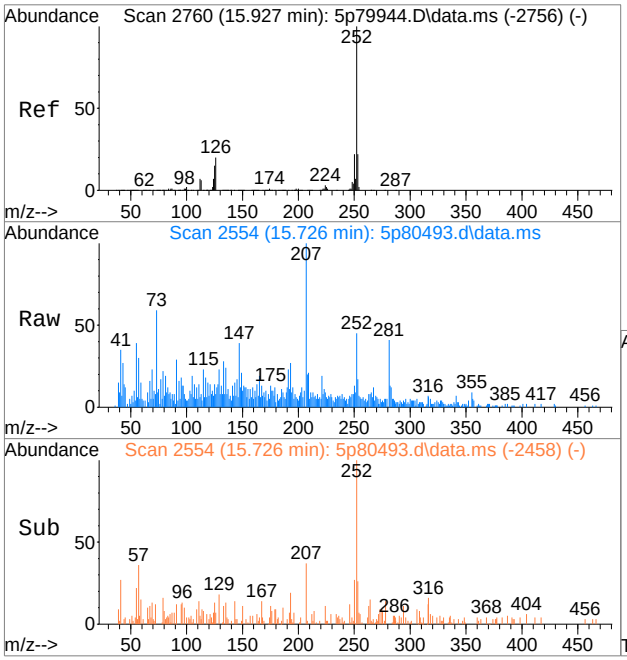


#95
Benzo[b]fluoranthene
Concen: 0.13 ppm
RT: 15.683 min Scan# 2546
Delta R.T. 0.005 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:252 Resp: 5737

Ion	Ratio	Lower	Upper
252	100		
253	19.7	0.0	53.8
125	12.1	0.0	47.1

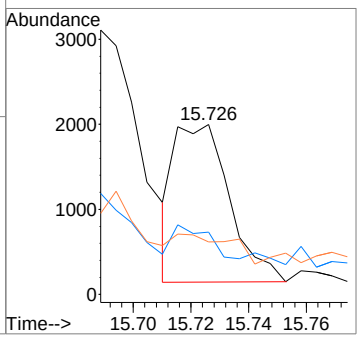


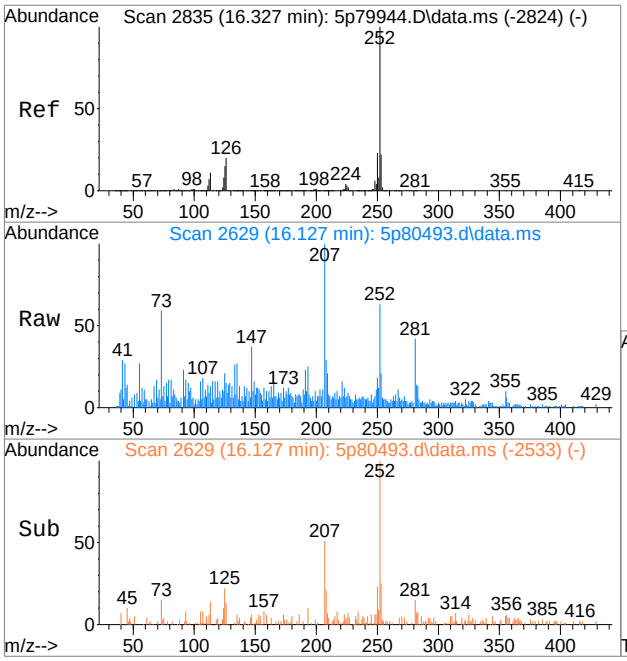


#96
Benzo[k]fluoranthene
Concen: 0.06 ppm
RT: 15.726 min Scan# 2554
Delta R.T. 0.011 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:252 Resp: 2477

Ion	Ratio	Lower	Upper
252	100		
253	23.3	0.0	51.9
125	6.2	0.0	45.4

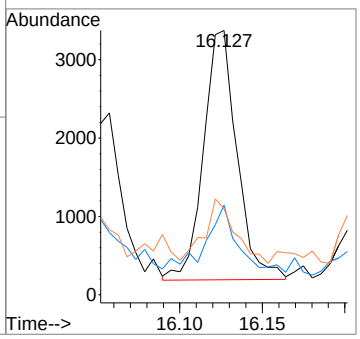


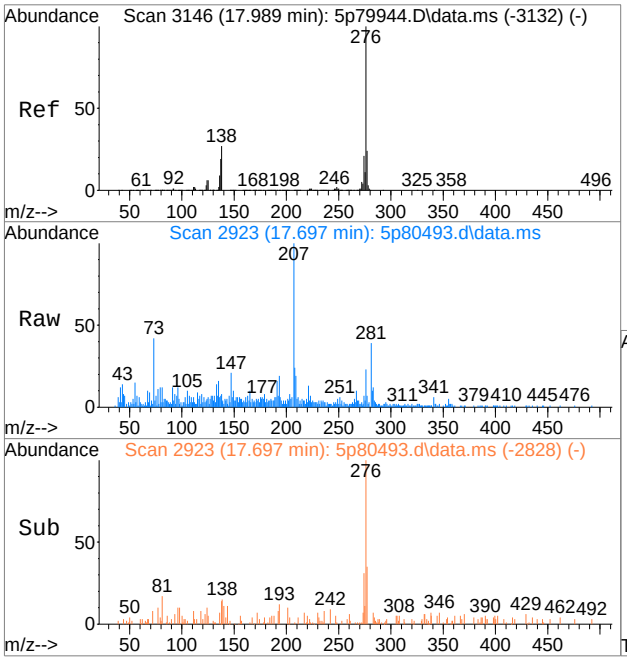


#97
Benzo[a]pyrene
Concen: 0.11 ppm
RT: 16.127 min Scan# 2629
Delta R.T. 0.011 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:252 Resp: 4492

Ion	Ratio	Lower	Upper
252	100		
253	26.7	0.0	52.5
125	14.2	0.0	46.9

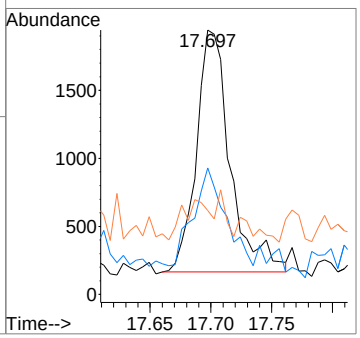


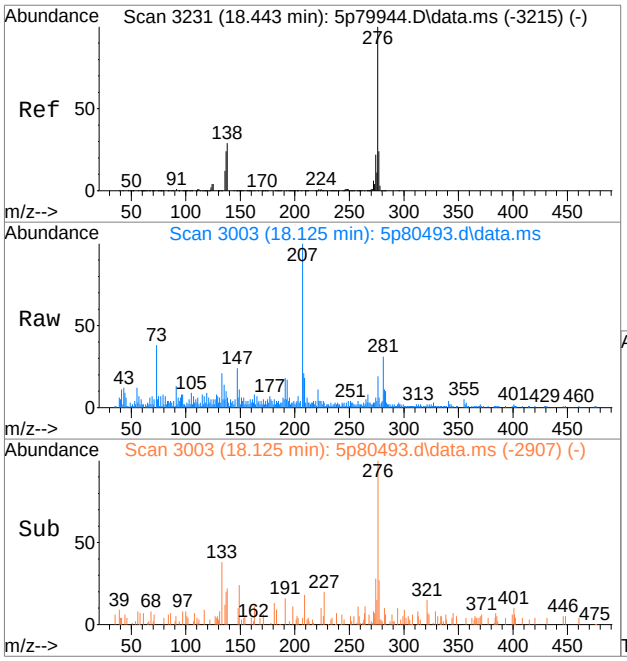


#98
Indeno[1,2,3-cd]pyrene
Concen: 0.09 ppm
RT: 17.697 min Scan# 2923
Delta R.T. 0.005 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:276 Resp: 3428

Ion	Ratio	Lower	Upper
276	100		
138	42.1	0.0	58.6
137	6.7	0.0	51.5

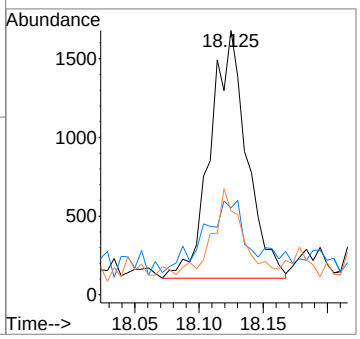




#102
Benzo[g,h,i]perylene
Concen: 0.07 ppm
RT: 18.125 min Scan# 3003
Delta R.T. 0.011 min
Lab File: 5p80493.d
Acq: 18 Dec 2021 7:01 am

Tgt Ion:276 Resp: 3110

Ion	Ratio	Lower	Upper
276	100		
138	22.0	3.9	63.9
277	21.4	0.0	54.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 15:40

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80494.d
Acq On : 18 Dec 2021 7:27 am
Operator : chriss2
Sample : jd36624-5 Inst : MS5P
Misc : op37108,e5p3810,250,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 01:48:36 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

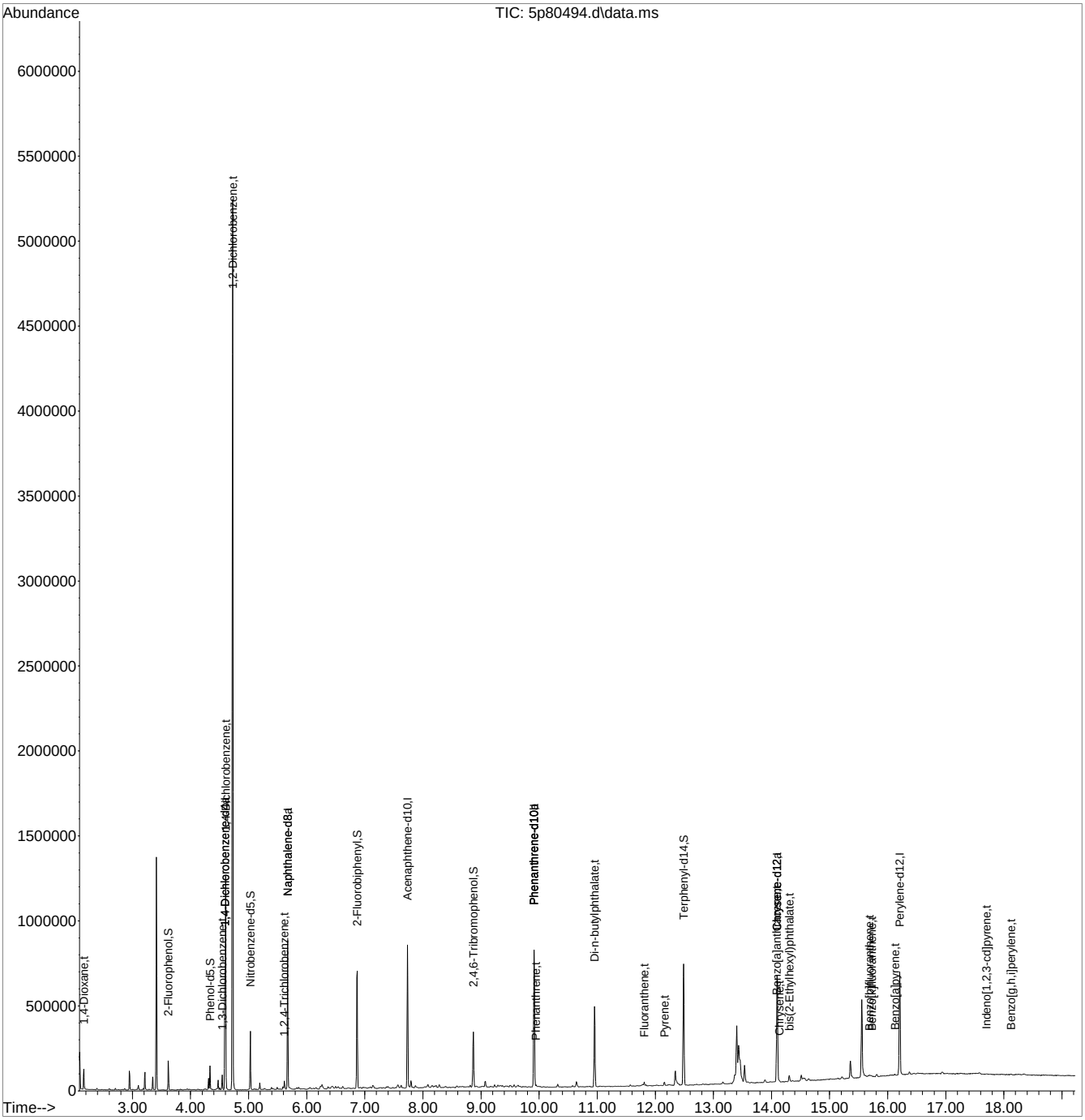
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.593	152	98059	8.00	ppm	0.00
24) Naphthalene-d8	5.672	136	376132	8.00	ppm	0.00
46) Acenaphthene-d10	7.734	164	212053	8.00	ppm	0.00
69) Phenanthrene-d10	9.914	188	361608	8.00	ppm	0.00
84) Chrysene-d12	14.097	240	289984	8.00	ppm	0.00
93) Perylene-d12	16.207	264	272582	8.00	ppm	0.01
103) 1,4-Dichlorobenzene-d4a	4.593	152	98059	8.00	ppm	0.00
105) Phenanthrene-d10a	9.914	188	361608	8.00	ppm	0.00
107) Naphthalene-d8a	5.672	136	376132	8.00	ppm	0.00
109) Chrysene-d12a	14.097	240	289984	8.00	ppm	0.00
111) Phenanthrene-d10b	9.914	188	361608	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.615	112	43024	2.71	ppm	0.02
Spiked Amount 10.000			Recovery	=	27.10%	
8) Phenol-d5	4.336	99	38715	1.90	ppm	0.02
Spiked Amount 10.000			Recovery	=	19.00%	
25) Nitrobenzene-d5	5.031	82	84401	5.96	ppm	0.00
Spiked Amount 10.000			Recovery	=	59.60%	
51) 2-Fluorobiphenyl	6.869	172	246693	7.09	ppm	0.00
Spiked Amount 10.000			Recovery	=	70.90%	
74) 2,4,6-Tribromophenol	8.867	330	44798	9.75	ppm	0.00
Spiked Amount 10.000			Recovery	=	97.50%	
87) Terphenyl-d14	12.489	244	307562	8.51	ppm	0.01
Spiked Amount 10.000			Recovery	=	85.10%	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery	=	0.00%	
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.162	88	39249	5.70	ppm	90
14) 1,3-Dichlorobenzene	4.545	146	14451	0.77	ppm	95
15) 1,4-Dichlorobenzene	4.604	146	232335	12.82	ppm	98
17) 1,2-Dichlorobenzene	4.726	146	1282374	74.45	ppm	94
36) 1,2,4-Trichlorobenzene	5.613	180	6801	0.46	ppm	92
78) Phenanthrene	9.946	178	5532	0.12	ppm	97
81) Di-n-butylphthalate	10.956	149	299005	5.16	ppm	99
82) Fluoranthene	11.810	202	9726	0.18	ppm	98
86) Pyrene	12.158	202	9403	0.19	ppm	90
89) Benzo[a]anthracene	14.086	228	4313m	0.09	ppm	
91) Chrysene	14.134	228	2666	0.07	ppm	88
92) bis(2-Ethylhexyl)phtha...	14.305	149	15449	0.52	ppm	95
95) Benzo[b]fluoranthene	15.683	252	4208	0.10	ppm	83
96) Benzo[k]fluoranthene	15.726	252	1141	0.03	ppm	86
97) Benzo[a]pyrene	16.127	252	2867	0.08	ppm	75
98) Indeno[1,2,3-cd]pyrene	17.697	276	2202	0.06	ppm	73
102) Benzo[g,h,i]perylene	18.125	276	2115	0.05	ppm	84

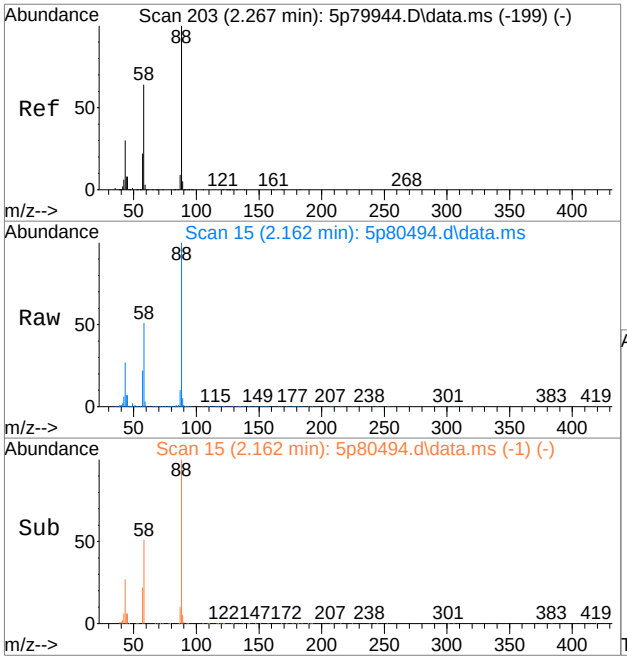
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80494.d
Acq On : 18 Dec 2021 7:27 am
Operator : chriss2
Sample : jd36624-5 Inst : MS5P
Misc : op37108,e5p3810,250,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 01:48:36 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

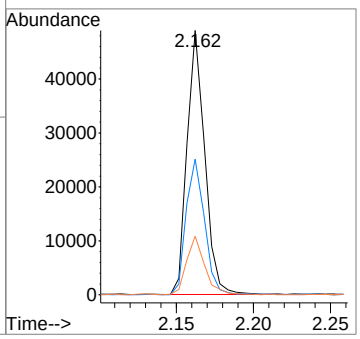


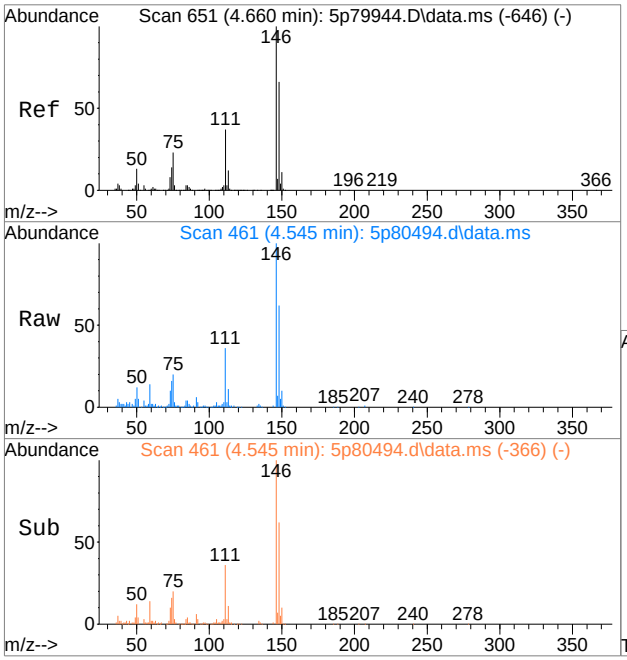


#2
1,4-Dioxane
Concen: 5.70 ppm
RT: 2.162 min Scan# 15
Delta R.T. 0.032 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion: 88 Resp: 39249

Ion	Ratio	Lower	Upper
88	100		
58	51.3	30.1	90.1
57	22.2	0.0	50.3

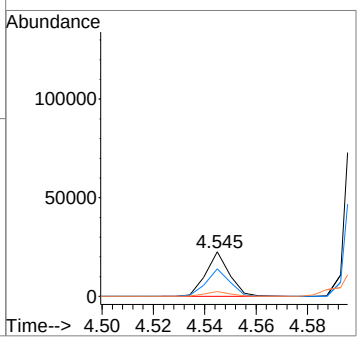


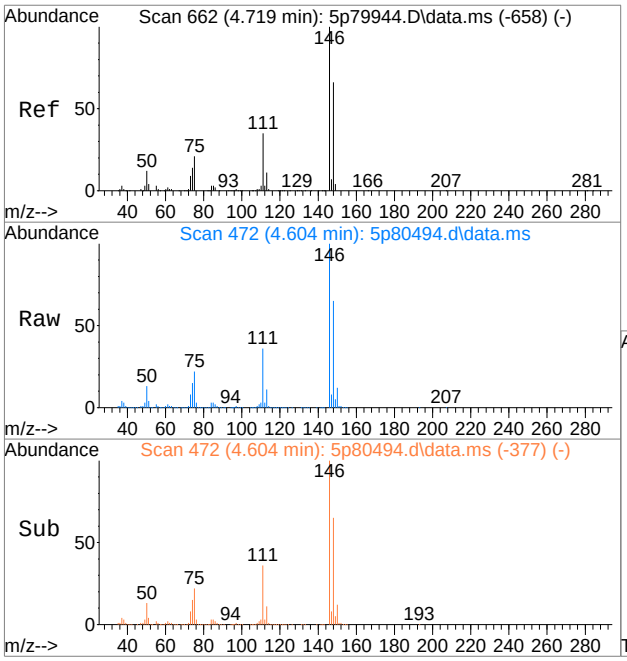


#14
1,3-Dichlorobenzene
Concen: 0.77 ppm
RT: 4.545 min Scan# 461
Delta R.T. 0.005 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:146 Resp: 14451

Ion	Ratio	Lower	Upper
146	100		
148	61.9	36.2	96.2
113	10.7	0.0	41.6

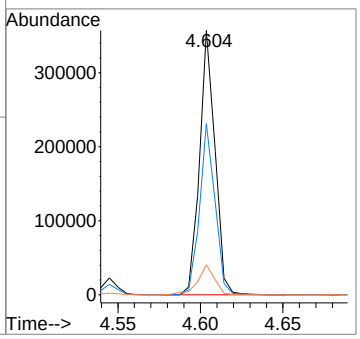


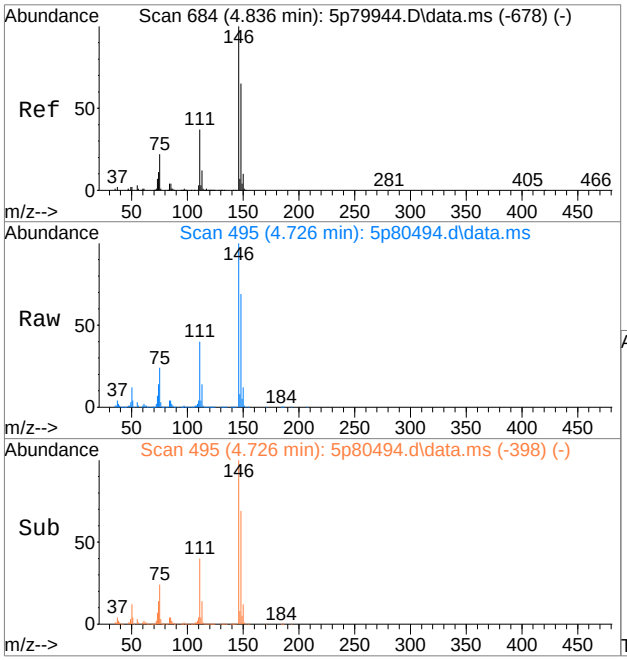


#15
1,4-Dichlorobenzene
Concen: 12.82 ppm
RT: 4.604 min Scan# 472
Delta R.T. 0.005 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:146 Resp: 232335

Ion	Ratio	Lower	Upper
146	100		
148	64.7	33.3	93.3
113	11.4	0.0	41.7

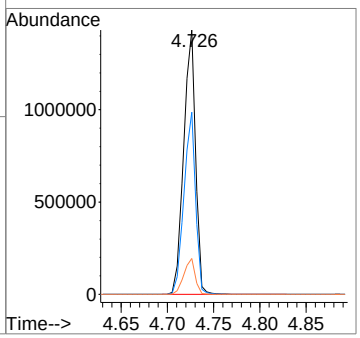


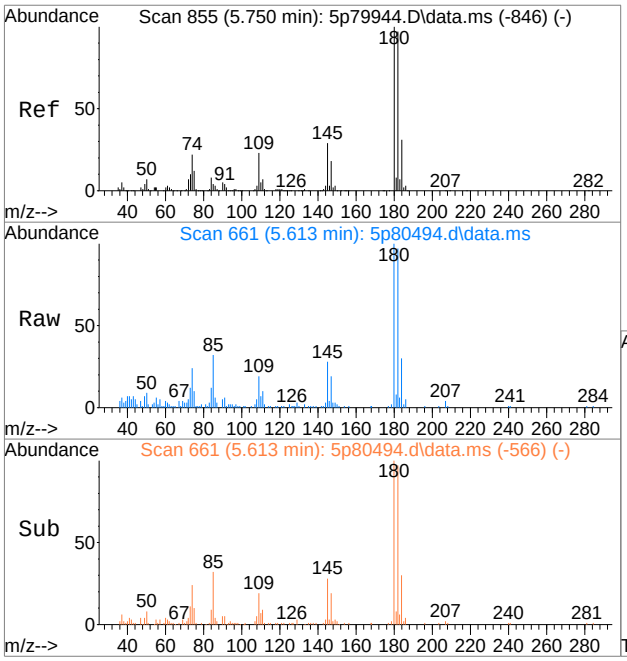


#17
1,2-Dichlorobenzene
Concen: 74.45 ppm
RT: 4.726 min Scan# 495
Delta R.T. 0.016 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:146 Resp: 1282374

Ion	Ratio	Lower	Upper
146	100		
148	69.0	33.7	93.7
113	13.6	0.0	42.3

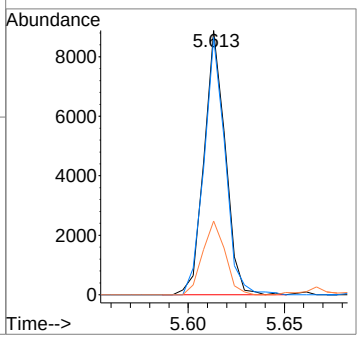


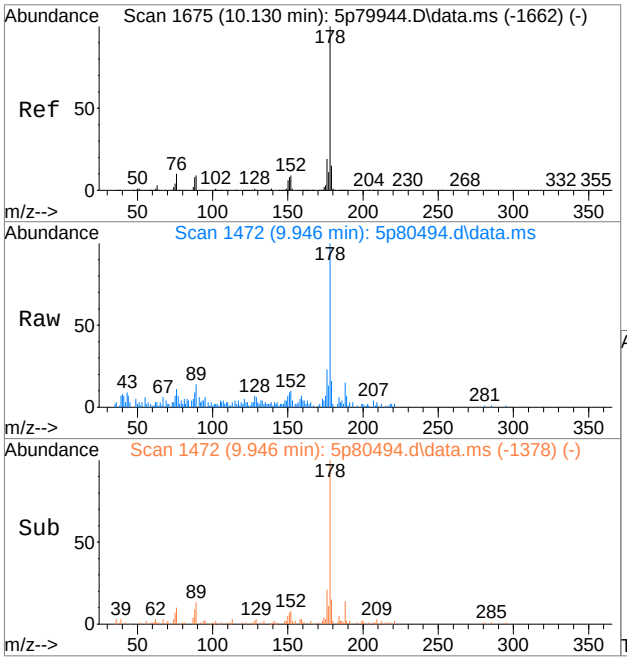


#36
1,2,4-Trichlorobenzene
Concen: 0.46 ppm
RT: 5.613 min Scan# 661
Delta R.T. 0.005 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:180 Resp: 6801

Ion	Ratio	Lower	Upper
180	100		
182	97.3	59.8	119.8
145	27.1	1.1	61.1

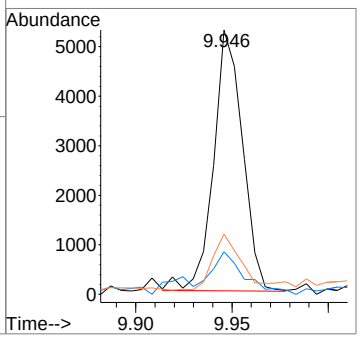


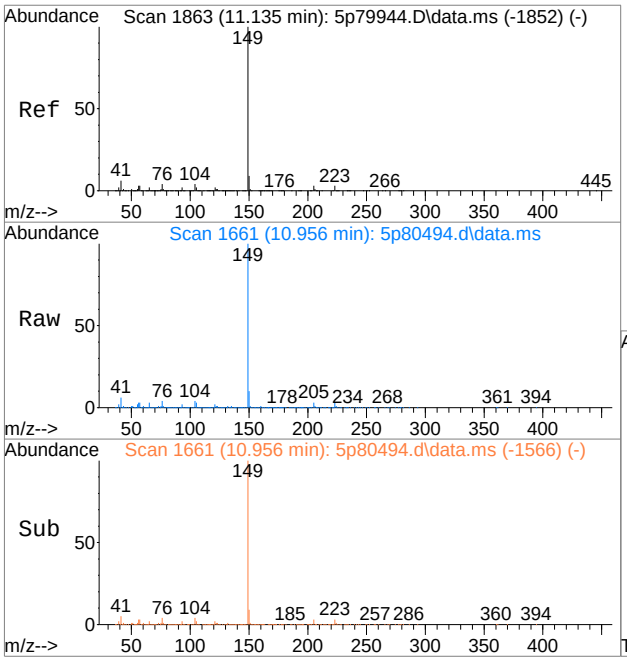


#78
Phenanthrene
Concen: 0.12 ppm
RT: 9.946 min Scan# 1472
Delta R.T. 0.000 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:178 Resp: 5532

Ion	Ratio	Lower	Upper
178	100		
179	13.3	0.0	44.9
176	19.7	0.0	48.7

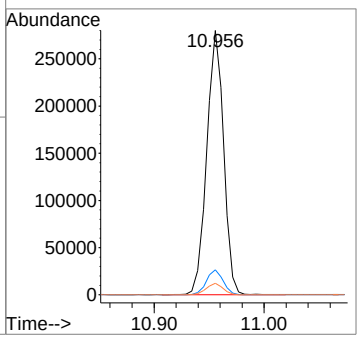


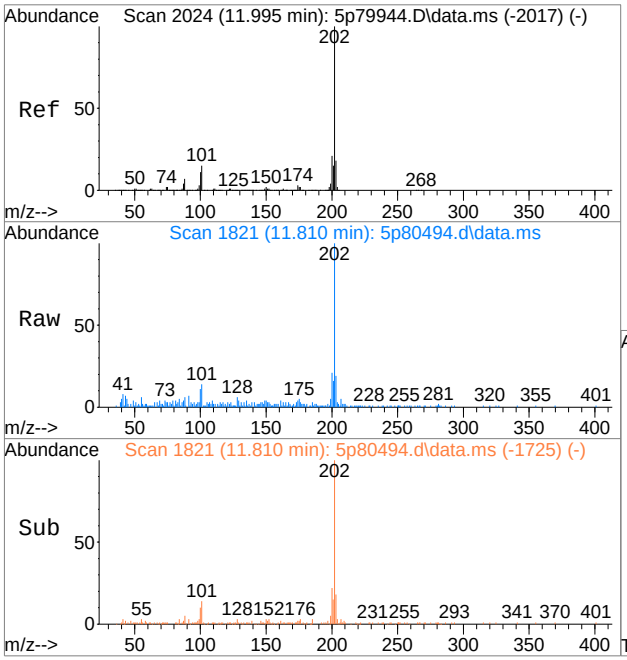


#81
Di-n-butylphthalate
Concen: 5.16 ppm
RT: 10.956 min Scan# 1661
Delta R.T. 0.005 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:149 Resp: 299005

Ion	Ratio	Lower	Upper
149	100		
150	9.5	0.0	38.9
104	4.4	0.0	34.2

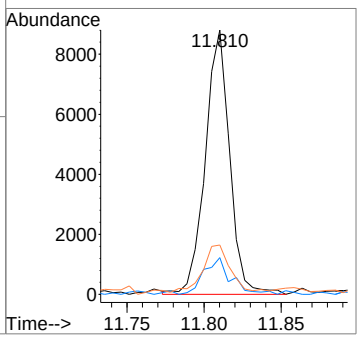


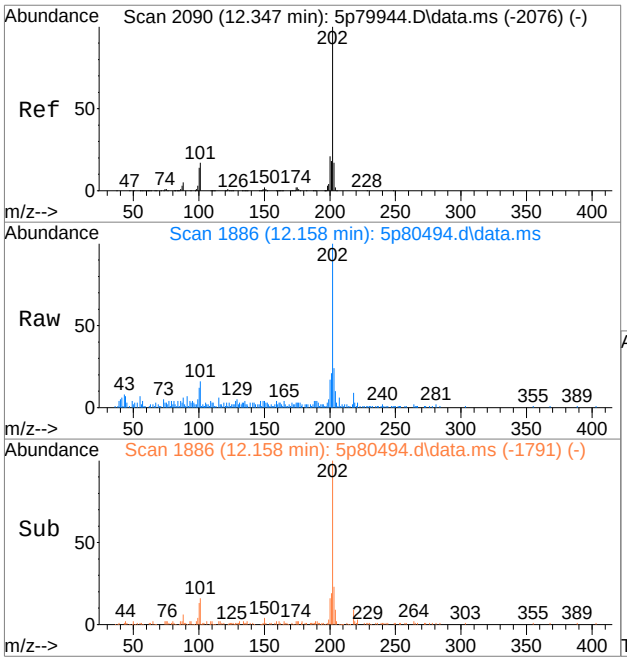


#82
Fluoranthene
Concen: 0.18 ppm
RT: 11.810 min Scan# 1821
Delta R.T. 0.011 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:202 Resp: 9726

Ion	Ratio	Lower	Upper
202	100		
101	13.0	0.0	42.9
203	16.8	0.0	48.1

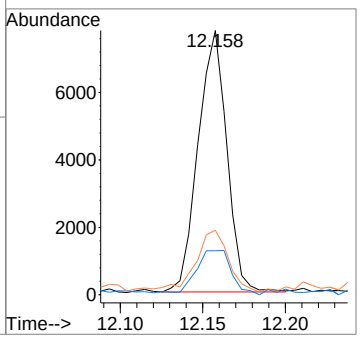


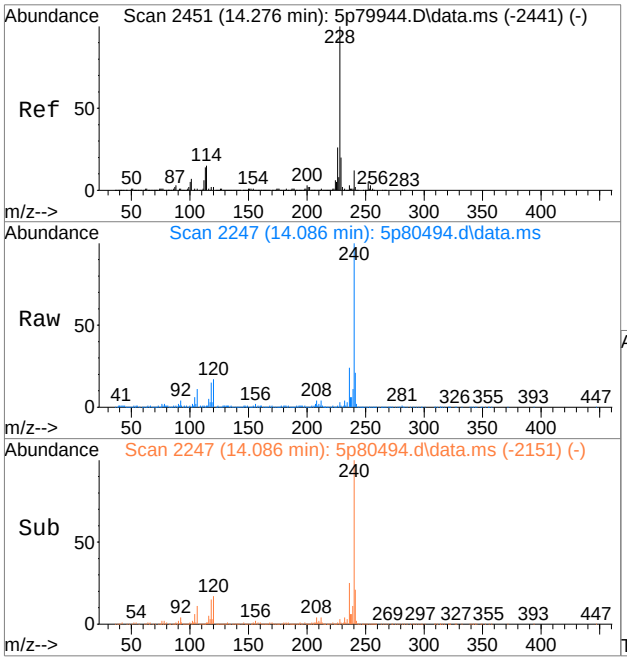


#86
Pyrene
Concen: 0.19 ppm
RT: 12.158 min Scan# 1886
Delta R.T. 0.005 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:202 Resp: 9403

Ion	Ratio	Lower	Upper
202	100		
200	15.2	0.0	50.2
203	21.8	0.0	47.7

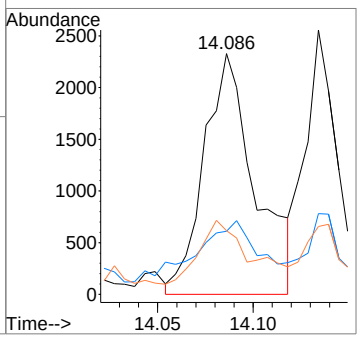


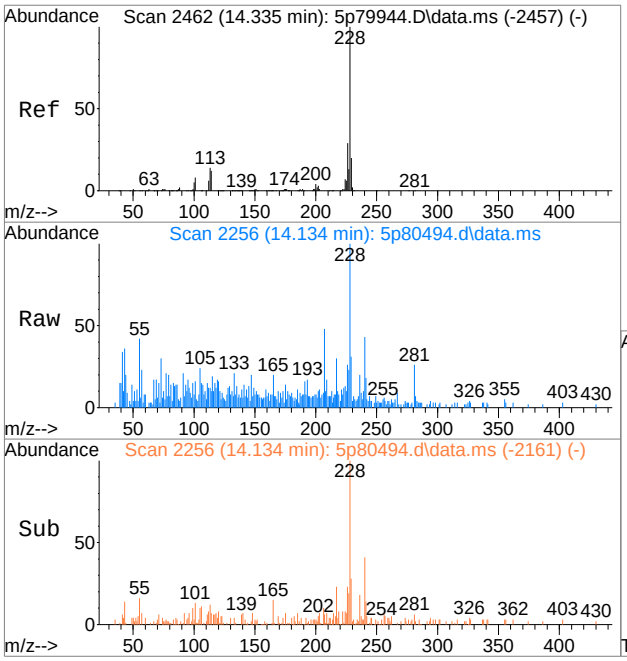


#89
Benzo[a]anthracene
Concen: 0.09 ppm m
RT: 14.086 min Scan# 2247
Delta R.T. 0.011 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:228 Resp: 4313

Ion	Ratio	Lower	Upper
228	100		
229	26.2	0.0	50.7
226	26.4	0.0	56.3

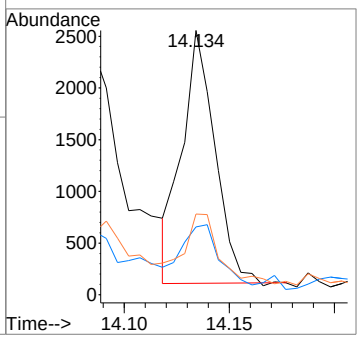


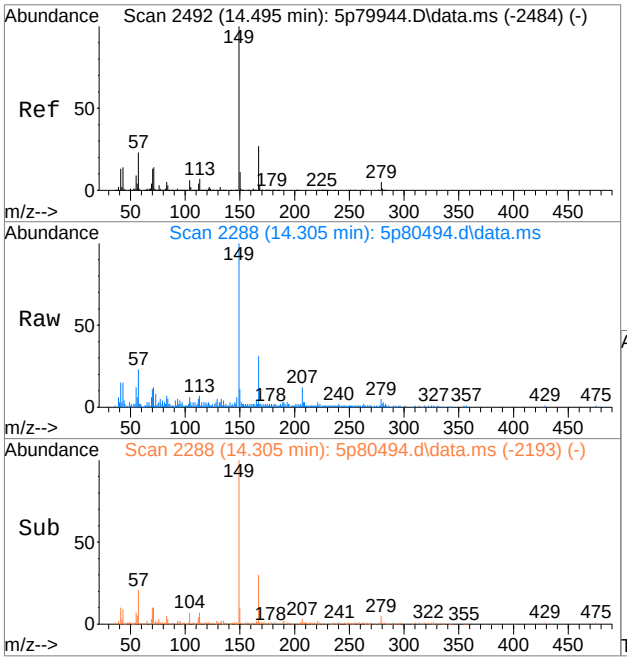


#91
Chrysene
Concen: 0.07 ppm
RT: 14.134 min Scan# 2256
Delta R.T. 0.005 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:228 Resp: 2666

Ion	Ratio	Lower	Upper
228	100		
226	23.4	0.0	59.0
229	26.3	0.0	49.7

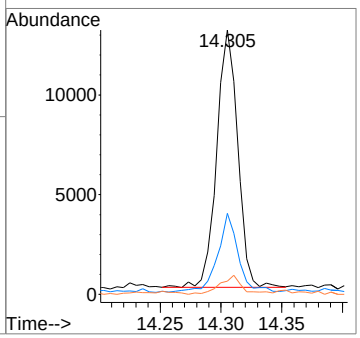


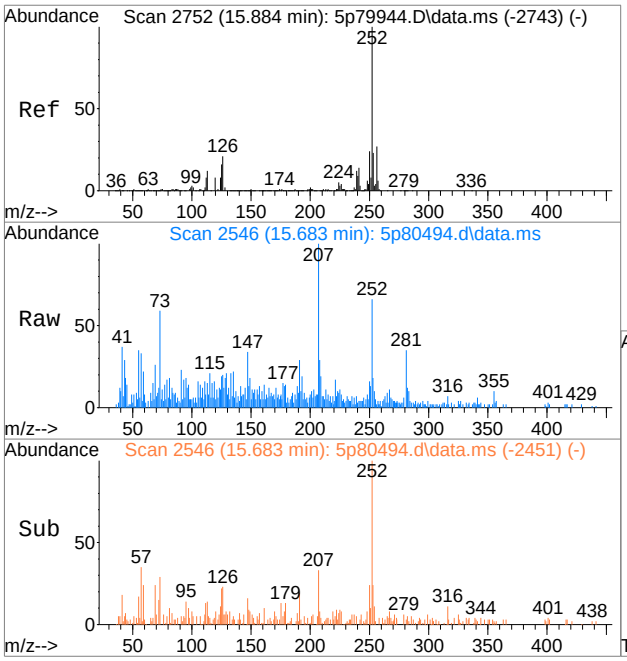


#92
bis(2-Ethylhexyl)phthalate
Concen: 0.52 ppm
RT: 14.305 min Scan# 2288
Delta R.T. 0.005 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:149 Resp: 15449

Ion	Ratio	Lower	Upper
149	100		
167	30.2	0.0	57.4
279	3.7	0.0	34.7

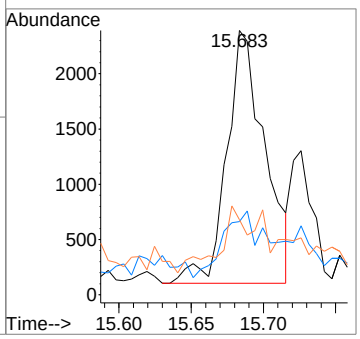


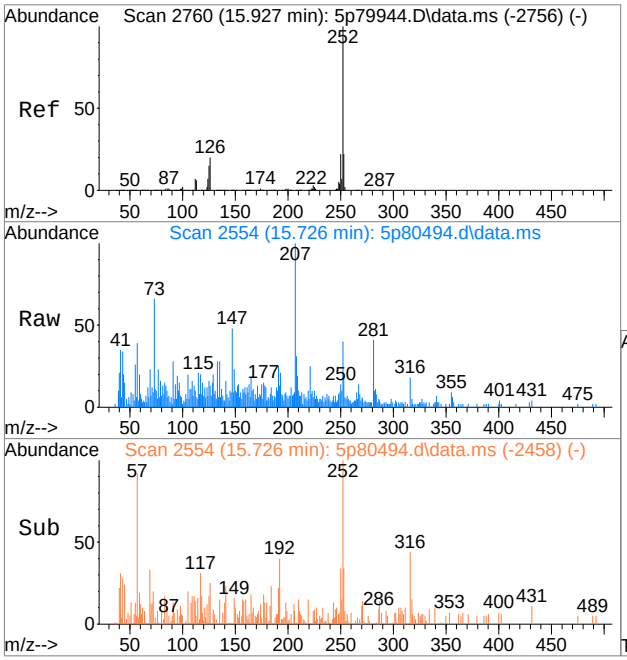


#95
Benzo[b]fluoranthene
Concen: 0.10 ppm
RT: 15.683 min Scan# 2546
Delta R.T. 0.005 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:252 Resp: 4208

Ion	Ratio	Lower	Upper
252	100		
253	12.2	0.0	53.8
125	14.2	0.0	47.1

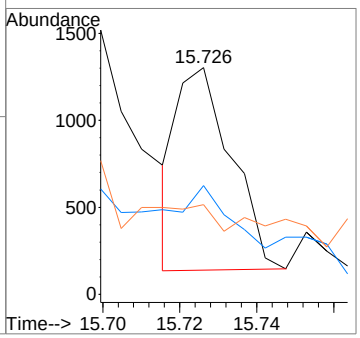


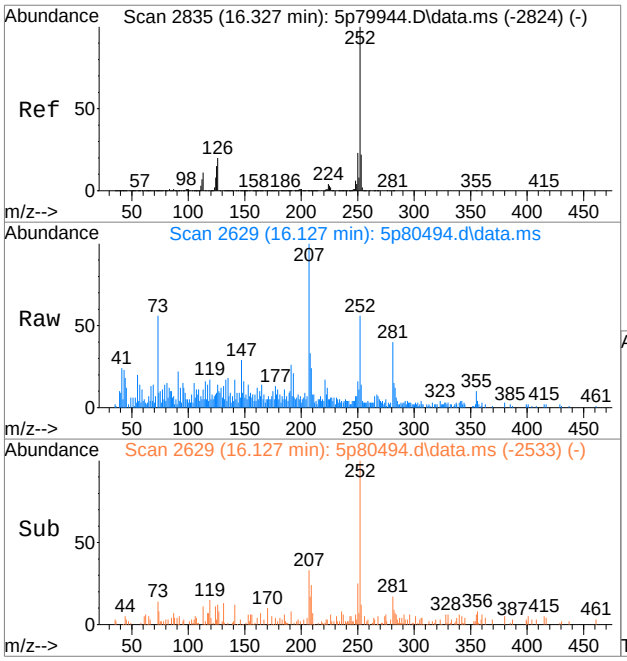


#96
Benzo[k]fluoranthene
Concen: 0.03 ppm
RT: 15.726 min Scan# 2554
Delta R.T. 0.011 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:252 Resp: 1141

Ion	Ratio	Lower	Upper
252	100		
253	25.3	0.0	51.9
125	5.8	0.0	45.4

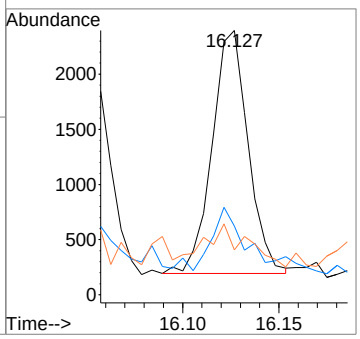


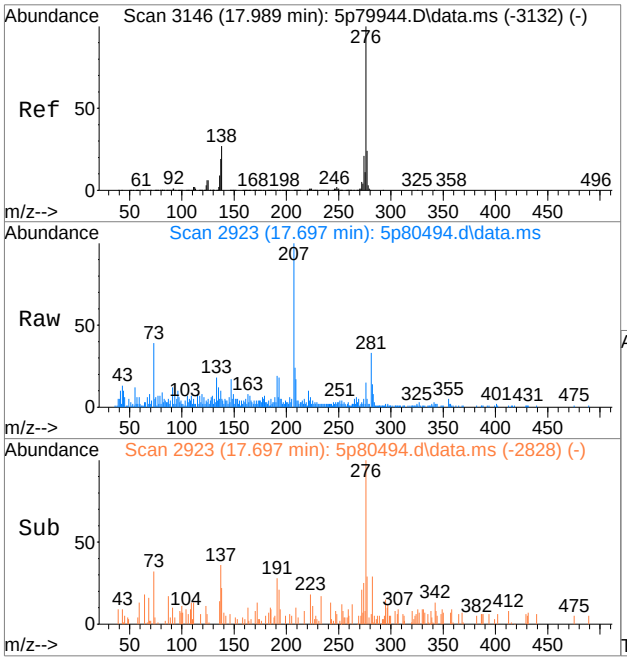


#97
Benzo[a]pyrene
Concen: 0.08 ppm
RT: 16.127 min Scan# 2629
Delta R.T. 0.011 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:252 Resp: 2867

Ion	Ratio	Lower	Upper
252	100		
253	14.7	0.0	52.5
125	0.8	0.0	46.9

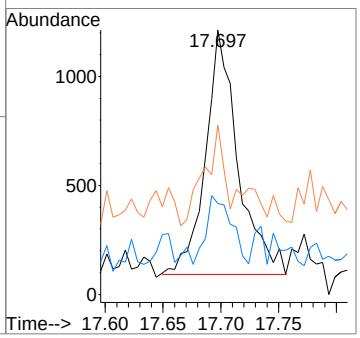


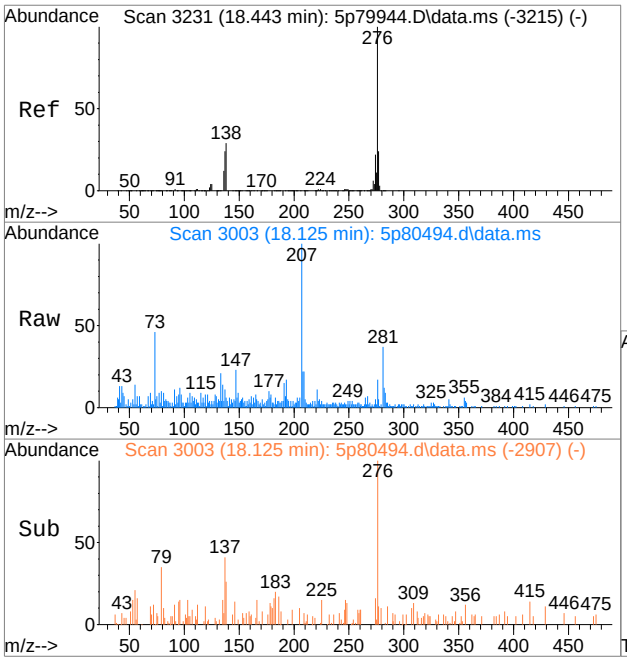


#98
Indeno[1,2,3-cd]pyrene
Concen: 0.06 ppm
RT: 17.697 min Scan# 2923
Delta R.T. 0.005 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:276 Resp: 2202

Ion	Ratio	Lower	Upper
276	100		
138	16.0	0.0	58.6
137	36.5	0.0	51.5

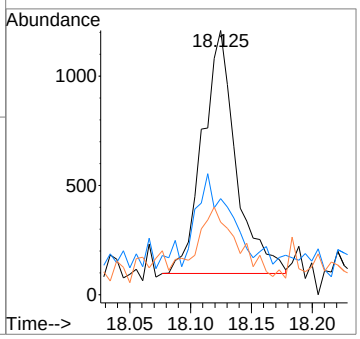




#102
Benzo[g,h,i]perylene
Concen: 0.05 ppm
RT: 18.125 min Scan# 3003
Delta R.T. 0.011 min
Lab File: 5p80494.d
Acq: 18 Dec 2021 7:27 am

Tgt Ion:276 Resp: 2115

Ion	Ratio	Lower	Upper
276	100		
138	23.5	3.9	63.9
277	17.5	0.0	54.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80495.d
Acq On : 18 Dec 2021 7:54 am
Operator : chriss2
Sample : jd36624-6 Inst : MS5P
Misc : op37108,e5p3810,250,,,1,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 01:51:59 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

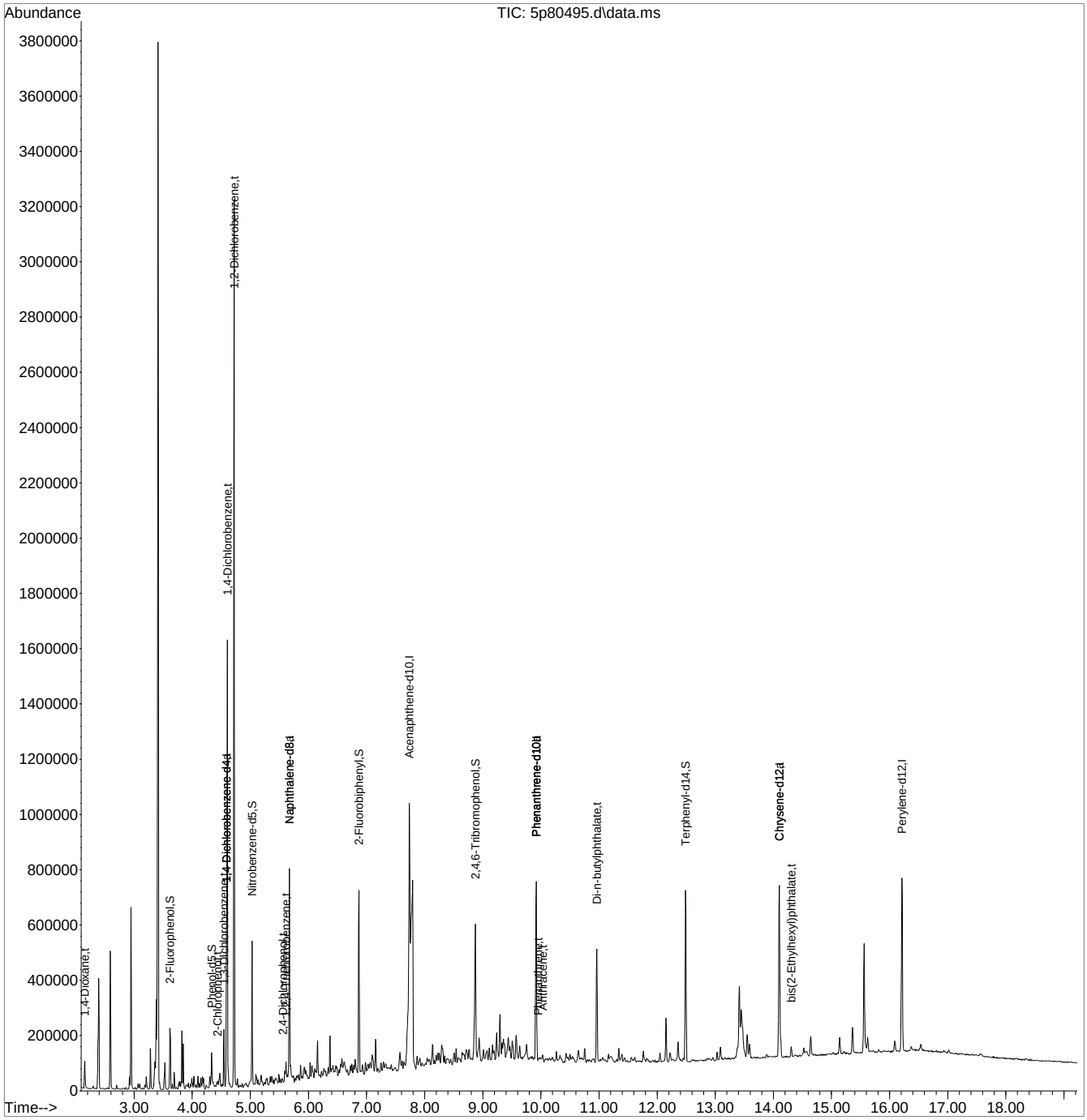
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.587	152	85282	8.00	ppm	0.00
24) Naphthalene-d8	5.672	136	334317	8.00	ppm	0.00
46) Acenaphthene-d10	7.734	164	219472	8.00	ppm	0.00
69) Phenanthrene-d10	9.919	188	302862	8.00	ppm	0.01
84) Chrysene-d12	14.102	240	274974	8.00	ppm	0.01
93) Perylene-d12	16.212	264	298628	8.00	ppm	0.02
103) 1,4-Dichlorobenzene-d4a	4.587	152	85282	8.00	ppm	0.00
105) Phenanthrene-d10a	9.919	188	302862	8.00	ppm	0.01
107) Naphthalene-d8a	5.672	136	334317	8.00	ppm	0.00
109) Chrysene-d12a	14.102	240	274974	8.00	ppm	0.01
111) Phenanthrene-d10b	9.919	188	302862	8.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.615	112	37756	2.73	ppm	0.02
Spiked Amount 10.000			Recovery = 27.30%			
8) Phenol-d5	4.336	99	37454	2.11	ppm	0.02
Spiked Amount 10.000			Recovery = 21.10%			
25) Nitrobenzene-d5	5.031	82	80007	6.36	ppm	0.00
Spiked Amount 10.000			Recovery = 63.60%			
51) 2-Fluorobiphenyl	6.869	172	217497	6.04	ppm	0.00
Spiked Amount 10.000			Recovery = 60.40%			
74) 2,4,6-Tribromophenol	8.872	330	38193	9.92	ppm	0.01
Spiked Amount 10.000			Recovery = 99.20%			
87) Terphenyl-d14	12.489	244	252896	7.38	ppm	0.01
Spiked Amount 10.000			Recovery = 73.80%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.151	88	37840	6.32	ppm	93
12) 2-Chlorophenol	4.438	128	3665	0.25	ppm	97
14) 1,3-Dichlorobenzene	4.545	146	38032	2.32	ppm	98
15) 1,4-Dichlorobenzene	4.603	146	299861	19.03	ppm	97
17) 1,2-Dichlorobenzene	4.721	146	651413	43.48	ppm	97
33) 2,4-Dichlorophenol	5.560	162	1862	0.15	ppm	90
36) 1,2,4-Trichlorobenzene	5.613	180	7938	0.61	ppm	97
78) Phenanthrene	9.951	178	2038	0.05	ppm	72
79) Anthracene	10.031	178	5763	0.14	ppm	77
81) Di-n-butylphthalate	10.961	149	239927	4.95	ppm	100
92) bis(2-Ethylhexyl)phtha...	14.305	149	16134	0.57	ppm	98

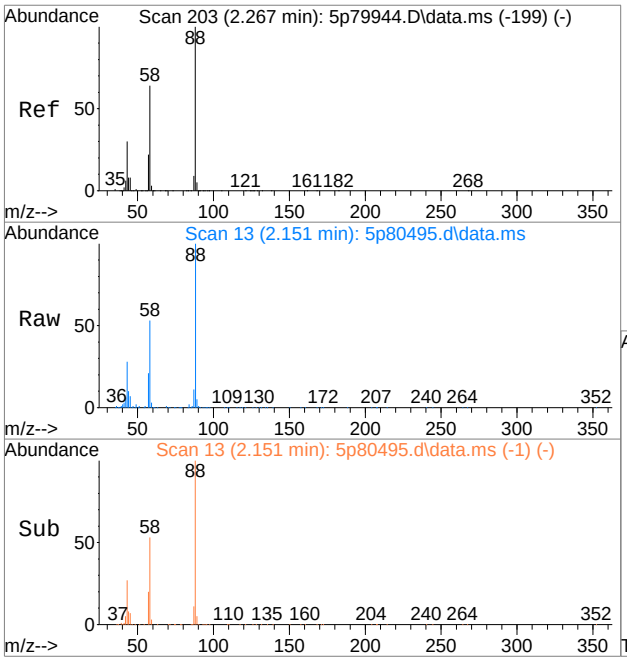
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80495.d
Acq On : 18 Dec 2021 7:54 am
Operator : chriss2
Sample : jd36624-6 Inst : MS5P
Misc : op37108,e5p3810,250,,,1,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 01:51:59 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

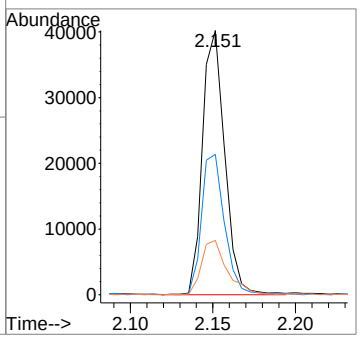


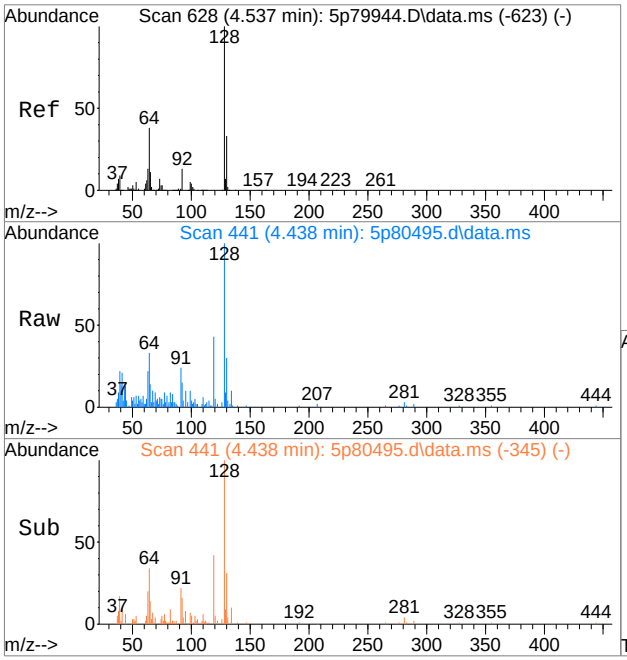


#2
1,4-Dioxane
Concen: 6.32 ppm
RT: 2.151 min Scan# 13
Delta R.T. 0.021 min
Lab File: 5p80495.d
Acq: 18 Dec 2021 7:54 am

Tgt Ion: 88 Resp: 37840

Ion	Ratio	Lower	Upper
88	100		
58	53.0	30.1	90.1
57	20.4	0.0	50.3

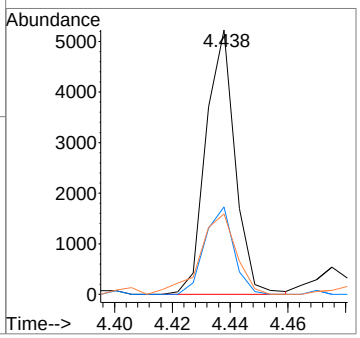


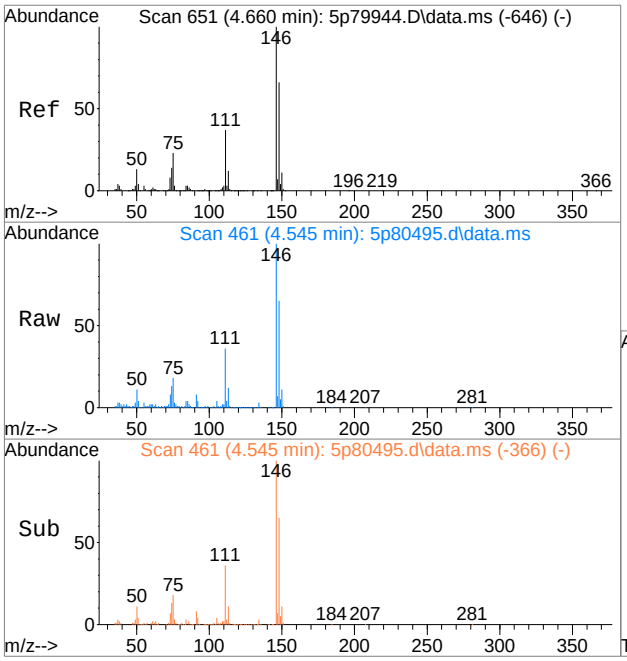


#12
2-Chlorophenol
Concen: 0.25 ppm
RT: 4.438 min Scan# 441
Delta R.T. 0.011 min
Lab File: 5p80495.d
Acq: 18 Dec 2021 7:54 am

Tgt Ion:128 Resp: 3665

Ion	Ratio	Lower	Upper
128	100		
64	33.3	4.3	64.3
130	29.7	2.5	62.5

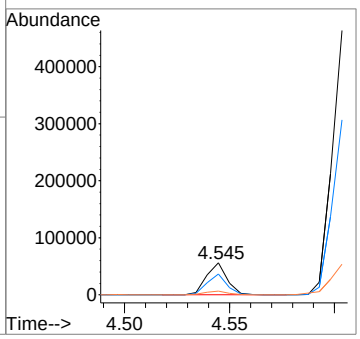


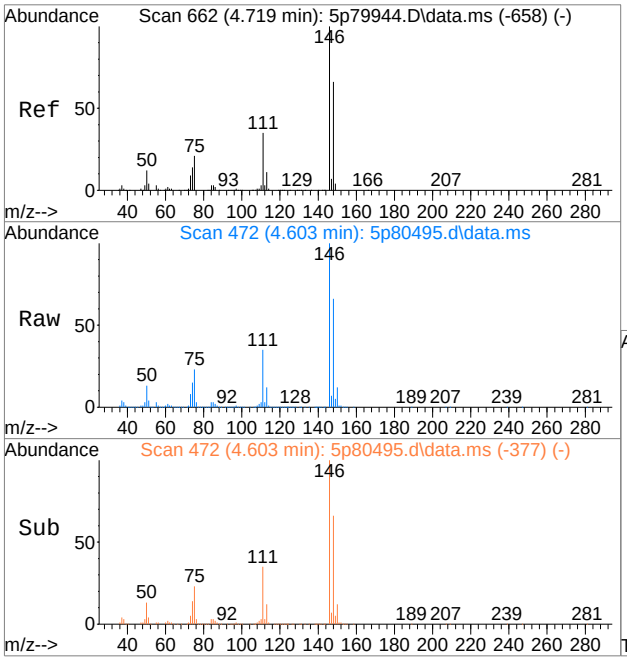


#14
1,3-Dichlorobenzene
Concen: 2.32 ppm
RT: 4.545 min Scan# 461
Delta R.T. 0.005 min
Lab File: 5p80495.d
Acq: 18 Dec 2021 7:54 am

Tgt Ion:146 Resp: 38032

Ion	Ratio	Lower	Upper
146	100		
148	64.9	36.2	96.2
113	11.4	0.0	41.6

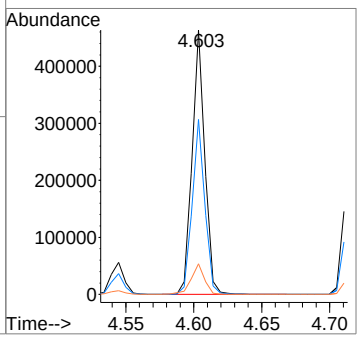


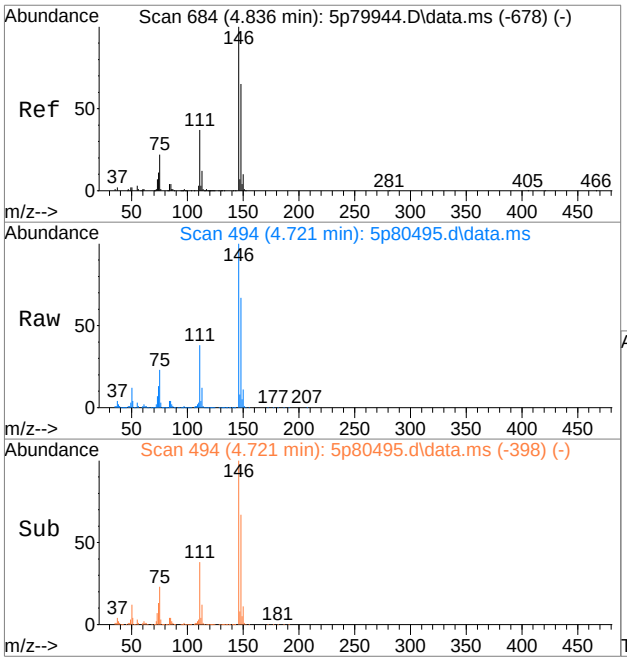


#15
1,4-Dichlorobenzene
Concen: 19.03 ppm
RT: 4.603 min Scan# 472
Delta R.T. 0.005 min
Lab File: 5p80495.d
Acq: 18 Dec 2021 7:54 am

Tgt Ion:146 Resp: 299861

Ion	Ratio	Lower	Upper
146	100		
148	66.1	33.3	93.3
113	11.6	0.0	41.7

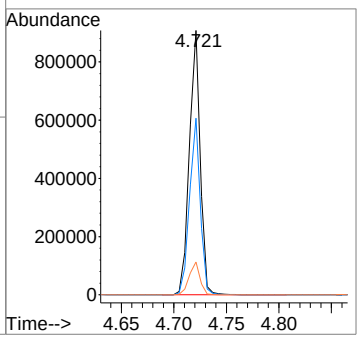


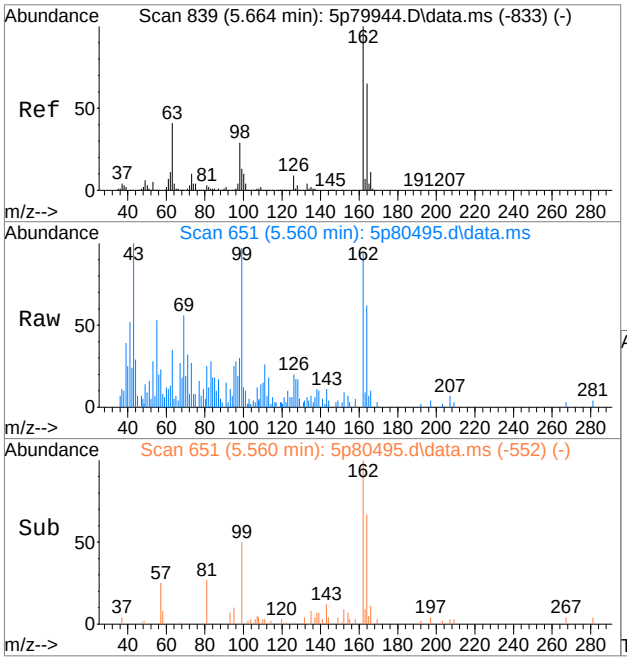


#17
1,2-Dichlorobenzene
Concen: 43.48 ppm
RT: 4.721 min Scan# 494
Delta R.T. 0.011 min
Lab File: 5p80495.d
Acq: 18 Dec 2021 7:54 am

Tgt Ion:146 Resp: 651413

Ion	Ratio	Lower	Upper
146	100		
148	66.8	33.7	93.7
113	12.4	0.0	42.3

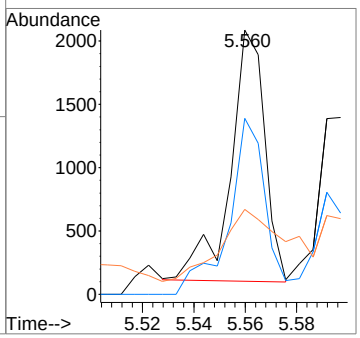


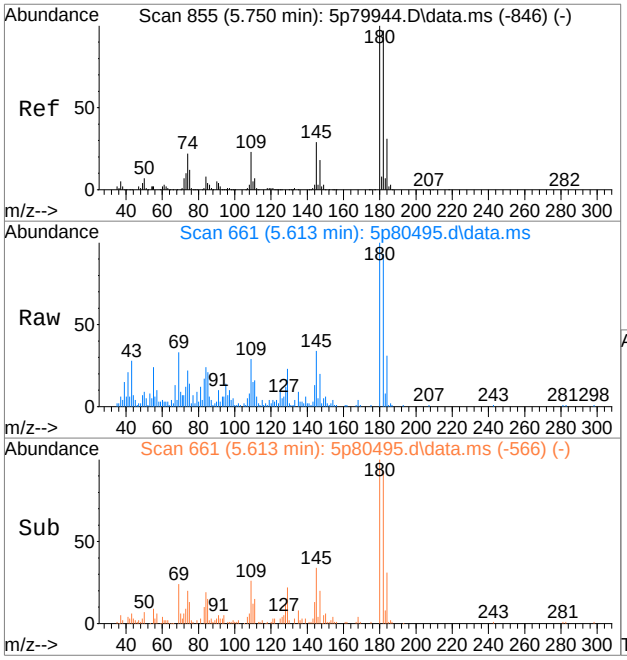


#33
2,4-Dichlorophenol
Concen: 0.15 ppm
RT: 5.560 min Scan# 651
Delta R.T. 0.027 min
Lab File: 5p80495.d
Acq: 18 Dec 2021 7:54 am

Tgt Ion:162 Resp: 1862

Ion	Ratio	Lower	Upper
162	100		
164	67.8	32.4	92.4
98	20.9	0.0	59.3

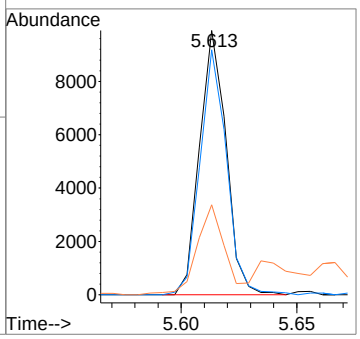


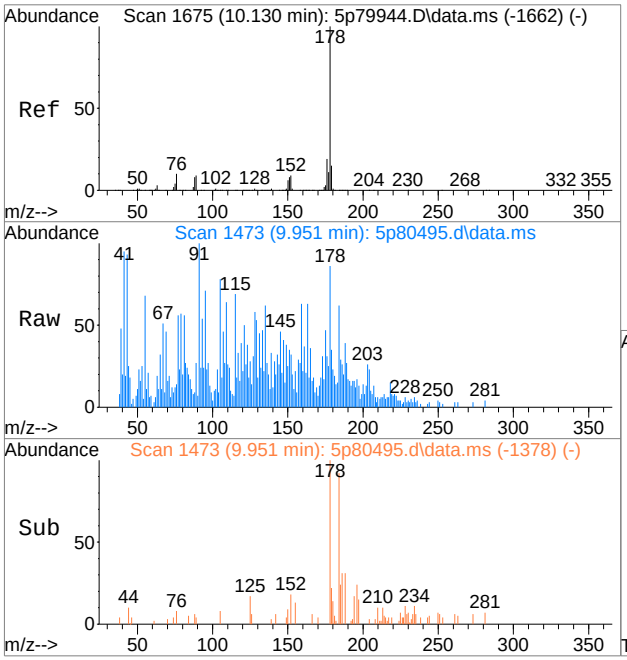


#36
1,2,4-Trichlorobenzene
Concen: 0.61 ppm
RT: 5.613 min Scan# 661
Delta R.T. 0.005 min
Lab File: 5p80495.d
Acq: 18 Dec 2021 7:54 am

Tgt Ion:180 Resp: 7938

Ion	Ratio	Lower	Upper
180	100		
182	92.3	59.8	119.8
145	29.1	1.1	61.1

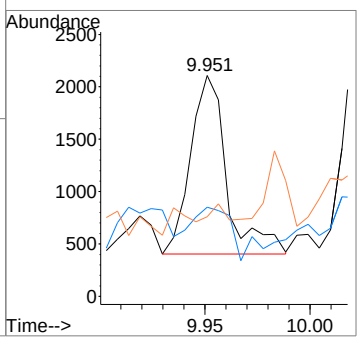


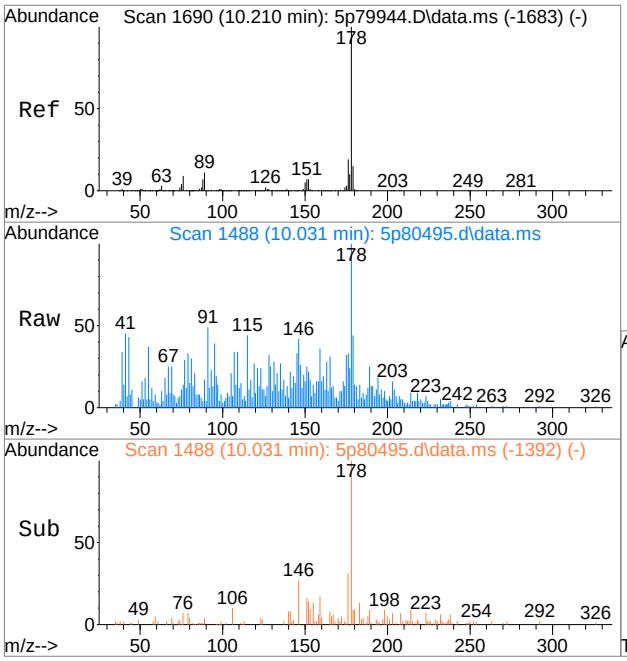


#78
Phenanthrene
Concen: 0.05 ppm
RT: 9.951 min Scan# 1473
Delta R.T. 0.005 min
Lab File: 5p80495.d
Acq: 18 Dec 2021 7:54 am

Tgt Ion:178 Resp: 2038

Ion	Ratio	Lower	Upper
178	100		
179	10.0	0.0	44.9
176	0.0	0.0	48.7

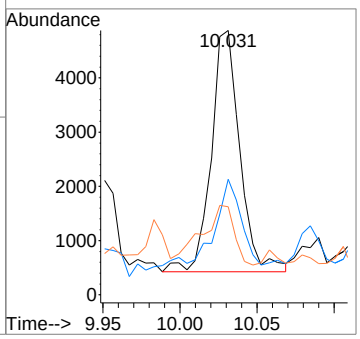


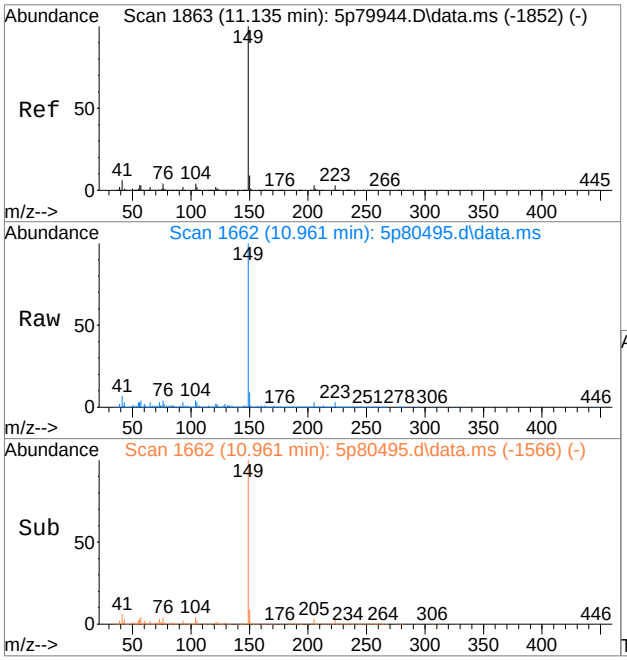


#79
Anthracene
Concen: 0.14 ppm
RT: 10.031 min Scan# 1488
Delta R.T. 0.011 min
Lab File: 5p80495.d
Acq: 18 Dec 2021 7:54 am

Tgt Ion:178 Resp: 5763

Ion	Ratio	Lower	Upper
178	100		
179	35.9	0.0	45.5
176	17.7	0.0	47.8

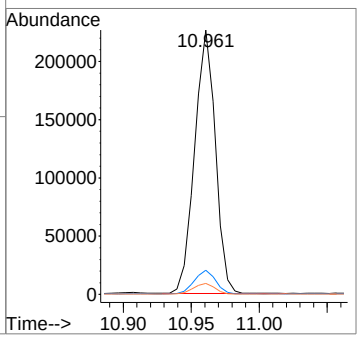


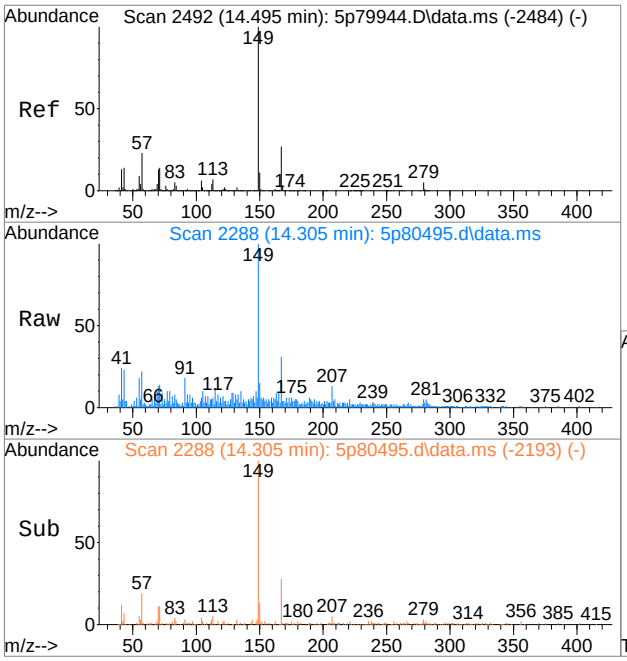


#81
Di-n-butylphthalate
Concen: 4.95 ppm
RT: 10.961 min Scan# 1662
Delta R.T. 0.011 min
Lab File: 5p80495.d
Acq: 18 Dec 2021 7:54 am

Tgt Ion:149 Resp: 239927

Ion	Ratio	Lower	Upper
149	100		
150	9.0	0.0	38.9
104	4.1	0.0	34.2

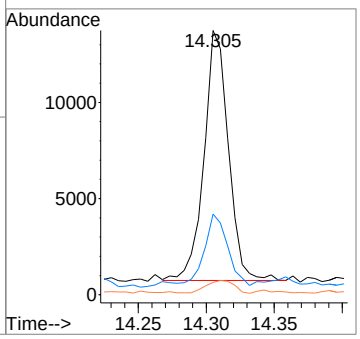




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.57 ppm
RT: 14.305 min Scan# 2288
Delta R.T. 0.005 min
Lab File: 5p80495.d
Acq: 18 Dec 2021 7:54 am

Tgt Ion:149 Resp: 16134

Ion	Ratio	Lower	Upper
149	100		
167	26.1	0.0	57.4
279	3.9	0.0	34.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80496.d
Acq On : 18 Dec 2021 8:21 am
Operator : chriss2
Sample : jd36624-7 Inst : MS5P
Misc : op37108,e5p3810,250,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 01:54:44 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

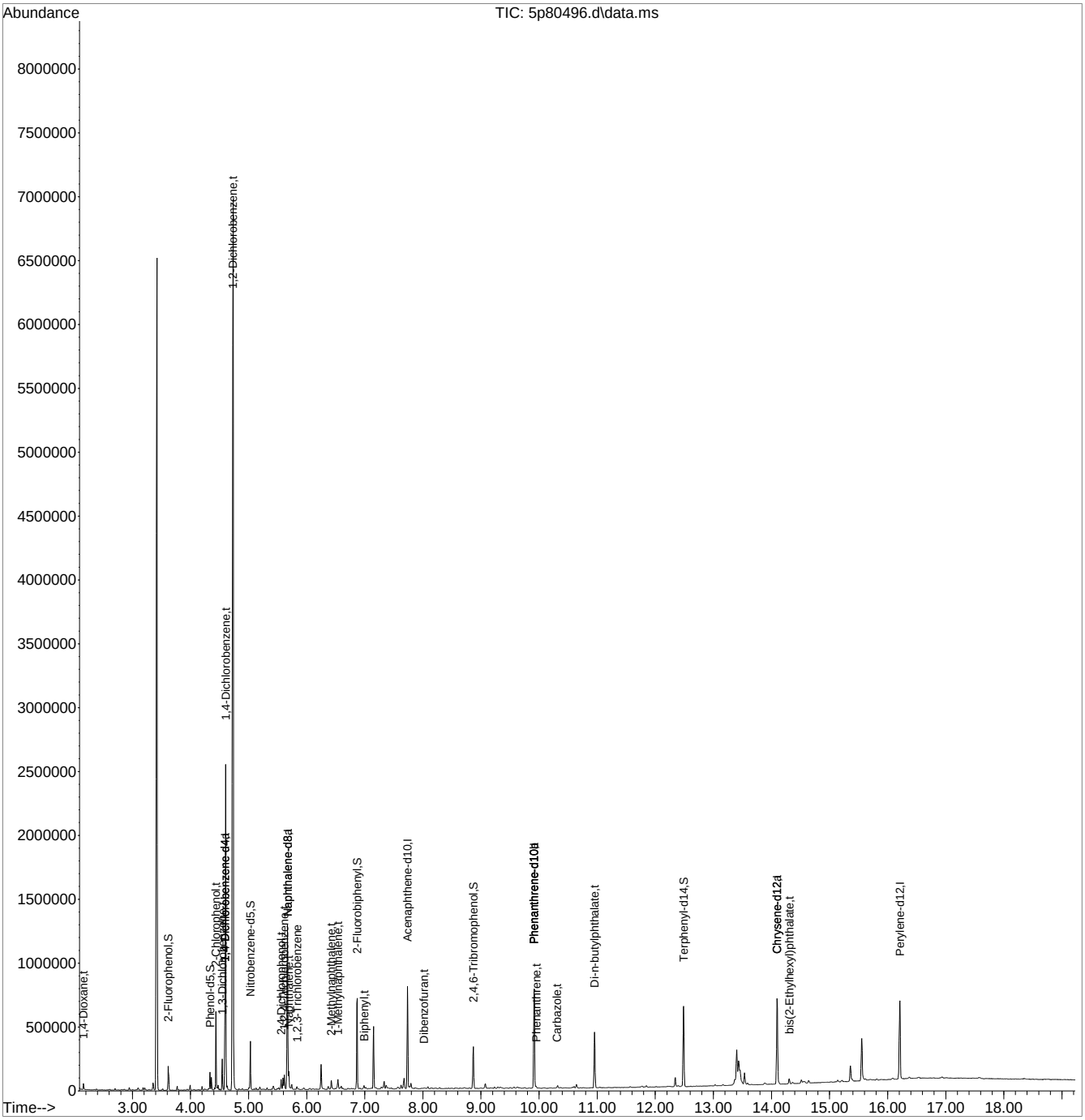
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.593	152	87738	8.00	ppm	0.00
24) Naphthalene-d8	5.672	136	332932	8.00	ppm	0.00
46) Acenaphthene-d10	7.734	164	206067	8.00	ppm	0.00
69) Phenanthrene-d10	9.914	188	361637	8.00	ppm	0.00
84) Chrysene-d12	14.097	240	300842	8.00	ppm	0.00
93) Perylene-d12	16.212	264	293040	8.00	ppm	0.02
103) 1,4-Dichlorobenzene-d4a	4.593	152	87738	8.00	ppm	0.00
105) Phenanthrene-d10a	9.914	188	361637	8.00	ppm	0.00
107) Naphthalene-d8a	5.672	136	332932	8.00	ppm	0.00
109) Chrysene-d12a	14.097	240	300842	8.00	ppm	0.00
111) Phenanthrene-d10b	9.914	188	361637	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.615	112	41365	2.91	ppm	0.02
Spiked Amount 10.000			Recovery = 29.10%			
8) Phenol-d5	4.337	99	40346	2.21	ppm	0.02
Spiked Amount 10.000			Recovery = 22.10%			
25) Nitrobenzene-d5	5.031	82	88747	7.08	ppm	0.00
Spiked Amount 10.000			Recovery = 70.80%			
51) 2-Fluorobiphenyl	6.869	172	251003	7.43	ppm	0.00
Spiked Amount 10.000			Recovery = 74.30%			
74) 2,4,6-Tribromophenol	8.867	330	42648	9.28	ppm	0.00
Spiked Amount 10.000			Recovery = 92.80%			
87) Terphenyl-d14	12.489	244	281875	7.52	ppm	0.01
Spiked Amount 10.000			Recovery = 75.20%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.157	88	16231	2.63	ppm	95
12) 2-Chlorophenol	4.438	128	135765	8.88	ppm	97
14) 1,3-Dichlorobenzene	4.545	146	43881	2.61	ppm	98
15) 1,4-Dichlorobenzene	4.604	146	516067	31.83	ppm	98
17) 1,2-Dichlorobenzene	4.732	146	2273204	147.49	ppm	93
33) 2,4-Dichlorophenol	5.560	162	15190	1.26	ppm	92
36) 1,2,4-Trichlorobenzene	5.613	180	17961	1.38	ppm	94
37) 1,2,3-Trichlorobenzene	5.832	180	3397	0.28	ppm	98
38) Naphthalene	5.694	128	60265	1.46	ppm	98
44) 2-Methylnaphthalene	6.425	141	14966	0.56	ppm	92
45) 1-Methylnaphthalene	6.538	141	17833	0.71	ppm	94
53) Biphenyl	6.986	154	8309	0.22	ppm	94
62) Dibenzofuran	8.017	168	2636	0.06	ppm	86
78) Phenanthrene	9.951	178	7048	0.15	ppm	93
80) Carbazole	10.309	167	2785	0.06	ppm	78
81) Di-n-butylphthalate	10.956	149	283640	4.90	ppm	100
92) bis(2-Ethylhexyl)phtha...	14.305	149	17582	0.57	ppm	99

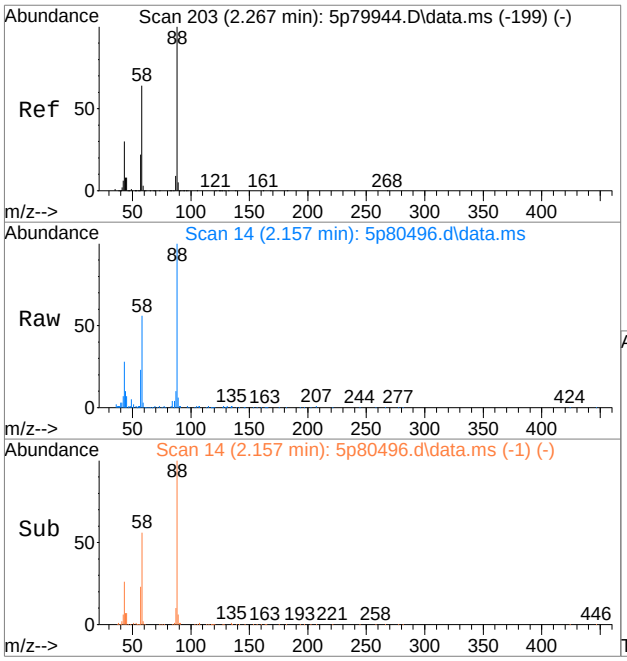
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80496.d
Acq On : 18 Dec 2021 8:21 am
Operator : chriss2
Sample : jd36624-7 Inst : MS5P
Misc : op37108,e5p3810,250,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 01:54:44 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

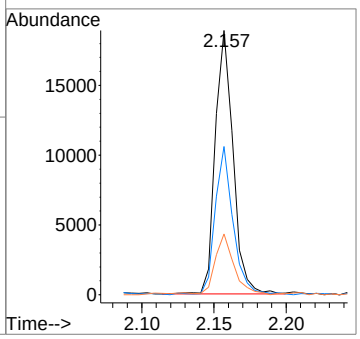


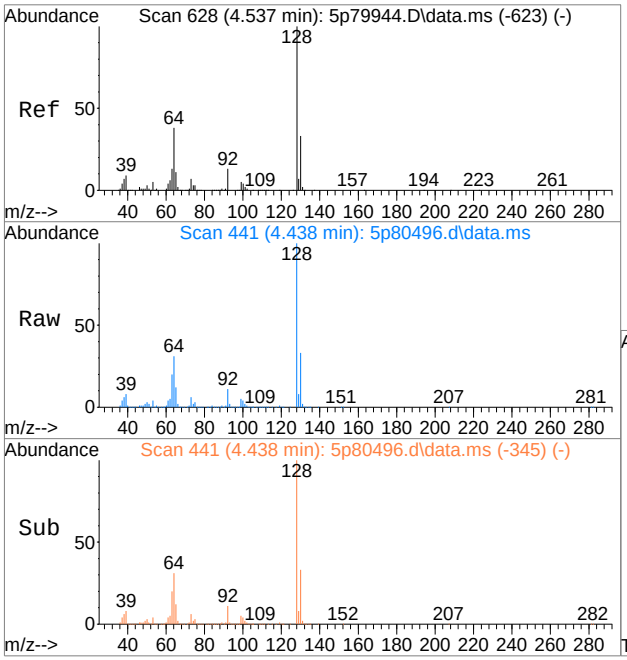


#2
1,4-Dioxane
Concen: 2.63 ppm
RT: 2.157 min Scan# 14
Delta R.T. 0.027 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion: 88 Resp: 16231

Ion	Ratio	Lower	Upper
88	100		
58	56.1	30.1	90.1
57	22.6	0.0	50.3

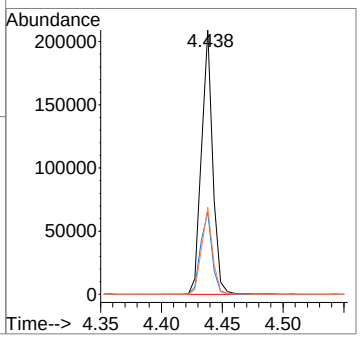


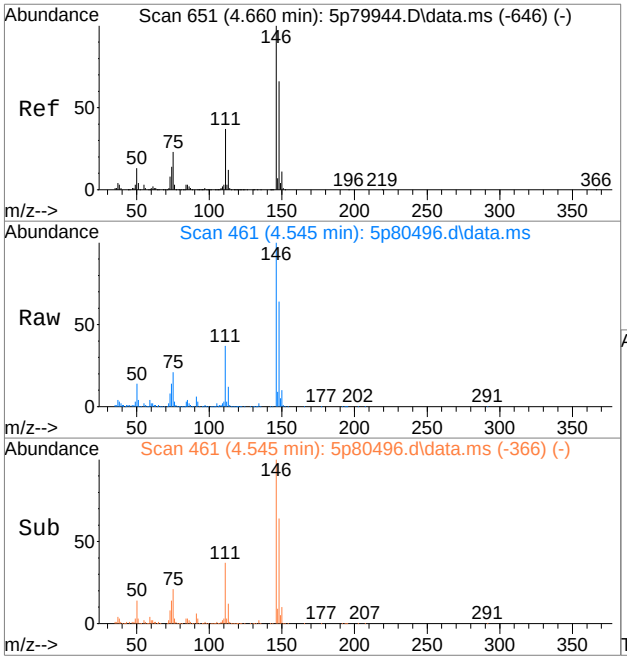


#12
2-Chlorophenol
Concen: 8.88 ppm
RT: 4.438 min Scan# 441
Delta R.T. 0.011 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:128 Resp: 135765

Ion	Ratio	Lower	Upper
128	100		
64	31.0	4.3	64.3
130	32.9	2.5	62.5

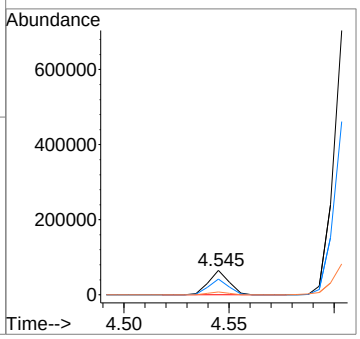


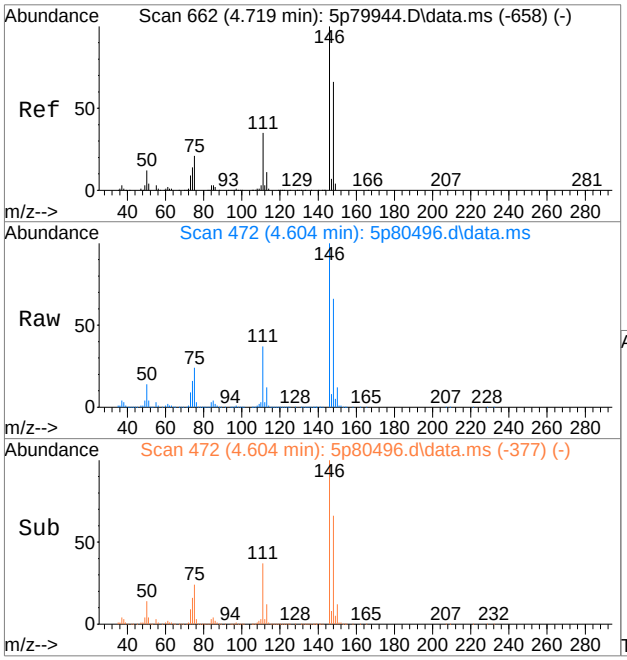


#14
1,3-Dichlorobenzene
Concen: 2.61 ppm
RT: 4.545 min Scan# 461
Delta R.T. 0.006 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:146 Resp: 43881

Ion	Ratio	Lower	Upper
146	100		
148	64.0	36.2	96.2
113	11.8	0.0	41.6

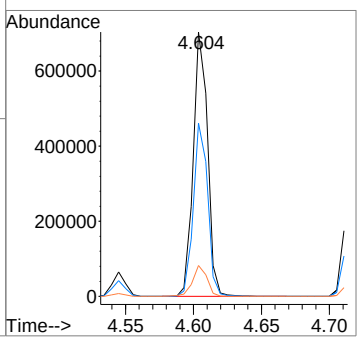


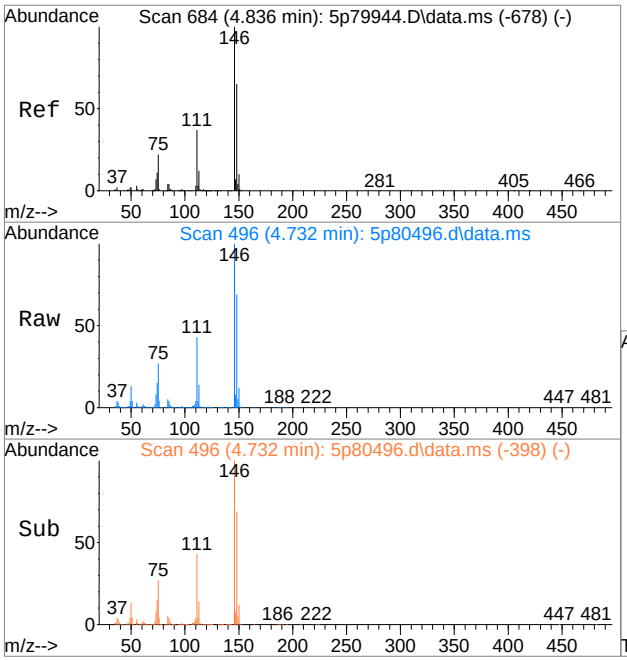


#15
1,4-Dichlorobenzene
Concen: 31.83 ppm
RT: 4.604 min Scan# 472
Delta R.T. 0.006 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:146 Resp: 516067

Ion	Ratio	Lower	Upper
146	100		
148	65.5	33.3	93.3
113	11.7	0.0	41.7

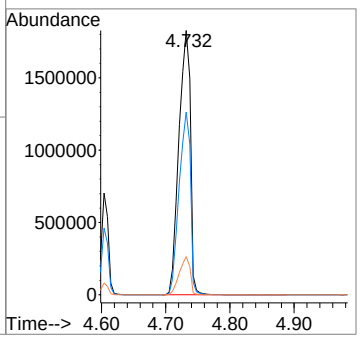


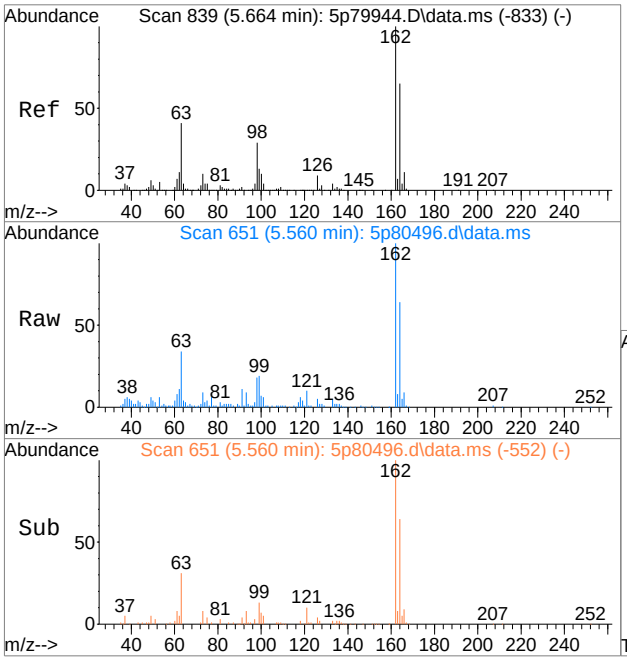


#17
1,2-Dichlorobenzene
Concen: 147.49 ppm
RT: 4.732 min Scan# 496
Delta R.T. 0.022 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:146 Resp: 2273204

Ion	Ratio	Lower	Upper
146	100		
148	69.1	33.7	93.7
113	14.4	0.0	42.3

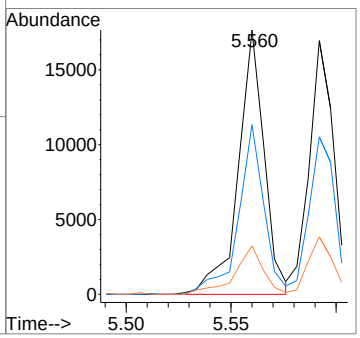


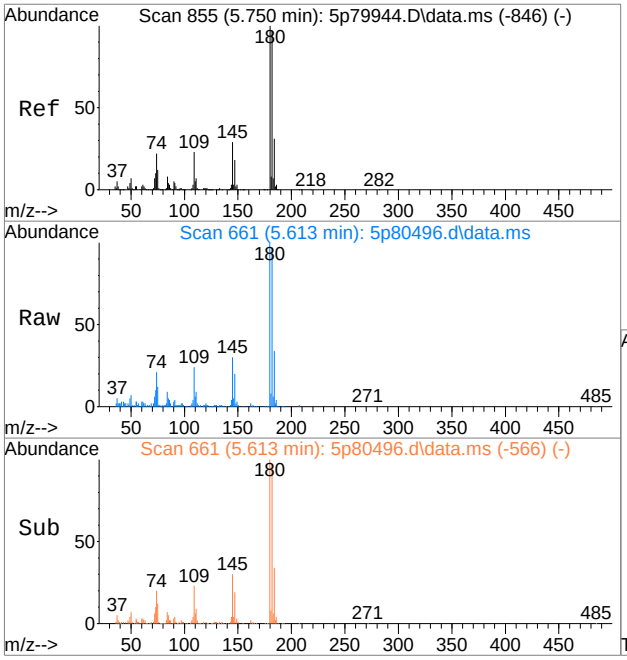


#33
2,4-Dichlorophenol
Concen: 1.26 ppm
RT: 5.560 min Scan# 651
Delta R.T. 0.027 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:162 Resp: 15190

Ion	Ratio	Lower	Upper
162	100		
164	64.2	32.4	92.4
98	18.4	0.0	59.3

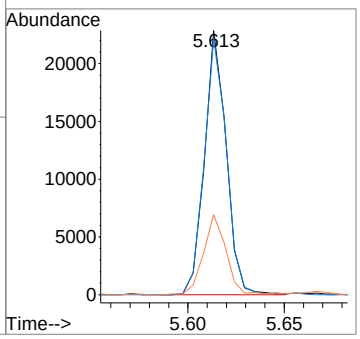


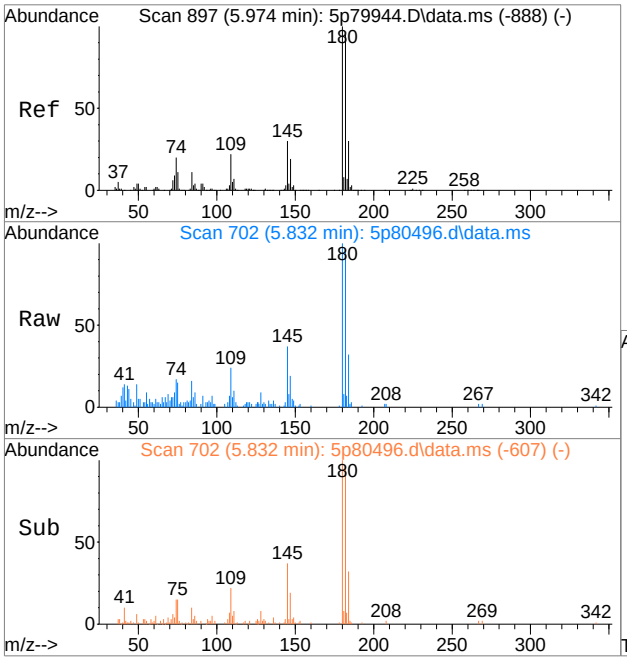


#36
1,2,4-Trichlorobenzene
Concen: 1.38 ppm
RT: 5.613 min Scan# 661
Delta R.T. 0.006 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:180 Resp: 17961

Ion	Ratio	Lower	Upper
180	100		
182	97.0	59.8	119.8
145	30.1	1.1	61.1

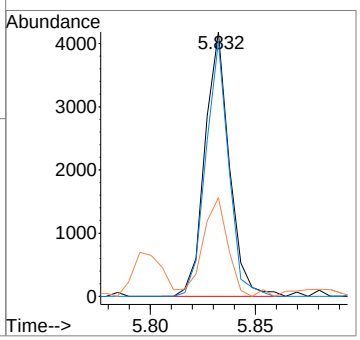


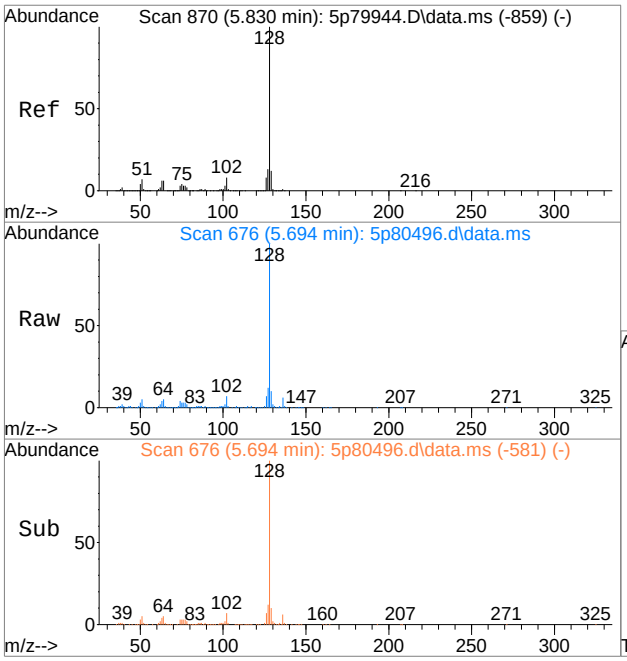


#37
1,2,3-Trichlorobenzene
Concen: 0.28 ppm
RT: 5.832 min Scan# 702
Delta R.T. 0.006 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:180 Resp: 3397

Ion	Ratio	Lower	Upper
180	100		
182	96.4	64.3	124.3
145	30.8	1.9	61.9

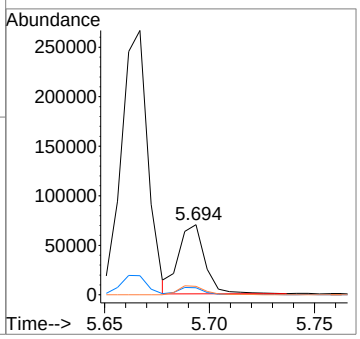


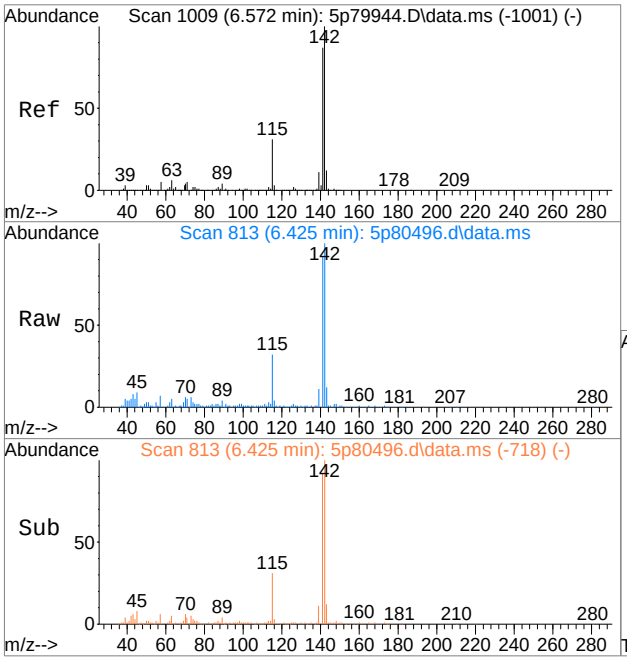


#38
Naphthalene
Concen: 1.46 ppm
RT: 5.694 min Scan# 676
Delta R.T. 0.006 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:128 Resp: 60265

Ion	Ratio	Lower	Upper
128	100		
129	10.2	0.0	41.0
127	13.7	0.0	42.9

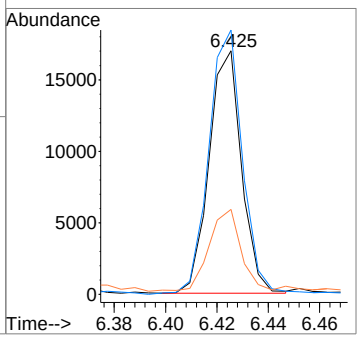


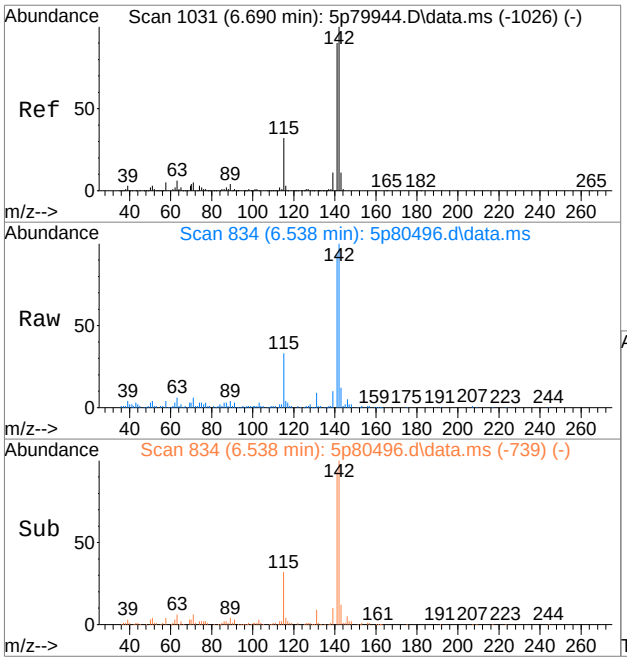


#44
2-Methylnaphthalene
Concen: 0.56 ppm
RT: 6.425 min Scan# 813
Delta R.T. 0.006 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:141 Resp: 14966

Ion	Ratio	Lower	Upper
141	100		
142	108.5	88.4	148.4
115	32.6	4.8	64.8

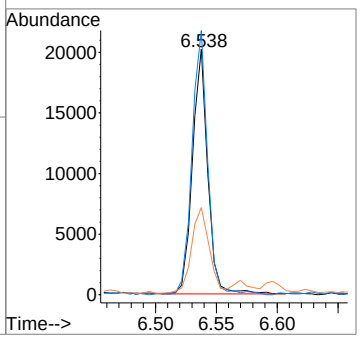


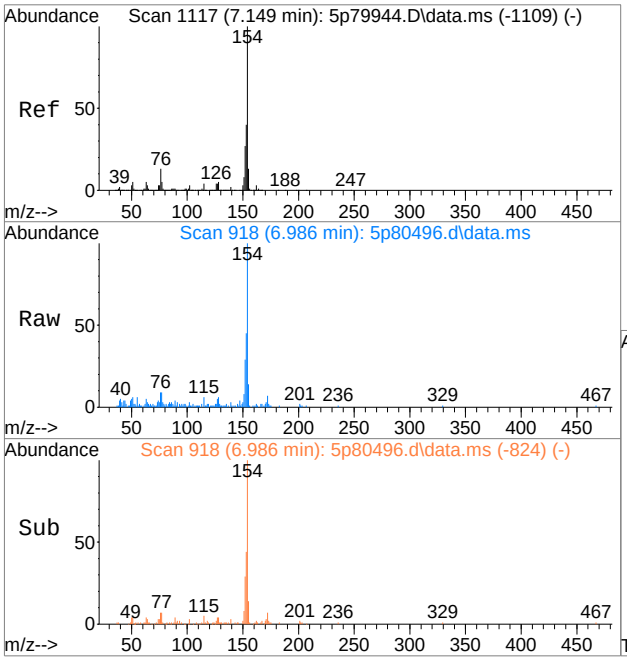


#45
1-Methylnaphthalene
Concen: 0.71 ppm
RT: 6.538 min Scan# 834
Delta R.T. 0.006 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:141 Resp: 17833

Ion	Ratio	Lower	Upper
141	100		
142	107.4	84.1	144.1
115	34.3	6.4	66.4

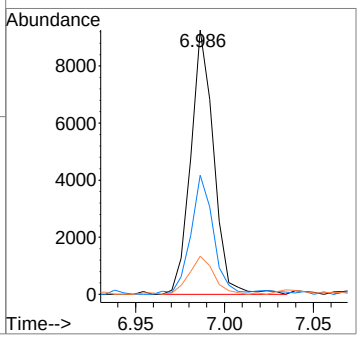


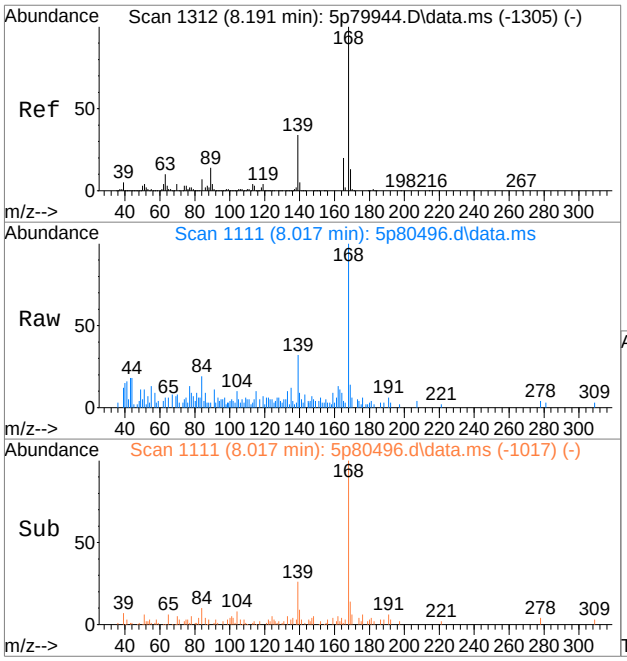


#53
Biphenyl
Concen: 0.22 ppm
RT: 6.986 min Scan# 918
Delta R.T. 0.000 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:154 Resp: 8309

Ion	Ratio	Lower	Upper
154	100		
153	44.3	10.4	70.4
155	13.6	0.0	41.8

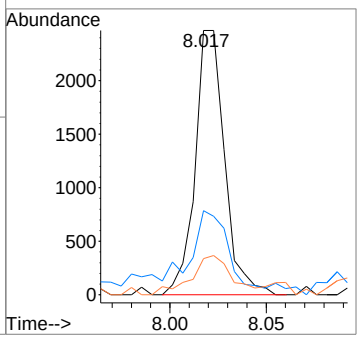


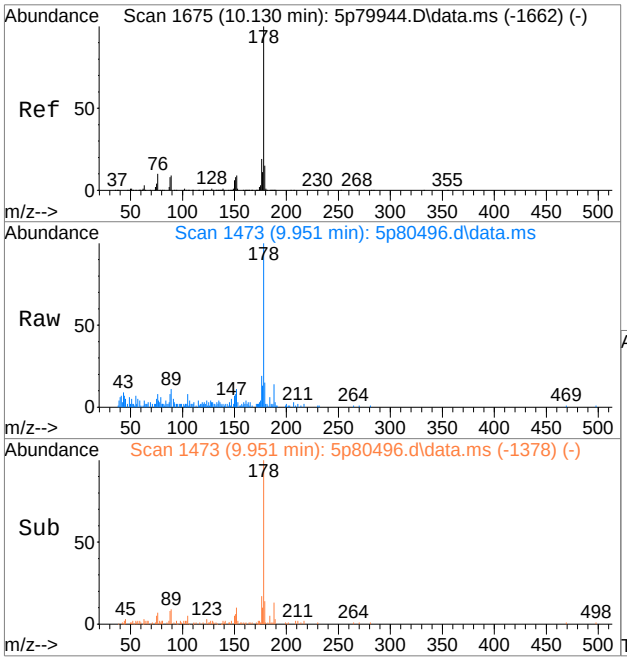


#62
Dibenzofuran
Concen: 0.06 ppm
RT: 8.017 min Scan# 1111
Delta R.T. 0.000 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:168 Resp: 2636

Ion	Ratio	Lower	Upper
168	100		
139	28.0	6.9	66.9
169	9.8	0.0	44.0

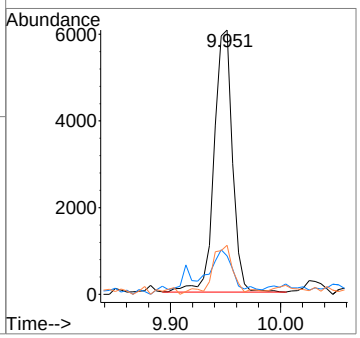


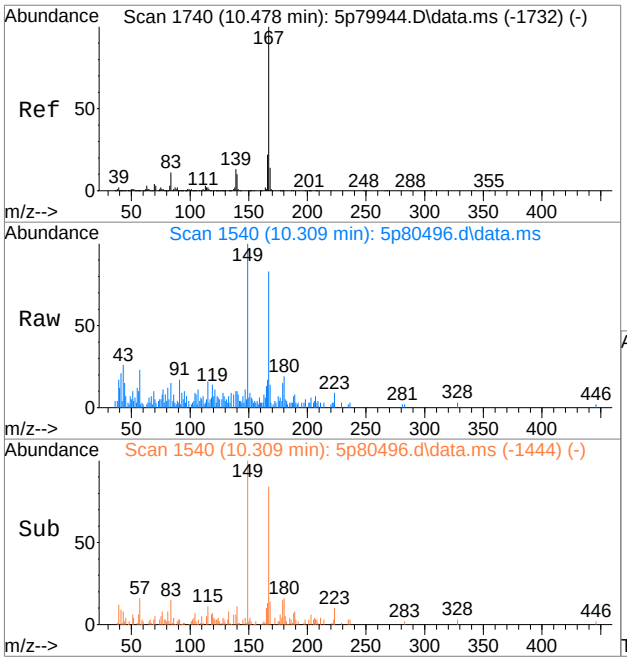


#78
Phenanthrene
Concen: 0.15 ppm
RT: 9.951 min Scan# 1473
Delta R.T. 0.006 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:178 Resp: 7048

Ion	Ratio	Lower	Upper
178	100		
179	11.2	0.0	44.9
176	16.4	0.0	48.7

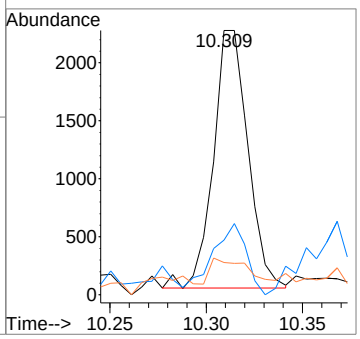


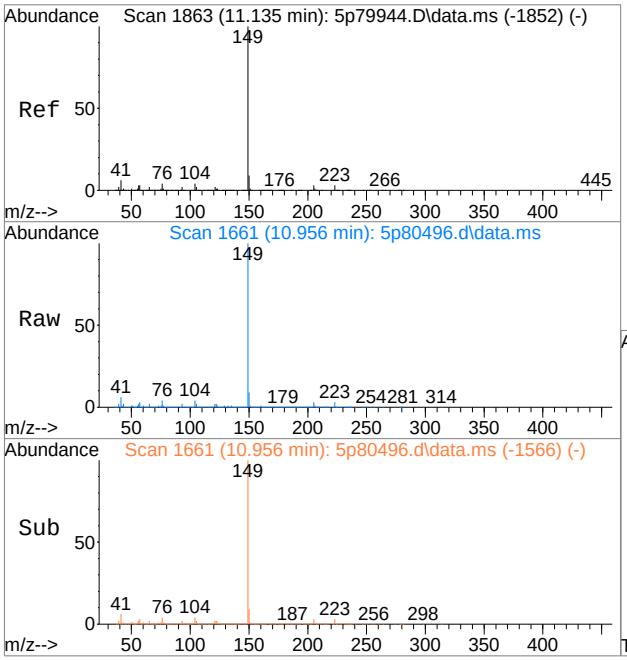


#80
Carbazole
Concen: 0.06 ppm
RT: 10.309 min Scan# 1540
Delta R.T. 0.011 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:167 Resp: 2785

Ion	Ratio	Lower	Upper
167	100		
166	10.1	0.0	51.0
139	5.0	0.0	42.7

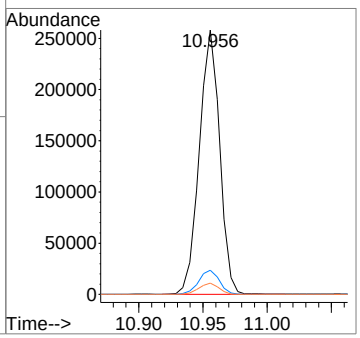


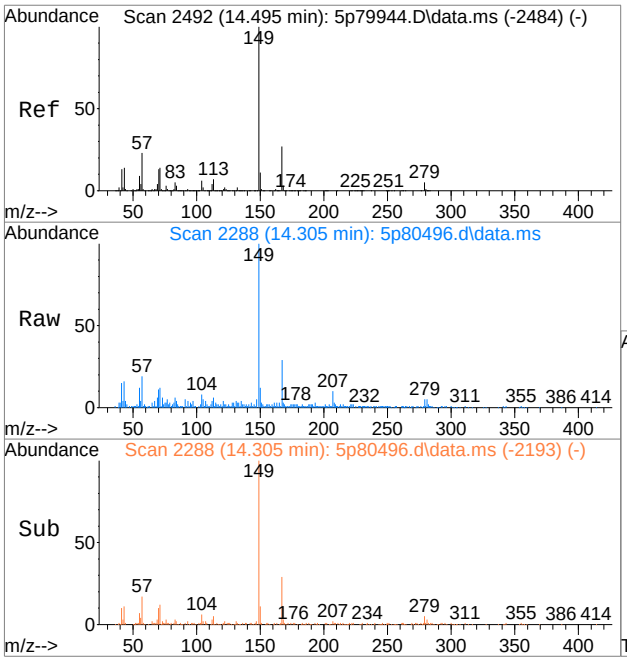


#81
Di-n-butylphthalate
Concen: 4.90 ppm
RT: 10.956 min Scan# 1661
Delta R.T. 0.006 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:149 Resp: 283640

Ion	Ratio	Lower	Upper
149	100		
150	9.1	0.0	38.9
104	4.2	0.0	34.2

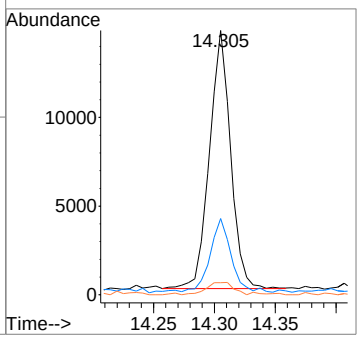




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.57 ppm
RT: 14.305 min Scan# 2288
Delta R.T. 0.006 min
Lab File: 5p80496.d
Acq: 18 Dec 2021 8:21 am

Tgt Ion:149 Resp: 17582

Ion	Ratio	Lower	Upper
149	100		
167	28.1	0.0	57.4
279	4.7	0.0	34.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2m5439\
Data File : 2m120969.d
Acq On : 22 Dec 2021 6:18 am
Operator : chriss2
Sample : jd36624-8 Inst : MS2M
Misc : op37113,e2m5439,260,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M
Quant Results File: M2M5435LVI.RES
Quant Time: Dec 23 04:31:32 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 23 04:04:48 2021
Response via : Initial Calibration

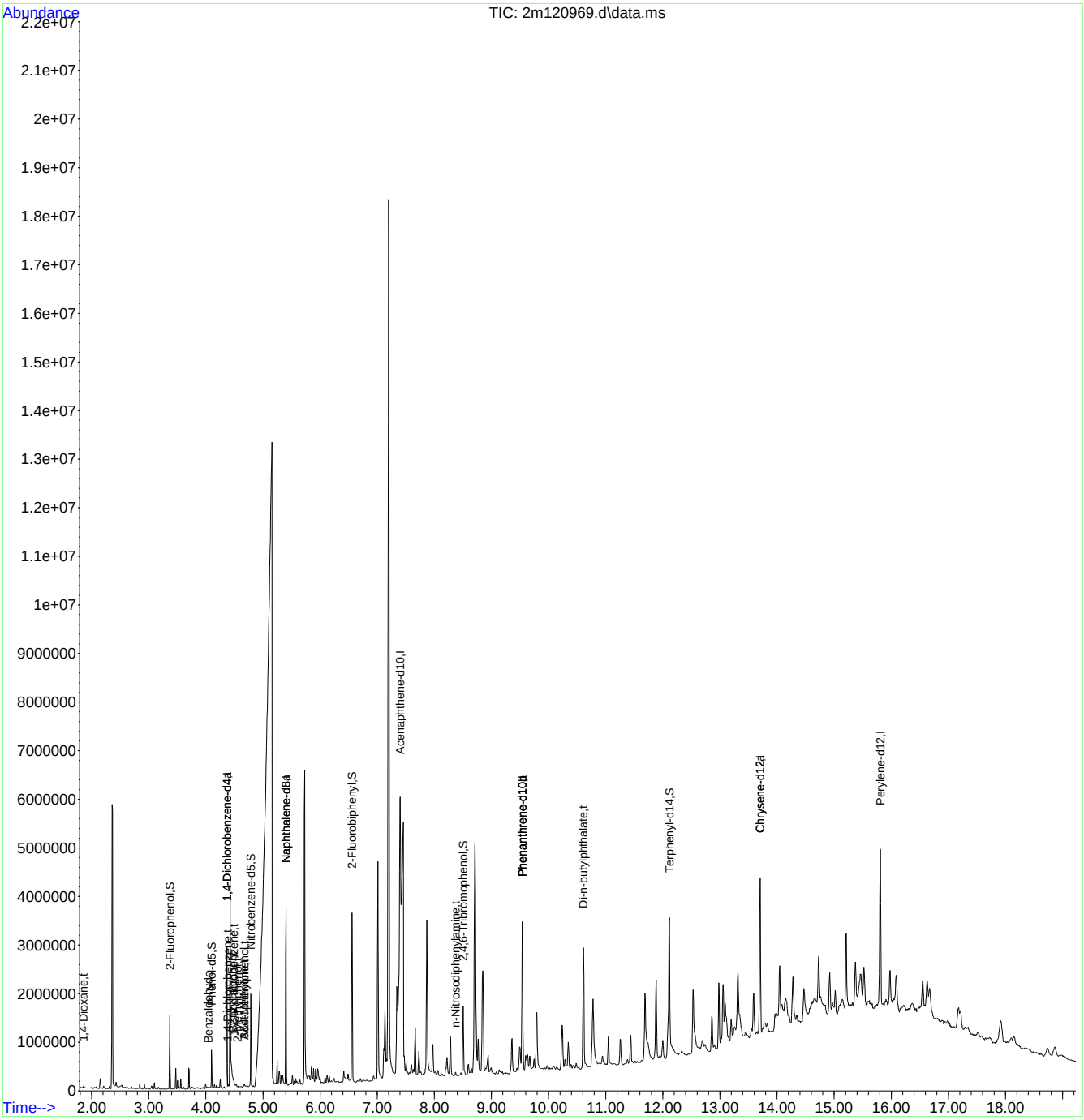
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.370	152	364805	8.00	ppm	0.00
24) Naphthalene-d8	5.402	136	1410338	8.00	ppm	0.00
46) Acenaphthene-d10	7.397	164	1236187	8.00	ppm	0.00
69) Phenanthrene-d10	9.542	188	1469486	8.00	ppm	0.00
84) Chrysene-d12	13.704	240	1544572	8.00	ppm	0.00
93) Perylene-d12	15.811	264	1662982	8.00	ppm	0.01
103) 1,4-Dichlorobenzene-d4a	4.370	152	364805	8.00	ppm	0.00
105) Phenanthrene-d10a	9.542	188	1469486	8.00	ppm	0.00
107) Naphthalene-d8a	5.402	136	1410338	8.00	ppm	0.00
109) Chrysene-d12a	13.704	240	1544572	8.00	ppm	0.00
111) Phenanthrene-d10b	9.542	188	1469486	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.370	112	211946	3.73	ppm	0.00
Spiked Amount 10.000			Recovery = 37.30%			
8) Phenol-d5	4.097	99	190112	2.64	ppm	0.00
Spiked Amount 10.000			Recovery = 26.40%			
25) Nitrobenzene-d5	4.787	82	399614	7.62	ppm	0.00
Spiked Amount 10.000			Recovery = 76.20%			
51) 2-Fluorobiphenyl	6.558	172	1134804	5.59	ppm	0.00
Spiked Amount 10.000			Recovery = 55.90%			
74) 2,4,6-Tribromophenol	8.505	330	186035	9.43	ppm	0.00
Spiked Amount 10.000			Recovery = 94.30%			
87) Terphenyl-d14	12.115	244	1184440	6.09	ppm	0.00
Spiked Amount 10.000			Recovery = 60.90%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.856	88	6516	0.29	ppm	98
15) 1,4-Dichlorobenzene	4.381	146	3601	0.05	ppm	99
16) Benzyl alcohol	4.472	108	5103	0.13	ppm	96
17) 1,2-Dichlorobenzene	4.488	146	7789	0.12	ppm	97
18) Acetophenone	4.670	105	3449	0.04	ppm	96
19) 2-Methylphenol	4.557	108	927	0.02	ppm	80
21) 3&4-Methylphenol	4.675	108	4951	0.09	ppm	94
71) n-Nitrosodiphenylamine	8.371	169	21364	0.18	ppm	99
81) Di-n-butylphthalate	10.607	149	997109	4.49	ppm	99
104) Benzaldehyde	4.044	105	2178	0.04	ppm	82

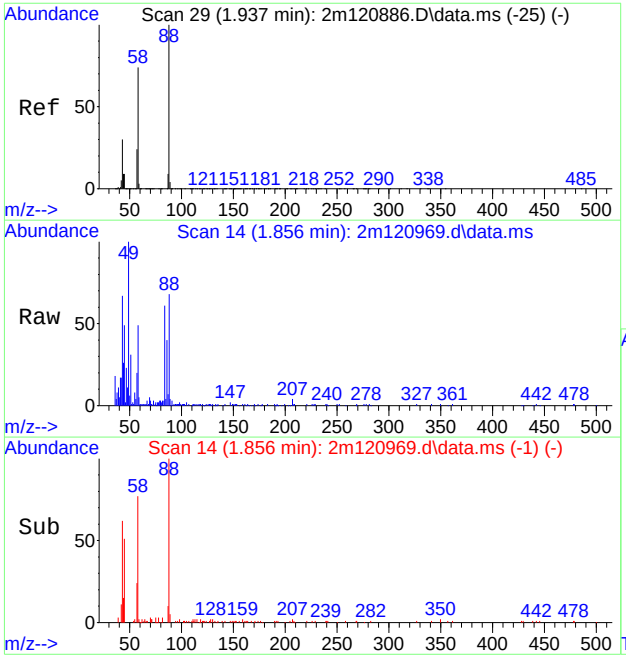
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2m5439\
Data File : 2m120969.d
Acq On : 22 Dec 2021 6:18 am
Operator : chriss2
Sample : jd36624-8 Inst : MS2M
Misc : op37113,e2m5439,260,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M
Quant Results File: M2M5435LVI.RES
Quant Time: Dec 23 04:31:32 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 23 04:04:48 2021
Response via : Initial Calibration

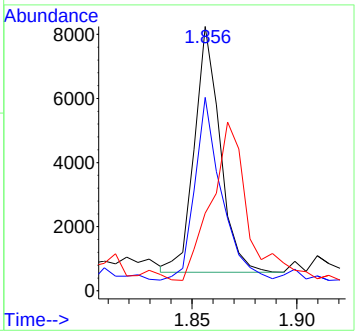


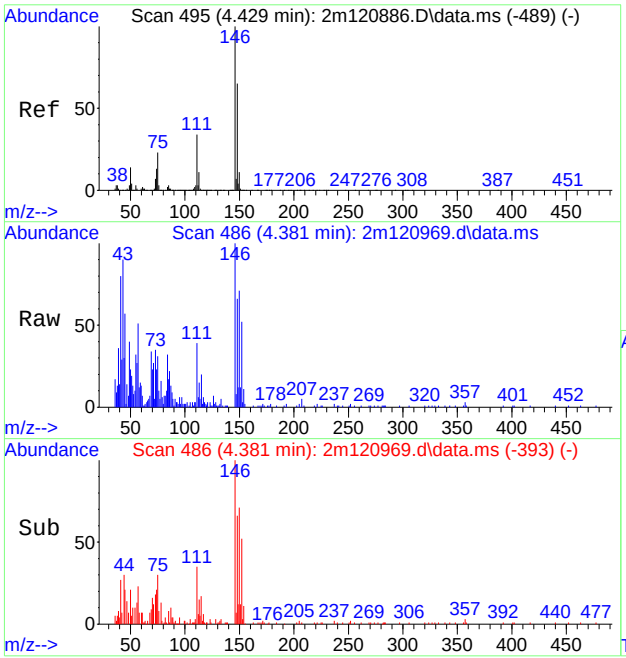


#2
1,4-Dioxane
Concen: 0.29 ppm
RT: 1.856 min Scan# 14
Delta R.T. 0.011 min
Lab File: 2m120969.d
Acq: 22 Dec 2021 6:18 am

Tgt Ion: 88 Resp: 6516

Ion	Ratio	Lower	Upper
88	100		
58	74.3	45.2	105.2
57	22.9	0.0	55.8

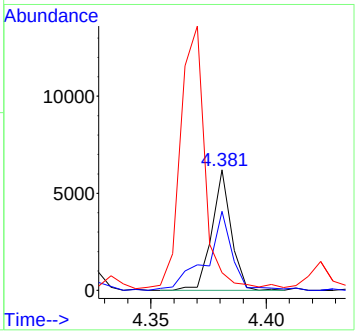


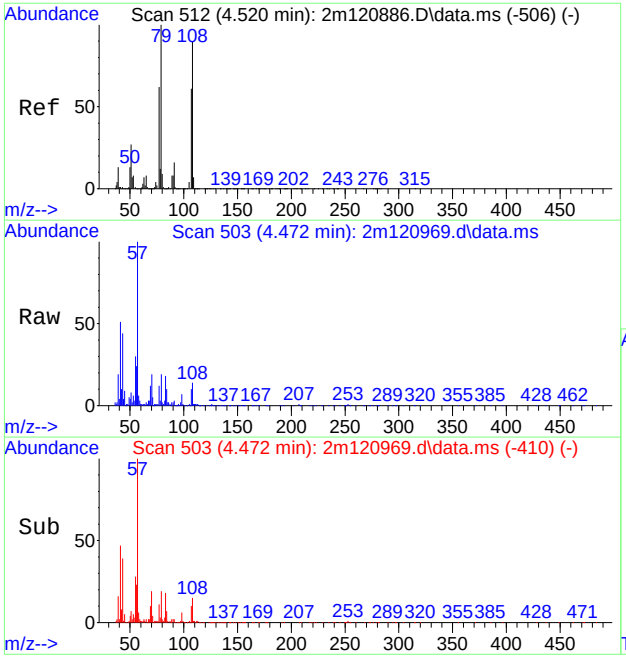


#15
1,4-Dichlorobenzene
Concen: 0.05 ppm
RT: 4.381 min Scan# 486
Delta R.T. -0.000 min
Lab File: 2m120969.d
Acq: 22 Dec 2021 6:18 am

Tgt Ion:146 Resp: 3601

Ion	Ratio	Lower	Upper
146	100		
148	64.1	34.8	94.8
113	11.3	0.0	41.4

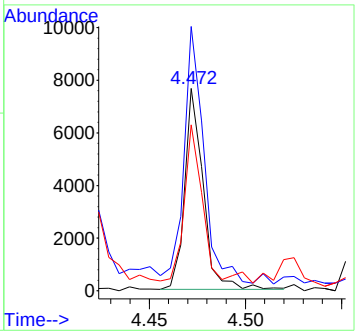


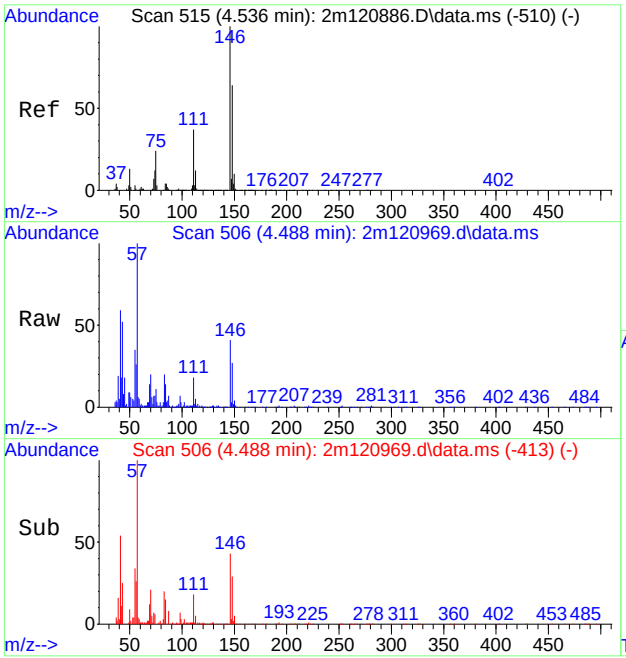


#16
Benzyl alcohol
Concen: 0.13 ppm
RT: 4.472 min Scan# 503
Delta R.T. -0.000 min
Lab File: 2m120969.d
Acq: 22 Dec 2021 6:18 am

Tgt Ion:108 Resp: 5103

Ion	Ratio	Lower	Upper
108	100		
79	124.9	93.3	153.3
77	72.6	48.8	108.8

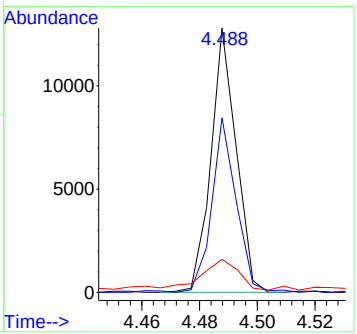


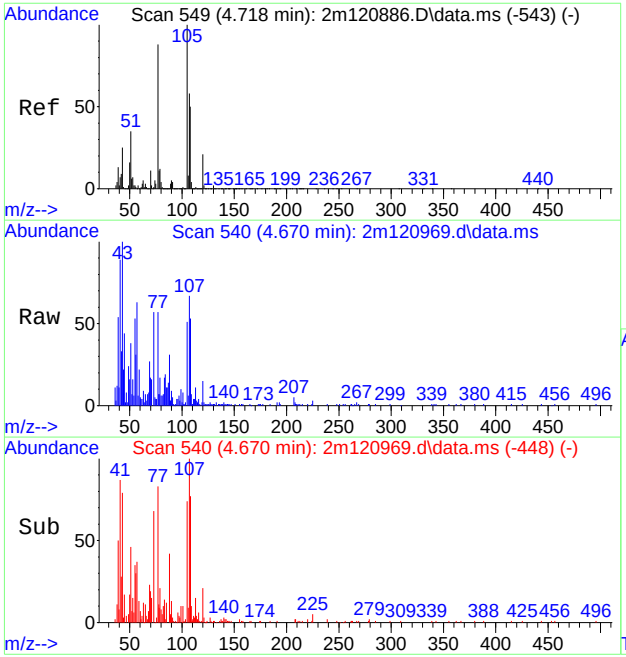


#17
1,2-Dichlorobenzene
Concen: 0.12 ppm
RT: 4.488 min Scan# 506
Delta R.T. -0.000 min
Lab File: 2m120969.d
Acq: 22 Dec 2021 6:18 am

Tgt Ion:146 Resp: 7789

Ion	Ratio	Lower	Upper
146	100		
148	65.4	33.2	93.2
113	10.5	0.0	42.5

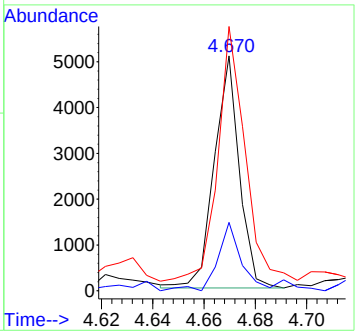


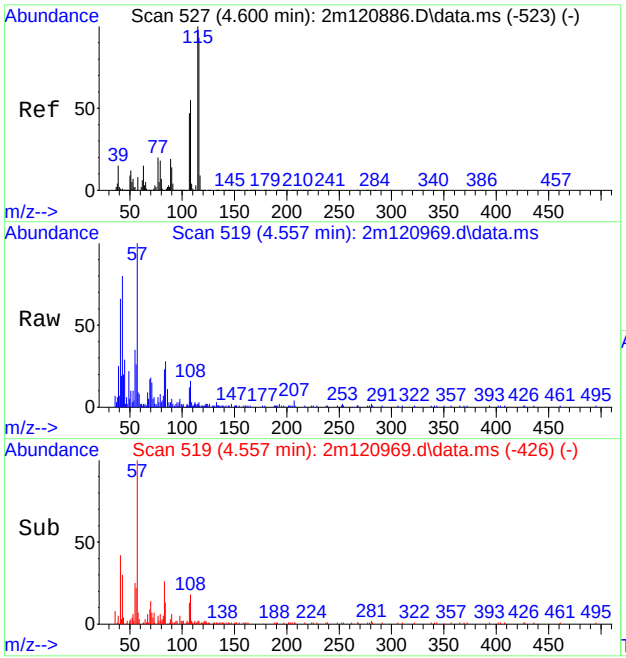


#18
Acetophenone
Concen: 0.04 ppm
RT: 4.670 min Scan# 540
Delta R.T. -0.005 min
Lab File: 2m120969.d
Acq: 22 Dec 2021 6:18 am

Tgt Ion:105 Resp: 3449

Ion	Ratio	Lower	Upper
105	100		
120	27.3	0.0	51.9
77	108.8	76.0	136.0

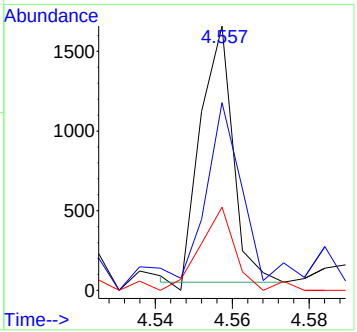


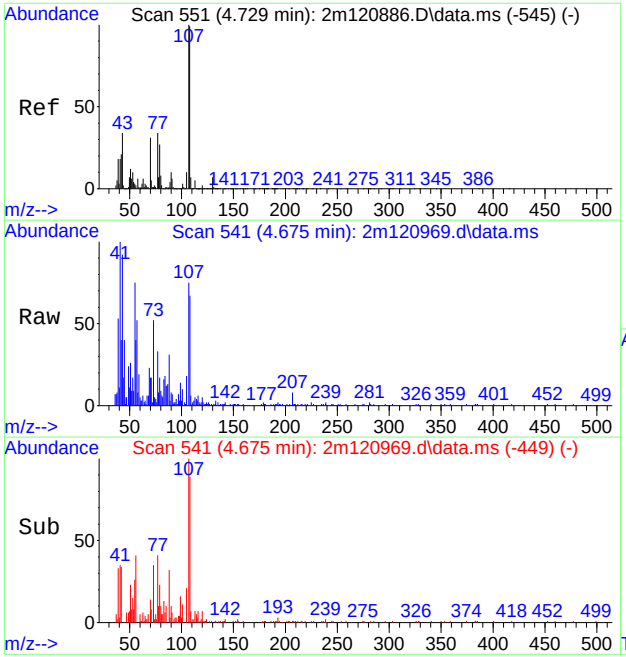


#19
2-Methylphenol
Concen: 0.02 ppm
RT: 4.557 min Scan# 519
Delta R.T. -0.000 min
Lab File: 2m120969.d
Acq: 22 Dec 2021 6:18 am

Tgt Ion:108 Resp: 927

Ion	Ratio	Lower	Upper
108	100		
107	64.4	54.8	114.8
90	31.1	0.0	55.7

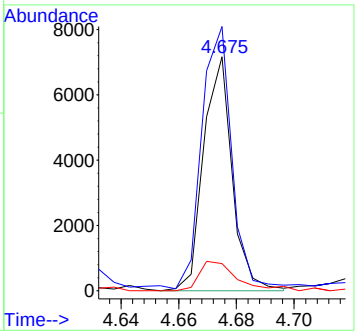


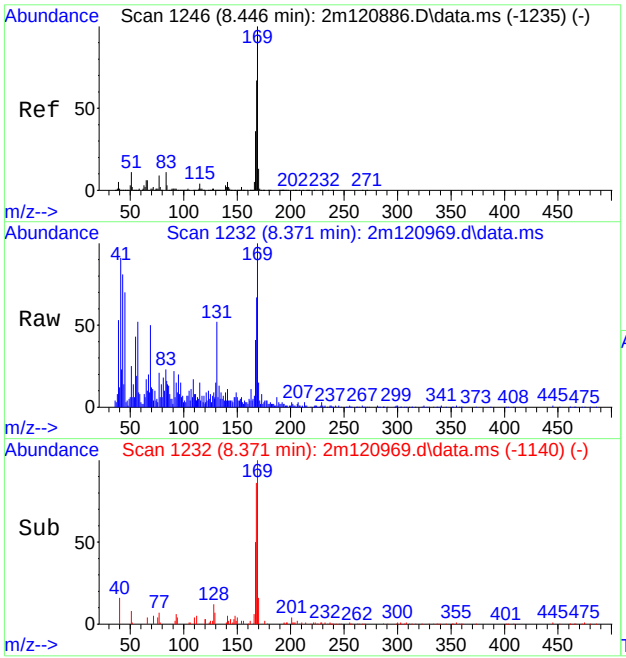


#21
3&4-Methylphenol
Concen: 0.09 ppm
RT: 4.675 min Scan# 541
Delta R.T. -0.005 min
Lab File: 2m120969.d
Acq: 22 Dec 2021 6:18 am

Tgt Ion:108 Resp: 4951

Ion	Ratio	Lower	Upper
108	100		
107	111.3	74.1	134.1
90	10.7	0.0	40.3

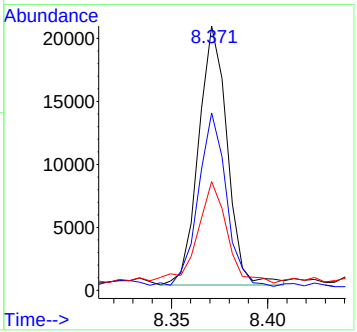


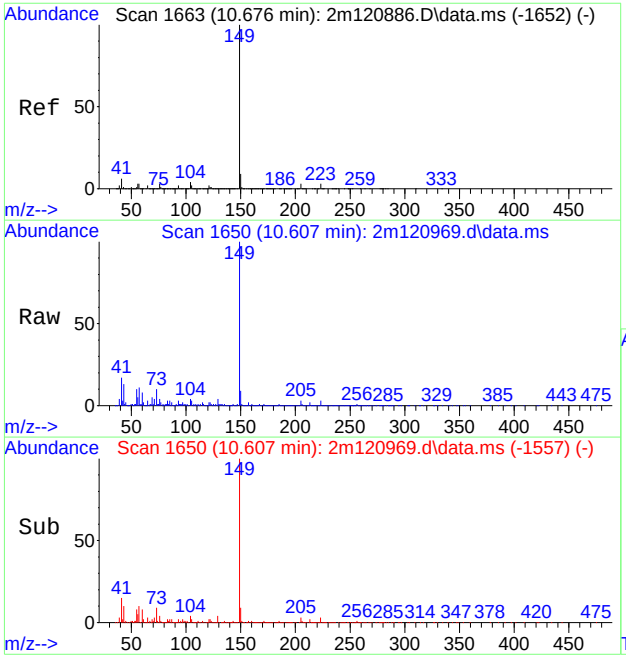


#71
n-Nitrosodiphenylamine
Concen: 0.18 ppm
RT: 8.371 min Scan# 1232
Delta R.T. -0.005 min
Lab File: 2m120969.d
Acq: 22 Dec 2021 6:18 am

Tgt Ion:169 Resp: 21364

Ion	Ratio	Lower	Upper
169	100		
168	66.4	37.1	97.1
167	37.8	6.9	66.9

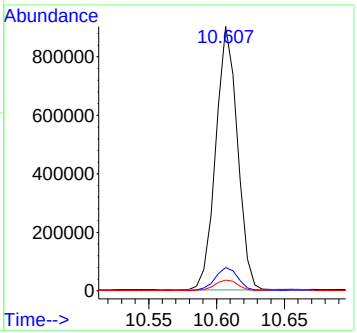


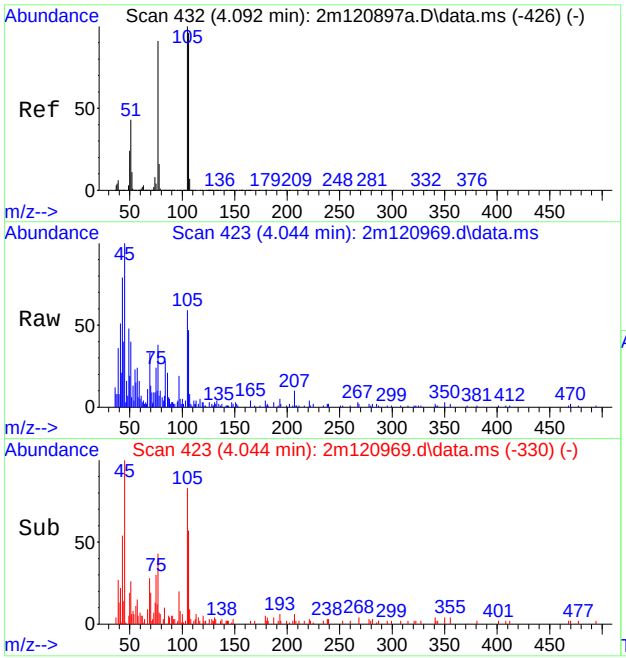


#81
Di-n-butylphthalate
Concen: 4.49 ppm
RT: 10.607 min Scan# 1650
Delta R.T. -0.000 min
Lab File: 2m120969.d
Acq: 22 Dec 2021 6:18 am

Tgt Ion:149 Resp: 997109

Ion	Ratio	Lower	Upper
149	100		
150	8.7	0.0	39.1
104	3.7	0.0	34.1

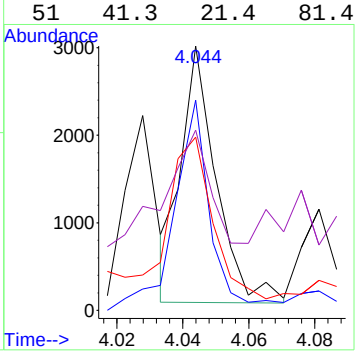




#104
Benzaldehyde
Concen: 0.04 ppm
RT: 4.044 min Scan# 423
Delta R.T. -0.000 min
Lab File: 2m120969.d
Acq: 22 Dec 2021 6:18 am

Tgt Ion:105 Resp: 2178

Ion	Ratio	Lower	Upper
105	100		
106	87.9	64.9	124.9
77	63.8	62.7	122.7
51	41.3	21.4	81.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2m5439\
Data File : 2m120970.d
Acq On : 22 Dec 2021 6:43 am
Operator : chriss2
Sample : jd36624-9 Inst : MS2M
Misc : op37113,e2m5439,260,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M
Quant Results File: M2M5435LVI.RES
Quant Time: Dec 26 23:32:59 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 23 04:04:48 2021
Response via : Initial Calibration

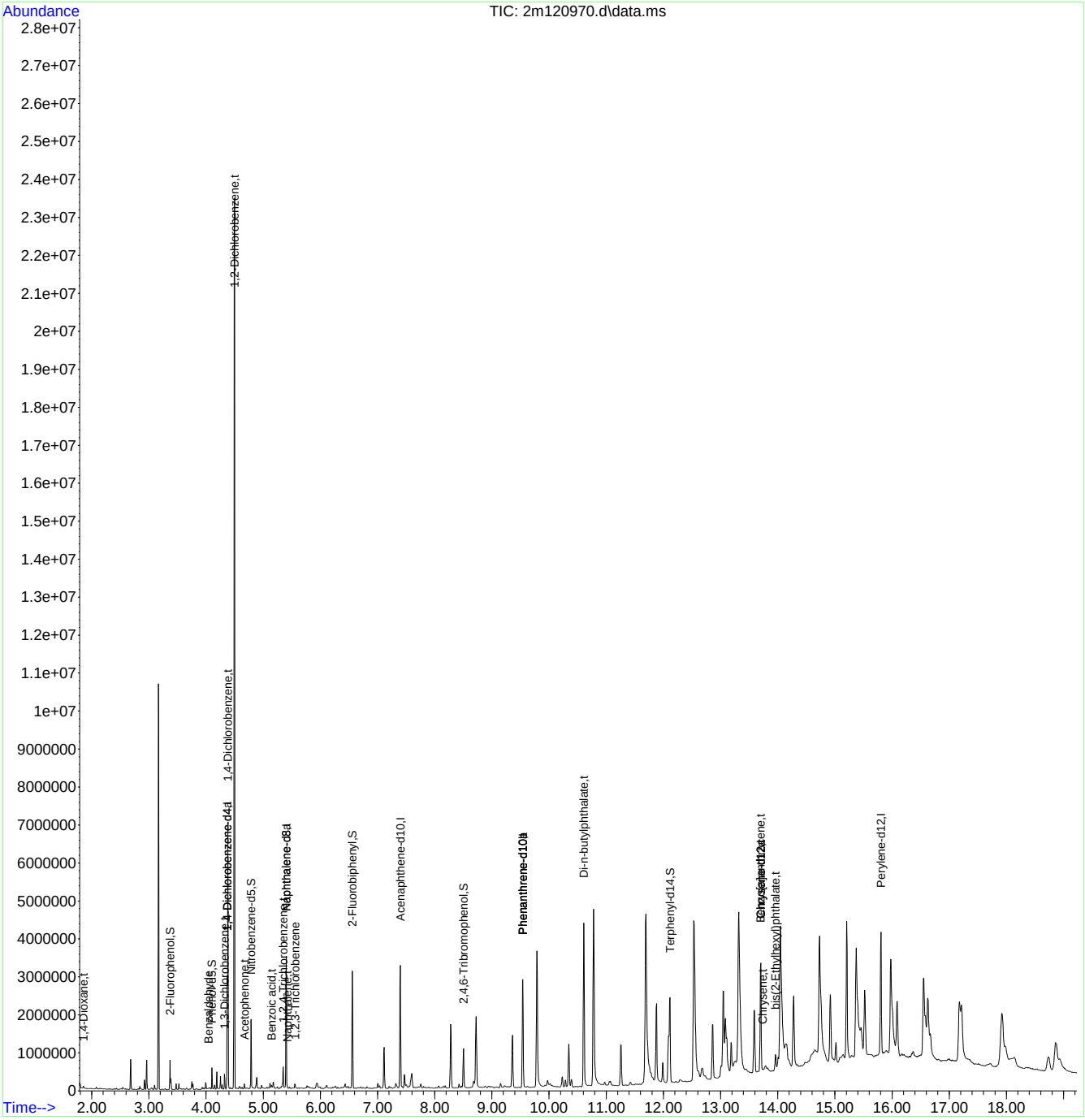
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.370	152	338245	8.00	ppm	0.00
24) Naphthalene-d8	5.402	136	1365468	8.00	ppm	0.00
46) Acenaphthene-d10	7.397	164	785728	8.00	ppm	0.00
69) Phenanthrene-d10	9.542	188	1419514	8.00	ppm	0.00
84) Chrysene-d12	13.704	240	1434042	8.00	ppm	0.00
93) Perylene-d12	15.806	264	1588777	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.370	152	338245	8.00	ppm	0.00
105) Phenanthrene-d10a	9.542	188	1419514	8.00	ppm	0.00
107) Naphthalene-d8a	5.402	136	1365468	8.00	ppm	0.00
109) Chrysene-d12a	13.704	240	1434042	8.00	ppm	0.00
111) Phenanthrene-d10b	9.542	188	1419514	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.370	112	142213	2.70	ppm	0.00
Spiked Amount 10.000			Recovery =	27.00%		
8) Phenol-d5	4.103	99	115890	1.73	ppm	0.00
Spiked Amount 10.000			Recovery =	17.30%		
25) Nitrobenzene-d5	4.787	82	376887	7.43	ppm	0.00
Spiked Amount 10.000			Recovery =	74.30%		
51) 2-Fluorobiphenyl	6.558	172	993355	7.70	ppm	0.00
Spiked Amount 10.000			Recovery =	77.00%		
74) 2,4,6-Tribromophenol	8.505	330	141810	7.44	ppm	0.00
Spiked Amount 10.000			Recovery =	74.40%		
87) Terphenyl-d14	12.115	244	1053455	5.84	ppm	0.00
Spiked Amount 10.000			Recovery =	58.40%		
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery =	0.00%		
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.856	88	18428	0.89	ppm	93
14) 1,3-Dichlorobenzene	4.322	146	61814	0.98	ppm	99
15) 1,4-Dichlorobenzene	4.381	146	1173451	18.33	ppm	99
17) 1,2-Dichlorobenzene	4.499	146	5168977	84.16	ppm	97
18) Acetophenone	4.670	105	24321	0.32	ppm #	67
31) Benzoic acid	5.146	105	15876	0.82	ppm	100
36) 1,2,4-Trichlorobenzene	5.349	180	78809	1.45	ppm	97
37) 1,2,3-Trichlorobenzene	5.558	180	15391	0.29	ppm	99
38) Naphthalene	5.418	128	11245	0.07	ppm	96
81) Di-n-butylphthalate	10.607	149	1882283	8.78	ppm	99
89) Benzo[a]anthracene	13.698	228	8962	0.04	ppm	69
91) Chrysene	13.736	228	11483	0.05	ppm	94
92) bis(2-Ethylhexyl)phtha...	13.960	149	168514	1.12	ppm	99
104) Benzaldehyde	4.044	105	4675	0.10	ppm	91

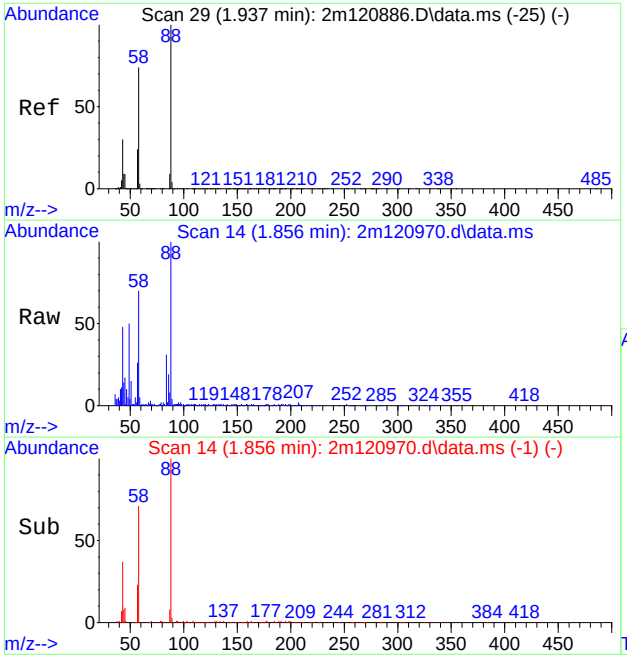
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2m5439\
Data File : 2m120970.d
Acq On : 22 Dec 2021 6:43 am
Operator : chriss2
Sample : jd36624-9 Inst : MS2M
Misc : op37113,e2m5439,260,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M
Quant Results File: M2M5435LVI.RES
Quant Time: Dec 26 23:32:59 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 23 04:04:48 2021
Response via : Initial Calibration

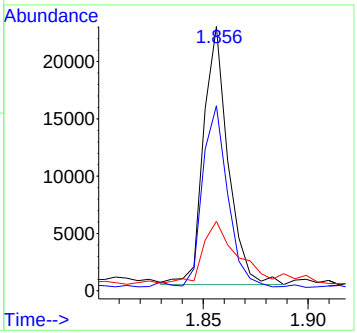


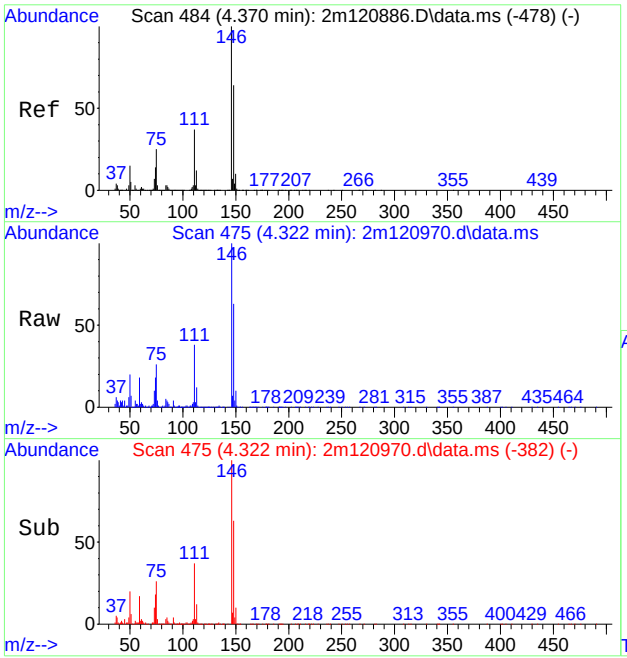


#2
1,4-Dioxane
Concen: 0.89 ppm
RT: 1.856 min Scan# 14
Delta R.T. 0.011 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion: 88 Resp: 18428

Ion	Ratio	Lower	Upper
88	100		
58	69.5	45.2	105.2
57	21.5	0.0	55.8

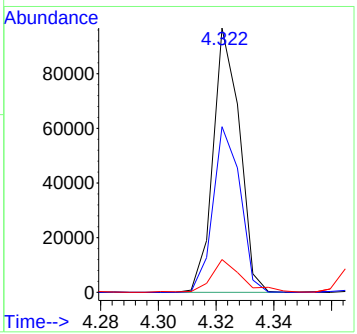


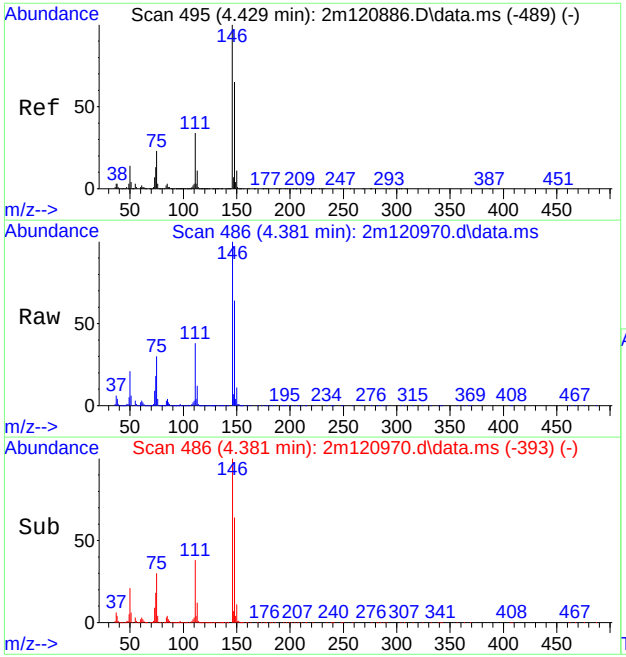


#14
1,3-Dichlorobenzene
Concen: 0.98 ppm
RT: 4.322 min Scan# 475
Delta R.T. 0.000 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:146 Resp: 61814

Ion	Ratio	Lower	Upper
146	100		
148	62.7	33.2	93.2
113	12.0	0.0	42.4

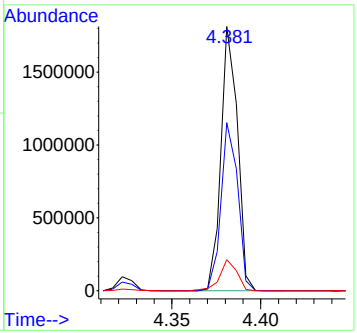


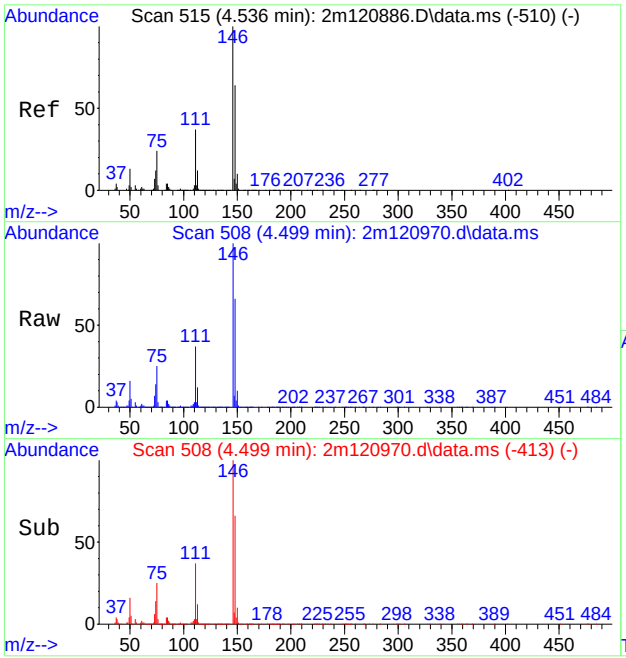


#15
1,4-Dichlorobenzene
Concen: 18.33 ppm
RT: 4.381 min Scan# 486
Delta R.T. 0.000 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:146 Resp: 1173451

Ion	Ratio	Lower	Upper
146	100		
148	63.6	34.8	94.8
113	11.8	0.0	41.4

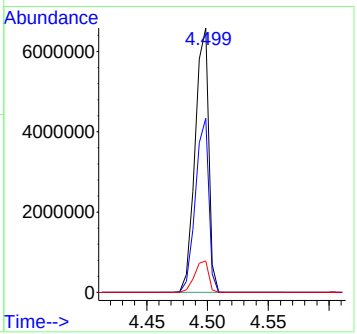


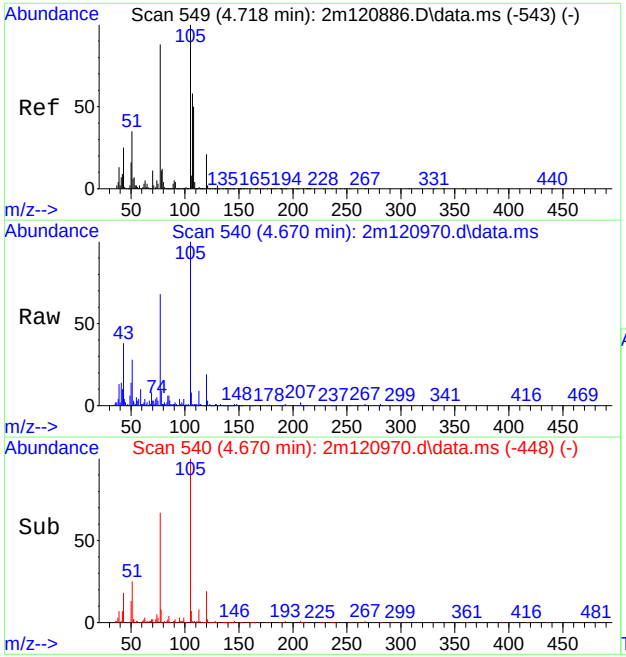


#17
1,2-Dichlorobenzene
Concen: 84.16 ppm
RT: 4.499 min Scan# 508
Delta R.T. 0.011 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:146 Resp: 5168977

Ion	Ratio	Lower	Upper
146	100		
148	65.8	33.2	93.2
113	11.8	0.0	42.5

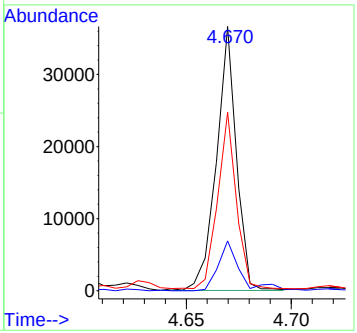


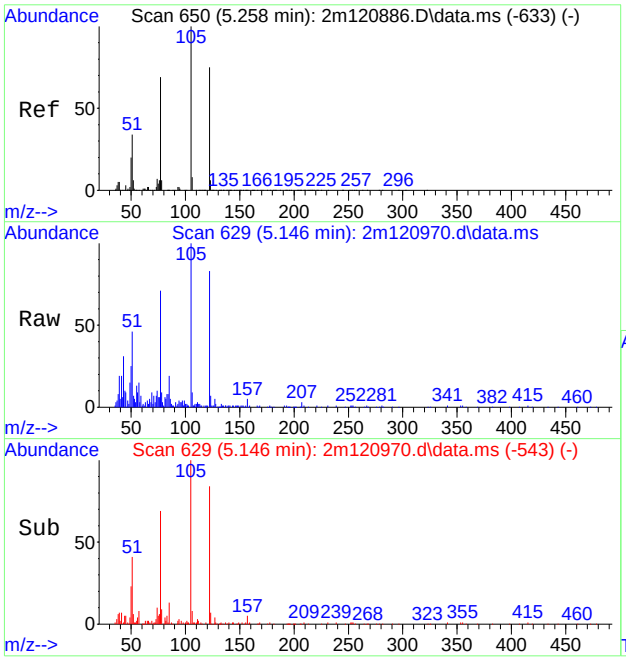


#18
Acetophenone
Concen: 0.32 ppm
RT: 4.670 min Scan# 540
Delta R.T. -0.005 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:105 Resp: 24321

Ion	Ratio	Lower	Upper
105	100		
120	18.5	0.0	51.9
77	66.8	76.0	136.0#

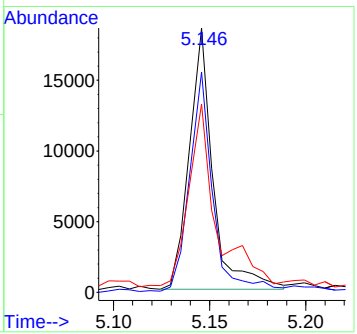


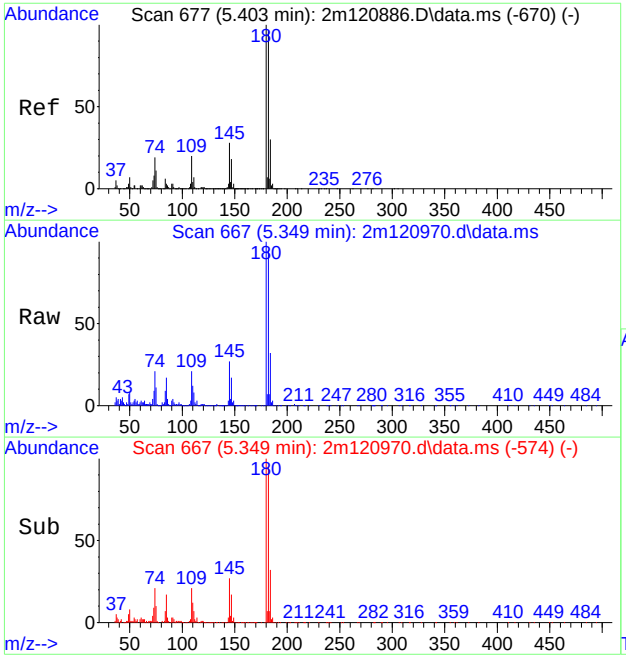


#31
Benzoic acid
Concen: 0.82 ppm
RT: 5.146 min Scan# 629
Delta R.T. -0.037 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:105 Resp: 15876

Ion	Ratio	Lower	Upper
105	100		
122	83.9	53.8	113.8
77	69.4	40.1	100.1

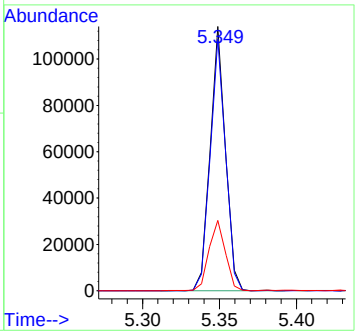


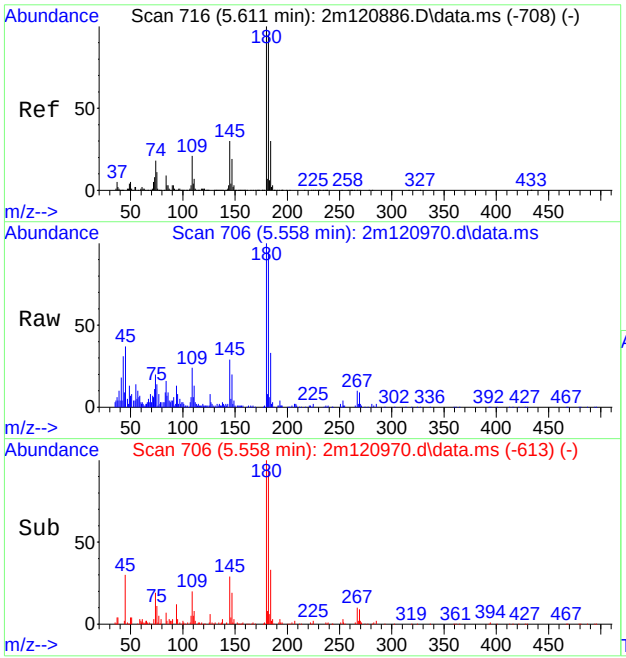


#36
1,2,4-Trichlorobenzene
Concen: 1.45 ppm
RT: 5.349 min Scan# 667
Delta R.T. 0.000 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:180 Resp: 78809

Ion	Ratio	Lower	Upper
180	100		
182	95.3	67.1	127.1
145	26.4	0.0	59.2

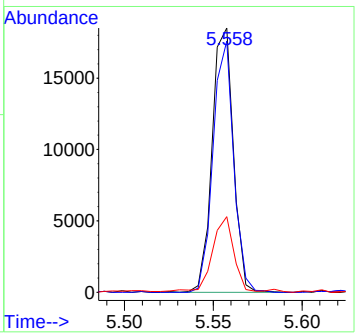


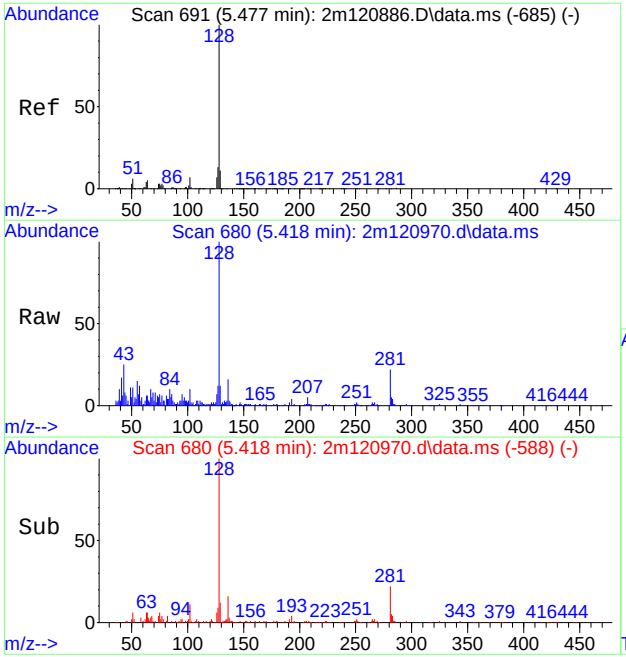


#37
1,2,3-Trichlorobenzene
Concen: 0.29 ppm
RT: 5.558 min Scan# 706
Delta R.T. 0.000 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:180 Resp: 15391

Ion	Ratio	Lower	Upper
180	100		
182	94.9	65.6	125.6
145	28.3	0.0	60.0

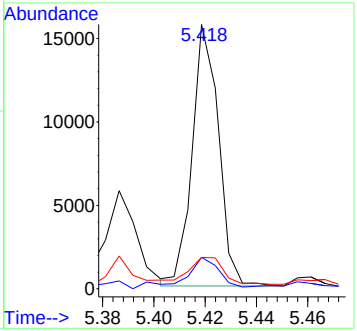


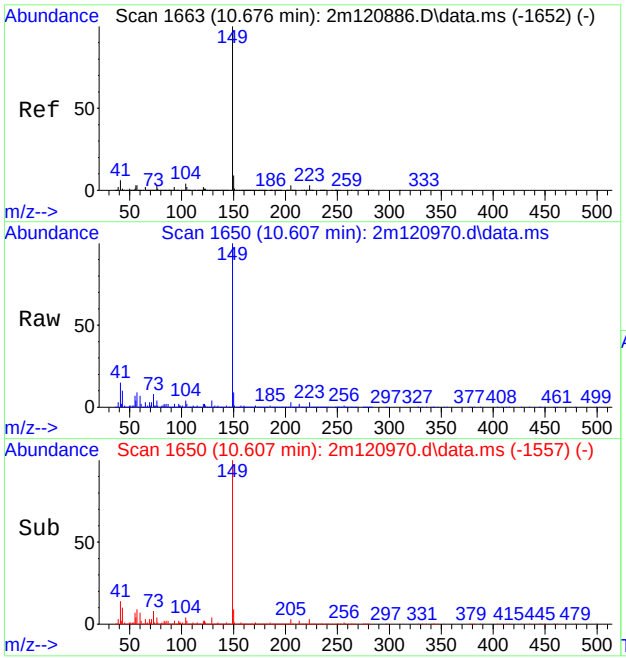


#38
Naphthalene
Concen: 0.07 ppm
RT: 5.418 min Scan# 680
Delta R.T. -0.005 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:128 Resp: 11245

Ion	Ratio	Lower	Upper
128	100		
129	10.6	0.0	40.6
127	9.7	0.0	42.6

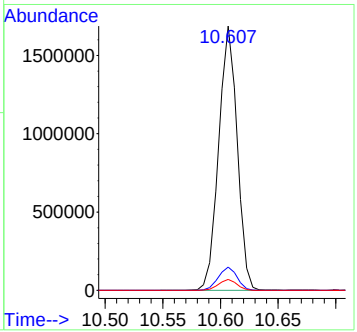


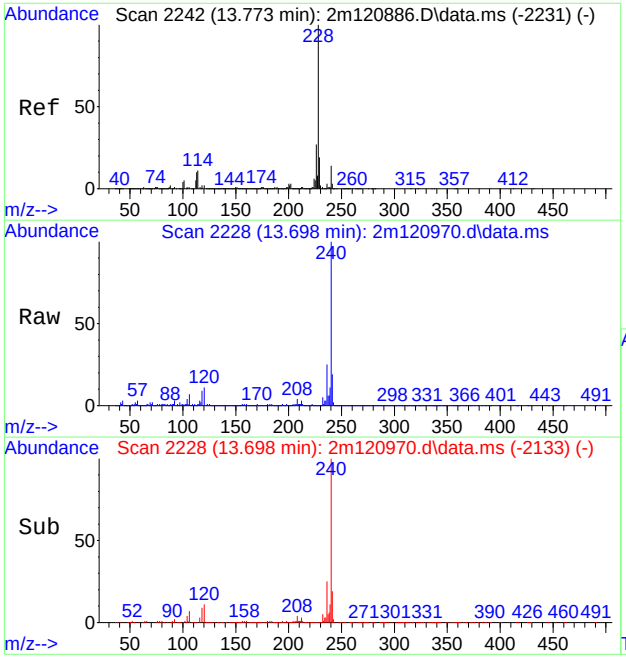


#81
Di-n-butylphthalate
Concen: 8.78 ppm
RT: 10.607 min Scan# 1650
Delta R.T. 0.000 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:149 Resp: 1882283

Ion	Ratio	Lower	Upper
149	100		
150	8.9	0.0	39.1
104	4.2	0.0	34.1

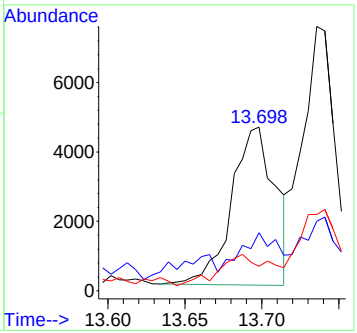


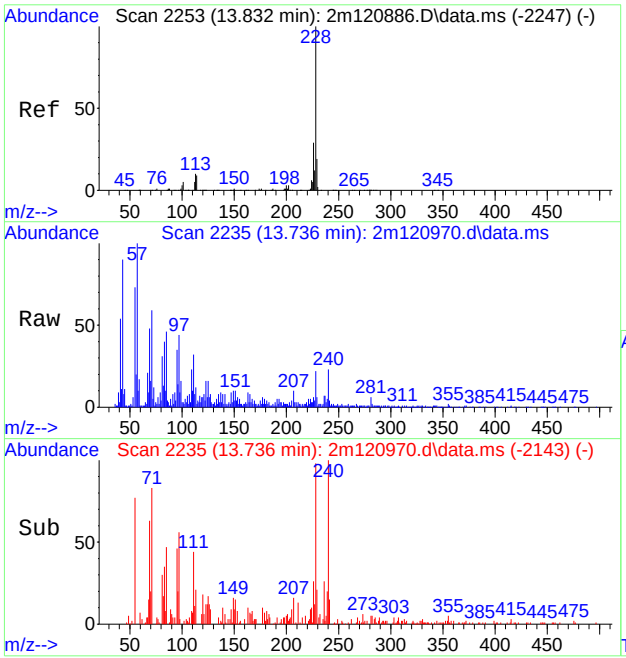


#89
Benzo[a]anthracene
Concen: 0.04 ppm
RT: 13.698 min Scan# 2228
Delta R.T. 0.011 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:228 Resp: 8962

Ion	Ratio	Lower	Upper
228	100		
229	27.4	0.0	49.2
226	5.5	0.0	56.7

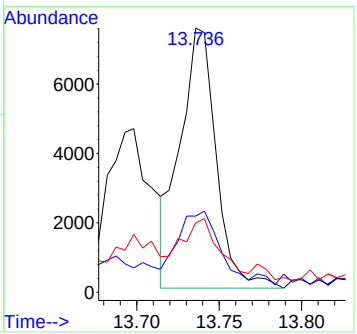


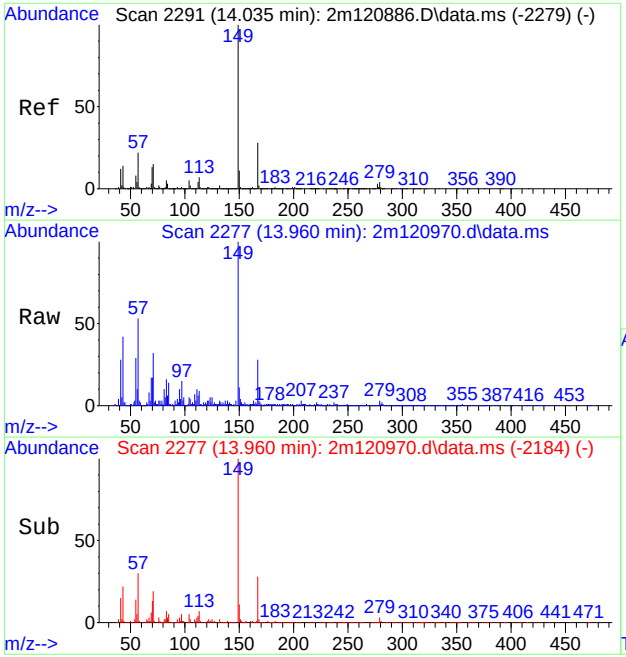


#91
Chrysene
Concen: 0.05 ppm
RT: 13.736 min Scan# 2235
Delta R.T. -0.005 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:228 Resp: 11483

Ion	Ratio	Lower	Upper
228	100		
226	25.9	0.0	59.5
229	20.6	0.0	48.7

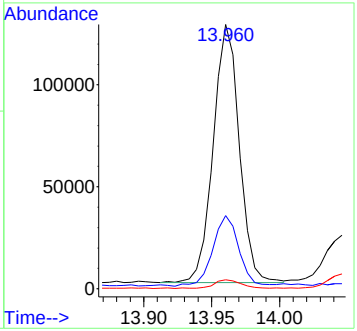


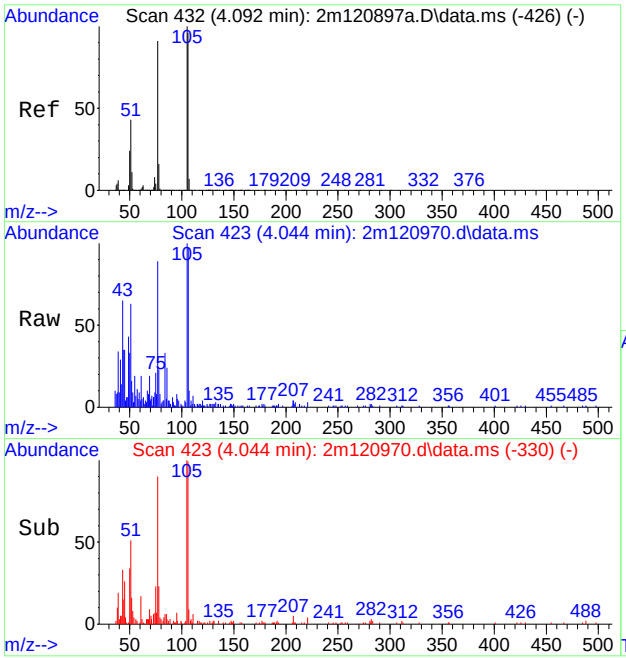


#92
bis(2-Ethylhexyl)phthalate
Concen: 1.12 ppm
RT: 13.960 min Scan# 2277
Delta R.T. 0.000 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:149 Resp: 168514

Ion	Ratio	Lower	Upper
149	100		
167	26.7	0.0	56.4
279	3.3	0.0	33.2

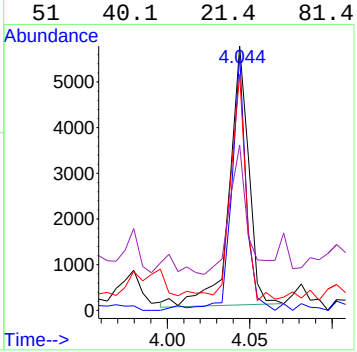




#104
Benzaldehyde
Concen: 0.10 ppm
RT: 4.044 min Scan# 423
Delta R.T. -0.000 min
Lab File: 2m120970.d
Acq: 22 Dec 2021 6:43 am

Tgt Ion:105 Resp: 4675

Ion	Ratio	Lower	Upper
105	100		
106	97.5	64.9	124.9
77	81.3	62.7	122.7
51	40.1	21.4	81.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2m5439\
Data File : 2m120971.d
Acq On : 22 Dec 2021 7:08 am
Operator : chriss2
Sample : jd36624-10 Inst : MS2M
Misc : op37113,e2m5439,260,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M
Quant Results File: M2M5435LVI.RES
Quant Time: Dec 23 04:40:39 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 23 04:04:48 2021
Response via : Initial Calibration

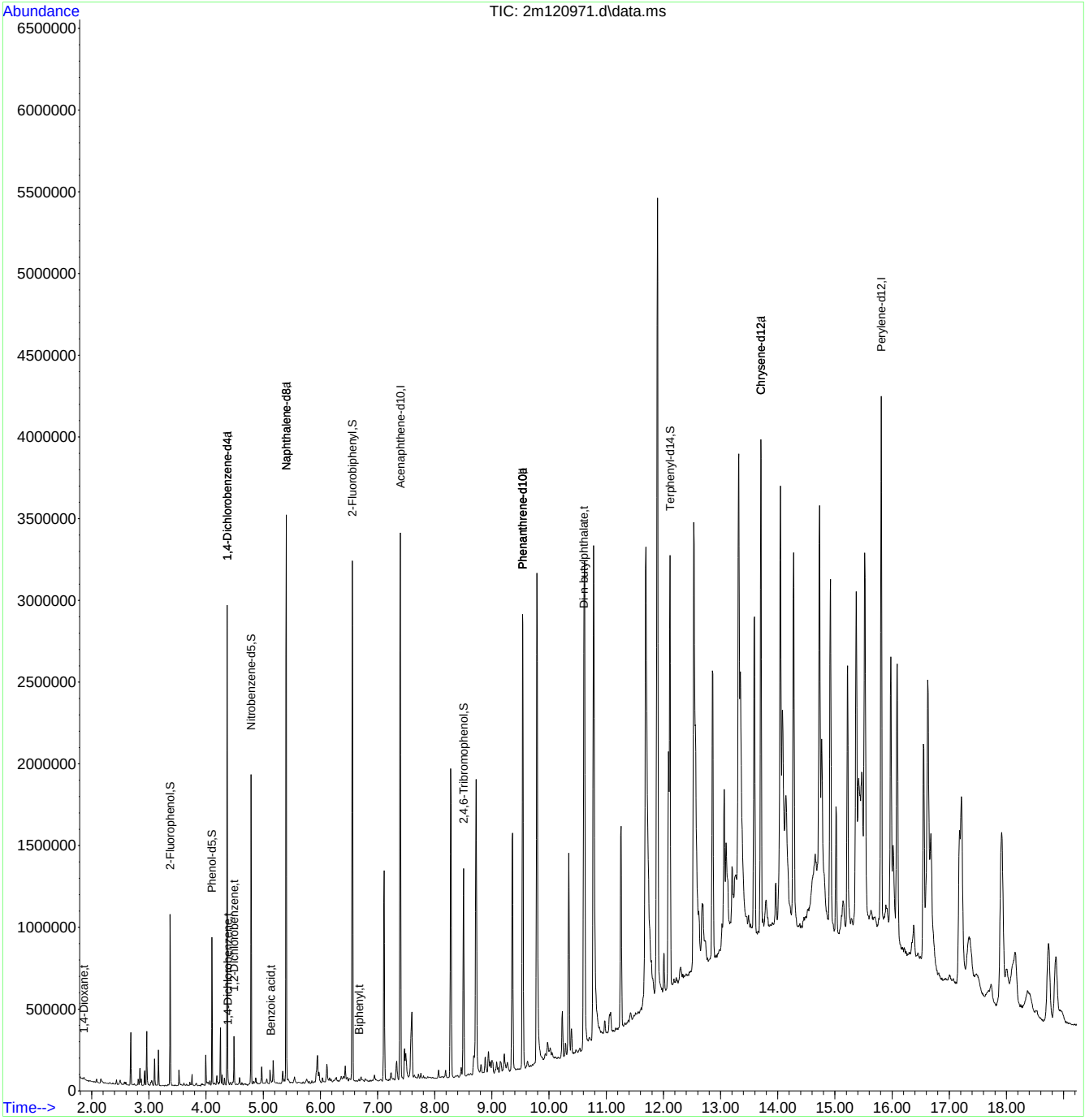
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.370	152	340785	8.00	ppm	0.00
24) Naphthalene-d8	5.403	136	1376920	8.00	ppm	0.00
46) Acenaphthene-d10	7.398	164	788525	8.00	ppm	0.00
69) Phenanthrene-d10	9.537	188	1374948	8.00	ppm	0.00
84) Chrysene-d12	13.704	240	1473769	8.00	ppm	0.00
93) Perylene-d12	15.811	264	1650372	8.00	ppm	0.01
103) 1,4-Dichlorobenzene-d4a	4.370	152	340785	8.00	ppm	0.00
105) Phenanthrene-d10a	9.537	188	1374948	8.00	ppm	0.00
107) Naphthalene-d8a	5.403	136	1376920	8.00	ppm	0.00
109) Chrysene-d12a	13.704	240	1473769	8.00	ppm	0.00
111) Phenanthrene-d10b	9.537	188	1374948	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.370	112	226616	4.27	ppm	0.00
Spiked Amount 10.000			Recovery = 42.70%			
8) Phenol-d5	4.103	99	183969	2.73	ppm	0.00
Spiked Amount 10.000			Recovery = 27.30%			
25) Nitrobenzene-d5	4.787	82	386697	7.56	ppm	0.00
Spiked Amount 10.000			Recovery = 75.60%			
51) 2-Fluorobiphenyl	6.558	172	1067896	8.25	ppm	0.00
Spiked Amount 10.000			Recovery = 82.50%			
74) 2,4,6-Tribromophenol	8.505	330	163081	8.83	ppm	0.00
Spiked Amount 10.000			Recovery = 88.30%			
87) Terphenyl-d14	12.115	244	1189019	6.41	ppm	0.00
Spiked Amount 10.000			Recovery = 64.10%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.862	88	3918	0.19	ppm	95
15) 1,4-Dichlorobenzene	4.381	146	10140	0.16	ppm	96
17) 1,2-Dichlorobenzene	4.488	146	48277	0.78	ppm	99
31) Benzoic acid	5.135	105	2763	0.51	ppm	78
53) Biphenyl	6.676	154	3453	0.02	ppm	94
81) Di-n-butylphthalate	10.607	149	742332	3.58	ppm	100

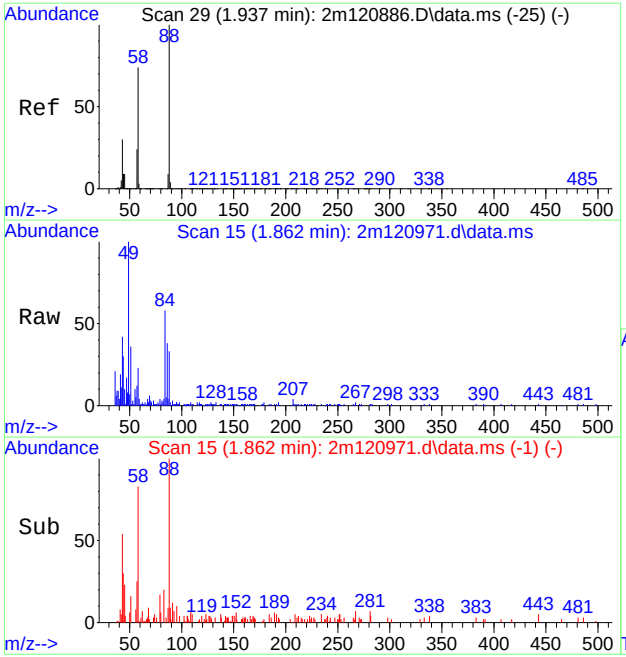
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2m5439\
Data File : 2m120971.d
Acq On : 22 Dec 2021 7:08 am
Operator : chriss2
Sample : jd36624-10 Inst : MS2M
Misc : op37113,e2m5439,260,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M
Quant Results File: M2M5435LVI.RES
Quant Time: Dec 23 04:40:39 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 23 04:04:48 2021
Response via : Initial Calibration

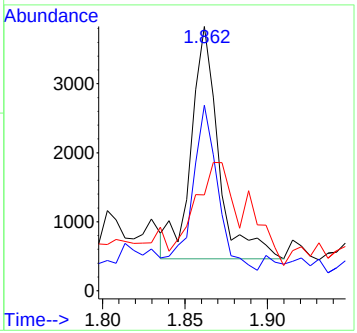


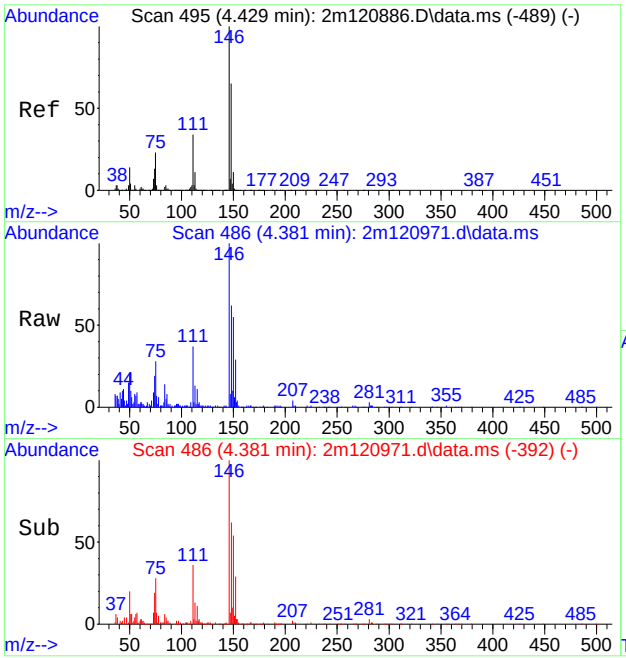


#2
1,4-Dioxane
Concen: 0.19 ppm
RT: 1.862 min Scan# 15
Delta R.T. 0.016 min
Lab File: 2m120971.d
Acq: 22 Dec 2021 7:08 am

Tgt Ion: 88 Resp: 3918

Ion	Ratio	Lower	Upper
88	100		
58	71.0	45.2	105.2
57	23.4	0.0	55.8

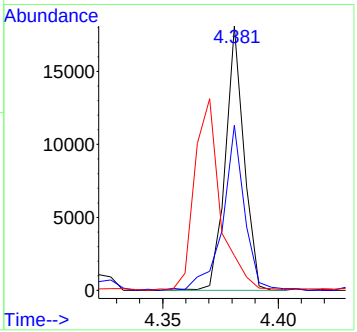


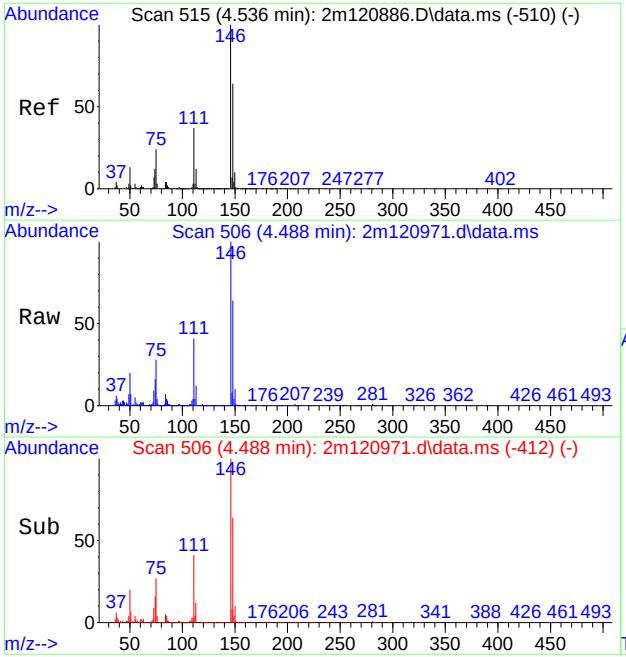


#15
1,4-Dichlorobenzene
Concen: 0.16 ppm
RT: 4.381 min Scan# 486
Delta R.T. 0.000 min
Lab File: 2m120971.d
Acq: 22 Dec 2021 7:08 am

Tgt Ion:146 Resp: 10140

Ion	Ratio	Lower	Upper
146	100		
148	62.0	34.8	94.8
113	12.7	0.0	41.4

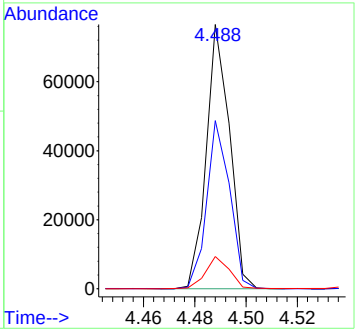


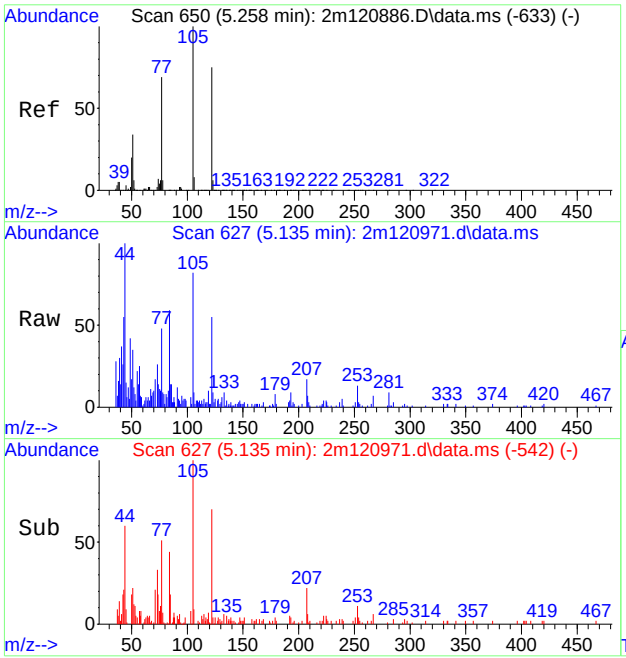


#17
1,2-Dichlorobenzene
Concen: 0.78 ppm
RT: 4.488 min Scan# 506
Delta R.T. 0.000 min
Lab File: 2m120971.d
Acq: 22 Dec 2021 7:08 am

Tgt Ion:146 Resp: 48277

Ion	Ratio	Lower	Upper
146	100		
148	63.6	33.2	93.2
113	12.2	0.0	42.5

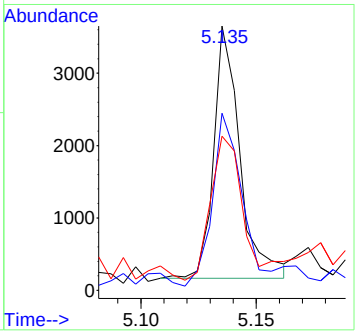


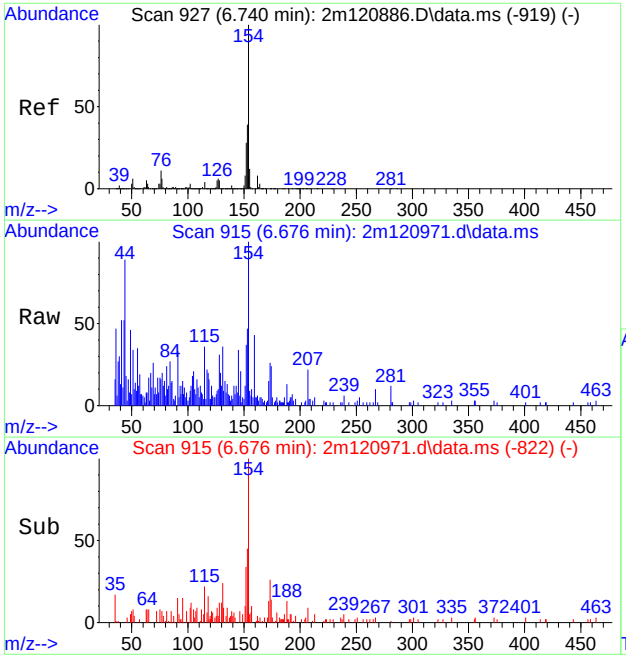


#31
Benzoic acid
Concen: 0.51 ppm
RT: 5.135 min Scan# 627
Delta R.T. -0.048 min
Lab File: 2m120971.d
Acq: 22 Dec 2021 7:08 am

Tgt Ion:105 Resp: 2763

Ion	Ratio	Lower	Upper
105	100		
122	63.8	53.8	113.8
77	52.0	40.1	100.1

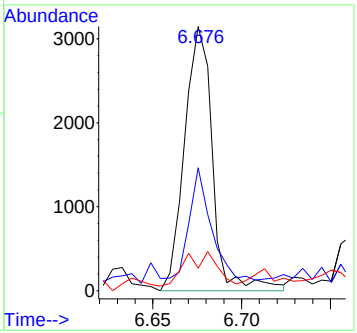


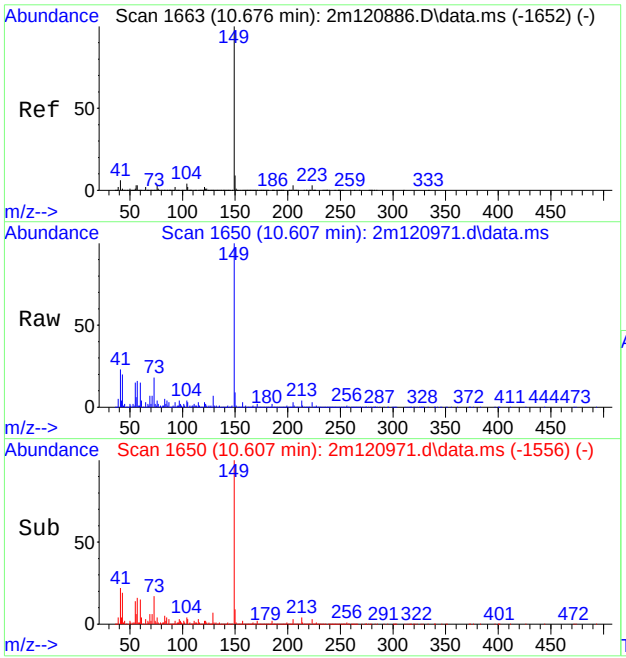


#53
Biphenyl
Concen: 0.02 ppm
RT: 6.676 min Scan# 915
Delta R.T. -0.005 min
Lab File: 2m120971.d
Acq: 22 Dec 2021 7:08 am

Tgt Ion:154 Resp: 3453

Ion	Ratio	Lower	Upper
154	100		
153	40.8	9.7	69.7
155	5.4	0.0	42.4

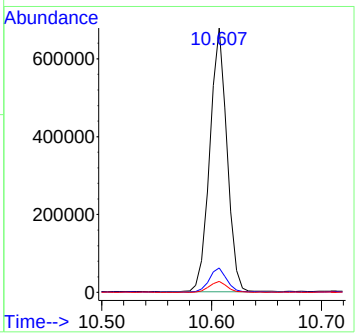




#81
Di-n-butylphthalate
Concen: 3.58 ppm
RT: 10.607 min Scan# 1650
Delta R.T. 0.000 min
Lab File: 2m120971.d
Acq: 22 Dec 2021 7:08 am

Tgt Ion:149 Resp: 742332

Ion	Ratio	Lower	Upper
149	100		
150	9.2	0.0	39.1
104	4.1	0.0	34.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2m5439\
Data File : 2m120972.d
Acq On : 22 Dec 2021 7:32 am
Operator : chriss2
Sample : jd36624-11 Inst : MS2M
Misc : op37113,e2m5439,270,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M
Quant Results File: M2M5435LVI.RES
Quant Time: Dec 23 04:47:43 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 23 04:04:48 2021
Response via : Initial Calibration

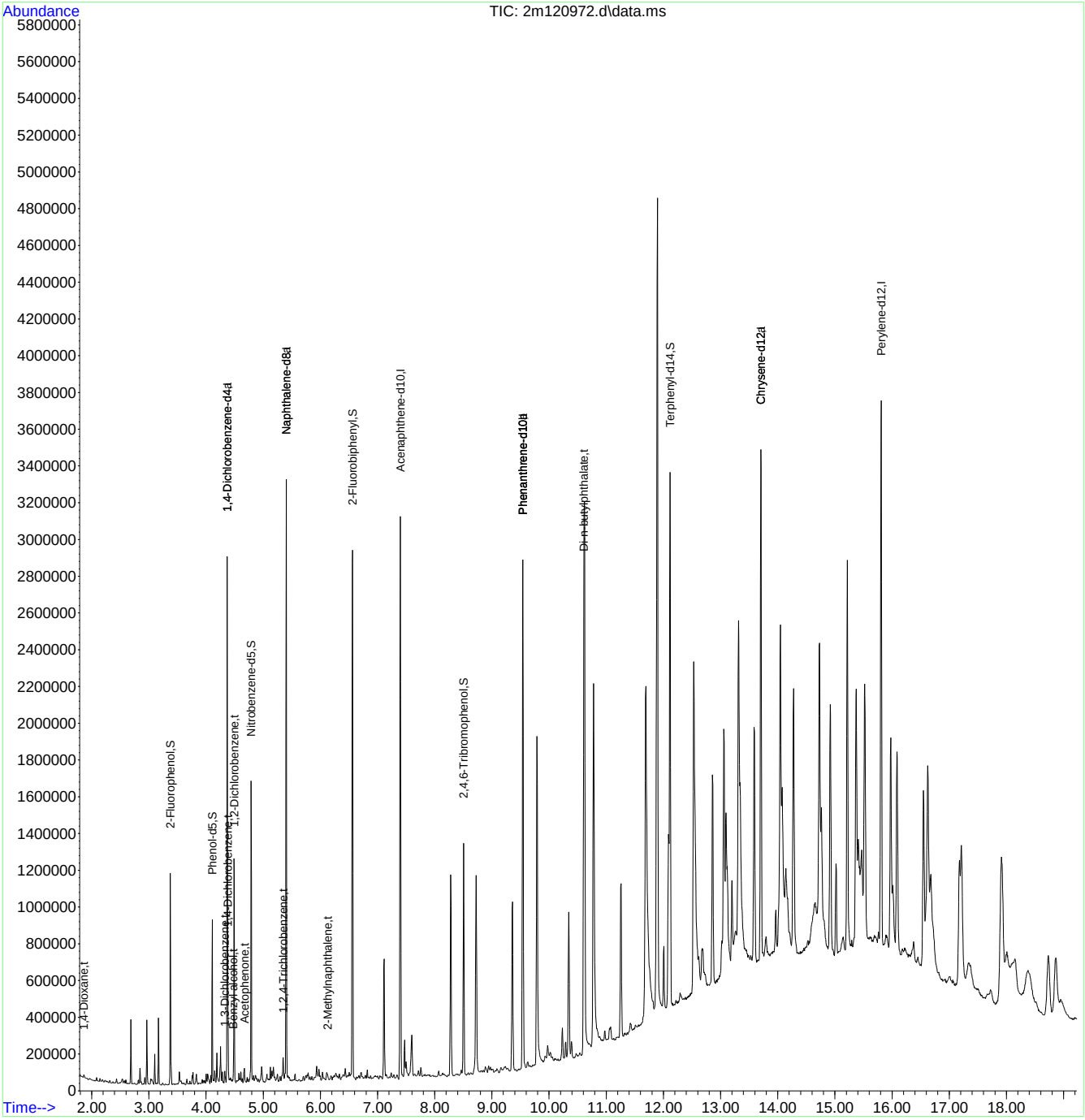
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.370	152	310485	8.00	ppm	0.00
24) Naphthalene-d8	5.402	136	1223454	8.00	ppm	0.00
46) Acenaphthene-d10	7.397	164	710969	8.00	ppm	0.00
69) Phenanthrene-d10	9.542	188	1298287	8.00	ppm	0.00
84) Chrysene-d12	13.704	240	1399908	8.00	ppm	0.00
93) Perylene-d12	15.811	264	1530289	8.00	ppm	0.01
103) 1,4-Dichlorobenzene-d4a	4.370	152	310485	8.00	ppm	0.00
105) Phenanthrene-d10a	9.542	188	1298287	8.00	ppm	0.00
107) Naphthalene-d8a	5.402	136	1223454	8.00	ppm	0.00
109) Chrysene-d12a	13.704	240	1399908	8.00	ppm	0.00
111) Phenanthrene-d10b	9.542	188	1298287	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.375	112	211727	4.38	ppm	0.01
Spiked Amount 10.000			Recovery = 43.80%			
8) Phenol-d5	4.108	99	180804	2.95	ppm	0.00
Spiked Amount 10.000			Recovery = 29.50%			
25) Nitrobenzene-d5	4.787	82	358905	7.89	ppm	0.00
Spiked Amount 10.000			Recovery = 78.90%			
51) 2-Fluorobiphenyl	6.563	172	996574	8.54	ppm	0.00
Spiked Amount 10.000			Recovery = 85.40%			
74) 2,4,6-Tribromophenol	8.505	330	156329	8.97	ppm	0.00
Spiked Amount 10.000			Recovery = 89.70%			
87) Terphenyl-d14	12.115	244	1374288	7.80	ppm	0.00
Spiked Amount 10.000			Recovery = 78.00%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.862	88	2394	0.13	ppm	87
14) 1,3-Dichlorobenzene	4.327	146	6859	0.12	ppm	93
15) 1,4-Dichlorobenzene	4.381	146	91750	1.56	ppm	97
16) Benzyl alcohol	4.477	108	4132	0.12	ppm	86
17) 1,2-Dichlorobenzene	4.493	146	234579	4.16	ppm	97
18) Acetophenone	4.670	105	20172	0.29	ppm	# 69
36) 1,2,4-Trichlorobenzene	5.349	180	13436	0.28	ppm	94
44) 2-Methylnaphthalene	6.124	141	4608	0.05	ppm	89
81) Di-n-butylphthalate	10.607	149	859798	4.39	ppm	100

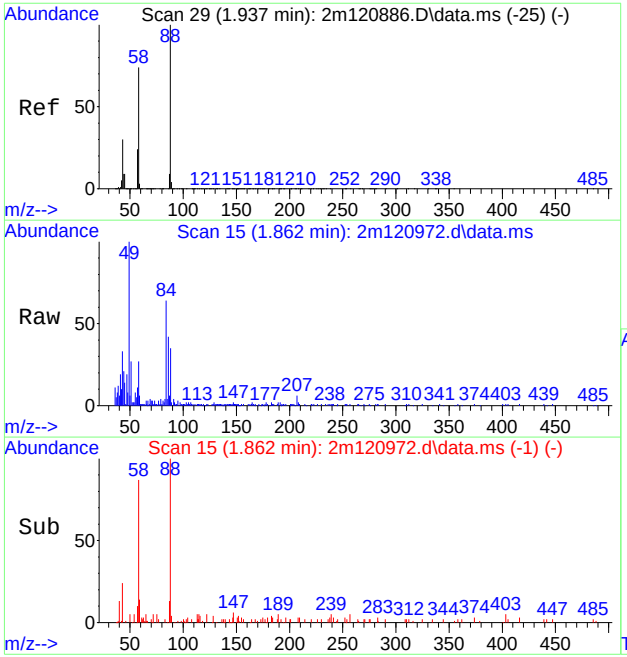
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2m5439\
Data File : 2m120972.d
Acq On : 22 Dec 2021 7:32 am
Operator : chriss2
Sample : jd36624-11 Inst : MS2M
Misc : op37113,e2m5439,270,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M
Quant Results File: M2M5435LVI.RES
Quant Time: Dec 23 04:47:43 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 23 04:04:48 2021
Response via : Initial Calibration

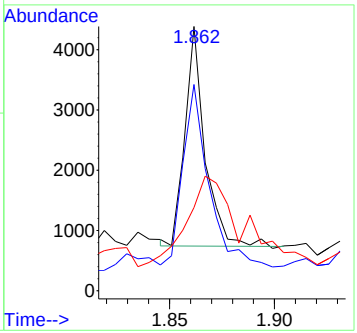


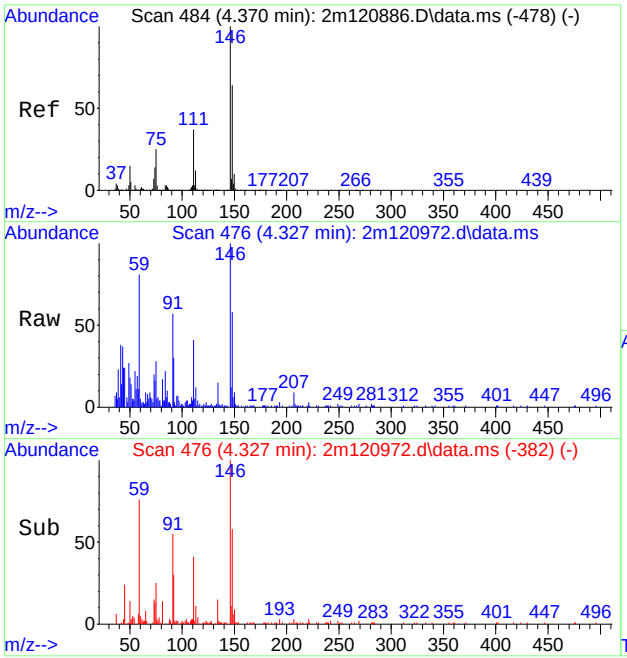


#2
1,4-Dioxane
Concen: 0.13 ppm
RT: 1.862 min Scan# 15
Delta R.T. 0.016 min
Lab File: 2m120972.d
Acq: 22 Dec 2021 7:32 am

Tgt Ion: 88 Resp: 2394

Ion	Ratio	Lower	Upper
88	100		
58	83.7	45.2	105.2
57	15.6	0.0	55.8

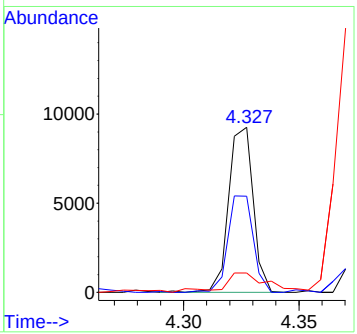


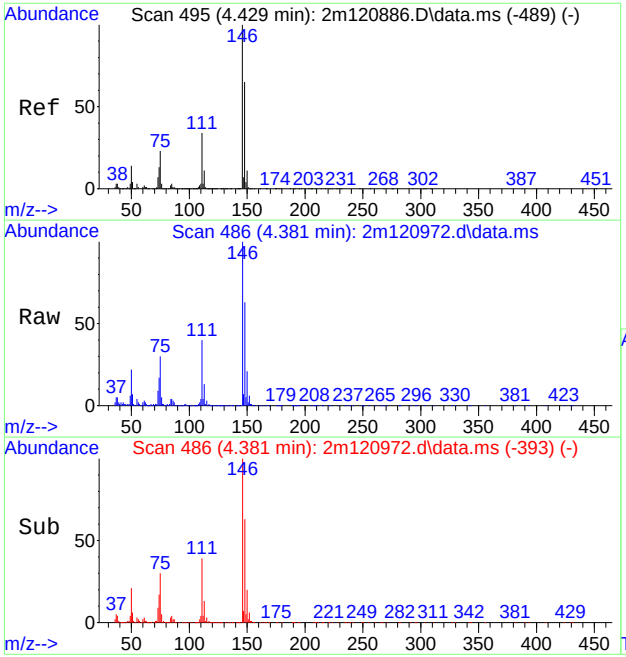


#14
1,3-Dichlorobenzene
Concen: 0.12 ppm
RT: 4.327 min Scan# 476
Delta R.T. 0.005 min
Lab File: 2m120972.d
Acq: 22 Dec 2021 7:32 am

Tgt Ion:146 Resp: 6859

Ion	Ratio	Lower	Upper
146	100		
148	57.9	33.2	93.2
113	9.9	0.0	42.4

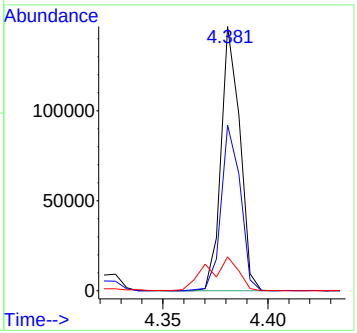


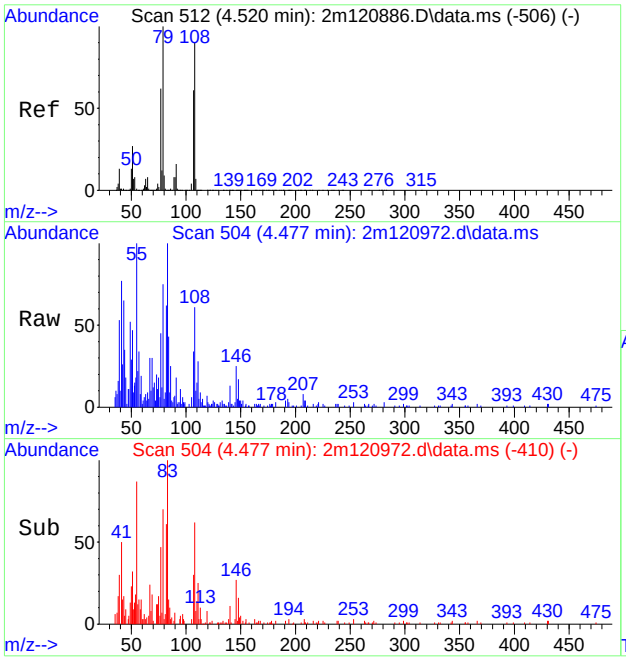


#15
1,4-Dichlorobenzene
Concen: 1.56 ppm
RT: 4.381 min Scan# 486
Delta R.T. -0.000 min
Lab File: 2m120972.d
Acq: 22 Dec 2021 7:32 am

Tgt Ion:146 Resp: 91750

Ion	Ratio	Lower	Upper
146	100		
148	62.5	34.8	94.8
113	12.7	0.0	41.4

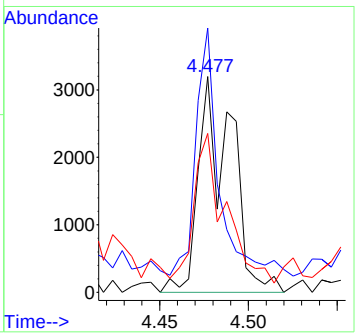


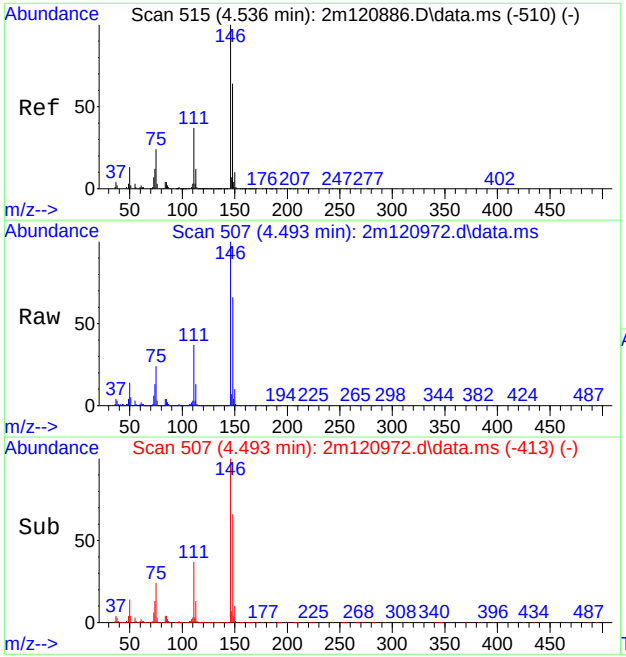


#16
Benzyl alcohol
Concen: 0.12 ppm
RT: 4.477 min Scan# 504
Delta R.T. 0.005 min
Lab File: 2m120972.d
Acq: 22 Dec 2021 7:32 am

Tgt Ion:108 Resp: 4132

Ion	Ratio	Lower	Upper
108	100		
79	112.2	93.3	153.3
77	61.9	48.8	108.8

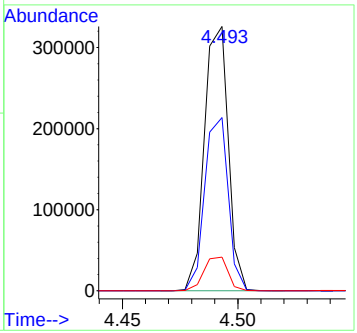


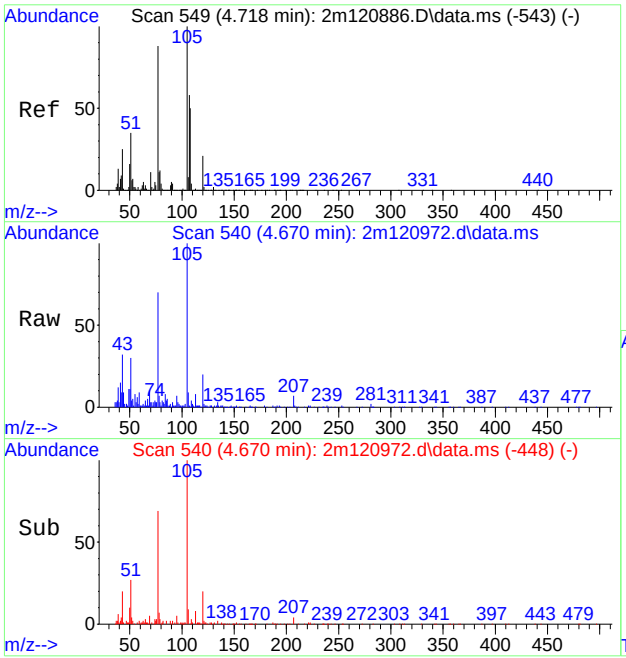


#17
1,2-Dichlorobenzene
Concen: 4.16 ppm
RT: 4.493 min Scan# 507
Delta R.T. 0.005 min
Lab File: 2m120972.d
Acq: 22 Dec 2021 7:32 am

Tgt Ion:146 Resp: 234579

Ion	Ratio	Lower	Upper
146	100		
148	65.5	33.2	93.2
113	12.7	0.0	42.5

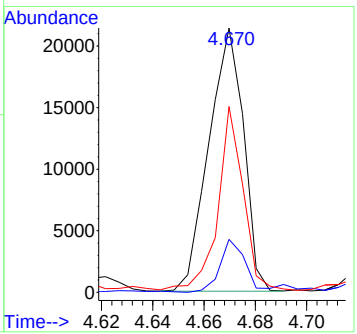


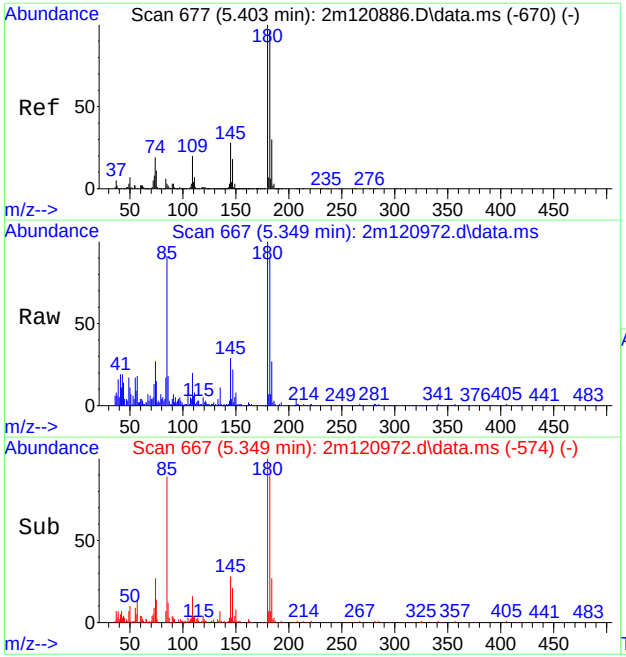


#18
Acetophenone
Concen: 0.29 ppm
RT: 4.670 min Scan# 540
Delta R.T. -0.005 min
Lab File: 2m120972.d
Acq: 22 Dec 2021 7:32 am

Tgt Ion:105 Resp: 20172

Ion	Ratio	Lower	Upper
105	100		
120	18.4	0.0	51.9
77	69.5	76.0	136.0#

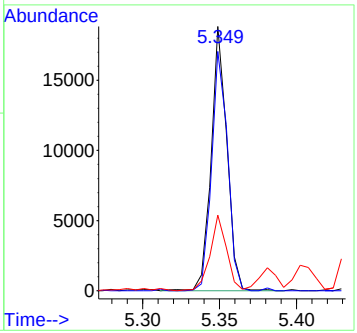


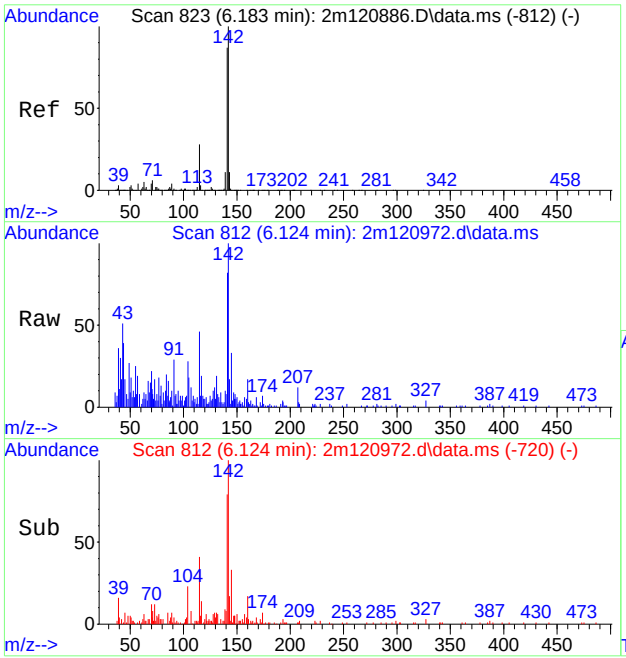


#36
1,2,4-Trichlorobenzene
Concen: 0.28 ppm
RT: 5.349 min Scan# 667
Delta R.T. -0.000 min
Lab File: 2m120972.d
Acq: 22 Dec 2021 7:32 am

Tgt Ion:180 Resp: 13436

Ion	Ratio	Lower	Upper
180	100		
182	90.2	67.1	127.1
145	27.6	0.0	59.2

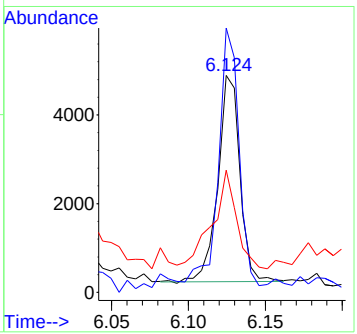


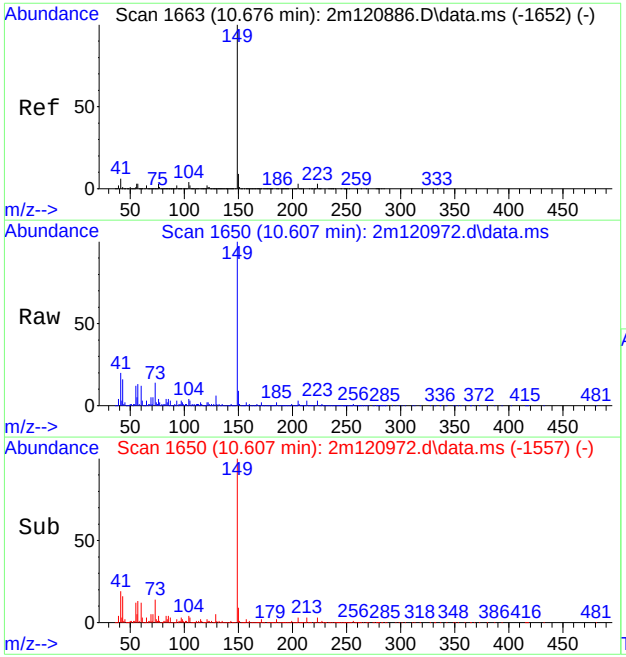


#44
2-Methylnaphthalene
Concen: 0.05 ppm
RT: 6.124 min Scan# 812
Delta R.T. -0.005 min
Lab File: 2m120972.d
Acq: 22 Dec 2021 7:32 am

Tgt Ion:141 Resp: 4608

Ion	Ratio	Lower	Upper
141	100		
142	124.7	83.6	143.6
115	42.3	4.4	64.4

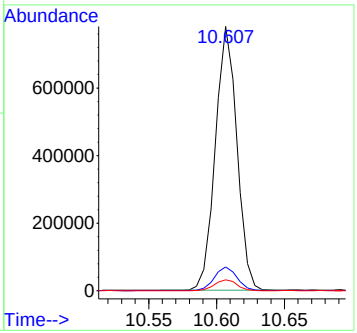




#81
Di-n-butylphthalate
Concen: 4.39 ppm
RT: 10.607 min Scan# 1650
Delta R.T. -0.000 min
Lab File: 2m120972.d
Acq: 22 Dec 2021 7:32 am

Tgt Ion:149 Resp: 859798

Ion	Ratio	Lower	Upper
149	100		
150	8.9	0.0	39.1
104	4.1	0.0	34.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2m5439\
Data File : 2m120973.d
Acq On : 22 Dec 2021 7:57 am
Operator : chriss2
Sample : jd36624-12 Inst : MS2M
Misc : op37113,e2m5439,260,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M
Quant Results File: M2M5435LVI.RES
Quant Time: Dec 23 04:52:19 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 23 04:04:48 2021
Response via : Initial Calibration

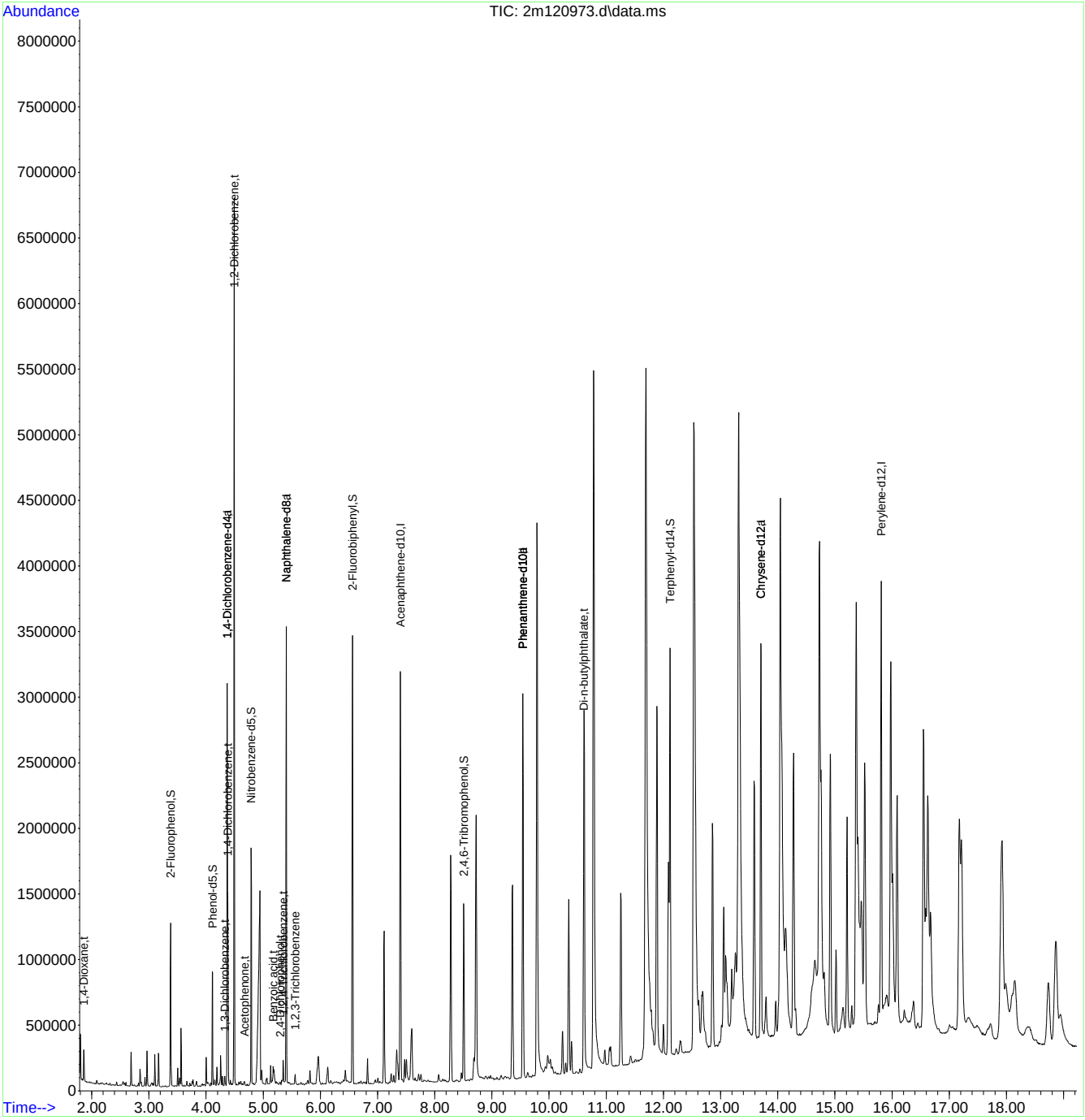
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.370	152	330309	8.00	ppm	0.00
24) Naphthalene-d8	5.403	136	1320534	8.00	ppm	0.00
46) Acenaphthene-d10	7.398	164	764439	8.00	ppm	0.00
69) Phenanthrene-d10	9.542	188	1395084	8.00	ppm	0.00
84) Chrysene-d12	13.704	240	1505631	8.00	ppm	0.00
93) Perylene-d12	15.811	264	1650177	8.00	ppm	0.01
103) 1,4-Dichlorobenzene-d4a	4.370	152	330309	8.00	ppm	0.00
105) Phenanthrene-d10a	9.542	188	1395084	8.00	ppm	0.00
107) Naphthalene-d8a	5.403	136	1320534	8.00	ppm	0.00
109) Chrysene-d12a	13.704	240	1505631	8.00	ppm	0.00
111) Phenanthrene-d10b	9.542	188	1395084	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.381	112	254469	4.95	ppm	0.02
Spiked Amount 10.000			Recovery = 49.50%			
8) Phenol-d5	4.114	99	214606	3.29	ppm	0.01
Spiked Amount 10.000			Recovery = 32.90%			
25) Nitrobenzene-d5	4.787	82	421379	8.58	ppm	0.00
Spiked Amount 10.000			Recovery = 85.80%			
51) 2-Fluorobiphenyl	6.563	172	1110398	8.85	ppm	0.00
Spiked Amount 10.000			Recovery = 88.50%			
74) 2,4,6-Tribromophenol	8.510	330	176751	9.44	ppm	0.00
Spiked Amount 10.000			Recovery = 94.40%			
87) Terphenyl-d14	12.115	244	1432451	7.56	ppm	0.00
Spiked Amount 10.000			Recovery = 75.60%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.862	88	64542	3.20	ppm	98
14) 1,3-Dichlorobenzene	4.327	146	7927	0.13	ppm	98
15) 1,4-Dichlorobenzene	4.381	146	232363	3.72	ppm	98
17) 1,2-Dichlorobenzene	4.493	146	1160903	19.36	ppm	100
18) Acetophenone	4.670	105	7962	0.11	ppm #	71
31) Benzoic acid	5.173	105	18696	0.90	ppm	97
33) 2,4-Dichlorophenol	5.296	162	2964	0.06	ppm	87
36) 1,2,4-Trichlorobenzene	5.349	180	15942	0.30	ppm	97
37) 1,2,3-Trichlorobenzene	5.558	180	3056	0.06	ppm	93
81) Di-n-butylphthalate	10.607	149	898069	4.26	ppm	99

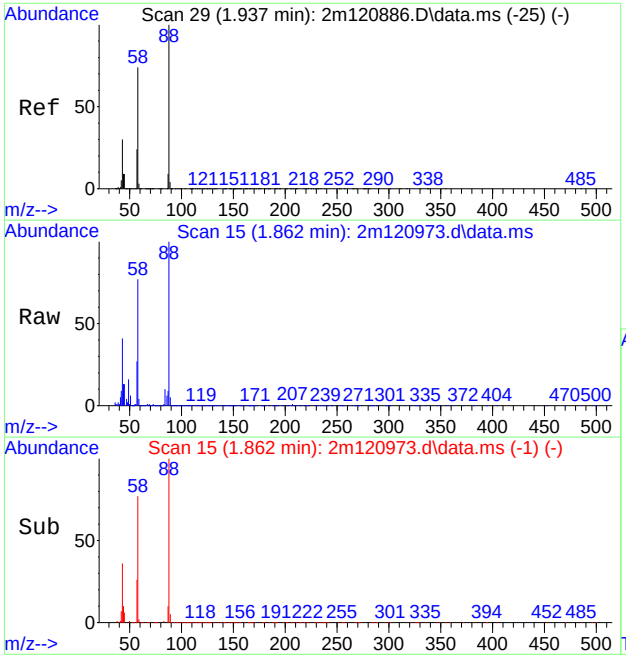
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2m5439\
Data File : 2m120973.d
Acq On : 22 Dec 2021 7:57 am
Operator : chriss2
Sample : jd36624-12 Inst : MS2M
Misc : op37113,e2m5439,260,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M
Quant Results File: M2M5435LVI.RES
Quant Time: Dec 23 04:52:19 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 23 04:04:48 2021
Response via : Initial Calibration

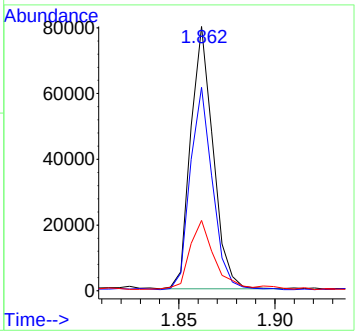


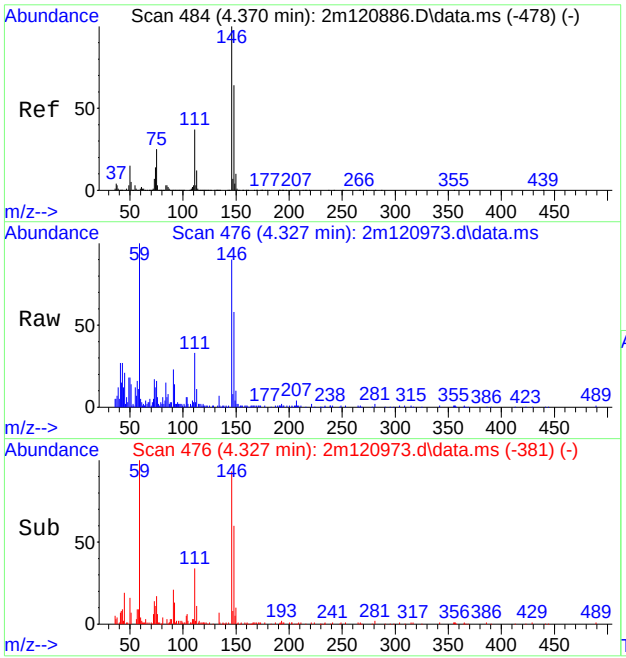


#2
1,4-Dioxane
Concen: 3.20 ppm
RT: 1.862 min Scan# 15
Delta R.T. 0.016 min
Lab File: 2m120973.d
Acq: 22 Dec 2021 7:57 am

Tgt Ion: 88 Resp: 64542

Ion	Ratio	Lower	Upper
88	100		
58	77.0	45.2	105.2
57	25.9	0.0	55.8

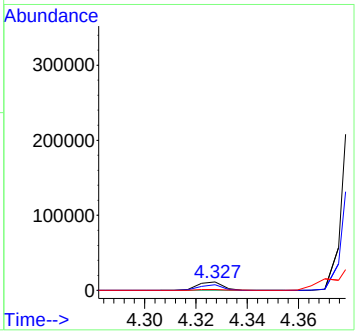


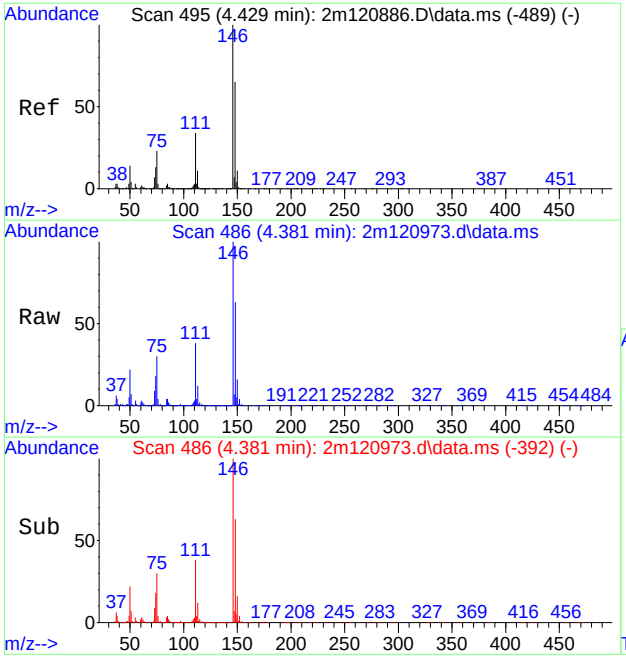


#14
1,3-Dichlorobenzene
Concen: 0.13 ppm
RT: 4.327 min Scan# 476
Delta R.T. 0.005 min
Lab File: 2m120973.d
Acq: 22 Dec 2021 7:57 am

Tgt Ion:146 Resp: 7927

Ion	Ratio	Lower	Upper
146	100		
148	64.1	33.2	93.2
113	10.8	0.0	42.4

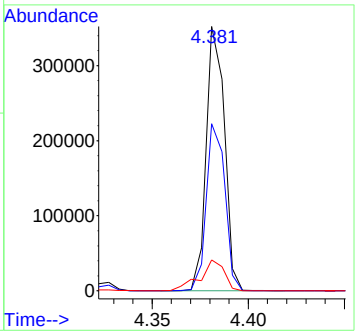


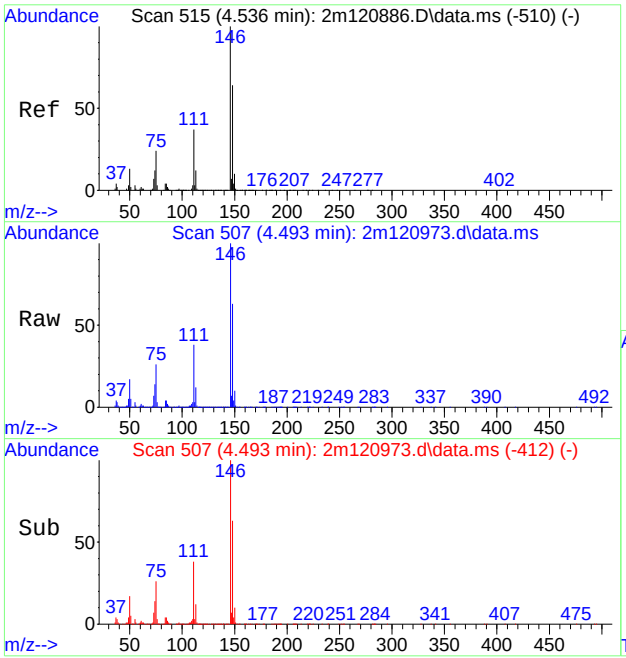


#15
1,4-Dichlorobenzene
Concen: 3.72 ppm
RT: 4.381 min Scan# 486
Delta R.T. 0.000 min
Lab File: 2m120973.d
Acq: 22 Dec 2021 7:57 am

Tgt Ion:146 Resp: 232363

Ion	Ratio	Lower	Upper
146	100		
148	63.2	34.8	94.8
113	11.7	0.0	41.4

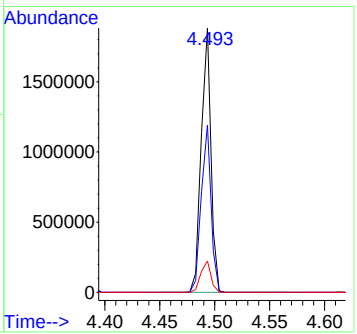


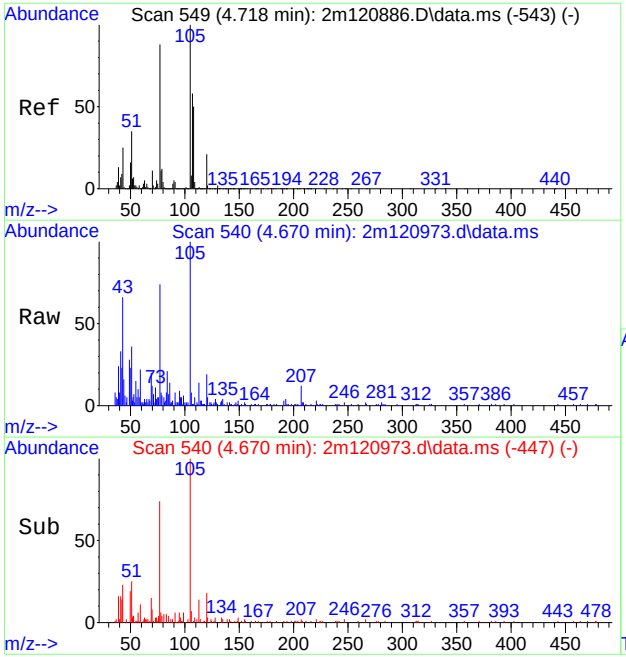


#17
1,2-Dichlorobenzene
Concen: 19.36 ppm
RT: 4.493 min Scan# 507
Delta R.T. 0.005 min
Lab File: 2m120973.d
Acq: 22 Dec 2021 7:57 am

Tgt Ion:146 Resp: 1160903

Ion	Ratio	Lower	Upper
146	100		
148	63.3	33.2	93.2
113	11.9	0.0	42.5

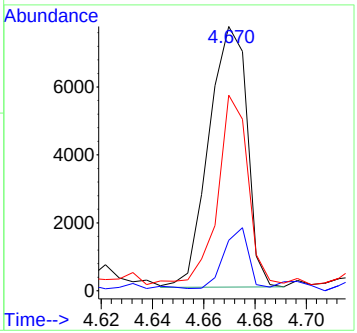


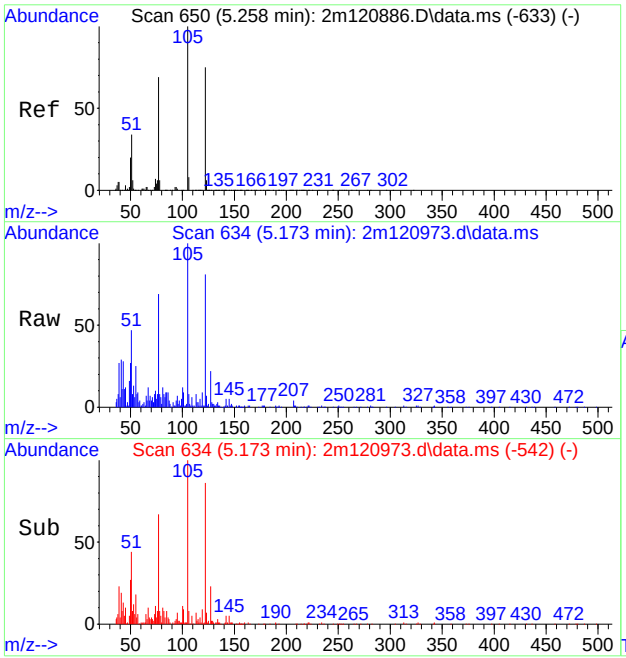


#18
Acetophenone
Concen: 0.11 ppm
RT: 4.670 min Scan# 540
Delta R.T. -0.005 min
Lab File: 2m120973.d
Acq: 22 Dec 2021 7:57 am

Tgt Ion:105 Resp: 7962

Ion	Ratio	Lower	Upper
105	100		
120	16.8	0.0	51.9
77	71.9	76.0	136.0#

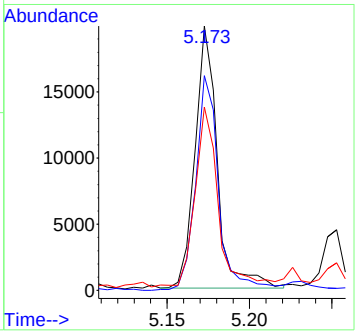


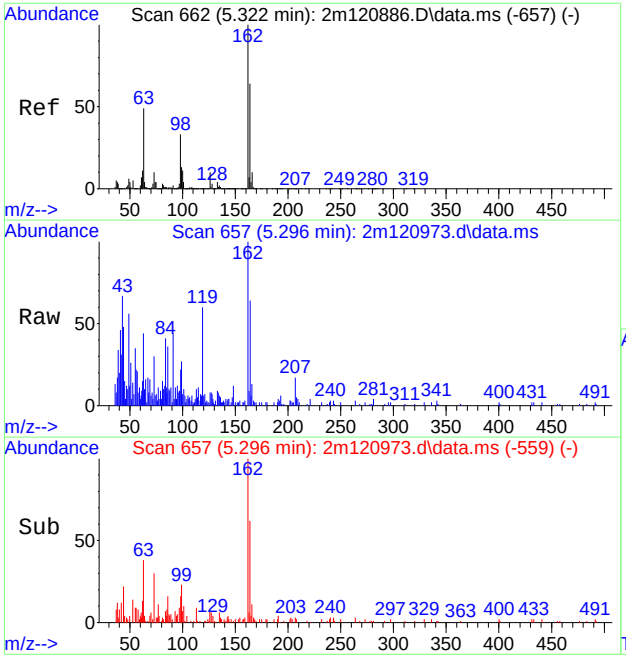


#31
Benzoic acid
Concen: 0.90 ppm
RT: 5.173 min Scan# 634
Delta R.T. -0.011 min
Lab File: 2m120973.d
Acq: 22 Dec 2021 7:57 am

Tgt Ion:105 Resp: 18696

Ion	Ratio	Lower	Upper
105	100		
122	81.3	53.8	113.8
77	67.2	40.1	100.1

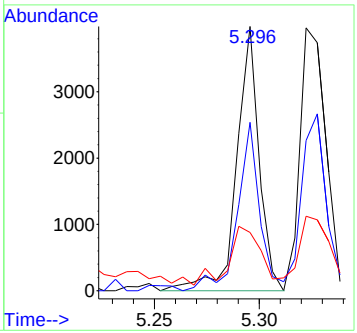


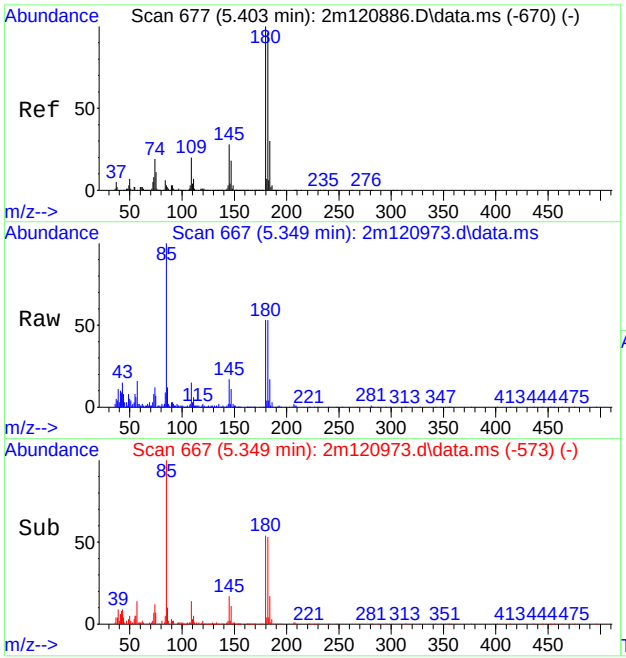


#33
2,4-Dichlorophenol
Concen: 0.06 ppm
RT: 5.296 min Scan# 657
Delta R.T. 0.022 min
Lab File: 2m120973.d
Acq: 22 Dec 2021 7:57 am

Tgt Ion:162 Resp: 2964

Ion	Ratio	Lower	Upper
162	100		
164	61.1	33.7	93.7
98	11.9	0.2	60.2

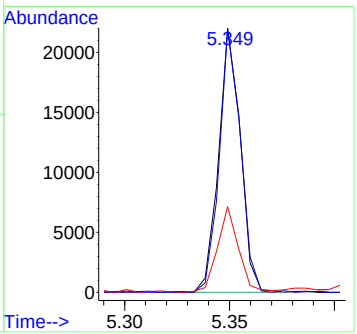


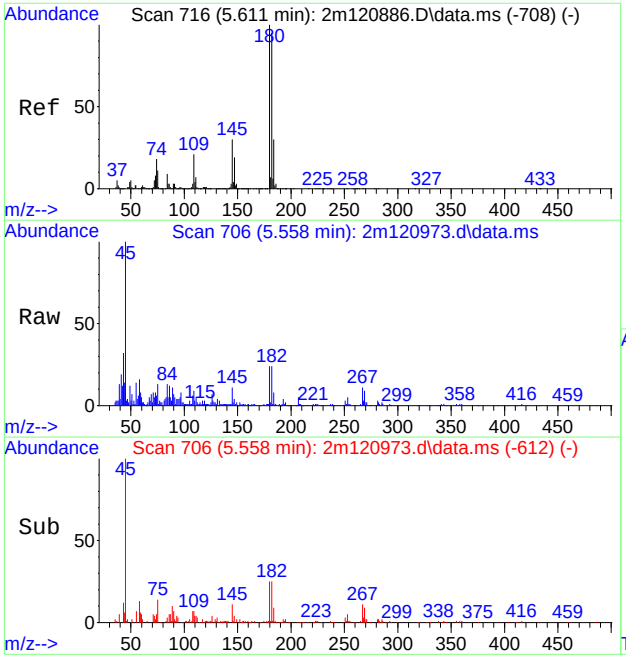


#36
1,2,4-Trichlorobenzene
Concen: 0.30 ppm
RT: 5.349 min Scan# 667
Delta R.T. 0.000 min
Lab File: 2m120973.d
Acq: 22 Dec 2021 7:57 am

Tgt Ion:180 Resp: 15942

Ion	Ratio	Lower	Upper
180	100		
182	99.2	67.1	127.1
145	31.7	0.0	59.2

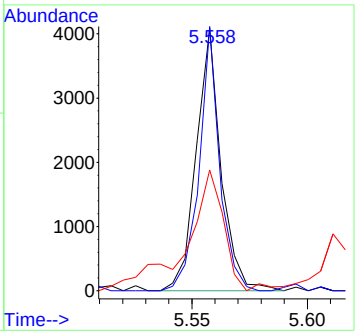


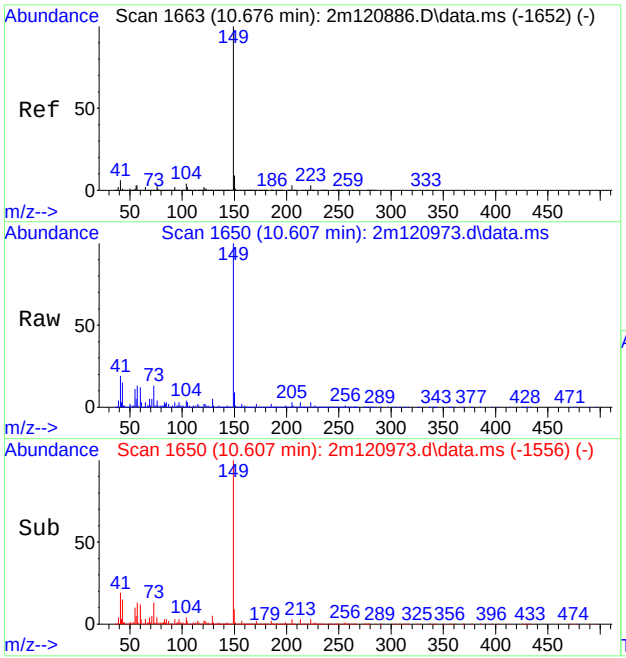


#37
1,2,3-Trichlorobenzene
Concen: 0.06 ppm
RT: 5.558 min Scan# 706
Delta R.T. 0.000 min
Lab File: 2m120973.d
Acq: 22 Dec 2021 7:57 am

Tgt Ion:180 Resp: 3056

Ion	Ratio	Lower	Upper
180	100		
182	100.1	65.6	125.6
145	38.9	0.0	60.0

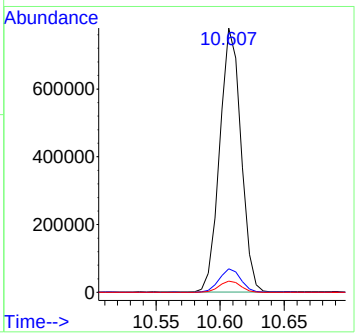




#81
Di-n-butylphthalate
Concen: 4.26 ppm
RT: 10.607 min Scan# 1650
Delta R.T. 0.000 min
Lab File: 2m120973.d
Acq: 22 Dec 2021 7:57 am

Tgt Ion:149 Resp: 898069

Ion	Ratio	Lower	Upper
149	100		
150	8.9	0.0	39.1
104	4.2	0.0	34.1



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 15:28

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80596.d
Acq On : 23 Dec 2021 3:34 pm
Operator : chriss2
Sample : jd36624-13 Inst : MS5P
Misc : op37115,e5p3816,275,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 04:01:49 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

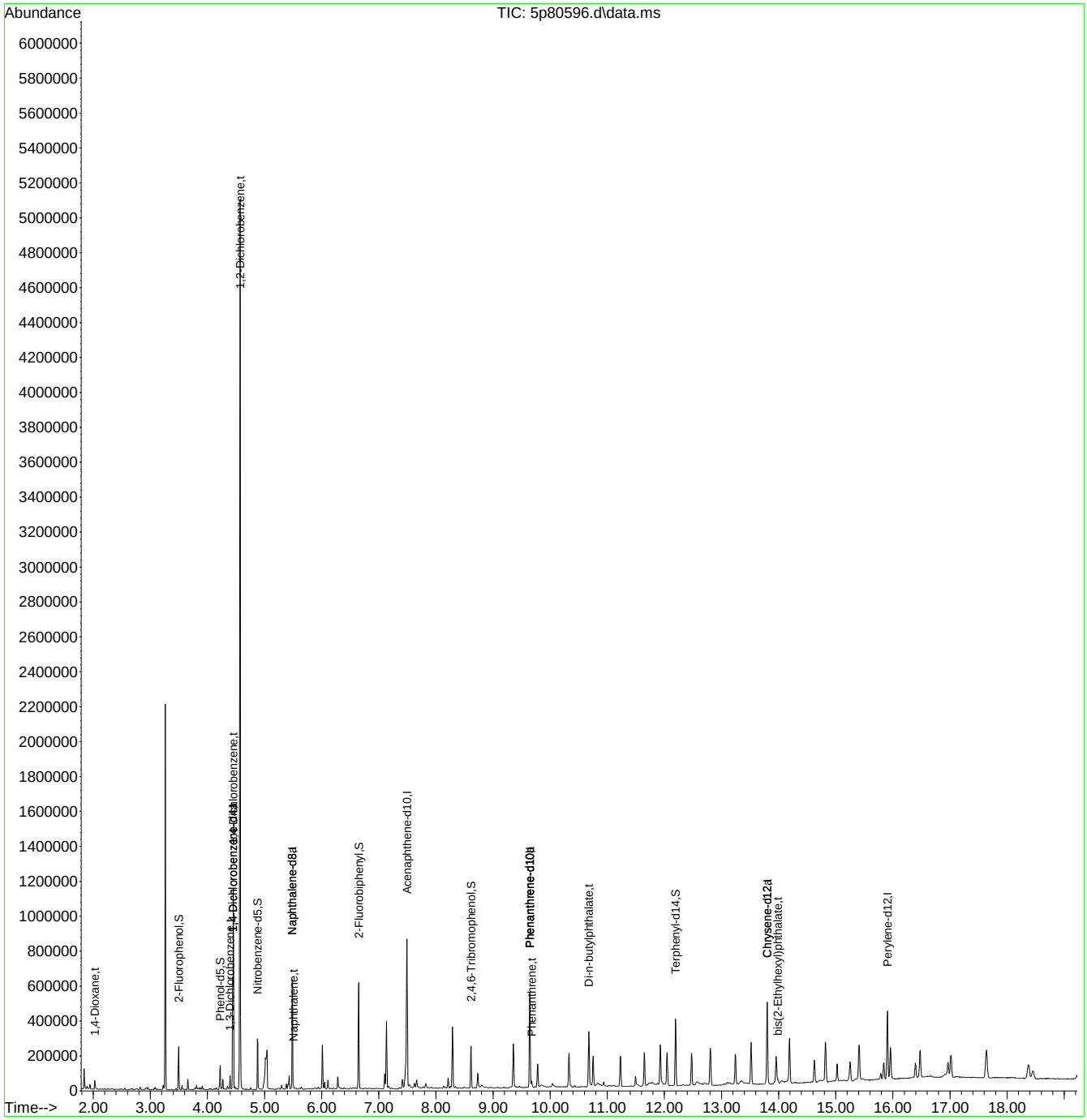
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.443	152	79682	8.00	ppm	0.00
24) Naphthalene-d8	5.484	136	286690	8.00	ppm	0.00
46) Acenaphthene-d10	7.493	164	172070	8.00	ppm	0.00
69) Phenanthrene-d10	9.641	188	262559	8.00	ppm	0.00
84) Chrysene-d12	13.802	240	208071	8.00	ppm	0.00
93) Perylene-d12	15.907	264	173170	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.443	152	79682	8.00	ppm	0.00
105) Phenanthrene-d10a	9.641	188	262559	8.00	ppm	0.00
107) Naphthalene-d8a	5.484	136	286690	8.00	ppm	0.00
109) Chrysene-d12a	13.802	240	208071	8.00	ppm	0.00
111) Phenanthrene-d10b	9.641	188	262559	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.497	112	42503	3.30	ppm	0.00
Spiked Amount 10.000			Recovery =	33.00%		
8) Phenol-d5	4.223	99	35227	2.13	ppm	0.00
Spiked Amount 10.000			Recovery =	21.30%		
25) Nitrobenzene-d5	4.875	82	73805	6.84	ppm	0.00
Spiked Amount 10.000			Recovery =	68.40%		
51) 2-Fluorobiphenyl	6.649	172	203276	7.20	ppm	0.00
Spiked Amount 10.000			Recovery =	72.00%		
74) 2,4,6-Tribromophenol	8.615	330	28826	8.64	ppm	0.00
Spiked Amount 10.000			Recovery =	86.40%		
87) Terphenyl-d14	12.194	244	161792	6.24	ppm	0.00
Spiked Amount 10.000			Recovery =	62.40%		
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery =	0.00%		
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.028	88	17185	3.07	ppm	99
14) 1,3-Dichlorobenzene	4.394	146	13518	0.88	ppm	97
15) 1,4-Dichlorobenzene	4.453	146	197996	13.45	ppm	98
17) 1,2-Dichlorobenzene	4.571	146	1189054	84.95	ppm	94
38) Naphthalene	5.506	128	4918m	0.14	ppm	
78) Phenanthrene	9.678	178	16843	0.50	ppm	96
81) Di-n-butylphthalate	10.677	149	48738	1.16	ppm	97
92) bis(2-Ethylhexyl)phtha...	13.984	149	6974	0.33	ppm	97

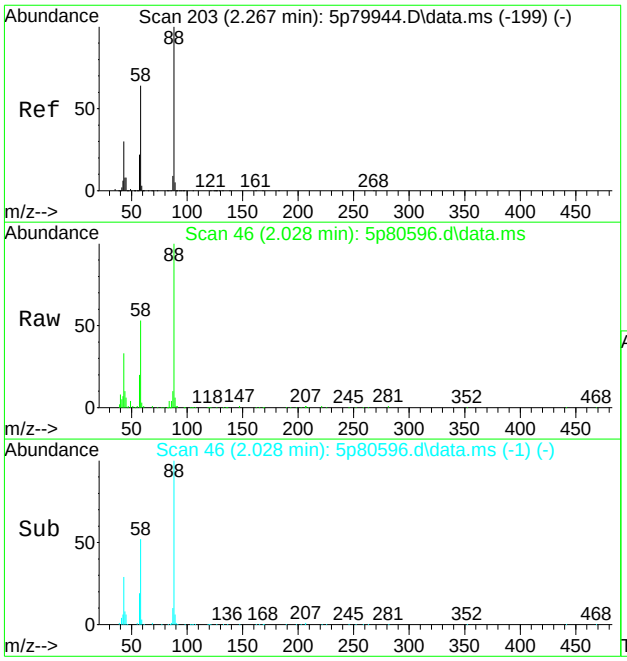
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80596.d
Acq On : 23 Dec 2021 3:34 pm
Operator : chriss2
Sample : jd36624-13 Inst : MS5P
Misc : op37115,e5p3816,275,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 04:01:49 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

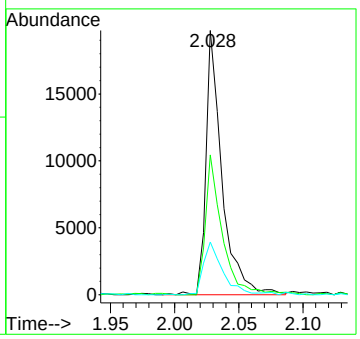


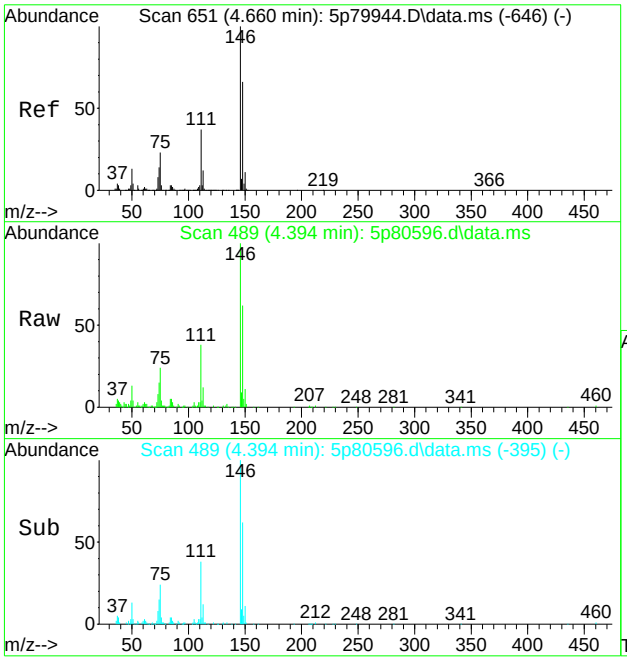


#2
1,4-Dioxane
Concen: 3.07 ppm
RT: 2.028 min Scan# 46
Delta R.T. 0.000 min
Lab File: 5p80596.d
Acq: 23 Dec 2021 3:34 pm

Tgt Ion: 88 Resp: 17185

Ion	Ratio	Lower	Upper
88	100		
58	52.3	22.1	82.1
57	19.6	0.0	50.9

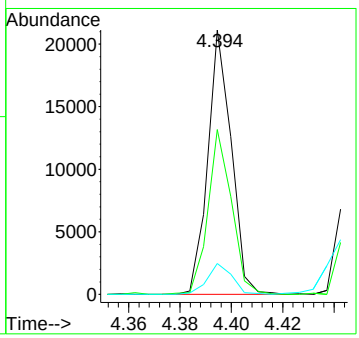


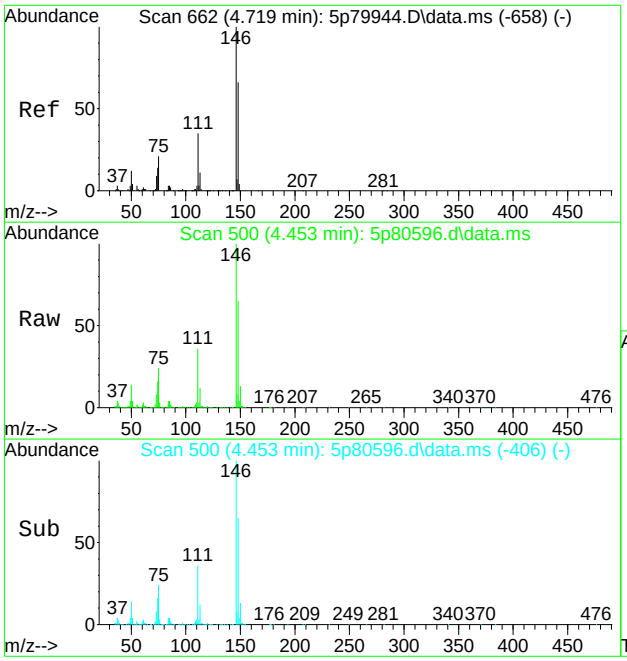


#14
1,3-Dichlorobenzene
Concen: 0.88 ppm
RT: 4.394 min Scan# 489
Delta R.T. 0.000 min
Lab File: 5p80596.d
Acq: 23 Dec 2021 3:34 pm

Tgt Ion:146 Resp: 13518

Ion	Ratio	Lower	Upper
146	100		
148	62.3	34.9	94.9
113	11.5	0.0	42.6

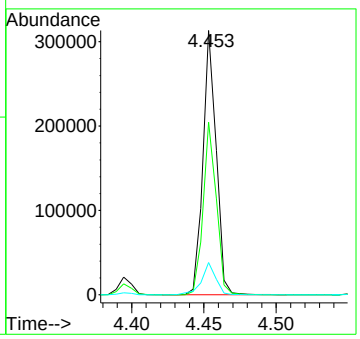


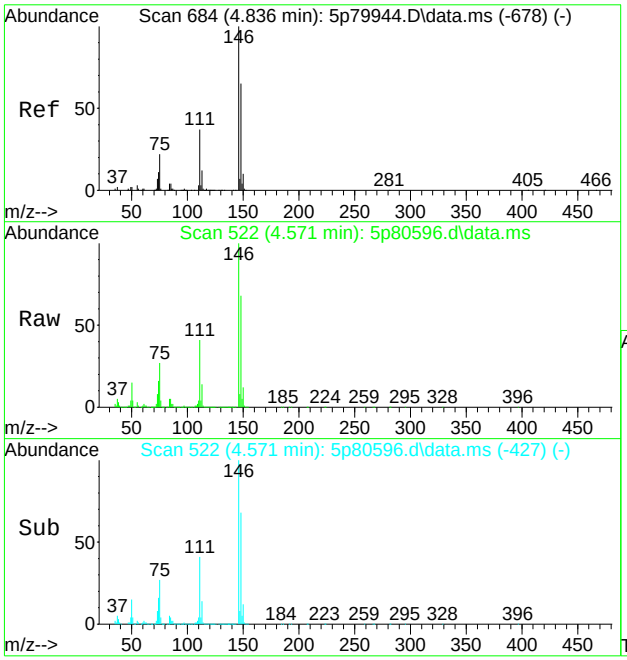


#15
1,4-Dichlorobenzene
Concen: 13.45 ppm
RT: 4.453 min Scan# 500
Delta R.T. 0.000 min
Lab File: 5p80596.d
Acq: 23 Dec 2021 3:34 pm

Tgt Ion:146 Resp: 197996

Ion	Ratio	Lower	Upper
146	100		
148	65.2	33.6	93.6
113	12.2	0.0	41.8

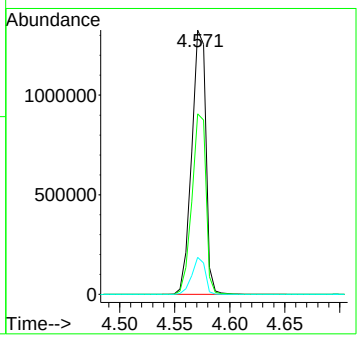


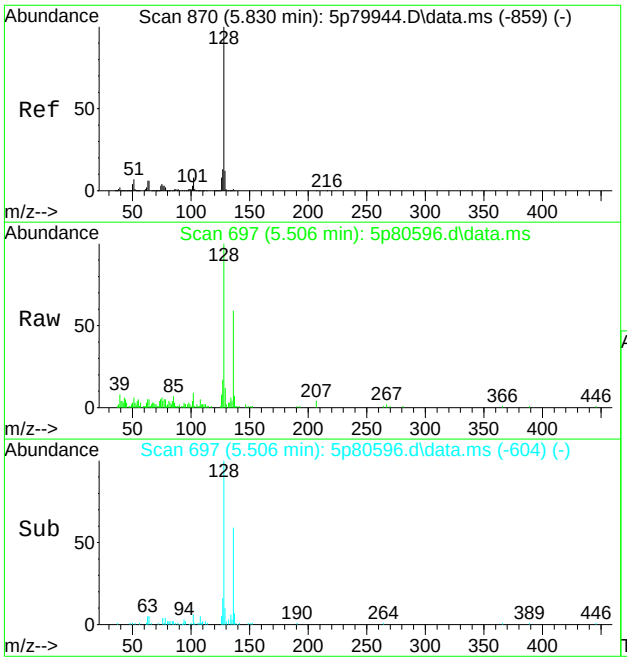


#17
1,2-Dichlorobenzene
Concen: 84.95 ppm
RT: 4.571 min Scan# 522
Delta R.T. 0.005 min
Lab File: 5p80596.d
Acq: 23 Dec 2021 3:34 pm

Tgt Ion:146 Resp: 1189054

Ion	Ratio	Lower	Upper
146	100		
148	68.3	33.8	93.8
113	14.0	0.0	40.3

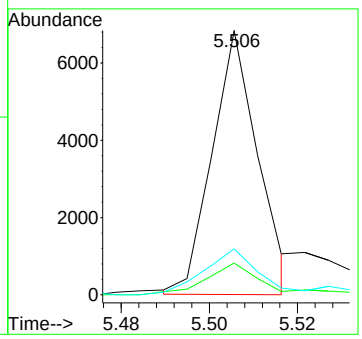


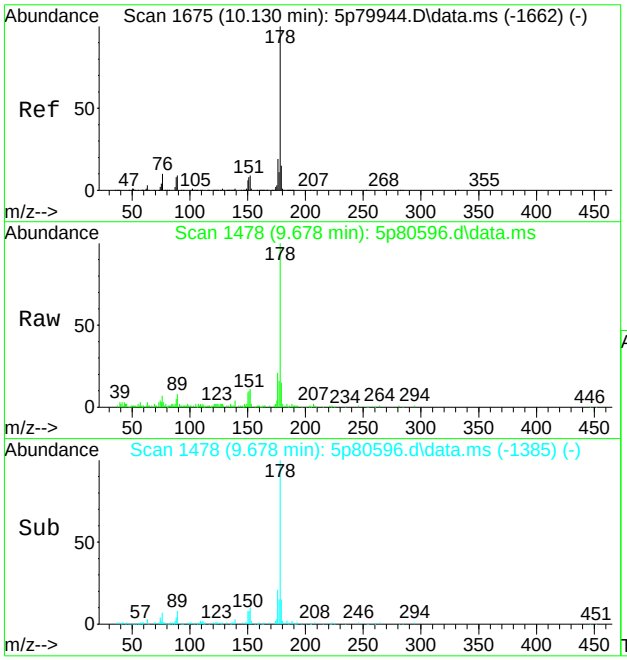


#38
Naphthalene
Concen: 0.14 ppm m
RT: 5.506 min Scan# 697
Delta R.T. -0.005 min
Lab File: 5p80596.d
Acq: 23 Dec 2021 3:34 pm

Tgt Ion:128 Resp: 4918

Ion	Ratio	Lower	Upper
128	100		
129	12.1	0.0	41.1
127	17.4	0.0	43.3

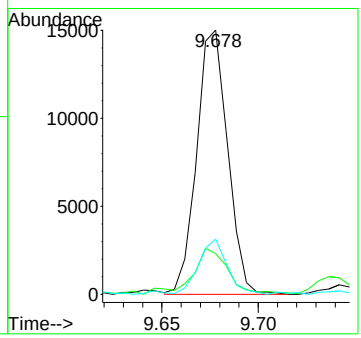


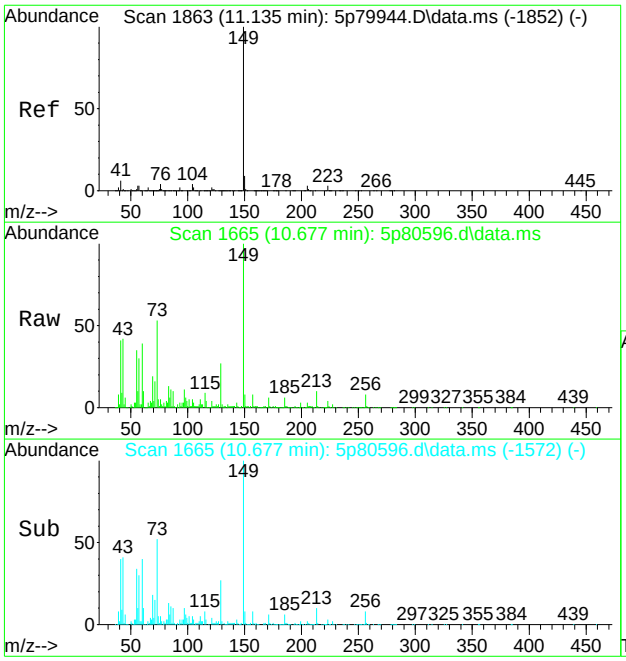


#78
Phenanthrene
Concen: 0.50 ppm
RT: 9.678 min Scan# 1478
Delta R.T. -0.005 min
Lab File: 5p80596.d
Acq: 23 Dec 2021 3:34 pm

Tgt Ion:178 Resp: 16843

Ion	Ratio	Lower	Upper
178	100		
179	14.1	0.0	45.5
176	20.5	0.0	48.7

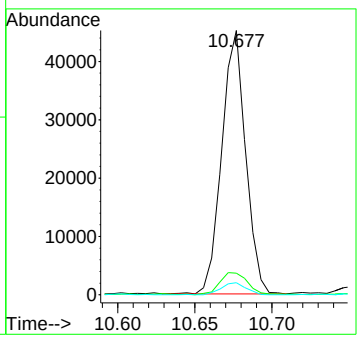


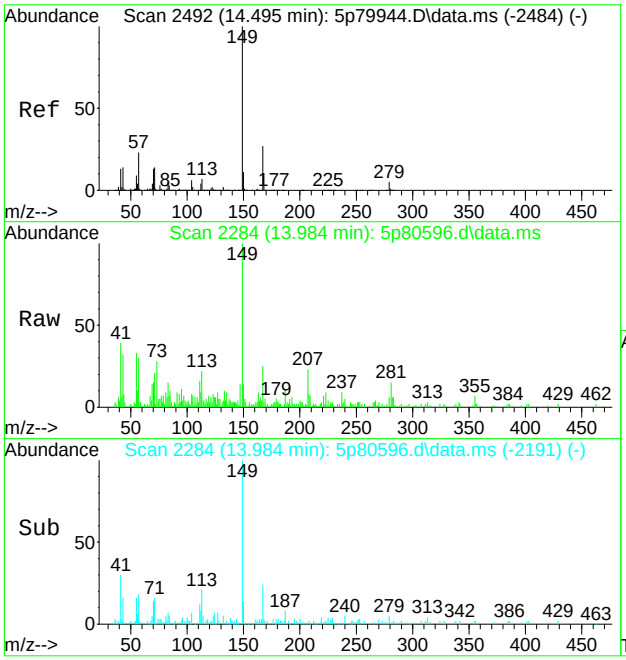


#81
Di-n-butylphthalate
Concen: 1.16 ppm
RT: 10.677 min Scan# 1665
Delta R.T. -0.005 min
Lab File: 5p80596.d
Acq: 23 Dec 2021 3:34 pm

Tgt Ion:149 Resp: 48738

Ion	Ratio	Lower	Upper
149	100		
150	7.8	0.0	39.5
104	4.6	0.0	34.8

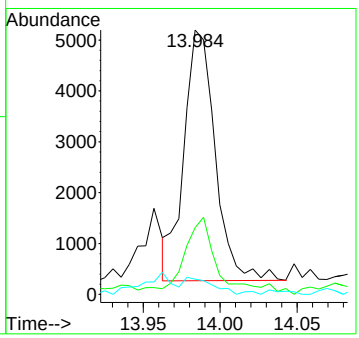




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.33 ppm
RT: 13.984 min Scan# 2284
Delta R.T. -0.005 min
Lab File: 5p80596.d
Acq: 23 Dec 2021 3:34 pm

Tgt Ion:149 Resp: 6974

Ion	Ratio	Lower	Upper
149	100		
167	26.6	0.0	55.7
279	1.1	0.0	34.6



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 15:28

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80597.d
Acq On : 23 Dec 2021 4:00 pm
Operator : chriss2
Sample : jd36624-14 Inst : MS5P
Misc : op37115,e5p3816,280,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 04:04:59 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

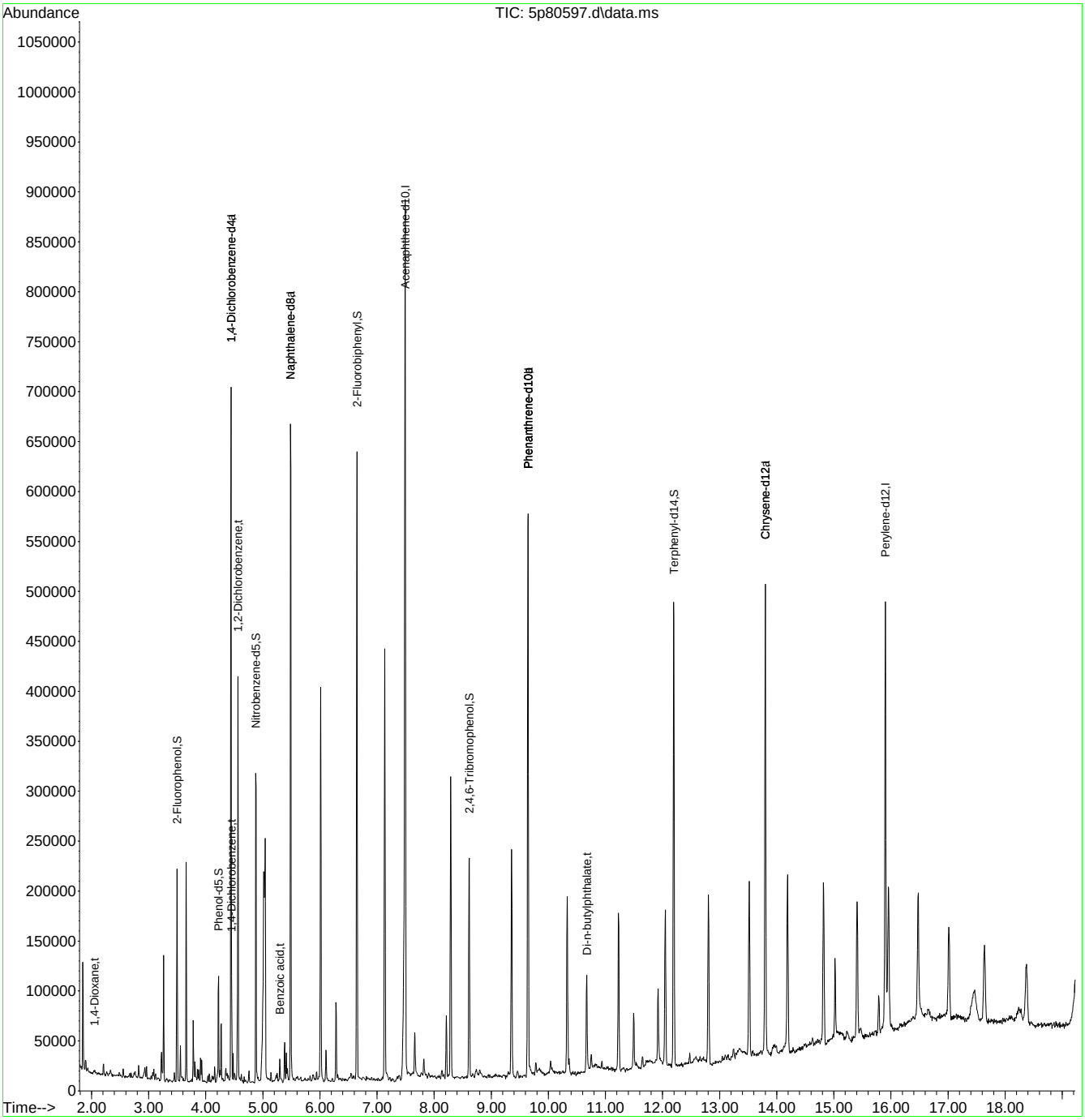
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.443	152	87343	8.00	ppm	0.00
24) Naphthalene-d8	5.484	136	308361	8.00	ppm	0.00
46) Acenaphthene-d10	7.493	164	178646	8.00	ppm	0.00
69) Phenanthrene-d10	9.646	188	269316	8.00	ppm	0.00
84) Chrysene-d12	13.802	240	201545	8.00	ppm	0.00
93) Perylene-d12	15.902	264	168996	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.443	152	87343	8.00	ppm	0.00
105) Phenanthrene-d10a	9.646	188	269316	8.00	ppm	0.00
107) Naphthalene-d8a	5.484	136	308361	8.00	ppm	0.00
109) Chrysene-d12a	13.802	240	201545	8.00	ppm	0.00
111) Phenanthrene-d10b	9.646	188	269316	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.497	112	38004	2.69	ppm	0.00
Spiked Amount 10.000			Recovery = 26.90%			
8) Phenol-d5	4.224	99	27553	1.52	ppm	0.00
Spiked Amount 10.000			Recovery = 15.20%			
25) Nitrobenzene-d5	4.875	82	79787	6.88	ppm	0.00
Spiked Amount 10.000			Recovery = 68.80%			
51) 2-Fluorobiphenyl	6.649	172	206773	7.06	ppm	0.00
Spiked Amount 10.000			Recovery = 70.60%			
74) 2,4,6-Tribromophenol	8.615	330	28492	8.33	ppm	0.00
Spiked Amount 10.000			Recovery = 83.30%			
87) Terphenyl-d14	12.200	244	204350	8.14	ppm	0.00
Spiked Amount 10.000			Recovery = 81.40%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.049	88	1796m	0.29	ppm	
15) 1,4-Dichlorobenzene	4.453	146	16265	1.01	ppm	99
17) 1,2-Dichlorobenzene	4.565	146	70249	4.58	ppm	99
31) Benzoic acid	5.297	105	3892	0.48	ppm	93
81) Di-n-butylphthalate	10.677	149	9891	0.23	ppm	92

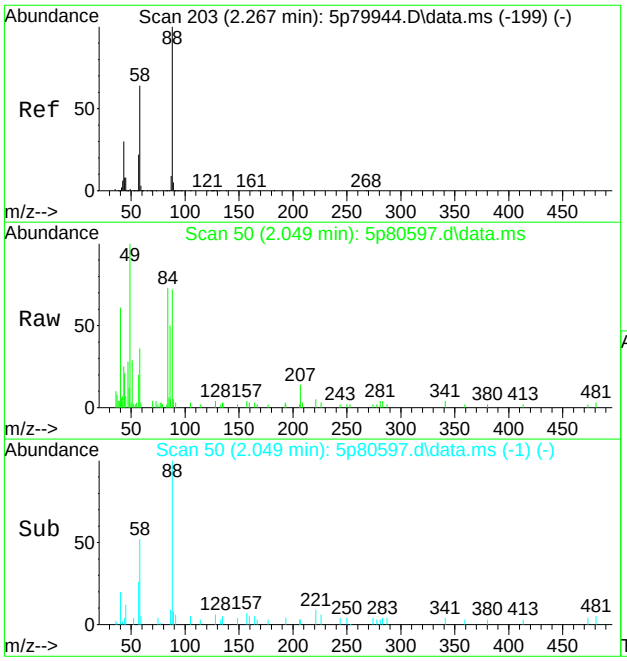
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80597.d
Acq On : 23 Dec 2021 4:00 pm
Operator : chriss2
Sample : jd36624-14 Inst : MS5P
Misc : op37115,e5p3816,280,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 04:04:59 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

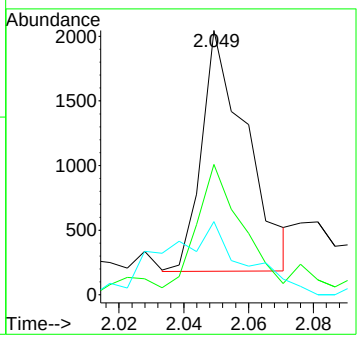


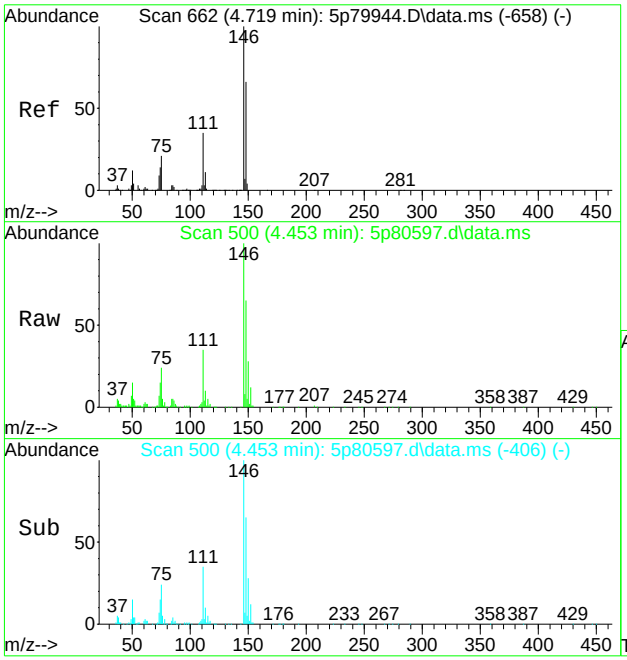


#2
1,4-Dioxane
Concen: 0.29 ppm m
RT: 2.049 min Scan# 50
Delta R.T. 0.022 min
Lab File: 5p80597.d
Acq: 23 Dec 2021 4:00 pm

Tgt Ion: 88 Resp: 1796

Ion	Ratio	Lower	Upper
88	100		
58	49.3	22.1	82.1
57	27.7	0.0	50.9

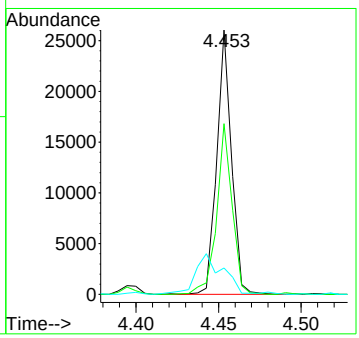


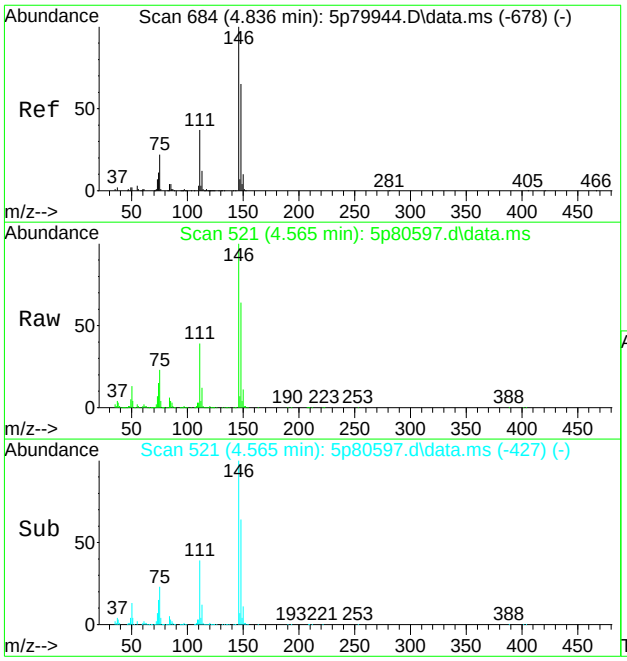


#15
1,4-Dichlorobenzene
Concen: 1.01 ppm
RT: 4.453 min Scan# 500
Delta R.T. 0.000 min
Lab File: 5p80597.d
Acq: 23 Dec 2021 4:00 pm

Tgt Ion:146 Resp: 16265

Ion	Ratio	Lower	Upper
146	100		
148	64.2	33.6	93.6
113	9.8	0.0	41.8

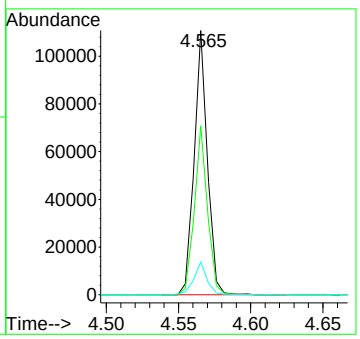


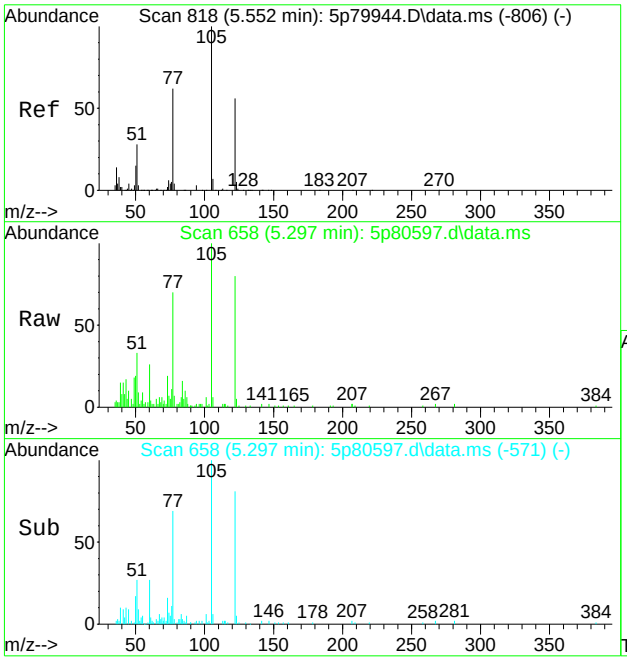


#17
1,2-Dichlorobenzene
Concen: 4.58 ppm
RT: 4.565 min Scan# 521
Delta R.T. 0.000 min
Lab File: 5p80597.d
Acq: 23 Dec 2021 4:00 pm

Tgt Ion:146 Resp: 70249

Ion	Ratio	Lower	Upper
146	100		
148	63.8	33.8	93.8
113	12.4	0.0	40.3

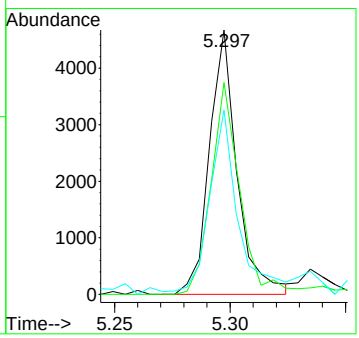


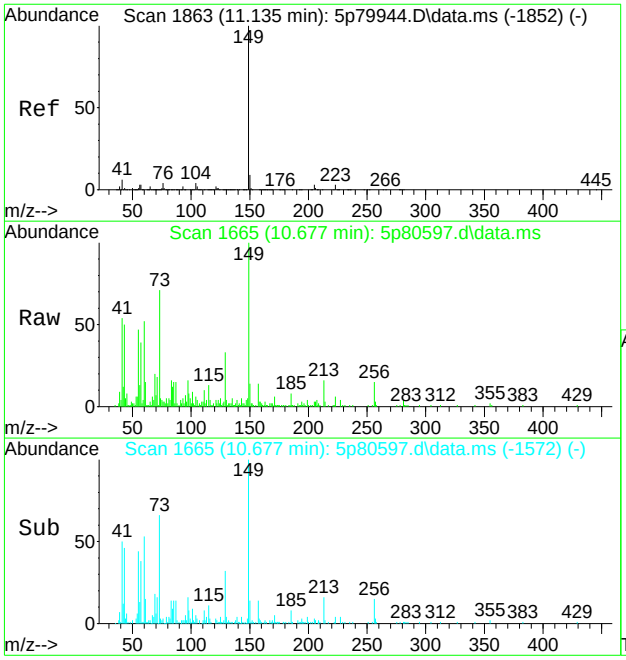


#31
Benzoic acid
Concen: 0.48 ppm
RT: 5.297 min Scan# 658
Delta R.T. -0.037 min
Lab File: 5p80597.d
Acq: 23 Dec 2021 4:00 pm

Tgt Ion:105 Resp: 3892

Ion	Ratio	Lower	Upper
105	100		
122	80.6	60.4	120.4
77	68.2	37.1	97.1

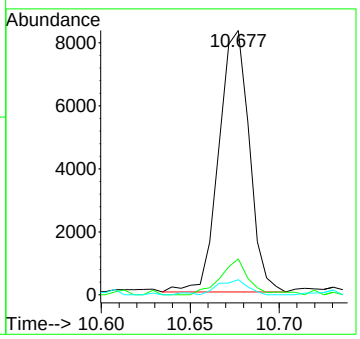




#81
Di-n-butylphthalate
Concen: 0.23 ppm
RT: 10.677 min Scan# 1665
Delta R.T. -0.005 min
Lab File: 5p80597.d
Acq: 23 Dec 2021 4:00 pm

Tgt Ion:149 Resp: 9891

Ion	Ratio	Lower	Upper
149	100		
150	13.2	0.0	39.5
104	5.9	0.0	34.8



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 15:28

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80598.d
Acq On : 23 Dec 2021 4:27 pm
Operator : chriss2
Sample : jd36624-15 Inst : MS5P
Misc : op37115,e5p3816,280,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 04:07:08 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

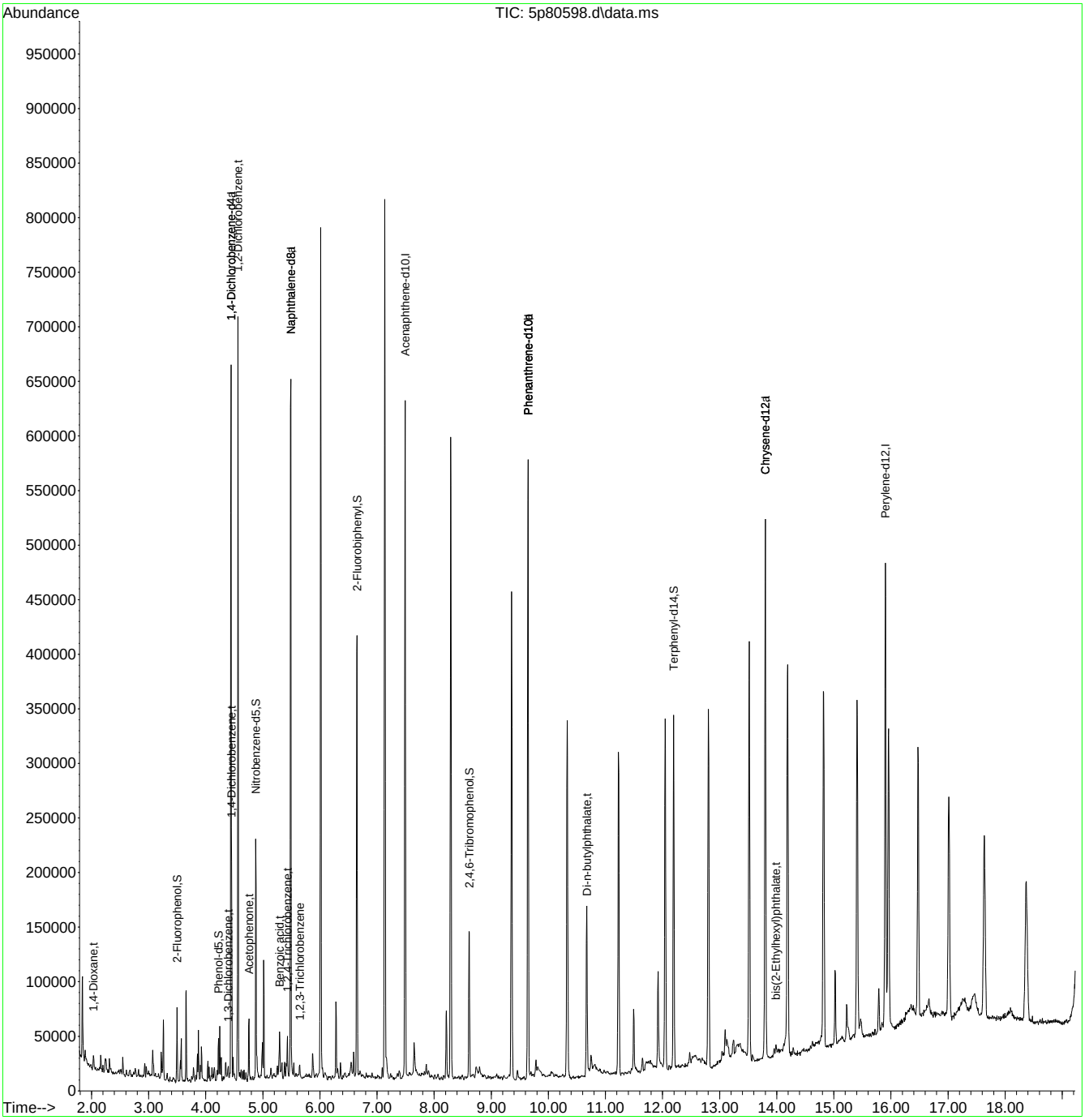
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.442	152	85424	8.00	ppm	0.00
24) Naphthalene-d8	5.490	136	299447	8.00	ppm	0.00
46) Acenaphthene-d10	7.493	164	158787	8.00	ppm	0.00
69) Phenanthrene-d10	9.646	188	263884	8.00	ppm	0.00
84) Chrysene-d12	13.802	240	210131	8.00	ppm	0.00
93) Perylene-d12	15.902	264	179237	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.442	152	85424	8.00	ppm	0.00
105) Phenanthrene-d10a	9.646	188	263884	8.00	ppm	0.00
107) Naphthalene-d8a	5.490	136	299447	8.00	ppm	0.00
109) Chrysene-d12a	13.802	240	210131	8.00	ppm	0.00
111) Phenanthrene-d10b	9.646	188	263884	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.497	112	13616	0.98	ppm	0.00
Spiked Amount 10.000			Recovery = 9.80%			
8) Phenol-d5	4.223	99	9468	0.53	ppm	0.00
Spiked Amount 10.000			Recovery = 5.30%			
25) Nitrobenzene-d5	4.875	82	52992	4.70	ppm	0.00
Spiked Amount 10.000			Recovery = 47.00%			
51) 2-Fluorobiphenyl	6.649	172	136667	5.25	ppm	0.00
Spiked Amount 10.000			Recovery = 52.50%			
74) 2,4,6-Tribromophenol	8.615	330	16866	5.03	ppm	0.00
Spiked Amount 10.000			Recovery = 50.30%			
87) Terphenyl-d14	12.194	244	133081	5.08	ppm	0.00
Spiked Amount 10.000			Recovery = 50.80%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.033	88	4791m	0.80	ppm	
14) 1,3-Dichlorobenzene	4.394	146	1679	0.10	ppm	94
15) 1,4-Dichlorobenzene	4.453	146	32467	2.06	ppm	99
17) 1,2-Dichlorobenzene	4.565	146	123991	8.26	ppm	99
18) Acetophenone	4.758	105	11669	0.66	ppm	97
31) Benzoic acid	5.292	105	10725	1.35	ppm	90
36) 1,2,4-Trichlorobenzene	5.431	180	5867	0.50	ppm	99
37) 1,2,3-Trichlorobenzene	5.644	180	1620	0.15	ppm	95
81) Di-n-butylphthalate	10.677	149	36052	0.85	ppm	98
92) bis(2-Ethylhexyl)phtha...	13.984	149	5048	0.23	ppm	92

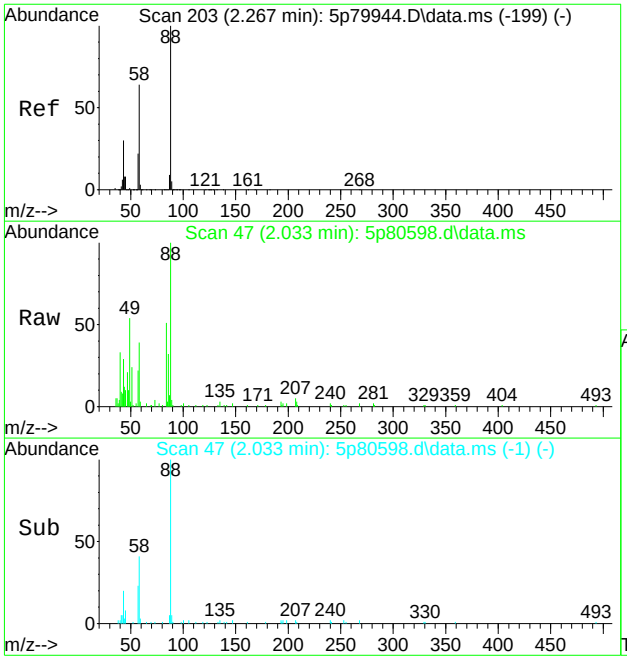
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80598.d
Acq On : 23 Dec 2021 4:27 pm
Operator : chriss2
Sample : jd36624-15 Inst : MS5P
Misc : op37115,e5p3816,280,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 04:07:08 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

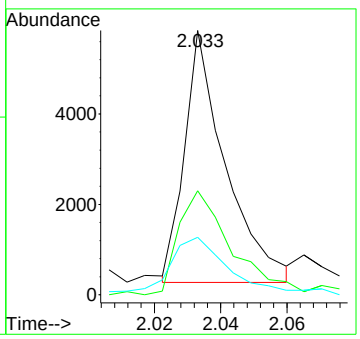


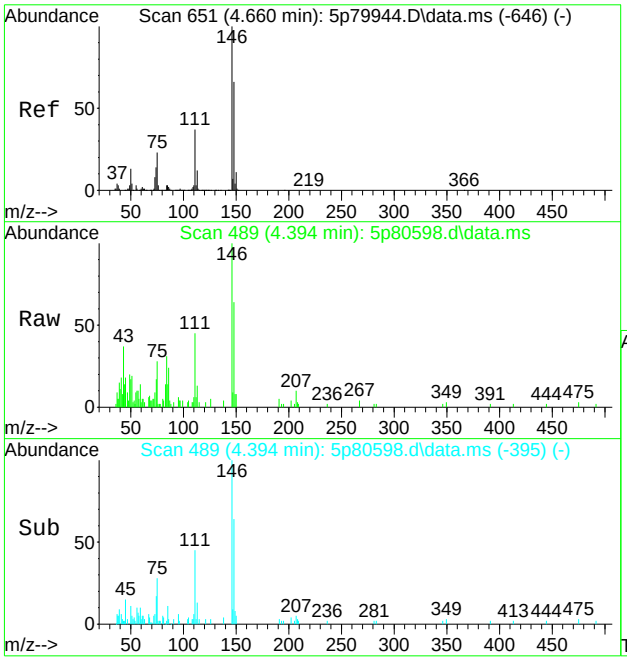


#2
1,4-Dioxane
Concen: 0.80 ppm m
RT: 2.033 min Scan# 47
Delta R.T. 0.005 min
Lab File: 5p80598.d
Acq: 23 Dec 2021 4:27 pm

Tgt Ion: 88 Resp: 4791

Ion	Ratio	Lower	Upper
88	100		
58	39.4	22.1	82.1
57	21.8	0.0	50.9

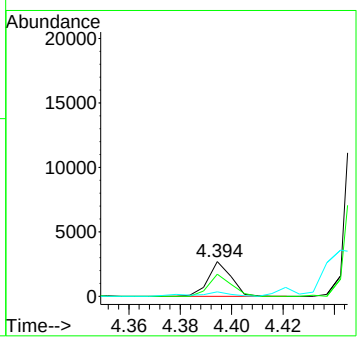


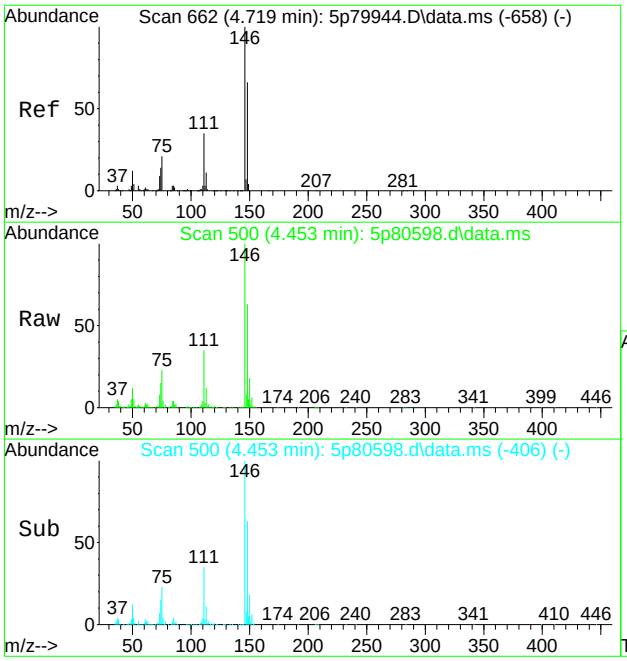


#14
1,3-Dichlorobenzene
Concen: 0.10 ppm
RT: 4.394 min Scan# 489
Delta R.T. 0.000 min
Lab File: 5p80598.d
Acq: 23 Dec 2021 4:27 pm

Tgt Ion:146 Resp: 1679

Ion	Ratio	Lower	Upper
146	100		
148	63.9	34.9	94.9
113	0.0	0.0	42.6

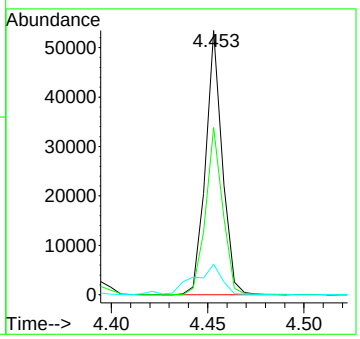


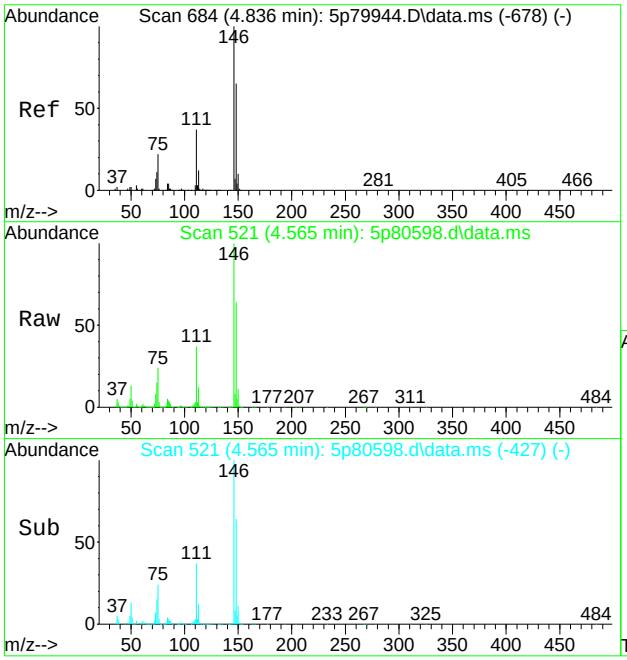


#15
1,4-Dichlorobenzene
Concen: 2.06 ppm
RT: 4.453 min Scan# 500
Delta R.T. 0.000 min
Lab File: 5p80598.d
Acq: 23 Dec 2021 4:27 pm

Tgt Ion:146 Resp: 32467

Ion	Ratio	Lower	Upper
146	100		
148	63.3	33.6	93.6
113	11.3	0.0	41.8

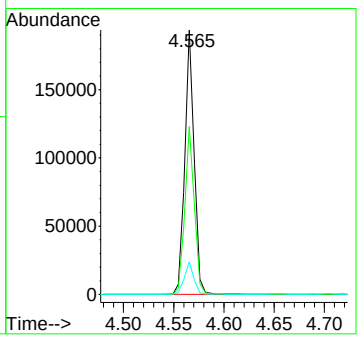


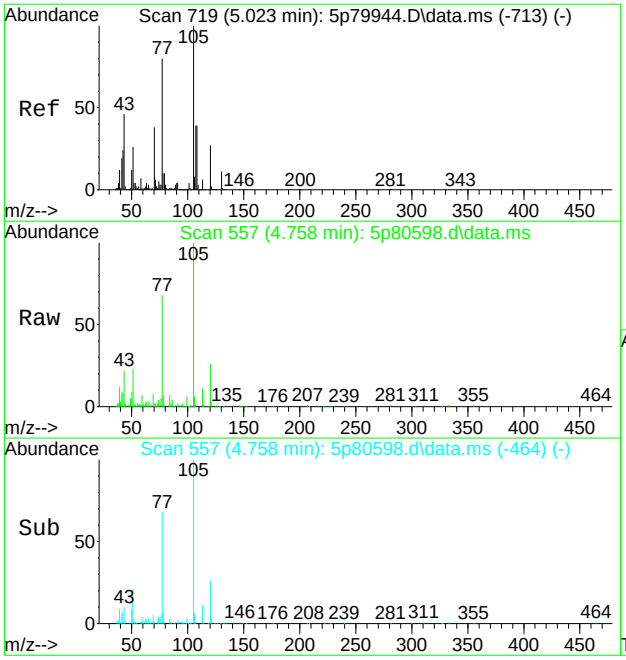


#17
1,2-Dichlorobenzene
Concen: 8.26 ppm
RT: 4.565 min Scan# 521
Delta R.T. 0.000 min
Lab File: 5p80598.d
Acq: 23 Dec 2021 4:27 pm

Tgt Ion:146 Resp: 123991

Ion	Ratio	Lower	Upper
146	100		
148	63.5	33.8	93.8
113	12.3	0.0	40.3

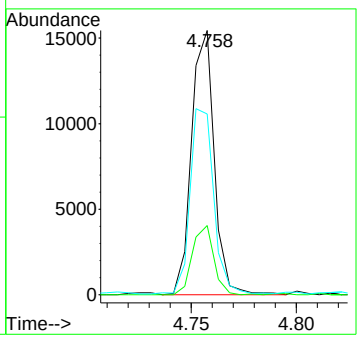


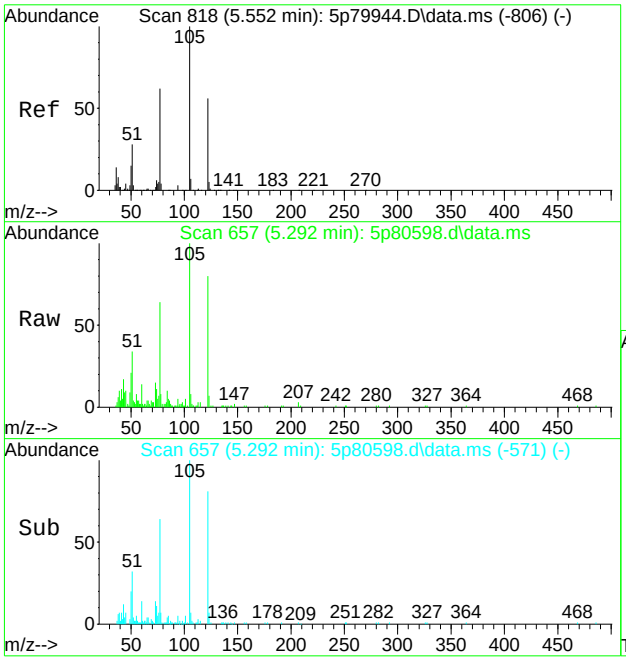


#18
Acetophenone
Concen: 0.66 ppm
RT: 4.758 min Scan# 557
Delta R.T. -0.005 min
Lab File: 5p80598.d
Acq: 23 Dec 2021 4:27 pm

Tgt Ion:105 Resp: 11669

Ion	Ratio	Lower	Upper
105	100		
120	26.0	0.0	55.4
77	67.5	40.3	100.3

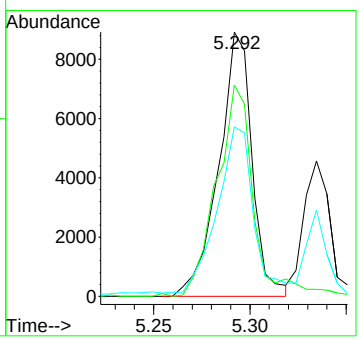


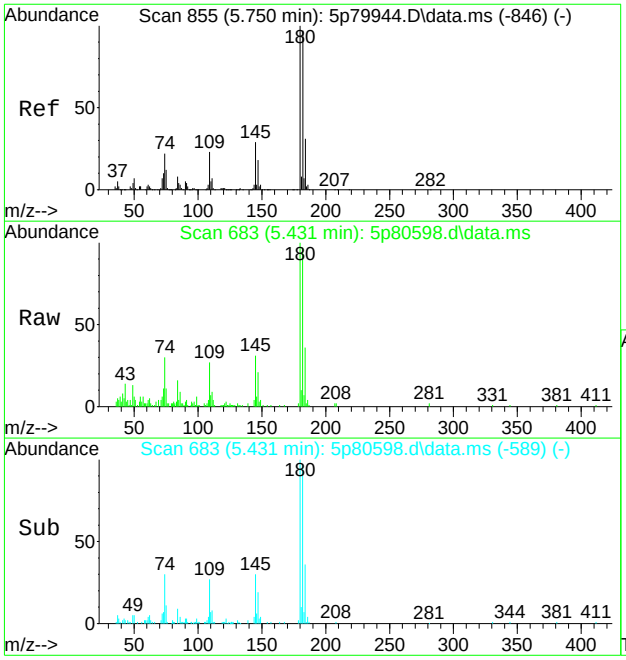


#31
Benzoic acid
Concen: 1.35 ppm
RT: 5.292 min Scan# 657
Delta R.T. -0.043 min
Lab File: 5p80598.d
Acq: 23 Dec 2021 4:27 pm

Tgt Ion:105 Resp: 10725

Ion	Ratio	Lower	Upper
105	100		
122	77.7	60.4	120.4
77	62.3	37.1	97.1

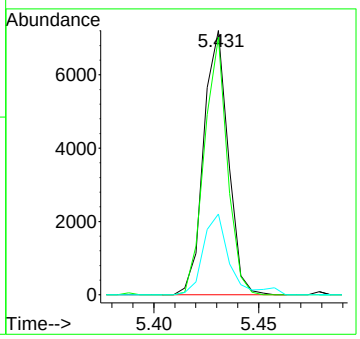


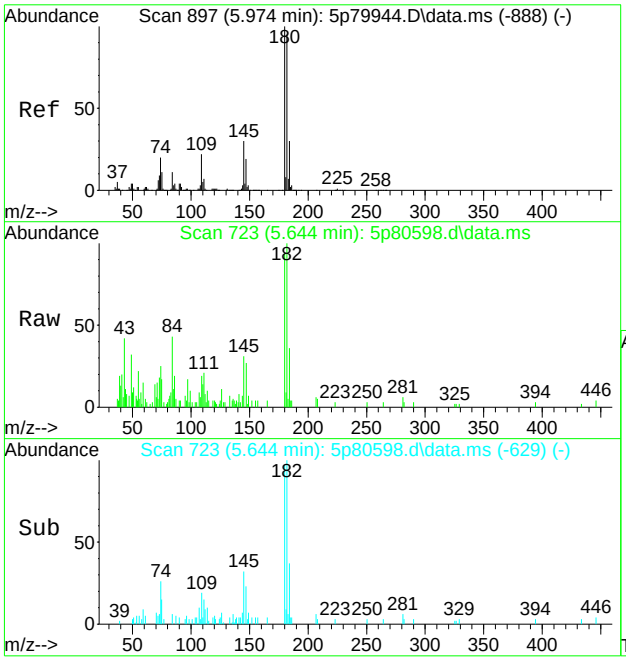


#36
1,2,4-Trichlorobenzene
Concen: 0.50 ppm
RT: 5.431 min Scan# 683
Delta R.T. 0.000 min
Lab File: 5p80598.d
Acq: 23 Dec 2021 4:27 pm

Tgt Ion:180 Resp: 5867

Ion	Ratio	Lower	Upper
180	100		
182	97.4	67.7	127.7
145	30.6	2.9	62.9

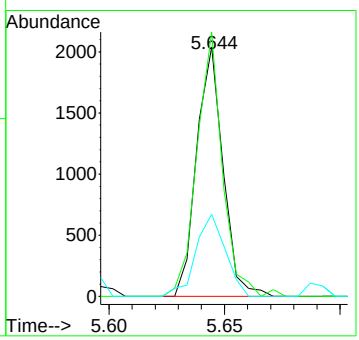


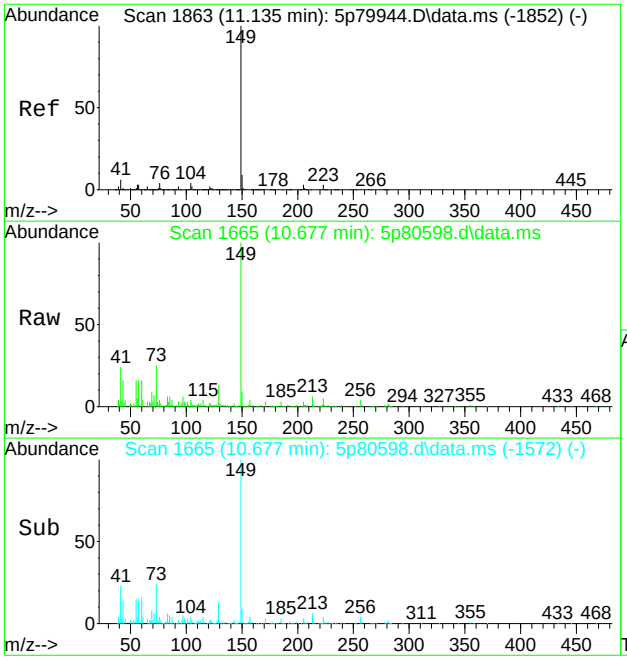


#37
1,2,3-Trichlorobenzene
Concen: 0.15 ppm
RT: 5.644 min Scan# 723
Delta R.T. 0.000 min
Lab File: 5p80598.d
Acq: 23 Dec 2021 4:27 pm

Tgt Ion:180 Resp: 1620

Ion	Ratio	Lower	Upper
180	100		
182	106.0	70.3	130.3
145	32.9	4.8	64.8

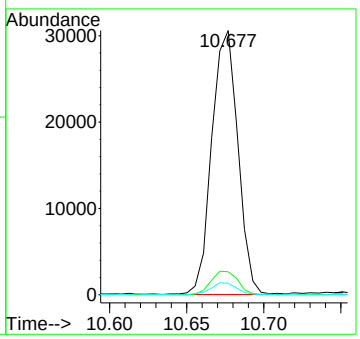


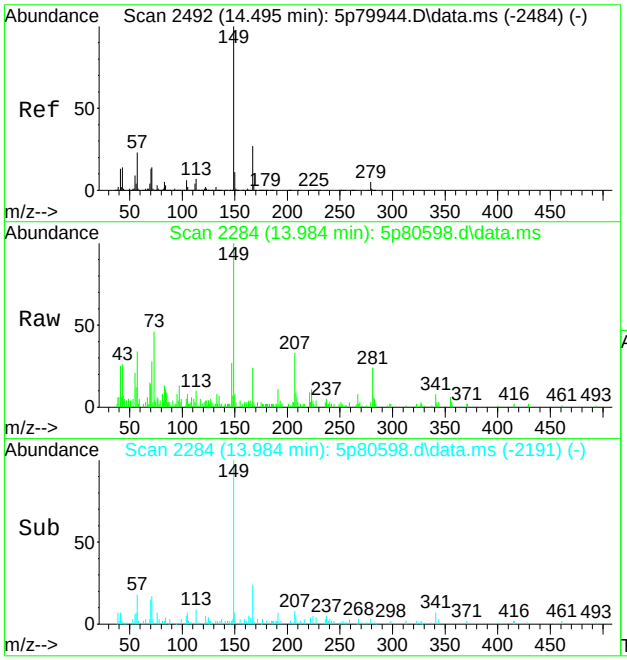


#81
Di-n-butylphthalate
Concen: 0.85 ppm
RT: 10.677 min Scan# 1665
Delta R.T. -0.005 min
Lab File: 5p80598.d
Acq: 23 Dec 2021 4:27 pm

Tgt Ion:149 Resp: 36052

Ion	Ratio	Lower	Upper
149	100		
150	8.6	0.0	39.5
104	4.3	0.0	34.8

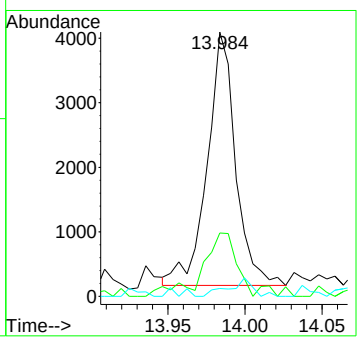




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.23 ppm
RT: 13.984 min Scan# 2284
Delta R.T. -0.005 min
Lab File: 5p80598.d
Acq: 23 Dec 2021 4:27 pm

Tgt Ion:149 Resp: 5048

Ion	Ratio	Lower	Upper
149	100		
167	21.5	0.0	55.7
279	3.2	0.0	34.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80599.d
Acq On : 23 Dec 2021 4:54 pm
Operator : chriss2
Sample : jd36624-16 Inst : MS5P
Misc : op37115,e5p3816,280,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 04:09:45 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

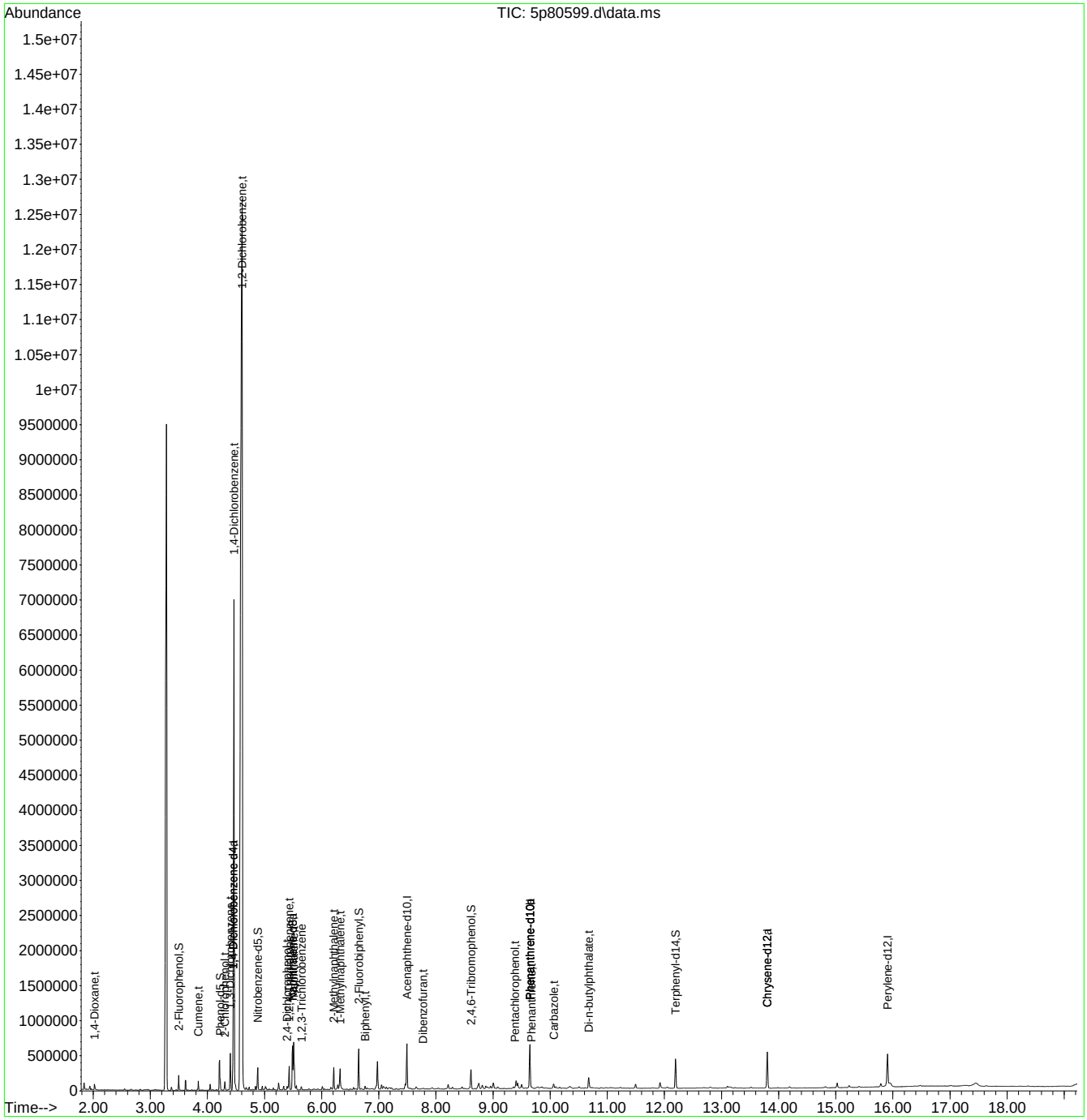
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.448	152	75377	8.00	ppm	0.00
24) Naphthalene-d8	5.490	136	281682	8.00	ppm	0.00
46) Acenaphthene-d10	7.493	164	162129	8.00	ppm	0.00
69) Phenanthrene-d10	9.646	188	272638	8.00	ppm	0.00
84) Chrysene-d12	13.802	240	221065	8.00	ppm	0.00
93) Perylene-d12	15.907	264	190322	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.448	152	75377	8.00	ppm	0.00
105) Phenanthrene-d10a	9.646	188	272638	8.00	ppm	0.00
107) Naphthalene-d8a	5.490	136	281682	8.00	ppm	0.00
109) Chrysene-d12a	13.802	240	221065	8.00	ppm	0.00
111) Phenanthrene-d10b	9.646	188	272638	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.497	112	40941	3.36	ppm	0.00
Spiked Amount 10.000			Recovery = 33.60%			
8) Phenol-d5	4.223	99	33399	2.13	ppm	0.00
Spiked Amount 10.000			Recovery = 21.30%			
25) Nitrobenzene-d5	4.881	82	67985	6.41	ppm	0.00
Spiked Amount 10.000			Recovery = 64.10%			
51) 2-Fluorobiphenyl	6.649	172	193258	7.27	ppm	0.00
Spiked Amount 10.000			Recovery = 72.70%			
74) 2,4,6-Tribromophenol	8.615	330	34778	10.04	ppm	0.00
Spiked Amount 10.000			Recovery = 100.40%			
87) Terphenyl-d14	12.194	244	178516	6.48	ppm	0.00
Spiked Amount 10.000			Recovery = 64.80%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.022	88	27743	5.24	ppm	98
7) Cumene	3.839	105	36234	1.29	ppm	100
12) 2-Chlorophenol	4.304	128	25015	1.90	ppm	99
14) 1,3-Dichlorobenzene	4.400	146	107897	7.46	ppm	99
15) 1,4-Dichlorobenzene	4.464	146	1694160	121.61	ppm	92
17) 1,2-Dichlorobenzene	4.608	146	7460809	563.45	ppm	86
33) 2,4-Dichlorophenol	5.393	162	8683	0.85	ppm	93
36) 1,2,4-Trichlorobenzene	5.431	180	46423	4.22	ppm	99
37) 1,2,3-Trichlorobenzene	5.644	180	6849	0.68	ppm	98
38) Naphthalene	5.511	128	373526	10.69	ppm	98
44) 2-Methylnaphthalene	6.211	141	76604	3.41	ppm	94
45) 1-Methylnaphthalene	6.323	141	69929	3.28	ppm	97
53) Biphenyl	6.761	154	13608	0.45	ppm	91
62) Dibenzofuran	7.776	168	5142	0.16	ppm	98
77) Pentachlorophenol	9.384	266	1233	0.53	ppm	85
78) Phenanthrene	9.673	178	7971	0.23	ppm	96
80) Carbazole	10.063	167	6390	0.18	ppm	97
81) Di-n-butylphthalate	10.672	149	44762	1.03	ppm	99

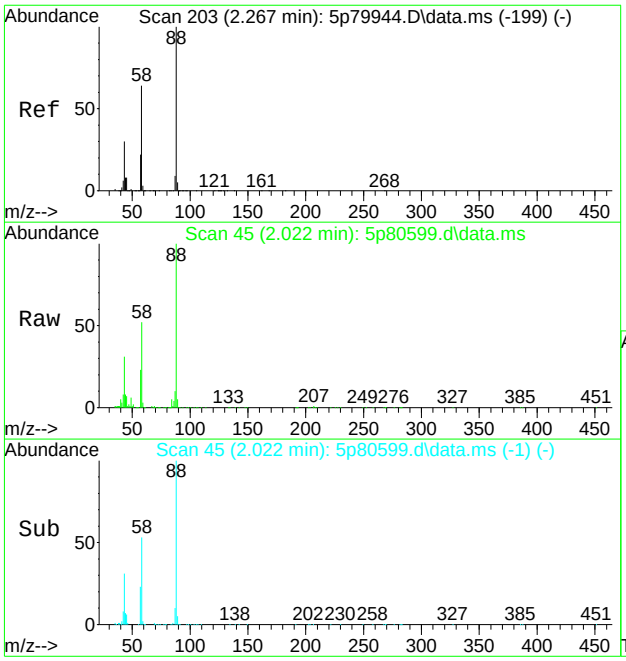
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80599.d
Acq On : 23 Dec 2021 4:54 pm
Operator : chriss2
Sample : jd36624-16 Inst : MS5P
Misc : op37115,e5p3816,280,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 04:09:45 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

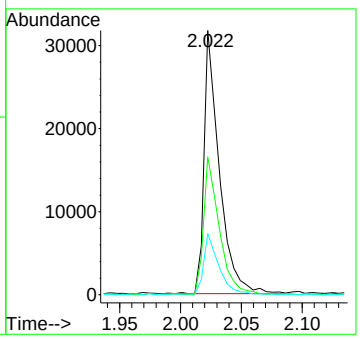


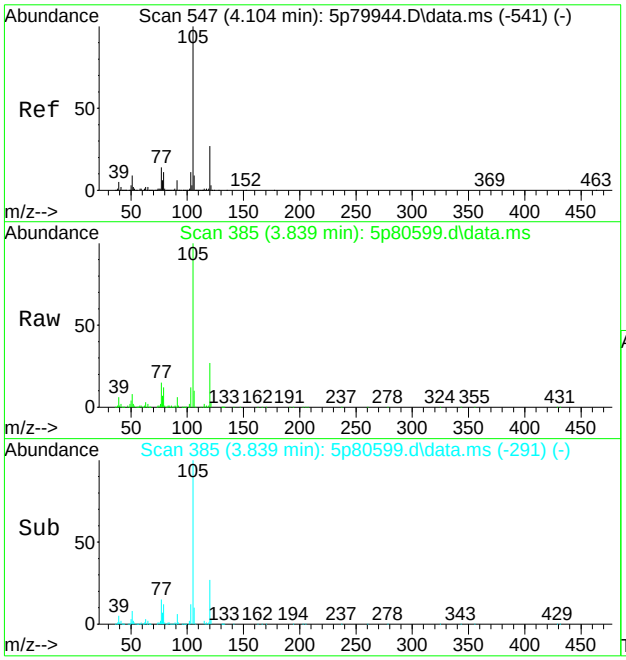


#2
1,4-Dioxane
Concen: 5.24 ppm
RT: 2.022 min Scan# 45
Delta R.T. -0.005 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion: 88 Resp: 27743

Ion	Ratio	Lower	Upper
88	100		
58	52.0	22.1	82.1
57	23.4	0.0	50.9

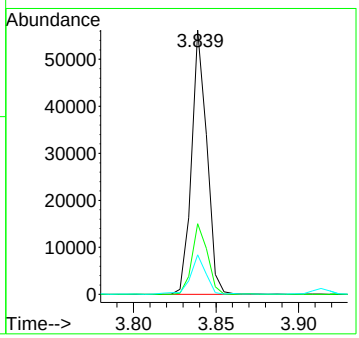


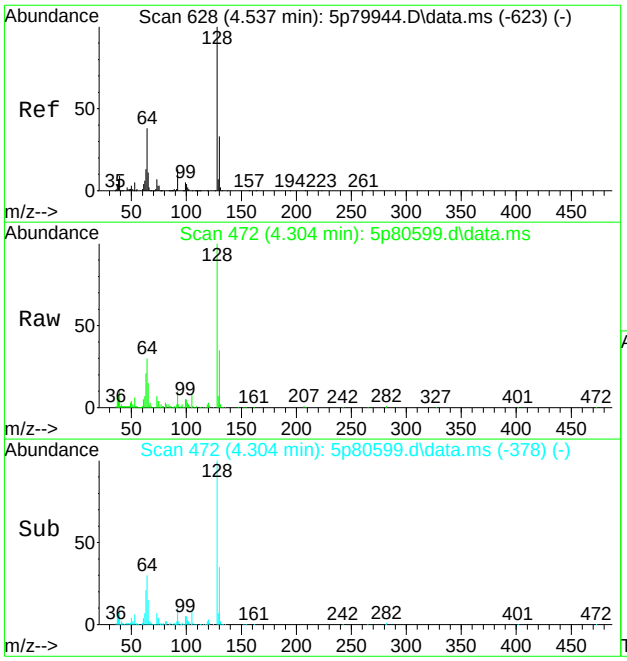


#7
Cumene
Concen: 1.29 ppm
RT: 3.839 min Scan# 385
Delta R.T. 0.000 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:105 Resp: 36234

Ion	Ratio	Lower	Upper
105	100		
120	26.7	0.0	56.9
77	14.7	0.0	44.9

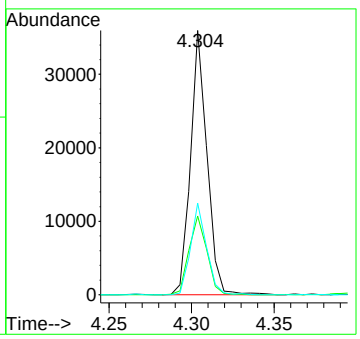


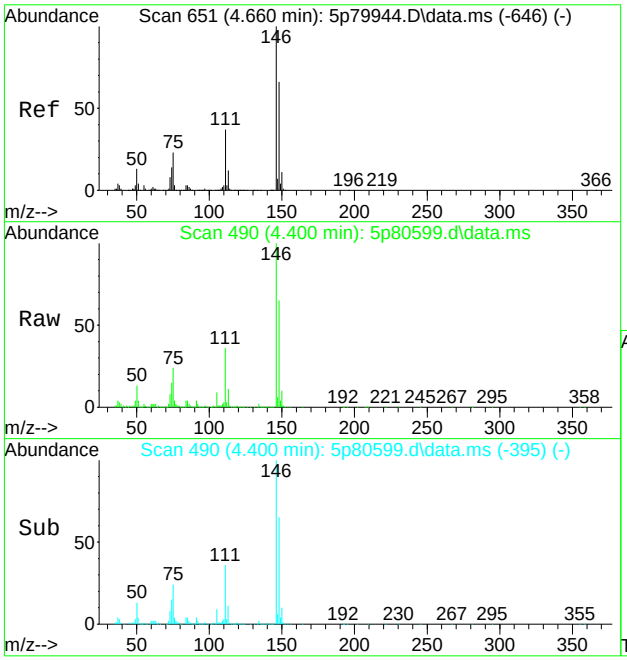


#12
2-Chlorophenol
Concen: 1.90 ppm
RT: 4.304 min Scan# 472
Delta R.T. 0.000 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:128 Resp: 25015

Ion	Ratio	Lower	Upper
128	100		
64	29.7	0.0	59.6
130	34.7	4.0	64.0

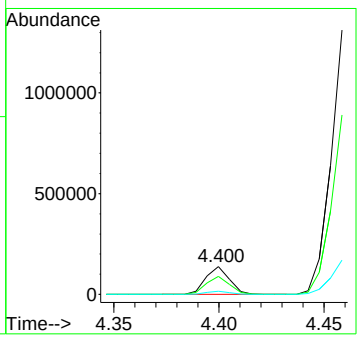


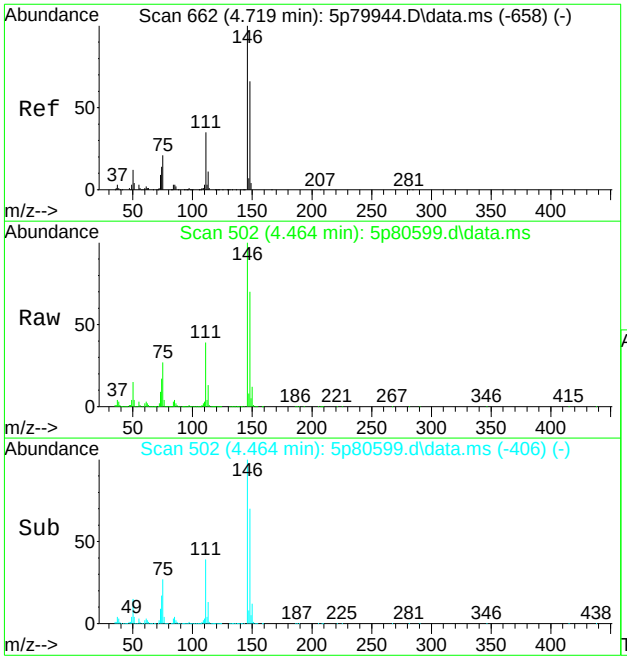


#14
1,3-Dichlorobenzene
Concen: 7.46 ppm
RT: 4.400 min Scan# 490
Delta R.T. 0.005 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:146 Resp: 107897

Ion	Ratio	Lower	Upper
146	100		
148	64.7	34.9	94.9
113	11.5	0.0	42.6

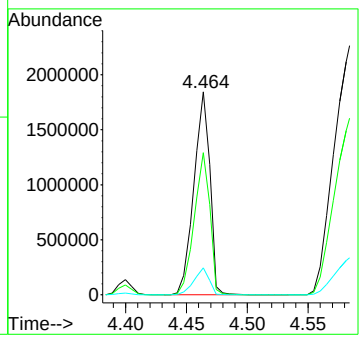


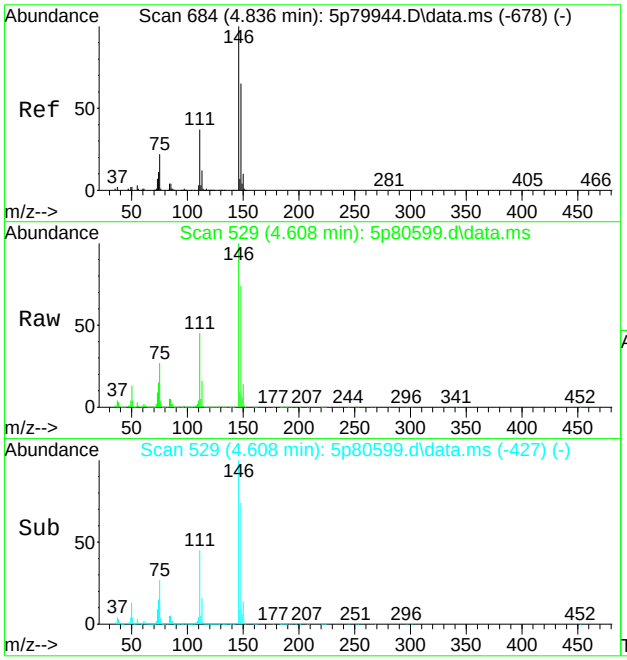


#15
1,4-Dichlorobenzene
Concen: 121.61 ppm
RT: 4.464 min Scan# 502
Delta R.T. 0.011 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:146 Resp: 1694160

Ion	Ratio	Lower	Upper
146	100		
148	70.0	33.6	93.6
113	13.2	0.0	41.8

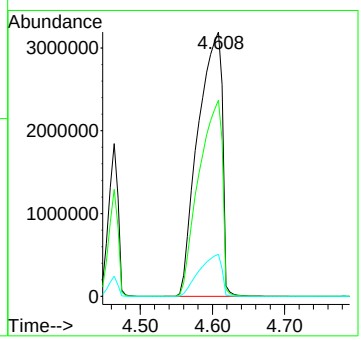


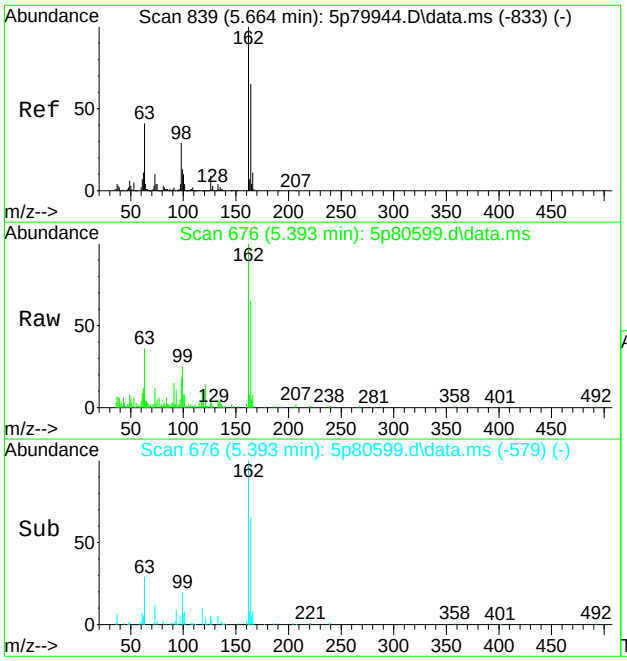


#17
1,2-Dichlorobenzene
Concen: 563.45 ppm
RT: 4.608 min Scan# 529
Delta R.T. 0.043 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:146 Resp: 7460809

Ion	Ratio	Lower	Upper
146	100		
148	74.2	33.8	93.8
113	15.9	0.0	40.3

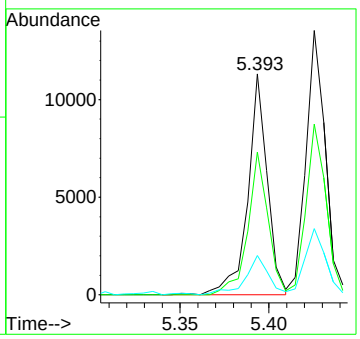


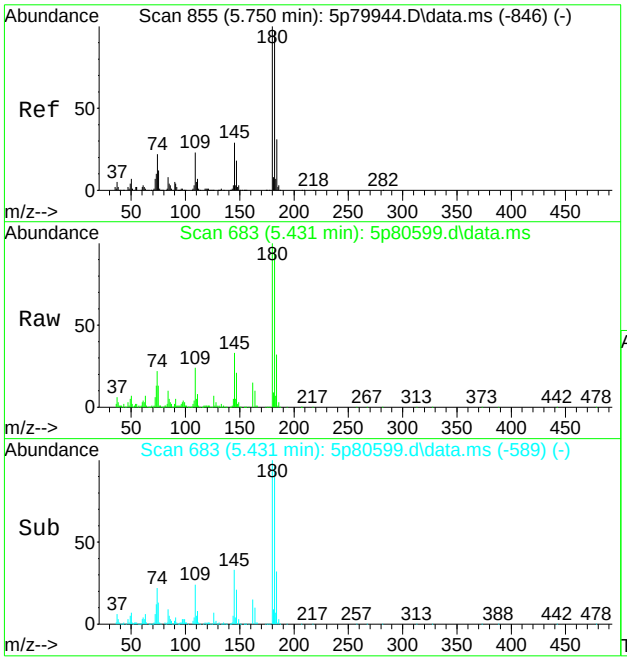


#33
2,4-Dichlorophenol
Concen: 0.85 ppm
RT: 5.393 min Scan# 676
Delta R.T. 0.016 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:162 Resp: 8683

Ion	Ratio	Lower	Upper
162	100		
164	64.5	35.5	95.5
98	17.3	0.0	57.9

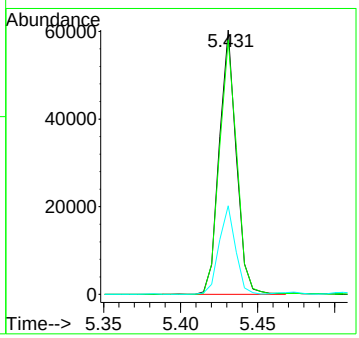


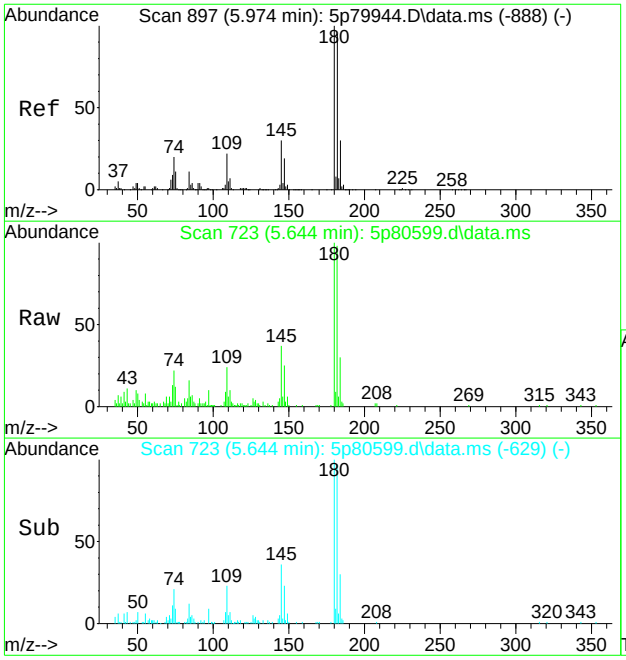


#36
1,2,4-Trichlorobenzene
Concen: 4.22 ppm
RT: 5.431 min Scan# 683
Delta R.T. 0.000 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:180 Resp: 46423

Ion	Ratio	Lower	Upper
180	100		
182	96.2	67.7	127.7
145	33.2	2.9	62.9

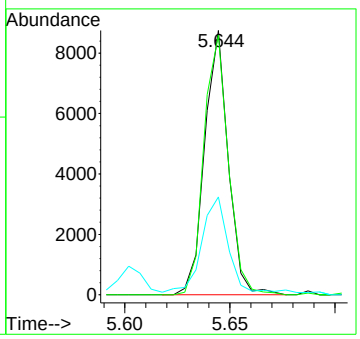


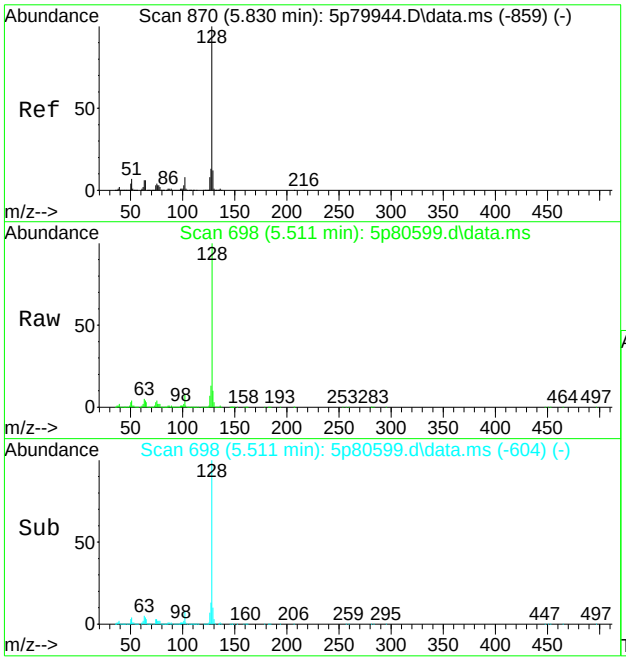


#37
1,2,3-Trichlorobenzene
Concen: 0.68 ppm
RT: 5.644 min Scan# 723
Delta R.T. 0.000 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:180 Resp: 6849

Ion	Ratio	Lower	Upper
180	100		
182	98.2	70.3	130.3
145	35.6	4.8	64.8

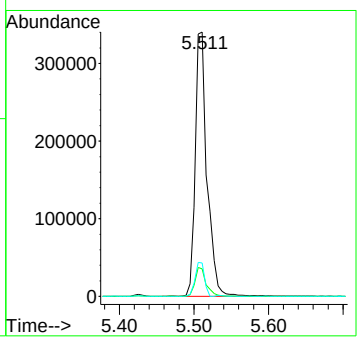


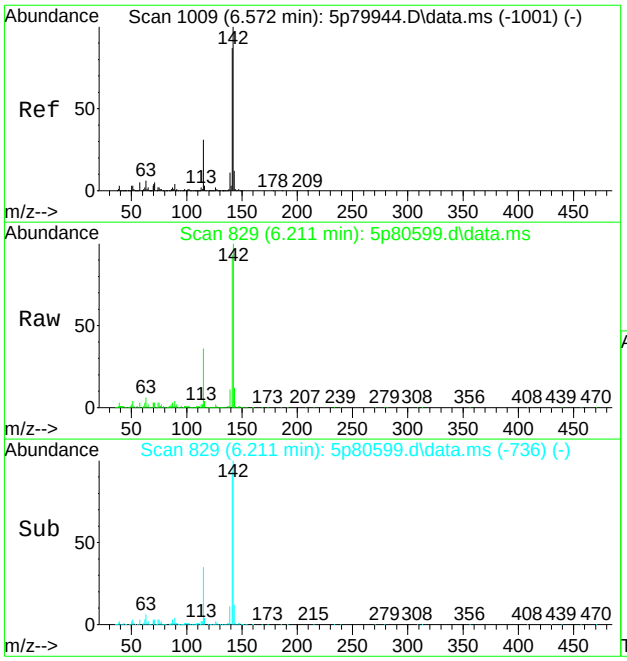


#38
Naphthalene
Concen: 10.69 ppm
RT: 5.511 min Scan# 698
Delta R.T. 0.000 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:128 Resp: 373526

Ion	Ratio	Lower	Upper
128	100		
129	10.4	0.0	41.1
127	12.6	0.0	43.3

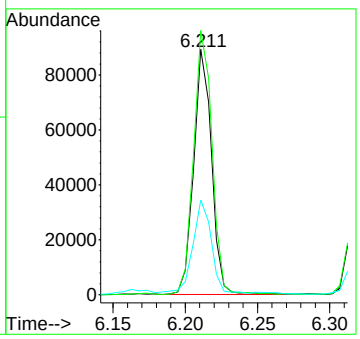


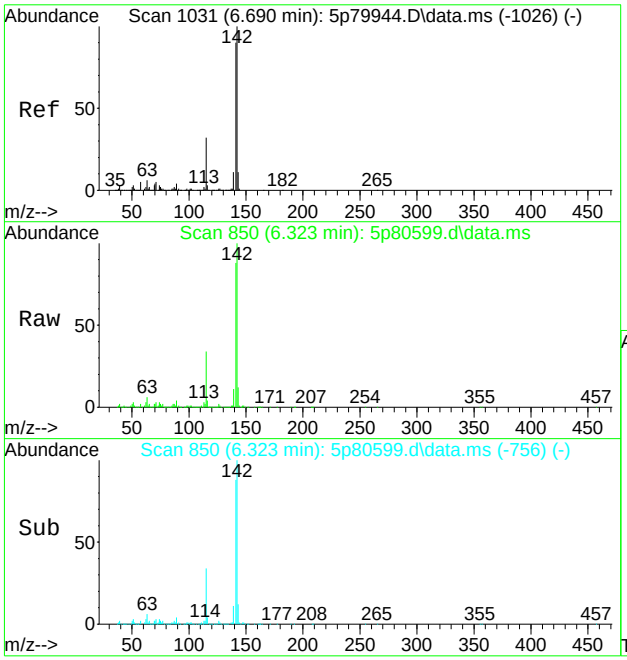


#44
2-Methylnaphthalene
Concen: 3.41 ppm
RT: 6.211 min Scan# 829
Delta R.T. -0.005 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:141 Resp: 76604

Ion	Ratio	Lower	Upper
141	100		
142	107.7	85.9	145.9
115	37.9	8.3	68.3

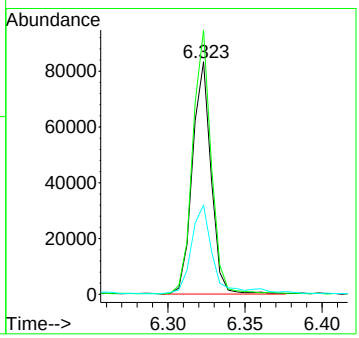


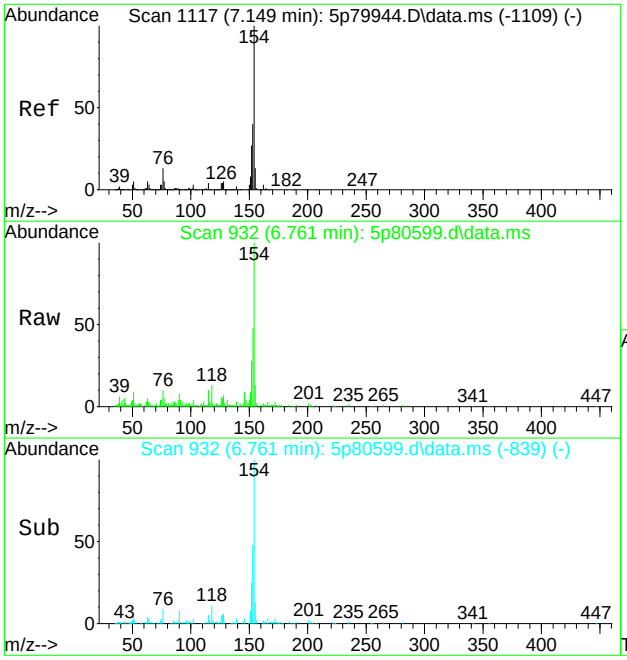


#45
1-Methylnaphthalene
Concen: 3.28 ppm
RT: 6.323 min Scan# 850
Delta R.T. 0.000 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:141 Resp: 69929

Ion	Ratio	Lower	Upper
141	100		
142	113.5	80.6	140.6
115	37.8	9.4	69.4

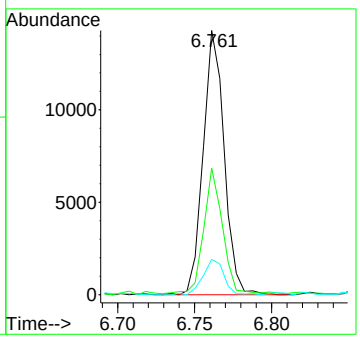


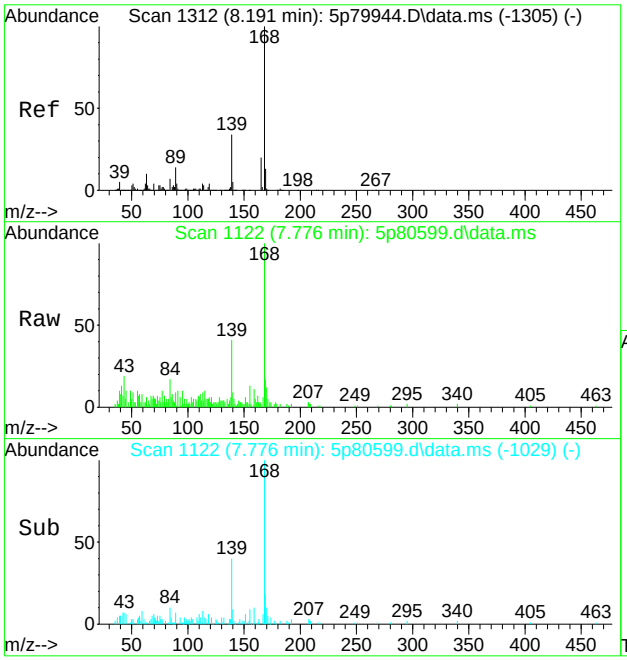


#53
Biphenyl
Concen: 0.45 ppm
RT: 6.761 min Scan# 932
Delta R.T. -0.005 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:154 Resp: 13608

Ion	Ratio	Lower	Upper
154	100		
153	47.4	10.5	70.5
155	13.1	0.0	42.7

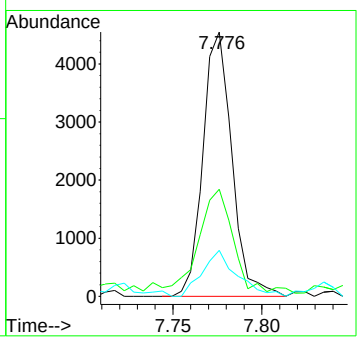


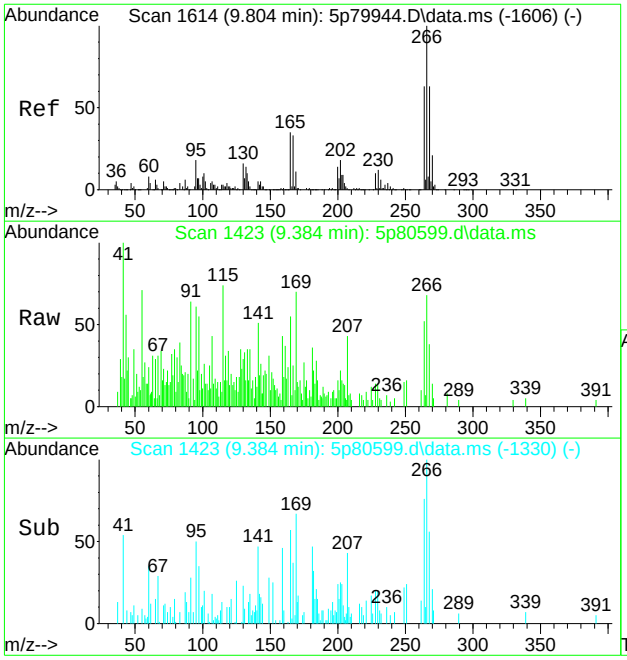


#62
Dibenzofuran
Concen: 0.16 ppm
RT: 7.776 min Scan# 1122
Delta R.T. -0.005 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:168 Resp: 5142

Ion	Ratio	Lower	Upper
168	100		
139	37.3	7.3	67.3
169	16.4	0.0	42.8

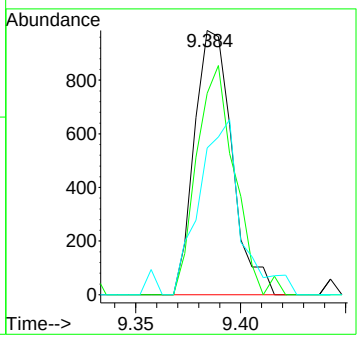


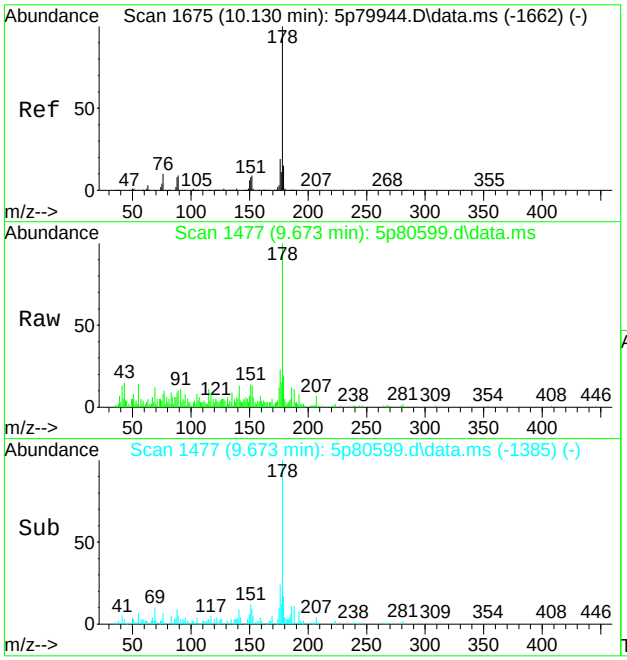


#77
Pentachlorophenol
Concen: 0.53 ppm
RT: 9.384 min Scan# 1423
Delta R.T. -0.005 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:266 Resp: 1233

Ion	Ratio	Lower	Upper
266	100		
264	76.2	33.9	93.9
268	51.9	33.2	93.2

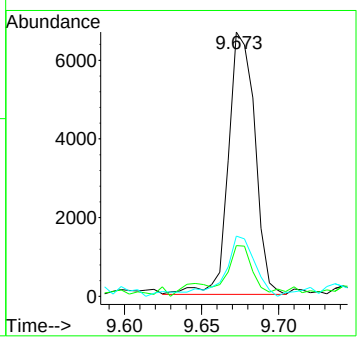


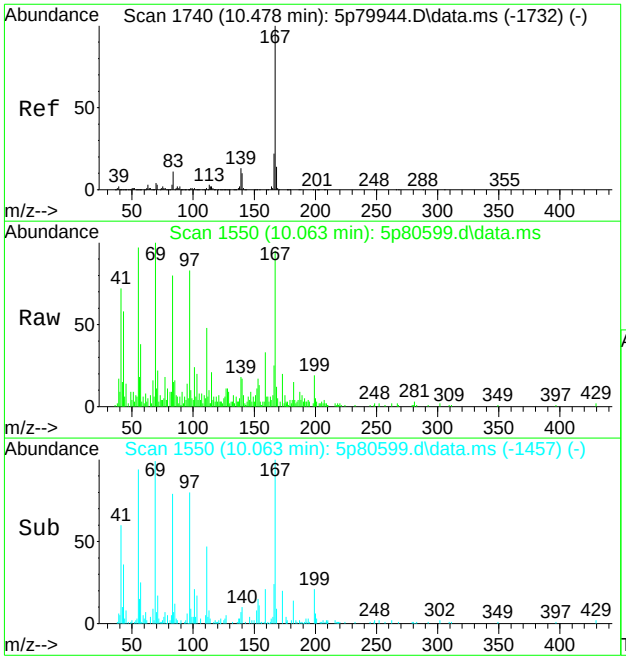


#78
Phenanthrene
Concen: 0.23 ppm
RT: 9.673 min Scan# 1477
Delta R.T. -0.011 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:178 Resp: 7971

Ion	Ratio	Lower	Upper
178	100		
179	16.6	0.0	45.5
176	21.4	0.0	48.7

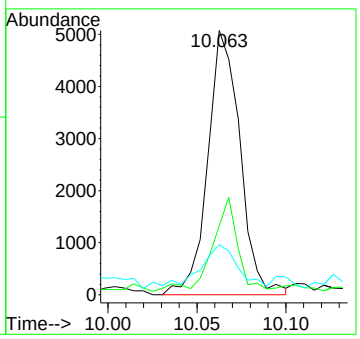


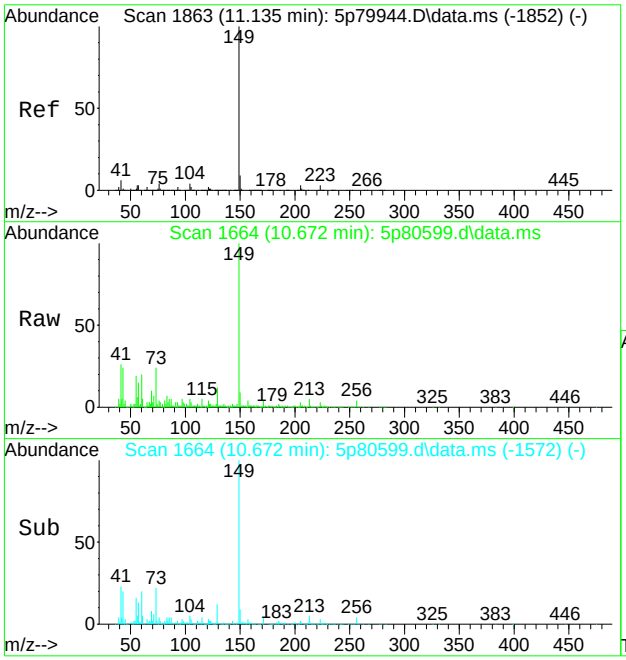


#80
Carbazole
Concen: 0.18 ppm
RT: 10.063 min Scan# 1550
Delta R.T. -0.005 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:167 Resp: 6390

Ion	Ratio	Lower	Upper
167	100		
166	23.4	0.0	51.8
139	14.0	0.0	42.7

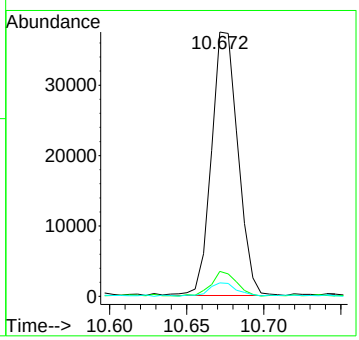




#81
Di-n-butylphthalate
Concen: 1.03 ppm
RT: 10.672 min Scan# 1664
Delta R.T. -0.011 min
Lab File: 5p80599.d
Acq: 23 Dec 2021 4:54 pm

Tgt Ion:149 Resp: 44762

Ion	Ratio	Lower	Upper
149	100		
150	9.2	0.0	39.5
104	4.6	0.0	34.8



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 15:28

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80600.d
Acq On : 23 Dec 2021 5:21 pm
Operator : chriss2
Sample : jd36624-17 Inst : MS5P
Misc : op37115,e5p3816,280,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 04:13:34 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.443	152	75144	8.00	ppm	0.00
24) Naphthalene-d8	5.490	136	280102	8.00	ppm	0.00
46) Acenaphthene-d10	7.493	164	161661	8.00	ppm	0.00
69) Phenanthrene-d10	9.646	188	251121	8.00	ppm	0.00
84) Chrysene-d12	13.802	240	164767	8.00	ppm	0.00
93) Perylene-d12	15.912	264	196239	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.443	152	75144	8.00	ppm	0.00
105) Phenanthrene-d10a	9.646	188	251121	8.00	ppm	0.00
107) Naphthalene-d8a	5.490	136	280102	8.00	ppm	0.00
109) Chrysene-d12a	13.802	240	164767	8.00	ppm	0.00
111) Phenanthrene-d10b	9.646	188	251121	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.502	112	31382	2.58	ppm	0.00
Spiked Amount 10.000			Recovery = 25.80%			
8) Phenol-d5	4.224	99	26256	1.68	ppm	0.00
Spiked Amount 10.000			Recovery = 16.80%			
25) Nitrobenzene-d5	4.881	82	67241	6.38	ppm	0.00
Spiked Amount 10.000			Recovery = 63.80%			
51) 2-Fluorobiphenyl	6.649	172	189716	7.15	ppm	0.00
Spiked Amount 10.000			Recovery = 71.50%			
74) 2,4,6-Tribromophenol	8.615	330	30324	9.50	ppm	0.00
Spiked Amount 10.000			Recovery = 95.00%			
87) Terphenyl-d14	12.199	244	173636	8.46	ppm	0.00
Spiked Amount 10.000			Recovery = 84.60%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.060	88	1039m	0.20	ppm	
7) Cumene	3.844	105	18286	0.65	ppm	99
9) Phenol	4.234	94	2383	0.14	ppm #	59
12) 2-Chlorophenol	4.304	128	70833	5.41	ppm	98
14) 1,3-Dichlorobenzene	4.400	146	91150	6.32	ppm	99
15) 1,4-Dichlorobenzene	4.459	146	457267	32.93	ppm	96
17) 1,2-Dichlorobenzene	4.571	146	815260	61.76	ppm	95
18) Acetophenone	4.758	105	3507	0.22	ppm	88
33) 2,4-Dichlorophenol	5.393	162	9481	0.94	ppm	94
36) 1,2,4-Trichlorobenzene	5.431	180	11194	1.02	ppm	96
37) 1,2,3-Trichlorobenzene	5.645	180	2016	0.20	ppm	84
38) Naphthalene	5.506	128	99828m	2.87	ppm	
44) 2-Methylnaphthalene	6.211	141	11587	0.52	ppm	93
45) 1-Methylnaphthalene	6.323	141	17266	0.81	ppm	98
80) Carbazole	10.068	167	14486	0.45	ppm	99
81) Di-n-butylphthalate	10.677	149	17455	0.43	ppm	98
82) Fluoranthene	11.526	202	12015	0.33	ppm	93
86) Pyrene	11.874	202	14839	0.53	ppm	92
89) Benzo[a]anthracene	13.791	228	5293	0.20	ppm	88
91) Chrysene	13.840	228	8162	0.35	ppm	94
92) bis(2-Ethylhexyl)phtha...	13.989	149	5840	0.35	ppm	98
95) Benzo[b]fluoranthene	15.383	252	15341	0.52	ppm	94
96) Benzo[k]fluoranthene	15.421	252	4123	0.16	ppm	81
97) Benzo[a]pyrene	15.827	252	6211	0.23	ppm	85
98) Indeno[1,2,3-cd]pyrene	17.312	276	9194	0.38	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80600.d
Acq On : 23 Dec 2021 5:21 pm
Operator : chriss2
Sample : jd36624-17 Inst : MS5P
Misc : op37115,e5p3816,280,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 04:13:34 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

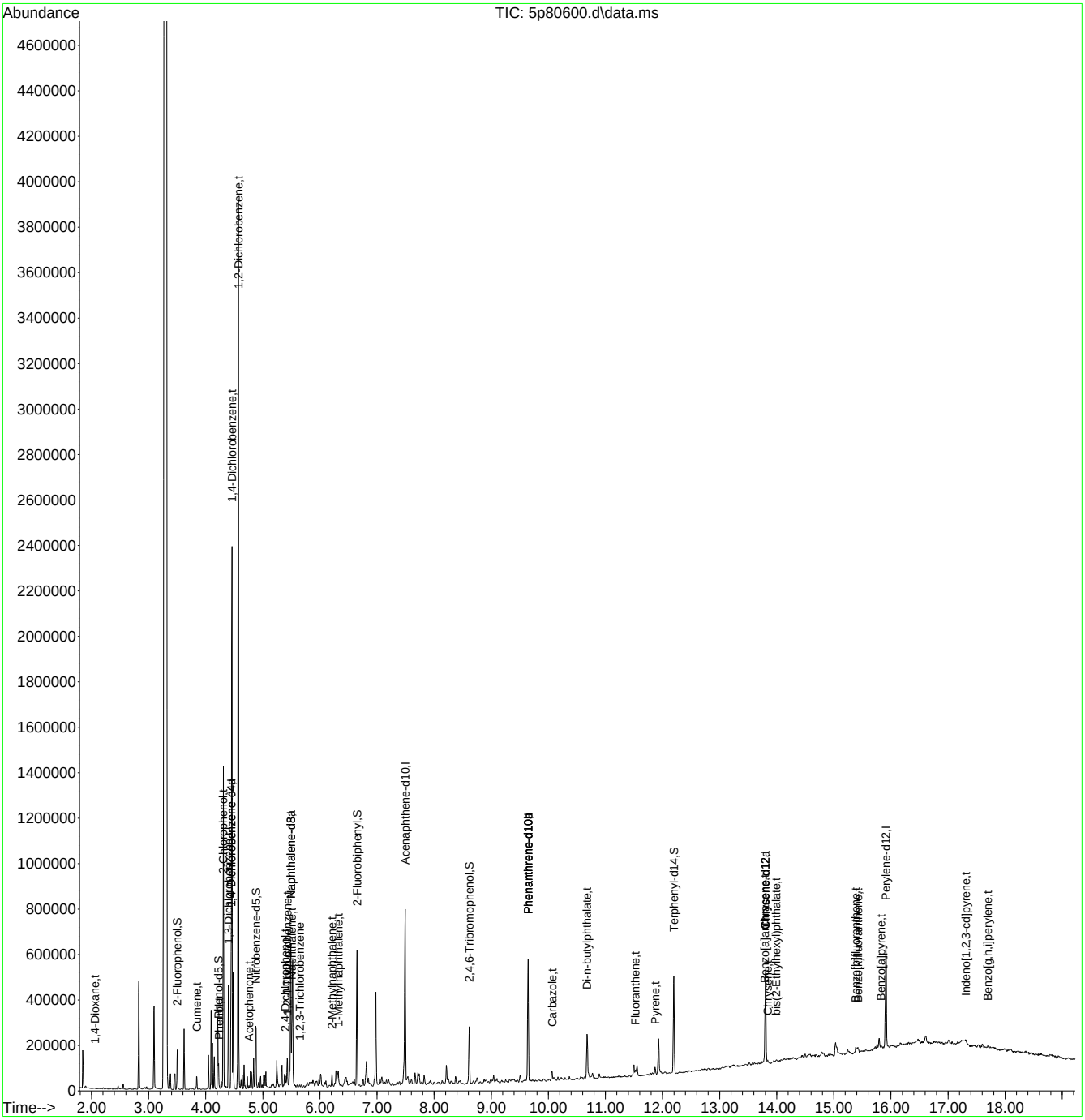
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
102) Benzo[g,h,i]perylene	17.697	276	7725	0.27	ppm	94

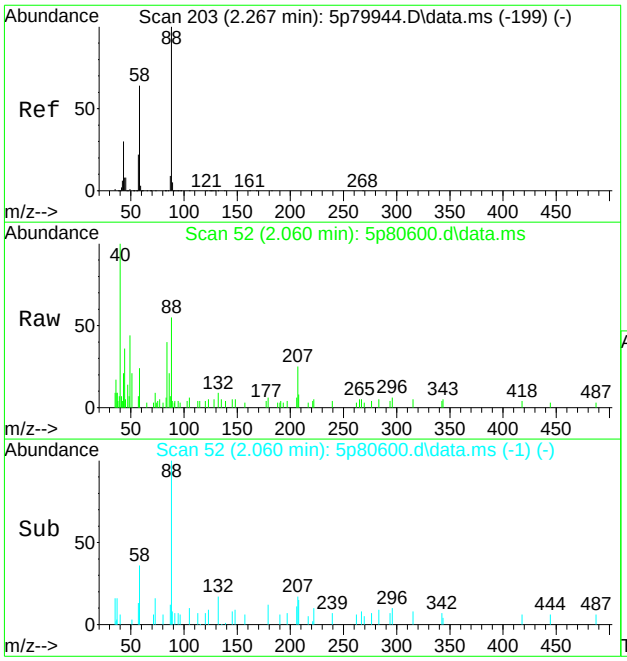
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80600.d
Acq On : 23 Dec 2021 5:21 pm
Operator : chriss2
Sample : jd36624-17 Inst : MS5P
Misc : op37115,e5p3816,280,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 04:13:34 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

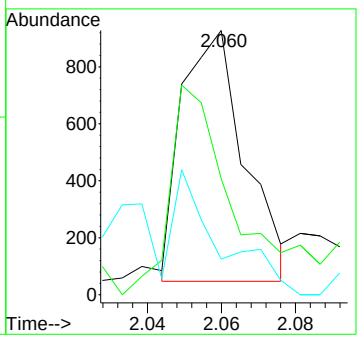


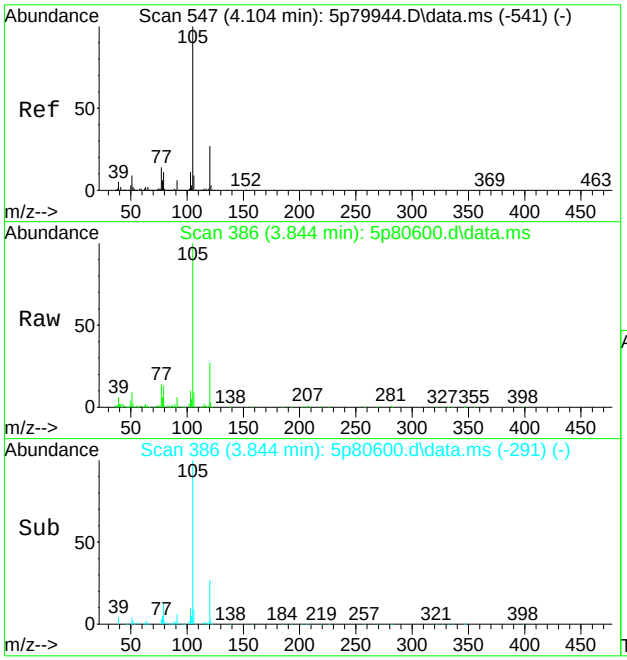


#2
1,4-Dioxane
Concen: 0.20 ppm m
RT: 2.060 min Scan# 52
Delta R.T. 0.032 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion: 88 Resp: 1039

Ion	Ratio	Lower	Upper
88	100		
58	43.9	22.1	82.1
57	13.5	0.0	50.9

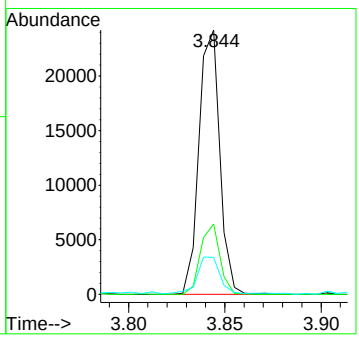


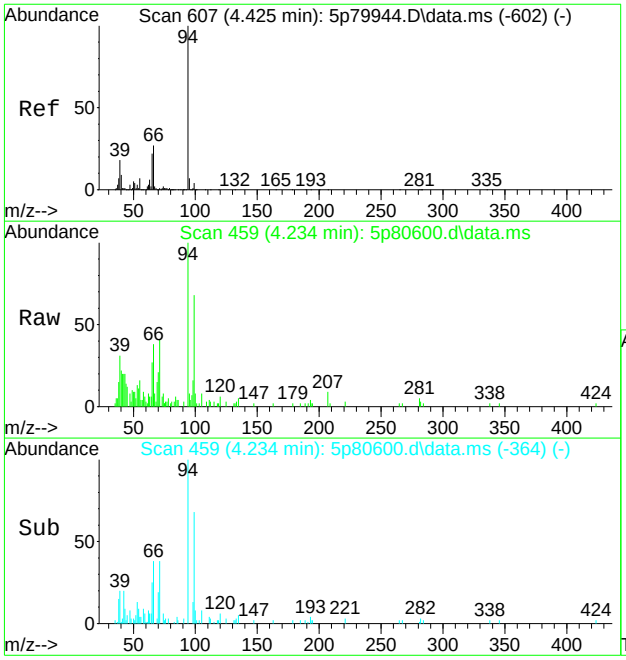


#7
Cumene
Concen: 0.65 ppm
RT: 3.844 min Scan# 386
Delta R.T. 0.005 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:105 Resp: 18286

Ion	Ratio	Lower	Upper
105	100		
120	26.6	0.0	56.9
77	13.7	0.0	44.9

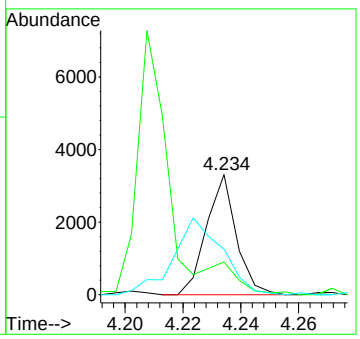


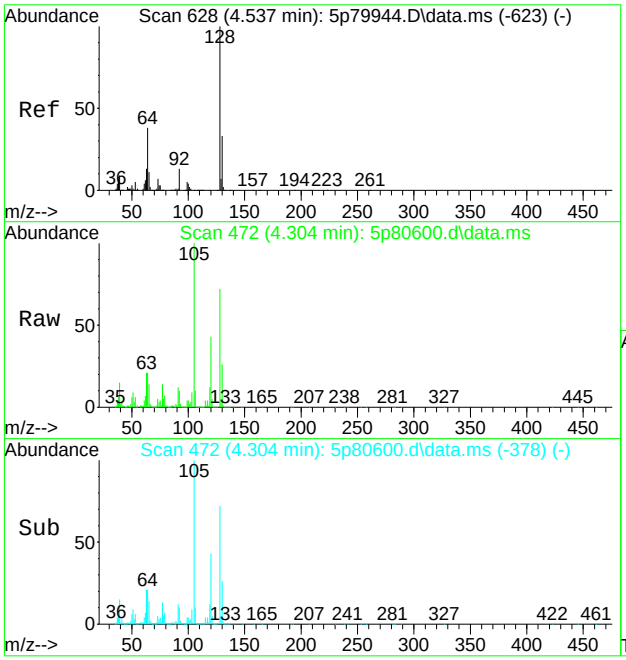


#9
Phenol
Concen: 0.14 ppm
RT: 4.234 min Scan# 459
Delta R.T. 0.005 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion: 94 Resp: 2383

Ion	Ratio	Lower	Upper
94	100		
65	0.0	4.5	64.5#
66	31.9	21.4	81.4

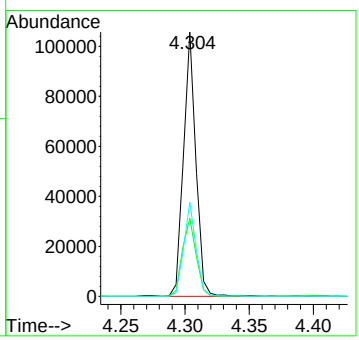


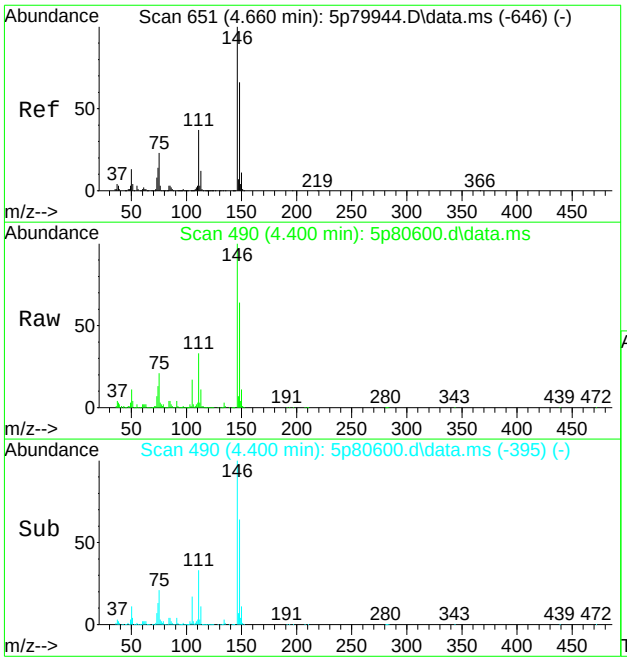


#12
2-Chlorophenol
Concen: 5.41 ppm
RT: 4.304 min Scan# 472
Delta R.T. 0.000 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:128 Resp: 70833

Ion	Ratio	Lower	Upper
128	100		
64	29.5	0.0	59.6
130	35.7	4.0	64.0

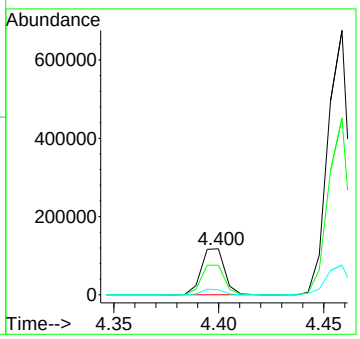


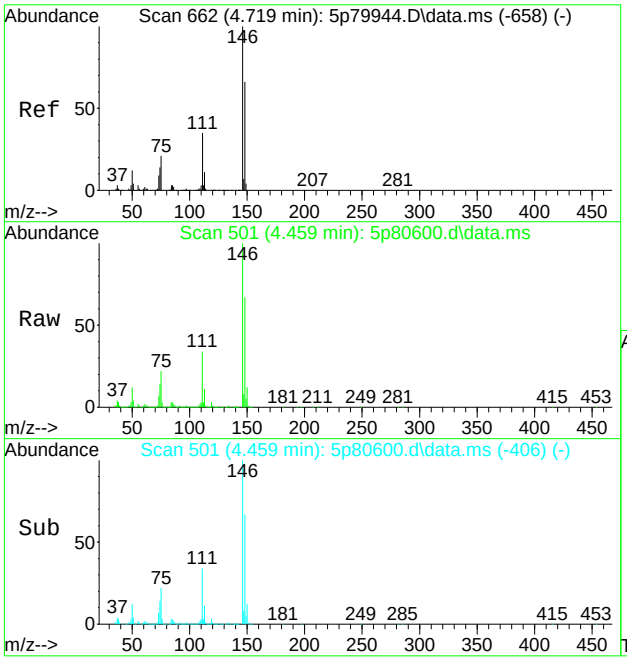


#14
1,3-Dichlorobenzene
Concen: 6.32 ppm
RT: 4.400 min Scan# 490
Delta R.T. 0.005 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:146 Resp: 91150

Ion	Ratio	Lower	Upper
146	100		
148	64.3	34.9	94.9
113	10.7	0.0	42.6

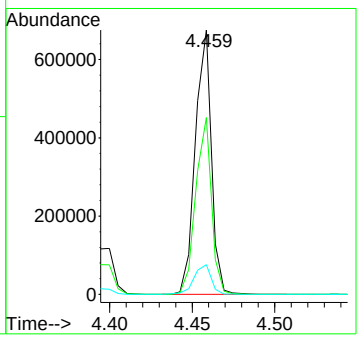


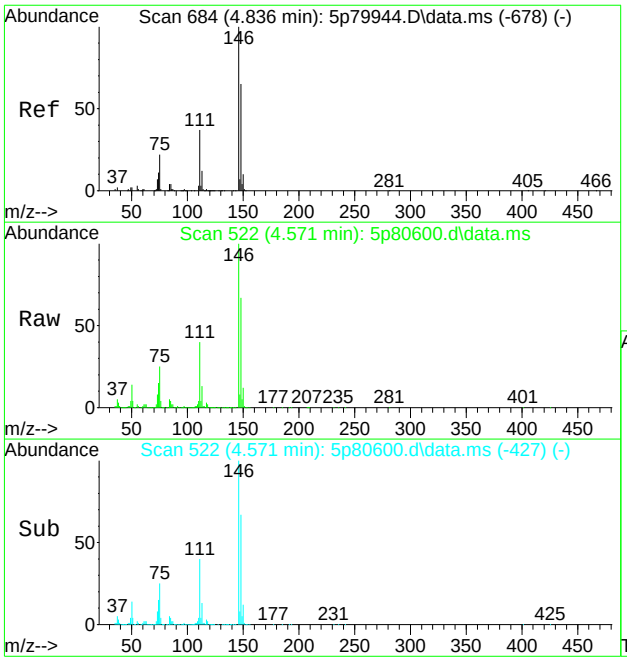


#15
1,4-Dichlorobenzene
Concen: 32.93 ppm
RT: 4.459 min Scan# 501
Delta R.T. 0.005 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:146 Resp: 457267

Ion	Ratio	Lower	Upper
146	100		
148	66.9	33.6	93.6
113	11.3	0.0	41.8

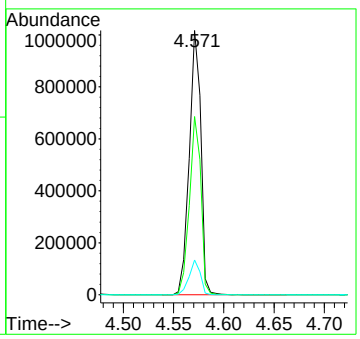


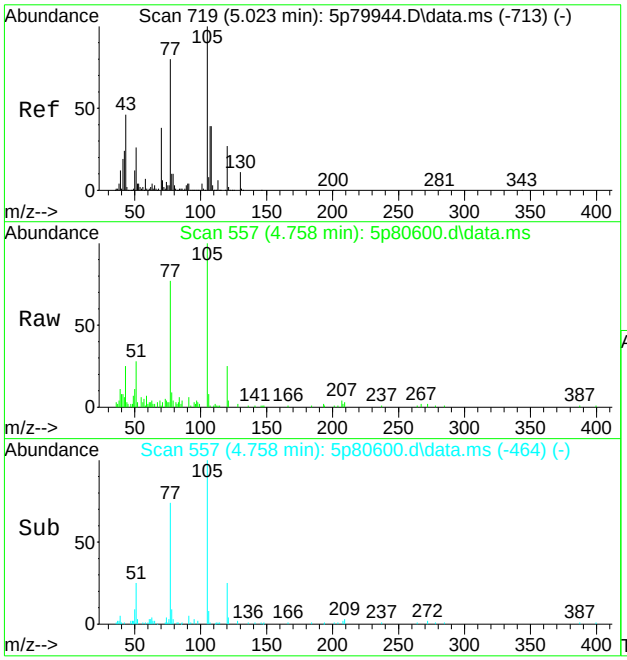


#17
1,2-Dichlorobenzene
Concen: 61.76 ppm
RT: 4.571 min Scan# 522
Delta R.T. 0.005 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:146 Resp: 815260

Ion	Ratio	Lower	Upper
146	100		
148	67.4	33.8	93.8
113	13.2	0.0	40.3

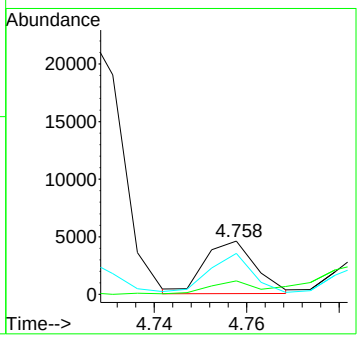


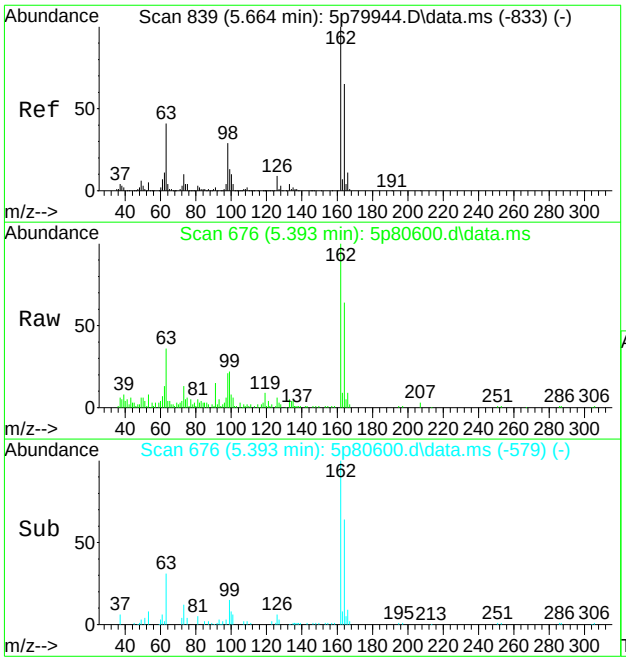


#18
Acetophenone
Concen: 0.22 ppm
RT: 4.758 min Scan# 557
Delta R.T. -0.005 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:105 Resp: 3507

Ion	Ratio	Lower	Upper
105	100		
120	19.1	0.0	55.4
77	79.6	40.3	100.3

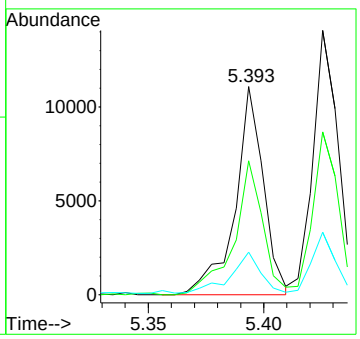


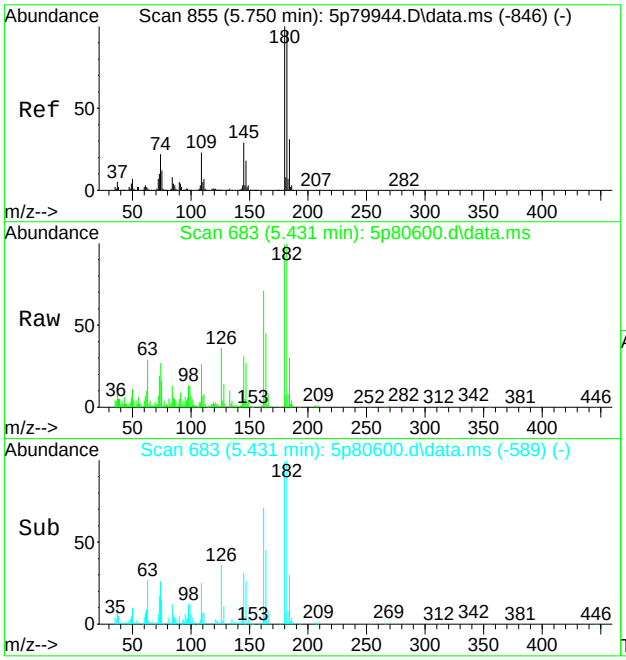


#33
2,4-Dichlorophenol
Concen: 0.94 ppm
RT: 5.393 min Scan# 676
Delta R.T. 0.016 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:162 Resp: 9481

Ion	Ratio	Lower	Upper
162	100		
164	63.8	35.5	95.5
98	19.3	0.0	57.9

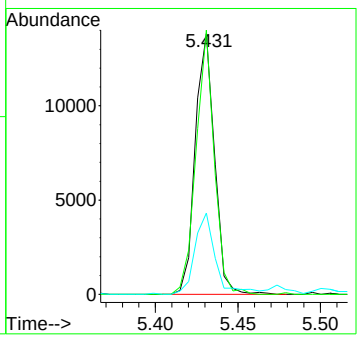


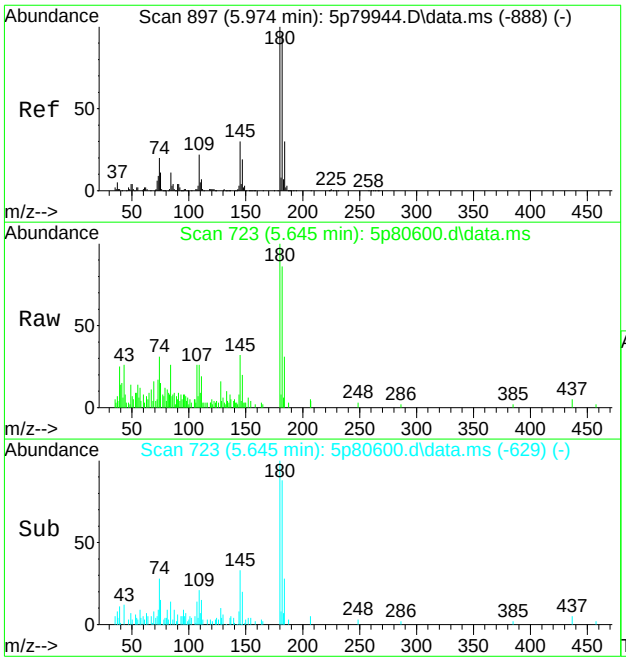


#36
1,2,4-Trichlorobenzene
Concen: 1.02 ppm
RT: 5.431 min Scan# 683
Delta R.T. 0.000 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:180 Resp: 11194

Ion	Ratio	Lower	Upper
180	100		
182	101.1	67.7	127.7
145	30.2	2.9	62.9

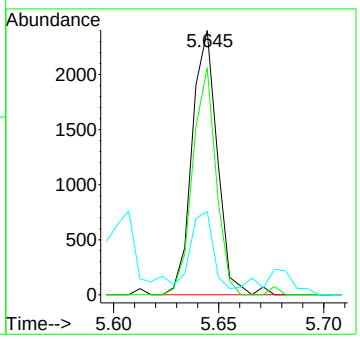


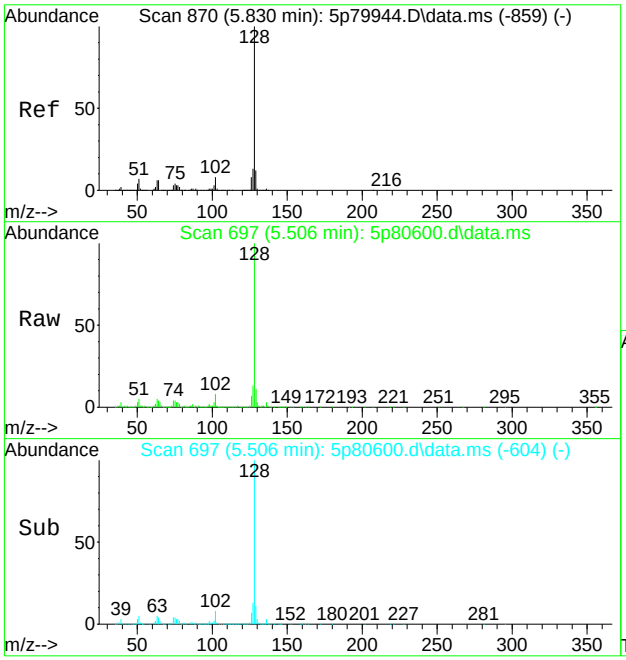


#37
1,2,3-Trichlorobenzene
Concen: 0.20 ppm
RT: 5.645 min Scan# 723
Delta R.T. 0.000 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:180 Resp: 2016

Ion	Ratio	Lower	Upper
180	100		
182	86.0	70.3	130.3
145	23.5	4.8	64.8

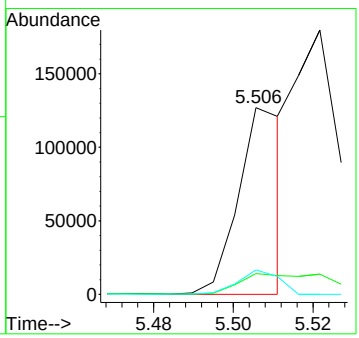


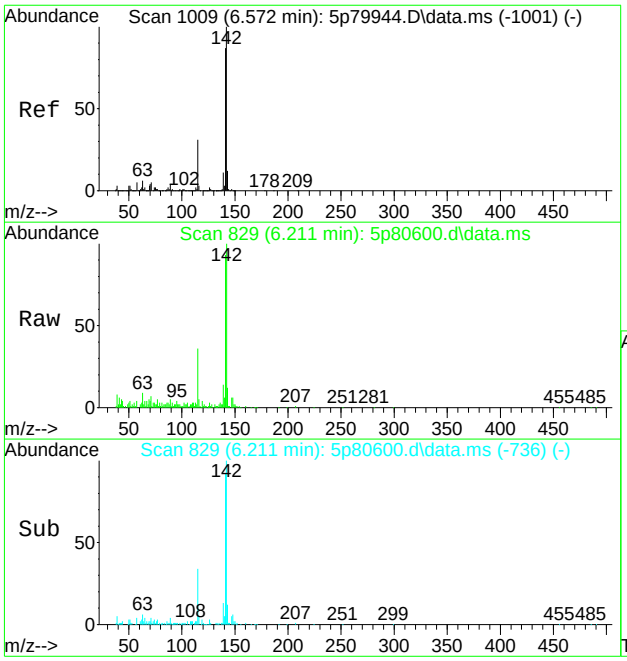


#38
Naphthalene
Concen: 2.87 ppm m
RT: 5.506 min Scan# 697
Delta R.T. -0.005 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:128 Resp: 99828

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	41.1
127	13.1	0.0	43.3

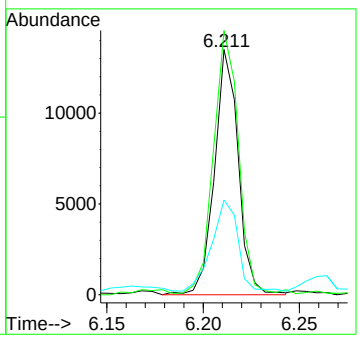


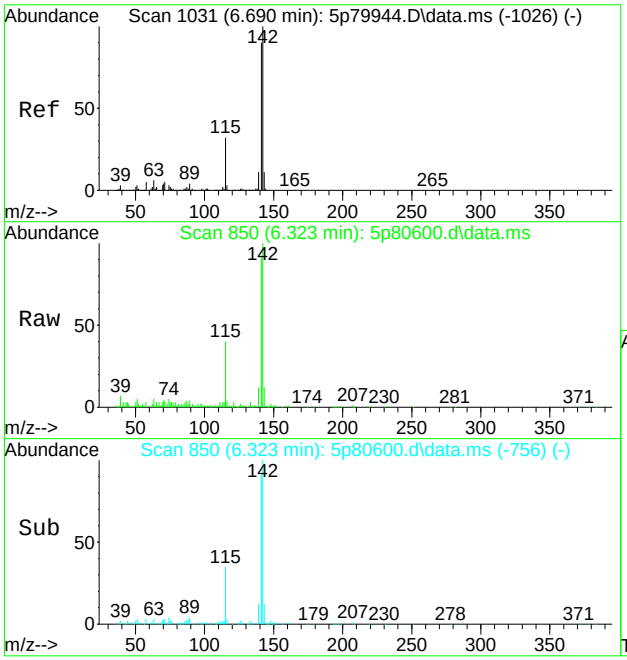


#44
2-Methylnaphthalene
Concen: 0.52 ppm
RT: 6.211 min Scan# 829
Delta R.T. -0.005 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:141 Resp: 11587

Ion	Ratio	Lower	Upper
141	100		
142	106.5	85.9	145.9
115	36.9	8.3	68.3

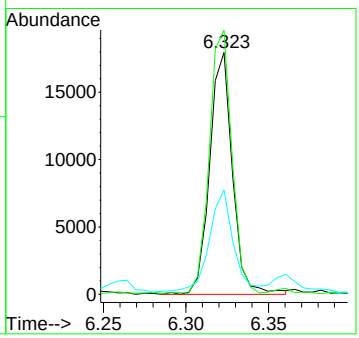


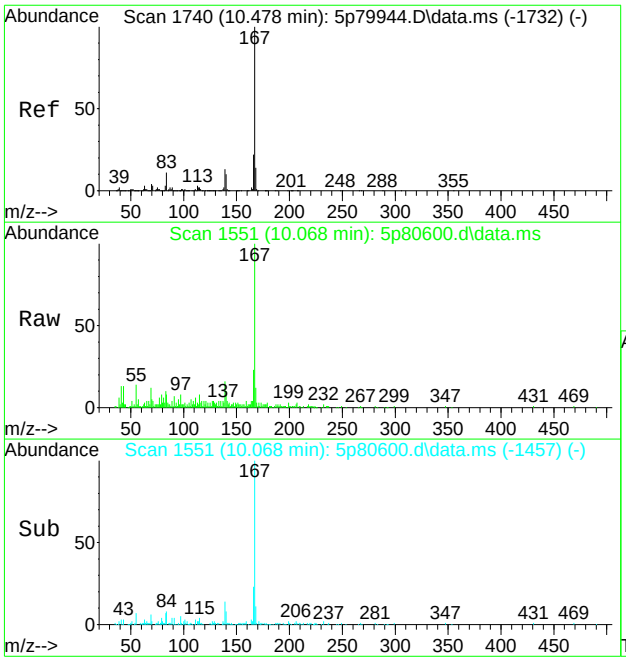


#45
1-Methylnaphthalene
Concen: 0.81 ppm
RT: 6.323 min Scan# 850
Delta R.T. 0.000 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:141 Resp: 17266

Ion	Ratio	Lower	Upper
141	100		
142	108.7	80.6	140.6
115	38.8	9.4	69.4

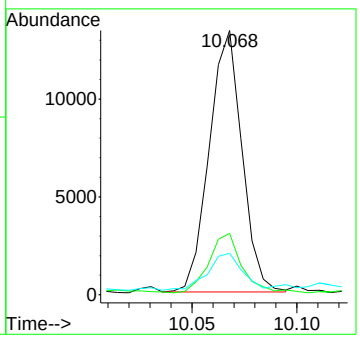


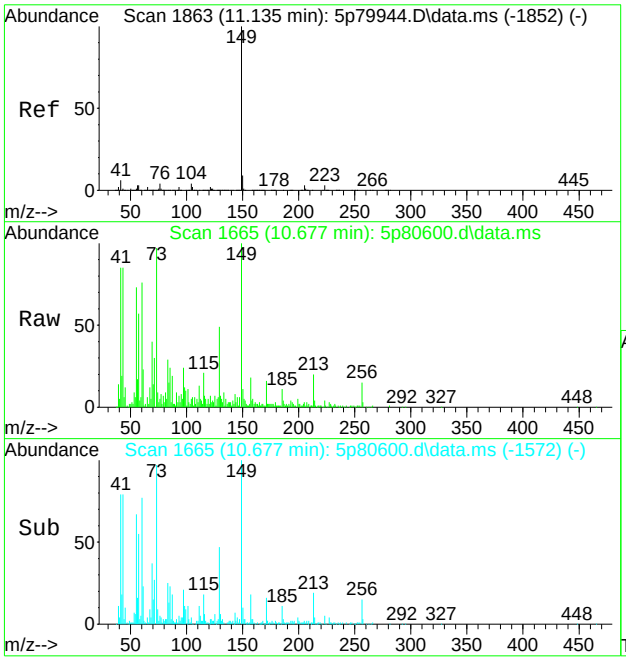


#80
Carbazole
Concen: 0.45 ppm
RT: 10.068 min Scan# 1551
Delta R.T. 0.000 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:167 Resp: 14486

Ion	Ratio	Lower	Upper
167	100		
166	22.1	0.0	51.8
139	13.1	0.0	42.7

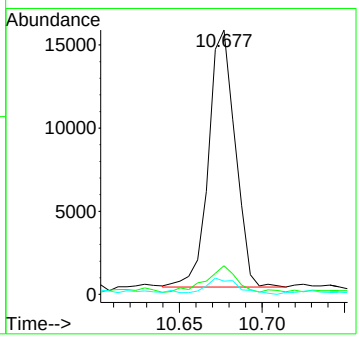


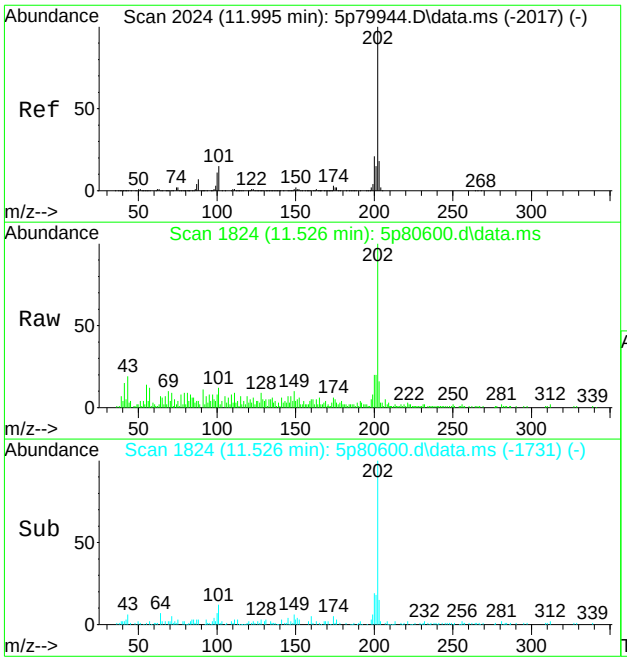


#81
Di-n-butylphthalate
Concen: 0.43 ppm
RT: 10.677 min Scan# 1665
Delta R.T. -0.005 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:149 Resp: 17455

Ion	Ratio	Lower	Upper
149	100		
150	10.3	0.0	39.5
104	4.4	0.0	34.8

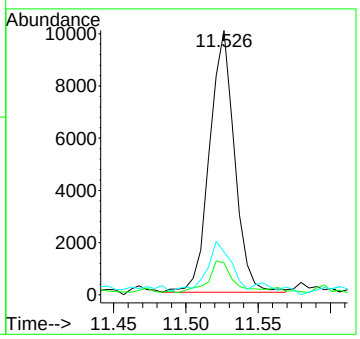


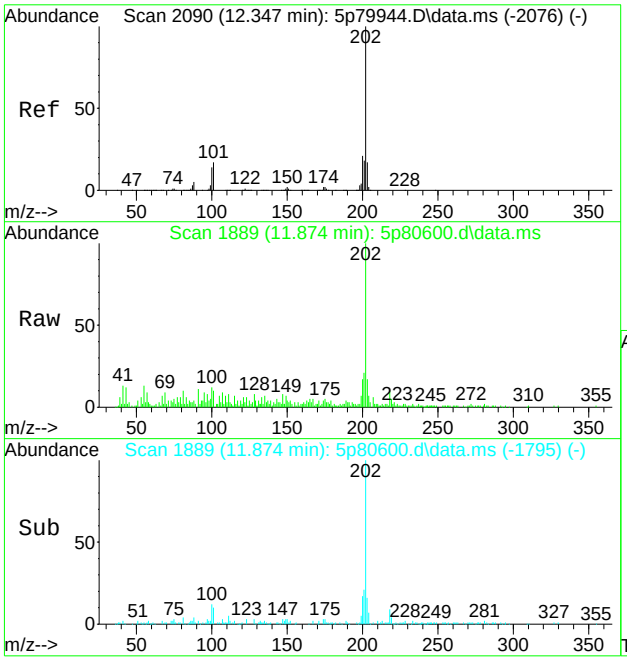


#82
Fluoranthene
Concen: 0.33 ppm
RT: 11.526 min Scan# 1824
Delta R.T. -0.005 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:202 Resp: 12015

Ion	Ratio	Lower	Upper
202	100		
101	11.0	0.0	39.8
203	13.1	0.0	47.3

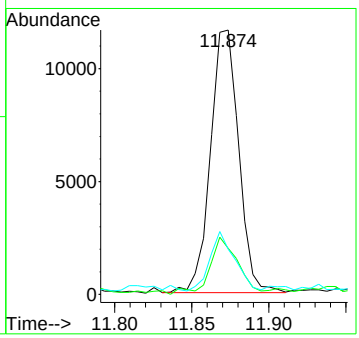


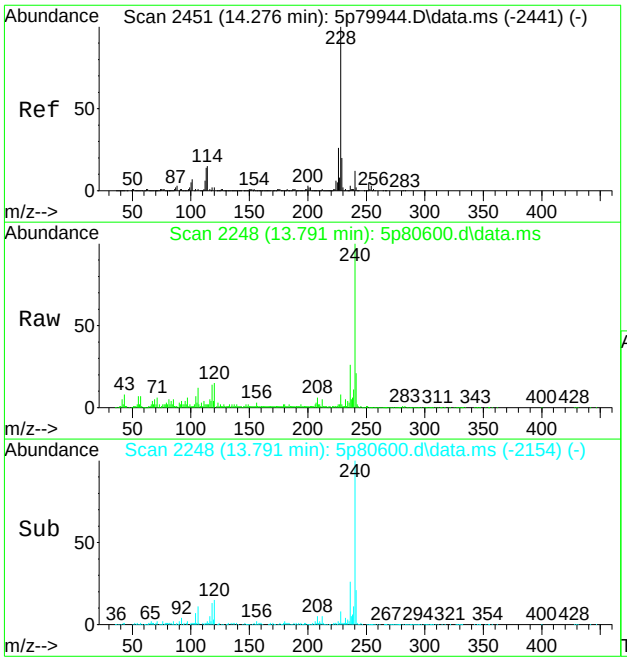


#86
Pyrene
Concen: 0.53 ppm
RT: 11.874 min Scan# 1889
Delta R.T. 0.000 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:202 Resp: 14839

Ion	Ratio	Lower	Upper
202	100		
200	16.1	0.0	50.5
203	15.0	0.0	48.0

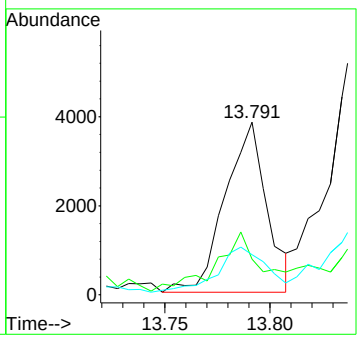


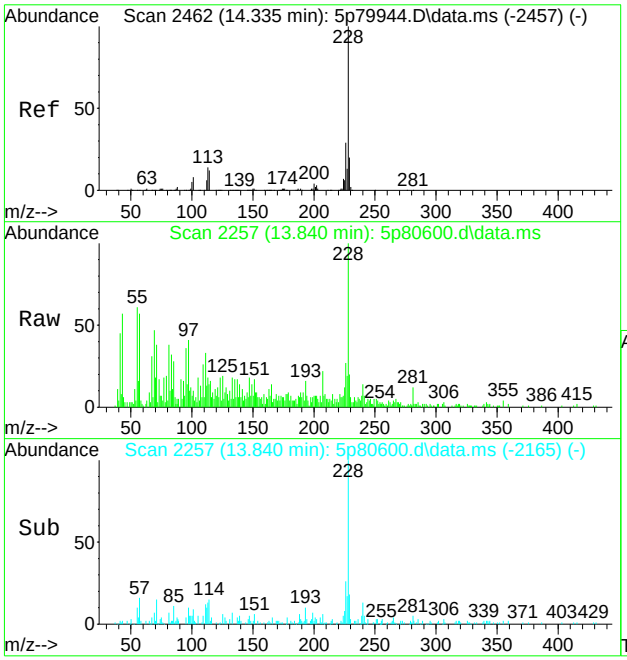


#89
Benzo[a]anthracene
Concen: 0.20 ppm
RT: 13.791 min Scan# 2248
Delta R.T. 0.000 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:228 Resp: 5293

Ion	Ratio	Lower	Upper
228	100		
229	12.6	0.0	49.5
226	21.2	0.0	56.4

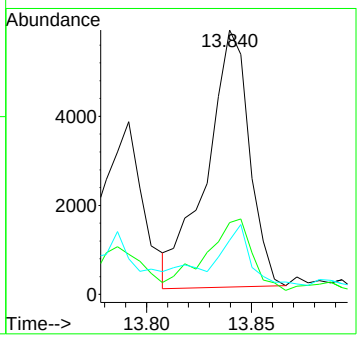


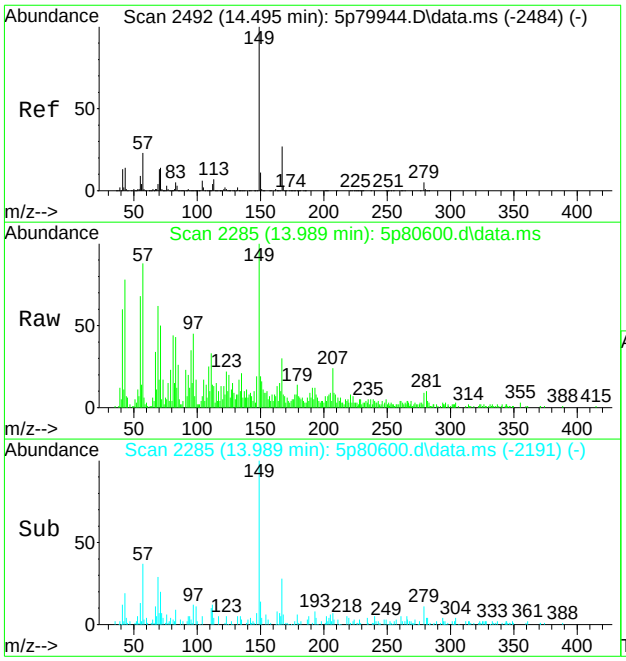


#91
Chrysene
Concen: 0.35 ppm
RT: 13.840 min Scan# 2257
Delta R.T. -0.011 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:228 Resp: 8162

Ion	Ratio	Lower	Upper
228	100		
226	26.7	0.0	58.8
229	15.3	0.0	49.1

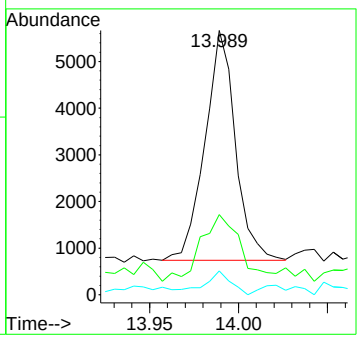


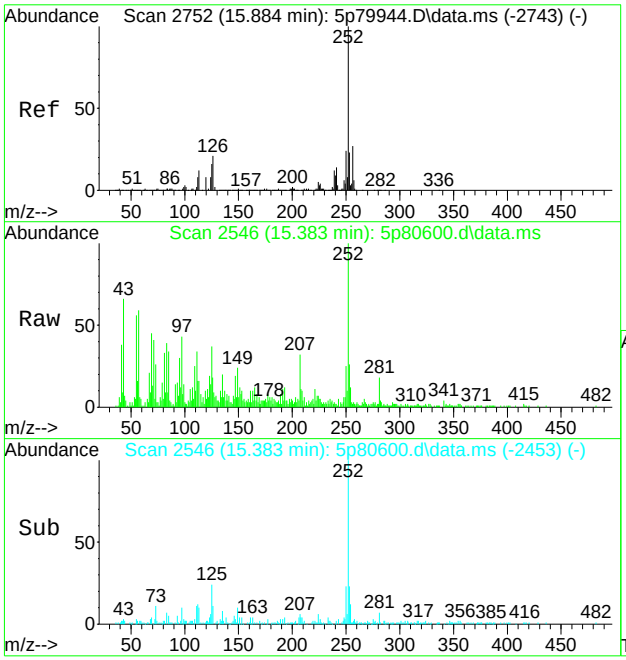


#92
bis(2-Ethylhexyl)phthalate
Concen: 0.35 ppm
RT: 13.989 min Scan# 2285
Delta R.T. 0.000 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:149 Resp: 5840

Ion	Ratio	Lower	Upper
149	100		
167	26.2	0.0	55.7
279	6.2	0.0	34.6

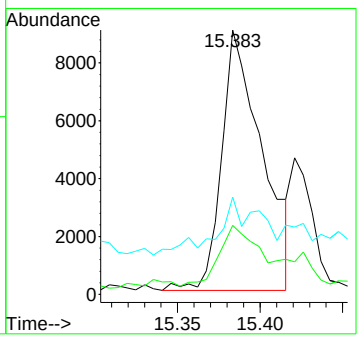


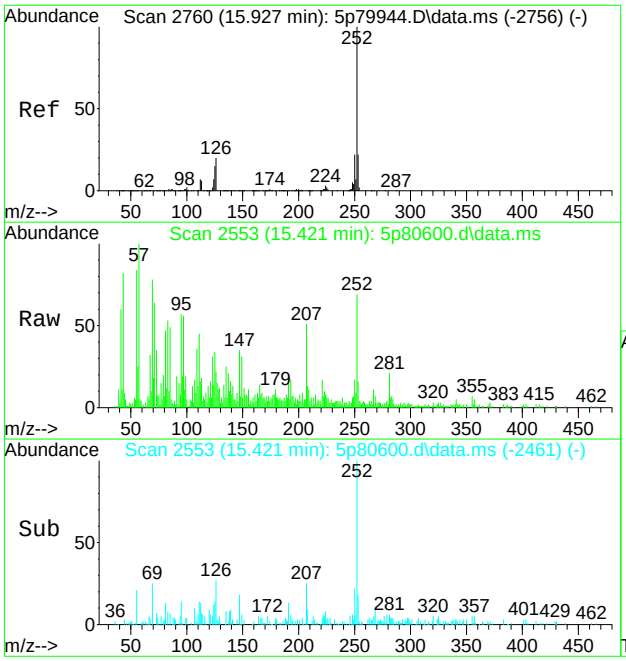


#95
Benzo[b]fluoranthene
Concen: 0.52 ppm
RT: 15.383 min Scan# 2546
Delta R.T. -0.005 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:252 Resp: 15341

Ion	Ratio	Lower	Upper
252	100		
253	21.1	0.0	53.9
125	18.6	0.0	45.6

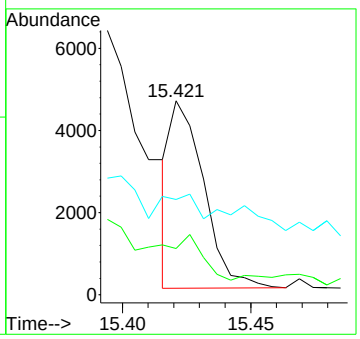


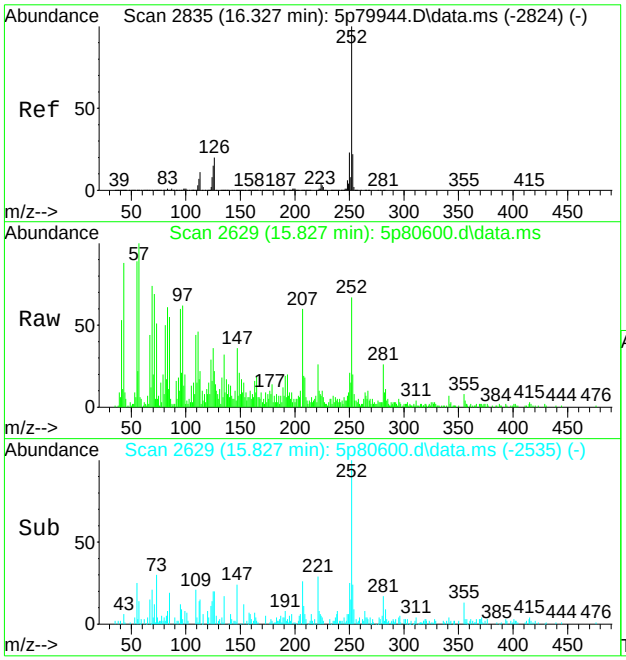


#96
Benzo[k]fluoranthene
Concen: 0.16 ppm
RT: 15.421 min Scan# 2553
Delta R.T. -0.011 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:252 Resp: 4123

Ion	Ratio	Lower	Upper
252	100		
253	9.1	0.0	52.1
125	11.4	0.0	43.5

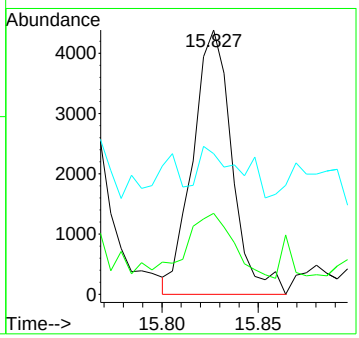


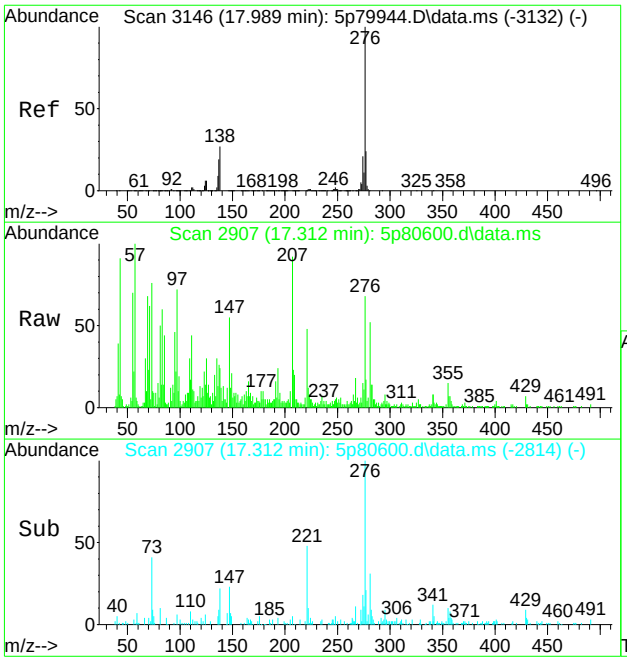


#97
Benzo[a]pyrene
Concen: 0.23 ppm
RT: 15.827 min Scan# 2629
Delta R.T. 0.000 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:252 Resp: 6211

Ion	Ratio	Lower	Upper
252	100		
253	14.6	0.0	51.7
125	9.0	0.0	44.9

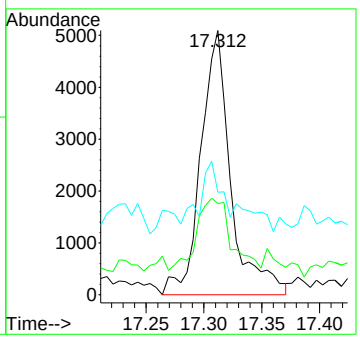


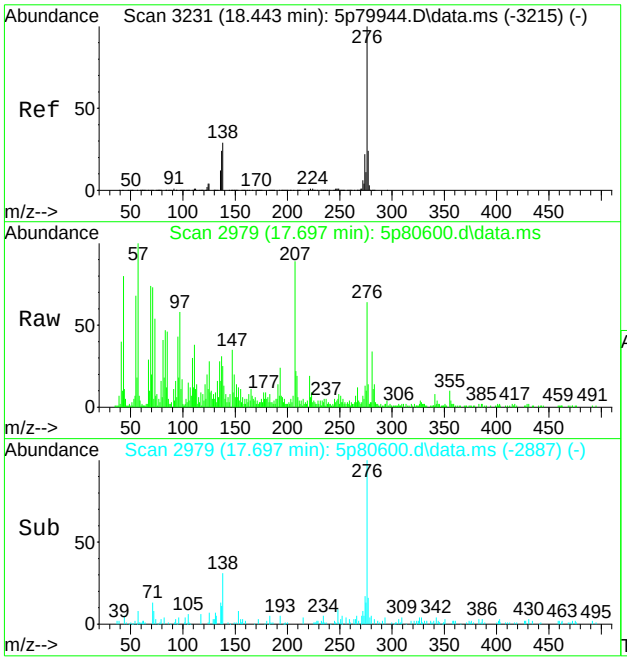


#98
Indeno[1,2,3-cd]pyrene
Concen: 0.38 ppm
RT: 17.312 min Scan# 2907
Delta R.T. -0.005 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:276 Resp: 9194

Ion	Ratio	Lower	Upper
276	100		
138	22.5	0.0	53.9
137	9.7	0.0	47.6

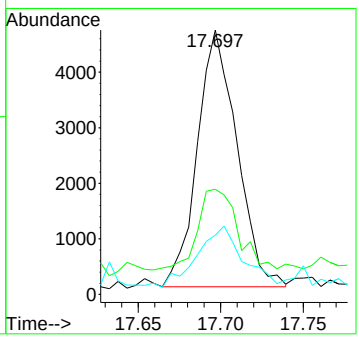




#102
Benzo[g,h,i]perylene
Concen: 0.27 ppm
RT: 17.697 min Scan# 2979
Delta R.T. -0.011 min
Lab File: 5p80600.d
Acq: 23 Dec 2021 5:21 pm

Tgt Ion:276 Resp: 7725

Ion	Ratio	Lower	Upper
276	100		
138	30.1	0.0	58.9
277	19.0	0.0	54.0



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/30/21 18:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2635\
Data File : 4p50291.D
Acq On : 28 Dec 2021 1:19 am
Operator : kristis
Sample : jd36624-2
Misc : op37108a,e4p2635,250,,,1,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 30 18:50:45 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

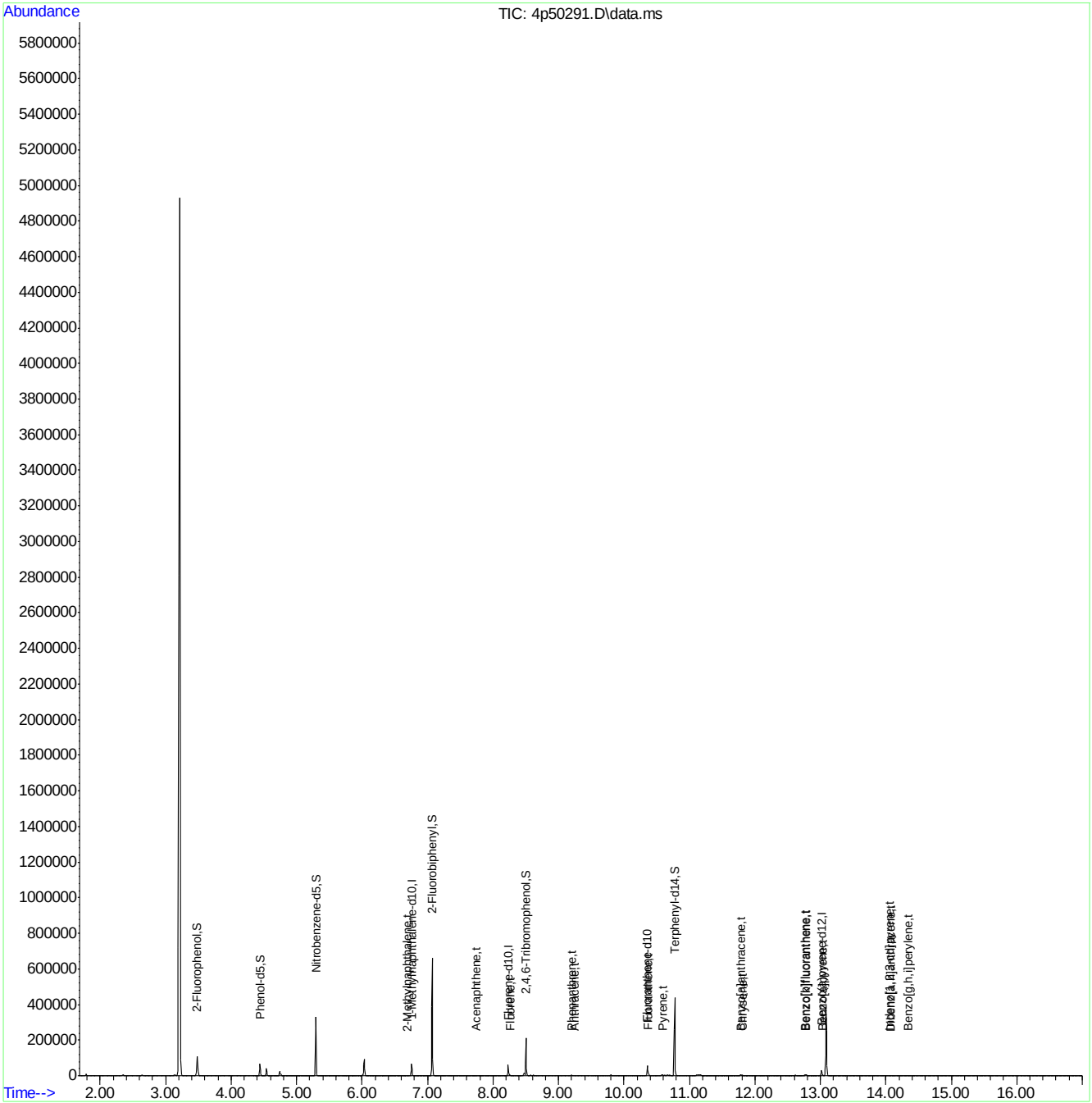
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.758	150	17320	800.00	ppm	0.00
13) Fluorene-d10	8.233	176	25428	800.00	ppm	0.00
20) Fluoranthene-d10	10.356	212	40663	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.020	264	20671	800.00	ppm	0.02
System Monitoring Compounds						
3) 2-Fluorophenol	3.482	112	46059	4286.91	ppm	0.02
Spiked Amount 50.000			Recovery = 8573.82%			
4) Phenol-d5	4.441	99	49200	2413.77	ppm	0.03
Spiked Amount 50.000			Recovery = 4827.54%			
7) Nitrobenzene-d5	5.296	82	196027	11784.96	ppm	0.02
Spiked Amount 50.000			Recovery = 23569.92%			
14) 2-Fluorobiphenyl	7.075	172	307584	9483.12	ppm	0.00
Spiked Amount 50.000			Recovery = 18966.24%			
19) 2,4,6-Tribromophenol	8.506	330	67769	13964.67	ppm	0.02
Spiked Amount 50.000			Recovery = 27929.34%			
27) Terphenyl-d14	10.780	244	277116	9514.50	ppm	0.02
Spiked Amount 50.000			Recovery = 19029.00%			
Target Compounds						Qvalue
10) 2-Methylnaphthalene	6.698	141	398	15.37	ppm	82
16) Acenaphthene	7.750	153	728m	24.08	ppm	
17) Fluorene	8.259	166	1009	27.66	ppm	97
23) Phenanthrene	9.202	178	1653m	30.18	ppm	
24) Anthracene	9.246	178	1573	29.95	ppm	81
25) Fluoranthene	10.374	202	3853	67.56	ppm	95
26) Pyrene	10.595	202	3368	53.67	ppm	91
28) Benzo[a]anthracene	11.784	228	3675	65.55	ppm	87
29) Chrysene	11.812	228	1903	34.65	ppm	97
31) Benzo[b]fluoranthene	12.765	252	3246m	71.95	ppm	
32) Benzo[k]fluoranthene	12.785	252	1190m	27.90	ppm	
33) Benzo[a]pyrene	13.035	252	2186	55.87	ppm	89
34) Indeno[1,2,3-cd]pyrene	14.064	276	1569	33.66	ppm	98
35) Dibenz[a,h]anthracene	14.080	278	475	13.08	ppm	95
36) Benzo[g,h,i]perylene	14.342	276	1507	38.15	ppm	99

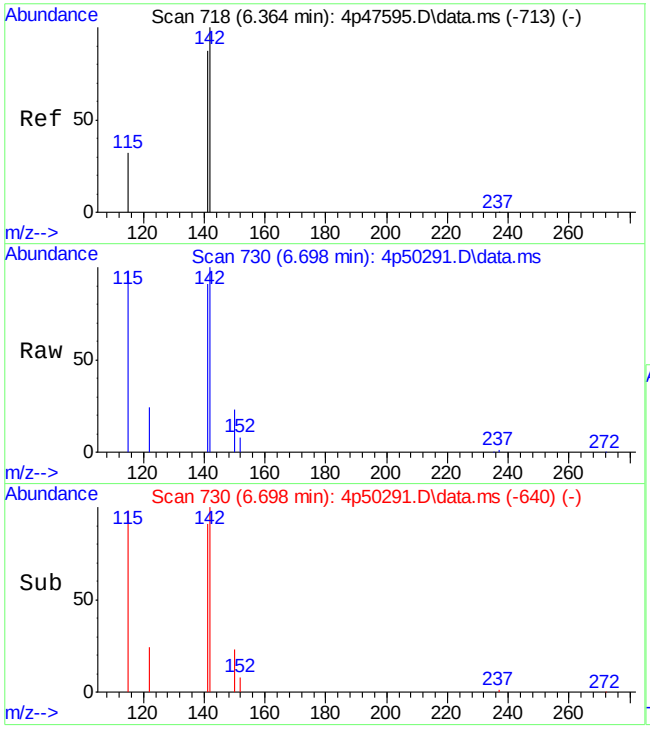
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2635\
Data File : 4p50291.D
Acq On : 28 Dec 2021 1:19 am
Operator : kristis
Sample : jd36624-2
Misc : op37108a,e4p2635,250,,,1,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 30 18:50:45 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

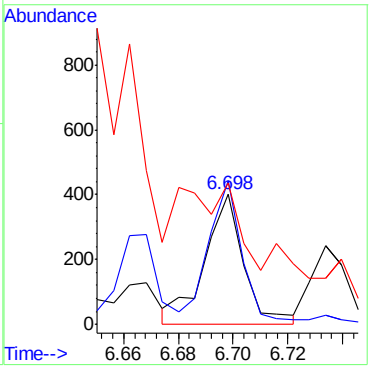


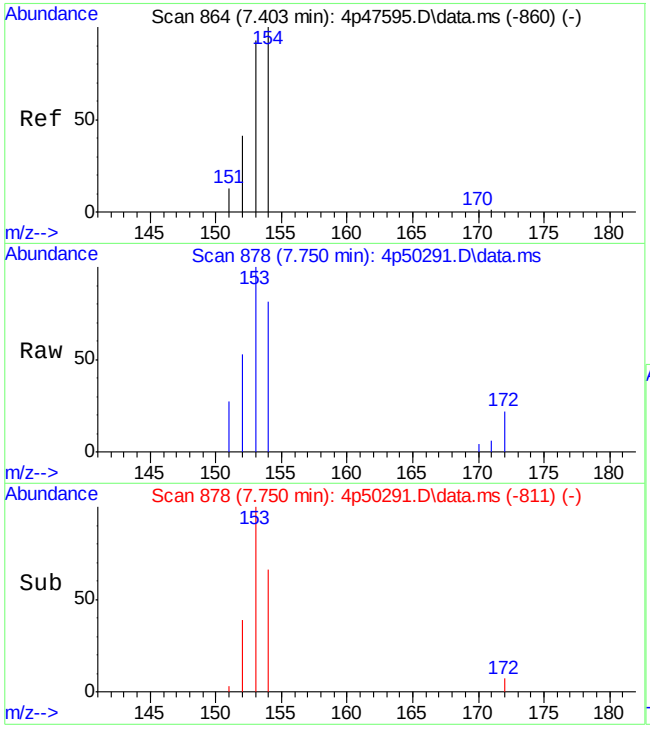


#10
2-Methylnaphthalene
Concen: 15.37 ppm
RT: 6.698 min Scan# 730
Delta R.T. 0.012 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:141 Resp: 398

Ion	Ratio	Lower	Upper
141	100		
142	111.0	96.1	156.1
115	59.2	7.9	67.9

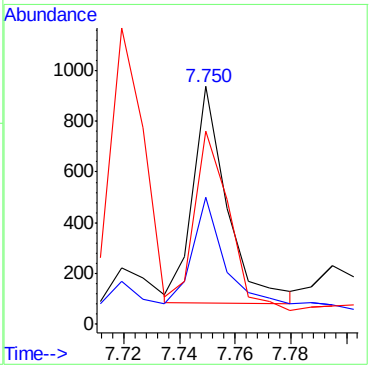


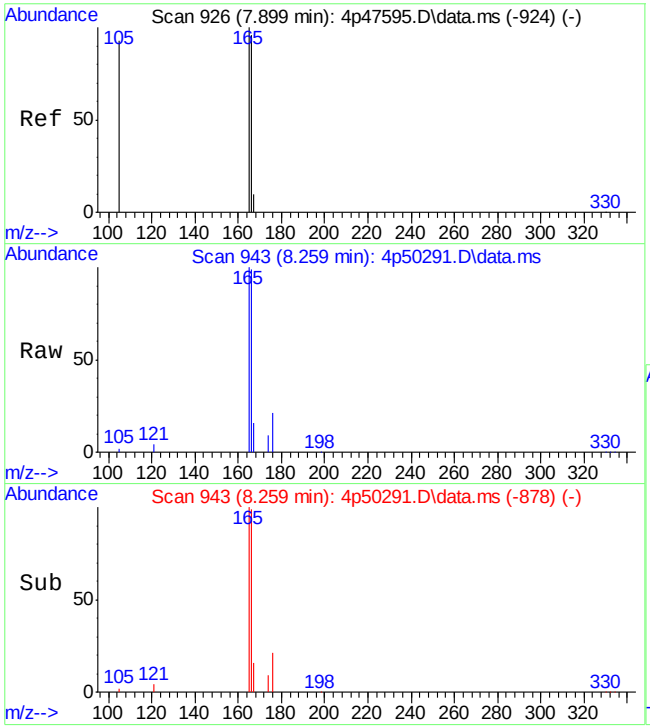


#16
Acenaphthene
Concen: 24.08 ppm m
RT: 7.750 min Scan# 878
Delta R.T. 0.008 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:153 Resp: 728

Ion	Ratio	Lower	Upper
153	100		
152	53.5	18.5	78.5
154	81.4	59.1	119.1

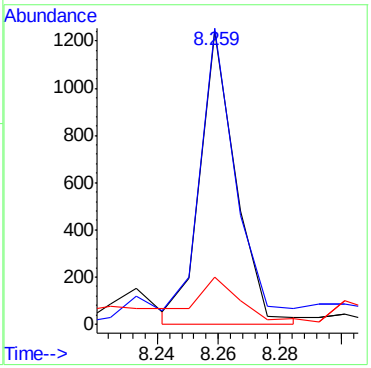


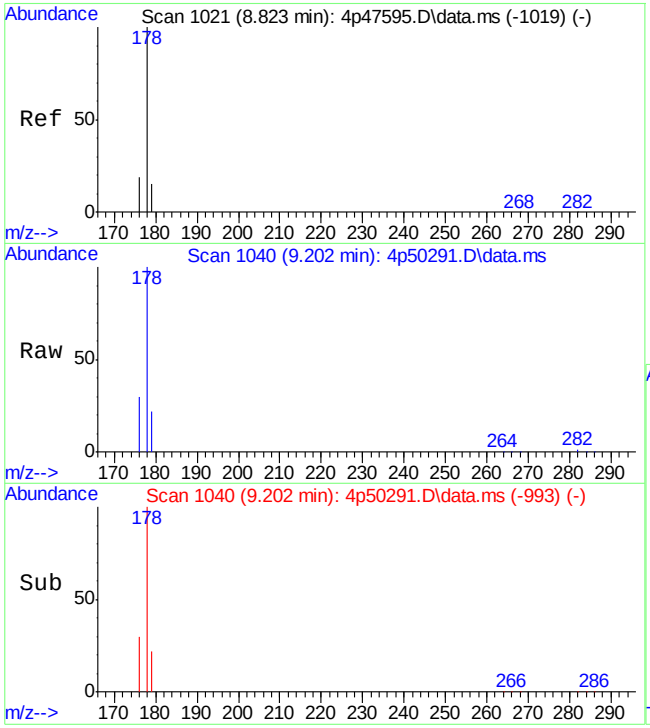


#17
Fluorene
Concen: 27.66 ppm
RT: 8.259 min Scan# 943
Delta R.T. 0.009 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:166 Resp: 1009

Ion	Ratio	Lower	Upper
166	100		
165	99.5	66.9	126.9
167	13.1	0.0	41.7

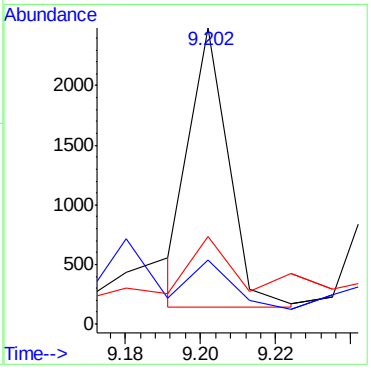


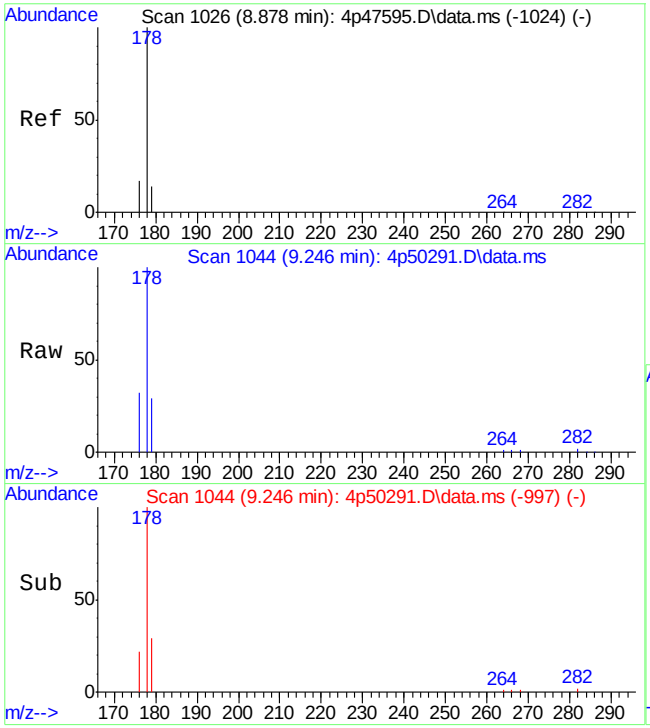


#23
Phenanthrene
Concen: 30.18 ppm m
RT: 9.202 min Scan# 1040
Delta R.T. 0.011 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:178 Resp: 1653

Ion	Ratio	Lower	Upper
178	100		
179	21.6	0.0	46.0
176	29.6	0.0	45.6

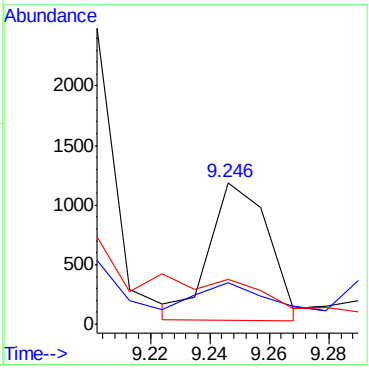


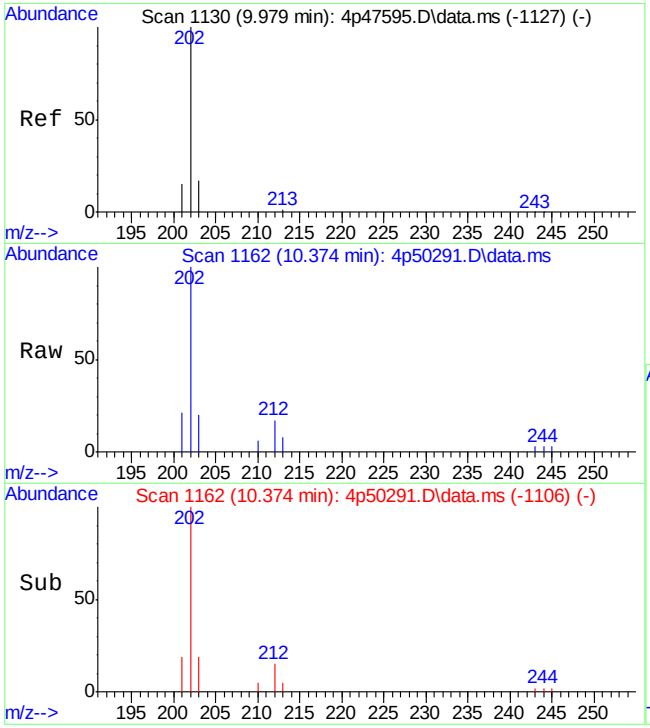


#24
Anthracene
Concen: 29.95 ppm
RT: 9.246 min Scan# 1044
Delta R.T. 0.011 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:178 Resp: 1573

Ion	Ratio	Lower	Upper
178	100		
179	20.1	0.0	43.0
176	9.4	0.0	48.4

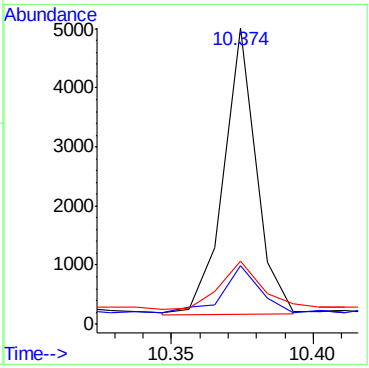


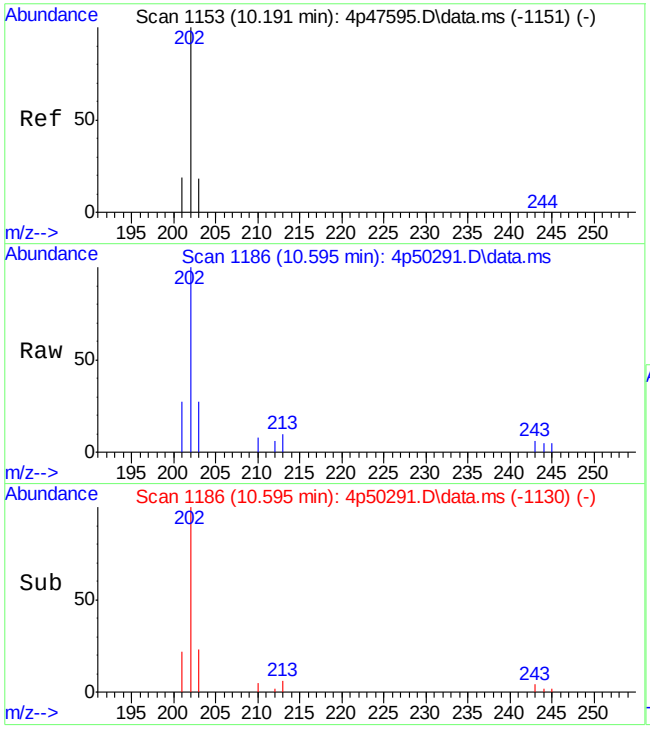


#25
Fluoranthene
Concen: 67.56 ppm
RT: 10.374 min Scan# 1162
Delta R.T. 0.018 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:202 Resp: 3853

Ion	Ratio	Lower	Upper
202	100		
203	16.5	0.0	47.6
201	16.1	0.0	42.9

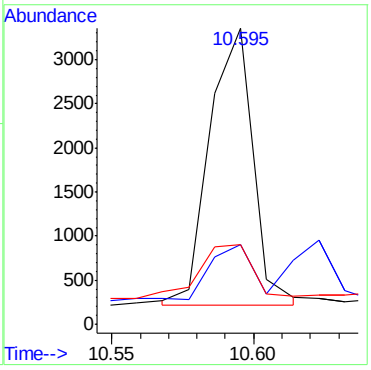


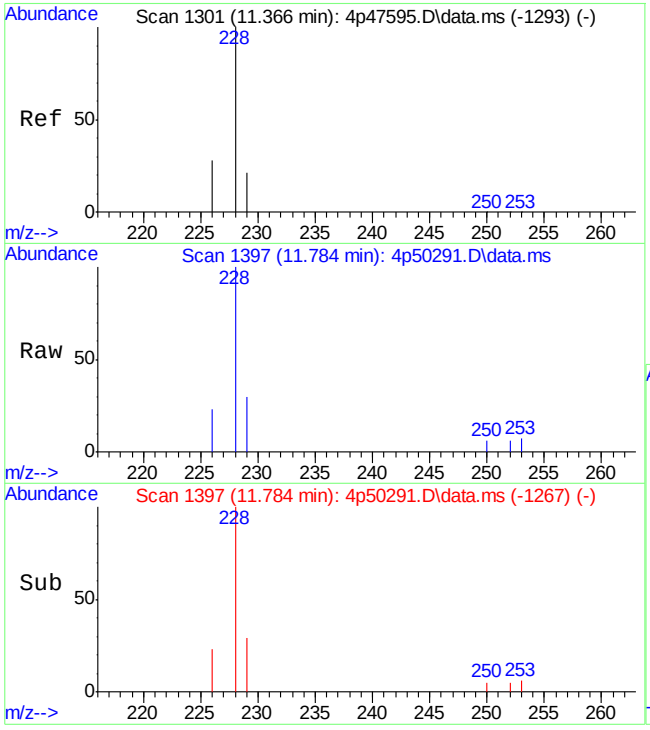


#26
Pyrene
Concen: 53.67 ppm
RT: 10.595 min Scan# 1186
Delta R.T. 0.018 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:202 Resp: 3368

Ion	Ratio	Lower	Upper
202	100		
203	12.8	0.0	47.6
201	18.4	0.0	46.0

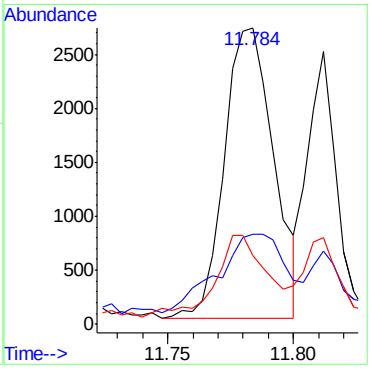


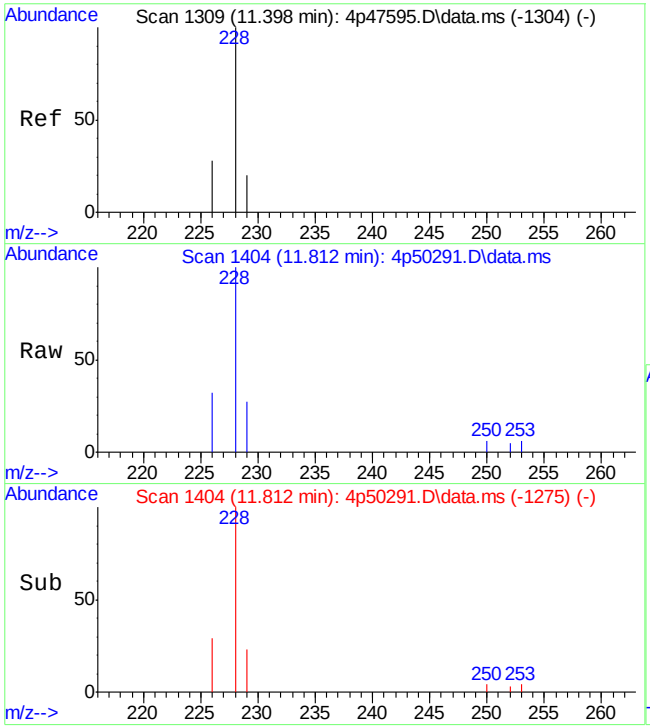


#28
Benzo[a]anthracene
Concen: 65.55 ppm
RT: 11.784 min Scan# 1397
Delta R.T. 0.020 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:228 Resp: 3675

Ion	Ratio	Lower	Upper
228	100		
229	25.1	0.0	49.8
226	16.6	0.0	53.3

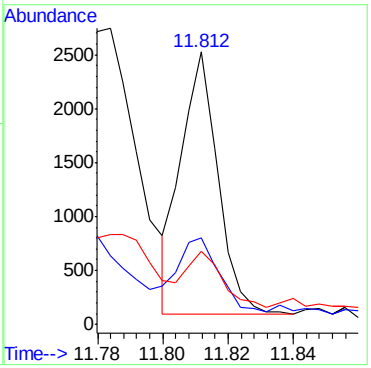


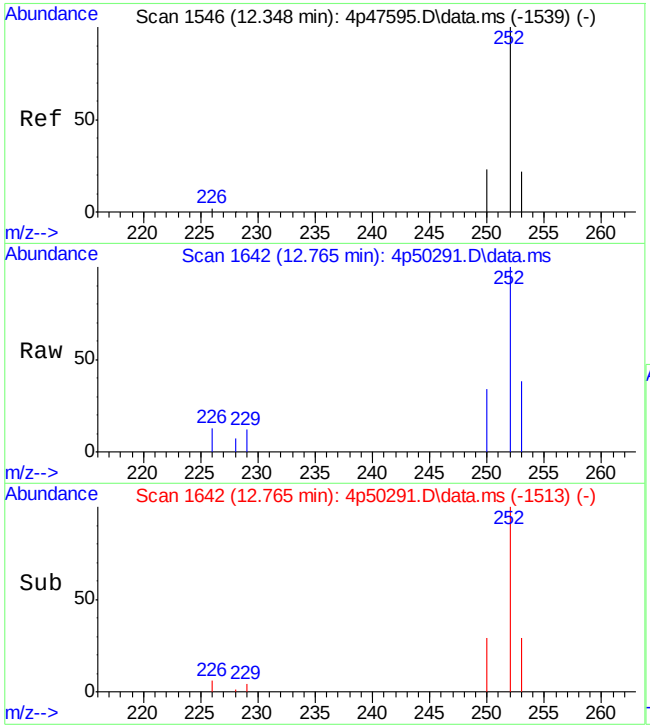


#29
Chrysene
Concen: 34.65 ppm
RT: 11.812 min Scan# 1404
Delta R.T. 0.016 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:228 Resp: 1903

Ion	Ratio	Lower	Upper
228	100		
226	27.1	0.0	58.5
229	17.2	0.0	48.7

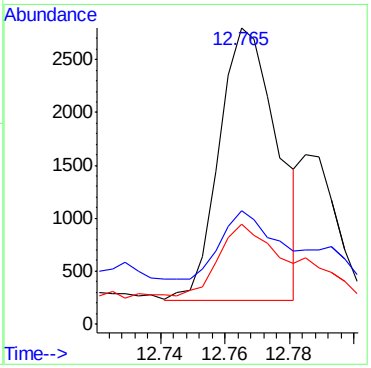


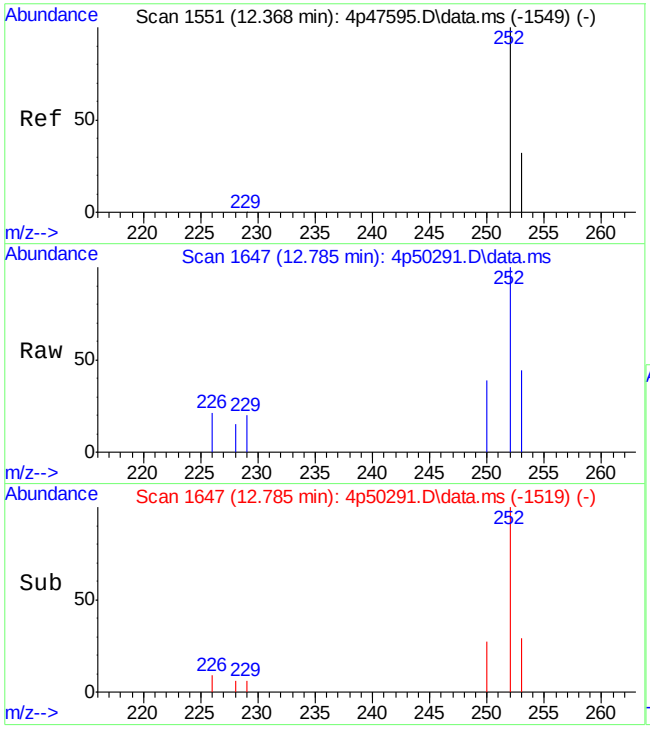


#31
Benzo[b]fluoranthene
Concen: 71.95 ppm m
RT: 12.765 min Scan# 1642
Delta R.T. 0.016 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:252 Resp: 3246

Ion	Ratio	Lower	Upper
252	100		
253	38.4	0.0	51.8
250	33.9	0.0	52.4

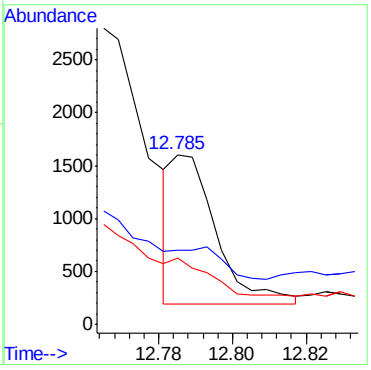


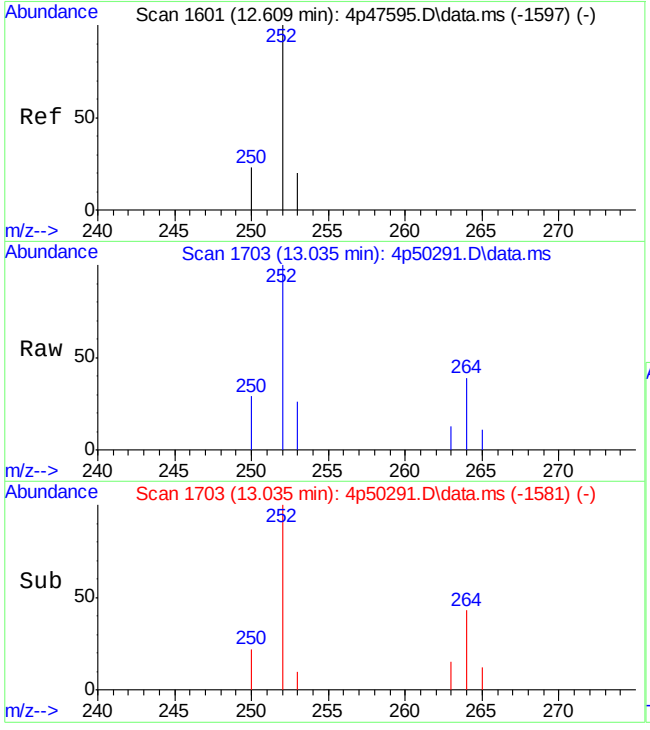


#32
Benzo[k]fluoranthene
Concen: 27.90 ppm m
RT: 12.785 min Scan# 1647
Delta R.T. 0.012 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:252 Resp: 1190

Ion	Ratio	Lower	Upper
252	100		
253	43.7	0.0	51.8
250	38.9	0.0	50.5

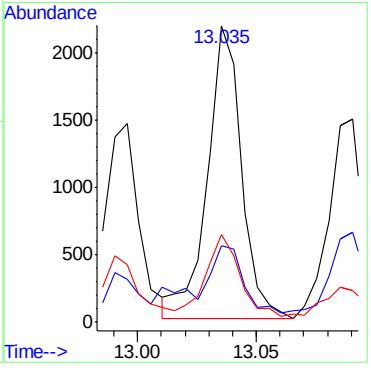


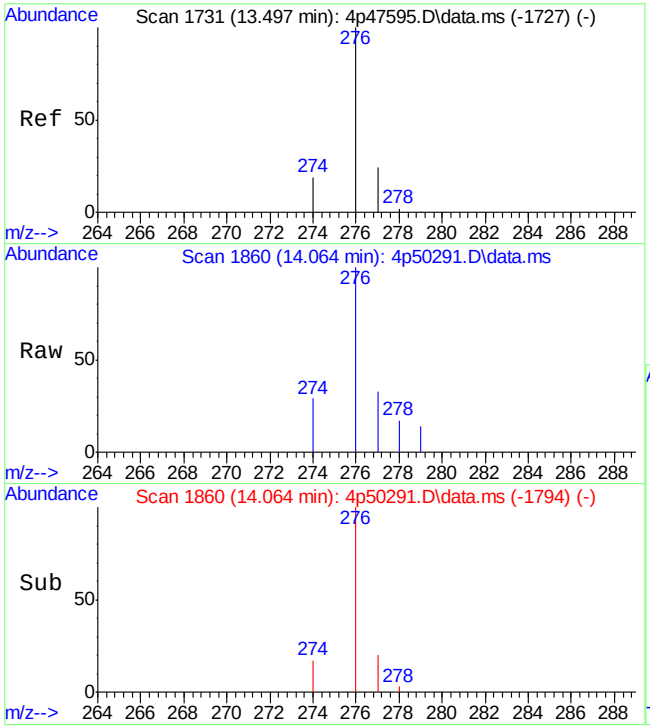


#33
Benzo[a]pyrene
Concen: 55.87 ppm
RT: 13.035 min Scan# 1703
Delta R.T. 0.015 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:252 Resp: 2186

Ion	Ratio	Lower	Upper
252	100		
253	18.9	0.0	52.8
250	26.9	0.0	50.6

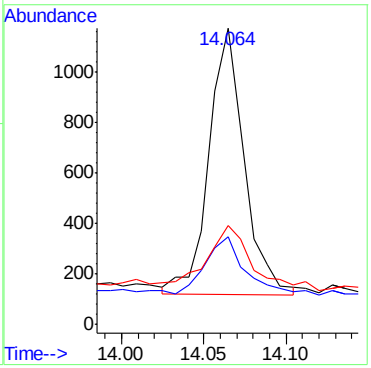


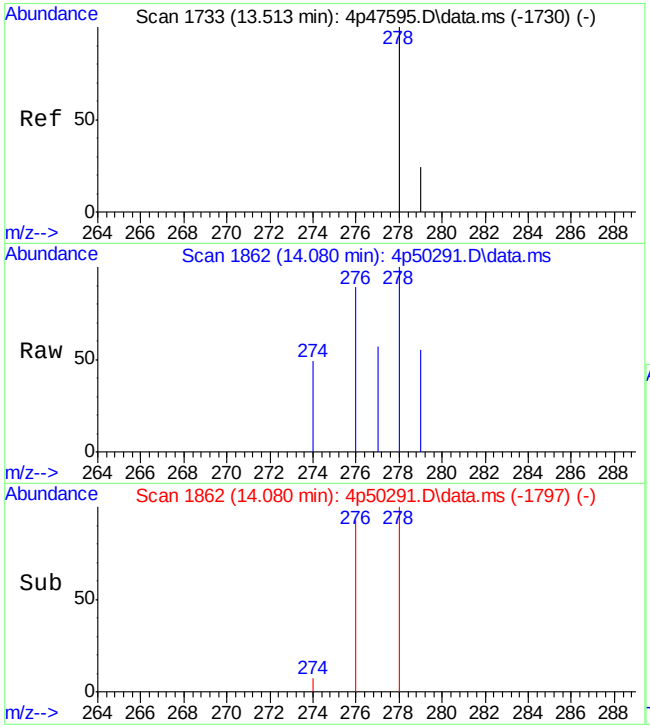


#34
Indeno[1,2,3-cd]pyrene
Concen: 33.66 ppm
RT: 14.064 min Scan# 1860
Delta R.T. 0.024 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:276 Resp: 1569

Ion	Ratio	Lower	Upper
276	100		
274	20.7	0.0	49.3
277	22.3	0.0	53.2

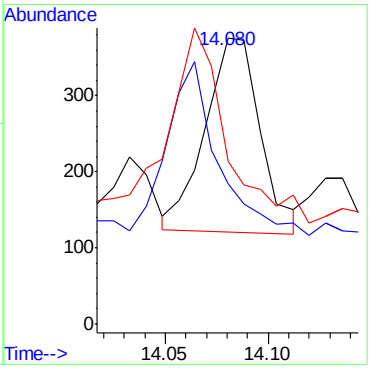


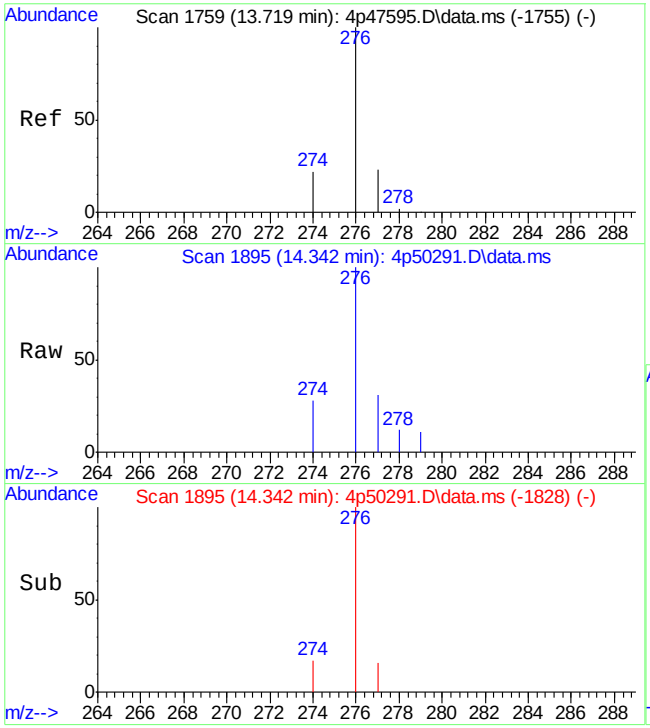


#35
Dibenz[a,h]anthracene
Concen: 13.08 ppm
RT: 14.080 min Scan# 1862
Delta R.T. 0.016 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:278 Resp: 475

Ion	Ratio	Lower	Upper
278	100		
274	4.6	0.0	35.2
277	9.3	0.0	36.7

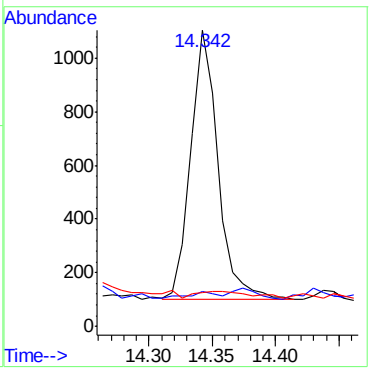




#36
Benzo[g,h,i]perylene
Concen: 38.15 ppm
RT: 14.342 min Scan# 1895
Delta R.T. 0.032 min
Lab File: 4p50291.D
Acq: 28 Dec 2021 1:19 am

Tgt Ion:276 Resp: 1507

Ion	Ratio	Lower	Upper
276	100		
278	2.0	0.0	32.5
279	0.9	0.0	30.4



9.1.17

9

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/29/21 19:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2635\
Data File : 4p50284.D
Acq On : 27 Dec 2021 10:33 pm
Operator : kristis
Sample : jd36624-3
Misc : op37108a,e4p2635,250,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 28 10:10:18 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

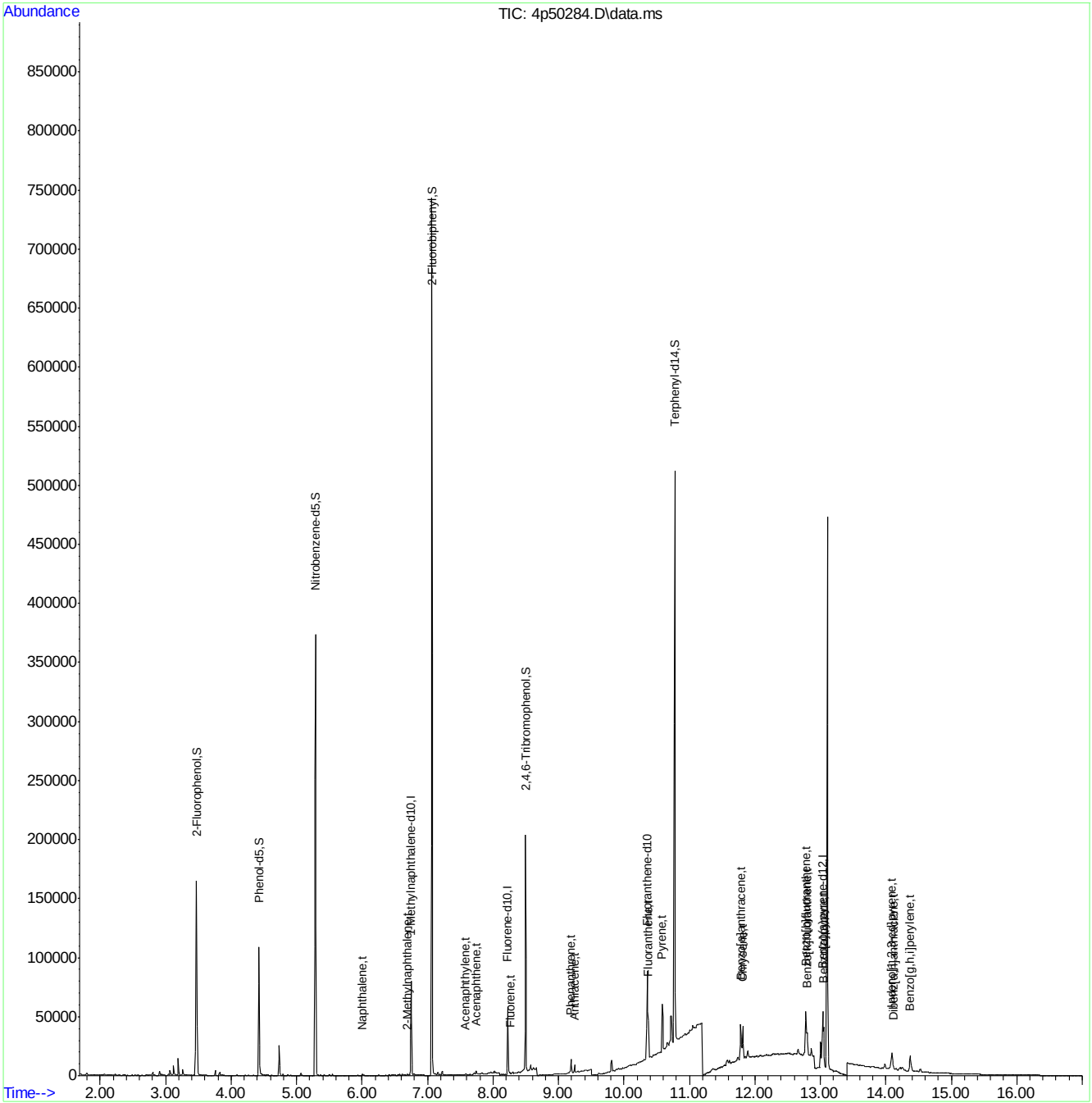
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	6.752	150	21704	800.00 ppm	0.00
13) Fluorene-d10	8.225	176	29013	800.00 ppm	0.00
20) Fluoranthene-d10	10.356	212	47409	800.00 ppm	0.00
30) Benzo(a)pyrene-d12	13.031	264	33605	800.00 ppm	0.03
System Monitoring Compounds					
3) 2-Fluorophenol	3.471	112	69437	5157.37 ppm	0.01
Spiked Amount 50.000			Recovery	= 10314.74%	
4) Phenol-d5	4.427	99	78671	3080.02 ppm	0.02
Spiked Amount 50.000			Recovery	= 6160.04%	
7) Nitrobenzene-d5	5.288	82	229964	11032.66 ppm	0.00
Spiked Amount 50.000			Recovery	= 22065.32%	
14) 2-Fluorobiphenyl	7.068	172	342190	9246.43 ppm	0.00
Spiked Amount 50.000			Recovery	= 18492.86%	
19) 2,4,6-Tribromophenol	8.497	330	70279	12692.43 ppm	0.00
Spiked Amount 50.000			Recovery	= 25384.86%	
27) Terphenyl-d14	10.780	244	308638	9088.92 ppm	0.02
Spiked Amount 50.000			Recovery	= 18177.84%	
Target Compounds					Qvalue
8) Naphthalene	6.006	128	929	14.96 ppm	93
10) 2-Methylnaphthalene	6.692	141	266m	8.20 ppm	
15) Acenaphthylene	7.575	152	307m	5.68 ppm	
16) Acenaphthene	7.742	153	1236m	35.83 ppm	
17) Fluorene	8.259	166	944m	22.68 ppm	
23) Phenanthrene	9.191	178	9841m	154.11 ppm	
24) Anthracene	9.246	178	3941m	64.35 ppm	
25) Fluoranthene	10.375	202	27417	412.35 ppm	97
26) Pyrene	10.586	202	27661	378.07 ppm	89
28) Benzo[a]anthracene	11.784	228	20302m	310.59 ppm	
29) Chrysene	11.816	228	17351m	270.96 ppm	
31) Benzo[b]fluoranthene	12.777	252	31130m	456.18 ppm	
32) Benzo[k]fluoranthene	12.801	252	10963m	158.09 ppm	
33) Benzo[a]pyrene	13.051	252	21989	345.71 ppm	93
34) Indeno[1,2,3-cd]pyrene	14.088	276	15960	210.60 ppm	96
35) Dibenz[a,h]anthracene	14.112	278	3218	54.52 ppm	82
36) Benzo[g,h,i]perylene	14.374	276	13561	211.15 ppm	99

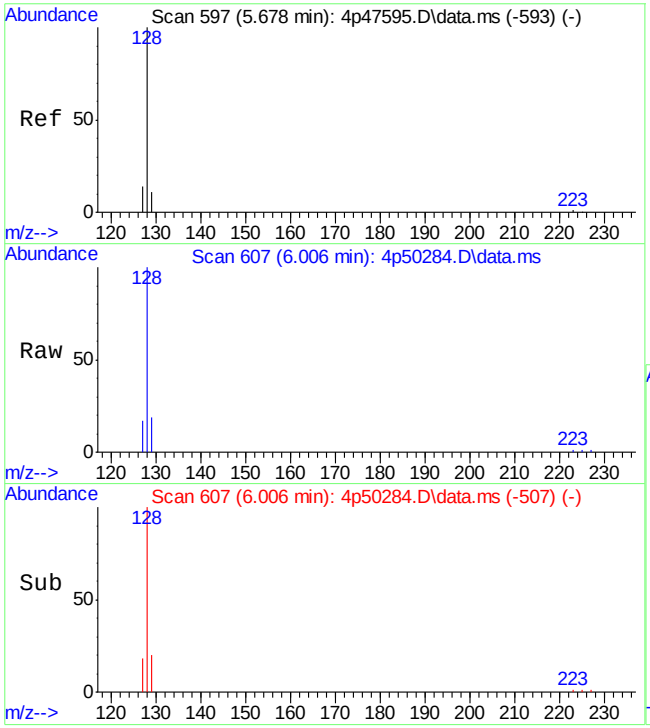
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2635\
Data File : 4p50284.D
Acq On : 27 Dec 2021 10:33 pm
Operator : kristis
Sample : jd36624-3
Misc : op37108a,e4p2635,250,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 28 10:10:18 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

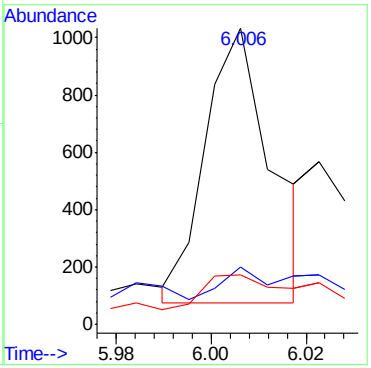


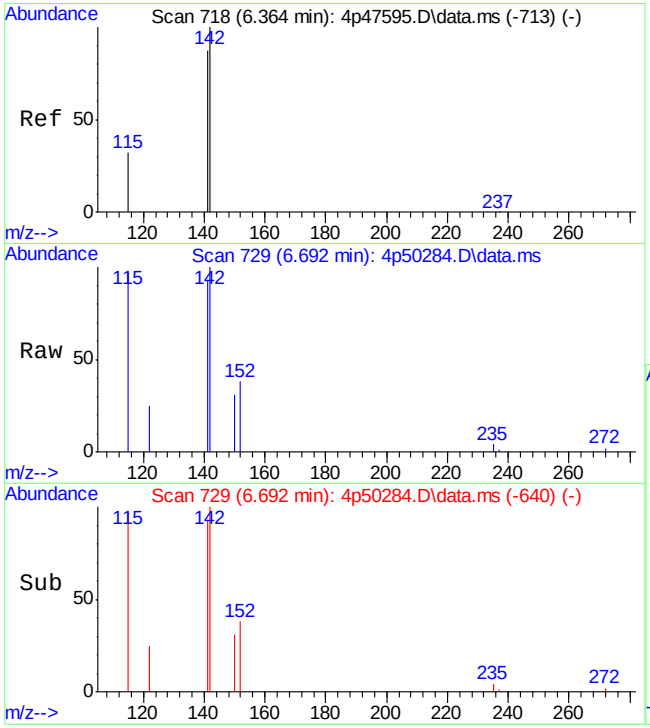


#8
Naphthalene
Concen: 14.96 ppm
RT: 6.006 min Scan# 607
Delta R.T. 0.006 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:128 Resp: 929

Ion	Ratio	Lower	Upper
128	100		
129	6.4	0.0	41.1
127	11.5	0.0	42.0

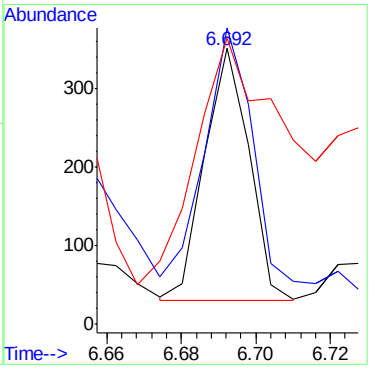


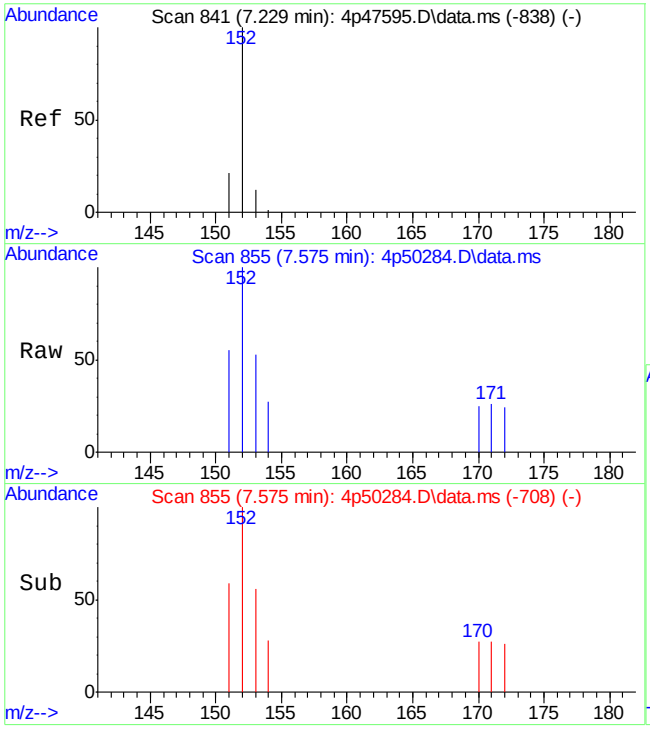


#10
2-Methylnaphthalene
Concen: 8.20 ppm m
RT: 6.692 min Scan# 729
Delta R.T. 0.006 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:141 Resp: 266

Ion	Ratio	Lower	Upper
141	100		
142	107.4	96.1	156.1
115	103.7	7.9	67.9#

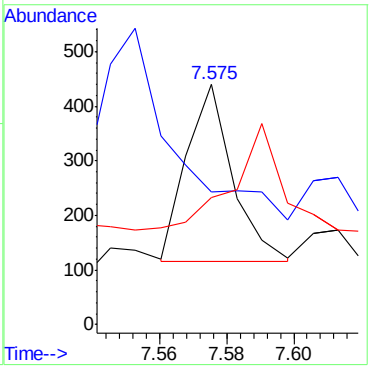


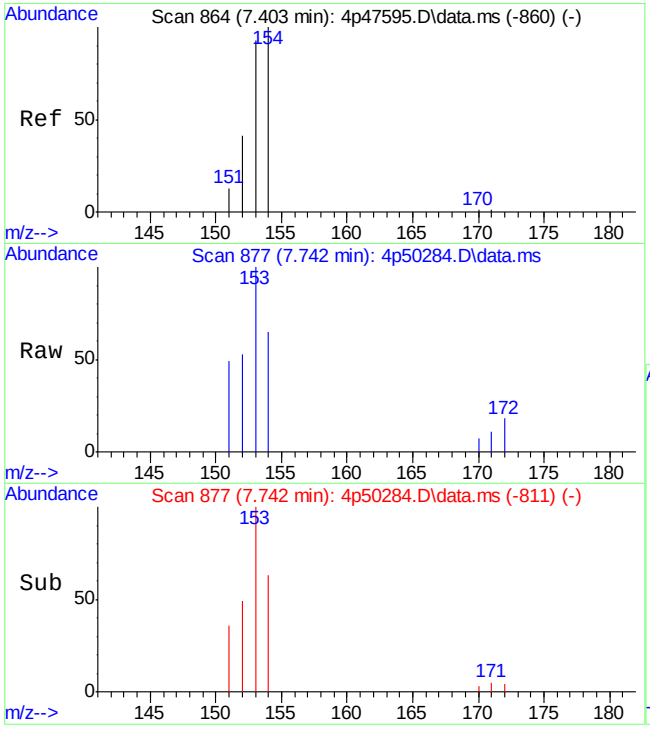


#15
Acenaphthylene
Concen: 5.68 ppm m
RT: 7.575 min Scan# 855
Delta R.T. 0.008 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:152 Resp: 307

Ion	Ratio	Lower	Upper
152	100		
151	55.1	0.0	50.8#
153	52.8	0.0	42.2#

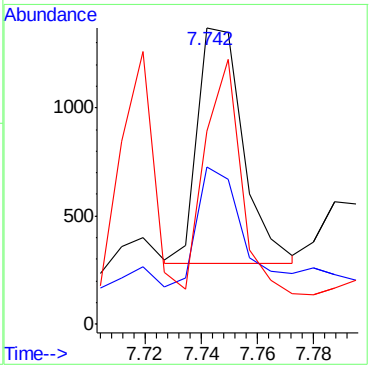


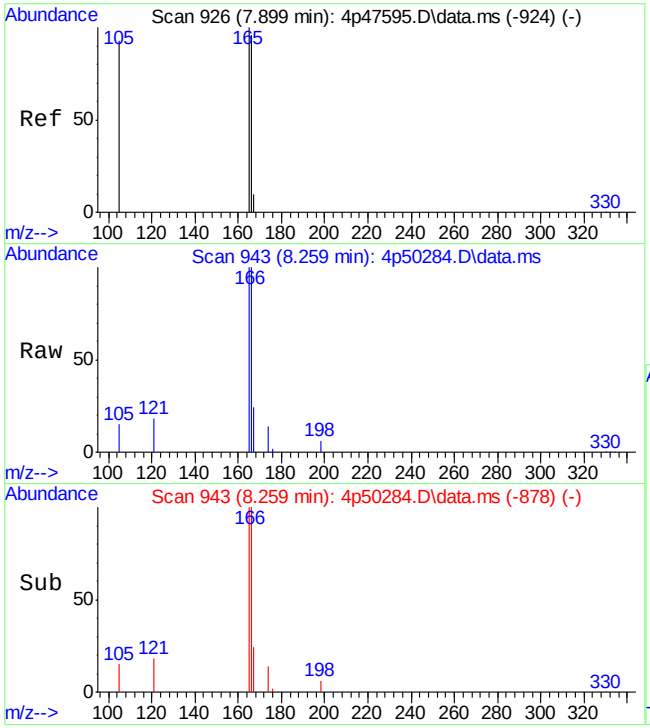


#16
Acenaphthene
Concen: 35.83 ppm m
RT: 7.742 min Scan# 877
Delta R.T. 0.000 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:153 Resp: 1236

Ion	Ratio	Lower	Upper
153	100		
152	53.0	18.5	78.5
154	65.3	59.1	119.1

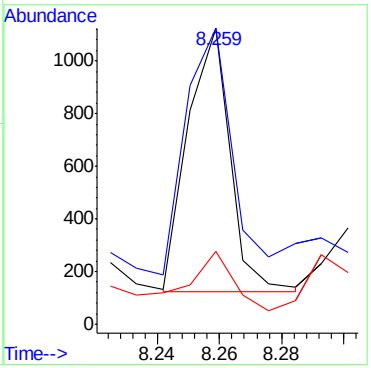


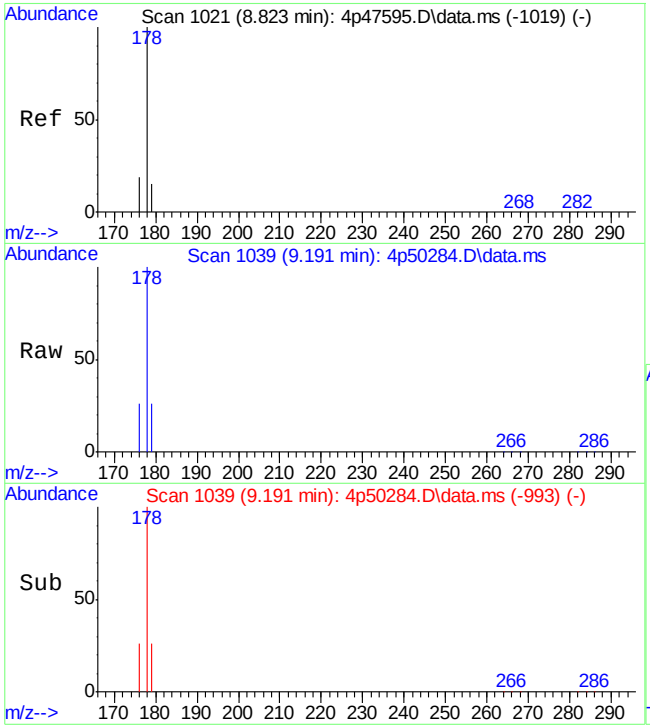


#17
Fluorene
Concen: 22.68 ppm m
RT: 8.259 min Scan# 943
Delta R.T. 0.009 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:166 Resp: 944

Ion	Ratio	Lower	Upper
166	100		
165	99.9	66.9	126.9
167	24.5	0.0	41.7

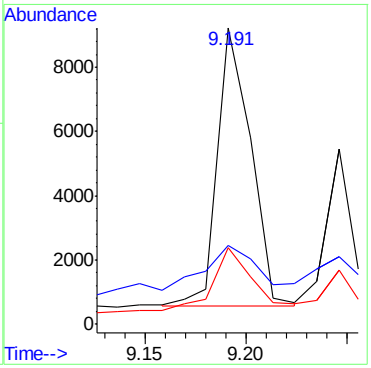


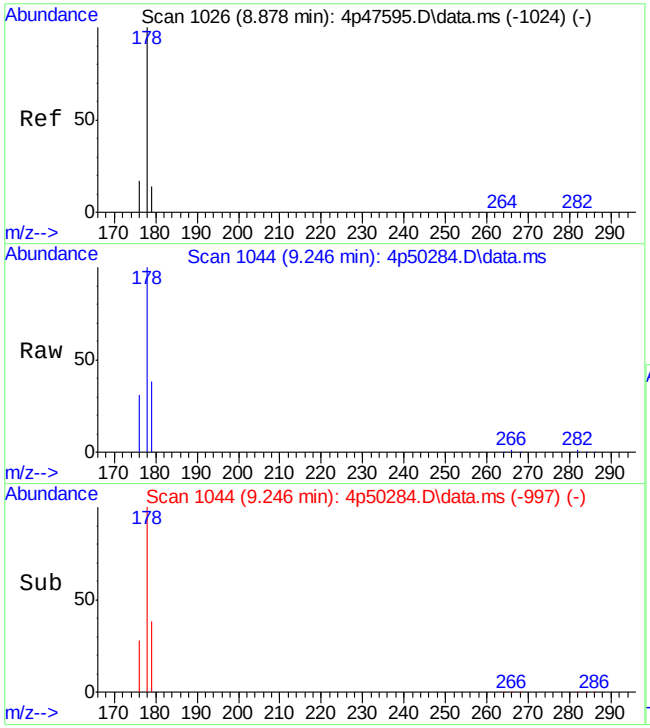


#23
Phenanthrene
Concen: 154.11 ppm m
RT: 9.191 min Scan# 1039
Delta R.T. 0.000 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:178 Resp: 9841

Ion	Ratio	Lower	Upper
178	100		
179	26.4	0.0	46.0
176	25.7	0.0	45.6

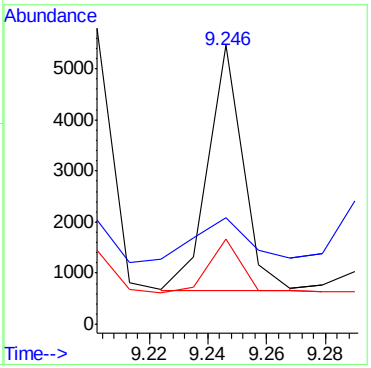


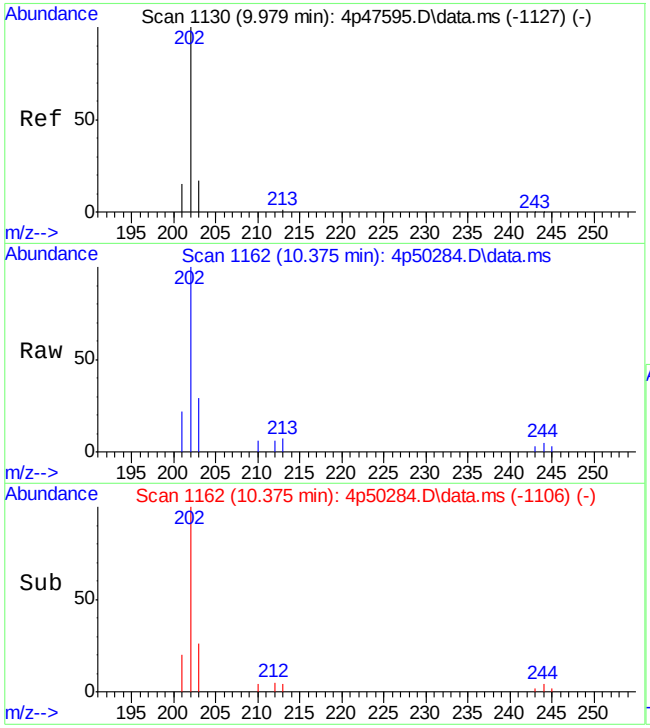


#24
Anthracene
Concen: 64.35 ppm m
RT: 9.246 min Scan# 1044
Delta R.T. 0.011 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:178 Resp: 3941

Ion	Ratio	Lower	Upper
178	100		
179	38.1	0.0	43.0
176	30.7	0.0	48.4

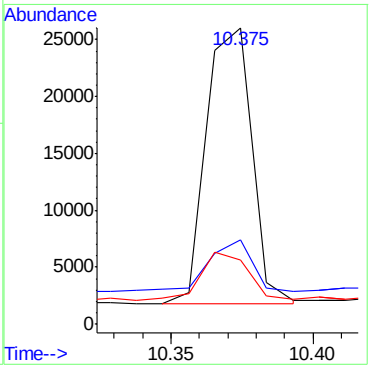


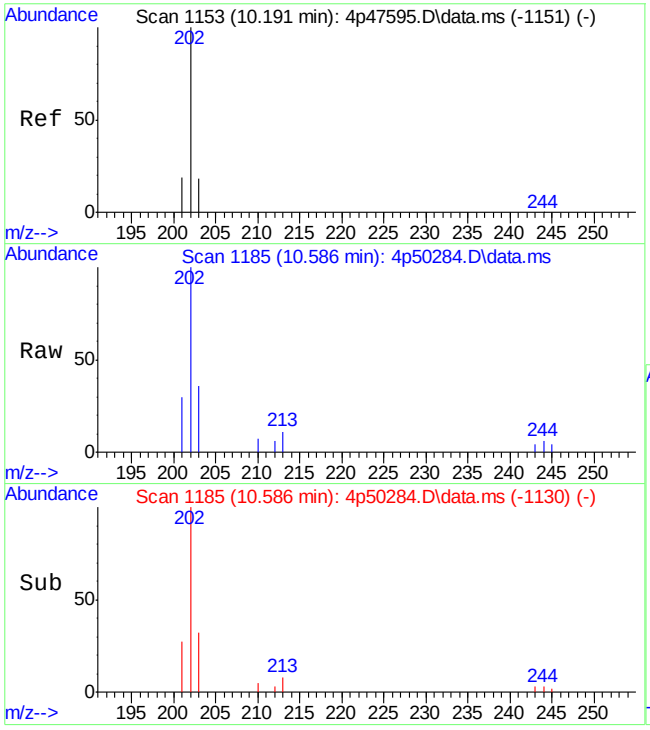


#25
Fluoranthene
Concen: 412.35 ppm
RT: 10.375 min Scan# 1162
Delta R.T. 0.018 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:202 Resp: 27417

Ion	Ratio	Lower	Upper
202	100		
203	18.6	0.0	47.6
201	14.1	0.0	42.9

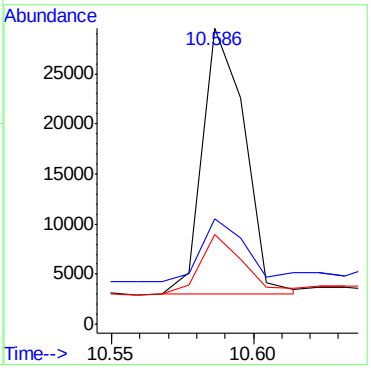


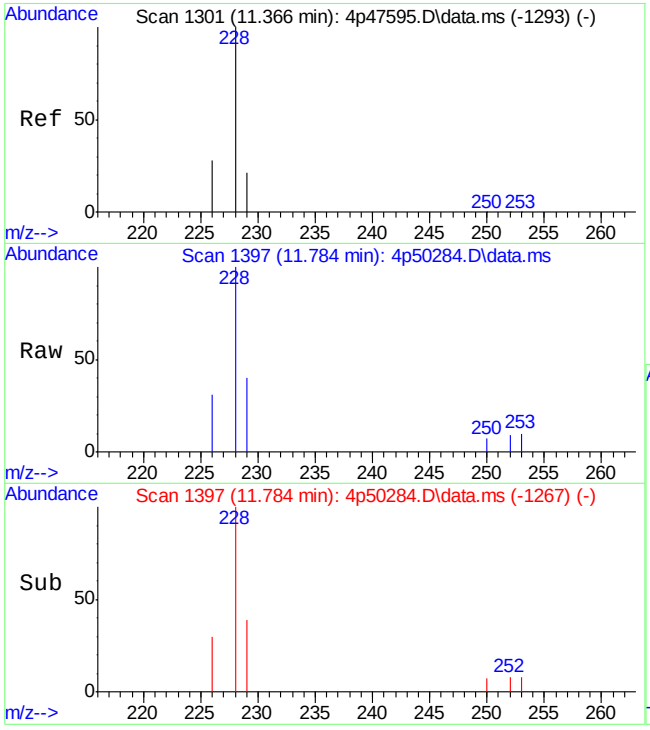


#26
Pyrene
Concen: 378.07 ppm
RT: 10.586 min Scan# 1185
Delta R.T. 0.009 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:202 Resp: 27661

Ion	Ratio	Lower	Upper
202	100		
203	22.1	0.0	47.6
201	21.5	0.0	46.0

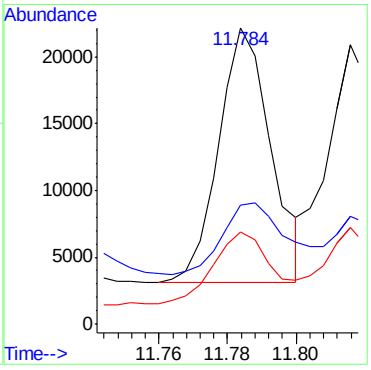


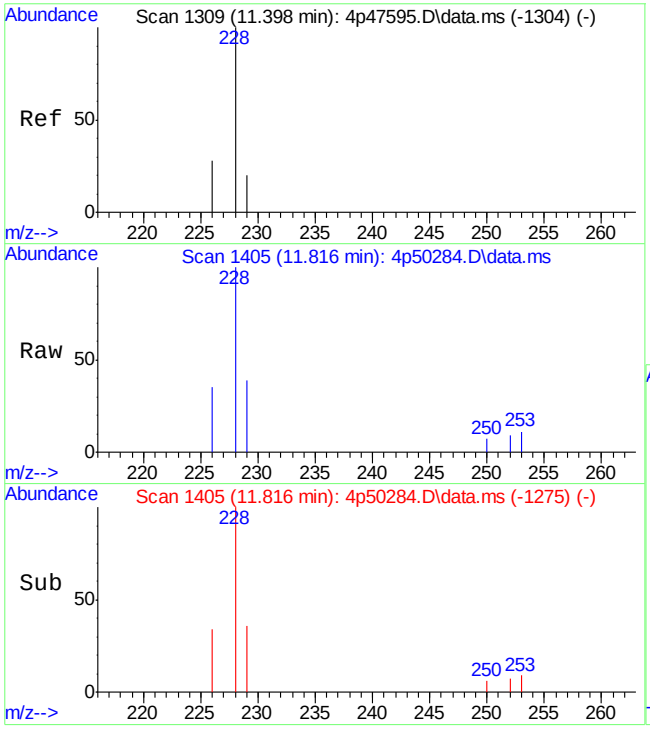


#28
Benzo[a]anthracene
Concen: 310.59 ppm m
RT: 11.784 min Scan# 1397
Delta R.T. 0.020 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:228 Resp: 20302

Ion	Ratio	Lower	Upper
228	100		
229	40.3	0.0	49.8
226	30.9	0.0	53.3

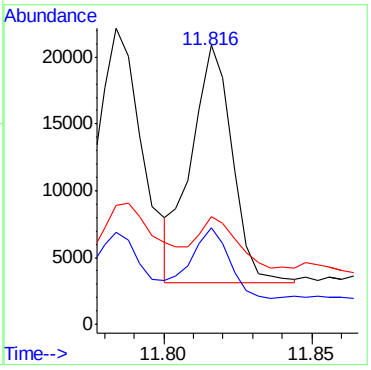


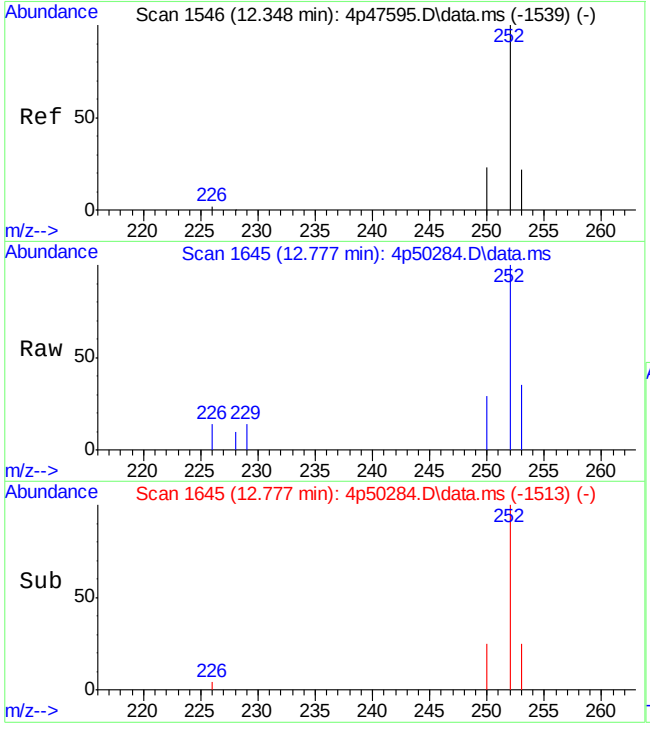


#29
Chrysene
Concen: 270.96 ppm m
RT: 11.816 min Scan# 1405
Delta R.T. 0.020 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:228 Resp: 17351

Ion	Ratio	Lower	Upper
228	100		
226	34.7	0.0	58.5
229	38.5	0.0	48.7

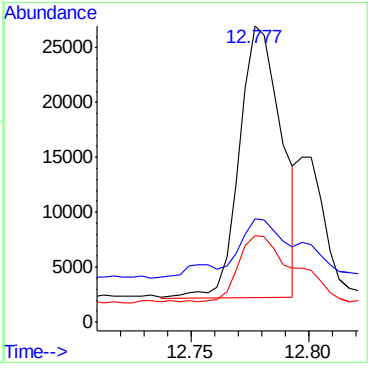


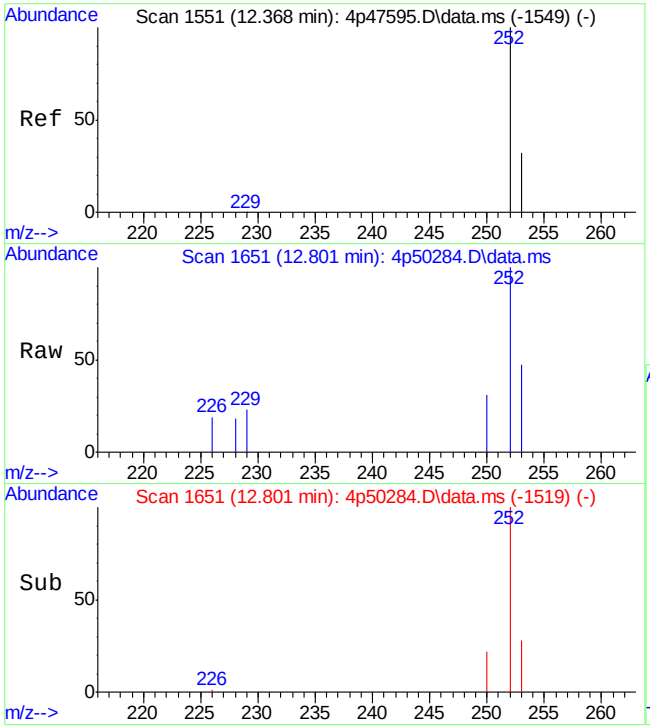


#31
Benzo[b]fluoranthene
Concen: 456.18 ppm m
RT: 12.777 min Scan# 1645
Delta R.T. 0.028 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:252 Resp: 31130

Ion	Ratio	Lower	Upper
252	100		
253	35.1	0.0	51.8
250	29.3	0.0	52.4

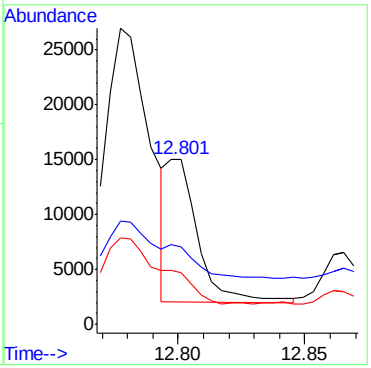


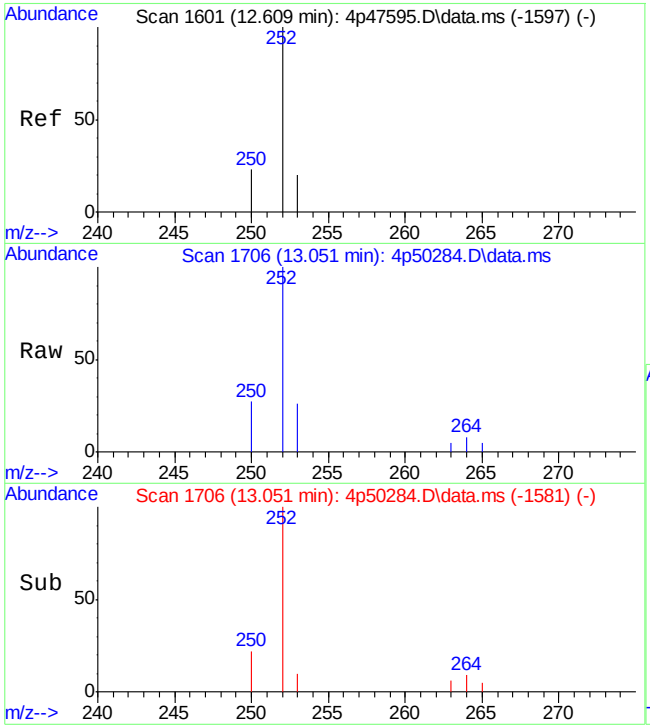


#32
Benzo[k]fluoranthene
Concen: 158.09 ppm m
RT: 12.801 min Scan# 1651
Delta R.T. 0.028 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:252 Resp: 10963

Ion	Ratio	Lower	Upper
252	100		
253	46.8	0.0	51.8
250	31.4	0.0	50.5

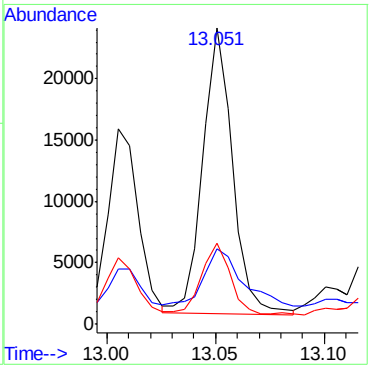


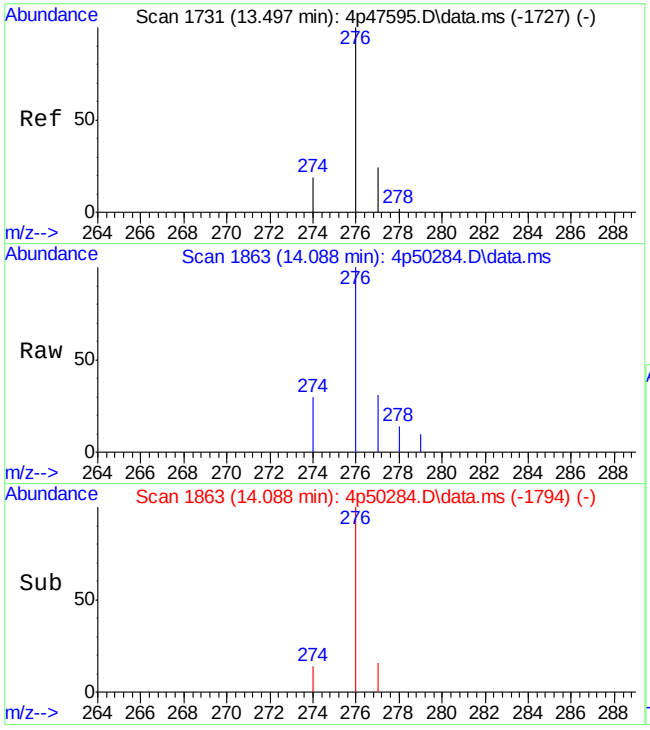


#33
Benzo[a]pyrene
Concen: 345.71 ppm
RT: 13.051 min Scan# 1706
Delta R.T. 0.030 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:252 Resp: 21989

Ion	Ratio	Lower	Upper
252	100		
253	20.3	0.0	52.8
250	24.9	0.0	50.6

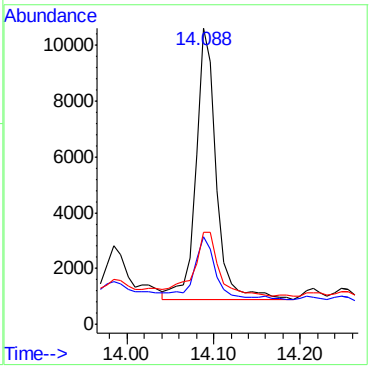


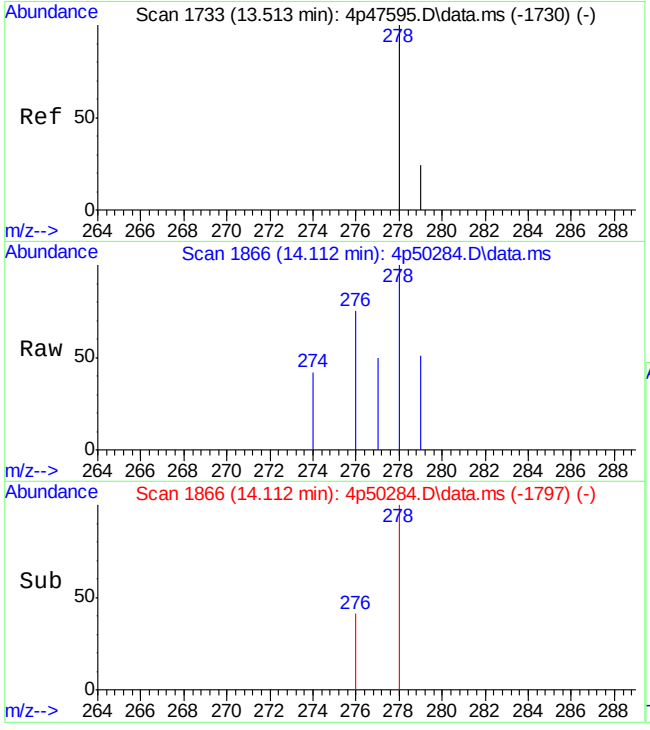


#34
Indeno[1,2,3-cd]pyrene
Concen: 210.60 ppm
RT: 14.088 min Scan# 1863
Delta R.T. 0.048 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:276 Resp: 15960

Ion	Ratio	Lower	Upper
276	100		
274	22.3	0.0	49.3
277	22.7	0.0	53.2

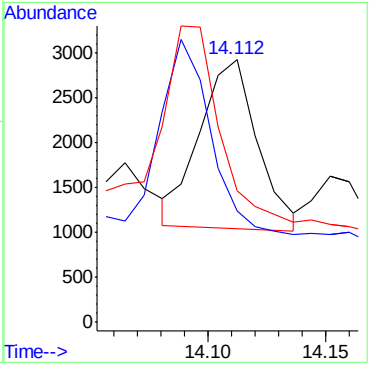


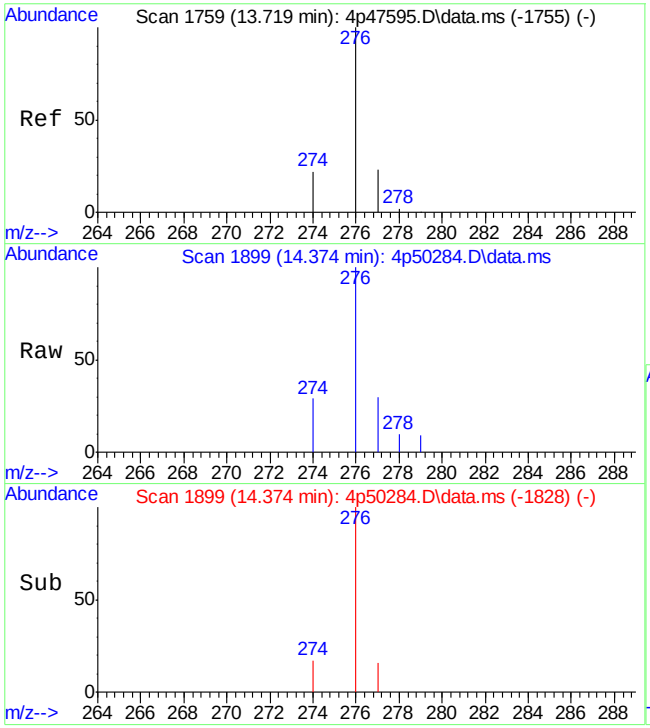


#35
Dibenz[a,h]anthracene
Concen: 54.52 ppm
RT: 14.112 min Scan# 1866
Delta R.T. 0.048 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:278 Resp: 3218

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	0.0	0.0	36.7

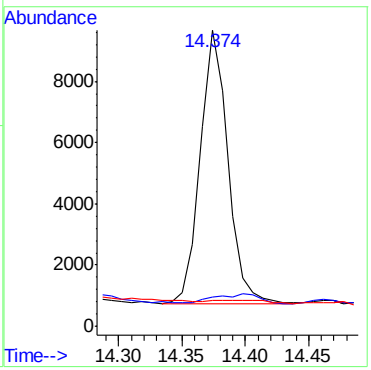




#36
Benzo[g,h,i]perylene
Concen: 211.15 ppm
RT: 14.374 min Scan# 1899
Delta R.T. 0.064 min
Lab File: 4p50284.D
Acq: 27 Dec 2021 10:33 pm

Tgt Ion:276 Resp: 13561

Ion	Ratio	Lower	Upper
276	100		
278	2.0	0.0	32.5
279	0.5	0.0	30.4



9.1.18

6

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/05/22 08:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2640\
Data File : 4p50435.D
Acq On : 4 Jan 2022 5:01 pm
Operator : kristis
Sample : jd36624-4
Misc : op37108a,e4p2640,245,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 04 18:49:53 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 31 08:56:57 2021
Response via : Initial Calibration

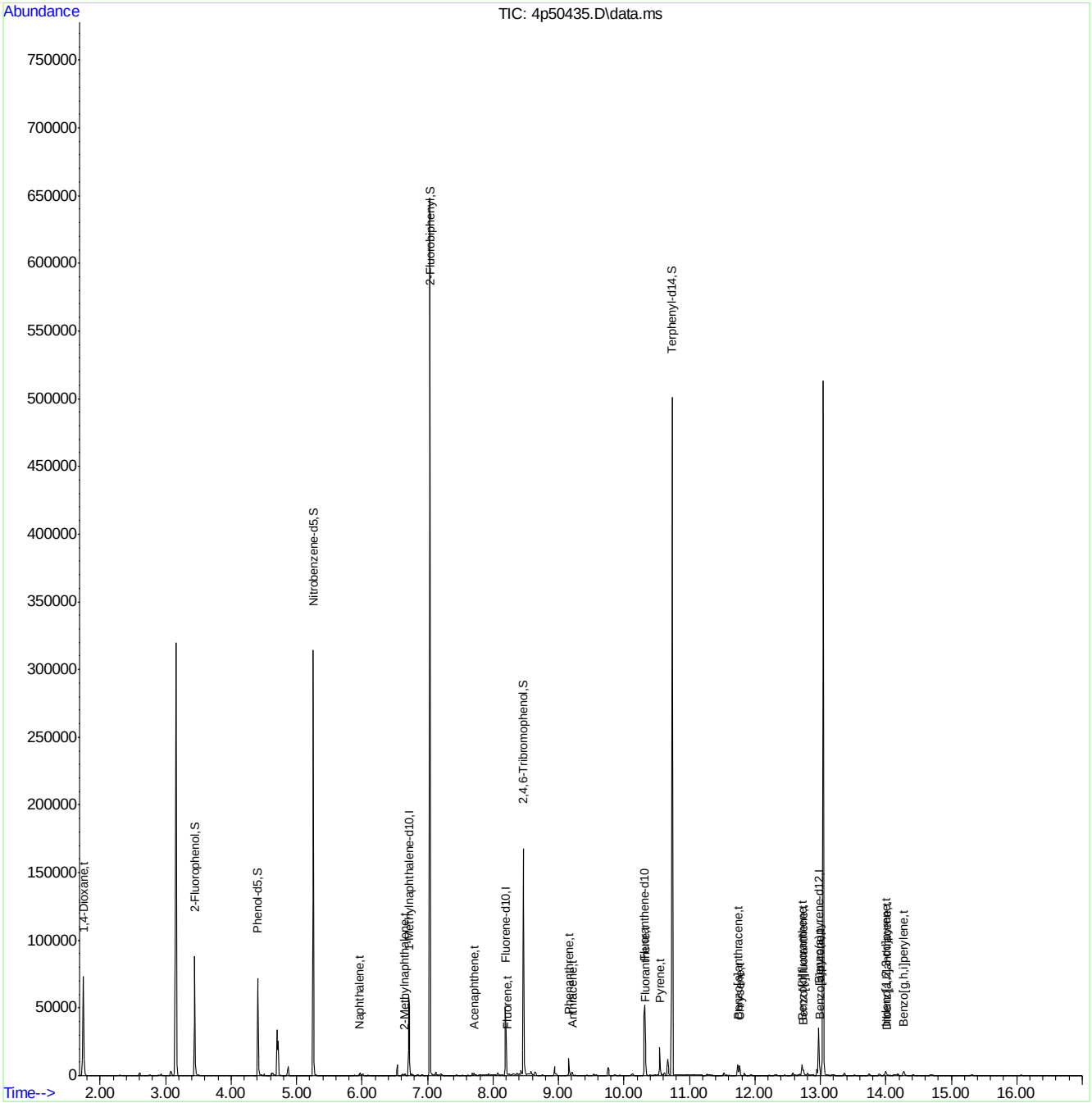
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.716	150	16815	800.00	ppm	-0.04
13) Fluorene-d10	8.191	176	24532	800.00	ppm	-0.03
20) Fluoranthene-d10	10.319	212	43392	800.00	ppm	-0.03
30) Benzo(a)pyrene-d12	12.975	264	22031	800.00	ppm	-0.03
System Monitoring Compounds						
3) 2-Fluorophenol	3.448	112	39239	3761.82	ppm	-0.01
Spiked Amount 50.000			Recovery = 7523.64%			
4) Phenol-d5	4.408	99	54840	2771.27	ppm	0.00
Spiked Amount 50.000			Recovery = 5542.54%			
7) Nitrobenzene-d5	5.257	82	189427	11730.19	ppm	-0.02
Spiked Amount 50.000			Recovery = 23460.38%			
14) 2-Fluorobiphenyl	7.038	172	308895	9871.37	ppm	-0.03
Spiked Amount 50.000			Recovery = 19742.74%			
19) 2,4,6-Tribromophenol	8.463	330	68221	14571.25	ppm	-0.03
Spiked Amount 50.000			Recovery = 29142.50%			
27) Terphenyl-d14	10.734	244	347045	11166.05	ppm	-0.03
Spiked Amount 50.000			Recovery = 22332.10%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.745	88	42515	10824.07	ppm	72
8) Naphthalene	5.968	128	1229	25.54	ppm	87
10) 2-Methylnaphthalene	6.656	141	354m	14.08	ppm	
16) Acenaphthene	7.712	153	541	18.55	ppm	99
17) Fluorene	8.225	166	522	14.83	ppm	95
23) Phenanthrene	9.158	178	8170	139.79	ppm	88
24) Anthracene	9.213	178	1505	26.85	ppm	96
25) Fluoranthene	10.328	202	12306	202.22	ppm	94
26) Pyrene	10.549	202	11974	178.81	ppm	95
28) Benzo[a]anthracene	11.740	228	7222	120.71	ppm	96
29) Chrysene	11.768	228	4244	72.41	ppm	96
31) Benzo[b]fluoranthene	12.721	252	6273	141.26	ppm	97
32) Benzo[k]fluoranthene	12.741	252	1942	42.72	ppm	94
33) Benzo[a]pyrene	12.990	252	4390	105.28	ppm	91
34) Indeno[1,2,3-cd]pyrene	14.001	276	3204	64.49	ppm	97
35) Dibenz[a,h]anthracene	14.017	278	756	19.54	ppm	82
36) Benzo[g,h,i]perylene	14.271	276	2979	70.75	ppm	98

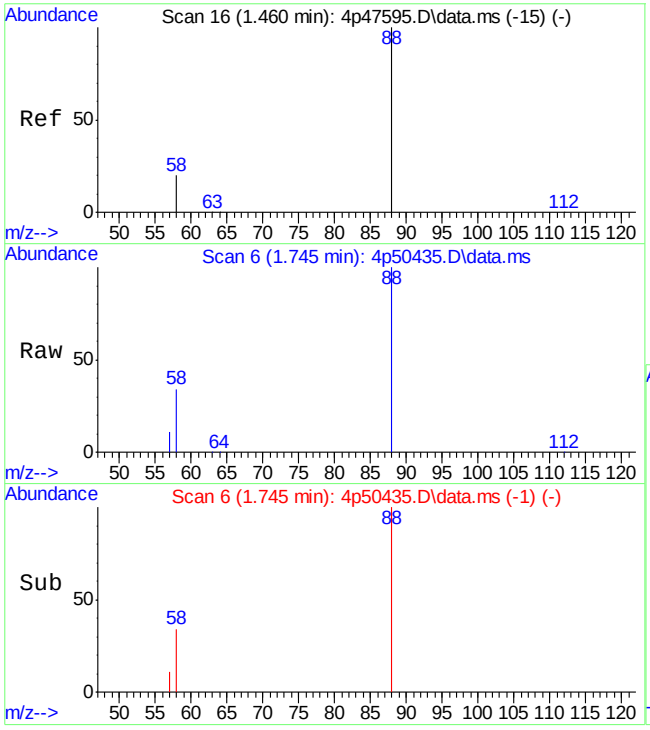
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2640\
Data File : 4p50435.D
Acq On : 4 Jan 2022 5:01 pm
Operator : kristis
Sample : jd36624-4
Misc : op37108a,e4p2640,245,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 04 18:49:53 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Dec 31 08:56:57 2021
Response via : Initial Calibration

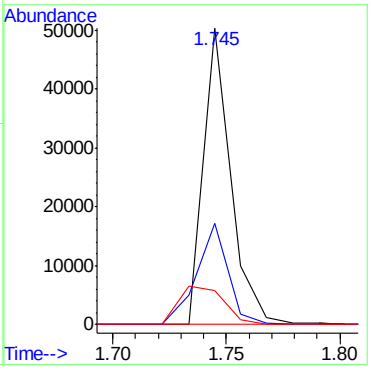


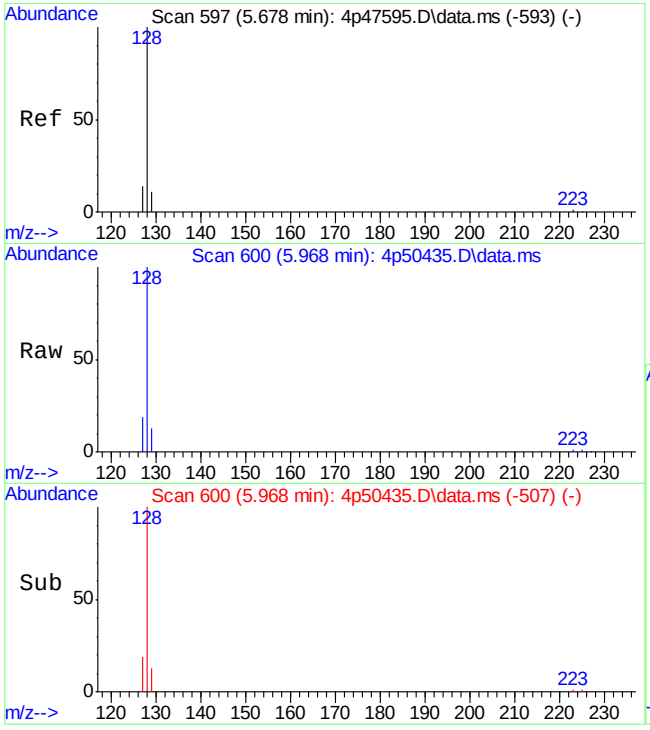


#2
1,4-Dioxane
Concen: 10824.07 ppm
RT: 1.745 min Scan# 6
Delta R.T. -0.046 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion: 88 Resp: 42515

Ion	Ratio	Lower	Upper
88	100		
58	34.0	0.1	40.1
57	11.3	0.0	24.7

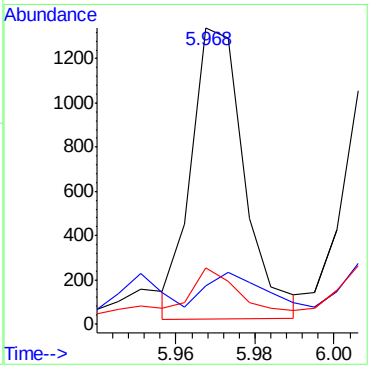


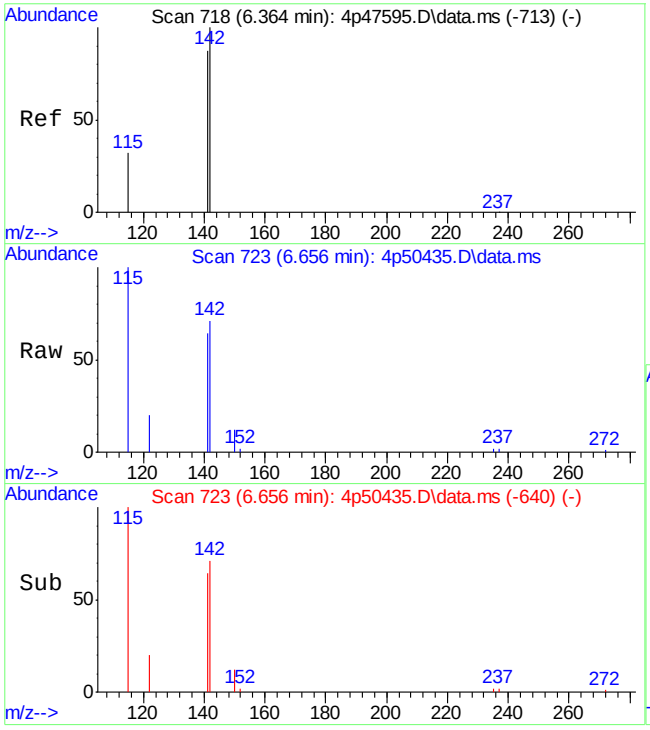


#8
Naphthalene
Concen: 25.54 ppm
RT: 5.968 min Scan# 600
Delta R.T. -0.033 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:128 Resp: 1229

Ion	Ratio	Lower	Upper
128	100		
129	4.6	0.0	41.1
127	15.6	0.0	42.0

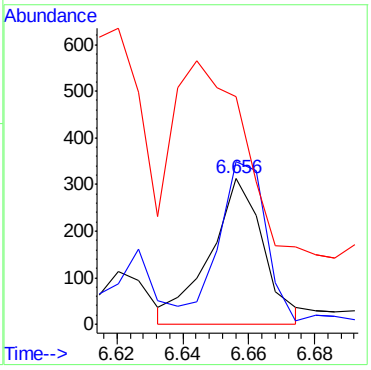


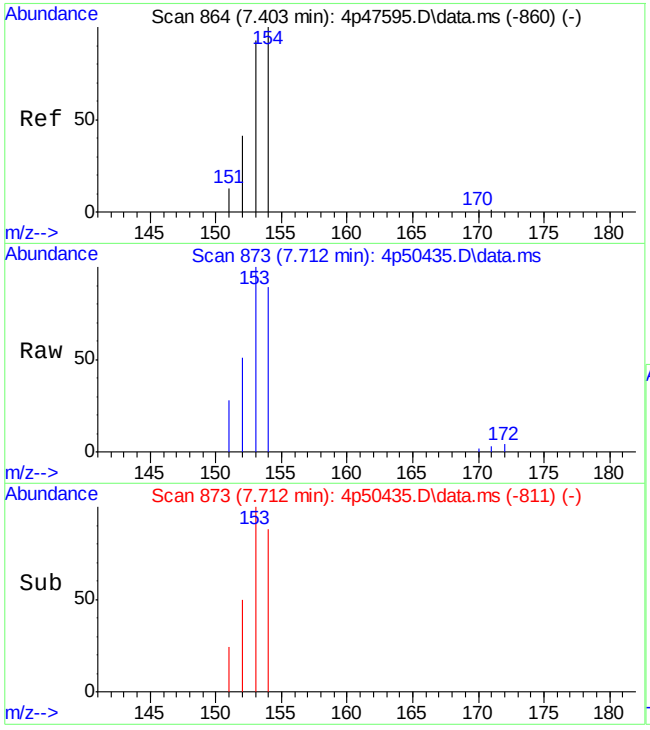


#10
2-Methylnaphthalene
Concen: 14.08 ppm m
RT: 6.656 min Scan# 723
Delta R.T. -0.030 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:141 Resp: 354

Ion	Ratio	Lower	Upper
141	100		
142	111.1	96.1	156.1
115	155.7	7.9	67.9#

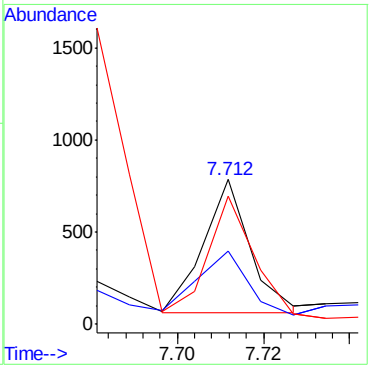


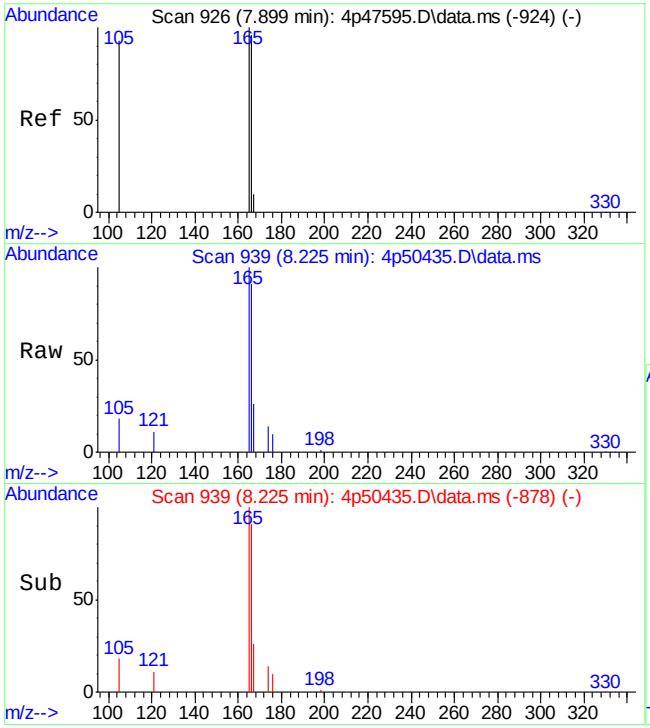


#16
Acenaphthene
Concen: 18.55 ppm
RT: 7.712 min Scan# 873
Delta R.T. -0.030 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:153 Resp: 541

Ion	Ratio	Lower	Upper
153	100		
152	47.8	18.5	78.5
154	90.4	59.1	119.1

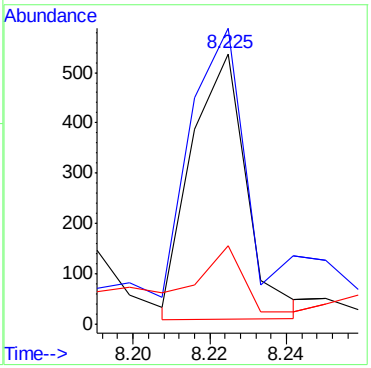


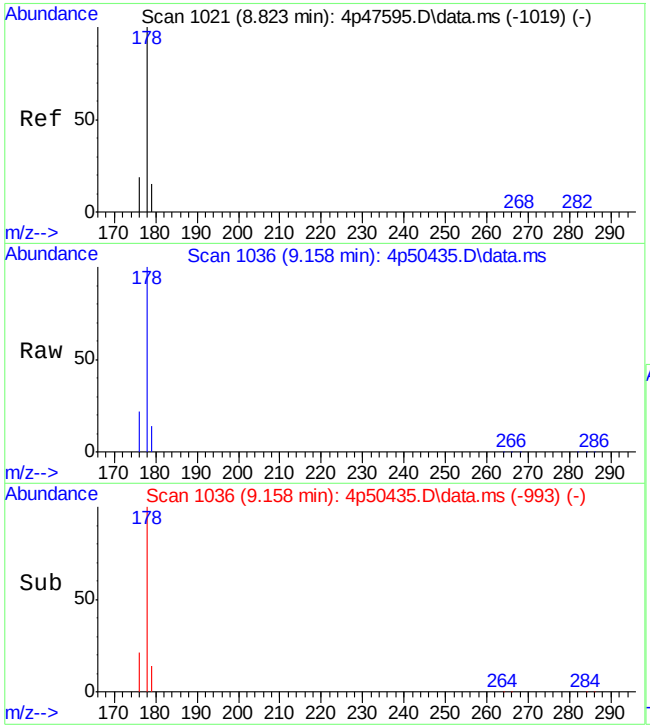


#17
Fluorene
Concen: 14.83 ppm
RT: 8.225 min Scan# 939
Delta R.T. -0.026 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:166 Resp: 522

Ion	Ratio	Lower	Upper
166	100		
165	99.4	66.9	126.9
167	22.4	0.0	41.7

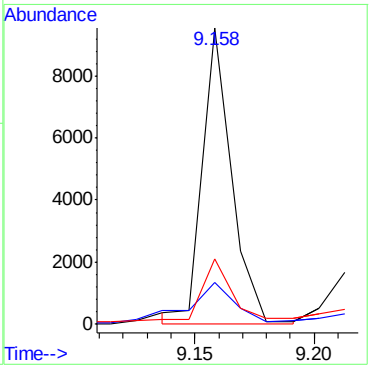


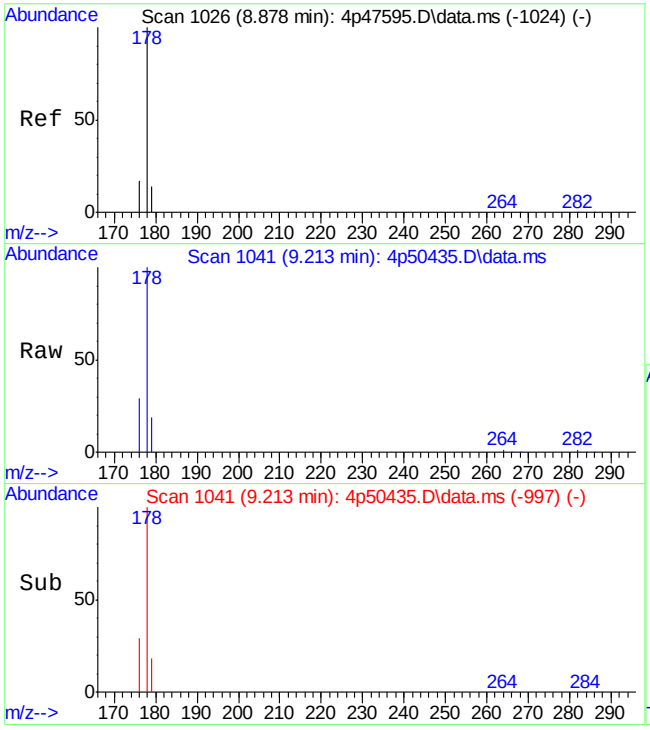


#23
Phenanthrene
Concen: 139.79 ppm
RT: 9.158 min Scan# 1036
Delta R.T. -0.033 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:178 Resp: 8170

Ion	Ratio	Lower	Upper
178	100		
179	11.5	0.0	46.0
176	21.0	0.0	45.6

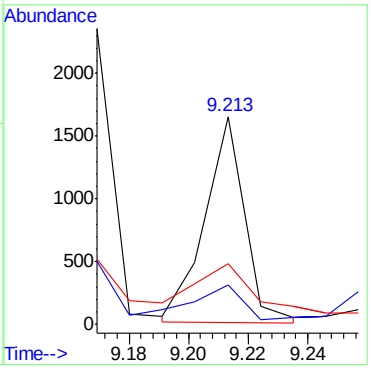


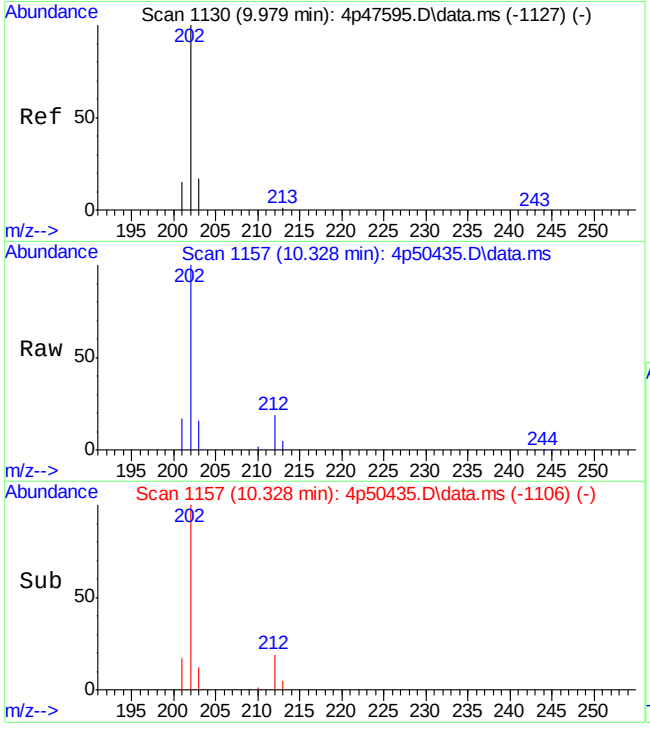


#24
Anthracene
Concen: 26.85 ppm
RT: 9.213 min Scan# 1041
Delta R.T. -0.022 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:178 Resp: 1505

Ion	Ratio	Lower	Upper
178	100		
179	14.5	0.0	43.0
176	20.2	0.0	48.4

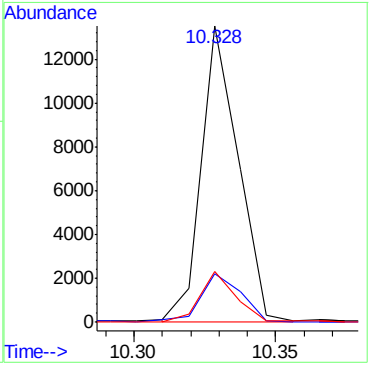


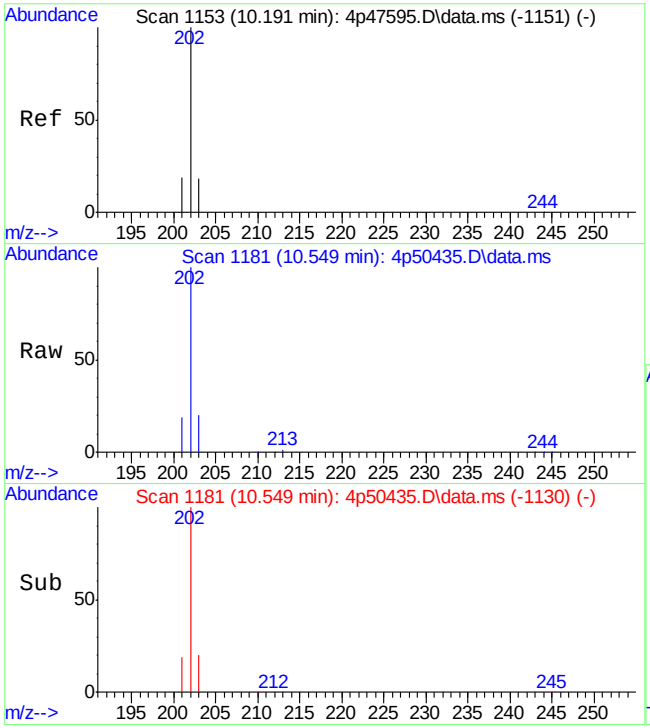


#25
Fluoranthene
Concen: 202.22 ppm
RT: 10.328 min Scan# 1157
Delta R.T. -0.028 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:202 Resp: 12306

Ion	Ratio	Lower	Upper
202	100		
203	16.1	0.0	47.6
201	17.0	0.0	42.9

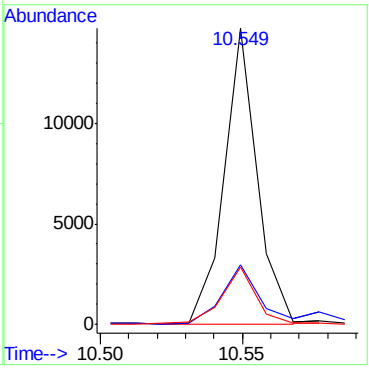


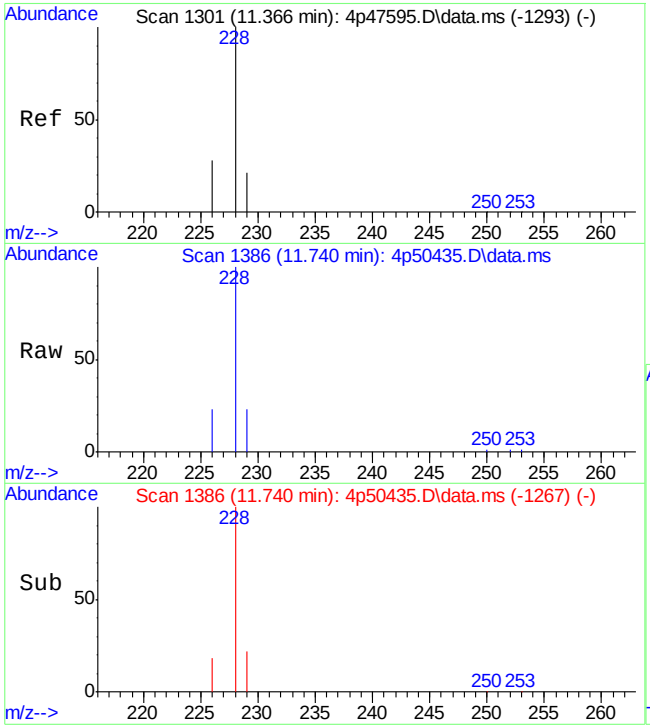


#26
Pyrene
Concen: 178.81 ppm
RT: 10.549 min Scan# 1181
Delta R.T. -0.028 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:202 Resp: 11974

Ion	Ratio	Lower	Upper
202	100		
203	19.1	0.0	47.6
201	19.1	0.0	46.0

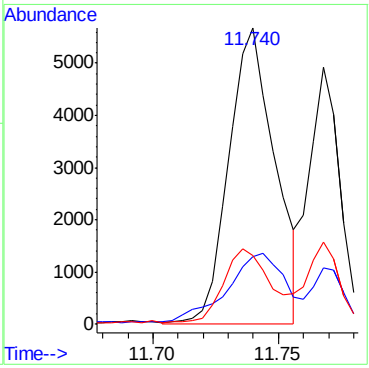


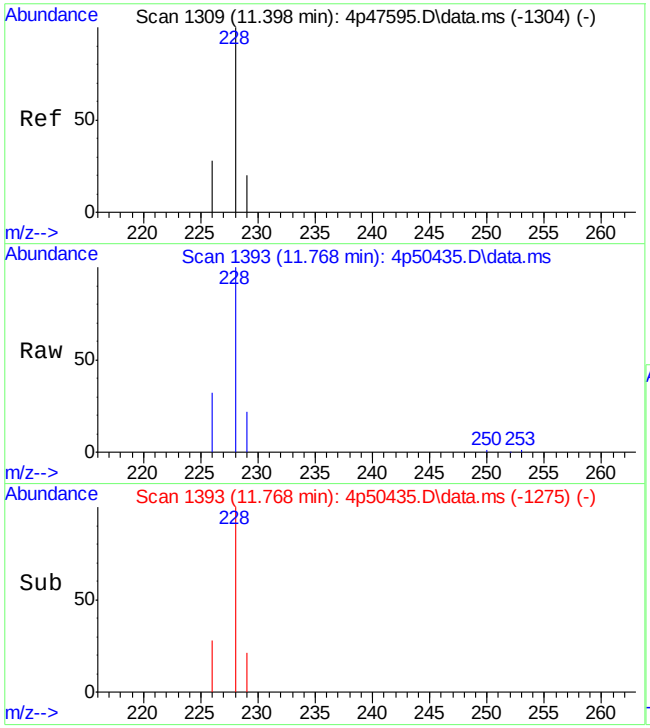


#28
Benzo[a]anthracene
Concen: 120.71 ppm
RT: 11.740 min Scan# 1386
Delta R.T. -0.024 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:228 Resp: 7222

Ion	Ratio	Lower	Upper
228	100		
229	21.2	0.0	49.8
226	21.4	0.0	53.3

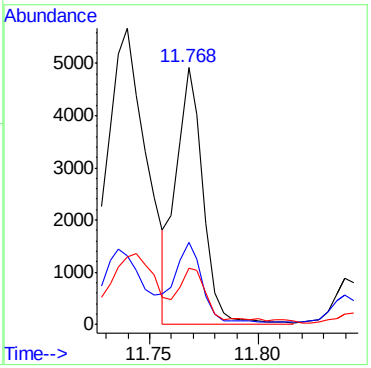


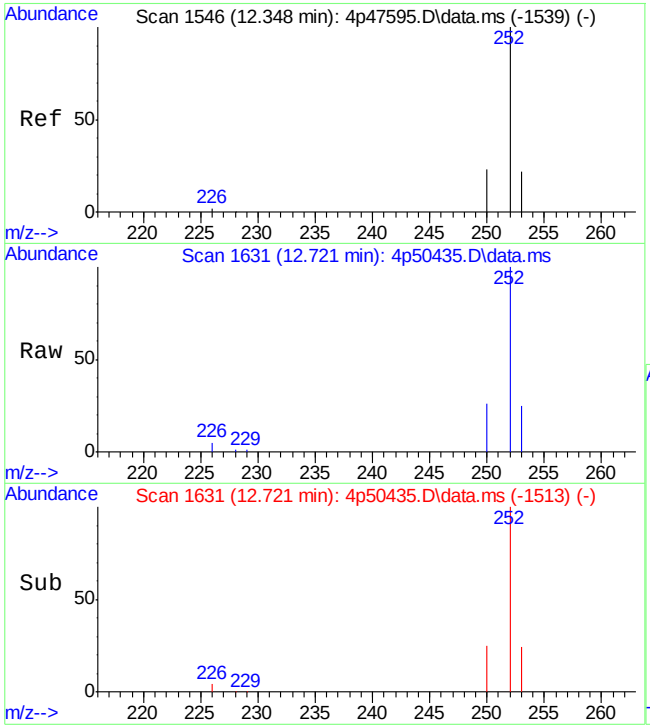


#29
Chrysene
Concen: 72.41 ppm
RT: 11.768 min Scan# 1393
Delta R.T. -0.028 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:228 Resp: 4244

Ion	Ratio	Lower	Upper
228	100		
226	31.3	0.0	58.5
229	19.6	0.0	48.7

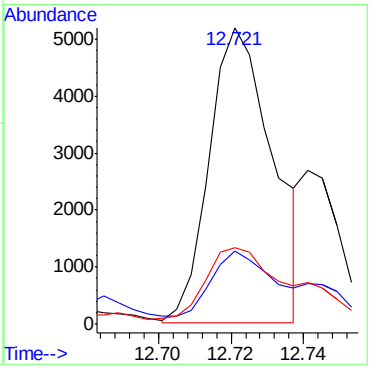


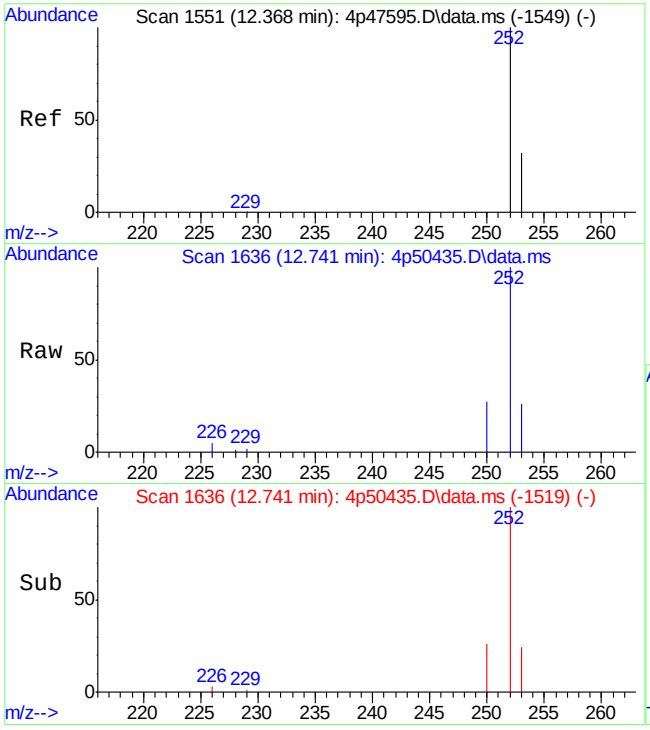


#31
Benzo[b]fluoranthene
Concen: 141.26 ppm
RT: 12.721 min Scan# 1631
Delta R.T. -0.028 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:252 Resp: 6273

Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	51.8
250	24.1	0.0	52.4

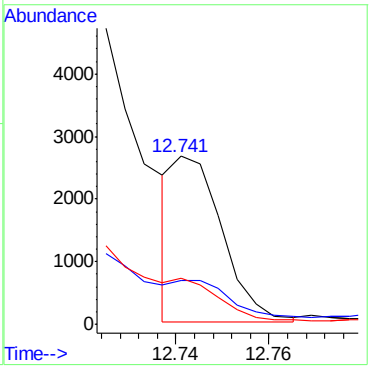


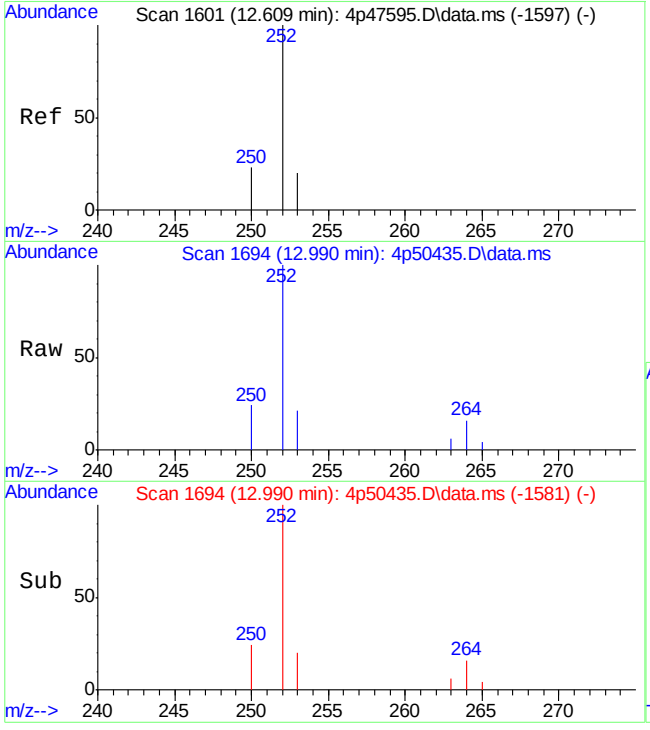


#32
Benzo[k]fluoranthene
Concen: 42.72 ppm
RT: 12.741 min Scan# 1636
Delta R.T. -0.032 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:252 Resp: 1942

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	51.8
250	25.1	0.0	50.5

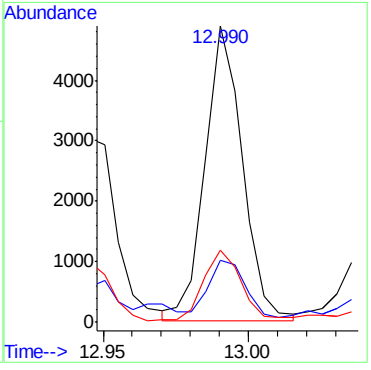


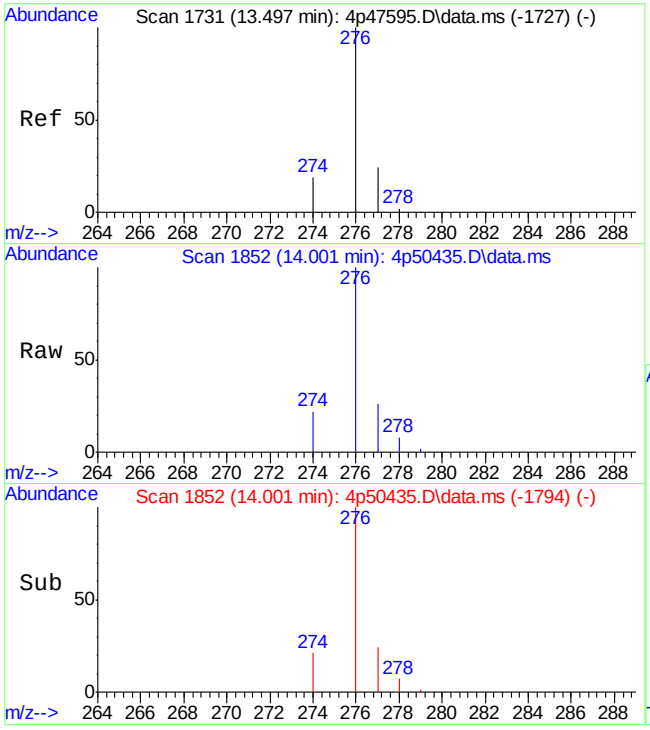


#33
Benzo[a]pyrene
Concen: 105.28 ppm
RT: 12.990 min Scan# 1694
Delta R.T. -0.030 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:252 Resp: 4390

Ion	Ratio	Lower	Upper
252	100		
253	17.5	0.0	52.8
250	23.7	0.0	50.6

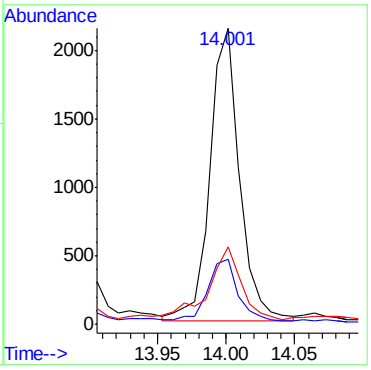


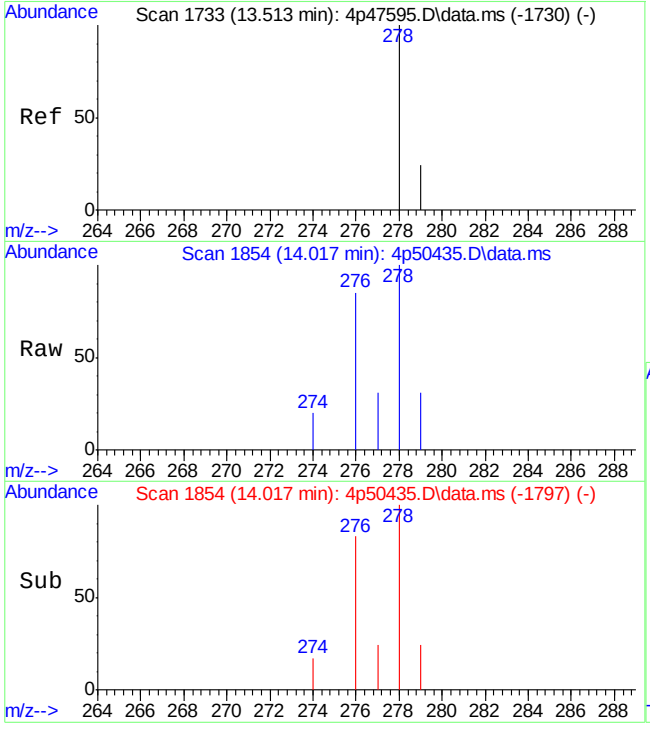


#34
Indeno[1,2,3-cd]pyrene
Concen: 64.49 ppm
RT: 14.001 min Scan# 1852
Delta R.T. -0.040 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:276 Resp: 3204

Ion	Ratio	Lower	Upper
276	100		
274	21.2	0.0	49.3
277	24.1	0.0	53.2

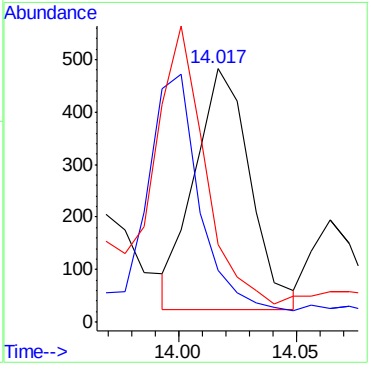


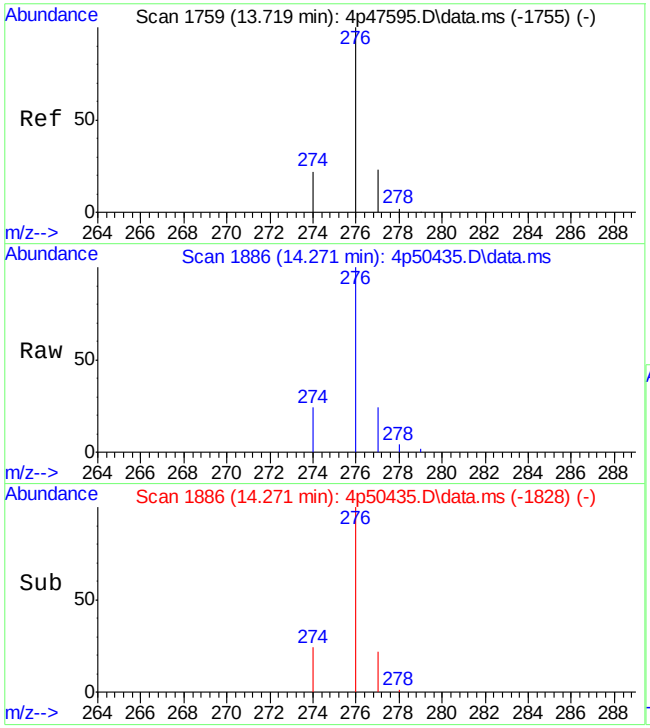


#35
Dibenz[a,h]anthracene
Concen: 19.54 ppm
RT: 14.017 min Scan# 1854
Delta R.T. -0.048 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:278 Resp: 756

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	0.0	0.0	36.7

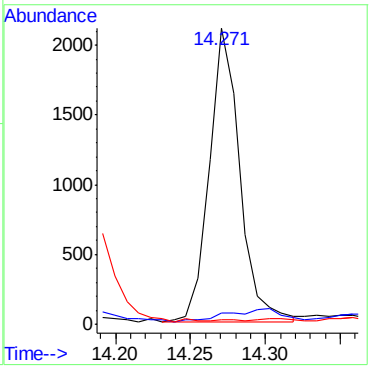




#36
Benzo[g,h,i]perylene
Concen: 70.75 ppm
RT: 14.271 min Scan# 1886
Delta R.T. -0.040 min
Lab File: 4p50435.D
Acq: 4 Jan 2022 5:01 pm

Tgt Ion:276 Resp: 2979

Ion	Ratio	Lower	Upper
276	100		
278	1.8	0.0	32.5
279	0.0	0.0	30.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/30/21 18:13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50376.D
Acq On : 30 Dec 2021 3:22 pm
Operator : kristis
Sample : jd36624-5
Misc : op37108a,e4p2638,250,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 30 16:35:36 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Dec 30 16:29:12 2021
Response via : Initial Calibration

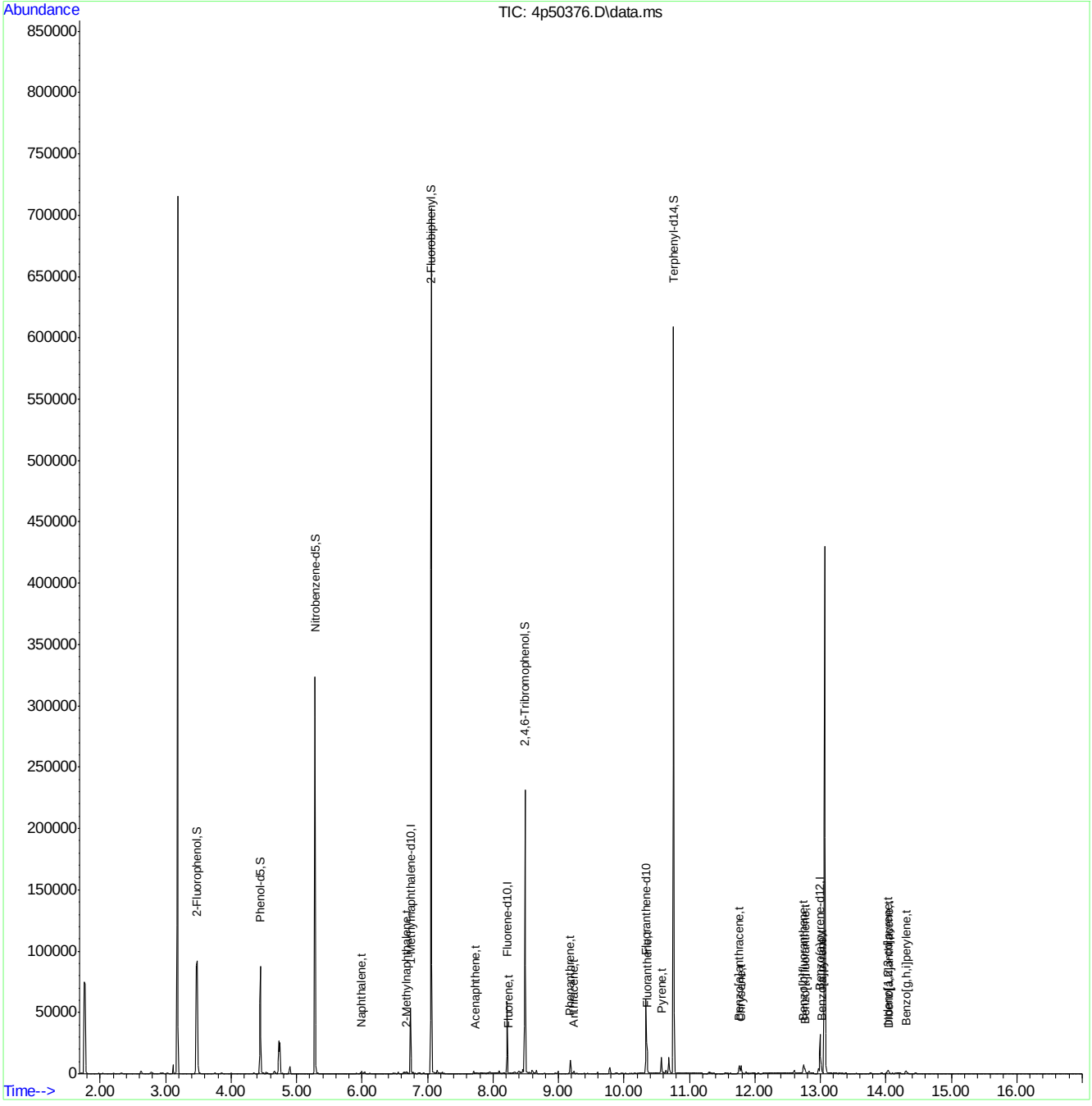
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	6.746	150	16455	800.00 ppm	0.00
13) Fluorene-d10	8.216	176	23630	800.00 ppm	0.00
20) Fluoranthene-d10	10.338	212	38361	800.00 ppm	0.00
30) Benzo(a)pyrene-d12	12.996	264	19584	800.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	3.483	112	58823	5762.71 ppm	0.02
Spiked Amount 50.000			Recovery	= 11525.42%	
4) Phenol-d5	4.446	99	68595	3542.20 ppm	0.04
Spiked Amount 50.000			Recovery	= 7084.40%	
7) Nitrobenzene-d5	5.284	82	194880	12331.89 ppm	0.00
Spiked Amount 50.000			Recovery	= 24663.78%	
14) 2-Fluorobiphenyl	7.060	172	326429	10829.90 ppm	0.00
Spiked Amount 50.000			Recovery	= 21659.80%	
19) 2,4,6-Tribromophenol	8.489	330	77041	17083.23 ppm	0.00
Spiked Amount 50.000			Recovery	= 34166.46%	
27) Terphenyl-d14	10.761	244	346385	12606.45 ppm	0.00
Spiked Amount 50.000			Recovery	= 25212.90%	
Target Compounds					Qvalue
8) Naphthalene	5.995	128	1381	29.32 ppm	91
10) 2-Methylnaphthalene	6.680	141	513	20.85 ppm	74
16) Acenaphthene	7.734	153	279	9.93 ppm	92
17) Fluorene	8.242	166	297	8.76 ppm	93
23) Phenanthrene	9.180	178	7088m	137.18 ppm	
24) Anthracene	9.235	178	1248	25.18 ppm	96
25) Fluoranthene	10.356	202	10972	203.94 ppm	98
26) Pyrene	10.577	202	10638	179.70 ppm	97
28) Benzo[a]anthracene	11.760	228	6031	114.03 ppm	99
29) Chrysene	11.792	228	3376	65.16 ppm	99
31) Benzo[b]fluoranthene	12.745	252	5171	130.20 ppm	99
32) Benzo[k]fluoranthene	12.765	252	2199	54.41 ppm	90
33) Benzo[a]pyrene	13.016	252	3848	103.81 ppm	93
34) Indeno[1,2,3-cd]pyrene	14.033	276	2711	61.38 ppm	97
35) Dibenz[a,h]anthracene	14.049	278	702	20.41 ppm	77
36) Benzo[g,h,i]perylene	14.311	276	2646	70.69 ppm	99

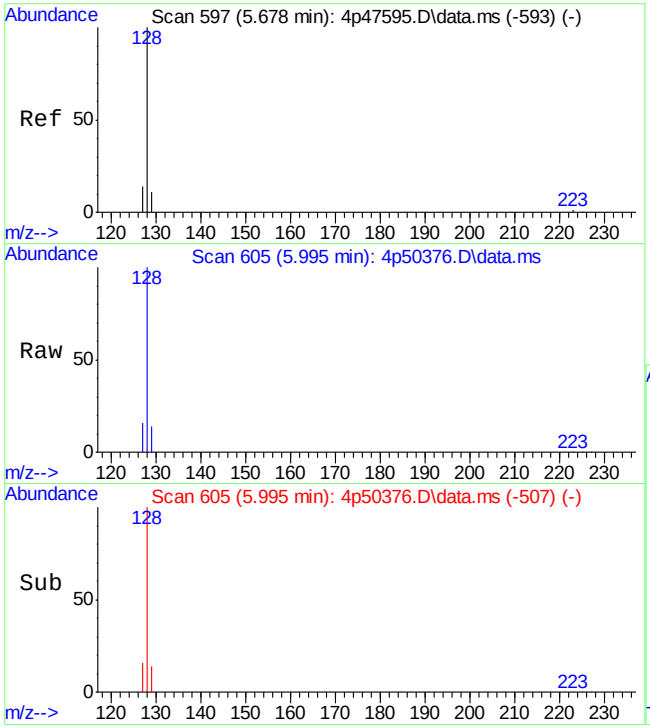
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50376.D
Acq On : 30 Dec 2021 3:22 pm
Operator : kristis
Sample : jd36624-5
Misc : op37108a,e4p2638,250,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 30 16:35:36 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Dec 30 16:29:12 2021
Response via : Initial Calibration

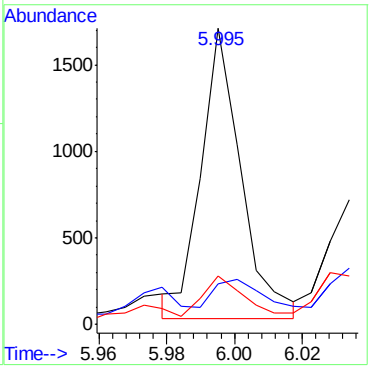


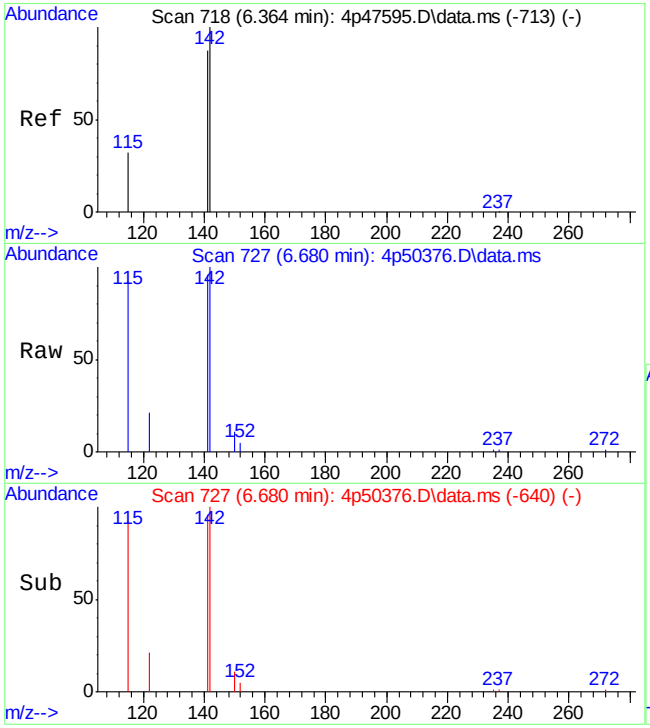


#8
Naphthalene
Concen: 29.32 ppm
RT: 5.995 min Scan# 605
Delta R.T. -0.005 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:128 Resp: 1381

Ion	Ratio	Lower	Upper
128	100		
129	4.9	0.0	41.1
127	12.9	0.0	42.0

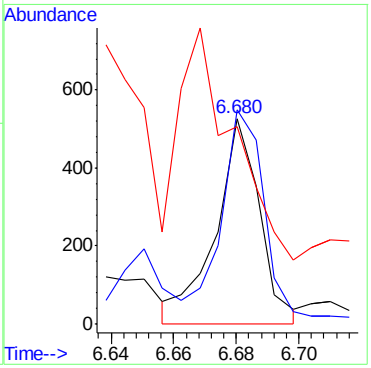


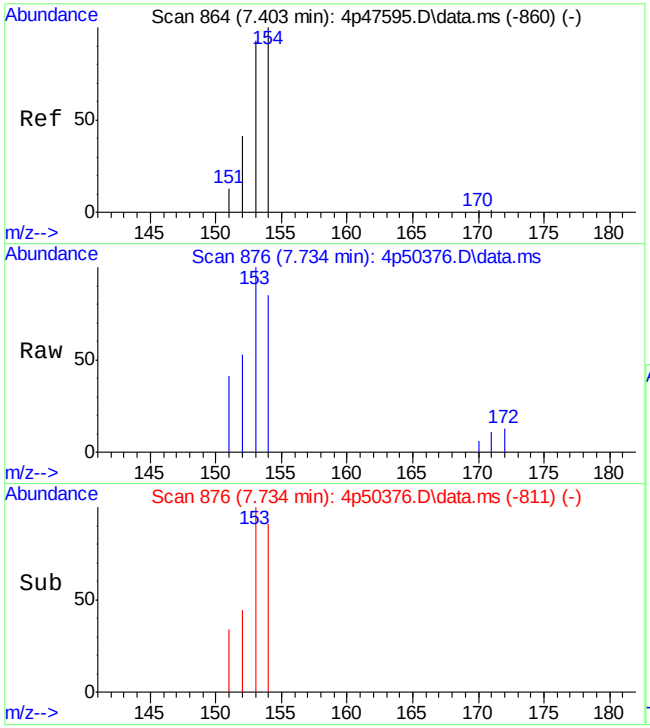


#10
2-Methylnaphthalene
Concen: 20.85 ppm
RT: 6.680 min Scan# 727
Delta R.T. -0.006 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:141 Resp: 513

Ion	Ratio	Lower	Upper
141	100		
142	101.7	96.1	156.1
115	63.5	7.9	67.9

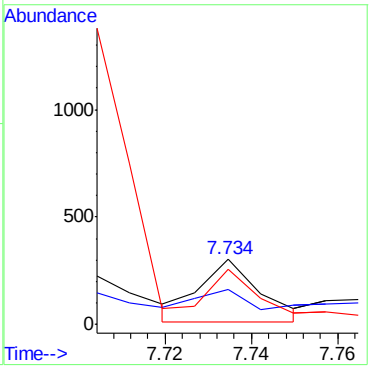


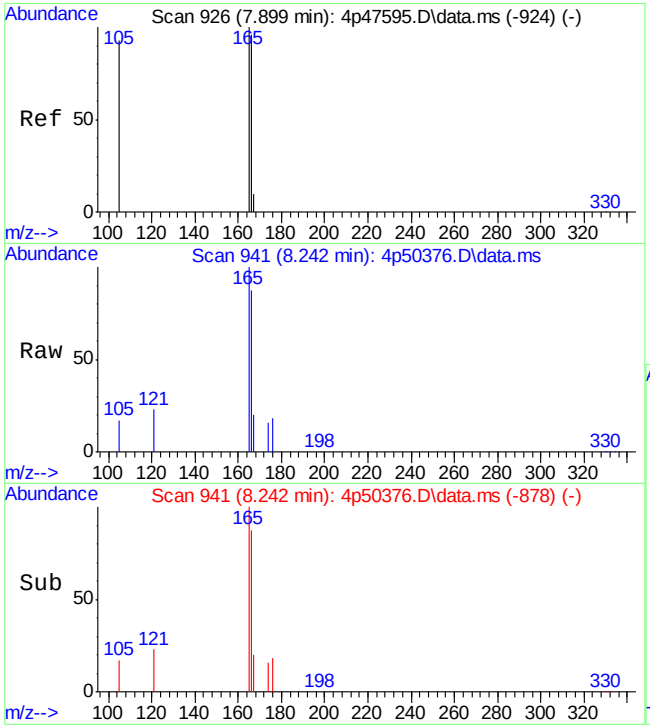


#16
Acenaphthene
Concen: 9.93 ppm
RT: 7.734 min Scan# 876
Delta R.T. -0.007 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:153 Resp: 279

Ion	Ratio	Lower	Upper
153	100		
152	34.7	18.5	78.5
154	88.2	59.1	119.1

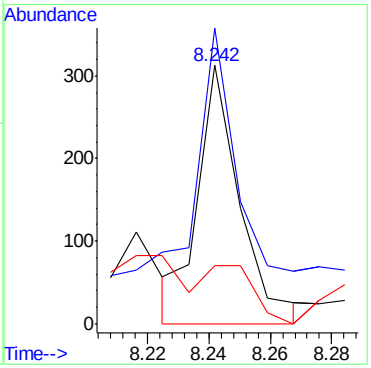


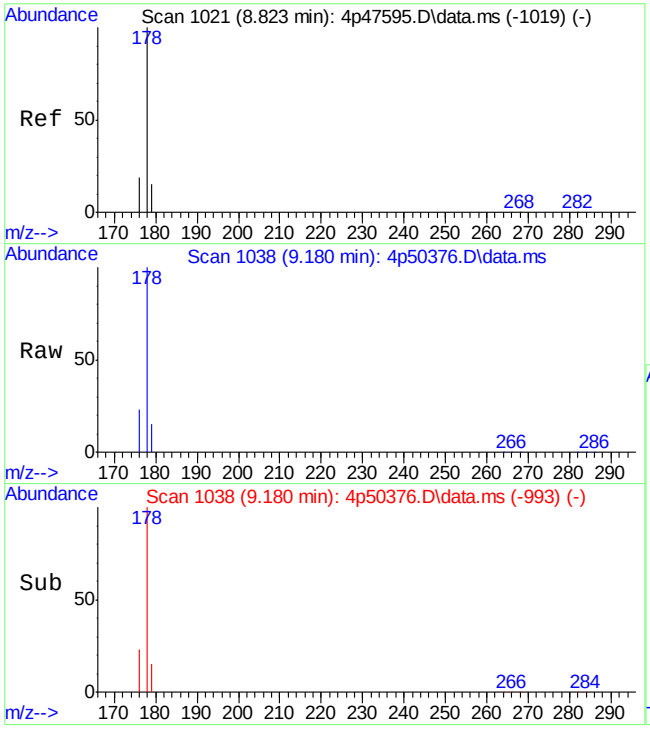


#17
Fluorene
Concen: 8.76 ppm
RT: 8.242 min Scan# 941
Delta R.T. -0.008 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:166 Resp: 297

Ion	Ratio	Lower	Upper
166	100		
165	104.2	66.9	126.9
167	11.0	0.0	41.7

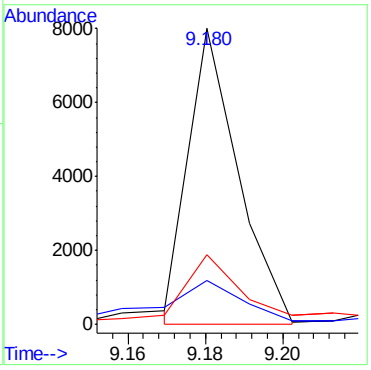


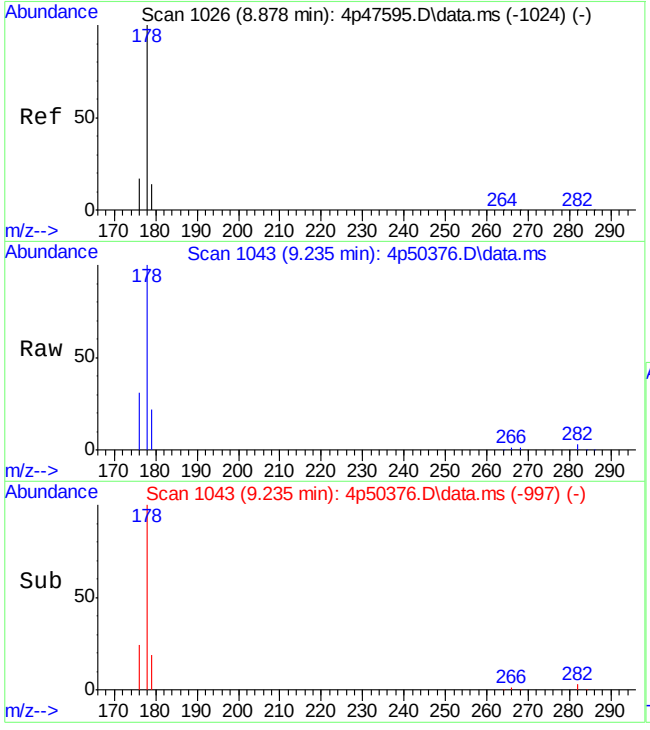


#23
Phenanthrene
Concen: 137.18 ppm m
RT: 9.180 min Scan# 1038
Delta R.T. -0.011 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:178 Resp: 7088

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	46.0
176	23.4	0.0	45.6

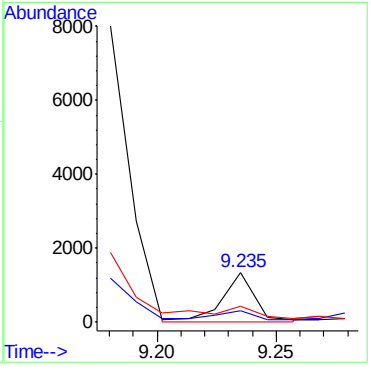


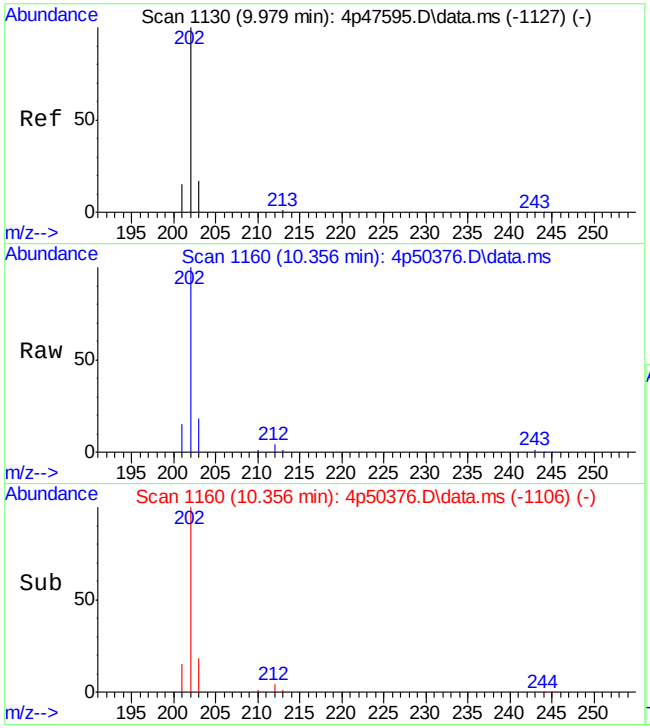


#24
Anthracene
Concen: 25.18 ppm
RT: 9.235 min Scan# 1043
Delta R.T. 0.000 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:178 Resp: 1248

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	43.0
176	19.3	0.0	48.4

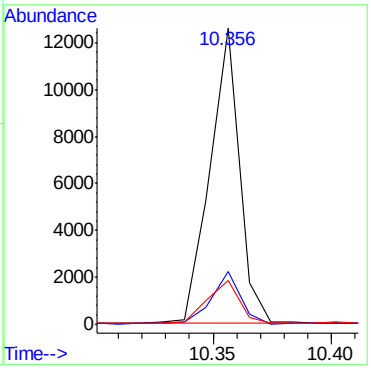


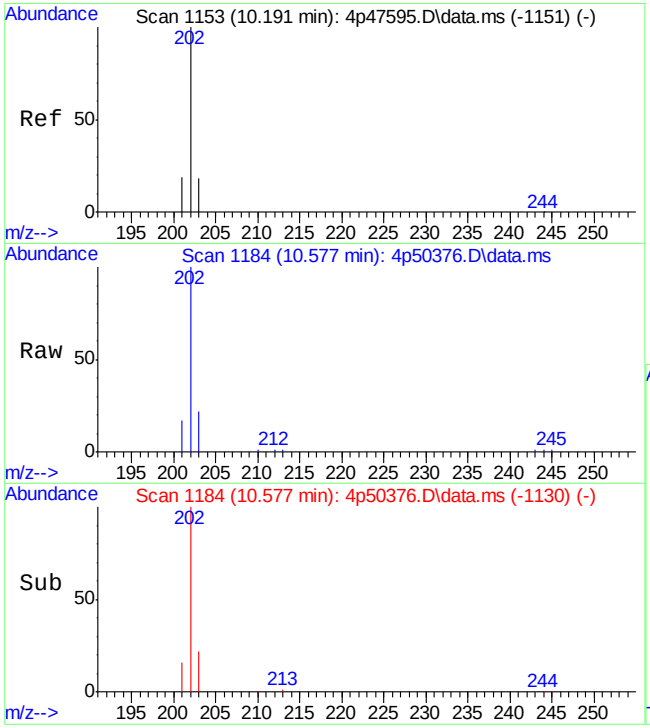


#25
Fluoranthene
Concen: 203.94 ppm
RT: 10.356 min Scan# 1160
Delta R.T. 0.000 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:202 Resp: 10972

Ion	Ratio	Lower	Upper
202	100		
203	17.8	0.0	47.6
201	14.5	0.0	42.9

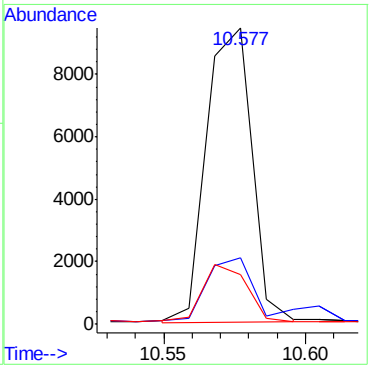


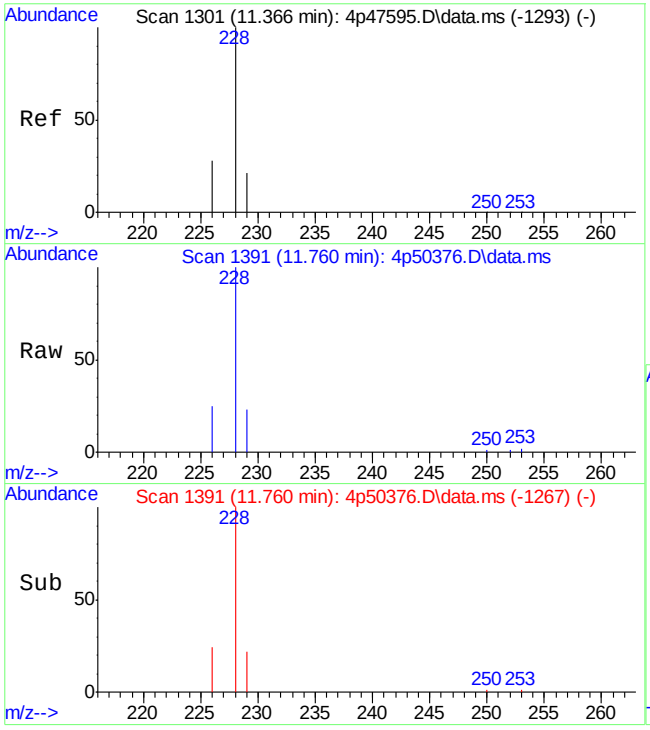


#26
Pyrene
Concen: 179.70 ppm
RT: 10.577 min Scan# 1184
Delta R.T. 0.000 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:202 Resp: 10638

Ion	Ratio	Lower	Upper
202	100		
203	19.6	0.0	47.6
201	15.8	0.0	46.0

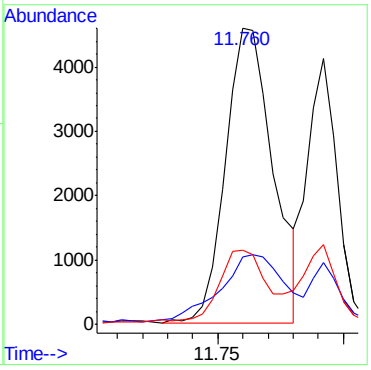


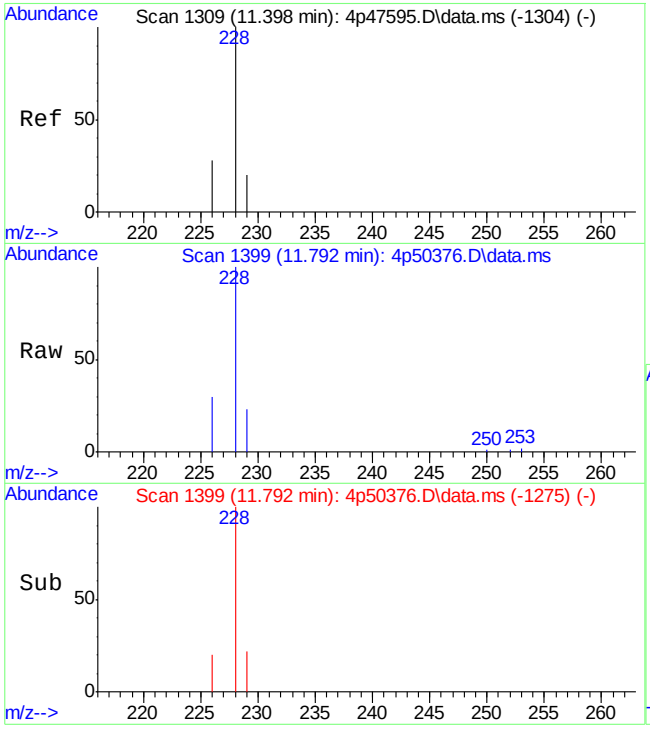


#28
Benzo[a]anthracene
Concen: 114.03 ppm
RT: 11.760 min Scan# 1391
Delta R.T. -0.004 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:228 Resp: 6031

Ion	Ratio	Lower	Upper
228	100		
229	20.0	0.0	49.8
226	22.4	0.0	53.3

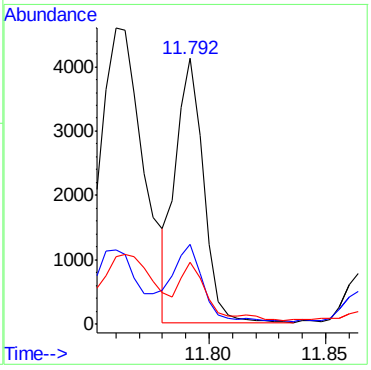


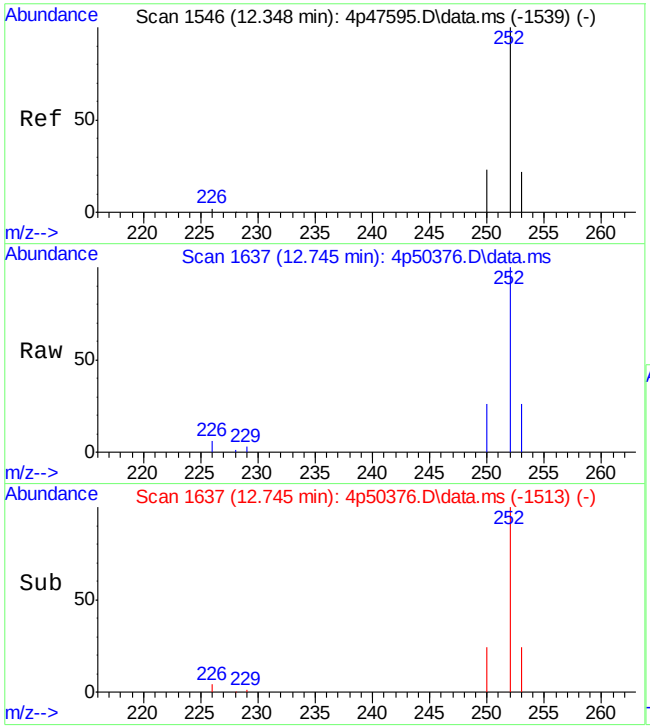


#29
Chrysene
Concen: 65.16 ppm
RT: 11.792 min Scan# 1399
Delta R.T. -0.004 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:228 Resp: 3376

Ion	Ratio	Lower	Upper
228	100		
226	28.6	0.0	58.5
229	20.0	0.0	48.7

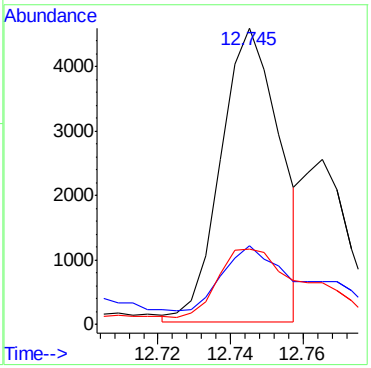


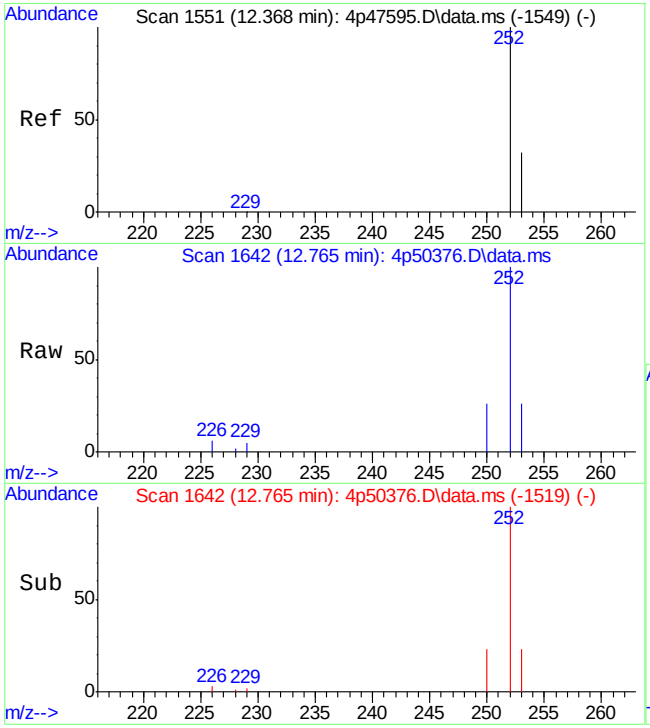


#31
Benzo[b]fluoranthene
Concen: 130.20 ppm
RT: 12.745 min Scan# 1637
Delta R.T. -0.004 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:252 Resp: 5171

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	51.8
250	22.5	0.0	52.4

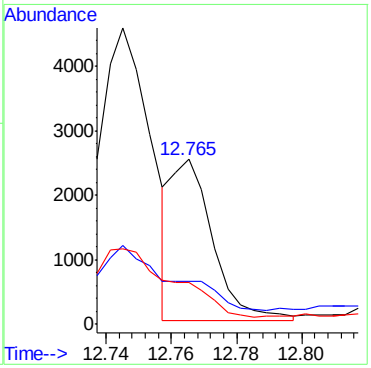


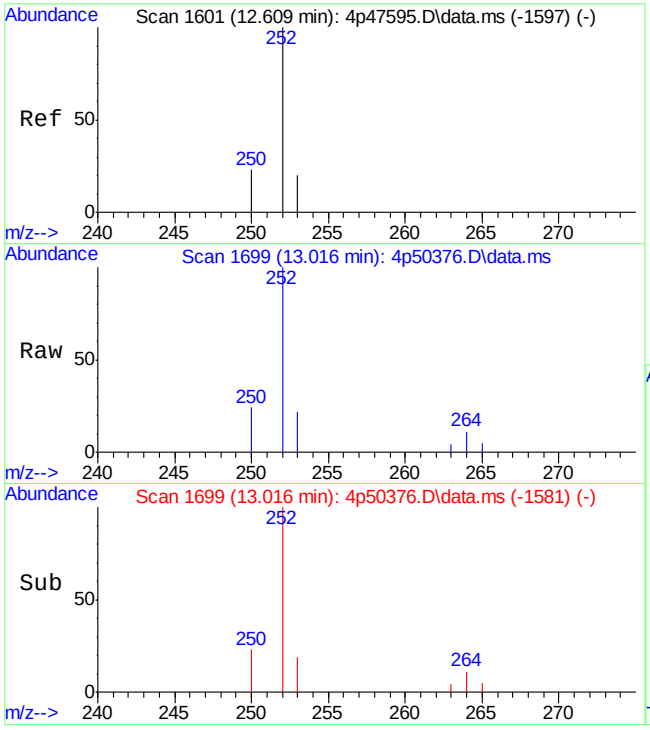


#32
Benzo[k]fluoranthene
Concen: 54.41 ppm
RT: 12.765 min Scan# 1642
Delta R.T. -0.008 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:252 Resp: 2199

Ion	Ratio	Lower	Upper
252	100		
253	15.3	0.0	51.8
250	17.8	0.0	50.5

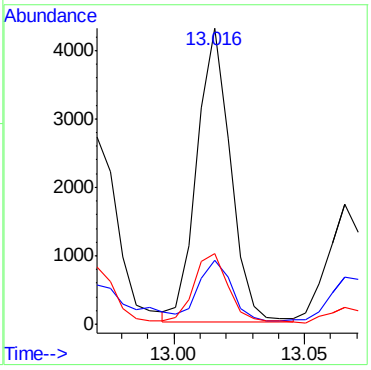


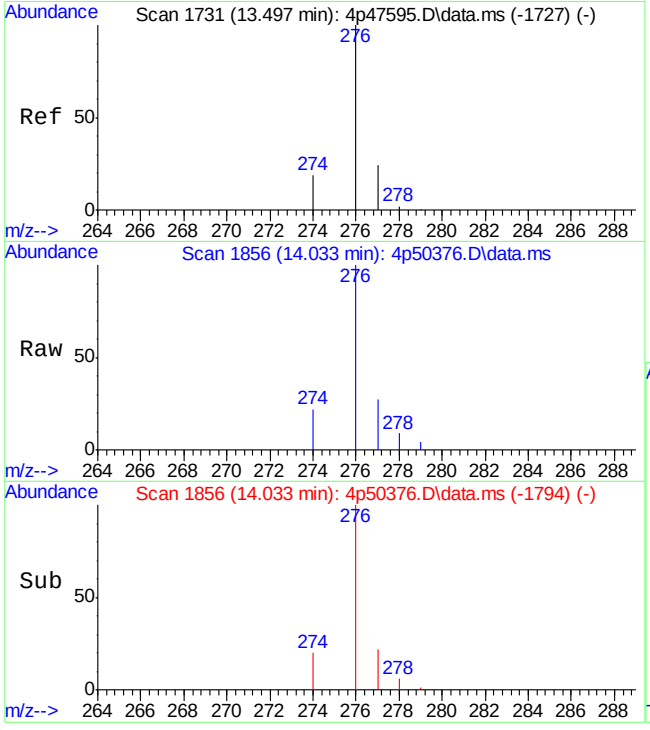


#33
Benzo[a]pyrene
Concen: 103.81 ppm
RT: 13.016 min Scan# 1699
Delta R.T. -0.005 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:252 Resp: 3848

Ion	Ratio	Lower	Upper
252	100		
253	19.4	0.0	52.8
250	23.7	0.0	50.6

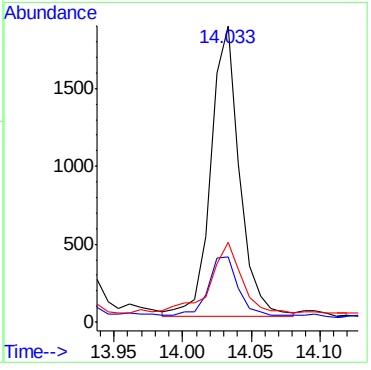


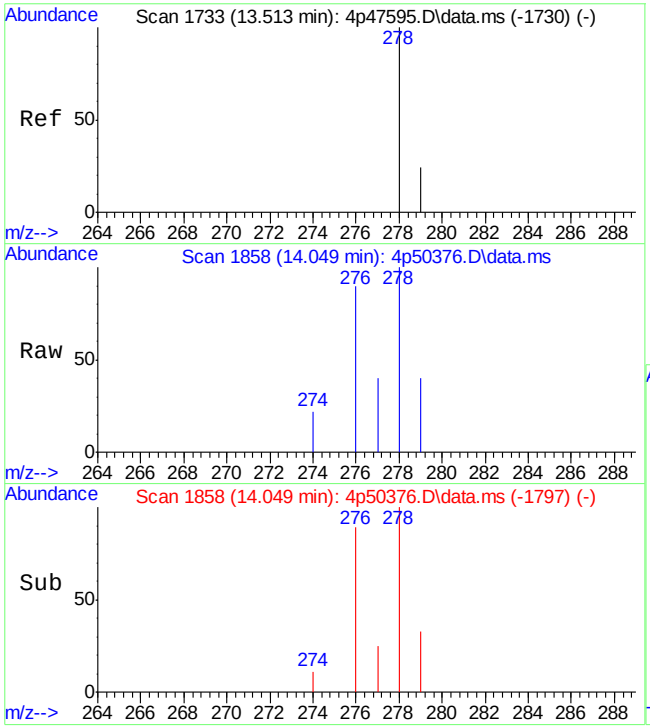


#34
Indeno[1,2,3-cd]pyrene
Concen: 61.38 ppm
RT: 14.033 min Scan# 1856
Delta R.T. -0.008 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:276 Resp: 2711

Ion	Ratio	Lower	Upper
276	100		
274	20.5	0.0	49.3
277	24.3	0.0	53.2

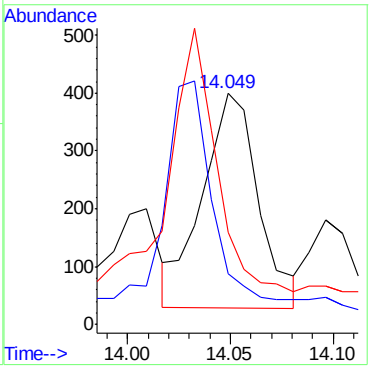


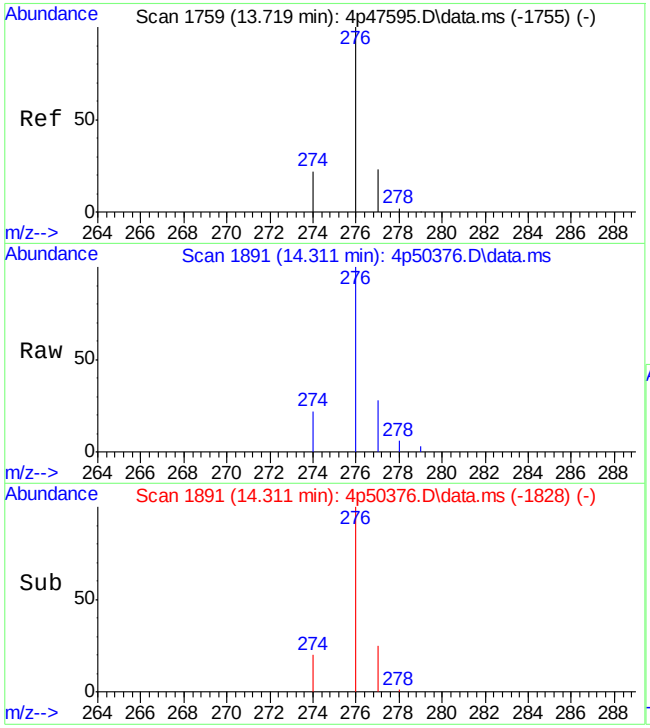


#35
Dibenz[a,h]anthracene
Concen: 20.41 ppm
RT: 14.049 min Scan# 1858
Delta R.T. -0.016 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:278 Resp: 702

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	16.6	0.0	36.7

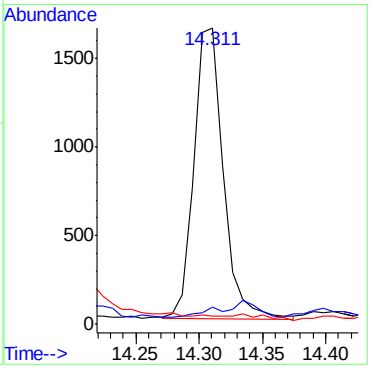




#36
Benzo[g,h,i]perylene
Concen: 70.69 ppm
RT: 14.311 min Scan# 1891
Delta R.T. 0.000 min
Lab File: 4p50376.D
Acq: 30 Dec 2021 3:22 pm

Tgt Ion:276 Resp: 2646

Ion	Ratio	Lower	Upper
276	100		
278	2.7	0.0	32.5
279	0.2	0.0	30.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 10:16

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2635\
Data File : 4p50287.D
Acq On : 27 Dec 2021 11:44 pm
Operator : kristis
Sample : jd36624-6
Misc : op37108a,e4p2635,270,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 04 11:08:53 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.758	150	18376	800.00	ppm	0.00
13) Fluorene-d10	8.233	176	25298	800.00	ppm	0.00
20) Fluoranthene-d10	10.356	212	39613	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.021	264	19222	800.00	ppm	0.02
System Monitoring Compounds						
3) 2-Fluorophenol	3.483	112	63575	5577.16	ppm	0.02
Spiked Amount 50.000			Recovery	= 11154.32%		
4) Phenol-d5	4.399	99	473	21.87	ppm	0.00
Spiked Amount 50.000			Recovery	= 43.74%		
7) Nitrobenzene-d5	5.296	82	227855	12911.23	ppm	0.02
Spiked Amount 50.000			Recovery	= 25822.46%		
14) 2-Fluorobiphenyl	7.076	172	366759	11365.65	ppm	0.00
Spiked Amount 50.000			Recovery	= 22731.30%		
19) 2,4,6-Tribromophenol	8.506	330	88314	18291.75	ppm	0.02
Spiked Amount 50.000			Recovery	= 36583.50%		
27) Terphenyl-d14	10.780	244	332782	11728.59	ppm	0.02
Spiked Amount 50.000			Recovery	= 23457.18%		
Target Compounds						Qvalue
8) Naphthalene	6.017	128	2980m	56.66	ppm	
16) Acenaphthene	7.750	153	765m	25.43	ppm	
23) Phenanthrene	9.202	178	3731m	69.93	ppm	
24) Anthracene	9.257	178	8869	173.32	ppm	79
25) Fluoranthene	10.375	202	2738	49.28	ppm	93
26) Pyrene	10.596	202	3201	52.36	ppm	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

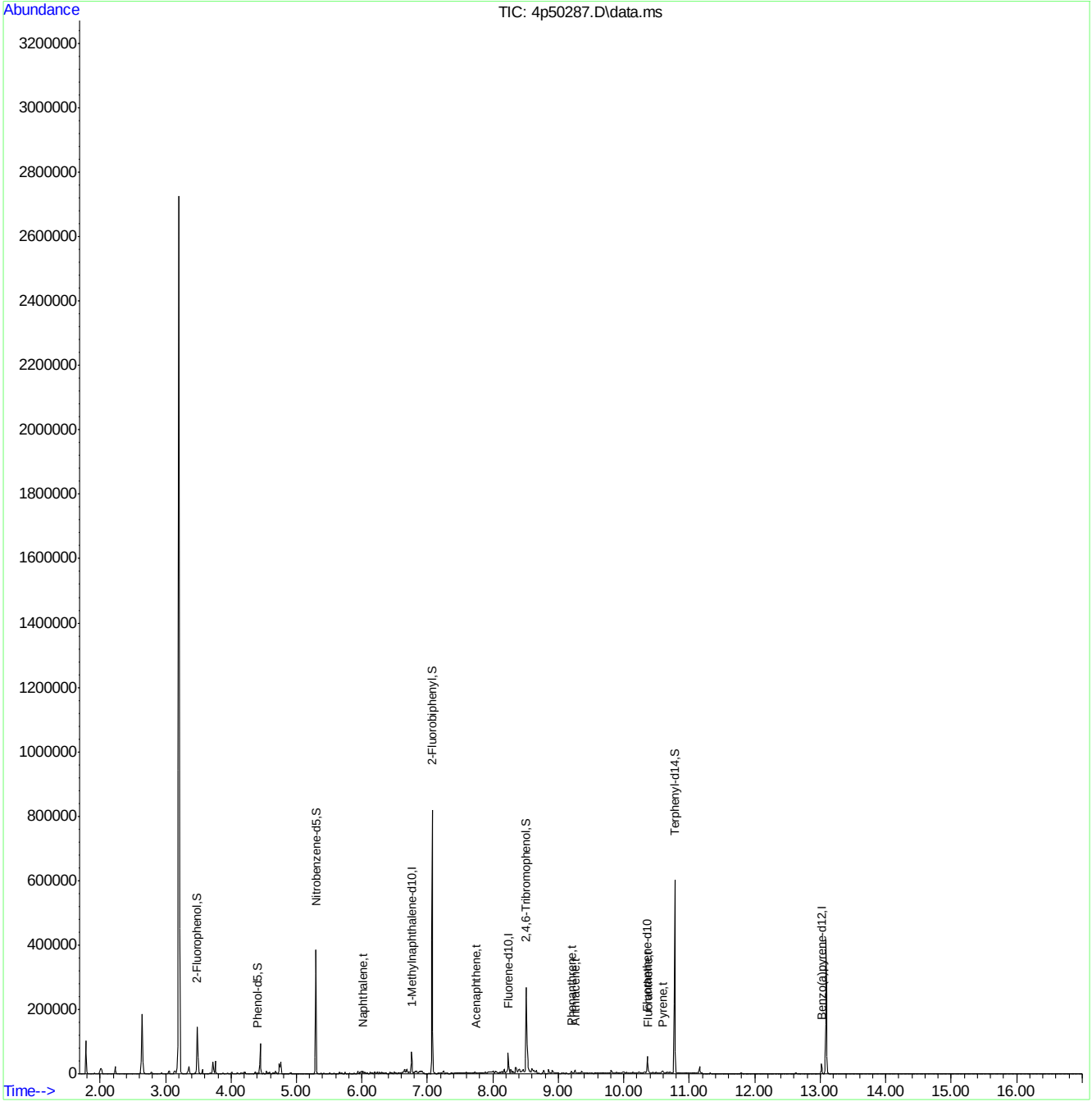
9.1.21

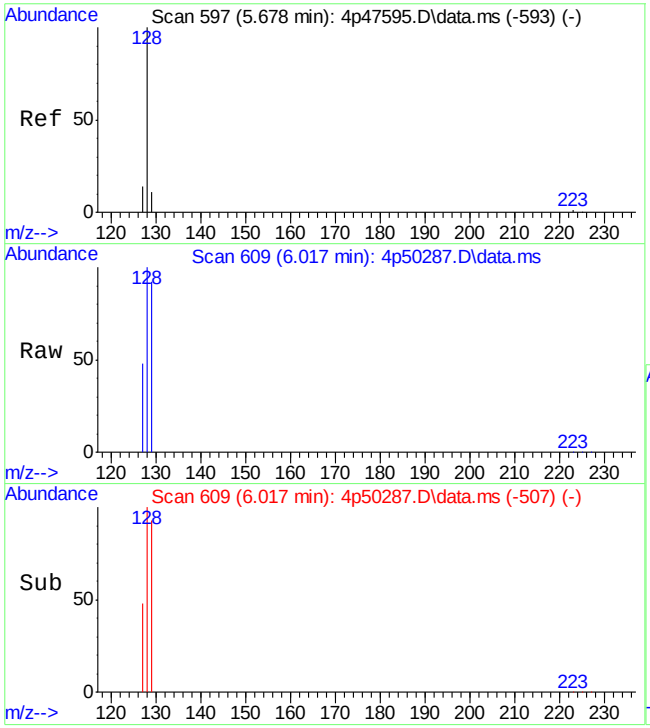
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2635\
Data File : 4p50287.D
Acq On : 27 Dec 2021 11:44 pm
Operator : kristis
Sample : jd36624-6
Misc : op37108a,e4p2635,270,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 04 11:08:53 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

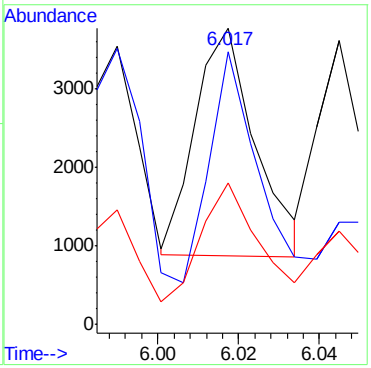


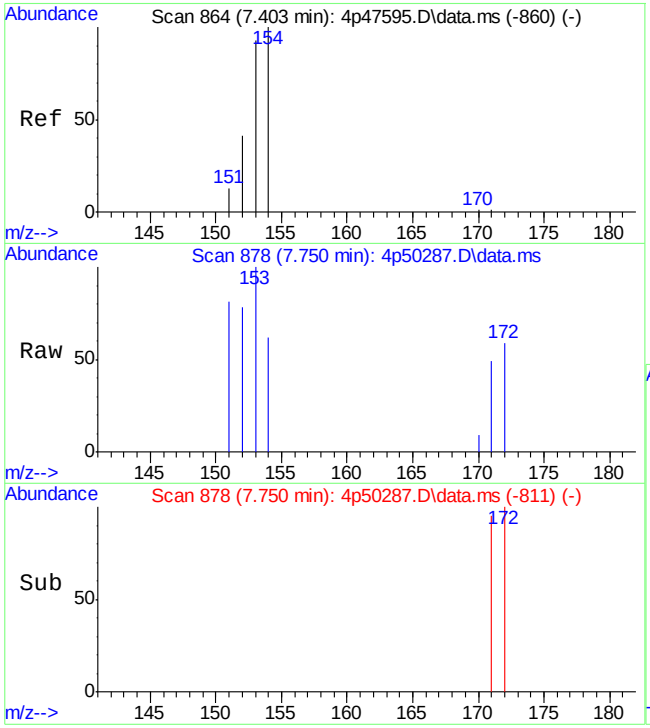


#8
Naphthalene
Concen: 56.66 ppm m
RT: 6.017 min Scan# 609
Delta R.T. 0.017 min
Lab File: 4p50287.D
Acq: 27 Dec 2021 11:44 pm

Tgt Ion:128 Resp: 2980

Ion	Ratio	Lower	Upper
128	100		
129	91.9	0.0	41.1#
127	47.8	0.0	42.0#

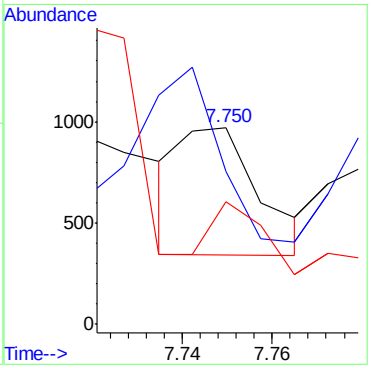


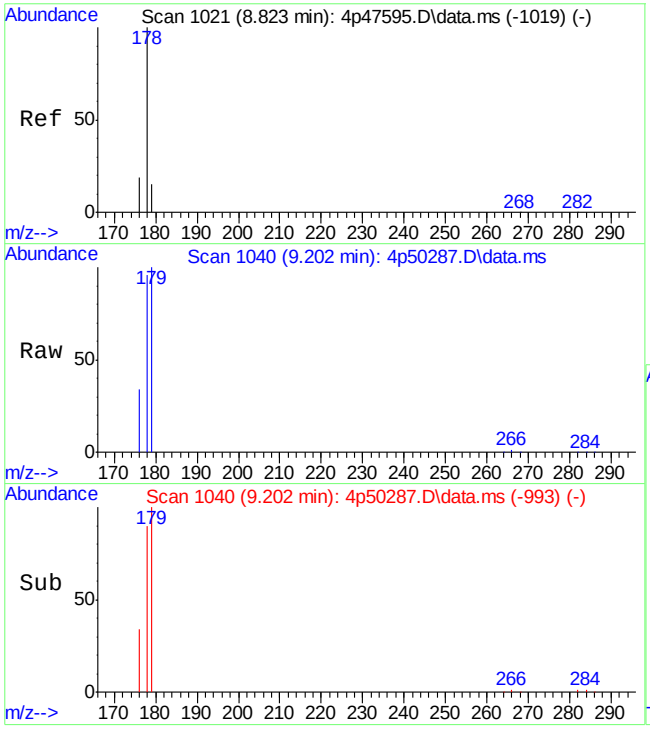


#16
Acenaphthene
Concen: 25.43 ppm m
RT: 7.750 min Scan# 878
Delta R.T. 0.008 min
Lab File: 4p50287.D
Acq: 27 Dec 2021 11:44 pm

Tgt Ion:153 Resp: 765

Ion	Ratio	Lower	Upper
153	100		
152	77.6	18.5	78.5
154	62.3	59.1	119.1

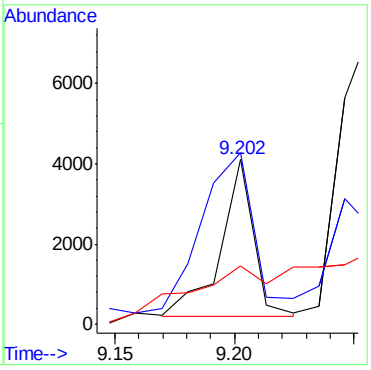


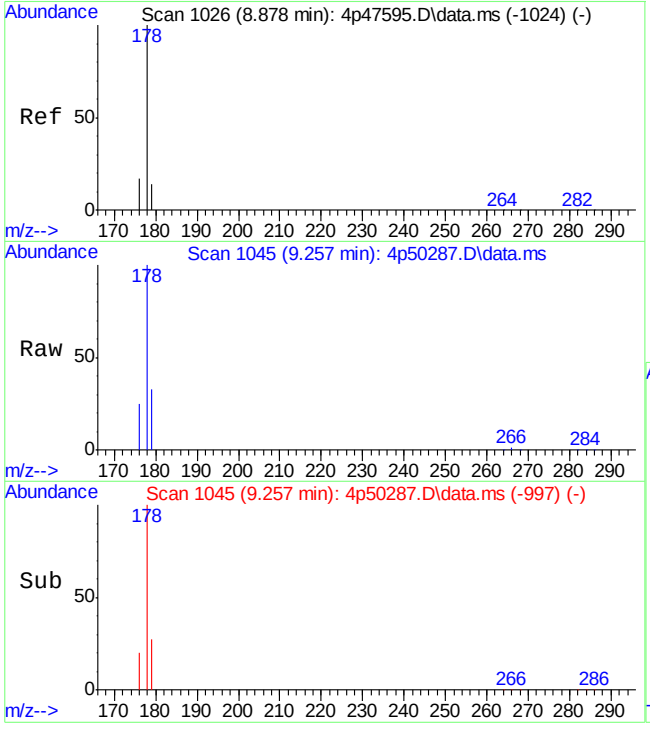


#23
Phenanthrene
Concen: 69.93 ppm m
RT: 9.202 min Scan# 1040
Delta R.T. 0.011 min
Lab File: 4p50287.D
Acq: 27 Dec 2021 11:44 pm

Tgt Ion:178 Resp: 3731

Ion	Ratio	Lower	Upper
178	100		
179	103.7	0.0	46.0#
176	35.1	0.0	45.6

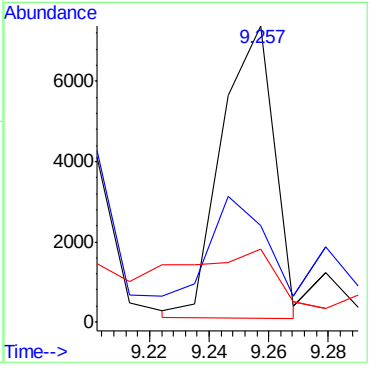


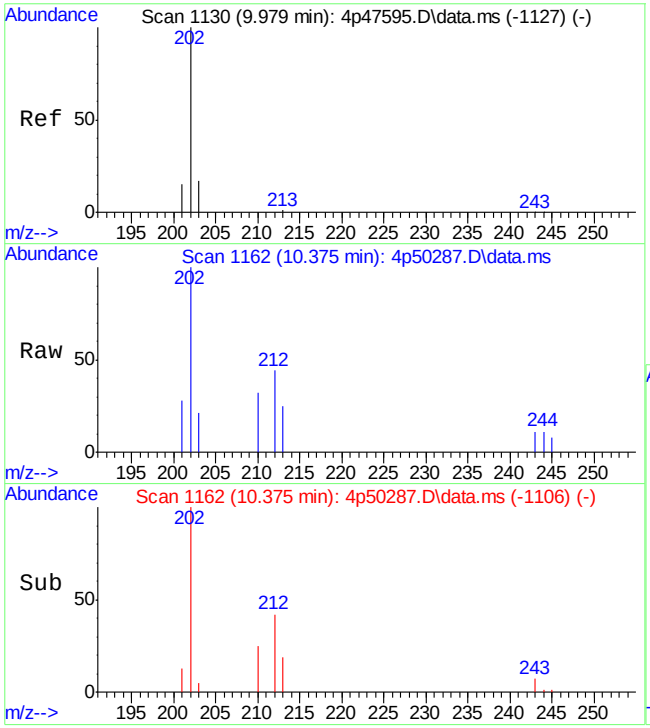


#24
Anthracene
Concen: 173.32 ppm
RT: 9.257 min Scan# 1045
Delta R.T. 0.022 min
Lab File: 4p50287.D
Acq: 27 Dec 2021 11:44 pm

Tgt Ion:178 Resp: 8869

Ion	Ratio	Lower	Upper
178	100		
179	25.1	0.0	43.0
176	12.4	0.0	48.4

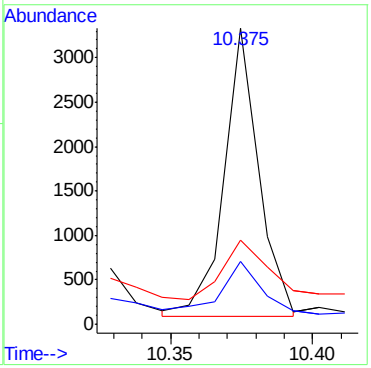


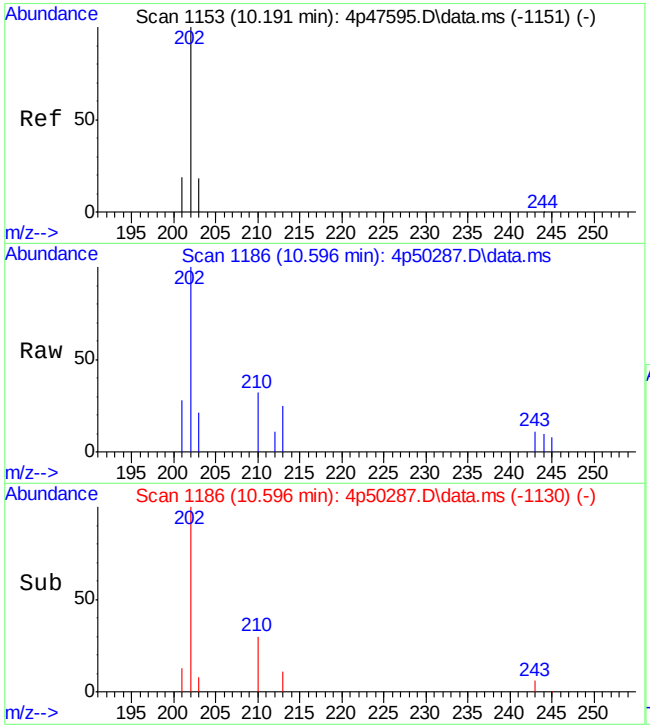


#25
Fluoranthene
Concen: 49.28 ppm
RT: 10.375 min Scan# 1162
Delta R.T. 0.019 min
Lab File: 4p50287.D
Acq: 27 Dec 2021 11:44 pm

Tgt Ion:202 Resp: 2738

Ion	Ratio	Lower	Upper
202	100		
203	17.1	0.0	47.6
201	19.0	0.0	42.9

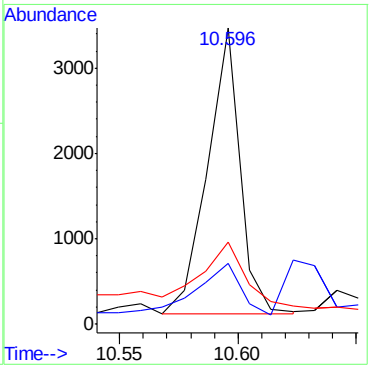




#26
Pyrene
Concen: 52.36 ppm
RT: 10.596 min Scan# 1186
Delta R.T. 0.019 min
Lab File: 4p50287.D
Acq: 27 Dec 2021 11:44 pm

Tgt Ion:202 Resp: 3201

Ion	Ratio	Lower	Upper
202	100		
203	7.2	0.0	47.6
201	21.0	0.0	46.0



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 10:16

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50377.D
Acq On : 30 Dec 2021 3:46 pm
Operator : kristis
Sample : jd36624-6
Misc : op37108a,e4p2638,250,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 30 16:38:27 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Dec 30 16:29:12 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.746	150	14441	800.00	ppm	0.00
13) Fluorene-d10	8.216	176	20540	800.00	ppm	0.00
20) Fluoranthene-d10	10.338	212	32276	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.000	264	17714	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.482	112	57361	6403.20	ppm	0.02
Spiked Amount 50.000			Recovery	= 12806.40%		
4) Phenol-d5	4.446	99	63052	3710.05	ppm	0.04
Spiked Amount 50.000			Recovery	= 7420.10%		
7) Nitrobenzene-d5	5.284	82	182339	13147.48	ppm	0.00
Spiked Amount 50.000			Recovery	= 26294.96%		
14) 2-Fluorobiphenyl	7.060	172	296907	11332.34	ppm	0.00
Spiked Amount 50.000			Recovery	= 22664.68%		
19) 2,4,6-Tribromophenol	8.497	330	72804	18572.34	ppm	0.00
Spiked Amount 50.000			Recovery	= 37144.68%		
27) Terphenyl-d14	10.761	244	273875	11846.67	ppm	0.00
Spiked Amount 50.000			Recovery	= 23693.34%		
Target Compounds						Qvalue
8) Naphthalene	6.001	128	3142m	76.02	ppm	
16) Acenaphthene	7.734	153	493m	20.19	ppm	
23) Phenanthrene	9.180	178	3893m	89.55	ppm	
24) Anthracene	9.235	178	7826	187.70	ppm	85
25) Fluoranthene	10.356	202	2110	46.61	ppm	90
26) Pyrene	10.577	202	2591	52.02	ppm	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

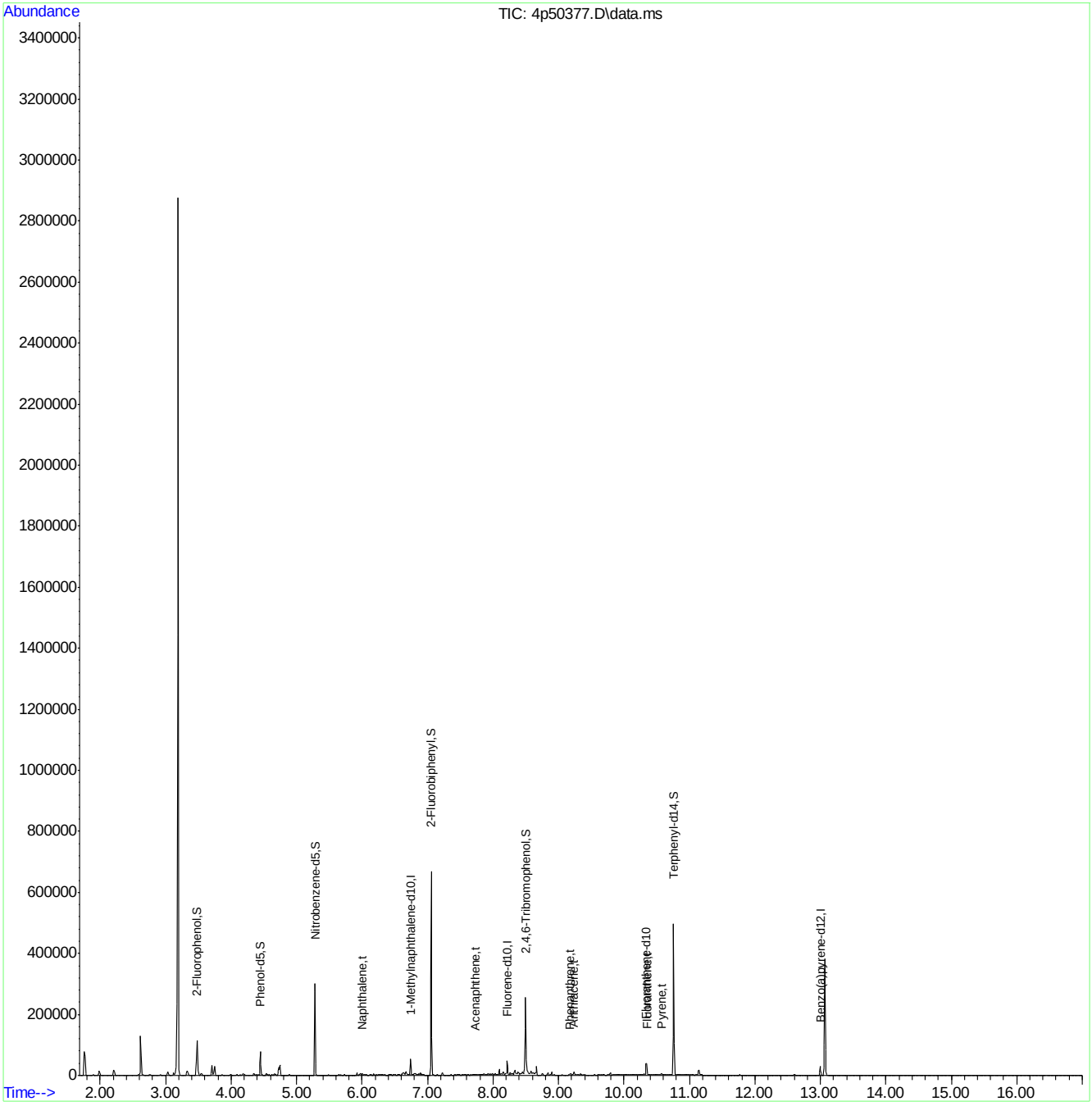
9.1.22

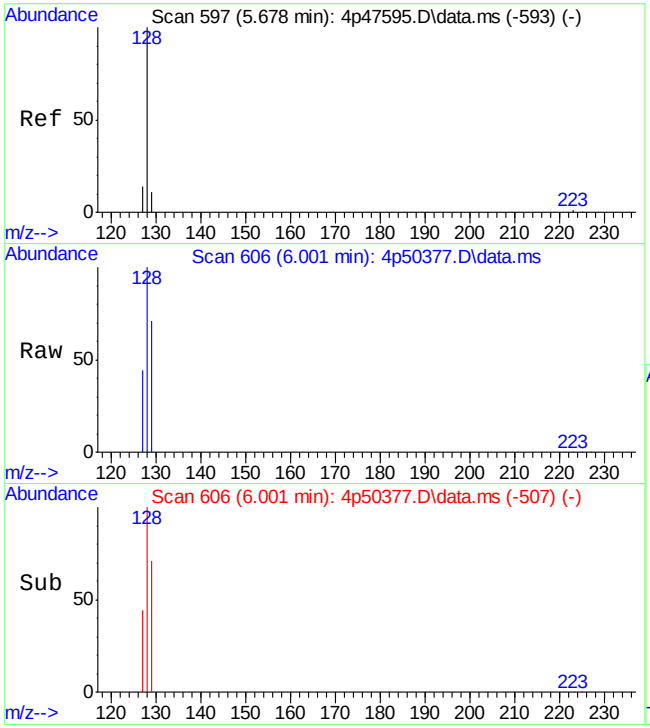
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50377.D
Acq On : 30 Dec 2021 3:46 pm
Operator : kristis
Sample : jd36624-6
Misc : op37108a,e4p2638,250,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 30 16:38:27 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Dec 30 16:29:12 2021
Response via : Initial Calibration

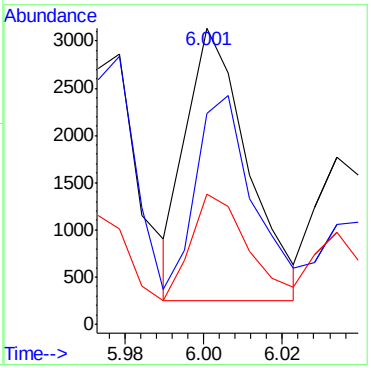


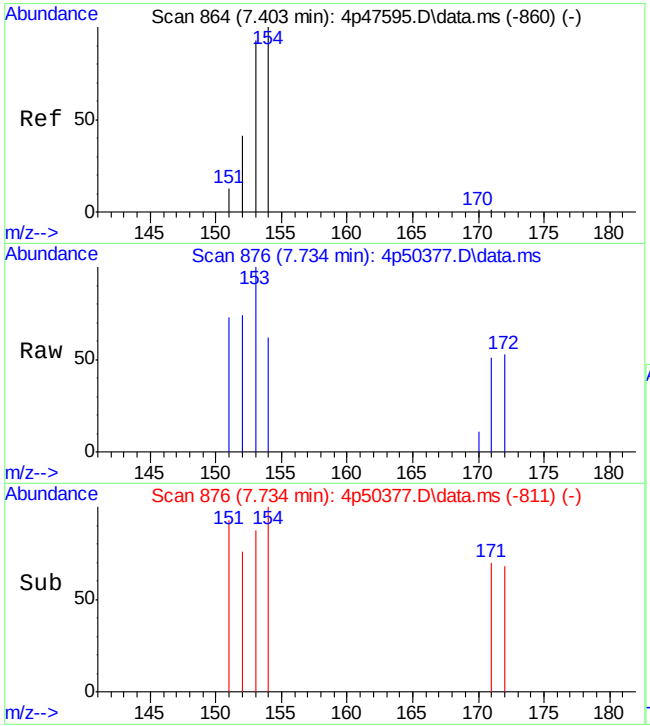


#8
Naphthalene
Concen: 76.02 ppm m
RT: 6.001 min Scan# 606
Delta R.T. 0.000 min
Lab File: 4p50377.D
Acq: 30 Dec 2021 3:46 pm

Tgt Ion:128 Resp: 3142

Ion	Ratio	Lower	Upper
128	100		
129	71.2	0.0	41.1#
127	43.9	0.0	42.0#

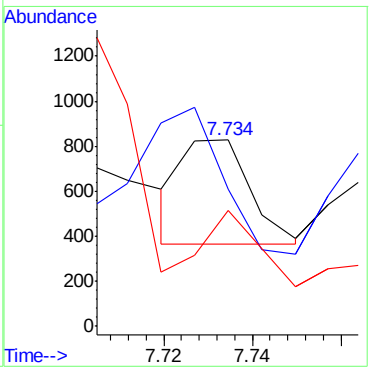


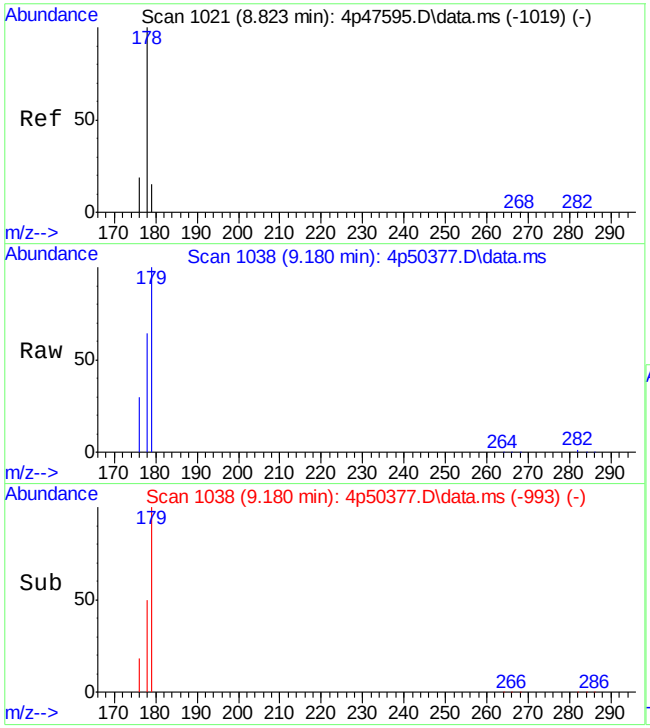


#16
Acenaphthene
Concen: 20.19 ppm m
RT: 7.734 min Scan# 876
Delta R.T. -0.007 min
Lab File: 4p50377.D
Acq: 30 Dec 2021 3:46 pm

Tgt Ion:153 Resp: 493

Ion	Ratio	Lower	Upper
153	100		
152	73.9	18.5	78.5
154	62.2	59.1	119.1

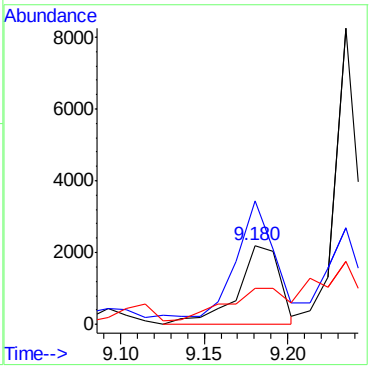


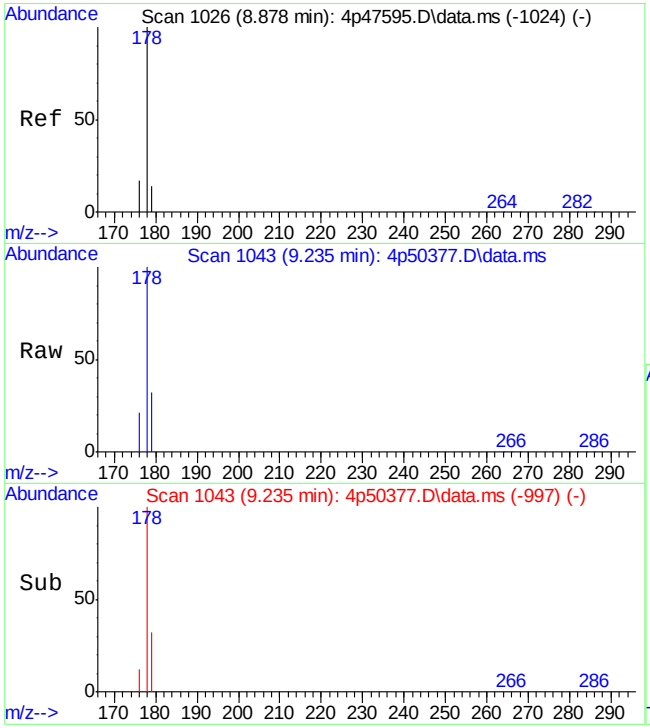


#23
Phenanthrene
Concen: 89.55 ppm m
RT: 9.180 min Scan# 1038
Delta R.T. -0.011 min
Lab File: 4p50377.D
Acq: 30 Dec 2021 3:46 pm

Tgt Ion:178 Resp: 3893

Ion	Ratio	Lower	Upper
178	100		
179	156.3	0.0	46.0#
176	46.1	0.0	45.6#

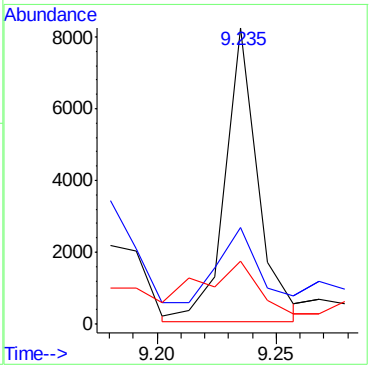


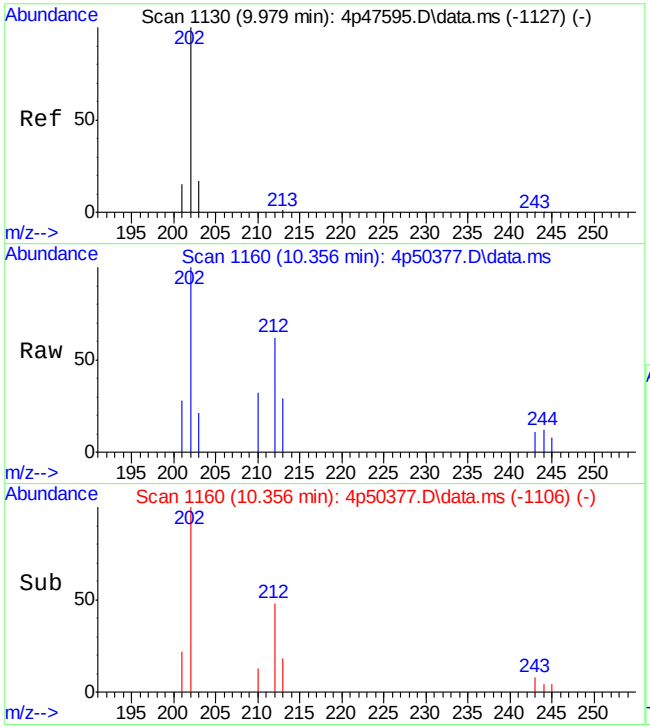


#24
Anthracene
Concen: 187.70 ppm
RT: 9.235 min Scan# 1043
Delta R.T. 0.000 min
Lab File: 4p50377.D
Acq: 30 Dec 2021 3:46 pm

Tgt Ion:178 Resp: 7826

Ion	Ratio	Lower	Upper
178	100		
179	25.2	0.0	43.0
176	16.5	0.0	48.4

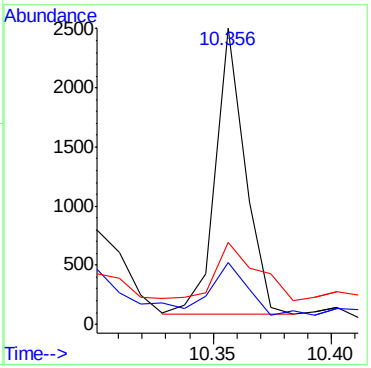


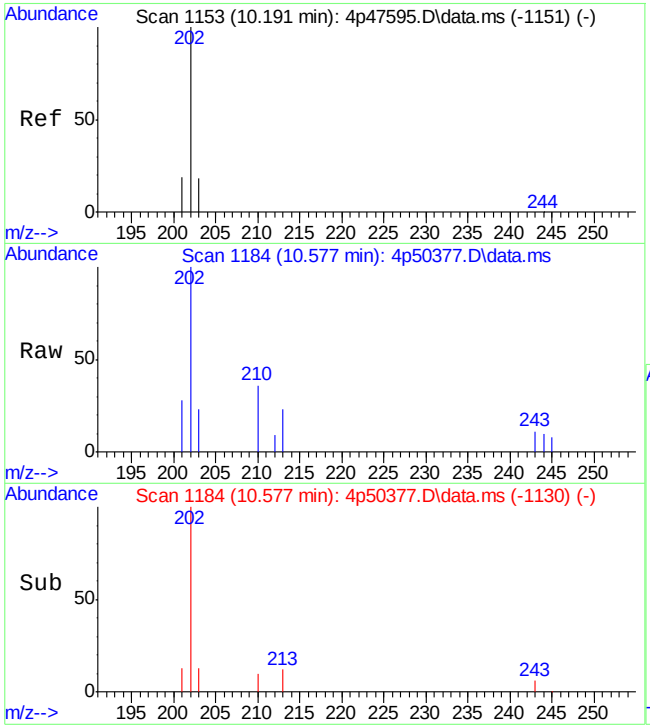


#25
Fluoranthene
Concen: 46.61 ppm
RT: 10.356 min Scan# 1160
Delta R.T. 0.000 min
Lab File: 4p50377.D
Acq: 30 Dec 2021 3:46 pm

Tgt Ion:202 Resp: 2110

Ion	Ratio	Lower	Upper
202	100		
203	15.6	0.0	47.6
201	20.0	0.0	42.9

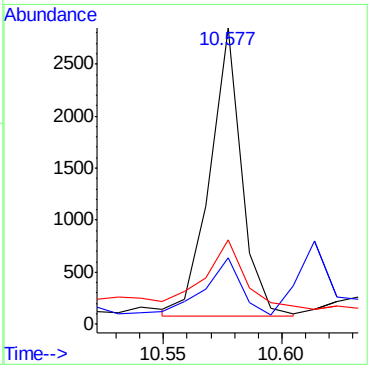




#26
Pyrene
Concen: 52.02 ppm
RT: 10.577 min Scan# 1184
Delta R.T. 0.000 min
Lab File: 4p50377.D
Acq: 30 Dec 2021 3:46 pm

Tgt Ion:202 Resp: 2591

Ion	Ratio	Lower	Upper
202	100		
203	14.7	0.0	47.6
201	22.3	0.0	46.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2635\
Data File : 4p50288.D
Acq On : 28 Dec 2021 12:08 am
Operator : kristis
Sample : jd36624-7
Misc : op37108a,e4p2635,250,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 28 10:16:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

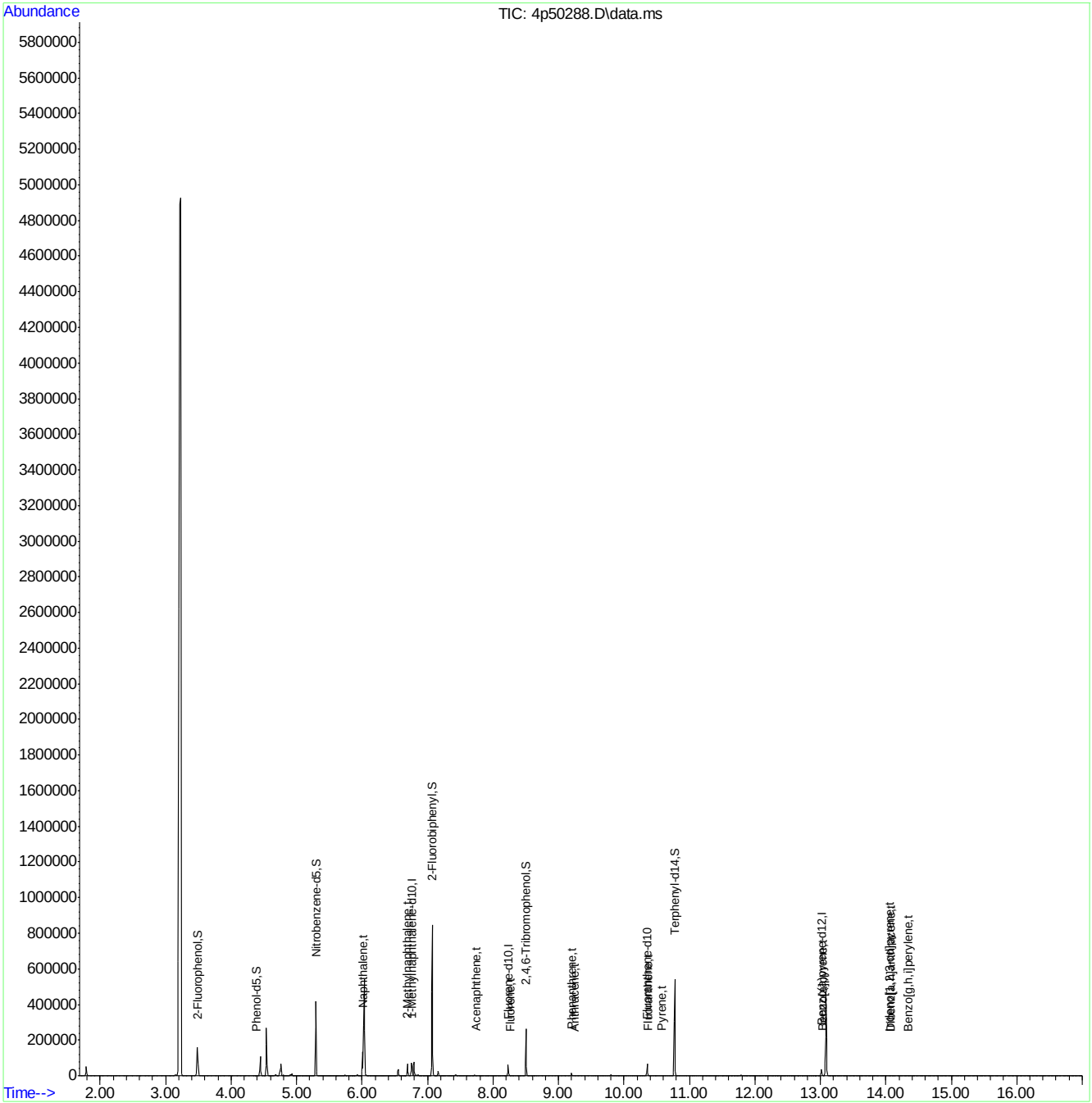
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.758	150	18294	800.00	ppm	0.00
13) Fluorene-d10	8.233	176	25672	800.00	ppm	0.00
20) Fluoranthene-d10	10.356	212	41014	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.016	264	21106	800.00	ppm	0.02
System Monitoring Compounds						
3) 2-Fluorophenol	3.494	112	70514	6213.61	ppm	0.03
Spiked Amount 50.000			Recovery = 12427.22%			
4) Phenol-d5	4.385	99	86	3.99	ppm	-0.02
Spiked Amount 50.000			Recovery = 7.98%			
7) Nitrobenzene-d5	5.296	82	251132	14293.99	ppm	0.02
Spiked Amount 50.000			Recovery = 28587.98%			
14) 2-Fluorobiphenyl	7.076	172	385442	11770.61	ppm	0.00
Spiked Amount 50.000			Recovery = 23541.22%			
19) 2,4,6-Tribromophenol	8.506	330	82354	16808.80	ppm	0.02
Spiked Amount 50.000			Recovery = 33617.60%			
27) Terphenyl-d14	10.780	244	334188	11375.81	ppm	0.02
Spiked Amount 50.000			Recovery = 22751.62%			
Target Compounds						Qvalue
8) Naphthalene	6.012	128	83970	1603.81	ppm	98
10) 2-Methylnaphthalene	6.698	141	17891	653.99	ppm	84
16) Acenaphthene	7.750	153	506	16.58	ppm	79
17) Fluorene	8.259	166	302	8.20	ppm	78
23) Phenanthrene	9.202	178	10559	191.14	ppm	96
24) Anthracene	9.246	178	471	8.89	ppm	83
25) Fluoranthene	10.375	202	560	9.74	ppm	88
26) Pyrene	10.586	202	475	7.50	ppm	74
33) Benzo[a]pyrene	13.031	252	185	4.63	ppm	80
34) Indeno[1,2,3-cd]pyrene	14.057	276	203	4.26	ppm	82
35) Dibenz[a,h]anthracene	14.080	278	183	4.94	ppm	87
36) Benzo[g,h,i]perylene	14.334	276	249	6.17	ppm	94

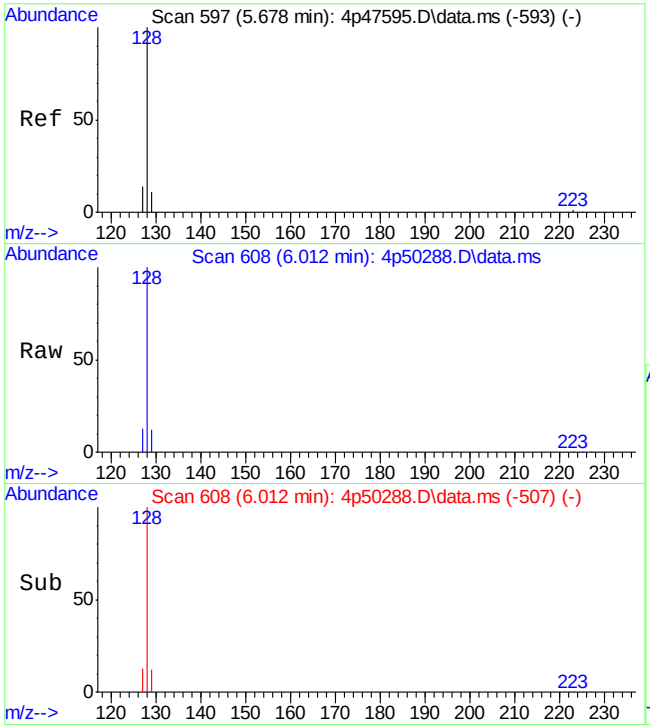
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2635\
Data File : 4p50288.D
Acq On : 28 Dec 2021 12:08 am
Operator : kristis
Sample : jd36624-7
Misc : op37108a,e4p2635,250,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 28 10:16:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

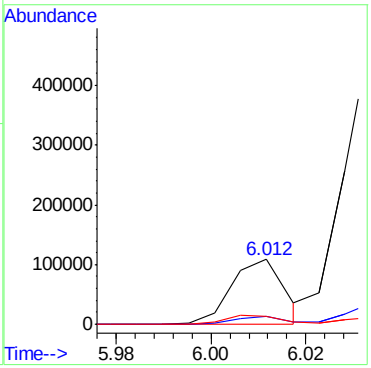


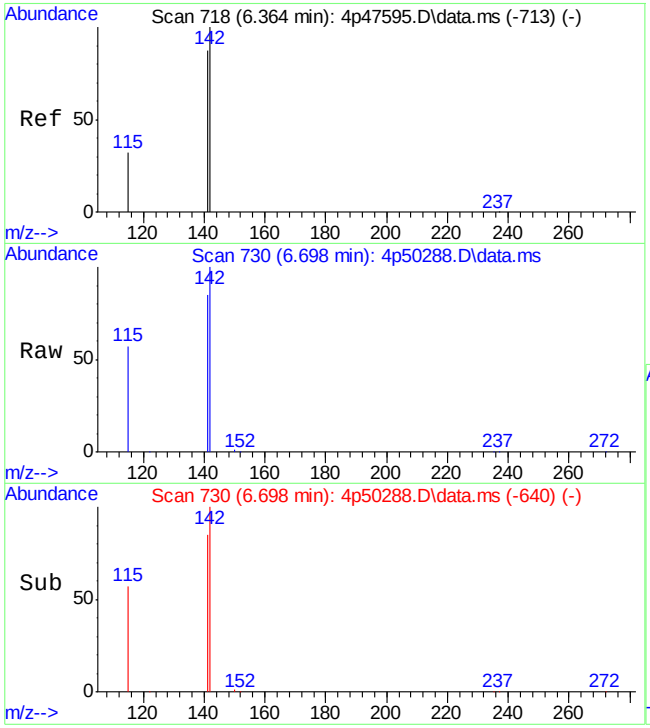


#8
Naphthalene
Concen: 1603.81 ppm
RT: 6.012 min Scan# 608
Delta R.T. 0.011 min
Lab File: 4p50288.D
Acq: 28 Dec 2021 12:08 am

Tgt Ion:128 Resp: 83970

Ion	Ratio	Lower	Upper
128	100		
129	11.5	0.0	41.1
127	13.2	0.0	42.0

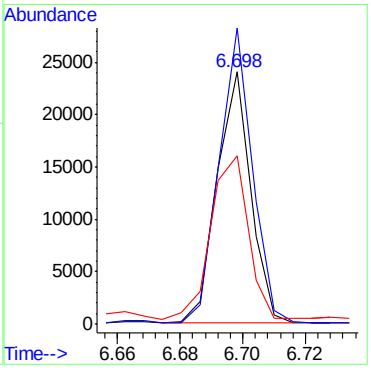


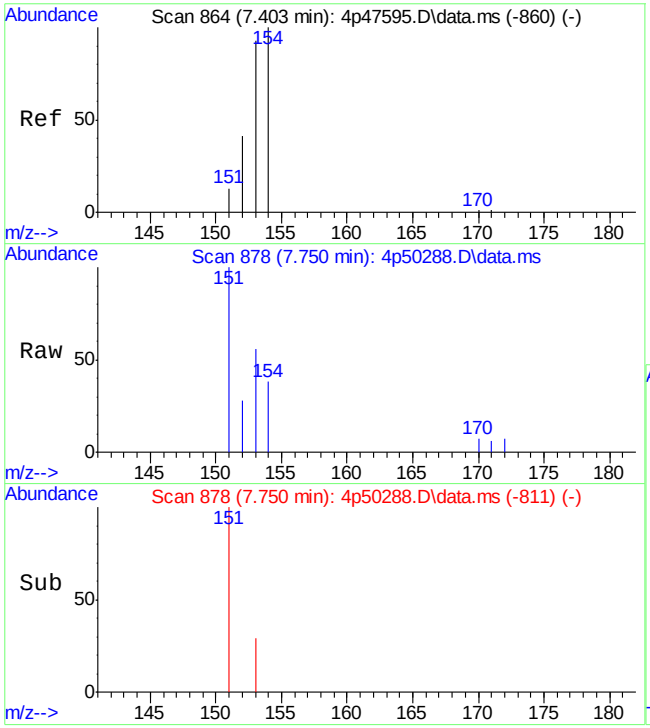


#10
2-Methylnaphthalene
Concen: 653.99 ppm
RT: 6.698 min Scan# 730
Delta R.T. 0.012 min
Lab File: 4p50288.D
Acq: 28 Dec 2021 12:08 am

Tgt Ion:141 Resp: 17891

Ion	Ratio	Lower	Upper
141	100		
142	117.4	96.1	156.1
115	65.0	7.9	67.9

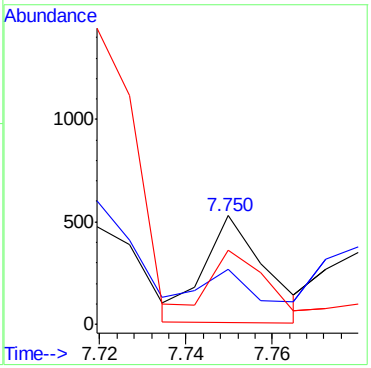


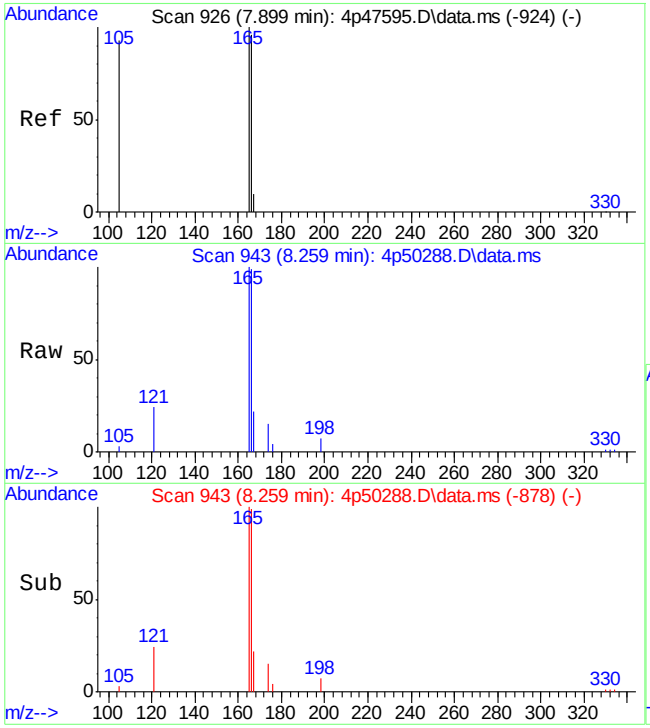


#16
Acenaphthene
Concen: 16.58 ppm
RT: 7.750 min Scan# 878
Delta R.T. 0.008 min
Lab File: 4p50288.D
Acq: 28 Dec 2021 12:08 am

Tgt Ion:153 Resp: 506

Ion	Ratio	Lower	Upper
153	100		
152	36.0	18.5	78.5
154	68.4	59.1	119.1

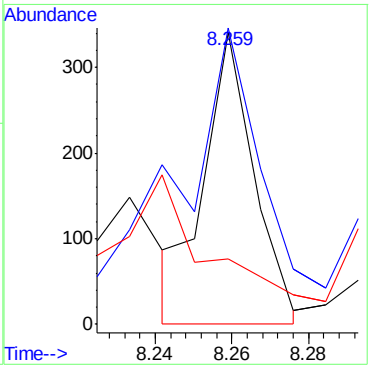


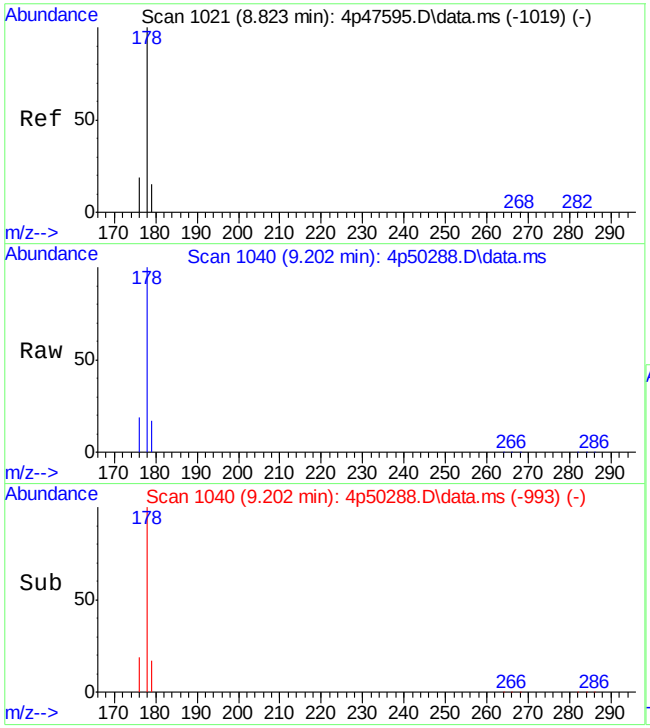


#17
Fluorene
Concen: 8.20 ppm
RT: 8.259 min Scan# 943
Delta R.T. 0.009 min
Lab File: 4p50288.D
Acq: 28 Dec 2021 12:08 am

Tgt Ion:166 Resp: 302

Ion	Ratio	Lower	Upper
166	100		
165	76.3	66.9	126.9
167	0.0	0.0	41.7

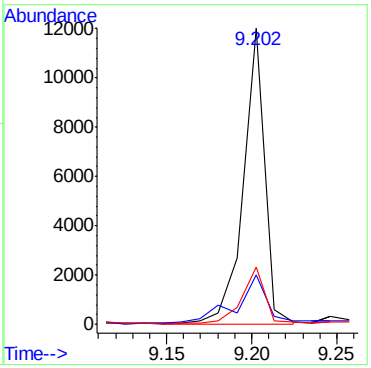


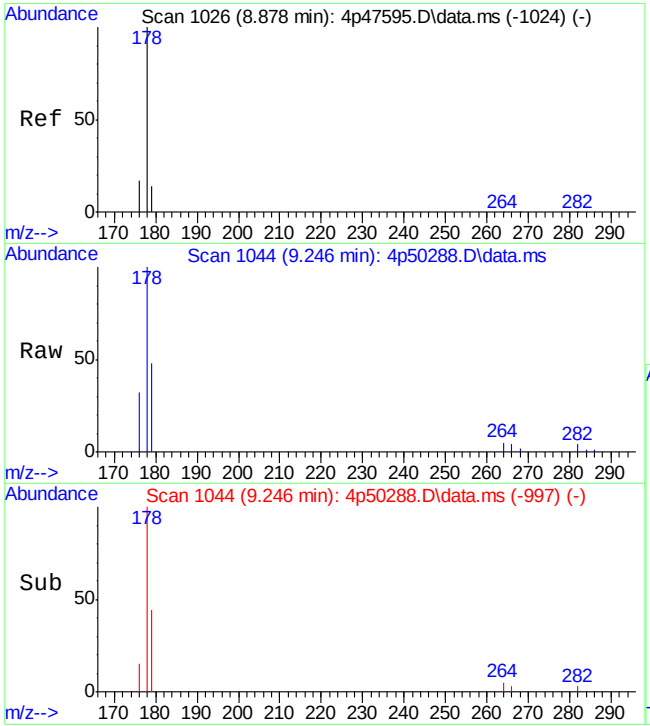


#23
Phenanthrene
Concen: 191.14 ppm
RT: 9.202 min Scan# 1040
Delta R.T. 0.011 min
Lab File: 4p50288.D
Acq: 28 Dec 2021 12:08 am

Tgt Ion:178 Resp: 10559

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	46.0
176	18.8	0.0	45.6

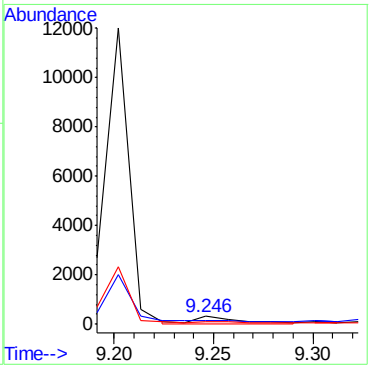


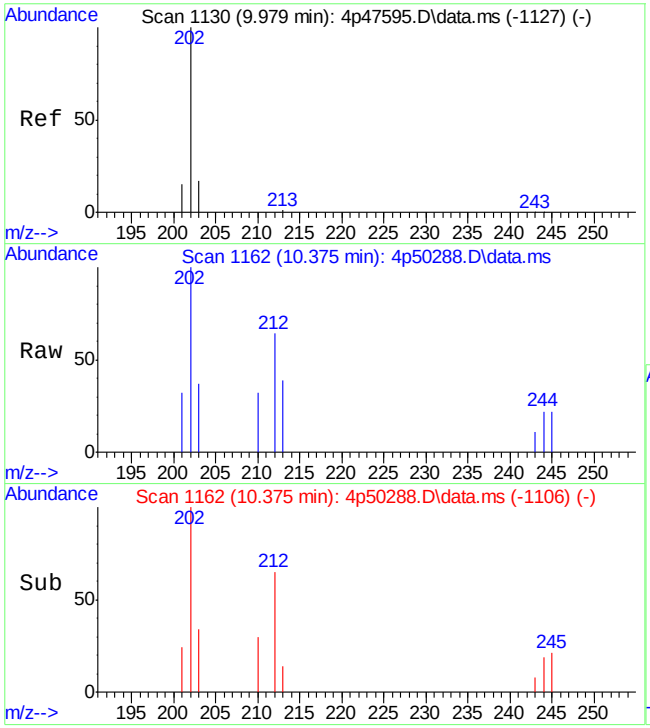


#24
Anthracene
Concen: 8.89 ppm
RT: 9.246 min Scan# 1044
Delta R.T. 0.011 min
Lab File: 4p50288.D
Acq: 28 Dec 2021 12:08 am

Tgt Ion:178 Resp: 471

Ion	Ratio	Lower	Upper
178	100		
179	12.7	0.0	43.0
176	5.9	0.0	48.4

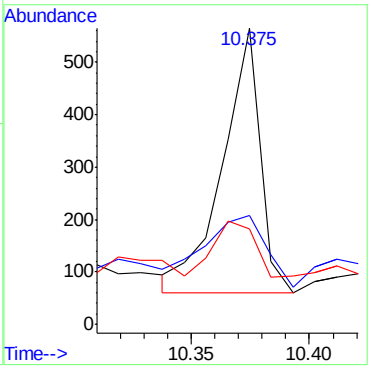


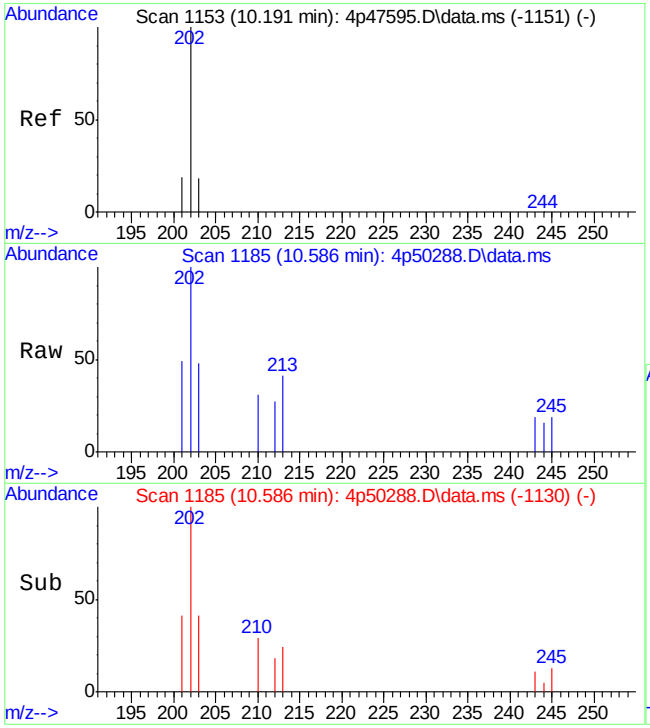


#25
Fluoranthene
Concen: 9.74 ppm
RT: 10.375 min Scan# 1162
Delta R.T. 0.019 min
Lab File: 4p50288.D
Acq: 28 Dec 2021 12:08 am

Tgt Ion:202 Resp: 560

Ion	Ratio	Lower	Upper
202	100		
203	24.7	0.0	47.6
201	15.4	0.0	42.9

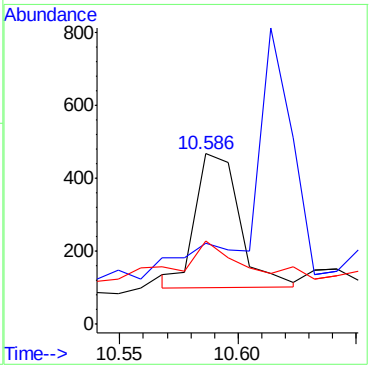


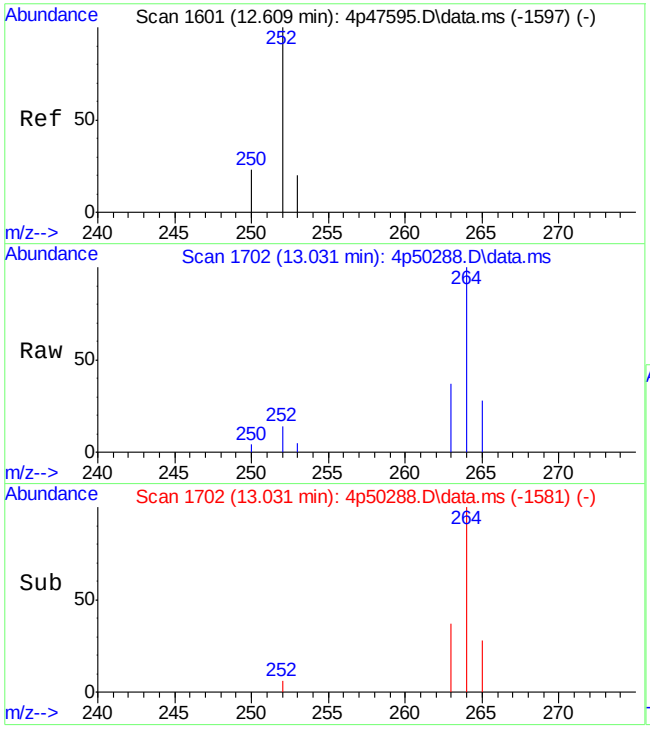


#26
Pyrene
Concen: 7.50 ppm
RT: 10.586 min Scan# 1185
Delta R.T. 0.009 min
Lab File: 4p50288.D
Acq: 28 Dec 2021 12:08 am

Tgt Ion:202 Resp: 475

Ion	Ratio	Lower	Upper
202	100		
203	0.0	0.0	47.6
201	20.6	0.0	46.0

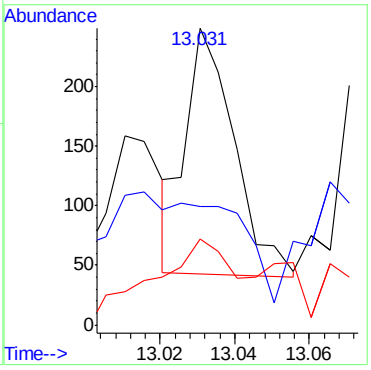


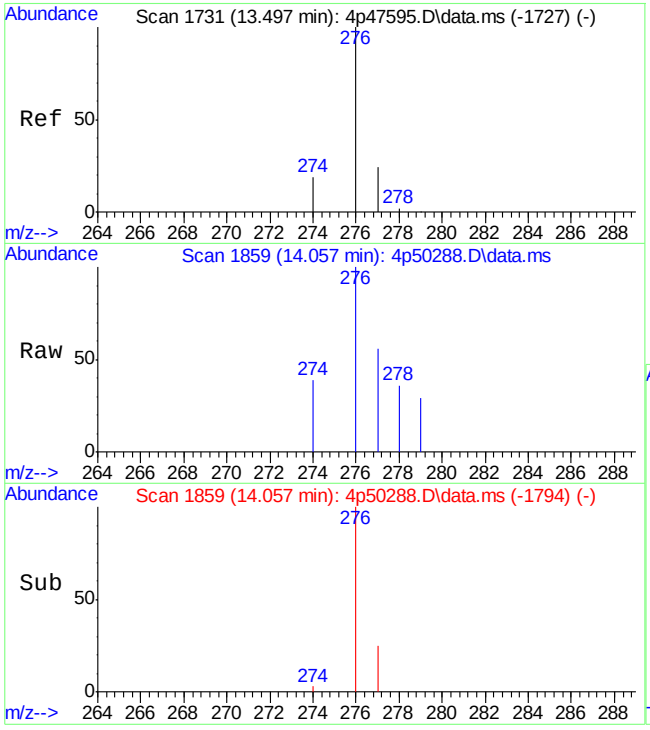


#33
Benzo[a]pyrene
Concen: 4.63 ppm
RT: 13.031 min Scan# 1702
Delta R.T. 0.010 min
Lab File: 4p50288.D
Acq: 28 Dec 2021 12:08 am

Tgt Ion:252 Resp: 185

Ion	Ratio	Lower	Upper
252	100		
253	9.4	0.0	52.8
250	15.7	0.0	50.6

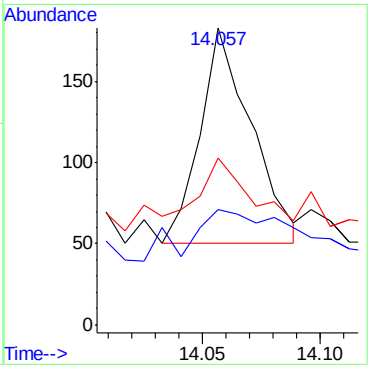


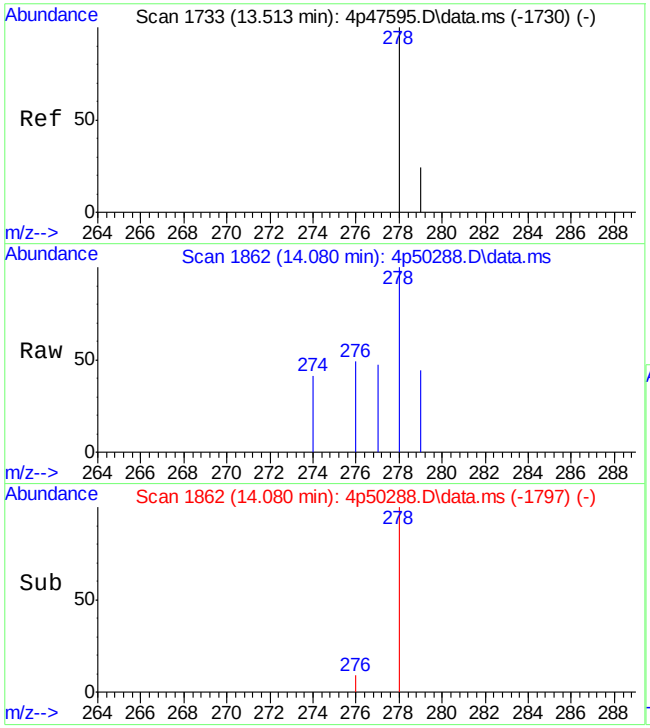


#34
Indeno[1,2,3-cd]pyrene
Concen: 4.26 ppm
RT: 14.057 min Scan# 1859
Delta R.T. 0.016 min
Lab File: 4p50288.D
Acq: 28 Dec 2021 12:08 am

Tgt Ion:276 Resp: 203

Ion	Ratio	Lower	Upper
276	100		
274	8.7	0.0	49.3
277	29.6	0.0	53.2

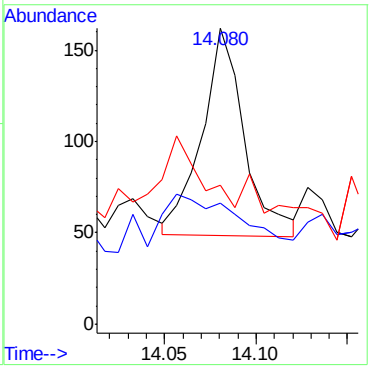


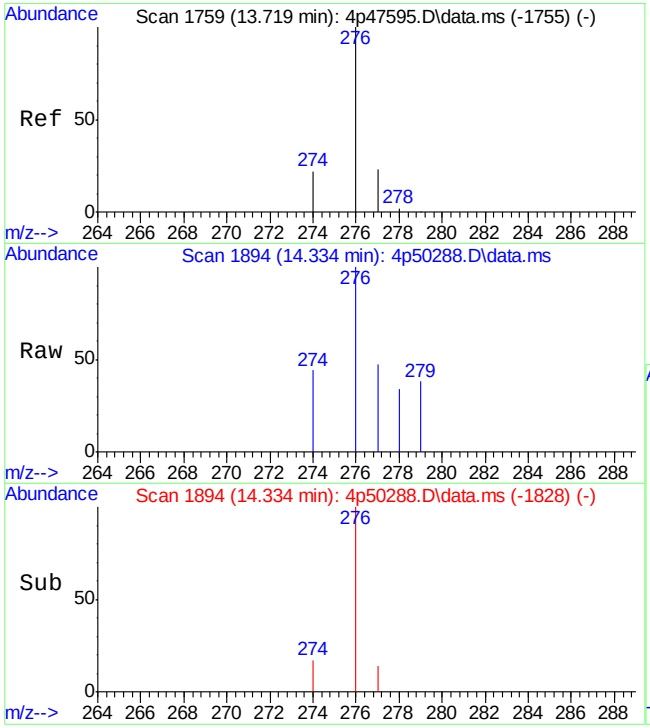


#35
Dibenz[a,h]anthracene
Concen: 4.94 ppm
RT: 14.080 min Scan# 1862
Delta R.T. 0.016 min
Lab File: 4p50288.D
Acq: 28 Dec 2021 12:08 am

Tgt Ion:278 Resp: 183

Ion	Ratio	Lower	Upper
278	100		
274	12.3	0.0	35.2
277	4.2	0.0	36.7

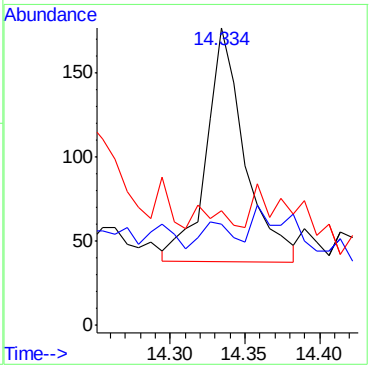




#36
Benzo[g,h,i]perylene
Concen: 6.17 ppm
RT: 14.334 min Scan# 1894
Delta R.T. 0.024 min
Lab File: 4p50288.D
Acq: 28 Dec 2021 12:08 am

Tgt Ion:276 Resp: 249

Ion	Ratio	Lower	Upper
276	100		
278	0.0	0.0	32.5
279	0.0	0.0	30.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50378.D
Acq On : 30 Dec 2021 4:09 pm
Operator : kristis
Sample : jd36624-7
Misc : op37108a,e4p2638,250,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 30 18:36:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Dec 30 16:29:12 2021
Response via : Initial Calibration

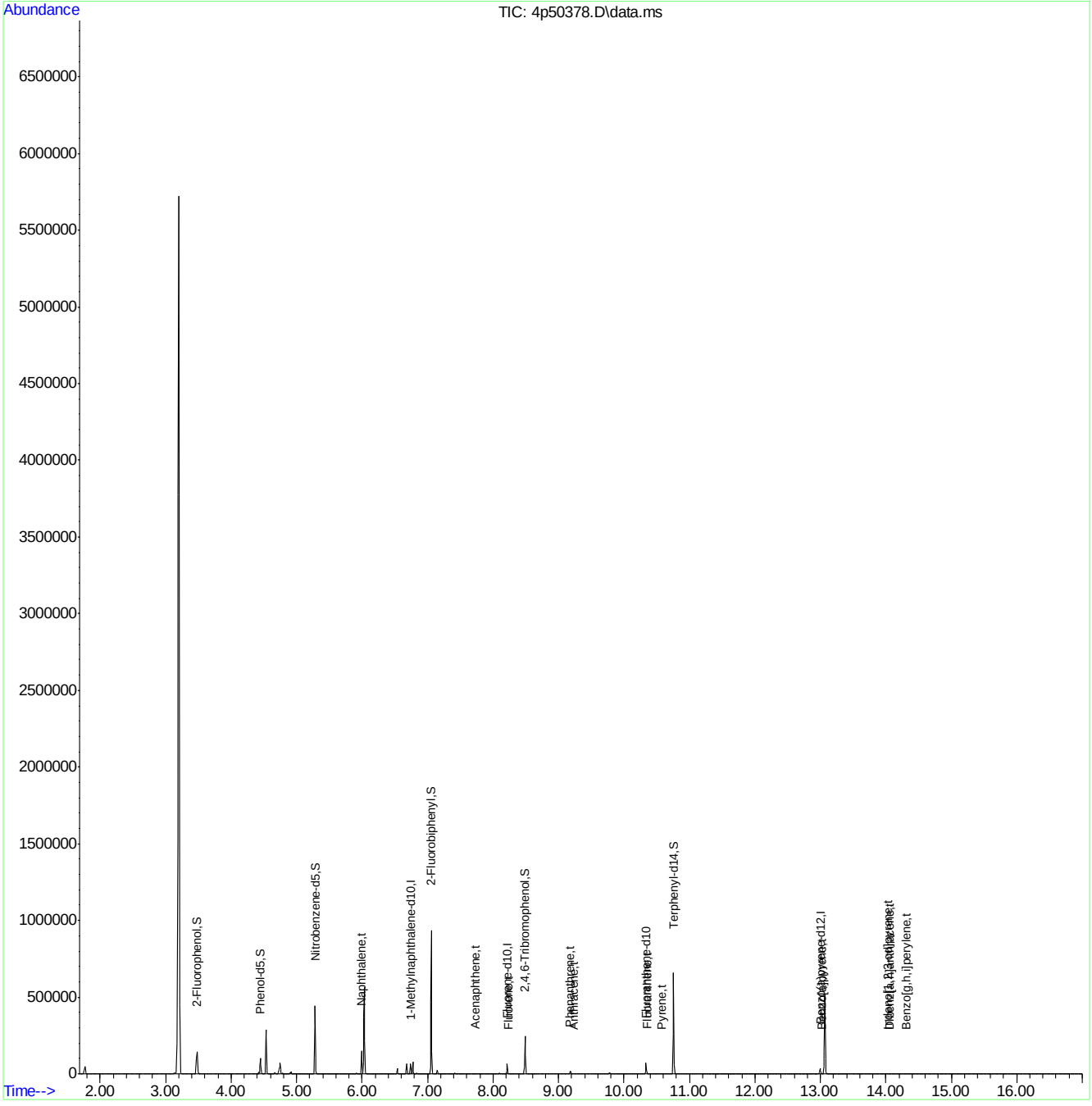
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.746	150	18973	800.00	ppm	0.00
13) Fluorene-d10	8.216	176	27447	800.00	ppm	0.00
20) Fluoranthene-d10	10.338	212	44149	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.000	264	22706	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.482	112	82630	7020.68	ppm	0.02
Spiked Amount 50.000			Recovery	= 14041.36%		
4) Phenol-d5	4.450	99	90971	4074.23	ppm	0.04
Spiked Amount 50.000			Recovery	= 8148.46%		
7) Nitrobenzene-d5	5.284	82	260161	14277.96	ppm	0.00
Spiked Amount 50.000			Recovery	= 28555.92%		
14) 2-Fluorobiphenyl	7.060	172	415100	11856.52	ppm	0.00
Spiked Amount 50.000			Recovery	= 23713.04%		
19) 2,4,6-Tribromophenol	8.489	330	89381	17063.27	ppm	0.00
Spiked Amount 50.000			Recovery	= 34126.54%		
27) Terphenyl-d14	10.761	244	372421	11777.06	ppm	0.00
Spiked Amount 50.000			Recovery	= 23554.12%		
Target Compounds						Qvalue
8) Naphthalene	5.995	128	85744	1579.09	ppm	96
16) Acenaphthene	7.734	153	524	16.06	ppm	81
17) Fluorene	8.242	166	323	8.20	ppm	97
23) Phenanthrene	9.180	178	10552	177.45	ppm	88
24) Anthracene	9.235	178	435	7.63	ppm	90
25) Fluoranthene	10.356	202	621	10.03	ppm	93
26) Pyrene	10.577	202	491	7.21	ppm	92
33) Benzo[a]pyrene	13.015	252	189	4.40	ppm	91
34) Indeno[1,2,3-cd]pyrene	14.033	276	239	4.67	ppm	90
35) Dibenz[a,h]anthracene	14.057	278	200	5.01	ppm	84
36) Benzo[g,h,i]perylene	14.311	276	212	4.89	ppm	94

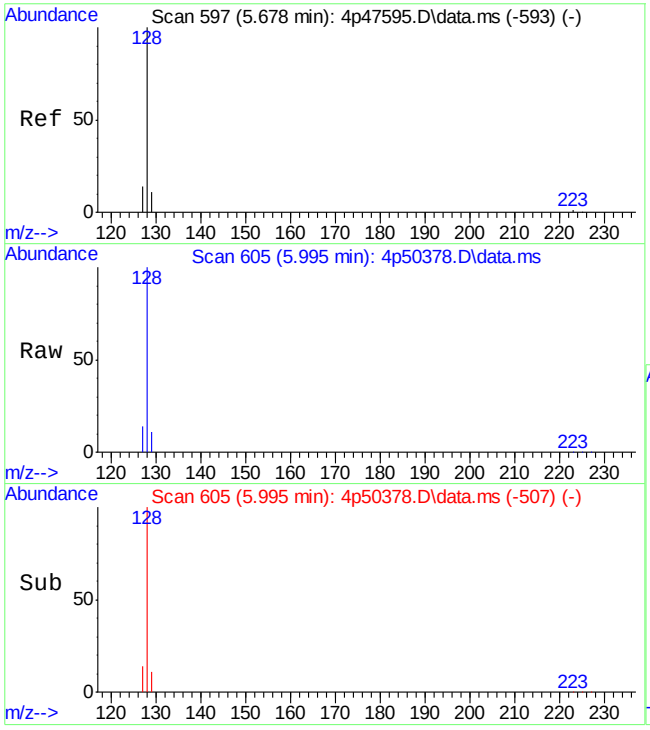
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50378.D
Acq On : 30 Dec 2021 4:09 pm
Operator : kristis
Sample : jd36624-7
Misc : op37108a,e4p2638,250,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 30 18:36:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Dec 30 16:29:12 2021
Response via : Initial Calibration

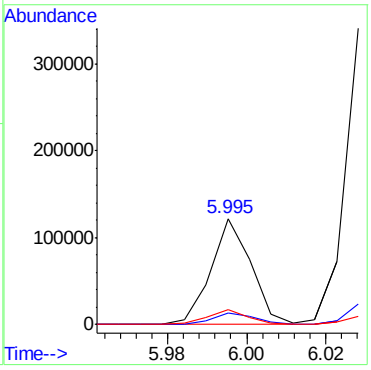


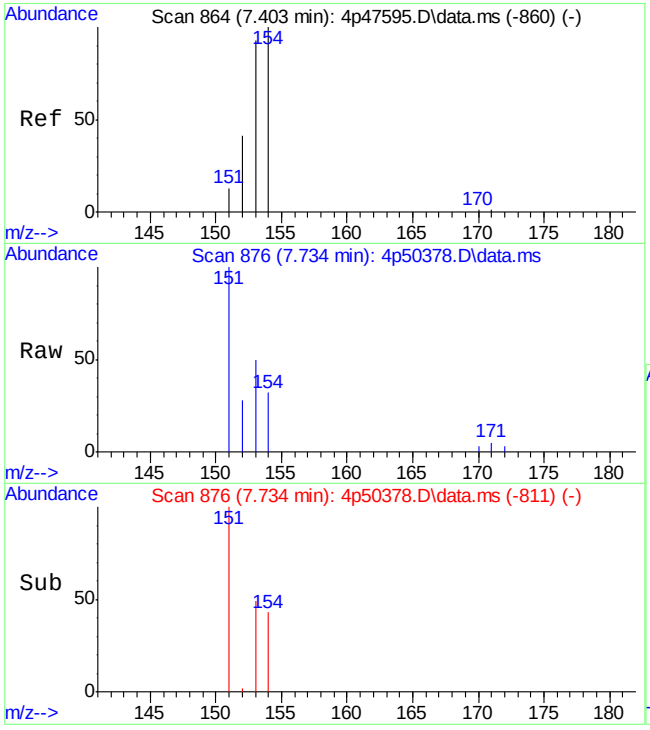


#8
Naphthalene
Concen: 1579.09 ppm
RT: 5.995 min Scan# 605
Delta R.T. -0.005 min
Lab File: 4p50378.D
Acq: 30 Dec 2021 4:09 pm

Tgt Ion:128 Resp: 85744

Ion	Ratio	Lower	Upper
128	100		
129	10.2	0.0	41.1
127	14.3	0.0	42.0

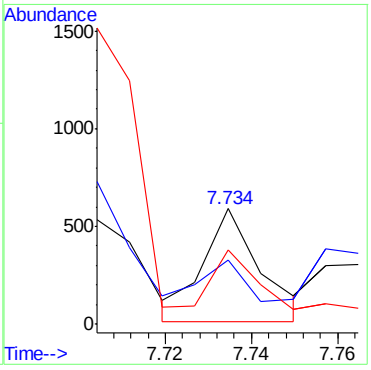


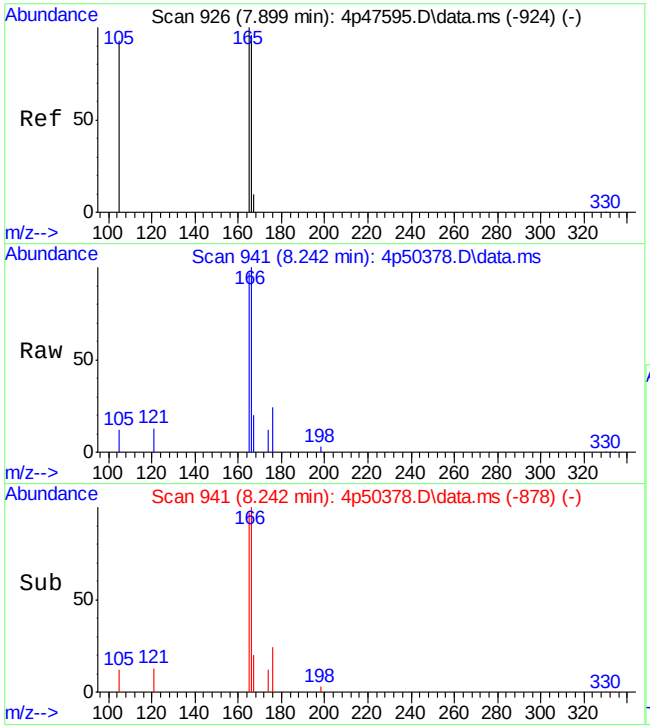


#16
Acenaphthene
Concen: 16.06 ppm
RT: 7.734 min Scan# 876
Delta R.T. -0.008 min
Lab File: 4p50378.D
Acq: 30 Dec 2021 4:09 pm

Tgt Ion:153 Resp: 524

Ion	Ratio	Lower	Upper
153	100		
152	42.2	18.5	78.5
154	66.0	59.1	119.1

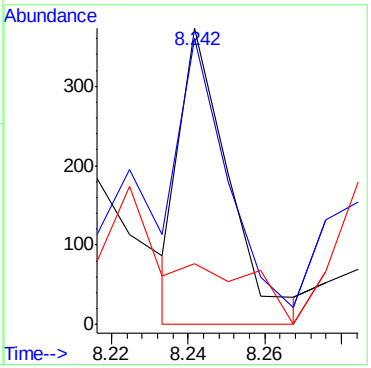


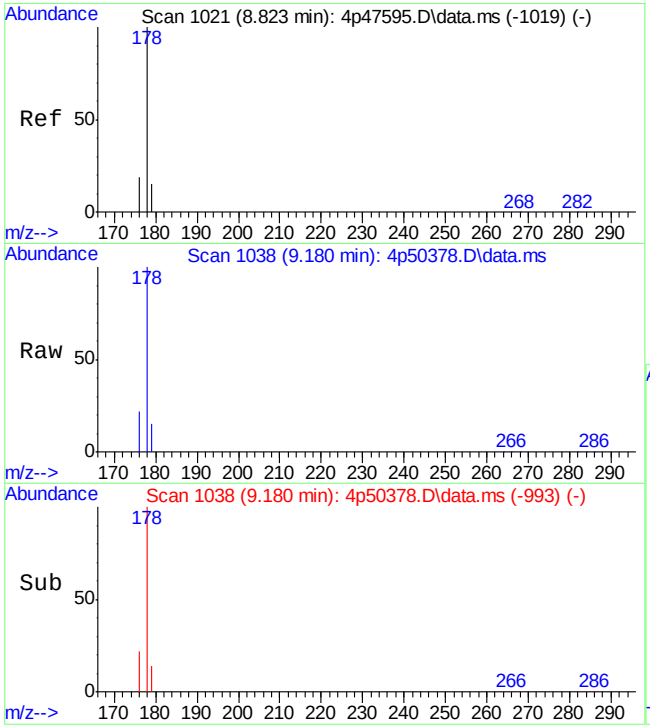


#17
Fluorene
Concen: 8.20 ppm
RT: 8.242 min Scan# 941
Delta R.T. -0.008 min
Lab File: 4p50378.D
Acq: 30 Dec 2021 4:09 pm

Tgt Ion:166 Resp: 323

Ion	Ratio	Lower	Upper
166	100		
165	93.9	66.9	126.9
167	14.5	0.0	41.7

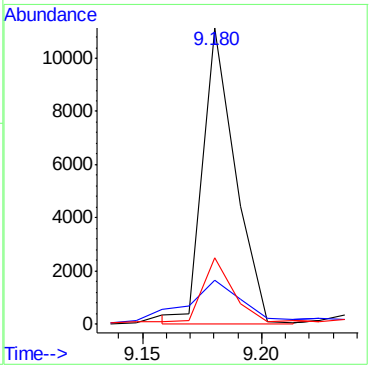


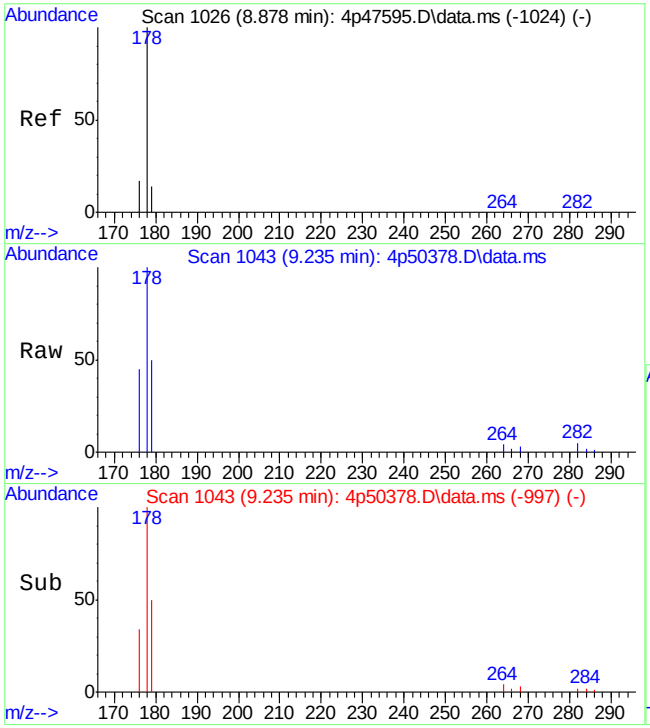


#23
Phenanthrene
Concen: 177.45 ppm
RT: 9.180 min Scan# 1038
Delta R.T. -0.011 min
Lab File: 4p50378.D
Acq: 30 Dec 2021 4:09 pm

Tgt Ion:178 Resp: 10552

Ion	Ratio	Lower	Upper
178	100		
179	11.8	0.0	46.0
176	21.7	0.0	45.6

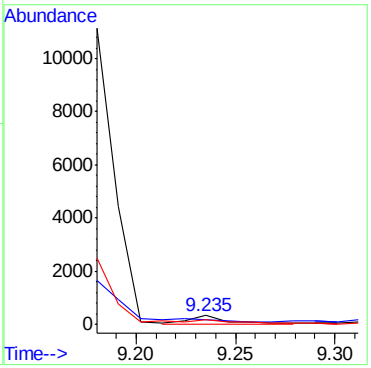


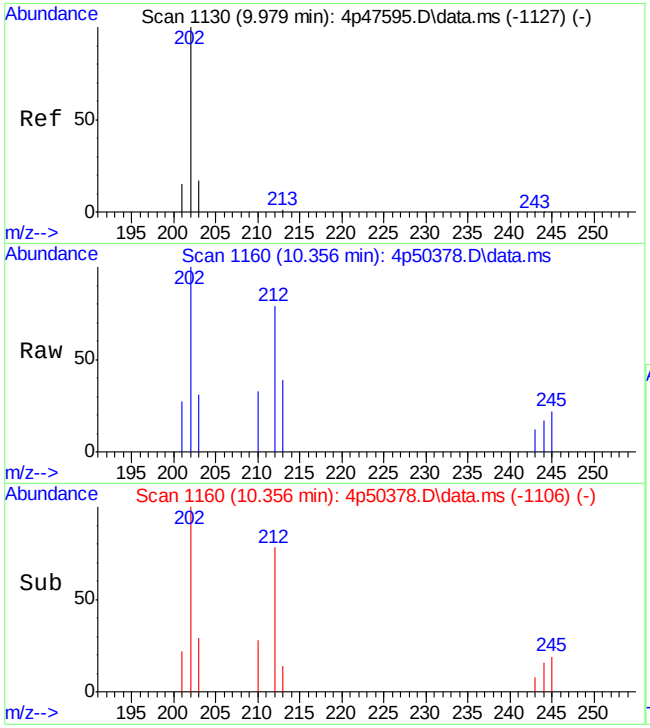


#24
Anthracene
Concen: 7.63 ppm
RT: 9.235 min Scan# 1043
Delta R.T. 0.000 min
Lab File: 4p50378.D
Acq: 30 Dec 2021 4:09 pm

Tgt Ion:178 Resp: 435

Ion	Ratio	Lower	Upper
178	100		
179	9.2	0.0	43.0
176	23.1	0.0	48.4

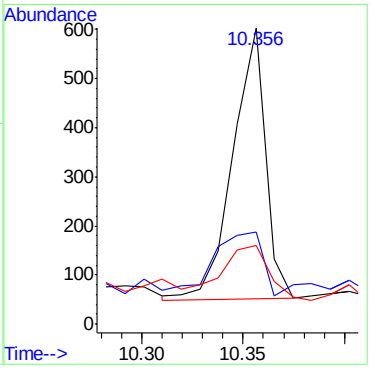


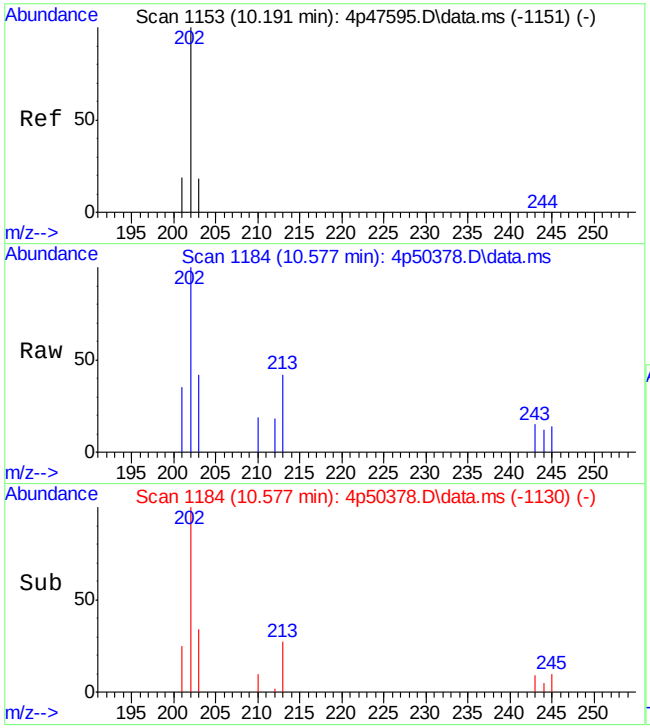


#25
Fluoranthene
Concen: 10.03 ppm
RT: 10.356 min Scan# 1160
Delta R.T. 0.000 min
Lab File: 4p50378.D
Acq: 30 Dec 2021 4:09 pm

Tgt Ion:202 Resp: 621

Ion	Ratio	Lower	Upper
202	100		
203	20.5	0.0	47.6
201	15.7	0.0	42.9

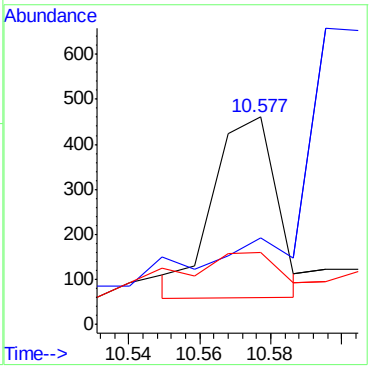


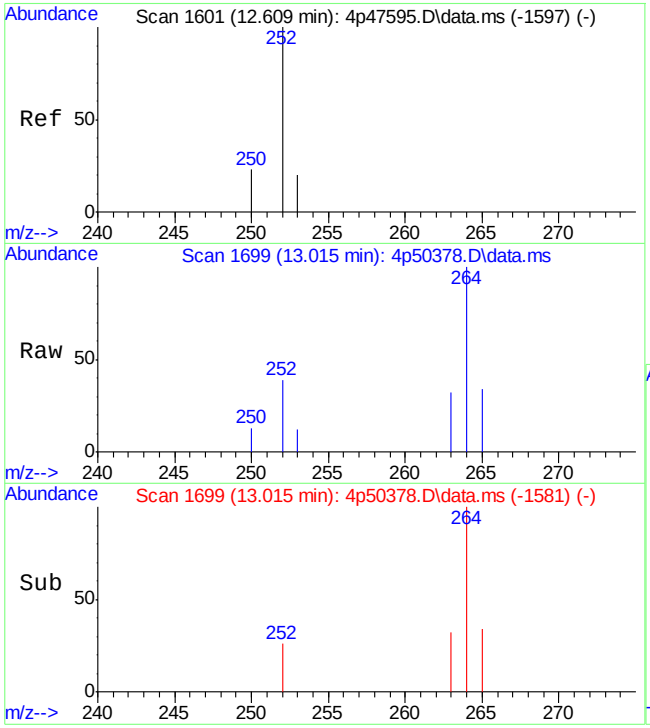


#26
Pyrene
Concen: 7.21 ppm
RT: 10.577 min Scan# 1184
Delta R.T. 0.000 min
Lab File: 4p50378.D
Acq: 30 Dec 2021 4:09 pm

Tgt Ion:202 Resp: 491

Ion	Ratio	Lower	Upper
202	100		
203	12.2	0.0	47.6
201	14.4	0.0	46.0

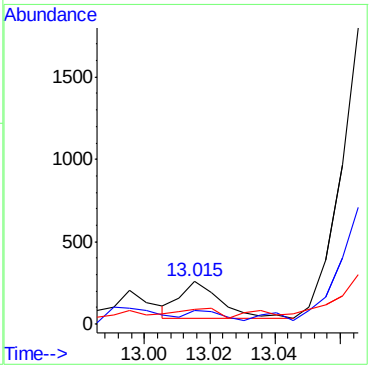


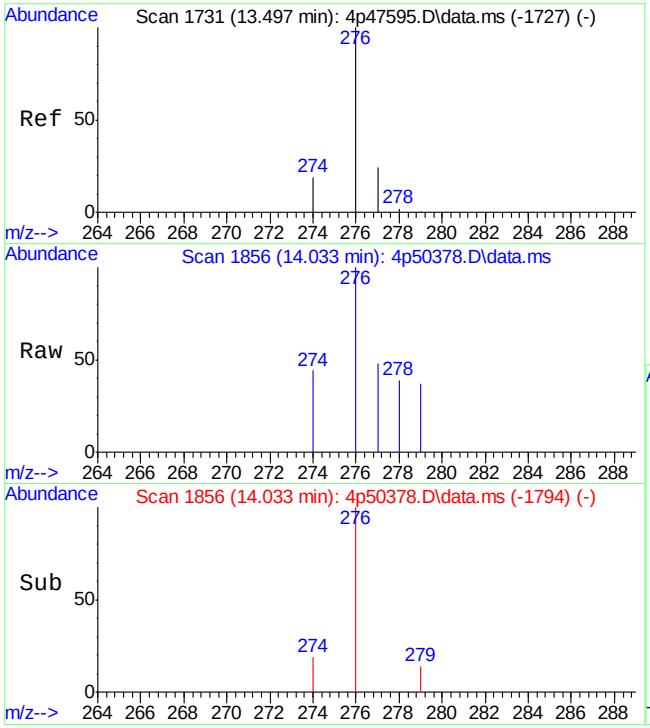


#33
Benzo[a]pyrene
Concen: 4.40 ppm
RT: 13.015 min Scan# 1699
Delta R.T. -0.005 min
Lab File: 4p50378.D
Acq: 30 Dec 2021 4:09 pm

Tgt Ion:252 Resp: 189

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	52.8
250	13.7	0.0	50.6

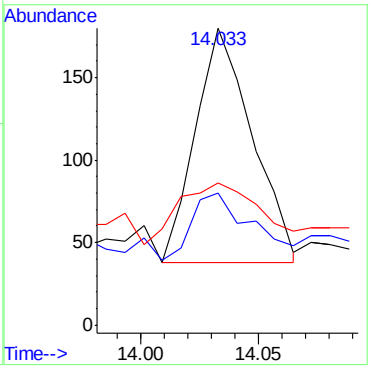


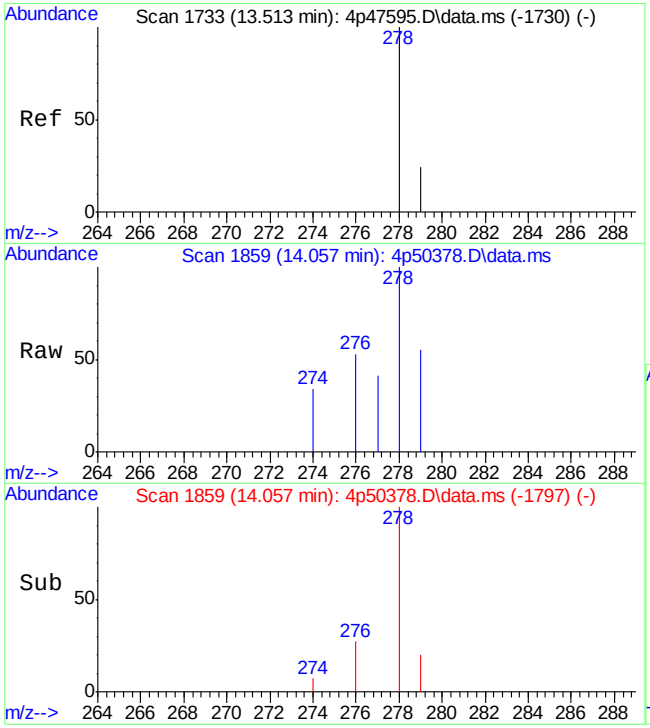


#34
Indeno[1,2,3-cd]pyrene
Concen: 4.67 ppm
RT: 14.033 min Scan# 1856
Delta R.T. -0.008 min
Lab File: 4p50378.D
Acq: 30 Dec 2021 4:09 pm

Tgt Ion:276 Resp: 239

Ion	Ratio	Lower	Upper
276	100		
274	26.3	0.0	49.3
277	20.5	0.0	53.2

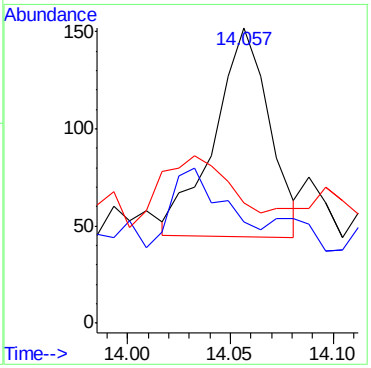




#35
Dibenz[a,h]anthracene
Concen: 5.01 ppm
RT: 14.057 min Scan# 1859
Delta R.T. -0.008 min
Lab File: 4p50378.D
Acq: 30 Dec 2021 4:09 pm

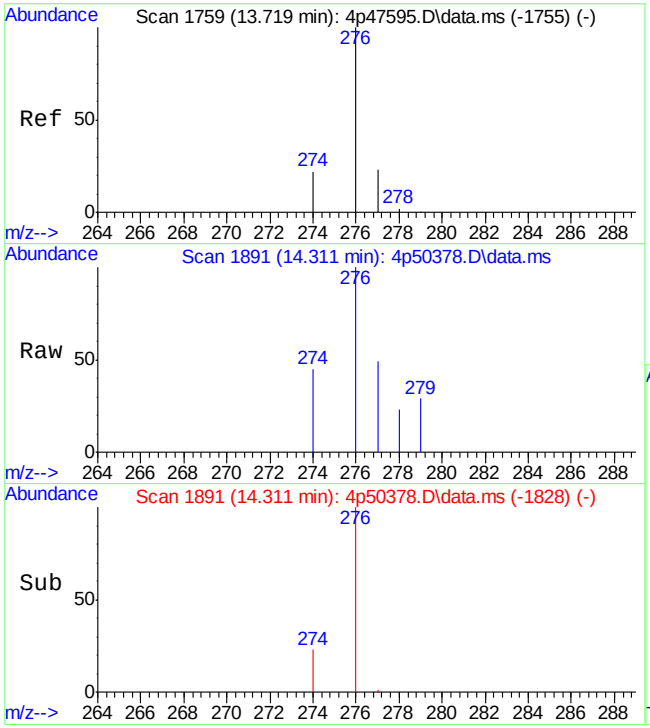
Tgt Ion:278 Resp: 200

Ion	Ratio	Lower	Upper
278	100		
274	1.6	0.0	35.2
277	0.0	0.0	36.7



9.1.24

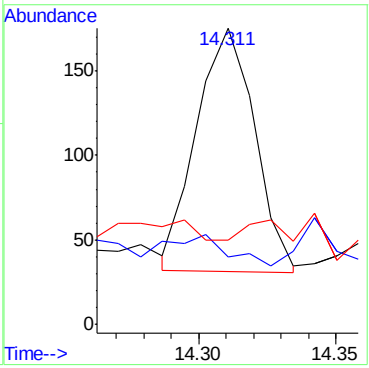
9



#36
Benzo[g,h,i]perylene
Concen: 4.89 ppm
RT: 14.311 min Scan# 1891
Delta R.T. 0.000 min
Lab File: 4p50378.D
Acq: 30 Dec 2021 4:09 pm

Tgt Ion:276 Resp: 212

Ion	Ratio	Lower	Upper
276	100		
278	0.0	0.0	32.5
279	0.0	0.0	30.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya 12/30/21 17:55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50370.D
Acq On : 30 Dec 2021 12:59 pm
Operator : kristis
Sample : jd36624-8
Misc : op37113a,e4p2638,260,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 30 14:45:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

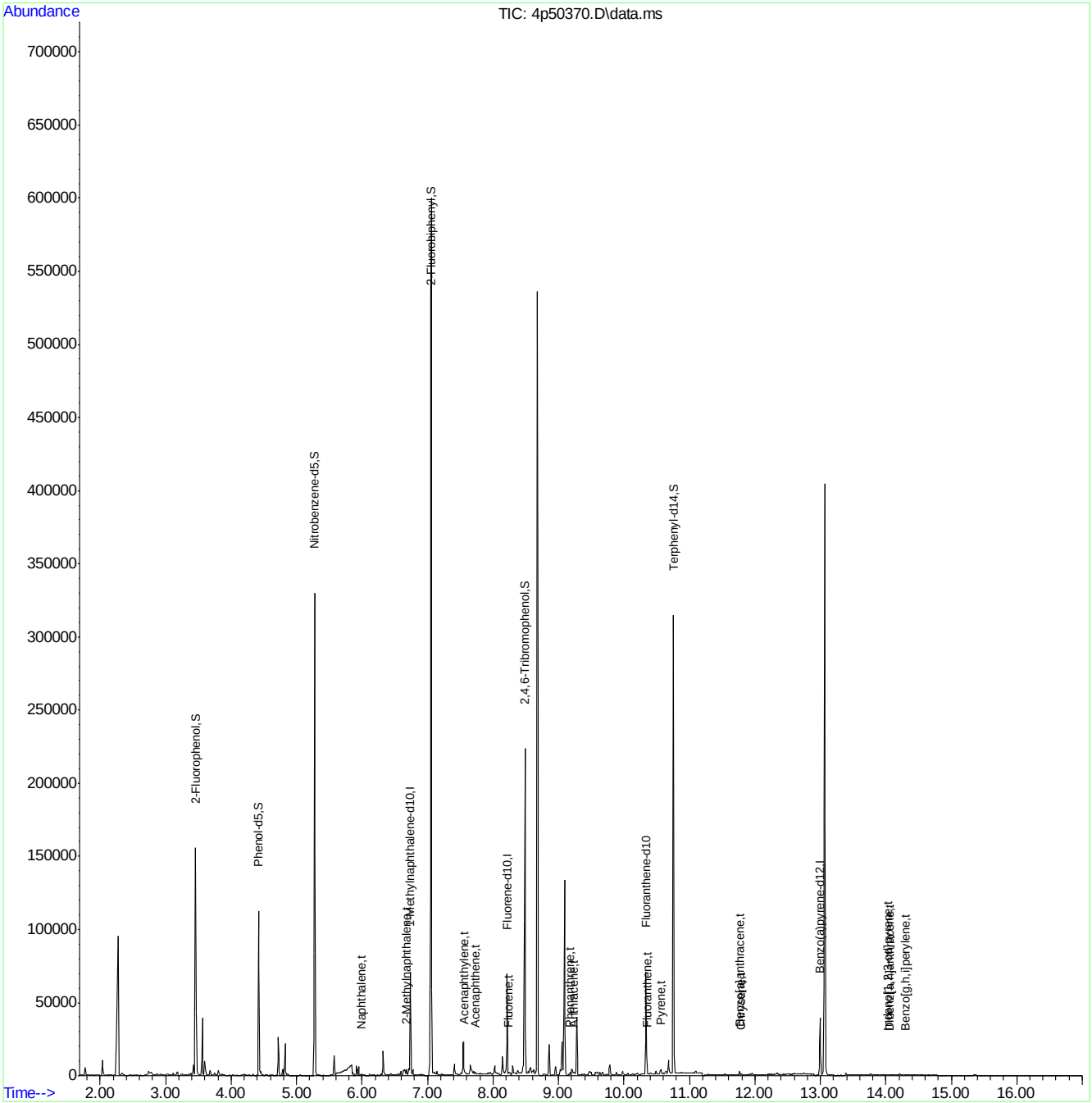
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.740	150	21570	800.00	ppm	-0.01
13) Fluorene-d10	8.216	176	28998	800.00	ppm	0.00
20) Fluoranthene-d10	10.338	212	45713	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	12.995	264	24905	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.459	112	66628	4979.48	ppm	0.00
Spiked Amount 50.000			Recovery	= 9958.96%		
4) Phenol-d5	4.422	99	84527m	3329.85	ppm	0.01
Spiked Amount 50.000			Recovery	= 6659.70%		
7) Nitrobenzene-d5	5.276	82	216207	10437.10	ppm	0.00
Spiked Amount 50.000			Recovery	= 20874.20%		
14) 2-Fluorobiphenyl	7.060	172	354665	9588.48	ppm	0.00
Spiked Amount 50.000			Recovery	= 19176.96%		
19) 2,4,6-Tribromophenol	8.489	330	76178	13764.91	ppm	0.00
Spiked Amount 50.000			Recovery	= 27529.82%		
27) Terphenyl-d14	10.761	244	246404	7525.44	ppm	0.00
Spiked Amount 50.000			Recovery	= 15050.88%		
Target Compounds						Qvalue
8) Naphthalene	5.995	128	1035	16.77	ppm	82
10) 2-Methylnaphthalene	6.680	141	1399	43.37	ppm	90
15) Acenaphthylene	7.560	152	574	10.63	ppm	75
16) Acenaphthene	7.734	153	248m	7.19	ppm	
17) Fluorene	8.242	166	620m	14.91	ppm	
23) Phenanthrene	9.180	178	830m	13.48	ppm	
24) Anthracene	9.235	178	838	14.19	ppm	64
25) Fluoranthene	10.356	202	925	14.43	ppm	88
26) Pyrene	10.568	202	914m	12.96	ppm	
28) Benzo[a]anthracene	11.768	228	1577	25.02	ppm	70
29) Chrysene	11.788	228	345	5.59	ppm	85
34) Indeno[1,2,3-cd]pyrene	14.033	276	212	3.77	ppm	79
35) Dibenz[a,h]anthracene	14.057	278	165	3.77	ppm	59
36) Benzo[g,h,i]perylene	14.303	276	323	6.79	ppm	99

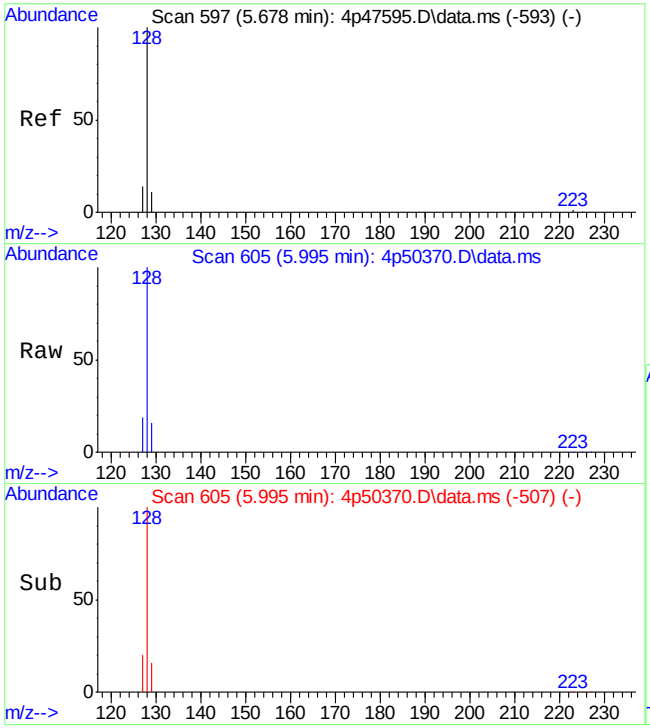
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50370.D
Acq On : 30 Dec 2021 12:59 pm
Operator : kristis
Sample : jd36624-8
Misc : op37113a,e4p2638,260,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 30 14:45:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

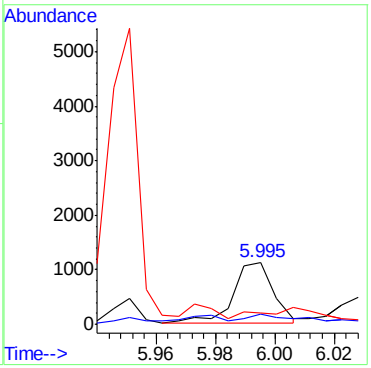


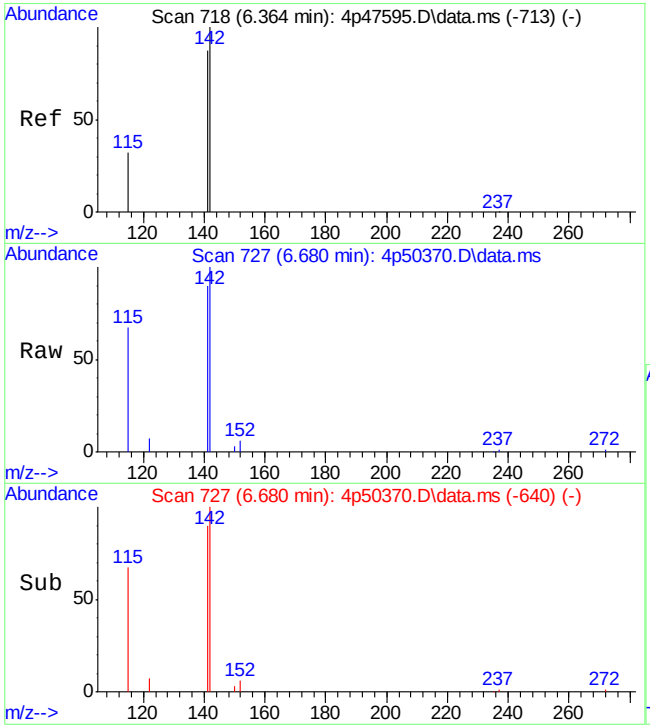


#8
Naphthalene
Concen: 16.77 ppm
RT: 5.995 min Scan# 605
Delta R.T. -0.006 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:128 Resp: 1035

Ion	Ratio	Lower	Upper
128	100		
129	9.3	0.0	41.1
127	0.0	0.0	42.0

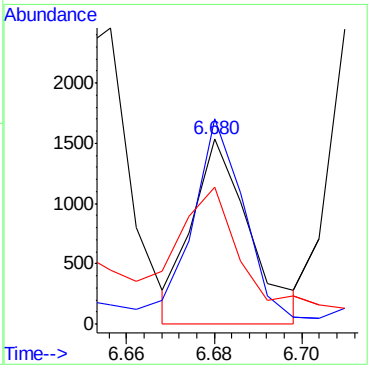


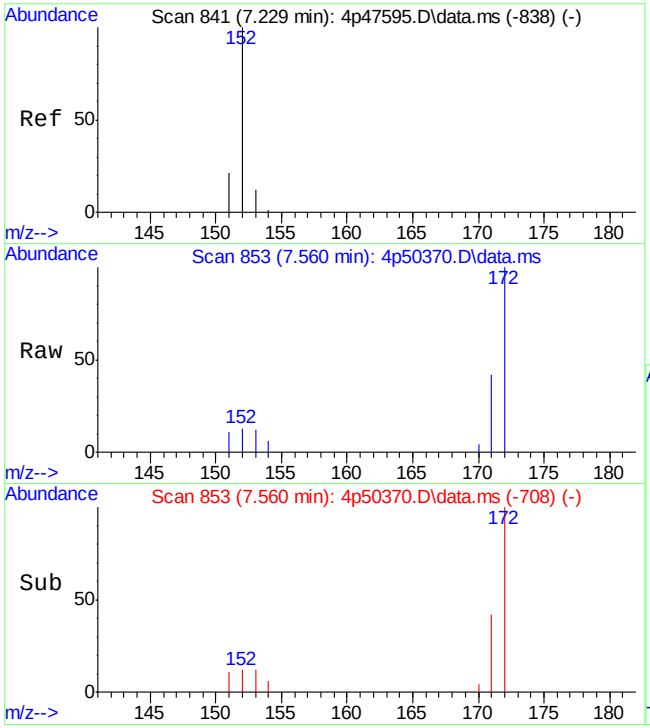


#10
2-Methylnaphthalene
Concen: 43.37 ppm
RT: 6.680 min Scan# 727
Delta R.T. -0.006 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:141 Resp: 1399

Ion	Ratio	Lower	Upper
141	100		
142	125.9	96.1	156.1
115	64.3	7.9	67.9

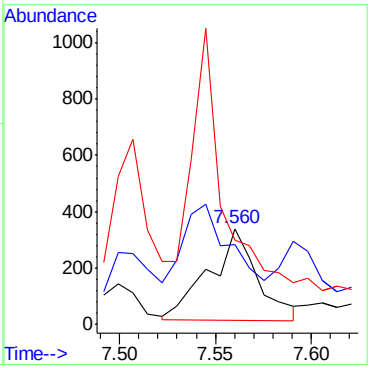


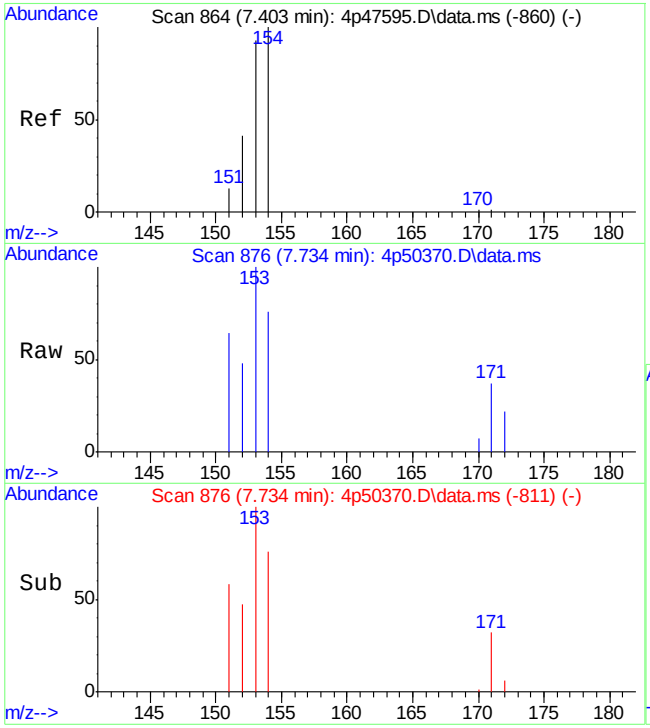


#15
Acenaphthylene
Concen: 10.63 ppm
RT: 7.560 min Scan# 853
Delta R.T. -0.008 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:152 Resp: 574

Ion	Ratio	Lower	Upper
152	100		
151	20.9	0.0	50.8
153	38.3	0.0	42.2

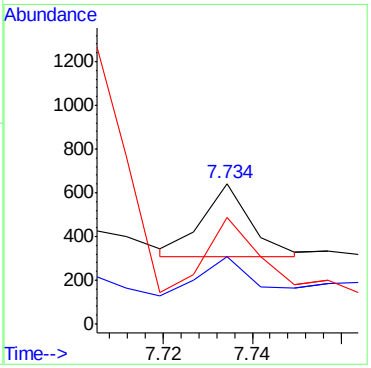


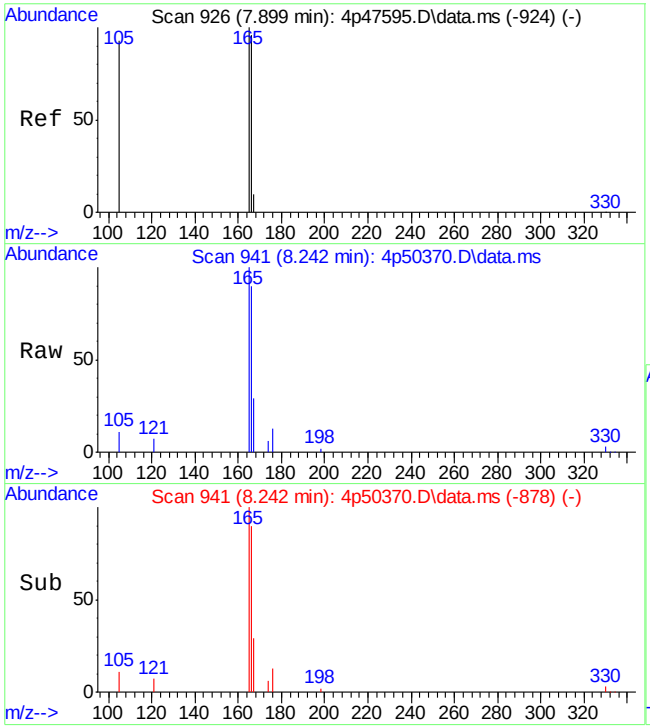


#16
Acenaphthene
Concen: 7.19 ppm m
RT: 7.734 min Scan# 876
Delta R.T. -0.008 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:153 Resp: 248

Ion	Ratio	Lower	Upper
153	100		
152	48.0	18.5	78.5
154	75.9	59.1	119.1

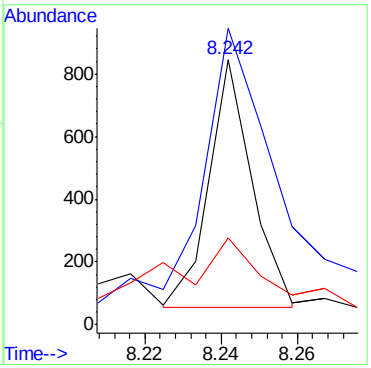


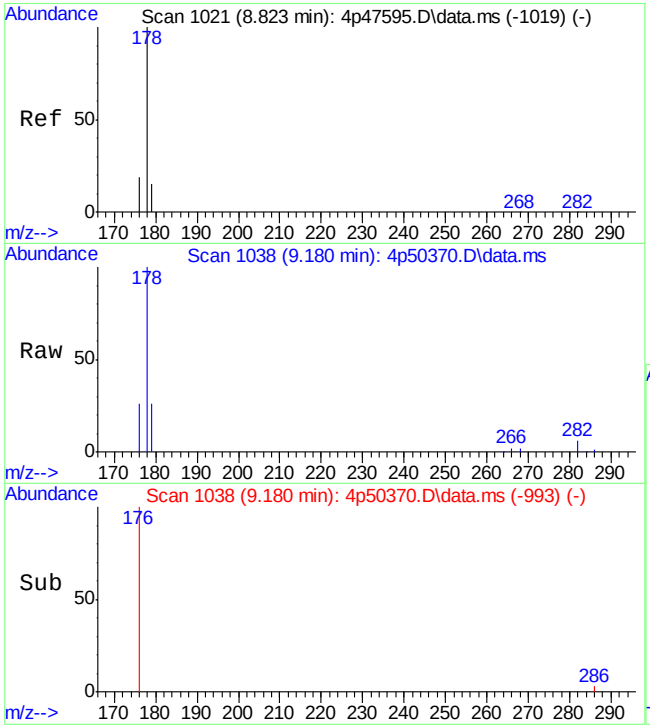


#17
Fluorene
Concen: 14.91 ppm m
RT: 8.242 min Scan# 941
Delta R.T. -0.009 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:166 Resp: 620

Ion	Ratio	Lower	Upper
166	100		
165	111.7	66.9	126.9
167	32.7	0.0	41.7

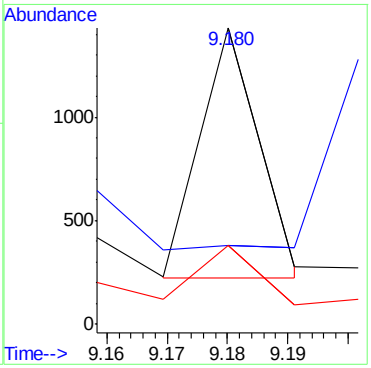


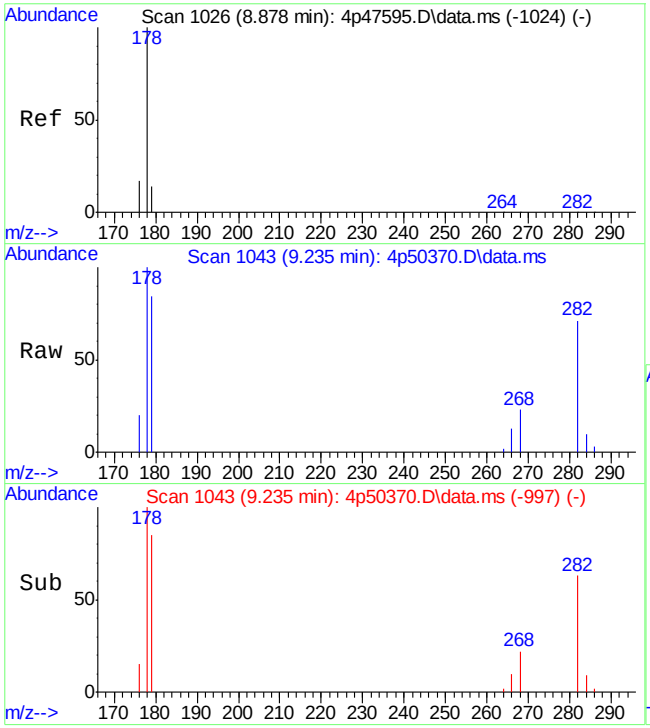


#23
Phenanthrene
Concen: 13.48 ppm m
RT: 9.180 min Scan# 1038
Delta R.T. -0.011 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:178 Resp: 830

Ion	Ratio	Lower	Upper
178	100		
179	26.4	0.0	46.0
176	26.5	0.0	45.6

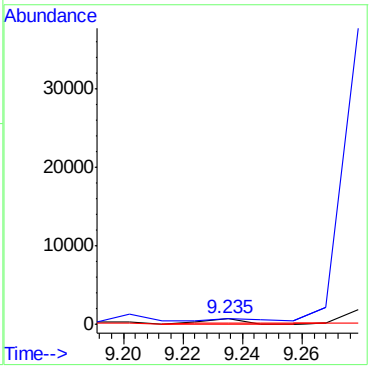


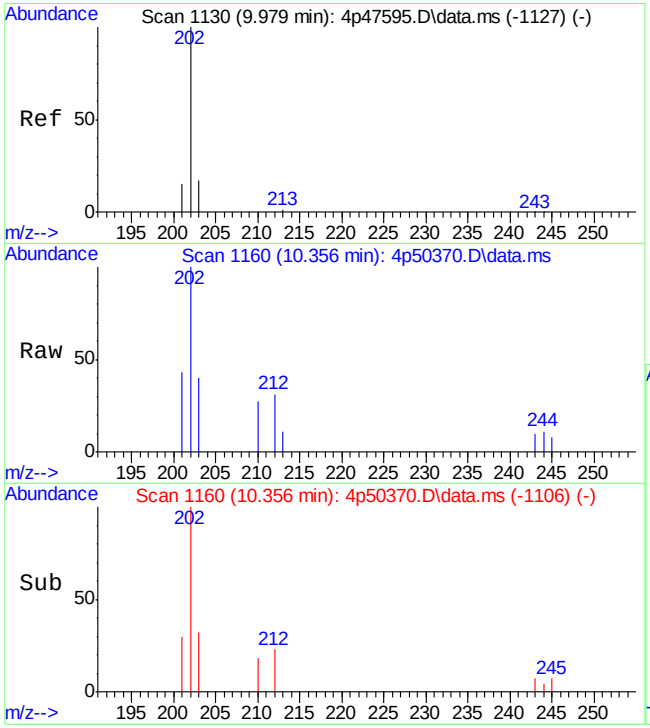


#24
Anthracene
Concen: 14.19 ppm
RT: 9.235 min Scan# 1043
Delta R.T. -0.000 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:178 Resp: 838

Ion	Ratio	Lower	Upper
178	100		
179	33.6	0.0	43.0
176	7.3	0.0	48.4

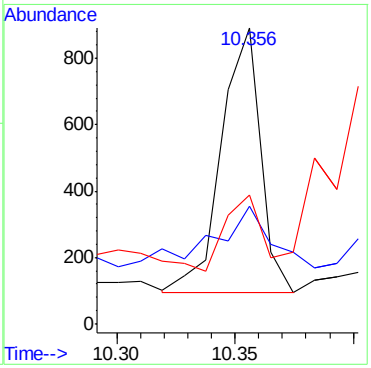


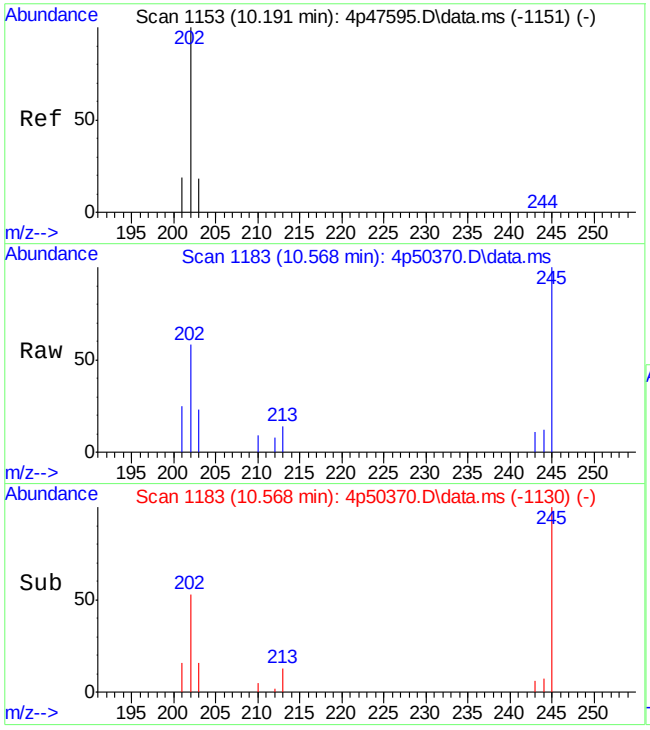


#25
Fluoranthene
Concen: 14.43 ppm
RT: 10.356 min Scan# 1160
Delta R.T. -0.000 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:202 Resp: 925

Ion	Ratio	Lower	Upper
202	100		
203	16.9	0.0	47.6
201	23.3	0.0	42.9

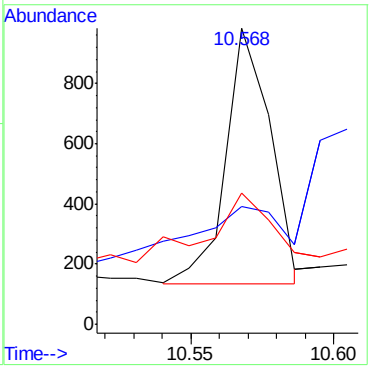


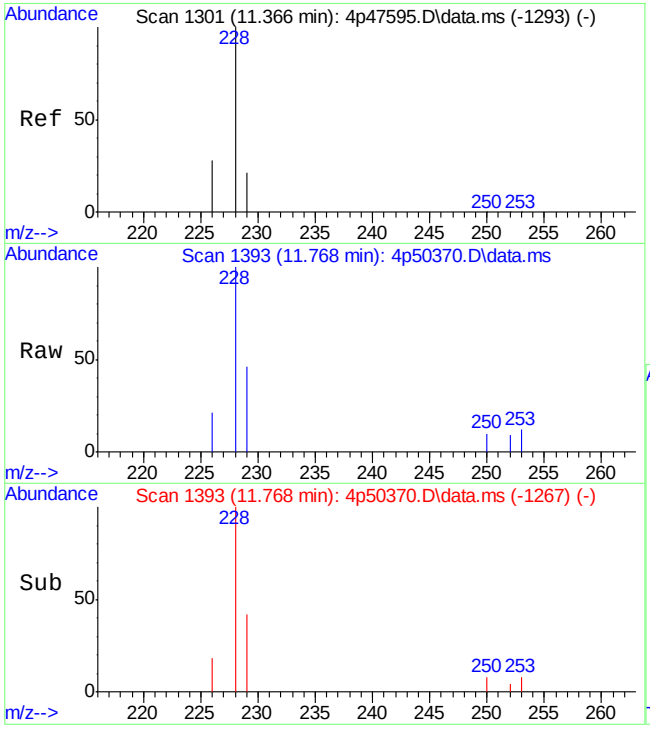


#26
Pyrene
Concen: 12.96 ppm m
RT: 10.568 min Scan# 1183
Delta R.T. -0.009 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:202 Resp: 914

Ion	Ratio	Lower	Upper
202	100		
203	39.6	0.0	47.6
201	44.3	0.0	46.0

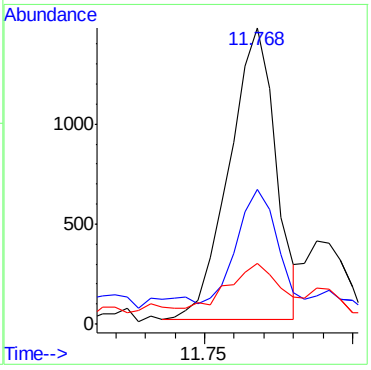


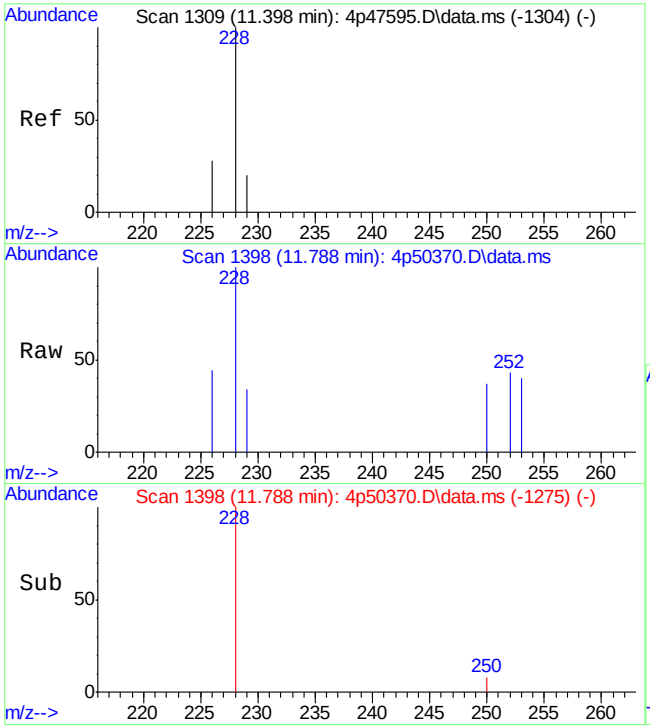


#28
Benzo[a]anthracene
Concen: 25.02 ppm
RT: 11.768 min Scan# 1393
Delta R.T. 0.004 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:228 Resp: 1577

Ion	Ratio	Lower	Upper
228	100		
229	40.4	0.0	49.8
226	14.9	0.0	53.3

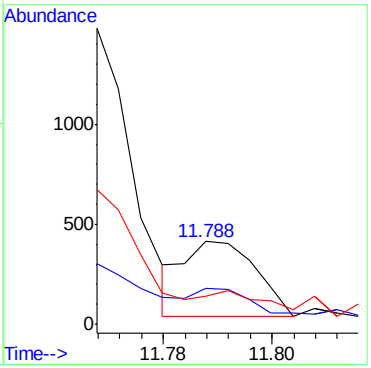


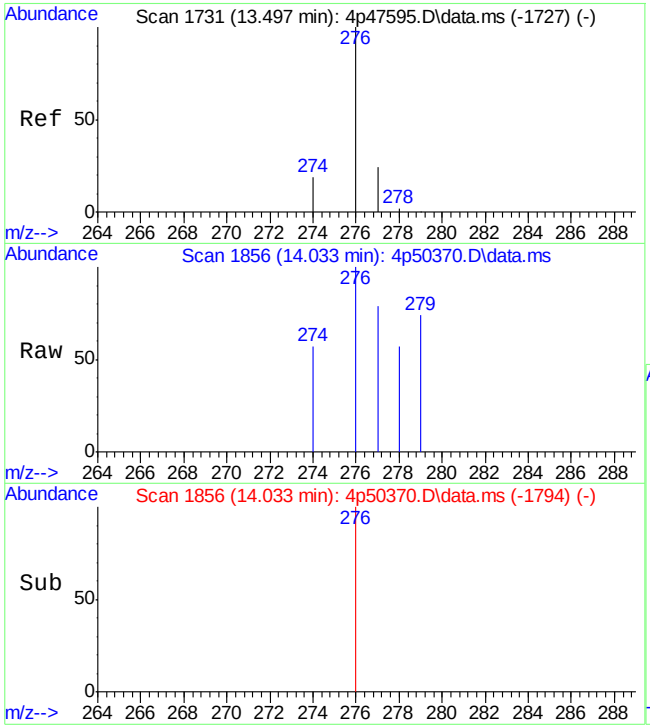


#29
Chrysene
Concen: 5.59 ppm
RT: 11.788 min Scan# 1398
Delta R.T. -0.008 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:228 Resp: 345

Ion	Ratio	Lower	Upper
228	100		
226	34.6	0.0	58.5
229	9.2	0.0	48.7

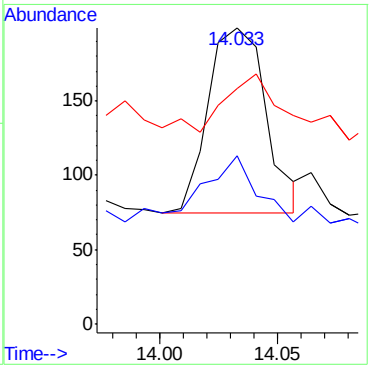


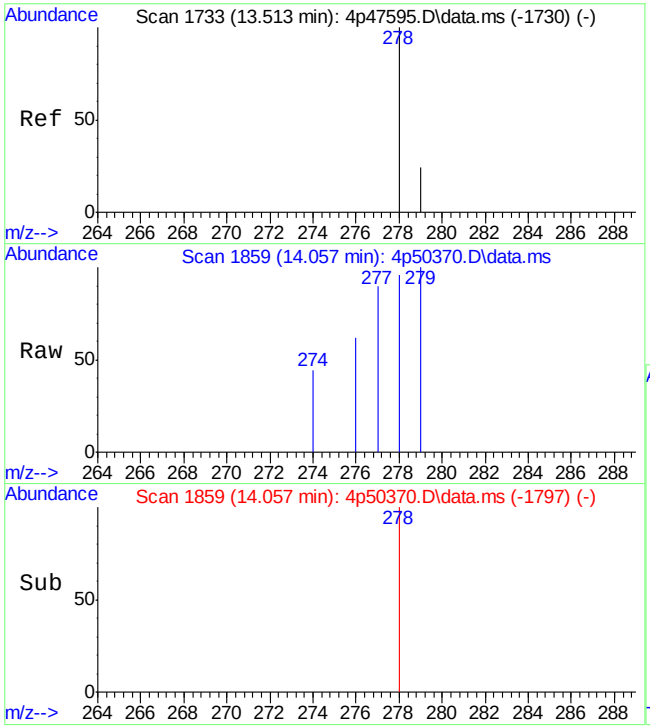


#34
Indeno[1,2,3-cd]pyrene
Concen: 3.77 ppm
RT: 14.033 min Scan# 1856
Delta R.T. -0.008 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:276 Resp: 212

Ion	Ratio	Lower	Upper
276	100		
274	36.1	0.0	49.3
277	19.4	0.0	53.2

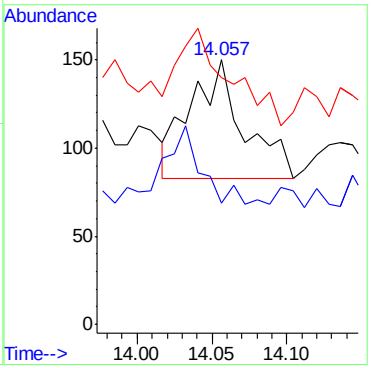


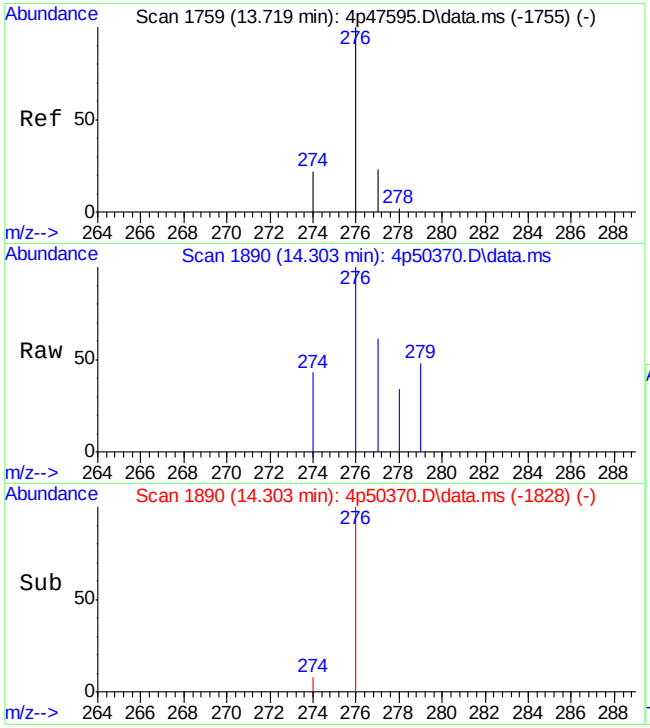


#35
Dibenz[a,h]anthracene
Concen: 3.77 ppm
RT: 14.057 min Scan# 1859
Delta R.T. -0.008 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:278 Resp: 165

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	27.2	0.0	36.7

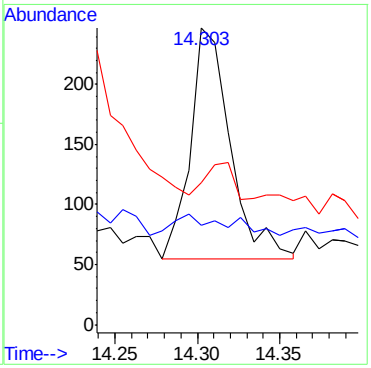




#36
Benzo[g,h,i]perylene
Concen: 6.79 ppm
RT: 14.303 min Scan# 1890
Delta R.T. -0.008 min
Lab File: 4p50370.D
Acq: 30 Dec 2021 12:59 pm

Tgt Ion:276 Resp: 323

Ion	Ratio	Lower	Upper
276	100		
278	2.4	0.0	32.5
279	2.6	0.0	30.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/30/21 17:55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50371.D
Acq On : 30 Dec 2021 1:22 pm
Operator : kristis
Sample : jd36624-9
Misc : op37113a,e4p2638,260,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 30 16:20:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

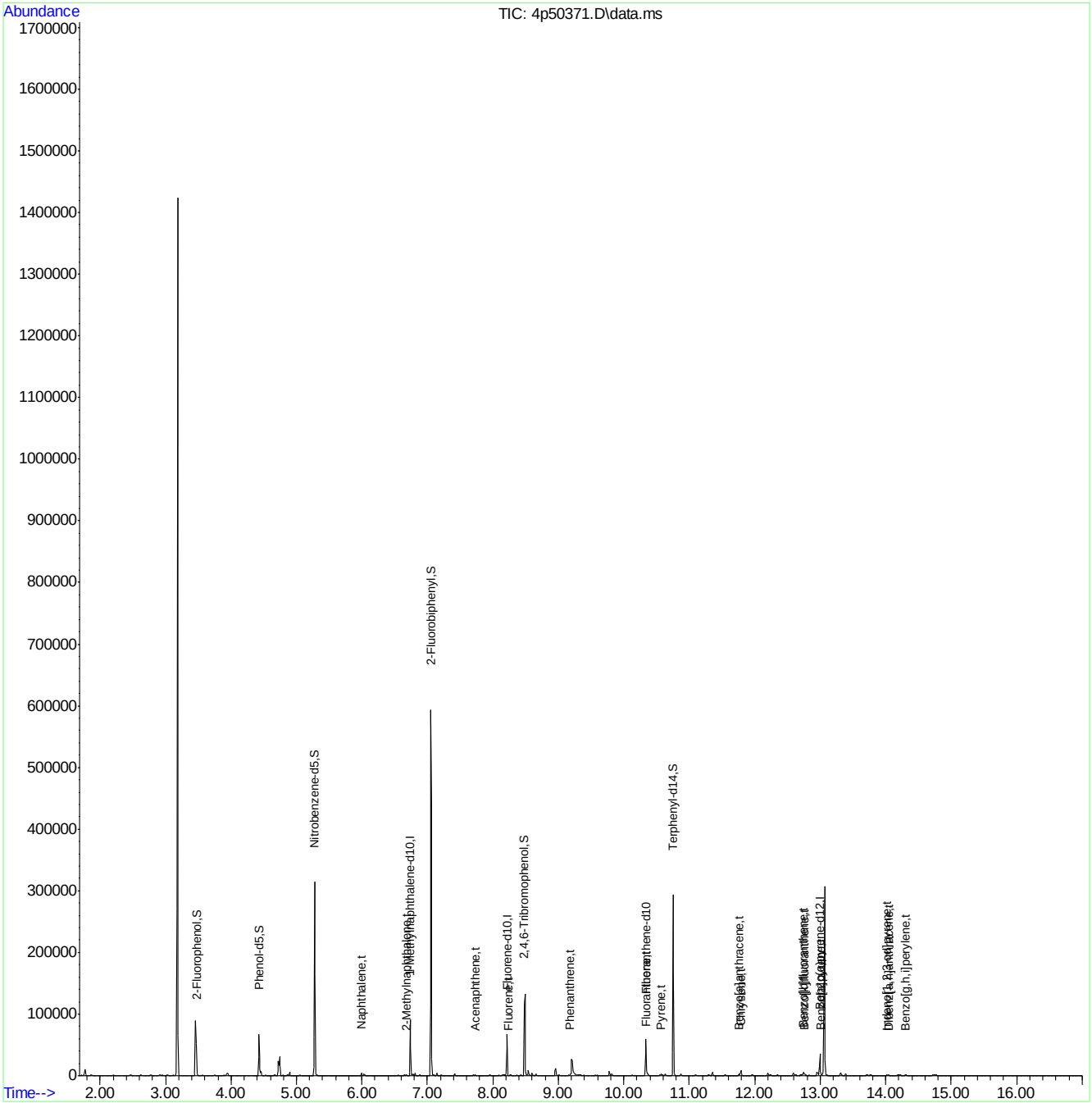
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	6.740	150	23365	800.00 ppm	-0.01
13) Fluorene-d10	8.216	176	32507	800.00 ppm	0.00
20) Fluoranthene-d10	10.338	212	45129	800.00 ppm	0.00
30) Benzo(a)pyrene-d12	12.996	264	21961	800.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	3.471	112	44889	3097.07 ppm	0.01
Spiked Amount 50.000			Recovery	= 6194.14%	
4) Phenol-d5	4.427	99	52238	1899.76 ppm	0.02
Spiked Amount 50.000			Recovery	= 3799.52%	
7) Nitrobenzene-d5	5.276	82	199899	8908.51 ppm	0.00
Spiked Amount 50.000			Recovery	= 17817.02%	
14) 2-Fluorobiphenyl	7.053	172	306790	7398.84 ppm	-0.01
Spiked Amount 50.000			Recovery	= 14797.68%	
19) 2,4,6-Tribromophenol	8.480	330	57003	9188.25 ppm	0.00
Spiked Amount 50.000			Recovery	= 18376.50%	
27) Terphenyl-d14	10.752	244	192460	5953.99 ppm	0.00
Spiked Amount 50.000			Recovery	= 11907.98%	
Target Compounds					Qvalue
8) Naphthalene	5.990	128	3188	47.67 ppm	90
10) 2-Methylnaphthalene	6.680	141	364m	10.42 ppm	
16) Acenaphthene	7.735	153	199	5.15 ppm	# 46
17) Fluorene	8.242	166	75m	1.61 ppm	
23) Phenanthrene	9.180	178	1330	21.88 ppm	76
25) Fluoranthene	10.347	202	2044	32.29 ppm	87
26) Pyrene	10.568	202	1320	18.95 ppm	76
28) Benzo[a]anthracene	11.764	228	2153	34.60 ppm	66
29) Chrysene	11.788	228	2210	36.26 ppm	85
31) Benzo[b]fluoranthene	12.741	252	3434	71.58 ppm	96
32) Benzo[k]fluoranthene	12.761	252	1367	30.16 ppm	92
33) Benzo[a]pyrene	13.011	252	624	15.01 ppm	88
34) Indeno[1,2,3-cd]pyrene	14.025	276	1563	31.56 ppm	94
35) Dibenz[a,h]anthracene	14.049	278	413	10.71 ppm	82
36) Benzo[g,h,i]perylene	14.303	276	1338	31.88 ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

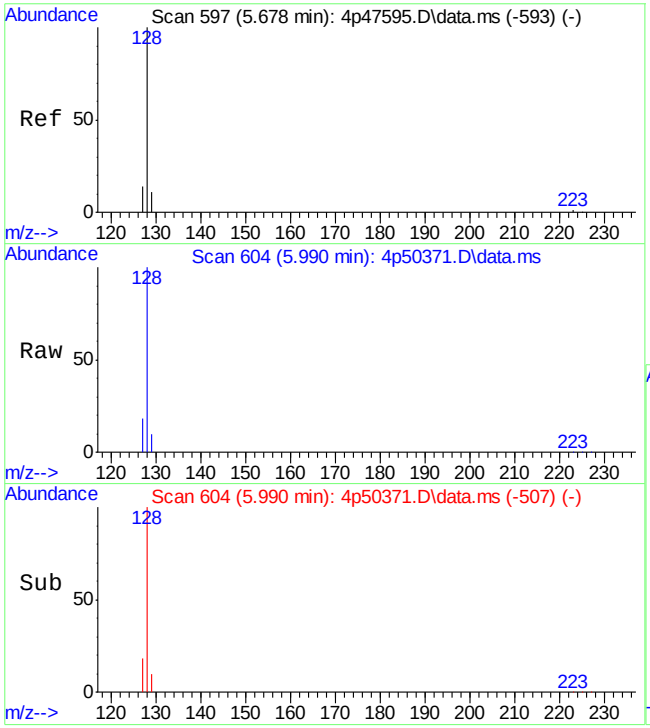
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50371.D
Acq On : 30 Dec 2021 1:22 pm
Operator : kristis
Sample : jd36624-9
Misc : op37113a,e4p2638,260,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 30 16:20:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration



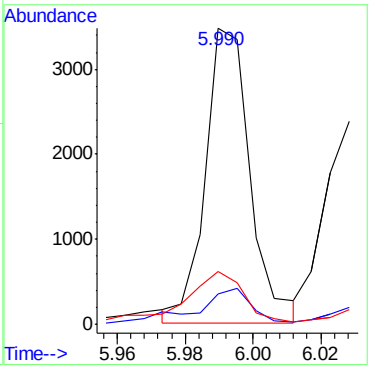
M4P2551SIMLVI.M Thu Dec 30 16:21:11 2021 YING Page: 2

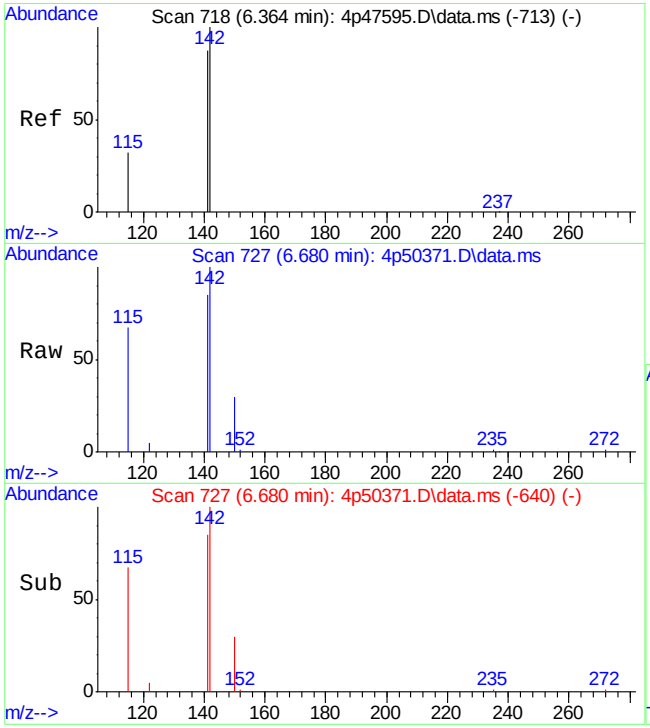


#8
Naphthalene
Concen: 47.67 ppm
RT: 5.990 min Scan# 604
Delta R.T. -0.011 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:128 Resp: 3188

Ion	Ratio	Lower	Upper
128	100		
129	8.1	0.0	41.1
127	16.8	0.0	42.0

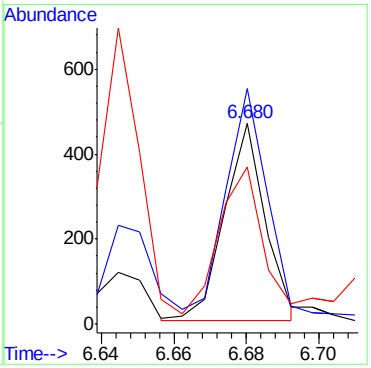


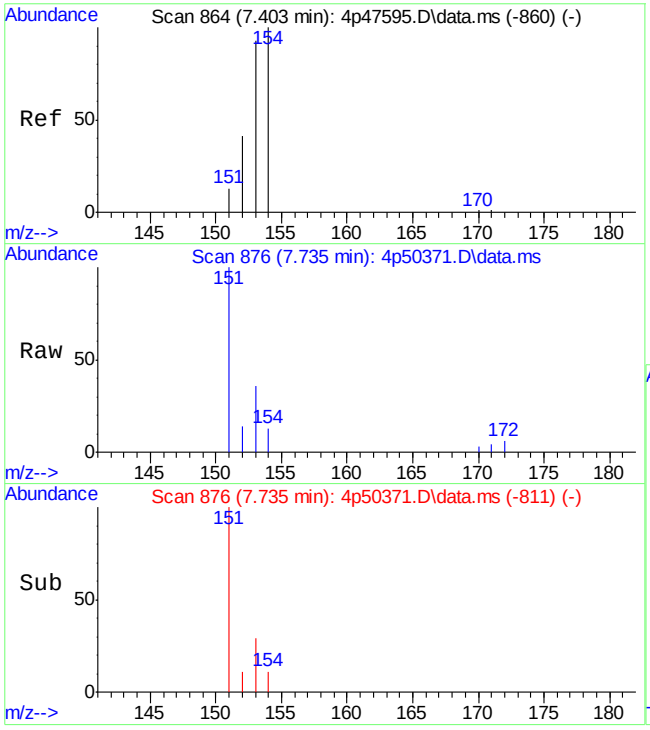


#10
2-Methylnaphthalene
Concen: 10.42 ppm m
RT: 6.680 min Scan# 727
Delta R.T. -0.006 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:141 Resp: 364

Ion	Ratio	Lower	Upper
141	100		
142	117.1	96.1	156.1
115	78.1	7.9	67.9#

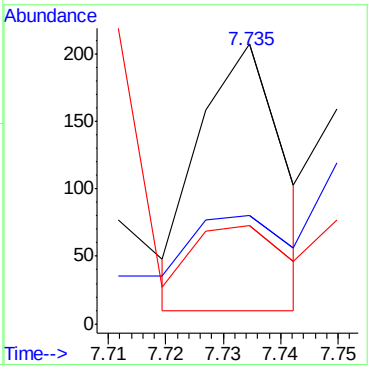


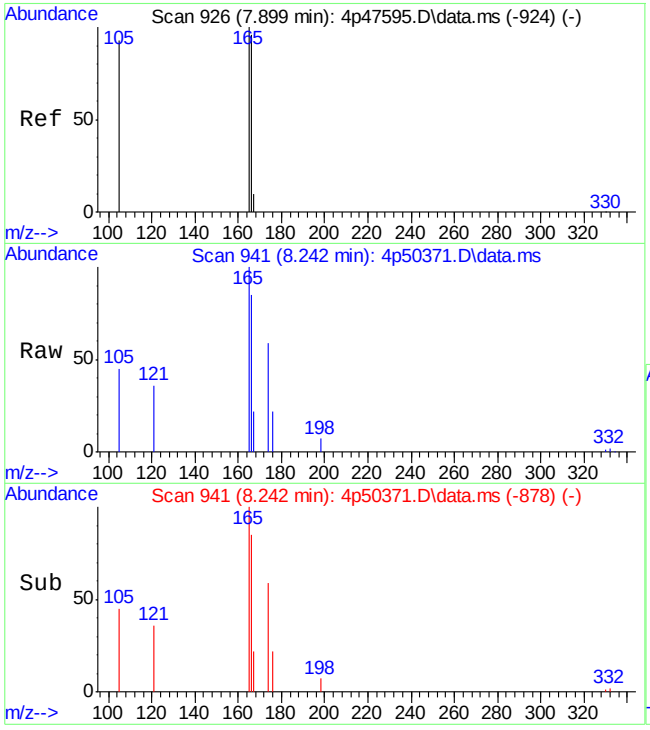


#16
Acenaphthene
Concen: 5.15 ppm
RT: 7.735 min Scan# 876
Delta R.T. -0.007 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:153 Resp: 199

Ion	Ratio	Lower	Upper
153	100		
152	26.2	18.5	78.5
154	27.8	59.1	119.1#

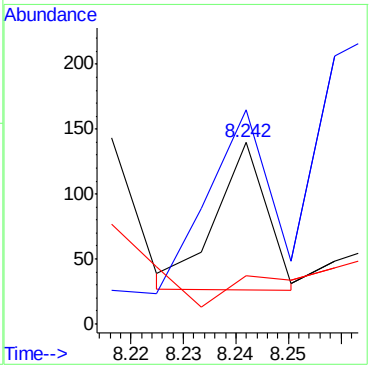


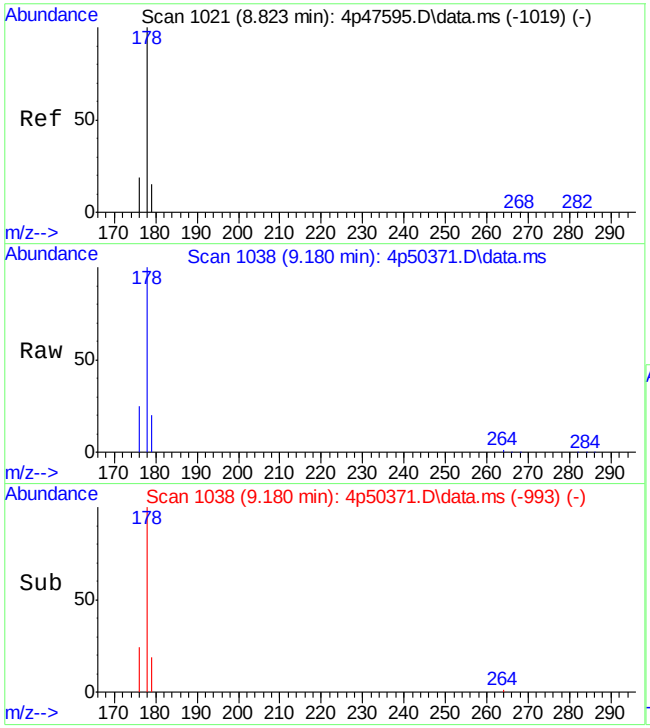


#17
Fluorene
Concen: 1.61 ppm m
RT: 8.242 min Scan# 941
Delta R.T. -0.008 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:166 Resp: 75

Ion	Ratio	Lower	Upper
166	100		
165	117.9	66.9	126.9
167	26.4	0.0	41.7

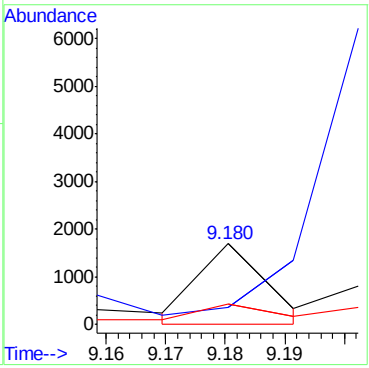


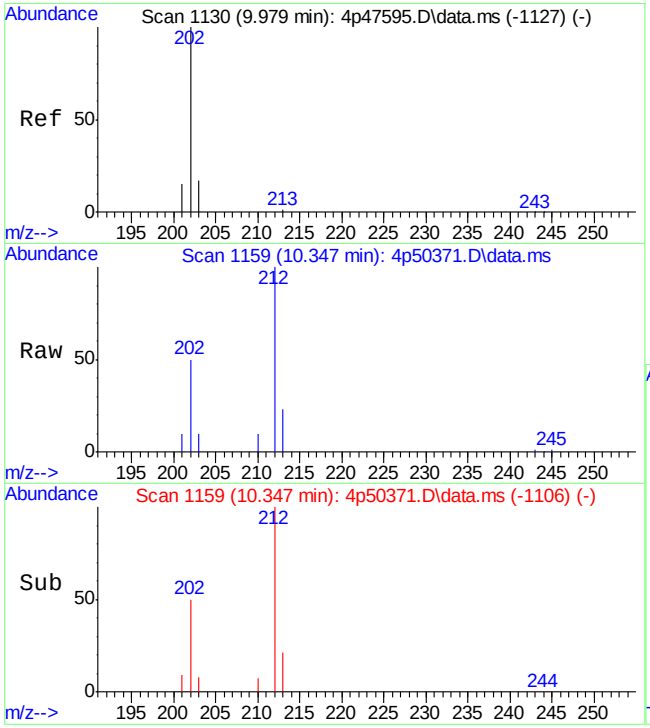


#23
Phenanthrene
Concen: 21.88 ppm
RT: 9.180 min Scan# 1038
Delta R.T. -0.011 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:178 Resp: 1330

Ion	Ratio	Lower	Upper
178	100		
179	0.0	0.0	46.0
176	20.0	0.0	45.6

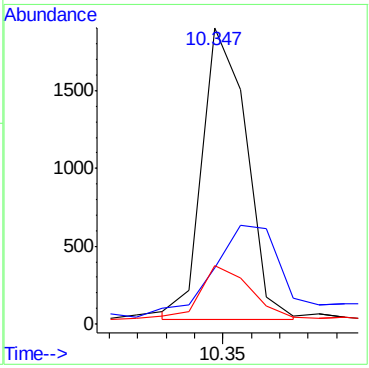


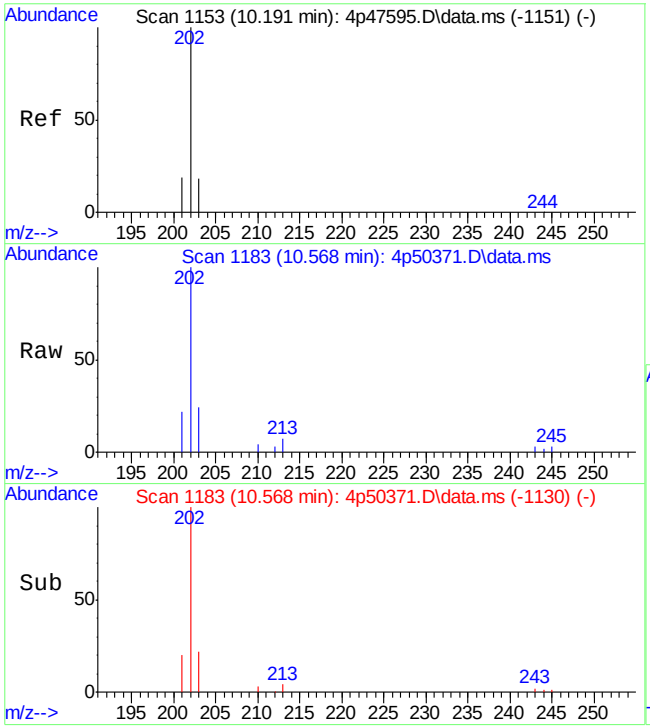


#25
Fluoranthene
Concen: 32.29 ppm
RT: 10.347 min Scan# 1159
Delta R.T. -0.009 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:202 Resp: 2044

Ion	Ratio	Lower	Upper
202	100		
203	12.2	0.0	47.6
201	18.2	0.0	42.9

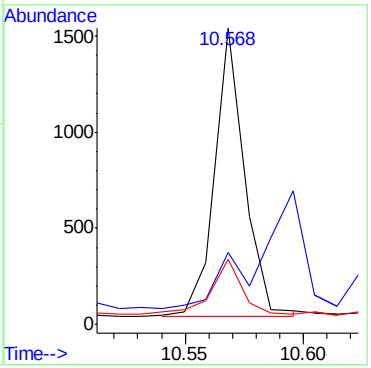


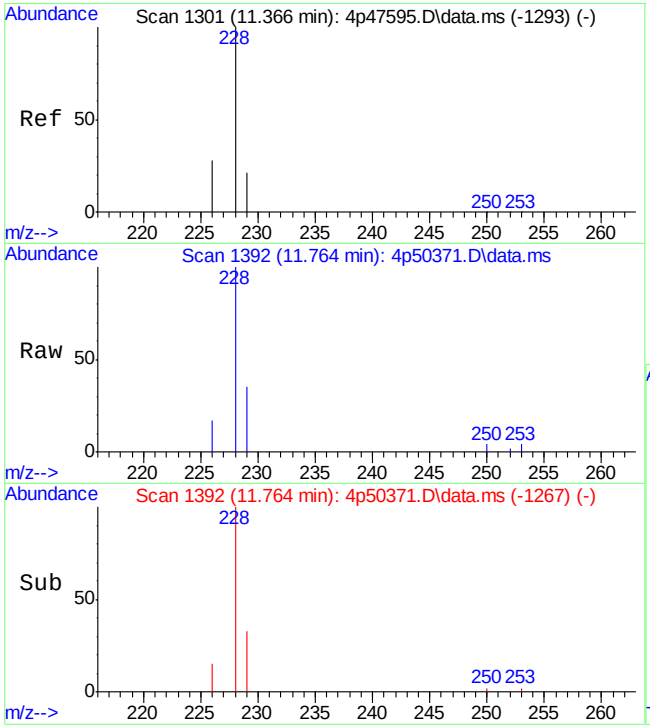


#26
Pyrene
Concen: 18.95 ppm
RT: 10.568 min Scan# 1183
Delta R.T. -0.009 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:202 Resp: 1320

Ion	Ratio	Lower	Upper
202	100		
203	0.0	0.0	47.6
201	18.9	0.0	46.0

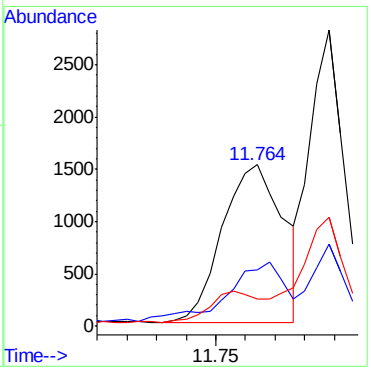


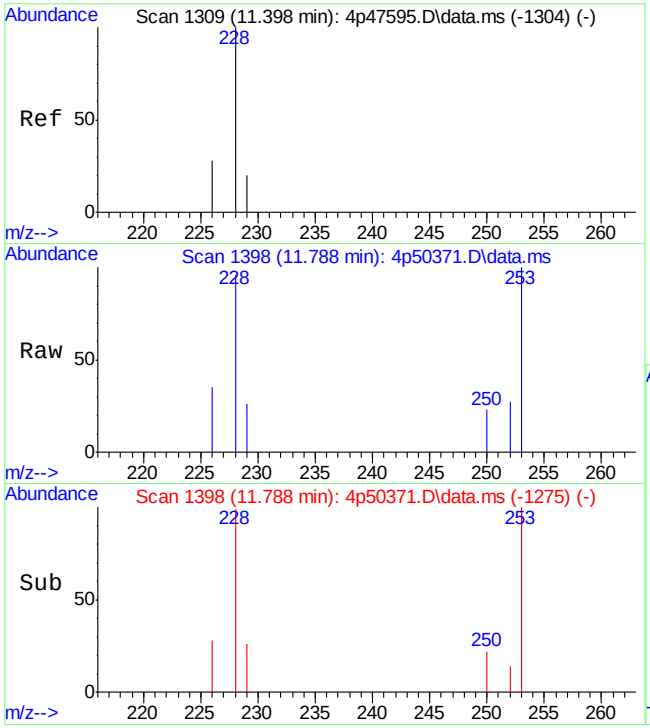


#28
Benzo[a]anthracene
Concen: 34.60 ppm
RT: 11.764 min Scan# 1392
Delta R.T. 0.000 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:228 Resp: 2153

Ion	Ratio	Lower	Upper
228	100		
229	34.1	0.0	49.8
226	6.0	0.0	53.3

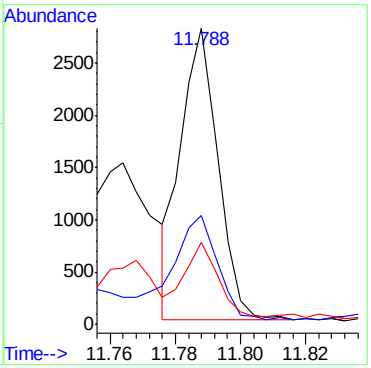


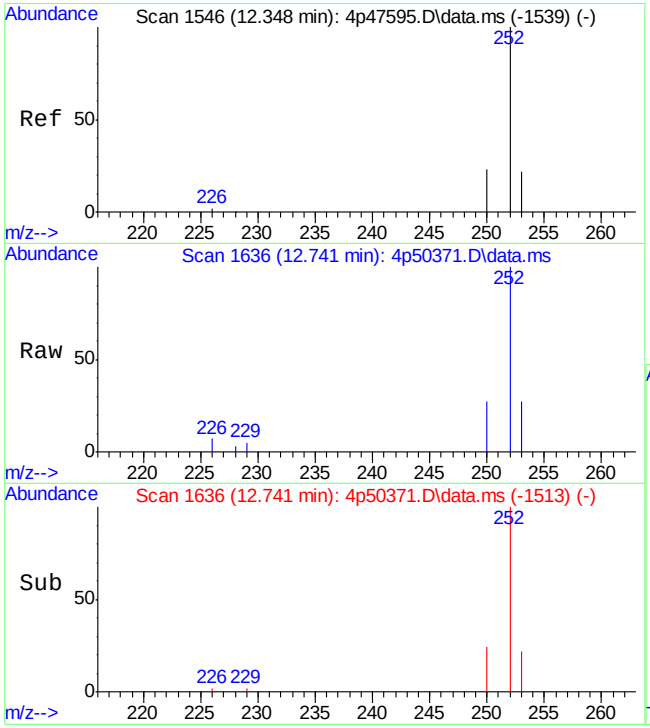


#29
Chrysene
Concen: 36.26 ppm
RT: 11.788 min Scan# 1398
Delta R.T. -0.008 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:228 Resp: 2210

Ion	Ratio	Lower	Upper
228	100		
226	36.1	0.0	58.5
229	25.8	0.0	48.7

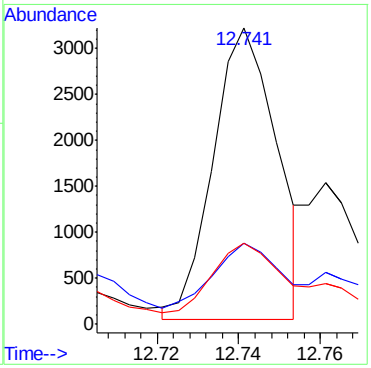


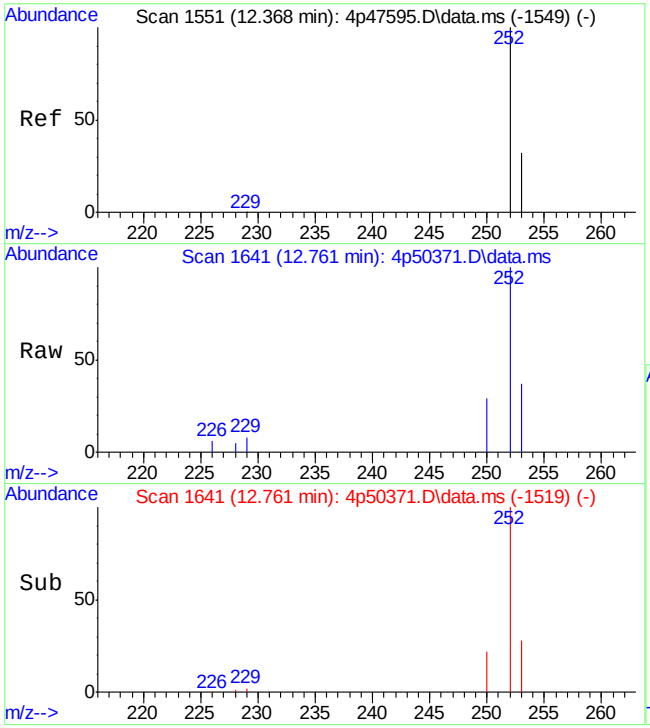


#31
Benzo[b]fluoranthene
Concen: 71.58 ppm
RT: 12.741 min Scan# 1636
Delta R.T. -0.008 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:252 Resp: 3434

Ion	Ratio	Lower	Upper
252	100		
253	23.4	0.0	51.8
250	24.5	0.0	52.4

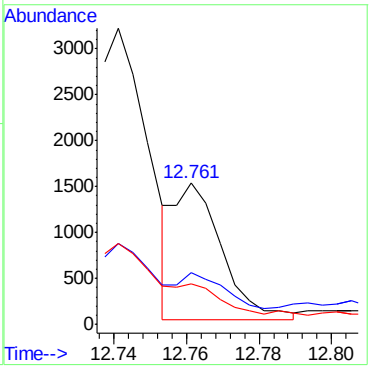


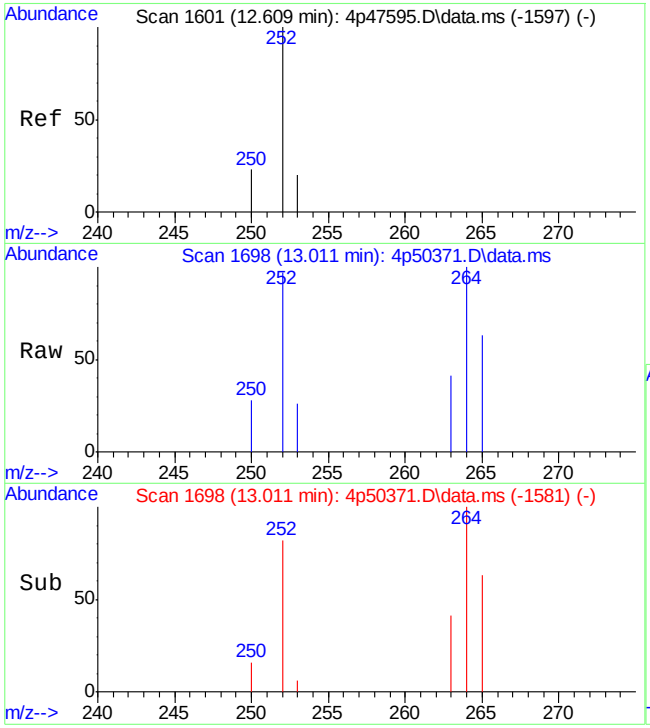


#32
Benzo[k]fluoranthene
Concen: 30.16 ppm
RT: 12.761 min Scan# 1641
Delta R.T. -0.012 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:252 Resp: 1367

Ion	Ratio	Lower	Upper
252	100		
253	29.5	0.0	51.8
250	20.5	0.0	50.5

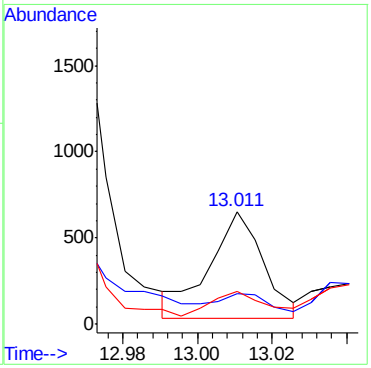


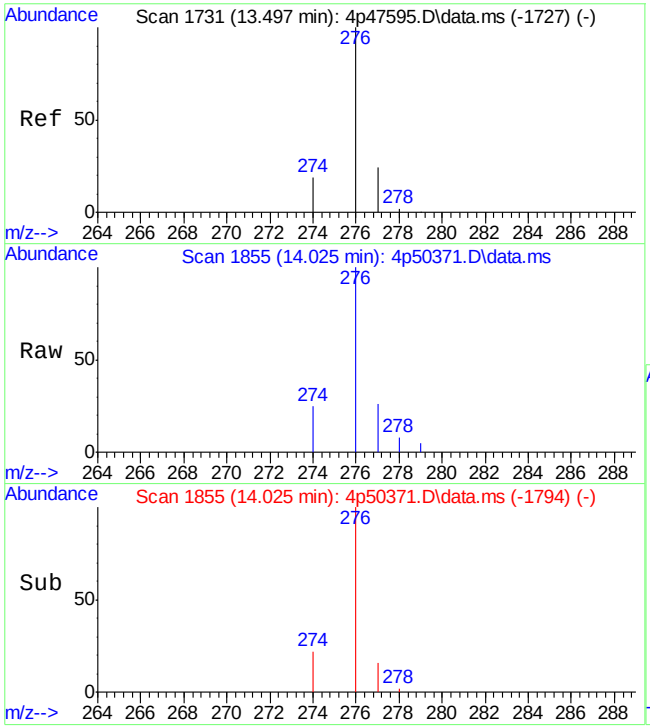


#33
Benzo[a]pyrene
Concen: 15.01 ppm
RT: 13.011 min Scan# 1698
Delta R.T. -0.010 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:252 Resp: 624

Ion	Ratio	Lower	Upper
252	100		
253	12.0	0.0	52.8
250	20.1	0.0	50.6

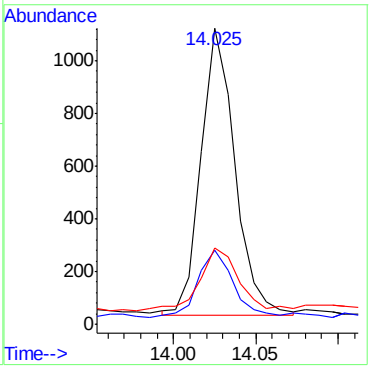


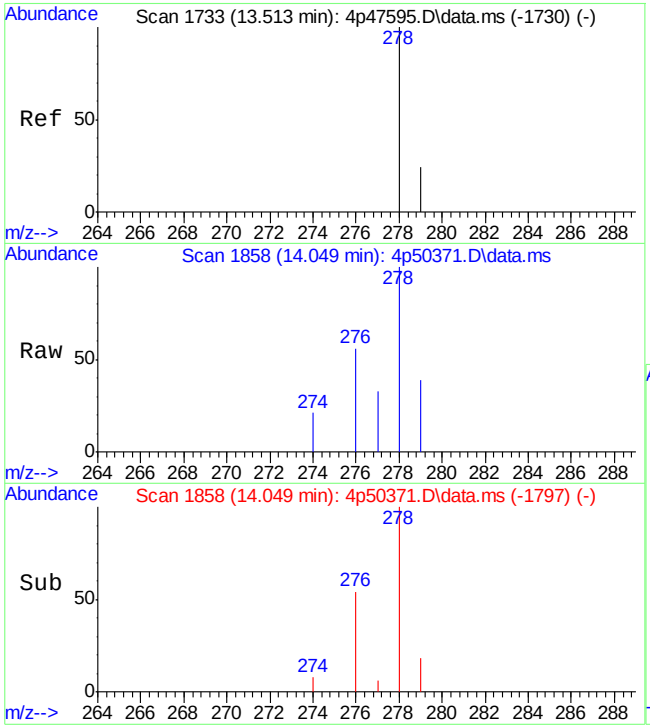


#34
Indeno[1,2,3-cd]pyrene
Concen: 31.56 ppm
RT: 14.025 min Scan# 1855
Delta R.T. -0.016 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:276 Resp: 1563

Ion	Ratio	Lower	Upper
276	100		
274	22.7	0.0	49.3
277	21.0	0.0	53.2

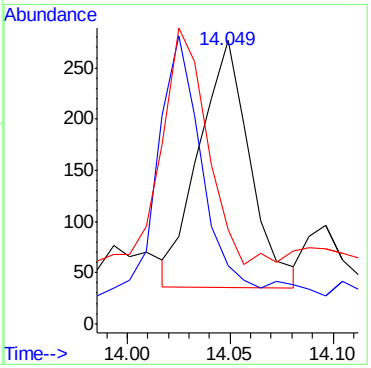


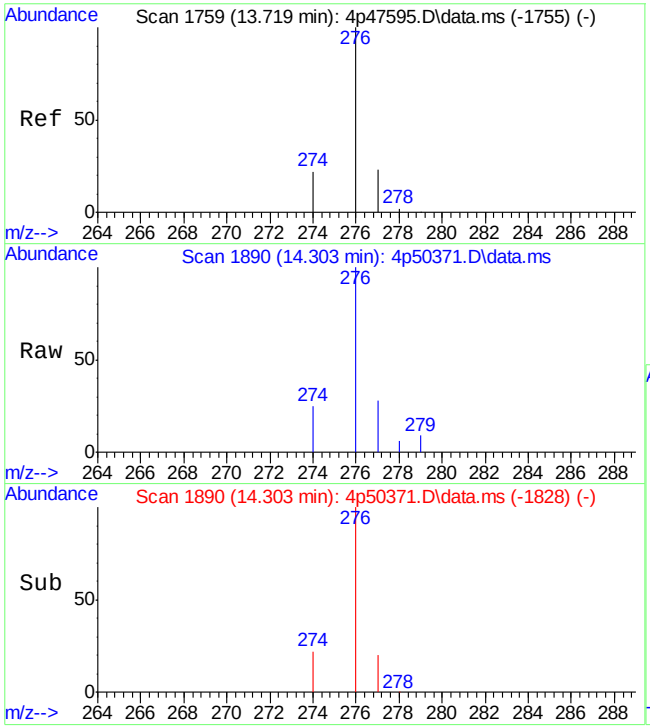


#35
Dibenz[a,h]anthracene
Concen: 10.71 ppm
RT: 14.049 min Scan# 1858
Delta R.T. -0.016 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:278 Resp: 413

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	0.0	0.0	36.7

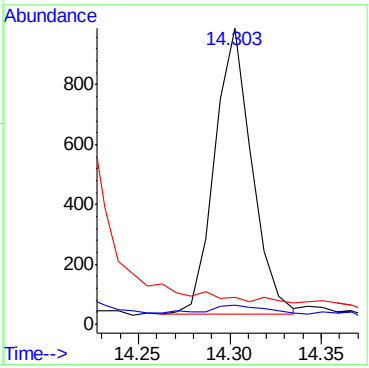




#36
Benzo[g,h,i]perylene
Concen: 31.88 ppm
RT: 14.303 min Scan# 1890
Delta R.T. -0.008 min
Lab File: 4p50371.D
Acq: 30 Dec 2021 1:22 pm

Tgt Ion:276 Resp: 1338

Ion	Ratio	Lower	Upper
276	100		
278	2.6	0.0	32.5
279	0.0	0.0	30.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/30/21 17:56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50372.D
Acq On : 30 Dec 2021 1:47 pm
Operator : kristis
Sample : jd36624-10
Misc : op37113a,e4p2638,260,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 30 16:21:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

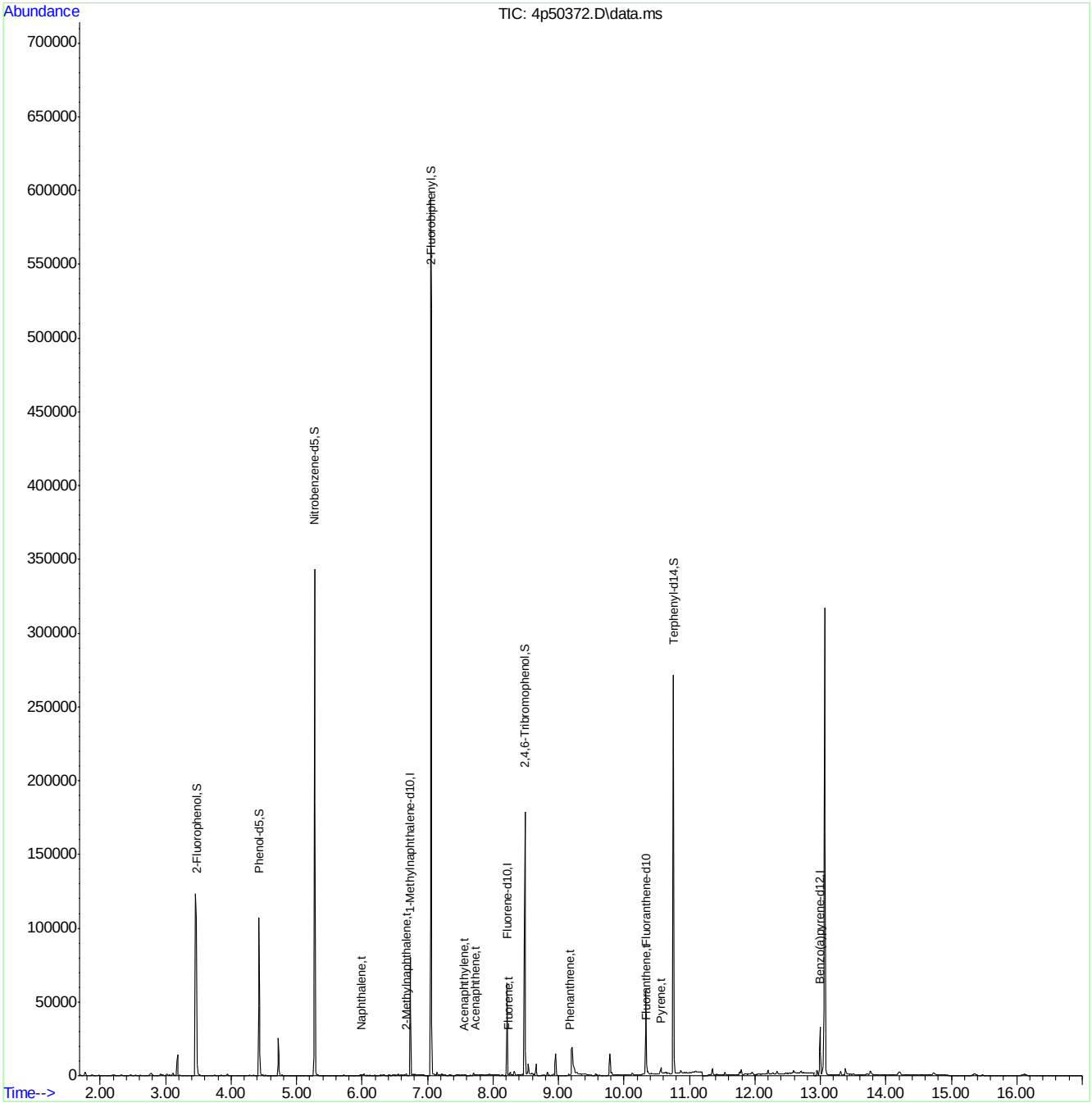
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.740	150	21062	800.00	ppm	-0.01
13) Fluorene-d10	8.216	176	28827	800.00	ppm	0.00
20) Fluoranthene-d10	10.338	212	40324	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	12.996	264	21221	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.471	112	74132	5673.92	ppm	0.01
Spiked Amount 50.000			Recovery	= 11347.84%		
4) Phenol-d5	4.427	99	83556	3370.98	ppm	0.02
Spiked Amount 50.000			Recovery	= 6741.96%		
7) Nitrobenzene-d5	5.280	82	212156	10488.56	ppm	0.00
Spiked Amount 50.000			Recovery	= 20977.12%		
14) 2-Fluorobiphenyl	7.061	172	326857	8889.10	ppm	0.00
Spiked Amount 50.000			Recovery	= 17778.20%		
19) 2,4,6-Tribromophenol	8.489	330	64614	11744.62	ppm	0.00
Spiked Amount 50.000			Recovery	= 23489.24%		
27) Terphenyl-d14	10.761	244	216722	7503.48	ppm	0.00
Spiked Amount 50.000			Recovery	= 15006.96%		
Target Compounds						Qvalue
8) Naphthalene	5.995	128	581	9.64	ppm	77
10) 2-Methylnaphthalene	6.680	141	391	12.41	ppm #	59
15) Acenaphthylene	7.560	152	163m	3.04	ppm	
16) Acenaphthene	7.735	153	158m	4.61	ppm	
17) Fluorene	8.242	166	385m	9.31	ppm	
23) Phenanthrene	9.180	178	316m	5.82	ppm	
25) Fluoranthene	10.347	202	401	7.09	ppm	81
26) Pyrene	10.568	202	521	8.37	ppm	47

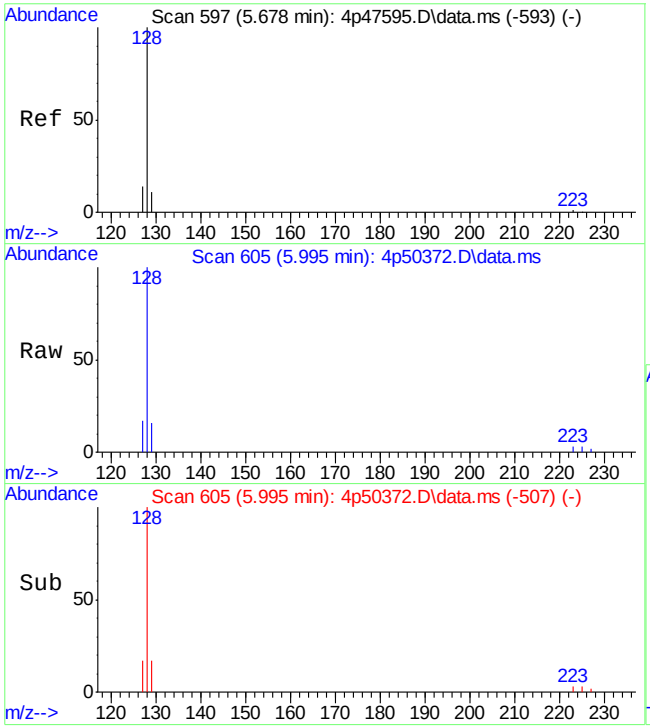
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50372.D
Acq On : 30 Dec 2021 1:47 pm
Operator : kristis
Sample : jd36624-10
Misc : op37113a,e4p2638,260,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 30 16:21:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

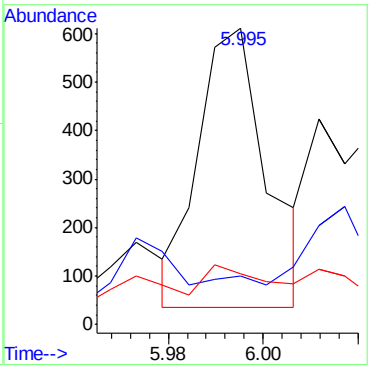


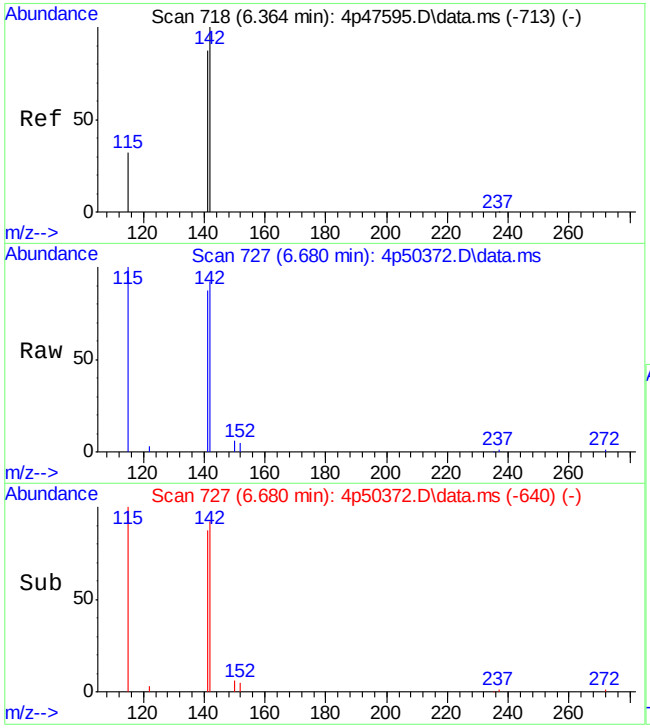


#8
Naphthalene
Concen: 9.64 ppm
RT: 5.995 min Scan# 605
Delta R.T. -0.005 min
Lab File: 4p50372.D
Acq: 30 Dec 2021 1:47 pm

Tgt Ion:128 Resp: 581

Ion	Ratio	Lower	Upper
128	100		
129	0.0	0.0	41.1
127	5.1	0.0	42.0

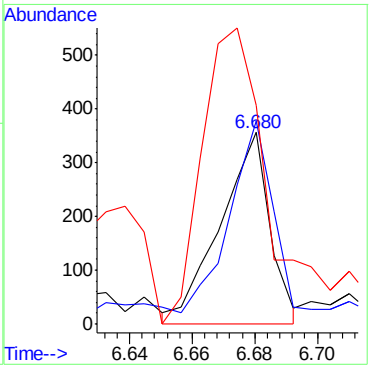


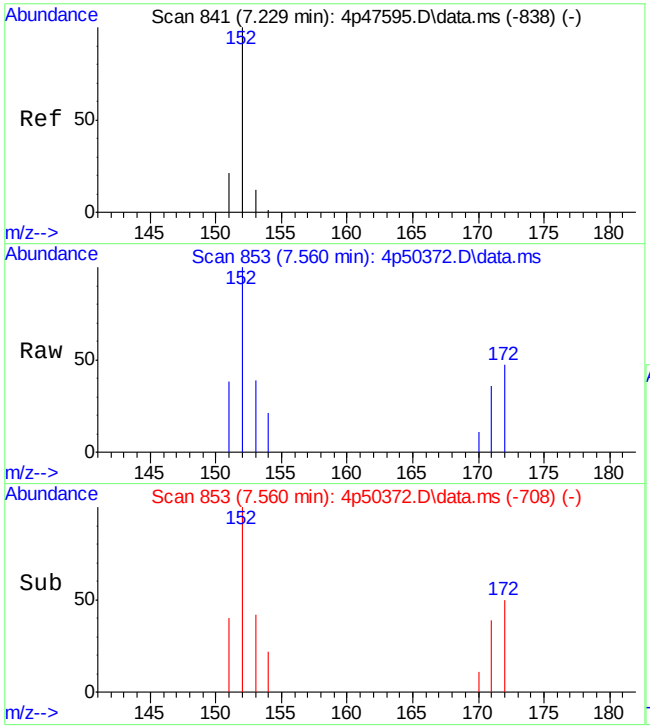


#10
2-Methylnaphthalene
Concen: 12.41 ppm
RT: 6.680 min Scan# 727
Delta R.T. -0.006 min
Lab File: 4p50372.D
Acq: 30 Dec 2021 1:47 pm

Tgt Ion:141 Resp: 391

Ion	Ratio	Lower	Upper
141	100		
142	104.2	96.1	156.1
115	105.4	7.9	67.9#

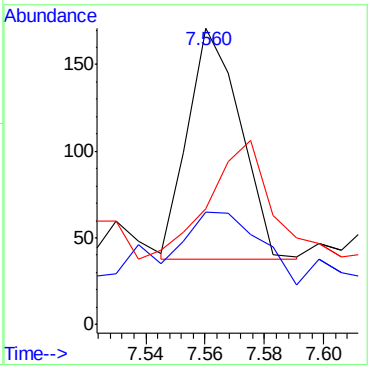


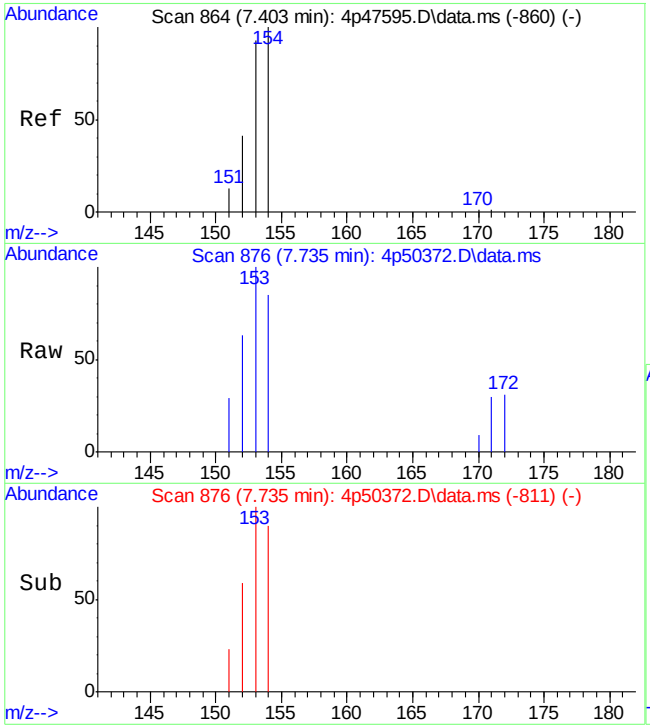


#15
Acenaphthylene
Concen: 3.04 ppm m
RT: 7.560 min Scan# 853
Delta R.T. -0.007 min
Lab File: 4p50372.D
Acq: 30 Dec 2021 1:47 pm

Tgt Ion:152 Resp: 163

Ion	Ratio	Lower	Upper
152	100		
151	38.0	0.0	50.8
153	39.2	0.0	42.2

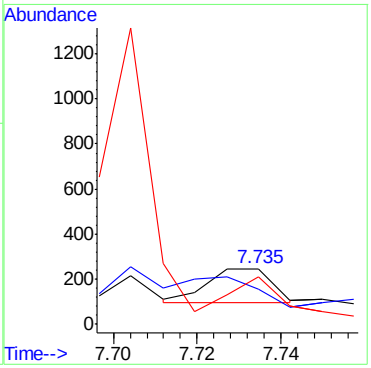


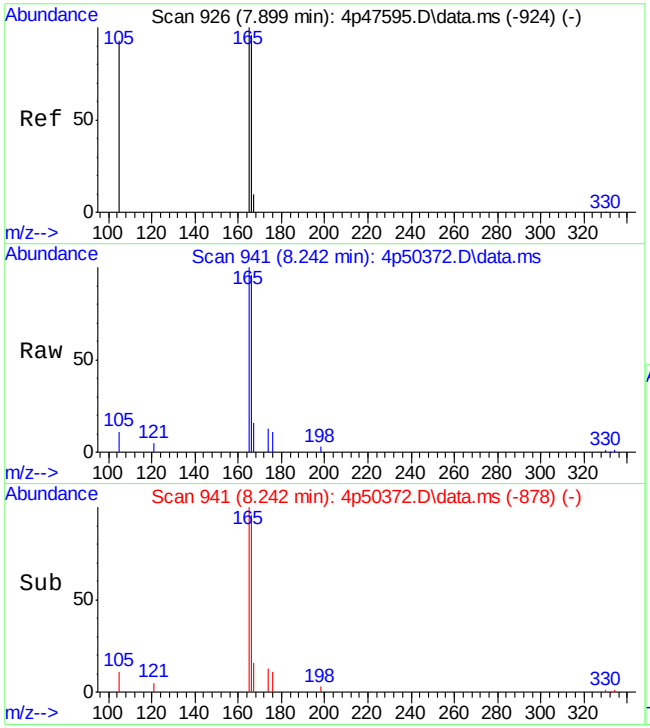


#16
Acenaphthene
Concen: 4.61 ppm m
RT: 7.735 min Scan# 876
Delta R.T. -0.007 min
Lab File: 4p50372.D
Acq: 30 Dec 2021 1:47 pm

Tgt Ion:153 Resp: 158

Ion	Ratio	Lower	Upper
153	100		
152	63.2	18.5	78.5
154	85.4	59.1	119.1

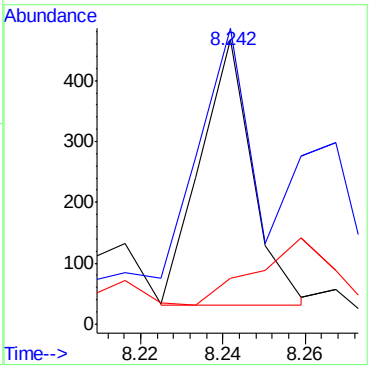


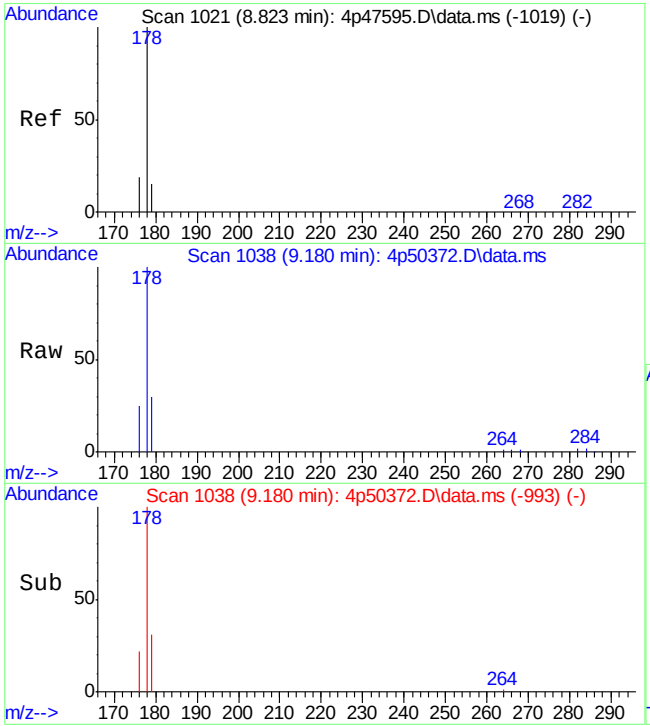


#17
Fluorene
Concen: 9.31 ppm m
RT: 8.242 min Scan# 941
Delta R.T. -0.008 min
Lab File: 4p50372.D
Acq: 30 Dec 2021 1:47 pm

Tgt Ion:166 Resp: 385

Ion	Ratio	Lower	Upper
166	100		
165	104.1	66.9	126.9
167	16.3	0.0	41.7

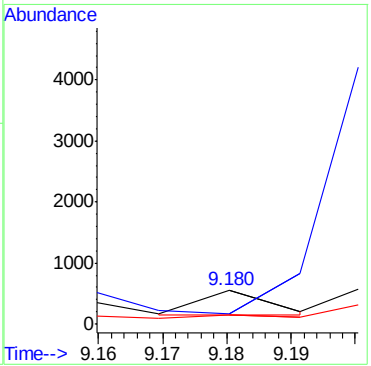


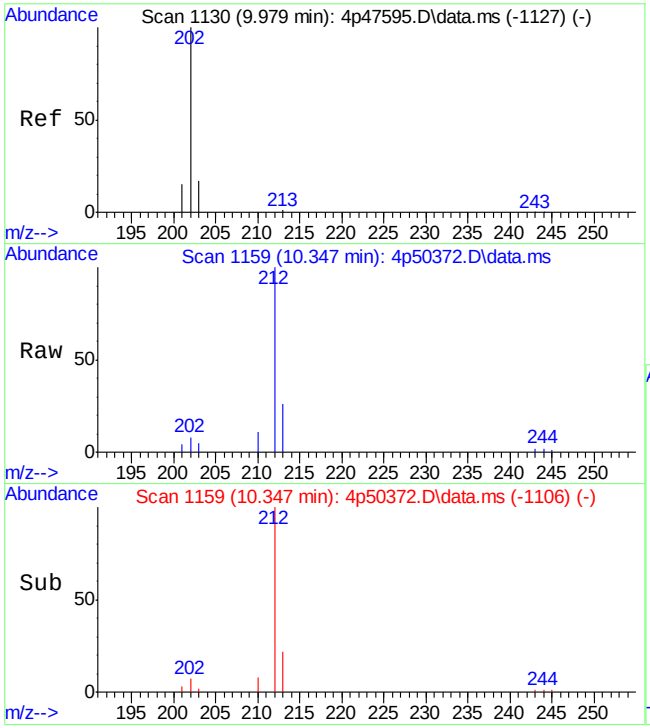


#23
Phenanthrene
Concen: 5.82 ppm m
RT: 9.180 min Scan# 1038
Delta R.T. -0.011 min
Lab File: 4p50372.D
Acq: 30 Dec 2021 1:47 pm

Tgt Ion:178 Resp: 316

Ion	Ratio	Lower	Upper
178	100		
179	30.4	0.0	46.0
176	25.2	0.0	45.6

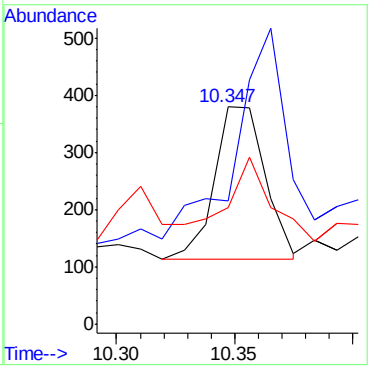


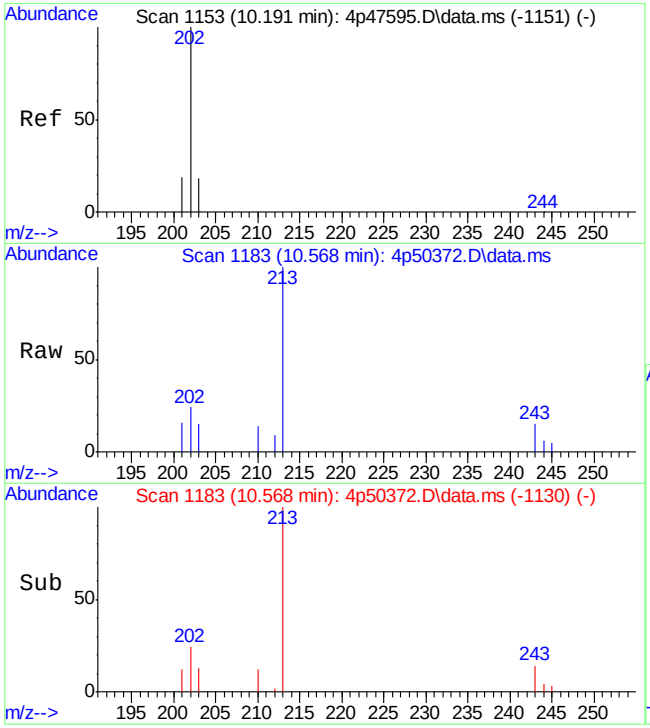


#25
Fluoranthene
Concen: 7.09 ppm
RT: 10.347 min Scan# 1159
Delta R.T. -0.009 min
Lab File: 4p50372.D
Acq: 30 Dec 2021 1:47 pm

Tgt Ion:202 Resp: 401

Ion	Ratio	Lower	Upper
202	100		
203	5.9	0.0	47.6
201	9.6	0.0	42.9

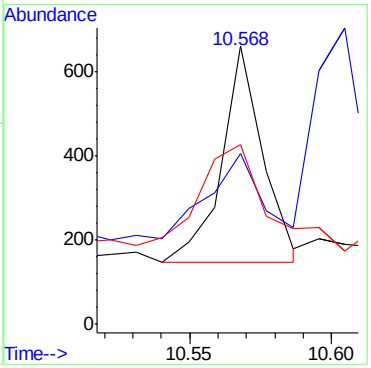




#26
Pyrene
Concen: 8.37 ppm
RT: 10.568 min Scan# 1183
Delta R.T. -0.009 min
Lab File: 4p50372.D
Acq: 30 Dec 2021 1:47 pm

Tgt Ion:202 Resp: 521

Ion	Ratio	Lower	Upper
202	100		
203	37.7	0.0	47.6
201	42.1	0.0	46.0



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya 12/30/21 17:55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50373.D
Acq On : 30 Dec 2021 2:11 pm
Operator : kristis
Sample : jd36624-11
Misc : op37113a,e4p2638,270,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 30 14:43:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

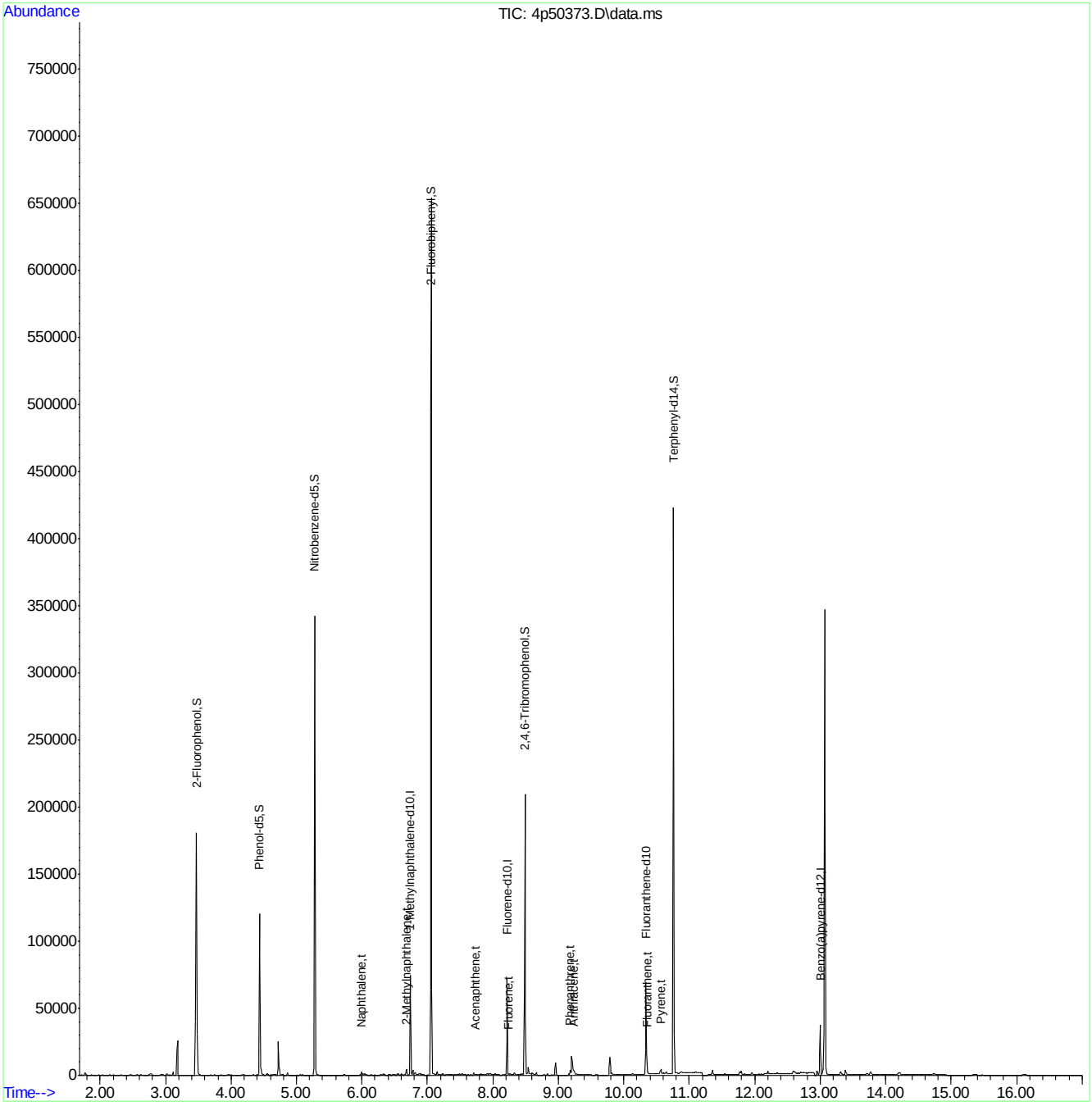
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.740	150	20277	800.00	ppm	-0.01
13) Fluorene-d10	8.216	176	29407	800.00	ppm	0.00
20) Fluoranthene-d10	10.338	212	43859	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.001	264	22675	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.471	112	82094	6526.57	ppm	0.01
Spiked Amount 50.000			Recovery = 13053.14%			
4) Phenol-d5	4.436	99	91575	3837.53	ppm	0.03
Spiked Amount 50.000			Recovery = 7675.06%			
7) Nitrobenzene-d5	5.280	82	206515	10604.93	ppm	0.00
Spiked Amount 50.000			Recovery = 21209.86%			
14) 2-Fluorobiphenyl	7.061	172	333282	8885.07	ppm	0.00
Spiked Amount 50.000			Recovery = 17770.14%			
19) 2,4,6-Tribromophenol	8.489	330	67089	11953.98	ppm	0.00
Spiked Amount 50.000			Recovery = 23907.96%			
27) Terphenyl-d14	10.761	244	276488	8801.19	ppm	0.00
Spiked Amount 50.000			Recovery = 17602.38%			
Target Compounds						Qvalue
8) Naphthalene	5.995	128	1844	31.78	ppm	94
10) 2-Methylnaphthalene	6.680	141	1362m	44.92	ppm	
16) Acenaphthene	7.735	153	212	6.06	ppm	69
17) Fluorene	8.242	166	549	13.02	ppm	94
23) Phenanthrene	9.180	178	2884	48.82	ppm	76
24) Anthracene	9.235	178	451	7.96	ppm	68
25) Fluoranthene	10.356	202	796	12.94	ppm	69
26) Pyrene	10.568	202	664	9.81	ppm	56

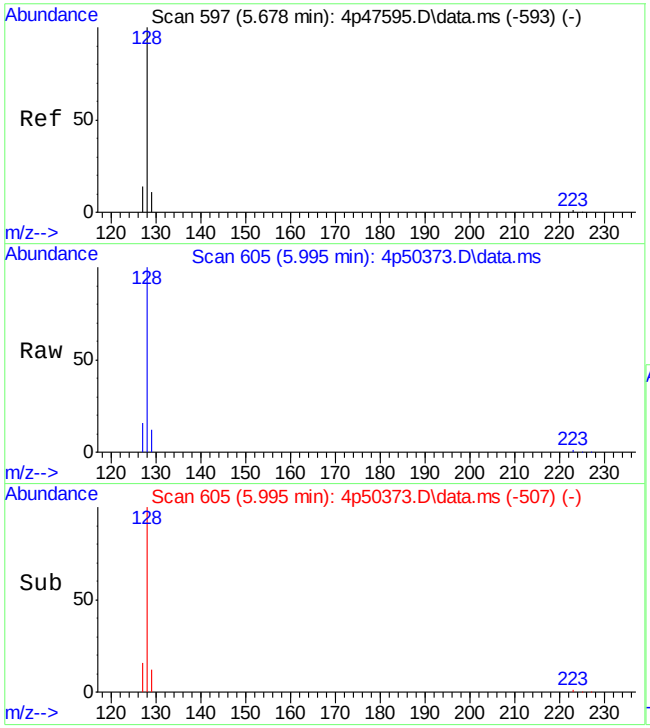
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50373.D
Acq On : 30 Dec 2021 2:11 pm
Operator : kristis
Sample : jd36624-11
Misc : op37113a,e4p2638,270,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 30 14:43:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

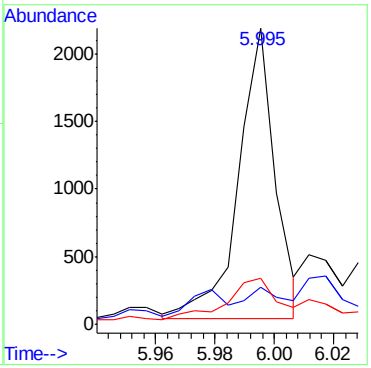


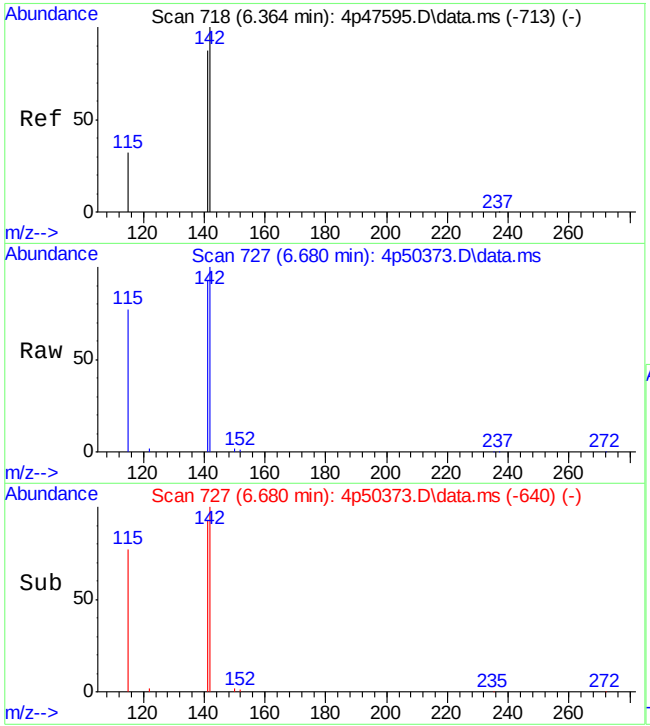


#8
Naphthalene
Concen: 31.78 ppm
RT: 5.995 min Scan# 605
Delta R.T. -0.005 min
Lab File: 4p50373.D
Acq: 30 Dec 2021 2:11 pm

Tgt Ion:128 Resp: 1844

Ion	Ratio	Lower	Upper
128	100		
129	7.7	0.0	41.1
127	13.1	0.0	42.0

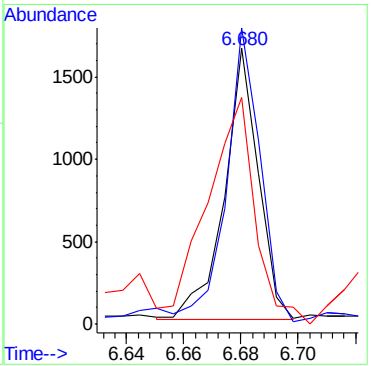


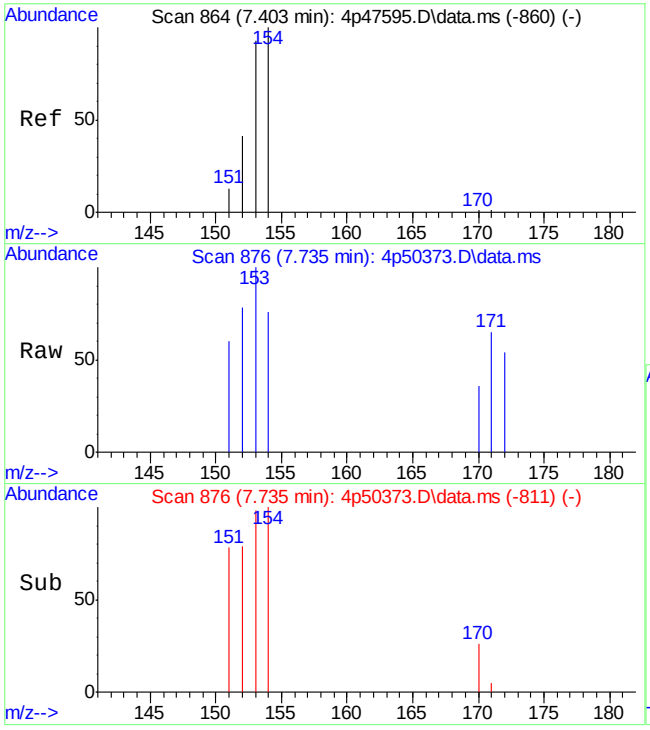


#10
2-Methylnaphthalene
Concen: 44.92 ppm m
RT: 6.680 min Scan# 727
Delta R.T. -0.006 min
Lab File: 4p50373.D
Acq: 30 Dec 2021 2:11 pm

Tgt Ion:141 Resp: 1362

Ion	Ratio	Lower	Upper
141	100		
142	107.1	96.1	156.1
115	81.9	7.9	67.9#

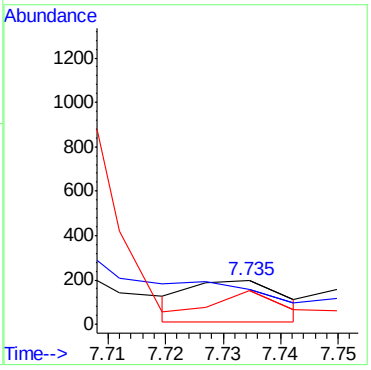


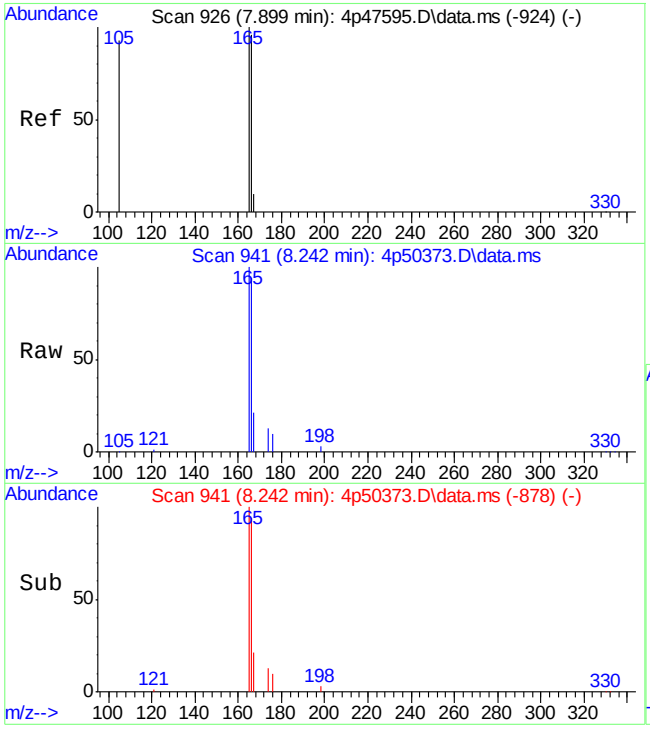


#16
Acenaphthene
Concen: 6.06 ppm
RT: 7.735 min Scan# 876
Delta R.T. -0.007 min
Lab File: 4p50373.D
Acq: 30 Dec 2021 2:11 pm

Tgt Ion:153 Resp: 212

Ion	Ratio	Lower	Upper
153	100		
152	20.0	18.5	78.5
154	113.1	59.1	119.1

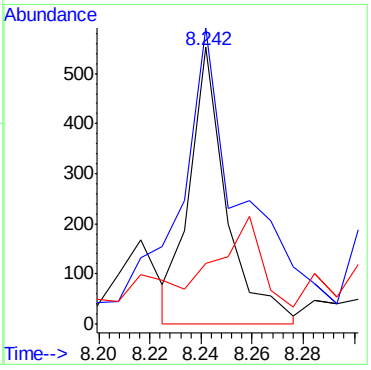


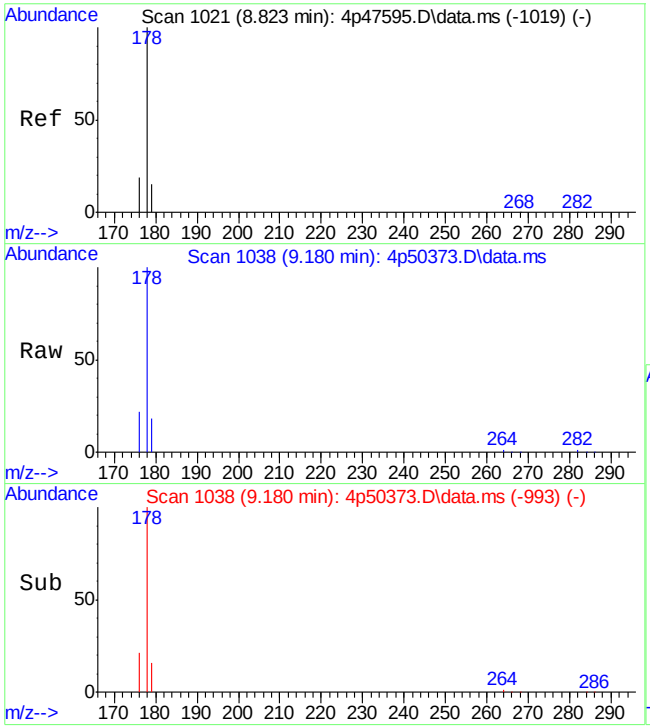


#17
Fluorene
Concen: 13.02 ppm
RT: 8.242 min Scan# 941
Delta R.T. -0.008 min
Lab File: 4p50373.D
Acq: 30 Dec 2021 2:11 pm

Tgt Ion:166 Resp: 549

Ion	Ratio	Lower	Upper
166	100		
165	90.2	66.9	126.9
167	12.1	0.0	41.7

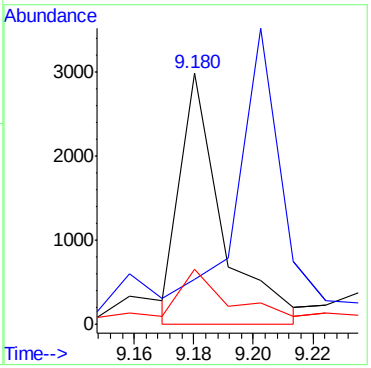


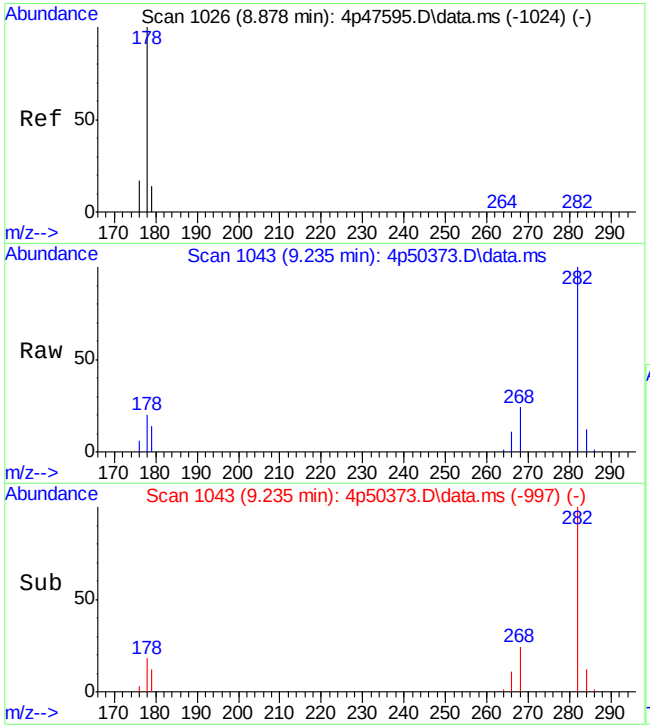


#23
Phenanthrene
Concen: 48.82 ppm
RT: 9.180 min Scan# 1038
Delta R.T. -0.011 min
Lab File: 4p50373.D
Acq: 30 Dec 2021 2:11 pm

Tgt Ion:178 Resp: 2884

Ion	Ratio	Lower	Upper
178	100		
179	0.6	0.0	46.0
176	20.1	0.0	45.6

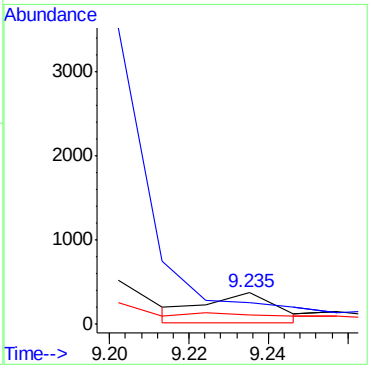


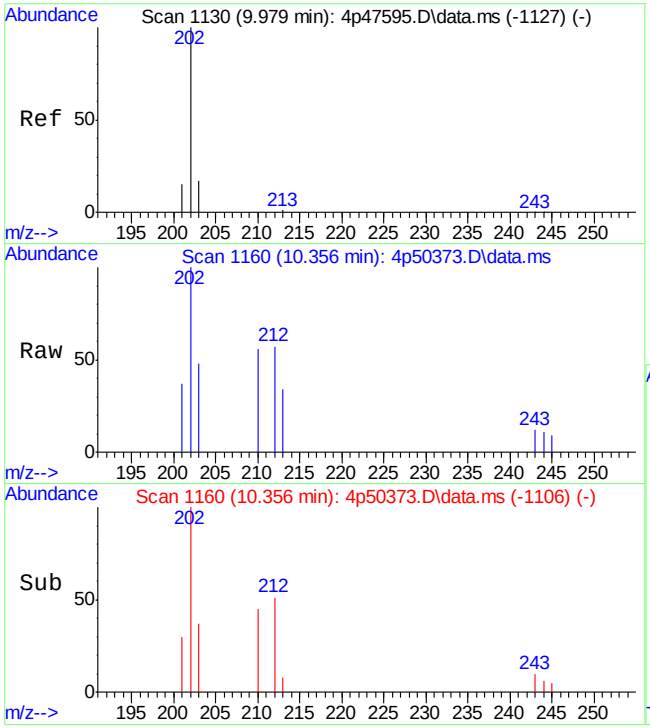


#24
Anthracene
Concen: 7.96 ppm
RT: 9.235 min Scan# 1043
Delta R.T. 0.000 min
Lab File: 4p50373.D
Acq: 30 Dec 2021 2:11 pm

Tgt Ion:178 Resp: 451

Ion	Ratio	Lower	Upper
178	100		
179	0.0	0.0	43.0
176	4.3	0.0	48.4

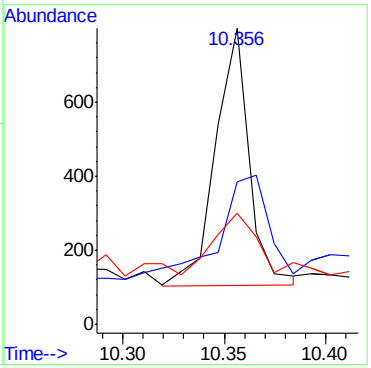


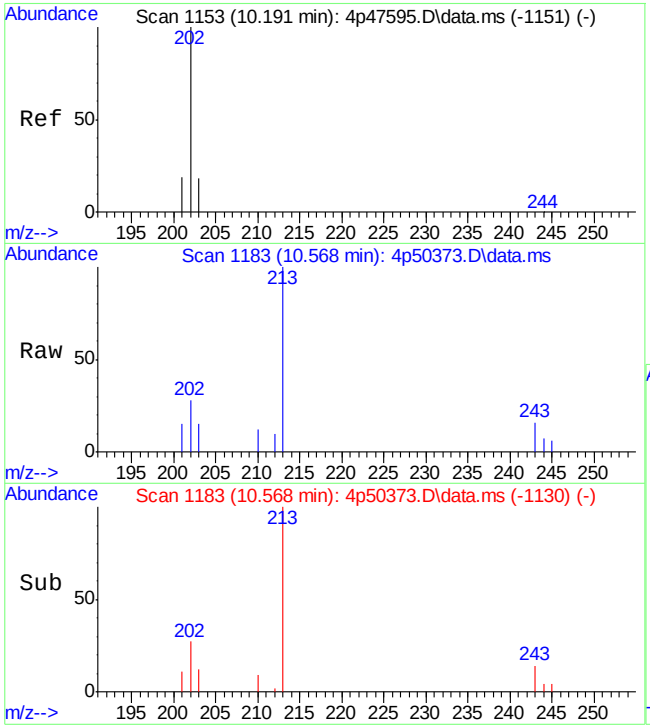


#25
Fluoranthene
Concen: 12.94 ppm
RT: 10.356 min Scan# 1160
Delta R.T. 0.000 min
Lab File: 4p50373.D
Acq: 30 Dec 2021 2:11 pm

Tgt Ion:202 Resp: 796

Ion	Ratio	Lower	Upper
202	100		
203	35.5	0.0	47.6
201	19.5	0.0	42.9

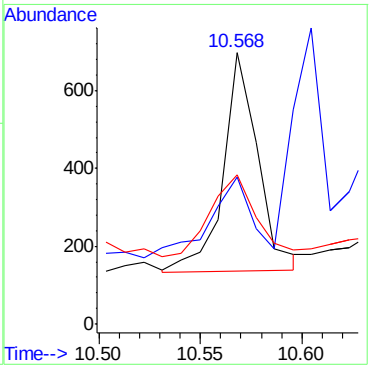




#26
Pyrene
Concen: 9.81 ppm
RT: 10.568 min Scan# 1183
Delta R.T. -0.009 min
Lab File: 4p50373.D
Acq: 30 Dec 2021 2:11 pm

Tgt Ion:202 Resp: 664

Ion	Ratio	Lower	Upper
202	100		
203	0.6	0.0	47.6
201	37.3	0.0	46.0



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/30/21 17:55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50374.D
Acq On : 30 Dec 2021 2:35 pm
Operator : kristis
Sample : jd36624-12
Misc : op37113a,e4p2638,260,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 30 16:33:02 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

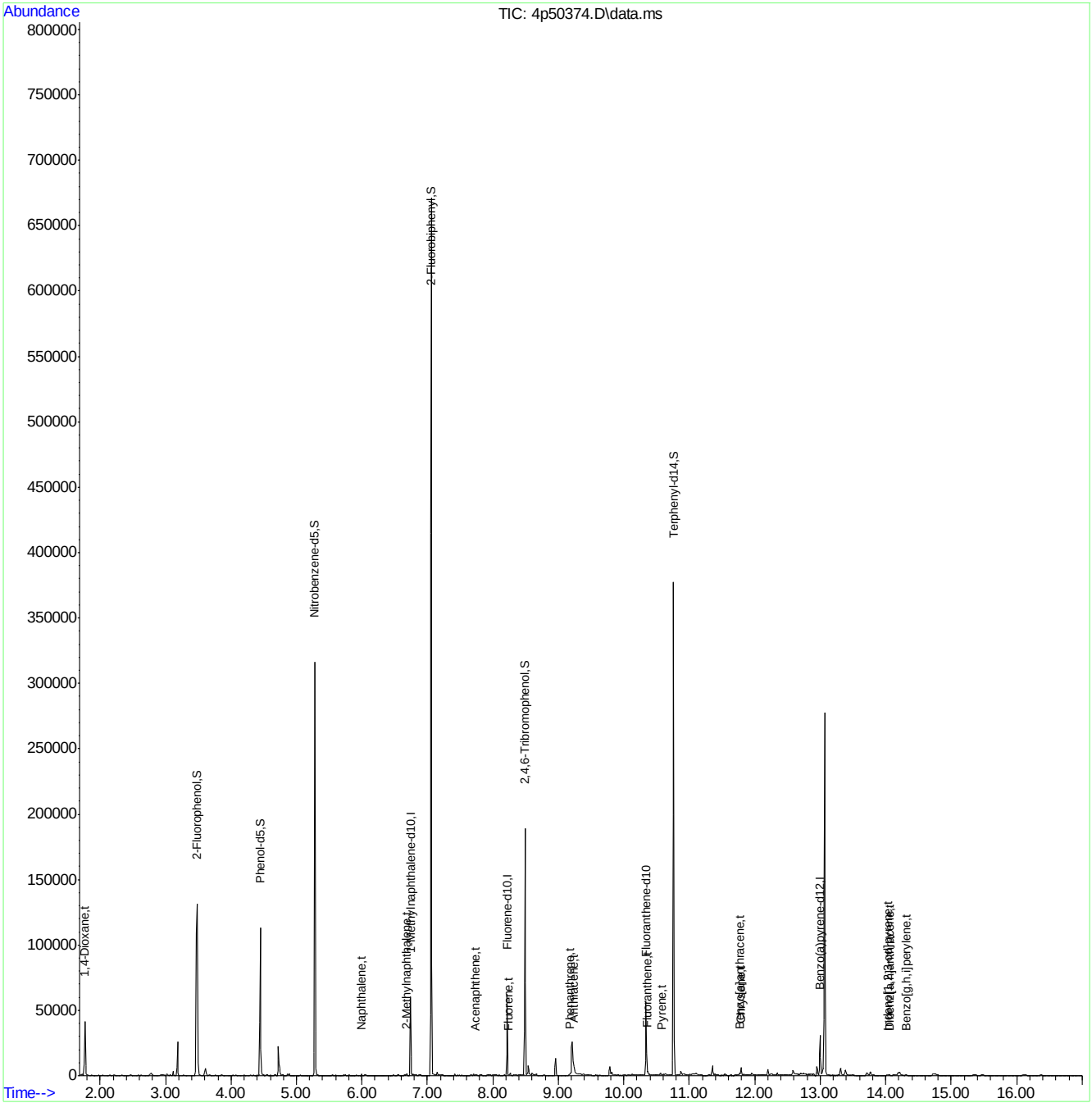
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	6.746	150	18265	800.00	ppm		0.00
13) Fluorene-d10	8.216	176	25299	800.00	ppm		0.00
20) Fluoranthene-d10	10.338	212	36342	800.00	ppm		0.00
30) Benzo(a)pyrene-d12	12.996	264	19043	800.00	ppm		0.00
System Monitoring Compounds							
3) 2-Fluorophenol	3.483	112	79654	7030.16	ppm		0.02
Spiked Amount 50.000			Recovery	= 14060.32%			
4) Phenol-d5	4.446	99	90605	4215.13	ppm		0.04
Spiked Amount 50.000			Recovery	= 8430.26%			
7) Nitrobenzene-d5	5.280	82	205214	11698.96	ppm		0.00
Spiked Amount 50.000			Recovery	= 23397.92%			
14) 2-Fluorobiphenyl	7.061	172	318338	9864.72	ppm		0.00
Spiked Amount 50.000			Recovery	= 19729.44%			
19) 2,4,6-Tribromophenol	8.489	330	62780	13002.59	ppm		0.00
Spiked Amount 50.000			Recovery	= 26005.18%			
27) Terphenyl-d14	10.761	244	236974	9103.65	ppm		0.00
Spiked Amount 50.000			Recovery	= 18207.30%			
Target Compounds							Qvalue
2) 1,4-Dioxane	1.768	88	25676	6018.01	ppm		82
8) Naphthalene	5.995	128	754	14.42	ppm		88
10) 2-Methylnaphthalene	6.680	141	461	16.88	ppm	#	71
16) Acenaphthene	7.735	153	174	5.78	ppm	#	72
17) Fluorene	8.242	166	201m	5.54	ppm		
23) Phenanthrene	9.180	178	1150m	23.49	ppm		
24) Anthracene	9.235	178	405	8.63	ppm		86
25) Fluoranthene	10.356	202	491m	9.63	ppm		
26) Pyrene	10.577	202	254	4.53	ppm		71
28) Benzo[a]anthracene	11.768	228	1150	22.95	ppm		68
29) Chrysene	11.792	228	431m	8.78	ppm		
34) Indeno[1,2,3-cd]pyrene	14.033	276	449	10.46	ppm		98
35) Dibenz[a,h]anthracene	14.057	278	311	9.30	ppm		90
36) Benzo[g,h,i]perylene	14.311	276	420	11.54	ppm		94

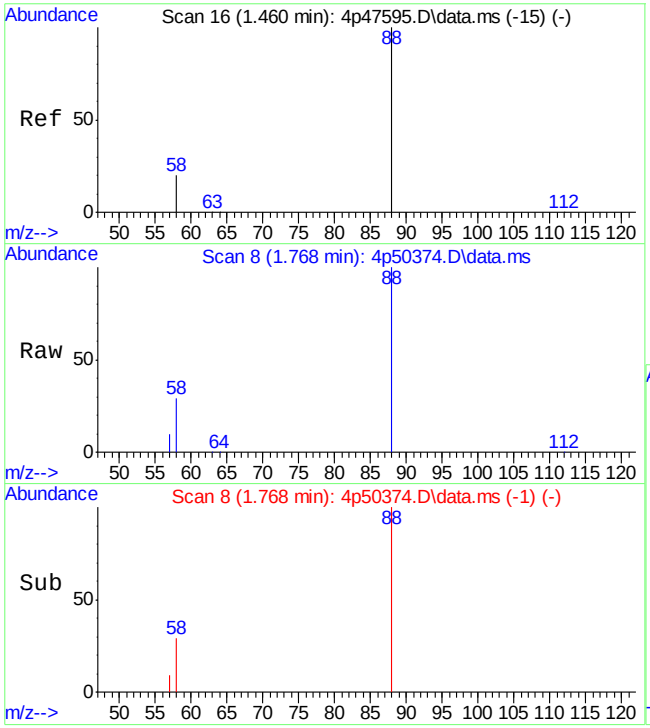
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2638\
Data File : 4p50374.D
Acq On : 30 Dec 2021 2:35 pm
Operator : kristis
Sample : jd36624-12
Misc : op37113a,e4p2638,260,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 30 16:33:02 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

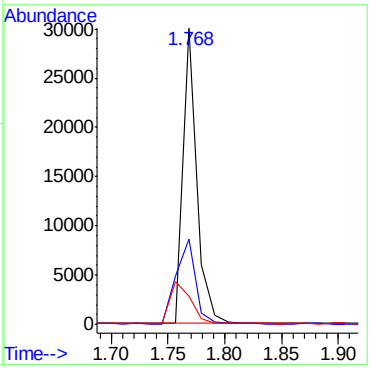


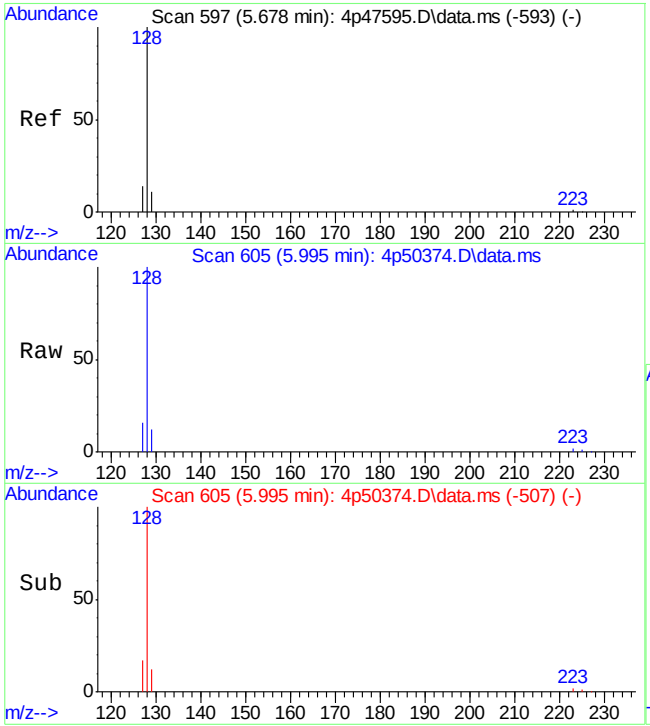


#2
1,4-Dioxane
Concen: 6018.01 ppm
RT: 1.768 min Scan# 8
Delta R.T. -0.023 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion: 88 Resp: 25676

Ion	Ratio	Lower	Upper
88	100		
58	28.8	0.1	40.1
57	9.4	0.0	24.7

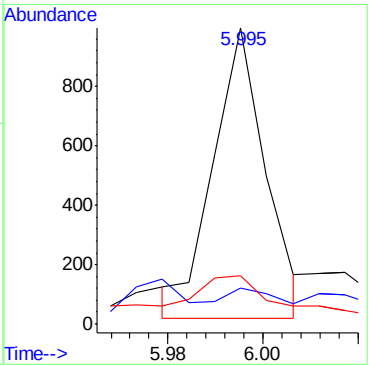


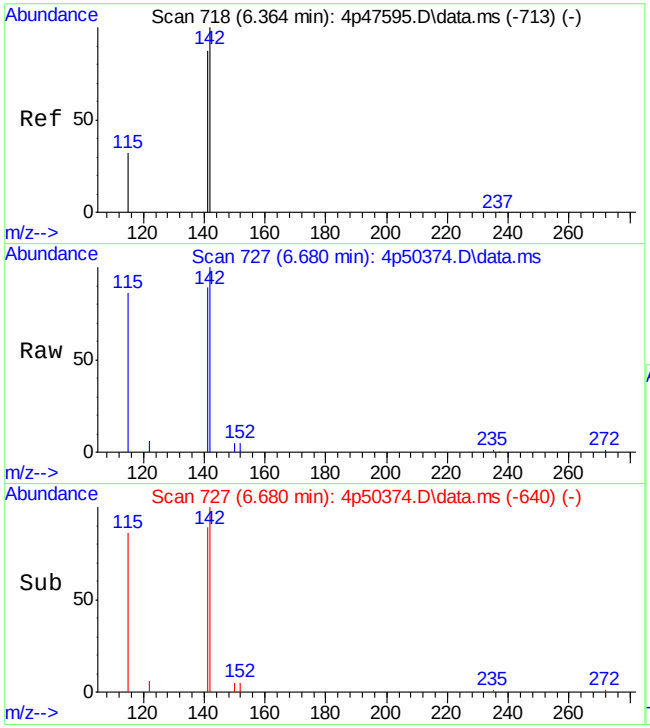


#8
Naphthalene
Concen: 14.42 ppm
RT: 5.995 min Scan# 605
Delta R.T. -0.005 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:128 Resp: 754

Ion	Ratio	Lower	Upper
128	100		
129	1.5	0.0	41.1
127	12.0	0.0	42.0

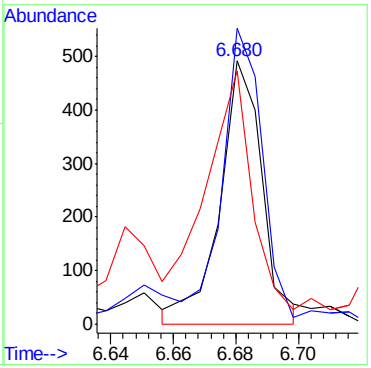


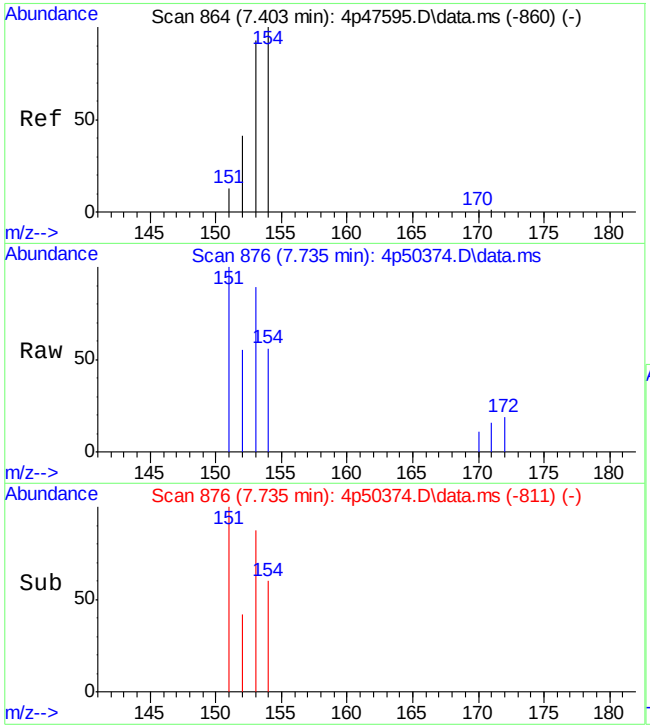


#10
2-Methylnaphthalene
Concen: 16.88 ppm
RT: 6.680 min Scan# 727
Delta R.T. -0.006 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:141 Resp: 461

Ion	Ratio	Lower	Upper
141	100		
142	113.1	96.1	156.1
115	91.6	7.9	67.9#

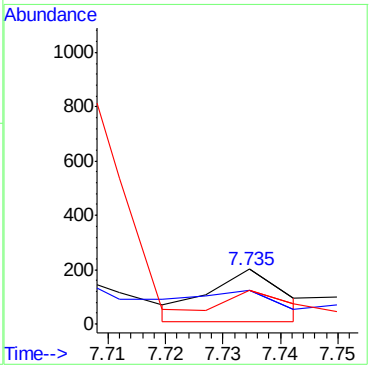


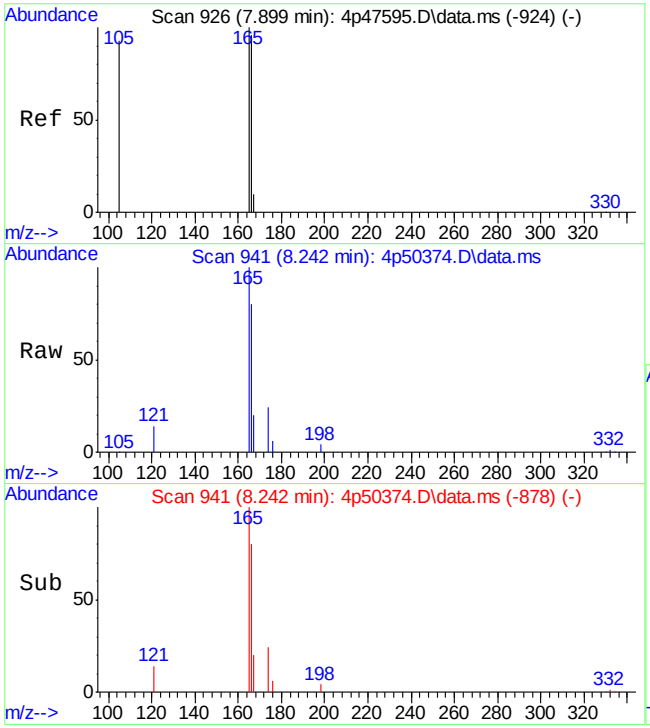


#16
Acenaphthene
Concen: 5.78 ppm
RT: 7.735 min Scan# 876
Delta R.T. -0.007 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:153 Resp: 174

Ion	Ratio	Lower	Upper
153	100		
152	44.0	18.5	78.5
154	52.6	59.1	119.1#

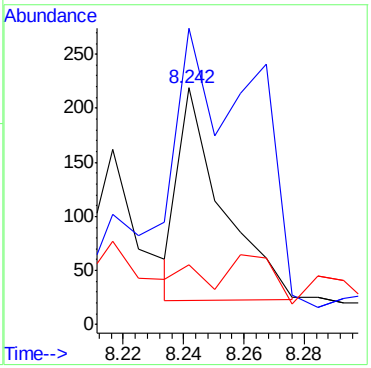


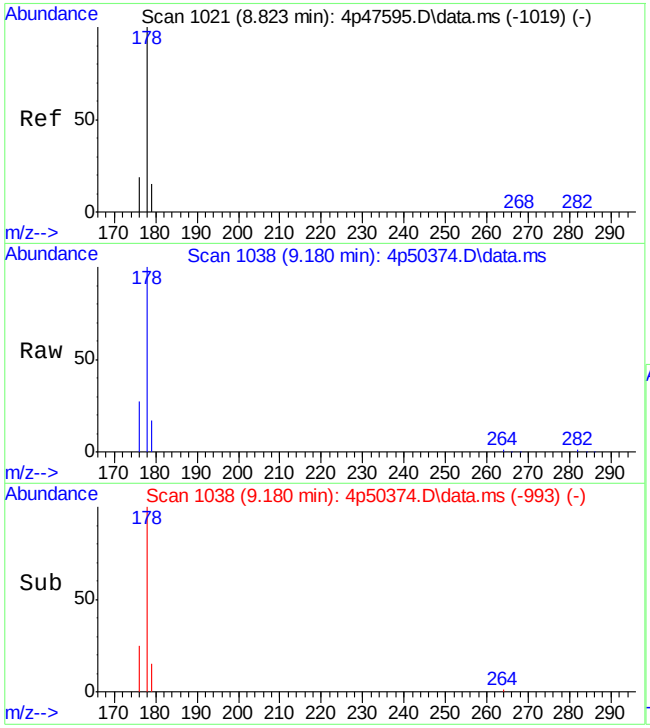


#17
Fluorene
Concen: 5.54 ppm m
RT: 8.242 min Scan# 941
Delta R.T. -0.008 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:166 Resp: 201

Ion	Ratio	Lower	Upper
166	100		
165	125.1	66.9	126.9
167	25.1	0.0	41.7

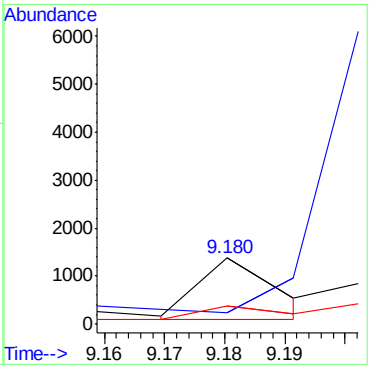


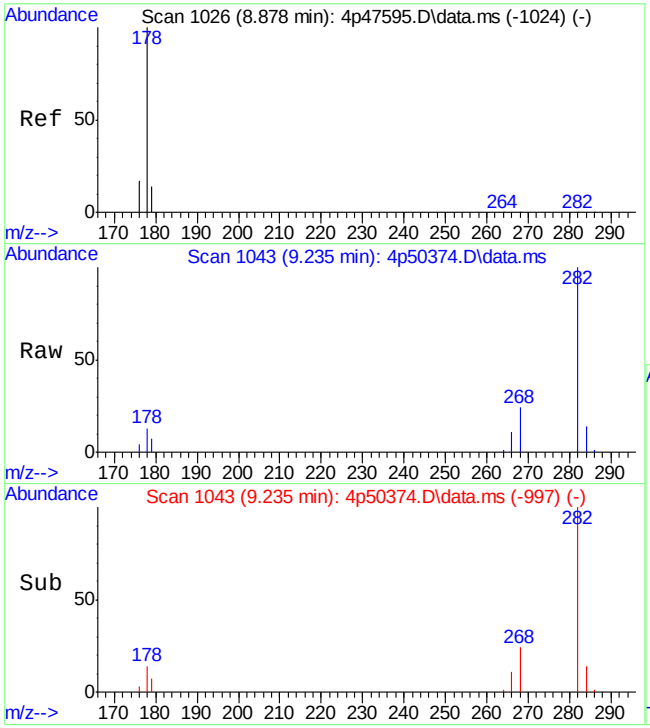


#23
Phenanthrene
Concen: 23.49 ppm m
RT: 9.180 min Scan# 1038
Delta R.T. -0.011 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:178 Resp: 1150

Ion	Ratio	Lower	Upper
178	100		
179	17.0	0.0	46.0
176	26.9	0.0	45.6

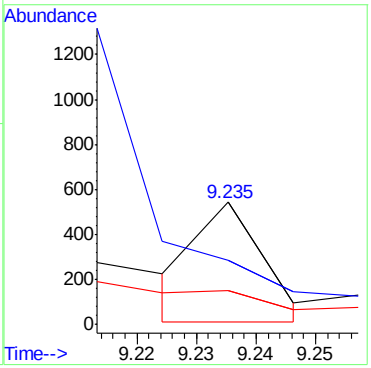


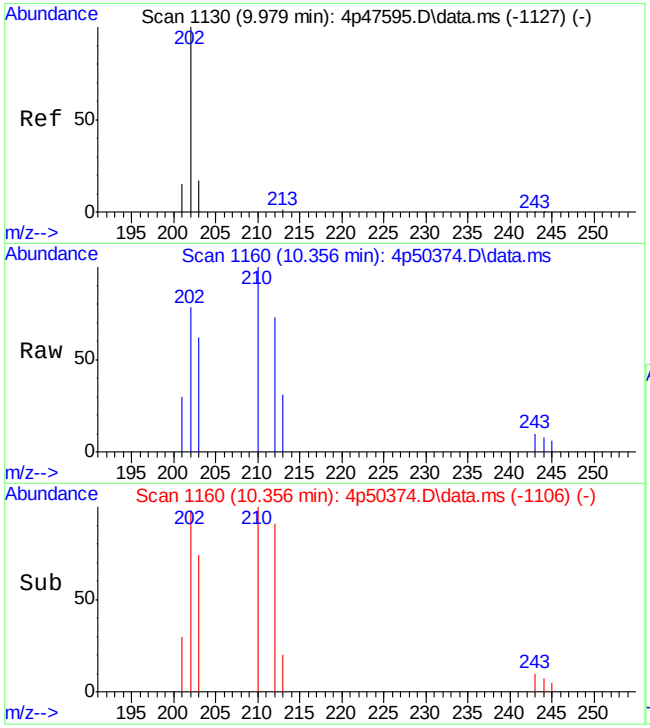


#24
Anthracene
Concen: 8.63 ppm
RT: 9.235 min Scan# 1043
Delta R.T. 0.000 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:178 Resp: 405

Ion	Ratio	Lower	Upper
178	100		
179	6.8	0.0	43.0
176	13.0	0.0	48.4

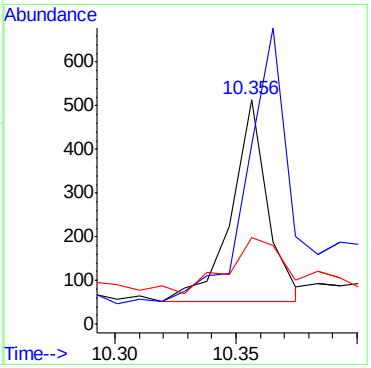


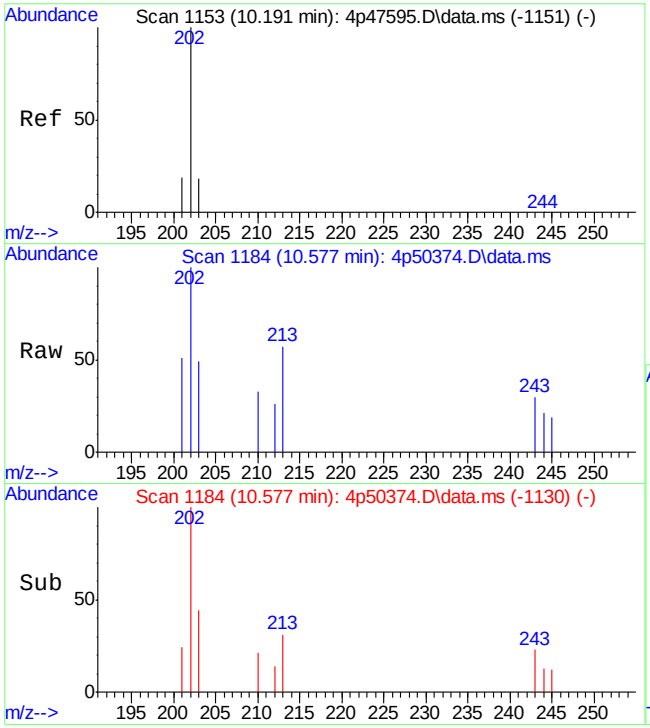


#25
Fluoranthene
Concen: 9.63 ppm m
RT: 10.356 min Scan# 1160
Delta R.T. 0.000 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:202 Resp: 491

Ion	Ratio	Lower	Upper
202	100		
203	79.8	0.0	47.6#
201	38.3	0.0	42.9

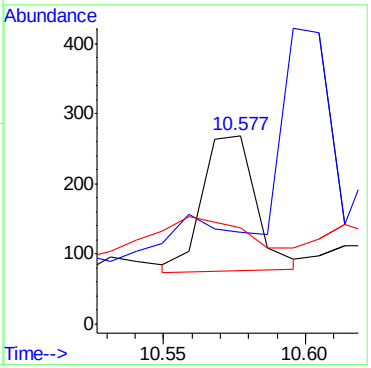


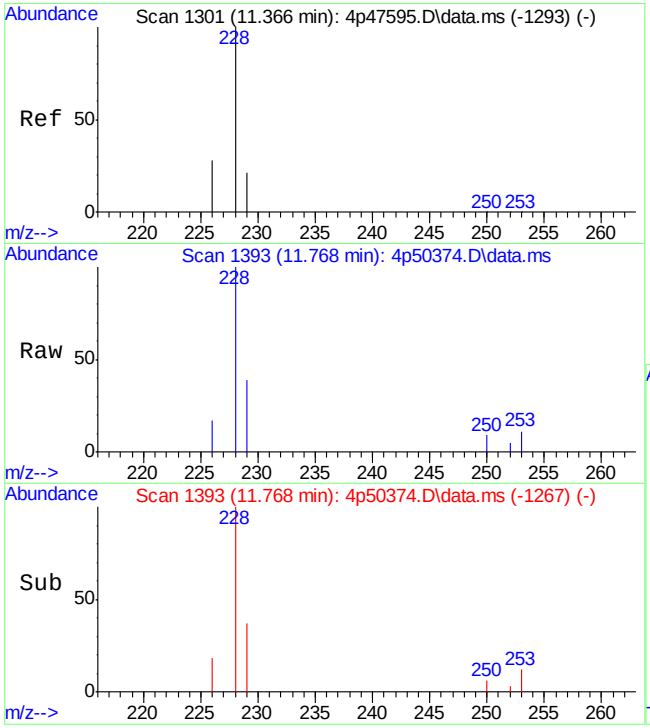


#26
Pyrene
Concen: 4.53 ppm
RT: 10.577 min Scan# 1184
Delta R.T. 0.000 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:202 Resp: 254

Ion	Ratio	Lower	Upper
202	100		
203	0.0	0.0	47.6
201	9.2	0.0	46.0

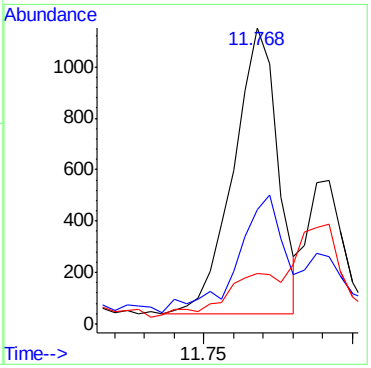


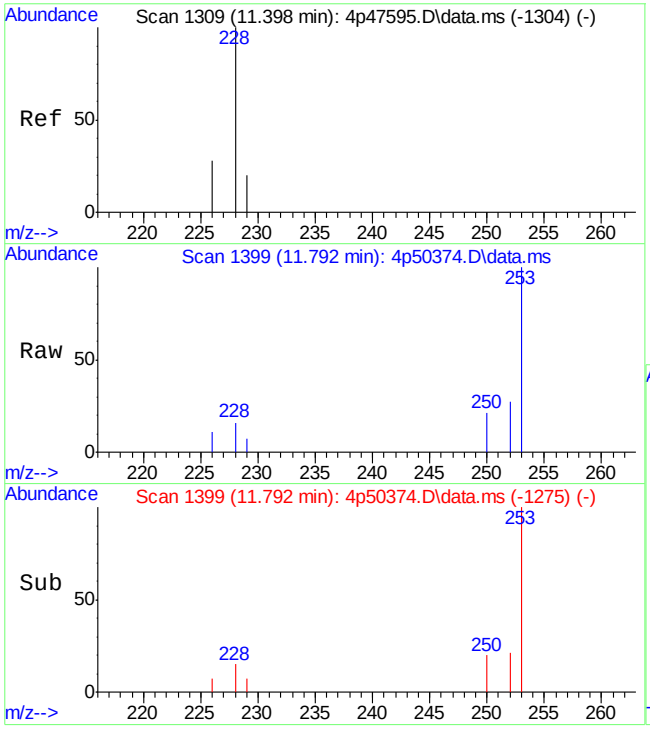


#28
Benzo[a]anthracene
Concen: 22.95 ppm
RT: 11.768 min Scan# 1393
Delta R.T. 0.004 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:228 Resp: 1150

Ion	Ratio	Lower	Upper
228	100		
229	32.8	0.0	49.8
226	6.4	0.0	53.3

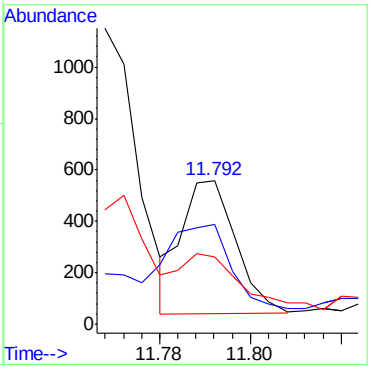


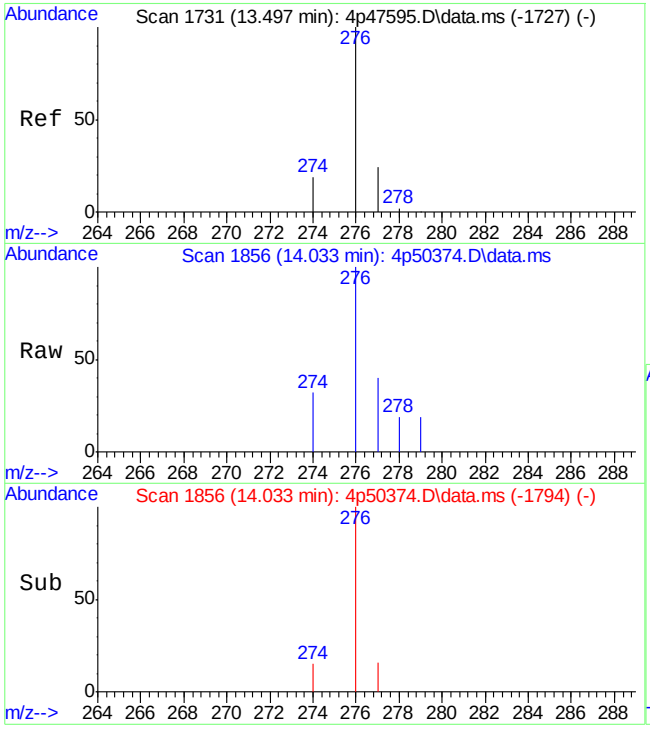


#29
Chrysene
Concen: 8.78 ppm m
RT: 11.792 min Scan# 1399
Delta R.T. -0.004 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:228 Resp: 431

Ion	Ratio	Lower	Upper
228	100		
226	69.3	0.0	58.5#
229	47.0	0.0	48.7

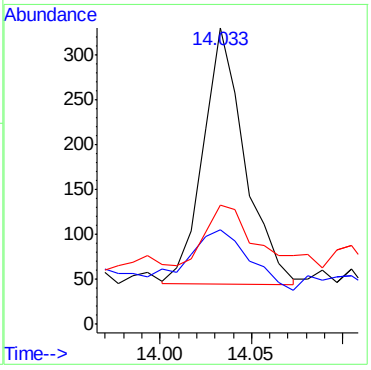


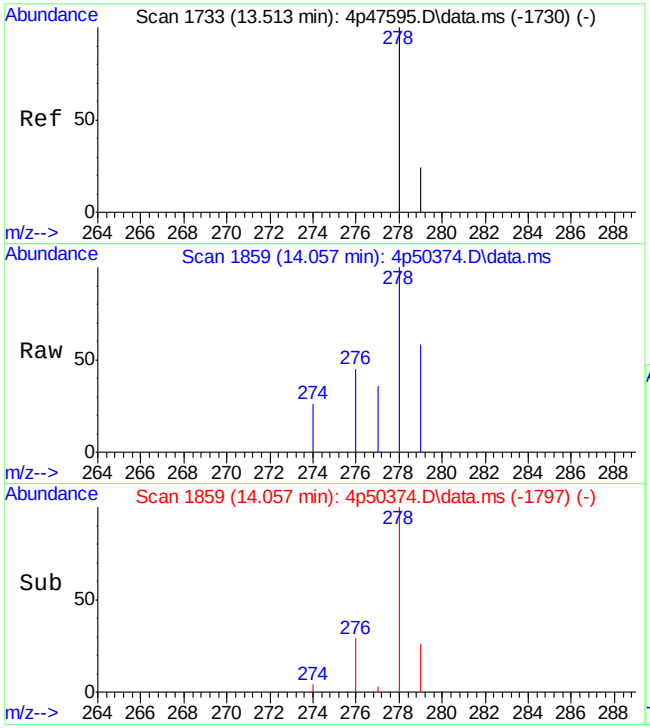


#34
Indeno[1,2,3-cd]pyrene
Concen: 10.46 ppm
RT: 14.033 min Scan# 1856
Delta R.T. -0.008 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:276 Resp: 449

Ion	Ratio	Lower	Upper
276	100		
274	19.9	0.0	49.3
277	21.7	0.0	53.2

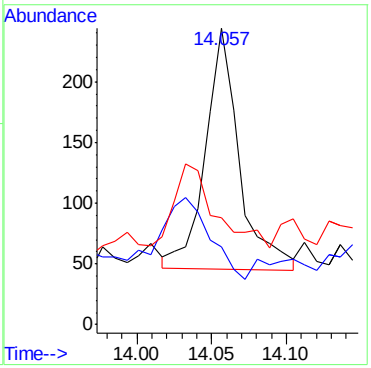


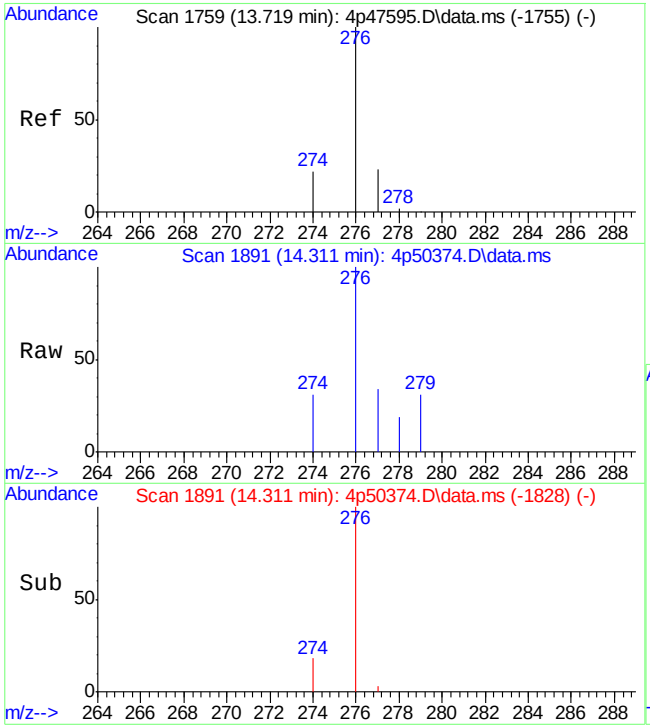


#35
Dibenz[a,h]anthracene
Concen: 9.30 ppm
RT: 14.057 min Scan# 1859
Delta R.T. -0.008 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:278 Resp: 311

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	35.2
277	4.5	0.0	36.7

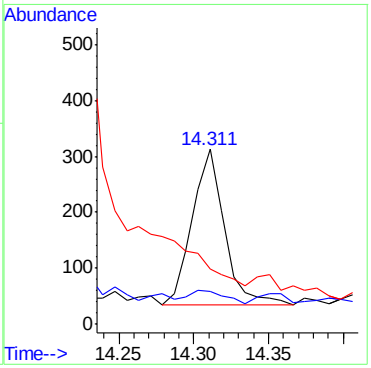




#36
Benzo[g,h,i]perylene
Concen: 11.54 ppm
RT: 14.311 min Scan# 1891
Delta R.T. 0.000 min
Lab File: 4p50374.D
Acq: 30 Dec 2021 2:35 pm

Tgt Ion:276 Resp: 420

Ion	Ratio	Lower	Upper
276	100		
278	4.7	0.0	32.5
279	0.0	0.0	30.4



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 19:09

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2629\
Data File : 4p50223.d
Acq On : 18 Dec 2021 8:41 am
Operator : chriss2
Sample : jd36624-13 Inst : MS4P
Misc : op37115a,e4p2629,275,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 20 00:52:03 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 23:01:53 2021
Response via : Initial Calibration

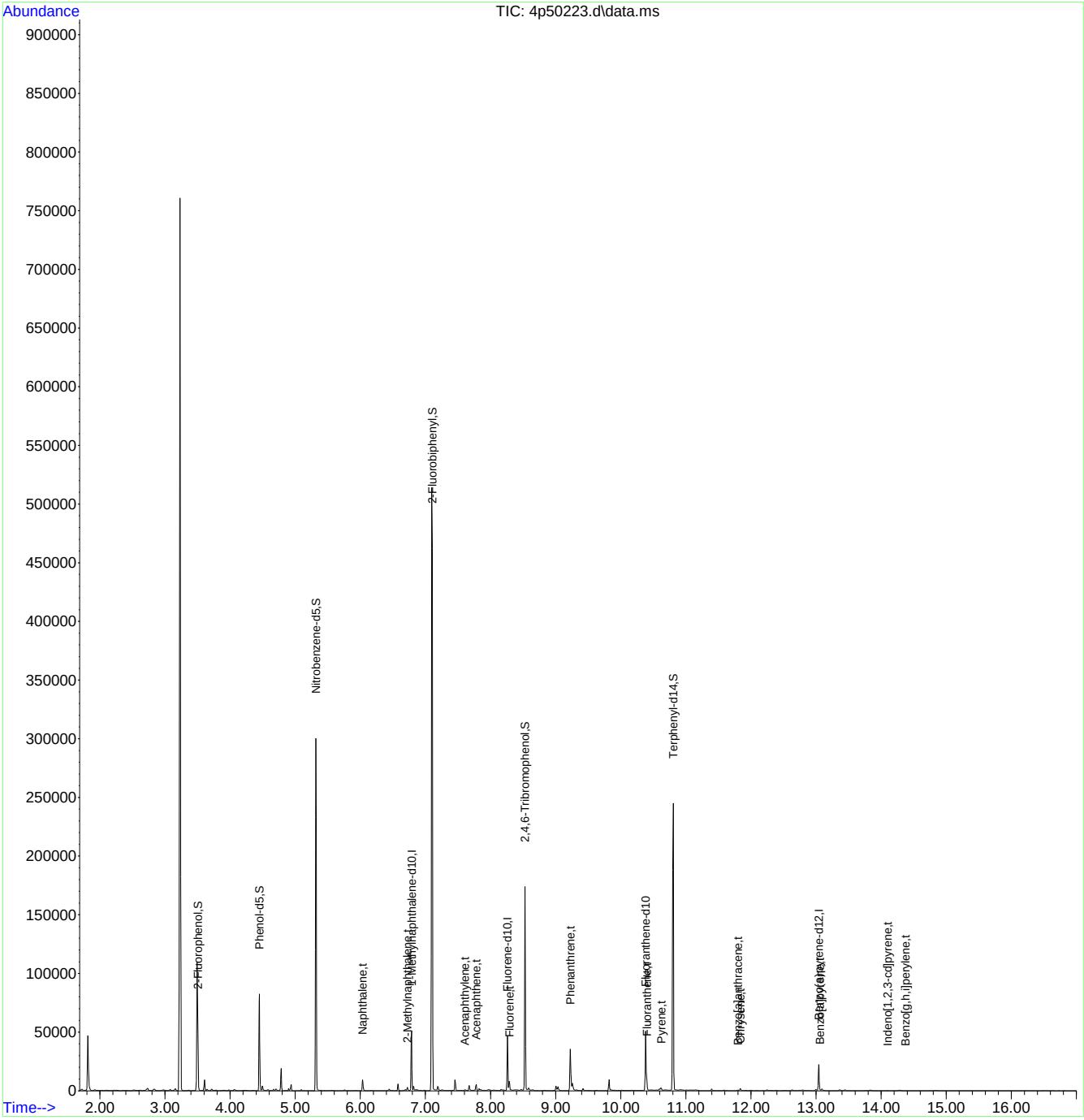
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.787	150	15902	800.00	ppm	0.00
13) Fluorene-d10	8.259	176	21678	800.00	ppm	0.00
20) Fluoranthene-d10	10.384	212	32715	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.040	264	13698	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.505	112	45923	4655.39	ppm	0.01
Spiked Amount 50.000			Recovery	= 9310.78%		
4) Phenol-d5	4.450	99	62907	3361.44	ppm	0.00
Spiked Amount 50.000			Recovery	= 6722.88%		
7) Nitrobenzene-d5	5.319	82	188222	12324.77	ppm	0.00
Spiked Amount 50.000			Recovery	= 24649.54%		
14) 2-Fluorobiphenyl	7.106	172	295851	10699.25	ppm	0.00
Spiked Amount 50.000			Recovery	= 21398.50%		
19) 2,4,6-Tribromophenol	8.531	330	60764	14687.20	ppm	0.00
Spiked Amount 50.000			Recovery	= 29374.40%		
27) Terphenyl-d14	10.807	244	177746	7585.37	ppm	0.00
Spiked Amount 50.000			Recovery	= 15170.74%		
Target Compounds						Qvalue
8) Naphthalene	6.034	128	7563	166.18	ppm	99
10) 2-Methylnaphthalene	6.722	141	891m	37.47	ppm	
15) Acenaphthylene	7.606	152	836m	20.70	ppm	
16) Acenaphthene	7.780	153	1495m	58.00	ppm	
17) Fluorene	8.293	166	3936m	126.58	ppm	
23) Phenanthrene	9.224	178	25051	568.51	ppm	98
25) Fluoranthene	10.402	202	5014m	109.28	ppm	
26) Pyrene	10.623	202	1492m	29.55	ppm	
28) Benzo[a]anthracene	11.800	228	269m	5.96	ppm	
29) Chrysene	11.836	228	553	12.51	ppm	82
33) Benzo[a]pyrene	13.060	252	137	5.28	ppm	79
34) Indeno[1,2,3-cd]pyrene	14.096	276	155	5.02	ppm	88
36) Benzo[g,h,i]perylene	14.374	276	161	6.15	ppm	94

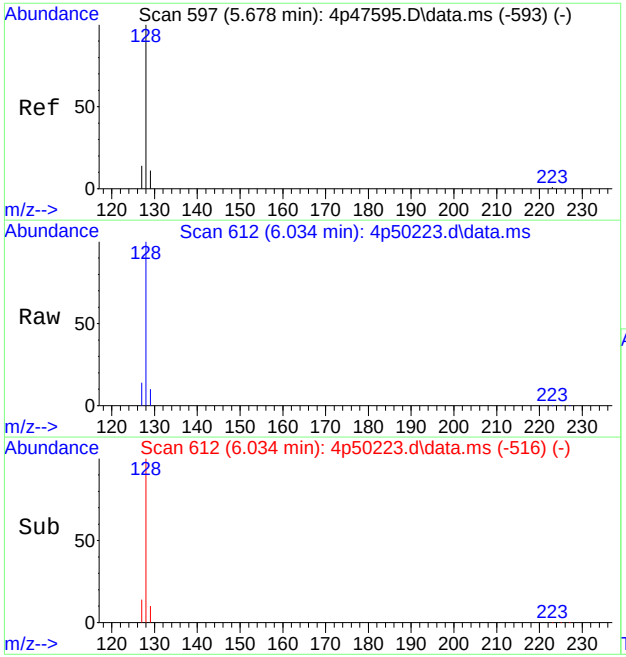
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2629\
Data File : 4p50223.d
Acq On : 18 Dec 2021 8:41 am
Operator : chriss2
Sample : jd36624-13 Inst : MS4P
Misc : op37115a,e4p2629,275,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 20 00:52:03 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 23:01:53 2021
Response via : Initial Calibration

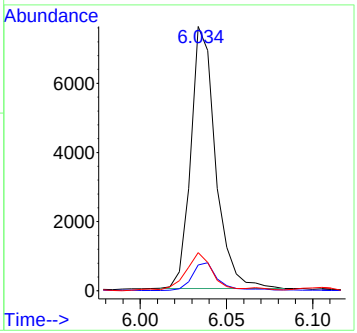


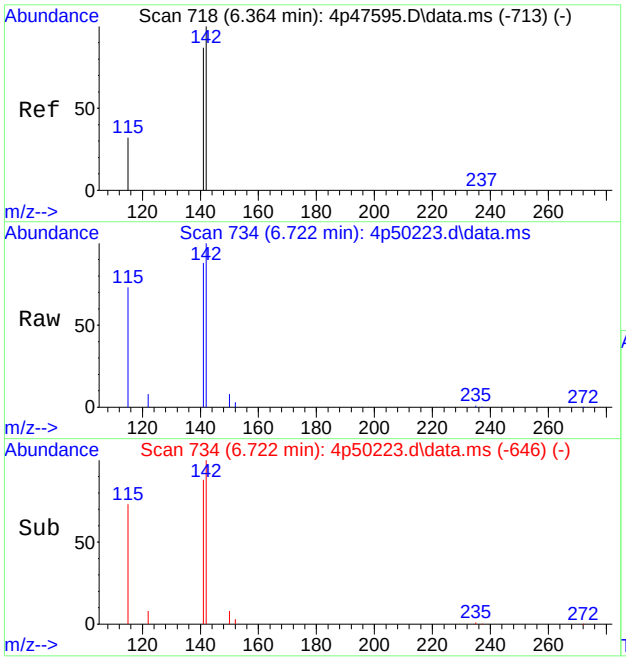


#8
Naphthalene
Concen: 166.18 ppm
RT: 6.034 min Scan# 612
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:128 Resp: 7563

Ion	Ratio	Lower	Upper
128	100		
129	9.6	0.0	39.7
127	14.1	0.0	44.6

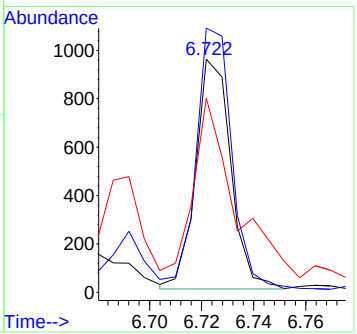


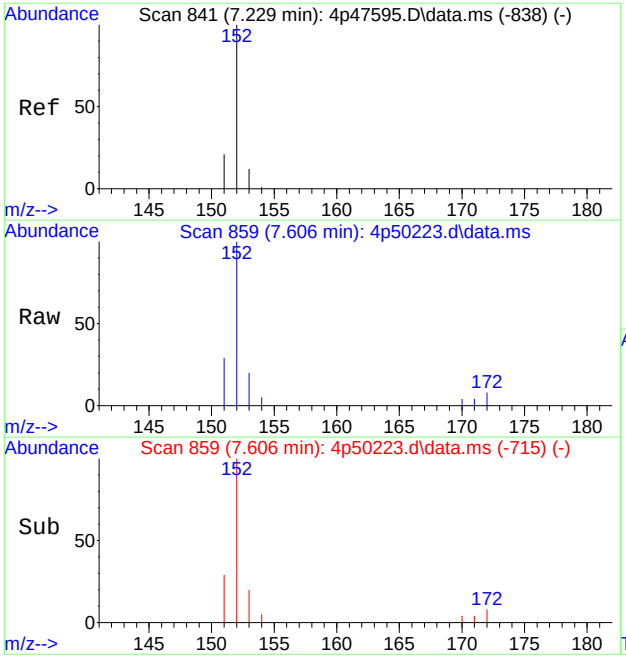


#10
2-Methylnaphthalene
Concen: 37.47 ppm m
RT: 6.722 min Scan# 734
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:141 Resp: 891

Ion	Ratio	Lower	Upper
141	100		
142	113.4	76.0	136.0
115	83.3	53.5	113.5

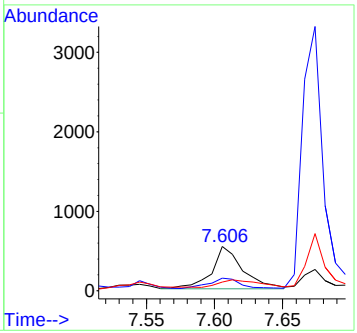


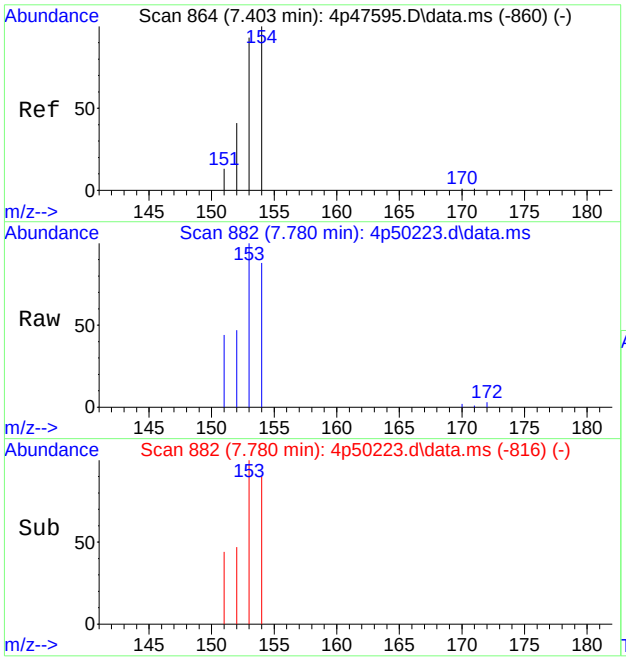


#15
Acenaphthylene
Concen: 20.70 ppm m
RT: 7.606 min Scan# 859
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:152 Resp: 836

Ion	Ratio	Lower	Upper
152	100		
151	28.8	0.0	51.0
153	19.6	0.0	42.4

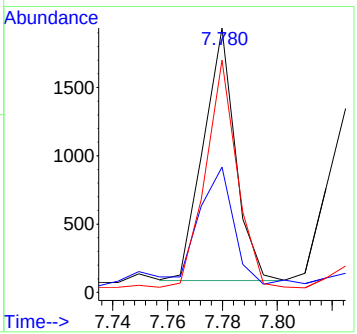


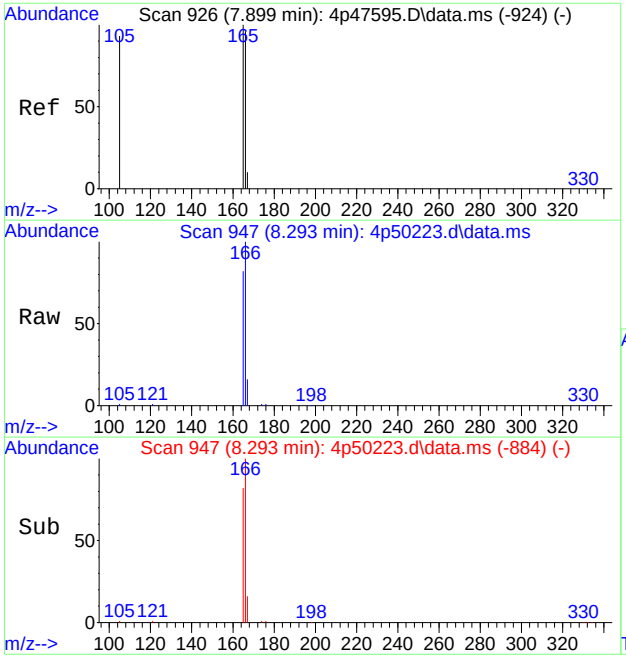


#16
Acenaphthene
Concen: 58.00 ppm m
RT: 7.780 min Scan# 882
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:153 Resp: 1495

Ion	Ratio	Lower	Upper
153	100		
152	47.4	17.9	77.9
154	87.9	64.7	124.7

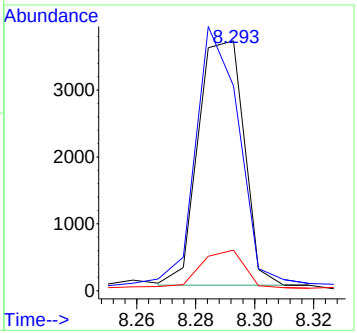


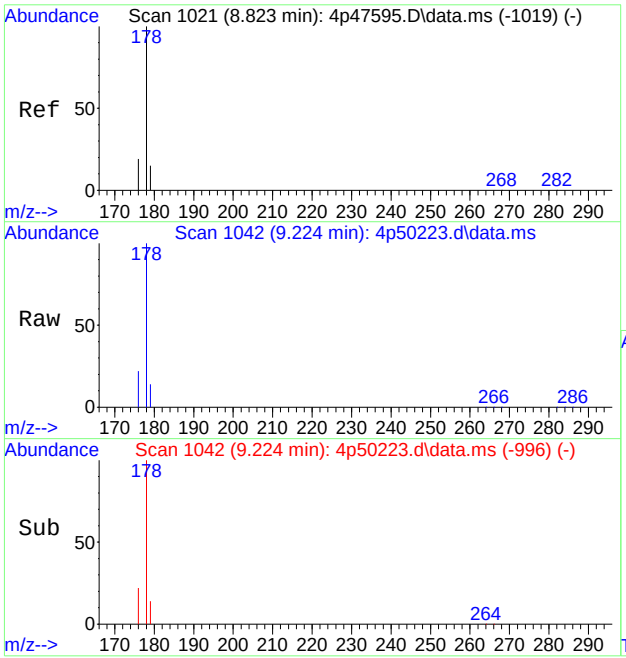


#17
Fluorene
Concen: 126.58 ppm m
RT: 8.293 min Scan# 947
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:166 Resp: 3936

Ion	Ratio	Lower	Upper
166	100		
165	81.9	53.7	113.7
167	16.2	0.0	43.4

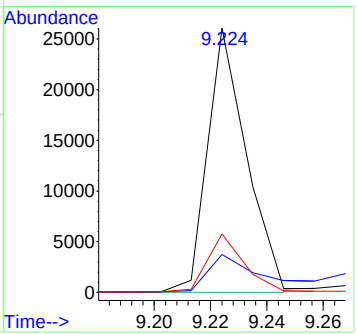


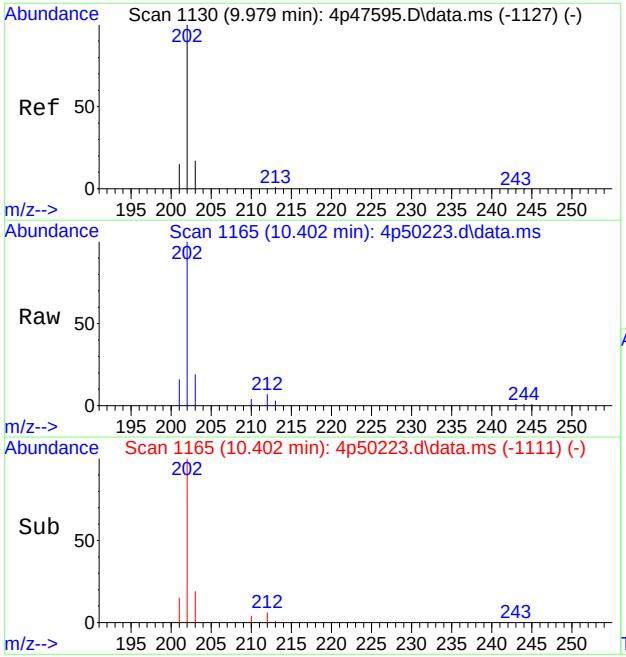


#23
Phenanthrene
Concen: 568.51 ppm
RT: 9.224 min Scan# 1042
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:178 Resp: 25051

Ion	Ratio	Lower	Upper
178	100		
179	12.1	0.0	43.8
176	21.9	0.0	52.4

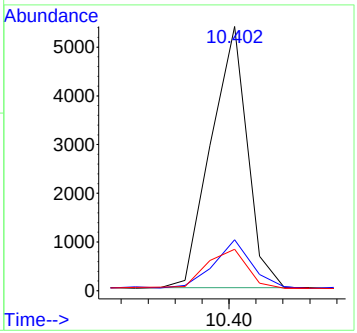


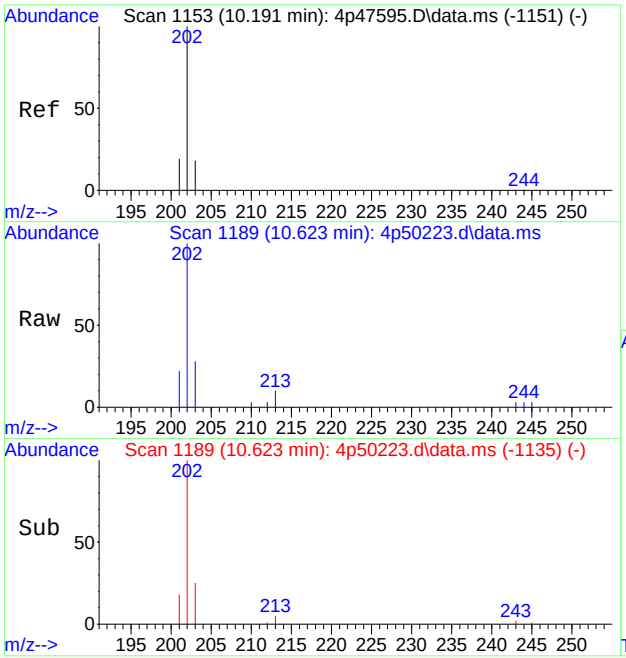


#25
Fluoranthene
Concen: 109.28 ppm m
RT: 10.402 min Scan# 1165
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:202 Resp: 5014

Ion	Ratio	Lower	Upper
202	100		
203	19.3	0.0	48.0
201	15.7	0.0	44.3

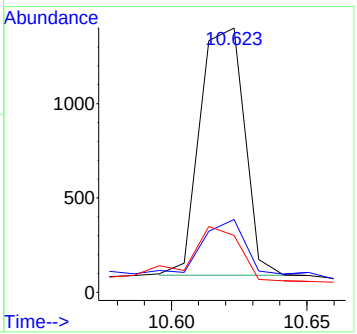


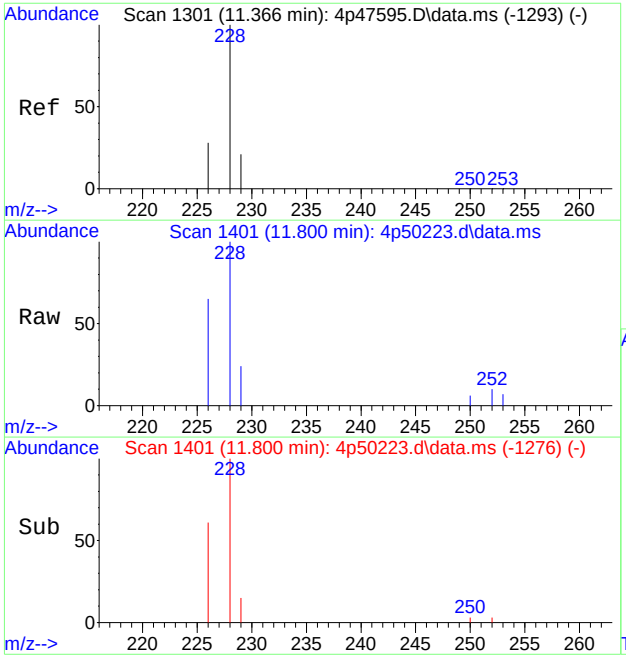


#26
Pyrene
Concen: 29.55 ppm m
RT: 10.623 min Scan# 1189
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:202 Resp: 1492

Ion	Ratio	Lower	Upper
202	100		
203	27.6	0.0	49.0
201	21.6	0.0	46.2

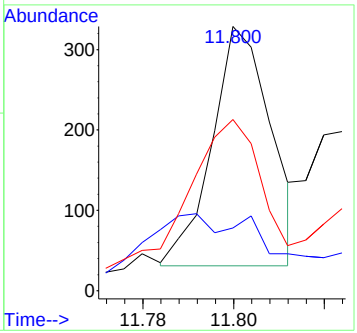


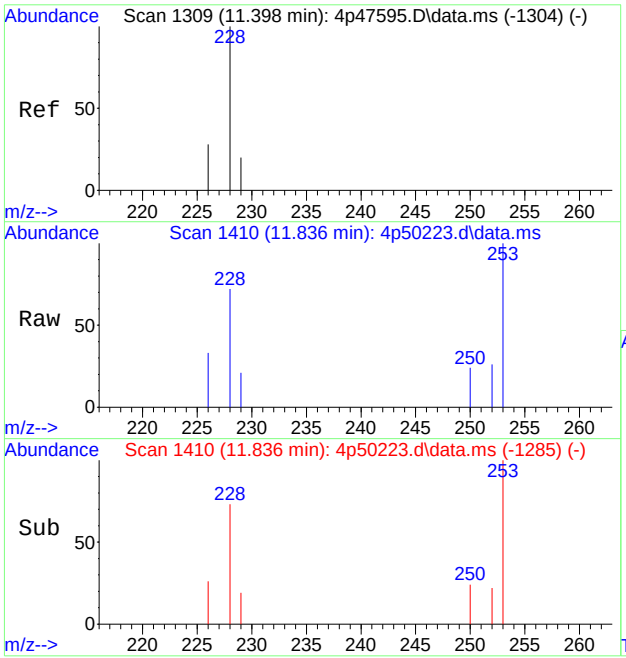


#28
Benzo[a]anthracene
Concen: 5.96 ppm m
RT: 11.800 min Scan# 1401
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:228 Resp: 269

Ion	Ratio	Lower	Upper
228	100		
229	23.7	0.0	48.5
226	64.7	0.0	58.4#

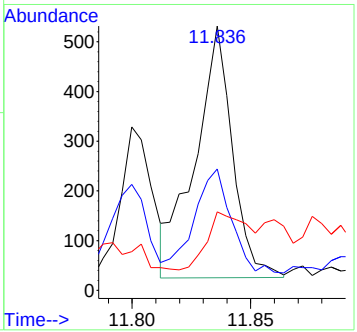


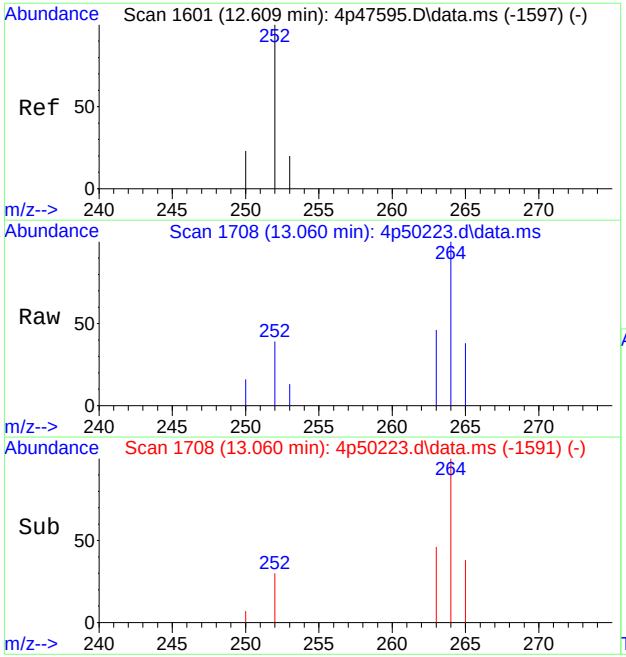


#29
Chrysene
Concen: 12.51 ppm
RT: 11.836 min Scan# 1410
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:228 Resp: 553

Ion	Ratio	Lower	Upper
228	100		
226	44.2	0.7	60.7
229	15.7	0.0	48.5

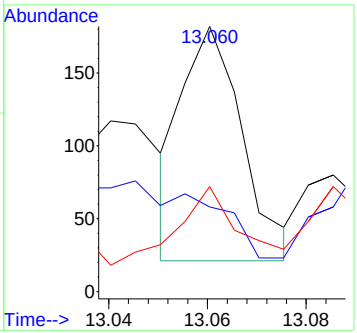


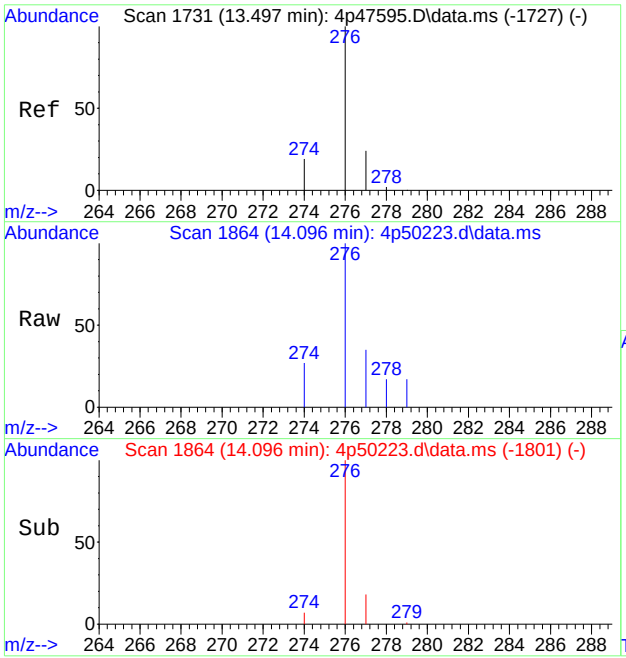


#33
Benzo[a]pyrene
Concen: 5.28 ppm
RT: 13.060 min Scan# 1708
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:252 Resp: 137

Ion	Ratio	Lower	Upper
252	100		
253	15.1	0.0	51.8
250	36.9	0.0	53.2

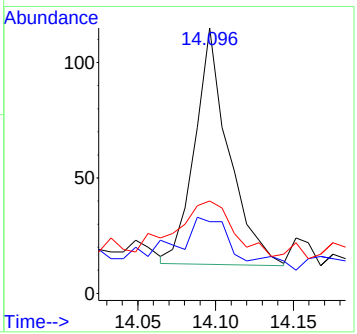


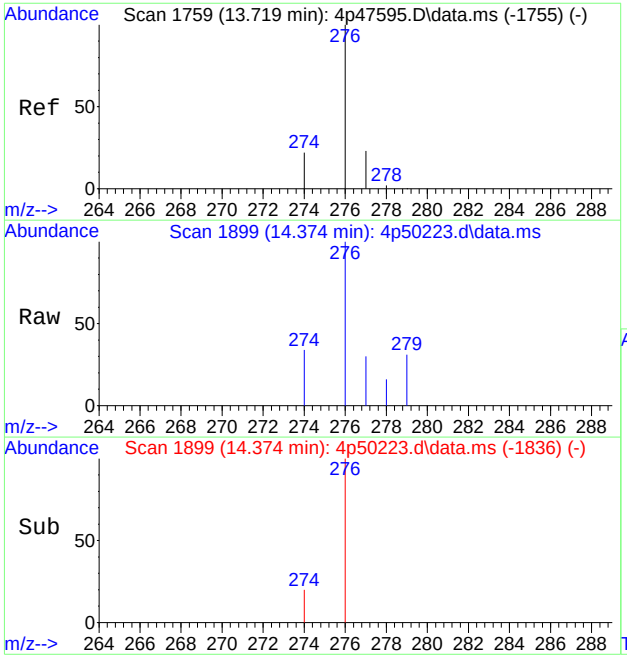


#34
Indeno[1,2,3-cd]pyrene
Concen: 5.02 ppm
RT: 14.096 min Scan# 1864
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:276 Resp: 155

Ion	Ratio	Lower	Upper
276	100		
274	12.4	0.0	50.8
277	19.4	0.0	52.4

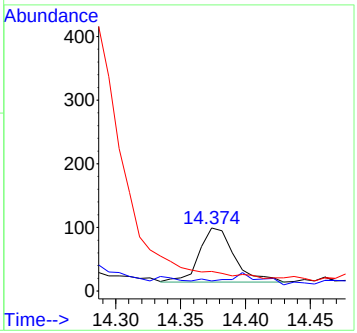




#36
Benzo[g,h,i]perylene
Concen: 6.15 ppm
RT: 14.374 min Scan# 1899
Delta R.T. -0.000 min
Lab File: 4p50223.d
Acq: 18 Dec 2021 8:41 am

Tgt Ion:276 Resp: 161

Ion	Ratio	Lower	Upper
276	100		
278	0.0	0.0	32.1
279	0.0	0.0	30.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2636\
Data File : 4p50301.D
Acq On : 28 Dec 2021 2:43 pm
Operator : kristis
Sample : jd36624-13
Misc : op37115a,e4p2636,275,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 04 18:51:30 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

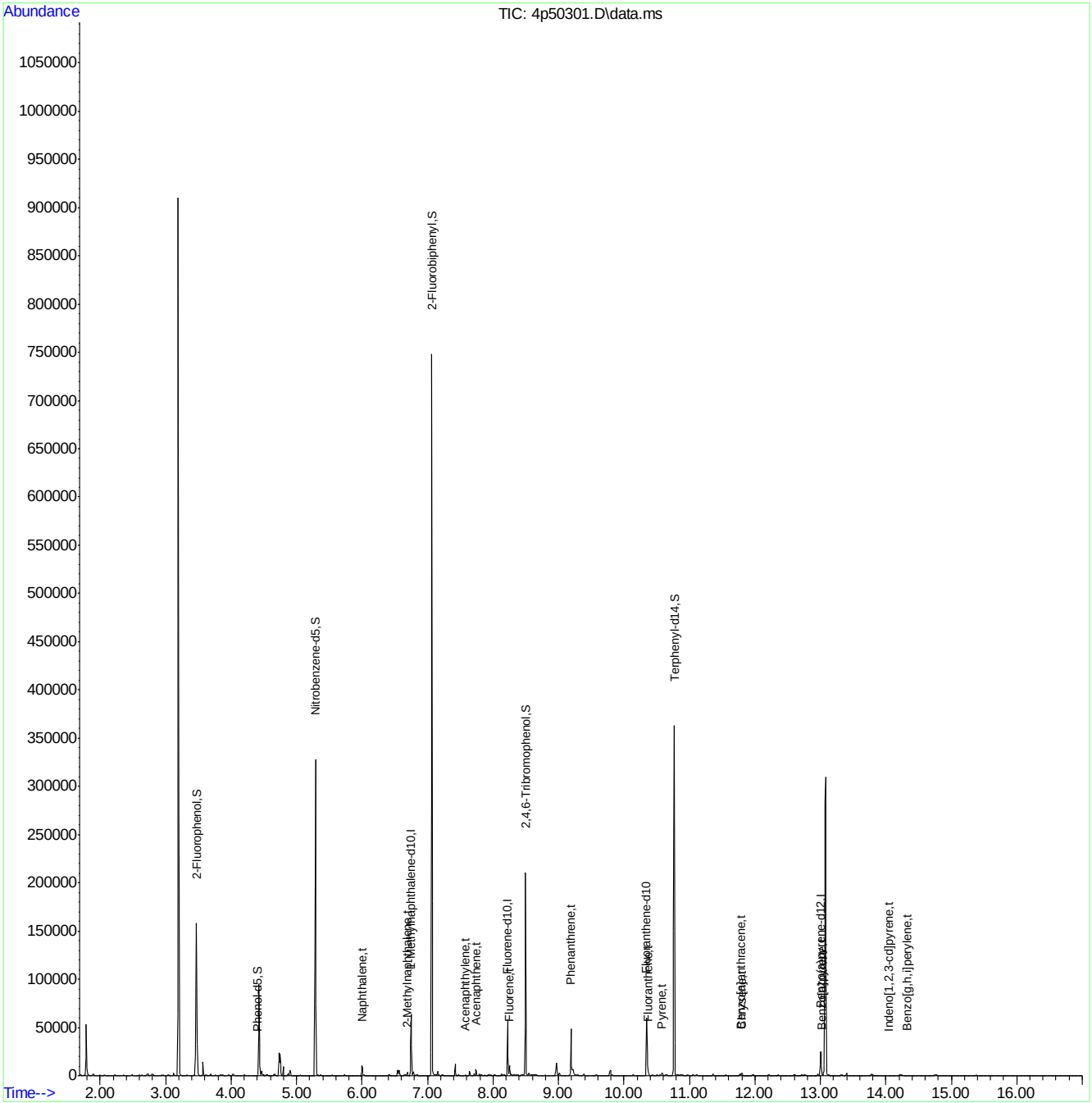
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.752	150	16678	800.00	ppm	0.00
13) Fluorene-d10	8.225	176	24121	800.00	ppm	0.00
20) Fluoranthene-d10	10.347	212	37621	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.005	264	14783	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.471	112	63842	6170.78	ppm	0.01
Spiked Amount 50.000			Recovery	= 12341.56%		
4) Phenol-d5	4.404	99	46	2.34	ppm	0.00
Spiked Amount 50.000			Recovery	= 4.68%		
7) Nitrobenzene-d5	5.288	82	192439	12014.60	ppm	0.00
Spiked Amount 50.000			Recovery	= 24029.20%		
14) 2-Fluorobiphenyl	7.068	172	322555	10483.54	ppm	0.00
Spiked Amount 50.000			Recovery	= 20967.08%		
19) 2,4,6-Tribromophenol	8.497	330	67347	14629.68	ppm	0.00
Spiked Amount 50.000			Recovery	= 29259.36%		
27) Terphenyl-d14	10.770	244	213811	7934.57	ppm	0.00
Spiked Amount 50.000			Recovery	= 15869.14%		
Target Compounds						Qvalue
8) Naphthalene	6.001	128	6733	141.06	ppm	93
10) 2-Methylnaphthalene	6.692	141	964	38.65	ppm	86
15) Acenaphthylene	7.575	152	248	5.52	ppm	79
16) Acenaphthene	7.742	153	1803	62.87	ppm	88
17) Fluorene	8.250	166	4524	130.75	ppm	97
23) Phenanthrene	9.191	178	29407	580.33	ppm	89
25) Fluoranthene	10.365	202	5866	111.18	ppm	97
26) Pyrene	10.586	202	1775	30.57	ppm	96
28) Benzo[a]anthracene	11.780	228	1537	29.63	ppm	68
29) Chrysene	11.804	228	532	10.47	ppm	90
33) Benzo[a]pyrene	13.025	252	168	6.00	ppm	73
34) Indeno[1,2,3-cd]pyrene	14.049	276	164	4.92	ppm	94
36) Benzo[g,h,i]perylene	14.326	276	146	5.17	ppm	99

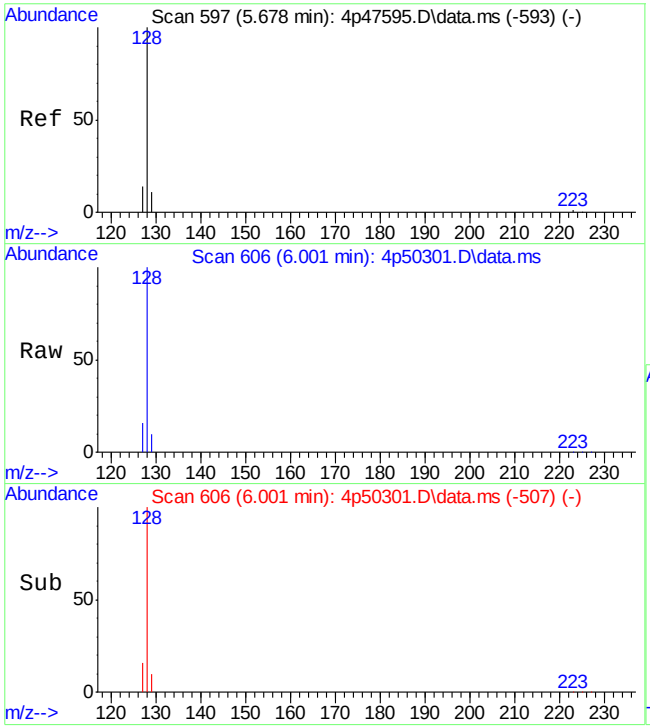
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2636\
Data File : 4p50301.D
Acq On : 28 Dec 2021 2:43 pm
Operator : kristis
Sample : jd36624-13
Misc : op37115a,e4p2636,275,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 04 18:51:30 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

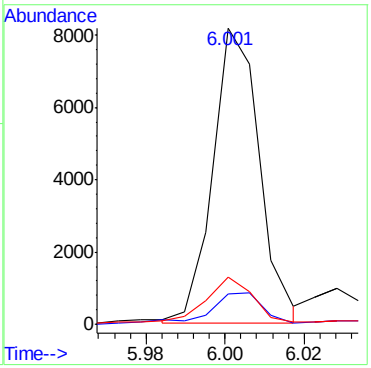


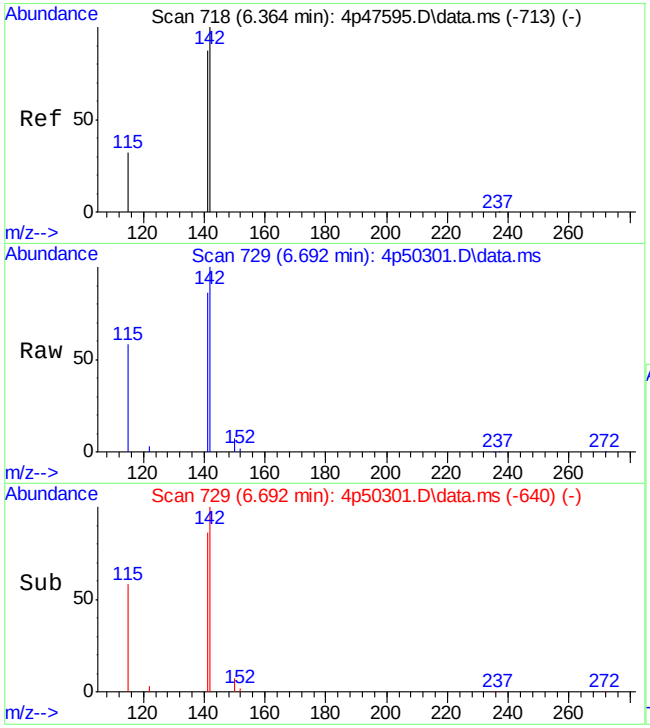


#8
Naphthalene
Concen: 141.06 ppm
RT: 6.001 min Scan# 606
Delta R.T. 0.000 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:128 Resp: 6733

Ion	Ratio	Lower	Upper
128	100		
129	9.4	0.0	41.1
127	15.7	0.0	42.0

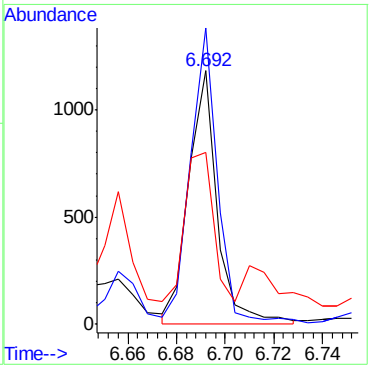


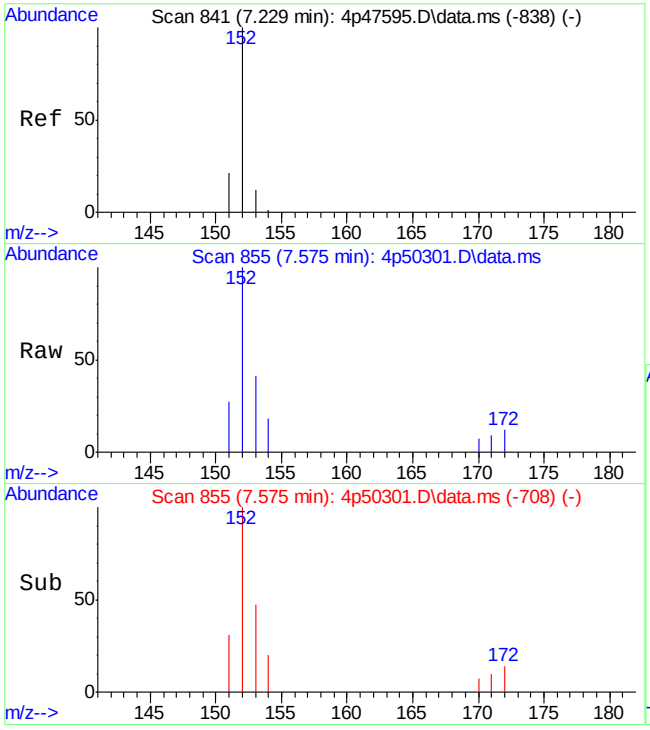


#10
2-Methylnaphthalene
Concen: 38.65 ppm
RT: 6.692 min Scan# 729
Delta R.T. 0.006 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:141 Resp: 964

Ion	Ratio	Lower	Upper
141	100		
142	117.7	96.1	156.1
115	58.6	7.9	67.9

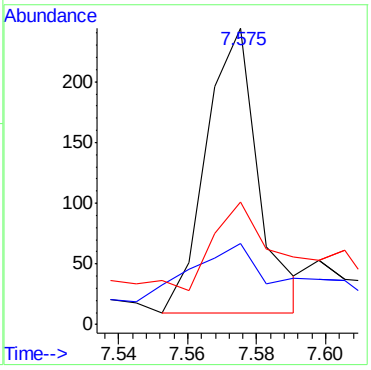


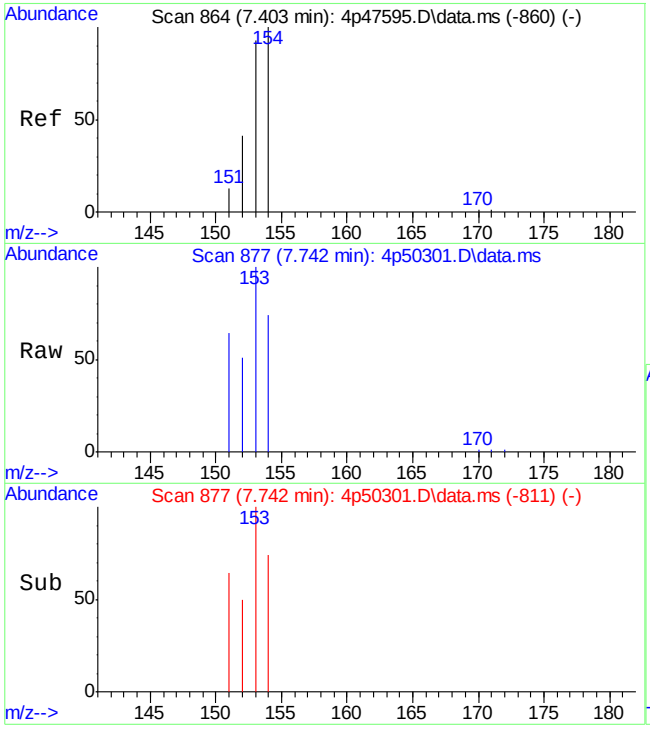


#15
Acenaphthylene
Concen: 5.52 ppm
RT: 7.575 min Scan# 855
Delta R.T. 0.008 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:152 Resp: 248

Ion	Ratio	Lower	Upper
152	100		
151	14.4	0.0	50.8
153	25.1	0.0	42.2

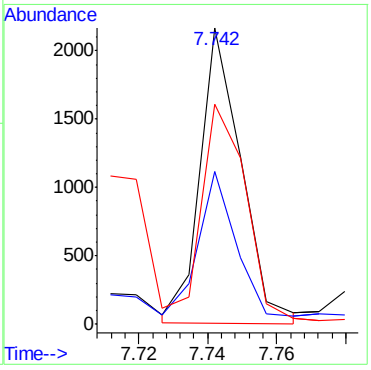


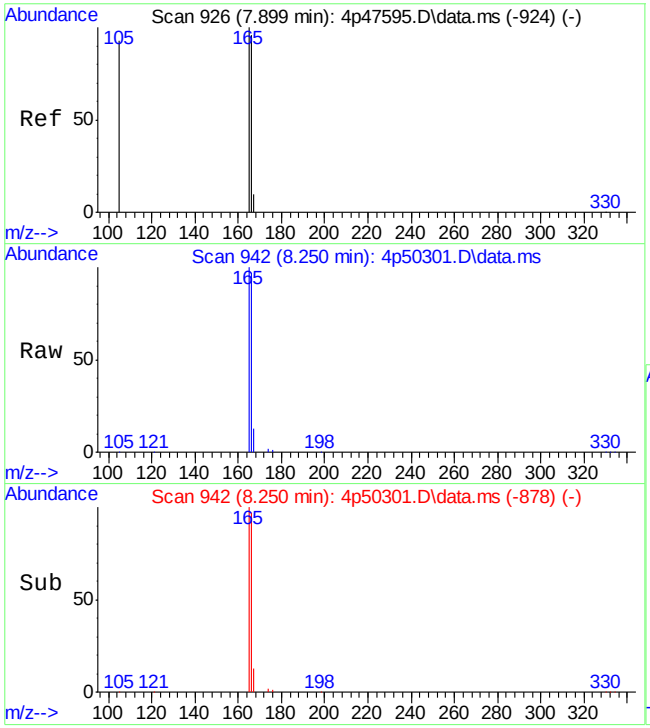


#16
Acenaphthene
Concen: 62.87 ppm
RT: 7.742 min Scan# 877
Delta R.T. 0.000 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:153 Resp: 1803

Ion	Ratio	Lower	Upper
153	100		
152	50.3	18.5	78.5
154	73.2	59.1	119.1

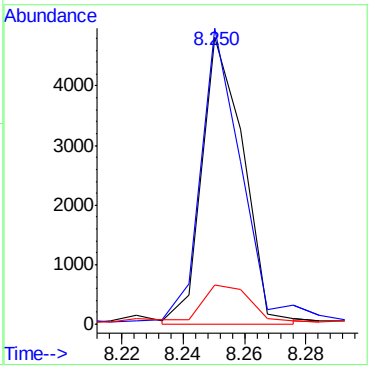


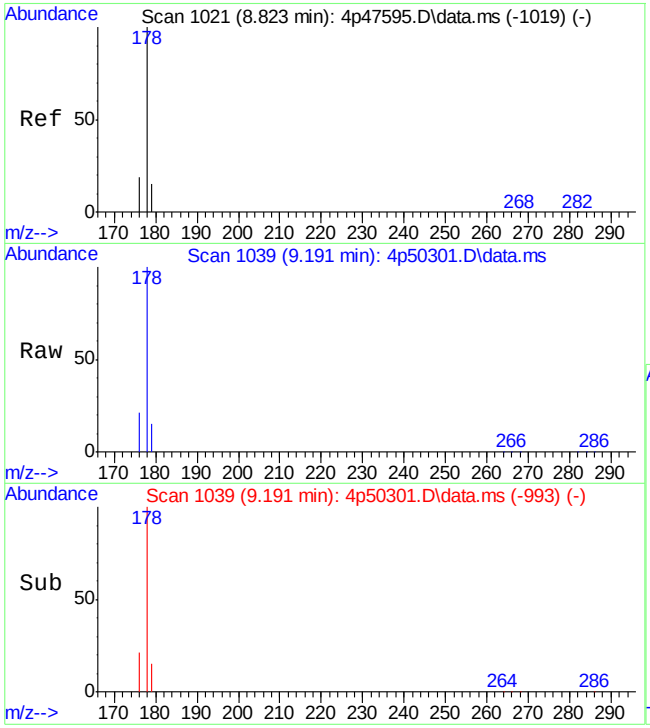


#17
Fluorene
Concen: 130.75 ppm
RT: 8.250 min Scan# 942
Delta R.T. 0.000 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:166 Resp: 4524

Ion	Ratio	Lower	Upper
166	100		
165	100.3	66.9	126.9
167	12.5	0.0	41.7

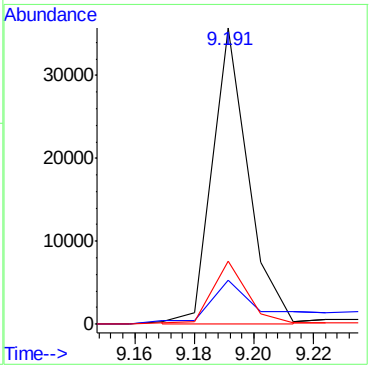


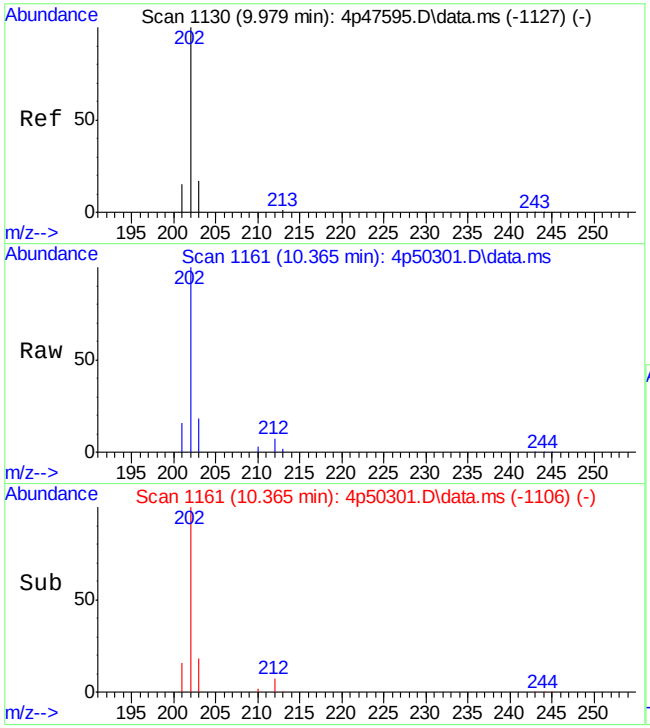


#23
Phenanthrene
Concen: 580.33 ppm
RT: 9.191 min Scan# 1039
Delta R.T. 0.000 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:178 Resp: 29407

Ion	Ratio	Lower	Upper
178	100		
179	12.1	0.0	46.0
176	20.9	0.0	45.6

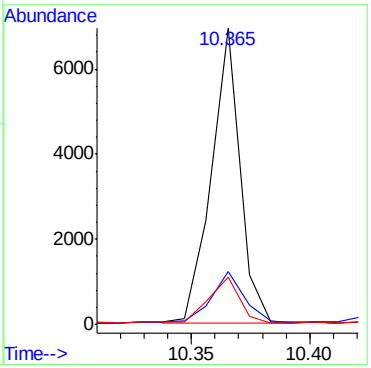


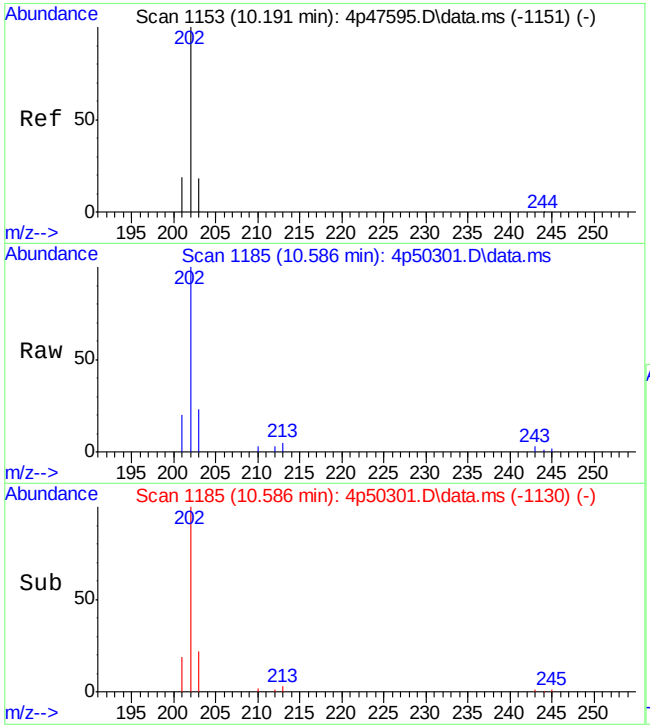


#25
Fluoranthene
Concen: 111.18 ppm
RT: 10.365 min Scan# 1161
Delta R.T. 0.009 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:202 Resp: 5866

Ion	Ratio	Lower	Upper
202	100		
203	17.5	0.0	47.6
201	15.7	0.0	42.9

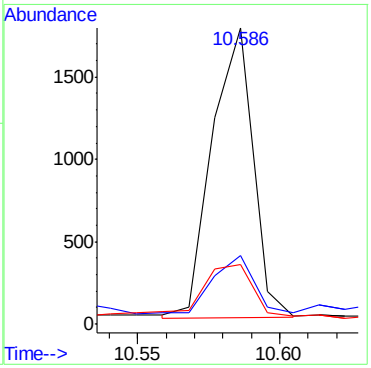


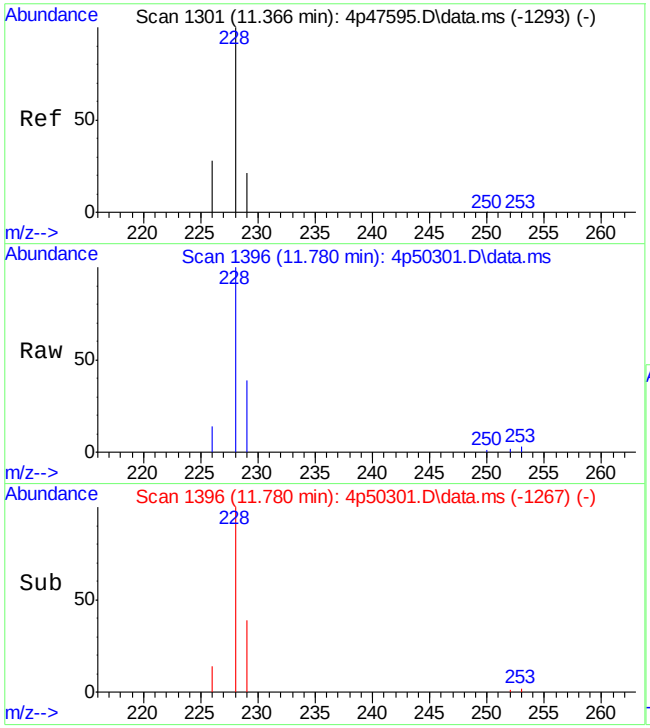


#26
Pyrene
Concen: 30.57 ppm
RT: 10.586 min Scan# 1185
Delta R.T. 0.009 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:202 Resp: 1775

Ion	Ratio	Lower	Upper
202	100		
203	19.9	0.0	47.6
201	17.2	0.0	46.0

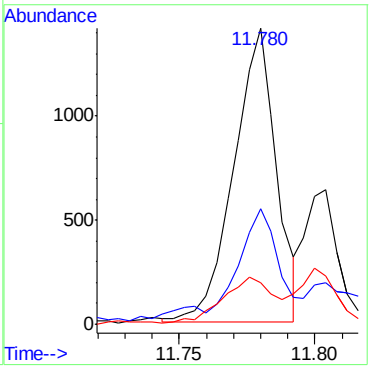


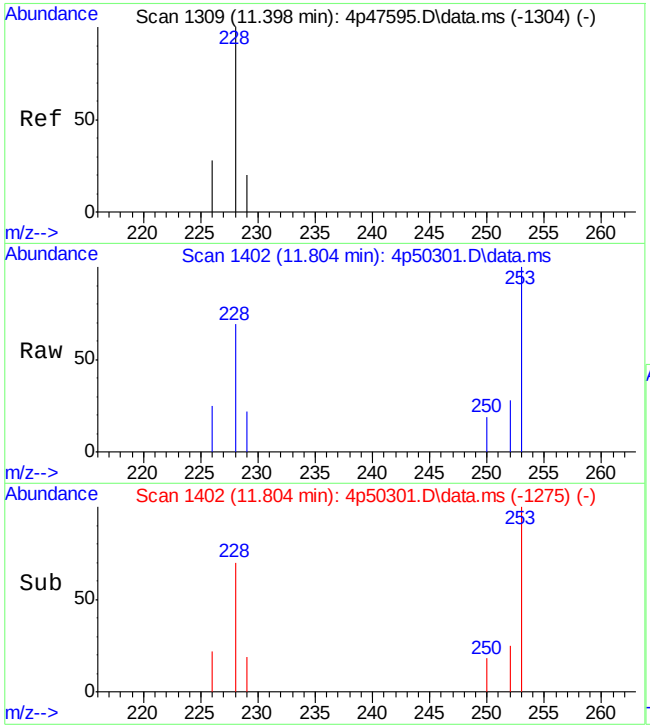


#28
Benzo[a]anthracene
Concen: 29.63 ppm
RT: 11.780 min Scan# 1396
Delta R.T. 0.016 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:228 Resp: 1537

Ion	Ratio	Lower	Upper
228	100		
229	37.3	0.0	49.8
226	10.1	0.0	53.3

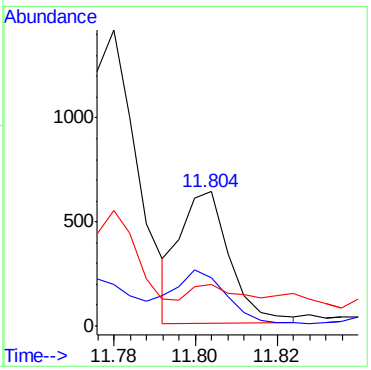


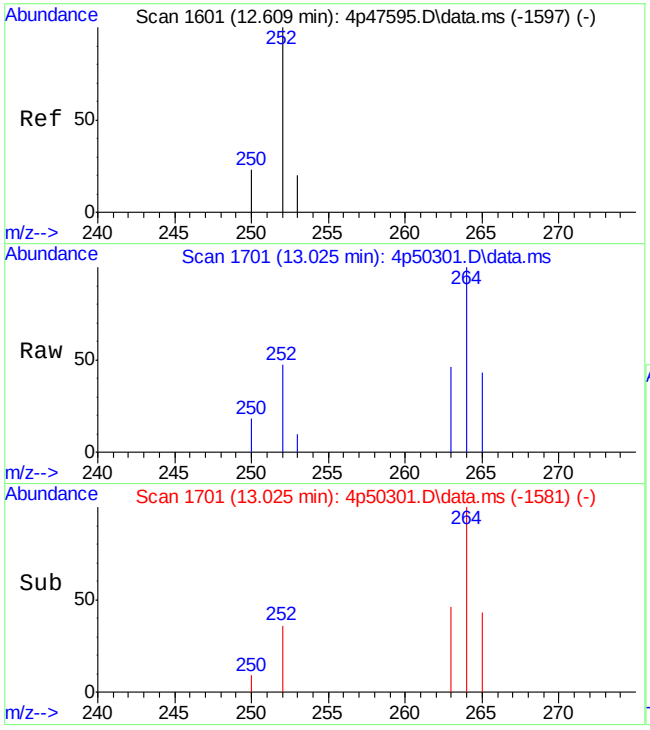


#29
Chrysene
Concen: 10.47 ppm
RT: 11.804 min Scan# 1402
Delta R.T. 0.008 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:228 Resp: 532

Ion	Ratio	Lower	Upper
228	100		
226	32.6	0.0	58.5
229	12.5	0.0	48.7

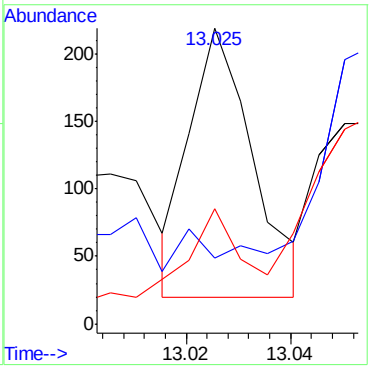


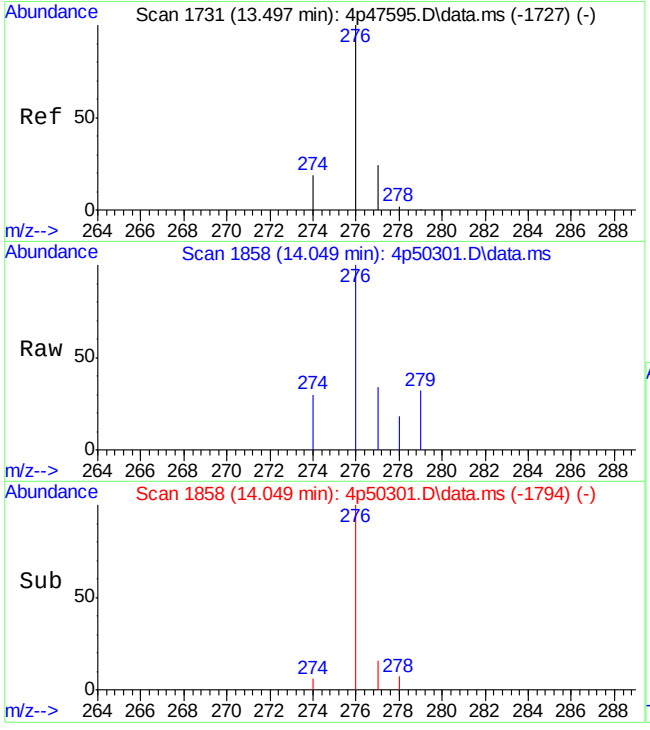


#33
Benzo[a]pyrene
Concen: 6.00 ppm
RT: 13.025 min Scan# 1701
Delta R.T. 0.005 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:252 Resp: 168

Ion	Ratio	Lower	Upper
252	100		
253	0.0	0.0	52.8
250	22.5	0.0	50.6

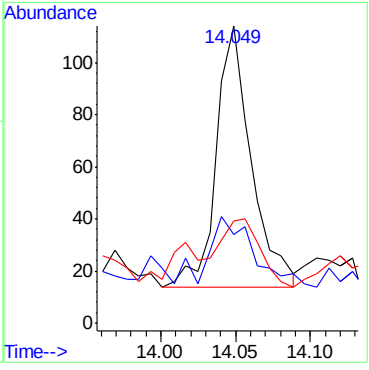


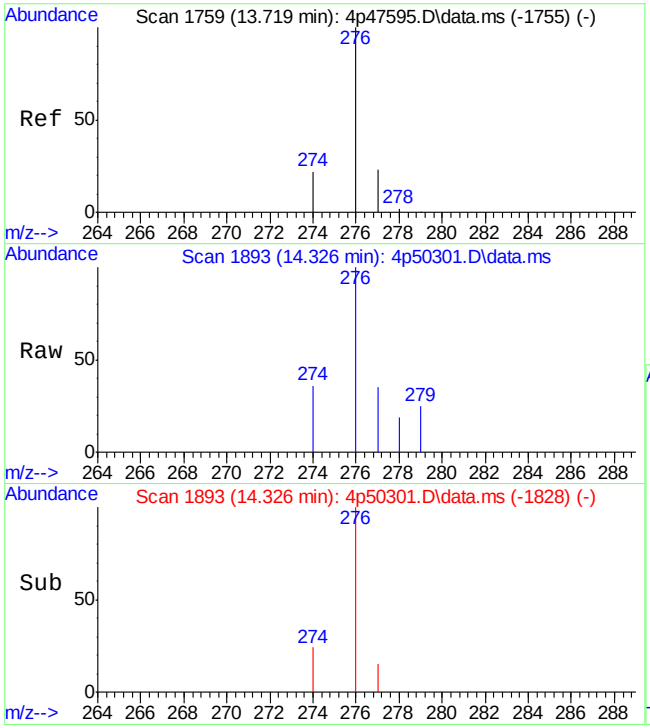


#34
Indeno[1,2,3-cd]pyrene
Concen: 4.92 ppm
RT: 14.049 min Scan# 1858
Delta R.T. 0.008 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:276 Resp: 164

Ion	Ratio	Lower	Upper
276	100		
274	14.4	0.0	49.3
277	24.1	0.0	53.2

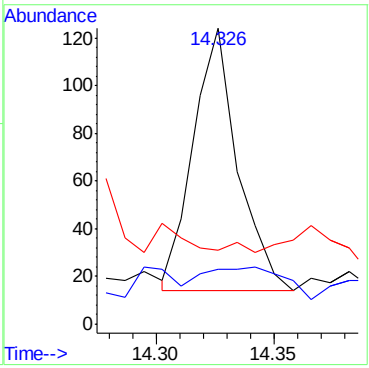




#36
Benzo[g,h,i]perylene
Concen: 5.17 ppm
RT: 14.326 min Scan# 1893
Delta R.T. 0.016 min
Lab File: 4p50301.D
Acq: 28 Dec 2021 2:43 pm

Tgt Ion:276 Resp: 146

Ion	Ratio	Lower	Upper
276	100		
278	2.3	0.0	32.5
279	0.0	0.0	30.4



9.1.31

9

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/25/21 15:41

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2629\
Data File : 4p50224.d
Acq On : 18 Dec 2021 9:04 am
Operator : chriss2
Sample : jd36624-14 Inst : MS4P
Misc : op37115a,e4p2629,280,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 20 00:54:28 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 23:01:53 2021
Response via : Initial Calibration

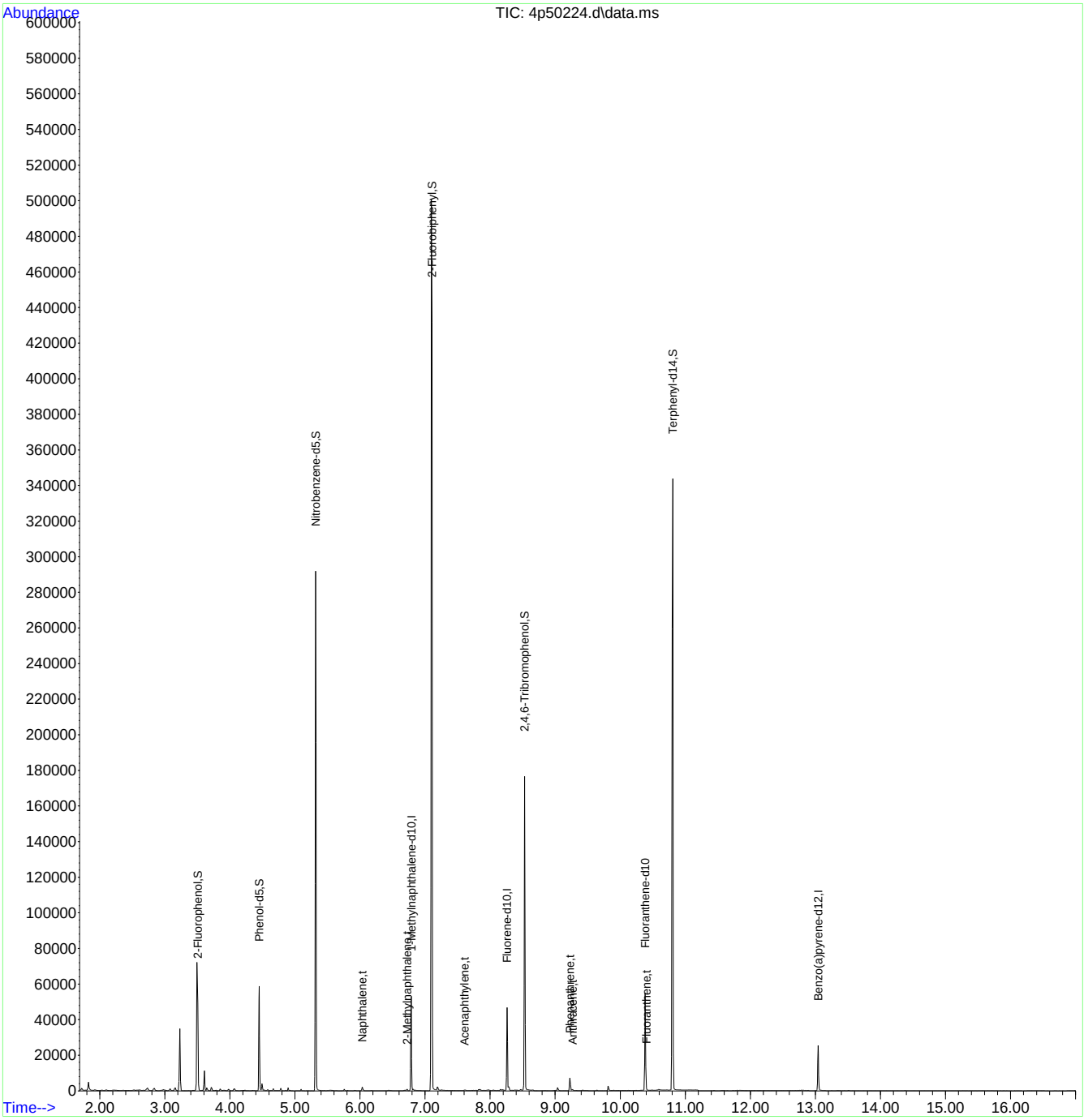
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.788	150	16200	800.00	ppm	0.00
13) Fluorene-d10	8.259	176	22271	800.00	ppm	0.00
20) Fluoranthene-d10	10.384	212	36114	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.041	264	15243	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.506	112	35901	3572.47	ppm	0.01
Spiked Amount 50.000			Recovery	= 7144.94%		
4) Phenol-d5	4.450	99	43991	2307.42	ppm	0.00
Spiked Amount 50.000			Recovery	= 4614.84%		
7) Nitrobenzene-d5	5.319	82	179509	11538.02	ppm	0.00
Spiked Amount 50.000			Recovery	= 23076.04%		
14) 2-Fluorobiphenyl	7.106	172	283013	9962.45	ppm	0.00
Spiked Amount 50.000			Recovery	= 19924.90%		
19) 2,4,6-Tribromophenol	8.531	330	59150	13916.40	ppm	0.00
Spiked Amount 50.000			Recovery	= 27832.80%		
27) Terphenyl-d14	10.807	244	247650	9573.84	ppm	0.00
Spiked Amount 50.000			Recovery	= 19147.68%		
Target Compounds						Qvalue
8) Naphthalene	6.034	128	1802m	38.87	ppm	
10) 2-Methylnaphthalene	6.722	141	302m	12.47	ppm	
15) Acenaphthylene	7.606	152	434m	10.46	ppm	
23) Phenanthrene	9.224	178	5328m	109.53	ppm	
24) Anthracene	9.268	178	178m	3.82	ppm	
25) Fluoranthene	10.402	202	544	10.74	ppm	94

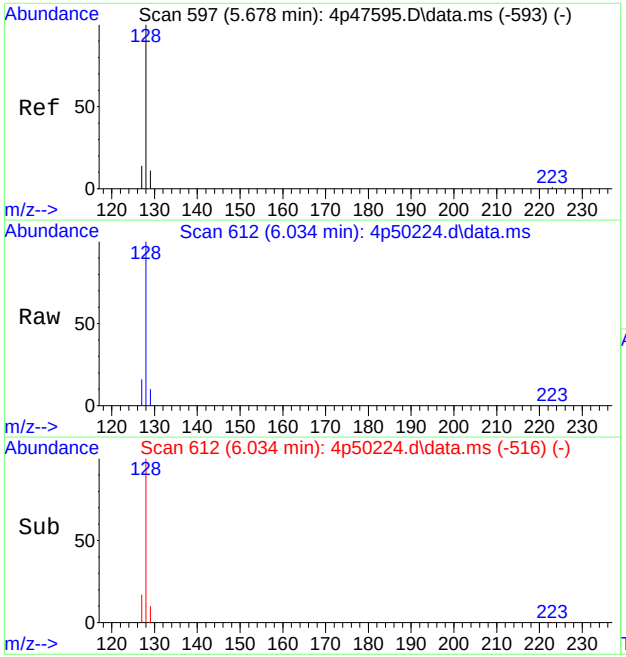
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2629\
Data File : 4p50224.d
Acq On : 18 Dec 2021 9:04 am
Operator : chriss2
Sample : jd36624-14 Inst : MS4P
Misc : op37115a,e4p2629,280,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 20 00:54:28 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 23:01:53 2021
Response via : Initial Calibration

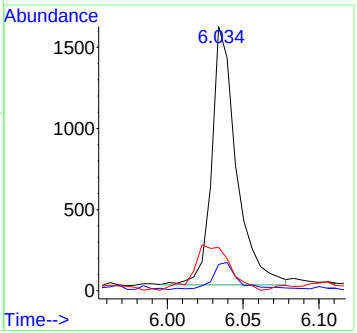


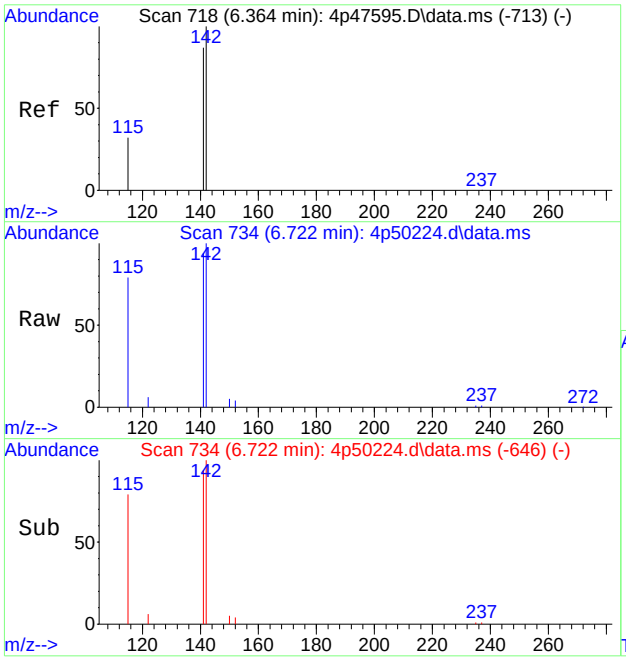


#8
Naphthalene
Concen: 38.87 ppm m
RT: 6.034 min Scan# 612
Delta R.T. 0.000 min
Lab File: 4p50224.d
Acq: 18 Dec 2021 9:04 am

Tgt Ion:128 Resp: 1802

Ion	Ratio	Lower	Upper
128	100		
129	9.9	0.0	39.7
127	16.5	0.0	44.6

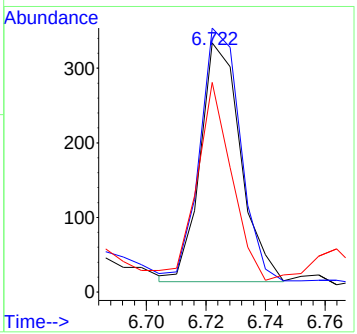


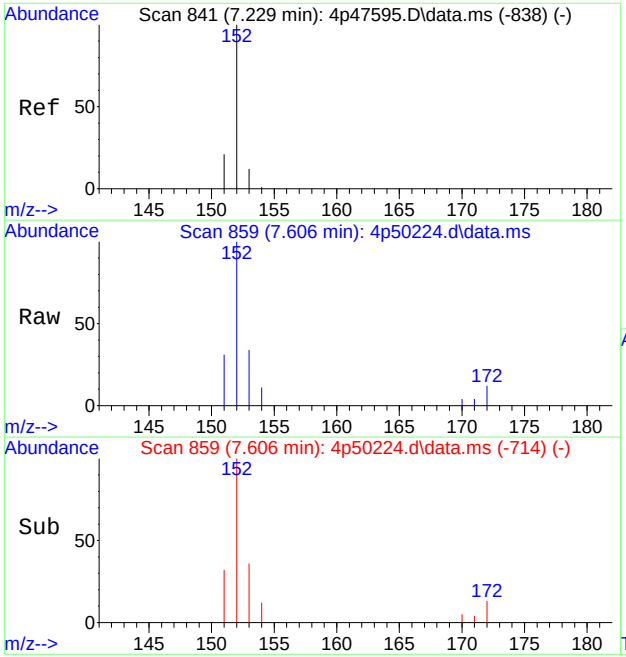


#10
2-Methylnaphthalene
Concen: 12.47 ppm m
RT: 6.722 min Scan# 734
Delta R.T. 0.000 min
Lab File: 4p50224.d
Acq: 18 Dec 2021 9:04 am

Tgt Ion:141 Resp: 302

Ion	Ratio	Lower	Upper
141	100		
142	106.0	76.0	136.0
115	84.1	53.5	113.5

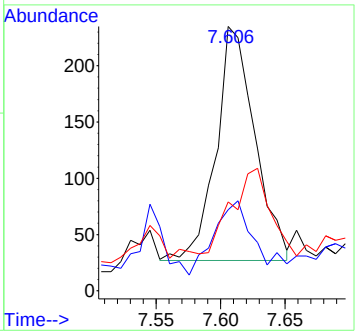


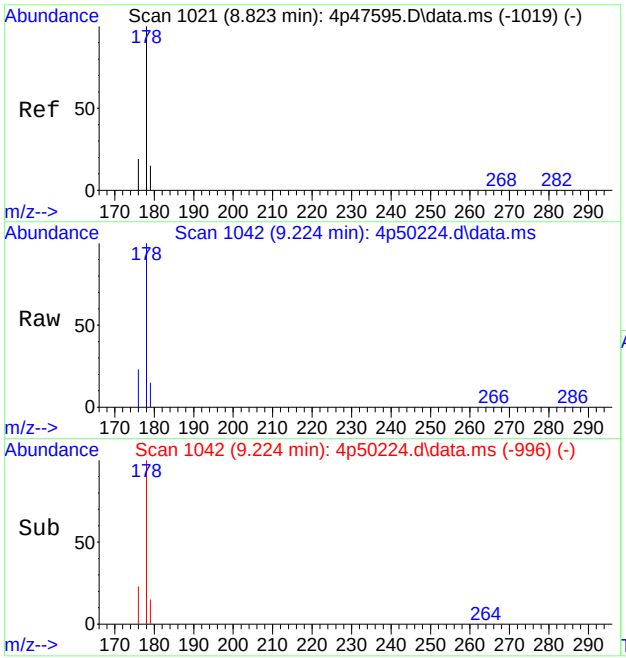


#15
Acenaphthylene
Concen: 10.46 ppm m
RT: 7.606 min Scan# 859
Delta R.T. 0.000 min
Lab File: 4p50224.d
Acq: 18 Dec 2021 9:04 am

Tgt Ion:152 Resp: 434

Ion	Ratio	Lower	Upper
152	100		
151	30.6	0.0	51.0
153	33.6	0.0	42.4

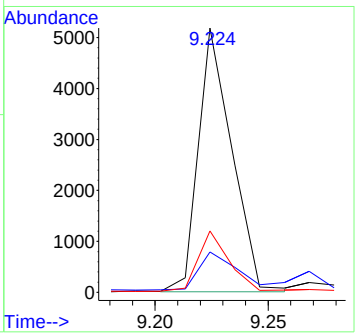


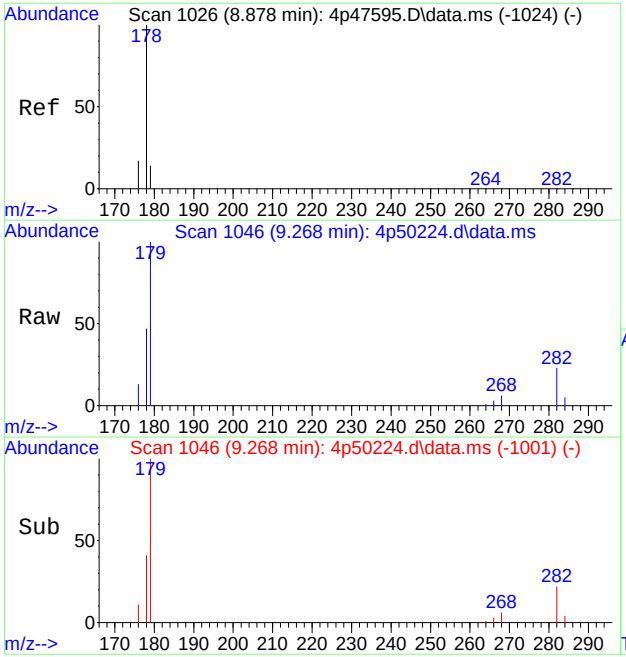


#23
Phenanthrene
Concen: 109.53 ppm m
RT: 9.224 min Scan# 1042
Delta R.T. 0.000 min
Lab File: 4p50224.d
Acq: 18 Dec 2021 9:04 am

Tgt Ion:178 Resp: 5328

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	43.8
176	23.2	0.0	52.4

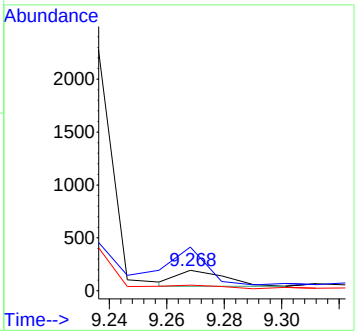


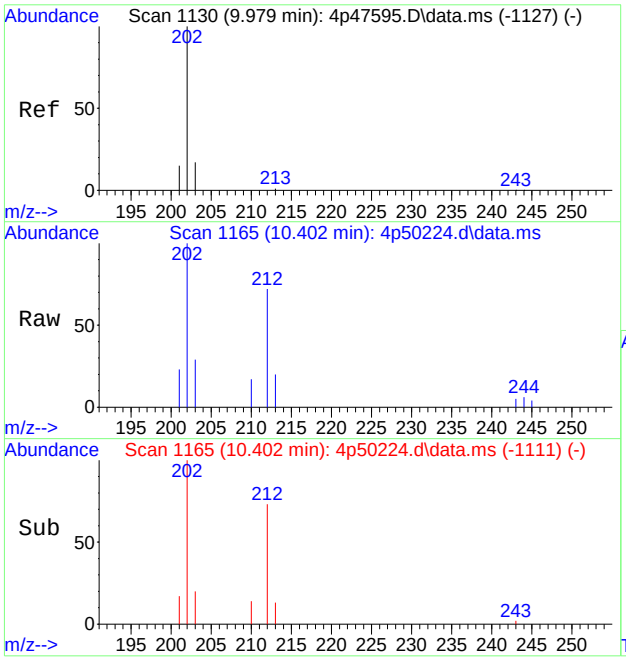


#24
Anthracene
Concen: 3.82 ppm m
RT: 9.268 min Scan# 1046
Delta R.T. -0.011 min
Lab File: 4p50224.d
Acq: 18 Dec 2021 9:04 am

Tgt Ion:178 Resp: 178

Ion	Ratio	Lower	Upper
178	100		
179	212.9	0.0	45.1#
176	27.8	0.0	49.2

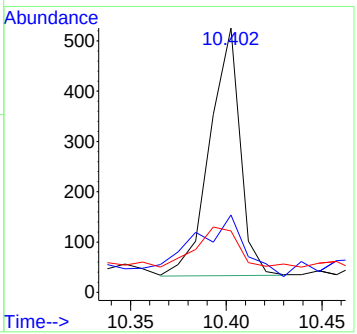




#25
Fluoranthene
Concen: 10.74 ppm
RT: 10.402 min Scan# 1165
Delta R.T. 0.000 min
Lab File: 4p50224.d
Acq: 18 Dec 2021 9:04 am

Tgt Ion:202 Resp: 544

Ion	Ratio	Lower	Upper
202	100		
203	22.6	0.0	48.0
201	14.0	0.0	44.3



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/25/21 15:41

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2629\
Data File : 4p50225.d
Acq On : 18 Dec 2021 9:28 am
Operator : chriss2
Sample : jd36624-15 Inst : MS4P
Misc : op37115a,e4p2629,280,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 20 00:56:41 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 23:01:53 2021
Response via : Initial Calibration

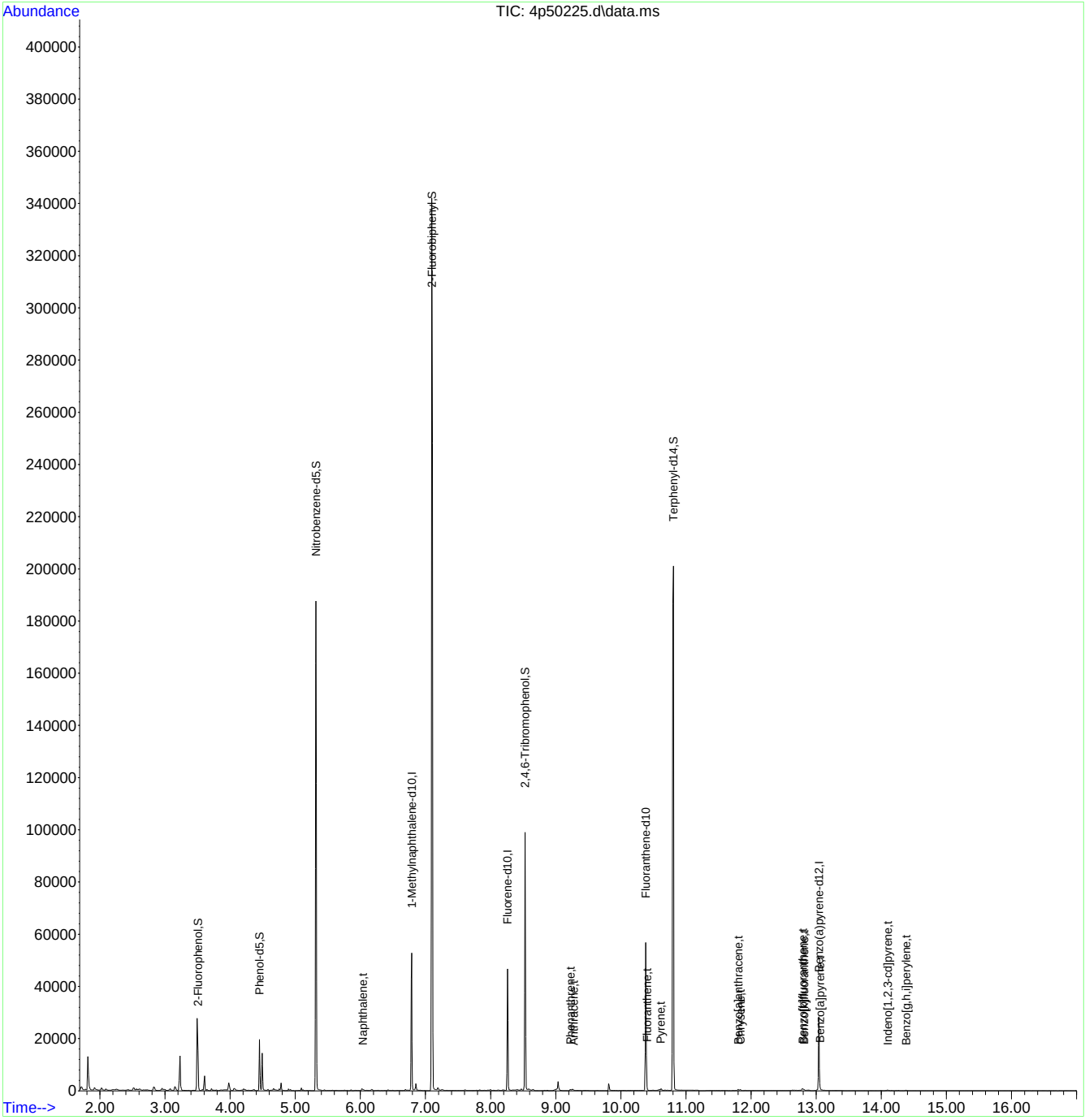
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.788	150	15688	800.00	ppm	0.00
13) Fluorene-d10	8.259	176	22070	800.00	ppm	0.00
20) Fluoranthene-d10	10.384	212	36836	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.041	264	16044	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.506	112	12623	1297.10	ppm	0.01
Spiked Amount 50.000			Recovery	= 2594.20%		
4) Phenol-d5	4.450	99	14144	766.10	ppm	0.00
Spiked Amount 50.000			Recovery	= 1532.20%		
7) Nitrobenzene-d5	5.319	82	119102	7905.18	ppm	0.00
Spiked Amount 50.000			Recovery	= 15810.36%		
14) 2-Fluorobiphenyl	7.098	172	179978	6393.18	ppm	0.00
Spiked Amount 50.000			Recovery	= 12786.36%		
19) 2,4,6-Tribromophenol	8.531	330	33632	7984.77	ppm	0.00
Spiked Amount 50.000			Recovery	= 15969.54%		
27) Terphenyl-d14	10.807	244	159070	6028.92	ppm	0.00
Spiked Amount 50.000			Recovery	= 12057.84%		
Target Compounds						Qvalue
8) Naphthalene	6.039	128	605m	13.47	ppm	
23) Phenanthrene	9.224	178	422m	8.51	ppm	
24) Anthracene	9.279	178	103m	2.16	ppm	
25) Fluoranthene	10.402	202	627	12.14	ppm	97
26) Pyrene	10.614	202	498m	8.76	ppm	
28) Benzo[a]anthracene	11.804	228	267m	5.26	ppm	
29) Chrysene	11.836	228	358m	7.20	ppm	
31) Benzo[b]fluoranthene	12.793	252	589	4.09	ppm	84
32) Benzo[k]fluoranthene	12.813	252	174	5.26	ppm	83
33) Benzo[a]pyrene	13.061	252	261	8.59	ppm	93
34) Indeno[1,2,3-cd]pyrene	14.096	276	205	5.67	ppm	98
36) Benzo[g,h,i]perylene	14.382	276	232	7.57	ppm	100

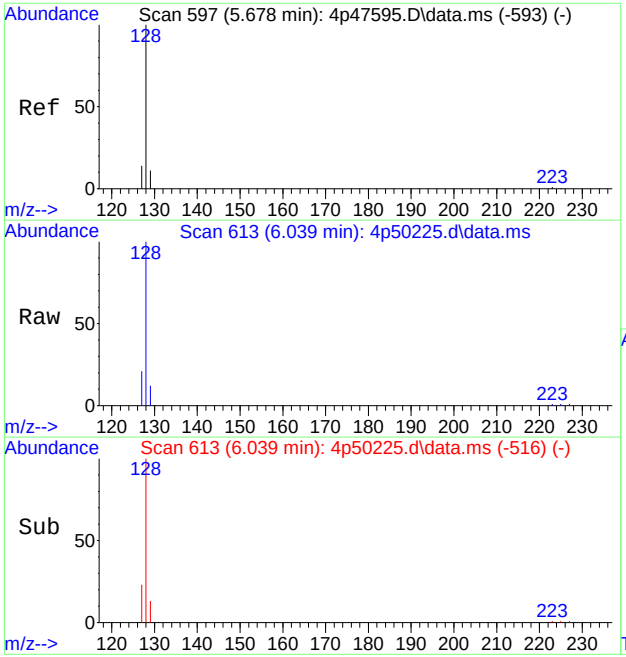
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2629\
Data File : 4p50225.d
Acq On : 18 Dec 2021 9:28 am
Operator : chriss2
Sample : jd36624-15 Inst : MS4P
Misc : op37115a,e4p2629,280,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 20 00:56:41 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 23:01:53 2021
Response via : Initial Calibration

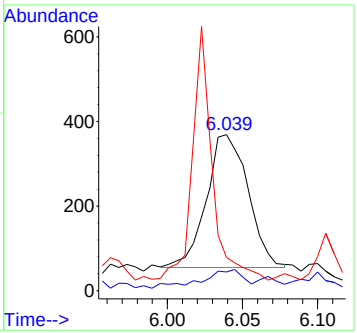


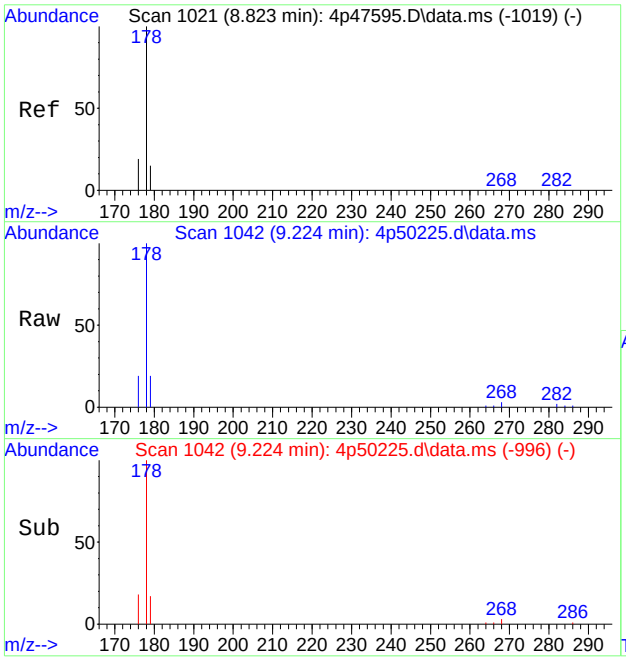


#8
Naphthalene
Concen: 13.47 ppm m
RT: 6.039 min Scan# 613
Delta R.T. 0.006 min
Lab File: 4p50225.d
Acq: 18 Dec 2021 9:28 am

Tgt Ion:128 Resp: 605

Ion	Ratio	Lower	Upper
128	100		
129	11.9	0.0	39.7
127	21.4	0.0	44.6

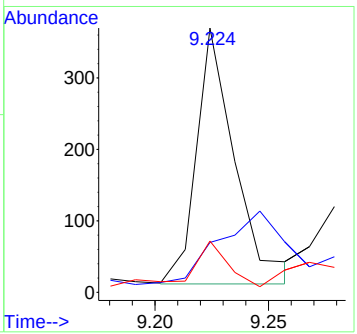


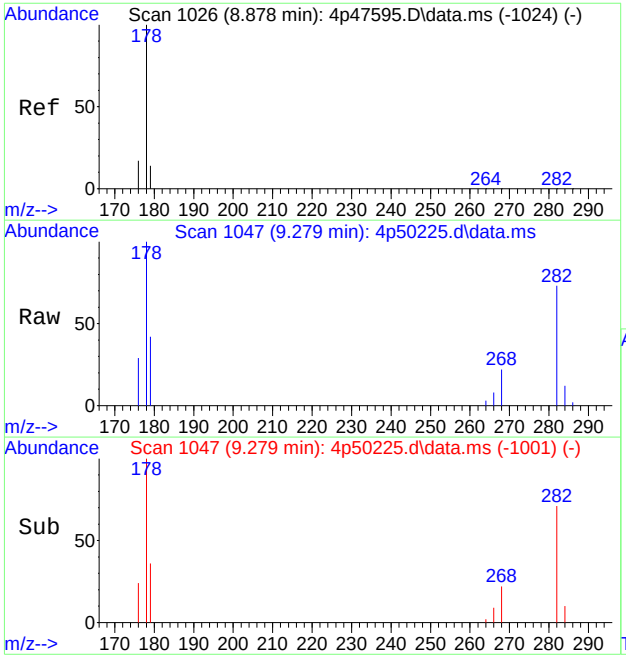


#23
Phenanthrene
Concen: 8.51 ppm m
RT: 9.224 min Scan# 1042
Delta R.T. 0.000 min
Lab File: 4p50225.d
Acq: 18 Dec 2021 9:28 am

Tgt Ion:178 Resp: 422

Ion	Ratio	Lower	Upper
178	100		
179	18.9	0.0	43.8
176	19.5	0.0	52.4

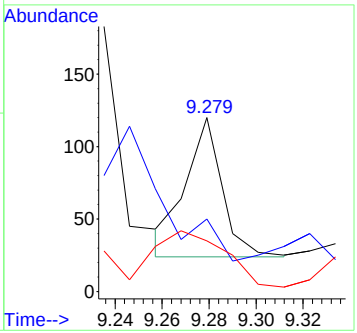


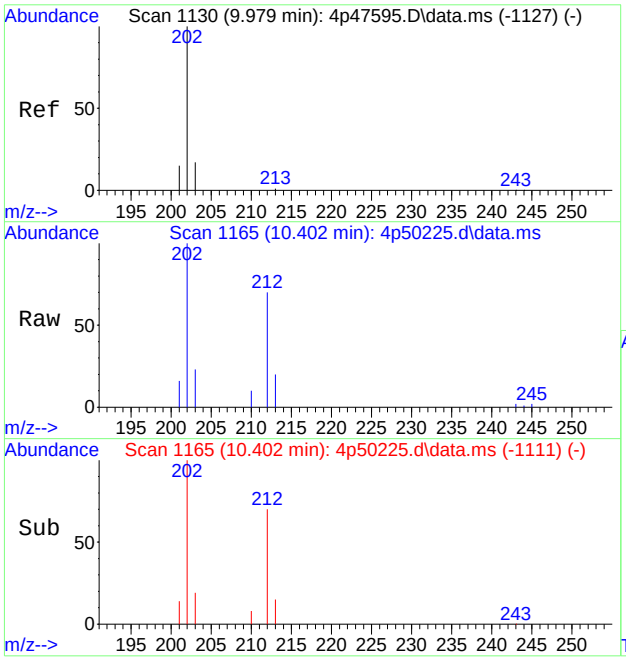


#24
Anthracene
Concen: 2.16 ppm m
RT: 9.279 min Scan# 1047
Delta R.T. 0.000 min
Lab File: 4p50225.d
Acq: 18 Dec 2021 9:28 am

Tgt Ion:178 Resp: 103

Ion	Ratio	Lower	Upper
178	100		
179	41.7	0.0	45.1
176	29.2	0.0	49.2

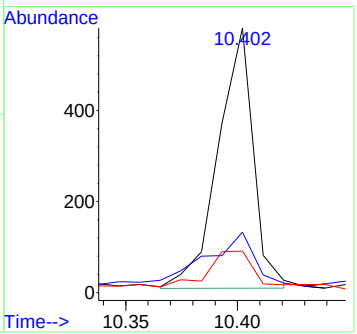


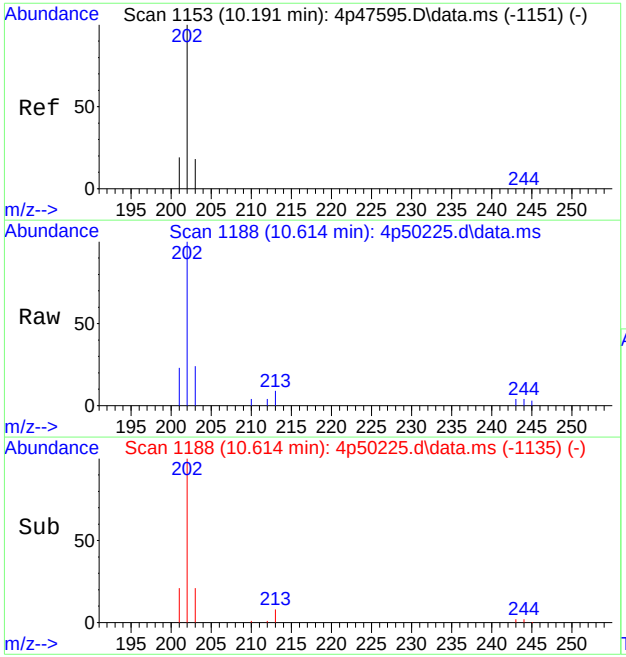


#25
Fluoranthene
Concen: 12.14 ppm
RT: 10.402 min Scan# 1165
Delta R.T. 0.000 min
Lab File: 4p50225.d
Acq: 18 Dec 2021 9:28 am

Tgt Ion:202 Resp: 627

Ion	Ratio	Lower	Upper
202	100		
203	19.4	0.0	48.0
201	13.6	0.0	44.3

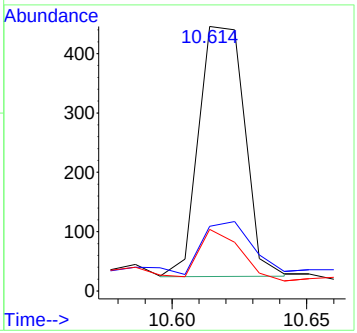


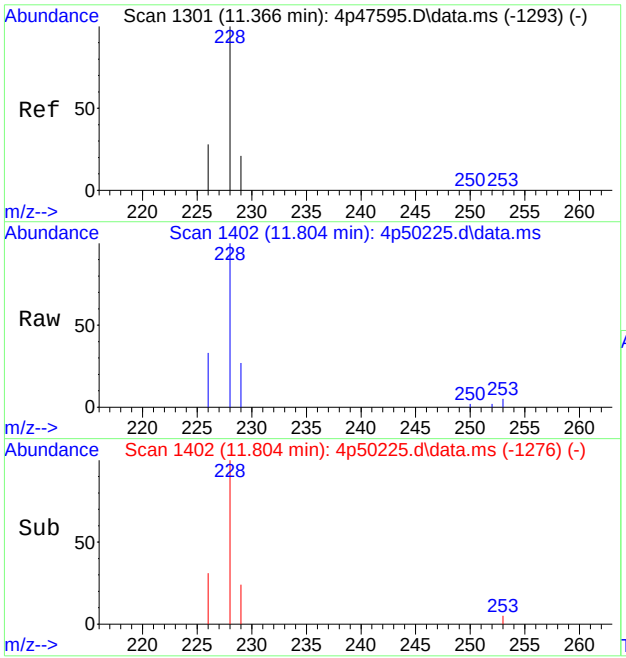


#26
Pyrene
Concen: 8.76 ppm m
RT: 10.614 min Scan# 1188
Delta R.T. -0.009 min
Lab File: 4p50225.d
Acq: 18 Dec 2021 9:28 am

Tgt Ion:202 Resp: 498

Ion	Ratio	Lower	Upper
202	100		
203	24.4	0.0	49.0
201	23.3	0.0	46.2

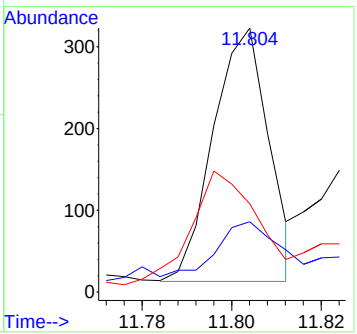


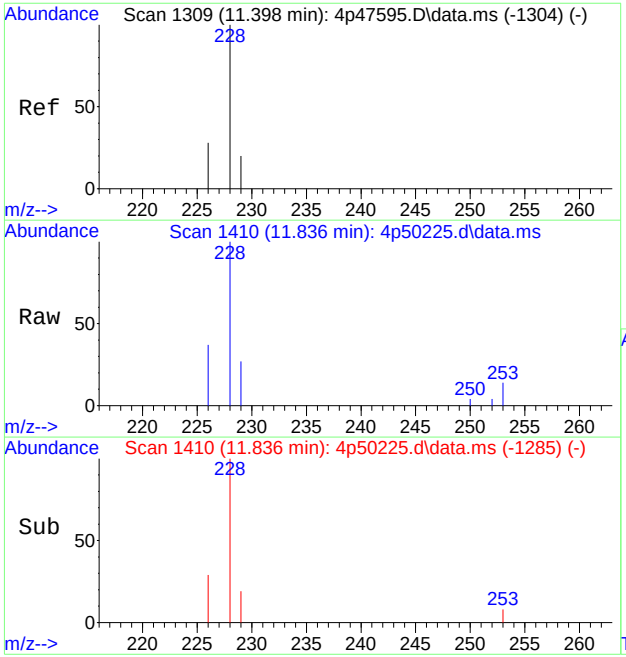


#28
Benzo[a]anthracene
Concen: 5.26 ppm m
RT: 11.804 min Scan# 1402
Delta R.T. 0.004 min
Lab File: 4p50225.d
Acq: 18 Dec 2021 9:28 am

Tgt Ion:228 Resp: 267

Ion	Ratio	Lower	Upper
228	100		
229	26.6	0.0	48.5
226	33.4	0.0	58.4

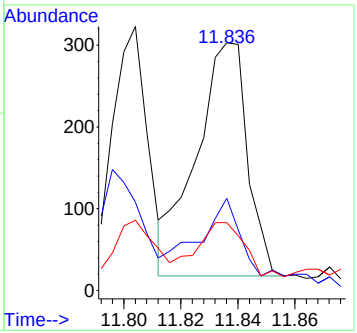


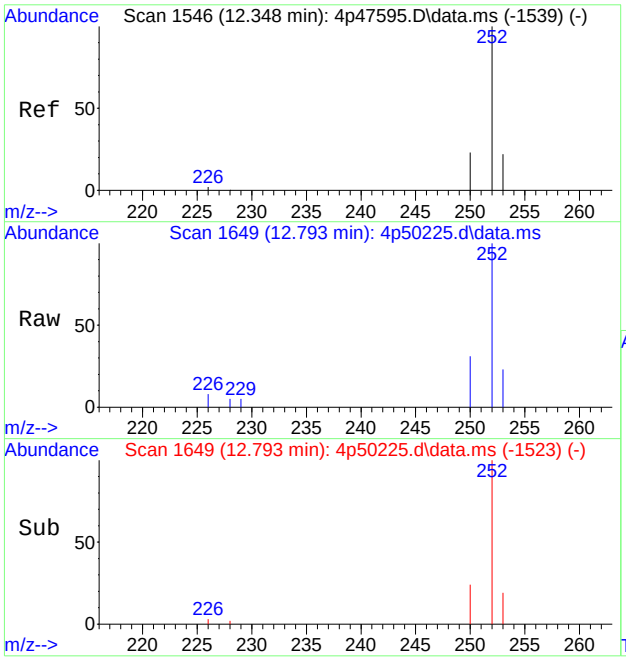


#29
Chrysene
Concen: 7.20 ppm m
RT: 11.836 min Scan# 1410
Delta R.T. 0.000 min
Lab File: 4p50225.d
Acq: 18 Dec 2021 9:28 am

Tgt Ion:228 Resp: 358

Ion	Ratio	Lower	Upper
228	100		
226	37.3	0.7	60.7
229	27.4	0.0	48.5

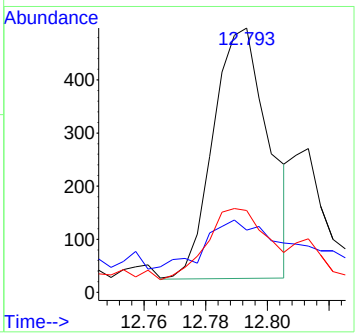


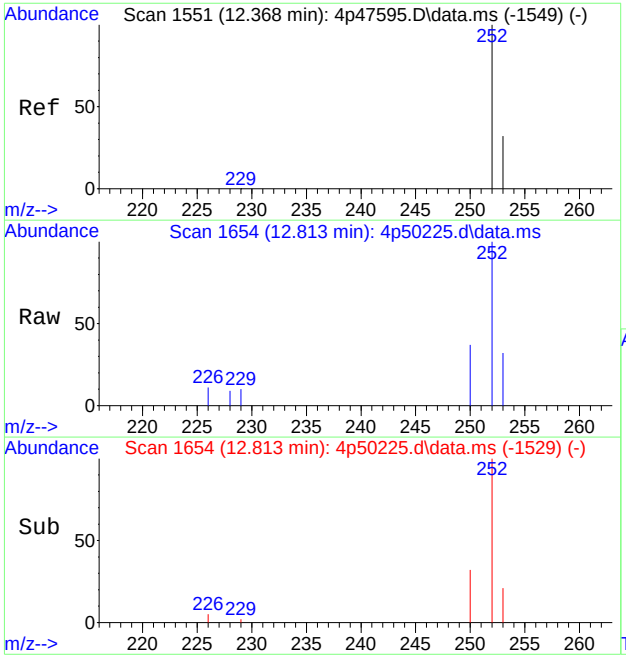


#31
Benzo[b]fluoranthene
Concen: 4.09 ppm
RT: 12.793 min Scan# 1649
Delta R.T. 0.004 min
Lab File: 4p50225.d
Acq: 18 Dec 2021 9:28 am

Tgt Ion:252 Resp: 589

Ion	Ratio	Lower	Upper
252	100		
253	12.8	0.0	52.0
250	28.7	0.0	52.7

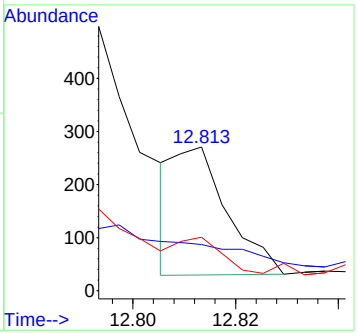


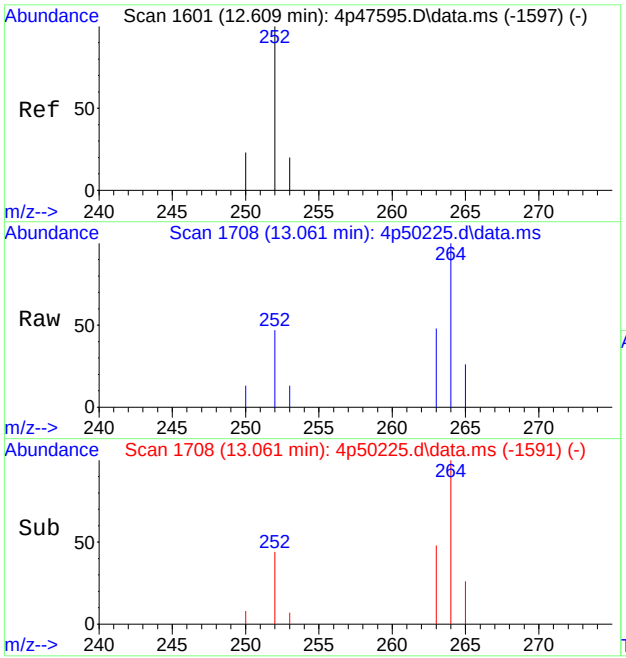


#32
Benzo[k]fluoranthene
Concen: 5.26 ppm
RT: 12.813 min Scan# 1654
Delta R.T. 0.000 min
Lab File: 4p50225.d
Acq: 18 Dec 2021 9:28 am

Tgt Ion:252 Resp: 174

Ion	Ratio	Lower	Upper
252	100		
253	10.4	0.0	52.5
250	27.8	0.0	53.0

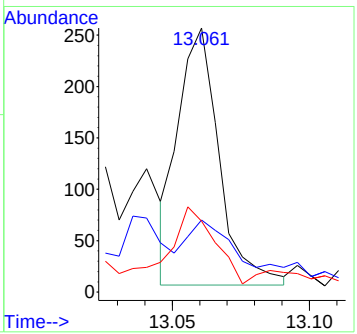


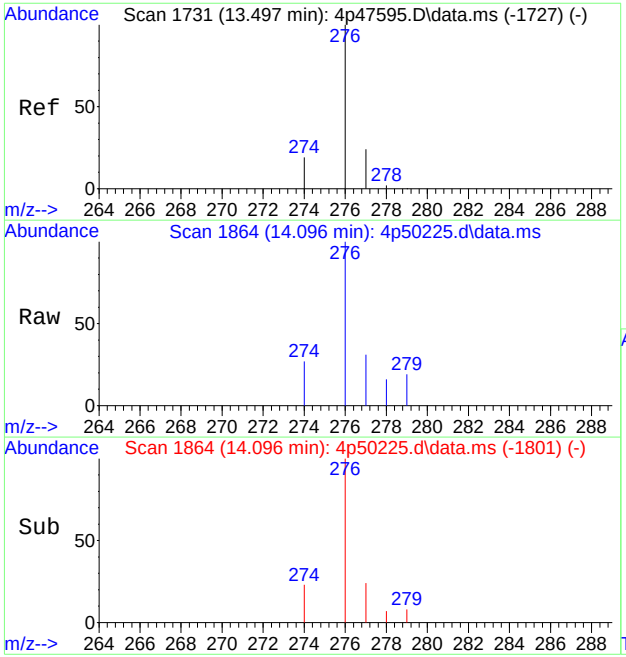


#33
Benzo[a]pyrene
Concen: 8.59 ppm
RT: 13.061 min Scan# 1708
Delta R.T. 0.000 min
Lab File: 4p50225.d
Acq: 18 Dec 2021 9:28 am

Tgt Ion:252 Resp: 261

Ion	Ratio	Lower	Upper
252	100		
253	16.5	0.0	51.8
250	21.9	0.0	53.2

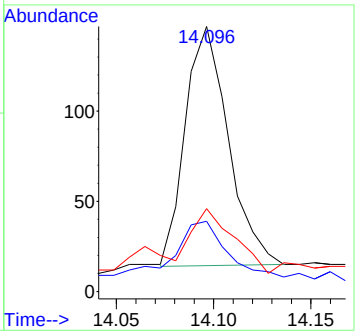


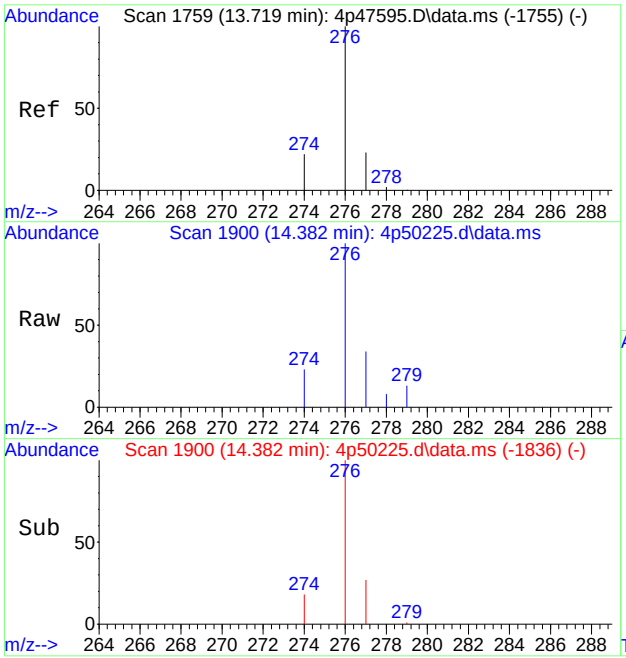


#34
Indeno[1,2,3-cd]pyrene
Concen: 5.67 ppm
RT: 14.096 min Scan# 1864
Delta R.T. 0.000 min
Lab File: 4p50225.d
Acq: 18 Dec 2021 9:28 am

Tgt Ion:276 Resp: 205

Ion	Ratio	Lower	Upper
276	100		
274	21.6	0.0	50.8
277	21.2	0.0	52.4

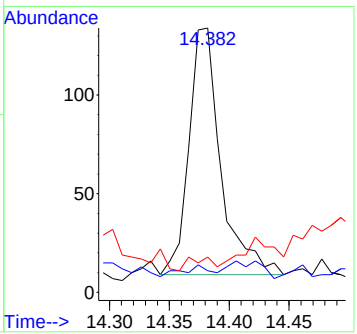




#36
Benzo[g,h,i]perylene
Concen: 7.57 ppm
RT: 14.382 min Scan# 1900
Delta R.T. 0.008 min
Lab File: 4p50225.d
Acq: 18 Dec 2021 9:28 am

Tgt Ion:276 Resp: 232

Ion	Ratio	Lower	Upper
276	100		
278	2.0	0.0	32.1
279	0.0	0.0	30.0



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 18:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2629\
Data File : 4p50226.d
Acq On : 18 Dec 2021 9:52 am
Operator : chriss2
Sample : jd36624-16 Inst : MS4P
Misc : op37115a,e4p2629,280,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 20 00:59:24 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 23:01:53 2021
Response via : Initial Calibration

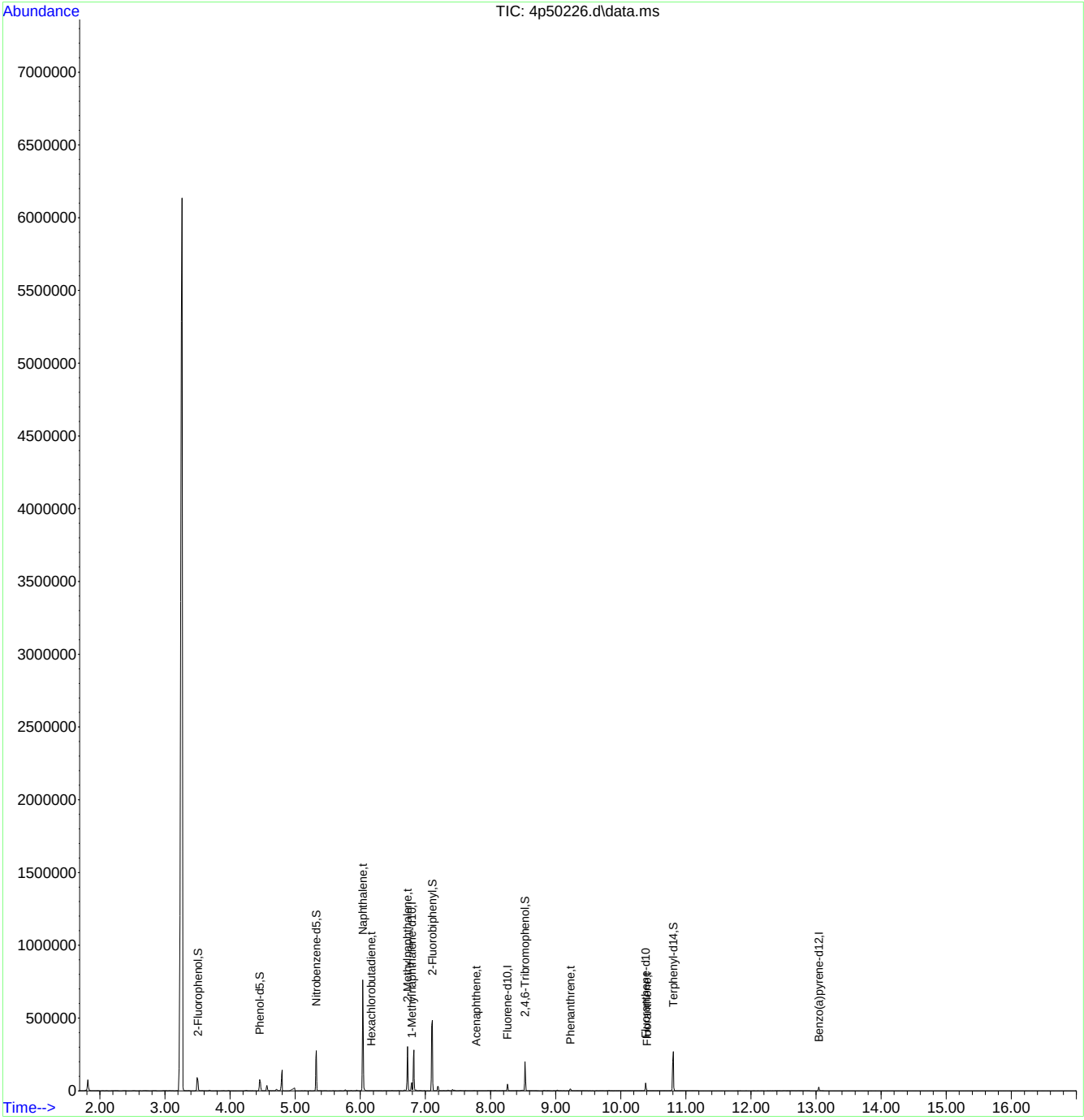
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.787	150	17755	800.00	ppm	0.00
13) Fluorene-d10	8.259	176	23263	800.00	ppm	0.00
20) Fluoranthene-d10	10.384	212	35782	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.040	264	15791	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.505	112	48122m	4369.18	ppm	0.01
Spiked Amount 50.000			Recovery	= 8738.36%		
4) Phenol-d5	4.455	99	60450	2893.04	ppm	0.00
Spiked Amount 50.000			Recovery	= 5786.08%		
7) Nitrobenzene-d5	5.323	82	167686	9834.14	ppm	0.00
Spiked Amount 50.000			Recovery	= 19668.28%		
14) 2-Fluorobiphenyl	7.106	172	275754	9292.99	ppm	0.00
Spiked Amount 50.000			Recovery	= 18585.98%		
19) 2,4,6-Tribromophenol	8.531	330	68570	15444.73	ppm	0.00
Spiked Amount 50.000			Recovery	= 30889.46%		
27) Terphenyl-d14	10.807	244	194287	7580.59	ppm	0.00
Spiked Amount 50.000			Recovery	= 15161.18%		
Target Compounds						Qvalue
8) Naphthalene	6.039	128	525360	10338.90	ppm	95
9) Hexachlorobutadiene	6.166	225	46	3.71	ppm	94
10) 2-Methylnaphthalene	6.728	141	88212	3322.39	ppm	81
16) Acenaphthene	7.780	153	248m	8.97	ppm	
23) Phenanthrene	9.224	178	10800	224.09	ppm	98
25) Fluoranthene	10.402	202	300	5.98	ppm	76

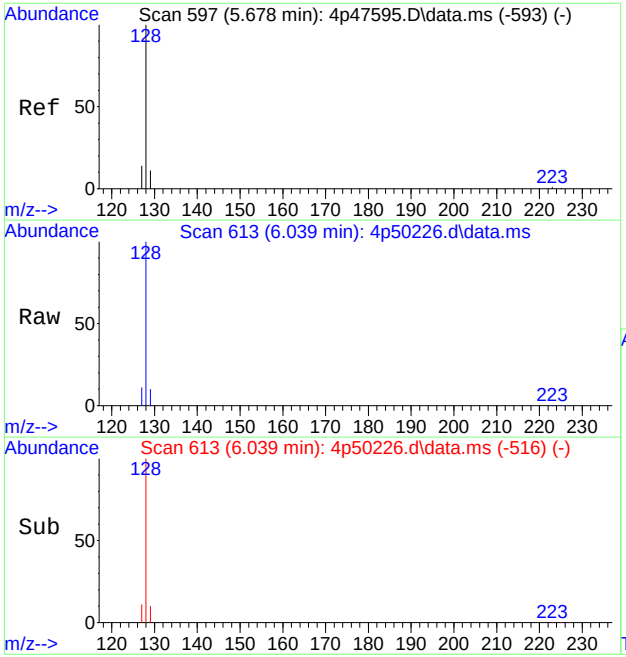
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2629\
Data File : 4p50226.d
Acq On : 18 Dec 2021 9:52 am
Operator : chriss2
Sample : jd36624-16 Inst : MS4P
Misc : op37115a,e4p2629,280,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 20 00:59:24 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 23:01:53 2021
Response via : Initial Calibration

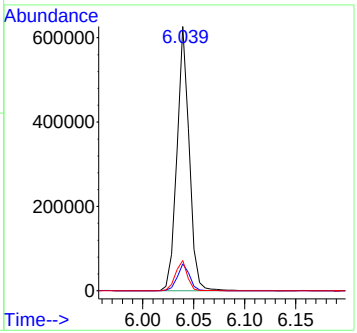


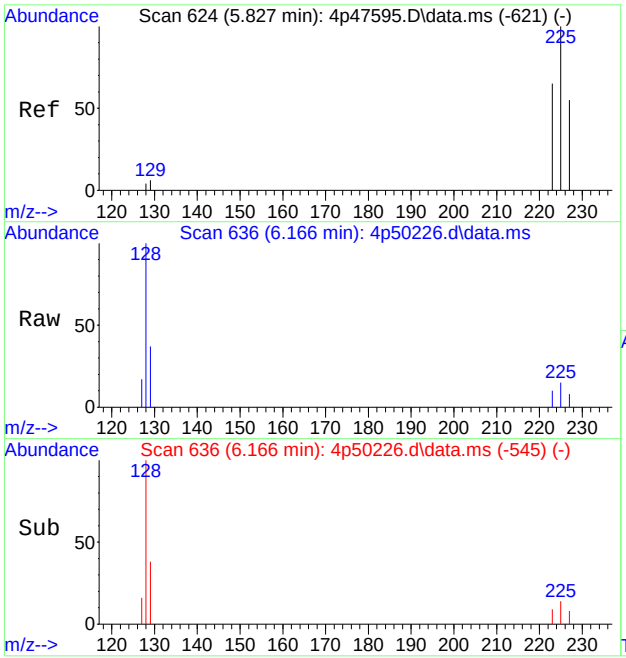


#8
Naphthalene
Concen: 10338.90 ppm
RT: 6.039 min Scan# 613
Delta R.T. 0.006 min
Lab File: 4p50226.d
Acq: 18 Dec 2021 9:52 am

Tgt Ion:128 Resp: 525360

Ion	Ratio	Lower	Upper
128	100		
129	10.2	0.0	39.7
127	11.5	0.0	44.6

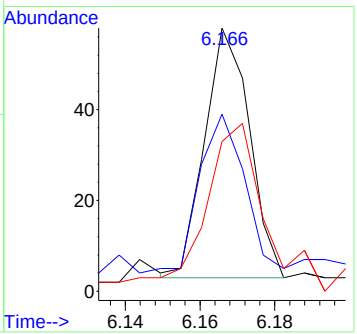


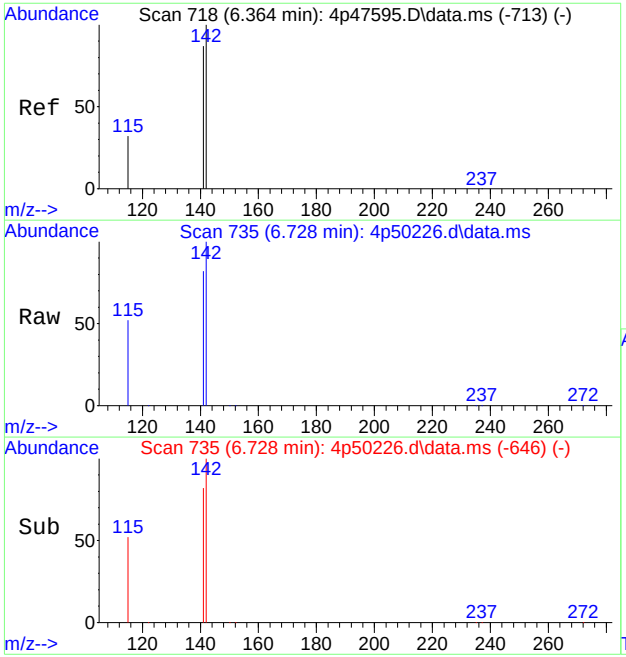


#9
Hexachlorobutadiene
Concen: 3.71 ppm
RT: 6.166 min Scan# 636
Delta R.T. 0.000 min
Lab File: 4p50226.d
Acq: 18 Dec 2021 9:52 am

Tgt Ion:225 Resp: 46

Ion	Ratio	Lower	Upper
225	100		
223	62.4	30.2	90.2
227	53.2	30.5	90.5

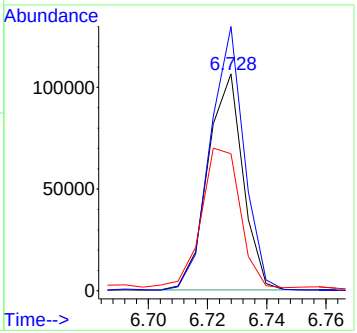


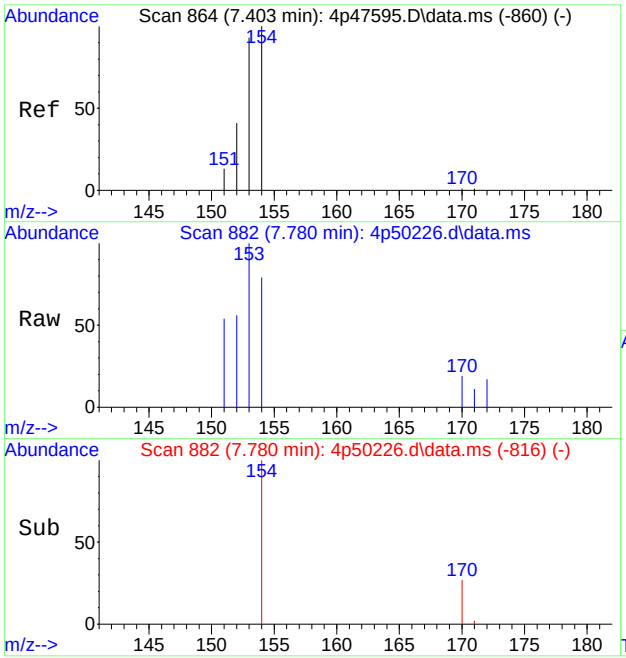


#10
2-Methylnaphthalene
Concen: 3322.39 ppm
RT: 6.728 min Scan# 735
Delta R.T. 0.006 min
Lab File: 4p50226.d
Acq: 18 Dec 2021 9:52 am

Tgt Ion:141 Resp: 88212

Ion	Ratio	Lower	Upper
141	100		
142	122.0	76.0	136.0
115	61.5	53.5	113.5

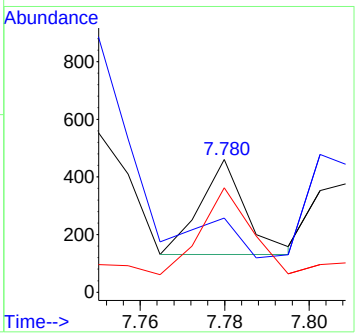


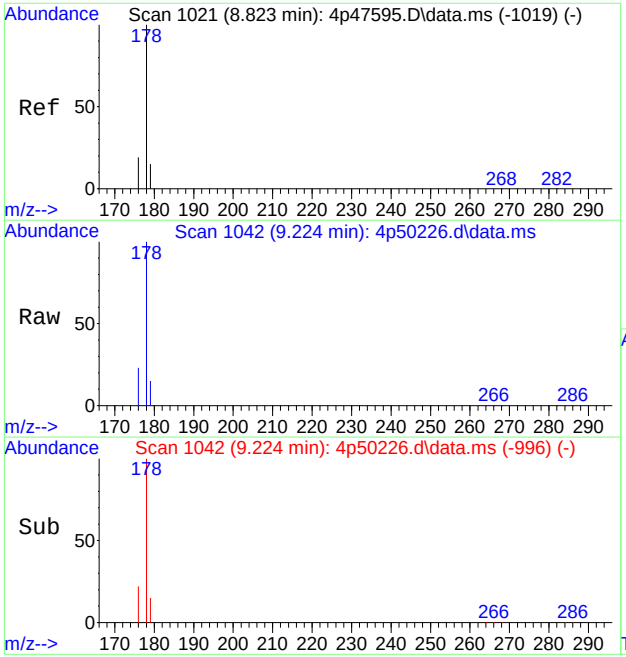


#16
Acenaphthene
Concen: 8.97 ppm m
RT: 7.780 min Scan# 882
Delta R.T. 0.000 min
Lab File: 4p50226.d
Acq: 18 Dec 2021 9:52 am

Tgt Ion:153 Resp: 248

Ion	Ratio	Lower	Upper
153	100		
152	55.7	17.9	77.9
154	78.5	64.7	124.7

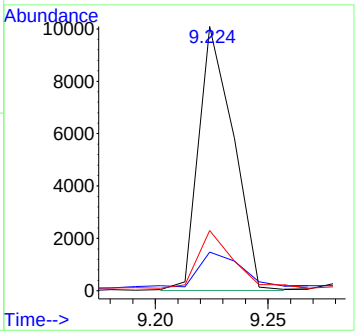


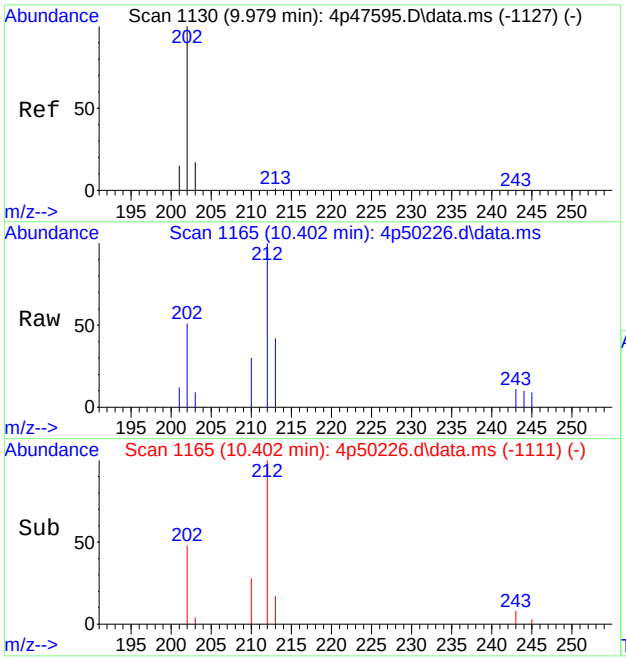


#23
Phenanthrene
Concen: 224.09 ppm
RT: 9.224 min Scan# 1042
Delta R.T. 0.000 min
Lab File: 4p50226.d
Acq: 18 Dec 2021 9:52 am

Tgt Ion:178 Resp: 10800

Ion	Ratio	Lower	Upper
178	100		
179	12.9	0.0	43.8
176	21.4	0.0	52.4

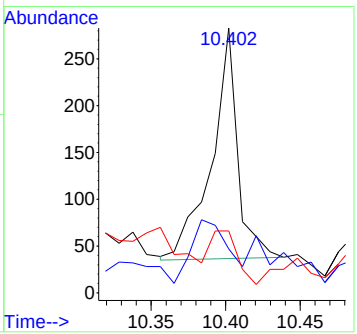




#25
Fluoranthene
Concen: 5.98 ppm
RT: 10.402 min Scan# 1165
Delta R.T. 0.000 min
Lab File: 4p50226.d
Acq: 18 Dec 2021 9:52 am

Tgt Ion:202 Resp: 300

Ion	Ratio	Lower	Upper
202	100		
203	4.7	0.0	48.0
201	7.6	0.0	44.3



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
01/04/22 18:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2629\
Data File : 4p50227.d
Acq On : 18 Dec 2021 10:15 am
Operator : chriss2
Sample : jd36624-17 Inst : MS4P
Misc : op37115a,e4p2629,280,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 20 01:02:30 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 23:01:53 2021
Response via : Initial Calibration

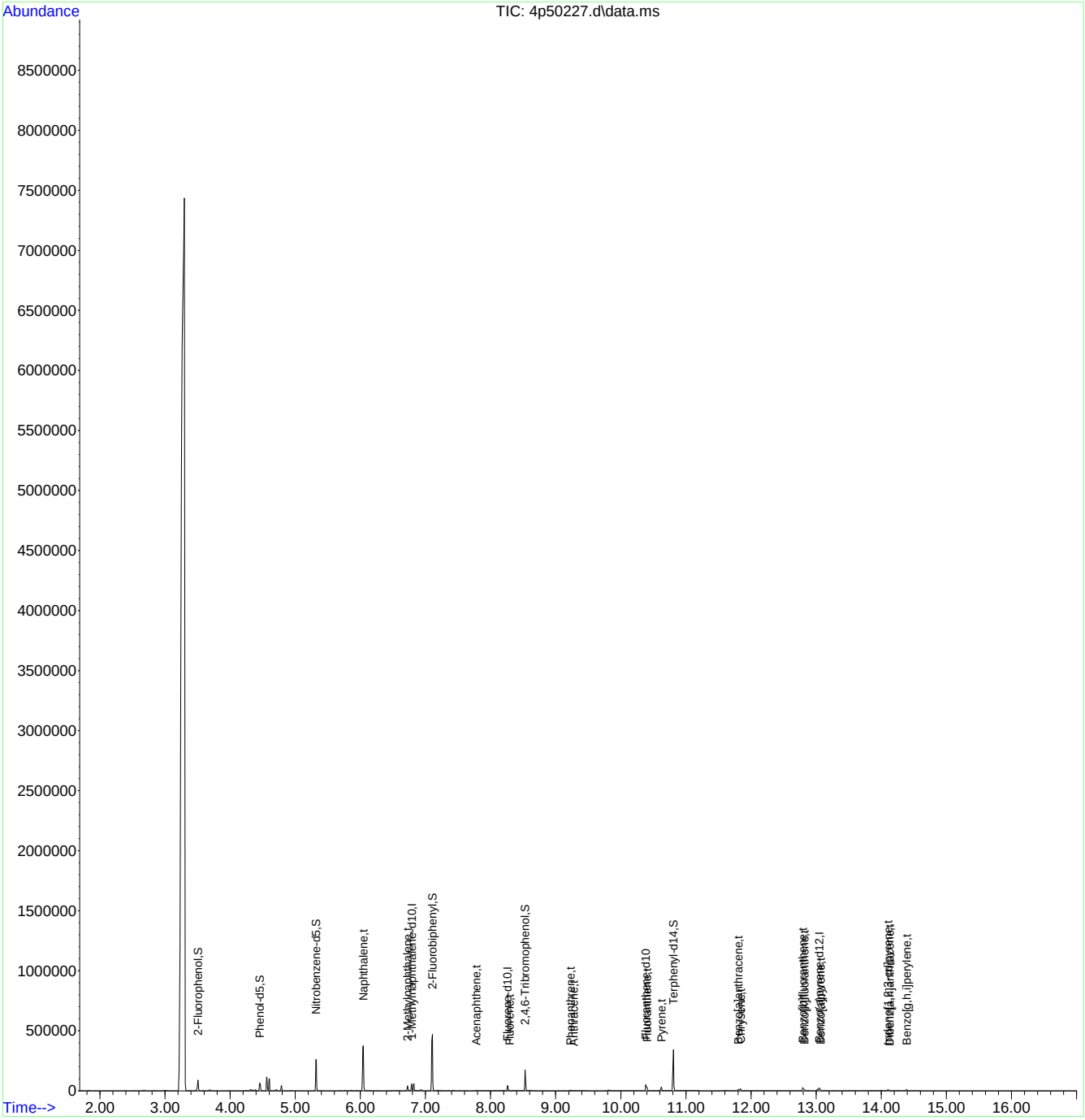
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.788	150	17153	800.00	ppm	0.00
13) Fluorene-d10	8.259	176	22735	800.00	ppm	0.00
20) Fluoranthene-d10	10.384	212	34243	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.046	264	15660	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.506	112	38201m	3590.14	ppm	0.01
Spiked Amount 50.000			Recovery	= 7180.28%		
4) Phenol-d5	4.455	99	46849	2320.81	ppm	0.00
Spiked Amount 50.000			Recovery	= 4641.62%		
7) Nitrobenzene-d5	5.319	82	168122	10205.74	ppm	0.00
Spiked Amount 50.000			Recovery	= 20411.48%		
14) 2-Fluorobiphenyl	7.106	172	265953	9170.85	ppm	0.00
Spiked Amount 50.000			Recovery	= 18341.70%		
19) 2,4,6-Tribromophenol	8.531	330	60496	13942.59	ppm	0.00
Spiked Amount 50.000			Recovery	= 27885.18%		
27) Terphenyl-d14	10.807	244	215251	8776.01	ppm	0.00
Spiked Amount 50.000			Recovery	= 17552.02%		
Target Compounds						Qvalue
8) Naphthalene	6.045	128	354740	7226.17	ppm	83
10) 2-Methylnaphthalene	6.728	141	13110	511.10	ppm	82
16) Acenaphthene	7.780	153	1550m	57.34	ppm	
17) Fluorene	8.293	166	1796m	55.07	ppm	
23) Phenanthrene	9.224	178	4608m	99.91	ppm	
24) Anthracene	9.279	178	1036m	23.42	ppm	
25) Fluoranthene	10.402	202	17405	362.42	ppm	97
26) Pyrene	10.623	202	20800	393.60	ppm	99
28) Benzo[a]anthracene	11.804	228	7861	166.50	ppm	100
29) Chrysene	11.840	228	13599	294.02	ppm	97
31) Benzo[b]fluoranthene	12.793	252	20031m	611.20	ppm	
32) Benzo[k]fluoranthene	12.817	252	6019m	186.26	ppm	
33) Benzo[a]pyrene	13.066	252	7519	253.67	ppm	100
34) Indeno[1,2,3-cd]pyrene	14.104	276	9818m	278.01	ppm	
35) Dibenz[a,h]anthracene	14.128	278	1720m	62.53	ppm	
36) Benzo[g,h,i]perylene	14.390	276	10019	334.76	ppm	100

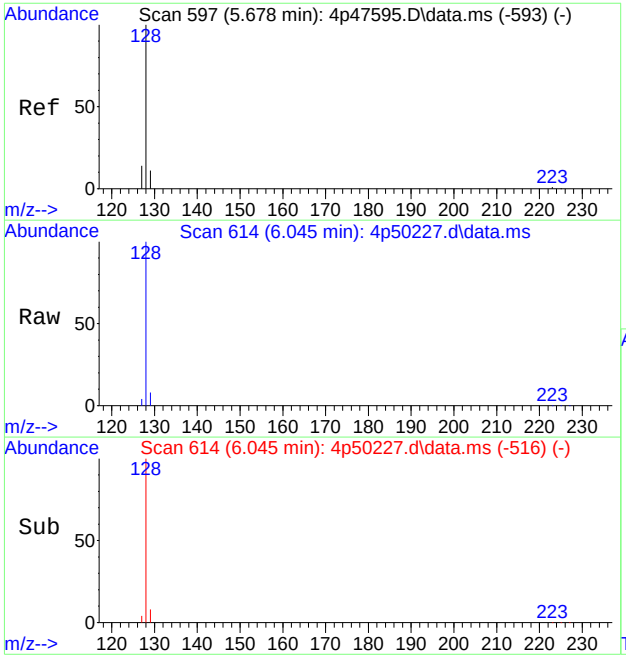
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2629\
Data File : 4p50227.d
Acq On : 18 Dec 2021 10:15 am
Operator : chriss2
Sample : jd36624-17 Inst : MS4P
Misc : op37115a,e4p2629,280,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 20 01:02:30 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 23:01:53 2021
Response via : Initial Calibration

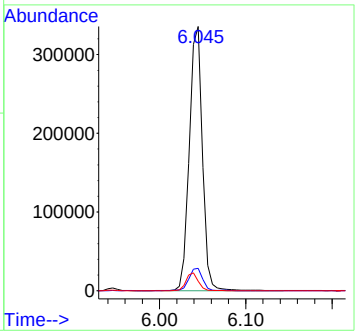


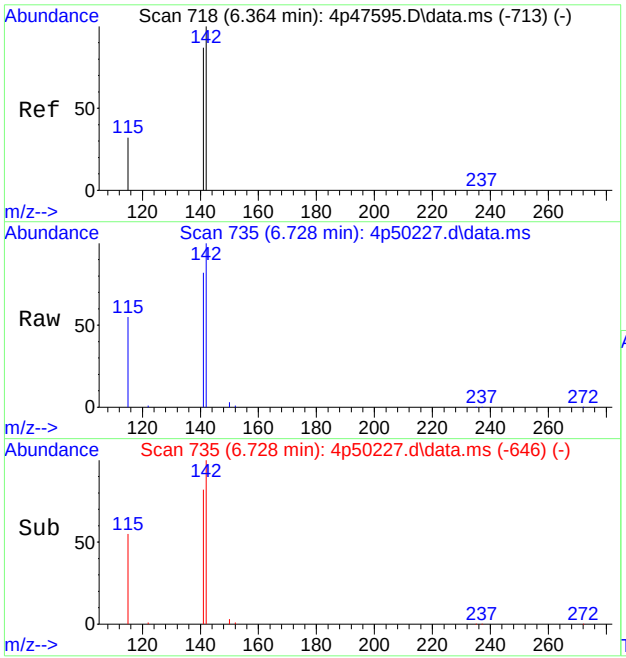


#8
Naphthalene
Concen: 7226.17 ppm
RT: 6.045 min Scan# 614
Delta R.T. 0.011 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:128 Resp: 354740

Ion	Ratio	Lower	Upper
128	100		
129	8.5	0.0	39.7
127	3.6	0.0	44.6

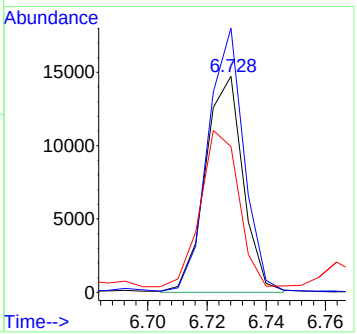


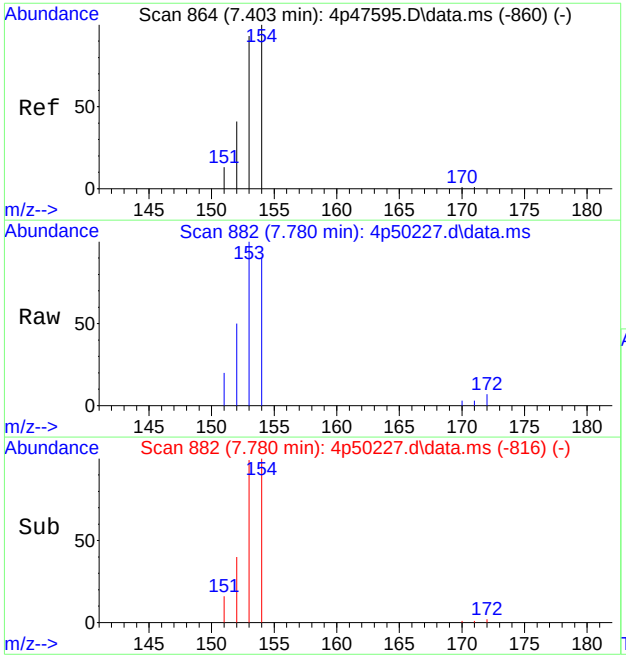


#10
2-Methylnaphthalene
Concen: 511.10 ppm
RT: 6.728 min Scan# 735
Delta R.T. 0.006 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:141 Resp: 13110

Ion	Ratio	Lower	Upper
141	100		
142	122.6	76.0	136.0
115	65.1	53.5	113.5

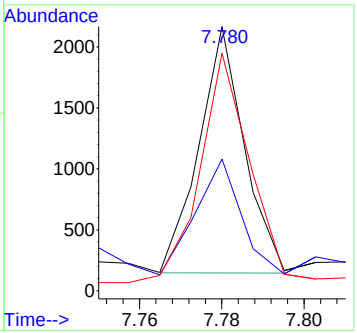


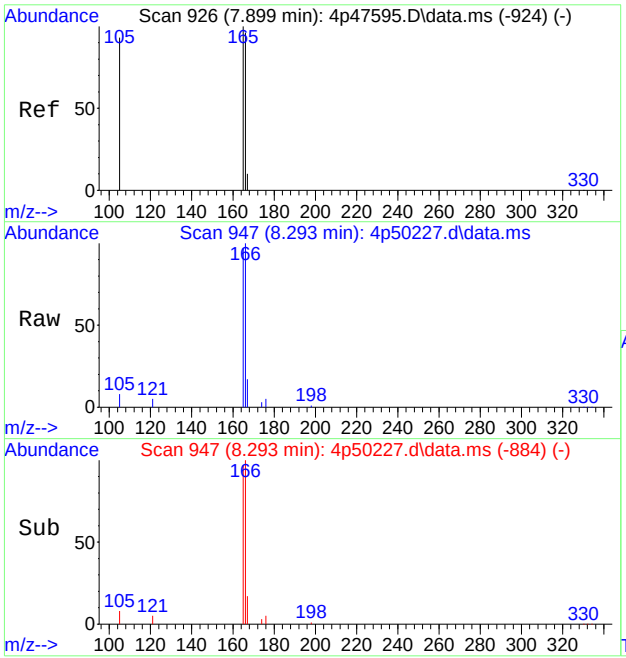


#16
Acenaphthene
Concen: 57.34 ppm m
RT: 7.780 min Scan# 882
Delta R.T. 0.000 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:153 Resp: 1550

Ion	Ratio	Lower	Upper
153	100		
152	49.8	17.9	77.9
154	89.9	64.7	124.7

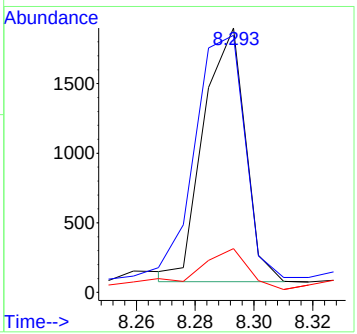


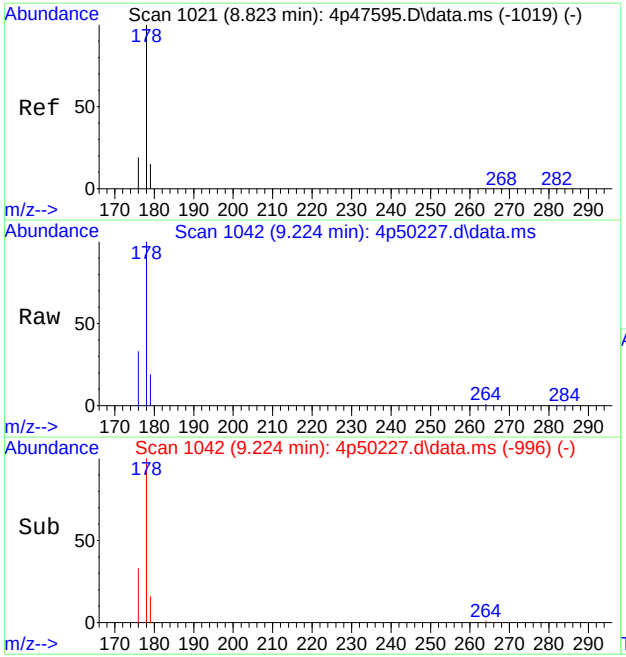


#17
Fluorene
Concen: 55.07 ppm m
RT: 8.293 min Scan# 947
Delta R.T. 0.000 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:166 Resp: 1796

Ion	Ratio	Lower	Upper
166	100		
165	97.2	53.7	113.7
167	16.6	0.0	43.4

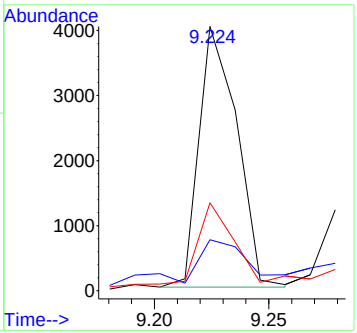


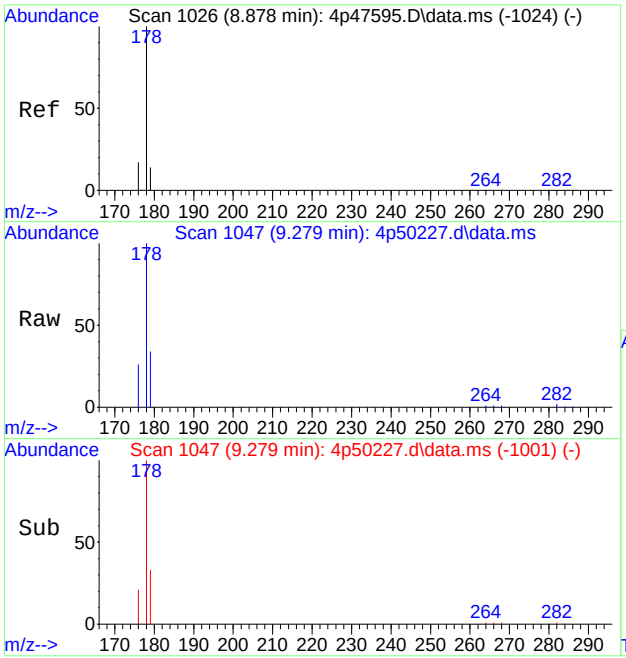


#23
Phenanthrene
Concen: 99.91 ppm m
RT: 9.224 min Scan# 1042
Delta R.T. 0.000 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:178 Resp: 4608

Ion	Ratio	Lower	Upper
178	100		
179	19.3	0.0	43.8
176	33.3	0.0	52.4

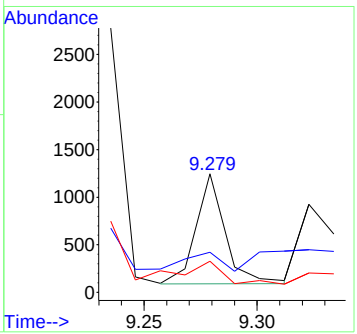


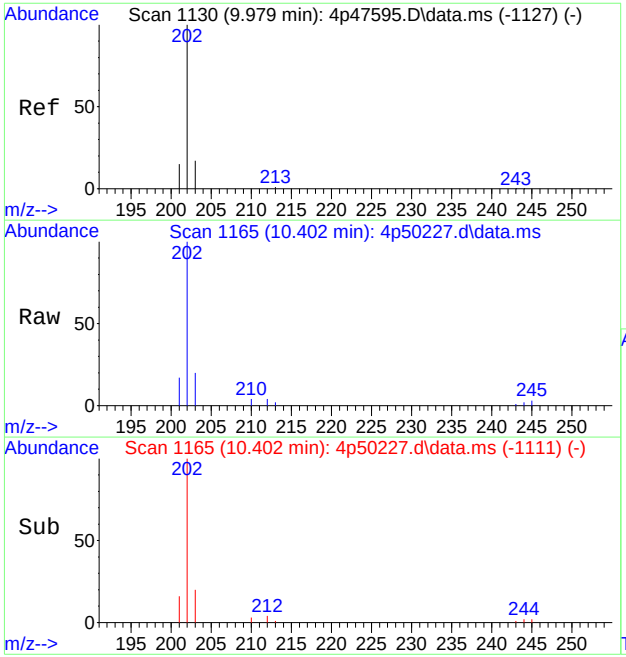


#24
Anthracene
Concen: 23.42 ppm m
RT: 9.279 min Scan# 1047
Delta R.T. 0.000 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:178 Resp: 1036

Ion	Ratio	Lower	Upper
178	100		
179	33.8	0.0	45.1
176	26.3	0.0	49.2

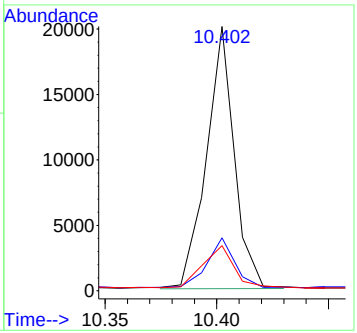


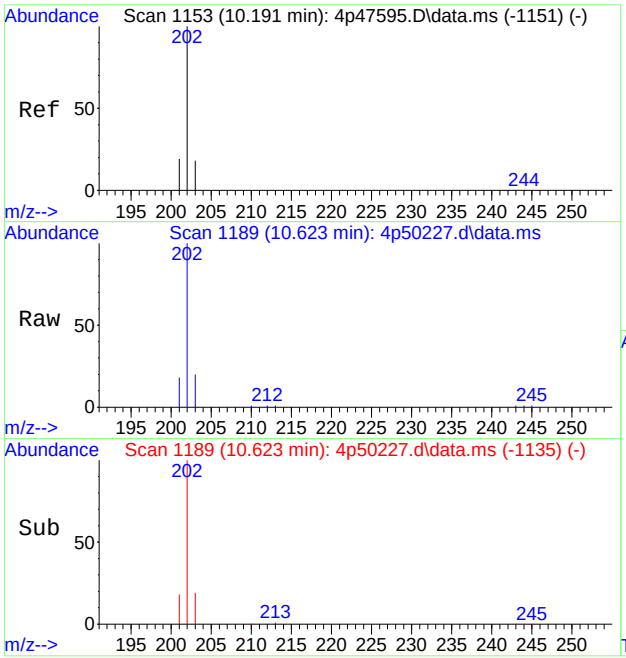


#25
Fluoranthene
Concen: 362.42 ppm
RT: 10.402 min Scan# 1165
Delta R.T. 0.000 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:202 Resp: 17405

Ion	Ratio	Lower	Upper
202	100		
203	19.0	0.0	48.0
201	16.0	0.0	44.3

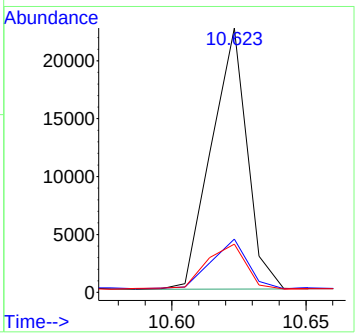


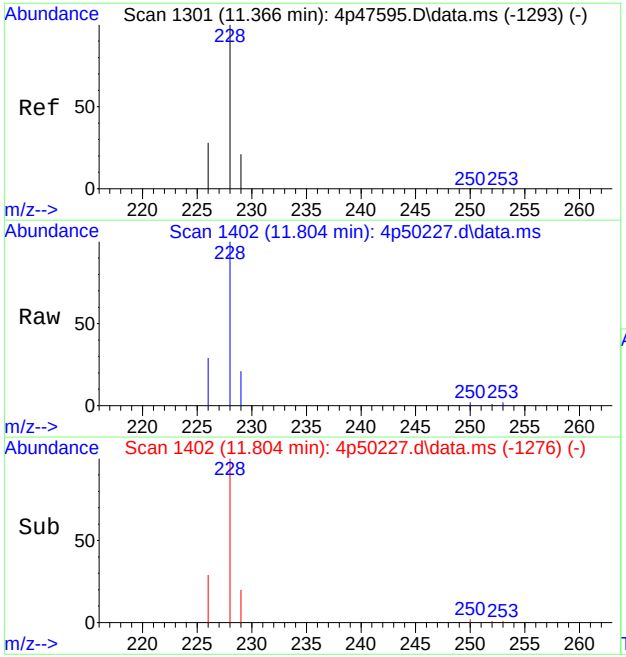


#26
Pyrene
Concen: 393.60 ppm
RT: 10.623 min Scan# 1189
Delta R.T. 0.000 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:202 Resp: 20800

Ion	Ratio	Lower	Upper
202	100		
203	18.9	0.0	49.0
201	17.0	0.0	46.2

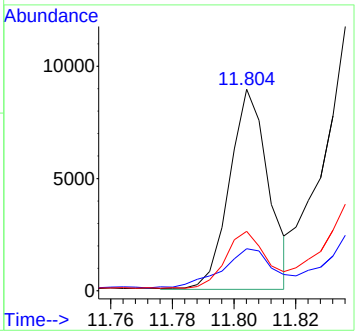


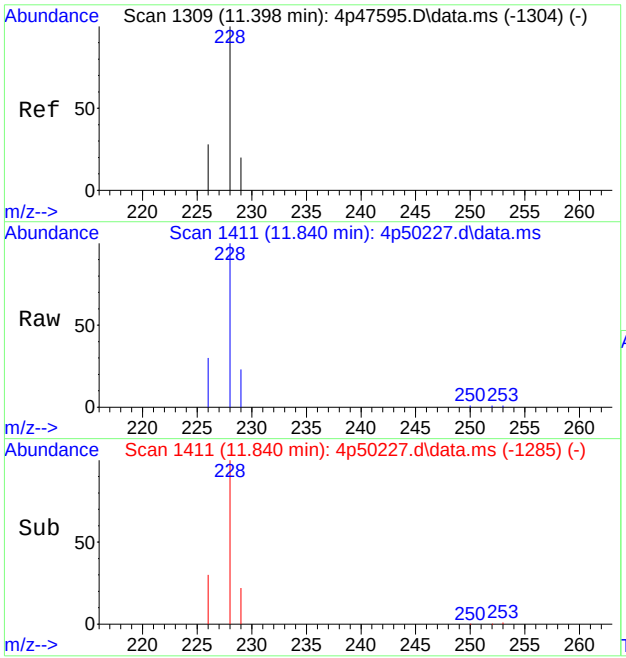


#28
Benzo[a]anthracene
Concen: 166.50 ppm
RT: 11.804 min Scan# 1402
Delta R.T. 0.004 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:228 Resp: 7861

Ion	Ratio	Lower	Upper
228	100		
229	18.6	0.0	48.5
226	28.1	0.0	58.4

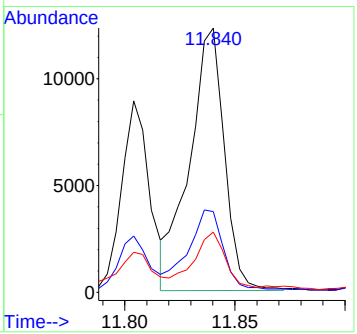


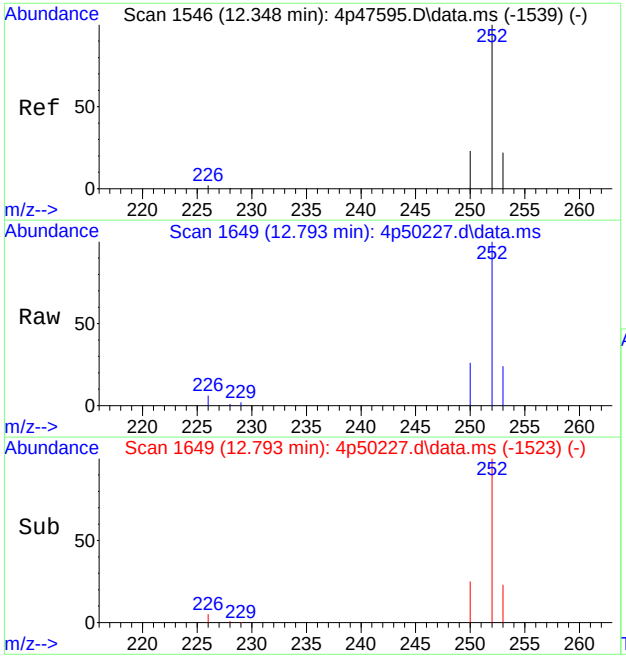


#29
Chrysene
Concen: 294.02 ppm
RT: 11.840 min Scan# 1411
Delta R.T. 0.004 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:228 Resp: 13599

Ion	Ratio	Lower	Upper
228	100		
226	29.5	0.7	60.7
229	21.0	0.0	48.5

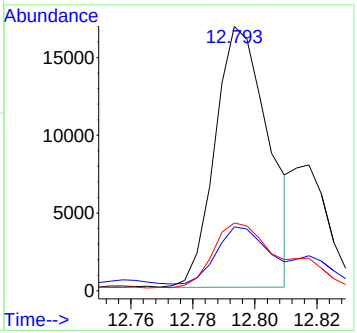


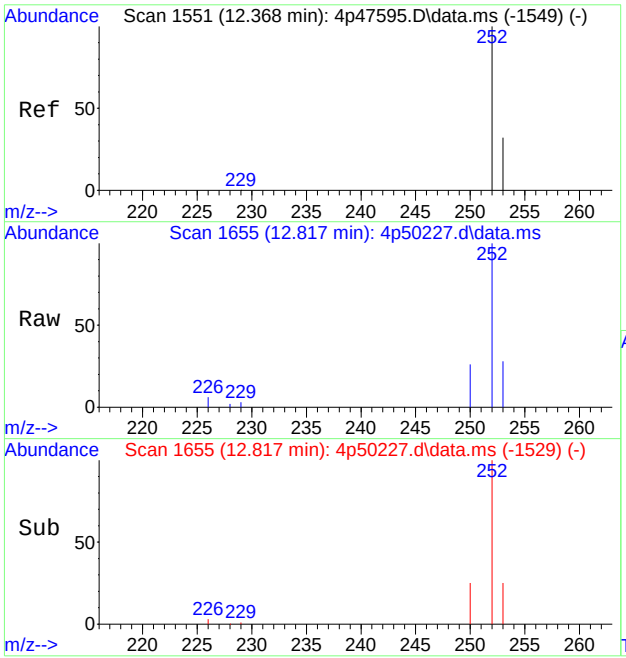


#31
Benzo[b]fluoranthene
Concen: 611.20 ppm m
RT: 12.793 min Scan# 1649
Delta R.T. 0.004 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:252 Resp: 20031

Ion	Ratio	Lower	Upper
252	100		
253	24.2	0.0	52.0
250	25.7	0.0	52.7

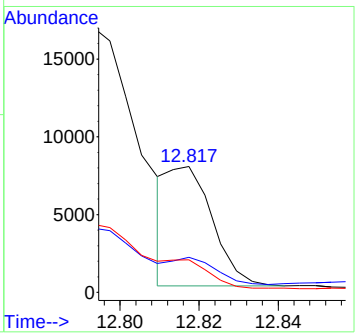


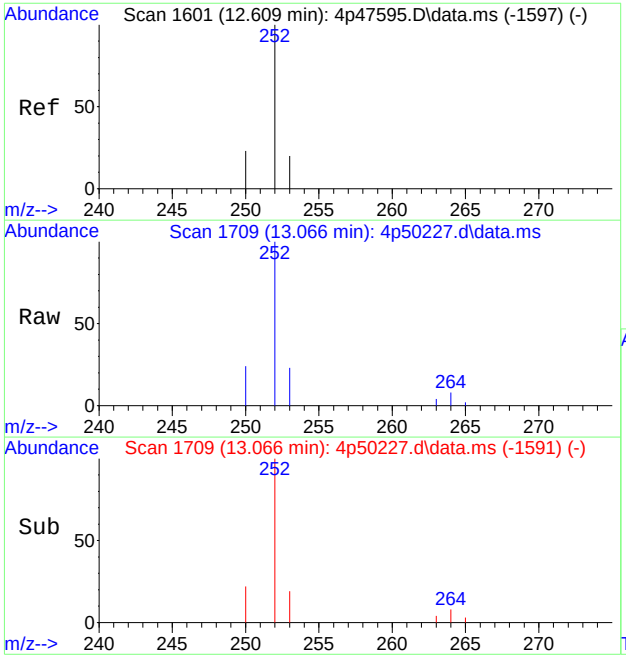


#32
Benzo[k]fluoranthene
Concen: 186.26 ppm m
RT: 12.817 min Scan# 1655
Delta R.T. 0.004 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:252 Resp: 6019

Ion	Ratio	Lower	Upper
252	100		
253	27.8	0.0	52.5
250	25.9	0.0	53.0

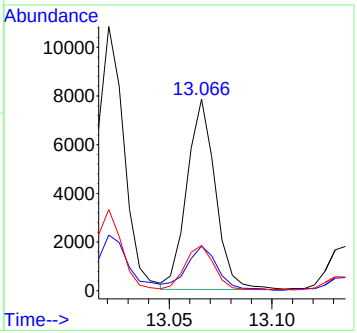


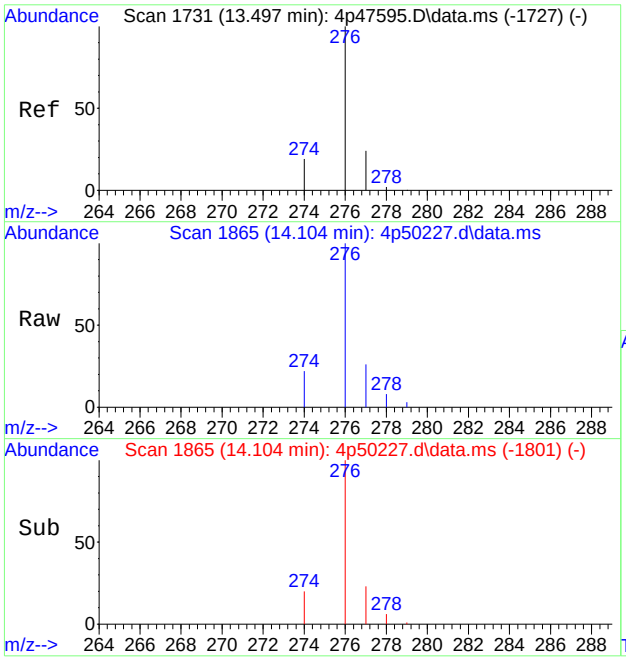


#33
Benzo[a]pyrene
Concen: 253.67 ppm
RT: 13.066 min Scan# 1709
Delta R.T. 0.005 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:252 Resp: 7519

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.8
250	23.4	0.0	53.2

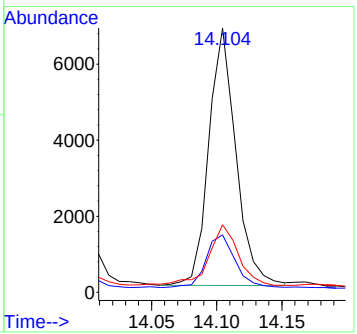


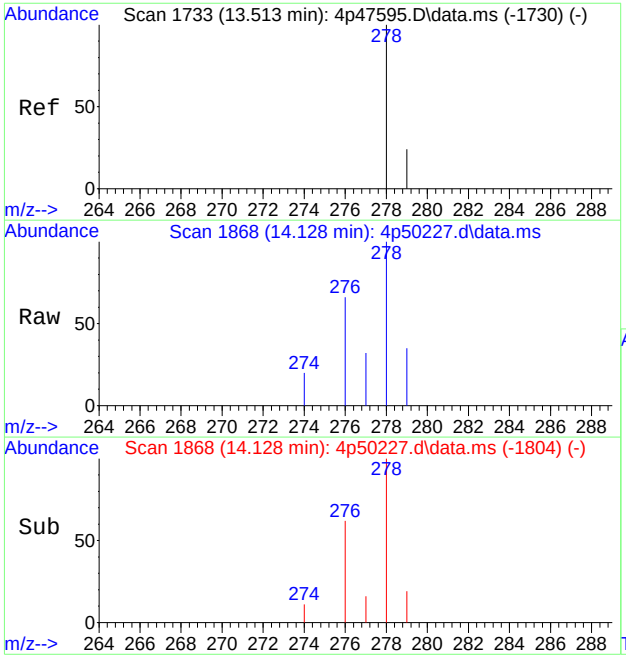


#34
Indeno[1,2,3-cd]pyrene
Concen: 278.01 ppm m
RT: 14.104 min Scan# 1865
Delta R.T. 0.008 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:276 Resp: 9818

Ion	Ratio	Lower	Upper
276	100		
274	21.7	0.0	50.8
277	25.5	0.0	52.4

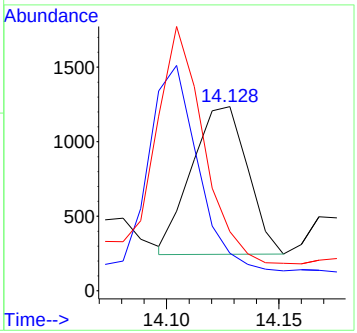


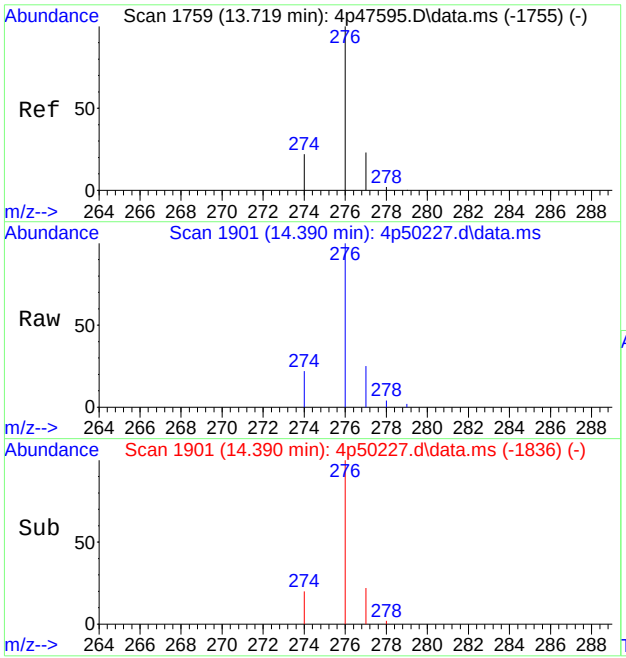


#35
Dibenz[a,h]anthracene
Concen: 62.53 ppm m
RT: 14.128 min Scan# 1868
Delta R.T. 0.008 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:278 Resp: 1720

Ion	Ratio	Lower	Upper
278	100		
274	20.4	0.0	37.8
277	32.1	0.0	39.9

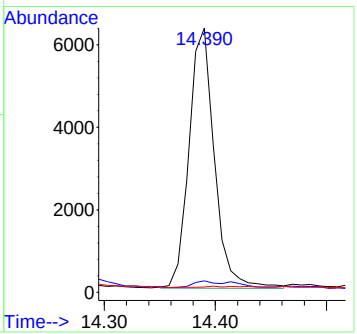




#36
Benzo[g,h,i]perylene
Concen: 334.76 ppm
RT: 14.390 min Scan# 1901
Delta R.T. 0.016 min
Lab File: 4p50227.d
Acq: 18 Dec 2021 10:15 am

Tgt Ion:276 Resp: 10019

Ion	Ratio	Lower	Upper
276	100		
278	2.2	0.0	32.1
279	0.0	0.0	30.0



Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2m5439\
Data File : 2m120966.d
Acq On : 22 Dec 2021 5:04 am
Operator : chriss2
Sample : op37113-mb1 Inst : MS2M
Misc : op37113,e2m5439,250,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M
Quant Results File: M2M5435LVI.RES
Quant Time: Dec 23 04:21:37 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 23 04:04:48 2021
Response via : Initial Calibration

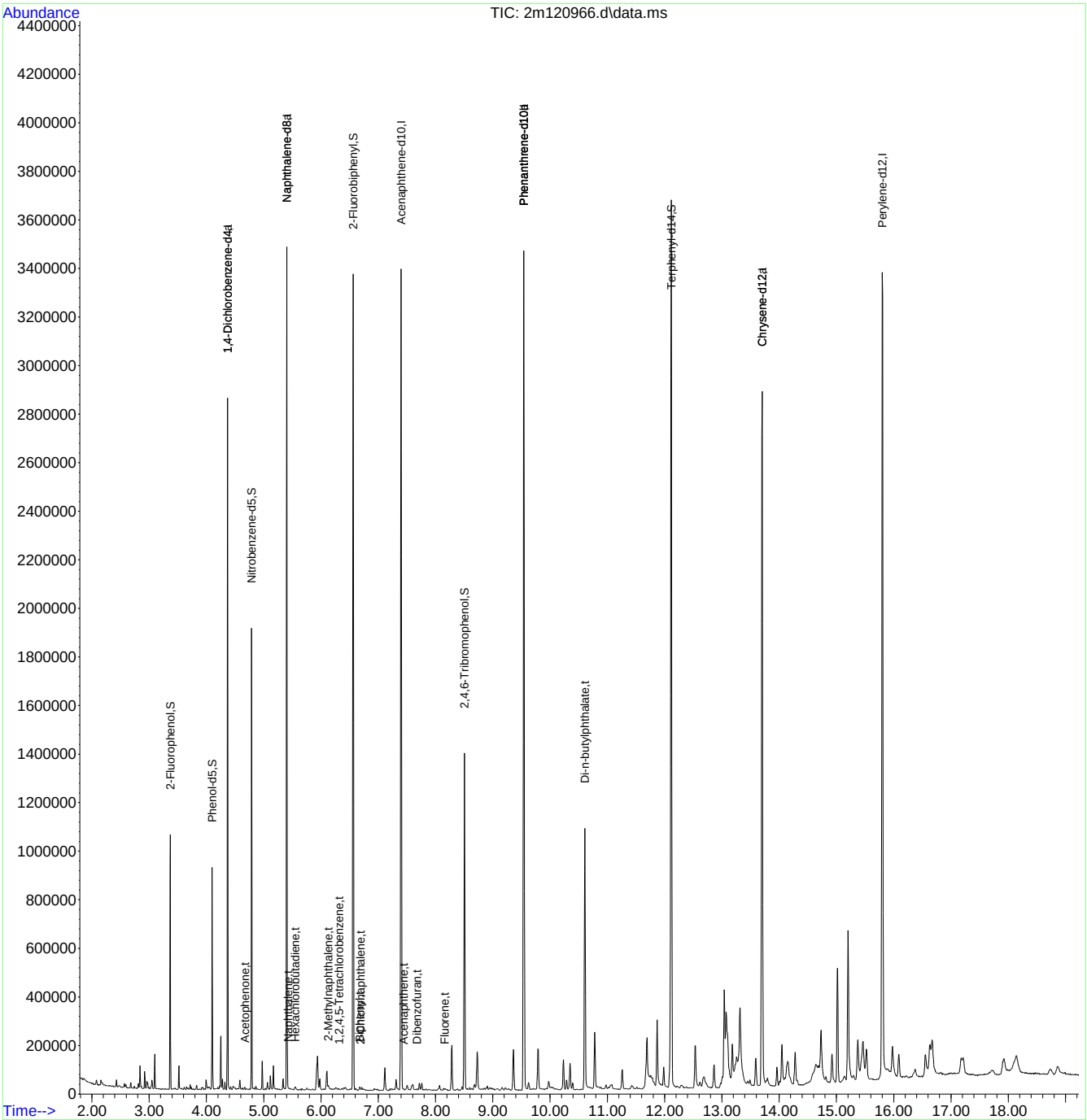
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.370	152	329508	8.00	ppm		0.00
24) Naphthalene-d8	5.402	136	1327244	8.00	ppm		0.00
46) Acenaphthene-d10	7.397	164	809600	8.00	ppm		0.00
69) Phenanthrene-d10	9.542	188	1619369	8.00	ppm		0.00
84) Chrysene-d12	13.703	240	1453025	8.00	ppm		0.00
93) Perylene-d12	15.800	264	1742885	8.00	ppm		0.00
103) 1,4-Dichlorobenzene-d4a	4.370	152	329508	8.00	ppm		0.00
105) Phenanthrene-d10a	9.542	188	1619369	8.00	ppm		0.00
107) Naphthalene-d8a	5.402	136	1327244	8.00	ppm		0.00
109) Chrysene-d12a	13.703	240	1453025	8.00	ppm		0.00
111) Phenanthrene-d10b	9.542	188	1619369	8.00	ppm		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	3.370	112	230699	4.50	ppm		0.00
Spiked Amount 10.000			Recovery	=	45.00%		
8) Phenol-d5	4.097	99	195618	3.01	ppm		0.00
Spiked Amount 10.000			Recovery	=	30.10%		
25) Nitrobenzene-d5	4.787	82	387925	7.86	ppm		0.00
Spiked Amount 10.000			Recovery	=	78.60%		
51) 2-Fluorobiphenyl	6.563	172	1119635	8.43	ppm		0.00
Spiked Amount 10.000			Recovery	=	84.30%		
74) 2,4,6-Tribromophenol	8.505	330	177421	8.16	ppm		0.00
Spiked Amount 10.000			Recovery	=	81.60%		
87) Terphenyl-d14	12.115	244	1758162	9.62	ppm		0.00
Spiked Amount 10.000			Recovery	=	96.20%		
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm		
Spiked Amount 10.000			Recovery	=	0.00%		
113) o-terphenyl	0.000	230	0	0.00	ppm		
Spiked Amount 10.000			Recovery	=	0.00%		
Target Compounds							Qvalue
18) Acetophenone	4.670	105	1922	0.03	ppm	#	70
38) Naphthalene	5.424	128	1688	0.01	ppm		86
42) Hexachlorobutadiene	5.547	225	539	0.02	ppm		79
44) 2-Methylnaphthalene	6.124	141	1242	0.01	ppm		87
48) 1,2,4,5-Tetrachloroben...	6.317	216	908	0.02	ppm	#	73
52) 2-Chloronaphthalene	6.691	162	1043	0.01	ppm		98
53) Biphenyl	6.675	154	3809	0.03	ppm		90
59) Acenaphthene	7.440	153	855	0.01	ppm		87
62) Dibenzofuran	7.676	168	1742	0.01	ppm		73
66) Fluorene	8.157	166	873	0.01	ppm	#	62
81) Di-n-butylphthalate	10.607	149	614719	2.51	ppm		99

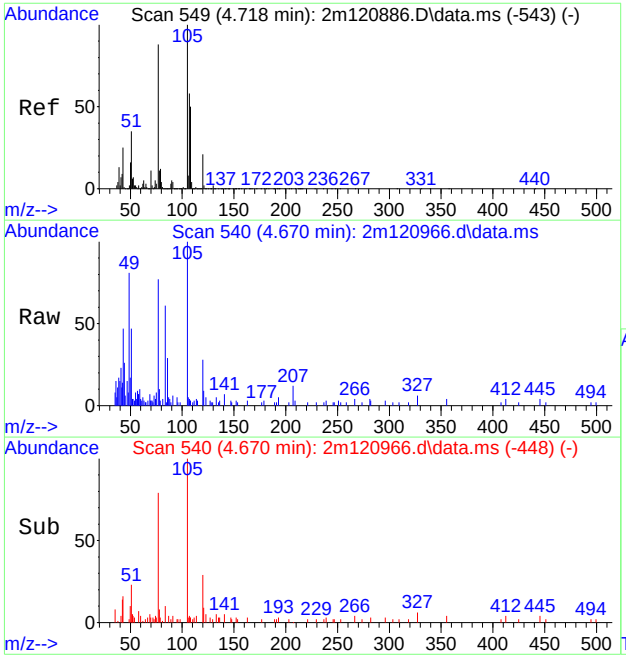
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\altheam\e2m5439\
Data File : 2m120966.d
Acq On : 22 Dec 2021 5:04 am
Operator : chriss2
Sample : op37113-mb1 Inst : MS2M
Misc : op37113,e2m5439,250,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2M5435LVI.M
Quant Results File: M2M5435LVI.RES
Quant Time: Dec 23 04:21:37 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Dec 23 04:04:48 2021
Response via : Initial Calibration

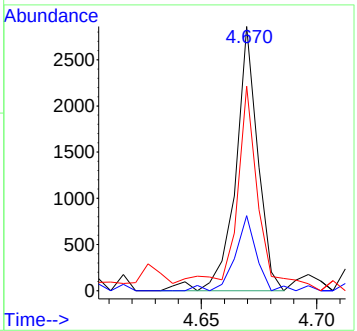


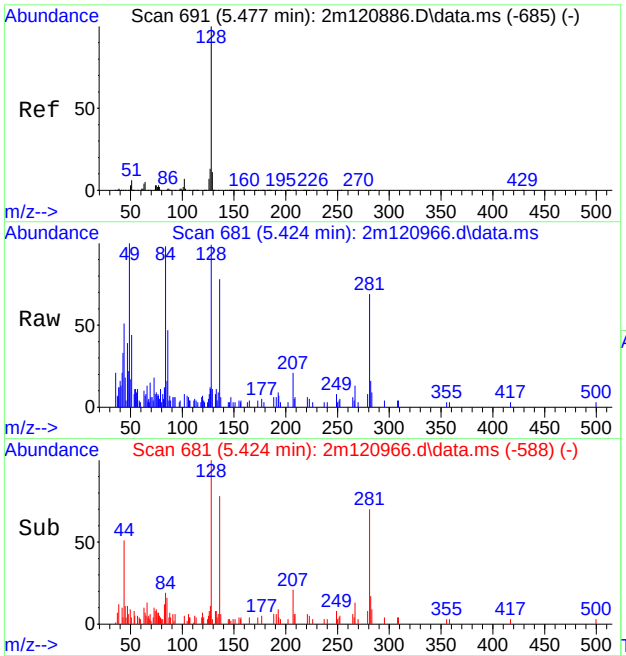


#18
Acetophenone
Concen: 0.03 ppm
RT: 4.670 min Scan# 540
Delta R.T. -0.005 min
Lab File: 2m120966.d
Acq: 22 Dec 2021 5:04 am

Tgt Ion:105 Resp: 1922

Ion	Ratio	Lower	Upper
105	100		
120	27.5	0.0	51.9
77	71.7	76.0	136.0#

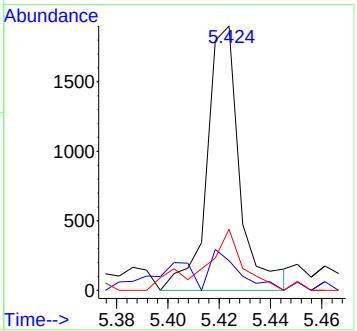


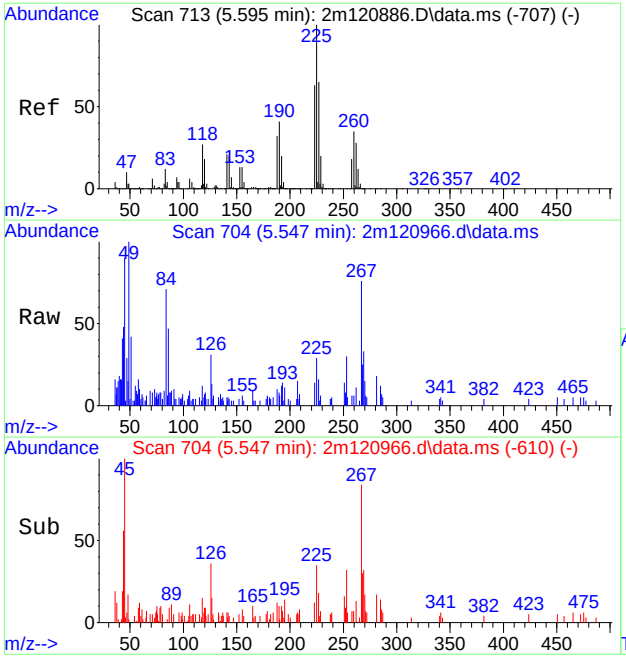


#38
Naphthalene
Concen: 0.01 ppm
RT: 5.424 min Scan# 681
Delta R.T. -0.000 min
Lab File: 2m120966.d
Acq: 22 Dec 2021 5:04 am

Tgt Ion:128 Resp: 1688

Ion	Ratio	Lower	Upper
128	100		
129	9.0	0.0	40.6
127	21.5	0.0	42.6

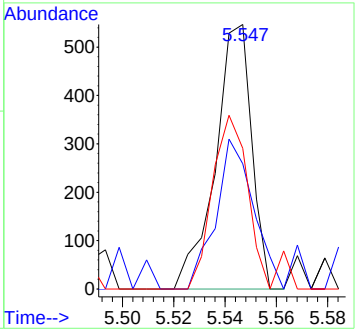


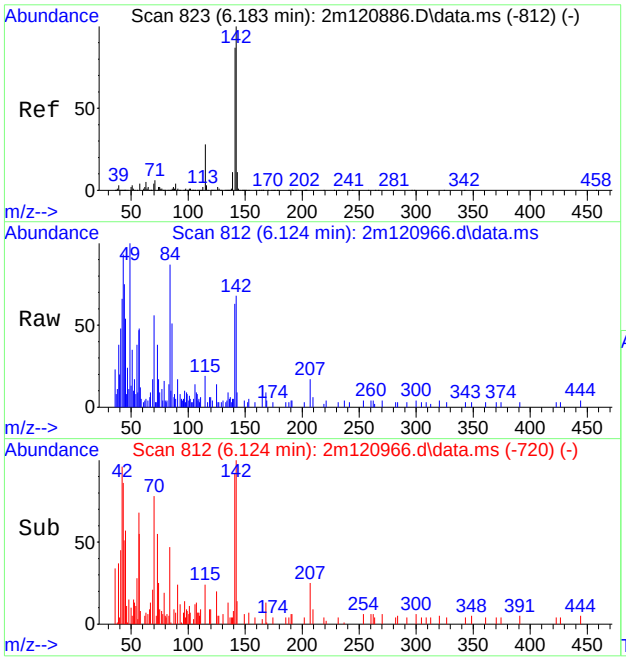


#42
Hexachlorobutadiene
Concen: 0.02 ppm
RT: 5.547 min Scan# 704
Delta R.T. 0.005 min
Lab File: 2m120966.d
Acq: 22 Dec 2021 5:04 am

Tgt Ion:225 Resp: 539

Ion	Ratio	Lower	Upper
225	100		
223	47.3	33.3	93.3
227	46.0	33.4	93.4

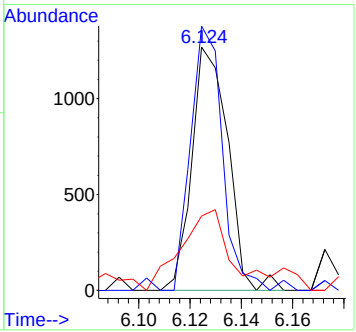


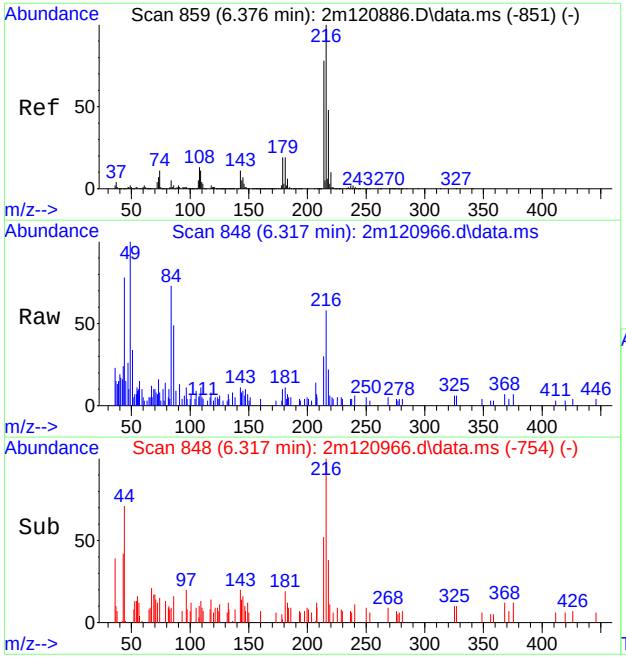


#44
2-Methylnaphthalene
Concen: 0.01 ppm
RT: 6.124 min Scan# 812
Delta R.T. -0.005 min
Lab File: 2m120966.d
Acq: 22 Dec 2021 5:04 am

Tgt Ion:141 Resp: 1242

Ion	Ratio	Lower	Upper
141	100		
142	103.3	83.6	143.6
115	21.0	4.4	64.4

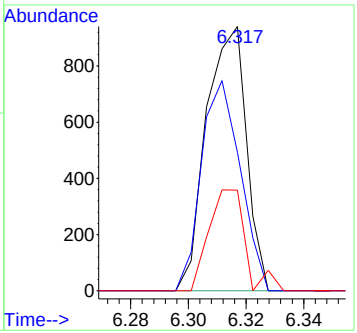


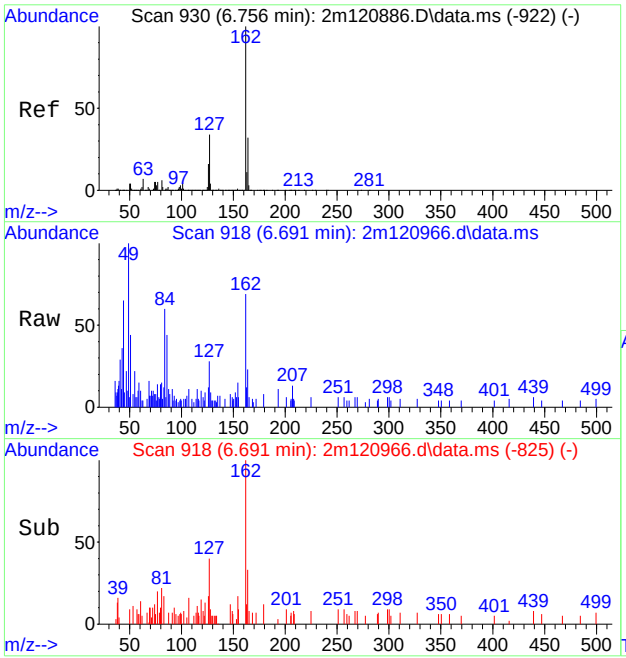


#48
1,2,4,5-Tetrachlorobenzene
Concen: 0.02 ppm
RT: 6.317 min Scan# 848
Delta R.T. 0.005 min
Lab File: 2m120966.d
Acq: 22 Dec 2021 5:04 am

Tgt Ion:216 Resp: 908

Ion	Ratio	Lower	Upper
216	100		
214	77.3	54.4	101.0
218	0.0	33.5	62.3#

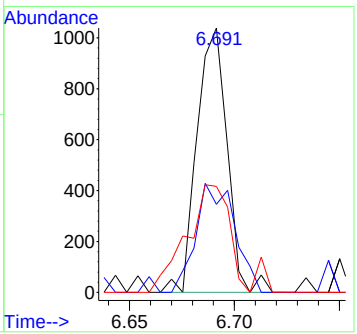


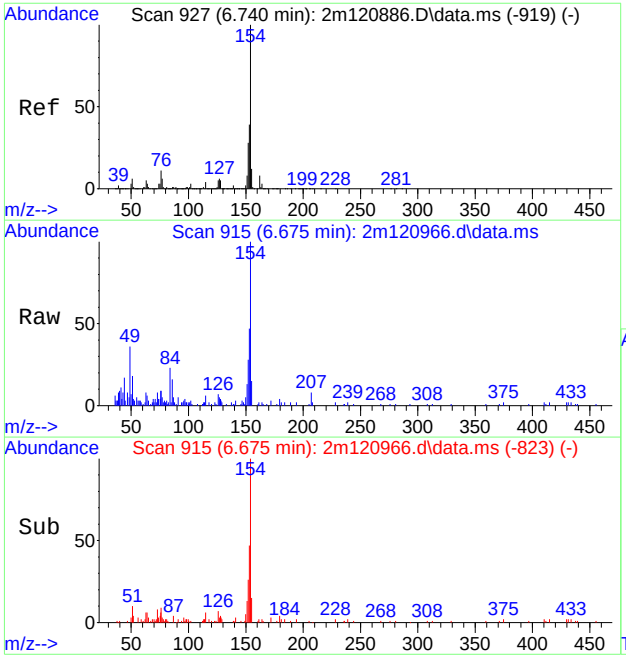


#52
2-Chloronaphthalene
Concen: 0.01 ppm
RT: 6.691 min Scan# 918
Delta R.T. -0.000 min
Lab File: 2m120966.d
Acq: 22 Dec 2021 5:04 am

Tgt Ion:162 Resp: 1043

Ion	Ratio	Lower	Upper
162	100		
164	34.6	3.3	63.3
127	38.3	7.7	67.7

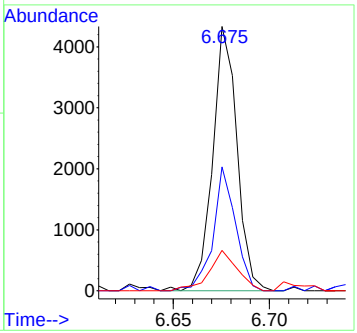


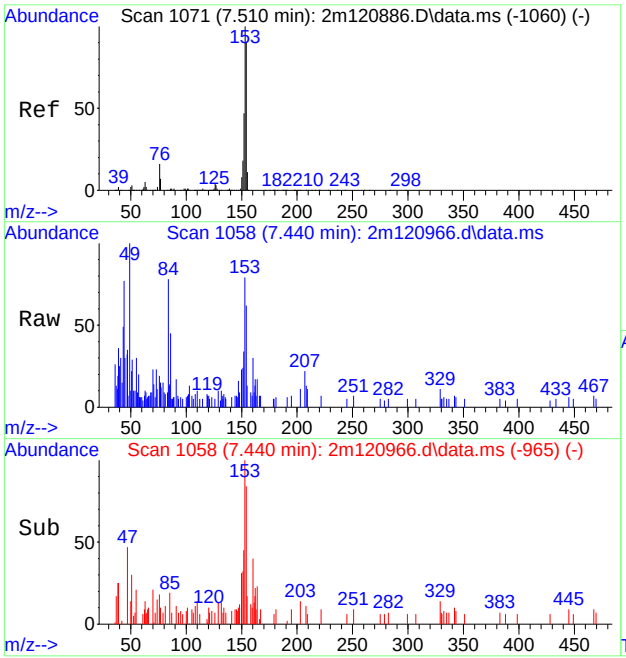


#53
Biphenyl
Concen: 0.03 ppm
RT: 6.675 min Scan# 915
Delta R.T. -0.005 min
Lab File: 2m120966.d
Acq: 22 Dec 2021 5:04 am

Tgt Ion:154 Resp: 3809

Ion	Ratio	Lower	Upper
154	100		
153	46.9	9.7	69.7
155	13.6	0.0	42.4

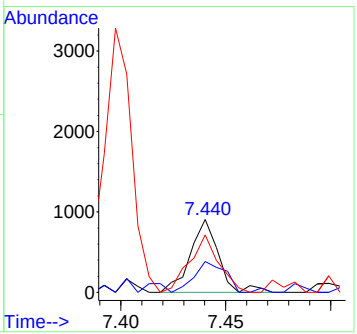


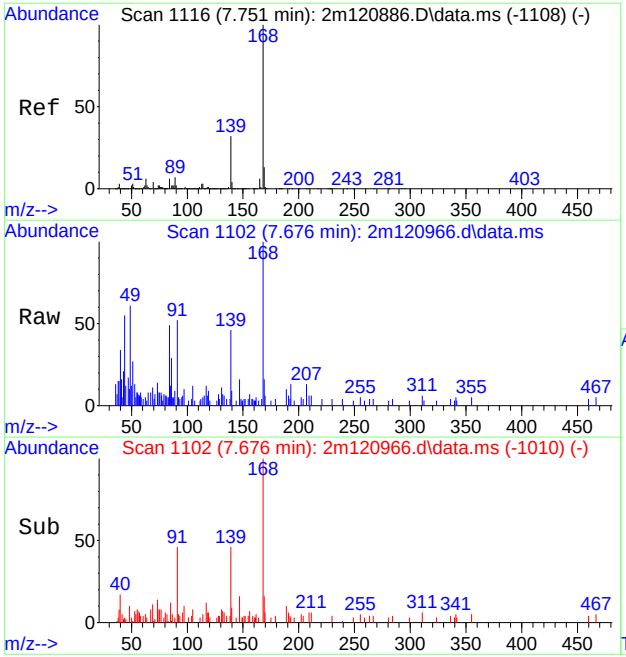


#59
Acenaphthene
Concen: 0.01 ppm
RT: 7.440 min Scan# 1058
Delta R.T. -0.000 min
Lab File: 2m120966.d
Acq: 22 Dec 2021 5:04 am

Tgt Ion:153 Resp: 855

Ion	Ratio	Lower	Upper
153	100		
152	36.4	17.4	77.4
154	72.2	52.1	112.1

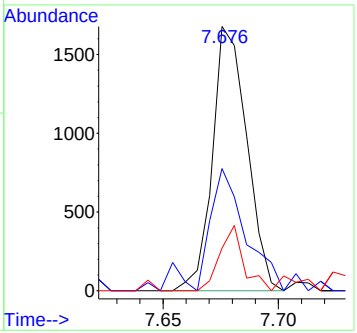


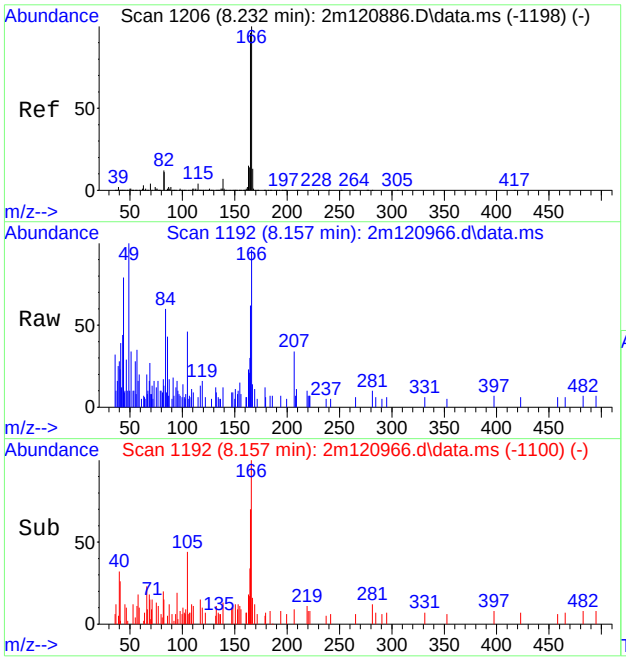


#62
Dibenzofuran
Concen: 0.01 ppm
RT: 7.676 min Scan# 1102
Delta R.T. -0.005 min
Lab File: 2m120966.d
Acq: 22 Dec 2021 5:04 am

Tgt Ion:168 Resp: 1742

Ion	Ratio	Lower	Upper
168	100		
139	54.7	6.3	66.3
169	19.4	0.0	43.1

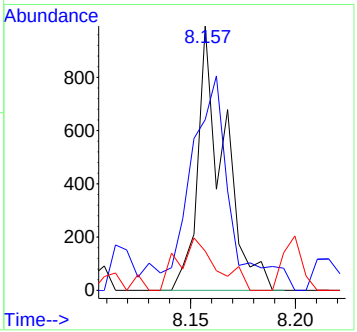


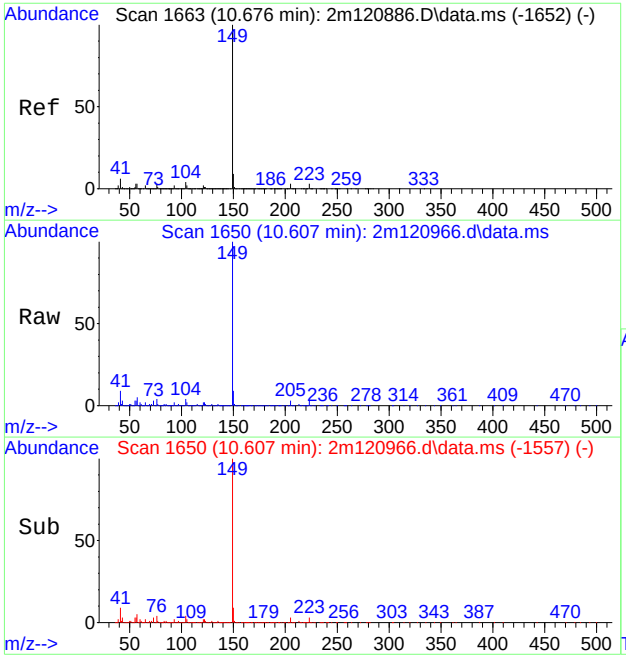


#66
Fluorene
Concen: 0.01 ppm
RT: 8.157 min Scan# 1192
Delta R.T. -0.005 min
Lab File: 2m120966.d
Acq: 22 Dec 2021 5:04 am

Tgt Ion:166 Resp: 873

Ion	Ratio	Lower	Upper
166	100		
165	57.1	67.5	127.5#
167	7.7	0.0	43.1

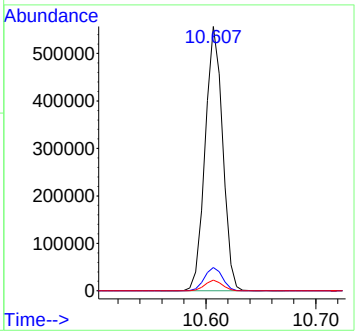




#81
Di-n-butylphthalate
Concen: 2.51 ppm
RT: 10.607 min Scan# 1650
Delta R.T. -0.000 min
Lab File: 2m120966.d
Acq: 22 Dec 2021 5:04 am

Tgt Ion:149 Resp: 614719

Ion	Ratio	Lower	Upper
149	100		
150	8.8	0.0	39.1
104	4.0	0.0	34.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2629\
Data File : 4p50209.d
Acq On : 18 Dec 2021 3:03 am
Operator : chriss2
Sample : op37115a-mb1 Inst : MS4P
Misc : op37115a,e4p2629,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 20 00:10:09 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 23:01:53 2021
Response via : Initial Calibration

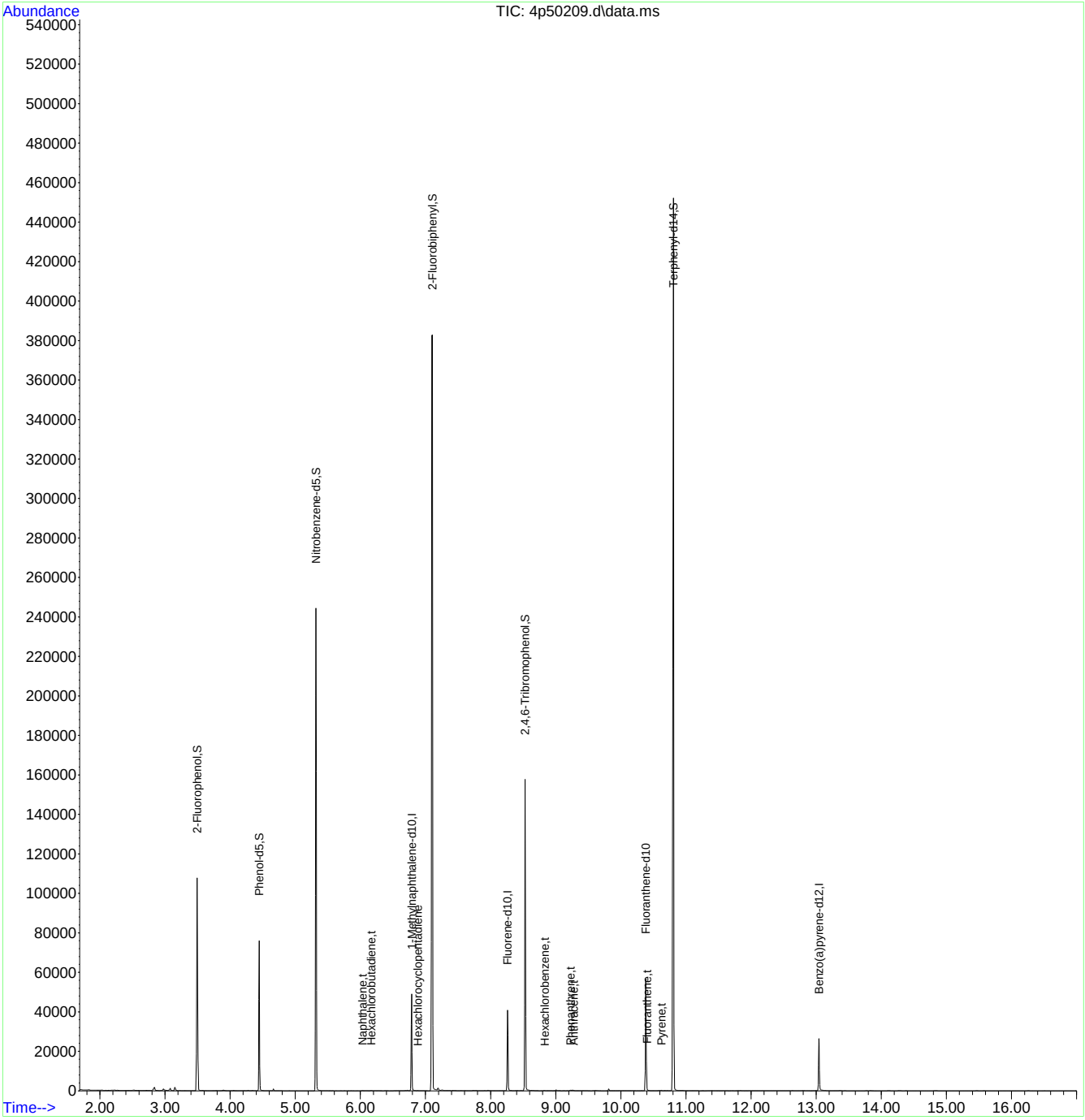
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.788	150	13712	800.00	ppm	0.00
13) Fluorene-d10	8.259	176	20079	800.00	ppm	0.00
20) Fluoranthene-d10	10.384	212	35671	800.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.041	264	15386	800.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.494	112	39733	4671.19	ppm	0.00
Spiked Amount 50.000			Recovery	= 9342.38%		
4) Phenol-d5	4.446	99	48545	3008.31	ppm	0.00
Spiked Amount 50.000			Recovery	= 6016.62%		
7) Nitrobenzene-d5	5.319	82	149686	11366.86	ppm	0.00
Spiked Amount 50.000			Recovery	= 22733.72%		
14) 2-Fluorobiphenyl	7.106	172	229258	8951.21	ppm	0.00
Spiked Amount 50.000			Recovery	= 17902.42%		
19) 2,4,6-Tribromophenol	8.531	330	51783	13513.16	ppm	0.00
Spiked Amount 50.000			Recovery	= 27026.32%		
27) Terphenyl-d14	10.807	244	274788	10754.89	ppm	0.00
Spiked Amount 50.000			Recovery	= 21509.78%		
Target Compounds						Qvalue
8) Naphthalene	6.034	128	169	4.31	ppm	93
9) Hexachlorobutadiene	6.166	225	73	7.62	ppm	88
12) Hexachlorocyclopentadiene	6.883	237	46	5.78	ppm	71
21) Hexachlorobenzene	8.830	284	89	7.91	ppm	88
23) Phenanthrene	9.224	178	324	6.74	ppm	90
24) Anthracene	9.279	178	181	3.93	ppm	86
25) Fluoranthene	10.402	202	268	5.36	ppm	91
26) Pyrene	10.623	202	152	2.76	ppm	89

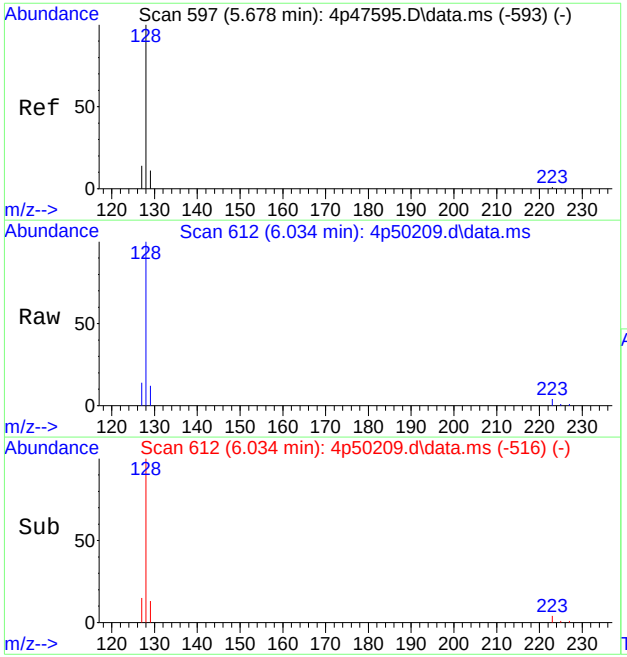
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\altheam\e4p2629\
Data File : 4p50209.d
Acq On : 18 Dec 2021 3:03 am
Operator : chriss2
Sample : op37115a-mb1 Inst : MS4P
Misc : op37115a,e4p2629,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Results File: M4P2551SIMLVI.RES
Quant Time: Dec 20 00:10:09 2021
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Dec 19 23:01:53 2021
Response via : Initial Calibration

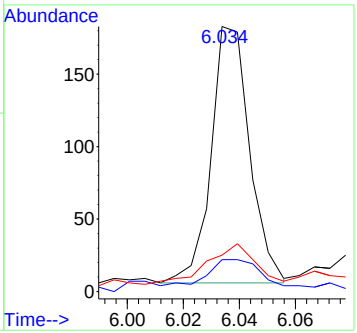


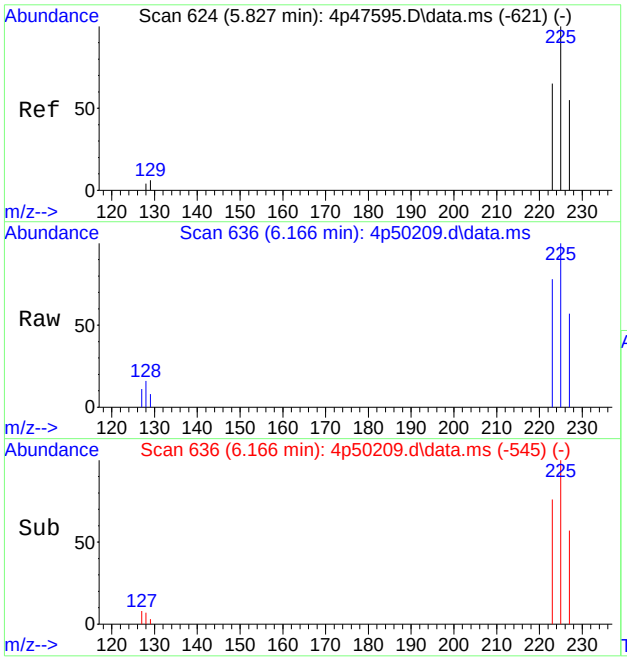


#8
Naphthalene
Concen: 4.31 ppm
RT: 6.034 min Scan# 612
Delta R.T. 0.000 min
Lab File: 4p50209.d
Acq: 18 Dec 2021 3:03 am

Tgt Ion:128 Resp: 169

Ion	Ratio	Lower	Upper
128	100		
129	10.3	0.0	39.7
127	10.3	0.0	44.6

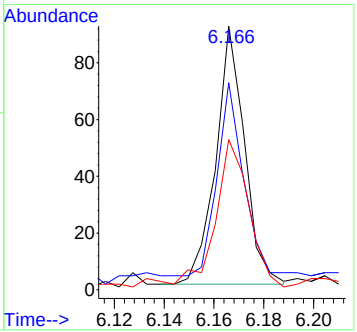


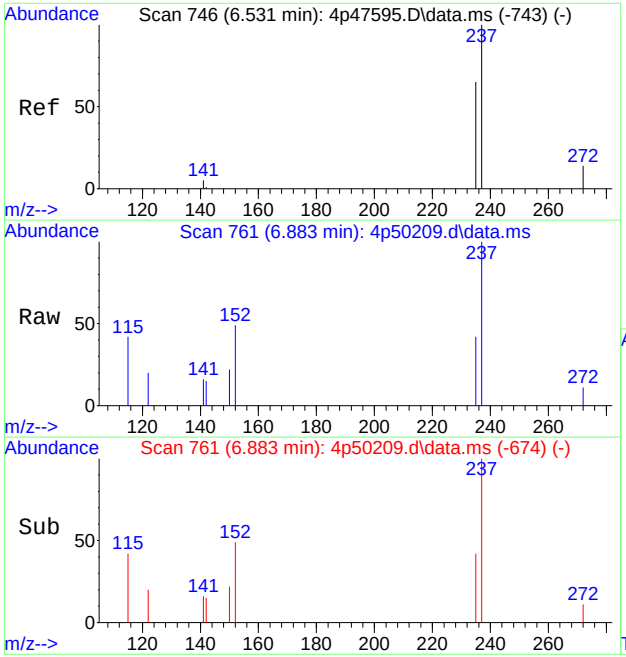


#9
Hexachlorobutadiene
Concen: 7.62 ppm
RT: 6.166 min Scan# 636
Delta R.T. 0.000 min
Lab File: 4p50209.d
Acq: 18 Dec 2021 3:03 am

Tgt Ion:225 Resp: 73

Ion	Ratio	Lower	Upper
225	100		
223	74.6	30.2	90.2
227	56.4	30.5	90.5

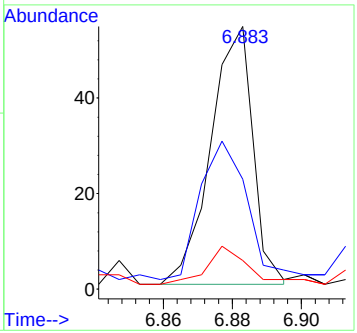


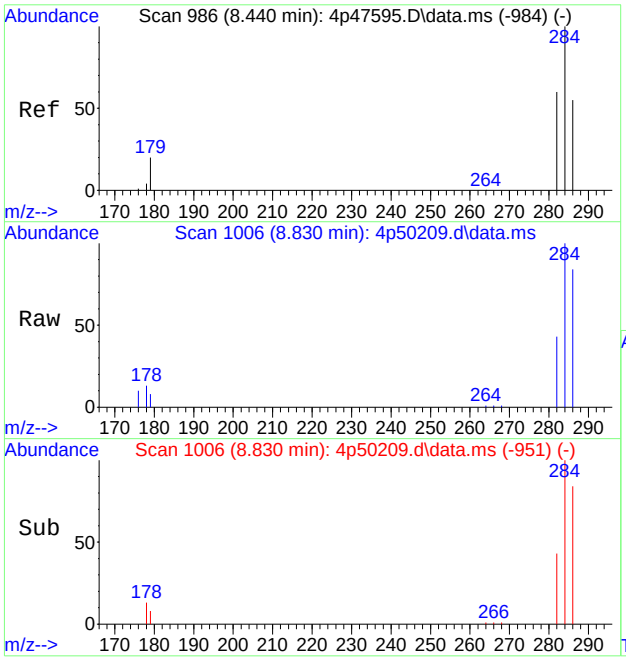


#12
Hexachlorocyclopentadiene
Concen: 5.78 ppm
RT: 6.883 min Scan# 761
Delta R.T. 0.006 min
Lab File: 4p50209.d
Acq: 18 Dec 2021 3:03 am

Tgt Ion:237 Resp: 46

Ion	Ratio	Lower	Upper
237	100		
235	37.4	33.2	93.2
272	8.4	0.0	40.4

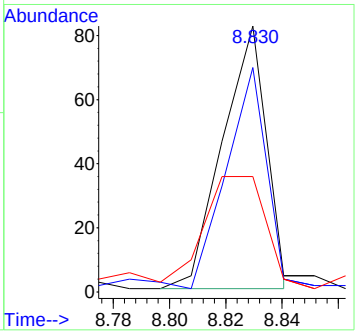


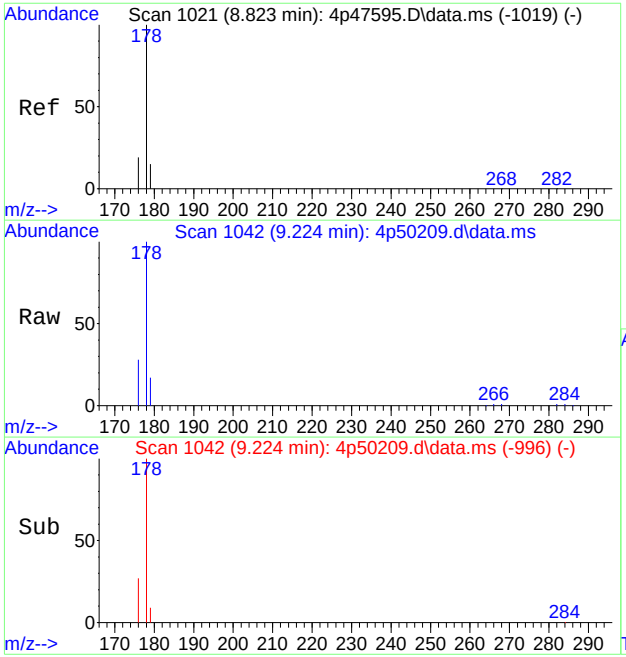


#21
Hexachlorobenzene
Concen: 7.91 ppm
RT: 8.830 min Scan# 1006
Delta R.T. 0.000 min
Lab File: 4p50209.d
Acq: 18 Dec 2021 3:03 am

Tgt Ion:284 Resp: 89

Ion	Ratio	Lower	Upper
284	100		
286	83.1	70.1	130.1
282	40.6	10.4	70.4

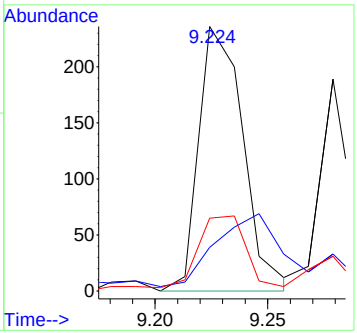


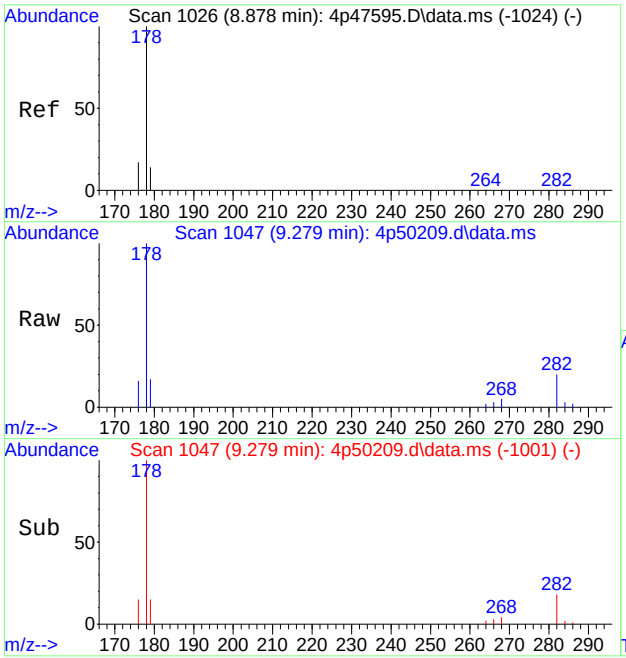


#23
Phenanthrene
Concen: 6.74 ppm
RT: 9.224 min Scan# 1042
Delta R.T. 0.000 min
Lab File: 4p50209.d
Acq: 18 Dec 2021 3:03 am

Tgt Ion:178 Resp: 324

Ion	Ratio	Lower	Upper
178	100		
179	8.9	0.0	43.8
176	26.7	0.0	52.4

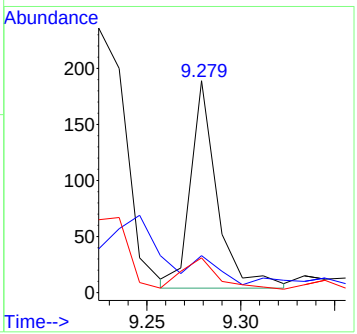


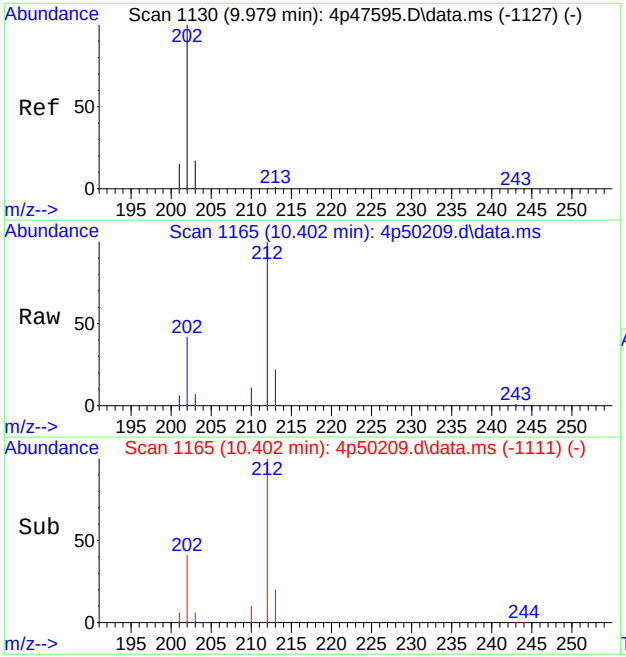


#24
Anthracene
Concen: 3.93 ppm
RT: 9.279 min Scan# 1047
Delta R.T. 0.000 min
Lab File: 4p50209.d
Acq: 18 Dec 2021 3:03 am

Tgt Ion:178 Resp: 181

Ion	Ratio	Lower	Upper
178	100		
179	6.1	0.0	45.1
176	15.4	0.0	49.2

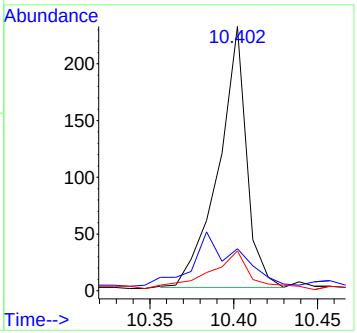


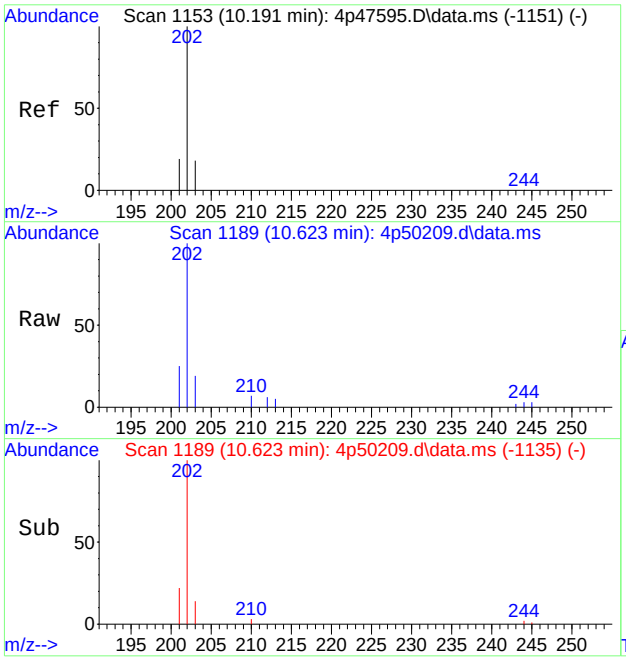


#25
Fluoranthene
Concen: 5.36 ppm
RT: 10.402 min Scan# 1165
Delta R.T. 0.000 min
Lab File: 4p50209.d
Acq: 18 Dec 2021 3:03 am

Tgt Ion:202 Resp: 268

Ion	Ratio	Lower	Upper
202	100		
203	12.2	0.0	48.0
201	13.1	0.0	44.3

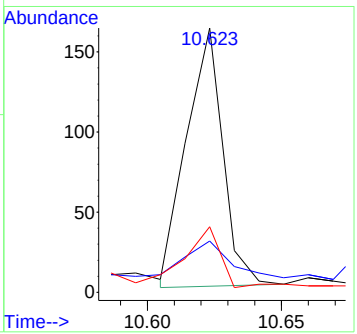




#26
Pyrene
Concen: 2.76 ppm
RT: 10.623 min Scan# 1189
Delta R.T. 0.000 min
Lab File: 4p50209.d
Acq: 18 Dec 2021 3:03 am

Tgt Ion:202 Resp: 152

Ion	Ratio	Lower	Upper
202	100		
203	13.9	0.0	49.0
201	20.8	0.0	46.2



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/29/21 18:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2635\
Data File : 4p50271.D
Acq On : 27 Dec 2021 4:18 pm
Operator : kristis
Sample : op37108a-mb1
Misc : op37108a,e4p2635,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 28 09:50:35 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

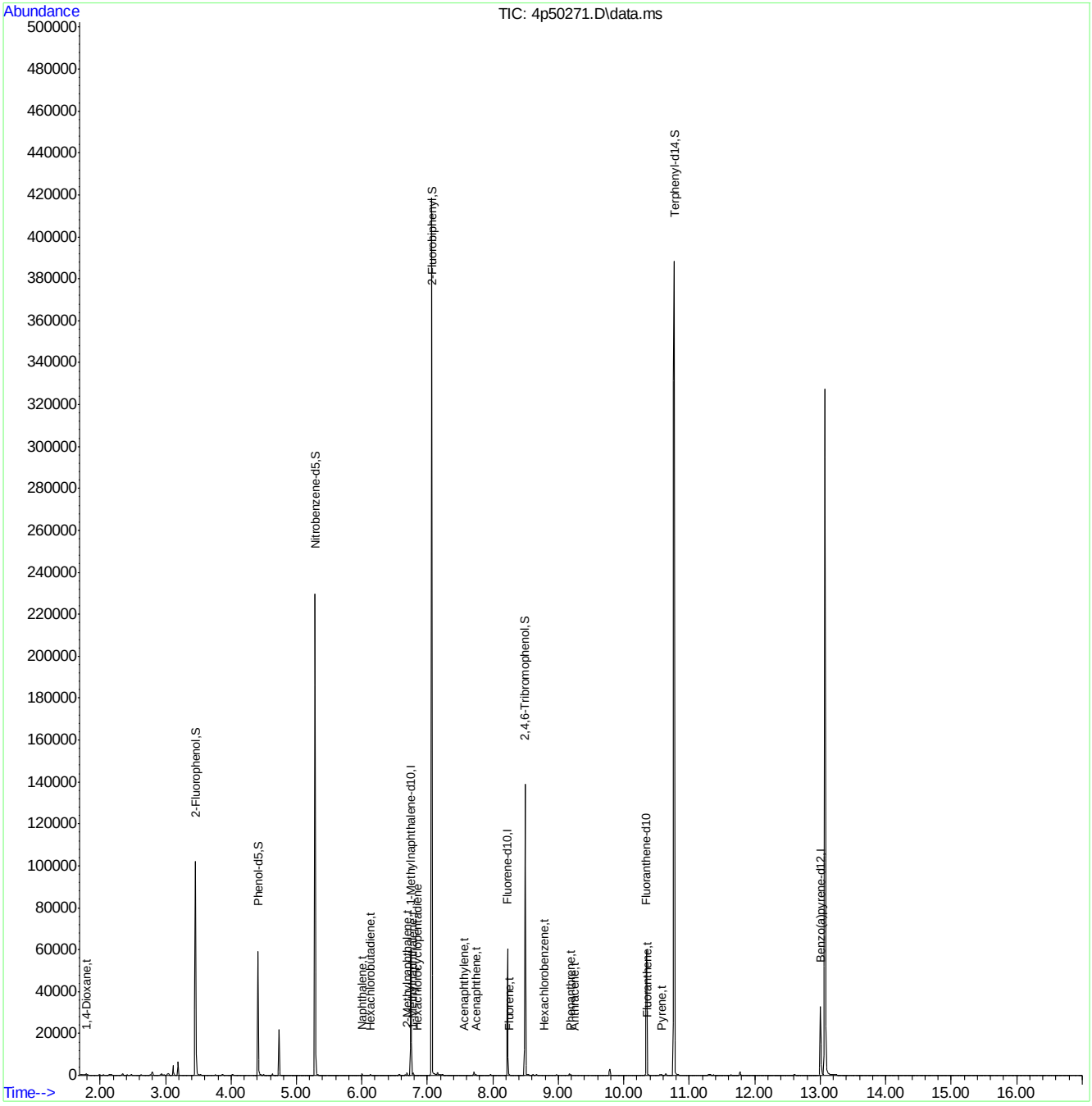
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	6.752	150	17822	800.00	ppm		0.00
13) Fluorene-d10	8.225	176	25516	800.00	ppm		0.00
20) Fluoranthene-d10	10.347	212	42111	800.00	ppm		0.00
30) Benzo(a)pyrene-d12	13.001	264	21761	800.00	ppm		0.00
System Monitoring Compounds							
3) 2-Fluorophenol	3.460	112	44821	4054.17	ppm		0.00
Spiked Amount 50.000			Recovery = 8108.34%				
4) Phenol-d5	4.413	99	42682	2035.01	ppm		0.00
Spiked Amount 50.000			Recovery = 4070.02%				
7) Nitrobenzene-d5	5.284	82	139496	8150.15	ppm		0.00
Spiked Amount 50.000			Recovery = 16300.30%				
14) 2-Fluorobiphenyl	7.068	172	212843	6539.53	ppm		0.00
Spiked Amount 50.000			Recovery = 13079.06%				
19) 2,4,6-Tribromophenol	8.489	330	53888	11066.02	ppm		0.00
Spiked Amount 50.000			Recovery = 22132.04%				
27) Terphenyl-d14	10.771	244	285528	9466.22	ppm		0.00
Spiked Amount 50.000			Recovery = 18932.44%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.791	88	220m	52.85	ppm		
8) Naphthalene	6.001	128	481m	9.43	ppm		
9) Hexachlorobutadiene	6.133	225	95	7.63	ppm		86
10) 2-Methylnaphthalene	6.686	141	431	16.17	ppm	#	65
11) 1-Methylnaphthalene	6.782	141	261	10.17	ppm	#	70
12) Hexachlorocyclopentadiene	6.841	237	67	6.48	ppm		91
15) Acenaphthylene	7.568	152	96	2.02	ppm		89
16) Acenaphthene	7.742	153	105	3.46	ppm		95
17) Fluorene	8.250	166	114	3.11	ppm		95
21) Hexachlorobenzene	8.786	284	57	4.29	ppm	#	77
23) Phenanthrene	9.191	178	252	4.44	ppm		82
24) Anthracene	9.246	178	108	1.99	ppm		95
25) Fluoranthene	10.356	202	168m	2.84	ppm		
26) Pyrene	10.577	202	142	2.19	ppm		74

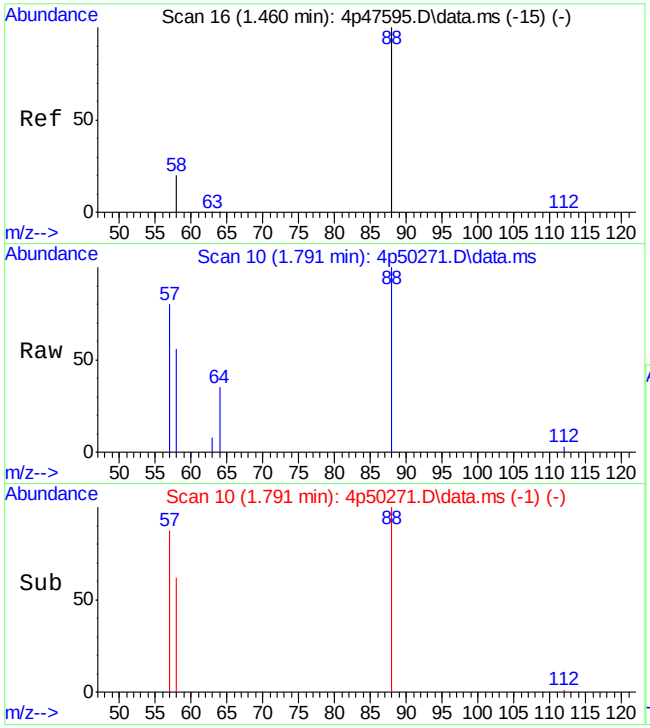
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2635\
Data File : 4p50271.D
Acq On : 27 Dec 2021 4:18 pm
Operator : kristis
Sample : op37108a-mb1
Misc : op37108a,e4p2635,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 28 09:50:35 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

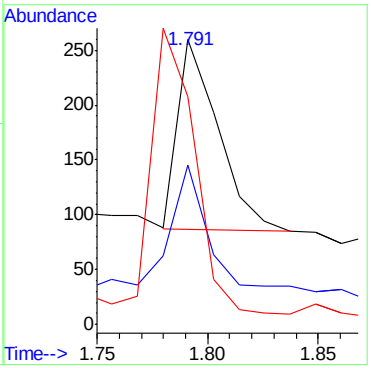


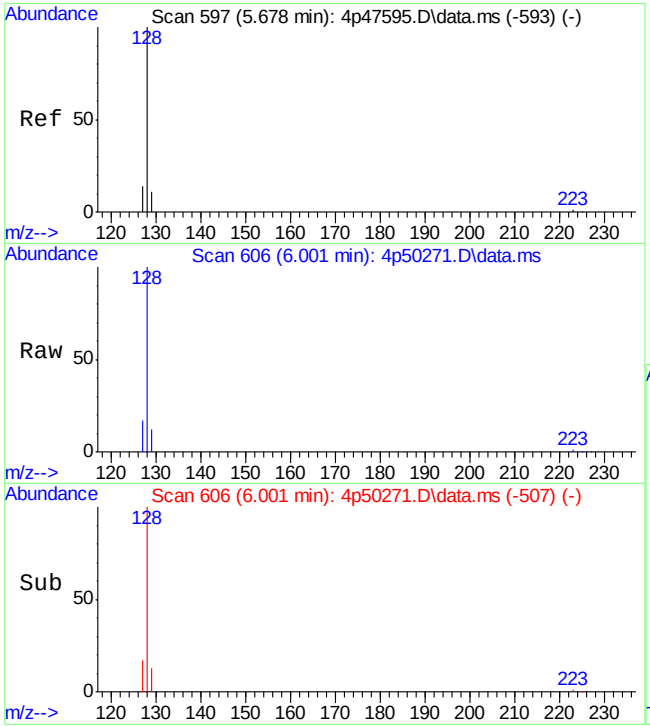


#2
1,4-Dioxane
Concen: 52.85 ppm m
RT: 1.791 min Scan# 10
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion: 88 Resp: 220

Ion	Ratio	Lower	Upper
88	100		
58	55.8	0.1	40.1#
57	80.0	0.0	24.7#

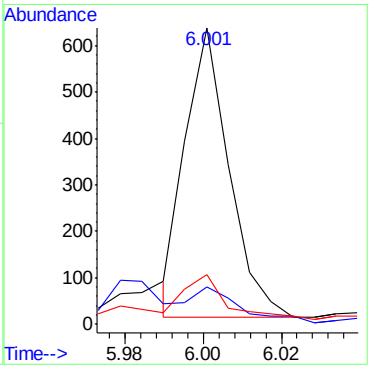


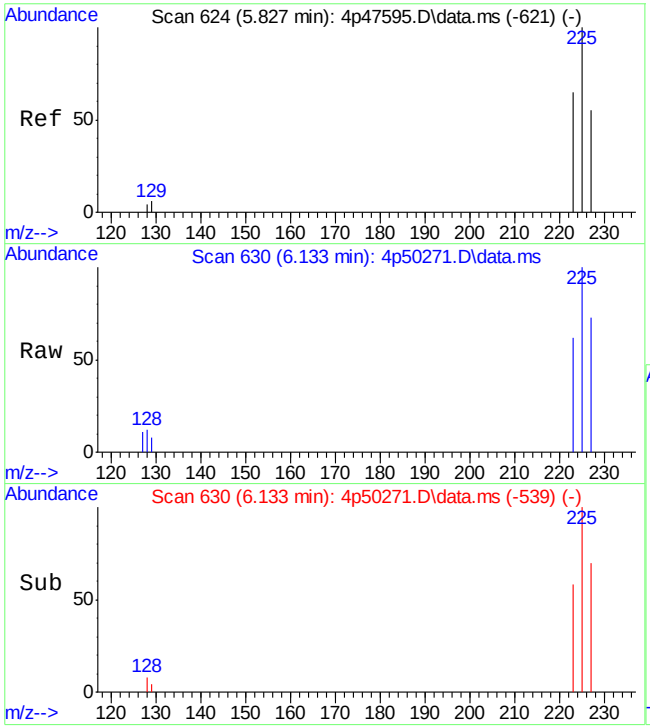


#8
Naphthalene
Concen: 9.43 ppm m
RT: 6.001 min Scan# 606
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:128 Resp: 481

Ion	Ratio	Lower	Upper
128	100		
129	12.4	0.0	41.1
127	16.6	0.0	42.0

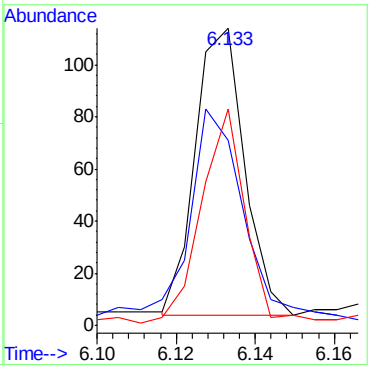


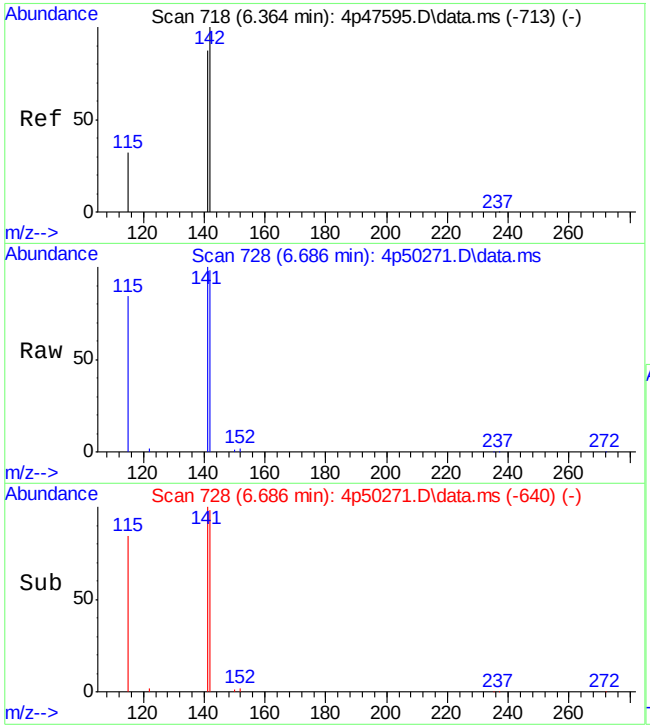


#9
Hexachlorobutadiene
Concen: 7.63 ppm
RT: 6.133 min Scan# 630
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:225 Resp: 95

Ion	Ratio	Lower	Upper
225	100		
223	57.1	35.2	95.2
227	72.6	29.1	89.1

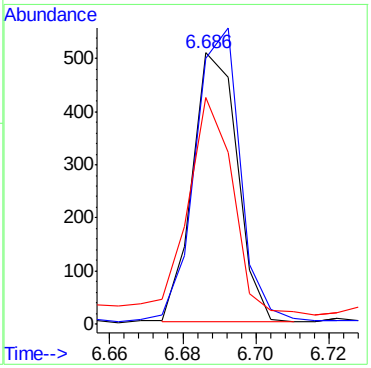


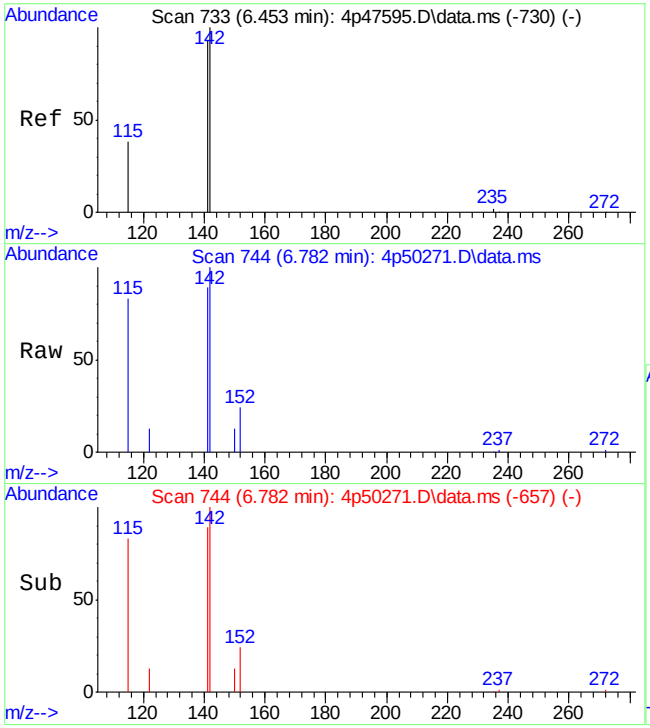


#10
2-Methylnaphthalene
Concen: 16.17 ppm
RT: 6.686 min Scan# 728
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:141 Resp: 431

Ion	Ratio	Lower	Upper
141	100		
142	96.4	96.1	156.1
115	77.9	7.9	67.9#

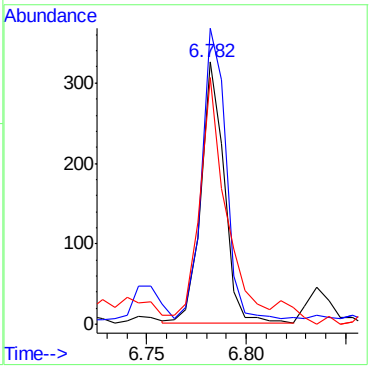


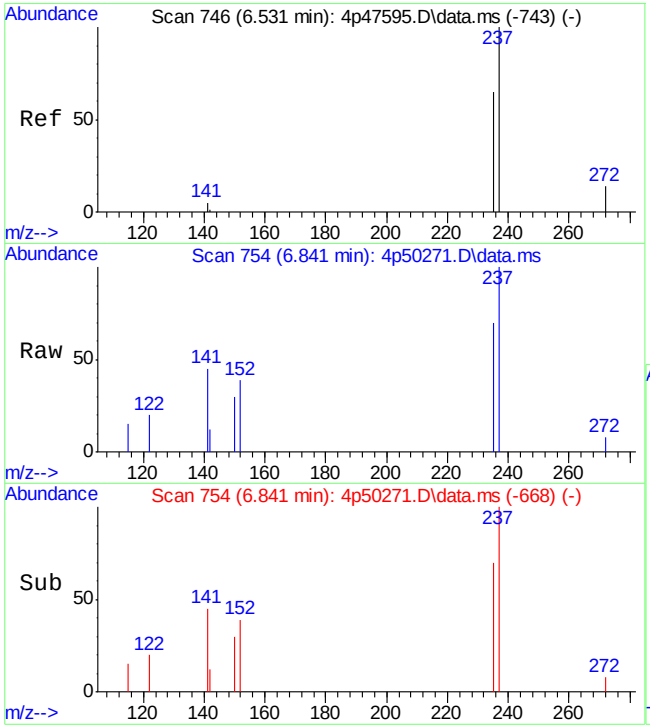


#11
1-Methylnaphthalene
Concen: 10.17 ppm
RT: 6.782 min Scan# 744
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:141 Resp: 261

Ion	Ratio	Lower	Upper
141	100		
142	108.8	93.8	153.8
115	90.2	9.4	69.4#

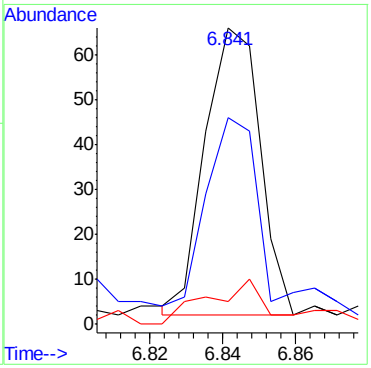


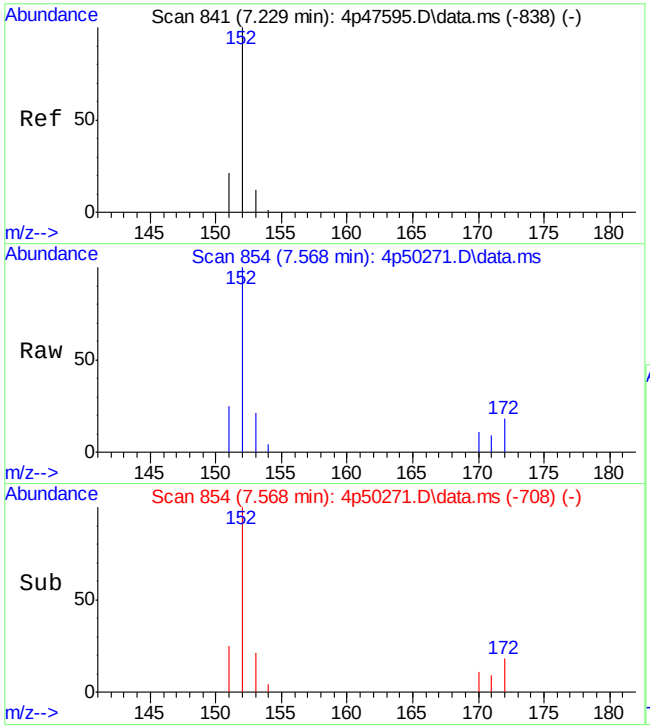


#12
Hexachlorocyclopentadiene
Concen: 6.48 ppm
RT: 6.841 min Scan# 754
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:237 Resp: 67

Ion	Ratio	Lower	Upper
237	100		
235	64.3	29.4	89.4
272	6.3	0.0	44.1

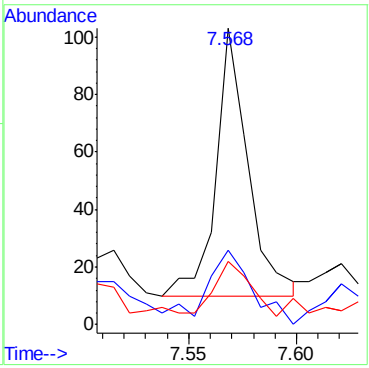


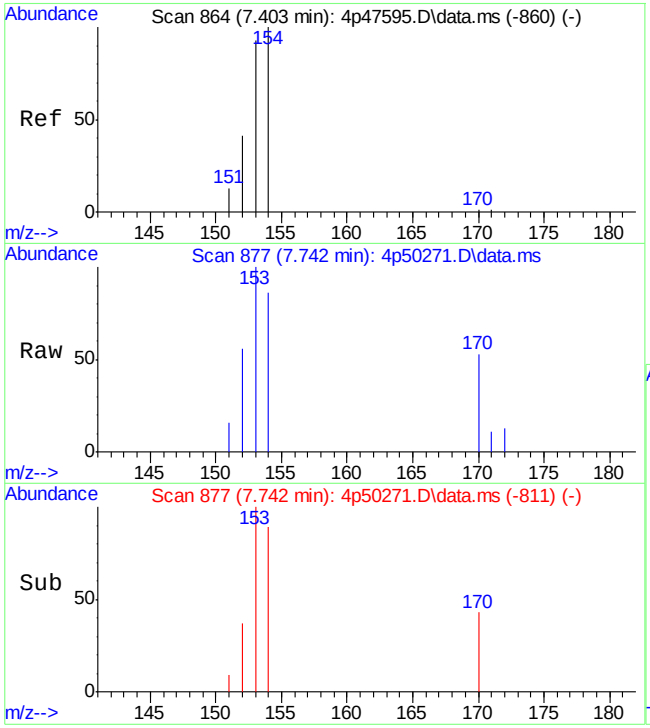


#15
Acenaphthylene
Concen: 2.02 ppm
RT: 7.568 min Scan# 854
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:152 Resp: 96

Ion	Ratio	Lower	Upper
152	100		
151	26.5	0.0	50.8
153	16.0	0.0	42.2

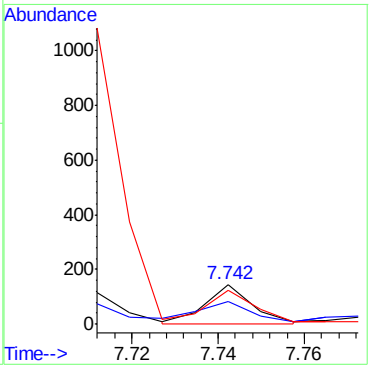


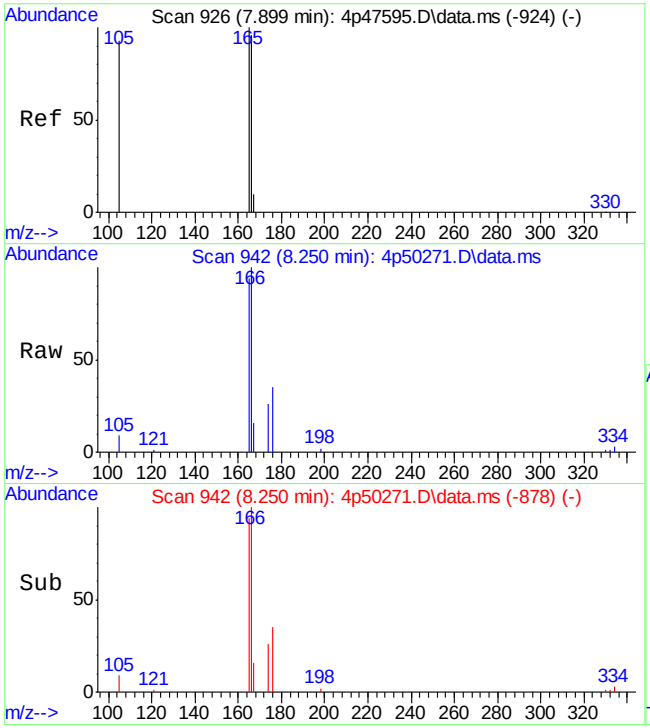


#16
Acenaphthene
Concen: 3.46 ppm
RT: 7.742 min Scan# 877
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:153 Resp: 105

Ion	Ratio	Lower	Upper
153	100		
152	48.7	18.5	78.5
154	82.5	59.1	119.1

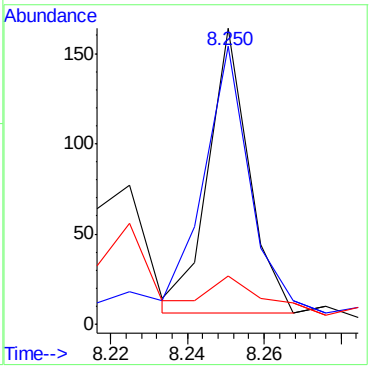


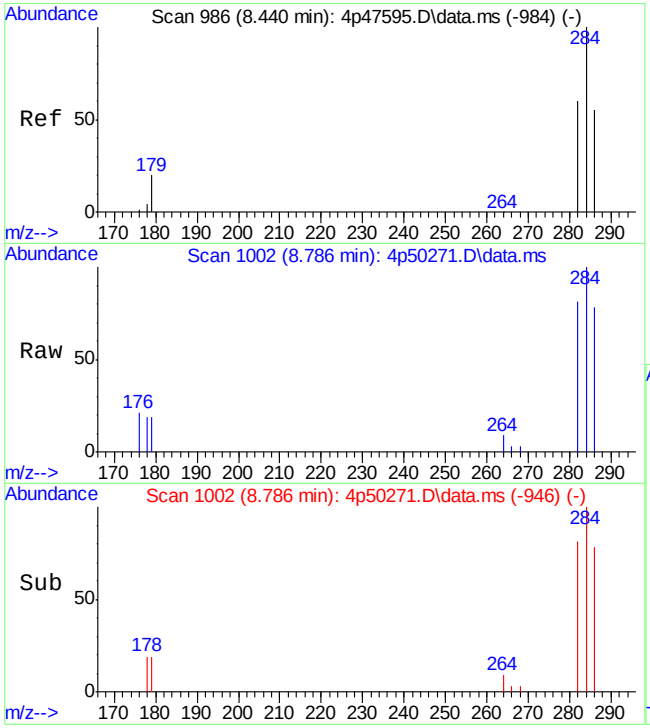


#17
Fluorene
Concen: 3.11 ppm
RT: 8.250 min Scan# 942
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:166 Resp: 114

Ion	Ratio	Lower	Upper
166	100		
165	91.6	66.9	126.9
167	9.4	0.0	41.7

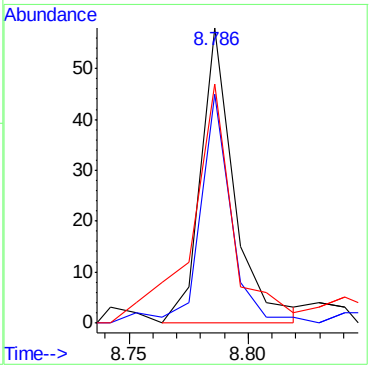


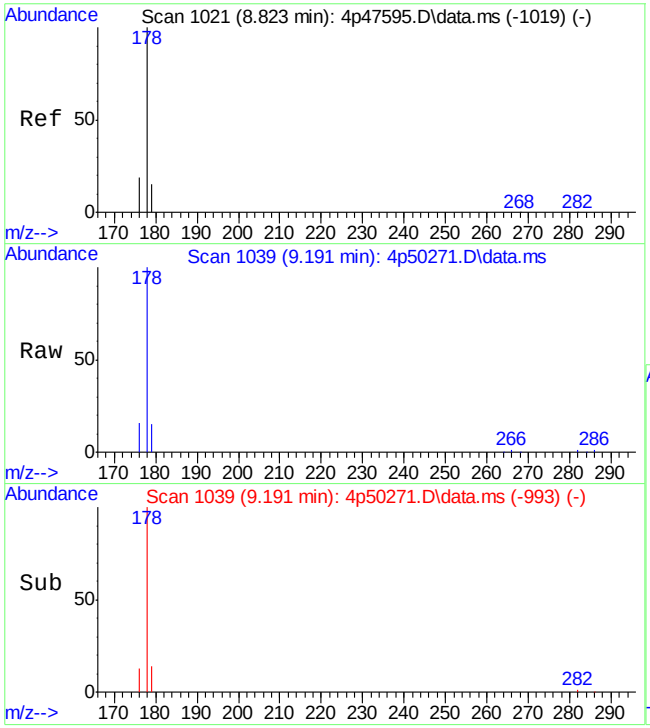


#21
Hexachlorobenzene
Concen: 4.29 ppm
RT: 8.786 min Scan# 1002
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:284 Resp: 57

Ion	Ratio	Lower	Upper
284	100		
286	77.9	57.8	117.8
282	74.3	13.6	73.6#

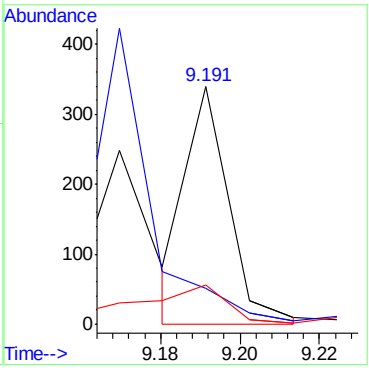


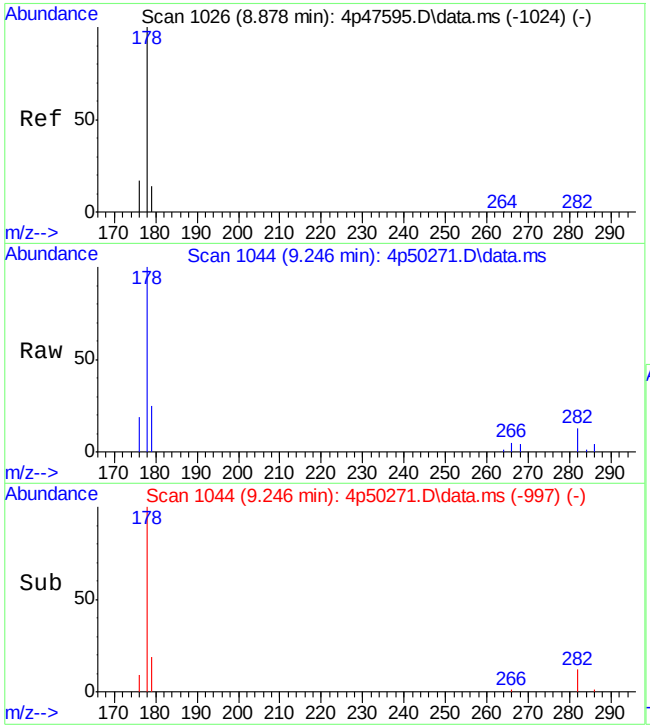


#23
Phenanthrene
Concen: 4.44 ppm
RT: 9.191 min Scan# 1039
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:178 Resp: 252

Ion	Ratio	Lower	Upper
178	100		
179	3.7	0.0	46.0
176	13.1	0.0	45.6

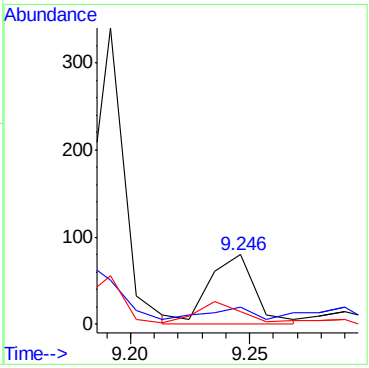


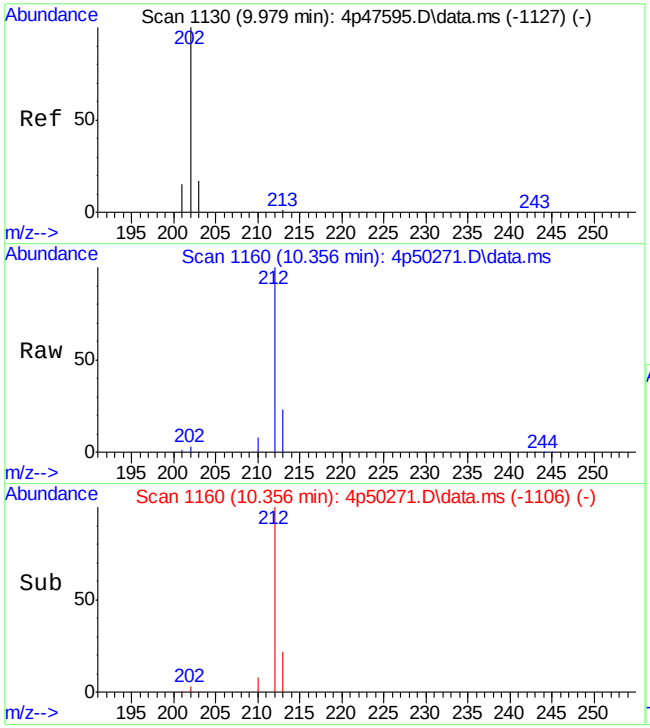


#24
Anthracene
Concen: 1.99 ppm
RT: 9.246 min Scan# 1044
Delta R.T. 0.011 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:178 Resp: 108

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	43.0
176	16.7	0.0	48.4

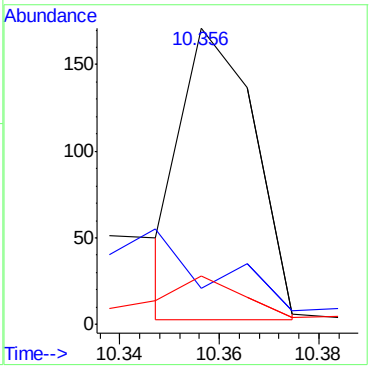


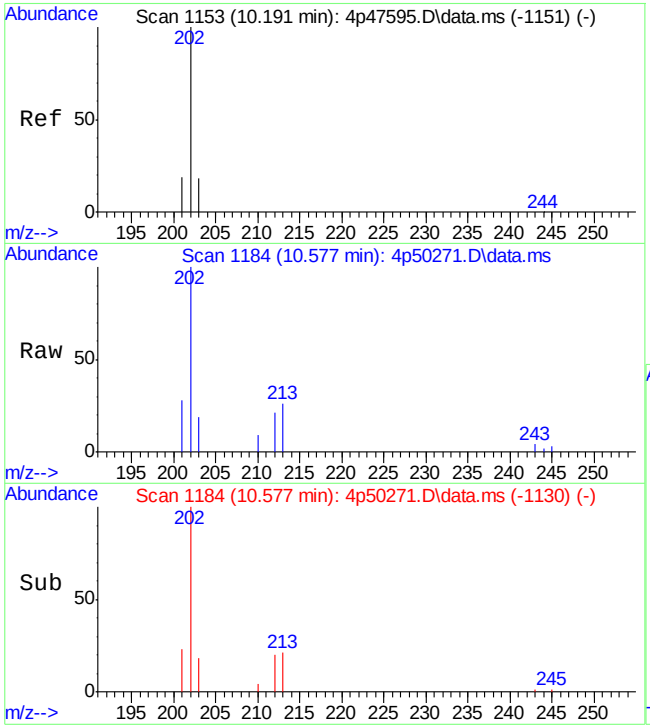


#25
Fluoranthene
Concen: 2.84 ppm m
RT: 10.356 min Scan# 1160
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:202 Resp: 168

Ion	Ratio	Lower	Upper
202	100		
203	12.3	0.0	47.6
201	16.4	0.0	42.9

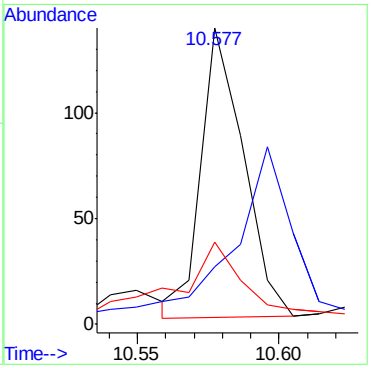




#26
Pyrene
Concen: 2.19 ppm
RT: 10.577 min Scan# 1184
Delta R.T. 0.000 min
Lab File: 4p50271.D
Acq: 27 Dec 2021 4:18 pm

Tgt Ion:202 Resp: 142

Ion	Ratio	Lower	Upper
202	100		
203	0.0	0.0	47.6
201	20.4	0.0	46.0



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
12/29/21 19:08

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2636\
Data File : 4p50298.D
Acq On : 28 Dec 2021 1:32 pm
Operator : kristis
Sample : op37113a-mb1
Misc : op37113a,e4p2636,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 29 09:45:29 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration

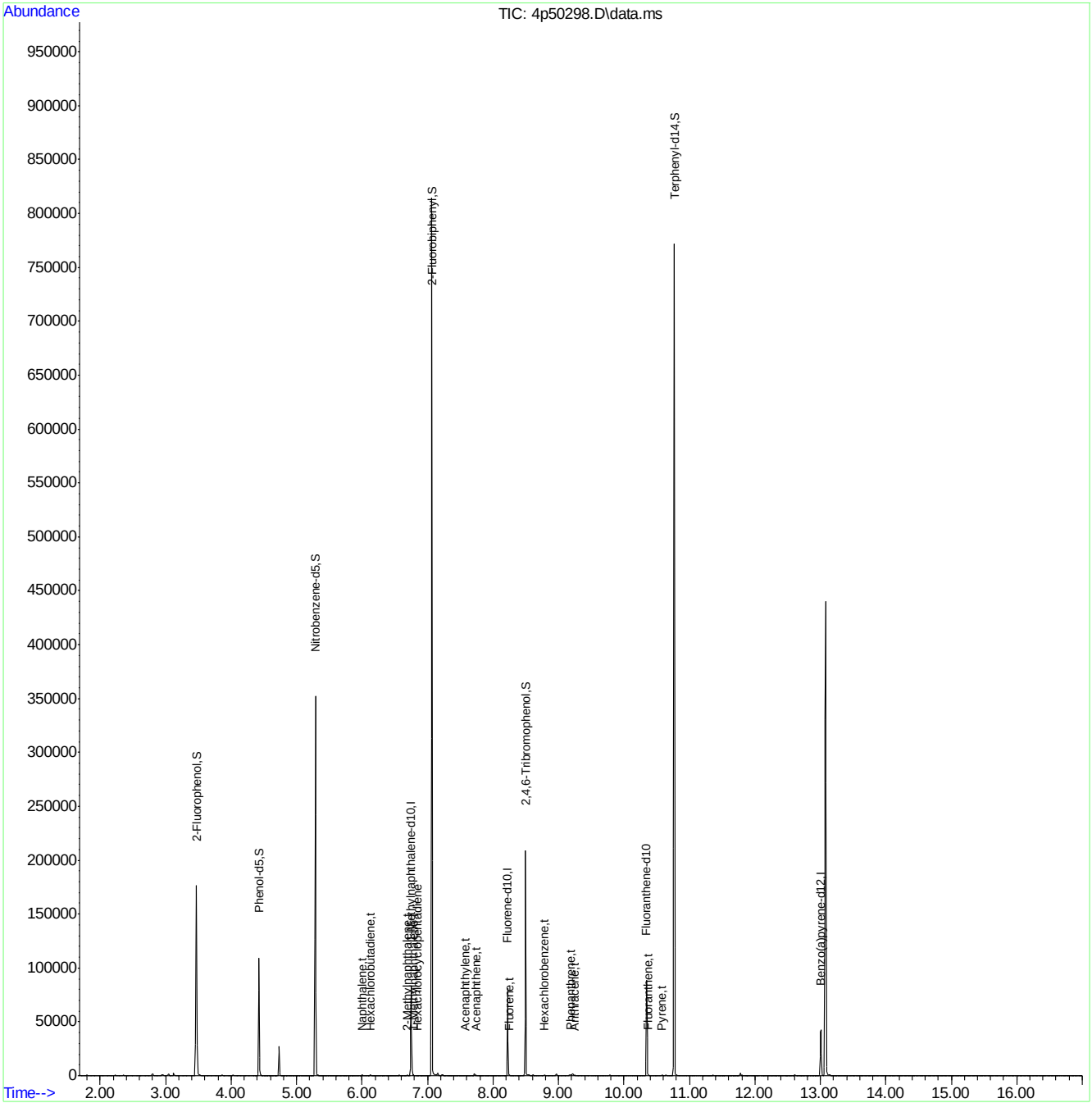
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	6.752	150	22048	800.00 ppm	0.00
13) Fluorene-d10	8.225	176	34002	800.00 ppm	0.00
20) Fluoranthene-d10	10.347	212	59138	800.00 ppm	0.00
30) Benzo(a)pyrene-d12	13.010	264	27041	800.00 ppm	0.01
System Monitoring Compounds					
3) 2-Fluorophenol	3.471	112	70147	5128.82 ppm	0.01
Spiked Amount 50.000			Recovery	= 10257.64%	
4) Phenol-d5	4.427	99	74654	2877.15 ppm	0.02
Spiked Amount 50.000			Recovery	= 5754.30%	
7) Nitrobenzene-d5	5.288	82	210067	9920.85 ppm	0.00
Spiked Amount 50.000			Recovery	= 19841.70%	
14) 2-Fluorobiphenyl	7.068	172	350160	8073.50 ppm	0.00
Spiked Amount 50.000			Recovery	= 16147.00%	
19) 2,4,6-Tribromophenol	8.497	330	65878	10151.91 ppm	0.00
Spiked Amount 50.000			Recovery	= 20303.82%	
27) Terphenyl-d14	10.770	244	429570	10141.24 ppm	0.00
Spiked Amount 50.000			Recovery	= 20282.48%	
Target Compounds					Qvalue
8) Naphthalene	6.001	128	399	6.32 ppm	87
9) Hexachlorobutadiene	6.133	225	214	13.89 ppm	88
10) 2-Methylnaphthalene	6.692	141	257	7.79 ppm	87
11) 1-Methylnaphthalene	6.787	141	187	5.89 ppm	81
12) Hexachlorocyclopentadiene	6.841	237	142	11.10 ppm	87
15) Acenaphthylene	7.575	152	138	2.18 ppm	88
16) Acenaphthene	7.742	153	176	4.35 ppm	78
17) Fluorene	8.250	166	203	4.16 ppm	96
21) Hexachlorobenzene	8.786	284	196	10.50 ppm	75
23) Phenanthrene	9.191	178	744m	9.34 ppm	
24) Anthracene	9.246	178	365	4.78 ppm	96
25) Fluoranthene	10.365	202	512	6.17 ppm	91
26) Pyrene	10.586	202	386	4.23 ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

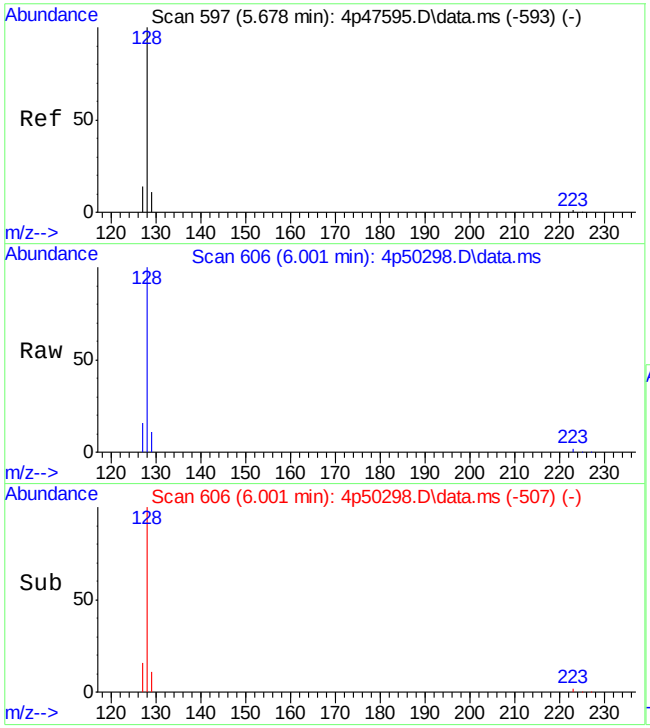
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P2636\
Data File : 4p50298.D
Acq On : 28 Dec 2021 1:32 pm
Operator : kristis
Sample : op37113a-mb1
Misc : op37113a,e4p2636,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 29 09:45:29 2021
Quant Method : C:\MSDCHEM\1\METHODS\M4P2551SIMLVI.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Dec 28 09:37:18 2021
Response via : Initial Calibration



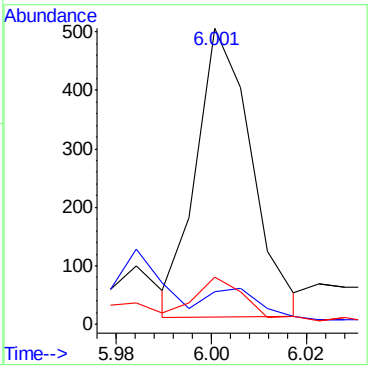
M4P2551SIMLVI.M Wed Dec 29 09:45:37 2021 YING Page: 2

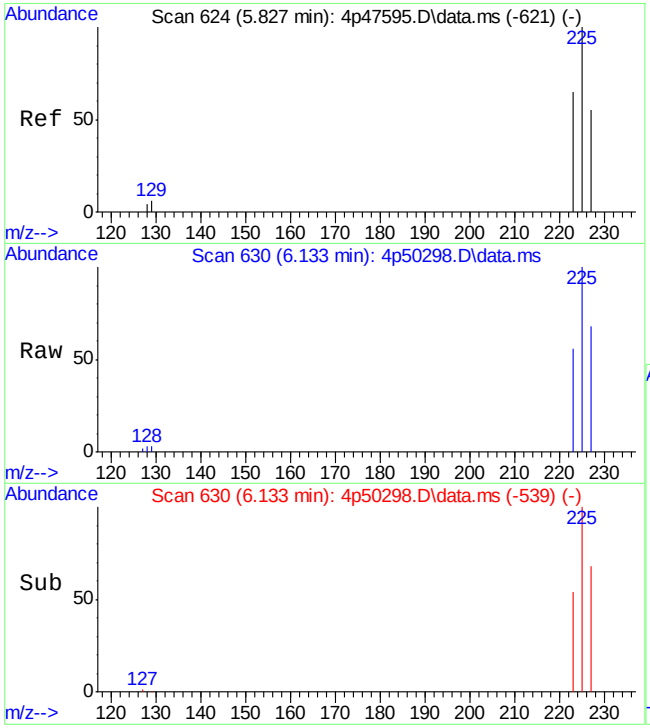


#8
Naphthalene
Concen: 6.32 ppm
RT: 6.001 min Scan# 606
Delta R.T. 0.000 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:128 Resp: 399

Ion	Ratio	Lower	Upper
128	100		
129	3.1	0.0	41.1
127	14.2	0.0	42.0

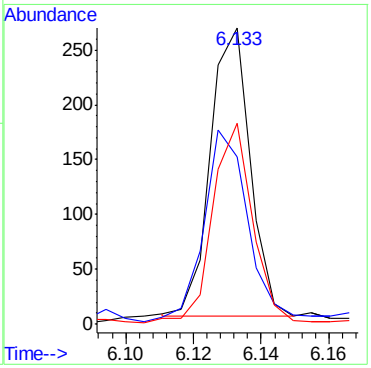


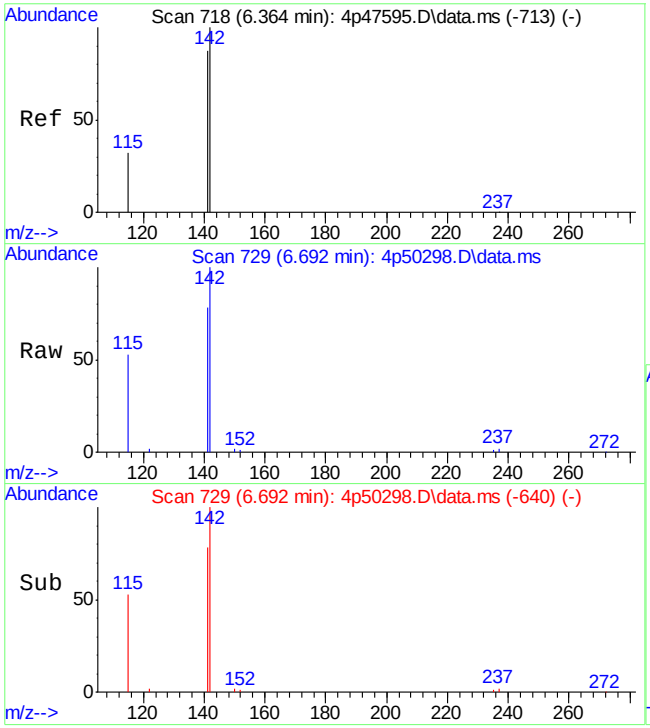


#9
Hexachlorobutadiene
Concen: 13.89 ppm
RT: 6.133 min Scan# 630
Delta R.T. 0.000 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:225 Resp: 214

Ion	Ratio	Lower	Upper
225	100		
223	55.3	35.2	95.2
227	68.3	29.1	89.1

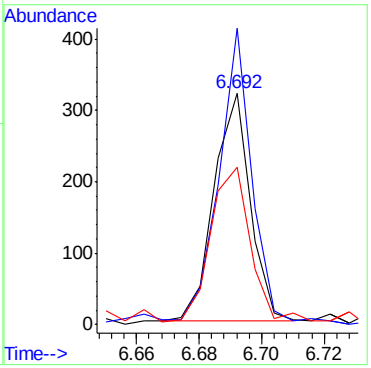


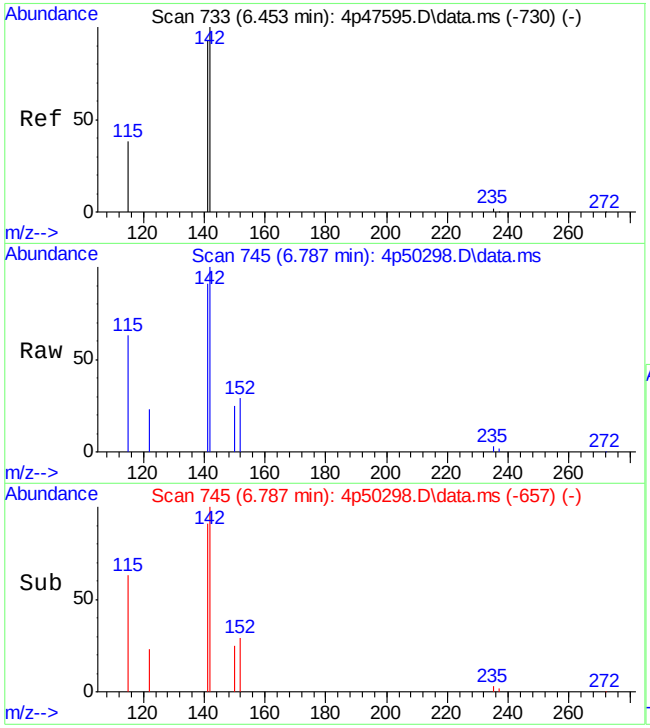


#10
2-Methylnaphthalene
Concen: 7.79 ppm
RT: 6.692 min Scan# 729
Delta R.T. 0.006 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:141 Resp: 257

Ion	Ratio	Lower	Upper
141	100		
142	128.7	96.1	156.1
115	66.1	7.9	67.9

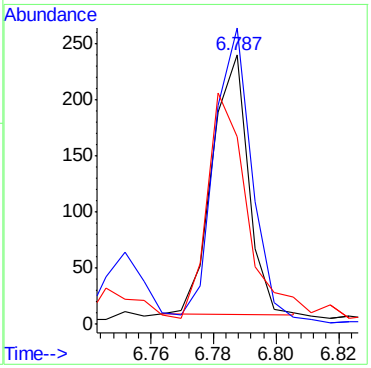


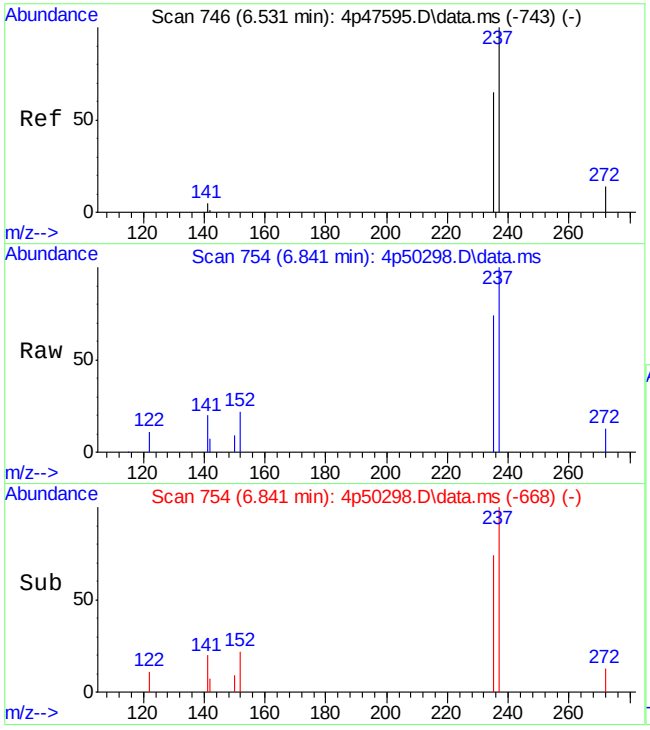


#11
1-Methylnaphthalene
Concen: 5.89 ppm
RT: 6.787 min Scan# 745
Delta R.T. 0.006 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:141 Resp: 187

Ion	Ratio	Lower	Upper
141	100		
142	111.1	93.8	153.8
115	65.5	9.4	69.4

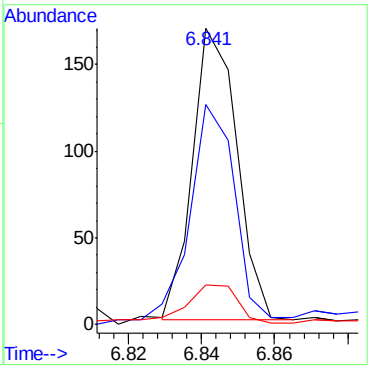


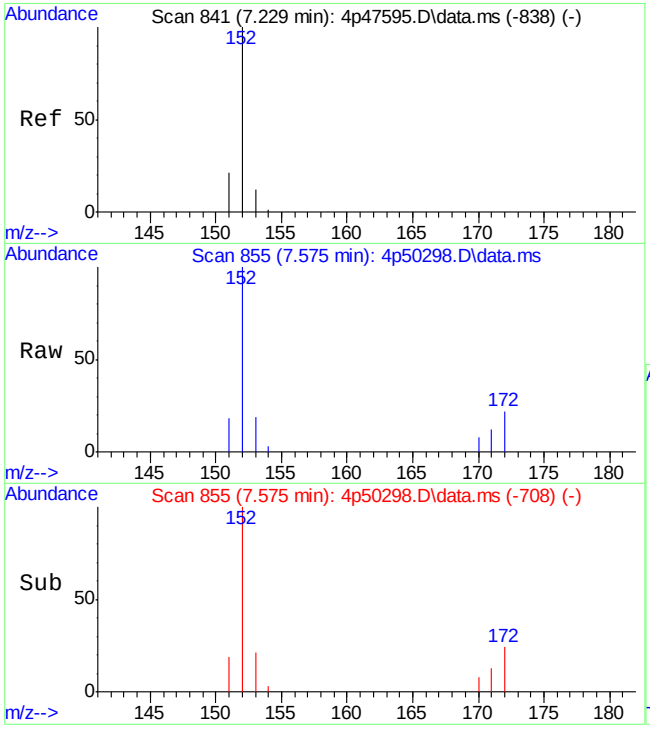


#12
Hexachlorocyclopentadiene
Concen: 11.10 ppm
RT: 6.841 min Scan# 754
Delta R.T. 0.000 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:237 Resp: 142

Ion	Ratio	Lower	Upper
237	100		
235	71.0	29.4	89.4
272	12.2	0.0	44.1

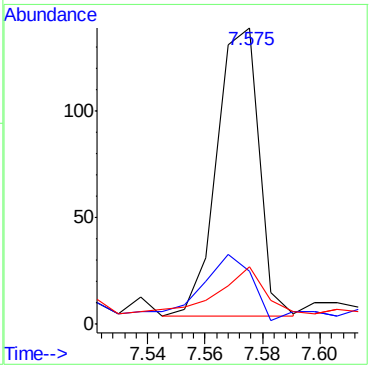


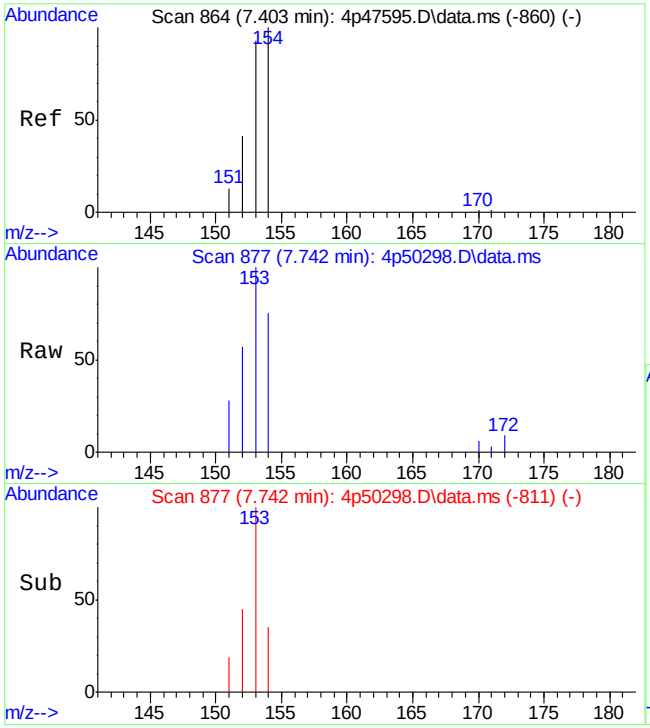


#15
Acenaphthylene
Concen: 2.18 ppm
RT: 7.575 min Scan# 855
Delta R.T. 0.008 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:152 Resp: 138

Ion	Ratio	Lower	Upper
152	100		
151	14.1	0.0	50.8
153	15.2	0.0	42.2

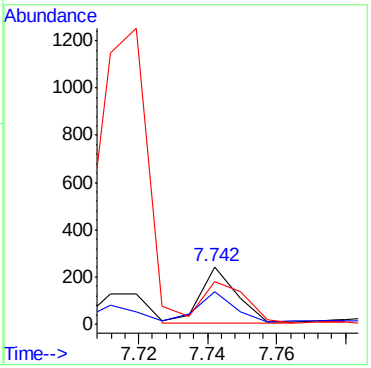


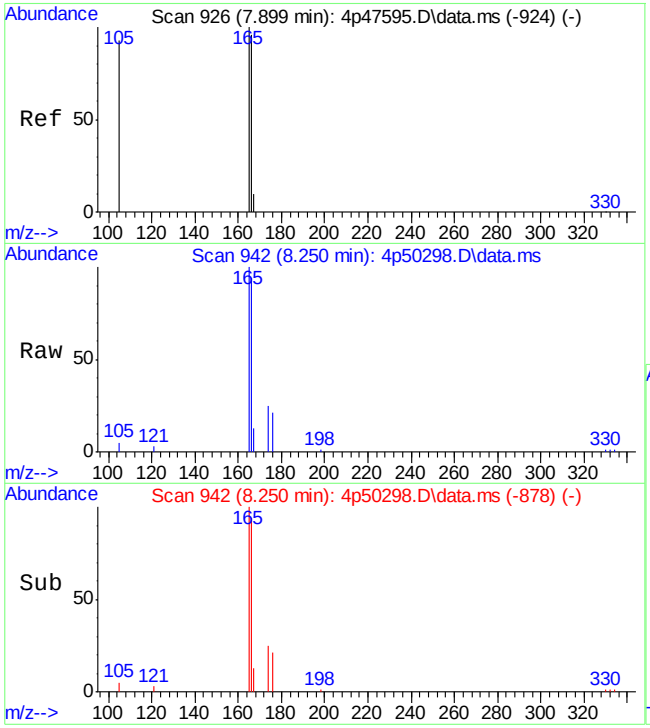


#16
Acenaphthene
Concen: 4.35 ppm
RT: 7.742 min Scan# 877
Delta R.T. 0.000 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:153 Resp: 176

Ion	Ratio	Lower	Upper
153	100		
152	54.2	18.5	78.5
154	61.1	59.1	119.1

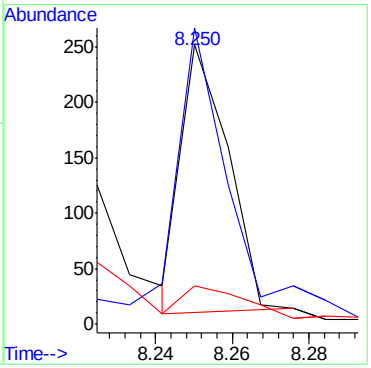


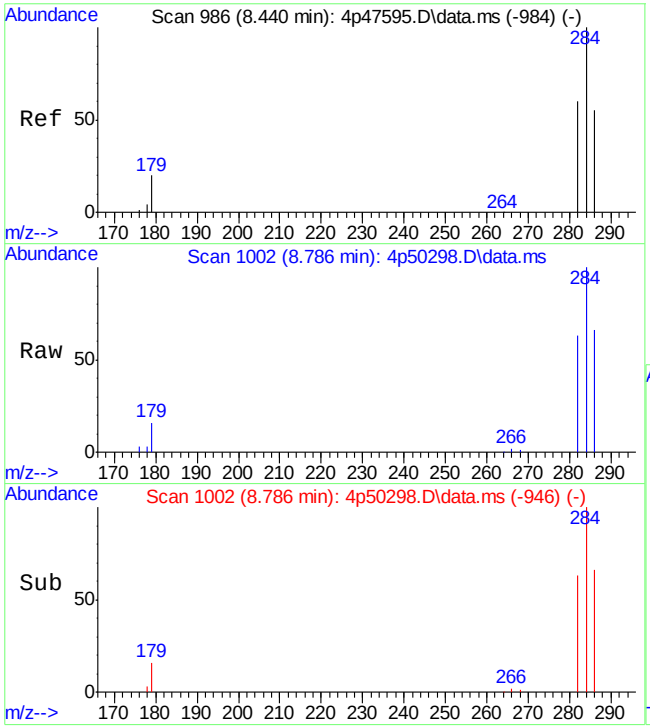


#17
Fluorene
Concen: 4.16 ppm
RT: 8.250 min Scan# 942
Delta R.T. 0.000 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:166 Resp: 203

Ion	Ratio	Lower	Upper
166	100		
165	101.5	66.9	126.9
167	12.3	0.0	41.7

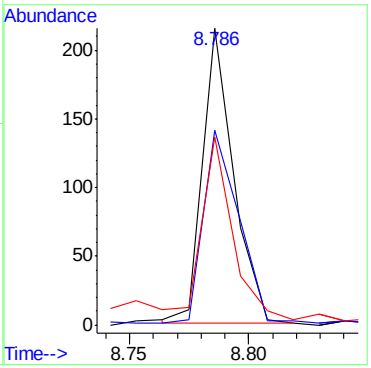


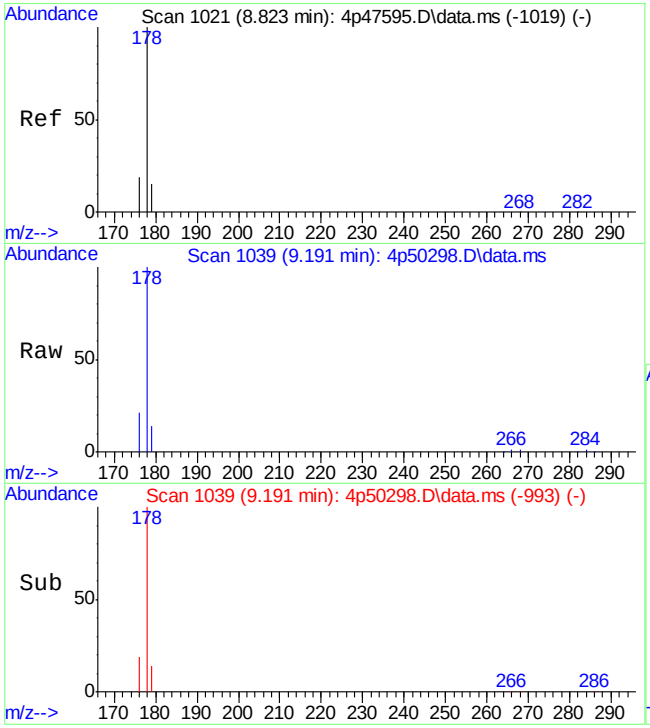


#21
Hexachlorobenzene
Concen: 10.50 ppm
RT: 8.786 min Scan# 1002
Delta R.T. 0.000 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:284 Resp: 196

Ion	Ratio	Lower	Upper
284	100		
286	65.6	57.8	117.8
282	60.7	13.6	73.6

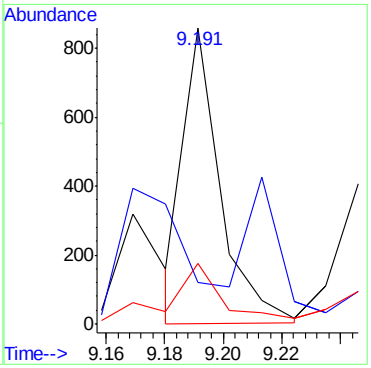


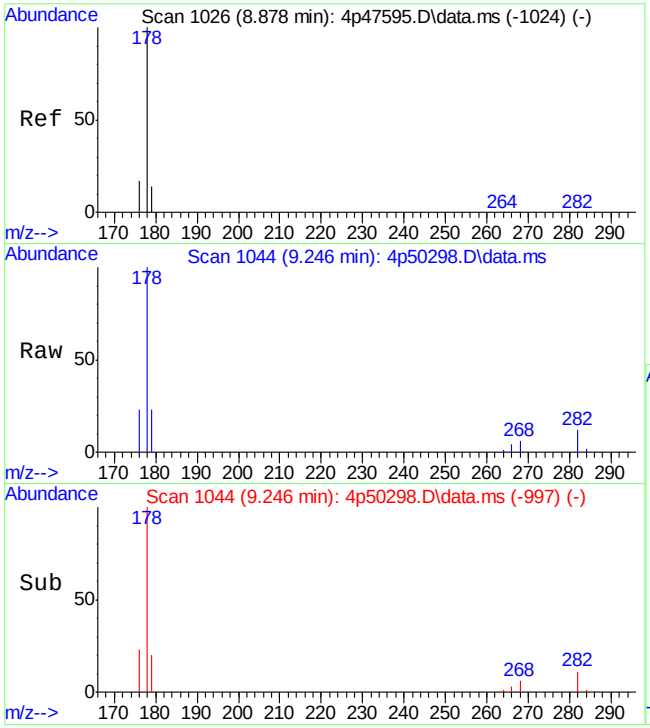


#23
Phenanthrene
Concen: 9.34 ppm m
RT: 9.191 min Scan# 1039
Delta R.T. 0.000 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:178 Resp: 744

Ion	Ratio	Lower	Upper
178	100		
179	14.2	0.0	46.0
176	20.6	0.0	45.6

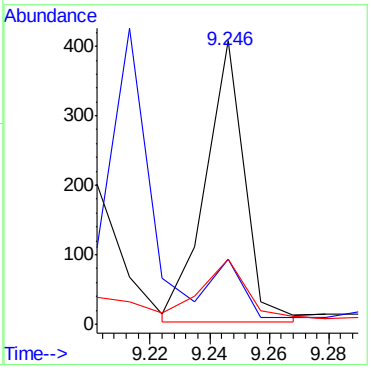


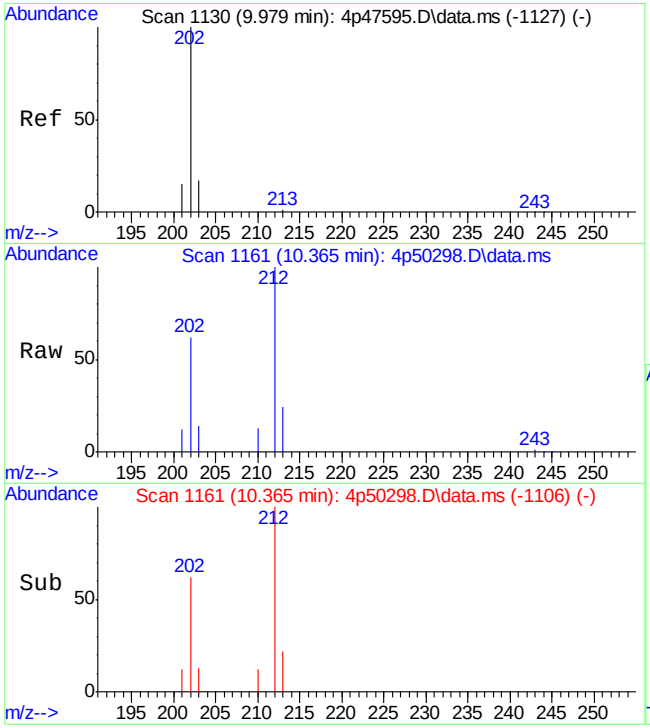


#24
Anthracene
Concen: 4.78 ppm
RT: 9.246 min Scan# 1044
Delta R.T. 0.011 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:178 Resp: 365

Ion	Ratio	Lower	Upper
178	100		
179	14.2	0.0	43.0
176	20.3	0.0	48.4

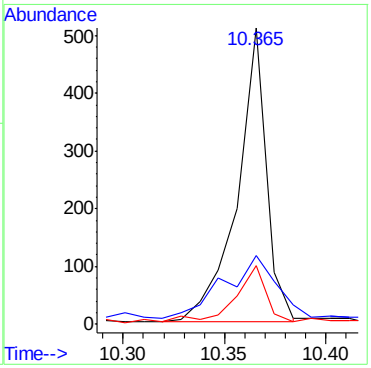


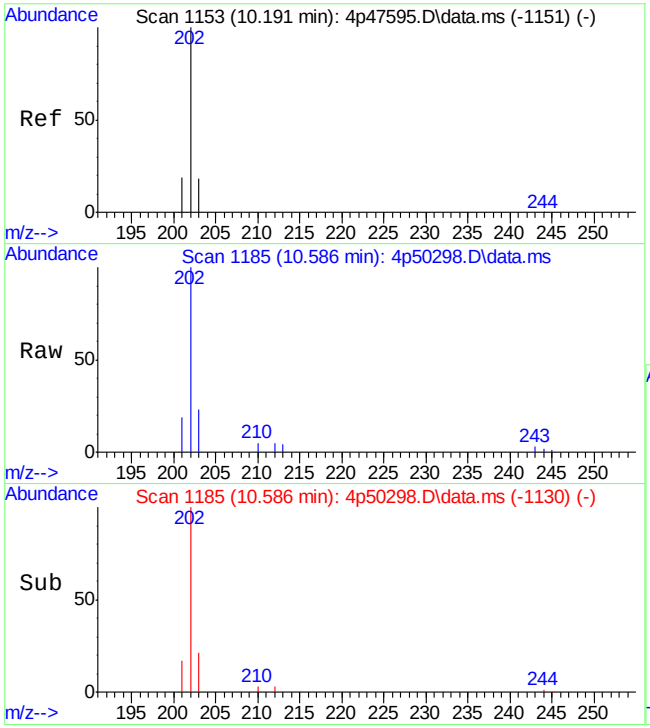


#25
Fluoranthene
Concen: 6.17 ppm
RT: 10.365 min Scan# 1161
Delta R.T. 0.009 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:202 Resp: 512

Ion	Ratio	Lower	Upper
202	100		
203	19.2	0.0	47.6
201	19.2	0.0	42.9

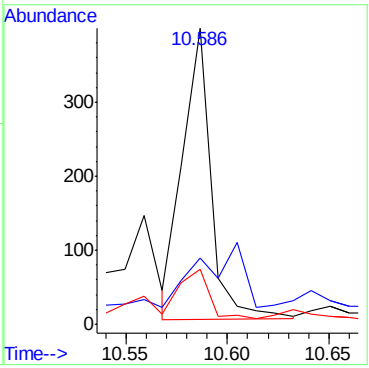




#26
Pyrene
Concen: 4.23 ppm
RT: 10.586 min Scan# 1185
Delta R.T. 0.009 min
Lab File: 4p50298.D
Acq: 28 Dec 2021 1:32 pm

Tgt Ion:202 Resp: 386

Ion	Ratio	Lower	Upper
202	100		
203	16.8	0.0	47.6
201	15.3	0.0	46.0



Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80475.d
Acq On : 17 Dec 2021 10:57 pm
Operator : chriss2
Sample : op37108-mb1 Inst : MS5P
Misc : op37108,e5p3810,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 01:26:17 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

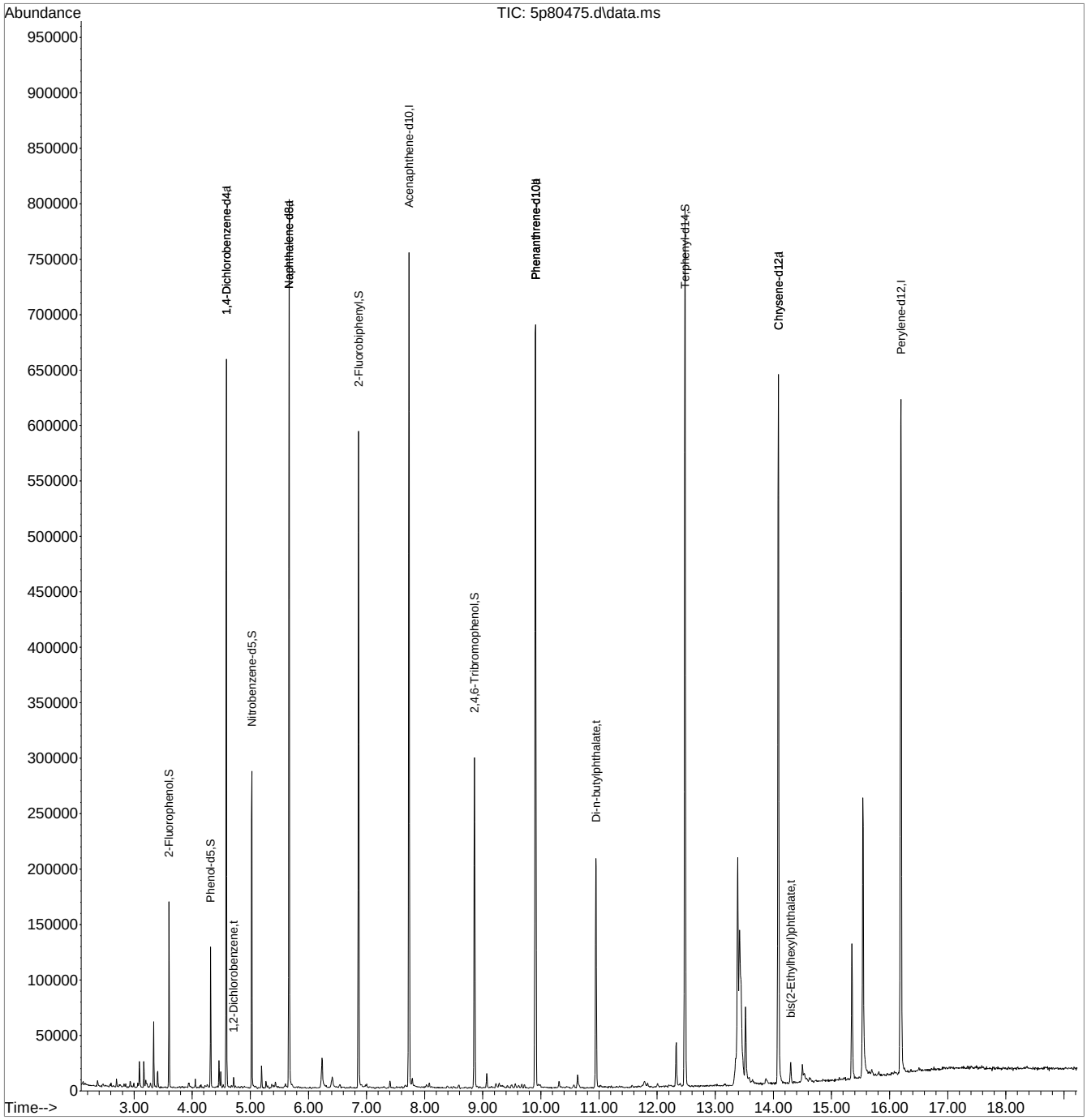
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.588	152	84323	8.00	ppm	0.00
24) Naphthalene-d8	5.667	136	329905	8.00	ppm	0.00
46) Acenaphthene-d10	7.729	164	189067	8.00	ppm	0.00
69) Phenanthrene-d10	9.909	188	331544	8.00	ppm	0.00
84) Chrysene-d12	14.086	240	283727	8.00	ppm	0.00
93) Perylene-d12	16.196	264	279566	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.588	152	84323	8.00	ppm	0.00
105) Phenanthrene-d10a	9.909	188	331544	8.00	ppm	0.00
107) Naphthalene-d8a	5.667	136	329905	8.00	ppm	0.00
109) Chrysene-d12a	14.086	240	283727	8.00	ppm	0.00
111) Phenanthrene-d10b	9.909	188	331544	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.599	112	38477	2.82	ppm	0.00
Spiked Amount 10.000			Recovery = 28.20%			
8) Phenol-d5	4.315	99	32480	1.85	ppm	0.00
Spiked Amount 10.000			Recovery = 18.50%			
25) Nitrobenzene-d5	5.026	82	74500	6.00	ppm	0.00
Spiked Amount 10.000			Recovery = 60.00%			
51) 2-Fluorobiphenyl	6.863	172	197758	6.38	ppm	0.00
Spiked Amount 10.000			Recovery = 63.80%			
74) 2,4,6-Tribromophenol	8.856	330	35067	8.32	ppm	0.00
Spiked Amount 10.000			Recovery = 83.20%			
87) Terphenyl-d14	12.478	244	332313	9.40	ppm	0.00
Spiked Amount 10.000			Recovery = 94.00%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
17) 1,2-Dichlorobenzene	4.711	146	1899	0.13	ppm	85
81) Di-n-butylphthalate	10.950	149	138476	2.61	ppm	99
92) bis(2-Ethylhexyl)phtha...	14.300	149	8111	0.28	ppm	98

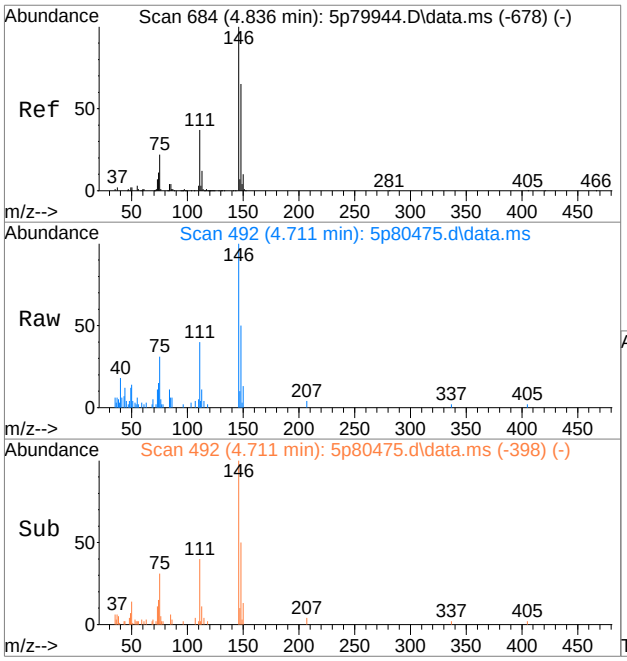
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\jonkm\122021\e5p3810\
Data File : 5p80475.d
Acq On : 17 Dec 2021 10:57 pm
Operator : chriss2
Sample : op37108-mb1 Inst : MS5P
Misc : op37108,e5p3810,250,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 20 01:26:17 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Sun Dec 19 23:46:51 2021
Response via : Initial Calibration

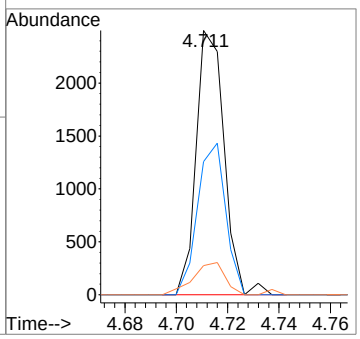


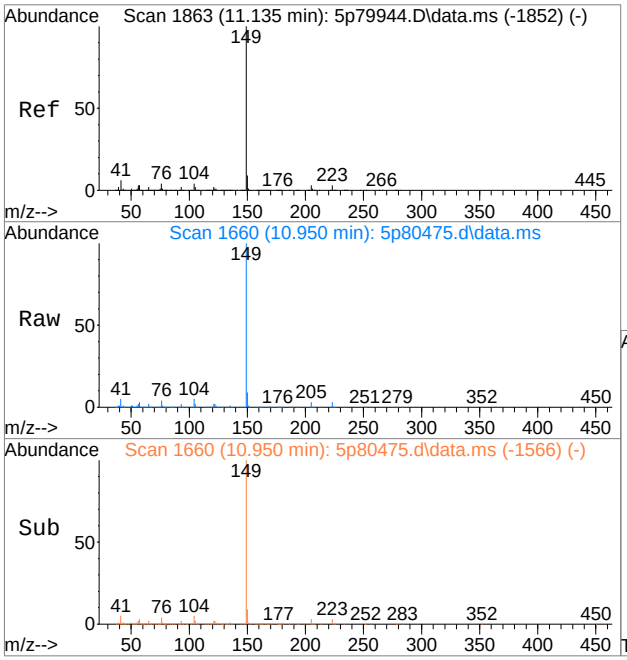


#17
1,2-Dichlorobenzene
Concen: 0.13 ppm
RT: 4.711 min Scan# 492
Delta R.T. 0.000 min
Lab File: 5p80475.d
Acq: 17 Dec 2021 10:57 pm

Tgt Ion:146 Resp: 1899

Ion	Ratio	Lower	Upper
146	100		
148	50.3	33.7	93.7
113	11.0	0.0	42.3

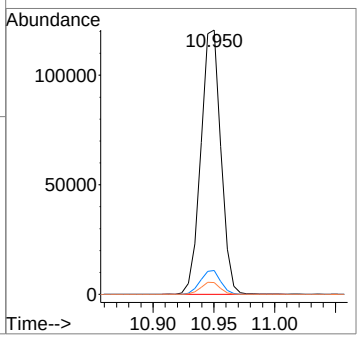


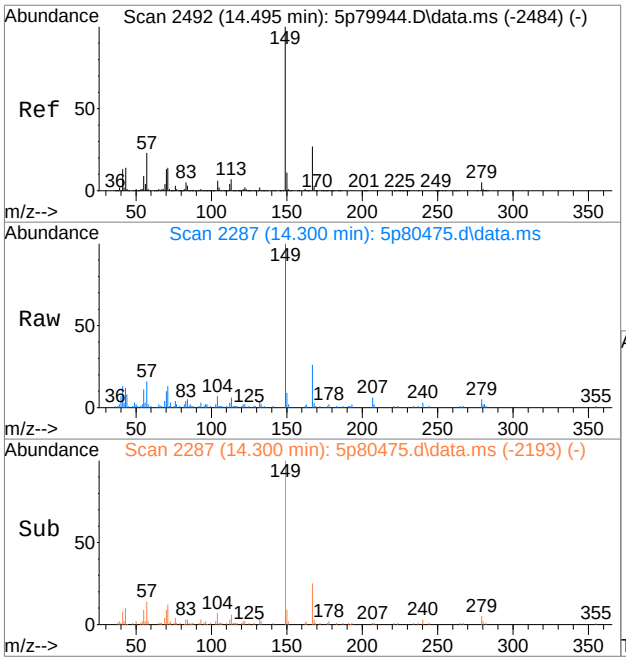


#81
Di-n-butylphthalate
Concen: 2.61 ppm
RT: 10.950 min Scan# 1660
Delta R.T. 0.000 min
Lab File: 5p80475.d
Acq: 17 Dec 2021 10:57 pm

Tgt Ion:149 Resp: 138476

Ion	Ratio	Lower	Upper
149	100		
150	9.0	0.0	38.9
104	4.5	0.0	34.2

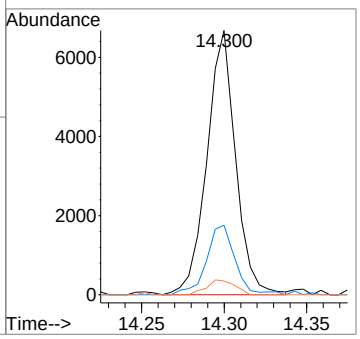




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.28 ppm
RT: 14.300 min Scan# 2287
Delta R.T. 0.000 min
Lab File: 5p80475.d
Acq: 17 Dec 2021 10:57 pm

Tgt Ion:149 Resp: 8111

Ion	Ratio	Lower	Upper
149	100		
167	26.4	0.0	57.4
279	5.3	0.0	34.7



Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80583.d
Acq On : 23 Dec 2021 9:45 am
Operator : chriss2
Sample : op37115-mb1 Inst : MS5P
Misc : op37115,e5p3816,250,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 03:35:57 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

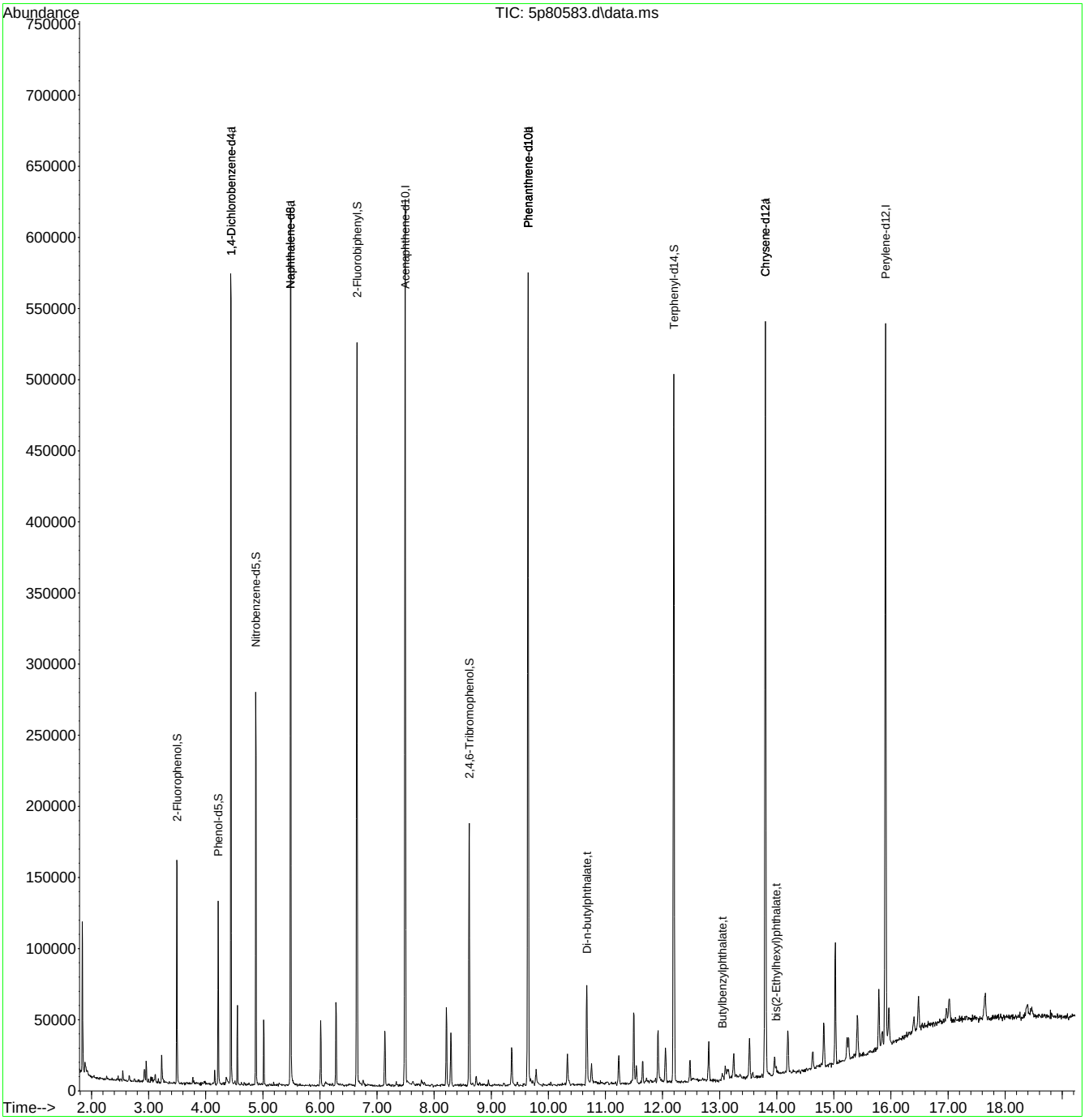
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.443	152	79976	8.00	ppm	0.00
24) Naphthalene-d8	5.484	136	286911	8.00	ppm	0.00
46) Acenaphthene-d10	7.493	164	155040	8.00	ppm	0.00
69) Phenanthrene-d10	9.646	188	264747	8.00	ppm	0.00
84) Chrysene-d12	13.802	240	229620	8.00	ppm	0.00
93) Perylene-d12	15.907	264	212013	8.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.443	152	79976	8.00	ppm	0.00
105) Phenanthrene-d10a	9.646	188	264747	8.00	ppm	0.00
107) Naphthalene-d8a	5.484	136	286911	8.00	ppm	0.00
109) Chrysene-d12a	13.802	240	229620	8.00	ppm	0.00
111) Phenanthrene-d10b	9.646	188	264747	8.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.497	112	39283	3.03	ppm	0.00
Spiked Amount 10.000			Recovery = 30.30%			
8) Phenol-d5	4.218	99	30623	1.84	ppm	0.00
Spiked Amount 10.000			Recovery = 18.40%			
25) Nitrobenzene-d5	4.875	82	69326	6.42	ppm	0.00
Spiked Amount 10.000			Recovery = 64.20%			
51) 2-Fluorobiphenyl	6.649	172	174780	6.87	ppm	0.00
Spiked Amount 10.000			Recovery = 68.70%			
74) 2,4,6-Tribromophenol	8.615	330	21825	6.49	ppm	0.00
Spiked Amount 10.000			Recovery = 64.90%			
87) Terphenyl-d14	12.199	244	217667	7.61	ppm	0.00
Spiked Amount 10.000			Recovery = 76.10%			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
113) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
81) Di-n-butylphthalate	10.677	149	22128	0.52	ppm	99
88) Butylbenzylphthalate	13.044	149	1344	0.08	ppm	91
92) bis(2-Ethylhexyl)phtha...	13.989	149	2678	0.11	ppm	93

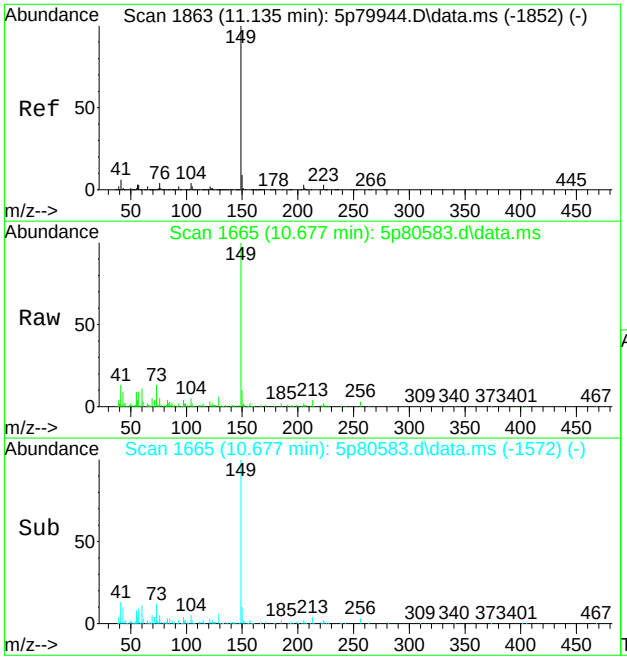
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e5p3816\
Data File : 5p80583.d
Acq On : 23 Dec 2021 9:45 am
Operator : chriss2
Sample : op37115-mb1 Inst : MS5P
Misc : op37115,e5p3816,250,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M5P3794LVI.M
Quant Results File: M5P3794LVI.RES
Quant Time: Dec 27 03:35:57 2021
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Dec 27 03:26:01 2021
Response via : Initial Calibration

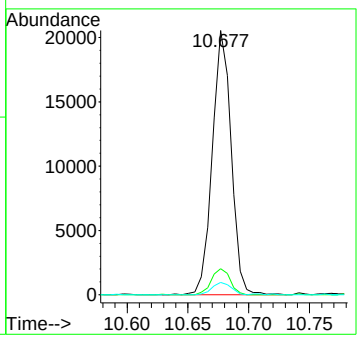


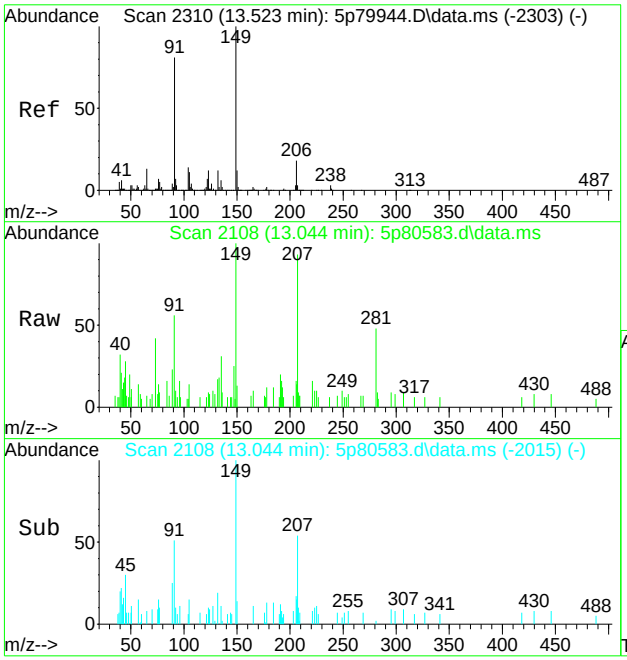


#81
Di-n-butylphthalate
Concen: 0.52 ppm
RT: 10.677 min Scan# 1665
Delta R.T. -0.005 min
Lab File: 5p80583.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:149 Resp: 22128

Ion	Ratio	Lower	Upper
149	100		
150	9.8	0.0	39.5
104	4.7	0.0	34.8

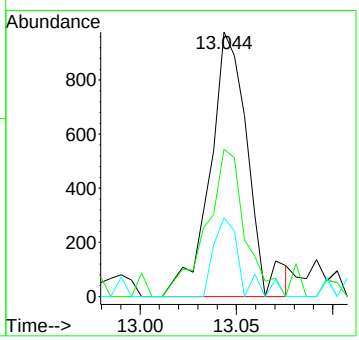


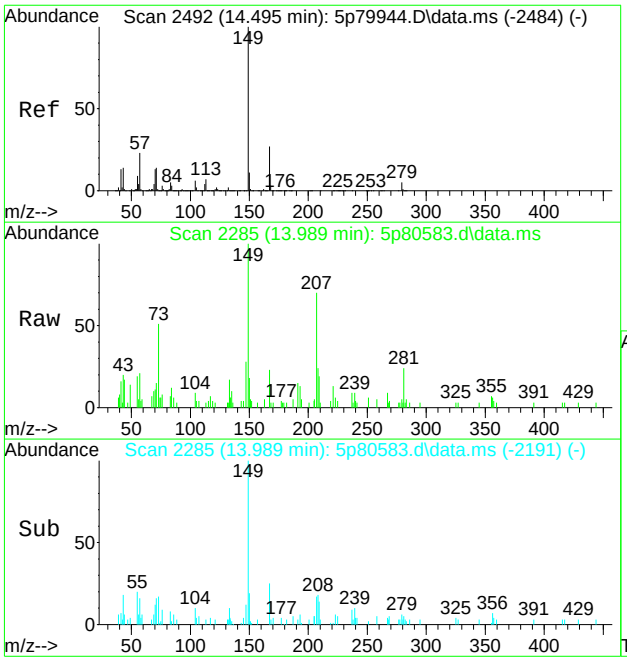


#88
Butylbenzylphthalate
Concen: 0.08 ppm
RT: 13.044 min Scan# 2108
Delta R.T. -0.005 min
Lab File: 5p80583.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:149 Resp: 1344

Ion	Ratio	Lower	Upper
149	100		
91	59.1	30.0	90.0
206	31.6	0.0	46.2

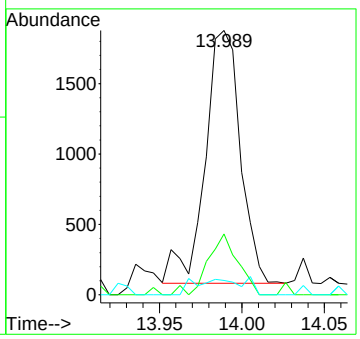




#92
bis(2-Ethylhexyl)phthalate
Concen: 0.11 ppm
RT: 13.989 min Scan# 2285
Delta R.T. 0.000 min
Lab File: 5p80583.d
Acq: 23 Dec 2021 9:45 am

Tgt Ion:149 Resp: 2678

Ion	Ratio	Lower	Upper
149	100		
167	21.6	0.0	55.7
279	5.7	0.0	34.6



GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA2462-MB	AA92454.D	1	12/14/21	WC	n/a	n/a	GAA2462

The QC reported here applies to the following samples: **Method:** RSK-175

JD36624-2, JD36624-6, JD36624-7, JD36624-8, JD36624-9

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.11	0.080	ug/l	
74-84-0	Ethane	ND	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA2463-MB	AA92492.D	1	12/15/21	WC	n/a	n/a	GAA2463

The QC reported here applies to the following samples: **Method:** RSK-175

JD36624-10, JD36624-11, JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.11	0.080	ug/l	
74-84-0	Ethane	ND	0.23	0.14	ug/l	
74-85-1	Ethene	ND	0.31	0.16	ug/l	

Laboratory Control Sample Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA2462-LCS	AA92452.D	1	12/14/21	WC	n/a	n/a	GAA2462

The QC reported here applies to the following samples: **Method:** RSK-175

JD36624-2, JD36624-6, JD36624-7, JD36624-8, JD36624-9

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
74-82-8	Methane	11	11.6	105	59-134
74-84-0	Ethane	23	24.9	108	63-135
74-85-1	Ethene	31	33.3	107	62-133

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA2463-LCS	AA92489.D	1	12/15/21	WC	n/a	n/a	GAA2463

The QC reported here applies to the following samples: **Method:** RSK-175

JD36624-10, JD36624-11, JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
74-82-8	Methane	11	11.5	105	59-134
74-84-0	Ethane	23	24.9	108	63-135
74-85-1	Ethene	31	33.3	107	62-133

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36499-6DUP	AA92463.D	1	12/14/21	WC	n/a	n/a	GAA2462
JD36499-6	AA92462.D	1	12/14/21	WC	n/a	n/a	GAA2462

The QC reported here applies to the following samples: **Method:** RSK-175

JD36624-2, JD36624-6, JD36624-7, JD36624-8, JD36624-9

CAS No.	Compound	JD36499-6 ug/l	Q	DUP ug/l	Q	RPD	Limits
74-82-8	Methane	2.19		2.33		6	20
74-84-0	Ethane	ND		ND		nc	20
74-85-1	Ethene	ND		ND		nc	20

* = Outside of Control Limits.

Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD36624-10DUP [a]	AA92495.D	5	12/15/21	WC	n/a	n/a	GAA2463
JD36624-10 [a]	AA92493.D	1	12/15/21	WC	n/a	n/a	GAA2463
JD36624-10 [a]	AA92494.D	5	12/15/21	WC	n/a	n/a	GAA2463

The QC reported here applies to the following samples: **Method:** RSK-175

JD36624-10, JD36624-11, JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	JD36624-10 ug/l	Q	DUP ug/l	Q	RPD	Limits
74-82-8	Methane	215 [b]		211		2	20
74-84-0	Ethane	0.38		ND		200* [c]	20
74-85-1	Ethene	ND		ND		nc	20

(a) Diluted due to high concentration of target compound.
(b) Result is from Run #2.
(c) Outside of control limits.

* = Outside of Control Limits.

Initial Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2456-ICC2456
Lab FileID: AA92263.D

Response Factor Report GCAA

Method : C:\MSDCHEM\1\METHODS\MAA2456.M (ChemStation Integrator)
Title : METHOD V8015 DG by GC-FID
Last Update : Mon Dec 06 16:10:37 2021
Response via : Initial Calibration

Calibration Files
200 =AA92264.d 100 =AA92263.d 20 =AA92262.d 10 =AA92261.d
2 =AA92258.d 1 =AA92256.d 500 =AA92265.d 1000=AA92269.d
= =

Compound	200	100	20	10	2	1	500	1000	Avg	%RSD
1) Methane	2.585	2.531	2.152	2.154	2.718	3.010	2.286	2.195	2.454 E4	12.68
2) Ethane	4.867	4.800	3.704	4.135	4.795	4.358	4.277	4.192	4.391 E4	9.23
3) Ethene	4.908	4.814	3.689	4.094	5.190	4.127	4.310	4.210	4.418 E4	11.38
4) Propane	7.479	7.619	5.136	6.489	7.688	6.323	6.605	6.555	6.737 E4	12.65
5) n-Butane	0.965	1.028	0.705	0.864	1.029	0.940	0.868	0.870	0.909 E5	11.74
6) n-Pentane	1.130	1.243	1.041	1.125	1.267	1.169	1.053	1.085	1.139 E5	7.29
7) Hexane	1.197	1.337	1.165	1.503	1.503	1.741	1.135	1.307	1.361 E5	15.33

(#) = Out of Range ### Number of calibration levels exceeded format ###

MAA2456.M Tue Dec 07 13:09:06 2021

10.4.1 10

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2456-ICV2456
Lab FileID: AA92270.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
Data File : AA92270.d
Signal(s) : FID1A.ch
Acq On : 6 Dec 2021 4:14 pm
Operator : williamc
Sample : icv2456-100
Misc : GC58872,GAA2456,,,,,1
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 06 16:24:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	24.540	25.806 E3	-5.2	102	0.00
2	Ethane	43.912	48.133 E3	-9.6	100	0.00
3	Ethene	44.177	48.632 E3	-10.1	101	0.00
4	Propane	67.367	68.304 E3	-1.4	90	0.00
5	n-Butane	90.851	86.895 E3	4.4	85	0.00
6	n-Pentane	113.932	85.778 E3	24.7#	69	0.00
7	Hexane	136.098	82.086 E3	39.7#	61	0.01

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA2456.M Tue Dec 07 13:08:39 2021

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2462-CC2456
Lab FileID: AA92451.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
Data File : AA92451.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 8:06 am
Operator : williamc
Sample : cc2456-100
Misc : GC58940,GAA2462,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 14 08:16:25 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	24.540	25.645 E3	-4.5	101	0.00
2	Ethane	43.912	48.772 E3	-11.1	102	0.00
3	Ethene	44.177	48.911 E3	-10.7	102	0.00
4	Propane	67.367	76.206 E3	-13.1	100	0.00
5	n-Butane	90.851	100.359 E3	-10.5	98	0.00
6	n-Pentane	113.932	123.075 E3	-8.0	99	0.02
7	Hexane	136.098	138.590 E3	-1.8	104	0.04

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA2456.M Wed Dec 15 10:40:39 2021

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2462-CC2456
Lab FileID: AA92466.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
Data File : AA92466.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 11:36 am
Operator : williamc
Sample : cc2456-100
Misc : GC58941,GAA2462,,,,,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 14 11:46:49 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	24.540	24.317 E3	0.9	96	0.00
2	Ethane	43.912	45.954 E3	-4.7	96	0.00
3	Ethene	44.177	46.159 E3	-4.5	96	0.00
4	Propane	67.367	71.302 E3	-5.8	94	0.00
5	n-Butane	90.851	92.195 E3	-1.5	90	0.00
6	n-Pentane	113.932	105.984 E3	7.0	85	0.00
7	Hexane	136.098	98.572 E3	27.6#	74	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA2456.M Wed Dec 15 10:40:16 2021

10.4.4 10

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2462-CC2456
Lab FileID: AA92481.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
Data File : AA92481.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 2:55 pm
Operator : williamc
Sample : cc2456-100
Misc : GC58942,GAA2462,,,,,1
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 14 15:05:48 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	24.540	25.046 E3	-2.1	99	0.00
2	Ethane	43.912	46.830 E3	-6.6	98	0.00
3	Ethene	44.177	46.991 E3	-6.4	98	0.00
4	Propane	67.367	72.801 E3	-8.1	96	0.00
5	n-Butane	90.851	94.919 E3	-4.5	92	0.00
6	n-Pentane	113.932	112.405 E3	1.3	90	0.00
7	Hexane	136.098	113.325 E3	16.7#	85	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA2456.M Wed Dec 15 10:39:53 2021

10.4.5 10

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2462-CC2456
Lab FileID: AA92487.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
Data File : AA92487.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 4:19 pm
Operator : williamc
Sample : cc2456-100
Misc : GC58942,GAA2462,,,,,1
ALS Vial : 37 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 14 16:29:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	24.540	25.323 E3	-3.2	100	0.00
2	Ethane	43.912	47.758 E3	-8.8	99	0.00
3	Ethene	44.177	47.990 E3	-8.6	100	0.00
4	Propane	67.367	74.536 E3	-10.6	98	0.00
5	n-Butane	90.851	97.346 E3	-7.1	95	0.00
6	n-Pentane	113.932	113.596 E3	0.3	91	0.00
7	Hexane	136.098	112.483 E3	17.4#	84	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA2456.M Wed Dec 15 10:39:30 2021

Continuing Calibration Summary

Job Number: JD36624 **Sample:** GAA2463-CC2456
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** AA92488.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
Data File : AA92488.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 8:05 am
Operator : williamc
Sample : cc2456-100
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 09:34:36 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	24.540	26.540 E3	-8.1	105	0.00
2	Ethane	43.912	49.773 E3	-13.3	104	0.00
3	Ethene	44.177	49.942 E3	-13.0	104	0.00
4	Propane	67.367	77.899 E3	-15.6#	102	0.00
5	n-Butane	90.851	102.853 E3	-13.2	100	0.00
6	n-Pentane	113.932	126.621 E3	-11.1	102	0.02
7	Hexane	136.098	139.442 E3	-2.5	104	0.04

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA2456.M Thu Dec 16 11:02:56 2021

10.4.7 10

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2463-CC2456
Lab FileID: AA92503.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
Data File : AA92503.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 11:53 am
Operator : williamc
Sample : cc2456-100
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 12:03:35 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	24.540	25.419 E3	-3.6	100	0.00
2	Ethane	43.912	47.617 E3	-8.4	99	0.00
3	Ethene	44.177	47.951 E3	-8.5	100	0.00
4	Propane	67.367	72.349 E3	-7.4	95	0.00
5	n-Butane	90.851	90.540 E3	0.3	88	0.00
6	n-Pentane	113.932	102.953 E3	9.6	83	0.00
7	Hexane	136.098	103.806 E3	23.7#	78	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA2456.M Thu Dec 16 11:02:33 2021

10.4.8 10

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: GAA2463-CC2456
Lab FileID: AA92518.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\
Data File : AA92518.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 3:39 pm
Operator : williamc
Sample : cc2456-100
Misc : GC58945,GAA2463,,,,,1
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 15:49:29 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	24.540	24.930 E3	-1.6	98	0.00
2	Ethane	43.912	47.544 E3	-8.3	99	0.00
3	Ethene	44.177	47.555 E3	-7.6	99	0.00
4	Propane	67.367	75.835 E3	-12.6	100	0.00
5	n-Butane	90.851	105.792 E3	-16.4#	103	0.00
6	n-Pentane	113.932	138.005 E3	-21.1#	111	0.00
7	Hexane	136.098	143.067 E3	-5.1	107	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA2456.M Thu Dec 16 11:02:10 2021

10.4.9 10

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: GAA2456	**Method:** RSK-175	**Instrument ID:** GCAA

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
GAA2456-IC2456	AA92256.D	12/06/21 11:08	n/a	Initial cal 1
GAA2456-IC2456	AA92258.D	12/06/21 11:35	n/a	Initial cal 2
GAA2456-IC2456	AA92261.D	12/06/21 13:19	n/a	Initial cal 10
GAA2456-IC2456	AA92262.D	12/06/21 13:32	n/a	Initial cal 20
GAA2456-ICC2456	AA92263.D	12/06/21 13:46	n/a	Initial cal 100
GAA2456-IC2456	AA92264.D	12/06/21 13:59	n/a	Initial cal 200
GAA2456-IC2456	AA92265.D	12/06/21 14:28	n/a	Initial cal 500
GAA2456-IC2456	AA92269.D	12/06/21 15:58	n/a	Initial cal 1000
GAA2456-ICV2456	AA92270.D	12/06/21 16:14	n/a	Initial cal verification 100

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: GAA2462	**Method:** RSK-175	**Instrument ID:** GCAA

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
GAA2462-CC2456	AA92451.D	12/14/21 08:06	n/a	Continuing cal 100
GAA2462-LCS	AA92452.D	12/14/21 08:19	n/a	Laboratory Control Sample
GAA2462-MB	AA92454.D	12/14/21 09:00	n/a	Method Blank
ZZZZZZ	AA92455.D	12/14/21 09:13	n/a	(unrelated sample)
ZZZZZZ	AA92456.D	12/14/21 09:26	n/a	(unrelated sample)
ZZZZZZ	AA92457.D	12/14/21 09:39	n/a	(unrelated sample)
ZZZZZZ	AA92458.D	12/14/21 09:52	n/a	(unrelated sample)
ZZZZZZ	AA92459.D	12/14/21 10:05	n/a	(unrelated sample)
ZZZZZZ	AA92460.D	12/14/21 10:18	n/a	(unrelated sample)
JD36499-6	AA92462.D	12/14/21 10:44	n/a	(used for QC only; not part of job JD36624)
JD36499-6DUP	AA92463.D	12/14/21 10:57	n/a	Duplicate
ZZZZZZ	AA92464.D	12/14/21 11:11	n/a	(unrelated sample)
ZZZZZZ	AA92465.D	12/14/21 11:23	n/a	(unrelated sample)
GAA2462-CC2456	AA92466.D	12/14/21 11:36	n/a	Continuing cal 100
ZZZZZZ	AA92467.D	12/14/21 11:49	n/a	(unrelated sample)
ZZZZZZ	AA92468.D	12/14/21 12:02	n/a	(unrelated sample)
ZZZZZZ	AA92469.D	12/14/21 12:19	n/a	(unrelated sample)
ZZZZZZ	AA92470.D	12/14/21 12:32	n/a	(unrelated sample)
ZZZZZZ	AA92471.D	12/14/21 12:46	n/a	(unrelated sample)
JD36567-5	AA92472.D	12/14/21 12:59	n/a	(used for QC only; not part of job JD36624)
JD36567-5	AA92473.D	12/14/21 13:12	n/a	(used for QC only; not part of job JD36624)
JD36567-5DUP	AA92474.D	12/14/21 13:25	n/a	Duplicate
ZZZZZZ	AA92475.D	12/14/21 13:37	n/a	(unrelated sample)
JD36624-2	AA92476.D	12/14/21 13:50	n/a	HOFF MW-8
JD36624-2	AA92477.D	12/14/21 14:03	n/a	HOFF MW-8
JD36624-6	AA92478.D	12/14/21 14:16	n/a	HOFF MW-FA
JD36624-6	AA92479.D	12/14/21 14:29	n/a	HOFF MW-FA
JD36624-7	AA92480.D	12/14/21 14:42	n/a	HOFF MW-FB
GAA2462-CC2456	AA92481.D	12/14/21 14:55	n/a	Continuing cal 100
JD36624-7	AA92482.D	12/14/21 15:08	n/a	HOFF MW-FB
JD36624-8	AA92483.D	12/14/21 15:21	n/a	HOFF MW-13
JD36624-8	AA92484.D	12/14/21 15:34	n/a	HOFF MW-13
JD36624-9	AA92485.D	12/14/21 15:46	n/a	HOFF MW-C
JD36624-9	AA92486.D	12/14/21 15:59	n/a	HOFF MW-C
GAA2462-CC2456	AA92487.D	12/14/21 16:19	n/a	Continuing cal 100

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: GAA2463	**Method:** RSK-175	**Instrument ID:** GCAA

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
GAA2463-CC2456	AA92488.D	12/15/21 08:05	n/a	Continuing cal 100
GAA2463-LCS	AA92489.D	12/15/21 08:18	n/a	Laboratory Control Sample
GAA2463-MB	AA92492.D	12/15/21 09:11	n/a	Method Blank
JD36624-10	AA92493.D	12/15/21 09:28	n/a	HOFF MW-D
JD36624-10	AA92494.D	12/15/21 09:40	n/a	HOFF MW-D
JD36624-10DUP	AA92495.D	12/15/21 09:53	n/a	Duplicate
JD36624-11	AA92496.D	12/15/21 10:21	n/a	HOFF IW-1A
JD36624-11	AA92497.D	12/15/21 10:34	n/a	HOFF IW-1A
JD36624-12	AA92498.D	12/15/21 10:47	n/a	HOFF IW-1B
JD36624-13	AA92499.D	12/15/21 11:00	n/a	HOFF IW-3A
JD36624-13	AA92500.D	12/15/21 11:13	n/a	HOFF IW-3A
JD36624-14	AA92501.D	12/15/21 11:27	n/a	HOFF IW-3B
JD36624-14	AA92502.D	12/15/21 11:40	n/a	HOFF IW-3B
GAA2463-CC2456	AA92503.D	12/15/21 11:53	n/a	Continuing cal 100
JD36624-15	AA92504.D	12/15/21 12:12	n/a	HOFF IW-2A
JD36624-15	AA92505.D	12/15/21 12:28	n/a	HOFF IW-2A
JD36624-16	AA92506.D	12/15/21 12:43	n/a	HOFF IW-2B
JD36624-16	AA92507.D	12/15/21 12:56	n/a	HOFF IW-2B
JD36624-17	AA92508.D	12/15/21 13:09	n/a	HOFF IW-B
JD36624-17	AA92509.D	12/15/21 13:24	n/a	HOFF IW-B
ZZZZZZ	AA92510.D	12/15/21 13:39	n/a	(unrelated sample)
ZZZZZZ	AA92511.D	12/15/21 13:54	n/a	(unrelated sample)
ZZZZZZ	AA92512.D	12/15/21 14:09	n/a	(unrelated sample)
ZZZZZZ	AA92513.D	12/15/21 14:31	n/a	(unrelated sample)
ZZZZZZ	AA92514.D	12/15/21 14:44	n/a	(unrelated sample)
LA75637-2	AA92515.D	12/15/21 14:56	n/a	(used for QC only; not part of job JD36624)
LA75637-2	AA92516.D	12/15/21 15:09	n/a	(used for QC only; not part of job JD36624)
LA75637-2DUP	AA92517.D	12/15/21 15:26	n/a	Duplicate
GAA2463-CC2456	AA92518.D	12/15/21 15:39	n/a	Continuing cal 100
ZZZZZZ	AA92519.D	12/15/21 15:53	n/a	(unrelated sample)
ZZZZZZ	AA92520.D	12/15/21 16:17	n/a	(unrelated sample)
ZZZZZZ	AA92521.D	12/15/21 16:31	n/a	(unrelated sample)
GAA2463-CC2456	AA92522.D	12/15/21 16:43	n/a	Continuing cal 100

GC Volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 12/16/21 02:06

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92476.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 1:50 pm
Operator : williamc
Sample : jd36624-2
Misc : GC58942,GAA2462,,,,,1
ALS Vial : 26 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 09:03:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.342	452837274	18453.228	PPMV
2)	Ethane	1.748	1022219	23.279	PPMV m
3)	Ethene	2.417	889062	20.125	PPMV m

(f)=RT Delta > 1/2 Window (m)=manual int.

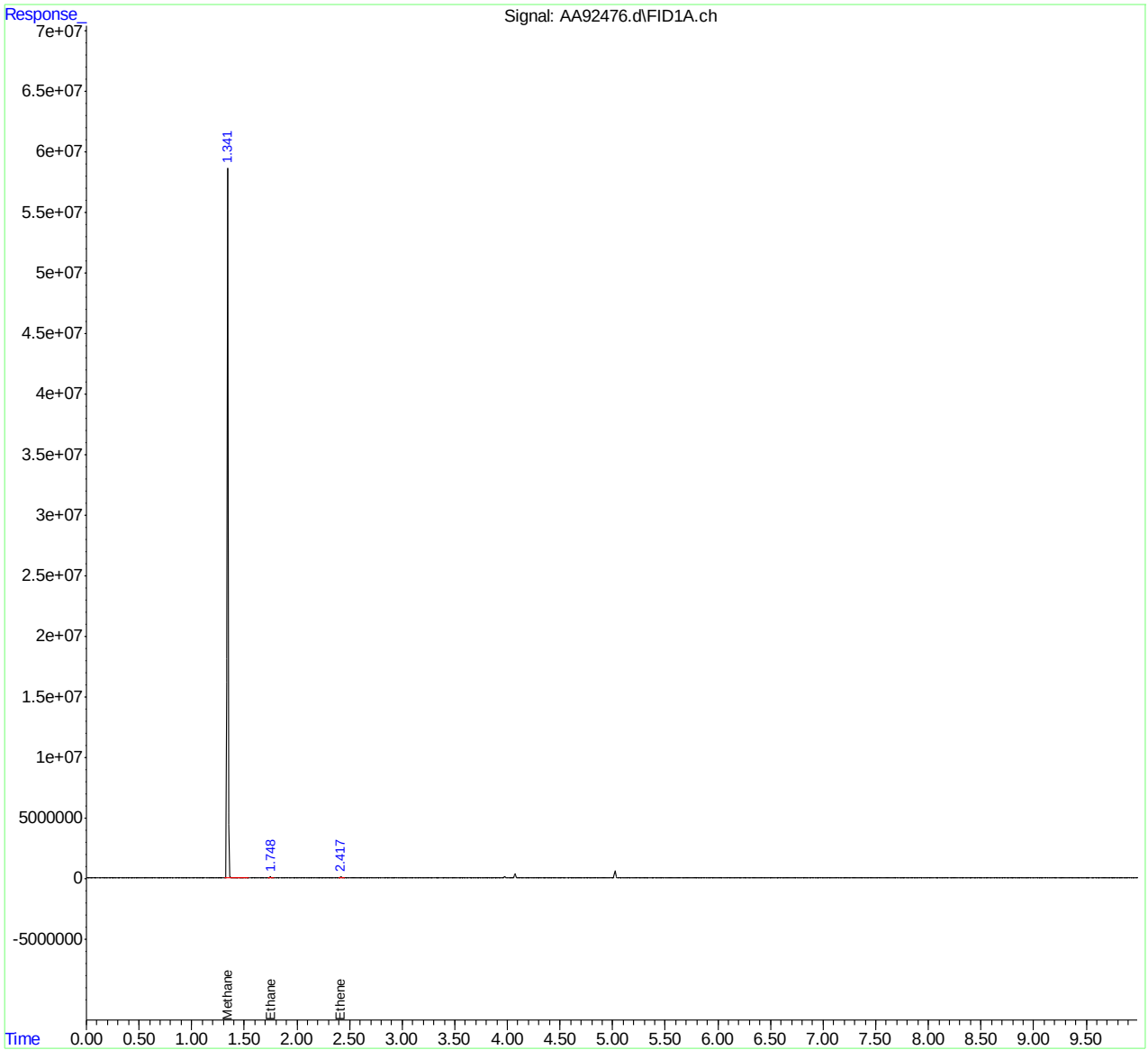
11.1.1 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92476.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 1:50 pm
Operator : williamc
Sample : jd36624-2
Misc : GC58942,GAA2462,,,,,1
ALS Vial : 26 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 09:03:40 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92476.d**
Date Acquired **12/14/2021 13:50**
Sample Name **jd36624-2**
Sample Multiplier **1**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	452837274	26526	18452.15	12197.18	1563.74	39080	419.281	1983.02	0.11	**1983.02**
Ethane	30	22.4	55.5	295	24.21	1022219.1	0	23.28	28.85	3.70	27860	1.391	5.090	0.23	**5.090**
Ethene	28	22.4	55.5	295	24.21	889062	0	20.12	23.28	2.98	10680	2.928	5.913	0.31	**5.913**
Propane	44	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	33643	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12937	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	58287	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	40945	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92477.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 2:03 pm
Operator : williamc
Sample : jd36624-2
Misc : GC58942,GAA2462,,,,,50
ALS Vial : 27 Sample Multiplier: 50

Integration File: autoint1.e
Quant Time: Dec 15 09:04:24 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.349	10980617	22373.140	PPMV

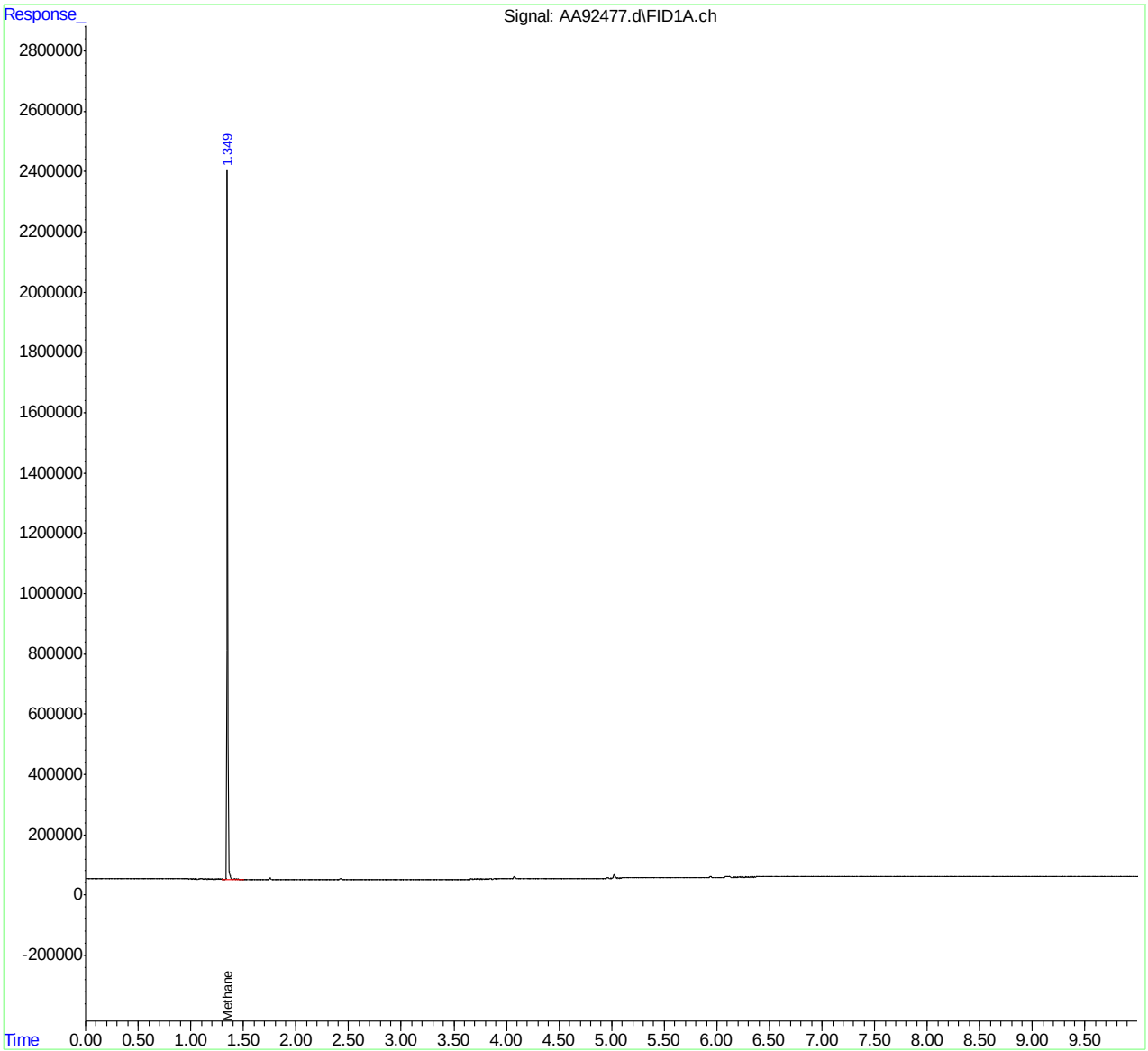
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92477.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 2:03 pm
Operator : williamc
Sample : jd36624-2
Misc : GC58942,GAA2462,,,,,50
ALS Vial : 27 Sample Multiplier: 50

Integration File: autoint1.e
Quant Time: Dec 15 09:04:24 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92477.d**
Date Acquired **12/14/2021 14:03**
Sample Name **jd36624-2**
Sample Multiplier **50**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	10980617	26526	22319.09	14753.30	1891.45	39080	507.148	2398.60	5.50	**2398.60**
Ethane	30	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	27860	#DIV/0!	#DIV/0!	11.50	**#DIV/0!**
Ethene	28	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10680	#DIV/0!	#DIV/0!	15.50	**#DIV/0!**
Propane	44	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	33643	#DIV/0!	#DIV/0!	16.00	**#DIV/0!**
n-Butane	42	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12937	#DIV/0!	#DIV/0!	21.50	**#DIV/0!**
n-Pentane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	58287	#DIV/0!	#DIV/0!	19.00	**#DIV/0!**
Hexane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	40945	#DIV/0!	#DIV/0!	20.50	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92478.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 2:16 pm
Operator : williamc
Sample : jd36624-6
Misc : GC58942,GAA2462,,,,,1
ALS Vial : 28 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 09:05:18 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.341	179680356	7322.018	PPMV
2)	Ethane	1.748	1108138	25.236	PPMV
3)	Ethene	2.417	337155	7.632	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

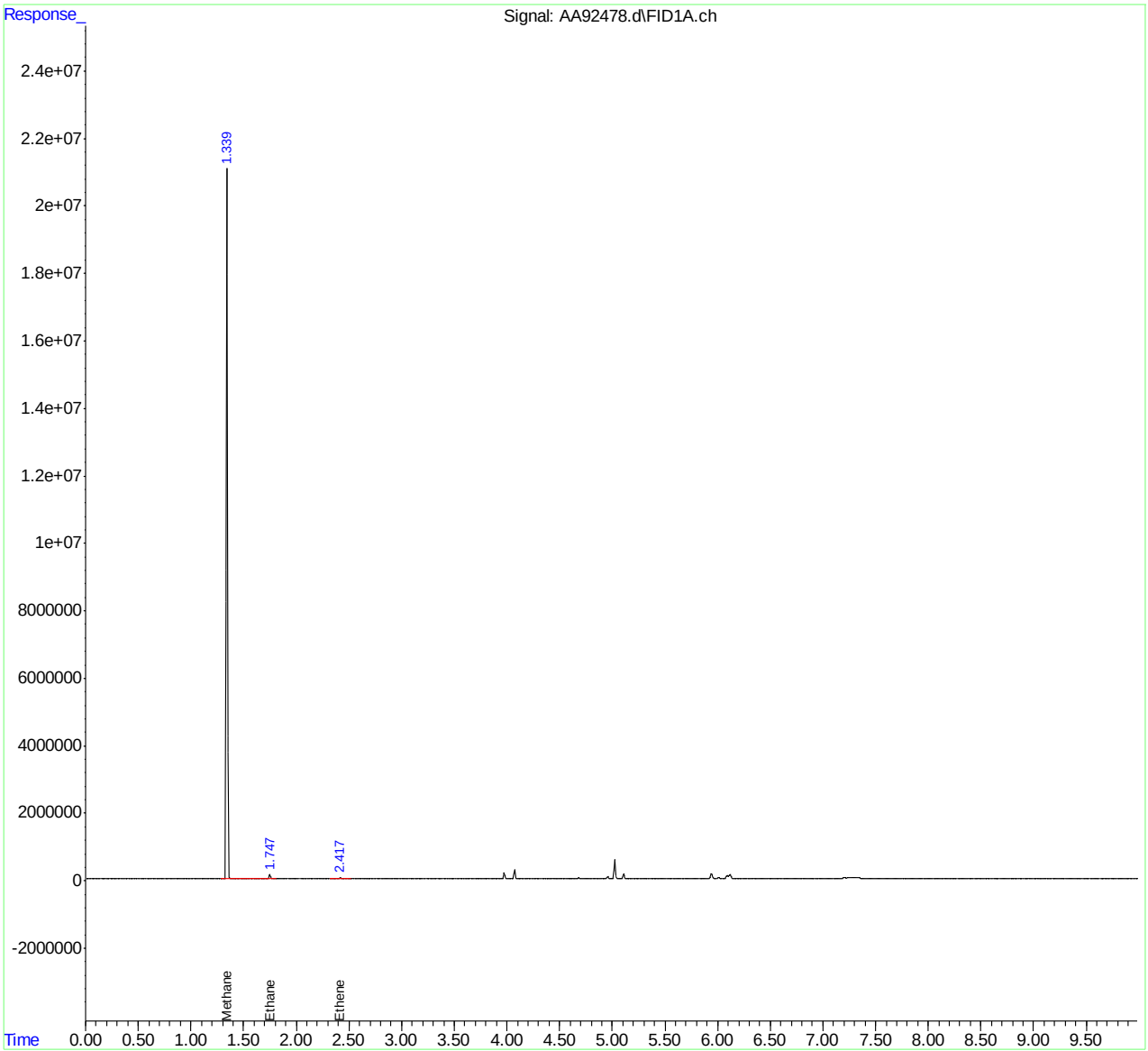
11.1.5 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92478.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 2:16 pm
Operator : williamc
Sample : jd36624-6
Misc : GC58942,GAA2462,,,,,1
ALS Vial : 28 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 09:05:18 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92478.d**
Date Acquired **12/14/2021 14:16**
Sample Name **jd36624-6**
Sample Multiplier **1**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	179680356	26526	7320.94	4839.26	620.42	39080	166.351	786.77	0.11	**786.77**
Ethane	30	22.4	55.5	295	24.21	1108137.8	0	25.24	31.28	4.01	27860	1.508	5.518	0.23	**5.518**
Ethene	28	22.4	55.5	295	24.21	337155	0	7.63	8.83	1.13	10680	1.110	2.242	0.31	**2.242**
Propane	44	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	33643	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12937	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	58287	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	40945	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 12/16/21 02:09

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92479.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 2:29 pm
Operator : williamc
Sample : jd36624-6
Misc : GC58942,GAA2462,,,,,20
ALS Vial : 29 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Dec 15 09:07:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	Methane	1.350	11496687	9369.855	PPMV	m
2)	Ethane	1.755	70508	32.113	PPMV	m
3)	Ethene	2.422	20749	9.393	PPMV	m

(f)=RT Delta > 1/2 Window (m)=manual int.

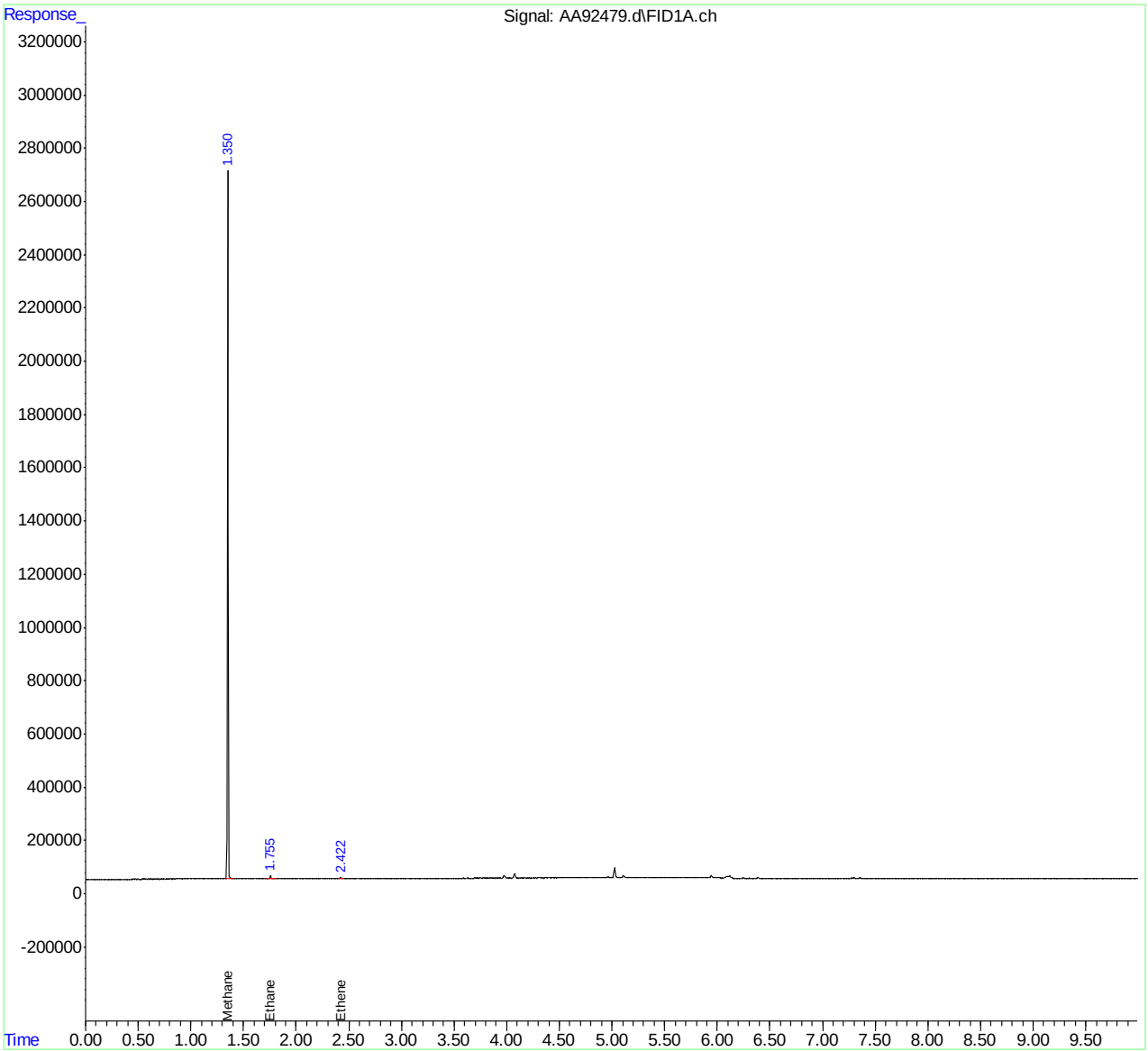
11.1.7 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92479.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 2:29 pm
Operator : williamc
Sample : jd36624-6
Misc : GC58942,GAA2462,,,,,20
ALS Vial : 29 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Dec 15 09:07:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



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Dissolved Gas Calculation Worksheet

Data File Name **AA92479.d**
Date Acquired **12/14/2021 14:29**
Sample Name **jd36624-6**
Sample Multiplier **20**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	11496687	26526	9348.24	6179.34	792.22	39080	212.416	1004.64	2.20	**1004.64**
Ethane	30	22.4	55.5	295	24.21	70507.515	0	32.11	39.80	5.10	27860	1.919	7.022	4.60	**7.022**
Ethene	28	22.4	55.5	295	24.21	20749	0	9.39	10.87	1.39	10680	1.367	2.760	6.20	**ND**
Propane	44	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	33643	#DIV/0!	#DIV/0!	6.40	**#DIV/0!**
n-Butane	42	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12937	#DIV/0!	#DIV/0!	8.60	**#DIV/0!**
n-Pentane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	58287	#DIV/0!	#DIV/0!	7.60	**#DIV/0!**
Hexane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	40945	#DIV/0!	#DIV/0!	8.20	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92480.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 2:42 pm
Operator : williamc
Sample : jd36624-7
Misc : GC58942,GAA2462,,,,,1
ALS Vial : 30 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 09:08:44 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.342	147473546	6009.583	PPMV
2)	Ethane	1.749	123989	2.824	PPMV
3)	Ethene	2.418	90245	2.043	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.9

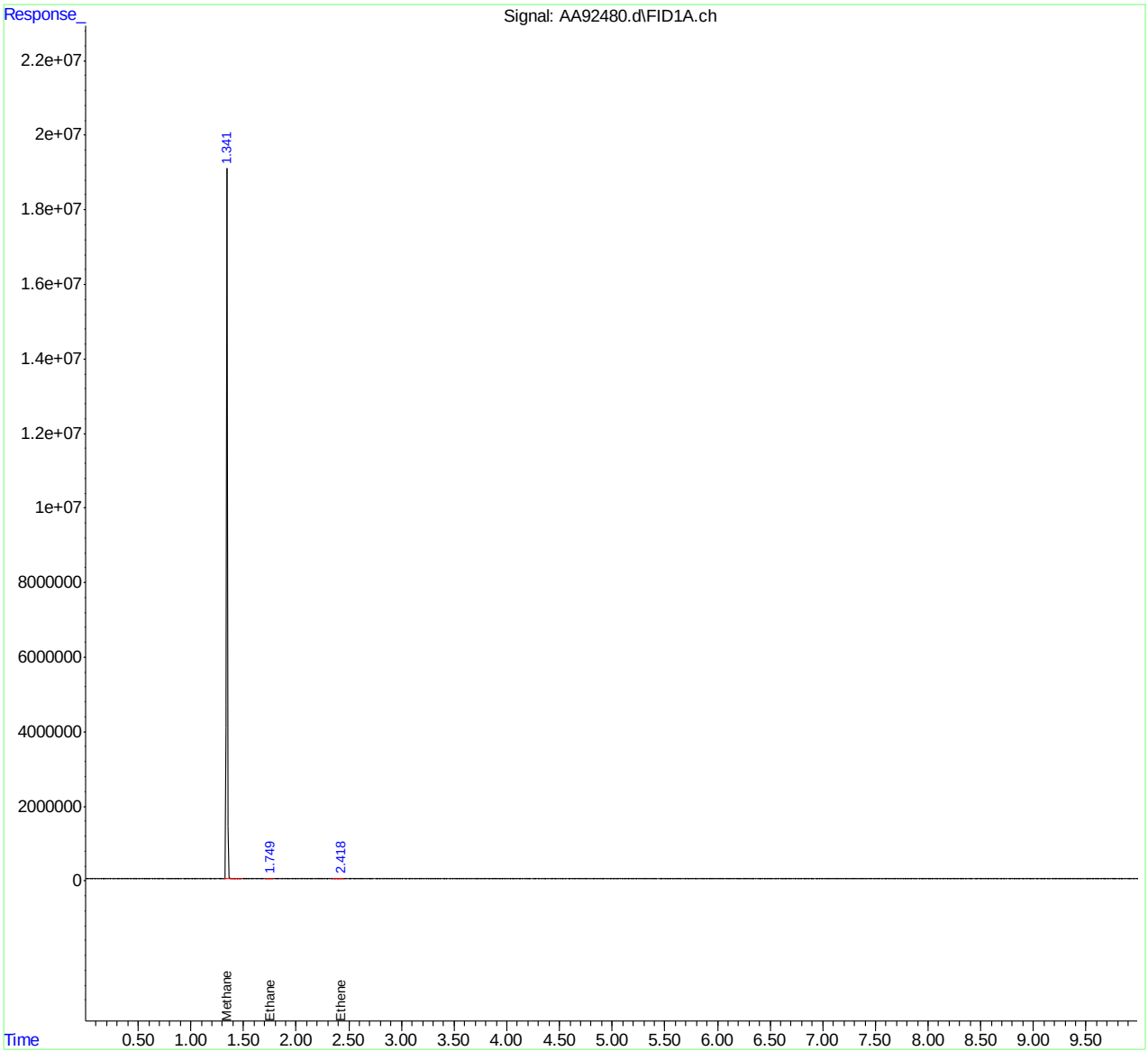
11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92480.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 2:42 pm
Operator : williamc
Sample : jd36624-7
Misc : GC58942,GAA2462,,,,,1
ALS Vial : 30 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 09:08:44 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92480.d**
Date Acquired **12/14/2021 14:42**
Sample Name **jd36624-7**
Sample Multiplier **1**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	147473546	26526	6008.50	3971.72	509.20	39080	136.529	645.72	0.11	**645.72**
Ethane	30	22.4	55.5	295	24.21	123989.27	0	2.82	3.50	0.45	27860	0.169	0.617	0.23	**0.617**
Ethene	28	22.4	55.5	295	24.21	90245	0	2.04	2.36	0.30	10680	0.297	0.600	0.31	**0.600**
Propane	44	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	33643	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12937	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	58287	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	40945	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92482.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 3:08 pm
Operator : williamc
Sample : jd36624-7
Misc : GC58942,GAA2462,,,,,20
ALS Vial : 32 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Dec 15 09:13:34 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.351	9870237	8044.291	PPMV

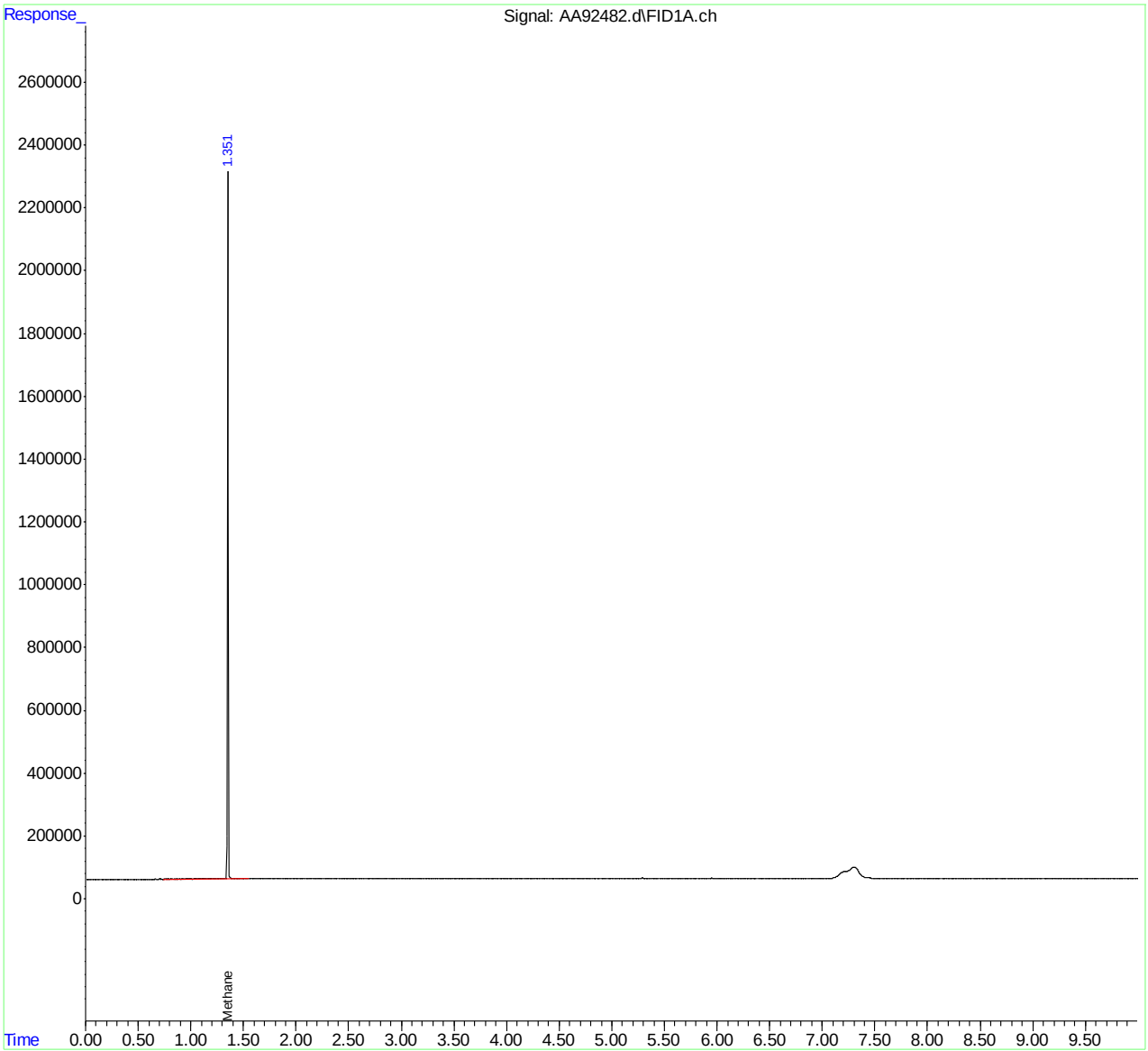
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92482.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 3:08 pm
Operator : williamc
Sample : jd36624-7
Misc : GC58942,GAA2462,,,,,20
ALS Vial : 32 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Dec 15 09:13:34 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



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Dissolved Gas Calculation Worksheet

Data File Name **AA92482.d**
Date Acquired **12/14/2021 15:08**
Sample Name **jd36624-7**
Sample Multiplier **20**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	9870236.7	26526	8022.67	5303.12	679.89	39080	182.296	862.18	2.20	**862.18**
Ethane	30	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	27860	#DIV/0!	#DIV/0!	4.60	**#DIV/0!**
Ethene	28	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10680	#DIV/0!	#DIV/0!	6.20	**#DIV/0!**
Propane	44	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	33643	#DIV/0!	#DIV/0!	6.40	**#DIV/0!**
n-Butane	42	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12937	#DIV/0!	#DIV/0!	8.60	**#DIV/0!**
n-Pentane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	58287	#DIV/0!	#DIV/0!	7.60	**#DIV/0!**
Hexane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	40945	#DIV/0!	#DIV/0!	8.20	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92483.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 3:21 pm
Operator : williamc
Sample : jd36624-8
Misc : GC58942,GAA2462,,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 09:14:12 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.345	165996657	6764.404	PPMV
2)	Ethane	1.751	126435	2.879	PPMV
3)	Ethene	2.420	45165	1.022	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

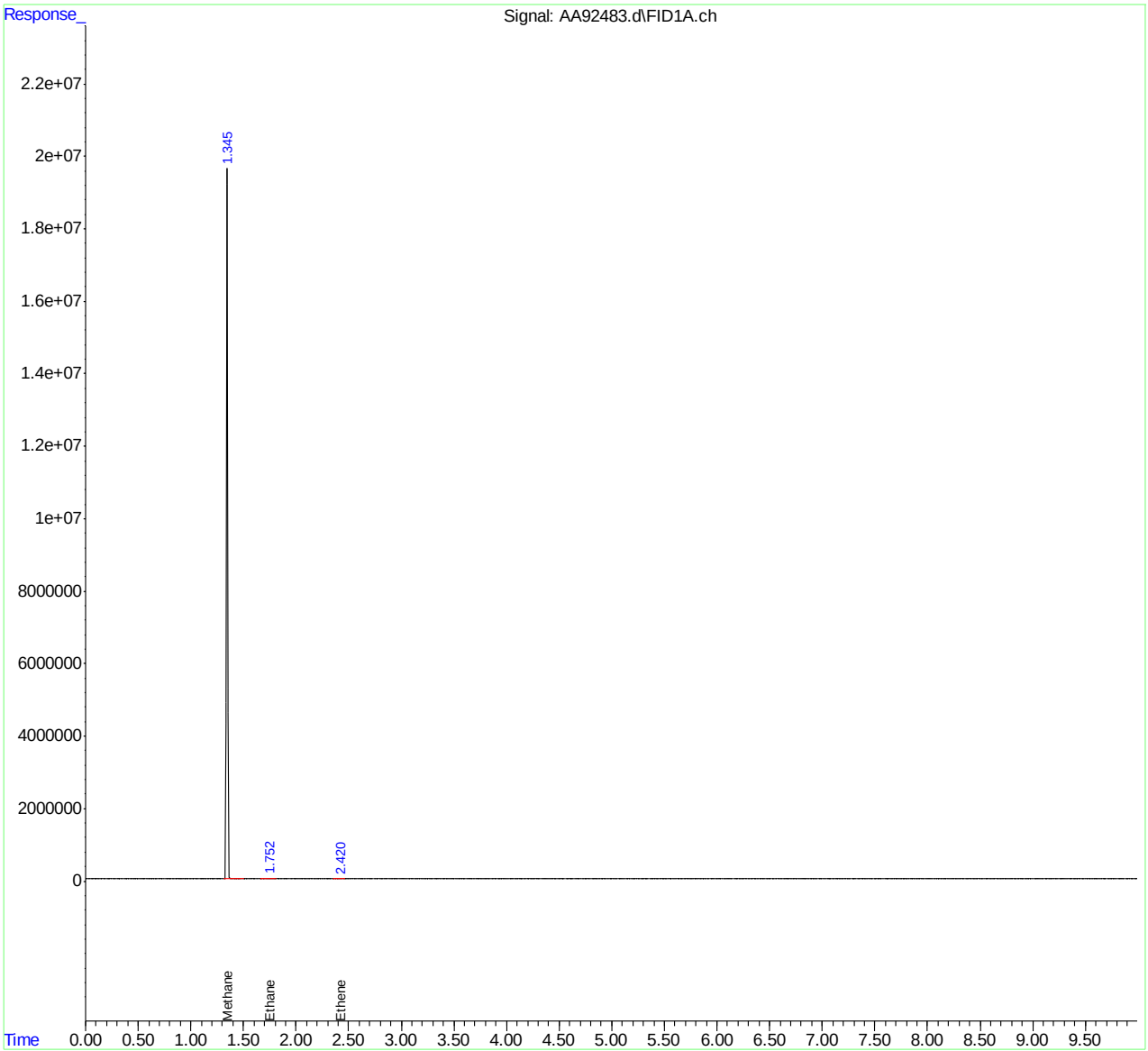
11.1.13 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92483.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 3:21 pm
Operator : williamc
Sample : jd36624-8
Misc : GC58942,GAA2462,,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 09:14:12 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92483.d**
Date Acquired **12/14/2021 15:21**
Sample Name **jd36624-8**
Sample Multiplier **1**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	165996657	26526	6763.32	4470.67	573.16	39080	153.680	726.84	0.11	**726.84**
Ethane	30	22.4	55.5	295	24.21	126435.24	0	2.88	3.57	0.46	27860	0.172	0.630	0.23	**0.630**
Ethene	28	22.4	55.5	295	24.21	45165	0	1.02	1.18	0.15	10680	0.149	0.300	0.31	**ND**
Propane	44	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	33643	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12937	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	58287	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	40945	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	The volume of 1 mole of any gas at standard temperature and pressure(STP)
Water g/Moles	1 Liter of water is equal to 55.5g-moles
Temp-kelvin	Is defined as 273 + degress C
Corrected Gas Density	Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)
Headspace conc(ug/l)	Is equal to (ppmv reading) x (mw/corrected gas density)
Water Concentration(ug/l)	Is equal to headspace conc(ug/l) x headspace vol/sample vol
Saturation Concentration(ug/l)	Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92484.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 3:34 pm
Operator : williamc
Sample : jd36624-8
Misc : GC58942,GAA2462,,,,,20
ALS Vial : 34 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Dec 15 09:14:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.350	6543448	5332.942	PPMV

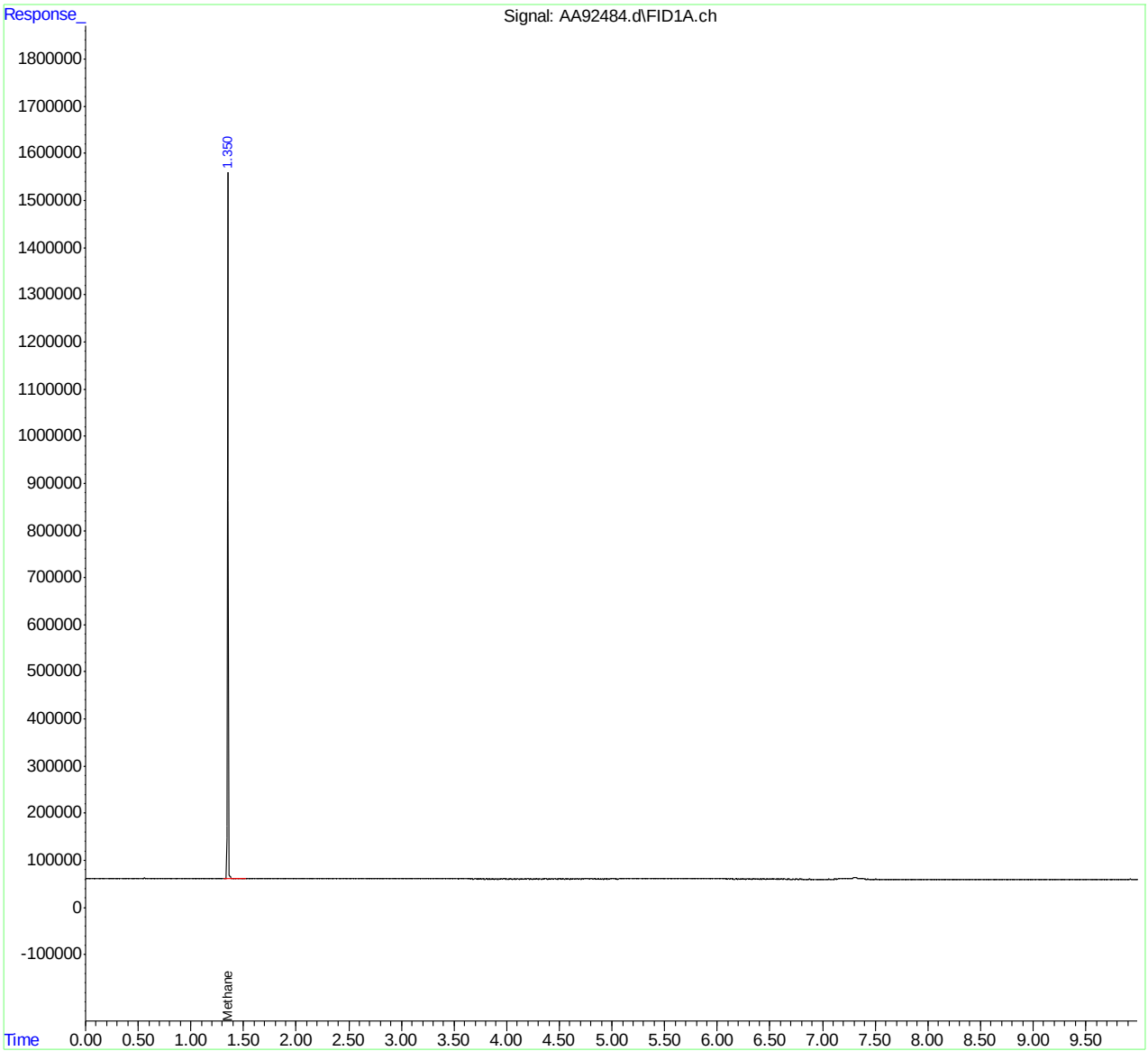
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92484.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 3:34 pm
Operator : williamc
Sample : jd36624-8
Misc : GC58942,GAA2462,,,,,20
ALS Vial : 34 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Dec 15 09:14:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92484.d**
Date Acquired **12/14/2021 15:34**
Sample Name **jd36624-8**
Sample Multiplier **20**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	6543448.3	26526	5311.32	3510.87	450.11	39080	120.687	570.80	2.20	**570.80**
Ethane	30	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	27860	#DIV/0!	#DIV/0!	4.60	**#DIV/0!**
Ethene	28	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10680	#DIV/0!	#DIV/0!	6.20	**#DIV/0!**
Propane	44	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	33643	#DIV/0!	#DIV/0!	6.40	**#DIV/0!**
n-Butane	42	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12937	#DIV/0!	#DIV/0!	8.60	**#DIV/0!**
n-Pentane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	58287	#DIV/0!	#DIV/0!	7.60	**#DIV/0!**
Hexane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	40945	#DIV/0!	#DIV/0!	8.20	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92485.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 3:46 pm
Operator : williamc
Sample : jd36624-9
Misc : GC58942,GAA2462,,,,,1
ALS Vial : 35 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 09:15:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.337	54678275	2228.153	PPMV
2) Ethane	1.745	78577	1.789	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

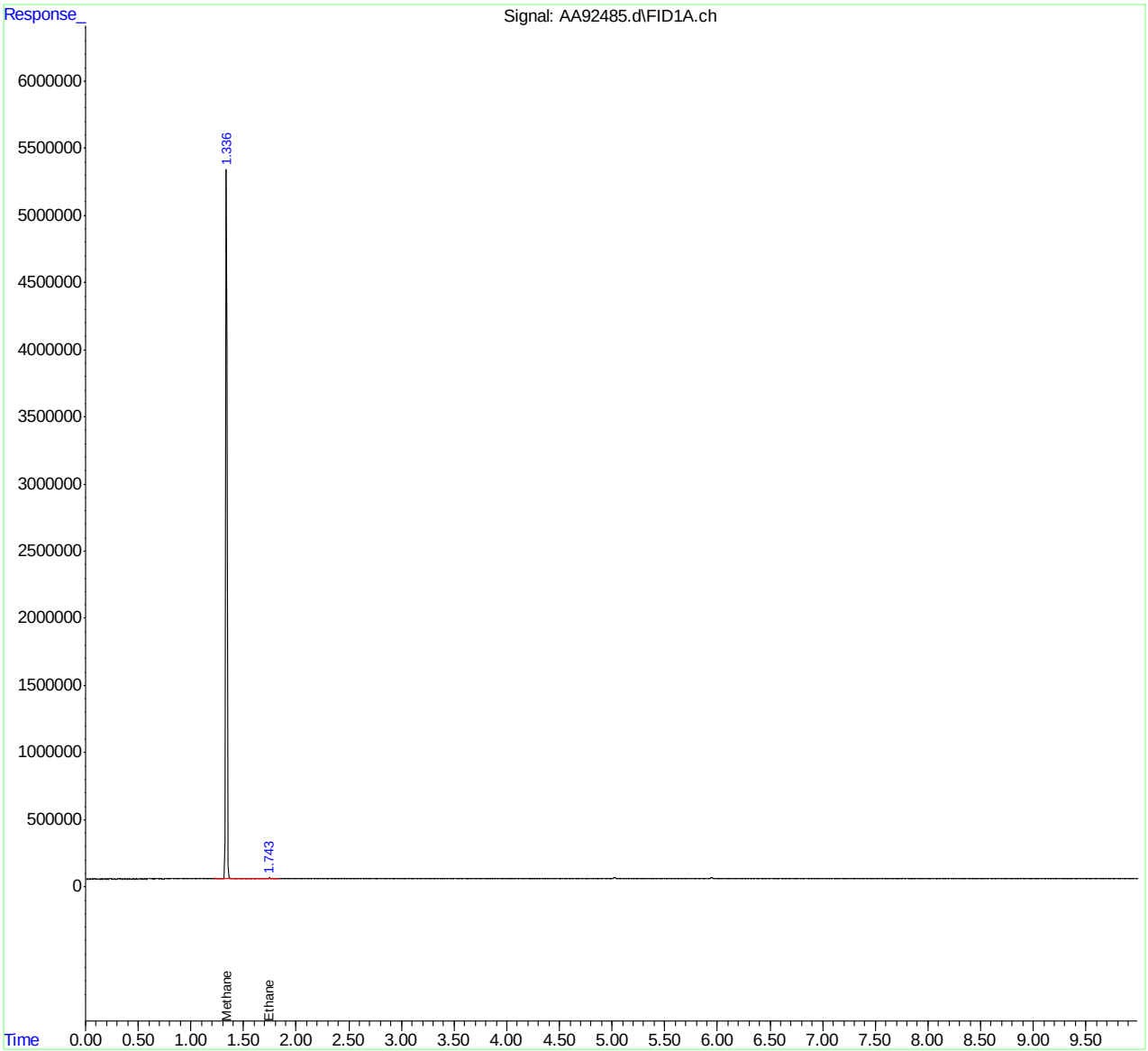
11.1.17 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92485.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 3:46 pm
Operator : williamc
Sample : jd36624-9
Misc : GC58942,GAA2462,,,,,1
ALS Vial : 35 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 09:15:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92485.d**
Date Acquired **12/14/2021 15:46**
Sample Name **jd36624-9**
Sample Multiplier **1**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	54678275	26526	2227.07	1472.13	188.73	39080	50.605	239.34	0.11	**239.34**
Ethane	30	22.4	55.5	295	24.21	78577.063	0	1.79	2.22	0.28	27860	0.107	0.391	0.23	**0.391**
Ethene	28	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10680	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	33643	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12937	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	58287	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	40945	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

11.1.18

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92486.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 3:59 pm
Operator : williamc
Sample : jd36624-9
Misc : GC58942,GAA2462,,,,,5
ALS Vial : 36 Sample Multiplier: 5

Integration File: autoint1.e
Quant Time: Dec 15 09:16:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.349	14980199	3052.234	PPMV

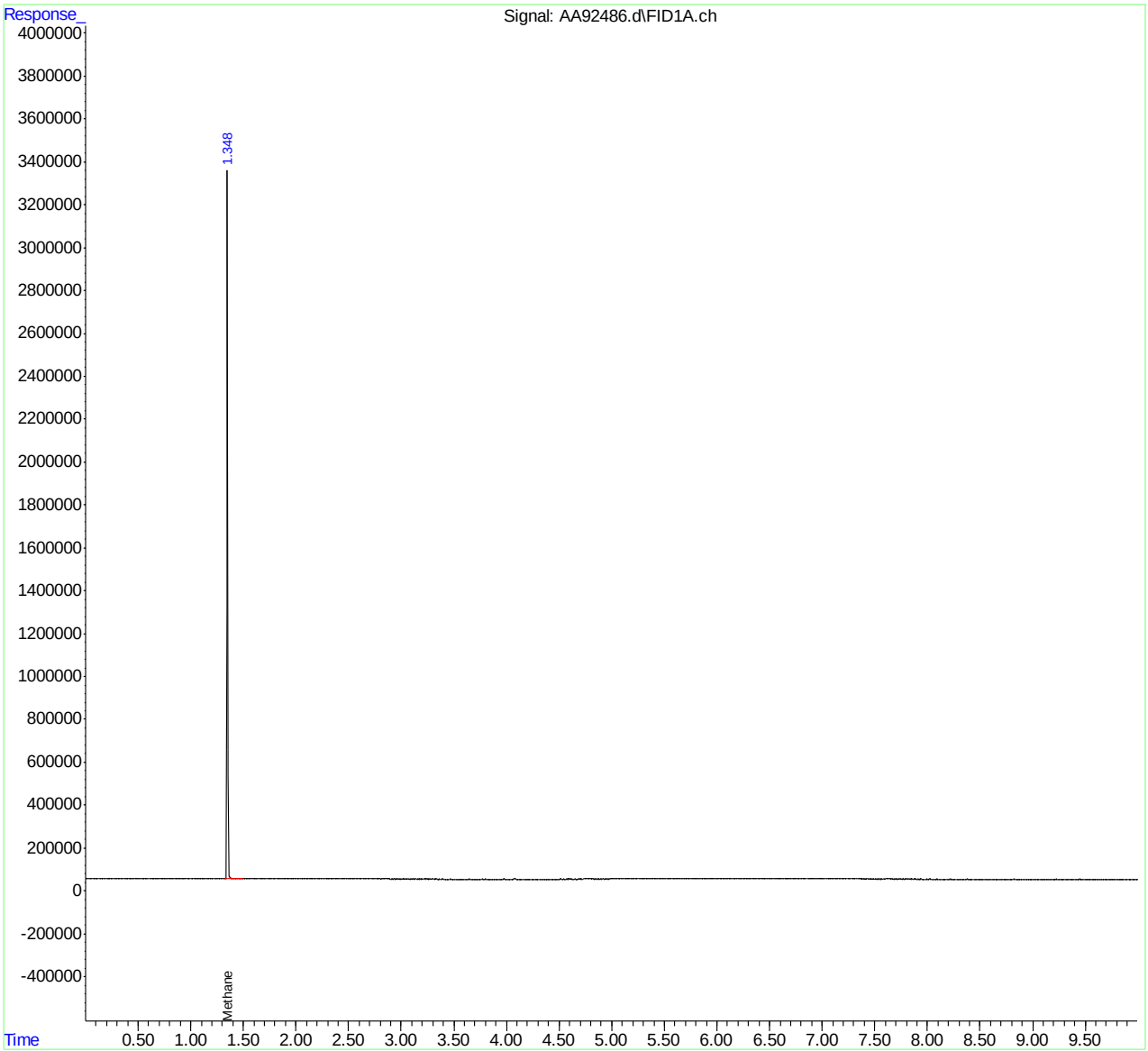
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92486.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 3:59 pm
Operator : williamc
Sample : jd36624-9
Misc : GC58942,GAA2462,,,,,5
ALS Vial : 36 Sample Multiplier: 5

Integration File: autoint1.e
Quant Time: Dec 15 09:16:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92486.d**
Date Acquired **12/14/2021 15:59**
Sample Name **jd36624-9**
Sample Multiplier **5**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	14980199	26526	3046.83	2014.01	258.21	39080	69.232	327.44	0.55	**327.44**
Ethane	30	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	27860	#DIV/0!	#DIV/0!	1.15	**#DIV/0!**
Ethene	28	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10680	#DIV/0!	#DIV/0!	1.55	**#DIV/0!**
Propane	44	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	33643	#DIV/0!	#DIV/0!	1.60	**#DIV/0!**
n-Butane	42	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12937	#DIV/0!	#DIV/0!	2.15	**#DIV/0!**
n-Pentane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	58287	#DIV/0!	#DIV/0!	1.90	**#DIV/0!**
Hexane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	40945	#DIV/0!	#DIV/0!	2.05	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92493.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 9:28 am
Operator : williamc
Sample : jd36624-10
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:23:43 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.336	35144927	1432.164	PPMV
2)	Ethane	1.744	74132	1.688	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

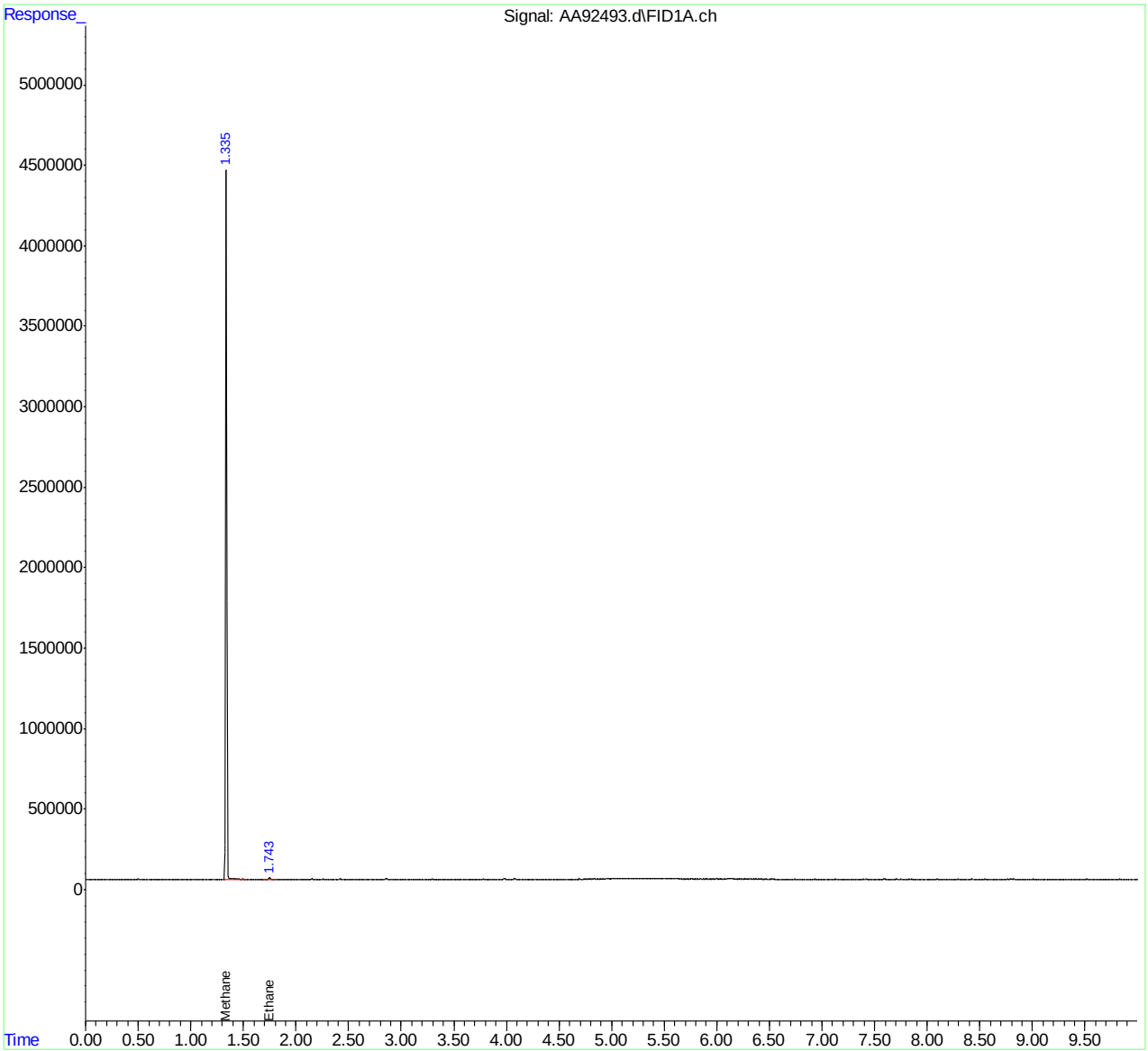
11.1.21
11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92493.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 9:28 am
Operator : williamc
Sample : jd36624-10
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:23:43 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92493.d**
Date Acquired **12/15/2021 9:28**
Sample Name **jd36624-10**
Sample Multiplier **1**
Temperature(C) **21**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	294	24.12	35144927	27622	1431.04	949.16	124.89	38340	33.145	158.03	0.11	**158.03**
Ethane	30	22.4	55.5	294	24.12	74132.001	0	1.69	2.10	0.28	27080	0.104	0.380	0.23	**0.380**
Ethene	28	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10440	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	32552	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12440	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	56501	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	39507	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92494.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 9:40 am
Operator : williamc
Sample : jd36624-10
Misc : GC58942,GAA2463,,,,,5
ALS Vial : 7 Sample Multiplier: 5

Integration File: autoint1.e
Quant Time: Dec 16 10:24:18 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.350	9566061	1949.097	PPMV

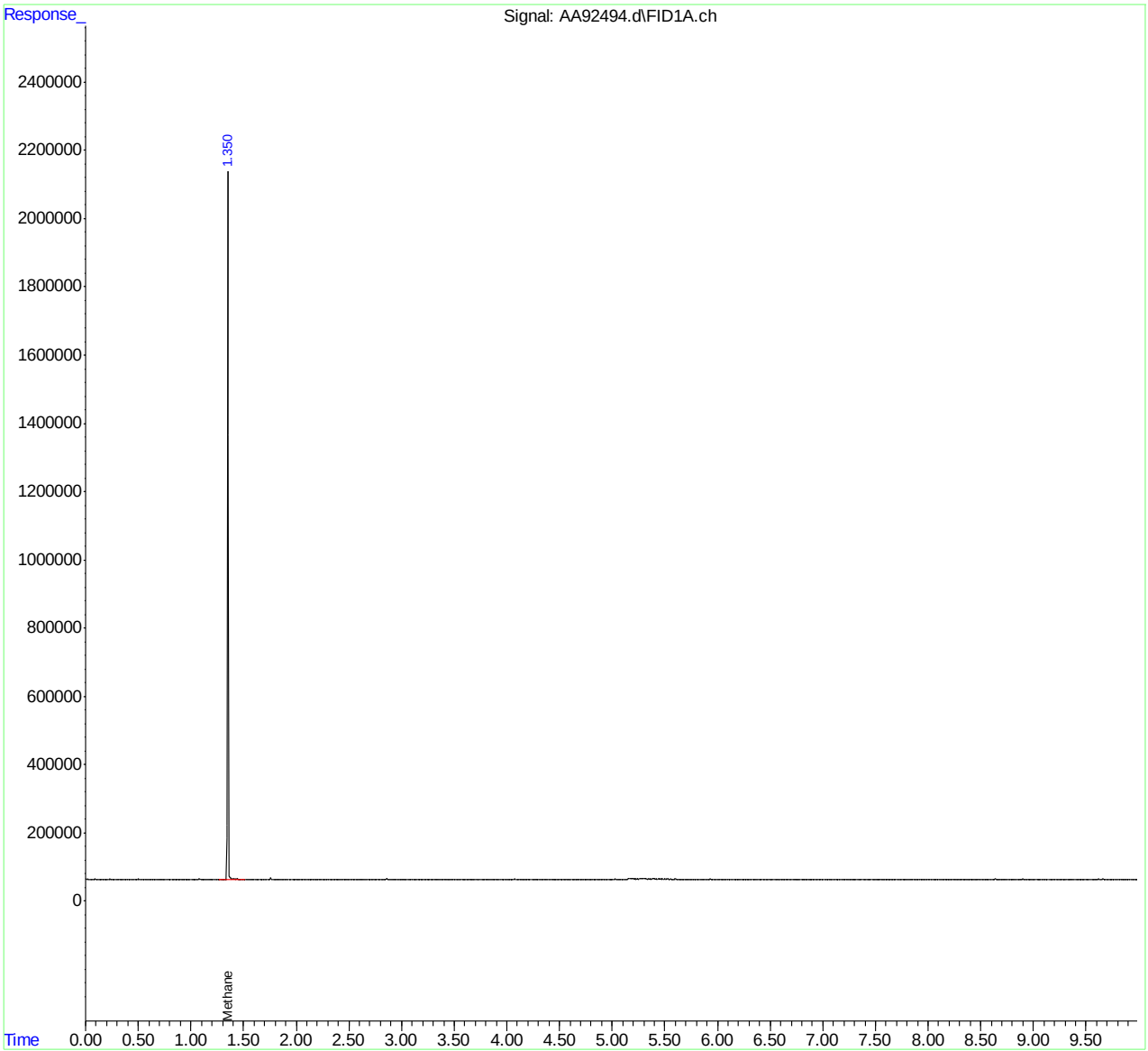
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92494.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 9:40 am
Operator : williamc
Sample : jd36624-10
Misc : GC58942,GAA2463,,,,,5
ALS Vial : 7 Sample Multiplier: 5

Integration File: autoint1.e
Quant Time: Dec 16 10:24:18 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92494.d**
Date Acquired **12/15/2021 9:40**
Sample Name **jd36624-10**
Sample Multiplier **5**
Temperature(C) **21**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	294	24.12	9566061.3	27622	1943.47	1289.04	169.61	38340	45.013	214.62	0.55	**214.62**
Ethane	30	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	27080	#DIV/0!	#DIV/0!	1.15	**#DIV/0!**
Ethene	28	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10440	#DIV/0!	#DIV/0!	1.55	**#DIV/0!**
Propane	44	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	32552	#DIV/0!	#DIV/0!	1.60	**#DIV/0!**
n-Butane	42	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12440	#DIV/0!	#DIV/0!	2.15	**#DIV/0!**
n-Pentane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	56501	#DIV/0!	#DIV/0!	1.90	**#DIV/0!**
Hexane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	39507	#DIV/0!	#DIV/0!	2.05	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92496.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 10:21 am
Operator : williamc
Sample : jd36624-11
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:25:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.346	38082299	1551.863	PPMV
2) Ethane	1.752	71592	1.630	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

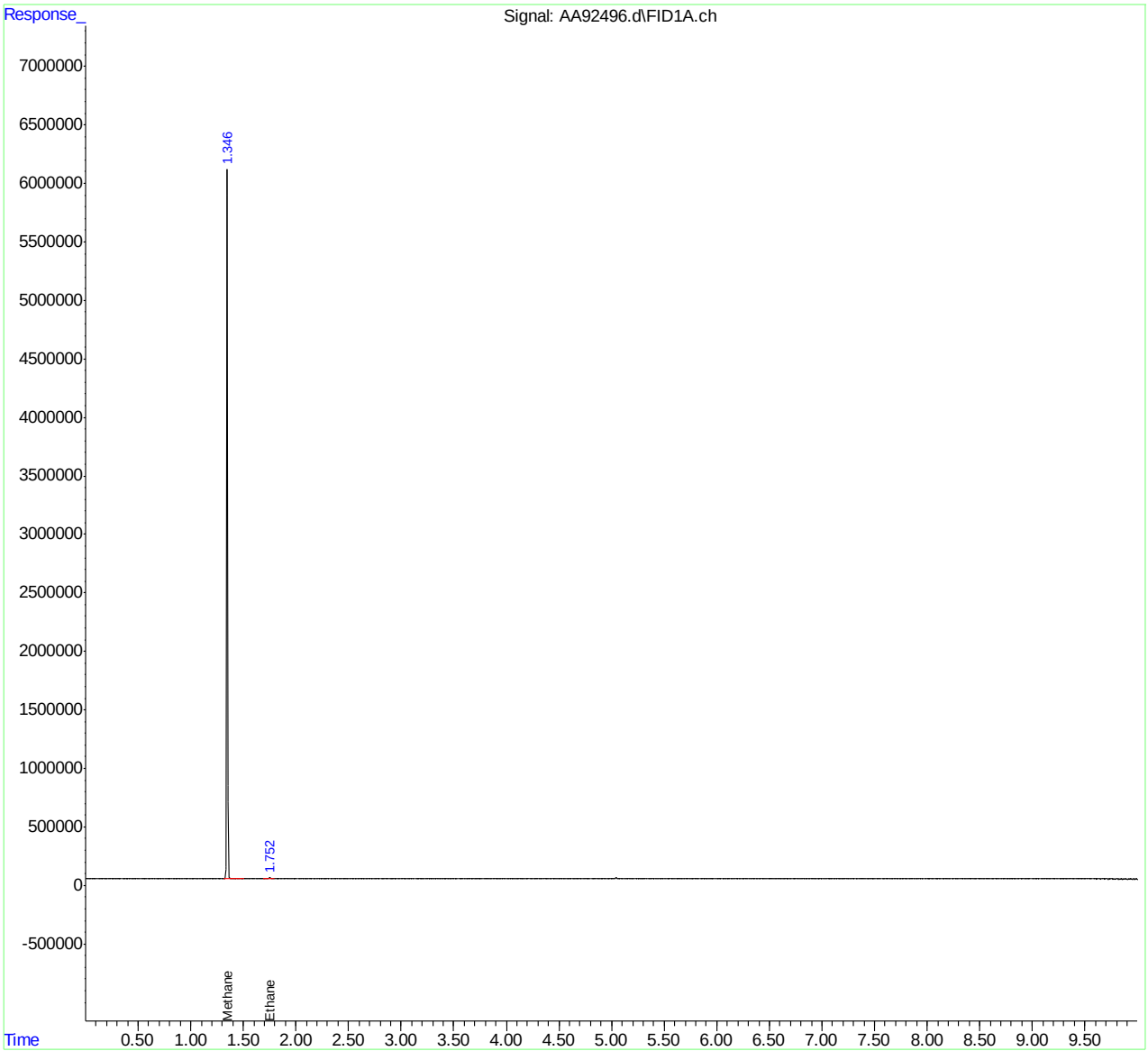
11.1.25 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92496.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 10:21 am
Operator : williamc
Sample : jd36624-11
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:25:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



MAA2456.M Thu Dec 16 10:26:10 2021 Page: 2

1

Dissolved Gas Calculation Worksheet

Data File Name **AA92496.d**
Date Acquired **12/15/2021 10:21**
Sample Name **jd36624-11**
Sample Multiplier **1**
Temperature(C) **21**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	294	24.12	38082299	27622	1550.74	1028.55	131.87	38340	35.917	167.78	0.11	**167.78**
Ethane	30	22.4	55.5	294	24.12	71592.291	0	1.63	2.03	0.26	27080	0.100	0.360	0.23	**0.360**
Ethene	28	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10440	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	32552	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12440	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	56501	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	39507	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92497.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 10:34 am
Operator : williamc
Sample : jd36624-11
Misc : GC58942,GAA2463,,,,,5
ALS Vial : 10 Sample Multiplier: 5

Integration File: autoint1.e
Quant Time: Dec 16 10:26:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.349	13014205	2651.660	PPMV

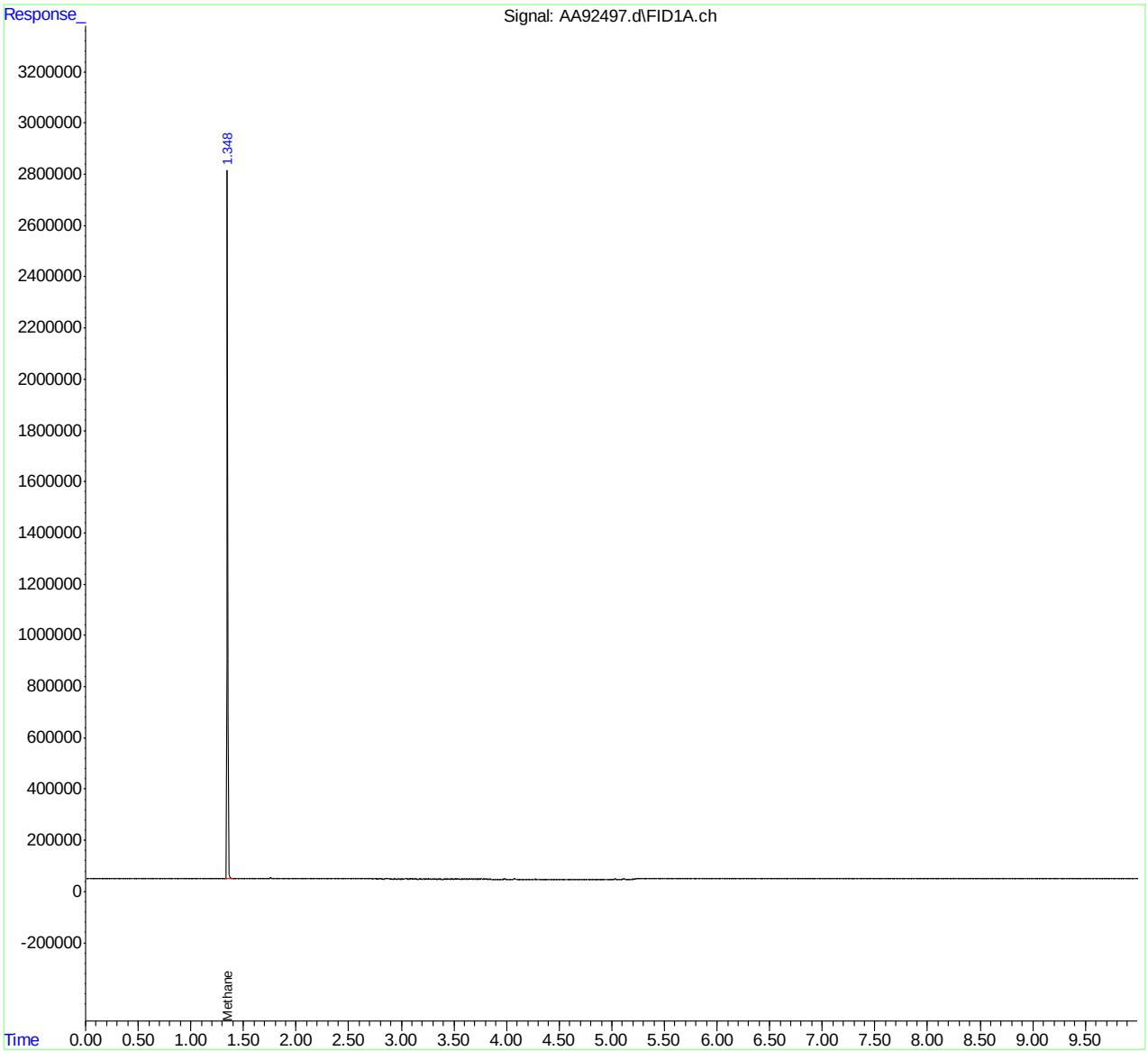
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92497.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 10:34 am
Operator : williamc
Sample : jd36624-11
Misc : GC58942,GAA2463,,,,,5
ALS Vial : 10 Sample Multiplier: 5

Integration File: autoint1.e
Quant Time: Dec 16 10:26:37 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92497.d**
Date Acquired **12/15/2021 10:34**
Sample Name **jd36624-11**
Sample Multiplier **5**
Temperature(C) **21**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	294	24.12	13014205	27622	2646.03	1755.02	225.00	38340	61.285	286.29	0.55	**286.29**
Ethane	30	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	27080	#DIV/0!	#DIV/0!	1.15	**#DIV/0!**
Ethene	28	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10440	#DIV/0!	#DIV/0!	1.55	**#DIV/0!**
Propane	44	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	32552	#DIV/0!	#DIV/0!	1.60	**#DIV/0!**
n-Butane	42	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12440	#DIV/0!	#DIV/0!	2.15	**#DIV/0!**
n-Pentane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	56501	#DIV/0!	#DIV/0!	1.90	**#DIV/0!**
Hexane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	39507	#DIV/0!	#DIV/0!	2.05	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92498.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 10:47 am
Operator : williamc
Sample : jd36624-12
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:30:10 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.345	19288541	786.013	PPMV
2) Ethane	1.752	62021	1.412	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

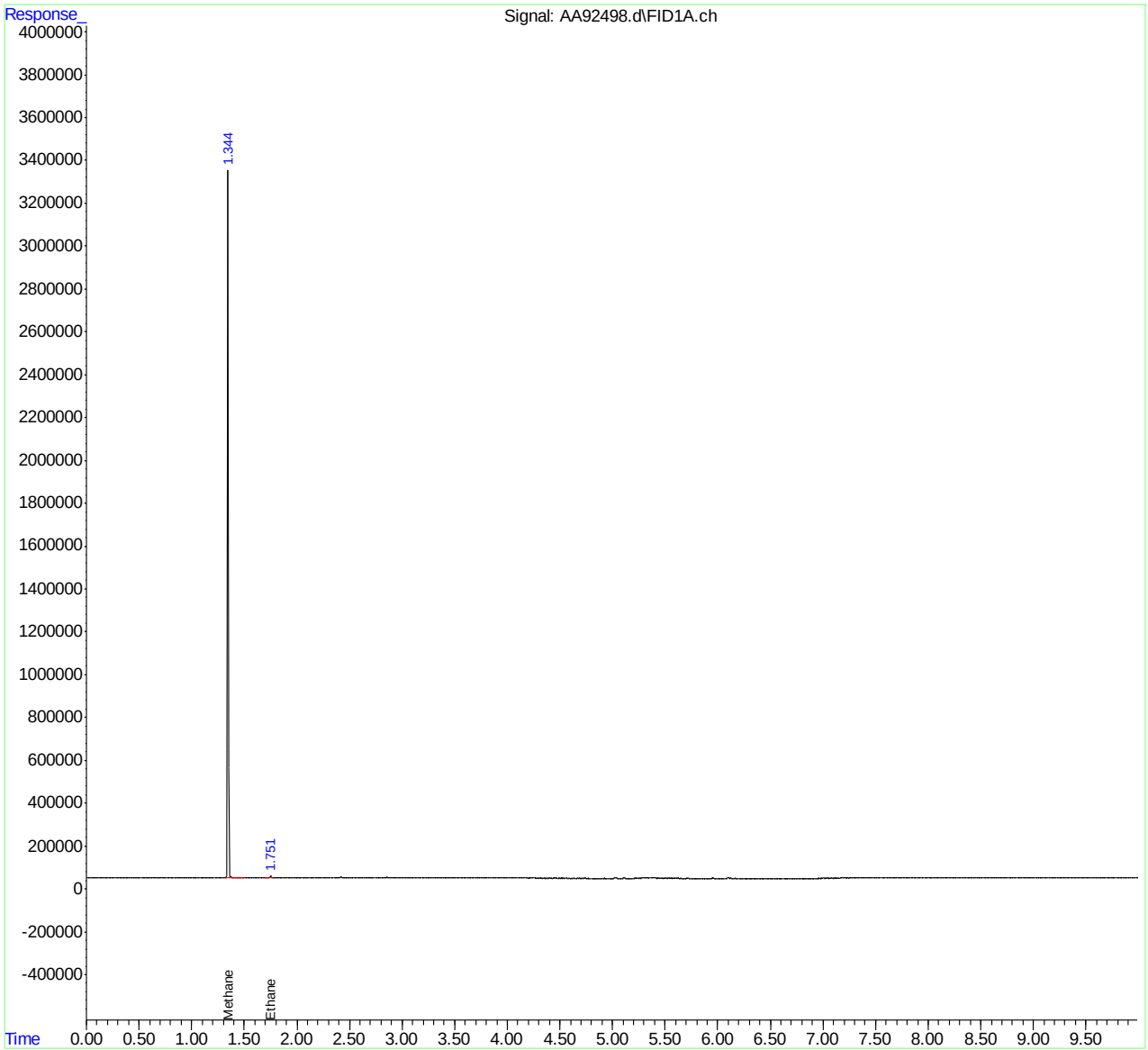
11.1.29 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92498.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 10:47 am
Operator : williamc
Sample : jd36624-12
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:30:10 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92498.d**
Date Acquired **12/15/2021 10:47**
Sample Name **jd36624-12**
Sample Multiplier **1**
Temperature(C) **21**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	294	24.12	19288541	27622	784.89	520.59	66.74	38340	18.179	84.92	0.11	**84.92**
Ethane	30	22.4	55.5	294	24.12	62021.472	0	1.41	1.76	0.23	27080	0.087	0.312	0.23	**0.312**
Ethene	28	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10440	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	32552	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12440	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	56501	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	39507	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

11.1.30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92499.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 11:00 am
Operator : williamc
Sample : jd36624-13
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:30:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.347	41695553	1699.104	PPMV
2) Ethane	1.753	159569	3.634	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

11.1.31

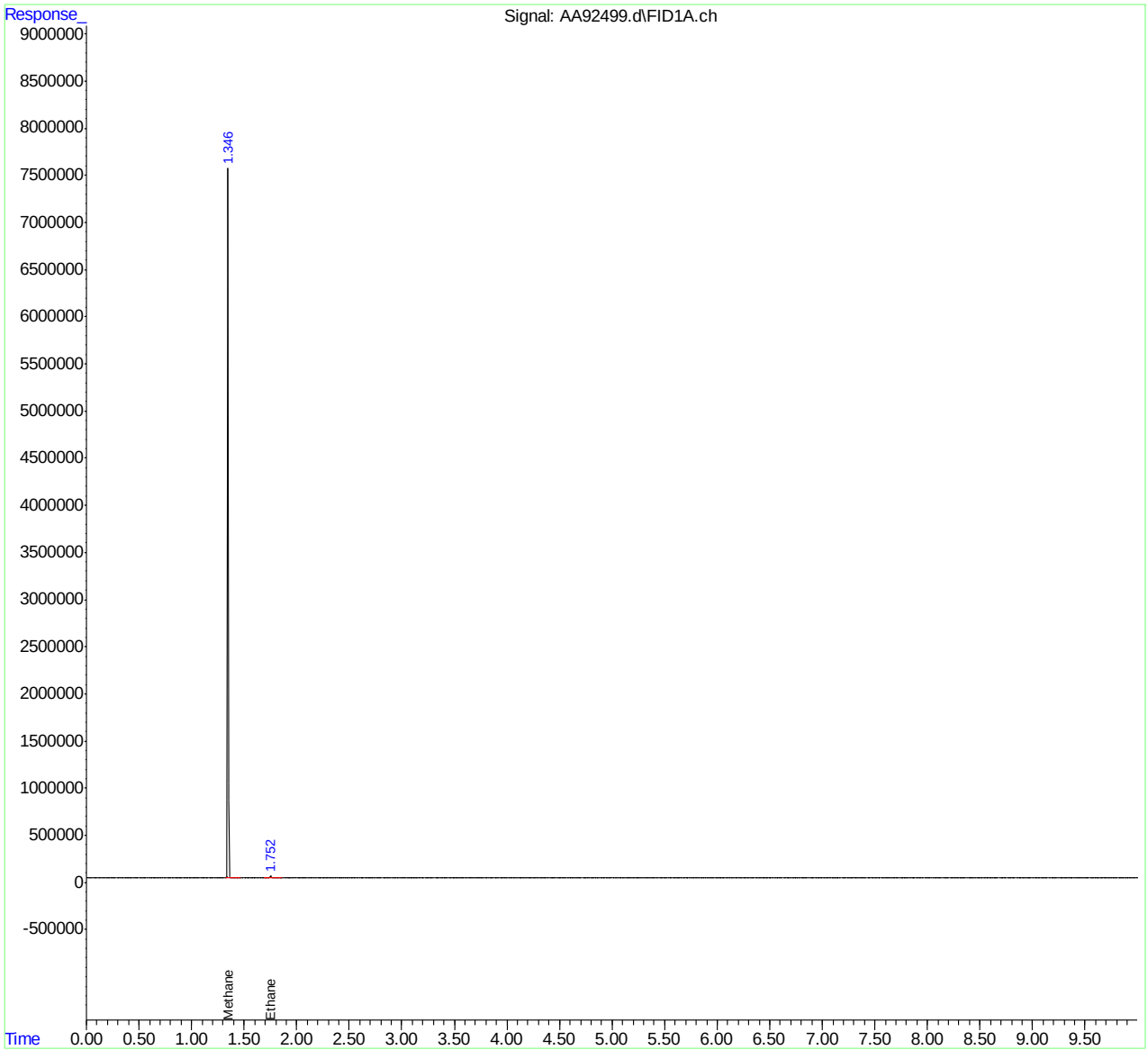
11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92499.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 11:00 am
Operator : williamc
Sample : jd36624-13
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:30:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92499.d**
Date Acquired **12/15/2021 11:00**
Sample Name **jd36624-13**
Sample Multiplier **1**
Temperature(C) **21**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	294	24.12	41695553	27622	1697.98	1126.21	148.19	38340	39.327	187.51	0.11	**187.51**
Ethane	30	22.4	55.5	294	24.12	159568.72	0	3.63	4.52	0.59	27080	0.223	0.818	0.23	**0.818**
Ethene	28	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10440	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	32552	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12440	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	56501	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	39507	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92500.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 11:13 am
Operator : williamc
Sample : jd36624-13
Misc : GC58942,GAA2463,,,,,5
ALS Vial : 13 Sample Multiplier: 5

Integration File: autoint1.e
Quant Time: Dec 16 10:31:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.348	15827636	3224.900	PPMV
2)	Ethane	1.754	61100	6.957	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

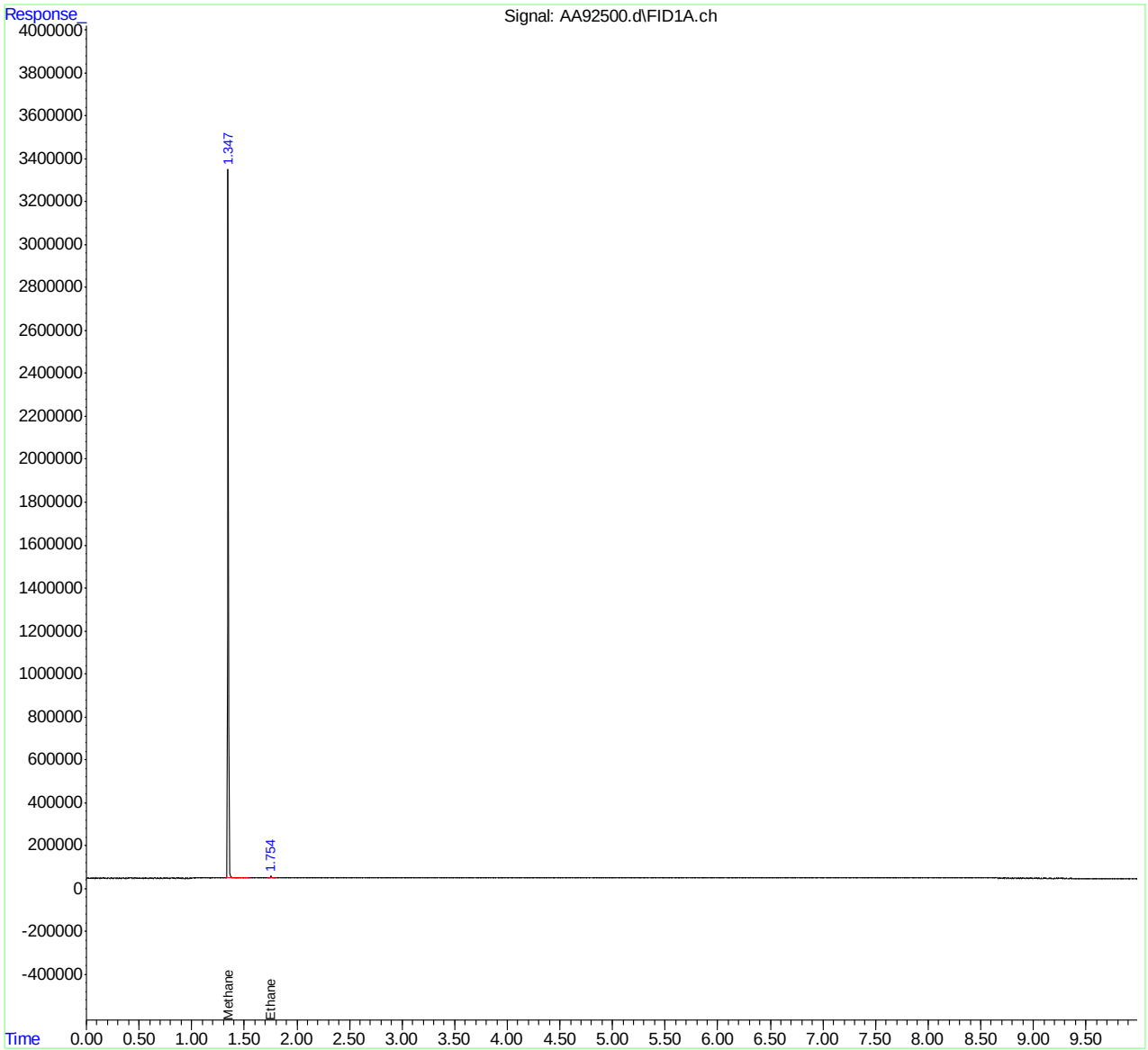
11.1.33 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92500.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 11:13 am
Operator : williamc
Sample : jd36624-13
Misc : GC58942,GAA2463,,,,,5
ALS Vial : 13 Sample Multiplier: 5

Integration File: autoint1.e
Quant Time: Dec 16 10:31:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92500.d**
Date Acquired **12/15/2021 11:13**
Sample Name **jd36624-13**
Sample Multiplier **5**
Temperature(C) **21**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	294	24.12	15827636	27622	3219.27	2135.23	280.95	38340	74.562	355.51	0.55	**355.51**
Ethane	30	22.4	55.5	294	24.12	61099.785	0	6.96	8.65	1.14	27080	0.428	1.566	1.15	**1.566**
Ethene	28	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10440	#DIV/0!	#DIV/0!	1.55	**#DIV/0!**
Propane	44	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	32552	#DIV/0!	#DIV/0!	1.60	**#DIV/0!**
n-Butane	42	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12440	#DIV/0!	#DIV/0!	2.15	**#DIV/0!**
n-Pentane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	56501	#DIV/0!	#DIV/0!	1.90	**#DIV/0!**
Hexane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	39507	#DIV/0!	#DIV/0!	2.05	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92501.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 11:27 am
Operator : williamc
Sample : jd36624-14
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:32:06 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.343	60921849	2482.580	PPMV
2)	Ethane	1.749	220428	5.020	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

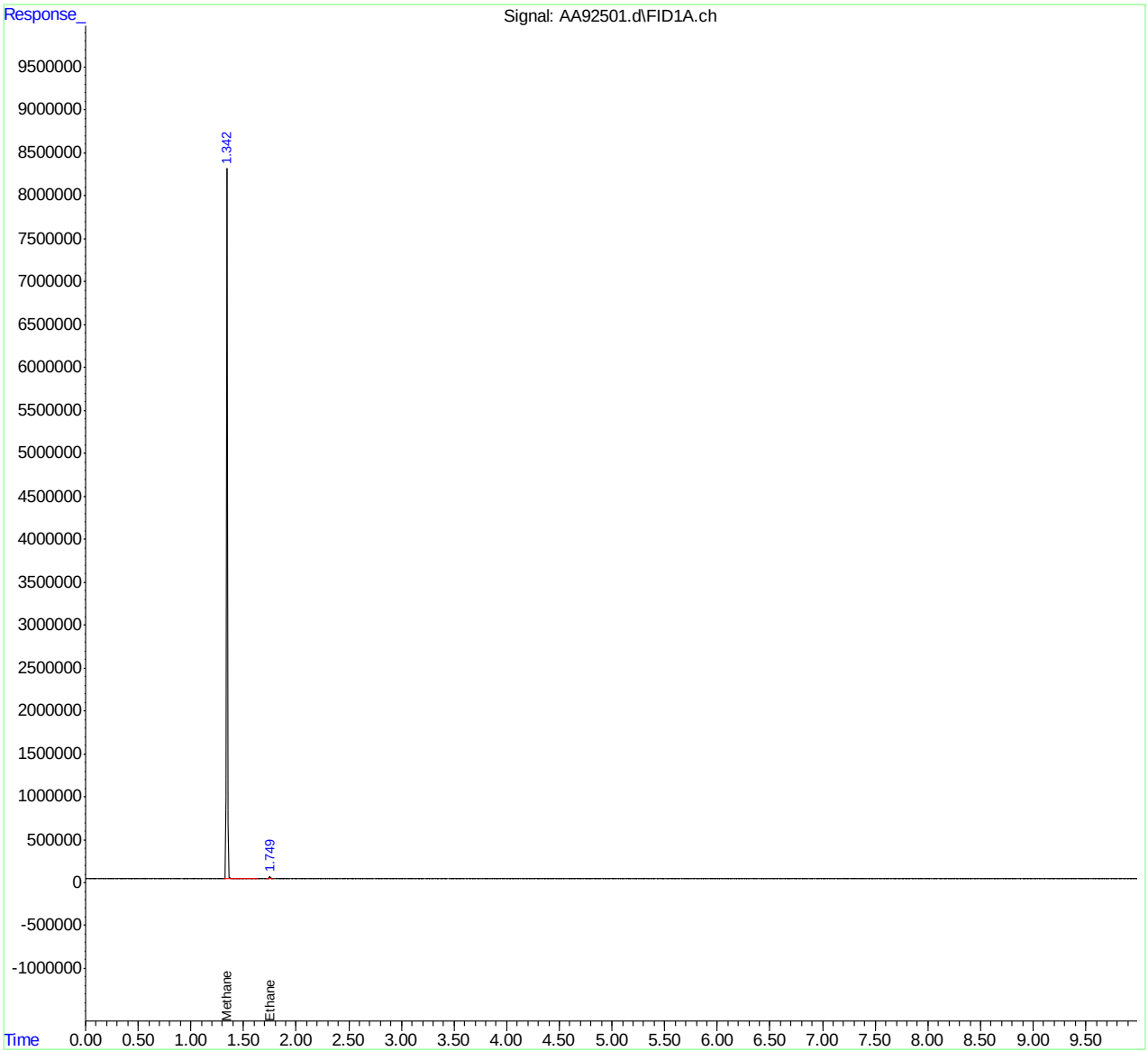
11.1.35 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92501.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 11:27 am
Operator : williamc
Sample : jd36624-14
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:32:06 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92501.d**
Date Acquired **12/15/2021 11:27**
Sample Name **jd36624-14**
Sample Multiplier **1**
Temperature(C) **21**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	294	24.12	60921849	27622	2481.45	1645.86	211.01	38340	57.473	268.48	0.11	**268.48**
Ethane	30	22.4	55.5	294	24.12	220427.65	0	5.02	6.24	0.80	27080	0.309	1.109	0.23	**1.109**
Ethene	28	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10440	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	32552	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12440	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	56501	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	39507	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92502.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 11:40 am
Operator : williamc
Sample : jd36624-14
Misc : GC58942,GAA2463,,,,,10
ALS Vial : 15 Sample Multiplier: 10

Integration File: autoint1.e
Quant Time: Dec 16 10:32:52 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.352	8061562	3285.106	PPMV

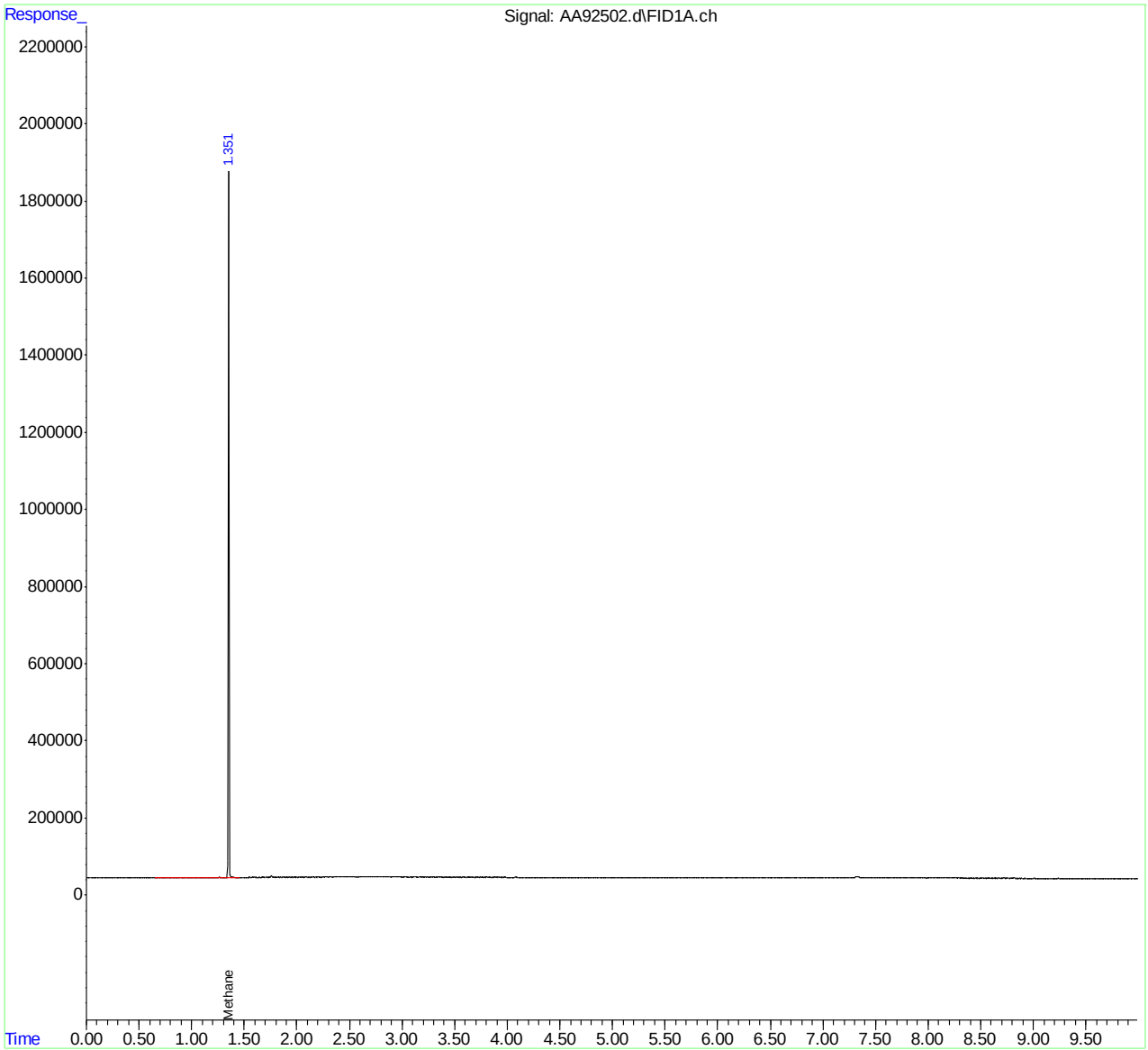
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92502.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 11:40 am
Operator : williamc
Sample : jd36624-14
Misc : GC58942,GAA2463,,,,,10
ALS Vial : 15 Sample Multiplier: 10

Integration File: autoint1.e
Quant Time: Dec 16 10:32:52 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



Dissolved Gas Calculation Worksheet

Data File Name **AA92502.d**
Date Acquired **12/15/2021 11:40**
Sample Name **jd36624-14**
Sample Multiplier **10**
Temperature(C) **21**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	294	24.12	8061562	27622	3273.85	2171.43	278.39	38340	75.826	354.21	1.10	**354.21**
Ethane	30	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	27080	#DIV/0!	#DIV/0!	2.30	**#DIV/0!**
Ethene	28	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10440	#DIV/0!	#DIV/0!	3.10	**#DIV/0!**
Propane	44	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	32552	#DIV/0!	#DIV/0!	3.20	**#DIV/0!**
n-Butane	42	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12440	#DIV/0!	#DIV/0!	4.30	**#DIV/0!**
n-Pentane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	56501	#DIV/0!	#DIV/0!	3.80	**#DIV/0!**
Hexane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	39507	#DIV/0!	#DIV/0!	4.10	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92504.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 12:12 pm
Operator : williamc
Sample : jd36624-15
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:38:36 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.344	40475823	1649.400	PPMV
2)	Ethane	1.750	79532	1.811	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

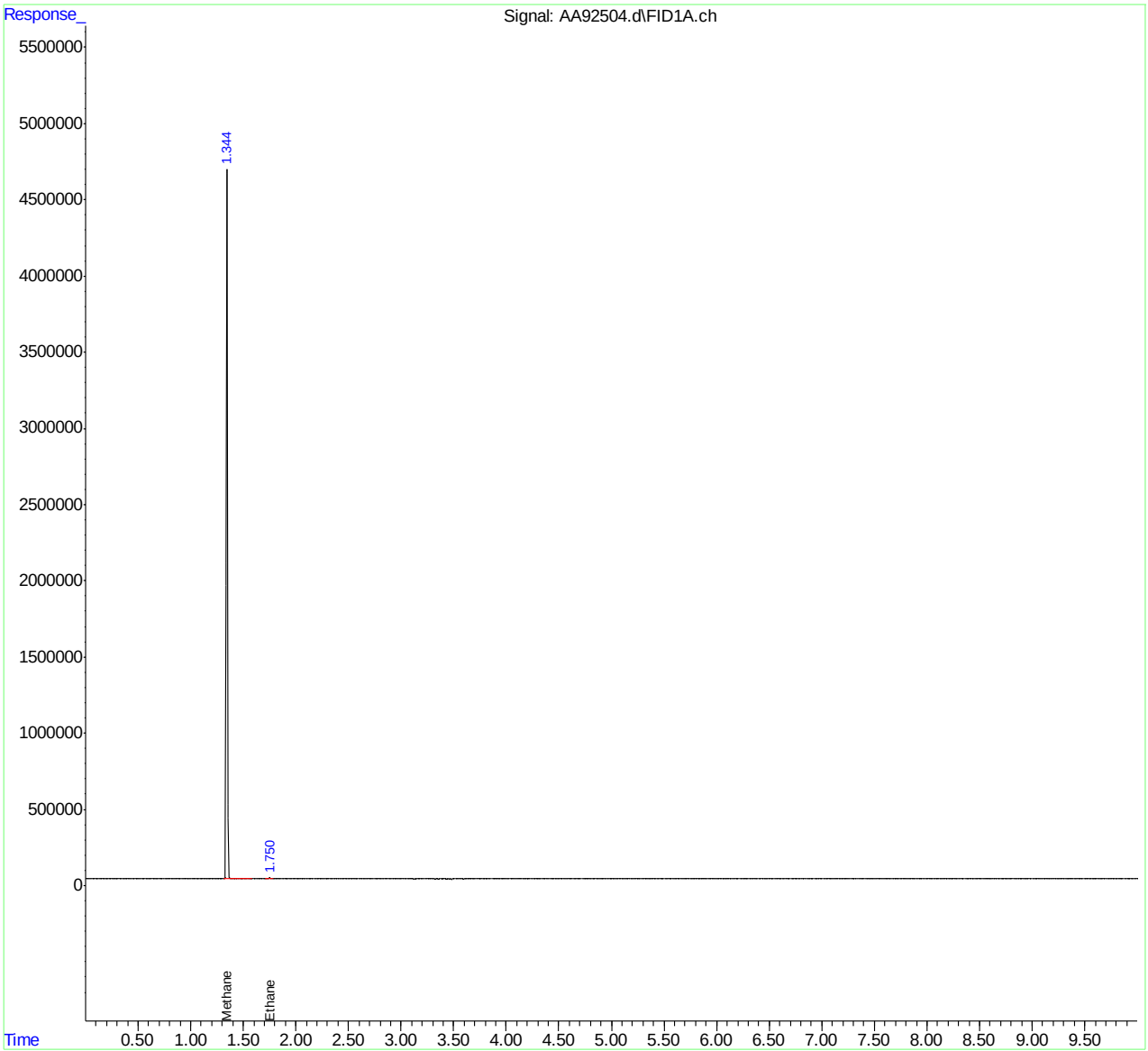
11.1.39 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92504.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 12:12 pm
Operator : williamc
Sample : jd36624-15
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:38:36 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92504.d**
Date Acquired **12/15/2021 12:12**
Sample Name **jd36624-15**
Sample Multiplier **1**
Temperature(C) **23**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	296	24.29	40475823	27622	1648.27	1085.86	139.21	39820	36.757	175.97	0.11	**175.97**
Ethane	30	22.4	55.5	296	24.29	79531.97	0	1.81	2.24	0.29	28640	0.105	0.392	0.23	**0.392**
Ethene	28	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10920	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	34744	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13451	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	60118	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	42425	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92505.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 12:28 pm
Operator : williamc
Sample : jd36624-15
Misc : GC58942,GAA2463,,,,,5
ALS Vial : 18 Sample Multiplier: 5

Integration File: autoint1.e
Quant Time: Dec 16 10:39:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.349	10492442	2137.848	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

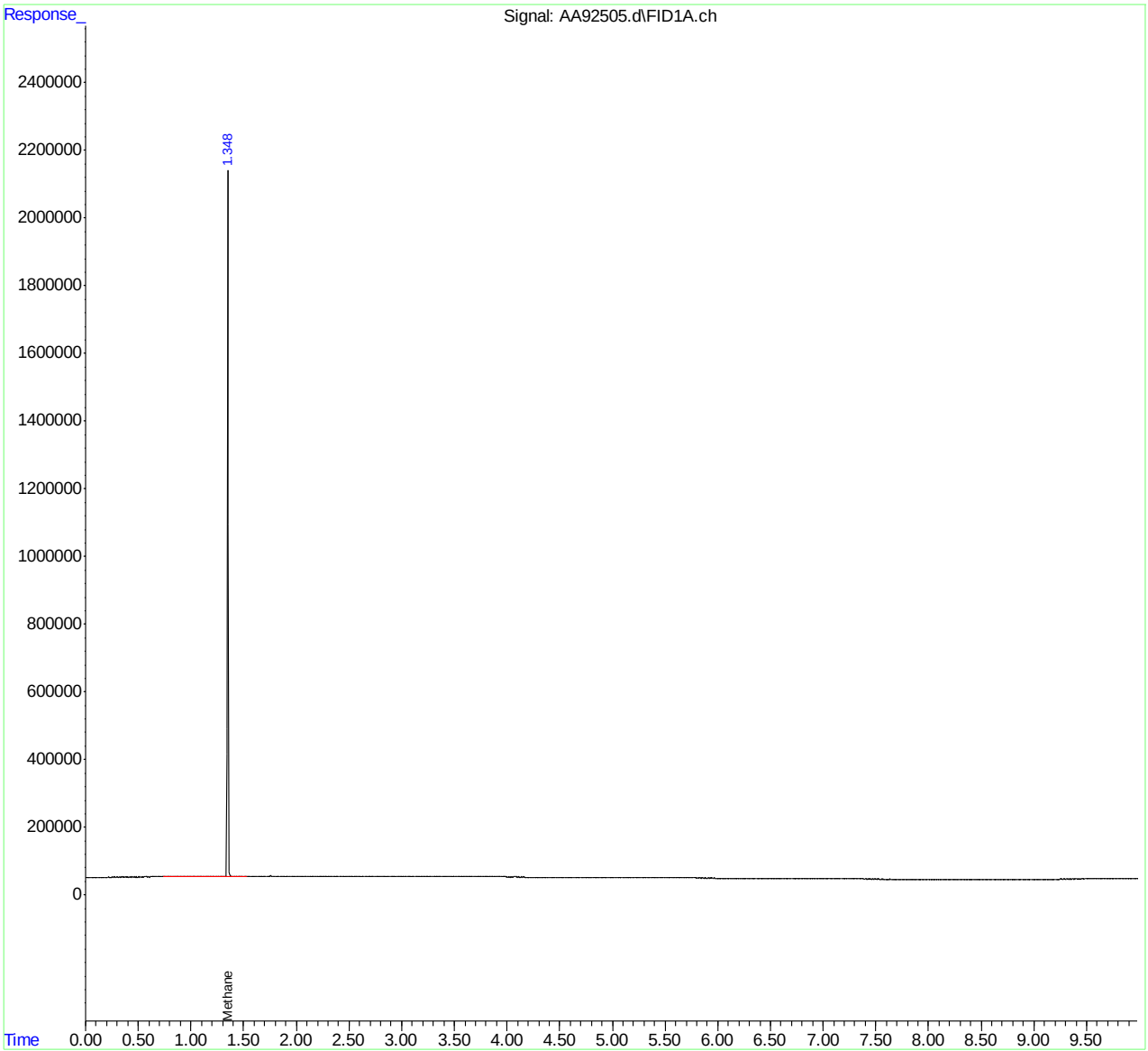
11.1.41
11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92505.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 12:28 pm
Operator : williamc
Sample : jd36624-15
Misc : GC58942,GAA2463,,,,,5
ALS Vial : 18 Sample Multiplier: 5

Integration File: autoint1.e
Quant Time: Dec 16 10:39:26 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



Dissolved Gas Calculation Worksheet

Data File Name **AA92505.d**
Date Acquired **12/15/2021 12:28**
Sample Name **jd36624-15**
Sample Multiplier **5**
Temperature(C) **23**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	296	24.29	10492442	27622	2132.22	1404.67	180.09	39820	47.549	227.64	0.55	**227.64**
Ethane	30	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	28640	#DIV/0!	#DIV/0!	1.15	**#DIV/0!**
Ethene	28	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10920	#DIV/0!	#DIV/0!	1.55	**#DIV/0!**
Propane	44	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	34744	#DIV/0!	#DIV/0!	1.60	**#DIV/0!**
n-Butane	42	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13451	#DIV/0!	#DIV/0!	2.15	**#DIV/0!**
n-Pentane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	60118	#DIV/0!	#DIV/0!	1.90	**#DIV/0!**
Hexane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	42425	#DIV/0!	#DIV/0!	2.05	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 12/17/21 12:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92506.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 12:43 pm
Operator : williamc
Sample : jd36624-16
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:41:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.339	206584272	8418.359	PPMV
2)	Ethane	1.745	351999	8.016	PPMV m
3)	Ethene	2.415	336473	7.616	PPMV m

(f)=RT Delta > 1/2 Window (m)=manual int.

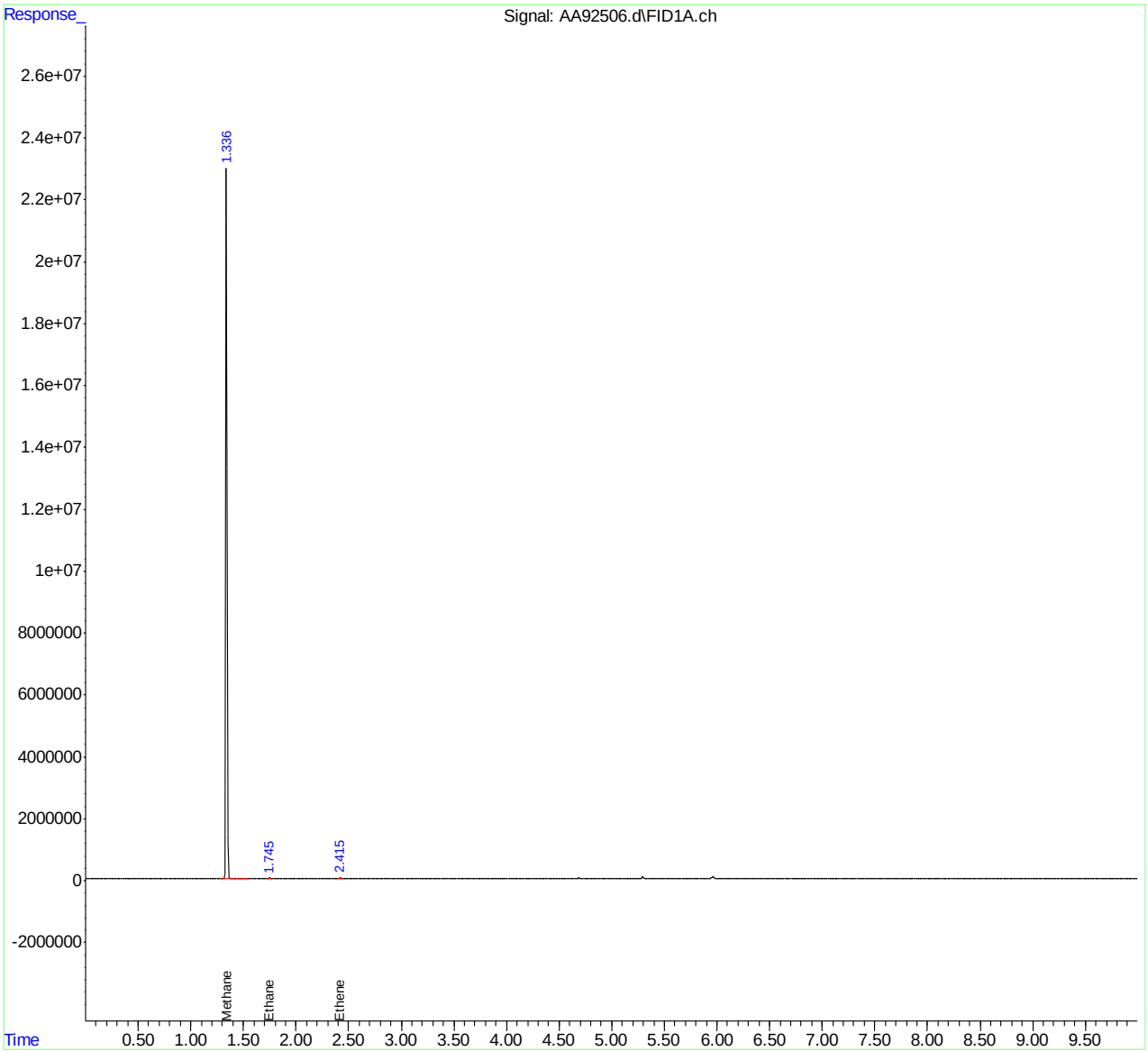
11.1.43 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92506.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 12:43 pm
Operator : williamc
Sample : jd36624-16
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:41:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92506.d**
Date Acquired **12/15/2021 12:43**
Sample Name **jd36624-16**
Sample Multiplier **1**
Temperature(C) **23**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	296	24.29	206584272	27622	8417.23	5545.14	729.62	39820	187.707	917.33	0.11	**917.33**
Ethane	30	22.4	55.5	296	24.29	351999.18	0	8.02	9.90	1.30	28640	0.466	1.769	0.23	**1.769**
Ethene	28	22.4	55.5	296	24.29	336473	0	7.62	8.78	1.16	10920	1.084	2.239	0.31	**2.239**
Propane	44	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	34744	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13451	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	60118	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	42425	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92507.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 12:56 pm
Operator : williamc
Sample : jd36624-16
Misc : GC58942,GAA2463,,,,,20
ALS Vial : 20 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Dec 16 10:42:01 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.350	13344289	10875.660	PPMV

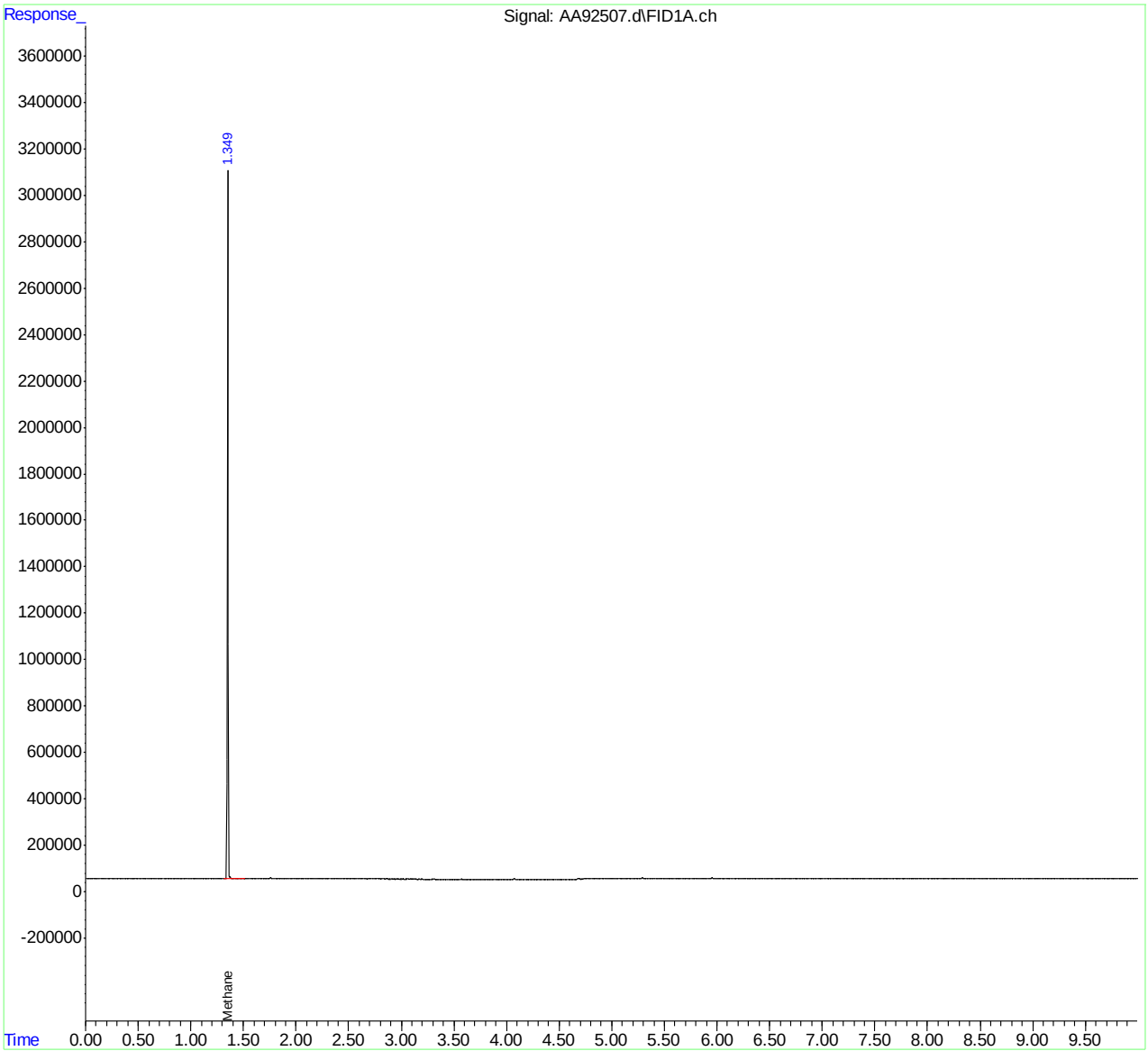
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92507.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 12:56 pm
Operator : williamc
Sample : jd36624-16
Misc : GC58942,GAA2463,,,,,20
ALS Vial : 20 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Dec 16 10:42:01 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92507.d**
Date Acquired **12/15/2021 12:56**
Sample Name **jd36624-16**
Sample Multiplier **20**
Temperature(C) **23**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	296	24.29	13344289	27622	10853.15	7149.88	940.77	39820	242.029	1182.80	2.20	**1182.80**
Ethane	30	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	28640	#DIV/0!	#DIV/0!	4.60	**#DIV/0!**
Ethene	28	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10920	#DIV/0!	#DIV/0!	6.20	**#DIV/0!**
Propane	44	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	34744	#DIV/0!	#DIV/0!	6.40	**#DIV/0!**
n-Butane	42	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13451	#DIV/0!	#DIV/0!	8.60	**#DIV/0!**
n-Pentane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	60118	#DIV/0!	#DIV/0!	7.60	**#DIV/0!**
Hexane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	42425	#DIV/0!	#DIV/0!	8.20	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92508.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 1:09 pm
Operator : williamc
Sample : jd36624-17
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:42:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.350	217625348	8868.286	PPMV

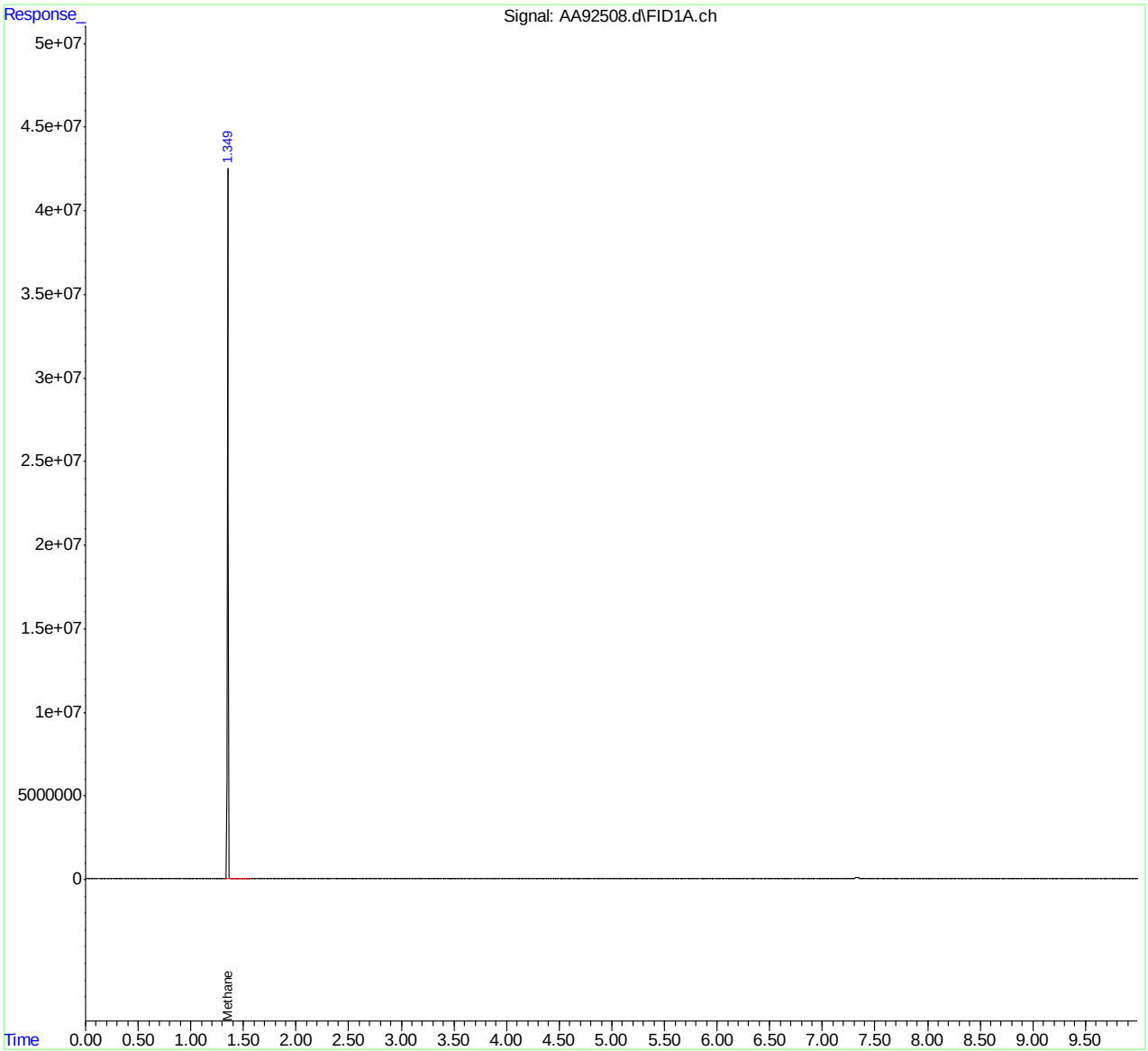
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92508.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 1:09 pm
Operator : williamc
Sample : jd36624-17
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 16 10:42:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92508.d**
Date Acquired **12/15/2021 13:09**
Sample Name **jd36624-17**
Sample Multiplier **1**
Temperature(C) **23**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	296	24.29	217625348	27622	8867.16	5841.54	748.92	39820	197.741	946.66	0.11	**946.66**
Ethane	30	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	28640	#DIV/0!	#DIV/0!	0.23	**#DIV/0!**
Ethene	28	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10920	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	34744	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13451	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	60118	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	42425	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92509.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 1:24 pm
Operator : johnn
Sample : jd36624-17
Misc : GC58942,GAA2463,,,,,20
ALS Vial : 22 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Dec 16 10:43:27 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.352	21743777	17721.283	PPMV

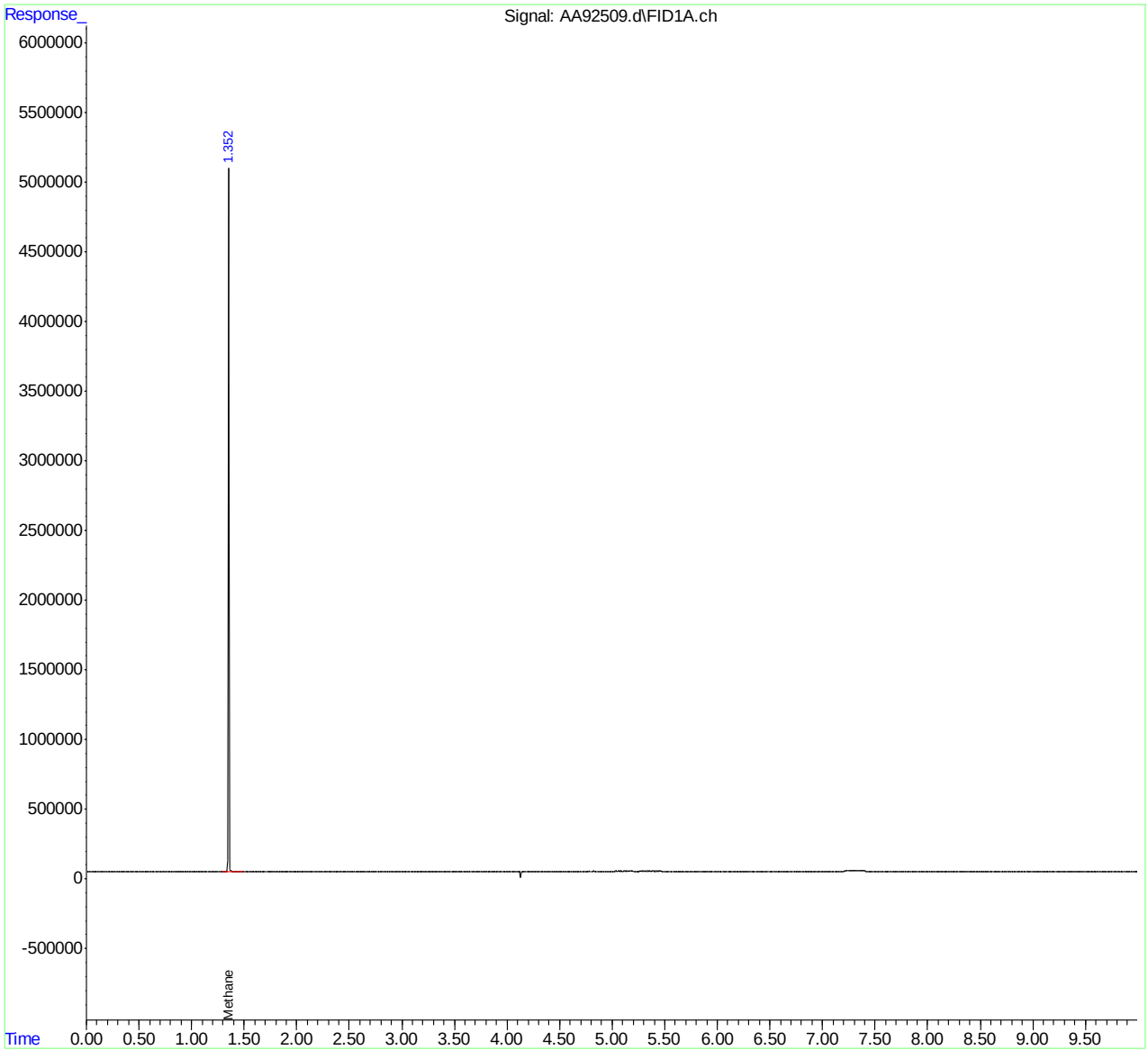
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92509.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 1:24 pm
Operator : johnn
Sample : jd36624-17
Misc : GC58942,GAA2463,,,,,20
ALS Vial : 22 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Dec 16 10:43:27 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92509.d**
Date Acquired **12/15/2021 13:24**
Sample Name **jd36624-17**
Sample Multiplier **20**
Temperature(C) **23**
Headspace Vol. (cc) **5**
Sample Vol(cc) **39**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	296	24.29	21743777	27622	17698.77	11659.66	1494.83	39820	394.689	1889.52	2.20	**1889.52**
Ethane	30	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	28640	#DIV/0!	#DIV/0!	4.60	**#DIV/0!**
Ethene	28	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10920	#DIV/0!	#DIV/0!	6.20	**#DIV/0!**
Propane	44	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	34744	#DIV/0!	#DIV/0!	6.40	**#DIV/0!**
n-Butane	42	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13451	#DIV/0!	#DIV/0!	8.60	**#DIV/0!**
n-Pentane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	60118	#DIV/0!	#DIV/0!	7.60	**#DIV/0!**
Hexane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	42425	#DIV/0!	#DIV/0!	8.20	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92454.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 9:00 am
Operator : williamc
Sample : mb
Misc : GC58940,GAA2462,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 14 09:11:17 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc Units
Target Compounds			
1) Methane	1.344	30708	1.251 PPMV

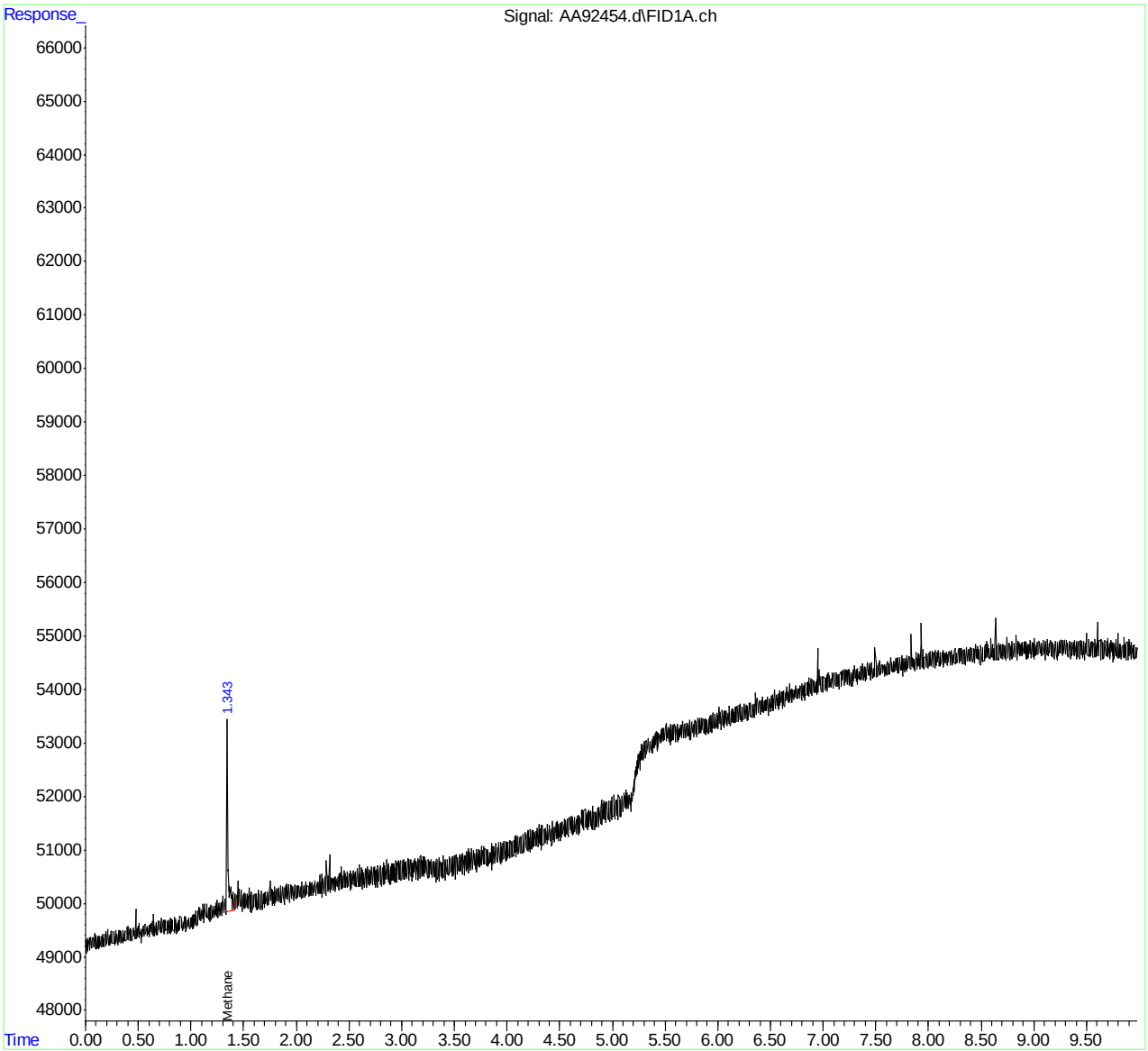
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92454.d
Signal(s) : FID1A.ch
Acq On : 14 Dec 2021 9:00 am
Operator : williamc
Sample : mb
Misc : GC58940,GAA2462,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 14 09:11:17 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



Dissolved Gas Calculation Worksheet

Data File Name **AA92454.d**
Date Acquired **12/14/2021 9:00**
Sample Name **mb**
Sample Multiplier **1**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	30708.124	26526	0.17	0.11	0.01	39080	0.004	0.02	0.11	**ND**
Ethane	30	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	27860	#DIV/0!	#DIV/0!	0.23	**#DIV/0!**
Ethene	28	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10680	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	33643	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12937	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	58287	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	295	24.21	0	0	#DIV/0!	#DIV/0!	#DIV/0!	40945	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 12/17/21 12:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92492.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 9:11 am
Operator : williamc
Sample : mb
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 09:24:24 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.355	11010	0.449	PPMV m

(f)=RT Delta > 1/2 Window (m)=manual int.

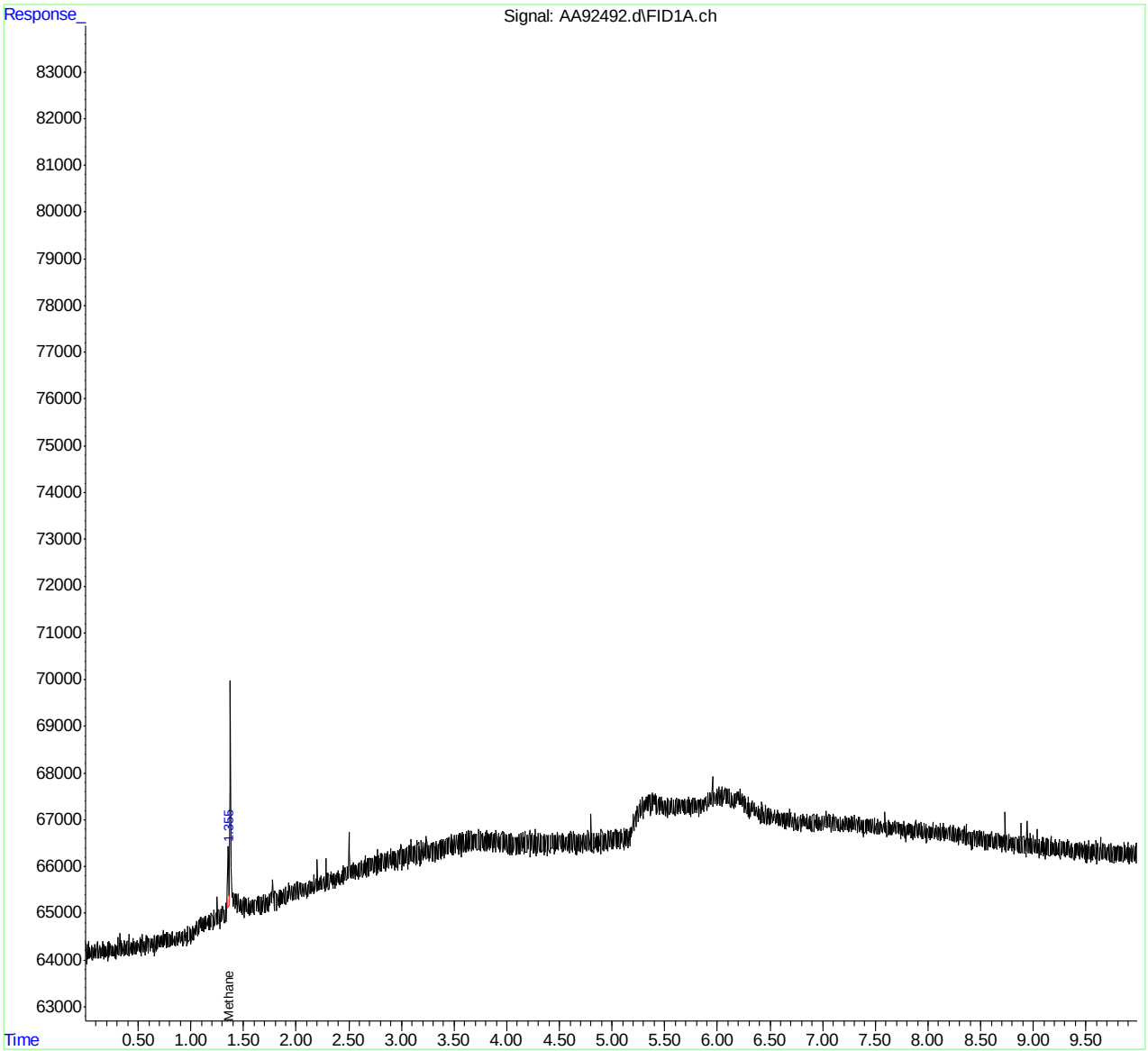
11.2.3 11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA92492.d
Signal(s) : FID1A.ch
Acq On : 15 Dec 2021 9:11 am
Operator : williamc
Sample : mb
Misc : GC58942,GAA2463,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 15 09:24:24 2021
Quant Method : C:\MSDCHEM\1\METHODS\MAA2456.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Mon Dec 06 16:10:39 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df



1

Dissolved Gas Calculation Worksheet

Data File Name **AA92492.d**
Date Acquired **12/15/2021 9:11**
Sample Name **mb**
Sample Multiplier **1**
Temperature(C) **21**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	294	24.12	11009.657	27622	-0.68	-0.45	-0.06	38340	-0.016	-0.07	0.11	**ND**
Ethane	30	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	27080	#DIV/0!	#DIV/0!	0.23	**#DIV/0!**
Ethene	28	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10440	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	32552	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	12440	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	56501	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	294	24.12	0	0	#DIV/0!	#DIV/0!	#DIV/0!	39507	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- DDT/Endrin Breakdown Checks
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37120-MB1	6G81274.D	1	12/17/21	RK	12/14/21	OP37120	G6G2874

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	62%	10-190%
877-09-8	Tetrachloro-m-xylene	57%	10-190%
2051-24-3	Decachlorobiphenyl	48%	10-156%
2051-24-3	Decachlorobiphenyl	49%	10-156%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37120-BS1	6G81275.D	1	12/17/21	RK	12/14/21	OP37120	G6G2874
OP37120-BSD	6G81276.D	1	12/17/21	RK	12/14/21	OP37120	G6G2874

The QC reported here applies to the following samples: **Method:** SW846 8081B

JD36624-2, JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.2	0.20	100	0.20	100	0	54-152/36
319-84-6	alpha-BHC	0.2	0.17	85	0.17	85	0	50-161/35
319-85-7	beta-BHC	0.2	0.20	100	0.20	100	0	56-150/36
319-86-8	delta-BHC	0.2	0.23	115	0.23	115	0	10-183/39
58-89-9	gamma-BHC (Lindane)	0.2	0.19	95	0.19	95	0	53-157/36
5103-71-9	alpha-Chlordane	0.2	0.20	100	0.20	100	0	57-152/37
5103-74-2	gamma-Chlordane	0.2	0.19	95	0.20	100	5	55-153/37
60-57-1	Dieldrin	0.2	0.20	100	0.20	100	0	56-163/36
72-54-8	4,4'-DDD	0.2	0.19	95	0.19	95	0	50-154/37
72-55-9	4,4'-DDE	0.2	0.19	95	0.19	95	0	47-157/43
50-29-3	4,4'-DDT	0.2	0.20	100	0.19	95	5	52-167/42
72-20-8	Endrin	0.2	0.20	100	0.20	100	0	55-165/36
1031-07-8	Endosulfan sulfate	0.2	0.20	100	0.20	100	0	43-150/36
7421-93-4	Endrin aldehyde	0.2	0.23	115	0.22	110	4	33-163/41
53494-70-5	Endrin ketone	0.2	0.24	120	0.24	120 [a]	0 [a]	42-178/38
959-98-8	Endosulfan-I	0.2	0.19	95	0.16	80	17	57-154/37
33213-65-9	Endosulfan-II	0.2	0.21	105	0.20	100	5	54-160/38
76-44-8	Heptachlor	0.2	0.18	90	0.18	90	0	55-151/37
1024-57-3	Heptachlor epoxide	0.2	0.20	100	0.20	100	0	58-157/36
72-43-5	Methoxychlor	0.2	0.21	105	0.20	100	10	55-155/39

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	91%	85%	10-190%
877-09-8	Tetrachloro-m-xylene	78%	72%	10-190%
2051-24-3	Decachlorobiphenyl	50%	43%	10-156%
2051-24-3	Decachlorobiphenyl	52%	51%	10-156%

(a) Reported from 2nd signal. 1st signal used for confirmation.

* = Outside of Control Limits.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2874-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81272.D	**Injection Time:**	22:34
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT
Check Std	723353283	2.06	1049763497	1.68
Upper Limit [a]	1446706566	2.56	2099526994	2.18
Lower Limit [b]	361676642	1.56	524881749	1.18

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT
OP37120-MB1	607411388	2.06	845950236	1.68
OP37120-BS1	609657237	2.06	819780196	1.68
OP37120-BSD	658505823	2.06	876019008	1.68
JD36624-4	705614030	2.06	822296621	1.68
JD36624-5	668051192	2.06	857737110	1.68
JD36624-6	775479596	2.06	643406153	1.68
JD36624-7	3245209758	2.05	3321572937	1.67
JD36624-8	634873200	2.06	746183919	1.68
JD36624-9	824434312	2.06	755302882	1.68
JD36624-10	623360684	2.06	763091703	1.68
JD36624-11	671639142	2.06	799736664	1.68
JD36624-12	802913202	2.06	737610307	1.69
JD36624-13	636850494	2.06	745397364	1.69
JD36624-14	692928892	2.06	911535945	1.68
JD36624-15	596745340	2.06	678752483	1.68
JD36624-16	2891834536	2.05	866728254	1.68
JD36624-17	3735860177	2.05	1110322504	1.68

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2878-CC2867	**Injection Date:**	12/21/21
Lab File ID:	6G81350.D	**Injection Time:**	03:51
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT
Check Std	609422005	2.07	834230824	1.69
Upper Limit [a]	1218844010	2.57	1668461648	2.19
Lower Limit [b]	304711003	1.57	417115412	1.19

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT
JD36624-7 [c]	1226640874	2.06	1204976698	1.69
JD36624-8 [c]	645274065	2.06	860844238	1.69
JD36624-16 [c]	1085735896	2.06	875176057	1.69
JD36624-17 [c]	1359902595	2.06	916934627	1.69
JD36624-2 [d]	817361799	2.06	801659560	1.69
JD36624-3 [d]	681559106	2.06	834186416	1.69
ZZZZZZ	574961055	2.06	778120595	1.69
ZZZZZZ	671988123	2.06	863835608	1.69
ZZZZZZ	709556676	2.06	857768325	1.69
ZZZZZZ	589553619	2.06	750607019	1.69
ZZZZZZ	722221844	2.06	1209995210	1.68
ZZZZZZ	621081931	2.06	1058024549	1.69

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run.
(d) Had TBA cleanup.

DDT/Endrin Breakdown Check

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample:	G6G2874-DDT	**Injection Date:**	12/17/21
Lab File ID:	6G81271.D	**Injection Time:**	22:16
Instrument ID:	GC6G		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	10658633	6656672
4,4'-DDE	17188135	11336581
4,4'-DDT	2121984300	1403203096
DDT Breakdown [a]	1.3 %	1.3 %
Endrin aldehyde	43625026	4459255
Endrin ketone	9778047	4503235
Endrin	1238366198	791335726
Endrin Breakdown [b]	4.1 %	1.1 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G2874-CC2867	6G81272.D	12/17/21	22:34	00:18	Continuing cal 25
OP37120-MB1	6G81274.D	12/17/21	23:10	00:54	Method Blank
OP37120-BS1	6G81275.D	12/17/21	23:28	01:12	Blank Spike
OP37120-BSD	6G81276.D	12/17/21	23:46	01:30	Blank Spike Duplicate
JD36624-4	6G81279.D	12/18/21	00:39	02:23	HOFF MW-4DU
JD36624-5	6G81280.D	12/18/21	00:57	02:41	DUP-2021
JD36624-6	6G81281.D	12/18/21	01:15	02:58	HOFF MW-FA
JD36624-7	6G81282.D	12/18/21	01:33	03:16	HOFF MW-FB
JD36624-8	6G81283.D	12/18/21	01:51	03:35	HOFF MW-13
JD36624-9	6G81284.D	12/18/21	02:09	03:53	HOFF MW-C
JD36624-10	6G81285.D	12/18/21	02:26	04:10	HOFF MW-D
JD36624-11	6G81286.D	12/18/21	02:44	04:27	HOFF IW-1A
JD36624-12	6G81287.D	12/18/21	03:02	04:46	HOFF IW-1B
JD36624-13	6G81288.D	12/18/21	03:20	05:04	HOFF IW-3A
JD36624-14	6G81289.D	12/18/21	03:38	05:21	HOFF IW-3B
JD36624-15	6G81290.D	12/18/21	03:56	05:40	HOFF IW-2A
JD36624-16	6G81291.D	12/18/21	04:13	05:57	HOFF IW-2B
JD36624-17	6G81292.D	12/18/21	04:31	06:15	HOFF IW-B

DDT/Endrin Breakdown Check

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2878-DDT
Lab File ID: 6G81349.D
Instrument ID: GC6G
Injection Date: 12/21/21
Injection Time: 03:33

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	20411838	8319806
4,4'-DDE	26404602	13636929
4,4'-DDT	1447556774	967246326
DDT Breakdown [a]	3.1 %	2.2 %
Endrin aldehyde	20172370	5178467
Endrin ketone	3422362	9867419
Endrin	888930807	578310744
Endrin Breakdown [b]	2.6 %	2.5 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G2878-CC2867	6G81350.D	12/21/21	03:51	00:17	Continuing cal 25
JD36624-7	6G81353.D	12/21/21	04:44	01:11	HOFF MW-FB
JD36624-8	6G81354.D	12/21/21	05:02	01:28	HOFF MW-13
JD36624-16	6G81355.D	12/21/21	05:20	01:46	HOFF IW-2B
JD36624-17	6G81356.D	12/21/21	05:38	02:04	HOFF IW-B
JD36624-2	6G81357.D	12/21/21	05:56	02:22	HOFF MW-8
JD36624-3	6G81358.D	12/21/21	06:14	02:40	HOFF MW-4DL
ZZZZZZ	6G81362.D	12/21/21	07:25	03:52	(unrelated sample)
ZZZZZZ	6G81363.D	12/21/21	07:43	04:10	(unrelated sample)
ZZZZZZ	6G81364.D	12/21/21	08:01	04:28	(unrelated sample)
ZZZZZZ	6G81368.D	12/21/21	09:12	05:39	(unrelated sample)
ZZZZZZ	6G81369.D	12/21/21	09:30	05:57	(unrelated sample)
ZZZZZZ	6G81370.D	12/21/21	09:48	06:15	(unrelated sample)

GC Identification Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2874-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81272.D	**Injection Time:**	22:34
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	JD36624-4	**Injection Date:**	12/18/21
Lab File ID:	6G81279.D	**Injection Time:**	00:39
Client ID:	HOFF MW-4DU		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
gamma-BHC (Lindane)	1	2.99	2.98	0.066		ug/l	35.7
gamma-BHC (Lindane)	2 [a]	4.01	3.98	0.046		ug/l	

(a) Final result reported from this column.

GC Identification Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2874-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81272.D	**Injection Time:**	22:34
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	JD36624-5	**Injection Date:**	12/18/21
Lab File ID:	6G81280.D	**Injection Time:**	00:57
Client ID:	DUP-2021		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
gamma-BHC (Lindane)	1	2.99	2.98	0.061		ug/l	49.0
gamma-BHC (Lindane) [a]	2 [b]	4.01	3.98	0.037		ug/l	

(a) More than 40 % RPD for detected concentrations between the two GC columns.
(b) Final result reported from this column.

GC Identification Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2874-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81272.D	**Injection Time:**	22:34
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	JD36624-6	**Injection Date:**	12/18/21
Lab File ID:	6G81281.D	**Injection Time:**	01:15
Client ID:	HOFF MW-FA		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
gamma-BHC (Lindane)	1	2.99	2.98	0.044		ug/l	62.7
gamma-BHC (Lindane) [a]	2 [b]	3.99	3.98	0.023		ug/l	
4,4'-DDD	1	5.67	5.69	0.051		ug/l	68.4
4,4'-DDD [a]	2 [b]	7.57	7.56	0.025		ug/l	
Endrin	1	5.56	5.55	0.027		ug/l	20.4
Endrin	2 [b]	7.39	7.38	0.022		ug/l	
Heptachlor epoxide	1	4.46	4.44	0.065		ug/l	50.0
Heptachlor epoxide [a]	2 [b]	5.82	5.84	0.039		ug/l	

(a) More than 40 % RPD for detected concentrations between the two GC columns.
(b) Final result reported from this column.

GC Identification Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2874-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81272.D	**Injection Time:**	22:34
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	JD36624-8	**Injection Date:**	12/18/21
Lab File ID:	6G81283.D	**Injection Time:**	01:51
Client ID:	HOFF MW-13		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.78	3.77	0.25		ug/l	162.3
Aldrin [a]	2 [b]	5.03	5.01	0.026		ug/l	
beta-BHC	1	3.06	3.06	0.57		ug/l	108.1
beta-BHC [a]	2 [b]	4.06	4.07	0.17		ug/l	
Endosulfan-II	1	5.85	5.86	0.14		ug/l	94.7
Endosulfan-II [a]	2 [b]	7.75	7.74	0.050		ug/l	
Heptachlor	1	3.46	3.45	0.093		ug/l	126.3
Heptachlor [a]	2 [b]	4.54	4.56	0.021		ug/l	

(a) More than 40 % RPD for detected concentrations between the two GC columns.
(b) Final result reported from this column.

GC Identification Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2874-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81272.D	**Injection Time:**	22:34
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	JD36624-13	**Injection Date:**	12/18/21
Lab File ID:	6G81288.D	**Injection Time:**	03:20
Client ID:	HOFF IW-3A		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
gamma-BHC (Lindane)	1 [a]	2.99	2.98	0.040		ug/l	28.0
gamma-BHC (Lindane)	2	3.97	3.98	0.053		ug/l	

(a) Final result reported from this column.

GC Identification Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2874-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81272.D	**Injection Time:**	22:34
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	JD36624-15	**Injection Date:**	12/18/21
Lab File ID:	6G81290.D	**Injection Time:**	03:56
Client ID:	HOFF IW-2A		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
delta-BHC	1	3.21	3.23	0.023		ug/l	19.0
delta-BHC [a]	2 [b]	4.45	4.46	0.019		ug/l	

(a) Reported from 2nd signal. 1st signal used for confirmation.
(b) Final result reported from this column.

GC Identification Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2874-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81272.D	**Injection Time:**	22:34
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	JD36624-17	**Injection Date:**	12/18/21
Lab File ID:	6G81292.D	**Injection Time:**	04:31
Client ID:	HOFF IW-B		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
delta-BHC	1	3.26	3.23	0.055		ug/l	133.3
delta-BHC [a]	2 [b]	4.46	4.46	0.011		ug/l	

(a) More than 40 % RPD for detected concentrations between the two GC columns.
(b) Final result reported from this column.

GC Identification Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2874-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81272.D	**Injection Time:**	22:34
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37120-BS1	**Injection Date:**	12/17/21
Lab File ID:	6G81275.D	**Injection Time:**	23:28
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.77	3.77	0.20		ug/l	0.0
Aldrin	2 [a]	5.01	5.01	0.20		ug/l	
alpha-BHC	1	2.71	2.71	0.19		ug/l	11.1
alpha-BHC	2 [a]	3.55	3.55	0.17		ug/l	
beta-BHC	1	3.06	3.06	0.25		ug/l	22.2
beta-BHC	2 [a]	4.07	4.07	0.20		ug/l	
delta-BHC	1	3.23	3.23	0.26		ug/l	12.2
delta-BHC	2 [a]	4.46	4.46	0.23		ug/l	
gamma-BHC (Lindane)	1	2.98	2.98	0.20		ug/l	5.1
gamma-BHC (Lindane)	2 [a]	3.98	3.98	0.19		ug/l	
alpha-Chlordane	1	4.76	4.76	0.24		ug/l	18.2
alpha-Chlordane	2 [a]	6.35	6.35	0.20		ug/l	
gamma-Chlordane	1	4.60	4.60	0.27		ug/l	34.8
gamma-Chlordane	2 [a]	6.12	6.12	0.19		ug/l	
Dieldrin	1	5.24	5.24	0.22		ug/l	9.5
Dieldrin	2 [a]	6.88	6.88	0.20		ug/l	
4,4'-DDD	1	5.69	5.69	0.21		ug/l	10.0
4,4'-DDD	2 [a]	7.57	7.56	0.19		ug/l	
4,4'-DDE	1	4.89	4.89	0.21		ug/l	10.0
4,4'-DDE	2 [a]	6.61	6.61	0.19		ug/l	
4,4'-DDT	1	6.09	6.09	0.23		ug/l	14.0
4,4'-DDT	2 [a]	8.10	8.10	0.20		ug/l	
Endrin	1	5.54	5.55	0.22		ug/l	9.5
Endrin	2 [a]	7.38	7.38	0.20		ug/l	
Endosulfan sulfate	1	7.12	7.12	0.21		ug/l	4.9
Endosulfan sulfate	2 [a]	8.78	8.78	0.20		ug/l	
Endrin aldehyde	1	6.46	6.46	0.23		ug/l	0.0
Endrin aldehyde	2 [a]	8.31	8.31	0.23		ug/l	
Endrin ketone	1	7.54	7.55	0.24		ug/l	0.0
Endrin ketone	2 [a]	9.74	9.74	0.24		ug/l	
Endosulfan-I	1	4.93	4.93	0.22		ug/l	14.6
Endosulfan-I	2 [a]	6.44	6.44	0.19		ug/l	
Endosulfan-II	1	5.86	5.86	0.22		ug/l	4.7
Endosulfan-II	2 [a]	7.74	7.74	0.21		ug/l	
Heptachlor	1	3.45	3.45	0.22		ug/l	20.0
Heptachlor	2 [a]	4.56	4.56	0.18		ug/l	
Heptachlor epoxide	1	4.44	4.44	0.23		ug/l	14.0
Heptachlor epoxide	2 [a]	5.84	5.84	0.20		ug/l	
Methoxychlor	1	6.88	6.88	0.22		ug/l	4.7
Methoxychlor	2 [a]	9.34	9.34	0.21		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2874-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81272.D	**Injection Time:**	22:34
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37120-BSD	**Injection Date:**	12/17/21
Lab File ID:	6G81276.D	**Injection Time:**	23:46
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.77	3.77	0.20		ug/l	4.9
Aldrin	2	5.01	5.01	0.21		ug/l	
alpha-BHC	1	2.71	2.71	0.19		ug/l	11.1
alpha-BHC	2 [a]	3.55	3.55	0.17		ug/l	
beta-BHC	1	3.06	3.06	0.24		ug/l	18.2
beta-BHC	2 [a]	4.07	4.07	0.20		ug/l	
delta-BHC	1	3.23	3.23	0.27		ug/l	16.0
delta-BHC	2 [a]	4.46	4.46	0.23		ug/l	
gamma-BHC (Lindane)	1	2.98	2.98	0.21		ug/l	10.0
gamma-BHC (Lindane)	2 [a]	3.98	3.98	0.19		ug/l	
alpha-Chlordane	1	4.76	4.76	0.24		ug/l	18.2
alpha-Chlordane	2 [a]	6.35	6.35	0.20		ug/l	
gamma-Chlordane	1	4.60	4.60	0.25		ug/l	22.2
gamma-Chlordane	2 [a]	6.12	6.12	0.20		ug/l	
Dieldrin	1	5.24	5.24	0.22		ug/l	9.5
Dieldrin	2 [a]	6.88	6.88	0.20		ug/l	
4,4'-DDD	1	5.69	5.69	0.22		ug/l	14.6
4,4'-DDD	2 [a]	7.56	7.56	0.19		ug/l	
4,4'-DDE	1	4.88	4.89	0.21		ug/l	10.0
4,4'-DDE	2 [a]	6.61	6.61	0.19		ug/l	
4,4'-DDT	1	6.09	6.09	0.23		ug/l	19.0
4,4'-DDT	2 [a]	8.10	8.10	0.19		ug/l	
Endrin	1	5.54	5.55	0.21		ug/l	4.9
Endrin	2 [a]	7.38	7.38	0.20		ug/l	
Endosulfan sulfate	1	7.12	7.12	0.21		ug/l	4.9
Endosulfan sulfate	2 [a]	8.78	8.78	0.20		ug/l	
Endrin aldehyde	1	6.46	6.46	0.22		ug/l	0.0
Endrin aldehyde	2 [a]	8.31	8.31	0.22		ug/l	
Endrin ketone	1	7.54	7.55	0.23		ug/l	4.3
Endrin ketone [b]	2 [a]	9.74	9.74	0.24		ug/l	
Endosulfan-I	1	4.93	4.93	0.23		ug/l	35.9
Endosulfan-I	2 [a]	6.44	6.44	0.16		ug/l	
Endosulfan-II	1	5.85	5.86	0.22		ug/l	9.5
Endosulfan-II	2 [a]	7.73	7.74	0.20		ug/l	
Heptachlor	1	3.45	3.45	0.22		ug/l	20.0
Heptachlor	2 [a]	4.56	4.56	0.18		ug/l	
Heptachlor epoxide	1	4.44	4.44	0.23		ug/l	14.0
Heptachlor epoxide	2 [a]	5.84	5.84	0.20		ug/l	
Methoxychlor	1 [a]	6.87	6.88	0.20		ug/l	4.9
Methoxychlor	2	9.34	9.34	0.21		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2874-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81272.D	**Injection Time:**	22:34
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP37120-BSD	**Injection Date:**	12/17/21
Lab File ID:	6G81276.D	**Injection Time:**	23:46
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(b) Reported from 2nd signal. 1st signal used for confirmation.

Surrogate Recovery Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Method: SW846 8081B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JD36624-2	6G81357.D	124	69	51	39
JD36624-3	6G81358.D	98	70	33	32
JD36624-4	6G81279.D	81	109	44	45
JD36624-5	6G81280.D	60	103	39	41
JD36624-6	6G81281.D	70	62	48	31
JD36624-7	6G81353.D	55	39	76	45
JD36624-7	6G81282.D	22	19	18	13
JD36624-8	6G81354.D	94	77	23	24
JD36624-8	6G81283.D	76	76	19	17
JD36624-9	6G81284.D	73	35	31	19
JD36624-10	6G81285.D	78	70	37	33
JD36624-11	6G81286.D	57	49	41	34
JD36624-12	6G81287.D	73	46	44	29
JD36624-13	6G81288.D	65	50	31	27
JD36624-14	6G81289.D	68	54	25	24
JD36624-15	6G81290.D	82	68	51	40
JD36624-16	6G81355.D	184	47	71	41
JD36624-16	6G81291.D	94	25	57	12
JD36624-17	6G81356.D	98	47	73	27
JD36624-17	6G81292.D	55	17	22	7* [c]
OP37120-BS1	6G81275.D	91	78	50	52
OP37120-BSD	6G81276.D	85	72	43	51
OP37120-MB1	6G81274.D	62	57	48	49

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	10-190%
S2 = Decachlorobiphenyl	10-156%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside control limits due to matrix interference.

GC Surrogate Retention Time Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2874-CC2867	**Injection Date:**	12/17/21
Lab File ID:	6G81272.D	**Injection Time:**	22:34
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.26	2.89	9.35	11.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP37120-MB1	6G81274.D	12/17/21	23:10	2.26	2.89	9.35	11.85
OP37120-BS1	6G81275.D	12/17/21	23:28	2.26	2.89	9.35	11.85
OP37120-BSD	6G81276.D	12/17/21	23:46	2.26	2.89	9.35	11.85
JD36624-4	6G81279.D	12/18/21	00:39	2.26	2.89	9.35	11.85
JD36624-5	6G81280.D	12/18/21	00:57	2.26	2.89	9.35	11.85
JD36624-6	6G81281.D	12/18/21	01:15	2.26	2.89	9.35	11.85
JD36624-7	6G81282.D	12/18/21	01:33	2.26	2.89	9.35	11.85
JD36624-8	6G81283.D	12/18/21	01:51	2.27	2.89	9.35	11.85
JD36624-9	6G81284.D	12/18/21	02:09	2.26	2.89	9.35	11.85
JD36624-10	6G81285.D	12/18/21	02:26	2.26	2.89	9.35	11.85
JD36624-11	6G81286.D	12/18/21	02:44	2.26	2.89	9.35	11.85
JD36624-12	6G81287.D	12/18/21	03:02	2.26	2.89	9.35	11.85
JD36624-13	6G81288.D	12/18/21	03:20	2.26	2.89	9.35	11.85
JD36624-14	6G81289.D	12/18/21	03:38	2.26	2.89	9.35	11.85
JD36624-15	6G81290.D	12/18/21	03:56	2.26	2.89	9.35	11.85
JD36624-16	6G81291.D	12/18/21	04:13	2.26	2.89	9.35	11.84
JD36624-17	6G81292.D	12/18/21	04:31	2.26	2.89	9.35	11.85

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Check Std:	G6G2878-CC2867	**Injection Date:**	12/21/21
Lab File ID:	6G81350.D	**Injection Time:**	03:51
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.27	2.89	9.35	11.85

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
JD36624-7	6G81353.D	12/21/21	04:44	2.26	2.89	9.35	11.84
JD36624-8	6G81354.D	12/21/21	05:02	2.26	2.89	9.34	11.84
JD36624-16	6G81355.D	12/21/21	05:20	2.26	2.89	9.34	11.84
JD36624-17	6G81356.D	12/21/21	05:38	2.26	2.89	9.34	11.84
JD36624-2	6G81357.D	12/21/21	05:56	2.27	2.89	9.34	11.84
JD36624-3	6G81358.D	12/21/21	06:14	2.26	2.89	9.34	11.84
ZZZZZZ	6G81362.D	12/21/21	07:25	2.26	2.89	9.34	11.84
ZZZZZZ	6G81363.D	12/21/21	07:43	2.27	2.89	9.34	11.84
ZZZZZZ	6G81364.D	12/21/21	08:01	2.26	2.89	9.34	11.84
ZZZZZZ	6G81368.D	12/21/21	09:12	2.27	2.89	9.34	11.84
ZZZZZZ	6G81369.D	12/21/21	09:30	2.27	2.89	9.34	11.84
ZZZZZZ	6G81370.D	12/21/21	09:48	2.27	2.89	9.34	11.84

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICC2867
Lab FileID: 6G81077.D

Response Factor Report GC6G

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Initial Calibration

Calibration Files
5 =6g81079.d 10 =6g81078.d 25 =6g81077.d 50 =6g81076.d
100 =6g81074.d 1 =6g81081.d 75 =6g81075.d 2 =6g81080.d
= =

Compound	5	10	25	50	100	1	75	2	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-m-xylene	0.595	0.614	0.640	0.654	0.654	0.555	0.651	0.605	0.621	5.68
3) hexachlorobenzene	1.747	1.786	1.705	1.723	1.704	1.927	1.729	1.787	1.763	4.18
4) alpha-BHC	1.188	1.251	1.286	1.411	1.480	1.196	1.510	1.149	1.309	10.68
5) gamma-BHC	1.330	1.053	1.086	1.146	1.196	1.131	1.165	1.001	1.139	8.75
6) Heptachlor	0.991	1.016	1.043	1.083	1.169	0.862	1.118	1.111	1.049	9.08
7) beta-BHC	0.422	0.445	0.433	0.445	0.440	0.525	0.438	0.452	0.450	7.05
8) delta-BHC	0.893	0.947	1.017	1.122	1.183	1.167	1.135	0.910	1.047	11.41
9) Aldrin	1.064	0.990	1.101	1.091	1.168	1.025	1.125	1.313	1.110	8.96
10) alachlor	0.129	0.108	0.110	0.108	0.098		0.103		0.109	9.90
11) Heptachlor Epoxide	0.920	0.928	0.944	0.977	1.004	1.172	0.975	0.869	0.974	9.28
12) gamma-Chlordane	0.882	0.939	0.965	1.077	1.031	1.017	1.025	0.967	0.988	6.25
13) alpha-Chlordane	0.849	0.922	0.983	0.992	1.032	0.872	1.020	0.920	0.949	7.15
14) Endosulfan I	0.992	1.014	1.038	1.084	1.122	0.968	1.117	1.134	1.059	6.06
15) 4,4'-DDE	0.933	0.943	0.953	0.987	1.025	1.015	1.009	1.102	0.996	5.52
16) Dieldrin	1.039	1.097	1.046	1.091	1.132	1.061	1.113	0.983	1.070	4.48
17) Endrin	1.098	0.986	1.012	1.060	1.108	1.128	1.106	0.955	1.057	6.10
18) 4,4'-DDD	0.760	0.751	0.771	0.818	0.839	0.757	0.843	0.765	0.788	4.90
19) Endosulfan II	1.209	0.924	0.909	0.963	0.991	1.051	0.989	0.929	0.996	9.80
20) 4,4'-DDT	0.792	0.793	0.801	0.828	0.890	0.978	0.870	0.802	0.844	7.76
21) Endrin Aldehyde	0.708	0.688	0.698	0.731	0.727	0.878	0.730	0.929	0.761	11.84
22) Endosulfan Sulfate	1.073	0.950	0.911	0.989	0.995	0.864	0.988	1.019	0.973	6.63
23) Methoxychlor										

Initial Calibration Summary

Job Number: JD36624 **Sample:** G6G2867-ICC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81077.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
          0.464 0.458 0.460 0.485 0.467 0.408 0.472 0.464          0.460    4.85
 24)  Mirex
          0.759 0.765 0.762 0.775 0.756 0.843 0.756 0.833          0.781    4.55
 25)  Endrin Ketone
          0.923 0.859 0.846 0.953 0.958 0.873 0.985 1.140          0.942   10.06
 26)  Decachlorobiphenyl
          1.228 1.217 1.097 1.158       1.303 1.083 1.283          1.195    7.19

 27) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
 28)  Toxaphene{A}
                            0.020                                  0.020    0.00
 29)  Toxaphene{B}
                            0.026                                  0.026    0.00
 30)  Toxaphene{C}
                            0.024                                  0.024    0.00
 31)  Toxaphene{D}
                            0.021                                  0.021    0.00
 32)  Toxaphene{E}
                            0.023                                  0.023    0.00

 33) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
 34)  Chlordane {A}
                            0.073                                  0.073    0.00
 35)  Chlordane {B}
                            0.044                                  0.044    0.00
 36)  Chlordane {C}
                            0.138                                  0.138    0.00
 37)  Chlordane {D}
                            0.226                                  0.226    0.00
 38)  Chlordane {E}
                            0.035                                  0.035    0.00

Signal #2


  1) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
  2)  Tetrachloro-m-xylene
          0.916 0.913 0.897 0.888 0.878 0.920 0.884 0.974          0.909    3.38
  3)  hexachlorobenzene
          1.093 1.079 1.034 1.003 0.980 1.262 0.986 1.153          1.074    8.96
  4)  alpha-BHC
          1.293 1.319 1.325 1.346 1.356 1.514 1.356 1.330          1.355    5.00
  5)  gamma-BHC
          1.115 1.114 1.112 1.109 1.098 1.222 1.103 1.140          1.127    3.60
  6)  Heptachlor
          1.148 1.137 1.142 1.116 1.124 1.240 1.131 1.163          1.150    3.40
  7)  beta-BHC
          0.522 0.508 0.489 0.468 0.448 0.612 0.456 0.550          0.507   10.84
  8)  delta-BHC
          0.996 1.021 1.024 1.069 1.081 0.979 1.080 0.998          1.031    3.92
  9)  Aldrin
          1.063 1.035 1.029 1.027 1.025 1.113 1.021 1.054          1.046    2.94
 10)  alachlor
          0.149 0.148 0.148 0.140 0.128       0.132                0.141    6.48
 11)  Heptachlor Epoxide
          0.976 0.987 0.989 0.972 0.970 1.101 0.967 1.007          0.996    4.44
 12)  gamma-Chlordane
          1.016 1.029 1.008 1.008 1.000 1.140 1.005 1.065          1.034    4.63
 13)  alpha-Chlordane
          0.999 0.992 0.971 0.961 0.952 1.003 0.957 0.997          0.979    2.16
```

Initial Calibration Summary

Job Number: JD36624 **Sample:** G6G2867-ICC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81077.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

```
14)  Endosulfan I
          0.955 0.962 0.941 0.929 0.922 1.057 0.926 0.979          0.959    4.63
15)  4,4'-DDE
          0.967 1.016 0.981 0.980 0.986 1.126 0.983 0.991          1.004    5.12
16)  Dieldrin
          1.007 1.020 1.017 1.012 1.013 1.126 1.014 1.040          1.031    3.84
17)  Endrin
          0.967 0.981 0.988 0.966 0.994 1.078 0.976 0.977          0.991    3.69
18)  4,4'-DDD
          0.829 0.837 0.829 0.828 0.831 0.954 0.831 0.847          0.848    5.11
19)  Endosulfan II
          0.906 0.905 0.884 0.872 0.869 1.015 0.872 0.927          0.906    5.37
20)  4,4'-DDT
          0.790 0.821 0.825 0.840 0.845 0.805 0.845 0.779          0.819    3.10
21)  Endrin Aldehyde
          0.649 0.645 0.629 0.656 0.646 0.650 0.645 0.634          0.644    1.32
22)  Endosulfan Sulfate
          0.871 0.890 0.863 0.876 0.866 0.916 0.871 0.896          0.881    2.06
23)  Methoxychlor
          0.446 0.460 0.456 0.444 0.433 0.492 0.439 0.460          0.454    4.03
24)  Mirex
          0.751 0.733 0.722 0.688 0.661 0.850 0.672 0.792          0.734    8.73
25)  Endrin Ketone
          0.816 0.817 0.789 0.838 0.836 0.804 0.838 0.826          0.820    2.15
26)  Decachlorobiphenyl
          0.788 0.763 0.733 0.699       0.911 0.686 0.876          0.779   11.01

27) I   1-bromo-2-nitrobenzen ----------------ISTD--------------------
28)  Toxaphene{A}
                              0.013                                0.013    0.00
29)  Toxaphene{B}
                              0.021                                0.021    0.00
30)  Toxaphene{C}
                              0.040                                0.040    0.00
31)  Toxaphene{D}
                              0.019                                0.019    0.00
32)  Toxaphene{E}
                              0.024                                0.024    0.00

33) I   1-bromo-2-nitrobenzen ----------------ISTD--------------------
34)  Chlordane {A}
                              0.066                                0.066    0.00
35)  Chlordane {B}
                              0.036                                0.036    0.00
36)  Chlordane {C}
                              0.133                                0.133    0.00
37)  Chlordane {D}
                              0.217                                0.217    0.00
38)  Chlordane {E}
                              0.033                                0.033    0.00
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          6pst2867.m        Sun Dec 12 10:40:46 2021
```

12.8.1 12

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81084.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81084.d\ECD1A.CH Vial: 13
Acq On : 10 Dec 2021 6:57 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81084.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 6:57 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene	0.621	0.698	-12.4	110	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.309	1.505	-15.0	118	0.00	2.69- 2.75
5	MA	gamma-BHC	1.139	1.342	-17.8	125	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.210	-15.3	117	0.00	3.43- 3.49
7	B	beta-BHC	0.450	0.521	-15.8	121	0.00	3.04- 3.10
8	B	delta-BHC	1.047	1.157	-10.5	115	0.00	3.21- 3.27
9	MB	Aldrin	1.110	1.219	-9.8	112	0.00	3.75- 3.81
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide	0.974	1.139	-16.9	122	0.00	4.42- 4.48
12	B	gamma-Chlordane	0.988	1.145	-15.9	120	0.00	4.58- 4.64
13	B	alpha-Chlordane	0.949	1.111	-17.1	114	0.00	4.74- 4.80
14	A	Endosulfan I	1.059	1.178	-11.2	114	0.00	4.91- 4.97
15	B	4,4'-DDE	0.996	1.098	-10.2	116	0.00	4.87- 4.93
16	MA	Dieldrin	1.070	1.195	-11.7	115	0.00	5.22- 5.28
17	MA	Endrin	1.057	1.040	1.6	104	0.00	5.53- 5.59
18	A	4,4'-DDD	0.788	0.877	-11.3	115	0.00	5.67- 5.73
19	B	Endosulfan II	0.996	1.056	-6.0	117	0.00	5.84- 5.90
20	MA	4,4'-DDT	0.844	0.928	-10.0	117	0.00	6.07- 6.13
21	B	Endrin Aldehyde	0.761	0.752	1.2	109	0.00	6.44- 6.50
22	B	Endosulfan Sulfate	0.973	0.984	-1.1	109	0.00	7.10- 7.16
23	A	Methoxychlor	0.460	0.529	-15.0	116	0.00	6.85- 6.91
24		Mirex		----------NA----------				
25	B	Endrin Ketone	0.942	0.938	0.4	112	0.00	7.53- 7.59
26	SA	Decachlorobiphenyl	1.195	1.211	-1.3	111	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

12.8.2 12

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81084.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	0.990	-8.9	110	0.00	2.86- 2.92
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC	1.355	1.524	-12.5	114	0.00	3.53- 3.59
5	MA	gamma-BHC	1.127	1.309	-16.1	117	0.00	3.96- 4.02
6	MA	Heptachlor	1.150	1.330	-15.7	116	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.570	-12.4	116	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.193	-15.7	116	0.00	4.44- 4.50
9	MB	Aldrin	1.046	1.214	-16.1	117	0.00	4.98- 5.04
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide	0.996	1.144	-14.9	115	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.172	-13.3	116	0.00	6.10- 6.16
13	B	alpha-Chlordane	0.979	1.127	-15.1	115	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	1.067	-11.3	113	0.00	6.42- 6.48
15	B	4,4'-DDE	1.004	1.115	-11.1	113	0.00	6.59- 6.65
16	MA	Dieldrin	1.031	1.171	-13.6	114	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.044	-5.3	105	0.00	7.36- 7.42
18	A	4,4'-DDD	0.848	0.943	-11.2	113	0.00	7.54- 7.60
19	B	Endosulfan II	0.906	1.017	-12.3	114	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.946	-15.5	114	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.690	-7.1	109	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.944	-7.2	109	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.530	-16.7	116	0.00	9.32- 9.38
24		Mirex			----------NA----------			
25	B	Endrin Ketone	0.820	0.882	-7.6	111	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.848	-8.9	115	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
28	L8	Toxaphene{A}			----------NA----------			
29	L8	Toxaphene{B}			----------NA----------			
30	L8	Toxaphene{C}			----------NA----------			
31	L8	Toxaphene{D}			----------NA----------			
32	L8	Toxaphene{E}			----------NA----------			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Sun Dec 12 10:39:03 2021

12.8.2 12

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81085.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81085.d\ECD1A.CH Vial: 14
Acq On : 10 Dec 2021 7:15 am Operator: christp
Sample : icv2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81085.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:15 am Operator: christp
Sample : icc2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene	0.621	0.760	-22.4#	115	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	1.195	1.187	0.7	101	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.19- 2.19
34		Chlordane {A}	0.073	0.067	8.2	89	0.00	3.36- 3.56

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81085.D

35		Chlordane {B}	0.044	0.040	9.1	88	0.00	3.81- 4.01
36		Chlordane {C}	0.138	0.151	-9.4	106	0.00	4.51- 4.71
37		Chlordane {D}	0.226	0.232	-2.7	99	0.00	4.67- 4.87
38		Chlordane {E}	0.035	0.038	-8.6	106	0.00	5.68- 5.88
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	1.024	-12.7	114	0.00	2.86- 2.92
3		hexachlorobenzene	----------NA----------					
4	A	alpha-BHC	----------NA----------					
5	MA	gamma-BHC	----------NA----------					
6	MA	Heptachlor	----------NA----------					
7	B	beta-BHC	----------NA----------					
8	B	delta-BHC	----------NA----------					
9	MB	Aldrin	----------NA----------					
10		alachlor	----------NA----------					
11	B	Heptachlor Epoxide	----------NA----------					
12	B	gamma-Chlordane	----------NA----------					
13	B	alpha-Chlordane	----------NA----------					
14	A	Endosulfan I	----------NA----------					
15	B	4,4'-DDE	----------NA----------					
16	MA	Dieldrin	----------NA----------					
17	MA	Endrin	----------NA----------					
18	A	4,4'-DDD	----------NA----------					
19	B	Endosulfan II	----------NA----------					
20	MA	4,4'-DDT	----------NA----------					
21	B	Endrin Aldehyde	----------NA----------					
22	B	Endosulfan Sulfate	----------NA----------					
23	A	Methoxychlor	----------NA----------					
24		Mirex	----------NA----------					
25	B	Endrin Ketone	----------NA----------					
26	SA	Decachlorobiphenyl	0.779	0.774	0.6	109	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.57- 2.57
28	L8	Toxaphene{A}	----------NA----------					
29	L8	Toxaphene{B}	----------NA----------					
30	L8	Toxaphene{C}	----------NA----------					
31	L8	Toxaphene{D}	----------NA----------					
32	L8	Toxaphene{E}	----------NA----------					
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.57- 2.57
34		Chlordane {A}	0.066	0.070	-6.1	105	0.00	4.46- 4.66
35		Chlordane {B}	0.036	0.038	-5.6	103	0.00	5.11- 5.31
36		Chlordane {C}	0.133	0.136	-2.3	102	0.00	6.02- 6.22
37		Chlordane {D}	0.217	0.222	-2.3	101	0.00	6.25- 6.45
38		Chlordane {E}	0.033	0.036	-9.1	109	0.00	7.72- 7.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6pst2867.m Sun Dec 12 10:40:04 2021

12.8.3 12

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81086.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81086.d\ECD1A.CH Vial: 15
Acq On : 10 Dec 2021 7:33 am Operator: christp
Sample : icv2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81086.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:33 am Operator: christp
Sample : icc2867-500 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene	0.621	0.768	-23.7#	116	0.00	2.24- 2.30
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	1.195	1.146	4.1	98	0.00	9.33- 9.39
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.20- 2.20
28	L8	Toxaphene{A}	0.020	0.018	10.0	89	0.00	5.51- 5.71
29	L8	Toxaphene{B}	0.026	0.024	7.7	92	0.00	5.75- 5.95
30	L8	Toxaphene{C}	0.024	0.023	4.2	96	0.00	5.93- 6.13
31	L8	Toxaphene{D}	0.021	0.022	-4.8	102	0.00	6.26- 6.46
32	L8	Toxaphene{E}	0.023	0.021	8.7	91	0.00	6.88- 7.08
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.20- 2.20
34		Chlordane {A}		----------NA----------				

12.8.4 12

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81086.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	1.059	-16.5	116	0.00	2.86- 2.92
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC			----------NA----------			
5	MA	gamma-BHC			----------NA----------			
6	MA	Heptachlor			----------NA----------			
7	B	beta-BHC			----------NA----------			
8	B	delta-BHC			----------NA----------			
9	MB	Aldrin			----------NA----------			
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide			----------NA----------			
12	B	gamma-Chlordane			----------NA----------			
13	B	alpha-Chlordane			----------NA----------			
14	A	Endosulfan I			----------NA----------			
15	B	4,4'-DDE			----------NA----------			
16	MA	Dieldrin			----------NA----------			
17	MA	Endrin			----------NA----------			
18	A	4,4'-DDD			----------NA----------			
19	B	Endosulfan II			----------NA----------			
20	MA	4,4'-DDT			----------NA----------			
21	B	Endrin Aldehyde			----------NA----------			
22	B	Endosulfan Sulfate			----------NA----------			
23	A	Methoxychlor			----------NA----------			
24		Mirex			----------NA----------			
25	B	Endrin Ketone			----------NA----------			
26	SA	Decachlorobiphenyl	0.779	0.805	-3.3	112	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.57- 2.57
28	L8	Toxaphene{A}	0.013	0.014	-7.7	107	0.00	6.75- 6.95
29	L8	Toxaphene{B}	0.021	0.021	0.0	103	0.00	7.61- 7.81
30	L8	Toxaphene{C}	0.040	0.041	-2.5	104	0.00	7.77- 7.97
31	L8	Toxaphene{D}	0.019	0.019	0.0	104	0.00	8.21- 8.41
32	L8	Toxaphene{E}	0.024	0.024	0.0	100	0.00	9.11- 9.31
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81076.d 6pst2867.m Sun Dec 12 10:40:25 2021

12.8.4 12

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81087.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81087.d\ECD1A.CH Vial: 16
Acq On : 10 Dec 2021 7:52 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81087.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 7:52 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
2	SAB	Tetrachloro-m-xylene		----------	NA	----------		
3		hexachlorobenzene		----------	NA	----------		
4	A	alpha-BHC		----------	NA	----------		
5	MA	gamma-BHC		----------	NA	----------		
6	MA	Heptachlor		----------	NA	----------		
7	B	beta-BHC		----------	NA	----------		
8	B	delta-BHC		----------	NA	----------		
9	MB	Aldrin		----------	NA	----------		
10		alachlor		----------	NA	----------		
11	B	Heptachlor Epoxide		----------	NA	----------		
12	B	gamma-Chlordane		----------	NA	----------		
13	B	alpha-Chlordane		----------	NA	----------		
14	A	Endosulfan I		----------	NA	----------		
15	B	4,4'-DDE		----------	NA	----------		
16	MA	Dieldrin		----------	NA	----------		
17	MA	Endrin		----------	NA	----------		
18	A	4,4'-DDD		----------	NA	----------		
19	B	Endosulfan II		----------	NA	----------		
20	MA	4,4'-DDT		----------	NA	----------		
21	B	Endrin Aldehyde		----------	NA	----------		
22	B	Endosulfan Sulfate		----------	NA	----------		
23	A	Methoxychlor		----------	NA	----------		
24		Mirex	0.781	0.804	-2.9	113	0.00	6.96- 7.02
25	B	Endrin Ketone		----------	NA	----------		
26	SA	Decachlorobiphenyl		----------	NA	----------		
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
28	L8	Toxaphene{A}		----------	NA	----------		
29	L8	Toxaphene{B}		----------	NA	----------		
30	L8	Toxaphene{C}		----------	NA	----------		
31	L8	Toxaphene{D}		----------	NA	----------		
32	L8	Toxaphene{E}		----------	NA	----------		
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.20- 2.20
34		Chlordane {A}		----------	NA	----------		

12.8.5 12

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81087.D

35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene			----------NA----------			
3		hexachlorobenzene			----------NA----------			
4	A	alpha-BHC			----------NA----------			
5	MA	gamma-BHC			----------NA----------			
6	MA	Heptachlor			----------NA----------			
7	B	beta-BHC			----------NA----------			
8	B	delta-BHC			----------NA----------			
9	MB	Aldrin			----------NA----------			
10		alachlor			----------NA----------			
11	B	Heptachlor Epoxide			----------NA----------			
12	B	gamma-Chlordane			----------NA----------			
13	B	alpha-Chlordane			----------NA----------			
14	A	Endosulfan I			----------NA----------			
15	B	4,4'-DDE			----------NA----------			
16	MA	Dieldrin			----------NA----------			
17	MA	Endrin			----------NA----------			
18	A	4,4'-DDD			----------NA----------			
19	B	Endosulfan II			----------NA----------			
20	MA	4,4'-DDT			----------NA----------			
21	B	Endrin Aldehyde			----------NA----------			
22	B	Endosulfan Sulfate			----------NA----------			
23	A	Methoxychlor			----------NA----------			
24		Mirex	0.734	0.756	-3.0	112	0.00	9.64- 9.70
25	B	Endrin Ketone			----------NA----------			
26	SA	Decachlorobiphenyl			----------NA----------			
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
28	L8	Toxaphene{A}			----------NA----------			
29	L8	Toxaphene{B}			----------NA----------			
30	L8	Toxaphene{C}			----------NA----------			
31	L8	Toxaphene{D}			----------NA----------			
32	L8	Toxaphene{E}			----------NA----------			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.57- 2.57
34		Chlordane {A}			----------NA----------			
35		Chlordane {B}			----------NA----------			
36		Chlordane {C}			----------NA----------			
37		Chlordane {D}			----------NA----------			
38		Chlordane {E}			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Sun Dec 12 10:39:23 2021

12.8.5 12

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81088.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\g6g2867\6g81088.d\ECD1A.CH Vial: 17
Acq On : 10 Dec 2021 8:10 am Operator: christp
Sample : icv2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\g6g2867\6g81088.d\ECD2B.CH Vial: 0
Acq On : 10 Dec 2021 8:10 am Operator: christp
Sample : icc2867-25 Inst : GC6G
Misc : op36673a,g6g2867,980,,,5,10 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene	1.763	1.832	-3.9	112	0.00	2.55- 2.61
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor	0.109	0.105	3.7	100	0.00	3.89- 3.95
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
34		Chlordane {A}		----------NA----------				

12.8.6 12

Initial Calibration Verification

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2867-ICV2867
Lab FileID: 6G81088.D

35		Chlordane {B}			----------NA----------				
36		Chlordane {C}			----------NA----------				
37		Chlordane {D}			----------NA----------				
38		Chlordane {E}			----------NA----------				
*****		Signal #2 *****							
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
2	SAB	Tetrachloro-m-xylene			----------NA----------				
3		hexachlorobenzene	1.074	1.092	-1.7	112	0.00	3.37-	3.43
4	A	alpha-BHC			----------NA----------				
5	MA	gamma-BHC			----------NA----------				
6	MA	Heptachlor			----------NA----------				
7	B	beta-BHC			----------NA----------				
8	B	delta-BHC			----------NA----------				
9	MB	Aldrin			----------NA----------				
10		alachlor	0.141	0.133	5.7	95	0.00	4.79-	4.85
11	B	Heptachlor Epoxide			----------NA----------				
12	B	gamma-Chlordane			----------NA----------				
13	B	alpha-Chlordane			----------NA----------				
14	A	Endosulfan I			----------NA----------				
15	B	4,4'-DDE			----------NA----------				
16	MA	Dieldrin			----------NA----------				
17	MA	Endrin			----------NA----------				
18	A	4,4'-DDD			----------NA----------				
19	B	Endosulfan II			----------NA----------				
20	MA	4,4'-DDT			----------NA----------				
21	B	Endrin Aldehyde			----------NA----------				
22	B	Endosulfan Sulfate			----------NA----------				
23	A	Methoxychlor			----------NA----------				
24		Mirex			----------NA----------				
25	B	Endrin Ketone			----------NA----------				
26	SA	Decachlorobiphenyl			----------NA----------				
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
28	L8	Toxaphene{A}			----------NA----------				
29	L8	Toxaphene{B}			----------NA----------				
30	L8	Toxaphene{C}			----------NA----------				
31	L8	Toxaphene{D}			----------NA----------				
32	L8	Toxaphene{E}			----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.57-	2.57
34		Chlordane {A}			----------NA----------				
35		Chlordane {B}			----------NA----------				
36		Chlordane {C}			----------NA----------				
37		Chlordane {D}			----------NA----------				
38		Chlordane {E}			----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Thu Dec 16 14:12:47 2021

12.8.6 12

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2874-CC2867
Lab FileID: 6G81272.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\G6G2874\6g81272.d\ECD1A.CH Vial: 2
Signal #2 : C:\msdchem\1\data\G6G2874\6g81272.d\ECD2B.CH
Acq On : 17-Dec-21, 22:34:22 Operator: rebeccak
Sample : cc2867-25 Inst : GC6G
Misc : op37055,g6g2874,250,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6PST2867.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	131	0.00	1.18- 2.18
2	SAB	Tetrachloro-m-xylene	0.621	0.573	7.7	118	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.647	6.6	127	0.00	2.54- 2.60
4	A	alpha-BHC	1.309	1.330	-1.6	136	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.221	-7.2	148	0.00	2.95- 3.01
6	MA	Heptachlor	1.049	1.173	-11.8	148	0.00	3.42- 3.48
7	B	beta-BHC	0.450	0.483	-7.3	147	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.194	-14.0	154#	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.146	-3.2	137	0.00	3.74- 3.80
10		alachlor	0.109	0.103	5.5	123	-0.01	3.88- 3.94
11	B	Heptachlor Epoxide	0.974	1.103	-13.2	153#	0.00	4.41- 4.47
12	B	gamma-Chlordane	0.988	1.131	-14.5	154#	0.00	4.57- 4.63
13	B	alpha-Chlordane	0.949	1.092	-15.1	146	0.00	4.73- 4.79
14	A	Endosulfan I	1.059	1.142	-7.8	144	-0.01	4.90- 4.96
15	B	4,4'-DDE	0.996	1.041	-4.5	143	-0.01	4.86- 4.92
16	MA	Dieldrin	1.070	1.125	-5.1	141	-0.01	5.21- 5.27
17	MA	Endrin	1.057	1.072	-1.4	139	0.00	5.52- 5.58
18	A	4,4'-DDD	0.788	0.822	-4.3	140	-0.01	5.66- 5.72
19	B	Endosulfan II	0.996	0.991	0.5	143	0.00	5.83- 5.89
20	MA	4,4'-DDT	0.844	0.892	-5.7	146	0.00	6.06- 6.12
21	B	Endrin Aldehyde	0.761	0.820	-7.8	154#	0.00	6.43- 6.49
22	B	Endosulfan Sulfate	0.973	0.996	-2.4	144	-0.01	7.09- 7.15
23	A	Methoxychlor	0.460	0.508	-10.4	145	0.00	6.85- 6.91
24		Mirex	0.781	0.831	-6.4	143	-0.01	6.95- 7.01
25	B	Endrin Ketone	0.942	1.043	-10.7	162#	-0.01	7.52- 7.58
26	SA	Decachlorobiphenyl	1.195	1.223	-2.3	146	0.00	9.32- 9.38
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	131	0.00	1.18- 2.18
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	131	0.00	1.18- 2.18
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

12.8.7 12

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2874-CC2867
Lab FileID: 6G81272.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	131	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.822	9.6	120	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.977	9.0	124	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.315	3.0	130	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.171	-3.9	138	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.171	-1.8	134	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.513	-1.2	137	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.140	-10.6	146	0.00	4.43- 4.49
9	MB	Aldrin	1.046	1.079	-3.2	137	0.00	4.98- 5.04
10		alachlor	0.141	0.149	-5.7	132	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	1.024	-2.8	136	0.00	5.81- 5.87
12	B	gamma-Chlordane	1.034	1.056	-2.1	137	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	0.988	-0.9	133	0.00	6.32- 6.38
14	A	Endosulfan I	0.959	0.968	-0.9	135	0.00	6.41- 6.47
15	B	4,4'-DDE	1.004	1.005	-0.1	134	0.00	6.58- 6.64
16	MA	Dieldrin	1.031	1.047	-1.6	135	0.00	6.85- 6.91
17	MA	Endrin	0.991	1.018	-2.7	135	0.00	7.35- 7.41
18	A	4,4'-DDD	0.848	0.855	-0.8	135	0.00	7.53- 7.59
19	B	Endosulfan II	0.906	0.915	-1.0	136	0.00	7.71- 7.77
20	MA	4,4'-DDT	0.819	0.850	-3.8	135	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.718	-11.5	149	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.925	-5.0	140	0.00	8.75- 8.81
23	A	Methoxychlor	0.454	0.467	-2.9	134	0.00	9.31- 9.37
24		Mirex	0.734	0.726	1.1	132	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.898	-9.5	149	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.788	-1.2	141	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	131	0.00	1.56- 2.56
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	131	0.00	1.56- 2.56
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6PST2867.M Fri Dec 17 22:53:52 2021

12.8.7 12

Continuing Calibration Summary

Job Number: JD36624 **Sample:** G6G2878-CC2867
Account: TTPAL Tetra Tech EC Inc. **Lab FileID:** 6G81350.D
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\6g81350.d\ECD1A.CH Vial: 2
Signal #2 : C:\msdchem\1\data\6g81350.d\ECD2B.CH
Acq On : 21 Dec 2021 3:51 am Operator: christp
Sample : cc2867-25 Inst : GC6G
Misc : op37121,g6g2878,260,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sun Dec 12 10:12:22 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
2	SAB	Tetrachloro-m-xylene	0.621	0.627	-1.0	102	0.00	2.24- 2.30
3		hexachlorobenzene	1.763	1.647	6.6	101	0.00	2.55- 2.61
4	A	alpha-BHC	1.309	1.310	-0.1	106	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.209	-6.1	116	0.00	2.96- 3.02
6	MA	Heptachlor	1.049	1.178	-12.3	118	0.00	3.42- 3.48
7	B	beta-BHC	0.450	0.489	-8.7	118	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.160	-10.8	119	0.00	3.20- 3.26
9	MB	Aldrin	1.110	1.144	-3.1	108	0.00	3.74- 3.80
10		alachlor	0.109	0.105	3.7	100	-0.01	3.88- 3.94
11	B	Heptachlor Epoxide	0.974	1.066	-9.4	118	0.00	4.41- 4.47
12	B	gamma-Chlordane	0.988	1.046	-5.9	113	-0.01	4.57- 4.63
13	B	alpha-Chlordane	0.949	1.013	-6.7	108	-0.01	4.73- 4.79
14	A	Endosulfan I	1.059	1.098	-3.7	110	-0.01	4.90- 4.96
15	B	4,4'-DDE	0.996	1.016	-2.0	111	-0.01	4.85- 4.91
16	MA	Dieldrin	1.070	1.109	-3.6	111	-0.01	5.21- 5.27
17	MA	Endrin	1.057	1.186	-12.2	122	-0.01	5.51- 5.57
18	A	4,4'-DDD	0.788	0.859	-9.0	116	-0.01	5.65- 5.71
19	B	Endosulfan II	0.996	0.999	-0.3	115	-0.01	5.82- 5.88
20	MA	4,4'-DDT	0.844	0.843	0.1	110	-0.01	6.06- 6.12
21	B	Endrin Aldehyde	0.761	0.819	-7.6	122	-0.01	6.43- 6.49
22	B	Endosulfan Sulfate	0.973	0.931	4.3	107	-0.02	7.09- 7.15
23	A	Methoxychlor	0.460	0.493	-7.2	112	-0.01	6.84- 6.90
24		Mirex	0.781	0.768	1.7	105	-0.02	6.95- 7.01
25	B	Endrin Ketone	0.942	0.927	1.6	114	-0.02	7.51- 7.57
26	SA	Decachlorobiphenyl	1.195	1.181	1.2	112	-0.01	9.32- 9.38
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.19- 2.19
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2878-CC2867
Lab FileID: 6G81350.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	0.909	0.835	8.1	103	0.00	2.86- 2.92
3		hexachlorobenzene	1.074	0.973	9.4	104	0.00	3.37- 3.43
4	A	alpha-BHC	1.355	1.249	7.8	104	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.135	-0.7	113	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.110	3.5	107	0.00	4.53- 4.59
7	B	beta-BHC	0.507	0.495	2.4	112	0.00	4.04- 4.10
8	B	delta-BHC	1.031	1.093	-6.0	118	0.00	4.43- 4.49
9	MB	Aldrin	1.046	1.040	0.6	112	0.00	4.98- 5.04
10		alachlor	0.141	0.139	1.4	103	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	0.964	3.2	108	0.00	5.80- 5.86
12	B	gamma-Chlordane	1.034	0.999	3.4	109	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	0.963	1.6	109	0.00	6.31- 6.37
14	A	Endosulfan I	0.959	0.922	3.9	108	0.00	6.41- 6.47
15	B	4,4'-DDE	1.004	0.963	4.1	108	0.00	6.58- 6.64
16	MA	Dieldrin	1.031	0.991	3.9	108	0.00	6.85- 6.91
17	MA	Endrin	0.991	0.977	1.4	109	0.00	7.35- 7.41
18	A	4,4'-DDD	0.848	0.806	5.0	107	0.00	7.53- 7.59
19	B	Endosulfan II	0.906	0.867	4.3	108	0.00	7.70- 7.76
20	MA	4,4'-DDT	0.819	0.766	6.5	103	0.00	8.07- 8.13
21	B	Endrin Aldehyde	0.644	0.706	-9.6	124	0.00	8.28- 8.34
22	B	Endosulfan Sulfate	0.881	0.815	7.5	104	0.00	8.74- 8.80
23	A	Methoxychlor	0.454	0.392	13.7	95	0.00	9.31- 9.37
24		Mirex	0.734	0.681	7.2	104	0.00	9.64- 9.70
25	B	Endrin Ketone	0.820	0.872	-6.3	122	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.702	9.9	106	0.00	11.82-11.88
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.57- 2.57
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.57- 2.57
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Wed Dec 22 14:11:37 2021

12.8.8 12

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2879-CC2867
Lab FileID: 6G81372.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ch...79\6g81372.d\ECD1A.CH Vial: 2
Signal #2 : C:\msdchem\1\data\chrisc2\g6g2879\6g81372.d\ECD2B.CH
Acq On : 21-Dec-21, 12:08:38 Operator: thomasl
Sample : cc2867-25 Inst : GC6G
Misc : op37121,g6g2879,250,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\6pst2867.m (ChemStation Integrator)
Title : PEST/PCB
Last Update : Wed Dec 22 03:53:35 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	1.18- 2.18
2	SAB	Tetrachloro-m-xylene	0.621	0.588	5.3	103	0.00	2.23- 2.29
3		hexachlorobenzene	1.763	1.361	22.8#	89	0.00	2.55- 2.61
4	A	alpha-BHC	1.309	1.288	1.6	112	0.00	2.68- 2.74
5	MA	gamma-BHC	1.139	1.151	-1.1	119	0.00	2.95- 3.01
6	MA	Heptachlor	1.049	1.131	-7.8	121	0.00	3.42- 3.48
7	B	beta-BHC	0.450	0.503	-11.8	130	0.00	3.03- 3.09
8	B	delta-BHC	1.047	1.257	-20.1#	138	0.00	3.19- 3.25
9	MB	Aldrin	1.110	1.145	-3.2	116	0.00	3.73- 3.79
10		alachlor	0.109	0.102	6.4	104	0.00	3.88- 3.94
11	B	Heptachlor Epoxide	0.974	1.016	-4.3	121	0.00	4.41- 4.47
12	B	gamma-Chlordane	0.988	1.034	-4.7	120	0.00	4.57- 4.63
13	B	alpha-Chlordane	0.949	1.008	-6.2	115	0.00	4.73- 4.79
14	A	Endosulfan I	1.059	1.087	-2.6	117	0.00	4.89- 4.95
15	B	4,4'-DDE	0.996	1.019	-2.3	120	0.00	4.85- 4.91
16	MA	Dieldrin	1.070	1.081	-1.0	116	0.00	5.20- 5.26
17	MA	Endrin	1.057	1.032	2.4	114	0.00	5.51- 5.57
18	A	4,4'-DDD	0.788	0.807	-2.4	117	0.00	5.65- 5.71
19	B	Endosulfan II	0.996	0.944	5.2	116	0.00	5.82- 5.88
20	MA	4,4'-DDT	0.844	0.827	2.0	116	0.00	6.06- 6.12
21	B	Endrin Aldehyde	0.761	0.846	-11.2	136	0.00	6.42- 6.48
22	B	Endosulfan Sulfate	0.973	0.930	4.4	114	0.00	7.08- 7.14
23	A	Methoxychlor	0.460	0.472	-2.6	115	0.00	6.84- 6.90
24		Mirex	0.781	0.761	2.6	112	0.00	6.94- 7.00
25	B	Endrin Ketone	0.942	0.987	-4.8	131	0.00	7.51- 7.57
26	SA	Decachlorobiphenyl	1.195	1.123	6.0	115	0.00	9.31- 9.37
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	1.18- 2.18
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	1.18- 2.18
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

12.8.9 12

Continuing Calibration Summary

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Sample: G6G2879-CC2867
Lab FileID: 6G81372.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.56- 2.56
2	SAB	Tetrachloro-m-xylene	0.909	0.843	7.3	102	0.00	2.85- 2.91
3		hexachlorobenzene	1.074	0.987	8.1	103	0.00	3.36- 3.42
4	A	alpha-BHC	1.355	1.298	4.2	106	0.00	3.52- 3.58
5	MA	gamma-BHC	1.127	1.171	-3.9	114	0.00	3.95- 4.01
6	MA	Heptachlor	1.150	1.152	-0.2	109	0.00	4.52- 4.58
7	B	beta-BHC	0.507	0.529	-4.3	117	0.00	4.03- 4.09
8	B	delta-BHC	1.031	1.204	-16.8	127	0.00	4.43- 4.49
9	MB	Aldrin	1.046	1.083	-3.5	114	0.00	4.98- 5.04
10		alachlor	0.141	0.143	-1.4	104	0.00	4.79- 4.85
11	B	Heptachlor Epoxide	0.996	1.013	-1.7	111	0.00	5.80- 5.86
12	B	gamma-Chlordane	1.034	1.032	0.2	111	0.00	6.09- 6.15
13	B	alpha-Chlordane	0.979	0.995	-1.6	111	0.00	6.31- 6.37
14	A	Endosulfan I	0.959	0.957	0.2	110	0.00	6.41- 6.47
15	B	4,4'-DDE	1.004	0.995	0.9	110	0.00	6.58- 6.64
16	MA	Dieldrin	1.031	1.037	-0.6	110	0.00	6.84- 6.90
17	MA	Endrin	0.991	1.014	-2.3	111	0.00	7.35- 7.41
18	A	4,4'-DDD	0.848	0.845	0.4	110	0.00	7.53- 7.59
19	B	Endosulfan II	0.906	0.900	0.7	110	0.00	7.70- 7.76
20	MA	4,4'-DDT	0.819	0.786	4.0	103	0.00	8.06- 8.12
21	B	Endrin Aldehyde	0.644	0.730	-13.4	125	0.00	8.27- 8.33
22	B	Endosulfan Sulfate	0.881	0.894	-1.5	112	0.00	8.74- 8.80
23	A	Methoxychlor	0.454	0.412	9.3	98	0.00	9.31- 9.37
24		Mirex	0.734	0.705	4.0	106	0.00	9.63- 9.69
25	B	Endrin Ketone	0.820	0.934	-13.9	128	0.00	9.71- 9.77
26	SA	Decachlorobiphenyl	0.779	0.763	2.1	113	0.00	11.81-11.87
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.56- 2.56
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.56- 2.56
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g81077.d 6pst2867.m Wed Dec 22 04:35:07 2021

12.8.9 12

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2867	**Method:** EPA 608.3	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2867-IC2867	6G81074.D	12/10/21 03:54	n/a	Initial cal 100
G6G2867-IC2867	6G81075.D	12/10/21 04:13	n/a	Initial cal 75
G6G2867-IC2867	6G81076.D	12/10/21 04:31	n/a	Initial cal 50
G6G2867-ICC2867	6G81077.D	12/10/21 04:49	n/a	Initial cal 25
G6G2867-IC2867	6G81078.D	12/10/21 05:08	n/a	Initial cal 10
G6G2867-IC2867	6G81079.D	12/10/21 05:25	n/a	Initial cal 5
G6G2867-IC2867	6G81080.D	12/10/21 05:43	n/a	Initial cal 2
G6G2867-IC2867	6G81081.D	12/10/21 06:02	n/a	Initial cal 1
G6G2867-IC2867	6G81082.D	12/10/21 06:20	n/a	Initial cal 500
G6G2867-IC2867	6G81083.D	12/10/21 06:38	n/a	Initial cal 500
G6G2867-ICV2867	6G81084.D	12/10/21 06:57	n/a	Initial cal verification 25
G6G2867-ICV2867	6G81085.D	12/10/21 07:15	n/a	Initial cal verification 500
G6G2867-ICV2867	6G81086.D	12/10/21 07:33	n/a	Initial cal verification 500
G6G2867-ICV2867	6G81087.D	12/10/21 07:52	n/a	Initial cal verification 25
G6G2867-ICV2867	6G81088.D	12/10/21 08:10	n/a	Initial cal verification 25

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2874	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2874-DDT	6G81271.D	12/17/21 20:16	n/a	DDT/Endrin Breakdown Check
G6G2874-DDT	6G81271.D	12/17/21 22:16	n/a	DDT/Endrin Breakdown Check
G6G2874-CC2867	6G81272.D	12/17/21 22:34	n/a	Continuing cal 25
OP37120-MB1	6G81274.D	12/17/21 23:10	OP37120	Method Blank
OP37120-BS1	6G81275.D	12/17/21 23:28	OP37120	Blank Spike
OP37120-BSD	6G81276.D	12/17/21 23:46	OP37120	Blank Spike Duplicate
JD36624-4	6G81279.D	12/18/21 00:39	OP37120	HOFF MW-4DU
JD36624-5	6G81280.D	12/18/21 00:57	OP37120	DUP-2021
JD36624-6	6G81281.D	12/18/21 01:15	OP37120	HOFF MW-FA
JD36624-7	6G81282.D	12/18/21 01:33	OP37120	HOFF MW-FB
JD36624-8	6G81283.D	12/18/21 01:51	OP37120	HOFF MW-13
JD36624-9	6G81284.D	12/18/21 02:09	OP37120	HOFF MW-C
JD36624-10	6G81285.D	12/18/21 02:26	OP37120	HOFF MW-D
JD36624-11	6G81286.D	12/18/21 02:44	OP37120	HOFF IW-1A
JD36624-12	6G81287.D	12/18/21 03:02	OP37120	HOFF IW-1B
JD36624-13	6G81288.D	12/18/21 03:20	OP37120	HOFF IW-3A
JD36624-14	6G81289.D	12/18/21 03:38	OP37120	HOFF IW-3B
JD36624-15	6G81290.D	12/18/21 03:56	OP37120	HOFF IW-2A
JD36624-16	6G81291.D	12/18/21 04:13	OP37120	HOFF IW-2B
JD36624-17	6G81292.D	12/18/21 04:31	OP37120	HOFF IW-B

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2878	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2878-DDT	6G81349.D	12/21/21 03:33	n/a	DDT/Endrin Breakdown Check
G6G2878-CC2867	6G81350.D	12/21/21 03:51	n/a	Continuing cal 25
JD36624-7	6G81353.D	12/21/21 04:44	OP37120	HOFF MW-FB
JD36624-8	6G81354.D	12/21/21 05:02	OP37120	HOFF MW-13
JD36624-16	6G81355.D	12/21/21 05:20	OP37120	HOFF IW-2B
JD36624-17	6G81356.D	12/21/21 05:38	OP37120	HOFF IW-B
JD36624-2	6G81357.D	12/21/21 05:56	OP37120	HOFF MW-8
JD36624-3	6G81358.D	12/21/21 06:14	OP37120	HOFF MW-4DL
ZZZZZZ	6G81362.D	12/21/21 07:25	OP37121	(unrelated sample)
ZZZZZZ	6G81363.D	12/21/21 07:43	OP37121	(unrelated sample)
ZZZZZZ	6G81364.D	12/21/21 08:01	OP37121	(unrelated sample)
ZZZZZZ	6G81368.D	12/21/21 09:12	OP37121	(unrelated sample)
ZZZZZZ	6G81369.D	12/21/21 09:30	OP37121	(unrelated sample)
ZZZZZZ	6G81370.D	12/21/21 09:48	OP37121	(unrelated sample)

Run Sequence Report

Job Number: JD36624
Account: TTPAL Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Run ID: G6G2879	**Method:** SW846 8081B	**Instrument ID:** GC6G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G6G2879-DDT	6G81371.D	12/21/21 11:50	n/a	DDT/Endrin Breakdown Check
G6G2879-CC2867	6G81372.D	12/21/21 12:08	n/a	Continuing cal 25
OP36880-MB1	6G81374.D	12/21/21 12:57	OP36880	Method Blank
OP36880-BS1	6G81375.D	12/21/21 13:15	OP36880	Blank Spike
ZZZZZZ	6G81380.D	12/21/21 14:44	OP36880	(unrelated sample)
ZZZZZZ	6G81381.D	12/21/21 15:01	OP36880	(unrelated sample)
ZZZZZZ	6G81383.D	12/21/21 15:37	OP36880	(unrelated sample)
ZZZZZZ	6G81384.D	12/21/21 15:55	OP36880	(unrelated sample)
ZZZZZZ	6G81387.D	12/21/21 16:49	OP36880	(unrelated sample)

GC/LC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/22/21 14:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\g6g2878\
Data File : 6g81357.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21-Dec-21, 05:56:18
Operator : christp
Sample : jd36624-2
Misc : op37120,g6g2878,260,,,2,1
ALS Vial : 51 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 22 03:21:20 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 22 01:13:25 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.689	2.063	801.7E6	817.4E6	50.000	50.000
27) I 1-bromo-2...	1.689	2.063	801.7E6	817.4E6	50.000	50.000
33) I 1-bromo-2...	1.689	2.063	801.7E6	817.4E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.266	2.887	492.3E6	410.1E6	49.450	27.610 #
Spiked Amount	40.000 Range	30 - 150	Recovery	=	123.63%	69.03%
26) SA Decachlor...	9.343	11.843	388.7E6	197.7E6	20.278m	15.519
Spiked Amount	40.000		Recovery	=	50.70%	38.80%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

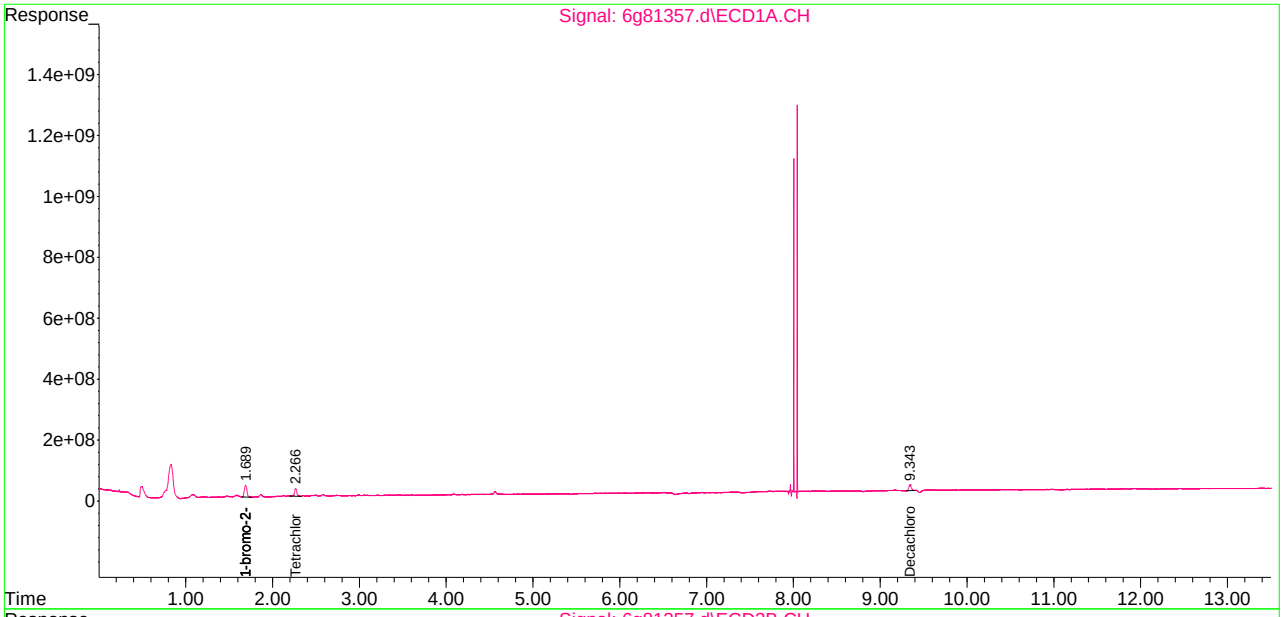
13.1.1
13

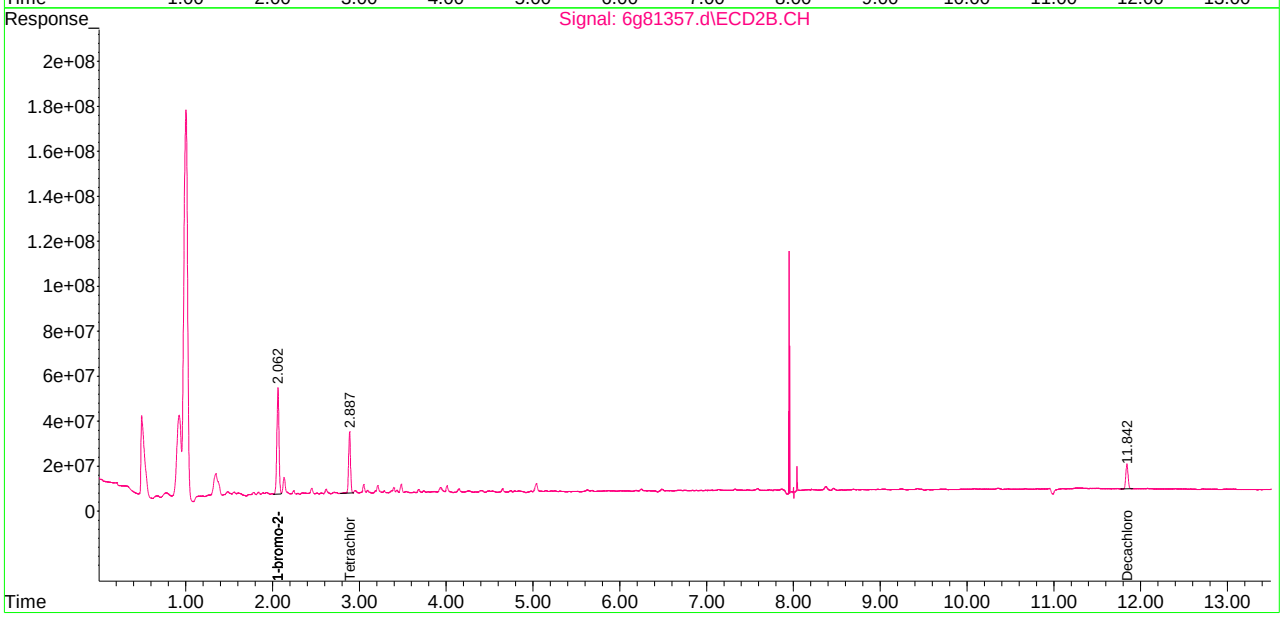
Quantitation Report (QT Reviewed)

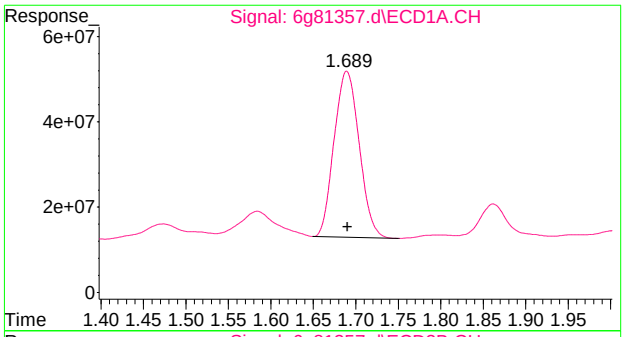
Data Path : C:\msdchem\1\data\chrisc2\g6g2878\
Data File : 6g81357.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21-Dec-21, 05:56:18
Operator : christp
Sample : jd36624-2
Misc : op37120,g6g2878,260,,,2,1
ALS Vial : 51 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 22 03:21:20 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 22 01:13:25 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

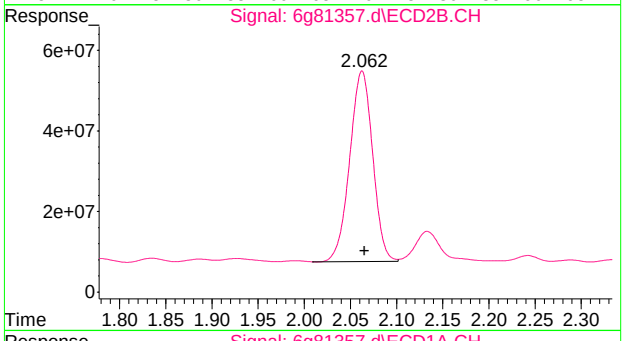






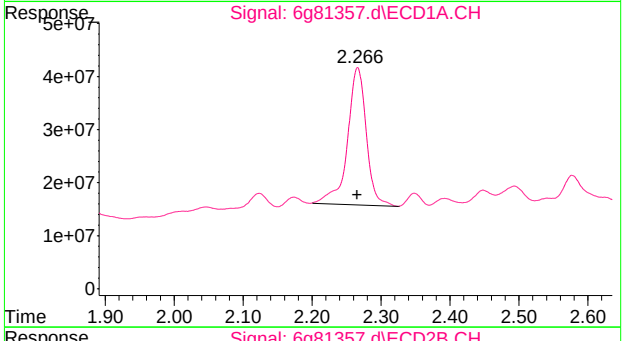
#1 1-bromo-2-nitrobenzene

R.T.: 1.689 min
Delta R.T.: 0.000 min
Response: 801659560
Conc: 50.00 PPB



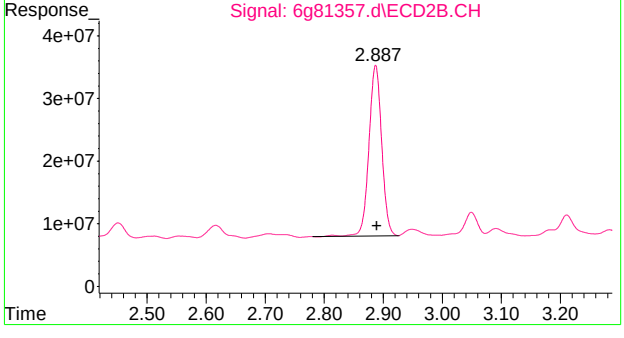
#1 1-bromo-2-nitrobenzene

R.T.: 2.063 min
Delta R.T.: -0.003 min
Response: 817361799
Conc: 50.00 PPB



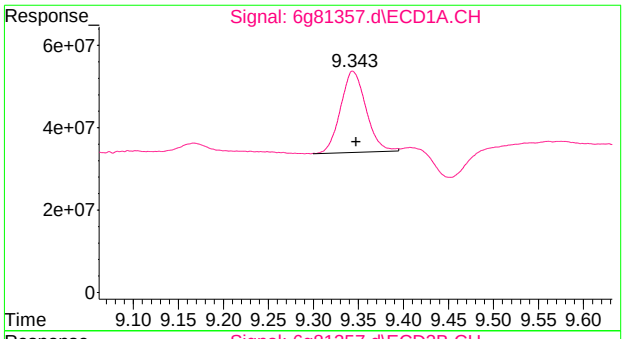
#2 Tetrachloro-m-xylene

R.T.: 2.266 min
Delta R.T.: 0.000 min
Response: 492305160
Conc: 49.45 PPB



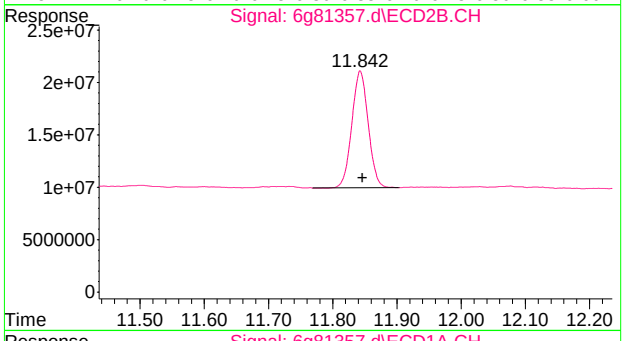
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: -0.002 min
Response: 410095779
Conc: 27.61 PPB



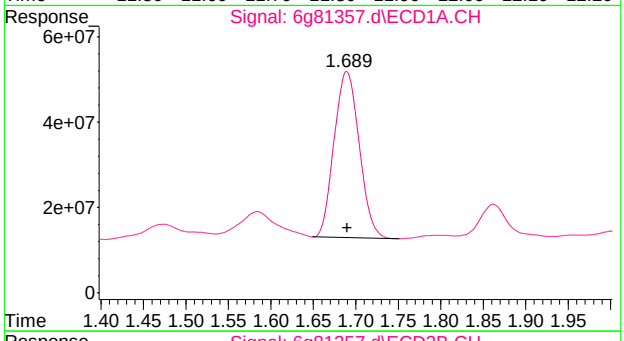
#26 Decachlorobiphenyl

R.T.: 9.343 min
Delta R.T.: -0.004 min
Response: 388683957
Conc: 20.28 PPB m



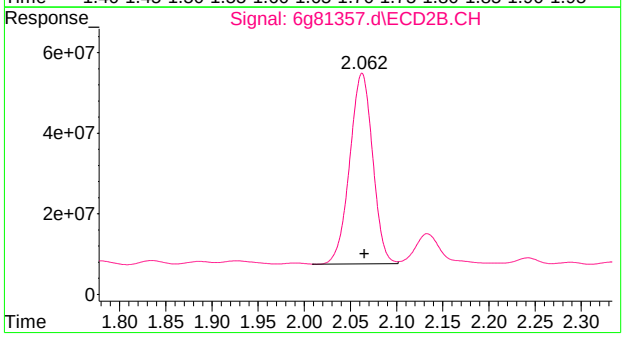
#26 Decachlorobiphenyl

R.T.: 11.843 min
Delta R.T.: -0.004 min
Response: 197714642
Conc: 15.52 PPB



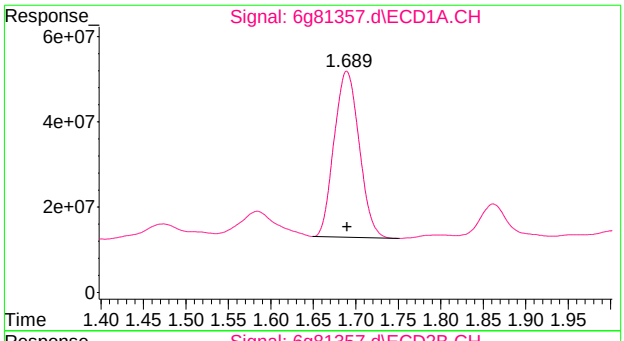
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.689 min
Delta R.T.: 0.000 min
Response: 801659560
Conc: 50.00 PPB



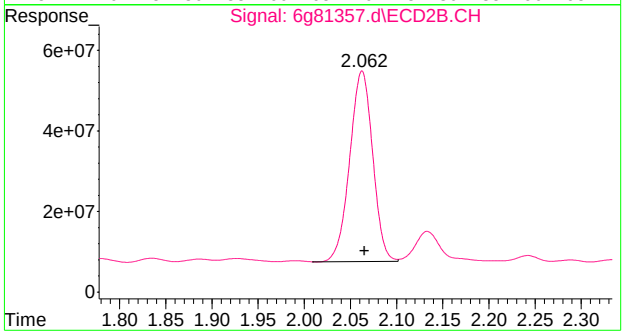
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.063 min
Delta R.T.: -0.003 min
Response: 817361799
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.689 min
Delta R.T.: 0.000 min
Response: 801659560
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.063 min
Delta R.T.: -0.003 min
Response: 817361799
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/22/21 14:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\g6g2878\
Data File : 6g81358.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21-Dec-21, 06:14:08
Operator : christp
Sample : jd36624-3
Misc : op37120,g6g2878,260,,,2,1
ALS Vial : 52 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 22 03:22:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 22 01:13:25 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.688	2.062	834.2E6	681.6E6	50.000	50.000
27) I 1-bromo-2...	1.688	2.062	834.2E6	681.6E6	50.000	50.000
33) I 1-bromo-2...	1.688	2.062	834.2E6	681.6E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.264	2.887	406.3E6	348.2E6	39.224m	28.117 #
Spiked Amount	40.000 Range	30 - 150	Recovery	=	98.06%	70.29%
26) SA Decachlor...	9.345	11.843	266.2E6	138.1E6	13.346m	12.998
Spiked Amount	40.000		Recovery	=	33.37%	32.49%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

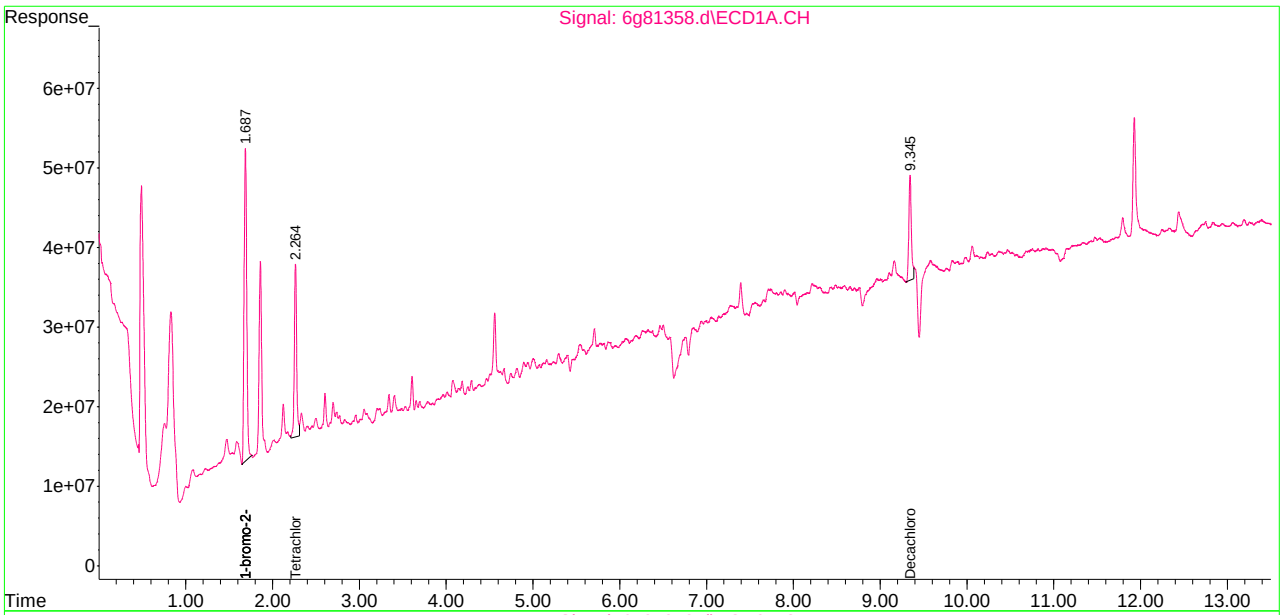
13.1.2
13

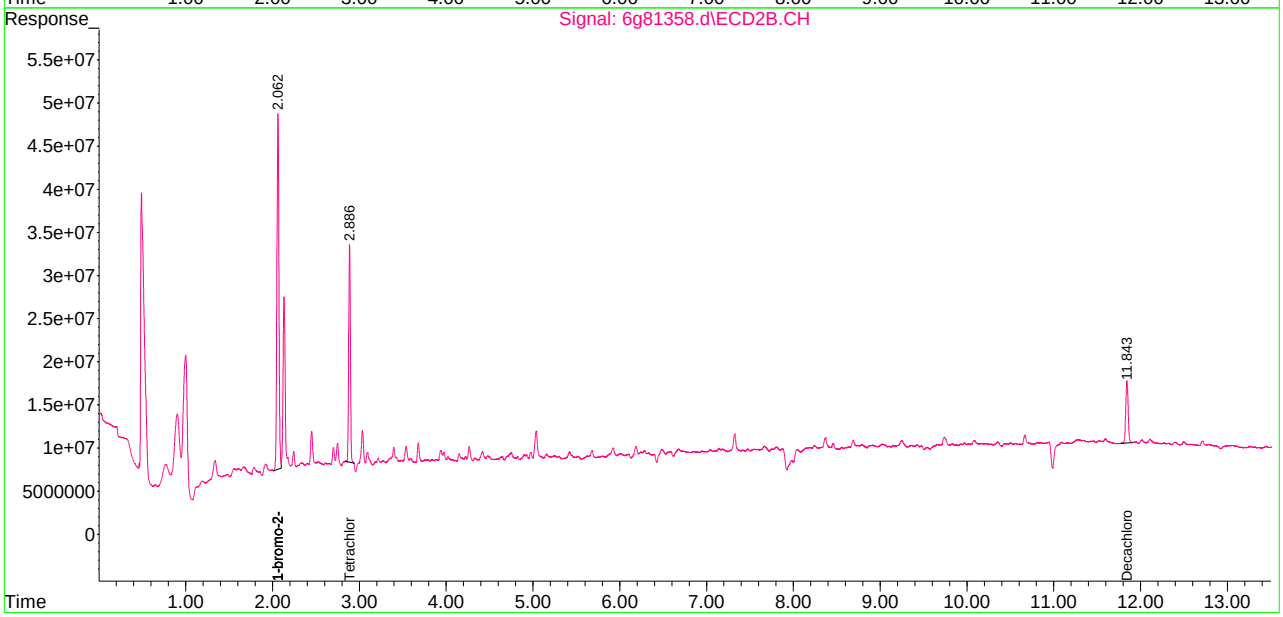
Quantitation Report (QT Reviewed)

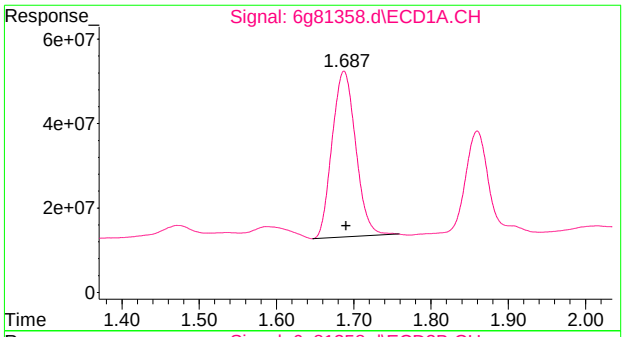
Data Path : C:\msdchem\1\data\chrisc2\g6g2878\
Data File : 6g81358.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21-Dec-21, 06:14:08
Operator : christp
Sample : jd36624-3
Misc : op37120,g6g2878,260,,,2,1
ALS Vial : 52 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 22 03:22:28 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 22 01:13:25 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

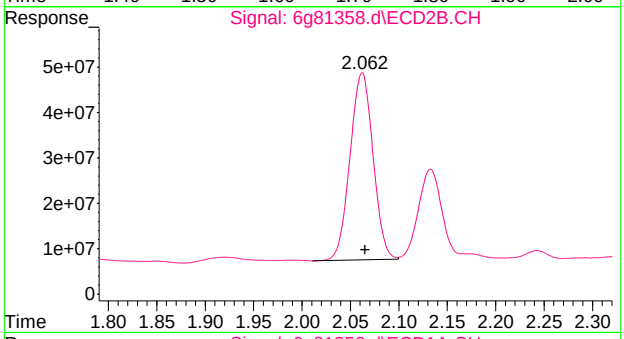






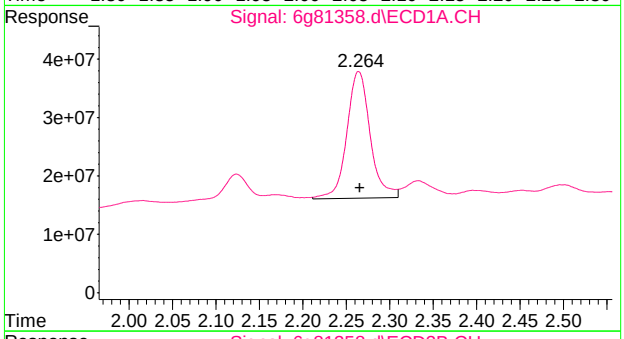
#1 1-bromo-2-nitrobenzene

R.T.: 1.688 min
Delta R.T.: -0.002 min
Response: 834186416
Conc: 50.00 PPB



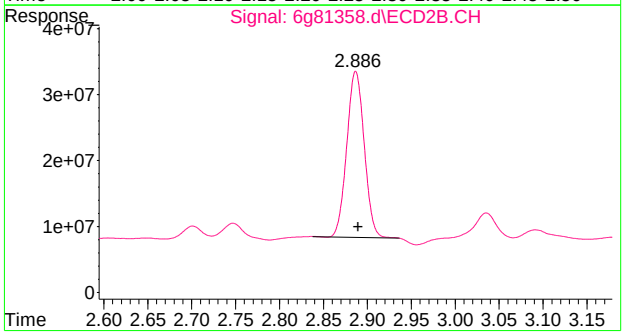
#1 1-bromo-2-nitrobenzene

R.T.: 2.062 min
Delta R.T.: -0.003 min
Response: 681559106
Conc: 50.00 PPB



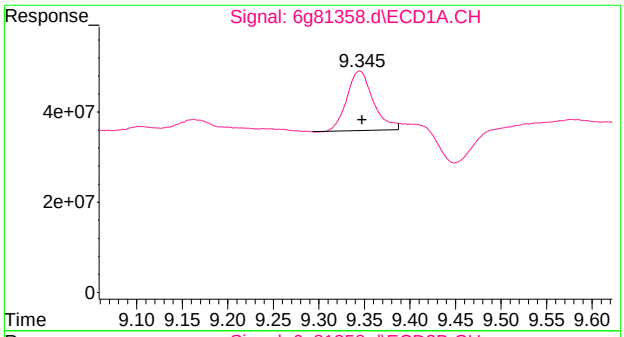
#2 Tetrachloro-m-xylene

R.T.: 2.264 min
Delta R.T.: -0.002 min
Response: 406349745
Conc: 39.22 PPB m



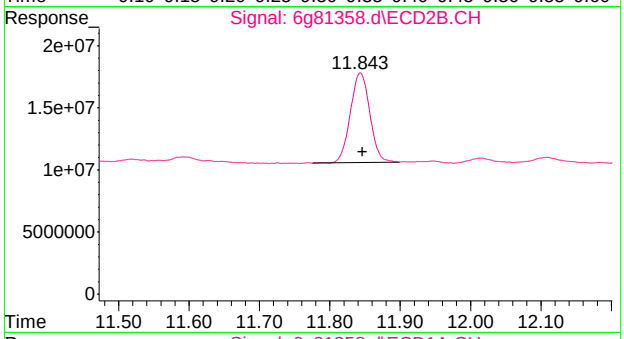
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: -0.003 min
Response: 348234976
Conc: 28.12 PPB



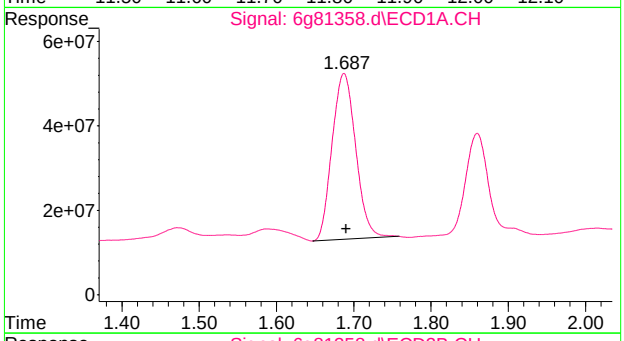
#26 Decachlorobiphenyl

R.T.: 9.345 min
Delta R.T.: -0.003 min
Response: 266192667
Conc: 13.35 PPB m



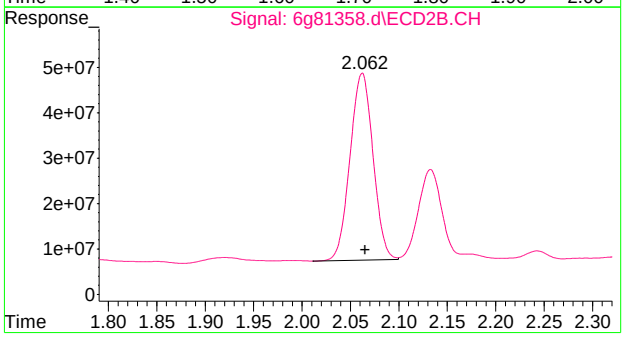
#26 Decachlorobiphenyl

R.T.: 11.843 min
Delta R.T.: -0.003 min
Response: 138079114
Conc: 13.00 PPB



#27 1-bromo-2-nitrobenzeneA

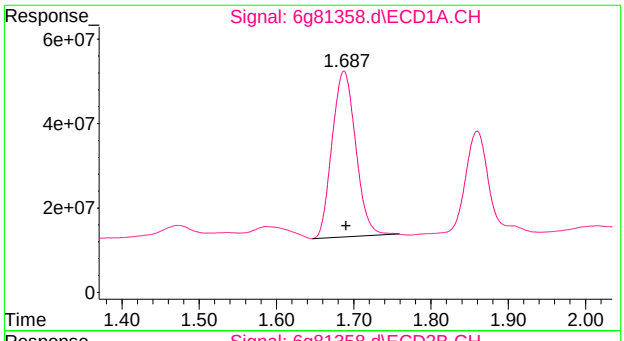
R.T.: 1.688 min
Delta R.T.: -0.002 min
Response: 834186416
Conc: 50.00 PPB



#27 1-bromo-2-nitrobenzeneA

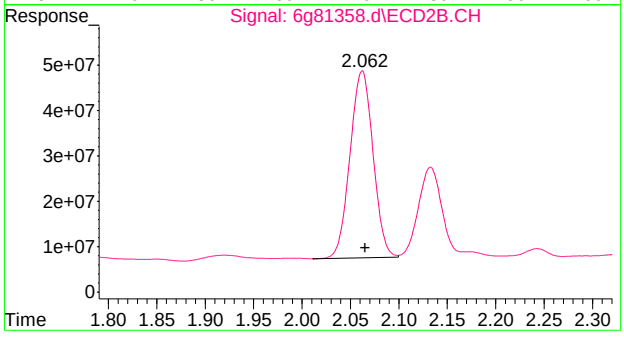
R.T.: 2.062 min
Delta R.T.: -0.003 min
Response: 681559106
Conc: 50.00 PPB

13.1.2
13



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.688 min
Delta R.T.: -0.002 min
Response: 834186416
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.062 min
Delta R.T.: -0.003 min
Response: 681559106
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/20/21 10:52

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81279.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 00:39:44
Operator : rebeccak
Sample : jd36624-4
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 86 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:11:58 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.683	2.059	822.3E6	705.6E6	50.000	50.000
27)	I 1-bromo-2...	1.683	2.059	822.3E6	705.6E6	50.000	50.000
33)	I 1-bromo-2...	1.683	2.059	822.3E6	705.6E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.261	2.887	330.2E6	561.2E6	32.339m	43.770m#
	Spiked Amount 40.000	Range 30 - 150		Recovery =		80.85%	109.43%
26)	SA Decachlor...	9.350	11.846	348.4E6	198.2E6	17.723m	18.025m
	Spiked Amount 40.000			Recovery =		44.31%	45.06%
	Target Compounds						
5)	MA gamma-BHC	2.989	4.009f	161.1E6	94403374	8.603m	5.937m#
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

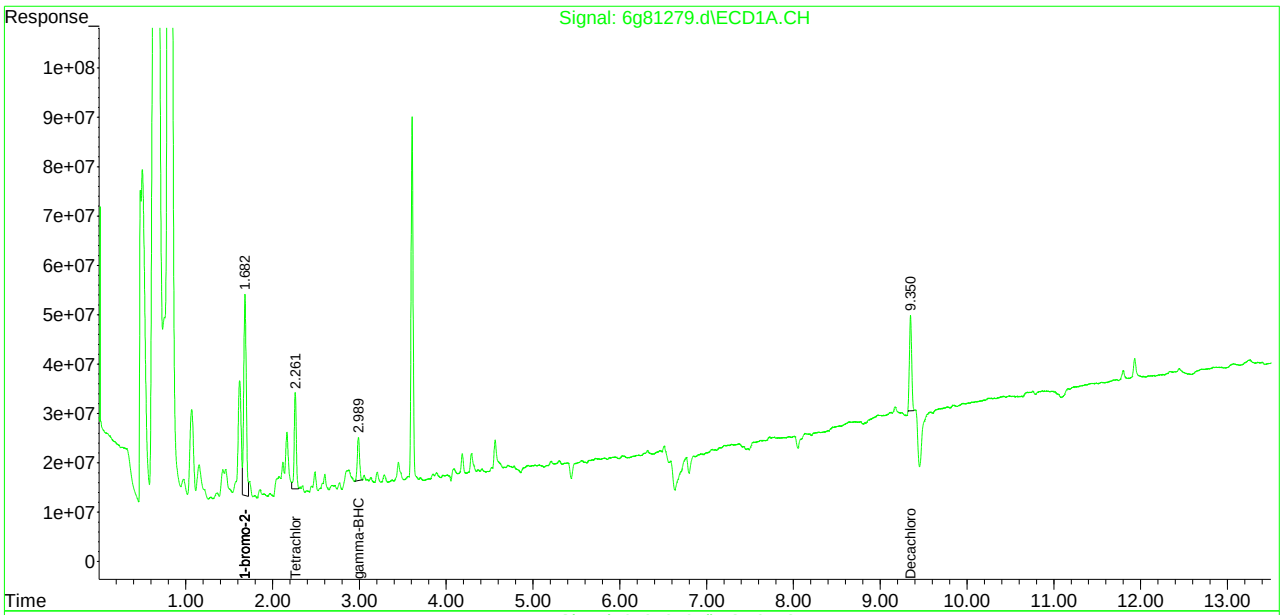
13.1.3
13

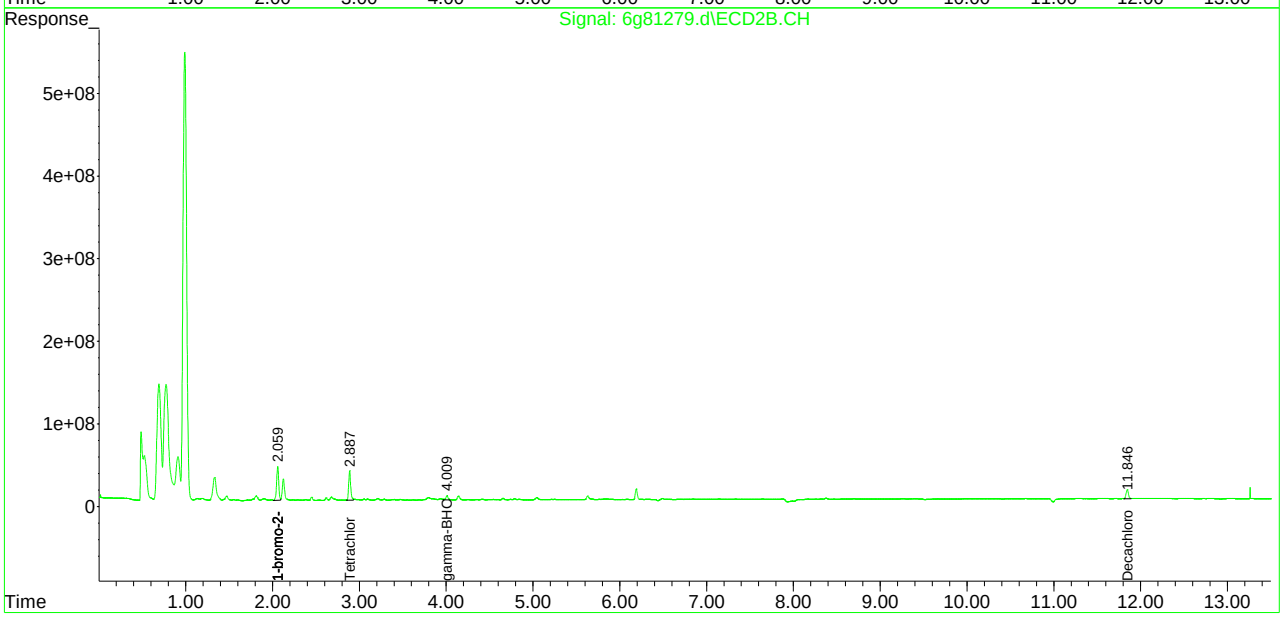
Quantitation Report (QT Reviewed)

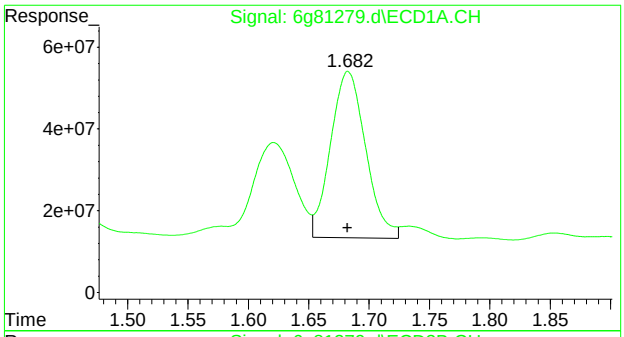
Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81279.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 00:39:44
Operator : rebeccak
Sample : jd36624-4
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 86 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:11:58 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

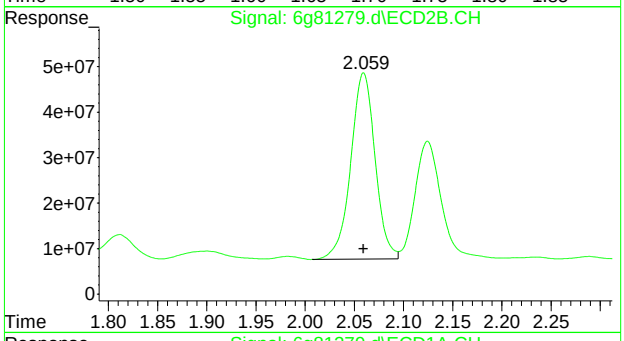






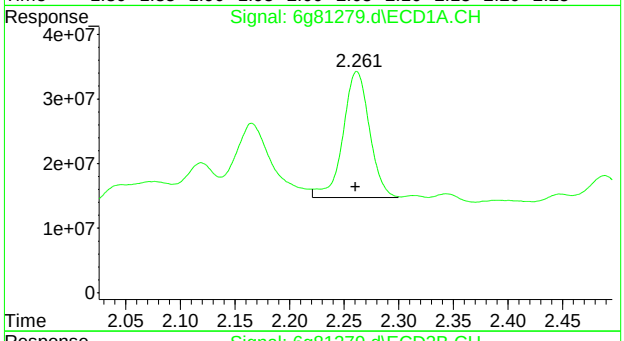
#1 1-bromo-2-nitrobenzene

R.T.: 1.683 min
Delta R.T.: 0.000 min
Response: 822296621
Conc: 50.00 PPB



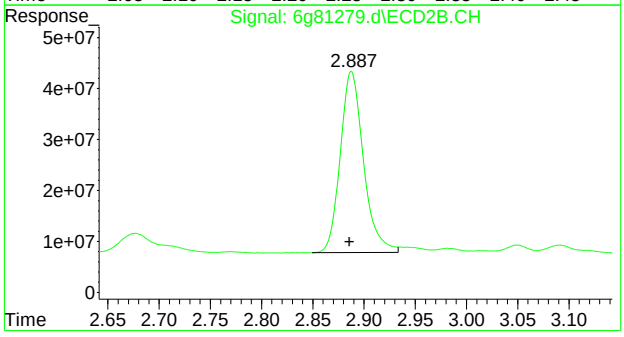
#1 1-bromo-2-nitrobenzene

R.T.: 2.059 min
Delta R.T.: 0.000 min
Response: 705614030
Conc: 50.00 PPB



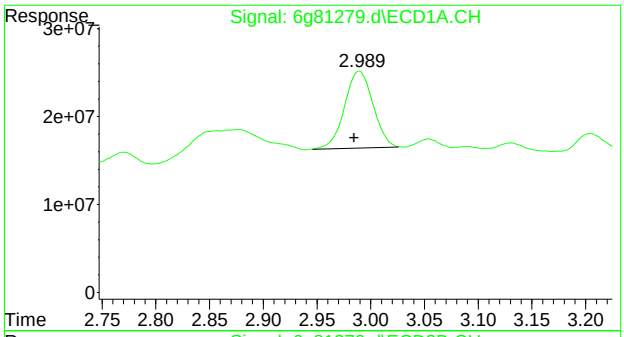
#2 Tetrachloro-m-xylene

R.T.: 2.261 min
Delta R.T.: 0.000 min
Response: 330244773
Conc: 32.34 PPB m



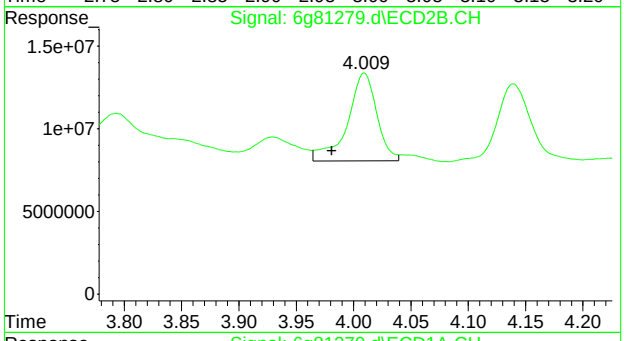
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: 0.002 min
Response: 561247988
Conc: 43.77 PPB m



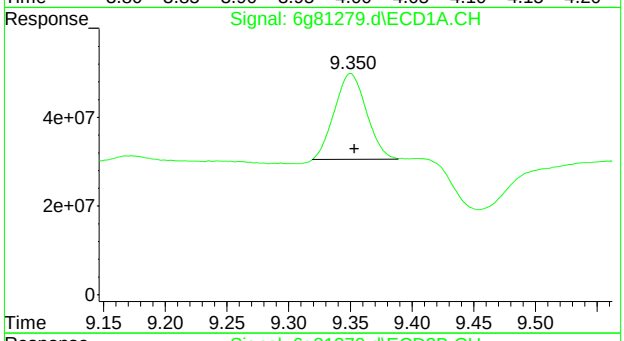
#5 gamma-BHC

R.T.: 2.989 min
Delta R.T.: 0.005 min
Response: 161086495
Conc: 8.60 PPB m



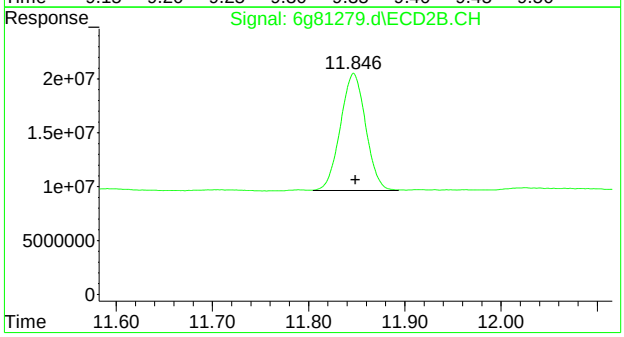
#5 gamma-BHC

R.T.: 4.009 min
Delta R.T.: 0.028 min
Response: 94403374
Conc: 5.94 PPB m



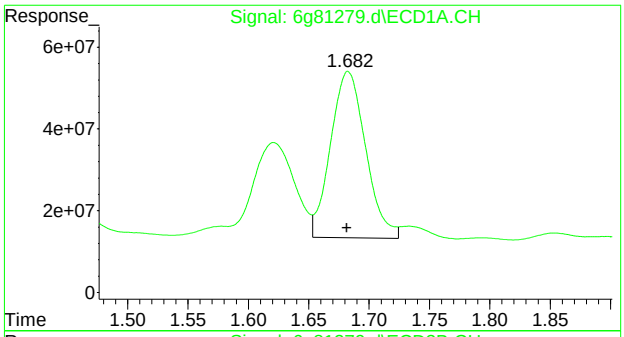
#26 Decachlorobiphenyl

R.T.: 9.350 min
Delta R.T.: -0.003 min
Response: 348444525
Conc: 17.72 PPB m



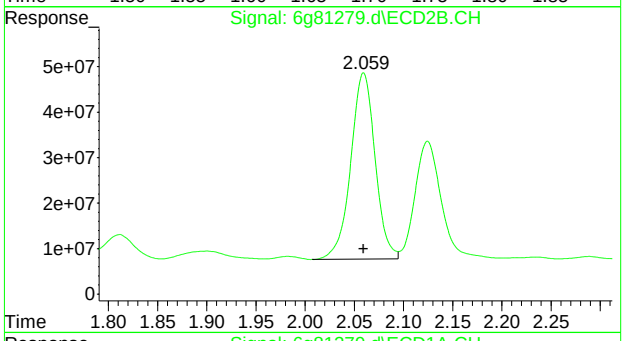
#26 Decachlorobiphenyl

R.T.: 11.846 min
Delta R.T.: -0.002 min
Response: 198249929
Conc: 18.03 PPB m



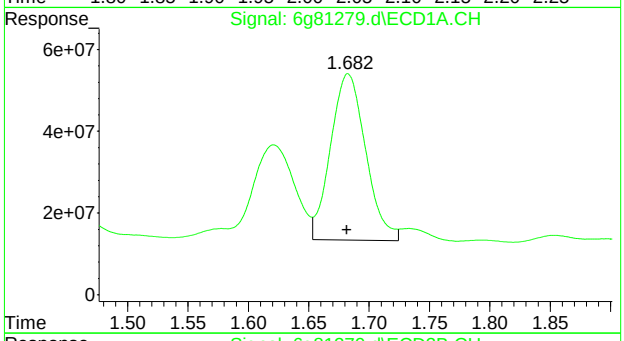
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.683 min
Delta R.T.: 0.000 min
Response: 822296621
Conc: 50.00 PPB



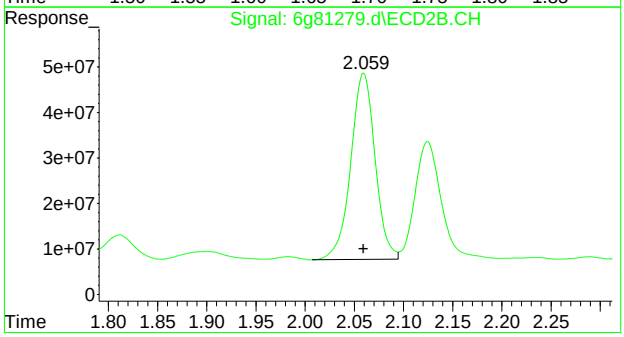
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.059 min
Delta R.T.: 0.000 min
Response: 705614030
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.683 min
Delta R.T.: 0.000 min
Response: 822296621
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.059 min
Delta R.T.: 0.000 min
Response: 705614030
Conc: 50.00 PPB

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/20/21 10:52

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81280.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 00:57:31
Operator : rebeccak
Sample : jd36624-5
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 87 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:15:44 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.682	2.060	857.7E6	668.1E6	50.000	50.000
27) I 1-bromo-2...	1.682	2.060	857.7E6	668.1E6	50.000	50.000
33) I 1-bromo-2...	1.682	2.060	857.7E6	668.1E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.261	2.887	256.0E6	499.9E6	24.030m	41.177m#
Spiked Amount	40.000 Range	30 - 150	Recovery	=	60.08%	102.94%
26) SA Decachlor...	9.349	11.846	318.5E6	169.4E6	15.530m	16.269m
Spiked Amount	40.000		Recovery	=	38.82%	40.67%
Target Compounds						
5) MA gamma-BHC	2.989	4.009f	155.7E6	71971648	7.974m	4.781m#
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

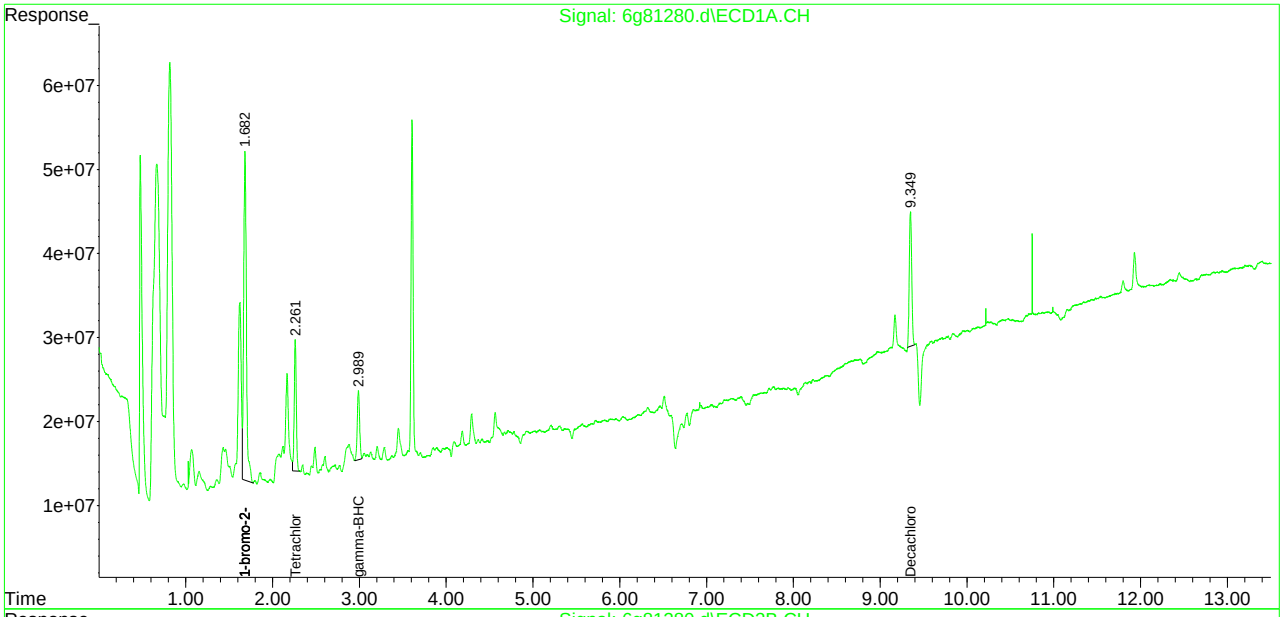
13.1.4
13

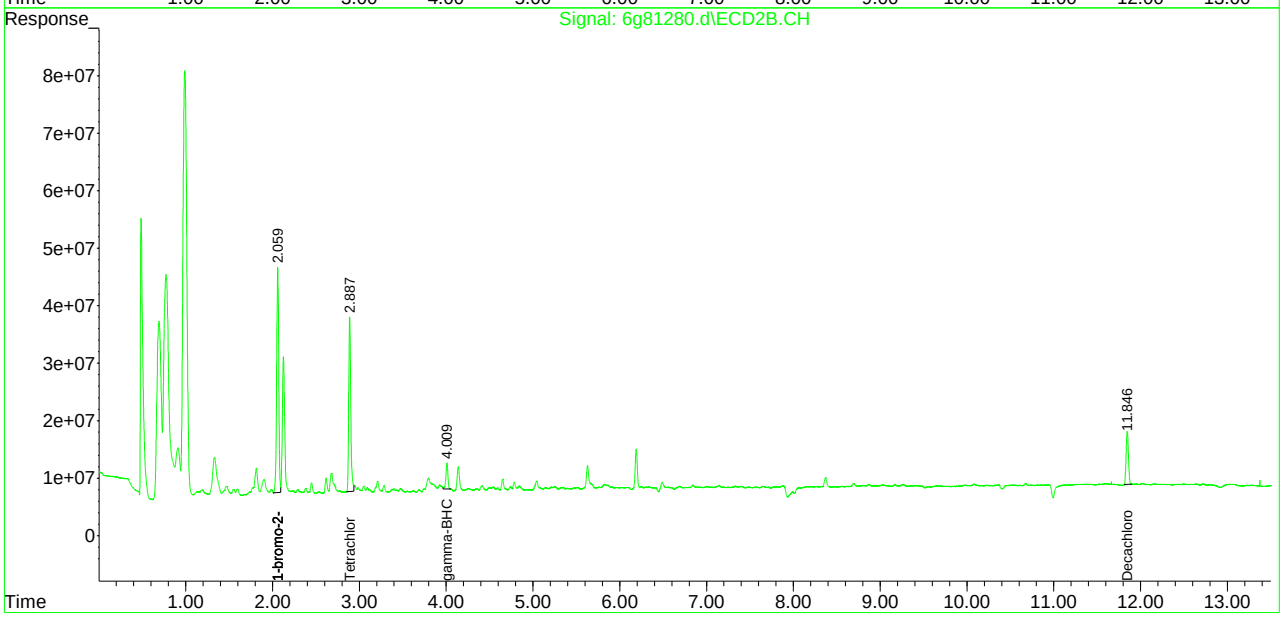
Quantitation Report (QT Reviewed)

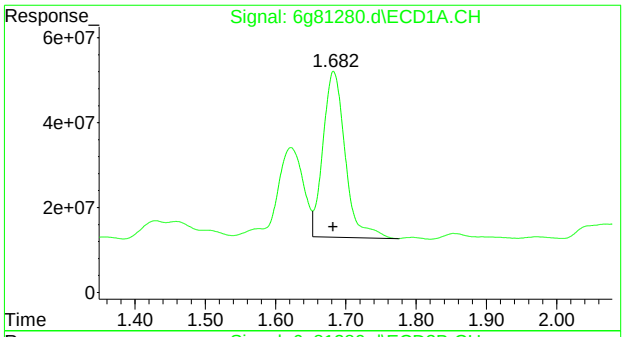
Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81280.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 00:57:31
Operator : rebeccak
Sample : jd36624-5
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 87 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:15:44 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

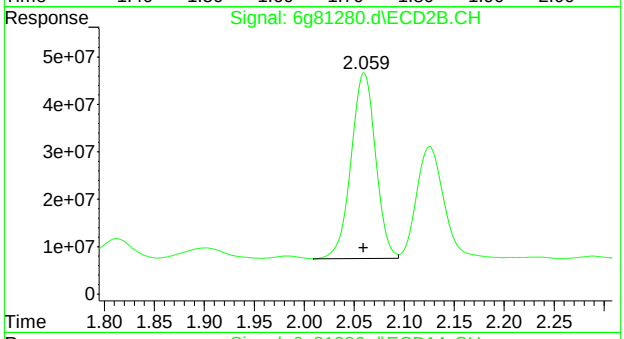






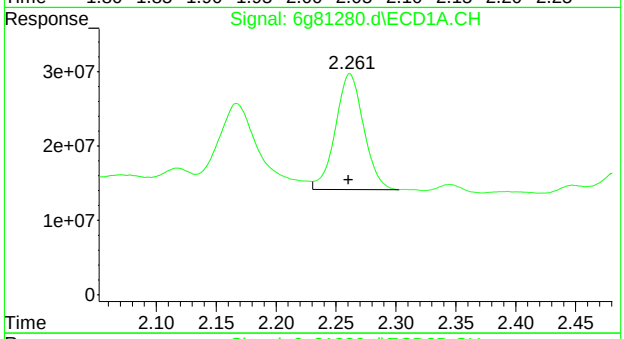
#1 1-bromo-2-nitrobenzene

R.T.: 1.682 min
Delta R.T.: 0.000 min
Response: 857737110
Conc: 50.00 PPB



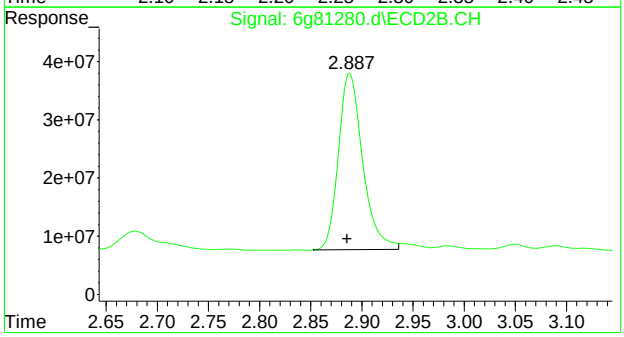
#1 1-bromo-2-nitrobenzene

R.T.: 2.060 min
Delta R.T.: 0.000 min
Response: 668051192
Conc: 50.00 PPB



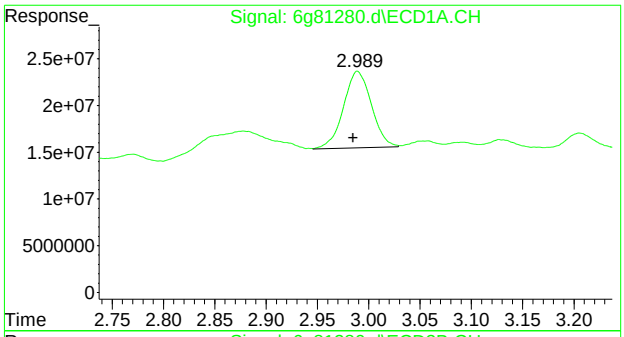
#2 Tetrachloro-m-xylene

R.T.: 2.261 min
Delta R.T.: 0.000 min
Response: 255974833
Conc: 24.03 PPB m



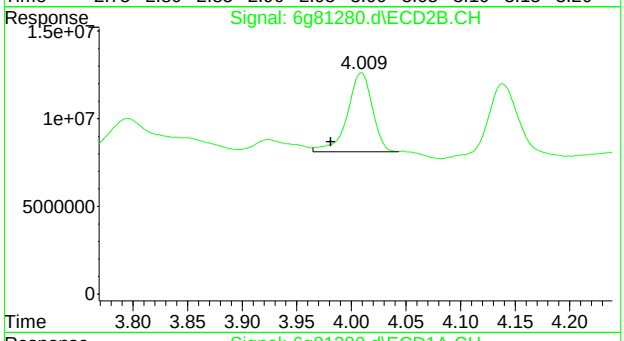
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: 0.002 min
Response: 499888635
Conc: 41.18 PPB m



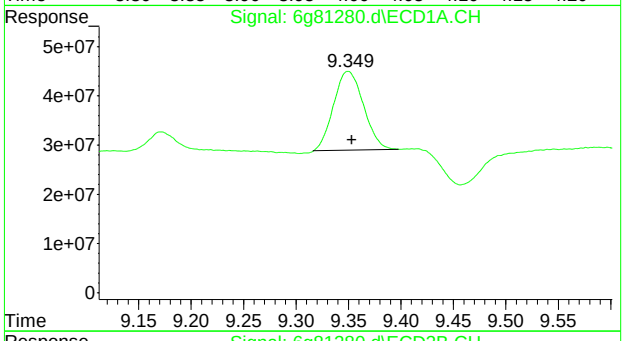
#5 gamma-BHC

R.T.: 2.989 min
Delta R.T.: 0.004 min
Response: 155743280
Conc: 7.97 PPB m



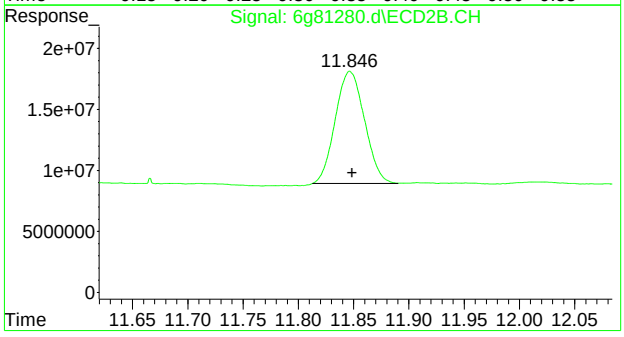
#5 gamma-BHC

R.T.: 4.009 min
Delta R.T.: 0.028 min
Response: 71971648
Conc: 4.78 PPB m



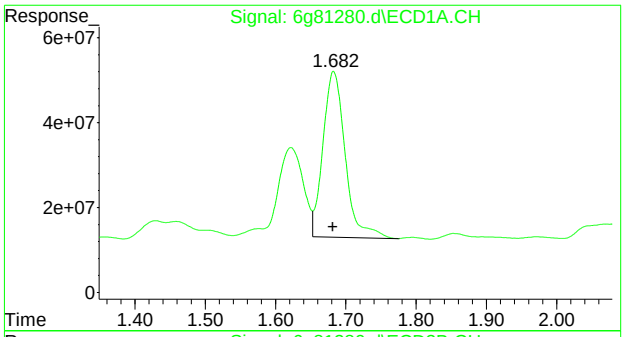
#26 Decachlorobiphenyl

R.T.: 9.349 min
Delta R.T.: -0.004 min
Response: 318504162
Conc: 15.53 PPB m



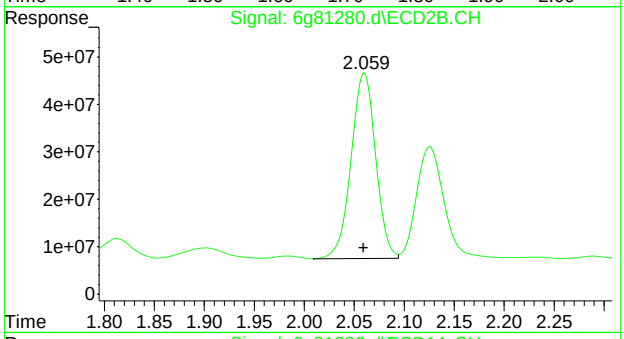
#26 Decachlorobiphenyl

R.T.: 11.846 min
Delta R.T.: -0.002 min
Response: 169409406
Conc: 16.27 PPB m



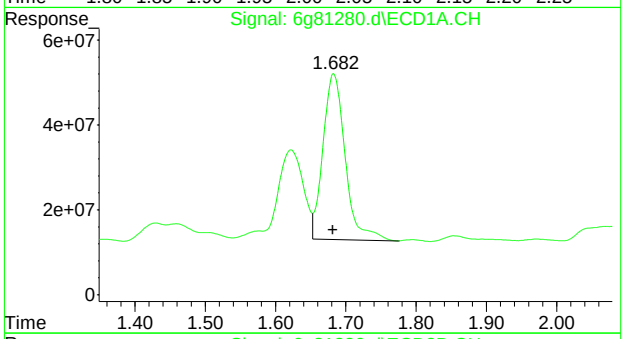
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.682 min
Delta R.T.: 0.000 min
Response: 857737110
Conc: 50.00 PPB



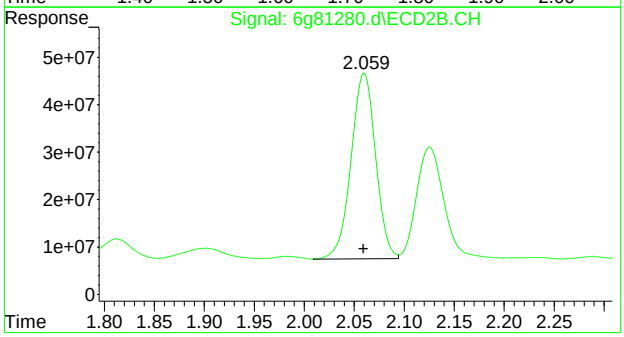
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.060 min
Delta R.T.: 0.000 min
Response: 668051192
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.682 min
Delta R.T.: 0.000 min
Response: 857737110
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.060 min
Delta R.T.: 0.000 min
Response: 668051192
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/20/21 11:41

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81281.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2021 1:15 am
Operator : rebeccak
Sample : jd36624-6
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 88 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 11:04:17 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:23 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.683	2.057	643.4E6	775.5E6	50.000	50.000
27) I	1-bromo-2...	1.683	2.057	643.4E6	775.5E6	50.000	50.000
33) I	1-bromo-2...	1.683	2.057	643.4E6	775.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.261	2.886	224.1E6	348.4E6	28.041m	24.720m
	Spiked Amount 40.000	Range 30 - 150		Recovery =		70.10%	61.80%
26) SA	Decachlor...	9.349	11.847	294.5E6	149.8E6	19.143m	12.395 #
	Spiked Amount 40.000			Recovery =		47.86%	30.99%
	Target Compounds						
5) MA	gamma-BHC	2.989	3.990	83660795	52080110	5.710m	2.980m#
11) B	Heptachlo...	4.456	5.817f	105.5E6	78168563	8.417m	5.060m#
17) MA	Endrin	5.565	7.391	48049432	44017408	3.533m	2.865m
18) A	4,4'-DDD	5.672f	7.570	67379550	42323266	6.644m	3.217m#
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

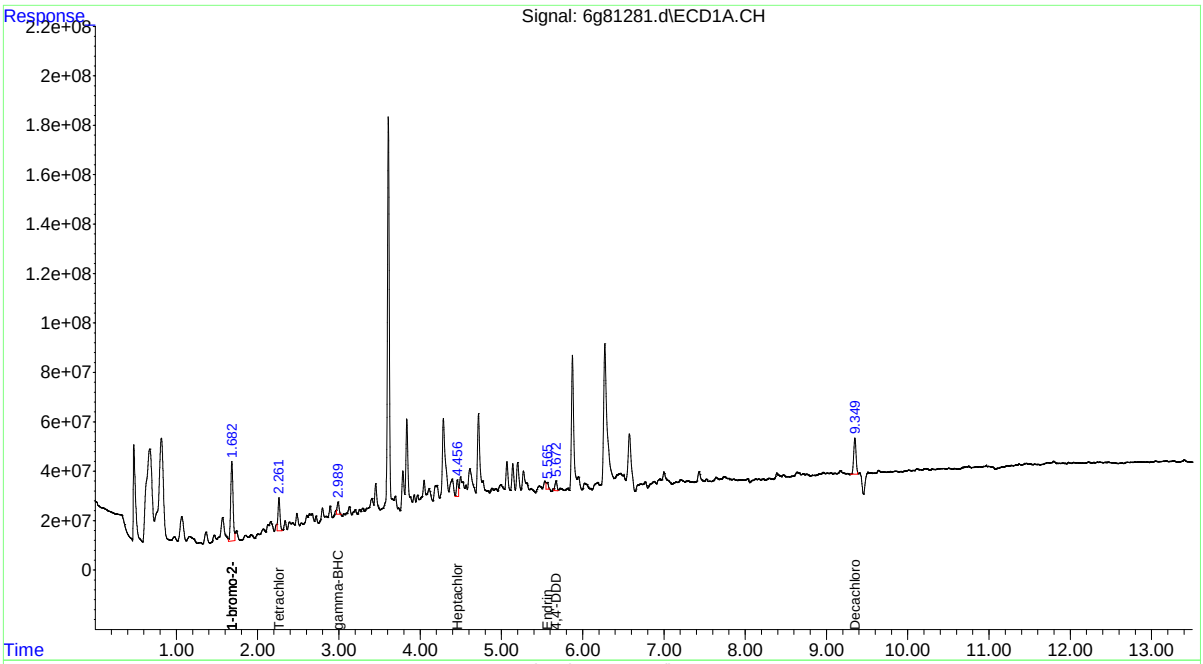
13.1.5
13

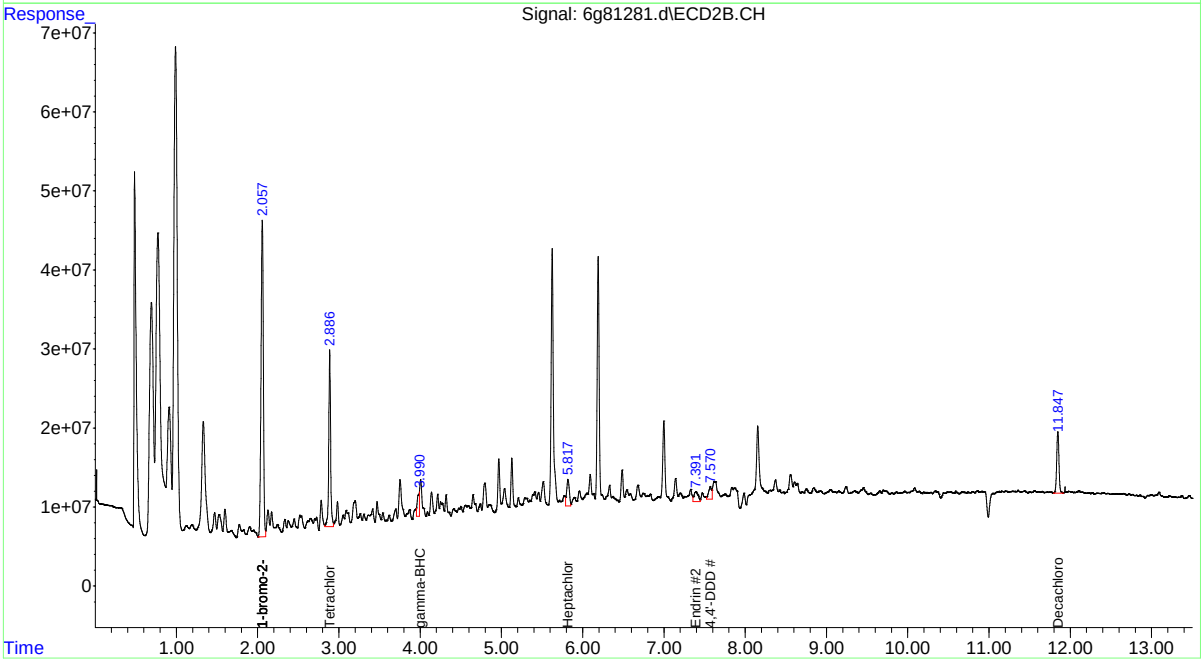
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81281.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2021 1:15 am
Operator : rebeccak
Sample : jd36624-6
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 88 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 11:04:17 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:23 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/22/21 14:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81282.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 01:33:02
Operator : rebeccak
Sample : jd36624-7
Misc : op37120,g6g2874,270,,,2,1
ALS Vial : 89 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:25:45 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.670	2.049	3321.6E6	3245.2E6	50.000	50.000
27) I 1-bromo-2...	1.670	2.049	3321.6E6	3245.2E6	50.000	50.000
33) I 1-bromo-2...	1.670	2.049	3321.6E6	3245.2E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.262	2.887	368.2E6	447.3E6	8.926	7.585
Spiked Amount	40.000 Range	30 - 150	Recovery	=	22.32%#	18.96%#
26) SA Decachlor...	9.350	11.847	565.7E6	273.1E6	7.123m	5.400m
Spiked Amount	40.000		Recovery	=	17.81%	13.50%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

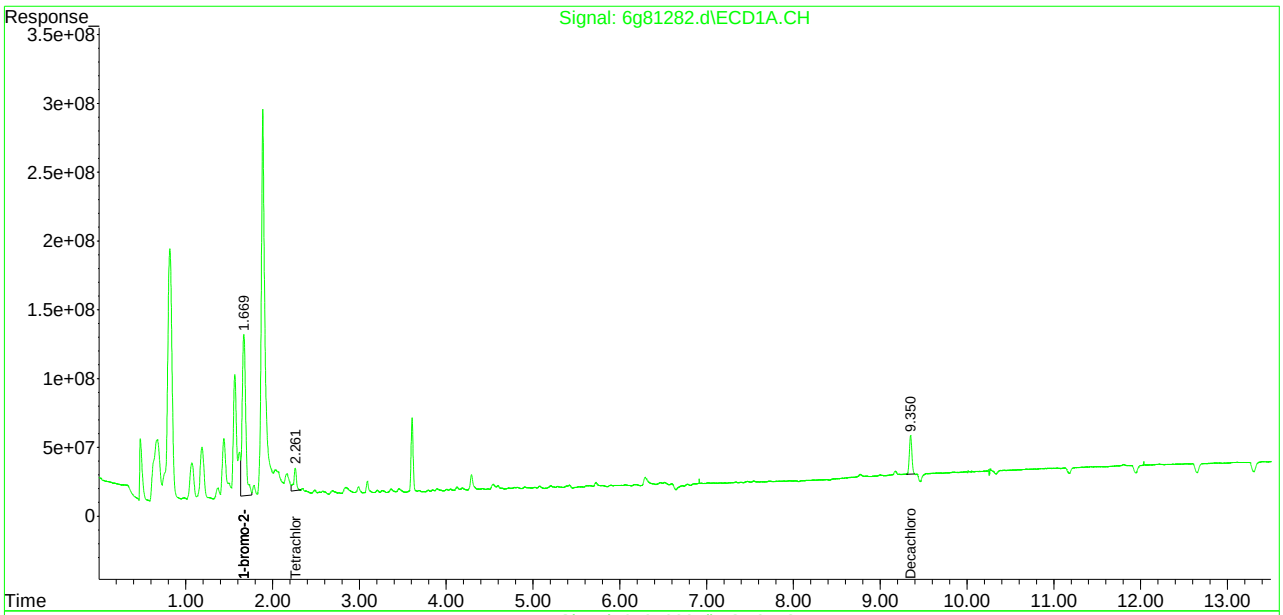
13.1.6
13

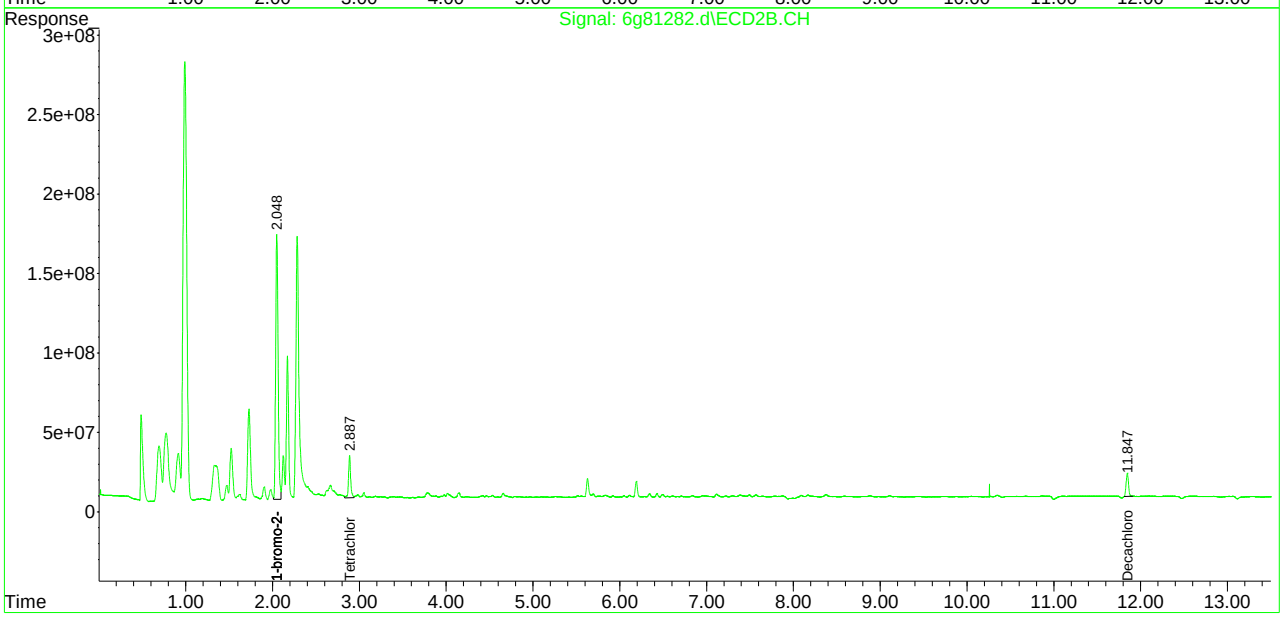
Quantitation Report (QT Reviewed)

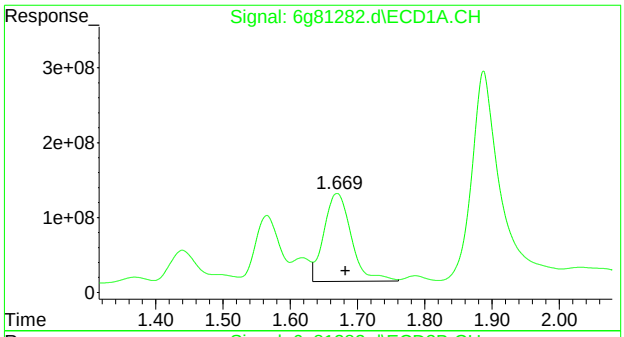
Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81282.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 01:33:02
Operator : rebeccak
Sample : jd36624-7
Misc : op37120,g6g2874,270,,,2,1
ALS Vial : 89 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:25:45 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

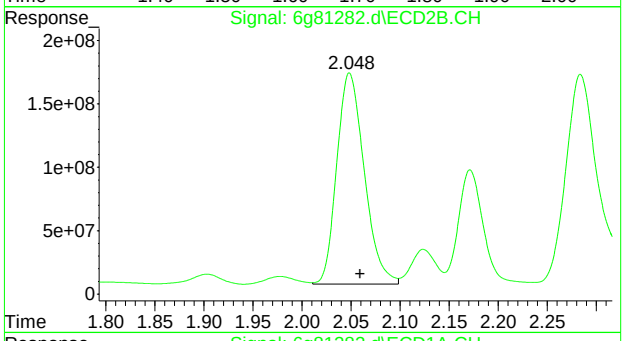






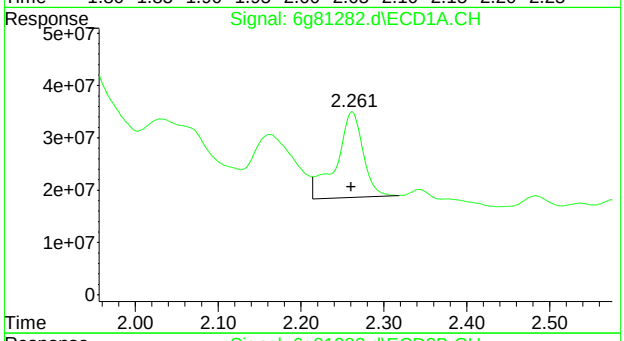
#1 1-bromo-2-nitrobenzene

R.T.: 1.670 min
Delta R.T.: -0.012 min
Response: 3321572937
Conc: 50.00 PPB



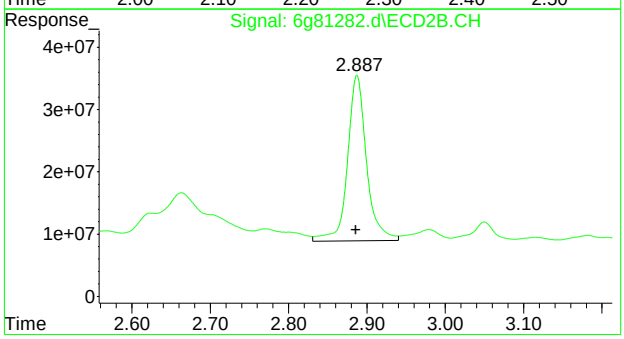
#1 1-bromo-2-nitrobenzene

R.T.: 2.049 min
Delta R.T.: -0.011 min
Response: 3245209758
Conc: 50.00 PPB



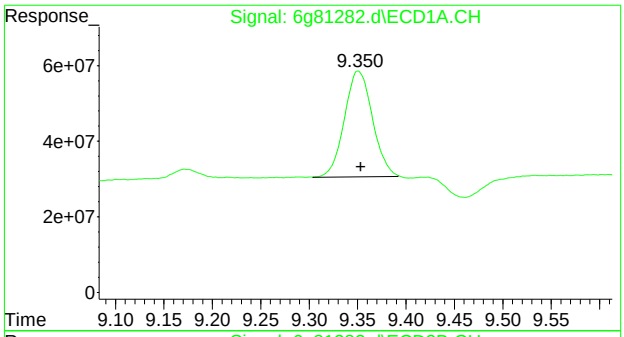
#2 Tetrachloro-m-xylene

R.T.: 2.262 min
Delta R.T.: 0.001 min
Response: 368181876
Conc: 8.93 PPB



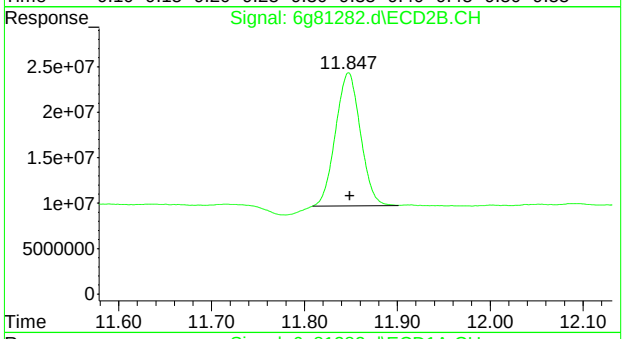
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: 0.002 min
Response: 447278316
Conc: 7.58 PPB



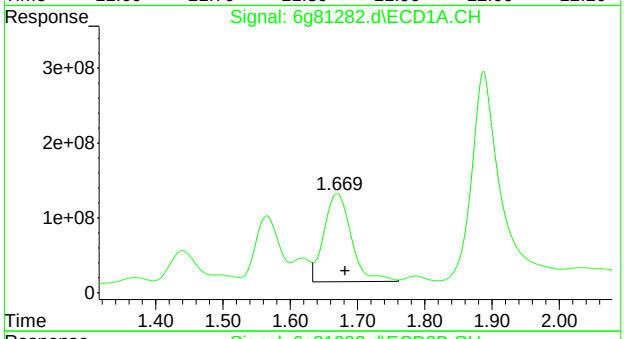
#26 Decachlorobiphenyl

R.T.: 9.350 min
Delta R.T.: -0.003 min
Response: 565719619
Conc: 7.12 PPB m



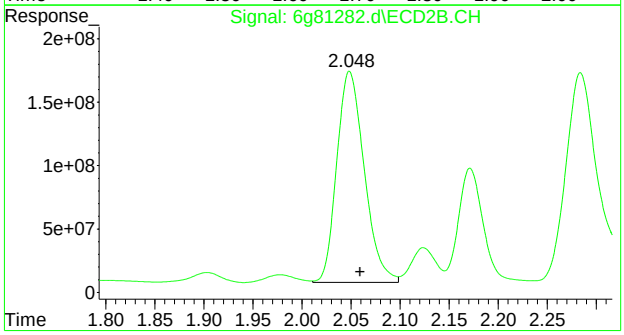
#26 Decachlorobiphenyl

R.T.: 11.847 min
Delta R.T.: -0.001 min
Response: 273137610
Conc: 5.40 PPB m



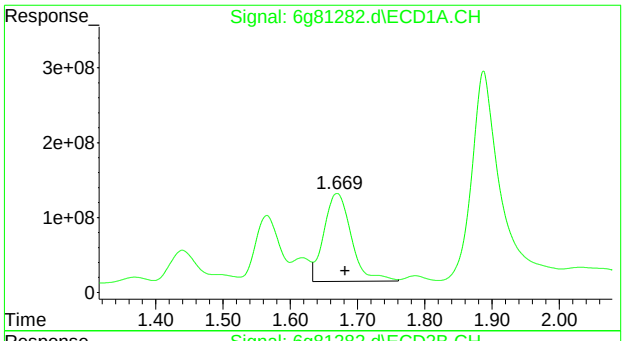
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.670 min
Delta R.T.: -0.012 min
Response: 3321572937
Conc: 50.00 PPB



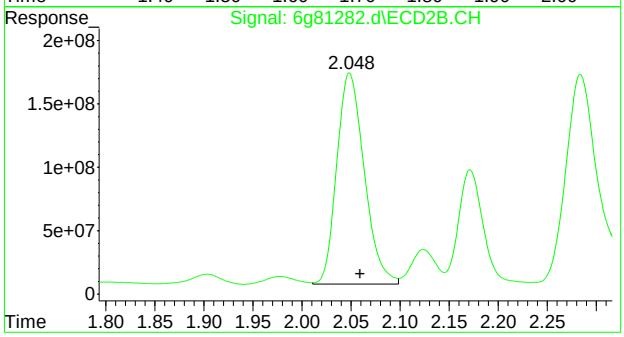
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.049 min
Delta R.T.: -0.011 min
Response: 3245209758
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.670 min
Delta R.T.: -0.012 min
Response: 3321572937
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.049 min
Delta R.T.: -0.011 min
Response: 3245209758
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/22/21 14:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\g6g2878\
Data File : 6g81353.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21-Dec-21, 04:44:54
Operator : christp
Sample : jd36624-7
Misc : op37120,g6g2878,270,,,2,5
ALS Vial : 47 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 22 02:19:35 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 22 01:13:25 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.687	2.062	1205.0E6	1226.6E6	50.000	50.000
27) I 1-bromo-2...	1.687	2.062	1205.0E6	1226.6E6	50.000	50.000
33) I 1-bromo-2...	1.687	2.062	1205.0E6	1226.6E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.263	2.887	65320089	69878368	4.365m	3.135 #
Spiked Amount	40.000	Range	30 - 150	Recovery	=	10.91%#	7.84%#
26) SA Decachlor...	9.347	11.844	174.4E6	69395713	6.053	3.630 #
Spiked Amount	40.000			Recovery	=	15.13%	9.07%
Target Compounds						
Sum Toxaphene				0	0	N.D.	N.D.
Average Toxaphene						0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

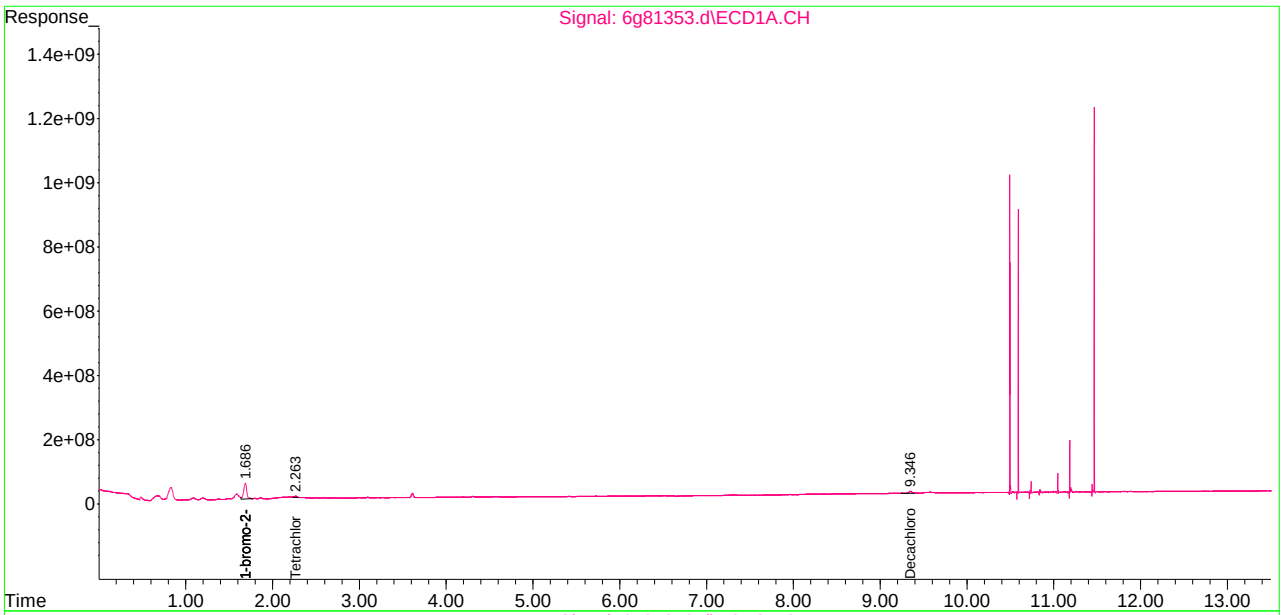
13.1.7
13

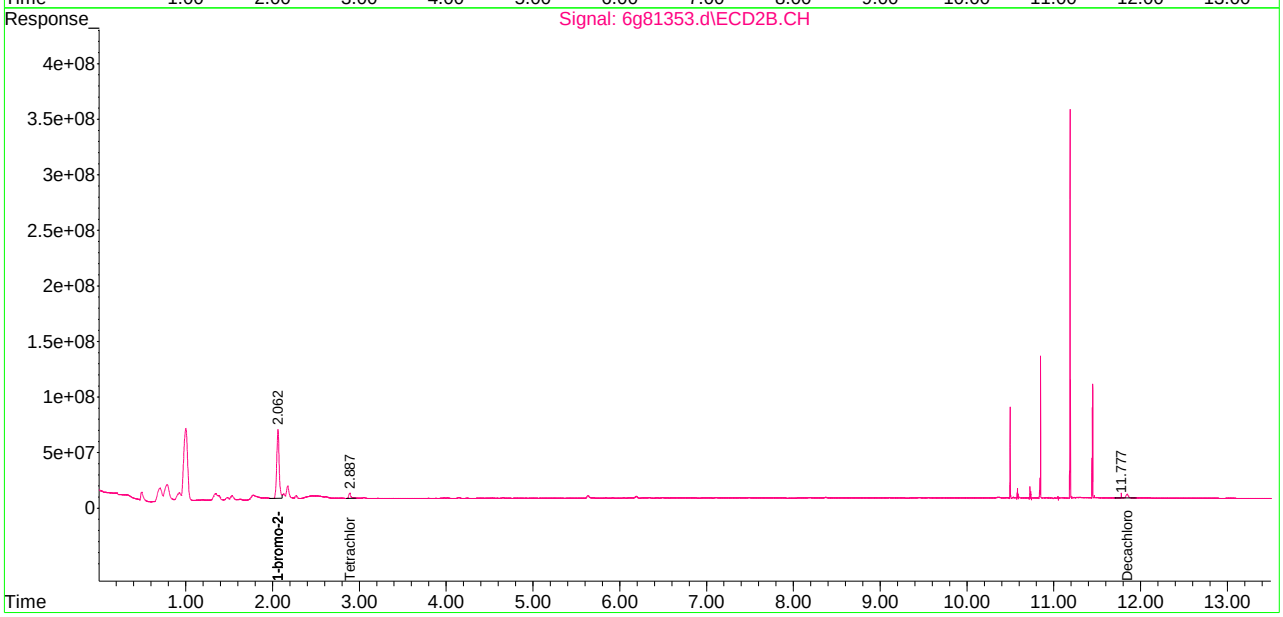
Quantitation Report (QT Reviewed)

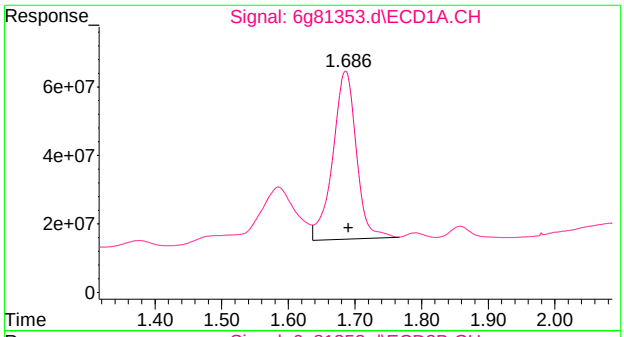
Data Path : C:\msdchem\1\data\chrisc2\g6g2878\
Data File : 6g81353.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21-Dec-21, 04:44:54
Operator : christp
Sample : jd36624-7
Misc : op37120,g6g2878,270,,,2,5
ALS Vial : 47 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 22 02:19:35 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 22 01:13:25 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

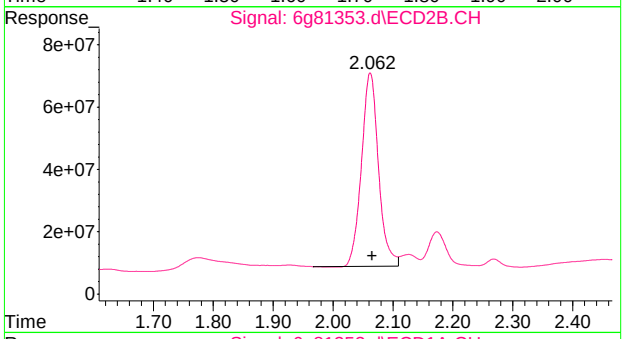






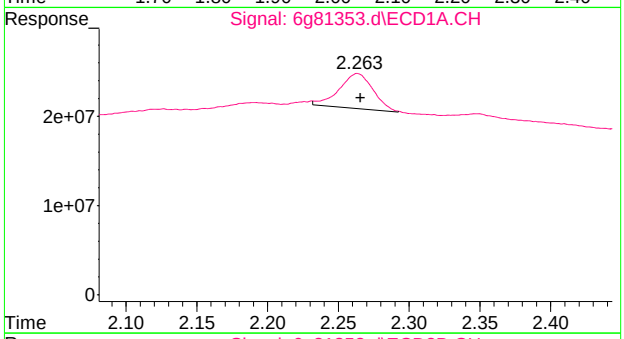
#1 1-bromo-2-nitrobenzene

R.T.: 1.687 min
Delta R.T.: -0.003 min
Response: 1204976698
Conc: 50.00 PPB



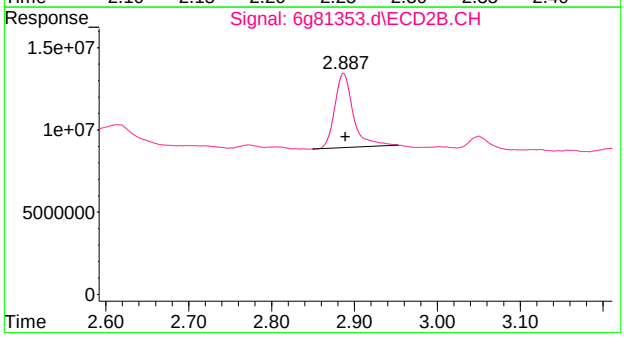
#1 1-bromo-2-nitrobenzene

R.T.: 2.062 min
Delta R.T.: -0.003 min
Response: 1226640874
Conc: 50.00 PPB



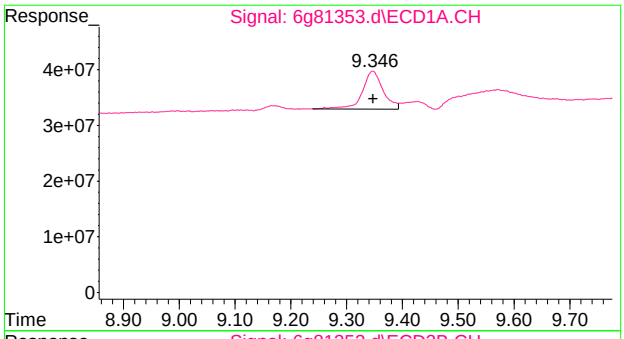
#2 Tetrachloro-m-xylene

R.T.: 2.263 min
Delta R.T.: -0.002 min
Response: 65320089
Conc: 4.37 PPB m



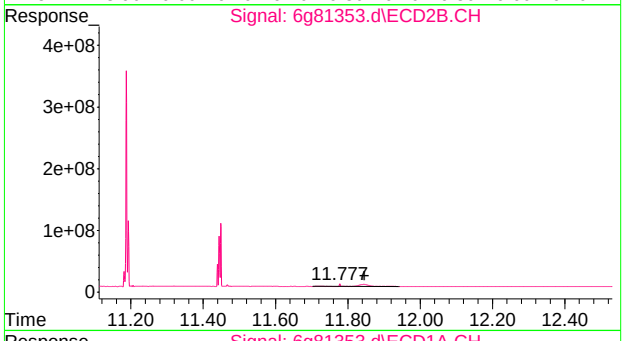
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: -0.002 min
Response: 69878368
Conc: 3.13 PPB



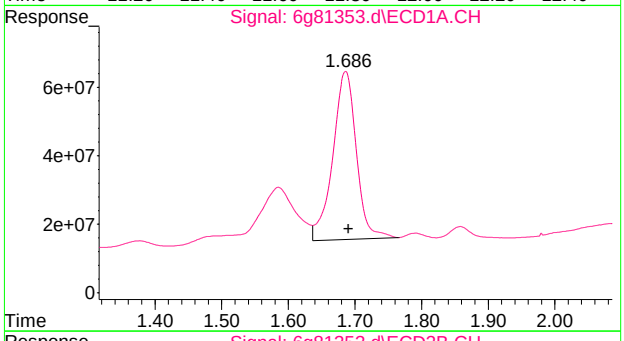
#26 Decachlorobiphenyl

R.T.: 9.347 min
Delta R.T.: 0.000 min
Response: 174386117
Conc: 6.05 PPB



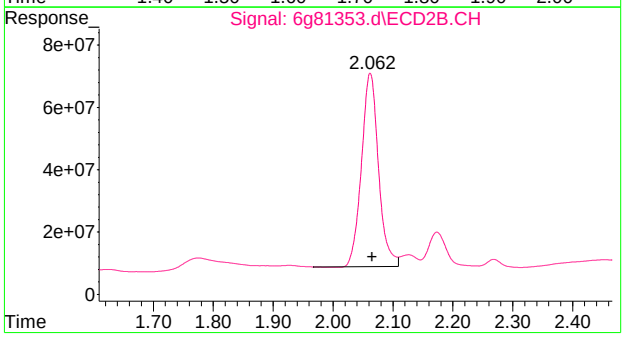
#26 Decachlorobiphenyl

R.T.: 11.844 min
Delta R.T.: -0.003 min
Response: 69395713
Conc: 3.63 PPB



#27 1-bromo-2-nitrobenzeneA

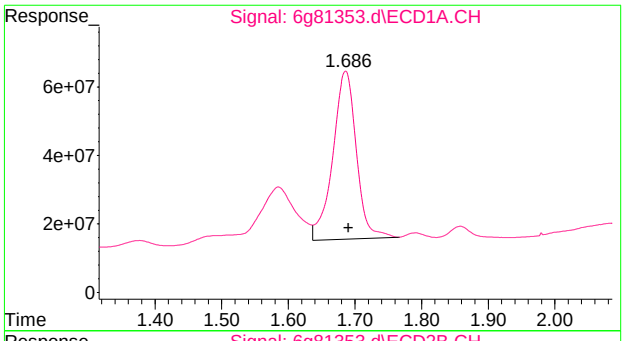
R.T.: 1.687 min
Delta R.T.: -0.003 min
Response: 1204976698
Conc: 50.00 PPB



#27 1-bromo-2-nitrobenzeneA

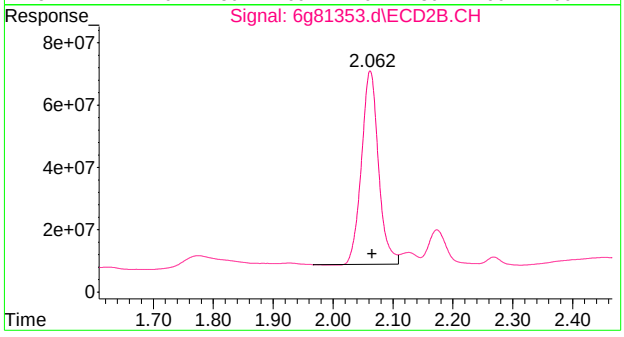
R.T.: 2.062 min
Delta R.T.: -0.003 min
Response: 1226640874
Conc: 50.00 PPB

13.1.7 13



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.687 min
Delta R.T.: -0.003 min
Response: 1204976698
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.062 min
Delta R.T.: -0.003 min
Response: 1226640874
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/22/21 14:21

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81283.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 01:51:16
Operator : rebeccak
Sample : jd36624-8
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 90 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:35:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.684	2.058	746.2E6	634.9E6	50.000	50.000m
27)	I 1-bromo-2...	1.684	2.058	746.2E6	637.4E6	50.000	50.000m
33)	I 1-bromo-2...	1.684	2.058	746.2E6	632.8E6	50.000	50.000m
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.265	2.887	281.3E6	351.3E6	30.358m	30.453m
	Spiked Amount 40.000	Range 30 - 150		Recovery =		75.89%	76.13%
26)	SA Decachlor...	9.353	11.848	138.3E6	66916174	7.751m	6.762m
	Spiked Amount 40.000			Recovery =		19.38%	16.90%
	Target Compounds						
6)	MA Heptachlor	3.459	4.542f	189.4E6	40635729	12.097	2.782 #
7)	B beta-BHC	3.059	4.063	496.3E6	145.2E6	73.928	22.566 #
9)	MB Aldrin	3.777	5.030f	537.5E6	44427365	32.452	3.345 #
19)	B Endosulfa...	5.853	7.749	264.1E6	74404014	17.776	6.466m#
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

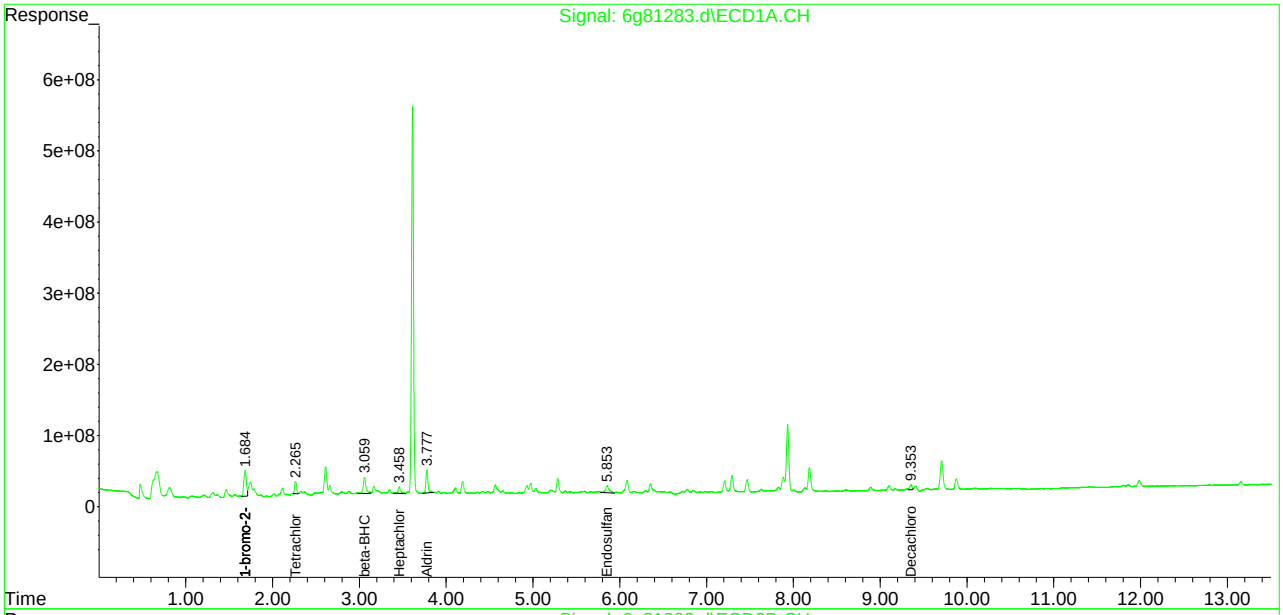
13.1.8
13

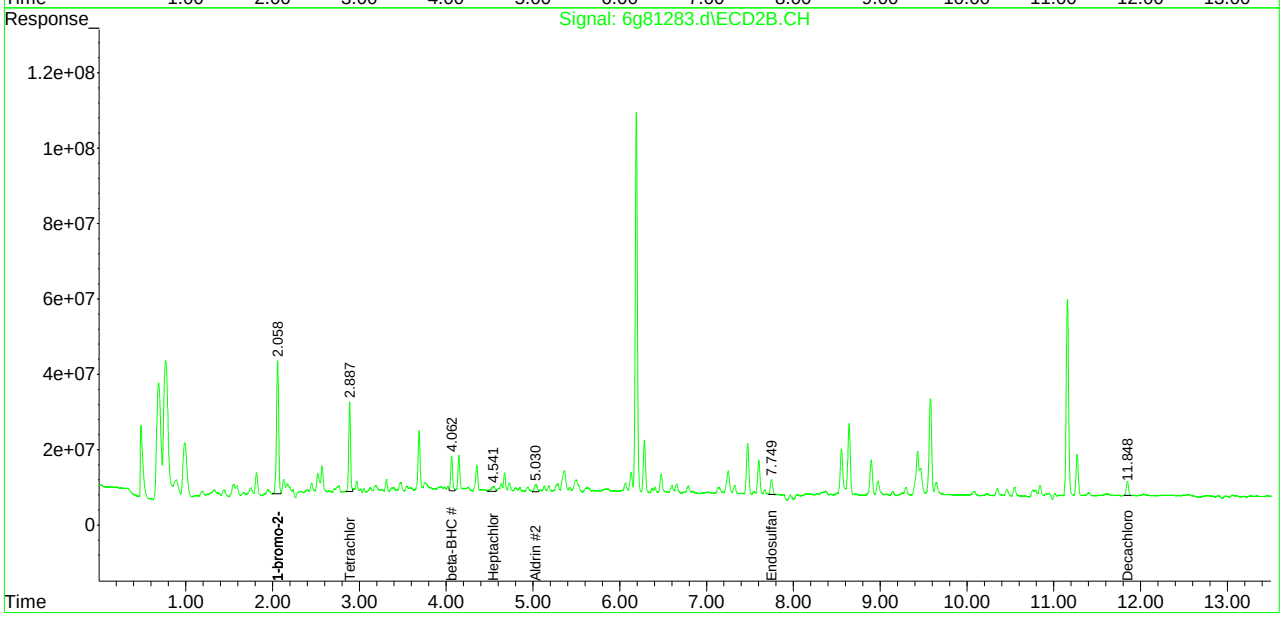
Quantitation Report (QT Reviewed)

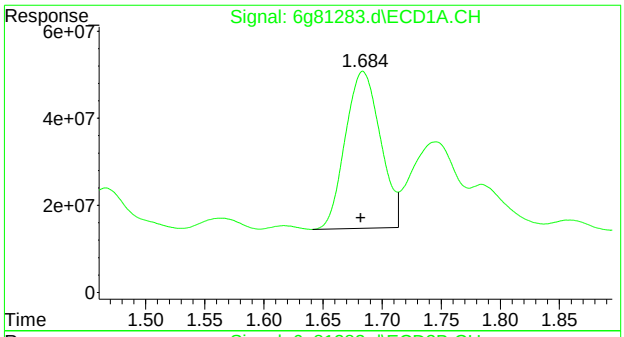
Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81283.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 01:51:16
Operator : rebeccak
Sample : jd36624-8
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 90 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:35:21 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

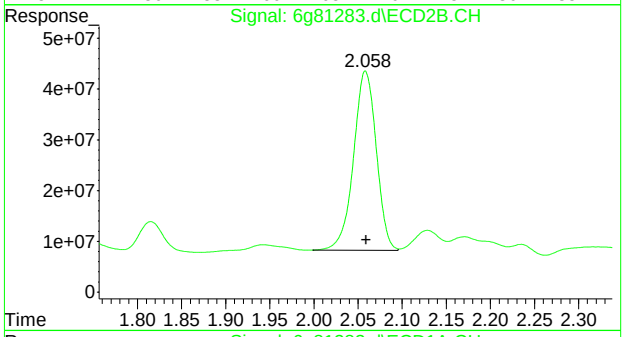






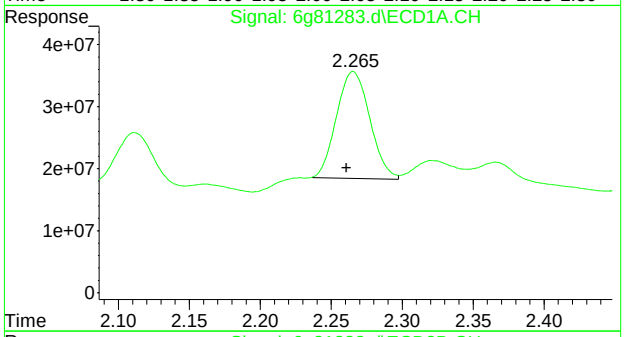
#1 1-bromo-2-nitrobenzene

R.T.: 1.684 min
Delta R.T.: 0.002 min
Response: 746183919
Conc: 50.00 PPB



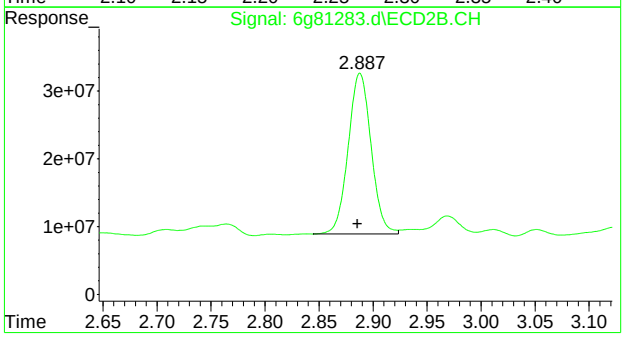
#1 1-bromo-2-nitrobenzene

R.T.: 2.058 min
Delta R.T.: -0.001 min
Response: 634873200
Conc: 50.00 PPB m



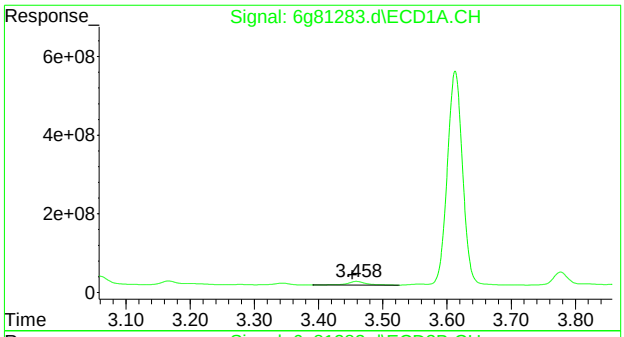
#2 Tetrachloro-m-xylene

R.T.: 2.265 min
Delta R.T.: 0.005 min
Response: 281315949
Conc: 30.36 PPB m



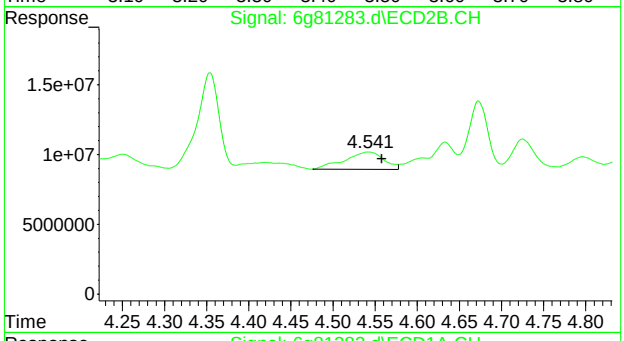
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: 0.002 min
Response: 351340669
Conc: 30.45 PPB m



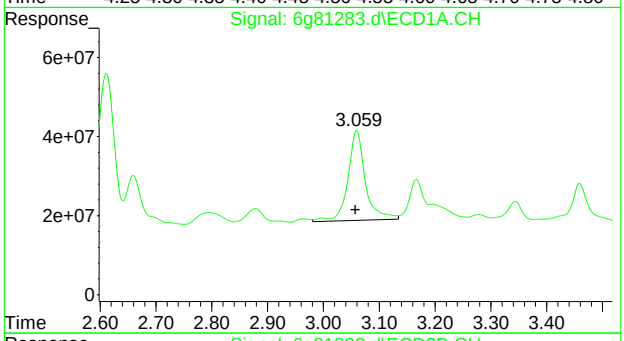
#6 Heptachlor

R.T.: 3.459 min
Delta R.T.: 0.006 min
Response: 189405552
Conc: 12.10 PPB



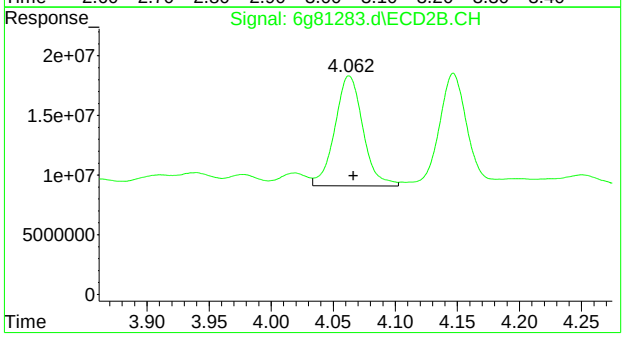
#6 Heptachlor

R.T.: 4.542 min
Delta R.T.: -0.015 min
Response: 40635729
Conc: 2.78 PPB



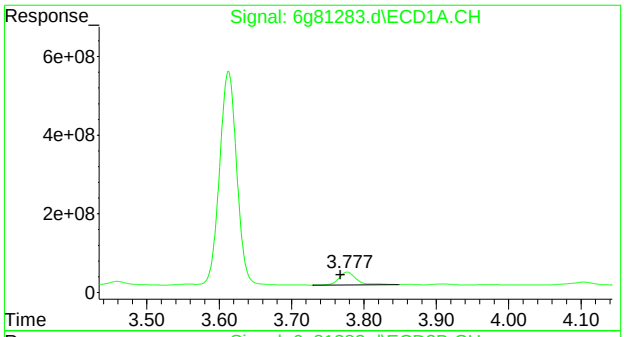
#7 beta-BHC

R.T.: 3.059 min
Delta R.T.: 0.002 min
Response: 496348461
Conc: 73.93 PPB



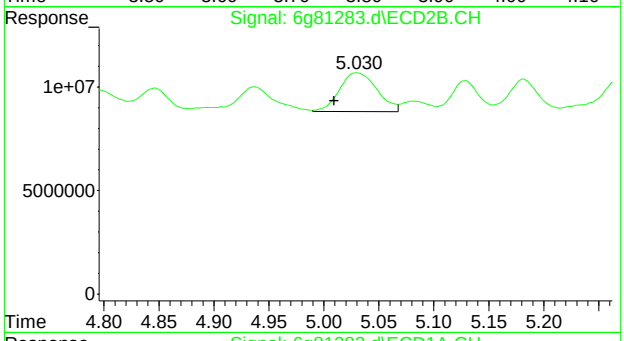
#7 beta-BHC

R.T.: 4.063 min
Delta R.T.: -0.003 min
Response: 145171846
Conc: 22.57 PPB



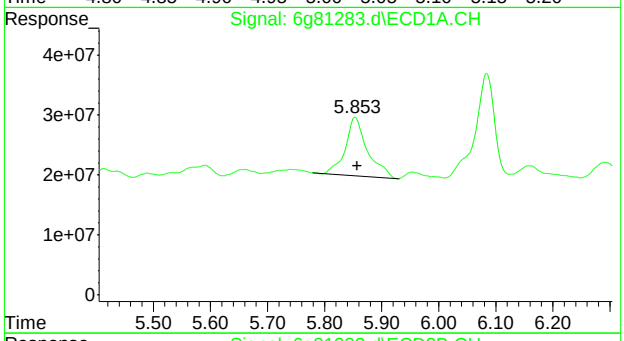
#9 Aldrin

R.T.: 3.777 min
Delta R.T.: 0.010 min
Response: 537459504
Conc: 32.45 PPB



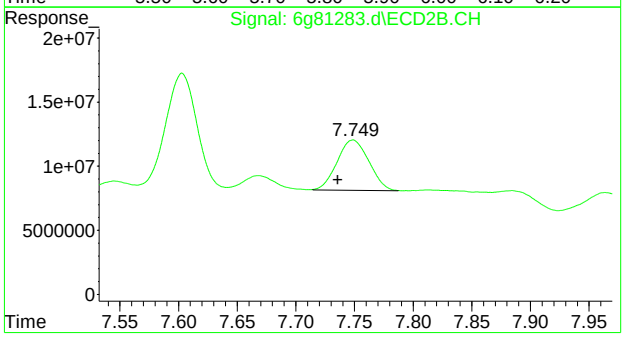
#9 Aldrin

R.T.: 5.030 min
Delta R.T.: 0.021 min
Response: 44427365
Conc: 3.35 PPB



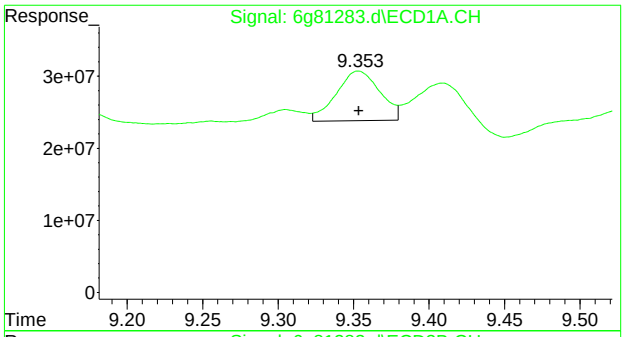
#19 Endosulfan II

R.T.: 5.853 min
Delta R.T.: -0.003 min
Response: 264140481
Conc: 17.78 PPB



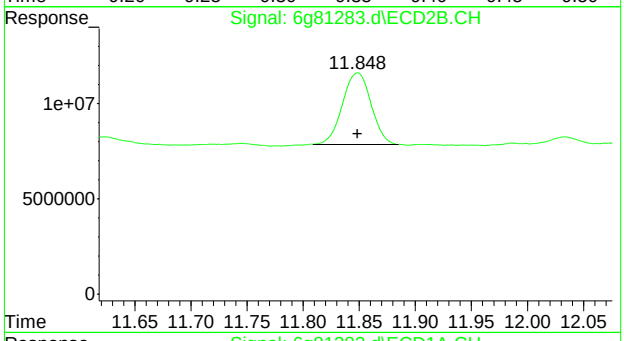
#19 Endosulfan II

R.T.: 7.749 min
Delta R.T.: 0.013 min
Response: 74404014
Conc: 6.47 PPB m



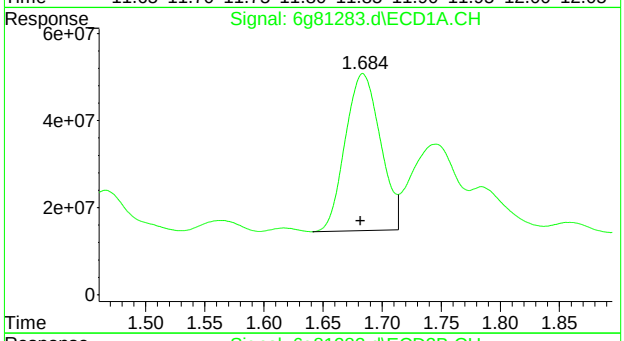
#26 Decachlorobiphenyl

R.T.: 9.353 min
Delta R.T.: 0.000 min
Response: 138280000
Conc: 7.75 PPB m



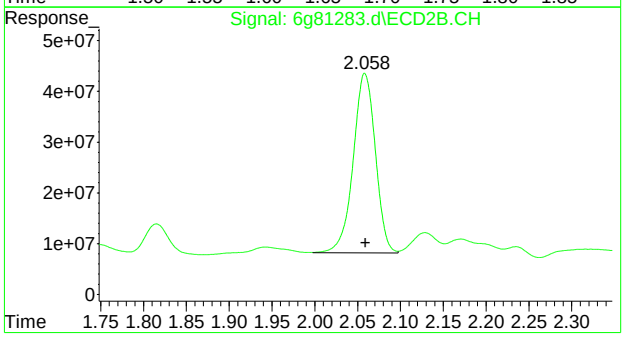
#26 Decachlorobiphenyl

R.T.: 11.848 min
Delta R.T.: 0.000 min
Response: 66916174
Conc: 6.76 PPB m



#27 1-bromo-2-nitrobenzeneA

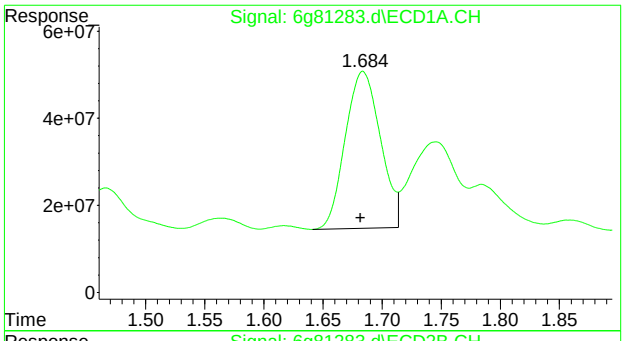
R.T.: 1.684 min
Delta R.T.: 0.002 min
Response: 746183919
Conc: 50.00 PPB



#27 1-bromo-2-nitrobenzeneA

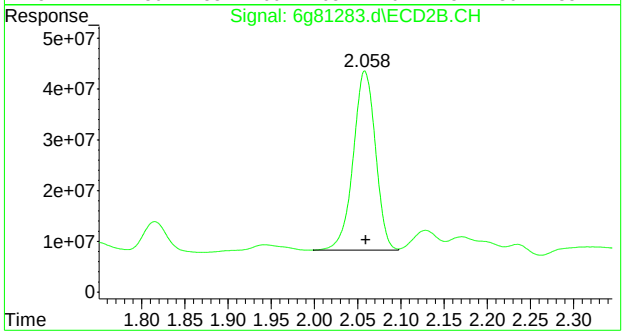
R.T.: 2.058 min
Delta R.T.: -0.001 min
Response: 637388151
Conc: 50.00 PPB m

13.1.8 13



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.684 min
Delta R.T.: 0.002 min
Response: 746183919
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.058 min
Delta R.T.: -0.001 min
Response: 632801940
Conc: 50.00 PPB m

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/22/21 14:21

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81354.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Dec 2021 5:02 am
Operator : christp
Sample : jd36624-8
Misc : op37120,g6g2878,260,,,2,5
ALS Vial : 48 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 22 14:09:04 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 22 01:13:25 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.686	2.062	860.8E6	645.3E6	50.000	50.000
27) I 1-bromo-2...	1.686	2.062	860.8E6	645.3E6	50.000	50.000
33) I 1-bromo-2...	1.686	2.062	860.8E6	645.3E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.265	2.887	80785058	71973587	7.557	6.138
Spiked Amount	40.000	Range 30 - 150	Recovery	=	18.89%#	15.35%#
26) SA Decachlor...	9.341	11.842	37256048	19293690	1.810m	1.918m
Spiked Amount	40.000		Recovery	=	4.52%	4.79%
Target Compounds						
6) MA Heptachlor	3.457	4.526f	38907584	11494482	2.154	0.774m#
7) B beta-BHC	3.038f	4.061	23818889	33073323	3.075	5.058 #
9) MB Aldrin	3.774	5.027f	67621524	12803572	3.539	0.949m#
19) B Endosulfa...	5.848	7.745	99893481	5283606	5.827	0.452m#
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

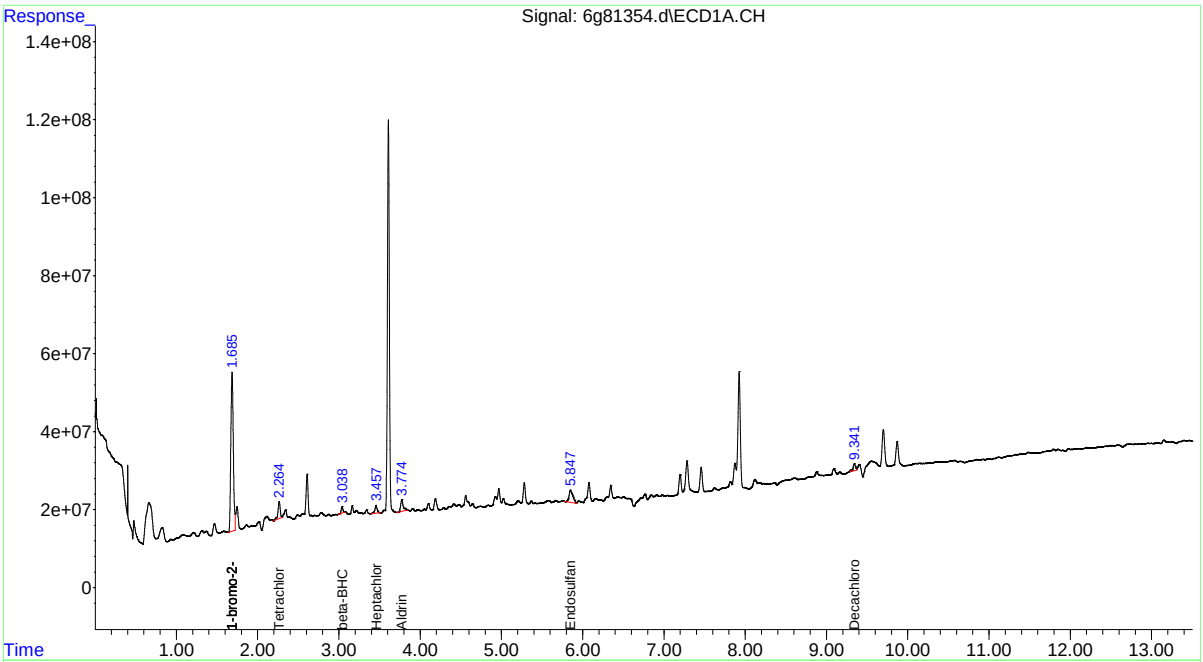
13.1.9 13

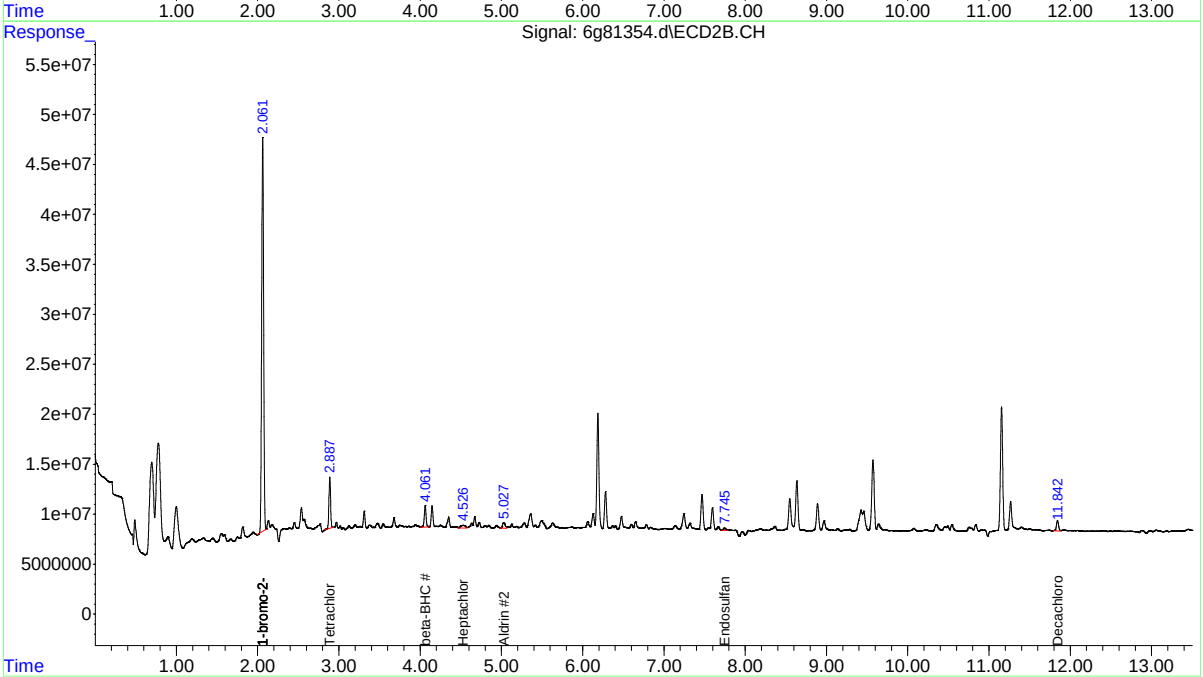
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81354.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Dec 2021 5:02 am
Operator : christp
Sample : jd36624-8
Misc : op37120,g6g2878,260,,,2,5
ALS Vial : 48 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 22 14:09:04 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 22 01:13:25 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/20/21 11:09

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81284.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 02:09:06
Operator : rebeccak
Sample : jd36624-9
Misc : op37120,g6g2874,280,,,2,1
ALS Vial : 91 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:38:22 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.683	2.060	755.3E6	824.4E6	50.000	50.000m
27) I 1-bromo-2...	1.683	2.060	755.3E6	822.5E6	50.000	50.000m
33) I 1-bromo-2...	1.683	2.060	755.3E6	818.1E6	50.000	50.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	2.263	2.887	273.8E6	208.9E6	29.191	13.941 #
Spiked Amount	40.000 Range	30 - 150	Recovery	=	72.98%	34.85%
26) SA Decachlor...	9.349	11.845	221.1E6	99680489	12.242m	7.757m#
Spiked Amount	40.000		Recovery	=	30.61%	19.39%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

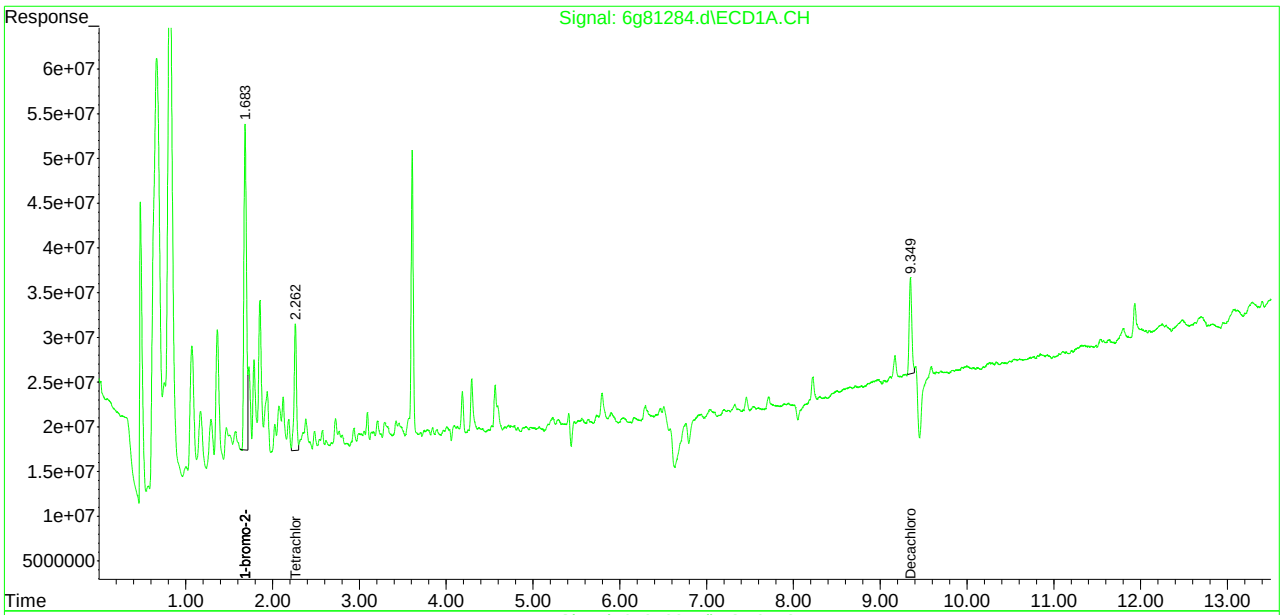
13.1.10
13

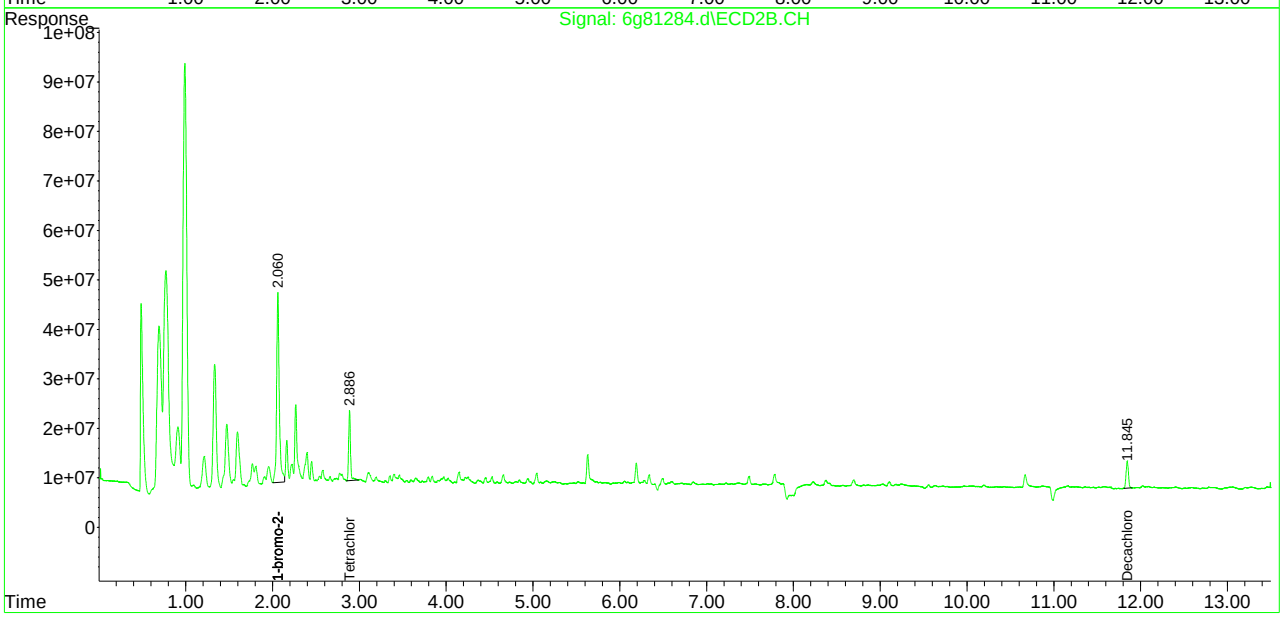
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81284.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 02:09:06
Operator : rebeccak
Sample : jd36624-9
Misc : op37120,g6g2874,280,,,2,1
ALS Vial : 91 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

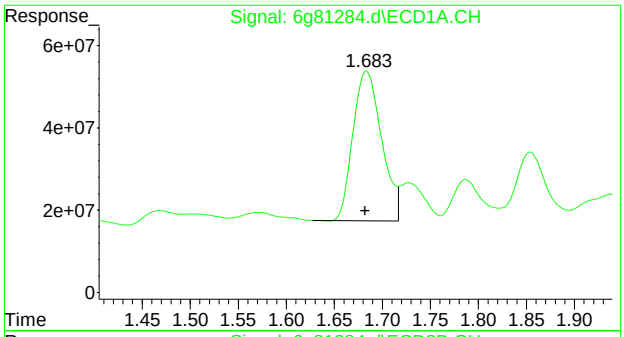
Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:38:22 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



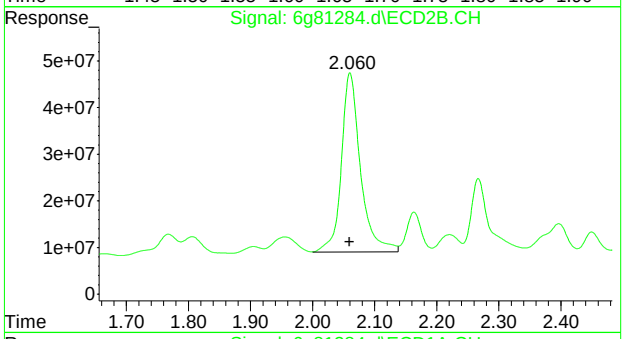


13.1.10
13



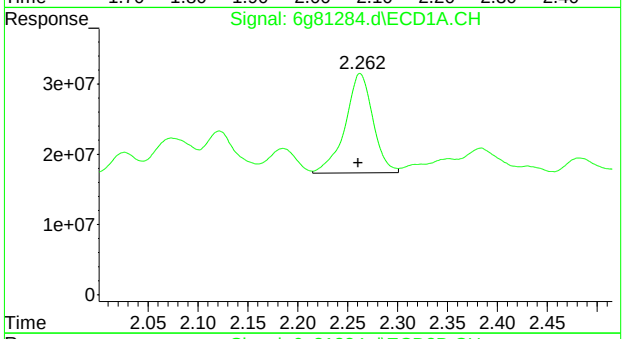
#1 1-bromo-2-nitrobenzene

R.T.: 1.683 min
Delta R.T.: 0.001 min
Response: 755302882
Conc: 50.00 PPB



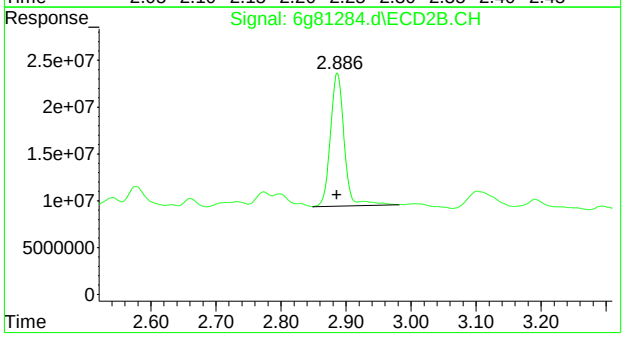
#1 1-bromo-2-nitrobenzene

R.T.: 2.060 min
Delta R.T.: 0.000 min
Response: 824434312
Conc: 50.00 PPB m



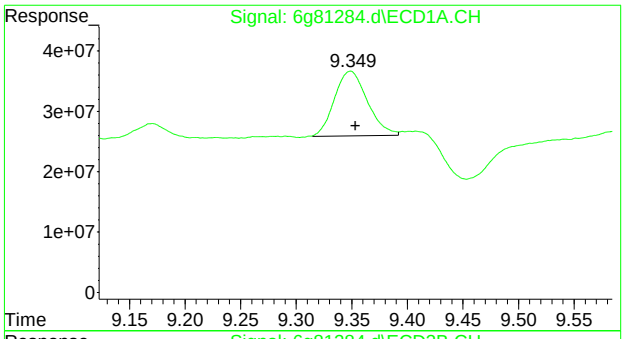
#2 Tetrachloro-m-xylene

R.T.: 2.263 min
Delta R.T.: 0.002 min
Response: 273808336
Conc: 29.19 PPB



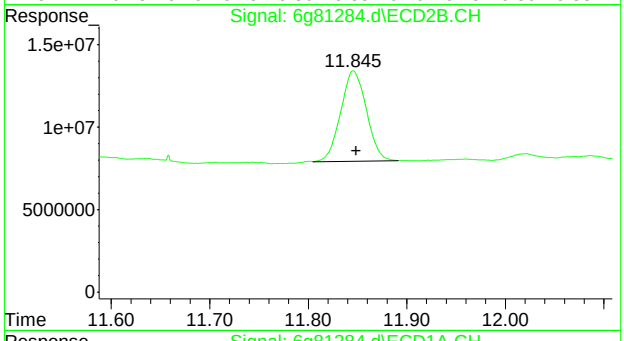
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: 0.000 min
Response: 208862832
Conc: 13.94 PPB



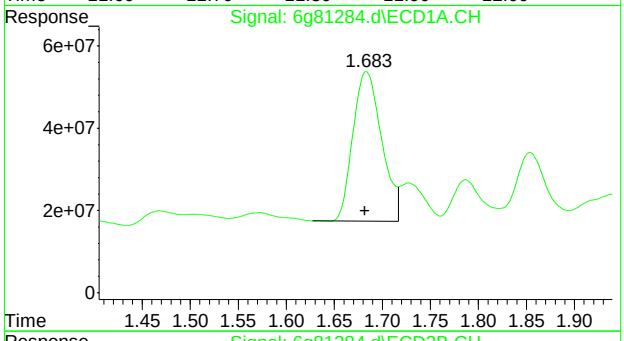
#26 Decachlorobiphenyl

R.T.: 9.349 min
Delta R.T.: -0.004 min
Response: 221088147
Conc: 12.24 PPB m



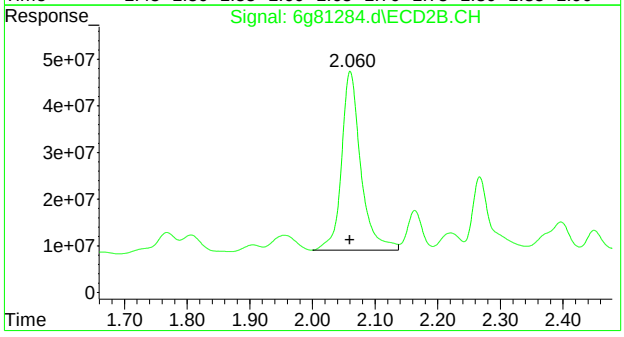
#26 Decachlorobiphenyl

R.T.: 11.845 min
Delta R.T.: -0.003 min
Response: 99680489
Conc: 7.76 PPB m



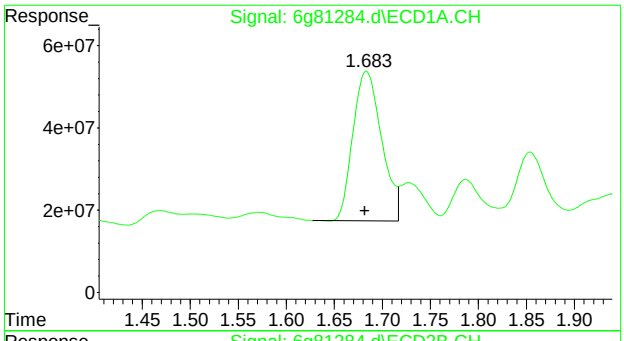
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.683 min
Delta R.T.: 0.002 min
Response: 755302882
Conc: 50.00 PPB



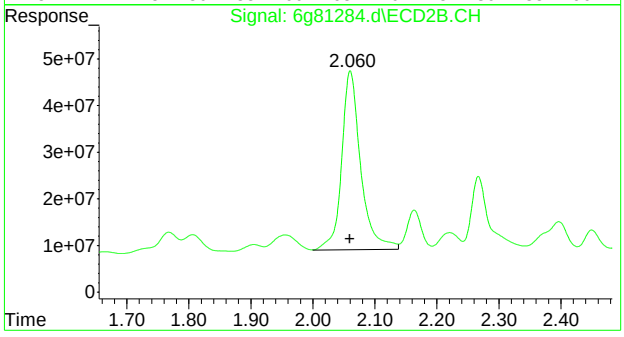
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.060 min
Delta R.T.: 0.000 min
Response: 822455403
Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.683 min
Delta R.T.: 0.002 min
Response: 755302882
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.060 min
Delta R.T.: 0.000 min
Response: 818084656
Conc: 50.00 PPB m

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/20/21 10:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81285.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 02:26:53
Operator : rebeccak
Sample : jd36624-10
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 92 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:41:55 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.683	2.060	763.1E6	623.4E6	50.000	50.000
27) I 1-bromo-2...	1.683	2.060	763.1E6	623.4E6	50.000	50.000
33) I 1-bromo-2...	1.683	2.060	763.1E6	623.4E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.260	2.888	294.1E6	315.5E6	31.030m	27.848m
Spiked Amount	40.000	Range 30 - 150	Recovery	=	77.58%	69.62%
26) SA Decachlor...	9.348	11.847	270.5E6	128.9E6	14.828m	13.265m
Spiked Amount	40.000		Recovery	=	37.07%	33.16%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

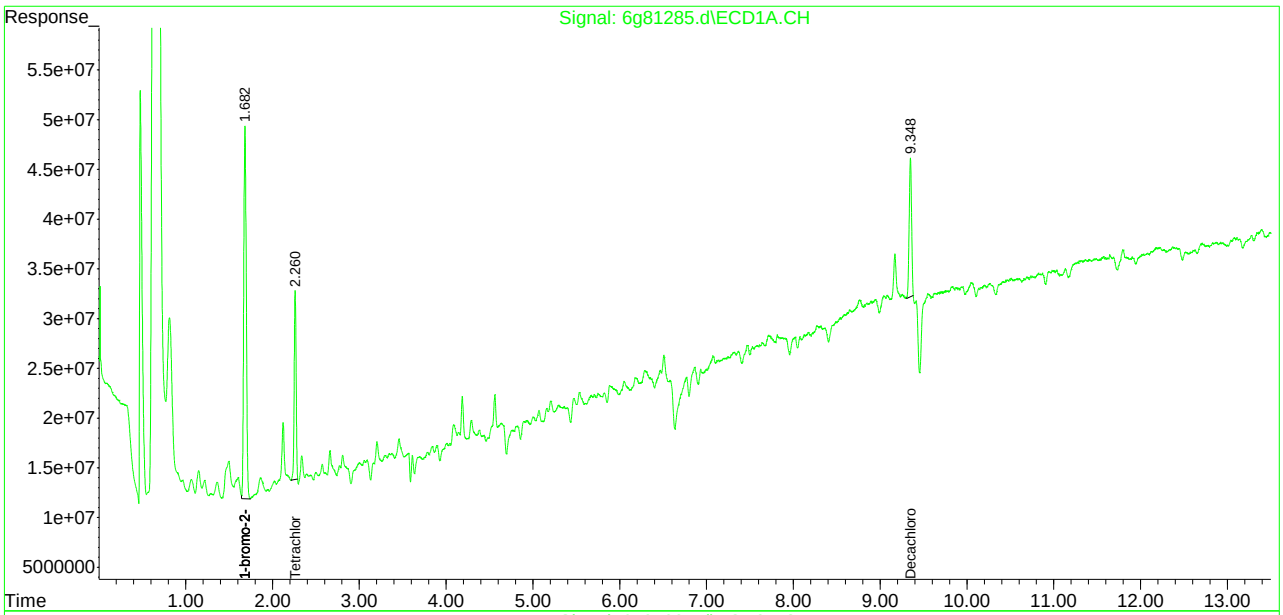
13.1.11
13

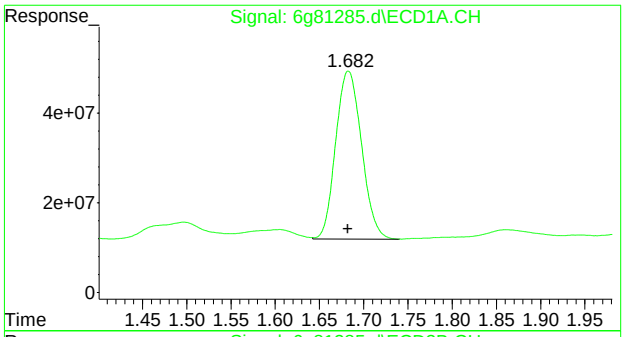
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81285.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 02:26:53
Operator : rebeccak
Sample : jd36624-10
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 92 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:41:55 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

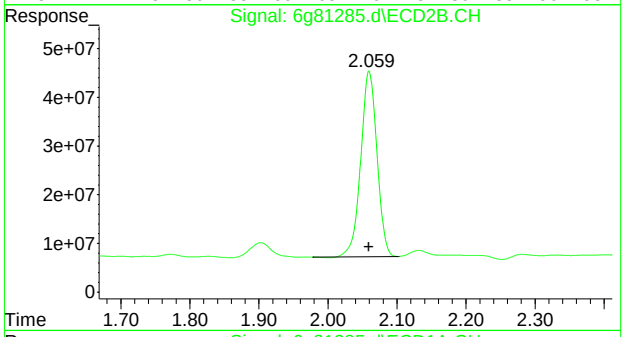
Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





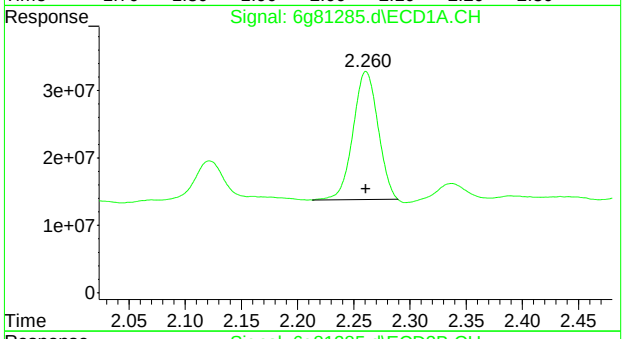
#1 1-bromo-2-nitrobenzene

R.T.: 1.683 min
Delta R.T.: 0.000 min
Response: 763091703
Conc: 50.00 PPB



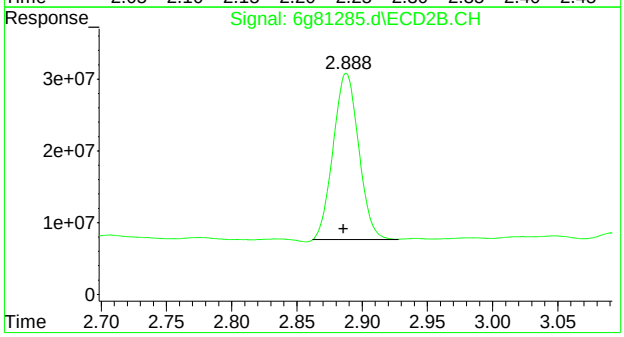
#1 1-bromo-2-nitrobenzene

R.T.: 2.060 min
Delta R.T.: 0.000 min
Response: 623360684
Conc: 50.00 PPB



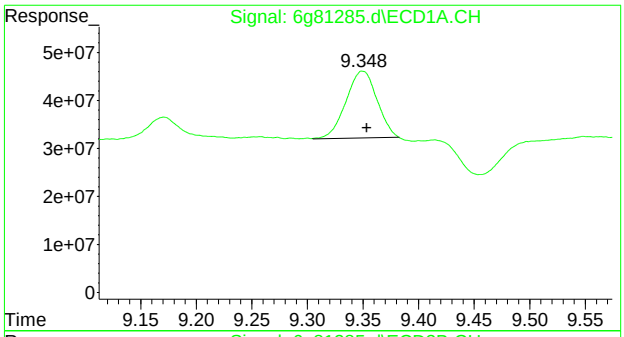
#2 Tetrachloro-m-xylene

R.T.: 2.260 min
Delta R.T.: 0.000 min
Response: 294058526
Conc: 31.03 PPB m



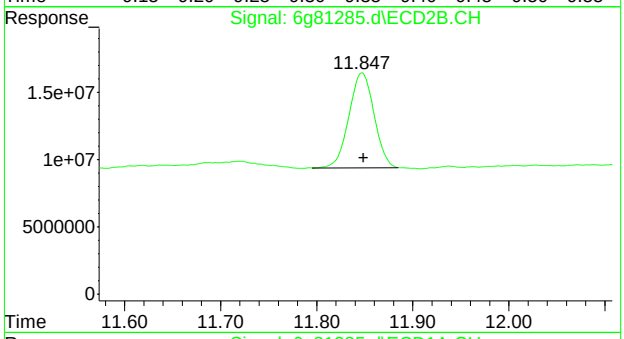
#2 Tetrachloro-m-xylene

R.T.: 2.888 min
Delta R.T.: 0.002 min
Response: 315456860
Conc: 27.85 PPB m



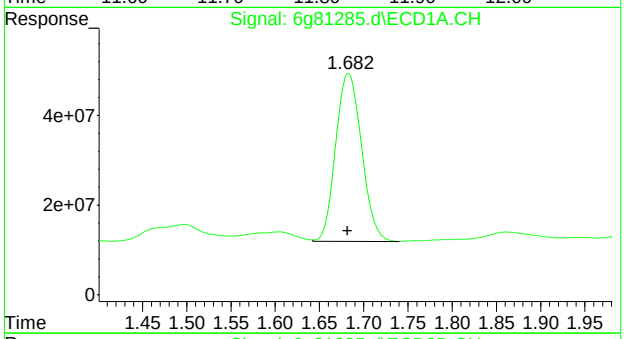
#26 Decachlorobiphenyl

R.T.: 9.348 min
Delta R.T.: -0.005 min
Response: 270547796
Conc: 14.83 PPB m



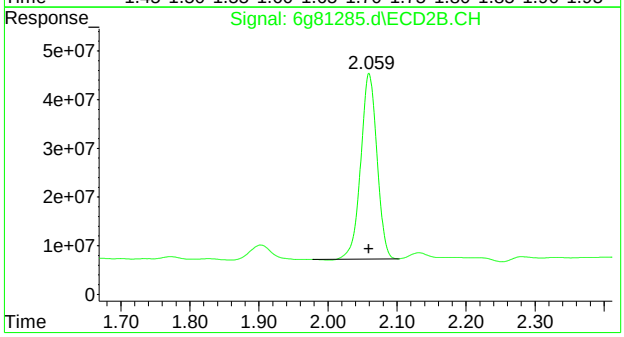
#26 Decachlorobiphenyl

R.T.: 11.847 min
Delta R.T.: -0.002 min
Response: 128887841
Conc: 13.27 PPB m



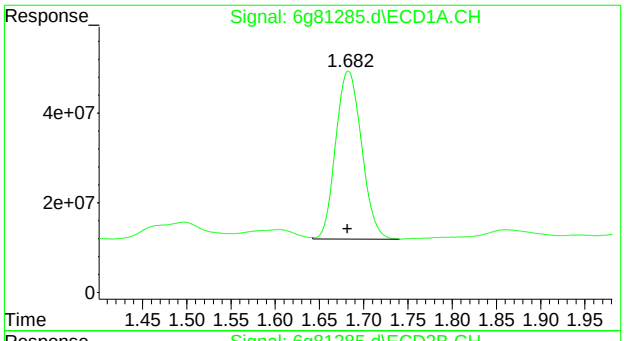
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.683 min
Delta R.T.: 0.001 min
Response: 763091703
Conc: 50.00 PPB



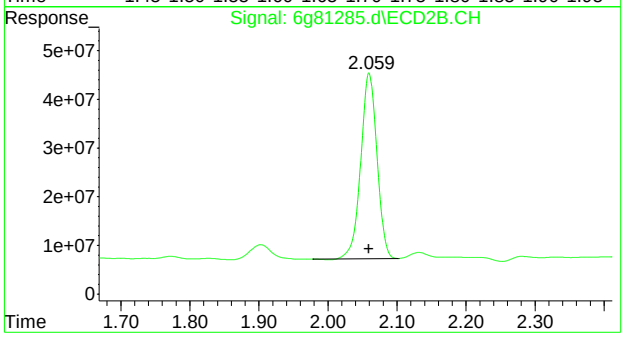
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.060 min
Delta R.T.: 0.000 min
Response: 623360684
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.683 min
Delta R.T.: 0.001 min
Response: 763091703
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.060 min
Delta R.T.: 0.000 min
Response: 623360684
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/20/21 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81286.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2021 2:44 am
Operator : rebeccak
Sample : jd36624-11
Misc : op37120,g6g2874,250,,,2,1
ALS Vial : 93 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 11:13:09 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:23 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.683	2.060	799.7E6	671.6E6	50.000	50.000
27) I	1-bromo-2...	1.683	2.060	799.7E6	671.6E6	50.000	50.000
33) I	1-bromo-2...	1.683	2.060	799.7E6	671.6E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.262	2.887	224.9E6	240.7E6	22.644	19.725
	Spiked Amount 40.000	Range 30 - 150		Recovery =		56.61%	49.31%
26) SA	Decachlor...	9.350	11.846	315.1E6	140.3E6	16.478m	13.406
	Spiked Amount 40.000			Recovery =		41.20%	33.52%
	Target Compounds						
3)	hexachlor...	2.575	3.397	110.3E6	40030962	3.912	2.775 #
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

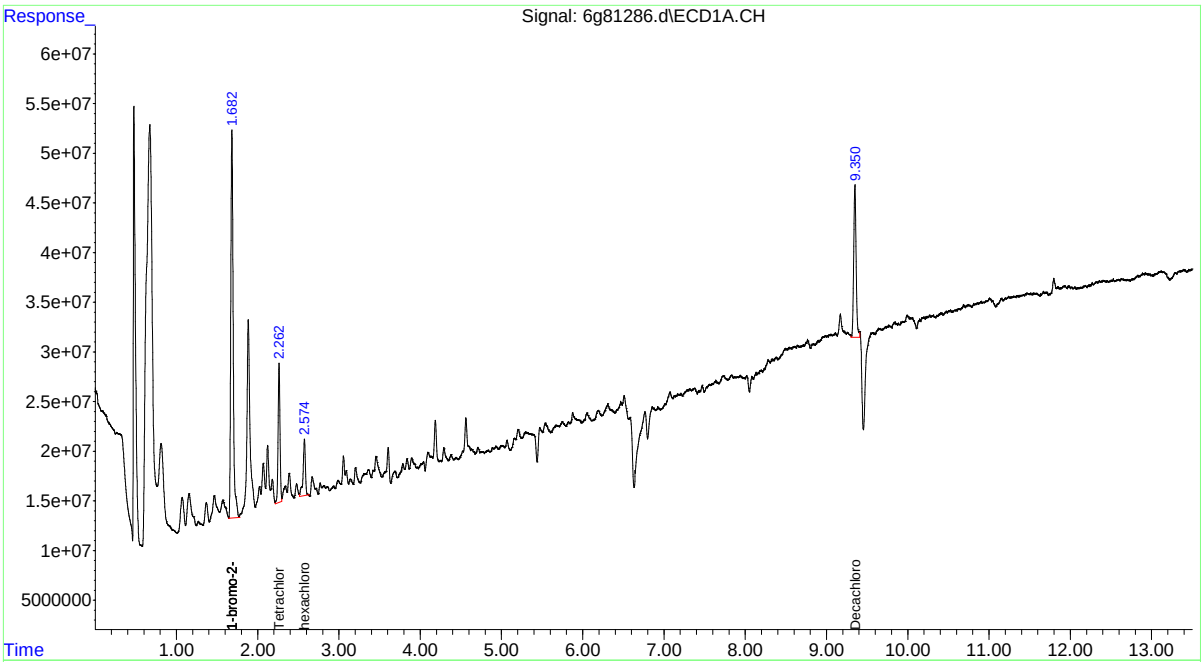
13.1.12
13

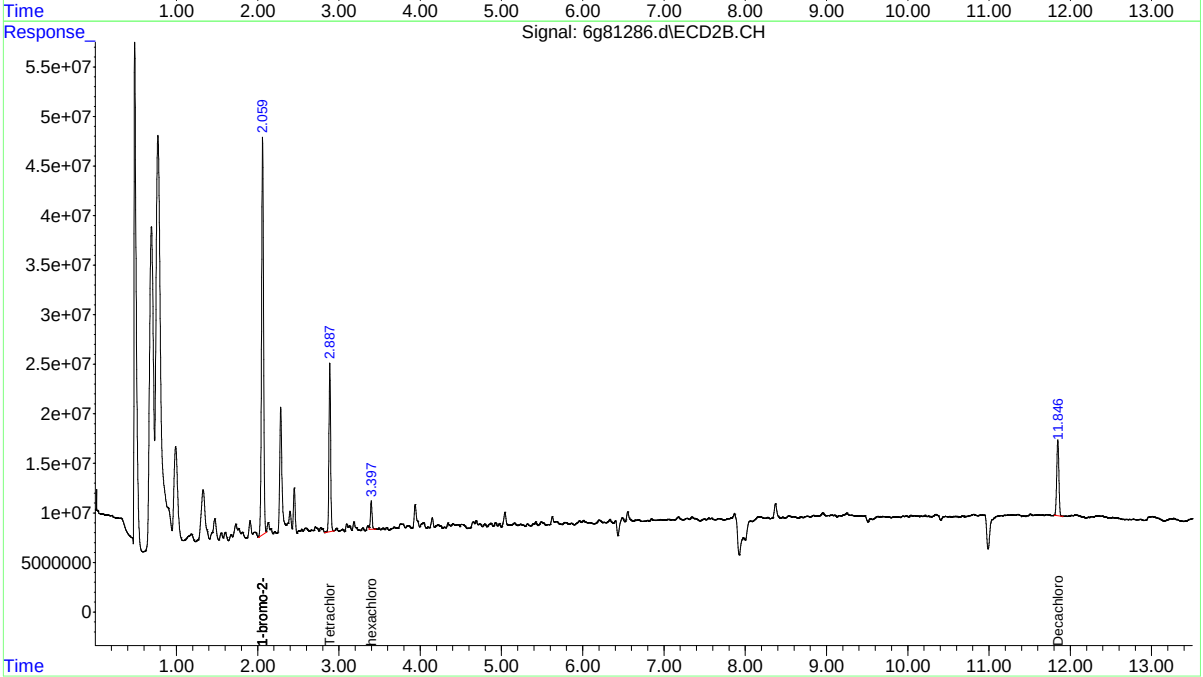
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81286.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2021 2:44 am
Operator : rebeccak
Sample : jd36624-11
Misc : op37120,g6g2874,250,,,2,1
ALS Vial : 93 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 11:13:09 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:23 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/20/21 10:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81287.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 03:02:32
Operator : rebeccak
Sample : jd36624-12
Misc : op37120,g6g2874,270,,,2,1
ALS Vial : 94 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:44:48 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.685	2.061	737.6E6	802.9E6	50.000	50.000
27) I 1-bromo-2...	1.685	2.061	737.6E6	802.9E6	50.000	50.000
33) I 1-bromo-2...	1.685	2.061	737.6E6	802.9E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.264	2.888	265.7E6	266.0E6	29.003	18.232 #
Spiked Amount	40.000 Range	30 - 150	Recovery	=	72.51%	45.58%
26) SA Decachlor...	9.351	11.846	312.5E6	143.3E6	17.720m	11.449m#
Spiked Amount	40.000		Recovery	=	44.30%	28.62%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

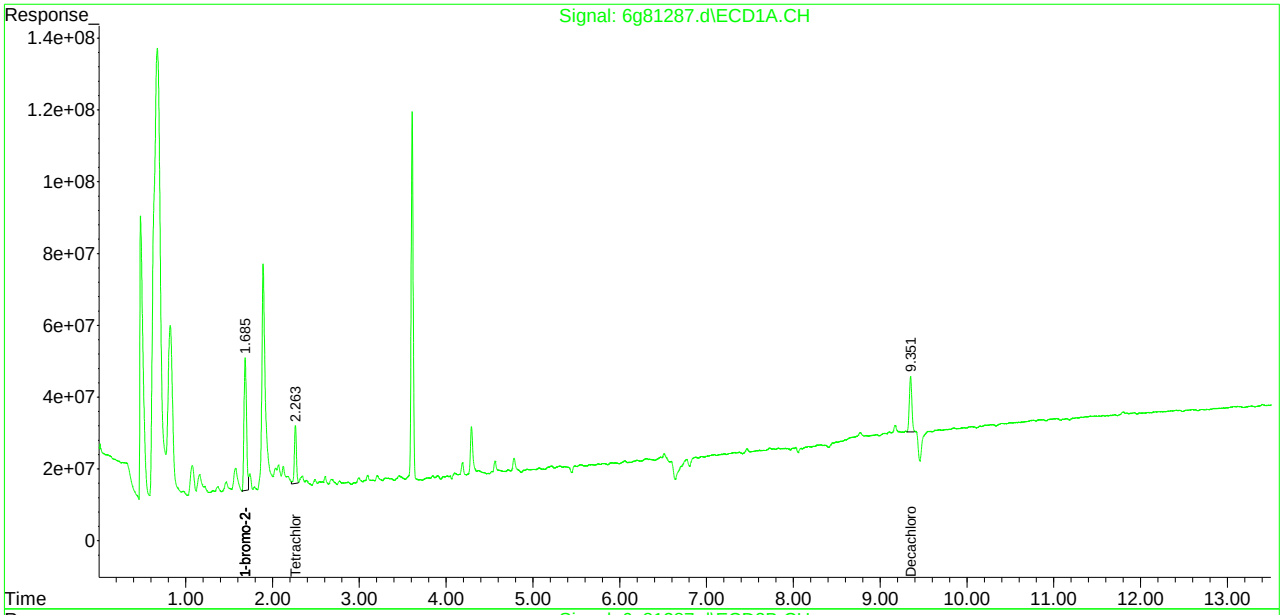
13.1.13
13

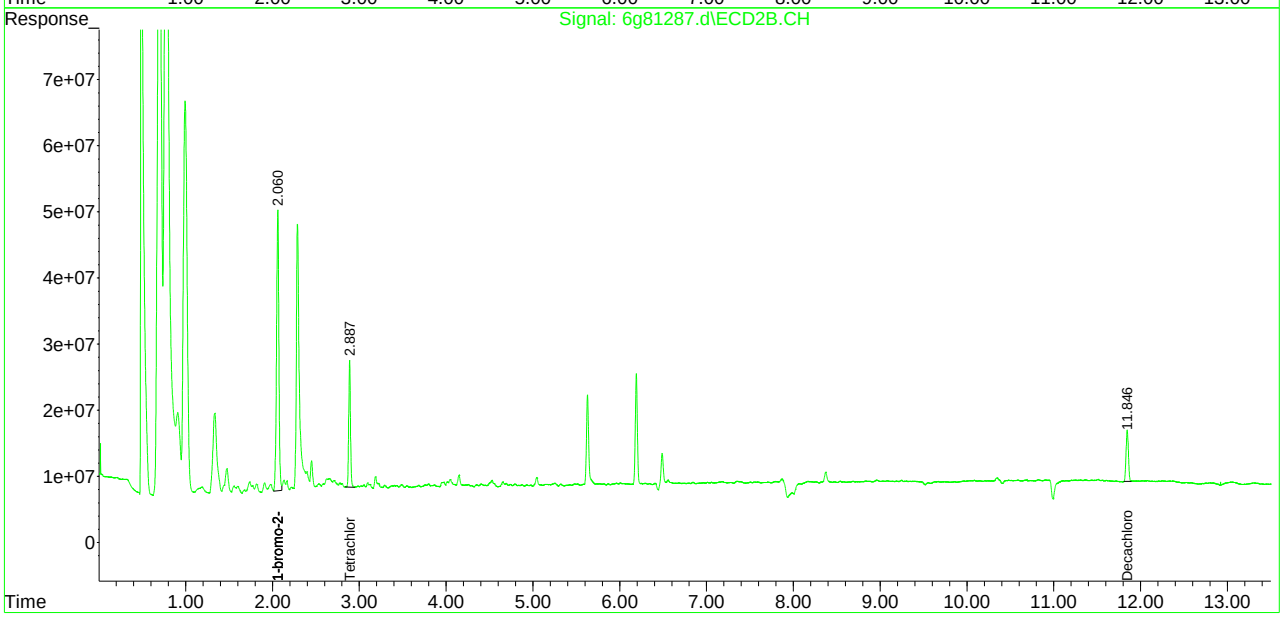
Quantitation Report (QT Reviewed)

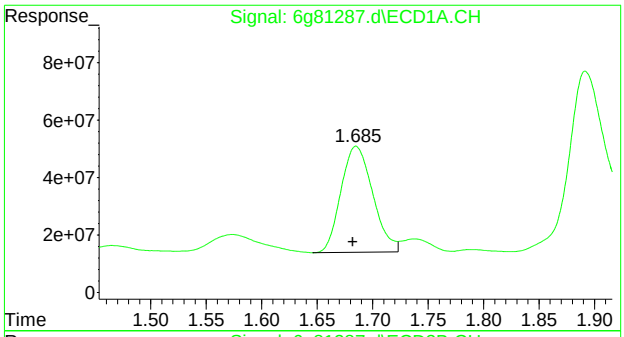
Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81287.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 03:02:32
Operator : rebeccak
Sample : jd36624-12
Misc : op37120,g6g2874,270,,,2,1
ALS Vial : 94 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:44:48 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

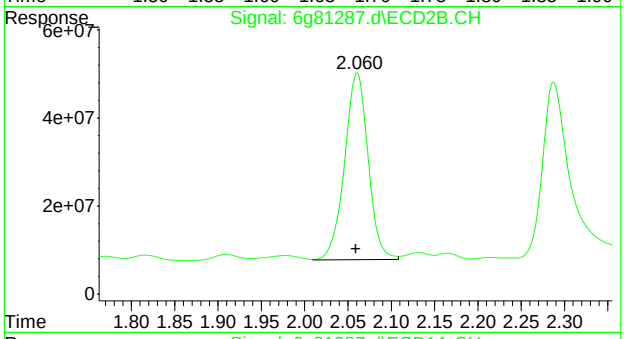






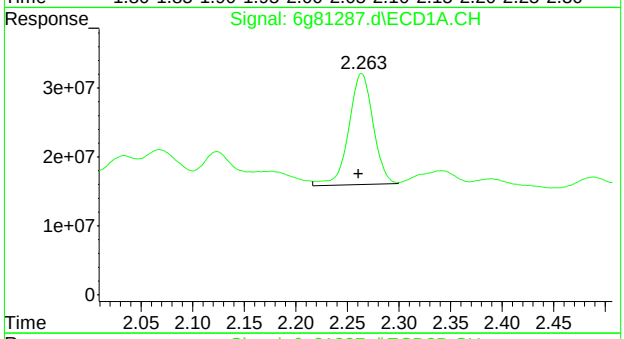
#1 1-bromo-2-nitrobenzene

R.T.: 1.685 min
Delta R.T.: 0.003 min
Response: 737610307
Conc: 50.00 PPB



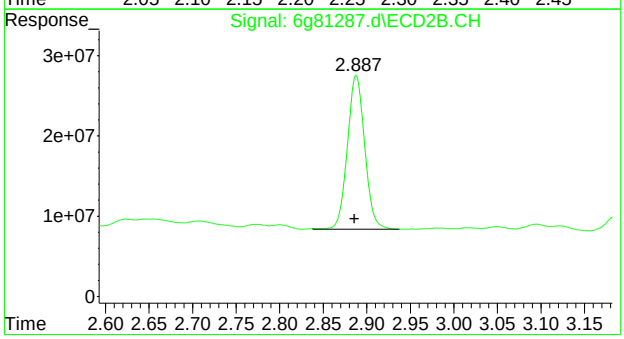
#1 1-bromo-2-nitrobenzene

R.T.: 2.061 min
Delta R.T.: 0.001 min
Response: 802913202
Conc: 50.00 PPB



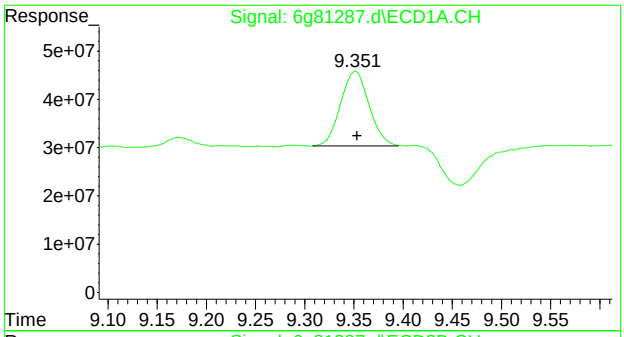
#2 Tetrachloro-m-xylene

R.T.: 2.264 min
Delta R.T.: 0.003 min
Response: 265672983
Conc: 29.00 PPB



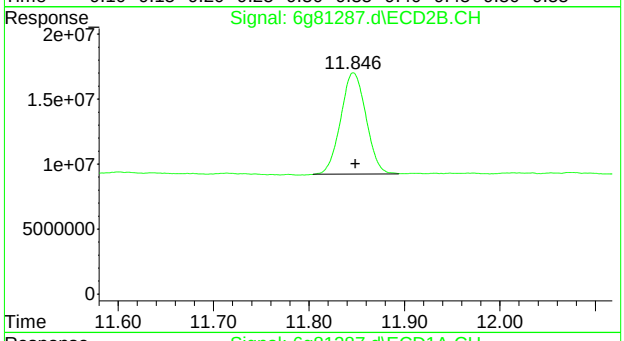
#2 Tetrachloro-m-xylene

R.T.: 2.888 min
Delta R.T.: 0.002 min
Response: 266016760
Conc: 18.23 PPB



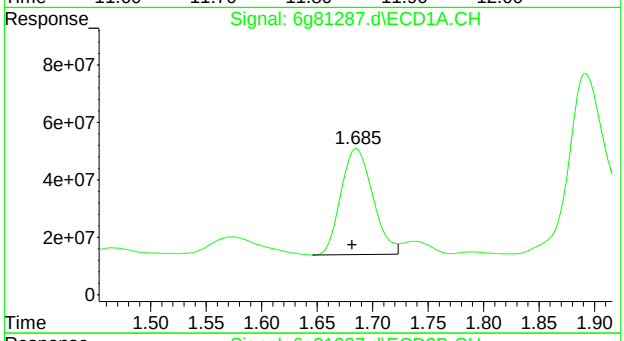
#26 Decachlorobiphenyl

R.T.: 9.351 min
Delta R.T.: -0.002 min
Response: 312515056
Conc: 17.72 PPB m



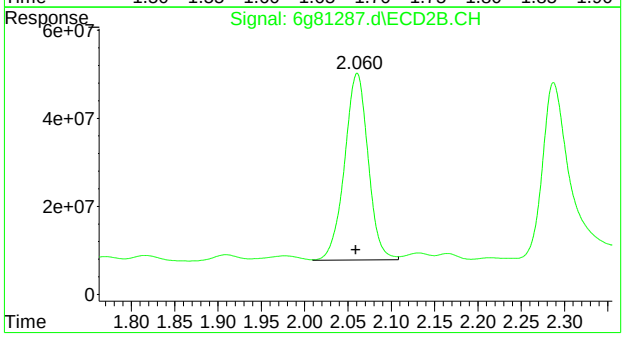
#26 Decachlorobiphenyl

R.T.: 11.846 min
Delta R.T.: -0.003 min
Response: 143283734
Conc: 11.45 PPB m



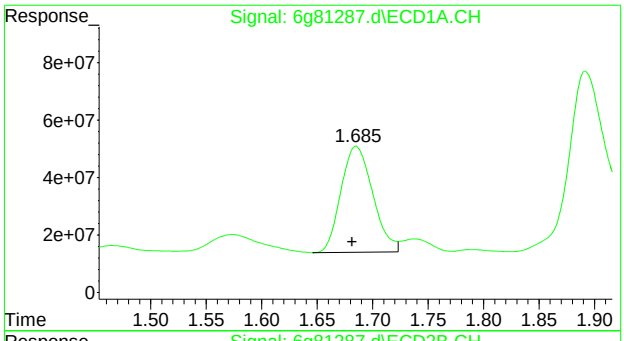
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.685 min
Delta R.T.: 0.003 min
Response: 737610307
Conc: 50.00 PPB



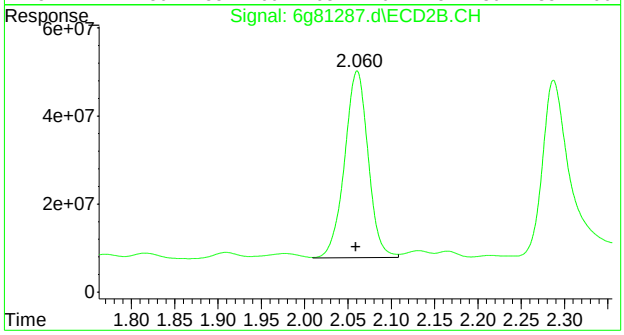
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.061 min
Delta R.T.: 0.001 min
Response: 802913202
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.685 min
Delta R.T.: 0.003 min
Response: 737610307
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.061 min
Delta R.T.: 0.001 min
Response: 802913202
Conc: 50.00 PPB

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/20/21 10:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81288.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 03:20:31
Operator : rebeccak
Sample : jd36624-13
Misc : op37120,g6g2874,270,,,2,1
ALS Vial : 95 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:47:23 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.685	2.062	745.4E6	636.9E6	50.000	50.000
27) I 1-bromo-2...	1.685	2.062	745.4E6	636.9E6	50.000	50.000
33) I 1-bromo-2...	1.685	2.062	745.4E6	636.9E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.264	2.886	240.7E6	231.2E6	26.004m	19.982m
Spiked Amount 40.000	Range 30 - 150		Recovery =		65.01%	49.95%
26) SA Decachlor...	9.349	11.846	222.3E6	107.5E6	12.471m	10.826
Spiked Amount 40.000			Recovery =		31.18%	27.07%
Target Compounds						
5) MA gamma-BHC	2.991	3.971	90512039	103.3E6	5.333m	7.196m#
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

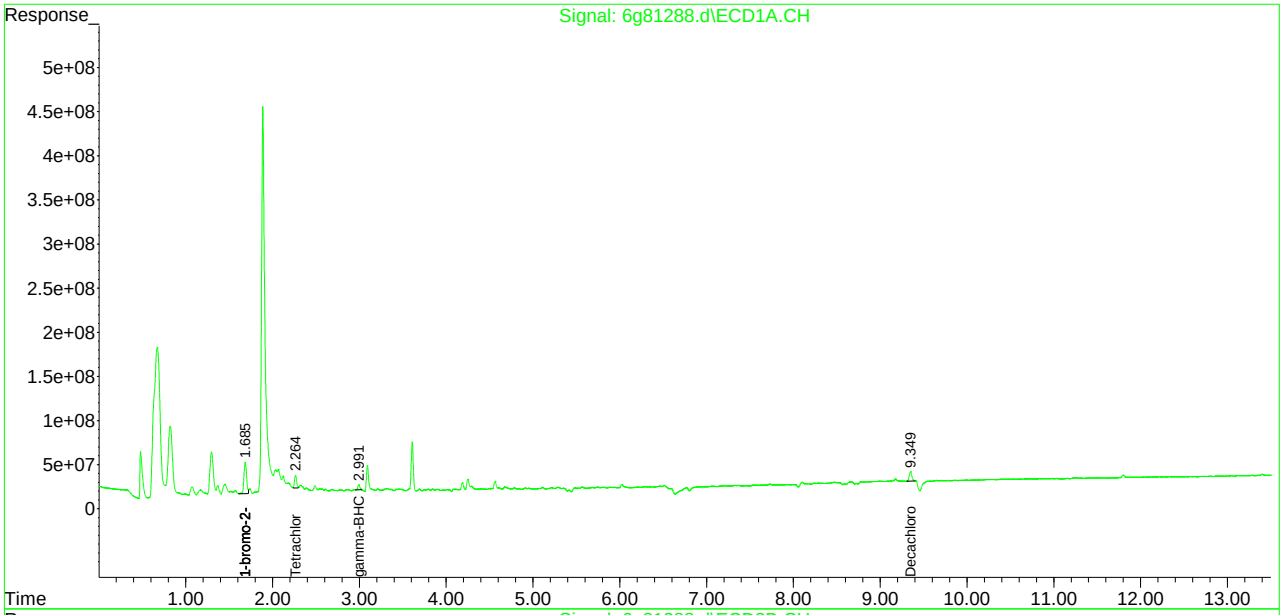
13.1.14
13

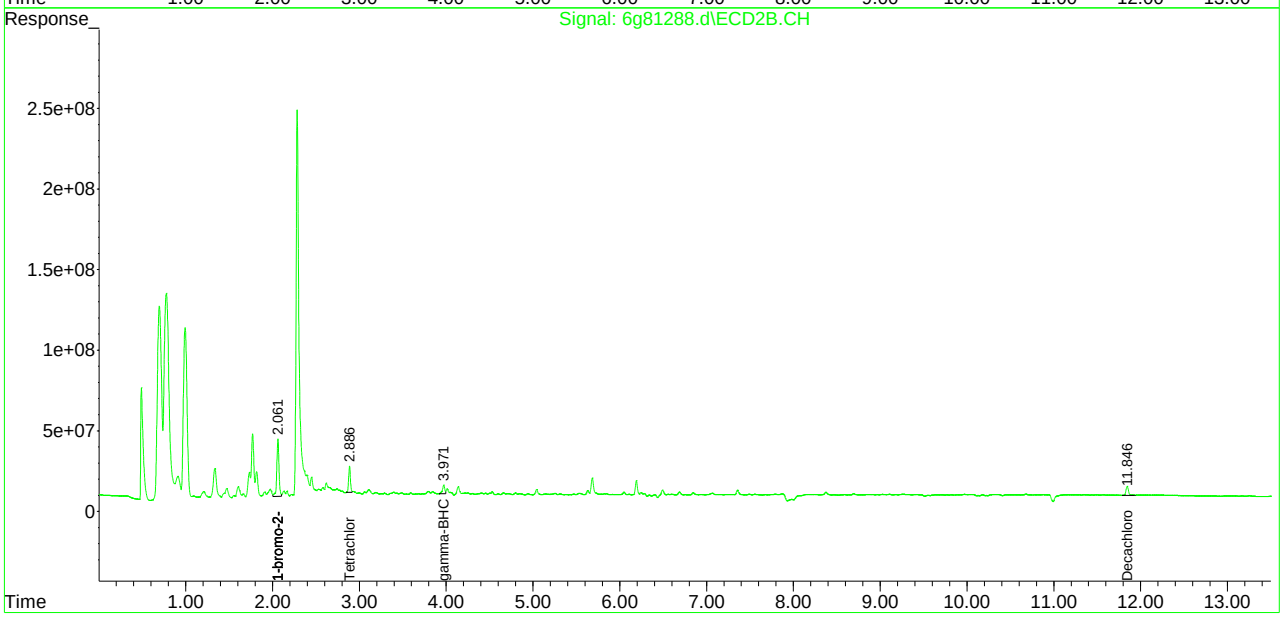
Quantitation Report (QT Reviewed)

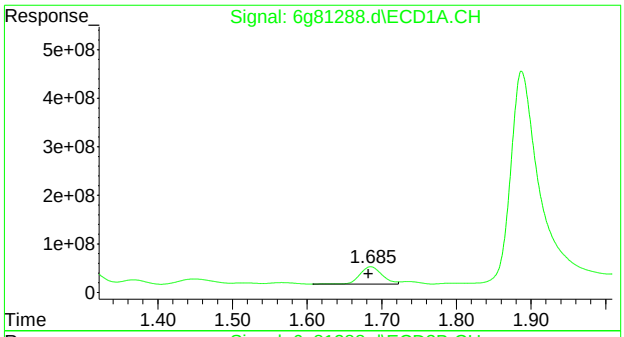
Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81288.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 03:20:31
Operator : rebeccak
Sample : jd36624-13
Misc : op37120,g6g2874,270,,,2,1
ALS Vial : 95 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:47:23 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

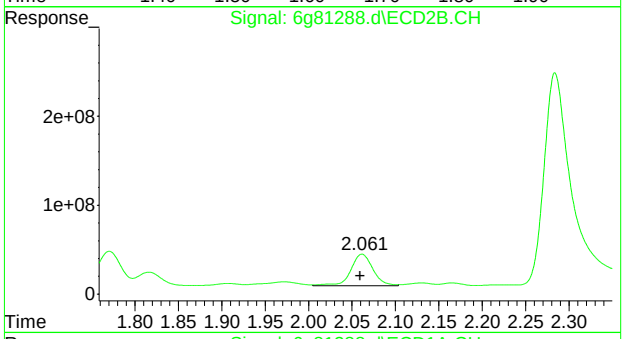






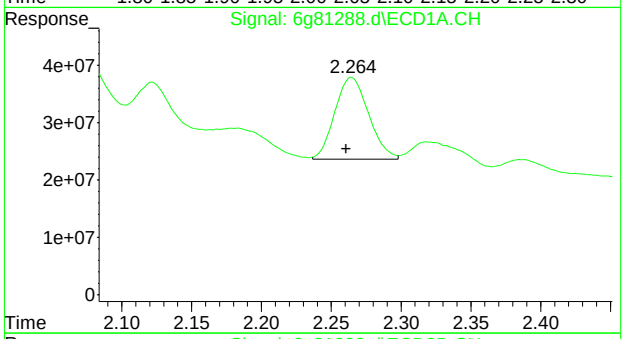
#1 1-bromo-2-nitrobenzene

R.T.: 1.685 min
Delta R.T.: 0.003 min
Response: 745397364
Conc: 50.00 PPB



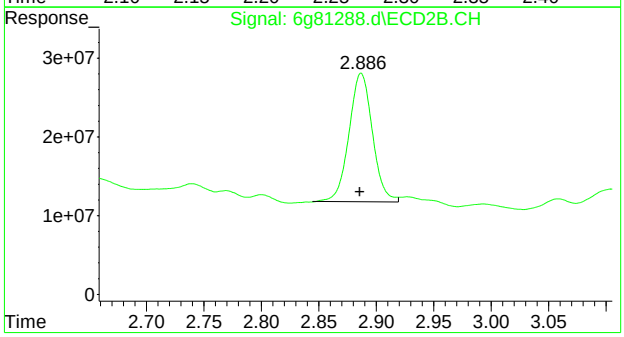
#1 1-bromo-2-nitrobenzene

R.T.: 2.062 min
Delta R.T.: 0.002 min
Response: 636850494
Conc: 50.00 PPB



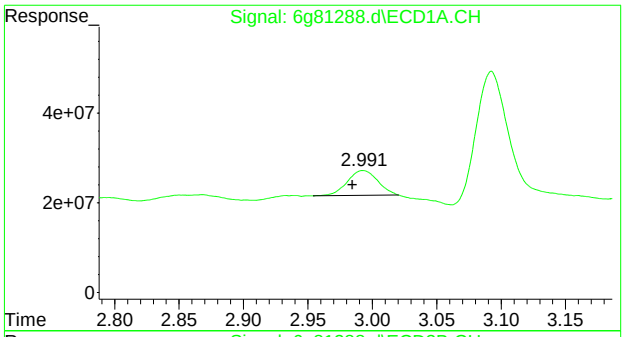
#2 Tetrachloro-m-xylene

R.T.: 2.264 min
Delta R.T.: 0.003 min
Response: 240722115
Conc: 26.00 PPB m



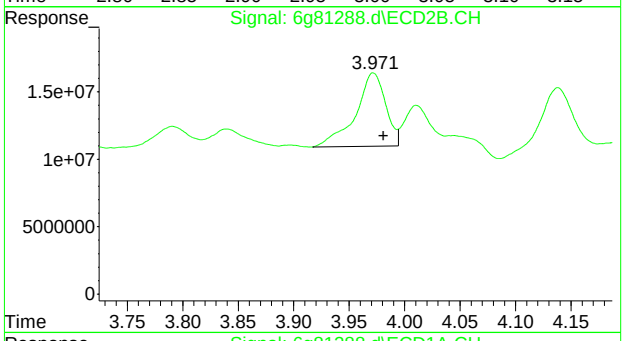
#2 Tetrachloro-m-xylene

R.T.: 2.886 min
Delta R.T.: 0.000 min
Response: 231248730
Conc: 19.98 PPB m



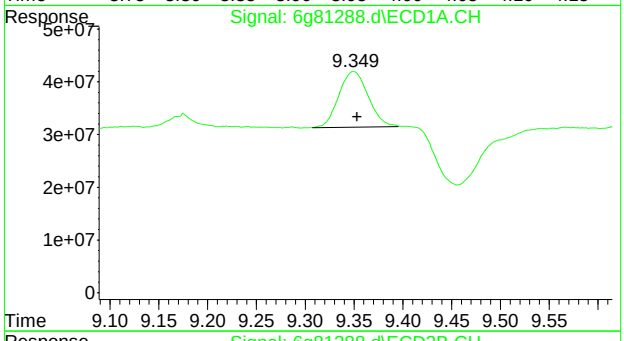
#5 gamma-BHC

R.T.: 2.991 min
Delta R.T.: 0.007 min
Response: 90512039
Conc: 5.33 PPB m



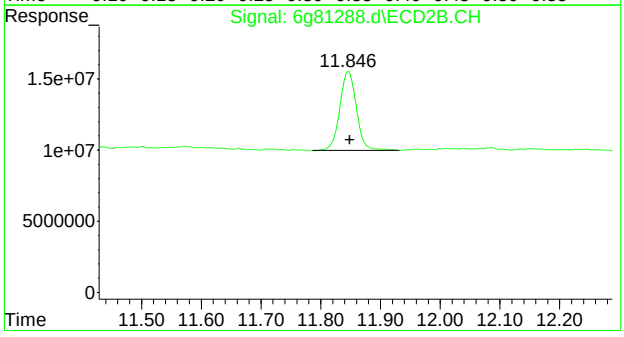
#5 gamma-BHC

R.T.: 3.971 min
Delta R.T.: -0.010 min
Response: 103265323
Conc: 7.20 PPB m



#26 Decachlorobiphenyl

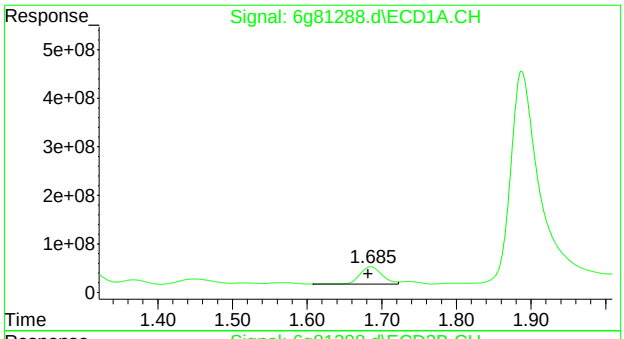
R.T.: 9.349 min
Delta R.T.: -0.004 min
Response: 222258058
Conc: 12.47 PPB m



#26 Decachlorobiphenyl

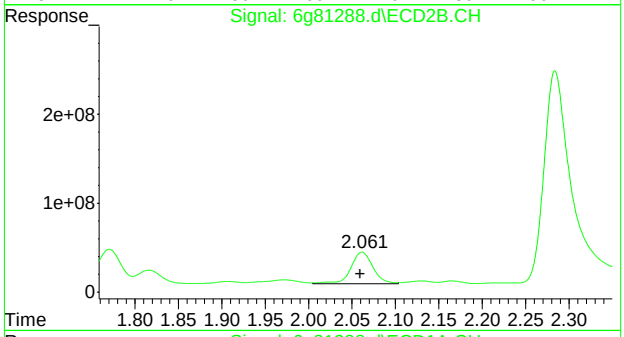
R.T.: 11.846 min
Delta R.T.: -0.003 min
Response: 107469736
Conc: 10.83 PPB

13.1.14
13



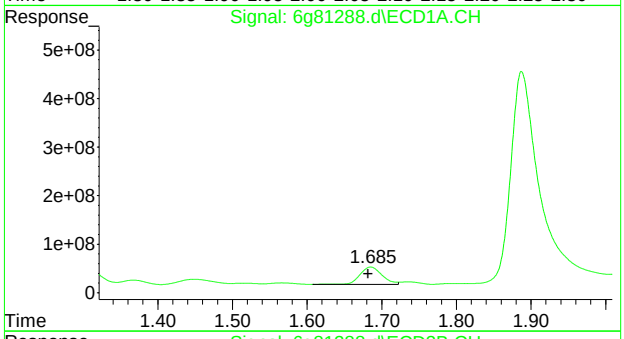
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.685 min
Delta R.T.: 0.004 min
Response: 745397364
Conc: 50.00 PPB



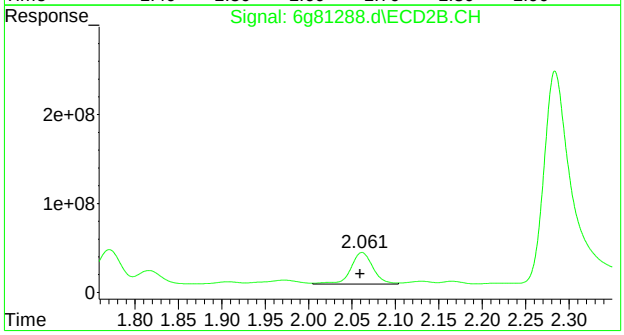
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.062 min
Delta R.T.: 0.002 min
Response: 636850494
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.685 min
Delta R.T.: 0.004 min
Response: 745397364
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.062 min
Delta R.T.: 0.002 min
Response: 636850494
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/20/21 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81289.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2021 3:38 am
Operator : rebeccak
Sample : jd36624-14
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 96 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 11:16:22 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:23 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.682	2.059	911.5E6	692.9E6	50.000m	50.000m
27) I	1-bromo-2...	1.682	2.059	900.7E6	685.5E6	50.000m	50.000m
33) I	1-bromo-2...	1.682	2.059	903.0E6	676.2E6	50.000m	50.000m
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.262	2.886	307.9E6	273.3E6	27.196	21.707m
	Spiked Amount 40.000	Range 30 - 150		Recovery =		67.99%	54.27%
26) SA	Decachlor...	9.348	11.847	222.1E6	102.5E6	10.190m	9.492m
	Spiked Amount 40.000			Recovery =		25.47%	23.73%
	Target Compounds						
3)	hexachlor...	2.572	3.396	98509160	42122321	3.064	2.831m
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

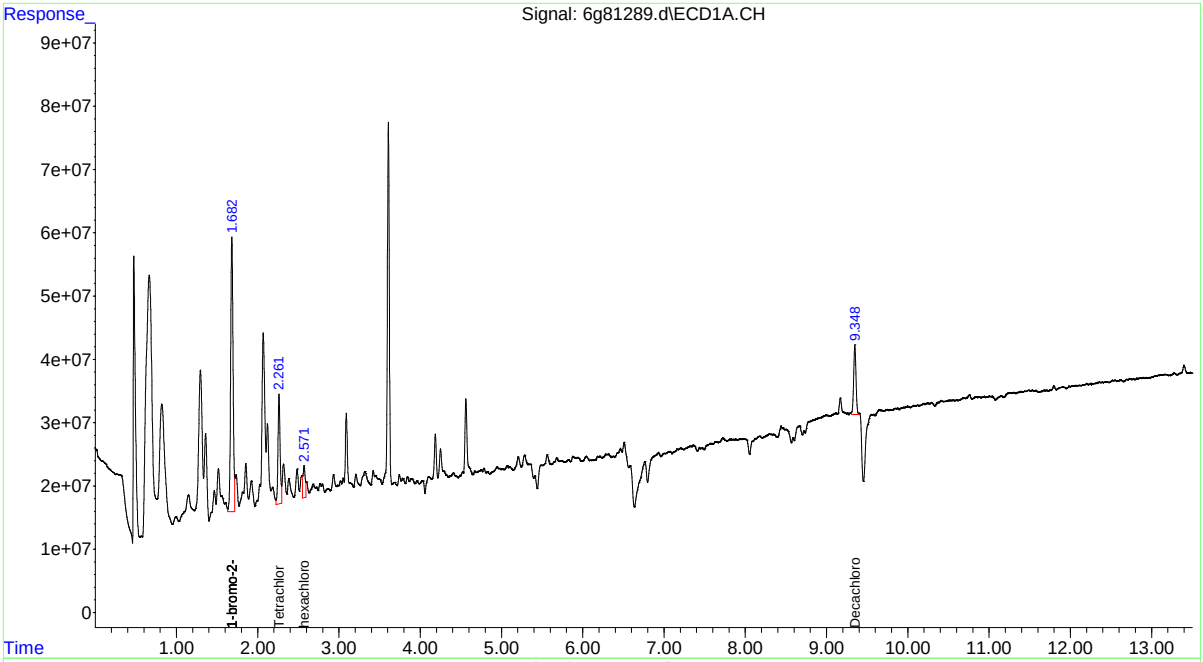
13.1.15
13

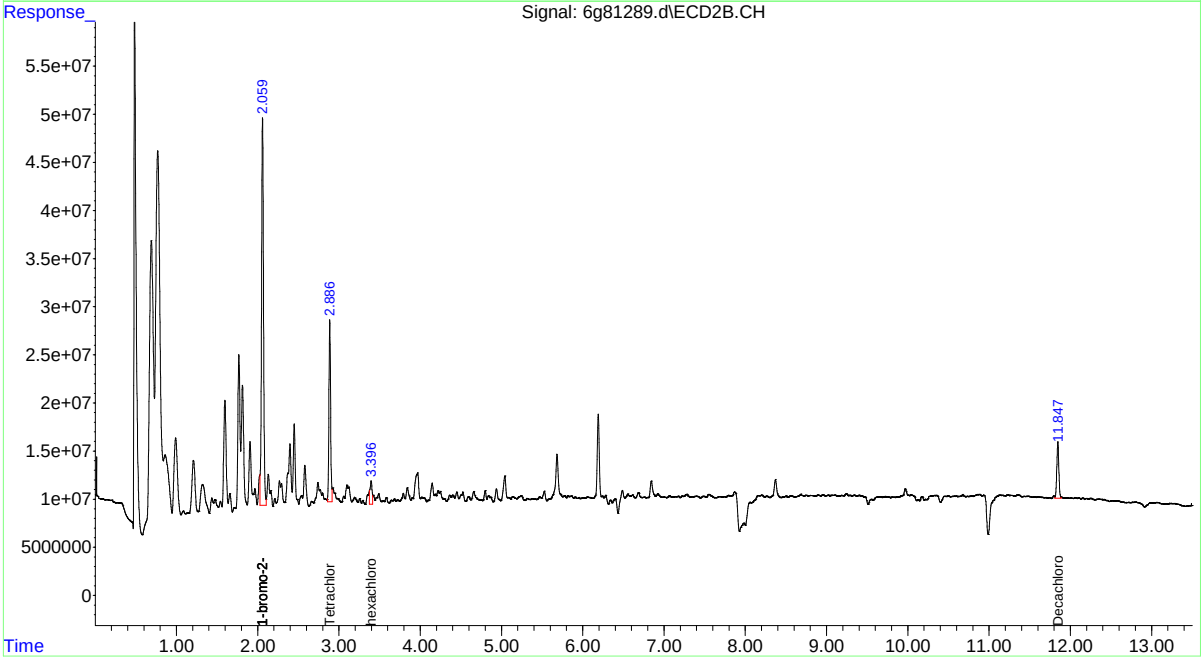
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81289.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2021 3:38 am
Operator : rebeccak
Sample : jd36624-14
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 96 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 20 11:16:22 2021
Quant Method : C:\MSDCHEM\1\METHODS\6PST2867.M
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:12:23 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/20/21 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81290.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 03:56:07
Operator : rebeccak
Sample : jd36624-15
Misc : op37120,g6g2874,280,,,2,1
ALS Vial : 97 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:57:32 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.683	2.060	678.8E6	596.7E6	50.000m	50.000m
27) I 1-bromo-2...	1.683	2.060	685.3E6	592.9E6	50.000m	50.000m
33) I 1-bromo-2...	1.683	2.060	686.6E6	595.4E6	50.000m	50.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	2.262	2.887	276.6E6	295.3E6	32.811m	27.234m
Spiked Amount 40.000	Range 30 - 150		Recovery =		82.03%	68.09%
26) SA Decachlor...	9.348	11.846	332.1E6	148.7E6	20.464m	15.991m
Spiked Amount 40.000			Recovery =		51.16%	39.98%
Target Compounds						
8) B delta-BHC	3.210f	4.453	45685063	33419892	3.215	2.716m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

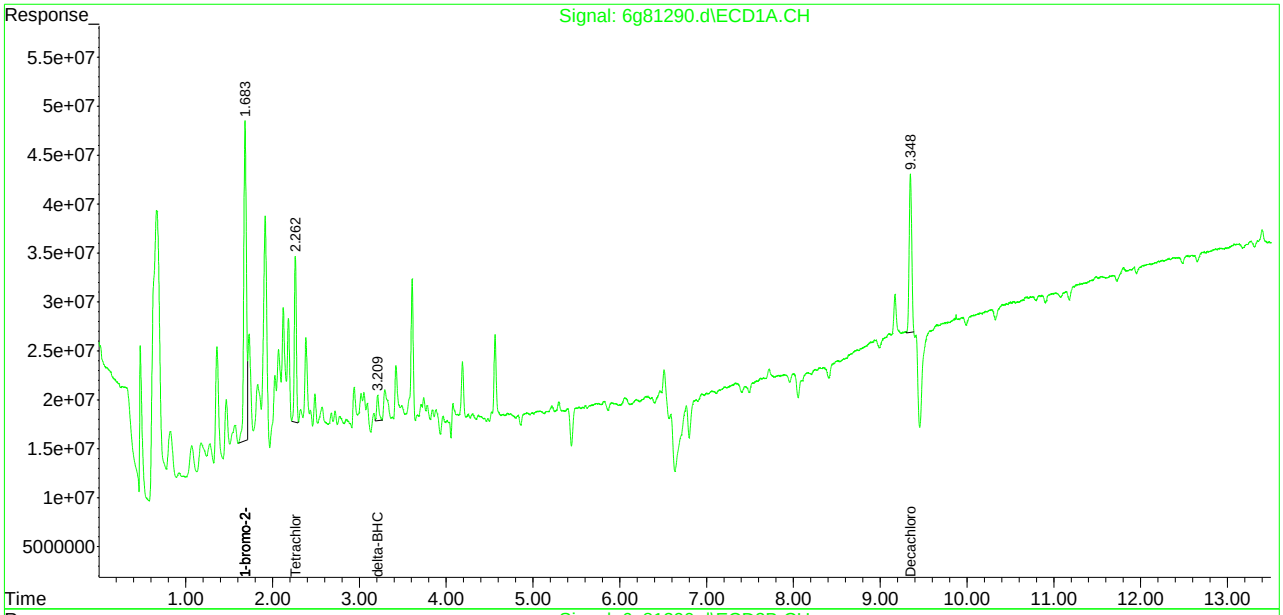
13.1.16
13

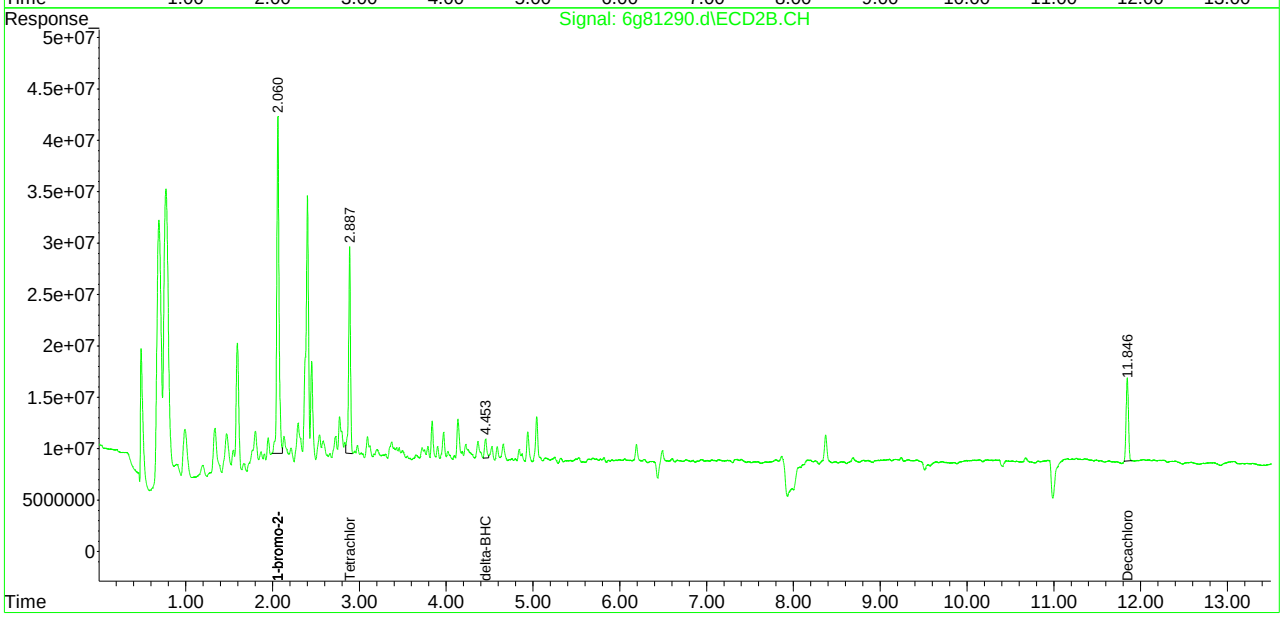
Quantitation Report (QT Reviewed)

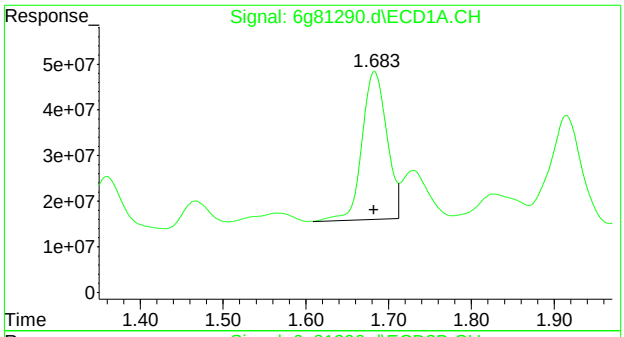
Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81290.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 03:56:07
Operator : rebeccak
Sample : jd36624-15
Misc : op37120,g6g2874,280,,,2,1
ALS Vial : 97 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 20:57:32 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

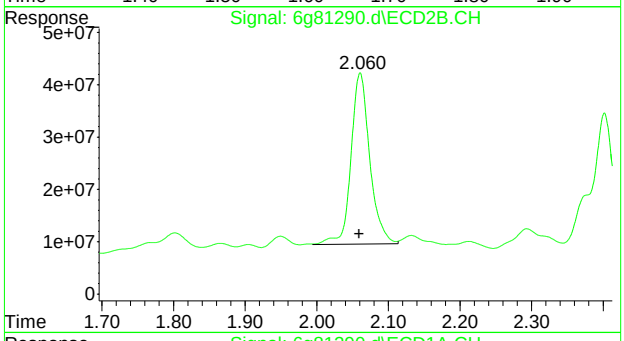






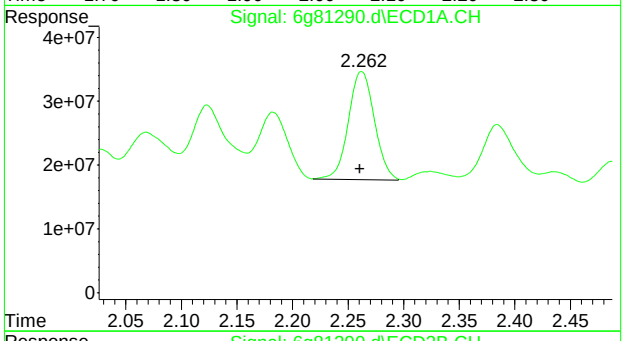
#1 1-bromo-2-nitrobenzene

R.T.: 1.683 min
Delta R.T.: 0.000 min
Response: 678752483
Conc: 50.00 PPB m



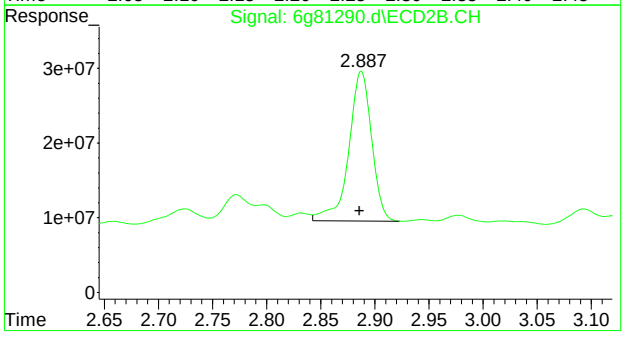
#1 1-bromo-2-nitrobenzene

R.T.: 2.060 min
Delta R.T.: 0.001 min
Response: 596745340
Conc: 50.00 PPB m



#2 Tetrachloro-m-xylene

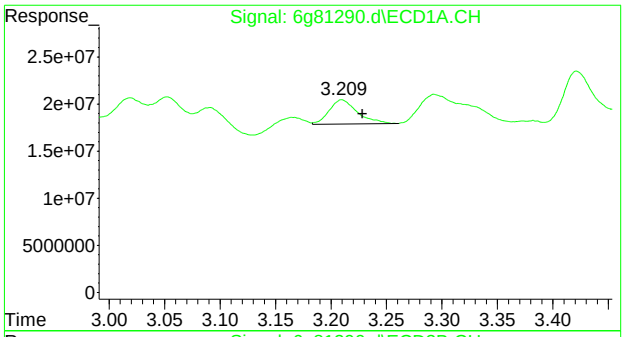
R.T.: 2.262 min
Delta R.T.: 0.001 min
Response: 276578508
Conc: 32.81 PPB m



#2 Tetrachloro-m-xylene

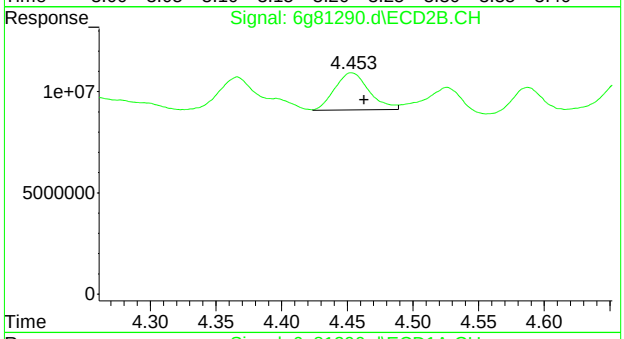
R.T.: 2.887 min
Delta R.T.: 0.001 min
Response: 295334446
Conc: 27.23 PPB m

13.1.16
13



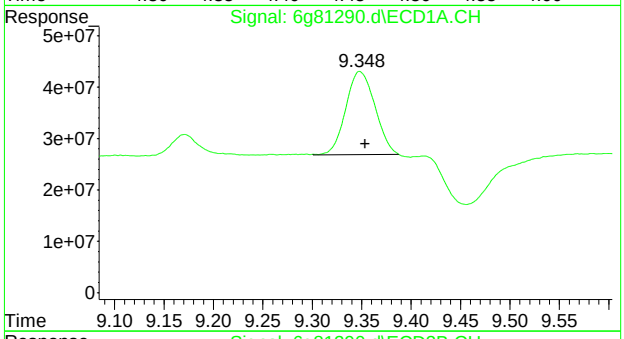
#8 delta-BHC

R.T.: 3.210 min
Delta R.T.: -0.019 min
Response: 45685063
Conc: 3.22 PPB



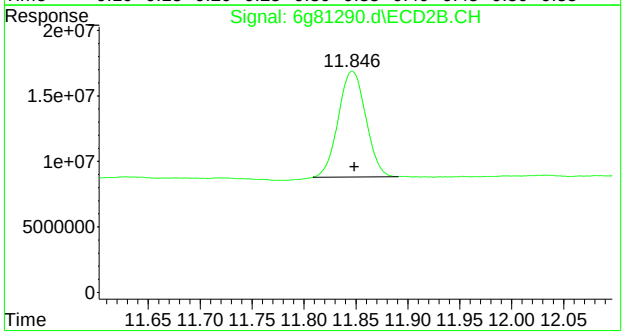
#8 delta-BHC

R.T.: 4.453 min
Delta R.T.: -0.010 min
Response: 33419892
Conc: 2.72 PPB m



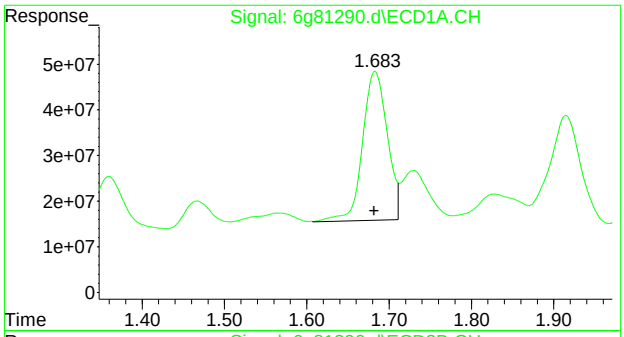
#26 Decachlorobiphenyl

R.T.: 9.348 min
Delta R.T.: -0.006 min
Response: 332112197
Conc: 20.46 PPB m



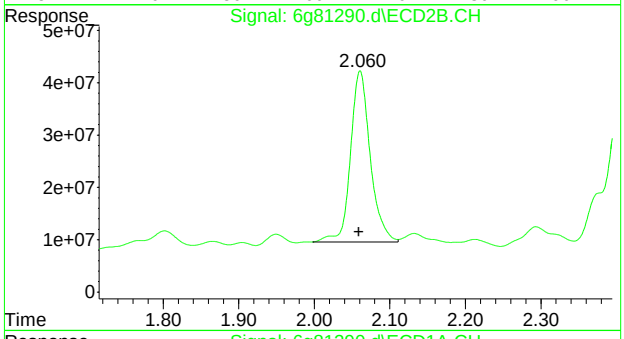
#26 Decachlorobiphenyl

R.T.: 11.846 min
Delta R.T.: -0.002 min
Response: 148743661
Conc: 15.99 PPB m



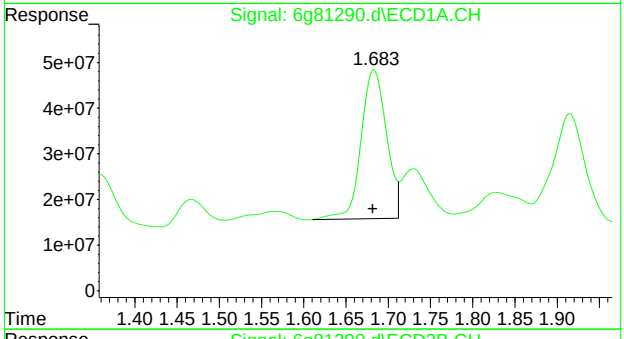
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.683 min
Delta R.T.: 0.000 min
Response: 685262825
Conc: 50.00 PPB m



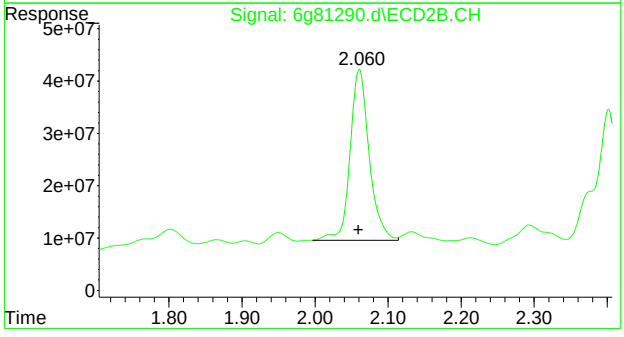
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.060 min
Delta R.T.: 0.001 min
Response: 592909189
Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.683 min
Delta R.T.: 0.000 min
Response: 686645811
Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.060 min
Delta R.T.: 0.001 min
Response: 595380034
Conc: 50.00 PPB m

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/22/21 14:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81291.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 04:13:59
Operator : rebeccak
Sample : jd36624-16
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 98 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 21:01:30 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.682	2.051	866.7E6	2891.8E6	50.000	50.000
27)	I 1-bromo-2...	1.682	2.051	866.7E6	2891.8E6	50.000	50.000
33)	I 1-bromo-2...	1.682	2.051	866.7E6	2891.8E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.262	2.887	405.9E6	519.3E6	37.712m	9.882m#
	Spiked Amount 40.000	Range 30 - 150		Recovery =		94.28%	24.70%#
26)	SA Decachlor...	9.348	11.844	475.7E6	224.4E6	22.956m	4.979m#
	Spiked Amount 40.000			Recovery =		57.39%	12.45%
	Target Compounds						
5)	MA gamma-BHC	2.992	3.972	412.4E6	32850076	20.897m	0.504m#
6)	MA Heptachlor	3.452	4.531f	153.6E6	28331904	8.447m	0.426m#
15)	B 4,4'-DDE	4.908f	6.589f	56620595	20084676	3.280m	0.346m#
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

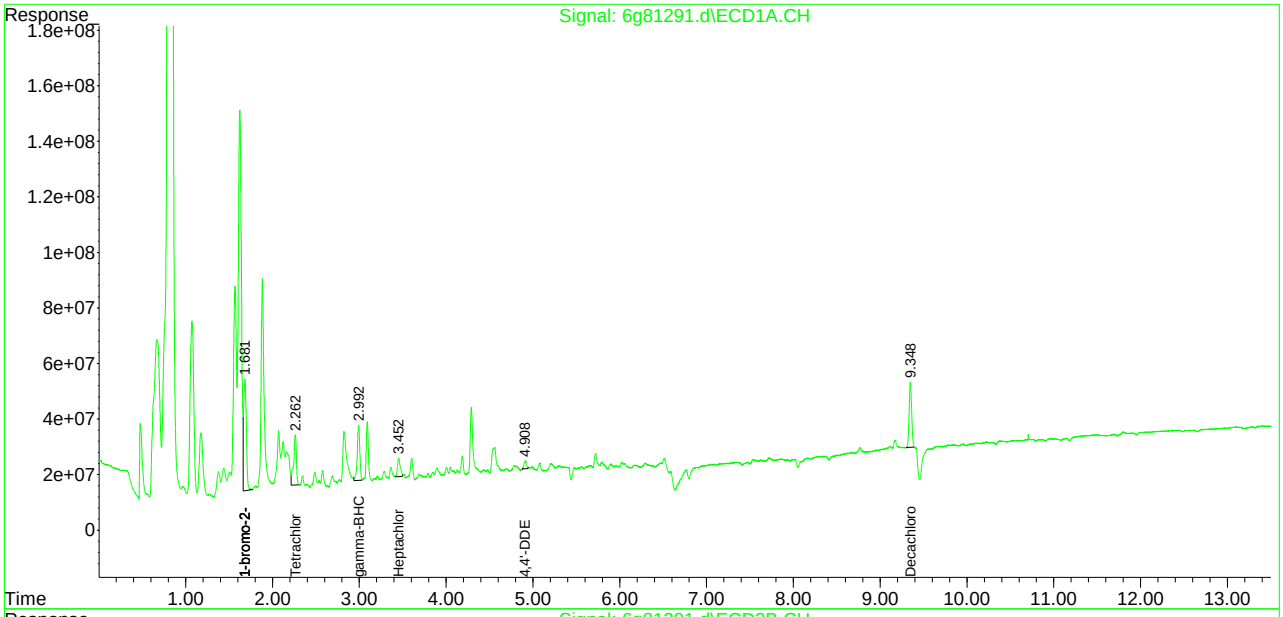
13.1.17 13

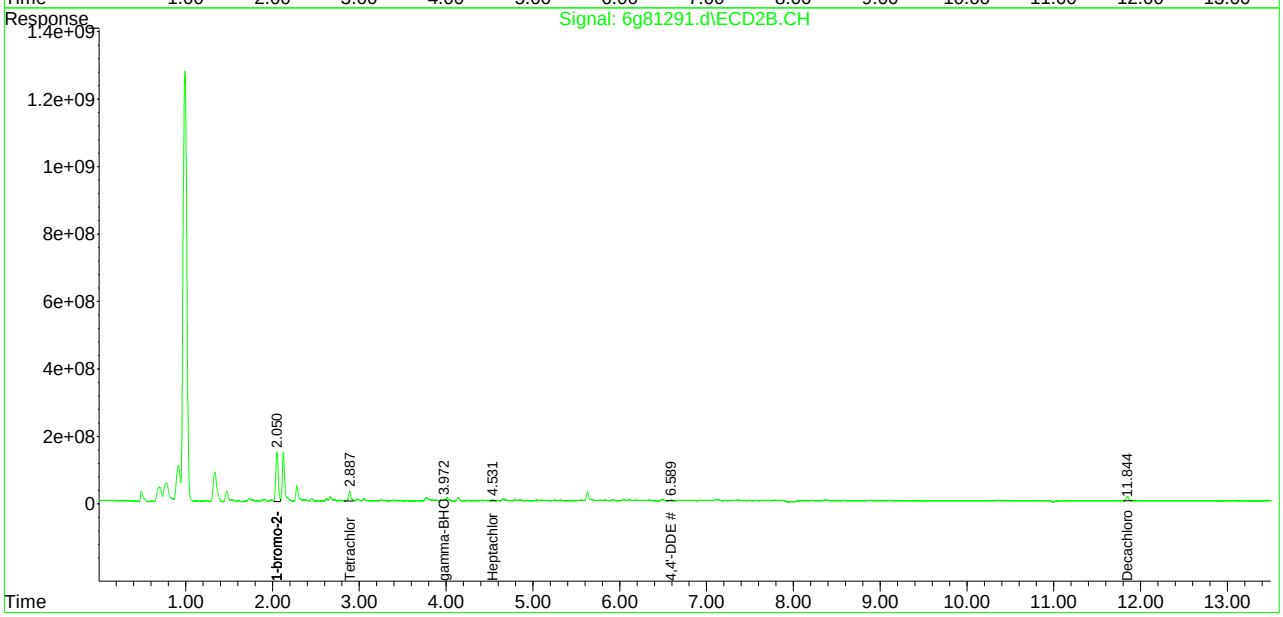
Quantitation Report (QT Reviewed)

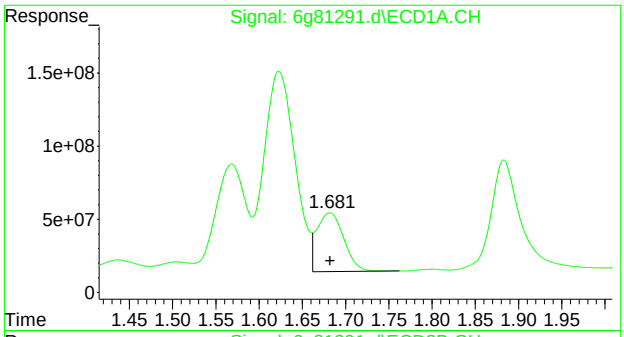
Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81291.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 04:13:59
Operator : rebeccak
Sample : jd36624-16
Misc : op37120,g6g2874,260,,,2,1
ALS Vial : 98 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 21:01:30 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

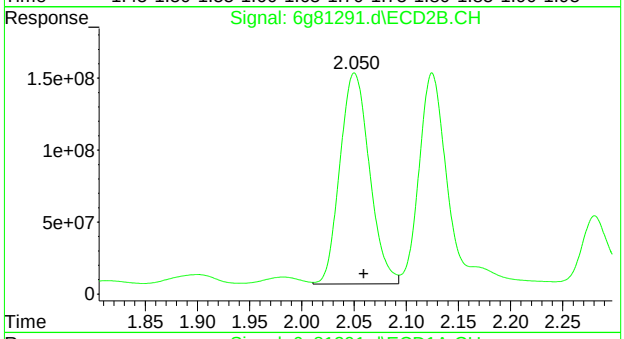






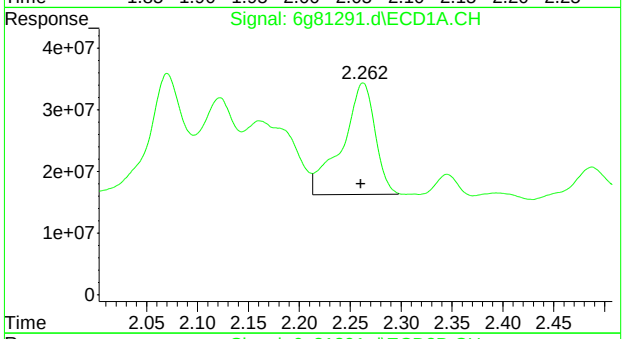
#1 1-bromo-2-nitrobenzene

R.T.: 1.682 min
Delta R.T.: 0.000 min
Response: 866728254
Conc: 50.00 PPB



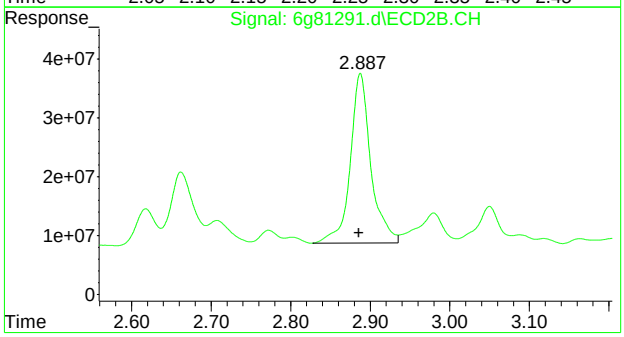
#1 1-bromo-2-nitrobenzene

R.T.: 2.051 min
Delta R.T.: -0.009 min
Response: 2891834536
Conc: 50.00 PPB



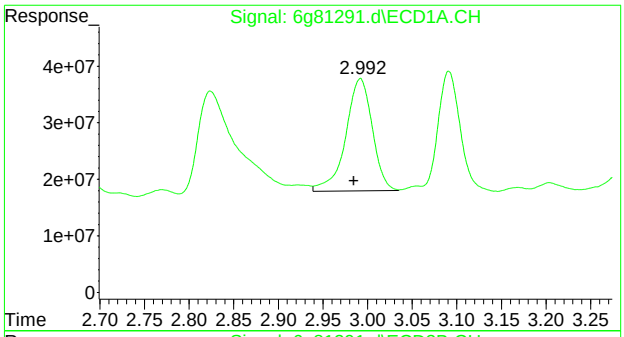
#2 Tetrachloro-m-xylene

R.T.: 2.262 min
Delta R.T.: 0.001 min
Response: 405923435
Conc: 37.71 PPB m



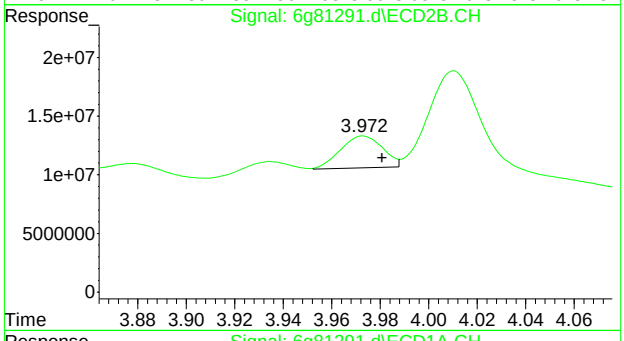
#2 Tetrachloro-m-xylene

R.T.: 2.887 min
Delta R.T.: 0.002 min
Response: 519283997
Conc: 9.88 PPB m



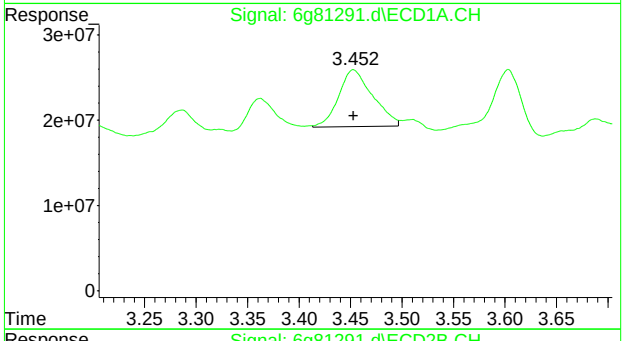
#5 gamma-BHC

R.T.: 2.992 min
Delta R.T.: 0.007 min
Response: 412419748
Conc: 20.90 PPB m



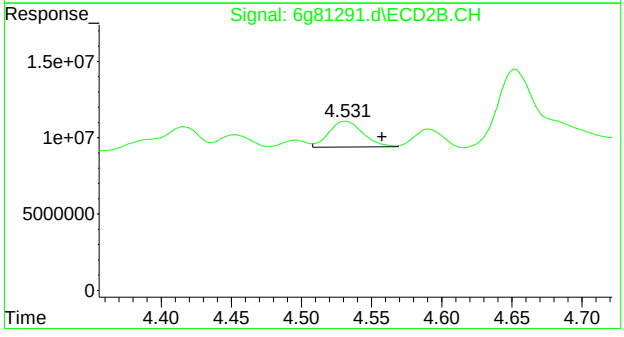
#5 gamma-BHC

R.T.: 3.972 min
Delta R.T.: -0.009 min
Response: 32850076
Conc: 0.50 PPB m



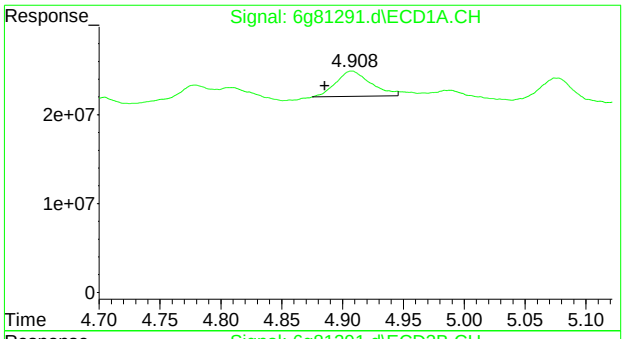
#6 Heptachlor

R.T.: 3.452 min
Delta R.T.: 0.000 min
Response: 153635963
Conc: 8.45 PPB m



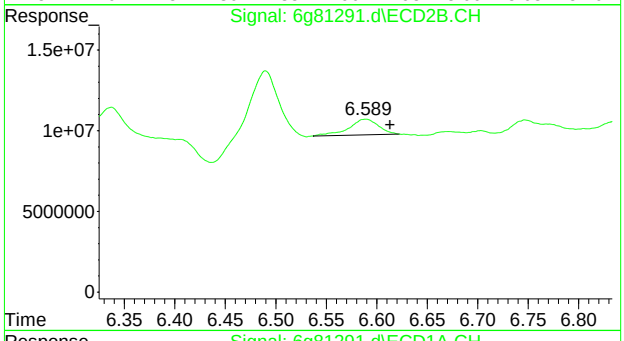
#6 Heptachlor

R.T.: 4.531 min
Delta R.T.: -0.026 min
Response: 28331904
Conc: 0.43 PPB m



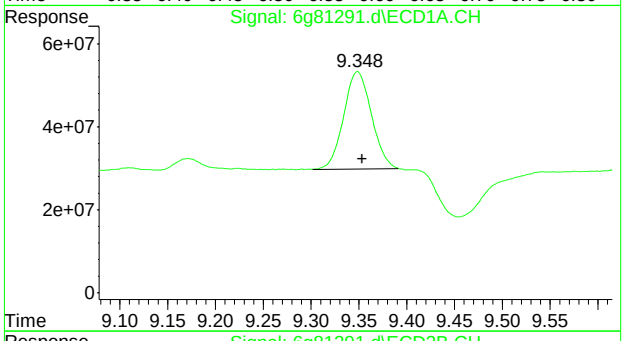
#15 4,4'-DDE

R.T.: 4.908 min
Delta R.T.: 0.023 min
Response: 56620595
Conc: 3.28 PPB m



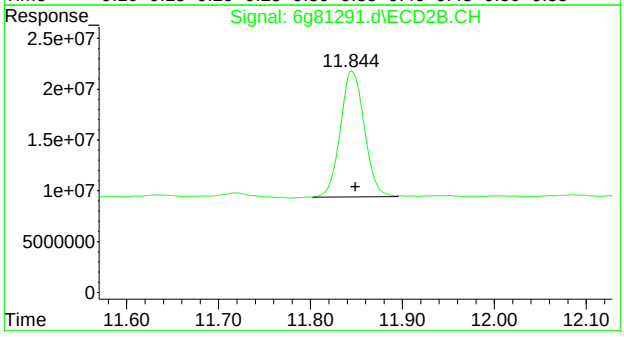
#15 4,4'-DDE

R.T.: 6.589 min
Delta R.T.: -0.024 min
Response: 20084676
Conc: 0.35 PPB m



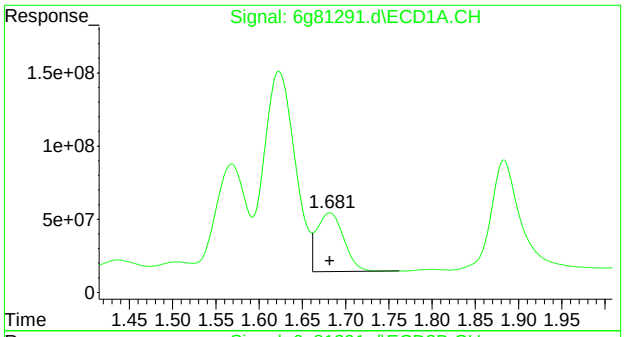
#26 Decachlorobiphenyl

R.T.: 9.348 min
Delta R.T.: -0.005 min
Response: 475716632
Conc: 22.96 PPB m



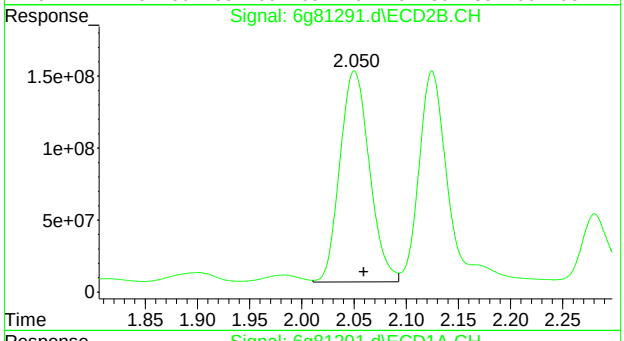
#26 Decachlorobiphenyl

R.T.: 11.844 min
Delta R.T.: -0.004 min
Response: 224442808
Conc: 4.98 PPB m



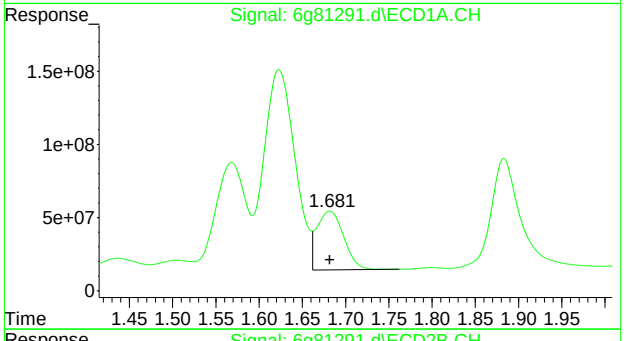
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.682 min
Delta R.T.: 0.000 min
Response: 866728254
Conc: 50.00 PPB



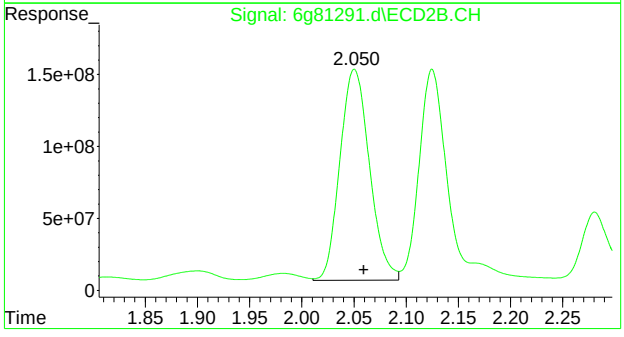
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.051 min
Delta R.T.: -0.009 min
Response: 2891834536
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.682 min
Delta R.T.: 0.000 min
Response: 866728254
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.051 min
Delta R.T.: -0.009 min
Response: 2891834536
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/22/21 14:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81355.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Dec 2021 5:20 am
Operator : christp
Sample : jd36624-16
Misc : op37120,g6g2878,260,,,2,5
ALS Vial : 49 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 22 14:10:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 22 01:13:25 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.687	2.062	875.2E6	1085.7E6	50.000	50.000
27)	I 1-bromo-2...	1.687	2.062	875.2E6	1085.7E6	50.000	50.000
33)	I 1-bromo-2...	1.687	2.062	875.2E6	1085.7E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.263	2.886	159.9E6	73880227	14.715	3.745 #
	Spiked Amount 40.000	Range 30 - 150		Recovery =		36.79%	9.36%#
26)	SA Decachlor...	9.345	11.844	119.2E6	55958427	5.698m	3.307 #
	Spiked Amount 40.000			Recovery =		14.25%	8.27%
	Target Compounds						
5)	MA gamma-BHC	2.990	3.972	102.4E6	21660029	5.138m	0.885m#
6)	MA Heptachlor	3.452	4.530f	51650089	6751963	2.812m	0.270m#
15)	B 4,4'-DDE	4.903f	6.584f	15936253	3362040	0.914m	0.154m#
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

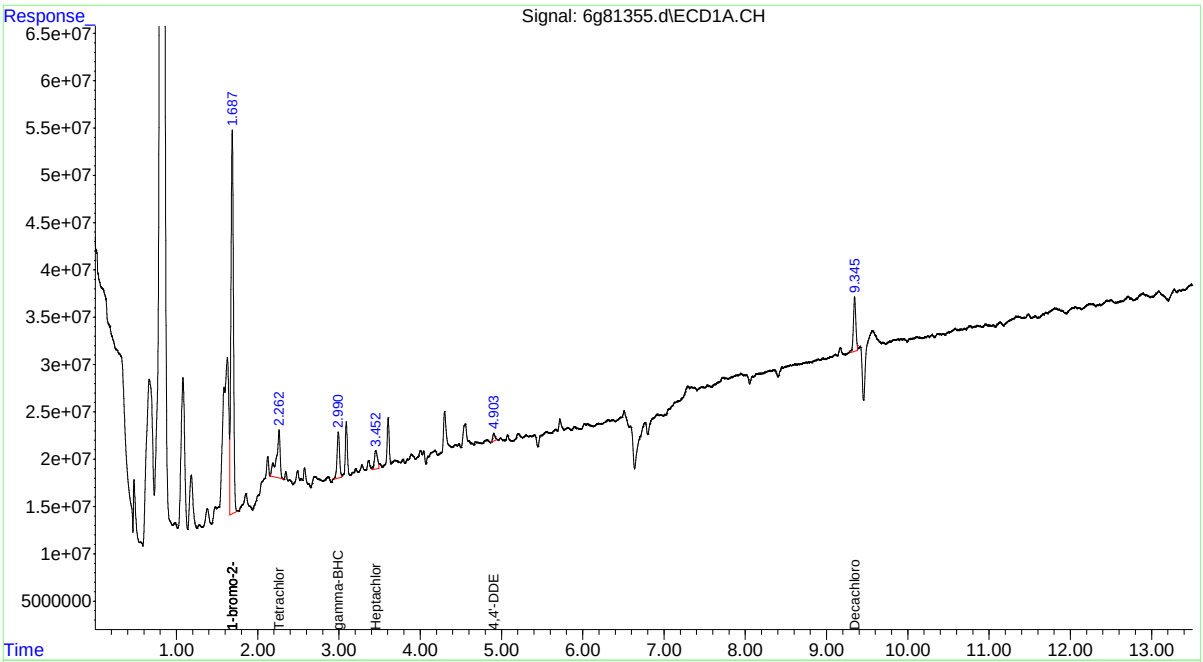
13.1.18
13

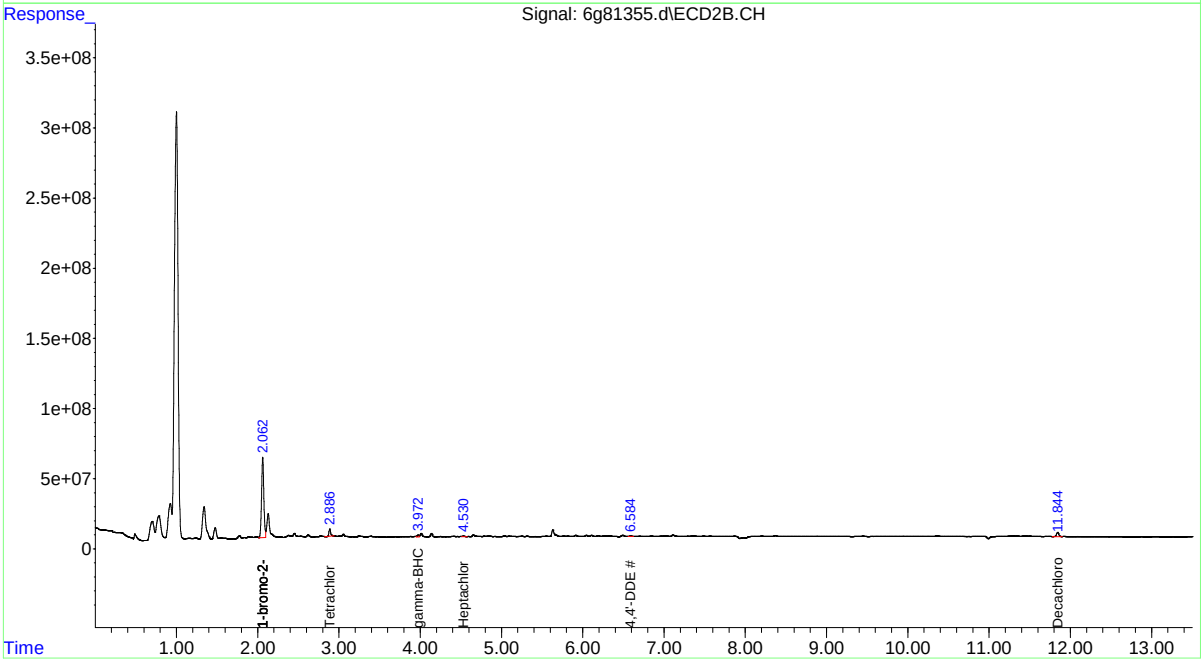
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : 6g81355.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Dec 2021 5:20 am
Operator : christp
Sample : jd36624-16
Misc : op37120,g6g2878,260,,,2,5
ALS Vial : 49 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 22 14:10:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 22 01:13:25 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/22/21 14:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81292.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 04:31:45
Operator : rebeccak
Sample : jd36624-17
Misc : op37120,g6g2874,250,,,2,1
ALS Vial : 99 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 21:09:56 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.681	2.050	1110.3E6	3735.9E6	50.000	50.000
27) I 1-bromo-2...	1.681	2.050	1110.3E6	3735.9E6	50.000	50.000
33) I 1-bromo-2...	1.681	2.050	1110.3E6	3735.9E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.262	2.888	305.2E6	461.4E6	22.133m	6.797 #
Spiked Amount 40.000	Range 30 - 150		Recovery =		55.33%	16.99%#
26) SA Decachlor...	9.347	11.846	233.4E6	160.4E6	8.792m	2.755m#
Spiked Amount 40.000			Recovery =		21.98%	6.89%
Target Compounds						
8) B delta-BHC	3.258f	4.462	160.2E6	105.0E6	6.894m	1.363m#
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

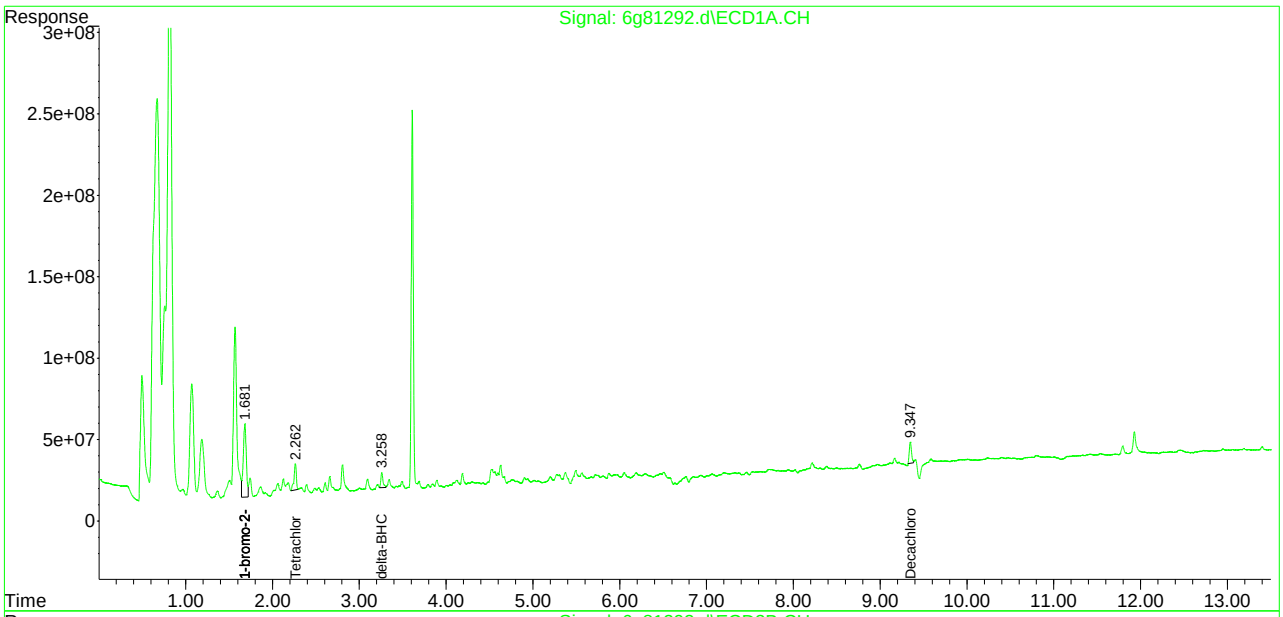
13.1.19
13

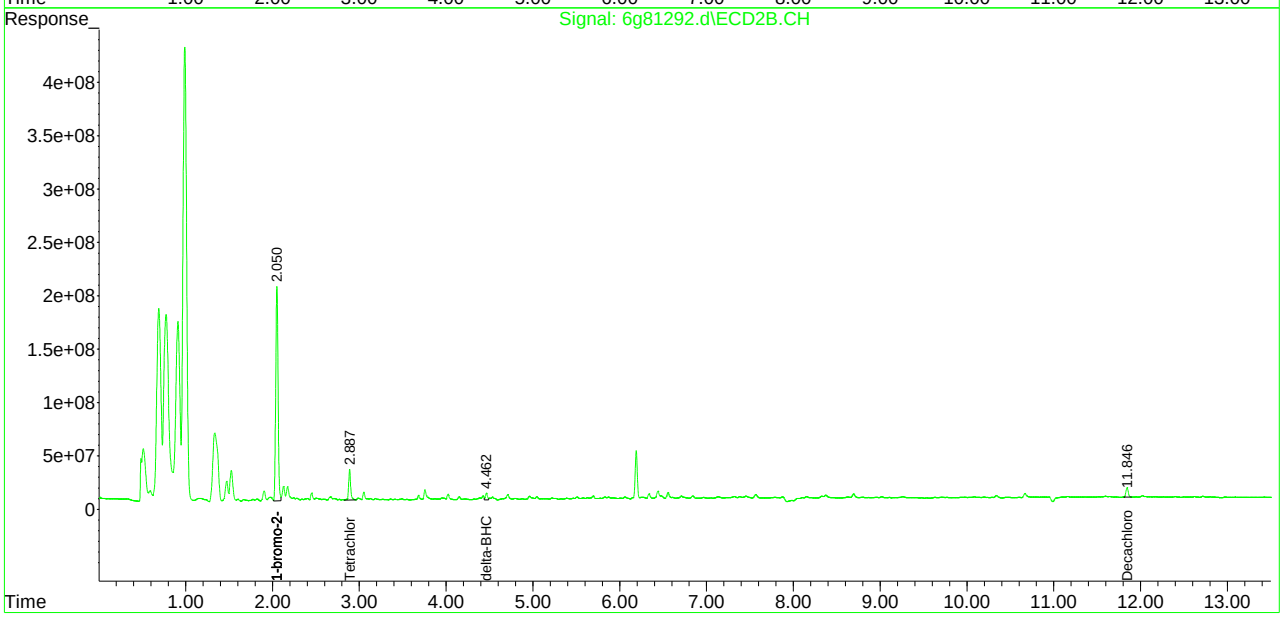
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81292.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18-Dec-21, 04:31:45
Operator : rebeccak
Sample : jd36624-17
Misc : op37120,g6g2874,250,,,2,1
ALS Vial : 99 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

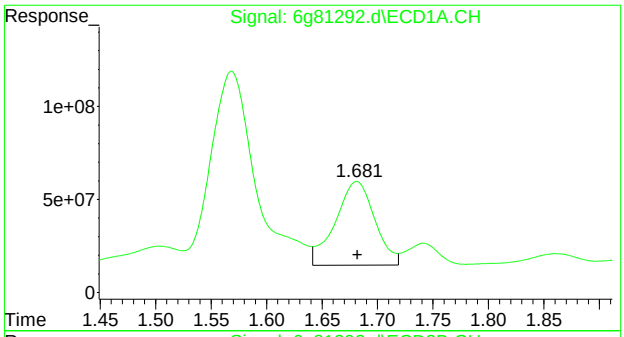
Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 21:09:56 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



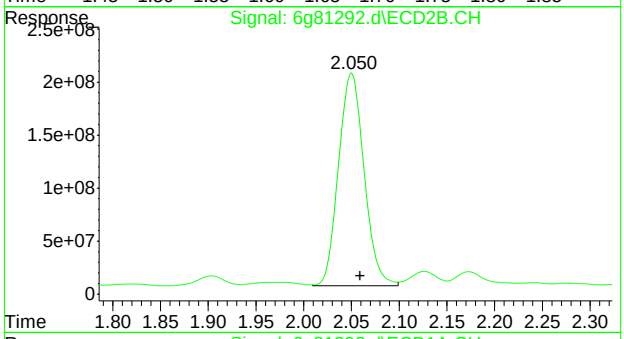


13.1.19 13



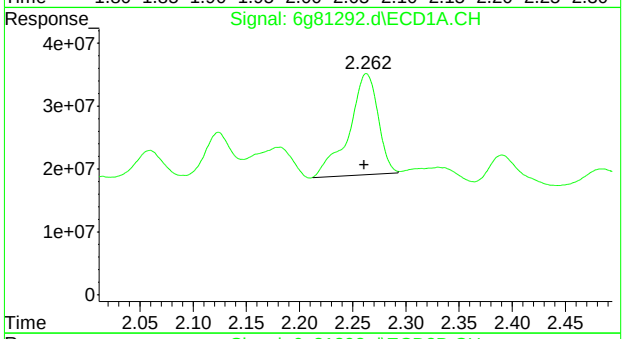
#1 1-bromo-2-nitrobenzene

R.T.: 1.681 min
Delta R.T.: 0.000 min
Response: 1110322504
Conc: 50.00 PPB



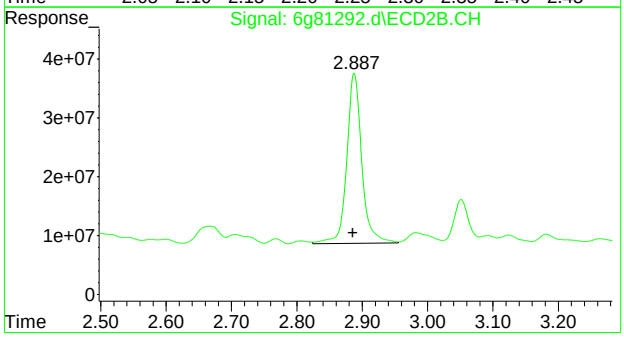
#1 1-bromo-2-nitrobenzene

R.T.: 2.050 min
Delta R.T.: -0.009 min
Response: 3735860177
Conc: 50.00 PPB



#2 Tetrachloro-m-xylene

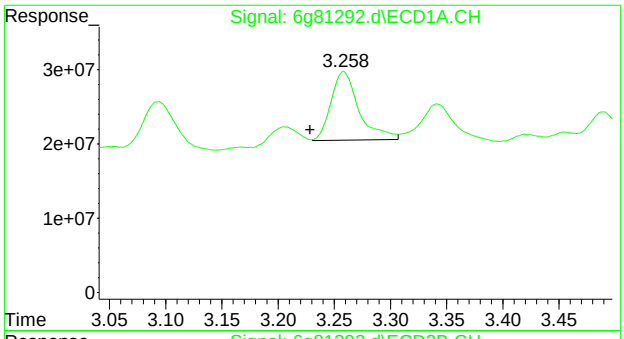
R.T.: 2.262 min
Delta R.T.: 0.002 min
Response: 305189958
Conc: 22.13 PPB m



#2 Tetrachloro-m-xylene

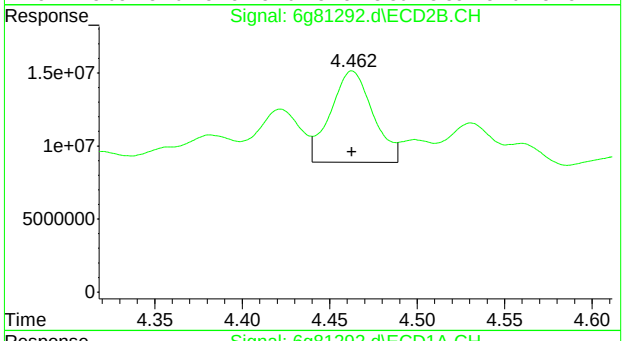
R.T.: 2.888 min
Delta R.T.: 0.002 min
Response: 461425187
Conc: 6.80 PPB

13.1.19 13



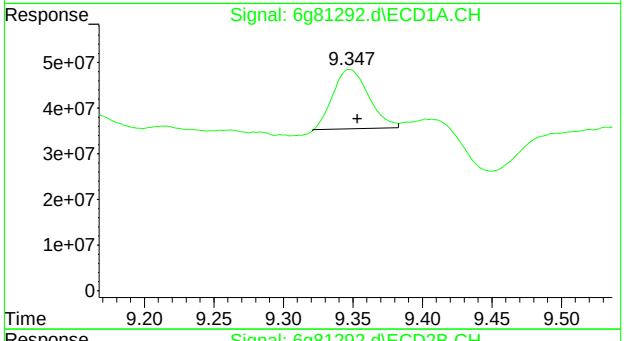
#8 delta-BHC

R.T.: 3.258 min
Delta R.T.: 0.030 min
Response: 160241934
Conc: 6.89 PPB m



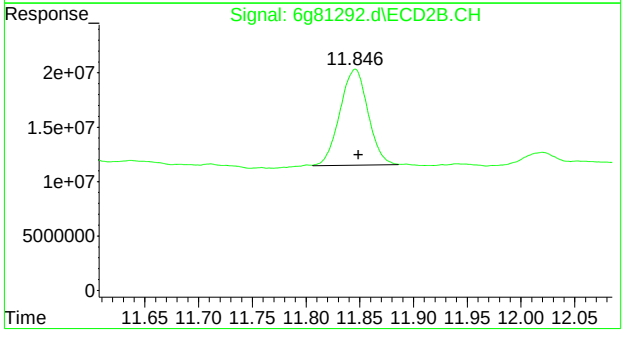
#8 delta-BHC

R.T.: 4.462 min
Delta R.T.: 0.000 min
Response: 104959282
Conc: 1.36 PPB m



#26 Decachlorobiphenyl

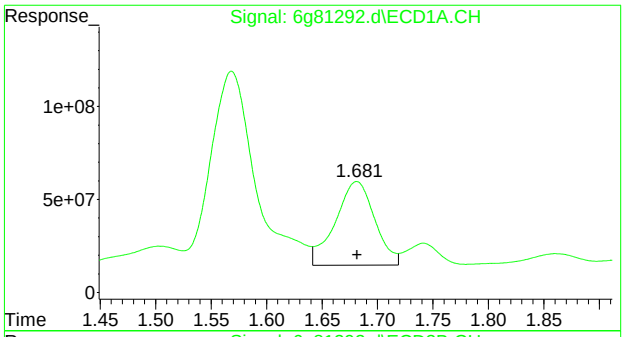
R.T.: 9.347 min
Delta R.T.: -0.006 min
Response: 233405276
Conc: 8.79 PPB m



#26 Decachlorobiphenyl

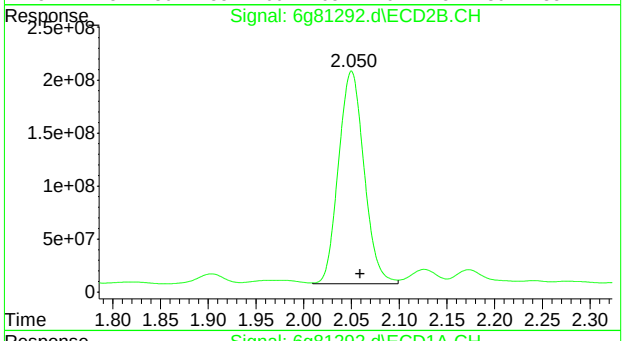
R.T.: 11.846 min
Delta R.T.: -0.003 min
Response: 160442519
Conc: 2.76 PPB m

13.1.19 13



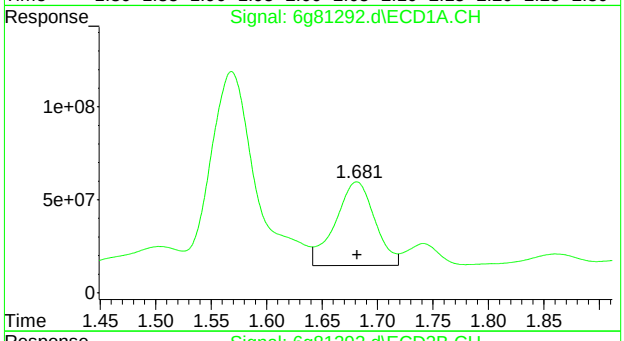
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.681 min
Delta R.T.: 0.000 min
Response: 1110322504
Conc: 50.00 PPB



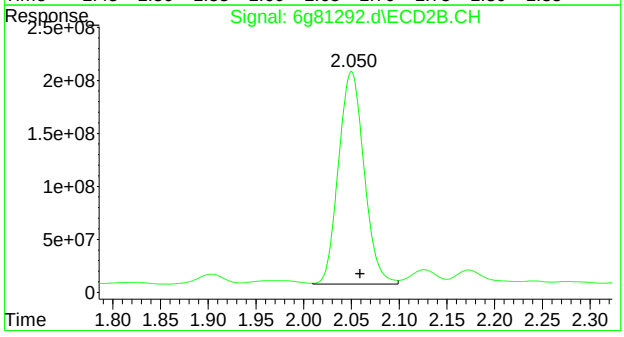
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.050 min
Delta R.T.: -0.009 min
Response: 3735860177
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.681 min
Delta R.T.: 0.000 min
Response: 1110322504
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.050 min
Delta R.T.: -0.009 min
Response: 3735860177
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/22/21 14:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\g6g2878\
Data File : 6g81356.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21-Dec-21, 05:38:19
Operator : christp
Sample : jd36624-17
Misc : op37120,g6g2878,250,,,2,5
ALS Vial : 50 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 22 03:16:59 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 22 01:13:25 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.687	2.060	916.9E6	1359.9E6	50.000	50.000m
27) I 1-bromo-2...	1.687	2.060	916.9E6	1357.6E6	50.000	50.000m
33) I 1-bromo-2...	1.687	2.060	916.9E6	1350.4E6	50.000	50.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	2.263	2.887	89460448	92423688	7.856	3.740 #
Spiked Amount	40.000 Range	30 - 150	Recovery	=	19.64%#	9.35%#
26) SA Decachlor...	9.344	11.843	127.8E6	45664533	5.829	2.154 #
Spiked Amount	40.000		Recovery	=	14.57%	5.38%
Target Compounds						
8) B delta-BHC	3.260f	4.463	46169549	19054895	2.405	0.680m#
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

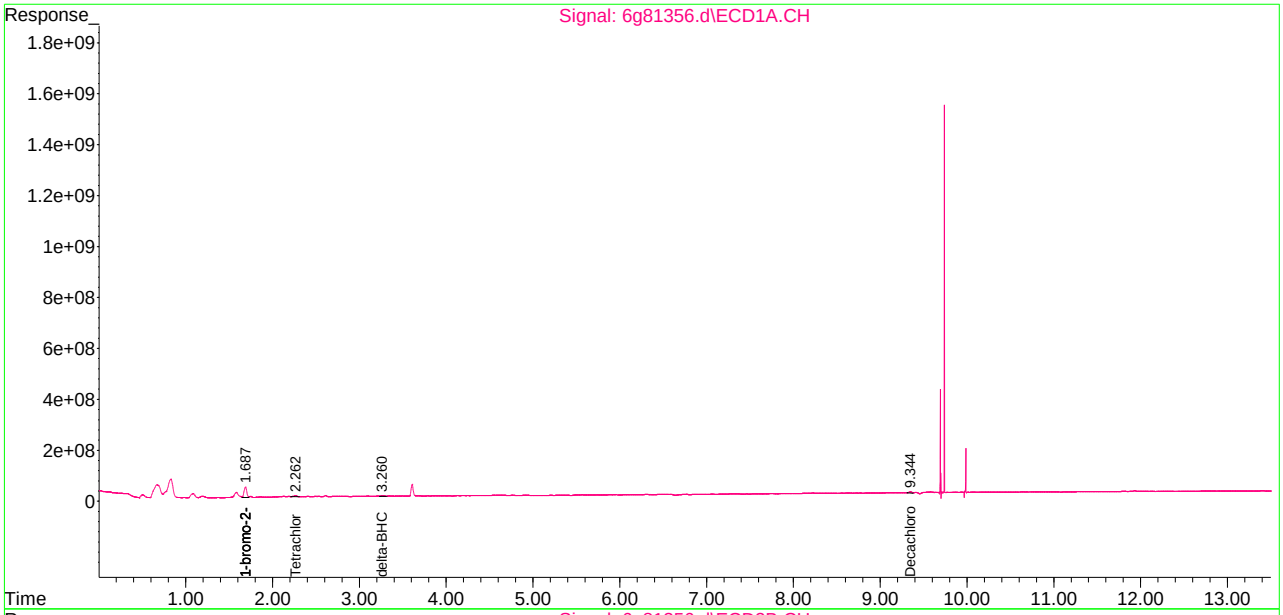
13.1.20
13

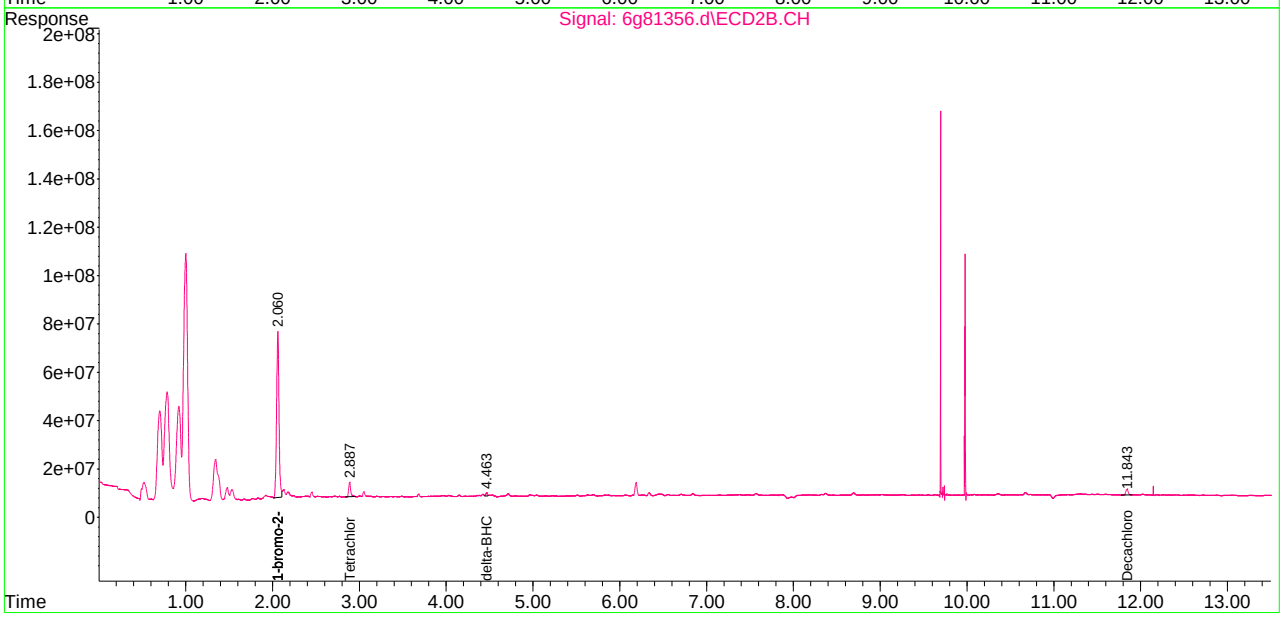
Quantitation Report (QT Reviewed)

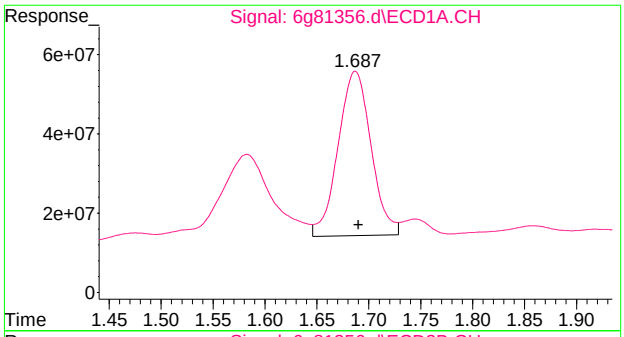
Data Path : C:\msdchem\1\data\chrisc2\g6g2878\
Data File : 6g81356.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21-Dec-21, 05:38:19
Operator : christp
Sample : jd36624-17
Misc : op37120,g6g2878,250,,,2,5
ALS Vial : 50 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 22 03:16:59 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Wed Dec 22 01:13:25 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

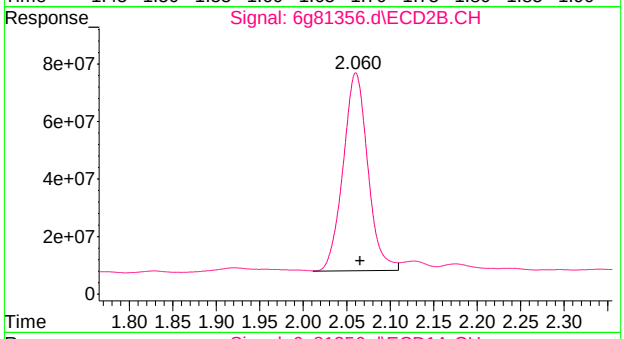






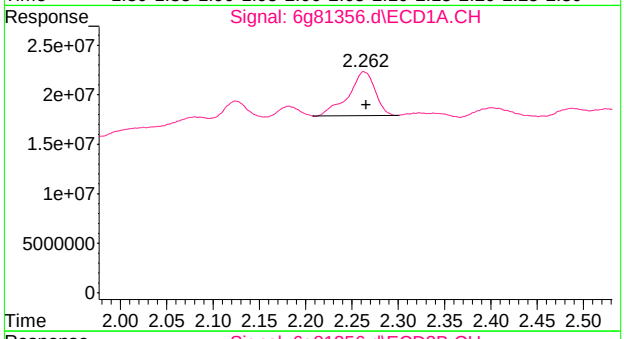
#1 1-bromo-2-nitrobenzene

R.T.: 1.687 min
Delta R.T.: -0.003 min
Response: 916934627
Conc: 50.00 PPB



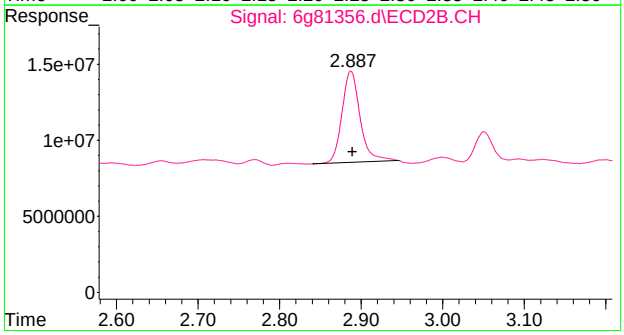
#1 1-bromo-2-nitrobenzene

R.T.: 2.060 min
Delta R.T.: -0.005 min
Response: 1359902595
Conc: 50.00 PPB m



#2 Tetrachloro-m-xylene

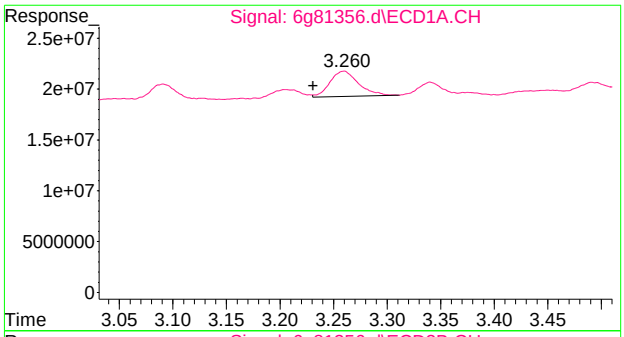
R.T.: 2.263 min
Delta R.T.: -0.003 min
Response: 89460448
Conc: 7.86 PPB



#2 Tetrachloro-m-xylene

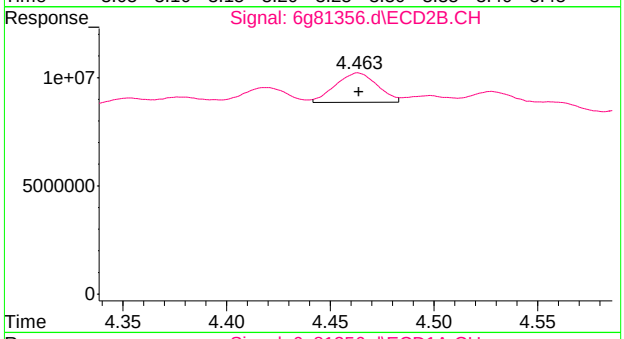
R.T.: 2.887 min
Delta R.T.: -0.002 min
Response: 92423688
Conc: 3.74 PPB

13.1.20 13



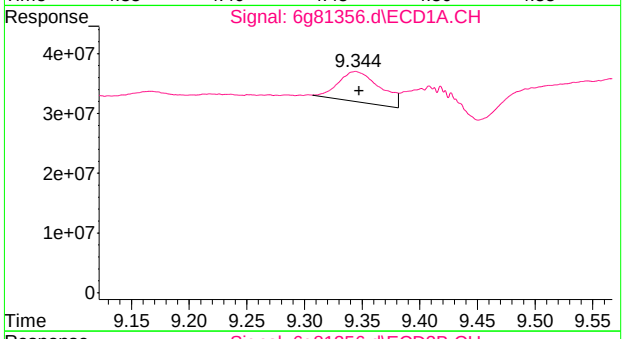
#8 delta-BHC

R.T.: 3.260 min
Delta R.T.: 0.029 min
Response: 46169549
Conc: 2.41 PPB



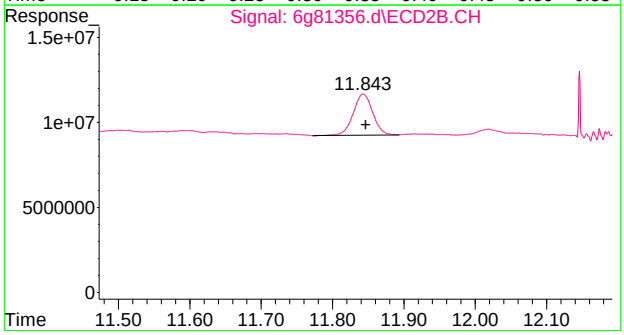
#8 delta-BHC

R.T.: 4.463 min
Delta R.T.: 0.000 min
Response: 19054895
Conc: 0.68 PPB m



#26 Decachlorobiphenyl

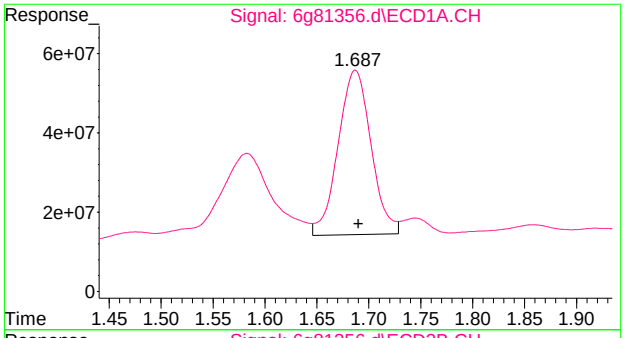
R.T.: 9.344 min
Delta R.T.: -0.003 min
Response: 127797681
Conc: 5.83 PPB



#26 Decachlorobiphenyl

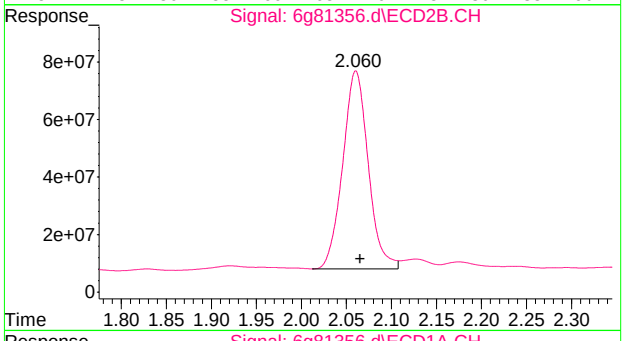
R.T.: 11.843 min
Delta R.T.: -0.003 min
Response: 45664533
Conc: 2.15 PPB

13.1.20
13



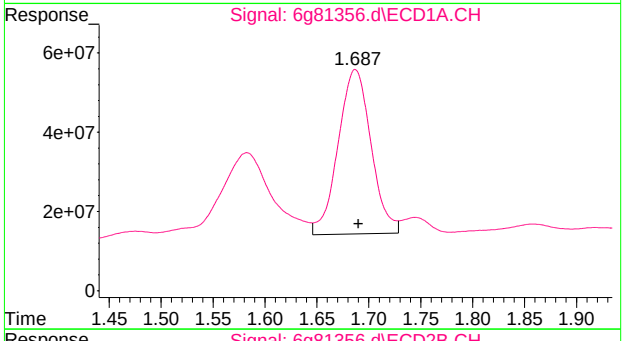
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.687 min
Delta R.T.: -0.003 min
Response: 916934627
Conc: 50.00 PPB



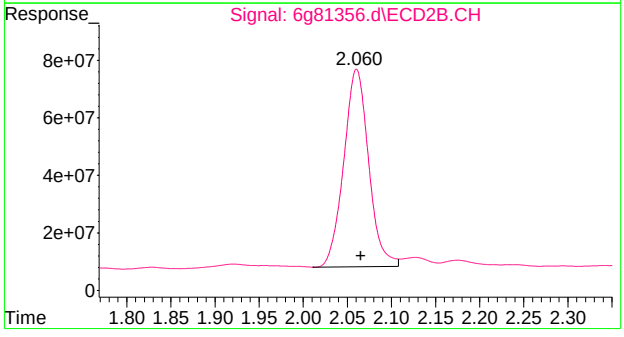
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.060 min
Delta R.T.: -0.005 min
Response: 1357587230
Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.687 min
Delta R.T.: -0.003 min
Response: 916934627
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.060 min
Delta R.T.: -0.005 min
Response: 1350404200
Conc: 50.00 PPB m

13.1.20
13

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/20/21 10:52

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81274.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17-Dec-21, 23:10:49
Operator : rebeccak
Sample : op37120-mb1
Misc : op37120,g6g2874,250,,,2,1
ALS Vial : 81 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 19:42:23 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.685	2.060	846.0E6	607.4E6	50.000	50.000
27) I 1-bromo-2...	1.685	2.060	846.0E6	607.4E6	50.000	50.000
33) I 1-bromo-2...	1.685	2.060	846.0E6	607.4E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.263	2.885	262.4E6	252.8E6	24.974	22.899
Spiked Amount 40.000	Range 30 - 150		Recovery =		62.43%	57.25%
26) SA Decachlor...	9.353	11.847	387.5E6	186.6E6	19.158m	19.711m
Spiked Amount 40.000			Recovery =		47.90%	49.28%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

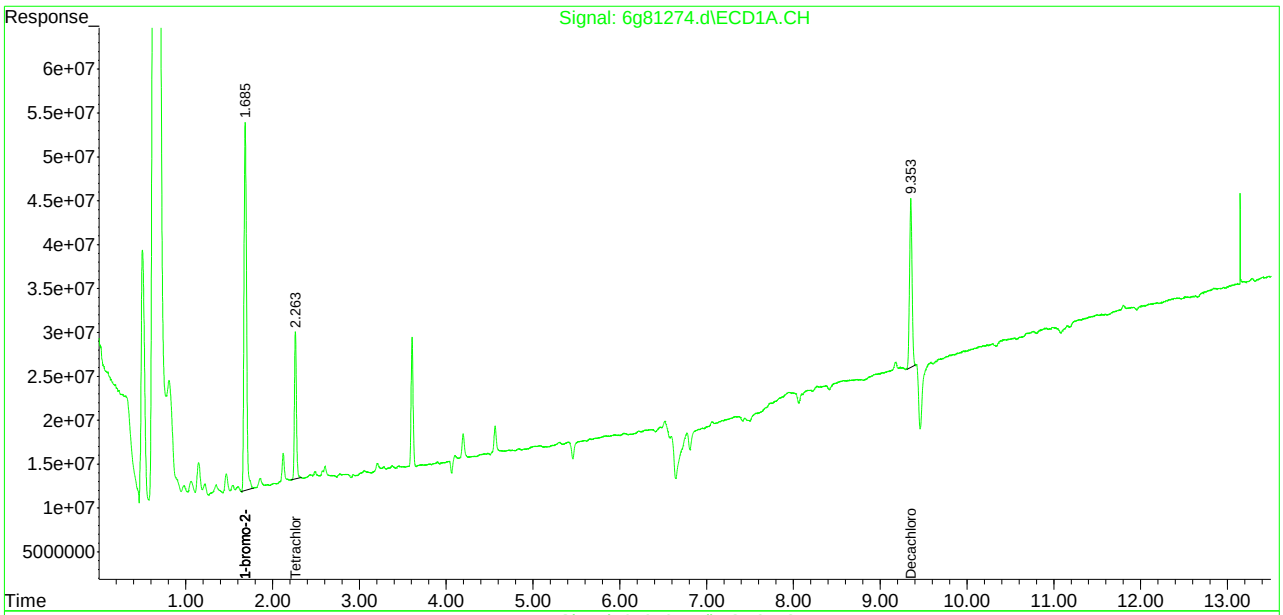
13.2.1
13

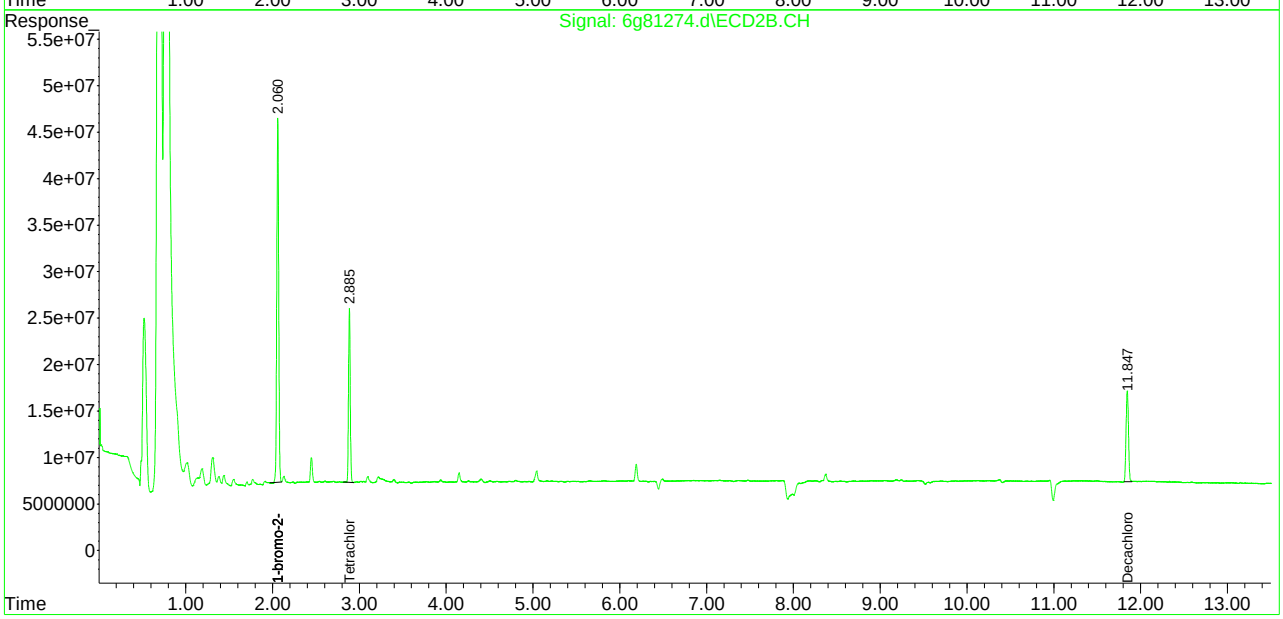
Quantitation Report (QT Reviewed)

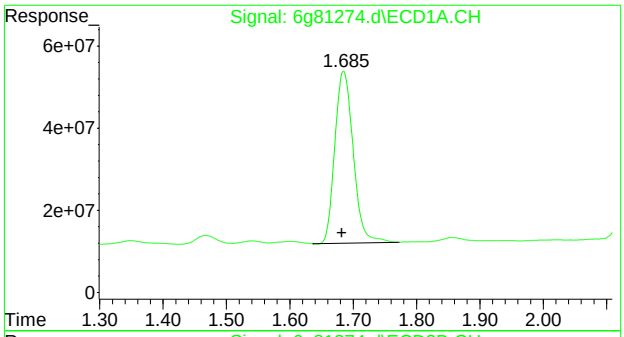
Data Path : C:\msdchem\1\data\trude\dec 20\g6g2874\
Data File : 6g81274.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17-Dec-21, 23:10:49
Operator : rebeccak
Sample : op37120-mb1
Misc : op37120,g6g2874,250,,,2,1
ALS Vial : 81 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 19 19:42:23 2021
Quant Method : C:\MSDCHEM\1\METHODS\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 19 19:20:17 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

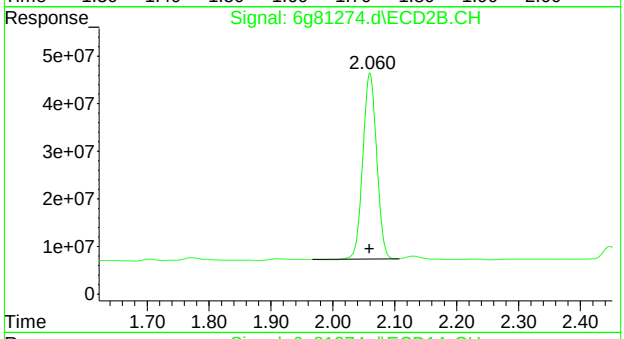






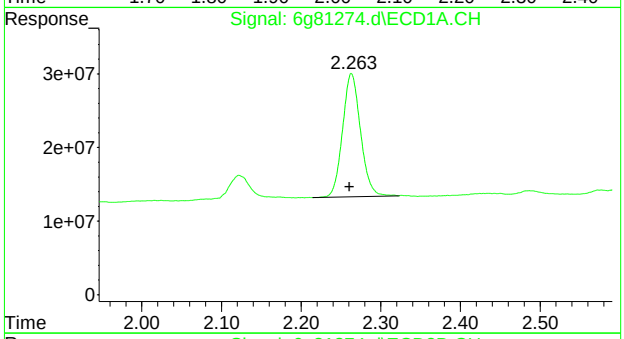
#1 1-bromo-2-nitrobenzene

R.T.: 1.685 min
Delta R.T.: 0.003 min
Response: 845950236
Conc: 50.00 PPB



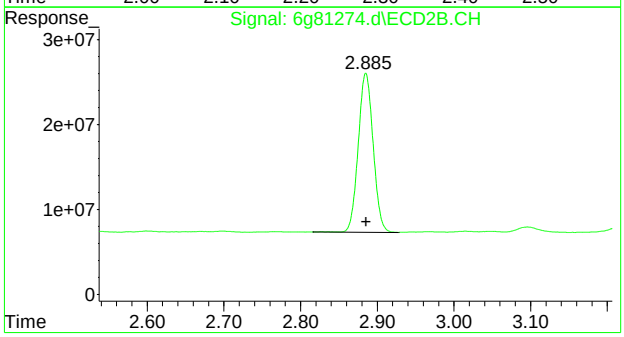
#1 1-bromo-2-nitrobenzene

R.T.: 2.060 min
Delta R.T.: 0.000 min
Response: 607411388
Conc: 50.00 PPB



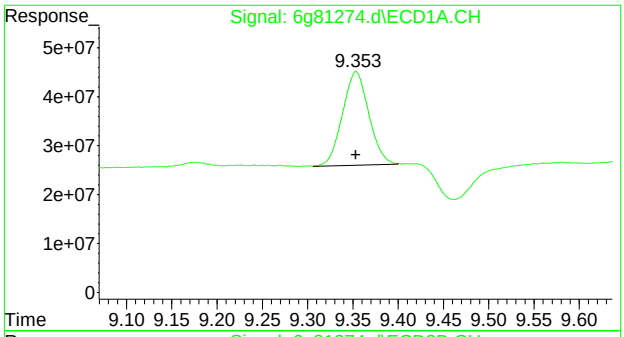
#2 Tetrachloro-m-xylene

R.T.: 2.263 min
Delta R.T.: 0.003 min
Response: 262367241
Conc: 24.97 PPB



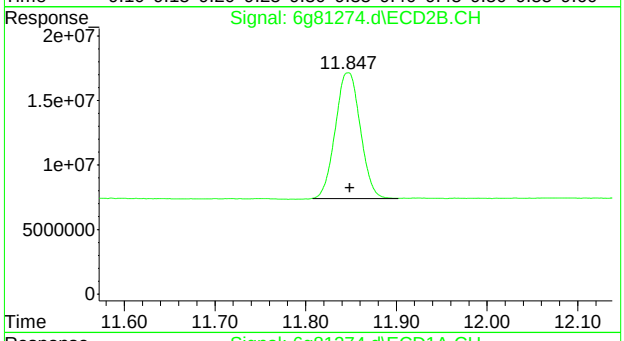
#2 Tetrachloro-m-xylene

R.T.: 2.885 min
Delta R.T.: 0.000 min
Response: 252753795
Conc: 22.90 PPB



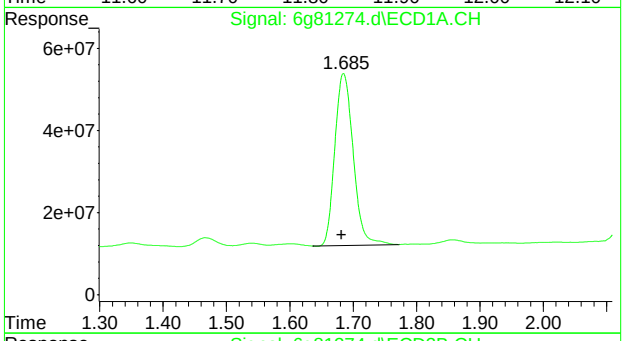
#26 Decachlorobiphenyl

R.T.: 9.353 min
Delta R.T.: 0.000 min
Response: 387490790
Conc: 19.16 PPB m



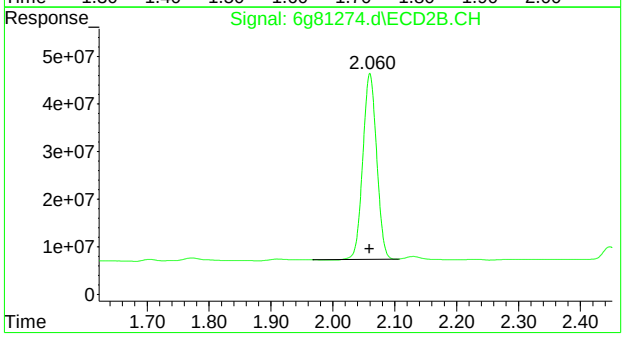
#26 Decachlorobiphenyl

R.T.: 11.847 min
Delta R.T.: -0.001 min
Response: 186620151
Conc: 19.71 PPB m



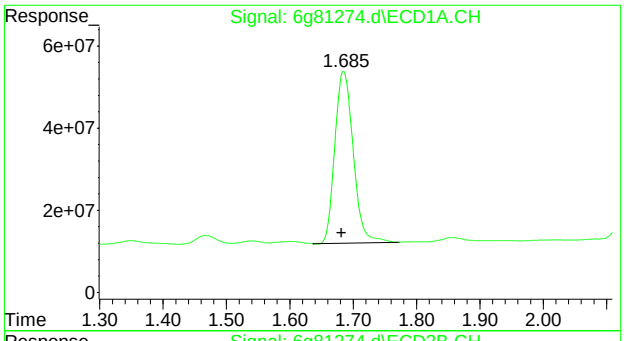
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.685 min
Delta R.T.: 0.003 min
Response: 845950236
Conc: 50.00 PPB



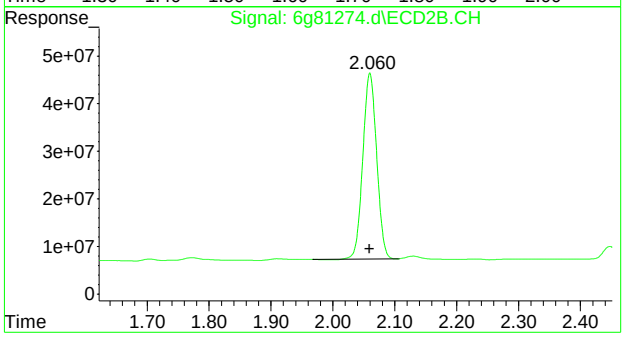
#27 1-bromo-2-nitrobenzeneA

R.T.: 2.060 min
Delta R.T.: 0.000 min
Response: 607411388
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.685 min
Delta R.T.: 0.003 min
Response: 845950236
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 2.060 min
Delta R.T.: 0.000 min
Response: 607411388
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81077.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 4:49 am
Operator : christp
Sample : icc2867-25
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 08:41:06 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 08:39:34 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
		Internal Standards							
1)	I	1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
27)	I	1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
33)	I	1-bromo-2...	1.689	2.064	799.4E6	552.2E6	50.000	50.000	
		System Monitoring Compounds							
2)	SAB	Tetrachlo...	2.268	2.889	255.6E6	247.5E6	27.942	25.988	
		Spiked Amount 40.000	Range 30 - 150		Recovery =		69.86%	64.97%	
26)	SA	Decachlor...	9.361	11.853	438.5E6	202.4E6	22.586m	28.026	
		Spiked Amount 40.000			Recovery =		56.46%	70.06%	
		Target Compounds							
3)		hexachlor...	2.581	3.400	681.4E6	285.6E6	26.546	25.055	
4)	A	alpha-BHC	2.714	3.555	513.9E6	365.8E6	21.637	25.439	
5)	MA	gamma-BHC	2.991	3.985	434.2E6	307.0E6	20.028	23.289	
6)	MA	Heptachlor	3.461	4.562	416.9E6	315.4E6	20.067	24.752	
7)	B	beta-BHC	3.064	4.070	173.0E6	135.0E6	20.133	21.978	
8)	B	delta-BHC	3.236	4.467	406.6E6	282.6E6	19.098m	23.262	
9)	MB	Aldrin	3.777	5.014	440.1E6	284.2E6	20.700	22.894	
10)		alachlor	3.922	4.825	43816318	40883081	31.937m	24.986	
11)	B	Heptachlo...	4.453	5.841	377.4E6	273.0E6	18.389	23.653	#
12)	B	gamma-Chl...	4.611	6.126	385.8E6	278.2E6	18.912	23.081	
13)	B	alpha-Chl...	4.774	6.352	392.8E6	268.1E6	19.962	23.729	
14)	A	Endosulfan I	4.938	6.447	414.9E6	259.8E6	21.462	23.483	
15)	B	4,4'-DDE	4.896	6.618	380.9E6	270.9E6	19.914	23.459	
16)	MA	Dieldrin	5.250	6.885	418.2E6	280.9E6	20.702	24.659	
17)	MA	Endrin	5.558	7.388	404.6E6	272.8E6	21.431	25.731	
18)	A	4,4'-DDD	5.697	7.570	308.3E6	228.8E6	20.877	24.816	
19)	B	Endosulfa...	5.867	7.741	363.2E6	244.0E6	20.937	24.705	
20)	MA	4,4'-DDT	6.102	8.103	320.0E6	227.7E6	20.678	25.144	
21)	B	Endrin Al...	6.473	8.315	279.1E6	173.8E6	19.630	21.385	
22)	B	Endosulfa...	7.134	8.782	364.1E6	238.3E6	21.795	25.847	
23)	A	Methoxychlor	6.883	9.348	184.0E6	125.9E6	26.356	27.933	
24)		Mirex	6.991	9.675	304.6E6	199.3E6	26.117	25.715	
25)	B	Endrin Ke...	7.557	9.742	337.9E6	217.8E6	20.265	21.830	
		Sum Toxaphene			0	0	N.D.	N.D.	
Average		Toxaphene					0.000	0.000	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

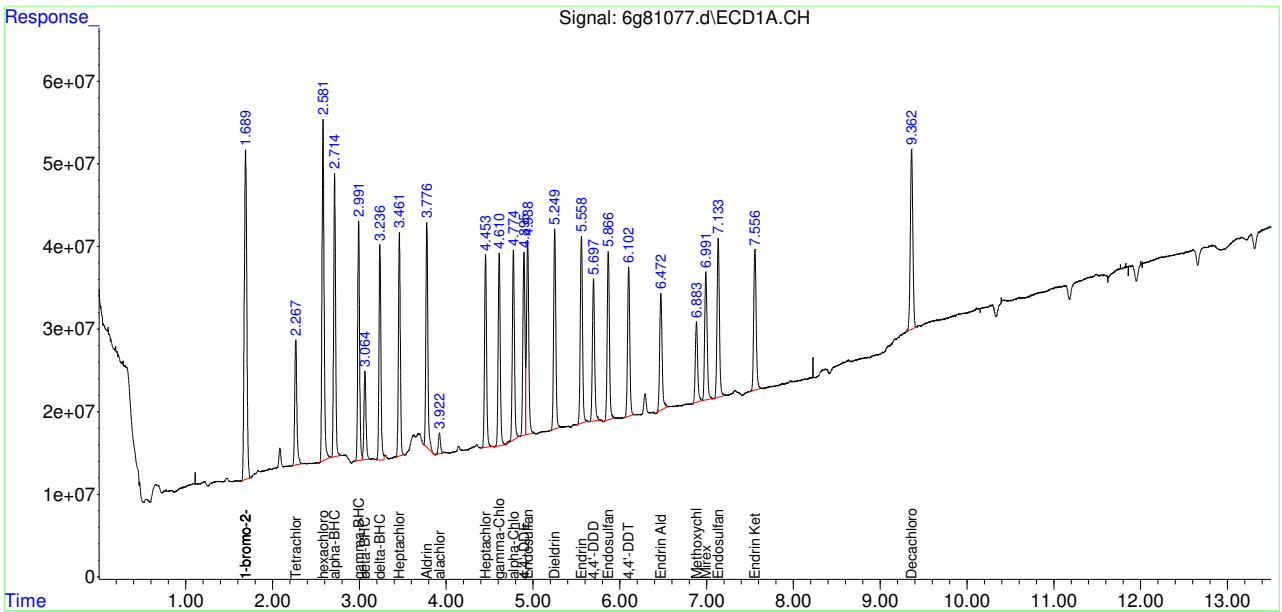
13.3.1
13

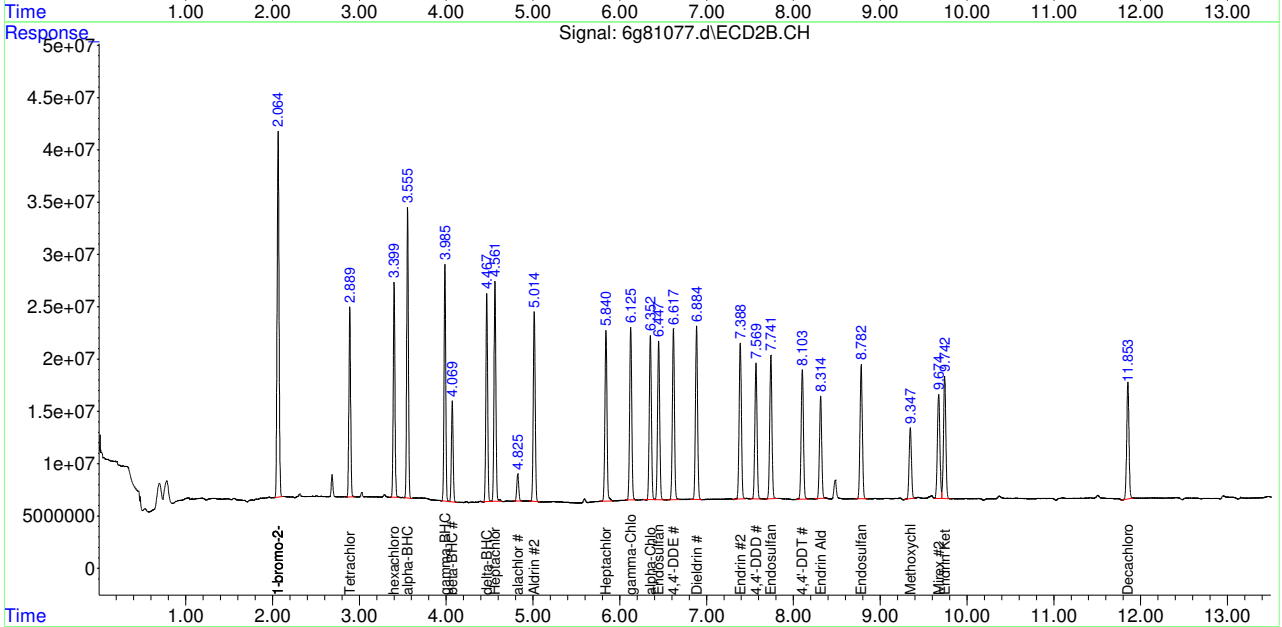
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81077.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 4:49 am
Operator : christp
Sample : icc2867-25
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 08:41:06 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 08:39:34 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81082.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:20 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:03:45 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:02:14 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000
27)	I 1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000
33)	I 1-bromo-2...	1.690	2.065	822.1E6	566.0E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.268	2.891	5806.8E6	5241.5E6	7.901	7.892
	Spiked Amount 40.000	Range 30 - 150		Recovery =		19.75%#	19.73%#
26)	SA Decachlor...	9.362	11.853	10772.8E6	4000.8E6	6.874m	6.911
	Spiked Amount 40.000			Recovery =		17.18%	17.28%
	Target Compounds						
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
34)	Chlordane...	3.461	4.562	597.5E6	374.1E6	1182.958	1382.044
35)	Chlordane...	3.914	5.209	365.7E6	205.2E6	702.530	688.043
36)	Chlordane...	4.610	6.126	1131.9E6	750.3E6	525.606	715.581 #
37)	Chlordane...	4.768	6.351	1859.4E6	1229.1E6	511.620	639.417m
38)	Chlordane...	5.779	7.818	284.4E6	185.6E6	468.892	682.840 #
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

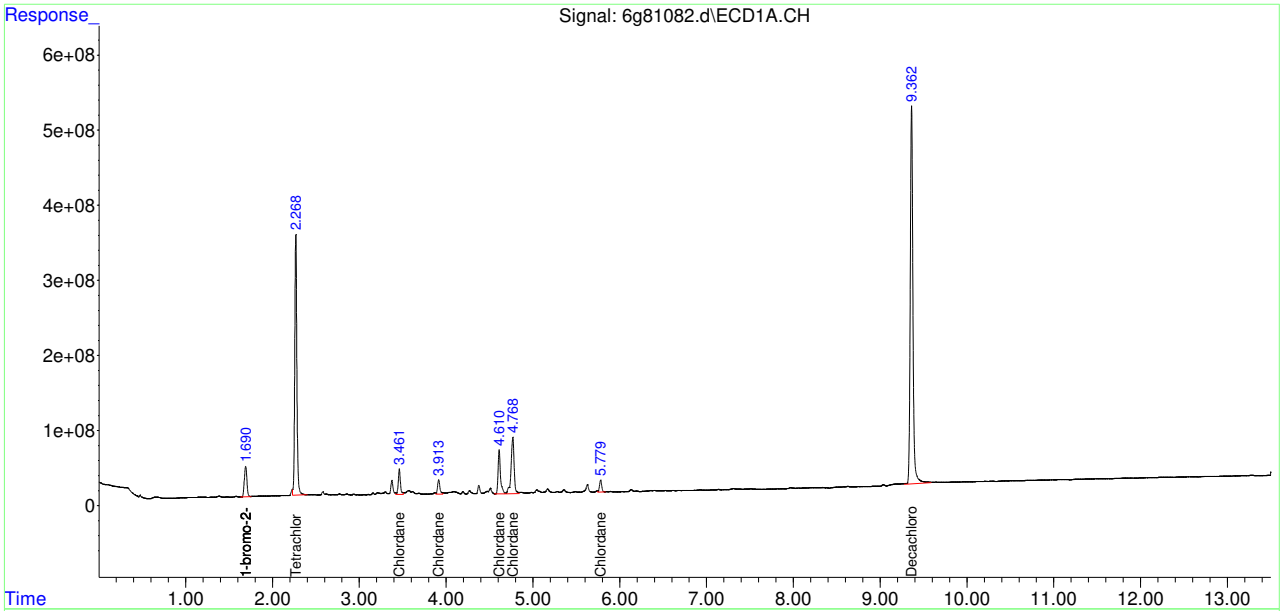
13.3.2
13

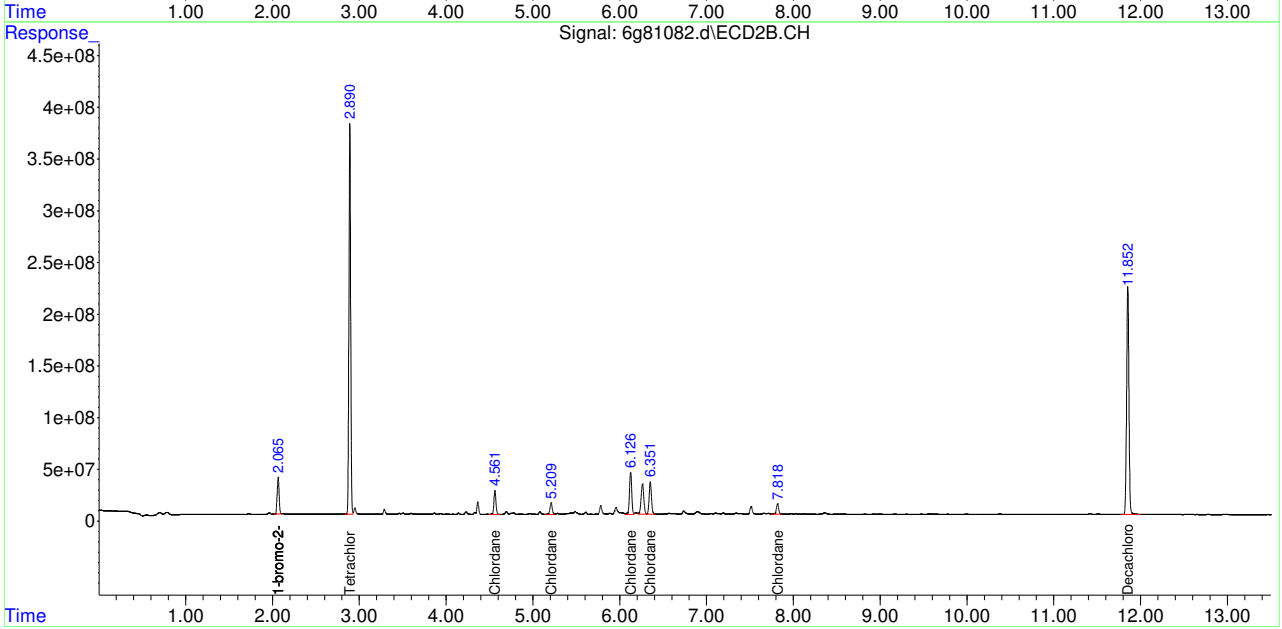
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81082.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:20 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:03:45 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:02:14 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/14/21 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81083.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:38 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:08:38 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:05:38 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
27)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
33)	I 1-bromo-2...	1.695	2.068	804.2E6	551.1E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.271	2.892	526.2E6	509.1E6	0.732	0.787
	Spiked Amount 40.000	Range 30 - 150		Recovery =		1.83%#	1.97%#
26)	SA Decachlor...	9.363	11.852	913.7E6	414.0E6	0.596	0.734
	Spiked Amount 40.000			Recovery =		1.49%	1.83%
	Target Compounds						
28)	L8 Toxaphene{A}	5.613	6.849	163.4E6	71929449	1242.670m	677.901m#
29)	L8 Toxaphene{B}	5.855	7.710	208.7E6	113.3E6	541.393m	632.663m
30)	L8 Toxaphene{C}	6.026	7.872	189.4E6	217.7E6	492.947m	636.971m#
31)	L8 Toxaphene{D}	6.361	8.310	167.8E6	102.1E6	571.511m	556.343m
32)	L8 Toxaphene{E}	6.982	9.214	183.5E6	131.3E6	543.649m	743.268 #
	Sum Toxaphene			912.9E6	636.3E6	3392.168	3247.146
Average Toxaphene						678.434	649.429

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

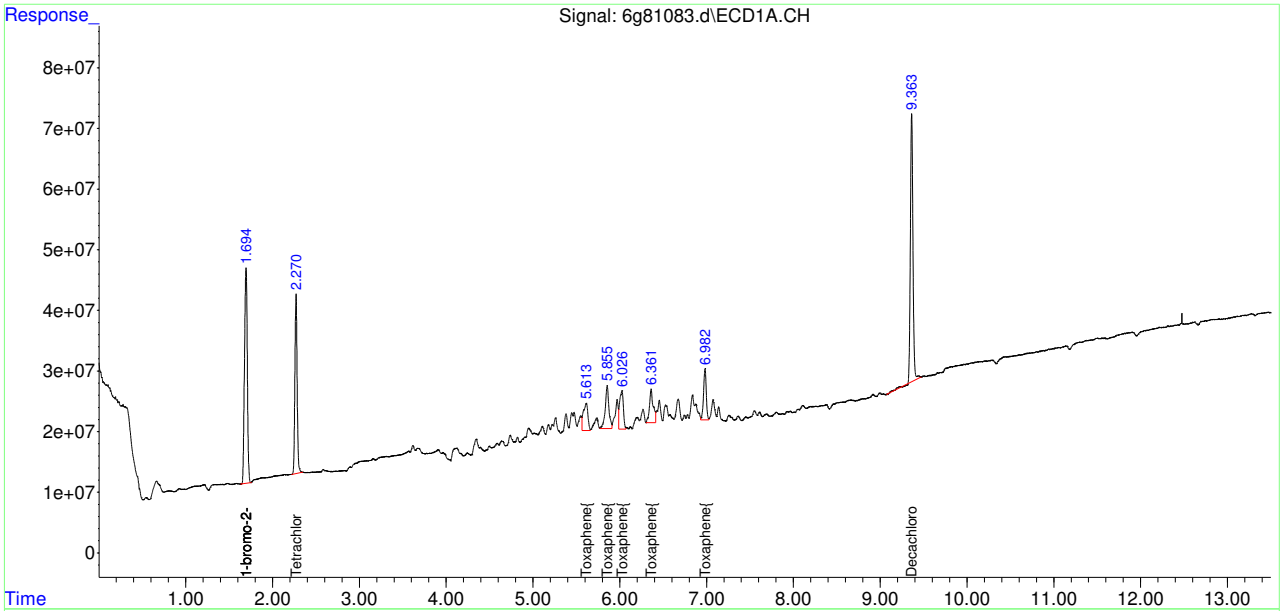
13.3.3
13

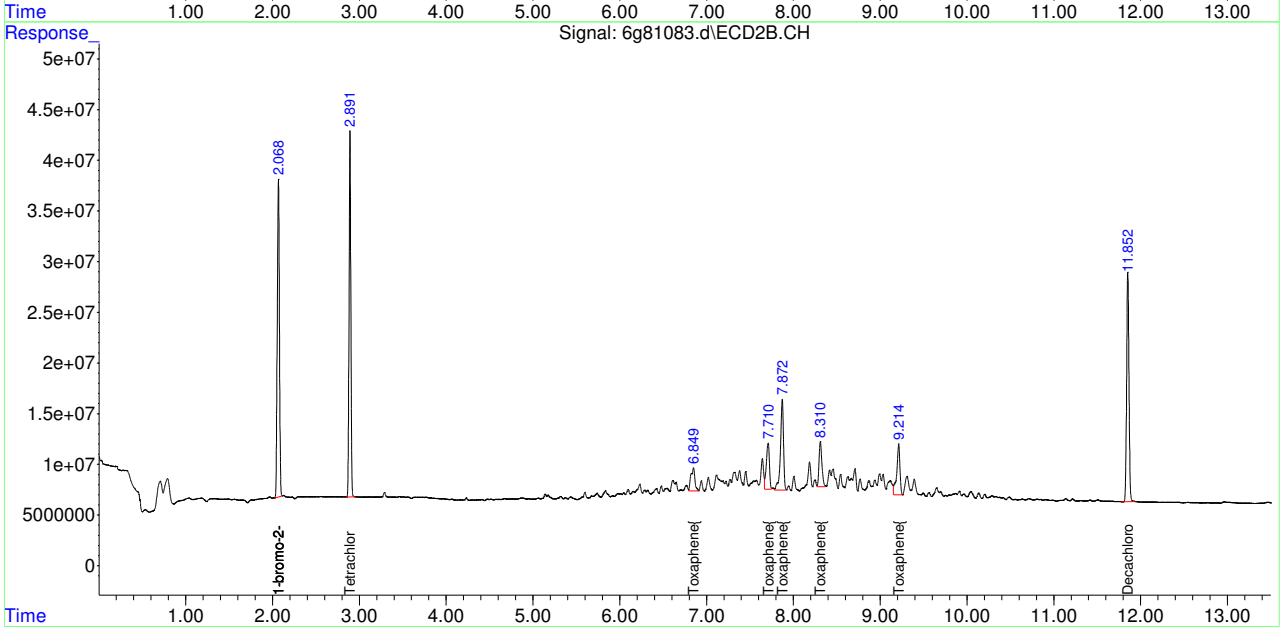
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g6g2867\
Data File : 6g81083.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Dec 2021 6:38 am
Operator : christp
Sample : ic2867-500
Misc : op36673a,g6g2867,980,,,5,1
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Dec 12 10:08:38 2021
Quant Method : C:\msdchem\1\methods\6pst2867.m
Quant Title : PEST/PCB
QLast Update : Sun Dec 12 10:05:38 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51602
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:09	MA51602-STD1	1		b=2.3337e-004,c=1.8259e-003,rho=0.9998036
11:10	MA51602-STD2	1		STDB
11:12	MA51602-STD3	1		STDC
11:13	MA51602-STD4	1		STDD
11:15	MA51602-STD5	1		STDE
11:17	MA51602-STD6	1		STDF
11:19	ZZZZZZ	1		
11:25	MA51602-ICV1	1		
11:26	MA51602-ICB1	1		
11:28	MA51602-CCV1	1		
11:30	MA51602-CCB1	1		
11:32	MA51602-CRI1	1		
11:33	MP30378-B1	1		
11:34	MP30378-B2	1		
11:36	MP30378-S1	1		
11:38	MP30378-S2	1		
11:41	MA51602-CCV2	1		
11:44	MA51602-CCB2	1		
11:46	MP30378-MB1	1		
11:47	JD36551-11	1		(sample used for QC only; not part of login JD36624)
11:48	ZZZZZZ	1		
11:51	ZZZZZZ	1		
11:53	ZZZZZZ	1		
11:56	ZZZZZZ	1		
11:58	ZZZZZZ	1		
11:59	ZZZZZZ	1		
12:01	MA51602-CCV3	1		
12:02	MA51602-CCB3	1		
12:04	ZZZZZZ	1		
12:06	ZZZZZZ	1		
12:07	ZZZZZZ	1		
12:08	ZZZZZZ	1		
12:10	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51602
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:11	ZZZZZZ	1		
12:12	ZZZZZZ	1		
12:14	ZZZZZZ	1		
12:15	MA51602-CCV4	1		
12:17	MA51602-CCB4	1		
12:19	ZZZZZZ	1		
12:20	ZZZZZZ	1		
12:21	ZZZZZZ	1		
12:23	MP30379-B1	1		
12:24	MP30379-S1	1		
12:26	MP30379-S2	1		
12:28	MA51602-CCV5	1		
12:30	MA51602-CCB5	1		
12:32	MP30379-MB1	1		
12:34	JD36568-3	1		(sample used for QC only; not part of login JD36624)
12:35	ZZZZZZ	1		
12:36	ZZZZZZ	1		
12:38	ZZZZZZ	1		
12:39	ZZZZZZ	1		
12:41	ZZZZZZ	1		
12:42	ZZZZZZ	1		
12:43	MA51602-CCV6	1		
12:45	MA51602-CCB6	1		
12:47	ZZZZZZ	1		
12:48	ZZZZZZ	1		
12:50	ZZZZZZ	1		
12:51	ZZZZZZ	1		
12:52	ZZZZZZ	1		
12:54	ZZZZZZ	1		
12:55	ZZZZZZ	1		
12:56	ZZZZZZ	1		
12:58	MA51602-CCV7	1		
12:59	MA51602-CCB7	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51602
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:01	ZZZZZZ	1		
13:03	ZZZZZZ	1		
13:04	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:07	ZZZZZZ	1		
13:08	MP30380-B1	1		
13:10	MP30380-S1	1		
13:12	MP30380-S2	1		
13:13	MA51602-CCV8	1		
13:15	MA51602-CCB8	1		
13:17	MP30380-MB1	1		
13:19	JD36567-4	1		(sample used for QC only; not part of login JD36624)
13:20	ZZZZZZ	1		
13:22	ZZZZZZ	1		
13:23	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:26	ZZZZZZ	1		
13:27	ZZZZZZ	1		
13:29	MA51602-CCV9	1		
13:30	MA51602-CCB9	1		
13:32	ZZZZZZ	1		
13:33	ZZZZZZ	1		
13:35	ZZZZZZ	1		
13:36	ZZZZZZ	1		
13:38	ZZZZZZ	1		
13:39	JD36624-2	1		
13:40	JD36624-3	1		
13:42	JD36624-4	1		
13:43	MA51602-CCV10	1		
13:45	MA51602-CCB10	1		
13:47	JD36624-2F	1		
13:48	JD36624-3F	1		
13:49	JD36624-4F	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51602
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:51	ZZZZZZ	1		
13:52	MP30381-B1	1		
13:54	MP30381-S1	1		
13:55	MP30381-S2	1		
13:57	MA51602-CCV11	1		
13:59	MA51602-CCB11	1		
14:01	MP30381-MB1	1		
14:03	JD36624-5	1		
14:04	JD36624-6	1		
14:06	JD36624-7	1		
14:07	JD36624-8	1		
14:08	ZZZZZZ	1		
14:10	JD36624-10	1		
14:11	JD36624-11	1		
14:13	MA51602-CCV12	1		
14:14	MA51602-CCB12	1		
14:16	JD36624-12	1		
14:18	JD36624-13	1		
14:19	JD36624-14	1		
14:21	JD36624-5F	1		
14:22	JD36624-6F	1		
14:24	JD36624-7F	1		
14:25	JD36624-8F	1		
14:27	MA51602-CCV13	1		
14:28	MA51602-CCB13	1		
14:30	ZZZZZZ	1		
14:31	JD36624-10F	1		
14:33	JD36624-11F	1		
14:34	JD36624-12F	1		
14:36	JD36624-13F	1		
14:37	JD36624-14F	1		
14:39	MP30382-B1	1		
14:40	MA51602-CCV14	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51602
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:42	MA51602-CCB14	1		
14:44	MP30382-MB1	1		
14:46	ZZZZZZ	1		
14:47	MP30383-B1	1		
14:48	MP30383-S1	1		
14:50	MP30383-S2	1		
14:52	MA51602-CCV15	1		
14:54	MA51602-CCB15	1		
14:56	MP30383-MB1	1		
14:58	JD35488-3	1		(sample used for QC only; not part of login JD36624)
14:59	ZZZZZZ	1		
15:01	ZZZZZZ	1		
15:02	ZZZZZZ	1		
15:03	ZZZZZZ	1		
15:05	ZZZZZZ	1		
15:06	ZZZZZZ	1		
15:08	MA51602-CCV16	1		
15:09	MA51602-CCB16	1		
15:11	ZZZZZZ	1		
15:12	ZZZZZZ	1		
15:14	ZZZZZZ	1		
15:15	ZZZZZZ	1		
15:16	ZZZZZZ	1		
15:18	ZZZZZZ	1		
15:20	ZZZZZZ	1		
15:21	MA51602-CCV17	1		
15:22	MA51602-CCB17	1		
15:24	ZZZZZZ	1		
15:26	ZZZZZZ	1		
15:27	ZZZZZZ	1		
15:29	ZZZZZZ	1		
15:30	MP30384-B1	1		
15:31	MP30384-S1	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51602
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:33	MP30384-S2	1		
15:35	MA51602-CCV18	1		
15:37	MA51602-CCB18	1		
15:39	MP30384-MB1	1		
15:41	JD35488-5	1		(sample used for QC only; not part of login JD36624)
15:42	ZZZZZZ	1		
15:44	ZZZZZZ	1		
15:45	ZZZZZZ	1		
15:46	ZZZZZZ	1		
15:48	ZZZZZZ	1		
15:49	ZZZZZZ	1		
15:51	MA51602-CCV19	1		
15:52	MA51602-CCB19	1		
15:54	ZZZZZZ	1		
15:55	JD36551-11	40		(sample used for QC only; not part of login JD36624)
15:57	ZZZZZZ	10		
15:59	ZZZZZZ	20		
16:01	ZZZZZZ	5		
16:02	JD36624-9	1		
16:04	JD36624-9F	1		
---------->	Last reportable sample/prep for job JD36624			
16:08	MA51602-CCV20	1		
16:10	MA51602-CCB20	1		
---------->	Last reportable CCB for job JD36624			
	Refer to raw data for calibration curve and standards.			

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51602
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
11:19	ZZZZZZ	1		
11:25	MA51602-ICV1	1	X	
11:26	MA51602-ICB1	1	X	
11:28	MA51602-CCV1	1	X	
11:30	MA51602-CCB1	1	X	
11:32	MA51602-CRI1	1	X	
11:33	MP30378-B1	1	X	
11:34	MP30378-B2	1	X	
11:36	MP30378-S1	1		
11:38	MP30378-S2	1		
11:41	MA51602-CCV2	1	X	
11:44	MA51602-CCB2	1	X	
11:46	MP30378-MB1	1	X	
11:47	JD36551-11	1		(a)
11:48	ZZZZZZ	1		
11:51	ZZZZZZ	1		
11:53	ZZZZZZ	1		
11:56	ZZZZZZ	1		
11:58	ZZZZZZ	1		
11:59	ZZZZZZ	1		
12:01	MA51602-CCV3	1	X	
12:02	MA51602-CCB3	1	X	
12:04	ZZZZZZ	1		
12:06	ZZZZZZ	1		
12:07	ZZZZZZ	1		
12:08	ZZZZZZ	1		
12:10	ZZZZZZ	1		
12:11	ZZZZZZ	1		
12:12	ZZZZZZ	1		
12:14	ZZZZZZ	1		
12:15	MA51602-CCV4	1	X	
12:17	MA51602-CCB4	1	X	
12:19	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51602
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
12:20	ZZZZZZ	1		
12:21	ZZZZZZ	1		
12:23	MP30379-B1	1	X	
12:24	MP30379-S1	1	X	
12:26	MP30379-S2	1	X	
12:28	MA51602-CCV5	1	X	
12:30	MA51602-CCB5	1	X	
12:32	MP30379-MB1	1	X	
12:34	JD36568-3	1	X	(a)
12:35	ZZZZZZ	1		
12:36	ZZZZZZ	1		
12:38	ZZZZZZ	1		
12:39	ZZZZZZ	1		
12:41	ZZZZZZ	1		
12:42	ZZZZZZ	1		
12:43	MA51602-CCV6	1	X	
12:45	MA51602-CCB6	1	X	
12:47	ZZZZZZ	1		
12:48	ZZZZZZ	1		
12:50	ZZZZZZ	1		
12:51	ZZZZZZ	1		
12:52	ZZZZZZ	1		
12:54	ZZZZZZ	1		
12:55	ZZZZZZ	1		
12:56	ZZZZZZ	1		
12:58	MA51602-CCV7	1	X	
12:59	MA51602-CCB7	1	X	
13:01	ZZZZZZ	1		
13:03	ZZZZZZ	1		
13:04	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:07	ZZZZZZ	1		
13:08	MP30380-B1	1	X	
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51602
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
13:10	MP30380-S1	1	X	
13:12	MP30380-S2	1	X	
13:13	MA51602-CCV8	1	X	
13:15	MA51602-CCB8	1	X	
13:17	MP30380-MB1	1	X	
13:19	JD36567-4	1	X	(a)
13:20	ZZZZZZ	1		
13:22	ZZZZZZ	1		
13:23	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:26	ZZZZZZ	1		
13:27	ZZZZZZ	1		
13:29	MA51602-CCV9	1	X	
13:30	MA51602-CCB9	1	X	
13:32	ZZZZZZ	1		
13:33	ZZZZZZ	1		
13:35	ZZZZZZ	1		
13:36	ZZZZZZ	1		
13:38	ZZZZZZ	1		
13:39	JD36624-2	1	X	
13:40	JD36624-3	1	X	
13:42	JD36624-4	1	X	
13:43	MA51602-CCV10	1	X	
13:45	MA51602-CCB10	1	X	
13:47	JD36624-2F	1	X	
13:48	JD36624-3F	1	X	
13:49	JD36624-4F	1	X	
13:51	ZZZZZZ	1		
13:52	MP30381-B1	1	X	
13:54	MP30381-S1	1	X	
13:55	MP30381-S2	1	X	
13:57	MA51602-CCV11	1	X	
13:59	MA51602-CCB11	1	X	
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51602
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg
14:01	MP30381-MB1	1	X
14:03	JD36624-5	1	X
14:04	JD36624-6	1	X
14:06	JD36624-7	1	X
14:07	JD36624-8	1	X
14:08	ZZZZZZ	1	
14:10	JD36624-10	1	X
14:11	JD36624-11	1	X
14:13	MA51602-CCV12	1	X
14:14	MA51602-CCB12	1	X
14:16	JD36624-12	1	X
14:18	JD36624-13	1	X
14:19	JD36624-14	1	X
14:21	JD36624-5F	1	X
14:22	JD36624-6F	1	X
14:24	JD36624-7F	1	X
14:25	JD36624-8F	1	X
14:27	MA51602-CCV13	1	X
14:28	MA51602-CCB13	1	X
14:30	ZZZZZZ	1	
14:31	JD36624-10F	1	X
14:33	JD36624-11F	1	X
14:34	JD36624-12F	1	X
14:36	JD36624-13F	1	X
14:37	JD36624-14F	1	X
14:39	MP30382-B1	1	X
14:40	MA51602-CCV14	1	X
14:42	MA51602-CCB14	1	X
14:44	MP30382-MB1	1	X
14:46	ZZZZZZ	1	
14:47	MP30383-B1	1	X
14:48	MP30383-S1	1	X
14:50	MP30383-S2	1	X
		Element:	Hg

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51602
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
14:52	MA51602-CCV15	1	X	
14:54	MA51602-CCB15	1	X	
14:56	MP30383-MB1	1	X	
14:58	JD35488-3	1	X	(a)
14:59	ZZZZZZ	1		
15:01	ZZZZZZ	1		
15:02	ZZZZZZ	1		
15:03	ZZZZZZ	1		
15:05	ZZZZZZ	1		
15:06	ZZZZZZ	1		
15:08	MA51602-CCV16	1	X	
15:09	MA51602-CCB16	1	X	
15:11	ZZZZZZ	1		
15:12	ZZZZZZ	1		
15:14	ZZZZZZ	1		
15:15	ZZZZZZ	1		
15:16	ZZZZZZ	1		
15:18	ZZZZZZ	1		
15:20	ZZZZZZ	1		
15:21	MA51602-CCV17	1	X	
15:22	MA51602-CCB17	1	X	
15:24	ZZZZZZ	1		
15:26	ZZZZZZ	1		
15:27	ZZZZZZ	1		
15:29	ZZZZZZ	1		
15:30	MP30384-B1	1	X	
15:31	MP30384-S1	1	X	
15:33	MP30384-S2	1	X	
15:35	MA51602-CCV18	1	X	
15:37	MA51602-CCB18	1	X	
15:39	MP30384-MB1	1	X	
15:41	JD35488-5	1	X	(a)
15:42	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51602
Parameters: Hg

Time	Sample Description	Element: Dilution	H g	
15:44	ZZZZZZ	1		
15:45	ZZZZZZ	1		
15:46	ZZZZZZ	1		
15:48	ZZZZZZ	1		
15:49	ZZZZZZ	1		
15:51	MA51602-CCV19	1	X	
15:52	MA51602-CCB19	1	X	
15:54	ZZZZZZ	1		
15:55	JD36551-11	40	X	(a)
15:57	ZZZZZZ	10		
15:59	ZZZZZZ	20		
16:01	ZZZZZZ	5		
16:02	JD36624-9	1	X	
16:04	JD36624-9F	1	X	
16:08	MA51602-CCV20	1	X	
16:10	MA51602-CCB20	1	X	

(a) Sample used for QC only; not part of login JD36624.

Element: H g

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51602 Units: ug/l

Time:			11:26		11:30		11:44		12:02	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0621	<0.20	-0.0696	<0.20	-0.0901	<0.20	-0.0733	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51602 Units: ug/l

Time:			12:17		12:30		12:45		12:59	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0462	<0.20	-0.0694	<0.20	-0.0439	<0.20	-0.0584	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51602 Units: ug/l

Time:			13:15		13:30		13:45		13:59	
Sample ID:			CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0504	<0.20	-0.0486	<0.20	-0.0500	<0.20	-0.0533	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51602 Units: ug/l

Time:			14:14		14:28		14:42		14:54	
Sample ID:			CCB12		CCB13		CCB14		CCB15	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0584	<0.20	-0.0514	<0.20	-0.0458	<0.20	-0.0612	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51602 Units: ug/l

Time:			15:09		15:22		15:37		15:52	
Sample ID:			CCB16		CCB17		CCB18		CCB19	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0549	<0.20	-0.0465	<0.20	-0.0413	<0.20	-0.0544	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51602 Units: ug/l

Time:			16:10	
Sample ID:			CCB20	
Metal	RL	IDL	raw	final
Mercury	0.20	.034	-0.0364	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51602 Units: ug/l

Time:		11:25			11:28			11:41	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.12	104.0	2.5	2.57	102.8	2.5	2.50	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51602 Units: ug/l

Time:		12:01			12:15			12:28	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.58	103.2	2.5	2.57	102.8	2.5	2.47	98.8

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51602 Units: ug/l

Time:		12:43			12:58			13:13	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.60	104.0	2.5	2.59	103.6	2.5	2.54	101.6

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51602 Units: ug/l

Time:		13:29			13:43			13:57	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.56	102.4	2.5	2.52	100.8	2.5	2.53	101.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51602 Units: ug/l

Time:		14:13			14:27			14:40	
Sample ID:	CCV	CCV12		CCV	CCV13		CCV	CCV14	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.47	98.8	2.5	2.56	102.4	2.5	2.43	97.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51602 Units: ug/l

Time:		14:52			15:08			15:21	
Sample ID:	CCV	CCV15		CCV	CCV16		CCV	CCV17	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.45	98.0	2.5	2.54	101.6	2.5	2.58	103.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51602 Units: ug/l

Time:		15:35			15:51			16:08	
Sample ID:	CCV	CCV18		CCV	CCV19		CCV	CCV20	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.55	102.0	2.5	2.59	103.6	2.5	2.53	101.2

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121521W1.CSV Date Analyzed: 12/15/21 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA51602 Units: ug/l

Time:			11:32	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Mercury	0.20		0.223	111.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51606
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:09	MA51606-STD1	1		b=1.8919e-004,c=1.0768e-002,rho=0.9997759
14:10	MA51606-STD2	1		STDB
14:11	MA51606-STD3	1		STDC
14:13	MA51606-STD4	1		STDD
14:15	MA51606-STD5	1		STDE
14:16	MA51606-STD6	1		STDF
14:19	MA51606-ICV1	1		
14:20	MA51606-ICB1	1		
14:22	MA51606-CCV1	1		
14:24	MA51606-CCB1	1		
14:26	MA51606-CRI1	1		
14:27	MP30402-B1	1		
14:29	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:33	MA51606-CCV2	1		
14:35	MA51606-CCB2	1		
14:37	MP30402-MB1	1		
14:39	JD36551-13	1		(sample used for QC only; not part of login JD36624)
14:40	ZZZZZZ	1		
14:42	ZZZZZZ	1		
14:45	ZZZZZZ	1		
14:47	ZZZZZZ	1		
14:50	JD36624-15	1		
14:51	JD36624-16	1		
14:53	MA51606-CCV3	1		
14:54	MA51606-CCB3	1		
14:56	JD36624-17	1		
14:58	JD36624-15F	1		
14:59	JD36624-16F	1		
15:01	JD36624-17F	1		
15:02	ZZZZZZ	1		
15:04	ZZZZZZ	1		
15:05	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51606
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:07	ZZZZZZ	1		
15:08	MA51606-CCV4	1		
15:10	MA51606-CCB4	1		
15:11	ZZZZZZ	1		
15:13	ZZZZZZ	1		
15:14	ZZZZZZ	1		
15:16	ZZZZZZ	1		
15:17	MP30403-B1	1		
15:19	MP30403-S1	1		
15:20	MP30403-S2	1		
15:22	MA51606-CCV5	1		
15:24	MA51606-CCB5	1		
15:26	MP30403-MB1	1		
15:28	JD36625-10	1		(sample used for QC only; not part of login JD36624)
15:29	ZZZZZZ	1		
15:30	ZZZZZZ	1		
15:32	ZZZZZZ	1		
15:33	ZZZZZZ	1		
15:35	ZZZZZZ	1		
15:36	MA51606-CCV6	1		
15:37	MA51606-CCB6	1		
15:39	ZZZZZZ	1		
15:41	ZZZZZZ	1		
15:42	ZZZZZZ	1		
15:44	ZZZZZZ	1		
15:45	ZZZZZZ	1		
15:46	ZZZZZZ	1		
15:48	ZZZZZZ	1		
15:49	MA51606-CCV7	1		
15:51	MA51606-CCB7	1		
15:53	ZZZZZZ	1		
15:54	ZZZZZZ	1		
15:55	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51606
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:57	MP30404-B1	1		
15:58	MP30404-S1	1		
16:00	MP30404-S2	1		
16:02	MA51606-CCV8	1		
16:04	MA51606-CCB8	1		
16:06	MP30404-MB1	1		
16:07	JD36659-1	1		(sample used for QC only; not part of login JD36624)
16:09	ZZZZZZ	1		
16:11	ZZZZZZ	1		
16:13	ZZZZZZ	1		
16:14	ZZZZZZ	1		
16:16	ZZZZZZ	1		
16:17	ZZZZZZ	1		
16:19	MA51606-CCV9	1		
16:21	MA51606-CCB9	1		
16:22	ZZZZZZ	1		
16:24	ZZZZZZ	1		
16:25	ZZZZZZ	1		
16:27	ZZZZZZ	1		
16:28	MP30405-B1	1		
16:30	MP30405-S1	1		
16:32	MP30405-S2	1		
16:34	MA51606-CCV10	1		
16:36	MA51606-CCB10	1		
16:38	MP30405-MB1	1		
16:39	JD36629-1A	1		(sample used for QC only; not part of login JD36624)
16:40	ZZZZZZ	1		
16:42	ZZZZZZ	1		
16:43	MP30402-S1	40		
16:45	MP30402-S2	40		
---------->	Last reportable sample/prep for job JD36624			
16:47	JD36551-13	40		(sample used for QC only; not part of login JD36624)
16:49	ZZZZZZ	40		
16:51	MA51606-CCV11	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51606
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:53	MA51606-CCB11	1		
---------->	Last reportable CCB for job JD36624			
16:55	ZZZZZZ	5		
16:56	ZZZZZZ	5		
16:58	MA51606-CCV12	1		
17:00	MA51606-CCB12	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51606
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
14:19	MA51606-ICV1	1	X	
14:20	MA51606-ICB1	1	X	
14:22	MA51606-CCV1	1	X	
14:24	MA51606-CCB1	1	X	
14:26	MA51606-CRI1	1	X	
14:27	MP30402-B1	1	X	
14:29	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:33	MA51606-CCV2	1	X	
14:35	MA51606-CCB2	1	X	
14:37	MP30402-MB1	1	X	
14:39	JD36551-13	1		(a)
14:40	ZZZZZZ	1		
14:42	ZZZZZZ	1		
14:45	ZZZZZZ	1		
14:47	ZZZZZZ	1		
14:50	JD36624-15	1	X	
14:51	JD36624-16	1	X	
14:53	MA51606-CCV3	1	X	
14:54	MA51606-CCB3	1	X	
14:56	JD36624-17	1	X	
14:58	JD36624-15F	1	X	
14:59	JD36624-16F	1	X	
15:01	JD36624-17F	1	X	
15:02	ZZZZZZ	1		
15:04	ZZZZZZ	1		
15:05	ZZZZZZ	1		
15:07	ZZZZZZ	1		
15:08	MA51606-CCV4	1	X	
15:10	MA51606-CCB4	1	X	
15:11	ZZZZZZ	1		
15:13	ZZZZZZ	1		
15:14	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51606
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
15:16	ZZZZZZ	1		
15:17	MP30403-B1	1	X	
15:19	MP30403-S1	1	X	
15:20	MP30403-S2	1	X	
15:22	MA51606-CCV5	1	X	
15:24	MA51606-CCB5	1	X	
15:26	MP30403-MB1	1	X	
15:28	JD36625-10	1	X	(a)
15:29	ZZZZZZ	1		
15:30	ZZZZZZ	1		
15:32	ZZZZZZ	1		
15:33	ZZZZZZ	1		
15:35	ZZZZZZ	1		
15:36	MA51606-CCV6	1	X	
15:37	MA51606-CCB6	1	X	
15:39	ZZZZZZ	1		
15:41	ZZZZZZ	1		
15:42	ZZZZZZ	1		
15:44	ZZZZZZ	1		
15:45	ZZZZZZ	1		
15:46	ZZZZZZ	1		
15:48	ZZZZZZ	1		
15:49	MA51606-CCV7	1	X	
15:51	MA51606-CCB7	1	X	
15:53	ZZZZZZ	1		
15:54	ZZZZZZ	1		
15:55	ZZZZZZ	1		
15:57	MP30404-B1	1	X	
15:58	MP30404-S1	1	X	
16:00	MP30404-S2	1	X	
16:02	MA51606-CCV8	1	X	
16:04	MA51606-CCB8	1	X	
16:06	MP30404-MB1	1	X	
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
Analyst: SB Run ID: MA51606
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg
16:07	JD36659-1	1	X (a)
16:09	ZZZZZZ	1	
16:11	ZZZZZZ	1	
16:13	ZZZZZZ	1	
16:14	ZZZZZZ	1	
16:16	ZZZZZZ	1	
16:17	ZZZZZZ	1	
16:19	MA51606-CCV9	1	X
16:21	MA51606-CCB9	1	X
16:22	ZZZZZZ	1	
16:24	ZZZZZZ	1	
16:25	ZZZZZZ	1	
16:27	ZZZZZZ	1	
16:28	MP30405-B1	1	X
16:30	MP30405-S1	1	X
16:32	MP30405-S2	1	X
16:34	MA51606-CCV10	1	X
16:36	MA51606-CCB10	1	X
16:38	MP30405-MB1	1	X
16:39	JD36629-1A	1	X (a)
16:40	ZZZZZZ	1	
16:42	ZZZZZZ	1	
16:43	MP30402-S1	40	X
16:45	MP30402-S2	40	X
16:47	JD36551-13	40	X (a)
16:49	ZZZZZZ	40	
16:51	MA51606-CCV11	1	X
16:53	MA51606-CCB11	1	X
16:55	ZZZZZZ	5	
16:56	ZZZZZZ	5	
16:58	MA51606-CCV12	1	X
17:00	MA51606-CCB12	1	X

(a) Sample used for QC only; not part of login JD36624.

	Element:	Hg

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51606 Units: ug/l

Time:			14:20		14:24		14:35		14:54	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0352	<0.20	-0.0316	<0.20	0.00570	<0.20	-0.0186	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51606 Units: ug/l

Time: / Sample ID:			15:10 CCB4		15:24 CCB5		15:37 CCB6		15:51 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0318	<0.20	-0.0362	<0.20	-0.0318	<0.20	-0.0339	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA51606 Units: ug/l

Time:			16:04		16:21		16:36		16:53	
Sample ID:			CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.034	-0.0363	<0.20	-0.0273	<0.20	-0.0252	<0.20	-0.0397	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51606 Units: ug/l

Time:		14:19			14:22			14:33	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	2.91	97.0	2.5	2.59	103.6	2.5	2.56	102.4

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51606 Units: ug/l

Time:		14:53			15:08			15:22	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.48	99.2	2.5	2.47	98.8	2.5	2.47	98.8

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51606 Units: ug/l

Time:		15:36			15:49			16:02	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.47	98.8	2.5	2.48	99.2	2.5	2.43	97.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA51606 Units: ug/l

Time:		16:19			16:34			16:51	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.37	94.8	2.5	2.37	94.8	2.5	2.38	95.2

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: H9121621W2.CSV Date Analyzed: 12/16/21 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA51606 Units: ug/l

Time:			14:26	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Mercury	0.20		0.217	108.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:15	MA51689-STD1	1		Sample introduction not stable, see rerun.
11:21	MA51689-STD2	1		Sample introduction not stable, see rerun.
11:27	MA51689-STD3	1		STDA
11:33	MA51689-STD4	1		STDB
11:39	MA51689-STD5	1		STDC
11:44	MA51689-STD6	1		STDD
11:50	MA51689-STD7	1		STDE
11:56	MA51689-STD8	1		STDF
12:01	MA51689-STD9	1		STDG
12:07	MA51689-STD10	1		STDH
12:17	MA51689-STD11	1		STDI
12:23	MA51689-STD12	1		STDJ
12:28	MA51689-STD13	1		STDA
12:34	MA51689-ICVA1	1		
12:40	MA51689-ICV1	1		
13:03	MA51689-ICVA2	1		
13:09	MA51689-ICB1	1		
13:14	MA51689-CCVA1	1		
13:20	MA51689-CCB1	1		
13:26	MA51689-CRI1	1		
13:31	MA51689-ICSA1	1		
13:37	MA51689-ICSAB1	1		
13:49	ZZZZZZ	1		
13:55	MA51689-CCVA2	1		
14:00	MA51689-CCB2	1		
14:06	MP30514A-S3	2		
14:12	ZZZZZZ	2		
14:18	ZZZZZZ	2		
14:23	ZZZZZZ	2		
14:29	ZZZZZZ	2		
14:35	MP30514A-PS1	2		
14:40	MA51689-CCVA3	1		
14:46	MA51689-CCB3	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:52	MP30471-MB1	2		
15:02	MP30471-B1	2		
15:08	MP30471-S1	2		multiple high elements
15:13	MP30471-S2	2		multiple high elements
15:19	JD36804-8	2		(sample used for QC only; not part of login JD36624)
15:25	MP30471-SD1	10		multiple high elements. Rerun 1;10 for be
15:31	JD36624-2F	2		multiple high elements
15:37	JD36624-2	2		multiple high elements
---------->	Last reportable sample/prep for job JD36624			
15:45	ZZZZZZ	2		
15:51	ZZZZZZ	1		
15:57	MA51689-CCVA4	1		
16:03	MA51689-CCB4	1		
---------->	Last reportable CCB for job JD36624			
16:08	MA51689-CCVA5	1		
16:14	MA51689-CCB5	1		
16:20	MP30668-MB1	5		
16:26	MP30668-B1	5		
16:31	MP30668-PS1	5		
16:37	MP30668-S1	5		
16:43	MP30668-S2	5		
16:49	JD37541-3	5		(sample used for QC only; not part of login JD36624)
16:54	MP30668-SD1	25		
17:00	MP30668-S2	5		
17:06	MA51689-CCVA6	1		
17:12	MA51689-CCB6	1		
17:17	ZZZZZZ	5		
17:23	ZZZZZZ	5		
17:29	ZZZZZZ	5		
17:35	ZZZZZZ	5		
17:41	ZZZZZZ	5		
17:46	MA51689-CCVA7	1		
17:52	MA51689-CCB7	1		
17:58	MP30668-S1	20		
18:03	MP30668-S2	20		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:09	JD37541-3	20		(sample used for QC only; not part of login JD36624)
18:15	MP30668-SD1	100		
18:20	ZZZZZZ	20		
18:26	ZZZZZZ	20		
18:32	ZZZZZZ	100		
18:37	ZZZZZZ	20		
18:43	ZZZZZZ	100		
18:49	MA51689-CCVA8	1		
18:54	MA51689-CCB8	1		
19:00	ZZZZZZ	50		
19:06	MP30668-S1	100		
19:12	MP30668-S1	100		
19:17	MP30668-S2	100		
19:23	JD37541-3	100		(sample used for QC only; not part of login JD36624)
19:29	MP30668-SD1	500		
19:34	ZZZZZZ	10		
19:40	ZZZZZZ	100		
19:46	MA51689-CCVA9	1		
19:51	MA51689-CCB9	1		
19:57	ZZZZZZ	2		
20:03	ZZZZZZ	2		
20:09	ZZZZZZ	2		
20:15	ZZZZZZ	2		
20:20	ZZZZZZ	2		
20:26	ZZZZZZ	2		
20:33	ZZZZZZ	2		
20:40	ZZZZZZ	1		
20:46	MA51689-CCVA10	1		
20:52	MA51689-CCB10	1		
20:58	ZZZZZZ	2		
21:05	ZZZZZZ	2		
21:11	ZZZZZZ	2		
21:18	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
21:24	ZZZZZZ	2		
21:30	ZZZZZZ	2		
21:36	ZZZZZZ	2		
21:42	ZZZZZZ	2		
21:48	ZZZZZZ	2		
21:55	MA51689-CCVA11	1		
22:01	MA51689-CCB11	1		
22:07	MP30417A-S3	10		
22:13	MP30417A-S4	10		
22:19	JD36575-4	10		(sample used for QC only; not part of login JD36624)
22:25	MP30417A-SD1	50		
22:32	ZZZZZZ	2		
22:38	ZZZZZZ	2		
22:45	ZZZZZZ	2		
22:50	ZZZZZZ	1		
22:56	MA51689-CCVA12	1		
23:02	MA51689-CCB12	1		
23:07	MP30496-MB1	2		
23:13	MP30496-B1	2		
23:19	MP30496-S1	2		
23:24	MP30496-S2	2		
23:30	JD36804-33	2		(sample used for QC only; not part of login JD36624)
23:36	MP30496-SD1	10		
23:42	MP30496-S3	2		
23:47	MP30496-S4	2		
23:53	JD36804-33F	2		(sample used for QC only; not part of login JD36624)
23:59	MP30496-SD2	10		
00:04	MA51689-CCVA13	1		
00:10	MA51689-CCB13	1		
00:16	ZZZZZZ	2		
00:21	ZZZZZZ	2		
00:27	ZZZZZZ	2		
00:33	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
00:39	ZZZZZZ	2		
00:44	ZZZZZZ	2		
00:50	ZZZZZZ	2		
00:56	ZZZZZZ	2		
01:01	MA51689-CCVA14	1		
01:07	MA51689-CCB14	1		
01:13	ZZZZZZ	2		
01:18	ZZZZZZ	2		
01:24	ZZZZZZ	2		
01:30	ZZZZZZ	2		
01:35	ZZZZZZ	2		
01:41	ZZZZZZ	2		
01:47	ZZZZZZ	2		
01:52	ZZZZZZ	1		
01:58	MA51689-CCVA15	1		
02:04	MA51689-CCB15	1		
02:09	ZZZZZZ	2		
02:15	ZZZZZZ	2		
02:21	ZZZZZZ	2		
02:27	ZZZZZZ	10		
02:32	ZZZZZZ	2		
02:38	ZZZZZZ	2		
02:44	ZZZZZZ	2		
02:49	ZZZZZZ	2		
02:55	MA51689-CCVA16	1		
03:01	MA51689-CCB16	1		
03:06	ZZZZZZ	1		
03:12	ZZZZZZ	1		
03:18	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
12:34	MA51689-ICVA1	1																							
12:40	MA51689-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:03	MA51689-ICVA2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:09	MA51689-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:14	MA51689-CCVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:20	MA51689-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:26	MA51689-CRI1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:31	MA51689-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:37	MA51689-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:49	ZZZZZZ	1																							
13:55	MA51689-CCVA2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:00	MA51689-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:06	MP30514A-S3	2												X								X			
14:12	ZZZZZZ	2																							
14:18	ZZZZZZ	2																							
14:23	ZZZZZZ	2																							
14:29	ZZZZZZ	2																							
14:35	MP30514A-PS1	2												X								X			
14:40	MA51689-CCVA3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:46	MA51689-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:52	MP30471-MB1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:02	MP30471-B1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:08	MP30471-S1	2		X		X	X	X		X	X	X	X			X	X	X		X	X				
15:13	MP30471-S2	2		X		X	X	X		X	X	X	X			X	X	X		X	X				
15:19	JD36804-8	2																							(a)
15:25	MP30471-SD1	10		X		X		X		X	X	X	X	X			X	X	X		X	X			
15:31	JD36624-2F	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X		X	X	X		
15:37	JD36624-2	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X		X	X			
15:45	ZZZZZZ	2																							
15:51	ZZZZZZ	1																							
15:57	MA51689-CCVA4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:03	MA51689-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:08	MA51689-CCVA5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution	Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
16:14	MA51689-CCB5	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:20	MP30668-MB1	5			X																X					
16:26	MP30668-B1	5			X																X					
16:31	MP30668-PS1	5			X										X											
16:37	MP30668-S1	5			X	X					X				X						X					
16:43	MP30668-S2	5																								
16:49	JD37541-3	5				X					X	X			X						X					(a)
16:54	MP30668-SD1	25			X	X					X				X						X					
17:00	MP30668-S2	5			X	X					X				X						X					
17:06	MA51689-CCVA6	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:12	MA51689-CCB6	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:17	ZZZZZZ	5																								
17:23	ZZZZZZ	5																								
17:29	ZZZZZZ	5																								
17:35	ZZZZZZ	5																								
17:41	ZZZZZZ	5																								
17:46	MA51689-CCVA7	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:52	MA51689-CCB7	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:58	MP30668-S1	20					X																		X	
18:03	MP30668-S2	20					X																		X	
18:09	JD37541-3	20					X																			(a)
18:15	MP30668-SD1	100					X																		X	
18:20	ZZZZZZ	20																								
18:26	ZZZZZZ	20																								
18:32	ZZZZZZ	100																								
18:37	ZZZZZZ	20																								
18:43	ZZZZZZ	100																								
18:49	MA51689-CCVA8	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:54	MA51689-CCB8	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:00	ZZZZZZ	50																								
19:06	MP30668-S1	100																								
19:12	MP30668-S1	100																X								
19:17	MP30668-S2	100																X								
			Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
19:23	JD37541-3	100																							(a)
19:29	MP30668-SD1	500													X										
19:34	ZZZZZZ	10																							
19:40	ZZZZZZ	100																							
19:46	MA51689-CCVA9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:51	MA51689-CCB9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:57	ZZZZZZ	2																							
20:03	ZZZZZZ	2																							
20:09	ZZZZZZ	2																							
20:15	ZZZZZZ	2																							
20:20	ZZZZZZ	2																							
20:26	ZZZZZZ	2																							
20:33	ZZZZZZ	2																							
20:40	ZZZZZZ	1																							
20:46	MA51689-CCVA10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:52	MA51689-CCB10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:58	ZZZZZZ	2																							
21:05	ZZZZZZ	2																							
21:11	ZZZZZZ	2																							
21:18	ZZZZZZ	2																							
21:24	ZZZZZZ	2																							
21:30	ZZZZZZ	2																							
21:36	ZZZZZZ	2																							
21:42	ZZZZZZ	2																							
21:48	ZZZZZZ	2																							
21:55	MA51689-CCVA11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
22:01	MA51689-CCB11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
22:07	MP30417A-S3	10																				X			
22:13	MP30417A-S4	10																				X			
22:19	JD36575-4	10																							(a)
22:25	MP30417A-SD1	50											X									X			
22:32	ZZZZZZ	2																							
22:38	ZZZZZZ	2																							
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
22:45	ZZZZZZ	2																							
22:50	ZZZZZZ	1																							
22:56	MA51689-CCVA12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
23:02	MA51689-CCB12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
23:07	MP30496-MB1	2			X																				
23:13	MP30496-B1	2			X																				
23:19	MP30496-S1	2			X																				
23:24	MP30496-S2	2			X																				
23:30	JD36804-33	2			X																				(a)
23:36	MP30496-SD1	10			X																				
23:42	MP30496-S3	2			X																				
23:47	MP30496-S4	2			X																				
23:53	JD36804-33F	2			X																				(a)
23:59	MP30496-SD2	10			X																				
00:04	MA51689-CCVA13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
00:10	MA51689-CCB13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
00:16	ZZZZZZ	2																							
00:21	ZZZZZZ	2																							
00:27	ZZZZZZ	2																							
00:33	ZZZZZZ	2																							
00:39	ZZZZZZ	2																							
00:44	ZZZZZZ	2																							
00:50	ZZZZZZ	2																							
00:56	ZZZZZZ	2																							
01:01	MA51689-CCVA14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01:07	MA51689-CCB14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01:13	ZZZZZZ	2																							
01:18	ZZZZZZ	2																							
01:24	ZZZZZZ	2																							
01:30	ZZZZZZ	2																							
01:35	ZZZZZZ	2																							
01:41	ZZZZZZ	2																							
01:47	ZZZZZZ	2																							
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn
01:52	ZZZZZZ	1																						
01:58	MA51689-CCVA15	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
02:04	MA51689-CCB15	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
02:09	ZZZZZZ	2																						
02:15	ZZZZZZ	2																						
02:21	ZZZZZZ	2																						
02:27	ZZZZZZ	10																						
02:32	ZZZZZZ	2																						
02:38	ZZZZZZ	2																						
02:44	ZZZZZZ	2																						
02:49	ZZZZZZ	2																						
02:55	MA51689-CCVA16	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
03:01	MA51689-CCB16	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
03:06	ZZZZZZ	1																						
03:12	ZZZZZZ	1																						
03:18	ZZZZZZ	1																						

(a) Sample used for QC only; not part of login JD36624.

Element: Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Ni K Se Ag Na Tl V Zn

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
11:15	MA51689-STD1	100	100	100	100	100	100	100	100
11:21	MA51689-STD2	100	100	100	100	100	100	100	100
11:27	MA51689-STD3	100	100	100	100	100	100	100	100
11:33	MA51689-STD4	99.568	99.161	100.519	96.654	100.431	101.533	95.636	99.847
11:39	MA51689-STD5	101.013	102.476	101.965	101.539	99.942	101.952	101.44	99.597
11:44	MA51689-STD6	100.636	97.979	100.888	99.849	101.322	102.057	100.057	102.088
11:50	MA51689-STD7	102.384	99.96	101.936	97.827	104.98	101.035	98.013	104.236
11:56	MA51689-STD8	98.073	95.745	99.288	99.628	100.932	99.871	99.902	100.907
12:01	MA51689-STD9	96.723	90.915	99.46	101.025	96.089	100.075	100.957	96.344
12:07	MA51689-STD10	102.902	105.066	103.129	105.014	102.611	103.049	104.672	102.443
12:17	MA51689-STD11	103.917	105.145	106.876	106.121	101.464	105.764	104.391	100.972
12:23	MA51689-STD12	104.974	106.929	106.353	103.323	103.015	103.43	102.403	102.476
12:28	MA51689-STD13	100	100	100	100	100	100	100	100
12:34	MA51689-ICVA1	No results reported for the elements associated with this internal standard.							
12:40	MA51689-ICV1	95.785	96.326	99.027	90.274	96.406	98.821	94.502	96.804
13:03	MA51689-ICVA2	98.774	100.165	103.683	101.026	97.043	102.519	100.28	97.97
13:09	MA51689-ICB1	98.018	97.861	96.402	100.181	97.607	97.56	100.908	98.191
13:14	MA51689-CCVA1	97.034	96.978	102.358	98.021	98.52	101.751	98.505	99.047
13:20	MA51689-CCB1	97.376	97.516	100.457	101.368	97.05	97.301	100.935	97.309
13:26	MA51689-CRI1	97.398	97.753	101.122	102.222	97.089	102.141	102.842	97.567
13:31	MA51689-ICSA1	90.905	92.526	94.731	93.817	89.432	90.521	89.516	88.285
13:37	MA51689-ICSAB1	86.026	82.825	90.324	90.904	87.092	87.611	87.846	86.313
13:49	ZZZZZZ	83.441	81.915	87.983	87.623	88.187	89.117	90.192	88.16
13:55	MA51689-CCVA2	84.147	84.541	91.557	92.86	91.002	91.804	93.187	92.132
14:00	MA51689-CCB2	86.308	84.758	90.322	94.25	91.109	92.234	95.077	91.978
14:06	MP30514A-S3	72.496	79.655	85.681	88.868	83.972	83.533	86.433	84.507
14:12	ZZZZZZ	73.741	80.753	86.362	89.969	84.84	84.553	87.875	85.063
14:18	ZZZZZZ	61.586 !	68.485 !	84.87	88.717	71.765	84.357	86.059	72.247
14:23	ZZZZZZ	88.339	87.624	92.879	94.794	92.704	93.383	95.957	92.408
14:29	ZZZZZZ	80.999	80.813	88.915	92.287	87.413	87.705	92.361	87.095
14:35	MP30514A-PS1	77.084	85.977	84.712	89.988	87.889	84.454	86.928	88.243
14:40	MA51689-CCVA3	85.646	83.872	92.321	94.68	91.461	92.833	94.388	92.037
14:46	MA51689-CCB3	87.225	86.45	91.744	94.584	90.937	92.59	95.516	91.629

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
14:52	MP30471-MB1	90.696	92.631	93.135	95.866	93.866	93.889	96.477	94.215
15:02	MP30471-B1	84.037	85.814	90.186	95.063	88.688	89.396	93.778	89.332
15:08	MP30471-S1	76.189	78.334	82.241	87.818	81.977	81.559	84.597	82.791
15:13	MP30471-S2	71.291	74.812	79.178	86.888	78.86	77.69	84.084	79.452
15:19	JD36804-8	70.295	72.862	76.068	84.984	77.153	76.008	82.595	77.522
15:25	MP30471-SD1	68.685 !a	65.624 !	82.707	88.371	76.054	84.577	88.888	76.696
15:31	JD36624-2F	73.094	74.675	81	88.338	81.52	81.429	87.397	81.566
15:37	JD36624-2	76.679	78.714	80.607	90.179	83.796	80.008	89.001	84.607
15:45	ZZZZZZ	77.199	78.3	79.428	90.575	82.743	79.21	88.937	83.087
15:51	ZZZZZZ	84.759	85.218	77.105	92.136	91.294	80.794	91.38	92.009
15:57	MA51689-CCVA4	87.187	85.63	93.043	93.222	92.459	92.197	91.822	93.257
16:03	MA51689-CCB4	86.381	83.988	90.033	92.493	90.831	90.277	92.338	91.142
16:08	MA51689-CCVA5	83.81	82.683	86.539	89.164	87.862	85.802	87.711	89.167
16:14	MA51689-CCB5	84.272	80.071	85.869	87.314	85.593	86.328	87.584	86.27
16:20	MP30668-MB1	84.48	81.206	76.238	89.154	86.497	77.9	88.846	86.81
16:26	MP30668-B1	87.845	84.449	92.833	90.262	89.839	91.381	89.208	90.18
16:31	MP30668-PS1	86.645	97.076	99.525	93.135	88.741	90.34	84.535	88.837
16:37	MP30668-S1	88.937	101.711	100.359	100.606	91.233	89.846	89.405	91.447
16:43	MP30668-S2	No results reported for the elements associated with this internal standard.							
16:49	JD37541-3	86.746	97.901	99.586	99.446	88.658	89.836	88.692	88.334
16:54	MP30668-SD1	92.452	94.695	97.233	94.276	93.198	94.575	92.348	93.089
17:00	MP30668-S2	86.455	97.555	99.904	99.491	88.792	90.459	88.801	88.793
17:06	MA51689-CCVA6	88.194	87.544	90.639	90.398	92.167	90.368	90.438	92.671
17:12	MA51689-CCB6	89.587	87.003	88.801	92.118	90.502	88.562	91.792	90.894
17:17	ZZZZZZ	84.372	87.728	91.961	92.509	87.216	87.772	87.33	87.018
17:23	ZZZZZZ	77.431	82.608	98.868	96.97	78.671	95.557	92.611	78.395
17:29	ZZZZZZ	92.479	98.255	99.594	97.909	93.497	95.491	93.136	93.433
17:35	ZZZZZZ	90.106	89.184	94.028	93.958	91.701	93.332	92.003	91.221
17:41	ZZZZZZ	93.581	100.002	103.089	99.738	94.726	98.591	94.199	94.112
17:46	MA51689-CCVA7	84.448	82.047	86.365	89.313	87.669	87.579	88.304	88.4
17:52	MA51689-CCB7	86.415	82.645	84.831	88.768	89.039	86.721	89.083	88.851
17:58	MP30668-S1	89.384	92.402	94.726	92.578	91.727	91.766	89.541	91.107
18:03	MP30668-S2	89.407	87.406	92.872	91.773	89.076	90.473	89.041	99.568

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:09	JD37541-3	87.423	82.461	93.781	92.58	88.099	91.811	89.588	87.432
18:15	MP30668-SD1	91.847	87.701	93.741	90.84	92.08	92.945	90.636	92.244
18:20	ZZZZZZ	89.912	85.197	92.509	89.528	89.615	91.903	88.891	90.508
18:26	ZZZZZZ	94.192	93.624	93.937	92.263	92.438	93.452	91.026	92.481
18:32	ZZZZZZ	94.793	90.253	94.272	90.539	92.828	94.904	91.059	93.464
18:37	ZZZZZZ	94.325	94.429	96.297	93.668	92.229	94.82	91.616	92.629
18:43	ZZZZZZ	96.998	94.187	95.047	91.595	94.093	95.097	91.561	94.348
18:49	MA51689-CCVA8	89.894	88.559	91.947	90.842	91.995	91.808	90.159	92.503
18:54	MA51689-CCB8	91.072	87.323	91.132	90.667	90.277	90.448	90.609	90.355
19:00	ZZZZZZ	95.094	88.582	94.305	75.416	93.57	93.656	76.779	94.257
19:06	MP30668-S1	No results reported for the elements associated with this internal standard.							
19:12	MP30668-S1	94.205	92.479	94.093	90.25	92.272	92.959	89.49	93.021
19:17	MP30668-S2	94.408	87.904	94.256	81.316	93.031	92.84	81.059	93.579
19:23	JD37541-3	94.188	89.48	89.622	90.108	92.084	88.59	89.645	92.224
19:29	MP30668-SD1	94.753	91.736	93.393	81.172	92.624	94.376	79.086	93.126
19:34	ZZZZZZ	93.58	95.119	96.089	91.462	91.84	93.048	89.319	90.952
19:40	ZZZZZZ	96.149	90.216	93.618	89.747	94.058	92.874	89.948	93.846
19:46	MA51689-CCVA9	90.251	88.087	91.419	90.39	91.458	90.802	88.613	91.645
19:51	MA51689-CCB9	90.52	87.368	90.247	88.693	90.576	90.009	89.193	90.25
19:57	ZZZZZZ	66.228 !	67.461 !	75.826	77.742	69.193 !	73.704	75.471	69.138 !
20:03	ZZZZZZ	70.062	72.35	74.41	75.944	74.871	72.325	73.115	74.945
20:09	ZZZZZZ	66.161 !	64.821 !	79.374	76.776	68.638 !	74.725	73.284	67.931 !
20:15	ZZZZZZ	69.554 !	68.579 !	71.863	75.052	72.849	72	72.853	73.151
20:20	ZZZZZZ	66.326 !	67.79 !	71.437	74.988	71.545	71.059	72.785	72.34
20:26	ZZZZZZ	67.975 !	69.696 !	70.097	69.887 !	72.814	68.975 !	66.31 !	72.722
20:33	ZZZZZZ	73.198	72.696	77.027	74.373	74.275	73.255	71.084	74.365
20:40	ZZZZZZ	80.447	75.026	79.235	81.496	82.37	81.308	81.865	81.974
20:46	MA51689-CCVA10	79.754	77.289	80.743	80.986	82.496	80.789	80.416	83.242
20:52	MA51689-CCB10	78.924	75.099	80.333	73.084	81.697	81.225	75.589	82.199
20:58	ZZZZZZ	72.142	70.761	75.534	81.144	77.601	77.57	80.201	77.013
21:05	ZZZZZZ	75.085	82.23	74.558	77.624	78.537	75.571	77.779	79.569
21:11	ZZZZZZ	72.28	71.395	74.813	80.348	78.712	76.274	80.709	78.438
21:18	ZZZZZZ	74.144	72.838	76.337	81.337	79.851	78.17	81.694	79.394

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
21:24	ZZZZZZ	72.123	71.413	74.994	80.674	76.604	76.027	80.227	77.047
21:30	ZZZZZZ	71.353	72.482	76.175	78.591	75.95	73.866	76.174	75.782
21:36	ZZZZZZ	70.201	71.575	74.145	77.082	75.534	74.621	76.21	75.829
21:42	ZZZZZZ	71.287	71.256	74.836	76.735	74.998	73.127	75.133	75.59
21:48	ZZZZZZ	68.757 !	74.252	74.754	79.407	74.505	72.202	75.207	73.731
21:55	MA51689-CCVA11	78.431	76.621	82.297	83.087	82.82	82.12	82.391	83.679
22:01	MA51689-CCB11	80.919	77.079	81.667	82.331	83.256	82.126	81.993	83.742
22:07	MP30417A-S3	83.743	80.698	88.863	83.371	82.069	84.097	79.196	82.949
22:13	MP30417A-S4	88.032	82.656	91.087	84.214	83.957	86.155	79.36	84.401
22:19	JD36575-4	89.855	83.276	92.923	90.038	84.719	86.825	83.197	84.719
22:25	MP30417A-SD1	92.684	87.874	92.29	83.726	89.901	91.95	82.951	89.719
22:32	ZZZZZZ	74.139	70.798	74.605	75.023	75.269	74.788	75.837	75.551
22:38	ZZZZZZ	72.932	72.036	75.404	75.443	74.945	75.835	75.863	75.025
22:45	ZZZZZZ	75.284	73.071	76.245	75.406	77.516	76.584	76.816	77.896
22:50	ZZZZZZ	76.59	72.939	73.365	79.918	79.235	76.795	80.873	79.825
22:56	MA51689-CCVA12	83.432	79.352	83.037	81.374	84.526	82.799	80.532	85.109
23:02	MA51689-CCB12	82.625	76.374	80.758	80.579	82.031	80.994	80.829	82.452
23:07	MP30496-MB1	83.495	77.344	81.986	81.39	82.852	82.098	81.065	83.181
23:13	MP30496-B1	77.06	74.591	74.729	80.074	79.587	75.851	81.202	80.181
23:19	MP30496-S1	75.911	75.285	78.722	78.27	77.509	74.959	76.283	77.992
23:24	MP30496-S2	76.588	75.28	78.97	76.69	77.524	75.16	76.264	77.911
23:30	JD36804-33	78.691	76.589	81.581	78.767	78.819	78.383	78.014	78.767
23:36	MP30496-SD1	90.714	85.238	89.719	83.524	87.227	87.218	81.849	87.932
23:42	MP30496-S3	79.26	75.966	79.699	76.958	77.309	76.424	74.585	77.907
23:47	MP30496-S4	78.728	75.709	80.069	80.633	77.647	76.497	78.667	77.787
23:53	JD36804-33F	79.522	77.213	81.516	78.759	78.986	77.25	77.958	79.154
23:59	MP30496-SD2	92.473	88.558	90.527	83.539	88.266	87.922	82.29	88.238
00:04	MA51689-CCVA13	85.264	78.558	83.596	79.479	83.463	82.729	78.413	83.806
00:10	MA51689-CCB13	84.179	76.354	81.291	79.289	81.724	81.102	79.589	81.796
00:16	ZZZZZZ	78.315	72.244	77.161	72.947	78.182	77.75	74.596	78.059
00:21	ZZZZZZ	76.337	72.482	75.861	77.834	76.597	75.247	77.793	76.569
00:27	ZZZZZZ	74.294	71.57	70.025	78.018	76.141	70.566	79.989	76.385
00:33	ZZZZZZ	74.885	72.498	71.053	77.896	76.918	71.237	78.461	76.967

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
00:39	ZZZZZZ	71.265	70.521	72.252	74.321	73.66	71.553	74.333	73.786
00:44	ZZZZZZ	73.856	74.472	78.953	77.777	76.79	75.373	76.368	76.814
00:50	ZZZZZZ	79.505	74.346	77.899	80.466	79.985	78.564	81.497	80.497
00:56	ZZZZZZ	77.99	73.609	76.93	80.527	79.665	77.455	83.103	79.352
01:01	MA51689-CCVA14	83.634	78.621	75.904	81.426	83.862	75.659	79.421	84.527
01:07	MA51689-CCB14	82.138	75.601	79.774	80.967	81.514	80.156	80.247	81.121
01:13	ZZZZZZ	74.051	69.781 !	73.972	78.128	74.921	74.371	78.562	75.229
01:18	ZZZZZZ	76.102	75.068	78.638	78.707	77.295	75.025	78.346	76.823
01:24	ZZZZZZ	80.368	75.56	78.328	80.866	80.546	79.144	83.534	80.866
01:30	ZZZZZZ	79.018	74.115	77.027	83.177	79.545	77.929	83.916	79.612
01:35	ZZZZZZ	75.671	72.484	70.595	78.457	76.928	69.896 !	79.776	77.389
01:41	ZZZZZZ	74.154	72.451	73.791	78.347	76.416	73.417	79.061	76.931
01:47	ZZZZZZ	74.179	71.858	70.273	77.733	75.221	68.2 !	76.271	75.449
01:52	ZZZZZZ	83.475	76.168	80.922	80.507	81.516	80.053	79.9	81.725
01:58	MA51689-CCVA15	80.783	76.086	79.73	79.68	80.443	78.656	78.368	81.346
02:04	MA51689-CCB15	81.1	73.729	78.269	79.185	79.399	78.873	78.937	79.61
02:09	ZZZZZZ	84.1	79.58	90.396	81.34	74.078	77.686	74.054	74.185
02:15	ZZZZZZ	90.967	81.302	92.478	74.451	75.245	78.856	70.56	75.706
02:21	ZZZZZZ	95.704	85.036	93.457	80.591	77.084	79.188	75.856	76.526
02:27	ZZZZZZ	105.578	96.797	99.309	85.085	86.553	89.709	79.254	86.863
02:32	ZZZZZZ	92.77	78.625	81.144	76.296	83.038	80.302	79.784	82.331
02:38	ZZZZZZ	81.639	73.968	74.802	75.357	77.891	75.389	76.825	78.445
02:44	ZZZZZZ	86.989	77.188	72.744	77.312	82.093	74.431	77.431	82.522
02:49	ZZZZZZ	79.34	73.125	76.789	75.618	77.412	75.794	77.862	77.662
02:55	MA51689-CCVA16	85.252	78.26	83.074	78.123	83.122	82.297	77.535	83.55
03:01	MA51689-CCB16	84.025	76.121	80.59	72.783	80.852	81.099	71.198	80.577
03:06	ZZZZZZ	84.992	76.774	81.724	75.559	82.093	81.369	76.78	82.137
03:12	ZZZZZZ	85.611	77.235	82.317	78.302	81.94	81.905	78.013	82.695
03:18	ZZZZZZ	84.897	76.326	81.832	78.525	81.624	81.317	78.119	82.076

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8

Istd#8	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

(a) No samples reported for this element in the area bracketed by this QC.

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
11:15	MA51689-STD1	100	100	100	100	100	100	100	100
11:21	MA51689-STD2	100	100	100	100	100	100	100	100
11:27	MA51689-STD3	100	100	100	100	100	100	100	100
11:33	MA51689-STD4	100.651	95.507	99.107	100.494	95.396	99.299	100.902	99.95
11:39	MA51689-STD5	101.677	100.168	100.432	100.793	101.369	100.287	101.428	100.245
11:44	MA51689-STD6	101.378	99.735	100.382	100.646	100.007	99.892	101.595	100.246
11:50	MA51689-STD7	99.962	97.351	102.543	100.523	98.353	103.483	100.99	104.6
11:56	MA51689-STD8	99.45	98.738	97.554	99.746	99.507	98.326	100.414	99.471
12:01	MA51689-STD9	99.652	101.38	94.852	99.874	101.093	95.964	101.427	97.404
12:07	MA51689-STD10	102.857	104.49	101.96	101.28	103.155	102.785	102.317	102.815
12:17	MA51689-STD11	105.113	103.686	100.533	102.457	101.151	101.225	104.431	101.844
12:23	MA51689-STD12	103.333	101.329	100.625	100.58	97.792	101.596	102.851	103.101
12:28	MA51689-STD13	100	100	100	100	100	100	100	100
12:34	MA51689-ICVA1	No results reported for the elements associated with this internal standard.							
12:40	MA51689-ICV1	99.073	94.554	96.783	98.919	93.286	97.13	98.547	98.158
13:03	MA51689-ICVA2	101.539	99.422	95.403	99.982	97.336	97.313	101.388	99.193
13:09	MA51689-ICB1	97.44	99.93	97.701	97.267	100.295	98.862	97.647	99.262
13:14	MA51689-CCVA1	102.798	98.315	94.589	100.114	95.467	96.605	101.818	97.648
13:20	MA51689-CCB1	97.617	100.496	97.226	98.925	100.719	97.875	97.997	98.698
13:26	MA51689-CRI1	102.219	102.086	96.864	101.644	101.602	97.469	102.151	97.318
13:31	MA51689-ICSA1	89.658	87.628	82.684	84.525	81.9	83.692	84.454	90.891
13:37	MA51689-ICSAB1	86.815	85.882	81.035	82.526	80.603	82.777	82.324	90.101
13:49	ZZZZZZ	89.704	89.052	91.331	91.332	89.988	93.193	91.778	96.011
13:55	MA51689-CCVA2	92.079	93.172	88.697	92.424	91.539	91.299	93.395	95.198
14:00	MA51689-CCB2	92.708	94.467	92.848	94.38	95.236	94.457	94.313	97.077
14:06	MP30514A-S3	84.483	86.607	79.27	81.442	82.388	83.841	84.704	90.885
14:12	ZZZZZZ	85.184	86.712	79.689	81.922	83.107	85.038	85.912	91.903
14:18	ZZZZZZ	84.474	86.402	67.25 !	81.469	82.349	71.745	84.93	77.077
14:23	ZZZZZZ	94.656	94.867	93.782	95.831	96.418	95.866	96.553	98.443
14:29	ZZZZZZ	88.179	91.665	86.042	91.18	92.146	88.862	91.129	94.015
14:35	MP30514A-PS1	84.306	86.915	82.954	81.223	83.044	89.243	84.036	96.3
14:40	MA51689-CCVA3	93.802	94.207	88.284	93.714	93.04	91.636	95.462	96.105
14:46	MA51689-CCB3	92.799	94.861	92.588	94.715	94.926	94.835	95.344	97.55

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
14:52	MP30471-MB1	94.263	95.866	95.271	95.296	96.129	97.04	95.6	99.8
15:02	MP30471-B1	90.033	93.479	89.852	91.316	93.537	91.988	91.834	95.982
15:08	MP30471-S1	81.531	84.556	77.599	78.879	79.534	84.878	83.275	91.81
15:13	MP30471-S2	78.662	82.863	75.23	76.612	78.658	82.799	80.111	91.445
15:19	JD36804-8	75.926	81.563	74.94	74.208	77.698	82.669	78.277	91.355
15:25	MP30471-SD1	85.648	88.524	71.884	86.82	87.312	77.012	89.652	84.003
15:31	JD36624-2F	82.032	86.679	79.619	82.465	84.782	85.517	83.383	93.393
15:37	JD36624-2	80.658	88.613	82.792	80.779	86.464	88.975	82.782	95.428
15:45	ZZZZZZ	79.681	87.648	82.597	79.402	85.646	88.607	81.205	94.947
15:51	ZZZZZZ	80.683	91.769	90.22	80.32	90.359	93.987	82.15	99.02
15:57	MA51689-CCVA4	91.931	91.661	90.549	92.257	90.313	95.063	94.406	99.079
16:03	MA51689-CCB4	90.206	92.298	91.942	92.308	92.733	94.839	92.596	98.697
16:08	MA51689-CCVA5	86.038	87.879	86.53	85.847	85.969	89.354	87.185	93.186
16:14	MA51689-CCB5	86.436	87.148	87.192	87.537	87.489	90.08	88.243	93.138
16:20	MP30668-MB1	77.981	88.073	88.205	78.967	88.683	90.752	78.848	94.065
16:26	MP30668-B1	91.752	88.636	88.945	92.354	87.682	91.85	92.991	95.3
16:31	MP30668-PS1	89.374	82.991	85.729	86.205	78.327	88.632	88.744	93.436
16:37	MP30668-S1	88.518	87.477	89.935	85.78	83.449	93.891	88.76	98.599
16:43	MP30668-S2	No results reported for the elements associated with this internal standard.							
16:49	JD37541-3	88.445	86.956	86.152	86.253	83.664	90.236	88.049	94.679
16:54	MP30668-SD1	94.536	91.393	92.376	92.739	89.097	95.746	94.762	98.576
17:00	MP30668-S2	89.27	86.963	85.434	86.28	83.236	89.948	88.613	93.155
17:06	MA51689-CCVA6	90.722	89.499	89.685	90.338	87.262	92.573	91.521	95.729
17:12	MA51689-CCB6	88.495	91.332	92.659	89.754	90.796	95.193	89.96	95.826
17:17	ZZZZZZ	86.606	85.788	83.558	84.504	82.492	87.746	86.823	93.224
17:23	ZZZZZZ	94.834	91.47	78.328	92.873	88.807	81.042	94.58	83.455
17:29	ZZZZZZ	94.156	91.114	91.827	91.804	88.571	94.814	93.891	96.753
17:35	ZZZZZZ	91.933	90.696	89.657	89.748	88.06	93.494	91.55	96.847
17:41	ZZZZZZ	97.277	91.544	92.909	95.741	89.453	95.467	97.149	97.801
17:46	MA51689-CCVA7	87.279	87.932	86.771	87.24	86.294	89.865	88.427	93.702
17:52	MA51689-CCB7	86.649	87.996	90.18	86.941	88.083	92.83	87.516	95.162
17:58	MP30668-S1	91.112	88.167	89.545	89.83	86.465	92.868	91.862	95.903
18:03	MP30668-S2	90.423	88.48	89.216	89.625	86.034	92.096	91.42	94.473

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:09	JD37541-3	91.918	88.72	85.509	89.089	86.434	89.01	91.701	90.983
18:15	MP30668-SD1	93.195	90.173	90.66	91.845	87.969	93.447	93.891	95.389
18:20	ZZZZZZ	91.326	87.866	89.322	89.057	85.259	92.759	91.442	95.341
18:26	ZZZZZZ	93.324	89.588	91.888	91.819	88.376	95.187	93.979	96.985
18:32	ZZZZZZ	93.937	90.078	93.364	92.716	88.871	96.528	94.641	97.519
18:37	ZZZZZZ	94.711	90.694	92.711	92.691	88.96	95.97	95.084	97.529
18:43	ZZZZZZ	94.586	91.041	95.068	93.762	89.421	96.916	95.238	97.735
18:49	MA51689-CCVA8	91.365	89.323	90.477	89.683	87.118	93.489	91.572	95.139
18:54	MA51689-CCB8	90.401	89.579	92.206	90.948	89.509	95.028	91.711	95.583
19:00	ZZZZZZ	94.711	76.294	93.86	93.064	74.035	96.326	94.808	98.096
19:06	MP30668-S1	No results reported for the elements associated with this internal standard.							
19:12	MP30668-S1	93.374	88.591	92.197	91.625	87.446	95.162	93.247	95.878
19:17	MP30668-S2	93.781	80.445	91.643	91.922	77.162	94.907	93.721	95.654
19:23	JD37541-3	88.389	88.805	91.945	86.196	87.067	93.797	88.064	94.897
19:29	MP30668-SD1	93.75	78.894	93.498	91.85	78.95	95.441	93.717	96.132
19:34	ZZZZZZ	92.534	87.593	90.973	89.902	86.484	93.114	92.152	95.289
19:40	ZZZZZZ	92.463	88.944	92.691	91.876	87.924	95.512	93.702	96.03
19:46	MA51689-CCVA9	90.907	88.136	89.832	89.566	86.288	91.921	91.197	93.233
19:51	MA51689-CCB9	90.767	88.285	92.036	90.364	87.19	94.06	90.651	95.005
19:57	ZZZZZZ	74.228	74.767	65.455 !	70.398	70.153	71.785	74.534	76.897
20:03	ZZZZZZ	72.683	72.489	65.143 !	67.599 !	66.362 !	75.398	71.854	82.818
20:09	ZZZZZZ	74.749	73.28	57.843 !	67.794 !	65.386 !	64.422 !	73.084	70.845
20:15	ZZZZZZ	71.968	72.706	67.978 !	68.878 !	68.491 !	76.757	73.577	83.36
20:20	ZZZZZZ	71.405	72.226	65.434 !	67.993 !	68.03 !	76.01	72.34	83.464
20:26	ZZZZZZ	69.658 !	65.821 !	63.049 !	64.801 !	61.132 !	74.649	69.669 !	82.289
20:33	ZZZZZZ	73.265	69.97 !	63.33 !	66.955 !	63.705 !	74.153	71.876	80.195
20:40	ZZZZZZ	82.16	81.628	85.38	82.721	81.938	88.684	84.557	91.171
20:46	MA51689-CCVA10	81.011	80.367	83.643	81.482	78.869	87.807	83.317	91.075
20:52	MA51689-CCB10	81.461	75.212	85.118	82.644	74.213	88.283	83.983	91.468
20:58	ZZZZZZ	77.513	79.71	78.704	77.638	79.373	82.724	80.152	87.559
21:05	ZZZZZZ	76.083	77.019	82.017	76.843	77.044	85.301	78.331	89.652
21:11	ZZZZZZ	76.307	80.266	80.341	77.642	79.324	84.604	79.262	89.482
21:18	ZZZZZZ	78.378	81.555	82.394	79.915	82.048	86.021	80.452	90.335

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
21:24	ZZZZZZ	76.048	79.421	77.342	75.78	77.407	82.37	77.363	87.976
21:30	ZZZZZZ	75.224	75.9	72.764	71.837	70.651	79.225	75.626	85.776
21:36	ZZZZZZ	74.501	75.757	73.139	71.732	71.911	79.074	75.186	85.706
21:42	ZZZZZZ	73.813	74.959	73.788	71.535	70.812	79.307	75.243	85.483
21:48	ZZZZZZ	70.776	73.915	70.967	67.712 !	69.607 !	77.011	71.403	84.743
21:55	MA51689-CCVA11	82.548	82.3	83.663	82.912	80.309	87.832	84.818	91.781
22:01	MA51689-CCB11	82.105	81.207	86.277	83.548	81.774	89.419	84.075	92.557
22:07	MP30417A-S3	84.015	78.403	78.968	77.714	72.005	84.791	83.857	89.23
22:13	MP30417A-S4	86.008	78.878	79.703	78.624	72.343	85.178	84.996	89.055
22:19	JD36575-4	86.852	82.885	80.069	78.844	76.789	85.411	85.454	88.272
22:25	MP30417A-SD1	91.869	82.587	86.974	85.744	77.755	91.487	90.606	92.4
22:32	ZZZZZZ	75.267	75.216	75.043	72.836	71.768	79.604	76.3	85.143
22:38	ZZZZZZ	76.385	75.284	75.636	74.779	72.975	80.008	77.686	85.374
22:45	ZZZZZZ	76.828	76.767	80.912	77.997	75.276	84.004	78.773	89.063
22:50	ZZZZZZ	76.309	80.246	82.676	77.332	80.087	86.031	77.319	90.391
22:56	MA51689-CCVA12	82.982	80.346	84.65	82.37	79.454	88.537	84.321	92.576
23:02	MA51689-CCB12	81.523	80.085	85.071	82.444	80.912	88.705	83.931	91.203
23:07	MP30496-MB1	82.161	80.829	85.707	83.015	81.163	89.175	84.153	91.773
23:13	MP30496-B1	75.997	80.315	81.227	77.166	78.342	84.474	77.322	89.245
23:19	MP30496-S1	75.216	75.903	72.944	70.954	68.282 !	79.074	75.198	85.056
23:24	MP30496-S2	75.783	75.926	72.353	70.507	66.8 !	78.424	75.102	84.688
23:30	JD36804-33	78.235	77.586	73.67	72.671	68.983 !	79.101	77.328	84.732
23:36	MP30496-SD1	87.979	81.36	85.739	83.429	77.319	90.211	87.58	92.649
23:42	MP30496-S3	76.177	74.34	72.368	70.807	66.798 !	78.169	76.202	83.47
23:47	MP30496-S4	75.907	78.453	72.289	70.754	69.789 !	78.026	75.595	84.041
23:53	JD36804-33F	77.662	77.538	74.106	71.815	68.654 !	79.305	76.749	84.658
23:59	MP30496-SD2	87.994	81.561	86.51	83.603	77.255	91.018	88.388	92.935
00:04	MA51689-CCVA13	82.487	78.436	82.7	81.446	76.53	86.895	83.716	89.94
00:10	MA51689-CCB13	81.6257	78.854	84.909	82.057	79.222	87.51	83.685	90.056
00:16	ZZZZZZ	78.13	74.276	81.177	78.094	70.806	83.905	79.172	87.796
00:21	ZZZZZZ	75.742	76.976	77.358	73.536	73.69	82.396	76.282	87.789
00:27	ZZZZZZ	71.142	80.344	75.139	68.374 !	72.199	80.644	70.621	87.145
00:33	ZZZZZZ	71.208	77.362	74.637	68.11 !	70.863	80.688	71.206	87.383

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
00:39	ZZZZZZ	72.432	73.804	71.361	69.123 !	68.18 !	78.016	72.687	84.96
00:44	ZZZZZZ	75.244	75.926	73.02	71.104	68.357 !	78.48	75.359	84.902
00:50	ZZZZZZ	79.463	81.205	83.127	79.526	79.274	86.186	79.752	89.557
00:56	ZZZZZZ	77.795	82.722	82.248	78.439	79.346	85.5	78.504	89.627
01:01	MA51689-CCVA14	76.474	79.07	84.74	75.811	77.726	88.608	77.263	92.599
01:07	MA51689-CCB14	80.043	79.649	84.75	81	79.928	88.359	81.735	90.986
01:13	ZZZZZZ	74.71	78.352	75.976	73.395	73.994	81.314	75.331	86.391
01:18	ZZZZZZ	75.422	77.418	73.048	70.787	68.518 !	78.869	74.51	85.081
01:24	ZZZZZZ	79.353	82.773	83.154	79.532	80.004	86.228	79.802	88.808
01:30	ZZZZZZ	78.027	83.181	82.826	78.839	81.009	86.05	79.222	89.777
01:35	ZZZZZZ	70.518	79.695	77.319	68.924 !	74.015	82.689	70.485	88.242
01:41	ZZZZZZ	74.477	78.405	75.21	71.544	71.803	81.392	74.353	88.011
01:47	ZZZZZZ	68.202 !	75.792	74.406	66.359 !	70.412	80.644	68.874 !	87.776
01:52	ZZZZZZ	80.338	79.019	85.887	81.76	78.992	88.51	82.638	91.861
01:58	MA51689-CCVA15	79.316	77.307	81.771	78.833	77.046	85.931	80.547	90.001
02:04	MA51689-CCB15	78.922	77.956	82.961	79.541	78.716	86.872	80.7	90.028
02:09	ZZZZZZ	76.995	73.224	61.071 !	65.165 !	59.183 !	71.659	72.215	75.94
02:15	ZZZZZZ	78.051	70.048	62.572 !	65.27 !	53.675 !	70.855	72.055	74.608
02:21	ZZZZZZ	79.043	75.692	61.678 !	65.788 !	58.537 !	72.763	73.033	75.614
02:27	ZZZZZZ	89.101	78.449	81.768	79.427	70.317	86.594	86.448	87.736
02:32	ZZZZZZ	80.918	79.224	84.413	79.4	75.244	86.741	81.226	87.554
02:38	ZZZZZZ	75.774	76.664	79.852	75.226	73.18	83.07	77.276	86.66
02:44	ZZZZZZ	74.204	76.767	85.828	73.835	76.823	88.796	75.611	91.26
02:49	ZZZZZZ	76.615	77.369	79.622	76.787	73.614	82.916	78.408	87.726
02:55	MA51689-CCVA16	81.934	77.117	84.016	81.187	76.066	88.518	84.128	91.809
03:01	MA51689-CCB16	81.221	70.602	84.845	80.885	71.278	87.502	83.024	90.58
03:06	ZZZZZZ	81.887	76.296	85.395	82.152	76.19	89.103	83.853	90.941
03:12	ZZZZZZ	82.147	77.717	86.347	82.417	78.057	88.988	84.279	91.696
03:18	ZZZZZZ	80.995	77.057	85.793	81.63	77.454	88.919	83.385	91.356

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Rhodium (103-3)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16

Istd#16 Indium (115-1)	70-130 %	70-130 %
Istd#15 Indium (115-2)	70-130 %	70-130 %
Istd#16 Terbium (159-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
11:15	MA51689-STD1	100	100	100	100	100	100
11:21	MA51689-STD2	100	100	100	100	100	100
11:27	MA51689-STD3	100	100	100	100	100	100
11:33	MA51689-STD4	100.28	95.822	99.007	100.457	99.574	100.408
11:39	MA51689-STD5	100.711	101.862	100.471	101.014	101.321	100.829
11:44	MA51689-STD6	101.463	100.734	100.517	101.271	100.92	101.59
11:50	MA51689-STD7	101.65	99.159	104.855	101.402	104.515	101.798
11:56	MA51689-STD8	101.795	102.189	99.877	101.761	100.476	102.195
12:01	MA51689-STD9	101.81	102.517	97.689	101.79	99.016	101.411
12:07	MA51689-STD10	103.018	103.899	103.652	103.32	102.304	100.26
12:17	MA51689-STD11	103.799	102.606	102.69	104.583	101.055	101.35
12:23	MA51689-STD12	102.867	100.392	103.274	102.93	99.467	98.036
12:28	MA51689-STD13	100	100	100	100	100	100
12:34	MA51689-ICVA1	No results reported for the elements associated with this internal standard.					
12:40	MA51689-ICV1	98.889	93.641	98.091	98.366	98.18	99.495
13:03	MA51689-ICVA2	102.72	99.596	99.236	103.264	97.45	101.25
13:09	MA51689-ICB1	97.467	99.935	99.912	97.54	99.856	97.657
13:14	MA51689-CCVA1	102.789	97.893	97.968	103.118	96.576	101.32
13:20	MA51689-CCB1	100.033	100.154	98.997	100.027	98.923	98.464
13:26	MA51689-CRI1	101.772	101.111	97.224	101.36	97.329	101.453
13:31	MA51689-ICSA1	92.528	91.314	91.69	92.067	85.186	85.51
13:37	MA51689-ICSAB1	91.081	90.083	91.014	91.231	85.285	85.099
13:49	ZZZZZZ	94.605	91.918	96.329	94.924	97.871	96.126
13:55	MA51689-CCVA2	97.914	96.717	96.015	97.848	96.423	97.414
14:00	MA51689-CCB2	96.973	97.18	97.74	96.983	98.983	98.625
14:06	MP30514A-S3	91.929	92.501	91.977	92.485	90.133	89.26
14:12	ZZZZZZ	92.931	93.379	92.854	93.96	87.462	88.035
14:18	ZZZZZZ	91.625	92.674	78.339	93.03	74.278	87.611
14:23	ZZZZZZ	99.075	98.572	98.963	99.382	101.273	100.786
14:29	ZZZZZZ	97.42	98.046	95.467	98.111	96.244	98.07
14:35	MP30514A-PS1	91.807	93.057	97.705	92.376	91.697	87.088
14:40	MA51689-CCVA3	99.809	98.103	96.646	100.048	96.202	99.507
14:46	MA51689-CCB3	97.3	97.673	98.216	98.056	99.284	99.575

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
14:52	MP30471-MB1	97.997	98.229	100.063	97.735	101.88	98.966
15:02	MP30471-B1	97.218	98.376	97.082	97.159	97.906	97.715
15:08	MP30471-S1	90.602	91.084	92.903	91.575	88.128	86.341
15:13	MP30471-S2	89.053	91.049	92.633	89.992	88.017	85.032
15:19	JD36804-8	86.986	89.822	92.721	87.858	88.503	83.085
15:25	MP30471-SD1	96.524	95.711	85.308	97.237	83.864	97.922
15:31	JD36624-2F	92.68	94.433	94.535	93.828	92.149	91.125
15:37	JD36624-2	90.044	96.02	96.516	90.893	93.557	87.828
15:45	ZZZZZZ	88.404	94.825	95.88	89.352	93.592	86.049
15:51	ZZZZZZ	86.542	96.677	99.952	86.936	99.201	86.237
15:57	MA51689-CCVA4	99.035	95.485	101.248	100.038	99.599	99.3
16:03	MA51689-CCB4	96.532	95.85	99.755	96.544	101.282	98.645
16:08	MA51689-CCVA5	90.552	90.159	94.426	91.193	92.435	90.466
16:14	MA51689-CCB5	90.961	89.934	93.343	91.028	94.829	92.194
16:20	MP30668-MB1	81.011	90.973	94.813	81.366	96.369	83.168
16:26	MP30668-B1	97.821	91.63	96.137	98.097	95.234	96.67
16:31	MP30668-PS1	93.38	85.411	94.51	93.71	90.362	89.782
16:37	MP30668-S1	92.885	90.041	98.976	93.186	93.749	89.351
16:43	MP30668-S2	No results reported for the elements associated with this internal standard.					
16:49	JD37541-3	93.286	89.565	95.1	94.001	91.25	89.158
16:54	MP30668-SD1	96.858	92.157	98.598	97.289	90.279	95.416
17:00	MP30668-S2	93.381	89.579	94.025	93.585	90.128	89.271
17:06	MA51689-CCVA6	95.115	91.099	96.625	95.335	94.833	94.566
17:12	MA51689-CCB6	93.306	91.056	95.956	93.284	97.334	91.664
17:17	ZZZZZZ	91.401	88.695	93.292	91.688	90.23	87.912
17:23	ZZZZZZ	96.918	92.069	83.589	97.169	81.701	95.407
17:29	ZZZZZZ	95.639	91.939	97.518	95.936	94.977	94.212
17:35	ZZZZZZ	94.614	91.647	97.156	94.67	93.597	92.439
17:41	ZZZZZZ	99.179	92.126	97.79	99.623	96.475	97.656
17:46	MA51689-CCVA7	92.242	90.623	94.173	92.44	93.293	91.719
17:52	MA51689-CCB7	89.792	90.943	95.628	89.39	95.685	90.307
17:58	MP30668-S1	94.424	90.286	95.973	94.741	90.991	92.699
18:03	MP30668-S2	93.636	89.794	95.296	93.937	89.87	92.477

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
18:09	JD37541-3	94.791	90.558	91.851	94.678	86.237	92.115
18:15	MP30668-SD1	94.77	90.438	95.497	94.76	79.367	92.176
18:20	ZZZZZZ	93.758	88.982	95.471	94.043	86.961	92.778
18:26	ZZZZZZ	94.263	90.256	97.097	94.151	90.68	94.383
18:32	ZZZZZZ	94.715	89.449	98.228	94.596	85.335	92.532
18:37	ZZZZZZ	94.741	90.797	97.353	94.648	91.91	95.079
18:43	ZZZZZZ	95.125	90.309	98.275	95.227	85.872	93.77
18:49	MA51689-CCVA8	94.199	90.57	95.424	94.39	94.542	93.18
18:54	MA51689-CCB8	92.816	90.059	96.174	92.721	96.861	93.452
19:00	ZZZZZZ	95.11	76.161	98.351	95.378	88.456	94.009
19:06	MP30668-S1	No results reported for the elements associated with this internal standard.					
19:12	MP30668-S1	93.677	88.962	96.767	93.759	80.901	91.271
19:17	MP30668-S2	94.807	79.236	95.806	94.412	67.62 !	87.923
19:23	JD37541-3	90.099	88.555	95.4	90.043	79.496	86.612
19:29	MP30668-SD1	93.638	83.715	96.123	93.974	76.909	90.556
19:34	ZZZZZZ	93.065	88.163	95.39	93.194	94.154	92.908
19:40	ZZZZZZ	93.732	88.929	97.052	93.371	65.779 !	85.546
19:46	MA51689-CCVA9	92.928	89.485	93.77	93.564	93.87	92.675
19:51	MA51689-CCB9	91.706	87.452	95.345	91.325	95.29	91.45
19:57	ZZZZZZ	80.519	80.205	77.88	81.288	75.158	78.708
20:03	ZZZZZZ	78.921	77.082	83.561	79.56	70.812	73.101
20:09	ZZZZZZ	77.675	74.167	71.896	78.234	59.209 !	68.428 !
20:15	ZZZZZZ	80.633	79.527	84.551	81.66	75.638	77.587
20:20	ZZZZZZ	79.686	79.019	84.643	80.38	77.142	75.513
20:26	ZZZZZZ	76.324	72.004	82.903	77.066	69.817 !	69.856 !
20:33	ZZZZZZ	76.748	72.736	81.441	77.342	65.245 !	67.944 !
20:40	ZZZZZZ	86.793	84.979	91.357	87.212	92.151	88.313
20:46	MA51689-CCVA10	87.296	84.512	91.981	87.911	92.087	87.362
20:52	MA51689-CCB10	86.834	76.884	91.741	87.283	93.051	88.513
20:58	ZZZZZZ	85.062	86.026	88.303	85.339	90.818	87.544
21:05	ZZZZZZ	84.027	83.262	90.504	84.361	92.988	85.648
21:11	ZZZZZZ	83.878	85.208	89.924	84.383	91.796	85.756
21:18	ZZZZZZ	84.627	86.378	91.229	85.102	92.607	86.483

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
21:24	ZZZZZZ	84.145	84.863	89.129	84.531	87.368	82.927
21:30	ZZZZZZ	82.3	80.101	87.773	82.757	77.315	76.512
21:36	ZZZZZZ	81.806	80.96	87.01	82.733	83.099	78.784
21:42	ZZZZZZ	81.6	79.892	86.53	81.876	77.95	76.917
21:48	ZZZZZZ	78.536	79.709	85.946	79.274	79.85	73.493
21:55	MA51689-CCVA11	88.743	85.338	92.629	89.162	91.194	88.443
22:01	MA51689-CCB11	86.986	84.076	93.43	87.051	94.082	88.37
22:07	MP30417A-S3	86.013	78.942	89.783	86.511	77.737	77.499
22:13	MP30417A-S4	86.853	78.938	90.114	87.214	80.406	77.682
22:19	JD36575-4	86.883	84.474	88.817	87.405	74.357	77.581
22:25	MP30417A-SD1	90.874	82.783	92.717	90.873	77.049	85.998
22:32	ZZZZZZ	82.024	79.885	85.986	82.715	84.192	80.666
22:38	ZZZZZZ	83.375	80.374	86.103	84.101	85.273	81.624
22:45	ZZZZZZ	83.889	79.905	90.34	84.398	90.562	85.198
22:50	ZZZZZZ	81.947	83.916	90.849	82.557	92.098	83.769
22:56	MA51689-CCVA12	87.947	84.547	93.203	88.387	92.016	88.302
23:02	MA51689-CCB12	86.36	83.553	92.364	86.716	93.08	87.466
23:07	MP30496-MB1	86.197	83.455	92.771	86.341	93.557	87.358
23:13	MP30496-B1	82.394	83.742	90.49	82.533	90.397	83.411
23:19	MP30496-S1	81.103	77.227	86.296	81.752	70.344	73.373
23:24	MP30496-S2	80.851	76.126	85.536	81.497	69.84 !	72.731
23:30	JD36804-33	82.299	77.059	84.897	82.726	69.51 !	73.607
23:36	MP30496-SD1	89.653	82.481	92.678	89.579	89.79	85.938
23:42	MP30496-S3	80.739	75.27	84.164	81.571	69.196 !	72.311
23:47	MP30496-S4	81.142	80.875	85.163	81.856	69.095 !	72.878
23:53	JD36804-33F	81.098	76.13	85.046	81.363	68.67 !	72.436
23:59	MP30496-SD2	89.671	82.238	93.261	89.667	88.934	85.711
00:04	MA51689-CCVA13	87.19	81.887	90.472	87.194	88.835	86.362
00:10	MA51689-CCB13	85.495	81.897	90.057	85.524	91.332	86.845
00:16	ZZZZZZ	83.279	73.862	88.57	83.43	90.389	84.355
00:21	ZZZZZZ	82.478	81.356	88.593	82.959	86.534	80.606
00:27	ZZZZZZ	76.394	80.658	88.081	77.207	83.738	73.256
00:33	ZZZZZZ	77.532	79.403	88.209	78.17	82.679	72.901

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
00:39	ZZZZZZ	79.684	77.787	86.042	80.466	81.767	76.058
00:44	ZZZZZZ	80.448	76.486	85.877	81.168	69.836 !	72.395
00:50	ZZZZZZ	83.705	83.07	90.549	84.6	91.263	84.749
00:56	ZZZZZZ	83.11	83.22	91.023	83.688	90.764	84.193
01:01	MA51689-CCVA14	81.176	83.127	93.28	81.368	91.471	80.674
01:07	MA51689-CCB14	84.581	83.077	91.773	84.568	93.052	85.841
01:13	ZZZZZZ	81.464	81.475	87.915	81.685	86.334	80.19
01:18	ZZZZZZ	80.654	77.007	86.192	81.13	70.024	72.571
01:24	ZZZZZZ	84.02	83.766	89.826	84.158	91.071	84.641
01:30	ZZZZZZ	83.173	85.112	90.884	83.926	91.624	84.294
01:35	ZZZZZZ	75.779	81.91	89.275	76.438	86.338	73.958
01:41	ZZZZZZ	80.874	80.561	88.42	81.542	84.449	76.88
01:47	ZZZZZZ	75.062	80.079	88.445	75.644	83.179	70.732
01:52	ZZZZZZ	87.367	82.291	92.61	87.983	93.475	86.979
01:58	MA51689-CCVA15	84.966	82.279	90.828	85.216	89.773	84.767
02:04	MA51689-CCB15	83.224	82.201	90.505	83.487	91.902	85.483
02:09	ZZZZZZ	72.332	65.39 !	76.822	72.692	58.063 !	58.847 !
02:15	ZZZZZZ	72.379	59.486 !	74.671	72.615	55.766 !	57.962 !
02:21	ZZZZZZ	72.034	64.535 !	75.706	72.112	55.315 !	57.766 !
02:27	ZZZZZZ	85.42	75.902	87.825	85.548	68.311 !	75.183
02:32	ZZZZZZ	83.464	79.211	88.158	83.473	88.191	83.481
02:38	ZZZZZZ	81.478	79.083	87.252	81.733	86.466	81.127
02:44	ZZZZZZ	76.844	80.392	91.717	77.135	91.887	78.229
02:49	ZZZZZZ	83.021	79.698	87.637	83.098	88.349	83.015
02:55	MA51689-CCVA16	87.592	81.374	92.55	87.761	91.342	87.046
03:01	MA51689-CCB16	84.909	74.22	90.498	85.069	92.341	86.257
03:06	ZZZZZZ	85.658	79.465	91.956	85.81	92.312	86.704
03:12	ZZZZZZ	86.01	81.313	91.994	86.057	92.817	86.83
03:18	ZZZZZZ	85.72	80.584	91.979	85.756	93.205	87.099

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	70-130 %	70-130 %
Istd#18	Terbium (159-3)	70-130 %	70-130 %
Istd#19	Holmium (165-1)	70-130 %	70-130 %
Istd#20	Holmium (165-2)	70-130 %	70-130 %
Istd#21	Bismuth (209-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51689
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
Istd#22 Bismuth (209-2)		70-130 %	70-130 %				

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51689 Units: ug/l

Time:			13:09		13:20		14:00		14:46	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	-6.25	<25	-6.83	<25	-6.66	<25	-6.60	<25
Antimony	2.0	.085	-0.0751	<2.0	-0.0588	<2.0	-0.0735	<2.0	0.00168	<2.0
Arsenic	0.50	.025	0.0382	<1.5	0.0340	<1.5	0.0432	<1.5	0.0518	<1.5
Barium	1.0	.009	0.00117	<1.0	0.000890	<1.0	0.00264	<1.0	0.00983	<1.0
Beryllium	0.50	.005	0.0117	<0.50	0.00558	<0.50	0.00891	<0.50	0.0136	<0.50
Boron	25	.85	anr							
Cadmium	0.50	.01	0.0140	<3.0	0.00972	<3.0	0.0121	<3.0	0.0107	<3.0
Calcium	250	3.6	0.304	<250	0.277	<250	-0.0505	<250	1.29	<250
Chromium	1.0	.018	0.00973	<4.0	0.0135	<4.0	-0.00164	<4.0	-0.000624	<4.0
Cobalt	0.50	.003	0.00533	<0.50	0.00555	<0.50	0.00146	<0.50	0.00445	<0.50
Copper	2.0	.024	0.0133	<5.0	-0.0258	<5.0	-0.0174	<5.0	-0.00504	<5.0
Iron	25	.24	-1.09	<25	-1.88	<25	-1.24	<25	-1.82	<25
Lead	0.50	.008	0.00936	<1.5	0.00825	<1.5	0.00819	<1.5	0.0164	<1.5
Magnesium	250	.19	-0.104	<250	-0.651	<250	-0.145	<250	-0.297	<250
Manganese	1.0	.012	0.00173	<2.0	0.00280	<2.0	-0.0256	<2.0	-0.00821	<2.0
Molybdenum	1.0	.017	anr							
Nickel	1.0	.017	0.00348	<4.0	0.00121	<4.0	-0.00787	<4.0	0.000543	<4.0
Potassium	250	.78	3.32	<250	1.98	<250	1.52	<250	3.13	<250
Selenium	0.50	.044	0.457	<1.0	0.402	<1.0	0.360	<1.0	0.414	<1.0
Silver	0.50	.004	0.0112	<1.0	0.0110	<1.0	0.00660	<1.0	0.0141	<1.0
Sodium	250	1.5	0.251	<250	-0.885	<250	0.705	<250	2.58	<250
Strontium	5.0	.014								
Thallium	0.50	.002	0.0332	<1.0	0.0358	<1.0	0.0313	<1.0	0.0336	<1.0
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	0.00723	<1.5	0.00414	<1.5	0.00765	<1.5	0.00639	<1.5
Zinc	5.0	.078	-0.0917	<10	-0.0884	<10	-0.102	<10	-0.0795	<10

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51689 Units: ug/l

Time:			16:03	
Sample ID:			CCB4	
Metal	RL	IDL	raw	final
Aluminum	25	.42	-6.79	<25
Antimony	2.0	.085	-0.0820	<2.0
Arsenic	0.50	.025	0.0377	<0.50
Barium	1.0	.009	-0.00423	<1.0
Beryllium	0.50	.005	0.00893	<0.50
Boron	25	.85	anr	
Cadmium	0.50	.01	0.00859	<0.50
Calcium	250	3.6	0.612	<250
Chromium	1.0	.018	0.00211	<1.0
Cobalt	0.50	.003	0.00398	<0.50
Copper	2.0	.024	-0.000202	<2.0
Iron	25	.24	-1.96	<25
Lead	0.50	.008	0.00881	<0.50
Magnesium	250	.19	-0.505	<250
Manganese	1.0	.012	-0.0260	<1.0
Molybdenum	1.0	.017	anr	
Nickel	1.0	.017	-0.00208	<1.0
Potassium	250	.78	2.79	<250
Selenium	0.50	.044	0.384	<0.50
Silver	0.50	.004	0.00810	<0.50
Sodium	250	1.5	1.25	<250
Strontium	5.0	.014		
Thallium	0.50	.002	0.0293	<0.50
Tin	5.0	.041		
Titanium	1.0	.11		
Vanadium	1.0	.013	0.00617	<1.0
Zinc	5.0	.078	-0.0603	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51689 Units: ug/l

Time:		12:40			13:03			13:14	
Sample ID:	ICV	ICV1		ICVA	ICVA2		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	60	59.3	98.8	5500	5370	97.6	5000	4770	95.4
Antimony				60	62.8	104.7	50	54.9	109.8
Arsenic				60	59.0	98.3	50	49.3	98.6
Barium				60	59.1	98.5	50	51.1	102.2
Beryllium				60	59.1	98.5	50	50.3	100.6
Boron									
Cadmium				60	59.1	98.5	50	48.3	96.6
Calcium				5500	5220	94.9	5000	4930	98.6
Chromium				60	59.7	99.5	50	49.2	98.4
Cobalt				60	58.8	98.0	50	48.5	97.0
Copper				60	57.6	96.0	50	48.2	96.4
Iron				5500	5400	98.2	5000	4800	96.0
Lead				60	59.3	98.8	50	51.0	102.0
Magnesium				5500	5360	97.5	5000	4860	97.2
Manganese				60	59.8	99.7	50	49.1	98.2
Molybdenum									
Nickel				60	58.1	96.8	50	48.2	96.4
Potassium				5500	5410	98.4	5000	4870	97.4
Selenium				260	253	97.3	200	196	98.0
Silver				60	59.4	99.0	50	50.4	100.8
Sodium				5500	5400	98.2	5000	4840	96.8
Strontium									
Thallium				60	60.0	100.0	50	50.5	101.0
Tin									
Titanium									
Vanadium				60	59.8	99.7	50	49.6	99.2
Zinc				60	57.3	95.5	50	47.0	94.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51689 Units: ug/l

Time:		13:55			14:40			15:57	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4680	93.6	5000	4700	94.0	5000	4590	91.8
Antimony	50	52.9	105.8	50	53.8	107.6	50	52.4	104.8
Arsenic	50	49.2	98.4	50	49.3	98.6	50	47.9	95.8
Barium	50	49.2	98.4	50	49.6	99.2	50	48.7	97.4
Beryllium	50	49.3	98.6	50	49.9	99.8	50	48.0	96.0
Boron	anr								
Cadmium	50	48.9	97.8	50	48.2	96.4	50	48.1	96.2
Calcium	5000	5050	101.0	5000	5220	104.4	5000	5050	101.0
Chromium	50	49.0	98.0	50	49.2	98.4	50	48.1	96.2
Cobalt	50	48.4	96.8	50	48.3	96.6	50	46.7	93.4
Copper	50	47.4	94.8	50	48.1	96.2	50	46.6	93.2
Iron	5000	4830	96.6	5000	4840	96.8	5000	4720	94.4
Lead	50	50.0	100.0	50	51.5	103.0	50	49.7	99.4
Magnesium	5000	4780	95.6	5000	4830	96.6	5000	4740	94.8
Manganese	50	49.5	99.0	50	49.2	98.4	50	48.0	96.0
Molybdenum	anr								
Nickel	50	48.0	96.0	50	48.2	96.4	50	46.6	93.2
Potassium	5000	4790	95.8	5000	4830	96.6	5000	4740	94.8
Selenium	200	193	96.5	200	193	96.5	200	193	96.5
Silver	50	49.6	99.2	50	50.4	100.8	50	48.1	96.2
Sodium	5000	4790	95.8	5000	4840	96.8	5000	4740	94.8
Strontium									
Thallium	50	49.2	98.4	50	50.7	101.4	50	49.2	98.4
Tin									
Titanium									
Vanadium	50	49.6	99.2	50	49.2	98.4	50	47.8	95.6
Zinc	50	48.1	96.2	50	47.9	95.8	50	46.9	93.8

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51689 Units: ug/l

Time:			13:26	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	28.3	113.2
Antimony	2.0	0.25	1.96	98.0
Arsenic	0.50	0.50	0.486	97.2
Barium	1.0	0.50	0.976	97.6
Beryllium	0.50	0.25	0.497	99.4
Boron	25	2.5	anr	
Cadmium	0.50	0.25	0.459	91.8
Calcium	250	125	252	100.8
Chromium	1.0	2.0	1.02	102.0
Cobalt	0.50	0.25	0.500	100.0
Copper	2.0	2.0	1.97	98.5
Iron	25	25	24.8	99.2
Lead	0.50	0.25	0.500	100.0
Magnesium	250	125	253	101.2
Manganese	1.0	0.25	1.01	101.0
Molybdenum	1.0	0.50	anr	
Nickel	1.0	2.0	1.01	101.0
Potassium	250	125	253	101.2
Selenium	0.50	0.50	0.570	114.0
Silver	0.50	1.0	0.582	116.4
Sodium	250	125	251	100.4
Strontium	5.0	0.50		
Thallium	0.50	0.25	0.498	99.6
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0	1.02	102.0
Zinc	5.0	2.0	4.93	98.6

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010622M1.CSV Date Analyzed: 01/06/22 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51689 Units: ug/l

Time:			13:31		13:37	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	92700	92.7	93700	93.7
Antimony			-0.00158		0.00994	
Arsenic		20	0.0850		18.3	91.5
Barium			0.0857		0.111	
Beryllium			0.00291		0.00116	
Boron		50	2.10		49.4	98.8
Cadmium		20	-0.320		19.1	95.5
Calcium	100000	100000	95400	95.4	103000	103.0
Chromium		20	0.850		20.6	103.0
Cobalt		20	0.121		19.0	95.0
Copper		20	0.115		17.9	89.5
Iron	100000	100000	90900	90.9	92400	92.4
Lead			0.0358		0.0433	
Magnesium	100000	100000	92500	92.5	93700	93.7
Manganese		20	0.214		19.8	99.0
Molybdenum	2000	2000	2180	109.0	2210	110.5
Nickel		20	0.492		18.6	93.0
Potassium	100000	100000	94100	94.1	95200	95.2
Selenium		20	0.112		19.4	97.0
Silver		20	0.0169		18.9	94.5
Sodium	100000	100000	93300	93.3	94500	94.5
Strontium	2000	2000	2140HH	107.0	2160HH	108.0
Thallium			0.00784		0.00706	
Tin	2000	2000	2010HH	100.5	2010HH	100.5
Titanium	2000	2000	1840HH	92.0	1850HH	92.5
Vanadium		20	0.0169		21.2	106.0
Zinc		20	0.565		18.4	92.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:50	MA51693-STD1	1		Sample introduction not stable, see rerun.
11:56	MA51693-STD2	1		Sample introduction not stable, see rerun.
12:02	MA51693-STD3	1		STDA
12:08	MA51693-STD4	1		STDB
12:14	MA51693-STD5	1		STDC
12:19	MA51693-STD6	1		STDC
12:25	MA51693-STD7	1		STDD
12:31	MA51693-STD8	1		STDE
12:37	MA51693-STD9	1		STDF
12:43	MA51693-STD10	1		STDG
12:48	MA51693-STD11	1		STDH
12:54	MA51693-STD12	1		STDI
13:00	MA51693-STD13	1		STDJ
13:15	MA51693-STD14	1		STDE
13:20	MA51693-STD15	1		STDG
13:27	MA51693-STD16	1		STDA
13:33	ZZZZZZ	1		
13:39	MA51693-ICVA1	1		
13:45	MA51693-ICV1	1		
14:11	MA51693-ICB1	1		
14:17	MA51693-CCVA1	1		
14:23	MA51693-CCB1	1		
14:28	MA51693-CRI1	1		
14:34	MA51693-ICSA1	1		
14:40	MA51693-ICSAB1	1		
14:48	ZZZZZZ	1		
14:54	MA51693-CCVA2	1		
15:00	MA51693-CCB2	1		
15:05	MP30584A-MB1	5		
15:11	MP30584A-B2	5		
15:17	MP30584A-S3	5		
15:23	MP30584A-S4	5		
15:28	JD37159-1	5		(sample used for QC only; not part of login JD36624)

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:34	MP30584A-SD1	25		
15:40	MP30584A-PS1	5		
15:46	ZZZZZZ	1		
15:52	MA51693-CCVA3	1		
15:58	MA51693-CCB3	1		
16:04	ZZZZZZ	2		
16:09	MP30441-MB1	2		
16:15	MP30441-B1	2		high rsd
16:21	MP30441-S1	2		Na high. Rerun 1;3 for Pb and Tl
16:27	MP30441-S2	2		Na high. Rerun 1;3 for Pb and Tl
16:32	ZZZZZZ	1		
16:38	JD36533-1	2		(sample used for QC only; not part of login JD36624)
16:44	MP30441-SD1	10		Na high
16:50	ZZZZZZ	1		
16:55	MA51693-CCVA4	1		
17:01	MA51693-CCB4	1		
17:07	JD36624-12	2		Ca, Mg, na high
17:12	JD36624-13	2		Ca, Mg, na high
17:18	JD36624-14	2		Ca, Mg, na high
17:24	JD36624-15	2		high elements
17:30	JD36624-16	2		high elements. undigested confirmed on ma51709
17:35	JD36624-17	2		high elements
17:41	JD36624-12F	2		Ca, MG, Na high
17:47	JD36624-13F	2		Ca, MG, Na high
17:53	MA51693-CCVA5	1		
17:58	MA51693-CCB5	1		
18:04	JD36624-14F	2		Ca, MG, Na high
18:10	JD36624-15F	2		high elelements
18:16	JD36624-16F	2		high elements. undigested confirmed on ma51709
18:21	JD36624-17F	2		high RSD
18:27	ZZZZZZ	2		
18:33	ZZZZZZ	2		
18:38	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:44	ZZZZZZ	2		
18:50	ZZZZZZ	2		
18:55	MA51693-CCVA6	1		
19:01	MA51693-CCB6	1		
19:07	MP30440-MB1	2		CCV out
19:12	MP30440-B1	2		CCV out
19:18	JD36624-17F	2		high elements
19:23	MP30440-S1	2		high elements. Rerun 1;2 for Se, CCV out
19:29	MP30440-S2	2		high elements. Rerun 1;2 for Se, CCV out
19:35	JD36624-5	2		high elements. Rerun 1;2 for Se, CCV out
19:41	MP30440-SD1	10		high elements. Rerun 1;2 for Se, CCV out
19:46	JD36624-3	2		high elements. Rerun 1;2 for Se, CCV out
19:52	JD36624-4	2		high elements. Rerun 1;2 for Se, CCV out
---------->	Last reportable sample/prep for job JD36624			
19:58	ZZZZZZ	1		
20:03	MA51693-CCVA7	1		
20:09	MA51693-CCB7	1		
---------->	Last reportable CCB for job JD36624			
20:15	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
13:33	ZZZZZZ	1																							
13:39	MA51693-ICVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:45	MA51693-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:11	MA51693-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:17	MA51693-CCVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:23	MA51693-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:28	MA51693-CRI1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:34	MA51693-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:40	MA51693-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:48	ZZZZZZ	1																							
14:54	MA51693-CCVA2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:00	MA51693-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:05	MP30584A-MB1	5		X	X		X															X			
15:11	MP30584A-B2	5		X	X		X															X			
15:17	MP30584A-S3	5		X	X		X															X			
15:23	MP30584A-S4	5		X	X		X															X			
15:28	JD37159-1	5		X	X		X															X			(a)
15:34	MP30584A-SD1	25		X	X		X															X			
15:40	MP30584A-PS1	5		X																					
15:46	ZZZZZZ	1																							
15:52	MA51693-CCVA3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
15:58	MA51693-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:04	ZZZZZZ	2																							
16:09	MP30441-MB1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16:15	MP30441-B1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
16:21	MP30441-S1	2	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X			X	X	
16:27	MP30441-S2	2	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X			X	X	
16:32	ZZZZZZ	1																							
16:38	JD36533-1	2											X		X			X						X	(a)
16:44	MP30441-SD1	10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	
16:50	ZZZZZZ	1																							
16:55	MA51693-CCVA4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:01	MA51693-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn
17:07	JD36624-12	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
17:12	JD36624-13	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
17:18	JD36624-14	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
17:24	JD36624-15	2		X	X		X	X		X	X	X		X			X		X	X		X	X	X
17:30	JD36624-16	2	X	X	X		X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
17:35	JD36624-17	2		X	X		X	X		X	X	X		X			X		X	X		X	X	
17:41	JD36624-12F	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
17:47	JD36624-13F	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
17:53	MA51693-CCVA5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:58	MA51693-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:04	JD36624-14F	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
18:10	JD36624-15F	2	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X		X	X	X
18:16	JD36624-16F	2	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X		X	X	X
18:21	JD36624-17F	2																	X					
18:27	ZZZZZZ	2																						
18:33	ZZZZZZ	2																						
18:38	ZZZZZZ	2																						
18:44	ZZZZZZ	2																						
18:50	ZZZZZZ	2																						
18:55	MA51693-CCVA6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:01	MA51693-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:07	MP30440-MB1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X
19:12	MP30440-B1	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X
19:18	JD36624-17F	2	X	X	X	X	X	X		X	X	X	X	X			X	X		X		X	X	X
19:23	MP30440-S1	2	X	X	X	X	X	X		X	X	X	X	X			X	X		X		X	X	X
19:29	MP30440-S2	2	X	X	X	X	X	X		X	X	X	X	X			X	X		X		X	X	X
19:35	JD36624-5	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X		X		X	X	X
19:41	MP30440-SD1	10	X	X	X	X	X	X		X	X	X	X	X		X	X	X		X		X	X	X
19:46	JD36624-3	2	X	X	X		X	X		X	X	X	X	X			X	X		X		X	X	X
19:52	JD36624-4	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X		X		X	X	X
19:58	ZZZZZZ	1																						
20:03	MA51693-CCVA7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:09	MA51693-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn
20:15	ZZZZZZ	1																						

(a) Sample used for QC only; not part of login JD36624.

Element: Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Ni K Se Ag Na Tl V Zn

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
11:50	MA51693-STD1	100	100	100	100	100	100	100	100
11:56	MA51693-STD2	100	100	100	100	100	100	100	100
12:02	MA51693-STD3	100	100	100	100	100	100	100	100
12:08	MA51693-STD4	100.045	99.887	100.249	96.081	100.156	101.157	98.239	99.691
12:14	MA51693-STD5	101.05	100.425	95.223	101.288	100.382	95.081	101.126	100.491
12:19	MA51693-STD6	100.836	100.347	101.131	101.911	100.331	101.644	101.563	100.705
12:25	MA51693-STD7	92.028	91.659	101.472	100.381	93.458	100.572	100.785	93.443
12:31	MA51693-STD8	91.372	93.825	100.339	100.475	92.974	101.197	100.493	93.065
12:37	MA51693-STD9	98.053	99.343	99.317	99.403	99.969	100.405	99.088	100.249
12:43	MA51693-STD10	98.278	97.857	100.049	78.082	98.245	100.831	81.498	99.143
12:48	MA51693-STD11	92.857	90.886	93.102	90.925	91.407	92.644	90.76	91.505
12:54	MA51693-STD12	93.486	92.601	93.746	90.611	91.324	93.2	90.862	91.838
13:00	MA51693-STD13	95.911	94.963	95.342	93.259	93.51	93.306	92.689	93.001
13:15	MA51693-STD14	95.549	92.095	94.369	91.218	91.173	94.337	92.322	91.467
13:20	MA51693-STD15	93.65	92.302	94.022	91.754	91.869	94.043	92.946	92.701
13:27	MA51693-STD16	100	100	100	100	100	100	100	100
13:33	ZZZZZZ	99.59	100.786	99.894	100.394	101.122	98.94	100.958	101.316
13:39	MA51693-ICVA1	98.421	99.668	99.976	100.214	101.27	99.572	99.908	101.424
13:45	MA51693-ICV1	98.85	99.607	98.645	100.47	101.352	99.923	100.993	100.765
14:11	MA51693-ICB1	101.394	98.87	101.733	101.826	97.821	101.44	102.106	98.091
14:17	MA51693-CCVA1	100.937	104.527	103.865	102.816	103.474	102.65	102.026	103.667
14:23	MA51693-CCB1	100.68	101.077	100.855	103.665	102.325	102.037	103.386	102.004
14:28	MA51693-CRI1	100.422	102.485	101.354	103.089	102.586	101.747	104.139	103.158
14:34	MA51693-ICSA1	93.551	95.73	93.719	95.027	93.555	91.762	92.064	92.402
14:40	MA51693-ICSAB1	87.354	90.104	91.108	92.905	90.069	89.675	90.148	89.731
14:48	ZZZZZZ	83.093	88.397	89.669	93.822	92.139	91.836	95.327	92.483
14:54	MA51693-CCVA2	85.358	91.745	92.062	95.542	93.803	93.493	96.952	95.223
15:00	MA51693-CCB2	87.628	92.864	92.92	97.942	95.837	95.325	98.642	95.869
15:05	MP30584A-MB1	91.304	95.725	95.132	96.941	98.156	96.749	99.362	98.204
15:11	MP30584A-B2	90.366	96.182	95.853	100.336	98.222	97.488	101.308	99.058
15:17	MP30584A-S3	93.685	101.259	93.819	103.853	104.649	94.928	104.808	98.548
15:23	MP30584A-S4	93.412	99.872	97.907	103.753	103.494	98.549	104.422	98.011
15:28	JD37159-1	92.704	97.934	95.192	101.474	100.831	96.462	101.043	97.029

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:34	MP30584A-SD1	95.557	98.533	88.79	102.791	100.511	91.316	102.704	100.33
15:40	MP30584A-PS1	92.686	97.604	94.177	101.18	99.445	95.062	102.754	96.076
15:46	ZZZZZZ	91.155	92.628	92.925	101.004	96.48	94.333	101.443	97.065
15:52	MA51693-CCVA3	92.78	97.904	95.043	101.875	99.474	96.357	101.673	100.247
15:58	MA51693-CCB3	93.99	97.715	95.702	102.548	98.866	96.648	103.069	99.627
16:04	ZZZZZZ	89.516	95.216	91.262	101.101	97.192	93.781	101.772	97.673
16:09	MP30441-MB1	96.703	98.258	97.331	104.248	99.958	98.525	105.319	100.766
16:15	MP30441-B1	86.902	93.387	89.616	90.086	95.719	91.709	88.452	96.102
16:21	MP30441-S1	71.545	78.206	81.417	86.123	74.293	76.678	80.783	74.277
16:27	MP30441-S2	78.836	83.26	82.755	85.499	78.62	76.889	80.106	79.255
16:32	ZZZZZZ	91.188	85.893	97.316	96.235	94.154	95.686	97.535	93.902
16:38	JD36533-1	75.887	79.127	79.004	81.964	74.99	74.345	77.301	75.741
16:44	MP30441-SD1	86.608	89.215	89.083	82.027	89.013	87.547	81.366	88.621
16:50	ZZZZZZ	85.868	86.985	87.032	94.714	91.401	90.594	96.023	91.347
16:55	MA51693-CCVA4	80.024	87.939	87.491	94.962	92.164	89.51	96.019	92.366
17:01	MA51693-CCB4	78.677	84.498	81.254	89.239	88.743	83.428	91.668	88.746
17:07	JD36624-12	74.451	80.885	79.263	90.436	82.795	80.036	89.08	82.52
17:12	JD36624-13	76.752	85.568	82.742	80.577	86.491	82.372	78.037	85.406
17:18	JD36624-14	77.09	83.495	81.561	89.587	85.426	81.213	87.024	84.879
17:24	JD36624-15	72.055	83.141	80.897	88.59	78.04	76.59	80.653	78.035
17:30	JD36624-16	76.706	85.427	81.505	96.813	89.903	82.945	96.282	89.898
17:35	JD36624-17	72.961	85.354	82.527	90.588	84.91	82.41	88.944	84.462
17:41	JD36624-12F	80.678	88.912	87.009	94.753	91.967	88.283	93.403	91.788
17:47	JD36624-13F	81.912	89.004	84.367	89.499	89.763	83.697	87.041	89.76
17:53	MA51693-CCVA5	86.903	92.052	90.038	83.123	95.789	91.997	88.928	95.624
17:58	MA51693-CCB5	90.975	94.596	94.182	99.024	98.185	96.77	100.995	98.725
18:04	JD36624-14F	81.717	88.145	84.389	95.638	88.329	83.485	92.42	88.273
18:10	JD36624-15F	74.255	83.774	80.265	86.61	81.926	76.823	82.524	82.207
18:16	JD36624-16F	74.566	83.66	80.898	96.627	88.396	84.116	96.816	87.901
18:21	JD36624-17F	81.23	90.405	78.177	101.126	95.117	82.061	99.798	93.653
18:27	ZZZZZZ	85.298	94.322	90.661	103.827	99.044	94.83	103.527	98.677
18:33	ZZZZZZ	86.094	95.998	91.566	104.068	101.458	95.129	103.674	99.838
18:38	ZZZZZZ	82.467	92.83	88.046	100.869	96.681	90.751	99.862	95.611

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:44	ZZZZZZ	83.326	92.787	86.073	96.949	98.324	90.783	97.677	98.128
18:50	ZZZZZZ	76.608	84.846	87.454	96.323	89.845	93.304	98.759	89.237
18:55	MA51693-CCVA6	91.549	96.581	93.919	99.089	99.631	95.623	99.158	99.701
19:01	MA51693-CCB6	93.544	95.733	94.23	99.279	98.44	97.034	100.469	99.126
19:07	MP30440-MB1	95.458	98.416	99.348	100.17	100.501	101.187	100.93	100.999
19:12	MP30440-B1	85.482	92.189	88.908	96.549	94.892	90.306	96.117	95.032
19:18	JD36624-17F	83.703	91.067	88.917	92.445	92.895	90.475	92.395	92.74
19:23	MP30440-S1	85.073	93.01	90.245	98.104	96.336	91.848	97.039	96.791
19:29	MP30440-S2	84.479	92.604	91.359	97.378	96.559	93.498	97.534	96.465
19:35	JD36624-5	85.933	93.094	89.875	98.383	97.428	92.48	98.458	96.601
19:41	MP30440-SD1	83.62	89.615	99.144	100.021	88.638	101.25	101.385	88.839
19:46	JD36624-3	84.055	91.655	88.491	86.257	91.147	86.527	83.462	90.552
19:52	JD36624-4	84.016	91.058	83.55	96.631	94.028	85.912	97.081	94.538
19:58	ZZZZZZ	99.872	101.851	98.62	101.051	104.074	99.47	102.243	103.701
20:03	MA51693-CCVA7	91.017	94.115	95.337	90.655	97.704	95.347	88.276	97.736
20:09	MA51693-CCB7	94.436	96.212	95.331	99.112	99.506	96.651	100.317	99.392
20:15	ZZZZZZ	99.567	104.249	96.65	89.858	104.948	96.187	88.931	105.638

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
11:50	MA51693-STD1	100	100	100	100	100	100	100	100
11:56	MA51693-STD2	100	100	100	100	100	100	100	100
12:02	MA51693-STD3	100	100	100	100	100	100	100	100
12:08	MA51693-STD4	100.315	98.59	100.364	100.812	97.543	100.819	100.022	100.094
12:14	MA51693-STD5	95.022	100.218	101.024	95.187	100.388	101.188	95.186	100.993
12:19	MA51693-STD6	101.732	101.357	102.052	101.627	101.655	101.453	101.217	101.483
12:25	MA51693-STD7	101.629	100.888	90.259	102.037	100.587	90.782	101.77	91.606
12:31	MA51693-STD8	101.082	100.471	92.795	101.449	100.259	93.298	100.828	93.956
12:37	MA51693-STD9	99.75	99.782	98.681	100.379	99.898	99.738	100.393	100.544
12:43	MA51693-STD10	101.047	81.47	98.712	100.683	78.503	100.502	101.463	100.894
12:48	MA51693-STD11	92.375	90.571	87.395	91.209	89.431	88.413	91.338	88.651
12:54	MA51693-STD12	92.21	90.582	87.363	90.057	88.112	89.468	91.229	89.588
13:00	MA51693-STD13	93.162	91.966	87.273	90.928	88.935	90.574	92.293	91.112
13:15	MA51693-STD14	94.231	91.528	90.1	93.067	90.901	91.481	92.673	91.176
13:20	MA51693-STD15	93.773	92.51	89.447	92.624	91.458	91.376	93.634	90.838
13:27	MA51693-STD16	100	100	100	100	100	100	100	100
13:33	ZZZZZZ	99.582	100.699	99.186	99.343	99.878	99.239	99.686	99.302
13:39	MA51693-ICVA1	100.306	99.465	98.13	98.217	97.532	97.787	99.538	99.192
13:45	MA51693-ICV1	99.822	100.225	99.19	99.668	99.935	99.055	99.098	99.738
14:11	MA51693-ICB1	101.074	101.118	103.936	99.882	100.954	101.116	100.754	100.467
14:17	MA51693-CCVA1	102.639	101.401	100.37	101.142	98.888	100.121	102.194	101.036
14:23	MA51693-CCB1	101.619	103.12	103.064	101.514	102.819	100.7	102.088	101.259
14:28	MA51693-CRI1	101.883	103.057	104.232	101.283	102.825	101.58	102.202	100.919
14:34	MA51693-ICSA1	90.28	89.922	85.538	84.911	85.054	85.789	84.62	93.841
14:40	MA51693-ICSAB1	89.178	88.838	83.13	84.15	83.861	82.107	83.595	92.564
14:48	ZZZZZZ	92.727	94.926	92.56	93.579	96.174	91.515	94.16	96.641
14:54	MA51693-CCVA2	93.412	95.833	93.496	93.715	94.821	92.98	95.892	98.179
15:00	MA51693-CCB2	95.106	98.35	95.147	96.008	99.354	93.826	96.655	98.459
15:05	MP30584A-MB1	96.165	98.037	97.773	97.464	98.592	98.563	97.763	99.118
15:11	MP30584A-B2	97.484	100.318	96.872	98.666	99.84	98.132	98.319	99.54
15:17	MP30584A-S3	91.943	99.59	93.577	88.292	95.251	97.66	91.332	99.938
15:23	MP30584A-S4	95.014	99.247	94.588	93.067	95.121	97.435	95.27	101.004
15:28	JD37159-1	92.66	96.624	92.596	91.905	93.626	97.097	94.082	101.54

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:34	MP30584A-SD1	90.221	102.357	98.003	90.463	100.922	102.245	90.765	105.291
15:40	MP30584A-PS1	92.803	98.57	92.608	92.064	95.283	96.709	94.064	101.308
15:46	ZZZZZZ	94.914	101.823	94.789	97.421	102.793	96.118	97.171	102.358
15:52	MA51693-CCVA3	97.504	101.684	97.352	97.459	100.583	100.324	97.255	104.308
15:58	MA51693-CCB3	96.605	102.406	102.528	99.228	103.117	102.144	98.308	104.134
16:04	ZZZZZZ	93.313	100.694	99.541	95.87	102.463	99.212	94.417	102.028
16:09	MP30441-MB1	98.424	104.932	104.094	99.907	105.199	102.781	99.342	105.766
16:15	MP30441-B1	92.126	88.817	96.026	94.088	89.468	95.89	92.969	101.858
16:21	MP30441-S1	77.759	80.376	66.71 !	70.975	73.942	70.874	76.346	80.433
16:27	MP30441-S2	77.581	80.003	71.155	71.225	73.069	75.092	77.017	85.811
16:32	ZZZZZZ	97.465	97.316	91.809	98.725	99.12	93.854	100.175	97.421
16:38	JD36533-1	75.068	76.539	68.93 !	68.895 !	70.747	73.203	74.635	84.025
16:44	MP30441-SD1	88.071	80.913	83.778	83.81	76.845	88.241	89.21	97.928
16:50	ZZZZZZ	90.9	95.375	91.105	93.366	97.959	91.382	93.399	98.787
16:55	MA51693-CCVA4	89.869	96.204	91.65	91.564	96.639	92.204	92.641	100.7
17:01	MA51693-CCB4	84.338	91.65	91.013	87.186	94.455	90.494	87.207	98.548
17:07	JD36624-12	80.809	88.184	78.895	78.039	85.005	81.093	82.062	92.051
17:12	JD36624-13	82.508	77.308	79.979	79.06	73.319	83.475	83.049	93.591
17:18	JD36624-14	81.876	86.017	79.404	78.061	82.095	83.153	82.353	93.2
17:24	JD36624-15	75.962	80.001	71.554	70.626	74.003	76.518	76.926	86.789
17:30	JD36624-16	83.666	95.7	85.971	82.563	92.396	88.359	83.705	100.521
17:35	JD36624-17	82.49	87.038	81.198	81.489	84.901	83.311	83.745	95.964
17:41	JD36624-12F	88.315	92.551	85.919	85.937	88.708	89.326	89.606	100.134
17:47	JD36624-13F	83.438	86.976	83.704	80.858	83.022	87.205	85.426	97.377
17:53	MA51693-CCVA5	91.99	89.158	96.649	94.007	86.681	98.991	95.359	103.764
17:58	MA51693-CCB5	96.475	100.603	99.508	98.466	102.245	103.105	99.086	106.359
18:04	JD36624-14F	83.41	91.934	81.977	80.433	86.542	85.554	84.747	96.032
18:10	JD36624-15F	76.859	81.515	75.533	72.278	75.112	80.933	77.6	91.935
18:16	JD36624-16F	84.251	96.083	82.874	82.753	92.295	86.859	85.112	98.805
18:21	JD36624-17F	82.067	99.76	88.455	80.095	95.471	94.9	81.132	102.55
18:27	ZZZZZZ	94.59	102.829	95.344	94.251	99.835	98.937	94.027	106.285
18:33	ZZZZZZ	95.533	103.178	95.445	93.468	100.053	100.965	94.12	105.974
18:38	ZZZZZZ	91.643	99.745	92.305	90.895	97.491	97.342	90.704	105.842

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:44	ZZZZZZ	91.871	97.63	93.833	89.794	95.723	99.079	91.17	105.922
18:50	ZZZZZZ	92.268	98.314	84.596	89.782	94.531	87.822	90.529	94.434
18:55	MA51693-CCVA6	96.317	98.985	102.052	96.489	98.779	102.691	98.251	107.4
19:01	MA51693-CCB6	96.494	99.521	104.137	98.885	101.803	103.777	98.766	107.359
19:07	MP30440-MB1	101.886	100.803	106.034	103.641	102.315	104.915	102.767	107.883
19:12	MP30440-B1	90.801	96.372	94.536	93.369	97.687	97.345	92.991	103.296
19:18	JD36624-17F	90.936	92.1	88.148	88.425	88.837	93.12	91.039	101.537
19:23	MP30440-S1	91.404	97.517	91.405	90.239	93.833	95.237	91.508	102.616
19:29	MP30440-S2	93.105	97.186	91.273	91.117	93.539	94	93.218	102.934
19:35	JD36624-5	92.975	98.36	91.736	90.641	94.63	96.014	93.077	103.838
19:41	MP30440-SD1	101.95	100.357	91.616	101.554	99.457	91.467	103.104	96.909
19:46	JD36624-3	86.652	82.898	83.838	82.883	78.19	86.435	86.376	98.499
19:52	JD36624-4	85.767	95.925	89.79	83.833	92.635	91.992	85.157	101.758
19:58	ZZZZZZ	100.751	101.871	108.784	101.499	103.017	107.533	102.179	110.551
20:03	MA51693-CCVA7	96.018	88.032	94.884	96.152	89.295	98.621	97.723	102.853
20:09	MA51693-CCB7	96.831	99.215	104.649	99.257	101.076	104.286	99.292	106.761
20:15	ZZZZZZ	97.256	88.929	108.331	96.538	89.258	109.434	98.661	113.521

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Rhodium (103-3)	70-130 %	70-130 %
Istd#14	Indium (115-1)	70-130 %	70-130 %
Istd#15	Indium (115-2)	70-130 %	70-130 %
Istd#16	Terbium (159-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
11:50	MA51693-STD1	100	100	100	100	100	100
11:56	MA51693-STD2	100	100	100	100	100	100
12:02	MA51693-STD3	100	100	100	100	100	100
12:08	MA51693-STD4	100.755	97.825	100.169	100.688	100.267	100.468
12:14	MA51693-STD5	95.984	101.062	100.995	95.672	101.573	95.131
12:19	MA51693-STD6	101.721	102.152	101.017	101.634	101.435	102.011
12:25	MA51693-STD7	101.997	101.422	91.646	101.472	91.313	101.905
12:31	MA51693-STD8	102.375	101.703	93.154	102.086	94.132	102.228
12:37	MA51693-STD9	101.965	101.597	100.421	101.942	101.511	102.914
12:43	MA51693-STD10	102.096	78.945	100.999	101.787	100.904	101.904
12:48	MA51693-STD11	91.458	90.312	89.489	90.809	85.954	90.838
12:54	MA51693-STD12	91.576	90.239	89.207	91.498	85.342	89.865
13:00	MA51693-STD13	93.021	91.723	91.388	92.266	84.479	89.257
13:15	MA51693-STD14	92.938	90.939	90.487	92.001	85.551	92.195
13:20	MA51693-STD15	93	91.947	90.434	92.342	87.688	92.506
13:27	MA51693-STD16	100	100	100	100	100	100
13:33	ZZZZZZ	99.382	99.114	98.983	99.453	101.152	99.568
13:39	MA51693-ICVA1	100.332	100.315	98.496	101.139	99.29	99.216
13:45	MA51693-ICV1	98.441	100.035	99.5	99.221	100.11	98.84
14:11	MA51693-ICB1	99.567	99.98	100.148	100.057	95.8	99.285
14:17	MA51693-CCVA1	103.011	101.395	100.411	103.918	101.413	101.427
14:23	MA51693-CCB1	101.5	102.707	100.793	101.519	102.846	101.162
14:28	MA51693-CRI1	101.199	102.259	99.707	101.226	99.403	100.505
14:34	MA51693-ICSA1	92.698	93.892	94.025	93.145	89.152	86.651
14:40	MA51693-ICSAB1	91.906	93.201	92.909	92.402	88.55	86.66
14:48	ZZZZZZ	96.606	99.107	96.818	97.305	98.008	97.618
14:54	MA51693-CCVA2	98.081	100.046	98.214	98.934	100.232	97.791
15:00	MA51693-CCB2	98.038	101.247	98.01	98.269	100.666	99.204
15:05	MP30584A-MB1	98.298	100.499	100.091	98.887	100.941	99.288
15:11	MP30584A-B2	100.774	102.62	100.164	101.869	101.79	101.458
15:17	MP30584A-S3	93.716	101.112	99.666	94.804	98.113	88.879
15:23	MP30584A-S4	98.665	102.023	101.649	99.581	97.971	93.333
15:28	JD37159-1	98.414	100.152	101.43	99.087	99.089	93.548

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
15:34	MP30584A-SD1	94.028	105.147	105.692	94.206	102.459	93.396
15:40	MP30584A-PS1	98.437	102.205	101.074	99.387	99.848	94.262
15:46	ZZZZZZ	99.9	105.182	101.953	100.171	103.008	100.796
15:52	MA51693-CCVA3	101.354	105.314	104.844	102.256	104.629	100.932
15:58	MA51693-CCB3	100.849	105.397	105.392	101.561	105.697	101.504
16:04	ZZZZZZ	98.531	105.168	102.567	99.029	107.541	102.066
16:09	MP30441-MB1	102.236	107.393	105.443	103.236	107.861	102.856
16:15	MP30441-B1	98.348	93.904	101.829	99.121	104.084	99.899
16:21	MP30441-S1	83.166	87.201	81.556	84.176	72.525	74.118
16:27	MP30441-S2	83.489	85.909	86.322	84.85	76.513	73.51
16:32	ZZZZZZ	103.667	103.533	97.902	104.053	99.933	104.153
16:38	JD36533-1	80.933	83.206	84.657	81.745	75.426	71.599
16:44	MP30441-SD1	94.864	86.937	98.078	95.813	92.676	89.258
16:50	ZZZZZZ	97.661	103.806	99.544	98.936	101.93	100.693
16:55	MA51693-CCVA4	98.52	103.854	101.137	100.043	104.036	99.61
17:01	MA51693-CCB4	92.038	100.285	98.672	92.79	102.473	94.994
17:07	JD36624-12	90.334	97.609	93.087	90.861	90.179	86.124
17:12	JD36624-13	90.878	84.779	95.594	91.681	90.647	86.519
17:18	JD36624-14	89.541	95.781	93.897	90.912	90.572	85.523
17:24	JD36624-15	82.441	87.925	87.281	83.446	80.362	75.823
17:30	JD36624-16	92.879	104.6	100.493	94.602	97.117	89.878
17:35	JD36624-17	93.297	97.575	97.152	94.78	93.67	90.118
17:41	JD36624-12F	96.35	100.908	100.323	97.308	96.314	92.026
17:47	JD36624-13F	92.805	96.285	98.06	93.585	92.284	87.286
17:53	MA51693-CCVA5	101.458	93.622	105.087	102.332	105.036	101.621
17:58	MA51693-CCB5	102.547	106.42	105.636	104.005	107.469	104.526
18:04	JD36624-14F	92.136	99.594	96.24	93.547	90.855	87.232
18:10	JD36624-15F	83.939	88.914	92.746	85.138	83.586	76.103
18:16	JD36624-16F	93.87	104.802	99.616	95.077	96.349	90.538
18:21	JD36624-17F	88.005	106.851	104.162	89.158	98.981	85.028
18:27	ZZZZZZ	101.184	108.911	106.269	102.489	103.493	99.429
18:33	ZZZZZZ	100.491	109.468	107.321	101.882	104.787	98.963
18:38	ZZZZZZ	99.454	108.001	105.413	100.505	103.875	97.561

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51693
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
18:44	ZZZZZZ	97.901	105.294	106.155	99.343	104.233	97.22
18:50	ZZZZZZ	97.725	103.969	95.065	98.619	93.892	96.519
18:55	MA51693-CCVA6	103.414	106.783	107.346	104.414	111.073	102.355
19:01	MA51693-CCB6	101.819	105.618	107.461	102.784	109.689	103.14
19:07	MP30440-MB1	104.896	106.312	107.799	105.743	110.741	106.246
19:12	MP30440-B1	99.165	105.09	103.173	99.284	104.051	100.108
19:18	JD36624-17F	98.547	99.467	102.804	99.081	97.72	94.02
19:23	MP30440-S1	98.298	104.175	102.762	99.823	100.75	95.469
19:29	MP30440-S2	100.638	103.771	103.677	102.217	101.058	97.823
19:35	JD36624-5	98.917	104.264	104.17	99.925	100.779	96.514
19:41	MP30440-SD1	107.67	105.524	96.765	108.644	99.234	107.064
19:46	JD36624-3	93.864	89.846	99.273	95.151	89.948	85.687
19:52	JD36624-4	91.715	103.253	101.146	92.138	98.759	88.683
19:58	ZZZZZZ	103.791	106.999	109.938	104.663	115.721	105.354
20:03	MA51693-CCVA7	102.563	95.678	103.464	102.988	103.809	101.818
20:09	MA51693-CCB7	101.903	105.336	107.707	102.62	110.158	103.011
20:15	ZZZZZZ	102.101	95.087	112.945	103.676	114.05	101.626

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	70-130 %	70-130 %
Istd#18	Terbium (159-3)	70-130 %	70-130 %
Istd#19	Holmium (165-1)	70-130 %	70-130 %
Istd#20	Holmium (165-2)	70-130 %	70-130 %
Istd#21	Bismuth (209-1)	70-130 %	70-130 %
Istd#22	Bismuth (209-2)	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51693 Units: ug/l

Time: / Sample ID:			14:11 ICB1		14:23 CCB1		15:00 CCB2		15:58 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	-6.55	<25	-6.50	<25	-5.91	<25	-6.76	<25
Antimony	2.0	.085	-0.305	<2.0	-0.289	<2.0	-0.299	<2.0	-0.300	<2.0
Arsenic	0.50	.025	-0.0177	<0.50	0.0364	<0.50	0.0245	<0.50	0.0297	<0.50
Barium	1.0	.009	0.00365	<1.0	0.00680	<1.0	0.00606	<1.0	-0.000288	<1.0
Beryllium	0.50	.005	-0.00618	<0.50	0.00620	<0.50	0.00332	<0.50	0.00519	<0.50
Boron	25	.85								
Cadmium	0.50	.01	0.0240	<0.50	0.0341	<0.50	0.0316	<0.50	0.0314	<0.50
Calcium	250	3.6	1.24	<250	1.51	<250	1.24	<250	1.19	<250
Chromium	1.0	.018	-0.00855	<1.0	0.0113	<1.0	0.00883	<1.0	0.00117	<1.0
Cobalt	0.50	.003	-0.000493	<0.50	0.00619	<0.50	0.00362	<0.50	0.00138	<0.50
Copper	2.0	.024	0.181	<2.0	0.143	<2.0	0.152	<2.0	0.106	<2.0
Iron	25	.24	-0.510	<25	0.361	<25	1.49	<25	2.28	<25
Lead	0.50	.008	-0.00212	<0.50	0.00543	<0.50	0.00925	<0.50	0.00581	<0.50
Magnesium	250	.19	0.0992	<250	0.170	<250	1.03	<250	0.0843	<250
Manganese	1.0	.012	0.00360	<1.0	0.0208	<1.0	0.0193	<1.0	0.0523	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	0.000975	<1.0	0.00177	<1.0	0.00585	<1.0	-0.000782	<1.0
Potassium	250	.78	0.246	<250	-0.0753	<250	-1.44	<250	-0.889	<250
Selenium	0.50	.044	-0.173	<0.50	0.220	<0.50	0.290	<0.50	0.309	<0.50
Silver	0.50	.004	-0.000989	<0.50	0.0139	<0.50	0.0108	<0.50	0.00704	<0.50
Sodium	250	1.5	0.470	<250	1.04	<250	2.55	<250	1.01	<250
Strontium	5.0	.014								
Thallium	0.50	.002	-0.00623	<0.50	0.0281	<0.50	0.0282	<0.50	0.0463	<0.50
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	0.00230	<1.0	-0.00612	<1.0	-0.00710	<1.0	-0.0148	<1.0
Zinc	5.0	.078	0.675	<5.0	0.674	<5.0	0.757	<5.0	0.737	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51693 Units: ug/l

Time: / Sample ID:			17:01 CCB4		17:58 CCB5		19:01 CCB6		20:09 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	-6.36	<25	-6.36	<25	-6.00	<25	-6.40	<25
Antimony	2.0	.085	-0.314	<2.0	-0.312	<2.0	-0.317	<2.0	-0.317	<2.0
Arsenic	0.50	.025	0.0174	<0.50	0.0310	<0.50	0.0142	<0.50	0.0225	<0.50
Barium	1.0	.009	0.000140	<1.0	0.000743	<1.0	0.00965	<1.0	0.0627	<1.0
Beryllium	0.50	.005	0.00820	<0.50	0.00807	<0.50	-0.00116	<0.50	0.00412	<0.50
Boron	25	.85								
Cadmium	0.50	.01	0.0284	<0.50	0.0281	<0.50	0.0305	<0.50	0.0337	<0.50
Calcium	250	3.6	0.255	<250	1.71	<250	0.477	<250	2.87	<250
Chromium	1.0	.018	-0.00379	<1.0	-0.0207	<1.0	-0.0128	<1.0	-0.0114	<1.0
Cobalt	0.50	.003	0.00528	<0.50	0.00423	<0.50	0.00408	<0.50	0.00440	<0.50
Copper	2.0	.024	0.292	<2.0	0.158	<2.0	0.120	<2.0	0.156	<2.0
Iron	25	.24	1.13	<25	0.981	<25	0.997	<25	0.915	<25
Lead	0.50	.008	0.00232	<0.50	0.00410	<0.50	0.00634	<0.50	0.0109	<0.50
Magnesium	250	.19	0.505	<250	2.65	<250	1.45	<250	1.05	<250
Manganese	1.0	.012	0.0314	<1.0	0.0300	<1.0	0.0315	<1.0	0.0450	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	0.00558	<1.0	0.00705	<1.0	0.0138	<1.0	0.0110	<1.0
Potassium	250	.78	0.768	<250	-0.463	<250	0.141	<250	0.109	<250
Selenium	0.50	.044	0.247	<0.50	0.201	<0.50	0.253	<0.50	0.276	<0.50
Silver	0.50	.004	0.00921	<0.50	0.0112	<0.50	0.00927	<0.50	0.0174	<0.50
Sodium	250	1.5	54.3	<250	25.5	<250	14.3	<250	13.9	<250
Strontium	5.0	.014								
Thallium	0.50	.002	0.0363	<0.50	0.0271	<0.50	0.0306	<0.50	0.0273	<0.50
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	-0.0154	<1.0	-0.000436	<1.0	0.00836	<1.0	-0.00757	<1.0
Zinc	5.0	.078	0.786	<5.0	0.763	<5.0	0.802	<5.0	0.376	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51693 Units: ug/l

Time:		13:39			13:45			14:17	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	5380	97.8	60	63.3	105.5	5000	4840	96.8
Antimony	60	64.5	107.5				50	53.7	107.4
Arsenic	60	59.1	98.5				50	48.9	97.8
Barium	60	60.2	100.3				50	49.1	98.2
Beryllium	60	59.7	99.5				50	49.7	99.4
Boron									
Cadmium	60	58.4	97.3				50	48.8	97.6
Calcium	5500	5360	97.5				5000	4800	96.0
Chromium	60	59.0	98.3				50	48.5	97.0
Cobalt	60	58.3	97.2				50	48.0	96.0
Copper	60	57.7	96.2				50	48.0	96.0
Iron	5500	5350	97.3				5000	4830	96.6
Lead	60	60.3	100.5				50	49.5	99.0
Magnesium	5500	5350	97.3				5000	4810	96.2
Manganese	60	58.8	98.0				50	48.6	97.2
Molybdenum									
Nickel	60	57.8	96.3				50	48.1	96.2
Potassium	5500	5310	96.5				5000	4840	96.8
Selenium	260	247	95.0				200	193	96.5
Silver	60	62.5	104.2				50	51.6	103.2
Sodium	5500	5410	98.4				5000	4850	97.0
Strontium									
Thallium	60	62.0	103.3				50	49.6	99.2
Tin									
Titanium									
Vanadium	60	59.4	99.0				50	49.3	98.6
Zinc	60	56.7	94.5				50	46.1	92.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51693 Units: ug/l

Time:		14:54			15:52			16:55	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4780	95.6	5000	4760	95.2	5000	4650	93.0
Antimony	50	52.7	105.4	50	51.9	103.8	50	51.3	102.6
Arsenic	50	49.8	99.6	50	49.5	99.0	50	49.2	98.4
Barium	50	48.6	97.2	50	47.7	95.4	50	47.5	95.0
Beryllium	50	50.4	100.8	50	48.2	96.4	50	49.0	98.0
Boron									
Cadmium	50	48.6	97.2	50	49.0	98.0	50	49.1	98.2
Calcium	5000	4840	96.8	5000	4790	95.8	5000	4750	95.0
Chromium	50	49.3	98.6	50	49.4	98.8	50	48.5	97.0
Cobalt	50	49.0	98.0	50	49.1	98.2	50	48.8	97.6
Copper	50	49.3	98.6	50	49.1	98.2	50	48.8	97.6
Iron	5000	4910	98.2	5000	4920	98.4	5000	4910	98.2
Lead	50	49.4	98.8	50	49.6	99.2	50	49.1	98.2
Magnesium	5000	4780	95.6	5000	4860	97.2	5000	4690	93.8
Manganese	50	49.7	99.4	50	49.7	99.4	50	48.8	97.6
Molybdenum									
Nickel	50	49.2	98.4	50	48.6	97.2	50	48.4	96.8
Potassium	5000	4830	96.6	5000	4800	96.0	5000	4700	94.0
Selenium	200	195	97.5	200	193	96.5	200	192	96.0
Silver	50	52.1	104.2	50	50.0	100.0	50	51.1	102.2
Sodium	5000	4800	96.0	5000	4900	98.0	5000	4790	95.8
Strontium									
Thallium	50	49.2	98.4	50	49.2	98.4	50	49.0	98.0
Tin									
Titanium									
Vanadium	50	49.5	99.0	50	49.8	99.6	50	48.9	97.8
Zinc	50	48.3	96.6	50	47.9	95.8	50	47.9	95.8

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51693 Units: ug/l

Time:		17:53			18:55			20:03	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4690	93.8	5000	4700	94.0	5000	4760	95.2
Antimony	50	50.6	101.2	50	50.3	100.6	50	54.0	108.0
Arsenic	50	48.7	97.4	50	48.5	97.0	50	48.5	97.0
Barium	50	46.9	93.8	50	46.8	93.6	50	49.4	98.8
Beryllium	50	48.3	96.6	50	48.7	97.4	50	51.2	102.4
Boron									
Cadmium	50	48.8	97.6	50	49.3	98.6	50	49.3	98.6
Calcium	5000	4740	94.8	5000	4780	95.6	5000	5080	101.6
Chromium	50	49.1	98.2	50	48.7	97.4	50	48.5	97.0
Cobalt	50	48.6	97.2	50	48.5	97.0	50	48.1	96.2
Copper	50	48.5	97.0	50	48.4	96.8	50	47.9	95.8
Iron	5000	4940	98.8	5000	4910	98.2	5000	4920	98.4
Lead	50	49.2	98.4	50	47.2	94.4	50	51.2	102.4
Magnesium	5000	4750	95.0	5000	4750	95.0	5000	4760	95.2
Manganese	50	49.5	99.0	50	49.1	98.2	50	48.8	97.6
Molybdenum									
Nickel	50	48.2	96.4	50	48.1	96.2	50	47.6	95.2
Potassium	5000	4720	94.4	5000	4730	94.6	5000	4820	96.4
Selenium	200	211	105.5	200	192	96.0	200	221	110.5*(a
Silver	50	49.1	98.2	50	49.0	98.0	50	51.7	103.4
Sodium	5000	4820	96.4	5000	4780	95.6	5000	4810	96.2
Strontium									
Thallium	50	49.0	98.0	50	47.1	94.2	50	50.8	101.6
Tin									
Titanium									
Vanadium	50	49.1	98.2	50	49.2	98.4	50	49.1	98.2
Zinc	50	47.6	95.2	50	48.2	96.4	50	47.7	95.4

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51693 Units: ug/l

Time:			14:28	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	21.8	87.2
Antimony	2.0	0.25	1.83	91.5
Arsenic	0.50	0.50	0.495	99.0
Barium	1.0	0.50	0.949	94.9
Beryllium	0.50	0.25	0.498	99.6
Boron	25	2.5		
Cadmium	0.50	0.25	0.504	100.8
Calcium	250	125	249	99.6
Chromium	1.0	2.0	1.02	102.0
Cobalt	0.50	0.25	0.515	103.0
Copper	2.0	2.0	2.18	109.0
Iron	25	25	27.0	108.0
Lead	0.50	0.25	0.514	102.8
Magnesium	250	125	257	102.8
Manganese	1.0	0.25	1.02	102.0
Molybdenum	1.0	0.50		
Nickel	1.0	2.0	1.01	101.0
Potassium	250	125	253	101.2
Selenium	0.50	0.50	0.419	83.8
Silver	0.50	1.0	0.577	115.4
Sodium	250	125	254	101.6
Strontium	5.0	0.50		
Thallium	0.50	0.25	0.491	98.2
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0	1.02	102.0
Zinc	5.0	2.0	5.32	106.4

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010722M1.CSV Date Analyzed: 01/07/22 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51693 Units: ug/l

Time:			14:34		14:40	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	93800	93.8	94400	94.4
Antimony			-0.246		-0.224	
Arsenic		20	0.0573		18.5	92.5
Barium			0.0889		0.107	
Beryllium			-0.00217		-0.00147	
Boron		50	0.553		52.6	105.2
Cadmium		20	-0.353		19.7	98.5
Calcium	100000	100000	95000	95.0	97600	97.6
Chromium		20	0.892		20.7	103.5
Cobalt		20	0.115		19.3	96.5
Copper		20	0.308		18.7	93.5
Iron	100000	100000	92900	92.9	93900	93.9
Lead			0.0380		0.0495	
Magnesium	100000	100000	92400	92.4	93600	93.6
Manganese		20	0.329		20.2	101.0
Molybdenum	2000	2000	2200HH	110.0	2220HH	111.0
Nickel		20	0.541		19.1	95.5
Potassium	100000	100000	93800	93.8	94400	94.4
Selenium		20	-0.0212		19.2	96.0
Silver		20	0.0176		20.5	102.5
Sodium	100000	100000	93900	93.9	95000	95.0
Strontium	2000	2000	2170HH	108.5	2190HH	109.5
Thallium			0.00522		0.00181	
Tin	2000	2000	2010HH	100.5	2030HH	101.5
Titanium	2000	2000	1800HH	90.0	1830HH	91.5
Vanadium		20	0.0149		21.3	106.5
Zinc		20	0.780		19.5	97.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:04	MA51703-STD1	1		Sample introduction not stable, see rerun.
13:09	MA51703-STD2	1		Sample introduction not stable, see rerun.
13:15	MA51703-STD3	1		STDA
13:21	MA51703-STD4	1		STDB
13:26	MA51703-STD5	1		STDC
13:32	MA51703-STD6	1		STDD
13:38	MA51703-STD7	1		STDE
13:43	MA51703-STD8	1		STDF
13:49	MA51703-STD9	1		STDG
13:55	MA51703-STD10	1		STDH
14:00	MA51703-STD11	1		STDI
14:06	MA51703-STD12	1		STDJ
14:12	MA51703-STD13	1		STDJ
14:17	MA51703-STD14	1		STDA
14:23	ZZZZZZ	1		
14:29	MA51703-ICVA1	1		
14:34	MA51703-ICV1	1		
14:48	MA51703-ICB1	1		
14:53	MA51703-CCVA1	1		
14:59	MA51703-CCB1	1		
15:05	MA51703-CRI1	1		
15:10	MA51703-ICSA1	1		
15:17	MA51703-ICSA2	1		
15:25	MA51703-ICSAB1	1		
15:34	ZZZZZZ	1		
15:39	MA51703-CCVA2	1		
15:45	MA51703-CCB2	1		
15:51	MP30440-MB1	2		
15:57	MP30440-B1	2		
16:03	JD36624-6	2		high elements
16:08	JD36624-7	2		high elements
16:14	JD36624-8	2		high elements
16:20	JD36624-9	2		high elements. rerun 1;2 for high rsd-s

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:26	JD36624-10	2		high elements
16:31	JD36624-11	2		high elements
16:37	JD36624-3F	2		high elements
16:43	MA51703-CCVA3	1		
16:48	MA51703-CCB3	1		
16:54	JD36624-4F	2		high elements
16:59	JD36624-5F	2		high elements
17:05	JD36624-6F	2		High elements
17:11	JD36624-7F	2		High elements
17:16	JD36624-8F	2		High elements
17:22	JD36624-9F	2		High elements
17:28	JD36624-10F	2		High elements
17:33	JD36624-11F	2		High elements
17:39	MA51703-CCVA4	1		
17:45	MA51703-CCB4	1		
17:50	MP30683-MB1	2		
17:56	MP30683-B1	2		
18:02	MP30683-S1	2		high elements
18:07	MP30683-S2	2		high elements
18:13	JD37564-1	2		(sample used for QC only; not part of login JD36624)
18:19	MP30683-SD1	10		high elements
18:24	ZZZZZZ	2		
18:30	ZZZZZZ	1		
18:36	ZZZZZZ	1		
18:41	MA51703-CCVA5	1		
18:47	MA51703-CCB5	1		
18:53	ZZZZZZ	2		
18:58	ZZZZZZ	2		
19:04	ZZZZZZ	2		
19:10	ZZZZZZ	2		
19:15	ZZZZZZ	2		
19:21	ZZZZZZ	2		
19:27	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:32	MA51703-CCVA6	1		
19:38	MA51703-CCB6	1		
19:44	ZZZZZZ	1		
19:49	MP30697-MB1	2		
19:55	MP30697-B1	2		
20:00	MP30697-S1	2		
20:06	MP30697-S2	2		
20:11	JD36387-33	2		(sample used for QC only; not part of login JD36624)
20:17	MP30697-SD1	10		
20:22	ZZZZZZ	2		
20:28	MA51703-CCVA7	1		
20:34	MA51703-CCB7	1		
20:39	MP30471-S1	20		
20:45	MP30471-S2	20		
20:50	JD36804-8	20		(sample used for QC only; not part of login JD36624)
20:56	MP30471-SD1	100		rerun for Be1;10
21:01	JD36624-2F	10		
21:07	JD36624-2F	50		CCV out
21:13	JD36624-2	10		
21:18	JD36624-2	50		CCV out
21:24	ZZZZZZ	1		
21:29	ZZZZZZ	1		
21:35	MA51703-CCVA8	1		
21:40	MA51703-CCB8	1		
21:46	ZZZZZZ	5		
21:51	ZZZZZZ	20		
21:57	ZZZZZZ	20		
22:03	MP30471-S1	100		
22:08	MP30471-S2	100		
22:14	JD36804-8	100		(sample used for QC only; not part of login JD36624)
22:19	MP30471-SD1	500		
---------->	Last reportable sample/prep for job JD36624			
22:25	ZZZZZZ	1		
22:30	MA51703-CCVA9	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:36	MA51703-CCB9	1		
---------->	Last reportable CCB for job JD36624			
22:41	MP30591-MB1	2		
22:47	MP30591-B1	2		
22:53	MP30591-S1	2		
22:58	MP30591-S2	2		
23:04	JD36418-7	2		(sample used for QC only; not part of login JD36624)
23:09	MP30591-SD1	10		
23:15	ZZZZZZ	1		
23:20	MA51703-CCVA10	1		
23:26	MA51703-CCB10	1		
23:31	ZZZZZZ	2		
23:37	ZZZZZZ	2		
23:43	ZZZZZZ	2		
23:48	ZZZZZZ	2		
23:54	ZZZZZZ	2		
23:59	ZZZZZZ	2		
00:05	MA51703-CCVA11	1		
00:10	MA51703-CCB11	1		
00:16	MP30416A-MB1	2		
00:22	MP30416A-B2	2		
00:27	MP30416A-S3	2		
00:33	MP30416A-S4	2		
00:38	JD36625-5	2		(sample used for QC only; not part of login JD36624)
00:44	MP30416A-SD1	10		
00:49	ZZZZZZ	2		
00:55	ZZZZZZ	2		
01:00	MA51703-CCVA12	1		
01:06	MA51703-CCB12	1		
01:12	ZZZZZZ	2		
01:17	ZZZZZZ	2		
01:23	ZZZZZZ	2		
01:28	ZZZZZZ	2		
01:34	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
01:39	ZZZZZZ	2		
01:45	ZZZZZZ	2		
01:51	ZZZZZZ	2		
01:56	ZZZZZZ	2		
02:02	MA51703-CCVA13	1		
02:07	MA51703-CCB13	1		
02:13	ZZZZZZ	1		
02:18	ZZZZZZ	1		
02:24	ZZZZZZ	2		
02:29	ZZZZZZ	2		
02:35	ZZZZZZ	2		
02:41	ZZZZZZ	2		
02:46	ZZZZZZ	2		
02:52	ZZZZZZ	2		
02:57	ZZZZZZ	2		
03:03	ZZZZZZ	2		
03:08	MA51703-CCVA14	1		
03:14	MA51703-CCB14	1		
03:19	MP30634-MB1	1		
03:25	MP30634-B1	1		
03:31	MP30634-S1	1		
03:36	MP30634-S2	1		
03:42	JD37473-6F	1		(sample used for QC only; not part of login JD36624)
03:47	ZZZZZZ	1		
03:53	ZZZZZZ	1		
03:58	ZZZZZZ	1		
04:04	MA51703-CCVA15	1		
04:10	MA51703-CCB15	1		
04:15	ZZZZZZ	1		
04:21	MP30634-S1	2		
04:26	MP30634-S2	2		
04:32	MP30691-MB1	1		
04:37	MP30691-B1	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
04:43	MP30691-S1	1		
04:49	MP30691-S2	1		
04:54	JD37653-1	1		(sample used for QC only; not part of login JD36624)
05:00	ZZZZZZ	1		
05:05	ZZZZZZ	1		
05:11	MA51703-CCVA16	1		
05:16	MA51703-CCB16	1		
05:22	ZZZZZZ	1		
05:28	ZZZZZZ	1		
05:33	ZZZZZZ	1		
05:39	ZZZZZZ	1		
05:44	ZZZZZZ	1		
05:50	ZZZZZZ	1		
05:55	ZZZZZZ	1		
06:01	MP30691-S1	2		MN still high
06:07	MP30691-S2	2		MN still high
06:12	JD37653-1	2		(sample used for QC only; not part of login JD36624)
06:18	MA51703-CCVA17	1		
06:23	MA51703-CCB17	1		
06:29	MP30633-MB1	1		
06:35	MP30633-B1	1		
06:40	MP30633-S1	1		
06:46	MP30633-S2	1		
06:52	JD37473-1	1		(sample used for QC only; not part of login JD36624)
06:57	ZZZZZZ	1		
07:03	ZZZZZZ	1		
07:08	ZZZZZZ	1		
07:14	ZZZZZZ	1		
07:20	ZZZZZZ	1		
07:25	MA51703-CCVA18	1		
07:31	MA51703-CCB18	1		
07:36	ZZZZZZ	1		
07:42	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
07:48	ZZZZZZ	1		
07:53	ZZZZZZ	1		
07:59	ZZZZZZ	1		
08:04	ZZZZZZ	1		
08:10	MA51703-CCVA19	1		
08:15	MA51703-CCB19	1		
08:21	ZZZZZZ	2		
08:27	ZZZZZZ	2		
08:32	ZZZZZZ	50		
08:38	ZZZZZZ	50		
08:43	ZZZZZZ	100		
08:49	ZZZZZZ	100		
08:54	MA51703-CCVA20	1		
09:00	MA51703-CCB20	1		
09:05	ZZZZZZ	1		
09:11	ZZZZZZ	1		
09:17	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn
14:23	ZZZZZZ	1																						
14:29	MA51703-ICVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:34	MA51703-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:48	MA51703-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:53	MA51703-CCVA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:59	MA51703-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:05	MA51703-CRI1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:10	MA51703-ICSA1	1																						
15:17	MA51703-ICSA2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:25	MA51703-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:34	ZZZZZZ	1																						
15:39	MA51703-CCVA2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:45	MA51703-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:51	MP30440-MB1	2																	X					
15:57	MP30440-B1	2																	X					
16:03	JD36624-6	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
16:08	JD36624-7	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
16:14	JD36624-8	2	X	X	X	X	X	X		X	X	X	X	X		X		X	X	X		X	X	X
16:20	JD36624-9	2	X	X	X		X	X		X	X	X				X		X	X	X		X	X	X
16:26	JD36624-10	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
16:31	JD36624-11	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
16:37	JD36624-3F	2	X	X	X		X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
16:43	MA51703-CCVA3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:48	MA51703-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:54	JD36624-4F	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
16:59	JD36624-5F	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
17:05	JD36624-6F	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
17:11	JD36624-7F	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
17:16	JD36624-8F	2	X	X	X	X	X	X		X	X	X	X	X		X		X	X	X		X	X	X
17:22	JD36624-9F	2	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X		X	X	X
17:28	JD36624-10F	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
17:33	JD36624-11F	2	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X
17:39	MA51703-CCVA4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
17:45	MA51703-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
17:50	MP30683-MB1	2			X		X	X	X		X	X	X	X	X	X	X			X			X	
17:56	MP30683-B1	2			X		X	X	X		X	X	X	X	X	X	X			X			X	
18:02	MP30683-S1	2			X		X		X		X	X	X			X				X			X	
18:07	MP30683-S2	2			X		X		X		X	X	X			X				X			X	
18:13	JD37564-1	2									X	X											X	(a)
18:19	MP30683-SD1	10			X		X		X		X	X	X			X				X			X	
18:24	ZZZZZZ	2																						
18:30	ZZZZZZ	1																						
18:36	ZZZZZZ	1																						
18:41	MA51703-CCVA5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:47	MA51703-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
18:53	ZZZZZZ	2																						
18:58	ZZZZZZ	2																						
19:04	ZZZZZZ	2																						
19:10	ZZZZZZ	2																						
19:15	ZZZZZZ	2																						
19:21	ZZZZZZ	2																						
19:27	ZZZZZZ	1																						
19:32	MA51703-CCVA6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:38	MA51703-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
19:44	ZZZZZZ	1																						
19:49	MP30697-MB1	2			X																			
19:55	MP30697-B1	2			X																			
20:00	MP30697-S1	2			X																			
20:06	MP30697-S2	2			X																			
20:11	JD36387-33	2			X																			(a)
20:17	MP30697-SD1	10			X																			
20:22	ZZZZZZ	2																						
20:28	MA51703-CCVA7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:34	MA51703-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
20:39	MP30471-S1	20	X		X					X					X	X	X				X			X	
20:45	MP30471-S2	20	X		X					X					X	X	X				X			X	
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
20:50	JD36804-8	20			X																				(a)
20:56	MP30471-SD1	100	X		X											X	X				X			X	
21:01	JD36624-2F	10													X						X				
21:07	JD36624-2F	50														X									
21:13	JD36624-2	10													X						X			X	
21:18	JD36624-2	50														X									
21:24	ZZZZZZ	1																							
21:29	ZZZZZZ	1																							
21:35	MA51703-CCVA8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
21:40	MA51703-CCB8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
21:46	ZZZZZZ	5																							
21:51	ZZZZZZ	20																							
21:57	ZZZZZZ	20																							
22:03	MP30471-S1	100							X																
22:08	MP30471-S2	100							X																
22:14	JD36804-8	100																							(a)
22:19	MP30471-SD1	500							X																
22:25	ZZZZZZ	1																							
22:30	MA51703-CCVA9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
22:36	MA51703-CCB9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
22:41	MP30591-MB1	2			X						X														
22:47	MP30591-B1	2			X						X														
22:53	MP30591-S1	2			X						X														
22:58	MP30591-S2	2			X						X														
23:04	JD36418-7	2									X														(a)
23:09	MP30591-SD1	10			X						X														
23:15	ZZZZZZ	1																							
23:20	MA51703-CCVA10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
23:26	MA51703-CCB10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
23:31	ZZZZZZ	2																							
23:37	ZZZZZZ	2																							
23:43	ZZZZZZ	2																							
23:48	ZZZZZZ	2																							
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
23:54	ZZZZZZ	2																							
23:59	ZZZZZZ	2																							
00:05	MA51703-CCVA11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
00:10	MA51703-CCB11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
00:16	MP30416A-MB1	2			X																	X			
00:22	MP30416A-B2	2			X																	X			
00:27	MP30416A-S3	2			X																	X			
00:33	MP30416A-S4	2			X																	X			
00:38	JD36625-5	2			X																	X			(a)
00:44	MP30416A-SD1	10			X																	X			
00:49	ZZZZZZ	2																							
00:55	ZZZZZZ	2																							
01:00	MA51703-CCVA12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01:06	MA51703-CCB12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01:12	ZZZZZZ	2																							
01:17	ZZZZZZ	2																							
01:23	ZZZZZZ	2																							
01:28	ZZZZZZ	2																							
01:34	ZZZZZZ	2																							
01:39	ZZZZZZ	2																							
01:45	ZZZZZZ	2																							
01:51	ZZZZZZ	2																							
01:56	ZZZZZZ	2																							
02:02	MA51703-CCVA13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
02:07	MA51703-CCB13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
02:13	ZZZZZZ	1																							
02:18	ZZZZZZ	1																							
02:24	ZZZZZZ	2																							
02:29	ZZZZZZ	2																							
02:35	ZZZZZZ	2																							
02:41	ZZZZZZ	2																							
02:46	ZZZZZZ	2																							
02:52	ZZZZZZ	2																							
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
02:57	ZZZZZZ	2																							
03:03	ZZZZZZ	2																							
03:08	MA51703-CCVA14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
03:14	MA51703-CCB14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
03:19	MP30634-MB1	1		X																		X			
03:25	MP30634-B1	1		X																		X			
03:31	MP30634-S1	1																				X			
03:36	MP30634-S2	1																				X			
03:42	JD37473-6F	1		X																					(a)
03:47	ZZZZZZ	1																							
03:53	ZZZZZZ	1																							
03:58	ZZZZZZ	1																							
04:04	MA51703-CCVA15	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
04:10	MA51703-CCB15	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
04:15	ZZZZZZ	1																							
04:21	MP30634-S1	2		X																					
04:26	MP30634-S2	2		X																					
04:32	MP30691-MB1	1	X		X					X			X			X						X			
04:37	MP30691-B1	1	X		X					X			X			X						X			
04:43	MP30691-S1	1	X		X					X			X									X			
04:49	MP30691-S2	1	X		X					X			X									X			
04:54	JD37653-1	1								X															(a)
05:00	ZZZZZZ	1																							
05:05	ZZZZZZ	1																							
05:11	MA51703-CCVA16	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
05:16	MA51703-CCB16	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
05:22	ZZZZZZ	1																							
05:28	ZZZZZZ	1																							
05:33	ZZZZZZ	1																							
05:39	ZZZZZZ	1																							
05:44	ZZZZZZ	1																							
05:50	ZZZZZZ	1																							
05:55	ZZZZZZ	1																							
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
06:01	MP30691-S1	2			MN		still		high																
06:07	MP30691-S2	2			MN		still		high																
06:12	JD37653-1	2																							(a)
06:18	MA51703-CCVA17	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
06:23	MA51703-CCB17	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
06:29	MP30633-MB1	1		X																					
06:35	MP30633-B1	1		X																					
06:40	MP30633-S1	1		X																					
06:46	MP30633-S2	1		X																					
06:52	JD37473-1	1		X																					(a)
06:57	ZZZZZZ	1																							
07:03	ZZZZZZ	1																							
07:08	ZZZZZZ	1																							
07:14	ZZZZZZ	1																							
07:20	ZZZZZZ	1																							
07:25	MA51703-CCVA18	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
07:31	MA51703-CCB18	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
07:36	ZZZZZZ	1																							
07:42	ZZZZZZ	1																							
07:48	ZZZZZZ	1																							
07:53	ZZZZZZ	1																							
07:59	ZZZZZZ	1																							
08:04	ZZZZZZ	1																							
08:10	MA51703-CCVA19	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
08:15	MA51703-CCB19	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
08:21	ZZZZZZ	2																							
08:27	ZZZZZZ	2																							
08:32	ZZZZZZ	50																							
08:38	ZZZZZZ	50																							
08:43	ZZZZZZ	100																							
08:49	ZZZZZZ	100																							
08:54	MA51703-CCVA20	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
09:00	MA51703-CCB20	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn
09:05	ZZZZZZ	1																						
09:11	ZZZZZZ	1																						
09:17	ZZZZZZ	1																						

(a) Sample used for QC only; not part of login JD36624.

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:04	MA51703-STD1	100	100	100	100	100	100	100	100
13:09	MA51703-STD2	100	100	100	100	100	100	100	100
13:15	MA51703-STD3	100	100	100	100	100	100	100	100
13:21	MA51703-STD4	100.437	98.745	98.764	100.006	100.594	100.421	101.112	100.473
13:26	MA51703-STD5	100.734	99.178	93.641	92.473	101.488	95.772	92.214	101.035
13:32	MA51703-STD6	100.778	101.265	100.89	100.477	101.829	102.173	100.486	101.676
13:38	MA51703-STD7	100.647	102.021	98.09	100.216	101.748	98.687	100.655	101.929
13:43	MA51703-STD8	100.154	99.44	101.69	100.403	103.584	102.079	100.537	102.267
13:49	MA51703-STD9	98.982	97.276	101.561	101.348	100.278	101.612	101.254	100.09
13:55	MA51703-STD10	101.752	104.787	104.101	102.907	101.721	103.139	103.19	101.791
14:00	MA51703-STD11	102.72	104.483	104.14	100.836	101.105	103.193	100.8	101.145
14:06	MA51703-STD12	102.61	105.278	98.051	101.267	100.602	96.344	99.686	99.641
14:12	MA51703-STD13	103.221	106.598	107.059	100.943	101.159	104.612	100.216	101.014
14:17	MA51703-STD14	100	100	100	100	100	100	100	100
14:23	ZZZZZZ	100.766	100.821	100.867	100.333	100.617	100.875	99.225	100.523
14:29	MA51703-ICVA1	99.529	100.489	94.811	100.187	101.703	93.86	99.006	102.496
14:34	MA51703-ICV1	99.688	99.409	98.966	94.287	99.712	100.126	91.986	99.674
14:48	MA51703-ICB1	100.024	100.017	100.293	99.476	97.377	99.344	99.118	97.36
14:53	MA51703-CCVA1	99.466	100.021	103.207	104.212	100.872	101.597	101.456	101.89
14:59	MA51703-CCB1	93.144	85.665	101.174	100.977	94.037	101.894	99.342	93.957
15:05	MA51703-CRI1	102.137	101.268	102.069	100.845	100.93	101.266	100.385	101.166
15:10	MA51703-ICSA1	No results reported for the elements associated with this internal standard.							
15:17	MA51703-ICSA2	87.66	85.924	90.719	90.524	88.829	87.96	86.241	88.209
15:25	MA51703-ICSAB1	82.726	81.508	87.536	88.12	86.067	85.404	84.205	84.843
15:34	ZZZZZZ	81.963	81.652	87.91	91.445	88.656	89.447	91.72	88.945
15:39	MA51703-CCVA2	83.418	85.19	90.661	93.279	92.397	91.901	92.492	93.09
15:45	MA51703-CCB2	85.639	86.387	90.665	93.905	91.75	92.764	94.337	92.033
15:51	MP30440-MB1	87.068	86.971	89.024	94.241	94.061	90.486	94.447	94.32
15:57	MP30440-B1	80.206	84.292	85.418	93.543	90.447	88.181	93.005	90.306
16:03	JD36624-6	77.246	80.401	84.443	91.749	85.924	85.264	90.214	86.441
16:08	JD36624-7	80.109	84.024	86.973	91.003	89.663	88.289	89.74	90.236
16:14	JD36624-8	78.495	81.184	85.123	91.219	86.841	85.457	89.422	86.616
16:20	JD36624-9	73.944	80.208	83.35	83.103	79.726	79.512	77.892	79.325

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
16:26	JD36624-10	76.938	79.875	84.87	92.628	88.027	88.349	93.323	88.311
16:31	JD36624-11	77.766	81.768	85.485	91.768	88.358	85.918	90.681	87.542
16:37	JD36624-3F	80.41	85.8	87.974	90.209	88.9	85.957	85.692	88.508
16:43	MA51703-CCVA3	86.241	87.705	89.058	93.225	94.397	89.29	91.903	95.084
16:48	MA51703-CCB3	87.801	86.817	89.308	93.704	94.56	90.337	93.338	94.313
16:54	JD36624-4F	80.979	83.349	87.034	89.199	90.437	88.918	89.137	90.489
16:59	JD36624-5F	81.864	85.171	82.998	94.248	91.99	85.498	93.466	91.464
17:05	JD36624-6F	80.499	83.862	86.76	93.109	89.443	86.96	91.693	89.7
17:11	JD36624-7F	79.952	80.925	88.432	92.864	89.046	88.357	91.863	88.46
17:16	JD36624-8F	80.222	83.85	87.723	91.093	88.934	87.137	90.405	88.483
17:22	JD36624-9F	77.542	80.284	82.198	83.604	82.487	78.328	78.044	82.628
17:28	JD36624-10F	76.792	78.583	84.005	90.158	87.074	87.258	92.035	86.472
17:33	JD36624-11F	77.76	81.21	84.244	89.463	89.542	86.444	91.667	88.098
17:39	MA51703-CCVA4	86.038	87.662	92.8	93.194	95.662	93.435	92.609	96.096
17:45	MA51703-CCB4	86.913	86.653	98.122	94.143	93.961	98.461	94.061	94.662
17:50	MP30683-MB1	90.505	90.027	94.299	94.457	97.147	95.722	94.363	96.908
17:56	MP30683-B1	83.168	86.483	89.155	93.376	92.697	89.653	91.346	93.146
18:02	MP30683-S1	76.525	79.997	85.215	88.554	84.232	84.223	84.619	84.572
18:07	MP30683-S2	76.438	80.344	84.496	88.7	84.763	83.778	85.168	85.822
18:13	JD37564-1	78.397	81.797	86.111	88.698	86.043	85.891	84.646	86.885
18:19	MP30683-SD1	86.521	86.946	87.77	91.767	94.891	91.722	91.001	95.769
18:24	ZZZZZZ	83.924	89.165	88.318	85.266	91.299	87.445	83.653	92.319
18:30	ZZZZZZ	88.12	88.688	97.202	89.264	96.845	98.177	88.964	97.144
18:36	ZZZZZZ	82.055	84.258	83.254	89.278	91.433	85.659	88.316	91.973
18:41	MA51703-CCVA5	84.602	87.599	92.495	88.415	95.308	93.095	87.91	94.848
18:47	MA51703-CCB5	84.771	85.923	91.484	84.381	93.107	93.748	84.497	93.237
18:53	ZZZZZZ	77.208	80.762	84.089	87.037	86.189	86.195	86.409	86.053
18:58	ZZZZZZ	73.254	76.976	84.253	94.464	84.504	87.919	93.351	84.684
19:04	ZZZZZZ	81.445	84.377	89.018	90.359	90.09	88.976	88.132	91.097
19:10	ZZZZZZ	80.599	83.748	83.794	91.244	89.708	84.443	88.539	90.45
19:15	ZZZZZZ	77.463	82.696	87.427	90.655	89.888	90.732	90.901	89.177
19:21	ZZZZZZ	72.761	76.968	86.664	91.018	84.826	90.027	90.456	85.285
19:27	ZZZZZZ	89.048	97.075	95.502	95.309	100.472	98.265	94.762	100.713

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
19:32	MA51703-CCVA6	84.158	89.286	92.998	91.997	96.935	94.624	90.741	97.496
19:38	MA51703-CCB6	86.695	90.933	94.219	93.259	97.178	95.946	93.361	96.723
19:44	ZZZZZZ	87.797	91.298	96.967	84.006	97.531	98.166	85.27	97.526
19:49	MP30697-MB1	85.409	88.45	89.759	93.088	96.865	93.823	92.437	97.136
19:55	MP30697-B1	80.13	86.687	90.322	92.819	94.078	91.069	94.711	94.281
20:00	MP30697-S1	78.172	84.261	87.991	80.155	92.752	90.297	81.52	93.62
20:06	MP30697-S2	77.793	84.663	86.827	91.522	93.276	91.088	93.243	93.338
20:11	JD36387-33	78.46	84.217	86.032	90.895	92.445	89.079	93.423	92.948
20:17	MP30697-SD1	88.356	91.754	94.755	93.075	100.556	96.983	93.021	101.1
20:22	ZZZZZZ	77.146	82.709	84.234	89.007	89.855	86.614	89.725	90.453
20:28	MA51703-CCVA7	77.821	82.854	92.449	89.954	89.737	94.194	89.429	90.178
20:34	MA51703-CCB7	84.698	87.437	90.169	90.018	95.031	92.519	90.567	95.269
20:39	MP30471-S1	86.527	87.794	92.783	86.891	96.921	94.89	89.135	97.222
20:45	MP30471-S2	84.012	85.501	86.633	87.227	93.901	89.672	86.944	94.417
20:50	JD36804-8	83.624	84.253	89.022	87.561	92.491	91.972	87.835	93.1
20:56	MP30471-SD1	77.788	80.494	92.86	88.805	86.691	95.815	89.626	86.918
21:01	JD36624-2F	82.059	84.857	88.198	87.105	93.09	91.66	87.572	93.235
21:07	JD36624-2F	88.361	87.412	93.744	88.591	97.127	96.307	89.117	97.671
21:13	JD36624-2	83.562	85.75	90.296	83.952	94.524	91.239	81.996	94.975
21:18	JD36624-2	88.398	88.385	91.03	82.148	97.664	93.473	85.09	97.945
21:24	ZZZZZZ	73.668	79.015	90.07	88.494	83.881	91.568	87.104	84.693
21:29	ZZZZZZ	83.99	85.907	90.602	89.507	93.346	93.222	88.823	93.533
21:35	MA51703-CCVA8	80.887	87.091	91.909	88.827	91.955	92.725	87.845	92.221
21:40	MA51703-CCB8	83.367	83.605	91.376	89.238	92.358	92.54	89.453	92.99
21:46	ZZZZZZ	79.456	83.147	79.378	86.09	89.863	79.724	84.236	90.054
21:51	ZZZZZZ	83.782	84.379	89.524	87.373	93.355	91.489	86.833	94.062
21:57	ZZZZZZ	83.648	84.164	89.467	86.047	93.043	90.854	86.36	93.309
22:03	MP30471-S1	87.844	86.502	91.38	88.385	97.785	94.392	88.949	98.216
22:08	MP30471-S2	86.217	86.039	91.298	89.067	96.289	94.571	88.787	96.202
22:14	JD36804-8	85.96	84.964	82.763	86.68	95.994	86.788	87.481	95.686
22:19	MP30471-SD1	87.128	85.14	92.468	87.363	96.044	94.982	87.996	96.312
22:25	ZZZZZZ	81.2	86.135	82.153	87.284	92.992	84.569	86.64	93.054
22:30	MA51703-CCVA9	82.003	86.298	90.286	85.817	93.369	91.682	85.073	94.52

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
22:36	MA51703-CCB9	83.655	85.279	90.245	89.507	92.759	92.871	89.234	92.949
22:41	MP30591-MB1	86.076	90.657	88.868	90.08	95.42	90.668	89.926	95.009
22:47	MP30591-B1	79.864	85.531	88.869	86.126	92.092	89.184	91.452	92.679
22:53	MP30591-S1	77.929	85.064	86.896	89.059	90.704	87.718	95.809	91.269
22:58	MP30591-S2	78.668	84.443	86.505	87.971	90.481	87.156	95.553	90.629
23:04	JD36418-7	79.258	83.819	87.487	88.007	89.695	88.278	95.934	89.34
23:09	MP30591-SD1	86.902	85.88	94.592	89.666	94.744	95.916	89.286	94.699
23:15	ZZZZZZ	88.448	91.279	92.787	88.803	95.321	93.751	88.863	95.254
23:20	MA51703-CCVA10	84.184	86.153	91.486	81.621	93.371	92.044	82.461	93.516
23:26	MA51703-CCB10	87.919	92.381	91.365	87.183	96.491	91.881	87.858	96.757
23:31	ZZZZZZ	79.296	83.324	87.111	89.656	89.728	88.634	93.844	89.978
23:37	ZZZZZZ	80.119	83.902	86.081	87.659	89.943	87.033	93.73	89.897
23:43	ZZZZZZ	78.111	82.482	84.278	85.705	87.376	85.472	91.73	86.632
23:48	ZZZZZZ	79.042	83.617	87.316	81.333	88.124	89.978	88.475	88.695
23:54	ZZZZZZ	79.906	88.835	92.677	92.523	89.977	86.891	89.171	89.316
23:59	ZZZZZZ	79.147	82.838	84.815	82.23	89.858	86.404	88.35	89.764
00:05	MA51703-CCVA11	83.985	86.398	90.634	88.244	92.626	91.082	86.95	93.408
00:10	MA51703-CCB11	85.471	87.398	90.088	88.083	92.741	90.3	87.136	92.468
00:16	MP30416A-MB1	86.826	86.572	86.414	88.103	93.124	88.175	87.74	93.29
00:22	MP30416A-B2	79.611	82.808	86.376	88.152	89.04	87.574	92.487	89.439
00:27	MP30416A-S3	74.922	78.741	82.229	87.091	85.228	83.399	95.255	85.769
00:33	MP30416A-S4	78.014	82.982	83.202	86.876	88.779	83.639	94.558	89.137
00:38	JD36625-5	77.799	82.282	81.805	87.003	88.655	82.513	93.952	88.834
00:44	MP30416A-SD1	84.556	84.62	91.482	87.916	92.607	93.009	86.682	92.912
00:49	ZZZZZZ	76.328	80.244	82.985	85.175	86.239	84.398	89.101	85.947
00:55	ZZZZZZ	75.885	79.891	82.753	85.181	86.928	84.138	94.674	87.034
01:00	MA51703-CCVA12	85.412	87.198	90.984	88.74	93.566	92.169	86.986	94.506
01:06	MA51703-CCB12	86.941	89.635	90.608	88.262	93.48	91.947	87.507	93.578
01:12	ZZZZZZ	76.028	78.075	83.412	84.819	85.303	84.779	90.631	85.547
01:17	ZZZZZZ	77.573	81.725	85.143	87.103	88.094	85.205	95.72	88.082
01:23	ZZZZZZ	78.328	83.013	84.524	84.352	88.656	84.753	93.801	88.779
01:28	ZZZZZZ	78.286	86.517	83.124	85.059	89.452	83.984	91.758	88.976
01:34	ZZZZZZ	76.637	79.834	82.815	81.953	86.625	83.205	89.395	86.338

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
01:39	ZZZZZZ	76.224	79.659	82.747	85.534	86.21	83.417	91.5	86.73
01:45	ZZZZZZ	75.76	79.587	82.215	84.317	85.783	83.589	89.197	85.921
01:51	ZZZZZZ	76.168	79.712	82.956	83.316	86.435	83.533	90.754	86.324
01:56	ZZZZZZ	76.105	80.137	82.999	85.289	86.895	84.409	90.206	87.221
02:02	MA51703-CCVA13	84.491	86.626	91.048	87.453	92.494	88.188	85.624	93.251
02:07	MA51703-CCB13	84.553	84.457	89.097	86.42	91.49	89.836	86.397	91.142
02:13	ZZZZZZ	76.263	79.707	82.578	85.165	85.583	83.939	90.187	85.391
02:18	ZZZZZZ	76.907	80.251	82.774	85.339	86.691	84.296	93.583	86.535
02:24	ZZZZZZ	69.583 !	73.167	80.27	83.872	79.458	81.281	90.073	79.229
02:29	ZZZZZZ	76.257	80.316	81.165	84.145	86.009	82.428	88.98	85.422
02:35	ZZZZZZ	76.045	80.099	79.574	84.164	86.518	80.806	89.351	86.461
02:41	ZZZZZZ	76.059	79.498	78.004	83.859	85.64	79.378	88.704	85.651
02:46	ZZZZZZ	76.557	80.063	82.958	84.645	86.538	83.589	90.867	85.936
02:52	ZZZZZZ	76.259	79.358	80.062	84.824	86.056	80.43	89.652	86.516
02:57	ZZZZZZ	85.688	84.89	89.004	86.645	92.128	89.198	86.105	92.515
03:03	ZZZZZZ	78.007	81.485	81.336	85.741	86.814	81.005	90.339	87.293
03:08	MA51703-CCVA14	83.503	85.67	88.756	86.849	91.706	89.412	85.468	92.14
03:14	MA51703-CCB14	84.198	83.1	84.874	85.895	90.527	83.883	85.612	90.667
03:19	MP30634-MB1	86.004	84.462	87.078	86.385	90.832	87.405	85.448	91.056
03:25	MP30634-B1	85.222	85.812	90.077	87.001	92.459	90.252	85.519	93.068
03:31	MP30634-S1	82.158	85.166	89.298	84.86	88.618	86.549	81.134	88.579
03:36	MP30634-S2	82.386	84.748	85.919	86.212	88.278	83.022	82.144	89.12
03:42	JD37473-6F	81.854	83.53	89.817	83.939	87.055	86.07	80.776	86.897
03:47	ZZZZZZ	81.609	80.392	89.067	83.61	86.572	86.492	80.807	86.723
03:53	ZZZZZZ	83.751	83.85	84.893	82.677	86.849	82.878	79.545	87.596
03:58	ZZZZZZ	83.41	83.044	89.12	82.071	86.152	86.973	78.791	86.01
04:04	MA51703-CCVA15	81.642	82.183	88.292	83.802	88.968	88.1	82.261	88.777
04:10	MA51703-CCB15	83.363	82.272	86.58	84.277	88.588	86.956	83.987	88.611
04:15	ZZZZZZ	81.521	82.628	85.315	83.253	85.958	81.559	79.225	86.115
04:21	MP30634-S1	83.951	83.384	90.265	83.87	88.831	89.927	82.236	89.53
04:26	MP30634-S2	83.895	82.158	90.565	83.962	89.515	89.768	82.363	89.616
04:32	MP30691-MB1	85.587	84.09	89.04	85.47	90.751	90.926	84.746	90.74
04:37	MP30691-B1	85.178	85.357	89.796	85.842	92.341	89.765	83.861	92.899

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
04:43	MP30691-S1	85.442	86.724	101.204	92.404	85.341	91.078	83.171	86.261
04:49	MP30691-S2	103.548	107.9	117.241	89.681	96.197	102.58	80.415	96.492
04:54	JD37653-1	113.232	115.156	112.926	97.942	98.731	99.158	88.07	98.477
05:00	ZZZZZZ	127.183 !	123.849	120.738	105.535	111.204	112.13	99.759	111.424
05:05	ZZZZZZ	113.345	114.122	102.241	95.39	105.074	100.322	92.628	104.937
05:11	MA51703-CCVA16	88.3	87.649	92.573	85.896	93.072	91.452	85.082	93.472
05:16	MA51703-CCB16	87.222	84.759	90.125	85.162	90.818	90.153	84.897	91.132
05:22	ZZZZZZ	86.052	84.201	85.847	84.305	89.269	87.192	82.66	89.92
05:28	ZZZZZZ	84.832	84.178	85.176	85.612	89.831	86.517	82.808	90.208
05:33	ZZZZZZ	81.898	78.644	88.492	79.039	86.137	88.503	78.704	86.159
05:39	ZZZZZZ	83.754	82.829	88.068	82.801	87.693	87.347	79.937	87.718
05:44	ZZZZZZ	80.22	79.762	85.435	82.215	86.029	86.248	81.099	86.621
05:50	ZZZZZZ	80.778	80.878	86.29	79.385	86.963	85.947	75.777	87.17
05:55	ZZZZZZ	80.351	81.622	86.015	83.35	86.878	86.328	82.051	86.185
06:01	MP30691-S1	No results reported for the elements associated with this internal standard.							
06:07	MP30691-S2	No results reported for the elements associated with this internal standard.							
06:12	JD37653-1	93.559	99.574	99.015	88.633	90.599	90.165	82.707	90.624
06:18	MA51703-CCVA17	95.15	98.647	96.171	86.315	95.463	93.884	84.583	95.682
06:23	MA51703-CCB17	86.196	83.755	83.932	84.627	89.887	84.264	84.136	90.13
06:29	MP30633-MB1	88.507	86.292	92.013	85.259	92.787	91.875	84.347	92.444
06:35	MP30633-B1	86.306	86.363	92.385	85.358	92.258	91.476	84.11	92.906
06:40	MP30633-S1	82.996	85.853	90.278	83.377	85.933	82.647	76.572	85.86
06:46	MP30633-S2	84.555	89.455	91.191	81.023	87.2	84.669	75.444	87.063
06:52	JD37473-1	84.009	84.95	92.101	81.721	84.933	85.566	75.617	85.359
06:57	ZZZZZZ	86.429	87.303	97.181	87.56	84.939	88.24	79.054	84.104
07:03	ZZZZZZ	101.564	109.099	107.088	94.109	93.64	96.787	85.263	93.45
07:08	ZZZZZZ	109.619	111.888	111.901	94.232	103.683	105.132	87.06	104.205
07:14	ZZZZZZ	103.615	110.877	100.926	91.91	102.78	98.004	87.224	103.127
07:20	ZZZZZZ	93.314	95.42	90.899	86.787	93.827	91.261	85.058	94.75
07:25	MA51703-CCVA18	84.212	84.444	89.511	82.496	89.987	88.042	80.673	90.95
07:31	MA51703-CCB18	85.114	82.661	88.396	80.629	88.944	88.836	80.662	89.189
07:36	ZZZZZZ	82.809	84.109	90.125	80.394	84.247	84.401	74.878	84.894
07:42	ZZZZZZ	86.791	87.543	96.853	78.276	84.5	88.206	70.283	83.375

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
07:48	ZZZZZZ	102.614	108.349	108.038	93.958	92.981	96.194	84.427	93.196
07:53	ZZZZZZ	108.591	110.386	111.229	94.579	101.369	106.297	90.468	101.818
07:59	ZZZZZZ	101.361	106.704	98.667	88.568	97.822	97.983	85.268	98.421
08:04	ZZZZZZ	95.95	100.987	95.472	86.903	94.766	95.369	85.714	95.091
08:10	MA51703-CCVA19	84.526	84.629	88.067	81.352	89.513	87.865	78.644	90.091
08:15	MA51703-CCB19	84.816	82.6	88.14	82.042	88.66	88.364	80.761	88.457
08:21	ZZZZZZ	85.064	85.486	90.637	81.186	88.143	87.835	76.546	88.189
08:27	ZZZZZZ	86.137	89.37	86.901	81.9	89.601	84.506	77.634	89.691
08:32	ZZZZZZ	93.992	93.772	97.258	84.951	97.346	97.419	84.509	96.959
08:38	ZZZZZZ	93.876	90.443	96.327	84.62	96.402	97.056	84.173	96.726
08:43	ZZZZZZ	89.606	80.626	96.806	94.413	91.803	97.788	89.949	92.133
08:49	ZZZZZZ	93.283	90.523	95.001	83.914	95.402	96.287	82.871	95.362
08:54	MA51703-CCVA20	84.425	82.521	88.468	81.098	88.841	88.581	79.108	89.599
09:00	MA51703-CCB20	85.158	82.386	88.916	81.619	87.898	88.629	81.062	88.467
09:05	ZZZZZZ	87.256	84.587	89.289	81.548	90.119	88.99	79.472	90.115
09:11	ZZZZZZ	86.182	83.529	85.556	87.501	89.693	85.245	84.391	88.978
09:17	ZZZZZZ	85.775	82.88	89.619	81.153	88.623	89.142	80.197	88.545

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (72-3)	60-125 %	60-125 %
Istd#8	Germanium (74-1)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:04	MA51703-STD1	100	100	100	100	100	100	100	100
13:09	MA51703-STD2	100	100	100	100	100	100	100	100
13:15	MA51703-STD3	100	100	100	100	100	100	100	100
13:21	MA51703-STD4	100.203	100.493	100.832	99.965	100.265	99.803	100.271	100.614
13:26	MA51703-STD5	96.032	91.999	100.667	95.079	91.672	100.357	95.296	99.966
13:32	MA51703-STD6	101.983	100.604	100.989	100.953	100.867	100.136	101.784	100.727
13:38	MA51703-STD7	99.122	99.816	100.927	97.473	100.298	100.425	98.22	101.441
13:43	MA51703-STD8	102.368	101.021	100.415	101.706	100.629	99.925	101.923	101.324
13:49	MA51703-STD9	101.626	101.258	99.854	101.287	101.058	100.079	101.285	100.619
13:55	MA51703-STD10	103.573	103.48	101.667	102.129	101.925	101.039	103.267	101.418
14:00	MA51703-STD11	103.448	99.779	100.396	100.325	98.027	99.927	102.653	100.823
14:06	MA51703-STD12	96.121	99.759	99.283	93.163	97.298	99.384	94.995	100.06
14:12	MA51703-STD13	104.856	99.785	100.364	101.051	97.032	99.506	103.759	100.518
14:17	MA51703-STD14	100	100	100	100	100	100	100	100
14:23	ZZZZZZ	100.274	101.07	100.971	100.073	100.405	100.646	100.714	99.567
14:29	MA51703-ICVA1	94.501	100.22	97.234	92.537	97.541	98.612	93.579	98.729
14:34	MA51703-ICV1	100.194	93.675	100.168	99.195	93.679	99.834	99.878	99.61
14:48	MA51703-ICB1	99.547	99.998	100.542	98.646	99.447	100.263	99.122	100.571
14:53	MA51703-CCVA1	100.879	103.472	97.784	99.855	100.322	98.807	100.186	99.835
14:59	MA51703-CCB1	101.004	100.415	91.157	100.152	100.754	91.745	101.583	91.451
15:05	MA51703-CRI1	101.55	101.341	102.123	100.177	100.987	102.011	101.337	101.201
15:10	MA51703-ICSA1	No results reported for the elements associated with this internal standard.							
15:17	MA51703-ICSA2	87.832	86.24	83.699	81.705	80.706	85.199	81.87	91.639
15:25	MA51703-ICSAB1	84.464	84.726	81.225	79.97	79.165	83.375	80.081	89.639
15:34	ZZZZZZ	89.414	92.597	92.151	91.279	94.11	93.8	91.887	96.7
15:39	MA51703-CCVA2	91.529	93.943	91.301	91.484	92.851	93.948	93.39	96.994
15:45	MA51703-CCB2	92.746	95.741	95.102	93.465	96.192	96.894	94.097	98.323
15:51	MP30440-MB1	90.053	95.494	95.941	92.146	96.725	97.281	92.12	99.356
15:57	MP30440-B1	88.385	94.365	91.405	89.535	94.063	92.343	89.93	96.525
16:03	JD36624-6	85.295	91.833	83.338	82.481	87.023	87.609	85.088	94.294
16:08	JD36624-7	87.277	91.593	85.45	84.09	85.324	90.124	86.623	95.925
16:14	JD36624-8	85.825	90.938	83.418	82.534	86.304	88.452	85.623	93.859
16:20	JD36624-9	79.073	78.887	72.818	73.624	72.179	79.862	79.215	84.122

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
16:26	JD36624-10	88.221	94.664	86.758	86.705	90.262	90.586	88.581	95.528
16:31	JD36624-11	86.898	91.334	83.784	82.487	84.469	89.133	85.877	93.795
16:37	JD36624-3F	85.688	86.723	83.173	80.619	80.296	86.652	84.268	92.541
16:43	MA51703-CCVA3	89.28	93.585	93.276	89.278	92.324	95.618	90.652	98.615
16:48	MA51703-CCB3	90.289	94.989	97.519	91.143	95.324	97.201	91.722	99.033
16:54	JD36624-4F	88.052	90.077	86.896	85.659	85.378	91.009	88.151	95.499
16:59	JD36624-5F	85.863	94.818	88.397	82.636	88.201	91.548	84.318	96.292
17:05	JD36624-6F	87.447	93.36	86.295	83.899	87.501	90.447	85.82	95.902
17:11	JD36624-7F	88.475	92.885	84.706	84.986	86.74	88.279	87.641	93.552
17:16	JD36624-8F	87.203	91.803	85.23	83.645	84.92	89.523	86.717	95.353
17:22	JD36624-9F	78.649	79.226	74.782	72.354	71.44	81.879	78.593	86.222
17:28	JD36624-10F	87.125	93.024	85.237	84.312	87.257	87.904	86.621	93.264
17:33	JD36624-11F	86.795	93.072	82.533	80.557	82.169	87.166	83.645	93.191
17:39	MA51703-CCVA4	93.477	94.1	94.484	92.904	91.564	96.005	94.797	98.902
17:45	MA51703-CCB4	98.157	94.795	97.021	99.335	95.626	97.654	100.3	98.799
17:50	MP30683-MB1	95.886	95.725	99.583	95.384	95.389	99.798	96.842	99.93
17:56	MP30683-B1	90.121	92.471	93.656	91.351	92.568	95.386	92.401	97.805
18:02	MP30683-S1	84.573	86.216	84.073	82.923	82.589	88.032	86.928	92.439
18:07	MP30683-S2	83.767	86.077	84.767	82.403	82.461	89.31	86.405	94.665
18:13	JD37564-1	85.053	85.821	86.879	83.407	82.649	91.16	87.295	95.878
18:19	MP30683-SD1	91.637	92.542	95.202	89.911	90.038	98.294	92.978	100.602
18:24	ZZZZZZ	87.488	84.639	92.69	85.125	80.864	97.659	88.748	100.775
18:30	ZZZZZZ	98.223	90.551	99.862	99.841	90.095	100.451	100.527	101.165
18:36	ZZZZZZ	85.824	90.238	92.028	84.147	88.684	94.379	86.065	97.179
18:41	MA51703-CCVA5	93.068	88.937	95.037	92.518	87.13	96.769	94.816	98.593
18:47	MA51703-CCB5	93.852	85.108	97.228	93.924	85.637	97.94	95.123	99.008
18:53	ZZZZZZ	84.858	86.737	87.015	82.624	83.114	90.459	85.966	95.7
18:58	ZZZZZZ	87.76	94.763	86.915	88.669	92.929	88.601	90.127	91.652
19:04	ZZZZZZ	89	89.147	91.769	87.954	86.045	94.838	91.476	98.606
19:10	ZZZZZZ	84.348	89.631	90.116	82.942	86.393	94.471	85.819	97.604
19:15	ZZZZZZ	88.986	90.949	90.047	87.897	88.164	93.223	90.954	98.297
19:21	ZZZZZZ	89.24	92.573	85.969	90.346	89.961	87.895	91.757	90.741
19:27	ZZZZZZ	97.67	96.162	104.25	98.392	96.025	104.247	99.289	104.803

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
19:32	MA51703-CCVA6	94.51	92.406	96.724	93.648	91.21	98.951	95.644	100.408
19:38	MA51703-CCB6	95.999	94.767	99.944	96.121	94.721	101.308	97.164	101.535
19:44	ZZZZZZ	97.293	86.823	94.435	91.537	80.661	98.095	96.622	100.472
19:49	MP30697-MB1	93.943	93.898	100.062	93.205	94.728	100.915	94.697	101.255
19:55	MP30697-B1	91.467	96.03	96.549	92.954	92.496	97.445	93.668	99.967
20:00	MP30697-S1	90.617	82.507	92.67	88.94	77.107	95.669	91.012	99.509
20:06	MP30697-S2	89.277	95.043	92.687	88.736	89.137	95.759	90.556	99.851
20:11	JD36387-33	88.921	94.655	93.076	87.862	89.905	96.221	90.063	99.167
20:17	MP30697-SD1	97.575	94.187	102.14	96.282	93.643	104.217	98.955	104.283
20:22	ZZZZZZ	86.891	92.098	91.847	86.666	88.557	94.842	88.37	97.73
20:28	MA51703-CCVA7	94.196	90.496	90.179	93.35	89.906	91.806	95.473	94.228
20:34	MA51703-CCB7	92.444	91.224	99.651	92.723	91.729	100.169	95.109	100.588
20:39	MP30471-S1	94.792	89.848	98.111	93.171	87.383	101.299	96.684	102.989
20:45	MP30471-S2	89.91	87.972	95.581	88.487	86.706	98.143	91.973	99.617
20:50	JD36804-8	92.214	88.563	94.666	90.407	87.508	97.494	94.323	98.751
20:56	MP30471-SD1	95.348	91.079	90.122	94.808	90.354	91.738	97.76	92.823
21:01	JD36624-2F	91.265	88.083	94.273	90.688	87.604	97.071	93.378	99.188
21:07	JD36624-2F	95.912	90.258	99.46	94.446	89.795	101.861	97.419	100.929
21:13	JD36624-2	91.355	83.372	95.278	89.585	82.614	97.806	92.667	99.329
21:18	JD36624-2	93.499	86.836	98.982	91.708	83.645	101.449	95.197	101.129
21:24	ZZZZZZ	92.401	87.723	85.259	90.914	87.26	87.644	93.25	89.859
21:29	ZZZZZZ	92.781	90.854	97.836	92.734	90.976	98.403	94.711	99.242
21:35	MA51703-CCVA8	92.879	89.606	93.237	91.628	87.876	95.337	94.505	96.576
21:40	MA51703-CCB8	93.105	90.51	96.248	92.85	91.105	97.477	94.804	98.03
21:46	ZZZZZZ	80.213	85.92	89.929	77.842	82.637	94.179	81.819	97.599
21:51	ZZZZZZ	91.704	88.475	95.808	89.88	86.144	98.856	93.361	100.527
21:57	ZZZZZZ	91.36	87.157	95.41	89.915	85.815	99.286	93.474	100.925
22:03	MP30471-S1	95.028	90.398	100.128	93.401	89.473	102.403	97.217	102.396
22:08	MP30471-S2	94.525	90.368	98.603	92.754	90.885	101.156	96.45	101.39
22:14	JD36804-8	86.845	89.485	97.246	84.452	88.547	99.863	87.63	100.773
22:19	MP30471-SD1	95.298	89.516	98.314	94.096	89.305	100.716	96.721	101.154
22:25	ZZZZZZ	84.321	88.03	94.365	83.65	86.952	96.311	86.094	98.579
22:30	MA51703-CCVA9	91.381	85.905	94.905	91.121	84.594	97.082	93.675	99.312

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
22:36	MA51703-CCB9	91.711	90.343	97.869	92.361	90.959	98.982	94.451	100.068
22:41	MP30591-MB1	90.078	91.27	100.023	90.668	91.586	100.397	91.765	101.496
22:47	MP30591-B1	89.836	92.675	96.379	90.738	85.709	96.499	91.703	99.484
22:53	MP30591-S1	87.866	96.593	88.978	83.752	82.75	93.041	87.55	97.395
22:58	MP30591-S2	87.581	96.329	88.919	83.718	82.09	92.789	86.861	97.513
23:04	JD36418-7	88.032	97.213	88.831	83.993	82.98	93.117	87.55	96.788
23:09	MP30591-SD1	95.055	90.649	95.25	93.034	88.055	96.995	96.597	97.417
23:15	ZZZZZZ	93.464	90.668	99.612	93.273	90.056	100.353	94.802	101.216
23:20	MA51703-CCVA10	92.083	83.365	93.601	90.758	81.684	95.987	93.85	97.588
23:26	MA51703-CCB10	92.935	89.277	101.333	92.363	88.875	101.914	94.161	102.715
23:31	ZZZZZZ	88.049	95.38	91.306	86.348	86.353	94.547	88.323	97.314
23:37	ZZZZZZ	87.308	94.778	90.073	84.219	82.479	93.983	86.514	97.485
23:43	ZZZZZZ	83.013	90.955	84.209	77.779	77.626	88.788	82.026	95.247
23:48	ZZZZZZ	87.202	87.391	86.323	81.448	73.637	91.281	86.075	96.873
23:54	ZZZZZZ	87.095	90.652	88.49	83.306	81.402	91.516	86.29	96.079
23:59	ZZZZZZ	86.312	88.509	90.41	84.943	79.836	94.044	87.315	96.249
00:05	MA51703-CCVA11	91.655	87.927	94.083	89.875	86.623	96.469	92.53	98.802
00:10	MA51703-CCB11	91.202	87.749	97.097	91.025	88.846	98.2	92.178	99.083
00:16	MP30416A-MB1	87.924	88.76	97.698	87.441	88.658	98.035	89.586	99.512
00:22	MP30416A-B2	87.489	94.37	93.032	87.856	87.404	94.825	88.475	97.602
00:27	MP30416A-S3	84.078	96.787	83.709	81.16	82.631	87.297	84.301	91.394
00:33	MP30416A-S4	83.003	96.088	88.135	80.458	81.846	92.037	83.608	97.034
00:38	JD36625-5	82.731	95.877	88.413	79.693	82.948	93.1	82.772	97.629
00:44	MP30416A-SD1	92.895	88.571	94.633	91.447	86.998	97.656	95.062	98.317
00:49	ZZZZZZ	83.873	90.736	88.105	81.979	82.02	91.201	85.015	95.166
00:55	ZZZZZZ	84.57	96.526	88.256	82.357	82.921	92.179	84.637	96.124
01:00	MA51703-CCVA12	92.109	88.141	95.982	90.304	86.63	98.436	93.241	99.795
01:06	MA51703-CCB12	91.339	89.422	99.632	91.528	89.214	99.591	92.393	100.575
01:12	ZZZZZZ	84.871	91.985	87.094	82.758	82.67	90.651	84.878	93.999
01:17	ZZZZZZ	85.891	97.412	88.193	82.717	82.088	92.391	85.463	96.992
01:23	ZZZZZZ	84.687	95.266	89.522	82.173	81.517	94.084	85.013	96.918
01:28	ZZZZZZ	83.801	92.724	91.398	82.28	82.306	95.763	84.699	98.229
01:34	ZZZZZZ	83.344	90.711	88.402	81.648	80.405	91.864	83.871	96.6

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
01:39	ZZZZZZ	83.821	92.73	88.405	82.139	82.24	91.56	84.795	95.766
01:45	ZZZZZZ	83.044	90.799	87.484	81.762	81.509	91.518	83.996	95.593
01:51	ZZZZZZ	83.853	91.774	87.301	81.342	80.526	91.596	84.08	95.205
01:56	ZZZZZZ	83.904	91.636	87.498	81.936	81.866	92.188	84.661	96.434
02:02	MA51703-CCVA13	88.563	87.142	95.678	88.326	85.718	98.216	90.564	100.169
02:07	MA51703-CCB13	89.778	87.21	96.284	89.859	87.833	98.286	91.408	98.62
02:13	ZZZZZZ	83.316	90.988	87.732	81.238	81.902	91.162	84.361	95.02
02:18	ZZZZZZ	84.685	94.584	87.906	81.745	81.708	92.669	84.503	96.762
02:24	ZZZZZZ	80.948	91.714	78.73	78.258	80.202	82.52	80.976	86.802
02:29	ZZZZZZ	82.299	90.456	86.563	79.315	80.12	91.24	82.403	95.521
02:35	ZZZZZZ	80.868	90.901	86.55	78.342	79.706	90.679	81.116	94.936
02:41	ZZZZZZ	79.482	89.999	86.585	76.679	80.099	91.453	79.335	95.296
02:46	ZZZZZZ	83.949	91.45	87.985	81.848	81.172	91.789	84.686	95.572
02:52	ZZZZZZ	80.674	90.324	87.542	78.38	80.795	91.25	80.286	95.964
02:57	ZZZZZZ	89.027	87.585	97.675	90.048	87.585	99.07	91.032	100.288
03:03	ZZZZZZ	81.388	91.496	91.174	81.794	84.878	93.404	82.983	96.744
03:08	MA51703-CCVA14	90.133	86.939	93.987	87.978	85.321	96.601	89.956	98.626
03:14	MA51703-CCB14	83.563	86.002	95.639	84.053	86.906	96.439	85.35	98.319
03:19	MP30634-MB1	86.908	87.109	96.859	86.75	87.526	98.65	88.791	99.619
03:25	MP30634-B1	90.493	86.63	94.588	88.968	85.938	96.821	91.101	98.752
03:31	MP30634-S1	86.498	81.908	86.923	81.3	77.77	90.888	86.387	95.602
03:36	MP30634-S2	82.343	83.689	86.887	77.467	79.417	91.474	82.607	95.223
03:42	JD37473-6F	86.429	81.777	86.499	81.385	77.334	90.891	86.978	94.516
03:47	ZZZZZZ	86.794	81.276	85.878	80.689	76.812	90.122	87.024	93.762
03:53	ZZZZZZ	82.561	80.837	87.995	76.907	76.868	90.966	81.484	94.791
03:58	ZZZZZZ	86.242	79.856	86.741	80.436	75.606	90.123	85.794	94.138
04:04	MA51703-CCVA15	87.826	83.635	90.308	85.48	82.109	93.158	89.052	94.65
04:10	MA51703-CCB15	87.061	84.937	94.257	86.614	85.187	95.567	88.4	96.738
04:15	ZZZZZZ	81.482	80.183	84.373	75.286	74.868	88.108	80.145	92.23
04:21	MP30634-S1	89.73	82.686	89.282	84.303	79.311	93.481	90.303	95.038
04:26	MP30634-S2	89.951	83.033	89.014	84.953	79.346	93.272	90.92	95.246
04:32	MP30691-MB1	90.016	85.75	96.51	89.182	85.902	97.74	91.14	97.763
04:37	MP30691-B1	90.006	85.564	95.502	88.455	84.526	96.163	90.561	97.625

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
04:43	MP30691-S1	91.911	84.384	81.822	80.604	75.004	86.539	87.106	90.416
04:49	MP30691-S2	102.726	81.566	89.608	88.7	70.788	93.764	96.717	93.542
04:54	JD37653-1	98.963	89.462	93.02	84.803	77.329	96.728	92.741	95.512
05:00	ZZZZZZ	111.63	100.844	107.853	100.305	91.852	111.124	105.07	105.103
05:05	ZZZZZZ	100.459	93.861	108.943	95.433	91.401	109.187	97.396	105.154
05:11	MA51703-CCVA16	91.773	85.779	95.536	88.659	83.213	97.001	92.029	97.91
05:16	MA51703-CCB16	90.795	85.689	97.667	89.235	85.545	98.04	91.576	98.071
05:22	ZZZZZZ	86.905	83.78	92.263	81.966	80.233	96.011	86.684	96.97
05:28	ZZZZZZ	86.236	83.857	91.489	81.63	80.629	95.041	86.889	96.72
05:33	ZZZZZZ	88.429	79.669	88.147	84.301	76.463	91.626	89.129	93.061
05:39	ZZZZZZ	86.886	81.634	89.285	81.897	77.402	94.474	87.525	96.607
05:44	ZZZZZZ	85.505	81.835	88.915	82.481	79.393	92.14	87.175	94.362
05:50	ZZZZZZ	85.167	77.733	89.764	82.396	75.252	93.596	86.571	96.078
05:55	ZZZZZZ	86.101	82.252	91.186	83.127	79.863	93.971	86.79	96.325
06:01	MP30691-S1	No results reported for the elements associated with this internal standard.							
06:07	MP30691-S2	No results reported for the elements associated with this internal standard.							
06:12	JD37653-1	90.862	83.911	88.891	81.53	76.152	93.489	88.515	95.083
06:18	MA51703-CCVA17	93.907	85.343	97.512	90.146	83.336	99.144	94	98.31
06:23	MA51703-CCB17	84.327	85.096	96.453	82.61	85.058	97.257	85.28	97.976
06:29	MP30633-MB1	91.613	85.527	99.232	90.28	85.487	99.603	93.599	99.071
06:35	MP30633-B1	91.8	85.388	96.527	89.315	84.322	98.147	92.753	98.553
06:40	MP30633-S1	82.904	77.756	84.265	76.333	71.437	88.407	82.406	92.616
06:46	MP30633-S2	84.968	76.425	85.105	76.729	69.532	88.431	82.92	92.297
06:52	JD37473-1	85.035	76.796	84.154	77.463	70.282	88.119	83.918	91.329
06:57	ZZZZZZ	87.729	79.871	81.808	76.849	70.559	85.637	83.763	88.439
07:03	ZZZZZZ	95.811	85.972	90.237	83.371	76.017	93.227	90.776	93.202
07:08	ZZZZZZ	104.922	87.775	101.19	93.74	81.04	103.997	100.876	101.366
07:14	ZZZZZZ	97.56	88.401	103.524	87.816	83.417	107.065	95.196	106.397
07:20	ZZZZZZ	91.566	86.094	100.538	88.332	85.971	100.098	91.6	98.324
07:25	MA51703-CCVA18	88.511	81.734	93.162	85.68	79.968	94.695	89.47	95.82
07:31	MA51703-CCB18	89.052	81.793	95.655	87.633	81.44	96.077	90.482	96.858
07:36	ZZZZZZ	84.03	75.431	84.323	76.222	69.287	88.18	82.884	92.258
07:42	ZZZZZZ	87.263	70.843	81.025	76.069	62.165	84.908	83.737	87.29

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
07:48	ZZZZZZ	95.133	84.731	89.377	83.448	75.051	92.465	91.054	91.801
07:53	ZZZZZZ	105.26	91.64	99.236	93.186	82.54	101.273	100.584	98.558
07:59	ZZZZZZ	97.559	85.821	97.896	86.98	79.102	101.161	93.816	99.597
08:04	ZZZZZZ	95.1	86.927	101.463	90.542	86.862	101.388	94.245	98.626
08:10	MA51703-CCVA19	88.145	80.885	94.281	85.189	78.7	95.434	89.526	96.393
08:15	MA51703-CCB19	88.439	82.182	95.539	86.716	81.575	96.931	90.215	96.069
08:21	ZZZZZZ	87.328	77.519	87.45	80.03	72.63	90.996	86.17	94.452
08:27	ZZZZZZ	84.208	78.419	88.525	76.684	72.574	91.421	82.564	94.256
08:32	ZZZZZZ	97.444	85.816	101.494	93.007	83.3	101.434	97.827	99.351
08:38	ZZZZZZ	96.972	85.086	101.024	91.737	83.275	102.613	97.197	99.656
08:43	ZZZZZZ	96.23	90.446	94.578	92.37	91.44	95.127	97.646	93.373
08:49	ZZZZZZ	95.81	84.048	99.958	91.628	82.453	100.68	96.342	98.753
08:54	MA51703-CCVA20	88.373	80.021	91.826	85.125	78.367	93.336	89.337	94.219
09:00	MA51703-CCB20	88.131	81.542	95.179	86.913	81.293	96.355	90.306	95.394
09:05	ZZZZZZ	89.413	80.288	97.475	87.484	80.612	97.1	89.925	96.473
09:11	ZZZZZZ	85.584	85.148	96.491	83.122	85.782	96.808	86.322	96.61
09:17	ZZZZZZ	88.809	81.08	95.766	87.805	81.355	96.322	90.55	95.873

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	60-125 %	60-125 %
Istd#10	Germanium (74-3)	60-125 %	60-125 %
Istd#11	Rhodium (103-1)	60-125 %	60-125 %
Istd#12	Rhodium (103-2)	60-125 %	60-125 %
Istd#13	Rhodium (103-3)	60-125 %	60-125 %
Istd#14	Indium (115-1)	60-125 %	60-125 %
Istd#15	Indium (115-2)	60-125 %	60-125 %
Istd#16	Terbium (159-1)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
13:04	MA51703-STD1	100	100	100	100	100	100
13:09	MA51703-STD2	100	100	100	100	100	100
13:15	MA51703-STD3	100	100	100	100	100	100
13:21	MA51703-STD4	100.117	100.679	100.559	100.151	100.057	99.64
13:26	MA51703-STD5	94.271	91.71	100.328	94.949	100.484	94.049
13:32	MA51703-STD6	102.054	101.666	100.842	102.425	101.026	101.44
13:38	MA51703-STD7	98.296	100.083	101.498	98.674	100.917	98.069
13:43	MA51703-STD8	102.653	101.733	100.847	102.565	101.151	102.189
13:49	MA51703-STD9	101.416	101.027	100.779	101.456	100.006	99.984
13:55	MA51703-STD10	102.547	102.577	101.247	102.448	100.87	100.892
14:00	MA51703-STD11	102.827	101.077	101.161	103.049	98.666	99.156
14:06	MA51703-STD12	95.533	100.234	100.345	95.95	96.812	91.3
14:12	MA51703-STD13	102.831	99.62	100.778	103.526	97.112	98.38
14:17	MA51703-STD14	100	100	100	100	100	100
14:23	ZZZZZZ	100.736	100.271	100.533	100.921	100.701	101.058
14:29	MA51703-ICVA1	94.691	100.369	99.406	95.332	98.103	93.375
14:34	MA51703-ICV1	99.506	93.596	99.547	99.771	100.664	99.855
14:48	MA51703-ICB1	98.491	99.936	100.117	98.48	100.316	98.588
14:53	MA51703-CCVA1	102.048	101.822	100.154	102.24	98.547	100.157
14:59	MA51703-CCB1	100.807	100.838	90.156	101.752	90.981	101.214
15:05	MA51703-CRI1	100.824	100.546	100.448	101.214	101.346	100.75
15:10	MA51703-ICSA1	No results reported for the elements associated with this internal standard.					
15:17	MA51703-ICSA2	89.688	89.559	92.162	90.208	86.118	83.782
15:25	MA51703-ICSAB1	88.511	88.806	90.142	88.889	84.75	83.381
15:34	ZZZZZZ	94.609	96.903	97.526	94.786	98.879	96.255
15:39	MA51703-CCVA2	97.329	97.241	97.667	97.963	96.932	97.277
15:45	MA51703-CCB2	95.994	98.127	99.606	96.819	100.105	98.277
15:51	MP30440-MB1	96.268	97.859	99.521	96.599	100.499	94.975
15:57	MP30440-B1	94.612	99.084	97.616	95.608	106.882	104.892
16:03	JD36624-6	91.828	95.803	95.489	92.479	94.529	91.482
16:08	JD36624-7	93.495	93.784	96.969	94.174	95.746	92.67
16:14	JD36624-8	92.459	94.988	95.092	93.387	92.537	90.174
16:20	JD36624-9	84.098	82.336	84.977	84.895	74.345	77.745

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
16:26	JD36624-10	94.152	97.362	96.387	95.393	95.942	94.193
16:31	JD36624-11	92.145	93.45	94.708	93.367	90.822	88.417
16:37	JD36624-3F	90.537	89.255	93.168	91.026	84.499	82.266
16:43	MA51703-CCVA3	94.177	96.92	99.366	94.934	97.525	93.255
16:48	MA51703-CCB3	93.252	96.461	99.664	92.794	99.642	93.376
16:54	JD36624-4F	93.499	92.239	96.17	93.875	93.618	90.74
16:59	JD36624-5F	90.224	95.575	97.111	90.514	94.197	87.451
17:05	JD36624-6F	92.03	95.097	96.632	92.77	90.866	87.368
17:11	JD36624-7F	93.558	95.481	94.15	94.319	89.768	89.649
17:16	JD36624-8F	93.159	93.222	96.266	94.08	90.915	88.547
17:22	JD36624-9F	82.597	81.028	86.878	83.197	72.387	74.428
17:28	JD36624-10F	91.916	94.318	93.863	92.337	91.988	89.944
17:33	JD36624-11F	89.661	90.998	93.498	89.914	88.523	85.177
17:39	MA51703-CCVA4	98.262	96.353	99.655	98.514	97.613	96.727
17:45	MA51703-CCB4	101.008	96.571	99.475	101.707	99.629	101.655
17:50	MP30683-MB1	97.535	96.643	100.179	97.336	100.792	97.458
17:56	MP30683-B1	95.164	96.601	97.869	95.674	97.329	94.809
18:02	MP30683-S1	91.184	91.173	93.454	92.437	89.412	87.92
18:07	MP30683-S2	91.826	90.874	94.42	92.485	90.28	87.604
18:13	JD37564-1	92.287	90.499	96.479	92.991	92.043	87.939
18:19	MP30683-SD1	94.353	94.301	101.019	94.45	100.103	93.72
18:24	ZZZZZZ	93.515	88.291	101.669	93.931	96.572	88.287
18:30	ZZZZZZ	103.199	91.696	101.472	103.707	102.226	101.676
18:36	ZZZZZZ	89.057	93.346	97.459	89.545	96.336	88.613
18:41	MA51703-CCVA5	97.296	91.542	99.831	97.386	98.398	95.819
18:47	MA51703-CCB5	95.839	88.051	99.288	95.781	99.937	96.577
18:53	ZZZZZZ	92.064	91.073	97.032	93.685	93.088	89.152
18:58	ZZZZZZ	93.12	96.11	91.778	94.307	92.887	94.827
19:04	ZZZZZZ	94.792	92.503	98.776	95.753	95.574	91.765
19:10	ZZZZZZ	89.494	93.326	97.224	90.136	94.71	86.65
19:15	ZZZZZZ	97.425	95.4	99.577	97.984	96.956	94.503
19:21	ZZZZZZ	96.464	94.675	91.22	96.766	88.368	96.146
19:27	ZZZZZZ	99.563	96.319	104.823	99.45	104.219	99.336

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
19:32	MA51703-CCVA6	98.335	94.625	101.236	98.271	99.417	96.517
19:38	MA51703-CCB6	97.523	95.276	101.796	97.853	102.045	97.779
19:44	ZZZZZZ	98.836	86.357	100.657	99.187	86.402	91.396
19:49	MP30697-MB1	94.563	94.955	101.26	94.824	101.671	95.243
19:55	MP30697-B1	96.618	96.175	100.553	96.998	100.87	97.163
20:00	MP30697-S1	95.525	82.807	99.987	95.835	98.447	94.52
20:06	MP30697-S2	94.946	95.503	100.432	95.67	98.587	93.965
20:11	JD36387-33	94.187	94.614	99.575	94.651	99.041	93.74
20:17	MP30697-SD1	99.25	95.1	104.892	99.201	104.647	100.41
20:22	ZZZZZZ	92.086	94.009	98.667	92.498	98.79	92.148
20:28	MA51703-CCVA7	98.051	93.846	93.947	98.667	92.455	96.343
20:34	MA51703-CCB7	95.321	93.045	100.677	95.376	100.308	95.326
20:39	MP30471-S1	97.141	91.364	103.423	97.508	101.049	97.996
20:45	MP30471-S2	95.173	90.928	100.067	95.789	99.406	92.934
20:50	JD36804-8	95.351	91.673	99.431	95.784	98.261	96.329
20:56	MP30471-SD1	97.405	92.444	92.578	97.266	77.847	97.453
21:01	JD36624-2F	95.124	91.819	99.141	95.281	98.151	94.679
21:07	JD36624-2F	96.705	92.524	100.896	96.894	94.768	95.968
21:13	JD36624-2	97.135	87.886	100.02	96.975	99.003	93.739
21:18	JD36624-2	94.603	85.572	101.722	94.811	93.377	92.598
21:24	ZZZZZZ	95.936	91.442	90.256	96.026	88.807	94.254
21:29	ZZZZZZ	95.494	92.403	99.424	95.318	99.897	95.435
21:35	MA51703-CCVA8	95.818	92.068	96.714	96.57	95.188	94.83
21:40	MA51703-CCB8	95.141	91.835	98.129	95.068	97.937	95.391
21:46	ZZZZZZ	84.287	89.123	97.552	85.042	95.783	82.702
21:51	ZZZZZZ	94.837	90.932	101.147	95.082	99.011	94.941
21:57	ZZZZZZ	94.532	90.219	100.957	94.969	98.454	93.963
22:03	MP30471-S1	96.048	91.755	102.721	96.682	90.524	95.134
22:08	MP30471-S2	96.243	95.374	100.716	96.248	92.835	96.061
22:14	JD36804-8	90.102	91.223	100.633	89.702	91.024	86.439
22:19	MP30471-SD1	96.449	91.393	101.409	96.837	86.248	93.895
22:25	ZZZZZZ	88.153	91.581	98.897	88.409	97.925	87.247
22:30	MA51703-CCVA9	95.967	88.257	99.751	96.315	98.044	94.683

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
22:36	MA51703-CCB9	95.855	92.345	100.758	95.554	101.221	95.244
22:41	MP30591-MB1	91.774	92.652	101.13	91.98	101.257	91.787
22:47	MP30591-B1	94.965	89.213	99.915	95.507	101.562	95.837
22:53	MP30591-S1	92.018	90.325	98.086	92.578	91.901	86.985
22:58	MP30591-S2	91.963	89.84	97.357	91.72	91.87	86.395
23:04	JD36418-7	91.433	89.409	97.484	91.615	91.824	85.913
23:09	MP30591-SD1	99.064	91.364	97.429	99.149	96.562	94.679
23:15	ZZZZZZ	95.149	91.2	101.2	94.827	100.905	94.074
23:20	MA51703-CCVA10	95.425	85.327	98.377	95.43	96.007	93.226
23:26	MA51703-CCB10	94.813	90.067	102.815	93.972	102.27	94.235
23:31	ZZZZZZ	91.787	92.167	97.034	92.523	96.508	90.402
23:37	ZZZZZZ	90.743	89.124	97.565	91.677	93.526	87.406
23:43	ZZZZZZ	87.725	87.476	96.218	88.73	86.244	78.314
23:48	ZZZZZZ	91.509	82.241	97.294	92.028	88.555	83.081
23:54	ZZZZZZ	91.05	88.259	96.66	91.375	90.434	85.428
23:59	ZZZZZZ	90.695	85.292	96.912	91.277	95.337	89.621
00:05	MA51703-CCVA11	94.855	91.491	99.143	95.145	97.253	92.462
00:10	MA51703-CCB11	92.814	90.428	99.286	93.034	98.716	92.634
00:16	MP30416A-MB1	89.241	90.321	99.626	89.197	99.555	88.986
00:22	MP30416A-B2	92.472	91.666	97.237	92.679	97.584	92.331
00:27	MP30416A-S3	88.582	89.927	92.276	89.115	87.65	84.364
00:33	MP30416A-S4	88.228	89.434	97.388	88.368	92.216	83.17
00:38	JD36625-5	86.511	89.676	98.034	86.579	93.293	82.941
00:44	MP30416A-SD1	100.973	90.396	98.872	101.094	97.809	94.83
00:49	ZZZZZZ	89.154	88.688	95.291	89.34	93.981	87.057
00:55	ZZZZZZ	89.108	89.062	97.043	89.312	94.737	86.924
01:00	MA51703-CCVA12	94.941	90.649	100.718	95.212	98.98	93.123
01:06	MA51703-CCB12	92.828	90.825	101.396	93.291	101.021	92.542
01:12	ZZZZZZ	89.513	89.001	94.848	89.651	92.777	87.624
01:17	ZZZZZZ	89.748	89.222	97.456	90.163	93.434	85.964
01:23	ZZZZZZ	89.614	88.716	97.518	90.145	93.427	86.114
01:28	ZZZZZZ	88.483	88.763	99.034	89.144	96.738	86.507
01:34	ZZZZZZ	88.901	86.336	96.814	89.301	94.323	86.267

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
01:39	ZZZZZZ	88.739	88.156	96.477	88.773	93.422	85.898
01:45	ZZZZZZ	89.012	88	96.247	89.185	93.275	85.768
01:51	ZZZZZZ	88.436	87.324	96.109	89.205	92.391	85.281
01:56	ZZZZZZ	88.732	88.556	97.1	89.481	93.331	85.687
02:02	MA51703-CCVA13	94.549	89.574	100.648	95.657	97.851	90.432
02:07	MA51703-CCB13	91.965	89.429	98.71	91.756	99.434	91.606
02:13	ZZZZZZ	88.019	88.295	95.441	88.886	92.892	86.018
02:18	ZZZZZZ	88.975	88.542	97.248	89.385	93.209	85.614
02:24	ZZZZZZ	86.282	86.836	87.473	85.921	83.502	81.073
02:29	ZZZZZZ	87.486	87.368	95.887	87.825	91.274	82.85
02:35	ZZZZZZ	85.565	87.262	95.859	85.909	91.711	81.582
02:41	ZZZZZZ	83.531	87.271	95.745	84.176	91.369	79.587
02:46	ZZZZZZ	89.215	87.581	95.806	89.694	92.69	85.254
02:52	ZZZZZZ	85.46	87.795	96.526	85.952	92.485	81.467
02:57	ZZZZZZ	92.047	89.378	100.509	91.801	100.381	91.748
03:03	ZZZZZZ	89.106	89.256	97.006	89.376	96.214	85.264
03:08	MA51703-CCVA14	92.657	89.313	99.109	92.65	97.56	90.959
03:14	MA51703-CCB14	89.407	88.488	98.649	89.607	99.163	86.205
03:19	MP30634-MB1	88.711	88.817	99.366	88.89	100.673	89.31
03:25	MP30634-B1	92.532	89.622	98.815	92.25	97.112	91.913
03:31	MP30634-S1	89.219	85.169	96.395	89.782	89.081	82.601
03:36	MP30634-S2	84.758	89.806	95.964	85.383	88.001	78.314
03:42	JD37473-6F	89.081	84.423	95.113	89.433	87.911	82.162
03:47	ZZZZZZ	89.38	84.455	93.902	89.78	86.749	82.365
03:53	ZZZZZZ	83.732	83.666	94.783	84.036	88.203	77.685
03:58	ZZZZZZ	88.056	82.584	94.281	88.488	87.999	81.362
04:04	MA51703-CCVA15	90.559	86.829	94.692	91.145	93.829	88.339
04:10	MA51703-CCB15	88.594	86.947	96.781	88.323	96.588	88.423
04:15	ZZZZZZ	82.746	82.127	93.437	83.541	85.15	76.09
04:21	MP30634-S1	90.997	85.444	95.542	91.42	89.545	86.344
04:26	MP30634-S2	92.353	85.819	95.872	92.462	88.564	86.762
04:32	MP30691-MB1	90.598	87.217	97.636	90.414	97.862	90.443
04:37	MP30691-B1	92.017	87.675	97.573	92.192	97.444	91.026

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
04:43	MP30691-S1	87.906	80.168	90.439	87.997	72.673	75.655
04:49	MP30691-S2	97.311	74.315	94.381	97.359	78.327	80.545
04:54	JD37653-1	89.146	81.548	95.298	88.894	78.32	75.286
05:00	ZZZZZZ	98.556	91.92	104.072	98.275	97.417	91.489
05:05	ZZZZZZ	93.2	89.83	104.199	92.327	102.053	90.489
05:11	MA51703-CCVA16	93.035	87.136	97.917	92.469	96.147	90.214
05:16	MA51703-CCB16	91.708	86.859	97.814	91.326	97.868	90.925
05:22	ZZZZZZ	87.653	85.548	96.875	87.592	93.981	83.835
05:28	ZZZZZZ	87.622	86.048	96.683	87.657	92.801	83.374
05:33	ZZZZZZ	90.402	81.677	93.138	90.076	90.404	86.806
05:39	ZZZZZZ	89.022	83.966	97.283	89.055	92.958	84.741
05:44	ZZZZZZ	89.036	84.911	94.536	88.907	92.921	86.919
05:50	ZZZZZZ	88.372	80.564	96.321	88.508	93.163	85.22
05:55	ZZZZZZ	89.158	84.978	97.082	89.645	95.083	87.527
06:01	MP30691-S1	No results reported for the elements associated with this internal standard.					
06:07	MP30691-S2	No results reported for the elements associated with this internal standard.					
06:12	JD37653-1	90.663	81.773	94.645	90.604	84.358	78.091
06:18	MA51703-CCVA17	93.257	86.324	97.938	93.362	95.46	90.032
06:23	MA51703-CCB17	87.743	85.905	97.437	87.94	97.899	83.225
06:29	MP30633-MB1	91.518	86.362	98.983	91.876	99.881	91.926
06:35	MP30633-B1	92.58	86.941	98.336	92.635	97.149	91.485
06:40	MP30633-S1	85.515	79.412	93.322	85.617	74.957	74.411
06:46	MP30633-S2	85.209	76.945	92.61	85.582	73.772	74.453
06:52	JD37473-1	86.065	78.459	91.416	85.941	80.709	74.949
06:57	ZZZZZZ	84.569	76.266	88.397	84.686	65.01	71.673
07:03	ZZZZZZ	87.978	80.312	93.417	88.458	68.804	75.85
07:08	ZZZZZZ	97.61	89.991	101.098	97.004	82.866	86.35
07:14	ZZZZZZ	92.969	90.669	106.813	93.108	88.797	85.582
07:20	ZZZZZZ	88.716	86.261	97.899	88.199	97.862	87.144
07:25	MA51703-CCVA18	90.106	83.086	96.044	90.424	94.068	87.863
07:31	MA51703-CCB18	89.227	82.458	96.922	89.496	96.379	88.481
07:36	ZZZZZZ	85.182	76.523	92.942	85.604	81.568	74.209
07:42	ZZZZZZ	84.075	66.973	87.847	84.011	64.282	70.449

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
Analyst: NV Run ID: MA51703
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
07:48	ZZZZZZ	91.303	78.72	92.131	91.118	70.955	74.557
07:53	ZZZZZZ	96.06	85.293	97.723	96.04	80.295	84.565
07:59	ZZZZZZ	90.846	82.754	99.285	91.051	85.497	80.752
08:04	ZZZZZZ	90.847	89.462	97.297	90.399	96.873	88.979
08:10	MA51703-CCVA19	89.913	82.138	96.086	89.648	93.414	86.821
08:15	MA51703-CCB19	88.743	82.573	96.62	88.852	95.487	87.582
08:21	ZZZZZZ	87.964	78.747	94.478	88.186	84.5	79.074
08:27	ZZZZZZ	83.345	78.931	94.528	83.608	84.215	74.906
08:32	ZZZZZZ	93.488	83.467	99.167	93.663	63.971	87.182
08:38	ZZZZZZ	93.428	83.52	99.401	92.983	71.976	87.05
08:43	ZZZZZZ	93.739	95.616	92.912	93.223	61.786	85.632
08:49	ZZZZZZ	92.225	82.648	98.895	91.953	79.178	87.877
08:54	MA51703-CCVA20	88.88	81.819	94.083	88.959	91.712	86.4
09:00	MA51703-CCB20	88.472	82.531	94.811	87.966	95.317	87.107
09:05	ZZZZZZ	88.385	81.026	97.143	88.14	96.916	87.656
09:11	ZZZZZZ	84.582	90.436	96.22	84.365	96.038	84.073
09:17	ZZZZZZ	88.88	82.033	95.969	89.111	95.469	88.288

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	60-125 %	60-125 %
Istd#18	Terbium (159-3)	60-125 %	60-125 %
Istd#19	Holmium (165-1)	60-125 %	60-125 %
Istd#20	Holmium (165-2)	60-125 %	60-125 %
Istd#21	Bismuth (209-1)	60-125 %	60-125 %
Istd#22	Bismuth (209-2)	60-125 %	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51703 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	14:48 ICB1 raw	final	14:59 CCB1 raw	final	15:45 CCB2 raw	final	16:48 CCB3 raw	final
Aluminum	25	.42	-6.61	<25	-6.61	<25	-6.61	<25	-6.32	<25
Antimony	2.0	.085	-0.0993	<2.0	-0.0573	<2.0	-0.0892	<2.0	-0.104	<2.0
Arsenic	0.50	.025	-0.00190	<0.50	0.0433	<0.50	0.0329	<0.50	0.0253	<0.50
Barium	1.0	.009	0.0173	<1.0	0.0684	<1.0	0.0205	<1.0	0.0331	<1.0
Beryllium	0.50	.005	-0.00374	<0.50	0.0242	<0.50	0.00614	<0.50	0.0140	<0.50
Boron	25	.85								
Cadmium	0.50	.01	-0.000858	<0.50	0.00519	<0.50	0.00382	<0.50	0.00466	<0.50
Calcium	250	3.6	-1.74	<250	2.84	<250	0.239	<250	3.70	<250
Chromium	1.0	.018	-0.0145	<1.0	-0.00969	<1.0	-0.0126	<1.0	-0.00436	<1.0
Cobalt	0.50	.003	0.000200	<0.50	0.00192	<0.50	0.000875	<0.50	0.00633	<0.50
Copper	2.0	.024	-0.00587	<2.0	0.00274	<2.0	0.0121	<2.0	0.120	<2.0
Iron	25	.24	-2.75	<25	-1.67	<25	-0.972	<25	-1.21	<25
Lead	0.50	.008	0.00264	<0.50	0.0322	<0.50	0.0146	<0.50	0.0195	<0.50
Magnesium	250	.19	-1.08	<250	-0.683	<250	-0.233	<250	1.13	<250
Manganese	1.0	.012	0.00247	<1.0	-0.00419	<1.0	0.00114	<1.0	0.0427	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	0.00714	<1.0	-0.000676	<1.0	0.0112	<1.0	0.00882	<1.0
Potassium	250	.78	-1.12	<250	-1.40	<250	-0.790	<250	-0.578	<250
Selenium	0.50	.044	-0.0129	<0.50	0.421	<0.50	0.392	<0.50	0.357	<0.50
Silver	0.50	.004	-0.0000775	<0.50	0.0239	<0.50	0.0121	<0.50	0.0111	<0.50
Sodium	250	1.5	-0.870	<250	-0.578	<250	1.07	<250	18.7	<250
Strontium	5.0	.014								
Thallium	0.50	.002	0.00112	<0.50	0.0559	<0.50	0.0396	<0.50	0.0400	<0.50
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	-0.00247	<1.0	-0.00497	<1.0	0.000873	<1.0	0.00188	<1.0
Zinc	5.0	.078	-0.00236	<5.0	0.00945	<5.0	-0.00123	<5.0	0.0158	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51703 Units: ug/l

Time: / Sample ID:			17:45 CCB4		18:47 CCB5		19:38 CCB6		20:34 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	-6.32	<25	-7.25	<25	-7.13	<25	-6.59	<25
Antimony	2.0	.085	-0.107	<2.0	-0.108	<2.0	-0.118	<2.0	0.0219	<2.0
Arsenic	0.50	.025	0.0255	<0.50	0.0268	<0.50	0.0179	<0.50	0.0253	<0.50
Barium	1.0	.009	0.0742	<1.0	0.0405	<1.0	0.0377	<1.0	0.0277	<1.0
Beryllium	0.50	.005	0.0157	<0.50	0.00954	<0.50	0.00432	<0.50	0.00762	<0.50
Boron	25	.85								
Cadmium	0.50	.01	0.00274	<0.50	0.00385	<0.50	-0.000197	<0.50	0.00375	<0.50
Calcium	250	3.6	1.65	<250	-1.48	<250	-1.31	<250	-0.589	<250
Chromium	1.0	.018	-0.0192	<1.0	-0.00995	<1.0	-0.00945	<1.0	-0.00758	<1.0
Cobalt	0.50	.003	0.00294	<0.50	0.00297	<0.50	-0.000367	<0.50	0.00322	<0.50
Copper	2.0	.024	0.0558	<2.0	0.0230	<2.0	0.0238	<2.0	-0.00389	<2.0
Iron	25	.24	-1.90	<25	-1.93	<25	-2.03	<25	-1.69	<25
Lead	0.50	.008	0.0156	<0.50	0.0138	<0.50	0.00914	<0.50	0.0112	<0.50
Magnesium	250	.19	0.302	<250	-0.686	<250	-0.885	<250	-0.649	<250
Manganese	1.0	.012	0.0467	<1.0	0.0216	<1.0	0.0461	<1.0	0.0560	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017	0.0134	<1.0	0.00630	<1.0	0.0166	<1.0	0.0200	<1.0
Potassium	250	.78	-2.88	<250	-2.48	<250	-1.77	<250	-1.33	<250
Selenium	0.50	.044	0.359	<0.50	0.627	* (a)	0.341	<0.50	0.456	<0.50
Silver	0.50	.004	0.0122	<0.50	0.0118	<0.50	0.00363	<0.50	0.00887	<0.50
Sodium	250	1.5	10.4	<250	6.28	<250	4.86	<250	3.22	<250
Strontium	5.0	.014								
Thallium	0.50	.002	0.0372	<0.50	0.0417	<0.50	0.0330	<0.50	0.0471	<0.50
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013	-0.00589	<1.0	-0.00925	<1.0	-0.0141	<1.0	-0.0121	<1.0
Zinc	5.0	.078	0.000958	<5.0	0.0686	<5.0	0.0486	<5.0	0.0546	<5.0

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51703 Units: ug/l

Time:			21:40		22:36	
Sample ID:			CCB8		CCB9	
Metal	RL	IDL	raw	final	raw	final
Aluminum	25	.42	-6.63	<25	-7.11	<25
Antimony	2.0	.085	-0.0326	<2.0	-0.0704	<2.0
Arsenic	0.50	.025	0.0282	<0.50	0.0435	<0.50
Barium	1.0	.009	0.0788	<1.0	0.0694	<1.0
Beryllium	0.50	.005	0.0240	<0.50	0.0100	<0.50
Boron	25	.85				
Cadmium	0.50	.01	0.0117	<0.50	0.00720	<0.50
Calcium	250	3.6	-0.233	<250	-2.40	<250
Chromium	1.0	.018	-0.0156	<1.0	-0.00214	<1.0
Cobalt	0.50	.003	0.00752	<0.50	0.00449	<0.50
Copper	2.0	.024	0.0113	<2.0	-0.0136	<2.0
Iron	25	.24	-1.53	<25	-1.90	<25
Lead	0.50	.008	0.0253	<0.50	0.0135	<0.50
Magnesium	250	.19	-0.825	<250	-1.11	<250
Manganese	1.0	.012	0.0274	<1.0	0.0109	<1.0
Molybdenum	1.0	.017				
Nickel	1.0	.017	0.0187	<1.0	0.0146	<1.0
Potassium	250	.78	-1.72	<250	-1.69	<250
Selenium	0.50	.044	0.461	<0.50	0.534	* (a)
Silver	0.50	.004	0.0177	<0.50	0.00761	<0.50
Sodium	250	1.5	2.37	<250	2.14	<250
Strontium	5.0	.014				
Thallium	0.50	.002	0.0518	<0.50	0.0479	<0.50
Tin	5.0	.041				
Titanium	1.0	.11				
Vanadium	1.0	.013	-0.00680	<1.0	-0.00937	<1.0
Zinc	5.0	.078	0.0257	<5.0	-0.0364	<5.0

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51703 Units: ug/l

Time:		14:29			14:34			14:53	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	6010	109.3	60	56.0	93.3	5000	5120	102.4
Antimony	60	63.6	106.0				50	55.6	111.2*(a
Arsenic	60	64.2	107.0				50	50.7	101.4
Barium	60	61.0	101.7				50	51.6	103.2
Beryllium	60	60.6	101.0				50	52.9	105.8
Boron									
Cadmium	60	63.3	105.5				50	51.1	102.2
Calcium	5500	5420	98.5				5000	5120	102.4
Chromium	60	64.7	107.8				50	50.6	101.2
Cobalt	60	63.0	105.0				50	49.3	98.6
Copper	60	62.4	104.0				50	49.5	99.0
Iron	5500	5940	108.0				5000	5100	102.0
Lead	60	60.2	100.3				50	50.8	101.6
Magnesium	5500	5950	108.2				5000	5130	102.6
Manganese	60	64.1	106.8				50	49.9	99.8
Molybdenum									
Nickel	60	63.0	105.0				50	49.9	99.8
Potassium	5500	5920	107.6				5000	5110	102.2
Selenium	260	252	96.9				200	201	100.5
Silver	60	59.1	98.5				50	50.0	100.0
Sodium	5500	5960	108.4				5000	5090	101.8
Strontium									
Thallium	60	61.5	102.5				50	50.2	100.4
Tin									
Titanium									
Vanadium	60	63.9	106.5				50	50.2	100.4
Zinc	60	62.5	104.2				50	49.6	99.2

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51703 Units: ug/l

Time:		15:39			16:43			17:39	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	5020	100.4	5000	5210	104.2	5000	5000	100.0
Antimony	50	53.4	106.8	50	53.5	107.0	50	53.5	107.0
Arsenic	50	51.4	102.8	50	53.3	106.6	50	51.3	102.6
Barium	50	50.0	100.0	50	50.3	100.6	50	50.2	100.4
Beryllium	50	52.2	104.4	50	52.4	104.8	50	52.7	105.4
Boron									
Cadmium	50	49.9	99.8	50	52.6	105.2	50	50.2	100.4
Calcium	5000	5280	105.6	5000	5290	105.8	5000	5330	106.6
Chromium	50	51.2	102.4	50	52.9	105.8	50	50.9	101.8
Cobalt	50	50.0	100.0	50	51.9	103.8	50	49.7	99.4
Copper	50	50.3	100.6	50	52.1	104.2	50	49.9	99.8
Iron	5000	5210	104.2	5000	5370	107.4	5000	5180	103.6
Lead	50	50.7	101.4	50	50.9	101.8	50	50.7	101.4
Magnesium	5000	5040	100.8	5000	5200	104.0	5000	4990	99.8
Manganese	50	50.7	101.4	50	52.9	105.8	50	50.5	101.0
Molybdenum									
Nickel	50	50.4	100.8	50	52.0	104.0	50	50.1	100.2
Potassium	5000	5050	101.0	5000	5260	105.2	5000	5050	101.0
Selenium	200	202	101.0	200	202	101.0	200	201	100.5
Silver	50	48.9	97.8	50	49.1	98.2	50	49.6	99.2
Sodium	5000	5040	100.8	5000	5230	104.6	5000	4990	99.8
Strontium									
Thallium	50	50.2	100.4	50	49.9	99.8	50	50.3	100.6
Tin									
Titanium									
Vanadium	50	50.8	101.6	50	52.4	104.8	50	50.9	101.8
Zinc	50	51.0	102.0	50	52.4	104.8	50	50.1	100.2

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51703 Units: ug/l

Time:		18:41			19:32			20:28	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4910	98.2	5000	4870	97.4	5000	4880	97.6
Antimony	50	52.8	105.6	50	52.7	105.4	50	56.4	112.8*(a
Arsenic	50	50.8	101.6	50	51.6	103.2	50	51.4	102.8
Barium	50	50.0	100.0	50	50.0	100.0	50	53.2	106.4
Beryllium	50	52.4	104.8	50	52.1	104.2	50	55.8	111.6*(a
Boron									
Cadmium	50	49.7	99.4	50	49.6	99.2	50	49.7	99.4
Calcium	5000	5230	104.6	5000	5220	104.4	5000	5570	111.4*(a
Chromium	50	50.5	101.0	50	50.2	100.4	50	50.6	101.2
Cobalt	50	49.3	98.6	50	49.5	99.0	50	49.5	99.0
Copper	50	49.4	98.8	50	49.5	99.0	50	49.8	99.6
Iron	5000	5150	103.0	5000	5170	103.4	5000	5200	104.0
Lead	50	49.2	98.4	50	49.2	98.4	50	52.9	105.8
Magnesium	5000	4880	97.6	5000	4850	97.0	5000	4830	96.6
Manganese	50	50.2	100.4	50	50.2	100.4	50	50.3	100.6
Molybdenum									
Nickel	50	49.5	99.0	50	49.5	99.0	50	49.7	99.4
Potassium	5000	5020	100.4	5000	5010	100.2	5000	5030	100.6
Selenium	200	208	104.0	200	200	100.0	200	202	101.0
Silver	50	48.3	96.6	50	48.0	96.0	50	51.5	103.0
Sodium	5000	4880	97.6	5000	4850	97.0	5000	4840	96.8
Strontium									
Thallium	50	48.5	97.0	50	48.5	97.0	50	51.9	103.8
Tin									
Titanium									
Vanadium	50	50.4	100.8	50	50.2	100.4	50	50.6	101.2
Zinc	50	50.2	100.4	50	50.1	100.2	50	51.0	102.0

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51703 Units: ug/l

Time:		21:35			22:30	
Sample ID:	CCVA	CCVA8		CCVA	CCVA9	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4910	98.2	5000	4910	98.2
Antimony	50	53.3	106.6	50	51.6	103.2
Arsenic	50	51.7	103.4	50	51.9	103.8
Barium	50	50.2	100.4	50	48.9	97.8
Beryllium	50	53.9	107.8	50	52.4	104.8
Boron						
Cadmium	50	49.6	99.2	50	50.0	100.0
Calcium	5000	5250	105.0	5000	5240	104.8
Chromium	50	50.3	100.6	50	50.4	100.8
Cobalt	50	49.7	99.4	50	49.5	99.0
Copper	50	49.6	99.2	50	49.6	99.2
Iron	5000	5240	104.8	5000	5270	105.4
Lead	50	49.5	99.0	50	48.2	96.4
Magnesium	5000	4880	97.6	5000	4890	97.8
Manganese	50	50.4	100.8	50	50.7	101.4
Molybdenum						
Nickel	50	49.9	99.8	50	49.8	99.6
Potassium	5000	5070	101.4	5000	5050	101.0
Selenium	200	203	101.5	200	211	105.5
Silver	50	48.6	97.2	50	46.9	93.8
Sodium	5000	4880	97.6	5000	4880	97.6
Strontium						
Thallium	50	48.7	97.4	50	47.6	95.2
Tin						
Titanium						
Vanadium	50	50.2	100.4	50	50.3	100.6
Zinc	50	51.9	103.8	50	52.1	104.2

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51703 Units: ug/l

Time:			15:05	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	26.1	104.4
Antimony	2.0	0.25	1.84	92.0
Arsenic	0.50	0.50	0.530	106.0
Barium	1.0	0.50	0.907	90.7
Beryllium	0.50	0.25	0.492	98.4
Boron	25	2.5		
Cadmium	0.50	0.25	0.452	90.4
Calcium	250	125	249	99.6
Chromium	1.0	2.0	1.01	101.0
Cobalt	0.50	0.25	0.490	98.0
Copper	2.0	2.0	1.94	97.0
Iron	25	25	24.4	97.6
Lead	0.50	0.25	0.486	97.2
Magnesium	250	125	254	101.6
Manganese	1.0	0.25	0.955	95.5
Molybdenum	1.0	0.50		
Nickel	1.0	2.0	1.02	102.0
Potassium	250	125	250	100.0
Selenium	0.50	0.50	0.567	113.4
Silver	0.50	1.0	0.563	112.6
Sodium	250	125	252	100.8
Strontium	5.0	0.50		
Thallium	0.50	0.25	0.483	96.6
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0	0.993	99.3
Zinc	5.0	2.0	5.45	109.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA010822M1.CSV Date Analyzed: 01/08/22 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51703 Units: ug/l

Time:			15:17		15:25	
Sample ID:	ICSA	ICSAB	ICSA2		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	94000	94.0	95600	95.6
Antimony			-0.0630		0.0939	
Arsenic		20	0.0701		18.9	94.5
Barium			0.0238		0.0328	
Beryllium			-0.00152		-0.00188	
Boron		50	2.22		50.9	101.8
Cadmium		20	-0.331		19.0	95.0
Calcium	100000	100000	101000	101.0	104000	104.0
Chromium		20	0.837		20.3	101.5
Cobalt		20	0.105		18.5	92.5
Copper		20	0.144		17.7	88.5
Iron	100000	100000	92000	92.0	94100	94.1
Lead			0.0344		0.0412	
Magnesium	100000	100000	92300	92.3	93800	93.8
Manganese		20	0.215		19.5	97.5
Molybdenum	2000	2000	2130HH	106.5	2180HH	109.0
Nickel		20	0.442		18.2	91.0
Potassium	100000	100000	95500	95.5	97900	97.9
Selenium		20	0.0520		19.2	96.0
Silver		20	0.0102		17.6	88.0
Sodium	100000	100000	92200	92.2	94200	94.2
Strontium	2000	2000	2070HH	103.5	2120HH	106.0
Thallium			0.00389		0.00493	
Tin	2000	2000	1920HH	96.0	1980HH	99.0
Titanium	2000	2000	1760HH	88.0	1810HH	90.5
Vanadium		20	0.0272		20.6	103.0
Zinc		20	0.274		18.3	91.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:39	MA51708-STD1	1		Sample introduction not stable, see rerun.
11:45	MA51708-STD2	1		Sample introduction not stable, see rerun.
11:50	MA51708-STD3	1		Sample introduction not stable, see rerun.
11:56	MA51708-STD4	1		STDB
12:01	MA51708-STD5	1		STDC
12:07	MA51708-STD6	1		STDD
12:15	MA51708-STD7	1		STDE
12:21	MA51708-STD8	1		STDF
12:26	MA51708-STD9	1		STDG
12:32	MA51708-STD10	1		STDH
12:37	MA51708-STD11	1		STDI
12:43	MA51708-STD12	1		STDJ
12:48	MA51708-STD13	1		STDH
12:54	MA51708-STD14	1		STDA
13:00	ZZZZZZ	1		
13:05	MA51708-ICVA1	1		
13:11	MA51708-ICV1	1		
13:16	MA51708-ICB1	1		
13:22	MA51708-CCVA1	1		
13:27	MA51708-CCB1	1		
13:33	MA51708-CRI1	1		
13:39	MA51708-CRI2	1		
13:44	MA51708-ICSA1	1		
13:50	MA51708-ICSAB1	1		
13:56	ZZZZZZ	1		
14:01	MP30471-SD1	10		
14:07	JD36624-2	25		
14:12	JD36624-2F	25		
---------->	Last reportable sample/prep for job JD36624			
14:18	MA51708-CCVA2	1		
14:23	MA51708-CCB2	1		
---------->	Last reportable CCB for job JD36624			
14:29	MP30683-S1	50		
14:34	MP30683-S2	50		
14:40	JD37564-1	50		(sample used for QC only; not part of login JD36624)

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:45	MP30683-SD1	250		
14:51	ZZZZZZ	50		
14:57	ZZZZZZ	50		
15:02	ZZZZZZ	250		
15:08	ZZZZZZ	50		
15:13	ZZZZZZ	1		
15:20	MA51708-CCVA3	1		
15:25	MA51708-CCB3	1		
15:31	MP30683-SD1	250		
15:36	ZZZZZZ	20		
15:42	ZZZZZZ	200		
15:47	ZZZZZZ	5		
15:53	ZZZZZZ	25		
15:59	ZZZZZZ	2		
16:04	ZZZZZZ	2		
16:10	ZZZZZZ	20		
16:15	MA51708-CCVA4	1		
16:27	MA51708-CCB4	1		
16:33	ZZZZZZ	20		
16:38	ZZZZZZ	2		
16:44	ZZZZZZ	2		
16:49	ZZZZZZ	2		
16:55	ZZZZZZ	2		
17:00	ZZZZZZ	2		
17:06	ZZZZZZ	2		
17:12	ZZZZZZ	1		
17:17	ZZZZZZ	1		
17:24	MA51708-CCVA5	1		
17:29	MA51708-CCB5	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Element: Dilution	Be	Ca	
13:00	ZZZZZZ	1			
13:05	MA51708-ICVA1	1	X	X	
13:11	MA51708-ICV1	1			
13:16	MA51708-ICB1	1	X	X	
13:22	MA51708-CCVA1	1	X	X	
13:27	MA51708-CCB1	1	X	X	
13:33	MA51708-CRI1	1			
13:39	MA51708-CRI2	1	X	X	
13:44	MA51708-ICSA1	1	X	X	
13:50	MA51708-ICSAB1	1	X	X	
13:56	ZZZZZZ	1			
14:01	MP30471-SD1	10	X		
14:07	JD36624-2	25		X	
14:12	JD36624-2F	25		X	
14:18	MA51708-CCVA2	1	X	X	
14:23	MA51708-CCB2	1	X	X	
14:29	MP30683-S1	50		X	
14:34	MP30683-S2	50		X	
14:40	JD37564-1	50			(a)
14:45	MP30683-SD1	250			
14:51	ZZZZZZ	50			
14:57	ZZZZZZ	50			
15:02	ZZZZZZ	250			
15:08	ZZZZZZ	50			
15:13	ZZZZZZ	1			
15:20	MA51708-CCVA3	1	X	X	
15:25	MA51708-CCB3	1	X	X	
15:31	MP30683-SD1	250		X	
15:36	ZZZZZZ	20			
15:42	ZZZZZZ	200			
15:47	ZZZZZZ	5			
15:53	ZZZZZZ	25			
15:59	ZZZZZZ	2			
		Element:	Be	Ca	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Element: Dilution	B e	C a
16:04	ZZZZZZ	2		
16:10	ZZZZZZ	20		
16:15	MA51708-CCVA4	1	X	X
16:27	MA51708-CCB4	1	X	X
16:33	ZZZZZZ	20		
16:38	ZZZZZZ	2		
16:44	ZZZZZZ	2		
16:49	ZZZZZZ	2		
16:55	ZZZZZZ	2		
17:00	ZZZZZZ	2		
17:06	ZZZZZZ	2		
17:12	ZZZZZZ	1		
17:17	ZZZZZZ	1		
17:24	MA51708-CCVA5	1	X	X
17:29	MA51708-CCB5	1	X	X

(a) Sample used for QC only; not part of login JD36624.

Element:	B e	C a

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
11:39	MA51708-STD1	100	100	100	100	100	100	100	100
11:45	MA51708-STD2	100	100	100	100	100	100	100	100
11:50	MA51708-STD3	100	100	100	100	100	100	100	100
11:56	MA51708-STD4	82.976	76.991	78.325	76.933	80.819	79.074	71.303	80.598
12:01	MA51708-STD5	82.623	75.443	78.243	75.74	79.751	78.82	70.616	79.9
12:07	MA51708-STD6	82.282	76.328	77.923	76.064	80.623	77.736	70.777	80.552
12:15	MA51708-STD7	81.153	74.363	73.991	74.769	79.13	73.78	69.834 !	79.119
12:21	MA51708-STD8	80.566	75.058	76.373	70.449	80.342	76.803	66.896 !	80.038
12:26	MA51708-STD9	79.586	72.856	76.834	75.448	77.334	77.604	70.433	77.813
12:32	MA51708-STD10	82.306	75.882	70.431	77.662	80.926	72.891	72.276	80.778
12:37	MA51708-STD11	84.015	77.976	80.665	77.912	81.767	80.909	71.7	81.209
12:43	MA51708-STD12	84.064	77.651	75.311	78.576	80.658	76.049	71.776	80.712
12:48	MA51708-STD13	85.333	77.951	82.432	69.002 !	82.102	82.912	66.842 !	82.876
12:54	MA51708-STD14	100	100	100	100	100	100	100	100
13:00	ZZZZZZ	101.527	103.747	99.347	100.851	101.636	100.489	101.108	101.26
13:05	MA51708-ICVA1	97.414	100.2	98.527	100.315	99.766	98.057	99.716	99.941
13:11	MA51708-ICV1	96.334	96.656	96.633	90.792	97.072	95.391	91.178	96.834
13:16	MA51708-ICB1	98.354	98.068	98.689	99.687	98.61	98.595	99.655	98.585
13:22	MA51708-CCVA1	96.09	99.234	97.814	97.339	98.49	97.22	96.963	98.757
13:27	MA51708-CCB1	96.372	96.068	96.757	97.702	96.697	96.097	97.825	96.557
13:33	MA51708-CRI1	85.677	87.281	98.768	93.897	85.318	99.407	95.863	85.528
13:39	MA51708-CRI2	99.601	99.334	102.734	99.536	99.771	100.386	99.709	99.44
13:44	MA51708-ICSA1	89.648	91.682	87.041	90.414	87.668	83.007	87.633	86.455
13:50	MA51708-ICSAB1	85.068	86.591	87.056	89.643	86.618	84.887	86.775	85.644
13:56	ZZZZZZ	81.569	86.867	87.213	92.515	89.571	88.464	92.761	89.824
14:01	MP30471-SD1	80.704	83.544	85.356	92.057	86.936	88.136	93.047	86.681
14:07	JD36624-2	88.491	91.635	93.368	96.093	95.84	95.549	97.391	96.023
14:12	JD36624-2F	89.217	91.876	94.539	95.774	95.634	96.12	97.381	95.639
14:18	MA51708-CCVA2	87.903	93.177	94.162	97.433	93.967	95.127	97.347	94.934
14:23	MA51708-CCB2	93.86	99.471	91.695	97.155	97.917	93.52	97.825	97.956
14:29	MP30683-S1	98.249	96.516	101.976	101.235	101.748	103.266	102.212	102.225
14:34	MP30683-S2	98.81	100.293	101.822	100.986	101.387	103.267	102.869	101.391
14:40	JD37564-1	99.101	97.4	101.743	101.001	100.834	102.875	103.137	101.522

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
14:45	MP30683-SD1	No results reported for the elements associated with this internal standard.							
14:51	ZZZZZZ	99.514	99.408	101.17	95.884	101.365	102.71	97.205	101.547
14:57	ZZZZZZ	100.135	98.703	101.645	101.653	101.297	103.282	102.382	101.695
15:02	ZZZZZZ	105.5	104.278	104.959	103.539	105.78	107.014	104.588	105.613
15:08	ZZZZZZ	103.539	103.488	104.722	97.337	105.423	106.772	99.818	105.444
15:13	ZZZZZZ	94.079	97.309	92.239	98.759	97.923	92.365	98.284	97.95
15:20	MA51708-CCVA3	93.281	96.25	96.895	98.269	97.1	97.109	97.811	97.152
15:25	MA51708-CCB3	93.779	94.239	94.704	97.774	95.815	95.686	98.884	95.65
15:31	MP30683-SD1	101.557	97.656	102.149	97.079	103.282	104.067	98.215	103.221
15:36	ZZZZZZ	95.563	93.358	92.944	89.552	94.656	93.295	92.812	94.465
15:42	ZZZZZZ	102.554	99.523	101.217	100.465	100.225	101.484	101.769	99.991
15:47	ZZZZZZ	93.587	92.454	91.221	95.575	92.696	90.499	95.369	92.618
15:53	ZZZZZZ	98.902	97.669	96.347	97.247	98.697	97.664	98.299	98.455
15:59	ZZZZZZ	93.031	92.155	89.5	95.59	92.788	88.633	95.766	92.492
16:04	ZZZZZZ	82.375	85.302	83.365	81.211	85.421	83.951	81.501	85.362
16:10	ZZZZZZ	95.912	93.063	93.207	95.151	94.892	92.371	96.396	94.749
16:15	MA51708-CCVA4	95.516	96.769	96.676	96.345	96.673	96.018	95.997	96.893
16:27	MA51708-CCB4	94.23	91.03	94.193	94.731	91.46	92.882	95.207	90.626
16:33	ZZZZZZ	97.545	94.815	95.78	96.611	96.36	97.14	96.724	96.055
16:38	ZZZZZZ	182.617 !	166.715 !	228.667 !	190.103 !	158.43 !	224.562 !	192.015 !	158.462 !
16:44	ZZZZZZ	129.588	130.511 !	219.634 !	222.703 !	121.852	213.054 !	223.604 !	122.115
16:49	ZZZZZZ	212.882 !	192.66 !	257.163 !	237.811 !	183.217 !	250.779 !	234.097 !	182.834 !
16:55	ZZZZZZ	221.314 !	198.852 !	249.19 !	225.095 !	186.905 !	241.876 !	218.581 !	186.968 !
17:00	ZZZZZZ	103.967	99.915	102.042	100.469	99.386	101.162	99.617	99.459
17:06	ZZZZZZ	96.436	96.64	95.323	97.572	95.512	94.957	96.063	95.842
17:12	ZZZZZZ	95.9	95.832	101.8	96.071	95.271	98.467	95.797	95.317
17:17	ZZZZZZ	73.41	68.588 !	94.221	94.64	71.785	93.858	95.111	72.079
17:24	MA51708-CCVA5	92.095	90.201	92.115	92.01	91.563	91.459	91.688	91.919
17:29	MA51708-CCB5	91.908	89.53	90.664	91.585	89.715	90.198	91.185	89.648

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8

Istd#8	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
11:39	MA51708-STD1	100	100	100	100	100	100	100	100
11:45	MA51708-STD2	100	100	100	100	100	100	100	100
11:50	MA51708-STD3	100	100	100	100	100	100	100	100
11:56	MA51708-STD4	78.823	71.492	78.023	77.581	74.909	79.29	78.238	79.787
12:01	MA51708-STD5	78.514	70.759	77.475	77.132	74.063	78.022	77.045	78.979
12:07	MA51708-STD6	78.401	70.722	77.638	76.493	74.357	78.049	77.212	78.936
12:15	MA51708-STD7	74.568	70.184	76.16	73.109	73.169	77.453	73.19	78.072
12:21	MA51708-STD8	77.164	66.805 !	76.189	75.71	69.988 !	77.083	76.767	78.342
12:26	MA51708-STD9	77.895	70.875	75.426	75.897	73.845	76.985	77.066	77.823
12:32	MA51708-STD10	72.835	72.475	77.775	69.974 !	74.814	79.073	71.179	79.795
12:37	MA51708-STD11	80.966	72.155	76.778	78.051	73.745	78.63	79.401	80.687
12:43	MA51708-STD12	75.809	72.103	76.752	71.345	73.119	78.582	72.979	79.949
12:48	MA51708-STD13	82.64	67.185 !	79.231	79.785	67.729 !	80.437	81.035	80.609
12:54	MA51708-STD14	100	100	100	100	100	100	100	100
13:00	ZZZZZZ	101.086	100.514	101.967	100.111	100.603	102.254	100.645	101.394
13:05	MA51708-ICVA1	99.206	99.336	96.394	96.59	97.298	98.071	98.326	98.661
13:11	MA51708-ICV1	96.244	91.688	97.495	96.902	91.194	98.023	96.723	97.466
13:16	MA51708-ICB1	98.904	99.421	99.512	98.713	99.21	99.299	98.611	98.592
13:22	MA51708-CCVA1	97.878	96.811	95.464	96.071	95.264	97.041	98.187	98.393
13:27	MA51708-CCB1	97.707	98.056	97.18	96.723	97.845	98.111	97.286	97.876
13:33	MA51708-CRI1	99.844	95.513	86.368	100.057	94.389	86.942	100.407	86.777
13:39	MA51708-CRI2	101.529	99.685	100.683	101.241	99.354	101.297	101.139	99.079
13:44	MA51708-ICSA1	83.245	86.132	81.605	78.302	80.495	83.875	78.296	89.083
13:50	MA51708-ICSAB1	85.903	85.77	80.536	80.091	80.201	82.659	80.537	89.347
13:56	ZZZZZZ	90.171	93.336	92.199	91.475	94.424	94.354	91.552	96.05
14:01	MP30471-SD1	89.327	93.241	86.42	87.723	90.506	91.312	91.348	94.018
14:07	JD36624-2	96.71	97.486	95.881	95.894	96.095	98.317	97.674	100.217
14:12	JD36624-2F	97.283	96.998	95.988	96.574	96.126	97.627	97.989	99.485
14:18	MA51708-CCVA2	96.041	96.781	93.603	95.363	95.136	95.669	96.608	97.919
14:23	MA51708-CCB2	94.478	97.948	100.385	94.881	98.314	102.542	95.678	103.636
14:29	MP30683-S1	104.067	101.933	100.847	101.991	100.19	103.042	104.935	102.473
14:34	MP30683-S2	103.934	102.352	101.139	101.374	100.425	103.448	103.608	103.883
14:40	JD37564-1	105.002	102.465	99.633	101.165	100.147	102.573	103.85	101.149

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
14:45	MP30683-SD1	No results reported for the elements associated with this internal standard.							
14:51	ZZZZZZ	103.495	96.874	100.995	101.399	95.054	103.275	103.911	103.011
14:57	ZZZZZZ	103.455	101.784	101.317	102.043	100.419	103.308	103.786	103.605
15:02	ZZZZZZ	107.131	104.681	105.053	105.446	102.421	106.676	107.251	105.624
15:08	ZZZZZZ	106.889	99.604	104.427	103.972	96.237	105.765	106.751	105.329
15:13	ZZZZZZ	93.022	98.009	96.381	91.224	96.741	98.466	93.464	100.396
15:20	MA51708-CCVA3	97.885	97.671	95.683	96.206	95.998	97.273	97.805	100.034
15:25	MA51708-CCB3	96.474	98.026	97.358	96.585	98.239	98.446	97.933	99.671
15:31	MP30683-SD1	105.136	97.879	102.173	101.353	95.346	103.456	104.944	103.246
15:36	ZZZZZZ	94.182	93.177	92.567	91.295	90.182	93.888	93.274	92.68
15:42	ZZZZZZ	102.79	101.564	99.806	99.126	98.818	100.132	101.586	98.726
15:47	ZZZZZZ	90.754	94.669	93.537	89.741	93.846	95.072	91.704	95.329
15:53	ZZZZZZ	98.529	97.792	99.572	96.369	96.339	100.619	97.951	100.232
15:59	ZZZZZZ	90.146	95.026	94.673	89.542	95.128	94.907	89.761	95.883
16:04	ZZZZZZ	85.477	81.805	87.199	85.869	81.238	88.109	85.361	91.216
16:10	ZZZZZZ	93.182	96.659	95.792	92.492	94.671	97.352	94.353	97.539
16:15	MA51708-CCVA4	97.207	95.967	95.161	95.08	93.368	95.892	96.229	96.397
16:27	MA51708-CCB4	94.023	94.906	94.882	92.805	94.029	95.659	93.92	94.977
16:33	ZZZZZZ	97.328	97.21	95.504	94.596	95.105	97.549	96.892	96.655
16:38	ZZZZZZ	226.027 !	192.071 !	168.303 !	241.084 !	196.115 !	173.625 !	226.447 !	179.312 !
16:44	ZZZZZZ	216.272 !	223.669 !	124.816	231.612 !	229.632 !	125.412	214.652 !	125.242
16:49	ZZZZZZ	252.702 !	234.359 !	193.32 !	268.37 !	238.054 !	199.595 !	250.086 !	201.577 !
16:55	ZZZZZZ	245.686 !	217.662 !	197.209 !	259.191 !	221.558 !	202.356 !	241.507 !	206.937 !
17:00	ZZZZZZ	101.851	100.148	100.639	98.829	98.366	98.953	100.161	97.512
17:06	ZZZZZZ	95.511	95.961	95.461	93.695	94.564	95.934	94.194	95.822
17:12	ZZZZZZ	99.849	95.186	93.201	96.814	92.569	94.587	98.917	95.67
17:17	ZZZZZZ	95.235	95.03	68.537 !	93.488	94.296	70.92	94.414	70.308
17:24	MA51708-CCVA5	92.265	91.017	89.67	89.955	89.145	90.639	91.613	91.35
17:29	MA51708-CCB5	91.188	91.39	90.936	90.199	91.091	91.087	91.435	90.977

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Rhodium (103-3)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16

Istd#16 Indium (115-1)	70-130 %	70-130 %
Istd#15 Indium (115-2)	70-130 %	70-130 %
Istd#16 Terbium (159-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
11:39	MA51708-STD1	100	100	100	100	100	100
11:45	MA51708-STD2	100	100	100	100	100	100
11:50	MA51708-STD3	100	100	100	100	100	100
11:56	MA51708-STD4	77.811	74.782	79.815	78.566	79.801	78.403
12:01	MA51708-STD5	77.598	74.229	78.925	77.831	78.954	77.895
12:07	MA51708-STD6	77.286	74.352	79.013	77.802	78.88	77.636
12:15	MA51708-STD7	73.88	73.447	77.947	74.189	78.45	74.577
12:21	MA51708-STD8	77.366	70.525	78.597	77.817	79.316	78.234
12:26	MA51708-STD9	77.664	73.977	78.243	78.054	78.232	77.658
12:32	MA51708-STD10	70.97	75.204	79.564	71.007	79.046	71.27
12:37	MA51708-STD11	79.774	74.475	80.121	80.583	78.192	78.489
12:43	MA51708-STD12	73.817	74.298	80.16	74.102	77.119	71.425
12:48	MA51708-STD13	80.032	67.022 !	80.58	80.461	80.26	80.251
12:54	MA51708-STD14	100	100	100	100	100	100
13:00	ZZZZZZ	100.217	101.037	100.897	99.956	100.902	100.336
13:05	MA51708-ICVA1	99.748	101.595	98.714	100.028	97.208	98.624
13:11	MA51708-ICV1	98.016	91.539	98	98.147	98.316	97.726
13:16	MA51708-ICB1	99.361	99.691	99.279	100.175	99.548	99.12
13:22	MA51708-CCVA1	99.276	98.84	98.044	99.802	96.776	97.871
13:27	MA51708-CCB1	97.433	98.251	97.83	97.341	98.957	98.387
13:33	MA51708-CRI1	99.98	95.492	86.69	100.251	87.168	99.777
13:39	MA51708-CRI2	102.593	99.695	100.126	102.81	99.631	101.548
13:44	MA51708-ICSA1	85.938	89.667	88.706	85.973	80.339	80.469
13:50	MA51708-ICSAB1	88.903	89.458	89.751	88.978	79.794	83.584
13:56	ZZZZZZ	94.04	96.438	96.276	94.184	97.532	95.843
14:01	MP30471-SD1	93.815	97.016	94.497	94.383	94.829	94.899
14:07	JD36624-2	99.076	99.046	100.577	99.645	96.801	100.307
14:12	JD36624-2F	100.208	99.075	100.023	100.051	96.843	101.362
14:18	MA51708-CCVA2	99.099	99.085	98.136	99.496	97.844	98.772
14:23	MA51708-CCB2	96.994	99.63	104.195	97.06	104.596	97.572
14:29	MP30683-S1	104.289	101.808	102.788	104.462	89.275	102.934
14:34	MP30683-S2	103.155	101.63	103.633	103.008	96.098	103.52
14:40	JD37564-1	103.142	101.932	100.837	102.903	95.822	103.734

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
14:45	MP30683-SD1	No results reported for the elements associated with this internal standard.					
14:51	ZZZZZZ	102.559	96.793	103.253	103.062	95.397	103.553
14:57	ZZZZZZ	103.422	102.078	103.341	103.549	96.943	104.258
15:02	ZZZZZZ	105.293	103.007	105.341	104.965	81.61	100.278
15:08	ZZZZZZ	104.828	96.103	105.145	104.633	94.988	104.244
15:13	ZZZZZZ	95.654	100.683	100.839	95.629	99.072	94.623
15:20	MA51708-CCVA3	99.779	99.662	99.362	100.271	97.134	99.465
15:25	MA51708-CCB3	98.249	99.825	99.214	97.949	99.635	99.051
15:31	MP30683-SD1	102.983	95.885	102.617	102.537	73.41	95.205
15:36	ZZZZZZ	92.662	90.771	92.752	92.485	90.857	92.529
15:42	ZZZZZZ	98.955	98.366	98.923	98.407	70.133	91.483
15:47	ZZZZZZ	91.463	95.678	95.512	91.778	96.798	93.529
15:53	ZZZZZZ	97.325	97.122	99.854	96.96	94.317	97.844
15:59	ZZZZZZ	89.852	96.016	95.721	89.921	95.365	90.293
16:04	ZZZZZZ	88.994	84.861	91.652	89.433	95.058	93.062
16:10	ZZZZZZ	94.961	96.234	97.61	94.95	95.431	93.798
16:15	MA51708-CCVA4	96.893	96.238	96.588	96.886	93.789	94.918
16:27	MA51708-CCB4	93.379	94.447	95.781	92.814	94.923	93.207
16:33	ZZZZZZ	95.816	96.232	96.376	95.337	94.372	96.486
16:38	ZZZZZZ	247.272 !	199.807 !	178.979 !	250.296 !	170.713 !	251.246 !
16:44	ZZZZZZ	235.82 !	231.645 !	124.307	237.028 !	121.47	235.675 !
16:49	ZZZZZZ	271.762 !	241.259 !	203.593 !	273.598 !	190.319 !	272.408 !
16:55	ZZZZZZ	262.287 !	224.845 !	206.608 !	264.064 !	194.677 !	263.216 !
17:00	ZZZZZZ	97.622	97.325	97.616	96.802	96.519	96.972
17:06	ZZZZZZ	94.908	96.918	96.287	95.307	97.159	97.042
17:12	ZZZZZZ	99.097	95.017	95.113	99.12	92.128	97.314
17:17	ZZZZZZ	94.209	94.961	70.253	94.069	67.062 !	93.932
17:24	MA51708-CCVA5	91.728	91.385	90.888	91.974	85.728	90.36
17:29	MA51708-CCB5	90.535	91.097	91.251	89.744	90.363	89.722

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	70-130 %	70-130 %
Istd#18	Terbium (159-3)	70-130 %	70-130 %
Istd#19	Holmium (165-1)	70-130 %	70-130 %
Istd#20	Holmium (165-2)	70-130 %	70-130 %
Istd#21	Bismuth (209-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51708
Parameters: Be,Ca

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
Istd#22 Bismuth (209-2)			70-130 %	70-130 %			

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51708 Units: ug/l

Time:			13:16		13:27		14:23	
Sample ID:			ICB1		CCB1		CCB2	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	25	.42						
Antimony	2.0	.085						
Arsenic	0.50	.025						
Barium	1.0	.009						
Beryllium	0.50	.005	0.00498	<0.50	0.00990	<0.50	0.00880	<0.50
Boron	25	.85						
Cadmium	0.50	.01						
Calcium	250	3.6	-0.114	<250	0.145	<250	1.75	<250
Chromium	1.0	.018						
Cobalt	0.50	.003						
Copper	2.0	.024	anr					
Iron	25	.24	anr					
Lead	0.50	.008						
Magnesium	250	.19	anr					
Manganese	1.0	.012	anr					
Molybdenum	1.0	.017						
Nickel	1.0	.017						
Potassium	250	.78	anr					
Selenium	0.50	.044						
Silver	0.50	.004						
Sodium	250	1.5						
Strontium	5.0	.014						
Thallium	0.50	.002						
Tin	5.0	.041						
Titanium	1.0	.11						
Vanadium	1.0	.013						
Zinc	5.0	.078	anr					

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51708 Units: ug/l

Time:		13:05			13:11			13:22	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium	60	60.1	100.2				50	54.9	109.8
Boron									
Cadmium									
Calcium	5500	5350	97.3				5000	5360	107.2
Chromium									
Cobalt									
Copper	anr								
Iron	anr								
Lead									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel									
Potassium	anr								
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51708 Units: ug/l

Time:		14:18	
Sample ID:	CCVA	CCVA2	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium	50	54.2	108.4
Boron			
Cadmium			
Calcium	5000	5360	107.2
Chromium			
Cobalt			
Copper	anr		
Iron	anr		
Lead			
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel			
Potassium	anr		
Selenium			
Silver			
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51708 Units: ug/l

Time:			13:33		13:39	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	25	25				
Antimony	2.0	0.25				
Arsenic	0.50	0.50				
Barium	1.0	0.50				
Beryllium	0.50	0.25			0.469	93.8
Boron	25	2.5				
Cadmium	0.50	0.25				
Calcium	250	125			251	100.4
Chromium	1.0	2.0				
Cobalt	0.50	0.25				
Copper	2.0	2.0				
Iron	25	25				
Lead	0.50	0.25				
Magnesium	250	125				
Manganese	1.0	0.25				
Molybdenum	1.0	0.50				
Nickel	1.0	2.0				
Potassium	250	125				
Selenium	0.50	0.50				
Silver	0.50	1.0				
Sodium	250	125				
Strontium	5.0	0.50				
Thallium	0.50	0.25				
Tin	5.0	0.50				
Titanium	1.0	0.50				
Vanadium	1.0	2.0				
Zinc	5.0	2.0				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M1.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51708 Units: ug/l

Time:			13:44		13:50	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	95700HH	95.7	94600HH	94.6
Antimony			0.0884		0.190	
Arsenic		20	0.0774		18.4	92.0
Barium			0.0851		0.117	
Beryllium			-0.00140		-0.0000453	
Boron		50	0.683		49.7	99.4
Cadmium		20	-0.366		19.0	95.0
Calcium	100000	100000	98300	98.3	101000	101.0
Chromium		20	0.886		20.9	104.5
Cobalt		20	0.124		19.1	95.5
Copper		20	0.117		18.0	90.0
Iron	100000	100000	91900	91.9	91000	91.0
Lead			0.0421		0.0523	
Magnesium	100000	100000	92500	92.5	91600	91.6
Manganese		20	0.232		20.0	100.0
Molybdenum	2000	2000	2260HH	113.0	2240HH	112.0
Nickel		20	0.515		19.0	95.0
Potassium	100000	100000	91600	91.6	90700	90.7
Selenium		20	0.0499		19.7	98.5
Silver		20	0.0124		18.2	91.0
Sodium	100000	100000	93200HH	93.2	92600HH	92.6
Strontium	2000	2000	2220HH	111.0	2210HH	110.5
Thallium			0.0145		0.0152	
Tin	2000	2000	2060HH	103.0	2020HH	101.0
Titanium	2000	2000	1850HH	92.5	1850HH	92.5
Vanadium		20	0.00313		21.5	107.5
Zinc		20	0.297		18.5	92.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:41	MA51710-STD1	1		Sample introduction not stable, see rerun.
17:47	MA51710-STD2	1		Sample introduction not stable, see rerun.
17:53	MA51710-STD3	1		STDA
17:58	MA51710-STD4	1		STDB
18:04	MA51710-STD5	1		STDC
18:09	MA51710-STD6	1		STDD
18:15	MA51710-STD7	1		STDE
18:21	MA51710-STD8	1		STDF
18:26	MA51710-STD9	1		STDG
18:32	MA51710-STD10	1		STDH
18:37	MA51710-STD11	1		STDI
18:43	MA51710-STD12	1		STDJ
18:48	MA51710-STD13	1		STDE
18:54	MA51710-STD14	1		STDA
18:59	MA51710-ICVA1	1		
19:05	MA51710-ICV1	1		
19:11	MA51710-ICB1	1		
19:16	MA51710-CCVA1	1		
19:22	MA51710-CCB1	1		
19:28	ZZZZZZ	1		
19:34	MA51710-CRI1	1		
19:42	MA51710-CRI2	1		
19:48	MA51710-ICSA1	1		
19:54	MA51710-ICSAB1	1		
20:01	MA51710-ICSAB2	1		
20:07	ZZZZZZ	1		
20:13	MA51710-CCVA2	1		
20:18	MA51710-CCB2	1		
20:24	ZZZZZZ	2		
20:30	MP30441-B1	2		
20:35	MP30441-S1	2		Bi out
20:41	MP30441-S2	2		Bi out
20:46	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:52	MP30441-S1	500		
20:57	MP30441-S2	500		
21:03	JD36533-1	500		(sample used for QC only; not part of login JD36624)
21:09	MP30441-SD1	2500		
21:14	MA51710-CCVA3	1		
21:20	MA51710-CCB3	1		
21:25	JD36624-12	50		CCV out
21:31	JD36624-13	50		CCV out
21:36	JD36624-14	50		CCV out
21:42	JD36624-15	5		CRI out
21:47	JD36624-15	20		
21:53	JD36624-15	100		CCV out
21:59	JD36624-16	20		CCV out
22:04	JD36624-17	10		CRI out
22:10	JD36624-17	20		
22:15	JD36624-17	100		
22:21	MA51710-CCVA4	1		
22:26	MA51710-CCB4	1		
22:32	JD36624-12F	50		CCV out
22:37	JD36624-13F	50		CCV out
22:43	JD36624-14F	50		CCV out
22:49	JD36624-15F	10		
22:54	JD36624-15F	100		CCV out
23:00	JD36624-16F	20		CCV out
23:05	JD36624-17F	20		CCV out
23:11	JD36624-17F	100		
23:16	MA51710-CCVA5	1		
23:22	MA51710-CCB5	1		
23:27	ZZZZZZ	10		
23:33	ZZZZZZ	10		
23:38	ZZZZZZ	10		
23:44	ZZZZZZ	50		
23:50	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:55	ZZZZZZ	20		
00:01	ZZZZZZ	2		
00:06	ZZZZZZ	20		
00:12	MA51710-CCVA6	1		
00:17	MA51710-CCB6	1		
00:23	ZZZZZZ	2		
00:28	ZZZZZZ	2		
00:34	MP30440-S1	2		
00:39	MP30440-S2	2		
00:45	JD36624-5	2		
00:51	MP30440-SD1	10		
---------->	Last reportable sample/prep for job JD36624			
00:56	MP30440-S1	20		rerun with the QC sample on dilution
01:02	MP30440-S2	20		rerun with the QC sample on dilution
01:07	MA51710-CCVA7	1		
01:13	MA51710-CCB7	1		
---------->	Last reportable CCB for job JD36624			
	Refer to raw data for calibration curve and standards.			

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Element: Dilution	B a	F e	M g	M n	K	S e	N a	Z n	
18:59	MA51710-ICVA1	1	X	X	X	X	X	X	X	X	
19:05	MA51710-ICV1	1	X	X	X	X	X	X	X	X	
19:11	MA51710-ICB1	1	X	X	X	X	X	X	X	X	
19:16	MA51710-CCVA1	1	X	X	X	X	X	X	X	X	
19:22	MA51710-CCB1	1	X	X	X	X	X	X	X	X	
19:28	ZZZZZZ	1									
19:34	MA51710-CRI1	1									
19:42	MA51710-CRI2	1	X	X	X	X	X	X	X	X	
19:48	MA51710-ICSA1	1	X	X	X	X	X	X	X	X	
19:54	MA51710-ICSAB1	1									
20:01	MA51710-ICSAB2	1	X	X	X	X	X	X	X	X	
20:07	ZZZZZZ	1									
20:13	MA51710-CCVA2	1	X	X	X	X	X	X	X	X	
20:18	MA51710-CCB2	1	X	X	X	X	X	X	X	X	
20:24	ZZZZZZ	2									
20:30	MP30441-B1	2						X			
20:35	MP30441-S1	2	Bi	out							
20:41	MP30441-S2	2	Bi	out							
20:46	ZZZZZZ	1									
20:52	MP30441-S1	500							X		
20:57	MP30441-S2	500							X		
21:03	JD36533-1	500									(a)
21:09	MP30441-SD1	2500							X		
21:14	MA51710-CCVA3	1	X	X	X	X	X	X	X	X	
21:20	MA51710-CCB3	1	X	X	X	X	X	X	X	X	
21:25	JD36624-12	50			X				X		
21:31	JD36624-13	50			X				X		
21:36	JD36624-14	50			X				X		
21:42	JD36624-15	5	X	X							
21:47	JD36624-15	20				X	X				
21:53	JD36624-15	100			X				X		
21:59	JD36624-16	20	X		X				X		
22:04	JD36624-17	10	X	X	X		X			X	
		Element:	B a	F e	M g	M n	K	S e	N a	Z n	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Element: Dilution	B a	F e	M g	M n	K	S e	N a	Z n
22:10	JD36624-17	20								
22:15	JD36624-17	100				X			X	
22:21	MA51710-CCVA4	1	X	X	X	X	X	X	X	X
22:26	MA51710-CCB4	1	X	X	X	X	X	X	X	X
22:32	JD36624-12F	50							X	
22:37	JD36624-13F	50								
22:43	JD36624-14F	50			X				X	
22:49	JD36624-15F	10					X			
22:54	JD36624-15F	100			X				X	
23:00	JD36624-16F	20			X	X			X	
23:05	JD36624-17F	20			X				X	
23:11	JD36624-17F	100				X				
23:16	MA51710-CCVA5	1	X	X	X	X	X	X	X	X
23:22	MA51710-CCB5	1	X	X	X	X	X	X	X	X
23:27	ZZZZZZ	10								
23:33	ZZZZZZ	10								
23:38	ZZZZZZ	10								
23:44	ZZZZZZ	50								
23:50	ZZZZZZ	2								
23:55	ZZZZZZ	20								
00:01	ZZZZZZ	2								
00:06	ZZZZZZ	20								
00:12	MA51710-CCVA6	1	X	X	X	X	X	X	X	X
00:17	MA51710-CCB6	1	X	X	X	X	X	X	X	X
00:23	ZZZZZZ	2								
00:28	ZZZZZZ	2								
00:34	MP30440-S1	2						X		
00:39	MP30440-S2	2						X		
00:45	JD36624-5	2						X		
00:51	MP30440-SD1	10						X		
00:56	MP30440-S1	20	rerun with the QC sample on dilution							
01:02	MP30440-S2	20	rerun with the QC sample on dilution							
01:07	MA51710-CCVA7	1	X	X	X	X	X	X	X	X
		Element:	B a	F e	M g	M n	K	S e	N a	Z n

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Element:	B a	F e	M g	M n	K	S e	N a	Z n
01:13	MA51710-CCB7	Dilution 1	X	X	X	X	X	X	X	X

(a) Sample used for QC only; not part of login JD36624.

Element:	B a	F e	M g	M n	K	S e	N a	Z n

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
17:41	MA51710-STD1	100	100	100	100	100	100	100	100
17:47	MA51710-STD2	100	100	100	100	100	100	100	100
17:53	MA51710-STD3	100	100	100	100	100	100	100	100
17:58	MA51710-STD4	95.129	91.702	100.207	100.868	94.092	99.523	100.965	95.032
18:04	MA51710-STD5	95.723	92.785	99.244	101.238	95.213	99.52	101.124	95.828
18:09	MA51710-STD6	95.429	91.861	100.135	100.603	95.386	99.739	100.603	96.476
18:15	MA51710-STD7	87.283	84.268	97.691	99.542	87.999	98.062	99.324	87.882
18:21	MA51710-STD8	92.638	91.554	96.798	98.014	94.431	96.76	97.631	96.466
18:26	MA51710-STD9	93.422	91.18	98.083	100.663	93.416	97.777	99.585	94.067
18:32	MA51710-STD10	95.038	92.452	100.009	101.862	95.283	100.784	101.921	96.141
18:37	MA51710-STD11	95.452	92.775	101.224	102.36	95.282	100.404	100.75	95.439
18:43	MA51710-STD12	95.398	93.704	102.923	99.006	95.79	100.388	96.387	95.687
18:48	MA51710-STD13	96.01	93.708	99.242	100.74	96.321	100.694	100.414	96.789
18:54	MA51710-STD14	100	100	100	100	100	100	100	100
18:59	MA51710-ICVA1	95.973	94.876	100.959	99.704	98.594	101.78	99.146	98.215
19:05	MA51710-ICV1	96.226	93.069	99.544	100.289	96.613	99.699	99.664	96.754
19:11	MA51710-ICB1	97.61	93.668	100.286	100.217	97.604	101.392	100.675	96.712
19:16	MA51710-CCVA1	96.414	95.37	101.056	99.903	99.192	101.286	98.59	99.013
19:22	MA51710-CCB1	95.868	100.401	100.081	99.821	96.667	100.852	99.838	96.045
19:28	ZZZZZZ	446.407 !	407.215 !	148.305 !	163.782 !	451.42 !	142.694 !	160.246 !	452.917 !
19:34	MA51710-CRI1	No results reported for the elements associated with this internal standard.							
19:42	MA51710-CRI2	98.894	95.191	98.357	101.646	98.739	99.762	101.694	98.326
19:48	MA51710-ICSA1	90.23	88.685	88.954	94.567	89.819	84.713	89.228	88.526
19:54	MA51710-ICSAB1	No results reported for the elements associated with this internal standard.							
20:01	MA51710-ICSAB2	81.433	81.438	87.961	90.715	84.69	86.582	86.818	83.858
20:07	ZZZZZZ	77.3	79.589	85.853	91.067	86.066	88.718	92.116	86.453
20:13	MA51710-CCVA2	80.053	83.235	88.989	93.62	89.127	91.264	93.803	89.781
20:18	MA51710-CCB2	82.628	84.152	84.688	94.658	89.992	85.964	95.916	90.433
20:24	ZZZZZZ	85.558	86.699	91.36	95.946	93.701	94.219	96.465	92.47
20:30	MP30441-B1	79.691	83.206	87.178	94.925	88.54	89.206	94.495	88.891
20:35	MP30441-S1	No results reported for the elements associated with this internal standard.							
20:41	MP30441-S2	No results reported for the elements associated with this internal standard.							
20:46	ZZZZZZ	90.034	85.354	93.337	86.201	91.559	95.53	89.699	91.339

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
20:52	MP30441-S1	83.269	78.619	89.081	88.409	88.793	92.644	91.132	88.312
20:57	MP30441-S2	76.889	74.789	87.492	87.197	82.155	91.339	89.447	82.674
21:03	JD36533-1	81.837	77.846	87.092	86.687	87.152	90.459	89.028	87.118
21:09	MP30441-SD1	72.761	69.396 !	86.535	86.954	78.351	90.087	89.453	78.545
21:14	MA51710-CCVA3	78.417	79.489	85.271	87.652	84.167	88.481	87.837	85.395
21:20	MA51710-CCB3	80.196	79.781	85.996	88.46	85.665	88.486	90.261	85.929
21:25	JD36624-12	85.006	82.052	88.971	89.268	90.288	93.297	91.546	89.997
21:31	JD36624-13	83.059	80.277	87.624	88.734	87.771	90.279	90.458	88.362
21:36	JD36624-14	83.557	81.01	88.798	89.812	88.419	92.341	91.523	88.74
21:42	JD36624-15	73.882	77.293	83.124	85.608	78.436	80.531	81.201	78.522
21:47	JD36624-15	82.084	82.164	86.877	89.235	87.357	88.144	88.467	87.718
21:53	JD36624-15	88.379	85.561	94.107	92.166	94.421	97.464	94.001	94.042
21:59	JD36624-16	83.911	82.156	89.372	89.572	89.799	92.985	90.801	90.037
22:04	JD36624-17	78.564	79.055	82.433	84.799	85.071	84.361	86.298	85.279
22:10	JD36624-17	82.466	81.422	88.237	88.239	88.413	90.469	88.771	88.15
22:15	JD36624-17	87.129	83.612	91.899	90.502	91.833	95.301	92.144	91.509
22:21	MA51710-CCVA4	87.613	91.083	90.155	90.248	93.628	92.098	90.746	94.051
22:26	MA51710-CCB4	85.089	83.692	89.532	87.752	89.342	91.887	89.437	89.504
22:32	JD36624-12F	89.992	83.453	95.217	94.199	93.962	98.722	95.571	93.737
22:37	JD36624-13F	91.331	87.643	87.867	94.13	95.686	90.801	95.004	95.401
22:43	JD36624-14F	92.228	87.678	96.086	93.9	95.201	98.03	95.51	95.741
22:49	JD36624-15F	86.483	84.881	91.408	89.092	89.048	90.709	86.948	88.644
22:54	JD36624-15F	93.735	89.009	97.909	93.322	97.168	100.256	93.583	96.733
23:00	JD36624-16F	88.986	86.256	91.411	89.333	92.849	94.006	90.85	93.094
23:05	JD36624-17F	88.585	84.926	91.138	89.79	92.209	94.995	92.037	92.097
23:11	JD36624-17F	91.991	83.025	94.757	91.283	94.503	97.762	92.824	94.869
23:16	MA51710-CCVA5	84.908	84.922	90.194	89.969	89.903	92.334	89.849	89.933
23:22	MA51710-CCB5	87.456	85.658	90.384	91.415	90.733	92.326	92.681	90.852
23:27	ZZZZZZ	89.191	87.656	92.446	91.512	93.786	95.372	92.306	92.557
23:33	ZZZZZZ	89.287	87.176	92.732	90.054	93.195	95.155	91.494	92.965
23:38	ZZZZZZ	88.29	85.858	91.854	90.38	91.552	93.622	90.802	91.836
23:44	ZZZZZZ	92.501	88.063	88.141	91.977	95.201	93.799	93.235	95.64
23:50	ZZZZZZ	79.251	79.116	86.702	88.905	86.046	89.397	91.461	85.901

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
23:55	ZZZZZZ	82.204	74.539	94.535	92.712	84.806	98.047	93.551	84.313
00:01	ZZZZZZ	81.071	81.346	86.263	90.141	87.973	89.903	91.25	87.553
00:06	ZZZZZZ	94.084	88.395	94.833	89.522	95.606	97.327	91.65	95.585
00:12	MA51710-CCVA6	87.937	85.369	92.598	91.808	90.77	91.478	90.329	91.044
00:17	MA51710-CCB6	78.972	74.912	92.517	92.025	80.871	93.813	92.802	80.422
00:23	ZZZZZZ	84.02	83.156	84.833	92.436	88.617	86.08	92.449	88.48
00:28	ZZZZZZ	83.322	83.172	87.502	91.265	88.611	89.043	91.514	88.279
00:34	MP30440-S1	81.082	81.333	86.692	91.714	87.402	88.218	91.112	87.265
00:39	MP30440-S2	83.233	83.358	88.144	91.789	89.232	90.12	91.691	89.396
00:45	JD36624-5	84.614	84.125	88.647	92.035	90.283	89.574	92.156	89.511
00:51	MP30440-SD1	93.315	89.139	94.027	89.659	94.637	95.209	89.534	95.067
00:56	MP30440-S1	No results reported for the elements associated with this internal standard.							
01:02	MP30440-S2	No results reported for the elements associated with this internal standard.							
01:07	MA51710-CCVA7	87.194	84.981	86.907	88.886	89.403	88.776	89.128	89.679
01:13	MA51710-CCB7	88.564	84.738	89.876	84.45	89.534	91.636	86.462	88.944

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
17:41	MA51710-STD1	100	100	100	100	100	100	100	100
17:47	MA51710-STD2	100	100	100	100	100	100	100	100
17:53	MA51710-STD3	100	100	100	100	100	100	100	100
17:58	MA51710-STD4	100.474	100.721	94.174	101.34	99.91	93.558	100.764	93.86
18:04	MA51710-STD5	100.355	100.409	95.065	100.814	100.122	93.844	99.777	94.856
18:09	MA51710-STD6	100.111	100.413	94.59	100.922	99.672	93.787	100.232	94.467
18:15	MA51710-STD7	99.268	99.114	84.094	99.918	98.721	84.488	99.221	86.153
18:21	MA51710-STD8	98.116	97.964	92.742	98.798	97.617	92.185	98.005	93.666
18:26	MA51710-STD9	98.234	99.343	92.514	99.198	98.575	92.97	99.252	94.036
18:32	MA51710-STD10	100.844	101.324	93.605	101.081	100.353	94.429	100.824	94.92
18:37	MA51710-STD11	100.788	100.49	92.46	99.979	98.686	93.821	100.418	94.251
18:43	MA51710-STD12	99.821	95.734	91.728	99.55	92.604	93.019	100.14	94.556
18:48	MA51710-STD13	100.683	99.758	94.745	101.182	99.344	94.663	100.223	94.446
18:54	MA51710-STD14	100	100	100	100	100	100	100	100
18:59	MA51710-ICVA1	101.155	98.357	92.815	98.331	96.438	93.534	99.701	95.375
19:05	MA51710-ICV1	100.324	99.69	95.502	100	99.201	95.069	100.442	96.348
19:11	MA51710-ICB1	101.029	100.073	96.006	99.891	100.348	96.045	101.18	96.05
19:16	MA51710-CCVA1	101.479	98.611	93.754	99.385	96.792	94.306	100.795	95.972
19:22	MA51710-CCB1	100.556	99.339	96.328	100.629	99.617	95.581	100.411	96.906
19:28	ZZZZZZ	142.659 !	158.924 !	411.83 !	146.872 !	160.499 !	416.104 !	141.333 !	423.267 !
19:34	MA51710-CRI1	No results reported for the elements associated with this internal standard.							
19:42	MA51710-CRI2	98.958	101.221	97.168	97.967	100.651	98.507	98.941	97.309
19:48	MA51710-ICSA1	83.799	88.513	81.741	79.273	82.473	83.064	78.988	90.115
19:54	MA51710-ICSAB1	No results reported for the elements associated with this internal standard.							
20:01	MA51710-ICSAB2	87.435	85.748	72.872	82.43	80.544	80.034	82.439	88.074
20:07	ZZZZZZ	88.83	92.153	87.383	90.861	93.163	88.136	91.429	92.174
20:13	MA51710-CCVA2	91.893	93.478	86.276	91.607	92.351	88.982	92.433	93.594
20:18	MA51710-CCB2	86.144	95.436	90.384	87.469	95.994	91.409	88.008	93.69
20:24	ZZZZZZ	93.848	96.215	92.974	94.972	96.347	94.254	94.916	96.841
20:30	MP30441-B1	89.488	94.212	87.953	91.233	94.774	88.719	90.679	93.257
20:35	MP30441-S1	No results reported for the elements associated with this internal standard.							
20:41	MP30441-S2	No results reported for the elements associated with this internal standard.							
20:46	ZZZZZZ	95.537	89.377	89.68	95.274	90.234	91.697	96.794	93.326

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
20:52	MP30441-S1	92.981	90.305	86.966	91.925	90.582	90.976	95.277	93.694
20:57	MP30441-S2	90.739	88.821	81.438	90.941	89.669	83.649	94.011	87.447
21:03	JD36533-1	91.726	88.656	85.445	90.41	89.117	88.448	94.047	92.511
21:09	MP30441-SD1	90.713	89.04	76.921	90.395	90.151	80.235	94.303	83.545
21:14	MA51710-CCVA3	88.041	87.512	82.746	88.158	87.806	85.335	90.849	89.976
21:20	MA51710-CCB3	89.033	89.304	86.652	90.107	91.62	87.552	90.969	91.773
21:25	JD36624-12	93.042	91.643	87.82	92.692	90.986	91.041	95.528	93.379
21:31	JD36624-13	90.937	90.759	85.938	89.425	90.245	89.075	92.72	92.276
21:36	JD36624-14	92.998	90.89	86.51	91.799	90.745	89.47	94.889	93.378
21:42	JD36624-15	81.125	80.887	68.808 !	77.157	77.472	76.794	82.87	84.844
21:47	JD36624-15	88.281	88.721	84.166	86.08	86.757	88.544	90.326	93.229
21:53	JD36624-15	97.928	94.639	91.411	96.071	93.573	94.412	99.412	96.913
21:59	JD36624-16	93.239	90.996	87.475	91.813	90.7	90.42	94.922	93.921
22:04	JD36624-17	84.16	85.981	82.952	83.887	85.526	86.767	86.587	91.62
22:10	JD36624-17	90.352	89.181	87.156	90.082	88.365	90.883	93.56	94.575
22:15	JD36624-17	94.926	92.885	90.512	95.278	92.801	93.198	97.531	96.619
22:21	MA51710-CCVA4	92.282	91.176	93.089	91.689	90.333	95.178	94.034	99.716
22:26	MA51710-CCB4	92.493	89.434	90.601	93.346	90.635	92.776	95.036	95.685
22:32	JD36624-12F	99.171	95.723	91.647	98.116	95.217	93.467	101.126	95.47
22:37	JD36624-13F	90.797	95.381	92.772	88.758	94.583	96.063	91.868	98.165
22:43	JD36624-14F	97.912	94.78	93.395	96.937	94.081	96.051	100.299	99.085
22:49	JD36624-15F	91.172	87.056	84.25	87.388	83.421	89.293	92.946	93.407
22:54	JD36624-15F	100.381	94.257	94.971	98.883	93.697	97.488	101.867	100.509
23:00	JD36624-16F	94.315	90.561	91.656	93.314	90.403	94.861	96.285	97.683
23:05	JD36624-17F	94.901	91.314	91.014	93.465	91.179	94.543	96.036	97.716
23:11	JD36624-17F	98.429	93.496	93.303	97.053	93.663	96.044	100.597	97.951
23:16	MA51710-CCVA5	92.822	90.328	88.32	92.715	90.252	90.637	95.055	95.783
23:22	MA51710-CCB5	93.012	91.829	92.636	94.272	94.128	93.658	95.445	96.96
23:27	ZZZZZZ	96.05	92.658	91.713	93.851	92.144	94.58	96.992	97.33
23:33	ZZZZZZ	95.261	92.383	91.853	94.426	91.593	95.105	97.635	98.153
23:38	ZZZZZZ	93.936	91.408	90.901	93.578	91.171	93.621	95.717	97.929
23:44	ZZZZZZ	94.344	93.145	94.378	93.076	93.473	96.081	95.975	99.561
23:50	ZZZZZZ	90.282	91.688	83.379	87.183	87.275	86.472	89.446	92.517

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
23:55	ZZZZZZ	97.738	93.899	80.042	97.891	94.129	84.084	99.915	86.836
00:01	ZZZZZZ	89.786	91.173	84.551	87.737	88.309	88.4	89.603	94.235
00:06	ZZZZZZ	97.624	92.194	95.462	97.121	91.988	98.034	99.262	100.847
00:12	MA51710-CCVA6	92.225	90.021	88.825	92.586	90.086	91.853	95.111	96.825
00:17	MA51710-CCB6	93.661	92.722	80.563	95.336	94.362	82.155	96.638	84.58
00:23	ZZZZZZ	86.695	92.366	90.094	87.593	93.448	91.842	88.445	95.821
00:28	ZZZZZZ	89.272	91.631	87.262	90.157	91.52	90.425	91.118	95.657
00:34	MP30440-S1	88.087	91.407	82.175	85.789	87.352	86.708	88.218	93.676
00:39	MP30440-S2	89.733	91.45	83.853	87.434	87.797	87.886	89.737	95.229
00:45	JD36624-5	90.186	92.339	85.75	88.003	87.874	90.121	89.553	96.13
00:51	MP30440-SD1	95.845	88.918	93.919	95.347	88.447	96.65	96.862	100.571
00:56	MP30440-S1	No results reported for the elements associated with this internal standard.							
01:02	MP30440-S2	No results reported for the elements associated with this internal standard.							
01:07	MA51710-CCVA7	88.715	88.642	88.188	87.653	88.871	90.737	90.256	94.757
01:13	MA51710-CCB7	92.1	86.975	90.24	92.823	87.788	92.452	94.519	96.276

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Rhodium (103-3)	70-130 %	70-130 %
Istd#14	Indium (115-1)	70-130 %	70-130 %
Istd#15	Indium (115-2)	70-130 %	70-130 %
Istd#16	Terbium (159-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
17:41	MA51710-STD1	100	100	100	100	100	100
17:47	MA51710-STD2	100	100	100	100	100	100
17:53	MA51710-STD3	100	100	100	100	100	100
17:58	MA51710-STD4	100.908	100.429	93.545	100.756	93.962	99.874
18:04	MA51710-STD5	100.18	100.231	94.078	100.441	93.993	99.989
18:09	MA51710-STD6	100.885	100.173	93.488	100.659	94.107	100.557
18:15	MA51710-STD7	99.874	100.07	85.815	100.239	85.733	100.248
18:21	MA51710-STD8	99.325	99.159	92.521	99.571	93.498	99.772
18:26	MA51710-STD9	99.97	99.525	93.369	99.764	94.167	99.577
18:32	MA51710-STD10	101.668	101.476	94.972	101.821	94.685	100.777
18:37	MA51710-STD11	102.165	100.543	94.359	101.501	92.672	99.585
18:43	MA51710-STD12	101.214	95.824	94.34	101.372	83.906	97.484
18:48	MA51710-STD13	101.383	100.501	93.835	101.001	94.161	100.757
18:54	MA51710-STD14	100	100	100	100	100	100
18:59	MA51710-ICVA1	100.894	99.687	95.591	101.221	93.414	98.727
19:05	MA51710-ICV1	99.849	99.534	96.072	99.146	96.408	98.971
19:11	MA51710-ICB1	100.062	99.852	96.995	99.537	95.988	99.582
19:16	MA51710-CCVA1	101.701	99.486	96.895	102.069	94.199	99.483
19:22	MA51710-CCB1	100.407	99.23	97.393	99.773	96.812	99.255
19:28	ZZZZZZ	148.655 !	165.829 !	427.266 !	148.677 !	408.866 !	147.092 !
19:34	MA51710-CRI1	No results reported for the elements associated with this internal standard.					
19:42	MA51710-CRI2	98.476	101	98.228	97.826	97.525	97.26
19:48	MA51710-ICSA1	86.426	91.338	90.085	86.501	76.806	80.041
19:54	MA51710-ICSAB1	No results reported for the elements associated with this internal standard.					
20:01	MA51710-ICSAB2	91.368	90.6	88.354	91.062	76.047	84.889
20:07	ZZZZZZ	94.114	95.495	92.939	94.385	90.501	95.16
20:13	MA51710-CCVA2	96.752	96.997	93.636	97.082	91.761	95.969
20:18	MA51710-CCB2	89.977	97.995	94.434	89.405	94.669	90.506
20:24	ZZZZZZ	97.047	98.142	96.305	97.41	97.213	97.793
20:30	MP30441-B1	95.951	99.296	93.531	95.717	97.679	99.158
20:35	MP30441-S1	No results reported for the elements associated with this internal standard.					
20:41	MP30441-S2	No results reported for the elements associated with this internal standard.					
20:46	ZZZZZZ	98.549	93.586	94.16	99.113	94.549	99.677

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
20:52	MP30441-S1	98.429	96.599	94.499	99.258	74.47	96.214
20:57	MP30441-S2	96.519	95.057	88.848	97.13	73.04	96.366
21:03	JD36533-1	96.239	94.283	93.152	96.588	75.795	96.369
21:09	MP30441-SD1	95.753	94.523	84.054	96.407	62.988 !	95.525
21:14	MA51710-CCVA3	94.55	94.354	90.657	95.202	86.132	94.402
21:20	MA51710-CCB3	94.085	95.427	92.559	94.29	93.396	95.471
21:25	JD36624-12	97.117	95.974	94.615	97.829	82.907	98.91
21:31	JD36624-13	95.226	95.966	93.061	95.551	82.067	95.756
21:36	JD36624-14	96.978	95.949	94.038	97.356	82.476	98.757
21:42	JD36624-15	88.582	88.075	86.232	89.302	76.004	83.535
21:47	JD36624-15	95.134	95.139	93.879	95.213	82.75	92.693
21:53	JD36624-15	102.106	98.841	97.938	102.656	83.527	101.845
21:59	JD36624-16	98.276	96.994	94.727	99.36	93.954	99.019
22:04	JD36624-17	91.759	94.127	92.773	92.316	85.603	91.698
22:10	JD36624-17	97.194	95.592	95.595	97.815	93.891	98.297
22:15	JD36624-17	99.154	97.941	97.176	99.94	81.32	99.095
22:21	MA51710-CCVA4	98.617	96.988	100.679	98.807	100.253	98.2
22:26	MA51710-CCB4	97.307	94.809	96.189	97.525	98.291	99.173
22:32	JD36624-12F	102.065	100.055	96.318	102.539	88.525	103.179
22:37	JD36624-13F	93.48	99.762	98.395	93.529	94.438	93.462
22:43	JD36624-14F	101.619	99.289	99.252	102.198	91.325	102.895
22:49	JD36624-15F	96.782	93.373	94.581	97.513	85.16	92.695
22:54	JD36624-15F	103.574	98.862	101.059	103.55	88.95	102.203
23:00	JD36624-16F	99.078	96.717	98.835	99.806	97.471	99.964
23:05	JD36624-17F	99.799	97.253	98.631	100.466	97.873	100.899
23:11	JD36624-17F	102.074	98.309	98.563	102.36	75.404	99.093
23:16	MA51710-CCVA5	99.227	97.193	96.686	99.838	96.677	99.011
23:22	MA51710-CCB5	97.649	97.795	97.566	97.804	99.935	99.079
23:27	ZZZZZZ	100.029	98.102	98.998	100.046	99.264	100.618
23:33	ZZZZZZ	99.803	96.812	99.01	100.725	98.87	100.962
23:38	ZZZZZZ	99.399	97.707	99.001	100.04	98.639	100.949
23:44	ZZZZZZ	97.152	98.252	100.109	97.098	94.117	93.915
23:50	ZZZZZZ	95.435	96.261	93.685	95.845	98.511	98.795

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
Analyst: NV Run ID: MA51710
Parameters: Ba,Fe,Mg,Mn,K,Se,Na,Zn

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
23:55	ZZZZZZ	102.266	99.288	87.317	102.696	83.929	102.738
00:01	ZZZZZZ	96.557	97.477	95.594	97.169	96.357	96.652
00:06	ZZZZZZ	102.059	96.666	101.453	102.197	100.424	102.803
00:12	MA51710-CCVA6	99.431	97.574	97.66	99.569	98.004	98.935
00:17	MA51710-CCB6	99.253	98.385	85.947	99.542	82.09	100.395
00:23	ZZZZZZ	92.647	98.602	96.746	93.363	99.751	96.099
00:28	ZZZZZZ	97.748	97.804	96.956	97.874	97.638	98.239
00:34	MP30440-S1	95.877	96.989	95.234	96.817	89.311	93.473
00:39	MP30440-S2	96.87	97.055	96.462	97.273	89.842	93.558
00:45	JD36624-5	96.42	96.835	96.974	97.217	94.499	93.745
00:51	MP30440-SD1	100.414	94.068	101.396	100.844	100.926	100.338
00:56	MP30440-S1	No results reported for the elements associated with this internal standard.					
01:02	MP30440-S2	No results reported for the elements associated with this internal standard.					
01:07	MA51710-CCVA7	93.745	95.547	95.929	94.772	96.156	94.24
01:13	MA51710-CCB7	96.682	91.717	97.028	97.025	97.928	97.657

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	70-130 %	70-130 %
Istd#18	Terbium (159-3)	70-130 %	70-130 %
Istd#19	Holmium (165-1)	70-130 %	70-130 %
Istd#20	Holmium (165-2)	70-130 %	70-130 %
Istd#21	Bismuth (209-1)	70-130 %	70-130 %
Istd#22	Bismuth (209-2)	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51710 Units: ug/l

Time: / Sample ID:			19:11 ICB1		19:22 CCB1		20:18 CCB2		21:20 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	anr							
Antimony	2.0	.085								
Arsenic	0.50	.025	anr							
Barium	1.0	.009	0.00272	<1.0	0.00256	<1.0	0.00568	<1.0	0.00419	<1.0
Beryllium	0.50	.005								
Boron	25	.85								
Cadmium	0.50	.01	anr							
Calcium	250	3.6	anr							
Chromium	1.0	.018								
Cobalt	0.50	.003								
Copper	2.0	.024	anr							
Iron	25	.24	-0.438	<25	-0.0674	<25	2.97	<25	0.184	<25
Lead	0.50	.008	anr							
Magnesium	250	.19	-0.145	<250	0.0122	<250	1.81	<250	0.323	<250
Manganese	1.0	.012	-0.00260	<1.0	-0.00310	<1.0	-0.00130	<1.0	-0.000545	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017								
Potassium	250	.78	-13.9	<250	-13.7	<250	-13.1	<250	-14.1	<250
Selenium	0.50	.044	0.0799	<0.50	0.404	<0.50	0.352	<0.50	0.428	<0.50
Silver	0.50	.004								
Sodium	250	1.5	-0.464	<250	-0.686	<250	3.45	<250	21.2	<250
Strontium	5.0	.014								
Thallium	0.50	.002	anr							
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013								
Zinc	5.0	.078	-0.0340	<5.0	-0.0400	<5.0	-0.0539	<5.0	0.0108	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA51710 Units: ug/l

Time: / Sample ID:			22:26 CCB4		23:22 CCB5		00:17 CCB6		01:13 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.42	anr							
Antimony	2.0	.085								
Arsenic	0.50	.025	anr							
Barium	1.0	.009	0.00560	<1.0	0.00194	<1.0	0.00990	<1.0	0.00968	<1.0
Beryllium	0.50	.005								
Boron	25	.85								
Cadmium	0.50	.01	anr							
Calcium	250	3.6	anr							
Chromium	1.0	.018								
Cobalt	0.50	.003								
Copper	2.0	.024	anr							
Iron	25	.24	0.459	<25	-0.238	<25	0.0717	<25	0.133	<25
Lead	0.50	.008	anr							
Magnesium	250	.19	0.355	<250	0.0324	<250	0.315	<250	0.333	<250
Manganese	1.0	.012	0.00746	<1.0	-0.00737	<1.0	0.00119	<1.0	-0.000361	<1.0
Molybdenum	1.0	.017								
Nickel	1.0	.017								
Potassium	250	.78	-13.6	<250	-12.5	<250	-13.6	<250	-14.1	<250
Selenium	0.50	.044	0.372	<0.50	0.361	<0.50	0.368	<0.50	0.460	<0.50
Silver	0.50	.004								
Sodium	250	1.5	8.31	<250	5.27	<250	3.75	<250	3.26	<250
Strontium	5.0	.014								
Thallium	0.50	.002	anr							
Tin	5.0	.041								
Titanium	1.0	.11								
Vanadium	1.0	.013								
Zinc	5.0	.078	-0.0569	<5.0	-0.0457	<5.0	-0.0395	<5.0	-0.0312	<5.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51710 Units: ug/l

Time:		18:59			19:05			19:16	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony									
Arsenic	anr								
Barium	60	61.7	102.8				50	51.7	103.4
Beryllium									
Boron									
Cadmium	anr								
Calcium	anr								
Chromium									
Cobalt									
Copper	anr								
Iron	5500	5550	100.9				5000	5030	100.6
Lead	anr								
Magnesium	5500	5490	99.8				5000	5040	100.8
Manganese	60	59.7	99.5				50	50.1	100.2
Molybdenum									
Nickel									
Potassium	5500	5460	99.3				5000	5050	101.0
Selenium	260	252	96.9				200	199	99.5
Silver									
Sodium	5500	5470	99.5				5000	5010	100.2
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	60	58.8	98.0				50	48.8	97.6

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51710 Units: ug/l

Time:		20:13			21:14			22:21	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony									
Arsenic	anr								
Barium	50	50.2	100.4	50	49.1	98.2	50	45.9	91.8
Beryllium									
Boron									
Cadmium	anr								
Calcium	anr								
Chromium									
Cobalt									
Copper	anr								
Iron	5000	5120	102.4	5000	5090	101.8	5000	5050	101.0
Lead	anr								
Magnesium	5000	4970	99.4	5000	4980	99.6	5000	4900	98.0
Manganese	50	50.6	101.2	50	50.5	101.0	50	49.8	99.6
Molybdenum									
Nickel									
Potassium	5000	4960	99.2	5000	4980	99.6	5000	4910	98.2
Selenium	200	199	99.5	200	202	101.0	200	198	99.0
Silver									
Sodium	5000	4930	98.6	5000	4960	99.2	5000	4870	97.4
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	50	50.3	100.6	50	50.5	101.0	50	49.3	98.6

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51710 Units: ug/l

Time:		23:16			00:12			01:07	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony									
Arsenic	anr								
Barium	50	48.6	97.2	50	48.1	96.2	50	48.6	97.2
Beryllium									
Boron									
Cadmium	anr								
Calcium	anr								
Chromium									
Cobalt									
Copper	anr								
Iron	5000	5040	100.8	5000	4990	99.8	5000	5250	105.0
Lead	anr								
Magnesium	5000	4950	99.0	5000	4890	97.8	5000	5210	104.2
Manganese	50	50.1	100.2	50	49.0	98.0	50	51.4	102.8
Molybdenum									
Nickel									
Potassium	5000	4940	98.8	5000	4910	98.2	5000	5130	102.6
Selenium	200	200	100.0	200	199	99.5	200	200	100.0
Silver									
Sodium	5000	4930	98.6	5000	4890	97.8	5000	5170	103.4
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	50	49.4	98.8	50	48.0	96.0	50	51.2	102.4

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51710 Units: ug/l

Time:			19:42	
Sample ID:	CRI	CRIA	CRI2	
Metal	True	True	Results	% Rec
Aluminum	25	25	anr	
Antimony	2.0	0.25		
Arsenic	0.50	0.50	anr	
Barium	1.0	0.50	1.01	101.0
Beryllium	0.50	0.25		
Boron	25	2.5		
Cadmium	0.50	0.25	anr	
Calcium	250	125	anr	
Chromium	1.0	2.0		
Cobalt	0.50	0.25		
Copper	2.0	2.0	anr	
Iron	25	25	26.7	106.8
Lead	0.50	0.25	anr	
Magnesium	250	125	264	105.6
Manganese	1.0	0.25	1.01	101.0
Molybdenum	1.0	0.50		
Nickel	1.0	2.0		
Potassium	250	125	251	100.4
Selenium	0.50	0.50	0.430	86.0
Silver	0.50	1.0		
Sodium	250	125	260	104.0
Strontium	5.0	0.50		
Thallium	0.50	0.25	anr	
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0		
Zinc	5.0	2.0	5.44	108.8

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XA011022M2.CSV Date Analyzed: 01/10/22 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51710 Units: ug/l

Time:			19:48		20:01	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	96700	96.7	92100	92.1
Antimony			-0.498		-0.481	
Arsenic		20	0.0164		18.7	93.5
Barium			0.101		0.117	
Beryllium			-0.00730		-0.0134	
Boron		50	1.80		52.0	104.0
Cadmium		20	-0.380		19.1	95.5
Calcium	100000	100000	97800	97.8	101000	101.0
Chromium		20	0.906		20.7	103.5
Cobalt		20	0.124		19.4	97.0
Copper		20	0.149		18.5	92.5
Iron	100000	100000	98900	98.9	95800	95.8
Lead			0.0331		0.0462	
Magnesium	100000	100000	101000	101.0	96600	96.6
Manganese		20	0.260		20.0	100.0
Molybdenum	2000	2000	2160HH	108.0	2360HH	118.0
Nickel		20	0.513		18.7	93.5
Potassium	100000	100000	104000	104.0	98700	98.7
Selenium		20	0.00491		19.4	97.0
Silver		20	0.00102		18.4	92.0
Sodium	100000	100000	102000	102.0	96600	96.6
Strontium	2000	2000	2160HH	108.0	2360HH	118.0
Thallium			-0.0118		-0.0108	
Tin	2000	2000	2130HH	106.5	2000HH	100.0
Titanium	2000	2000	1890HH	94.5	1800HH	90.0
Vanadium		20	0.0242		21.0	105.0
Zinc		20	0.236		19.3	96.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:48	MA51719-STD1	1		Sample introduction not stable, see rerun.
16:52	MA51719-STD2	1		Sample introduction not stable, see rerun.
16:55	MA51719-STD3	1		STDA
16:59	MA51719-STD4	1		STDB
17:03	MA51719-STD5	1		STDC
17:07	MA51719-STD6	1		STDD
17:11	MA51719-STD7	1		STDE
17:14	MA51719-STD8	1		STDF
17:18	MA51719-STD9	1		STDG
17:21	MA51719-STD10	1		STDH
17:25	MA51719-STD11	1		STDI
17:28	MA51719-STD12	1		STDJ
17:37	ZZZZZZ	1		
17:40	MA51719-ICVA1	1		
17:43	MA51719-ICV1	1		
17:47	MA51719-ICB1	1		
17:50	MA51719-CRI1	1		
17:53	MA51719-ICSA1	1		
17:57	MA51719-ICSAB1	1		
18:00	ZZZZZZ	1		
18:03	ZZZZZZ	1		
18:10	ZZZZZZ	1		
18:14	MA51719-CCVA1	1		
18:17	MA51719-CCB1	1		
18:20	ZZZZZZ	5		
18:23	ZZZZZZ	5		
18:27	JD36624-3	2		
18:30	JD36624-4	2		
18:33	ZZZZZZ	5		
18:36	ZZZZZZ	5		
18:40	MA51719-CCVA2	1		
18:43	MA51719-CCB2	1		
18:46	MP30441-S1	10		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:49	MP30441-S2	10		
18:53	JD36533-1	10		(sample used for QC only; not part of login JD36624)
18:56	ZZZZZZ	50		
18:59	JD36624-12	50		
19:02	JD36624-13	50		
19:06	JD36624-14	50		
19:09	JD36624-15	5		
19:12	JD36624-15	100		
19:15	MA51719-CCVA3	1		
19:18	MA51719-CCB3	1		
19:22	JD36624-16	20		
19:25	JD36624-17	5		
19:28	JD36624-17	20		
19:31	JD36624-12F	50		
19:34	JD36624-13F	50		
19:38	JD36624-14F	50		
19:41	JD36624-15F	100		
19:44	JD36624-16F	20		
19:47	JD36624-17F	20		
19:50	MA51719-CCVA4	1		
19:53	MA51719-CCB4	1		
19:57	MP30440-S1	20		
20:00	MP30440-S2	20		
20:03	JD36624-5	20		
20:06	MP30440-SD1	100		
20:10	JD36624-3	5		
20:13	JD36624-3	20		
20:16	JD36624-3	100		
20:19	JD36624-4	20		
20:22	JD36624-6	20		
20:26	MA51719-CCVA5	1		
20:29	MA51719-CCB5	1		
20:32	JD36624-6	100		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:35	JD36624-7	25		
20:38	JD36624-8	10		
20:42	JD36624-8	50		
20:45	JD36624-9	2		
20:48	JD36624-9	10		
20:51	JD36624-9	100		
20:54	JD36624-10	10		
20:57	JD36624-10	50		
21:01	MA51719-CCVA6	1		
21:04	MA51719-CCB6	1		
21:07	JD36624-11	20		
21:10	JD36624-11	50		
21:14	JD36624-3F	5		
21:17	JD36624-3F	20		
21:20	JD36624-3F	100		
21:23	JD36624-4F	20		
21:26	JD36624-5F	20		
21:30	JD36624-6F	20		
21:33	JD36624-6F	100		
21:36	MA51719-CCVA7	1		
21:39	MA51719-CCB7	1		
21:42	JD36624-7F	25		
21:46	JD36624-8F	10		
21:49	JD36624-8F	50		
21:52	JD36624-9F	10		
21:55	JD36624-9F	100		
21:58	JD36624-10F	10		
22:02	JD36624-10F	50		
22:05	JD36624-11F	20		
22:08	JD36624-11F	50		
---------->	Last reportable sample/prep for job JD36624			
22:11	MA51719-CCVA8	1		
22:14	MA51719-CCB8	1		
---------->	Last reportable CCB for job JD36624			
22:18	MP30658A-MB1	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:21	MP30658A-B2	2		
22:24	MP30658A-S3	2		
22:27	MP30658A-S4	2		
22:30	JD37399-2	2		(sample used for QC only; not part of login JD36624)
22:33	MP30658A-SD1	10		
22:37	ZZZZZZ	2		
22:40	ZZZZZZ	2		
22:43	MA51719-CCVA9	1		
22:46	MA51719-CCB9	1		
22:49	MP30561A-MB1	2		
22:53	MP30561A-B2	2		
22:56	MP30561A-S3	2		
22:59	MP30561A-S4	2		
23:02	JD37260-6F	2		(sample used for QC only; not part of login JD36624)
23:06	MP30561A-SD1	10		
23:09	ZZZZZZ	2		
23:12	ZZZZZZ	2		
23:15	ZZZZZZ	2		
23:18	MA51719-CCVA10	1		
23:21	MA51719-CCB10	1		
23:25	ZZZZZZ	2		
23:28	ZZZZZZ	2		
23:31	ZZZZZZ	2		
23:34	ZZZZZZ	2		
23:38	ZZZZZZ	2		
23:41	ZZZZZZ	2		
23:44	ZZZZZZ	2		
23:47	ZZZZZZ	2		
23:50	MA51719-CCVA11	1		
23:54	MA51719-CCB11	1		
23:57	MP30560A-MB1	2		
00:00	MP30560A-B2	2		
00:03	MP30560A-S3	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Dilution Factor	PS Recov	Comments
00:06	MP30560A-S4	2		
00:10	JD37096-1	2		(sample used for QC only; not part of login JD36624)
00:13	MP30560A-SD1	2		
00:16	ZZZZZZ	2		
00:19	ZZZZZZ	2		
00:23	ZZZZZZ	2		
00:26	ZZZZZZ	2		
00:29	MA51719-CCVA12	1		
00:32	MA51719-CCB12	1		
00:35	ZZZZZZ	2		
00:39	ZZZZZZ	2		
00:42	ZZZZZZ	2		
00:45	ZZZZZZ	2		
00:48	ZZZZZZ	2		
00:51	ZZZZZZ	2		
00:54	ZZZZZZ	2		
00:57	ZZZZZZ	2		
01:01	ZZZZZZ	2		
01:04	ZZZZZZ	2		
01:07	MA51719-CCVA13	1		
01:10	MA51719-CCB13	1		
01:14	ZZZZZZ	2		
01:17	ZZZZZZ	2		
01:20	ZZZZZZ	2		
01:24	ZZZZZZ	2		
01:27	ZZZZZZ	2		
01:30	ZZZZZZ	2		
01:34	MA51719-CCVA14	1		
01:37	MA51719-CCB14	1		
01:40	ZZZZZZ	2		
01:43	ZZZZZZ	2		
01:47	ZZZZZZ	2		
01:50	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Dilution Factor	PS Recov	Comments
01:54	ZZZZZZ	2		
01:57	ZZZZZZ	2		
02:00	MA51719-CCVA15	1		
02:03	MA51719-CCB15	1		
02:07	ZZZZZZ	1		
02:10	MP30717-B1	1		
02:13	MP30717-S1	1		
02:16	MP30717-S2	1		
02:19	JD37867-1	1		(sample used for QC only; not part of login JD36624)
02:22	ZZZZZZ	1		
02:26	ZZZZZZ	1		
02:29	MP30717-MB1	1		
02:32	MA51719-CCVA16	1		
02:35	MA51719-CCB16	1		
02:38	ZZZZZZ	1		
02:41	ZZZZZZ	1		
02:45	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Dilution	Al	Ba	Ca	Fe	Pb	Mg	Mn	K	Se	Na	Tl	
17:37	ZZZZZZ	1												
17:40	MA51719-ICVA1	1	X	X	X	X	X	X	X	X	X	X	X	
17:43	MA51719-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	
17:47	MA51719-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	
17:50	MA51719-CRI1	1	X	X	X	X	X	X	X	X	X	X	X	
17:53	MA51719-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	
17:57	MA51719-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	
18:00	ZZZZZZ	1												
18:03	ZZZZZZ	1												
18:10	ZZZZZZ	1												
18:14	MA51719-CCVA1	1	X	X	X	X	X	X	X	X	X	X	X	
18:17	MA51719-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	
18:20	ZZZZZZ	5												
18:23	ZZZZZZ	5												
18:27	JD36624-3	2		X							X			
18:30	JD36624-4	2									X			
18:33	ZZZZZZ	5												
18:36	ZZZZZZ	5												
18:40	MA51719-CCVA2	1	X	X	X	X	X	X	X	X	X	X	X	
18:43	MA51719-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	
18:46	MP30441-S1	10					X						X	
18:49	MP30441-S2	10					X						X	
18:53	JD36533-1	10												(a)
18:56	ZZZZZZ	50												
18:59	JD36624-12	50			X									
19:02	JD36624-13	50			X									
19:06	JD36624-14	50			X									
19:09	JD36624-15	5	X											
19:12	JD36624-15	100			X									
19:15	MA51719-CCVA3	1	X	X	X	X	X	X	X	X	X	X	X	
19:18	MA51719-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	
19:22	JD36624-16	20			X									
19:25	JD36624-17	5	X											
	Element:		Al	Ba	Ca	Fe	Pb	Mg	Mn	K	Se	Na	Tl	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Element: Dilution	Al	Ba	Ca	Fe	Pb	Mg	Mn	K	Se	Na	Tl
19:28	JD36624-17	20			X								
19:31	JD36624-12F	50			X			X					
19:34	JD36624-13F	50			X			X				X	
19:38	JD36624-14F	50			X								
19:41	JD36624-15F	100			X								
19:44	JD36624-16F	20			X								
19:47	JD36624-17F	20			X								
19:50	MA51719-CCVA4	1	X	X	X	X	X	X	X	X	X	X	X
19:53	MA51719-CCB4	1	X	X	X	X	X	X	X	X	X	X	X
19:57	MP30440-S1	20			X			X	X			X	
20:00	MP30440-S2	20			X			X	X			X	
20:03	JD36624-5	20			X			X				X	
20:06	MP30440-SD1	100			X			X				X	
20:10	JD36624-3	5						X					
20:13	JD36624-3	20							X				
20:16	JD36624-3	100			X							X	
20:19	JD36624-4	20			X			X				X	
20:22	JD36624-6	20			X			X				X	
20:26	MA51719-CCVA5	1	X	X	X	X	X	X	X	X	X	X	X
20:29	MA51719-CCB5	1	X	X	X	X	X	X	X	X	X	X	X
20:32	JD36624-6	100							X				
20:35	JD36624-7	25			X			X	X			X	
20:38	JD36624-8	10			X			X		X			
20:42	JD36624-8	50							X			X	
20:45	JD36624-9	2		X			X						
20:48	JD36624-9	10				X			X				
20:51	JD36624-9	100			X			X		X		X	
20:54	JD36624-10	10			X			X				X	
20:57	JD36624-10	50							X				
21:01	MA51719-CCVA6	1	X	X	X	X	X	X	X	X	X	X	X
21:04	MA51719-CCB6	1	X	X	X	X	X	X	X	X	X	X	X
21:07	JD36624-11	20			X			X	X				
21:10	JD36624-11	50										X	
		Element:	Al	Ba	Ca	Fe	Pb	Mg	Mn	K	Se	Na	Tl

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Element: Dilution	Al	Ba	Ca	Fe	Pb	Mg	Mn	K	Se	Na	Tl	
21:14	JD36624-3F	5		X				X						
21:17	JD36624-3F	20							X					
21:20	JD36624-3F	100			X							X		
21:23	JD36624-4F	20			X			X				X		
21:26	JD36624-5F	20			X			X				X		
21:30	JD36624-6F	20			X			X				X		
21:33	JD36624-6F	100							X					
21:36	MA51719-CCVA7	1	X	X	X	X	X	X	X	X	X	X	X	
21:39	MA51719-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	
21:42	JD36624-7F	25			X			X	X			X		
21:46	JD36624-8F	10			X			X		X				
21:49	JD36624-8F	50							X			X		
21:52	JD36624-9F	10												
21:55	JD36624-9F	100			X			X		X		X		
21:58	JD36624-10F	10			X			X				X		
22:02	JD36624-10F	50							X					
22:05	JD36624-11F	20			X			X	X					
22:08	JD36624-11F	50										X		
22:11	MA51719-CCVA8	1	X	X	X	X	X	X	X	X	X	X	X	
22:14	MA51719-CCB8	1	X	X	X	X	X	X	X	X	X	X	X	
22:18	MP30658A-MB1	2											X	
22:21	MP30658A-B2	2											X	
22:24	MP30658A-S3	2											X	
22:27	MP30658A-S4	2											X	
22:30	JD37399-2	2											X	(a)
22:33	MP30658A-SD1	10											X	
22:37	ZZZZZZ	2												
22:40	ZZZZZZ	2												
22:43	MA51719-CCVA9	1	X	X	X	X	X	X	X	X	X	X	X	
22:46	MA51719-CCB9	1	X	X	X	X	X	X	X	X	X	X	X	
22:49	MP30561A-MB1	2					X						X	
22:53	MP30561A-B2	2					X						X	
22:56	MP30561A-S3	2					X						X	
		Element:	Al	Ba	Ca	Fe	Pb	Mg	Mn	K	Se	Na	Tl	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Element: Dilution	Al	Ba	Ca	Fe	Pb	Mg	Mn	K	Se	Na	Tl	
22:59	MP30561A-S4	2					X						X	
23:02	JD37260-6F	2											X	(a)
23:06	MP30561A-SD1	10					X						X	
23:09	ZZZZZZ	2												
23:12	ZZZZZZ	2												
23:15	ZZZZZZ	2												
23:18	MA51719-CCVA10	1	X	X	X	X	X	X	X	X	X	X	X	
23:21	MA51719-CCB10	1	X	X	X	X	X	X	X	X	X	X	X	
23:25	ZZZZZZ	2												
23:28	ZZZZZZ	2												
23:31	ZZZZZZ	2												
23:34	ZZZZZZ	2												
23:38	ZZZZZZ	2												
23:41	ZZZZZZ	2												
23:44	ZZZZZZ	2												
23:47	ZZZZZZ	2												
23:50	MA51719-CCVA11	1	X	X	X	X	X	X	X	X	X	X	X	
23:54	MA51719-CCB11	1	X	X	X	X	X	X	X	X	X	X	X	
23:57	MP30560A-MB1	2					X						X	
00:00	MP30560A-B2	2					X						X	
00:03	MP30560A-S3	2					X						X	
00:06	MP30560A-S4	2					X						X	
00:10	JD37096-1	2											X	(a)
00:13	MP30560A-SD1	2					X						X	
00:16	ZZZZZZ	2												
00:19	ZZZZZZ	2												
00:23	ZZZZZZ	2												
00:26	ZZZZZZ	2												
00:29	MA51719-CCVA12	1	X	X	X	X	X	X	X	X	X	X	X	
00:32	MA51719-CCB12	1	X	X	X	X	X	X	X	X	X	X	X	
00:35	ZZZZZZ	2												
00:39	ZZZZZZ	2												
00:42	ZZZZZZ	2												
		Element:	Al	Ba	Ca	Fe	Pb	Mg	Mn	K	Se	Na	Tl	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Element: Dilution	Al	Ba	Ca	Fe	Pb	Mg	Mn	K	Se	Na	Tl	
00:45	ZZZZZZ	2												
00:48	ZZZZZZ	2												
00:51	ZZZZZZ	2												
00:54	ZZZZZZ	2												
00:57	ZZZZZZ	2												
01:01	ZZZZZZ	2												
01:04	ZZZZZZ	2												
01:07	MA51719-CCVA13	1	X	X	X	X	X	X	X	X	X	X	X	
01:10	MA51719-CCB13	1	X	X	X	X	X	X	X	X	X	X	X	
01:14	ZZZZZZ	2												
01:17	ZZZZZZ	2												
01:20	ZZZZZZ	2												
01:24	ZZZZZZ	2												
01:27	ZZZZZZ	2												
01:30	ZZZZZZ	2												
01:34	MA51719-CCVA14	1	X	X	X	X	X	X	X	X	X	X	X	
01:37	MA51719-CCB14	1	X	X	X	X	X	X	X	X	X	X	X	
01:40	ZZZZZZ	2												
01:43	ZZZZZZ	2												
01:47	ZZZZZZ	2												
01:50	ZZZZZZ	2												
01:54	ZZZZZZ	2												
01:57	ZZZZZZ	2												
02:00	MA51719-CCVA15	1	X	X	X	X	X	X	X	X	X	X	X	
02:03	MA51719-CCB15	1	X	X	X	X	X	X	X	X	X	X	X	
02:07	ZZZZZZ	1												
02:10	MP30717-B1	1				X			X					
02:13	MP30717-S1	1				X			X					
02:16	MP30717-S2	1				X			X					
02:19	JD37867-1	1				X			X					(a)
02:22	ZZZZZZ	1												
02:26	ZZZZZZ	1												
02:29	MP30717-MB1	1				X			X					
		Element:	Al	Ba	Ca	Fe	Pb	Mg	Mn	K	Se	Na	Tl	

REPORTED ELEMENTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Element: Dilution	Al	Ba	Ca	Fe	Pb	Mg	Mn	K	Se	Na	Tl
02:32	MA51719-CCVA16	1	X	X	X	X	X	X	X	X	X	X	X
02:35	MA51719-CCB16	1	X	X	X	X	X	X	X	X	X	X	X
02:38	ZZZZZZ	1											
02:41	ZZZZZZ	1											
02:45	ZZZZZZ	1											

(a) Sample used for QC only; not part of login JD36624.

Element: Al Ba Ca Fe Pb Mg Mn K Se Na Tl

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
16:48	MA51719-STD1	100	100	100	100	100	100	100	100
16:52	MA51719-STD2	100	100	100	100	100	100	100	100
16:55	MA51719-STD3	100	100	100	100	100	100	100	100
16:59	MA51719-STD4	98.895	98.744	103.082	98.226	98.911	101.105	99.991	99.439
17:03	MA51719-STD5	100.005	99.092	101.382	97.134	97.717	100.223	99.509	99.374
17:07	MA51719-STD6	96.516	96.594	100.653	97.352	97.23	100.602	99.622	97.163
17:11	MA51719-STD7	95.356	96.646	101.958	95.601	96.82	102.034	99.845	97.575
17:14	MA51719-STD8	96.055	96.539	100.16	95.594	95.152	101.012	100.276	96.675
17:18	MA51719-STD9	94.807	95.096	99.053	97.207	95.236	99.706	99.604	96.306
17:21	MA51719-STD10	96.165	97.594	100.764	96.245	96.906	101.076	99.549	98.003
17:25	MA51719-STD11	96.985	98.494	104.448	98.902	97.553	100.882	98.478	97.151
17:28	MA51719-STD12	97.099	98.417	103.601	98.355	97.694	103.741	98.602	96.807
17:37	ZZZZZZ	100.155	101.619	109.073	99.437	101.129	97.731	97.223	101.752
17:40	MA51719-ICVA1	98.986	99.414	104.827	96.981	97.928	103.45	100.162	98.649
17:43	MA51719-ICV1	99.234	99.199	109.172	98.862	99.251	100.679	99.32	99.72
17:47	MA51719-ICB1	99.766	99.792	103.755	98.501	98.524	100.499	98.654	99.769
17:50	MA51719-CRI1	99.701	99.02	107.773	99.175	98.705	100.439	100.115	99.416
17:53	MA51719-ICSA1	90.329	93.212	97.855	96.336	102.301	138.772 !	101.346	86.27
17:57	MA51719-ICSAB1	89.398	93.681	99.98	98.82	102.368	143.525 !	104.598	86.946
18:00	ZZZZZZ	87.632	96.748	95.834	101.632	98.322	97.737	102.91	99.332
18:03	ZZZZZZ	0.181 !	0.03 !	0.022 !	0.016 !	0.076 !	0.052 !	0.054 !	0.061 !
18:10	ZZZZZZ	317.568 !	325.936 !	271.904 !	165.213 !	333.149 !	254.51 !	161.331 !	337.629 !
18:14	MA51719-CCVA1	97.138	101.463	100.625	101.209	101.422	102.912	104.061	102.38
18:17	MA51719-CCB1	99.412	102.694	106.849	102.45	103.989	102.523	103.517	104.785
18:20	ZZZZZZ	95.187	99.334	98.979	101.332	106.077	122.206	103.599	96.501
18:23	ZZZZZZ	96.841	101.822	104.951	102.578	104.57	117.382	104.434	99.63
18:27	JD36624-3	92.79	97.396	99.409	98.903	87.263	89.235	95.552	88.531
18:30	JD36624-4	98.104	100.86	98.359	103.233	94.675	93.824	101.436	95.373
18:33	ZZZZZZ	103.923	105.686	113.892	102.844	104.936	103.386	103.766	105.892
18:36	ZZZZZZ	99.621	102.641	107.024	102.687	101.566	105.803	105.907	101.769
18:40	MA51719-CCVA2	102.138	103.861	110.296	101.95	103.01	108.922	106.627	104.005
18:43	MA51719-CCB2	101.169	102.046	106.689	102.121	102.029	102.846	102.733	103.131
18:46	MP30441-S1	96.993	100.659	116.925	101.434	94.97	100.019	100.297	95.768

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:49	MP30441-S2	99.51	103.074	117.645	104.564	96.697	101.279	101.678	97.924
18:53	JD36533-1	100.995	106.756	120.569	108.707	99.581	102.716	104.042	100.538
18:56	ZZZZZZ	104.175	107.233	117.243	106.375	105.934	105.249	105.589	106.808
18:59	JD36624-12	105.147	107.107	113.455	106.559	108.109	105.197	106.744	109.113
19:02	JD36624-13	102.925	104.86	106.683	106.407	105.009	104.457	106.602	106.806
19:06	JD36624-14	103.986	105.536	113.763	105.113	106.847	104.436	105.117	107.863
19:09	JD36624-15	94.647	97.163	94.947	106.358	88.761	89.503	101.728	89.217
19:12	JD36624-15	109.066	111.288	114.135	111.869	112.51	107.662	112.909	114.232
19:15	MA51719-CCVA3	105.172	108.804	111.259	109.205	108.78	109.245	111.424	109.825
19:18	MA51719-CCB3	106.759	108.587	115.269	108.705	108.7	105.374	108.269	109.838
19:22	JD36624-16	104.973	108.476	115.867	109.735	108.671	106.908	110.048	109.984
19:25	JD36624-17	102.361	107.708	105.817	107.581	107.273	107.979	108.254	105.051
19:28	JD36624-17	103.579	108.301	116.959	108.883	107.583	110.105	110.568	108.147
19:31	JD36624-12F	106.48	109.719	116.319	108.445	109.905	109.652	108.759	111.098
19:34	JD36624-13F	107.627	109.885	116.097	107.916	110.639	108.673	109.181	111.282
19:38	JD36624-14F	107.997	110.237	118.447	107.868	110.215	108.17	107.935	110.671
19:41	JD36624-15F	107.395	109.664	116.476	110.194	108.733	107.571	108.797	109.892
19:44	JD36624-16F	109.422	110.511	118.103	107.467	109.73	106.889	107.97	110.505
19:47	JD36624-17F	108.413	107.35	116.456	107.486	107.812	106.793	107.886	109.804
19:50	MA51719-CCVA4	107.604	107.828	115.219	107.938	107.141	110.29	109.004	107.579
19:53	MA51719-CCB4	108.183	108.383	116.928	106.698	107.347	105.823	106.596	108.868
19:57	MP30440-S1	106.144	107.551	117.18	107.472	107.62	108.021	108.515	108.455
20:00	MP30440-S2	108.32	107.519	116.417	105.037	107.627	106.824	106.199	109.073
20:03	JD36624-5	106.419	106.304	116.894	104.787	106.179	106.267	105.547	107.327
20:06	MP30440-SD1	105.802	105.813	116.651	105.728	106.867	107.506	105.862	107.573
20:10	JD36624-3	104.031	105.13	113.95	104.173	98.849	98.066	101.136	99.339
20:13	JD36624-3	105.758	105.973	117.571	105.114	104.501	106.21	105.512	105.61
20:16	JD36624-3	105.027	106.464	117.198	103.787	106.074	107.145	104.268	106.903
20:19	JD36624-4	106.392	106.12	114.262	103.155	104.757	105.298	103.958	106.304
20:22	JD36624-6	105.094	104.627	114.624	102.904	104.391	104.221	102.502	105.774
20:26	MA51719-CCVA5	105.653	105.363	113.681	104.039	104.266	108.152	105.27	104.027
20:29	MA51719-CCB5	104.999	105.344	115.383	103.893	104.735	103.342	103.024	105.125
20:32	JD36624-6	103.822	105.531	115.513	102.045	104.766	106.261	103.908	106.064

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
20:35	JD36624-7	104.274	104.458	114.634	101.904	103.733	105.927	103.799	106.546
20:38	JD36624-8	101.864	104.269	105.231	101.507	102.139	101.571	102.537	103.708
20:42	JD36624-8	102.055	102.912	110.496	101.769	104.45	105.423	102.616	104.826
20:45	JD36624-9	93.261	92.997	93.257	102.872	83.574	87.953	100.735	82.523
20:48	JD36624-9	102.672	109.953	112.622	112.128	106.885	102.69	109.495	107.485
20:51	JD36624-9	109.573	113.031	118.669	110.249	114.176	109.963	110.109	115.509
20:54	JD36624-10	107.073	109.648	114.046	109.343	109.22	106.125	108.332	111.195
20:57	JD36624-10	107.026	108.818	116.7	105.246	109.861	108.729	107.519	111.696
21:01	MA51719-CCVA6	106.432	108.338	110.492	104.674	107.036	108.561	107.984	107.118
21:04	MA51719-CCB6	106.605	107.183	116.57	104.872	107.486	105.783	104.746	108.744
21:07	JD36624-11	107.713	108.966	115.407	105.429	107.691	106.788	106.257	109.028
21:10	JD36624-11	106.584	108.518	117.956	105.108	107.793	108.468	105.403	108.956
21:14	JD36624-3F	105.365	107.005	115.499	104.106	100.696	98.518	100.45	101.744
21:17	JD36624-3F	104.856	104.813	115.982	101.571	104.27	105.61	103.015	105.288
21:20	JD36624-3F	105.88	105.895	116.173	101.408	107.079	107.512	102.642	107.484
21:23	JD36624-4F	104.242	105.366	113.614	101.943	105.42	104.664	103.001	105.788
21:26	JD36624-5F	104.065	104.119	108.781	100.919	104.591	103.529	102.344	105.029
21:30	JD36624-6F	102.092	102.491	105.036	100.136	101.993	103.518	100.796	103.713
21:33	JD36624-6F	101.919	103.807	106.422	98.642	104.295	104.92	100.564	105.816
21:36	MA51719-CCVA7	102.107	103.023	107.228	99.517	102.37	105.808	101.92	101.801
21:39	MA51719-CCB7	103.102	103.676	105.708	100.547	103.1	102.506	101.157	103.488
21:42	JD36624-7F	102.364	104.834	112.97	100.504	105.422	104.398	101.126	105.561
21:46	JD36624-8F	101.872	102.755	105.126	99.432	101.772	101.342	99.862	103.327
21:49	JD36624-8F	104.068	104.543	111.243	101.502	105.489	106.281	102.932	106.344
21:52	JD36624-9F	99.876	102.304	103.46	103.234	97.426	96.178	100.797	98.444
21:55	JD36624-9F	107.991	108.301	115.878	105.538	107.948	106.611	104.736	109.112
21:58	JD36624-10F	108.943	109.041	114.094	105.335	107.576	103.604	105.381	108.781
22:02	JD36624-10F	108.404	107.509	116.26	103.76	108.163	106.223	103.814	109.125
22:05	JD36624-11F	107.527	106.563	109.656	104.45	105.923	103.808	104.199	106.53
22:08	JD36624-11F	105.205	105.107	113.382	104.079	106.139	105.065	103.067	106.901
22:11	MA51719-CCVA8	105.087	103.296	108.88	101.849	103.12	106.43	103.44	103.758
22:14	MA51719-CCB8	103.758	104.275	105.641	102.075	104.38	102.476	101.313	105.19
22:18	MP30658A-MB1	107.576	104.395	104.325	105.742	102.694	97.857	101.83	103.536

INTERNAL STANDARD SUMMARY

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Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
22:21	MP30658A-B2	107.768	104.941	105.211	102.581	102.232	100.893	102.93	103.071
22:24	MP30658A-S3	99.817	99.493	98.78	98.739	94.176	97.458	99.563	93.431
22:27	MP30658A-S4	101.073	100.376	99.938	99.87	95.164	98.896	99.834	94.386
22:30	JD37399-2	100.694	99.868	101.162	98.836	94.685	95.21	96.749	94
22:33	MP30658A-SD1	103.186	105.889	116.66	102.273	104.256	106.833	102.275	104.845
22:37	ZZZZZZ	107.319	106.366	114.2	104.357	102.779	99.9	102.089	104.12
22:40	ZZZZZZ	109.499	108.058	111.907	104.072	103.81	103.8	104.851	104.203
22:43	MA51719-CCVA9	107.627	105.955	115.887	100.978	105.523	110.31	103.65	105.348
22:46	MA51719-CCB9	107.363	106.206	118.675	104.138	105.512	106.405	102.679	106.8
22:49	MP30561A-MB1	108.5	108.092	118.406	102.623	105.921	104.826	100.874	107.973
22:53	MP30561A-B2	109.226	106.649	110.69	102.004	103.183	102.242	103.103	103.321
22:56	MP30561A-S3	104.221	103.701	105.05	102.439	103.734	113.055	105.06	100.091
22:59	MP30561A-S4	103.088	101.764	104.732	101.412	102.068	113.62	104.712	99.053
23:02	JD37260-6F	103.448	102.889	101.88	100.18	103.548	108.778	101.527	100.305
23:06	MP30561A-SD1	105.29	105.026	113.34	101.006	104.714	106.82	102.083	105.079
23:09	ZZZZZZ	104.541	103.266	101.762	100.789	99.752	94.569	98.742	101.481
23:12	ZZZZZZ	103.265	104.144	99.597	101.875	99.721	96.347	100.525	101.452
23:15	ZZZZZZ	104.787	102.398	98.07	102.357	102.169	105.788	101.193	99.248
23:18	MA51719-CCVA10	106.247	106.317	115.903	102.024	105.102	109.639	102.989	104.555
23:21	MA51719-CCB10	104.835	104.96	116.655	100.402	103.376	103.476	99.78	104.958
23:25	ZZZZZZ	102.512	102.358	98.679	101.743	98.97	95.134	100.285	99.141
23:28	ZZZZZZ	103.933	102.95	100.323	103.473	99.183	97.375	101.131	100.327
23:31	ZZZZZZ	104.13	103.048	103.825	99.848	99.798	98.888	100.477	100.621
23:34	ZZZZZZ	103.577	102.551	98.972	101.822	102.949	107.563	101.645	99.308
23:38	ZZZZZZ	102.604	102.476	97.811	101.669	99.449	99.318	101.092	99.978
23:41	ZZZZZZ	103.832	101.445	97.352	100.709	101.119	102.669	100.238	99.163
23:44	ZZZZZZ	102.981	102.099	97.982	101.742	103.182	106.995	101.931	99.904
23:47	ZZZZZZ	104.471	101.975	102.8	102.911	100.661	95.288	99.352	101.168
23:50	MA51719-CCVA11	106.861	105.585	117.023	102.261	104.377	108.7	103.092	104.488
23:54	MA51719-CCB11	106.494	105.899	118.129	101.502	104.971	104.365	100.58	106.286
23:57	MP30560A-MB1	105.437	106.011	116.416	101.303	104.236	102.749	99.448	105.291
00:00	MP30560A-B2	106.683	104.338	103.431	101.511	100.975	100.506	102.245	101.252
00:03	MP30560A-S3	102.598	100.46	100.503	99.508	96.19	97.177	100.779	97.871

INTERNAL STANDARD SUMMARY

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Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
00:06	MP30560A-S4	101.429	100.559	100.295	98.8	95.723	96.886	100.366	97.461
00:10	JD37096-1	100.53	100.1	101.48	100.546	96.267	94.15	99.993	96.847
00:13	MP30560A-SD1	104.395	102.683	109.897	99.538	102.26	103.106	100.655	104.44
00:16	ZZZZZZ	100.975	99.712	97.82	100.23	96.644	93.707	99.687	97.198
00:19	ZZZZZZ	103.964	101.757	101.786	101.229	98.943	94.798	98.564	99.963
00:23	ZZZZZZ	102.278	101.334	96.433	100.464	98.18	93.131	99.038	99.093
00:26	ZZZZZZ	102.521	99.621	96.926	100.05	97.212	93.793	98.553	98.824
00:29	MA51719-CCVA12	102.405	102.154	103.185	96.779	101.181	105.393	99.429	101.991
00:32	MA51719-CCB12	104.088	102.407	112.109	101.195	102.022	101.335	98.639	103.012
00:35	ZZZZZZ	97.827	97.248	92.828	96.508	93.309	88.559	94.041	92.989
00:39	ZZZZZZ	97.964	96.613	93.393	96.762	89.3	87.781	93.038	88.778
00:42	ZZZZZZ	88.766	93.402	109.977	87.637	73.581	78.552	83.61	72.232
00:45	ZZZZZZ	101.691	105.361	129.748	101.645	84.952	91.276	96.829	84.471
00:48	ZZZZZZ	101.637	103.267	108.547	98.358	93.552	92.915	94.292	92.854
00:51	ZZZZZZ	94.316	98.155	98.84	99.511	90.48	92.433	96.342	90.076
00:54	ZZZZZZ	93.36	97.418	96.185	99.74	93.181	95.035	97.245	91.647
00:57	ZZZZZZ	100.584	105.48	112.442	104.493	102.919	99.482	101.933	104.176
01:01	ZZZZZZ	103.872	107.763	120.796	102	107.419	106.122	100.052	106.981
01:04	ZZZZZZ	100.06	102.093	106.864	99.985	99.116	100.472	100.602	99.377
01:07	MA51719-CCVA13	99.583	102.751	115.134	98.436	101.776	107.968	100.059	101.202
01:10	MA51719-CCB13	100.341	102.292	115.732	99.998	101.042	103.132	97.581	101.922
01:14	ZZZZZZ	98.929	102.401	119.734	99.009	103.133	105.955	97.936	102.959
01:17	ZZZZZZ	99.166	104.723	121.548	99.134	100.641	104.349	96.503	101.692
01:20	ZZZZZZ	98.275	100.057	118.512	97.318	100.305	105.405	96.706	101.997
01:24	ZZZZZZ	96.739	100.056	118.086	96.232	99.546	104.259	95.535	100.82
01:27	ZZZZZZ	96.921	100.413	117.386	96.224	99.885	104.244	95.602	100.216
01:30	ZZZZZZ	96.689	100.052	116.307	96.065	98.415	102.715	94.953	100.427
01:34	MA51719-CCVA14	98.298	101.209	107.567	96.689	99.763	105.363	98.483	99.287
01:37	MA51719-CCB14	98.871	100.762	109.196	96.938	100.527	101.613	96.295	101.725
01:40	ZZZZZZ	96.507	99.467	117.009	96.275	99.32	103.843	95.456	101.079
01:43	ZZZZZZ	96.409	99.075	114.796	96.617	99.095	102.872	94.697	100.487
01:47	ZZZZZZ	97.017	100.019	116.698	94.624	99.126	102.382	94.6	100.188
01:50	ZZZZZZ	96.671	99.43	115.979	94.911	98.402	102.172	93.59	99.221

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
01:54	ZZZZZZ	97.401	98.764	114.253	95.798	99.911	102.476	94.062	101.431
01:57	ZZZZZZ	97.342	99.646	115.854	95.079	99.756	102.268	93.741	100.182
02:00	MA51719-CCVA15	99.92	100.543	106.022	96.27	99.558	103.418	97.222	99.16
02:03	MA51719-CCB15	99.829	100.983	107.433	96.314	100.546	99.761	95.152	100.738
02:07	ZZZZZZ	100.501	100.394	110.01	97.407	99.926	99.775	94.755	101.295
02:10	MP30717-B1	99.978	101.211	110.882	95.905	99.906	104.925	98.1	100.583
02:13	MP30717-S1	96.655	97.653	102.109	94.174	93.582	99.77	95.627	94.063
02:16	MP30717-S2	95.124	98.223	101.215	93.855	94	99.377	95.705	93.83
02:19	JD37867-1	93.016	95.817	96.082	93.279	91.238	91.846	92.025	92.081
02:22	ZZZZZZ	93.649	94.186	95.002	92.845	90.358	90.395	91.916	91.117
02:26	ZZZZZZ	93.052	94.558	94.924	92.47	91.073	91.181	91.115	91.522
02:29	MP30717-MB1	96.699	97.526	96.394	93.442	97.773	96.061	92.617	98.149
02:32	MA51719-CCVA16	98.804	99.174	100.596	94.198	98.172	101.82	96.271	98.377
02:35	MA51719-CCB16	96.402	98.066	102.206	95.847	97.181	96.961	94.445	99.089
02:38	ZZZZZZ	98.191	98.463	102.185	95.347	97.691	97.453	93.144	99.456
02:41	ZZZZZZ	96.685	97.939	101.628	94.486	98.185	97.146	93.529	98.478
02:45	ZZZZZZ	97.948	98.944	100.434	94.995	98.429	96.021	92.67	98.437

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (72-3)	60-125 %	60-125 %
Istd#8	Germanium (74-1)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
16:48	MA51719-STD1	100	100	100	100	100	100	100	100
16:52	MA51719-STD2	100	100	100	100	100	100	100	100
16:55	MA51719-STD3	100	100	100	100	100	100	100	100
16:59	MA51719-STD4	101.24	100.144	98.544	100.086	99.44	98.657	99.503	99.37
17:03	MA51719-STD5	100.827	99.554	97.885	99.559	98.952	99.481	98.627	98.336
17:07	MA51719-STD6	100.862	99.977	96.303	98.355	97.503	97.213	97.891	96.987
17:11	MA51719-STD7	102.457	99.885	95.789	98.285	96.715	97.155	96.757	97.521
17:14	MA51719-STD8	101.743	99.8	95.501	96.951	97.825	96.457	95.941	98.159
17:18	MA51719-STD9	99.995	99.338	94.17	97.119	98.189	96.341	96.593	97.31
17:21	MA51719-STD10	100.792	99.908	96.356	97.845	97.964	97.939	97.243	98.44
17:25	MA51719-STD11	98.818	98.061	94.254	95.623	96.235	96.583	96.225	98.738
17:28	MA51719-STD12	98.514	98.022	92.703	94.146	95.213	95.188	96.298	96.52
17:37	ZZZZZZ	98.477	97.035	99.529	101.578	100.134	100.411	101.553	100.9
17:40	MA51719-ICVA1	101.243	99.819	94.965	94.327	95.054	97.295	96.177	98.913
17:43	MA51719-ICV1	101.2	99.071	98.422	100.902	100.327	98.986	99.284	98.992
17:47	MA51719-ICB1	100.637	98.479	99.02	100.429	99.387	99.979	100.046	99.47
17:50	MA51719-CRI1	101.072	99.832	97.802	99.619	100.023	99.544	100.463	98.236
17:53	MA51719-ICSA1	89.044	94.808	82.145	81.557	94.103	88.072	87.289	94.539
17:57	MA51719-ICSAB1	91.448	97.72	82.488	82.322	92.977	89.551	88.42	95.776
18:00	ZZZZZZ	98.268	103.032	99.258	99.98	102.587	102.03	97.676	101.202
18:03	ZZZZZZ	0.052 !	0.044 !	0.032 !	0.029 !	0.022 !	0.044 !	0.041 !	0.013 !
18:10	ZZZZZZ	252.52 !	161.599 !	325.523 !	252.495 !	168.303 !	334.452 !	249.472 !	335.155 !
18:14	MA51719-CCVA1	100.486	103.672	99.069	97.281	100.389	101.456	96.183	103.225
18:17	MA51719-CCB1	102.915	103.345	102.601	103.2	103.454	105.511	101.809	104.381
18:20	ZZZZZZ	95.942	99.547	93.178	92.204	95.331	97.221	92.654	98.568
18:23	ZZZZZZ	100.616	101.894	95.203	95.826	98.234	99.573	96.664	100.852
18:27	JD36624-3	88.573	95.219	84.203	83.063	91.746	90.613	87.011	94.86
18:30	JD36624-4	94.176	100.719	92.807	91.542	98.249	97.758	93.417	102.063
18:33	ZZZZZZ	103.788	104.067	105.058	104.586	105.469	106.199	103.532	107.321
18:36	ZZZZZZ	104.555	106.241	100.307	100.862	101.836	102.681	100.609	103.519
18:40	MA51719-CCVA2	106.314	106.095	100.482	100.15	100.898	103.697	100.931	104.134
18:43	MA51719-CCB2	102.716	102.352	102.273	103.274	102.549	104.807	102.315	104.22
18:46	MP30441-S1	99.628	100.506	89.417	90.674	92.678	94.737	96.078	98.287

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:49	MP30441-S2	101.146	101.422	90.739	91.985	93.019	97.362	96.26	100.167
18:53	JD36533-1	103.149	103.603	92.907	93.688	94.327	99.144	97.208	101.257
18:56	ZZZZZZ	105.582	105.063	99.743	99.689	100.287	104.951	102.1	105.712
18:59	JD36624-12	105.557	106.41	104.849	103.278	103.93	107.835	102.494	106.803
19:02	JD36624-13	104.501	106.579	102.077	101.549	103.087	106.175	101.037	104.859
19:06	JD36624-14	105.138	105.321	102.965	102.492	103.861	107.752	101.392	106.774
19:09	JD36624-15	86.202	101.354	84.684	82.035	95.475	94.19	85.381	97.725
19:12	JD36624-15	108.393	112.491	108.957	105.255	108.488	113.434	102.118	112.358
19:15	MA51719-CCVA3	106.82	111.219	105.961	102.237	105.219	110.611	100.309	109.682
19:18	MA51719-CCB3	105.628	107.921	109.396	105.902	107.158	111.749	103.491	110.158
19:22	JD36624-16	106.969	109.874	105.438	104.466	106.562	108.821	103.566	108.052
19:25	JD36624-17	100.663	107.146	99.641	97.372	101.135	105.093	96.565	107.329
19:28	JD36624-17	108.66	109.85	103.259	104.182	105.28	108.505	103.799	106.573
19:31	JD36624-12F	109.908	109.028	106.686	106.361	105.898	110.574	106.288	108.317
19:34	JD36624-13F	108.701	108.484	105.812	105.553	105.844	109.447	104.375	108.109
19:38	JD36624-14F	108.626	107.404	106.43	106.161	105.998	109.732	105.1	108.821
19:41	JD36624-15F	108.113	108.555	105.98	104.845	106.437	108.297	104.201	107.408
19:44	JD36624-16F	107.681	107.701	105.927	104.847	105.123	110.422	102.815	107.26
19:47	JD36624-17F	107.05	107.828	105.04	104.548	104.92	107.865	103.35	106.861
19:50	MA51719-CCVA4	107.528	108.401	103.846	102.653	103.644	108.404	101.233	107.547
19:53	MA51719-CCB4	106.738	105.894	106.765	107.228	106.458	110.1	105.043	108.385
19:57	MP30440-S1	108.564	108.842	103.814	105.549	106	106.973	105.66	106.694
20:00	MP30440-S2	107.536	105.666	104.454	104.018	103.808	107.678	103.08	107.726
20:03	JD36624-5	106.6	105.457	103.244	104.218	103.751	108.08	103.688	105.67
20:06	MP30440-SD1	108.013	105.81	104.443	105.058	104.941	107.138	105.337	105.009
20:10	JD36624-3	97.734	100.596	93.038	92.76	96.037	100.031	95.117	102.312
20:13	JD36624-3	106.347	105.713	99.695	100.849	101.3	104.377	102.919	105.62
20:16	JD36624-3	107.27	104.521	101.909	103.602	101.566	105.88	105.261	105.087
20:19	JD36624-4	105.349	104.194	103.303	102.778	103.275	105.531	103.153	105.192
20:22	JD36624-6	104.522	102.532	101.069	102.405	100.518	104.671	102.686	103.641
20:26	MA51719-CCVA5	105.152	105.152	100.976	99.819	100.919	104.827	101.033	106.068
20:29	MA51719-CCB5	103.452	102.754	103.06	103.585	104.136	106.47	103.554	105.816
20:32	JD36624-6	106.684	103.651	102.306	103.578	101.934	105.132	105.003	104.616

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
20:35	JD36624-7	106.356	103.709	102.988	103.366	102.7	105.311	103.431	104.675
20:38	JD36624-8	101.471	102.335	98.861	98.491	99.919	102.826	98.755	103.949
20:42	JD36624-8	105.941	103.098	100.986	101.972	100.709	104.981	102.797	103.755
20:45	JD36624-9	81.409	99.607	79.456	75.88	98.424	88.553	80.235	93.566
20:48	JD36624-9	101.352	109.021	100.209	96.397	102.867	108.199	95.89	107.83
20:51	JD36624-9	110.116	109.641	110.271	107.716	107.303	114.436	105.578	111.853
20:54	JD36624-10	106.398	108.271	107.133	104.345	105.636	111.115	102.745	109.27
20:57	JD36624-10	109.241	107.29	108.183	106.202	105.834	111.155	104.977	108.585
21:01	MA51719-CCVA6	105.915	107.038	103.327	100.85	103.286	108.457	100.325	108.574
21:04	MA51719-CCB6	106.189	104.694	106.358	105.973	104.372	108.731	105.415	107.691
21:07	JD36624-11	107.153	106.072	104.498	103.376	102.657	108.154	103.724	106.548
21:10	JD36624-11	108.915	105.535	104.763	105.524	102.914	108.516	106.104	106.704
21:14	JD36624-3F	98.944	100.411	94.934	92.952	95.938	101.363	96.154	103.715
21:17	JD36624-3F	105.534	102.707	99.79	99.033	98.581	104.64	101.908	104.738
21:20	JD36624-3F	108.123	102.31	103.311	103.233	100.759	105.834	105.877	104.789
21:23	JD36624-4F	105.16	102.45	102.252	101.469	100.915	104.983	102.012	103.957
21:26	JD36624-5F	103.768	102.157	102.032	101.24	101.005	105.805	101.75	104.025
21:30	JD36624-6F	103.227	100.602	99.333	101.384	99.163	102.601	100.448	102.221
21:33	JD36624-6F	105.536	99.995	101.505	101.54	98.193	105.417	103.003	102.808
21:36	MA51719-CCVA7	103.39	101.507	98.642	97.698	98.152	102.234	98.61	103.632
21:39	MA51719-CCB7	103.001	100.321	101.784	102.368	101.233	104.432	102.68	103.23
21:42	JD36624-7F	104.746	101.333	101.443	100.96	100.381	105.889	103.293	103.856
21:46	JD36624-8F	101.237	99.393	97.306	97.689	97.963	102.859	99.835	102.25
21:49	JD36624-8F	106.668	101.884	101.677	102.357	99.666	105.929	104.389	103.891
21:52	JD36624-9F	97.054	100.62	93.598	92.59	97.286	98.737	94.725	101.371
21:55	JD36624-9F	106.678	104.937	103.837	103.747	103.916	108.209	103.287	107.886
21:58	JD36624-10F	103.806	104.994	104.947	102.594	104.593	109.139	102.196	108.459
22:02	JD36624-10F	106.744	103.948	104.385	104.304	102.949	109.11	104.3	106.52
22:05	JD36624-11F	104.214	104.511	102.084	101.501	102.296	107.326	101.868	106.114
22:08	JD36624-11F	105.031	103.345	101.602	102.772	102.901	106.184	103.764	104.531
22:11	MA51719-CCVA8	104.052	103.28	99.612	97.866	100.146	104.605	99.66	103.798
22:14	MA51719-CCB8	102.837	100.915	102.781	102.523	102.042	107.058	102.016	104.652
22:18	MP30658A-MB1	97.771	101.562	103.76	101.709	103.791	106.953	99.785	107.877

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
22:21	MP30658A-B2	100.105	102.403	102.271	99.013	101.626	106.233	97.47	105.713
22:24	MP30658A-S3	92.934	98.811	89.6	86.686	93.752	97.083	90.563	101.247
22:27	MP30658A-S4	93.863	99.328	90.247	88.142	95.34	97.709	91.119	101.553
22:30	JD37399-2	91.254	95.989	90.934	88.982	94.22	98.042	91.801	102.136
22:33	MP30658A-SD1	106.237	102.065	99.711	101.518	99.361	104.782	104.452	104.75
22:37	ZZZZZZ	100.102	101.828	103.734	103.61	105.982	107.432	103.419	107.647
22:40	ZZZZZZ	102.913	104.757	103.366	101.103	103.174	106.604	101.762	108.708
22:43	MA51719-CCVA9	108.103	102.505	101.212	100.253	99.038	105.026	102.466	105.468
22:46	MA51719-CCB9	106.194	102.525	104.561	104.621	104.05	106.262	105.861	105.788
22:49	MP30561A-MB1	105.305	101.241	104.826	104.806	103.16	107.226	106.858	105.843
22:53	MP30561A-B2	101.663	103.019	102.928	99.188	100.49	105.495	99.608	106.6
22:56	MP30561A-S3	99.485	102.861	98.262	95.456	100.105	102.596	96.773	105.426
22:59	MP30561A-S4	98.79	102.526	96.776	94.913	98.64	102.644	95.283	103.979
23:02	JD37260-6F	96.067	99.978	97.76	95.604	99.446	103.225	96.278	105.983
23:06	MP30561A-SD1	104.303	101.329	101.204	101.118	102.136	105.442	103.122	104.531
23:09	ZZZZZZ	94.981	98.783	101.218	99.014	103.063	104.926	98.683	105.555
23:12	ZZZZZZ	96.478	100.855	101.095	98.386	103.045	105.068	98.936	106.928
23:15	ZZZZZZ	94.882	98.936	98.703	96.235	99.688	103.212	96.152	104.869
23:18	MA51719-CCVA10	106.936	102.53	100.543	100.631	100.096	104.281	103.035	105.278
23:21	MA51719-CCB10	103.128	99.87	102.452	103.403	102.558	105.719	104.845	104.56
23:25	ZZZZZZ	95.491	99.91	98.389	95.826	101.285	102.675	97.268	104.199
23:28	ZZZZZZ	97.438	101.742	99.099	97.875	100.918	104.085	97.717	104.729
23:31	ZZZZZZ	97.071	100.075	99.538	96.96	100.271	104.152	96.959	104.896
23:34	ZZZZZZ	94.914	99.862	97.844	95.378	100.421	102.85	95.563	104.241
23:38	ZZZZZZ	95.218	99.572	97.898	95.772	101.237	103.669	96.979	104.827
23:41	ZZZZZZ	94.34	98.69	97.465	95.784	99.784	102.247	95.897	104.91
23:44	ZZZZZZ	94.594	100.29	97.144	94.637	100.907	101.966	96.066	104.755
23:47	ZZZZZZ	95.544	99.384	101.623	100.426	103.36	104.001	98.873	104.883
23:50	MA51719-CCVA11	105.921	102.584	99.919	99.935	99.943	104.245	102.939	105.273
23:54	MA51719-CCB11	104.806	100.562	103.259	103.57	102.755	106.212	105.481	104.549
23:57	MP30560A-MB1	103.081	99.201	103.944	104.305	102.776	105.838	105.393	104.164
00:00	MP30560A-B2	99.789	102.246	100.698	98.574	100.832	104.364	99.113	105.76
00:03	MP30560A-S3	96.944	100.664	94.606	92.806	98.014	99.762	94.174	103.515

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
00:06	MP30560A-S4	96.083	100.922	94.105	92.631	97.417	99.788	93.753	102.963
00:10	JD37096-1	95.132	100.146	95.038	93.694	98.199	101.464	94.075	103.891
00:13	MP30560A-SD1	103.34	100.503	100.027	99.588	100.456	104.382	101.585	104.252
00:16	ZZZZZZ	93.855	99.649	94.031	92.748	98.759	101.184	93.532	103.083
00:19	ZZZZZZ	95.193	98.526	100.451	98.911	102.687	103.888	99.03	105.72
00:23	ZZZZZZ	94.134	99.31	98.273	96.098	100.926	103.303	95.592	104.405
00:26	ZZZZZZ	94.088	98.749	97.188	95.616	99.604	102.032	96.756	104.575
00:29	MA51719-CCVA12	102.55	98.895	98.037	96.837	97.969	102.018	99.72	102.524
00:32	MA51719-CCB12	101.745	98.147	100.74	102.234	101.522	103.581	104.053	103.545
00:35	ZZZZZZ	87.777	93.988	90.212	87.721	95.308	95.988	90.361	100.785
00:39	ZZZZZZ	85.227	92.721	85.707	83.599	94.623	92.867	88.037	99.173
00:42	ZZZZZZ	73.173	83.184	63.78 !	58.652 !	93.662	70.729	69.808 !	69.301 !
00:45	ZZZZZZ	88.025	96.309	76.7	74.043	104.672	84.358	85.498	83.754
00:48	ZZZZZZ	89.665	93.637	88.357	85.279	95.712	95.674	92.686	99.92
00:51	ZZZZZZ	89.678	95.702	86.829	86.303	98.257	94.337	92.268	99.153
00:54	ZZZZZZ	89.742	96.067	89.974	88.174	97.704	96.409	93.689	100.946
00:57	ZZZZZZ	100.157	101.469	103.521	103.421	106.693	108.052	104.687	107.627
01:01	ZZZZZZ	106.141	99.709	105.831	106.08	103.021	108.025	109.478	106.658
01:04	ZZZZZZ	100.547	100.675	99.496	98.697	101.059	103.029	100.859	103.821
01:07	MA51719-CCVA13	105.881	100.103	97.309	98.421	98.275	100.548	102.399	101.204
01:10	MA51719-CCB13	103.491	97.376	99.477	102.837	100.724	102.828	104.926	102.096
01:14	ZZZZZZ	106.549	97.661	99.981	102.942	101.197	102.47	107.351	101.185
01:17	ZZZZZZ	104.202	96.872	100.74	104.948	100.947	103.654	108.435	102.663
01:20	ZZZZZZ	105.275	96.609	98.714	102.632	99.496	101.847	108.028	99.429
01:24	ZZZZZZ	104.556	94.955	98.068	102.491	98.597	100.457	106.086	99.543
01:27	ZZZZZZ	104.307	96.057	97.857	101.106	99.085	100.359	106.439	98.985
01:30	ZZZZZZ	102.786	94.799	97.75	101.027	98.442	100.619	104.895	99.6
01:34	MA51719-CCVA14	102.568	98.374	96.316	96.13	97.218	99.305	100.114	100.547
01:37	MA51719-CCB14	101.898	96.106	99.415	101.274	99.849	102.751	104.164	100.799
01:40	ZZZZZZ	103.798	95.48	97.11	101.367	98.621	99.679	104.939	98.445
01:43	ZZZZZZ	102.81	94.61	97.44	99.842	98.556	99.068	105.031	98.831
01:47	ZZZZZZ	102.199	94.907	97.083	101.25	98.269	100.806	105.293	99.771
01:50	ZZZZZZ	102.76	93.748	97.818	100.939	97.284	99.679	105.62	99.497

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
01:54	ZZZZZZ	102.869	94.378	98.085	100.079	97.668	99.747	105.281	98.958
01:57	ZZZZZZ	102.265	93.706	97.657	100.05	97.427	100.059	104.437	99.265
02:00	MA51719-CCVA15	100.692	97.253	95.807	95.567	96.241	99.285	100.438	101.678
02:03	MA51719-CCB15	100.075	95.02	99.188	99.528	99.169	102.112	102.17	101.245
02:07	ZZZZZZ	99.682	94.646	98.024	100.404	98.861	102.052	103.364	100.577
02:10	MP30717-B1	102.889	97.855	96.887	97.281	96.966	101.184	101.103	101.266
02:13	MP30717-S1	97.989	95.402	88.138	88	90.614	95.373	95.722	97.819
02:16	MP30717-S2	97.34	95.697	88.227	87.887	92.265	95.277	94.191	98.903
02:19	JD37867-1	92.068	92.142	87.116	86.643	91.598	94.687	92.584	97.368
02:22	ZZZZZZ	91.008	91.94	85.862	86.323	91.824	93.21	93.457	97.507
02:26	ZZZZZZ	91.085	91.211	86.806	86.975	91.25	94.409	94.801	96.833
02:29	MP30717-MB1	96.302	92.879	97.195	96.909	96.996	100.279	99.406	100.292
02:32	MA51719-CCVA16	99.622	95.903	95.439	94.588	96.096	99.793	98.393	102.518
02:35	MA51719-CCB16	97.691	94.377	97.4	97.888	98.506	101.113	100.907	99.994
02:38	ZZZZZZ	97.919	93.391	97.893	98.227	97.751	100.596	101.802	100.572
02:41	ZZZZZZ	96.968	93.457	98.024	98.184	97.845	100.187	100.871	100.357
02:45	ZZZZZZ	96.259	93.069	98.145	97.596	97.398	101.417	100.307	100.222

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	60-125 %	60-125 %
Istd#10	Germanium (74-3)	60-125 %	60-125 %
Istd#11	Rhodium (103-1)	60-125 %	60-125 %
Istd#12	Rhodium (103-2)	60-125 %	60-125 %
Istd#13	Rhodium (103-3)	60-125 %	60-125 %
Istd#14	Indium (115-1)	60-125 %	60-125 %
Istd#15	Indium (115-2)	60-125 %	60-125 %
Istd#16	Terbium (159-1)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
16:48	MA51719-STD1	100	100	100	100	100	100
16:52	MA51719-STD2	100	100	100	100	100	100
16:55	MA51719-STD3	100	100	100	100	100	100
16:59	MA51719-STD4	99.946	98.689	99.395	99.782	98.8	99.209
17:03	MA51719-STD5	99.754	98.831	99.331	99.932	99.329	98.626
17:07	MA51719-STD6	98.52	96.992	97.462	97.902	98.383	97.593
17:11	MA51719-STD7	98.064	97.086	97.589	98.5	98.232	98.082
17:14	MA51719-STD8	97.266	97.379	97.486	98.103	98.423	97.394
17:18	MA51719-STD9	98.654	98.029	97.969	97.905	97.258	97.402
17:21	MA51719-STD10	99.437	98.327	98.102	99.547	97.668	97.916
17:25	MA51719-STD11	98.918	98.646	97.645	99.126	95.454	94.307
17:28	MA51719-STD12	97.689	97.24	97.585	98.823	93.092	92.78
17:37	ZZZZZZ	101.007	99.595	100.799	100.929	100.085	99.983
17:40	MA51719-ICVA1	99.25	97.852	99.163	99.245	96.647	94.545
17:43	MA51719-ICV1	100.543	98.395	99.59	101.342	99.795	100.106
17:47	MA51719-ICB1	100.949	98.939	99.446	100.334	99.148	99.873
17:50	MA51719-CRI1	100.636	98.939	98.506	100.734	99.233	99.11
17:53	MA51719-ICSA1	92.706	105.607	94.532	92.799	79.861	77.869
17:57	MA51719-ICSAB1	92.944	103.433	96.249	94.267	80.853	77.977
18:00	ZZZZZZ	100.537	101.704	101.361	101.636	101.284	100.12
18:03	ZZZZZZ	0.015 !	0.011 !	0.013 !	0.016 !	0.097 !	0.076 !
18:10	ZZZZZZ	252.822 !	167.046 !	334.35 !	253.581 !	329.246 !	256.106 !
18:14	MA51719-CCVA1	99.996	101.503	103.526	101.106	99.275	96.274
18:17	MA51719-CCB1	102.96	102.4	103.005	103.285	103.335	101.75
18:20	ZZZZZZ	96.362	98.256	98.23	96.775	93.054	90.488
18:23	ZZZZZZ	99.072	101.085	100.831	100.148	95.589	94.472
18:27	JD36624-3	91.337	100.378	95.499	91.822	77.583	74.866
18:30	JD36624-4	98.844	104.181	101.714	99.763	91.433	88.941
18:33	ZZZZZZ	104.755	104.015	107.715	106.005	105.66	104.597
18:36	ZZZZZZ	103.614	103.495	103.373	104.166	100.943	100.07
18:40	MA51719-CCVA2	103.835	103.042	104.029	104.114	101.101	98.862
18:43	MA51719-CCB2	102.742	102.196	103.778	104.002	103.356	103.181
18:46	MP30441-S1	98.369	98.858	99.314	99.138	85.965	85.304

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
18:49	MP30441-S2	98.011	98.359	100.812	98.995	86.609	84.432
18:53	JD36533-1	98.259	98.968	101.394	99.294	86.972	84.315
18:56	ZZZZZZ	103.516	102.202	105.033	104.185	98.322	96.801
18:59	JD36624-12	103.724	104.777	105.88	104.41	105.897	102.257
19:02	JD36624-13	102.877	103.39	104.364	103.801	103.42	101.25
19:06	JD36624-14	103.654	103.988	106.895	103.63	105.098	101.749
19:09	JD36624-15	89.929	105.079	98.162	91.262	82.631	76.91
19:12	JD36624-15	106.034	109.417	111.76	107.016	108.507	103.376
19:15	MA51719-CCVA3	104.57	108.144	110.404	105.746	103.61	99.527
19:18	MA51719-CCB3	105.655	107.119	109.439	106.875	107.634	104.059
19:22	JD36624-16	105.424	107.07	108.642	105.875	104.483	101.979
19:25	JD36624-17	101.688	106.233	107.403	102.874	97.376	92.87
19:28	JD36624-17	105.589	105.814	107.553	106.293	103.069	102.021
19:31	JD36624-12F	107.222	105.245	107.997	107.522	107.032	105.428
19:34	JD36624-13F	106.665	105.915	108.001	106.567	105.255	103.667
19:38	JD36624-14F	106.043	105.257	108.377	106.708	106.049	103.911
19:41	JD36624-15F	105.778	105.759	107.094	106.259	105.295	102.74
19:44	JD36624-16F	105.299	104.233	107.411	105.218	104.629	102.131
19:47	JD36624-17F	105.191	104.683	106.343	104.921	105.119	102.284
19:50	MA51719-CCVA4	104.77	104.483	107.253	105.361	101.751	99.57
19:53	MA51719-CCB4	104.664	104.37	107.433	105.057	106.867	103.988
19:57	MP30440-S1	106.363	105.798	105.868	105.731	104.106	102.783
20:00	MP30440-S2	104.888	103.092	107.249	105.055	104.9	101.604
20:03	JD36624-5	104.638	103.267	104.931	105.122	103.905	102.813
20:06	MP30440-SD1	104.847	103.918	105.285	105.075	105.827	103.94
20:10	JD36624-3	99.436	102.006	103.02	100.089	89.678	86.563
20:13	JD36624-3	104.037	103.555	104.577	104.807	98.931	97.801
20:16	JD36624-3	104.143	103.225	105.098	104.794	104.283	103.323
20:19	JD36624-4	104.098	102.914	104.837	104.76	103.306	102.145
20:22	JD36624-6	104.157	101.477	103.828	103.753	102.018	100.762
20:26	MA51719-CCVA5	103.254	104.536	105.081	104.542	101.584	98.82
20:29	MA51719-CCB5	104.646	102.898	104.476	104.516	104.535	103.363
20:32	JD36624-6	104.63	101.254	103.869	104.515	103.946	103.05

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
20:35	JD36624-7	104.142	102.25	103.854	104.453	103.803	102.363
20:38	JD36624-8	101.725	102.653	103.931	102.552	99.529	97.877
20:42	JD36624-8	103.076	101.834	103.457	103.555	104.521	103.176
20:45	JD36624-9	84.936	109.814	93.478	84.848	74.751	68.264 !
20:48	JD36624-9	100.724	106.41	107.727	101.895	95.45	90.491
20:51	JD36624-9	108.393	106.024	110.85	107.445	108.312	105.275
20:54	JD36624-10	105.17	107.162	109.639	106.71	105.837	102.497
20:57	JD36624-10	106.37	104.688	107.528	106.44	106.327	105.31
21:01	MA51719-CCVA6	103.981	104.132	107.631	104.826	103.054	99.454
21:04	MA51719-CCB6	105.928	103.851	107.212	106.177	105.522	104.549
21:07	JD36624-11	105.56	104.228	107.159	105.798	103.578	102.186
21:10	JD36624-11	105.477	102.634	106.128	105.611	105.784	104.513
21:14	JD36624-3F	100.205	100.576	103.307	100.24	89.896	86.776
21:17	JD36624-3F	102.841	101.353	104.145	104.333	98.334	97.15
21:20	JD36624-3F	105.34	101.116	104.274	104.942	102.859	101.871
21:23	JD36624-4F	103.153	101.482	103.613	103.445	102.755	100.827
21:26	JD36624-5F	102.642	100.678	104.529	102.91	102.405	100.633
21:30	JD36624-6F	101.991	99.558	102.621	103.006	99.541	99.055
21:33	JD36624-6F	101.986	98.801	102.171	101.915	102.9	101.028
21:36	MA51719-CCVA7	100.751	99.928	103.41	102.088	98.884	96.999
21:39	MA51719-CCB7	102.773	100.731	102.998	103.536	102.146	102.308
21:42	JD36624-7F	103.665	99.952	104.002	103.342	103.315	100.854
21:46	JD36624-8F	101.121	100.14	102.236	101.5	99.181	96.902
21:49	JD36624-8F	102.809	100.702	104.503	104.455	104.443	102.847
21:52	JD36624-9F	99.333	102.108	101.212	99.898	92.125	89.426
21:55	JD36624-9F	104.734	104.653	107.476	106.096	105.735	103.978
21:58	JD36624-10F	102.766	104.892	107.04	103.712	104.238	100.119
22:02	JD36624-10F	104.611	102.421	105.365	104.992	105.829	103.281
22:05	JD36624-11F	103.098	103.744	105.987	103.941	103.911	100.47
22:08	JD36624-11F	103.973	102.948	103.928	104.124	103.946	103.225
22:11	MA51719-CCVA8	102.26	101.71	103.734	103.28	99.765	97.62
22:14	MA51719-CCB8	103.585	101.186	104.354	103.53	104.325	100.987
22:18	MP30658A-MB1	103.231	104.915	106.956	103.667	103.096	99.07

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
22:21	MP30658A-B2	102.046	102.429	106.479	103.235	100.803	97.02
22:24	MP30658A-S3	96.2	102.602	101.352	96.984	88.705	83.526
22:27	MP30658A-S4	97.329	103.643	101.716	97.843	88.382	84.445
22:30	JD37399-2	96.805	102.159	101.651	98.531	88.616	84.657
22:33	MP30658A-SD1	105.561	103.29	103.778	106.699	100.327	100.007
22:37	ZZZZZZ	106.621	105.97	106.837	106.678	103.36	101.401
22:40	ZZZZZZ	104.603	105.262	107.844	105.176	102.411	98.331
22:43	MA51719-CCVA9	103.771	101.676	105.68	104.806	100.899	98.323
22:46	MA51719-CCB9	105.325	103.116	106.05	106.523	104.98	103.479
22:49	MP30561A-MB1	105.23	102.007	104.486	105.405	105.111	103.086
22:53	MP30561A-B2	104.121	104.049	106.013	105.29	100.361	97.204
22:56	MP30561A-S3	101.871	104.951	105.377	102.658	97.061	94.17
22:59	MP30561A-S4	101.596	103.754	104.185	101.431	96.202	93.288
23:02	JD37260-6F	102.156	105.16	105.306	102.848	98.84	94.964
23:06	MP30561A-SD1	103.526	102.167	103.741	104.316	105.141	102.633
23:09	ZZZZZZ	103.05	104.527	105.418	103.032	101.513	98.496
23:12	ZZZZZZ	103.518	104.819	105.866	104.203	100.952	97.861
23:15	ZZZZZZ	101.077	103.95	105.936	101.488	99.324	95.097
23:18	MA51719-CCVA10	104.118	102.189	105.157	104.779	100.641	99.089
23:21	MA51719-CCB10	104.474	102.052	103.975	104.316	104.459	103.588
23:25	ZZZZZZ	102.217	103.889	104.241	103.047	99.656	95.784
23:28	ZZZZZZ	102.654	103.79	105.34	102.797	99.161	97.374
23:31	ZZZZZZ	102.701	103.264	105.086	102.8	98.808	95.753
23:34	ZZZZZZ	101.897	105.056	104.586	101.225	97.48	94.271
23:38	ZZZZZZ	102.271	104.955	104.599	101.906	99.838	96.465
23:41	ZZZZZZ	100.684	104.725	104.231	101.325	98.759	95.48
23:44	ZZZZZZ	100.756	105.367	105.215	102.203	97.46	93.741
23:47	ZZZZZZ	103.199	104.516	105.868	102.87	102.284	98.767
23:50	MA51719-CCVA11	103.97	102.137	103.821	103.556	100.359	98.623
23:54	MA51719-CCB11	104.512	102.937	103.968	105.752	104.056	103.317
23:57	MP30560A-MB1	104.437	102.69	103.957	105.189	103.813	102.718
00:00	MP30560A-B2	103.207	104.036	105.73	103.29	99.849	96.888
00:03	MP30560A-S3	100.492	103.139	103.664	100.245	93.749	90.564

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
00:06	MP30560A-S4	98.899	102.932	103.095	99.907	93.119	90.267
00:10	JD37096-1	100.381	103.905	103.162	100.776	95.084	92.353
00:13	MP30560A-SD1	102.798	101.656	103.595	103.25	102.783	100.432
00:16	ZZZZZZ	100.129	103.933	103.828	100.556	94.458	91.481
00:19	ZZZZZZ	103.095	104.496	105.606	102.931	101.396	98.755
00:23	ZZZZZZ	100.904	104.627	104.114	101.044	99.8	95.577
00:26	ZZZZZZ	101.485	104.365	104.688	102.245	99.261	96.199
00:29	MA51719-CCVA12	101.412	100.615	103.206	102.263	99.611	96.994
00:32	MA51719-CCB12	103.341	101.15	103.251	103.78	103.869	101.859
00:35	ZZZZZZ	96.661	102.605	99.891	97.689	89.915	86.286
00:39	ZZZZZZ	93.772	104.738	99.508	95.537	84.222	79.797
00:42	ZZZZZZ	63.601 !	111.742	68.095 !	63.708 !	46.752 !a	43.887 !
00:45	ZZZZZZ	80.714	122.528	83.191	80.605	58.907 !a	57.806 !
00:48	ZZZZZZ	96.31	106.425	100.259	97.118	81.839	80.055
00:51	ZZZZZZ	96.918	108.869	98.626	98.853	82.907	81.961
00:54	ZZZZZZ	99.081	107.961	101.606	99.064	87.416	85.431
00:57	ZZZZZZ	107.576	108.634	107.024	108.029	102.78	102.595
01:01	ZZZZZZ	106.368	103.551	106.347	107.233	104.47	104.984
01:04	ZZZZZZ	104.379	105.025	103.404	104.748	98.212	98.14
01:07	MA51719-CCVA13	102.232	100.609	101.009	102.989	97.082	96.765
01:10	MA51719-CCB13	102.52	100.798	100.781	103.433	101.027	101.157
01:14	ZZZZZZ	102.612	98.962	99.986	102.845	100.769	102.431
01:17	ZZZZZZ	105.632	100.208	100.974	107.089	100.201	102.807
01:20	ZZZZZZ	103.378	98.737	100.568	104.171	99.978	103.436
01:24	ZZZZZZ	103.529	97.239	98.806	103.682	99.498	101.886
01:27	ZZZZZZ	102.377	98.1	98.763	103.051	100.856	101.429
01:30	ZZZZZZ	103.324	98.113	98.807	103.918	99.176	101.849
01:34	MA51719-CCVA14	100.983	99.435	99.892	101.555	97.034	96.469
01:37	MA51719-CCB14	101.986	99.607	100.096	102.69	100.401	101.405
01:40	ZZZZZZ	102.222	99.007	98.417	102.732	100.88	102.475
01:43	ZZZZZZ	101.151	97.993	97.526	101.673	98.974	101.647
01:47	ZZZZZZ	102.364	97.857	99.82	103.889	100.241	101.46
01:50	ZZZZZZ	102.672	97.386	99.112	102.515	100.351	102.044

INTERNAL STANDARD SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
Analyst: MET Run ID: MA51719
Parameters: Al,Ba,Ca,Fe,Pb,Mg,Mn,K,Se,Na,Tl

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
01:54	ZZZZZZ	101.966	98.102	99.188	102.525	101.219	102.516
01:57	ZZZZZZ	101.53	97.997	98.914	102.431	100.828	101.589
02:00	MA51719-CCVA15	99.854	99.436	100.963	101.108	98.126	95.991
02:03	MA51719-CCB15	101.924	99.754	100.64	101.897	101.31	100.819
02:07	ZZZZZZ	102.078	99.93	101.086	103.464	102.019	101.553
02:10	MP30717-B1	102.288	99.803	101.967	102.503	98.67	97.562
02:13	MP30717-S1	97.123	99.187	97.572	98.581	89.02	87.14
02:16	MP30717-S2	97.296	100.44	98.447	98.521	89.158	87.444
02:19	JD37867-1	97.105	100.9	97.336	97.223	88.752	87.418
02:22	ZZZZZZ	95.934	101.193	97.792	97.288	88.411	86.852
02:26	ZZZZZZ	96.686	100.179	97.321	98.187	89.302	88.042
02:29	MP30717-MB1	99.658	99.953	100.074	101.12	101.047	99.818
02:32	MA51719-CCVA16	101.559	100.736	101.752	101.122	98.136	96.87
02:35	MA51719-CCB16	100.324	100.453	99.723	101.132	100.222	100.952
02:38	ZZZZZZ	102.105	99.302	100.115	101.487	101.598	100.575
02:41	ZZZZZZ	100.641	99.724	100.376	101.359	100.421	100.319
02:45	ZZZZZZ	100.506	100.01	100.446	100.987	100.661	99.418

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	60-125 %	60-125 %
Istd#18	Terbium (159-3)	60-125 %	60-125 %
Istd#19	Holmium (165-1)	60-125 %	60-125 %
Istd#20	Holmium (165-2)	60-125 %	60-125 %
Istd#21	Bismuth (209-1)	60-125 %	60-125 %
Istd#22	Bismuth (209-2)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51719 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	17:47 ICB1 raw	final	18:17 CCB1 raw	final	18:43 CCB2 raw	final	19:18 CCB3 raw	final
Aluminum	25	.27	-0.846	<25	0.284	<25	-0.320	<25	-0.655	<25
Antimony	2.0	.022								
Arsenic	0.50	.009	anr							
Barium	1.0	.009	-0.00267	<1.0	-0.000943	<1.0	0.00277	<1.0	0.0116	<1.0
Beryllium	0.50	.003								
Boron	25	.87								
Calcium	250	7.6	-1.50	<250	-1.64	<250	0.281	<250	1.00	<250
Chromium	1.0	.015								
Cobalt	0.50	.002								
Copper	2.0	.012	anr							
Iron	25	.56	0.0816	<25	1.86	<25	1.05	<25	0.483	<25
Lead	0.50	.007	0.00565	<0.50	0.00965	<0.50	0.0215	<0.50	0.00851	<0.50
Magnesium	250	.37	-0.472	<250	0.327	<250	-0.127	<250	2.74	<250
Manganese	1.0	.009	-0.00993	<1.0	-0.00644	<1.0	-0.00393	<1.0	-0.00622	<1.0
Molybdenum	1.0	.027								
Nickel	1.0	.008								
Potassium	250	1.2	-0.330	<250	0.631	<250	0.244	<250	-0.446	<250
Selenium	0.50	.35	0.0417	<0.50	0.0282	<0.50	0.0392	<0.50	0.0407	<0.50
Silver	0.50	.002								
Sodium	250	.53	-0.563	<250	1.04	<250	3.13	<250	10.1	<250
Strontium	5.0	.016								
Thallium	0.50	.009	-0.132	<0.50	-0.0174	<0.50	0.128	<0.50	0.0546	<0.50
Tin	5.0	.035								
Titanium	1.0	.045								
Vanadium	1.0	.017								
Zinc	5.0	.048								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51719 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	19:53 CCB4 raw	final	20:29 CCB5 raw	final	21:04 CCB6 raw	final	21:39 CCB7 raw	final
Aluminum	25	.27	-0.795	<25	-0.823	<25	-0.784	<25	-0.659	<25
Antimony	2.0	.022								
Arsenic	0.50	.009	anr							
Barium	1.0	.009	0.000450	<1.0	-0.00163	<1.0	0.00827	<1.0	0.00403	<1.0
Beryllium	0.50	.003								
Boron	25	.87								
Calcium	250	7.6	-0.811	<250	-1.04	<250	-0.362	<250	-0.717	<250
Chromium	1.0	.015								
Cobalt	0.50	.002								
Copper	2.0	.012	anr							
Iron	25	.56	0.553	<25	0.187	<25	0.456	<25	0.643	<25
Lead	0.50	.007	0.0109	<0.50	0.00913	<0.50	0.00783	<0.50	0.00636	<0.50
Magnesium	250	.37	-0.449	<250	-1.09	<250	0.247	<250	-0.202	<250
Manganese	1.0	.009	-0.00256	<1.0	-0.00371	<1.0	-0.0000716	<1.0	0.00493	<1.0
Molybdenum	1.0	.027								
Nickel	1.0	.008								
Potassium	250	1.2	-0.737	<250	-0.549	<250	0.247	<250	0.925	<250
Selenium	0.50	.35	0.0840	<0.50	0.0402	<0.50	0.0233	<0.50	0.0538	<0.50
Silver	0.50	.002								
Sodium	250	.53	2.01	<250	2.26	<250	4.32	<250	3.10	<250
Strontium	5.0	.016								
Thallium	0.50	.009	-0.0688	<0.50	-0.00279	<0.50	0.0527	<0.50	-0.0261	<0.50
Tin	5.0	.035								
Titanium	1.0	.045								
Vanadium	1.0	.017								
Zinc	5.0	.048								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA51719 Units: ug/l

Time:			22:14	
Sample ID:			CCB8	
Metal	RL	IDL	raw	final
Aluminum	25	.27	-0.810	<25
Antimony	2.0	.022		
Arsenic	0.50	.009	anr	
Barium	1.0	.009	-0.000380	<1.0
Beryllium	0.50	.003		
Boron	25	.87		
Calcium	250	7.6	-0.963	<250
Chromium	1.0	.015		
Cobalt	0.50	.002		
Copper	2.0	.012	anr	
Iron	25	.56	0.386	<25
Lead	0.50	.007	0.00446	<0.50
Magnesium	250	.37	-0.323	<250
Manganese	1.0	.009	-0.00222	<1.0
Molybdenum	1.0	.027		
Nickel	1.0	.008		
Potassium	250	1.2	0.635	<250
Selenium	0.50	.35	0.0494	<0.50
Silver	0.50	.002		
Sodium	250	.53	2.34	<250
Strontium	5.0	.016		
Thallium	0.50	.009	-0.0714	<0.50
Tin	5.0	.035		
Titanium	1.0	.045		
Vanadium	1.0	.017		
Zinc	5.0	.048		

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51719 Units: ug/l

Time:		17:40			17:43			18:14	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	5320	96.7	60	60.6	101.0	5000	4980	99.6
Antimony									
Arsenic	anr								
Barium	60	58.4	97.3				50	47.2	94.4
Beryllium									
Boron									
Calcium	5500	5350	97.3				5000	5000	100.0
Chromium									
Cobalt									
Copper	anr								
Iron	5500	5390	98.0				5000	5180	103.6
Lead	60	58.3	97.2				50	48.3	96.6
Magnesium	5500	5290	96.2				5000	5080	101.6
Manganese	60	57.2	95.3				50	49.5	99.0
Molybdenum									
Nickel									
Potassium	5500	5270	95.8				5000	5090	101.8
Selenium	260	247	95.0				200	203	101.5
Silver									
Sodium	5500	5320	96.7				5000	5150	103.0
Strontium									
Thallium	60	61.0	101.7				50	51.1	102.2
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51719 Units: ug/l

Time:		18:40			19:15			19:50	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4810	96.2	5000	4630	92.6	5000	4670	93.4
Antimony									
Arsenic	anr								
Barium	50	51.6	103.2	50	49.9	99.8	50	49.8	99.6
Beryllium									
Boron									
Calcium	5000	5160	103.2	5000	5010	100.2	5000	5050	101.0
Chromium									
Cobalt									
Copper	anr								
Iron	5000	4980	99.6	5000	4870	97.4	5000	4790	95.8
Lead	50	50.8	101.6	50	49.5	99.0	50	49.6	99.2
Magnesium	5000	4890	97.8	5000	4890	97.8	5000	4790	95.8
Manganese	50	48.0	96.0	50	46.7	93.4	50	45.8	91.6
Molybdenum									
Nickel									
Potassium	5000	4870	97.4	5000	4790	95.8	5000	4770	95.4
Selenium	200	199	99.5	200	200	100.0	200	201	100.5
Silver									
Sodium	5000	4930	98.6	5000	4950	99.0	5000	4890	97.8
Strontium									
Thallium	50	51.7	103.4	50	51.1	102.2	50	51.0	102.0
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51719 Units: ug/l

Time:		20:26			21:01			21:36	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4720	94.4	5000	4830	96.6	5000	4880	97.6
Antimony									
Arsenic	anr								
Barium	50	49.1	98.2	50	49.7	99.4	50	50.1	100.2
Beryllium									
Boron									
Calcium	5000	5040	100.8	5000	5050	101.0	5000	5140	102.8
Chromium									
Cobalt									
Copper	anr								
Iron	5000	4750	95.0	5000	4890	97.8	5000	4930	98.6
Lead	50	48.9	97.8	50	49.6	99.2	50	49.6	99.2
Magnesium	5000	4780	95.6	5000	4910	98.2	5000	4960	99.2
Manganese	50	45.9	91.8	50	47.1	94.2	50	47.6	95.2
Molybdenum									
Nickel									
Potassium	5000	4730	94.6	5000	4850	97.0	5000	4910	98.2
Selenium	200	201	100.5	200	201	100.5	200	200	100.0
Silver									
Sodium	5000	4880	97.6	5000	4950	99.0	5000	4980	99.6
Strontium									
Thallium	50	50.2	100.4	50	51.5	103.0	50	51.7	103.4
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA51719 Units: ug/l

Time:		22:11	
Sample ID:	CCVA	CCVA8	
Metal	True	Results	% Rec
Aluminum	5000	4840	96.8
Antimony			
Arsenic	anr		
Barium	50	50.0	100.0
Beryllium			
Boron			
Calcium	5000	5120	102.4
Chromium			
Cobalt			
Copper	anr		
Iron	5000	4880	97.6
Lead	50	49.6	99.2
Magnesium	5000	4940	98.8
Manganese	50	46.8	93.6
Molybdenum			
Nickel			
Potassium	5000	4850	97.0
Selenium	200	201	100.5
Silver			
Sodium	5000	4970	99.4
Strontium			
Thallium	50	51.5	103.0
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51719 Units: ug/l

Time:			17:50	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	27.4	109.6
Antimony	2.0	0.25		
Arsenic	0.50	0.50	anr	
Barium	1.0	0.50	0.997	99.7
Beryllium	0.50	0.25		
Boron	25	2.5		
Calcium	250	125	267	106.8
Chromium	1.0	2.0		
Cobalt	0.50	0.25		
Copper	2.0	2.0	anr	
Iron	25	25	27.9	111.6
Lead	0.50	0.25	0.559	111.8
Magnesium	250	125	256	102.4
Manganese	1.0	0.25	0.950	95.0
Molybdenum	1.0	0.50		
Nickel	1.0	2.0		
Potassium	250	125	247	98.8
Selenium	0.50	0.50	0.586	117.2
Silver	0.50	1.0		
Sodium	250	125	247	98.8
Strontium	5.0	0.50		
Thallium	0.50	0.25	0.475	95.0
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0		
Zinc	5.0	2.0		

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: XB011122M3.CSV Date Analyzed: 01/11/22 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA51719 Units: ug/l

Time:			17:53		17:57	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	92100	92.1	93800	93.8
Antimony			0.0476		0.173	
Arsenic		20	0.0896		17.8	89.0
Barium			0.129		0.154	
Beryllium			0.000675		0.00131	
Boron		50	1.63		46.0	92.0
Calcium	100000	100000	95200	95.2	97700	97.7
Chromium		20	0.761		20.0	100.0
Cobalt		20	-0.865*		17.4	87.0
Copper		20	0.182		16.4	82.0
Iron	100000	100000	91500	91.5	94300	94.3
Lead			0.0447		0.0560	
Magnesium	100000	100000	90900	90.9	93700	93.7
Manganese		20	0.106		18.8	94.0
Molybdenum	2000	2000	2030HH	101.5	2120HH	106.0
Nickel		20	0.432		17.5	87.5
Potassium	100000	100000	93800	93.8	98100	98.1
Selenium		20	0.108		19.3	96.5
Silver		20	0.0202		18.4	92.0
Sodium	100000	100000	93900	93.9	96500	96.5
Strontium	2000	2000	2060HH	103.0	2120HH	106.0
Thallium			0.477		0.497	
Tin	2000	2000	1760HH	88.0	1790HH	89.5
Titanium	2000	2000	1720HH	86.0	1780HH	89.0
Vanadium		20	0.0685		20.6	103.0
Zinc		20	0.603		16.7	83.5

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30380
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/15/21

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.034	.095	0.0044	<0.20

Associated samples MP30380: JD36624-2, JD36624-3, JD36624-4, JD36624-2F, JD36624-3F, JD36624-4F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30380
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/15/21

Metal	JD36567-4 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	2.3	2	115.0	75-125

Associated samples MP30380: JD36624-2, JD36624-3, JD36624-4, JD36624-2F, JD36624-3F, JD36624-4F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30380 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/15/21

Metal	JD36567-4 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.2	2	110.0	4.4	20

Associated samples MP30380: JD36624-2, JD36624-3, JD36624-4, JD36624-2F, JD36624-3F, JD36624-4F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30380
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/15/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	2.3	2	115.0	80-120

Associated samples MP30380: JD36624-2, JD36624-3, JD36624-4, JD36624-2F, JD36624-3F, JD36624-4F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30381
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/15/21

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.034	.095	0.0011	<0.20

Associated samples MP30381: JD36624-5, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13, JD36624-14, JD36624-5F, JD36624-6F, JD36624-7F, JD36624-8F, JD36624-9F, JD36624-10F, JD36624-11F, JD36624-12F, JD36624-13F, JD36624-14F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30381
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/15/21

Metal	JD36624-5 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	2.2	2	110.0	75-125

Associated samples MP30381: JD36624-5, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13, JD36624-14, JD36624-5F, JD36624-6F, JD36624-7F, JD36624-8F, JD36624-9F, JD36624-10F, JD36624-11F, JD36624-12F, JD36624-13F, JD36624-14F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30381
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/15/21

Metal	JD36624-5 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.2	2	110.0	0.0	20

Associated samples MP30381: JD36624-5, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13, JD36624-14, JD36624-5F, JD36624-6F, JD36624-7F, JD36624-8F, JD36624-9F, JD36624-10F, JD36624-11F, JD36624-12F, JD36624-13F, JD36624-14F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30381
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/15/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	2.2	2	110.0	80-120

Associated samples MP30381: JD36624-5, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13, JD36624-14, JD36624-5F, JD36624-6F, JD36624-7F, JD36624-8F, JD36624-9F, JD36624-10F, JD36624-11F, JD36624-12F, JD36624-13F, JD36624-14F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30402 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/16/21

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.034	.095	0.0019	<0.20

Associated samples MP30402: JD36624-15, JD36624-16, JD36624-17, JD36624-15F, JD36624-16F, JD36624-17F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30402
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/16/21

Metal	JD36551-13 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	199	190	2	-450.0(a	75-125

Associated samples MP30402: JD36624-15, JD36624-16, JD36624-17, JD36624-15F, JD36624-16F, JD36624-17F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30402 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/16/21

Metal	JD36551-13 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	199	197	2	-100.0(a	3.6	20

Associated samples MP30402: JD36624-15, JD36624-16, JD36624-17, JD36624-15F, JD36624-16F, JD36624-17F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30402
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/16/21

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	2.0	2	100.0	80-120

Associated samples MP30402: JD36624-15, JD36624-16, JD36624-17, JD36624-15F, JD36624-16F, JD36624-17F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30440
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.83	32	-13	<50
Antimony	4.0	.17	1.7	-0.68	<4.0
Arsenic	1.0	.05	.39	-0.037	<1.0
Barium	2.0	.018	.73	-0.010	<2.0
Beryllium	1.0	.01	.15	-0.0074	<1.0
Boron	50	1.7	14		
Cadmium	1.0	.02	.17	0.051	<1.0
Calcium	500	7.2	200	-3.1	<500
Chromium	2.0	.036	.62	-0.033	<2.0
Cobalt	1.0	.006	.17	-0.00069	<1.0
Copper	4.0	.048	1.9	0.21	<4.0
Iron	50	.47	19	0.57	<50
Lead	1.0	.016	.52	-0.0028	<1.0
Magnesium	500	.38	46	2.1	<500
Manganese	2.0	.024	.63	0.061	<2.0
Molybdenum	2.0	.034	.45		
Nickel	2.0	.034	.95	-0.018	<2.0
Potassium	500	1.6	68	-1.7	<500
Selenium	1.0	.088	.55	0.073	<1.0
Silver	1.0	.008	.16	0.0012	<1.0
Sodium	500	3	470	25.2	<500
Strontium	10	.028	2.4		
Thallium	1.0	.004	.17	-0.00097	<1.0
Tin	10	.082	2.6		
Titanium	2.0	.22	1.6		
Vanadium	2.0	.026	1.8	-0.0060	<2.0
Zinc	10	.16	5.4	-0.068	<10

Associated samples MP30440: JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-3F, JD36624-4F, JD36624-5F, JD36624-6F, JD36624-7F, JD36624-8F, JD36624-9F, JD36624-10F, JD36624-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30440
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	JD36624-5 Original	MS	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	130	3950	4000	95.5	75-125
Antimony	0.0	87.8	80	109.8	75-125
Arsenic	2.2	80.7	80	97.5	75-125
Barium	42.2	128	80	103.9	75-125
Beryllium	0.0	86.5	80	108.1	75-125
Boron					
Cadmium	0.092	82.1	80	102.5	75-125
Calcium	112000	117000	4000	125.0	75-125
Chromium	4.9	92.1	80	106.0	75-125
Cobalt	0.43	83.7	80	104.1	75-125
Copper	0.79	83.0	80	101.0	75-125
Iron	559	4560	4000	100.0	75-125
Lead	0.37	89.5	80	111.3	75-125
Magnesium	43200	47500	4000	107.5	75-125
Manganese	177	238	80	76.3	75-125
Molybdenum					
Nickel	3.0	86.0	80	100.8	75-125
Potassium	2890	7040	4000	95.0	75-125
Selenium	0.57	340	400	84.9	75-125
Silver	0.064	88.7	80	110.8	75-125
Sodium	23100	27000	4000	97.5	75-125
Strontium					
Thallium	0.0	88.9	80	111.0	75-125
Tin					
Titanium					
Vanadium	1.1	86.6	80	106.9	75-125
Zinc	4.2	82.7	80	98.1	75-125

Associated samples MP30440: JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-3F, JD36624-4F, JD36624-5F, JD36624-6F, JD36624-7F, JD36624-8F, JD36624-9F, JD36624-10F, JD36624-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30440
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	JD36624-5 Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum	130	4150	4000	100.5	4.9	20
Antimony	0.0	94.7	80	118.4	7.6	20
Arsenic	2.2	84.6	80	102.4	4.7	20
Barium	42.2	140	80	118.9	9.0	20
Beryllium	0.0	93.7	80	117.1	8.0	20
Boron						
Cadmium	0.092	85.5	80	106.8	4.1	20
Calcium	112000	138000	4000	650.0(a)	16.5	20
Chromium	4.9	97.5	80	112.8	5.7	20
Cobalt	0.43	87.1	80	108.3	4.0	20
Copper	0.79	87.1	80	106.1	4.8	20
Iron	559	4820	4000	106.5	5.5	20
Lead	0.37	96.9	80	120.5	7.9	20
Magnesium	43200	53400	4000	255.0(a)	11.7	20
Manganese	177	254	80	96.3	6.5	20
Molybdenum						
Nickel	3.0	90.6	80	106.5	5.2	20
Potassium	2890	7600	4000	109.0	7.7	20
Selenium	0.57	353	400	88.1	3.8	20
Silver	0.064	96.7	80	120.8	8.6	20
Sodium	23100	30400	4000	182.5(a)	11.8	20
Strontium						
Thallium	0.0	95.5	80	119.2	7.2	20
Tin						
Titanium						
Vanadium	1.1	92.1	80	113.8	6.2	20
Zinc	4.2	87.5	80	104.1	5.6	20

Associated samples MP30440: JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-3F, JD36624-4F, JD36624-5F, JD36624-6F, JD36624-7F, JD36624-8F, JD36624-9F, JD36624-10F, JD36624-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30440
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	4110	4000	102.8	80-120
Antimony	94.6	80	118.3	80-120
Arsenic	84.2	80	105.3	80-120
Barium	90.5	80	113.1	80-120
Beryllium	92.5	80	115.6	80-120
Boron				
Cadmium	88.9	80	111.1	80-120
Calcium	4390	4000	109.8	80-120
Chromium	92.7	80	115.9	80-120
Cobalt	92.2	80	115.3	80-120
Copper	92.2	80	115.3	80-120
Iron	4650	4000	116.3	80-120
Lead	94.5	80	118.1	80-120
Magnesium	4180	4000	104.5	80-120
Manganese	92.5	80	115.6	80-120
Molybdenum				
Nickel	91.3	80	114.1	80-120
Potassium	4180	4000	104.5	80-120
Selenium	381	400	95.3	80-120
Silver	93.5	80	116.9	80-120
Sodium	4250	4000	106.3	80-120
Strontium				
Thallium	93.4	80	116.8	80-120
Tin				
Titanium				
Vanadium	92.1	80	115.1	80-120
Zinc	91.6	80	114.5	80-120

Associated samples MP30440: JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-3F, JD36624-4F, JD36624-5F, JD36624-6F, JD36624-7F, JD36624-8F, JD36624-9F, JD36624-10F, JD36624-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30440
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	JD36624-5 Original	SDL 2:10	%DIF	QC Limits
Aluminum	130	85.4	34.3*(a)	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	2.19	2.98	9.4	0-10
Barium	44.9	54.5	21.2*(a)	0-10
Beryllium	0.0573	0.0663	15.6 (b)	0-10
Boron				
Cadmium	0.0924	0.355	284.1(b)	0-10
Calcium	112000	115000	2.6	0-10
Chromium	7.32	7.64	4.4	0-10
Cobalt	0.434	0.440	1.4	0-10
Copper	2.15	2.77	28.9 (b)	0-10
Iron	559	559	0.1	0-10
Lead	0.371	0.591	17.7 (b)	0-10
Magnesium	43200	45300	4.9	0-10
Manganese	177	181	2.2	0-10
Molybdenum				
Nickel	3.01	5.16	3.5	0-10
Potassium	2890	3240	0.1	0-10
Selenium	0.573	0.00	100.0(b)	0-10
Silver	0.0608	0.00	100.0(b)	0-10
Sodium	23100	23700	2.6	0-10
Strontium				
Thallium	0.105	0.0265	74.8 (b)	0-10
Tin				
Titanium				
Vanadium	0.00	1.13	7.7	0-10
Zinc	4.21	7.25	72.3 (b)	0-10

Associated samples MP30440: JD36624-3, JD36624-4, JD36624-5, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-3F, JD36624-4F, JD36624-5F, JD36624-6F, JD36624-7F, JD36624-8F, JD36624-9F, JD36624-10F, JD36624-11F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.
(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30441
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.83	32	-14	<50
Antimony	4.0	.17	1.7	-0.67	<4.0
Arsenic	1.0	.05	.39	-0.052	<1.0
Barium	2.0	.018	.73	0.013	<2.0
Beryllium	1.0	.01	.15	-0.0079	<1.0
Boron	50	1.7	14		
Cadmium	1.0	.02	.17	0.043	<1.0
Calcium	500	7.2	200	-3.1	<500
Chromium	2.0	.036	.62	-0.028	<2.0
Cobalt	1.0	.006	.17	0.0060	<1.0
Copper	4.0	.048	1.9	0.22	<4.0
Iron	50	.47	19	0.56	<50
Lead	1.0	.016	.52	-0.0098	<1.0
Magnesium	500	.38	46	-0.24	<500
Manganese	2.0	.024	.63	0.069	<2.0
Molybdenum	2.0	.034	.45		
Nickel	2.0	.034	.95	-0.0092	<2.0
Potassium	500	1.6	68	-2.9	<500
Selenium	1.0	.088	.55	-0.29	<1.0
Silver	1.0	.008	.16	0.0063	<1.0
Sodium	500	3	470	-0.89	<500
Strontium	10	.028	2.4		
Thallium	1.0	.004	.17	0.0092	<1.0
Tin	10	.082	2.6		
Titanium	2.0	.22	1.6		
Vanadium	2.0	.026	1.8	-0.036	<2.0
Zinc	10	.16	5.4	-0.079	<10

Associated samples MP30441: JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17, JD36624-12F, JD36624-13F, JD36624-14F, JD36624-15F, JD36624-16F, JD36624-17F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30441
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	JD36533-1 Original	MS	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	0.0	4030	4000	100.8	75-125
Antimony	0.0	96.5	80	120.6	75-125
Arsenic	0.0	75.5	80	94.2	75-125
Barium	6.6	103	80	119.6	75-125
Beryllium	0.017	92.7	80	115.9	75-125
Boron					
Cadmium	0.065	77.3	80	96.5	75-125
Calcium	5040	10400	4000	122.8	75-125
Chromium	7.8	94.8	80	106.4	75-125
Cobalt	0.0	80.5	80	100.5	75-125
Copper	1.9	79.1	80	95.0	75-125
Iron	36.7	4250	4000	105.1	75-125
Lead	0.074	83.7	80	104.5	75-125
Magnesium	8460	12400	4000	98.5	75-125
Manganese	0.75	85.2	80	105.4	75-125
Molybdenum					
Nickel	11.3	90.5	80	95.0	75-125
Potassium	5680	9600	4000	98.0	75-125
Selenium	0.49	396	400	98.9	75-125
Silver	0.069	94.2	80	117.7	75-125
Sodium	2950000	2920000	4000	-750.0(a	75-125
Strontium					
Thallium	0.021	88.8	80	111.0	75-125
Tin					
Titanium					
Vanadium	0.0	89.8	80	111.8	75-125
Zinc	2.6	67.9	80	81.6	75-125

Associated samples MP30441: JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17, JD36624-12F, JD36624-13F, JD36624-14F, JD36624-15F, JD36624-16F, JD36624-17F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30441
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	JD36533-1 Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum	0.0	3950	4000	98.8	2.0	20
Antimony	0.0	87.0	80	108.8	10.4	20
Arsenic	0.0	73.7	80	91.9	2.4	20
Barium	6.6	94.3	80	108.8	8.8	20
Beryllium	0.017	83.2	80	104.0	10.8	20
Boron						
Cadmium	0.065	76.5	80	95.5	1.0	20
Calcium	5040	9680	4000	104.8	7.2	20
Chromium	7.8	92.6	80	103.6	2.3	20
Cobalt	0.0	78.9	80	98.5	2.0	20
Copper	1.9	76.5	80	91.8	3.3	20
Iron	36.7	4140	4000	102.3	2.6	20
Lead	0.074	84.9	80	106.0	1.4	20
Magnesium	8460	12300	4000	96.0	0.8	20
Manganese	0.75	83.4	80	103.2	2.1	20
Molybdenum						
Nickel	11.3	87.8	80	91.6	3.0	20
Potassium	5680	9620	4000	98.5	0.2	20
Selenium	0.49	386	400	96.4	2.6	20
Silver	0.069	86.3	80	107.9	8.8	20
Sodium	2950000	3010000	4000	1500.0(a	3.0	20
Strontium						
Thallium	0.021	90.5	80	113.1	1.9	20
Tin						
Titanium						
Vanadium	0.0	88.4	80	110.0	1.6	20
Zinc	2.6	65.0	80	78.0	4.4	20

Associated samples MP30441: JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17, JD36624-12F, JD36624-13F, JD36624-14F, JD36624-15F, JD36624-16F, JD36624-17F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30441
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	4130	4000	103.3	80-120
Antimony	94.1	80	117.6	80-120
Arsenic	82.8	80	103.5	80-120
Barium	89.5	80	111.9	80-120
Beryllium	91.0	80	113.8	80-120
Boron				
Cadmium	87.6	80	109.5	80-120
Calcium	4380	4000	109.5	80-120
Chromium	91.4	80	114.3	80-120
Cobalt	91.2	80	114.0	80-120
Copper	92.4	80	115.5	80-120
Iron	4390	4000	109.8	80-120
Lead	91.8	80	114.8	80-120
Magnesium	4250	4000	106.3	80-120
Manganese	91.7	80	114.6	80-120
Molybdenum				
Nickel	91.5	80	114.4	80-120
Potassium	4180	4000	104.5	80-120
Selenium	359	400	89.8	80-120
Silver	97.7	80	122.1*(a	80-120
Sodium	4300	4000	107.5	80-120
Strontium				
Thallium	90.7	80	113.4	80-120
Tin				
Titanium				
Vanadium	90.6	80	113.3	80-120
Zinc	79.0	80	98.8	80-120

Associated samples MP30441: JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17, JD36624-12F, JD36624-13F, JD36624-14F, JD36624-15F, JD36624-16F, JD36624-17F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Spike blank indicates possible high bias, but all associated samples < RL.

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30441
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/20/21

Metal	JD36533-1 Original	SDL 2:10	%DIF	QC Limits
Aluminum	0.00	0.00	NC	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	0.00	0.00	NC (a)	0-10
Barium	7.25	7.29	0.5	0-10
Beryllium	0.00	0.00	NC (a)	0-10
Boron				
Cadmium	0.0648	0.189	192.5(a)	0-10
Calcium	5040	5490	0.0	0-10
Chromium	9.70	10.2	4.9	0-10
Cobalt	0.00	0.135	39.1 (a)	0-10
Copper	3.06	4.85	58.5*(b)	0-10
Iron	36.7	61.0	28.6*(b)	0-10
Lead	0.0739	0.00	100.0(a)	0-10
Magnesium	7740	8730	3.2	0-10
Manganese	0.755	1.12	31.8 (a)	0-10
Molybdenum				
Nickel	11.3	15.3	5.2	0-10
Potassium	5150	5780	1.7	0-10
Selenium	0.454	0.00	100.0(a)	0-10
Silver	0.0194	0.00	100.0(a)	0-10
Sodium	2510000	3050000	3.5	0-10
Strontium				
Thallium	0.0206	0.00	100.0(a)	0-10
Tin				
Titanium				
Vanadium	0.00	0.196	50.3 (a)	0-10
Zinc	2.58	2.46	4.6	0-10

Associated samples MP30441: JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16, JD36624-17, JD36624-12F, JD36624-13F, JD36624-14F, JD36624-15F, JD36624-16F, JD36624-17F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30471
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/21/21

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.83	32	-9.6	<50
Antimony	4.0	.17	1.7	-0.12	<4.0
Arsenic	1.0	.05	.39	0.017	<1.0
Barium	2.0	.018	.73	-0.0039	<2.0
Beryllium	1.0	.01	.15	0.0056	<1.0
Boron	50	1.7	14		
Cadmium	1.0	.02	.17	0.0044	<1.0
Calcium	500	7.2	200	1.5	<500
Chromium	2.0	.036	.62	-0.012	<2.0
Cobalt	1.0	.006	.17	-0.0026	<1.0
Copper	4.0	.048	1.9	0.061	<4.0
Iron	50	.47	19	-4.6	<50
Lead	1.0	.016	.52	0.0059	<1.0
Magnesium	500	.38	46	-1.2	<500
Manganese	2.0	.024	.63	0.010	<2.0
Molybdenum	2.0	.034	.45		
Nickel	2.0	.034	.95	-0.021	<2.0
Potassium	500	1.6	68	5.1	<500
Selenium	1.0	.088	.55	0.19	<1.0
Silver	1.0	.008	.16	0.0035	<1.0
Sodium	500	3	470	2.7	<500
Strontium	10	.028	2.4		
Thallium	1.0	.004	.17	0.0073	<1.0
Tin	10	.082	2.6		
Titanium	2.0	.22	1.6		
Vanadium	2.0	.026	1.8	0.0069	<2.0
Zinc	10	.16	5.4	0.23	<10

Associated samples MP30471: JD36624-2, JD36624-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30471
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/21/21

Metal	JD36804-8 Original	MS	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	19600	23100	4000	87.5	75-125
Antimony	51.2	143	80	114.8	75-125
Arsenic	378	454	80	95.0	75-125
Barium	41.1	128	80	108.6	75-125
Beryllium	1.3	87.8	80	108.1	75-125
Boron					
Cadmium	0.30	80.3	80	100.0	75-125
Calcium	672000	668000	4000	-100.0(a	75-125
Chromium	155	230	80	93.8	75-125
Cobalt	6.7	89.4	80	103.4	75-125
Copper	9.5	83.9	80	93.0	75-125
Iron	14400	17900	4000	87.5	75-125
Lead	2.5	93.2	80	113.4	75-125
Magnesium	17600	20500	4000	72.5 (a)	75-125
Manganese	1460	1510	80	62.5 (a)	75-125
Molybdenum					
Nickel	546	625	80	98.8	75-125
Potassium	6420	10500	4000	102.0	75-125
Selenium	1.5	389	400	96.9	75-125
Silver	0.040	83.6	80	104.5	75-125
Sodium	86000	89100	4000	77.5	75-125
Strontium					
Thallium	0.080	90.0	80	112.4	75-125
Tin					
Titanium					
Vanadium	15.4	103	80	109.5	75-125
Zinc	902	966	80	80.0	75-125

Associated samples MP30471: JD36624-2, JD36624-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30471
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/21/21

Metal	JD36804-8 Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum	19600	24500	4000	122.5	5.9	20
Antimony	51.2	141	80	112.3	1.4	20
Arsenic	378	487	80	136.3(a)	7.0	20
Barium	41.1	127	80	107.4	0.8	20
Beryllium	1.3	87.2	80	107.4	0.7	20
Boron						
Cadmium	0.30	81.6	80	101.6	1.6	20
Calcium	672000	677000	4000	125.0	1.3	20
Chromium	155	246	80	113.8	6.7	20
Cobalt	6.7	89.5	80	103.5	0.1	20
Copper	9.5	83.8	80	92.9	0.1	20
Iron	14400	18100	4000	92.5	1.1	20
Lead	2.5	93.6	80	113.9	0.4	20
Magnesium	17600	21700	4000	102.5	5.7	20
Manganese	1460	1620	80	200.0(a)	7.0	20
Molybdenum						
Nickel	546	658	80	140.0(a)	5.1	20
Potassium	6420	10400	4000	99.5	1.0	20
Selenium	1.5	391	400	97.4	0.5	20
Silver	0.040	83.2	80	104.0	0.5	20
Sodium	86000	93400	4000	185.0(a)	4.7	20
Strontium						
Thallium	0.080	89.9	80	112.3	0.1	20
Tin						
Titanium						
Vanadium	15.4	104	80	110.8	1.0	20
Zinc	902	1030	80	160.0(a)	6.4	20

Associated samples MP30471: JD36624-2, JD36624-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30471
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/21/21

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	3940	4000	98.5	80-120
Antimony	89.7	80	112.1	80-120
Arsenic	78.7	80	98.4	80-120
Barium	84.8	80	106.0	80-120
Beryllium	84.8	80	106.0	80-120
Boron				
Cadmium	82.6	80	103.3	80-120
Calcium	4280	4000	107.0	80-120
Chromium	86.3	80	107.9	80-120
Cobalt	84.9	80	106.1	80-120
Copper	85.1	80	106.4	80-120
Iron	4170	4000	104.3	80-120
Lead	84.8	80	106.0	80-120
Magnesium	4100	4000	102.5	80-120
Manganese	87.0	80	108.8	80-120
Molybdenum				
Nickel	84.0	80	105.0	80-120
Potassium	4070	4000	101.8	80-120
Selenium	367	400	91.8	80-120
Silver	88.4	80	110.5	80-120
Sodium	4080	4000	102.0	80-120
Strontium				
Thallium	83.5	80	104.4	80-120
Tin				
Titanium				
Vanadium	86.3	80	107.9	80-120
Zinc	77.9	80	97.4	80-120

Associated samples MP30471: JD36624-2, JD36624-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD36624
Account: TTPAL - Tetra Tech EC Inc.
Project: Hoff VC- 336 Layfield Road, Perkiomenville, PA

QC Batch ID: MP30471
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 12/21/21

Metal	JD36804-8 Original	SDL 2:10	%DIF	QC Limits
Aluminum	19600	19200	1.9	0-10
Antimony	51.2	64.9	26.8*(a)	0-10
Arsenic	378	370	2.1	0-10
Barium	41.1	50.8	23.7*(a)	0-10
Beryllium	1.30	1.19	8.4	0-10
Boron				
Cadmium	0.303	0.340	12.1 (b)	0-10
Calcium	672000	706000	5.1	0-10
Chromium	155	159	2.4	0-10
Cobalt	6.67	6.94	4.1	0-10
Copper	9.45	10.3	9.5	0-10
Iron	14400	15400	7.1	0-10
Lead	2.52	3.21	27.4*(a)	0-10
Magnesium	17600	17900	1.8	0-10
Manganese	1460	1450	0.7	0-10
Molybdenum				
Nickel	546	553	1.3	0-10
Potassium	6420	6390	0.4	0-10
Selenium	1.47	1.29	12.4 (b)	0-10
Silver	0.0397	0.0462	16.3 (b)	0-10
Sodium	86000	85100	1.0	0-10
Strontium				
Thallium	0.0803	0.0634	21.0 (b)	0-10
Tin				
Titanium				
Vanadium	15.4	15.1	2.3	0-10
Zinc	902	989	9.6	0-10

Associated samples MP30471: JD36624-2, JD36624-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.
(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Misc. Forms

Custody Documents and Other Forms

(SGS Orlando, FL)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #: JD36624

Client / Reporting Information

Company Name: SGS North America Inc.
Street Address: 2235 Route 130
City: Dayton State: NJ Zip: 08810
Project Contact: jadon.schiller@sgs.com E-mail:
Phone #: 732-329-0200
Sampler(s) Name(s): MEB Phone:

Project Information

Project Name: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB-Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	HNO3	H2SO4	NaOH	Ascorbic	MEOH	EnCore	SO4	LAB USE ONLY
2	HOFF MW-8		12/7/21	3:30:00 PM	MEB	AQ									X	
6	HOFF MW-FA		12/8/21	2:55:00 PM	MEB	AQ									X	
7	HOFF MW-FB		12/8/21	3:55:00 PM	MEB	AQ									X	
8	HOFF MW-13		12/9/21	9:35:00 AM	MEB	AQ									X	
9	HOFF MW-C		12/9/21	11:20:00 AM	MEB	AQ									X	
10	HOFF MW-D		12/9/21	12:50:00 PM	MEB	AQ									X	
11	HOFF IW-1A		12/9/21	2:30:00 PM	MEB	AQ									X	
12	HOFF IW-1B		12/9/21	3:30:00 PM	MEB	AQ									X	
13	HOFF IW-3A		12/10/21	9:15:00 AM	MEB	AQ									X	
14	HOFF IW-3B		12/10/21	9:40:00 AM	MEB	AQ									X	
15	HOFF IW-2A		12/10/21	11:00:00 AM	MEB	AQ									X	
16	HOFF IW-2B		12/10/21	12:00:00 PM	MEB	AQ									X	

Turnaround Time (Business days)

- [ ] Standard 10 Business Days
- [ ] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENCY
- [X] Other Due 12/17/2021

Emergency & Rush T/A data available via Lablink. Approval needed for RUSH/Emergency TAT

Approved By (SGS PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other REDT2

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions: INITIAL ASSESSMENT

LABEL VERIFICATION SM

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1		12/7/21 1709	1	2	12/7/21 1615	2
3		Date / Time:	3	4	Date / Time:	4
5		Date / Time:	5	Custody Seal #	Intact / Not Intact	Preserved where applicable / Absent

Therm. ID: On Ice: Cooler Temp. °C: 1.2-1.1

jd36624.xls
Rev. Date: 4/10/18

SGS

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsus

FED-EX Tracking #	Bottle Order Control #
SGS Quote #	SGS Job # JD36624

Client / Reporting Information

Company Name: SGS North America Inc.
Street Address: 2235 Route 130
City: Dayton State: NJ Zip: 08810
Project Contact: jadon.schiller@sgs.com E-mail:
Phone #: 732-329-0200
Sampler(s) Name(s): MEB Phone:

Project Information

Project Name: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)
Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MECH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	SO4	LAB USE ONLY
17	HOFF IW-B		12/10/21	1:00:00 PM	MEB	AQ										X	

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- [ ] Standard 10 Business Days
- [ ] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENCY
- [X] Other Due 12/17/2021

Emergency & Rush T/A data available via Lablink Approval needed for RUSH/Emergency TAT

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- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other REDT2

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 [signature]	12/21/21 1700	1 FedEx	2	12/22/21 1600	2 [signature]
3		3	4		4
5		5			

Custody Seal # ☐ Intact ☐ Not intact ☐ Absent Preserved where applicable ☐ Therm. ID On ice ☐ Cooler Temp. °C

jd36624.xls
Rev. Date: 4/10/18

15.1 15

JD36624: Chain of Custody
Page 2 of 3

SGS Sample Receipt Summary

Job Number: JD36624 **Client:** SGS NJ **Project:** HOFF VC - 336

Date / Time Received: 12/22/2021 4:00:00 PM **Delivery Method:** FX **Airbill #'s:** 5272 0637 4059

Therm ID: IR 1; **Therm CF:** 0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (1.0);

Cooler Temps (Corrected) °C: Cooler 1: (1.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: STEPHENP Date: 12/22/2021 4:00:00 P Reviewer: _____ Date: _____

SGS North America Inc.

Internal Sample Tracking Chronicle

SGS Dayton, NJ

Job No: JD36624

TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Project No: TTPAL90539

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-2	Collected: 07-DEC-21 15:30 By: MEB	Received: 10-DEC-21 By:				
HOFF MW-8						
JD36624-2	EPA 300/SW846 9056A	27-DEC-21 16:54	JB	27-DEC-21	JB	SO4
JD36624-6	Collected: 08-DEC-21 14:55 By: MEB	Received: 10-DEC-21 By:				
HOFF MW-FA						
JD36624-6	EPA 300/SW846 9056A	27-DEC-21 17:13	JB	27-DEC-21	JB	SO4
JD36624-7	Collected: 08-DEC-21 15:55 By: MEB	Received: 10-DEC-21 By:				
HOFF MW-FB						
JD36624-7	EPA 300/SW846 9056A	27-DEC-21 18:11	JB	27-DEC-21	JB	SO4
JD36624-8	Collected: 09-DEC-21 09:35 By: MEB	Received: 10-DEC-21 By:				
HOFF MW-13						
JD36624-8	EPA 300/SW846 9056A	27-DEC-21 18:30	JB	27-DEC-21	JB	SO4
JD36624-9	Collected: 09-DEC-21 11:20 By: MEB	Received: 10-DEC-21 By:				
HOFF MW-C						
JD36624-9	EPA 300/SW846 9056A	27-DEC-21 18:49	JB	27-DEC-21	JB	SO4
JD36624-10	Collected: 09-DEC-21 12:50 By: MEB	Received: 10-DEC-21 By:				
HOFF MW-D						
JD36624-10	EPA 300/SW846 9056A	27-DEC-21 19:09	JB	27-DEC-21	JB	SO4
JD36624-11	Collected: 09-DEC-21 14:30 By: MEB	Received: 10-DEC-21 By:				
HOFF IW-1A						
JD36624-11	EPA 300/SW846 9056A	27-DEC-21 20:07	JB	27-DEC-21	JB	SO4
JD36624-12	Collected: 09-DEC-21 15:30 By: MEB	Received: 10-DEC-21 By:				
HOFF IW-1B						
JD36624-12	EPA 300/SW846 9056A	27-DEC-21 20:27	JB	27-DEC-21	JB	SO4

Internal Sample Tracking Chronicle

SGS Dayton, NJ

Job No: JD36624

TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA
Project No: TTPAL90539

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD36624-13 Collected: 10-DEC-21 09:15 By: MEB Received: 10-DEC-21 By: HOFF IW-3A						
JD36624-13	EPA 300/SW846 9056A	27-DEC-21 20:46	JB	27-DEC-21	JB	SO4
JD36624-14 Collected: 10-DEC-21 09:40 By: MEB Received: 10-DEC-21 By: HOFF IW-3B						
JD36624-14	EPA 300/SW846 9056A	27-DEC-21 21:05	JB	27-DEC-21	JB	SO4
JD36624-15 Collected: 10-DEC-21 11:00 By: MEB Received: 10-DEC-21 By: HOFF IW-2A						
JD36624-15	EPA 300/SW846 9056A	27-DEC-21 21:24	JB	27-DEC-21	JB	SO4
JD36624-16 Collected: 10-DEC-21 12:00 By: MEB Received: 10-DEC-21 By: HOFF IW-2B						
JD36624-16	EPA 300/SW846 9056A	27-DEC-21 21:44	JB	27-DEC-21	JB	SO4
JD36624-17 Collected: 10-DEC-21 13:00 By: MEB Received: 10-DEC-21 By: HOFF IW-B						
JD36624-17	EPA 300/SW846 9056A	27-DEC-21 22:42	JB	27-DEC-21	JB	SO4

General Chemistry

QC Data Summaries

(SGS Orlando, FL)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD36624
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP37254/GN90200	2.0	0.0	mg/l	50	51.1	102.2	90-110%
Sulfate	GP37253/GN90200	2.0	0.0	mg/l	50	51.1	102.2	90-110%
Sulfate	GP37254/GN90200	2.0	0.0	mg/l	50	51.2	102.4	90-110%

Associated Samples:
Batch GP37253: JD36624-2, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16
Batch GP37254: JD36624-17
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD36624
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP37254/GN90200	JD36624-17	mg/l	90.9	50	121	60.2N(a)	90-110%
Sulfate	GP37253/GN90200	JD36624-6	mg/l	39.2	50	76.4	74.4N(a)	90-110%
Sulfate	GP37254/GN90200	JD36624-17	mg/l	179	50	193	28.0N(a)	90-110%

Associated Samples:
Batch GP37253: JD36624-2, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16
Batch GP37254: JD36624-17
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD36624
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP37254/GN90200	JD36624-17	mg/l	90.9	50	119	1.7	15%
Sulfate	GP37253/GN90200	JD36624-6	mg/l	39.2	50	77.2	1.0	15%
Sulfate	GP37254/GN90200	JD36624-17	mg/l	179	50	191	1.0	15%

Associated Samples:
Batch GP37253: JD36624-2, JD36624-6, JD36624-7, JD36624-8, JD36624-9, JD36624-10, JD36624-11, JD36624-12, JD36624-13, JD36624-14, JD36624-15, JD36624-16
Batch GP37254: JD36624-17
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: 42021122701.CSV Date Analyzed: 12/14/21 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN90200
Parameters: Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:12	GN90200-STD1	1		STDA
18:32	GN90200-STD2	1		STDB
18:51	GN90200-STD3	1		STDC
19:11	GN90200-STD4	1		STDD
19:30	GN90200-STD5	1		STDE
19:50	GN90200-STD6	1		STDF
20:09	GN90200-STD7	1		STDG
20:29	GN90200-STD8	1		STDH
20:48	GN90200-STD9	1		STDI
21:08	GN90200-STD10	1		STDJ
21:27	GN90200-STD11	1		STDK
21:47	GN90200-ICV1	1		
22:06	GN90200-ICB1	1		
22:26	GN90200-CRI1	1		
22:45	GN90200-CCV1	1		
23:05	GN90200-CCB1	1		
10:19	GN90200-CCV2	1		
10:43	GP37253-MB1	1		
11:03	GP37253-B1	1		
12:16	ZZZZZZ	5		
12:42	ZZZZZZ	1		
13:01	ZZZZZZ	10		
13:20	JD36277-4	5		(sample used for QC only; not part of login JD36624)
13:40	GP37253-S1	5		
13:59	GP37253-S2	5		
14:18	ZZZZZZ	1		
14:38	ZZZZZZ	25		
14:57	GN90200-CCV3	1		
15:16	GN90200-CCV4	1		
15:36	GN90200-CCV5	1		
15:55	GN90200-CCB2	1		
16:15	ZZZZZZ	1		
16:35	ZZZZZZ	10		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: 42021122701.CSV Date Analyzed: 12/14/21 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN90200
Parameters: Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:54	JD36624-2	5		
17:13	JD36624-6	10		
17:32	GP37253-S3	10		
17:52	GP37253-S4	10		
18:11	JD36624-7	10		
18:30	JD36624-8	10		
18:49	JD36624-9	50		
19:09	JD36624-10	1		
19:28	GN90200-CCV6	1		
19:48	GN90200-CCB3	1		
20:07	JD36624-11	10		
20:27	JD36624-12	10		
20:46	JD36624-13	25		
21:05	JD36624-14	25		
21:24	JD36624-15	100		
21:44	JD36624-16	10		
22:03	GP37254-MB1	1		
22:23	GP37254-B1	1		
22:42	JD36624-17	10		
23:01	GP37254-S1	10		
23:21	GN90200-CCV7	1		
23:40	GN90200-CCB4	1		
00:00	GP37254-S2	10		
00:19	ZZZZZZ	500		
00:38	ZZZZZZ	100		
00:57	ZZZZZZ	200		
01:17	ZZZZZZ	500		
01:36	ZZZZZZ	500		
01:55	ZZZZZZ	1		
02:15	ZZZZZZ	500		
02:34	JD36703-9	50		(sample used for QC only; not part of login JD36624)
02:53	GP37254-S3	50		
03:13	GN90200-CCV8	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD36624
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: 42021122701.CSV Date Analyzed: 12/14/21 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN90200
Parameters: Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
03:32	GN90200-CCB5	1		
03:52	GP37254-S4	50		
04:11	ZZZZZZ	5		
04:30	ZZZZZZ	10		
04:49	ZZZZZZ	5		
05:09	ZZZZZZ	1		
05:28	ZZZZZZ	1		
05:48	ZZZZZZ	1		
06:07	ZZZZZZ	1		
06:27	ZZZZZZ	1		
07:06	GN90200-CCV9	1		
07:25	GN90200-CCB6	1		
07:45	ZZZZZZ	1		
08:04	ZZZZZZ	1		
08:24	GP37255-MB1	1		
08:43	GP37255-B1	1		
09:08	JD36761-2	1		(sample used for QC only; not part of login JD36624)
09:27	GP37255-S1	1		
09:47	GP37255-S2	1		
10:06	ZZZZZZ	1		
11:04	GN90200-CCV10	1		
11:24	GN90200-CCB7	1		
12:03	ZZZZZZ	1		
12:22	ZZZZZZ	1		
12:42	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:21	ZZZZZZ	1		
13:40	ZZZZZZ	5		
13:59	ZZZZZZ	5		
14:19	ZZZZZZ	50		
14:38	ZZZZZZ	5		
14:57	GN90200-CCV11	1		
15:17	GN90200-CCB8	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JD36624
Account: ALNJ - SGS Dayton, NJ
Project: TTPAL: Hoff VC- 336 Layfield Road, Perkiomenville, PA

File ID: 42021122701.CSV Date Analyzed: 12/14/21 Methods: EPA 300/SW846 9056A
Run ID: GN90200 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN90200-ICV1	Sulfate	50.4	2.0	0.60	50	100.8	90-110
GN90200-ICB1	Sulfate	0.60 U	2.0	0.60			
GN90200-CRI1	Sulfate	1.09	2.0	0.60	1	109.0	50-150
GN90200-CCV1	Sulfate	50.8	2.0	0.60	50	101.6	90-110
GN90200-CCB1	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV2	Sulfate	51.2	2.0	0.60	50	102.4	90-110
GN90200-CCV3	Sulfate	55.7	2.0	0.60	50	111.4!(a)	90-110
GN90200-CCV4	Sulfate	52.3	2.0	0.60	50	104.6	90-110
GN90200-CCV5	Sulfate	51.8	2.0	0.60	50	103.6	90-110
GN90200-CCB2	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV6	Sulfate	50.8	2.0	0.60	50	101.6	90-110
GN90200-CCB3	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV7	Sulfate	51.0	2.0	0.60	50	102.0	90-110
GN90200-CCB4	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV8	Sulfate	50.9	2.0	0.60	50	101.8	90-110
GN90200-CCB5	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV9	Sulfate	50.7	2.0	0.60	50	101.4	90-110
GN90200-CCB6	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV10	Sulfate	51.6	2.0	0.60	50	103.2	90-110
GN90200-CCB7	Sulfate	0.60 U	2.0	0.60			
GN90200-CCV11	Sulfate	51.4	2.0	0.60	50	102.8	90-110
GN90200-CCB8	Sulfate	0.60 U	2.0	0.60			

(!) Outside of QC limits
(a) No samples for so4 reported in the area bracketed by this CCV.